PHASE II REMEDIAL INVESTIGATION REPORT
FORMER EATON CORPORATION FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA
LONGITUDE W78°17'02", LATITUDE N35°31'33"
NONCD 0002853

Prepared for:

Eaton Corporation, Inc.
1111 Superior Avenue
Cleveland, OH 44114

Prepared by

Solutions-IES, Inc.
1101 Nowell Road
www.solutions-ies.com
Solutions-IES Project No. 6010.08A2.EATN

February 8, 2012

Kathryn Doll
Environmental Scientist

Jody Overmyer, P.E.
Project Manager

Solutions-IES
Industrial & Environmental Services

Solutions-IES
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February 9, 2012

Mr. Kim Caulk, P.G.
Inactive Hazardous Sites Branch-REC Program
NCDENR-Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, NC 27605

RE: **Remedial Investigation Report February 8, 2012**
Former Eaton Corporation Facility
1100 East Preston Street
Selma, NC
NCDENR Site ID No. NONCD 0002853
Solutions-IES Project No. 6010.08A2.EATN

Dear Mr. Caulk,

Solutions-IES, Inc. (Solutions-IES), on behalf of Eaton Corporation (Eaton), has prepared this submittal in accordance with the REC program rules for the above-referenced site. Attached please find an electronic version of the Phase II Remedial Investigation Report, including certification statements, saved in PDF format on the enclosed CD. Work is progressing in a manner to achieve the mandatory work phase completion deadlines specified in the Administrative Agreement and 15A NCAC 13C .0302(h).

If you have any questions or need any additional information, please feel free to contact us at (919) 873-1060.

Yours truly,
Solutions-IES

Kathryn Doll
Project Scientist

Jody Overmyer, P.E.
Project Manager

Attachment 1 – Certification Statements
Attachment 2 – Remedial Investigation Report

cc: Ms. Karen Souza, P.G., Allegheny Environmental Services, Inc.
Mr. Jeffery P. Allen, P.G, Eaton Corporation
Ms. Vicki Shore, Johnston County Industries

ATTACHMENT 1

CERTIFICATION STATEMENTS

IHSB SITE NAME NONCD 0002853 / Former Eaton Selma

DATE & NAME OF DOCUMENT 02/08/2012 Phase II RI Report

TYPE OF SUBMITTAL (circle all that apply): Report, Workplan, Work Phase Comp. Statement, Schedule Change

REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT (.0306(B)(2))

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Karen E. Souza, agent; Eaton Corp.
Name of Remediating Party

Karen E. Souza
Signature of Remediating Party

2-8-2012
Date

NOTARIZATION

Pennsylvania (Enter State)

Allegheny **COUNTY**

I, Clare J Denny, a Notary Public of said County and State, do hereby certify that Karen. E. Souza did personally appear and sign before me this day, produced proper identification in the form of PA Driver Lic 22765419, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 8th day of February, 2012

Clare J Denny
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: Nov 03 2014

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Clare J. Denny, Notary Public
Hampton Twp., Allegheny County
My Commission Expires Nov. 3, 2014
Member, Pennsylvania Association of Notaries

IHSB SITE NAME NONCD 0002853 / Former Eaton Selma

DATE & NAME OF DOCUMENT 02/08/2012 Phase II RI Report

TYPE OF SUBMITTAL (circle all that apply): Report, Workplan, Work Phase Comp. Statement, Schedule Change

REGISTERED SITE MANAGER CERTIFICATION OF SIGNATURES

As the Registered Environmental Consultant for the Site for which this filing is made, I certify that the signatures included herewith are genuine and authentic original handwritten signatures and/or true, accurate, and complete copies of the genuine and authentic original handwritten signatures of the persons who purport to sign for this filing. I further certify that I have collected through reliable means the originals and/or copies of said signatures from the persons authorized to sign for this filing who, in fact, signed the originals thereof. Those persons and I understand and agree that any copies of signatures have the same legally binding effect as original handwritten signatures, and I certify that any person for whom I am submitting a copy of their signature has provided me with their express consent to submit said copy. Additionally, I certify that I am authorized to attest to the genuineness and authenticity of the signatures, both originals and any copies, being submitted herewith and that by signing below, I do in fact attest to the genuineness and authenticity of all the signatures, both originals and copies, being submitted for this filing.

M. Tony Lieberman
Name of Registered Site Manager

M. Tony Lieberman
Signature of Registered Site Manager

Date 2/9/12

REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT (.0306(b)(1))

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

M. TONY LIEBERMAN
Name of Registered Site Manager

M. Tony Lieberman
Signature of Registered Site Manager

Date 2/9/12

NOTARIZATION

North Carolina (Enter State)

Wake COUNTY

I, Debra A. Tabron, a Notary Public of said County and State, do hereby certify that M. Tony Lieberman did personally appear and sign before me this day, produced proper identification in the form of Driver's License, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 9th day of February, 2012.

Debra A Tabron
Notary Public (signature)

(OFFICIAL SEAL)

DEBRA A. TABRON
Notary Public
Wake County
NORTH CAROLINA

My commission expires: 8.22.15.

PHASE I REMEDIAL INVESTIGATION COMPLETION CERTIFICATION
15A NCAC 13C.0306(b)(5)(A)

Media (check all that apply): ☑ All Media ☐ Soil ☐ Ground water ☐ Surface water ☐ Sediment

Site Name: Former Eaton Selma
County: Johnston
Site ID No.: NONCD 0002853

Street Address: 1100 East Preston Street
Selma, NC

The Phase I remedial investigation, which is the subject of this certification has, to the best of my knowledge, been completed in compliance with the Inactive Hazardous Sites Response Act G.S. 130A-310, et seq. and the remedial action program Rules 15A NCAC 13C .0300, and
Solutions-IES, Inc.
[REC Name]
is in compliance with Rules .0305(b)(2) and .0305(b)(3), of this section. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information.

M. Tony Lieberman
RSM Signature

2/9/12
Date

M. TONY LIEBERMAN
RSM Name

Solutions-IES, Inc.
REC Name

00090
REC No.

1101 Nowell Raod
Mailing Address
Raleigh, NC 27607
City, State, ZIP

NOTARIZATION

North Carolina (Enter State)

Wake **COUNTY**

I, Debra A. Tabron, a Notary Public of said County and State, do hereby certify that M. Tony Lieberman did personally appear and sign before me this day, produced proper identification in the form of Driver's License, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 9th day of February, 2012.

Debra A. Tabron
Notary Public (signature)

(OFFICIAL SEAL)
DEBRA A. TABRON
Notary Public
Wake County
NORTH CAROLINA

My commission expires: 8.22.15.

ATTACHMENT 2

REMEDIAL INVESTIGATION REPORT

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Solutions-IES
Industrial & Environmental Services

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1.0 INTRODUCTION

This Phase II Remedial Investigation (RI) Report has been prepared for the former Eaton Corporation (Eaton) facility located at 1100 East Preston Street in Selma, Johnston County, North Carolina. In October 2008, Eaton applied to enter the Registered Environmental Consultant (REC) Program as administered by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Waste Management (DWM), Inactive Hazardous Sites Branch (IHSB), Superfund Section. The final Administrative Agreement was executed by NCDENR on February 10, 2009. Solutions-IES, Inc. (Solutions-IES) is the designated REC for this project on behalf of Eaton, the Responsible Party (RP), and Mr. M. Tony Lieberman of Solutions-IES has been assigned to work on behalf of the IHSB as the Registered Site Manager (RSM).

A series of environmental investigations have been completed at the site. Mid-Atlantic Associates (MAA) prepared the initial environmental assessment in January 2008 and identified several hydrocarbon and chlorinated constituents (predominantly tetrachloroethene [PCE]) in groundwater. In response, Eaton contracted Solutions-IES to perform a Phase I RI to further evaluate the apparent contamination. A Phase I RI Report dated September 2008, was prepared by Solutions-IES prior to the site entering the REC Program (Solutions-IES, 2008). Subsequently, the Phase II RI Work Plan (RIWP) dated February 17, 2009, was prepared by Solutions-IES and submitted to NCDENR (Solutions-IES, 2009). The RIWP provided an approach to further delineate the volatile organic compound (VOC) constituents both on site and off site, in addition to evaluating the presence of metals and semi-volatile organic compounds (SVOCs) in soil and groundwater. As new data became available, two amendments to the RIWP dated June 25, 2010, and December 21, 2010, were submitted to the NCDENR (Solutions-IES, 2010a and 2010b) that described additional activities necessary to complete the delineation. This Phase II RI Report builds on the historical investigations conducted at the site prior to Eaton's entry into the REC Program and describes the findings of the several stages of Phase II RI site assessments that served to delineate the extent of contamination.

1.1 SITE BACKGROUND

The Eaton Selma facility is approximately 20 acres of developed and wooded land with a 90,000 square foot manufacturing building and three smaller storage buildings north of the manufacturing building. It is located about 0.5 miles northeast of the intersection of US Highway 95 and NC Highway 70 in Selma,

North Carolina (**Figure 1**). Solutions-IES review of construction and record drawings from the site revealed that the manufacturing building was constructed and expanded between 1958 and 1977.
In general, the area is zoned Industrial with residential properties to the southwest of the site. Properties that immediately surround the site are shown on the Site Vicinity Map (**Figure 2**) and include the following:

- Wooded/partially logged land to the north (zoned Industrial) owned by NSEW Corporation (NSEW).
- Preston Street to the east, across which are located the following industrial properties:
  - Wooded land (owned by NSEW Corporation) traversed by Bawdy Swamp Creek
  - Johnston County Shriner's Club
  - Ralph L. and Louise N. Stancil property
- Vacant land to the south (zoned Industrial); owned by Ralph L. and Louise N. Stancil.
- Vacant land to the west (zoned Industrial); owned by Paul H. Howard.
- Medium density residential land to the southwest (zoned Residential Overaly); owned by Yelverton Y. and Tyrone Soard, Eddie Sword[1] and Judy B. Ricks.

1.1.1 Ownership History

Based on a historical review of the property conducted by MAA in January 2008, the subject site was agricultural land before it was first developed in 1958. The property was originally developed by Mr. John Shallcross of Johnston County Industries, Inc. (JCI). Cutler Hammer Corporation purchased the site in 1967. Eaton then purchased the site in 1976. In early 2008, JCI purchased the property and currently occupies the building.

1.1.2 Operational History

The original structures included the manufacturing building and the Cardboard Storage Building. The manufacturing building was expanded in 1968 by Cutler Hammer Corporation. Eaton constructed an addition to the building in 1977 and added an Oil Storage Building. The Wood Storage Building was built in 2003. The locations of the manufacturing building and various outbuildings are shown in **Figure 3**.

The facility was used to manufacture and assemble winding resistors, small parts and switches. Various industrial processes were employed at the plant, including injection molding (thermoset and thermoplastic), metal stamping, and parts cleaning and washing. The facility also stored and used a variety of oils, hydraulic fluids, and solvents in their processes. Details of past storage practices are unknown. Eaton moved their operations from Selma in October 2007, and placed the property for sale. In early 2008, JCI purchased the property and after renovations, re-opened the facility in July 2008 as a community

[1] Edward Soard and Eddie Sword spelled as shown on the tax map may be the same owner.

rehabilitation center. The center evaluates, trains, and returns individuals with vocational barriers to employment. No manufacturing is presently conducted at the site.

MAA's Environmental Site Assessment (ESA) in January 2008 included a search of environmental records by Environmental Data Resources (EDR). According to Eaton, the EDR report was included as an appendix of MAA's ESA report, but was not made available to Eaton. MAA also determined that Sanborn Fire Insurance Maps did not exist for this area.

1.1.3 Hazardous Waste Management

Based upon their review of historical information, MAA noted the following information regarding past practices:

- Long-term storage and use of oil, solvents, hydraulic fluids and similar fluids.
- Oil staining from manufacturing equipment.
- The use of two sumps for parts cleaning/washing. (These sumps have since been abandoned by filling with concrete.)

1.1.4 Environmental Permits and Regulatory History

As part of the Phase I RI, Solutions-IES reviewed several Federal and State databases to determine the site's regulatory history and identify environmental permits that might be in place. The following agencies' listings were reviewed:

- U.S. Environmental Protection Agency (USEPA)/NCDENR DWM Small Quantity Generators Listing
- Resource Conservation and Recovery Act (RCRA)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which includes:
    - USEPA Superfund National Priorities List (NPL)
    - USEPA Superfund
- NCDENR DWM IHSB
- NCDENR Groundwater Incident Numbers

1.1.5 Summary of Pre-REC Environmental Assessment Activities

The facility's RCRA identification number was noted in the records as NCD981858806. The former Eaton facility was reported to be a small quantity generator. However, there were no past or current permits in any of the databases reviewed. Prior to Eaton's entry into the REC Program, two environmental assessments and two air quality monitoring events were conducted. These activities are summarized below.

1.1.5.1 January 2008 – Environmental Site Assessment

MAA conducted a Phase I ESA for a potential purchaser in early January 2008, including a historical and regulatory records review. Several hydrocarbon and chlorinated constituents (predominantly tetrachloroethene [PCE]) in excess of the 15A NCAC 02L .0202 Groundwater Quality Standard (NC 2L Standards) were reported in groundwater. A copy of the MAA report was included in Appendix A of the Phase I RI Report (Solutions-IES, 2008).

1.1.5.2 February 2008 – Indoor Air Sampling

Solutions-IES conducted a site visit on February 27, 2008, to gather preliminary information about the site and surrounding properties. At the same time and at the request of Eaton, Solutions-IES' subcontractor (Trigon Engineering Consultants, Inc. [Trigon]) conducted indoor ambient air quality monitoring on February 27, 2008. The indoor air quality monitoring events indicated that the constituents detected were below their respective Generic Screening Levels (GSL)[2] for indoor air, as well as the North Carolina Department of Labor Occupational Safety and Health Division (OSHD) permissible exposure limits (PELs) and American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit values (TLVs) established for worker safety. The Trigon report was included in Appendix A of the Phase I RI Report (Solutions-IES, 2008).

1.1.5.3 March 2008 – Soil Gas Survey

On March 6, 2008, MAA independently conducted indoor ambient air quality monitoring and a soil gas survey beneath the building slab. The soil gas survey samples were collected between 0.5 and 1-foot (ft) beneath the bottom of the building slab. Although seven of the eight soil gas sampling locations reported the presence of PCE and 1,4-dioxane, none of the constituent concentrations exceeded their respective GSL for indoor air, nor did they exceed the OSHD PELs and ACGIH TLVs established for worker safety.

1.1.5.4 May through September 2008 – Phase I RI Assessment

Solutions-IES began field activities as part of a Phase I RI in May 2008. Solutions-IES advanced 18 soil borings with direct-push technology (DPT) methods and installed five groundwater monitoring wells. Soil impacts appeared to be primarily limited to the vicinity of the former Oil Storage Building and at various locations along the route of subsurface stormwater piping that parallels the northern property line. The extent of the soil impacts to the north (off site) were not delineated during the Phase I RI assessment. Soil in the immediate vicinity of the Oil Storage Building and along the underground utilities between the Oil

Storage Building and East Preston Street was shown to be impacted, and the conclusion of the Phase I RI was that further soil delineation was needed.

The Phase I RI activities identified a groundwater plume to the north and east (off site), but did not delineate the extent. Because VOCs in groundwater had not been defined laterally, it was possible that the groundwater plume may have migrated north or northwest off the site. The assessment report suggested that below-grade utilities, particularly the stormwater piping, might have influenced the plume's migration in a direction opposite to the apparent local groundwater flow direction at the time. The conclusion of the Phase I RI was that further groundwater delineation was needed.

1.2 PHASE II REMEDIAL INVESTIGATION OBJECTIVES

The Phase I RI identified elevated VOC concentrations in soil and groundwater near the northern property boundary in the vicinity of the former oil storage areas. The objectives of the Phase II RI activities as presented in Phase II RIWP were to:

- Better understand the influence of the stormwater system on contaminant profiles in soil and groundwater;
- Evaluate whether other constituents such as metals or SVOCs including 1,4-dioxane (due to its association with detected chlorinated ethanes) were present;
- Eliminate pesticides, polychlorinated biphenyls (PCBs), cyanide and formaldehyde as chemicals of concern for further consideration based on Generator knowledge that these chemicals were never used at the site;
- Delineate the areal and vertical extent of constituents exceeding Preliminary Remediation Goals (PRGs) in soil;
- Delineate the areal and vertical extent of constituents exceeding NC 2L Standards for groundwater;
- Evaluate the potential for contaminants to have migrated off site and create impacts to soil, groundwater and or surface water and sediment; and
- Gather data necessary to support potential remedial alternatives for site media.

2.0 GEOLOGY AND HYDROGEOLOGY

2.1 SITE AREA GEOLOGY

The site is located at the boundary between the Coastal Plain and Piedmont Physiographic Provinces where Coastal Plain sediments feather onto residual soil weathered from metamorphic and igneous bedrock. The 1985 Geologic Map of North Carolina (Rhodes and Conrad, 1985) shows the site area to be underlain by recent-aged terrace deposits and upland sediments that are described as gravel, clayey sand,

and sand with minor occurrences of iron-cemented sandstone. Marine sediments of the Yorktown Formation have been mapped approximately 2 miles southeast as isolated outcrops southwest of the site. Older Cretaceous-aged sediments of the Cape Fear and Middendorf Formations are mapped several miles southwest and east of the site. Crystalline bedrock, mapped as biotite gneiss and felsic metavolcanics, is present a few miles west of the site. The Coastal Plain sediments thicken considerably within a short distance to the east. Three geological cross-sections across the site are presented in **Figure 4**, **Figure 5** and **Figure 6**, and the locations of the cross-sections are shown in **Figure 3**.

The soils present at the site are typically poorly drained soils on broad smooth flats and in shallow depressions in the uplands on the Coastal Plain. Surface soils in undisturbed areas at the site tend to consist of a few inches of topsoil underlain by residual sedimentary deposits of sands, clays and silts. The site soils have been mapped as Rains, Goldsboro and Lynchburg sandy loams, and Rains Urban Land Complex Series soils consisting of poorly drained sandy loam as described in the Phase I RI Report (Solutions-IES, 2009). The typical soil sequence consists of approximately 5 inches of gray sandy loam overlying several feet of red silty clay, with a Unified Soil Classification System (USCS) designation of "CL", which is underlain by silty or clayey sandy soils (USCS designation ML) that transitions with increasing depth into slightly silty or slightly clayey sand mixtures (SP and SM) containing low but varying amounts of phosphatic sand grains. The boring logs from site investigative activities are provided in **Appendix A**.

2.2 SITE AREA HYDROGEOLOGY

The conceptual hydrogeologic model for the Piedmont is based on a sloped aquifer system where precipitation infiltrates through the unsaturated zone to recharge the water table. Groundwater moves down slope in response to gravity and discharges as springs in the topographic lows and as base flow to perennial streams and rivers. In most cases, the water table surface mimics the overlying land surface and surface topography can be used to estimate groundwater flow direction.

The Piedmont aquifer system at the former Eaton site is divided into three groundwater transport zones. These zones include the surficial semi-confined unconsolidated zone, the underlying sand and gravel zone, and a highly weathered portion of the underlying bedrock. The sand and gravel zone and the competent bedrock are separated by a semi-confining silty-clay residuum that extends from approximately 38 to 50 ft below ground surface (bgs). The weathered bedrock zone occurs from

approximately 50 to 64 ft bgs, which is from the bottom of the silty-clay residuum to the top of the competent bedrock.

A total of 13 permanent monitoring wells have been installed at the site. Eleven of the site wells are screened in the sand and gravel layer above the consolidated silty-clay residuum, while two monitoring wells (MW-14 and MW-15) have been installed to the top of bedrock in the weathered bedrock zone. **Table 1** summarizes the screen depths for the monitoring wells that are shown on the current site layout provided as **Figure 3**.

The clay unit ("CL") described in **Section 2.1** occurs approximately 7 to 8 ft bgs as shown in the cross-sections provided as **Figures 4, 5**, and **6**. The clay layer contributes to the surficial aquifer's semi-confined characteristics, which is supported by the low hydraulic conductivity, and the seasonal change in groundwater flow based on the depth of the water table. Groundwater tends to fluctuate up into the clay layer during wetter seasons. Groundwater flow characteristics are discussed further in **Section 4.2**.

3.0 INVESTIGATION METHODOLOGY

The intent of the Phase II RI was to achieve the objectives in Section 1.2 and primarily characterize the extent of contamination by defining the horizontal and vertical extent of VOCs in soil and groundwater. Investigation activities were performed in accordance with the methodology established in the Phase II RIWP (Solutions-IES, 2009) and RIWP Addendums (Solutions-IES, 2011a and 2011b). The Phase II RI was comprised of four field events that are described in the following sections.

3.1 FIELD EVENT #1

On April 7-8, 2009, and April 22, 2009, Solutions-IES performed the scope-of-work outlined in the Phase II RIWP for Field Event #1. The objectives of Field Event #1 were the following:

- Perform a site reconnaissance of the adjacent properties and surface drainage features, including an evaluation of the apparent influence of the man-made stormwater conveyance system on contaminant migration in soil and groundwater;
- Establish "background" concentrations for metals in soil;
- Evaluate the groundwater flow direction and hydraulic gradient beneath the site; and
- Evaluate the constituents of concern in soil and groundwater to guide future laboratory analyses.

3.1.1 Surface Drainage

Field notes from Field Event #1 are included in **Appendix B1** and site photographs taken during Field Event #1 are provided in **Appendix C1**. Solutions-IES visually evaluated the stormwater conveyance system during the site activities. While the property is nearly flat, there is some topographic relief. The highest elevation appears to occur along the west side of the property and the lowest along the east side. Surface drainage is poor, as exhibited by development of wetland-type areas within the interior of the property and wetland areas on the adjacent property to the north (**Photographs 1, 2** and **3** in **Appendix C1**).

Stormwater is conveyed from various areas of the property through a series of shallow ditches, catch basins and underground pipes. Stormwater drainage from the vicinity of the west, southwest and south parking lots (**Photograph 4**) travels by overland flow into ditches and flows to the east via a shallow drainage swale along the south property boundary (**Photographs 6** and **7**) to a drainage depression paralleling the west side of East Preston Street (**Photograph 8**). From the north side of the west parking lot (**Photograph 9**), stormwater drainage flows to the north to the vicinity of the previous Cardboard Storage Area, where it is directed to the east **(Photographs 11** and **12**).

Stormwater drains from the north property boundary (**Photograph 13**) by flowing towards the swale at the northern property line. From the vicinity of the previous Wood Storage Building, stormwater is piped below grade to the east to East Preston Street. Stormwater in the northern part of the site enters the underground pipe through a series of catch basins located along the northern property line extending from the former Oil Storage Area to East Preston Street (**Photograph 13**).

Roof drainage from the west side of the building is piped underground along the west wall of the building (**Photograph 10**). This pipe passes beneath the former Oil Storage Building and enters the stormwater system just north of the Oil Storage Area. At East Preston Street, stormwater from the north half of the site is discharged to the roadside ditch (**Photograph 15**). The ditch also carries Bawdy Swamp Creek from the adjacent property to the north (**Photograph 16**) where it is piped beneath East Preston Street. The underground piping shown on the cross-section A-A' (**Figure 4)** interprets site conditions through the cross-section area.

Solutions-IES also installed three piezometers to evaluate whether the near-surface clay soils confine the water table and whether the drainage ditch along East Preston Street is a groundwater discharge or recharge feature. Piezometers PZ-2A and PZ-2B were installed in the immediate vicinity of MW-2

(**Figure 3**). PZ-3 was installed adjacent to the drainage ditch. The piezometers were constructed using a 1-ft long screened tip (Solinst Model 615) attached to threaded and coupled ¾-inch (in) iron pipe.

The pipe and tip were driven into the subsurface using a manual fence post driver. PZ-2A is screened between 13.5 to 14.5 ft bgs; PZ-2B is screened from 5.5 to 6.5 ft bgs; and PZ-3 is screened from 7.5 to 8.5 ft bgs.

3.1.2 Soil Evaluation

Solutions-IES collected three background soil samples (BG-1 through BG-3) using a decontaminated hand auger from undisturbed, undeveloped areas of the site at depths less than 2 ft bgs to establish background concentrations of metals in soil. The samples were collected into laboratory-supplied sample bottles, stored on ice, and delivered under chain-of-custody control to Pace Analytical Services (Pace Labs) in Huntersville, NC. The background samples were analyzed for 23 metals by EPA Methods 6010/7470. A fourth soil sample (SB-7A) was collected using a decontaminated hand auger from an area with previously-identified soil impacts. This sample was collected from a depth of 6 to7 ft bgs, which was based on field headspace screening results of soil recovered between 1.5 ft and 7 ft bgs. In addition to metals analysis, aliquots of the soil collected from SB-7A were submitted for VOC scan including tentative identification of the 10 largest non-target peaks (TICs) by EPA Method 8260B and SVOC scan including TICs by EPA Method 8270C. Samples were not analyzed for pesticides, polychlorinated biphenyls, cyanide or formaldehyde based on Generator knowledge that these chemicals were never used at the site. Soil samples were placed in resealable plastic bags for screening the head space for VOCs. A calibrated flame ionization detector (FID) was used to screen the bagged samples after they equilibrated for approximately 15 minutes.

3.1.3 Groundwater Evaluation

Water levels were measured in all of the site wells on April 8, 2009, and again on April 22, 2009. Prior to measuring the depth to water (DTW) in each well, the wells were opened and allowed to equilibrate with the atmospheric pressure for at least 15 minutes. One groundwater sample and one duplicate sample were collected from MW-2 using low-flow sampling techniques, with the duplicate sample designated “MW-12”. The well was purged at a rate equal to or less than the groundwater recharge rate, until field parameters (temperature, pH, conductivity, and turbidity) stabilized. The water level in the well was continuously monitored during purging to maintain minimal drawdown. The samples were collected into laboratory-supplied sample bottles, stored on ice, and delivered under chain-of-custody control to Pace Labs and analyzed for VOCs plus TICs by EPA Method 8260B, SVOCs plus TICs by EPA Method

8270C, and metals by EPA Method 6010/7470. Samples were not analyzed for pesticides, polychlorinated biphenyls, cyanide or formaldehyde based on Generator knowledge that these chemicals were never used at the site.

3.2 FIELD EVENT #2

Solutions-IES performed the field activities for Field Event #2 on October 26-27, 2009, as outlined in the Phase II RIWP. The objectives of Field Event #2 were to address the following:

- Further delineate VOC impacts to soil and groundwater in the off-site areas north and east of the site;
- Evaluate a sediment sample collected from immediately downgradient of the site within Bawdy Swamp Creek; and
- Evaluate a surface water sample collected from Bawdy Swamp Creek immediately downgradient of the site for VOCs.

3.2.1 Soil and Groundwater Evaluation

Field notes from Field Event #2 are included in **Appendix B2** and site photographs taken during Field Event #2 are provided in **Appendix C2**. Underground utility locators cleared the boring locations prior to initiating work. Subsequently, 11 borings were advanced to approximately 12 ft bgs using a truck-mounted Geoprobe® in the accessible areas and by hand-auger at three locations inaccessible by the Geoprobe®. The boring locations, identified with numbers SB-19 through SB-29, are shown in the site map provided as **Figure 3**. For each boring, the lithology was described and soil samples collected at 2-ft intervals were placed in resealable plastic bags for screening the head space for VOCs. A calibrated MiniRAE 3000 photoionization detector (PID) was used to screen the bagged samples after they equilibrated for approximately 15 minutes. An unsaturated soil sample was then collected from the depth interval with the highest PID reading using a laboratory-supplied sampling kit.

Following advancement of the borings, 1-in diameter PVC temporary monitoring wells (TMWs) were installed in each of the borings to an approximate depth of 16 ft bgs, with a 10 ft screen to collect groundwater samples for VOC analysis by EPA Method 8260B. During development of each well, field parameters including turbidity, pH, conductivity, temperature and oxidation-reduction potential (ORP) were recorded until stabilization was apparent (typically when results were within 10%). Turbidity was greater than 100 nephelometric turbidity units (NTUs) at five locations. Boring logs are provided in **Appendix A1**, well construction forms are provided in **Appendix D1**, and the monitoring well permit issued by NCDENR is provided in **Appendix E**.

A total of 12 soil samples (including one duplicate) and 14 groundwater samples (including a duplicate and two quality assurance/quality control [QA/QC]) samples were collected into laboratory-supplied sample bottles, stored on ice, and delivered under chain-of-custody control to Pace Labs.

A sediment and surface water sample were collected from the confluence of Bawdy Swamp Creek and the site's subsurface drainage outfall. The sediment sample was collected approximately 3 in (0.25 ft) bgs. These samples were collected to evaluate whether impacted surface water from the storm drainage ditch has affected the creek. The locations of the samples are shown on **Figure 3**.

3.3 FIELD EVENT #3

Field Event #3 was conducted July 12-16, 2010, July 19-21, 2010, and July 28-29, 2010 in accordance with the Phase II Work Plan Amendment dated June 25, 2010 (Solutions-IES, 2010a). The objectives of Field Event #3 were to address the following:

- Advance two deep geotechnical borings to bedrock followed by 10 ft of rock core;
- Install six permanent monitoring wells to further delineate groundwater impacts;
- Install three drive-point piezometers in Bawdy Swamp Creek to observe the groundwater and surface water interaction;
- Collect seven soil samples from predetermined locations to further assess the extent of soil impacts; and
- Perform a groundwater sampling event which includes gauging all site monitoring wells and collecting groundwater samples.

Underground utility locators cleared the boring and monitoring well locations prior to initiating work. Solutions-IES subcontracted Parratt-Wolff, Inc. (PWI) to perform the drilling operations during the field event. The field notes are included as **Appendix B3** and a collection of site photographs from the field event are included as **Appendix C3**. The soil and groundwater samples collected during Field Event #3 were collected into laboratory-supplied sample bottles, stored on ice, and delivered under chain-of-custody control to SGS North America, Inc. (SGS) in Wilmington, North Carolina.

3.3.1 Bedrock Determination

Two geotechnical borings (RC-1 and RC-2) were advanced to determine the depth and nature of bedrock at the site. The locations of RC-1 and RC-2 are presented on the site map and cross-section trace map provided as **Figure 3**. Continuous split-spoon samples were collected in 5-ft intervals until reaching bedrock refusal in each of the borings. Once bedrock was encountered, the boring was extended an additional 10 ft using an NQ (nominal 2-in diameter core) core barrel and diamond bit. Bedrock was

encountered at a depth of approximately 64 ft bgs in RC-1 and 55 ft bgs in RC-2. Soil and bedrock lithology were recorded during field activities and the boring logs are provided in **Appendix A2**.

3.3.2 Groundwater Evaluation

Five new permanent monitoring wells were installed. The location of each of the monitoring wells is shown on **Figure 3**. The wells were constructed as specified in the Phase II RI Work Plan Amendment (Solutions-IES, 2010a). As a deviation from the work plan, one of the proposed monitoring wells (MW-10) was not installed because the location was in close proximity to overhead power lines and underground utilities which prevented the drill rig from being able to safely access the location. Additionally, monitoring wells MW-6 and MW-7 were finished as stick-up wells with a protective riser because the locations of the wells are in an overgrown vegetation area.

The shallow Type II monitoring wells (MW-6 through MW-9 and MW-11) are constructed of 2-in diameter PVC riser attached to a 2-in diameter PVC 0.010-in slot screen. The monitoring wells were drilled using a hollow-stem auger rig. Monitoring wells MW-6, MW-7, and MW-8 are screened from 20 to 30 ft bgs, MW-9 from 28 to 38 ft bgs, and MW-11 from 25 to 35 ft bgs. The unsaturated soil from each of the monitoring well installations was collected using a 4-ft split-spoon sampler. Soil samples collected at 2-ft intervals were placed in resealable plastic bags for screening the headspace for VOCs. A calibrated MiniRAE 3000 PID was used to screen the bagged samples after they equilibrated for approximately 15 minutes. The PID readings are presented on the soil boring logs included in **Appendix A2**.

In each of the monitoring wells, a filter sand pack was placed around the well screen to approximately 2-feet above the top of the screen. Bentonite was used to seal each well to 2 feet above the filter sand pack and the wells were grouted to ground surface. Monitoring wells MW-6 and MW-7 were finished as stick-up wells with a protective riser, while M-8, MW-9 and MW-11 were completed with an 8-in diameter flush-mounted protective cover concreted into a 2-ft by 2-ft pad. The wells were developed by pumping until the discharge water appeared relatively silt-free. Approximately 55 gallons (one drum volume) was removed from each newly installed monitoring well during development. Well construction forms are included as **Appendix D2**.

On July 28-29, 2010, approximately one week after the new monitoring wells were installed, Solutions-IES conducted groundwater sampling activities. On July 28, 2010, a round of stabilized groundwater levels was collected from each of the site monitoring wells and drive-point piezometers. Each monitoring

well was sampled using low-flow technology. The wells were purged using a peristaltic pump, at a rate equal to or less than the groundwater recharge rate, until field parameters (temperature, pH, conductivity, turbidity and dissolved oxygen [DO] and ORP) stabilized. Water levels in the wells were continuously monitored during purging to maintain minimal drawdown. All site monitoring wells were sampled for VOC analysis by EPA Method 8260B. Four of the samples (MW-4, MW-6, MW-7, and MW-11) were also sampled for 1, 4-dioxane by EPA Method 8270C. QA/QC samples included a rinse blank, a field blank, and a duplicate sample, which were analyzed for VOC analysis by EPA Method 8260B. Groundwater sampling logs from Field Event #3 are included in **Appendix F1**.

3.3.3 Bawdy Swamp Creek Evaluation

Three drive point piezometers (DP-1, DP-2, and DP-3) were installed along Bawdy Swamp Creek to observe the surface water and groundwater elevations at these locations. The piezometers were constructed using Solinst® Model No. 615N ¾-in stainless-steel screen drive points attached to steel pipe. The piezometer was manually driven into the edge of the stream bed to a depth of approximately 5 ft bgs. The locations of the drive point piezometers are presented on site map included as **Figure 3**.

3.3.4 Soil Evaluation

Seven soil borings were advanced to approximately 8 to 12 ft bgs using a 4-ft split-spoon sampler. The soil boring locations, identified by sample identification SB-30 through SB-36, are shown on **Figure 3**. The unsaturated soil from each of the borings was collected using a 4-ft split-spoon sampler. The lithology was described and soil samples collected at 2-ft intervals were placed in resealable plastic bags for screening the headspace for VOCs. A calibrated MiniRAE 3000 PID was used to screen the bagged samples after they equilibrated for about 15 minutes. An unsaturated soil sample was then collected from the depth interval with the highest PID reading using a laboratory-supplied sampling kit. The PID readings are presented on the soil boring logs included in **Appendix A2**. Nine soil samples (including one duplicate and one from MW-7) were submitted for VOC analysis by EPA Method 8260B. Two of the soil samples (SB-30 and SB-33) were also analyzed for 1,4-dioxane by EPA Method 8270C.

3.4 FIELD EVENT #4

Field Event #4 was conducted May 4-5, 2011, June 9-10, 2011, and June 27-28, 2011, in accordance to the Phase II Work Plan Amendment dated December 21, 2010 (Solutions-IES, 2010b). The objectives of Field Event #4 were the following:

- Install one shallow monitoring well (MW-13) to the north of the presumed source area to further delineate the shallow horizontal extent of groundwater;
- Install two shallow monitoring wells (MW-10 and MW-12) on the shoulder of East Preston Street east of the presumed source area;
- Install two Type III deep monitoring wells (MW-14 and MW-15) near the presumed source area (i.e., one between the Cardboard and Parts Storage Area and the Wood Storage Building, and one approximately 100 ft southwest of MW-4); and
- Perform a groundwater sampling event which includes gauging all site monitoring wells, sampling and sampling the newly installed monitoring wells.

In addition to the outlined scope-of-work above, Eaton negotiated an agreement with ExxonMobil Environmental Services Company (EMES) and JCI to sample monitoring wells which are owned by EMES located on the adjacent NSEW property to the east. The NSEW property is the location of the former Gurley Pesticide Burial Site (EPA ID: NCD986172526), a CERCLA-regulated site. The locations of the wells are adjacent to the JCI property to the east and would serve as data points to further delineate shallow groundwater contamination east of the site. These wells are designated by "AMW" and "APZ" on the property east of East Preston St. (**Figure 3**). Additionally, as part of the agreement and a subsequent amendment, Eaton and JCI authorized EMES to sample the Eaton monitoring wells MW-1, MW-3, MW-4, MW-5, MW-9, and MW-11 located on the current JCI property. The limited access agreement and amendment is included in **Appendix G**.

The monitoring wells during Field Event #4 were installed by Geologic Exploration, Inc. (Geologic) of Statesville, North Carolina. MW-13 was installed to the north of the presumed source area and consisted of a 2-in PVC riser attached to 10 ft of 2-in diameter PVC 0.010-in slotted screen. The screen was installed at a depth of 31 ft bgs. MW-14 and MW-15 consisted of an approximately 6-in diameter PVC outer casing installed into the silt stratum. The bottom of the outer casing is 44 ft bgs for both MW-14 and MW-15. A boring was advanced using mud-rotary drilling method through the PVC outer casing into the deeper silty soil residuum to the top of bedrock where a 2-in diameter PVC riser attached to 10 ft of 2-in diameter PVC 0.010-in slot screen was installed inside the 6-in casing. The screen extended to the top of bedrock. The total depths of MW-14 and MW-15 are 57 ft bgs and 56 ft bgs, respectively. The locations of the new monitoring wells are shown in **Figure 3**. Boring logs are in **Appendix A3**, well construction forms are in **Appendix D3**, and the monitoring well permit issued by NCDENR is provided in **Appendix E**.

Solutions-IES conducted the groundwater sampling event on June 27, 2011. Stabilized groundwater levels were measured in each of the site monitoring wells, drive-point piezometers, and EMES monitoring

wells located on the adjacent NSEW property. Each monitoring well was sampled using low-flow technology. The wells were purged using a peristaltic pump, at a rate equal to or less than the groundwater recharge rate, until field parameters (temperature, pH, conductivity, turbidity and DO and ORP) stabilized. Water levels in the wells were continuously monitored during purging to maintain minimal drawdown. The new site monitoring wells (MW-13, MW-14, MW-15) and EMES wells were sampled for VOC analysis by EPA Method 8260B. Groundwater sampling logs from Field Event #4 are included in **Appendix F2**. Groundwater samples were collected and placed into laboratory-supplied sample bottles, stored on ice, and delivered under chain-of-custody control to SGS for analysis.

3.5 INVESTIGATION-DERIVED WASTE

Investigation-derived waste (IDW) generated during the various field events included the following:

- Packaging from new materials such as cardboard and paper;
- Personal protective equipment (PPE), including disposable gloves, booties, etc.;
- Soil cuttings from the installation of monitoring wells and soil borings;
- Drilling mud and/or water used for rotary drilling of monitoring wells;
- Groundwater removed during well development and well purging/evacuation; and
- Spent equipment cleaning fluids, such as isopropanol, detergent solution, and rinse water.

Soil and groundwater IDW generated during the Phase II RI was temporarily containerized in DOT-approved 55-gallon metal drums. The drums were temporarily stored at a JCI-approved location at the former Eaton facility. The wastes were promptly characterized according to state requirements and subsequently managed according to state regulation based on the characterization results. Solutions-IES made arrangements for disposal by a certified waste handler (A&D Environmental). IDW manifests and the agreement for Solutions-IES to sign as an agent on behalf of Eaton Corporation are included in **Appendix H**.

3.6 VARIANCES FROM PHASE II RIWP

As described in the Phase II RIWP Amendment dated June 25, 2010 (Solutions-IES, 2010a), shallow monitoring well MW-10 was originally going to be installed along the east side of East Preston Street during Field Event #3. However, the drill rig could not access the location safely due to the proximity of the proposed monitoring well location to overhead power lines. Therefore, the Phase II RIWP Amendment date December 21, 2010 (Solutions-IES, 2010b) planned for the installation of MW-10 south of the originally proposed location, as well as the installation of shallow monitoring well MW-12 further

south of MW-10 to evaluate the horizontal extent of contamination. As discussed in **Section 3.4**, Eaton reached an access agreement with EMES to sample the monitoring wells belonging to EMES on the adjacent NSEW property to the east. Groundwater quality data from the NSEW property were used to delineate the eastern extent of the groundwater plume, therefore installation of additional monitoring wells (MW-10 and MW-12) was not warranted. Another variance from the Phase II RIWP, as mentioned in **Section 3.3,** includes finishing f monitoring wells MW-6 and MW-7 as stick-up wells with a protective riser rather than flush mount.

4.0 RESULTS AND DISCUSSION

4.1 SOIL SAMPLING RESULTS

4.1.1 Field Event #1

The analytical results for metals in soil are shown in **Table 2**. The laboratory report and chain-of-custody are included as **Appendix I1**. The average ± standard deviation of the concentrations for each of the reported metals was calculated from the results of the three background soil samples and compared with the results of SB-7A. The soil sample collected from SB-7A contained concentrations of metals that compared favorably to the average background concentrations for the site.

Table 3 shows the VOCs detected in soil in SB-7A. While some VOCs were identified in the sample from SB-7A, they are consistent with previous sample data collected in 2008 during the Phase I RI. The primary constituents of concern continue to be PCE, trichloroethene (TCE), 1,1-dichloroethene (1,1-DCE) and other less prevalent VOCs. No VOC TICs, SVOCs, or SVOC TICs were reported by the laboratory in the soil sample from SB-7A. 1,4-Dioxane (reported on the VOC scan) was not identified by the laboratory above the reporting limit in the soil from SB-7A.

4.1.2 Field Event #2

The analytical results from Field Event #2 for VOCs in soil are shown in **Table 3**. **Table 3** also provides the historical soil results from the Phase I RI for comparison. The laboratory report and chain-of-custody are included as **Appendix I2**. PCE and TCE were the only two constituents that exceeded the lesser of the IHSB Preliminary Soil Remediation Goals (PSRGs) (health-based or protection of groundwater remediation goals for non-restricted use), with the dominant constituent of concern being PCE at a maximum concentration of 2.020 milligrams per kilogram (mg/kg) in GP-20 at depth of 4 to 6 ft bgs. The

highest concentrations detected during this field event in the vicinity of the former Oil Storage Building were less than the concentrations previously reported in the Phase I RI in 2008.

4.1.3 Field Event #3

The laboratory analytical results from Field Event #3 for VOCs in soil are shown in **Table 3**. The laboratory report and chain-of-custody are included as **Appendix I3**. PCE and TCE were again the main constituents that exceeded the lesser of the IHSB PSRGs (health-based or protection of groundwater remediation goals for non-restricted use). During this field event, 1,1-DCE was also detected in SB-33 at a concentration in excess of the IHSB Protection of Groundwater value. The highest detection of PCE in soil from this field event was from soil boring SB-31 (3.740 mg/kg), collected at a depth from 4 to 6 ft bgs. The location is east of the Former Oil Storage Building, along the path of the sewer line. The sample collected from soil boring SB-35 (2.830 mg/kg) indicates soil impacts extend eastward to East Preston Street. Additionally, the soil sample collected from MW-7 (0.0103 mg/kg) revealed that soil impacts extended northeast of the Former Oil Storage Building.

4.1.4 Horizontal and Vertical Extent of Soil Contamination

As shown on **Figure 7**, the primary soil impacts are located on the north side of the Former Oil Storage Area and extend eastward in a narrow band, possibly influenced by the below-grade utility lines, particularly the stormwater piping. Field screening and laboratory data indicate the approximate horizontal extent of soil contamination extends along the stormwater piping north of the former Eaton facility, turns south, and runs parallel to East Preston Street for approximately 225 ft. Vertically, the soil contamination extends up to 8 ft bgs in some areas, depending on the depth of the water table at the time the soil sample was collected. In the “hot spot” behind the former Oil Storage Building, soil contamination was detected as shallow as 4 ft bgs and as deep as 8 ft bgs.

4.2 GROUNDWATER CHARACTERISTICS

During Phase I RI site investigation activities in June and July 2008, generalized groundwater flow beneath the site appeared to be toward the west-northwest. But, groundwater levels at the site have fluctuated over the last few years and prior to the Phase I RI in April 2008, groundwater flow was to the south-southeast as shown in the historical potentiometric maps included in **Appendix J**. **Figure 8** shows the shallow groundwater elevation map prepared from the measurements collected in June 2011. This map suggests that groundwater is heading west-southwest.

As described in **Section 2.2**, the site has a thin mantle of silty soil underlain by a clay layer. The clayey soil shown in the cross-section near the surface has the potential to perch water and influence flow direction. When the water table is above the clay, groundwater drains to the southeast as would be expected based on topography and the location of Bawdy Swamp Creek. During drier seasons, when the water table falls below or near the bottom of the clay, the water table slopes to the northwest. Deeper groundwater flow within the weathered bedrock (deep aquifer) is expected to be primarily to the east and southeast.

4.2.1 Aquifer Testing

As part of the Phase I RI, slug tests were conducted on July 16, 2008. The results were presented in the Phase I RI Report and included as an appendix in the Phase II RIWP (Solutions-IES, 2008). The tests were conducted on three permanent monitoring wells: MW-2, MW-4 and MW-5. The hydraulic conductivity (K) values for these three wells were 2.14E-05 ft per second (ft/sec) (1.85 ft per day [ft/day]), 4.91E-05 ft/sec (4.24 ft/day), and 3.55E-05 ft/sec (3.07 ft/day), respectively. The geometric mean of the three K values is 3.34E-05 ft/sec (2.89 ft/day).

4.2.2 Hydraulic Gradients and Groundwater Flow Rate

The average groundwater gradient was calculated from the groundwater elevation data collected during the June 2011 sampling event using wells MW-1 and MW-8 in the shallow aquifer. Hydraulic gradient is calculated using the following equation:

$$i = \frac{dh}{dl}$$

Where: i = the horizontal hydraulic gradient (unitless)
dh is the difference between two hydraulic heads (ft)
dl is the flow path length between the two wells (ft)

The average horizontal gradient (i) in the shallow zone is:

$$\mathrm{i_H} = \frac{(163.72\mathrm{ft} - 163.42\mathrm{ft})}{475\mathrm{ft}} = 0.0006$$

The vertical gradient between adjacent wells MW-4 and MW-14 was calculated by subtracting the water levels measured in each well during the June 2011 sampling event and dividing by the distance between the mid-points of each of the screens.

$$i_V = \frac{(163.74\text{ft} - 163.92\text{ft})}{(154.06\text{ft} - 119.45\text{ft})} = -0.005 \quad \text{upward}$$

The geometric mean of the three slug tests (Bouwer & Rice method) conducted on July 16, 2008, and hydraulic gradient discussed above were used with an estimate of effective soil porosity to calculate the average linear groundwater flow velocity according to the equation:

$$V = \frac{K \times i}{n}$$

Where: V = the average linear flow velocity in feet per day
K = the hydraulic conductivity in feet per day
i = the horizontal hydraulic gradient (unitless)
n = the soil effective porosity

An effective porosity value of 20 percent was assumed based on published data for a silty clay (Fetter, 1993). The average groundwater velocity for the site was calculated to be 0.009 ft/day or 3.3 ft per year. The aquifer calculations are provided in **Appendix K**.

4.3 GROUNDWATER SAMPLING RESULTS

4.3.1 Temporary Monitoring Wells

The analytical groundwater results from the temporary monitoring wells installed during the Phase II RI are shown in **Table 4**. Each of the 11 temporary monitoring wells installed and sampled had PCE concentrations exceeding the NC 2L Standard of 0.7 µg/L, with the highest concentration reported in TMW-20 (27,400 µg/L) located north of the Former Oil Storage Area. The results from the temporary monitoring wells were used to guide the location of permanent monitoring wells MW-6 through MW-9 and MW-11.

1,4-Dioxane exceeded the NC 2L Standard of 3 µg/L in TMW-19 and TMW-20 (305 µg/L and 332 µg/L, respectively) when analyzed and reported as part of the standard EPA Method 8260 VOC scan. Previous analytical results reported by the analytical laboratory did not include results for 1,4-dioxane in the Method 8260 scan. As a result, 1,4-dioxane was added to the list of COCs for the site. However, the presence of 1,4-dioxane was not confirmed in the permanent monitoring wells (see **Section 4.3.2**).

4.3.2 Permanent Monitoring Wells

Table 5 and **Table 6** present metals and VOC/SVOC concentrations, respectively, in the permanent site monitoring wells through 2011 compared with their respective NC 2L Standards. PCE, TCE, and 1,1-DCE were confirmed to be the primary COCs in groundwater, with several other VOCs exceeding their NC 2L Standards. PCE exceeds its NC 2L Standard in all shallow monitoring wells on site. Concentrations of PCE in the deep monitoring wells MW-14 and MW-15, as well as four of the six off site EMES wells do not exceed the NC 2L Standard. Wells MW-2 and MW-4, screened in the shallow aquifer, show the greatest impacts of PCE (5,150 and 18,200 µg/L, respectively), TCE (624 and 3,460 µg/L, respectively), and 1,1-DCE (838 and 3,230 µg/L, respectively). Six other chlorinated VOCs (carbon tetrachloride, 1,1-dichloroethane, 1,2-dichloroethane, *cis*-1,2-dichloroethene, 1,1,1-trichloroethane, and 1,1,2-trichloroethane), two petroleum VOCs (benzene and 1,2-dichlorobenzene), and one trihalomethane VOC (dibromochloromethane) have been reported by the laboratory in excess of their NC 2L Standard (**Table 6**). Results from April 2009 and July 2010 showed 1,4-dioxane was not detected above the laboratory reporting limits and therefore did not confirm the results from TMW-19 and TMW-20.

Results from MW-2 and its duplicate sample (designated MW-12) in April 2009 did not identify VOC TICs. There were also no SVOCs (including 1,4-dioxane) reported by the laboratory for either of the samples. Three SVOC TICs were found. These included TCE and PCE (both also reported on the VOC scan) and one unknown.

The only metals that exceeded any of the established NC 2L Standards were iron and manganese. Elevated iron and manganese can occur in groundwater plumes containing organic constituents.

4.3.3 Horizontal and Vertical Extent of Groundwater Contamination

Figure 9 estimates the horizontal and vertical extent of PCE in groundwater at the site. The horizontal delineation of PCE in the shallow and deep zones is complete. PCE impacts follow groundwater flow to the southeast and may potentially be influenced by the stormwater conveyance system. Reduction in PCE concentrations in the shallow zone can be seen horizontally from the presumed source area to the east from MW-2 (5,150 µg/L) to MW-8 (974 µg/L) and to the north from MW-2 (5,150 µg/L) to MW-6 (244 µg/L) to MW-13 (6.20 µg/L). PCE concentration reductions are also seen horizontally in the shallow zone from MW-4 (18,200 µg/L) to MW-3 (1,630 µg/L) to MW-11 (2.01 µg/L). Vertically, a decreasing trend in PCE concentrations was found in the presumed source area, from MW-2 (5,150 µg/L) to MW-15 (0.440 µg/L) and also from MW-4 (18,200 µg/L) to MW-14 (0.230 µg/L).

4.4 SEDIMENT AND SURFACE WATER SAMPLING RESULTS

The analytical results of the sediment sample (SED-1) are presented on **Table 3**. Chloroethane was detected above the laboratory reporting limit at a concentration of 0.0423 mg/kg. Since there is no established IHSB PSRG or protection of groundwater standard for chloroethane, the detection is considered an exceedance. However, chloroethane is not believed to be a contaminant of concern from the release associated with former Eaton facility.

The analytical results of the surface water sample (SW-1) are presented on **Table 6**. The surface water sample collected during Field Event #2 in October 2009 had detections of VOCs found in groundwater above the laboratory reporting limits, but they did not exceed the 15A NCAC 2B surface water standards for protection of human health.

4.5 FIELD PARAMETERS

The groundwater parameters measured in the field are presented in **Table 7**. The pH in the permanent wells located on the former Eaton property ranged from 5.01 to 6.54 (average = 6.03 SU), not including the two anomalous measurements in MW-5 (10.26) and MW-15 (10.97). By comparison, the pH in groundwater in the EMES monitoring wells ranged from 3.28 to 5.74 SU (average = 3.82 SU). The groundwater west of East Preston St. also has a generally lower oxidation-reduction potential (average = 41.9 mV) than the groundwater in the EMES wells (average = 322 mV). Specific conductance is approximately 10 times lower on the Eaton side of East Preston St. (average = 229 µS/cm) versus the EMES wells (average = 2934 µS/cm). The reasons for the apparent differences on the former Eaton site compared to the EMES groundwater wells are unknown.

4.6 QUALITY ASSURANCE AND QUALITY CONTROL

Industry accepted methods of quality assurance and quality control QA/QC were followed and QA/QC samples were submitted during the course of the investigation. QA/QC samples submitted for analysis during the course of the Phase II RI included duplicates, trip blanks, rinse blanks, and field blanks. No issues with sample collection techniques were observed in the QA/QC samples. The rinse blank prepared from the mixing bowl after sampling SB-7A contained cobalt at 6.1 µg/L. No other metals were reported by the laboratory for the rinse blank sample. The cobalt detection would appear to be anomalous, as it exceeds cobalt concentrations in SB-7A by a factor of 40. Acetone and methylene chloride were detected in several

QA/QC samples analyzed for VOCs. Both constituents are common laboratory contaminants. With no record of its use at the Eaton Selma site, this is the most likely source in these samples.

5.0 POTENTIAL RECEPTORS

5.1 WATER SUPPLY WELL SURVEY

During the ESA conducted by MAA, no water supply wells were reported in the vicinity of the facility. However, during the initial site reconnaissance conducted by Solutions-IES, one water-supply well was observed approximately 1,000 ft south of the site. Solutions-IES contacted the Town of Selma in December 2011 to update the locations of the Town's water supply wells. The current water supply wells are located north and west of the site (**Figure 1**). These wells are screened both in the Upper Cape Fear Formation and the underlying slate bedrock at an approximate depth of 300 ft bgs. As shown in **Figure 1**, the water supply wells are not located within the 1,500 ft radius surrounding the site.

5.2 SENSITIVE ENVIRONMENTS SURVEY

During the Phase I activities, a sensitive environments survey performed by the NCDENR Division of Water Quality (DWQ) and the U.S. Army Corp of Engineers (USACE) reported this area to be environmentally sensitive. The DWQ made their determination because Bawdy Swamp Creek is a tributary to the nutrient sensitive Neuse River. However, Bawdy Swamp Creek flows approximately 15.75 miles from the site before it drains into the Neuse River. Additionally, the USACE determined that the site does contain wetlands.

REC Program guidance requires 13 Federal and State agencies be contacted to determine if the site area is listed on any related databases or has been found to contain any sensitive populations, environments, habitats or features of special or historical significance. The agency responses were included in the Phase I RI Report. The summary table below lists each agency contacted and their response regarding whether the site area is environmentally sensitive.

Agency	Responder	Environmentally Sensitive Area?
National Parks Service	No National Parks located in Johnston County	No
US Forest Service	No National Forests within 1/2 mile	No
US Fish and Wildlife	Dale Suiter	No
National Oceanic and Atmospheric Administration (NOAA)	Did not contact because site not located near the ocean.	No
The U.S. Army Corps of Engineers (USACE)	Thomas Brown	Yes; wetlands are located in the vicinity of the site
NC Division of Parks and Recreation-National Heritage Program	Harry Legrand	No
NC Division of Planning and Natural Resources	Brian Strong	No response
NC Division of Water Quality (DWQ)	Nora Deamer	Yes; Bawdy Swamp Creek is a tributary to the nutrient sensitive Neuse River.
NC Division of Forest Resources	Chris Carlson	No
NC Department of Cultural Resources	Renee Gledhill-Early	No
NC Division of Coastal Management	Did not contact because site not located near the coast.	No
NC Wildlife Resources Commission	Molly Ellwood	No

6.0 CONCEPTUAL SITE MODEL

Soil and groundwater beneath the former Eaton Selma site are impacted by VOCs. Former surface releases originating in the northern portion of the site likely migrated downward through the silty clay overburden where it encountered groundwater and begins to spread laterally primarily to the east and vertically through the underlying sand and gravel layer. During this migration, contamination likely found more permeable

conduits for transport associated with the stormwater conveyances found along the northern property line. Stormwater pipes, inlets, and/or sand and gravel bedding can provide directional transport zones beneath the subsurface of the site. The below-ground stormwater conveyance system extending eastward along the northern property boundary may have influenced the distribution of soil impacts, as shown in **Figure 7**. Two locations along the stormwater piping downgradient of the primary source area also have particularly elevated VOCs in soil. The cause of these two hot spots in soil is unknown.

PCE is the chlorinated VOC that defines the extent of the groundwater plume, though other chlorinated and petroleum VOCs have also been detected above the NC 2L Standards. **Figure 9** shows that the PCE plume that exceeds the NC 2L Standard of 0.7 µg/L is fairly wide, covering most of the developed portion of the site and extending off site to the north and east. However, the area of greatest impact is a narrow "spine" of high PCE concentrations runs along the northern and eastern sides of the building. Like soil, the pattern is possibly influenced by the stormwater conveyance system. An area of elevated PCE concentration in groundwater, located about 300 ft downgradient from the presumed primary source area, coincides with the location of the elevated PCE in soil.

As discussed in **Section 4.1**, groundwater flow fluctuates at the site, which may explain the apparent widespread distribution of PCE contamination in groundwater. The shallow gradient and tight soils explain the slow groundwater movement. If the groundwater flow direction fluctuates throughout the year, then the low concentrations observed on the eastern and southern sides of the property may be due to natural groundwater flow fluctuation and may not be influenced by underground utilities (mainly stormwater piping). There may also be some residual impacts associated with the former septic tank and drain field (removed in approximately 1967). The locations of these former appurtenances are now under the manufacturing building.

Based on the water level data from the piezometers along Bawdy Swamp Creek (DP-1, DP-2 and DP-3), the creek is not believed to be a receptor of concern at the site. The piezometers are screened at 5 ft bgs, above the clay layer identified at a depth of approximately 7 to 8 ft bgs as depicted in the cross-section provided as **Figure 4**. Since their installation in July 2010, the piezometers have been dry. In addition, Bawdy Swamp Creek has been observed to be intermittent in response to seasonal precipitation. Therefore, the stream is not hydraulically connected to the primary transport zone of the unconsolidated aquifer beneath the site. Detections of VOCs above the laboratory detection limit in the surface water sample collected in Bawdy Swamp Creek may be related to the stormwater conveyance system that discharges to the ditch adjacent to East Preston Street.

7.0 CONCLUSIONS

A total of 23 soil borings were advanced, 11 temporary monitoring wells were installed and sampled, 8 permanent monitoring wells (six shallow and two deep) were installed and sampled, and one surface water and one sediment sample were collected during the Phase II RI. Historic and Phase II RI analytical laboratory data results suggest that several VOCs exceed the IHSB PSRGs in soil and the NC 2L Standards in groundwater. Conclusions of the Phase II RI are that:

- PCE is the primary COC in soil;
- PCE, TCE, and 1,1-DCE are the primary COCs in groundwater;
- Other VOCs have been detected in soil and groundwater in excess of either the ISHB PSRGs in soil or the NC 2L Standards in groundwater;
- VOCs in the surface water sample collected in Bawdy Swamp Creek do not exceed the NC 2B Standards;
- Sediment in Bawdy Swamp Creek has not been impacted;
- The horizontal and vertical extent of soil and groundwater impacts have been delineated; and
- SVOCs and metals are not COCs.

The primary exposure pathway for the site is through soil. It appears as though there is not one primary direction that the groundwater plume is migrating, as groundwater flow varies depending on seasonal water level fluctuations. The migration pathway of the groundwater plume is through the sand and gravel layer. The stormwater line appears to have provided an artificial conduit that facilitated migration along the northern side of the property. The closest receptor is a suspected wetland located approximately 150 ft west of the building. The NC DWQ has deemed this area environmentally sensitive. No water supply wells are located within the 1,500 ft radius surrounding the site.

8.0 REFERENCES

Fetter, C.W., 1993. *Contaminant Hydrogeology*, Prentice Hall, 2nd Edition.

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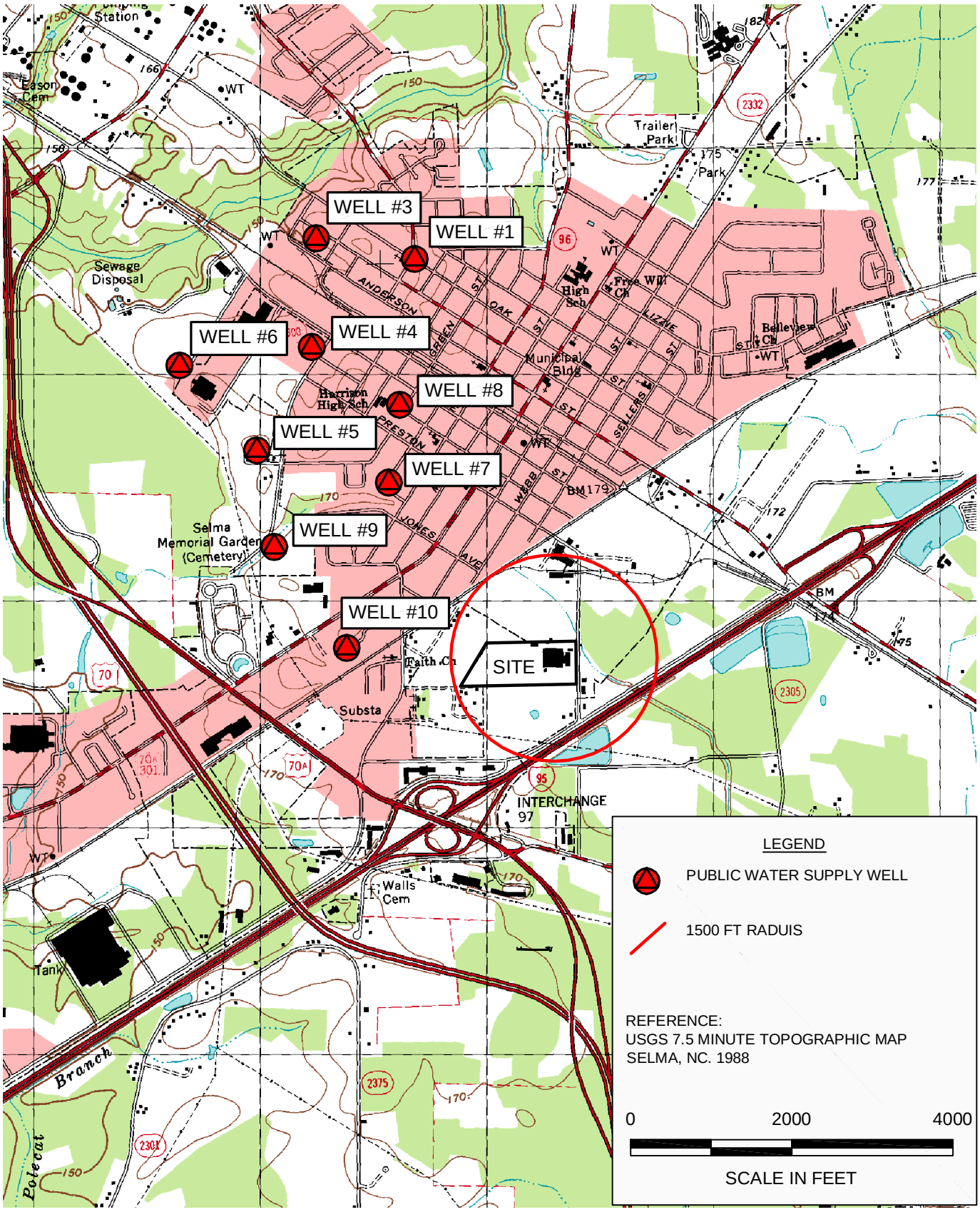
Solutions-IES, 2010b. *Work Plan Amendment for the Phase II Remedial Investigation*, Former Eaton Corporation Facility, 1100 East Preston Street, Selma, North Carolina, December 21.

Rhodes, T.S. and Conrad, S.G., 1985. *Geologic Map of North Carolina*.

FIGURES



PROJECT NUMBER 6010.08A2.EATN

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PROJECT MANAGER JLO

DATE 12/29/2011

FILE Figure 1.pdf

Solutions-IES
Industrial & Environmental Services
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SITE LOCATION AND WATER SUPPLY
WELL LOCATION MAP
FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

FIGURE:

1

J:\Project Files\Eaton Corporation\6010.08A2.EATN EATON SELMA\CAD\Current Drawings\6010-Eaton-SelmaX.dwg

PROJECT NUMBER 6010.08A2.EATN

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FILE Figure 2.pdf

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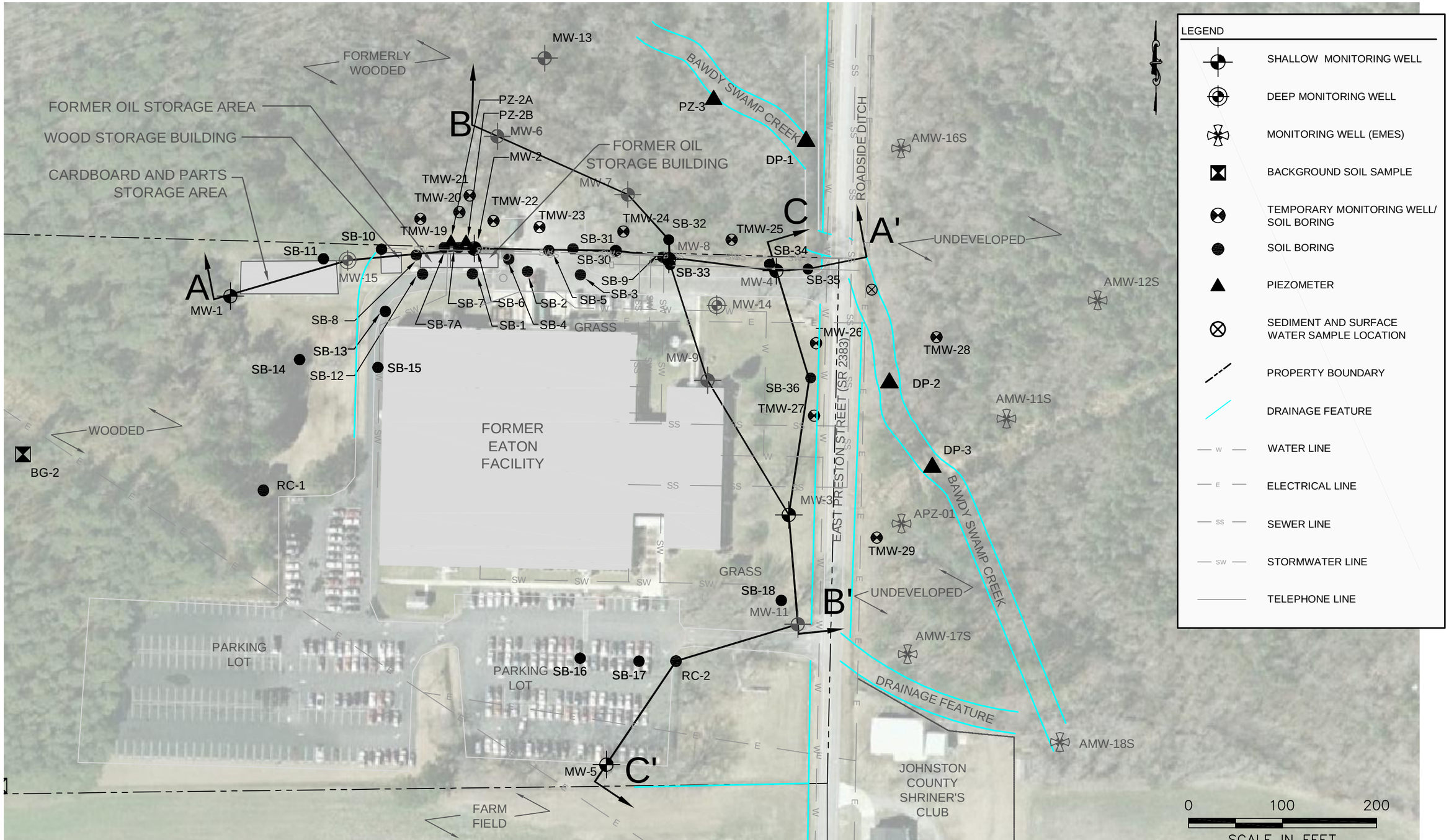
FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

SITE VICINITY MAP

FIGURE: 2



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DATE 12/22/2011
FILE Figure 3.pdf

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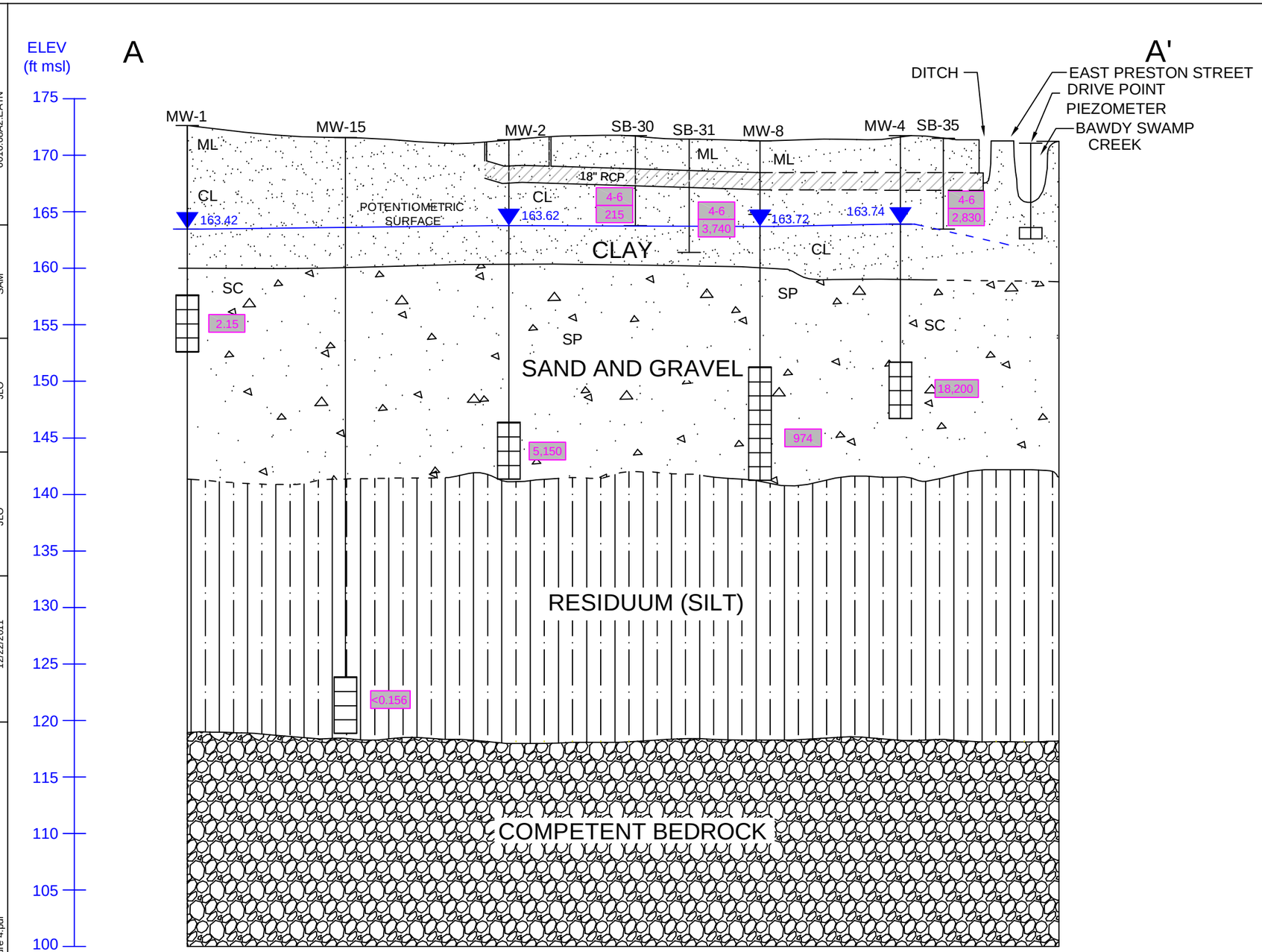
NOTES:
1) BASEMAP OBTAINED FROM JIMMY BARBOUR SURVEYING, PA, APRIL 2008 .
2) WELL LOCATIONS ARE BASED ON SURVEY DATA PROVIDED BY KCI ASSOCIATES OF N.C. JUNE 2008 & JULY 2010.
3) EMES - EXXON MOBIL ENVIRONMENTAL SERVICES COMPANY
4) BG-1 AND BG-3 NOT SHOWN. BG-1 LOCATED APPROXIMATELY 550 FT WEST OF MW-1. BG-3 LOCATED APPROXIMATELY 400 FT SOUTH OF BG-2.

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

SITE MAP WITH GEOLOGIC CROSS SECTION LOCATIONS

FIGURE: 3



LEGEND

	SILTY CLAY WITH SAND STRINGERS
	SAND, VARIES BETWEEN CLAYEY AND SILTY, SOME LARGE GRAVEL LENSES
	RESIDUUM, CLAYEY SILT, BECOMES HARDER WITH DEPTH
	BEDROCK - HARD, SLIGHTLY WEATHERED TO WEATHERED GRAY-GREEN METAVOLCANIC ROCK
CL	CLAY
SC	CLAYEY SAND
SP	GRAVELLY SAND
ML	SILT
RCP	REINFORCED CONCRETE PIPE
163.62	STATIC WATER LEVEL JUNE 27, 2011
6-8 ft / 2,830	SOIL BORING SAMPLE DEPTH (ft) PCE CONCENTRATION (µg/kg)
18,200	MONITOR WELL SCREENED INTERVAL PCE CONCENTRATION (µg/L)
(ft msl)	FEET MEAN SEA LEVEL

HORIZONTAL SCALE 0 100 200
SCALE IN FEET

VERTICAL SCALE 0 10 20
SCALE IN FEET

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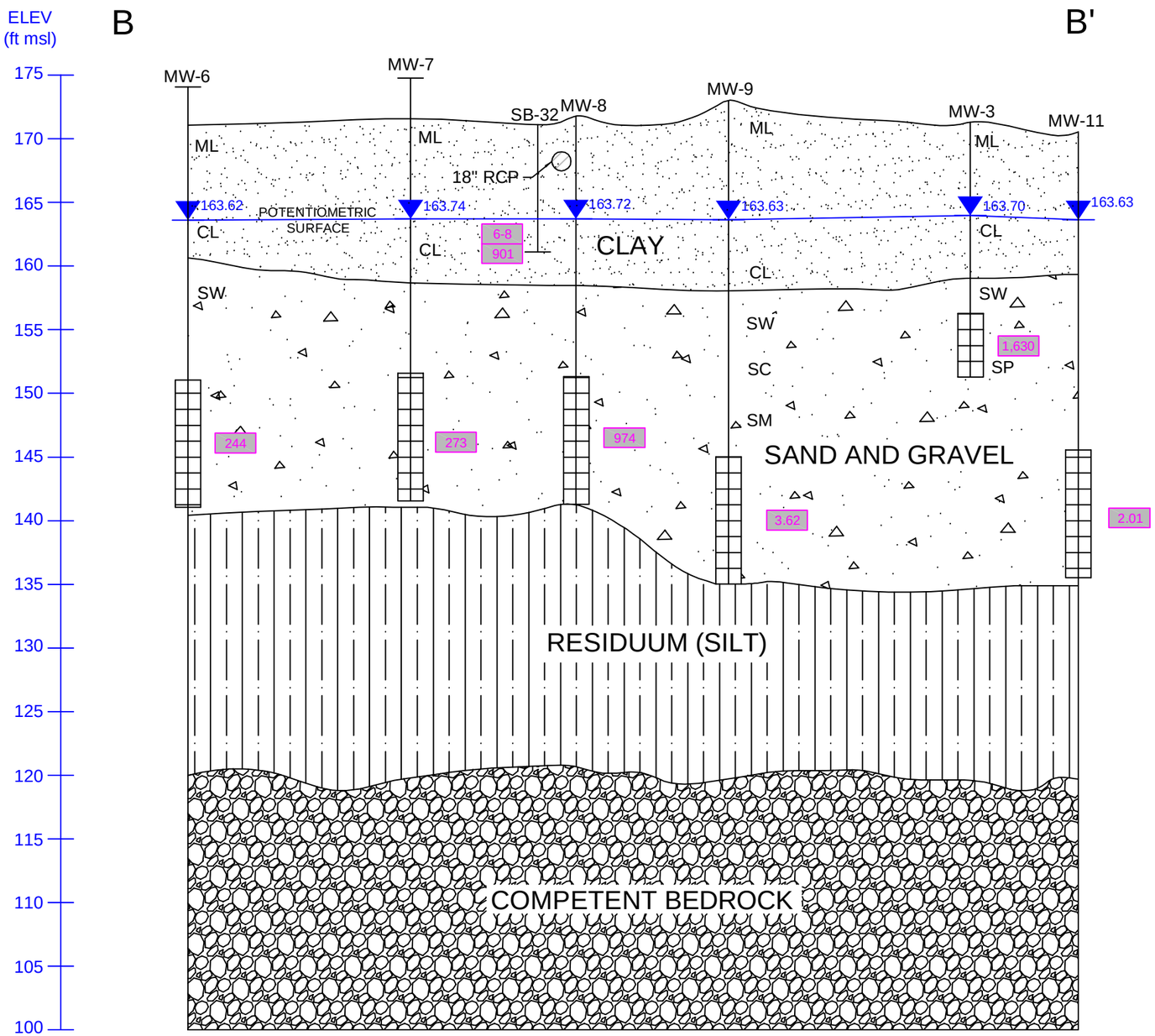
NOTES:
1. VERTICAL EXAGGERATION IS 10:1
2. VISUAL SOIL CLASSIFICATIONS BASED ON USGS

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

GEOLOGIC CROSS SECTION A-A'

FIGURE: 4



LEGEND

	SILTY CLAY WITH SAND STRINGERS
	SAND, VARIES BETWEEN CLAYEY AND SILTY, SOME LARGE GRAVEL LENSES
	RESIDUUM, CLAYEY SILT, BECOMES HARDER WITH DEPTH
	BEDROCK - HARD, SLIGHTLY WEATHERED TO WEATHERED GRAY-GREEN METAVOLCANIC ROCK
CL	CLAY
SC	CLAYEY SAND
SP	GRAVELLY SAND
ML	SILT
SM	SILTY SAND
RCP	REINFORCED CONCRETE PIPE
163.85	STATIC WATER LEVEL JUNE 27, 2011
6-8 / 901	SOIL BORING SAMPLE DEPTH (ft) PCE CONCENTRATION (µg/kg)
1.53	MONITOR WELL SCREENED INTERVAL PCE CONCENTRATION (µg/L)
(ft msl)	FEET MEAN SEA LEVEL

HORIZONTAL SCALE 0 100 200
SCALE IN FEET

VERTICAL SCALE 0 10 20
SCALE IN FEET

PROJECT NUMBER 6010.08A2.EATN
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DATE 12/22/2011
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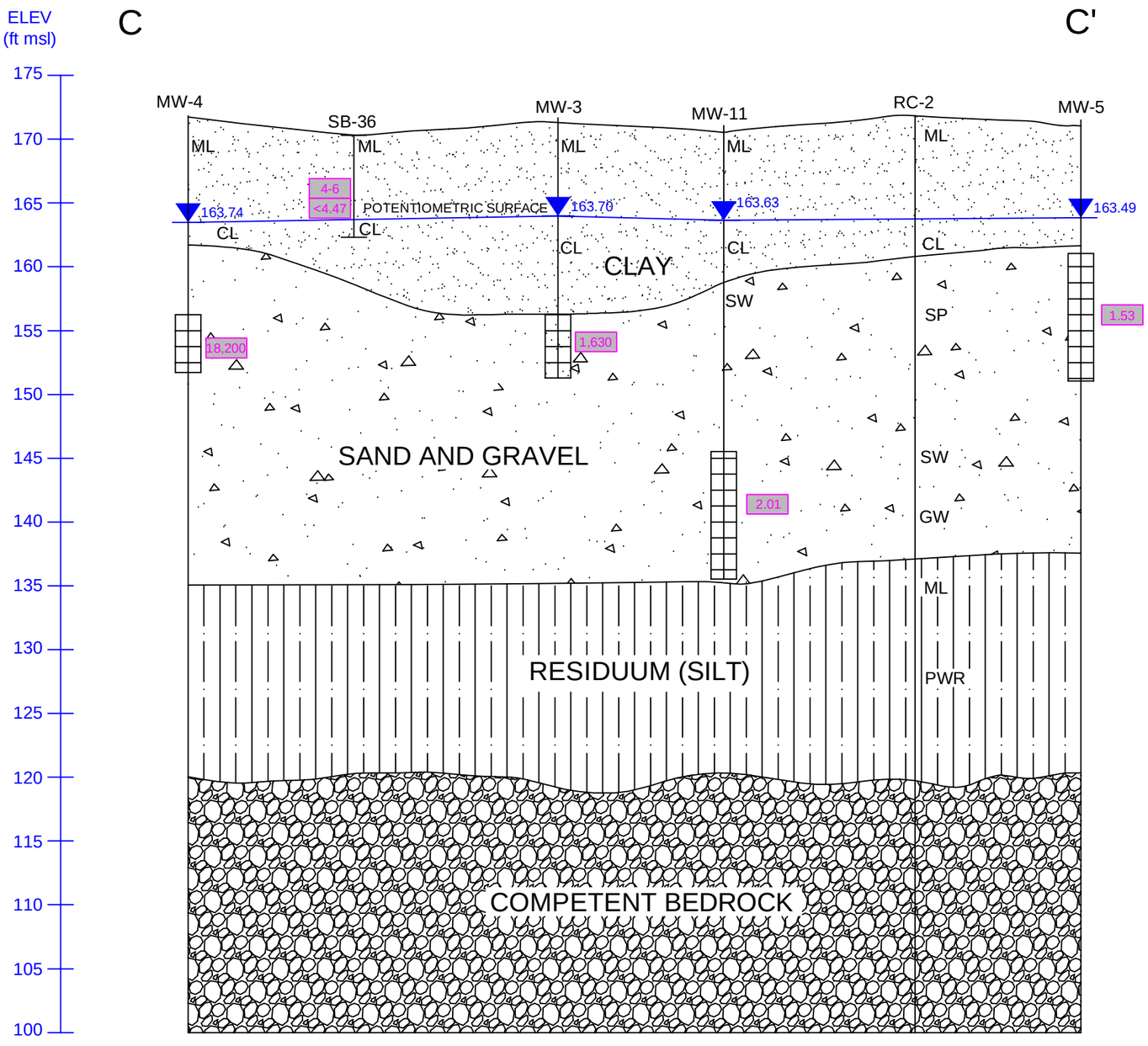
NOTES:
1. VERTICAL EXAGGERATION IS 10:1
2. VISUAL SOIL CLASSIFICATIONS BASED ON USGS

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

GEOLOGIC CROSS SECTION B-B'

FIGURE: 5



LEGEND

	SILTY CLAY WITH SAND STRINGERS
	SAND, VARIES BETWEEN CLAYEY AND SILTY, SOME LARGE GRAVEL LENSES
	RESIDUUM, CLAYEY SILT, BECOMES HARDER WITH DEPTH
	BEDROCK - HARD, SLIGHTLY WEATHERED TO WEATHERED GRAY-GREEN METAVOLCANIC ROCK
CL	CLAY
GW	WELL-GRADED GRAVEL
SP	GRAVELLY SAND
SW	WELL-GRADED SAND
ML	SILT
PWR	PARTIALLY WEATHERED ROCK
163.85	STATIC WATER LEVEL JULY 27, 2011
6-8 ft / <4.47	SOIL BORING SAMPLE DEPTH (ft) PCE CONCENTRATION (µg/kg)
1.53	MONITOR WELL SCREENED INTERVAL PCE CONCENTRATION (µg/L)
(ft msl)	FEET MEAN SEA LEVEL

HORIZONTAL SCALE 0 100 200
SCALE IN FEET

VERTICAL SCALE 0 10 20
SCALE IN FEET

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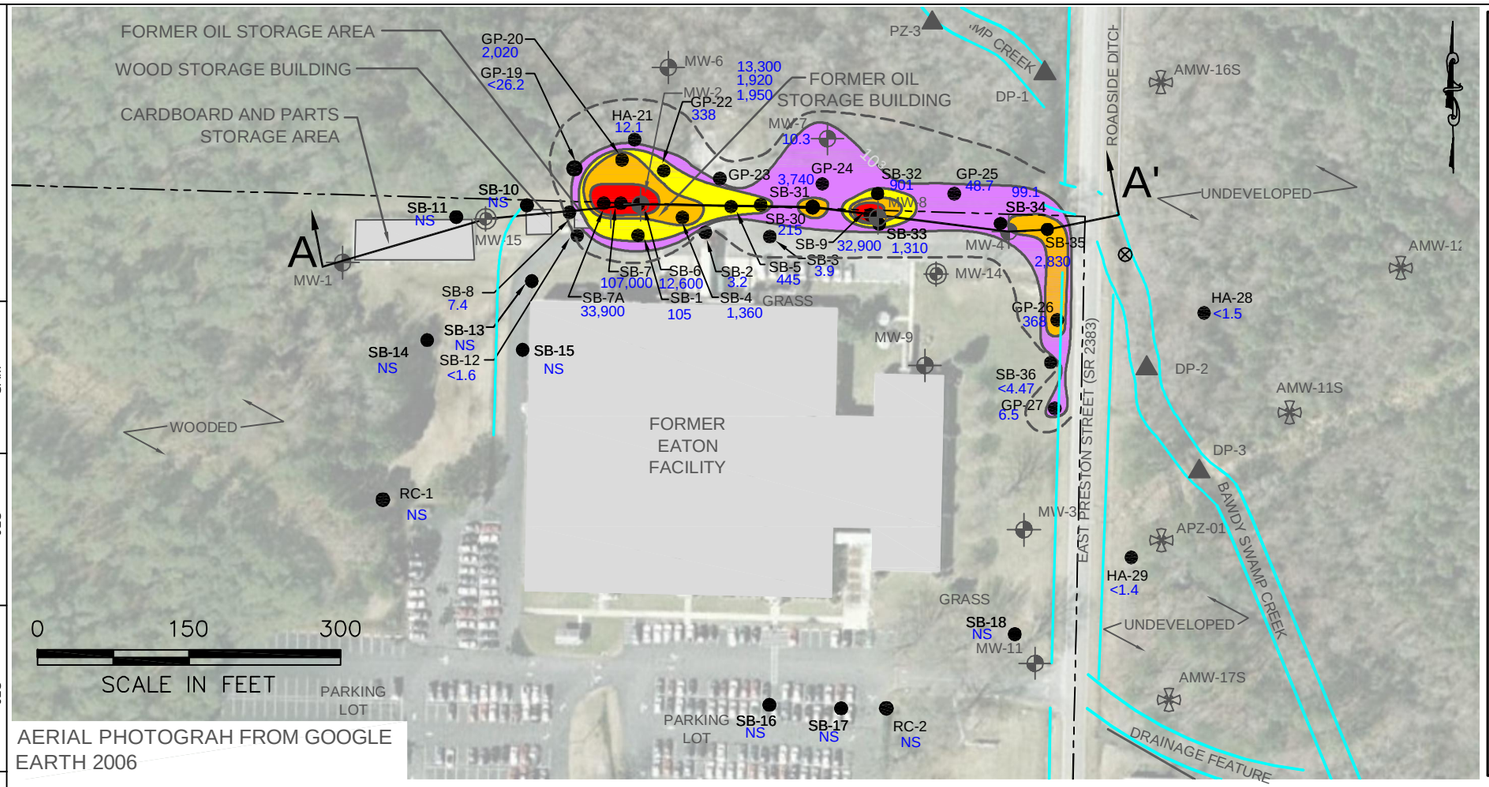
TEL.: (919) 873-1060 FAX.: (919) 873-1074

NOTES:
1. VERTICAL EXAGGERATION IS 10:1
2. VISUAL SOIL CLASSIFICATIONS BASED ON USGS

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

GEOLOGIC CROSS SECTION C-C'

FIGURE: 6



AERIAL PHOTOGRAH FROM GOOGLE EARTH 2006

LEGEND

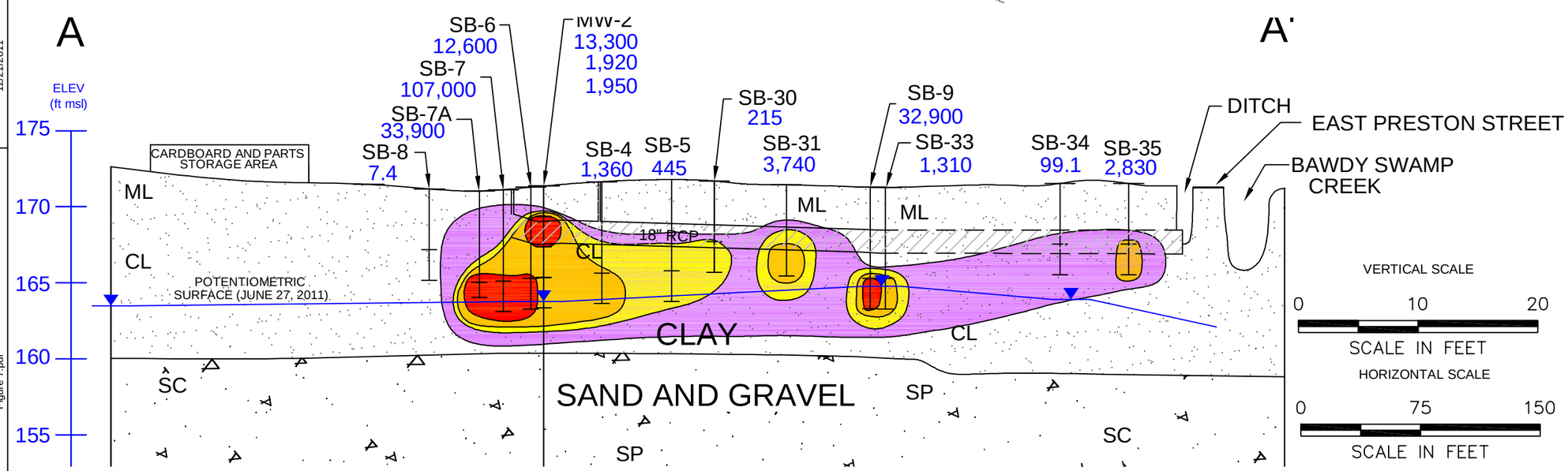
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- MONITORING WELL (EMES)
- SOIL BORING
- PIEZOMETER
- SEDIMENT AND SURFACE WATER SAMPLE LOCATION
- 368 — PCE CONCENTRATION (µg/kg)
- <4.47 — CONCENTRATION IS LESS THAN THE ANALYTICAL LABORATORY METHOD DETECTION LIMIT
- STATIC WATER LEVEL JUNE 27, 2011
- NS — NOT SAMPLED
- DRAINAGE FEATURE
- PROPERTY BOUNDARY

ft bgs - FEET BELOW GROUND SURFACE

ft msl - FEET MEAN SEA LEVEL

ISOCONCENTRATION CONTOURS OF PCE IN SOIL:

- ≥ 10^4 µg/kg
- ≥ 10^3 µg/kg
- ≥ 10^2 µg/kg
- ≥ 10 µg/kg
- < 5 µg/kg



Boring ID	Sample Depth (ft bgs)
SB-4	6-8
SB-5	6-8
SB-6	6-8
SB-7	6-8
SB-7A	6-7
SB-8	4-6
SB-9	6-8
SB-30	4-6
SB-31	4-6
SB-32	6-8
SB-33	6-8
SB-34	4-6
SB-35	4-6
MW-2	2-4
	4-6
	6-8

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TEL.: (919) 873-1060 FAX.: (919) 873-1074

NOTES:
1) BASEMAP OBTAINED FROM JIMMY BARBOUR SURVEYING, PA, APRIL 2008 .
2) WELL LOCATIONS ARE BASED ON SURVEY DATA PROVIDED BY KCI ASSOCIATES OF N.C. JUNE 2008 & JULY 2010.
3) EMES - EXXON MOBIL ENVIRONMENTAL SERVICES COMPANY

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

ESTIMATED EXTENT OF PCE IN SOIL

FIGURE: 7

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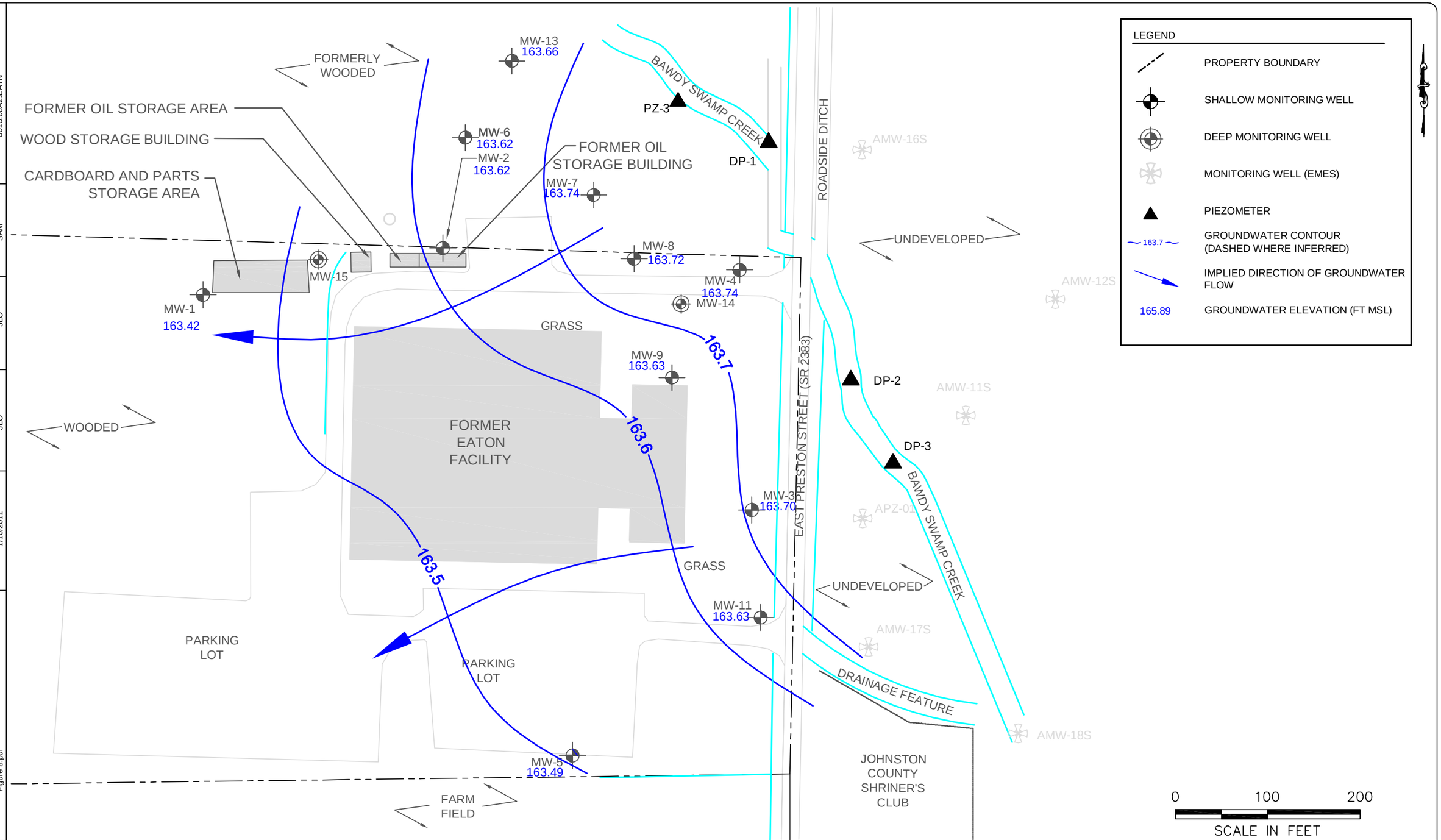
DATE 12/21/2011
FILE Figure 7.pdf



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FILE Figure 8.pdf

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NOTES:
1) BASEMAP OBTAINED FROM JIMMY BARBOUR SURVEYING, PA, APRIL 2008 .
2) WELL LOCATIONS ARE BASED ON SURVEY DATA PROVIDED BY KCI ASSOCIATES OF N.C. JUNE 2008 & JULY 2010.
3) EMES - EXXON MOBIL ENVIRONMENTAL SERVICES COMPANY
4) EMES WELLS NOT USED TO GENERATE GROUNDWATER ELEVATION MAP

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

SHALLOW GROUNDWATER ELEVATION MAP
JUNE 2011

FIGURE: 8

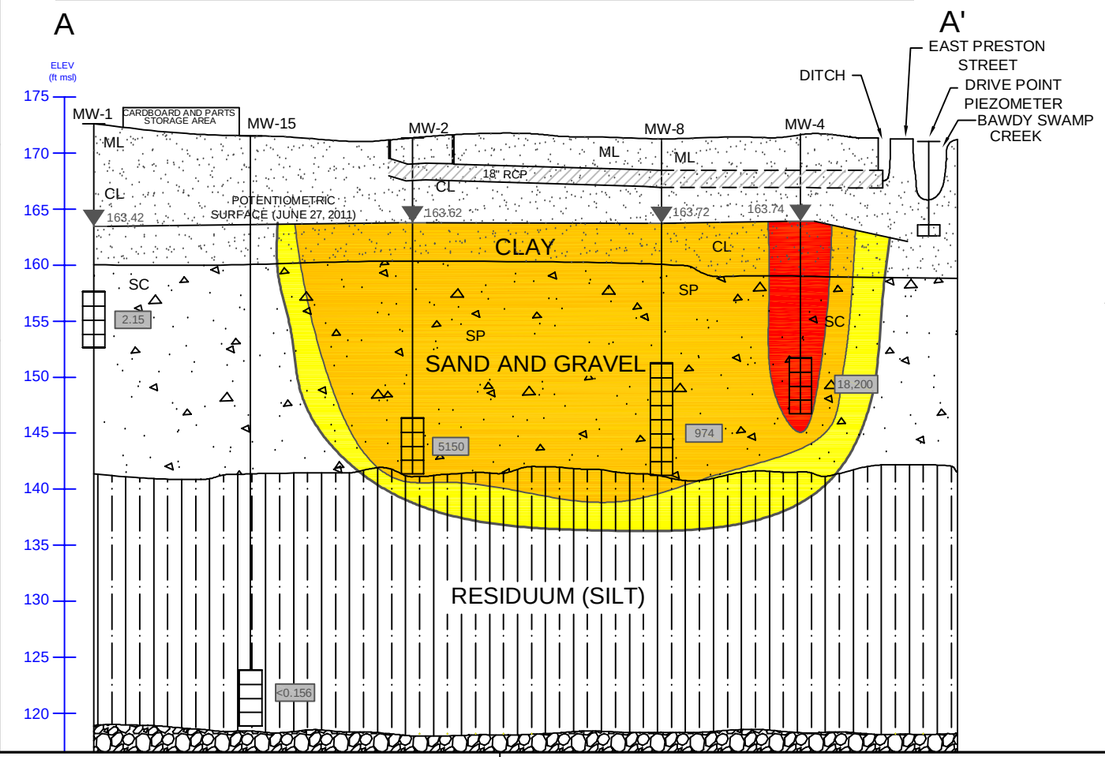
PROJECT NUMBER 6010.08A2.EATN | DRAFTER SAM | CHECKED BY JLO | PROJECT MANAGER JLO | DATE 12/21/2011 | FILE Figure 9.pdf

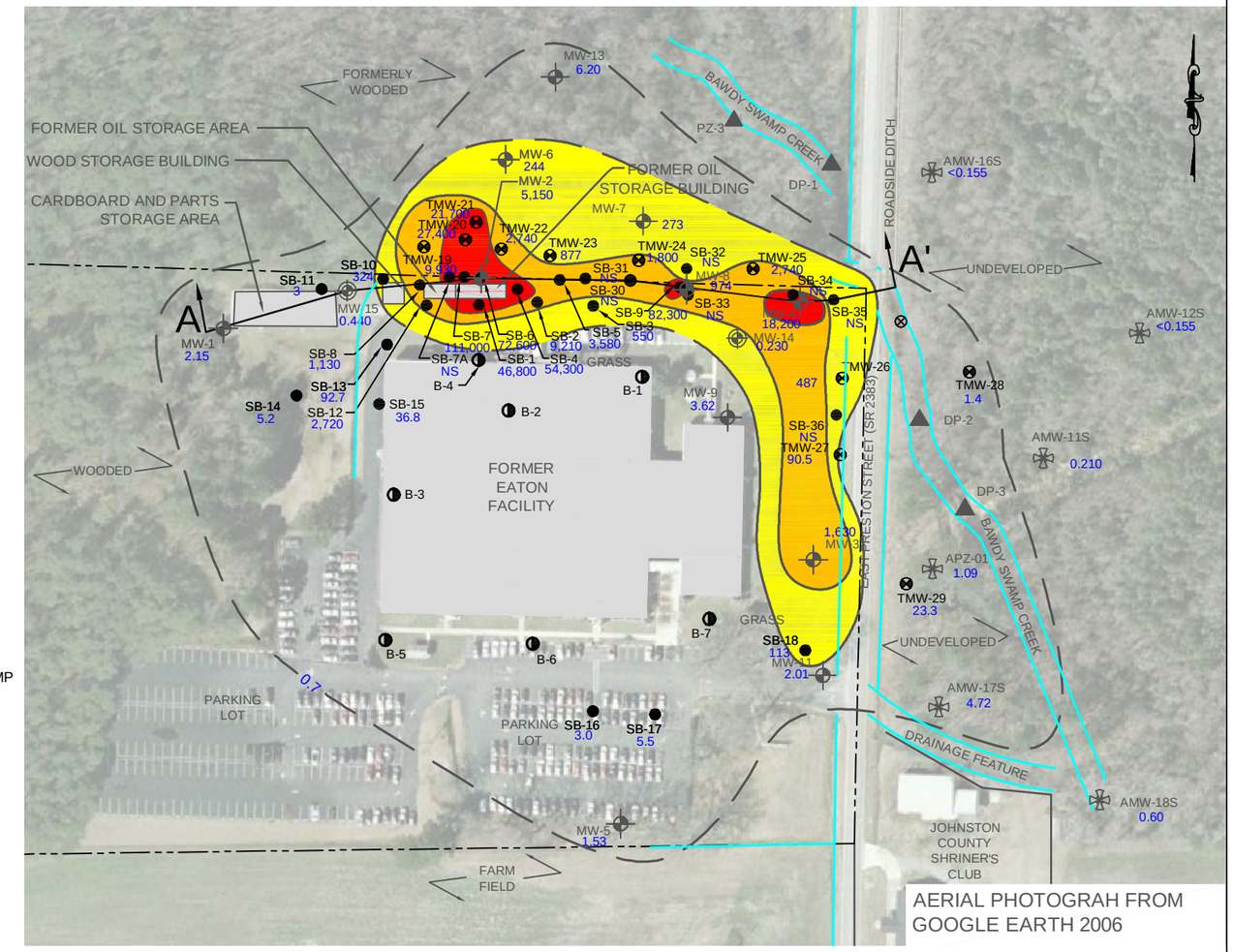
LEGEND

- PROPERTY BOUNDARY
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- TEMPORARY MONITORING WELL
- MONITORING WELL (EMES)
- PIEZOMETER
- SEDIMENT AND SURFACE WATER SAMPLE LOCATION
- MAA GROUNDWATER SAMPLE (2008)
- SOIL BORING
- 2.15 PCE CONCENTRATION (µg/L)
- STATIC WATER LEVEL JUNE 27, 2011
- 1.53 MONITORING WELL SCREENED INTERVAL AND PCE CONCENTRATION (µg/L)
- DRAINAGE FEATURE

ISOCONCENTRATION CONTOURS OF PCE IN GROUNDWATER:

- $\geq 10^4$ µg/L
- $\geq 10^3$ µg/L
- $\geq 10^2$ µg/L
- ≥ 0.7 µg/L





AERIAL PHOTOGRAH FROM GOOGLE EARTH 2006

VERTICAL SCALE

0 15 30

SCALE IN FEET

HORIZONTAL SCALE

0 125 250

SCALE IN FEET

0 150 300

SCALE IN FEET

Solutions-IES
Industrial & Environmental Services
1101 NOWELL ROAD
RALEIGH, NORTH CAROLINA 27607
TEL.: (919) 873-1060 FAX.: (919) 873-1074

NOTES:
1) BASEMAP OBTAINED FROM JIMMY BARBOUR SURVEYING, PA, APRIL 2008 .
2) WELL LOCATIONS ARE BASED ON SURVEY DATA PROVIDED BY KCI ASSOCIATES OF N.C. JUNE 2008 & JULY 2010.
3) EMES: EXXON MOBIL ENVIRONMENTAL SERVICES COMPANY
4) MAA: MID-ATLANTIC ASSOCIATES, INC.

FORMER EATON FACILITY
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NC

ESTIMATED EXTENT OF PCE IN GROUNDWATER

FIGURE: 9

TABLES

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Monitoring Well or Piezometer ID	Top of PVC (ft msl)[1]	Screened Interval (ft bgs)	Date	Depth-To-Water (ft)	Groundwater Elevation (ft msl)
Shallow Zone					
MW-1	172.00	15 - 20	6/18/2008	6.61	165.39
			7/16/2008	6.60	165.40
			4/8/2009	1.68	170.32
			4/22/2009	1.38	170.62
			7/28/2010	8.53	163.47
			6/27/2011	8.58	163.42
MW-2	171.21	25 - 30	6/18/2008	5.68	165.53
			7/16/2008	5.65	165.56
			4/8/2009	0.98	170.23
			4/22/2009	1.67	169.54
			7/28/2010	7.45	163.76
			6/27/2011	7.59	163.62
MW-3	171.13	15 - 20	6/18/2008	5.14	165.99
			7/16/2008	4.91	166.22
			4/8/2009	1.01	170.12
			4/22/2009	1.58	169.55
			7/28/2010	7.15	163.98
			6/27/2011	7.43	163.70
MW-4	171.56	15 - 20	6/18/2008	5.84	165.72
			7/16/2008	5.88	165.68
			4/8/2009	1.31	170.25
			4/22/2009	2.02	169.54
			7/28/2010	7.66	163.90
			6/27/2011	7.82	163.74
MW-5	170.42	15 - 20	6/18/2008	4.47	165.95
			7/16/2008	4.02	166.40
			4/8/2009	0.4	170.02
			4/22/2009	1.06	169.36
			7/28/2010	6.57	163.85
			6/27/2011	6.93	163.49
MW-6	173.88	20-30	7/28/2010	10.13	163.75
			6/27/2011	10.26	163.62
MW-7	174.68	20-30	7/28/2010	10.78	163.90
			6/27/2011	10.94	163.74
MW-8	171.08	20-30	7/28/2010	7.23	163.85
			6/27/2011	7.36	163.72
MW-9	172.66	28-38	7/28/2010	9.05	163.61
			6/27/2011	9.03	163.63
MW-11	170.25	25-35	7/28/2010	6.35	163.90
			6/27/2011	6.62	163.63
MW-13	173.94	21-31	6/27/2011	10.32	163.62

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Monitoring Well or Piezometer ID	Top of PVC (ft msl)[1]	Screened Interval (ft bgs)	Date	Depth-To-Water (ft)	Groundwater Elevation (ft msl)
EMES Wells (Shallow Zone)[2]					
AMW-11S	175.63	11.9-21.9	6/27/2011	11.72	163.91
AMW-12S	175.25	13.1-23.1	6/27/2011	11.14	164.11
AMW-16S	174.62	11.45-16.45	6/27/2011	10.84	163.78
AMW-17S	176.08	14.1-24.1	6/27/2011	11.65	164.43
AMW-18S	175.58	14.1-24.1	6/27/2011	11.90	163.68
APZ-01	174.98	12.0-22.0	6/27/2011	11.15	163.83
Deep Zone					
MW-14	171.45	47-57	6/27/2011	7.53	163.92
MW-15	171.49	46-56	6/27/2011	8.00	163.49
Piezometers					
DP-1	171.01	4-5	7/28/2010	DRY	<162.61
			6/27/2011	DRY	<162.61
DP-2	170.59	4-5	7/28/2010	DRY	<162.34
			6/27/2011	DRY	<162.34
DP-3	107.51	4-5	7/28/2010	DRY	<162.21
			6/27/2011	DRY	<162.21
PZ-2A	172.84	13.5-14.5	4/22/2009	2.69	170.15
			6/27/2011	9.14	163.70
PZ-2B	172.81	5.5-6.5	4/22/2009	4.75	168.06
			6/27/2011	DRY	172.81
PZ-3	170.01	7.5-8.5	4/22/2009	0.64	169.37
			6/27/2011	1.0	169.01
DITCH	[3]	--	4/22/2009	1.31	-1.31

Notes:
ft msl = feet mean sea level (NAVD 1988)
ft bgs = feet below ground surface
Piezometer elevations were measured from nearby monitoring wells and are approximate.
1. All wells were surveyed by KCI Associates.
2. Ditch water elevation determined at time of reading from top of PVC of PZ-3.
3. The ExxonMobil Environmental Services Company (EMES) monitoring wells are part of the Gurley Pesticide Site and do not belong to Eaton Corporation

TABLE 2
SUMMARY OF ANALYTICAL LABORATORY DATA FOR METALS IN SOIL
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Soil Boring ID	Date Sampled	Sample Depth (ft bgs)	Metals by EPA Method 6010 (Mercury by 7041)																						
			Aluminum	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium (total)**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Nickel**	**Potassium**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
Prelminary Residential Health-Based PSRG			15,000,000	6,200.0	390.00	3,000,000	32,000	14,000	NE	NE	4,600.0	620,000	11,000,000	400,000	NE	360,000	2,000.0	NE	NE	78,000	78,000	NE	160.00	78,000	4,600,000
Prelminary Industrial Health-Based PSRG			100,000,000	82,000	1,600.0	38,000,000	400,000	160,000	NE	NE	60,000	8,200,000	100,000,000	800,000	NE	4,600,000	3,100.0	NE	NE	1,000,000	1,000,000	NE	2,000.0	1,000,000	62,000,000
Protection of Groundwater PSRG[1]			NE	900.00	5,800.0	580,000	63,000	3,000.0	NE	NE	900.0	700,000	150,000	270,000	NE	65,000	1,000.0	NE	NE	2,100.0	3,400.0	NE	280.00	6,000.0	1,200,000
Average Background			2,823	0.81	0.77	13.9	0.15	0.18	121	3.1	0.83	4.2	2,407	18.8	44.6	3.1	0.06	0.75	NC	NC	NC	NC	NC	7.2	11.9
Standard Deviation			1,099	NC	0.12	8.3	NC	NC	22	1.3	0.25	6.0	716	24.0	15.2	3.4	0.08	0.34	NC	NC	NC	NC	NC	0.6	17.3
Phase II Remedial Investigation - Field Event #1																									
BG-1	**4/7/2009**	**1-2**	**2,490**	**0.81**	**0.85**	**23.2**	**0.15**	<0.081	**142**	**2.7**	**1.0**	**11.2**	**3,200**	**46.5**	**51.0**	**7.1**	**0.16**	**0.99**	<403	<0.81	<0.40	<403	<0.81	**7.8**	**31.9**
BG-2	**4/7/2009**	**0.5-2**	**1,930**	<0.46	<0.46	**7.2**	<0.093	<0.093	**121**	**2.1**	**0.65**	**0.51**	**1,810**	**5.8**	**27.3**	**0.90**	**0.011**	<0.46	<463	<0.93	<0.46	<463	<0.93	**6.9**	**1.7**
BG-3	**4/7/2009**	**1-2**	**4,050**	<0.45	**0.68**	**11.2**	<0.090	**0.18**	**99.0**	**4.6**	<0.45	**0.98**	**2,210**	**4.1**	**55.6**	**1.4**	**0.022**	**0.51**	<452	<0.90	<0.45	<452	<0.90	**6.8**	**2.2**
SB-7A	**4/7/2009**	**5-6**	**1,900**	<0.54	**1.1**	**7.9**	**0.18**	**0.45**	**52.2**	**5.3**	<0.54	**1.3**	**4,320**	**4.8**	**27.1**	**2.5**	<0.0024	**0.59**	<540	<1.1	<0.54	<540	<1.1	**26.0**	**1.9**

Notes:
All analytical results are reported in µg/kg.
ft bgs = feet below ground surface
NE = not established
NC = not calculated
Bolded values indicate concentration greater than the laboratory reporting limit.
< = not detected above the laboratory detection limit shown.

TABLE 3
SUMMARY OF ANALYTICAL LABORATORY DATA FOR VOCS IN SOIL AND SEDIMENT
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Soil Boring ID	Date Sampled	Sample Depth (ft bgs)	Soil Moisture (%)	VOCs by EPA Method 8260B																										
				Chlorinated VOCs														Petroleum VOCs									THMs		Other	
				Carbon tetracholride	Chloroform	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	1,1,1,2-Tetrachloroethane	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl chloride	Chlorobenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Ethylbenzene	4-Isopropyltoluene	Iodomethane	Naphthalene	Toluene	Xylene (Total)	1,1,2-Trichlorotri fluoroethane	Trichloro fluoromethane	Acetone	1,4 Dioxane
Prelminary Residential Health-Based PSRG				610	290	NE	3,300	430	48,000	32,000	30,000	11,000	1,900	550	640,000	1,800	60	58,000	380,000	2,400	5,400	NE	NE	3,600	820,000	130,000	910,000	160,000	12,000,000	4900
Prelminary Industrial Health-Based PSRG				3,000	1,500	NE	17,000	2,200	220,000	400,000	140,000	53,000	9,300	2,600	640,000	14,000	1,700	280,000	380,000	12,000	27,000	NE	NE	18,000	820,000	260,000	910,000	680,000	100,000,000	170000
Protection of Groundwater				2.1	340	NE	30	2.0	45	360	510	23	5.9	5.0	1,200	18	1.9	430	240	70	8,100	680.0	NE	210	5,500	5,800	9,000,000	24,000	24,000	12
Phase 1 Remedial Investigation																														
SB-1	5/27/2008	6-8	20.8	< 2.3	< 1.4	NR	**4.4**	< 1.9	< 1.6	**87.4**	< 1.7	< 5.2	< 1.8	**105**	< 1.6	**5.8**	< 1.6	< 1.7	< 1.7	< 1.5	< 1.6	NR	NR	< 1.0	< 1.6	< 4.8	NR	< 1.9	**13.4J**	NR
SB-2	5/27/2008	2-4	13	< 2.0	< 1.2	NR	< 1.2	< 1.7	< 1.4	**6.8**	< 1.5	**5.1J**	< 1.6	**3.2J**	< 1.4	< 1.6	**9.0000**	< 1.5	< 1.5	< 1.3	< 1.4	NR	NR	< 0.94	< 1.4	< 4.3	NR	< 1.7	**17.5J**	NR
SB-3	5/27/2008	2-4	11.9	< 2.2	< 1.3	NR	< 1.3	< 1.8	< 1.5	< 1.2	< 1.6	**5.7J**	< 1.8	**3.9J**	< 1.5	< 1.8	< 1.5	< 1.6	< 1.6	< 1.4	< 1.5	NR	NR	< 1.0	< 1.5	< 4.6	NR	< 1.8	**27.2J**	NR
SB-4	5/27/2008	6-8	19.6	**6.3**	**2.1J**	NR	**7.5**	< 2.2	< 1.8	**86.1**	< 1.9	< 3.0	< 2.1	**1,360**	**21.4**	**178**	**21.0**	< 1.9	< 1.9	< 1.7	< 1.8	NR	NR	< 1.2	< 1.8	< 5.5	NR	**8.1**	< 10	NA
SB-5	5/27/2008	6-8	22.8	< 2.6	< 1.6	NR	**5.8**	< 2.2	< 1.8	**34.6**	< 1.9	**6.5J**	< 2.1	**445E**	< 1.8	**51.9**	< 1.8	< 1.9	< 1.9	< 1.7	< 1.8	NR	NR	< 1.2	< 1.8	< 5.5	NR	**2.4J**	**19.4J**	NA
SB-6	5/27/2008	6-8	18.2	< 1,140	< 704	NR	< 660	< 969	< 793	< 616	< 837	< 1,320	< 925	**12,600**	**3,010**	< 925	< 793	< 837	**44,400**	**1,740J**	**1,090J**	NR	NR	< 528	< 793	**5,490J**	NR	< 969	< 4,400	NR
SB-7	5/27/2008	6-8	18.2	< 2.4	**3.4J**	NR	**27.7**	**5.5**	**1.7J**	**120**	**1.7J**	**22.8**	**5.8**	**107,000**	**625E**	**201E**	**3.1J**	< 1.7	**1.9J**	< 1.6	**6.4**	NR	NR	< 1.1	**12.8**	**27.9**	NR	**358E**	**29.3J**	NR
SB-8	5/28/2008	4-6	18.7	< 3.2	< 2.0	NR	< 1.8	< 2.7	< 2.2	< 1.7	< 2.3	< 3.7	< 2.6	**7.4**	< 2.2	< 2.6	< 2.2	< 2.3	< 2.3	< 2.1	< 2.2	NR	NR	< 1.5	< 2.2	< 6.8	NR	< 2.7	< 12.3	NR
SB-9	5/29/2008	6-8	19.4	< 2.5	< 1.5	NR	**7.6**	< 2.1	< 1.7	**72.4**	< 1.8	< 2.8	< 2.0	**32,900**	**2,630E**	**452E**	**2.4J**	**2.3J**	**19.3**	< 1.6	**93.9**	NR	NR	< 1.1	**40.3**	**354**	NR	**19.1**	< 9.5	NR
SB-12	5/28/2008	2-4	16	< 2.4	< 1.5	NR	< 1.4	< 2.0	< 1.6	< 1.3	< 1.7	< 2.7	< 1.9	< 1.6	< 1.6	< 1.9	< 1.6	< 1.7	< 1.7	< 1.6	< 1.6	NR	NR	< 1.1	< 1.6	< 5.0	NR	< 2.0	< 9.2	NR
MW-2	6/11/2008	2-4	19.4	< 600	< 369	NR	< 346	< 507	< 415	< 323	< 438	< 692	< 484	**13,300**	**3,650**	**871J**	< 415	< 438	**22,300**	**873J**	**1,010J**	NR	NR	< 277	< 415	**4,760**	NR	< 507	< 2310	NR
		4-6	18.2	< 115	< 70.7	NR	< 66.3	< 97.2	< 79.5	< 61.8	< 83.9	< 133	< 92.8	**1,920**	**1,860**	**114J**	< 79.5	< 83.9	**1,930**	< 75.1	< 79.5	NR	NR	**150J**	< 79.5	ND	NR	< 97.2	< 442	NR
		6-8	17.8	< 1,190	< 735	NR	< 689	< 1,010	< 827	< 643	< 873	**1,440J**	< 965	**1,950J**	< 827	< 965	< 827	< 873	**79,300**	**3,780**	**2,660**	NR	NR	< 551	< 827	**12,920**	NR	< 1,010	< 4,590	NR
		29-30	14.3	< 2.3	< 1.4	NR	< 1.4	< 2.0	< 1.6	< 1.3	< 1.7	< 2.7	< 1.9	**113**	**3.0J**	**11.3**	< 1.6	< 1.7	**4.3J**	< 1.5	< 1.6	NR	NR	< 1.1	< 1.6	ND	NR	**3.2J**	**14.7J**	NR
Phase II Remedial Investigation - Field Event #1																														
SB-7A	4/7/2009	6-7	15.8	<132	<81.5	<122	<76.4	<112	**2,160**	**276**	<96.8	<153	NR	**33,900**	**882**	**298**	<91.7	<96.8	<96.8	<86.6	<91.7	NR	NR	NR	<91.7	<183	<96.8	**393**	>509	<6.110
Phase II Remedial Investigation - Field Event #2																														
GP-19	#########	4-6	18.5	<40.0	<24.6	<37.0	<23.1	<33.9	<27.7	<21.6	<29.3	<46.2	NR	<26.2	<27.7	<32.3	<27.7	<29.3	<29.3	<26.2	<27.7	NR	NR	NR	<27.7	<29.3	<29.3	<33.9	< 154	NR
GP-20	#########	4-6	23.2	<2.6	<1.6	<2.4	<1.5	<2.2	**38.5**	**15.5**	<1.9	<3.0	NR	**2,020**	**7.2**	**39.8**	<1.8	<1.9	<1.9	<1.7	<1.8	NR	NR	NR	<1.8	<1.9	**7.5**	<2.2	<10	NR
HA-21	#########	4-6	23	<2.5	<1.6	<2.3	<1.5	<2.1	<1.7	**21.6**	<1.8	<2.9	NR	**12.1**	<1.7	<2.0	<1.7	<1.8	<1.8	<1.7	<1.7	NR	NR	NR	<1.7	<1.8	<1.8	<2.1	<9.7	NR
GP-22	#########	6-8	18.7	<2.4	<1.5	<2.2	<1.4	<2.0	**17.6**	**22.8**	<1.7	<2.7	NR	**338 E**	<1.6	**17.6**	<1.6	<1.7	<1.7	<1.6	<1.6	NR	NR	NR	<1.6	<1.7	<1.7	<2.0	<9.1	NR
GP-23	#########	4-6	10.2	<2.0	<1.2	<1.8	<1.2	<1.7	<1.4	<1.1	<1.5	<2.3	NR	**6.2**	<1.4	<1.6	<1.4	<1.5	<1.5	<1.3	<1.4	NR	NR	NR	<1.4	<1.5	<1.5	<1.7	<7.7	NR
GP-24	#########	4-6	6.2	<2.1	<1.3	<1.9	<1.2	<1.8	<1.5	<1.1	<1.5	<2.4	NR	**76.2**	<1.5	<1.7	<1.5	<1.5	<1.5	<1.4	<1.5	NR	NR	NR	<1.5	<1.5	<1.5	<1.8	<8.1	NR
GP-25	#########	4-6	6.6	<2.0	<1.2	<1.8	<1.1	<1.7	<1.4	<1.1	<1.4	<2.3	NR	**48.7**	<1.4	<1.6	<1.4	<1.4	<1.4	<1.3	<1.4	NR	NR	NR	<1.4	<1.4	<1.4	<1.7	<7.5	NR
GP-26	#########	6-7	6.1	<2.1	<1.3	<1.9	<1.2	<1.8	**41.4**	<1.1	<1.5	<2.4	NR	**368**	<1.5	**22.3**	<1.5	<1.5	<1.5	<1.4	<1.5	NR	NR	NR	<1.5	<1.5	**25.3**	<1.8	<8.1	NR
GP-27	#########	6-7	8.9	<2.2	<1.4	<2.1	<1.3	<1.9	<1.6	<1.2	<1.6	<2.6	NR	**6.5**	<1.6	<1.8	<1.6	<1.6	<1.6	<1.5	<1.6	NR	NR	NR	<1.6	<1.6	<1.6	<1.9	<8.6	NR
HA-28	#########	6-8	6.3	<2.2	<1.4	<2.1	<1.3	<1.9	<1.5	<1.2	<1.6	<2.6	NR	<1.5	<1.5	<1.8	<1.5	<1.6	<1.6	<1.5	<1.5	NR	NR	NR	<1.5	<1.6	<1.6	<1.9	<8.6	NR
HA-29	#########	8-10	5.9	<2.1	<1.3	<2.0	<1.2	<1.8	<1.5	<1.1	<1.6	<2.5	NR	<1.4	<1.5	<1.7	<1.5	<1.6	<1.6	<1.4	<1.5	NR	NR	NR	<1.5	<1.6	<1.6	<1.8	<8.2	NR
HA-29-Dup	#########	8-10	11.3	<2.5	<1.5	<2.3	<1.4	<2.1	<1.7	<1.3	<1.8	<2.9	NR	<1.6	<1.7	<2.0	<1.7	<1.8	<1.7	<1.6	<1.7	NR	NR	NR	<1.7	<1.8	<1.8	<2.1	<9.6	NR
SED-1	#########	0.25	24.1	<3.0	<1.8	**42.3**	<1.7	<2.5	<2.1	<1.6	<2.2	<3.5	NR	<2.0	<2.1	<2.4	<2.1	< 2.2	< 2.2	<2.0	<2.1	NR	NR	NR	<2.1	<2.2	<2.2	<2.5	< 11.5	NR
Phase II Remedial Investigation - Field Event #3																														
MW-7	7/20/2010	4-6	17.8	<3.94	<3.94	<3.94	<3.94	<3.94	<3.94	**14.6**	<3.94	<15.8	<3.94	**10.3**	<3.94	**25.3**	<3.94	<3.94	<3.94	<3.94	<3.94	<3.94	<3.94	<3.94	<3.94	<11.82	NR	<3.94	<39.4	NR
SB-30	7/19/2010	4-6	18.8	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<221	<44.2	**215**	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	<44.2	NR	<44.2	<1100	<8.98
SB-30 DUP	7/19/2010	4-6	18.9	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<226	<45.3	**470**	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	<45.3	NR	<45.3	<1130	NR
SB-31	7/19/2010	4-6	14.5	<126	<126	<126	<126	<126	<126	<126	<126	<631	<126	**3,740**	<126	<126	<126	<126	<126	<126	<126	<126	<126	<126	<126	<126	NR	<126	<3160	NR
SB-32	7/16/2010	6-8	19.3	<30.9	<30.9	<30.9	<30.9	<30.9	<30.9	<30.9	<30.9	<155	<30.9	**901**	<30.9	<30.9	<30.9	<30.9	<30.9	<30.9	<30.9	**33.7**	**35.6**	<30.9	<30.9	<30.9	NR	<30.9	<774	NR
SB-33	7/16/2010	6-8	21.1	<38.1	<38.1	<38.1	**48.7**	<38.1	<38.1	<38.1	<38.1	<190	<38.1	**1,310**	<38.1	**50.6**	<38.1	<38.1	<38.1	<38.1	<38.1	<38.1	<38.1	<38.1	<38.1	<38.1	NR	<38.1	<952	<9.37
SB-34	7/14/2010	4-6	11.0	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<18.3	<4.57	**99.1**	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	<4.57	NR	<4.57	<45.7	NR
SB-35	7/14/2010	4-6	16.6	<167	<167	<167	<167	<167	<167	<167	<167	<837	<167	**2,830**	**467**	**169**	<167	<167	<167	<167	<167	<167	<167	<167	<167	<167	NR	<167	<4190	NR
SB-36	7/19/2010	4-6	13.9	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<17.9	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	<4.47	NR	<4.47	<44.7	NR

TABLE 3
SUMMARY OF ANALYTICAL LABORATORY DATA FOR VOCS IN SOIL AND SEDIMENT
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Soil Boring ID	Date Sampled	Sample Depth (ft bgs)	Soil Moisture (%)	VOCs by EPA Method 8260B																									
				Chlorinated VOCs														Petroleum VOCs									THMs		Other	
				Carbon tetracholride	Chloroform	Chloroethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	1,1,1,2-Tetrachloroethane	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl chloride	Chlorobenzene	1,2-Dichlorobenzene	1,4-Dichlorobenzene	Ethylbenzene	4-Isopropyltoluene	Iodomethane	Naphthalene	Toluene	Xylene (Total)	1,1,2-Trichlorotri fluoroethane	Trichloro fluoromethane	Acetone	1,4 Dioxane
Prelminary Residential Health-Based PSRG				610	290	NE	3,300	430	48,000	32,000	30,000	11,000	1,900	550	640,000	1,800	60	58,000	380,000	2,400	5,400	NE	NE	3,600	820,000	130,000	910,000	160,000	12,000,000	4900
Prelminary Industrial Health-Based PSRG				3,000	1,500	NE	17,000	2,200	220,000	400,000	140,000	53,000	9,300	2,600	640,000	14,000	1,700	280,000	380,000	12,000	27,000	NE	NE	18,000	820,000	260,000	910,000	680,000	100,000,000	170000
Protection of Groundwater				2.1	340	NE	30	2.0	45	360	510	23	5.9	5.0	1,200	18	1.9	430	240	70	8,100	680.0	NE	210	5,500	5,800	9,000,000	24,000	24,000	12

Notes:
All analytical results are reported in µg/kg.
ft bgs = feet below ground surface
THM = Trihalomethanes
NE = not established
< = not detected above the laboratory detection limit shown.
NR = not reported
Bolded values indicate concentration greater than the laboratory reporting limit.
Shaded cells are concentrations in excess of the more conservative PSRG.
J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
E = Analyte concentration exceeded the calibration range. The sample was diluted, so the reported results is estimated.

TABLE 4
SUMMARY OF ANALYTICAL LABORATORY DATA FOR VOCS IN TEMPORARY WELLS AND BORINGS
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Monitoring Well/ Sample ID	Date Sampled	VOCs by EPA Method 8260B																																						
		Chlorinated VOCs																			Petroleum VOCs																	THMs			Other	
		Carbon tetrachloride	Chloroethane	Chloroform	Chloromethane	Dichlorodiflouromethane (Freon 12)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane (CFC 113)	Trichloroethene	Vinyl chloride	Benzene	sec-Butylbenzene	Chlorobenzene	Ethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Isopropylbenzene	Methylcyclohexane	Naphthalene	n-Propylbenzene	Styrene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	Bromomethane	Dibromochloromethane	Trichlorofluoromethane	Acetone	1,4 Dioxane
NC 2L Standard (µg/L)		0.3	3,000	70	3	1,000	6	0.4	7	70	100	5	NE	0.2	0.7	200	NE	200,000	3	0.03	1	70	50	600	20	200	6	70	NE	6	70	70	600	400	400	500	NE	0.4	2,000	6,000	3
Phase I Remedial Investigation																																								
SB-1	5/27/2008	**39.5**	< 0.54	**8.2**	<0.11	**2.1**	**175.0**	**2.6**	**3,170**	**967 J**	**7.0**	**2.5**	**2.4**	< 0.40	**46,800**	**879 J**	**5.0**	NR	**2,090**	**70.7**	**0.89 J**	**1.0**	**0.87 J**	**86.3**	**7.6**	<0.24	**0.34 J**	**2.3**	NR	**1.7**	**1.3**	**3.3**	**97.4**	**1.5**	**2.6**	**344.8**	< 0.29	**6.2**	< 200	**11.5 J**	NR
Dup-1[1]	5/27/2008	**38.4**	< 0.54	**7.3**	<0.11	**2.1**	**171.0**	**2.5**	**3,430**	**986**	**6.2**	< 0.97	**2.3**	< 0.40	**48,800**	**1,070**	< 0.29	NR	**2,030**	**85.9**	**0.88 J**	< 0.38	**0.83 J**	**82.4**	**7.0**	<0.24	< 0.33	**2.1**	NR	**1.7**	**1.1**	< 0.26	**90.5**	< 0.31	< 0.36	**323.3**	< 0.29	< 0.21	**270 J**	**8.2 J**	NR
SB-2	5/27/2008	< 25.0	< 54.0	< 14.0	<0.11	< 21.0	**154.0**	< 12.0	**2,090**	**631**	< 49.0	< 97.0	< 33.0	< 40.0	**9,210**	**171.0**	< 29.0	NR	**1,610**	**130**	**46.7 J**	< 38.0	< 23.0	< 30.0	< 30.0	<24	< 33.0	< 40.0	NR	< 24.0	< 42.0	< 26.0	**51.0 J**	< 31.0	< 36.0	<89.0	< 29.0	< 21.0	**108**	**732 J**	NR
SB-3	5/27/2008	**2.2 J**	< 2.7	< 0.70	<0.55	< 1.0	**203.0**	< 0.60	**384**	**131**	< 2.4	< 4.8	< 1.6	< 2.0	**550**	< 2.4	< 1.4	NR	**129**	**63.9**	< 1.2	< 1.9	< 1.2	< 1.5	< 1.5	<1.2	< 1.6	< 2.0	NR	< 1.2	< 2.1	< 1.3	< 1.3	< 1.6	< 1.8	<4.5	< 1.4	< 1.0	< 1.0	**27.1 J**	NR
SB-4	5/27/2008	< 0.25	**2.2**	**138.0**	<0.11	**2.6**	< 320	**7.3**	**5,910**	**1,110**	**11.4**	**24.4**	**4.1**	**1.2**	**54,300**	**5,730**	**11.1**	NR	**2,740**	**137**	**1.6**	< 0.38	**2.3**	**68.2**	**7.7**	<0.24	**0.38 J**	**0.77 J**	NR	**1.7**	< 0.42	< 0.26	**161.0**	**0.76 J**	< 0.36	**254.6**	< 0.29	< 0.21	< 200	**36.2**	NR
SB-5	5/27/2008	**0.88 J**	< 0.54	**10.6**	<0.11	**1.7**	**166.0**	**2.2**	**875**	**265**	< 0.49	**1.7 J**	< 0.33	< 0.40	**3,580**	**20.7**	**2.3**	NR	**572**	**42.1**	**0.33 J**	< 0.38	**0.26 J**	< 0.30	**0.60 J**	<0.24	< 0.33	< 0.40	NR	**1.8**	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	**53.5**	**3.2 J**	NR
SB-6	5/27/2008	< 125	< 270	< 70.0	<55	< 105	< 160	< 60.0	**5,730**	**614**	< 245	< 485	< 165	< 200	**72,600**	**4,440**	< 145	NR	**2,320**	< 310	< 125	< 190	< 115	**178 J**	**3,330**	<120	< 165	< 200	NR	< 120	< 210	< 130	**136 J**	< 155	< 180	**760 J**	< 145	< 105	**237 J**	**3,520 J**	NR
SB-7	5/27/2008	< 250	< 540	< 140	<110	< 210	< 320	< 120	**17,400**	**1,430**	< 490	< 970	< 330	< 400	**111,000**	**13,600**	< 290	NR	**3,060**	< 620	< 250	< 380	< 230	< 300	< 300	<240	< 330	< 400	NR	< 240	< 420	< 260	**463 J**	< 310	< 360	**1,570 J**	< 290	< 210	**532 J**	**6,210 J**	NR
SB-8	5/28/2008	< 0.25	< 0.54	**0.55 J**	<0.11	< 0.21	**9.1**	< 0.12	**107**	**61.5**	**0.75 J**	< 0.97	< 0.33	< 0.40	**1,130**	**0.81 J**	**0.30 J**	NR	**92.1**	**0.98 J**	< 0.25	< 0.38	< 0.23	< 0.30	**0.33 J**	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	**7.0**	**3.5 J**	NR
SB-9	5/29/2008	< 50.0	< 108	**36.4 J**	<0.22	< 42	**72.0 J**	< 24.0	**2,170**	**112 J**	< 98.0	**506**	< 66.0	< 80.0	**82,300**	**8,280**	< 58.0	NR	**879**	< 124	< 50	< 76.0	< 46.0	**368**	**64.7 J**	<48	< 66.0	< 80.0	NR	< 48.0	< 84.0	< 52.0	**140 J**	< 62.0	< 72.0	**1,484**	**1,230**	< 42.0	**57.0 J**	**1,150 J**	NR
SB-10	5/28/2008	< 0.50	< 1.1	< 0.28	<0.22	< 0.42	**3.0**	< 0.24	**20.0**	**10.2**	<0.98	< 1.9	< 0.66	< 0.80	**324**	< 0.96	< 0.58	NR	**16.6**	< 1.2	< 0.50	< 0.76	< 0.46	< 0.60	< 0.60	<0.48	< 0.66	< 0.80	NR	< 0.48	< 0.84	< 0.52	< 0.52	< 0.62	< 0.72	<1.76	< 0.58	< 0.42	**10.0**	< 4.3	NR
SB-11	5/28/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	< 0.32	< 0.12	< 0.56	< 0.19	< 0.49	< 0.97	< 0.33	< 0.40	**3**	< 0.48	< 0.29	NR	< 0.47	< 0.62	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	< 2.2	NR
SB-12	5/28/2008	< 0.25	< 0.54	**0.70 J**	<0.11	< 0.21	**15.2**	< 0.12	**172**	**174**	**2.5**	< 0.97	< 0.33	< 0.40	**2,720**	**0.94 J**	**0.73 J**	NR	**170**	**2.8**	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	**10.0**	**3.5 J**	NR
SB-13	5/28/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	0.77 J	< 0.12	7.6	1.4	< 0.49	< 0.97	< 0.33	< 0.40	**92.7**	< 0.48	< 0.29	NR	**4.5**	< 0.62	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	< 2.2	NR
SB-14	5/28/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	**1.4**	< 0.12	**4.1**	**0.36 J**	< 0.49	< 0.97	< 0.33	< 0.40	**5.2**	< 0.48	< 0.29	NR	**0.51 J**	< 0.62	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	**4.2 J**	NR
SB-15	5/28/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	**4.0**	< 0.12	**3.2**	**1.8**	< 0.49	< 0.97	< 0.33	< 0.40	**36.8**	< 0.48	< 0.29	NR	**1.4**	< 0.62	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	< 2.2	NR
SB-16	5/29/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	< 0.32	< 0.12	< 0.56	**1.1**	< 0.49	< 0.97	< 0.33	< 0.40	**3.0**	< 0.48	< 0.29	NR	**0.79 J**	**2.7**	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	< 2.2	NR
SB-17	5/29/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	< 0.32	< 0.12	**0.71 J**	< 0.19	< 0.49	< 0.97	< 0.33	< 0.40	**5.5**	< 0.48	< 0.29	NR	< 0.47	< 0.62	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	< 2.2	NR
SB-18	5/29/2008	< 0.25	< 0.54	< 0.14	<0.11	< 0.21	**0.46 J**	< 0.12	**5.4**	**1.1**	< 0.49	< 0.97	< 0.33	< 0.40	**113**	< 0.48	< 0.29	NR	**2.0**	< 0.62	< 0.25	< 0.38	< 0.23	< 0.30	< 0.30	<0.24	< 0.33	< 0.40	NR	< 0.24	< 0.42	< 0.26	< 0.26	< 0.31	< 0.36	<0.89	< 0.29	< 0.21	< 0.20	< 2.2	NR
Phase II Remedial Investigation - Field Event #2																																								
TMW-19	10/26/2009	<0.25	<0.54	**5.3**	<0.11	<0.21	**135**	**3.8**	**1,640**	**869 E**	<0.49	**7.0**	NR	<0.40	**9,930**	**488**	**7.4**	**471 E**	**642**	**37.9**	<0.25	NR	<0.23	**6.3**	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	**18.6**	NR	NR	**44.0**	<0.29	<0.21	**42.1**	<2.2	**305**
TMW-20	10/26/2009	**82.1**	<0.54	**63.7**	<0.11	**1.5**	**180**	**5.6**	<0.56	**524 E**	<0.49	**21.9**	NR	**3.3**	**27,400**	**714**	**10.6**	**1,180**	**1,210**	**35.8**	<0.25	NR	<0.23	**24.7**	**45.3**	**1.0**	**4.5**	<0.40	**22.1**	NR	NR	<0.26	**47.8**	NR	NR	**124.2**	<0.29	<0.21	**232 E**	<2.2	**332**
TMW-21	10/26/2009	**88.2**	<0.54	**13.9**	**2.7**	**2.1**	**131**	**4.3**	<0.56	**292 E**	<0.49	<0.97	NR	<0.40	**21,700**	**292**	**7.8**	**837**	**1,330**	**14.5**	<0.25	NR	<0.23	<0.30	**7.8**	<0.24	**1.4**	<0.40	<1.9	NR	NR	<0.26	**3.7**	NR	NR	<0.66	<0.29	<0.21	**131**	<2.2	<78.4
TMW-22	10/26/2009	<0.25	<0.54	**16.1**	<0.11	**1.1**	**89.6**	**1.9**	**795**	**215 E**	<0.49	<0.97	NR	<0.40	**2,740**	**26.7**	**3.0**	**148**	**409**	**6.5**	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	**28.2**	<2.2	<78.4
TMW-23	10/26/2009	<0.25	<0.54	<0.14	**3.0**	<0.21	**7.7**	<0.12	**113**	**237 E**	<0.49	<0.97	NR	<0.40	**877**	<0.48	<0.29	**56**	**246**	**1.5**	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	**1.7**	<2.2	<78.4
TMW-24	10/26/2009	**3.5**	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	**234 E**	**6.5**	<0.49	<0.97	NR	<0.40	**1,800**	**23.4**	<0.29	**493**	**101**	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	**2.7**	<2.2	<78.4
TMW-25	10/26/2009	<0.25	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	**356**	<0.19	<0.49	<0.97	NR	<0.40	**2,170**	**75.0**	<0.29	**627**	**174**	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	**8.1**	<0.29	<0.21	**4.4**	<2.2	<78.4
TMW-26	10/27/2009	<1.2	<2.7	<0.70	<0.55	<1.0	<1.6	<0.60	**40.0**	<0.95	<2.4	<4.8	NR	<2.0	**487**	<2.4	<1.4	**122**	**12.3**	<3.1	<1.2	NR	<1.2	<1.5	<1.5	<1.2	<1.6	<2.0	<9.4	NR	NR	<1.3	<1.3	NR	NR	<3.3	<1.4	<1.0	<1.0	<10.8	<392
TMW-27	10/27/2009	<0.25	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	<0.56	<0.19	<0.49	<0.97	NR	<0.40	**90.5**	<0.48	<0.29	**26.1**	**1.7**	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	<0.20	<2.2	<78.4
TMW-28	10/27/2009	<0.25	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	<0.56	<0.19	<0.49	<0.97	NR	<0.40	**1.4**	<0.48	<0.29	<0.19	<0.47	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	<0.20	<2.2	<78.4
Dup-1[2]	10/27/2009	<0.25	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	<0.56	<0.19	<0.49	<0.97	NR	<0.40	**1.2**	<0.48	<0.29	<0.19	<0.47	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	<0.20	<2.2	<78.4
TMW-29	10/27/2009	<0.25	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	<0.56	<0.19	<0.49	<0.97	NR	<0.40	**23.3**	<0.48	<0.29	**8.7**	**2.0**	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<1.9	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.29	<0.21	<0.20	<2.2	<78.4

Notes:
All analytical results are reported in µg/L.
THMs = trihalomethanes
NE = not established
Bolded values indicate concentration greater than the laboratory reporting limit.
Shaded cells are concentrations in excess of the NC 2L Standard or a detection if no NC 2L Standard is estbalished.
< = not detected above the laboratory detection limit shown.
J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
NR = not reported
E = Analyte concentration exceeded the calibration range. The reported result is estimated.
1. Duplicate of SB-1
2. Duplicate of TMW-28

TABLE 5
SUMMARY OF ANALYTICAL LABORATORY DATA FOR METALS IN GROUNDWATER
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Sample ID	Date Sampled	Metals by EPA Method 6010 (Mercury by 7041)																						
		Aluminum	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Nickel**	**Potassium**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
NC 2L Standard (µg/L)		NE	NE	10	700	NE	2	NE	10	NE	1,000	300	15	NE	50	1	100	NE	20	20	NE	NE	NE	1000
Phase II Remedial Investigation - Field Event #1																								
MW-2	4/7/2009	**207**	<2.6	<2.7	**37.7**	<0.10	<0.50	**7,740**	<0.40	**16.8**	<0.30	**3,240**	<4.0	**1,310**	**323**	<0.070	<1.7	<3.0	<3.8	<0.10	**13,900**	<3.0	<0.20	**12.4**
MW-12[1]	4/7/2009	**170**	<2.6	<2.7	**36.8**	<0.10	<0.50	**7,450**	<0.40	**15.8**	<0.30	**3,100**	<4.0	**1,280**	**313**	<0.070	<1.7	<3.0	<3.8	<0.10	**13,400**	<3.0	<0.20	<0.40

Notes:
All analytical results are reported in µg/L.
NE = not established
Bolded values indicate concentration greater than the laboratory reporting limit.
Shaded cells are concentrations in excess of the NC 2L Standard or a detection if no NC 2L Standard is estbalished.
< = not detected above the laboratory detection limit shown.
1. Duplicate sample of MW-2.

TABLE 6
SUMMARY OF ANALYTICAL LABORATORY DATA FOR VOCS IN PERMANENT MONITORING WELLS AND SURFACE WATER
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Monitoring Well/ Sample ID	Date Sampled	VOCs by EPA Method 8260B																																						SVOCs by EPA Method 8270C
		Chlorinated VOCs																				Petroleum VOCs																THMs		Other	
		Carbon tetrachloride	Carbon Disulfide	Chloroethane	Chloroform	Chloromethane	Dichlorodiflouromethane (Freon 12)	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene Chloride	1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane (CFC 113)	Trichloroethene	Vinyl chloride	Benzene	sec-Butylbenzene	Chlorobenzene	Ethylbenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Isopropylbenzene	Naphthalene	n-Propylbenzene	Styrene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Total Xylenes	Dibromochloromethane	Trichlorofluoromethane	Acetone	1,4, Dioxane
NC 2L Standard (µg/L)		0.3	700	3,000	70	3	1,000	6	0.4	7	70	100	5	NE	0.2	0.7	200	NE	200,000	3	0.03	1	70	50	600	20	200	6	70	6	70	70	600	400	400	500	0.4	2,000	6,000	3
Shallow Monitoring Wells																																								
MW-1	6/18/2008	<0.25	NR	<0.54	< 0.14	<0.11	<0.21	<0.32	<0.12	<0.56	<0.19	<0.49	<0.97	<0.33	<0.40	**1.2**	<0.48	<0.29	NR	<0.47	<0.62	**2.8**	<0.38	<0.23	**1.3**	<0.30	<0.24	<0.33	<0.40	<0.24	<0.42	<0.26	**8.6**	**1.0**	<0.36	**5.9**	<0.21	<0.20	<2.2	NA
	7/29/2010	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	**4.58**	<1.00	<1.00	**7.02**	<1.00	<5.00	<1.00	<1.00	**2.15**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<25.0	<0.534
MW-2	6/18/2008	**6.6**	NR	<0.54	**10.2**	<0.11	**3.8**	**7.0**	<0.12	**1,780**	**4.4**	<0.49	**2.0**	<0.33	<0.40	**8,820**	**6.5**	**1.8**	NR	**1,080**	<0.62	**1.2**	< 0.38	<0.23	**3.0**	**102**	< 0.24	**3.9**	<0.40	<0.24	<0.42	<0.26	**4.9**	<0.31	<0.36	**16.9**	<0.21	**45.7**	<2.2	NA
	4/7/2009	<2.5	<11.5	<5.4	<1.4	<1.1	<2.1	<3.2	<1.2	**910**	**100**	<4.9	<9.7	NR	<4.0	**7,140**	<4.8	<2.9	**189**	**879**	<6.2	<2.5	NR	<2.3	<3.0	<3.0	<2.4	<3.3	<4.0	NR	NR	<2.6	<2.6	NR	NR	<6.6	<2.1	**21.5**	<21.7	<0.78
	7/28/2010	<320	<320	<320	<320	<320	<1600	<320	<320	**838**	<320	<320	<1600	<320	<320	**5,150**	<320	<320	<320	**624**	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<8000	NA
MW-12[1]	4/7/2009	**1.5**	<1.2	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	**1,200**	**123**	<0.49	<0.97	NR	<0.40	**5,730**	**3.6**	**1.4**	**221**	**952**	<0.62	<0.25	NR	<0.23	<0.30	**21.2**	<0.24	**1.1**	<0.40	NR	NR	<0.26	<0.26	NR	NR	**1.6**	<0.21	**34.0**	<2.2	<0.76
Dup-1[1]	7/28/2010	<320	NR	<320	<320	<320	<1600	<320	<320	**867**	<320	<320	<1600	<320	<320	**5,270**	<320	<320	<320	**653**	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<320	<8000	NA
MW-3	6/18/2008	<0.25	NR	<0.54	<0.14	<0.11	<0.21	<0.32	<0.12	**13.9**	<0.19	<0.49	<0.97	<0.33	<0.40	**573**	**3.1**	< 0.29	NR	**2.8**	<0.62	<0.25	<0.38	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<0.24	<0.42	<0.26	**2.1**	<0.31	<0.36	<0.89	<0.21	<0.20	<2.2	NA
	7/29/2010	<80.0	<80.0	<80.0	<80.0	<80.0	<400	<80.0	<80.0	<80.0	<80.0	<80.0	<400	<80.0	<80.0	**1,630**	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<80.0	<2000	NA
MW-4	6/18/2008	<0.25	NR	<0.54	<0.14	<0.11	<0.21	**6.3**	<0.12	**553**	**1.0**	<0.49	<0.97	<0.33	<0.40	**2,320**	**47.6**	**1.1**	NR	**1,030**	<0.62	<0.25	<0.38	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	<0.24	<0.42	<0.26	**2.2**	<0.31	<0.36	**4.6**	<0.21	**30.0**	<2.2	NA
	7/28/2010	<1,250	<1,250	<1,250	<1,250	<1,250	<6,250	<1,250	<1,250	**3,230**	<1,250	<1,250	<6,250	<1,250	<1,250	**18,200**	**6,560**	<1,250	<1,250	**3,460**	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<1,250	<31,200	<0.515
MW-5	6/18/2008	<0.25	NR	<0.54	< 0.14	<0.11	<0.21	<0.32	<0.12	<0.56	<0.19	<0.49	<0.97	<0.33	<0.40	<0.46	< 0.48	< 0.29	NR	< 0.47	<0.62	<0.25	<0.38	<0.23	< 0.30	<0.30	<0.24	<0.33	<0.40	<0.24	<0.42	<0.26	< 0.26	<0.31	<0.36	<0.89	<0.21	<0.20	<2.2	NA
	7/29/2010	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	**1.53**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<25.0	NA
MW-6	7/28/2010	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	**24.7**	<10.0	<10.0	<50.0	<10.0	<10.0	**244**	<10.0	<10.0	<10.0	**14.2**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<250	<0.548
MW-7	7/28/2010	<16.0	<16.0	<16.0	<16.0	<16.0	<80.0	<16.0	<16.0	**52.3**	<16.0	<16.0	<80.0	<16.0	<16.0	**273**	<16.0	<16.0	<16.0	**29.6**	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<16.0	<400	<0.546
MW-8	7/28/2010	<50.0	<50.0	<50.0	<50.0	<50.0	<250	<50.0	<50.0	**132**	<50.0	<50.0	<250	<50.0	<50.0	**974**	**102**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<1,250	NA
MW-9	7/28/2010	<1.00	<1.00	<1.00	**1.40**	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	**3.62**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<25.0	NA
MW-11	7/29/2010	<1.00	<1.00	<1.00	**1.86**	<1.00	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	**2.01**	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<25.0	<0.548
MW-13	6/27/2011	<0.101	**0.320 J**	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	**2.88**	<0.136	<0.223	<0.152	<0.104	<0.156	**6.20**	**0.170 J**	<0.126	NA	**1.60**	<0.124	<0.113	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.113	<0.102	**0.150 J**	<0.0961	<0.113	<0.2694	<0.134	<0.137	<0.864	NA
EMES Monitoring Wells																																								
APZ-01	6/28/2011	<0.101	<0.106	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	**1.09**	<0.123	<0.126	NA	<0.125	<0.124	**0.990 J**	<0.112	<0.116	**0.0900 J**	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.102	<0.102	**0.270 J**	**0.130 J**	<0.113	**0.580 J**	<0.134	<0.137	**0.890 J**	NA
AMW-11S	6/27/2011	<0.101	<0.106	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	**0.210 J**	<0.123	<0.126	NA	<0.125	<0.124	**0.460 J**	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.102	<0.102	<0.133	<0.0961	<0.113	**0.110 J**	<0.134	<0.137	<0.864	NA
Dup-1[2]	6/27/2011	<0.101	<0.106	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	**0.190 J**	<0.123	<0.126	NA	<0.125	<0.124	**0.460 J**	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.102	<0.102	<0.133	<0.0961	<0.113	**0.110 J**	<0.134	<0.137	<0.864	NA
AMW-12S	6/27/2011	<0.101	**0.260 J**	<0.311	**0.340 J**	<0.448	<0.171	<0.165	**0.510**	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	<0.155	<0.123	<0.126	NA	<0.125	<0.124	**4.65**	<0.112	<0.116	**0.520 J**	<0.137	<0.103	<0.130	<0.0869	**0.620 J**	<0.102	<0.102	**1.34**	**0.650 J**	**0.260 J**	**2.69 J**	<0.134	<0.137	**5.75 J**	NA
AMW-16S	6/28/2011	<0.101	<0.106	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	<0.155	<0.123	<0.126	NA	<0.125	<0.124	**0.130 J**	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.102	<0.102	<0.133	<0.0961	<0.113	<0.2694	<0.134	<0.137	<0.864	NA
AMW-17S	6/28/2011	<0.101	<0.106	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	**0.880 J**	<0.136	<0.223	<0.152	<0.104	<0.156	**4.72**	<0.123	<0.126	NA	<0.125	<0.124	**0.270 J**	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.102	<0.102	**0.200 J**	**0.140 J**	<0.113	**0.460 J**	<0.134	<0.137	<0.864	NA
AMW-18S	6/28/2011	<0.101	<0.106	<0.311	<0.139	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	**0.600 J**	<0.123	<0.126	NA	<0.125	<0.124	<0.113	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.102	<0.102	<0.133	<0.0961	<0.113	<0.2694	<0.134	<0.137	<0.864	NA
Deep Monitoring Wells																																								
MW-14	6/27/2011	<0.101	<0.106	<0.311	**0.980 J**	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	<0.152	<0.104	<0.156	**0.230 J**	<0.123	<0.126	NA	<0.125	<0.124	<0.113	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0133	<0.102	**0.280 J**	<0.0961	<0.113	<0.2694	**0.640 J**	<0.137	**3.31 J**	NA
MW-15	6/27/2011	<0.101	**1.60 J**	<0.311	**1.03**	<0.448	<0.171	<0.165	<0.167	<0.212	<0.136	<0.223	**0.240 J**	<0.104	<0.156	**0.440 J**	<0.123	<0.126	NA	<0.125	<0.124	<0.113	<0.112	<0.116	<0.0877	<0.137	<0.103	<0.130	<0.0869	<0.0855	<0.113	<0.102	**1.18**	<0.0961	<0.113	**0.120 J**	<0.134	<0.137	**7.01 J**	NA
Surface Water																																								
NC 2B Standard (µg/L)		1.6	NE	550	170	NE	NE	170	37	7.1	4.9	10	590	4	NE	3.3	NE	16	NE	30	2.4	51	NE	NE	NE	NE	NE	NE	3.1	NE	3,200	NE	NE	NE	NE	NE	NE	67	NE	110
SW-1	10/27/2009	<0.25	<1.2	**26.2**	<0.14	<0.11	<0.21	**5.9**	<0.12	<0.56	<0.19	<0.49	<0.97	NR	<0.40	**1.7**	**1.6**	<0.29	<0.19	**1.5**	<0.62	<0.25	NR	<0.23	<0.30	<0.30	<0.24	<0.33	<0.40	NR	NR	<0.26	<0.26	NR	NR	<0.66	<0.21	<0.20	<2.2	NA

Notes:
All analytical results are reported in µg/L.
THMs = trihalomethanes
NE = not established
< = not detected above the laboratory detection limit shown.
NR = not reported
Bolded values indicate concentration greater than the laboratory reporting limit.
Shaded cells are concentrations in excess of the NC 2L Standard or a detection if no NC 2L Standard is estbalished.
J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
1. Duplicates of MW-2
2. Duplicate of AMW-11S

Additional detections not listed on the table:
APZ-01: 4-Isopropyltoluene (0.130 J)
AMW-12S: 1,2-Dibromo-3-chloropropane
MW-14: Dibromochloromethane (0.640 J), Bromodichloromethane (0.710 J)

TABLE 7
SUMMARY OF FIELD PARAMETERS
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Soil Boring ID	Date Sampled	pH (SU)	Specific Conductance (µS/cm)	Temperature (°C)	Turbidity (NTU)	Oxidation-Reduction Potential (mV)
Phase I Remedial Investigation						
SB-1	5/27/2008	5.16	152	26.9	129	NM
SB-2	5/27/2008	4.73	141	27.9	186	NM
SB-3	5/27/2008	4.79	216	28.7	154	NM
SB-4	5/27/2008	4.27	246	24.7	164	NM
SB-5	5/27/2008	4.56	217	23.4	76	NM
SB-6	5/27/2008	5.54	231	25.0	84	NM
SB-7	5/27/2008	5.14	306	24.8	131	NM
SB-8	5/28/2008	5.06	158	20.0	193	NM
SB-9	5/29/2008	5.21	450	18.5	61	NM
SB-10	5/28/2008	4.53	128	19.3	185	NM
SB-11	5/28/2008	4.96	165	19.4	141	NM
SB-12	5/28/2008	4.46	180	20.9	196	NM
SB-13	5/28/2008	4.78	141	19.0	170	NM
SB-14	5/28/2008	4.95	100	16.6	123	NM
SB-15	5/28/2008	4.97	132	18.4	56	NM
SB-16	5/29/2008	4.63	132	23.3	110	NM
SB-17	5/29/2008	4.76	164	23.1	131	NM
SB-18	5/29/2008	4.19	1,334	17.8	240	NM
Phase II Remedial Investigation - Field Event #2						
TMW-19	10/28/2009	5.05	171	21.1	360	-183
TMW-20	10/28/2009	5.04	182	21.3	184	-395
TMW-21	10/28/2009	4.76	474	20.7	67	296
TMW-22	10/28/2009	4.87	379	22.1	43	-412
TMW-23	10/28/2009	4.98	152	23.3	48	-154
TMW-24	10/28/2009	4.51	554	20.5	39	-110
TMW-25	10/28/2009	3.95	2,350	20.5	28	17
TMW-26	10/28/2009	3.93	1,920	20.5	84	-164
TMW-27	10/27/2009	3.73	1,440	19.8	550	119
TMW-28	10/27/2009	3.67	3,060	18.3	500	370
TMW-29	10/27/2009	3.81	1,495	18.5	475	395
Permanent Monitoring Wells						
MW-1	6/18/2008	4.98	126	19.3	81	NM
	7/29/2010	3.82	39	21.3	8	79
MW-2	6/18/2008	5.56	177	23.4	46	NM
	4/8/2009	6.42	139	16.5	NM	31
	7/28/2010	5.98	94	29.2	7	61
MW-3	6/18/2008	3.59	1,287	19.5	205	NM
	7/29/2010	3.20	4,506	20.8	4	192
MW-4	6/18/2008	3.89	1,201	19.4	168	NM
	7/28/2010	3.54	2,881	19.2	19	214

TABLE 7
SUMMARY OF FIELD PARAMETERS
FORMER EATON CORPORATION
1100 EAST PRESTON STREET
SELMA, JOHNSTON COUNTY, NORTH CAROLINA

Soil Boring ID	**Date Sampled**	**pH** (SU)	**Specific Conductance** (µS/cm)	**Temperature** (°C)	**Turbidity** (NTU)	**Oxidation-Reduction Potential** (mV)
MW-5	6/18/2008	6.51	240	19.3	166	NM
	7/29/2010	10.26	254	21.1	171	29
MW-6	7/28/2010	6.13	123	21.9	107	79
MW-7	7/28/2010	6.07	179	20.5	27	46
MW-8	7/28/2010	5.63	160	20.7	20	121
MW-9	7/28/2010	5.01	72	22.5	84	10
MW-11	7/29/2010	6.38	278	23.1	84	40
MW-13	6/27/2011	5.95	132	20.1	88	-94
MW-14	6/27/2011	6.54	238	23.2	240	71
MW-15	6/27/2011	10.97	622	22.7	12	-68
EMES Wells						
APZ-01	6/28/2011	3.31	2,469	17.7	5	398
AMW-11S	6/27/2011	3.52	1,677	18.3	3	256
AMW-12S	6/27/2011	3.28	8,285	18.7	1	290
AMW-16S	6/28/2011	3.75	2,185	21.2	2	374
AMW-17S	6/28/2011	3.33	2,697	21.7	2	413
AMW-18S	6/28/2011	5.74	293	19.4	21	199

Notes:
SU = Standard Units
µS/cm = MicroSiemens per centimeter
°C = Degrees Celsius
NTU = Nephelometric Turbidity Units
mV = Millivolts
NM = not measured
EMES - ExxonMobil Environmental Services Company