Phase II Environmental Site Assessment

Location:

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

Prepared for:

Ms. Amy Fisk
Niagara County Department of Economic Development
6311 Inducon Corporate Drive
Sanborn, New York 14132

LaBella Project No. 221436

November 13, 2012

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1.0 Introduction and Background

1.1 Introduction

LaBella Associates, P.C. ("LaBella") was retained to conduct a Phase II Environmental Site Assessment (ESA) at the property located at 8473 West Somerset Road, Barker (Town of Somerset), Niagara County, New York, which is hereinafter referred to as the "Site." Figure 1 shows the location of the Site while Figure 2 identifies the historic Site characteristics.

The 10.9-acre Barker Chemical Site was used from 1930 through the 1970s for the manufacture and distribution of fungicides and herbicides, and has since lain dormant for an extended period. This property has been the subject of significant investigation and remediation efforts by the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA).

In December 1999, the NYSDEC completed a preliminary investigation of the Former Barker Chemical Site. This investigation documented the presence of metals at elevated concentrations and low pH surface water (1.71 to 3.62 standard pH units) throughout the Site. In late January 2000, based upon the presence of low pH surface water, the Niagara County Health Department (NCHD) issued a public health advisory to nearby residents cautioning against entry onto the Site. In response to this advisory the NYSDEC implemented an emergency Site security action by placing warning signs across the front of the property and installing high visibility fencing around the direct contact areas of concern.

In May 2000 the NYSDEC made a request to the USEPA to evaluate the Site and perform removal actions, as appropriate, to address the public health threats from low pH surface waters, and to identify, contain, control and/or remediate any other hazardous wastes or hazardous substances found at the Site. Due to the public health threat that existed, USEPA agreed to this request.

Following a Removal Site Evaluation (RSE) of the Site in June 2000 to determine the nature and extent of contamination requiring remediation, the USEPA removal action was authorized on September 29, 2000. The NYSDEC has subsequently completed additional investigations of the Site.

1.2 Areas of Concern

The USEPA's and NYSDEC's work focused on a number of areas of the Site, and these included the production area (which had contained five abandoned buildings), an above ground storage tank, two lagoons (the North and South Lagoons), one filled lagoon (the Filled Lagoon) and two large areas void of vegetation (the Barren Strip and Lime Waste area). The areas are shown in Figure 2 and are discussed individually in the following sections.

A number of areas of the site contained high concentrations of sulfur, which had been used in the pesticide manufacturing process. The presence of sulfur at the Site has resulted in high acidity in surface water.

1.2.1 Production Area

The Production Area is located between West Somerset Road and the Central Drainage Ditch, and once included five buildings. Four of the buildings were removed during USEPA removal activities to facilitate an assessment of soil conditions while one of the storage buildings remains standing.

As part of the 2000 removal action, USEPA demolished the buildings and conducted a soil sampling program to identify the extent of contamination, if any. Based upon the results of this assessment, the USEPA identified arsenic as the primary contaminant in soil underlying the former Production Building. As a result, the soil from the former Production Building area was excavated to a depth of approximately two feet and sent to Modern Landfill for disposal. Two confirmatory samples were collected from native clay. The excavation was backfilled with clay and covered with stone from a local quarry.

For reasons discussed later in this report, this area of the Site is the most likely location for any future development at the Site. Because of this, additional investigation was determined to be necessary to evaluate the location's suitability for development.

1.2.2 Low pH Trough

North of the Production Area, the Low pH Trough was the primary drainage channel for the Former Barker Chemical Site, and was approximately 30 feet by 100 feet in size. USEPA excavated approximately 250 tons of arsenic contaminated sediment from this channel to a depth of 1 to 2 feet. Excavated soils were sent off-site for disposal. The excavation was backfilled with limestone rip rap from a local quarry to reduce erosion during rainfall or snow melt events, and to buffer any low pH runoff that might occur during the completion of remedial activities.

1.2.3 Lime Waste Area and Central Drainage Ditch

The Lime Waste Area contained a whitish-gray, lime-like waste material with large quantities of sulfur and was a contributing factor to the low pH runoff from the Site. While remediating this area, a natural spring was encountered that discharged water with a pH less than 2 at a continuous rate. USEPA also believed that precipitation and snow melt leaching through the lime waste was producing acidic runoff. As a result, USEPA excavated approximately 825 tons of waste from this area and sent off-site for disposal. The excavation was backfilled with one foot of clay and one foot of topsoil, and graded to promote surface water runoff. The area was hydroseeded to provide a vegetative cover.

Once excavation activities were complete, USEPA created an east-west drainage trough (Central Drainage Ditch) immediately south of the Lime Waste area to promote better site drainage. This ditch was excavated into native clay to a depth of approximately 1½ feet, and connects to the natural spring encountered during excavation of this area. The Central Drainage Ditch flows into the remediated Low pH Trough through a culvert under the gravel roadway.

1.2.4 Ponded Water Area

The Ponded Water area was located on the eastern portion of the property to the north of the

Central Drainage Ditch. This area appeared to be an overflow area and/or historic discharge area from the South Lagoon, and contained low pH surface water. During USEPA's removal action, approximately 100 cubic yards of sludge from this trough were excavated and placed into the South Lagoon. The sludge had a distinct black-green color and was visually removed from this area. The Ponded Water area was restored with wetland sediment from Buckhorn Marsh.

1.2.5 Aboveground Storage Tank

The above ground storage tank was one of two or three small tanks historically located in this area of the Former Barker Chemical Site. During the USEPA removal action, the contents of the tank were removed, with the tank cleaned and subsequently scrapped. USEPA then excavated approximately 400 tons of contaminated soil from this area for off-site disposal. The Storage Tank Area was excavated to a depth of two feet, reaching native clay soil at the base of the excavation. Confirmatory samples were not collected from this excavation. The excavation was backfilled with stone from a local quarry to promote better drainage, and was connected to the Central Drainage Ditch. Sediments from Buckhorn Marsh were placed on the quarry stone for restoration purposes.

1.2.6 Barren Strip

The Barren Strip contained a brownish-gray, fine-grained waste material and was very wet, devoid of vegetation, and appeared to be impacted by low pH runoff and Site contaminants. This area was remediated during roadway construction to gain access to the North Lagoon and Chip Area via the excavation of impacted soil for off-site disposal. The Barren Strip was excavated to a depth of 1.5 feet, reaching native clay soil at the base of the excavation. The excavation was backfilled with approximately three feet of stone to create a roadway.

1.2.7 Filled Lagoon

The analytical results from the USEPA's investigation indicated that the waste material (black sludge with blue-green mottling underlies the lime-like waste) in the Filled Lagoon contained significant concentrations of sulfur. However, the USEPA did not identify any impacts to the environment by this material. As a result, USEPA did not complete any remedial actions in this area, but did place topsoil within the lagoon area to enrich the existing soil.

1.2.8 South Lagoon

In 2000, USEPA documented two problems with the South Lagoon that needed to be addressed by the removal action: (1) the acidic water within the lagoon and (2) the acidic lagoon sludge. The sludge itself did not exhibit the characteristics of a hazardous waste, but did contain high concentrations of sulfur that USEPA believed was the source of the low pH water in the lagoon. Samples of this sludge were sent to a testing lab to assist USEPA with a recipe for sludge stabilization. Along with the sludge sample, USEPA sent the lab a sample of weathered lime that was available from a previous USEPA Superfund project in Buffalo, New York. The testing lab recommended that a mixture of 5% Portland cement, 20% weathered lime and 75% sludge from the South Lagoon would produce a stabilized mass with a strength sufficient to support heavy equipment during stabilization operations.

At the start of the stabilization process, water from the South Lagoon was pumped into the North Lagoon. A long reach excavator was then utilized to mix the sludge, lime and Portland cement according to the recipe. Due to excessive water within the sludge, clay was added to the mixture to help dry the sludge.

The end result was a monolith of stabilized sludge resembling concrete, which was capped with at least one foot of clay and one foot of topsoil within the original confines of the South Lagoon. The cap was graded to promote surface water runoff into the remediated Low pH Trough. The final cap was hydroseeded to provide a vegetative cover.

While this work was generally effective in stabilizing the sludge in the South Lagoon, one boring completed by the NYSDEC in this area encountered crystallized sulfur and lime and layers of what was believed to be Portland Cement, suggesting that mixing was not complete.

1.2.10 North Lagoon

Like the South Lagoon, the North Lagoon contained low pH water and acidic sludge. Initially, USEPA neutralized the water in the lagoon with weathered lime, bringing the pH into the 4 to 9 range for off-site treatment and disposal. Approximately 366,000 gallons of neutralized water were shipped off-site for treatment. Once the North Lagoon was dewatered, weathered lime and clay were added to help solidify the sludge. Because the quantity of sludge in this lagoon was substantially lower than in the South Lagoon, USEPA determined that it was less expensive to excavate and dispose of the material than to stabilize it in place. As a result, approximately 3,200 tons of sludge were excavated from the lagoon and disposed off-site. The North Lagoon was restored with a minimum of one foot of wetland sediment from Buckhorn Marsh and flooded with 500,000 gallons of water.

1.2.11 Eastern Boundary Ditch

An open drainage ditch parallels the eastern boundary of the Site from West Somerset Road to the north end of the South Lagoon, where it makes a sharp eastward turn. This ditch ultimately feeds Golden Hill Creek, a tributary to Lake Ontario. In 2000, the NYSDEC measured the pH of surface water in the Eastern Boundary Ditch and found the water to be only slightly acidic (pH of 6.74), which was consistent with the December 17, 1999 measurement. However, the NYSDEC recommended periodic monitoring of pH in the surface water at the Site.

1.2.12 Chip Area

The Chip Area contained arsenic contamination of unknown origin, although it was suspected that arsenic-containing waste was dumped in this area by Barker Chemical. This is the area where the green-blue chips were observed by NCHD personnel in 1999. USEPA removed trees and brush from the Chip Area before excavating approximately 600 tons of arsenic contaminated soil for off-site disposal. The excavation area was restored with topsoil and hydro seeded to provide a vegetative cover.

1.2.13 Northern Portion of the Site

Based on a review of existing files, no investigatory work has been completed in the area of the Site north of the Chip Area. Prior to the transfer of property ownership, investigation including soil and groundwater characterization was recommended.

1.3 NYSDEC Investigation and Conclusions

In 2003, the NYSDEC conducted a Site Investigation to evaluate areas of the Site not remediated by USEPA to determine the degree to which waste and sludge had contaminated Site soil, groundwater, surface water and sediment. The Site Investigation Report was completed in March 2007 and augmented in the January 2009 Supplemental Site Investigation Report (SSIR). The SSIR concluded that, while waste materials were present in the Filled and South Lagoons and impacts to groundwater and surface water remain, no hazardous waste is present on the Site.

Due to the absence of hazardous waste, this Site did not qualify for inclusion in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites in New York State. However, due to the presence of contamination and waste at this Site in the center portion of the Site (the area extending from the Central Drainage Ditch to the Chip Area), the NYSDEC recommended the restriction of redevelopment activities to the southern portion of the Site that was deemed to be remediated fully by USEPA. It was further recommended that no subsurface activities take place in the Filled and South lagoons as waste is still present at these locations. If excavation in these lagoons is necessary, excavated materials must be transported off-site for proper disposal as discussed in the Soils Management Plan contained in Appendix C of the SSIR. The NYSDEC also recommended that methods should also be put in place to avoid direct contact with low pH and contaminated surface water at the Site. Lastly, the NYSDEC concluded that groundwater underlying the Site should not be utilized as a source of potable or process water, without necessary water quality treatment as determined by the Niagara County Health Department.

1.4 Phase II ESA Objectives

Despite extensive efforts by the NYSDEC and USEPA, redevelopment of the Site has not occurred because ownership remains a question, contaminants are known to remain at the Site, and portions of the Site had yet to be investigated. These contaminants include volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, metals, sulfide, and sulfate, in the Site soil, sediment, surface water, and groundwater.

The unknown nature of current conditions at the Site and of the redevelopment costs associated with addressing the contamination issues at the property has prevented Niagara County from foreclosing on the tax-delinquent property. To address these concerns, the County obtained a grant from National Grid to confirm the efficacy of the previous remedial efforts at the Site; characterize areas not previously assessed; estimate costs for additional remedial activities, if any; identify feasible end use for the property; and develop an Action Plan for advancing the Site.

To assist the County in determining if property tax foreclosure is appropriate at this site, the Phase II ESA was implemented to identify the level of environmental impairment at the site which in turn could attempt to determine feasible redevelopment options and corresponding site remediation/preparation costs. As such, this investigation was conducted in order to address those environmental concerns identified in prior environmental reports that were not previously addressed, including:

- Additional characterization in the portion of the Site targeted for redevelopment (the southern portion of the Site).
- Soil characterization in the area of the Site not previously investigated, north of the Chip Area.
- Measurement of surface water pH.
- Collection of surface water samples to characterize current conditions.
- Additional characterization of groundwater conditions in the southern and northern portions of the Site.

2.0 Field Investigation Summary

This investigation was devised based upon a review of a Request for Proposal (RFP), relevant reports provided by Niagara County, and our experience with Phase II ESAs of similar brownfield sites.

This section provides a summary of the fieldwork completed as part of this Phase II ESA, which included the following:

- Surface soil screening and analysis to characterize the chemistry of surface soils in:
    - The southern portion of the site (between West Somerset Road and the Central Drainage Ditch)
    - Areas to the north of the Chip Area not previously characterized
- Subsurface soil sampling in:
    - The southern portion of the site
    - Accessible areas to the north of the Chip Area
- Surface water characterization:
    - Collection of two surface water samples
    - Measurement of pH in surface waters to provide updated information
- Groundwater characterization:
    - In the southern portion of the Site to characterize groundwater conditions in the area most likely to be redeveloped
    - To the immediate north and south of the lagoons to characterize impacts, if any, from the materials stored in the lagoons
    - In the existing wells down-gradient direction of the lagoons to determine if contaminant concentrations have significantly changed over time
- Performance of an asbestos survey in the remaining structure

2.1 Surface Soil

A subsurface utility stakeout was arranged with the Underground Facilities Protection Organization (UFPO) to locate any underground public subsurface utilities servicing the Site.

On June 13, 2012, a sample grid system was established across the targeted areas with more concentrated nodes in the areas of the Site that appeared to have received fill. At each location, LaBella utilized an X-Ray Fluorescence (XRF) meter to screen the soils for lead, arsenic and other metals. Based upon the screening results and visual observations, samples were collected for laboratory analysis to characterize areas of elevated metals concentrations and to assess site-wide conditions.

A total of 28 surface soil samples were collected from the southern portion of the Site. The samples were collected in seven rows of four with each sample being approximately 25 feet apart. In addition, a total of 18 surface soil samples were collected from the portion of the Site north of the chip area. Such were collected in nine rows of two with each sample being approximately 100 feet apart. The sampling locations are shown on Figures 3 and 4.

To confirm the field screening measurements and further characterize the surface soils, eight surface soil samples were submitted under standard chain-of-custody procedures for laboratory analyses using United States Environmental Protection Agency (USEPA) methods. Five were submitted from the southern portion of the site (SS3, SS6, SS13, SS24 and SS28), while three were submitted from the northern portion of the site (SS29, SS40 and SS45).

The samples were analyzed for TCL SVOCs and pesticides, Target Analyte List (TAL) metals, leachable pH, and sulfur. This analytical program was selected based on the findings of previous investigatory activities performed by the NYSDEC and the USEPA.

2.2 Subsurface Soil

A subsurface utility stakeout was arranged with the Underground Facilities Protection Organization (UFPO) to locate any underground public subsurface utilities servicing the Site.

A total of nine soil borings (designated B-1 through B-9) were completed on June 14 and 15, 2012 by Nature's Way Environmental of Alden, New York, under LaBella supervision. The borings were advanced to depths ranging from approximately 7.4 to 11 feet below ground surface using a truck-mounted Geoprobe® direct-push sampling system. Three soil borings were advanced immediately north of the north lagoon while six soil borings were advanced on the southern portion of the Site. The locations of the soil borings are shown on Figure 5.

The Geoprobe® unit utilizes a four-foot-long macro-core sampler with disposable polyethylene sleeves. Soil cores are retrieved in four-foot sections that can be cut from the polyethylene sleeves for observation, field screening, and sampling. The macro-core sampler was decontaminated between samples and borings using an Alconox and water solution.

The soil from the borings was screened using a photoionization detector (PID), which measures concentrations of total organic compounds. The soil from the borings was also evaluated for visual and olfactory evidence of contamination and these observations as well as lithologic and other pertinent information were recorded on boring logs. Soil boring logs prepared by LaBella are included in Appendix 1.

LaBella collected one soil sample from each of the 9 boring locations for laboratory analysis. The samples were placed on ice and transported to a New York State Department of Health Environmental Laboratory Approval Program (ELAP) certified laboratory under proper chain-of-custody protocols for analysis of TCL SVOCs and pesticides, TAL metals, leachable pH, and sulfur.

Upon completion of direct-push drilling activities, all soil borings not completed as wells were backfilled with cuttings.

2.3 Surface Water

During the June 2012 field program, many of the surface water location previously sampled by USEPA and the NYSDEC were dry. The only locations in which water was present were the Eastern Drainage Ditch and the North Lagoon. LaBella measured pH at the bend in the Eastern Drainage Ditch where the flow direction changes from north to east and in three areas of the North Lagoon. Surface water samples were also collected from the Eastern Boundary Ditch and the North Lagoon.

The samples were collected by carefully dipping a pre-clean jar supplied by the laboratory into the surface water body and pouring the water into each of the required sample bottles. The samples were analyzed for TCL VOCs, SVOCs, and pesticides, TAL metals, sulfate, and sulfide.

2.4 Groundwater

On June 14 and 15, 2012, LaBella installed five shallow overburden, one-inch diameter, temporary groundwater monitoring wells in selected soil borings. The well locations were based on observed evidence of impairment and local hydrogeological conditions encountered during the soil characterization activities. Three of the wells were installed on the southern portion of the Site, and two of the wells were installed on the northern portion of the Site. The locations of the wells are shown on Figure 5.

Each well was completed with five to ten feet of one-inch, Schedule 40 0.010-slot well screen connected to the appropriate length of schedule 40 PVC well riser. The borehole annulus surrounding the well screen was filled with quartz sand to one to two feet above the screen section. The remaining annulus was bentonite-sealed to approximately one to two feet below ground surface, and then grouted to ground surface. Each well was completed with a protective casing. New wells TPMW3 and TPMW5 were developed through the removal of three to five well volumes from each well using dedicated bailers. The remaining new wells (TPMW1, TPMW2, and TPMW4) contained insufficient water for development and/or sampling.

In addition, LaBella redeveloped two of the existing permanent wells within the central portion of the Site (MW3 and MW5) in order to confirm previous sampling results, evaluate whether trends in contaminant concentrations were evident, and evaluate the potential for off-site migration of contamination. The locations of the wells are shown on Figure 5.

Two groundwater samples were obtained from the new wells on the southern portion of the Site for analysis of TCL VOCs, TCL SVOCs, TCL pesticides, TAL metals, sulfate and sulfide. In addition, one groundwater sample was obtained from a permanent well (MW5) for analysis of TCL pesticides, TAL metals, sulfate and sulfide. The groundwater sample collected from MW3 was only submitted for analysis of TCL pesticides due to very limited volume in the well. Lastly, one trip blank was submitted for analysis of VOCs for Quality Assurance/Quality Control (QA/QC) purposes.

Consistent with previous investigatory activities at the Site, groundwater recharge rates were very slow, thus prohibiting collection of samples from TPMW1, TPMW2, TPMW4, MW1 and MW12. Furthermore, the volume of water in MW3 was very limited so that only TCL Pesticides were sampled from this well.

2.5 Regulated Building Materials

LaBella completed a pre-demolition inspection that included the following tasks:

A. Visual inspection of the building.
B. Bulk sampling of suspect asbestos-containing materials (ACM) from the interior and exterior of the building, including the roof. Suspect ACM were collected in the field and submitted for laboratory analysis
C. Submitted ACM samples were analyzed using Polarized Light Microscopy (PLM) analysis to determine the presence of asbestos.
D. Lead testing was completed with Lead Chek swabs.
E. Inspection of the building for the presence of fluorescent light fixtures.
F. Inspect for the presence of mercury-containing thermostats and light bulbs.
G. Collect and record site data sufficient to report approximate locations, condition and quantities of confirmed ACM. General locations of lead-based paint were recorded.
H. A final report was prepared for the Pre-Demolition Regulated Building Materials Assessment and is included in Appendix 3.
I. Prepare an asbestos abatement cost estimate.

3.0 Results

LaBella submitted eight surface soil samples, nine subsurface soil samples, two surface water samples and four groundwater samples for laboratory analysis to evaluate the surface and subsurface conditions in the areas previously identified. A copy of the laboratory analytical report is included in Appendix 2. The soil results were compared to the NYSDEC Part 375-6.8 and Commissioner's Policy CP-51Unrestricted, Commercial and Industrial Soil Cleanup Objectives (SCOs). The surface water and groundwater results were compared to the Class A and Class GA, respectively, NYSDEC Ambient Water Quality Standards and Guidance Values (TOGS 1.1.1 Table 1). The different media are discussed individually below.

3.1 Site Geology and Hydrogeology

The borings were advanced to 7.4 to 11 feet below grade before encountering direct-push equipment "refusal." Soils at the Site consisted primarily of sand and silt with some gravel identified in the borings.

Apparent saturated conditions were encountered at depths ranging from 8 to 11 feet below grade, although the fine-grained nature of the overburden makes estimating the elevation of the water table difficult.

3.2 Surface Soil

The 46 surface soil sample locations were screened using a portable X-ray Fluorescence (XRF) meter. X-ray Fluorescence is a technique for chemical compositional measurement in which X-rays of a known energy are directed towards a target or sample, causing the atoms within the material to emit "fluorescent" X-rays at energies characteristic of its elemental composition. The XRF field screening results are shown in Table 1. These screening results demonstrate relatively good correlation with the analytical laboratory results for the eight submitted samples. The samples with high to very high concentrations of metals in the screening results also have high to very high concentrations in the laboratory results. However, when

the concentrations are lower, the screening results tend to overestimate the laboratory results. This may be a result of the variability present within the soil matrix.

The screening results show:

- Arsenic
  - Screening results were above the SCOs in many instances. However, the laboratory results did not corroborate these findings in most cases.
  - The two samples (SS-24 and SS-28) with the highest screening results contained laboratory concentrations significantly above the Industrial Use SCOs.
- Copper
  - With the exception of SS-28, screening results for copper were below the Commercial Use SCOs for all samples and Unrestricted Use SCOs for most samples.
  - The screening results for SS-28 were very high (123,600 ppm) which was generally corroborated by a very high laboratory result of 51,800 ppm.
- Lead
  - With the exception of three samples, screening results for lead were below the Commercial Use SCOs for all samples, and were below Unrestricted Use SCOs for more than half the samples.
  - While the screening result for SS-40 was slightly above (less than two times) the Commercial Use SCO, the laboratory result was less than the SCO.
  - The screening results for SS-28 were high (2,919 ppm) which was generally corroborated by a laboratory result of 1,780 ppm.
- Zinc
  - The zinc results were relatively inconsistent, as demonstrated by the screening and laboratory results from SS-3, SS-6, SS-13, SS-29, SS-40, and SS-45. In each case, the screening result was above the Unrestricted Use SCO but the laboratory result was below the SCO.
  - The screening results for SS-28 were very high (66,100 ppm) which was generally corroborated by a very high laboratory result of 62,800 ppm.

The surface soil analytical results are summarized in Table 2 and showed:

- One TCL SVOC was detected in SS24 and two TCL SVOCs were detected in SS28 above Unrestricted SCOs. However, the concentrations were below the Commercial Use SCOs.
- Four TCL pesticides were detected in SS13 and SS24, and one TCL pesticide was detected in SS45 above Unrestricted SCOs. Only the concentration of alpha-chlordane in SS24 exceeded the Commercial Use SCOs, and this concentration also exceeded the Industrial Use SCOs. The remaining samples did not contain detectable concentrations of pesticides.
- Metals concentrations were below the Commercial Use SCOs in all samples except for SS24 and SS28.
- One TAL metal was detected in SS24 and three TAL metals were detected in SS28 above the Industrial Use SCOs. The material in SS28 was gray in color and was present in a slightly mounded area that paralleled the eastern property boundary.
- Leachable pH levels appear to be in the normal range for all of the surface soil samples.
- Sulfur levels appear to be elevated in the surface soil samples collected from the southern portion of the Site.

3.3 Subsurface Soil

While no elevated PID measurements were encountered, a sulfur odor was detected within B4, B5 and B6 ranging from 0 to 9 feet below grade. In addition, a strong sulfur odor was detected within groundwater samples collected from MW3, MW5 and TPMW3. No evidence of contamination was observed in any of the other borings/wells advanced throughout the site.

Based upon analytical subsurface soil results, summarized in Table 3, the following was identified:

- One TCL Pesticide was detected in B5, one TCL Pesticide was detected in B6 and three TCL Pesticides were detected in B7 above Unrestricted Use SCOs.
- One TAL Metal (arsenic) was detected in B5, B6 and B7 above the Industrial Use SCOs.
- Leachable pH levels appear to be in the normal range for a majority of the subsurface soil samples; however, it should be noted that a level of 4.6 and 5.6 S.U. were identified in B4 and B5, respectively.
- Sulfur levels appear to be elevated in the subsurface soil samples collected from B4, B5, B6 and B7.

3.4 Surface Water

LaBella measured pH at the bend in the Eastern Drainage ditch where the flow direction changes from north to east. The measurement was 7.17, which is consistent with historic measurements at this location.

LaBella measured pH in the North Lagoon, and the results were consistent with the NYSDEC's 2008 measurements and included:

- North side: 7.07
- Southeast corner: 7.26
- Southwest corner: 7.36

LaBella also collected surface water samples from the Eastern Boundary Ditch (SW-1) and the North Lagoon (SW-2). The results are summarized in Table 3.

Although the NYSDEC's SSIR concluded that the pesticide concentrations were increasing in the surface water in the North Lagoon, sample SW-2 collected in June 2012 did not contain detectable concentrations of pesticides. Additionally, pesticides were not detected in the sample collected from the Eastern Boundary Ditch, and VOCs and SVOCs were also not detected in either sample. Three metals (aluminum, iron, and manganese) were detected in the Eastern Boundary Ditch sample at concentrations above the standards. Sulfate levels appear to be elevated in the surface water samples collected from SW1 and SW2.

Relative to 2003 and 2008 results, the metals concentrations in the North Lagoon surface water sample increased for a number of analytes and decreased for others. However, only four analytes (aluminum, iron, manganese, and sulfide) were detected at concentrations above the standards.

The increasing trend in a number of analytes in the North Lagoon surface water sample may be Site related or may be weather dependent. Because many of the other Site features which had previously contained surface water were dry during this event, it is possible that the increased concentrations were

due in part to a concentration of analytes via evaporation. Future precipitation events could potentially dilute these concentrations. In either case, only two analytes were detected at concentrations above the standards.

3.5 Groundwater

Based upon analytical groundwater results, summarized in Table 5, the following was identified:

- Nine TCL VOCs and one TCL SVOC were detected in TPMW3 above NYSDEC regulatory criteria.
- Fourteen TAL metals were detected in MW5 and TPMW3, and eight TAL metals were detected in TPMW5 above NYSDEC regulatory criteria.
- Sulfate levels appear to be elevated in the groundwater samples collected from MW5, TPMW3 and TPMW5, and sulfide concentrations in TPMW3 and TPMW5 exceeded the regulatory values.

3.6 Pre-Demolition Regulated Building Materials Assessment

The Pre-Demolition Regulated Building Materials Assessment report in Appendix 3 shows the following:

- The roofing material and window glazing compound contain asbestos.
- Potentially PCB containing and mercury containing materials were not observed in the building.
- Wood components of door and window frames were found to contain lead.

4.0 Discussion of Findings

Based on the results of the investigation, LaBella has developed the following conclusions for the characterized media:

- Analytical data above regulatory criteria pertaining to surface and subsurface soils and associated elevated sulfur levels appear to be primarily concentrated on the southern portion of the Site. The presence of sulfur throughout portions of the Site has likely impacted the pH of surface water at the Site.
- With the exception of two surface soil samples and three subsurface soil sample, the concentrations of contaminants in on-site soils were less than the Commercial Use SCOs. The highest concentrations of metals were detected in one corner of the southern portion of the Site.
- The discolored soil in surface soil sample SS28 had visual characteristics of waste material, and the very high concentrations of arsenic, copper, lead, and zinc in this sample indicate that removal of this mounded area will be required prior to redevelopment of the Site.
- With the exception of one lead concentration (in SS-40) that was above Unrestricted SCOs but less than Commercial Use SCOs, the northern portion of the Site appears to have no impacts from the manufacturing and waste handling operations that historically occurred in the south and central portions of the property. The cause for the detection of lead in one sample is not known, but the lack of other Site contaminants in this sample suggests that concern regarding lead in this sample is not warranted.
- Elevated levels of TAL metals and sulfate were identified in both surface water samples collected

and submitted for laboratory analysis. Relative to 2003 and 2008 results, the metals concentrations in the North Lagoon surface water sample increased for a number of analytes and decreased for others. However, only four analytes (aluminum, iron, manganese, and sulfide) were detected at concentrations above the standards.

The increasing trend in a number of analytes in the North Lagoon surface water sample may be Site related or may be weather dependent. Because many of the other Site features which had previously contained surface water were dry during this event, it is possible that the increased concentrations were due in part to a concentration of analytes via evaporation. Future precipitation events could potentially dilute these concentrations. In either case, only two analytes were detected at concentrations above the standards.

- Analytical data above regulatory criteria pertaining to the groundwater and associated elevated sulfate levels were identified in each of the groundwater wells sampled at the Site. With the exception of the sample collected from TPMW3, these results are generally consistent with previous sampling results. Slightly elevated concentrations of petroleum-related compounds were detected in the sample collected from TPMW3, which is consistent with its location in the area of the former storage tank.

5.0 Conclusions

Based on the findings of this Phase II ESA as well as previous studies at the Site, the southern portion of the Site appears to be most suitable for commercial or industrial redevelopment. The soil types are conducive to development and the lack of significant contamination will allow for redevelopment with a reasonable effort. Because waste materials remain in the Filled Lagoon and the South Lagoon, the central portion of the Site cannot be redeveloped without considerable effort. These contaminated materials likely do not have the structural integrity to support construction of any kind, so excavation and off-site disposal would be required to develop this portion of the property. Development of the northern portion of the property is possible due to the lack of waste materials in this area, although access may be difficult because of the presence of the waste materials in the central portion of the site. To facilitate access to the northern portion of the property, the gravel roadway constructed during the 2000 remedial activities could be utilized and expanded.

One action necessary to enable redevelopment will be the demolition of the existing structure. The presence of asbestos was confirmed in the building, so the roofing and window glazing materials will need to be handled accordingly. Table 6 provides a cost estimate of approximately $55,000 for the removal of the asbestos from the building.

Additionally, remediation of soils in the vicinity of SS24 and SS28 will be necessary to facilitate redevelopment of the southern portion of the Site. The costs to complete this action have been estimated at $50,000, as shown in Table 7. This estimate includes the removal of soil from an area 40 by 20 feet (to include surface soil sample locations SS24 and SS28 and subsurface sample B6) to a depth of ten feet (based on the elevated arsenic concentration in sample B6, collected from 6.5 to 8.5 feet below grade) for off-site disposal. However, these costs are conservative and the volume of removal may be substantially reduced through the completion of a delineation program. Additionally, the B6 sample results were substantially lower than the concentrations at the surface (samples SS24 and SS28) and the NYSDEC may not require removal of this material. When the remedial project is being planned, the NYSDEC should be consulted on the need for the removal of soil deeper than two feet.

The results of this Phase II ESA corroborate the findings and conclusions of the NYSDEC's 2009 SSIR, and include:

- Due to the presence of contamination and waste at this Site in the center portion of the Site, any redevelopment activities should be restricted to the southern portion of the Site. The northern portion of the Site may be developed, although expansion of the gravel road in the central portion of the Site would be necessary. A small gravel road currently exists in this area and would need to be expanded to support commercial or industrial use on the northern portion of the Site. Figure 7 provides an illustration of the conceptual redevelopment areas.
- Property use should be restricted to commercial or industrial use.
    - Because concentrations of analytes above the Unrestricted Use SCOs were found in a number of locations throughout the Site, residential use of the property does not appear to be appropriate. The costs to remediate the Site to allow residential uses would be prohibitive.
    - Commercial and industrial uses of the Site could include:
        - Conforming to the area's agriculturally based economy, the Site's best use appears most likely related to agriculture.
        - Such uses may include:
            - Equipment sales and repair
            - Greenhouse
            - Food processing
            - Farm-related retail sales (fertilizers, pesticides, etc.)
            - Cold storage
            - Dry storage
        - Another possible commercial use includes self-storage warehouses
        - The site could also be used for light industry, such as:
            - A machine shop
            - Auto or small engine repair
- Institutional controls should be placed on the property to include:
    - No subsurface activities should take place in the Filled and South Lagoons as waste is still present at these locations, and the geotechnical nature of the waste materials may not support development of these areas if the waste is left in place. If this material must be removed, off-site disposal will be required.
    - If excavation is necessary at the Site, excavated materials must be properly handled in accordance with a Soils Management Plan, such as the one contained in the SSIR.
    - Although current results do not indicate a significant issue, relatively recent NYSDEC sampling indicated that the pH of surface water has been low. Direct contact with low pH and contaminated surface water at the Site should be avoided.
    - Groundwater underlying the Site should not be utilized as a source of potable or process water, without necessary water quality treatment as determined by the Niagara County Health Department.

6.0 Action Plan

The following presents a step-by-step approach for advancing potential redevelopment of the Site.

Action 1 – Obtain Remediation Funding

The Town and County should jointly pursue funding to complete the remediation of the area of SS24 and SS28 and the removal of asbestos from the building. The NYSDEC and/or USEPA may have emergency removal funds available to perform the required work. There is no cost associated with pursuing funding, and it is expected that this task will take up to six months.

Action 2 – Complete Remedial Actions

Following successful completion of Action 1, the agency (NYSDEC or USEPA) supplying the remediation funds should complete the asbestos abatement in the extant structure and the removal of the contaminated soil in the area of SS24 and SS28. The estimated cost of this action is $105,000. Upon initiation, this task is expected to take one to two months.

Action 3 – Develop Site Use Restrictions and Complete Foreclosure

Niagara County should add site use restrictions to the property deed that would restrict site reuse to commercial or industrial uses, prohibit the use of groundwater at the site as a source of potable water, and require the use of a Soils Management Plan if any contamination is found at the site in the future. Niagara County could complete foreclosure on this tax delinquent property and offer the property for sale at the tax foreclosure auction. This Phase II ESA report should be made available to perspective bidders.

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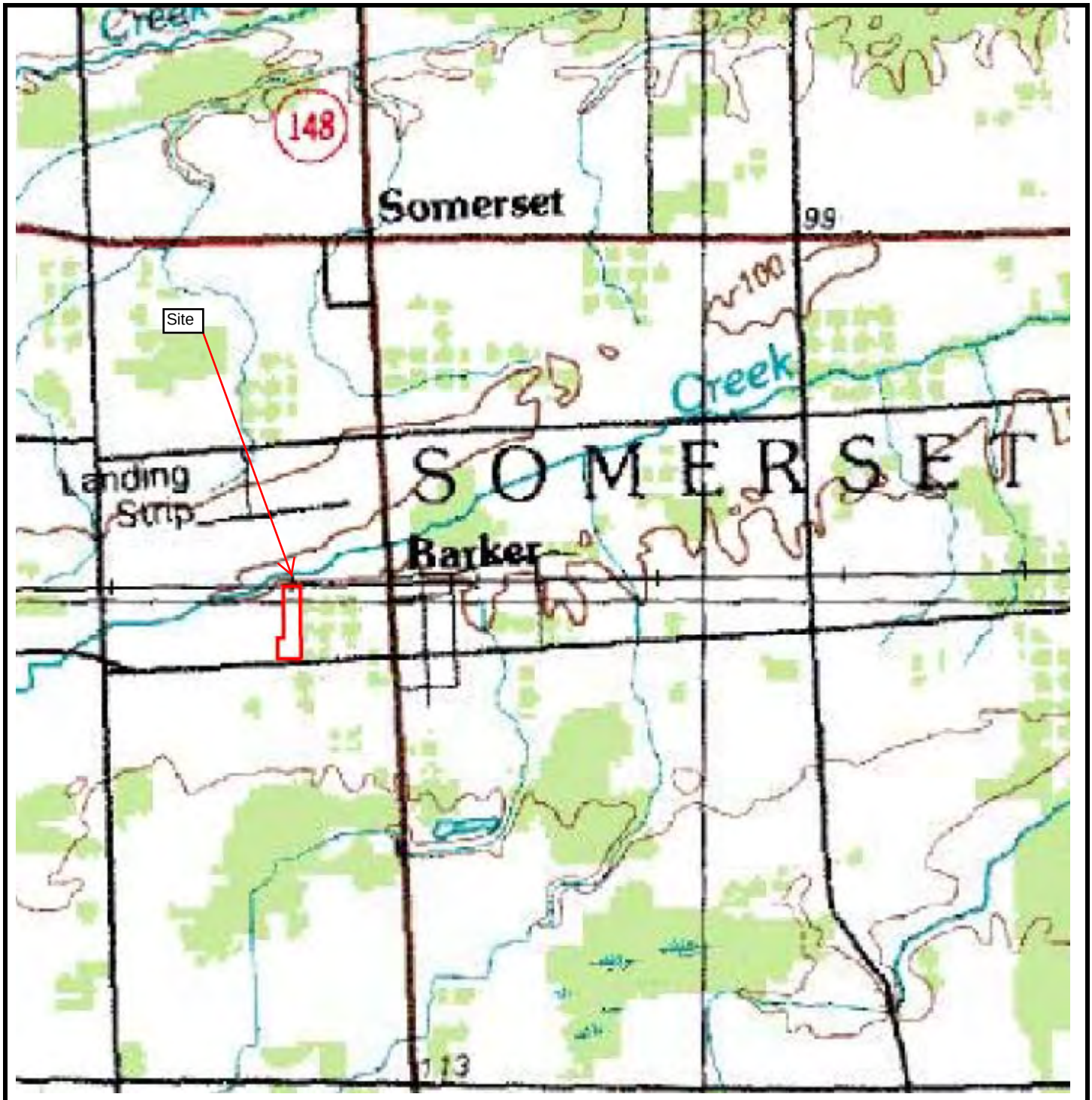
Buffalo, New York 14202

Figures



N

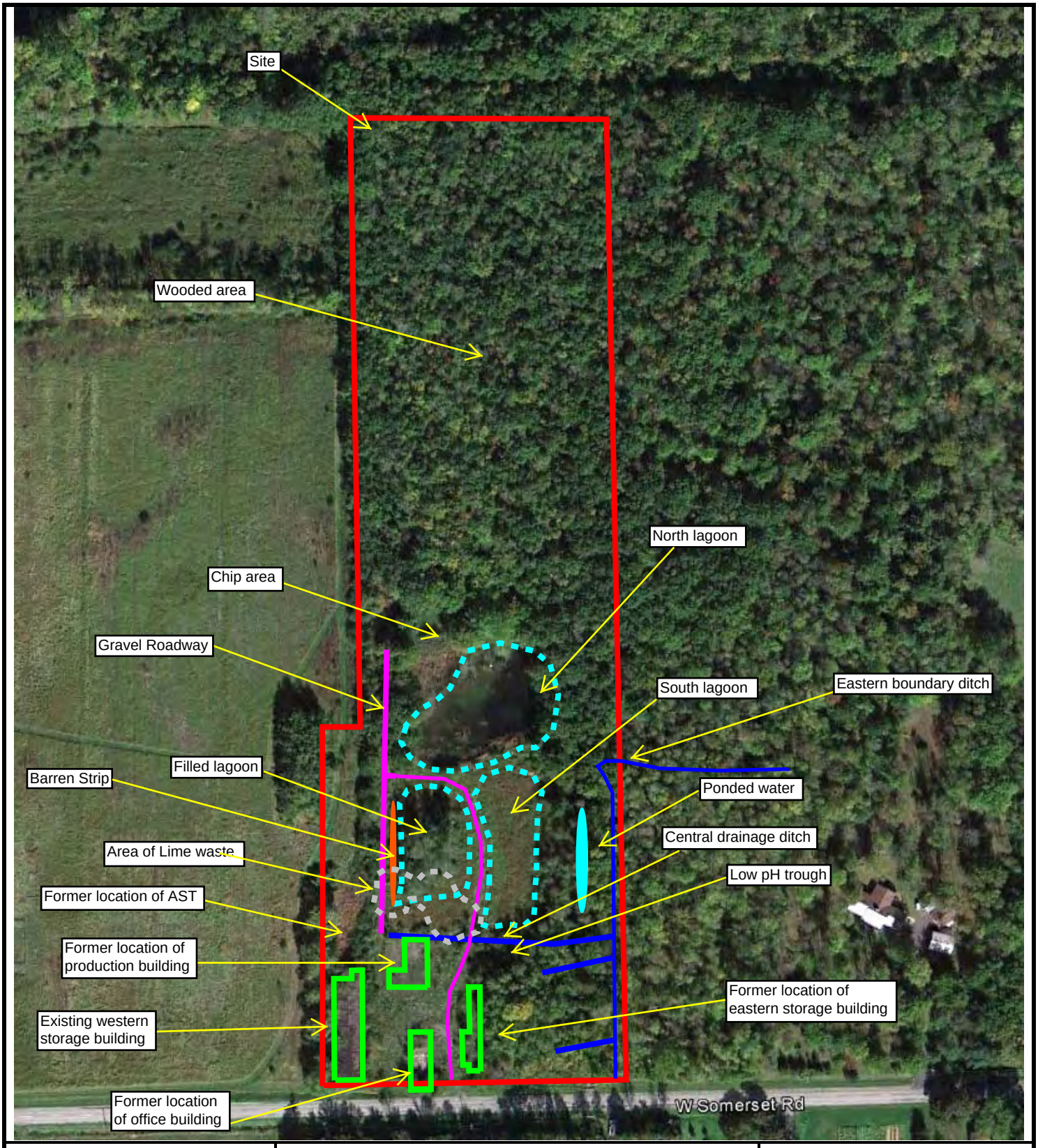
NOT TO SCALE

FIGURE 1
SITE LOCATION MAP

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436



N

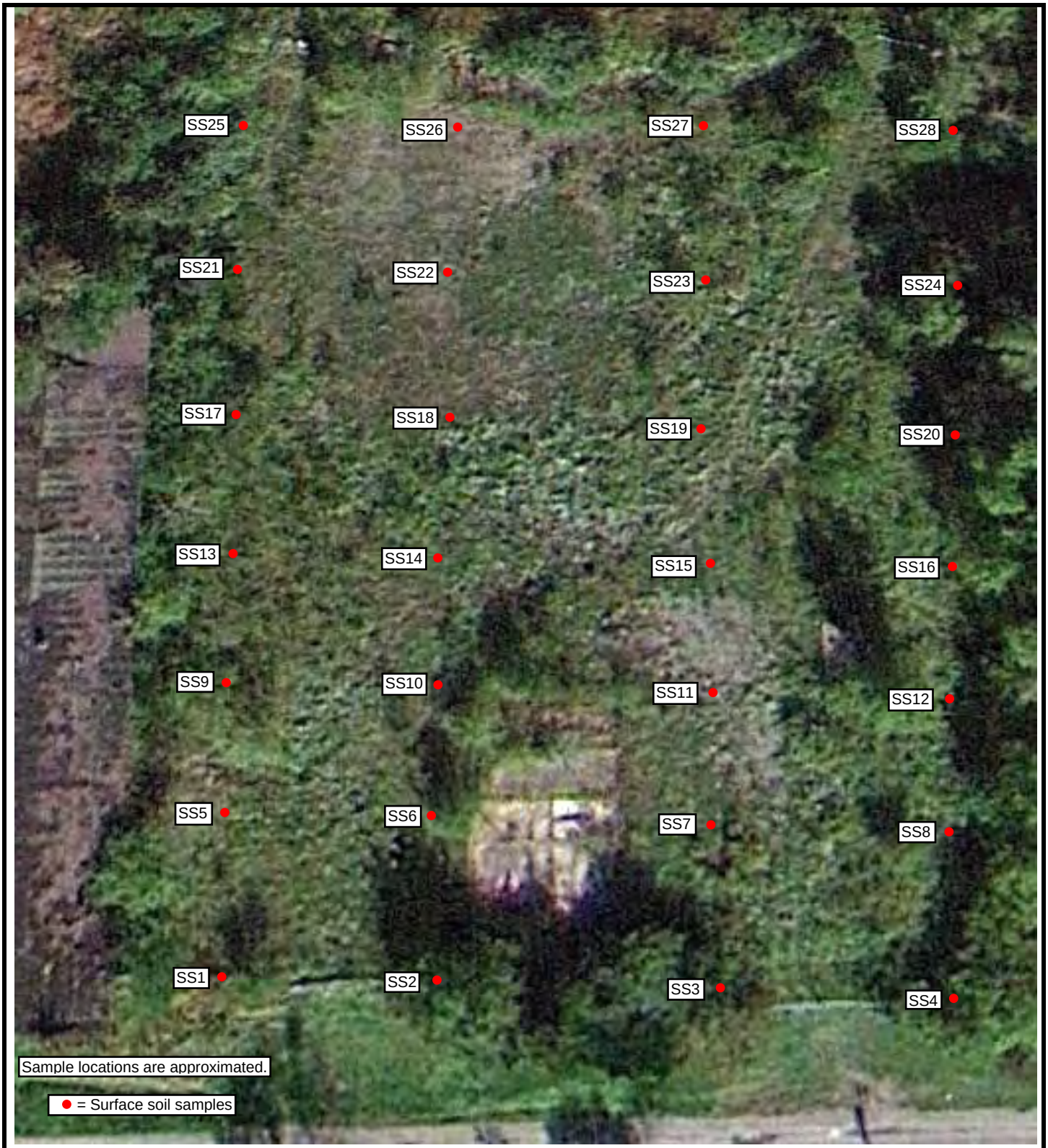
Not To Scale

FIGURE 2
HISTORIC LOCATION MAP

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436



N

Not To Scale

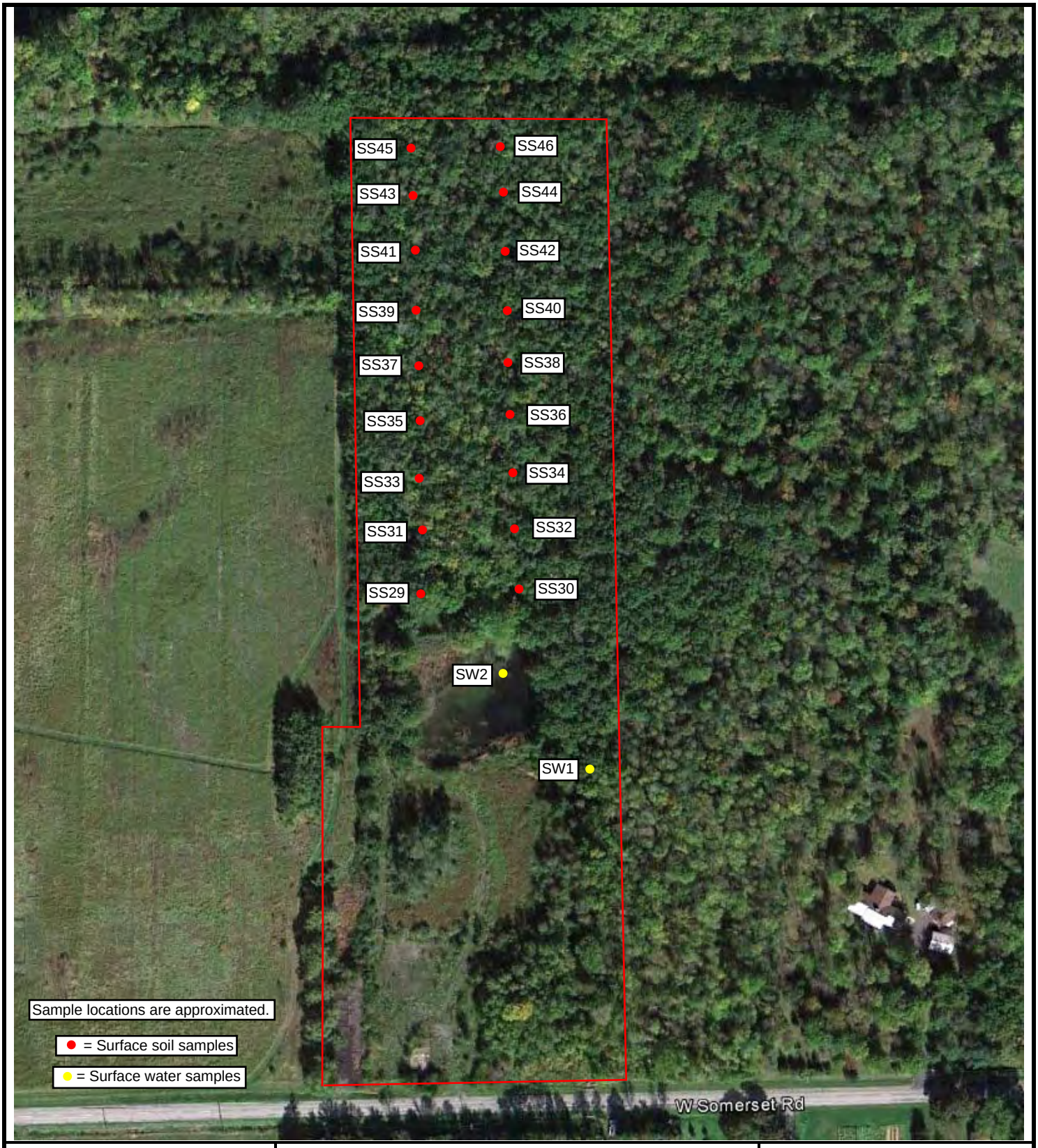
FIGURE 3

SURFACE SOIL LOCATIONS-SOUTHERN PORTION OF SITE

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436



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Not To Scale

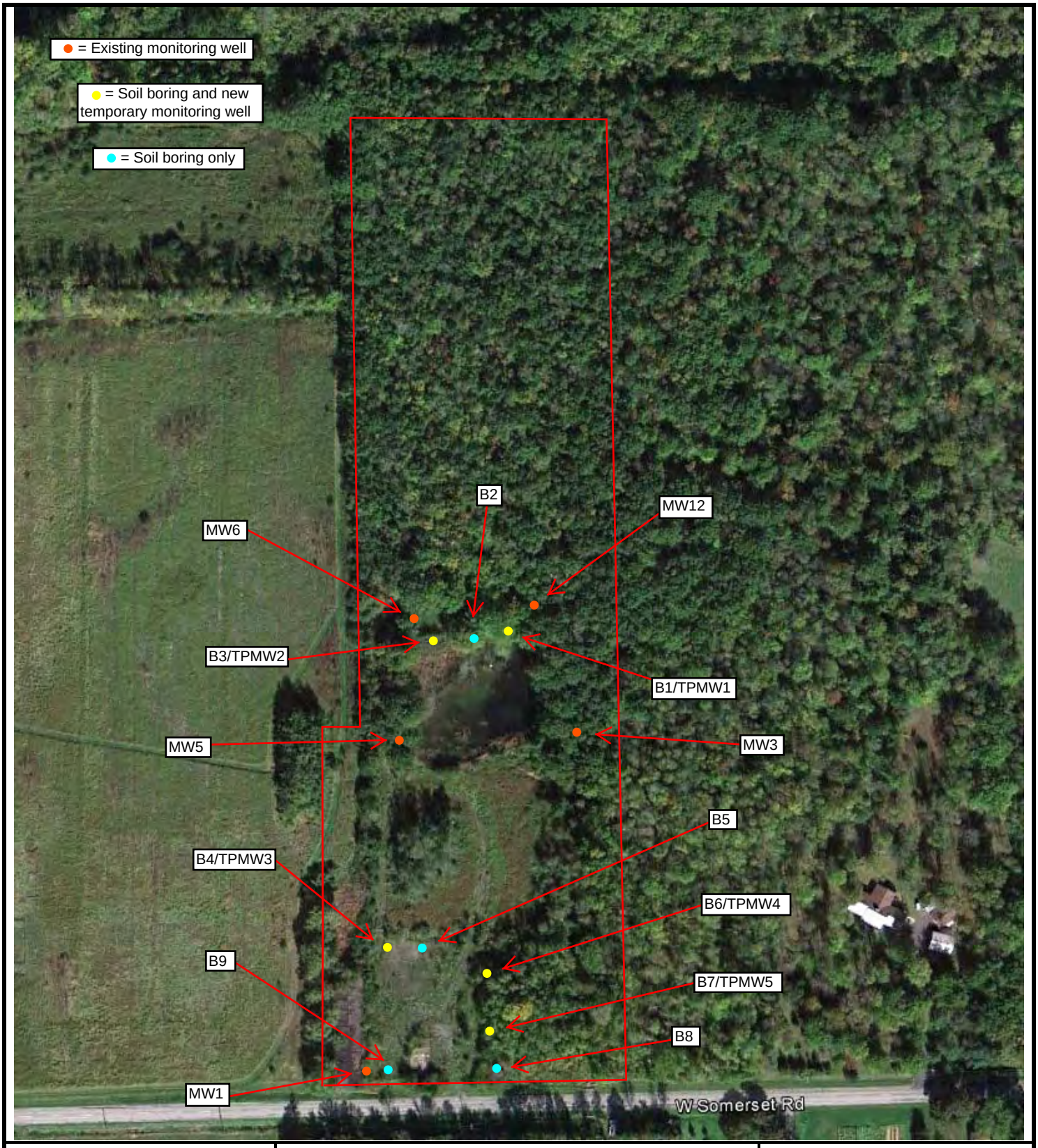
FIGURE 4

SURFACE SOIL AND WATER SAMPLE LOCATIONS-CENTRAL AND NORTHERN PORTIONS OF SITE

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436



N

Not To Scale

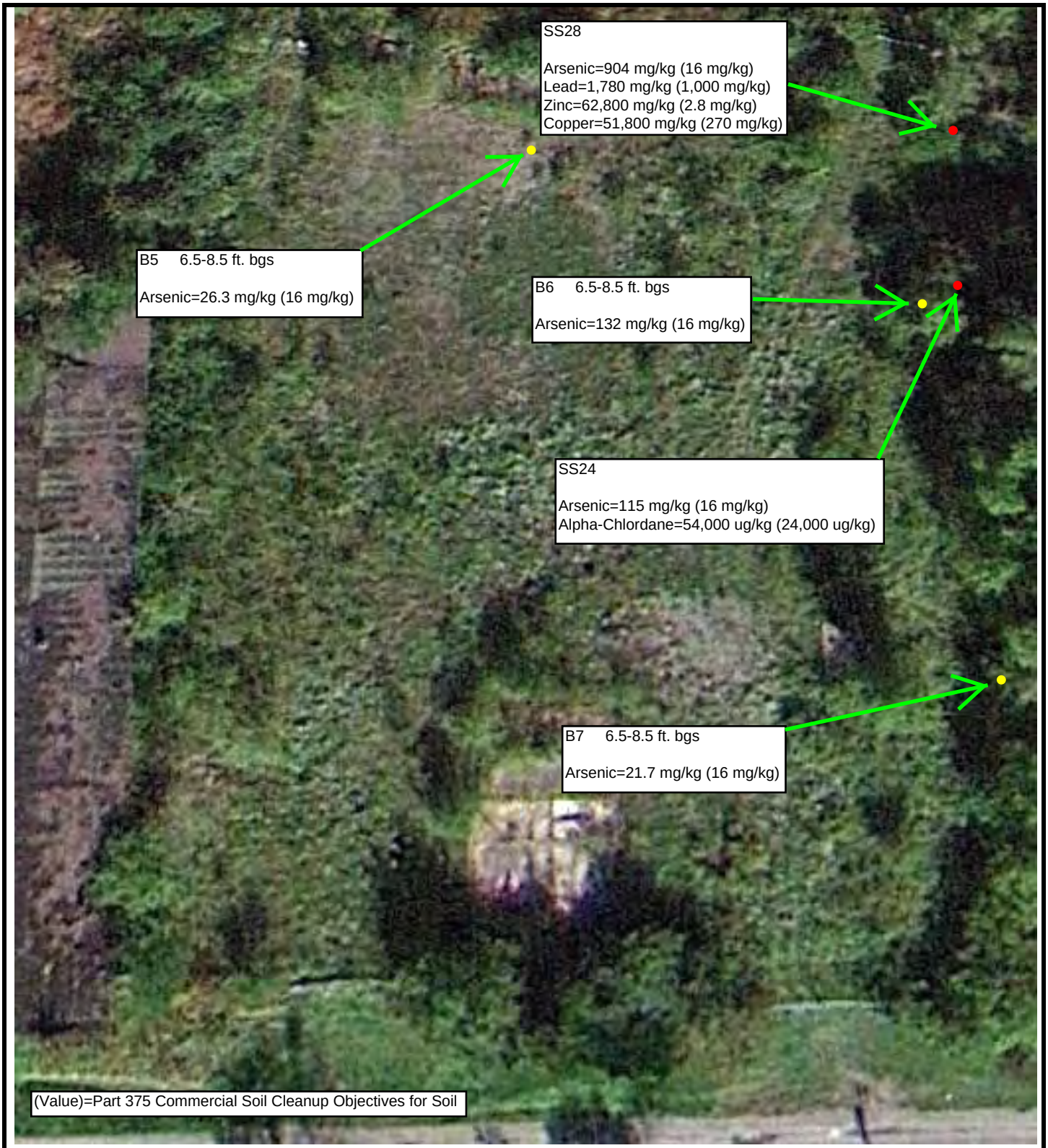
FIGURE 5

SUBSURFACE SOIL AND GROUNDWATER SAMPLE LOCATIONS

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436



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Not To Scale

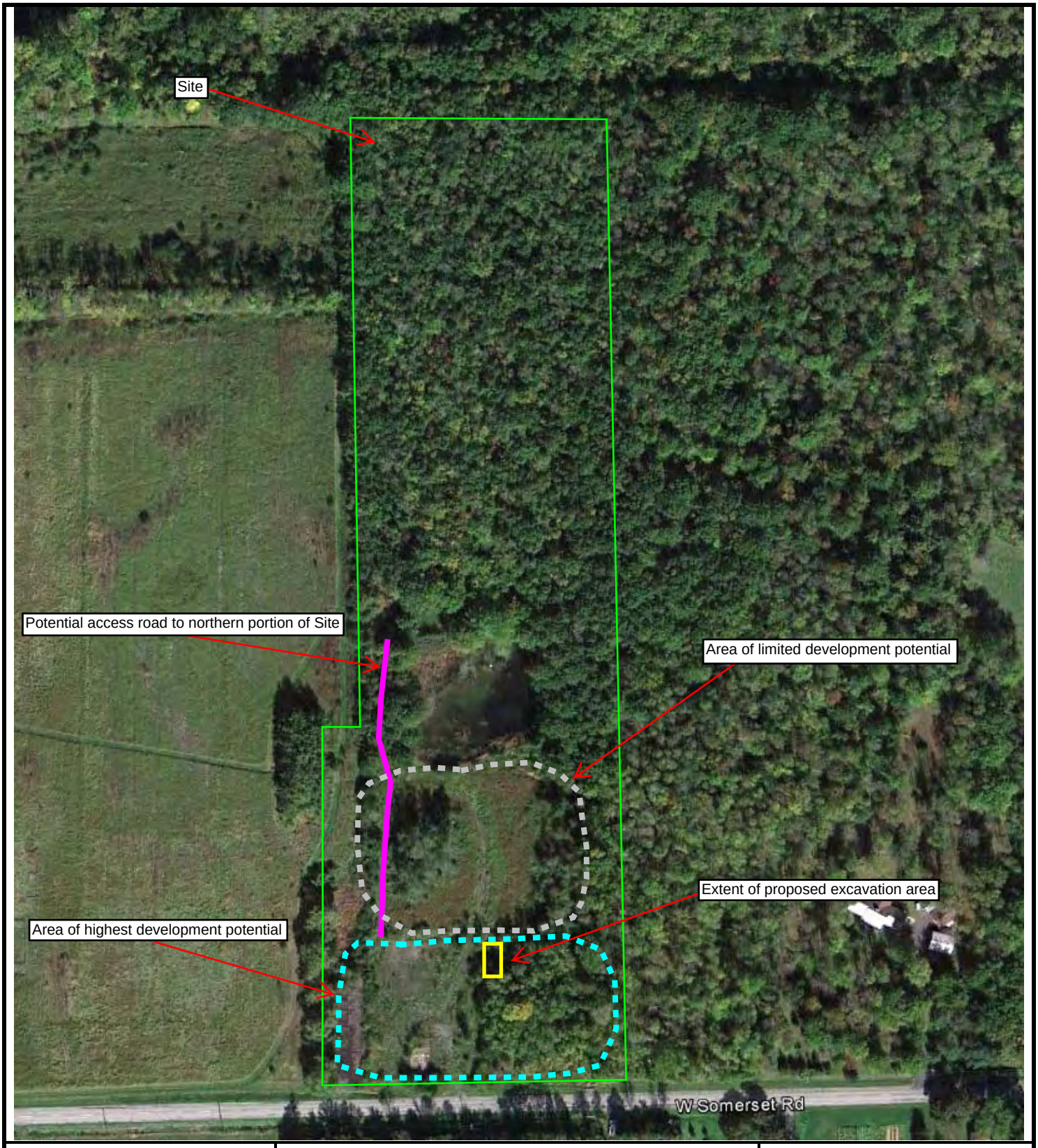
FIGURE 6

SOIL EXCEEDANCES ABOVE COMMERCIAL USE STANDARDS

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436



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Not To Scale

FIGURE 7

CONCEPTUAL REDEVELOPMENT AREAS

Barker Chemical
8473 West Somerset Road
Barker (Town of Somerset), New York

LABELLA

PROJECT NO. 212436

LaBella Associates, P.C.
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Tables

Table 1
Surface Soil Screening Results

Sample ID	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12
Arsenic	38	70	ND	ND	30	175	27	ND	48	ND	42	81
Copper	15	41	ND	29	24	148	19	16	54	20	30	62
Lead	78	190	ND	64	102	132	71	85	113	61	77	72
Zinc	53	189	1,001	155	142	173	108	173	136	86	133	188

Sample ID	SS13	SS14	SS15	SS16	SS17	SS18	SS19	SS20	SS21	SS22	SS23	SS24
Arsenic	97	ND	23	ND	20	ND	21	124	112	ND	ND	429
Copper	103	35	34	ND	33	27	40	155	68	28	28	361
Lead	201	64	37	39	39	57	53	177	104	49	43	468
Zinc	353	143	55	135	97	120	126	368	116	253	152	364

Sample ID	SS25	SS26	SS27	SS28	SS29	SS30	SS31	SS32	SS33	SS34	SS35	SS36
Arsenic	35	ND	ND	2,369	25	34	18	ND	17	ND	ND	ND
Copper	45	25	19	12,360,000	32	92	25	26	24	36	21	20
Lead	93	47	55	2,919	42	43	68	60	79	31	35	48
Zinc	222	130	108	6,610,000	175	179	104	104	96	74	154	93

Sample ID	SS37	SS38	SS39	SS40	SS41	SS42	SS43	SS44	SS45	SS46
Arsenic	ND	ND	ND	ND	ND	ND	22	28	21	ND
Copper	23	24	31	20	11	17	23	ND	37	21
Lead	50	46	57	1,151	53	36	59	33	67	50
Zinc	90	92	150	140	84	104	125	74	212	100

Notes:

ND=Not detected

All measurements in parts per million

All samples collected and screened on June 6, 2012.

Table 2
Surface Soil Testing Results

Sample ID	SS3	SS6	SS13	SS24	SS28	SS29	SS40	SS45	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Commercial Soil Cleanup Objectives	Part 375 Industrial Soil Cleanup Objectives
Date	6/13/2012	6/13/2012	6/13/2012	6/13/2012	6/13/2012	6/13/2012	6/13/2012	6/13/2012			
TCL SVOCs by USEPA SW-846 Method 8270 (ug/kg)											
Acenaphthylene	ND	ND	ND	ND	120	ND	ND	ND	100,000	500,000	1,000,000
Hexachlorobenzene	ND	ND	ND	150	ND	ND	ND	ND	330	6,000	12,000
Pentachlorophenol	ND	ND	ND	1,400	ND	ND	ND	ND	800	6,700	55,000
Phenanthrene	ND	ND	ND	330	250	ND	ND	ND	100,000	500,000	1,000,000
Anthracene	ND	ND	ND	210	130	ND	ND	ND	100,000	500,000	1,000,000
Di-n-butylphthalate	ND	ND	88	ND	ND	ND	ND	ND	100,000	NL	NL
Fluoranthene	ND	ND	ND	370	ND	ND	ND	ND	100,000	500,000	1,000,000
Pyrene	ND	ND	150	620	ND	ND	ND	140	100,000	500,000	1,000,000
Benzo(a)anthracene	ND	ND	86	330	310	ND	ND	ND	1,000	5,600	11,000
Chrysene	ND	ND	110	460	900	ND	ND	87	1,000	56,000	110,000
Benzo(b)fluoranthene	ND	ND	97	490	1,200	ND	ND	130	1,000	5,600	11,000
Benzo(k)fluoranthene	ND	ND	ND	160	410	ND	ND	ND	800	56,000	110,000
Benzo(a)pyrene	ND	ND	ND	350	240	ND	ND	ND	1,000	1,000	1,100
Indeno(1,2,3-cd)pyrene	ND	ND	ND	250	630	ND	ND	ND	500	5,600	11,000
Dibenzo(a,h)anthracene	ND	ND	ND	97	200	ND	ND	ND	330	560	1,100
Benzo(g,h,i)perylene	ND	ND	ND	560	790	ND	ND	ND	100,000	500,000	1,000,000
TCL Pesticides by USEPA SW-846 Method 8081 (ug/kg)											
Dieldrin	ND	ND	ND	560	ND	ND	ND	ND	5	1,400	2,800
4,4´-DDE	ND	ND	120	ND	ND	ND	ND	4	3.3	62,000	120,000
4,4´-DDD	ND	ND	280	ND	ND	ND	ND	ND	3.3	92,000	180,000
4,4´-DDT	ND	ND	100	2,000	ND	ND	ND	3	3.3	47,000	94,000
Alpha-Chlordane	ND	ND	320	**54,000**	ND	ND	ND	ND	94	24,000	47,000
Gamma-Chlordane	ND	ND	310	52,000	ND	ND	ND	ND	540	NL	NL
TAL Metals by USEPA SW-846 Method 6010/7471 (mg/kg)											
Aluminum	1,530	1,630	2,330	6,150	8,330	11,000	10,600	10,300	10,000	NL	NL
Antimony	ND	ND	ND	0.9	31.6	ND	2.9	ND	12	NL	NL
Arsenic	4.6	5.6	15.9	**115**	**904**	6.2	4.9	5.9	13	16	16
Barium	8.5	9.5	17.4	155	1,420	71.9	96.1	103	350	400	10,000
Beryllium	0.14	0.14	0.16	0.23	0.02	0.33	0.25	0.35	7.2	590	2,700
Cadmium	ND	ND	ND	0.43	7.2	0.29	0.15	0.2	2.5	9.3	60
Calcium	170,000	176,000	192,000	10,400	23,900	4,930	1,720	1,710	NL	NL	NL
Chromium	2.6	2.8	4.1	33.6	62.6	12.1	13.4	12.3	1*/30*	400*/1,500*	800*/6,800*
Cobalt	1.6	1.7	1.4	5.3	5.6	6.3	4.4	5	30	NL	NL
Copper	5.5	5.4	27.2	234	**51,800**	31.1	16.8	21.2	50	270	10,000
Iron	6,080	6,530	5,470	22,100	116,000	143,000	13,200	14,800	2,000	NL	NL
Lead	16	14.9	25.5	164	**1,780**	39.4	572	29.7	63	1,000	3,900
Magnesium	97,600	101,000	108,000	4,330	998	3,430	2,480	2,390	NL	NL	NL
Manganese	498	486	385	480	385	828	281	568	1,600	10,000	10,000
Nickel	2.8	2.9	3	15.7	69.8	11.7	10.8	12.8	30	310	10,000
Potassium	812	788	857	1,230	894	977	745	609	NL	NL	NL
Selenium	1.1	1.7	2.7	ND	ND	ND	ND	ND	3.9	1,500	6,800
Silver	ND	ND	ND	1.4	11.7	ND	ND	ND	2	1,500	6,800
Sodium	49	174	207	205	189	49	39.4	35.9	NL	NL	NL
Thallium	2.6	2.7	1.7	0.5	ND	0.9	ND	0.6	5	NL	NL
Vanadium	4	4.5	4.9	18.7	30.7	19.3	19.6	21.6	100	NL	NL
Zinc	29.2	25.6	56.6	191	**62,800**	102	95.6	73.6	109	10,000	10,000
Mercury	0.02	0.01	0.1	0.61	0.53	0.04	0.11	0.09	0.18	2.8	5.7
Leachable PH by USEPA SW-846 Method 9045 (S.U.)											
Leachable PH	8.3	8.3	8.2	7.3	6.6	7.2	6.9	6.7	NL	NL	NL
Sulfur by USEPA SW-846 Method 3050 (mg/kg)											
Sulfur	3,200	2,650	1,770	2,600	1,780	158	218	188	NL	NL	NL

Only detected analytes are shown.
ug/kg = micrograms per kilogram
mg/kg = milligrams per kilogram
S.U. = Standard Unit
ND = Not detected
NL = Not listed
x*/x* = hexavalent chromium/trivalent chromium
= Analyte detected above Unrestricted Soil Cleanup Objectives
Bold = Analyte detected above Commercial Soil Cleanup Objectives
Underlined = Analyte detected above Industrial Soil Cleanup Objectives

Table 3
Subsurface Soil Testing Results

Sample ID	B1	B2	B3	B4	B5	B6	B7	B8	B9	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Commercial Soil Cleanup Objectives	Part 375 Industrial Soil Cleanup Objectives
Depth	**8-10 ft. bg**	**8-10 ft bg**	**8-10 ft bg**	**7-9 ft. bg**	**6.5-8.5 ft. bg**	**6.5-8.5 ft. bg**	**6.5-8.5 ft. bg**	**5-7 ft. bg**	**5-7 ft. bg**			
Date	**6/14/2012**	**6/14/2012**	**6/14/2012**	**6/15/2012**	**6/15/2012**	**6/15/2012**	**6/15/2012**	**6/15/2012**	**6/15/2012**			
TCL SVOCs by USEPA SW-846 Method 8270 (ug/kg)												
Naphthalene	ND	ND	ND	150	ND	ND	ND	ND	ND	12,000	500,000	1,000,000
Phenanthrene	ND	ND	ND	ND	ND	ND	420	ND	ND	100,000	500,000	1,000,000
Anthracene	ND	ND	ND	ND	ND	ND	100	ND	ND	100,000	500,000	1,000,000
Di-n-butylphthalate	ND	ND	ND	ND	ND	74	ND	79	ND	100,000	NL	NL
Fluoranthene	ND	ND	ND	ND	ND	ND	310	ND	ND	100,000	500,000	1,000,000
Pyrene	ND	ND	ND	ND	ND	ND	580	ND	ND	100,000	500,000	1,000,000
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	270	ND	ND	1,000	5,600	11,000
Chrysene	ND	ND	ND	ND	ND	ND	270	ND	ND	1,000	56,000	110,000
Bis (2-ethylhexyl)phthalate	110	ND	ND	ND	ND	ND	ND	ND	ND	50,000	NL	NL
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	270	ND	ND	1,000	5,600	11,000
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	170	ND	ND	800	56,000	110,000
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	160	ND	ND	1,000	1,000	1,100
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	94	ND	ND	500	5,600	11,000
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND	110	ND	ND	100,00	500,000	1,000,000
TCL Pesticides by USEPA SW-846 Method 8081 (ug/kg)												
4,4´-DDE	ND	ND	ND	ND	ND	ND	9.1	ND	ND	3.3	62,000	120,000
4,4´-DDD	ND	ND	ND	ND	8.3	4.3	19	ND	ND	3.3	92,000	180,000
4,4´-DDT	ND	ND	ND	ND	ND	ND	26	ND	ND	3.3	47,000	94,000
TAL Metals by USEPA SW-846 Method 6010/7471 (mg/kg)												
Aluminum	6,280	6,670	6,190	6,600	8,250	6,810	2,720	7,710	7,830	10,000	NL	NL
Antimony	ND	0.55	ND	ND	ND	ND	ND	ND	ND	12	NL	NL
Arsenic	3.6	3	2.1	1.7	**26.3**	**132**	**21.7**	4	2.3	13	16	16
Barium	92.6	89	94.2	41.3	137	105	53.7	91.6	77	350	400	10,000
Beryllium	0.2	0.22	0.2	0.22	0.1	0.28	0.13	0.25	0.28	7.2	590	2,700
Cadmium	0.53	0.56	0.5	0.57	1.1	0.61	0.32	0.71	0.63	2.5	9.3	60
Calcium	39,800	41,000	42,500	4,810	2,760	7,250	160,000	39,300	41,900	NL	NL	NL
Chromium	9.6	9.9	8.5	7.7	62.4	10.1	6.3	10.5	11	1*/30*	400*/1,500*	800*/6,800*
Cobalt	6.6	6.5	6	6.9	5	5.6	2.6	6.8	7.6	30	NL	NL
Copper	20	13.9	14.3	12	16	50.5	26.1	31.9	10.9	50	270	10,000
Iron	14,100	14,500	13,000	11,300	9,170	14,900	11,300	16,500	15,700	2,000	NL	NL
Lead	3.7	3.4	2.9	3.2	8.6	28.1	69.3	4.5	4.1	63	1,000	3,900
Magnesium	7,890	7,510	6,870	2,220	2,920	3,270	84,100	6,460	11,000	NL	NL	NL
Manganese	696	716	647	190	110	166	698	734	708	1,600	10,000	10,000
Nickel	13	13.5	12.2	12.7	11.3	12.4	5.1	13.9	15.7	30	310	10,000
Potassium	999	1,080	937	628	993	625	998	1,020	1,240	NL	NL	NL
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.9	1,500	6,800
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	1,500	6,800
Sodium	94.4	97.5	97	52.2	60.5	56.7	234	93.1	151	NL	NL	NL
Thallium	0.6	1.1	0.36	0.39	0.33	0.26	3.6	1.1	0.94	5	NL	NL
Vanadium	14.5	14.6	13	13	63.8	15	7	16.5	15.1	100	NL	NL
Zinc	29.6	30.4	28.2	74.4	61.4	71.8	47.1	34	33.8	109	10,000	10,000
Mercury	ND	ND	ND	0.006	0.21	0.01	0.02	0.009	0.003	0.18	2.8	5.7
Leachable PH by USEPA SW-846 Method 9045 (S.U.)												
Leachable PH	8.4	8.8	8.6	4.6	5.6	7.5	7.7	8.5	8.4	NL	NL	NL
Sulfur by USEPA SW-846 Method 3050 (mg/kg)												
Sulfur	136	103	105	22,400	8,170	12,100	932	81.6	117	NL	NL	NL

Only detected analytes are shown.
ug/kg = micrograms per kilogram
mg/kg = micrograms per kilogram
S.U. = Standard Unit
ND = Not detected
NL = Not listed
x*/x* = hexavalent chromium/trivalent chromium
= Analyte detected above Unrestricted Soil Cleanup Objectives
Bold = Analyte detected above Commercial Soil Cleanup Objectives
Underlined = Analyte detected above Industrial Soil Cleanup Objectives

Table 4
Surface Water Testing Results

TCL VOCs by USEPA SW-846 Method 8260

No analytes were detected above the laboratory's method detection limits.

TCL SVOCs by USEPA SW-846 Method 8270

No analytes were detected above the laboratory's method detection limits.

TCL Pesticides by USEPA SW-846 Method 8081

No analytes were detected above the laboratory's method detection limits.

Sample ID	SW1	SW2	NYSDEC Ambient Water Quality Standards and Guidance Values
Location	Drainage ditch proximate MW3	North side of the north lagoon	
Date	6/13/2012	6/13/2012	
TAL Metals by USEPA SW-846 Method 6010/7471 (ug/L)			
Aluminum	340	4,200	100
Antimony	ND	ND	3
Arsenic	ND	4.3	50
Barium	93.1	56.9	1,000
Beryllium	ND	ND	3
Cadmium	ND	ND	5
Calcium	95,800	81,400	NL
Chromium	0.67	6.6	50
Cobalt	0.76	3.4	5
Copper	5.4	12.7	200
Iron	1,090	6,490	300
Lead	ND	6.3	50
Magnesium	18,800	24,400	35,000
Manganese	430	694	300
Nickel	1.5	8.2	100
Potassium	4,650	4,500	NL
Selenium	ND	ND	10
Silver	ND	ND	50
Sodium	44,100	4,180	NL
Thallium	ND	ND	0.5
Vanadium	ND	7.8	14
Zinc	7.6	41.8	2,000
Mercury	ND	ND	0.7
Sulfate by USEPA Method 300 (mg/L)			
Sulfate	92	210	250
Sulfide by USEPA Method 4500 (mg/L)			
Sulfide	ND	0.4	0.05

Only detected analytes are shown.
ug/L = micrograms per liter
mg/L = milligrams per liter
ND = Not detected
NL = Not listed
= Analyte detected above Class A Surface Water NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Table 1, Ambient Water Quality Standards and Guidance Values (6 NYCRR Parts 700-706 Water Quality Regulations effective June 1998)

Table 5
Groundwater Testing Results

Sample ID	MW3	MW5	TPMW3	TPMW5	NYSDEC Ambient Water Quality Standards and Guidance Values
Date	6/15/2012	6/15/2012	6/15/2012	6/15/2012	
TCL VOCs by USEPA SW-846 Method 8260 (ug/L)					
Acetone	NA	NA	ND	3	50
Carbon disulfide	NA	NA	14	ND	NL
1,2-Dichloropropene	NA	NA	2.7	ND	NL
Benzene	NA	NA	1.2	ND	1
1,2-Dichloropropane	NA	NA	13	ND	1
Ethylbenzene	NA	NA	34	ND	5
m,p-Xylene	NA	NA	25	ND	5
o-Xylene	NA	NA	6.2	ND	5
Xylene (Total)	NA	NA	31	ND	5
Isopropylbenzene	NA	NA	1	ND	5
n-Propylbenzene	NA	NA	2.4	ND	5
1,3,5-Trimethylbenzene	NA	NA	5.4	ND	5
1,2,4-Trimethylbenzene	NA	NA	19	ND	5
Naphthalene	NA	NA	610	9.9	10
TCL SVOCs by USEPA SW-846 Method 8270 (ug/L)					
2,4-Dichlorophenol	NA	NA	1.9	ND	5
Naphthalene	NA	NA	190	ND	10
2-Methylnaphthalene	NA	NA	13	ND	NL
Acenaphthene	NA	NA	6	ND	20
Dibenzofuran	NA	NA	2.9	ND	NL
Fluorene	NA	NA	2.5	ND	50
Phenanthrene	NA	NA	2.2	ND	50
Carbazole	NA	NA	2.3	ND	NL
TCL Pesticides by USEPA SW-846 Method 8081 (ug/L)					
Alpha-BHC	ND	ND	0.1	ND	0.01
Heptachlor epoxide	ND	ND	0.11	ND	0.03
Endosulfan II	ND	ND	0.18	ND	NL
4,4´-DDE	ND	ND	0.25	ND	0.2
TAL Metals by USEPA SW-846 Method 6010/7471 (ug/L)					
Aluminum	NA	275,000	236,000	32,100	NL
Antimony	NA	ND	ND	ND	3
Arsenic	NA	202	103	90.4	25
Barium	NA	2,120	782	779	1,000
Beryllium	NA	9.6	12.7	1.6	3
Cadmium	NA	2.6	21.4	ND	5
Calcium	NA	5,760,000	655,000	714,000	NL
Chromium	NA	460	247	68	50
Cobalt	NA	216	61.8	34.4	NL
Copper	NA	953	868	299	200
Iron	NA	617,000	892,000	59,400	300
Lead	NA	127	125	292	25
Magnesium	NA	666,000	185,000	150,000	35,000
Manganese	NA	29,200	25,200	8,230	300
Nickel	NA	466	158	59.7	100
Potassium	NA	28,800	49,600	11,000	NL
Selenium	NA	45.8	15.7	ND	10
Silver	NA	ND	ND	ND	50
Sodium	NA	159,000	31,900	19,700	20,000
Thallium	NA	27.9	26	7.5	0.5
Vanadium	NA	508	371	63.5	NL
Zinc	NA	954	1,140	233	2,000
Mercury	NA	1.7	0.81	0.24	0.7
Sulfate by USEPA Method 300 (mg/L)					
Sulfate	NA	1,700	3,400	520	250
Sulfide by USEPA Method 4500 (mg/L)					
Sulfide	NA	0.04	2.1	0.53	0.05

Only detected analytes are shown.
ug/L = micrograms per liter
mg/L = milligrams per liter
ND = Not detected
NL = Not listed
NA = Not analyzed
= Analyte detected above Class GW NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Table 1, Ambient Water Quality Standards and Guidance Values (6 NYCRR Parts 700-706 Water Quality Regulations effective June 1998)

Table 6 PROJECT #212031

Barker Chemical
8473 West Somerset Road Barker, NY
Preliminary Opinion of Probable Removal Cost *

August 7, 2012

SCOPE OF WORK	Unit	Quantity	Cost per Unit	Total
Exterior				
Asbestos-Containing Roofing Materials	SF	5,680	$7.00	$39,760.00
Asbestos-Containing Window Glazing Compound	LF	80	$20.00	$1,600.00
SUB-TOTAL				**$41,360.00**
Project & Air Monitoring Services	Per Day	5	$425.00	$2,125.00
SUB-TOTAL				**$43,485.00**
			25% Contingency	**$10,871.25**
			TOTAL	**$54,356.25**

*** For Budgetary purposes only.**

Final costs will be dependent on conditions of approved site-specific variances, construction schedule, etc.

LABELLA

Table 7

Soil Remediation Cost Estimate
Assumptions and Estimated Cost

Assumptions:	
Estimated Area of removal (sq. ft.)	800
Estimated Depth of removal	10
Cubic Yards of Soil Requiring Excavation	300
Cubic Yards of Soil Excavated but Reused on-Site	0
Cubic Yards of Soil - Haz. Waste Pretreat	0
Cubic Yards of Soil - Haz. Waste Regular	0
Cubic Yards of Soil - Non-Haz.	300
Tons of Soil - Haz. Waste Pretreat	0
Tons of Soil - Haz. Waste Regular	0
Tons of Soil - Non-Haz.	480
Gallons of Groundwater Requiring Dewatering	0

Item	Estimated Quantity		Unit Cost		Estimated Total
Subcontractor					
Mob/Demob	1		Lump Sum		$2,500
Decon Area	1		Lump Sum		$500
Odor Suppression	0		Lump Sum		$500
Asphalt Removal & Disposal	0	sq. ft.	$2.25	/sq. ft.	$0
Concrete Removal & Disposal	0	sq. ft.	$3.00	/sq. ft.	$0
Soil Excavation Work	300	cy	$6.50	/cy	$1,950
Soil Loading	480	tons	$3	/ton	$1,440
Pretreat Haz. Waste Soil T&D	0	tons	$350	/ton	$0
Regular Haz. Waste Soil T&D	0	tons	$170	/ton	$0
Non-Haz. Soil T&D	480	tons	$40	/ton	$19,200
Septic System		LS	$50,000	each	$0
Backfill	300	cy	$23	/cy	$6,900
Asphalt Replacement	0	sq. ft.	$4	/sq. ft.	$0
Concrete Replacement	0	sq. ft.	$10	/sq. ft.	$0
Groundwater disposal characterization	0	LS	$1,000	each	$0
Dewatering	0	days	$150	/day	$0
Frac Tank Mob	0	tank	$1,200	/tank	$0
Frac Tank Rental	0	mos	$1,500	/mos	$0
Water Treatment System	0	LS	$6,000	each	$0
Disposal of Groundwater	0	gal	$0.08	/gal	$0
			Subcontractor Subtotal:		*$32,990*
Fieldwork and Reporting					
LaBella Rep (Estimated 3 Business Days)	54	hrs	$80		$4,320
Project Manager	16	hrs	$115		$1,840
Confirmatory Soil Samples	10	samples	$250	/sample	$2,500
			Subtotal:		*$8,660*
			Subtotal:		*$41,650*
			Contingency (20%):		$8,330
			Estimated Total Cost:		**$49,980**

Assumption:
Soil is non-hazardous
Dewatering will not be required

LaBella Associates, P.C.
300 Pearl Street, Suite 325
Buffalo, New York 14202

Appendix 1

Field Logs

#212436

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

Barber Chemical
West Somerset Rd.,
Barker, NY.

BORING: #1 / TPMW1
SHEET 1 OF
JOB: Barber Chemical
CHKD BY: CK

CONTRACTOR:
DRILLER: Nature's Way
LABELLA REPRESENTATIVE: CK
BORING LOCATION: BH1
GROUND SURFACE ELEVATION:
START DATE: 6-14-12
END DATE: 6-14-12
TIME: 9am TO
DATUM:

TYPE OF DRILL RIG: Geoprobe
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1 4ft	48"	none	0-4ft. - Brown silt (lp, M)	0	
2					0	
4	#2 4ft	48"	none	4-8ft - SAA	0	
6					0	
8	#3 3ft	48"	~10	8-10ft SAA	0	
10				10-11ft - Brown sandy silt (lp, mto, lw)	0.1	
12						
14				Equipment refusal @ 11 ft. bgs		
16						
18				* No odors/staining observed		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
			~11ft.	11 -FL	10ft bgs	- trace GW

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: #1

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 2
SHEET 1 OF
JOB: Barber Chen
CHKD BY: CH

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION: BH2
GROUND SURFACE ELEVATION:
START DATE:
END DATE: 4/14/2010
TIME: 10am TO
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1	48"	none	0-4 ft - Brown silt (lp,m)	0	
2	4'				0.3	
4						
6	#2	48"	none	SAA-4-8ft	0	
8	4'				0.1	
10	#3	48"	none	8-10 ft SAA	0	
	2'				[illegible]	
14				Equipment refusal @ 10ft. bgs		
16						
18				* no odors/staining		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME		-Ft.		- No GW observed

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations

and = 35 to 50 %	c = coarse	BGS = Below the Ground Surface
some = 20 to 35%	m = medium	NA = Not Applicable
little = 10 to 20%	f = fine	
trace = 1 to 10%	vf = very fine	

BORING: #2

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 3
SHEET 1 OF
JOB: Barber Chem
CHKD BY: CK

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION: BH3
GROUND SURFACE ELEVATION:
START DATE:
TIME: 11:20am TO
DATUM:
END DATE: 4/14/2010

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1	48"		0-2ft Brown silt (lp,m)	0.1	
2	4'			2-2.5ft Light brown sand (f,l,d)		
4				2.5-4 ft. Brown silt (lp,m)	0.1	
6	#2	48"		4-5ft - SAA 5-6 ft - Brown gravelly silt (lp,m)	0	
8	4'			6-8 ft - Brown silt (lp,m)	0	
10	#3	48'		8-10.75' Brown gravelly silt (lp,m tow)		
10.75'	3.75'					
12						
14				Equipment refusal @ 10.75' * No odors/staining observed		
16						
18				*Refusal @ 2ft. on ititial try, moved ~2 ft east to attempt BH3 for 2nd attempt		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME	~10.75'	10.75 Ft	~10.75'	- trace GW

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: #3

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 4/TPMW3
SHEET 1 OF
JOB: Barber Chem
CHKD BY: CK

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION: BH4
GROUND SURFACE ELEVATION:
START DATE: 6-15-10
END DATE: 4/14/2010
TIME: 8:15 AM
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1 4'	40"		0-3 ft Brown silt (lp,d)	0	
2						
4				3-4 ft Grayish-black silt (lp,m)	0.1	sulfer odor
6	#2 4'	48"		4-8 ft Gray sandy silt (lmp,m)	0.2	sulfer odor
8					0.2	
10	#3 1.1'	13"		8-8.75 Gray sandy silt (lp,w)	0	no odors
				8.75-9.1 ft Grayish-red silt (lp,m)	0	
12						
14				*Equipment refusal @ 9.1 ft bgs		
16						
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME		9.1 -Ft.	~8 ft	

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: #4

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: #5
SHEET 1 OF
JOB:
CHKD BY:

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION: #5
GROUND SURFACE ELEVATION:
START DATE:
END DATE: 4/14/2010
TIME: 1:40pm TO
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1 4'	36"		0-2ft Brown-gray gravel (gr,f,sa,l,d)	0.6	
2		[redacted]		2-4ft Gray silt (hp,m)	0.6	sulfer odor
4						
6	#2 4'	18"		4-5ft SAA	7.4	
8				5-8ft Brown silt (lp,m)	0.4	
10				-equipment refusal @ 8ft bgs	[redacted]	
12					[redacted]	
14						
16						
18				-truck broke down at start of this boring at 9am, had to go get different rig, commenced drilling at 1:30pm		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME		8 -Ft.		

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: #5

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 6
SHEET 1 OF
JOB:
CHKD BY:

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION: #6
GROUND SURFACE ELEVATION:
START DATE:
END DATE: 4/14/2010
TIME: 1:30pm TO
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1	48"		0-1ft Gray gravel (f,m,f,sa,l,cl)	0	
2	4'			1-4ft Red-brown sand (m,f,l,m)	0	
4						
6	#2			4-7 ft Gray sandy silt (mp,m)	0	
8	4'	48"		7-8 Gray brown silt (mp,m)	0	
10	#3 1'	30"		Gray-brown sandy silt mp (m to L)	0	
12						
14				-Equipment refusal @ 9 ft. bgs		
16						
18				-slight sulfer odor		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME		9 -Ft.		GW possibly at 8 or 9 feet

GENERAL NOTES

1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations

and = 35 to 50 %	c = coarse	
some = 20 to 35%	m = medium	BGS = Below the Ground Surface
little = 10 to 20%	f = fine	NA = Not Applicable
trace = 1 to 10%	vf = very fine	

BORING: #6

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 7
SHEET 1 OF
JOB:
CHKD BY:

CONTRACTOR: BORING LOCATION: TIME: 2:10pm TO
DRILLER: GROUND SURFACE ELEVATION: DATUM:
LABELLA REPRESENTATIVE: START DATE: END DATE: 4/14/2010

TYPE OF DRILL RIG: DRIVE SAMPLER TYPE:
AUGER SIZE AND TYPE: INSIDE DIAMETER: ~1.8-Inch
OVERBURDEN SAMPLING METHOD: Direct Push OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1 4'	48"		0-1 ft Gray gravel (c,m,f,l,sa,d)	0	
2				1-3 ft - Brown silt (lp,m)	0.1	
4				3-4 ft Light brown silt (mp,m)		
6	#2 4'	48"		4-8' Brown silt (mp,m)	0.1	
8					0.1	
10	#3 1'	28"		8-9 Gray-brown silt (lp,m to l)	0.4	
12						
14				- Equipment refusal @ 9 ft bgs		
16						
18				- no odors/staining		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME		9 -Ft.		GW possibly @ 8-9 ft.

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: #7

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 8
SHEET 1 OF
JOB:
CHKD BY: CH

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE:
END DATE: 4/14/2010
TIME: 3:15pm TO
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1	48"		0-2 ft Gray Gravel (c,f,l,sa,d)	0	
2	4'			2-4 ft Brown Silt (mp,m)	0	
4						
6	#2	48"		4-7.8 ft - SAA	0	
8	3.8'				0	
10				-Equipment refusal @ 7.8 ft. bgs		
12						
14						
16				-no odors/ staining		
18						

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME				
				18 -Ft.		

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations
and = 35 to 50 %
some = 20 to 35%
little = 10 to 20%
trace = 1 to 10%
c = coarse
m = medium
f = fine
vf = very fine
BGS = Below the Ground Surface
NA = Not Applicable

BORING: 8

LABELLA Associates, P.C.

300 STATE STREET, ROCHESTER, NY
ENVIRONMENTAL ENGINEERING CONSULTANTS

TEST BORING LOG

BORING: 9
SHEET 1 OF
JOB:
CHKD BY: CK

CONTRACTOR:
DRILLER:
LABELLA REPRESENTATIVE:
BORING LOCATION:
GROUND SURFACE ELEVATION:
START DATE:
END DATE: 4/14/2010
TIME: 4:05pm TO
DATUM:

TYPE OF DRILL RIG:
AUGER SIZE AND TYPE:
OVERBURDEN SAMPLING METHOD: Direct Push
DRIVE SAMPLER TYPE:
INSIDE DIAMETER: ~1.8-Inch
OTHER:

DEPTH	SAMPLE NO AND DEPTH	SAMPLE RECOVERY	STRATA CHANGE	VISUAL CLASSIFICATION	PID FIELD SCREEN (PPM)	REMARKS
0	#1			0-1 Gray gravel (c,f,sa,l,d)	0	
2	4'	30"		1-4 Brown silt (lp,M)	0	
4						
6	#2 3.4'	48"		4-7.4 - SAA	0	
8					0	
10						
12						
14				- Refusal @ 7.4 ft. bgs		
16						
18				- no odors/staining		

WATER LEVEL DATA			BOTTOM OF CASING	BOTTOM OF BORING	GROUNDWATER ENCOUNTERED	NOTES:
DATE	TIME	ELAPSED TIME		24 -Ft.		

GENERAL NOTES
1) STRATIFICATION LINES REPRESENT APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE AT TIMES AND UNDER CONDITIONS STATED, FLUCTUATIONS OF GROUNDWATER
3) Abbreviations

and = 35 to 50 %	c = coarse	BGS = Below the Ground Surface
some = 20 to 35%	m = medium	NA = Not Applicable
little = 10 to 20%	f = fine	
trace = 1 to 10%	vf = very fine	

BORING: #9

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: _____

Project Name: Barber Chemical
Location: West Somerset Rd, Barber, NY
Project No.: 22436
Sampled By: Chris Webber (CW)
Date: 6-15-12
Weather: Sunny, 90°F

WELL SAMPLING INFORMATION

Well Diameter:	1"	Static Water Level:	5'
Depth of Well:	8'	Length of Well Screen:	5'
Measuring Point:		Depth to Top of Pump:	
Pump Type:	Bailer	Tubing Type:	PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH +/- 0.1	Temp °C	Conductivity (µS/cm) +/- 3%	Turbidity (NTU)	Dissolved O_2 (mg/L) + 10%	Redox (mV) +/- 10 mV	Depth to Water (feet)	Comments
440		0.6	7.08	25.3		78	0.02	-45	5'	
447		0.4	7.02	24.8		74	0.04	-42	6.1'	
455		0.3	7.01	25.1		77	0.06	-44	6.4'	

Total _____ Gallons Purged

Purge Time Start: 4:30pm Purge Time End: 4:48 Final Static Water Level: 7.3'

OBSERVATIONS

Notes:

- Could not get turbidity below 50 NTU's; sampled after 3rd purge

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: TPMW1

Project Name: Barber Chemical
Location: West Somerset Rd, Barber, NY.
Project No.: 212436
Sampled By: Chris Hibler (CH)
Date: 6-14-12
Weather: Sunny, 75°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 11'
Measuring Point:
Pump Type: Bailer

Static Water Level: 10.6'
Length of Well Screen: 5'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH	Temp °C	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Depth to Water (feet)	Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV		
3:15pm	~0.1	[redacted]	6.99	20.9	—	87	0.01	-14.7	10.3	

Total 0.8 Gallons Purged

Purge Time Start: 3:15pm
Purge Time End: 3:30pm
Final Static Water Level: 10.7'

OBSERVATIONS

Notes:
- Recharge next to nothing following 1st purge, attempted 2nd purge for 20 minutes and only retrieved trace amount of water

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: TPMW2

Project Name: Barber Chemical
Location: West Somerset Rd, Barber, NY
Project No.: 212436
Sampled By: Chris Vhilder (CH)
Date: 6-14-12
Weather: Sunny, 75°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 10.2
Measuring Point:
Pump Type: Bailor

Static Water Level: 9.7
Length of Well Screen: 5'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH	Temp °C	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Depth to Water (feet)	Comments
		~0.2	+/- 0.1		+/- 3%		+ 10%	+/- 10 mV		
3:45			6.23	25.4		71	0.04	-13.2	9.8'	

Total ~0.8 Gallons Purged

Purge Time Start: 3:45pm
Purge Time End: 4:08pm
Final Static Water Level: 9.9'

OBSERVATIONS

Notes:

- Recharge next to nothing following 1st purge, attempted 2nd purge for 20 minutes and only retrieved trace amount of water

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

existing well

WELL I.D.: MW3

Project Name: Barber Chemical
Location: West Somerset Rd, Barber, NY.
Project No.: 212436
Sampled By: Chris Hibler (CH)
Date: 6-14-12
Weather: Sunny, 75°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 12.4'
Measuring Point:
Pump Type: Baiber

Static Water Level: ~~11.7'~~ 5'
Length of Well Screen:
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH	Temp °C	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Depth to Water (feet)	Comments
		~0.4	+/- 0.1		+/- 3%		+ 10%	+/- 10 mV		
4:15pm		~~0.4~~	6.47	26.2	—	62	0.07	-14.1	~~11.9'~~	

Total ~0.9 Gallons Purged

Purge Time Start: 4:15pm
Purge Time End: 4:50pm
Final Static Water Level: 12.1'

OBSERVATIONS

Notes:

- Recharg next to nothing following 1st purge, attempted 2nd purge for 20 minutes and only retrieved trace amount of water

-went back to well on 6/15/12, managed to get enough water for pest. testing (1, 1,000ml amber)
water dark yellow, strong sulfer odor

LABELLA Associates, P.C.

300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

existing well

WELL I.D.: MW12

Project Name: Barber Chemical
Location: West Somerset Rd, Barker
Project No.: 212436
Sampled By: Chris Binder (CB)
Date: 6-14-12
Weather: Sunny, 75°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 11.3'
Measuring Point:
Pump Type: Bailer

Static Water Level: 10.7'
Length of Well Screen: 5'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH +/- 0.1	Temp °C	Conductivity (µS/cm) +/- 3%	Turbidity (NTU)	Dissolved O_2 (mg/L) + 10%	Redox (mV) +/- 10 mV	Depth to Water (feet)	Comments
4:55pm		~0.3	6.28	25.4	\	74	0.04	-13.2	10.9'	

Total ~0.3 Gallons Purged

Purge Time Start: 4:55pm
Purge Time End: 5:30pm
Final Static Water Level: 10.8'

OBSERVATIONS

Notes:

- Recharge next to nothing following 1st purge, attempted 2nd purge for 20 minutes and only retrieved trace amount of water

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: MW5

Project Name: Barber Chemical
Location: West Sproket Rd, Barber, NY.
Project No.: 212436
Sampled By: Chris Kibler (CK)
Date: 6/14/12
Weather: Sunny, 82°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 16'
Measuring Point:
Pump Type: Bailer

Static Water Level: 4'
Length of Well Screen: 10'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH +/- 0.1	Temp °C	Conductivity (µS/cm) +/- 3%	Turbidity (NTU)	Dissolved O_2 (mg/L) + 10%	Redox (mV) +/- 10 mV	Depth to Water (feet)	Comments
10:15am		0.6	6.66	19.7	\	210	0.09	-325.7	12.4	-strong sulfer odor
10:40am		0.5	6.69	19.4	\	19.7	0.06	-337.2	12.8	
11:00am		0.1	6.63	19.9	\	202	0.03	-337.9	15.6	-water dark gray

Total ~1 Gallons Purged

Purge Time Start: 10:00am
Purge Time End: 11:15am
Final Static Water Level: 15.4'

OBSERVATIONS

Notes:
- could not get turbidity below 50 NTU's; sampled after 3rd purge.

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: TPMW3

Project Name: Barber Chemical
Location: West Somerset Rd., Barker, NY
Project No.: 212436
Sampled By: Chris Hibler (CH)
Date: 6-15-12
Weather: Sunny, 85°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 9'
Measuring Point:
Pump Type: Bailer

Static Water Level: 1.8'
Length of Well Screen: 5'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH +/- 0.1	Temp °C	Conductivity (µS/cm) +/- 3%	Turbidity (NTU)	Dissolved O_2 (mg/L) + 10%	Redox (mV) +/- 10 mV	Depth to Water (feet)	Comments
12:40pm		0.6	5.64	27.6	/	187	0.3	-78.6	2.7	Strong
12:46pm		0.4	5.61	26.4	/	139	0.6	-75.4	3.9	Grey color / sulfer odor
12:52pm		0.6	5.69	24.2	/	168	0.4	-76.3	6.4	

Total ~1.6 Gallons Purged

Purge Time Start: 12:40pm
Purge Time End: 1:00pm
Final Static Water Level: 5'

OBSERVATIONS

Notes:
- Could not get turbidity below 50 NTU's. Suspected to be due to high sulfer content.

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: MW1 - existing well

Project Name: Barber Chemical
Location: West Somerset Road, Barber, NY.
Project No.: 212436
Sampled By: Chris Kibler (CK)
Date: 6-15-12
Weather: Sunny, 88°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 67
Measuring Point:
Pump Type: Bailer

Static Water Level: 4.8
Length of Well Screen: 5'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH +/- 0.1	Temp °C	Conductivity (µS/cm) +/- 3%	Turbidity (NTU)	Dissolved O_2 (mg/L) + 10%	Redox (mV) +/- 10 mV	Depth to Water (feet)	Comments
2:25pm		0.3	5.62	24.2	\	64	0.6	-68.9	6.3	

Total _____ Gallons Purged

Purge Time Start: 2:25pm
Purge Time End: 3:00pm
Final Static Water Level: 6.4

OBSERVATIONS

Notes:

-Recharge next to nothing following 1st purge, attempted 2nd purge for 25 minutes and only retrieved trace amount of water

LABELLA Associates, P.C.
300 State Street
Rochester, New York 14614
Telephone: (585) 454-6110
Facsimile: (585) 454-3066

WELL I.D.: TPMW4

Project Name: Barker Chemical
Location: West Somerset Rd., Barker, NY.
Project No.: 212436
Sampled By: Chris Kibler (CK)
Date: 6-15-12
Weather: Sunny, 90°F

WELL SAMPLING INFORMATION

Well Diameter: 1"
Depth of Well: 8'
Measuring Point:
Pump Type: Bailer

Static Water Level: 8'
Length of Well Screen: 5'
Depth to Top of Pump:
Tubing Type: PVC

FIELD PARAMETER MEASUREMENT

Time	Pump Rate (ml/min)	Gallons Purged	pH	Temp °C	Conductivity (µS/cm)	Turbidity (NTU)	Dissolved O_2 (mg/L)	Redox (mV)	Depth to Water (feet)	Comments
			+/- 0.1		+/- 3%		+ 10%	+/- 10 mV		

Total -0 Gallons Purged

Purge Time Start: 3:50pm
Purge Time End: 3:55pm
Final Static Water Level: 8'

OBSERVATIONS

Notes:

- No recharge, soils appear to have been only very moist

LaBella Associates, P.C.
300 Pearl Street, Suite 325
Buffalo, New York 14202

Appendix 2

Laboratory Analytical Report

Report Date:
10-Jul-12 16:13

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Labella Associates
300 Pearl St. Suite 325
Buffalo, NY 14202

Work Order: L1335
Project : Barker Chemical
Project #:

Attn: Dan Riker

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L1335-01	BH1 8-10	Soil	14-Jun-12 09:00	16-Jun-12 08:50
L1335-02	BH3 8-10	Soil	14-Jun-12 11:20	16-Jun-12 08:50
L1335-03	BH2 8-10	Soil	14-Jun-12 10:00	16-Jun-12 08:50
L1335-04	BH4	Soil	15-Jun-12 08:30	16-Jun-12 08:50
L1335-05	BH5	Soil	15-Jun-12 13:45	16-Jun-12 08:50
L1335-06	BH6	Soil	15-Jun-12 14:15	16-Jun-12 08:50
L1335-07	BH7	Soil	15-Jun-12 14:45	16-Jun-12 08:50
L1335-08	BH8	Soil	15-Jun-12 15:15	16-Jun-12 08:50
L1335-09	BH9	Soil	15-Jun-12 16:20	16-Jun-12 08:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Identification and Analytical Requirements Summary

Project Name : Barker Chemical **SDG :** L1335

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
BH1 8-10	L1335-01		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH1 8-10	L1335-01				SW6010_S	
BH1 8-10	L1335-01				SW7471	
BH3 8-10	L1335-02		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH3 8-10	L1335-02				SW6010_S	
BH3 8-10	L1335-02				SW7471	
BH2 8-10	L1335-03		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH2 8-10	L1335-03				SW6010_S	
BH2 8-10	L1335-03				SW7471	
BH4	L1335-04		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH4	L1335-04				SW6010_S	
BH4	L1335-04				SW7471	
BH5	L1335-05		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH5	L1335-05				SW6010_S	
BH5	L1335-05				SW7471	
BH6	L1335-06		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH6	L1335-06				SW6010_S	
BH6	L1335-06				SW7471	
BH7	L1335-07		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH7	L1335-07				SW6010_S	
BH7	L1335-07				SW7471	
BH8	L1335-08		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH8	L1335-08				SW6010_S	
BH8	L1335-08				SW7471	
BH9	L1335-09		SW8270_S	SW8081_S	SW6010_S	SEE DATA
BH9	L1335-09				SW6010_S	
BH9	L1335-09				SW7471	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : Barker Chemical **SDG :** L1335

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_S					
L1335-01A	SL	6/14/2012	6/16/2012	6/20/2012	6/22/2012
L1335-02A	SL	6/14/2012	6/16/2012	6/20/2012	6/22/2012
L1335-03A	SL	6/14/2012	6/16/2012	6/20/2012	6/22/2012
L1335-04A	SL	6/15/2012	6/16/2012	6/20/2012	6/22/2012
L1335-05A	SL	6/15/2012	6/16/2012	6/20/2012	6/22/2012
L1335-06A	SL	6/15/2012	6/16/2012	6/20/2012	6/22/2012
L1335-07A	SL	6/15/2012	6/16/2012	6/20/2012	6/22/2012
L1335-08A	SL	6/15/2012	6/16/2012	6/20/2012	6/22/2012
L1335-09A	SL	6/15/2012	6/16/2012	6/20/2012	6/22/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : Barker Chemical **SDG :** L1335

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8081_S					
L1335-01A	SL	6/14/2012	6/16/2012	6/20/2012	6/25/2012
L1335-02A	SL	6/14/2012	6/16/2012	6/20/2012	6/25/2012
L1335-03A	SL	6/14/2012	6/16/2012	6/20/2012	6/25/2012
L1335-04A	SL	6/15/2012	6/16/2012	6/20/2012	6/25/2012
L1335-05A	SL	6/15/2012	6/16/2012	6/20/2012	6/25/2012
L1335-06A	SL	6/15/2012	6/16/2012	6/20/2012	6/25/2012
L1335-07A	SL	6/15/2012	6/16/2012	6/20/2012	6/25/2012
L1335-08A	SL	6/15/2012	6/16/2012	6/20/2012	6/25/2012
L1335-09A	SL	6/15/2012	6/16/2012	6/20/2012	6/25/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : Barker Chemical **SDG :** L1335

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_S					
L1335-01A	SL	SW8270_S	3550B	NA	1
L1335-02A	SL	SW8270_S	3550B	NA	1
L1335-03A	SL	SW8270_S	3550B	NA	1
L1335-04A	SL	SW8270_S	3550B	NA	1
L1335-05A	SL	SW8270_S	3550B	NA	1
L1335-06A	SL	SW8270_S	3550B	NA	1
L1335-07A	SL	SW8270_S	3550B	NA	1
L1335-08A	SL	SW8270_S	3550B	NA	1
L1335-09A	SL	SW8270_S	3550B	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : Barker Chemical **SDG :** L1335

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8081_S					
L1335-01A	SL	SW8081_S	3550B	sulfur	1
L1335-02A	SL	SW8081_S	3550B	sulfur	1
L1335-03A	SL	SW8081_S	3550B	sulfur	1
L1335-04A	SL	SW8081_S	3550B	sulfur	1
L1335-05A	SL	SW8081_S	3550B	sulfur	1
L1335-06A	SL	SW8081_S	3550B	sulfur	1
L1335-07A	SL	SW8081_S	3550B	sulfur	1
L1335-08A	SL	SW8081_S	3550B	sulfur	1
L1335-09A	SL	SW8081_S	3550B	sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary ME

Project Name : Barker Chemical **SDG :** L1335

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_S				
L1335-01A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-02A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-03A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-04A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-05A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-06A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-07A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-08A	SL	SW6010_S	6/16/2012	6/19/2012
L1335-09A	SL	SW6010_S	6/16/2012	6/19/2012
SW7471				
L1335-01A	SL	SW7471	6/16/2012	6/19/2012
L1335-02A	SL	SW7471	6/16/2012	6/19/2012
L1335-03A	SL	SW7471	6/16/2012	6/19/2012
L1335-04A	SL	SW7471	6/16/2012	6/19/2012
L1335-05A	SL	SW7471	6/16/2012	6/19/2012
L1335-06A	SL	SW7471	6/16/2012	6/19/2012
L1335-07A	SL	SW7471	6/16/2012	6/19/2012
L1335-08A	SL	SW7471	6/16/2012	6/19/2012
L1335-09A	SL	SW7471	6/16/2012	6/19/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1335

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1335-01A	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	PMoist	/					P1
L1335-01A	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-01A	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-01A	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	SW8081_S	/					P1
L1335-01A	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	SW8270_S	/					P1
L1335-01A	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	SW9045_S	/					P1
L1335-01B	BH1 8-10	06/14/2012 09:00	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-02A	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	PMoist	/					P1
L1335-02A	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-02A	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-02A	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	SW8081_S	/					P1
L1335-02A	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	SW8270_S	/					P1
L1335-02A	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	SW9045_S	/					P1
L1335-02B	BH3 8-10	06/14/2012 11:20	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-03A	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	PMoist	/					P1
L1335-03A	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-03A	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-03A	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	SW8081_S	/					P1
L1335-03A	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	SW8270_S	/					P1
L1335-03A	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	SW9045_S	/					P1
L1335-03B	BH2 8-10	06/14/2012 10:00	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-04A	BH4	06/15/2012 08:30	06/16/2012	Soil	PMoist	/					P1
L1335-04A	BH4	06/15/2012 08:30	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1335

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1335-04A	BH4	06/15/2012 08:30	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-04A	BH4	06/15/2012 08:30	06/16/2012	Soil	SW8081_S	/					P1
L1335-04A	BH4	06/15/2012 08:30	06/16/2012	Soil	SW8270_S	/					P1
L1335-04A	BH4	06/15/2012 08:30	06/16/2012	Soil	SW9045_S	/					P1
L1335-04B	BH4	06/15/2012 08:30	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-05A	BH5	06/15/2012 13:45	06/16/2012	Soil	PMoist	/					P1
L1335-05A	BH5	06/15/2012 13:45	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-05A	BH5	06/15/2012 13:45	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-05A	BH5	06/15/2012 13:45	06/16/2012	Soil	SW8081_S	/					P1
L1335-05A	BH5	06/15/2012 13:45	06/16/2012	Soil	SW8270_S	/					P1
L1335-05A	BH5	06/15/2012 13:45	06/16/2012	Soil	SW9045_S	/					P1
L1335-05B	BH5	06/15/2012 13:45	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-06A	BH6	06/15/2012 14:15	06/16/2012	Soil	PMoist	/					P1
L1335-06A	BH6	06/15/2012 14:15	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-06A	BH6	06/15/2012 14:15	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-06A	BH6	06/15/2012 14:15	06/16/2012	Soil	SW8081_S	/					P1
L1335-06A	BH6	06/15/2012 14:15	06/16/2012	Soil	SW8270_S	/					P1
L1335-06A	BH6	06/15/2012 14:15	06/16/2012	Soil	SW9045_S	/					P1
L1335-06B	BH6	06/15/2012 14:15	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-07A	BH7	06/15/2012 14:45	06/16/2012	Soil	PMoist	/					P1
L1335-07A	BH7	06/15/2012 14:45	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-07A	BH7	06/15/2012 14:45	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-07A	BH7	06/15/2012 14:45	06/16/2012	Soil	SW8081_S	/					P1

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1335

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1335-07A	BH7	06/15/2012 14:45	06/16/2012	Soil	SW8270_S	/					P1
L1335-07A	BH7	06/15/2012 14:45	06/16/2012	Soil	SW9045_S	/					P1
L1335-07B	BH7	06/15/2012 14:45	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-08A	BH8	06/15/2012 15:15	06/16/2012	Soil	PMoist	/					P1
L1335-08A	BH8	06/15/2012 15:15	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-08A	BH8	06/15/2012 15:15	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-08A	BH8	06/15/2012 15:15	06/16/2012	Soil	SW8081_S	/					P1
L1335-08A	BH8	06/15/2012 15:15	06/16/2012	Soil	SW8270_S	/					P1
L1335-08A	BH8	06/15/2012 15:15	06/16/2012	Soil	SW9045_S	/					P1
L1335-08B	BH8	06/15/2012 15:15	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1335-09A	BH9	06/15/2012 16:20	06/16/2012	Soil	PMoist	/					P1
L1335-09A	BH9	06/15/2012 16:20	06/16/2012	Soil	SW6010_S	/ TAL				Y	P1
L1335-09A	BH9	06/15/2012 16:20	06/16/2012	Soil	SW7471	/ TAL					P1
L1335-09A	BH9	06/15/2012 16:20	06/16/2012	Soil	SW8081_S	/					P1
L1335-09A	BH9	06/15/2012 16:20	06/16/2012	Soil	SW8270_S	/					P1
L1335-09A	BH9	06/15/2012 16:20	06/16/2012	Soil	SW9045_S	/					P1
L1335-09B	BH9	06/15/2012 16:20	06/16/2012	Soil	SW6010_S	/ SPECTRUM					SUB

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

* Semivolatile Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1335

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8270D

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S6
Instrument Type: GCMS-Semi
Description: HP7890A
Manufacturer: Agilent
Model: 7890A/5973

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

BH4 (L1335-04A), recovery is below criteria for Phenol-d5 at 37% with criteria of (40-100).

BH6 (L1335-06A), recovery is below criteria for 2-Fluorobiphenyl at 44% with criteria of (45-105) and Phenol-d5 at 36% with criteria of (40-100).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

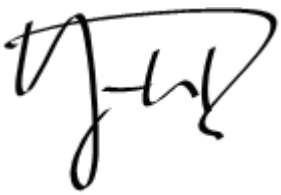
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____  _____

Date:_____7/5/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

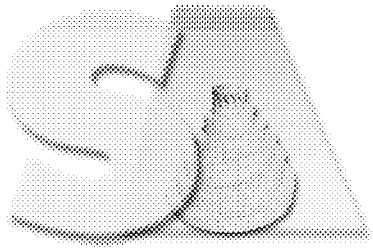
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH1 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-01A

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9373.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.8 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2´-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	730	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	730	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	730	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	730	U
100-02-7	4-Nitrophenol	730	U
132-64-9	Dibenzofuran	360	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH1 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-01A

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9373.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.8 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	730	U
534-52-1	4,6-Dinitro-2-methylphenol	730	U
86-30-6	N-Nitrosodiphenylamine	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	730	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	360	U
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3´-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-ethylhexyl)phthalate	110	J
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH3 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-02A

Sample wt/vol: 15.5 (g/mL) G Lab File ID: S6A9374.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.7 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2´-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	720	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	720	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	720	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	720	U
100-02-7	4-Nitrophenol	720	U
132-64-9	Dibenzofuran	350	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH3 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-02A

Sample wt/vol: 15.5 (g/mL) G Lab File ID: S6A9374.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 9.7 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	720	U
534-52-1	4,6-Dinitro-2-methylphenol	720	U
86-30-6	N-Nitrosodiphenylamine	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3´-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	Bis(2-ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH2 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-03A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S6A9375.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 5.3 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2´-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	700	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	700	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	700	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	700	U
100-02-7	4-Nitrophenol	700	U
132-64-9	Dibenzofuran	350	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH2 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-03A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S6A9375.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 5.3 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	700	U
534-52-1	4,6-Dinitro-2-methylphenol	700	U
86-30-6	N-Nitrosodiphenylamine	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	700	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3´-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	Bis(2-ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-04A

Sample wt/vol: 15.6 (g/mL) G Lab File ID: S6A9376.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	Bis(2-chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2´-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	150	J
106-47-8	4-Chloroaniline	370	U
111-91-1	Bis(2-chloroethoxy)methane	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	760	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	760	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	760	U
83-32-9	Acenaphthene	370	U
51-28-5	2,4-Dinitrophenol	760	U
100-02-7	4-Nitrophenol	760	U
132-64-9	Dibenzofuran	370	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-04A

Sample wt/vol: 15.6 (g/mL) G Lab File ID: S6A9376.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	760	U
534-52-1	4,6-Dinitro-2-methylphenol	760	U
86-30-6	N-Nitrosodiphenylamine	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	760	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3´-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	Bis(2-ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-05A

Sample wt/vol: 15.5 (g/mL) G Lab File ID: S6A9377.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	Bis(2-chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2´-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
111-91-1	Bis(2-chloroethoxy)methane	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	810	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	810	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	810	U
83-32-9	Acenaphthene	400	U
51-28-5	2,4-Dinitrophenol	810	U
100-02-7	4-Nitrophenol	810	U
132-64-9	Dibenzofuran	400	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-05A

Sample wt/vol: 15.5 (g/mL) G Lab File ID: S6A9377.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 20 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	810	U
534-52-1	4,6-Dinitro-2-methylphenol	810	U
86-30-6	N-Nitrosodiphenylamine	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	810	U
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	400	U
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3´-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	Bis(2-ethylhexyl)phthalate	400	U
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-06A

Sample wt/vol: 15.8 (g/mL) G Lab File ID: S6A9378.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 12 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2´-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	720	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	720	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	720	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	720	U
100-02-7	4-Nitrophenol	720	U
132-64-9	Dibenzofuran	360	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-06A

Sample wt/vol: 15.8 (g/mL) G Lab File ID: S6A9378.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 12 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	720	U
534-52-1	4,6-Dinitro-2-methylphenol	720	U
86-30-6	N-Nitrosodiphenylamine	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	74	J
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3´-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-07A

Sample wt/vol: 15.7 (g/mL) G Lab File ID: S6A9379.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 21 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	400	U
111-44-4	Bis(2-chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	2,2´-oxybis(1-Chloropropane)	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
111-91-1	Bis(2-chloroethoxy)methane	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	810	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	810	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	400	U
99-09-2	3-Nitroaniline	810	U
83-32-9	Acenaphthene	400	U
51-28-5	2,4-Dinitrophenol	810	U
100-02-7	4-Nitrophenol	810	U
132-64-9	Dibenzofuran	400	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-07A

Sample wt/vol: 15.7 (g/mL) G Lab File ID: S6A9379.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 21 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	400	U
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	810	U
534-52-1	4,6-Dinitro-2-methylphenol	810	U
86-30-6	N-Nitrosodiphenylamine	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	810	U
85-01-8	Phenanthrene	420	
120-12-7	Anthracene	100	J
86-74-8	Carbazole	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	310	J
129-00-0	Pyrene	580	
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3´-Dichlorobenzidine	400	U
56-55-3	Benzo(a)anthracene	270	J
218-01-9	Chrysene	270	J
117-81-7	Bis(2-ethylhexyl)phthalate	400	U
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	270	J
207-08-9	Benzo(k)fluoranthene	170	J
50-32-8	Benzo(a)pyrene	160	J
193-39-5	Indeno(1,2,3-cd)pyrene	94	J
53-70-3	Dibenzo(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	110	J

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH8

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-08A

Sample wt/vol: 15.7 (g/mL) G Lab File ID: S6A9380.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 11 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2´-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	720	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	720	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	720	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	720	U
100-02-7	4-Nitrophenol	720	U
132-64-9	Dibenzofuran	360	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH8

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-08A

Sample wt/vol: 15.7 (g/mL) G Lab File ID: S6A9380.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 11 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	720	U
534-52-1	4,6-Dinitro-2-methylphenol	720	U
86-30-6	N-Nitrosodiphenylamine	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	79	J
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	360	U
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3´-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	360	U
218-01-9	Chrysene	360	U
117-81-7	Bis(2-ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	360	U
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-09A

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9381.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 12 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	Bis(2-chloroethyl)ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	370	U
108-60-1	2,2´-oxybis(1-Chloropropane)	370	U
106-44-5	4-Methylphenol	370	U
621-64-7	N-Nitroso-di-n-propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	370	U
106-47-8	4-Chloroaniline	370	U
111-91-1	Bis(2-chloroethoxy)methane	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-methylphenol	370	U
91-57-6	2-Methylnaphthalene	370	U
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	760	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	760	U
131-11-3	Dimethylphthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U
99-09-2	3-Nitroaniline	760	U
83-32-9	Acenaphthene	370	U
51-28-5	2,4-Dinitrophenol	760	U
100-02-7	4-Nitrophenol	760	U
132-64-9	Dibenzofuran	370	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-09A

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9381.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 12 Decanted: (Y/N) N Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	370	U
100-01-6	4-Nitroaniline	760	U
534-52-1	4,6-Dinitro-2-methylphenol	760	U
86-30-6	N-Nitrosodiphenylamine	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	760	U
85-01-8	Phenanthrene	370	U
120-12-7	Anthracene	370	U
86-74-8	Carbazole	370	U
84-74-2	Di-n-butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3´-Dichlorobenzidine	370	U
56-55-3	Benzo(a)anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	Bis(2-ethylhexyl)phthalate	370	U
117-84-0	Di-n-octylphthalate	370	U
205-99-2	Benzo(b)fluoranthene	370	U
207-08-9	Benzo(k)fluoranthene	370	U
50-32-8	Benzo(a)pyrene	370	U
193-39-5	Indeno(1,2,3-cd)pyrene	370	U
53-70-3	Dibenzo(a,h)anthracene	370	U
191-24-2	Benzo(g,h,i)perylene	370	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9366.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2´-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	Bis(2-chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9366.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3´-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9367.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2100	
111-44-4	Bis(2-chloroethyl)ether	2700	
95-57-8	2-Chlorophenol	2600	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2800	
95-50-1	1,2-Dichlorobenzene	2800	
95-48-7	2-Methylphenol	2400	
108-60-1	2,2´-oxybis(1-Chloropropane)	2500	
106-44-5	4-Methylphenol	2100	
621-64-7	N-Nitroso-di-n-propylamine	2300	
67-72-1	Hexachloroethane	3000	
98-95-3	Nitrobenzene	3000	
78-59-1	Isophorone	2600	
88-75-5	2-Nitrophenol	2900	
105-67-9	2,4-Dimethylphenol	2800	
120-83-2	2,4-Dichlorophenol	2700	
120-82-1	1,2,4-Trichlorobenzene	2800	
91-20-3	Naphthalene	2900	
106-47-8	4-Chloroaniline	1200	
111-91-1	Bis(2-chloroethoxy)methane	2800	
87-68-3	Hexachlorobutadiene	3300	
59-50-7	4-Chloro-3-methylphenol	2100	
91-57-6	2-Methylnaphthalene	2700	
77-47-4	Hexachlorocyclopentadiene	4400	
88-06-2	2,4,6-Trichlorophenol	3200	
95-95-4	2,4,5-Trichlorophenol	2900	
91-58-7	2-Chloronaphthalene	3300	
88-74-4	2-Nitroaniline	2700	
131-11-3	Dimethylphthalate	2800	
208-96-8	Acenaphthylene	3000	
606-20-2	2,6-Dinitrotoluene	2700	
99-09-2	3-Nitroaniline	1700	
83-32-9	Acenaphthene	3000	
51-28-5	2,4-Dinitrophenol	2500	
100-02-7	4-Nitrophenol	2000	
132-64-9	Dibenzofuran	2900	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9367.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2500	
84-66-2	Diethylphthalate	2700	
7005-72-3	4-Chlorophenyl-phenylether	2900	
86-73-7	Fluorene	2700	
100-01-6	4-Nitroaniline	1800	
534-52-1	4,6-Dinitro-2-methylphenol	3000	
86-30-6	N-Nitrosodiphenylamine	3400	
101-55-3	4-Bromophenyl-phenylether	3500	
118-74-1	Hexachlorobenzene	3300	
87-86-5	Pentachlorophenol	2500	
85-01-8	Phenanthrene	3100	
120-12-7	Anthracene	3100	
86-74-8	Carbazole	2600	
84-74-2	Di-n-butylphthalate	2900	
206-44-0	Fluoranthene	2400	
129-00-0	Pyrene	4000	
85-68-7	Butylbenzylphthalate	3800	
91-94-1	3,3´-Dichlorobenzidine	2500	
56-55-3	Benzo(a)anthracene	3300	
218-01-9	Chrysene	3100	
117-81-7	Bis(2-ethylhexyl)phthalate	3700	
117-84-0	Di-n-octylphthalate	3900	
205-99-2	Benzo(b)fluoranthene	3100	
207-08-9	Benzo(k)fluoranthene	3200	
50-32-8	Benzo(a)pyrene	3100	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2800	
191-24-2	Benzo(g,h,i)perylene	2900	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9368.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	
111-44-4	Bis(2-chloroethyl)ether	2600	
95-57-8	2-Chlorophenol	2600	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2700	
95-50-1	1,2-Dichlorobenzene	2600	
95-48-7	2-Methylphenol	2300	
108-60-1	2,2´-oxybis(1-Chloropropane)	2400	
106-44-5	4-Methylphenol	1900	
621-64-7	N-Nitroso-di-n-propylamine	2200	
67-72-1	Hexachloroethane	2900	
98-95-3	Nitrobenzene	3000	
78-59-1	Isophorone	2600	
88-75-5	2-Nitrophenol	2800	
105-67-9	2,4-Dimethylphenol	2700	
120-83-2	2,4-Dichlorophenol	2600	
120-82-1	1,2,4-Trichlorobenzene	2700	
91-20-3	Naphthalene	2800	
106-47-8	4-Chloroaniline	1600	
111-91-1	Bis(2-chloroethoxy)methane	2700	
87-68-3	Hexachlorobutadiene	3300	
59-50-7	4-Chloro-3-methylphenol	2100	
91-57-6	2-Methylnaphthalene	2600	
77-47-4	Hexachlorocyclopentadiene	4400	
88-06-2	2,4,6-Trichlorophenol	3100	
95-95-4	2,4,5-Trichlorophenol	2900	
91-58-7	2-Chloronaphthalene	3300	
88-74-4	2-Nitroaniline	2700	
131-11-3	Dimethylphthalate	2800	
208-96-8	Acenaphthylene	3000	
606-20-2	2,6-Dinitrotoluene	2700	
99-09-2	3-Nitroaniline	1900	
83-32-9	Acenaphthene	3000	
51-28-5	2,4-Dinitrophenol	2600	
100-02-7	4-Nitrophenol	1900	
132-64-9	Dibenzofuran	2900	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9368.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2400	
84-66-2	Diethylphthalate	2700	
7005-72-3	4-Chlorophenyl-phenylether	2900	
86-73-7	Fluorene	2700	
100-01-6	4-Nitroaniline	1900	
534-52-1	4,6-Dinitro-2-methylphenol	2800	
86-30-6	N-Nitrosodiphenylamine	3400	
101-55-3	4-Bromophenyl-phenylether	3500	
118-74-1	Hexachlorobenzene	3400	
87-86-5	Pentachlorophenol	2600	
85-01-8	Phenanthrene	3100	
120-12-7	Anthracene	3100	
86-74-8	Carbazole	2700	
84-74-2	Di-n-butylphthalate	3000	
206-44-0	Fluoranthene	2400	
129-00-0	Pyrene	4100	
85-68-7	Butylbenzylphthalate	3700	
91-94-1	3,3´-Dichlorobenzidine	2600	
56-55-3	Benzo(a)anthracene	3400	
218-01-9	Chrysene	3100	
117-81-7	Bis(2-ethylhexyl)phthalate	3700	
117-84-0	Di-n-octylphthalate	3900	
205-99-2	Benzo(b)fluoranthene	3100	
207-08-9	Benzo(k)fluoranthene	3300	
50-32-8	Benzo(a)pyrene	3200	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2900	
191-24-2	Benzo(g,h,i)perylene	2900	

2K - FORM II SV-4

SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-66863	89	93	119	74	86	88			0
02	LCS-66863	88	98	115	71	83	97			0
03	LCSD-66863	84	95	116	67	81	97			0
04	BH1 8-10	58	62	90	48	56	67			0
05	BH3 8-10	57	61	93	47	54	64			0
06	BH2 8-10	56	60	94	49	55	70			0
07	BH4	47	56	75	37 *	43	59			1
08	BH5	55	60	84	43	50	68			0
09	BH6	40	44 *	73	36 *	39	52			2
10	BH7	64	72	83	51	61	72			0
11	BH8	56	61	85	46	53	58			0
12	BH9	66	71	95	55	64	76			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(35-100)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(45-105)
SDMC3	(TPH)	= Terphenyl-d14	(30-125)
SDMC4	(PHL)	= Phenol-d5	(40-100)
SDMC5	(2FP)	= 2-Fluorophenol	(35-105)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(35-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

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3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCS-66863 LCS Lot No.: A084216

Date Extracted: 06/20/2012 Date Analyzed (1): 06/22/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	3333.0000	0.0000	2084.7853	63		40 - 100
Bis(2-chloroethyl)ether	3333.0000	0.0000	2676.6803	80		40 - 105
2-Chlorophenol	3333.0000	0.0000	2565.4582	77		45 - 105
1,3-Dichlorobenzene	3333.0000	0.0000	2748.8907	82		40 - 100
1,4-Dichlorobenzene	3333.0000	0.0000	2794.7925	84		35 - 105
1,2-Dichlorobenzene	3333.0000	0.0000	2781.5092	83		45 - 95
2-Methylphenol	3333.0000	0.0000	2357.9434	71		40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	0.0000	2503.1275	75		20 - 115
4-Methylphenol	3333.0000	0.0000	2093.0131	63		40 - 105
N-Nitroso-di-n-propylamine	3333.0000	0.0000	2278.6358	68		40 - 115
Hexachloroethane	3333.0000	0.0000	3009.8807	90		35 - 110
Nitrobenzene	3333.0000	0.0000	3042.9246	91		40 - 115
Isophorone	3333.0000	0.0000	2644.8717	79		45 - 110
2-Nitrophenol	3333.0000	0.0000	2941.2276	88		40 - 110
2,4-Dimethylphenol	3333.0000	0.0000	2790.1712	84		30 - 105
2,4-Dichlorophenol	3333.0000	0.0000	2738.6145	82		45 - 110
1,2,4-Trichlorobenzene	3333.0000	0.0000	2844.2774	85		45 - 110
Naphthalene	3333.0000	0.0000	2867.7249	86		40 - 105
4-Chloroaniline	3333.0000	0.0000	1169.3327	35		10 - 100
Bis(2-chloroethoxy)methane	3333.0000	0.0000	2765.0211	83		45 - 110
Hexachlorobutadiene	3333.0000	0.0000	3344.3026	100		40 - 115
4-Chloro-3-methylphenol	3333.0000	0.0000	2067.5506	62		45 - 115
2-Methylnaphthalene	3333.0000	0.0000	2674.4616	80		45 - 105
Hexachlorocyclopentadiene	3333.0000	0.0000	4379.3401	131		8 - 148
2,4,6-Trichlorophenol	3333.0000	0.0000	3164.2200	95		45 - 110
2,4,5-Trichlorophenol	3333.0000	0.0000	2911.4503	87		50 - 110
2-Chloronaphthalene	3333.0000	0.0000	3298.0258	99		45 - 105
2-Nitroaniline	3333.0000	0.0000	2704.3164	81		45 - 120
Dimethylphthalate	3333.0000	0.0000	2834.6916	85		50 - 110
Acenaphthylene	3333.0000	0.0000	3011.7158	90		45 - 105
2,6-Dinitrotoluene	3333.0000	0.0000	2706.2049	81		50 - 110
3-Nitroaniline	3333.0000	0.0000	1677.9005	50		25 - 110
Acenaphthene	3333.0000	0.0000	3009.1164	90		45 - 110
2,4-Dinitrophenol	3333.0000	0.0000	2541.4763	76		15 - 130
4-Nitrophenol	3333.0000	0.0000	2040.5549	61		15 - 140
Dibenzofuran	3333.0000	0.0000	2926.6756	88		50 - 105
2,4-Dinitrotoluene	3333.0000	0.0000	2458.3986	74		50 - 115
Diethylphthalate	3333.0000	0.0000	2669.5001	80		50 - 115
4-Chlorophenyl-phenylether	3333.0000	0.0000	2907.9378	87		45 - 110
Fluorene	3333.0000	0.0000	2683.4430	81		50 - 110
4-Nitroaniline	3333.0000	0.0000	1815.1066	54		35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	0.0000	2956.2682	89		30 - 135
N-Nitrosodiphenylamine	3333.0000	0.0000	3444.9468	103		50 - 115
4-Bromophenyl-phenylether	3333.0000	0.0000	3500.3403	105		45 - 115

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCS-66863 LCS Lot No.: A084216

Date Extracted: 06/20/2012 Date Analyzed (1): 06/22/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	3333.0000	0.0000	3324.6299	100		45 - 120
Pentachlorophenol	3333.0000	0.0000	2463.5679	74		25 - 120
Phenanthrene	3333.0000	0.0000	3059.1960	92		50 - 110
Anthracene	3333.0000	0.0000	3069.3263	92		55 - 105
Carbazole	3333.0000	0.0000	2643.5180	79		45 - 115
Di-n-butylphthalate	3333.0000	0.0000	2892.3126	87		55 - 110
Fluoranthene	3333.0000	0.0000	2408.5790	72		55 - 115
Pyrene	3333.0000	0.0000	3972.6600	119		45 - 125
Butylbenzylphthalate	3333.0000	0.0000	3792.8718	114		50 - 125
3,3´-Dichlorobenzidine	3333.0000	0.0000	2512.9558	75		10 - 130
Benzo(a)anthracene	3333.0000	0.0000	3293.9193	99		50 - 110
Chrysene	3333.0000	0.0000	3053.4827	92		55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	0.0000	3723.0521	112		45 - 125
Di-n-octylphthalate	3333.0000	0.0000	3900.2712	117		40 - 130
Benzo(b)fluoranthene	3333.0000	0.0000	3119.8463	94		45 - 115
Benzo(k)fluoranthene	3333.0000	0.0000	3240.9952	97		45 - 125
Benzo(a)pyrene	3333.0000	0.0000	3064.7833	92		50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	0.0000	2768.7947	83		40 - 120
Dibenzo(a,h)anthracene	3333.0000	0.0000	2815.9231	84		40 - 125
Benzo(g,h,i)perylene	3333.0000	0.0000	2888.2441	87		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

3 - FORM III

SOIL LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCSD-66863 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	3333.0000	2032.7240	61		3		40	40 - 100
Bis(2-chloroethyl)ether	3333.0000	2608.3229	78		3		40	40 - 105
2-Chlorophenol	3333.0000	2560.2029	77		0		40	45 - 105
1,3-Dichlorobenzene	3333.0000	2669.5800	80		2		40	40 - 100
1,4-Dichlorobenzene	3333.0000	2711.3098	81		4		40	35 - 105
1,2-Dichlorobenzene	3333.0000	2645.4771	79		5		40	45 - 95
2-Methylphenol	3333.0000	2251.1085	68		4		40	40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	2426.9614	73		3		40	20 - 115
4-Methylphenol	3333.0000	1929.6841	58		8		40	40 - 105
N-Nitroso-di-n-propylamine	3333.0000	2248.0239	67		1		40	40 - 115
Hexachloroethane	3333.0000	2866.0652	86		5		40	35 - 110
Nitrobenzene	3333.0000	2977.8106	89		2		40	40 - 115
Isophorone	3333.0000	2592.5224	78		1		40	45 - 110
2-Nitrophenol	3333.0000	2800.6373	84		5		40	40 - 110
2,4-Dimethylphenol	3333.0000	2698.1594	81		4		40	30 - 105
2,4-Dichlorophenol	3333.0000	2611.7577	78		5		40	45 - 110
1,2,4-Trichlorobenzene	3333.0000	2721.8636	82		4		40	45 - 110
Naphthalene	3333.0000	2808.9335	84		2		40	40 - 105
4-Chloroaniline	3333.0000	1589.3997	48		31		40	10 - 100
Bis(2-chloroethoxy)methane	3333.0000	2744.6430	82		1		40	45 - 110
Hexachlorobutadiene	3333.0000	3263.2185	98		2		40	40 - 115
4-Chloro-3-methylphenol	3333.0000	2074.8764	62		0		40	45 - 115
2-Methylnaphthalene	3333.0000	2550.4728	77		4		40	45 - 105
Hexachlorocyclopentadiene	3333.0000	4376.0816	131		0		40	8 - 148
2,4,6-Trichlorophenol	3333.0000	3075.1543	92		3		40	45 - 110
2,4,5-Trichlorophenol	3333.0000	2852.0648	86		1		40	50 - 110
2-Chloronaphthalene	3333.0000	3254.3014	98		1		40	45 - 105
2-Nitroaniline	3333.0000	2727.6080	82		1		40	45 - 120
Dimethylphthalate	3333.0000	2819.5140	85		0		40	50 - 110
Acenaphthylene	3333.0000	2958.8245	89		1		40	45 - 105
2,6-Dinitrotoluene	3333.0000	2708.7556	81		0		40	50 - 110
3-Nitroaniline	3333.0000	1941.0919	58		15		40	25 - 110
Acenaphthene	3333.0000	2964.6077	89		1		40	45 - 110
2,4-Dinitrophenol	3333.0000	2619.3445	79		4		40	15 - 130
4-Nitrophenol	3333.0000	1872.6689	56		9		40	15 - 140
Dibenzofuran	3333.0000	2858.3575	86		2		40	50 - 105
2,4-Dinitrotoluene	3333.0000	2406.4249	72		3		40	50 - 115
Diethylphthalate	3333.0000	2663.7563	80		0		40	50 - 115
4-Chlorophenyl-phenylether	3333.0000	2860.8949	86		1		40	45 - 110
Fluorene	3333.0000	2691.6295	81		0		40	50 - 110
4-Nitroaniline	3333.0000	1854.7026	56		4		40	35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	2805.0340	84		6		40	30 - 135
N-Nitrosodiphenylamine	3333.0000	3445.8179	103		0		40	50 - 115
4-Bromophenyl-phenylether	3333.0000	3528.2495	106		1		40	45 - 115
Hexachlorobenzene	3333.0000	3422.8879	103		3		40	45 - 120
Pentachlorophenol	3333.0000	2581.9745	77		4		40	25 - 120

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCSD-66863 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenanthrene	3333.0000	3068.5759	92		0		40	50 - 110
Anthracene	3333.0000	3131.4543	94		2		40	55 - 105
Carbazole	3333.0000	2740.0583	82		4		40	45 - 115
Di-n-butylphthalate	3333.0000	2986.7807	90		3		40	55 - 110
Fluoranthene	3333.0000	2427.0259	73		1		40	55 - 115
Pyrene	3333.0000	4096.4334	123		3		40	45 - 125
Butylbenzylphthalate	3333.0000	3726.7761	112		2		40	50 - 125
3,3´-Dichlorobenzidine	3333.0000	2644.1619	79		5		40	10 - 130
Benzo(a)anthracene	3333.0000	3382.4114	101		2		40	50 - 110
Chrysene	3333.0000	3122.9278	94		2		40	55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	3675.6577	110		2		40	45 - 125
Di-n-octylphthalate	3333.0000	3861.3307	116		1		40	40 - 130
Benzo(b)fluoranthene	3333.0000	3129.9324	94		0		40	45 - 115
Benzo(k)fluoranthene	3333.0000	3302.2921	99		2		40	45 - 125
Benzo(a)pyrene	3333.0000	3196.4051	96		4		40	50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	2847.1759	85		2		40	40 - 120
Dibenzo(a,h)anthracene	3333.0000	2929.6936	88		5		40	40 - 125
Benzo(g,h,i)perylene	3333.0000	2905.9434	87		0		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab File ID: S6A9366.D Lab Sample ID: MB-66863

Instrument ID: S6 Date Extracted: 06/20/2012

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 06/22/2012

Level: (LOW/MED) LOW Time Analyzed: 13:33

Extraction: (Type) SONC GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-66863	LCS-66863	S6A9367.D	06/22/2012
02	LCSD-66863	LCSD-66863	S6A9368.D	06/22/2012
03	BH1 8-10	L1335-01A	S6A9373.D	06/22/2012
04	BH3 8-10	L1335-02A	S6A9374.D	06/22/2012
05	BH2 8-10	L1335-03A	S6A9375.D	06/22/2012
06	BH4	L1335-04A	S6A9376.D	06/22/2012
07	BH5	L1335-05A	S6A9377.D	06/22/2012
08	BH6	L1335-06A	S6A9378.D	06/22/2012
09	BH7	L1335-07A	S6A9379.D	06/22/2012
10	BH8	L1335-08A	S6A9380.D	06/22/2012
11	BH9	L1335-09A	S6A9381.D	06/22/2012

COMMENTS:

* Pesticide Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1335

SW846 8081B, Organochlorine Pesticides by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8081B

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3550

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E5
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard
Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per column.

BH1 8-10 (L1335-01A), recovery is below criteria for Decachlorobiphenyl on front column, at 52% with criteria of (55-130).

BH2 8-10 (L1335-03A), recovery is below criteria for Decachlorobiphenyl on rear column, at 53% with criteria of (55-130) and Decachlorobiphenyl on front column, at 39% with criteria of (55-130).

BH4 (L1335-04A), recovery is below criteria for Decachlorobiphenyl on rear column, at 51% with criteria of (55-130) and Decachlorobiphenyl on front column, at 39% with criteria of (55-130).

BH5 (L1335-05A), recovery is below criteria for Decachlorobiphenyl on front column, at 53% with criteria of (55-130).

BH6 (L1335-06A), recovery is below criteria for Decachlorobiphenyl on front column, at 52% with criteria of (55-130).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

No sample in this SDG required analysis at dilution.

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____ _____

Date:_____7/5/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

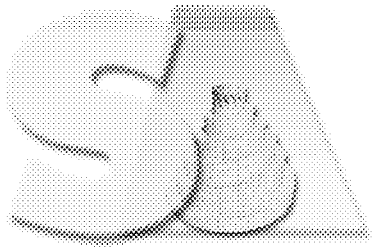
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH1 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-01A

Sample wt/vol: 30.2 (g/mL) G Lab File ID: E5H9016F.D/E5H9016R.D

% Moisture: 8.8 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4´-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4´-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4´-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH3 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-02A

Sample wt/vol: 30.4 (g/mL) G Lab File ID: E5H9017F.D/E5H9017R.D

% Moisture: 9.7 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4´-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4´-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4´-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH2 8-10

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-03A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5H9018F.D/E5H9018R.D

% Moisture: 5.3 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.5	U
72-55-9	4,4´-DDE	3.5	U
72-20-8	Endrin	3.5	U
33213-65-9	Endosulfan II	3.5	U
72-54-8	4,4´-DDD	3.5	U
1031-07-8	Endosulfan sulfate	3.5	U
50-29-3	4,4´-DDT	3.5	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.5	U
7421-93-4	Endrin aldehyde	3.5	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH4

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-04A

Sample wt/vol: 30.3 (g/mL) G Lab File ID: E5H9019F.D/E5H9019R.D

% Moisture: 15 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.8	U
72-55-9	4,4´-DDE	3.8	U
72-20-8	Endrin	3.8	U
33213-65-9	Endosulfan II	3.8	U
72-54-8	4,4´-DDD	3.8	U
1031-07-8	Endosulfan sulfate	3.8	U
50-29-3	4,4´-DDT	3.8	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.8	U
7421-93-4	Endrin aldehyde	3.8	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-05A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5H9020F.D/E5H9020R.D

% Moisture: 20 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4´-DDE	4.1	U
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4´-DDD	8.3	
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4´-DDT	4.1	U
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-06A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E5H9021F.D/E5H9021R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4´-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4´-DDD	4.3	
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4´-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH7

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-07A

Sample wt/vol: 30.7 (g/mL) G Lab File ID: E5H9022F.D/E5H9022R.D

% Moisture: 21 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	U
319-85-7	beta-BHC	2.1	U
319-86-8	delta-BHC	2.1	U
58-89-9	gamma-BHC (Lindane)	2.1	U
76-44-8	Heptachlor	2.1	U
309-00-2	Aldrin	2.1	U
1024-57-3	Heptachlor epoxide	2.1	U
959-98-8	Endosulfan I	2.1	U
60-57-1	Dieldrin	4.1	U
72-55-9	4,4´-DDE	9.1	
72-20-8	Endrin	4.1	U
33213-65-9	Endosulfan II	4.1	U
72-54-8	4,4´-DDD	19	
1031-07-8	Endosulfan sulfate	4.1	U
50-29-3	4,4´-DDT	26	
72-43-5	Methoxychlor	21	U
53494-70-5	Endrin ketone	4.1	U
7421-93-4	Endrin aldehyde	4.1	U
5103-71-9	alpha-Chlordane	2.1	U
5103-74-2	gamma-Chlordane	2.1	U
8001-35-2	Toxaphene	210	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH8

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-08A

Sample wt/vol: 30.5 (g/mL) G Lab File ID: E5H9023F.D/E5H9023R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4´-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4´-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4´-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BH9

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1335-09A

Sample wt/vol: 30.7 (g/mL) G Lab File ID: E5H9024F.D/E5H9024R.D

% Moisture: 12 Decanted: (Y/N) N Date Received: 06/16/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.7	U
72-55-9	4,4´-DDE	3.7	U
72-20-8	Endrin	3.7	U
33213-65-9	Endosulfan II	3.7	U
72-54-8	4,4´-DDD	3.7	U
1031-07-8	Endosulfan sulfate	3.7	U
50-29-3	4,4´-DDT	3.7	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.7	U
7421-93-4	Endrin aldehyde	3.7	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-66862

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5H9013F.D/E5H9013R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4´-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4´-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4´-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66862(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9014F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.2	
319-85-7	beta-BHC	5.8	
319-86-8	delta-BHC	5.4	
58-89-9	gamma-BHC (Lindane)	5.3	
76-44-8	Heptachlor	5.0	
309-00-2	Aldrin	5.1	
1024-57-3	Heptachlor epoxide	5.3	
959-98-8	Endosulfan I	5.4	
60-57-1	Dieldrin	11	
72-55-9	4,4´-DDE	10	
72-20-8	Endrin	10	
33213-65-9	Endosulfan II	11	
72-54-8	4,4´-DDD	10	
1031-07-8	Endosulfan sulfate	10	
50-29-3	4,4´-DDT	9.2	
72-43-5	Methoxychlor	47	
53494-70-5	Endrin ketone	10	
7421-93-4	Endrin aldehyde	9.9	
5103-71-9	alpha-Chlordane	4.8	
5103-74-2	gamma-Chlordane	5.0	
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66862(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9014R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.5	
319-85-7	beta-BHC	5.6	
319-86-8	delta-BHC	5.9	
58-89-9	gamma-BHC (Lindane)	5.8	
76-44-8	Heptachlor	5.6	
309-00-2	Aldrin	5.6	
1024-57-3	Heptachlor epoxide	5.8	
959-98-8	Endosulfan I	5.9	
60-57-1	Dieldrin	12	
72-55-9	4,4´-DDE	12	
72-20-8	Endrin	11	
33213-65-9	Endosulfan II	12	
72-54-8	4,4´-DDD	12	
1031-07-8	Endosulfan sulfate	12	
50-29-3	4,4´-DDT	11	
72-43-5	Methoxychlor	56	
53494-70-5	Endrin ketone	12	
7421-93-4	Endrin aldehyde	11	
5103-71-9	alpha-Chlordane	5.5	
5103-74-2	gamma-Chlordane	5.8	
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-66862(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9015F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.4	
319-85-7	beta-BHC	6.1	
319-86-8	delta-BHC	5.7	
58-89-9	gamma-BHC (Lindane)	5.5	
76-44-8	Heptachlor	5.2	
309-00-2	Aldrin	5.3	
1024-57-3	Heptachlor epoxide	5.4	
959-98-8	Endosulfan I	5.6	
60-57-1	Dieldrin	11	
72-55-9	4,4´-DDE	10	
72-20-8	Endrin	10	
33213-65-9	Endosulfan II	11	
72-54-8	4,4´-DDD	11	
1031-07-8	Endosulfan sulfate	11	
50-29-3	4,4´-DDT	9.6	
72-43-5	Methoxychlor	47	
53494-70-5	Endrin ketone	10	
7421-93-4	Endrin aldehyde	10	
5103-71-9	alpha-Chlordane	4.7	
5103-74-2	gamma-Chlordane	5.3	
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-66862(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9015R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.8	
319-85-7	beta-BHC	5.9	
319-86-8	delta-BHC	6.2	
58-89-9	gamma-BHC (Lindane)	6.0	
76-44-8	Heptachlor	5.6	
309-00-2	Aldrin	5.8	
1024-57-3	Heptachlor epoxide	6.3	
959-98-8	Endosulfan I	6.0	
60-57-1	Dieldrin	12	
72-55-9	4,4´-DDE	12	
72-20-8	Endrin	11	
33213-65-9	Endosulfan II	13	
72-54-8	4,4´-DDD	12	
1031-07-8	Endosulfan sulfate	12	
50-29-3	4,4´-DDT	11	
72-43-5	Methoxychlor	56	
53494-70-5	Endrin ketone	12	
7421-93-4	Endrin aldehyde	11	
5103-71-9	alpha-Chlordane	5.6	
5103-74-2	gamma-Chlordane	6.0	
8001-35-2	Toxaphene	170	U

2P - FORM II PEST-2

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-66862	76		83		67		89				0
02	LCS-66862	75		80		68		91				0
03	LCSD-66862	77		84		68		91				0
04	BH1 8-10	53		57		52	*	70				1
05	BH3 8-10	53		58		56		72				0
06	BH2 8-10	36		38		39	*	53	*			2
07	BH4	31		33		39	*	51	*			2
08	BH5	54		57		53	*	72				1
09	BH6	50		53		52	*	71				1
10	BH7	59		62		67		106				0
11	BH8	48		54		55		70				0
12	BH9	54		56		60		76				0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(14-113)
DCB = Decachlorobiphenyl	(55-130)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

3M - FORM III PEST-3

SOIL PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCS-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
alpha-BHC	6.6670	5.1533	77	60-125
beta-BHC	6.6670	5.7862	87	60-125
delta-BHC	6.6670	5.4378	82	55-130
gamma-BHC (Lindane)	6.6670	5.2638	79	60-125
Heptachlor	6.6670	4.9876	75	50-140
Aldrin	6.6670	5.0726	76	45-140
Heptachlor epoxide	6.6670	5.2556	79	65-130
Endosulfan I	6.6670	5.3966	81	15-135
Dieldrin	13.3330	10.5719	79	65-125
4,4´-DDE	13.3330	10.0051	75	70-125
Endrin	13.3330	10.0204	75	60-135
Endosulfan II	13.3330	10.7680	81	35-140
4,4´-DDD	13.3330	10.2895	77	30-135
Endosulfan sulfate	13.3330	10.3621	78	60-135
4,4´-DDT	13.3330	9.1692	69	45-140
Methoxychlor	66.6670	46.6975	70	55-145
Endrin ketone	13.3330	10.1292	76	65-135
Endrin aldehyde	13.3330	9.8819	74	35-145
alpha-Chlordane	6.6670	4.7558	71	65-120
gamma-Chlordane	6.6670	5.0403	76	65-125

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/25/2012

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
alpha-BHC	6.6670	5.5440	83	60-125
beta-BHC	6.6670	5.6266	84	60-125
delta-BHC	6.6670	5.8630	88	55-130
gamma-BHC (Lindane)	6.6670	5.7714	87	60-125

COMMENTS:

3M - FORM III PEST-3

SOIL PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCS-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Heptachlor	6.6670	5.5708	84	50-140
Aldrin	6.6670	5.5881	84	45-140
Heptachlor epoxide	6.6670	5.7774	87	65-130
Endosulfan I	6.6670	5.8704	88	15-135
Dieldrin	13.3330	11.5799	87	65-125
4,4´-DDE	13.3330	11.5165	86	70-125
Endrin	13.3330	11.0253	83	60-135
Endosulfan II	13.3330	12.0267	90	35-140
4,4´-DDD	13.3330	11.5606	87	30-135
Endosulfan sulfate	13.3330	11.7180	88	60-135
4,4´-DDT	13.3330	10.5468	79	45-140
Methoxychlor	66.6670	55.5695	83	55-145
Endrin ketone	13.3330	11.8597	89	65-135
Endrin aldehyde	13.3330	11.1002	83	35-145
alpha-Chlordane	6.6670	5.5100	83	65-120
gamma-Chlordane	6.6670	5.7917	87	65-125

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

COMMENTS:

3M - FORM III PEST-3

SOIL PESTICIDE LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCSD-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	6.6670	5.4198	81	60-125	5.0	30
beta-BHC	6.6670	6.0541	91	60-125	4.0	30
delta-BHC	6.6670	5.6648	85	55-130	4.0	30
gamma-BHC (Lindane)	6.6670	5.4994	82	60-125	4.0	30
Heptachlor	6.6670	5.2238	78	50-140	4.0	30
Aldrin	6.6670	5.2851	79	45-140	4.0	30
Heptachlor epoxide	6.6670	5.4494	82	65-130	4.0	30
Endosulfan I	6.6670	5.5617	83	15-135	2.0	30
Dieldrin	13.3330	10.5030	79	65-125	0	30
4,4´-DDE	13.3330	10.3976	78	70-125	4.0	30
Endrin	13.3330	10.1623	76	60-135	1.0	30
Endosulfan II	13.3330	11.3539	85	35-140	5.0	30
4,4´-DDD	13.3330	10.6702	80	30-135	4.0	30
Endosulfan sulfate	13.3330	10.6966	80	60-135	3.0	30
4,4´-DDT	13.3330	9.5749	72	45-140	4.0	30
Methoxychlor	66.6670	47.0564	71	55-145	1.0	30
Endrin ketone	13.3330	10.3255	77	65-135	1.0	30
Endrin aldehyde	13.3330	10.2048	77	35-145	4.0	30
alpha-Chlordane	6.6670	4.7241	71	65-120	0	30
gamma-Chlordane	6.6670	5.2553	79	65-125	4.0	30

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/25/2012

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	6.6670	5.7798	87	60-125	5.0	30
beta-BHC	6.6670	5.9138	89	60-125	6.0	30
delta-BHC	6.6670	6.1800	93	55-130	6.0	30
gamma-BHC (Lindane)	6.6670	6.0435	91	60-125	4.0	30

COMMENTS:

3M - FORM III PEST-3

SOIL PESTICIDE LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab Sample ID: LCSD-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Heptachlor	6.6670	5.6245	84	50-140	0	30
Aldrin	6.6670	5.7662	86	45-140	2.0	30
Heptachlor epoxide	6.6670	6.2511	94	65-130	8.0	30
Endosulfan I	6.6670	6.0033	90	15-135	2.0	30
Dieldrin	13.3330	12.0602	90	65-125	3.0	30
4,4´-DDE	13.3330	11.9198	89	70-125	3.0	30
Endrin	13.3330	11.3280	85	60-135	2.0	30
Endosulfan II	13.3330	12.5090	94	35-140	4.0	30
4,4´-DDD	13.3330	12.1991	91	30-135	4.0	30
Endosulfan sulfate	13.3330	12.1377	91	60-135	3.0	30
4,4´-DDT	13.3330	10.7237	80	45-140	1.0	30
Methoxychlor	66.6670	56.4938	85	55-145	2.0	30
Endrin ketone	13.3330	12.3559	93	65-135	4.0	30
Endrin aldehyde	13.3330	11.1734	84	35-145	1.0	30
alpha-Chlordane	6.6670	5.5813	84	65-120	1.0	30
gamma-Chlordane	6.6670	6.0427	91	65-125	4.0	30

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

RPD: 0 out of 40 outside limits.

COMMENTS:

4E - FORM IV PEST

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1335 Mod. Ref No.: SDG No.: SL1335

Lab File ID: E5H9013F.D / E5H9013R.D Lab Sample ID: MB-66862

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 06/20/2012

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Date Analyzed (1): 06/25/2012 Date Analyzed (2): 06/25/2012

Time Analyzed (1): 19:08 Time Analyzed (2): 19:08

Instrument ID (1): E5 Instrument ID (2): E5

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-66862	LCS-66862	06/25/2012	06/25/2012
02	LCSD-66862	LCSD-66862	06/25/2012	06/25/2012
03	BH1 8-10	L1335-01A	06/25/2012	06/25/2012
04	BH3 8-10	L1335-02A	06/25/2012	06/25/2012
05	BH2 8-10	L1335-03A	06/25/2012	06/25/2012
06	BH4	L1335-04A	06/25/2012	06/25/2012
07	BH5	L1335-05A	06/25/2012	06/25/2012
08	BH6	L1335-06A	06/25/2012	06/25/2012
09	BH7	L1335-07A	06/25/2012	06/25/2012
10	BH8	L1335-08A	06/25/2012	06/25/2012
11	BH9	L1335-09A	06/25/2012	06/25/2012

COMMENTS:

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1335

SW846 6010C, SW846 7471B

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 6010C, SW846 7471B.

IV. PREPARATION

Soil Samples were prepared following procedures in laboratory test code: SW3050B and SW7471B.

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

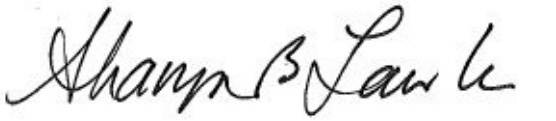
Serial Dilution analysis was performed on sample: BH9 (L1335-09ASD) for Thallium only.

Percent difference was within the QC limit.

G. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 07/10/2012

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

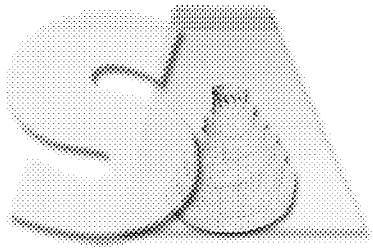
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH1 8-10

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-01

Level (low/med): MED Date Received: 06/16/2012

% Solids: 91.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6280			P
7440-36-0	Antimony	0.40	U		P
7440-38-2	Arsenic	3.6			P
7440-39-3	Barium	92.6			P
7440-41-7	Beryllium	0.20	B		P
7440-43-9	Cadmium	0.53			P
7440-70-2	Calcium	39800			P
7440-47-3	Chromium	9.6			P
7440-48-4	Cobalt	6.6			P
7440-50-8	Copper	20.0			P
7439-89-6	Iron	14100			P
7439-92-1	Lead	3.7			P
7439-95-4	Magnesium	7890			P
7439-96-5	Manganese	696			P
7439-97-6	Mercury	0.0024	U		CV
7440-02-0	Nickel	13.0			P
7440-09-7	Potassium	999			P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.067	U		P
7440-23-5	Sodium	94.4			P
7440-28-0	Thallium	0.60	B		P
7440-62-2	Vanadium	14.5			P
7440-66-6	Zinc	29.6			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH2 8-10

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-03

Level (low/med): MED Date Received: 06/16/2012

% Solids: 94.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6670			P
7440-36-0	Antimony	0.55	B		P
7440-38-2	Arsenic	3.0			P
7440-39-3	Barium	89.0			P
7440-41-7	Beryllium	0.22	B		P
7440-43-9	Cadmium	0.56			P
7440-70-2	Calcium	41000			P
7440-47-3	Chromium	9.9			P
7440-48-4	Cobalt	6.5			P
7440-50-8	Copper	13.9			P
7439-89-6	Iron	14500			P
7439-92-1	Lead	3.4			P
7439-95-4	Magnesium	7510			P
7439-96-5	Manganese	716			P
7439-97-6	Mercury	0.0025	U		CV
7440-02-0	Nickel	13.5			P
7440-09-7	Potassium	1080			P
7782-49-2	Selenium	0.61	U		P
7440-22-4	Silver	0.061	U		P
7440-23-5	Sodium	97.5			P
7440-28-0	Thallium	1.1			P
7440-62-2	Vanadium	14.6			P
7440-66-6	Zinc	30.4			P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH3 8-10

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-02

Level (low/med): MED Date Received: 06/16/2012

% Solids: 90.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6190			P
7440-36-0	Antimony	0.35	U		P
7440-38-2	Arsenic	2.1			P
7440-39-3	Barium	94.2			P
7440-41-7	Beryllium	0.20	B		P
7440-43-9	Cadmium	0.50			P
7440-70-2	Calcium	42500			P
7440-47-3	Chromium	8.5			P
7440-48-4	Cobalt	6.0			P
7440-50-8	Copper	14.3			P
7439-89-6	Iron	13000			P
7439-92-1	Lead	2.9			P
7439-95-4	Magnesium	6870			P
7439-96-5	Manganese	647			P
7439-97-6	Mercury	0.0024	U		CV
7440-02-0	Nickel	12.2			P
7440-09-7	Potassium	937			P
7782-49-2	Selenium	0.60	U		P
7440-22-4	Silver	0.060	U		P
7440-23-5	Sodium	97.0			P
7440-28-0	Thallium	0.36	B		P
7440-62-2	Vanadium	13.0			P
7440-66-6	Zinc	28.2			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH4

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-04

Level (low/med): MED Date Received: 06/16/2012

% Solids: 85.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6600			P
7440-36-0	Antimony	0.33	U		P
7440-38-2	Arsenic	1.7			P
7440-39-3	Barium	41.3			P
7440-41-7	Beryllium	0.22			P
7440-43-9	Cadmium	0.57			P
7440-70-2	Calcium	4810			P
7440-47-3	Chromium	7.7			P
7440-48-4	Cobalt	6.9			P
7440-50-8	Copper	12.0			P
7439-89-6	Iron	11300			P
7439-92-1	Lead	3.2			P
7439-95-4	Magnesium	2220			P
7439-96-5	Manganese	190			P
7439-97-6	Mercury	0.0059	B		CV
7440-02-0	Nickel	12.7			P
7440-09-7	Potassium	628			P
7782-49-2	Selenium	0.56	U		P
7440-22-4	Silver	0.056	U		P
7440-23-5	Sodium	52.2			P
7440-28-0	Thallium	0.39	B		P
7440-62-2	Vanadium	13.0			P
7440-66-6	Zinc	74.4			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH5

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-05

Level (low/med): MED Date Received: 06/16/2012

% Solids: 80.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8250			P
7440-36-0	Antimony	0.32	U		P
7440-38-2	Arsenic	26.3			P
7440-39-3	Barium	137			P
7440-41-7	Beryllium	0.097	B		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	2760			P
7440-47-3	Chromium	62.4			P
7440-48-4	Cobalt	5.0			P
7440-50-8	Copper	16.0			P
7439-89-6	Iron	9170			P
7439-92-1	Lead	8.6			P
7439-95-4	Magnesium	2920			P
7439-96-5	Manganese	110			P
7439-97-6	Mercury	0.021	B		CV
7440-02-0	Nickel	11.3			P
7440-09-7	Potassium	993			P
7782-49-2	Selenium	0.54	U		P
7440-22-4	Silver	0.054	U		P
7440-23-5	Sodium	60.5			P
7440-28-0	Thallium	0.33	B		P
7440-62-2	Vanadium	63.8			P
7440-66-6	Zinc	61.4			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH6

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-06

Level (low/med): MED Date Received: 06/16/2012

% Solids: 88.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6810			P
7440-36-0	Antimony	0.33	U		P
7440-38-2	Arsenic	132			P
7440-39-3	Barium	105			P
7440-41-7	Beryllium	0.28			P
7440-43-9	Cadmium	0.61			P
7440-70-2	Calcium	7250			P
7440-47-3	Chromium	10.1			P
7440-48-4	Cobalt	5.6			P
7440-50-8	Copper	50.5			P
7439-89-6	Iron	14900			P
7439-92-1	Lead	28.1			P
7439-95-4	Magnesium	3270			P
7439-96-5	Manganese	166			P
7439-97-6	Mercury	0.015	B		CV
7440-02-0	Nickel	12.4			P
7440-09-7	Potassium	625			P
7782-49-2	Selenium	0.56	U		P
7440-22-4	Silver	0.056	U		P
7440-23-5	Sodium	56.7			P
7440-28-0	Thallium	0.26	B		P
7440-62-2	Vanadium	15.0			P
7440-66-6	Zinc	71.8			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH7

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-07

Level (low/med): MED Date Received: 06/16/2012

% Solids: 78.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2720			P
7440-36-0	Antimony	0.44	U		P
7440-38-2	Arsenic	21.7			P
7440-39-3	Barium	53.7			P
7440-41-7	Beryllium	0.13	B		P
7440-43-9	Cadmium	0.32			P
7440-70-2	Calcium	160000			P
7440-47-3	Chromium	6.3			P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	26.1			P
7439-89-6	Iron	11300			P
7439-92-1	Lead	69.3			P
7439-95-4	Magnesium	84100			P
7439-96-5	Manganese	698			P
7439-97-6	Mercury	0.018	B		CV
7440-02-0	Nickel	5.1			P
7440-09-7	Potassium	998			P
7782-49-2	Selenium	0.73	U		P
7440-22-4	Silver	0.073	U		P
7440-23-5	Sodium	234			P
7440-28-0	Thallium	3.6			P
7440-62-2	Vanadium	7.0			P
7440-66-6	Zinc	47.1			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH8

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-08

Level (low/med): MED Date Received: 06/16/2012

% Solids: 88.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7710			P
7440-36-0	Antimony	0.32	U		P
7440-38-2	Arsenic	4.0			P
7440-39-3	Barium	91.6			P
7440-41-7	Beryllium	0.25			P
7440-43-9	Cadmium	0.71			P
7440-70-2	Calcium	39300			P
7440-47-3	Chromium	10.5			P
7440-48-4	Cobalt	6.8			P
7440-50-8	Copper	31.9			P
7439-89-6	Iron	16500			P
7439-92-1	Lead	4.5			P
7439-95-4	Magnesium	6460			P
7439-96-5	Manganese	734			P
7439-97-6	Mercury	0.0086	B		CV
7440-02-0	Nickel	13.9			P
7440-09-7	Potassium	1020			P
7782-49-2	Selenium	0.54	U		P
7440-22-4	Silver	0.054	U		P
7440-23-5	Sodium	93.1			P
7440-28-0	Thallium	1.1			P
7440-62-2	Vanadium	16.5			P
7440-66-6	Zinc	34.0			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

BH9

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Matrix (soil/water): SOIL Lab Sample ID: L1335-09

Level (low/med): MED Date Received: 06/16/2012

% Solids: 88.0

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7830			P
7440-36-0	Antimony	0.39	U		P
7440-38-2	Arsenic	2.3			P
7440-39-3	Barium	77.0			P
7440-41-7	Beryllium	0.28			P
7440-43-9	Cadmium	0.63			P
7440-70-2	Calcium	41900			P
7440-47-3	Chromium	11.0			P
7440-48-4	Cobalt	7.6			P
7440-50-8	Copper	10.9			P
7439-89-6	Iron	15700			P
7439-92-1	Lead	4.1			P
7439-95-4	Magnesium	11000			P
7439-96-5	Manganese	708			P
7439-97-6	Mercury	0.0029	B		CV
7440-02-0	Nickel	15.7			P
7440-09-7	Potassium	1240			P
7782-49-2	Selenium	0.66	U		P
7440-22-4	Silver	0.066	U		P
7440-23-5	Sodium	151			P
7440-28-0	Thallium	0.94	B		P
7440-62-2	Vanadium	15.1			P
7440-66-6	Zinc	33.8			P

Comments:

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66781**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum				455.0	448.8		364	546.0	98.6
Antimony				22.8	24.2		18.2	27.3	106.1
Arsenic				22.8	23.0		18.2	27.3	100.9
Barium				455.0	470.2		364	546.0	103.3
Beryllium				11.4	11.4		9.1	13.6	100.0
Cadmium				11.4	11.2		9.1	13.6	98.2
Calcium				1135.0	1086.3		908	1362.0	95.7
Chromium				45.5	45.3		36.4	54.6	99.6
Cobalt				113.5	113.1		90.8	136.2	99.6
Copper				56.5	57.5		45.2	67.8	101.8
Iron				227.5	228.0		182	273.0	100.2
Lead				22.8	22.8		18.2	27.3	100.0
Magnesium				1135.0	1138.7		908	1362.0	100.3
Manganese				113.5	115.0		90.8	136.2	101.3
Nickel				113.5	113.2		90.8	136.2	99.7
Potassium				1135.0	1141.2		908	1362.0	100.5
Selenium				22.8	21.7		18.2	27.3	95.2
Silver				56.5	59.3		42.4	67.8	105.0
Sodium				1135.0	1149.9		908	1362.0	101.3
Thallium				22.8	20.6		18.2	27.3	90.4
Vanadium				113.5	114.0		90.8	136.2	100.4
Zinc				113.5	111.0		90.8	136.2	97.8

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66783**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury				0.8	0.8		0.6	0.9	100.0

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-66783**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

FIMS2_120619A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/19/12 11:08	C	06/19/12 11:21	C		C	Preparation Blank	C	M
Mercury	0.028	U	0.028	U	0.033	B			0.002	U	CV

U.S. EPA - CLP

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-66781**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

OPTIMA3_120619B

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	06/19/12 11:15	C	06/19/12 11:48	C	06/19/12 12:21	C		C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	1.200	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	0.851	B	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	0.410	U	P
Barium	1.2	B	1.3	B	1.3	B	1.3	B	0.093	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.002	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.015	U	P
Calcium	110.0	U	110.0	U	110.0	U	110.0	U	6.100	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.019	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.044	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	0.196	B	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	1.500	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	0.170	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	0.630	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	0.130	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.043	U	P
Potassium	76.0	U	76.0	U	76.0	U	76.0	U	3.400	U	P
Selenium	12.0	U	14.3	B	12.0	U	12.0	U	0.640	U	P
Silver	7.5	B	6.9	U	6.9	U	6.9	U	0.064	U	P
Sodium	29.0	U	29.0	U	39.4	B	29.0	U	1.100	U	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	0.220	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	0.060	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	0.357	B	P

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120619B

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/19/12 12:55	C		C		C	Preparation Blank	C	M
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			4.3	U							P
Barium			1.3	B							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U	110.0	U					P
Chromium			0.6	U							P
Cobalt			0.7	U							P
Copper			3.6	U							P
Iron			31.0	U							P
Lead			4.2	U							P
Magnesium			76.0	U							P
Manganese			10.0	U							P
Nickel			0.8	U							P
Potassium			76.0	U							P
Selenium			12.0	U							P
Silver			6.9	U							P
Sodium			-36.8	B							P
Vanadium			1.1	U							P
Zinc			4.9	U							P

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1335

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120619C

	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
Analyte		C	06/19/12 15:08	C	06/19/12 15:44	C		C		C	M
Thallium	6.2	U	6.2	U	6.2	U					P

* Wet Chemistry *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1335

SW846 9045C

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 9045C

IV. INSTRUMENTATION

The following instrumentation was used to perform analysis:

Instrument Code: WC03
Instrument Type: Probe
Description: pH Meter

Manufacturer: Oakton Instruments
Model: Bench 2700 Series

V. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Duplicate sample:

No client-requested laboratory duplicate analyses were included in this SDG.

C. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 07/10/12

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

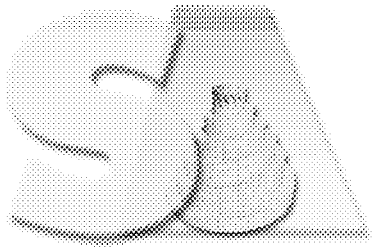
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



SPECTRUM ANALYTICAL, INC.
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HANIBAL TECHNOLOGY

Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

Client: Labella Associates
Client Sample ID: BH1 8-10
Lab ID: L1335-01
Project: Barker Chemical
Collection Date: 06/14/12 9:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.4		1.0	S.U.	1	06/26/2012 17:02	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

07/10/2012

Client: Labella Associates
Client Sample ID: BH3 8-10
Lab ID: L1335-02
Project: Barker Chemical
Collection Date: 06/14/12 11:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.6		1.0	S.U.	1	06/26/2012 17:03	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: Labella Associates
Client Sample ID: BH2 8-10
Lab ID: L1335-03
Project: Barker Chemical
Collection Date: 06/14/12 10:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.8		1.0	S.U.	1	06/26/2012 17:04	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

07/10/2012

Client: Labella Associates
Client Sample ID: BH4
Lab ID: L1335-04
Project: Barker Chemical
Collection Date: 06/15/12 8:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	4.6		1.0	S.U.	1	06/26/2012 17:05	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: Labella Associates
Client Sample ID: BH5
Lab ID: L1335-05
Project: Barker Chemical
Collection Date: 06/15/12 13:45

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	5.6		1.0	S.U.	1	06/26/2012 17:06	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

07/10/2012

Client: Labella Associates
Client Sample ID: BH6
Lab ID: L1335-06
Project: Barker Chemical
Collection Date: 06/15/12 14:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.5		1.0	S.U.	1	06/26/2012 17:08	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: Labella Associates
Client Sample ID: BH7
Lab ID: L1335-07
Project: Barker Chemical
Collection Date: 06/15/12 14:45

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.7		1.0	S.U.	1	06/26/2012 17:09	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

07/10/2012

Client: Labella Associates
Client Sample ID: BH8
Lab ID: L1335-08
Project: Barker Chemical
Collection Date: 06/15/12 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.5		1.0	S.U.	1	06/26/2012 17:10	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: Labella Associates
Client Sample ID: BH9
Lab ID: L1335-09
Project: Barker Chemical
Collection Date: 06/15/12 16:20

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.4		1.0	S.U.	1	06/26/2012 17:11	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

SPECTRUM ANALYTICAL, INC.

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Form 1 Summary Pack

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH1 8-10

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-01	File ID:	20120625A-005
Sampled:	06/14/12 09:00	Prepared:	06/22/12 11:15		
% Solids:	89.20	Preparation:	SW846 3050B	Initial/Final:	1.0816 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	136	1	0.429	5.18	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH3 8-10

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-02	File ID:	20120625A-006
Sampled:	06/14/12 11:20	Prepared:	06/22/12 11:15		
% Solids:	91.49	Preparation:	SW846 3050B	Initial/Final:	1.0645 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	105	1	0.425	5.13	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH2 8-10

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-03	File ID:	20120625A-007
Sampled:	06/14/12 10:00	Prepared:	06/22/12 11:15		
% Solids:	94.28	Preparation:	SW846 3050B	Initial/Final:	1.0337 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	103	1	0.424	5.13	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH4

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-04	File ID:	20120625-077
Sampled:	06/15/12 08:30	Prepared:	06/22/12 11:15		
% Solids:	81.61	Preparation:	SW846 3050B	Initial/Final:	1.0534 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	22400	100	48.1	582	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH5

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-05	File ID:	20120625-078
Sampled:	06/15/12 13:45	Prepared:	06/22/12 11:15		
% Solids:	82.08	Preparation:	SW846 3050B	Initial/Final:	1.0681 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	8170	50	23.6	285	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH6

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-06	File ID:	20120625-079
Sampled:	06/15/12 14:15	Prepared:	06/22/12 11:15		
% Solids:	84.11	Preparation:	SW846 3050B	Initial/Final:	1.1093 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	12100	50	22.2	268	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH7

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-07	File ID:	20120625-080
Sampled:	06/15/12 14:45	Prepared:	06/22/12 11:15		
% Solids:	89.36	Preparation:	SW846 3050B	Initial/Final:	1.0279 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	932	5	2.25	27.2	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH8

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-08	File ID:	20120625A-014
Sampled:	06/15/12 15:15	Prepared:	06/22/12 11:15		
% Solids:	90.08	Preparation:	SW846 3050B	Initial/Final:	1.1981 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	81.6	1	0.383	4.63	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

BH9

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-09	File ID:	20120625A-015
Sampled:	06/15/12 16:20	Prepared:	06/22/12 11:15		
% Solids:	87.09	Preparation:	SW846 3050B	Initial/Final:	1.0456 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	117	1	0.454	5.49	

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH1 8-10

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-01	File ID:	
Sampled:	06/14/12 09:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	89.20	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	89.2	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH3 8-10

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-02	File ID:	
Sampled:	06/14/12 11:20	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	91.49	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	91.5	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH2 8-10

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-03	File ID:	
Sampled:	06/14/12 10:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	94.28	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	94.3	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH4

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-04	File ID:	
Sampled:	06/15/12 08:30	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	81.61	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	81.6	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH5

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-05	File ID:	
Sampled:	06/15/12 13:45	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	82.08	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	82.1	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH6

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-06	File ID:	
Sampled:	06/15/12 14:15	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	84.11	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	84.1	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH7

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-07	File ID:	
Sampled:	06/15/12 14:45	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	89.36	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	89.4	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH8

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-08	File ID:	
Sampled:	06/15/12 15:15	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	90.08	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	90.1	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

BH9

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51437
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1335			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51437-09	File ID:	
Sampled:	06/15/12 16:20	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	87.09	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	87.1	1			

Report Date:
10-Jul-12 16:50

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Labella Associates
300 Pearl St. Suite 325
Buffalo, NY 14202

Work Order: L1336
Project : Barker Chemical
Project #: 212436

Attn: Dan Riker

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L1336-01	MW5	Aqueous	15-Jun-12 11:15	16-Jun-12 08:50
L1336-02	TPMW3	Aqueous	15-Jun-12 12:50	16-Jun-12 08:50
L1336-03	TPMW5	Aqueous	15-Jun-12 17:15	16-Jun-12 08:50
L1336-04	MW3	Aqueous	15-Jun-12 11:40	16-Jun-12 08:50
L1336-05	TRIP BLANK	Aqueous	15-Jun-12 00:00	16-Jun-12 08:50

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Identification and Analytical Requirements Summary

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
MW5	L1336-01			SW8081_W	SW6010_W	SEE DATA
MW5	L1336-01				SW7470	
TPMW3	L1336-02	SW8260_W	SW8270_W	SW8081_W	SW6010_W	SEE DATA
TPMW3	L1336-02				SW7470	
TPMW5	L1336-03	SW8260_W	SW8270_W	SW8081_W	SW6010_W	SEE DATA
TPMW5	L1336-03				SW7470	
MW3	L1336-04			SW8081_W		
TRIP BLANK	L1336-05	SW8260_W				

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L1336-02A	AQ	6/15/2012	6/16/2012	NA	6/20/2012
L1336-02ADL	AQ	6/15/2012	6/16/2012	NA	6/21/2012
L1336-03A	AQ	6/15/2012	6/16/2012	NA	6/21/2012
L1336-05A	AQ	6/15/2012	6/16/2012	NA	6/20/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_W					
L1336-02B	AQ	6/15/2012	6/16/2012	6/19/2012	6/21/2012
L1336-02BDL	AQ	6/15/2012	6/16/2012	6/19/2012	6/22/2012
L1336-03B	AQ	6/15/2012	6/16/2012	6/19/2012	6/21/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8081_W					
L1336-01A	AQ	6/15/2012	6/16/2012	6/19/2012	6/25/2012
L1336-02B	AQ	6/15/2012	6/16/2012	6/19/2012	6/25/2012
L1336-03B	AQ	6/15/2012	6/16/2012	6/19/2012	6/19/2012
L1336-04A	AQ	6/15/2012	6/16/2012	6/19/2012	6/25/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L1336-02A	AQ	SW8260_W	NA	LOW	1
L1336-02ADL	AQ	SW8260_W	NA	LOW	10
L1336-03A	AQ	SW8260_W	NA	LOW	1
L1336-05A	AQ	SW8260_W	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_W					
L1336-02B	AQ	SW8270_W	3510C	NA	1
L1336-02BDL	AQ	SW8270_W	3510C	NA	4
L1336-03B	AQ	SW8270_W	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8081_W					
L1336-01A	AQ	SW8081_W	3510C	sulfur	1
L1336-02B	AQ	SW8081_W	3510C	sulfur	1
L1336-03B	AQ	SW8081_W	3510C	sulfur	1
L1336-04A	AQ	SW8081_W	3510C	sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary ME

Project Name : Barker Chemical -- 212436 **SDG :** L1336

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_W				
L1336-01D	AQ	SW6010_W	6/16/2012	6/22/2012
L1336-02E	AQ	SW6010_W	6/16/2012	6/22/2012
L1336-03E	AQ	SW6010_W	6/16/2012	6/22/2012
SW7470				
L1336-01D	AQ	SW7470	6/16/2012	6/22/2012
L1336-02E	AQ	SW7470	6/16/2012	6/22/2012
L1336-03E	AQ	SW7470	6/16/2012	6/22/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1336

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER, 212436
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1336-01A	MW5	06/15/2012 11:15	06/16/2012	Aqueous	SW8081_W	/					P1
L1336-01B	MW5	06/15/2012 11:15	06/16/2012	Aqueous	E300IC_W	/ SO4 only				Y	P1
L1336-01C	MW5	06/15/2012 11:15	06/16/2012	Aqueous	SM4500_S-_W	/					P1
L1336-01D	MW5	06/15/2012 11:15	06/16/2012	Aqueous	SW6010_W	/ TAL				Y	M6
L1336-01D	MW5	06/15/2012 11:15	06/16/2012	Aqueous	SW7470	/ TAL					M6
L1336-02A	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	SW8260_W	/					VOA
L1336-02B	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	SW8081_W	/					P1
L1336-02B	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	SW8270_W	/					P1
L1336-02C	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	E300IC_W	/ SO4 only				Y	P1
L1336-02D	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	SM4500_S-_W	/					P1
L1336-02E	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	SW6010_W	/ TAL				Y	M6
L1336-02E	TPMW3	06/15/2012 12:50	06/16/2012	Aqueous	SW7470	/ TAL					M6
L1336-03A	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	SW8260_W	/					VOA
L1336-03B	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	SW8081_W	/					P1
L1336-03B	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	SW8270_W	/					P1
L1336-03C	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	E300IC_W	/ SO4 only				Y	P1
L1336-03D	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	SM4500_S-_W	/					P1
L1336-03E	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	SW6010_W	/ TAL				Y	M6
L1336-03E	TPMW5	06/15/2012 17:15	06/16/2012	Aqueous	SW7470	/ TAL					M6

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1336

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER, 212436
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1336-04A	MW3	06/15/2012 11:40	06/16/2012	Aqueous	SW8081_W	/					P1
L1336-05A	TRIP BLANK	06/15/2012 00:00	06/16/2012	Aqueous	SW8260_W	/					VOA

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1336

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V6
Instrument Type: GCMS-VOA
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 5973
GC Column used: 30 m X 0.25 mm ID [1.40 um thickness] DB-624 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

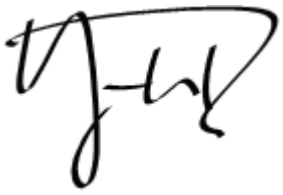
The following samples were analyzed at dilution:

TPMW3 (L1336-02ADL) : Dilution Factor: 10

G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:____  _____

Date:_____7/6/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

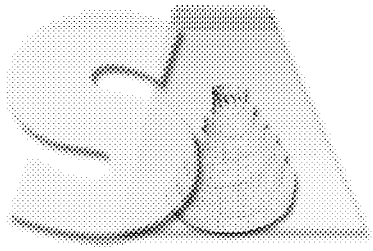
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7905.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	14	
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	2.7	J
71-43-2	Benzene	1.2	J
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	13	
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7905.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	34	
179601-23-1	m,p-Xylene	25	
95-47-6	o-Xylene	6.2	
1330-20-7	Xylene (Total)	31	
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	1.0	J
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	2.4	J
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.4	
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	19	
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	610	E

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7960.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	50	U
74-87-3	Chloromethane	50	U
75-01-4	Vinyl chloride	50	U
74-83-9	Bromomethane	50	U
75-00-3	Chloroethane	50	U
75-69-4	Trichlorofluoromethane	50	U
75-35-4	1,1-Dichloroethene	50	U
67-64-1	Acetone	50	U
74-88-4	Iodomethane	50	U
75-15-0	Carbon disulfide	12	DJ
75-09-2	Methylene chloride	50	U
156-60-5	trans-1,2-Dichloroethene	50	U
1634-04-4	Methyl tert-butyl ether	50	U
75-34-3	1,1-Dichloroethane	50	U
108-05-4	Vinyl acetate	50	U
78-93-3	2-Butanone	50	U
156-59-2	cis-1,2-Dichloroethene	50	U
594-20-7	2,2-Dichloropropane	50	U
74-97-5	Bromochloromethane	50	U
67-66-3	Chloroform	50	U
71-55-6	1,1,1-Trichloroethane	50	U
563-58-6	1,1-Dichloropropene	50	U
56-23-5	Carbon tetrachloride	50	U
107-06-2	1,2-Dichloroethane	50	U
71-43-2	Benzene	50	U
79-01-6	Trichloroethene	50	U
78-87-5	1,2-Dichloropropane	15	DJ
74-95-3	Dibromomethane	50	U
75-27-4	Bromodichloromethane	50	U
10061-01-5	cis-1,3-Dichloropropene	50	U
108-10-1	4-Methyl-2-pentanone	50	U
108-88-3	Toluene	50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
79-00-5	1,1,2-Trichloroethane	50	U
142-28-9	1,3-Dichloropropane	50	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02ADL

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7960.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	50	U
591-78-6	2-Hexanone	50	U
124-48-1	Dibromochloromethane	50	U
106-93-4	1,2-Dibromoethane	50	U
108-90-7	Chlorobenzene	50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
100-41-4	Ethylbenzene	38	DJ
179601-23-1	m,p-Xylene	30	DJ
95-47-6	o-Xylene	7.2	DJ
1330-20-7	Xylene (Total)	37	DJ
100-42-5	Styrene	50	U
75-25-2	Bromoform	50	U
98-82-8	Isopropylbenzene	50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	U
108-86-1	Bromobenzene	50	U
96-18-4	1,2,3-Trichloropropane	50	U
103-65-1	n-Propylbenzene	50	U
95-49-8	2-Chlorotoluene	50	U
108-67-8	1,3,5-Trimethylbenzene	7.3	DJ
106-43-4	4-Chlorotoluene	50	U
98-06-6	tert-Butylbenzene	50	U
95-63-6	1,2,4-Trimethylbenzene	24	DJ
135-98-8	sec-Butylbenzene	50	U
99-87-6	4-Isopropyltoluene	50	U
541-73-1	1,3-Dichlorobenzene	50	U
106-46-7	1,4-Dichlorobenzene	50	U
104-51-8	n-Butylbenzene	50	U
95-50-1	1,2-Dichlorobenzene	50	U
96-12-8	1,2-Dibromo-3-chloropropane	50	U
120-82-1	1,2,4-Trichlorobenzene	50	U
87-68-3	Hexachlorobutadiene	50	U
87-61-6	1,2,3-Trichlorobenzene	50	U
91-20-3	Naphthalene	750	D

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TPMW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7961.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	3.0	J
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TPMW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-03A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7961.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	9.9	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7902.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-05A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7902.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/16/2012

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66852

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7897.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66852

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7897.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7957.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7957.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66852

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7893.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	38	
74-87-3	Chloromethane	51	
75-01-4	Vinyl chloride	54	
74-83-9	Bromomethane	51	
75-00-3	Chloroethane	56	
75-69-4	Trichlorofluoromethane	45	
75-35-4	1,1-Dichloroethene	53	
67-64-1	Acetone	55	
74-88-4	Iodomethane	54	
75-15-0	Carbon disulfide	51	
75-09-2	Methylene chloride	55	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	56	
75-34-3	1,1-Dichloroethane	54	
108-05-4	Vinyl acetate	55	
78-93-3	2-Butanone	56	
156-59-2	cis-1,2-Dichloroethene	55	
594-20-7	2,2-Dichloropropane	52	
74-97-5	Bromochloromethane	57	
67-66-3	Chloroform	53	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	54	
56-23-5	Carbon tetrachloride	51	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	53	
79-01-6	Trichloroethene	54	
78-87-5	1,2-Dichloropropane	55	
74-95-3	Dibromomethane	59	
75-27-4	Bromodichloromethane	53	
10061-01-5	cis-1,3-Dichloropropene	56	
108-10-1	4-Methyl-2-pentanone	57	
108-88-3	Toluene	53	
10061-02-6	trans-1,3-Dichloropropene	55	
79-00-5	1,1,2-Trichloroethane	56	
142-28-9	1,3-Dichloropropane	55	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66852

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7893.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/20/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	49	
591-78-6	2-Hexanone	57	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	55	
108-90-7	Chlorobenzene	52	
630-20-6	1,1,1,2-Tetrachloroethane	52	
100-41-4	Ethylbenzene	52	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	52	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	53	
75-25-2	Bromoform	55	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	50	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	54	
103-65-1	n-Propylbenzene	48	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	47	
106-43-4	4-Chlorotoluene	50	
98-06-6	tert-Butylbenzene	46	
95-63-6	1,2,4-Trimethylbenzene	48	
135-98-8	sec-Butylbenzene	45	
99-87-6	4-Isopropyltoluene	46	
541-73-1	1,3-Dichlorobenzene	49	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	46	
95-50-1	1,2-Dichlorobenzene	49	
96-12-8	1,2-Dibromo-3-chloropropane	49	
120-82-1	1,2,4-Trichlorobenzene	59	
87-68-3	Hexachlorobutadiene	52	
87-61-6	1,2,3-Trichlorobenzene	45	
91-20-3	Naphthalene	46	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7953.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	49	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	52	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	58	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	58	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	52	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	50	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	46	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7953.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	56	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	56	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	50	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	45	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	40	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7954.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	49	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	52	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	44	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	52	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	52	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	48	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	50	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	46	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7954.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	53	
591-78-6	2-Hexanone	47	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	55	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	44	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	40	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-66852	99	98	98	98				0
02	MB-66852	98	101	99	98				0
03	TRIP BLANK	97	101	98	98				0
04	TPMW3	100	102	98	98				0
05	LCS-66894	100	98	100	100				0
06	LCSD-66894	101	94	99	99				0
07	MB-66894	102	100	98	99				0
08	TPMW3DL	102	98	99	98				0
09	TPMW5	100	100	97	96				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som111.10.27.A

3 - FORM III

WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66852 LCS Lot No.:

Date Extracted: 06/20/2012 Date Analyzed (1): 06/20/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	38.2187	76		30 - 155
Chloromethane	50.0000	0.0000	50.7474	101		40 - 125
Vinyl chloride	50.0000	0.0000	53.7556	108		50 - 145
Bromomethane	50.0000	0.0000	50.7556	102		30 - 145
Chloroethane	50.0000	0.0000	56.0362	112		60 - 135
Trichlorofluoromethane	50.0000	0.0000	44.7135	89		60 - 145
1,1-Dichloroethene	50.0000	0.0000	52.7547	106		70 - 130
Acetone	50.0000	0.0000	54.7944	110		40 - 140
Iodomethane	50.0000	0.0000	54.0121	108		72 - 121
Carbon disulfide	50.0000	0.0000	51.4300	103		35 - 160
Methylene chloride	50.0000	0.0000	54.6968	109		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.9106	106		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	56.1978	112		65 - 125
1,1-Dichloroethane	50.0000	0.0000	54.2366	108		70 - 135
Vinyl acetate	50.0000	0.0000	55.2797	111		38 - 163
2-Butanone	50.0000	0.0000	55.9078	112		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	55.2935	111		70 - 125
2,2-Dichloropropane	50.0000	0.0000	51.6117	103		70 - 135
Bromochloromethane	50.0000	0.0000	56.8207	114		65 - 130
Chloroform	50.0000	0.0000	53.4817	107		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	50.3238	101		65 - 130
1,1-Dichloropropene	50.0000	0.0000	54.1020	108		75 - 130
Carbon tetrachloride	50.0000	0.0000	50.8318	102		65 - 140
1,2-Dichloroethane	50.0000	0.0000	50.7902	102		70 - 130
Benzene	50.0000	0.0000	53.3373	107		80 - 120
Trichloroethene	50.0000	0.0000	53.6767	107		70 - 125
1,2-Dichloropropane	50.0000	0.0000	54.7479	109		75 - 125
Dibromomethane	50.0000	0.0000	58.5091	117		75 - 125
Bromodichloromethane	50.0000	0.0000	52.8041	106		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	55.6667	111		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	56.8786	114		60 - 135
Toluene	50.0000	0.0000	53.1214	106		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	55.1013	110		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	56.3299	113		75 - 125
1,3-Dichloropropane	50.0000	0.0000	55.0508	110		75 - 125
Tetrachloroethene	50.0000	0.0000	48.6123	97		45 - 150
2-Hexanone	50.0000	0.0000	56.7715	114		55 - 130
Dibromochloromethane	50.0000	0.0000	53.3140	107		60 - 135
1,2-Dibromoethane	50.0000	0.0000	55.4446	111		80 - 120
Chlorobenzene	50.0000	0.0000	52.2287	104		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.6452	103		80 - 130
Ethylbenzene	50.0000	0.0000	51.9024	104		75 - 125
m,p-Xylene	100.0000	0.0000	102.8161	103		75 - 130
o-Xylene	50.0000	0.0000	51.9829	104		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66852 LCS Lot No.:

Date Extracted: 06/20/2012 Date Analyzed (1): 06/20/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	154.7990	103		81 - 121
Styrene	50.0000	0.0000	52.8998	106		65 - 135
Bromoform	50.0000	0.0000	54.9472	110		70 - 130
Isopropylbenzene	50.0000	0.0000	49.4826	99		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	49.9294	100		65 - 130
Bromobenzene	50.0000	0.0000	50.0472	100		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	53.5491	107		75 - 125
n-Propylbenzene	50.0000	0.0000	48.1462	96		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.3621	99		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	46.7997	94		75 - 130
4-Chlorotoluene	50.0000	0.0000	49.7015	99		75 - 130
tert-Butylbenzene	50.0000	0.0000	46.0804	92		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	47.6376	95		75 - 130
sec-Butylbenzene	50.0000	0.0000	44.8780	90		70 - 125
4-Isopropyltoluene	50.0000	0.0000	45.5866	91		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	48.6110	97		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	49.2464	98		75 - 125
n-Butylbenzene	50.0000	0.0000	45.6581	91		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	48.8614	98		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	48.9118	98		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	59.0921	118		65 - 135
Hexachlorobutadiene	50.0000	0.0000	52.0091	104		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	44.9682	90		55 - 140
Naphthalene	50.0000	0.0000	46.2741	93		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66894 LCS Lot No.:

Date Extracted: 06/21/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	48.9304	98		30 - 155
Chloromethane	50.0000	0.0000	49.3086	99		40 - 125
Vinyl chloride	50.0000	0.0000	49.2214	98		50 - 145
Bromomethane	50.0000	0.0000	50.2448	100		30 - 145
Chloroethane	50.0000	0.0000	47.2570	95		60 - 135
Trichlorofluoromethane	50.0000	0.0000	53.2774	107		60 - 145
1,1-Dichloroethene	50.0000	0.0000	52.4207	105		70 - 130
Acetone	50.0000	0.0000	51.7130	103		40 - 140
Iodomethane	50.0000	0.0000	50.9181	102		72 - 121
Carbon disulfide	50.0000	0.0000	57.8018	116		35 - 160
Methylene chloride	50.0000	0.0000	45.8897	92		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.9474	106		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.7134	101		65 - 125
1,1-Dichloroethane	50.0000	0.0000	51.0073	102		70 - 135
Vinyl acetate	50.0000	0.0000	48.8386	98		38 - 163
2-Butanone	50.0000	0.0000	57.8915	116		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	50.7700	102		70 - 125
2,2-Dichloropropane	50.0000	0.0000	48.8113	98		70 - 135
Bromochloromethane	50.0000	0.0000	51.6557	103		65 - 130
Chloroform	50.0000	0.0000	50.6739	101		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	49.6807	99		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.0566	102		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.9360	104		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.2226	104		70 - 130
Benzene	50.0000	0.0000	50.1831	100		80 - 120
Trichloroethene	50.0000	0.0000	49.2810	99		70 - 125
1,2-Dichloropropane	50.0000	0.0000	50.2039	100		75 - 125
Dibromomethane	50.0000	0.0000	51.7247	103		75 - 125
Bromodichloromethane	50.0000	0.0000	51.8285	104		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	50.1723	100		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.2210	96		60 - 135
Toluene	50.0000	0.0000	51.1161	102		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	45.7239	91		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	49.9117	100		75 - 125
1,3-Dichloropropane	50.0000	0.0000	50.9195	102		75 - 125
Tetrachloroethene	50.0000	0.0000	56.4147	113		45 - 150
2-Hexanone	50.0000	0.0000	48.4395	97		55 - 130
Dibromochloromethane	50.0000	0.0000	53.6736	107		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.6109	101		80 - 120
Chlorobenzene	50.0000	0.0000	50.1758	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.1123	102		80 - 130
Ethylbenzene	50.0000	0.0000	48.9040	98		75 - 125
m,p-Xylene	100.0000	0.0000	100.2111	100		75 - 130
o-Xylene	50.0000	0.0000	50.0010	100		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66894 LCS Lot No.:

Date Extracted: 06/21/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	150.2121	100		81 - 121
Styrene	50.0000	0.0000	49.9287	100		65 - 135
Bromoform	50.0000	0.0000	55.8505	112		70 - 130
Isopropylbenzene	50.0000	0.0000	50.0661	100		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.7333	97		65 - 130
Bromobenzene	50.0000	0.0000	50.7991	102		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	49.0359	98		75 - 125
n-Propylbenzene	50.0000	0.0000	49.7199	99		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.0734	98		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	48.9504	98		75 - 130
4-Chlorotoluene	50.0000	0.0000	48.8084	98		75 - 130
tert-Butylbenzene	50.0000	0.0000	48.3279	97		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	49.4739	99		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.9201	98		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.1865	96		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.5303	95		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	48.8410	98		75 - 125
n-Butylbenzene	50.0000	0.0000	48.0268	96		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.9458	96		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	50.0796	100		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	44.6109	89		65 - 135
Hexachlorobutadiene	50.0000	0.0000	47.3328	95		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	41.7254	83		55 - 140
Naphthalene	50.0000	0.0000	39.7936	80		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCSD-66894 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	49.4272	99		1		40	30 - 155
Chloromethane	50.0000	47.9250	96		3		40	40 - 125
Vinyl chloride	50.0000	48.9615	98		0		40	50 - 145
Bromomethane	50.0000	49.7481	99		1		40	30 - 145
Chloroethane	50.0000	46.7851	94		1		40	60 - 135
Trichlorofluoromethane	50.0000	51.4231	103		4		40	60 - 145
1,1-Dichloroethene	50.0000	51.8061	104		1		40	70 - 130
Acetone	50.0000	51.6886	103		0		40	40 - 140
Iodomethane	50.0000	50.9459	102		0		40	72 - 121
Carbon disulfide	50.0000	44.4838	89		26		40	35 - 160
Methylene chloride	50.0000	45.9347	92		0		40	55 - 140
trans-1,2-Dichloroethene	50.0000	51.5556	103		3		40	60 - 140
Methyl tert-butyl ether	50.0000	49.8412	100		1		40	65 - 125
1,1-Dichloroethane	50.0000	50.7810	102		0		40	70 - 135
Vinyl acetate	50.0000	49.2933	99		1		40	38 - 163
2-Butanone	50.0000	51.5868	103		12		40	30 - 150
cis-1,2-Dichloroethene	50.0000	50.2937	101		1		40	70 - 125
2,2-Dichloropropane	50.0000	48.2764	97		1		40	70 - 135
Bromochloromethane	50.0000	51.4227	103		0		40	65 - 130
Chloroform	50.0000	50.5392	101		0		40	65 - 135
1,1,1-Trichloroethane	50.0000	50.5078	101		2		40	65 - 130
1,1-Dichloropropene	50.0000	50.3259	101		1		40	75 - 130
Carbon tetrachloride	50.0000	52.3147	105		1		40	65 - 140
1,2-Dichloroethane	50.0000	50.6340	101		3		40	70 - 130
Benzene	50.0000	50.5700	101		1		40	80 - 120
Trichloroethene	50.0000	49.1950	98		1		40	70 - 125
1,2-Dichloropropane	50.0000	49.9425	100		0		40	75 - 125
Dibromomethane	50.0000	51.5643	103		0		40	75 - 125
Bromodichloromethane	50.0000	52.1102	104		0		40	75 - 120
cis-1,3-Dichloropropene	50.0000	50.2130	100		0		40	70 - 130
4-Methyl-2-pentanone	50.0000	48.2145	96		0		40	60 - 135
Toluene	50.0000	50.5322	101		1		40	75 - 120
trans-1,3-Dichloropropene	50.0000	46.3845	93		2		40	55 - 140
1,1,2-Trichloroethane	50.0000	49.1789	98		2		40	75 - 125
1,3-Dichloropropane	50.0000	50.6006	101		1		40	75 - 125
Tetrachloroethene	50.0000	53.4532	107		5		40	45 - 150
2-Hexanone	50.0000	46.9598	94		3		40	55 - 130
Dibromochloromethane	50.0000	53.0891	106		1		40	60 - 135
1,2-Dibromoethane	50.0000	50.5040	101		0		40	80 - 120
Chlorobenzene	50.0000	50.0479	100		0		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	50.0546	100		2		40	80 - 130
Ethylbenzene	50.0000	48.6691	97		1		40	75 - 125
m,p-Xylene	100.0000	99.6928	100		0		40	75 - 130
o-Xylene	50.0000	49.5771	99		1		40	80 - 120
Xylene (Total)	150.0000	149.2700	100		0		40	81 - 121
Styrene	50.0000	49.7488	99		1		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCSD-66894 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	55.4019	111		1		40	70 - 130
Isopropylbenzene	50.0000	48.9027	98		2		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	48.9685	98		1		40	65 - 130
Bromobenzene	50.0000	50.0430	100		2		40	75 - 125
1,2,3-Trichloropropane	50.0000	49.1590	98		0		40	75 - 125
n-Propylbenzene	50.0000	49.0807	98		1		40	70 - 130
2-Chlorotoluene	50.0000	49.8001	100		2		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	48.6859	97		1		40	75 - 130
4-Chlorotoluene	50.0000	48.9269	98		0		40	75 - 130
tert-Butylbenzene	50.0000	47.5395	95		2		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	48.7129	97		2		40	75 - 130
sec-Butylbenzene	50.0000	49.0851	98		0		40	70 - 125
4-Isopropyltoluene	50.0000	47.3534	95		1		40	75 - 130
1,3-Dichlorobenzene	50.0000	47.1937	94		1		40	75 - 125
1,4-Dichlorobenzene	50.0000	48.1051	96		2		40	75 - 125
n-Butylbenzene	50.0000	47.2221	94		2		40	70 - 135
1,2-Dichlorobenzene	50.0000	47.7383	95		1		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	50.4192	101		1		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	44.2638	89		0		40	65 - 135
Hexachlorobutadiene	50.0000	47.0217	94		1		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	42.1224	84		1		40	55 - 140
Naphthalene	50.0000	39.9469	80		0		40	55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66852

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab File ID: V6I7897.D Lab Sample ID: MB-66852

Instrument ID: V6

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/20/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 11:35

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-66852	LCS-66852	V6I7893.D	9:40
02	TRIP BLANK	L1336-05A	V6I7902.D	13:53
03	TPMW3	L1336-02A	V6I7905.D	15:06

COMMENTS:

som111.10.27.A

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab File ID: V6I7957.D Lab Sample ID: MB-66894

Instrument ID: V6

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/21/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 19:49

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-66894	LCS-66894	V6I7953.D	18:13
02	LCSD-66894	LCSD-66894	V6I7954.D	18:37
03	TPMW3DL	L1336-02ADL	V6I7960.D	21:01
04	TPMW5	L1336-03A	V6I7961.D	21:25

COMMENTS:

som111.10.27.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/15/2012 06/15/2012

EPA Sample No.(VSTD#####): VSTD0506D Date Analyzed: 06/20/2012

Lab File ID (Standard): V6I7892.D Time Analyzed: 9:05

Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	413021		5.306		369499		8.288		212278		10.796	
	UPPER LIMIT	826042		5.806		738998		8.788		424556		11.296	
	LOWER LIMIT	206511		4.806		184750		7.788		106139		10.296	
	EPA SAMPLE NO.												
01	LCS-66852	410790		5.308		364618		8.290		211833		10.798	
02	MB-66852	407391		5.307		363204		8.289		208955		10.797	
03	TRIP BLANK	406237		5.306		360865		8.288		210906		10.796	
04	TPMW3	394001		5.306		357288		8.300		211599		10.797	

IS1 () = Fluorobenzene
IS2 () = Chlorobenzene-d5
IS3 () = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/21/2012 06/21/2012

EPA Sample No.(VSTD#####): VSTD0506F Date Analyzed: 06/21/2012

Lab File ID (Standard): V6I7951.D Time Analyzed: 17:25

Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	469780		5.116		417510		8.086		241772		10.607	
	UPPER LIMIT	939560		5.616		835020		8.586		483544		11.107	
	LOWER LIMIT	234890		4.616		208755		7.586		120886		10.107	
	EPA SAMPLE NO.												
01	LCS-66894	454712		5.116		398759		8.086		238217		10.606	
02	LCSD-66894	452467		5.120		397824		8.078		236381		10.610	
03	MB-66894	433088		5.117		387968		8.087		229880		10.608	
04	TPMW3DL	424661		5.120		381799		8.078		229128		10.610	
05	TPMW5	432600		5.116		388345		8.086		228866		10.607	

IS1 () = Fluorobenzene
IS2 () = Chlorobenzene-d5
IS3 () = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

* Semivolatile Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1336

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8270D

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S6
Instrument Type: GCMS-Semi
Description: HP7890A
Manufacturer: Agilent
Model: 7890A/5973
GC Column used: 30 m X 0.25 mm ID [0.25 um thickness] Rxi-5sil MS capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

F. Dilutions:

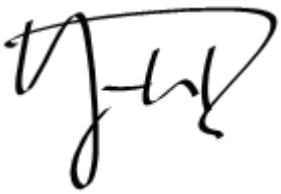
The following samples were analyzed at dilution:

TPMW3 (L1336-02BDL) : Dilution Factor: 4

G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____  _____

Date:_____7/5/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

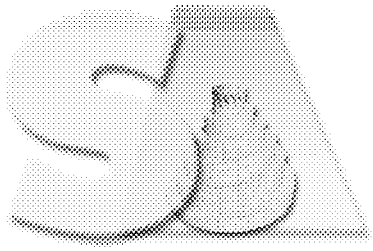
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9341.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	1.9	J
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	190	E
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	13	
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	6.0	J
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	2.9	J

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9341.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	2.5	J
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	2.2	J
120-12-7	Anthracene	10	U
86-74-8	Carbazole	2.3	J
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9372.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	40	U
111-44-4	Bis(2-chloroethyl)ether	40	U
95-57-8	2-Chlorophenol	40	U
541-73-1	1,3-Dichlorobenzene	40	U
106-46-7	1,4-Dichlorobenzene	40	U
95-50-1	1,2-Dichlorobenzene	40	U
95-48-7	2-Methylphenol	40	U
108-60-1	2,2´-oxybis(1-Chloropropane)	40	U
106-44-5	4-Methylphenol	40	U
621-64-7	N-Nitroso-di-n-propylamine	40	U
67-72-1	Hexachloroethane	40	U
98-95-3	Nitrobenzene	40	U
78-59-1	Isophorone	40	U
88-75-5	2-Nitrophenol	40	U
105-67-9	2,4-Dimethylphenol	40	U
120-83-2	2,4-Dichlorophenol	40	U
120-82-1	1,2,4-Trichlorobenzene	40	U
91-20-3	Naphthalene	180	D
106-47-8	4-Chloroaniline	40	U
111-91-1	Bis(2-chloroethoxy)methane	40	U
87-68-3	Hexachlorobutadiene	40	U
59-50-7	4-Chloro-3-methylphenol	40	U
91-57-6	2-Methylnaphthalene	12	DJ
77-47-4	Hexachlorocyclopentadiene	40	U
88-06-2	2,4,6-Trichlorophenol	40	U
95-95-4	2,4,5-Trichlorophenol	80	U
91-58-7	2-Chloronaphthalene	40	U
88-74-4	2-Nitroaniline	80	U
131-11-3	Dimethylphthalate	40	U
208-96-8	Acenaphthylene	40	U
606-20-2	2,6-Dinitrotoluene	40	U
99-09-2	3-Nitroaniline	80	U
83-32-9	Acenaphthene	5.8	DJ
51-28-5	2,4-Dinitrophenol	80	U
100-02-7	4-Nitrophenol	80	U
132-64-9	Dibenzofuran	40	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3DL

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02BDL

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9372.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 4.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	40	U
84-66-2	Diethylphthalate	40	U
7005-72-3	4-Chlorophenyl-phenylether	40	U
86-73-7	Fluorene	40	U
100-01-6	4-Nitroaniline	80	U
534-52-1	4,6-Dinitro-2-methylphenol	80	U
86-30-6	N-Nitrosodiphenylamine	40	U
101-55-3	4-Bromophenyl-phenylether	40	U
118-74-1	Hexachlorobenzene	40	U
87-86-5	Pentachlorophenol	80	U
85-01-8	Phenanthrene	40	U
120-12-7	Anthracene	40	U
86-74-8	Carbazole	40	U
84-74-2	Di-n-butylphthalate	40	U
206-44-0	Fluoranthene	40	U
129-00-0	Pyrene	40	U
85-68-7	Butylbenzylphthalate	40	U
91-94-1	3,3´-Dichlorobenzidine	40	U
56-55-3	Benzo(a)anthracene	40	U
218-01-9	Chrysene	40	U
117-81-7	Bis(2-ethylhexyl)phthalate	40	U
117-84-0	Di-n-octylphthalate	40	U
205-99-2	Benzo(b)fluoranthene	40	U
207-08-9	Benzo(k)fluoranthene	40	U
50-32-8	Benzo(a)pyrene	40	U
193-39-5	Indeno(1,2,3-cd)pyrene	40	U
53-70-3	Dibenzo(a,h)anthracene	40	U
191-24-2	Benzo(g,h,i)perylene	40	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9342.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9342.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9332.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9332.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9333.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	31	
111-44-4	Bis(2-chloroethyl)ether	39	
95-57-8	2-Chlorophenol	37	
541-73-1	1,3-Dichlorobenzene	39	
106-46-7	1,4-Dichlorobenzene	41	
95-50-1	1,2-Dichlorobenzene	40	
95-48-7	2-Methylphenol	35	
108-60-1	2,2´-oxybis(1-Chloropropane)	40	
106-44-5	4-Methylphenol	32	
621-64-7	N-Nitroso-di-n-propylamine	35	
67-72-1	Hexachloroethane	40	
98-95-3	Nitrobenzene	44	
78-59-1	Isophorone	43	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	25	
120-83-2	2,4-Dichlorophenol	41	
120-82-1	1,2,4-Trichlorobenzene	41	
91-20-3	Naphthalene	44	
106-47-8	4-Chloroaniline	36	
111-91-1	Bis(2-chloroethoxy)methane	41	
87-68-3	Hexachlorobutadiene	48	
59-50-7	4-Chloro-3-methylphenol	30	
91-57-6	2-Methylnaphthalene	42	
77-47-4	Hexachlorocyclopentadiene	41	
88-06-2	2,4,6-Trichlorophenol	44	
95-95-4	2,4,5-Trichlorophenol	39	
91-58-7	2-Chloronaphthalene	45	
88-74-4	2-Nitroaniline	45	
131-11-3	Dimethylphthalate	46	
208-96-8	Acenaphthylene	44	
606-20-2	2,6-Dinitrotoluene	44	
99-09-2	3-Nitroaniline	39	
83-32-9	Acenaphthene	46	
51-28-5	2,4-Dinitrophenol	49	
100-02-7	4-Nitrophenol	27	
132-64-9	Dibenzofuran	44	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9333.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	44	
84-66-2	Diethylphthalate	46	
7005-72-3	4-Chlorophenyl-phenylether	45	
86-73-7	Fluorene	44	
100-01-6	4-Nitroaniline	37	
534-52-1	4,6-Dinitro-2-methylphenol	45	
86-30-6	N-Nitrosodiphenylamine	44	
101-55-3	4-Bromophenyl-phenylether	46	
118-74-1	Hexachlorobenzene	47	
87-86-5	Pentachlorophenol	29	
85-01-8	Phenanthrene	44	
120-12-7	Anthracene	43	
86-74-8	Carbazole	43	
84-74-2	Di-n-butylphthalate	46	
206-44-0	Fluoranthene	41	
129-00-0	Pyrene	48	
85-68-7	Butylbenzylphthalate	50	
91-94-1	3,3´-Dichlorobenzidine	42	
56-55-3	Benzo(a)anthracene	48	
218-01-9	Chrysene	45	
117-81-7	Bis(2-ethylhexyl)phthalate	50	
117-84-0	Di-n-octylphthalate	49	
205-99-2	Benzo(b)fluoranthene	45	
207-08-9	Benzo(k)fluoranthene	45	
50-32-8	Benzo(a)pyrene	44	
193-39-5	Indeno(1,2,3-cd)pyrene	43	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	44	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9334.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	43	
95-57-8	2-Chlorophenol	40	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	42	
95-50-1	1,2-Dichlorobenzene	43	
95-48-7	2-Methylphenol	35	
108-60-1	2,2´-oxybis(1-Chloropropane)	42	
106-44-5	4-Methylphenol	33	
621-64-7	N-Nitroso-di-n-propylamine	37	
67-72-1	Hexachloroethane	45	
98-95-3	Nitrobenzene	45	
78-59-1	Isophorone	42	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	22	
120-83-2	2,4-Dichlorophenol	42	
120-82-1	1,2,4-Trichlorobenzene	43	
91-20-3	Naphthalene	44	
106-47-8	4-Chloroaniline	35	
111-91-1	Bis(2-chloroethoxy)methane	43	
87-68-3	Hexachlorobutadiene	46	
59-50-7	4-Chloro-3-methylphenol	32	
91-57-6	2-Methylnaphthalene	42	
77-47-4	Hexachlorocyclopentadiene	41	
88-06-2	2,4,6-Trichlorophenol	44	
95-95-4	2,4,5-Trichlorophenol	42	
91-58-7	2-Chloronaphthalene	46	
88-74-4	2-Nitroaniline	44	
131-11-3	Dimethylphthalate	46	
208-96-8	Acenaphthylene	44	
606-20-2	2,6-Dinitrotoluene	47	
99-09-2	3-Nitroaniline	39	
83-32-9	Acenaphthene	45	
51-28-5	2,4-Dinitrophenol	49	
100-02-7	4-Nitrophenol	34	
132-64-9	Dibenzofuran	44	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9334.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	46	
7005-72-3	4-Chlorophenyl-phenylether	46	
86-73-7	Fluorene	44	
100-01-6	4-Nitroaniline	36	
534-52-1	4,6-Dinitro-2-methylphenol	46	
86-30-6	N-Nitrosodiphenylamine	47	
101-55-3	4-Bromophenyl-phenylether	49	
118-74-1	Hexachlorobenzene	49	
87-86-5	Pentachlorophenol	31	
85-01-8	Phenanthrene	47	
120-12-7	Anthracene	47	
86-74-8	Carbazole	46	
84-74-2	Di-n-butylphthalate	49	
206-44-0	Fluoranthene	44	
129-00-0	Pyrene	50	
85-68-7	Butylbenzylphthalate	51	
91-94-1	3,3´-Dichlorobenzidine	43	
56-55-3	Benzo(a)anthracene	50	
218-01-9	Chrysene	47	
117-81-7	Bis(2-ethylhexyl)phthalate	53	
117-84-0	Di-n-octylphthalate	51	
205-99-2	Benzo(b)fluoranthene	48	
207-08-9	Benzo(k)fluoranthene	46	
50-32-8	Benzo(a)pyrene	46	
193-39-5	Indeno(1,2,3-cd)pyrene	43	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	44	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-66819	85	88	99	69	75	85			0
02	LCS-66819	84	87	91	67	69	80			0
03	LCSD-66819	86	89	97	76	77	91			0
04	TPMW3	65	70	76	36	53	81			0
05	TPMW5	80	83	77	42	64	88			0
06	TPMW3DL	59	69	75	30	47	73			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som111.10.27.A

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66819 LCS Lot No.: A084216

Date Extracted: 06/19/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	31.2293	62		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	39.1294	78		35 - 110
2-Chlorophenol	50.0000	0.0000	36.9169	74		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	39.3500	79		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	40.9030	82		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	39.5119	79		35 - 100
2-Methylphenol	50.0000	0.0000	34.7373	69		40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	39.5484	79		30 - 123
4-Methylphenol	50.0000	0.0000	31.5995	63		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	34.5852	69		35 - 130
Hexachloroethane	50.0000	0.0000	40.0166	80		30 - 95
Nitrobenzene	50.0000	0.0000	44.3835	89		45 - 110
Isophorone	50.0000	0.0000	42.6047	85		50 - 110
2-Nitrophenol	50.0000	0.0000	43.6538	87		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	25.1799	50		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	41.3457	83		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	41.3759	83		35 - 105
Naphthalene	50.0000	0.0000	43.8123	88		40 - 100
4-Chloroaniline	50.0000	0.0000	35.9593	72		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	41.2494	82		45 - 105
Hexachlorobutadiene	50.0000	0.0000	48.1033	96		25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	30.0947	60		45 - 110
2-Methylnaphthalene	50.0000	0.0000	42.4646	85		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	41.1239	82		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	44.2270	88		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	39.1839	78		50 - 110
2-Chloronaphthalene	50.0000	0.0000	45.3633	91		50 - 105
2-Nitroaniline	50.0000	0.0000	44.8000	90		50 - 115
Dimethylphthalate	50.0000	0.0000	45.8841	92		25 - 125
Acenaphthylene	50.0000	0.0000	43.7288	87		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	44.0261	88		50 - 115
3-Nitroaniline	50.0000	0.0000	38.6212	77		20 - 125
Acenaphthene	50.0000	0.0000	45.8327	92		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	48.9906	98		15 - 140
4-Nitrophenol	50.0000	0.0000	27.3074	55		0 - 125
Dibenzofuran	50.0000	0.0000	43.6496	87		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	44.1445	88		50 - 120
Diethylphthalate	50.0000	0.0000	46.3503	93		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	45.3136	91		50 - 110
Fluorene	50.0000	0.0000	44.3666	89		50 - 110
4-Nitroaniline	50.0000	0.0000	36.6036	73		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	44.5788	89		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	44.3495	89		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	45.6723	91		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66819 LCS Lot No.: A084216

Date Extracted: 06/19/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	47.2790	95		50 - 110
Pentachlorophenol	50.0000	0.0000	28.7366	57		40 - 115
Phenanthrene	50.0000	0.0000	44.2114	88		50 - 115
Anthracene	50.0000	0.0000	43.2118	86		55 - 110
Carbazole	50.0000	0.0000	43.4057	87		50 - 115
Di-n-butylphthalate	50.0000	0.0000	46.4593	93		55 - 115
Fluoranthene	50.0000	0.0000	41.4200	83		55 - 115
Pyrene	50.0000	0.0000	47.7468	95		50 - 130
Butylbenzylphthalate	50.0000	0.0000	49.5557	99		45 - 115
3,3´-Dichlorobenzidine	50.0000	0.0000	42.1464	84		20 - 110
Benzo(a)anthracene	50.0000	0.0000	48.1147	96		55 - 110
Chrysene	50.0000	0.0000	45.3341	91		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	50.4539	101		40 - 125
Di-n-octylphthalate	50.0000	0.0000	48.7930	98		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	45.1889	90		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	44.9932	90		45 - 125
Benzo(a)pyrene	50.0000	0.0000	44.2541	89		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	43.0372	86		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	44.0830	88		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	44.1049	88		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCSD-66819 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	34.3616	69		11		40	0 - 115
Bis(2-chloroethyl)ether	50.0000	42.7435	85		9		40	35 - 110
2-Chlorophenol	50.0000	39.8118	80		8		40	35 - 105
1,3-Dichlorobenzene	50.0000	42.5098	85		7		40	30 - 100
1,4-Dichlorobenzene	50.0000	42.4489	85		4		40	30 - 100
1,2-Dichlorobenzene	50.0000	42.6340	85		7		40	35 - 100
2-Methylphenol	50.0000	35.2838	71		3		40	40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	42.3355	85		7		40	30 - 123
4-Methylphenol	50.0000	32.7450	65		3		40	30 - 110
N-Nitroso-di-n-propylamine	50.0000	36.6339	73		6		40	35 - 130
Hexachloroethane	50.0000	44.9648	90		12		40	30 - 95
Nitrobenzene	50.0000	45.0484	90		1		40	45 - 110
Isophorone	50.0000	41.8268	84		1		40	50 - 110
2-Nitrophenol	50.0000	44.0620	88		1		40	40 - 115
2,4-Dimethylphenol	50.0000	21.9124	44		13		40	30 - 110
2,4-Dichlorophenol	50.0000	42.1522	84		1		40	50 - 105
1,2,4-Trichlorobenzene	50.0000	42.8551	86		4		40	35 - 105
Naphthalene	50.0000	43.6866	87		1		40	40 - 100
4-Chloroaniline	50.0000	34.6301	69		4		40	15 - 110
Bis(2-chloroethoxy)methane	50.0000	43.2277	86		5		40	45 - 105
Hexachlorobutadiene	50.0000	45.5740	91		5		40	25 - 105
4-Chloro-3-methylphenol	50.0000	32.4247	65		8		40	45 - 110
2-Methylnaphthalene	50.0000	42.0083	84		1		40	45 - 105
Hexachlorocyclopentadiene	50.0000	40.6556	81		1		40	27 - 147
2,4,6-Trichlorophenol	50.0000	44.2029	88		0		40	50 - 115
2,4,5-Trichlorophenol	50.0000	42.0484	84		7		40	50 - 110
2-Chloronaphthalene	50.0000	45.8056	92		1		40	50 - 105
2-Nitroaniline	50.0000	43.6722	87		3		40	50 - 115
Dimethylphthalate	50.0000	46.2634	93		1		40	25 - 125
Acenaphthylene	50.0000	44.0954	88		1		40	50 - 105
2,6-Dinitrotoluene	50.0000	46.5886	93		6		40	50 - 115
3-Nitroaniline	50.0000	39.0003	78		1		40	20 - 125
Acenaphthene	50.0000	44.6637	89		3		40	45 - 110
2,4-Dinitrophenol	50.0000	48.9506	98		0		40	15 - 140
4-Nitrophenol	50.0000	34.0470	68		21		40	0 - 125
Dibenzofuran	50.0000	44.0717	88		1		40	55 - 105
2,4-Dinitrotoluene	50.0000	43.4843	87		1		40	50 - 120
Diethylphthalate	50.0000	45.8782	92		1		40	40 - 120
4-Chlorophenyl-phenylether	50.0000	46.2943	93		2		40	50 - 110
Fluorene	50.0000	44.1535	88		1		40	50 - 110
4-Nitroaniline	50.0000	36.4722	73		0		40	35 - 120
4,6-Dinitro-2-methylphenol	50.0000	46.4518	93		4		40	40 - 130
N-Nitrosodiphenylamine	50.0000	46.9696	94		5		40	50 - 110
4-Bromophenyl-phenylether	50.0000	48.5060	97		6		40	50 - 115
Hexachlorobenzene	50.0000	48.9577	98		3		40	50 - 110
Pentachlorophenol	50.0000	31.3474	63		10		40	40 - 115

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCSD-66819 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenanthrene	50.0000	47.3212	95		8		40	50 - 115
Anthracene	50.0000	46.5943	93		8		40	55 - 110
Carbazole	50.0000	45.7546	92		6		40	50 - 115
Di-n-butylphthalate	50.0000	48.7256	97		4		40	55 - 115
Fluoranthene	50.0000	44.4886	89		7		40	55 - 115
Pyrene	50.0000	49.8097	100		5		40	50 - 130
Butylbenzylphthalate	50.0000	51.2789	103		4		40	45 - 115
3,3´-Dichlorobenzidine	50.0000	42.7799	86		2		40	20 - 110
Benzo(a)anthracene	50.0000	49.5136	99		3		40	55 - 110
Chrysene	50.0000	47.1371	94		3		40	55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	52.8496	106		5		40	40 - 125
Di-n-octylphthalate	50.0000	51.4850	103		5		40	35 - 135
Benzo(b)fluoranthene	50.0000	47.9691	96		6		40	45 - 120
Benzo(k)fluoranthene	50.0000	46.4261	93		3		40	45 - 125
Benzo(a)pyrene	50.0000	45.7796	92		3		40	55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	43.2579	87		1		40	45 - 125
Dibenzo(a,h)anthracene	50.0000	44.4626	89		1		40	40 - 125
Benzo(g,h,i)perylene	50.0000	44.2448	88		0		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab File ID: S6A9332.D Lab Sample ID: MB-66819

Instrument ID: S6 Date Extracted: 06/19/2012

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/21/2012

Level: (LOW/MED) LOW Time Analyzed: 13:37

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-66819	LCS-66819	S6A9333.D	06/21/2012
02	LCSD-66819	LCSD-66819	S6A9334.D	06/21/2012
03	TPMW3	L1336-02B	S6A9341.D	06/21/2012
04	TPMW5	L1336-03B	S6A9342.D	06/21/2012
05	TPMW3DL	L1336-02BDL	S6A9372.D	06/22/2012

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/14/2012 06/14/2012

EPA Sample No.(SSTD020##) SSTD0256Z Date Analyzed: 06/21/2012

Lab File ID (Standard): S6A9331A.D Time Analyzed: 12:46

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	92690		4.002		354423		5.723		283009		7.492	
	UPPER LIMIT	185380		4.502		708846		6.223		566018		7.992	
	LOWER LIMIT	46345		3.502		177212		5.223		141505		6.992	
	EPA SAMPLE NO.												
01	MB-66819	66572		3.996		262452		5.717		198392		7.492	
02	LCS-66819	75552		4.002		281803		5.723		215345		7.492	
03	LCSD-66819	79465		4.002		320134		5.723		242477		7.492	
04	TPMW3	82077		4.002		316573		5.723		246493		7.492	
05	TPMW5	61011		4.002		240909		5.723		190004		7.486	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

EPA Sample No.(SSTD020##) SSTD0256Z Date Analyzed: 06/21/2012

Lab File ID (Standard): S6A9331A.D Time Analyzed: 12:46

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	614658		8.773		799954		11.017		704164		12.522	
	UPPER LIMIT	1229316		9.273		1599908		11.517		1408328		13.022	
	LOWER LIMIT	307329		8.273		399977		10.517		352082		12.022	
	EPA SAMPLE NO.												
01	MB-66819	457951		8.773		601989		11.076		622655		12.598	
02	LCS-66819	500887		8.773		651789		11.029		659636		12.533	
03	LCSD-66819	528903		8.773		686821		11.023		684332		12.527	
04	TPMW3	529020		8.767		662184		11.011		606727		12.516	
05	TPMW5	435562		8.767		580556		11.012		567127		12.516	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/14/2012 06/14/2012

EPA Sample No.(SSTD020##) SSTD0256A Date Analyzed: 06/22/2012

Lab File ID (Standard): S6A9361.D Time Analyzed: 11:17

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	98452		3.933		347803		5.678		237817		7.447	
	UPPER LIMIT	196904		4.433		695606		6.178		475634		7.947	
	LOWER LIMIT	49226		3.433		173902		5.178		118909		6.947	
	EPA SAMPLE NO.												
01	TPMW3DL	116201		3.927		420657		5.672		292352		7.441	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

EPA Sample No.(SSTD020##) SSTD0256A Date Analyzed: 06/22/2012

Lab File ID (Standard): S6A9361.D Time Analyzed: 11:17

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	468497		8.722		524193		10.966		451416		12.435	
	UPPER LIMIT	936994		9.222		1048386		11.466		902832		12.935	
	LOWER LIMIT	234249		8.222		262097		10.466		225708		11.935	
	EPA SAMPLE NO.												
01	TPMW3DL	573945		8.722		562967		10.949		514541		12.418	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

* Pesticide Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1336

SW846 8081B, Organochlorine Pesticides by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8081B

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E5
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard
Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

TPMW3 (L1336-02B), recovery is below criteria for Decachlorobiphenyl on front column, at 26% with criteria of (30-135).

TPMW5 (L1336-03B), recovery is below criteria for Decachlorobiphenyl on rear column, at 29% with criteria of (30-135).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

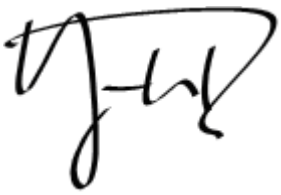
No sample in this SDG required analysis at dilution.

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____  _____

Date:_____7/5/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

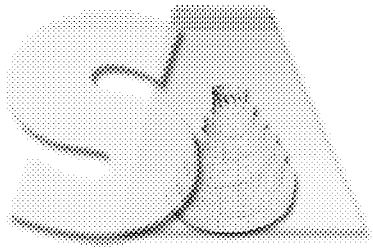
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-01A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H9006F.D/E5H9006R.D

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H9007F.D/E5H9007R.D

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.10	P
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.11	
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.18	P
72-54-8	4,4´-DDD	0.25	
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TPMW5

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-03B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8809F.D/E5H8809R.D

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1336-04A

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H9008F.D/E5H9008R.D

% Moisture: Decanted: (Y/N) Date Received: 06/16/2012

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8804F.D/E5H8804R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66817(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8805F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.20	
319-85-7	beta-BHC	0.21	
319-86-8	delta-BHC	0.21	
58-89-9	gamma-BHC (Lindane)	0.20	
76-44-8	Heptachlor	0.21	
309-00-2	Aldrin	0.20	
1024-57-3	Heptachlor epoxide	0.20	
959-98-8	Endosulfan I	0.20	
60-57-1	Dieldrin	0.42	
72-55-9	4,4´-DDE	0.42	
72-20-8	Endrin	0.41	
33213-65-9	Endosulfan II	0.40	
72-54-8	4,4´-DDD	0.39	
1031-07-8	Endosulfan sulfate	0.43	
50-29-3	4,4´-DDT	0.41	
72-43-5	Methoxychlor	2.1	
53494-70-5	Endrin ketone	0.42	
7421-93-4	Endrin aldehyde	0.41	
5103-71-9	alpha-Chlordane	0.19	
5103-74-2	gamma-Chlordane	0.20	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66817(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8805R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.19	
319-85-7	beta-BHC	0.18	
319-86-8	delta-BHC	0.20	
58-89-9	gamma-BHC (Lindane)	0.18	
76-44-8	Heptachlor	0.20	
309-00-2	Aldrin	0.18	
1024-57-3	Heptachlor epoxide	0.19	
959-98-8	Endosulfan I	0.18	
60-57-1	Dieldrin	0.38	
72-55-9	4,4´-DDE	0.38	
72-20-8	Endrin	0.36	
33213-65-9	Endosulfan II	0.35	
72-54-8	4,4´-DDD	0.37	
1031-07-8	Endosulfan sulfate	0.40	
50-29-3	4,4´-DDT	0.36	
72-43-5	Methoxychlor	2.0	
53494-70-5	Endrin ketone	0.38	
7421-93-4	Endrin aldehyde	0.37	
5103-71-9	alpha-Chlordane	0.18	
5103-74-2	gamma-Chlordane	0.23	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-66817(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8806F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.20	
319-85-7	beta-BHC	0.21	
319-86-8	delta-BHC	0.21	
58-89-9	gamma-BHC (Lindane)	0.20	
76-44-8	Heptachlor	0.21	
309-00-2	Aldrin	0.20	
1024-57-3	Heptachlor epoxide	0.20	
959-98-8	Endosulfan I	0.20	
60-57-1	Dieldrin	0.41	
72-55-9	4,4´-DDE	0.41	
72-20-8	Endrin	0.40	
33213-65-9	Endosulfan II	0.40	
72-54-8	4,4´-DDD	0.38	
1031-07-8	Endosulfan sulfate	0.43	
50-29-3	4,4´-DDT	0.40	
72-43-5	Methoxychlor	2.1	
53494-70-5	Endrin ketone	0.43	
7421-93-4	Endrin aldehyde	0.40	
5103-71-9	alpha-Chlordane	0.19	
5103-74-2	gamma-Chlordane	0.20	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
LCSD-66817(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8806R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.19	
319-85-7	beta-BHC	0.19	
319-86-8	delta-BHC	0.20	
58-89-9	gamma-BHC (Lindane)	0.19	
76-44-8	Heptachlor	0.20	
309-00-2	Aldrin	0.18	
1024-57-3	Heptachlor epoxide	0.19	
959-98-8	Endosulfan I	0.18	
60-57-1	Dieldrin	0.37	
72-55-9	4,4´-DDE	0.38	
72-20-8	Endrin	0.37	
33213-65-9	Endosulfan II	0.34	
72-54-8	4,4´-DDD	0.37	
1031-07-8	Endosulfan sulfate	0.37	
50-29-3	4,4´-DDT	0.36	
72-43-5	Methoxychlor	2.0	
53494-70-5	Endrin ketone	0.38	
7421-93-4	Endrin aldehyde	0.37	
5103-71-9	alpha-Chlordane	0.18	
5103-74-2	gamma-Chlordane	0.19	
8001-35-2	Toxaphene	5.0	U

2N - FORM II PEST-1

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-66817	91	91	100	95			0
02	LCS-66817	97	98	102	97			0
03	LCSD-66817	93	95	102	96			0
04	TPMW5	80	79	34	29 *			1
05	MW5	77	82	54	77			0
06	TPMW3	83	54	26 *	34			1
07	MW3	74	78	58	81			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(25-140)
DCB = Decachlorobiphenyl	(30-135)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
alpha-BHC	0.2000	0.2034	102		60-130
beta-BHC	0.2000	0.2147	107		65-125
delta-BHC	0.2000	0.2075	104		45-135
gamma-BHC (Lindane)	0.2000	0.2006	100		25-135
Heptachlor	0.2000	0.2103	105		40-130
Aldrin	0.2000	0.1952	98		25-140
Heptachlor epoxide	0.2000	0.2021	101		60-130
Endosulfan I	0.2000	0.2000	100		50-110
Dieldrin	0.4000	0.4152	104		60-130
4,4´-DDE	0.4000	0.4166	104		35-140
Endrin	0.4000	0.4076	102		55-135
Endosulfan II	0.4000	0.4021	101		30-130
4,4´-DDD	0.4000	0.3911	98		25-150
Endosulfan sulfate	0.4000	0.4322	108		55-135
4,4´-DDT	0.4000	0.4052	101		45-140
Methoxychlor	2.0000	2.1295	106		55-150
Endrin ketone	0.4000	0.4244	106		75-125
Endrin aldehyde	0.4000	0.4081	102		55-135
alpha-Chlordane	0.2000	0.1949	97		65-125
gamma-Chlordane	0.2000	0.2040	102		60-125

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/19/2012

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC	#	QC LIMITS
alpha-BHC	0.2000	0.1886	94		60-130
beta-BHC	0.2000	0.1786	89		65-125
delta-BHC	0.2000	0.1975	99		45-135
gamma-BHC (Lindane)	0.2000	0.1843	92		25-135

COMMENTS:

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCS-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Heptachlor	0.2000	0.1967	98	40-130
Aldrin	0.2000	0.1828	91	25-140
Heptachlor epoxide	0.2000	0.1896	95	60-130
Endosulfan I	0.2000	0.1757	88	50-110
Dieldrin	0.4000	0.3762	94	60-130
4,4´-DDE	0.4000	0.3804	95	35-140
Endrin	0.4000	0.3624	91	55-135
Endosulfan II	0.4000	0.3549	89	30-130
4,4´-DDD	0.4000	0.3712	93	25-150
Endosulfan sulfate	0.4000	0.3951	99	55-135
4,4´-DDT	0.4000	0.3629	91	45-140
Methoxychlor	2.0000	1.9742	99	55-150
Endrin ketone	0.4000	0.3782	95	75-125
Endrin aldehyde	0.4000	0.3714	93	55-135
alpha-Chlordane	0.2000	0.1763	88	65-125
gamma-Chlordane	0.2000	0.2324	116	60-125

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

COMMENTS:

som111.10.27.A

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCSD-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	0.2000	0.1998	100	60-130	2.0	30
beta-BHC	0.2000	0.2093	105	65-125	2.0	30
delta-BHC	0.2000	0.2087	104	45-135	0	30
gamma-BHC (Lindane)	0.2000	0.1989	99	25-135	1.0	30
Heptachlor	0.2000	0.2080	104	40-130	1.0	30
Aldrin	0.2000	0.1975	99	25-140	1.0	30
Heptachlor epoxide	0.2000	0.2022	101	60-130	0	30
Endosulfan I	0.2000	0.1965	98	50-110	2.0	30
Dieldrin	0.4000	0.4133	103	60-130	1.0	30
4,4´-DDE	0.4000	0.4136	103	35-140	1.0	30
Endrin	0.4000	0.3997	100	55-135	2.0	30
Endosulfan II	0.4000	0.4033	101	30-130	0	30
4,4´-DDD	0.4000	0.3791	95	25-150	3.0	30
Endosulfan sulfate	0.4000	0.4314	108	55-135	0	30
4,4´-DDT	0.4000	0.3973	99	45-140	2.0	30
Methoxychlor	2.0000	2.1344	107	55-150	1.0	30
Endrin ketone	0.4000	0.4299	107	75-125	1.0	30
Endrin aldehyde	0.4000	0.4015	100	55-135	2.0	30
alpha-Chlordane	0.2000	0.1922	96	65-125	1.0	30
gamma-Chlordane	0.2000	0.2029	101	60-125	1.0	30

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/19/2012

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	0.2000	0.1876	94	60-130	0	30
beta-BHC	0.2000	0.1855	93	65-125	4.0	30
delta-BHC	0.2000	0.1956	98	45-135	1.0	30
gamma-BHC (Lindane)	0.2000	0.1921	96	25-135	4.0	30

COMMENTS:

som111.10.27.A

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab Sample ID: LCSD-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Heptachlor	0.2000	0.1953	98	40-130	0	30
Aldrin	0.2000	0.1846	92	25-140	1.0	30
Heptachlor epoxide	0.2000	0.1891	95	60-130	0	30
Endosulfan I	0.2000	0.1777	89	50-110	1.0	30
Dieldrin	0.4000	0.3747	94	60-130	0	30
4,4´-DDE	0.4000	0.3780	94	35-140	1.0	30
Endrin	0.4000	0.3656	91	55-135	0	30
Endosulfan II	0.4000	0.3377	84	30-130	6.0	30
4,4´-DDD	0.4000	0.3705	93	25-150	0	30
Endosulfan sulfate	0.4000	0.3705	93	55-135	6.0	30
4,4´-DDT	0.4000	0.3614	90	45-140	1.0	30
Methoxychlor	2.0000	1.9522	98	55-150	1.0	30
Endrin ketone	0.4000	0.3755	94	75-125	1.0	30
Endrin aldehyde	0.4000	0.3734	93	55-135	0	30
alpha-Chlordane	0.2000	0.1787	89	65-125	1.0	30
gamma-Chlordane	0.2000	0.1926	96	60-125	19	30

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

RPD: 0 out of 40 outside limits.

COMMENTS:

som111.10.27.A

4E - FORM IV PEST

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1336 Mod. Ref No.: SDG No.: SL1336

Lab File ID: E5H8804F.D / E5H8804R.D Lab Sample ID: MB-66817

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 06/19/2012

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Date Analyzed (1): 06/19/2012 Date Analyzed (2): 06/19/2012

Time Analyzed (1): 15:56 Time Analyzed (2): 15:56

Instrument ID (1): E5 Instrument ID (2): E5

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-66817	LCS-66817	06/19/2012	06/19/2012
02	LCSD-66817	LCSD-66817	06/19/2012	06/19/2012
03	TPMW5	L1336-03B	06/19/2012	06/19/2012
04	MW5	L1336-01A	06/25/2012	06/25/2012
05	TPMW3	L1336-02B	06/25/2012	06/25/2012
06	MW3	L1336-04A	06/25/2012	06/25/2012

COMMENTS:

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1336

SW846 6010C, SW846 7470A

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 6010C, SW846 7470A.

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test codes: SW3005A and SW7470A.

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

G. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 07/10/12

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

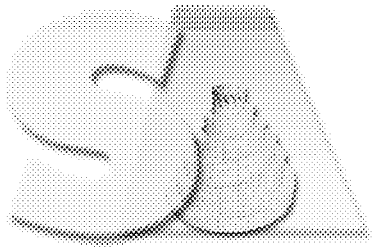
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

MW5

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Matrix (soil/water): WATER Lab Sample ID: L1336-01

Level (low/med): MED Date Received: 06/16/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	275000			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	202			P
7440-39-3	Barium	2120			P
7440-41-7	Beryllium	9.6			P
7440-43-9	Cadmium	2.6	B		P
7440-70-2	Calcium	5760000			P
7440-47-3	Chromium	460			P
7440-48-4	Cobalt	216			P
7440-50-8	Copper	953			P
7439-89-6	Iron	617000			P
7439-92-1	Lead	127			P
7439-95-4	Magnesium	666000			P
7439-96-5	Manganese	29200			P
7439-97-6	Mercury	1.7			CV
7440-02-0	Nickel	466			P
7440-09-7	Potassium	28800			P
7782-49-2	Selenium	45.8			P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	159000			P
7440-28-0	Thallium	27.9			P
7440-62-2	Vanadium	508			P
7440-66-6	Zinc	954			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

TPMW3

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Matrix (soil/water): WATER Lab Sample ID: L1336-02

Level (low/med): MED Date Received: 06/16/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	236000			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	103			P
7440-39-3	Barium	782			P
7440-41-7	Beryllium	12.7			P
7440-43-9	Cadmium	21.4			P
7440-70-2	Calcium	655000			P
7440-47-3	Chromium	247			P
7440-48-4	Cobalt	61.8			P
7440-50-8	Copper	868			P
7439-89-6	Iron	892000			P
7439-92-1	Lead	125			P
7439-95-4	Magnesium	185000			P
7439-96-5	Manganese	25200			P
7439-97-6	Mercury	0.81			CV
7440-02-0	Nickel	158			P
7440-09-7	Potassium	49600			P
7782-49-2	Selenium	15.7	B		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	31900			P
7440-28-0	Thallium	26.0			P
7440-62-2	Vanadium	371			P
7440-66-6	Zinc	1140			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

TPMW5

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Matrix (soil/water): WATER Lab Sample ID: L1336-03

Level (low/med): MED Date Received: 06/16/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	32100			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	90.4			P
7440-39-3	Barium	779			P
7440-41-7	Beryllium	1.6	B		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	714000			P
7440-47-3	Chromium	68.0			P
7440-48-4	Cobalt	34.4	B		P
7440-50-8	Copper	299			P
7439-89-6	Iron	59400			P
7439-92-1	Lead	292			P
7439-95-4	Magnesium	150000			P
7439-96-5	Manganese	8230			P
7439-97-6	Mercury	0.24			CV
7440-02-0	Nickel	59.7			P
7440-09-7	Potassium	11000			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	19700			P
7440-28-0	Thallium	7.5	B		P
7440-62-2	Vanadium	63.5			P
7440-66-6	Zinc	233			P

Comments:

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66879**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8806.18	96.8						
Antimony	455.0	467.57	102.8						
Arsenic	455.0	450.63	99.0						
Barium	9100.0	8952.69	98.4						
Beryllium	227.0	224.13	98.7						
Cadmium	227.0	222.18	97.9						
Calcium	22700.0	21479.77	94.6						
Chromium	910.0	892.07	98.0						
Cobalt	2270.0	2222.12	97.9						
Copper	1130.0	1090.99	96.5						
Iron	4550.0	4446.54	97.7						
Lead	455.0	446.20	98.1						
Magnesium	22700.0	21933.16	96.6						
Manganese	2270.0	2208.45	97.3						
Nickel	2270.0	2222.55	97.9						
Potassium	22700.0	22216.91	97.9						
Selenium	455.0	466.17	102.5						
Silver	1130.0	1153.56	102.1						
Sodium	22700.0	22561.30	99.4						
Thallium	455.0	417.20	91.7						
Vanadium	2270.0	2210.33	97.4						
Zinc	2270.0	2169.63	95.6						

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66883**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.64	100.9						

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCSD-66879**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8999.21	98.9						
Antimony	455.0	469.35	103.2						
Arsenic	455.0	449.83	98.9						
Barium	9100.0	9132.64	100.4						
Beryllium	227.0	228.92	100.8						
Cadmium	227.0	223.54	98.5						
Calcium	22700.0	21609.23	95.2						
Chromium	910.0	896.71	98.5						
Cobalt	2270.0	2228.86	98.2						
Copper	1130.0	1112.41	98.4						
Iron	4550.0	4449.90	97.8						
Lead	455.0	449.54	98.8						
Magnesium	22700.0	22395.51	98.7						
Manganese	2270.0	2252.41	99.2						
Nickel	2270.0	2230.64	98.3						
Potassium	22700.0	22320.52	98.3						
Selenium	455.0	457.54	100.6						
Silver	1130.0	1174.37	103.9						
Sodium	22700.0	22371.80	98.6						
Thallium	455.0	423.30	93.0						
Vanadium	2270.0	2253.15	99.3						
Zinc	2270.0	2180.58	96.1						

U.S. EPA - CLP

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCSD-66883**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.68	101.7						

U.S. EPA - CLP

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-66883**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 11:21	C	06/22/12 11:40	C	06/22/12 11:58	C	Preparation Blank	C	M
Mercury	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

FIMS2_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 12:17	C		C		C	Preparation Blank	C	M
Mercury			0.028	U							CV

U.S. EPA - CLP

3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-66879**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 6:50	C	06/22/12 7:16	C	06/22/12 7:34	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	B	1.1	B	1.3	B	1.4	B	1.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	110.0	U	110.0	U	110.0	U	110.0	U	110.000	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Potassium	76.0	U	76.0	U	76.0	U	268.9	B	102.735	B	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P
Sodium	-41.4	B	-37.2	B	29.0	U	249.3	B	153.854	B	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	4.900	U	P

U.S. EPA - CLP

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1336

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 8:19	C		C		C	Preparation Blank	C	M
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			4.3	U							P
Barium			1.4	B							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U	110.0	U					P
Chromium			0.6	U							P
Cobalt			0.7	B							P
Copper			3.6	U							P
Iron			31.0	U	31.0	U					P
Lead			4.2	U							P
Magnesium			76.0	U							P
Manganese			10.0	U							P
Nickel			0.8	U							P
Potassium			98.9	B							P
Selenium			12.0	U							P
Silver			6.9	U							P
Sodium			74.2	B							P
Thallium			6.2	U							P
Vanadium			1.1	U							P
Zinc			4.9	U							P

* Wet Chemistry *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1336

EPA 300.0, SM 4500D S-

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: EPA 300.0, SM 4500D S-

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: EPA 300.0, SM 4500D S-

V. INSTRUMENTATION

The following instrumentation was used to perform analysis:

Instrument Code: IC1
Instrument Type: IC
Description: DX-500
Manufacturer: Dionex
Model: DX-500
GC Column used: 0.25 m X 4 mm ID [um thickness] AS14A-7 capillary column.

Instrument Code: SPEC2
Instrument Type: SP
Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000
GC Column used: 0.25 m X 4 mm ID [um thickness] AS14A-7 capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

D. Duplicate sample:

No client-requested laboratory duplicate analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

MW5 (L1336-01B), dilution factor: 100 for Sulfate
TPMW3 (L1336-02C), dilution factor: 50 for Sulfate
TPMW5 (L1336-03C), dilution factor: 10 for Sulfate

F. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 07/10/12

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

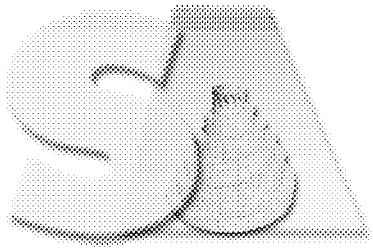
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: MW5
Lab ID: L1336-01
Project: Barker Chemical
Collection Date: 06/15/12 11:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							**E300IC_W**
Sulfate	1700		500	mg/L	100	06/26/2012 13:31	66951
SM 4500D S- -- Total Sulfides							**SM4500_S-_W**
Sulfide	0.043		0.030	mg/L	1	06/19/2012 9:06	66829

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: TPMW3
Lab ID: L1336-02
Project: Barker Chemical
Collection Date: 06/15/12 12:50

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							**E300IC_W**
Sulfate	3400		250	mg/L	50	06/26/2012 14:43	66951
SM 4500D S- -- Total Sulfides							**SM4500_S-_W**
Sulfide	2.1		0.30	mg/L	1	06/19/2012 9:08	66829

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Client: Labella Associates
Client Sample ID: TPMW5 **Project:** Barker Chemical
Lab ID: L1336-03 **Collection Date:** 06/15/12 17:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							**E300IC_W**
Sulfate	520		50	mg/L	10	06/26/2012 13:54	66951
SM 4500D S- -- Total Sulfides							**SM4500_S-_W**
Sulfide	0.53		0.30	mg/L	1	06/19/2012 9:09	66829

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: Labella Associates
Work Order: L1336
Project: Barker Chemical

ANALYTICAL QC SUMMARY REPORT

E300IC_W

EPA 300.0 -- Ion Chromotography (LOW)

Sample ID: **MB-66951** SampType: **MBLK** TestCode: **E300IC_W** Prep Date: **06/26/12 9:35** Run ID: **IC1_120626A**
Client ID: **MB-66951** Batch ID: **66951** Units: **mg/L** Analysis Date: **06/26/12 10:18** SeqNo: **1759714**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.20	5.0									

Sample ID: **LCS-66951** SampType: **LCS** TestCode: **E300IC_W** Prep Date: **06/26/12 9:35** Run ID: **IC1_120626A**
Client ID: **LCS-66951** Batch ID: **66951** Units: **mg/L** Analysis Date: **06/26/12 10:55** SeqNo: **1759715**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	41.01	0.20	5.0	40.00	0	103	90	110	0			

Sample ID: **LCSD-66951** SampType: **LCSD** TestCode: **E300IC_W** Prep Date: **06/26/12 9:35** Run ID: **IC1_120626A**
Client ID: **LCSD-66951** Batch ID: **66951** Units: **mg/L** Analysis Date: **06/26/12 11:07** SeqNo: **1759716**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	41.03	0.20	5.0	40.00	0	103	90	110	41.01	0.0427	20	

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

CLIENT: Labella Associates
Work Order: L1336
Project: Barker Chemical

ANALYTICAL QC SUMMARY REPORT

SM4500_S-_W

SM 4500D S- -- Total Sulfides

Sample ID: **MB-66829**	SampType: **MBLK**	TestCode: **SM4500_S-_W**			Prep Date: **06/19/12 9:00**				Run ID: **SPEC2_120619A**			
Client ID: **MB-66829**	Batch ID: **66829**	Units: **mg/L**			Analysis Date: **06/19/12 9:02**				SeqNo: **1757410**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	ND	0.030	0.030									

Sample ID: **LCS-66829**	SampType: **LCS**	TestCode: **SM4500_S-_W**			Prep Date: **06/19/12 9:00**				Run ID: **SPEC2_120619A**			
Client ID: **LCS-66829**	Batch ID: **66829**	Units: **mg/L**			Analysis Date: **06/19/12 9:04**				SeqNo: **1757411**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	0.2083	0.030	0.030	0.2000	0	104	80	120	0			

Sample ID: **LCSD-66829**	SampType: **LCSD**	TestCode: **SM4500_S-_W**			Prep Date: **06/19/12 9:00**				Run ID: **SPEC2_120619A**			
Client ID: **LCSD-66829**	Batch ID: **66829**	Units: **mg/L**			Analysis Date: **06/19/12 9:05**				SeqNo: **1757412**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	0.2051	0.030	0.030	0.2000	0	103	80	120	0.2083	1.57	20	

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

Report Date:
10-Jul-12 17:31

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

- [x] Final Report
- [ ] Re-Issued Report
- [ ] Revised Report

Laboratory Report

Labella Associates
300 Pearl St. Suite 325
Buffalo, NY 14202

Work Order: L1348
Project : Barker Chemical
Project #:

Attn:

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
L1348-01	SW-1	Aqueous	13-Jun-12 11:45	18-Jun-12 11:33
L1348-02	SW-2	Aqueous	13-Jun-12 12:00	18-Jun-12 11:33
L1348-03	SS-3	Soil	13-Jun-12 13:00	18-Jun-12 11:33
L1348-04	SS-6	Soil	13-Jun-12 13:00	18-Jun-12 11:33
L1348-05	SS-13	Soil	13-Jun-12 13:00	18-Jun-12 11:33
L1348-06	SS-24	Soil	13-Jun-12 13:00	18-Jun-12 11:33
L1348-07	SS-28	Soil	13-Jun-12 13:00	18-Jun-12 11:33
L1348-08	SS-29	Soil	13-Jun-12 15:15	18-Jun-12 11:33
L1348-09	SS-40	Soil	13-Jun-12 15:15	18-Jun-12 11:33
L1348-10	SS-45	Soil	13-Jun-12 15:15	18-Jun-12 11:33

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirments have been meet.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Pennsylvania	68-00520
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

NELAP ACCREDITED TNI LABORATORY

LABORATORY ACCREDITATION BUREAU ACCREDITED
Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

* Data Summary Pack *

175 Metro Center Boulevard · Warwick, RI 02886-1755 · 401-732-3400 · FAX 401-732-3499
www.spectrum-analytical.com

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Identification and Analytical Requirements Summary

Project Name : Barker Chemical **SDG :** L1348

Customer Sample ID	Laboratory Sample ID	Analytical Requirements				
		MSVOA Method #	MSSEMI Method #	GC* Method #	ME	Other
SW-1	L1348-01	SW8260_W	SW8270_W	SW8081_W	SW6010_W	SEE DATA
SW-1	L1348-01				SW7470	
SW-2	L1348-02	SW8260_W	SW8270_W	SW8081_W	SW6010_W	SEE DATA
SW-2	L1348-02				SW7470	
SS-3	L1348-03		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-3	L1348-03				SW6010_S	
SS-3	L1348-03				SW7471	
SS-6	L1348-04		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-6	L1348-04				SW6010_S	
SS-6	L1348-04				SW7471	
SS-13	L1348-05		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-13	L1348-05				SW6010_S	
SS-13	L1348-05				SW7471	
SS-24	L1348-06		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-24	L1348-06				SW6010_S	
SS-24	L1348-06				SW7471	
SS-28	L1348-07		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-28	L1348-07				SW6010_S	
SS-28	L1348-07				SW7471	
SS-29	L1348-08		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-29	L1348-08				SW6010_S	
SS-29	L1348-08				SW7471	
SS-40	L1348-09		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-40	L1348-09				SW6010_S	
SS-40	L1348-09				SW7471	
SS-45	L1348-10		SW8270_S	SW8081_S	SW6010_S	SEE DATA
SS-45	L1348-10				SW6010_S	
SS-45	L1348-10				SW7471	

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8260_W					
L1348-01A	AQ	6/13/2012	6/18/2012	NA	6/21/2012
L1348-02A	AQ	6/13/2012	6/18/2012	NA	6/21/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8270_S					
L1348-03A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-04A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-05A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-06A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-07A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-08A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-09A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
L1348-10A	SL	6/13/2012	6/18/2012	6/20/2012	6/22/2012
SW8270_W					
L1348-01B	AQ	6/13/2012	6/18/2012	6/19/2012	6/21/2012
L1348-02B	AQ	6/13/2012	6/18/2012	6/19/2012	6/21/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Date Collected	Date Received By Lab	Date Extracted	Date Analyzed
SW8081_S					
L1348-03A	SL	6/13/2012	6/18/2012	6/20/2012	6/25/2012
L1348-04A	SL	6/13/2012	6/18/2012	6/20/2012	6/25/2012
L1348-05A	SL	6/13/2012	6/18/2012	6/20/2012	6/25/2012
L1348-06A	SL	6/13/2012	6/18/2012	6/20/2012	6/29/2012
L1348-07A	SL	6/13/2012	6/18/2012	6/20/2012	6/29/2012
L1348-08A	SL	6/13/2012	6/18/2012	6/20/2012	6/25/2012
L1348-09A	SL	6/13/2012	6/18/2012	6/20/2012	6/25/2012
L1348-10A	SL	6/13/2012	6/18/2012	6/20/2012	6/25/2012
SW8081_W					
L1348-01B	AQ	6/13/2012	6/18/2012	6/19/2012	6/19/2012
L1348-02B	AQ	6/13/2012	6/18/2012	6/19/2012	6/19/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSVOA

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Low/Medium Level	Dil/Conc Factor
SW8260_W					
L1348-01A	AQ	SW8260_W	NA	LOW	1
L1348-02A	AQ	SW8260_W	NA	LOW	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary MSSEMI

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8270_S					
L1348-03A	SL	SW8270_S	3550B	NA	1
L1348-04A	SL	SW8270_S	3550B	NA	1
L1348-05A	SL	SW8270_S	3550B	NA	1
L1348-06A	SL	SW8270_S	3550B	NA	1
L1348-07A	SL	SW8270_S	3550B	NA	1
L1348-08A	SL	SW8270_S	3550B	NA	1
L1348-09A	SL	SW8270_S	3550B	NA	1
L1348-10A	SL	SW8270_S	3550B	NA	1
SW8270_W					
L1348-01B	AQ	SW8270_W	3510C	NA	1
L1348-02B	AQ	SW8270_W	3510C	NA	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary GC*

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Analytical Protocol	Extraction Method	Auxiliary Cleanup	Dil/Conc Factor
SW8081_S					
L1348-03A	SL	SW8081_S	3550B	sulfur	1
L1348-04A	SL	SW8081_S	3550B	sulfur	1
L1348-05A	SL	SW8081_S	3550B	sulfur	20
L1348-06A	SL	SW8081_S	3550B	sulfur	60
L1348-07A	SL	SW8081_S	3550B	sulfur	5000
L1348-08A	SL	SW8081_S	3550B	sulfur	1
L1348-09A	SL	SW8081_S	3550B	sulfur	1
L1348-10A	SL	SW8081_S	3550B	sulfur	1
SW8081_W					
L1348-01B	AQ	SW8081_W	3510C	sulfur	1
L1348-02B	AQ	SW8081_W	3510C	sulfur	1

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

New York State Department of Environmental Conservation
Sample Preparation and Analysis Summary ME

Project Name : Barker Chemical **SDG :** L1348

Laboratory Sample ID	Matrix	Metals Requested	Date Received By Lab	Date Analyzed
SW6010_S				
L1348-03A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-04A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-05A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-06A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-07A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-08A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-09A	SL	SW6010_S	6/18/2012	6/26/2012
L1348-10A	SL	SW6010_S	6/18/2012	6/26/2012
SW6010_W				
L1348-01E	AQ	SW6010_W	6/18/2012	6/22/2012
L1348-02E	AQ	SW6010_W	6/18/2012	6/22/2012
SW7470				
L1348-01E	AQ	SW7470	6/18/2012	6/22/2012
L1348-02E	AQ	SW7470	6/18/2012	6/22/2012
SW7471				
L1348-03A	SL	SW7471	6/18/2012	6/29/2012
L1348-04A	SL	SW7471	6/18/2012	6/29/2012
L1348-05A	SL	SW7471	6/18/2012	6/29/2012
L1348-06A	SL	SW7471	6/18/2012	6/29/2012
L1348-07A	SL	SW7471	6/18/2012	6/29/2012
L1348-08A	SL	SW7471	6/18/2012	6/29/2012
L1348-09A	SL	SW7471	6/18/2012	6/29/2012
L1348-10A	SL	SW7471	6/18/2012	6/29/2012

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1348

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1348-01A	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	SW8260_W	/					VOA
L1348-01B	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	SW8081_W	/					H2
L1348-01B	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	SW8270_W	/					H2
L1348-01C	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	E300IC_W	/ SO4 only				Y	H2
L1348-01D	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	SM4500_S-_W	/					H2
L1348-01E	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	SW6010_W	/ TAL				Y	M5
L1348-01E	SW-1	06/13/2012 11:45	06/18/2012	Aqueous	SW7470	/ TAL					M5
L1348-02A	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	SW8260_W	/					VOA
L1348-02B	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	SW8081_W	/					H2
L1348-02B	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	SW8270_W	/					H2
L1348-02C	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	E300IC_W	/ SO4 only				Y	H2
L1348-02D	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	SM4500_S-_W	/					H2
L1348-02E	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	SW6010_W	/ TAL				Y	M5
L1348-02E	SW-2	06/13/2012 12:00	06/18/2012	Aqueous	SW7470	/ TAL					M5
L1348-03A	SS-3	06/13/2012 13:00	06/18/2012	Soil	PMoist	/					H2
L1348-03A	SS-3	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-03A	SS-3	06/13/2012 13:00	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-03A	SS-3	06/13/2012 13:00	06/18/2012	Soil	SW8081_S	/					H2
L1348-03A	SS-3	06/13/2012 13:00	06/18/2012	Soil	SW8270_S	/					H2
L1348-03A	SS-3	06/13/2012 13:00	06/18/2012	Soil	SW9045_S	/					H2
L1348-03B	SS-3	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1348

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1348-04A	SS-6	06/13/2012 13:00	06/18/2012	Soil	PMoist	/					H2
L1348-04A	SS-6	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-04A	SS-6	06/13/2012 13:00	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-04A	SS-6	06/13/2012 13:00	06/18/2012	Soil	SW8081_S	/					H2
L1348-04A	SS-6	06/13/2012 13:00	06/18/2012	Soil	SW8270_S	/					H2
L1348-04A	SS-6	06/13/2012 13:00	06/18/2012	Soil	SW9045_S	/					H2
L1348-04B	SS-6	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1348-05A	SS-13	06/13/2012 13:00	06/18/2012	Soil	PMoist	/					H2
L1348-05A	SS-13	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-05A	SS-13	06/13/2012 13:00	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-05A	SS-13	06/13/2012 13:00	06/18/2012	Soil	SW8081_S	/					H2
L1348-05A	SS-13	06/13/2012 13:00	06/18/2012	Soil	SW8270_S	/					H2
L1348-05A	SS-13	06/13/2012 13:00	06/18/2012	Soil	SW9045_S	/					H2
L1348-05B	SS-13	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1348-06A	SS-24	06/13/2012 13:00	06/18/2012	Soil	PMoist	/					H2
L1348-06A	SS-24	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-06A	SS-24	06/13/2012 13:00	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-06A	SS-24	06/13/2012 13:00	06/18/2012	Soil	SW8081_S	/					H2
L1348-06A	SS-24	06/13/2012 13:00	06/18/2012	Soil	SW8270_S	/					H2
L1348-06A	SS-24	06/13/2012 13:00	06/18/2012	Soil	SW9045_S	/					H2
L1348-06B	SS-24	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1348-07A	SS-28	06/13/2012 13:00	06/18/2012	Soil	PMoist	/					H2
L1348-07A	SS-28	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2

HF = Fraction logged in but all tests have been placed on hold

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Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1348

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1348-07A	SS-28	06/13/2012 13:00	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-07A	SS-28	06/13/2012 13:00	06/18/2012	Soil	SW8081_S	/					H2
L1348-07A	SS-28	06/13/2012 13:00	06/18/2012	Soil	SW8270_S	/					H2
L1348-07A	SS-28	06/13/2012 13:00	06/18/2012	Soil	SW9045_S	/					H2
L1348-07B	SS-28	06/13/2012 13:00	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1348-08A	SS-29	06/13/2012 15:15	06/18/2012	Soil	PMoist	/					H2
L1348-08A	SS-29	06/13/2012 15:15	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-08A	SS-29	06/13/2012 15:15	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-08A	SS-29	06/13/2012 15:15	06/18/2012	Soil	SW8081_S	/					H2
L1348-08A	SS-29	06/13/2012 15:15	06/18/2012	Soil	SW8270_S	/					H2
L1348-08A	SS-29	06/13/2012 15:15	06/18/2012	Soil	SW9045_S	/					H2
L1348-08B	SS-29	06/13/2012 15:15	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1348-09A	SS-40	06/13/2012 15:15	06/18/2012	Soil	PMoist	/					H2
L1348-09A	SS-40	06/13/2012 15:15	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-09A	SS-40	06/13/2012 15:15	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-09A	SS-40	06/13/2012 15:15	06/18/2012	Soil	SW8081_S	/					H2
L1348-09A	SS-40	06/13/2012 15:15	06/18/2012	Soil	SW8270_S	/					H2
L1348-09A	SS-40	06/13/2012 15:15	06/18/2012	Soil	SW9045_S	/					H2
L1348-09B	SS-40	06/13/2012 15:15	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB
L1348-10A	SS-45	06/13/2012 15:15	06/18/2012	Soil	PMoist	/					H2
L1348-10A	SS-45	06/13/2012 15:15	06/18/2012	Soil	SW6010_S	/ TAL				Y	H2
L1348-10A	SS-45	06/13/2012 15:15	06/18/2012	Soil	SW7471	/ TAL					H2
L1348-10A	SS-45	06/13/2012 15:15	06/18/2012	Soil	SW8081_S	/					H2

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

WorkOrder: L1348

Client ID: LABELLA_BUFFALO
Project: Barker Chemical
WO Name: Barker Chemical
Location: LABELLA_BARKER,
Comments: N/A

Case:
SDG:
PO: 212436

HC Due: 07/09/12
Fax Due:
Fax Report: ☐

Report Level: ASP-B
Special Program:
EDD: EQUIIS_4_NYSDEC

Lab Samp ID	Client Sample ID	Collection Date	Date Recv'd	Matrix	Test Code	Samp / Lab Test Comments	HF	HT	MS	SEL	Storage
L1348-10A	SS-45	06/13/2012 15:15	06/18/2012	Soil	SW8270_S	/					H2
L1348-10A	SS-45	06/13/2012 15:15	06/18/2012	Soil	SW9045_S	/					H2
L1348-10B	SS-45	06/13/2012 15:15	06/18/2012	Soil	SW6010_S	/ SPECTRUM					SUB

HF = Fraction logged in but all tests have been placed on hold

HT = Test logged in but has been placed on hold

* Volatiles *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1348

SW846 8260C, VOC by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8260C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW5030

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: V6
Instrument Type: GCMS-VOA
Description: HP6890 / HP5973
Manufacturer: Hewlett-Packard
Model: 6890 / 5973

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

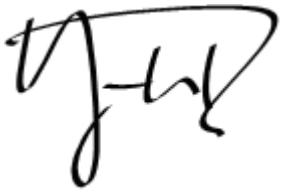
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.



Signed:_____ _____

Date:_____7/5/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

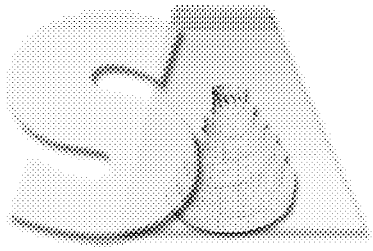
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7962.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-01A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7962.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7963.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	5.0	U
75-15-0	Carbon disulfide	5.0	U
75-09-2	Methylene chloride	5.0	U
156-60-5	trans-1,2-Dichloroethene	5.0	U
1634-04-4	Methyl tert-butyl ether	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
108-05-4	Vinyl acetate	5.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
74-97-5	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
56-23-5	Carbon tetrachloride	5.0	U
107-06-2	1,2-Dichloroethane	5.0	U
71-43-2	Benzene	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-5	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-5	cis-1,3-Dichloropropene	5.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-5	1,1,2-Trichloroethane	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-02A

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7963.D

Level: (TRACE/LOW/MED) LOW Date Received: 06/18/2012

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	5.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromoethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U
100-41-4	Ethylbenzene	5.0	U
179601-23-1	m,p-Xylene	5.0	U
95-47-6	o-Xylene	5.0	U
1330-20-7	Xylene (Total)	5.0	U
100-42-5	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane	5.0	U
108-86-1	Bromobenzene	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	U
91-20-3	Naphthalene	5.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7957.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	1.0	U
74-87-3	Chloromethane	1.0	U
75-01-4	Vinyl chloride	1.0	U
74-83-9	Bromomethane	1.0	U
75-00-3	Chloroethane	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
75-35-4	1,1-Dichloroethene	1.0	U
67-64-1	Acetone	5.0	U
74-88-4	Iodomethane	1.0	U
75-15-0	Carbon disulfide	1.0	U
75-09-2	Methylene chloride	1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	U
1634-04-4	Methyl tert-butyl ether	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U
108-05-4	Vinyl acetate	1.0	U
78-93-3	2-Butanone	5.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
74-97-5	Bromochloromethane	1.0	U
67-66-3	Chloroform	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
107-06-2	1,2-Dichloroethane	1.0	U
71-43-2	Benzene	1.0	U
79-01-6	Trichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
74-95-3	Dibromomethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7957.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	1.0	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	1.0	U
106-93-4	1,2-Dibromoethane	1.0	U
108-90-7	Chlorobenzene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
100-41-4	Ethylbenzene	1.0	U
179601-23-1	m,p-Xylene	1.0	U
95-47-6	o-Xylene	1.0	U
1330-20-7	Xylene (Total)	1.0	U
100-42-5	Styrene	1.0	U
75-25-2	Bromoform	1.0	U
98-82-8	Isopropylbenzene	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
108-86-1	Bromobenzene	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
103-65-1	n-Propylbenzene	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
104-51-8	n-Butylbenzene	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
91-20-3	Naphthalene	1.0	U

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7953.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	49	
74-87-3	Chloromethane	49	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	53	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	52	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	58	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	53	
1634-04-4	Methyl tert-butyl ether	51	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	58	
156-59-2	cis-1,2-Dichloroethene	51	
594-20-7	2,2-Dichloropropane	49	
74-97-5	Bromochloromethane	52	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	50	
563-58-6	1,1-Dichloropropene	51	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	52	
71-43-2	Benzene	50	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	50	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	46	
79-00-5	1,1,2-Trichloroethane	50	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7953.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	56	
591-78-6	2-Hexanone	48	
124-48-1	Dibromochloromethane	54	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	51	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	56	
98-82-8	Isopropylbenzene	50	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	51	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	50	
95-49-8	2-Chlorotoluene	49	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	48	
541-73-1	1,3-Dichlorobenzene	48	
106-46-7	1,4-Dichlorobenzene	49	
104-51-8	n-Butylbenzene	48	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	45	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	40	

1A - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7954.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-71-8	Dichlorodifluoromethane	49	
74-87-3	Chloromethane	48	
75-01-4	Vinyl chloride	49	
74-83-9	Bromomethane	50	
75-00-3	Chloroethane	47	
75-69-4	Trichlorofluoromethane	51	
75-35-4	1,1-Dichloroethene	52	
67-64-1	Acetone	52	
74-88-4	Iodomethane	51	
75-15-0	Carbon disulfide	44	
75-09-2	Methylene chloride	46	
156-60-5	trans-1,2-Dichloroethene	52	
1634-04-4	Methyl tert-butyl ether	50	
75-34-3	1,1-Dichloroethane	51	
108-05-4	Vinyl acetate	49	
78-93-3	2-Butanone	52	
156-59-2	cis-1,2-Dichloroethene	50	
594-20-7	2,2-Dichloropropane	48	
74-97-5	Bromochloromethane	51	
67-66-3	Chloroform	51	
71-55-6	1,1,1-Trichloroethane	51	
563-58-6	1,1-Dichloropropene	50	
56-23-5	Carbon tetrachloride	52	
107-06-2	1,2-Dichloroethane	51	
71-43-2	Benzene	51	
79-01-6	Trichloroethene	49	
78-87-5	1,2-Dichloropropane	50	
74-95-3	Dibromomethane	52	
75-27-4	Bromodichloromethane	52	
10061-01-5	cis-1,3-Dichloropropene	50	
108-10-1	4-Methyl-2-pentanone	48	
108-88-3	Toluene	51	
10061-02-6	trans-1,3-Dichloropropene	46	
79-00-5	1,1,2-Trichloroethane	49	
142-28-9	1,3-Dichloropropane	51	

1B - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66894

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V6I7954.D

Level: (TRACE/LOW/MED) LOW Date Received:

% Moisture: not dec. Date Analyzed: 06/21/2012

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
127-18-4	Tetrachloroethene	53	
591-78-6	2-Hexanone	47	
124-48-1	Dibromochloromethane	53	
106-93-4	1,2-Dibromoethane	51	
108-90-7	Chlorobenzene	50	
630-20-6	1,1,1,2-Tetrachloroethane	50	
100-41-4	Ethylbenzene	49	
179601-23-1	m,p-Xylene	100	
95-47-6	o-Xylene	50	
1330-20-7	Xylene (Total)	150	
100-42-5	Styrene	50	
75-25-2	Bromoform	55	
98-82-8	Isopropylbenzene	49	
79-34-5	1,1,2,2-Tetrachloroethane	49	
108-86-1	Bromobenzene	50	
96-18-4	1,2,3-Trichloropropane	49	
103-65-1	n-Propylbenzene	49	
95-49-8	2-Chlorotoluene	50	
108-67-8	1,3,5-Trimethylbenzene	49	
106-43-4	4-Chlorotoluene	49	
98-06-6	tert-Butylbenzene	48	
95-63-6	1,2,4-Trimethylbenzene	49	
135-98-8	sec-Butylbenzene	49	
99-87-6	4-Isopropyltoluene	47	
541-73-1	1,3-Dichlorobenzene	47	
106-46-7	1,4-Dichlorobenzene	48	
104-51-8	n-Butylbenzene	47	
95-50-1	1,2-Dichlorobenzene	48	
96-12-8	1,2-Dibromo-3-chloropropane	50	
120-82-1	1,2,4-Trichlorobenzene	44	
87-68-3	Hexachlorobutadiene	47	
87-61-6	1,2,3-Trichlorobenzene	42	
91-20-3	Naphthalene	40	

2B - FORM II VOA-2

WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Level: (TRACE or LOW) LOW

	EPA SAMPLE NO.	VDMC1 (DBFM) #	VDMC2 (DCE) #	VDMC3 (TOL) #	VDMC4 (BFB) #				TOT OUT
01	LCS-66894	100	98	100	100				0
02	LCSD-66894	101	94	99	99				0
03	MB-66894	102	100	98	99				0
04	SW-1	102	99	99	97				0
05	SW-2	101	99	98	98				0

		QC LIMITS
VDMC1	(DBFM) Dibromofluoromethane	(85-115)
VDMC2	(DCE) = 1,2-Dichloroethane-d4	(70-120)
VDMC3	(TOL) = Toluene-d8	(85-120)
VDMC4	(BFB) = Bromofluorobenzene	(75-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

som111.10.27.A

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66894 LCS Lot No.:

Date Extracted: 06/21/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Dichlorodifluoromethane	50.0000	0.0000	48.9304	98		30 - 155
Chloromethane	50.0000	0.0000	49.3086	99		40 - 125
Vinyl chloride	50.0000	0.0000	49.2214	98		50 - 145
Bromomethane	50.0000	0.0000	50.2448	100		30 - 145
Chloroethane	50.0000	0.0000	47.2570	95		60 - 135
Trichlorofluoromethane	50.0000	0.0000	53.2774	107		60 - 145
1,1-Dichloroethene	50.0000	0.0000	52.4207	105		70 - 130
Acetone	50.0000	0.0000	51.7130	103		40 - 140
Iodomethane	50.0000	0.0000	50.9181	102		72 - 121
Carbon disulfide	50.0000	0.0000	57.8018	116		35 - 160
Methylene chloride	50.0000	0.0000	45.8897	92		55 - 140
trans-1,2-Dichloroethene	50.0000	0.0000	52.9474	106		60 - 140
Methyl tert-butyl ether	50.0000	0.0000	50.7134	101		65 - 125
1,1-Dichloroethane	50.0000	0.0000	51.0073	102		70 - 135
Vinyl acetate	50.0000	0.0000	48.8386	98		38 - 163
2-Butanone	50.0000	0.0000	57.8915	116		30 - 150
cis-1,2-Dichloroethene	50.0000	0.0000	50.7700	102		70 - 125
2,2-Dichloropropane	50.0000	0.0000	48.8113	98		70 - 135
Bromochloromethane	50.0000	0.0000	51.6557	103		65 - 130
Chloroform	50.0000	0.0000	50.6739	101		65 - 135
1,1,1-Trichloroethane	50.0000	0.0000	49.6807	99		65 - 130
1,1-Dichloropropene	50.0000	0.0000	51.0566	102		75 - 130
Carbon tetrachloride	50.0000	0.0000	51.9360	104		65 - 140
1,2-Dichloroethane	50.0000	0.0000	52.2226	104		70 - 130
Benzene	50.0000	0.0000	50.1831	100		80 - 120
Trichloroethene	50.0000	0.0000	49.2810	99		70 - 125
1,2-Dichloropropane	50.0000	0.0000	50.2039	100		75 - 125
Dibromomethane	50.0000	0.0000	51.7247	103		75 - 125
Bromodichloromethane	50.0000	0.0000	51.8285	104		75 - 120
cis-1,3-Dichloropropene	50.0000	0.0000	50.1723	100		70 - 130
4-Methyl-2-pentanone	50.0000	0.0000	48.2210	96		60 - 135
Toluene	50.0000	0.0000	51.1161	102		75 - 120
trans-1,3-Dichloropropene	50.0000	0.0000	45.7239	91		55 - 140
1,1,2-Trichloroethane	50.0000	0.0000	49.9117	100		75 - 125
1,3-Dichloropropane	50.0000	0.0000	50.9195	102		75 - 125
Tetrachloroethene	50.0000	0.0000	56.4147	113		45 - 150
2-Hexanone	50.0000	0.0000	48.4395	97		55 - 130
Dibromochloromethane	50.0000	0.0000	53.6736	107		60 - 135
1,2-Dibromoethane	50.0000	0.0000	50.6109	101		80 - 120
Chlorobenzene	50.0000	0.0000	50.1758	100		80 - 120
1,1,1,2-Tetrachloroethane	50.0000	0.0000	51.1123	102		80 - 130
Ethylbenzene	50.0000	0.0000	48.9040	98		75 - 125
m,p-Xylene	100.0000	0.0000	100.2111	100		75 - 130
o-Xylene	50.0000	0.0000	50.0010	100		80 - 120

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66894 LCS Lot No.:

Date Extracted: 06/21/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Xylene (Total)	150.0000	0.0000	150.2121	100		81 - 121
Styrene	50.0000	0.0000	49.9287	100		65 - 135
Bromoform	50.0000	0.0000	55.8505	112		70 - 130
Isopropylbenzene	50.0000	0.0000	50.0661	100		75 - 125
1,1,2,2-Tetrachloroethane	50.0000	0.0000	48.7333	97		65 - 130
Bromobenzene	50.0000	0.0000	50.7991	102		75 - 125
1,2,3-Trichloropropane	50.0000	0.0000	49.0359	98		75 - 125
n-Propylbenzene	50.0000	0.0000	49.7199	99		70 - 130
2-Chlorotoluene	50.0000	0.0000	49.0734	98		75 - 125
1,3,5-Trimethylbenzene	50.0000	0.0000	48.9504	98		75 - 130
4-Chlorotoluene	50.0000	0.0000	48.8084	98		75 - 130
tert-Butylbenzene	50.0000	0.0000	48.3279	97		70 - 130
1,2,4-Trimethylbenzene	50.0000	0.0000	49.4739	99		75 - 130
sec-Butylbenzene	50.0000	0.0000	48.9201	98		70 - 125
4-Isopropyltoluene	50.0000	0.0000	48.1865	96		75 - 130
1,3-Dichlorobenzene	50.0000	0.0000	47.5303	95		75 - 125
1,4-Dichlorobenzene	50.0000	0.0000	48.8410	98		75 - 125
n-Butylbenzene	50.0000	0.0000	48.0268	96		70 - 135
1,2-Dichlorobenzene	50.0000	0.0000	47.9458	96		70 - 120
1,2-Dibromo-3-chloropropan	50.0000	0.0000	50.0796	100		50 - 130
1,2,4-Trichlorobenzene	50.0000	0.0000	44.6109	89		65 - 135
Hexachlorobutadiene	50.0000	0.0000	47.3328	95		50 - 140
1,2,3-Trichlorobenzene	50.0000	0.0000	41.7254	83		55 - 140
Naphthalene	50.0000	0.0000	39.7936	80		55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66894 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	50.0000	49.4272	99		1		40	30 - 155
Chloromethane	50.0000	47.9250	96		3		40	40 - 125
Vinyl chloride	50.0000	48.9615	98		0		40	50 - 145
Bromomethane	50.0000	49.7481	99		1		40	30 - 145
Chloroethane	50.0000	46.7851	94		1		40	60 - 135
Trichlorofluoromethane	50.0000	51.4231	103		4		40	60 - 145
1,1-Dichloroethene	50.0000	51.8061	104		1		40	70 - 130
Acetone	50.0000	51.6886	103		0		40	40 - 140
Iodomethane	50.0000	50.9459	102		0		40	72 - 121
Carbon disulfide	50.0000	44.4838	89		26		40	35 - 160
Methylene chloride	50.0000	45.9347	92		0		40	55 - 140
trans-1,2-Dichloroethene	50.0000	51.5556	103		3		40	60 - 140
Methyl tert-butyl ether	50.0000	49.8412	100		1		40	65 - 125
1,1-Dichloroethane	50.0000	50.7810	102		0		40	70 - 135
Vinyl acetate	50.0000	49.2933	99		1		40	38 - 163
2-Butanone	50.0000	51.5868	103		12		40	30 - 150
cis-1,2-Dichloroethene	50.0000	50.2937	101		1		40	70 - 125
2,2-Dichloropropane	50.0000	48.2764	97		1		40	70 - 135
Bromochloromethane	50.0000	51.4227	103		0		40	65 - 130
Chloroform	50.0000	50.5392	101		0		40	65 - 135
1,1,1-Trichloroethane	50.0000	50.5078	101		2		40	65 - 130
1,1-Dichloropropene	50.0000	50.3259	101		1		40	75 - 130
Carbon tetrachloride	50.0000	52.3147	105		1		40	65 - 140
1,2-Dichloroethane	50.0000	50.6340	101		3		40	70 - 130
Benzene	50.0000	50.5700	101		1		40	80 - 120
Trichloroethene	50.0000	49.1950	98		1		40	70 - 125
1,2-Dichloropropane	50.0000	49.9425	100		0		40	75 - 125
Dibromomethane	50.0000	51.5643	103		0		40	75 - 125
Bromodichloromethane	50.0000	52.1102	104		0		40	75 - 120
cis-1,3-Dichloropropene	50.0000	50.2130	100		0		40	70 - 130
4-Methyl-2-pentanone	50.0000	48.2145	96		0		40	60 - 135
Toluene	50.0000	50.5322	101		1		40	75 - 120
trans-1,3-Dichloropropene	50.0000	46.3845	93		2		40	55 - 140
1,1,2-Trichloroethane	50.0000	49.1789	98		2		40	75 - 125
1,3-Dichloropropane	50.0000	50.6006	101		1		40	75 - 125
Tetrachloroethene	50.0000	53.4532	107		5		40	45 - 150
2-Hexanone	50.0000	46.9598	94		3		40	55 - 130
Dibromochloromethane	50.0000	53.0891	106		1		40	60 - 135
1,2-Dibromoethane	50.0000	50.5040	101		0		40	80 - 120
Chlorobenzene	50.0000	50.0479	100		0		40	80 - 120
1,1,1,2-Tetrachloroethane	50.0000	50.0546	100		2		40	80 - 130
Ethylbenzene	50.0000	48.6691	97		1		40	75 - 125
m,p-Xylene	100.0000	99.6928	100		0		40	75 - 130
o-Xylene	50.0000	49.5771	99		1		40	80 - 120
Xylene (Total)	150.0000	149.2700	100		0		40	81 - 121
Styrene	50.0000	49.7488	99		1		40	65 - 135

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66894 LCS Lot No.:

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Bromoform	50.0000	55.4019	111		1		40	70 - 130
Isopropylbenzene	50.0000	48.9027	98		2		40	75 - 125
1,1,2,2-Tetrachloroethane	50.0000	48.9685	98		1		40	65 - 130
Bromobenzene	50.0000	50.0430	100		2		40	75 - 125
1,2,3-Trichloropropane	50.0000	49.1590	98		0		40	75 - 125
n-Propylbenzene	50.0000	49.0807	98		1		40	70 - 130
2-Chlorotoluene	50.0000	49.8001	100		2		40	75 - 125
1,3,5-Trimethylbenzene	50.0000	48.6859	97		1		40	75 - 130
4-Chlorotoluene	50.0000	48.9269	98		0		40	75 - 130
tert-Butylbenzene	50.0000	47.5395	95		2		40	70 - 130
1,2,4-Trimethylbenzene	50.0000	48.7129	97		2		40	75 - 130
sec-Butylbenzene	50.0000	49.0851	98		0		40	70 - 125
4-Isopropyltoluene	50.0000	47.3534	95		1		40	75 - 130
1,3-Dichlorobenzene	50.0000	47.1937	94		1		40	75 - 125
1,4-Dichlorobenzene	50.0000	48.1051	96		2		40	75 - 125
n-Butylbenzene	50.0000	47.2221	94		2		40	70 - 135
1,2-Dichlorobenzene	50.0000	47.7383	95		1		40	70 - 120
1,2-Dibromo-3-chloropropan	50.0000	50.4192	101		1		40	50 - 130
1,2,4-Trichlorobenzene	50.0000	44.2638	89		0		40	65 - 135
Hexachlorobutadiene	50.0000	47.0217	94		1		40	50 - 140
1,2,3-Trichlorobenzene	50.0000	42.1224	84		1		40	55 - 140
Naphthalene	50.0000	39.9469	80		0		40	55 - 140

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 68 outside limits

Spike Recovery: 0 out of 68 outside limits

COMMENTS:

4A - FORM IV VOA

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66894

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab File ID: V6I7957.D Lab Sample ID: MB-66894

Instrument ID: V6

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/21/2012

Level: (TRACE or LOW/MED) LOW Time Analyzed: 19:49

GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCS-66894	LCS-66894	V6I7953.D	18:13
02	LCSD-66894	LCSD-66894	V6I7954.D	18:37
03	SW-1	L1348-01A	V6I7962.D	21:49
04	SW-2	L1348-02A	V6I7963.D	22:13

COMMENTS:

som111.10.27.A

8A - FORM VIII VOA

VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 06/21/2012 06/21/2012

EPA Sample No.(VSTD#####): VSTD0506F Date Analyzed: 06/21/2012

Lab File ID (Standard): V6I7951.D Time Analyzed: 17:25

Instrument ID: V6 Heated Purge: (Y/N) N

		IS1 (S1) AREA	#	RT	#	IS2 (S2) AREA	#	RT	#	IS3 (S3) AREA	#	RT	#
	12 HOUR STD	469780		5.116		417510		8.086		241772		10.607	
	UPPER LIMIT	939560		5.616		835020		8.586		483544		11.107	
	LOWER LIMIT	234890		4.616		208755		7.586		120886		10.107	
	EPA SAMPLE NO.												
01	LCS-66894	454712		5.116		398759		8.086		238217		10.606	
02	LCSD-66894	452467		5.120		397824		8.078		236381		10.610	
03	MB-66894	433088		5.117		387968		8.087		229880		10.608	
04	SW-1	433232		5.120		386465		8.078		231273		10.610	
05	SW-2	426762		5.119		385272		8.089		226518		10.609	

IS1 () = Fluorobenzene
IS2 () = Chlorobenzene-d5
IS3 () = 1,4-Dichlorobenzene-d4
AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area
AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area
RT UPPER LIMIT = +0.50 (Low-Medium Volatiles) and +0.33 (Trace Volatiles) minutes of internal standard RT
RT LOWER LIMIT = -0.50 (Low-Medium Volatiles) and -0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

* Semivolatile Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1348

SW846 8270D, SVOA by GC-MS

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8270D

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510
Soil Samples were prepared following procedures in laboratory test code: SW3550

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: S6
Instrument Type: GCMS-Semi
Description: HP7890A
Manufacturer: Agilent
Model: 7890A/5973
GC Column used: 30 m X 0.25 mm ID [0.25 um thickness] Rxi-5sil MS capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits.

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Internal Standards:

Internal standard peak areas were within the QC limits.

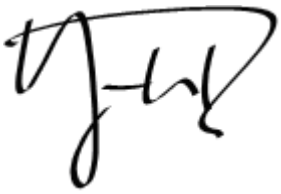
F. Dilutions:

No sample in this SDG required analysis at dilution.

G. Samples:

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed:_____  _____

Date:_____7/5/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

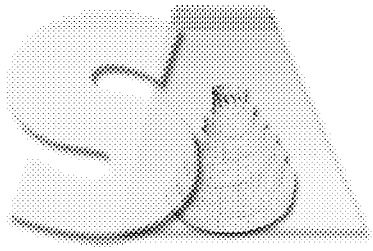
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9343.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9343.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9344.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9344.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-03A

Sample wt/vol: 15.5 (g/mL) G Lab File ID: S6A9382.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.9 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2´-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	710	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	710	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	710	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	710	U
100-02-7	4-Nitrophenol	710	U
132-64-9	Dibenzofuran	350	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-03A

Sample wt/vol: 15.5 (g/mL) G Lab File ID: S6A9382.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.9 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	710	U
534-52-1	4,6-Dinitro-2-methylphenol	710	U
86-30-6	N-Nitrosodiphenylamine	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	710	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3´-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	Bis(2-ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-04A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6A9383.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.2 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	350	U
111-44-4	Bis(2-chloroethyl)ether	350	U
95-57-8	2-Chlorophenol	350	U
541-73-1	1,3-Dichlorobenzene	350	U
106-46-7	1,4-Dichlorobenzene	350	U
95-50-1	1,2-Dichlorobenzene	350	U
95-48-7	2-Methylphenol	350	U
108-60-1	2,2´-oxybis(1-Chloropropane)	350	U
106-44-5	4-Methylphenol	350	U
621-64-7	N-Nitroso-di-n-propylamine	350	U
67-72-1	Hexachloroethane	350	U
98-95-3	Nitrobenzene	350	U
78-59-1	Isophorone	350	U
88-75-5	2-Nitrophenol	350	U
105-67-9	2,4-Dimethylphenol	350	U
120-83-2	2,4-Dichlorophenol	350	U
120-82-1	1,2,4-Trichlorobenzene	350	U
91-20-3	Naphthalene	350	U
106-47-8	4-Chloroaniline	350	U
111-91-1	Bis(2-chloroethoxy)methane	350	U
87-68-3	Hexachlorobutadiene	350	U
59-50-7	4-Chloro-3-methylphenol	350	U
91-57-6	2-Methylnaphthalene	350	U
77-47-4	Hexachlorocyclopentadiene	350	U
88-06-2	2,4,6-Trichlorophenol	350	U
95-95-4	2,4,5-Trichlorophenol	720	U
91-58-7	2-Chloronaphthalene	350	U
88-74-4	2-Nitroaniline	720	U
131-11-3	Dimethylphthalate	350	U
208-96-8	Acenaphthylene	350	U
606-20-2	2,6-Dinitrotoluene	350	U
99-09-2	3-Nitroaniline	720	U
83-32-9	Acenaphthene	350	U
51-28-5	2,4-Dinitrophenol	720	U
100-02-7	4-Nitrophenol	720	U
132-64-9	Dibenzofuran	350	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-04A

Sample wt/vol: 15.3 (g/mL) G Lab File ID: S6A9383.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 8.2 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	350	U
84-66-2	Diethylphthalate	350	U
7005-72-3	4-Chlorophenyl-phenylether	350	U
86-73-7	Fluorene	350	U
100-01-6	4-Nitroaniline	720	U
534-52-1	4,6-Dinitro-2-methylphenol	720	U
86-30-6	N-Nitrosodiphenylamine	350	U
101-55-3	4-Bromophenyl-phenylether	350	U
118-74-1	Hexachlorobenzene	350	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	350	U
120-12-7	Anthracene	350	U
86-74-8	Carbazole	350	U
84-74-2	Di-n-butylphthalate	350	U
206-44-0	Fluoranthene	350	U
129-00-0	Pyrene	350	U
85-68-7	Butylbenzylphthalate	350	U
91-94-1	3,3´-Dichlorobenzidine	350	U
56-55-3	Benzo(a)anthracene	350	U
218-01-9	Chrysene	350	U
117-81-7	Bis(2-ethylhexyl)phthalate	350	U
117-84-0	Di-n-octylphthalate	350	U
205-99-2	Benzo(b)fluoranthene	350	U
207-08-9	Benzo(k)fluoranthene	350	U
50-32-8	Benzo(a)pyrene	350	U
193-39-5	Indeno(1,2,3-cd)pyrene	350	U
53-70-3	Dibenzo(a,h)anthracene	350	U
191-24-2	Benzo(g,h,i)perylene	350	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-05A

Sample wt/vol: 15.6 (g/mL) G Lab File ID: S6A9387.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 11 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	360	U
111-44-4	Bis(2-chloroethyl)ether	360	U
95-57-8	2-Chlorophenol	360	U
541-73-1	1,3-Dichlorobenzene	360	U
106-46-7	1,4-Dichlorobenzene	360	U
95-50-1	1,2-Dichlorobenzene	360	U
95-48-7	2-Methylphenol	360	U
108-60-1	2,2´-oxybis(1-Chloropropane)	360	U
106-44-5	4-Methylphenol	360	U
621-64-7	N-Nitroso-di-n-propylamine	360	U
67-72-1	Hexachloroethane	360	U
98-95-3	Nitrobenzene	360	U
78-59-1	Isophorone	360	U
88-75-5	2-Nitrophenol	360	U
105-67-9	2,4-Dimethylphenol	360	U
120-83-2	2,4-Dichlorophenol	360	U
120-82-1	1,2,4-Trichlorobenzene	360	U
91-20-3	Naphthalene	360	U
106-47-8	4-Chloroaniline	360	U
111-91-1	Bis(2-chloroethoxy)methane	360	U
87-68-3	Hexachlorobutadiene	360	U
59-50-7	4-Chloro-3-methylphenol	360	U
91-57-6	2-Methylnaphthalene	360	U
77-47-4	Hexachlorocyclopentadiene	360	U
88-06-2	2,4,6-Trichlorophenol	360	U
95-95-4	2,4,5-Trichlorophenol	720	U
91-58-7	2-Chloronaphthalene	360	U
88-74-4	2-Nitroaniline	720	U
131-11-3	Dimethylphthalate	360	U
208-96-8	Acenaphthylene	360	U
606-20-2	2,6-Dinitrotoluene	360	U
99-09-2	3-Nitroaniline	720	U
83-32-9	Acenaphthene	360	U
51-28-5	2,4-Dinitrophenol	720	U
100-02-7	4-Nitrophenol	720	U
132-64-9	Dibenzofuran	360	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-05A

Sample wt/vol: 15.6 (g/mL) G Lab File ID: S6A9387.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 11 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	360	U
84-66-2	Diethylphthalate	360	U
7005-72-3	4-Chlorophenyl-phenylether	360	U
86-73-7	Fluorene	360	U
100-01-6	4-Nitroaniline	720	U
534-52-1	4,6-Dinitro-2-methylphenol	720	U
86-30-6	N-Nitrosodiphenylamine	360	U
101-55-3	4-Bromophenyl-phenylether	360	U
118-74-1	Hexachlorobenzene	360	U
87-86-5	Pentachlorophenol	720	U
85-01-8	Phenanthrene	360	U
120-12-7	Anthracene	360	U
86-74-8	Carbazole	360	U
84-74-2	Di-n-butylphthalate	88	J
206-44-0	Fluoranthene	360	U
129-00-0	Pyrene	150	J
85-68-7	Butylbenzylphthalate	360	U
91-94-1	3,3´-Dichlorobenzidine	360	U
56-55-3	Benzo(a)anthracene	86	J
218-01-9	Chrysene	110	J
117-81-7	Bis(2-ethylhexyl)phthalate	360	U
117-84-0	Di-n-octylphthalate	360	U
205-99-2	Benzo(b)fluoranthene	97	J
207-08-9	Benzo(k)fluoranthene	360	U
50-32-8	Benzo(a)pyrene	360	U
193-39-5	Indeno(1,2,3-cd)pyrene	360	U
53-70-3	Dibenzo(a,h)anthracene	360	U
191-24-2	Benzo(g,h,i)perylene	360	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-24

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-06A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S6A9388.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 31 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	470	U
111-44-4	Bis(2-chloroethyl)ether	470	U
95-57-8	2-Chlorophenol	470	U
541-73-1	1,3-Dichlorobenzene	470	U
106-46-7	1,4-Dichlorobenzene	470	U
95-50-1	1,2-Dichlorobenzene	470	U
95-48-7	2-Methylphenol	470	U
108-60-1	2,2´-oxybis(1-Chloropropane)	470	U
106-44-5	4-Methylphenol	470	U
621-64-7	N-Nitroso-di-n-propylamine	470	U
67-72-1	Hexachloroethane	470	U
98-95-3	Nitrobenzene	470	U
78-59-1	Isophorone	470	U
88-75-5	2-Nitrophenol	470	U
105-67-9	2,4-Dimethylphenol	470	U
120-83-2	2,4-Dichlorophenol	470	U
120-82-1	1,2,4-Trichlorobenzene	470	U
91-20-3	Naphthalene	470	U
106-47-8	4-Chloroaniline	470	U
111-91-1	Bis(2-chloroethoxy)methane	470	U
87-68-3	Hexachlorobutadiene	470	U
59-50-7	4-Chloro-3-methylphenol	470	U
91-57-6	2-Methylnaphthalene	470	U
77-47-4	Hexachlorocyclopentadiene	470	U
88-06-2	2,4,6-Trichlorophenol	470	U
95-95-4	2,4,5-Trichlorophenol	960	U
91-58-7	2-Chloronaphthalene	470	U
88-74-4	2-Nitroaniline	960	U
131-11-3	Dimethylphthalate	470	U
208-96-8	Acenaphthylene	470	U
606-20-2	2,6-Dinitrotoluene	470	U
99-09-2	3-Nitroaniline	960	U
83-32-9	Acenaphthene	470	U
51-28-5	2,4-Dinitrophenol	960	U
100-02-7	4-Nitrophenol	960	U
132-64-9	Dibenzofuran	470	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-24

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-06A

Sample wt/vol: 15.1 (g/mL) G Lab File ID: S6A9388.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 31 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	470	U
84-66-2	Diethylphthalate	470	U
7005-72-3	4-Chlorophenyl-phenylether	470	U
86-73-7	Fluorene	470	U
100-01-6	4-Nitroaniline	960	U
534-52-1	4,6-Dinitro-2-methylphenol	960	U
86-30-6	N-Nitrosodiphenylamine	470	U
101-55-3	4-Bromophenyl-phenylether	470	U
118-74-1	Hexachlorobenzene	150	J
87-86-5	Pentachlorophenol	1400	
85-01-8	Phenanthrene	330	J
120-12-7	Anthracene	210	J
86-74-8	Carbazole	470	U
84-74-2	Di-n-butylphthalate	470	U
206-44-0	Fluoranthene	370	J
129-00-0	Pyrene	620	
85-68-7	Butylbenzylphthalate	470	U
91-94-1	3,3´-Dichlorobenzidine	470	U
56-55-3	Benzo(a)anthracene	330	J
218-01-9	Chrysene	460	J
117-81-7	Bis(2-ethylhexyl)phthalate	470	U
117-84-0	Di-n-octylphthalate	470	U
205-99-2	Benzo(b)fluoranthene	490	
207-08-9	Benzo(k)fluoranthene	160	J
50-32-8	Benzo(a)pyrene	350	J
193-39-5	Indeno(1,2,3-cd)pyrene	250	J
53-70-3	Dibenzo(a,h)anthracene	97	J
191-24-2	Benzo(g,h,i)perylene	560	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-28

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-07A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6A9389.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 42 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	560	U
111-44-4	Bis(2-chloroethyl)ether	560	U
95-57-8	2-Chlorophenol	560	U
541-73-1	1,3-Dichlorobenzene	560	U
106-46-7	1,4-Dichlorobenzene	560	U
95-50-1	1,2-Dichlorobenzene	560	U
95-48-7	2-Methylphenol	560	U
108-60-1	2,2´-oxybis(1-Chloropropane)	560	U
106-44-5	4-Methylphenol	560	U
621-64-7	N-Nitroso-di-n-propylamine	560	U
67-72-1	Hexachloroethane	560	U
98-95-3	Nitrobenzene	560	U
78-59-1	Isophorone	560	U
88-75-5	2-Nitrophenol	560	U
105-67-9	2,4-Dimethylphenol	560	U
120-83-2	2,4-Dichlorophenol	560	U
120-82-1	1,2,4-Trichlorobenzene	560	U
91-20-3	Naphthalene	560	U
106-47-8	4-Chloroaniline	560	U
111-91-1	Bis(2-chloroethoxy)methane	560	U
87-68-3	Hexachlorobutadiene	560	U
59-50-7	4-Chloro-3-methylphenol	560	U
91-57-6	2-Methylnaphthalene	560	U
77-47-4	Hexachlorocyclopentadiene	560	U
88-06-2	2,4,6-Trichlorophenol	560	U
95-95-4	2,4,5-Trichlorophenol	1100	U
91-58-7	2-Chloronaphthalene	560	U
88-74-4	2-Nitroaniline	1100	U
131-11-3	Dimethylphthalate	560	U
208-96-8	Acenaphthylene	120	J
606-20-2	2,6-Dinitrotoluene	560	U
99-09-2	3-Nitroaniline	1100	U
83-32-9	Acenaphthene	560	U
51-28-5	2,4-Dinitrophenol	1100	U
100-02-7	4-Nitrophenol	1100	U
132-64-9	Dibenzofuran	560	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-28

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-07A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6A9389.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 42 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	560	U
84-66-2	Diethylphthalate	560	U
7005-72-3	4-Chlorophenyl-phenylether	560	U
86-73-7	Fluorene	560	U
100-01-6	4-Nitroaniline	1100	U
534-52-1	4,6-Dinitro-2-methylphenol	1100	U
86-30-6	N-Nitrosodiphenylamine	560	U
101-55-3	4-Bromophenyl-phenylether	560	U
118-74-1	Hexachlorobenzene	560	U
87-86-5	Pentachlorophenol	1100	U
85-01-8	Phenanthrene	250	J
120-12-7	Anthracene	130	J
86-74-8	Carbazole	560	U
84-74-2	Di-n-butylphthalate	560	U
206-44-0	Fluoranthene	560	U
129-00-0	Pyrene	560	U
85-68-7	Butylbenzylphthalate	560	U
91-94-1	3,3´-Dichlorobenzidine	560	U
56-55-3	Benzo(a)anthracene	310	J
218-01-9	Chrysene	900	
117-81-7	Bis(2-ethylhexyl)phthalate	560	U
117-84-0	Di-n-octylphthalate	560	U
205-99-2	Benzo(b)fluoranthene	1200	
207-08-9	Benzo(k)fluoranthene	610	
50-32-8	Benzo(a)pyrene	240	J
193-39-5	Indeno(1,2,3-cd)pyrene	630	
53-70-3	Dibenzo(a,h)anthracene	200	J
191-24-2	Benzo(g,h,i)perylene	790	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-29

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-08A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6A9384.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	Bis(2-chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	2,2´-oxybis(1-Chloropropane)	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	390	U
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
111-91-1	Bis(2-chloroethoxy)methane	390	U
87-68-3	Hexachlorobutadiene	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	790	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	790	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	390	U
606-20-2	2,6-Dinitrotoluene	390	U
99-09-2	3-Nitroaniline	790	U
83-32-9	Acenaphthene	390	U
51-28-5	2,4-Dinitrophenol	790	U
100-02-7	4-Nitrophenol	790	U
132-64-9	Dibenzofuran	390	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-29

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-08A

Sample wt/vol: 15.2 (g/mL) G Lab File ID: S6A9384.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	790	U
534-52-1	4,6-Dinitro-2-methylphenol	790	U
86-30-6	N-Nitrosodiphenylamine	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	790	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
86-74-8	Carbazole	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3´-Dichlorobenzidine	390	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	Bis(2-ethylhexyl)phthalate	390	U
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenzo(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-40

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-09A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6A9385.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 27 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	440	U
111-44-4	Bis(2-chloroethyl)ether	440	U
95-57-8	2-Chlorophenol	440	U
541-73-1	1,3-Dichlorobenzene	440	U
106-46-7	1,4-Dichlorobenzene	440	U
95-50-1	1,2-Dichlorobenzene	440	U
95-48-7	2-Methylphenol	440	U
108-60-1	2,2´-oxybis(1-Chloropropane)	440	U
106-44-5	4-Methylphenol	440	U
621-64-7	N-Nitroso-di-n-propylamine	440	U
67-72-1	Hexachloroethane	440	U
98-95-3	Nitrobenzene	440	U
78-59-1	Isophorone	440	U
88-75-5	2-Nitrophenol	440	U
105-67-9	2,4-Dimethylphenol	440	U
120-83-2	2,4-Dichlorophenol	440	U
120-82-1	1,2,4-Trichlorobenzene	440	U
91-20-3	Naphthalene	440	U
106-47-8	4-Chloroaniline	440	U
111-91-1	Bis(2-chloroethoxy)methane	440	U
87-68-3	Hexachlorobutadiene	440	U
59-50-7	4-Chloro-3-methylphenol	440	U
91-57-6	2-Methylnaphthalene	440	U
77-47-4	Hexachlorocyclopentadiene	440	U
88-06-2	2,4,6-Trichlorophenol	440	U
95-95-4	2,4,5-Trichlorophenol	900	U
91-58-7	2-Chloronaphthalene	440	U
88-74-4	2-Nitroaniline	900	U
131-11-3	Dimethylphthalate	440	U
208-96-8	Acenaphthylene	440	U
606-20-2	2,6-Dinitrotoluene	440	U
99-09-2	3-Nitroaniline	900	U
83-32-9	Acenaphthene	440	U
51-28-5	2,4-Dinitrophenol	900	U
100-02-7	4-Nitrophenol	900	U
132-64-9	Dibenzofuran	440	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-40

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-09A

Sample wt/vol: 15.4 (g/mL) G Lab File ID: S6A9385.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 27 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	440	U
84-66-2	Diethylphthalate	440	U
7005-72-3	4-Chlorophenyl-phenylether	440	U
86-73-7	Fluorene	440	U
100-01-6	4-Nitroaniline	900	U
534-52-1	4,6-Dinitro-2-methylphenol	900	U
86-30-6	N-Nitrosodiphenylamine	440	U
101-55-3	4-Bromophenyl-phenylether	440	U
118-74-1	Hexachlorobenzene	440	U
87-86-5	Pentachlorophenol	900	U
85-01-8	Phenanthrene	440	U
120-12-7	Anthracene	440	U
86-74-8	Carbazole	440	U
84-74-2	Di-n-butylphthalate	440	U
206-44-0	Fluoranthene	440	U
129-00-0	Pyrene	440	U
85-68-7	Butylbenzylphthalate	440	U
91-94-1	3,3´-Dichlorobenzidine	440	U
56-55-3	Benzo(a)anthracene	440	U
218-01-9	Chrysene	440	U
117-81-7	Bis(2-ethylhexyl)phthalate	440	U
117-84-0	Di-n-octylphthalate	440	U
205-99-2	Benzo(b)fluoranthene	440	U
207-08-9	Benzo(k)fluoranthene	440	U
50-32-8	Benzo(a)pyrene	440	U
193-39-5	Indeno(1,2,3-cd)pyrene	440	U
53-70-3	Dibenzo(a,h)anthracene	440	U
191-24-2	Benzo(g,h,i)perylene	440	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-45

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-10A

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9386.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	430	U
111-44-4	Bis(2-chloroethyl)ether	430	U
95-57-8	2-Chlorophenol	430	U
541-73-1	1,3-Dichlorobenzene	430	U
106-46-7	1,4-Dichlorobenzene	430	U
95-50-1	1,2-Dichlorobenzene	430	U
95-48-7	2-Methylphenol	430	U
108-60-1	2,2´-oxybis(1-Chloropropane)	430	U
106-44-5	4-Methylphenol	430	U
621-64-7	N-Nitroso-di-n-propylamine	430	U
67-72-1	Hexachloroethane	430	U
98-95-3	Nitrobenzene	430	U
78-59-1	Isophorone	430	U
88-75-5	2-Nitrophenol	430	U
105-67-9	2,4-Dimethylphenol	430	U
120-83-2	2,4-Dichlorophenol	430	U
120-82-1	1,2,4-Trichlorobenzene	430	U
91-20-3	Naphthalene	430	U
106-47-8	4-Chloroaniline	430	U
111-91-1	Bis(2-chloroethoxy)methane	430	U
87-68-3	Hexachlorobutadiene	430	U
59-50-7	4-Chloro-3-methylphenol	430	U
91-57-6	2-Methylnaphthalene	430	U
77-47-4	Hexachlorocyclopentadiene	430	U
88-06-2	2,4,6-Trichlorophenol	430	U
95-95-4	2,4,5-Trichlorophenol	860	U
91-58-7	2-Chloronaphthalene	430	U
88-74-4	2-Nitroaniline	860	U
131-11-3	Dimethylphthalate	430	U
208-96-8	Acenaphthylene	430	U
606-20-2	2,6-Dinitrotoluene	430	U
99-09-2	3-Nitroaniline	860	U
83-32-9	Acenaphthene	430	U
51-28-5	2,4-Dinitrophenol	860	U
100-02-7	4-Nitrophenol	860	U
132-64-9	Dibenzofuran	430	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SS-45

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-10A

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9386.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 06/18/2012

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	430	U
84-66-2	Diethylphthalate	430	U
7005-72-3	4-Chlorophenyl-phenylether	430	U
86-73-7	Fluorene	430	U
100-01-6	4-Nitroaniline	860	U
534-52-1	4,6-Dinitro-2-methylphenol	860	U
86-30-6	N-Nitrosodiphenylamine	430	U
101-55-3	4-Bromophenyl-phenylether	430	U
118-74-1	Hexachlorobenzene	430	U
87-86-5	Pentachlorophenol	860	U
85-01-8	Phenanthrene	430	U
120-12-7	Anthracene	430	U
86-74-8	Carbazole	430	U
84-74-2	Di-n-butylphthalate	430	U
206-44-0	Fluoranthene	430	U
129-00-0	Pyrene	140	J
85-68-7	Butylbenzylphthalate	430	U
91-94-1	3,3´-Dichlorobenzidine	430	U
56-55-3	Benzo(a)anthracene	430	U
218-01-9	Chrysene	87	J
117-81-7	Bis(2-ethylhexyl)phthalate	430	U
117-84-0	Di-n-octylphthalate	430	U
205-99-2	Benzo(b)fluoranthene	130	J
207-08-9	Benzo(k)fluoranthene	430	U
50-32-8	Benzo(a)pyrene	430	U
193-39-5	Indeno(1,2,3-cd)pyrene	430	U
53-70-3	Dibenzo(a,h)anthracene	430	U
191-24-2	Benzo(g,h,i)perylene	430	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9332.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	Bis(2-chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2´-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
111-91-1	Bis(2-chloroethoxy)methane	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	20	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	20	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	20	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	20	U
100-02-7	4-Nitrophenol	20	U
132-64-9	Dibenzofuran	10	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9332.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	20	U
534-52-1	4,6-Dinitro-2-methylphenol	20	U
86-30-6	N-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	20	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3´-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	Bis(2-ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenzo(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9366.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	Bis(2-chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	2,2´-oxybis(1-Chloropropane)	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
111-91-1	Bis(2-chloroethoxy)methane	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	670	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	670	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U
99-09-2	3-Nitroaniline	670	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	670	U
100-02-7	4-Nitrophenol	670	U
132-64-9	Dibenzofuran	330	U

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9366.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	670	U
534-52-1	4,6-Dinitro-2-methylphenol	670	U
86-30-6	N-Nitrosodiphenylamine	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	670	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
86-74-8	Carbazole	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3´-Dichlorobenzidine	330	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	Bis(2-ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenzo(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9333.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	31	
111-44-4	Bis(2-chloroethyl)ether	39	
95-57-8	2-Chlorophenol	37	
541-73-1	1,3-Dichlorobenzene	39	
106-46-7	1,4-Dichlorobenzene	41	
95-50-1	1,2-Dichlorobenzene	40	
95-48-7	2-Methylphenol	35	
108-60-1	2,2´-oxybis(1-Chloropropane)	40	
106-44-5	4-Methylphenol	32	
621-64-7	N-Nitroso-di-n-propylamine	35	
67-72-1	Hexachloroethane	40	
98-95-3	Nitrobenzene	44	
78-59-1	Isophorone	43	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	25	
120-83-2	2,4-Dichlorophenol	41	
120-82-1	1,2,4-Trichlorobenzene	41	
91-20-3	Naphthalene	44	
106-47-8	4-Chloroaniline	36	
111-91-1	Bis(2-chloroethoxy)methane	41	
87-68-3	Hexachlorobutadiene	48	
59-50-7	4-Chloro-3-methylphenol	30	
91-57-6	2-Methylnaphthalene	42	
77-47-4	Hexachlorocyclopentadiene	41	
88-06-2	2,4,6-Trichlorophenol	44	
95-95-4	2,4,5-Trichlorophenol	39	
91-58-7	2-Chloronaphthalene	45	
88-74-4	2-Nitroaniline	45	
131-11-3	Dimethylphthalate	46	
208-96-8	Acenaphthylene	44	
606-20-2	2,6-Dinitrotoluene	44	
99-09-2	3-Nitroaniline	39	
83-32-9	Acenaphthene	46	
51-28-5	2,4-Dinitrophenol	49	
100-02-7	4-Nitrophenol	27	
132-64-9	Dibenzofuran	44	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9333.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	44	
84-66-2	Diethylphthalate	46	
7005-72-3	4-Chlorophenyl-phenylether	45	
86-73-7	Fluorene	44	
100-01-6	4-Nitroaniline	37	
534-52-1	4,6-Dinitro-2-methylphenol	45	
86-30-6	N-Nitrosodiphenylamine	44	
101-55-3	4-Bromophenyl-phenylether	46	
118-74-1	Hexachlorobenzene	47	
87-86-5	Pentachlorophenol	29	
85-01-8	Phenanthrene	44	
120-12-7	Anthracene	43	
86-74-8	Carbazole	43	
84-74-2	Di-n-butylphthalate	46	
206-44-0	Fluoranthene	41	
129-00-0	Pyrene	48	
85-68-7	Butylbenzylphthalate	50	
91-94-1	3,3´-Dichlorobenzidine	42	
56-55-3	Benzo(a)anthracene	48	
218-01-9	Chrysene	45	
117-81-7	Bis(2-ethylhexyl)phthalate	50	
117-84-0	Di-n-octylphthalate	49	
205-99-2	Benzo(b)fluoranthene	45	
207-08-9	Benzo(k)fluoranthene	45	
50-32-8	Benzo(a)pyrene	44	
193-39-5	Indeno(1,2,3-cd)pyrene	43	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	44	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9367.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2100	
111-44-4	Bis(2-chloroethyl)ether	2700	
95-57-8	2-Chlorophenol	2600	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2800	
95-50-1	1,2-Dichlorobenzene	2800	
95-48-7	2-Methylphenol	2400	
108-60-1	2,2´-oxybis(1-Chloropropane)	2500	
106-44-5	4-Methylphenol	2100	
621-64-7	N-Nitroso-di-n-propylamine	2300	
67-72-1	Hexachloroethane	3000	
98-95-3	Nitrobenzene	3000	
78-59-1	Isophorone	2600	
88-75-5	2-Nitrophenol	2900	
105-67-9	2,4-Dimethylphenol	2800	
120-83-2	2,4-Dichlorophenol	2700	
120-82-1	1,2,4-Trichlorobenzene	2800	
91-20-3	Naphthalene	2900	
106-47-8	4-Chloroaniline	1200	
111-91-1	Bis(2-chloroethoxy)methane	2800	
87-68-3	Hexachlorobutadiene	3300	
59-50-7	4-Chloro-3-methylphenol	2100	
91-57-6	2-Methylnaphthalene	2700	
77-47-4	Hexachlorocyclopentadiene	4400	
88-06-2	2,4,6-Trichlorophenol	3200	
95-95-4	2,4,5-Trichlorophenol	2900	
91-58-7	2-Chloronaphthalene	3300	
88-74-4	2-Nitroaniline	2700	
131-11-3	Dimethylphthalate	2800	
208-96-8	Acenaphthylene	3000	
606-20-2	2,6-Dinitrotoluene	2700	
99-09-2	3-Nitroaniline	1700	
83-32-9	Acenaphthene	3000	
51-28-5	2,4-Dinitrophenol	2500	
100-02-7	4-Nitrophenol	2000	
132-64-9	Dibenzofuran	2900	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9367.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2500	
84-66-2	Diethylphthalate	2700	
7005-72-3	4-Chlorophenyl-phenylether	2900	
86-73-7	Fluorene	2700	
100-01-6	4-Nitroaniline	1800	
534-52-1	4,6-Dinitro-2-methylphenol	3000	
86-30-6	N-Nitrosodiphenylamine	3400	
101-55-3	4-Bromophenyl-phenylether	3500	
118-74-1	Hexachlorobenzene	3300	
87-86-5	Pentachlorophenol	2500	
85-01-8	Phenanthrene	3100	
120-12-7	Anthracene	3100	
86-74-8	Carbazole	2600	
84-74-2	Di-n-butylphthalate	2900	
206-44-0	Fluoranthene	2400	
129-00-0	Pyrene	4000	
85-68-7	Butylbenzylphthalate	3800	
91-94-1	3,3´-Dichlorobenzidine	2500	
56-55-3	Benzo(a)anthracene	3300	
218-01-9	Chrysene	3100	
117-81-7	Bis(2-ethylhexyl)phthalate	3700	
117-84-0	Di-n-octylphthalate	3900	
205-99-2	Benzo(b)fluoranthene	3100	
207-08-9	Benzo(k)fluoranthene	3200	
50-32-8	Benzo(a)pyrene	3100	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2800	
191-24-2	Benzo(g,h,i)perylene	2900	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9334.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	34	
111-44-4	Bis(2-chloroethyl)ether	43	
95-57-8	2-Chlorophenol	40	
541-73-1	1,3-Dichlorobenzene	43	
106-46-7	1,4-Dichlorobenzene	42	
95-50-1	1,2-Dichlorobenzene	43	
95-48-7	2-Methylphenol	35	
108-60-1	2,2´-oxybis(1-Chloropropane)	42	
106-44-5	4-Methylphenol	33	
621-64-7	N-Nitroso-di-n-propylamine	37	
67-72-1	Hexachloroethane	45	
98-95-3	Nitrobenzene	45	
78-59-1	Isophorone	42	
88-75-5	2-Nitrophenol	44	
105-67-9	2,4-Dimethylphenol	22	
120-83-2	2,4-Dichlorophenol	42	
120-82-1	1,2,4-Trichlorobenzene	43	
91-20-3	Naphthalene	44	
106-47-8	4-Chloroaniline	35	
111-91-1	Bis(2-chloroethoxy)methane	43	
87-68-3	Hexachlorobutadiene	46	
59-50-7	4-Chloro-3-methylphenol	32	
91-57-6	2-Methylnaphthalene	42	
77-47-4	Hexachlorocyclopentadiene	41	
88-06-2	2,4,6-Trichlorophenol	44	
95-95-4	2,4,5-Trichlorophenol	42	
91-58-7	2-Chloronaphthalene	46	
88-74-4	2-Nitroaniline	44	
131-11-3	Dimethylphthalate	46	
208-96-8	Acenaphthylene	44	
606-20-2	2,6-Dinitrotoluene	47	
99-09-2	3-Nitroaniline	39	
83-32-9	Acenaphthene	45	
51-28-5	2,4-Dinitrophenol	49	
100-02-7	4-Nitrophenol	34	
132-64-9	Dibenzofuran	44	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66819

Sample wt/vol: 1000 (g/mL) ML Lab File ID: S6A9334.D

Level: (LOW/MED) LOW Extraction: (Type) SEPF

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/21/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	46	
7005-72-3	4-Chlorophenyl-phenylether	46	
86-73-7	Fluorene	44	
100-01-6	4-Nitroaniline	36	
534-52-1	4,6-Dinitro-2-methylphenol	46	
86-30-6	N-Nitrosodiphenylamine	47	
101-55-3	4-Bromophenyl-phenylether	49	
118-74-1	Hexachlorobenzene	49	
87-86-5	Pentachlorophenol	31	
85-01-8	Phenanthrene	47	
120-12-7	Anthracene	47	
86-74-8	Carbazole	46	
84-74-2	Di-n-butylphthalate	49	
206-44-0	Fluoranthene	44	
129-00-0	Pyrene	50	
85-68-7	Butylbenzylphthalate	51	
91-94-1	3,3´-Dichlorobenzidine	43	
56-55-3	Benzo(a)anthracene	50	
218-01-9	Chrysene	47	
117-81-7	Bis(2-ethylhexyl)phthalate	53	
117-84-0	Di-n-octylphthalate	51	
205-99-2	Benzo(b)fluoranthene	48	
207-08-9	Benzo(k)fluoranthene	46	
50-32-8	Benzo(a)pyrene	46	
193-39-5	Indeno(1,2,3-cd)pyrene	43	
53-70-3	Dibenzo(a,h)anthracene	44	
191-24-2	Benzo(g,h,i)perylene	44	

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9368.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	2000	
111-44-4	Bis(2-chloroethyl)ether	2600	
95-57-8	2-Chlorophenol	2600	
541-73-1	1,3-Dichlorobenzene	2700	
106-46-7	1,4-Dichlorobenzene	2700	
95-50-1	1,2-Dichlorobenzene	2600	
95-48-7	2-Methylphenol	2300	
108-60-1	2,2´-oxybis(1-Chloropropane)	2400	
106-44-5	4-Methylphenol	1900	
621-64-7	N-Nitroso-di-n-propylamine	2200	
67-72-1	Hexachloroethane	2900	
98-95-3	Nitrobenzene	3000	
78-59-1	Isophorone	2600	
88-75-5	2-Nitrophenol	2800	
105-67-9	2,4-Dimethylphenol	2700	
120-83-2	2,4-Dichlorophenol	2600	
120-82-1	1,2,4-Trichlorobenzene	2700	
91-20-3	Naphthalene	2800	
106-47-8	4-Chloroaniline	1600	
111-91-1	Bis(2-chloroethoxy)methane	2700	
87-68-3	Hexachlorobutadiene	3300	
59-50-7	4-Chloro-3-methylphenol	2100	
91-57-6	2-Methylnaphthalene	2600	
77-47-4	Hexachlorocyclopentadiene	4400	
88-06-2	2,4,6-Trichlorophenol	3100	
95-95-4	2,4,5-Trichlorophenol	2900	
91-58-7	2-Chloronaphthalene	3300	
88-74-4	2-Nitroaniline	2700	
131-11-3	Dimethylphthalate	2800	
208-96-8	Acenaphthylene	3000	
606-20-2	2,6-Dinitrotoluene	2700	
99-09-2	3-Nitroaniline	1900	
83-32-9	Acenaphthene	3000	
51-28-5	2,4-Dinitrophenol	2600	
100-02-7	4-Nitrophenol	1900	
132-64-9	Dibenzofuran	2900	

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66863

Sample wt/vol: 15.0 (g/mL) G Lab File ID: S6A9368.D

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: Decanted: (Y/N) Date Received:

Concentrated Extract Volume: 1000 (uL) Date Extracted: 06/20/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Date Analyzed: 06/22/2012

GPC Cleanup:(Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
121-14-2	2,4-Dinitrotoluene	2400	
84-66-2	Diethylphthalate	2700	
7005-72-3	4-Chlorophenyl-phenylether	2900	
86-73-7	Fluorene	2700	
100-01-6	4-Nitroaniline	1900	
534-52-1	4,6-Dinitro-2-methylphenol	2800	
86-30-6	N-Nitrosodiphenylamine	3400	
101-55-3	4-Bromophenyl-phenylether	3500	
118-74-1	Hexachlorobenzene	3400	
87-86-5	Pentachlorophenol	2600	
85-01-8	Phenanthrene	3100	
120-12-7	Anthracene	3100	
86-74-8	Carbazole	2700	
84-74-2	Di-n-butylphthalate	3000	
206-44-0	Fluoranthene	2400	
129-00-0	Pyrene	4100	
85-68-7	Butylbenzylphthalate	3700	
91-94-1	3,3´-Dichlorobenzidine	2600	
56-55-3	Benzo(a)anthracene	3400	
218-01-9	Chrysene	3100	
117-81-7	Bis(2-ethylhexyl)phthalate	3700	
117-84-0	Di-n-octylphthalate	3900	
205-99-2	Benzo(b)fluoranthene	3100	
207-08-9	Benzo(k)fluoranthene	3300	
50-32-8	Benzo(a)pyrene	3200	
193-39-5	Indeno(1,2,3-cd)pyrene	2800	
53-70-3	Dibenzo(a,h)anthracene	2900	
191-24-2	Benzo(g,h,i)perylene	2900	

2H - FORM II SV-2

WATER SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-66819	85	88	99	69	75	85			0
02	LCS-66819	84	87	91	67	69	80			0
03	LCSD-66819	86	89	97	76	77	91			0
04	SW-1	81	80	91	33	51	88			0
05	SW-2	84	84	87	35	56	89			0

		QC LIMITS
SDMC1	(NBZ) = Nitrobenzene-d5	(40-110)
SDMC2	(FBP) = 2-Fluorobiphenyl	(50-110)
SDMC3	(TPH) = Terphenyl-d14	(50-135)
SDMC4	(PHL) = Phenol-d5	(10-115)
SDMC5	(2FP) = 2-Fluorophenol	(20-110)
SDMC6	(TBP) = 2,4,6-Tribromophenol	(40-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som111.10.27.A

2K - FORM II SV-4

SOIL SEMIVOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	SDMC1 (NBZ) #	SDMC2 (FBP) #	SDMC3 (TPH) #	SDMC4 (PHL) #	SDMC5 (2FP) #	SDMC6 (TBP) #			TOT OUT
01	MB-66863	89	93	119	74	86	88			0
02	LCS-66863	88	98	115	71	83	97			0
03	LCSD-66863	84	95	116	67	81	97			0
04	SS-3	64	72	94	52	61	73			0
05	SS-6	65	72	94	54	62	72			0
06	SS-29	63	69	93	49	60	73			0
07	SS-40	58	67	88	51	57	68			0
08	SS-45	67	77	93	54	63	77			0
09	SS-13	51	62	72	41	47	64			0
10	SS-24	56	69	67	44	49	69			0
11	SS-28	63	77	75	52	58	75			0

			QC LIMITS
SDMC1	(NBZ)	= Nitrobenzene-d5	(35-100)
SDMC2	(FBP)	= 2-Fluorobiphenyl	(45-105)
SDMC3	(TPH)	= Terphenyl-d14	(30-125)
SDMC4	(PHL)	= Phenol-d5	(40-100)
SDMC5	(2FP)	= 2-Fluorophenol	(35-105)
SDMC6	(TBP)	= 2,4,6-Tribromophenol	(35-125)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D DMC diluted out

som111.10.27.A

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE RECOVERY

EPA SAMPLE NO.

LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66819 LCS Lot No.: A084216

Date Extracted: 06/19/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	50.0000	0.0000	31.2293	62		0 - 115
Bis(2-chloroethyl)ether	50.0000	0.0000	39.1294	78		35 - 110
2-Chlorophenol	50.0000	0.0000	36.9169	74		35 - 105
1,3-Dichlorobenzene	50.0000	0.0000	39.3500	79		30 - 100
1,4-Dichlorobenzene	50.0000	0.0000	40.9030	82		30 - 100
1,2-Dichlorobenzene	50.0000	0.0000	39.5119	79		35 - 100
2-Methylphenol	50.0000	0.0000	34.7373	69		40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	0.0000	39.5484	79		30 - 123
4-Methylphenol	50.0000	0.0000	31.5995	63		30 - 110
N-Nitroso-di-n-propylamine	50.0000	0.0000	34.5852	69		35 - 130
Hexachloroethane	50.0000	0.0000	40.0166	80		30 - 95
Nitrobenzene	50.0000	0.0000	44.3835	89		45 - 110
Isophorone	50.0000	0.0000	42.6047	85		50 - 110
2-Nitrophenol	50.0000	0.0000	43.6538	87		40 - 115
2,4-Dimethylphenol	50.0000	0.0000	25.1799	50		30 - 110
2,4-Dichlorophenol	50.0000	0.0000	41.3457	83		50 - 105
1,2,4-Trichlorobenzene	50.0000	0.0000	41.3759	83		35 - 105
Naphthalene	50.0000	0.0000	43.8123	88		40 - 100
4-Chloroaniline	50.0000	0.0000	35.9593	72		15 - 110
Bis(2-chloroethoxy)methane	50.0000	0.0000	41.2494	82		45 - 105
Hexachlorobutadiene	50.0000	0.0000	48.1033	96		25 - 105
4-Chloro-3-methylphenol	50.0000	0.0000	30.0947	60		45 - 110
2-Methylnaphthalene	50.0000	0.0000	42.4646	85		45 - 105
Hexachlorocyclopentadiene	50.0000	0.0000	41.1239	82		27 - 147
2,4,6-Trichlorophenol	50.0000	0.0000	44.2270	88		50 - 115
2,4,5-Trichlorophenol	50.0000	0.0000	39.1839	78		50 - 110
2-Chloronaphthalene	50.0000	0.0000	45.3633	91		50 - 105
2-Nitroaniline	50.0000	0.0000	44.8000	90		50 - 115
Dimethylphthalate	50.0000	0.0000	45.8841	92		25 - 125
Acenaphthylene	50.0000	0.0000	43.7288	87		50 - 105
2,6-Dinitrotoluene	50.0000	0.0000	44.0261	88		50 - 115
3-Nitroaniline	50.0000	0.0000	38.6212	77		20 - 125
Acenaphthene	50.0000	0.0000	45.8327	92		45 - 110
2,4-Dinitrophenol	50.0000	0.0000	48.9906	98		15 - 140
4-Nitrophenol	50.0000	0.0000	27.3074	55		0 - 125
Dibenzofuran	50.0000	0.0000	43.6496	87		55 - 105
2,4-Dinitrotoluene	50.0000	0.0000	44.1445	88		50 - 120
Diethylphthalate	50.0000	0.0000	46.3503	93		40 - 120
4-Chlorophenyl-phenylether	50.0000	0.0000	45.3136	91		50 - 110
Fluorene	50.0000	0.0000	44.3666	89		50 - 110
4-Nitroaniline	50.0000	0.0000	36.6036	73		35 - 120
4,6-Dinitro-2-methylphenol	50.0000	0.0000	44.5788	89		40 - 130
N-Nitrosodiphenylamine	50.0000	0.0000	44.3495	89		50 - 110
4-Bromophenyl-phenylether	50.0000	0.0000	45.6723	91		50 - 115

3 - FORM III
WATER LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66819 LCS Lot No.: A084216

Date Extracted: 06/19/2012 Date Analyzed (1): 06/21/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	50.0000	0.0000	47.2790	95		50 - 110
Pentachlorophenol	50.0000	0.0000	28.7366	57		40 - 115
Phenanthrene	50.0000	0.0000	44.2114	88		50 - 115
Anthracene	50.0000	0.0000	43.2118	86		55 - 110
Carbazole	50.0000	0.0000	43.4057	87		50 - 115
Di-n-butylphthalate	50.0000	0.0000	46.4593	93		55 - 115
Fluoranthene	50.0000	0.0000	41.4200	83		55 - 115
Pyrene	50.0000	0.0000	47.7468	95		50 - 130
Butylbenzylphthalate	50.0000	0.0000	49.5557	99		45 - 115
3,3´-Dichlorobenzidine	50.0000	0.0000	42.1464	84		20 - 110
Benzo(a)anthracene	50.0000	0.0000	48.1147	96		55 - 110
Chrysene	50.0000	0.0000	45.3341	91		55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	0.0000	50.4539	101		40 - 125
Di-n-octylphthalate	50.0000	0.0000	48.7930	98		35 - 135
Benzo(b)fluoranthene	50.0000	0.0000	45.1889	90		45 - 120
Benzo(k)fluoranthene	50.0000	0.0000	44.9932	90		45 - 125
Benzo(a)pyrene	50.0000	0.0000	44.2541	89		55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	0.0000	43.0372	86		45 - 125
Dibenzo(a,h)anthracene	50.0000	0.0000	44.0830	88		40 - 125
Benzo(g,h,i)perylene	50.0000	0.0000	44.1049	88		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66863 LCS Lot No.: A084216

Date Extracted: 06/20/2012 Date Analyzed (1): 06/22/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Phenol	3333.0000	0.0000	2084.7853	63		40 - 100
Bis(2-chloroethyl)ether	3333.0000	0.0000	2676.6803	80		40 - 105
2-Chlorophenol	3333.0000	0.0000	2565.4582	77		45 - 105
1,3-Dichlorobenzene	3333.0000	0.0000	2748.8907	82		40 - 100
1,4-Dichlorobenzene	3333.0000	0.0000	2794.7925	84		35 - 105
1,2-Dichlorobenzene	3333.0000	0.0000	2781.5092	83		45 - 95
2-Methylphenol	3333.0000	0.0000	2357.9434	71		40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	0.0000	2503.1275	75		20 - 115
4-Methylphenol	3333.0000	0.0000	2093.0131	63		40 - 105
N-Nitroso-di-n-propylamine	3333.0000	0.0000	2278.6358	68		40 - 115
Hexachloroethane	3333.0000	0.0000	3009.8807	90		35 - 110
Nitrobenzene	3333.0000	0.0000	3042.9246	91		40 - 115
Isophorone	3333.0000	0.0000	2644.8717	79		45 - 110
2-Nitrophenol	3333.0000	0.0000	2941.2276	88		40 - 110
2,4-Dimethylphenol	3333.0000	0.0000	2790.1712	84		30 - 105
2,4-Dichlorophenol	3333.0000	0.0000	2738.6145	82		45 - 110
1,2,4-Trichlorobenzene	3333.0000	0.0000	2844.2774	85		45 - 110
Naphthalene	3333.0000	0.0000	2867.7249	86		40 - 105
4-Chloroaniline	3333.0000	0.0000	1169.3327	35		10 - 100
Bis(2-chloroethoxy)methane	3333.0000	0.0000	2765.0211	83		45 - 110
Hexachlorobutadiene	3333.0000	0.0000	3344.3026	100		40 - 115
4-Chloro-3-methylphenol	3333.0000	0.0000	2067.5506	62		45 - 115
2-Methylnaphthalene	3333.0000	0.0000	2674.4616	80		45 - 105
Hexachlorocyclopentadiene	3333.0000	0.0000	4379.3401	131		8 - 148
2,4,6-Trichlorophenol	3333.0000	0.0000	3164.2200	95		45 - 110
2,4,5-Trichlorophenol	3333.0000	0.0000	2911.4503	87		50 - 110
2-Chloronaphthalene	3333.0000	0.0000	3298.0258	99		45 - 105
2-Nitroaniline	3333.0000	0.0000	2704.3164	81		45 - 120
Dimethylphthalate	3333.0000	0.0000	2834.6916	85		50 - 110
Acenaphthylene	3333.0000	0.0000	3011.7158	90		45 - 105
2,6-Dinitrotoluene	3333.0000	0.0000	2706.2049	81		50 - 110
3-Nitroaniline	3333.0000	0.0000	1677.9005	50		25 - 110
Acenaphthene	3333.0000	0.0000	3009.1164	90		45 - 110
2,4-Dinitrophenol	3333.0000	0.0000	2541.4763	76		15 - 130
4-Nitrophenol	3333.0000	0.0000	2040.5549	61		15 - 140
Dibenzofuran	3333.0000	0.0000	2926.6756	88		50 - 105
2,4-Dinitrotoluene	3333.0000	0.0000	2458.3986	74		50 - 115
Diethylphthalate	3333.0000	0.0000	2669.5001	80		50 - 115
4-Chlorophenyl-phenylether	3333.0000	0.0000	2907.9378	87		45 - 110
Fluorene	3333.0000	0.0000	2683.4430	81		50 - 110
4-Nitroaniline	3333.0000	0.0000	1815.1066	54		35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	0.0000	2956.2682	89		30 - 135
N-Nitrosodiphenylamine	3333.0000	0.0000	3444.9468	103		50 - 115
4-Bromophenyl-phenylether	3333.0000	0.0000	3500.3403	105		45 - 115

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE RECOVERY

EPA SAMPLE NO.
LCS-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66863 LCS Lot No.: A084216

Date Extracted: 06/20/2012 Date Analyzed (1): 06/22/2012

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	LCS CONCENTRATION	LCS %REC	#	QC. LIMITS REC.
Hexachlorobenzene	3333.0000	0.0000	3324.6299	100		45 - 120
Pentachlorophenol	3333.0000	0.0000	2463.5679	74		25 - 120
Phenanthrene	3333.0000	0.0000	3059.1960	92		50 - 110
Anthracene	3333.0000	0.0000	3069.3263	92		55 - 105
Carbazole	3333.0000	0.0000	2643.5180	79		45 - 115
Di-n-butylphthalate	3333.0000	0.0000	2892.3126	87		55 - 110
Fluoranthene	3333.0000	0.0000	2408.5790	72		55 - 115
Pyrene	3333.0000	0.0000	3972.6600	119		45 - 125
Butylbenzylphthalate	3333.0000	0.0000	3792.8718	114		50 - 125
3,3´-Dichlorobenzidine	3333.0000	0.0000	2512.9558	75		10 - 130
Benzo(a)anthracene	3333.0000	0.0000	3293.9193	99		50 - 110
Chrysene	3333.0000	0.0000	3053.4827	92		55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	0.0000	3723.0521	112		45 - 125
Di-n-octylphthalate	3333.0000	0.0000	3900.2712	117		40 - 130
Benzo(b)fluoranthene	3333.0000	0.0000	3119.8463	94		45 - 115
Benzo(k)fluoranthene	3333.0000	0.0000	3240.9952	97		45 - 125
Benzo(a)pyrene	3333.0000	0.0000	3064.7833	92		50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	0.0000	2768.7947	83		40 - 120
Dibenzo(a,h)anthracene	3333.0000	0.0000	2815.9231	84		40 - 125
Benzo(g,h,i)perylene	3333.0000	0.0000	2888.2441	87		40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66819 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	50.0000	34.3616	69		11		40	0 - 115
Bis(2-chloroethyl)ether	50.0000	42.7435	85		9		40	35 - 110
2-Chlorophenol	50.0000	39.8118	80		8		40	35 - 105
1,3-Dichlorobenzene	50.0000	42.5098	85		7		40	30 - 100
1,4-Dichlorobenzene	50.0000	42.4489	85		4		40	30 - 100
1,2-Dichlorobenzene	50.0000	42.6340	85		7		40	35 - 100
2-Methylphenol	50.0000	35.2838	71		3		40	40 - 110
2,2´-oxybis(1-Chloropropan	50.0000	42.3355	85		7		40	30 - 123
4-Methylphenol	50.0000	32.7450	65		3		40	30 - 110
N-Nitroso-di-n-propylamine	50.0000	36.6339	73		6		40	35 - 130
Hexachloroethane	50.0000	44.9648	90		12		40	30 - 95
Nitrobenzene	50.0000	45.0484	90		1		40	45 - 110
Isophorone	50.0000	41.8268	84		1		40	50 - 110
2-Nitrophenol	50.0000	44.0620	88		1		40	40 - 115
2,4-Dimethylphenol	50.0000	21.9124	44		13		40	30 - 110
2,4-Dichlorophenol	50.0000	42.1522	84		1		40	50 - 105
1,2,4-Trichlorobenzene	50.0000	42.8551	86		4		40	35 - 105
Naphthalene	50.0000	43.6866	87		1		40	40 - 100
4-Chloroaniline	50.0000	34.6301	69		4		40	15 - 110
Bis(2-chloroethoxy)methane	50.0000	43.2277	86		5		40	45 - 105
Hexachlorobutadiene	50.0000	45.5740	91		5		40	25 - 105
4-Chloro-3-methylphenol	50.0000	32.4247	65		8		40	45 - 110
2-Methylnaphthalene	50.0000	42.0083	84		1		40	45 - 105
Hexachlorocyclopentadiene	50.0000	40.6556	81		1		40	27 - 147
2,4,6-Trichlorophenol	50.0000	44.2029	88		0		40	50 - 115
2,4,5-Trichlorophenol	50.0000	42.0484	84		7		40	50 - 110
2-Chloronaphthalene	50.0000	45.8056	92		1		40	50 - 105
2-Nitroaniline	50.0000	43.6722	87		3		40	50 - 115
Dimethylphthalate	50.0000	46.2634	93		1		40	25 - 125
Acenaphthylene	50.0000	44.0954	88		1		40	50 - 105
2,6-Dinitrotoluene	50.0000	46.5886	93		6		40	50 - 115
3-Nitroaniline	50.0000	39.0003	78		1		40	20 - 125
Acenaphthene	50.0000	44.6637	89		3		40	45 - 110
2,4-Dinitrophenol	50.0000	48.9506	98		0		40	15 - 140
4-Nitrophenol	50.0000	34.0470	68		21		40	0 - 125
Dibenzofuran	50.0000	44.0717	88		1		40	55 - 105
2,4-Dinitrotoluene	50.0000	43.4843	87		1		40	50 - 120
Diethylphthalate	50.0000	45.8782	92		1		40	40 - 120
4-Chlorophenyl-phenylether	50.0000	46.2943	93		2		40	50 - 110
Fluorene	50.0000	44.1535	88		1		40	50 - 110
4-Nitroaniline	50.0000	36.4722	73		0		40	35 - 120
4,6-Dinitro-2-methylphenol	50.0000	46.4518	93		4		40	40 - 130
N-Nitrosodiphenylamine	50.0000	46.9696	94		5		40	50 - 110
4-Bromophenyl-phenylether	50.0000	48.5060	97		6		40	50 - 115
Hexachlorobenzene	50.0000	48.9577	98		3		40	50 - 110
Pentachlorophenol	50.0000	31.3474	63		10		40	40 - 115

3 - FORM III

WATER LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.

LCSD-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66819 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenanthrene	50.0000	47.3212	95		8		40	50 - 115
Anthracene	50.0000	46.5943	93		8		40	55 - 110
Carbazole	50.0000	45.7546	92		6		40	50 - 115
Di-n-butylphthalate	50.0000	48.7256	97		4		40	55 - 115
Fluoranthene	50.0000	44.4886	89		7		40	55 - 115
Pyrene	50.0000	49.8097	100		5		40	50 - 130
Butylbenzylphthalate	50.0000	51.2789	103		4		40	45 - 115
3,3´-Dichlorobenzidine	50.0000	42.7799	86		2		40	20 - 110
Benzo(a)anthracene	50.0000	49.5136	99		3		40	55 - 110
Chrysene	50.0000	47.1371	94		3		40	55 - 110
Bis(2-ethylhexyl)phthalate	50.0000	52.8496	106		5		40	40 - 125
Di-n-octylphthalate	50.0000	51.4850	103		5		40	35 - 135
Benzo(b)fluoranthene	50.0000	47.9691	96		6		40	45 - 120
Benzo(k)fluoranthene	50.0000	46.4261	93		3		40	45 - 125
Benzo(a)pyrene	50.0000	45.7796	92		3		40	55 - 110
Indeno(1,2,3-cd)pyrene	50.0000	43.2579	87		1		40	45 - 125
Dibenzo(a,h)anthracene	50.0000	44.4626	89		1		40	40 - 125
Benzo(g,h,i)perylene	50.0000	44.2448	88		0		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66863 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	3333.0000	2032.7240	61		3		40	40 - 100
Bis(2-chloroethyl)ether	3333.0000	2608.3229	78		3		40	40 - 105
2-Chlorophenol	3333.0000	2560.2029	77		0		40	45 - 105
1,3-Dichlorobenzene	3333.0000	2669.5800	80		2		40	40 - 100
1,4-Dichlorobenzene	3333.0000	2711.3098	81		4		40	35 - 105
1,2-Dichlorobenzene	3333.0000	2645.4771	79		5		40	45 - 95
2-Methylphenol	3333.0000	2251.1085	68		4		40	40 - 105
2,2´-oxybis(1-Chloropropan	3333.0000	2426.9614	73		3		40	20 - 115
4-Methylphenol	3333.0000	1929.6841	58		8		40	40 - 105
N-Nitroso-di-n-propylamine	3333.0000	2248.0239	67		1		40	40 - 115
Hexachloroethane	3333.0000	2866.0652	86		5		40	35 - 110
Nitrobenzene	3333.0000	2977.8106	89		2		40	40 - 115
Isophorone	3333.0000	2592.5224	78		1		40	45 - 110
2-Nitrophenol	3333.0000	2800.6373	84		5		40	40 - 110
2,4-Dimethylphenol	3333.0000	2698.1594	81		4		40	30 - 105
2,4-Dichlorophenol	3333.0000	2611.7577	78		5		40	45 - 110
1,2,4-Trichlorobenzene	3333.0000	2721.8636	82		4		40	45 - 110
Naphthalene	3333.0000	2808.9335	84		2		40	40 - 105
4-Chloroaniline	3333.0000	1589.3997	48		31		40	10 - 100
Bis(2-chloroethoxy)methane	3333.0000	2744.6430	82		1		40	45 - 110
Hexachlorobutadiene	3333.0000	3263.2185	98		2		40	40 - 115
4-Chloro-3-methylphenol	3333.0000	2074.8764	62		0		40	45 - 115
2-Methylnaphthalene	3333.0000	2550.4728	77		4		40	45 - 105
Hexachlorocyclopentadiene	3333.0000	4376.0816	131		0		40	8 - 148
2,4,6-Trichlorophenol	3333.0000	3075.1543	92		3		40	45 - 110
2,4,5-Trichlorophenol	3333.0000	2852.0648	86		1		40	50 - 110
2-Chloronaphthalene	3333.0000	3254.3014	98		1		40	45 - 105
2-Nitroaniline	3333.0000	2727.6080	82		1		40	45 - 120
Dimethylphthalate	3333.0000	2819.5140	85		0		40	50 - 110
Acenaphthylene	3333.0000	2958.8245	89		1		40	45 - 105
2,6-Dinitrotoluene	3333.0000	2708.7556	81		0		40	50 - 110
3-Nitroaniline	3333.0000	1941.0919	58		15		40	25 - 110
Acenaphthene	3333.0000	2964.6077	89		1		40	45 - 110
2,4-Dinitrophenol	3333.0000	2619.3445	79		4		40	15 - 130
4-Nitrophenol	3333.0000	1872.6689	56		9		40	15 - 140
Dibenzofuran	3333.0000	2858.3575	86		2		40	50 - 105
2,4-Dinitrotoluene	3333.0000	2406.4249	72		3		40	50 - 115
Diethylphthalate	3333.0000	2663.7563	80		0		40	50 - 115
4-Chlorophenyl-phenylether	3333.0000	2860.8949	86		1		40	45 - 110
Fluorene	3333.0000	2691.6295	81		0		40	50 - 110
4-Nitroaniline	3333.0000	1854.7026	56		4		40	35 - 115
4,6-Dinitro-2-methylphenol	3333.0000	2805.0340	84		6		40	30 - 135
N-Nitrosodiphenylamine	3333.0000	3445.8179	103		0		40	50 - 115
4-Bromophenyl-phenylether	3333.0000	3528.2495	106		1		40	45 - 115
Hexachlorobenzene	3333.0000	3422.8879	103		3		40	45 - 120
Pentachlorophenol	3333.0000	2581.9745	77		4		40	25 - 120

3 - FORM III
SOIL LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

EPA SAMPLE NO.
LCSD-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66863 LCS Lot No.: A084216

COMPOUND	SPIKE ADDED	LCSD CONCENTRATION	LCSD %REC	#	%RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenanthrene	3333.0000	3068.5759	92		0		40	50 - 110
Anthracene	3333.0000	3131.4543	94		2		40	55 - 105
Carbazole	3333.0000	2740.0583	82		4		40	45 - 115
Di-n-butylphthalate	3333.0000	2986.7807	90		3		40	55 - 110
Fluoranthene	3333.0000	2427.0259	73		1		40	55 - 115
Pyrene	3333.0000	4096.4334	123		3		40	45 - 125
Butylbenzylphthalate	3333.0000	3726.7761	112		2		40	50 - 125
3,3´-Dichlorobenzidine	3333.0000	2644.1619	79		5		40	10 - 130
Benzo(a)anthracene	3333.0000	3382.4114	101		2		40	50 - 110
Chrysene	3333.0000	3122.9278	94		2		40	55 - 110
Bis(2-ethylhexyl)phthalate	3333.0000	3675.6577	110		2		40	45 - 125
Di-n-octylphthalate	3333.0000	3861.3307	116		1		40	40 - 130
Benzo(b)fluoranthene	3333.0000	3129.9324	94		0		40	45 - 115
Benzo(k)fluoranthene	3333.0000	3302.2921	99		2		40	45 - 125
Benzo(a)pyrene	3333.0000	3196.4051	96		4		40	50 - 110
Indeno(1,2,3-cd)pyrene	3333.0000	2847.1759	85		2		40	40 - 120
Dibenzo(a,h)anthracene	3333.0000	2929.6936	88		5		40	40 - 125
Benzo(g,h,i)perylene	3333.0000	2905.9434	87		0		40	40 - 125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 64 outside limits

Spike Recovery: 0 out of 64 outside limits

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66819

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab File ID: S6A9332.D Lab Sample ID: MB-66819

Instrument ID: S6 Date Extracted: 06/19/2012

Matrix: (SOIL/SED/WATER) WATER Date Analyzed: 06/21/2012

Level: (LOW/MED) LOW Time Analyzed: 13:37

Extraction: (Type) SEPF GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-66819	LCS-66819	S6A9333.D	06/21/2012
02	LCSD-66819	LCSD-66819	S6A9334.D	06/21/2012
03	SW-1	L1348-01B	S6A9343.D	06/21/2012
04	SW-2	L1348-02B	S6A9344.D	06/21/2012

COMMENTS:

4C - FORM IV SV

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

MB-66863

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab File ID: S6A9366.D Lab Sample ID: MB-66863

Instrument ID: S6 Date Extracted: 06/20/2012

Matrix: (SOIL/SED/WATER) SOIL Date Analyzed: 06/22/2012

Level: (LOW/MED) LOW Time Analyzed: 13:33

Extraction: (Type) SONC GPC Cleanup: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	LCS-66863	LCS-66863	S6A9367.D	06/22/2012
02	LCSD-66863	LCSD-66863	S6A9368.D	06/22/2012
03	SS-3	L1348-03A	S6A9382.D	06/22/2012
04	SS-6	L1348-04A	S6A9383.D	06/22/2012
05	SS-29	L1348-08A	S6A9384.D	06/22/2012
06	SS-40	L1348-09A	S6A9385.D	06/22/2012
07	SS-45	L1348-10A	S6A9386.D	06/22/2012
08	SS-13	L1348-05A	S6A9387.D	06/22/2012
09	SS-24	L1348-06A	S6A9388.D	06/22/2012
10	SS-28	L1348-07A	S6A9389.D	06/22/2012

COMMENTS:

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/14/2012 06/14/2012

EPA Sample No.(SSTD020##) SSTD0256Z Date Analyzed: 06/21/2012

Lab File ID (Standard): S6A9331A.D Time Analyzed: 12:46

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	92690		4.002		354423		5.723		283009		7.492	
	UPPER LIMIT	185380		4.502		708846		6.223		566018		7.992	
	LOWER LIMIT	46345		3.502		177212		5.223		141505		6.992	
	EPA SAMPLE NO.												
01	MB-66819	66572		3.996		262452		5.717		198392		7.492	
02	LCS-66819	75552		4.002		281803		5.723		215345		7.492	
03	LCSD-66819	79465		4.002		320134		5.723		242477		7.492	
04	SW-1	62580		4.002		239100		5.723		191781		7.486	
05	SW-2	71958		4.002		265898		5.724		208860		7.486	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

EPA Sample No.(SSTD020##) SSTD0256Z Date Analyzed: 06/21/2012

Lab File ID (Standard): S6A9331A.D Time Analyzed: 12:46

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	614658		8.773		799954		11.017		704164		12.522	
	UPPER LIMIT	1229316		9.273		1599908		11.517		1408328		13.022	
	LOWER LIMIT	307329		8.273		399977		10.517		352082		12.022	
	EPA SAMPLE NO.												
01	MB-66819	457951		8.773		601989		11.076		622655		12.598	
02	LCS-66819	500887		8.773		651789		11.029		659636		12.533	
03	LCSD-66819	528903		8.773		686821		11.023		684332		12.527	
04	SW-1	440246		8.767		573799		11.017		574071		12.521	
05	SW-2	455061		8.767		609127		11.017		590119		12.522	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8C - FORM VIII SV-1

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

GC Column: Rxi-5sil MS ID: 0.25 (mm) Init. Calib. Date(s): 06/14/2012 06/14/2012

EPA Sample No.(SSTD020##) SSTD0256A Date Analyzed: 06/22/2012

Lab File ID (Standard): S6A9361.D Time Analyzed: 11:17

Instrument ID: S6

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	98452		3.933		347803		5.678		237817		7.447	
	UPPER LIMIT	196904		4.433		695606		6.178		475634		7.947	
	LOWER LIMIT	49226		3.433		173902		5.178		118909		6.947	
	EPA SAMPLE NO.												
01	MB-66863	148875		3.933		520903		5.673		344455		7.447	
02	LCS-66863	147931		3.933		507068		5.678		316798		7.447	
03	LCSD-66863	137201		3.933		476766		5.678		295596		7.447	
04	SS-3	151958		3.927		500712		5.672		304046		7.441	
05	SS-6	130873		3.928		446176		5.673		277378		7.441	
06	SS-29	142240		3.927		473816		5.672		298824		7.441	
07	SS-40	123035		3.928		417990		5.673		250024		7.441	
08	SS-45	128558		3.927		414553		5.673		250581		7.441	
09	SS-13	112784		3.927		363173		5.673		224917		7.441	
10	SS-24	119348		3.928		368723		5.673		215321		7.441	
11	SS-28	106708		3.928		350263		5.673		213291		7.441	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8D - FORM VIII SV-2

SEMIVOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

EPA Sample No.(SSTD020##) SSTD0256A Date Analyzed: 06/22/2012

Lab File ID (Standard): S6A9361.D Time Analyzed: 11:17

Instrument ID: S6 GC Column: Rxi-5sil MS ID: 0.25 (mm)

		IS4 (PHN) AREA	#	RT	#	IS5 (CRY) AREA	#	RT	#	IS6 (PRY) AREA	#	RT	#
	12 HOUR STD	468497		8.722		524193		10.966		451416		12.435	
	UPPER LIMIT	936994		9.222		1048386		11.466		902832		12.935	
	LOWER LIMIT	234249		8.222		262097		10.466		225708		11.935	
	EPA SAMPLE NO.												
01	MB-66863	632590		8.722		517047		10.955		397334		12.418	
02	LCS-66863	567432		8.722		471743		10.954		390641		12.418	
03	LCSD-66863	523243		8.722		452061		10.955		389000		12.418	
04	SS-3	518597		8.716		431183		10.949		367432		12.418	
05	SS-6	464992		8.716		368914		10.943		346758		12.406	
06	SS-29	521288		8.716		427594		10.949		337044		12.412	
07	SS-40	413841		8.716		347269		10.943		321927		12.406	
08	SS-45	418928		8.716		362770		10.949		374394		12.412	
09	SS-13	380767		8.716		383099		10.943		403391		12.406	
10	SS-24	380374		8.716		444852		10.949		468594		12.418	
11	SS-28	381798		8.722		477182		10.961		468087		12.447	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = 200% of internal standard area
AREA LOWER LIMIT = 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

* Pesticide Organics *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1348

SW846 8081B, Organochlorine Pesticides by GC-ECD

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: SW846 8081B

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: SW3510
Soil Samples were prepared following procedures in laboratory test code: SW3550

V. INSTRUMENTATION

The following instrumentation was used

Instrument Code: E5
Instrument Type: GC-ECD
Description: HP6890
Manufacturer: Hewlett-Packard
Model: 6890
GC Column used: 30 m X 0.53 mm ID [0.50 um thickness] CLPPest capillary column.
GC Column used: 30 m X 0.53 mm ID [0.42 um thickness] CLPPestII capillary column.

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Surrogates:

Surrogate standard percent recoveries were within the QC limits with the following exceptions. Please note that the acceptance criteria allow one surrogate recovery outside of the QC limits per fraction.

SS-3 (L1348-03A), recovery is below criteria for Decachlorobiphenyl on front column, at 51% with criteria of (55-130).

SS-6 (L1348-04A), recovery is below criteria for Decachlorobiphenyl on front column, at 51% with criteria of (55-130).

SS-13 (L1348-05A) Surrogate outside of QC limit due to dilution, recovery is above criteria for Decachlorobiphenyl on front column, at 132% with criteria of (55-130).

SS-24 (L1348-06A) Surrogate outside of QC limit due to dilution, recovery is below criteria for Decachlorobiphenyl on rear column, at 0% with criteria of (55-130), Decachlorobiphenyl on front column, at 0% with criteria of (55-130), Tetrachloro-m-xylene on rear column, at 0% with criteria of (14-113) and Tetrachloro-m-xylene on front column, at 0% with criteria of (14-113).

SS-28 (L1348-07A) Surrogate outside of QC limit due to dilution, recovery is below criteria for Decachlorobiphenyl on rear column, at 0% with criteria of (55-130), Decachlorobiphenyl on front column, at 0% with criteria of (55-130), Tetrachloro-m-xylene on rear column, at 0% with criteria of (14-113) and Tetrachloro-m-xylene on front column, at 0% with criteria of (14-113).

SS-29 (L1348-08A), recovery is below criteria for Decachlorobiphenyl on front column, at 53% with criteria of (55-130).

SS-45 (L1348-10A), recovery is below criteria for Decachlorobiphenyl on front column, at 42% with criteria of (55-130).

D. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

E. Dilutions:

The following samples were analyzed at dilution:

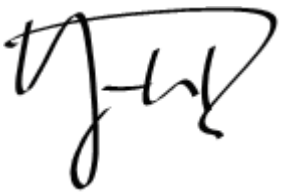
SS-13 (L1348-05A) : Dilution Factor: 20
SS-24 (L1348-06A) : Dilution Factor: 60
SS-28 (L1348-07A) : Dilution Factor: 5000

F. Samples:

The lower concentration between the primary and confirmatory GC column concentrations is reported due to the presence of interferences unless otherwise indicated. P flags are assigned to compounds when D% between the two columns are greater than 40%.

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.



Signed:_____ _____

Date:_____7/9/2012_____

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

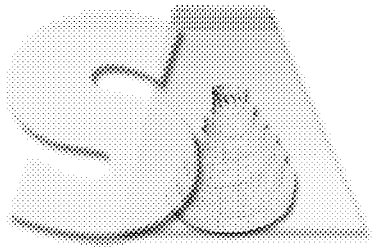
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SW-1

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-01B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8811F.D/E5H8811R.D

% Moisture: Decanted: (Y/N) Date Received: 06/18/2012

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SW-2

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: L1348-02B

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8812F.D/E5H8812R.D

% Moisture: Decanted: (Y/N) Date Received: 06/18/2012

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-3

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-03A

Sample wt/vol: 30.6 (g/mL) G Lab File ID: E5H9025F.D/E5H9025R.D

% Moisture: 8.9 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.8	U
319-85-7	beta-BHC	1.8	U
319-86-8	delta-BHC	1.8	U
58-89-9	gamma-BHC (Lindane)	1.8	U
76-44-8	Heptachlor	1.8	U
309-00-2	Aldrin	1.8	U
1024-57-3	Heptachlor epoxide	1.8	U
959-98-8	Endosulfan I	1.8	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4´-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4´-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4´-DDT	3.6	U
72-43-5	Methoxychlor	18	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.8	U
5103-74-2	gamma-Chlordane	1.8	U
8001-35-2	Toxaphene	180	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-6

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-04A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5H9026F.D/E5H9026R.D

% Moisture: 8.2 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.9	U
319-85-7	beta-BHC	1.9	U
319-86-8	delta-BHC	1.9	U
58-89-9	gamma-BHC (Lindane)	1.9	U
76-44-8	Heptachlor	1.9	U
309-00-2	Aldrin	1.9	U
1024-57-3	Heptachlor epoxide	1.9	U
959-98-8	Endosulfan I	1.9	U
60-57-1	Dieldrin	3.6	U
72-55-9	4,4´-DDE	3.6	U
72-20-8	Endrin	3.6	U
33213-65-9	Endosulfan II	3.6	U
72-54-8	4,4´-DDD	3.6	U
1031-07-8	Endosulfan sulfate	3.6	U
50-29-3	4,4´-DDT	3.6	U
72-43-5	Methoxychlor	19	U
53494-70-5	Endrin ketone	3.6	U
7421-93-4	Endrin aldehyde	3.6	U
5103-71-9	alpha-Chlordane	1.9	U
5103-74-2	gamma-Chlordane	1.9	U
8001-35-2	Toxaphene	190	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-13

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-05A

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5H9027F.D/E5H9027R.D

% Moisture: 11 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 20.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	38	U
319-85-7	beta-BHC	38	U
319-86-8	delta-BHC	38	U
58-89-9	gamma-BHC (Lindane)	38	U
76-44-8	Heptachlor	38	U
309-00-2	Aldrin	38	U
1024-57-3	Heptachlor epoxide	38	U
959-98-8	Endosulfan I	38	U
60-57-1	Dieldrin	74	U
72-55-9	4,4´-DDE	120	
72-20-8	Endrin	74	U
33213-65-9	Endosulfan II	74	U
72-54-8	4,4´-DDD	280	
1031-07-8	Endosulfan sulfate	74	U
50-29-3	4,4´-DDT	100	
72-43-5	Methoxychlor	380	U
53494-70-5	Endrin ketone	74	U
7421-93-4	Endrin aldehyde	74	U
5103-71-9	alpha-Chlordane	38	U
5103-74-2	gamma-Chlordane	38	U
8001-35-2	Toxaphene	3800	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-24

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-06A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5H9306F.D/E5H9306R.D

% Moisture: 31 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/29/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 60.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	150	U
319-85-7	beta-BHC	150	U
319-86-8	delta-BHC	150	U
58-89-9	gamma-BHC (Lindane)	150	U
76-44-8	Heptachlor	150	U
309-00-2	Aldrin	150	U
1024-57-3	Heptachlor epoxide	150	U
959-98-8	Endosulfan I	150	U
60-57-1	Dieldrin	560	
72-55-9	4,4´-DDE	280	U
72-20-8	Endrin	280	U
33213-65-9	Endosulfan II	280	U
72-54-8	4,4´-DDD	280	U
1031-07-8	Endosulfan sulfate	280	U
50-29-3	4,4´-DDT	2000	
72-43-5	Methoxychlor	1500	U
53494-70-5	Endrin ketone	280	U
7421-93-4	Endrin aldehyde	280	U
5103-71-9	alpha-Chlordane	320	P
5103-74-2	gamma-Chlordane	310	
8001-35-2	Toxaphene	15000	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-28

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-07A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5H9307F.D/E5H9307R.D

% Moisture: 42 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/29/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 5000.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	15000	U
319-85-7	beta-BHC	15000	U
319-86-8	delta-BHC	15000	U
58-89-9	gamma-BHC (Lindane)	15000	U
76-44-8	Heptachlor	15000	U
309-00-2	Aldrin	15000	U
1024-57-3	Heptachlor epoxide	15000	U
959-98-8	Endosulfan I	15000	U
60-57-1	Dieldrin	28000	U
72-55-9	4,4´-DDE	28000	U
72-20-8	Endrin	28000	U
33213-65-9	Endosulfan II	28000	U
72-54-8	4,4´-DDD	28000	U
1031-07-8	Endosulfan sulfate	28000	U
50-29-3	4,4´-DDT	28000	U
72-43-5	Methoxychlor	150000	U
53494-70-5	Endrin ketone	28000	U
7421-93-4	Endrin aldehyde	28000	U
5103-71-9	alpha-Chlordane	54000	P
5103-74-2	gamma-Chlordane	52000	
8001-35-2	Toxaphene	1500000	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-29

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-08A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5H9030F.D/E5H9030R.D

% Moisture: 16 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.0	U
319-85-7	beta-BHC	2.0	U
319-86-8	delta-BHC	2.0	U
58-89-9	gamma-BHC (Lindane)	2.0	U
76-44-8	Heptachlor	2.0	U
309-00-2	Aldrin	2.0	U
1024-57-3	Heptachlor epoxide	2.0	U
959-98-8	Endosulfan I	2.0	U
60-57-1	Dieldrin	3.9	U
72-55-9	4,4´-DDE	3.9	U
72-20-8	Endrin	3.9	U
33213-65-9	Endosulfan II	3.9	U
72-54-8	4,4´-DDD	3.9	U
1031-07-8	Endosulfan sulfate	3.9	U
50-29-3	4,4´-DDT	3.9	U
72-43-5	Methoxychlor	20	U
53494-70-5	Endrin ketone	3.9	U
7421-93-4	Endrin aldehyde	3.9	U
5103-71-9	alpha-Chlordane	2.0	U
5103-74-2	gamma-Chlordane	2.0	U
8001-35-2	Toxaphene	200	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-40

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-09A

Sample wt/vol: 30.7 (g/mL) G Lab File ID: E5H9031F.D/E5H9031R.D

% Moisture: 27 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.3	U
319-85-7	beta-BHC	2.3	U
319-86-8	delta-BHC	2.3	U
58-89-9	gamma-BHC (Lindane)	2.3	U
76-44-8	Heptachlor	2.3	U
309-00-2	Aldrin	2.3	U
1024-57-3	Heptachlor epoxide	2.3	U
959-98-8	Endosulfan I	2.3	U
60-57-1	Dieldrin	4.4	U
72-55-9	4,4´-DDE	4.4	U
72-20-8	Endrin	4.4	U
33213-65-9	Endosulfan II	4.4	U
72-54-8	4,4´-DDD	4.4	U
1031-07-8	Endosulfan sulfate	4.4	U
50-29-3	4,4´-DDT	4.4	U
72-43-5	Methoxychlor	23	U
53494-70-5	Endrin ketone	4.4	U
7421-93-4	Endrin aldehyde	4.4	U
5103-71-9	alpha-Chlordane	2.3	U
5103-74-2	gamma-Chlordane	2.3	U
8001-35-2	Toxaphene	230	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SS-45

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: L1348-10A

Sample wt/vol: 30.1 (g/mL) G Lab File ID: E5H9032F.D/E5H9032R.D

% Moisture: 22 Decanted: (Y/N) N Date Received: 06/18/2012

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.2	U
319-85-7	beta-BHC	2.2	U
319-86-8	delta-BHC	2.2	U
58-89-9	gamma-BHC (Lindane)	2.2	U
76-44-8	Heptachlor	2.2	U
309-00-2	Aldrin	2.2	U
1024-57-3	Heptachlor epoxide	2.2	U
959-98-8	Endosulfan I	2.2	U
60-57-1	Dieldrin	4.2	U
72-55-9	4,4´-DDE	4.0	J
72-20-8	Endrin	4.2	U
33213-65-9	Endosulfan II	4.2	U
72-54-8	4,4´-DDD	4.2	U
1031-07-8	Endosulfan sulfate	4.2	U
50-29-3	4,4´-DDT	3.0	PJ
72-43-5	Methoxychlor	22	U
53494-70-5	Endrin ketone	4.2	U
7421-93-4	Endrin aldehyde	4.2	U
5103-71-9	alpha-Chlordane	2.2	U
5103-74-2	gamma-Chlordane	2.2	U
8001-35-2	Toxaphene	220	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: MB-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8804F.D/E5H8804R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.050	U
319-85-7	beta-BHC	0.050	U
319-86-8	delta-BHC	0.050	U
58-89-9	gamma-BHC (Lindane)	0.050	U
76-44-8	Heptachlor	0.050	U
309-00-2	Aldrin	0.050	U
1024-57-3	Heptachlor epoxide	0.050	U
959-98-8	Endosulfan I	0.050	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4´-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4´-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4´-DDT	0.10	U
72-43-5	Methoxychlor	0.50	U
53494-70-5	Endrin ketone	0.10	U
7421-93-4	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.050	U
5103-74-2	gamma-Chlordane	0.050	U
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MB-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: MB-66862

Sample wt/vol: 30.0 (g/mL) G Lab File ID: E5H9013F.D/E5H9013R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4´-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4´-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4´-DDT	3.3	U
72-43-5	Methoxychlor	17	U
53494-70-5	Endrin ketone	3.3	U
7421-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5103-74-2	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66817(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8805F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.20	
319-85-7	beta-BHC	0.21	
319-86-8	delta-BHC	0.21	
58-89-9	gamma-BHC (Lindane)	0.20	
76-44-8	Heptachlor	0.21	
309-00-2	Aldrin	0.20	
1024-57-3	Heptachlor epoxide	0.20	
959-98-8	Endosulfan I	0.20	
60-57-1	Dieldrin	0.42	
72-55-9	4,4´-DDE	0.42	
72-20-8	Endrin	0.41	
33213-65-9	Endosulfan II	0.40	
72-54-8	4,4´-DDD	0.39	
1031-07-8	Endosulfan sulfate	0.43	
50-29-3	4,4´-DDT	0.41	
72-43-5	Methoxychlor	2.1	
53494-70-5	Endrin ketone	0.42	
7421-93-4	Endrin aldehyde	0.41	
5103-71-9	alpha-Chlordane	0.19	
5103-74-2	gamma-Chlordane	0.20	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66817(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCS-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8805R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.19	
319-85-7	beta-BHC	0.18	
319-86-8	delta-BHC	0.20	
58-89-9	gamma-BHC (Lindane)	0.18	
76-44-8	Heptachlor	0.20	
309-00-2	Aldrin	0.18	
1024-57-3	Heptachlor epoxide	0.19	
959-98-8	Endosulfan I	0.18	
60-57-1	Dieldrin	0.38	
72-55-9	4,4´-DDE	0.38	
72-20-8	Endrin	0.36	
33213-65-9	Endosulfan II	0.35	
72-54-8	4,4´-DDD	0.37	
1031-07-8	Endosulfan sulfate	0.40	
50-29-3	4,4´-DDT	0.36	
72-43-5	Methoxychlor	2.0	
53494-70-5	Endrin ketone	0.38	
7421-93-4	Endrin aldehyde	0.37	
5103-71-9	alpha-Chlordane	0.18	
5103-74-2	gamma-Chlordane	0.23	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66862(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9014F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.2	
319-85-7	beta-BHC	5.8	
319-86-8	delta-BHC	5.4	
58-89-9	gamma-BHC (Lindane)	5.3	
76-44-8	Heptachlor	5.0	
309-00-2	Aldrin	5.1	
1024-57-3	Heptachlor epoxide	5.3	
959-98-8	Endosulfan I	5.4	
60-57-1	Dieldrin	11	
72-55-9	4,4´-DDE	10	
72-20-8	Endrin	10	
33213-65-9	Endosulfan II	11	
72-54-8	4,4´-DDD	10	
1031-07-8	Endosulfan sulfate	10	
50-29-3	4,4´-DDT	9.2	
72-43-5	Methoxychlor	47	
53494-70-5	Endrin ketone	10	
7421-93-4	Endrin aldehyde	9.9	
5103-71-9	alpha-Chlordane	4.8	
5103-74-2	gamma-Chlordane	5.0	
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

LCS-66862(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCS-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9014R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.5	
319-85-7	beta-BHC	5.6	
319-86-8	delta-BHC	5.9	
58-89-9	gamma-BHC (Lindane)	5.8	
76-44-8	Heptachlor	5.6	
309-00-2	Aldrin	5.6	
1024-57-3	Heptachlor epoxide	5.8	
959-98-8	Endosulfan I	5.9	
60-57-1	Dieldrin	12	
72-55-9	4,4´-DDE	12	
72-20-8	Endrin	11	
33213-65-9	Endosulfan II	12	
72-54-8	4,4´-DDD	12	
1031-07-8	Endosulfan sulfate	12	
50-29-3	4,4´-DDT	11	
72-43-5	Methoxychlor	56	
53494-70-5	Endrin ketone	12	
7421-93-4	Endrin aldehyde	11	
5103-71-9	alpha-Chlordane	5.5	
5103-74-2	gamma-Chlordane	5.8	
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-66817(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8806F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.20	
319-85-7	beta-BHC	0.21	
319-86-8	delta-BHC	0.21	
58-89-9	gamma-BHC (Lindane)	0.20	
76-44-8	Heptachlor	0.21	
309-00-2	Aldrin	0.20	
1024-57-3	Heptachlor epoxide	0.20	
959-98-8	Endosulfan I	0.20	
60-57-1	Dieldrin	0.41	
72-55-9	4,4´-DDE	0.41	
72-20-8	Endrin	0.40	
33213-65-9	Endosulfan II	0.40	
72-54-8	4,4´-DDD	0.38	
1031-07-8	Endosulfan sulfate	0.43	
50-29-3	4,4´-DDT	0.40	
72-43-5	Methoxychlor	2.1	
53494-70-5	Endrin ketone	0.43	
7421-93-4	Endrin aldehyde	0.40	
5103-71-9	alpha-Chlordane	0.19	
5103-74-2	gamma-Chlordane	0.20	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-66817(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: LCSD-66817

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E5H8806R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SEPF Date Extracted: 06/19/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/19/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.19	
319-85-7	beta-BHC	0.19	
319-86-8	delta-BHC	0.20	
58-89-9	gamma-BHC (Lindane)	0.19	
76-44-8	Heptachlor	0.20	
309-00-2	Aldrin	0.18	
1024-57-3	Heptachlor epoxide	0.19	
959-98-8	Endosulfan I	0.18	
60-57-1	Dieldrin	0.37	
72-55-9	4,4´-DDE	0.38	
72-20-8	Endrin	0.37	
33213-65-9	Endosulfan II	0.34	
72-54-8	4,4´-DDD	0.37	
1031-07-8	Endosulfan sulfate	0.37	
50-29-3	4,4´-DDT	0.36	
72-43-5	Methoxychlor	2.0	
53494-70-5	Endrin ketone	0.38	
7421-93-4	Endrin aldehyde	0.37	
5103-71-9	alpha-Chlordane	0.18	
5103-74-2	gamma-Chlordane	0.19	
8001-35-2	Toxaphene	5.0	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-66862(1)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9015F.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.4	
319-85-7	beta-BHC	6.1	
319-86-8	delta-BHC	5.7	
58-89-9	gamma-BHC (Lindane)	5.5	
76-44-8	Heptachlor	5.2	
309-00-2	Aldrin	5.3	
1024-57-3	Heptachlor epoxide	5.4	
959-98-8	Endosulfan I	5.6	
60-57-1	Dieldrin	11	
72-55-9	4,4´-DDE	10	
72-20-8	Endrin	10	
33213-65-9	Endosulfan II	11	
72-54-8	4,4´-DDD	11	
1031-07-8	Endosulfan sulfate	11	
50-29-3	4,4´-DDT	9.6	
72-43-5	Methoxychlor	47	
53494-70-5	Endrin ketone	10	
7421-93-4	Endrin aldehyde	10	
5103-71-9	alpha-Chlordane	4.7	
5103-74-2	gamma-Chlordane	5.3	
8001-35-2	Toxaphene	170	U

1G - FORM I PEST

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
LCSD-66862(2)

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: LCSD-66862

Sample wt/vol: 30 (g/mL) G Lab File ID: E5H9015R.D

% Moisture: Decanted: (Y/N) Date Received:

Extraction: (Type) SONC Date Extracted: 06/20/2012

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 06/25/2012

Injection Volume: 1.0 (uL) GPC Factor: 1.00 Dilution Factor: 1.0

GPC Cleanup:(Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	5.8	
319-85-7	beta-BHC	5.9	
319-86-8	delta-BHC	6.2	
58-89-9	gamma-BHC (Lindane)	6.0	
76-44-8	Heptachlor	5.6	
309-00-2	Aldrin	5.8	
1024-57-3	Heptachlor epoxide	6.3	
959-98-8	Endosulfan I	6.0	
60-57-1	Dieldrin	12	
72-55-9	4,4´-DDE	12	
72-20-8	Endrin	11	
33213-65-9	Endosulfan II	13	
72-54-8	4,4´-DDD	12	
1031-07-8	Endosulfan sulfate	12	
50-29-3	4,4´-DDT	11	
72-43-5	Methoxychlor	56	
53494-70-5	Endrin ketone	12	
7421-93-4	Endrin aldehyde	11	
5103-71-9	alpha-Chlordane	5.6	
5103-74-2	gamma-Chlordane	6.0	
8001-35-2	Toxaphene	170	U

2N - FORM II PEST-1

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	MB-66817	91	91	100	95			0
02	LCS-66817	97	98	102	97			0
03	LCSD-66817	93	95	102	96			0
04	SW-1	79	77	63	58			0
05	SW-2	76	72	65	57			0

	QC LIMITS
TCX = Tetrachloro-m-xylene	(25-140)
DCB = Decachlorobiphenyl	(30-135)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

2P - FORM II PEST-2

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	CLIENT SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB-66862	76		83		67		89				0
02	LCS-66862	75		80		68		91				0
03	LCSD-66862	77		84		68		91				0
04	SS-3	51		56		51	*	73				1
05	SS-6	56		65		51	*	75				1
06	SS-13	66		73		132	D	86				1
07	SS-29	50		52		53	*	66				1
08	SS-40	49		53		57		69				0
09	SS-45	47		51		42	*	61				1
10	SS-24	0	D	0	D	0	D	0	D			4
11	SS-28	0	D	0	D	0	D	0	D			4

	QC LIMITS
TCX = Tetrachloro-m-xylene	(14-113)
DCB = Decachlorobiphenyl	(55-130)

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

som111.10.27.A

SW846

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
alpha-BHC	0.2000	0.2034	102	60-130
beta-BHC	0.2000	0.2147	107	65-125
delta-BHC	0.2000	0.2075	104	45-135
gamma-BHC (Lindane)	0.2000	0.2006	100	25-135
Heptachlor	0.2000	0.2103	105	40-130
Aldrin	0.2000	0.1952	98	25-140
Heptachlor epoxide	0.2000	0.2021	101	60-130
Endosulfan I	0.2000	0.2000	100	50-110
Dieldrin	0.4000	0.4152	104	60-130
4,4´-DDE	0.4000	0.4166	104	35-140
Endrin	0.4000	0.4076	102	55-135
Endosulfan II	0.4000	0.4021	101	30-130
4,4´-DDD	0.4000	0.3911	98	25-150
Endosulfan sulfate	0.4000	0.4322	108	55-135
4,4´-DDT	0.4000	0.4052	101	45-140
Methoxychlor	2.0000	2.1295	106	55-150
Endrin ketone	0.4000	0.4244	106	75-125
Endrin aldehyde	0.4000	0.4081	102	55-135
alpha-Chlordane	0.2000	0.1949	97	65-125
gamma-Chlordane	0.2000	0.2040	102	60-125

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/19/2012

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS
alpha-BHC	0.2000	0.1886	94	60-130
beta-BHC	0.2000	0.1786	89	65-125
delta-BHC	0.2000	0.1975	99	45-135
gamma-BHC (Lindane)	0.2000	0.1843	92	25-135

COMMENTS:

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL SAMPLE RECOVERY

CLIENT SAMPLE NO.

LCS-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Heptachlor	0.2000	0.1967	98	40-130
Aldrin	0.2000	0.1828	91	25-140
Heptachlor epoxide	0.2000	0.1896	95	60-130
Endosulfan I	0.2000	0.1757	88	50-110
Dieldrin	0.4000	0.3762	94	60-130
4,4´-DDE	0.4000	0.3804	95	35-140
Endrin	0.4000	0.3624	91	55-135
Endosulfan II	0.4000	0.3549	89	30-130
4,4´-DDD	0.4000	0.3712	93	25-150
Endosulfan sulfate	0.4000	0.3951	99	55-135
4,4´-DDT	0.4000	0.3629	91	45-140
Methoxychlor	2.0000	1.9742	99	55-150
Endrin ketone	0.4000	0.3782	95	75-125
Endrin aldehyde	0.4000	0.3714	93	55-135
alpha-Chlordane	0.2000	0.1763	88	65-125
gamma-Chlordane	0.2000	0.2324	116	60-125

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

COMMENTS:

3M - FORM III PEST-3
SOIL PESTICIDE LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
alpha-BHC	6.6670	5.1533	77	60-125
beta-BHC	6.6670	5.7862	87	60-125
delta-BHC	6.6670	5.4378	82	55-130
gamma-BHC (Lindane)	6.6670	5.2638	79	60-125
Heptachlor	6.6670	4.9876	75	50-140
Aldrin	6.6670	5.0726	76	45-140
Heptachlor epoxide	6.6670	5.2556	79	65-130
Endosulfan I	6.6670	5.3966	81	15-135
Dieldrin	13.3330	10.5719	79	65-125
4,4´-DDE	13.3330	10.0051	75	70-125
Endrin	13.3330	10.0204	75	60-135
Endosulfan II	13.3330	10.7680	81	35-140
4,4´-DDD	13.3330	10.2895	77	30-135
Endosulfan sulfate	13.3330	10.3621	78	60-135
4,4´-DDT	13.3330	9.1692	69	45-140
Methoxychlor	66.6670	46.6975	70	55-145
Endrin ketone	13.3330	10.1292	76	65-135
Endrin aldehyde	13.3330	9.8819	74	35-145
alpha-Chlordane	6.6670	4.7558	71	65-120
gamma-Chlordane	6.6670	5.0403	76	65-125

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/25/2012

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS
alpha-BHC	6.6670	5.5440	83	60-125
beta-BHC	6.6670	5.6266	84	60-125
delta-BHC	6.6670	5.8630	88	55-130
gamma-BHC (Lindane)	6.6670	5.7714	87	60-125

COMMENTS:

3M - FORM III PEST-3
SOIL PESTICIDE LABORATORY CONTROL
SAMPLE RECOVERY

CLIENT SAMPLE NO.
LCS-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCS-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Heptachlor	6.6670	5.5708	84	50-140
Aldrin	6.6670	5.5881	84	45-140
Heptachlor epoxide	6.6670	5.7774	87	65-130
Endosulfan I	6.6670	5.8704	88	15-135
Dieldrin	13.3330	11.5799	87	65-125
4,4´-DDE	13.3330	11.5165	86	70-125
Endrin	13.3330	11.0253	83	60-135
Endosulfan II	13.3330	12.0267	90	35-140
4,4´-DDD	13.3330	11.5606	87	30-135
Endosulfan sulfate	13.3330	11.7180	88	60-135
4,4´-DDT	13.3330	10.5468	79	45-140
Methoxychlor	66.6670	55.5695	83	55-145
Endrin ketone	13.3330	11.8597	89	65-135
Endrin aldehyde	13.3330	11.1002	83	35-145
alpha-Chlordane	6.6670	5.5100	83	65-120
gamma-Chlordane	6.6670	5.7917	87	65-125

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

COMMENTS:

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.

LCSD-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	0.2000	0.1998	100	60-130	2.0	30
beta-BHC	0.2000	0.2093	105	65-125	2.0	30
delta-BHC	0.2000	0.2087	104	45-135	0	30
gamma-BHC (Lindane)	0.2000	0.1989	99	25-135	1.0	30
Heptachlor	0.2000	0.2080	104	40-130	1.0	30
Aldrin	0.2000	0.1975	99	25-140	1.0	30
Heptachlor epoxide	0.2000	0.2022	101	60-130	0	30
Endosulfan I	0.2000	0.1965	98	50-110	2.0	30
Dieldrin	0.4000	0.4133	103	60-130	1.0	30
4,4´-DDE	0.4000	0.4136	103	35-140	1.0	30
Endrin	0.4000	0.3997	100	55-135	2.0	30
Endosulfan II	0.4000	0.4033	101	30-130	0	30
4,4´-DDD	0.4000	0.3791	95	25-150	3.0	30
Endosulfan sulfate	0.4000	0.4314	108	55-135	0	30
4,4´-DDT	0.4000	0.3973	99	45-140	2.0	30
Methoxychlor	2.0000	2.1344	107	55-150	1.0	30
Endrin ketone	0.4000	0.4299	107	75-125	1.0	30
Endrin aldehyde	0.4000	0.4015	100	55-135	2.0	30
alpha-Chlordane	0.2000	0.1922	96	65-125	1.0	30
gamma-Chlordane	0.2000	0.2029	101	60-125	1.0	30

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/19/2012

COMPOUND	AMOUNT ADDED (UG/L)	AMOUNT RECOVERED (UG/L)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	0.2000	0.1876	94	60-130	0	30
beta-BHC	0.2000	0.1855	93	65-125	4.0	30
delta-BHC	0.2000	0.1956	98	45-135	1.0	30
gamma-BHC (Lindane)	0.2000	0.1921	96	25-135	4.0	30

COMMENTS:

3L - FORM III PEST-3

WATER PESTICIDE LABORATORY CONTROL

SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.

LCSD-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66817 LCS Lot No.: A079294

Date Extracted: 06/19/2012 Date Analyzed (1): 06/19/2012

Heptachlor	0.2000	0.1953	98	40-130	0	30
Aldrin	0.2000	0.1846	92	25-140	1.0	30
Heptachlor epoxide	0.2000	0.1891	95	60-130	0	30
Endosulfan I	0.2000	0.1777	89	50-110	1.0	30
Dieldrin	0.4000	0.3747	94	60-130	0	30
4,4´-DDE	0.4000	0.3780	94	35-140	1.0	30
Endrin	0.4000	0.3656	91	55-135	0	30
Endosulfan II	0.4000	0.3377	84	30-130	6.0	30
4,4´-DDD	0.4000	0.3705	93	25-150	0	30
Endosulfan sulfate	0.4000	0.3705	93	55-135	6.0	30
4,4´-DDT	0.4000	0.3614	90	45-140	1.0	30
Methoxychlor	2.0000	1.9522	98	55-150	1.0	30
Endrin ketone	0.4000	0.3755	94	75-125	1.0	30
Endrin aldehyde	0.4000	0.3734	93	55-135	0	30
alpha-Chlordane	0.2000	0.1787	89	65-125	1.0	30
gamma-Chlordane	0.2000	0.1926	96	60-125	19	30

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

RPD: 0 out of 40 outside limits.

COMMENTS:

3M - FORM III PEST-3
SOIL PESTICIDE LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.
LCSD-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Instrument ID (1): E5 GC Column(1): CLPPest ID: 0.53 (mm)

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	6.6670	5.4198	81	60-125	5.0	30
beta-BHC	6.6670	6.0541	91	60-125	4.0	30
delta-BHC	6.6670	5.6648	85	55-130	4.0	30
gamma-BHC (Lindane)	6.6670	5.4994	82	60-125	4.0	30
Heptachlor	6.6670	5.2238	78	50-140	4.0	30
Aldrin	6.6670	5.2851	79	45-140	4.0	30
Heptachlor epoxide	6.6670	5.4494	82	65-130	4.0	30
Endosulfan I	6.6670	5.5617	83	15-135	2.0	30
Dieldrin	13.3330	10.5030	79	65-125	0	30
4,4´-DDE	13.3330	10.3976	78	70-125	4.0	30
Endrin	13.3330	10.1623	76	60-135	1.0	30
Endosulfan II	13.3330	11.3539	85	35-140	5.0	30
4,4´-DDD	13.3330	10.6702	80	30-135	4.0	30
Endosulfan sulfate	13.3330	10.6966	80	60-135	3.0	30
4,4´-DDT	13.3330	9.5749	72	45-140	4.0	30
Methoxychlor	66.6670	47.0564	71	55-145	1.0	30
Endrin ketone	13.3330	10.3255	77	65-135	1.0	30
Endrin aldehyde	13.3330	10.2048	77	35-145	4.0	30
alpha-Chlordane	6.6670	4.7241	71	65-120	0	30
gamma-Chlordane	6.6670	5.2553	79	65-125	4.0	30

Instrument ID (2): E5 GC Column(2): CLPPestII ID: 0.53 (mm)

Date Analyzed (2): 06/25/2012

COMPOUND	AMOUNT ADDED (UG/KG)	AMOUNT RECOVERED (UG/KG)	%REC #	QC LIMITS	%RPD #	RPD LIMIT
alpha-BHC	6.6670	5.7798	87	60-125	5.0	30
beta-BHC	6.6670	5.9138	89	60-125	6.0	30
delta-BHC	6.6670	6.1800	93	55-130	6.0	30
gamma-BHC (Lindane)	6.6670	6.0435	91	60-125	4.0	30

COMMENTS:

3M - FORM III PEST-3
SOIL PESTICIDE LABORATORY CONTROL
SAMPLE DUPLICATE RECOVERY

CLIENT SAMPLE NO.
LCSD-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab Sample ID: LCSD-66862 LCS Lot No.: A079294

Date Extracted: 06/20/2012 Date Analyzed (1): 06/25/2012

Heptachlor	6.6670	5.6245	84	50-140	0	30
Aldrin	6.6670	5.7662	86	45-140	2.0	30
Heptachlor epoxide	6.6670	6.2511	94	65-130	8.0	30
Endosulfan I	6.6670	6.0033	90	15-135	2.0	30
Dieldrin	13.3330	12.0602	90	65-125	3.0	30
4,4´-DDE	13.3330	11.9198	89	70-125	3.0	30
Endrin	13.3330	11.3280	85	60-135	2.0	30
Endosulfan II	13.3330	12.5090	94	35-140	4.0	30
4,4´-DDD	13.3330	12.1991	91	30-135	4.0	30
Endosulfan sulfate	13.3330	12.1377	91	60-135	3.0	30
4,4´-DDT	13.3330	10.7237	80	45-140	1.0	30
Methoxychlor	66.6670	56.4938	85	55-145	2.0	30
Endrin ketone	13.3330	12.3559	93	65-135	4.0	30
Endrin aldehyde	13.3330	11.1734	84	35-145	1.0	30
alpha-Chlordane	6.6670	5.5813	84	65-120	1.0	30
gamma-Chlordane	6.6670	6.0427	91	65-125	4.0	30

Column to be used to flag recovery values with an asterisk
* Values outside of QC limits

LCS Recovery: 0 out of 40 outside limits.

RPD: 0 out of 40 outside limits.

COMMENTS:

4E - FORM IV PEST

PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-66817

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab File ID: E5H8804F.D / E5H8804R.D Lab Sample ID: MB-66817

Matrix: (SOIL/SED/WATER) WATER Extraction: (Type) SEPF Date Extracted: 06/19/2012

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Date Analyzed (1): 06/19/2012 Date Analyzed (2): 06/19/2012

Time Analyzed (1): 15:56 Time Analyzed (2): 15:56

Instrument ID (1): E5 Instrument ID (2): E5

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-66817	LCS-66817	06/19/2012	06/19/2012
02	LCSD-66817	LCSD-66817	06/19/2012	06/19/2012
03	SW-1	L1348-01B	06/19/2012	06/19/2012
04	SW-2	L1348-02B	06/19/2012	06/19/2012

COMMENTS:

4E - FORM IV PEST

PESTICIDE METHOD BLANK SUMMARY

CLIENT SAMPLE NO.

MB-66862

Lab Name: SPECTRUM ANALYTICAL, INC. Contract:

Lab Code: MITKEM Case No.: L1348 Mod. Ref No.: SDG No.: SL1348

Lab File ID: E5H9013F.D / E5H9013R.D Lab Sample ID: MB-66862

Matrix: (SOIL/SED/WATER) SOIL Extraction: (Type) SONC Date Extracted: 06/20/2012

Sulfur Cleanup: (Y/N) Y GPC Cleanup:(Y/N) N

Date Analyzed (1): 06/25/2012 Date Analyzed (2): 06/25/2012

Time Analyzed (1): 19:08 Time Analyzed (2): 19:08

Instrument ID (1): E5 Instrument ID (2): E5

GC Column(1): CLPPest ID: 0.53 (mm) GC Column(2): CLPPestII ID: 0.53 (mm)

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED (1)	DATE ANALYZED (2)
01	LCS-66862	LCS-66862	06/25/2012	06/25/2012
02	LCSD-66862	LCSD-66862	06/25/2012	06/25/2012
03	SS-3	L1348-03A	06/25/2012	06/25/2012
04	SS-6	L1348-04A	06/25/2012	06/25/2012
05	SS-13	L1348-05A	06/25/2012	06/25/2012
06	SS-29	L1348-08A	06/25/2012	06/25/2012
07	SS-40	L1348-09A	06/25/2012	06/25/2012
08	SS-45	L1348-10A	06/25/2012	06/25/2012
09	SS-24	L1348-06A	06/29/2012	06/29/2012
10	SS-28	L1348-07A	06/29/2012	06/29/2012

COMMENTS:

* Metals *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1348

SW846 6010C, SW846 7470A, SW846 7471B

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test codes: SW846 6010C, SW846 7470A, and SW846 7471B.

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test codes: SW3005A, SW7470A.
Soil Samples were prepared following procedures in laboratory test codes: SW3050B and SW7471B.

V. INSTRUMENTATION

The following instrumentation was used:

Instrument Code: FIMS2
Instrument Type: CVAA
Description: FIMS
Manufacturer: Perkin-Elmer
Model: FIMS100

Instrument Code: OPTIMA3
Instrument Type: ICP
Description: Optima ICP-OES
Manufacturer: Perkin-Elmer
Model: 4300 DV

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for laboratory control samples were within the QC limits.

2. Matrix spike (MS):

A matrix spike was not performed on any sample in this SDG.

D. Post Digestion Spike (PDS):

A post-digestion spike was not performed on any sample in this SDG.

E. Duplicate sample:

A duplicate analysis was not performed on any sample in this SDG.

F. Serial Dilution (SD):

A serial dilution was not performed on any sample in this SDG.

G. Samples:

No unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 07/10/12

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

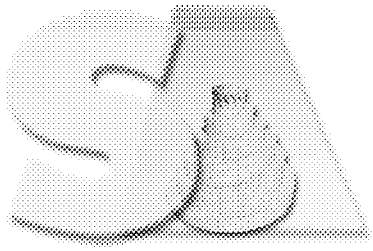
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-13

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-05

Level (low/med): MED Date Received: 06/18/2012

% Solids: 89.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2330			P
7440-36-0	Antimony	0.34	U		P
7440-38-2	Arsenic	15.9			P
7440-39-3	Barium	17.4			P
7440-41-7	Beryllium	0.16	B		P
7440-43-9	Cadmium	0.013	U		P
7440-70-2	Calcium	192000			P
7440-47-3	Chromium	4.1			P
7440-48-4	Cobalt	1.4	B		P
7440-50-8	Copper	27.2			P
7439-89-6	Iron	5470			P
7439-92-1	Lead	25.5			P
7439-95-4	Magnesium	108000			P
7439-96-5	Manganese	385			P
7439-97-6	Mercury	0.10			CV
7440-02-0	Nickel	3.0			P
7440-09-7	Potassium	857			P
7782-49-2	Selenium	2.7			P
7440-22-4	Silver	0.057	U		P
7440-23-5	Sodium	207			P
7440-28-0	Thallium	1.7			P
7440-62-2	Vanadium	4.9			P
7440-66-6	Zinc	56.6			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-24

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-06

Level (low/med): MED Date Received: 06/18/2012

% Solids: 69.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6150			P
7440-36-0	Antimony	0.90	B		P
7440-38-2	Arsenic	115			P
7440-39-3	Barium	155			P
7440-41-7	Beryllium	0.23	B		P
7440-43-9	Cadmium	0.43			P
7440-70-2	Calcium	10400			P
7440-47-3	Chromium	33.6			P
7440-48-4	Cobalt	5.3			P
7440-50-8	Copper	234			P
7439-89-6	Iron	22100			P
7439-92-1	Lead	164			P
7439-95-4	Magnesium	4330			P
7439-96-5	Manganese	480			P
7439-97-6	Mercury	0.61			CV
7440-02-0	Nickel	15.7			P
7440-09-7	Potassium	1230			P
7782-49-2	Selenium	0.66	U		P
7440-22-4	Silver	1.4	B		P
7440-23-5	Sodium	205			P
7440-28-0	Thallium	0.47	B		P
7440-62-2	Vanadium	18.7			P
7440-66-6	Zinc	191			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-28

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-07

Level (low/med): MED Date Received: 06/18/2012

% Solids: 57.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8330			P
7440-36-0	Antimony	31.6			P
7440-38-2	Arsenic	904			P
7440-39-3	Barium	1420			P
7440-41-7	Beryllium	0.023	B		P
7440-43-9	Cadmium	7.2			P
7440-70-2	Calcium	23900			P
7440-47-3	Chromium	62.6			P
7440-48-4	Cobalt	5.6			P
7440-50-8	Copper	51800			P
7439-89-6	Iron	116000			P
7439-92-1	Lead	1780			P
7439-95-4	Magnesium	998			P
7439-96-5	Manganese	385			P
7439-97-6	Mercury	0.53			CV
7440-02-0	Nickel	69.8			P
7440-09-7	Potassium	894			P
7782-49-2	Selenium	0.95	U		P
7440-22-4	Silver	11.7			P
7440-23-5	Sodium	189			P
7440-28-0	Thallium	0.33	U		P
7440-62-2	Vanadium	30.7			P
7440-66-6	Zinc	62800			P

Comments:

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1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-29

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-08

Level (low/med): MED Date Received: 06/18/2012

% Solids: 83.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11000			P
7440-36-0	Antimony	0.44	U		P
7440-38-2	Arsenic	6.2			P
7440-39-3	Barium	71.9			P
7440-41-7	Beryllium	0.33			P
7440-43-9	Cadmium	0.29	B		P
7440-70-2	Calcium	4930			P
7440-47-3	Chromium	12.1			P
7440-48-4	Cobalt	6.3			P
7440-50-8	Copper	31.1			P
7439-89-6	Iron	14300			P
7439-92-1	Lead	39.4			P
7439-95-4	Magnesium	3430			P
7439-96-5	Manganese	828			P
7439-97-6	Mercury	0.042	B		CV
7440-02-0	Nickel	11.7			P
7440-09-7	Potassium	977			P
7782-49-2	Selenium	0.73	U		P
7440-22-4	Silver	0.073	U		P
7440-23-5	Sodium	49.0	B		P
7440-28-0	Thallium	0.92	B		P
7440-62-2	Vanadium	19.3			P
7440-66-6	Zinc	102			P

Comments:

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1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-3

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-03

Level (low/med): MED Date Received: 06/18/2012

% Solids: 91.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1530			P
7440-36-0	Antimony	0.35	U		P
7440-38-2	Arsenic	4.6			P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	0.014	U		P
7440-70-2	Calcium	170000			P
7440-47-3	Chromium	2.6			P
7440-48-4	Cobalt	1.6	B		P
7440-50-8	Copper	5.5			P
7439-89-6	Iron	6080			P
7439-92-1	Lead	16.0			P
7439-95-4	Magnesium	97600			P
7439-96-5	Manganese	498			P
7439-97-6	Mercury	0.022	B		CV
7440-02-0	Nickel	2.8			P
7440-09-7	Potassium	812			P
7782-49-2	Selenium	1.1	B		P
7440-22-4	Silver	0.060	U		P
7440-23-5	Sodium	179			P
7440-28-0	Thallium	2.6			P
7440-62-2	Vanadium	4.0			P
7440-66-6	Zinc	29.2			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-40

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-09

Level (low/med): MED Date Received: 06/18/2012

% Solids: 72.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600			P
7440-36-0	Antimony	2.9			P
7440-38-2	Arsenic	4.9			P
7440-39-3	Barium	96.1			P
7440-41-7	Beryllium	0.25	B		P
7440-43-9	Cadmium	0.15	B		P
7440-70-2	Calcium	1720			P
7440-47-3	Chromium	13.4			P
7440-48-4	Cobalt	4.4			P
7440-50-8	Copper	16.8			P
7439-89-6	Iron	13200			P
7439-92-1	Lead	572			P
7439-95-4	Magnesium	2480			P
7439-96-5	Manganese	281			P
7439-97-6	Mercury	0.11			CV
7440-02-0	Nickel	10.8			P
7440-09-7	Potassium	745			P
7782-49-2	Selenium	0.67	U		P
7440-22-4	Silver	0.067	U		P
7440-23-5	Sodium	39.4	B		P
7440-28-0	Thallium	0.23	U		P
7440-62-2	Vanadium	19.6			P
7440-66-6	Zinc	95.6			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-45

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-10

Level (low/med): MED Date Received: 06/18/2012

% Solids: 77.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10300			P
7440-36-0	Antimony	0.41	U		P
7440-38-2	Arsenic	5.9			P
7440-39-3	Barium	103			P
7440-41-7	Beryllium	0.35			P
7440-43-9	Cadmium	0.20	B		P
7440-70-2	Calcium	1710			P
7440-47-3	Chromium	12.3			P
7440-48-4	Cobalt	5.0			P
7440-50-8	Copper	21.2			P
7439-89-6	Iron	14800			P
7439-92-1	Lead	29.7			P
7439-95-4	Magnesium	2390			P
7439-96-5	Manganese	568			P
7439-97-6	Mercury	0.092			CV
7440-02-0	Nickel	12.8			P
7440-09-7	Potassium	609			P
7782-49-2	Selenium	0.69	U		P
7440-22-4	Silver	0.069	U		P
7440-23-5	Sodium	35.9	B		P
7440-28-0	Thallium	0.57	B		P
7440-62-2	Vanadium	21.6			P
7440-66-6	Zinc	73.6			P

Comments:

U.S. EPA - CLP

1

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SS-6

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): SOIL Lab Sample ID: L1348-04

Level (low/med): MED Date Received: 06/18/2012

% Solids: 91.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1630			P
7440-36-0	Antimony	0.25	U		P
7440-38-2	Arsenic	5.6			P
7440-39-3	Barium	9.5			P
7440-41-7	Beryllium	0.14	B		P
7440-43-9	Cadmium	0.0099	U		P
7440-70-2	Calcium	176000			P
7440-47-3	Chromium	2.8			P
7440-48-4	Cobalt	1.7			P
7440-50-8	Copper	5.4			P
7439-89-6	Iron	6530			P
7439-92-1	Lead	14.9			P
7439-95-4	Magnesium	101000			P
7439-96-5	Manganese	486			P
7439-97-6	Mercury	0.010	B		CV
7440-02-0	Nickel	2.9			P
7440-09-7	Potassium	788			P
7782-49-2	Selenium	1.7			P
7440-22-4	Silver	0.042	U		P
7440-23-5	Sodium	174			P
7440-28-0	Thallium	2.7			P
7440-62-2	Vanadium	4.5			P
7440-66-6	Zinc	25.6			P

Comments:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SW-1

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): WATER Lab Sample ID: L1348-01

Level (low/med): MED Date Received: 06/18/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	340			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	U		P
7440-39-3	Barium	93.1	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	95800			P
7440-47-3	Chromium	0.67	B		P
7440-48-4	Cobalt	0.76	B		P
7440-50-8	Copper	5.4	B		P
7439-89-6	Iron	1090			P
7439-92-1	Lead	4.2	U		P
7439-95-4	Magnesium	18800			P
7439-96-5	Manganese	430			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	1.5	B		P
7440-09-7	Potassium	4650			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	44100			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	7.6	B		P

Comments:

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SW-2

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Matrix (soil/water): WATER Lab Sample ID: L1348-02

Level (low/med): MED Date Received: 06/18/2012

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4200			P
7440-36-0	Antimony	9.3	U		P
7440-38-2	Arsenic	4.3	B		P
7440-39-3	Barium	56.9	B		P
7440-41-7	Beryllium	0.26	U		P
7440-43-9	Cadmium	0.89	U		P
7440-70-2	Calcium	81400			P
7440-47-3	Chromium	6.6	B		P
7440-48-4	Cobalt	3.4	B		P
7440-50-8	Copper	12.7	B		P
7439-89-6	Iron	6490			P
7439-92-1	Lead	6.3	B		P
7439-95-4	Magnesium	24400			P
7439-96-5	Manganese	694			P
7439-97-6	Mercury	0.028	U		CV
7440-02-0	Nickel	8.2	B		P
7440-09-7	Potassium	4500			P
7782-49-2	Selenium	12.0	U		P
7440-22-4	Silver	6.9	U		P
7440-23-5	Sodium	4180			P
7440-28-0	Thallium	6.2	U		P
7440-62-2	Vanadium	7.8	B		P
7440-66-6	Zinc	41.8	B		P

Comments:

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66879**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8806.18	96.8						
Antimony	455.0	467.57	102.8						
Arsenic	455.0	450.63	99.0						
Barium	9100.0	8952.69	98.4						
Beryllium	227.0	224.13	98.7						
Cadmium	227.0	222.18	97.9						
Calcium	22700.0	21479.77	94.6						
Chromium	910.0	892.07	98.0						
Cobalt	2270.0	2222.12	97.9						
Copper	1130.0	1090.99	96.5						
Iron	4550.0	4446.54	97.7						
Lead	455.0	446.20	98.1						
Magnesium	22700.0	21933.16	96.6						
Manganese	2270.0	2208.45	97.3						
Nickel	2270.0	2222.55	97.9						
Potassium	22700.0	22216.91	97.9						
Selenium	455.0	466.17	102.5						
Silver	1130.0	1153.56	102.1						
Sodium	22700.0	22561.30	99.4						
Thallium	455.0	417.20	91.7						
Vanadium	2270.0	2210.33	97.4						
Zinc	2270.0	2169.63	95.6						

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66883**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.64	100.9						

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66920**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum				455.0	462.8		364	546.0	101.7
Antimony				22.8	24.2		18.2	27.3	106.1
Arsenic				22.8	23.2		18.2	27.3	101.8
Barium				455.0	484.5		364	546.0	106.5
Beryllium				11.4	11.8		9.1	13.6	103.5
Cadmium				11.4	11.5		9.1	13.6	100.9
Calcium				1135.0	1122.1		908	1362.0	98.9
Chromium				45.5	47.5		36.4	54.6	104.4
Cobalt				113.5	117.2		90.8	136.2	103.3
Copper				56.5	59.0		45.2	67.8	104.4
Iron				227.5	237.0		182	273.0	104.2
Lead				22.8	23.3		18.2	27.3	102.2
Magnesium				1135.0	1182.2		908	1362.0	104.2
Manganese				113.5	119.0		90.8	136.2	104.8
Nickel				113.5	117.3		90.8	136.2	103.3
Potassium				1135.0	1130.2		908	1362.0	99.6
Selenium				22.8	21.7		18.2	27.3	95.2
Silver				56.5	58.6		42.4	67.8	103.7
Sodium				1135.0	1123.6		908	1362.0	99.0
Thallium				22.8	21.7		18.2	27.3	95.2
Vanadium				113.5	117.9		90.8	136.2	103.9
Zinc				113.5	114.6		90.8	136.2	101.0

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCS-66996**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury				0.8	0.8		0.6	0.9	100.0

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCSD-66879**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Aluminum	9100.0	8999.21	98.9						
Antimony	455.0	469.35	103.2						
Arsenic	455.0	449.83	98.9						
Barium	9100.0	9132.64	100.4						
Beryllium	227.0	228.92	100.8						
Cadmium	227.0	223.54	98.5						
Calcium	22700.0	21609.23	95.2						
Chromium	910.0	896.71	98.5						
Cobalt	2270.0	2228.86	98.2						
Copper	1130.0	1112.41	98.4						
Iron	4550.0	4449.90	97.8						
Lead	455.0	449.54	98.8						
Magnesium	22700.0	22395.51	98.7						
Manganese	2270.0	2252.41	99.2						
Nickel	2270.0	2230.64	98.3						
Potassium	22700.0	22320.52	98.3						
Selenium	455.0	457.54	100.6						
Silver	1130.0	1174.37	103.9						
Sodium	22700.0	22371.80	98.6						
Thallium	455.0	423.30	93.0						
Vanadium	2270.0	2253.15	99.3						
Zinc	2270.0	2180.58	96.1						

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LABORATORY CONTROL SAMPLE

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Solid LCS Source: LCS(D) ID:

Aqueous LCS Source: **LCSD-66883**

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/Kg) True	Found	C	Limits		%R
Mercury	4.6	4.68	101.7						

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-66883**

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

FIMS2_120622A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	06/22/12 11:21	C	06/22/12 11:40	C	06/22/12 11:58	C		C	M
Mercury	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	CV

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

FIMS2_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 12:17	C	06/22/12 12:23	C		C	Preparation Blank	C	M
Mercury			0.028	U	0.028	U					CV

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-66996**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

FIMS2_120629A

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	06/29/12 10:22	C	06/29/12 10:34	C		C		C	M
Mercury	0.028	U	0.028	U	0.028	U			0.002	B	CV

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3

BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): WATER

Method Blank ID: **MB-66879**

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

OPTIMA3_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 6:50	C	06/22/12 7:16	C	06/22/12 7:34	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	66.000	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	9.300	U	P
Arsenic	4.3	U	4.3	U	4.3	U	4.3	U	4.300	U	P
Barium	1.1	B	1.1	B	1.3	B	1.4	B	1.100	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.260	U	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.890	U	P
Calcium	110.0	U	110.0	U	110.0	U	110.0	U	110.000	U	P
Chromium	0.6	U	0.6	U	0.6	U	0.6	U	0.640	U	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.670	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	3.600	U	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	31.000	U	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	4.200	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	76.000	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.000	U	P
Nickel	0.9	U	0.8	U	0.8	U	0.8	U	0.850	U	P
Potassium	76.0	U	76.0	U	76.0	U	268.9	B	102.735	B	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	12.000	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	6.900	U	P
Sodium	-41.4	B	-37.2	B	29.0	U	249.3	B	153.854	B	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	6.200	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	1.100	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	4.900	U	P

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120622A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/22/12 8:19	C		C		C	Preparation Blank	C	M
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			4.3	U							P
Barium			1.4	B							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U							P
Chromium			0.6	U							P
Cobalt			0.7	B							P
Copper			3.6	U							P
Iron			31.0	U							P
Lead			4.2	U							P
Magnesium			76.0	U							P
Manganese			10.0	U							P
Nickel			0.8	U							P
Potassium			98.9	B							P
Selenium			12.0	U							P
Silver			6.9	U							P
Sodium			74.2	B							P
Thallium			6.2	U							P
Vanadium			1.1	U							P
Zinc			4.9	U							P

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): SOIL

Method Blank ID: **MB-66920**

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

OPTIMA3_120626A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/26/12 8:37	C	06/26/12 9:14	C	06/26/12 9:51	C	Preparation Blank	C	M
Aluminum	66.0	U	66.0	U	66.0	U	66.0	U	1.200	U	P
Antimony	9.3	U	9.3	U	9.3	U	9.3	U	0.537	B	P
Arsenic	4.7	B	4.3	U	5.3	B	4.4	B	0.410	U	P
Barium	1.1	U	1.1	U	1.1	U	1.1	U	0.050	B	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.004	B	P
Cadmium	0.9	U	0.9	U	0.9	U	0.9	U	0.015	U	P
Calcium	110.0	U	110.0	U	118.9	B	110.0	U	6.100	U	P
Chromium	0.6	U	0.6	U	-0.9	B	-0.7	B	0.303	B	P
Cobalt	0.7	U	0.7	U	0.7	U	0.7	U	0.044	U	P
Copper	3.6	U	3.6	U	3.6	U	3.6	U	0.812	B	P
Iron	31.0	U	31.0	U	31.0	U	31.0	U	2.573	B	P
Lead	4.2	U	4.2	U	4.2	U	4.2	U	0.170	U	P
Magnesium	76.0	U	76.0	U	76.0	U	76.0	U	0.630	U	P
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	0.130	U	P
Nickel	0.9	U	0.8	U	0.8	U	1.0	B	0.043	U	P
Potassium	76.0	U	76.0	U	76.0	U	96.1	B	3.400	U	P
Selenium	12.0	U	12.0	U	12.0	U	12.0	U	0.640	U	P
Silver	6.9	U	6.9	U	6.9	U	6.9	U	0.156	B	P
Sodium	46.9	B	29.0	U	52.1	B	29.0	U	1.100	U	P
Thallium	6.2	U	6.2	U	6.2	U	6.2	U	0.220	U	P
Vanadium	1.1	U	1.1	U	1.1	U	1.1	U	0.060	U	P
Zinc	4.9	U	4.9	U	4.9	U	4.9	U	1.061	B	P

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BLANKS

Lab Name: Spectrum Analytical, Inc. Contract: 212436

Lab Code: MITKEM Case No.: SAS No.: SDG No.: SL1348

Preparation Blank Matrix (soil/water): Method Blank ID:

Preparation Blank Concentration Units (ug/L or mg/kg):

OPTIMA3_120626A

Analyte	Initial Calibration Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 06/26/12 10:33	C		C		C	Preparation Blank	C	M
Aluminum			66.0	U							P
Antimony			9.3	U							P
Arsenic			4.3	U							P
Barium			1.2	B							P
Beryllium			0.3	U							P
Cadmium			0.9	U							P
Calcium			110.0	U	110.0	U					P
Chromium			-1.1	B							P
Cobalt			0.7	U							P
Copper			7.7	B	6.6	B					P
Iron			31.0	U	31.0	U					P
Lead			5.5	B							P
Magnesium			76.0	U	76.0	U					P
Manganese			10.0	U							P
Nickel			0.8	U							P
Potassium			76.0	U							P
Selenium			12.0	U							P
Silver			6.9	U							P
Sodium			76.1	B							P
Thallium			6.2	U							P
Vanadium			1.1	U							P
Zinc			15.9	B	6.0	B					P

* Wet Chemistry *

REPORT NARRATIVE

Spectrum Analytical, Inc. Featuring Hanibal Technology, RI Division.

Client : Labella Associates

Project: Barker Chemical

Laboratory Workorder / SDG #: L1348

EPA 300.0, SM 4500D S-, SW846 9045C

I. SAMPLE RECEIPT

No exceptions or unusual conditions were encountered unless a Sample Condition Notification Form, or other record of communication is included with the Sample Receipt Documentation.

II. HOLDING TIMES

A. Sample Preparation:

All samples were prepared within the method-specified holding times.

B. Sample Analysis:

All samples were analyzed within the method-specified holding times.

III. METHODS

Samples were analyzed following procedures in laboratory test code: EPA 300.0, SM 4500D S-, SW846 9045C

IV. PREPARATION

Aqueous Samples were prepared following procedures in laboratory test code: EPA 300.0, SM 4500D S-, SW846 9045C

V. INSTRUMENTATION

The following instrumentation was used to perform analysis:

Instrument Code: IC1
Instrument Type: IC
Description: DX-500
Manufacturer: Dionex
Model: DX-500
GC Column used: 0.25 m X 4 mm ID [um thickness] AS14A-7 capillary column.

Instrument Code: SPEC2
Instrument Type: SP
Description: Spectronic 20 Genesys
Manufacturer: Spectronic Instruments
Model: 4004-000

Instrument Code: WC03
Instrument Type: Probe
Description: pH Meter
Manufacturer: Oakton Instruments
Model: Bench 2700 Series

VI. ANALYSIS

A. Calibration:

Calibrations met the method/SOP acceptance criteria.

B. Blanks:

All method blanks were within the acceptance criteria.

C. Spikes:

1. Laboratory Control Spikes (LCS):

Percent recoveries for lab control samples were within the QC limits.

2. Matrix Spike / Matrix Spike Duplicate (MS/MSD):

No client-requested MS/MSD analyses were included in this SDG.

D. **Duplicate sample:**

Relative percent differences were within the QC limits.

E. **Dilutions:**

The following samples were analyzed at dilution:

SW-2 (L1348-02C), dilution factor: 10 for Sulfate

F. **Samples:**

No other unusual occurrences were noted during sample analysis.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Spectrum, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Signed: 

Date: 07/10/12

Data Flag/Qualifiers:

U Not Detected. This compound was analyzed-for but not detected. For most analyses the reporting limit (lowest standard concentration) is the value listed. For Department of Defense programs, this is the Limit of Detection (LOD).

J This flag indicates an estimated value due to either
- the compound was detected below the reporting limit, or
- estimated concentration for Tentatively Identified Compound

B This flag indicates the compound was also detected in the associated Method Blank. The B flag has an alternative meaning for Inorganics analyses reported using CLP ILM-type metals forms, indicating a "trace" concentration below the reporting limit and equal to or above the detection limit.

D For Organics analysis, this flag indicates the compound concentration was obtained from a secondary dilution analysis

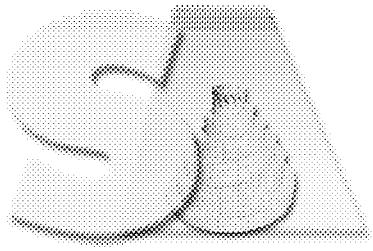
E This flag indicates the compound concentration exceeded the Calibration Range. The E flag has an alternative meaning for Inorganics analyses reported using CLP metals forms, indicating an estimated concentration due to the presence of interferences, as determined by the serial dilution analysis.

P This flag is used for pesticides/PCB/herbicide compound when there is a greater than 40% difference for detected concentration between the two GC columns used for primary and confirmation analyses. This difference typically indicates an interference, causing one value to be unusually high. The **lower** of the two values is generally reported on the Form 1, and both values reported on the Form 10.

A Used to flag semivolatile organic Tentatively Identified Compound library search results for compounds identified as aldol condensation byproducts.

N Used to flag results for volatile and semivolatile Organics analysis Tentatively Identified Compounds where an analyte has passed the identification criteria, and is considered to be positively identified. For Inorganics analysis the N flag indicates the matrix spike recovery falls outside of the control limit.

* For Inorganics analysis the * flag indicates Relative Percent Difference for duplicate analyses is outside of the control limit.



Sample ID Suffixes

DL Diluted analysis. The sample was diluted and reanalyzed. The DL may be followed by a digit if more than one diluted reanalysis is provided. The DL suffix is not attached to an analysis initially performed at dilution, only to reanalyses performed at dilution

RE Reanalysis. Appended to the client sample ID to indicate a reextraction and reanalysis or a reanalysis of the original sample extract.

RA Reanalysis. Appended to the laboratory sample ID indicates a reanalysis of the original sample extract.

RX Reextraction. Appended to the laboratory sample ID indicates a reextraction of the sample.

MS Matrix Spike.

MSD Matrix Spike Duplicate

DUP Duplicate analysis

SD Serial Dilution

PS Post-digestion or Post-distillation spike. For metals or inorganic analyses

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SW-1
Lab ID: L1348-01
Project: Barker Chemical
Collection Date: 06/13/12 11:45

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							**E300IC_W**
Sulfate	92		5.0	mg/L	1	06/25/2012 11:04	66880
SM 4500D S- -- Total Sulfides							**SM4500_S-_W**
Sulfide	ND		0.030	mg/L	1	06/19/2012 9:10	66829

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SW-2
Lab ID: L1348-02
Project: Barker Chemical
Collection Date: 06/13/12 12:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
EPA 300.0 -- Ion Chromotography (LOW)							**E300IC_W**
Sulfate	210		50	mg/L	10	06/26/2012 14:13	66880
SM 4500D S- -- Total Sulfides							**SM4500_S-_W**
Sulfide	0.40		0.030	mg/L	1	06/19/2012 9:12	66829

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-3
Lab ID: L1348-03
Project: Barker Chemical
Collection Date: 06/13/12 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.3		1.0	S.U.	1	06/26/2012 17:16	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-6
Lab ID: L1348-04
Project: Barker Chemical
Collection Date: 06/13/12 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.3		1.0	S.U.	1	06/26/2012 17:17	R68121

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-13
Lab ID: L1348-05
Project: Barker Chemical
Collection Date: 06/13/12 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	8.2		1.0	S.U.	1	06/26/2012 17:18	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-24
Lab ID: L1348-06
Project: Barker Chemical
Collection Date: 06/13/12 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.3		1.0	S.U.	1	06/26/2012 17:20	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-28
Lab ID: L1348-07
Project: Barker Chemical
Collection Date: 06/13/12 13:00

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.6		1.0	S.U.	1	06/26/2012 17:21	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-29
Lab ID: L1348-08
Project: Barker Chemical
Collection Date: 06/13/12 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	7.2		1.0	S.U.	1	06/26/2012 17:23	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-40
Lab ID: L1348-09
Project: Barker Chemical
Collection Date: 06/13/12 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.9		1.0	S.U.	1	06/26/2012 17:24	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

Spectrum Analytical, Inc. Featuring Hanibal Technology -- Rhode Island Division

06/27/2012

Client: Labella Associates
Client Sample ID: SS-45
Lab ID: L1348-10
Project: Barker Chemical
Collection Date: 06/13/12 15:15

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SW846 9045C -- Soil and Waste pH							**SW9045_S**
pH	6.7		1.0	S.U.	1	06/26/2012 17:25	R68121

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
DF - Dilution Factor
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
RL - Reporting Limit

CLIENT: Labella Associates
Work Order: L1348
Project: Barker Chemical

ANALYTICAL QC SUMMARY REPORT

E300IC_W

EPA 300.0 -- Ion Chromotography (LOW)

Sample ID: **MB-66880** SampType: **MBLK** TestCode: **E300IC_W** Prep Date: **06/21/12 9:00** Run ID: **IC1_120625A**
Client ID: **MB-66880** Batch ID: **66880** Units: **mg/L** Analysis Date: **06/25/12 8:24** SeqNo: **1759461**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	ND	0.20	5.0									

Sample ID: **LCS-66880** SampType: **LCS** TestCode: **E300IC_W** Prep Date: **06/21/12 9:00** Run ID: **IC1_120625A**
Client ID: **LCS-66880** Batch ID: **66880** Units: **mg/L** Analysis Date: **06/25/12 8:36** SeqNo: **1759462**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	41.02	0.20	5.0	40.00	0	103	90	110	0			

Sample ID: **LCSD-66880** SampType: **LCSD** TestCode: **E300IC_W** Prep Date: **06/21/12 9:00** Run ID: **IC1_120625A**
Client ID: **LCSD-66880** Batch ID: **66880** Units: **mg/L** Analysis Date: **06/25/12 8:47** SeqNo: **1759463**

Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfate	40.98	0.20	5.0	40.00	0	102	90	110	41.02	0.101	20	

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

CLIENT: Labella Associates
Work Order: L1348
Project: Barker Chemical

ANALYTICAL QC SUMMARY REPORT

SM4500_S-_W

SM 4500D S- -- Total Sulfides

Sample ID: **MB-66829**	SampType: **MBLK**	TestCode: **SM4500_S-_W**			Prep Date: **06/19/12 9:00**				Run ID: **SPEC2_120619A**			
Client ID: **MB-66829**	Batch ID: **66829**	Units: **mg/L**			Analysis Date: **06/19/12 9:02**				SeqNo: **1757410**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	ND	0.030	0.030									

Sample ID: **LCS-66829**	SampType: **LCS**	TestCode: **SM4500_S-_W**			Prep Date: **06/19/12 9:00**				Run ID: **SPEC2_120619A**			
Client ID: **LCS-66829**	Batch ID: **66829**	Units: **mg/L**			Analysis Date: **06/19/12 9:04**				SeqNo: **1757411**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	0.2083	0.030	0.030	0.2000	0	104	80	120	0			

Sample ID: **LCSD-66829**	SampType: **LCSD**	TestCode: **SM4500_S-_W**			Prep Date: **06/19/12 9:00**				Run ID: **SPEC2_120619A**			
Client ID: **LCSD-66829**	Batch ID: **66829**	Units: **mg/L**			Analysis Date: **06/19/12 9:05**				SeqNo: **1757412**			
Analyte	Result	MDL	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Sulfide	0.2051	0.030	0.030	0.2000	0	103	80	120	0.2083	1.57	20	

Qualifiers:
ND - Not Detected at the MDL
J - Analyte detected below quanititation limits
S - Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
MDL - Method Detection Limit
RL - Reporting Limit
B - Analyte detected in the associated Method Blank

SPECTRUM ANALYTICAL, INC.

Featuring

HANIBAL TECHNOLOGY

Form 1 Summary Pack

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-3

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-01	File ID:	20120625-082
Sampled:	06/13/12 13:00	Prepared:	06/22/12 11:15		
% Solids:	93.16	Preparation:	SW846 3050B	Initial/Final:	1.002 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	3200	10	4.43	53.6	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-6

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-02	File ID:	20120625-083
Sampled:	06/13/12 13:00	Prepared:	06/22/12 11:15		
% Solids:	92.71	Preparation:	SW846 3050B	Initial/Final:	1.0442 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	2650	20	8.54	103	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-13

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-03	File ID:	20120625-089
Sampled:	06/13/12 13:00	Prepared:	06/22/12 11:15		
% Solids:	89.72	Preparation:	SW846 3050B	Initial/Final:	1.0693 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	1770	10	4.31	52.1	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-24

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-04	File ID:	20120625-090
Sampled:	06/13/12 13:00	Prepared:	06/22/12 11:15		
% Solids:	76.93	Preparation:	SW846 3050B	Initial/Final:	1.1122 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	2600	10	4.83	58.4	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-28

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-05	File ID:	20120625-091
Sampled:	06/13/12 13:00	Prepared:	06/22/12 11:15		
% Solids:	59.86	Preparation:	SW846 3050B	Initial/Final:	1.0567 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	1780	10	6.54	79.0	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-29

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-06	File ID:	20120625A-028
Sampled:	06/13/12 15:15	Prepared:	06/22/12 11:15		
% Solids:	84.03	Preparation:	SW846 3050B	Initial/Final:	1.1781 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	158	1	0.418	5.05	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-40

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-07	File ID:	20120625A-029
Sampled:	06/13/12 15:15	Prepared:	06/22/12 11:15		
% Solids:	72.17	Preparation:	SW846 3050B	Initial/Final:	1.0121 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	218	1	0.566	6.84	

FORM I - INORGANIC ANALYSIS DATA SHEET

SW846 6010C

SS-45

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-08	File ID:	20120625A-034
Sampled:	06/13/12 15:15	Prepared:	06/22/12 11:15		
% Solids:	64.28	Preparation:	SW846 3050B	Initial/Final:	1.0779 g / 50 ml
Batch:	1214861	Sequence:	S207915	Calibration:	1206079
Instrument:	ICAP2				
Reported to:	MDL				

CAS NO.	Analyte	Result (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7704-34-9	Sulfur	188	1	0.597	7.22	

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-3

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-01	File ID:	
Sampled:	06/13/12 13:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	93.16	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	93.2	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-6

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-02	File ID:	
Sampled:	06/13/12 13:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	92.71	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	92.7	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-13

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-03	File ID:	
Sampled:	06/13/12 13:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	89.72	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	89.7	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-24

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-04	File ID:	
Sampled:	06/13/12 13:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	76.93	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	76.9	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-28

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-05	File ID:	
Sampled:	06/13/12 13:00	Prepared:	06/21/12 12:18	Analyzed:	06/21/12 16:44
% Solids:	59.86	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214836	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	59.9	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-29

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-06	File ID:	
Sampled:	06/13/12 15:15	Prepared:	06/22/12 10:51	Analyzed:	06/22/12 14:54
% Solids:	84.03	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214953	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	84.0	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-40

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-07	File ID:	
Sampled:	06/13/12 15:15	Prepared:	06/22/12 10:51	Analyzed:	06/22/12 14:54
% Solids:	72.17	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214953	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	72.2	1			

FORM I - INORGANIC ANALYSIS DATA SHEET

SM2540 G Mod.

SS-45

Laboratory:	Spectrum Analytical, Inc. - Agawam, MA			SDG:	51440
Client:	Spectrum Analytical, Inc.-- RI Division			Project:	See Chain of Custody
Project Number:	L1348			Received:	06/19/12 17:30
Matrix:	Soil	Laboratory ID:	SB51440-08	File ID:	
Sampled:	06/13/12 15:15	Prepared:	06/22/12 10:51	Analyzed:	06/22/12 14:54
% Solids:	64.28	Preparation:	General Preparation	Initial/Final:	1 g / 1 ml
Batch:	1214953	Sequence:		Calibration:	
Instrument:	Inst				
Reported to:	MDL				

CAS NO.	Analyte	Result (%)	Dilution Factor	MDL	MRL	Q
solids	% Solids	64.3	1			

LaBella Associates, P.C.
300 Pearl Street, Suite 325
Buffalo, New York 14202

Appendix 3

Pre-Demolition Regulated Building Materials Assessment Report

LABELLA Associates, P.C.

Engineering
Architecture
Environmental
Planning

Pre-Demolition
Regulated Building Materials Inspection

Location:
Barker Chemical
8473 West Somerset Road
Barker, NY 14132

Prepared for:
Niagara County
Niagara County Dept. Economic Dev
Sanborn, NY 14012

LaBella Project No. 212436

June 2012

Table of Contents

I. Project Description

In accordance with current regulations, LaBella Associates, P.C. conducted a Pre- Demolition Regulated Building Materials (RBM) Inspection of the Barker Chemical building at 8473 West Somerset Road, Barker, NY. The objective was to identify common building materials, such as asbestos-containing materials, lead-based paint, PCB caulk and other RBM that must be abated or removed before or during demolition due to applicable regulations. The areas inspected include the interior and exterior, including the roof. The building in its entirety is expected to be impacted during the planned demolitions.

See the Survey Results Section of this report for further details concerning the above referenced regulated building materials.

II. Survey Procedures

The following procedures were used to obtain the data for this Report:

A. A visual inspection of the site was conducted to identify potential visible/accessible sources of the following regulated building materials.
   - Asbestos-containing materials
   - PCB-containing materials
   - Mercury containing materials
   - Lead-containing materials

B. Bulk samples of the following materials were collected and submitted for laboratory analysis:
   - Suspect asbestos-containing materials
   - Asbestos samples were submitted for laboratory analysis. Preliminary Polarized Light Microscopy analyses of non-friable, organically bound (NOB) materials were performed by LaBella Laboratories, a NYSDOH approved laboratory, to determine the presence and percentage of asbestos in each sample. Transmission electron microscopy analyses of NOB materials, if necessary, were performed by AMA Laboratories.
   - Suspect lead-based paint was spot checked in the field using "Lead Check" color-metric swab testing procedures.
   - Results of the laboratory analyses, field testing and the visual on-site survey were compiled and summarized.

Limitations: This survey was conducted in a manner consistent with generally recognized professional practices for a pre-demolition building survey. Collection of bulk samples of suspect ACMs was limited to those materials readily accessible using hand tools or hand-held power tools. No sub-surface investigations were performed to determine the possible presence of regulated materials on or in the immediate vicinity of the Site including the coring of the concrete slabs. No record drawings of the building were available for review as part of this investigation. Additionally there was vegetation growth

that may have concealed exterior conditions, and additional asbestos-containing materials.

III. Survey Results

Asbestos-Containing Materials (ACMs)

Based on laboratory analyses of bulk samples collected, the following materials were determined to contain greater than 1% asbestos:

Asbestos Containing Materials Summary Table

Barker Chemical Building				
Type of Material	**Typical Location[1]**	**Estimated Amount[2]**	**Friability**	**Condition**
Black Roofing	Entire Roof Including Debris on Floor and in Field	5680 SF	Non-Friable	Damaged
White Window Glazing Compound	On the Glass Panes and Muntins of the Windows	80 LF	Non-Friable	Damaged

Asbestos-Containing Materials (ACMs) Continued

Black Roofing
Asbestos-containing roofing materials are on the field, flashing, and penetrations of the entire roof. However, much of the roof has deteriorated and is either on the floor of the building or along the exterior.

White Window Glazing Compound
Asbestos-containing white window glazing compound is located on the exterior windows. There is ACM below the windows where the window glazing compound is missing from the glass panes and muntins.

PCB-Containing Materials

Capacitors in Fluorescent Light Fixture Ballasts
No ceiling mounted fluorescent light fixtures were observed in the building.

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1 Typical Location may not be inclusive of all material locations present at the subject structure.

2 For general reference only: Estimated amounts of confirmed ACMs listed above were obtained through field observations made during site visits. Quantities are approximations and LaBella assumes no responsibility if used for bidding.

Caulk
There are no suspect caulks present in the building.

Mercury-Containing Materials

No mercury thermostats were identified in the inspected areas.

Lead – Based Paint

Several representative interior and exterior painted surfaces such as window and door frames, CMU, etc. were tested for the presence of lead-based paint using color-metric lead swab testing procedures. Wooden components were found to be positive for the presence of lead-based paint.

IV. Observations and Cautionary Statements

The Barker Chemical building is in a deteriorating condition. The exterior is partially concealed by vegetation. Asbestos-containing window glazing compound is missing from many window panes. Roofing materials and window glazing compound pieces are likely to be on the ground in the long grass and weeds. These materials are to be picked up and disposed of as ACM prior to the demolition of the building.

A heating unit is located in the South section of the building. No suspect materials were observed on or around the unit but there may be ACM inside of the unit, beyond the jacket.

J:\Niagara County\212436\RBM\RBM Report .doc

Asbestos Bulk Sample Summary Tables

LaBella Asbestos Bulk Sample Summary Table

Barker Chemical Building
8473 West Somerset Road
LaBella Project 212436

Sample #	Sample Location	Type of Material	Results % Asbestos
1A	Floor of the Main Room	Black Rolled Roofing	8% Chrysotile
1B	East Roof Edge	Black Rolled Roofing	Not Analyzed
2A	South West Window	White Window Glazing Compound	10% Chrysotile
2B	North West Window	White Window Glazing Compound	Not Analyzed

Appendix A
Asbestos Survey Fact Sheet

Asbestos Survey Fact Sheet

Name and Address of Building/Structure

Barker Chemical

8473 West Somerset Road

Barker, New York

Name and Address of Building/Structure Owner

Niagara County

Niagara County Dept. Economic Dev.

Sanborn, NY 14132

Name and Address of Owner's Agent

LaBella Associates, P.C.

300 State Street, Suite 201

Rochester, NY 14614

Name of the Firm & Person Conducting the Survey

LaBella Associates, P.C.

Michael Croteau *(NYSDOL Cert. #08-16526)*

Date(s) the Survey Was Conducted

June 12, 2012

Asbestos Survey Fact Sheet
(continued)

List of Homogeneous Areas
8473 West Somerset Road, Barker, NY
(Items in Bold Confirmed ACM)

Black Rolled Roofing

White Window Glazing Compound

Appendix B

Licenses and Certifications

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2012
Issued April 01, 2011

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. RICHARD K. ROTE
LABELLA ASSOCIATES
300 STATE STREET SUITE 200
ROCHESTER, NY 14614

NY Lab Id No: 11184
EPA Lab Code:

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	EPA 600/M4/82/020
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)

Serial No.: 44184

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2013
Issued April 1, 2012

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. G EDWARD CARNEY
AMA ANALYTICAL SERVICES INC
4475 FORBES BLVD
LANHAM, MD 20706

NY Lab Id No: 10920

is hereby APPROVED as an Environmental Laboratory for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:

Miscellaneous

Asbestos in Friable Material	EPA 600/M4/82/020
	Item 198.1 of Manual
Asbestos in Non-Friable Material-PLM	Item 198.6 of Manual (NOB by PLM)
Asbestos in Non-Friable Material-TEM	Item 198.4 of Manual
Lead in Dust Wipes	EPA 7000B
Lead in Paint	EPA 7000B

Sample Preparation Methods

	ASTM E-1979-04
	EPA 600/R-93/200

Serial No.: 46674

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

STATE OF NEW YORK - DEPARTMENT OF LABOR

ASBESTOS CERTIFICATE

MICHAEL N CROTEAU

CLASS(EXPIRES)

C ATEC(04/13) D INSP(04/13)

H PM (04/13)

DEPARTMENT OF LABOR

CERT# 08-16526

DMV# 500543856

MUST BE CARRIED ON ASBESTOS PROJECTS

EYES BRO
HAIR BRO
HGT 6' 00"

IF FOUND RETURN TO:
NYSDOL - L&C UNIT
ROOM 161A BUILDING 12
STATE OFFICE CAMPUS
ALBANY NY 12240

NEW YORK STATE - DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH
LICENSE AND CERTIFICATE UNIT
STATE CAMPUS BUILDING 12
ALBANY, NY 12240

ASBESTOS HANDLING LICENSE

La Bella Associates PC
Suite 200
300 State Street

Rochester, NY 14614

FILE NUMBER: 99-1172
LICENSE NUMBER: 29278
LICENSE CLASS: RESTRICTED
DATE OF ISSUE: 01/19/2012
EXPIRATION DATE: 02/28/2013

Duly Authorized Representative – Sergio Esteban:

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. This license verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Maureen A. Cox

Maureen A. Cox, Director
FOR THE COMMISSIONER OF LABOR

SH 432 (4-07)

Appendix C

Laboratory Analytical Reports

BULK SAMPLE ASBESTOS ANALYTICAL REPORT

LABELLA ASSOCIATES, P. C.
ANALYTICAL LABORATORY
300 STATE STREET
ROCHESTER, NY 14614
(585) 454-6110 FAX(585) 454-3066

LBL JOB # 43412

ELAP # 11184
TEM ELAP # 10920

LABELLA PROJECT # 212436/1

434

CLIENT: Labella Associates, PC
ADDRESS: 300 State Street
Rochester, NY 14614

SAMPLE TYPE: PLM Bulk
SAMPLE DATE: 06/12/2012

PROJECT LOCATION: Barker Chemicle, 8473 West Somerset Road, Barker, NY

FIELD ID	LBL ID	method	ASBESTOS TYPE	%	OTHER FIBERS	%	MATRIX	%	COLOR / DESCRIPTION
1A	43412-1	N	CHRYSOTILE	8	CELLULOSE	22	TAR	70	BLACK LAYERED ROOFING
2A	43412-2	N	CHRYSOTILE	10	ND		MIN/BINDER	90	WHITE WINDOW GLAZING COMPOUND

PLM Methods 198.1, 198.4, 198.6 & EPA 600/M4/82/020

Lab Supervisor: Matt Smith Date: 6/12/12

ND - None Detected CELL-Cellulose JC - Joint Compound MIN - Mineral GLASS - Fiberglass <1 = Trace PLAS - Plaster
P - Friable PLM analytical result N - NOB PLM analytical result T - TEM analytical result IN - Inconclusive*
G-Gravimetric Matrix Reduction; Sample residue weight <1% of original sample weight, TEM not required.

*"Polarized-light microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can be used to determine if this material can be considered to be non-asbestos containing."