INITIAL SITE SAMPLING PLAN
MERCHANTS METALS
Statesville, Iredell County, North Carolina

ESI Project ER10-125.00
October 22, 2010

FOR

MMI Products, Inc.
400 N. Sam Houston Parkway E
Suite 1200
Houston, Texas 77060

BY

ENVIRONMENTAL SERVICES, INC.
524 S. New Hope Road
Raleigh, North Carolina, 27610
(919) 212-1760 and (919) 212-1707 (fax)
www.environmentalservicesinc.com

Table of Contents

Appendix:

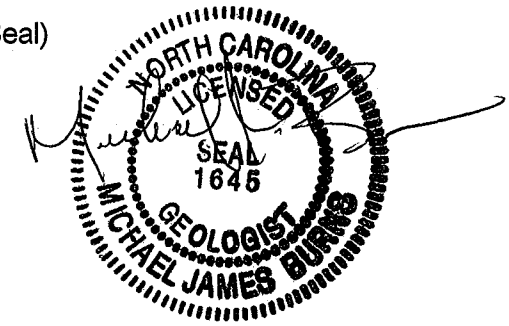
1.0 Title Page

Date: October 2010
***Property* Name: Merchants Metals Facility**
***Property* Location: 165 Fanjoy Road**
Nearest City/Town: Statesville
County: Iredell

Owner Information:	Merchants Metals 400 N. Sam Houston Parkway E Suite 1200 Houston, TX 77060
Facility Information:	Merchants Metals 165 Fanjoy Road Statesville, NC 28625 (704) 872-0926
Consultant/Contractor	Michael Burns, P.G. Environmental Services, Inc. 524 S. New Hope Road Raleigh, NC 27610 (919) 212-1760

I, Michael Burns a Professional Engineer/Licensed Geologist (circle one) for Environmental Services, Inc., do certify that the information contained in this report is correct and accurate to the best of my knowledge.

(Seal)



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2.0 Introduction

Environmental Services, Inc. (ESI) has completed the Initial Site Sampling Plan (ISSP) for the Merchants Metals facility (hereafter referred to as the *property*) located at 165 Fanjoy Road in Statesville, Iredell County, North Carolina (**Figure 1**). The ISSP has been prepared in general accordance with the North Carolina Department of Environment and Natural Resources (NCDENR), Division of Waste Management, Hazardous Waste Section: *Generator Closure Guidelines* (Guidelines) dated June 18, 2008. This ISSP has been prepared to provide information concerning the *property*, previous investigations, receptors, proposed sampling plan and a schedule for completion of the proposed work. The report follows as close as reasonably possible the outline described in the Guidelines. Tabulated summaries of information and data (as well as appropriate figures) are provided.

3.0 Merchants Metals Facility Description

The *property* is located at 165 Fanjoy Road in Statesville, Iredell County, North Carolina (**Figure 1**). The *property* is situated about 600 feet northwest of the intersection of US Highway 70 (Salisbury Highway) and Fanjoy Road. Based on Iredell County tax records, the *property* is identified as parcel ID No. 4753879727 and has an area of approximately 22 acres. Merchants Metals is listed as the current owner with a purchase date of January 21, 1982 from Joy Areas Farm, LTD (a limited partnership owned by John A. Fanjoy, Weldon S. Fanjoy and Thomas A. Fanjoy). The *property* is located at 35°47'47.71"N latitude and 80°49'25.49"W longitude (center of *property*).

The Merchants Metals facility manufactures various types of metal fencing beginning with the raw materials and ending with the finished product. The facility has been in operation since the early 1980s. The *property* development consists of a main office/manufacturing building located in the eastern portion of the *property* near Fanjoy Road. A former galvanizing building (currently empty) is located about 50 feet to the west of the main building. The remainder of the developed portion of the *property* consists of asphalt paved storage areas, loading and unloading areas, and storage buildings of various sizes. The western portion of the *property* is undeveloped wooded land. There is a significant down slope from the developed portion to the undeveloped portion of up to 30 feet in some areas. The slope is due to fill being placed on the *property* during development. The *property* is supplied with public water and sewer. There is an unused septic tank located northwest of the main building and an unused drinking water well in the northern portion of the *property*. An

unnamed tributary of Fourth Creek is located in the western portion of the *property.* The unnamed tributary apparently originates southwest of the *property* near the eastern edge of a closed Iredell County C&D landfill and to the south near the Accuma Corp. parcel.

3.1 Adjacent Properties

There are three parcels located to the north of the *property*, two of which are owned by Wanda and Kimber Haneline with the remaining parcel being owned by Douglas Haneline. These parcels are a mixture of a residential development and undeveloped wooded land. The parcel located to the east across Fanjoy Road is owned by Joy Acres Farm, LTD and is a mixture of wooded land and agricultural fields. The parcel to the southeast across Fanjoy Road is owned by Iredell Fiber, Inc. and is industrially developed. The parcels located to the south and southwest are owned by Accuma Corp. The Accuma Corp. parcel to the south is industrially developed and the parcel to the southwest is a mixture of wooded land and agricultural fields. The parcel located to the west is owned by Iredell County and consists of closed construction and demolition (C&D) landfills (Phase I and II) and four phases of the Iredell County Municipal Solid Waste Landfill (MSWLF).

4.0 Galvanizing Process

As mentioned in Section 3.0, there is a vacant galvanizing building located to the west of the main building. Beginning in the 1980s, fencing fabric was processed through this area of the facility to apply a galvanized coating for rust protection. The "hot-dip" galvanizing process included surface preparation of the material starting with a caustic cleaning dip tank (7,000 gallon steel tank) containing an alkali solution, followed by a clean water rinse in a steel 3,500 gallon steel tank, then "pickling" by immersing the fencing fabric in a fiberglass-lined concrete 8,000 gallon hydrochloric acid (HCL) tank to remove impurities. Following the surface preparation, the fencing products were galvanized by immersing them in molten zinc bath (4,000 gallon steel kettle) with a flux of zinc ammonium chloride floating on the surface, run through three water cooling tanks (600 gallons steel each), and then sealed using a chromic acid solution (1% acid, 99% water). The fence fabric was then run through the process a second time. It was during the second run that zinc accumulated in the HCL tank. All tanks were above ground.

In late 2009, all of the tanks were removed and the HCL dip tank was observed to be in degraded condition. Merchants Metals contracted Terracon to mobilize to the facility to observe the tank conditions and to perform preliminary assessment activities. The following section describes the assessment activities performed by Terracon.

5.0 Source Characterization

5.1 Terracon November 2009 Assessment Activities

On November 17, 2009, Terracon completed a subsurface assessment to evaluate the area beneath the degraded former HCL dip tank. Terracon cored through the concrete slab in six locations (B-1 through B-6) within the former HCL dip tank. According to information provided to Merchants Metals by Terracon, the concrete at the bottom of the former HCL tank consisted of a 4-inch layer of concrete, a thin layer of fiberglass and another 4-inch layer of concrete (floor slab). After coring through the bottom of the tank, hand auger borings were advanced in each area to a maximum depth of five feet below the lower concrete slab. Soil samples were collected from each soil boring at one foot and four feet for laboratory analyses for pH, cadmium, chromium, lead, and zinc. The results of the laboratory analyses indicated concentrations of zinc in all of the samples that exceeded the Hazardous Waste Section, Soil Screening Level (SSL) of 500 milligrams per kilogram (mg/Kg). None of the zinc concentrations detected exceeded the Residential Risk-Based Cleanup Level (RRBCL) of 23,000 mg/Kg. Cadmium concentrations exceeded the SSL of 0.95 mg/Kg in sample B-1 @ 4' (2.1 mg/Kg), B-2 @ 1' (4.5 mg/Kg), B-2 @ 4' (2.3 mg/Kg), B-3 @ 4' (4.2 mg/Kg), B-4 @ 1' (3.5 mg/Kg), B-4 @ 4' (2.1 mg/Kg), B-5 @ 4' (2.6 mg/Kg), B-6 @ 1' (2.5 mg/Kg), and B-6 @ 4' (2.0 mg/Kg). None of the cadmium concentrations exceeded the RRBCL of 37 mg/Kg. Total chromium concentrations exceeded the SSL of 27.2 mg/Kg in the samples collected from B-2 @ 1' (70 mg/Kg), B-2 @ 4' (27.4 mg/Kg), B-4 @ 1' (64.2 mg/Kg) and B-6 @ 1' (40.2 mg/Kg). None of the total chromium concentrations exceeded the RRBCL of 210 mg/Kg. None of the total lead concentrations exceeded either the SSL of 270 mg/Kg or the RRBCL of 400 mg/Kg. The pH data indicated acidic soil conditions in each of the soil samples; however, the pH analyses were performed beyond the laboratory holding time. Terracon also advanced a background soil boring (BG-1) on the east side of the main building. The background soil data is discussed in Section 5.4. The Terracon sample locations, summary of data (tables) and laboratory reports for the November 17, 2009 sampling are provided in the **Appendix**.

5.2 Terracon January 2010 Assessment Activities

In January 2010, Terracon completed a "Limited Site Investigation" that included advancing 11 soil borings (B-1A, B-4A, B-5A, B-7 through B-14) and four background soil borings (BG-2 through BG-5). Soil borings B-1A, B-4A and B-5A were offset soil borings of the November 2009 borings B-1, B-4 and B-5, respectively. Soil boring B-1A was advanced to 27 feet below the ground surface (bgs), B-4A was advanced to 46 feet bgs, and B-5A was advanced to 26 feet bgs. Soil borings B-7 (22 feet bgs), B-8 (20 feet bgs), B-10 (10 feet bgs), B-11 (20 feet bgs) and B-14 (15 feet bgs) were advanced within the galvanizing building. Soil borings B-9 (25 feet bgs) and B-12 (20 feet bgs) were advanced on the west side of the galvanizing building and soil boring B-14 (15 feet bgs) was advanced on the east side of the galvanizing building. The locations of the soil borings are presented on the Terracon "Soil Boring Location Diagram" provided in the **Appendix**.

As part of the January 2010 assessment, Terracon collected soil samples at various intervals at each soil boring for field screening for pH. Based on information provided by Terracon, it was their conclusion that elevated zinc concentrations were related to highly acidic soil conditions. Based on the pH values in each soil sample measured, Terracon selected at least one soil sample from each soil boring for laboratory analyses for cadmium, chromium, lead and zinc. The laboratory results for the samples collected in January 2010 are as follows:

Former HCL Tank

- B-1A (2 samples analyzed) - Zinc concentrations exceeded the SSL in the sample collected from 10 feet bgs (pH = 3.4) and at 27 feet bgs (pH = 3.4). The sample from 27 feet was at boring termination, so the vertical extent of zinc impact is not defined in this area. Cadmium concentrations exceeded the SSL only the 10 foot bgs sample. None of the other concentrations met or exceeded the applicable SSL.
- B-4A (5 samples analyzed) – Zinc and cadmium concentrations exceeded the SSLs in the samples collected at 7 feet bgs (pH = 3.0) and 16 feet bgs (pH = 3.2). No concentrations above the SSLs were detected in the samples analyzed from 20 feet, 32 feet and 46 feet bgs (pH = 5.1, 5.6 and 5.7). As such, it appears that the cadmium and zinc impact extends to between 16 feet bgs and 20 feet bgs. None of the other concentrations met or exceeded the applicable SSL.
- B-5A (2 samples analyzed) – Zinc impact above the SSL was detected in the samples analyzed from 16 feet bgs (pH = 3.4) and 26 feet bgs (pH = 3.4). A cadmium concentration above the SSL was detected in the sample collected at 16 feet bgs. The vertical extent of zinc impact has not been defined at this location. None of the other concentrations met or exceeded the applicable SSL.

Other Samples Within The Galvanizing Building

- B-7 (2 samples analyzed) – Zinc and cadmium concentrations were detected above the SSLs in the samples collected at 7 feet bgs (pH = 3.3). No concentrations at or above the SSLs were detected in the sample analyzed from 22 feet bgs (pH = 5.5).
- B-8 (2 samples analyzed) – Zinc and cadmium concentrations were detected above the SSLs in the samples collected at 10 feet bgs (pH = 3.7). The other soil samples submitted for laboratory analyses (20 feet bgs) did not indicate any concentrations that met or exceeded the applicable SSL (pH = 5.6).
- B-10 (1 sample analyzed) – Cadmium was detected in the soil sample collected from 10 feet bgs (pH = 5.5). No other concentrations met or exceeded the applicable SSL.
- B-11 (2 samples analyzed) – Zinc exceeded the SSL in the sample collected at 10 feet bgs (pH = 4.1). No other concentrations detected in the 10 foot sample met or exceeded the applicable SSL. None of the concentrations detected in the 20 foot sample met or exceeded the applicable SSL (pH = 5.4).
- B-14 (2 samples analyzed) - Zinc and cadmium concentrations were detected above the SSLs in the samples collected at 7 feet bgs (pH = 4.0). No other concentrations detected in the 7 foot sample met or exceeded the applicable SSL. The other soil samples submitted for laboratory analyses (15 feet bgs) did not indicate any concentrations that met or exceeded the applicable SSL (pH = 5.4).

Upgradient of Galvanizing Building

- B-13 (1 sample analyzed) – None of the concentrations detected in the sample analyzed from 10 feet bgs met or exceeded the applicable SSL (pH = 5.3).

Down-gradient of Galvanizing Building

- B-12 (2 samples analyzed) – Zinc and cadmium concentrations from the samples collected at 15 feet and 20 feet bgs exceeded the SSLs (pH = 4.0 and 3.9). None of the other constituents analyzed indicated concentrations at or above the applicable SSL.
- B-9 (2 samples analyzed) - Zinc and cadmium concentrations were detected above the SSLs in the samples collected at 15 feet bgs (pH = 3.5). None of the other analyzed constituents met or exceeded the applicable SSL. The other soil samples submitted for laboratory analyses (20 feet bgs) did not indicate any concentrations that met or exceeded the SSLs (pH = 5.7).

A summary of the soil analytical data and the laboratory reports are provided in the **Appendix**. ESI **Figure 2** in the **Appendix** depicts the soil boring locations.

Based on soil boring logs provided by Terracon, subsurface soils generally consisted of micaceous sandy silt with some interbedded sand layers to at least 17 feet bgs. The micaceous sandy silt was generally underlain by partially weathered rock (PWR) in some of the soil borings (B-1A @ 22'; B-4A @ 19' to 40'; B-5A @ 20' to 25 feet; and B-7 @ 20' to 21'). The PWR or sandy silt was generally underlain by silty sand. Bedrock (probe refusal) was reportedly encountered in soil boring B-4A at 46 feet. Based on a Site and Erosion Control Plan obtained from Merchants Metals, there appears

to have been up to about eight feet of soil removed (cut) in the northeastern portion of the *property* and up to 20 feet of soil fill added to the western portion of the *property*. The area beneath the galvanizing building appears to have received between about six and 16 feet of fill to achieve the current elevation. There was reportedly no groundwater encountered in any of the soil borings, including boring B-4A which was advanced to 46 feet bgs where bedrock was encountered. Based on information provided by Terracon, soil boring B-4A was left open for several hours and no groundwater entered the soil boring. The Terracon soil boring logs are provided in the **Appendix**.

5.3 Terracon August 2010 Assessment Activities

On August 19, 2010, Terracon advanced four hand auger borings (HA-1 through HA-4) to three feet bgs in the area west of the galvanizing building. The soil boring locations are presented on **Figure 3** in the **Appendix**. Soil samples collected at three feet bgs were submitted for laboratory analyses for cadmium, chromium, lead and zinc. Based on the laboratory data provided by Terracon, zinc exceeded the SSL in the sample collected from HA-1 (943 mg/Kg). Chromium and zinc concentrations exceeded the SSLs in the sample collected from HA-4. A summary of the laboratory data is provided on Terracon **Table 1** in the **Appendix**. The laboratory reports for these samples were not provided by Terracon. Since the laboratory reports were not available for ESI to review, the validity of the data cannot be verified.

5.4 Terracon Background Samples

Terracon has completed seven background soil borings (Background 1 through Background 7). Background 1 was advanced on November 17, 2009, Background 2 though Background 5 were advanced on January 20, 2010, and Background 6 and Background 7 were advanced on August 19, 2010. Background borings 1 through 5 were advanced to 4 feet bgs and Background 6 and 7 were advanced to 3 feet bgs. Background 1, 2 and 3 were advanced on the east side of the main building in a landscaped area. Background 4 and 5 were advanced northwest and southwest of the galvanizing building. Background 6 and 7 were advanced north of the galvanizing building. All of the background sample locations appear to have been advanced in areas where significant depths of fill has been placed, except for background 1, 2 and 3. The background boring locations are depicted on ESI **Figure 3** in the **Appendix**.

The background samples were submitted for laboratory analyses for cadmium, chromium, lead and zinc. In addition, the samples were analyzed in the laboratory (beyond the holding time), or in the

field for pH. The laboratory results indicated cadmium concentrations that ranged from <0.54 mg/Kg to 2.9 mg/Kg. Chromium concentrations ranged from 11.7 mg/Kg to 20.3 mg/Kg. Lead concentrations ranged from 11.2 mg/Kg to 14.7 mg/Kg. Zinc concentrations ranged from 26.8 mg/Kg to 107 mg/Kg. pH values ranged from 4.9 to 5.9 standard units in the background soil samples. Background 7 concentrations were generally higher than those from the other background boring locations (cadmium 2.3 mg/Kg, chromium 53.9 mg/Kg, lead 457 mg/Kg, and zinc 33,600 mg/Kg). A summary of the background analytical data (Terracon Table 1) and laboratory reports are provided in the **Appendix**. The laboratory reports for background samples 6 and 7 were not provided by Terracon. Since the laboratory reports were not available for ESI to review, the validity of the data cannot be verified.

5.5 Stormwater and Surface Water Samples

On August 19, 2010, Terracon collected a stormwater runoff sample, an upstream sample and a downstream sample for analyses for cadmium, chromium, lead and zinc. The stream samples were apparently collected from the unnamed tributary of Fourth Branch Creek. The unnamed tributary of Fourth Branch Creek appears to flow from south to north, apparently with one portion originating just south of the Merchants Metals facility and the other on the adjacent Iredell County landfill property. The unnamed tributary, then flows back onto the Iredell County Landfill property. The sample locations are presented on ESI **Figure 3** in the **Appendix**.

Based on the results of the laboratory analyses of the stormwater runoff and stream samples, zinc concentrations exceeded the NCDENR Surface Water Quality standard of 50 micrograms per liter (ug/L) in all of the samples collected. The stormwater runoff sample result for zinc was 2,270 ug/L. The upstream laboratory result for zinc was 76.8 ug/L and the downstream zinc result was 499 ug/L. A summary of the sampling data is provided on Terracon **Table 2** in the **Appendix**. Laboratory reports for these samples were not provided by Terracon. Since the laboratory reports were not available for ESI to review, the validity of the data cannot be verified.

Based on review of Statesville weather conditions on August 18 and 19, 2010, it appears that between 11:00 PM on the 18th and 10:00 AM on the 19th, almost 2 inches (1.97 inches) of rain fell in the area. Based on the amount of rainfall, there was likely a large amount of suspended sediment in both the stormwater runoff and stream samples. It is ESI's opinion that these sample results were skewed by the presence of sediment in the water samples.

6.0 Contaminants of Concern

Based on the sampling completed to date, it appears that the contaminants of concern (COC) for the Merchants Metals facility are cadmium, chromium and zinc. In addition, acidic pH concentrations are a health concern for subsurface assessment activities. Background data from samples collected indicate that cadmium concentrations detected in some of the soil samples may represent naturally occurring concentrations. However, it appears that all of the background sample locations were in areas where there could be influence by facility operations. Additional background samples should be collected in areas that have historically not been influenced by facility operations.

7.0 Receptor Information

A receptor survey has not been conducted for the facility or the surrounding area. ESI proposes to conduct a receptor survey as part of the ISSP. The receptor survey is proposed to inventory all wells, springs, surface water intakes and other sources of potable water within 1,500 feet of the *property*. In addition, ESI proposes to conduct an evaluation of the *property* and all adjacent properties for the existence of any environmentally sensitive areas as defined in the guidelines.

8.0 Proposed Sampling Plan

ESI proposes to advance four background soil borings in the western portion of the *property* in areas that have been historically undisturbed by the facility operations. The proposed background soil boring locations are present on **Figure 4** in the **Appendix**. The soil borings are proposed to be advanced to maximum depth of five feet bgs or to the local water table, whichever occurs first. The soil borings are proposed to be advanced using a hand auger since the proposed locations are in a wooded area where access with a drill rig may be difficult. Soil samples are proposed to be classified in the field by a geologist. Soil samples are proposed to be selected for laboratory analyses from each distinct soil strata observed in each background soil boring.

8.1 Equipment and Personnel Decontamination Procedures

To prevent cross contamination in the field that could result in inaccurate analytical data, ESI requires that subcontracted firms and field personnel observe very strict decontamination procedures. The decontamination procedures are briefly described below.

8.1.1 Drilling Equipment Decontamination Procedure

The drilling equipment is proposed to be decontaminated in a designated area away from the soil borings. The decontamination area is proposed to consist of several layers (at least 3) of plastic sheeting. The base of the decontamination area is proposed to be constructed in a way so that the decontamination water will drain to a location where it can be collected into 55-gallon drums for storage until laboratory results are evaluated. If laboratory results indicate potential contamination, the drummed decontamination water will be transported to an approved treatment facility for disposal. The drilling equipment will be decontaminated using liquinox and distilled water. The drilling equipment will be decontaminated upon arrival to the *property*, between each soil boring, and prior to leaving the *property*. The effectiveness of the decontamination process will be evaluated by collecting equipment rinsate blanks for laboratory analyses.

8.1.2 Personnel Decontamination Procedures

All field personnel are required to wear disposable nitrile gloves during sampling activities. The gloves are stored in a new Ziploc plastic bag between project locations to prevent cross-contamination. The gloves will be changed and discarded after collection of each sample. The gloves will also be changed and discarded if they are damaged during sampling.

Personnel are proposed to be working under a site-specific health and safety plan and are to be briefed on the potential hazards prior to mobilizing to the facility.

8.1.3 Field Instrument Decontamination Procedures

Field instruments such as groundwater probes and water quality probes will be decontaminated in a three (3) step process prior to each sample location. The decontamination steps are as follows:

- Step 1: Spray instrument with liquinox/deionized water to wash
- Step 2: Spray with clean deionized water to rinse
- Step 3: Spray with isopropyl alcohol/deionized water

Following decontamination, the instruments will be allowed to air dry, then wrapped in aluminum foil to protect them from coming into contact with potential sources of contamination, and stored in a sealed container.

8.2 Field and Laboratory QA/QC

8.2.1 Samples

Each type of site assessment sample has a unique label. The following table represents the type of sample and its denoted symbol:

Table - Sample Identification Symbols	
Background Soil boring	BG

For the ISSP, all samples are labeled sequentially starting at the last background sample number from the Terracon assessment. For samples that are collected at a specific depth from a background soil boring, the depth is also incorporated into the sample identification (BG-8 @ 5'). On occasion, deviations from this symbol procedure may occur. Deviations from this standardized nomenclature will be defined within the scope of the contract for each individual project. With additional sampling events, the technician assigned to sample performs an initial check with a quality control officer to determine the identification of the previous sample so that no sample receives the same identification. The technician also checks previous chain-of-custodies prior to sampling to determine the identification of previous samples, if any.

8.2.2 Laboratory Blanks

There are several types of field-generated quality controls utilized by ESI. These controls are pre-cleaned and field-cleaned equipment blanks, trip blanks and duplicate blanks. ESI proposes to collect a trip blank and a duplicate blank. A duplicate blank will be collected for each sample matrix. All pertinent documentation of each field quality control measure is recorded in the permanent field records.

8.2.3 Laboratory QA/QC

All sample bottles, vials and jars are received by the subcontracted laboratory already pre-cleaned and contain the proper preservative, if needed, for the appropriate EPA

Method. A clean insulated cooler is provided as well to hold sample containers. Prior to sampling, the ESI technician fills the cooler with ice. The cooler is kept isolated away from possible contamination, like other equipment and containers, during the entire sampling event (from the laboratory to the site and back to the laboratory). All equipment and containers are also organized into sections of clean vs. dirty. Container types, preservation techniques, holding times, and transport methods are as specified for the appropriate EPA Methods.

Chain-of-custody documentation is implemented in the field and accompanies the samples to the laboratory. A state-certified, subcontracted laboratory analyzes all samples using approved EPA analytical methods.

8.3 Analytical Methods

Per the Generator Closure Guidelines, ESI proposes to perform laboratory analyses to evaluate the background samples as follows:

Soil Analytical Methods

- Metals (SW-846 Method-EPA Method 6010B): cadmium, chromium, lead and zinc
- pH in the field with EPA Method 9045D preparation

The pH measurements are proposed to be performed using a portable pH meter. The pH meter is proposed to be calibrated using pH 10.0, 7.0 and 4.0 buffer solutions prior to the measurements.

9.0 Schedule

ESI expects that the proposed tasks to complete the ISSP can be finalized according to the following schedule:

Task	Completion
• Receptor Survey	November 2010
• Background Sampling	November 2010
• Initial Site Sampling Report	December 2010

10.0 Acknowledgement

Environmental Services, Inc. appreciates the opportunity to provide professional environmental services to the MMI Products, Inc. If you have any questions regarding this report or if we can

provide any additional assistance, please do not hesitate to contact the Raleigh office of Environmental Services, Inc.

11.0 References

Geologic Map of North Carolina, NC Department of Natural Resources and Community Development. Brown, 1985.

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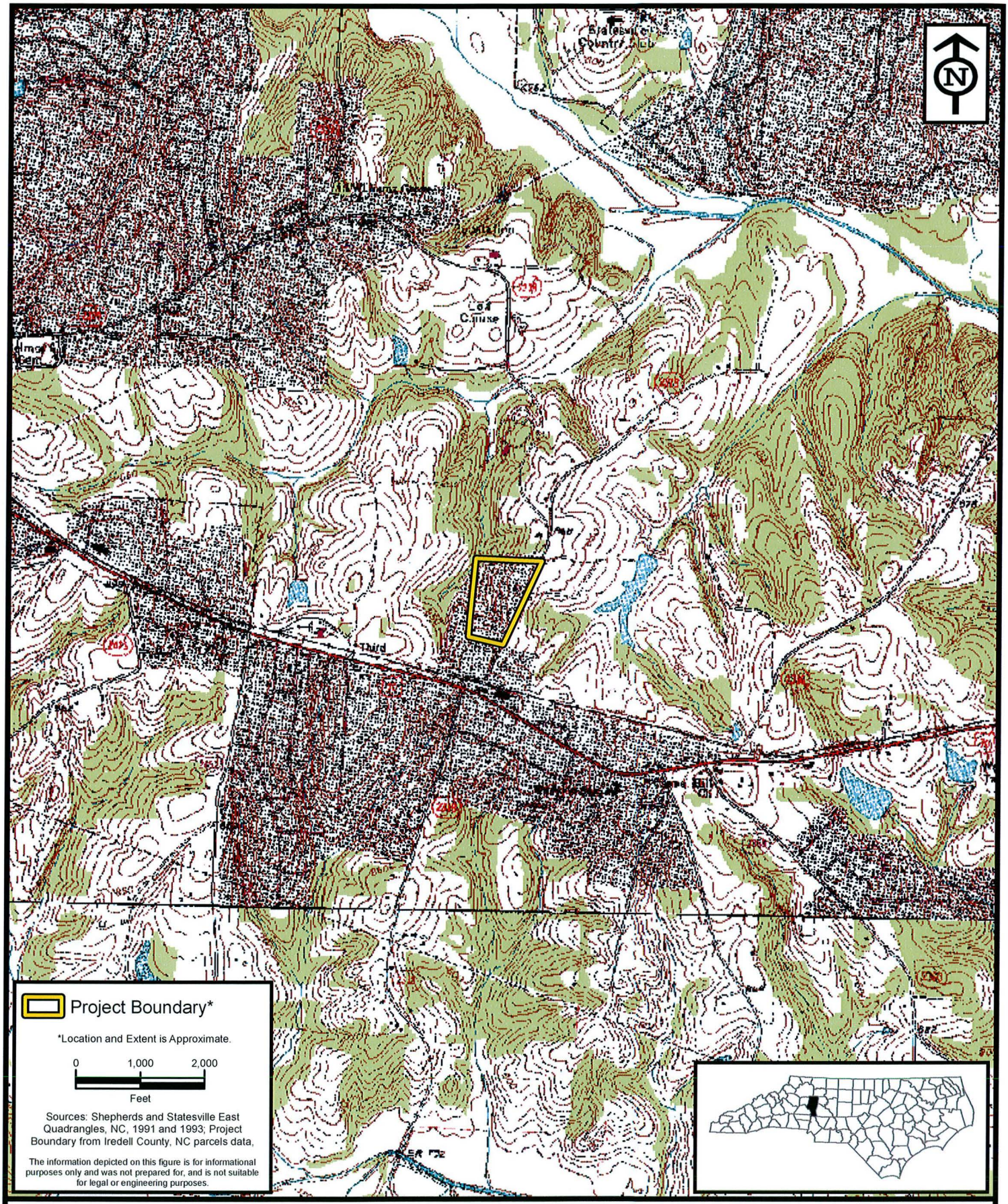
Semi-Annual Groundwater Sampling and Analysis Report, prepared for Iredell County Closed C&D Landfill, All Phases I, 2 and 3, Statesville, North Carolina, Municipal Engineering Company, PA, January 2010.

APPENDIX

ESI FIGURES
TERRACON FIGURES
TERRACON TABLES
TERRACON SOIL BORING LOGS
TERRACON LABORATORY REPORTS

ESI FIGURES



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Project Location

Merchants Metals

Iredell County, North Carolina

Project:	ER10-125.00
Date:	Oct. 2010
Drwn/Chkd:	CD/MB
Figure:	1

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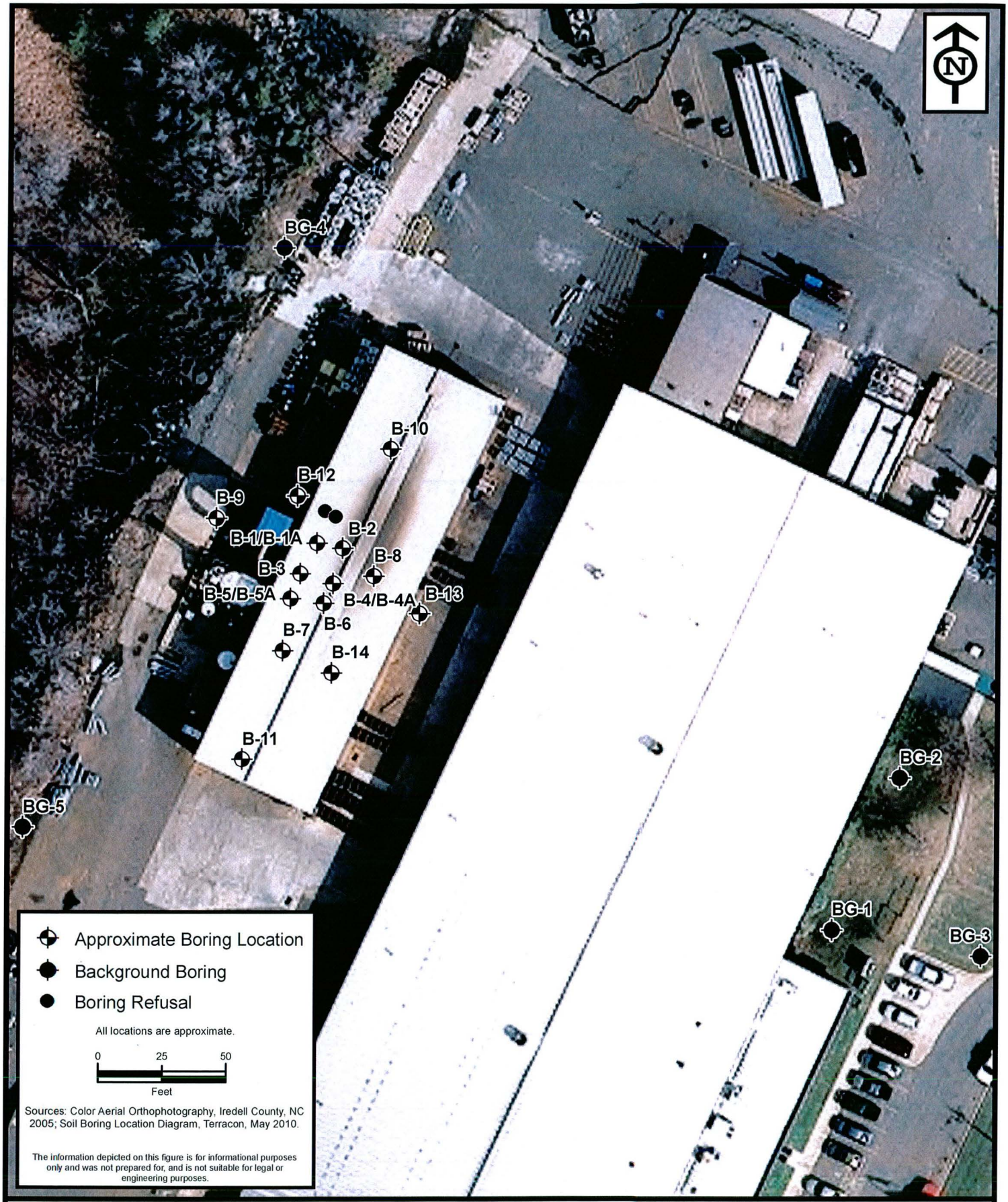

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Source Area Soil Boring Locations

Merchants Metals

Iredell County, North Carolina

Project:	ER10-125.00
Date:	Oct. 2010
Drwn/Chkd:	CD/MB
Figure:	2

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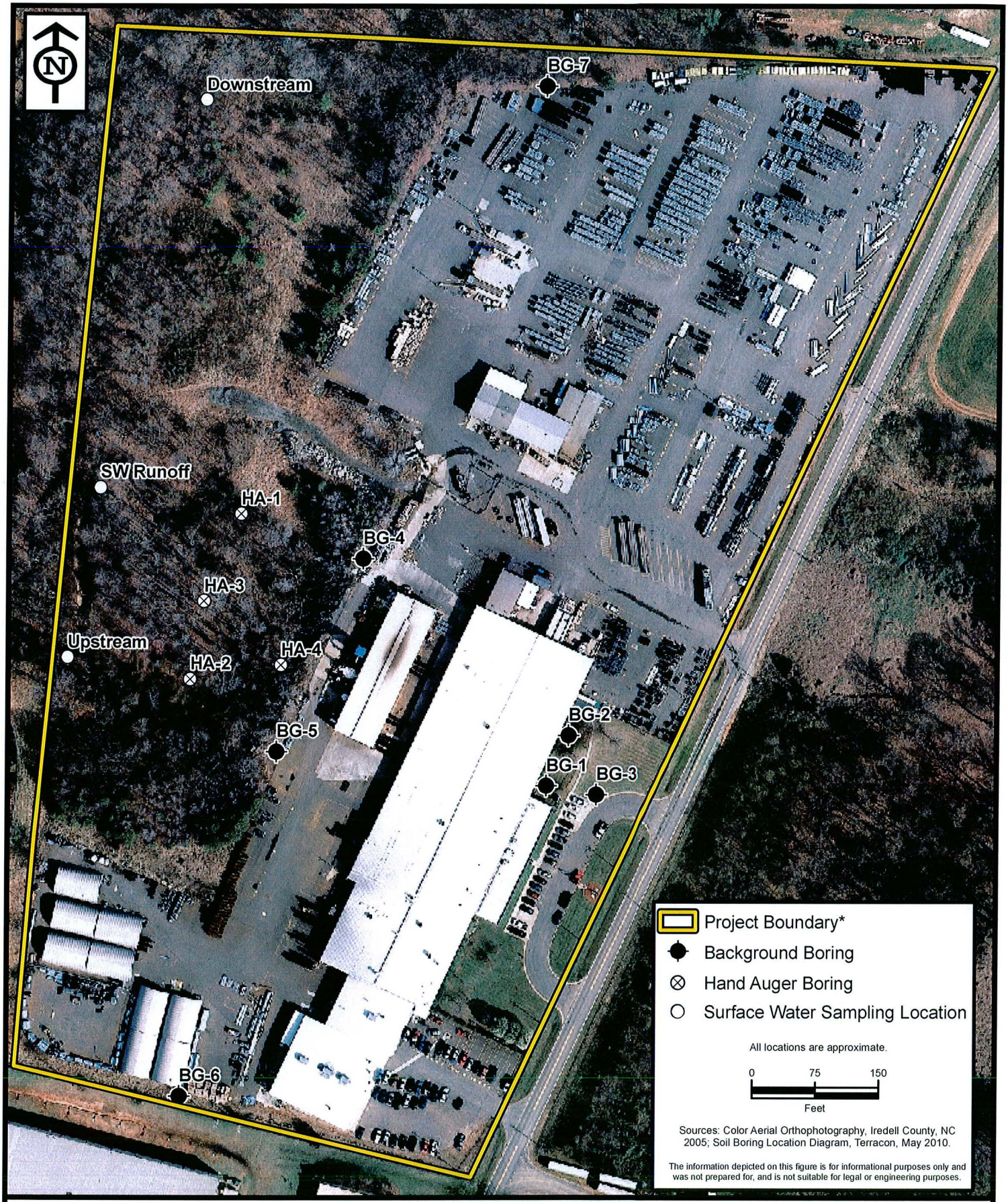

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Additional Sampling Locations

Merchants Metals

Iredell County, North Carolina

Project:	ER10-125.00
Date:	Oct. 2010
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Figure:	3

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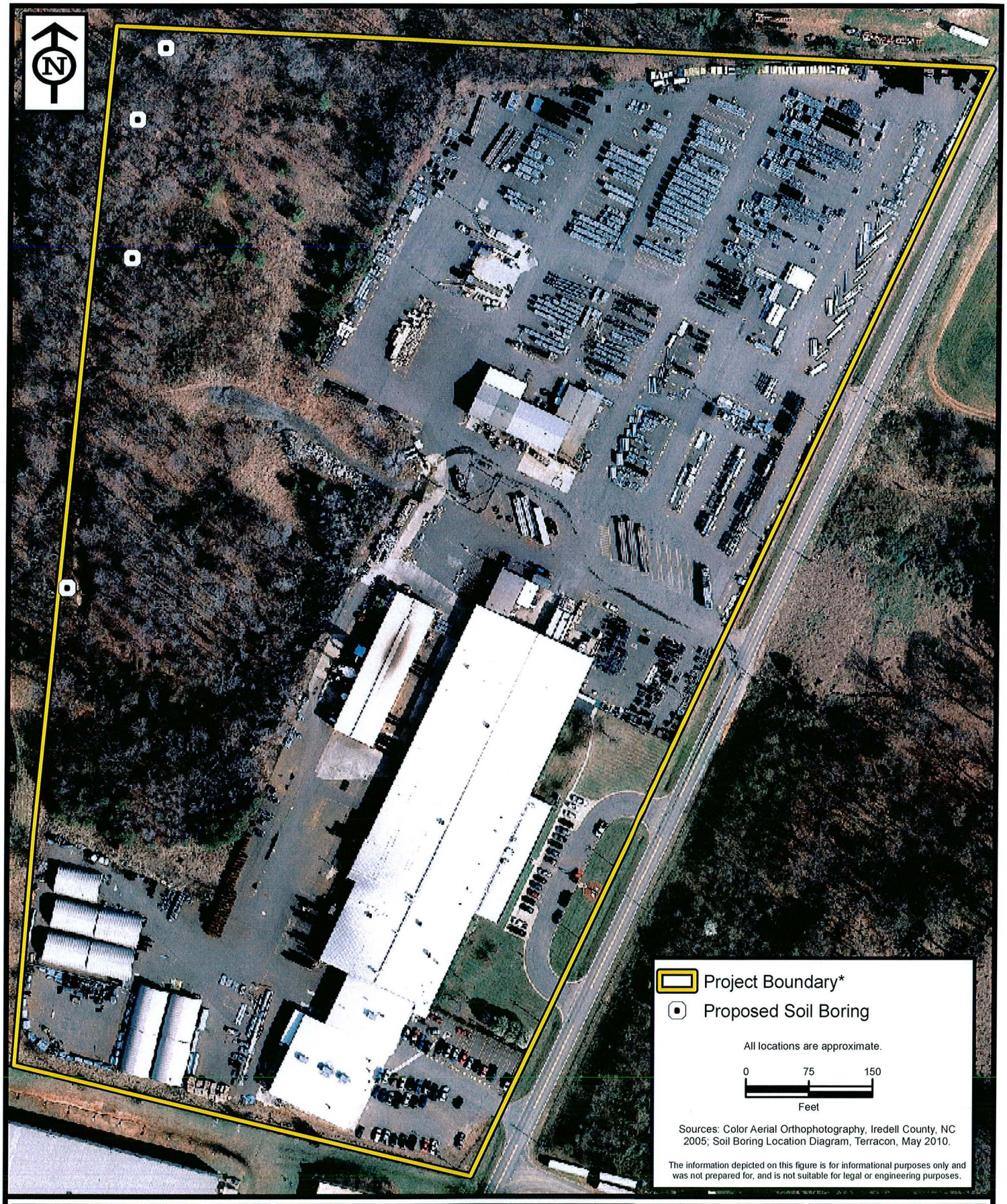

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Proposed Soil Boring Locations

Merchants Metals

Iredell County, North Carolina

Project:	ER10-125.00
Date:	Oct. 2010
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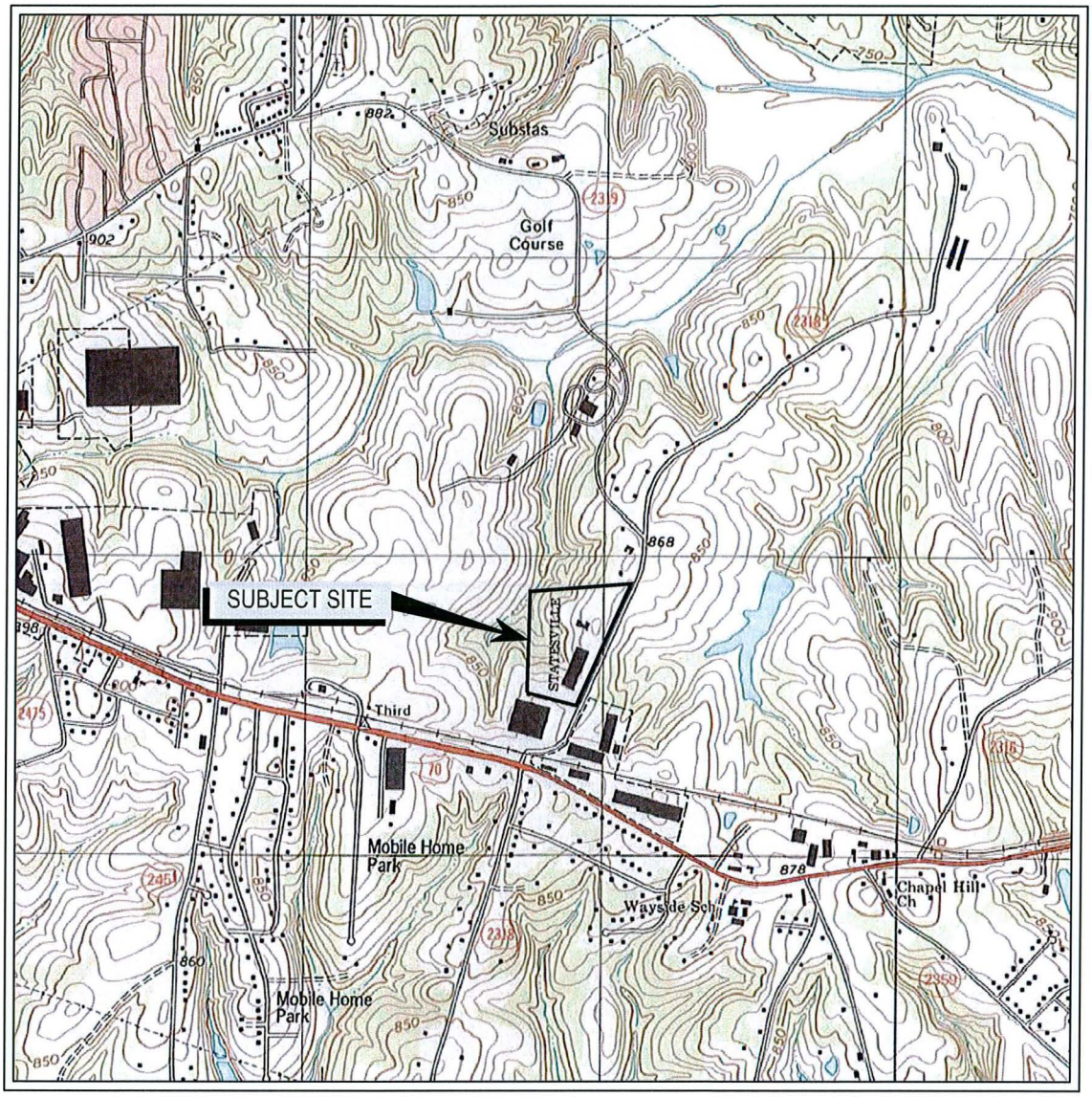
TERRACON FIGURES

UNITED STATES – DEPARTMENT OF THE INTERIOR – GEOLOGICAL SURVEY



SCALE 1:24 000

1 .5 0 KILOMETERS 1 2

1000 0 METERS 1000 2000

1 .5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000

FEET

CONTOUR INTERVAL 10 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

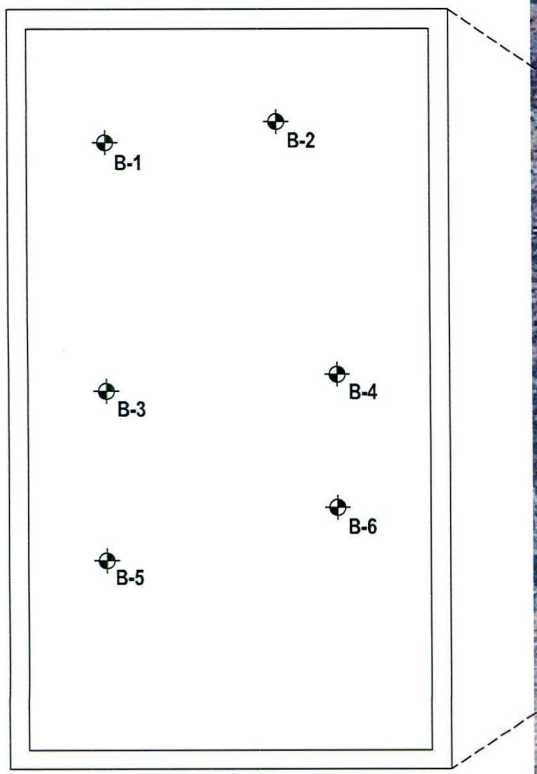
TOPO LINES REPRESENT 10-FOOT CONTOURS

N

QUADRANGLE
STATESVILLE EAST, NC
2002
7.5 MINUTE SERIES (TOPOGRAPHIC)

Project Mngr: CAK	Project No. 71097797	Terracon Consulting Engineers and Scientists	SITE VICINITY DIAGRAM
Drawn By: DWD	Scale: AS SHOWN		INITIAL SITE SAMPLING PLAN
Checked By: CAK/MRF	File No. ISSP71097797-1		MERCHANT METALS, INC
Approved By: CAK	Date: MAY 2010	2020 Starita Rd., Suite E Charlotte, North Carolina 28206 (704) 509-1777 (704) 509-1888	165 FANJOY ROAD STATESVILLE, IREDELL COUNTY, NC

EXHIBIT A-1



CONCRETE CONTAINMENT AREA
SCALE: 1"=10'

OVERALL BUILDING VIEW

N

0 60

Approximate Scale (Feet)

LEGEND

- APPROXIMATE BORING LOCATION
- BORING REFUSAL
- BACKGROUND BORING

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr:	CAK
Drawn By:	DWD
Checked By:	CAK/MRF
Approved By:	CAK

Project No.	71097797
Scale:	AS SHOWN
File No.	ISSP71097797-2
Date:	MAY 2010

Terracon
Consulting Engineers and Scientists
2020 Starita Rd., Suite E Charlotte, North Carolina 28206
(704) 509-1777 (704) 509-1888

SOIL BORING LOCATION DIAGRAM

INITIAL SITE SAMPLING PLAN
MERCHANT METALS, INC.
165 FANJOY ROAD
STATESVILLE, IREDELL COUNTY, NC

EXHIBIT
A-2

TERRACON TABLES

Table 1: Results of Metals and pH in Soils
Merchant Metals Facility
Statesville, North Carolina
Terracon Project: 71097797

Boring Location	Date of Sample	Depth of Sample (in feet)	Laboratory Analytical Results				
			Cadmium	Chromium	Lead	Zinc	pH[1]
B-1	11-17-09	1	0.34	5.4	24.1	**9,620**	2.1
		4	**2.1**	20.0	24.5	**6,980**	3.2
B-1A (B-1 Offset)	01-20-10	9 to 10	**1.4**	10.2	29.3	**6,830**	3.4
		26 to 27	BDL	9.3	13.7	**2,120**	3.4
B-2	11-17-09	1	**4.5**	**70.0**	8.2	**872**	2.6
		4	**2.3**	**27.4**	18.4	**3,550**	3.7
B-3	11-17-09	1	0.52	9.9	37.9	**16,900**	1.6
		4	**4.2**	**33.9**	30.5	**8,480**	2.9
B-4	11-17-09	1	**3.5**	**64.2**	34.9	**13,300**	1.9
		4	**2.1**	16.4	27.9	**6,280**	3.8
B-4A (B-4 Offset)	01-20-10	6 to 7	**3.3**	17.3	32.7	**9,590**	3.0
		15 to 16	**2.5**	18.5	33.9	**10,300**	3.2
		19 to 20	BDL	16.2	15.3	65.9	5.1
		31 to 32	BDL	NS	NS	33.3	5.6
		45 to 46	0.29	NS	NS	26.0	5.7
B-5	11-17-09	1	0.66	12.5	40.2	**19,200**	2.0
		4	**2.6**	26.2	37.3	**10,200**	3.4
B-5A (B-5 Offset)	01-20-10	15 to 16	**1.8**	16.6	18.1	**8,080**	3.4
		25 to 26	BDL	2.0	5.3	**3,500**	3.4
B-6	11-17-09	1	**2.5**	**40.2**	14.6	**1,260**	3.3
		4	**2.0**	23.5	28.4	**6,690**	3.6
B-7	01-20-10	6 to 7	**1.8**	22.0	21.2	**5,930**	3.3
		21 to 22	BDL	NS	NS	22.5	5.5
B-8	01-20-10	9 to 10	**2.6**	17.8	13.9	**3,630**	3.7
		19 to 20	BDL	NS	NS	9.3	5.6
B-9	01-20-10	14 to 15	**3.6**	16.4	33.3	**7,160**	3.5
		24 to 25	BDL	NS	NS	5.6	5.7
B-10	01-20-10	9 to 10	**3.0**	13.9	12.9	33.4	5.5
B-11	01-21-10	9 to 10	BDL	13.3	16.3	**1,380**	4.1
		19 to 20	BDL	NS	NS	7.0	5.4
B-12	01-21-10	14 to 15	**2.1**	21.7	32.9	**6,890**	4.0
		19 to 20	**1.4**	NS	NS	**6,230**	3.9
B-13	01-21-10	9 to 10	0.56	9.5	7.1	14.4	5.3
B-14	01-21-10	6 to 7	**2.0**	13.9	35.6	**7,460**	4.0
		14 to 15	**3.0**	NS	NS	32.8	5.4
HA-1	08-19-10	3	0.22	20.3	20.9	**943**	N/A
HA-2	08-19-10	3	BDL	4.3	4.4	39.2	N/A
HA-3	08-19-10	3	BDL	3.1	4.8	7.7	N/A
HA-4	08-19-10	3	BDL	**45.5**	23.5	**649**	N/A
Background 1	11-17-09	4	**1.3**	15.6	14.3	32.9	5.7
Background 2	01-20-10	4	**2.9**	14.4	13.0	40.2	5.9
Background 3	01-20-10	4	0.73	11.7	14.7	32.3	5.1
Background 4	01-20-10	4	BDL	20.3	13.2	107	5.2
Background 5	01-20-10	4	**0.98**	11.7	13.3	26.8	4.9
Background 6	08-19-10	3	BDL	13.7	11.2	41.1	N/A
Background 7	08-19-10	3	**2.30**	**53.9**	**457**	**33,600**	N/A
Concrete Composite	11-17-09	N/A	NS	BDL	BDL	178	N/S
NCDENR HWS Soil Cleanup Levels		SSL	**0.95**	**27.2**	**270**	**500**	N/L
		Residential Risk-Based Level	**37**	**210**	**400**	**23,000**	N/L

All metals results in milligrams/kilogram (mg/kg) or milligrams/Liter (mg/L)

pH[1] testing within the laboratory was conducted outside the EPA Method Holding Time. results in standard units

N/A - Concrete chips were composited from the 6 boring locations

N/L - No standard listed

NS - Not submitted for laboratory analysis

BDL - Below laboratory detection limits

NCDENR HWS - NCDENR Hazardous Waste Section Soil Cleanup Levels

SSL - Soil Screening Level Protective of Groundwater

Bold denotes above the NCDENR HWS SSL

Table 2: Results of Metals and pH in Soils
Merchant Metals Facility
Statesville, North Carolina
Terracon Project: 71097797

Boring Location	Date of Sample	Laboratory Analytical Results			
		Cadmium	Chromium	Lead	Zinc
Stormwater Runoff	08-19-10	BDL	BDL	7.0	**2,270**
Downstream	08-19-10	BDL	BDL	9.0	**499**
Updstream	08-19-10	BDL	BDL	14.4	**76.8**
NCDENR DWQ Fresh Surface Water Quality Standards		**2**	**50**	**25**	**50**

All metals results in micrograms/Liter (ug/L)
BDL - Below laboratory detection limits
NCDENR DWQ - NCDENR Division of Water Quality
Bold denotes above the NCDENR DWQ Fresh Surface Water Quality Standards

Table 2: Results of Total Zinc by Depth in Soils
Merchant Metals Facility
Statesville, North Carolina
Terracon Project: 71097797

Boring Location	Date Sampled	Sample Depth (in feet below grade)																											
		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	19 to 20	20 to 21	21 to 22	22 to 23	24 to 25	25 to 26	26 to 27	29 to 30	31 to 32	36 to 37	44 to 45	45 to 46
B-1	11-17-09		9,620		6,980																								
B-1A	01-20-10					X		X			6,830			X			X		X	X					2,120				
B-2	11-17-09		872		3,550																								
B-3	11-17-09		16,900		8,480																								
B-4	11-17-09		13,300		6,280																								
B-4A	01-20-10					X		9,590			X			X			10,300		65.9	X					X		33.3	X	X	26.0
B-5	11-17-09		19,200		10,200																								
B-5A	01-20-10					X		X			X			X			8,080		X	X				3,500						
B-6	11-17-09		1,260		6,690																								
B-7	01-20-10					X		5,930			X		X					X			22.5				X					
B-8	01-20-10					X		X			3,630			X			X		9.3			X			X					
B-9	01-20-10						X				X					7,160			X				5.6			X				
B-10	01-20-10					X					33.4					X			X				X			X				
B-11	01-21-10					X					1,380					X			7.0											
B-12	01-21-10					X		X			X	X				6,890			6,230											
B-13	01-21-10					X					14.4					X			X											
B-14	01-21-10					X		7,460			X	X				32.8			X											
Back 1	11-17-09					32.9																								
Back 2	01-20-10					40.2																								
Back 3	01-20-10					32.3																								
Back 4	01-20-10					107																								
Back 5	01-20-10					26.8																								

All results in milligrams/kilogram (mg/kg)
X - Soil sample collected during soil boring advancement was not submitted for laboratory analysis
Empty field denotes sample was not collected from that interval
Borings B-1, B-4, and B-5 required offsets due to accumulated water in the previous hand augers

Table 3: Results of pH by Depth in Soils
Merchant Metals Facility
Statesville, North Carolina
Terracon Project: 71097797

Boring Location	Date Sampled	Sample Depth (in feet below grade)																										
		0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	19 to 20	20 to 21	21 to 22	22 to 23	24 to 25	25 to 26	26 to 27	29 to 30	31 to 32	36 to 37	44 to 45	45 to 46
B-1	11-17-09		2.1		3.2																									
B-1A	01-20-10					3.2		3.4			3.4			3.4			4.2		4.2	4.3					3.4					
B-2	11-17-09		3.4		3.4																									
B-3	11-17-09		1.6		2.9																									
B-4	11-17-09		1.9		3.8																									
B-4A	01-20-10					2.7		3.0			3.8			3.3			3.2		5.1	5.1					5.3		5.6	5.6	5.6	5.7
B-5	11-17-09		2.0		3.4																									
B-5A	01-20-10					3.5		3.6			3.6			3.6			3.4		3.9	4.0				3.4						
B-6	11-17-09		3.3		3.6																									
B-7	01-20-10					3.1		3.3			3.7		4.5					4.6			5.5				4.2					
B-8	01-20-10					4.8		5.0			3.7			4.5			4.7		5.6			5.6			5.5					
B-9	01-20-10						4.4				3.8					3.5			4.9				5.7			5.7				
B-10	01-20-10					5.4					5.5					5.9			6.1				6.1			5.9				
B-11	01-21-10					4.4					4.1					4.8			5.4											
B-12	01-21-10					4.6		4.8			4.8	5.2				4.0			3.9											
B-13	01-21-10					5.3					5.3					5.8			5.9											
B-14	01-21-10					4.1		4.0			4.4	5.1				5.4			5.7											
Back 1	11-17-09					5.1																								
Back 2	01-20-10					5.9																								
Back 3	01-20-10					5.1																								
Back 4	01-20-10					5.2																								
Back 5	01-20-10					4.9																								

All results in standard units, (7.0 is neutral)
Empty field denotes sample from that interval was not tested for pH
Borings B-1, B-4, and B-5 required offsets due to accumulated water in the previous hand augers

TERRACON SOIL BORING LOGS

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-1
PROJECT NO.: 71097797	DATE(S) DRILLED: November 17, 2009
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: N/A
	DRILL METHOD: Hand Auger
	BORING DIAMETER: 2 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: hand auger
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Previously hand augered
		2.1		1.0	
				2.0	
				3.0	
		3.2		4.0	
				5.0	
				6.0	
				7.0	
				8.0	
				9.0	
				10.0	
				11.0	
				12.0	
				13.0	
				14.0	
				15.0	
				16.0	
				17.0	
				18.0	
				19.0	
				20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-2
PROJECT NO.: 71097797	DATE(S) DRILLED: November 17, 2009
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: N/A
	DRILL METHOD: Hand Auger
	BORING DIAMETER: 2 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: hand auger
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Previously hand augered
		3.4		1.0	
				2.0	
				3.0	
		3.4		4.0	
				5.0	
				6.0	
				7.0	
				8.0	
				9.0	
				10.0	
				11.0	
				12.0	
				13.0	
				14.0	
				15.0	
				16.0	
				17.0	
				18.0	
				19.0	
				20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-3
PROJECT NO.: 71097797	DATE(S) DRILLED: November 17, 2009
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: N/A
	DRILL METHOD: Hand Auger
	BORING DIAMETER: 2 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: hand auger
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Previously hand augered
		1.6		1.0	
				2.0	
				3.0	
		2.9		4.0	
				5.0	
				6.0	
				7.0	
				8.0	
				9.0	
				10.0	
				11.0	
				12.0	
				13.0	
				14.0	
				15.0	
				16.0	
				17.0	
				18.0	
				19.0	
				20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY

* - Sample collected for

ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-4
PROJECT NO.: 71097797	DATE(S) DRILLED: November 17, 2009
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: N/A
	DRILL METHOD: Hand Auger
	BORING DIAMETER: 2 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: hand auger
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Previously hand augered
		1.9		1.0	
				2.0	
				3.0	
		3.8		4.0	
				5.0	
				6.0	
				7.0	
				8.0	
				9.0	
				10.0	
				11.0	
				12.0	
				13.0	
				14.0	
				15.0	
				16.0	
				17.0	
				18.0	
				19.0	
				20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-5
PROJECT NO.: 71097797	DATE(S) DRILLED: November 17, 2009
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: N/A
	DRILL METHOD: Hand Auger
	BORING DIAMETER: 2 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: hand auger
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Previously hand augered
		2		1.0	
				2.0	
				3.0	
		3.4		4.0	
				5.0	
				6.0	
				7.0	
				8.0	
				9.0	
				10.0	
				11.0	
				12.0	
				13.0	
				14.0	
				15.0	
				16.0	
				17.0	
				18.0	
				19.0	
				20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-6
PROJECT NO.: 71097797	DATE(S) DRILLED: November 17, 2009
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: N/A
	DRILL METHOD: Hand Auger
	BORING DIAMETER: 2 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: hand auger
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Previously hand augered
		3.3		1.0	
				2.0	
				3.0	
		3.6		4.0	
				5.0	
				6.0	
				7.0	
				8.0	
				9.0	
				10.0	
				11.0	
				12.0	
				13.0	
				14.0	
				15.0	
				16.0	
				17.0	
				18.0	
				19.0	
				20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY

* - Sample collected for

ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-1A
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	48			0.0	8" Concrete
1 - 4				1.0	Brown orange fine to medium sandy silt
				2.0	
				3.0	
4 - 6				4.0	
	48	3.2		5.0	Moist brown orange fine to medium micaceous sandy silt
6 - 16				6.0	
		3.4		7.0	Brown orange clayey fine to medium micaceous sandy silt
				8.0	
				9.0	
	36	3.4		10.0	
				11.0	
				12.0	
		3.4		13.0	
				14.0	
	60			15.0	
16 - 20		4.2		16.0	Tan brown fine to medium sandy silt
				17.0	
				18.0	
				19.0	
	12	4.2		20.0	Orange tan fine to medium micaceous sandy silt
		4.3		21.0	
22 - 30				22.0	Tan yellow fine to medium micaceous sandy silt with PWR
				23.0	
				24.0	
	24			25.0	
				26.0	
		3.4		27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-4A
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010 & January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	36			0.0	6" Concrete
1 - 5				1.0	Yellow fine to coarse sandy silt
				2.0	
				3.0	
				4.0	
5 - 6	36	2.7		5.0	Brown orange fien to medium micaceous sandy silt
6 - 11				6.0	
		3.0		7.0	Red orange clayey fine to medium micaceous sandy silt
				8.0	
				9.0	
	36	3.8		10.0	
11 - 13				11.0	Red orange clyey fine to medium micaceous sandy silt with some
				12.0	yellow fine to medium micaceous sandy silt
13 - 16		3.3		13.0	Red clayey fine to medium micaceous sandy silt
				14.0	
	36			15.0	
16 - 20		3.2		16.0	Red orange clyey fine to medium micaceous sandy silt with some
				17.0	yellow fine to medium micaceous sandy silt
				18.0	
19 - 21				19.0	
	24	5.1		20.0	Brown orange fine to medium micaceous sandy silt with PWR
21 - 30		5.1		21.0	
				22.0	Tan orange yellow fine to medium micaceous sandy silt with PWR
				23.0	
				24.0	
	24			25.0	
				26.0	
		5.3		27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-4A
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010 & January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
30 - 41	24			30.0	White tan fine to medium micaceous sandy silt with PWR
				31.0	
		5.6		32.0	
				33.0	
				34.0	
	36			35.0	
				36.0	
		5.6		37.0	
				38.0	
				39.0	
	60			40.0	
41 - 44				41.0	Brown orange fine to medium micaceous sandy silt
				42.0	
				43.0	
44 - 45				44.0	White silty fine sand
45 - 46	12	5.6		45.0	Brown tan fine to medium sand
		5.7		46.0	
				47.0	
				48.0	
				49.0	
				50.0	
				51.0	
				52.0	
				53.0	
				54.0	
				55.0	
				56.0	
				57.0	
				58.0	
				59.0	
				60.0	
Boring refusal at 46' bgs due to bedrock/PWR					

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-5A
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010 & January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	48			0.0	8" Concrete-yellow on surface
1 - 6				1.0	Red orange fine to medium micaceous sandy silt
				2.0	
				3.0	
				4.0	
	60	3.5		5.0	
6 - 13				6.0	Brown orange fine to medium micaceous sandy silt
		3.6		7.0	
				8.0	
				9.0	
	36	3.6		10.0	
				11.0	
				12.0	
13 - 19		3.6		13.0	Brown orange clayey fine to medium micaceous sandy silt
				14.0	
	36			15.0	
		3.4		16.0	
				17.0	
				18.0	
19 - 20				19.0	Tan orange fine to medium sandy silt with some organics
20 - 21	24	3.9		20.0	Orange tan silty fine to medium sand with PWR
21 - 26		4		21.0	Orange tan fine to medium sandy silt with PWR
				22.0	
				23.0	
				24.0	
	12			25.0	
26 - 30		3.4		26.0	Tan grey silty fine sand
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-7
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	60			0.0	8" Concrete
1 - 3				1.0	Yellow clayey fine to medium sandy silt
				2.0	
3 - 7				3.0	Orange fine to medium micaceous sandy silt
				4.0	
	60	3.1		5.0	
				6.0	
7 - 9		3.3		7.0	Grey silty fine to medium sand
				8.0	
9 - 11				9.0	Red orange clayey fine to medium micaceous sandy silt
	24	3.7		10.0	
11 - 12				11.0	Tan brown fine to medium sandy silt with trace organics
12 - 17		4.5		12.0	Tan brown fine to medium sandy silt
				13.0	
				14.0	
	36			15.0	
				16.0	
17 - 21		4.6		17.0	Red orange fine to medium sandy silt
				18.0	
				19.0	Tan orange fine to medium sandy silt with some organics
	24			20.0	Orange tan silty fine to medium sand with PWR
21 - 26				21.0	Orange grey tan fine to medium micaceous sandy silt
		5.5		22.0	
				23.0	
				24.0	
	24			25.0	
26 - 30				26.0	Grey tan silty fine to medium sand
		5.5		27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-8
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	PID (ppm)	FID (ppm)	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5	60				0.0	Red orange fine to medium sandy silt
					1.0	
					2.0	
					3.0	
					4.0	
5 - 6	36		4.8		5.0	Brown olive fine to medium sandy silt with some rock frags
6 - 9					6.0	Tan orange fine to medium micaceous sandy silt
			5.0		7.0	
					8.0	
9 - 11					9.0	Tan orange clayey fine to medium micaceous sandy silt
	36		3.7		10.0	
11 - 13					11.0	Red orange clayey fine to medium micaceous sandy silt
					12.0	
13 - 14			4.5		13.0	Orange clayey fine to medium micaceous sandy silt
14 - 21					14.0	Orange tan silty fine to medium sand
	36				15.0	
			4.7		16.0	
					17.0	
					18.0	
					19.0	
	36		5.6		20.0	
21 - 23					21.0	Tan orange fine to medium micaceous sandy silt
					22.0	
23 - 26			5.6		23.0	White tan silty fine to coarse sand
					24.0	
	36				25.0	
26 - 30					26.0	Tan white silty fine to coarse sand
			5.5		27.0	
					28.0	
					29.0	
					30.0	

DRILLING METHODS
AR - AIR ROTARY
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING
RC - ROCK CORING
WR - WATER ROTARY

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-9
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 5				0.0	Hand augered down 5' - samples not collected
				1.0	
				2.0	
				3.0	
				4.0	
5 - 19	60			5.0	Red orange micaceous silty clay
		4.4		6.0	
				7.0	
				8.0	
				9.0	
	60	3.8		10.0	
				11.0	
				12.0	
				13.0	
				14.0	
	60	3.5		15.0	
				16.0	
				17.0	
				18.0	
19 - 20				19.0	Tan brown fine to medium sandy silt with some topsoil
20 - 24	36	4.9		20.0	Tan brown fine to medium sandy silt
				21.0	
				22.0	
				23.0	
24 - 30				24.0	Tan orange fine to medium sandy silt
	60	5.7		25.0	
				26.0	
				27.0	
				28.0	
				29.0	
		5.7		30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-10
PROJECT NO.: 71097797	DATE(S) DRILLED: January 20, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	36			0.0	6" Concrete
1 - 6				1.0	Red orange fine to medium micaceous sandy silt
				2.0	
				3.0	
				4.0	
	48	5.4		5.0	
6 - 14				6.0	Orange brown clayey fine to medium micaceous sandy silt
				7.0	
				8.0	
				9.0	
	60	5.5		10.0	
				11.0	
				12.0	
				13.0	
14 - 16				14.0	Tan orange silty fine to medium sand
	36	5.9		15.0	
16 - 23				16.0	Tan orange with some black fine to medium sandy silt
				17.0	
				18.0	
				19.0	
	48	6.1		20.0	
				21.0	
				22.0	
23 - 28				23.0	Tan orange with some white fine to medium sandy silt
				24.0	
	60	6.1		25.0	
				26.0	
				27.0	
28 - 30				28.0	Tan orange silty fine to medium sand with PWR
				29.0	
		5.9		30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-11
PROJECT NO.: 71097797	DATE(S) DRILLED: January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe©
	BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	36			0.0	8" Concrete
1 - 15				1.0	Red orange fine to medium micaceous sandy silt
				2.0	
				3.0	
				4.0	
	60	4.4		5.0	
				6.0	
				7.0	
				8.0	
				9.0	
	60	4.1		10.0	
				11.0	
				12.0	
				13.0	
				14.0	
15 - 17	60	4.8		15.0	Orange brown clayey fine to medium sandy silt
				16.0	
17 - 20				17.0	Tan orange fine to medium micaceous sandy silt
				18.0	
				19.0	
		5.4		20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY
* - Sample collected for
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-12
PROJECT NO.: 71097797	DATE(S) DRILLED: January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	24			0.0	Concrete and ABC stone
1 - 7				1.0	White tan fine to medium sandy silt
				2.0	
				3.0	
				4.0	
	36	4.6		5.0	
				6.0	
7 - 14		4.8		7.0	Red orange fine to medium micaceous sandy silt
				8.0	
				9.0	
	60	4.8		10.0	
		5.2		11.0	
				12.0	
				13.0	
14 - 18				14.0	Brown orange fine to medium micaceous sandy silt
	48	4		15.0	
				16.0	
				17.0	
18 - 20				18.0	Tan brown orange fine to medium micaceous sandy silt
				19.0	
		3.9		20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
analysis
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY

* - Sample collected for

ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-13
PROJECT NO.: 71097797	DATE(S) DRILLED: January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	48			0.0	Concrete and ABC stone
1 - 10				1.0	Red orange fine to meidum micaceous sandy silt
				2.0	
				3.0	
				4.0	
	36	5.3		5.0	
				6.0	
				7.0	
				8.0	
				9.0	
10 - 11	60	5.3		10.0	Tan brown fine to medium sandy silt
11 - 18				11.0	Red orange fine to medium micaceous sandy silt
				12.0	
				13.0	
				14.0	Brown orange fine to medium micaceous sandy silt
	60	5.8		15.0	
				16.0	
				17.0	
18 - 20				18.0	Tan orange fine micaceous sandy silt
				19.0	
		5.9		20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
METHODS
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
TUBE
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING
SS - SPLIT SPOON
ST - SHELBY

* - Sample collected for analysis
ND = <1 ppm

Terracon

SOIL BORING LOG

PROJECT NAME: Merchant Metals	SOIL BORING I.D.: B-14
PROJECT NO.: 71097797	DATE(S) DRILLED: January 21, 2010
PROJECT LOCATION: 165 Fanjoy Road Statesville, Iredell County, North Carolina	DRILLING CONTR.: Probe Technology, Inc. DRILL METHOD: Geoprobe© BORING DIAMETER: 1 inches
CLIENT: Merchant Metals Inc.	SAMPLING METHOD/INTERVAL: 5-foot macro-core sleeves
LOGGED BY: Ben Swift	REMARKS: BGS = below ground surface

DESCRIPTIVE LOG

SAMPLE INTERVAL	SAMPLE REC. (IN.)	pH	GRAPHIC COLUMN	DEPTH (FT)	DESCRIPTION OF SOIL
0 - 1	36			0.0	Concrete and ABC stone
1 - 12				1.0	Red orange clayey fine to medium micaceous sandy silt
				2.0	
				3.0	
				4.0	
	36	4.1		5.0	
				6.0	
		4		7.0	
				8.0	
				9.0	
	48	4.4		10.0	
		5.1		11.0	
12 - 14				12.0	Brown clayey fine to medium sandy silt
				13.0	
14 - 18				14.0	Brown orange fine to medium micaceous sandy silt
	48	5.4		15.0	
				16.0	
				17.0	
18 - 20				18.0	Tan orange fine to medium micaceous sandy silt
				19.0	
		5.7		20.0	
				21.0	
				22.0	
				23.0	
				24.0	
				25.0	
				26.0	
				27.0	
				28.0	
				29.0	
				30.0	

DRILLING METHODS
AR - AIR ROTARY
CFA - CONTINUOUS FLIGHT AUGER
DC - DRIVEN CASING
HA - HAND AUGER
HSA - HOLLOW STEM AUGER
MD - MUD DRILLING

SAMPLING METHODS
SS - SPLIT SPOON
ST - SHELBY TUBE
* - Sample collected for analysis
ND = <1 ppm

Terracon

TERRACON LABORATORY REPORTS

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Huntersville, NC 28078
(704)875-9092

May 03, 2010

Mr. Chris Kelly
Terracon
2020 Starita Rd
Charlotte, NC

RE: Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

Dear Mr. Kelly:
Enclosed are the analytical results for sample(s) received by the laboratory on February 26, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

cc: Mr. Chris Corbitt, Terracon

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CERTIFICATIONS

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

Charlotte Certification IDs
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
Kentucky UST Certification #: 84
Florida/NELAP Certification #: E87627
Connecticut Certification #: PH-0104
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
West Virginia Certification #: 357
Virginia Certification #: 00213
Tennessee Certification #: 04010
South Carolina Drinking Water Cert. #: 99006003
South Carolina Certification #: 99006001
Pennsylvania Certification #: 68-00784
North Carolina Wastewater Certification #: 12
North Carolina Field Services Certification #: 5342
North Carolina Drinking Water Certification #: 37706

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Tennessee Certification #: 2980
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South Carolina Bioassay Certification #: 9903002
Pennsylvania Certification #: 68-03578
North Carolina Wastewater Certification #: 40
North Carolina Drinking Water Certification #: 37712
North Carolina Bioassay Certification #: 9
New Jersey Certification #: NC011
Massachusetts Certification #: M-NC030
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Florida/NELAP Certification #: E87648
West Virginia Certification #: 356

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SAMPLE ANALYTE COUNT

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9264215001	B-4A 31-32	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	KDF	1	PASI-C
9264215002	B-4A 45-46	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	JEA	1	PASI-C
9264215003	B-7 21-22	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	JEA	1	PASI-C
9264215004	B-8 19-20	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	JEA	1	PASI-C
9264215005	B-9 24-25	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	JEA	1	PASI-C
9264215006	B-11 19-20	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	JEA	1	PASI-C
9264215007	B-12 19-20	EPA 6010	EWS	2	PASI-A
		ASTM D2974-87	JEA	1	PASI-C
9264215008	B-14 14-15	EPA 6010	EWS	1	PASI-A
		ASTM D2974-87	JEA	1	PASI-C

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ANALYTICAL RESULTS

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

Sample: B-4A 31-32 **Lab ID: 9264215001** Collected: 01/21/10 11:36 Received: 02/26/10 15:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.22	2	03/01/10 14:43	03/02/10 15:14	7440-43-9	D3
Zinc	**33.3**	mg/kg	2.2	2	03/01/10 14:43	03/02/10 15:14	7440-66-6	D3
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**17.0**	%	0.10	1		03/03/10 08:04		

Sample: B-4A 45-46 **Lab ID: 9264215002** Collected: 01/21/10 12:02 Received: 02/26/10 15:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.29**	mg/kg	0.086	1	03/01/10 14:43	03/02/10 00:16	7440-43-9	
Zinc	**26.0**	mg/kg	0.86	1	03/01/10 14:43	03/02/10 00:16	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**17.2**	%	0.10	1		03/01/10 09:06		

Sample: B-7 21-22 **Lab ID: 9264215003** Collected: 01/20/10 14:51 Received: 02/26/10 15:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.57	5	03/01/10 14:43	03/02/10 17:14	7440-43-9	D3
Zinc	**22.5**	mg/kg	5.7	5	03/01/10 14:43	03/02/10 17:14	7440-66-6	D3
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.8**	%	0.10	1		03/01/10 09:07		

Sample: B-8 19-20 **Lab ID: 9264215004** Collected: 01/20/10 15:28 Received: 02/26/10 15:35 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.17	2	03/01/10 14:43	03/02/10 16:03	7440-43-9	D3
Zinc	**9.3**	mg/kg	1.7	2	03/01/10 14:43	03/02/10 16:03	7440-66-6	D3
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**5.4**	%	0.10	1		03/01/10 09:07		

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ANALYTICAL RESULTS

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

Sample: B-9 24-25 **Lab ID: 9264215005** Collected: 01/20/10 16:28 Received: 02/26/10 15:35 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.079	1	03/01/10 14:43	03/02/10 00:30	7440-43-9	D3
Zinc	**5.6**	mg/kg	0.79	1	03/01/10 14:43	03/02/10 00:30	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**16.6**	%	0.10	1		03/01/10 09:07		

Sample: B-11 19-20 **Lab ID: 9264215006** Collected: 01/20/10 09:21 Received: 02/26/10 15:35 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.084	1	03/01/10 14:43	03/02/10 00:34	7440-43-9	
Zinc	**7.0**	mg/kg	0.84	1	03/01/10 14:43	03/02/10 00:34	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**18.3**	%	0.10	1		03/01/10 09:07		

Sample: B-12 19-20 **Lab ID: 9264215007** Collected: 01/21/10 09:58 Received: 02/26/10 15:35 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**1.4**	mg/kg	0.12	1	03/01/10 14:43	03/02/10 00:38	7440-43-9	
Zinc	**6230**	mg/kg	115	100	03/01/10 14:43	03/02/10 17:21	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.1**	%	0.10	1		03/01/10 09:07		

Sample: B-14 14-15 **Lab ID: 9264215008** Collected: 01/21/10 11:22 Received: 02/26/10 15:35 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Zinc	**32.8**	mg/kg	0.69	1	03/04/10 10:48	03/09/10 11:59	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.5**	%	0.10	1		03/01/10 09:08		

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QUALITY CONTROL DATA

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

QC Batch: MPRP/5893 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 9264215001, 9264215002, 9264215003, 9264215004, 9264215005, 9264215006, 9264215007

METHOD BLANK: 408935 Matrix: Solid
Associated Lab Samples: 9264215001, 9264215002, 9264215003, 9264215004, 9264215005, 9264215006, 9264215007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	mg/kg	ND	0.10	03/01/10 22:32	
Zinc	mg/kg	ND	1.0	03/01/10 22:32	

LABORATORY CONTROL SAMPLE: 408936

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	50	42.8	86	80-120	
Zinc	mg/kg	50	43.9	88	80-120	

MATRIX SPIKE SAMPLE: 408937

Parameter	Units	9264093001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	ND	37.9	32.0	85	75-125	
Zinc	mg/kg	11.2 ug/g	37.9	63.3	138	75-125	M0

SAMPLE DUPLICATE: 408938

Parameter	Units	9264093002 Result	Dup Result	RPD	Qualifiers
Cadmium	mg/kg	ND	ND		
Zinc	mg/kg	4.84 ug/g	4.3	12	

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QUALITY CONTROL DATA

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

QC Batch: MPRP/5911
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 9264215008

METHOD BLANK: 410119
Matrix: Solid
Associated Lab Samples: 9264215008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	mg/kg	ND	0.10	03/09/10 11:52	
Zinc	mg/kg	ND	1.0	03/09/10 11:52	

LABORATORY CONTROL SAMPLE: 410120

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	50	49.8	100	80-120	
Zinc	mg/kg	50	49.6	99	80-120	

MATRIX SPIKE SAMPLE: 410121

Parameter	Units	9264215008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	3.0	47.5	40.9	80	75-125	
Zinc	mg/kg	32.8	47.5	79.6	99	75-125	

SAMPLE DUPLICATE: 410122

Parameter	Units	9264041001 Result	Dup Result	RPD	Qualifiers
Cadmium	mg/kg	0.95	1.3	32	R1
Zinc	mg/kg	317	417	27	R1

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QUALITY CONTROL DATA

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

QC Batch: PMST/3043 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 9264215002, 9264215003, 9264215004, 9264215005, 9264215006, 9264215007, 9264215008

SAMPLE DUPLICATE: 408529

Parameter	Units	9264209006 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	15.3	14.5	5	

SAMPLE DUPLICATE: 408530

Parameter	Units	6074430005 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	11.0	10.6	3	

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QUALITY CONTROL DATA

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

QC Batch: PMST/3047
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 9264215001

SAMPLE DUPLICATE: 409537

Parameter	Units	9264303002 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	28.1	29.6	5	

SAMPLE DUPLICATE: 409545

Parameter	Units	9263874003 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	32.3	31.8	2	

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QUALIFIERS

Project: MMI STATESVILLE 71097797
Pace Project No.: 9264215

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

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

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 1

1326982

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Terracon Consultants	Report To: Chris Kelly	Attention: Same
Address: 2020 Starita Road Charlotte, NC 28206	Copy To:	Company Name:
		Address:
Email To: cakelly@terracon.com	Purchase Order No.: 71097797	Pace Quote Reference:
Phone: (704) 509-1777 Fax: (704) 509-1888	Project Name: MMI - Statesville	Pace Project Manager:
Requested Due Date/TAT: Standard	Project Number: 71097797	Pace Profile #: 3176-9

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: Zinc by 6010	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B-4A 31-32	SL	G			1/21/10	1136		1										X		001
2	B-4A 45-46					1/21/10	1202		1										X		002
3	B-7 21-22					1/20/10	1451		1										X		003
4	B-8 19-20					1/20/10	1528		1										X		004
5	B-9 24-25					1/20/10	1628		1										X		005
6	B-11 19-20					1/20/10	0921		1										X		006
7	B-12 19-20					1/21/10	0958		1										X		007
8	B-14 14-15	↓	↓			1/21/10	1122		1										X		008
9																					
10																					
11																					
12																					

9264015

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	C Kelly	2/26/10	1535	[signature] TPACE	2/26/10	1535	4.6 / 4 / 4 / 4

Temp In °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ben Swift and Chris Kelly

SIGNATURE of SAMPLER: C Kelly

DATE Signed (MM/DD/YY): 2/26/10

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

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May 04, 2010

Mr. Chris Kelly
Terracon
2020 Starita Rd
Charlotte, NC

RE: Project: MMI 71097797
Pace Project No.: 9261807

Dear Mr. Kelly:
Enclosed are the analytical results for sample(s) received by the laboratory on January 22, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

cc: Mr. Chris Corbitt, Terracon

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CERTIFICATIONS

Project: MMI 71097797
Pace Project No.: 9261807

Charlotte Certification IDs

Kentucky UST Certification #: 84
Florida/NELAP Certification #: E87627
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
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Connecticut Certification #: PH-0104

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New Jersey Certification #: NC011
North Carolina Bioassay Certification #: 9
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
Pennsylvania Certification #: 68-03578
South Carolina Bioassay Certification #: 9903002
South Carolina Certification #: 9903001
Tennessee Certification #: 2980
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West Virginia Certification #: 356
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SAMPLE ANALYTE COUNT

Project: MMI 71097797
Pace Project No.: 9261807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9261807001	BACKGROUND 2	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807002	BACKGROUND 3	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807003	BACKGROUND 4	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807004	BACKGROUND 5	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807005	B-1A 9-10	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807006	B-1A 26-27	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807007	B-4A 6-7	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807008	B-4A 15-16	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807009	B-4A 19-20	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807010	B-5A 15-16	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807011	B-5A 25-26	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807012	B-7 6-7	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807013	B-8 9-10	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807014	B-9 14-15	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807015	B-10 9-10	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807016	B-11 9-10	EPA 6010	EWS	3	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807017	B-12 14-15	EPA 6010	EWS	3	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807018	B-13 9-10	EPA 6010	EWS	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
9261807019	B-14 6-7	EPA 6010	EWS	4	PASI-A

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SAMPLE ANALYTE COUNT

Project: MMI 71097797
Pace Project No.: 9261807

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974-87	TNM	1	PASI-C

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: BACKGROUND 2 **Lab ID: 9261807001** Collected: 01/20/10 09:30 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.9**	mg/kg	0.099	1	01/27/10 11:37	01/27/10 15:32	7440-43-9	
Chromium	**14.4**	mg/kg	0.50	1	01/27/10 11:37	01/27/10 15:32	7440-47-3	
Lead	**13.0**	mg/kg	0.50	1	01/27/10 11:37	01/27/10 15:32	7439-92-1	
Zinc	**40.2**	mg/kg	0.99	1	01/27/10 11:37	01/27/10 15:32	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.6**	%	0.10	1		01/25/10 08:17		

Sample: BACKGROUND 3 **Lab ID: 9261807002** Collected: 01/20/10 09:41 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.73**	mg/kg	0.12	1	01/27/10 11:37	01/27/10 15:37	7440-43-9	
Chromium	**11.7**	mg/kg	0.58	1	01/27/10 11:37	01/27/10 15:37	7440-47-3	
Lead	**14.7**	mg/kg	0.58	1	01/27/10 11:37	01/27/10 15:37	7439-92-1	
Zinc	**32.3**	mg/kg	1.2	1	01/27/10 11:37	01/27/10 15:37	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.9**	%	0.10	1		01/25/10 08:18		

Sample: BACKGROUND 4 **Lab ID: 9261807003** Collected: 01/20/10 09:50 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.54	5	01/27/10 11:37	01/28/10 10:58	7440-43-9	D3
Chromium	**20.3**	mg/kg	2.7	5	01/27/10 11:37	01/28/10 10:58	7440-47-3	D3
Lead	**13.2**	mg/kg	2.7	5	01/27/10 11:37	01/28/10 10:58	7439-92-1	D3
Zinc	**107**	mg/kg	5.4	5	01/27/10 11:37	01/28/10 10:58	7440-66-6	D3
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**23.9**	%	0.10	1		01/25/10 08:18		

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: BACKGROUND 5 **Lab ID: 9261807004** Collected: 01/20/10 11:12 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.98**	mg/kg	0.13	1	01/27/10 11:37	01/27/10 15:47	7440-43-9	
Chromium	**11.7**	mg/kg	0.63	1	01/27/10 11:37	01/27/10 15:47	7440-47-3	
Lead	**13.3**	mg/kg	0.63	1	01/27/10 11:37	01/27/10 15:47	7439-92-1	
Zinc	**26.8**	mg/kg	1.3	1	01/27/10 11:37	01/27/10 15:47	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.8**	%	0.10	1		01/25/10 08:19		

Sample: B-1A 9-10 **Lab ID: 9261807005** Collected: 01/20/10 10:39 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**1.4**	mg/kg	0.077	1	01/27/10 11:37	01/27/10 15:52	7440-43-9	
Chromium	**10.2**	mg/kg	0.38	1	01/27/10 11:37	01/27/10 15:52	7440-47-3	
Lead	**29.3**	mg/kg	0.38	1	01/27/10 11:37	01/27/10 15:52	7439-92-1	
Zinc	**6830**	mg/kg	38.5	50	01/27/10 11:37	01/28/10 12:10	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.8**	%	0.10	1		01/25/10 08:19		

Sample: B-1A 26-27 **Lab ID: 9261807006** Collected: 01/20/10 14:09 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.40	5	01/27/10 11:37	01/28/10 11:02	7440-43-9	D3
Chromium	**9.3**	mg/kg	2.0	5	01/27/10 11:37	01/28/10 11:02	7440-47-3	D3
Lead	**13.7**	mg/kg	2.0	5	01/27/10 11:37	01/28/10 11:02	7439-92-1	D3
Zinc	**2120**	mg/kg	4.0	5	01/27/10 11:37	01/28/10 11:02	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.0**	%	0.10	1		01/25/10 08:19		

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: B-4A 6-7 **Lab ID: 9261807007** Collected: 01/20/10 12:48 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**3.3**	mg/kg	0.066	1	01/27/10 11:37	01/27/10 16:03	7440-43-9	
Chromium	**17.3**	mg/kg	0.33	1	01/27/10 11:37	01/27/10 16:03	7440-47-3	
Lead	**32.7**	mg/kg	0.33	1	01/27/10 11:37	01/27/10 16:03	7439-92-1	
Zinc	**9590**	mg/kg	33.1	50	01/27/10 11:37	01/28/10 12:18	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.4**	%	0.10	1		01/25/10 08:19		

Sample: B-4A 15-16 **Lab ID: 9261807008** Collected: 01/20/10 12:09 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.5**	mg/kg	0.089	1	01/27/10 11:37	01/27/10 16:09	7440-43-9	
Chromium	**18.5**	mg/kg	0.45	1	01/27/10 11:37	01/27/10 16:09	7440-47-3	
Lead	**33.9**	mg/kg	0.45	1	01/27/10 11:37	01/27/10 16:09	7439-92-1	
Zinc	**10300**	mg/kg	44.6	50	01/27/10 11:37	01/28/10 12:21	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.1**	%	0.10	1		01/25/10 08:19		

Sample: B-4A 19-20 **Lab ID: 9261807009** Collected: 01/20/10 12:11 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.37	5	01/27/10 11:37	01/28/10 11:07	7440-43-9	D3
Chromium	**16.2**	mg/kg	1.9	5	01/27/10 11:37	01/28/10 11:07	7440-47-3	D3
Lead	**15.3**	mg/kg	1.9	5	01/27/10 11:37	01/28/10 11:07	7439-92-1	D3
Zinc	**65.9**	mg/kg	3.7	5	01/27/10 11:37	01/28/10 11:07	7440-66-6	D3
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**24.1**	%	0.10	1		01/25/10 08:19		

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: B-5A 15-16 **Lab ID: 9261807010** Collected: 01/20/10 12:23 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**1.8**	mg/kg	0.078	1	01/27/10 11:37	01/27/10 16:31	7440-43-9	
Chromium	**16.6**	mg/kg	0.39	1	01/27/10 11:37	01/27/10 16:31	7440-47-3	
Lead	**18.1**	mg/kg	0.39	1	01/27/10 11:37	01/27/10 16:31	7439-92-1	
Zinc	**8080**	mg/kg	39.2	50	01/27/10 11:37	01/28/10 12:25	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.3**	%	0.10	1		01/25/10 08:20		

Sample: B-5A 25-26 **Lab ID: 9261807011** Collected: 01/20/10 14:29 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	ND	mg/kg	0.068	1	01/27/10 11:37	01/27/10 16:37	7440-43-9	
Chromium	**2.0**	mg/kg	0.34	1	01/27/10 11:37	01/27/10 16:37	7440-47-3	
Lead	**5.3**	mg/kg	0.34	1	01/27/10 11:37	01/27/10 16:37	7439-92-1	
Zinc	**3500**	mg/kg	33.8	50	01/27/10 11:37	01/28/10 12:40	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**8.8**	%	0.10	1		01/25/10 08:20		

Sample: B-7 6-7 **Lab ID: 9261807012** Collected: 01/20/10 11:28 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**1.8**	mg/kg	0.096	1	01/27/10 11:37	01/27/10 16:42	7440-43-9	
Chromium	**22.0**	mg/kg	0.48	1	01/27/10 11:37	01/27/10 16:42	7440-47-3	
Lead	**21.2**	mg/kg	0.48	1	01/27/10 11:37	01/27/10 16:42	7439-92-1	
Zinc	**5930**	mg/kg	47.9	50	01/27/10 11:37	01/28/10 12:43	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**18.4**	%	0.10	1		01/25/10 08:20		

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: B-8 9-10 **Lab ID: 9261807013** Collected: 01/20/10 15:19 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.6**	mg/kg	0.077	1	01/27/10 11:37	01/27/10 16:47	7440-43-9	
Chromium	**17.8**	mg/kg	0.38	1	01/27/10 11:37	01/27/10 16:47	7440-47-3	
Lead	**13.9**	mg/kg	0.38	1	01/27/10 11:37	01/27/10 16:47	7439-92-1	
Zinc	**3630**	mg/kg	38.3	50	01/27/10 11:37	01/28/10 12:47	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.3**	%	0.10	1		01/25/10 08:20		

Sample: B-9 14-15 **Lab ID: 9261807014** Collected: 01/20/10 16:15 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**3.6**	mg/kg	0.089	1	01/27/10 11:37	01/27/10 16:53	7440-43-9	
Chromium	**16.4**	mg/kg	0.44	1	01/27/10 11:37	01/27/10 16:53	7440-47-3	
Lead	**33.3**	mg/kg	0.44	1	01/27/10 11:37	01/27/10 16:53	7439-92-1	
Zinc	**7160**	mg/kg	44.3	50	01/27/10 11:37	01/28/10 12:51	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.8**	%	0.10	1		01/25/10 08:21		

Sample: B-10 9-10 **Lab ID: 9261807015** Collected: 01/20/10 16:45 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**3.0**	mg/kg	0.071	1	01/27/10 11:37	01/27/10 16:59	7440-43-9	
Chromium	**13.9**	mg/kg	0.36	1	01/27/10 11:37	01/27/10 16:59	7440-47-3	
Lead	**12.9**	mg/kg	0.36	1	01/27/10 11:37	01/27/10 16:59	7439-92-1	
Zinc	**33.4**	mg/kg	0.71	1	01/27/10 11:37	01/27/10 16:59	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**24.7**	%	0.10	1		01/25/10 08:21		

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: B-11 9-10 **Lab ID: 9261807016** Collected: 01/21/10 08:54 Received: 01/22/10 08:30 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Chromium	**13.3**	mg/kg	2.1	5	01/27/10 13:28	01/29/10 14:31	7440-47-3	
Lead	**16.3**	mg/kg	2.1	5	01/27/10 13:28	01/29/10 14:31	7439-92-1	
Zinc	**1380**	mg/kg	4.2	5	01/27/10 13:28	01/29/10 14:31	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.5**	%	0.10	1		01/25/10 08:21		

Sample: B-12 14-15 **Lab ID: 9261807017** Collected: 01/21/10 09:53 Received: 01/22/10 08:30 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Chromium	**21.7**	mg/kg	0.51	1	01/27/10 13:28	01/28/10 14:37	7440-47-3	
Lead	**32.9**	mg/kg	0.51	1	01/27/10 13:28	01/28/10 14:37	7439-92-1	
Zinc	**6890**	mg/kg	50.6	50	01/27/10 13:28	01/29/10 15:31	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.6**	%	0.10	1		01/25/10 08:22		

Sample: B-13 9-10 **Lab ID: 9261807018** Collected: 01/21/10 10:47 Received: 01/22/10 08:30 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.56**	mg/kg	0.073	1	01/27/10 13:28	01/28/10 14:47	7440-43-9	
Chromium	**9.5**	mg/kg	0.37	1	01/27/10 13:28	01/28/10 14:47	7440-47-3	
Lead	**7.1**	mg/kg	0.37	1	01/27/10 13:28	01/28/10 14:47	7439-92-1	
Zinc	**14.4**	mg/kg	0.73	1	01/27/10 13:28	01/28/10 14:47	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**12.6**	%	0.10	1		01/25/10 08:22		

Sample: B-14 6-7 **Lab ID: 9261807019** Collected: 01/21/10 11:16 Received: 01/22/10 08:30 Matrix: Solid
Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.0**	mg/kg	0.089	1	01/27/10 13:28	01/28/10 14:52	7440-43-9	
Chromium	**13.9**	mg/kg	0.44	1	01/27/10 13:28	01/28/10 14:52	7440-47-3	

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ANALYTICAL RESULTS

Project: MMI 71097797
Pace Project No.: 9261807

Sample: B-14 6-7 **Lab ID: 9261807019** Collected: 01/21/10 11:16 Received: 01/22/10 08:30 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Lead	**35.6**	mg/kg	0.44	1	01/27/10 13:28	01/28/10 14:52	7439-92-1	
Zinc	**7460**	mg/kg	44.5	50	01/27/10 13:28	01/29/10 15:39	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.8**	%	0.10	1		01/25/10 08:22		

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QUALITY CONTROL DATA

Project: MMI 71097797
Pace Project No.: 9261807

QC Batch: MPRP/5735 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 9261807001, 9261807002, 9261807003, 9261807004, 9261807005, 9261807006, 9261807007, 9261807008, 9261807009, 9261807010, 9261807011, 9261807012, 9261807013, 9261807014, 9261807015

METHOD BLANK: 395026 Matrix: Solid
Associated Lab Samples: 9261807001, 9261807002, 9261807003, 9261807004, 9261807005, 9261807006, 9261807007, 9261807008, 9261807009, 9261807010, 9261807011, 9261807012, 9261807013, 9261807014, 9261807015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	mg/kg	ND	0.10	01/27/10 14:42	
Chromium	mg/kg	ND	0.50	01/27/10 14:42	
Lead	mg/kg	ND	0.50	01/27/10 14:42	
Zinc	mg/kg	ND	1.0	01/27/10 14:42	

LABORATORY CONTROL SAMPLE: 395027

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	50	48.7	97	80-120	
Chromium	mg/kg	50	48.5	97	80-120	
Lead	mg/kg	50	49.3	99	80-120	
Zinc	mg/kg	50	49.0	98	80-120	

MATRIX SPIKE SAMPLE: 395028

Parameter	Units	9261714001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	ND	37.3	34.3	92	75-125	
Chromium	mg/kg	32.7 ug/g	37.3	66.6	91	75-125	
Lead	mg/kg	2.10 ug/g	37.3	35.7	90	75-125	
Zinc	mg/kg	31.5 ug/g	37.3	63.7	86	75-125	

SAMPLE DUPLICATE: 395029

Parameter	Units	9261714002 Result	Dup Result	RPD	Qualifiers
Cadmium	mg/kg	ND	ND		
Chromium	mg/kg	34.1 ug/g	32.8	4	
Lead	mg/kg	1.93 ug/g	2.0	4	
Zinc	mg/kg	32.7 ug/g	30.9	5	

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QUALITY CONTROL DATA

Project: MMI 71097797
Pace Project No.: 9261807

QC Batch: MPRP/5741 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 9261807016, 9261807017, 9261807018, 9261807019

METHOD BLANK: 395310 Matrix: Solid
Associated Lab Samples: 9261807016, 9261807017, 9261807018, 9261807019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	mg/kg	ND	0.10	01/28/10 14:20	
Chromium	mg/kg	ND	0.50	01/28/10 14:20	
Lead	mg/kg	ND	0.50	01/28/10 14:20	
Zinc	mg/kg	ND	1.0	01/28/10 14:20	

LABORATORY CONTROL SAMPLE: 395311

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	50	48.3	97	80-120	
Chromium	mg/kg	50	48.0	96	80-120	
Lead	mg/kg	50	47.9	96	80-120	
Zinc	mg/kg	50	48.7	97	80-120	

MATRIX SPIKE SAMPLE: 395312

Parameter	Units	9261807016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	ND	53.1	45.7	86	75-125	
Chromium	mg/kg	13.3	53.1	58.9	86	75-125	
Lead	mg/kg	16.3	53.1	64.2	90	75-125	
Zinc	mg/kg	1380	53.1	1660	523	75-125	M0

SAMPLE DUPLICATE: 395313

Parameter	Units	9261807017 Result	Dup Result	RPD	Qualifiers
Cadmium	mg/kg	2.1	1.8	14	
Chromium	mg/kg	21.7	13.6	46	R1
Lead	mg/kg	32.9	29.0	13	
Zinc	mg/kg	6890	6720	2	

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QUALITY CONTROL DATA

Project: MMI 71097797
Pace Project No.: 9261807

QC Batch: PMST/2987 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 9261807001, 9261807002, 9261807003, 9261807004, 9261807005, 9261807006, 9261807007, 9261807008, 9261807009, 9261807010, 9261807011, 9261807012, 9261807013, 9261807014, 9261807015, 9261807016, 9261807017, 9261807018, 9261807019

SAMPLE DUPLICATE: 393705

Parameter	Units	9261807001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	22.6	23.4	4	

SAMPLE DUPLICATE: 393706

Parameter	Units	9261814001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	16.4	17.0	4	

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QUALIFIERS

Project: MMI 71097797
Pace Project No.: 9261807

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

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

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

1351777

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Terracon	Report To: Chris Kelly	Attention: Same
Address: 3000 Starita Road Charlotte, NC	Copy To:	Company Name:
Email To: CaKelly@terracon.com	Purchase Order No.: 71097797	Address:
Phone: (704) 509-1777 Fax: (704) 509-1888	Project Name: MMI	Pace Quote Reference:
Requested Due Date/TAT: Standard	Project Number: 71097797	Pace Project Manager:
		Pace Profile #: 3176-2

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test ↓ Gold for lead	Chromium end	Zinc	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Background 2		SL	G	1-20-10			0930		1										X					926807
2	Background 3							0941		1										X					001
3	Background 4							0950		1										X					002
4	Background 5							1112		1										X					003
5	B-1A 9-10'							1039		1										X					004
6	B-1A 26-27'							1409		1										X					005
7	B-4A 6-7'							1248		1										X					006
8	B-4A 15-16'							1209		1										X					007
9	B-4A 19-20'							1211		1										X					008
10	B-5A 15-16'							1223		1										X					009
11	B-5A 25-26'							1429		1										X					010
12	B-7 6-7'							1128		1										X					011

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	C. Kelly	1-22-10	0830	Jmoore / Pace	1/22	830	4	4	NO	4

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ben Swift

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 1-22-10

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 2

1329086

Section A Required Client Information:

Company: Terracon
Address: 3020 Starita Road
Charlotte, NC
Email To: CaKelly@terracon.com
Phone: (704) 509-1777 Fax: (704) 509-1888
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Chris Kelly
Copy To:
Purchase Order No.: 71097797
Project Name: MMI
Project Number: 71097797

Section C Invoice Information:

Attention: Same
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / -)
Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE
Drinking Water DW
Water WT
Waste Water WW
Product P
Soil/Solid SL
Oil OL
Wipe WP
Air AR
Tissue TS
Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: COD for lead Chromium and Zinc	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 9261807
1	B-8 9-10'	SL	G	1-20-10			1519												X		13
2	B-9 14-15'	SL	G	1-20-10			1615												X		14
3	B-10 9-10'	"	"	1-20-10			1645												X		15
4	B-11 9-10'	"	"	1-21-10			0854												X		16
5	B-12 14-15'	"	"	1-21-10			0953												X		17
6	B-13 9-10'	"	"	1-21-10			1047												X		18
7	B-14 6-7'	↓	V	1-21-10			1116												X		19
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		1-22-10	0830	Unmanned Pace	1/22	830	A1	4	2	4

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ben Swift

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 1-22-10

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May 19, 2010

Mr. Chris Kelly
Terracon
2020 Starita Rd
Charlotte, NC

RE: Project: MERCHANT METALS
Pace Project No.: 9257769

Dear Mr. Kelly:
Enclosed are the analytical results for sample(s) received by the laboratory on November 18, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Huntersville laboratory unless otherwise footnoted. All Microbiological analyses were performed at the laboratory where the samples were received.

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

Sincerely,

Kevin Herring

kevin.herring@pacelabs.com
Project Manager

Enclosures

cc: Mr. Chris Corbitt, Terracon

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MERCHANT METALS
Pace Project No.: 9257769

Charlotte Certification IDs
9800 Kincey Ave. - Ste 100 Huntersville, NC 28078
West Virginia Certification #: 357
Connecticut Certification #: PH-0104
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana/LELAP Certification #: 04034
New Jersey Certification #: NC012
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
Pennsylvania Certification #: 68-00784
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Tennessee Certification #: 04010
Virginia Certification #: 00213

Asheville Certification IDs
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Louisiana/LELAP Certification #: 03095
Massachusetts Certification #: M-NC030
New Jersey Certification #: NC011
North Carolina Bioassay Certification #: 9
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
Pennsylvania Certification #: 68-03578
South Carolina Bioassay Certification #: 9903002
South Carolina Certification #: 9903001
Tennessee Certification #: 2980
Virginia Certification #: 00072
West Virginia Certification #: 356
Florida/NELAP Certification #: E87648

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SAMPLE ANALYTE COUNT

Project: MERCHANT METALS
Pace Project No.: 9257769

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9257769001	B-1 1'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769002	B-2 1'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769003	B-3 1'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769004	B-4 1'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769005	B-5 1'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769006	B-6 1'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769007	BACKGROUND	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	JDA	1	PASI-A
9257769008	CONCRETE COMPOSITE	EPA 6010	JMW	3	PASI-A
9257769009	B-1 4'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	SAJ	1	PASI-A
9257769010	B-2 4'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	SAJ	1	PASI-A
9257769011	B-3 4'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	SAJ	1	PASI-A
9257769012	B-4 4'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	SAJ	1	PASI-A
9257769013	B-5 4'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	SAJ	1	PASI-A

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SAMPLE ANALYTE COUNT

Project: MERCHANT METALS
Pace Project No.: 9257769

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
9257769014	B-6 4'	EPA 6010	JMW	4	PASI-A
		ASTM D2974-87	TNM	1	PASI-C
		EPA 9045	SAJ	1	PASI-A

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ANALYTICAL RESULTS

Project: MERCHANT METALS
Pace Project No.: 9257769

Sample: B-1 1' **Lab ID: 9257769001** Collected: 11/17/09 11:05 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.34**	mg/kg	0.094	1	11/18/09 23:15	11/19/09 20:45	7440-43-9	
Chromium	**5.4**	mg/kg	0.47	1	11/18/09 23:15	11/19/09 20:45	7440-47-3	
Lead	**24.1**	mg/kg	0.47	1	11/18/09 23:15	11/19/09 20:45	7439-92-1	
Zinc	**9620**	mg/kg	46.8	50	11/18/09 23:15	11/20/09 12:04	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**26.8**	%	0.10	1		11/19/09 08:55		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**2.1**	Std. Units	0.10	1		11/23/09 11:00		H1

Sample: B-2 1' **Lab ID: 9257769002** Collected: 11/17/09 11:25 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**4.5**	mg/kg	0.097	1	11/18/09 23:15	11/19/09 20:50	7440-43-9	
Chromium	**70.0**	mg/kg	0.49	1	11/18/09 23:15	11/19/09 20:50	7440-47-3	
Lead	**8.2**	mg/kg	0.49	1	11/18/09 23:15	11/19/09 20:50	7439-92-1	
Zinc	**872**	mg/kg	0.97	1	11/18/09 23:15	11/19/09 20:50	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**33.2**	%	0.10	1		11/19/09 08:55		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**2.6**	Std. Units	0.10	1		11/23/09 11:00		H1

Sample: B-3 1' **Lab ID: 9257769003** Collected: 11/17/09 11:40 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.52**	mg/kg	0.12	1	11/18/09 23:15	11/19/09 20:55	7440-43-9	
Chromium	**9.9**	mg/kg	0.60	1	11/18/09 23:15	11/19/09 20:55	7440-47-3	
Lead	**37.9**	mg/kg	0.60	1	11/18/09 23:15	11/19/09 20:55	7439-92-1	
Zinc	**16900**	mg/kg	59.6	50	11/18/09 23:15	11/20/09 12:07	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**45.5**	%	0.10	1		11/19/09 08:55		

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ANALYTICAL RESULTS

Project: MERCHANT METALS
Pace Project No.: 9257769

Sample: B-3 1' **Lab ID: 9257769003** Collected: 11/17/09 11:40 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**1.6**	Std. Units	0.10	1		11/23/09 11:00		H1

Sample: B-4 1' **Lab ID: 9257769004** Collected: 11/17/09 11:55 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**3.5**	mg/kg	0.092	1	11/18/09 23:15	11/19/09 21:00	7440-43-9	
Chromium	**64.2**	mg/kg	0.46	1	11/18/09 23:15	11/19/09 21:00	7440-47-3	
Lead	**34.9**	mg/kg	0.46	1	11/18/09 23:15	11/19/09 21:00	7439-92-1	
Zinc	**13300**	mg/kg	46.0	50	11/18/09 23:15	11/20/09 12:10	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**23.5**	%	0.10	1		11/19/09 08:56		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**1.9**	Std. Units	0.10	1		11/23/09 11:00		H1

Sample: B-5 1' **Lab ID: 9257769005** Collected: 11/17/09 12:10 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**0.66**	mg/kg	0.097	1	11/18/09 23:15	11/19/09 21:05	7440-43-9	
Chromium	**12.5**	mg/kg	0.49	1	11/18/09 23:15	11/19/09 21:05	7440-47-3	
Lead	**40.2**	mg/kg	0.49	1	11/18/09 23:15	11/19/09 21:05	7439-92-1	
Zinc	**19200**	mg/kg	48.6	50	11/18/09 23:15	11/20/09 12:14	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**34.0**	%	0.10	1		11/19/09 08:56		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**2.0**	Std. Units	0.10	1		11/23/09 11:00		H1

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ANALYTICAL RESULTS

Project: MERCHANT METALS
Pace Project No.: 9257769

Sample: B-6 1' **Lab ID: 9257769006** Collected: 11/17/09 12:25 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.5**	mg/kg	0.11	1	11/18/09 23:15	11/19/09 21:10	7440-43-9	
Chromium	**40.2**	mg/kg	0.57	1	11/18/09 23:15	11/19/09 21:10	7440-47-3	
Lead	**14.6**	mg/kg	0.57	1	11/18/09 23:15	11/19/09 21:10	7439-92-1	
Zinc	**1260**	mg/kg	11.3	10	11/18/09 23:15	11/20/09 12:27	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**24.0**	%	0.10	1		11/19/09 08:56		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**3.3**	Std. Units	0.10	1		11/23/09 11:00		H1

Sample: BACKGROUND **Lab ID: 9257769007** Collected: 11/17/09 13:00 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**1.3**	mg/kg	0.12	1	11/18/09 23:15	11/19/09 21:15	7440-43-9	
Chromium	**15.6**	mg/kg	0.59	1	11/18/09 23:15	11/19/09 21:15	7440-47-3	
Lead	**14.3**	mg/kg	0.59	1	11/18/09 23:15	11/19/09 21:15	7439-92-1	
Zinc	**32.9**	mg/kg	1.2	1	11/18/09 23:15	11/19/09 21:15	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**25.2**	%	0.10	1		11/19/09 08:56		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**5.7**	Std. Units	0.10	1		11/23/09 11:00		H1

Sample: CONCRETE COMPOSITE **Lab ID: 9257769008** Collected: 11/17/09 12:50 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 11/23/09 16:50							
Chromium	ND	mg/L	0.025	1	11/24/09 13:00	11/24/09 16:53	7440-47-3	
Lead	ND	mg/L	0.025	1	11/24/09 13:00	11/24/09 16:53	7439-92-1	
Zinc	**178**	mg/L	2.5	50	11/24/09 13:00	11/25/09 11:49	7440-66-6	

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ANALYTICAL RESULTS

Project: MERCHANT METALS
Pace Project No.: 9257769

Sample: B-1 4' **Lab ID: 9257769009** Collected: 11/17/09 11:15 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.1**	mg/kg	0.093	1	12/10/09 13:20	12/11/09 14:16	7440-43-9	
Chromium	**20.0**	mg/kg	0.46	1	12/10/09 13:20	12/11/09 14:16	7440-47-3	
Lead	**24.5**	mg/kg	0.46	1	12/10/09 13:20	12/11/09 14:16	7439-92-1	
Zinc	**6980**	mg/kg	18.6	20	12/10/09 13:20	12/11/09 15:27	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**20.8**	%	0.10	1		12/08/09 13:41		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**3.2**	Std. Units	0.10	1		12/10/09 10:47		H1

Sample: B-2 4' **Lab ID: 9257769010** Collected: 11/17/09 11:30 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.3**	mg/kg	0.087	1	12/10/09 13:20	12/11/09 14:27	7440-43-9	
Chromium	**27.4**	mg/kg	0.44	1	12/10/09 13:20	12/11/09 14:27	7440-47-3	
Lead	**18.4**	mg/kg	0.44	1	12/10/09 13:20	12/11/09 14:27	7439-92-1	
Zinc	**3550**	mg/kg	17.5	20	12/10/09 13:20	12/11/09 15:35	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**29.4**	%	0.10	1		12/08/09 13:42		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**3.7**	Std. Units	0.10	1		12/10/09 10:47		H1

Sample: B-3 4' **Lab ID: 9257769011** Collected: 11/17/09 11:45 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**4.2**	mg/kg	0.090	1	12/10/09 13:20	12/11/09 14:37	7440-43-9	
Chromium	**33.9**	mg/kg	0.45	1	12/10/09 13:20	12/11/09 14:37	7440-47-3	
Lead	**30.5**	mg/kg	0.45	1	12/10/09 13:20	12/11/09 14:37	7439-92-1	
Zinc	**8480**	mg/kg	45.2	50	12/10/09 13:20	12/14/09 12:41	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**19.9**	%	0.10	1		12/08/09 13:42		

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ANALYTICAL RESULTS

Project: MERCHANT METALS
Pace Project No.: 9257769

Sample: B-3 4' **Lab ID: 9257769011** Collected: 11/17/09 11:45 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**2.9**	Std. Units	0.10	1		12/10/09 10:47		H1

Sample: B-4 4' **Lab ID: 9257769012** Collected: 11/17/09 12:05 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.1**	mg/kg	0.081	1	12/10/09 13:20	12/11/09 14:43	7440-43-9	
Chromium	**16.4**	mg/kg	0.40	1	12/10/09 13:20	12/11/09 14:43	7440-47-3	
Lead	**27.9**	mg/kg	0.40	1	12/10/09 13:20	12/11/09 14:43	7439-92-1	
Zinc	**6280**	mg/kg	40.5	50	12/10/09 13:20	12/14/09 12:45	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.8**	%	0.10	1		12/08/09 13:42		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**3.8**	Std. Units	0.10	1		12/10/09 10:47		H1

Sample: B-5 4' **Lab ID: 9257769013** Collected: 11/17/09 12:20 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.6**	mg/kg	0.12	1	12/10/09 13:20	12/11/09 14:48	7440-43-9	
Chromium	**26.2**	mg/kg	0.62	1	12/10/09 13:20	12/11/09 14:48	7440-47-3	
Lead	**37.3**	mg/kg	0.62	1	12/10/09 13:20	12/11/09 14:48	7439-92-1	
Zinc	**10200**	mg/kg	61.7	50	12/10/09 13:20	12/14/09 12:48	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**22.1**	%	0.10	1		12/08/09 13:42		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**3.4**	Std. Units	0.10	1		12/10/09 10:47		H1

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ANALYTICAL RESULTS

Project: MERCHANT METALS
Pace Project No.: 9257769

Sample: B-6 4' **Lab ID: 9257769014** Collected: 11/17/09 12:40 Received: 11/18/09 09:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050							
Cadmium	**2.0**	mg/kg	0.11	1	12/10/09 13:20	12/11/09 15:04	7440-43-9	
Chromium	**23.5**	mg/kg	0.55	1	12/10/09 13:20	12/11/09 15:04	7440-47-3	
Lead	**28.4**	mg/kg	0.55	1	12/10/09 13:20	12/11/09 15:04	7439-92-1	
Zinc	**6690**	mg/kg	54.9	50	12/10/09 13:20	12/14/09 12:52	7440-66-6	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**21.5**	%	0.10	1		12/08/09 13:43		
9045 pH Soil	Analytical Method: EPA 9045							
pH at 25 Degrees C	**3.6**	Std. Units	0.10	1		12/10/09 10:47		H1

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: MPRP/5407 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 9257769001, 9257769002, 9257769003, 9257769004, 9257769005, 9257769006, 9257769007

METHOD BLANK: 368387 Matrix: Solid
Associated Lab Samples: 9257769001, 9257769002, 9257769003, 9257769004, 9257769005, 9257769006, 9257769007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	mg/kg	ND	0.10	11/19/09 19:13	
Chromium	mg/kg	ND	0.50	11/19/09 19:13	
Lead	mg/kg	ND	0.50	11/19/09 19:13	
Zinc	mg/kg	ND	1.0	11/19/09 19:13	

LABORATORY CONTROL SAMPLE: 368388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	50	44.8	90	80-120	
Chromium	mg/kg	50	45.2	90	80-120	
Lead	mg/kg	50	45.2	90	80-120	
Zinc	mg/kg	50	44.9	90	80-120	

MATRIX SPIKE SAMPLE: 368389

Parameter	Units	9257504007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	0.40	41.1	28.9	69	75-125	M0
Chromium	mg/kg	6.8	41.1	37.6	75	75-125	
Lead	mg/kg	7.0	41.1	36.2	71	75-125	M0
Zinc	mg/kg	35.7	41.1	68.6	80	75-125	

SAMPLE DUPLICATE: 368390

Parameter	Units	9257504008 Result	Dup Result	RPD	Qualifiers
Cadmium	mg/kg		0.18		R1
Chromium	mg/kg		4.7		
Lead	mg/kg		5.7		
Zinc	mg/kg		27.0		

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: MPRP/5515 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 9257769009, 9257769010, 9257769011, 9257769012, 9257769013, 9257769014

METHOD BLANK: 377342 Matrix: Solid
Associated Lab Samples: 9257769009, 9257769010, 9257769011, 9257769012, 9257769013, 9257769014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cadmium	mg/kg	ND	0.10	12/11/09 14:09	
Chromium	mg/kg	ND	0.50	12/11/09 14:09	
Lead	mg/kg	ND	0.50	12/11/09 14:09	
Zinc	mg/kg	ND	1.0	12/11/09 14:09	

LABORATORY CONTROL SAMPLE: 377343

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	50	48.3	97	80-120	
Chromium	mg/kg	50	47.8	96	80-120	
Lead	mg/kg	50	48.6	97	80-120	
Zinc	mg/kg	50	50.1	100	80-120	

MATRIX SPIKE SAMPLE: 377344

Parameter	Units	9257769009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cadmium	mg/kg	2.1	49.3	41.1	79	75-125	
Chromium	mg/kg	20.0	49.3	61.9	85	75-125	
Lead	mg/kg	24.5	49.3	62.6	77	75-125	
Zinc	mg/kg	6980	49.3	6820	-311	75-125	M0

SAMPLE DUPLICATE: 377345

Parameter	Units	9257769010 Result	Dup Result	RPD	Qualifiers
Cadmium	mg/kg	2.3	1.9	18	
Chromium	mg/kg	27.4	25.6	7	
Lead	mg/kg	18.4	17.7	4	
Zinc	mg/kg	3550	3310	7	

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: MPRP/5439
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 9257769008

METHOD BLANK: 370861
Matrix: Water
Associated Lab Samples: 9257769008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	mg/L	ND	0.025	11/24/09 16:46	
Lead	mg/L	ND	0.025	11/24/09 16:46	
Zinc	mg/L	ND	0.050	11/24/09 16:46	

LABORATORY CONTROL SAMPLE: 370862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	mg/L	2.5	2.5	100	80-120	
Lead	mg/L	2.5	2.3	93	80-120	
Zinc	mg/L	2.5	2.6	105	80-120	

MATRIX SPIKE SAMPLE: 370864

Parameter	Units	9257625001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium	mg/L	ND	5	4.7	94	75-125	
Lead	mg/L	ND	5	4.3	86	75-125	
Zinc	mg/L	1.4	5	6.0	93	75-125	

SAMPLE DUPLICATE: 370863

Parameter	Units	9257769008 Result	Dup Result	RPD	Qualifiers
Chromium	mg/L	ND	0.043		
Lead	mg/L	ND	ND		
Zinc	mg/L	178	172	3	

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: PMST/2889 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 9257769001, 9257769002, 9257769003, 9257769004, 9257769005, 9257769006, 9257769007

SAMPLE DUPLICATE: 368346

Parameter	Units	9257769001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	26.8	27.1	1	

SAMPLE DUPLICATE: 368347

Parameter	Units	9257760001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	82.6	82.8	0	

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: PMST/2921 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 9257769009, 9257769010, 9257769011, 9257769012, 9257769013, 9257769014

SAMPLE DUPLICATE: 375940

Parameter	Units	9257769009 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	20.8	20.1	3	

SAMPLE DUPLICATE: 375941

Parameter	Units	9258912001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	14.1	14.6	4	

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: WET/10566 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 9257769001, 9257769002, 9257769003, 9257769004, 9257769005, 9257769006, 9257769007

SAMPLE DUPLICATE: 370190

Parameter	Units	9257365001 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	7.7	7.7	0	

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QUALITY CONTROL DATA

Project: MERCHANT METALS
Pace Project No.: 9257769

QC Batch: WET/10759 Analysis Method: EPA 9045
QC Batch Method: EPA 9045 Analysis Description: 9045 pH
Associated Lab Samples: 9257769009, 9257769010, 9257769011, 9257769012, 9257769013, 9257769014

SAMPLE DUPLICATE: 377201

Parameter	Units	9257769009 Result	Dup Result	RPD	Qualifiers
pH at 25 Degrees C	Std. Units	3.2	3.2	0	

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: MERCHANT METALS
Pace Project No.: 9257769

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.
U - Indicates the compound was analyzed for, but not detected.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

H1	Analysis conducted outside the EPA method holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

Pace Analytical®
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

1336130

Section A Required Client Information:

Company: Terracon Consultants
Address: 2020 Starita Rd.
Charlotte, NC 28206
Email To: CAKelly@terracon.com
Phone: (704) 509-1777 Fax: (704) 509-1888
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Chris Kelly
Copy To: Chris Corbitt
CLcorbitt@terracon.com
Purchase Order No.: 71097797
Project Name: Merchant Metals
Project Number: 71097797

Section C Invoice Information:

Attention: Same
Company Name:
Address:
Pace Quote Reference: 92110309.102
Pace Project Manager:
Pace Profile #: 3176-8

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: Zn, Cr, Pb by 6010	pH	TCLP for Zn, Cr, Pb	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	B-1 1'	SL	G			11/17/09	1105		1										X	X			001
2	B-1 4'						1115		1														Hold 009
3	B-2 1'						1125		1										X	X			002
4	B-2 4'						1130		1														Hold 006
5	B-3 1'						1140		1										X	X			003
6	B-3 4'						1145		1														Hold 011
7	B-4 1'						1155		1										X	X			004
8	B-4 4'						1205		1														Hold 012
9	B-5 1'						1210		1										X	X			005
10	B-5 4'						1220		1														Hold 013
11	B-6 1'						1225		1										X	X			006
12	B-6 4'						1240		1														Hold 014

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D. (first): 9257769

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Chris Kelly	11/18/09	0900	Justin Matley/PACE	11/18/09	0900	3.0	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Kelly

SIGNATURE of SAMPLER: Chris Kelly

DATE Signed (MM/DD/YY): 11/17/09

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

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www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 2

1331091

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Terracon Consultants	Report To: Chris Kelly	Attention: Same
Address: 2020 Starita Road Charlotte, NC 28206	Copy To: Chris Corbitt	Company Name:
Email To: Cakelly@terracon.com	cjcorbitt@terracon.com	Address:
Phone: (704) 509-1777 Fax: (704) 509-1888	Purchase Order No.: 71097797	Pace Quote Reference: 92110309.102
Requested Due Date/TAT: Standard	Project Name: Merchant Metals	Pace Project Manager:
	Project Number: 71097797	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: NC

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 2a, Cr, Pb by 6010	pH	TCLP for 2a, Cr, Pb	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Concrete Composite	SL	C	11/17/09	1250				1												X			925769 008
2	Background	SL	G			11/17/09	1300		1										X	X				925769 009
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
		11/18/09	0900	Justin Kelley / pace	11/18/09	900	3.0	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Kelly

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 11/17/09

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5%