Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	BTR Properties, Inc.				
CONTACT PERSON/TITLE	Todd Rambo				
ADDRESS	141 Hammond Street, Carrollton, Georgia 30117				
PHONE	(770) 832-2000	**FAX**	(770) 832-2095	**E-MAIL**	toddr@bometals.com

GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Steven W. Hart			**GA PE/PG NUMBER**	660
COMPANY	Peachtree Environmental				
ADDRESS	3000 Northwoods Parkway, Suite 105, Norcross, Georgia 30071				
PHONE	(770) 824-3136	**FAX**	(770) 449-6119	**E-MAIL**	shart@peachtreeenvironmental.com

APPLICANT'S CERTIFICATION

In order to be considered a qualifying property for the VRP:

(1) The property must have a release of regulated substances into the environment;
(2) The property shall not be:
- (A) Listed on the federal National Priorities List pursuant to the federal Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. Section 9601.
- (B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or
- (C) A facility required to have a permit under Code Section 12-8-66.

(3) Qualifying the property under this part would not violate the terms and conditions under which the division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency.
(4) Any lien filed under subsection (e) of Code Section 12-8-96 or subsection (b) of Code Section 12-13-12 against the property shall be satisfied or settled and released by the director pursuant to Code Section 12-8-94 or Code Section 12-13-6.

In order to be considered a participant under the VRP:
(1) The participant must be the property owner of the voluntary remediation property or have express permission to enter another's property to perform corrective action.
(2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify that this property is eligible for the Voluntary Remediation Program (VRP) as defined in Code Section 12-8-105 and I am eligible as a participant as defined in Code Section 12-8-106.

APPLICANT'S SIGNATURE	Todd Rambo		
APPLICANT'S NAME/TITLE (PRINT)	TODD RAMBO MEMBER BTR PROPERTIES, LLC	**DATE**	12/19/16

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10604	Date HSI Site listed	2/15/2000
HSI Facility Name	Trent Tube Division	NAICS CODE	
PROPERTY INFORMATION			
TAX PARCEL ID	C02-043-0003	PROPERTY SIZE (ACRES)	36.25
PROPERTY ADDRESS	141 Hammond Street		
CITY	Carrollton	COUNTY	Carroll
STATE	Georgia	ZIPCODE	30117
LATITUDE (decimal format)	33.59009	LONGITUDE (decimal format)	-85.093404
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	BTR Properties, LLC	PHONE # (770) 832-2000	
MAILING ADDRESS	141 Hammond Street		
CITY	Carrollton	STATE/ZIPCODE	Georgia 30117

ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	**$5,000 APPLICATION FEE** IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)	**Attached**	
2.	**WARRANTY DEED(S)** FOR QUALIFYING PROPERTY.	**Attached**	
3.	**TAX PLAT** OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	**Appendix A**	
4.	**ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES** OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	**Attached**	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a **PROJECTED MILESTONE SCHEDULE** for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-	**Section 3.0**	

	annual status report to the director describing implementation of the plan during the preceding period. A Gantt chart format is preferred for the milestone schedule. The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;		
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;		
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and		
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.		
6.	**SIGNED AND SEALED PE/PG CERTIFICATION** AND SUPPORTING DOCUMENTATION: "I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances. Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." STEVEN W. HAAS / 668 — Printed Name and GA PE/PG Number 12-21-2016 — Date Signature and Stamp		

ADDITIONAL QUALIFYING PROPERTIES (COPY THIS PAGE AS NEEDED)

PROPERTY INFORMATION			
TAX PARCEL ID	C02 0430015	PROPERTY SIZE (ACRES)	20
PROPERTY ADDRESS	1065 Alabama Street		
CITY	Carrollton	COUNTY	Carroll
STATE	Georgia	ZIPCODE	30117
LATITUDE (decimal format)	33.591493	LONGITUDE (decimal format)	-85.096295
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Lawrence Properties, Inc.	PHONE #	(770) 834-3307
MAILING ADDRESS	1065 Alabama Street, Suite 36D		
CITY	Carrollton	STATE/ZIPCODE	Georgia 30117

PROPERTY INFORMATION			
TAX PARCEL ID		PROPERTY SIZE (ACRES)	
PROPERTY ADDRESS			
CITY		COUNTY	
STATE		ZIPCODE	
LATITUDE (decimal format)		LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)		PHONE #	
MAILING ADDRESS			
CITY		STATE/ZIPCODE	

PROPERTY INFORMATION			
TAX PARCEL ID		PROPERTY SIZE (ACRES)	
PROPERTY ADDRESS			
CITY		COUNTY	
STATE		ZIPCODE	
LATITUDE (decimal format)		LONGITUDE (decimal format)	
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)		PHONE #	
MAILING ADDRESS			
CITY		STATE/ZIPCODE	

110262

BK PG
3753 287

PT-61 022-2006 007579
CARROLL COUNTY, GEORGIA
REAL ESTATE TRANSFER TAX
PAID 0
DATE 10/24/06
CLERK OF SUPERIOR COURT

FILED
GA. CARROLL COUNTY
CLERK SUPERIOR COURT
06 OCT 24 PM 3:16

(5)

Please Return Recorded Document to:
Raymond J. Kearns, Esquire
Kearns Harp & Brumby
5775-B Glenridge Drive, #210
Atlanta, GA 30328
Attn: Sue Despres (06090995)

STATE OF GEORGIA
COUNTY OF FULTON

Transfer Tax Due: $0.00

LIMITED WARRANTY DEED

THIS INDENTURE, made this 19TH day of October, 2006 between BOMETALS, INC., a Georgia corporation, as party of the first part ("Grantor"), and BTR PROPERTIES, LLC, a Georgia limited liability company, as party of the second part ("Grantee").

WITNESSETH:

That the said Grantor, for and in consideration of the sum of Ten and No/100 Dollars ($10.00) and other good and valuable consideration, in hand paid by Grantee at and before the execution and delivery of these presents, the receipt, adequacy and sufficiency of which are hereby acknowledged by Grantor, has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto Grantee and to its heirs, administrators, successors and assigns, all that tract or parcel of land lying and being in Land Lot 131, 158 and 159, 10th District, Carroll County, Georgia, and being more particularly described on Exhibit "A" attached hereto and by this reference incorporated herein.

TOGETHER WITH all and singular rights, members and appurtenances in and to the above-described property in anywise appertaining or belonging.

This conveyance and the warranties contained herein are expressly made subject only to those items set forth on Exhibit "B" attached hereto and by this reference incorporated herein.

TO HAVE AND TO HOLD the above-described property with all and singular the rights, members and appurtenances thereof, to the same being, belonging or in anywise appertaining to

the only proper use, benefit and behoof of the said Grantee, its heirs, administrators, successors and assigns, forever, in FEE SIMPLE.

AND THE SAID GRANTOR, for its successors and assigns will warrant and forever defend the right and title to the above-described property unto the said Grantee, its heirs, administrators, successors and assigns, against the lawful claims of all persons claiming by, through or under Grantor.

IN WITNESS WHEREOF, the Grantor has set hereunto its hand and seal as of the day and year first above written.

Grantor
BoMetals, Inc.

By: _____ (SEAL)
Todd A. Rambo, President

By: _____ (SEAL)
D. Bryan Rambo, Jr., Treasurer

Signed, sealed and delivered in presence of:

_____
Unofficial Witness

_____
Notary Public
My Commission Expires: June 27, 2009

(NOTARIAL SEAL)

AMANDA T MILLS
Notary Public, State of Georgia
Carroll County
My Commission Expires
June 27, 2009

EXHIBIT "A"
LEGAL DESCRIPTION

All that tract or parcel of land lying and being in Land Lots 130, 131, 158 and 159 of the 10th District of Carroll County, Georgia, and being more particularly described as follows:

BEGINNING at a point located on the northwesterly right-of-way line of the Central of Georgia Railroad (a 100-foot right-of-way), 1,186.00 feet northeasterly, as measured along said Railroad right-of-way, from the point of intersection of said right-of-way with the northerly right-of-way line of Alabama Street (a 60-foot right-of-way); thence leaving the northwesterly right-of-way line of the Central of Georgia Railroad and running south 88 degrees 46 minutes 00 seconds west, 815.11 feet to a point located on the easterly right-of-way line of Hammond Street (a 60-foot right-of-way); running thence northerly along the easterly right-of-way line of Hammond Street, the following courses and distances: north 02 degrees 02 minutes 50 seconds west, 194.05 feet to a point; north 01 degree 04 minutes 35 seconds west, 134.92 feet to a point; and, north 00 degrees 41 minutes 16 seconds west, 187.75 feet to a point; running thence south 89 degrees 18 minutes 44 seconds west, along the terminus of the right-of-way of Hammond Street, 30.00 feet to a point; running thence north 00 degrees 41 minutes 16 seconds west, 275.03 feet to a point; continuing thence north 00 degrees 41 minutes 16 seconds west, 530.73 feet to a point; continuing thence north 00 degrees 41 minutes 16 seconds west, 69.27 feet to a point located on the center line of the Little Tallapoosa River; running thence in a generally northeasterly direction along the center line of said river, the following courses and distances: north 88 degrees 23 minutes 06 seconds east, 225.45 feet to a point; north 86 degrees 43 minutes 45 seconds east, 73.47 feet to a point; north 78 degrees 08 minutes 14 seconds east, 226.47 feet to a point; north 60 degrees 20 minutes 45 seconds east, 282.28 feet to a point; north 67 degrees 13 minutes 14 seconds east, 106.34 feet to a point; and, north 70 degrees 53 minutes 52 seconds east, 175.76 feet to the point of intersection of the center line of said river with the southwesterly right-of-way line of the aforementioned Central of Georgia Railroad; running thence southeasterly, southerly and southwesterly along the southwesterly, westerly and northwesterly right-of-way line of said Railroad right-of-way, the following courses and distances: south 25 degrees 39 minutes 56 seconds east, 189.91 feet to a point; south 20 degrees 26 minutes 17 seconds east, 106.35 feet to a point; south 13 degrees 48 minutes 25 seconds east, 107.99 feet to a point; south 07 degrees 06 minutes 10 seconds east, 84.47 feet to a point; south 01 degree 06 minutes 57 seconds east, 95.72 feet to a point; south 05 degrees 41 minutes 32 seconds west, 101.16 feet to a point; south 12 degrees 13 minutes 13 seconds west, 107.39 feet to a point; south 16 degrees 08 minutes 34 seconds west, 88.11 feet to a point; and, south 17 degrees 42 minutes 04 seconds west, 864.53 feet to the POINT OF BEGINNING; and being a tract or parcel of land containing 36.10 acres according to a plat of survey entitled "Property Survey for: Crucible Materials Corporation, BoMetals, Inc., Old Republic National Title Insurance Company and Chesnut & Livingston, PC", prepared by Crawford & Associates, Inc., bearing the seal and certification of Douglas C. Crawford, Georgia Registered Land Surveyor No. 1833, dated April 28, 2005.

Exhibit "B"

Permitted Encumbrances

1. Those matters which would be disclosed by a survey or inspection of the property, including, without limitation, those matters shown on that certain Property Survey of the Property as prepared by Crawford & Associates, Inc., dated April 28, 2005, at Job No. JN910610, including, but not limited to, the following:

(A) EMC power line (Deed Book 54, Page 158, aforesaid records) traversing southeasterly portion of subject property.
(B) Central of Georgia Railroad spur track located on southeasterly portion of subject property;
(C) Georgia Power Company easement with power poles and power service lines therein located along easterly portion of subject property adjacent to Central of Georgia Railroad right-of-way (Deed Book 135, Page 511, Deed Book 136, Page 372, Deed Book 136, Page 404 and Deed Book 266, Page 259, aforesaid records);
(D) 30-inch sanitary sewer line and manholes associated therewith traversing northerly portion of subject property;
(E) 10-foot sewer easement (Deed Book 135, Page 543, aforesaid records) with 8-inch sanitary sewer line therein traversing easterly and northeasterly portions of subject property;
(F) Portion of subject property adjacent to Little Tallapoosa River lying within 100-year flood plain;
(G) Metal building, outbuilding, gas valves, gas tanks, gas pump and shed, power station, concrete tanks, fencing, asphalt parking area, and other improvements located on and within the boundaries of subject property; and,
(H) 14-inch water main traversing central portion of subject property.

2. City, State and County taxes for 2006, which are liens but are not yet due or payable and all taxes for years subsequent to 2006.

3. Right-of-Way Easement from O.L. Hammond to Carroll County, Rural Electric Membership Corporation, dated April 15, 1937, recorded at Deed Book 54, Page 158, Carroll County, Georgia records.

4. Easements for Channel Improvements in favor of West Soil Conservation District, as follows:

(a) from D.L. Hammond, dated February 5, 1959, recorded at Deed Book 124, Page 221, aforesaid records; and

(b) from D.L. Hammond, dated February 5, 1959, recorded at Deed Book 124, Page 241, aforesaid records.

5. Easement from Trent Tube Company to Georgia Power Company, dated January 29, 1962, recorded at Deed Book 135, Page 543, aforesaid records.

6. Sewer Easement from Trent Tube Company to Georgia Power Company to The City of Carrollton, Georgia, dated December 27, 1961, recorded at Deed Book 135, Page 543, aforesaid records.

7. Right-of-Way easements in favor of Georgia Power Company, as follows:

(a) from D.L. Hammond, dated January 5, 1962, recorded at Deed Book 136, Page 372, aforesaid records; and

(b) from O.L. Hammond, dated January 5, 1962, recorded in Deed Book 136, Page 404, aforesaid records.

8. General Permit from O.L. Hammond to Southern Bell Telephone and Telegraph Company, recorded at Deed Book 138, Page 186, aforesaid records.

9. Right-of-Way Easement from Crucible, Inc. to Georgia Power Company, dated March 29, 1972, recorded at Deed Book 266, Page 259, aforesaid records.

10. Riparian rights, if any.

11. The reserved easements and restrictions as set forth in this Limited Warranty Deed.

12. Security Deed from BoMetals, Inc. to Wachovia Bank, National Association, dated September 29, 2005, recorded in Deed Book 3304, Page 135, aforesaid records.

VOLUNTARY INVESTIGATION AND REMEDIATION PLAN

141 Hammond Street
Carrollton, Carroll County, Georgia

Prepared for:

Mr. Todd Rambo
BTR Properties, LLC
141 Hammond Street
Carrollton, GA 30117

DOCUMENT PREPARED BY:

PEACHTREE ENVIRONMENTAL
3000 NORTHWOODS PARKWAY, SUITE 105
NORCROSS, GEORGIA 30071
(770) 449-6100 · (770) 449-6119 FAX
WWW.PEACHTREEENVIRONMENTAL.COM

DECEMBER 2016

CERTIFICATION

I certify that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Todd Rambo
BTR Properties, LLC

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ATTACHMENTS

LIST OF ACRONYMS

CAP	Corrective Action Plan
CSR	Compliance Status Report
ECS	Environmental Compliance Services
EPA	Environmental Protection Agency
EPD	Environmental Protection Division
GPM	Gallons Per Minute
HSRA	Georgia Hazardous Site Response Act
MCL	Maximum Contaminant Level
mg/kg	Milligrams per Kilogram (same as ppm)
mg/L	Milligrams per Liter
NAVD	North American Vertical Datum
RRS	Risk Reduction Standard
TCE	Trichloroethene
USGS	United States Geological Survey
VIRP	Voluntary Investigation and Remediation Plan
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

PEACHTREE ENVIRONMENTAL, INC. (Peachtree) is submitting this Voluntary Investigationand Remediation Plan (VIRP) on behalf of the applicant, BTR Properties, LLC (BTR, or the Applicant), current owner of the property located at 141 Hammond Street, Carrollton, Carroll County, Georgia, occupied by BoMetals, Inc. (the Subject Site). In February 2000, the Subject Site was listed on the Georgia Hazardous Site Inventory (HSI) as the Trent Tube Division facility (HSI Site No. 10604). The purpose of this VIRP is to provide documentation as required to allow the delisting of the Subject Site from the HSI.

1.2 Site Description

The Subject Site consists of 36.25 acres of land located at 141 Hammond Drive in Carrollton, Carroll County, Georgia. The Site has a latitude coordinate 33° 35' 24" North and a longitude coordinate of 85° 05' 39" West. A Site Location Map is included as **Figure 1 – Site Location Map**.

The property is bordered to the south by Southern States farmers' co-op, to the west by a residential trailer park (Elizabeth Village), to the north by the Little Tallapoosa River, and to the east by Central of Georgia Railroad property.

Prior to purchase by BoMetals, the Subject Site was formerly occupied by the Trent Tube Division of Crucible Materials Corporation (Crucible). The 170,000-square-foot Trent Tube building was built in 1962 for the manufacture of stainless steel pipe and tubing products. Between 1973 and 1987, wastewater from the facility was directed to a former on-site wastewater treatment plant (WWTP), which consisted of a lime house, lime silo, and a 20,000-gallon holding tank. The water was then directed to three small settling ponds/basins. Clear water from the settling ponds was discharged to the Little Tallapoosa River, and sludge from the ponds was periodically removed by vacuum truck for off-site disposal. The settling ponds were closed between 1987 and 1989. A Site Plan showing the location of the former WWTP and settling ponds/basins is provided as **Figure 2 – Site Plan**.

The Trent Tube Division facility was closed in 2004. In 2005, BoMetals entered into an Agreement for Purchase and Sale of Real Property with Crucible, the former owner of the Trent Tube facility. Following the purchase of the Subject Site by BoMetals, ownership was transferred to BTR.

1.3 Qualifications of the Site and Applicant

BTR is submitting this VIRP under the Georgia Voluntary Remediation Act (the Act) for the former Trent Tube facility (HSI No. 10604). According to O.C.G.A. 12-8-105, in order to be considered a qualifying property, the Property must be listed on the Georgia Hazardous Site Inventory (HSI), or meet the criteria of the Georgia Brownfields Act (O.C.G.A. 12-8-205), or have a release of regulated substances to the environment. Under O.C.G.A. 12-8-105 the property shall also not:

1) Be listed on the federal National Priorities List;
2) Be currently undergoing response activities required by an Order of the Regional Administration of the United States Environmental Protection Agency;
3) Be a facility required to have a permit under the Georgia Hazardous Waste Management Act (HWMA);
4) Violate the terms and conditions under which the Environmental Protection Division operates and administers remedial programs by delegation or similar authorization from the United States Environmental Protection Agency; and
5) Have any unsatisfied or unsettled lien filed under subsection (e) of the HWMA or subsection (b) of the Georgia Underground Storage Tank Management Act.

The Property is listed as HSI No. 10604. None of the other criteria listed in items 1 - 5 apply. Therefore, the Property is a qualifying property under the Act.

In order for the Participant to meet the qualifications of the Voluntary Remediation Program (VRP) according to O.C.G.A. 12-8-106, the following additional criteria must be met:

1) The Applicant must be the owner of the VRP property or have express permission to enter another's property to perform corrective action including, to the extent applicable, implementing controls for the site pursuant to written lease, license, order or indenture;
2) Not be in violation of any order, judgement, statue, rule or regulation subject to the enforcement authority of the Director; and
3) Meet other such criteria as may be established by the DNR Board pursuant to O.C.G.A. 12-8-103.

As the Participant meets all the criteria stated above, the Participant is qualified for admission into the VRP.

The contact for the Applicant is as follows:

BTR Properties, LLC
Mr. Todd Rambo
3003 Springs Industrial Drive
Powder Springs, Georgia 30127-3858
(770) 832-2000

Appendix A – Legal Description contains the Warranty Deed(s) and Tax Plat(s) for the Qualifying Property(s).

2.0 SITE INVESTIGATION HISTORY

2.1 Summary of Previous Studies Conducted at the Site

As part of a 1996 potential property transfer, Triad Engineering, Inc. of Milwaukee and Civil & Environmental Consultants, Inc. of Pittsburgh conducted an environmental investigation of the Subject Site. Fifteen soil test borings (B-1 through B-15) and fourteen groundwater monitoring wells (MW-1 through MW-9 and MW-11 through MW-15) were installed as part of the 1996 investigation; monitoring wells MW-7 through MW-9 and MW-15 were subsequently abandoned. In 1997, Williams Environmental Services, LLC (Williams) of Birmingham, Alabama installed an additional, deep monitoring well (MW-12R).

The Subject Site was subsequently listed on the HSI as the Trent Tube Division facility (HSI No. 10604) in February 2000. An initial Compliance Status Report (CSR) for the Subject Site was prepared by Williams and submitted to the Georgia Environmental Protection Division (EPD) on November 22, 2002. Following receipt of Georgia EPD's September 15, 2003 comments, a revised CSR was submitted by Williams on September 20, 2004. The revised CSR documented that soils at the facility were in compliance with applicable risk reduction standards; therefore, corrective action was not required for soil at the Subject Site. However, nickel, fluoride and trichloroethene (TCE) were found to exceed Type 4 risk reduction standards in groundwater. Additional revisions to the CSR were submitted on March 14, 2005, and August 1, 2005 in response to Georgia EPD comments.

As part of the CSR investigation, Williams sampled soils at 22 locations (SB-5 through SB-26) and four background locations (BGSB-1 through BGSB-4), and installed twelve additional monitoring wells (MW-16 through MW-25, MW-21D and MW-24D), between 2002 and 2004. The groundwater investigations indicated that shallow groundwater flows to the north and west with discharge to the Little Tallapoosa River. Vertical hydraulic gradients between the shallow and deeper groundwater is upward, as typical in groundwater discharge zones, implying that deeper groundwater also discharges to the Little Tallapoosa River.

An initial Corrective Action Plan (CAP) was submitted by Williams on November 30, 2004. A Revised CAP was prepared by Williams in September 2005 in response to Georgia EPD comments dated May 24, 2005. The Revised CAP addressed the presence of nickel, fluoride, and TCE in groundwater at the Subject Site at concentrations above the applicable risk reduction standards (RRS). Georgia EPD conditionally approved the CAP in a November 22, 2005 letter, adding nitrate and nitrite to the analyte list.

In May 2005, BoMetals submitted a Prospective Purchaser CSR prepared by Peachtree Environmental (Peachtree). According to the Prospective Purchaser CSR, a general sampling rationale had been developed as a result of a meeting among Georgia EPD and representatives of BoMetals and Crucible. The sampling strategy included investigation of additional source areas which might have been present within the facility building associated with former process areas, as well as other potential source areas that may have been impacted by constituents of concern. The results of these investigations were summarized in the May 2005 Prospective Purchaser CSR, which certified that soil at the site was in compliance with Type 1 risk reduction standards for various volatile organic compounds (acetone, toluene and tetrachloroethene) and Type 3 risk reduction standards for fluoride and nickel (Peachtree, 2005).

Georgia EPD reviewed the May 2005 Prospective Purchaser CSR and in a September 22, 2005 letter concurred with the certification for soils. Georgia EPD further granted BoMetals, Inc. a limitation of liability for pre-existing releases at the site. In September 2005, BoMetals, Inc. submitted an Addendum to the Prospective Purchaser CSR which included the results of Crucible's August 1, 2005 revised CSR.

The groundwater monitoring program described in the September 2005 Revised CAP included quarterly sampling of selected monitoring wells (MW-1 through MW-5, MW-12, MW-12D, MW-13, MW-18, MW-20, MW-24, MW-25, and MW-26). Groundwater monitoring was initiated in March 2006 by Crucible following purchase of the property by BoMetals, although changes to the monitoring program have occurred over time.

On May 1, 2007, Georgia EPD informed Crucible that analysis for nitrites was no longer required, based on the absence of nitrites above detection limits in the quarterly groundwater samples obtained in 2006. Additionally, in an April 27, 2007 letter, Georgia EPD agreed that monitoring wells MW-12D, MW-18 and MW-24 only needed to be sampled annually. On February 5, 2009, Georgia EPD agreed that the sampling frequency at monitoring well MW-13 could also be reduced to an annual basis.

On July 23, 2007, Georgia EPD agreed that analyses for TCE could be discontinued at monitoring wells MW-3, MW-5, MW-12D, MW-18, MW-20, MW-24, MW-25 and MW-26, based on the absence of TCE above detection limits in groundwater samples from these wells during previous monitoring events. However, on February 5, 2009, Georgia EPD requested that biodegradation products for TCE be included in future monitoring for those remaining wells analyzed for TCE.

Groundwater monitoring well MW-4 had been dry on numerous occasions and was incapable of providing samples representative of groundwater quality. On January 19, 2009, Crucible requested permission to abandon monitoring well MW-4 and install a deeper replacement well (MW-4R) due to the frequent lack of water in the well. On

January 23, 2009, EPD concurred with the request to install monitoring well MW-4R but required continued sampling of monitoring well MW-4, when possible, until sufficient data was collected from MW-4R to determine comparability to monitoring well MW-4. Monitoring well MW-4R was installed on February 3, 2009.

Crucible filed for bankruptcy protection on May 6, 2009. The groundwater monitoring program continued under the direction of the Bankruptcy Court between May 2009 and August 2010. There has not been environmental compliance monitoring or corrective action activities performed at the Subject Site since August 2010 until Georgia EPD retained Environmental Compliance Services, Inc (ECS) of Woodstock, Georgia to perform sampling on July 20, 2016. A copy of the ECS report is included as **Appendix B - Groundwater Monitoring Report: July 2016**.

2.2 Regulated Substances Released

As a result of prior investigation activities, the following regulated substances have been identified in soil and/or groundwater:

Metals

- Barium (CAS No: 7440-39-3) – Soil only
- Chromium (CAS No: 7440-47-3) – Soil only
- Fluoride (CAS No. 16984-48-8) – Soil and groundwater
- Lead (CAS No: 7439-92-1) – Soil only
- Mercury (CAS No. 7439-97-6) – Soil only
- Nickel (CAS No. 7440-02-0) – Soil and groundwater

Volatile Organic Compounds

- Acetone (CAS No. 67-64-1) – Soil only
- Toluene (CAS No. 108-88-3) – Soil only
- Trichloroethene (CAS No. 79-01-6) – Soil and groundwater

Polychlorinated Biphenyls (PCBs)

- Aroclor 1248 (CAS No. 12672-29-6) – Soil only

As previously noted, the May 2005 Prospective Purchaser CSR certified that soil at the site was in compliance with Type 1 and Type 3 RRS. On September 22, 2005, Georgia EPD concurred with the certification for soils. The September 2005 Revised CAP was prepared to address the presence of nickel, fluoride, and TCE in groundwater at concentrations above the RRS.

2.3 Site Delineation Standards

The Georgia VRP allows the following standards for horizontal and vertical delineation of regulated substances in soil and groundwater:

(A) Concentrations from an appropriate number of samples that are representative of local ambient or anthropogenic background conditions not affected by the subject site release;

(B) Soil concentrations less than those concentrations that require notification under hazardous site response act (HSRA);

(C) Two times the laboratory lower detection limit concentration using an applicable analytical test method recognized by the U.S. Environmental Protection Agency, provided that such concentrations do not exceed all cleanup standards;

(D) For metals in soils, the concentrations reported for Georgia undisturbed native soil samples as reported in the United States Geological Survey (USGS) Open File Report 8 1-197 (Boerngen and Shacklette, 1981), or such later version as may be adopted by rule or regulation of the board; or

(E) Default, residential cleanup standards;

The Type 1 residential RRS will serve as the soil delineation standards for the Subject Site. The current soil delineation standards are listed as follows:

SOIL DELINEATION STANDARDS

REGULATED CONSTITUENT	HIGHEST DETECTED CONCENTRATION (MG/KG)	TYPE 1 RRS (MG/KG)
METALS		
Barium	187	1,000
Chromium	6,400	100
Fluoride	502	400
Lead	87.8	75
Mercury	2.88	0.5
Nickel	393	50
VOLATILE ORGANIC COMPOUNDS		
Acetone	0.66	400
Toluene	0.0041	100
Trichloroethene	0.0088	0.5
PCBs		
Arochlor 1248	0.12	1.55

The Type 1 residential RRS will also serve as the groundwater delineation standards for the Subject Site. The current groundwater delineation standards are listed as follows:

GROUNDWATER DELINEATION STANDARDS

REGULATED CONSTITUENT	HIGHEST DETECTED CONCENTRATION (MG/L)	TYPE 1 RRS (MG/L)
METALS		
Fluoride	302	4
Nickel	12.4	0.1
VOLATILE ORGANIC COMPOUNDS		
Trichloroethene	0.051	0.005

Calculation of the RRS are discussed in Section 4.0.

3.0 CONCEPTUAL SITE MODEL

3.1 Hydrogeologic Setting

The Subject Site is located in the southwestern portion of the Central Uplands District of the Southern Piedmont Physiographic Province (Clark and Zisa, 1976). Streams in the southwestern portion of the Central Uplands District exhibit rectangular drainage and generally lie 100 to 500 feet below the surrounding land surface.

The Subject Site occurs at elevations between 980 and approximately 1,040 feet above the North American Vertical Datum (NAVD) of 1988 (NAVD is approximately mean sea level). The ground surface slopes gently to the north toward the Little Tallapoosa River, which forms the northern boundary of the property. In Carroll County, the Little Tallapoosa River is a southwest-flowing stream. Approximately 35 miles southwest of the Subject Site, the Little Tallapoosa River flows into the Tallapoosa River in Randolph County, Alabama. The Tallapoosa River joins the Coosa River about 10 miles northeast of Montgomery near Wetumpka (Elmore County, Alabama) to form the Alabama River, a south-flowing tributary to the Gulf of Mexico.

In Carrollton, the Little Tallapoosa River has a 7-day, 10-year minimum flow (7Q10) of 3.3 million gallons per day, and the City of Carrollton is required to ensure that the flow does not decrease below this level (Environ, 2005). The City adds water from three reservoirs to the River during drought conditions to maintain the 7Q10 minimum flow.

Soil beneath the Subject Site consists of Madison gravelly clay loam and Madison gravelly fine sandy loam (USDA, 2016). Both soils are well drained and typically occupy the side slopes and shoulders of hills, and are derived from residuum weathered from mica schist and/or gneiss. At the Subject Site, the clay loam occurs at higher elevations and underlies the main facility building, while the fine sandy loam occurs at lower elevations between the building and the Little Tallapoosa River.

The Georgia Geological Survey (1976) indicates that bedrock beneath the Subject Site consists of a garnet mica schist. Higgins et al (1988) proposed that all the bedrock in western Georgia and eastern Alabama occurs as an enormous stack or stacks of folded thrust sheets. Mapping by Higgins et al (1988) show the vicinity of the Subject Site to be underlain by eroded remnants of the Bill Arp and Zebulon thrust sheets, the lowermost of the stacked thrust sheets, along with remnants of the overlying Sandy Springs thrust sheet. Mapped formations within the Bill Arp thrust sheet include the Wacoochee Complex (Woodland Gneiss, Cunningham Granite, Apalachee Formation, and Sparks Schist). The Zebulon thrust sheet mainly contains rocks of the Zebulon Formation. Rocks in the Sandy Springs thrust sheet are assigned to the Sandy Springs Group (Powers Ferry Formation, Chattahoochee Palisades Quartzite, and Factory Shoals Formation).

Bedrock in the Southern Piedmont is overlain by unconsolidated material called regolith, which includes saprolite, a layer of earthy, decomposed rock developed by weathering of bedrock, residual soil that develops in the upper part of the saprolite, and alluvium, which is mainly confined to stream valleys and may overlie residual soil, saprolite, and bedrock. The saprolite is by far the thickest component of the regolith; although highly variable, the thickness of saprolite in Georgia ranges up to 150 feet in places. Where saturated, the unconsolidated materials form the uppermost water-bearing zone in the Piedmont. Groundwater in the regolith is generally under unconfined (water table) conditions.

Metamorphic rocks of the Southern Piedmont are generally not considered good producers of groundwater, except where secondary porosity occurs in the form of fractures and joints. Groundwater may occupy fractures, joints, and other secondary openings in the underlying bedrock, as well as pore spaces in the overlying residual mantle of regolith. Water recharges the underground openings in bedrock by the seeping of precipitation through the overlying regolith or by flowing directly into openings in exposed rock. These openings tend to decrease in number and thickness with depth. Locally, artesian conditions exist when wells penetrate deeply buried fractures that are hydraulically connected to recharge areas at higher altitudes, or in places where the overlying regolith is clayey and forms a confining unit.

Based on the assumption that the groundwater flow direction approximates the drop in land surface topography, groundwater in the vicinity of the Subject Site is assumed to flow toward the north and discharge to the Little Tallapoosa River. The assumed groundwater flow direction has been confirmed by water-level measurements from the on-site monitoring wells and development of potentiometric maps. It is not possible for groundwater to flow beyond the Little Tallapoosa River, as there is no groundwater discharge point at a lower elevation than the Little Tallapoosa for groundwater to flow toward. Surrounding streams and creeks are all higher-elevation tributaries to the lower Little Tallapoosa, and the Little Tallapoosa does not discharge to another river until it travels another 35 miles west to its confluence in Alabama with the Tallapoosa River.

Since the ground surface on the opposite (north) side of the Little Tallapoosa River from the Subject Site also slopes toward the river, groundwater on the opposite side of the river is expected to flow to the south, with groundwater discharging to the Little Tallapoosa. Groundwater from both sides of the river is then carried downstream as streamflow. As a result, there is no property (other than the narrow Little Tallapoosa River itself) downgradient from the Subject Site.

In summary, groundwater in the Little Tallapoosa River basin is recharged by rainfall across the basin, which infiltrates to the water table and then migrates laterally toward the Little Tallapoosa or its tributaries (where present). Groundwater that enters the river or

its tributaries is eventually conveyed to the Tallapoosa River and then the Alabama River and ultimately the Gulf of Mexico.

A block diagram showing the general hydrogeologic characteristics of the Subject Site and vicinity, along with groundwater transport pathways, is provided as **Figure 3 – Conceptual Site Model**.

3.2 Potential Sources

Sources that potentially have or are contributing to a release of hazardous substances at the Subject Site include the former settling ponds and areas where facility wastewater was stored or transported.

The potential sources are described in further detail below

- Settling Basin No. 1 – Settling Basin No. 1 was described in a Closure Plan dated August 31, 1987 as 84 feet by 99 feet at the surface, 30 feet by 45 feet at the base, and 9 feet deep. The closure plan indicated that four feet of sludge, four to six inches of clay liner, and concrete structures were to be removed from the basin, and the underground PVC pipes would be capped and left in place. In 2002, soil boring SB-15 was advanced adjacent to former Settling Basin No. 1; nickel was detected in the soil samples from 0-2 feet and 15-17 feet at concentrations greater than the Type 1 RRS but below the Type 2 RRS (see **Table 1 – Summary of Soil Analyses)**.

- Settling Basin No. 2 – Settling Basin No. 2 was reportedly the same dimensions as Settling Basin No. 1 and was scheduled for closure in a manner similar to Settling Basin No. 1. In 1996, soil boring B-2 was advanced adjacent to former Settling Basin No. 2 and a soil sample was obtained at a depth of 3-5 feet; the concentrations of metals were below the Type 1 RRS (see **Table 1**). In addition, monitoring well MW-1 was installed within former Settling Basin No. 2; fluoride concentrations in groundwater from MW-1 have historically been above the Type 4 RRS, including the recent (July 2016) groundwater sampling event (see **Table 2 – Summary of Groundwater Analyses**). Although concentrations of nickel in groundwater were historically also above Type 4 RRS, since November 2009, nickel concentrations in groundwater from MW-1 have been below the Type 4 RRS, including during the July 2016 sampling event.

- Settling Basin No. 3 – The dimensions of Settling Basin No. 3 were reported in the Closure Plan as 55 feet across at the base. The Carroll County Georgia Tax Map indicated that the pond was approximately 150 feet by

100 feet at the surface. The Closure Plan indicated that one and a half feet of sludge were to be removed before back filling and that the concrete effluent pad would be left in place and covered. In 1996, soil borings B-3 and B-4 were advanced within former Settling Basin No. 3 and soil samples were obtained at depths of 3-5 feet (B-3) and 6-8 feet (B-4); concentrations of chromium and nickel in both samples exceeded the Type 1 RRS but were less than the Type 2 RRS (see **Table 1**). In 2002, soil boring SB-16 was also installed within former Settling Basin No. 3; as at B-3 and B-4, concentrations of chromium and nickel exceeded the Type 1 but were less than the Type 2 RRS in the soil samples obtained. In addition, the concentration of fluoride in an SB-16 soil sample from a depth of 5-7 feet exceeded the Type 1 but was less than the Type 2 RRS. Finally, monitoring well MW-2 was installed in 1996 within former Settling Basin No. 3. Nickel has never exceeded the Type 4 RRS in groundwater from MW-2, but concentrations of fluoride and TCE have historically exceeded the Type 4 RRS in groundwater from MW-2, including during the recent (July 2016) sampling event (see **Table 2**).

- Wastewater Lines – Contact and non-contact cooling water was transported through wastewater lines to the sanitary sewer. The old lines were reported removed in January 2003 and replaced with new conduits with secondary containment piping.

- Hydrofluoric Acid Vats and Pickle Rinse Lines – Acid pickling was used in metal casting to remove scale, rust, oxides, oil, grease, and dirt from the surface of the product. The pickling process involved the cleaning of the metal surface with inorganic acids such as hydrochloric acid, sulfuric acid, or nitric acid. Castings generally pass from the pickling bath through a series of rinses. Hydrofluoric acid was used at the Trent Tube facility in vats in at least three areas including Bay A, Bay B, and Bay C. The acid was stored in tanks adjacent to the vats. The spent pickle rinse was transported through pipelines to the wastewater treatment plant for neutralization. In 2002, shallow (0-2 feet) soil samples were obtained at borings SB-24 and SB-25 inside of the building near the pickling process operations. Concentrations of metals were below the Type 1 RRS in both samples, with the exception of nickel at SB-24, which exceeded the Type 1 RRS but was below the Type 2 RRS (see **Table 1**). Monitoring well MW-5 was installed outside of the western end of the building near soil boring SB-25. Concentrations of fluoride and nickel in groundwater from MW-5 have historically exceeded the Type 4 RRS, including the recent, July 2016 sampling event (see **Table 2**).

The former settling ponds were closed between 1987 and 1989 and soil sampling has not detected inorganics (metals and fluoride) at concentrations greater than Type 2 RRS, although groundwater beneath the former settling ponds has been impacted by nickel, fluoride and TCE. The wastewater lines were removed by January 2003 and replaced with conduits with secondary containment piping. Groundwater near the former Crucible acid pickling process on the western end of the building has been impacted by nickel and fluoride. BoMetals no longer operates the former pickling process. Therefore, these potential sources are no longer active.

3.3 Soil Concentrations

The extent of hazardous substances in soil has previously been delineated to background concentrations; documentation of the lateral and horizontal extent of hazardous substances in soil and certification of compliance with risk reduction standards was provided to Georgia EPD in the Application for Limitation of Liability and Prospective Purchaser Compliance Status Report for the Former Trent Tube Facility, Carrollton, Carroll County, Georgia (Peachtree, 2005) prepared for BoMetals and dated May 2005.

Acetone, trichloroethene, toluene, Aroclor 1248, barium, chromium, lead, mercury, nickel and fluoride were each detected above background standards in one or more soil samples. The analytical results are summarized in **Table 1**. Of these substances, the maximum concentrations of acetone, trichloroethene, toluene, Aroclor 1248, barium, and chromium in soil were less than the Type 1 RRS. The maximum concentrations of lead and nickel in soil were less than the Type 2 RRS. The maximum concentration of mercury and fluoride were less than the Type 3 RRS.

As the maximum concentration of any detected regulated substance in soil did not exceed the Type 3 RRS and the Subject Site is not being used for residences, corrective action was not required for soils.

The lateral extent of the detected regulated substances in soil was delineated to the Type 1 residential RRS listed in Section 2.3. Although some regulated substances were detected in soil above background on the adjacent, residential property, none of the soil samples on the adjacent property has concentrations exceeding the residential Type 2 RRS.

A summary of soil analytical testing results is presented in **Table 1** and on **Figure 4 – Extent of Regulated Substances in Soil**. Regulated substances in soil have been delineated on the BTR property to the Type 1 RRS, and off-site soil on the adjacent parcel to the west complies with Type 1 RRS.

3.4 Groundwater Concentrations

As discussed in Section 2.1, the groundwater monitoring program at the Subject Site was initiated in Match 2006 by Crucible and continued under the direction of the Bankruptcy Court between May 2009 and August 2010. On July 20, 2016, Georgia EPD retained Environmental Compliance Services, Inc (ECS) of Woodstock, Georgia to sample the existing monitoring wells. The analytical data are included in **Table 2**. Georgia EPD provided BTR with a copy of the ECS sampling report (see **Attachment B**).

As indicated by the July 2016 report, nickel and fluoride have been detected in groundwater samples from the Subject Site at concentrations exceeding the Type 4 RRS in one of more wells. TCE has been detected in groundwater samples from monitoring well MW-2 at concentrations exceeding the Type 4 RRS.

As part of a June 2009 Addendum to the CAP, a groundwater plume stability analysis was prepared for nickel and fluoride in groundwater. The analysis considered the area, average concentration, contaminant mass, and center of mass of the nickel and fluoride plumes at the Subject Site between March 2006 and May 2009. Because TCE has only been detected in one monitoring well (MW-2), plume maps were not generated and TCE plume stability was evaluated based solely of the concentration trend at MW-2. Copies of the plume maps and trend analyses areprovided as **Attachment C – Plume Stability Analysis**.

The Plume Stability Analysis provided “very strong” evidence that the nickel plume area, average concentration, and contaminant mass were decreasing. The average concentration and contaminant mass for the fluoride plume were also shown to be decreasing based on the observed trend lines, although the trends were statistically considered “stable.” The TCE plume was also shown to be stable based on a time-trend analysis of the concentrations at monitoring well MW-2. No plume characteristics (area, average concentration, or mass) were observed to be increasing for nickel, fluoride or TCE.

The decreasing trends are attributed to the removal of the former sources. The former settling ponds were closed between 1987 and 1989 and the wastewater lines were replaced by January 2003 with secondary containment piping. BoMetals no longer operates the former Crucible acid pickling process. With no source, the groundwater plumes are attenuating through dispersion and advection, as well as biodegradation in the case of TCE.

As shown in **Table 2**, groundwater concentrations have continued to decrease since the June 2009 Plume Stability Analysis. Concentrations in groundwater of nickel at source-area monitoring well MW-4 have decreased from 9.19 milligrams per liter (mg/L) in March

2006 to 4.84 mg/L in July 2016, and concentrations of fluoride have decreased over the same period of time from 230 mg/L to 182 mg/L.

Downgradient of the source area, nickel concentrations have decreased from 3.04 mg/L (March 2006) to 0.450 mg/L (July 2016) in groundwater from monitoring well MW-1 and from 1.42 mg/L to 0.698 mg/L in groundwater from MW-2. Similarly, fluoride concentrations decreased over the same time period from 110 mg/L to 32.3 mg/L in groundwater from monitoring well MW-1 and from 40.0 mg/L to 22.4 mg/L in groundwater from monitoring well MW-2.

Similar results are also observed further downgradient near the groundwater discharge area along the Little Tallapoosa River. At monitoring well MW-12, nickel concentrations decreased from 1.27 mg/L (March 2006) to 0.360 mg/L (July 2016) and fluoride concentrations decreased from 56 mg/L to 34.1 mg/L. Nickel has not been detected in groundwater from deep monitoring well MW-12D above laboratory Reporting Limits, but concentrations of fluoride decreased from 0.65 mg/L (March 2006) to 0.372 mg/L (July 2016) in groundwater from the well.

The concentration trends at downgradient/sidegradient monitoring well MW-20 are more complex. Concentrations of nickel and fluoride generally increased in groundwater from the well between March 2006 and November 2008 as the plume migrated to the MW-20 location. However, since that time, concentrations of nickel have decreased from 0.884 mg/L (November 2008) to 0.484 (August 2010) and concentrations of fluoride decreased from 47 mg/L to 21 mg/L. Monitoring well MW-20 was not sampled in July 2016 as the well was apparently removed or destroyed during recent construction of a Riverwalk along the Little Tallapoosa River.

TCE has only been detected in groundwater from monitoring well MW-2. In July 2016, the concentration of TCE was 0.00618 mg/L, less than the March 2006 concentration of 0.015 mg/L and almost an order of magnitude less than the maximum observed concentration of 0.034 mg/L (January 2008). Degradation products of TCE (e.g., dichloroethene and vinyl chloride) have not been detected in groundwater samples from MW-2 or from other monitoring wells.

The current extent of substances in groundwater is shown in **Figure 5 - Nickel Concentrations in Groundwater (mg/L) – July 2016, Figure 6 - Fluoride Concentrations in Groundwater (mg/L) – July 2016,** and **Figure 7 - TCE Concentrations in Groundwater (mg/L) – July 2016.** As shown on the figures, the extent of substances in groundwater above the Type 1 RRS is generally limited to the Subject Site. The exception to this trend is the historical presence of fluoride in groundwater in off-site monitoring well MW-25, where fluoride has been detected at concentrations exceeding the Type 4 RRS. Monitoring well MW-25 has reportedly been

destroyed during recent construction activities along the Little Tallapoosa River and was not sampled during the July 2016 monitoring event.

Contaminants in groundwater on the Subject Property enter the Little Tallapoosa River where they mix with the streamflow, maintained at a 7Q10 of 3.3 million gallons per day by the City of Carrollton by adding water as required from three reservoirs. After mixing with the streamflow, the diluted concentrations of contaminants are eventually conveyed to the Tallapoosa River and then the Alabama River, ultimately emptying into the Gulf of Mexico. Therefore, the Little Tallapoosa River is considered the Point of Exposure for groundwater.

As explained in **Section 3.1**, groundwater on the opposite side of the Little Tallapoosa River is expected to flow to the south and discharge into the river. As groundwater from both sides of the Little Tallapoosa discharges into the river, contaminants present in groundwater on the Subject Site do not cross the Little Tallapoosa and there is no property downgradient from the Subject Site.

4.0 COMPLIANCE WITH RISK REDUCTION STANDARDS

RRS were calculated for the constituents of potential concern in soil and groundwater (barium, chromium, lead, mercury, nickel, fluoride, acetone, trichloroethene, toluene, and Aroclor 1248). The calculations used the toxicity values (reference doses and cancer slope factors) provided in the on-line U.S. Environmental Protection Agency (EPA) Regional Screening Level (RSL) tables (May 2016 update). As previous RRS calculations used toxicity values from older data bases (i.e., IRIS and HEAST), some of the RRS values changed from previous submittals (e.g., Peachtree, 2005), particularly with regard to fluoride. **Attachment D** contains the RRS calculations.

Since chromium, lead, nickel, mercury and fluoride were each present in one or more soil samples at concentrations exceeding the Type 1 RRS, Type 2 RRS were calculated for those specific inorganic substances. Further, since mercury was present in soil at concentrations exceeding the Type 2 RRS, the Type 3 RRS for mercury was also calculated.

The soil-to-groundwater portioning calculation for total chromium generates unrealistically large values, and there are no EPA-approved toxicity values for total chromium. As a result, it is not possible to calculate a Type 2 RRS for total chromium. Therefore, the Type 2 RRS for total chromium assumes the chromium is present in the trivalent state, and the calculation of the Type 2 RRS for total chromium used the trivalent chromium toxicity values.

4.1 Soil

The maximum concentrations detected in soil for acetone, trichloroethene, toluene, Aroclor 1248, and barium were less than the Type 1 RRS. The maximum concentrations of chromium, lead, nickel and fluoride in soil were less than the Type 2 RRS. The maximum concentration of mercury in soil less than the Type 3 RRS. Therefore, the Subject Site meets at least the Type 3 RRS for soil for the Subject Site constituents of potential concern.

4.2 Groundwater

As stated earlier, the groundwater Point of Exposure for the Subject Site is the Little Tallapoosa River. Downgradient monitoring well MW-12, located near the Little Tallapoosa River, is considered the Point of Demonstration well for the Subject Site. Point of Demonstration well MW-12 is downgradient of monitoring well MW-2, where TCE was detected at a concentration of 0.00618 mg/L. TCE was not detected above the laboratory Reporting Limit (0.005 mg/L) in groundwater from Point of Demonstration well MW-12.

The concentration of nickel in groundwater from monitoring well MW-12 (0.360 mg/L) exceeds the Type 1/3 RRS (0.10 mg/L) and Type 2 RRS (0.31), but is currently less than the Type 4 RRS (2.0 mg/L) and has never exceeded the Type 4 RRS (see **Table 2**).

However, the concentration of fluoride in groundwater from monitoring well MW-12 (34.1 mg/L) during the July 2016 sampling is greater than the Type 4 RRS for fluoride (12.2 mg/L). It is assumed that groundwater with concentrations of fluoride greater than the Type 4 RRS reaches the Point of Exposure at the Little Tallapoosa River. However, as explained below, upon reaching the river, the groundwater discharges to the river and the seepage mixes with the streamflow, mixing the concentrations present in groundwater with the flow in the river. Since the river is naturally intercepting and assimilating the groundwater plume, there is no unacceptable risk to human health of the environment.

The groundwater seepage rate into the Little Tallapoosa River has been estimated at approximately 4.9 gallons per minute (gpm) along the roughly 900 feet where the river intercepts the fluoride plume (see plume maps in **Attachment C**) based on Darcy's law:

$$Q_{gw}=kiA$$

where:

Q_{gw} = groundwater discharge rate
k = hydraulic conductivity (0.00282 ft/min)
i = hydraulic gradient (0.052 feet/foot)
A = cross-sectional area (900 feet x 5 feet = 4,500 $feet^2$)

The hydraulic conductivity and gradient were estimated from slug tests and water-level measurement performed as part of the 2002 CSR investigation (Williams, 2005). The cross-sectional area was derived from the width of the fluoride plume as it enters the river (see **Figure 6**) and the saturated thickness between the water table at MW-12 and the top of bedrock.

Conservatively assuming that all of the groundwater passing through the 4,500 $feet^2$ cross-sectional area has the 34.1 mg/L fluoride concentration observed at MW-12 (in other words, ignoring the lower concentrations historically observed at MW-20 and MW-25, and assuming no attenuation between monitoring well MW-12 and the river), and conservatively assuming the minimum stream flow of 3.3 million gallons per day (2,292 gpm), the fluoride concentration after mixing with river water in the Little Tallapoosa River can be estimated using the following equation:

$$Q_{gw} * C_{gw} = Q_{sw} * C_{sw}$$

where:

Q_{gw} = groundwater flow rate (4.9 gpm)
C_{gw} = fluoride concentration in groundwater (34.1 mg/L)
Q_{sw} = stream flow rate (2,292 gpm)
C_{sw} = fluoride concentration in groundwater

Assuming that the groundwater seepage mixes homogeneously with the river water, and ignoring potential upstream contributions of fluoride to the river, the resulting fluoride concentration in the Little Tallapoosa River is 0.073 mg/L. This concentration is below the Type 1 RRS for fluoride (2 mg/L). The federal drinking water Maximum Contaminant Level (MCL) for chloride is also 2 mg/L; there is no Georgia In-Stream Water Quality Standard for fluoride.

Substituting the concentration of nickel (0.360 mg/L) in groundwater from monitoring well MW-12 for fluoride into the above equation results in a nickel concentration in the river of 0.000775 mg/L, well below both the Type 1 RRS and also the MCL for nickel (both 0.10 mg/L), as well as both the acute Georgia In-Stream Water Quality Standard for nickel (0.029 mg/L) and typical laboratory Reporting Limits for nickel (0.02 mg/L).

As discussed in **Section 5.0**, BTR, current owner of the Subject Property, is placing an Environmental Covenant on the Subject Site forbidding the use of groundwater on the property as a potable water source. A draft version of the Environmental Covenant is attached as **Appendix E – Environmental Covenant.** Therefore, there will be no ingestion of groundwater on the Subject Site. Since groundwater from off-site monitoring well MW-25 has historically had concentrations of fluoride greater than the Type 4 RRS, the owner of the adjacent Lawrence property is also implementing an Environmental Covenant forbidding the use of groundwater as a potable water source.

The Little Tallapoosa River assimilates the fluoride and nickel in groundwater to levels below the drinking water MCL and Type 1 RRS, based on the concentrations measured at Point of Demonstration monitoring well MW-12. Therefore, there is no unacceptable risk associated with groundwater or surface water ingestion, and in accordance with the Georgia VRP, the Environmental Covenant restricting groundwater use and the concentrations measured at MW-12 demonstrates that groundwater at the Subject Property is in compliance with the Type 1 RRS.

5.0 CORRECTIVE ACTION PLAN

The use of groundwater at the Subject Site as a potable water source will be prohibited by Environmental Covenants on the BTR property and the adjacent Lawrence property. The Environmental Covenant (**Appendix E**) for the Subject Site conforms to the Georgia Uniform Environmental Covenants Act, and include the following:

- Groundwater use is prohibited;
- Regulatory agency right of access will be granted when requested.

As the extent of substances in soil and groundwater has been delineated to the Type 1 RRS, no further investigation and sampling is necessary. As on-site soil meets the Type 3 RRS, corrective action is not needed on site (off-site soil concentrations are below the Type 1 RRS). With the proposed Environmental Covenants prohibiting exposure to groundwater, groundwater meets the Type 1 RRS at the Point of Exposure as demonstrated by the concentrations at Point of Demonstration well MW-12. Therefore, corrective action is not necessary for groundwater.

Following completion and approval of the Environmental Covenants, BTR respectfully requests that the Trent Tube Division HSI Site (No. 10604) be removed from the Hazardous Site Inventory.

6.0 REFERENCES

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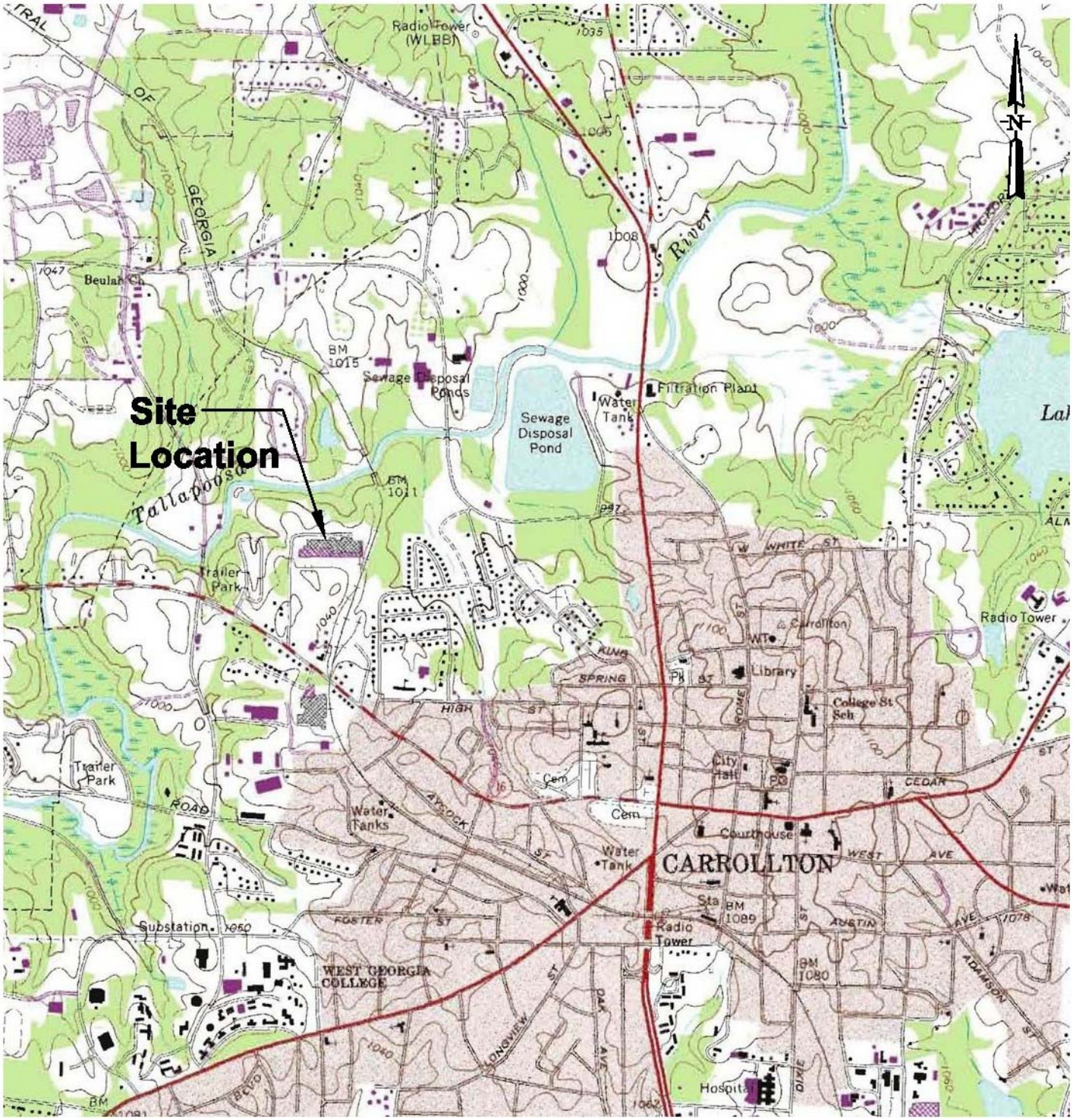
USDA, 2016, Web Soil Survey, http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Williams, 2005, Compliance Status Report, Crucible Materials Corporation, Trent Tube Division Site (HSI # 10604); August 2005

PEACHTREE ENVIRONMENTAL

FIGURES



Graphic Scale

2000 0 1000 2000 4000

N

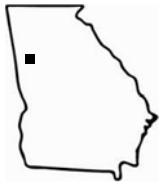
Bo Metals

141 Hammond Street, Carrollton, Georgia

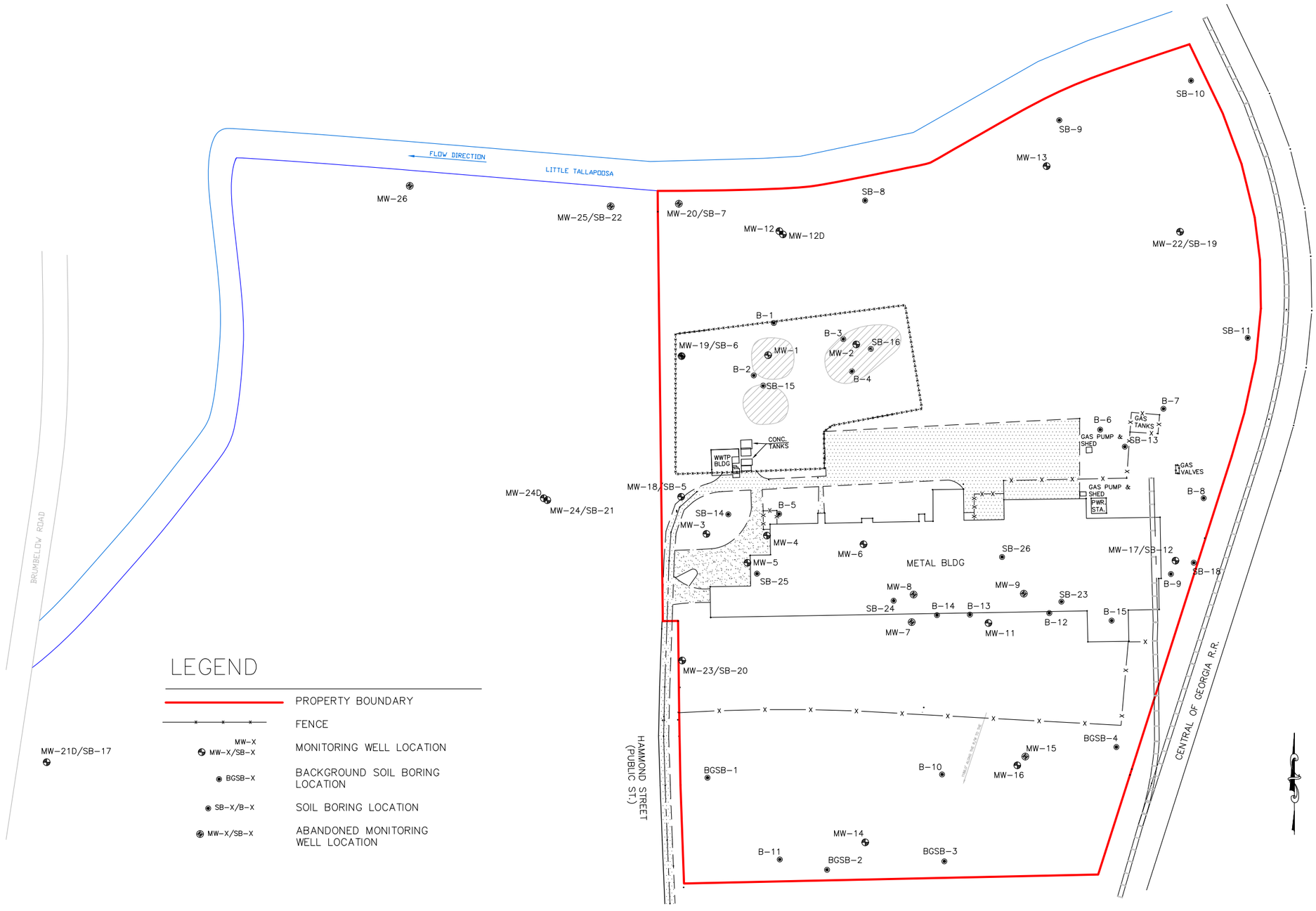
FIGURE 1
SITE LOCATION MAP

Base Map: 2014 USGS Carrollton, Georgia

PEACHTREE ENVIRONMENTAL



Quadrangle Location



LEGEND

- PROPERTY BOUNDARY
- FENCE
- MONITORING WELL LOCATION (MW-X / MW-X/SB-X)
- BACKGROUND SOIL BORING LOCATION (BGSB-X)
- SOIL BORING LOCATION (SB-X/B-X)
- ABANDONED MONITORING WELL LOCATION (MW-X/SB-X)

MW-21D/SB-17

REV	DATE	DES BY	DWN BY	CHK BY	APP BY	DESCRIPTION
DATE OF ISSUE 11/11/2016		DES BY MRH	DWN BY MRH	CHK BY	APP BY	SWH SWH

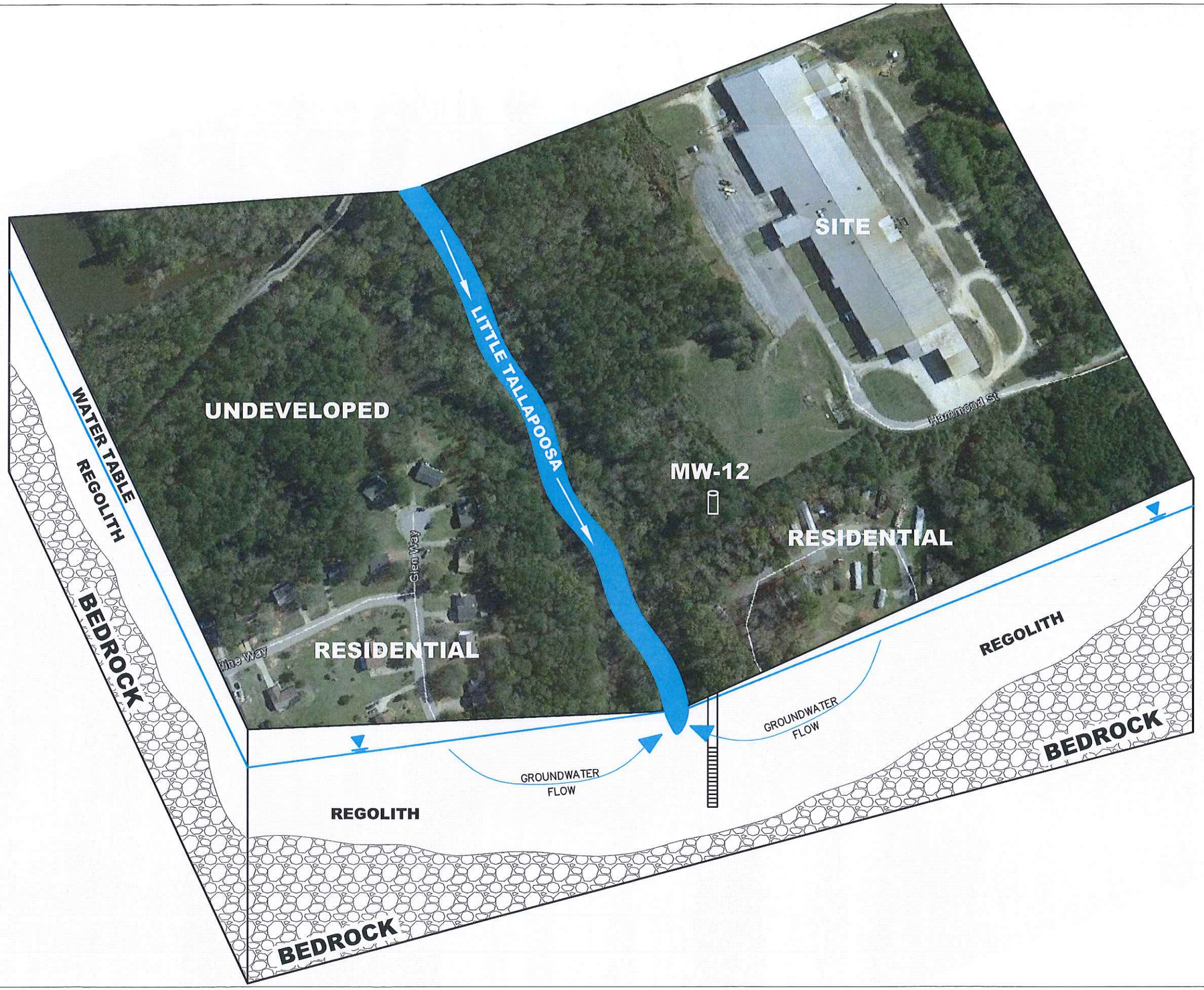
CONCEPTUALMODEL.DWG

PEACHTREE ENVIRONMENTAL

BO METALS
141 HAMMOND STREET
CARROLLTON, GEORGIA

SITE PLAN

FIGURE NO.
2
Hammond Drive
2733



REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	DATE OF ISSUE 12/21/2016		MRH		SWH	
		DWN BY MRH	CHK BY SWH			
		DES BY MRH	APP BY SWH			

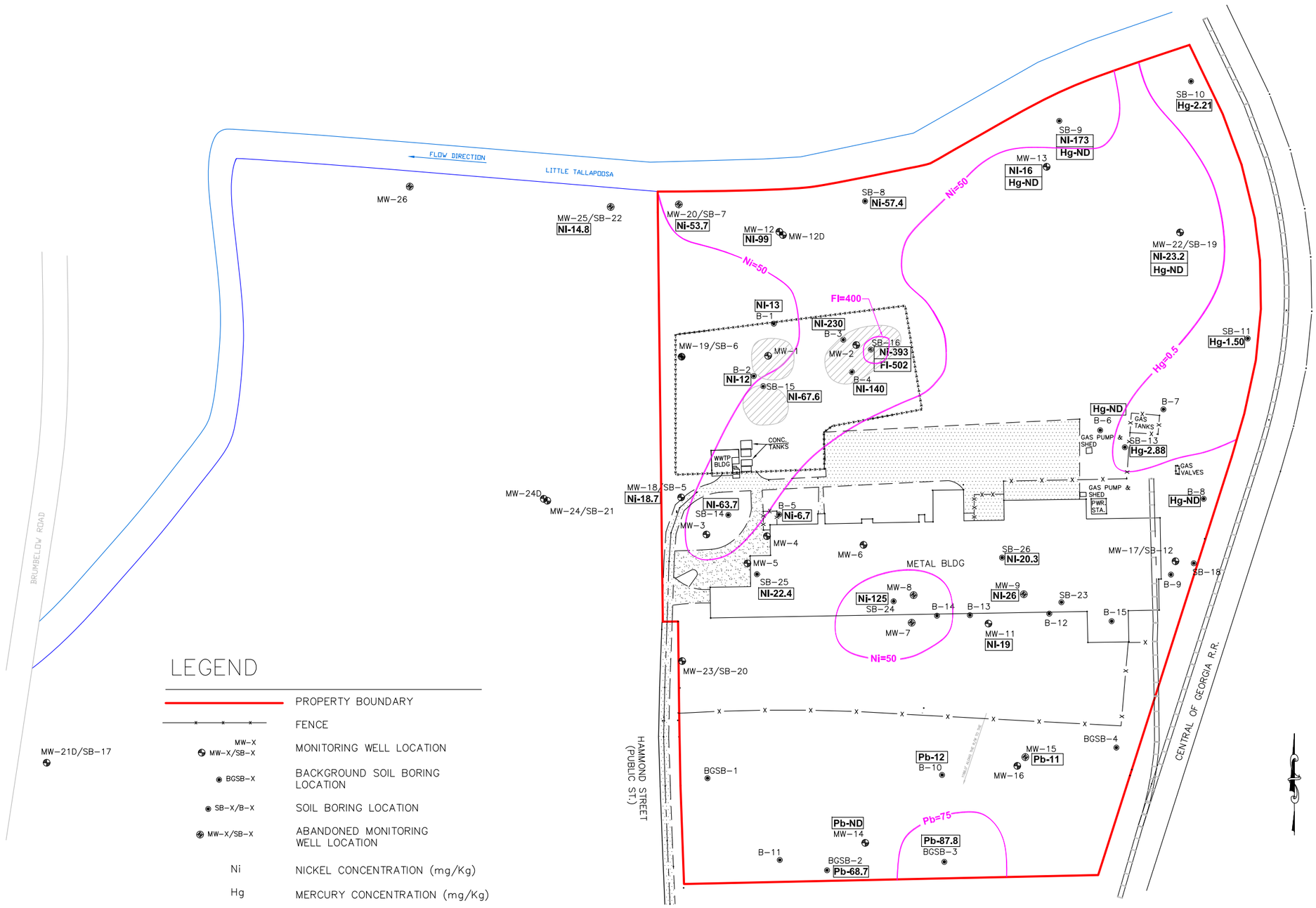
CONCEPTUALMODEL.DWG

PEACHTREE ENVIRONMENTAL

BO METALS
141 HAMMOND STREET
CARROLLTON, GEORGIA

CONCEPTUAL SITE MODEL

FIGURE NO.
3
Hammond Drive
2733



LEGEND

	PROPERTY BOUNDARY
	FENCE
MW-X / MW-X/SB-X	MONITORING WELL LOCATION
BGSB-X	BACKGROUND SOIL BORING LOCATION
SB-X/B-X	SOIL BORING LOCATION
MW-X/SB-X	ABANDONED MONITORING WELL LOCATION
Ni	NICKEL CONCENTRATION (mg/Kg)
Hg	MERCURY CONCENTRATION (mg/Kg)
Pb	LEAD CONCENTRATION (mg/Kg)
Fl	FLUORIDE CONCENTRATION (mg/Kg)
	ANALYTE CONTOUR (mg/Kg)

ANALYTE - CONCENTRATION (mg/Kg)

0 400’ 800’

REV	DATE	DESCRIPTION	DWN BY	CHK BY	APP BY
DATE OF ISSUE 11/11/2016			MRH		
			DES BY	CHK BY	APP BY
				SWH	
				SWH	

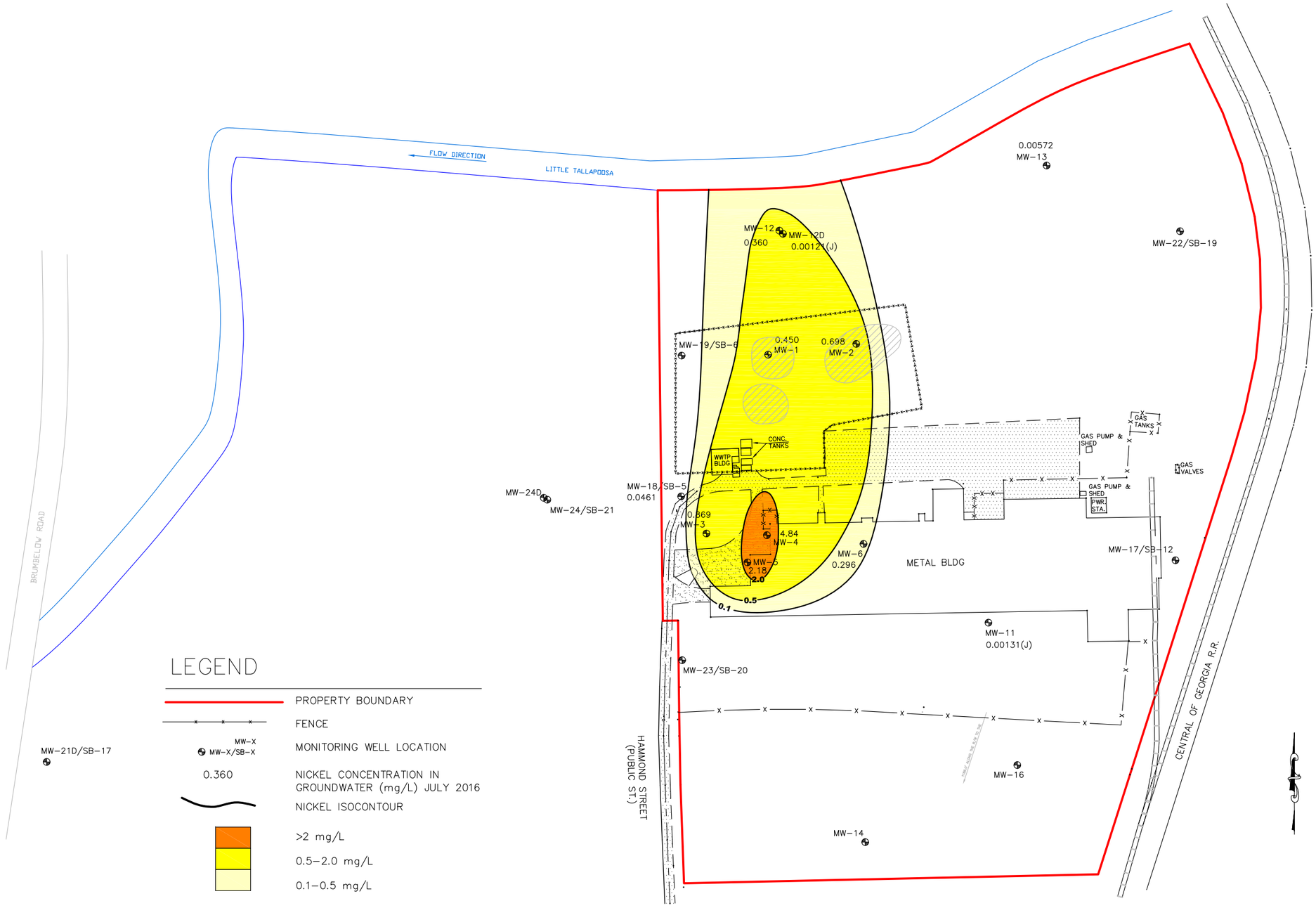
CONCEPTUALMODEL.DWG

PEACHTREE ENVIRONMENTAL

BO METALS
141 HAMMOND STREET
CARROLLTON, GEORGIA

EXTENT OF REGULATED SUBSTANCES IN SOIL

FIGURE NO.
4
Hammond Drive
2733



REV	DATE	DWN BY	CHK BY	APP BY
DATE OF ISSUE 11/11/2016	DWN BY MRH DES BY MRH	DES BY	CHK BY SWH APP BY SWH	DESCRIPTION

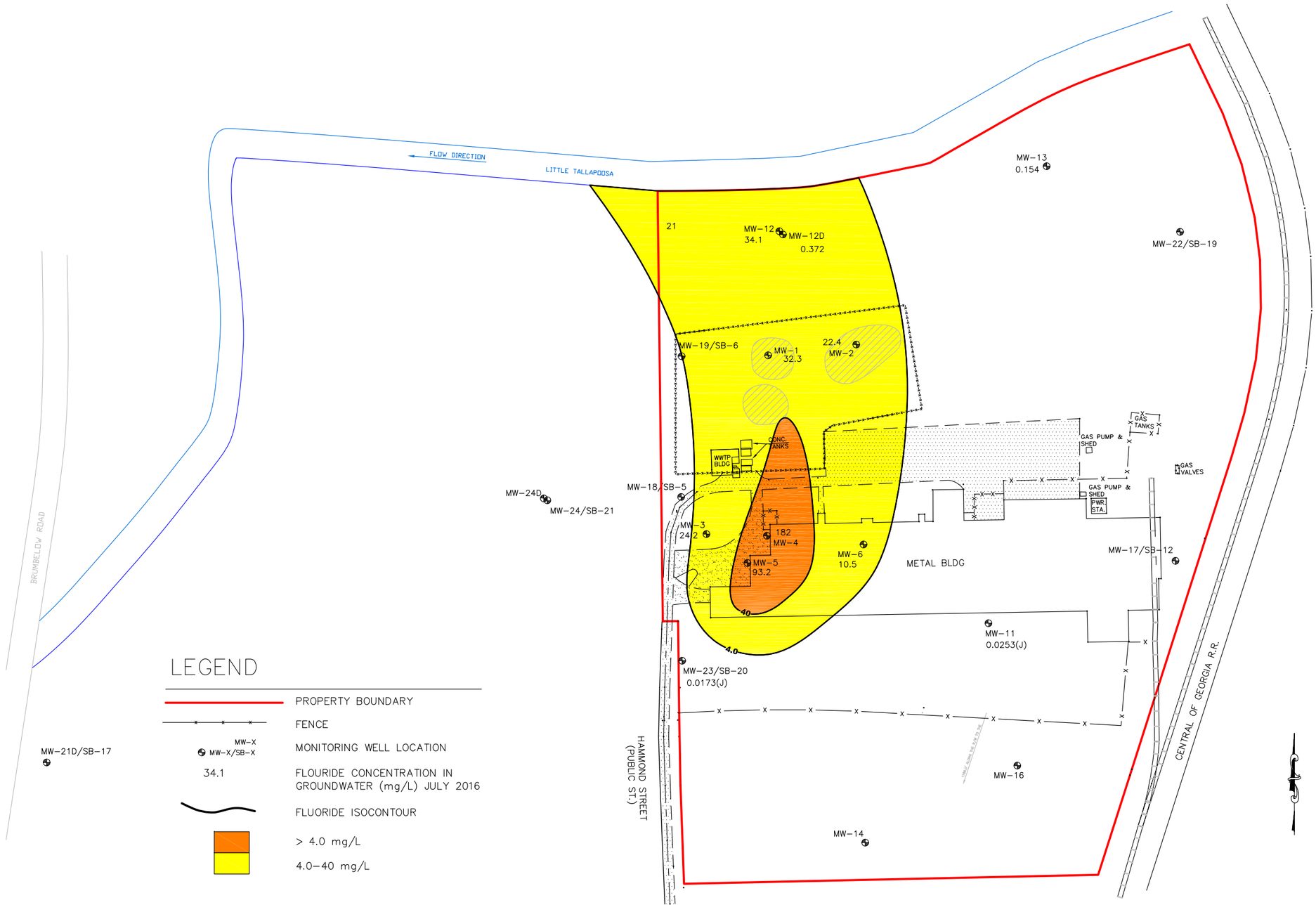
CONCEPTUALMODEL.DWG

PEACHTREE ENVIRONMENTAL

BO METALS
141 HAMMOND STREET
CARROLLTON, GEORGIA

NICKEL CONCENTRATION IN GROUNDWATER (mg/L)
JULY 2016

FIGURE NO.
5
Hammond Drive
2733



LEGEND

- PROPERTY BOUNDARY
- FENCE
- MW-X — MONITORING WELL LOCATION
- MW-21D/SB-17
- MW-X/SB-X
- 34.1 — FLOURIDE CONCENTRATION IN GROUNDWATER (mg/L) JULY 2016
- FLUORIDE ISOCONTOUR
- > 4.0 mg/L
- 4.0–40 mg/L

REV	DATE	DES BY	DWN BY	CHK BY	APP BY	DESCRIPTION
DATE OF ISSUE	11/11/2016	MRH	MRH	SWH	SWH	CONCEPTUALMODEL.DWG

PEACHTREE ENVIRONMENTAL

BO METALS
141 HAMMOND STREET
CARROLLTON, GEORGIA

FLUORIDE CONCENTRATION IN GROUNDWATER (mg/L)
JULY 2016

FIGURE NO.
6
Hammond Drive
2733

FLOW DIRECTION

LITTLE TALLAPOOSA

BRUMBELOW ROAD

MW-13

MW-12

MW-12D

MW-22/SB-19

MW-19/SB-6

MW-1

MW-2
0.00618

0.005

CONC. TANKS

WWTP BLDG

GAS TANKS

GAS PUMP & SHED

GAS VALVES

MW-24D

MW-24/SB-21

MW-18/SB-5

MW-3

MW-4

MW-5

MW-6

METAL BLDG

PWR. STA.

MW-17/SB-12

MW-11

MW-23/SB-20

MW-16

MW-14

HAMMOND STREET (PUBLIC ST.)

CENTRAL OF GEORGIA R.R.

LEGEND

PROPERTY BOUNDARY

FENCE

MW-X
MW-X/SB-X — MONITORING WELL LOCATION

MW-21D/SB-17

34.1 — TRICHLOROETHENE CONCENTRATION IN GROUNDWATER (mg/L) JULY 2016

TRICHLOROETHENE ISOCONTOUR

0.005–0.00618 mg/L

0 400' 800'

REV	DATE	DWN BY	DES BY	CHK BY	APP BY
DATE OF ISSUE 11/11/2016		MRH			
DESCRIPTION		DWN BY		CHK BY	
		MRH		APP BY	
		DES BY			

CONCEPTUALMODEL.DWG

PEACHTREE ENVIRONMENTAL

BO METALS
141 HAMMOND STREET
CARROLLTON, GEORGIA

TCE CONCENTRATION IN GROUNDWATER (mg/L)
JULY 2016

FIGURE NO.
7
Hammond Drive
2733

PEACHTREE ENVIRONMENTAL

TABLES

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			Maximum Concentrations Detected	B-1	B-2	B-3	B-4	B-5	B-6
					0-2	3-5	3-5	6-8	6-8	6-8
	Type 1	Type 2	Type 3		4/23/1996	4/23/1996	4/23/1996	4/24/1996	4/23/1996	4/25/1996
Volatile Organic Compounds (ug/kg)										
Acetone	400,000	--	--	660	--	--	--	--	--	--
Trichloroethene	500	--	--	8.8	--	--	--	--	--	--
Toluene	100,000	--	--	4.1	--	--	--	--	--	--
PCBs (ug/kg)										
Aroclor1248	1,550	--	--	120	--	--	--	--	--	--
Metals (mg/kg)										
Barium	1,000	--	--	187	88	30	14	29	7.4	54
Chromium	100	117,321	--	6,400	40	23	**2800**	**2600**	21	45
Lead	75.0	270	--	87.8	27	34	38	29	33	30
Nickel	50.0	409	--	393	13	12	**230**	**140**	6.7	29
Fluoride	400	3,123	--	502	--	--	--	--	--	--
Mercury	0.500	2.09	17.0	2.88	ND	ND	ND	ND	ND	ND

Bold values indicate the concentration exceeds the Type 1 RRS.
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14
				12-14	18-20	9-11	18-19.5	6-8	15-17	3-5	3-5
	Type 1	Type 2	Type 3	4/24/1996	4/24/1996	4/25/1996	4/19/1996	4/20/1996	4/23/1996	4/22/1996	4/21/1996
Volatile Organic Compounds (ug/kg)											
Acetone	400,000	--	--	--	--	--	--	--	--	--	--
Trichloroethene	500	--	--	--	--	--	--	--	--	--	--
Toluene	100,000	--	--	--	--	--	--	--	--	--	--
PCBs (ug/kg)											
Aroclor1248	1,550	--	--	--	--	--	--	--	ND	ND	45
Metals (mg/kg)											
Barium	1,000	--	--	43	8.8	1.1	63	27	--	--	--
Chromium	100	117,321	--	**190**	18	6.5	2.5	21	--	--	--
Lead	75.0	270	--	35	31	13	12	ND	--	--	--
Nickel	50.0	409	--	29	5.7	2	4.4	9.9	--	--	--
Fluoride	400	3,123	--	--	--	--	--	--	--	--	--
Mercury	0.500	2.09	17.0	ND	ND	ND	ND	ND	--	--	--

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			B-15	MW-9	MW-11	MW-12	MW-13	MW-14	MW-15
				6-8	6-8	9-11	0-2	0-2	6-8	33-35
	Type 1	Type 2	Type 3	4/26/1996	4/27/1996	4/22/1996	4/24/1996	4/25/1996	4/20/1996	4/19/1996
Volatile Organic Compounds (ug/kg)										
Acetone	400,000	--	--	--	--	--	--	--	--	--
Trichloroethene	500	--	--	--	--	--	--	--	--	--
Toluene	100,000	--	--	--	--	--	--	--	--	--
PCBs (ug/kg)										
Aroclor1248	1,550	--	--	ND	ND	120	--	--	--	--
Metals (mg/kg)										
Barium	1,000	--	--	--	68	100	55	82	48	49
Chromium	100	117,321	--	--	24	11	100	20	13	8.7
Lead	75.0	270	--	--	10	ND	19	28	ND	11
Nickel	50.0	409	--	--	26	19	**99**	16	13	30
Fluoride	400	3,123	--	--	--	--	--	--	--	--
Mercury	0.500	2.09	17.0	--	ND	ND	ND	ND	ND	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			BGSB-1			BGSB-2			BGSB-3		
				0-2	5-7	12-13	0-2	10-12	19-20	0-2	10-12	15-17
	Type 1	Type 2	Type 3	4/1/2002	4/1/2002	4/1/2002	4/2/2002	4/3/2002	4/4/2002	4/3/2002	4/3/2002	4/3/2002
Volatile Organic Compounds (ug/kg)												
Acetone	400,000	--	--	--	--	--	--	--	--	240	ND	ND
Trichloroethene	500	--	--	--	--	--	--	--	--	ND	ND	ND
Toluene	100,000	--	--	--	--	--	--	--	--	ND	ND	ND
PCBs (ug/kg)												
Aroclor1248	1,550	--	--	--	--	--	--	--	--	ND	ND	ND
Metals (mg/kg)												
Barium	1,000	--	--	8.31	43.9	100	55.5	108	79.8	139	49.3	36.7
Chromium	100	117,321	--	32.1	23.8	38.9	30.4	3.69	2.95	13.9	181	23.4
Lead	75.0	270	--	12.5	11.3	11.2	15.0	68.6	44.9	87.8	13.9	5.60
Nickel	50.0	409	--	ND	11.8	18.2	ND	13.6	ND	10.4	31.1	16.5
Fluoride	400	3,123	--	0.247	ND	ND	0.325	ND	ND	ND	ND	ND
Mercury	0.500	2.09	17.0	ND	ND	ND	ND	ND	ND	ND	ND	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			BGSB-3A	BGSB-4			SB-5		
				0-2	0-2	5-7	10-12	0-2	8-10	18-20
	Type 1	Type 2	Type 3	11/12/2003	4/2/2002	4/2/2002	4/2/2002	4/8/2002	4/8/2002	4/8/2002
Volatile Organic Compounds (ug/kg)										
Acetone	400,000	--	--	660	--	--	--	ND	ND	ND
Trichloroethene	500	--	--	ND	--	--	--	ND	ND	ND
Toluene	100,000	--	--	ND	--	--	--	ND	ND	ND
PCBs (ug/kg)										
Aroclor1248	1,550	--	--	--	--	--	--	ND	ND	ND
Metals (mg/kg)										
Barium	1,000	--	--	--	33.5	16.8	7.15	50.3	14.2	68.3
Chromium	100	117,321	--	--	**122**	15.2	16.2	38.4	24.8	42.2
Lead	75.0	270	--	--	12.2	12.5	7.86	9.71	19.0	21.2
Nickel	50.0	409	--	--	13.7	ND	ND	14.7	ND	18.7
Fluoride	400	3,123	--	--	ND	ND	ND	ND	ND	ND
Mercury	0.500	2.09	17.0	--	ND	ND	ND	ND	0.342	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-6			SB-7		SB-8		SB-9	
				0-2	8-10	18-20	0-2	7-8	0-2	5-7	0-2	3-5
	Type 1	Type 2	Type 3	4/9/2002	4/9/2002	4/9/2002	4/2/2002	4/2/2002	4/2/2002	4/2/2002	4/10/2002	4/10/2002
Volatile Organic Compounds (ug/kg)												
Acetone	400,000	--	--	ND	ND	ND	97	ND	180	ND	170	280
Trichloroethene	500	--	--	ND	ND	ND	ND	ND	ND	8.8	ND	ND
Toluene	100,000	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs (ug/kg)												
Aroclor1248	1,550	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (mg/kg)												
Barium	1,000	--	--	47.6	92.2	117	80.7	67.7	97.6	102	69.5	111
Chromium	100	117,321	--	35.0	24.9	28.9	30.4	33.6	21.7	31.1	27.6	70.3
Lead	75.0	270	--	14.4	9.40	8.02	11.8	11.2	9.53	8.05	12.0	28.8
Nickel	50.0	409	--	6.35	24.4	28.4	14.6	**53.7**	22.8	**57.4**	**102**	**173**
Fluoride	400	3,123	--	ND	ND	0.512	ND	27.2	0.357	6.36	ND	0.607
Mercury	0.500	2.09	17.0	ND	ND	ND	ND	ND	ND	ND	ND	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-10		SB-11		SB-12			SB-12A
				0-2	7-8	0-2	10-12	0-2	8-10	18-20	0-2
	Type 1	Type 2	Type 3	4/2/2002	4/2/2002	4/3/2002	4/3/2002	4/3/2002	4/9/2002	4/9/2002	11/11/2003
Volatile Organic Compounds (ug/kg)											
Acetone	400,000	--	--	ND	ND	ND	ND	120	ND	ND	ND
Trichloroethene	500	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100,000	--	--	ND	ND	ND	ND	ND	ND	ND	ND
PCBs (ug/kg)											
Aroclor1248	1,550	--	--	ND	ND	ND	ND	ND	ND	ND	--
Metals (mg/kg)											
Barium	1,000	--	--	115	187	24.0	75.9	31.1	9.08	41.0	--
Chromium	100	117,321	--	29.4	25.8	72.4	ND	25.9	16.6	**265**	--
Lead	75.0	270	--	12.6	6.67	11.9	56.2	9.49	7.59	12.4	--
Nickel	50.0	409	--	17.8	22.2	ND	ND	13.9	ND	28.9	--
Fluoride	400	3,123	--	ND	ND	ND	ND	ND	ND	ND	--
Mercury	0.500	2.09	17.0	ND	**2.21**	ND	**1.50**	ND	ND	ND	--

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-13			SB-14			SB-15		
				0-2	10-12	20-22	0-2	10-12	20-21	0-2	5-7	15-17
	Type 1	Type 2	Type 3	4/2/2002	4/2/2002	4/2/2002	4/3/2002	4/3/2002	4/3/2002	4/3/2002	4/3/2002	4/3/2002
Volatile Organic Compounds (ug/kg)												
Acetone	400,000	--	--	140	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	500	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	100,000	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCBs (ug/kg)												
Aroclor1248	1,550	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND
Metals (mg/kg)												
Barium	1,000	--	--	74.1	108	112	44.9	45.6	78.1	41.4	21.8	27.8
Chromium	100	117,321	--	27.6	31.5	29.8	81.3	**241**	28.4	86.4	14.2	31.5
Lead	75.0	270	--	16.3	9.09	10.5	13.5	14.8	10.4	12.8	15.6	12.0
Nickel	50.0	409	--	33.0	26.3	29.5	34.9	**63.7**	32.0	**67.6**	ND	**54.2**
Fluoride	400	3,123	--	6.13	ND	0.293	11.6	45.8	8.89	10.5	0.264	7.61
Mercury	0.500	2.09	17.0	**2.88**	**0.840**	**1.34**	ND	ND	ND	ND	ND	0.222

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-16			SB-17				SB-18
				0-2	5-7	12-14	0-2	3-5	13-15	18-20	18-20
	Type 1	Type 2	Type 3	4/3/2002	4/3/2002	4/3/2002	10/9/2002	10/9/2002	10/9/2002	10/9/2002	11/11/2003
Volatile Organic Compounds (ug/kg)											
Acetone	400,000	--	--	ND	ND	ND	--	--	--	--	--
Trichloroethene	500	--	--	ND	ND	ND	--	--	--	--	--
Toluene	100,000	--	--	ND	ND	ND	--	--	--	--	--
PCBs (ug/kg)											
Aroclor1248	1,550	--	--	ND	ND	ND	--	--	--	--	--
Metals (mg/kg)											
Barium	1,000	--	--	46.1	72.9	84.2	19.9	29.6	17.9	65.1	--
Chromium	100	117,321	--	**6400**	**4330**	**335**	30.2	24.6	44.5	22.1	16.8
Lead	75.0	270	--	13.6	17.7	9.80	19.20	8.67	11.6	8.72	--
Nickel	50.0	409	--	**393**	**109**	**321**	ND	ND	ND	26.3	--
Fluoride	400	3,123	--	11.9	**502**	22.0	ND	ND	ND	ND	--
Mercury	0.500	2.09	17.0	ND	ND	ND	0.298	ND	0.165	ND	--

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-19				SB-20		
				0-2	8-10	18-20	38-40	0-1.5	8.5-10	13.5-15
	Type 1	Type 2	Type 3	11/11/2003	11/11/2003	11/11/2003	11/11/2003	11/10/2003	11/10/2003	11/10/2003
Volatile Organic Compounds (ug/kg)										
Acetone	400,000	--	--	210	ND	ND	ND	ND	ND	ND
Trichloroethene	500	--	--	ND	ND	ND	ND	ND	ND	ND
Toluene	100,000	--	--	ND	ND	ND	ND	ND	ND	ND
PCBs (ug/kg)										
Aroclor1248	1,550	--	--	ND	ND	ND	ND	ND	ND	ND
Metals (mg/kg)										
Barium	1,000	--	--	20.5	19.4	64.7	114	38.4	41.6	65.1
Chromium	100	117,321	--	36.9	11.8	26.3	26.6	32.1	18.3	22.2
Lead	75.0	270	--	12.6	7.55	12.9	10.2	13.6	10.1	10.5
Nickel	50.0	409	--	ND	7.08	23.2	21.1	15.3	14.4	18.8
Fluoride	400	3,123	--	ND	ND	ND	ND	0.264	0.546	ND
Mercury	0.500	2.09	17.0	ND	ND	ND	ND	ND	ND	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-21				SB-22		SB-23
				0-2	3.5-5.5	8.5-10.5	13.5-15.5	0-2	3.5-5.5	0-2
	Type 1	Type 2	Type 3	8/10/2004	8/10/2004	8/10/2004	8/10/2004	8/10/2004	8/10/2004	2/4/2005
Volatile Organic Compounds (ug/kg)										
Acetone	400,000	--	--	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	500	--	--	ND	ND	ND	ND	ND	ND	ND
Toluene	100,000	--	--	ND	ND	ND	ND	ND	ND	ND
PCBs (ug/kg)										
Aroclor1248	1,550	--	--	ND	ND	ND	ND	ND	ND	ND
Metals (mg/kg)										
Barium	1,000	--	--	42	69.5	83.5	70.9	55	65.9	17.3
Chromium	100	117,321	--	17.2	33.1	24.7	15.5	21.9	35	78.2
Lead	75.0	270	--	10.8	5.81	8.54	11	9.65	11.8	11.7
Nickel	50.0	409	--	33.7	26	15.4	33.7	10.6	14.8	8.93
Fluoride	400	3,123	--	8.4	2.5	2.6	ND	ND	ND	ND
Mercury	0.500	2.09	17.0	ND	ND	ND	ND	ND	ND	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 1
SUMMARY OF SOIL ANALYSES

	Risk Reduction Standards			SB-24	SB-25	SB-26
				0-2	0-2	0-2
	Type 1	Type 2	Type 3	2/4/2005	2/4/2005	2/4/2005
Volatile Organic Compounds (ug/kg)						
Acetone	400,000	--	--	ND	ND	ND
Trichloroethene	500	--	--	ND	ND	ND
Toluene	100,000	--	--	ND	4.1	ND
PCBs (ug/kg)						
Aroclor1248	1,550	--	--	ND	ND	ND
Metals (mg/kg)						
Barium	1,000	--	--	54.2	6.29	105
Chromium	100	117,321	--	29.3	7.48	24.4
Lead	75.0	270	--	8.19	ND	9.00
Nickel	50.0	409	--	**125**	22.4	20.3
Fluoride	400	3,123	--	19	4.3	ND
Mercury	0.500	2.09	17.0	ND	ND	ND

Bold values indicate the concentration exceeds the T
Data from Williams, 2005

TABLE 2
SUMMARY OF GROUNDWATER ANALYSES
Milligrams per Liter (mg/L)

Location	Date	RRS	Nickel (total)	Fluoride	Trichloroethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Nitrate	Nitrite
		Type 1/3	0.10	4.0	0.005	--	--	--	--	--	--
		Type 2	0.31	0.626	0.005	--	--	--	--	--	--
		Type 4	2.0	4.09	0.005	--	--	--	--	-	--
Maximum 2016 Concentration (Sitewide)			**4.84**	**182**	**0.00618**	<0.001	<0.001	<0.001	<0.001	--	--
MW-1	03/09/06		**3.04**	**110**	<0.005	--	--	--	--	49	<0.25
	06/07/06		**3.28**	**92**	<0.005	--	--	--	--	57	<0.25
	09/08/06		**3.49**	**130**	<0.005	--	--	--	--	64	<0.25
	11/29/2006		**3.95**	**110**	<0.005	--	--	--	--	67	<0.25
	5/21/2007		**3.59**	**120**	<0.005	--	--	--	--	65	--
	8/14/2007		**3.65**	**130**	<0.005	--	--	--	--	65	--
	11/1/2007		**4.11**	**150**	<0.005	--	--	--	--	81	--
	1/30/2008		**4.22**	**84**	<0.005	--	--	--	--	71	--
	5/12/2008		2.96	**100**	<0.005	--	--	--	--	57	--
	8/6/2008		**2.93**	**110**	<0.005	--	--	--	--	54	--
	11/5/2008		**3.19**	**130**	<0.005	--	--	--	--	69	--
	2/16/2009		**2.80**	**81**	<0.005	<0.005	<0.005	<0.005	<0.002	58	--
	5/18/2009		**2.28**	**51**	<0.005	<0.005	<0.005	<0.005	<0.002	49	--
	8/3/2009		**2.15**	**59**	<0.005	<0.005	<0.005	<0.005	<0.002	42	--
	11/4/2009		1.55	**61**	<0.005	<0.005	<0.005	<0.005	<0.002	33	--
	11/4/2009		1.55	**61**	<0.005	<0.005	<0.005	<0.005	<0.002	33	--
	2/1/2010		1.51	**23**	<0.005	<0.005	<0.005	<0.005	<0.002	14	--
	5/18/2010		1.17	**56**	<0.005	<0.005	<0.005	<0.005	<0.002	25	--
	8/25/2010		1.34	**67**	<0.005	<0.005	<0.005	<0.005	<0.002	29	--
	7/20/2016		0.450	**32.3**	--	--	--	--	--	--	--
MW-2	03/08/2006		1.42	**40**	**0.015**	--		--	--	8.4	<0.25
	06/07/2006		1.44	**51**	**0.015**	--	--	--	--	8.0	<0.25
	09/07/2006		1.01	**63**	**0.021**	--	--	--	--	9.7	<0.25
	11/29/2006		1.28	**39**	**0.030**	--	--	--	--	11	<0.25
	5/21/2007		1.06	**28**	**0.025**	--	--	--	--	7.8	--
	8/14/2007		1.00	**43**	**0.023**	--	--	--	--	7.9	--
	11/1/2007		1.05	**58**	**0.018**	--	--	--	--	9.3	--
	1/30/2008		1.05	**27**	**0.034**	--	--	--	--	8.0	--
	5/12/2008		0.783	**29**	**0.020**	--	--	--	--	3.9	--
	8/6/2008		0.785	**35**	**0.021**	--	--	--	--	5.2	--
	11/05/08		0.818	**46**	**0.033**	--	--	--	--	6.3	--
	02/16/09		0.850	**39**	**0.028**	<0.005	<0.005	<0.005	<0.002	6.2	--
	05/18/09		0.798	**20**	**0.016**	<0.005	<0.005	<0.005	<0.002	3.6	--
	8/3/2009		0.839	**30**	**0.017**	<0.005	<0.005	<0.005	<0.002	4.3	--
	11/4/2009		0.816	**37**	**0.019**	<0.005	<0.005	<0.005	<0.002	2.9	--
	2/1/2010		0.887	**36**	**0.019**	<0.005	<0.005	<0.005	<0.002	2.6	--
	5/18/2010		0.819	**30**	**0.012**	<0.005	<0.005	<0.005	<0.002	3.9	--
	5/18/2010		0.826	**32**	**0.012**	<0.005	<0.005	<0.005	<0.002	3.9	--
	8/25/2010		0.987	**37**	**0.014**	<0.005	<0.005	<0.005	<0.002	4.9	--
	7/20/2016		0.698	**22.4**	**0.00618**	<0.001	<0.001	<0.001	<0.001	NA	NA
MW-3	03/09/2006		1.42	**32**	<0.005	--	--	--	--	23	<0.25
	06/06/2006		1.50	**31**	<0.005	--	--	--	--	25	<0.25
	09/06/2006		**2.21**	**43**	<0.005	--	--	--	--	37	<0.25
	11/29/2006		**2.38**	**38**	<0.005	--	--	--	--	36	<0.25
	5/22/2007		1.82	**38**	<0.005	--	--	--	--	27	--
	8/14/2007		1.48	**41**	--	--	--	--	--	21	--
	11/1/2007		1.68	**38**	--	--	--	--	--	23	--
	1/30/2008		1.90	**19**	--	--	--	--	--	19	--
	5/12/2008		0.95	**20**	--	--	--	--	--	14	--
	8/6/2008		1.69	**47**	--	--	--	--	--	26	--
	11/5/2008		1.73	**49**	--	--	--	--	--	25	--
	2/16/2009		1.60	**41**	--	--	--	--	--	22	--
	5/18/2009		0.47	5.6	--	--	--	--	--	7.3	--
	8/3/2009		1.26	**16**	--	--	--	--	--	18	--
	11/4/2009		0.47	**13**	--	--	--	--	--	6.7	--
	2/1/2010		0.45	**6.1**	--	--	--	--	--	7.5	--
	5/18/2010		0.39	**8.8**	--	--	--	--	--	9.9	--
	8/25/2010		0.96	**21**	--	--	--	--	--	31	--
	7/20/2016		0.869	**24.2**	--	--	--	--	--	--	--
MW-4	03/10/2006		**9.19**	**230**	<0.005	--	--	--	--	110	<0.25
	06/06/2006		**6.69**	**180**	<0.005	--	--	--	--	90	<0.25
	09/06/2006		**8.26**	**190**	<0.005	--	--	--	--	110	<0.25
	11/29/2006		**9.14**	**180**	<0.005	--	--	--	--	110	<0.25
	5/21/2007		NS	NS	NS	--	--	--	--	NS	--
	8/14/2007		NS	NS	NS	--	--	--	--	NS	--
	11/1/2007		NS	NS	NS	--	--	--	--	NS	--
	1/30/2008		NS	NS	NS	--	--	--	--	NS	--
	5/12/2008		**5.27**	**150**	<0.005	--	--	--	--	76	--
	8/6/2008		**4.36**	**180**	<0.005	--	--	--	--	70	--
	11/5/2008		NS	NS	NS	--	--	--	--	NS	--
	2/16/2009		**4.50**	**190**	<0.005	<0.005	<0.005	<0.005	<0.002	70	--
	5/18/2009		**5.26**	**100**	<0.005	<0.005	<0.005	<0.005	<0.002	85	--
	8/3/2009		**3.37**	**120**	<0.005	<0.005	<0.005	<0.005	<0.002	50	--
	11/4/2009		**3.53**	**160**	<0.005	<0.005	<0.005	<0.005	<0.002	66	--
	2/1/2010		**3.05**	**87**	<0.005	<0.005	<0.005	<0.005	<0.002	44	--
	5/18/2010		**2.31**	**107**	<0.005	<0.005	<0.005	<0.005	<0.002	40	--
	8/25/2010		**4.28**	**200**	<0.005	<0.005	<0.005	<0.005	<0.002	65	--
	7/20/2016		**4.84**	**182**	--	--	--	--	--	--	--
MW-4R	02/16/09		1.90	**140**	<0.005	<0.005	<0.005	<0.005	<0.002	31	--
	05/18/09		**2.07**	**59**	<0.005	<0.005	<0.005	<0.005	<0.002	32	--
	8/3/2009		**2.18**	**98**	<0.005	<0.005	<0.005	<0.005	<0.002	29	--
	11/4/2009		**2.15**	**120**	<0.005	<0.005	<0.005	<0.005	<0.002	29	--
	2/1/2010		**2.24**	**120**	<0.005	<0.005	<0.005	<0.005	<0.002	37	--
	5/18/2010		1.98	**90**	<0.005	<0.005	<0.005	<0.005	<0.002	23	--
	8/25/2010		**2.41**	**180**	<0.005	<0.005	<0.005	<0.005	<0.002	31	--
	7/20/2016		1.65	**125**	--	--	--	--	--	--	--

TABLE 2
SUMMARY OF GROUNDWATER ANALYSES
Milligrams per Liter (mg/L)

Location	Date	RRS	Nickel (total)	Fluoride	Trichloroethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Nitrate	Nitrite
		Type 1/3	0.10	4.0	0.005	--	--	--	--	--	--
		Type 2	0.31	0.626	0.005	--	--	--	--	--	--
		Type 4	2.0	4.09	0.005	--	--	--	--	-	--
MW-5	03/09/2006		**4.15**	**110**	<0.005	--	--	--	--	42	<0.25
	06/06/2006		**4.22**	**110**	<0.005	--	--	--	--	44	<0.25
	09/06/2006		**3.84**	**94**	<0.005	--	--	--	--	45	<0.25
	11/29/2006		**4.68**	**100**	<0.005	--	--	--	--	53	<0.25
	5/21/2007		**4.15**	**97**	<0.005	--	--	--	--	47	--
	8/14/2007		**3.17**	**87**	--	--	--	--	--	34	--
	11/1/2007		**3.31**	**82**	--	--	--	--	--	37	--
	1/30/2008		**3.20**	**62**	--	--	--	--	--	29	--
	5/12/2008		**2.71**	**60**	--	--	--	--	--	31	--
	8/6/2008		**3.24**	**82**	--	--	--	--	--	40	--
	11/5/2008		**2.88**	**93**	--	--	--	--	--	32	--
	2/16/2009		**4.70**	**130**	--	--	--	--	--	53	--
	5/18/2009		**5.05**	**66**	--	--	--	--	--	53	--
	8/3/2009		**3.97**	**77**	--	--	--	--	--	44	--
	11/4/2009		**5.00**	**100**	--	--	--	--	--	61	--
	2/1/2010		**5.93**	**77**	--	--	--	--	--	46	--
	05/18/10		**4.48**	**82**	--	--	--	--	--	37	--
	08/25/10		**3.76**	**70**	--	--	--	--	--	40	--
	07/20/16		**2.18**	**93.2**	--	--	--	--	--	--	--
MW-6	07/20/16		0.246	**10.5**	--	--	--	--	--	--	--
MW-11	07/19/16		0.00131 (J)	0.0253 (J)	--	--	--	--	--	--	--
MW-12	03/08/2006		1.27	**56**	<0.005	--	--	--	--	27	<0.25
	06/07/2006		1.24	**53**	<0.005	--	--	--	--	26	<0.25
	09/07/2006		1.27	**61**	<0.005	--	--	--	--	32	<0.25
	11/30/2006		1.56	**44**	<0.005	--	--	--	--	31	<0.25
	5/22/2007		1.37	**60**	<0.005	--	--	--	--	30	--
	8/14/2007		1.26	**54**	<0.005	--	--	--	--	27	--
	11/1/2007		1.43	**42**	<0.005	--	--	--	--	35	--
	1/31/2008		1.48	**24**	<0.005	--	--	--	--	30	--
	5/13/2008		1.22	**38**	<0.005	--	--	--	--	25	--
	8/7/2008		1.26	**50**	<0.005	--	--	--	--	28	--
	11/5/2008		1.38	**61**	<0.005	--	--	--	--	28	--
	2/17/2009		1.41	**65**	<0.005	<0.005	<0.005	<0.005	<0.002	32	--
	5/18/2009		1.20	**20**	<0.005	<0.005	<0.005	<0.005	<0.002	23	--
	8/3/2009		1.13	**33**	<0.005	<0.005	<0.005	<0.005	<0.002	24	--
	11/4/2009		1.04	**45**	<0.005	<0.005	<0.005	<0.005	<0.002	23	--
	2/2/2010		0.929	**30**	<0.005	<0.005	<0.005	<0.005	<0.002	13	--
	2/2/2010		0.950	**40**	<0.005	<0.005	<0.005	<0.005	<0.002	13	--
	5/19/2010		0.700	**29**	<0.005	<0.005	<0.005	<0.005	<0.002	12	--
	8/25/2010		0.833	**76**	<0.005	<0.005	<0.005	<0.005	<0.002	18	--
	7/20/2016		0.360	**34.1**	--	--	--	--	--	--	--
MW-12D	03/09/2006		<0.0200	0.65	<0.005	--	--	--	--	<0.25	<0.25
	06/07/2006		<0.0200	0.45	<0.005	--	--	--	--	<0.25	<0.25
	09/07/2006		<0.0200	0.51	<0.005	--	--	--	--	<0.25	<0.25
	11/30/2006		<0.0200	0.36	<0.005	--	--	--	--	<0.25	<0.25
	5/22/2007		<0.0200	2.3	<0.005	--	--	--	--	<0.25	--
	1/31/2008		<0.0200	<0.20	--	--	--	--	--	<0.25	--
	2/17/2009		<0.0200	0.29	--	--	--	--	--	<0.25	--
	2/2/2010		<0.0200	0.25	--	--	--	--	--	<0.25	--
	7/19/2016		0.00121 (J)	0.372	--	--	--	--	--	--	--
MW-13	03/08/2006		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	<0.25
	06/08/2006		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	<0.25
	09/07/2006		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	<0.25
	11/30/2006		<0.0200	1.4	<0.005	--	--	--	--	<0.25	<0.25
	5/22/2007		<0.0200	0.25	<0.005	--	--	--	--	<0.25	--
	8/14/2007		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	--
	11/1/2007		<0.0200	0.53	<0.005	--	--	--	--	<0.25	--
	1/31/2008		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	--
	5/13/2008		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	--
	8/7/2008		<0.0200	0.36	<0.005	--	--	--	--	<0.25	--
	11/6/2008		<0.0200	<0.20	<0.005	--	--	--	--	<0.25	--
	2/17/2009		<0.0200	0.21	<0.005	<0.005	<0.005	<0.005	<0.002	<0.25	--
	2/2/2010		<0.0200	0.90	<0.005	<0.005	<0.005	<0.005	<0.002	<0.25	--
	7/19/2016		0.00572	0.154	--	--	--	--	--	--	--
MW-18	03/07/2006		<0.0200	0.44	<0.005	--	--	--	--	1.5	<0.25
	06/06/2006		0.089	3.2	<0.005	--	--	--	--	1.6	<0.25
	09/06/2006		0.145	**6.8**	<0.005	--	--	--	--	4.6	<0.25
	11/30/2006		0.165	**6.7**	<0.005	--	--	--	--	3.2	<0.25
	5/21/2007		0.146	**7.5**	<0.005	--	--	--	--	1.5	--
	1/30/2008		0.303	**7.4**	--	--	--	--	--	4.2	--
	2/16/2009		0.110	3.2	--	--	--	--	--	<2.5	--
	2/1/2010		<0.0200	0.46	--	--	--	--	--	0.61	--
	7/20/2016		0.0461	1.71	--	--	--	--	--	--	--
MW-20	03/08/2006		0.322	**12**	<0.005	--	--	--	--	4.5	<0.25
	06/08/2006		0.651	**20**	<0.005	--	--	--	--	14	<0.25
	09/07/2006		NS	NS	NS	--	--	--	--	NS	NS
	11/30/2006		0.241	**19**	<0.005	--	--	--	--	9.9	<0.25
	5/21/2007		NS	NS	NS	--	--	--	--	NS	--
	8/14/2007		NS	NS	NS	--	--	--	--	NS	--
	11/1/2007		NS	NS	NS	--	--	--	--	NS	--
	1/31/2008		0.936	**24**	--	--	--	--	--	16	--
	5/12/2008		0.428	**10**	--	--	--	--	--	6.2	--
	8/6/2008		NS	NS	--	--	--	--	--	NS	--
	11/5/2008		0.884	**47**	--	--	--	--	--	19	--
	2/17/2009		0.670	**28**	--	--	--	--	--	14	--
	5/18/2009		0.510	**11**	--	--	--	--	--	8.8	--
	8/3/2009		0.763	**28**	--	--	--	--	--	19	--
	11/4/2009		0.441	**14**	--	--	--	--	--	7.1	--
	2/2/2010		0.279	**8.5**	--	--	--	--	--	2.9	--
	05/19/10		0.307	**9.0**	--	--	--	--	--	5.4	--
	08/25/10		0.484	**21**	--	--	--	--	--	9.8	--
MW-23	07/19/16		0.00160 (J)	0.0173 (J)	--	--	--	--	--	--	--
MW-23 Dup.	07/19/16		0.00173 (J)	0.0175 (J)	--	--	--	--	--	--	--

TABLE 2
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Milligrams per Liter (mg/L)

Location	Date	RRS	Nickel (total)	Fluoride	Trichloroethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Nitrate	Nitrite
		Type 1/3	0.10	4.0	0.005	--	--	--	--	--	--
		Type 2	0.31	0.626	0.005	--	--	--	--	--	--
		Type 4	2.0	4.09	0.005	--	--	--	--	-	--
MW-24	03/09/2006		0.085	3.5	<0.005	--	--	--	--	1.3	<0.25
	06/07/2006		0.074	0.48	<0.005	--	--	--	--	1.4	<0.25
	09/08/2006		<0.0200	3.9	<0.005	--	--	--	--	0.28	<0.25
	12/01/2006		0.045	0.57	<0.005	--	--	--	--	<0.25	<0.25
	5/22/2007		0.079	0.41	<0.005	--	--	--	--	0.61	--
	1/30/2008		0.095	0.32	--	--	--	--	--	0.66	--
	2/16/2009		0.091	**5.6**	--	--	--	--	--	<2.5	--
	2/1/2010		0.065	0.36	--	--	--	--	--	2.3	--
MW-25	03/08/2006		0.302	**5.8**	<0.005	--	--	--	--	5.6	<0.25
	06/07/2006		**0.328**	**6.4**	<0.005	--	--	--	--	7.3	<0.25
	09/07/2006		0.272	**7.3**	<0.005	--	--	--	--	9.6	<0.25
	11/30/2006		**0.399**	**5.0**	<0.005	--	--	--	--	8.8	<0.25
	5/22/2007		**0.318**	**6.3**	<0.005	--	--	--	--	7.3	--
	8/14/2007		**0.353**	**9.9**	--	--	--	--	--	8.0	--
	11/1/2007		**0.408**	**7.6**	--	--	--	--	--	8.9	--
	1/31/2008		**0.571**	**6.6**	--	--	--	--	--	12	--
	5/12/2008		0.221	3.7	--	--	--	--	--	3.1	--
	8/6/2008		0.304	**6.4**	--	--	--	--	--	6.9	--
	11/5/2008		**0.371**	**8.2**	--	--	--	--	--	9.5	--
	2/17/2009		0.308	**9.2**	--	--	--	--	--	7.1	--
	5/18/2009		0.267	**4.5**	--	--	--	--	--	5.0	--
	8/3/2009		**0.375**	**7.1**	--	--	--	--	--	9.9	--
	11/4/2009		0.247	**5.0**	--	--	--	--	--	4.5	--
	2/2/2010		0.199	**4.2**	--	--	--	--	--	2.5	--
	5/19/2010		0.190	**5.4**	--	--	--	--	--	3.1	--
	8/25/2010		0.260	**7.6**	--	--	--	--	--	5.3	--
MW-26	03/08/2006		0.110	0.95	<0.005	--	--	--	--	3.2	<0.25
			0.165	1.2	<0.005	--	--	--	--	4.1	<0.25
	09/07/2006		<0.0200	1.7	<0.005	--	--	--	--	<0.25	<0.25
	11/30/2006		0.085	1.4	<0.005	--	--	--	--	1.6	<0.25
	5/22/2007		0.116	0.73	<0.005	--	--	--	--	3.2	--
	8/14/2007		0.092	0.57	--	--	--	--	--	1.2	--
	11/1/2007		0.106	1.1	--	--	--	--	--	1.6	--
	1/31/2008		0.233	0.81	--	--	--	--	--	8.2	--
	5/12/2008		0.087	1.3	--	--	--	--	--	0.94	--
	8/6/2008		0.097	0.70	--	--	--	--	--	0.57	--
	11/5/2008		0.106	0.82	--	--	--	--	--	0.88	--
	2/17/2009		0.094	0.78	--	--	--	--	--	1.7	--
	5/18/2009		0.092	1.6	--	--	--	--	--	1.7	--
	8/3/2009		0.088	0.83	--	--	--	--	--	0.57	--
	11/4/2009		0.090	1.4	--	--	--	--	--	<0.25	--
	2/2/2010		0.052	0.49	--	--	--	--	--	0.40	--
	5/19/2010		0.101	0.71	--	--	--	--	--	0.51	--
	8/25/2010		0.097	1.2	--	--	--	--	--	0.27	--

All results in milligrams per liter (mg/L).
RRS - Risk-Reduction Standards
Bold values indicate concentration exceeds applicable RRS.
DCE - Dichloroethene
NS - Not Sampled due to well being dry
Data from multiple sources, including Peachtree, 2005 and ECS, 2013

PEACHTREE ENVIRONMENTAL

ATTACHMENT A

LEGAL DESCRIPTION

EXHIBIT "A"

FIRST: All that tract or parcel of land lying and being in the City of Carrollton in Land Lots 130, 131, 158 and 159 of the 10th District of Carroll County, Georgia, and being more particularly described as follows, all as per plat by Harrison Engineering Company, dated May 27, 1961, a copy of which is recorded in Plat Book 5, page 27, which plat and the record thereof are by reference incorporated herein.

BEGINNING at a point in Land Lot 131 on the northwestern side of the right-of-way of the Central of Georgia Railroad, which point of beginning is at a stake 1467.3 feet northerly and northeasterly from the center line of Alabama Street in the City of Carrollton, Georgia, as measured along the northwestern side of said right-of-way of said railroad and following the curvature thereof; and running thence north 73 degrees 30 minutes west a distance of 427 feet to a stake; thence north 2 degrees 0 minutes west a distance of 1085 feet to a point in land Lot 158 in the center of the channel of the Little Tallapoosa River; thence along the center of said channel in an easterly and northeasterly direction to a point where said channel intersects the southwestern side of the right-of-way of the Central of Georgia Railroad, said point being further determined as being a distance of 575 feet from the preceding point as measured in a straight line in the direction of north 61 degrees 40 minutes east; thence in a southeasterly, southerly and southwesterly direction along the southwestern, western and northwestern side of the right-of-way of the Central of Georgia Railroad in land Lots 158, 159, 130 and 131 and following the curvature of said right-of-way a distance of 1540 feet to the point of beginning; said tract containing 15.6 acres**,** more or less.

SUBJECT to an easement granted by Trent Tube Company to Georgia Power Company for an electric transmission line, dated January 29, 1962, and recorded in the C1erk's Office, Superior Court, County of Carroll and State of Georgia on February 1,1962 in Deed Book 135, page 511.

SECOND. All that tract or parcel of land lying and being in the City of Carrollton, Georgia, in Land Lots 131 and 158 of the 10th District of said County containing 12.8 acres and being the West most tract identified by "12.8 Acres" on a plat prepared by Harrison Engineering Company dated August 2, 1961, recorded in Plat Book 5, page 32 Carroll County Public Records, which plat and the record thereof are by reference incorporated herein. Said property is more particularly described as beginning at a point which is Northeasterly along the west right of way line of the Central of Georgia Railway 1,467.3 feet from the intersection of said right of way with the center line of Alabama Street and thence north 73 degrees 30 minutes west 427 feet. Said beginning point is further described as being the Southwest corner of that property shown on a plat prepared by Harrison Engineering on May 27, 1961, and recorded in Plat Book 5, page 27, Carroll County Public Records, which plat and

the record thereof are by reference incorporated herein. From said point of beginning as thus established thence South 88 degrees West 511.5 feet; thence North two degrees 30 minutes West 1,071 feet to the center of the channel of the Little Tallapoosa River; thence along the center of the said channel in an easterly direction to a point measured in a straight line North 87 degrees east 523 feet; thence South two degrees east 1,085 feet to the point of-beginning. Said property is bound on the North by the Little Tallapoosa River, on the east by property of Trent Tube Company, on the south by O. L. Hammond and on the west by property of W. T. Green and Carl Barnes.

Excepting and reserving thereout and therefrom that portion of land lot 131 of the Tenth district of Carroll County, Georgia which was conveyed by Trent Tube Company by quit-claim deed to the Mayor and City Council of Carrollton for a right of way for a public street, CONVEYING HEREWITH HOWEVER to grantee herein the reversion retained by Trent Tube Company in said deed, which deed is recorded in the Clerk's Office, Superior Court, County of Carroll and State of Georgia in Book 135, Page 336.

SUBJECT to an easement granted by Trent Tube Company to The City of Carrollton, Georgia, for a sewer line, dated December 27, 1961 and recorded in the Clerk's Office, Superior Court, County of Carroll and State of Georgia on February 16, 1962 in Deed Book 135, page 543.

SUBJECT to an easement and right of way granted by Crucible Inc to Georgia Power Company for a transmission tap line, dated March 29, 1972, and recorded in the Clerk's Office, Superior Court, County of Carroll and State of Georgia on April 17, 1972 in Deed Book 266, page 259.

THIRD. All that tract or parcel of land lying and being in Land Lot No. 131 of the 10th District of Carroll County, Georgia, containing six (6) acres, as shown and delineated on a plat entitled "Property of Crucible Steel Company of America, Trent Tube Division", prepared by Harrison Engineering, Registered Land Surveyor No. 1134, dated June 20, 1967, a copy of which is recorded in Plat Book 8, page 69, Carroll County, Georgia Public Real Estate Records, which plat and the record thereof are each specifically by reference incorporated herein. Said property is further described in detail as BEGINNING at a point in the east boundary of Hammond Road, also sometimes know and referred to as Trent Tube Road, which point is 791 feet northward along the east boundary of Hammond Road from a point where the projection of the east boundary thereof intersects the center line of Alabama Street, which point of beginning is marked by an iron monument; and from thence running along the east boundary of Hammond Road in a compass bearing of north 2 degrees 17 minutes west, for a distance of 330 feet to an iron pin monument; thence on a compass bearing of north 88 degrees 00 minutes east, a distance of 481.5 feet to a corner; thence on a compass bearing of south 17 degrees 30 minutes east, for a distance of 427 feet to the west boundary of the right of way of the Central of

Georgia Railway Company; thence along said boundary, south 73 degrees 26 minutes west, for a distance of 217.8 feet to a corner in said right of way of said Railway Company's road bed; thence on a compass bearing of south 88 degrees 46 minutes west, for a distance of 812 feet and to the point of beginning. Said property is bounded on the north by the property known as the Trent Tube Manufacturing Company Site, on the south by the property of O.L. Hammond and D.L. Hammond, on the east by the Central of Georgia Railway Company right of way, and on the west by the Hammond Road.

ALSO,

ALL THAT TRACT OR PARCEL OF LAND lying and being in Land Lot 131 of the 10th District of Carroll County, Georgia, being more particularly described as follows:

To find the true point of beginning start at the intersection of the west right-of-way of the Central of Georgia Railroad and the north right-of-way of Alabama Street; thence proceed northerly along the west right-of-way of said railroad 1186.00 feet to a point; thence proceed South 86°46'00" West for a distance of 815.11 feet to a point on the east right-of-way of Hammond Street; thence proceed along the east right-of-way of Hammond Street North 02°02'50" West for a distance of 194.05 feet to a point; thence North 01°04'35" for a distance of 134.92 feet to a point; thence North 00°41'16" West for a distance of 187.75 feet to the true point of beginning;

Thence proceed South 89°18'44" West for a distance of 30.00 feet to a point; thence North 00°41'16" West a distance of 275.03 feet to a point; thence North 84°30'04" East for a distance of 435.00 feet to a point; thence South 05°29'56" East for a distance of 60.00 feet to a point; thence South 84°30'04" West for a distance of 409.94 feet to a point; thence South 00°41'16" East for a distance of 217.35 feet to the point of beginning. Said tract of land containing 0.75 acres.

The foregoing legal description of the property is based on a survey prepared by Crawford & Associates, Inc., dated May 9, 1996 at Job No. JN910610.

PEACHTREE ENVIRONMENTAL

ATTACHMENT B

GROUNDWATER MONITORING REPORT: JULY 2016

ENVIRONMENTAL COMPLIANCE SERVICES, INC.

9874 Main Street, Woodstock, GA 30188 tel 770.926.8883 fax 770.926.5383 www.ecsconsult.com

August 11, 2016

Mr. Yue Han
Georgia Environmental Protection Division
Hazardous Site Response Program
2 Martin Luther King Jr. Drive, Suite 1462 East
Atlanta, Georgia 30334

RE: Groundwater Monitoring Report: July 2016
Crucible Materials Corp.- Trent Tube Division
Carrollton, Carroll County, Georgia
HSI No. 10604
ECS Project No. 27-225273.00

Dear Mr. Han:

On behalf of the Georgia Environmental Protection Division (GEPD) Hazardous Site Response Program, Environmental Compliance Services, Inc. (ECS), is pleased to submit the July 2016 Groundwater Monitoring Report for the above-referenced site.

If you have any questions regarding this report, please contact me at 770.926.8883, extension 139.

Sincerely,

ENVIRONMENTAL COMPLIANCE SERVICES, INC.

Dean R. McCartney
Program Manager

ENVIRONMENTAL COMPLIANCE SERVICES, INC.

9874 Main Street, Woodstock, GA 30188 tel 770.926.8883 fax 770.926.5383 www.ecsconsult.com

August 11, 2016

Mr. Yue Han
Georgia Environmental Protection Division
Hazardous Site Response Program
2 Martin Luther King Jr. Drive, Suite 1462 East
Atlanta, Georgia 30334

RE: Groundwater Monitoring Report: July 2016
Crucible Materials Corp. - Trent Tube Division
Carrollton, Carroll County, Georgia
HSI No. 10604
ECS Project No. 27-225273.00

Dear Mr. Han:

Environmental Compliance Services, Inc., (ECS) is pleased to provide this semiannual groundwater monitoring report for the former Crucible Materials Corporation (Crucible) - Trent Tube Division facility located at 141 Hammond Street in Carrollton, Carroll County, Georgia. Referenced as the "Former Trent Tube" site (site) in several documents, it is currently operated by Bo Metals, Inc. (Bo Metals), which manufactures a wide variety of concrete accessory products. A site location map is included as **Figure 1**. This report summarizes the field sampling activities, conditions encountered, and analytical results for the July 19 and 20, 2016, groundwater monitoring event. These tasks were performed in accordance with the Project Assignment Form for Contractor Services, Contract Number 46200-741-DNR0000365-0002.

SITE BACKGROUND INFORMATION

The sources of the two previously identified on-site releases are presumed to be from the wastewater and on-site settling ponds associated with the former stainless-steel pipe and tubing manufacturing as performed by Crucible, the former site operator. The site was listed on the Hazardous Site Inventory (HSI) on February 15, 2000, as a result of nickel impact to groundwater. In 2005, Bo Metals submitted a Prospective Purchaser Compliance Status Report (PPCSR), as part of a Brownfield Limitation of Liability (LOL) Application. The Georgia Environmental Protection Division (GEPD) approved the PPCSR certification, that site soils met the residential risk reduction standards for fluoride and nickel. However, nickel, fluoride, and trichloroethene (TCE) were not in compliance with established Risk Reduction Standards (RRS). As a result, in 2009 Crucible proposed to implement Monitored Natural Attenuation (MNA) as a groundwater corrective measure.

Prior to concurrence, the GEPD required additional groundwater data and associated modeling for the nickel and fluoride impacts to groundwater. Crucible filed for bankruptcy (Chapter 7) in 2010, and additional groundwater information was not provided to GEPD. There has not been additional environmental compliance monitoring or corrective action activities completed at the site since 2010, with the exception of the Bo Metals LOL annual certifications.

SITE DESCRIPTION

The 37-acre site is located at 141 Hammond Street, Carrollton, Carroll County, Georgia, identified as Carroll County tax parcel no. CO2 0430003. The site property is fenced and consists of one approximately 170,000-square foot building, which is used for the manufacturing and storage of the Bo Metals concrete accessory products. Most of the remainder of the ground surface at the site is covered with asphalt parking, gravel roads, or natural vegetative cover. Surrounding land uses consist of Southern States (a farmers cooperative) to the south, a residential trailer park to the west, the Little Tallapoosa River to the north, and Central of Georgia Railroad property to the east. Elevations at the site range from 960 to 1,060 feet above mean sea level (AMSL) and slopes gradually to the north toward the Little Tallapoosa River. According to the information listed in an August 1, 2005, Compliance Status Report (CSR) for the site, the soils on site consist of sand/clay/gravel/concrete fill materials, clayey sand/clayey silty sand/silty clay containing quartz and garnet fragments, alluvium soils, saprolite, and schist bedrock. The depth to groundwater at the site generally ranges from 10 to 20 feet below ground surface (BGS), with shallower depths as the locations approach the Little Tallapoosa River to the north. Groundwater flow mimics the general topography of the site and flows generally in a northerly trending direction, toward the Little Tallapoosa River. Based on the above referenced 2005 CSR, the nearest drinking water well was located approximately 3,000 feet west of the site.

JULY 2016 FIELD ACTIVITIES

The objective of this work is to further characterize groundwater impacts at the site by collecting additional groundwater data. The conditions of the existing groundwater monitoring locations were assessed, and minor repairs and modifications were made prior to sampling collection. The PAF requested the gauging and sampling of sixteen groundwater monitoring wells, including:MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, MW-6, MW-7, MW-12, MW-12D, MW-13, MW-20, MW-23, MW-24, MW-25, and MW-26. Groundwater samples were to be submitted for laboratory analysis of nickel and fluoride, with monitoring wells MW-2 and MW-23 additionally analyzed for volatile organic compounds (VOCs).

The Carrollton Greenbelt Trail (Greenbelt) construction is ongoing along the northern boundary of the site, along the southern banks of the Little Tallapoosa River. Based on visual observations of this area, it appears that Greenbelt construction activities have destroyed some monitoring wells. ECS has been provided copies of five segments of the Construction Plan by Georgia & West, Inc. (segments CP-04 through CP-09), for the construction segment comprised of Alabama Street to Avalon Drive, in Carrollton, Georgia. Based on the Construction Plan and site maps, it appears that monitoring wells MW-20, MW-25, and MW-26 are be located in the vicinity of the Greenbelt construction.

On June 16, 2016, ECS personnel mobilized to the site to identify monitoring well locations, gauge the wells, and to make minor repairs and modifications prior to sampling collection. During the initial site visit, the following wells were unable to be located: MW-14, MW-16, MW-17, MW-19, MW-20, MW-21D, MW-22, MW-24, MW-24D, MW-25, and MW-26. In addition, monitoring wells MW-7, MW-8, MW-9, and MW-15 were listed as abandoned in previous reports.

ECS conducted an additional site visit on July 19, 2016, prior to performing groundwater gauging and sampling activities. With the assistance of Bo Metals personnel, the following wells were unable to be located and the following presumptions are made:

- Monitoring wells MW-20, MW-25, and MW-26 are presumed to be destroyed, due to their location within the Greenbelt construction activities zone;
- Monitoring wells MW-24 and MW-24D were unable to be located and are presumed to have been destroyed; and
- Monitoring wells MW-7, MW-8, and MW-9 were reported as abandoned on historical reports and were unable to be located during site visits.

On July 19 and 20, 2016, ECS recorded groundwater level data from thirteen existing monitoring wells: MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, MW-6, MW-11, MW-12, MW-12D, MW-13, MW-18, and MW-23. Monitoring well locations are shown on the site map provided as **Figure 2**. Note: monitoring well MW-11 was gauged and sampled in the place of abandoned MW-7, following correspondence with the GEPD.

The groundwater level in each monitoring well was measured using an electronic water-level meter. After the water-level data was recorded, the monitoring wells were purged utilizing low-flow techniques with a peristaltic pump fitted with clean, disposable tubing. The monitoring wells were purged until the hydrogen ion concentration (pH), specific conductance, and temperature of the groundwater stabilized and the turbidity had either stabilized or was below 10 Nephelometric Turbidity Units (NTUs).

In accordance with SESDPROC-301-R3 Section 3, Groundwater Sampling Methods - Purging (time required to sample, quantities of investigation derived waste (IDW) requiring management, etc.), the alternate purge procedures or sampling strategies available are the "Tubing-in-Screened Interval", also known as the "Low Flow/Low Volume" method. This method described in SESDPROC-301-R3 Section 3.2.2 was utilized for purging of sampled wells..Justification for using the "Low Flow/Low Volume" method is as described in Section 3.2.2 of SESDPROC-301-R3. Section 3.2.2 "Tubing-in-Screened-Interval" Method indicates the "Tubing-in-Screen" method, sometimes referred to as the "Low Flow" method, is used primarily when calculated purge volumes for the traditional purging method are excessive and present issues related to timely completion of the project and/or management of investigative derived waste (IDW).

A peristaltic pump with clean, disposable Teflon tubing was used for purging monitoring wells MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, MW-6, MW-11, MW-12, MW-13, MW-18, and MW-23. These wells were purged with tubing placed within the screen interval. Based on the screened interval location of MW-12D, located at depths of 84 to 94 feet below ground surface, purging was conducted using a decontaminated downwell electric submersible pump. A summary of purging information is presented in **Table 4**.

Purge water was containerized and staged at the site in one 55-gallon drum for future disposal pending analytical results. ECS may propose disposing of the containerized purge water by discharging to the municipal wastewater treatment system via an onsite drain connection. While this disposal method is pending approval, it is noted that this disposal method has been utilized by prior environmental consultants during historical groundwater monitoring events.

Upon completion of purging activities, groundwater samples from a total of thirteen monitoring wells were sampled and analyzed for nickel, via US Environmental Protection Agency (EPA) Method 6020B, fluoride via EPA Method 9056A, and routine indicator parameters consisting of temperature, specific conductivity, pH, and turbidity. Groundwater samples obtained from MW-23 and MW-2, were also analyzed for VOCs per EPA Method 8260B. A duplicate groundwater sample, identified as DUP-01, was collected from monitoring well MW-23.

The groundwater samples for analysis of TCE and its biodegradation daughter products were collected from the intake end of the discharge tubing, after the peristaltic pump was stopped and the tubing removed from the monitoring well. The nickel and fluoride samples were collected directly from the discharge end of the tubing during uninterrupted, low-flow peristaltic pump operation. The groundwater samples were placed into clean, laboratory-provided containers, labeled, and recorded on a Chain-of-Custody form.

The containerized groundwater samples were stored in an ice-filled cooler and were transported to TestAmerica Laboratory Services, located in Nashville, Tennessee, for analysis. Field sampling records are provided in **Attachment A**.

GROUNDWATER SAMPLING AND GAUGING RESULTS:

Depths to groundwater were measured to have varied between approximately 0.11 feet below top of casing (BTOC) in MW-12D to 24.92 feet BTOC in MW-18. Neither high density nor low density free phase product was detected in site wells. Groundwater flow direction is interpreted to trend primarily northerly, towards the Little Tallapoosa River. In July 2016, groundwater elevations were 1.94 to 3.88 feet lower than the levels observed during the May 2010 quarterly sampling event. The hydraulic gradient, calculated between upgradient monitoring well MW-4R and downgradient monitoring well MW-1, was approximately 0.016 ft/ft. The groundwater elevation summaries for the historical and the current gauging events are included in **Table 1**. The groundwater potentiometric surface map for July 19, 2016, is shown as **Figure 3**.

Current and historical nickel, fluoride, nitrate, nitrite, TCE, cis-1,2 dichloroethene (cis-1,2 DCE), trans-1,2 dichloroethene (trans-1,2 DCE), 1,1 dichloroethene (1,1 DCE), and vinyl chloride groundwater analytical data is summarized in **Table 2** and are presented on **Figure 4**. The field parameters collected during sampling (turbidity, pH, specific conductance, and temperature) are summarized in **Table 3**. The laboratory analytical report is provided as **Attachment B**.

Nickel

During the July 2016 sampling event, nickel was reported to exceed the laboratory method-detection limits (MDL) in all thirteen groundwater samples (MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, MW-6, MW-11, MW-12, MW-12D, MW-13, MW-18, and MW-23) analyzed for this constituent. The nickel concentrations in the groundwater samples from monitoring wells MW-4 (4.84 milligrams per liter [mg/L]) and MW-5 (2.18 mg/L) exceeded the applicable Type 4 Risk Reduction Standard (RRS) of 2.0 mg/L. The nickel concentrations in the groundwater samples from the remaining monitoring wells were less than either the Type 4 or Type 2 RRS, as applicable.

In July 2016, the concentrations of nickel in groundwater had increased from the May 2010 levels at monitoring wells MW-3 (from 0.39 mg/L to 0.869 mg/L), MW-4 (from 2.31 mg/L to 4.84 mg/L), MW-12D (from <0.0200 mg/L to 0.00121 [J] mg/L), MW-13 (from <0.0200 mg/L to 0.00572 mg/L), and MW-18 (from <0.0200 mg/L to 0.0461 mg/L). Concentrations of nickel decreased in July 2016 from the May 2010 levels in groundwater samples from monitoring wells MW-1 (from 1.17 mg/L to 0.450 mg/L), MW-2 (from 0.826 mg/L to 0.698 mg/L), MW-4R (from

1.98 mg/L to 1.65 mg/L), MW-5 (from 4.48 mg/L to 2.18 mg/L), and MW-12 (from 0.700 mg/L to 0.360 mg/L).

Fluoride

During the July 2016 sampling event, fluoride was reported to exceed the laboratory MDL in all thirteen groundwater samples (MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, MW-6, MW-11, MW-12, MW-12D, MW-13, MW-18, and MW-23) analyzed for this constituent. The fluoride concentrations in the groundwater samples from monitoring wells MW-1 (32.3 mg/L), MW-2 (22.4 mg/L), MW-3 (24.2 mg/L), MW-4 (182 mg/L), MW-4R (125 mg/L), MW-5 (93.2 mg/L), and MW-12 (34.1 mg/L) exceeded the applicable Type 4 Risk Reduction Standard (RRS) of 12.2 mg/L. The fluoride concentrations in the groundwater samples from the remaining monitoring wells were less than either the Type 4 or Type 2 RRS, as applicable.

In July 2016, the concentrations of fluoride in groundwater had increased from the May 2010 levels at monitoring wells MW-3 (from 8.8 mg/L to 24.2 mg/L), MW-4 (from 107 mg/L to 182 mg/L), MW-4R (from 90 mg/L to 125 mg/L), MW-5 (from 82 mg/L to 93.2 mg/L), MW-12 (from 29 mg/L to 34.1 mg/L), MW-12D (from 0.25 mg/L to 0.372 mg/L), and MW-18 (from 0.46 mg/L to 1.71 mg/L). Concentrations of nickel decreased in July 2016 from the May 2010 levels in groundwater samples from monitoring wells MW-1 (from 56 mg/L to 32.3 mg/L), MW-2 (from 32 mg/L to 22.4 mg/L), and MW-13 (from 0.90 mg/L to 0.154 mg/L).

TCE

During the July 2016 sampling event, TCE was reported to exceed the laboratory MDL in one of the two groundwater samples (MW-2) analyzed for this constituent. The TCE concentration in the groundwater sample from monitoring well MW-2 (0.00618 mg/L) exceeded the Type 4 RRS of 0.005 mg/L. The TCE concentration decreased in MW-2 from 0.012 mg/L in May 2010 to 0.00618 mg/L in July 2016. TCE biodegradation products (cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, and vinyl chloride) were not reported to have exceeded the MDL in the two groundwater samples analyzed for these constituents.

CONCLUSIONS

Based on the groundwater monitoring activities conducted at the former Trent Tube facility and a review of historical data, the following conclusions for the site are as follows:

- During the initial site visit in July 2016 gauging activities, ECS collected groundwater water level data from thirteen monitoring wells: MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, MW-6, MW-11, MW-12, MW-12D, MW-13, MW-18, and MW-23;

- Monitoring wells MW-14, MW-16, MW-17, MW-19, MW-20, MW-21D, MW-22, MW-24, MW-24D, MW-25, and MW-26 were unable to be located and are presumed to have been destroyed;

- Monitoring wells MW-7, MW-8, MW-9, and MW-15 were reported to have been abandoned, per review of historical reports;

- Monitoring well MW-11 was sampled in the place of abandoned MW-7, following correspondence with GEPD; and

- Laboratory results from the July 2016 sampling event reported that nickel concentrations in groundwater samples obtained from monitoring wells MW-4 and MW-5 exceeded the Type 4 RRS for this constituent. The fluoride concentrations reported in groundwater samples obtained from monitoring wells MW-1, MW-2, MW-3, MW-4, MW-4R, MW-5, and MW-12 were reported to have exceeded the applicable Type 4 RRS. The TCE concentration in the groundwater sample obtained from monitoring well MW-2 was reported to have exceeded the applicable Type 4 RRS.

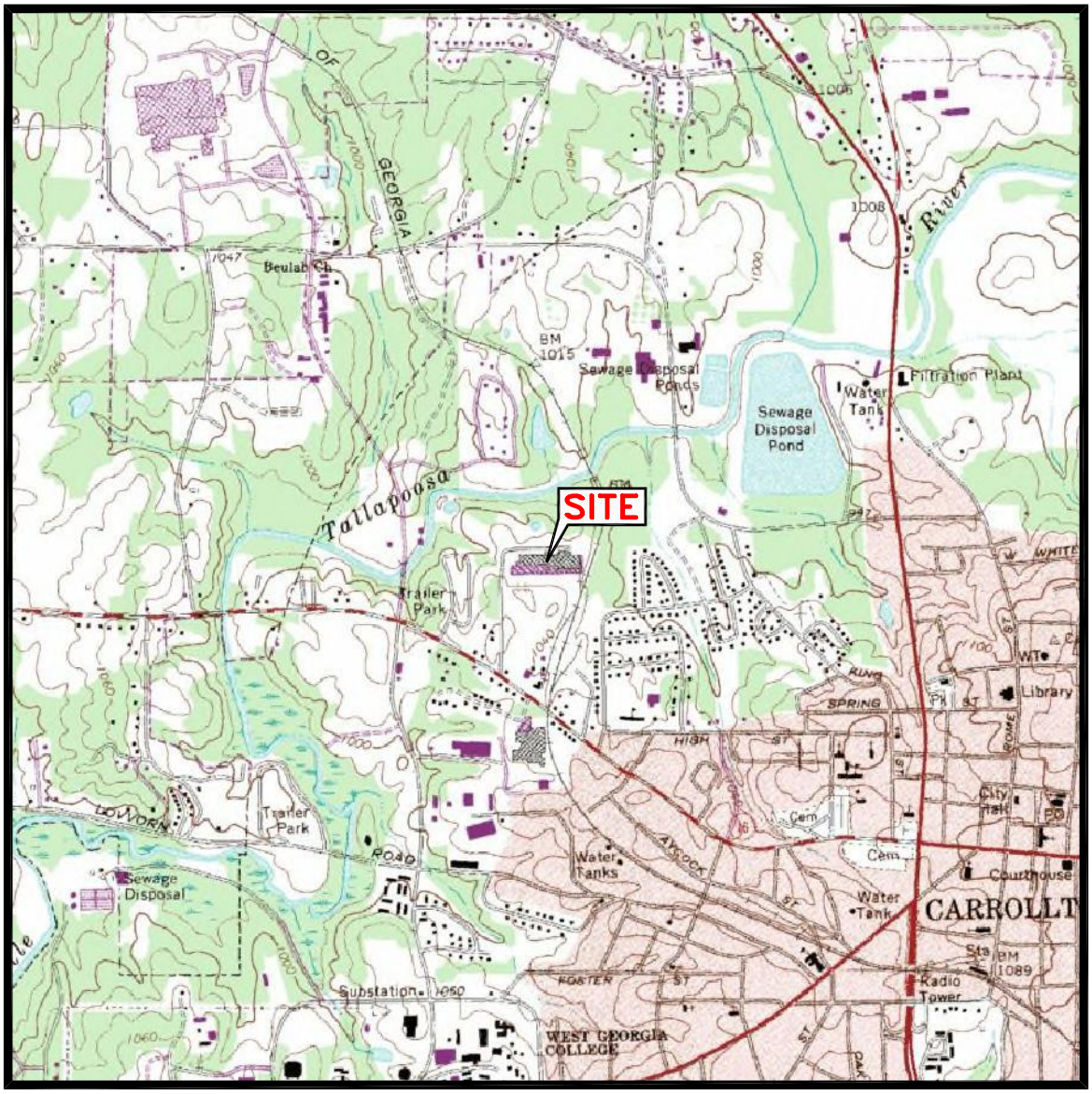
Georgia Professional Engineer's Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenneth J. Perignat, P.E.
Georgia Registered Professional Engineer No. 32249

ECS Certificate of Authorization – Engineering Firm, No. PEF006594

FIGURES



SOURCE: U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP

MAP SOURCE: 7.5 MINUTE SERIES, CARROLLTON, GEORGIA, 1982

QUAD LOCATION

SCALE 1:24,000

0 2,000 4,000

SCALE FEET

N

ecs
9874 Main Street, Suite 100, Woodstock, Ga. 30188
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ecsconsult.com

PROJECT:

FORMER TRENT TUBE

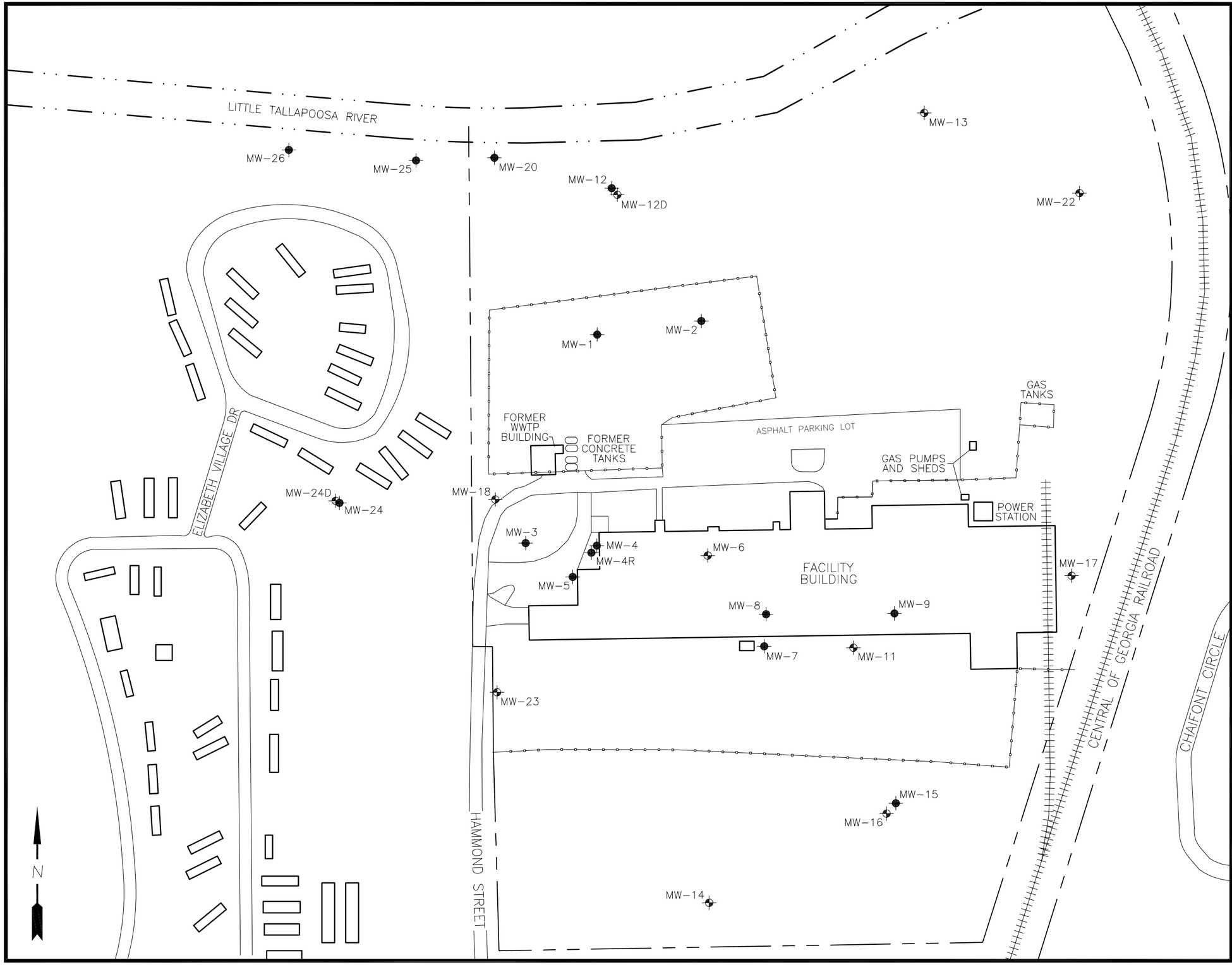
141 HAMMOND STREET
CARROLLTON, GEORGIA

TITLE:

SITE LOCATION MAP

COMPUTER CADFILE : 27-225273-8.5X11QUAD

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
EL	JE	KP	KP
SCALE:	**DATE:**	**JOB NO.:**	**FIGURE NO.:**
1:2,000	8-3-16	27-225273.00	1



LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- PROPERTY LINE
- RAILROAD TRACKS
- FENCE

ecs
9874 MAIN STREET, SUITE 100, WOODSTOCK, GA 30188
PHONE: 770-926-8883 FAX: 770-926-5383
ecsconsult.com

PROJECT:

FORMER TRENT TUBE

141 HAMMOND STREET
CARROLLTON, GEORGIA

TITLE:

SITE MAP

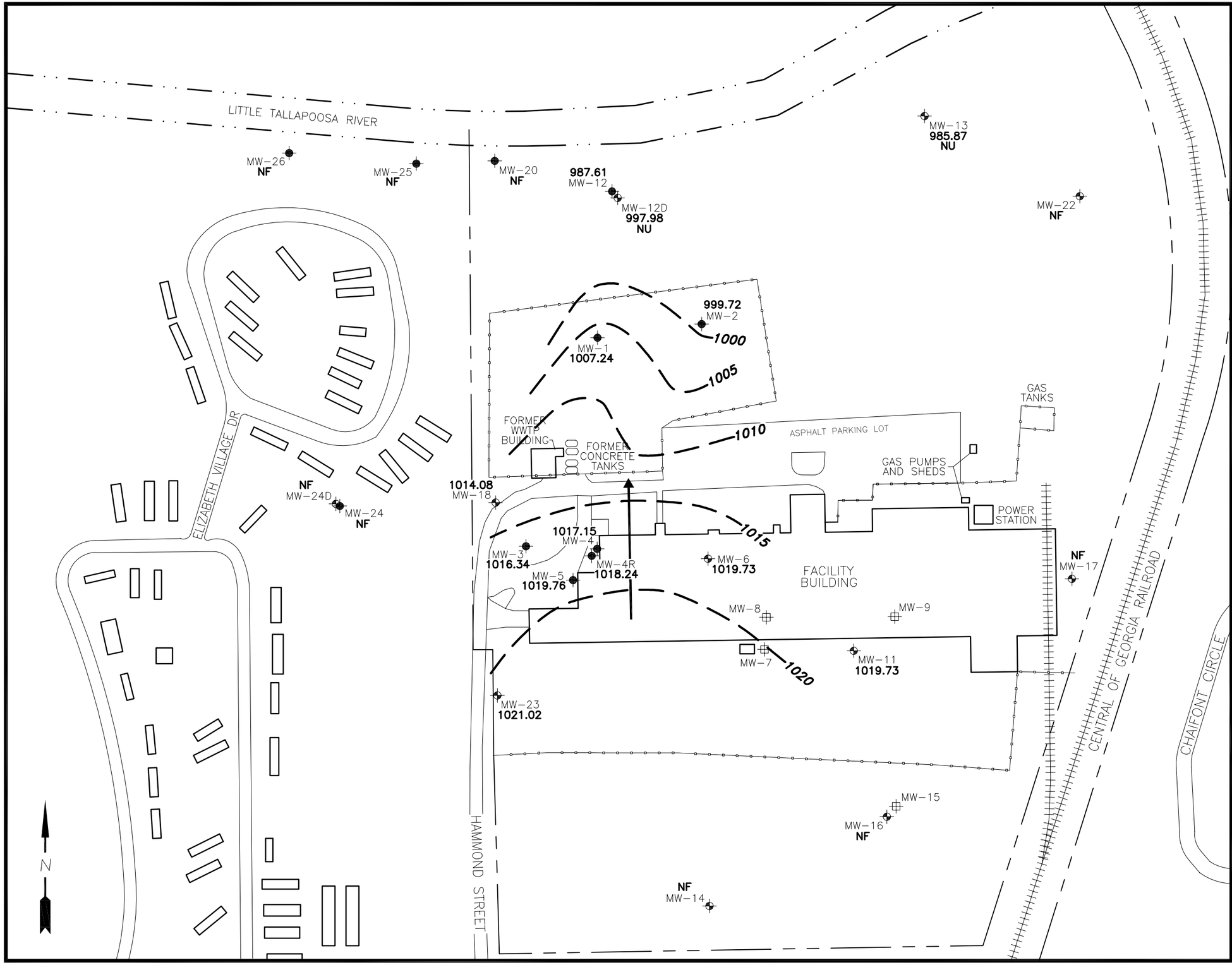
CLIENT:

GA EPD

GRAPHIC SCALE: 300 150 0 150 300

COMPUTER CADFILE : 27-225273-SIT

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
EL	JE	KP	KP
DATE:	JOB NO.:	FIGURE NO.:	PAGE NO.:
8-3-16	27-225273.00	2	



LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- ABANDONED MONITORING WELL LOCATION
- PROPERTY LINE
- RAILROAD TRACKS
- FENCE
- NF — NOT FOUND
- NU — NOT USED IN CONTOURING
- 985.87 — GROUNDWATER ELEVATION IN FEET RELATIVE TO A COMMON DATUM
- 1000 — CONTOUR LINE OF ESTIMATED EQUAL GROUNDWATER ELEVATION IN FEET RELATIVE TO A COMMON DATUM
- APPROXIMATE GROUNDWATER FLOW DIRECTION

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PROJECT:
FORMER TRENT TUBE
141 HAMMOND STREET
CARROLLTON, GEORGIA

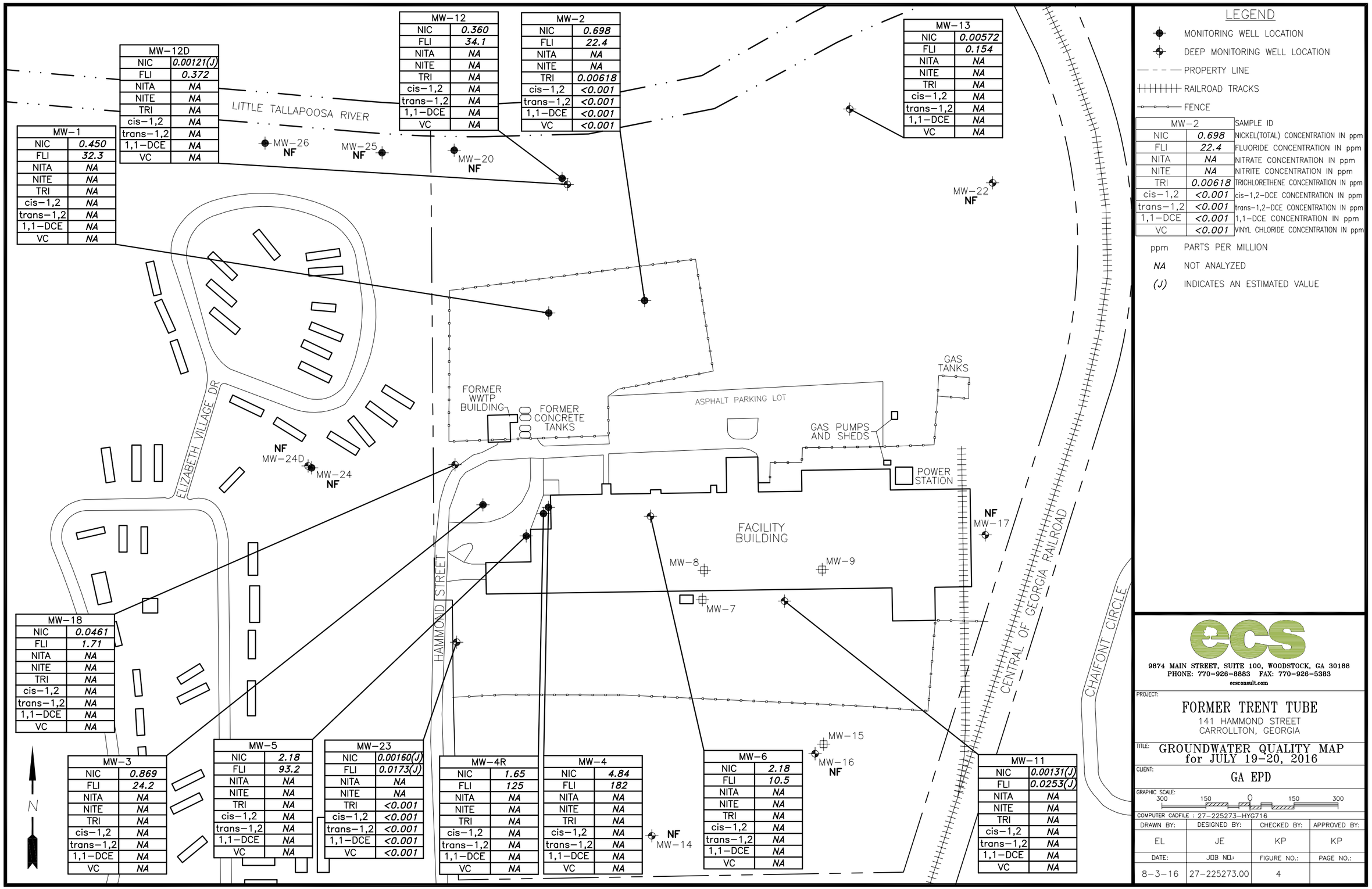
TITLE: POTENTIOMETRIC SURFACE MAP for JULY 19, 2016

CLIENT: GA EPD

GRAPHIC SCALE: 300 150 0 150 300

COMPUTER CADFILE : 27-225273-POT716

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
EL	JE	KP	KP
DATE:	JOB NO.:	FIGURE NO.:	PAGE NO.:
8-3-16	27-225273.00	3	



MW-1	
NIC	*0.450*
FLI	*32.3*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-12D	
NIC	*0.00121(J)*
FLI	*0.372*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-12	
NIC	*0.360*
FLI	*34.1*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-2	
NIC	*0.698*
FLI	*22.4*
NITA	*NA*
NITE	*NA*
TRI	*0.00618*
cis-1,2	*<0.001*
trans-1,2	*<0.001*
1,1-DCE	*<0.001*
VC	*<0.001*

MW-13	
NIC	*0.00572*
FLI	*0.154*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-18	
NIC	*0.0461*
FLI	*1.71*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-3	
NIC	*0.869*
FLI	*24.2*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-5	
NIC	*2.18*
FLI	*93.2*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-23	
NIC	*0.00160(J)*
FLI	*0.0173(J)*
NITA	*NA*
NITE	*NA*
TRI	*<0.001*
cis-1,2	*<0.001*
trans-1,2	*<0.001*
1,1-DCE	*<0.001*
VC	*<0.001*

MW-4R	
NIC	*1.65*
FLI	*125*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-4	
NIC	*4.84*
FLI	*182*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-6	
NIC	*2.18*
FLI	*10.5*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

MW-11	
NIC	*0.00131(J)*
FLI	*0.0253(J)*
NITA	*NA*
NITE	*NA*
TRI	*NA*
cis-1,2	*NA*
trans-1,2	*NA*
1,1-DCE	*NA*
VC	*NA*

LEGEND

- MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- PROPERTY LINE
- RAILROAD TRACKS
- FENCE

MW-2	SAMPLE ID
NIC *0.698*	NICKEL(TOTAL) CONCENTRATION IN ppm
FLI *22.4*	FLUORIDE CONCENTRATION IN ppm
NITA *NA*	NITRATE CONCENTRATION IN ppm
NITE *NA*	NITRITE CONCENTRATION IN ppm
TRI *0.00618*	TRICHLORETHENE CONCENTRATION IN ppm
cis-1,2 *<0.001*	cis-1,2-DCE CONCENTRATION IN ppm
trans-1,2 *<0.001*	trans-1,2-DCE CONCENTRATION IN ppm
1,1-DCE *<0.001*	1,1-DCE CONCENTRATION IN ppm
VC *<0.001*	VINYL CHLORIDE CONCENTRATION IN ppm

ppm PARTS PER MILLION

NA NOT ANALYZED

(J) INDICATES AN ESTIMATED VALUE

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PROJECT:
FORMER TRENT TUBE
141 HAMMOND STREET
CARROLLTON, GEORGIA

TITLE: GROUNDWATER QUALITY MAP for JULY 19-20, 2016

CLIENT: GA EPD

GRAPHIC SCALE: 300 150 0 150 300

COMPUTER CADFILE : 27-225273-HYG716

DRAWN BY:	DESIGNED BY:	CHECKED BY:	APPROVED BY:
EL	JE	KP	KP
DATE:	JOB NO.:	FIGURE NO.:	PAGE NO.:
8-3-16	27-225273.00	4	

TABLES

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
(All measurements in feet)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Top of Casing Elevation	Screen Interval	Depth of Free Product	Water Depth	Product Thickness	Specific Gravity Adjustment	Corrected Groundwater Elevation
MW-1	08/23/04	1021.39	10-20	--	13.39	--	--	1008.00
	03/09/06			--	11.27	--	--	1010.12
	06/07/06			--	12.29	--	--	1009.10
	09/08/06			--	14.18	--	--	1007.21
	11/29/06			--	13.45	--	--	1007.94
	05/21/07			--	14.04	--	--	1007.35
	08/14/07			--	15.07	--	--	1006.32
	11/01/07			--	16.03	--	--	1005.36
	01/30/08			--	15.74	--	--	1005.65
	05/12/08			--	12.11	--	--	1009.28
	08/06/08			--	14.00	--	--	1007.39
	11/05/08			--	15.34	--	--	1006.05
	02/16/09			--	13.81	--	--	1007.58
	05/18/09			--	11.53	--	--	1009.86
	08/03/09			--	13.32	--	--	1008.07
	11/04/09			--	10.96	--	--	1010.43
	02/01/10			--	10.99	--	--	1010.40
	05/18/10			--	12.11	--	--	1009.28
	07/19/16			**--**	**14.15**	**--**	**--**	**1007.24**
MW-2	08/23/04	1011.98	7-17	--	11.84	--	--	1000.14
	03/08/06			--	8.38	--	--	1003.60
	06/07/06			--	9.99	--	--	1001.99
	09/07/06			--	13.20	--	--	998.78
	11/29/06			--	12.16	--	--	999.82
	05/21/07			--	13.03	--	--	998.95
	08/14/07			--	14.25	--	--	997.73
	11/01/07			--	15.60	--	--	996.38
	01/30/08			--	14.97	--	--	997.01
	05/12/08			--	9.82	--	--	1002.16
	08/06/08			--	12.87	--	--	999.11
	11/05/08			--	14.34	--	--	997.64
	02/16/09			--	12.37	--	--	999.61
	05/18/09			--	8.45	--	--	1003.53
	08/03/09			--	11.60	--	--	1000.38
	11/04/09			--	7.56	--	--	1004.42
	02/01/10			--	6.44	--	--	1005.54
	05/18/10			--	8.38	--	--	1003.60
	07/19/16			**--**	**12.26**	**--**	**--**	**999.72**

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SUMMARY OF GROUNDWATER ELEVATION DATA
(All measurements in feet)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Top of Casing Elevation	Screen Interval	Depth of Free Product	Water Depth	Product Thickness	Specific Gravity Adjustment	Corrected Groundwater Elevation
MW-3	08/23/04	1035.98	15-25	--	19.60	--	--	1016.38
	03/09/06			--	17.19	--	--	1018.79
	06/06/06			--	18.01	--	--	1017.97
	09/06/06			--	20.22	--	--	1015.76
	11/29/06			--	20.23	--	--	1015.75
	05/22/07			--	20.65	--	--	1015.33
	08/14/07			--	21.74	--	--	1014.24
	11/01/07			--	22.82	--	--	1013.16
	01/30/08			--	22.84	--	--	1013.14
	05/12/08			--	19.03	--	--	1016.95
	08/06/08			--	20.31	--	--	1015.67
	11/05/08			--	21.73	--	--	1014.25
	02/16/09			--	20.74	--	--	1015.24
	05/18/09			--	17.80	--	--	1018.18
	08/03/09			--	19.26	--	--	1016.72
	11/04/09			--	17.21	--	--	1018.77
	02/01/10			--	15.56	--	--	1020.42
	05/18/10			--	16.60	--	--	1019.38
	07/19/16			**--**	**19.64**	**--**	**--**	**1016.34**
MW-4	08/23/04	1038.71	15-25	--	19.74	--	--	1018.97
	03/10/06			--	19.74	--	--	1018.97
	06/06/06			--	19.97	--	--	1018.74
	09/06/06			--	22.89	--	--	1015.82
	11/29/06			--	23.74	--	--	1014.97
	05/21/07			--	23.82	--	--	1014.89
	08/14/07			--	24.65	--	--	1014.06
	11/01/07			--	24.89	--	--	1013.82
	01/30/08			--	24.93	--	--	1013.78
	05/12/08			--	21.52	--	--	1017.19
	08/06/08			--	22.39	--	--	1016.32
	11/05/08			--	24.34	--	--	1014.37
	02/16/09			--	23.45	--	--	1015.26
	05/18/09			--	19.58	--	--	1019.13
	08/03/09			--	20.98	--	--	1017.73
	11/04/09			--	19.31	--	--	1019.40
	02/01/10			--	17.06	--	--	1021.65
	05/18/10			--	17.92	--	--	1020.79
	07/19/16			**--**	**21.56**	**--**	**--**	**1017.15**
MW-4R	02/16/09	1038.28	24.5-34.5	--	22.24	--	--	1016.04
	05/18/09			--	18.57	--	--	1019.71
	08/03/09			--	19.76	--	--	1018.52
	11/04/09			--	18.32	--	--	1019.96
	02/01/10			--	16.02	--	--	1022.26
	05/18/10			--	16.91	--	--	1021.37
	07/19/16			**--**	**20.04**	**--**	**--**	**1018.24**

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
(All measurements in feet)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Top of Casing Elevation	Screen Interval	Depth of Free Product	Water Depth	Product Thickness	Specific Gravity Adjustment	Corrected Groundwater Elevation
MW-5	08/23/04	1038.71	15-25	--	20.22	--	--	1018.49
	03/09/06			--	17.32	--	--	1021.39
	06/06/06			--	17.51	--	--	1021.20
	09/06/06			--	20.27	--	--	1018.44
	11/29/06			--	21.22	--	--	1017.49
	05/21/07			--	21.08	--	--	1017.63
	08/14/07			--	22.12	--	--	1016.59
	11/01/07			--	23.05	--	--	1015.66
	01/30/08			--	23.80	--	--	1014.91
	05/12/08			--	19.55	--	--	1019.16
	08/06/08			--	20.05	--	--	1018.66
	11/05/08			--	21.95	--	--	1016.76
	02/16/09			--	21.48	--	--	1017.23
	05/18/09			--	17.65	--	--	1021.06
	08/03/09			--	18.69	--	--	1020.02
	11/04/09			--	17.57	--	--	1021.14
	02/01/10			--	14.77	--	--	1023.94
	05/18/10			--	15.49	--	--	1023.22
	07/19/16			**--**	**18.95**	**--**	**--**	**1019.76**
MW-6	08/23/04	1042.40	17-27	--	23.22	--	--	1019.18
	07/19/16			**--**	**22.67**	**--**	**--**	**1019.73**
MW-7	08/23/04	UNK	UNK	Abandoned				
	07/19/16			**Abandoned**				
MW-8	08/23/04	UNK	UNK	Abandoned				
	07/19/16			**Abandoned**				
MW-9	08/23/04	UNK	UNK	Abandoned				
	07/19/16			**Abandoned**				
MW-11	08/23/04	1042.47	17-27	--	23.11	--	--	1019.36
	07/19/16			**--**	**22.74**	**--**	**--**	**1019.73**
MW-12	08/23/04	998.73	8-18	--	11.52	--	--	987.21
	03/08/06			--	9.01	--	--	989.72
	06/07/06			--	10.18	--	--	988.55
	09/07/06			--	12.27	--	--	986.46
	11/30/06			--	10.24	--	--	988.49
	05/22/07			--	11.90	--	--	986.83
	08/14/07			--	12.65	--	--	986.08
	11/01/07			--	13.38	--	--	985.35
	01/30/08			--	12.05	--	--	986.68
	05/12/08			--	8.95	--	--	989.78
	08/06/08			--	12.33	--	--	986.40
	11/05/08			--	12.49	--	--	986.24
	02/16/09			--	10.90	--	--	987.83
	05/18/09			--	8.73	--	--	990.00
	08/03/09			--	10.98	--	--	987.75
	11/04/09			--	8.47	--	--	990.26
	02/02/10			--	7.80	--	--	990.93
	05/19/10			--	9.18	--	--	989.55
	07/19/16			**--**	**11.12**	**--**	**--**	**987.61**

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
(All measurements in feet)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Top of Casing Elevation	Screen Interval	Depth of Free Product	Water Depth	Product Thickness	Specific Gravity Adjustment	Corrected Groundwater Elevation
MW-12D	08/23/04	998.09	84-94	--	0.00	--	--	998.09
	03/09/06			--	0.00	--	--	998.09
	06/07/06			--	0.00	--	--	998.09
	09/07/06			--	0.00	--	--	998.09
	11/30/06			--	0.00	--	--	998.09
	05/22/07			--	0.00	--	--	998.09
	11/01/07			--	0.69	--	--	997.40
	01/30/08			--	0.08	--	--	998.01
	02/16/09			--	0.00	--	--	998.09
	02/02/10			--	0.00	--	--	998.09
	07/19/16			**--**	**0.11**	**--**	**--**	**997.98**
MW-13	08/23/04	993.28	8-18	--	8.52	--	--	984.76
	03/08/06			--	5.74	--	--	987.54
	06/08/06			--	7.56	--	--	985.72
	09/07/06			--	9.31	--	--	983.97
	11/30/06			--	6.14	--	--	987.14
	05/22/07			--	8.88	--	--	984.40
	08/14/07			--	10.45	--	--	982.83
	11/01/07			--	9.76	--	--	983.52
	01/30/08			--	8.07	--	--	985.21
	05/12/08			--	5.75	--	--	987.53
	08/06/08			--	9.67	--	--	983.61
	11/05/08			--	8.94	--	--	984.34
	02/16/09			--	7.68	--	--	985.60
	05/18/09			--	5.94	--	--	987.34
	08/03/09			--	8.45	--	--	984.83
	02/02/10			--	5.35	--	--	987.93
	07/19/16			**--**	**7.41**	**--**	**--**	**985.87**
MW-14	08/23/04	1046.61	10-20	--	16.49	--	--	1030.12
	07/19/16			**Not Found/Destroyed**				
MW-15	08/23/04	UNK	UNK	Abandoned				
	07/19/16			**Abandoned**				
MW-16	08/23/04	1049.07	20-35	--	28.78	--	--	1020.29
	07/19/16			**Not Found/Destroyed**				
MW-17	08/23/04	1037.30	19-34	--	29.03		--	1008.27
	07/19/16			**Not Found/Destroyed**				
MW-18	08/23/04	1039.00	20-30	--	24.85	--	--	1014.15
	03/07/06			--	22.99	--	--	1016.01
	06/06/06			--	23.78	--	--	1015.22
	09/06/06			--	25.38	--	--	1013.62
	11/30/06			--	24.99	--	--	1014.01
	05/21/07			--	25.56	--	--	1013.44
	11/01/07			--	27.87	--	--	1011.13
	01/30/08			--	27.47	--	--	1011.53
	02/16/09			--	25.35	--	--	1013.65
	02/01/10			--	21.93	--	--	1017.07
	07/19/16			**--**	**24.92**	**--**	**--**	**1014.08**

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
(All measurements in feet)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Top of Casing Elevation	Screen Interval	Depth of Free Product	Water Depth	Product Thickness	Specific Gravity Adjustment	Corrected Groundwater Elevation
MW-19	08/23/04	1033.52	5-20	--	19.37	--	--	1014.15
	07/19/16			**Not Found/Destroyed**				
MW-20	08/23/04	990.67	4-9	--	6.18	--	--	984.49
	03/08/06			--	5.92	--	--	984.75
	06/07/06			--	7.22	--	--	983.45
	09/07/06			--	DRY	--	--	DRY
	11/30/06			--	6.44	--	--	984.23
	05/22/07			--	7.67	--	--	983.00
	08/14/07			--	8.10	--	--	982.57
	11/01/07			--	8.49	--	--	982.18
	01/30/08			--	7.13	--	--	983.54
	05/12/08			--	3.65	--	--	987.02
	08/06/08			--	8.08	--	--	982.59
	11/05/08			--	7.56	--	--	983.11
	02/16/09			--	6.91	--	--	983.76
	05/18/09			--	5.07	--	--	985.60
	08/03/09			--	7.62	--	--	983.05
	11/04/09			--	5.65	--	--	985.02
	02/02/10			--	5.26	--	--	985.41
	05/19/10			--	6.51	--	--	984.16
	07/19/16			**Not Found/Destroyed**				
MW-21D	08/23/04	1017.31	35-45	--	24.66	--	--	992.65
	07/19/16			**Not Found/Destroyed**				
MW-22	08/23/04	1030.05	32-47	--	42.95		--	987.10
	07/19/16			**Not Found/Destroyed**				
MW-23	08/23/04	1041.44	13.5-23.5	--	21.50	--	--	1019.94
	07/19/16			**--**	**20.42**	**--**	**--**	**1021.02**
MW-24	08/23/04	1004.34	13-18	--	2.85	--	--	1001.49
	03/09/06			--	1.98	--	--	1002.36
	06/08/06			--	2.08	--	--	1002.26
	09/08/06			--	3.19	--	--	1001.15
	12/01/06			--	2.05	--	--	1002.29
	05/22/07			--	3.95	--	--	1000.39
	01/30/08			--	3.44	--	--	1000.90
	02/16/09			--	2.52	--	--	1001.82
	02/01/10			--	1.46	--	--	1002.88
	07/19/16			**Not Found/Destroyed**				
MW-24D	08/23/04	1003.84	89-99	--	2.93	--	--	1000.91
	07/19/16			**Not Found/Destroyed**				

TABLE 1
SUMMARY OF GROUNDWATER ELEVATION DATA
(All measurements in feet)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Top of Casing Elevation	Screen Interval	Depth of Free Product	Water Depth	Product Thickness	Specific Gravity Adjustment	Corrected Groundwater Elevation
MW-25	08/23/04	996.91	4-14	--	5.77	--	--	991.14
	03/08/06			--	4.19	--	--	992.72
	06/07/06			--	5.44	--	--	991.47
	09/07/06			--	6.29	--	--	990.62
	11/30/06			--	4.76	--	--	992.15
	05/22/07			--	5.48	--	--	991.43
	08/14/07			--	6.57	--	--	990.34
	11/01/07			--	6.28	--	--	990.63
	01/30/08			--	5.34	--	--	991.57
	05/12/08			--	1.82	--	--	995.09
	08/06/08			--	6.68	--	--	990.23
	11/05/08			--	5.75	--	--	991.16
	02/16/09			--	5.26	--	--	991.65
	05/18/09			--	3.27	--	--	993.64
	08/03/09			--	5.80	--	--	991.11
	11/04/09			--	3.90	--	--	993.01
	02/02/10			--	3.42	--	--	993.49
	05/19/10			--	4.79	--	--	992.12
	07/19/16			**Not Found/Destroyed**				
MW-26	03/08/06	NS	5-10	--	3.88	--	--	NM
	06/07/06			--	4.94	--	--	NM
	09/07/06			--	5.82	--	--	NM
	11/30/06			--	4.39	--	--	NM
	05/22/07			--	5.49	--	--	NM
	08/14/07			--	6.10	--	--	NM
	11/01/07			--	5.85	--	--	NM
	01/30/08			--	4.94	--	--	NM
	05/12/08			--	1.40	--	--	NM
	08/06/08			--	6.20	--	--	NM
	11/05/08			--	5.34	--	--	NM
	02/16/09			--	4.89	--	--	NM
	05/18/09			--	2.87	--	--	NM
	08/03/09			--	5.34	--	--	NM
	11/04/09			--	3.57	--	--	NM
	02/02/10			--	3.10	--	--	NM
	05/19/10			--	4.29	--	--	NM
	07/19/16			**Not Found/Destroyed**				

NOTES:
ND - Not Detected
NM - Not Measured
NA - Not Applicable
UNK - Unknown
NS - Not Surveyed

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-1	03/09/06	**3.04**	**110**	49	<0.25	<0.005	--	--	--	--
	06/07/06	**3.28**	**92**	57	<0.25	<0.005	--	--	--	--
	09/08/06	**3.49**	**130**	64	<0.25	<0.005	--	--	--	--
	11/29/06	**3.95**	**110**	67	<0.25	<0.005	--	--	--	--
	05/21/07	**3.59**	**120**	65	--	<0.005	--	--	--	--
	08/14/07	**3.65**	**130**	65	--	<0.005	--	--	--	--
	11/01/07	**4.11**	**150**	81	--	<0.005	--	--	--	--
	01/30/08	**4.22**	**84**	71	--	<0.005	--	--	--	--
	05/12/08	**2.96**	**100**	57	--	<0.005	--	--	--	--
	08/06/08	**2.93**	**110**	54	--	<0.005	--	--	--	--
	11/05/08	**3.19**	**130**	69	--	<0.005	--	--	--	--
	02/16/09	**2.80**	**81**	58	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/09	**2.28**	**51**	49	--	<0.005	<0.005	<0.005	<0.005	<0.002
	08/03/09	**2.15**	**59**	42	--	<0.005	<0.005	<0.005	<0.005	<0.002
	11/04/09	1.55	**61**	33	--	<0.005	<0.005	<0.005	<0.005	<0.002
	11/04/09	1.55	**61**	33	--	<0.005	<0.005	<0.005	<0.005	<0.002
	02/01/10	1.51	**23**	14	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/10	1.17	**56**	25	--	<0.005	<0.005	<0.005	<0.005	<0.002
	07/20/16	0.450	**32.3**	NA	NA	NA	NA	NA	NA	NA
MW-2	03/09/06	1.42	**40**	8.4	<0.25	**0.015**	--	--	--	--
	06/07/06	1.44	**51**	8.0	<0.25	**0.015**	--	--	--	--
	09/07/06	1.01	**63**	9.7	<0.25	**0.021**	--	--	--	--
	11/29/06	1.28	**39**	11.0	<0.25	**0.030**	--	--	--	--
	05/21/07	1.06	**28**	7.8	--	**0.025**	--	--	--	--
	08/14/07	1.00	**43**	7.9	--	**0.023**	--	--	--	--
	11/01/07	1.05	**58**	9.3	--	**0.018**	--	--	--	--
	01/30/08	1.05	**27**	8.0	--	**0.034**	--	--	--	--
	05/12/08	0.783	**29**	3.9	--	**0.020**	--	--	--	--
	08/06/08	0.785	**35**	5.2	--	**0.021**	--	--	--	--
	11/05/08	0.818	**46**	6.3	--	**0.033**	--	--	--	--
	02/16/09	0.850	**39**	6.2	--	**0.028**	<0.005	<0.005	<0.005	<0.002
	05/18/09	0.798	**20**	3.6	--	**0.016**	<0.005	<0.005	<0.005	<0.002
	08/03/09	0.839	**30**	4.3	--	**0.017**	<0.005	<0.005	<0.005	<0.002
	11/04/09	0.816	**37**	2.9	--	**0.019**	<0.005	<0.005	<0.005	<0.002
	02/01/10	0.887	**36**	2.6	--	**0.019**	<0.005	<0.005	<0.005	<0.002
	05/18/10	0.819	**30**	3.9	--	**0.012**	<0.005	<0.005	<0.005	<0.002
	05/18/10	0.826	**32**	3.9	--	**0.012**	<0.005	<0.005	<0.005	<0.002
	07/20/16	0.698	**22.4**	NA	NA	**0.00618**	<0.001	<0.001	<0.001	<0.001

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-3	03/09/06	1.42	**32**	23	<0.25	<0.005	--	--	--	--
	06/06/06	1.50	**31**	25	<0.25	<0.005	--	--	--	--
	09/06/06	**2.21**	**43**	37	<0.25	<0.005	--	--	--	--
	11/29/06	**2.38**	**38**	36	<0.25	<0.005	--	--	--	--
	05/22/07	1.82	**38**	27	--	<0.005	--	--	--	--
	08/14/07	1.48	**41**	21	--	--	--	--	--	--
	11/01/07	1.68	**38**	23	--	--	--	--	--	--
	01/30/08	1.90	**19**	19	--	--	--	--	--	--
	05/12/08	0.95	**20**	14	--	--	--	--	--	--
	08/06/08	1.69	**47**	26	--	--	--	--	--	--
	11/05/08	1.73	**49**	25	--	--	--	--	--	--
	02/16/09	1.60	**41**	22	--	--	--	--	--	--
	05/18/09	0.47	5.6	7.3	--	--	--	--	--	--
	08/03/09	1.26	**16**	18	--	--	--	--	--	--
	11/04/09	0.47	**13**	6.7	--	--	--	--	--	--
	02/01/10	0.45	6.1	7.5	--	--	--	--	--	--
	05/18/10	0.39	8.8	9.9	--	--	--	--	--	--
	07/20/16	0.869	**24.2**	NA	NA	NA	NA	NA	NA	NA
MW-4	03/10/06	**9.19**	**230**	110	<0.25	<0.005	--	--	--	--
	06/06/06	**6.69**	**180**	90	<0.25	<0.005	--	--	--	--
	09/06/06	**8.26**	**190**	110	<0.25	<0.005	--	--	--	--
	11/29/06	**9.14**	**180**	110	<0.25	<0.005	--	--	--	--
	05/21/07	NS	NS	NS	--	NS	--	--	--	--
	08/14/07	NS	NS	NS	--	NS	--	--	--	--
	11/01/07	NS	NS	NS	--	NS	--	--	--	--
	01/30/08	NS	NS	NS	--	NS	--	--	--	--
	05/12/08	**5.27**	**150**	76	--	<0.005	--	--	--	--
	08/06/08	**4.36**	**180**	70	--	<0.005	--	--	--	--
	11/05/08	NS	NS	NS	--	NS	--	--	--	--
	02/16/09	**4.50**	**190**	70	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/09	**5.26**	**100**	85	--	<0.005	<0.005	<0.005	<0.005	<0.002
	08/03/09	**3.37**	**120**	50	--	<0.005	<0.005	<0.005	<0.005	<0.002
	11/04/09	**3.53**	**160**	66	--	<0.005	<0.005	<0.005	<0.005	<0.002
	02/01/10	**3.05**	**87**	44	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/10	**2.31**	**107**	40	--	<0.005	<0.005	<0.005	<0.005	<0.002
	07/20/16	**4.84**	**182**	NA	NA	NA	NA	NA	NA	NA

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-4R	02/16/09	1.90	**140**	31	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/09	**2.07**	**59**	32	--	<0.005	<0.005	<0.005	<0.005	<0.002
	08/03/09	**2.18**	**98**	29	--	<0.005	<0.005	<0.005	<0.005	<0.002
	11/04/09	**2.15**	**120**	29	--	<0.005	<0.005	<0.005	<0.005	<0.002
	02/01/10	**2.24**	**120**	37	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/10	1.98	**90**	23	--	<0.005	<0.005	<0.005	<0.005	<0.002
	07/20/16	1.65	**125**	NA	NA	NA	NA	NA	NA	NA
MW-5	03/09/06	**4.15**	**110**	42	<0.25	<0.005	--	--	--	--
	06/06/06	**4.22**	**110**	44	<0.25	<0.005	--	--	--	--
	09/06/06	**3.84**	**94**	45	<0.25	<0.005	--	--	--	--
	11/29/06	**4.68**	**100**	53	<0.25	<0.005	--	--	--	--
	05/21/07	**4.15**	**97**	47	--	<0.005	--	--	--	--
	08/14/07	**3.17**	**87**	34	--	--	--	--	--	--
	11/01/07	**3.31**	**82**	37	--	--	--	--	--	--
	01/30/08	**3.20**	**62**	29	--	--	--	--	--	--
	05/12/08	**2.71**	**60**	31	--	--	--	--	--	--
	08/06/08	**3.24**	**82**	40	--	--	--	--	--	--
	11/05/08	**2.88**	**93**	32	--	--	--	--	--	--
	02/16/09	**4.70**	**130**	53	--	--	--	--	--	--
	05/18/09	**5.05**	**66**	53	--	--	--	--	--	--
	08/03/09	**3.97**	**77**	44	--	--	--	--	--	--
	11/04/09	**5.00**	**100**	61	--	--	--	--	--	--
	02/01/10	**5.93**	**77**	46	--	--	--	--	--	--
	05/18/10	**4.48**	**82**	37	--	--	--	--	--	--
	07/20/16	**2.18**	**93.2**	NA	NA	NA	NA	NA	NA	NA

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-6	07/20/16	0.246	10.5	NA	NA	NA	NA	NA	NA	NA
MW-7		Well Abandoned								
MW-8		Well Abandoned								
MW-9		Well Abandoned								
MW-11	07/19/16	0.00131 (J)	0.0253 (J)	NA	NA	NA	NA	NA	NA	NA
MW-12	03/08/06	1.27	**56**	27	<0.25	<0.005	--	--	--	--
	06/07/06	1.24	**53**	26	<0.25	<0.005	--	--	--	--
	09/07/06	1.27	**61**	32	<0.25	<0.005	--	--	--	--
	11/30/06	1.56	**44**	31	<0.25	<0.005	--	--	--	--
	05/22/07	1.37	**60**	30	--	<0.005	--	--	--	--
	08/14/07	1.26	**54**	27	--	<0.005	--	--	--	--
	11/01/07	1.43	**42**	35	--	<0.005	--	--	--	--
	01/30/08	1.48	**24**	30	--	<0.005	--	--	--	--
	05/12/08	1.22	**38**	25	--	<0.005	--	--	--	--
	08/06/08	1.26	**50**	28	--	<0.005	--	--	--	--
	11/05/08	1.38	**61**	28	--	<0.005	--	--	--	--
	02/16/09	1.41	**65**	32	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/18/09	1.20	**20**	23	--	<0.005	<0.005	<0.005	<0.005	<0.002
	08/03/09	1.13	**33**	24	--	<0.005	<0.005	<0.005	<0.005	<0.002
	11/04/09	1.04	**45**	23	--	<0.005	<0.005	<0.005	<0.005	<0.002
	02/02/10	0.929	**30**	13	--	<0.005	<0.005	<0.005	<0.005	<0.002
	02/02/10	0.950	**40**	13	--	<0.005	<0.005	<0.005	<0.005	<0.002
	05/19/10	0.700	**29**	12	--	<0.005	<0.005	<0.005	<0.005	<0.002
	07/20/16	0.360	**34.1**	NA	NA	NA	NA	NA	NA	NA

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-12D	03/09/06	<0.0200	0.65	<0.25	<0.25	<0.005	--	--	--	--
	06/07/06	<0.0200	0.45	<0.25	<0.25	<0.005	--	--	--	--
	09/07/06	<0.0200	0.51	<0.25	<0.25	<0.005	--	--	--	--
	11/30/06	<0.0200	0.36	<0.25	<0.25	<0.005	--	--	--	--
	05/22/07	<0.0200	2.3	<0.25	--	<0.005	--	--	--	--
	01/31/08	<0.0200	<0.20	<0.25	--	--	--	--	--	--
	02/17/09	<0.0200	0.29	<0.25	--	--	--	--	--	--
	02/02/10	<0.0200	0.25	<0.25	--	--	--	--	--	--
	07/19/16	0.00121 (J)	0.372	NA	NA	NA	NA	NA	NA	NA
MW-13	03/08/06	<0.0200	<0.20	<0.25	<0.25	<0.005	--	--	--	--
	06/08/06	<0.0200	<0.20	<0.25	<0.25	<0.005	--	--	--	--
	09/07/06	<0.0200	<0.20	<0.25	<0.25	<0.005	--	--	--	--
	11/30/06	<0.0200	1.4	<0.25	<0.25	<0.005	--	--	--	--
	05/22/07	<0.0200	0.25	<0.25	--	<0.005	--	--	--	--
	08/14/07	<0.0200	<0.20	<0.25	--	<0.005	--	--	--	--
	11/01/07	<0.0200	0.53	<0.25	--	<0.005	--	--	--	--
	01/31/08	<0.0200	<0.20	<0.25	--	<0.005	--	--	--	--
	05/13/08	<0.0200	<0.20	<0.25	--	<0.005	--	--	--	--
	08/07/08	<0.0200	0.36	<0.25	--	<0.005	--	--	--	--
	11/06/08	<0.0200	<0.20	<0.25	--	<0.005	--	--	--	--
	02/17/09	<0.0200	0.21	<0.25	--	<0.005	<0.005	<0.005	<0.005	<0.002
	02/02/10	<0.0200	0.90	<0.25	--	<0.005	<0.005	<0.005	<0.005	<0.002
	07/19/16	0.00572	0.154	NA	NA	NA	NA	NA	NA	NA
MW-14	07/19/16	Destroyed/Not Found								
MW-15	07/19/16	Destroyed/Not Found								
MW-16	07/19/16	Destroyed/Not Found								
MW-17	07/19/16	Destroyed/Not Found								

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-18	03/07/06	<0.0200	0.44	1.5	<0.25	<0.005	--	--	--	--
	06/06/06	0.089	3.2	1.6	<0.25	<0.005	--	--	--	--
	09/06/06	0.145	6.8	4.6	<0.25	<0.005	--	--	--	--
	11/30/06	0.165	6.7	3.2	<0.25	<0.005	--	--	--	--
	05/21/07	0.146	7.5	1.5	--	<0.005	--	--	--	--
	01/30/08	0.303	7.4	4.2	--	--	--	--	--	--
	02/16/09	0.110	3.2	<2.5	--	--	--	--	--	--
	02/01/10	<0.0200	0.46	0.61	--	--	--	--	--	--
	07/20/16	0.0461	1.71	NA	NA	NA	NA	NA	NA	NA
MW-19	07/19/16	Destroyed/Not Found								
MW-20	03/08/06	0.322	12	4.5	<0.25	<0.005	--	--	--	--
	06/08/06	0.651	**20**	14	<0.25	<0.005	--	--	--	--
	09/07/06	NS	NS	NS	NS	NS	--	--	--	--
	11/30/06	0.241	**19**	9.9	<0.25	<0.005	--	--	--	--
	05/21/07	NS	NS	NS	--	NS	--	--	--	--
	08/14/07	NS	NS	NS	--	NS	--	--	--	--
	11/01/07	NS	NS	NS	--	NS	--	--	--	--
	01/31/08	0.936	**24**	16	--	--	--	--	--	--
	05/12/08	0.428	10	6.2	--	--	--	--	--	--
	08/06/08	NS	NS	NS	--	--	--	--	--	--
	11/05/08	0.884	**47**	19	--	--	--	--	--	--
	02/17/09	0.670	**28**	14	--	--	--	--	--	--
	05/18/09	0.510	11	8.8	--	--	--	--	--	--
	08/03/09	0.763	**28**	19	--	--	--	--	--	--
	11/04/09	0.441	**14**	7.1	--	--	--	--	--	--
	02/02/10	0.279	8.5	2.9	--	--	--	--	--	--
	05/19/10	0.307	9	5.4	--	--	--	--	--	--
	07/19/16	Destroyed/Not Found								

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-21D	07/19/16	Destroyed/Not Found								
MW-22	07/19/16	Destroyed/Not Found								
MW-23	07/19/16	0.00160 (J)	0.0173 (J)	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001
MW-23 Dup.	07/19/16	0.00173 (J)	0.0175 (J)	NA	NA	<0.001	<0.001	<0.001	<0.001	<0.001
MW-24	03/09/06	0.085	3.5	1.3	<0.25	<0.005	--	--	--	--
	06/08/06	0.074	0.48	1.4	<0.25	<0.005	--	--	--	--
	09/08/06	<0.0200	3.9	0.28	<0.25	<0.005	--	--	--	--
	12/01/06	0.045	0.57	<0.25	<0.25	<0.005	--	--	--	--
	05/22/07	0.079	0.41	0.61	--	<0.005	--	--	--	--
	01/30/08	0.095	0.32	0.66	--	--	--	--	--	--
	02/16/09	0.091	**5.6**	<2.5	--	--	--	--	--	--
	02/01/10	0.065	0.36	2.3	--	--	--	--	--	--
	07/19/16	Destroyed/Not Found								
MW-25	03/08/06	0.302	**5.8**	5.6	<0.25	<0.005	--	--	--	--
	06/07/06	**0.328**	**6.4**	7.3	<0.25	<0.005	--	--	--	--
	09/07/06	0.272	**7.3**	9.6	<0.25	<0.005	--	--	--	--
	11/30/06	**0.399**	**5.0**	8.8	<0.25	<0.005	--	--	--	--
	05/22/07	**0.318**	**6.3**	7.3	--	<0.005	--	--	--	--
	08/14/07	**0.353**	**9.9**	8.0	--	--	--	--	--	--
	11/01/07	**0.408**	**7.6**	8.9	--	--	--	--	--	--
	01/31/08	**0.571**	**6.6**	12	--	--	--	--	--	--
	05/12/08	0.221	3.7	3.1	--	--	--	--	--	--
	08/06/08	0.304	**6.4**	6.9	--	--	--	--	--	--
	11/05/08	**0.371**	**8.2**	9.5	--	--	--	--	--	--
	02/17/09	0.308	**9.2**	7.1	--	--	--	--	--	--
	05/18/09	0.267	**4.5**	5.0	--	--	--	--	--	--
	08/03/09	**0.375**	**7.1**	9.9	--	--	--	--	--	--
	11/04/09	0.247	**5.0**	4.5	--	--	--	--	--	--
	02/02/10	0.199	4.2	2.5	--	--	--	--	--	--
	05/19/10	0.190	**5.4**	3.1	--	--	--	--	--	--
	07/19/16	Destroyed/Not Found								

TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL DATA
(All results reported in parts per million)

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Sampled	Nickel (Total)	Fluoride	Nitrate	Nitrite	Trichlorethene	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride
MW-26	03/08/06	0.110	0.95	3.2	<0.25	<0.005	--	--	--	--
	06/07/06	0.165	1.2	4.1	<0.25	<0.005	--	--	--	--
	09/07/06	<0.0200	1.7	<0.25	<0.25	<0.005	--	--	--	--
	11/30/06	0.085	1.4	1.6	<0.25	<0.005	--	--	--	--
	05/22/07	0.116	0.73	3.2	--	<0.005	--	--	--	--
	08/14/07	0.092	0.57	1.2	--	--	--	--	--	--
	11/01/07	0.106	1.1	1.6	--	--	--	--	--	--
	01/31/08	0.233	0.81	8.2	--	--	--	--	--	--
	05/12/08	0.087	1.3	0.94	--	--	--	--	--	--
	08/06/08	0.097	0.70	0.57	--	--	--	--	--	--
	11/05/08	0.106	0.82	0.88	--	--	--	--	--	--
	02/17/09	0.094	0.78	1.7	--	--	--	--	--	--
	05/18/09	0.092	1.6	1.7	--	--	--	--	--	--
	08/03/09	0.088	0.83	0.57	--	--	--	--	--	--
	11/04/09	0.090	1.4	<0.25	--	--	--	--	--	--
	02/02/10	0.052	0.49	0.40	--	--	--	--	--	--
	05/19/10	0.101	0.71	0.51	--	--	--	--	--	--
	07/19/16	Destroyed/Not Found								
Risk-Reduction Standards										
Type 1/3		0.10	4.0	0.25	0.25	0.005	NA	0.1	0.007	0.002
Type 2		0.31	4.4	25	1.6	0.005	NA	0.1	0.007	0.002
Type 4		2.0	12.2	164	10.00	0.005	NA	0.1	0.007	0.002

Notes:
NR = Not Reported
NA = Not Analyzed
NS = Not Sampled due to well being dry

All data before July 19, 2016, was provided by others.
Bold values indicate concentration exceeds applicable RRS.

cis-1,2-DCE = cis-1,2-dichloroethene
trans-1,2-DCE = trans-1,2-dichloroethene
1,1-DCE = 1,1-dichloroethene

Risk Reduction Standards (RRS)
Type 1 = RRS will pose no significant risk on the basis of standardized exposure assumptions and defined risk level for residential properties.
Type 2 = RRS will pose not significant risk on the basis of site-specific risk assessment for residential properties
Type 3 = RRS will pose no significant risk on the basis of standardized exposure assumptions and defined risk level for non-residential properties.
Type 4 = RRS will pose no significant risk on the basis of site-specific risk assessment for non-residential properties.

TABLE 3
SUMMARY OF FIELD PARAMETERS

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Turbidity (NTU)	pH (SU)	Sp. Cond. (µs/cm)	Temp. (deg. C)
MW-1	03/09/06	4.7	4.54	407	17.1
	06/07/06	1.1	4.34	455	18.9
	09/08/06	3.1	4.17	498	19.3
	11/29/06	4.6	4.46	524	18.8
	05/21/07	1.2	3.61	487	18.4
	08/14/07	1.6	3.85	512	19.8
	11/01/07	2.1	3.82	524	19.2
	01/30/08	5.1	4.16	564	16.1
	05/12/08	0.3	4.62	413	16.7
	08/06/08	0.4	4.22	440	20.3
	11/05/08	0.2	4.29	473	19.1
	02/16/09	3.5	4.52	389	16.0
	05/18/09	1.6	4.16	352	16.2
	08/03/09	1.0	6.35	345	19.4
	11/04/09	3.2	5.11	258	20.1
	02/01/10	1.3	4.21	283	16.6
	05/18/10	2.8	4.44	253	19.0
	07/20/16	11.4	4.72	125	20.3
MW-2	03/08/06	3.2	4.92	155	16.3
	06/07/06	0.4	4.93	152	18.3
	09/07/06	0.8	4.93	154	19.2
	11/29/06	1.1	5.04	154	18.9
	05/21/07	0.3	4.08	119	18.0
	08/14/07	0.4	4.29	119	18.4
	11/01/07	0.7	4.20	113	19.5
	01/30/08	2.8	4.70	117	15.2
	05/12/08	0.2	5.01	92	16.4
	08/06/08	0.5	4.11	97	19.8
	11/05/08	0.2	4.60	104	19.7
	02/16/09	3.6	4.84	92	15.2
	05/18/09	0.4	4.70	93	15.9
	08/03/09	1.4	6.05	115	19.7
	11/04/09	0.3	4.97	121	20.0
	02/01/10	0.3	5,17	181	14.6
	05/18/10	4.4	4.88	120	17.1
	07/20/16	9.5	5.04	92	19.4

TABLE 3
SUMMARY OF FIELD PARAMETERS

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Turbidity (NTU)	pH (SU)	Sp. Cond. (µs/cm)	Temp. (deg. C)
MW-3	03/09/06	2.6	4.64	217	17.4
	06/06/06	1.1	4.51	243	19.5
	09/06/06	1.2	4.02	329	19.3
	11/29/06	3.7	4.48	312	18.3
	05/22/07	0.8	3.64	247	17.7
	08/14/07	0.8	3.78	194	19.2
	11/01/07	0.8	3.85	168	19.2
	01/30/08	0.2	4.23	189	16.9
	05/12/08	0.4	4.76	121	17.2
	08/06/08	0.7	4.14	220	20.6
	11/05/08	0.2	4.16	204	19.2
	02/16/09	0.7	4.35	167	17.5
	05/18/09	0.5	4.46	88	16.8
	08/03/09	0.5	6.19	191	19.2
	11/04/09	0.5	4.81	107	19.6
	02/01/10	0.9	5.07	121	16.4
	05/18/10	5.9	4.60	126	18.8
	07/20/16	6.6	4.52	165	19.8
MW-4	03/10/06	3.0	4.62	863	17.4
	06/06/06	3.6	4.63	717	19.8
	09/06/06	1.3	4.42	825	21.6
	11/29/06	1.1	4.73	831	18.5
	05/21/07	NS	NS	NS	NS
	08/14/07	NS	NS	NS	NS
	11/01/07	NS	NS	NS	NS
	01/30/08	NS	NS	NS	NS
	05/12/08	0.5	4.70	581	16.7
	08/06/08	0.7	4.35	546	20.8
	11/05/08	NS	NS	NS	NS
	02/16/09	5.2	4.84	515	12.6
	05/18/09	2.4	4.45	735	16.7
	08/03/09	1.9	5.12	457	20.2
	11/04/09	6.5	4.78	495	17.9
	02/01/10	2.4	4.47	506	17.4
	05/18/10	4.9	4.59	474	18.0
	07/20/16	11.0	4.65	464	20.5

TABLE 3
SUMMARY OF FIELD PARAMETERS

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Turbidity (NTU)	pH (SU)	Sp. Cond. (µs/cm)	Temp. (deg. C)
MW-4R	02/16/09	11.7	4.74	229	16.0
	05/18/09	5.7	4.62	266	17.1
	08/03/09	0.9	5.81	282	19.4
	11/04/09	12.0	4.86	278	17.8
	02/01/10	2.1	4.57	284	17.2
	05/18/10	5.5	4.67	279	18.2
	07/20/16	25.2	4.97	221	19.8
MW-5	03/09/06	8.6	4.74	346	17.5
	06/06/06	6.2	4.66	339	19.3
	09/06/06	0.9	4.37	352	19.6
	11/29/06	1.0	4.77	358	18.4
	05/21/07	0.3	3.83	356	18.3
	08/14/07	0.2	3.90	276	18.3
	11/01/07	0.2	3.81	294	18.2
	01/30/08	0.7	4.14	316	13.7
	05/12/08	0.2	4.62	233	17.1
	08/06/08	0.4	4.14	329	19.0
	11/05/08	0.3	4.39	254	18.1
	02/16/09	0.6	4.66	388	16.9
	05/18/09	1.3	4.07	398	16.4
	08/03/09	0.9	5.43	357	18.7
	11/04/09	0.4	4.65	441	17.9
	02/01/10	0.3	4.63	405	16.1
	05/18/10	1.9	4.40	415	17.4
	07/20/16	19.7	4.52	226	20.9
MW-6	07/20/16	2.4	4.51	45	20.2
MW-11	07/19/16	5.0	4.79	46	25.4
MW-12	03/08/06	1.2	4.84	237	16.1
	06/07/06	0.3	4.60	231	19.3
	09/07/06	0.6	4.50	272	18.6
	11/30/06	0.7	4.93	268	17.8
	05/22/07	0.4	4.17	252	17.7
	08/14/07	4.1	4.07	228	17.0
	11/01/07	1.3	3.75	234	17.4
	01/31/08	1.5	4.73	234	14.6
	05/13/08	0.6	4.91	211	14.7
	08/07/08	0.8	4.44	229	17.4
	11/05/08	0.5	4.49	233	17.1
	02/17/09	4.9	4.95	251	14.4
	05/18/09	2.9	4.45	195	15.0
	08/03/09	1.3	5.45	228	17.8
	11/04/09	1.1	4.62	189	17.3
	02/02/10	0.6	4.96	164	11.6
	05/19/10	0.8	4.59	162	14.5
	07/20/16	4.3	4.91	102	19.2

TABLE 3
SUMMARY OF FIELD PARAMETERS

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Measured	Turbidity (NTU)	pH (SU)	Sp. Cond. (µs/cm)	Temp. (deg. C)
MW-12D	03/09/06	1.8	7.62	164	16.9
	06/07/06	1.7	7.38	164	19.1
	09/07/06	2.9	7.17	167	19.1
	11/30/06	1.8	7.56	166	17.3
	05/22/07	1.4	6.90	153	18.4
	01/31/08	1.3	7.26	150	14.1
	02/17/09	2.3	7.46	159	12.4
	02/02/10	1.6	7.78	174	12.1
	07/19/16	8.6	7.72	152	18.7
MW-13	03/08/06	30.0	6.25	119	15.5
	06/08/06	36.0	6.21	144	19.1
	09/07/06	19.0	6.03	159	21.1
	11/30/06	48.0	6.24	193	18.6
	05/22/07	50.0	5.52	162	18.2
	08/14/07	177.0	5.29	89	21.3
	11/01/07	13.0	5.03	86	17.6
	01/31/08	8.8	5.58	116	15.0
	05/13/08	61.9	6.00	61	15.9
	08/07/08	25.3	5.30	61	20.7
	11/06/08	18.2	5.48	84	16.9
	02/17/09	12.6	5.99	106	14.1
	02/02/10	21.5	5.56	41	11.4
	07/19/16	8.5	6.47	233	21.2
MW-18	03/07/06	2.3	4.89	43	18.9
	06/06/06	0.8	4.71	41	19.7
	09/06/06	0.9	4.69	66	22.9
	11/30/06	0.8	5.09	52	18.7
	05/21/07	0.5	4.09	33	18.7
	01/30/08	0.4	4.52	55	16.5
	02/16/09	0.3	4.72	26	15.9
	02/01/10	0.5	5.02	30	15.4
	07/20/16	2.9	4.38	63	19.8
MW-23	07/19/16	2.1	4.40	38	22.2

TABLE 4
SUMMARY OF PURGING DATA

Former Trent Tube Facility
141 Hammond Street
Carrollton, Carroll County, Georgia
GEPD Facility ID HSI-10604

Well ID	Date Purged	Purge Rate (GPM)	Purge Duration (min)	Purge Volume (gal)
MW-1	07/20/16	0.04	35	1.36
MW-2	07/20/16	0.04	34	1.36
MW-3	07/20/16	0.04	33	1.36
MW-4	07/20/16	0.04	34	1.36
MW-4R	07/20/16	0.05	57	2.85
MW-5	07/20/16	0.04	34	1.36
MW-6	07/20/16	0.04	34	1.36
MW-11	07/19/16	0.04	34	1.37
MW-12	07/20/16	0.04	46	1.84
MW-12D	07/19/16	0.05	87	4.35
MW-13	07/19/16	0.04	52	2.08
MW-18	07/20/16	0.04	34	1.36
MW-23	07/19/16	0.04	88	3.60

Notes:
GPM : gallons per minute
min: minutes
gal: Gallons

ATTACHMENT A

Sampling Logs

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammond St Carrollton, GA
WELL NO:	mw-1	SAMPLE ID:	mw-1
DATE:	7-20-16		

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	10 feet to 20 feet	STATIC DEPTH TO WATER (feet):	14.15	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (20.40 feet – 14.15 feet) X 0.16 gallons/foot = 0.94 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	17.1	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	17.1	PURGING INITIATED AT:	14:10	PURGING ENDED AT:	14:45	TOTAL VOLUME PURGED (gallons):	1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
14:35	1.0	1.0	0.04	14.88	4.71	20.33	0.126	1.62	12.4	clear	none	277.1
14:38	0.12	1.12	0.04	14.90	4.72	20.30	0.125	1.65	12.0	clear	none	275.2
14:42	0.12	1.24	0.04	14.91	4.72	20.32	0.125	1.66	11.50	clear	none	273.4
14:45	0.12	1.36	0.04	14.91	4.72	20.33	0.125	1.68	11.48	clear	none	274.7

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Ash Yun	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	14:45	SAMPLING ENDED AT:	14:50
PUMP OR TUBING DEPTH IN WELL (feet):	17.1	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION:	PUMP (Y) N	TUBING Y (N (replaced))		DUPLICATE:	Y (N)		

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
mw-1	1	AG	250mL	HNO_3	Prepreserved	<2	Nickel	APP	125 mL
mw-1	1	PE	250mL	none	None	N/A	Fluoride	APP	125 mL

REMARKS: Tube Place within Screen. Turbid Slight high, Pump slow as I could.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammond St. Carrollton, GA
WELL NO:	MW-2	SAMPLE ID:	MW-2
DATE:	7.20.16		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:) feet to 77 feet	STATIC DEPTH TO WATER (feet): 12.26	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (17.35 feet – 12.26 feet) X 0.16 gallons/foot = 0.81 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 15.20	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 15.2	PURGING INITIATED AT: 11:45	PURGING ENDED AT: 12:19	TOTAL VOLUME PURGED (gallons): 1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
12:16	1.0	1.0	0.04	12.57	5.05	19.19	0.092	3.35	11.7	clear	none	283.6
12:13	0.12	1.12	0.04	12.57	5.04	19.40	0.093	3.25	9.94	clear	none	282.9
12:18	0.12	1.24	0.04	12.57	5.04	19.38	0.092	3.27	9.88	clear	none	281.9
12:19	0.12	1.36	0.04	12.57	5.04	19.37	0.092	3.29	9.51	clear	none	281.3

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ash Ym	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 12:19	SAMPLING ENDED AT: 12:24
PUMP OR TUBING DEPTH IN WELL (feet): 15.2	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-2	1	PE	250 mL	HNO3	Prepreserved	<2	Nickel	APP	125mL
MW-2	1	PE	250 mL	None	None	N/A	Fluoride	APP	125mL
MW-2	3	OG	40mL	HCl	Prepreserved	<2	VOC 8260	SM	<100mL

REMARKS: Tube Place within Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Transit Tube	SITE LOCATION:	141 Hammond st, Carrollton, GA
WELL NO:	MW3	SAMPLE ID:	MW-3
		DATE:	7-20-16

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/8	WELL SCREEN INTERVAL DEPTH: 15 feet to 25 feet	STATIC DEPTH TO WATER (feet): 19.64	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (24.4 feet – 19.64 feet) X 0.16 gallons/foot = 0.76 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	23.6	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	23.6	PURGING INITIATED AT:	9:30	PURGING ENDED AT:	10:03	TOTAL VOLUME PURGED (gallons):	1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
9:55	1.0	1.0	0.04	20.06	4.53	19.65	0.166	1.24	11.0	clear	none	295.5
9:58	0.12	1.12	0.04	20.07	4.53	19.78	0.165	1.25	9.55	clear	none	290.6
10:01	0.12	1.24	0.04	20.08	4.53	19.80	0.165	1.23	8.29	clear	none	292.3
10:03	0.12	1.36	0.04	20.09	4.52	19.79	0.165	1.22	6.61	clear	none	292.6

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Ath Km	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	10:03	SAMPLING ENDED AT:	10:08
PUMP OR TUBING DEPTH IN WELL (feet):	23.1	TUBING MATERIAL CODE:	PP	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y (N (replaced)) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW3	1	PE	250 mL	HNO3	Prepreserved	<2	Nickel	APP	125mL
MW-3	1	PE	250 mL	None	None	NA	Fluoride	APP	125mL

REMARKS: Tube Place within Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammond St. Carrollton, GA
WELL NO:	MW-4	SAMPLE ID:	MW-4
		DATE:	7.20.16

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/16	15 feet to 25 feet	21.56	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (25.25 feet – 21.56 feet) X 0.16 gallons/foot = 0.56 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
23.5	23.5	18:45	19:19	1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
19:10	1.0	1.0	0.04	22.70	4.70	29.47	0.414	4.72	16.7	clear	none	281.8
19:13	0.12	1.12	0.04	22.71	4.67	29.49	0.420	4.69	11.4	clear	none	287.2
19:16	0.12	1.24	0.04	22.72	4.66	29.51	0.467	4.71	10.5	clear	none	294.7
19:19	0.12	1.36	0.04	22.73	4.65	29.52	0.464	4.69	11.0	clear	none	297.6

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Ath Km		19:19	19:24

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
23.5	PE		

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
	1	PG	250mL	HNO_3	Preserved	<2	Nickel	PP	125 mL
	1	PE	250mL	none	None	N/A	Fluoride	PP	125 mL

Tube Placed within Screen

AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

This does not constitute all of the information required by Chapter 62-160, F.A.C.

STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Harmon St. Carrollton, GA
WELL NO:	MW-4R	SAMPLE ID:	MW-4R
DATE:	7.20.16		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/16		20.04	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (34.85 feet – 20.04 feet) X 0.16 gallons/foot = 2.36 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
25.0	29.0	17:25	18:22	2.85

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
18:13	2.40	2.40	0.05	21.30	4.99	19.80	0.221	1.60	27.3	clear	none	229.1
18:16	0.15	2.55	0.05	21.30	4.98	19.78	0.221	1.57	25.6	clear	none	227.9
18:19	0.15	2.70	0.05	21.30	4.97	19.76	0.221	1.57	26.2	clear	none	227.
18:22	0.15	2.85	0.05	21.30	4.97	19.75	0.221	1.55	25.2	clear	none	227.7
												227.6

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT: 18:27

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
23.0	PE		

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW4R	1	PE	250mL	HNO3	Prepreserved	<2	Nickel	APP	125 mL
MW4R	1	PE	250mL	None	None	N/A	Fluoride	APP	125 mL

REMARKS: Place tubing in middle of screen, used low flow/low volume method
Turbidity Slightly High / Purge Stable As I could.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hannon St, Carrollton, GA
WELL NO:	MW-5	SAMPLE ID:	MW-5
		DATE:	7-20-16

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	15 feet to 25 feet	STATIC DEPTH TO WATER (feet):	18.95	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (24.65 feet – 18.95 feet) X 0.16 gallons/foot = 0.91 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	22.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	22.0	PURGING INITIATED AT:	16:25	PURGING ENDED AT:	16:59	TOTAL VOLUME PURGED (gallons):	1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
16:50	1.0	1.0	0.04	19.39	4.53	20.92	0.226	1.00	24.2	clear	none	307
16:53	0.12	1.12	0.04	19.39	4.52	20.89	0.227	1.01	23.5	clear	none	307
16:56	0.12	1.24	0.04	19.39	4.52	20.87	0.226	1.01	22.8	clear	none	308.1
16:59	0.12	1.36	0.04	19.39	4.52	20.89	0.226	1.01	19.9	clear	none	308.1

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	16:59	SAMPLING ENDED AT:	17:04
PUMP OR TUBING DEPTH IN WELL (feet):	22.00	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION: PUMP (Y) N		TUBING Y (N (replaced))		DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-5	1	PE	250mL	HNO3	Preperserved	<2	Nickel	APP	125mL
MW-5	1	PE	250mL	None	None	N/A	Fluoride	APP	125mL

REMARKS: Tube Place within Screen. Turbidity Slightly High Pump Slow as I Can

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trant Tube	SITE LOCATION:	141 Hammon St. Carrollton, GA
WELL NO:	MW-6	SAMPLE ID:	MW-6
DATE:	7-20-16		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 17 feet to 27 feet	STATIC DEPTH TO WATER (feet): 22.67	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (27 feet – 22.67 feet) X 0.16 gallons/foot = 0.69 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 24.7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 24.7	PURGING INITIATED AT: 10:40	PURGING ENDED AT: 11:14	TOTAL VOLUME PURGED (gallons): 1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
11:05	1.00	1.00	0.04	22.75	4.49	20.10	0.046	6.13	5.28	clear	none	252.9
11:08	0.12	1.12	0.04	22.75	4.50	20.17	0.045	6.00	3.63	clear	none	254.3
11:11	0.12	1.24	0.04	22.75	4.49	20.18	0.044	6.02	1.85	clear	none	255.8
11:14	0.12	1.36	0.04	22.75	4.51	20.16	0.045	6.03	2.43	clear	none	257.1

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 11:14	SAMPLING ENDED AT: 11:19
Ash Yon			

PUMP OR TUBING DEPTH IN WELL (feet): 24.7	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y (N (replaced)) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-6	1	PE	250 ml	HNO3	Preperservan	<2	Nickel	APP	125 mL
MW-6	1	PE	250mL	None	None	N/A	Fluoride	APP	125 mL

REMARKS: Dup @ Place within Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammond St. Carrollton, GA
WELL NO:	MW-11	SAMPLE ID:	MW-11
DATE:	7-19-16		

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	17 feet to 27 feet	STATIC DEPTH TO WATER (feet):	22.74	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: (only fill out if applicable) 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY

= (27 feet − 22.74 feet) X 0.16 gallons/foot = 0.68 gallons

EQUIPMENT VOLUME PURGE: (only fill out if applicable) 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	25.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	25.0	PURGING INITIATED AT:	14:00	PURGING ENDED AT:	14:34	TOTAL VOLUME PURGED (gallons):	1.37

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
14:27	0.68	0.68	0.04	23.35	5.16	26.73	0.055	7.10	21.9	clear	none	179.6
14:25	1.00	1.00	0.04	23.51	4.79	25.50	0.051	7.04	6.57	clear	none	174.3
14:28	0.12	1.12	0.04	23.55	4.81	25.95	0.048	7.03	7.48	clear	none	174.7
14:31	0.12	1.24	0.04	23.58	4.79	25.91	0.052	7.07	6.05	clear	none	176.9
14:34	0.12	1.37	0.04	23.60	4.79	25.38	0.046	7.10	4.95	clear	none	177.6

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	AH YM	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	14:34	SAMPLING ENDED AT:	14:39
PUMP OR TUBING DEPTH IN WELL (feet):	25.0	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-11	1	PB	250mL	HNO3	Preserved	<2	Nickel	APP	125mL
	1	PB	250mL	None	None	N/A	Fluoride	APP	125 mL

REMARKS: Tube place with Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammond St. Carrollton, GA
WELL NO:	MW-12	SAMPLE ID:	MW-12
		DATE:	7-20-16

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	feet to	feet	STATIC DEPTH TO WATER (feet):	11.12	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (20.3 feet – 11.12 feet) X 0.16 gallons/foot = 1.46 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	14.1	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	14.1	PURGING INITIATED AT:	12:50	PURGING ENDED AT:	13:36	TOTAL VOLUME PURGED (gallons):	1.84

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
13:27	1.48	1.48	0.04	12.53	4.90	19.02	0.103	1.62	6.77	clear	none	281.3
13:30	0.12	1.60	0.04	12.54	4.91	19.16	0.103	1.65	4.28	clear	none	280.8
13:33	0.12	1.72	0.04	12.54	4.92	19.15	0.103	1.63	4.18	clear	none	281.2
13:36	0.12	1.84	0.04	12.54	4.91	19.15	0.102	1.65	4.31	clear	none	280.9

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	AH Km	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	13:36	SAMPLING ENDED AT:	13:41
PUMP OR TUBING DEPTH IN WELL (feet):	14.1	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-12	1	PE	250mL	HNO_3	Preprepared	<2	Nickel	APP	125mL
MW-12	1	PE	250mL	None	None	N/A	Fluoride	APP	125mL

REMARKS: Tube Place within Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Frent Tube	SITE LOCATION:	144 Hammond St. Carrollton, GA
WELL NO:	MW-12D	SAMPLE ID:	MW-12D
		DATE:	7-19-16

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	1/2	WELL SCREEN INTERVAL DEPTH:	84 feet to 94 feet	STATIC DEPTH TO WATER (feet):	0.11	PURGE PUMP TYPE OR BAILER:	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (0.010 gallons/foot X 110 feet) + .20 gallons = 1.3 gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	90.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	90.0	PURGING INITIATED AT:	17:55	PURGING ENDED AT:	19:22	TOTAL VOLUME PURGED (gallons):	4.35

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	
												one
19:13	3.9	3.9	0.05	29.95	7.74	18.82	0.155	0.55	9.65	clear	none	-88.2
19:16	0.15	4.05	0.05	30.70	7.73	18.81	0.154	0.52	9.23	clear	none	-100.
19:19	0.15	4.20	0.05	31.46	7.73	18.70	0.153	0.49	9.15	clear	none	-103.
19:22	0.15	4.35	0.05	31.97	7.72	18.68	0.152	0.50	8.55	clear	none	-100

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Ath Kn	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	19:22	SAMPLING ENDED AT:	19:27
PUMP OR TUBING DEPTH IN WELL (feet):		TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	
FIELD DECONTAMINATION: PUMP (Y) N		TUBING Y (N (replaced))		DUPLICATE: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
12D	1	PE	250mL	HNO3	preserved	<2	Nickel	APP	200mL
12D	1	PE	250mL	none	none	N/A	Fluoride	APP	200mL

REMARKS: Tube Place within Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: Former Trout Tute		SITE LOCATION: 141 Hammond St. Carrollton, GA	
WELL NO: mw-13	SAMPLE ID: mw-13		DATE: 7-19-16

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 3/16	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 7.41	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (18 feet – 7.41 feet) X 0.16 gallons/foot = 1.69 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 13.4	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 13.4	PURGING INITIATED AT: 15:55	PURGING ENDED AT: 16:47	TOTAL VOLUME PURGED (gallons): 2.08

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
16:38	1.72	1.72	0.04	12.45	6.39	22.11	0.188	0.99	11.9	clear	none	+78.8
16:41	0.12	1.84	0.04	12.76	6.40	21.37	0.195	0.79	9.75	clear	none	+83.3
16:44	0.12	1.96	0.04	12.84	6.43	21.31	0.208	0.71	9.57	clear	none	+109.8
16:47	0.12	2.08	0.04	12.98	6.47	21.22	0.233	0.68	8.51	clear	none	+121.8

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Ath Vu	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 16:47	SAMPLING ENDED AT: 16:52
PUMP OR TUBING DEPTH IN WELL (feet): 13.4	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP (Y) N	TUBING Y (N (replaced))	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
mw13	1	PE	250mL	HNO3	Preserved	<2	Nickel	APP	125mL
mw3	1	PE	250mL	none	None	N/A	Fluoride	APP	125mL

REMARKS: Tube placed within screen. Pump slow as possible but water took still drop quickly

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammon St. Carrollton, GA
WELL NO:	MW-18	SAMPLE ID:	MW-18
DATE:	7-20-22		

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	3/16	20 feet to 30 feet	24.92	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (30.25 feet – 24.92 feet) X 0.16 gallons/foot = 0.85 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
27.9	27.9	15:20	15:54	1.36

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	ORP
15:45	1.0	1.0	0.04	25.90	4.38	19.86	0.075	1.33	2.58	clear	none	245.7
15:48	0.12	1.12	0.04	25.90	4.37	19.76	0.069	1.33	2.33	clear	none	246.1
15:51	0.12	1.24	0.04	25.90	4.38	19.79	0.064	1.31	3.06	clear	none	246.9
15:54	0.12	1.36	0.04	25.90	4.38	19.81	0.063	1.33	2.89	clear	none	247.1

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
Ash Yon	Ash Yon	15:54	15:59

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
27.9	PE		

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y N (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-18	1	PE	250mL	HNO3	Prepreserved	<2	Nickel	APP	125 mL
MW-18	1	PE	250 mL	none	none	N/A	Fluoride	APP	125 mL

REMARKS: Tube Placed within Screen

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME:	Former Trent Tube	SITE LOCATION:	141 Hammond St. Carrollton, GA
WELL NO:	MW-23	SAMPLE ID:	MW-23
		DATE:	7-19-16

PURGING DATA

WELL DIAMETER (inches):	2	TUBING DIAMETER (inches):	3/16	WELL SCREEN INTERVAL DEPTH:	13.5 feet to 23 feet	STATIC DEPTH TO WATER (feet):	20.42	PURGE PUMP TYPE OR BAILER:	PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (27.3 feet – 20.42 feet) X 0.16 gallons/foot = 1.10 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	23.4	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	23.4	PURGING INITIATED AT:	11:25	PURGING ENDED AT:	12:53	TOTAL VOLUME PURGED (gallons):	3.60

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)	
11:53	1.12	1.12	0.04	20.61	4.53	21.59	0.045	10.11	10.18	clear	none	106.8
12:21	1.12	2.24	0.04	20.61	4.51	22.97	0.047	12.7	6.74	clear	none	70.7
12:49	1.12	3.36	0.04	20.61	4.48	23.05	0.041	12.40	3.42	clear	none	22.1
12:52	0.12	3.48	0.04	20.61	4.42	22.24	0.040	12.17	2.35	clear	none	32.0
12:53	0.12	3.60	0.04	20.61	4.40	22.20	0.038	12.11	2.06	clear	none	33.2

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	Ath Km	SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT:	12:53	SAMPLING ENDED AT:	12:58
PUMP OR TUBING DEPTH IN WELL (feet):	23.4	TUBING MATERIAL CODE:	PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE: ____ µm	

FIELD DECONTAMINATION: PUMP (Y) N TUBING Y N (replaced) DUPLICATE: (Y) N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW23	1	PE	250mL	HNO3	Preprezerved	<2	Nickel 6020	APP	125 mL
MW23	1	PE	250mL	None	None	N/A	Fluoride	APP	125 mL
MW23	3	CG	40mL	HCl	Preprezerved	<2	VOC 8260	SM	<100mL

REMARKS: Tube Placed within the Screen.
Purge 3 well Volume and 2 consecutive readings after S.C. Stabilized

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

ATTACHMENT B

Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Nashville
2960 Foster Creighton Drive
Nashville, TN 37204
Tel: (615)726-0177

TestAmerica Job ID: 490-108145-1
TestAmerica Sample Delivery Group: 27-225273.00/00/1
Client Project/Site: Former Trent Tube

For:
Environmental Compliance Services, Inc.
9874 Main Street, Suite 100
Woodstock, Georgia 30188-6619

Attn: Mr. Dean McCartney

Authorized for release by:
8/4/2016 2:22:42 PM
Ken Hayes, Project Manager II
(615)301-5035
ken.hayes@testamericainc.com

Designee for

Heather Baker, Project Manager I
(615)301-5043
heather.baker@testamericainc.com

Table of Contents

Sample Summary

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-108145-1	MW-1	Water	07/20/16 14:50	07/21/16 09:20
490-108145-2	MW-2	Water	07/20/16 12:24	07/21/16 09:20
490-108145-3	MW-3	Water	07/20/16 10:08	07/21/16 09:20
490-108145-4	MW-4	Water	07/20/16 19:24	07/21/16 09:20
490-108145-5	MW-4R	Water	07/20/16 18:27	07/21/16 09:20
490-108145-6	MW-5	Water	07/20/16 17:04	07/21/16 09:20
490-108145-7	MW-6	Water	07/20/16 11:19	07/21/16 09:20
490-108145-8	MW-11	Water	07/19/16 14:39	07/21/16 09:20
490-108145-9	MW-12	Water	07/20/16 13:41	07/21/16 09:20
490-108145-10	MW-13	Water	07/19/16 16:52	07/21/16 09:20
490-108145-11	MW-18	Water	07/20/16 15:59	07/21/16 09:20
490-108145-12	MW-12D	Water	07/19/16 19:27	07/21/16 09:20
490-108145-13	MW-23	Water	07/19/16 12:58	07/21/16 09:20
490-108145-14	Trip Blank	Water	07/19/16 00:01	07/21/16 09:20
490-108145-15	Rinsate	Water	07/19/16 19:45	07/21/16 09:20
490-108145-16	Field Duplicate	Water	07/19/16 00:01	07/21/16 09:20

Job ID: 490-108145-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative
490-108145-1

Comments
No additional comments.

Receipt
The samples were received on 7/21/2016 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0º C.

GC/MS VOA
Method 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 490-357218 recovered outside control limits for the following analytes: Trichlorofluoromethane.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HPLC/IC
Method 9056A: The following samples was diluted due to the nature of the sample matrix: MW-1 (490-108145-1), MW-2 (490-108145-2), MW-3 (490-108145-3), MW-4 (490-108145-4), MW-4R (490-108145-5), MW-5 (490-108145-6), MW-6 (490-108145-7), MW-12 (490-108145-9). and MW-18 (490-108145-11). Elevated reporting limits (RLs) are provided.

Method 9056A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 490-359127 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample ID: MW-1

Lab Sample ID: 490-108145-1

Date Collected: 07/20/16 14:50
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	32.3		4.00	0.400	mg/L			08/01/16 18:27	40

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.450		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 14:57	1

Client Sample ID: MW-2

Lab Sample ID: 490-108145-2

Date Collected: 07/20/16 12:24
Matrix: Water
Date Received: 07/21/16 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			07/22/16 19:42	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 19:42	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			07/22/16 19:42	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 19:42	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			07/22/16 19:42	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			07/22/16 19:42	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			07/22/16 19:42	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			07/22/16 19:42	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			07/22/16 19:42	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			07/22/16 19:42	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			07/22/16 19:42	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			07/22/16 19:42	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			07/22/16 19:42	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			07/22/16 19:42	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			07/22/16 19:42	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			07/22/16 19:42	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			07/22/16 19:42	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			07/22/16 19:42	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/22/16 19:42	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			07/22/16 19:42	1
2-Hexanone	ND		10.0	1.28	ug/L			07/22/16 19:42	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			07/22/16 19:42	1
Acetone	ND		25.0	2.66	ug/L			07/22/16 19:42	1
Benzene	ND		1.00	0.200	ug/L			07/22/16 19:42	1
Bromobenzene	ND		1.00	0.210	ug/L			07/22/16 19:42	1
Bromochloromethane	ND		1.00	0.150	ug/L			07/22/16 19:42	1
Bromodichloromethane	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Bromoform	ND		1.00	0.290	ug/L			07/22/16 19:42	1
Bromomethane	ND		1.00	0.350	ug/L			07/22/16 19:42	1
Carbon disulfide	ND		1.00	0.220	ug/L			07/22/16 19:42	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			07/22/16 19:42	1
Chlorobenzene	ND		1.00	0.180	ug/L			07/22/16 19:42	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			07/22/16 19:42	1
Chloroethane	ND		1.00	0.360	ug/L			07/22/16 19:42	1

Client Sample ID: MW-2

Lab Sample ID: 490-108145-2

Date Collected: 07/20/16 12:24

Matrix: Water

Date Received: 07/21/16 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.00	0.230	ug/L			07/22/16 19:42	1
Chloromethane	ND		1.00	0.360	ug/L			07/22/16 19:42	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			07/22/16 19:42	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Dibromomethane	ND		1.00	0.450	ug/L			07/22/16 19:42	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Ethylbenzene	ND		1.00	0.190	ug/L			07/22/16 19:42	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			07/22/16 19:42	1
Isopropylbenzene	ND		1.00	0.330	ug/L			07/22/16 19:42	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Methylene Chloride	ND		5.00	1.00	ug/L			07/22/16 19:42	1
Naphthalene	ND		5.00	0.210	ug/L			07/22/16 19:42	1
n-Butylbenzene	ND		1.00	0.240	ug/L			07/22/16 19:42	1
N-Propylbenzene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Styrene	ND		1.00	0.280	ug/L			07/22/16 19:42	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Tetrachloroethene	**0.298**	**J**	1.00	0.140	ug/L			07/22/16 19:42	1
Toluene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			07/22/16 19:42	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 19:42	1
Trichloroethene	**6.18**		1.00	0.200	ug/L			07/22/16 19:42	1
Trichlorofluoromethane	ND	*	1.00	0.210	ug/L			07/22/16 19:42	1
Vinyl chloride	ND		1.00	0.180	ug/L			07/22/16 19:42	1
Xylenes, Total	ND		3.00	0.580	ug/L			07/22/16 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*07/22/16 19:42*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*07/22/16 19:42*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*07/22/16 19:42*	*1*
Toluene-d8 (Surr)	*101*		*70 - 130*		*07/22/16 19:42*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**22.4**		2.00	0.200	mg/L			08/01/16 18:47	20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.698**		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 15:24	1

Client Sample ID: MW-3

Lab Sample ID: 490-108145-3

Date Collected: 07/20/16 10:08

Matrix: Water

Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**24.2**		2.00	0.200	mg/L			08/01/16 19:07	20

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: MW-3

Lab Sample ID: 490-108145-3
Date Collected: 07/20/16 10:08
Matrix: Water
Date Received: 07/21/16 09:20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.869		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 15:30	1

Client Sample ID: MW-4

Lab Sample ID: 490-108145-4
Date Collected: 07/20/16 19:24
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	182		20.0	2.00	mg/L			08/01/16 19:27	200

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	4.84		0.0200	0.00500	mg/L		07/24/16 12:38	07/26/16 20:31	10

Client Sample ID: MW-4R

Lab Sample ID: 490-108145-5
Date Collected: 07/20/16 18:27
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	125		10.0	1.00	mg/L			08/01/16 19:47	100

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	1.65		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 15:51	1

Client Sample ID: MW-5

Lab Sample ID: 490-108145-6
Date Collected: 07/20/16 17:04
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	93.2		5.00	0.500	mg/L			07/30/16 01:03	50

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	2.18		0.0100	0.00250	mg/L		07/24/16 12:38	07/26/16 20:37	5

Client Sample ID: MW-6

Lab Sample ID: 490-108145-7
Date Collected: 07/20/16 11:19
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	10.5		1.00	0.100	mg/L			08/03/16 13:54	10

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.246		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 16:03	1

Client Sample ID: MW-11

Lab Sample ID: 490-108145-8

Date Collected: 07/19/16 14:39
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0253	J	0.100	0.0100	mg/L			07/23/16 02:48	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00131	J	0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 16:08	1

Client Sample ID: MW-12

Lab Sample ID: 490-108145-9

Date Collected: 07/20/16 13:41
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	34.1		2.00	0.200	mg/L			08/03/16 15:37	20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.360		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 16:14	1

Client Sample ID: MW-13

Lab Sample ID: 490-108145-10

Date Collected: 07/19/16 16:52
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.154		0.100	0.0100	mg/L			07/23/16 03:05	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00572		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 16:19	1

Client Sample ID: MW-18

Lab Sample ID: 490-108145-11

Date Collected: 07/20/16 15:59
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	1.71		0.500	0.0500	mg/L			07/30/16 02:29	5

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.0461		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 16:25	1

Client Sample ID: MW-12D

Lab Sample ID: 490-108145-12

Date Collected: 07/19/16 19:27
Matrix: Water
Date Received: 07/21/16 09:20

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.372		0.100	0.0100	mg/L			07/23/16 03:22	1

Client Sample ID: MW-12D

Lab Sample ID: 490-108145-12

Date Collected: 07/19/16 19:27
Matrix: Water
Date Received: 07/21/16 09:20

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00121	J	0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 16:30	1

Client Sample ID: MW-23

Lab Sample ID: 490-108145-13

Date Collected: 07/19/16 12:58
Matrix: Water
Date Received: 07/21/16 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			07/22/16 20:11	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 20:11	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			07/22/16 20:11	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 20:11	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			07/22/16 20:11	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			07/22/16 20:11	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			07/22/16 20:11	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			07/22/16 20:11	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			07/22/16 20:11	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			07/22/16 20:11	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			07/22/16 20:11	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			07/22/16 20:11	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			07/22/16 20:11	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			07/22/16 20:11	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			07/22/16 20:11	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			07/22/16 20:11	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			07/22/16 20:11	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			07/22/16 20:11	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/22/16 20:11	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			07/22/16 20:11	1
2-Hexanone	ND		10.0	1.28	ug/L			07/22/16 20:11	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			07/22/16 20:11	1
Acetone	ND		25.0	2.66	ug/L			07/22/16 20:11	1
Benzene	ND		1.00	0.200	ug/L			07/22/16 20:11	1
Bromobenzene	ND		1.00	0.210	ug/L			07/22/16 20:11	1
Bromochloromethane	ND		1.00	0.150	ug/L			07/22/16 20:11	1
Bromodichloromethane	ND		1.00	0.170	ug/L			07/22/16 20:11	1
Bromoform	ND		1.00	0.290	ug/L			07/22/16 20:11	1
Bromomethane	ND		1.00	0.350	ug/L			07/22/16 20:11	1
Carbon disulfide	ND		1.00	0.220	ug/L			07/22/16 20:11	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			07/22/16 20:11	1
Chlorobenzene	ND		1.00	0.180	ug/L			07/22/16 20:11	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			07/22/16 20:11	1
Chloroethane	ND		1.00	0.360	ug/L			07/22/16 20:11	1
Chloroform	ND		1.00	0.230	ug/L			07/22/16 20:11	1
Chloromethane	ND		1.00	0.360	ug/L			07/22/16 20:11	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			07/22/16 20:11	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 20:11	1

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: MW-23

Lab Sample ID: 490-108145-13

Date Collected: 07/19/16 12:58
Date Received: 07/21/16 09:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromomethane	ND		1.00	0.450	ug/L			07/22/16 20:11	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			07/22/16 20:11	1
Ethylbenzene	ND		1.00	0.190	ug/L			07/22/16 20:11	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			07/22/16 20:11	1
Isopropylbenzene	ND		1.00	0.330	ug/L			07/22/16 20:11	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			07/22/16 20:11	1
Methylene Chloride	ND		5.00	1.00	ug/L			07/22/16 20:11	1
Naphthalene	ND		5.00	0.210	ug/L			07/22/16 20:11	1
n-Butylbenzene	ND		1.00	0.240	ug/L			07/22/16 20:11	1
N-Propylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
Styrene	ND		1.00	0.280	ug/L			07/22/16 20:11	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
Tetrachloroethene	ND		1.00	0.140	ug/L			07/22/16 20:11	1
Toluene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			07/22/16 20:11	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 20:11	1
Trichloroethene	ND		1.00	0.200	ug/L			07/22/16 20:11	1
Trichlorofluoromethane	ND	*	1.00	0.210	ug/L			07/22/16 20:11	1
Vinyl chloride	ND		1.00	0.180	ug/L			07/22/16 20:11	1
Xylenes, Total	ND		3.00	0.580	ug/L			07/22/16 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*70 - 130*		*07/22/16 20:11*	*1*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*		*07/22/16 20:11*	*1*
Dibromofluoromethane (Surr)	*93*		*70 - 130*		*07/22/16 20:11*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*07/22/16 20:11*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.0173**	**J**	0.100	0.0100	mg/L			07/23/16 03:39	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.00160**	**J**	0.00200	0.000500	mg/L		07/26/16 08:35	07/26/16 22:06	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-108145-14

Date Collected: 07/19/16 00:01
Date Received: 07/21/16 09:20

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			07/22/16 16:51	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 16:51	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			07/22/16 16:51	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 16:51	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			07/22/16 16:51	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			07/22/16 16:51	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			07/22/16 16:51	1

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: Trip Blank
Date Collected: 07/19/16 00:01
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			07/22/16 16:51	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			07/22/16 16:51	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			07/22/16 16:51	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			07/22/16 16:51	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			07/22/16 16:51	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			07/22/16 16:51	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			07/22/16 16:51	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			07/22/16 16:51	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			07/22/16 16:51	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			07/22/16 16:51	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			07/22/16 16:51	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/22/16 16:51	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			07/22/16 16:51	1
2-Hexanone	ND		10.0	1.28	ug/L			07/22/16 16:51	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			07/22/16 16:51	1
Acetone	ND		25.0	2.66	ug/L			07/22/16 16:51	1
Benzene	ND		1.00	0.200	ug/L			07/22/16 16:51	1
Bromobenzene	ND		1.00	0.210	ug/L			07/22/16 16:51	1
Bromochloromethane	ND		1.00	0.150	ug/L			07/22/16 16:51	1
Bromodichloromethane	ND		1.00	0.170	ug/L			07/22/16 16:51	1
Bromoform	ND		1.00	0.290	ug/L			07/22/16 16:51	1
Bromomethane	ND		1.00	0.350	ug/L			07/22/16 16:51	1
Carbon disulfide	ND		1.00	0.220	ug/L			07/22/16 16:51	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			07/22/16 16:51	1
Chlorobenzene	ND		1.00	0.180	ug/L			07/22/16 16:51	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			07/22/16 16:51	1
Chloroethane	ND		1.00	0.360	ug/L			07/22/16 16:51	1
Chloroform	ND		1.00	0.230	ug/L			07/22/16 16:51	1
Chloromethane	ND		1.00	0.360	ug/L			07/22/16 16:51	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			07/22/16 16:51	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
Dibromomethane	ND		1.00	0.450	ug/L			07/22/16 16:51	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			07/22/16 16:51	1
Ethylbenzene	ND		1.00	0.190	ug/L			07/22/16 16:51	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			07/22/16 16:51	1
Isopropylbenzene	ND		1.00	0.330	ug/L			07/22/16 16:51	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			07/22/16 16:51	1
Methylene Chloride	ND		5.00	1.00	ug/L			07/22/16 16:51	1
Naphthalene	ND		5.00	0.210	ug/L			07/22/16 16:51	1
n-Butylbenzene	ND		1.00	0.240	ug/L			07/22/16 16:51	1
N-Propylbenzene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
Styrene	ND		1.00	0.280	ug/L			07/22/16 16:51	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 16:51	1

Client Sample ID: Trip Blank

Lab Sample ID: 490-108145-14

Date Collected: 07/19/16 00:01

Matrix: Water

Date Received: 07/21/16 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.00	0.140	ug/L			07/22/16 16:51	1
Toluene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			07/22/16 16:51	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 16:51	1
Trichloroethene	ND		1.00	0.200	ug/L			07/22/16 16:51	1
Trichlorofluoromethane	ND	*	1.00	0.210	ug/L			07/22/16 16:51	1
Vinyl chloride	ND		1.00	0.180	ug/L			07/22/16 16:51	1
Xylenes, Total	ND		3.00	0.580	ug/L			07/22/16 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*07/22/16 16:51*	*1*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*		*07/22/16 16:51*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*07/22/16 16:51*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*07/22/16 16:51*	*1*

Client Sample ID: Rinsate

Lab Sample ID: 490-108145-15

Date Collected: 07/19/16 19:45

Matrix: Water

Date Received: 07/21/16 09:20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			07/22/16 17:19	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 17:19	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			07/22/16 17:19	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 17:19	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			07/22/16 17:19	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			07/22/16 17:19	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			07/22/16 17:19	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			07/22/16 17:19	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			07/22/16 17:19	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			07/22/16 17:19	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			07/22/16 17:19	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			07/22/16 17:19	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			07/22/16 17:19	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			07/22/16 17:19	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			07/22/16 17:19	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			07/22/16 17:19	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			07/22/16 17:19	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			07/22/16 17:19	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/22/16 17:19	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			07/22/16 17:19	1
2-Hexanone	ND		10.0	1.28	ug/L			07/22/16 17:19	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			07/22/16 17:19	1
Acetone	ND		25.0	2.66	ug/L			07/22/16 17:19	1
Benzene	ND		1.00	0.200	ug/L			07/22/16 17:19	1
Bromobenzene	ND		1.00	0.210	ug/L			07/22/16 17:19	1

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: Rinsate
Date Collected: 07/19/16 19:45
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		1.00	0.150	ug/L			07/22/16 17:19	1
Bromodichloromethane	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Bromoform	ND		1.00	0.290	ug/L			07/22/16 17:19	1
Bromomethane	ND		1.00	0.350	ug/L			07/22/16 17:19	1
Carbon disulfide	ND		1.00	0.220	ug/L			07/22/16 17:19	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			07/22/16 17:19	1
Chlorobenzene	ND		1.00	0.180	ug/L			07/22/16 17:19	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			07/22/16 17:19	1
Chloroethane	ND		1.00	0.360	ug/L			07/22/16 17:19	1
Chloroform	ND		1.00	0.230	ug/L			07/22/16 17:19	1
Chloromethane	ND		1.00	0.360	ug/L			07/22/16 17:19	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			07/22/16 17:19	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Dibromomethane	ND		1.00	0.450	ug/L			07/22/16 17:19	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Ethylbenzene	ND		1.00	0.190	ug/L			07/22/16 17:19	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			07/22/16 17:19	1
Isopropylbenzene	ND		1.00	0.330	ug/L			07/22/16 17:19	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Methylene Chloride	ND		5.00	1.00	ug/L			07/22/16 17:19	1
Naphthalene	ND		5.00	0.210	ug/L			07/22/16 17:19	1
n-Butylbenzene	ND		1.00	0.240	ug/L			07/22/16 17:19	1
N-Propylbenzene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Styrene	ND		1.00	0.280	ug/L			07/22/16 17:19	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Tetrachloroethene	ND		1.00	0.140	ug/L			07/22/16 17:19	1
Toluene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			07/22/16 17:19	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 17:19	1
Trichloroethene	ND		1.00	0.200	ug/L			07/22/16 17:19	1
Trichlorofluoromethane	ND	*	1.00	0.210	ug/L			07/22/16 17:19	1
Vinyl chloride	ND		1.00	0.180	ug/L			07/22/16 17:19	1
Xylenes, Total	ND		3.00	0.580	ug/L			07/22/16 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*70 - 130*		*07/22/16 17:19*	*1*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*		*07/22/16 17:19*	*1*
Dibromofluoromethane (Surr)	*94*		*70 - 130*		*07/22/16 17:19*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*07/22/16 17:19*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.100	0.0100	mg/L			07/23/16 03:56	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.000790**	**J**	0.00200	0.000500	mg/L		07/26/16 08:35	07/26/16 22:12	1

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: Field Duplicate
Date Collected: 07/19/16 00:01
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			07/22/16 20:39	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 20:39	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			07/22/16 20:39	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 20:39	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			07/22/16 20:39	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			07/22/16 20:39	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			07/22/16 20:39	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			07/22/16 20:39	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			07/22/16 20:39	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			07/22/16 20:39	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			07/22/16 20:39	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			07/22/16 20:39	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			07/22/16 20:39	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			07/22/16 20:39	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			07/22/16 20:39	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			07/22/16 20:39	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			07/22/16 20:39	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			07/22/16 20:39	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/22/16 20:39	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			07/22/16 20:39	1
2-Hexanone	ND		10.0	1.28	ug/L			07/22/16 20:39	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			07/22/16 20:39	1
Acetone	ND		25.0	2.66	ug/L			07/22/16 20:39	1
Benzene	ND		1.00	0.200	ug/L			07/22/16 20:39	1
Bromobenzene	ND		1.00	0.210	ug/L			07/22/16 20:39	1
Bromochloromethane	ND		1.00	0.150	ug/L			07/22/16 20:39	1
Bromodichloromethane	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Bromoform	ND		1.00	0.290	ug/L			07/22/16 20:39	1
Bromomethane	ND		1.00	0.350	ug/L			07/22/16 20:39	1
Carbon disulfide	ND		1.00	0.220	ug/L			07/22/16 20:39	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			07/22/16 20:39	1
Chlorobenzene	ND		1.00	0.180	ug/L			07/22/16 20:39	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			07/22/16 20:39	1
Chloroethane	ND		1.00	0.360	ug/L			07/22/16 20:39	1
Chloroform	ND		1.00	0.230	ug/L			07/22/16 20:39	1
Chloromethane	ND		1.00	0.360	ug/L			07/22/16 20:39	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			07/22/16 20:39	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Dibromomethane	ND		1.00	0.450	ug/L			07/22/16 20:39	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Ethylbenzene	ND		1.00	0.190	ug/L			07/22/16 20:39	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			07/22/16 20:39	1
Isopropylbenzene	ND		1.00	0.330	ug/L			07/22/16 20:39	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Methylene Chloride	ND		5.00	1.00	ug/L			07/22/16 20:39	1

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: Field Duplicate
Date Collected: 07/19/16 00:01
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.00	0.210	ug/L			07/22/16 20:39	1
n-Butylbenzene	ND		1.00	0.240	ug/L			07/22/16 20:39	1
N-Propylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Styrene	ND		1.00	0.280	ug/L			07/22/16 20:39	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Tetrachloroethene	ND		1.00	0.140	ug/L			07/22/16 20:39	1
Toluene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			07/22/16 20:39	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 20:39	1
Trichloroethene	ND		1.00	0.200	ug/L			07/22/16 20:39	1
Trichlorofluoromethane	ND	*	1.00	0.210	ug/L			07/22/16 20:39	1
Vinyl chloride	ND		1.00	0.180	ug/L			07/22/16 20:39	1
Xylenes, Total	ND		3.00	0.580	ug/L			07/22/16 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*70 - 130*		*07/22/16 20:39*	*1*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*07/22/16 20:39*	*1*
Dibromofluoromethane (Surr)	*97*		*70 - 130*		*07/22/16 20:39*	*1*
Toluene-d8 (Surr)	*103*		*70 - 130*		*07/22/16 20:39*	*1*

Method: 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.0175	J	0.100	0.0100	mg/L			07/23/16 04:13	1

Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.00173	J	0.00200	0.000500	mg/L		07/26/16 08:35	07/26/16 22:18	1

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-357218/7
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.00	0.150	ug/L			07/22/16 15:44	1
1,1,1-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 15:44	1
1,1,2,2-Tetrachloroethane	ND		1.00	0.190	ug/L			07/22/16 15:44	1
1,1,2-Trichloroethane	ND		1.00	0.190	ug/L			07/22/16 15:44	1
1,1-Dichloroethane	ND		1.00	0.240	ug/L			07/22/16 15:44	1
1,1-Dichloroethene	ND		1.00	0.250	ug/L			07/22/16 15:44	1
1,1-Dichloropropene	ND		1.00	0.200	ug/L			07/22/16 15:44	1
1,2,3-Trichlorobenzene	ND		1.00	0.230	ug/L			07/22/16 15:44	1
1,2,3-Trichloropropane	ND		1.00	0.230	ug/L			07/22/16 15:44	1
1,2,4-Trichlorobenzene	ND		1.00	0.200	ug/L			07/22/16 15:44	1
1,2,4-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
1,2-Dibromo-3-Chloropropane	ND		10.0	0.940	ug/L			07/22/16 15:44	1
1,2-Dibromoethane (EDB)	ND		1.00	0.210	ug/L			07/22/16 15:44	1
1,2-Dichlorobenzene	ND		1.00	0.190	ug/L			07/22/16 15:44	1
1,2-Dichloroethane	ND		1.00	0.200	ug/L			07/22/16 15:44	1
1,2-Dichloropropane	ND		1.00	0.250	ug/L			07/22/16 15:44	1
1,3,5-Trimethylbenzene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
1,3-Dichlorobenzene	ND		1.00	0.180	ug/L			07/22/16 15:44	1
1,3-Dichloropropane	ND		1.00	0.190	ug/L			07/22/16 15:44	1
1,4-Dichlorobenzene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
2,2-Dichloropropane	ND		1.00	0.160	ug/L			07/22/16 15:44	1
2-Butanone (MEK)	ND		50.0	2.64	ug/L			07/22/16 15:44	1
2-Chlorotoluene	ND		1.00	0.180	ug/L			07/22/16 15:44	1
2-Hexanone	ND		10.0	1.28	ug/L			07/22/16 15:44	1
4-Chlorotoluene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
4-Methyl-2-pentanone (MIBK)	ND		10.0	0.810	ug/L			07/22/16 15:44	1
Acetone	ND		25.0	2.66	ug/L			07/22/16 15:44	1
Benzene	ND		1.00	0.200	ug/L			07/22/16 15:44	1
Bromobenzene	ND		1.00	0.210	ug/L			07/22/16 15:44	1
Bromochloromethane	ND		1.00	0.150	ug/L			07/22/16 15:44	1
Bromodichloromethane	ND		1.00	0.170	ug/L			07/22/16 15:44	1
Bromoform	ND		1.00	0.290	ug/L			07/22/16 15:44	1
Bromomethane	ND		1.00	0.350	ug/L			07/22/16 15:44	1
Carbon disulfide	ND		1.00	0.220	ug/L			07/22/16 15:44	1
Carbon tetrachloride	ND		1.00	0.180	ug/L			07/22/16 15:44	1
Chlorobenzene	ND		1.00	0.180	ug/L			07/22/16 15:44	1
Chlorodibromomethane	ND		1.00	0.250	ug/L			07/22/16 15:44	1
Chloroethane	ND		1.00	0.360	ug/L			07/22/16 15:44	1
Chloroform	ND		1.00	0.230	ug/L			07/22/16 15:44	1
Chloromethane	ND		1.00	0.360	ug/L			07/22/16 15:44	1
cis-1,2-Dichloroethene	ND		1.00	0.210	ug/L			07/22/16 15:44	1
cis-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
Dibromomethane	ND		1.00	0.450	ug/L			07/22/16 15:44	1
Dichlorodifluoromethane	ND		1.00	0.170	ug/L			07/22/16 15:44	1
Ethylbenzene	ND		1.00	0.190	ug/L			07/22/16 15:44	1
Hexachlorobutadiene	ND		2.00	0.380	ug/L			07/22/16 15:44	1
Isopropylbenzene	ND		1.00	0.330	ug/L			07/22/16 15:44	1
Methyl tert-butyl ether	ND		1.00	0.170	ug/L			07/22/16 15:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-357218/7
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.00	1.00	ug/L			07/22/16 15:44	1
Naphthalene	ND		5.00	0.210	ug/L			07/22/16 15:44	1
n-Butylbenzene	ND		1.00	0.240	ug/L			07/22/16 15:44	1
N-Propylbenzene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
p-Isopropyltoluene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
sec-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
Styrene	ND		1.00	0.280	ug/L			07/22/16 15:44	1
tert-Butylbenzene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
Tetrachloroethene	ND		1.00	0.140	ug/L			07/22/16 15:44	1
Toluene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
trans-1,2-Dichloroethene	ND		1.00	0.230	ug/L			07/22/16 15:44	1
trans-1,3-Dichloropropene	ND		1.00	0.170	ug/L			07/22/16 15:44	1
Trichloroethene	ND		1.00	0.200	ug/L			07/22/16 15:44	1
Trichlorofluoromethane	ND		1.00	0.210	ug/L			07/22/16 15:44	1
Vinyl chloride	ND		1.00	0.180	ug/L			07/22/16 15:44	1
Xylenes, Total	ND		3.00	0.580	ug/L			07/22/16 15:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 130*		*07/22/16 15:44*	*1*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*		*07/22/16 15:44*	*1*
Dibromofluoromethane (Surr)	*95*		*70 - 130*		*07/22/16 15:44*	*1*
Toluene-d8 (Surr)	*102*		*70 - 130*		*07/22/16 15:44*	*1*

Lab Sample ID: LCS 490-357218/3
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	20.0	17.14		ug/L		86	70 - 130
1,1,1-Trichloroethane	20.0	15.95		ug/L		80	70 - 135
1,1,2,2-Tetrachloroethane	20.0	18.79		ug/L		94	69 - 131
1,1,2-Trichloroethane	20.0	18.23		ug/L		91	70 - 130
1,1-Dichloroethane	20.0	19.31		ug/L		97	70 - 130
1,1-Dichloroethene	20.0	19.13		ug/L		96	70 - 132
1,1-Dichloropropene	20.0	17.84		ug/L		89	70 - 130
1,2,3-Trichlorobenzene	20.0	16.87		ug/L		84	46 - 150
1,2,3-Trichloropropane	20.0	17.90		ug/L		90	70 - 131
1,2,4-Trichlorobenzene	20.0	17.12		ug/L		86	58 - 147
1,2,4-Trimethylbenzene	20.0	20.51		ug/L		103	70 - 130
1,2-Dibromo-3-Chloropropane	20.0	15.65		ug/L		78	45 - 138
1,2-Dibromoethane (EDB)	20.0	17.85		ug/L		89	70 - 130
1,2-Dichlorobenzene	20.0	19.11		ug/L		96	70 - 130
1,2-Dichloroethane	20.0	17.19		ug/L		86	70 - 130
1,2-Dichloropropane	20.0	20.13		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	20.0	20.51		ug/L		103	70 - 130
1,3-Dichlorobenzene	20.0	19.27		ug/L		96	70 - 130
1,3-Dichloropropane	20.0	18.38		ug/L		92	70 - 130
1,4-Dichlorobenzene	20.0	18.87		ug/L		94	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-357218/3
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	20.0	15.74		ug/L		79	60 - 143
2-Butanone (MEK)	100	74.91		ug/L		75	55 - 143
2-Chlorotoluene	20.0	18.49		ug/L		92	70 - 130
2-Hexanone	100	87.10		ug/L		87	54 - 142
4-Chlorotoluene	20.0	20.60		ug/L		103	70 - 130
4-Methyl-2-pentanone (MIBK)	100	88.82		ug/L		89	60 - 137
Acetone	100	78.06		ug/L		78	39 - 150
Benzene	20.0	18.96		ug/L		95	70 - 130
Bromobenzene	20.0	20.17		ug/L		101	70 - 130
Bromochloromethane	20.0	17.23		ug/L		86	70 - 130
Bromodichloromethane	20.0	18.62		ug/L		93	70 - 130
Bromoform	20.0	15.57		ug/L		78	70 - 137
Bromomethane	20.0	19.28		ug/L		96	53 - 150
Carbon disulfide	20.0	16.66		ug/L		83	64 - 135
Carbon tetrachloride	20.0	15.93		ug/L		80	70 - 147
Chlorobenzene	20.0	19.27		ug/L		96	70 - 130
Chlorodibromomethane	20.0	16.53		ug/L		83	70 - 133
Chloroethane	20.0	18.17		ug/L		91	60 - 138
Chloroform	20.0	17.56		ug/L		88	70 - 130
Chloromethane	20.0	17.84		ug/L		89	33 - 150
cis-1,2-Dichloroethene	20.0	18.75		ug/L		94	70 - 130
cis-1,3-Dichloropropene	20.0	17.86		ug/L		89	70 - 133
Dibromomethane	20.0	17.89		ug/L		89	70 - 130
Dichlorodifluoromethane	20.0	17.29		ug/L		86	48 - 150
Ethylbenzene	20.0	19.49		ug/L		97	70 - 130
Hexachlorobutadiene	20.0	17.66		ug/L		88	70 - 138
Isopropylbenzene	20.0	19.78		ug/L		99	70 - 131
Methyl tert-butyl ether	20.0	16.06		ug/L		80	70 - 130
Methylene Chloride	20.0	18.19		ug/L		91	70 - 130
Naphthalene	20.0	18.44		ug/L		92	54 - 150
n-Butylbenzene	20.0	18.96		ug/L		95	68 - 137
N-Propylbenzene	20.0	19.21		ug/L		96	70 - 134
p-Isopropyltoluene	20.0	19.21		ug/L		96	66 - 130
sec-Butylbenzene	20.0	19.39		ug/L		97	70 - 135
Styrene	20.0	19.28		ug/L		96	70 - 130
tert-Butylbenzene	20.0	19.87		ug/L		99	70 - 130
Tetrachloroethene	20.0	19.09		ug/L		95	70 - 130
Toluene	20.0	19.54		ug/L		98	70 - 130
trans-1,2-Dichloroethene	20.0	19.65		ug/L		98	70 - 130
trans-1,3-Dichloropropene	20.0	16.61		ug/L		83	63 - 142
Trichloroethene	20.0	19.41		ug/L		97	70 - 130
Trichlorofluoromethane	20.0	17.30		ug/L		86	59 - 150
Vinyl chloride	20.0	19.76		ug/L		99	57 - 137
Xylenes, Total	40.0	39.13		ug/L		98	70 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-357218/3
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*89*		*70 - 130*
Toluene-d8 (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 490-357218/4
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			20.0	17.28		ug/L		86	70 - 130	1	13
1,1,1-Trichloroethane			20.0	15.75		ug/L		79	70 - 135	1	15
1,1,2,2-Tetrachloroethane			20.0	18.45		ug/L		92	69 - 131	2	15
1,1,2-Trichloroethane			20.0	18.29		ug/L		91	70 - 130	0	13
1,1-Dichloroethane			20.0	19.09		ug/L		95	70 - 130	1	17
1,1-Dichloroethene			20.0	19.71		ug/L		99	70 - 132	3	20
1,1-Dichloropropene			20.0	17.54		ug/L		88	70 - 130	2	16
1,2,3-Trichlorobenzene			20.0	17.32		ug/L		87	46 - 150	3	16
1,2,3-Trichloropropane			20.0	17.68		ug/L		88	70 - 131	1	14
1,2,4-Trichlorobenzene			20.0	17.22		ug/L		86	58 - 147	1	15
1,2,4-Trimethylbenzene			20.0	20.33		ug/L		102	70 - 130	1	13
1,2-Dibromo-3-Chloropropane			20.0	15.34		ug/L		77	45 - 138	2	19
1,2-Dibromoethane (EDB)			20.0	17.91		ug/L		90	70 - 130	0	13
1,2-Dichlorobenzene			20.0	19.09		ug/L		95	70 - 130	0	12
1,2-Dichloroethane			20.0	17.49		ug/L		87	70 - 130	2	13
1,2-Dichloropropane			20.0	20.02		ug/L		100	70 - 130	1	15
1,3,5-Trimethylbenzene			20.0	20.03		ug/L		100	70 - 130	2	14
1,3-Dichlorobenzene			20.0	19.50		ug/L		97	70 - 130	1	13
1,3-Dichloropropane			20.0	18.43		ug/L		92	70 - 130	0	12
1,4-Dichlorobenzene			20.0	18.87		ug/L		94	70 - 130	0	12
2,2-Dichloropropane			20.0	15.20		ug/L		76	60 - 143	3	20
2-Butanone (MEK)			100	76.64		ug/L		77	55 - 143	2	19
2-Chlorotoluene			20.0	18.09		ug/L		90	70 - 130	2	15
2-Hexanone			100	87.31		ug/L		87	54 - 142	0	17
4-Chlorotoluene			20.0	20.29		ug/L		101	70 - 130	2	15
4-Methyl-2-pentanone (MIBK)			100	88.67		ug/L		89	60 - 137	0	21
Acetone			100	76.13		ug/L		76	39 - 150	3	23
Benzene			20.0	19.04		ug/L		95	70 - 130	0	12
Bromobenzene			20.0	20.08		ug/L		100	70 - 130	0	16
Bromochloromethane			20.0	16.61		ug/L		83	70 - 130	4	16
Bromodichloromethane			20.0	18.36		ug/L		92	70 - 130	1	14
Bromoform			20.0	15.64		ug/L		78	70 - 137	0	14
Bromomethane			20.0	19.11		ug/L		96	53 - 150	1	19
Carbon disulfide			20.0	16.69		ug/L		83	64 - 135	0	16
Carbon tetrachloride			20.0	15.39		ug/L		77	70 - 147	3	16
Chlorobenzene			20.0	19.43		ug/L		97	70 - 130	1	12
Chlorodibromomethane			20.0	16.96		ug/L		85	70 - 133	3	13
Chloroethane			20.0	18.07		ug/L		90	60 - 138	1	15
Chloroform			20.0	17.51		ug/L		88	70 - 130	0	14
Chloromethane			20.0	17.85		ug/L		89	33 - 150	0	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-357218/4
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,2-Dichloroethene	20.0	18.39		ug/L		92	70 - 130	2	15
cis-1,3-Dichloropropene	20.0	17.77		ug/L		89	70 - 133	0	15
Dibromomethane	20.0	17.47		ug/L		87	70 - 130	2	14
Dichlorodifluoromethane	20.0	17.11		ug/L		86	48 - 150	1	16
Ethylbenzene	20.0	19.63		ug/L		98	70 - 130	1	12
Hexachlorobutadiene	20.0	17.54		ug/L		88	70 - 138	1	16
Isopropylbenzene	20.0	20.01		ug/L		100	70 - 131	1	13
Methyl tert-butyl ether	20.0	16.51		ug/L		83	70 - 130	3	16
Methylene Chloride	20.0	18.18		ug/L		91	70 - 130	0	15
Naphthalene	20.0	18.53		ug/L		93	54 - 150	0	15
n-Butylbenzene	20.0	18.54		ug/L		93	68 - 137	2	14
N-Propylbenzene	20.0	19.08		ug/L		95	70 - 134	1	14
p-Isopropyltoluene	20.0	19.06		ug/L		95	66 - 130	1	13
sec-Butylbenzene	20.0	19.06		ug/L		95	70 - 135	2	14
Styrene	20.0	19.41		ug/L		97	70 - 130	1	12
tert-Butylbenzene	20.0	19.75		ug/L		99	70 - 130	1	14
Tetrachloroethene	20.0	18.72		ug/L		94	70 - 130	2	17
Toluene	20.0	19.54		ug/L		98	70 - 130	0	13
trans-1,2-Dichloroethene	20.0	19.65		ug/L		98	70 - 130	0	15
trans-1,3-Dichloropropene	20.0	16.65		ug/L		83	63 - 142	0	13
Trichloroethene	20.0	19.08		ug/L		95	70 - 130	2	14
Trichlorofluoromethane	20.0	12.23	*	ug/L		61	59 - 150	34	22
Vinyl chloride	20.0	19.41		ug/L		97	57 - 137	2	15
Xylenes, Total	40.0	39.50		ug/L		99	70 - 132	1	11

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*70 - 130*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
Dibromofluoromethane (Surr)	*91*		*70 - 130*
Toluene-d8 (Surr)	*102*		*70 - 130*

Lab Sample ID: 490-108128-A-1 MS
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		20.0	17.18		ug/L		86	70 - 131
1,1,1-Trichloroethane	ND		20.0	16.34		ug/L		82	68 - 144
1,1,2,2-Tetrachloroethane	ND		20.0	19.57		ug/L		98	56 - 145
1,1,2-Trichloroethane	ND		20.0	19.38		ug/L		97	70 - 130
1,1-Dichloroethane	0.516	J	20.0	20.01		ug/L		97	61 - 139
1,1-Dichloroethene	ND		20.0	20.35		ug/L		102	54 - 150
1,1-Dichloropropene	ND		20.0	18.24		ug/L		91	54 - 150
1,2,3-Trichlorobenzene	ND		20.0	15.63		ug/L		78	36 - 150
1,2,3-Trichloropropane	ND		20.0	17.62		ug/L		88	65 - 131
1,2,4-Trichlorobenzene	ND		20.0	16.11		ug/L		81	47 - 147
1,2,4-Trimethylbenzene	ND		20.0	20.00		ug/L		100	64 - 136
1,2-Dibromo-3-Chloropropane	ND		20.0	15.09		ug/L		75	38 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-108128-A-1 MS
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromoethane (EDB)	ND		20.0	19.02		ug/L		95	65 - 137
1,2-Dichlorobenzene	ND		20.0	19.32		ug/L		97	70 - 130
1,2-Dichloroethane	ND		20.0	18.21		ug/L		91	64 - 136
1,2-Dichloropropane	ND		20.0	20.93		ug/L		105	67 - 130
1,3,5-Trimethylbenzene	ND		20.0	20.19		ug/L		101	69 - 139
1,3-Dichlorobenzene	ND		20.0	19.32		ug/L		97	68 - 131
1,3-Dichloropropane	ND		20.0	19.41		ug/L		97	70 - 130
1,4-Dichlorobenzene	ND		20.0	19.11		ug/L		96	70 - 130
2,2-Dichloropropane	ND		20.0	14.46		ug/L		72	50 - 146
2-Butanone (MEK)	ND		100	82.51		ug/L		83	50 - 143
2-Chlorotoluene	ND		20.0	18.22		ug/L		91	67 - 138
2-Hexanone	ND		100	93.71		ug/L		94	44 - 150
4-Chlorotoluene	ND		20.0	20.65		ug/L		103	69 - 138
4-Methyl-2-pentanone (MIBK)	ND		100	96.22		ug/L		96	50 - 140
Acetone	ND		100	71.90		ug/L		72	39 - 150
Benzene	0.224	J	20.0	19.25		ug/L		95	55 - 147
Bromobenzene	ND		20.0	20.19		ug/L		101	60 - 133
Bromochloromethane	ND		20.0	17.86		ug/L		89	59 - 132
Bromodichloromethane	ND		20.0	18.79		ug/L		94	70 - 140
Bromoform	ND		20.0	15.78		ug/L		79	53 - 150
Bromomethane	ND		20.0	17.46		ug/L		87	30 - 150
Carbon disulfide	ND		20.0	16.74		ug/L		84	35 - 150
Carbon tetrachloride	ND		20.0	16.58		ug/L		83	56 - 150
Chlorobenzene	ND		20.0	19.68		ug/L		98	70 - 130
Chlorodibromomethane	ND		20.0	17.60		ug/L		88	66 - 140
Chloroethane	ND		20.0	20.27		ug/L		101	58 - 141
Chloroform	ND		20.0	17.67		ug/L		88	66 - 138
Chloromethane	ND		20.0	20.28		ug/L		101	10 - 150
cis-1,2-Dichloroethene	26.7		20.0	46.78		ug/L		100	68 - 131
cis-1,3-Dichloropropene	ND		20.0	18.31		ug/L		92	70 - 133
Dibromomethane	ND		20.0	18.56		ug/L		93	70 - 130
Dichlorodifluoromethane	ND		20.0	20.15		ug/L		101	10 - 150
Ethylbenzene	ND		20.0	19.73		ug/L		99	65 - 139
Hexachlorobutadiene	ND		20.0	16.66		ug/L		83	61 - 141
Isopropylbenzene	ND		20.0	20.94		ug/L		105	70 - 137
Methyl tert-butyl ether	0.724	J	20.0	18.07		ug/L		87	55 - 141
Methylene Chloride	ND		20.0	18.59		ug/L		93	64 - 130
Naphthalene	ND		20.0	17.30		ug/L		86	32 - 150
n-Butylbenzene	ND		20.0	18.67		ug/L		93	61 - 141
N-Propylbenzene	ND		20.0	19.27		ug/L		96	53 - 150
p-Isopropyltoluene	ND		20.0	19.32		ug/L		97	66 - 137
sec-Butylbenzene	ND		20.0	19.56		ug/L		98	55 - 136
Styrene	ND		20.0	20.25		ug/L		101	70 - 130
tert-Butylbenzene	ND		20.0	19.99		ug/L		100	70 - 138
Tetrachloroethene	1.19		20.0	20.97		ug/L		99	57 - 138
Toluene	ND		20.0	19.95		ug/L		100	64 - 136
trans-1,2-Dichloroethene	0.801	J	20.0	20.95		ug/L		101	59 - 143
trans-1,3-Dichloropropene	ND		20.0	17.29		ug/L		86	63 - 142

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-108128-A-1 MS
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	3.72		20.0	23.99		ug/L		101	63 - 135
Trichlorofluoromethane	ND	F2 *	20.0	19.70		ug/L		98	44 - 150
Vinyl chloride	3.76		20.0	27.49		ug/L		119	57 - 150
Xylenes, Total	ND		40.0	40.23		ug/L		101	69 - 132

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Lab Sample ID: 490-108128-A-1 MSD
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		20.0	17.29		ug/L		86	70 - 131	1	16
1,1,1-Trichloroethane	ND		20.0	16.19		ug/L		81	68 - 144	1	17
1,1,2,2-Tetrachloroethane	ND		20.0	19.27		ug/L		96	56 - 145	2	19
1,1,2-Trichloroethane	ND		20.0	19.05		ug/L		95	70 - 130	2	18
1,1-Dichloroethane	0.516	J	20.0	20.08		ug/L		98	61 - 139	0	23
1,1-Dichloroethene	ND		20.0	19.76		ug/L		99	54 - 150	3	24
1,1-Dichloropropene	ND		20.0	18.34		ug/L		92	54 - 150	1	24
1,2,3-Trichlorobenzene	ND		20.0	17.23		ug/L		86	36 - 150	10	43
1,2,3-Trichloropropane	ND		20.0	17.59		ug/L		88	65 - 131	0	19
1,2,4-Trichlorobenzene	ND		20.0	17.14		ug/L		86	47 - 147	6	24
1,2,4-Trimethylbenzene	ND		20.0	20.23		ug/L		101	64 - 136	1	18
1,2-Dibromo-3-Chloropropane	ND		20.0	15.50		ug/L		78	38 - 138	3	26
1,2-Dibromoethane (EDB)	ND		20.0	18.31		ug/L		92	65 - 137	4	21
1,2-Dichlorobenzene	ND		20.0	19.37		ug/L		97	70 - 130	0	15
1,2-Dichloroethane	ND		20.0	18.02		ug/L		90	64 - 136	1	22
1,2-Dichloropropane	ND		20.0	20.74		ug/L		104	67 - 130	1	19
1,3,5-Trimethylbenzene	ND		20.0	20.36		ug/L		102	69 - 139	1	17
1,3-Dichlorobenzene	ND		20.0	19.36		ug/L		97	68 - 131	0	14
1,3-Dichloropropane	ND		20.0	19.43		ug/L		97	70 - 130	0	17
1,4-Dichlorobenzene	ND		20.0	19.15		ug/L		96	70 - 130	0	14
2,2-Dichloropropane	ND		20.0	14.37		ug/L		72	50 - 146	1	20
2-Butanone (MEK)	ND		100	79.18		ug/L		79	50 - 143	4	28
2-Chlorotoluene	ND		20.0	18.43		ug/L		92	67 - 138	1	17
2-Hexanone	ND		100	90.12		ug/L		90	44 - 150	4	21
4-Chlorotoluene	ND		20.0	20.18		ug/L		101	69 - 138	2	15
4-Methyl-2-pentanone (MIBK)	ND		100	95.00		ug/L		95	50 - 140	1	24
Acetone	ND		100	74.27		ug/L		74	39 - 150	3	28
Benzene	0.224	J	20.0	19.22		ug/L		95	55 - 147	0	22
Bromobenzene	ND		20.0	20.70		ug/L		104	60 - 133	2	18
Bromochloromethane	ND		20.0	17.76		ug/L		89	59 - 132	1	21
Bromodichloromethane	ND		20.0	18.66		ug/L		93	70 - 140	1	196
Bromoform	ND		20.0	16.01		ug/L		80	53 - 150	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-108128-A-1 MSD
Matrix: Water
Analysis Batch: 357218

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromomethane	ND		20.0	19.49		ug/L		97	30 - 150	11	44
Carbon disulfide	ND		20.0	16.18		ug/L		81	35 - 150	3	34
Carbon tetrachloride	ND		20.0	16.28		ug/L		81	56 - 150	2	18
Chlorobenzene	ND		20.0	19.72		ug/L		99	70 - 130	0	15
Chlorodibromomethane	ND		20.0	17.25		ug/L		86	66 - 140	2	19
Chloroethane	ND		20.0	20.26		ug/L		101	58 - 141	0	31
Chloroform	ND		20.0	17.62		ug/L		88	66 - 138	0	21
Chloromethane	ND		20.0	19.63		ug/L		98	10 - 150	3	43
cis-1,2-Dichloroethene	26.7		20.0	46.54		ug/L		99	68 - 131	1	21
cis-1,3-Dichloropropene	ND		20.0	18.12		ug/L		91	70 - 133	1	19
Dibromomethane	ND		20.0	18.26		ug/L		91	70 - 130	2	19
Dichlorodifluoromethane	ND		20.0	19.73		ug/L		99	10 - 150	2	50
Ethylbenzene	ND		20.0	19.87		ug/L		99	65 - 139	1	18
Hexachlorobutadiene	ND		20.0	16.90		ug/L		84	61 - 141	1	26
Isopropylbenzene	ND		20.0	20.81		ug/L		104	70 - 137	1	17
Methyl tert-butyl ether	0.724	J	20.0	17.12		ug/L		82	55 - 141	5	24
Methylene Chloride	ND		20.0	18.23		ug/L		91	64 - 130	2	22
Naphthalene	ND		20.0	18.50		ug/L		92	32 - 150	7	40
n-Butylbenzene	ND		20.0	18.67		ug/L		93	61 - 141	0	17
N-Propylbenzene	ND		20.0	19.36		ug/L		97	53 - 150	0	18
p-Isopropyltoluene	ND		20.0	19.69		ug/L		98	66 - 137	2	16
sec-Butylbenzene	ND		20.0	19.33		ug/L		97	55 - 136	1	50
Styrene	ND		20.0	20.04		ug/L		100	70 - 130	1	16
tert-Butylbenzene	ND		20.0	20.20		ug/L		101	70 - 138	1	17
Tetrachloroethene	1.19		20.0	21.28		ug/L		100	57 - 138	1	17
Toluene	ND		20.0	20.11		ug/L		101	64 - 136	1	18
trans-1,2-Dichloroethene	0.801	J	20.0	20.73		ug/L		100	59 - 143	1	25
trans-1,3-Dichloropropene	ND		20.0	16.98		ug/L		85	63 - 142	2	18
Trichloroethene	3.72		20.0	23.90		ug/L		101	63 - 135	0	17
Trichlorofluoromethane	ND	F2 *	20.0	14.10	F2	ug/L		71	44 - 150	33	32
Vinyl chloride	3.76		20.0	26.70		ug/L		115	57 - 150	3	37
Xylenes, Total	ND		40.0	40.37		ug/L		101	69 - 132	0	17

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 130*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
Dibromofluoromethane (Surr)	*90*		*70 - 130*
Toluene-d8 (Surr)	*104*		*70 - 130*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 490-357365/6
Matrix: Water
Analysis Batch: 357365

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.100	0.0100	mg/L			07/22/16 21:06	1

Method: 9056A - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 490-357365/7
Matrix: Water
Analysis Batch: 357365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			1.00	1.050		mg/L		105	80 - 120		

Lab Sample ID: LCSD 490-357365/8
Matrix: Water
Analysis Batch: 357365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			1.00	1.043		mg/L		104	80 - 120	1	20

Lab Sample ID: 490-108050-B-1 MS
Matrix: Water
Analysis Batch: 357365

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.255		0.200	0.4154		mg/L		80	80 - 120		

Lab Sample ID: 490-108050-B-1 MSD
Matrix: Water
Analysis Batch: 357365

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.255		0.200	0.4137		mg/L		80	80 - 120	0	20

Lab Sample ID: MB 490-359120/3
Matrix: Water
Analysis Batch: 359120

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.100	0.0100	mg/L			07/30/16 00:12	1

Lab Sample ID: LCS 490-359120/4
Matrix: Water
Analysis Batch: 359120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			1.00	1.006		mg/L		101	80 - 120		

Lab Sample ID: LCSD 490-359120/5
Matrix: Water
Analysis Batch: 359120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride			1.00	1.010		mg/L		101	80 - 120	0	20

Lab Sample ID: 490-108145-6 MS
Matrix: Water
Analysis Batch: 359120

Client Sample ID: MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	93.2		10.0	126.2	E 4	mg/L		330	80 - 120		

Lab Sample ID: 490-108145-6 MSD — **Client Sample ID: MW-5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 359120

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	93.2		10.0	144.5	E 4	mg/L		513	80 - 120	14	20

Lab Sample ID: MB 490-359587/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 359587

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.100	0.0100	mg/L			08/01/16 16:26	1

Lab Sample ID: LCS 490-359587/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 359587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	0.9694		mg/L		97	80 - 120

Lab Sample ID: LCSD 490-359587/5 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 359587

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	1.00	0.9523		mg/L		95	80 - 120	2	20

Lab Sample ID: MB 490-360033/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360033

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.100	0.0100	mg/L			08/03/16 10:12	1

Lab Sample ID: LCS 490-360033/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	0.9914		mg/L		99	80 - 120

Lab Sample ID: LCSD 490-360033/8 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360033

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	1.00	0.9727		mg/L		97	80 - 120	2	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 490-357520/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 357905 — **Prep Batch: 357520**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.00200	0.000500	mg/L		07/24/16 12:38	07/25/16 14:46	1

Lab Sample ID: LCS 490-357520/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 357905 — **Prep Batch: 357520**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.100	0.09524		mg/L		95	80 - 120

Lab Sample ID: 490-108145-1 MS — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 357905 — **Prep Batch: 357520**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.450		0.100	0.5193	4	mg/L		70	75 - 125

Lab Sample ID: 490-108145-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 357905 — **Prep Batch: 357520**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	0.450		0.100	0.5426	4	mg/L		93	75 - 125	4	20

Lab Sample ID: MB 490-357881/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 358232 — **Prep Batch: 357881**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.00200	0.000500	mg/L		07/26/16 08:35	07/26/16 20:59	1

Lab Sample ID: LCS 490-357881/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 358232 — **Prep Batch: 357881**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	0.100	0.1005		mg/L		101	80 - 120

Lab Sample ID: LCSD 490-357881/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 358442 — **Prep Batch: 357881**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	0.100	0.1048		mg/L		105	80 - 120	4	20

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: 490-108190-A-1-B MS
Matrix: Water
Analysis Batch: 358232

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 357881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	884	E	0.100	1018	E 4	mg/L		13400	75 - 125
								0	

Lab Sample ID: 490-108190-A-1-C MSD
Matrix: Water
Analysis Batch: 358232

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 357881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	884	E	0.100	931.0	E 4	mg/L		47000	75 - 125	9	20

GC/MS VOA

Analysis Batch: 357218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-2	MW-2	Total/NA	Water	8260B	
490-108145-13	MW-23	Total/NA	Water	8260B	
490-108145-14	Trip Blank	Total/NA	Water	8260B	
490-108145-15	Rinsate	Total/NA	Water	8260B	
490-108145-16	Field Duplicate	Total/NA	Water	8260B	
MB 490-357218/7	Method Blank	Total/NA	Water	8260B	
LCS 490-357218/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-357218/4	Lab Control Sample Dup	Total/NA	Water	8260B	
490-108128-A-1 MS	Matrix Spike	Total/NA	Water	8260B	
490-108128-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	

HPLC/IC

Analysis Batch: 357365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-8	MW-11	Total/NA	Water	9056A	
490-108145-10	MW-13	Total/NA	Water	9056A	
490-108145-12	MW-12D	Total/NA	Water	9056A	
490-108145-13	MW-23	Total/NA	Water	9056A	
490-108145-15	Rinsate	Total/NA	Water	9056A	
490-108145-16	Field Duplicate	Total/NA	Water	9056A	
MB 490-357365/6	Method Blank	Total/NA	Water	9056A	
LCS 490-357365/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-357365/8	Lab Control Sample Dup	Total/NA	Water	9056A	
490-108050-B-1 MS	Matrix Spike	Total/NA	Water	9056A	
490-108050-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	9056A	

Analysis Batch: 359120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-6	MW-5	Total/NA	Water	9056A	
490-108145-11	MW-18	Total/NA	Water	9056A	
MB 490-359120/3	Method Blank	Total/NA	Water	9056A	
LCS 490-359120/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-359120/5	Lab Control Sample Dup	Total/NA	Water	9056A	
490-108145-6 MS	MW-5	Total/NA	Water	9056A	
490-108145-6 MSD	MW-5	Total/NA	Water	9056A	

Analysis Batch: 359587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-1	MW-1	Total/NA	Water	9056A	
490-108145-2	MW-2	Total/NA	Water	9056A	
490-108145-3	MW-3	Total/NA	Water	9056A	
490-108145-4	MW-4	Total/NA	Water	9056A	
490-108145-5	MW-4R	Total/NA	Water	9056A	
MB 490-359587/3	Method Blank	Total/NA	Water	9056A	
LCS 490-359587/4	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-359587/5	Lab Control Sample Dup	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 360033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-7	MW-6	Total/NA	Water	9056A	
490-108145-9	MW-12	Total/NA	Water	9056A	
MB 490-360033/6	Method Blank	Total/NA	Water	9056A	
LCS 490-360033/7	Lab Control Sample	Total/NA	Water	9056A	
LCSD 490-360033/8	Lab Control Sample Dup	Total/NA	Water	9056A	

Metals

Prep Batch: 357520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-1	MW-1	Total/NA	Water	3010A	
490-108145-2	MW-2	Total/NA	Water	3010A	
490-108145-3	MW-3	Total/NA	Water	3010A	
490-108145-4	MW-4	Total/NA	Water	3010A	
490-108145-5	MW-4R	Total/NA	Water	3010A	
490-108145-6	MW-5	Total/NA	Water	3010A	
490-108145-7	MW-6	Total/NA	Water	3010A	
490-108145-8	MW-11	Total/NA	Water	3010A	
490-108145-9	MW-12	Total/NA	Water	3010A	
490-108145-10	MW-13	Total/NA	Water	3010A	
490-108145-11	MW-18	Total/NA	Water	3010A	
490-108145-12	MW-12D	Total/NA	Water	3010A	
MB 490-357520/1-A	Method Blank	Total/NA	Water	3010A	
LCS 490-357520/2-A	Lab Control Sample	Total/NA	Water	3010A	
490-108145-1 MS	MW-1	Total/NA	Water	3010A	
490-108145-1 MSD	MW-1	Total/NA	Water	3010A	

Prep Batch: 357881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-13	MW-23	Total/NA	Water	3010A	
490-108145-15	Rinsate	Total/NA	Water	3010A	
490-108145-16	Field Duplicate	Total/NA	Water	3010A	
MB 490-357881/1-A	Method Blank	Total/NA	Water	3010A	
LCS 490-357881/2-A	Lab Control Sample	Total/NA	Water	3010A	
LCSD 490-357881/3-A	Lab Control Sample Dup	Total/NA	Water	3010A	
490-108190-A-1-B MS	Matrix Spike	Total/NA	Water	3010A	
490-108190-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 357905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-1	MW-1	Total/NA	Water	6020A	357520
490-108145-2	MW-2	Total/NA	Water	6020A	357520
490-108145-3	MW-3	Total/NA	Water	6020A	357520
490-108145-5	MW-4R	Total/NA	Water	6020A	357520
490-108145-7	MW-6	Total/NA	Water	6020A	357520
490-108145-8	MW-11	Total/NA	Water	6020A	357520
490-108145-9	MW-12	Total/NA	Water	6020A	357520
490-108145-10	MW-13	Total/NA	Water	6020A	357520
490-108145-11	MW-18	Total/NA	Water	6020A	357520
490-108145-12	MW-12D	Total/NA	Water	6020A	357520

Metals (Continued)

Analysis Batch: 357905 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 490-357520/1-A	Method Blank	Total/NA	Water	6020A	357520
LCS 490-357520/2-A	Lab Control Sample	Total/NA	Water	6020A	357520
490-108145-1 MS	MW-1	Total/NA	Water	6020A	357520
490-108145-1 MSD	MW-1	Total/NA	Water	6020A	357520

Analysis Batch: 358232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-13	MW-23	Total/NA	Water	6020A	357881
490-108145-15	Rinsate	Total/NA	Water	6020A	357881
490-108145-16	Field Duplicate	Total/NA	Water	6020A	357881
MB 490-357881/1-A	Method Blank	Total/NA	Water	6020A	357881
LCS 490-357881/2-A	Lab Control Sample	Total/NA	Water	6020A	357881
490-108190-A-1-B MS	Matrix Spike	Total/NA	Water	6020A	357881
490-108190-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	357881

Analysis Batch: 358233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-108145-4	MW-4	Total/NA	Water	6020A	357520
490-108145-6	MW-5	Total/NA	Water	6020A	357520

Analysis Batch: 358442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 490-357881/3-A	Lab Control Sample Dup	Total/NA	Water	6020A	357881

Lab Chronicle

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: MW-1

Date Collected: 07/20/16 14:50
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		40	359587	08/01/16 18:27	JHS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 14:57	KKK	TAL NSH

Client Sample ID: MW-2

Date Collected: 07/20/16 12:24
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	357218	07/22/16 19:42	AK1	TAL NSH
Total/NA	Analysis	9056A		20	359587	08/01/16 18:47	JHS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 15:24	KKK	TAL NSH

Client Sample ID: MW-3

Date Collected: 07/20/16 10:08
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		20	359587	08/01/16 19:07	JHS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 15:30	KKK	TAL NSH

Client Sample ID: MW-4

Date Collected: 07/20/16 19:24
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		200	359587	08/01/16 19:27	JHS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		10	358233	07/26/16 20:31	KKK	TAL NSH

Client Sample ID: MW-4R

Date Collected: 07/20/16 18:27
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		100	359587	08/01/16 19:47	JHS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 15:51	KKK	TAL NSH

Lab Chronicle

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: MW-5

Lab Sample ID: 490-108145-6

Date Collected: 07/20/16 17:04
Matrix: Water
Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		50	359120	07/30/16 01:03	NC	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		5	358233	07/26/16 20:37	KKK	TAL NSH

Client Sample ID: MW-6

Lab Sample ID: 490-108145-7

Date Collected: 07/20/16 11:19
Matrix: Water
Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		10	360033	08/03/16 13:54	LDC	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 16:03	KKK	TAL NSH

Client Sample ID: MW-11

Lab Sample ID: 490-108145-8

Date Collected: 07/19/16 14:39
Matrix: Water
Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	357365	07/23/16 02:48	KS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 16:08	KKK	TAL NSH

Client Sample ID: MW-12

Lab Sample ID: 490-108145-9

Date Collected: 07/20/16 13:41
Matrix: Water
Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		20	360033	08/03/16 15:37	LDC	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 16:14	KKK	TAL NSH

Client Sample ID: MW-13

Lab Sample ID: 490-108145-10

Date Collected: 07/19/16 16:52
Matrix: Water
Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	357365	07/23/16 03:05	KS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 16:19	KKK	TAL NSH

Client Sample ID: MW-18

Lab Sample ID: 490-108145-11

Date Collected: 07/20/16 15:59

Matrix: Water

Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		5	359120	07/30/16 02:29	NC	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 16:25	KKK	TAL NSH

Client Sample ID: MW-12D

Lab Sample ID: 490-108145-12

Date Collected: 07/19/16 19:27

Matrix: Water

Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A		1	357365	07/23/16 03:22	KS	TAL NSH
Total/NA	Prep	3010A			357520	07/24/16 12:38	RDF	TAL NSH
Total/NA	Analysis	6020A		1	357905	07/25/16 16:30	KKK	TAL NSH

Client Sample ID: MW-23

Lab Sample ID: 490-108145-13

Date Collected: 07/19/16 12:58

Matrix: Water

Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	357218	07/22/16 20:11	AK1	TAL NSH
Total/NA	Analysis	9056A		1	357365	07/23/16 03:39	KS	TAL NSH
Total/NA	Prep	3010A			357881	07/26/16 08:35	RDF	TAL NSH
Total/NA	Analysis	6020A		1	358232	07/26/16 22:06	KKK	TAL NSH

Client Sample ID: Trip Blank

Lab Sample ID: 490-108145-14

Date Collected: 07/19/16 00:01

Matrix: Water

Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	357218	07/22/16 16:51	AK1	TAL NSH

Client Sample ID: Rinsate

Lab Sample ID: 490-108145-15

Date Collected: 07/19/16 19:45

Matrix: Water

Date Received: 07/21/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	357218	07/22/16 17:19	AK1	TAL NSH
Total/NA	Analysis	9056A		1	357365	07/23/16 03:56	KS	TAL NSH
Total/NA	Prep	3010A			357881	07/26/16 08:35	RDF	TAL NSH
Total/NA	Analysis	6020A		1	358232	07/26/16 22:12	KKK	TAL NSH

Lab Chronicle

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Client Sample ID: Field Duplicate

Date Collected: 07/19/16 00:01
Date Received: 07/21/16 09:20

Lab Sample ID: 490-108145-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	357218	07/22/16 20:39	AK1	TAL NSH
Total/NA	Analysis	9056A		1	357365	07/23/16 04:13	KS	TAL NSH
Total/NA	Prep	3010A			357881	07/26/16 08:35	RDF	TAL NSH
Total/NA	Analysis	6020A		1	358232	07/26/16 22:18	KKK	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
9056A	Anions, Ion Chromatography	SW846	TAL NSH
6020A	Metals (ICP/MS)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Environmental Compliance Services, Inc.
Project/Site: Former Trent Tube

TestAmerica Job ID: 490-108145-1
SDG: 27-225273.00/00/1

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Florida	NELAP	4	E87358	06-30-17

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

490-108145 Chain of Custody

Cooler Received/Opened On 7/21/2016 @ 0920

Time Samples Removed From Cooler_____ Time Samples Placed In Storage 1928 (2 Hour Window)

1. Tracking # 6369 (last 4 digits, FedEx) Courier: _FedEx_

IR Gun ID 17960357 pH Strip Lot HC564992 Chlorine Strip Lot 012516A

2. Temperature of rep. sample or temp blank when opened: 1.0 *Degrees Celsius*

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO..NA

4. Were custody seals on outside of cooler? YES...NO...NA

If yes, how many and where: 1 front

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (intial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

Were these signed and dated correctly? YES...NO...NA

8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13a. Were VOA vials received? YES...NO...NA

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # NA

I certify that I unloaded the cooler and answered questions 7-14 (intial) AES

15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES..NO..NA

b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (intial) AES

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (intial) AES

I certify that I attached a label with the unique LIMS number to each container (intial) AES

21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO..# NA

BIS = Broken in shipment
Cooler Receipt Form.doc

LF-1
End of Form

Revised 12/15/15

TestAmerica INCORPORATED

CHAIN OF CUSTODY RECORD

TA account # : ____ Quote# GUST / HSRA

Client email address:

FedEx Tracking #: _____

1 of 2

Client Name: Pangean-CMD/ECS Client #2054

Address: 9874 Main Street, Suite 100

City/State/Zip: Woodstock, GA 30188

Project Manager: Dean McCartney

Telephone Number: 770-926-8883 x139 Fax No.: 770-926-5383

Requested TAT: STANDARD

Report To: Dean McCartney 770-926-8883, ext. 139

PO#: 27-225273 00/1

Quote #: HIS 10604

Sampler Name: (Print) Ashley Kim

Sampler Signature:

Project ID: Former Trent Tube 141 Hammond Street

Project #: 27-225273

Loc: 490
108145

Analyze For:

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab / Composite	Matrix	Field Filtered	Ice	HNO_3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Nickel (SW-846 6020B)	Fluoride (SW-846 9056)	VOCs (SW-846 82606)	TEMP	Conductivity	pH	DO	Turbidity	Vapor VOC's &/or BTEX (EPA18)	Vapor VOC's full list (TO-14)	8 RCRA metals	4 RCRA Metals (As, Cd, Cr, Pb)			
MW-1	7-20-16	14:50	2	G	W			X					X		X	X	X	X	X	X	X	X							
MW-2		12:24	5						X						X	X	X	X	X	X	X	X							
MW-3		10:08	2												X	X	X	X	X	X	X	X							
MW-4		19:24	2												X	X	X	X	X	X	X	X							
MW-4R		18:27	2												X	X	X	X	X	X	X	X							
MW-5		17:04	2												X	X	X	X	X	X	X	X							
MW-6	7-20-16	11:19	2												X	X	X	X	X	X	X	X							
[redacted] MW-11	7-19-16	14:39	2												X	X	X	X	X	X	X	X							
MW-12	7-20-16	13:41	2												X	X	X	X	X	X	X	X							
MW-13	7-19-16	16:52	2												X	X	X	X	X	X	X	X							

Method of Shipment:

Laboratory Comments:

Temperature Upon Receipt:

VOCs Free of Headspace? N

Relinquished by:	Date	Time	Received by:	Time
	7-20-16	20:30		
Relinquished by:	Date	Time	Received by TestAmerica:	Time
	7/21/16	0920		0920

TestAmerica INCORPORATED

CHAIN OF CUSTODY RECORD

TA account # : ___ Quote# GUST / HSRA
Client email address:

FedEx Tracking #: _____

Client Name: Pangean-CMD/ECS Client #2054
Address: 9874 Main Street, Suite 100
City/State/Zip: Woodstock, GA 30188
Project Manager: Dean McCartney
Telephone Number: 770-926-8883 x139 Fax No.: 770-926-5383

Requested TAT: STANDARD
Report To: Dean McCartney 770-926-8883, ext. 139
PO#: 27-225273 00/1
Quote #: HIS 10604

Sampler Name: (Print) Ann Yan
Sampler Signature:

Project ID: Former Trent Tube 141 Hammond Street
Project #: 27-225273

Analyze For:

Loc: 490
108145

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab / Composite	Matrix	Field Filtered	Ice	HNO_3 (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H_2SO_4 Plastic (Yellow Label)	H_2SO_4 Glass(Yellow Label)	None (Black Label)	Other (Specify)	Nickel (SW-846 6020B)	Fluoride (SW-846 9056)	VOCs (SW-846 82606)	TEMP	Conductivity	pH	DO	Turbidity	Vapor VOC's &/or BTEX (EPA18)	Vapor VOC's full list (TO-14)	8 RCRA metals				
MW-18	7-20-16	15:59	2	G	W			X					X		X	X		X	X	X	X	X							
[redacted] MW-12D	7-19-16	19:27	2	G	W			X					X		X	X		X	X	X	X	X							
MW-23	7-19-16	12:58	5	G	W			X					X		X	X	X	X	X	X	X	X							
[redacted]															X	X		X	X	X	X	X							
[redacted]															X	X		X	X	X	X	X							
Trip Blank	Lab	Lab	2	G	W				X						X	X	X	X	X	X	X	X							
Rinsate	7-19-16	19:45	5	G	W			X	X				X		X	X	X	X	X	X	X	X							
Field Duplicate [redacted]	7-19-16	—	5	G	W			X	X				X		X	X	X	X	X	X	X	X							

Method of Shipment:

Laboratory Comments:
Temperature Upon Receipt:
VOCs Free of Headspace? N

Relinquished by:	Date	Time	Received by:	Time
Ann Yan	7-20-16	20:30		
Relinquished by:	Date	Time	Received by TestAmerica:	Time
	7/21/16			0920

Login Sample Receipt Checklist

Client: Environmental Compliance Services, Inc.

Job Number: 490-108145-1
SDG Number: 27-225273.00/00/1

Login Number: 108145
List Number: 1
Creator: Stvartak, Anthony Q

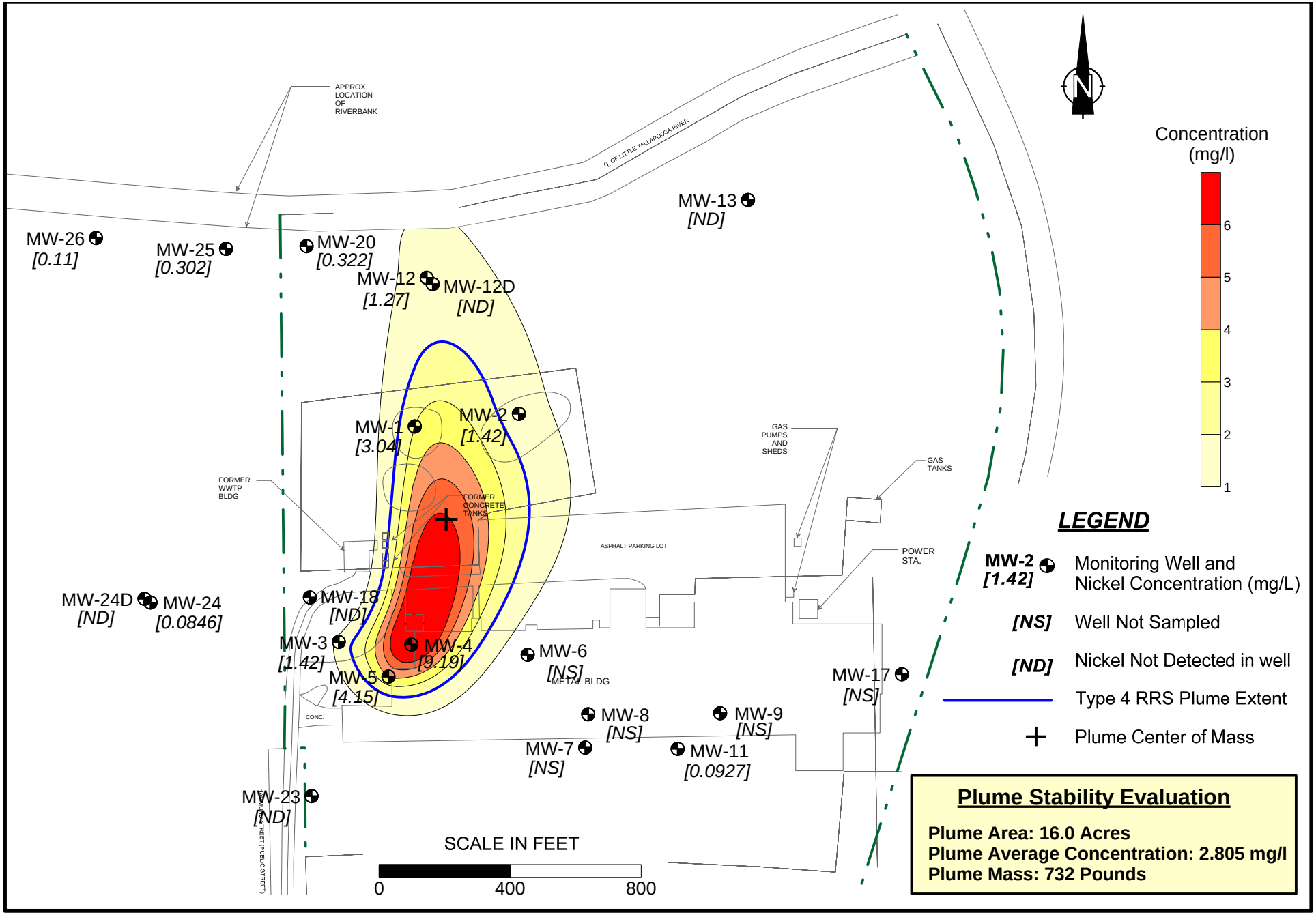
List Source: TestAmerica Nashville

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

PEACHTREE ENVIRONMENTAL

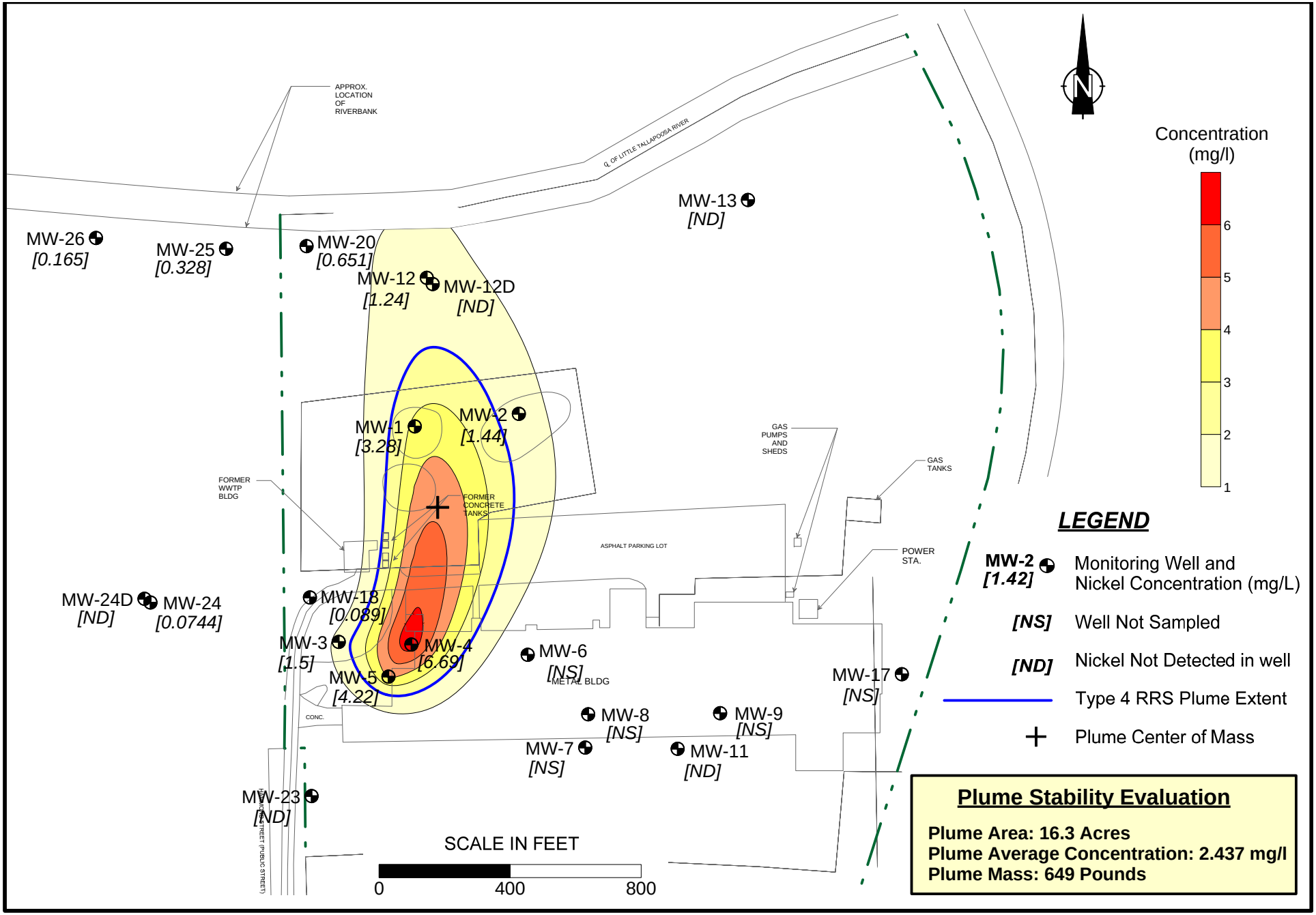
ATTACHMENT C

PLUME STABILITY ANALYSIS



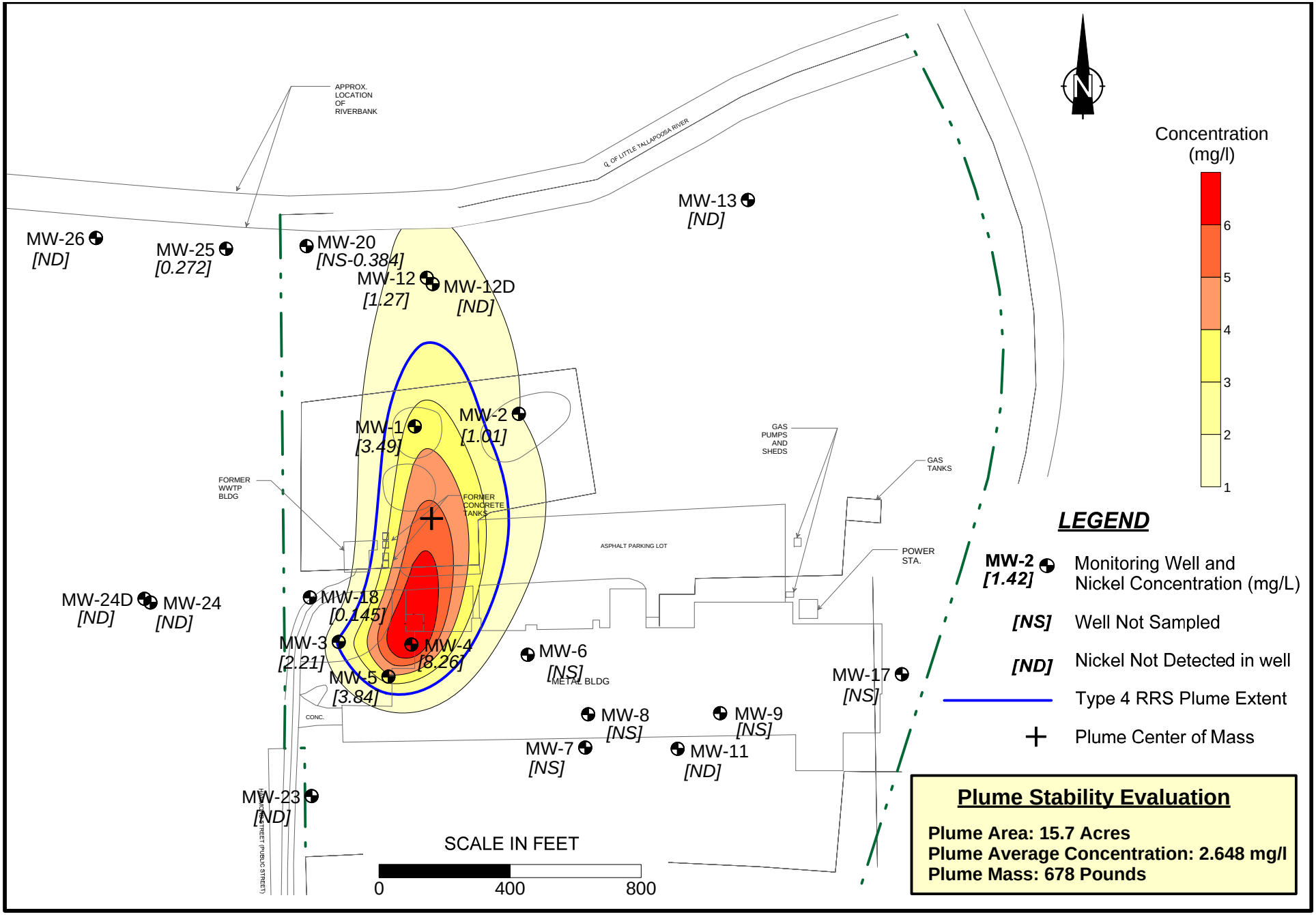
NICKEL PLUME STABILITY ANALYSIS - MARCH 2006

PREMIER ENVIRONMENTAL SERVICES, INC



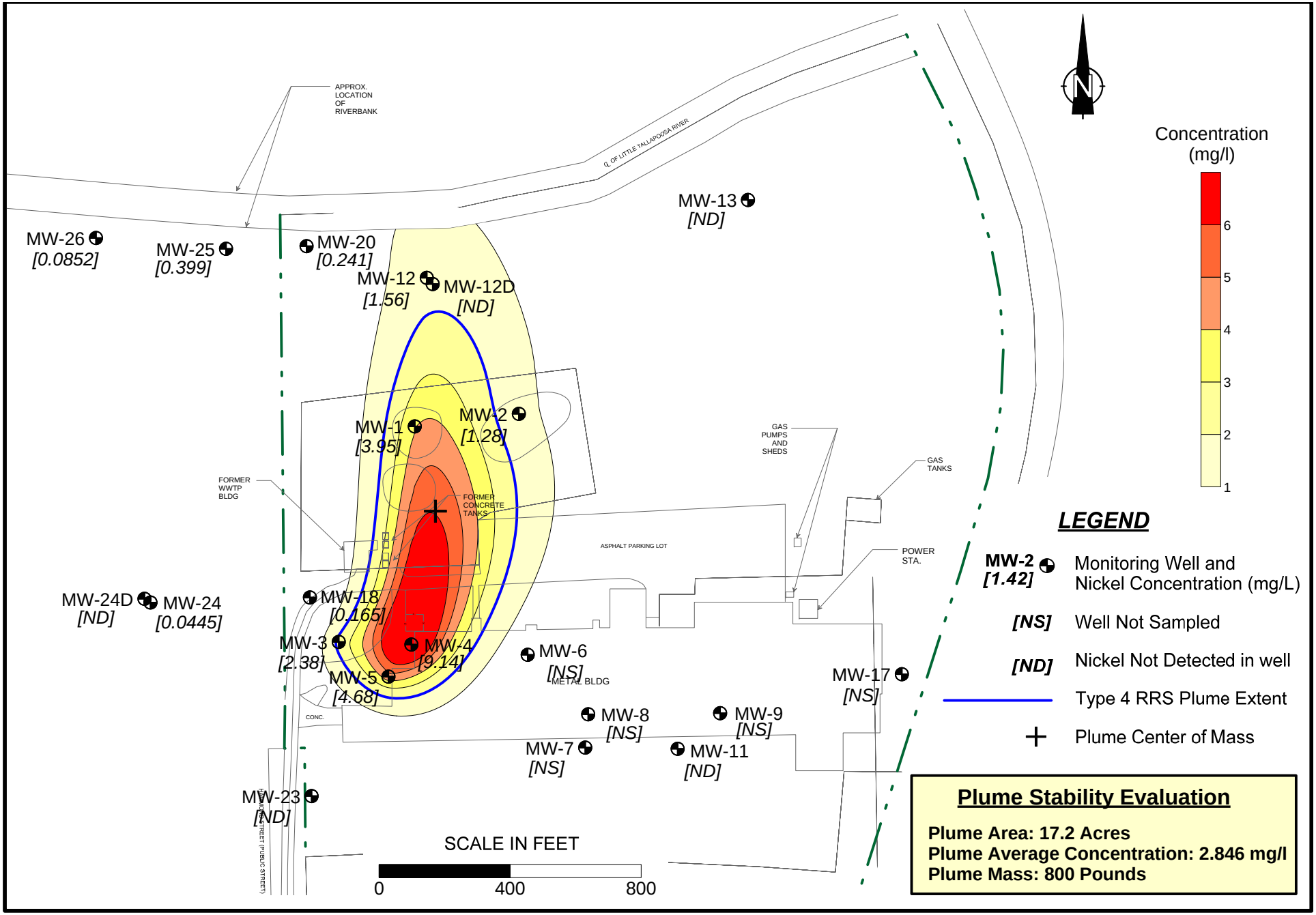
NICKEL PLUME STABILITY ANALYSIS - JUNE 2006

PREMIER ENVIRONMENTAL SERVICES, INC



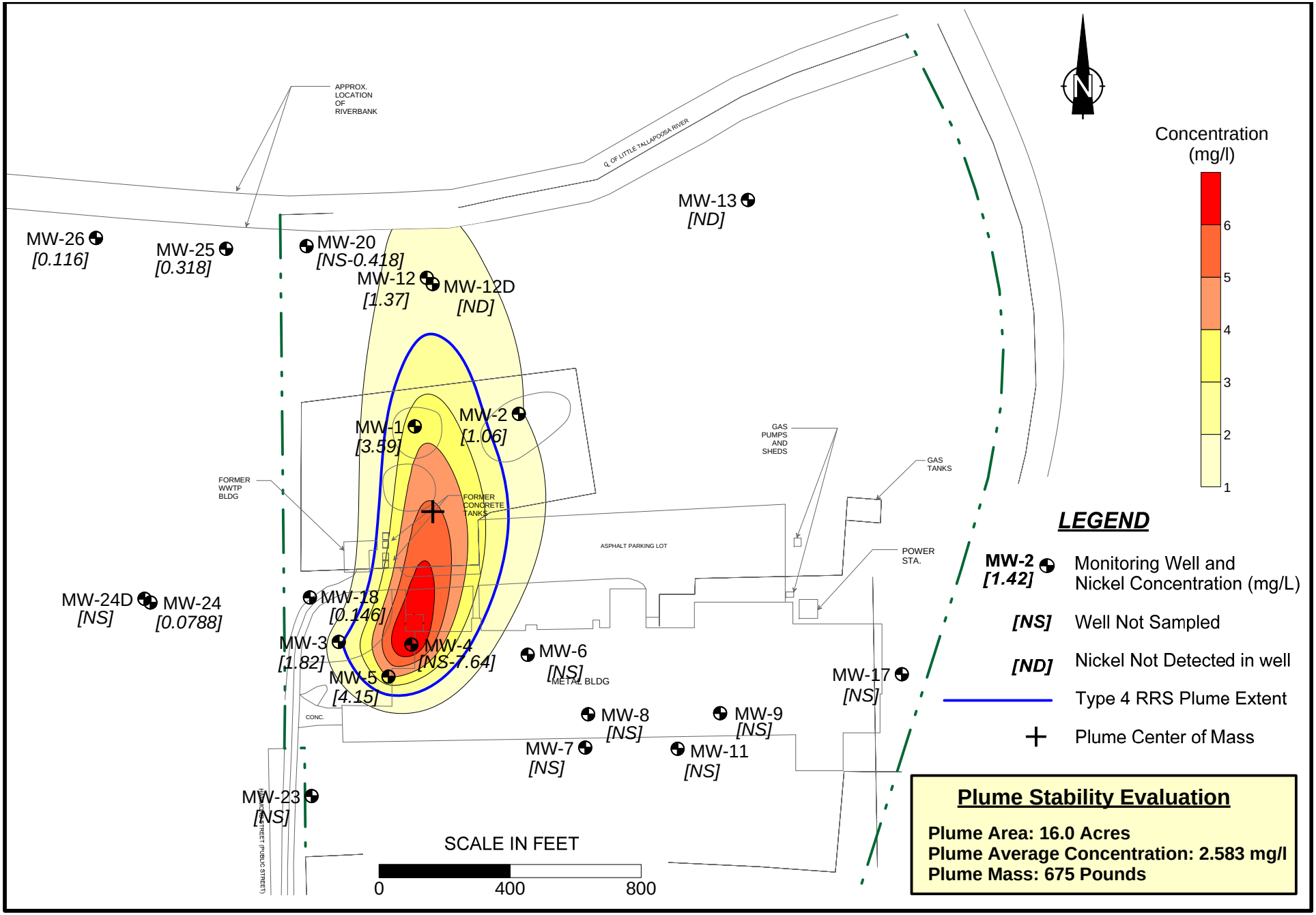
NICKEL PLUME STABILITY ANALYSIS - SEPTEMBER 2006

PREMIER ENVIRONMENTAL SERVICES, INC



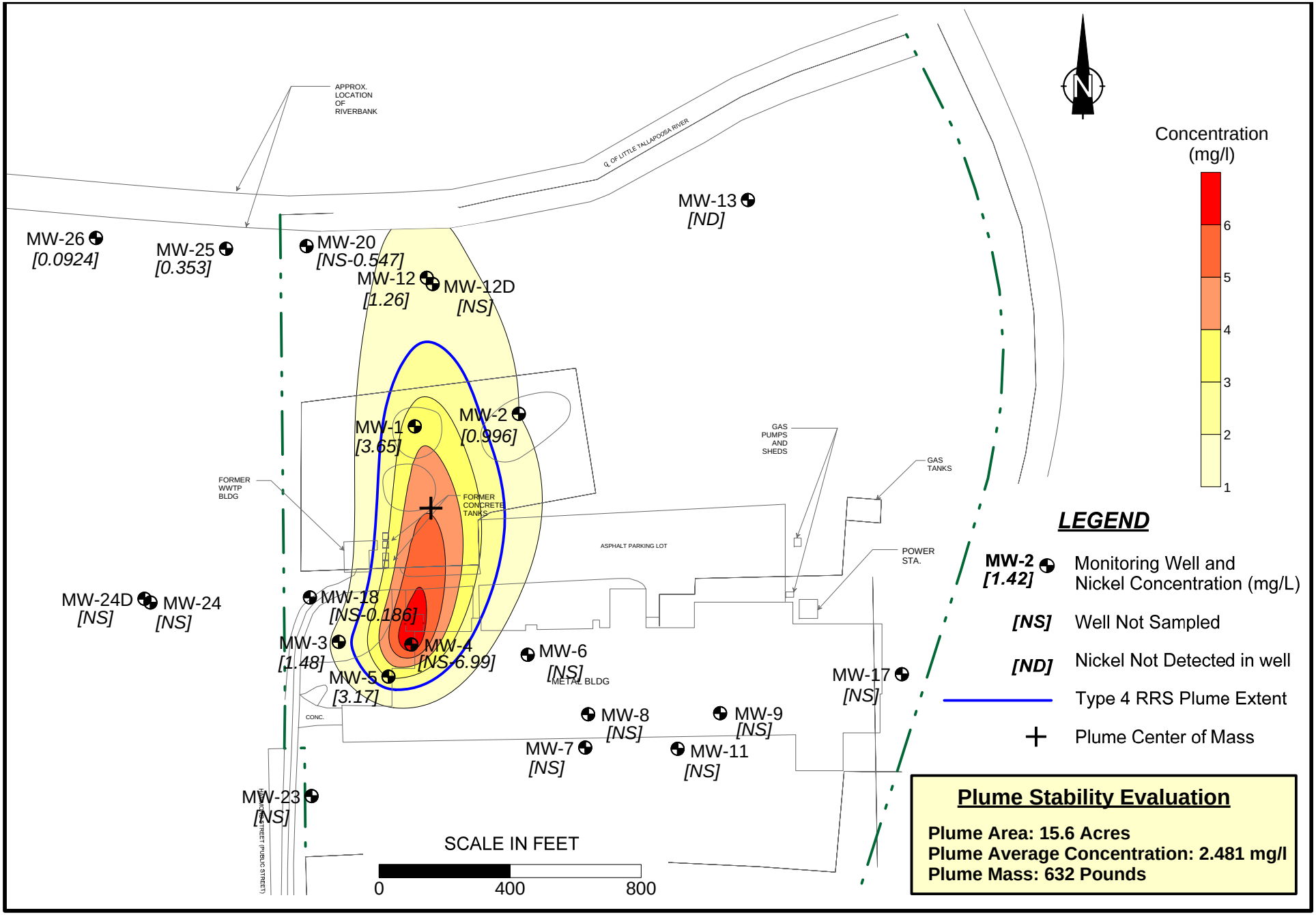
NICKEL PLUME STABILITY ANALYSIS - NOVEMBER 2006

PREMIER ENVIRONMENTAL SERVICES, INC



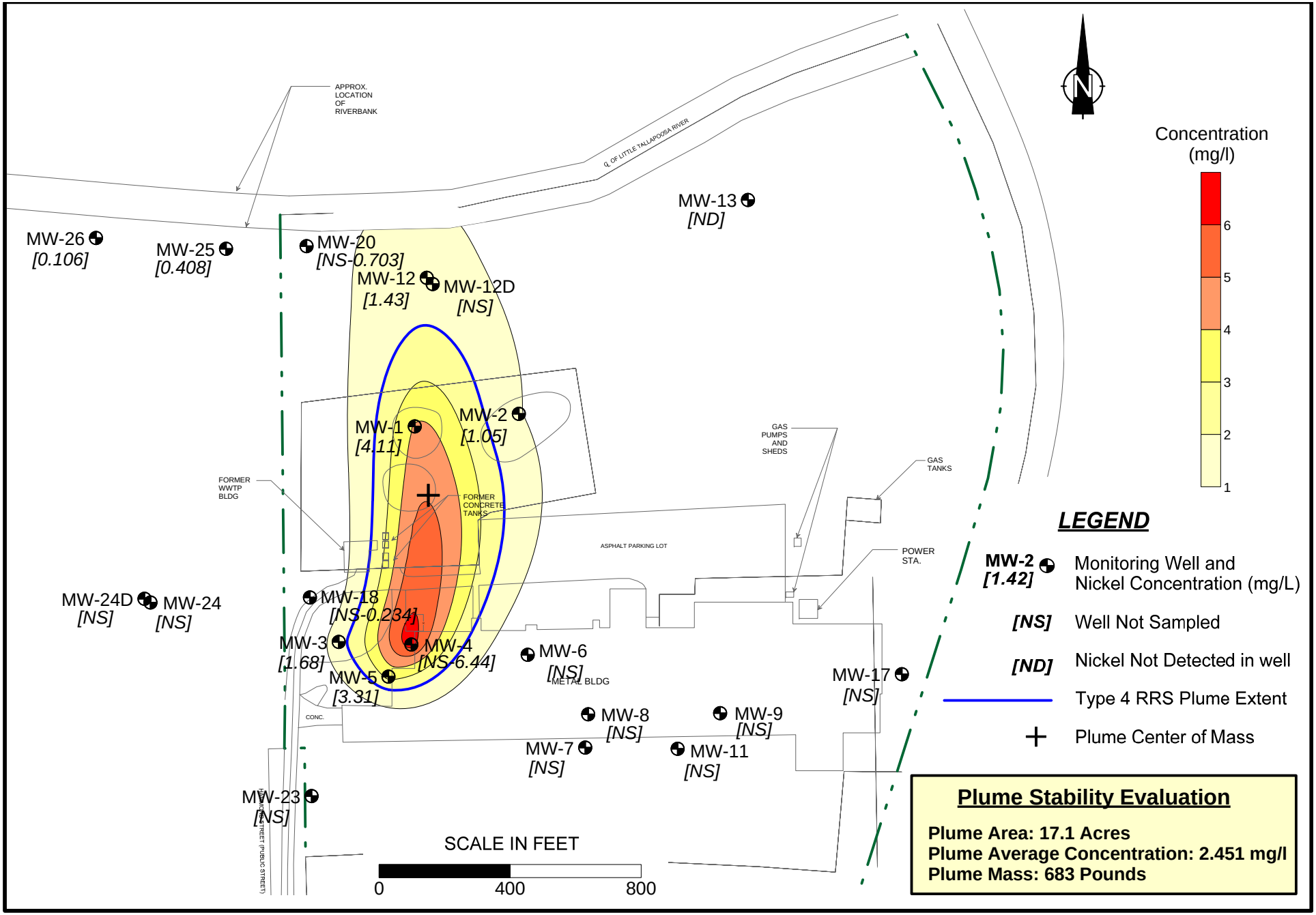
NICKEL PLUME STABILITY ANALYSIS - MAY 2007

PREMIER ENVIRONMENTAL SERVICES, INC



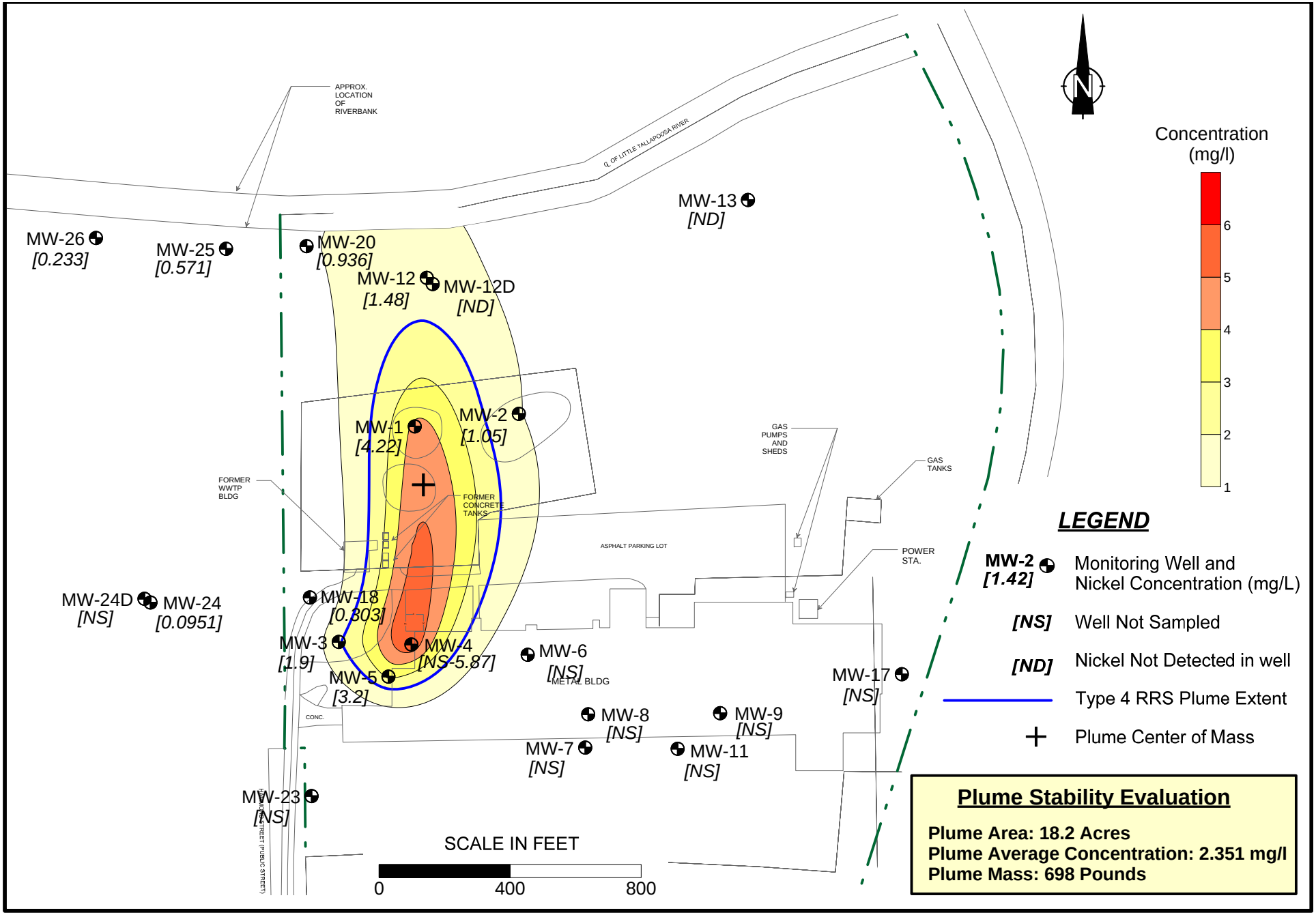
NICKEL PLUME STABILITY ANALYSIS - AUGUST 2007

PREMIER ENVIRONMENTAL SERVICES, INC



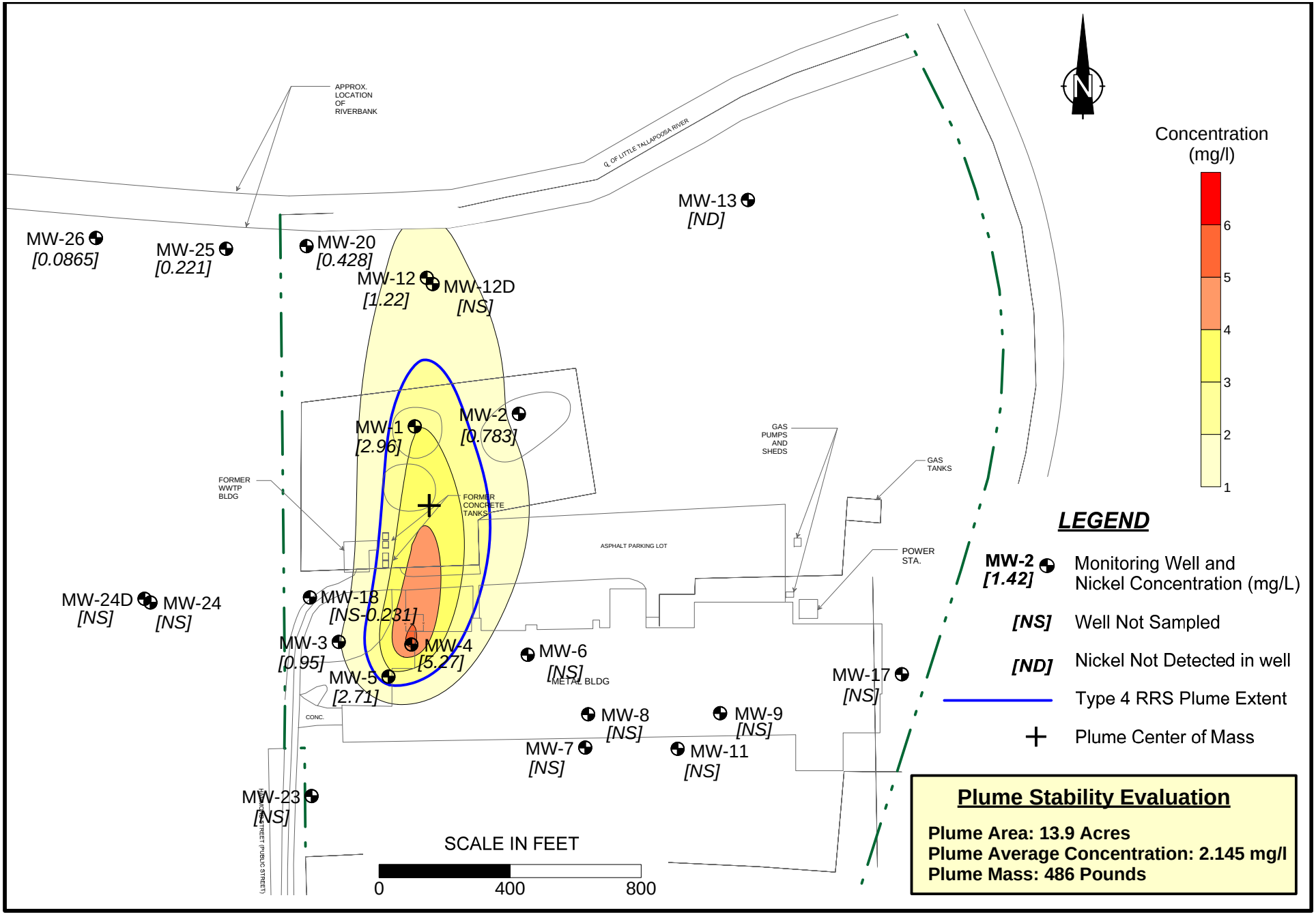
NICKEL PLUME STABILITY ANALYSIS - NOVEMBER 2007

PREMIER ENVIRONMENTAL SERVICES, INC



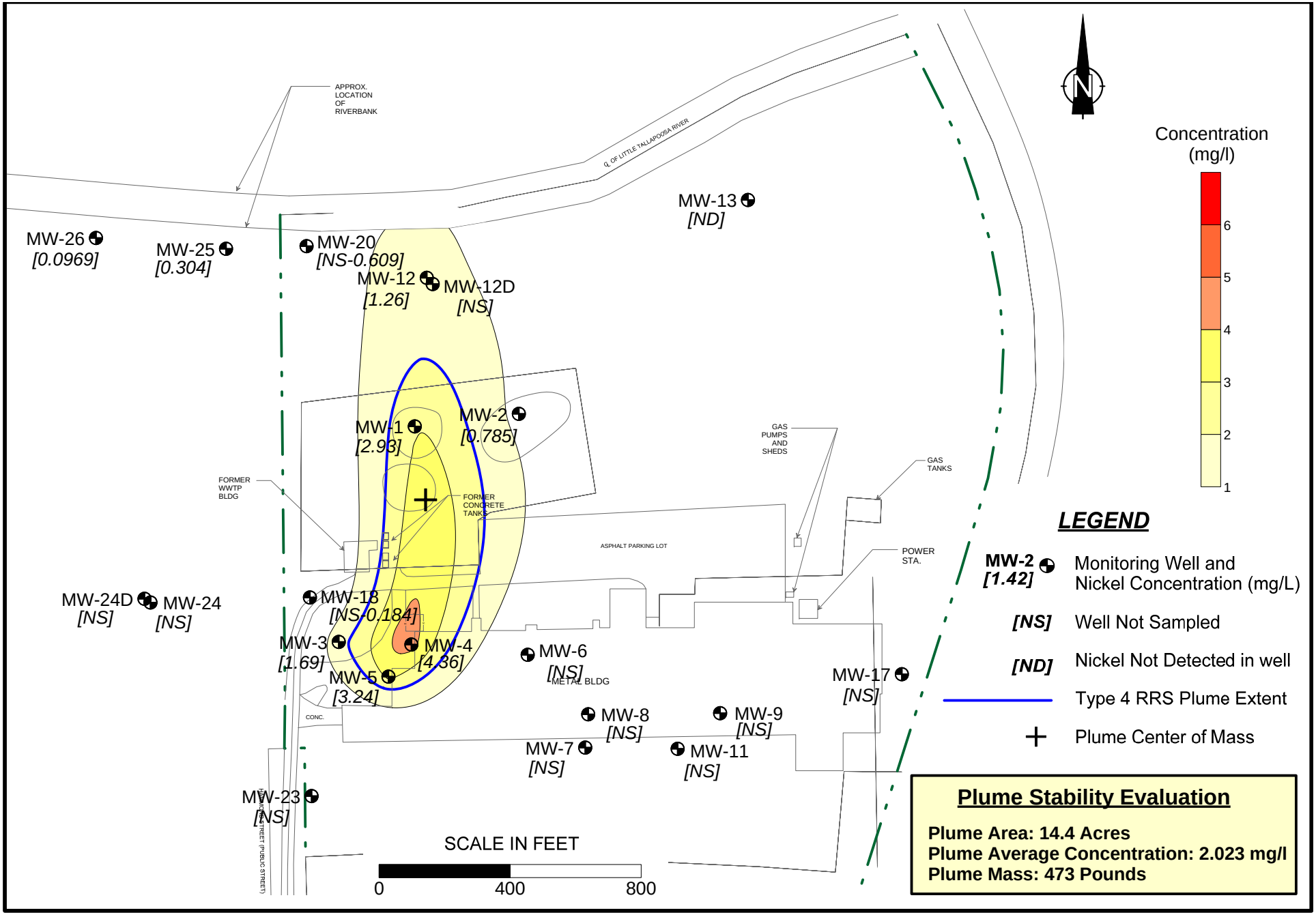
NICKEL PLUME STABILITY ANALYSIS - JANUARY 2008

PREMIER ENVIRONMENTAL SERVICES, INC



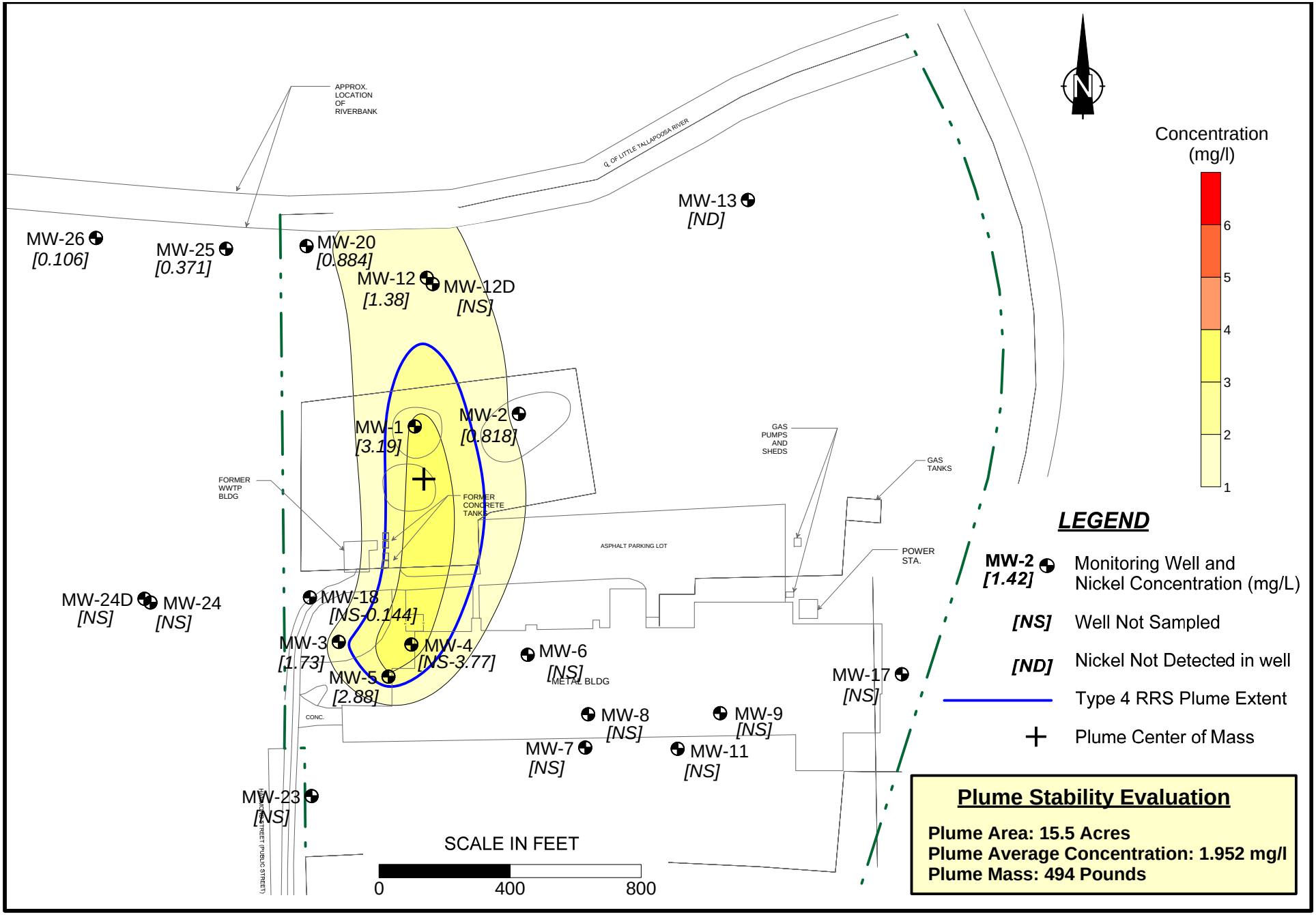
NICKEL PLUME STABILITY ANALYSIS - MAY 2008

PREMIER ENVIRONMENTAL SERVICES, INC



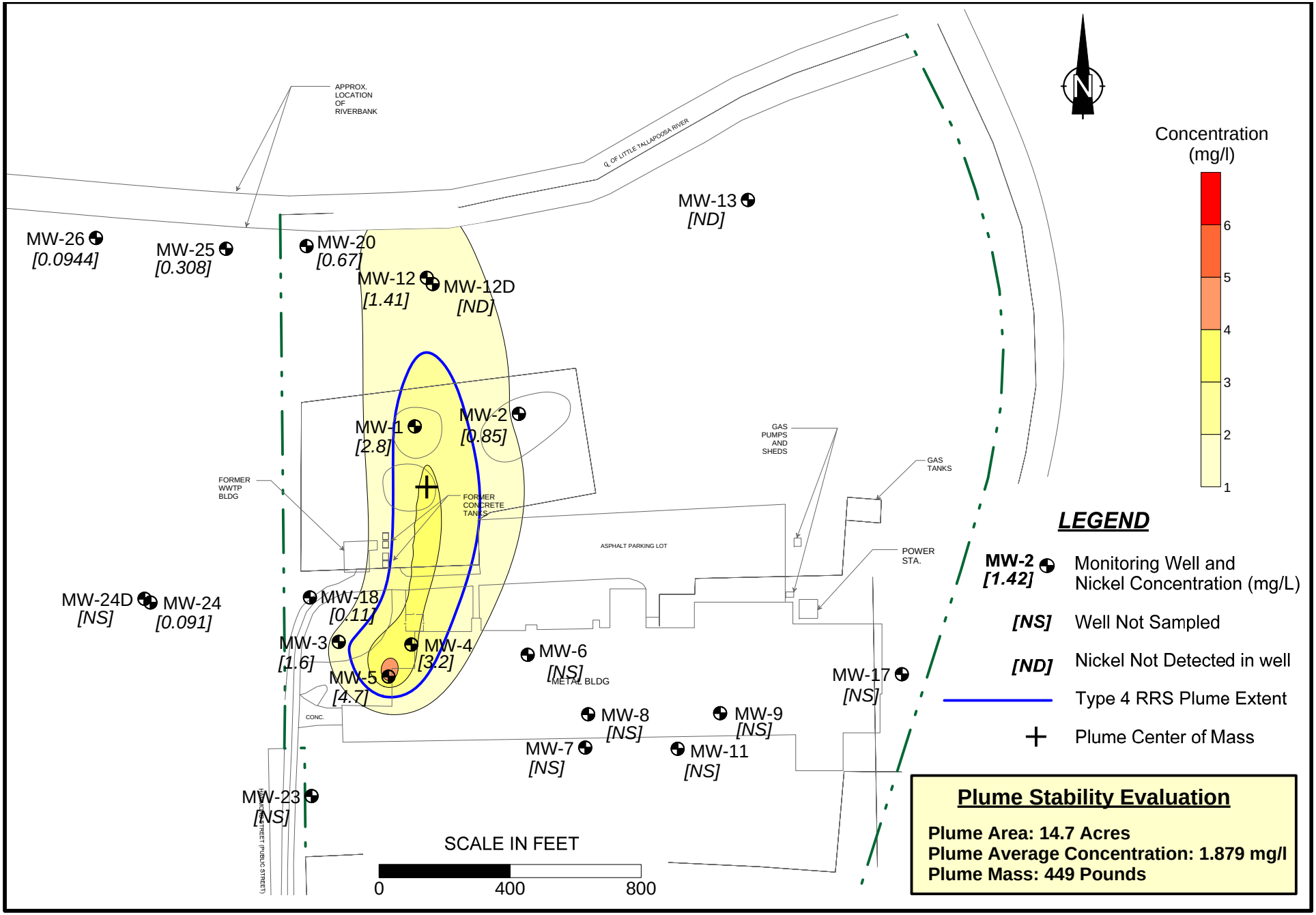
NICKEL PLUME STABILITY ANALYSIS - AUGUST 2008

PREMIER ENVIRONMENTAL SERVICES, INC



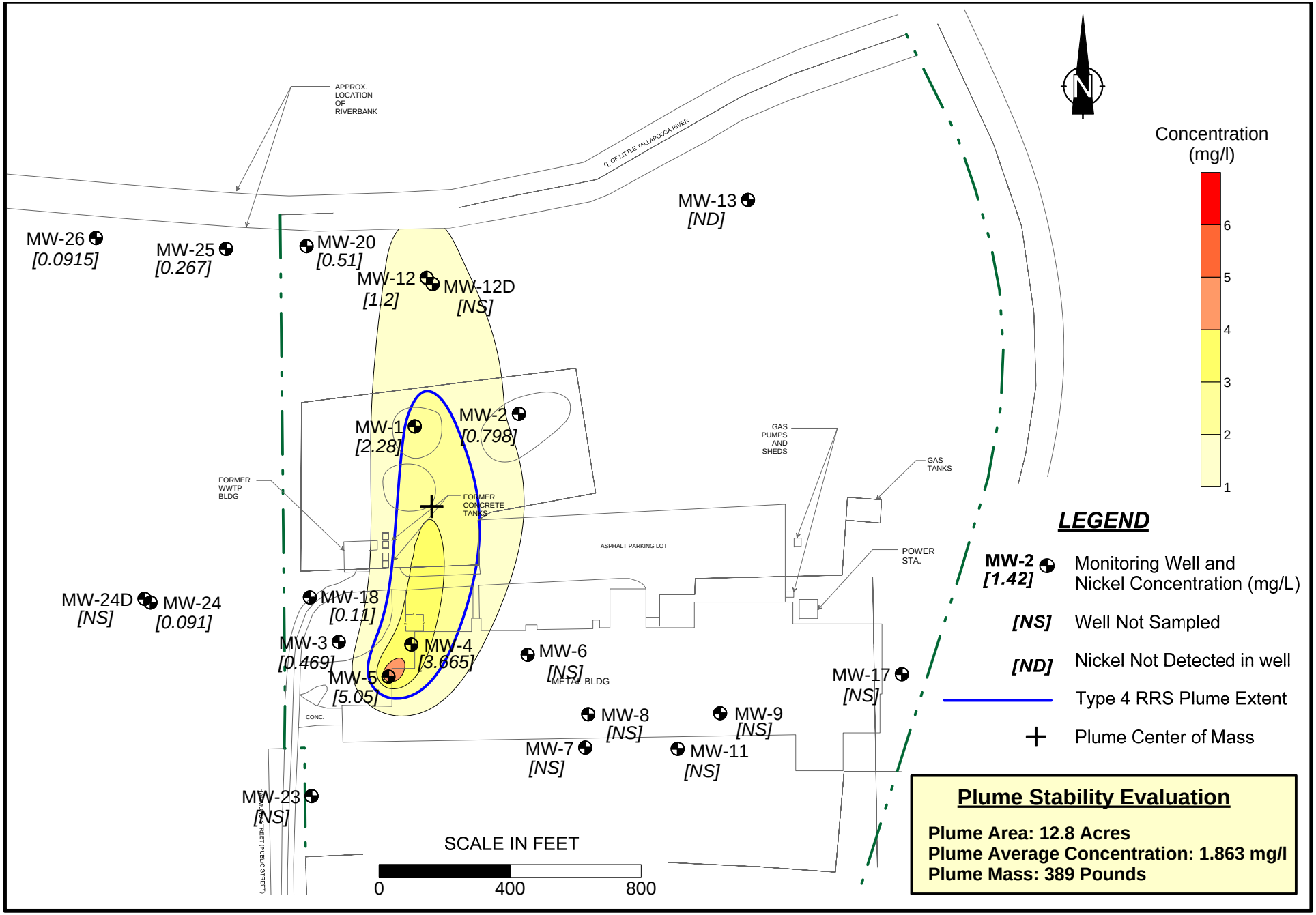
NICKEL PLUME STABILITY ANALYSIS - NOVEMBER 2008

PREMIER ENVIRONMENTAL SERVICES, INC



NICKEL PLUME STABILITY ANALYSIS - FEBRUARY 2009

PREMIER ENVIRONMENTAL SERVICES, INC



NICKEL PLUME STABILITY ANALYSIS - MAY 2009

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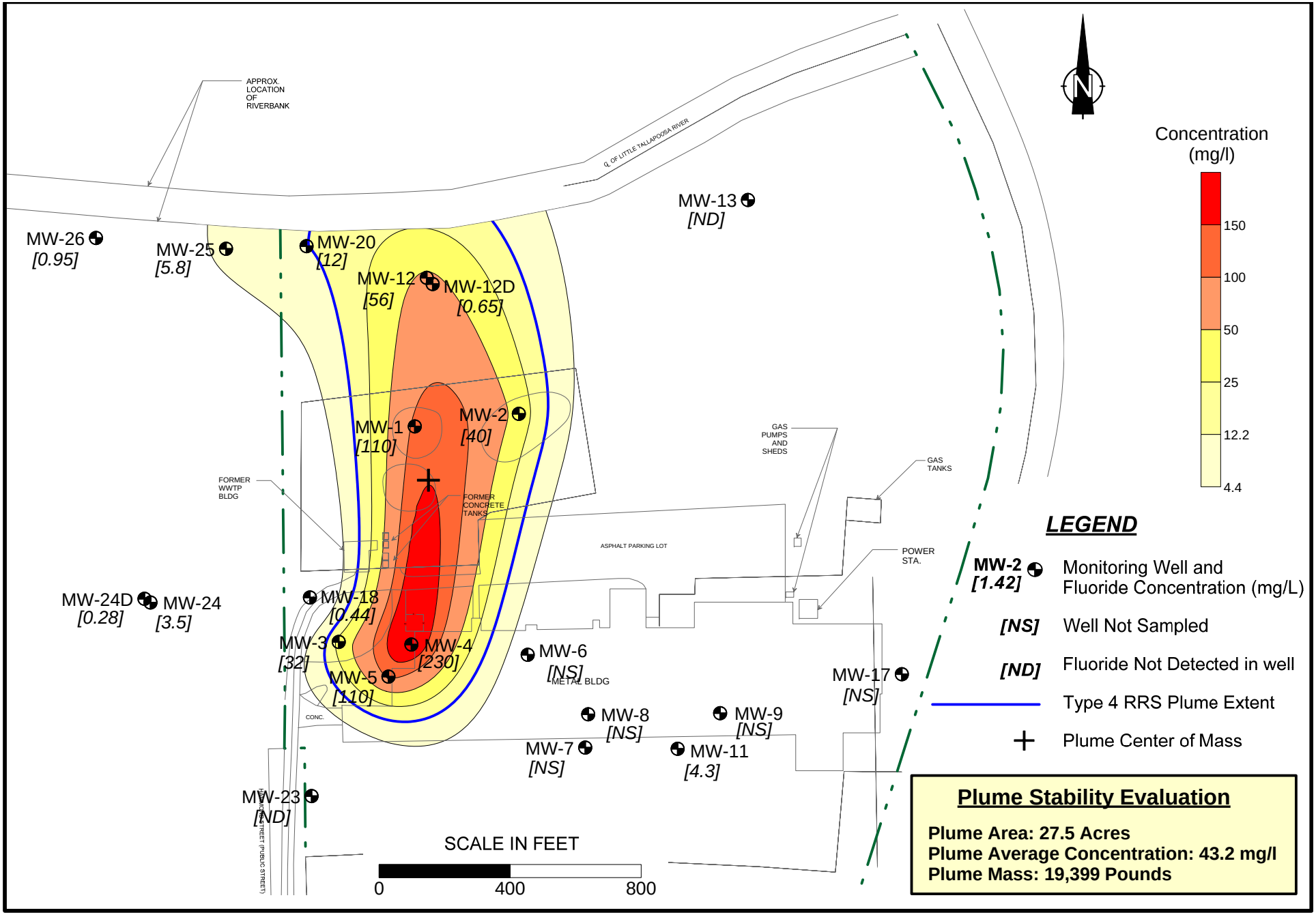

FLUORIDE PLUME STABILITY ANALYSIS - MARCH 2006

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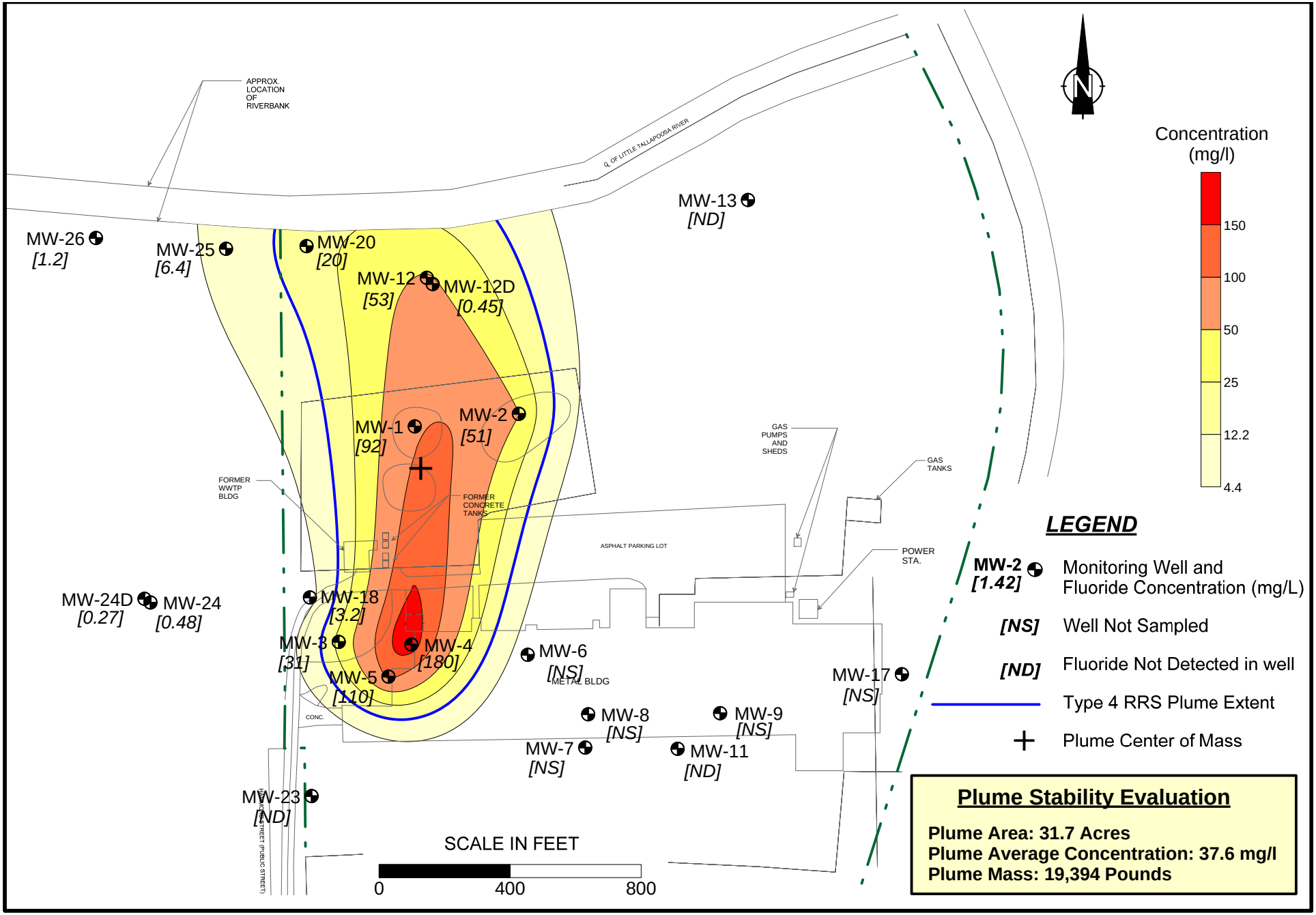

FLUORIDE PLUME STABILITY ANALYSIS - JUNE 2006

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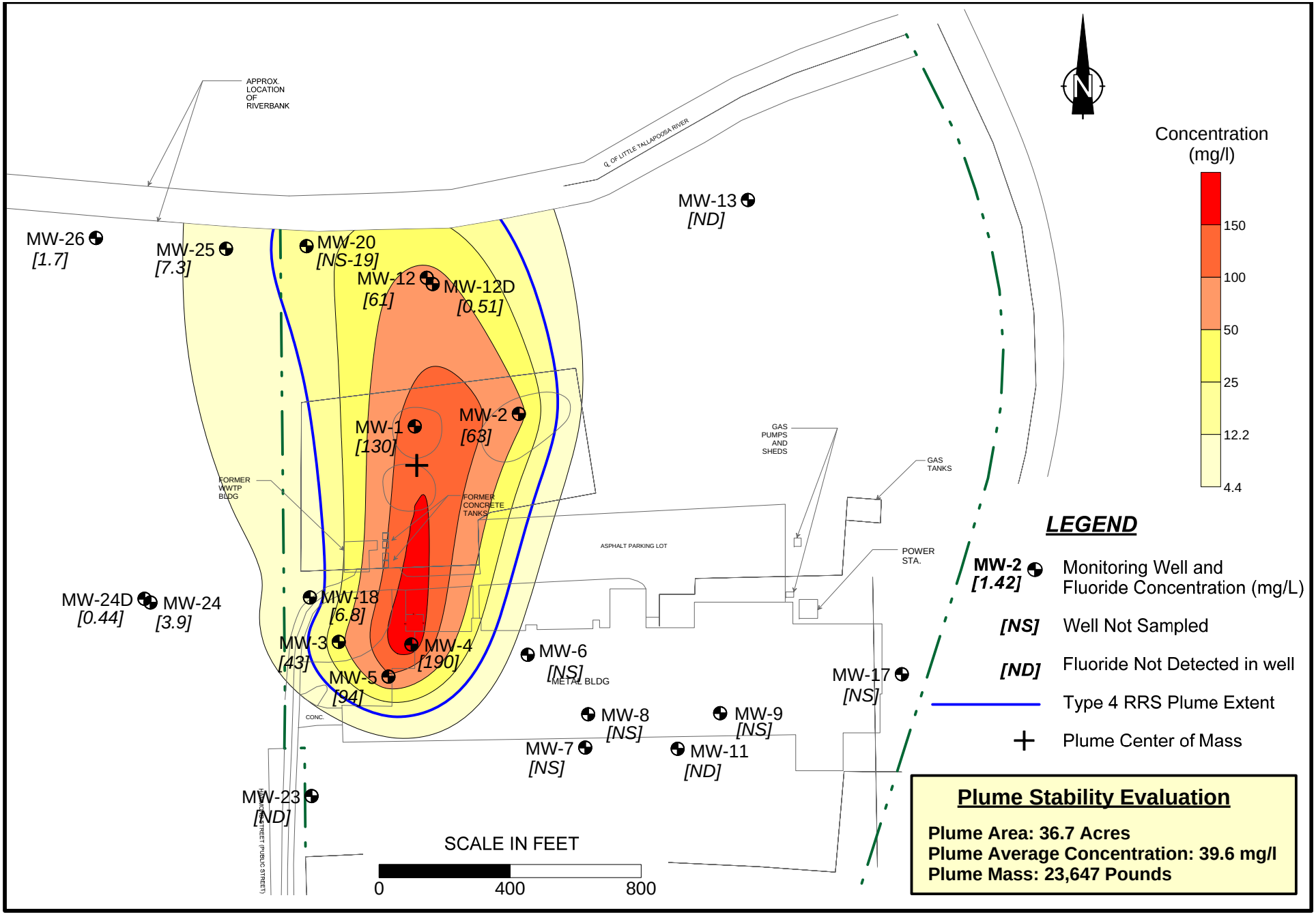

FLUORIDE PLUME STABILITY ANALYSIS - SEPTEMBER 2006

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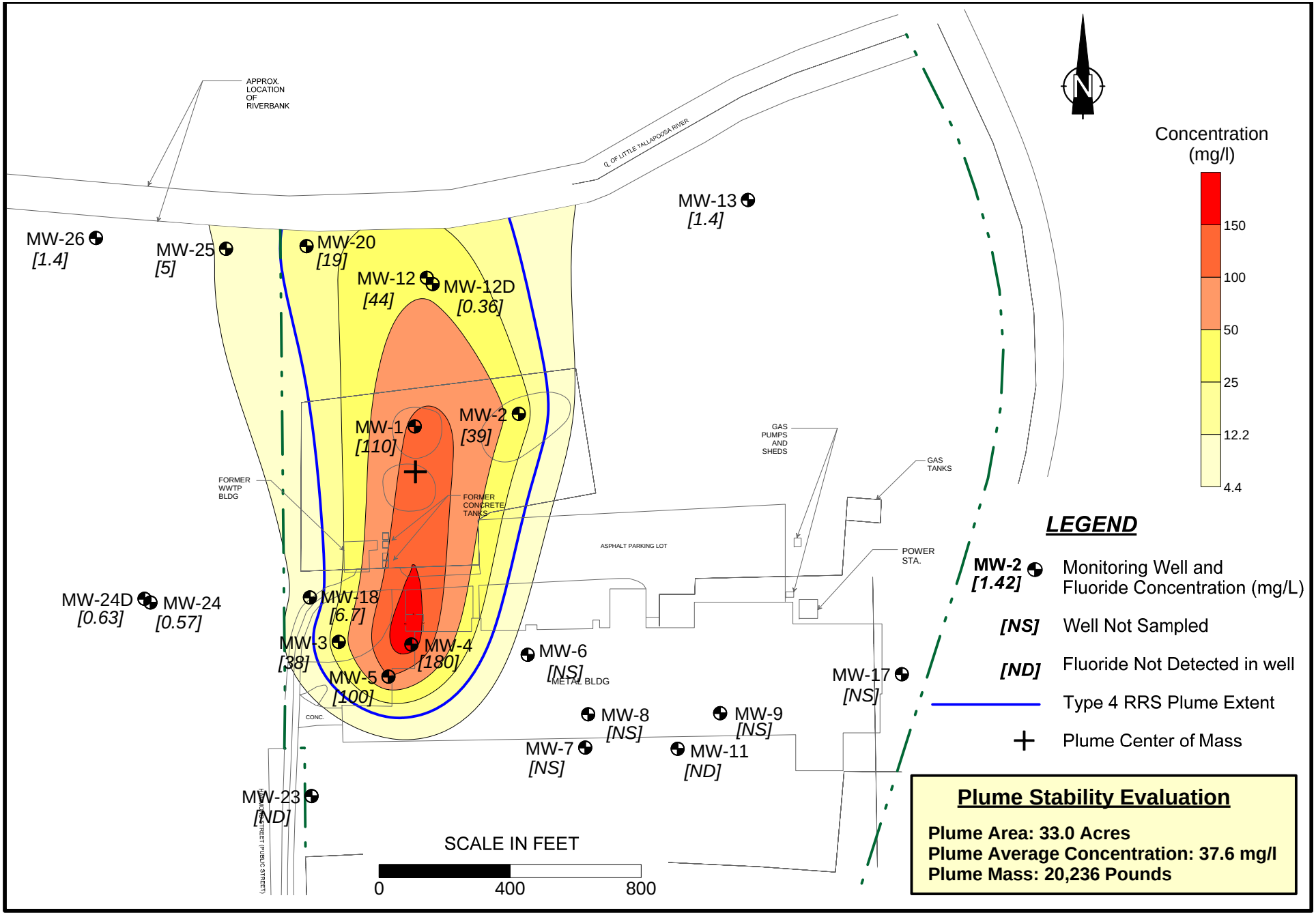

FLUORIDE PLUME STABILITY ANALYSIS - NOVEMBER 2006

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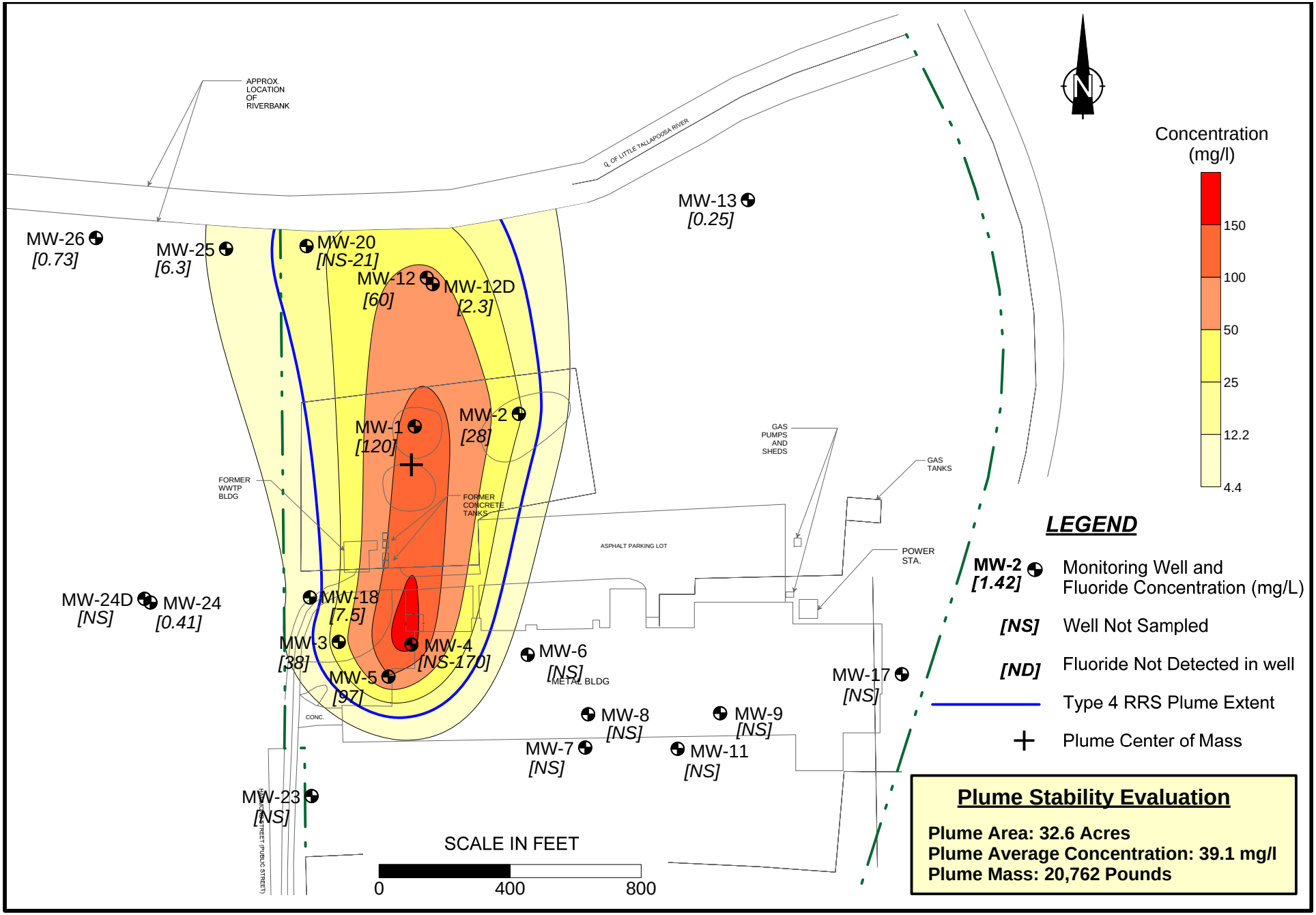

FLUORIDE PLUME STABILITY ANALYSIS - MAY 2007

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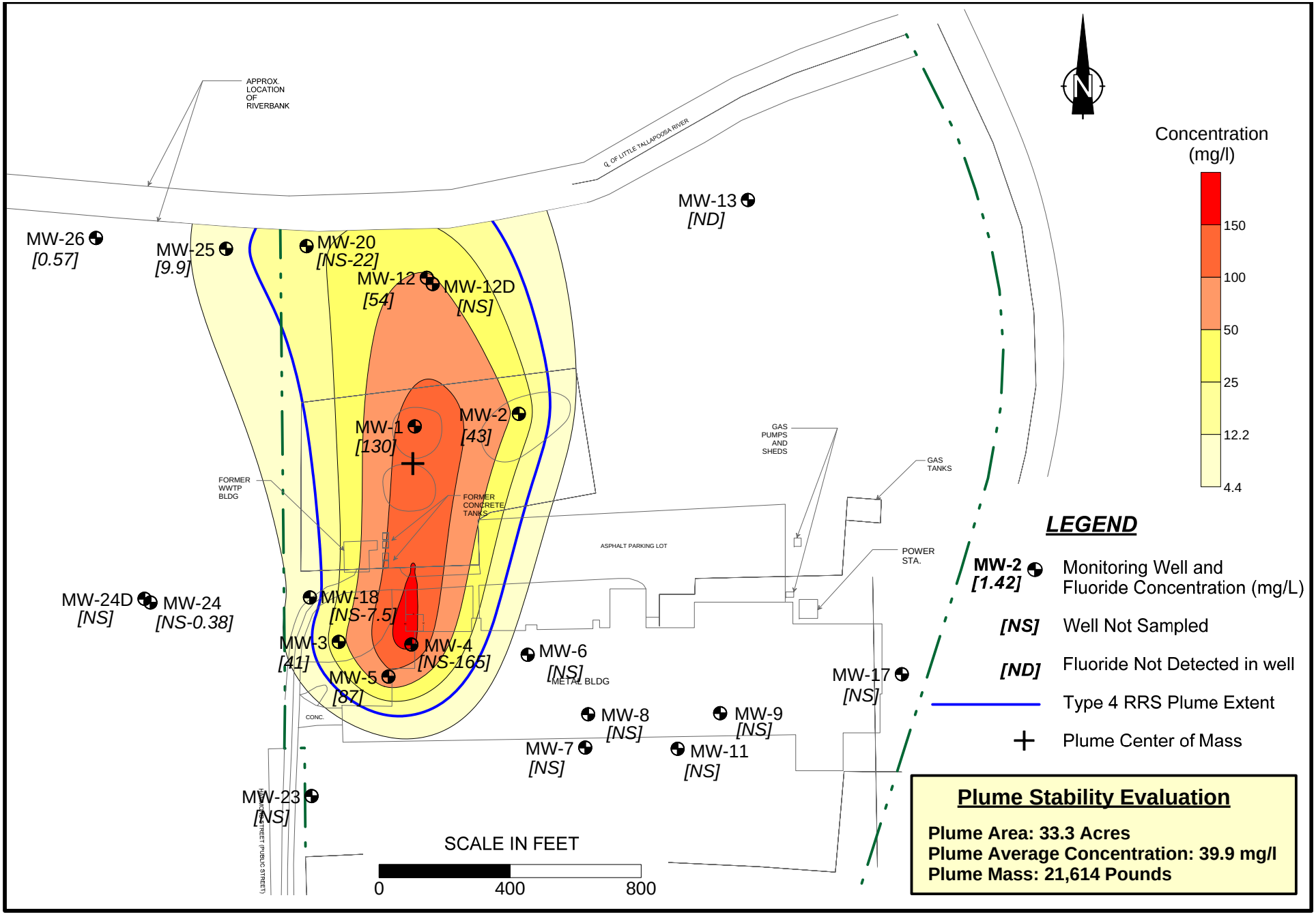

FLUORIDE PLUME STABILITY ANALYSIS - AUGUST 2007

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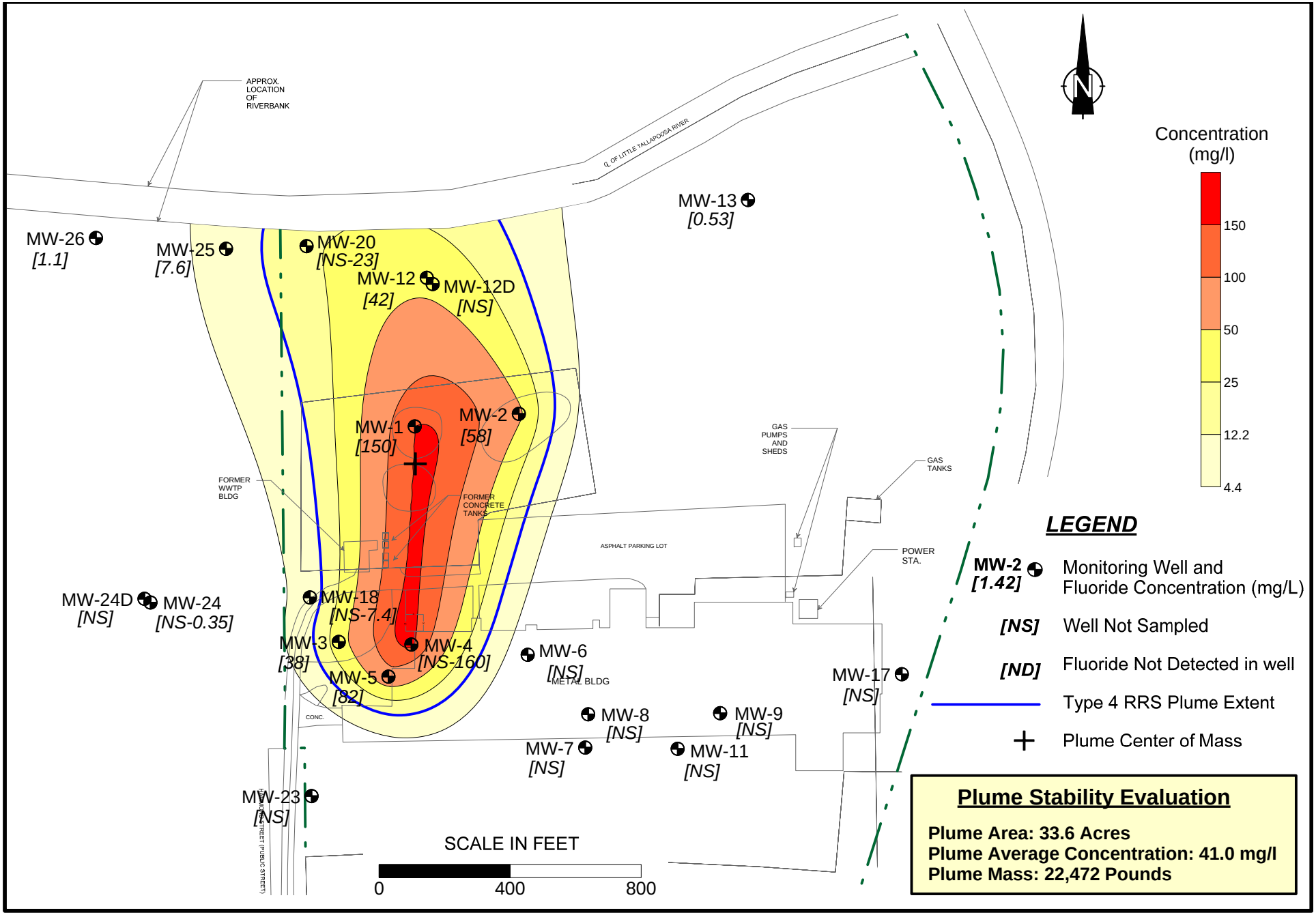

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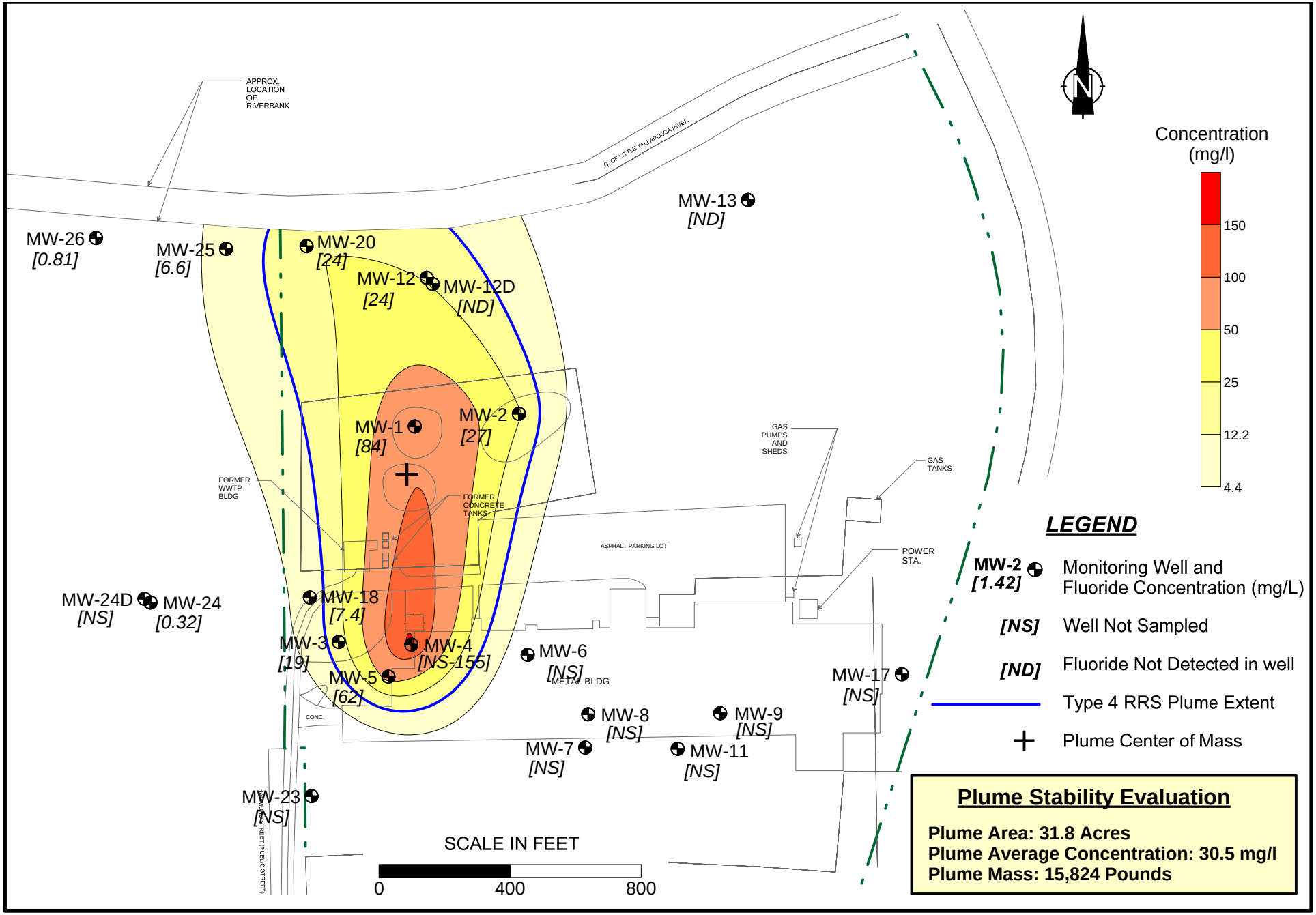

FLUORIDE PLUME STABILITY ANALYSIS JANUARY 2008

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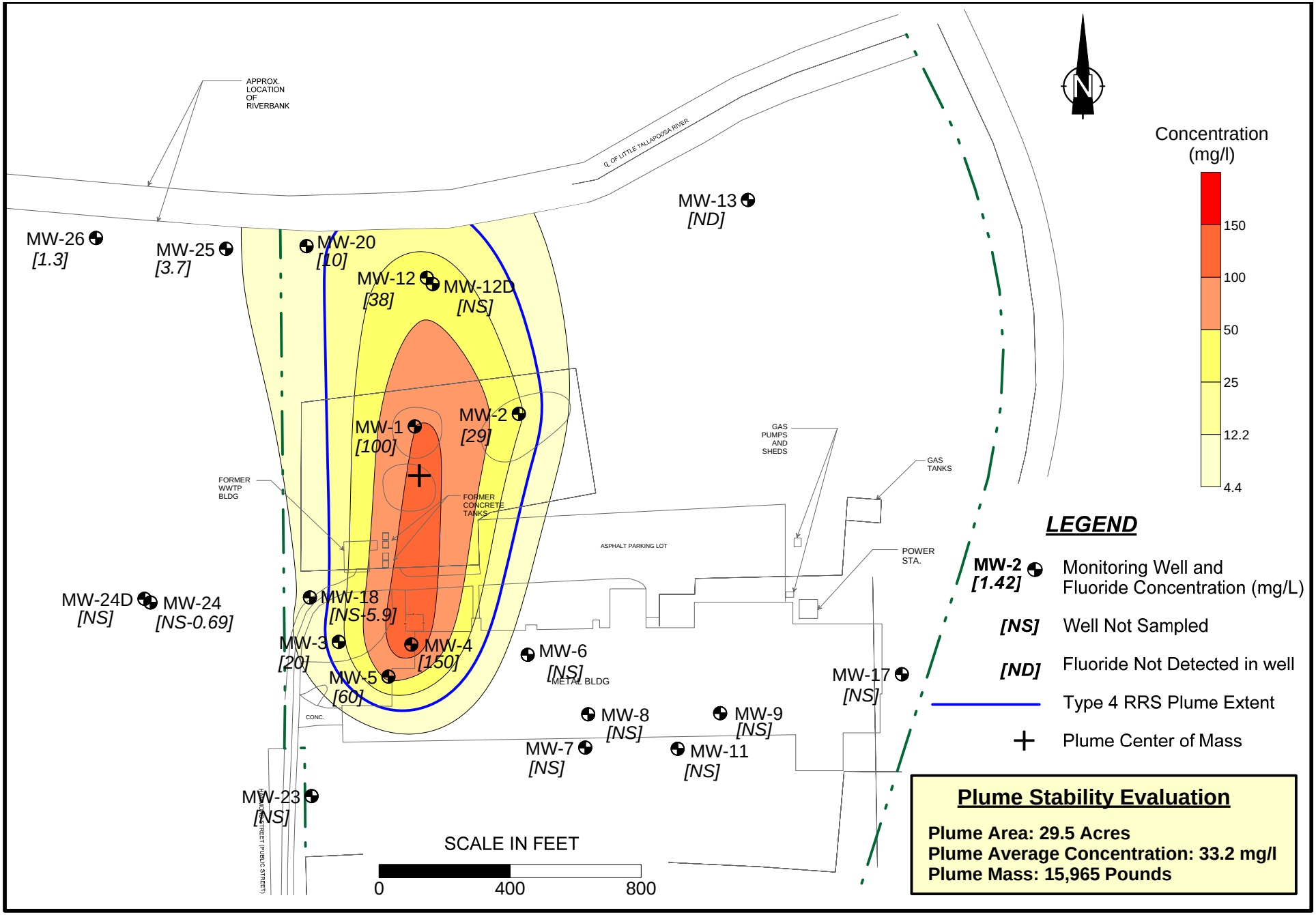
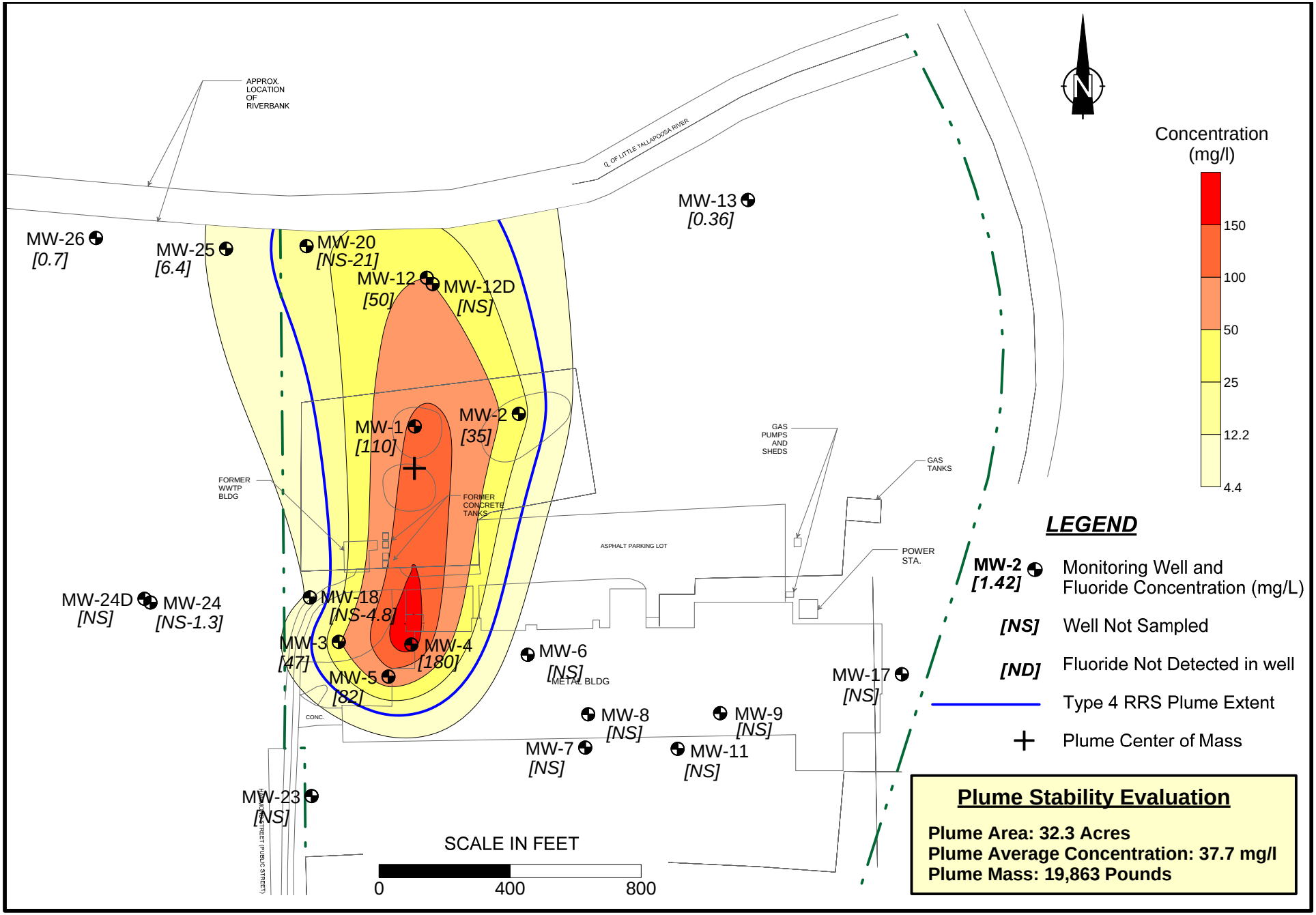


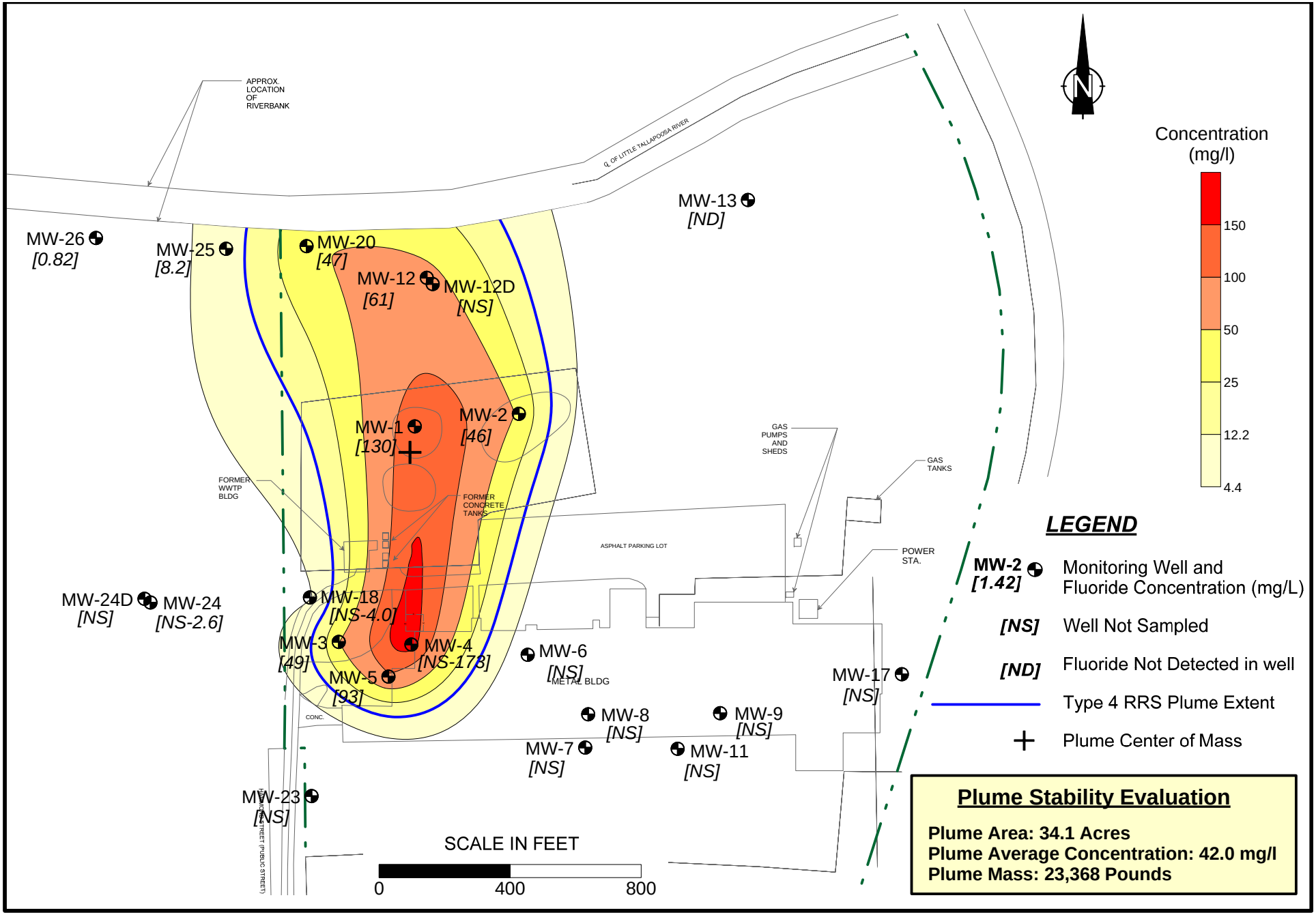
FLUORIDE PLUME STABILITY ANALYSIS MAY 2008

PREMIER ENVIRONMENTAL SERVICES, INC



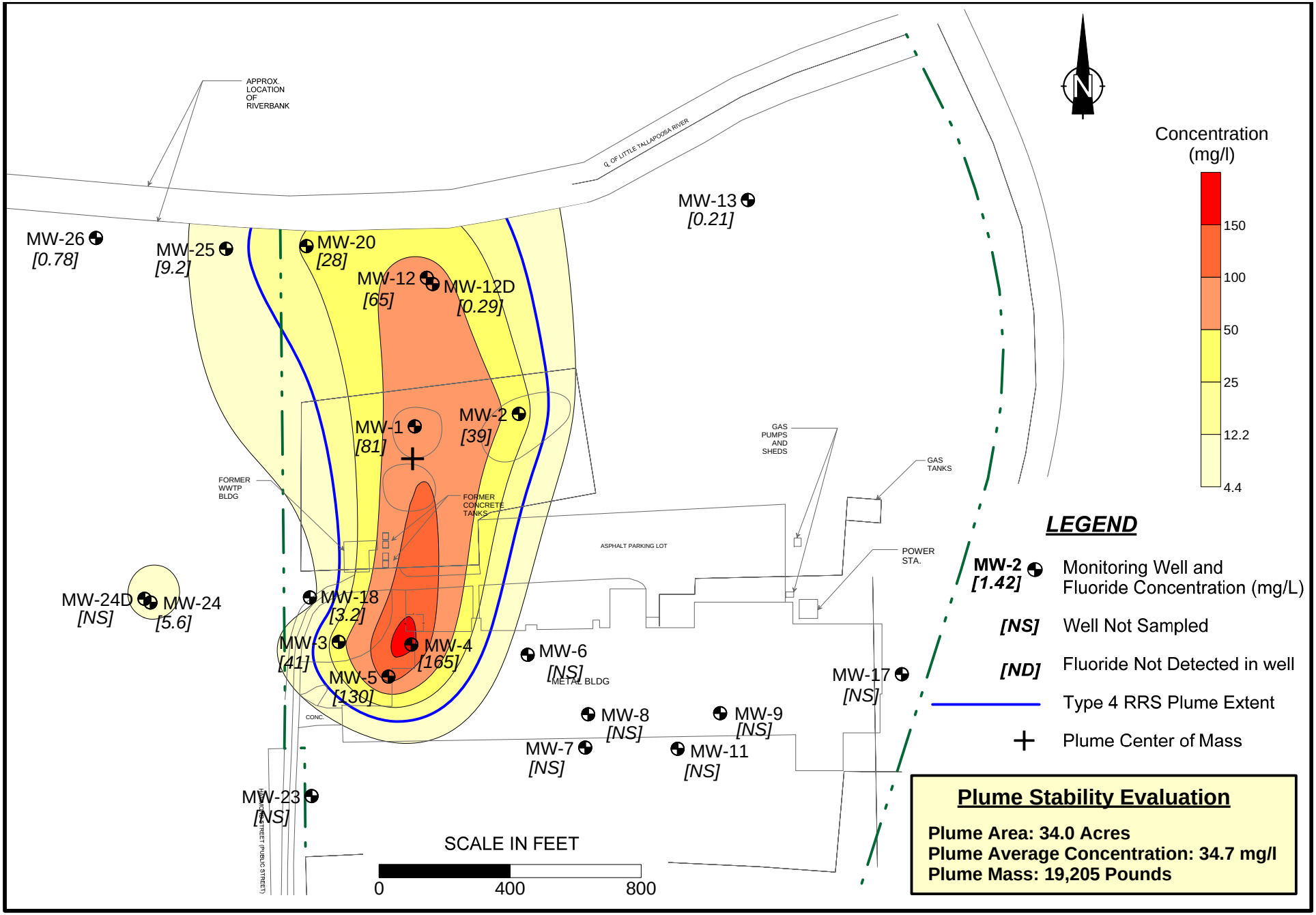
FLUORIDE PLUME STABILITY ANALYSIS AUGUST 2008

PREMIER ENVIRONMENTAL SERVICES, INC



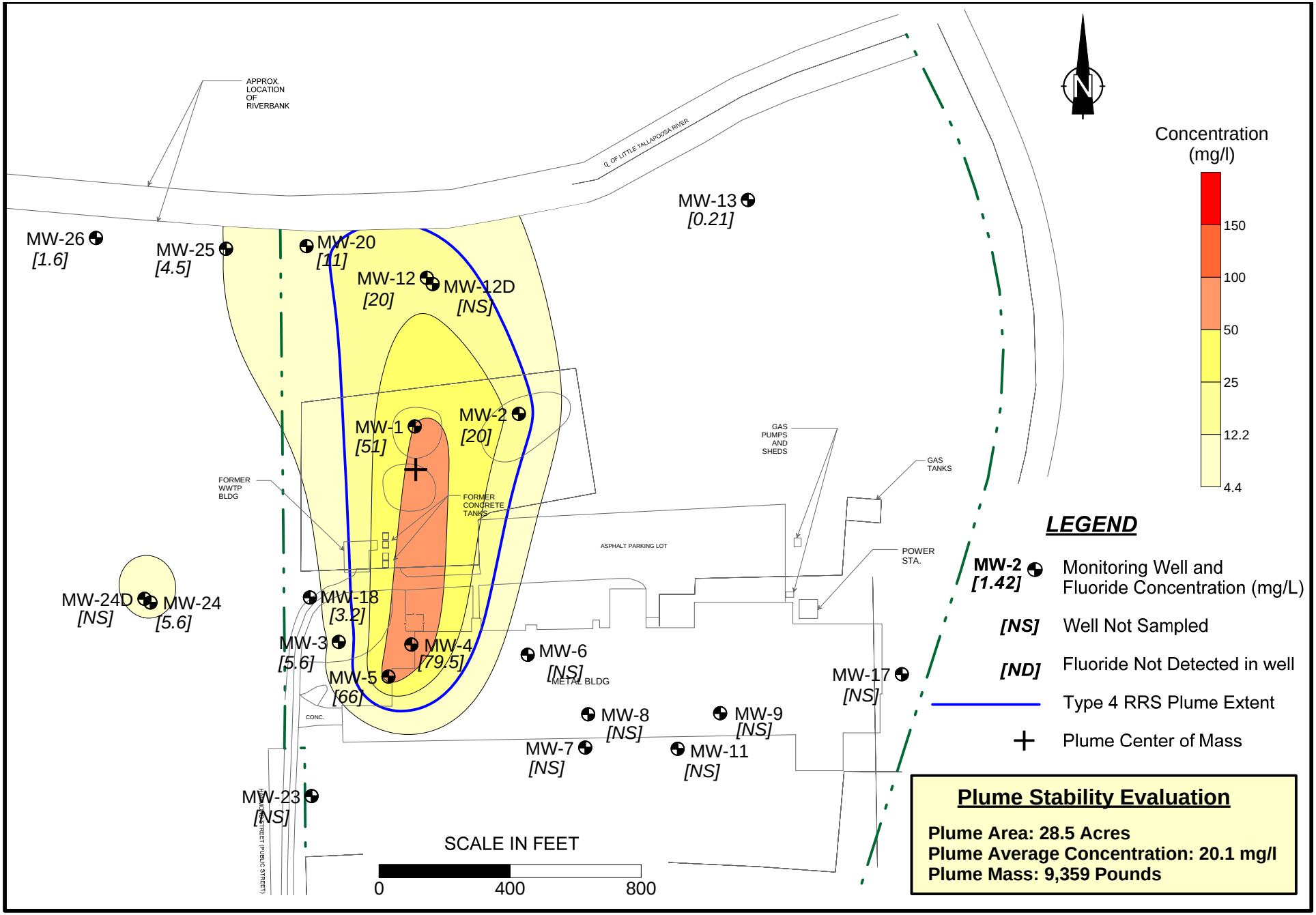
FLUORIDE PLUME STABILITY ANALYSIS NOVEMBER 2008

PREMIER ENVIRONMENTAL SERVICES, INC



FLUORIDE PLUME STABILITY ANALYSIS FEBRUARY 2009

PREMIER ENVIRONMENTAL SERVICES, INC



FLUORIDE PLUME STABILITY ANALYSIS MAY 2009

PREMIER ENVIRONMENTAL SERVICES, INC

PEACHTREE ENVIRONMENTAL

ATTACHMENT D

RISK REDUCTION STANDARDS

Summary: Risk Reduction Standards for Groundwater

Constituents	CAS Number	Type 1/3 GW RRS (mg/L)	Type 2 GW RRS (mg/L)	Type 4 GW RRS (mg/L)
Inorganics				
Chromium(III), Insoluble Salts (not regulated substance)	16065-83-1	--	23.5	--
Lead and Compounds	7439-92-1	0.015	0.010	--
Nickel Soluble Salts	7440-02-0	0.100	0.313	2.04
Mercury (elemental)	7439-97-6	0.002	0.0002	--
Fluoride	16984-48-8	4.00	0.626	4.09
VOCs				
Trichloroethene (TCE)	79-01-6	0.005	0.005	0.005

Except where otherwise noted, RRS calculations based on standard default values of Georgia HSRA regulations (§391-3-19), U.S. EPA Mid-Atlantic Risk Assessment toxicity factors and physio-chemical properties (May 2016 update), and project-specific detection limits. Values derived using site-specific exposure factors such as water ingestion rate, exposure duration, etc., other detection limits, or updated toxicity factors and physio-chemical properties, will differ from the calculations contained herein.

Type 2 Risk Reduction Standards for Groundwater[Rule 391-3-19-.07(7)(b)]

Constituents (mg/L)	Item 1 RAGS (Equ 2) Non-Carc Adult	Item 1 RAGS (Equ 2) Non-Carc Child	Item 2 RAGS (Equ 1) Carc Adult	Item 2 RAGS (Equ 1) Carc Child	Least of Items 1 & 2	Detection Limit	**TYPE 2 RRS**
Inorganics							
Chromium(III), Insoluble Salts (not regulated substance)	5.48E+01	**2.35E+01**	--	--	2.35E+01	1.00E-02	2.35E+01
Lead and Compounds	--	**--**	--	--	--	**1.00E-02**	1.00E-02
Nickel Soluble Salts	7.30E-01	**3.13E-01**	--	--	3.13E-01	2.00E-02	3.13E-01
Mercury (elemental)	--	--	--	--	--	**2.00E-04**	2.00E-04
Fluoride	1.46E+00	**6.26E-01**	--	--	6.26E-01	1.00E-01	6.26E-01
VOCs							
Trichloroethene (TCE)	4.26E-03	1.03E-03	8.53E-03	1.19E-02	1.03E-03	**5.00E-03**	5.00E-03

Type 2 Non-Carcinogenic Evaluation for Groundwater; Residential Adult (RAGS Equ. 2)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR w (L/d)	Oral RfD (mg/kg-d)	IR a (m3/d)	K (L/m^3)	Inh. RfD (mg/kg-d)	Type 2 GW Stnd (mg/L)	Remarks
Inorganics													
Chromium(III), Insoluble Salts (not regulated substance)	1	70	30	365	350	30	2	1.5E+00	15	0.5	--	5.48E+01	oral only
Lead and Compounds	1	70	30	365	350	30	2	--	15	0.5	--	--	no tox values
Nickel Soluble Salts	1	70	30	365	350	30	2	2.0E-02	15	0.5	2.6E-05	7.30E-01	not volatile
Mercury (elemental)	1	70	30	365	350	30	2	--	15	0.5	8.6E-05	--	not volatile
Fluoride	1	70	30	365	350	30	2	4.0E-02	15	0.5	3.7E-03	1.46E+00	not volatile
VOCs													
Trichloroethene (TCE)	1	70	30	365	350	30	2	5.0E-04	15	0.5	5.7E-04	4.26E-03	oral & inh.

Type 2 Non-Carcinogenic Evaluation for Groundwater; Residential Child (RAGS Equ. 2)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR w (L/d)	Oral RfD (mg/kg-d)	IR a (m3/d)	K (L/m^3)	Inh. RfD (mg/kg-d)	Type 2 GW Stnd (mg/L)	Remarks
Inorganics													
Chromium(III), Insoluble Salts (not regulated substance)	1	15	6	365	350	6	1	1.5E+00	15	0.5	--	2.35E+01	oral only
Lead and Compounds	1	15	6	365	350	6	1	--	15	0.5	--	--	no tox values
Nickel Soluble Salts	1	15	6	365	350	6	1	2.0E-02	15	0.5	2.6E-05	3.13E-01	not volatile
Mercury (elemental)	1	15	6	365	350	6	1	--	15	0.5	8.6E-05	--	not volatile
Fluoride	1	15	6	365	350	6	1	4.0E-02	15	0.5	3.7E-03	6.26E-01	not volatile
VOCs													
Trichloroethene (TCE)	1	15	6	365	350	6	1	5.0E-04	15	0.5	5.7E-04	1.03E-03	oral & inh.

Type 2 Carcinogenic Evaluation for Groundwater; Residential Adult (RAGS Equ. 1)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR w (L/d)	Oral SF (mg/kg-d)-1	IR a (m3/d)	K (L/m^3)	Inh. SF (mg/kg-d)-1	Type 2 GW Stnd (mg/L)	Remarks
Inorganics													
Chromium(III), Insoluble Salts (not regulated substance)	1.00E-05	70	70	365	350	30	2	--	15	0.5	--	--	no tox value
Lead and Compounds	1.00E-05	70	70	365	350	30	2	--	15	0.5	--	--	no tox value
Nickel Soluble Salts	1.00E-05	70	70	365	350	30	2	--	15	0.5	9.1E-01	--	not volatile
Mercury (elemental)	1.00E-05	70	70	365	350	30	2	--	15	0.5	--	--	no tox value
Fluoride	1.00E-05	70	70	365	350	30	2	--	15	0.5	--	--	no tox value
VOCs													
Trichloroethene (TCE)	1.00E-05	70	70	365	350	30	2	4.6E-02	15	0.5	1.4E-02	8.53E-03	oral & inh.

Type 2 Carcinogenic Evaluation for Groundwater; Residential Child (RAGS Equ. 1)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR w (L/d)	Oral SF (mg/kg-d)-1	IR a (m3/d)	K (L/m^3)	Inh. SF (mg/kg-d)-1	Type 2 GW Stnd (mg/L)	Remarks
Inorganics													
Chromium(III), Insoluble Salts (not regulated substance)	1.00E-05	15	70	365	350	6	1	--	15	0.5	--	--	no tox value
Lead and Compounds	1.00E-05	15	70	365	350	6	1	--	15	0.5	--	--	no tox value
Nickel Soluble Salts	1.00E-05	15	70	365	350	6	1	--	15	0.5	9.1E-01	--	no tox value
Mercury (elemental)	1.00E-05	15	70	365	350	6	1	--	15	0.5	--	--	no tox value
Fluoride	1.00E-05	15	70	365	350	6	1	--	15	0.5	--	--	no tox value
VOCs													
Acetone	1.00E-05	15	70	365	350	6	1	--	15	0.5	--	--	no tox value
Toluene	1.00E-05	15	70	365	350	6	1	--	15	0.5	--	--	no tox value
Trichloroethene (TCE)	1.00E-05	15	70	365	350	6	1	4.6E-02	15	0.5	1.4E-02	1.19E-02	oral & inh.

Type 4 Risk Reduction Standards for Groundwater [Rule 391-3-19-.07(9)(c)]

Constituents (mg/L)	Item 1 RAGS (Equ 2) Non-Carc Adult	Item 2 RAGS (Equ 1) Carc Adult	Least of Items 1 & 2	Detection Limit	**TYPE 4 RRS**
Inorganics					
Nickel Soluble Salts	**2.04E+00**	--	2.04E+00	2.00E-02	2.04E+00
Fluoride	**4.09E+00**	--	4.09E+00	**1.00E-01**	4.09E+00
VOCs					
Trichloroethene (TCE)	**5.24E-03**	1.51E-02	5.24E-03	5.00E-03	5.24E-03

Type 4 Non-Carcinogenic Evaluation for Groundwater; Non-Residential Adult (RAGS Equ. 2)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR w (L/d)	Oral RfD (mg/kg-d)	IR a (m3/d)	K (L/m^3)	Inh. RfD (mg/kg-d)	Type 4 GW Stnd (mg/L)	Remarks
Inorganics													
Nickel Soluble Salts	1	70	25	365	250	25	1	2.0E-02	20	0.5	2.6E-05	2.04E+00	not volatile
Fluoride	1	70	25	365	250	25	1	4.0E-02	20	0.5	3.7E-03	4.09E+00	not volatile
VOCs													
Trichloroethene (TCE)	1	70	25	365	250	25	1	5.0E-04	20	0.5	5.7E-04	5.24E-03	oral & inh.

Type 4 Carcinogenic Evaluation for Groundwater; non-Residential Adult (RAGS Equ. 1)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR w (L/d)	Oral SF (mg/kg-d)-1	IR a (m3/d)	K (L/m^3)	Inh. SF (mg/kg-d)-1	Type 4 GW Stnd (mg/L)	Remarks
Inorganics													
Nickel Soluble Salts	1.00E-05	70	70	365	250	25	1	--	20	0.5	9.1E-01	--	no tox value
Fluoride	1.00E-05	70	70	365	250	25	1	--	20	0.5	--	--	no tox value
VOCs													
Trichloroethene (TCE)	1.00E-05	70	70	365	250	25	1	4.6E-02	20	0.5	1.4E-02	1.51E-02	oral & inh.

Constituents	CAS Number	Type 1 Soil RRS (mg/kg)	Type 2 Soil RRS (mg/kg)	Type 3 Soil RRS	
				Surface Soil (mg/kg)	Subsurface Soil (mg/kg)
PCBs					
Aroclor 1248	12672-29-6	1.55	--	--	--
Inorganics					
Barium	7440-39-3	1,000	--	--	--
Chromium, Total	7440-47-3	100	117,321	--	--
Lead and Compounds	7439-92-1	75.0	270	--	--
Nickel Soluble Salts	7440-02-0	50.0	409	--	--
Mercury (elemental)	7439-97-6	0.500	2.09	17.0	17.0
Fluoride	16984-48-8	400	3,128		
VOCs					
Acetone	67-64-1	400	--	--	--
Toluene	108-88-3	100	--	--	--
Trichloroethene (TCE)	79-01-6	0.500	--	--	--

Except where otherwise noted, RRS calculations based on standard default values of Georgia HSRA regulations (§391-3-19), U.S. EPA Mid-Atlantic Risk Assessment toxicity factors and physio-chemical properties (May 2016 update), Partioning Equation for Migration to Groundwater (Equation 4-10) of U.S. EPA Supplemental Guidance for Developing Soil Screening Levels at Superfund Sites (December 2002), and project-specific detection limits. Values derived using site-specific factors such as fraction of organic carbon (foc), SPLP test results, etc., updated toxicity factors and physio-chemical properties, or other detection limits will differ from the calculations contained herein.

Type 2 risk reduction standard for chromium assumes trivalent state

Type 1 Risk Reduction Standards for Soil [Rule 391-3-19-.07(6)(c)]

Constituents (mg/kg)	Appendix III Table 2 Value	Item 1 (i) Appendix I Concentration	Item 1 (ii) Type 1 GW Criteria x 100	Greatest of Item i - iii	Item 2 RAGS (Equ 7) Non-Carcinogenic	Item 3 RAGS (Equ 6) Carcinogenic	**Type 1 RRS (mg/kg)**
PCBs							
Aroclor 1248	--	**1.55**	0.05	1.55	--	7.47E+00	**1.55**
Inorganics							
Barium	**1,000**	--	--	--	--	--	**1,000**
Chromium, Total	100	--	--	--	--	--	**100**
Lead and Compounds	**75.0**	--	--	--	--	--	**75.0**
Nickel Soluble Salts	**50.0**	--	--	--	--	--	**50.0**
Mercury (elemental)	**0.500**	--	--	--	--	--	**0.500**
Fluoride	**--**	--	**400**	400	2.56E+04	--	**400**
VOCs							
Acetone	--	2.74	**400**	400	5.65E+05	--	**400**
Toluene	--	14.40	**100**	100	5.05E+04	--	**100**
Trichloroethene (TCE)	--	0.13	**0.500**	0.500	2.03E+02	2.69E+02	**0.500**

Type 1 Non-Carcinogenic Evaluation for Soil; Residential Use Scenario (RAGS Equ. 7)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral RfD (mg/kg-d)	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. RfD (mg/kg-d)	Type 1 Soil Std. (mg/kg)	Remarks
PCBs															
Aroclor 1248	1	70	30	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Inorganics															
Barium	1	70	30	365	350	30	114	1.0E-06	2.0E-01	15	--	4.63E+09	1.4E-04	1.23E+05	oral & inh.
Chromium, Total	1	70	30	365	350	30	114	1.0E-06	--	15	-	4.63E+09	--	--	no tox values
Lead and Compounds	1	70	30	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Nickel Soluble Salts	1	70	30	365	350	30	114	1.0E-06	2.0E-02	15	--	4.63E+09	2.6E-05	1.25E+04	oral & inh.
Mercury (elemental)	1	70	30	365	350	30	114	1.0E-06	--	15	--	4.63E+09	8.6E-05	1.93E+06	inh only
Fluoride	1	70	30	365	350	30	114	1.0E-06	4.0E-02	16	--	4.63E+09	3.7E-03	2.56E+04	inh only
VOCs															
Acetone	1	70	30	365	350	30	114	1.0E-06	9.0E-01	15	6.42E+05	4.63E+09	8.9E+00	5.65E+05	oral & inh.
Toluene	1	70	30	365	350	30	114	1.0E-06	8.0E-02	15	5.17E+05	4.63E+09	1.4E+00	5.05E+04	oral & inh.
Trichloroethene (TCE)	1	70	30	365	350	30	114	1.0E-06	5.0E-04	15	2.00E+05	4.63E+09	5.7E-04	2.03E+02	oral & inh.

Type 1 Carcinogenic Evaluation for Soil; Residential Use Scenario (RAGS Equ. 6)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral SF (mg/kg-d)-1	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. SF (mg/kg-d)-1	Type 1 Soil Std. (mg/kg)	Remarks
PCBs															
Aroclor 1248	1.00E-05	70	70	365	350	30	114	1.0E-06	2.0E+00	15	--	4.63E+09	2.0E+00	7.47E+00	oral & inh.
Inorganics															
Barium	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Chromium, Total	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Lead and Compounds	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Nickel Soluble Salts	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	--	4.63E+09	9.1E-01	5.78E+05	inh only
Mercury (elemental)	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
VOCs															
Acetone	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	6.42E+05	4.63E+09	--	--	no tox values
Toluene	1.00E-05	70	70	365	350	30	114	1.0E-06	--	15	5.17E+05	4.63E+09	--	--	no tox values
Trichloroethene (TCE)	1.00E-05	70	70	365	350	30	114	1.0E-06	4.6E-02	15	2.00E+05	4.63E+09	1.4E-02	2.69E+02	oral & inh.

Type 2 Risk Reduction Standards for Soil [Rule 391-3-19-.07(7)(c)]

Constituents (mg/kg)	Item 1 Groundwater Protection Standard	Item 2 RAGS (Equ 7) Non-Carc Adult	Item 2 RAGS (Equ 7) Non-Carc Child	Item 3 RAGS (Equ 6) Carc Adult	Item 3 RAGS (Equ 6) Carc Child	Least of Items 1 - 3	IEUBK Model	**TYPE 2 RRS** (mg/kg)
Inorganics								
Chromium(III), Insoluble Salts (not regulated substance)	(a)	1.10E+06	1.17E+05	--	--	1.17E+05	--	**117,321**
Lead and Compounds	**270**	--	--	--	--	2.70E+02	4.18E+02	**270**
Nickel Soluble Salts	**409**	1.42E+04	1.54E+03	5.78E+05	6.19E+05	4.09E+02	--	**409**
Mercury (elemental)	**2.09**	1.93E+06	4.14E+05	--	--	2.09E+00	--	**2.09**
Fluoride	12,023	2.92E+04	**3.13E+03**	--	--	3.13E+03	--	**3,128**

(a) Chemical-specific properties are such that this pathway is not of concern at any soil contaminant concentration

Type 2 Non-Carcinogenic Evaluation for Soil; Residential Adult (RAGS Equ. 7)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral RfD (mg/kg-d)	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. RfD (mg/kg-d)	Type 2 Soil Std. (mg/kg)	Remarks
Inorganics															
Chromium(III), Insoluble Salts (not regulated substance)	1	70	30	365	350	30	100	1.0E-06	1.5E+00	15	--	4.63E+09	--	1.10E+06	oral only
Lead and Compounds	1	70	30	365	350	30	100	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Nickel Soluble Salts	1	70	30	365	350	30	100	1.0E-06	2.0E-02	15	--	4.63E+09	2.6E-05	1.42E+04	oral & inh.
Mercury (elemental)	1	70	30	365	350	30	100	1.0E-06	--	15	--	4.63E+09	8.6E-05	1.93E+06	inh only
Fluoride	1	70	30	365	350	30	100	1.0E-06	4.0E-02	15	--	4.63E+09	3.7E-03	2.92E+04	oral & inh.

Type 2 Non-Carcinogenic Evaluation for Soil; Residential Child (RAGS Equ. 7)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral RfD (mg/kg-d)	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. RfD (mg/kg-d)	Type 2 Soil Std. (mg/kg)	Remarks
Inorganics															
Chromium(III), Insoluble Salts (not regulated substance)	1	15	6	365	350	6	200	1.0E-06	1.5E+00	15	--	4.63E+09	--	1.17E+05	oral only
Lead and Compounds	1	15	6	365	350	6	200	1.0E-06	--	15	;--	4.63E+09	--	--	no tox values
Nickel Soluble Salts	1	15	6	365	350	6	200	1.0E-06	2.0E-02	15	--	4.63E+09	2.6E-05	1.54E+03	oral & inh.
Mercury (elemental)	1	15	6	365	350	6	200	1.0E-06	--	15	--	4.63E+09	8.6E-05	4.14E+05	inh only
Fluorene	1	15	6	365	350	6	200	1.0E-06	4.0E-02	15	--	4.63E+09	3.7E-03	3.13E+03	

Type 2 Carcinogenic Evaluation for Soil; Residential Adult (RAGS Equ. 6)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral SF (mg/kg-d)-1	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. SF (mg/kg-d)-1	Type 2 Soil Std. (mg/kg)	Remarks
Inorganics															
Chromium(III), Insoluble Salts (not regulated substance)	1.00E-05	70	70	365	350	30	100	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Lead and Compounds	1.00E-05	70	70	365	350	30	100	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Nickel Soluble Salts	1.00E-05	70	70	365	350	30	100	1.0E-06	--	15	--	4.63E+09	9.1E-01	5.78E+05	inh only
Mercury (elemental)	1.00E-05	70	70	365	350	30	100	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Fluoride	1.00E-05	70	70	365	350	30	100	1.0E-06	--	16	--	4.63E+09	--	--	no tox values

Type 2 Carcinogenic Evaluation for Soil; Residential Child (RAGS Equ. 6)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral SF (mg/kg-d)-1	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. SF (mg/kg-d)-1	Type 2 Soil Std. (mg/kg)	Remarks
Inorganics															
Chromium(III), Insoluble Salts (not regulated substance)	1.00E-05	15	70	365	350	6	200	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Lead and Compounds	1.00E-05	15	70	365	350	6	200	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Nickel Soluble Salts	1.00E-05	15	70	365	350	6	200	1.0E-06	--	15	--	4.63E+09	9.1E-01	6.19E+05	inh only
Mercury (elemental)	1.00E-05	15	70	365	350	6	200	1.0E-06	--	15	--	4.63E+09	--	--	no tox values
Fluoride	1.00E-05	15	70	365	350	6	200	1.0E-06	--	16	--	4.63E+09	--	--	no tox values

Type 2 Soil Screening Level for Migration to Groundwater

Constituents	Cw		Kd* (L/kg)	Koc (L/kg)	foc (g/g)	Ow** (Lwater/ Lsoil)	Oa (Lair/Lsoil)	n (Lpore/Lsoil)	Pb** (kg/L)	Ps** (kg/L)	H' (unitless)	Soil Screening Level (mg/kg)
	Type 1 or 2 GW Criteria (mg/L)	DAF (unitless)										
Inorganics												
Chromium(III), Insoluble Salts (not regulated substance)	23.5	20	1.80E+06	--	0.002	0.3	0.134	0.434	1.5	2.65	--	(a)
Lead and Compounds	0.015	20	9.00E+02	--	0.002	0.3	0.134	0.434	1.5	2.65	--	270
Nickel Soluble Salts	0.313	20	6.50E+01	--	0.002	0.3	0.134	0.434	1.5	2.65	--	409
Mercury (elemental)	0.002	20	5.20E+01	--	0.002	0.3	0.134	0.434	1.5	2.65	--	2.09
Fluoride	4.00	20	1.50E+02	--	0.002	0.3	0.134	0.434	1.5	2.65	--	12023

Notes:

Physical/chemical parameters obtained from U.S. EPA Mid-Atlantic Risk Assessment Regional Screening Tables (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm) except as noted below.

** Values for Ow, Pb, and Ps obtained from Appendix B (Equation 13) of Supplemental Guidance for Developing Sol Screening Levels for Superfund Sites (EPA, 2002)

(a) Chemical-specific properties are such that this pathway is not of concern at any soil contaminant concentration

Soil screening level = Cw [Kd + (Ow + Oa*H')/Pb]

Cw = target soil leachate concentration (mg/L)

Cw = groundwater critieria * dilultion attenuation factor (DAF)

Kd = soil-water partition coefficient (L/kg) = Koc x foc

Koc=soil organic carbon-water partition coefficient (L/kg)

foc = fraction organic carbon-water partition coefficient (g/g)

Ow = water-filled soil porosity (Lwater/Lsoil)

Oa = air-filled soil porosity (Lair/Lsoil) = n-Ow

n = soil porosity (Lpore/Lsoil) = 1-(Pb/Ps)

Pb = dry soil bulk density (kg/L)

Ps = soil particle density (kg/L)

H' = dimensionless Henry's Law Constant

Type 3 Risk Reduction Standards for Soil [Rule 391-3-19-.07(8)(d)]

Constituents (mg/kg)	Appendix III Table 2 Value	Item 1 (i) Appendix I Concentration	Item 1 (ii) Type 1 GW Criteria x 100	**Type 3 RRS (subsurface) (mg/kg)**	Item 2 RAGS (Equ 7) Non-Carcinogenic	Item 3 RAGS (Equ 6) Carcinogenic	**Type 3 RRS (surficial) (mg/kg)**
Inorganics							
Mercury (elemental)	0.500	**17.0**	0.200	**17.0**	2.03E+06	--	**17.0**

Type 3 Non-Carcinogenic Evaluation for Soil; Non-Residential Adult (RAGS Equ. 7)

Constituents	THI	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral RfD (mg/kg-d)	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. RfD (mg/kg-d)	Type 3 Soil Std. (mg/kg)	Remarks
Inorganics															
Mercury (elemental)	1	70	25	365	250	25	50	1.0E-06	--	20	--	4.63E+09	8.6E-05	2.03E+06	inh only

Type 3 Carcinogenic Evaluation for Soil; Non-Residential Adult (RAGS Equ. 6)

Constituents	TR	BW (kg)	AT (yr)	CF (d/yr)	EF (d/yr)	ED (yr)	IR s (mg/d)	CF (kg/mg)	Oral SF (mg/kg-d)-1	IR a (m3/d)	VF (m3/kg)	PEF (m3/kg)	Inh. SF (mg/kg-d)-1	Type 3 Soil Std. (mg/kg)	Remarks
Inorganics															
Mercury (elemental)	1.00E-05	70	70	365	250	25	50	1.0E-06	--	20	--	4.63E+09	--	--	no tox values

Calculation of the Volatilization Factor

Parameter	Default Value
LS, Length of side of contaminated area (m)	45
V, Wind speed in mixing zone (m/s)	2.25
DH, Diffusion height, m	2
A, Area of contamination (sq. m)	2030
A, Area of contamination (sq. cm)	2.03E+07
E, True soil porosity (unitless)	0.35
ps, true soil density, g/cc	2.65
T, exposure interval, s	7.90E+08
G, fraction of vegetative cover (unitless)	0
OC, Soil organic carbon content (fraction)	0.02

Constituent	Molecular Wt. (g/mol)	Diffusivity (cm^2/s)	Henry's Law constant ($atm\text{-}m^3/mol$)	Kd (cm^3/g)	Koc (cm^3/g)	Dei (cm^2/s)	Kas (g/cm^3)	alpha (cm^2/s)	VF (m^3/kg)
VOCs									
Acetone	58.08	1.15E-05	3.50E-05	0.0	2.364	8.13E-06	3.04E-02	4.98E-08	6.42E+05
Toluene	92.14	9.20E-06	6.64E-03	4.7	233.9	6.51E-06	5.82E-02	7.61E-08	5.17E+05
Trichloroethene (TCE)	131.39	1.02E-05	9.85E-03	1.2	60.7	7.21E-06	3.33E-01	4.57E-07	2.00E+05

Default parameters are from Appendix III, Table 3 of the HSRA regulations.
Physical/chemical parameters obtained from U.S. EPA Mid-Atlantic Risk Assessment Regional Screening Tables (http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm) unless otherwise noted..

PEACHTREE ENVIRONMENTAL

ATTACHMENT E

ENVIRONMENTAL COVENANT

After Recording Return to:

Georgia Environmental Protection Division
Response and Remediation Program
2 Martin Luther King, Jr. Drive, SE
Suite 1462 East
Atlanta, Georgia 30334

Environmental Covenant

This instrument is an Environmental Covenant executed pursuant to the Georgia Uniform Environmental Covenants Act, OCGA § 44-16-1, *et seq.* This Environmental Covenant subjects the Property identified below to the activity and/or use limitations specified in this document. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded in accordance with OCGA § 44-16-8(a).

Fee Owner of Property/Grantor: BTR Properties, LLC
3003 Springs Industrial Drive
Powder Springs, GA 30127-3858

Grantee/Entity with express power to enforce: State of Georgia
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1152 East Tower
Atlanta, GA 30334

Property:

The property subject to this Environmental Covenant is the BoMetals, Inc. property (hereinafter "Property"), located on 141 Hammond Street in Carrollton, Carroll County, Georgia. The Property is located in Land Lots 130, 131, 158 & 159 of the 10th District of Carroll County, Georgia. The Property contains approximately 36.25 acres. A complete legal description of the area is attached as **Exhibit A** .

Tax Parcel Number(s):

C02 0430003 of Carroll County, Georgia

Name and Location of Administrative Records:

The corrective action at the Property that is the subject of this Environmental Covenant is described in the following document:

- Voluntary Investigation and Remediation Plan, prepared by Peachtree Environmental for BTR Properties, LLC., dated December 2016.

This document is available at the following locations:

Georgia Environmental Protection Division

Response and Remediation Program
2 MLK Jr. Drive, SE, Suite 1462 East Tower
Atlanta, GA 30334
M-F 8:00 AM to 4:30 PM excluding state holidays

Description of Contamination and Corrective Action:

This Property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this Property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

This Declaration of Covenant is made pursuant to the Georgia Uniform Environmental Covenants Act, O.C.G.A. § 44-16-1 *et seq.* by BTR Properties, LLC ("BTR Properties"), its successors and assigns, and the State of Georgia, Department of Natural Resources, Environmental Protection Division (hereinafter "EPD"), its successors and assigns. This Environmental Covenant is required because a release of nickel, flouride, trichloroethene, nitrate and nitrite occurred on the Property. These substances are "regulated substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. § 12-8-90 *et seq.*, and the rules promulgated thereunder (hereinafter "HSRA" and "Rules", respectively). The Corrective Action consists of institutional controls to restrict the use of groundwater to protect human health and the environment.

Grantor, BTR Properties, LLC (hereinafter "BTR"), hereby binds Grantor, its successors and assigns to the activity and use restriction(s) for the Property identified herein and grants such other rights under this Environmental Covenant in favor of the EPD. EPD shall have full right of enforcement of the rights conveyed under this Environmental Covenant pursuant to HSRA, O.C.G.A. § 12-8-90 *et seq.*, and the rules promulgated thereunder. Failure to timely enforce compliance with this Environmental Covenant or the use or activity limitations contained herein by any person shall not bar subsequent enforcement by such person and shall not be deemed a waiver of the person's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict EPD from excising any authority under applicable law.

BTR makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, pursuant to O.C.G.A. § 44-16-5(a); is perpetual, unless modified or terminated pursuant to the terms of this Covenant pursuant to O.C.G.A. § 44-16-9; and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter "Owner"). Should a transfer or sale of the Property occur before such time as this Environmental Covenant has been amended or revoked then said Environmental Covenant shall be binding on the transferee(s) or purchaser(s).

The Environmental Covenant shall inure to the benefit of EPD, BTR, and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns, BTR, or its successors and assigns, and other party(ies) as provided for in O.C.G.A. § 44-16-11 in a court of competent jurisdiction.

Activity and/or Use Limitation(s)

1. Registry. Pursuant to O.C.G.A. § 44-16-12, this Environmental Covenant and any amendment or termination thereof, may be contained in EPD's registry for environmental covenants.

2. Notice of Limitation in Future Conveyances. The Owner of the Property must give thirty (30) day advance written notice to EPD of the Owner's intent to convey any interest in the Property. Each instrument hereafter conveying an interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of the Environmental Covenant.

3. Groundwater Limitation. The use or extraction of groundwater beneath the Property for drinking water or for any other non-remedial purposes shall be prohibited.

4. Right of Access. In addition to any rights already possessed by EPD, the Owner shall allow authorized representatives of EPD the right to enter the Property at reasonable times for the purpose of evaluating the Corrective Action; to take samples, to inspect the Corrective Action conducted at the Property, to determine compliance with this Environmental Covenant, and to inspect records that are related to the Corrective Action.

5. Recording of Environmental Covenant and Proof of Notification. Within thirty (30) days after the date of the Director's signature, the Owner shall file this Environmental Covenant with the Recorders of Deeds for each County in which the Property is located, and send a file stamped copy of this Environmental Covenant to EPD within thirty (30) days of recording. Within that time period, the Owner shall also send a file-stamped copy to each of the following: (1) BTR, (2) each person holding a recorded interest in the Property subject to the covenant, (3) each person in possession of the real property subject to the covenant, (4) each municipality, county, consolidated government, or other unit of local government in which real property subject to the covenant is located, and (5) each owner in fee simple whose property abuts the property subject to the Environmental Covenant.

6. Termination or Modification. The Environmental Covenant shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60, unless and until the Director determines that the Property is in compliance with the Type 1, 2, 3, or 4 Risk Reduction Standards, as defined in Georgia Rules of Hazardous Site Response (Rules) Section 391-3-19-.07 and removes the Property from the Hazardous Site Inventory, whereupon the Environmental Covenant may be amended or revoked in accordance with Section 391-3-19-08(7) of the Rules and O.C.G.A. § 44-16-1 *et seq*.

7. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

8. No Property Interest Created in EPD. This Environmental Covenant does not in any way create any interest by EPD in the Property that is subject to the Environmental Covenant. Furthermore, the act of approving this Environmental Covenant does not in any way create any interest by EPD in the Property in accordance with O.C.G.A. § 44-16-3(b).

Representations and Warranties.

Grantor hereby represents and warrants to the other signatories hereto:

a) That the Grantor has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;
b) That the Grantor has identified all other parties that hold any interest (e.g., encumbrance) in the Property and notified such parties of the Grantor's intention to enter into this Environmental Covenant;

c) That this Environmental Covenant will not materially violate, contravene, or constitute a material default under any other agreement, document or instrument to which Grantor is a party, by which Grantor may be bound or affected;
d) That the Grantor has served each of the people or entities referenced in Activity 6 above with an identical copy of this Environmental Covenant in accordance with O.C.G.A. § 44-16-4(d).
e) That this Environmental Covenant will not materially violate or contravene any zoning law or other law regulating use of the Property; and
f) That this Environmental Covenant does not authorize a use of the Property that is otherwise prohibited by a recorded instrument that has priority over the Environmental Covenant.

Notices.

Any document or communication required to be sent pursuant to the terms of this Environmental Covenant shall be sent to the following persons:

Georgia Environmental Protection Division
Branch Chief
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1154 East Tower
Atlanta, GA 30334

Todd Rambo
BoMetals, Inc.
141 Hammond Street
Carrollton, GA 30117

Grantor has caused this Environmental Covenant to be executed pursuant to The Georgia Uniform Environmental Covenants Act, on the _____ day of _____, 20___.

BTR Properties, LLC

_____
Todd Rambo
Member

Dated: _____

STATE OF GEORGIA
ENVIRONMENTAL PROTECTION DIVISION

_____
[Name of Person Acknowledging Receipt]

[Title]

Dated: _____

[CORPORATE ACKNOWLEDGMENT]

STATE OF GEORGIA
COUNTY OF CARROLL

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of
Georgia, residing at _____.
My appointment expires_____.

Exhibit A
Legal Description

After Recording Return to:

Georgia Environmental Protection Division
Response and Remediation Program
2 Martin Luther King, Jr. Drive, SE
Suite 1462 East
Atlanta, Georgia 30334

Environmental Covenant

This instrument is an Environmental Covenant executed pursuant to the Georgia Uniform Environmental Covenants Act, OCGA § 44-16-1, *et seq.* This Environmental Covenant subjects the Property identified below to the activity and/or use limitations specified in this document. The effective date of this Environmental Covenant shall be the date upon which the fully executed Environmental Covenant has been recorded in accordance with OCGA § 44-16-8(a).

Fee Owner of Property/Grantor: Lawrence Properties, Inc.
1065 Alabama Street, Suite 36D
Carrollton, GA 30117

Grantee/Entity with express power to enforce: State of Georgia
Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1152 East Tower
Atlanta, GA 30334

Property:

The property subject to this Environmental Covenant is the Lawrence Properties, Inc. property (hereinafter "Property"), located on 1065 Alabama Street, Carrollton, Carroll County, Georgia. The Property is located in Land Lot 131 of the 10th District of Carroll County, Georgia. The Property contains approximately 20 acres. A complete legal description of the area is attached as **Exhibit A** .

Tax Parcel Number(s):

C02 0430015 of Carroll County, Georgia

Name and Location of Administrative Records:

The corrective action at the Property that is the subject of this Environmental Covenant is described in the following document:

- Voluntary Investigation and Remediation Plan, prepared by Peachtree Environmental for BTR Properties, LLC., dated December 2016.

This document is available at the following locations:

Georgia Environmental Protection Division

Response and Remediation Program
2 MLK Jr. Drive, SE, Suite 1462 East Tower
Atlanta, GA 30334
M-F 8:00 AM to 4:30 PM excluding state holidays

Description of Contamination and Corrective Action:

This Property has been listed on the state's hazardous site inventory and has been designated as needing corrective action due to the presence of hazardous wastes, hazardous constituents, or hazardous substances regulated under state law. Contact the property owner or the Georgia Environmental Protection Division for further information concerning this Property. This notice is provided in compliance with the Georgia Hazardous Site Response Act.

This Declaration of Covenant is made pursuant to the Georgia Uniform Environmental Covenants Act, O.C.G.A. § 44-16-1 *et seq.* by BTR Properties, LLC ("BTR Properties"), its successors and assigns, and the State of Georgia, Department of Natural Resources, Environmental Protection Division (hereinafter "EPD"), its successors and assigns. This Environmental Covenant is required because a release of nickel, flouride, trichloroethene, nitrate and nitrite occurred on the Property. These substances are "regulated substances" as defined under the Georgia Hazardous Site Response Act, O.C.G.A. § 12-8-90 *et seq.*, and the rules promulgated thereunder (hereinafter "HSRA" and "Rules", respectively). The Corrective Action consists of institutional controls to restrict the use of groundwater to protect human health and the environment.

Grantor, Lawrence Properties, Inc. (hereinafter "Lawrence"), hereby binds Grantor, its successors and assigns to the activity and use restriction(s) for the Property identified herein and grants such other rights under this Environmental Covenant in favor of the EPD. EPD shall have full right of enforcement of the rights conveyed under this Environmental Covenant pursuant to HSRA, O.C.G.A. § 12-8-90 *et seq.*, and the rules promulgated thereunder. Failure to timely enforce compliance with this Environmental Covenant or the use or activity limitations contained herein by any person shall not bar subsequent enforcement by such person and shall not be deemed a waiver of the person's right to take action to enforce any non-compliance. Nothing in this Environmental Covenant shall restrict EPD from excising any authority under applicable law.

Lawrence makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, pursuant to O.C.G.A. § 44-16-5(a); is perpetual, unless modified or terminated pursuant to the terms of this Covenant pursuant to O.C.G.A. § 44-16-9; and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereinafter "Owner"). Should a transfer or sale of the Property occur before such time as this Environmental Covenant has been amended or revoked then said Environmental Covenant shall be binding on the transferee(s) or purchaser(s).

The Environmental Covenant shall inure to the benefit of EPD, Lawrence, and their respective successors and assigns and shall be enforceable by the Director or his agents or assigns, Lawrence, or its successors and assigns, and other party(ies) as provided for in O.C.G.A. § 44-16-11 in a court of competent jurisdiction.

Activity and/or Use Limitation(s)

1. Registry. Pursuant to O.C.G.A. § 44-16-12, this Environmental Covenant and any amendment or termination thereof, may be contained in EPD's registry for environmental covenants.

2. Notice of Limitation in Future Conveyances. The Owner of the Property must give thirty (30) day advance written notice to EPD of the Owner's intent to convey any interest in the Property. Each instrument hereafter conveying an interest in the Property subject to this Environmental Covenant shall contain a notice of the activity and use limitations set forth in this Environmental Covenant and shall provide the recorded location of the Environmental Covenant.

3. Groundwater Limitation. The use or extraction of groundwater beneath the Property for drinking water or for any other non-remedial purposes shall be prohibited.

4. Right of Access. In addition to any rights already possessed by EPD, the Owner shall allow authorized representatives of EPD the right to enter the Property at reasonable times for the purpose of evaluating the Corrective Action; to take samples, to inspect the Corrective Action conducted at the Property, to determine compliance with this Environmental Covenant, and to inspect records that are related to the Corrective Action.

5. Recording of Environmental Covenant and Proof of Notification. Within thirty (30) days after the date of the Director's signature, the Owner shall file this Environmental Covenant with the Recorders of Deeds for each County in which the Property is located, and send a file stamped copy of this Environmental Covenant to EPD within thirty (30) days of recording. Within that time period, the Owner shall also send a file-stamped copy to each of the following: (1) Lawrence, (2) each person holding a recorded interest in the Property subject to the covenant, (3) each person in possession of the real property subject to the covenant, (4) each municipality, county, consolidated government, or other unit of local government in which real property subject to the covenant is located, and (5) each owner in fee simple whose property abuts the property subject to the Environmental Covenant.

6. Termination or Modification. The Environmental Covenant shall remain in full force and effect in accordance with O.C.G.A. § 44-5-60, unless and until the Director determines that the Property is in compliance with the Type 1, 2, 3, or 4 Risk Reduction Standards, as defined in Georgia Rules of Hazardous Site Response (Rules) Section 391-3-19-.07 and removes the Property from the Hazardous Site Inventory, whereupon the Environmental Covenant may be amended or revoked in accordance with Section 391-3-19-08(7) of the Rules and O.C.G.A. § 44-16-1 *et seq*.

7. Severability. If any provision of this Environmental Covenant is found to be unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired.

8. No Property Interest Created in EPD. This Environmental Covenant does not in any way create any interest by EPD in the Property that is subject to the Environmental Covenant. Furthermore, the act of approving this Environmental Covenant does not in any way create any interest by EPD in the Property in accordance with O.C.G.A. § 44-16-3(b).

Representations and Warranties.

Grantor hereby represents and warrants to the other signatories hereto:

a) That the Grantor has the power and authority to enter into this Environmental Covenant, to grant the rights and interests herein provided and to carry out all obligations hereunder;

b) That the Grantor has identified all other parties that hold any interest (e.g., encumbrance) in the Property and notified such parties of the Grantor's intention to enter into this Environmental Covenant;
c) That this Environmental Covenant will not materially violate, contravene, or constitute a material default under any other agreement, document or instrument to which Grantor is a party, by which Grantor may be bound or affected;
d) That the Grantor has served each of the people or entities referenced in Activity 6 above with an identical copy of this Environmental Covenant in accordance with O.C.G.A. § 44-16-4(d).
e) That this Environmental Covenant will not materially violate or contravene any zoning law or other law regulating use of the Property; and
f) That this Environmental Covenant does not authorize a use of the Property that is otherwise prohibited by a recorded instrument that has priority over the Environmental Covenant.

Notices.

Any document or communication required to be sent pursuant to the terms of this Environmental Covenant shall be sent to the following persons:

Georgia Environmental Protection Division
Branch Chief
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1154 East Tower
Atlanta, GA 30334

Lawrence Properties, Inc.
1065 Alabama Street, Suite 36D
Carrollton, GA 30117

Grantor has caused this Environmental Covenant to be executed pursuant to The Georgia Uniform Environmental Covenants Act, on the _____ day of _____, 20___.

Lawrence Properties, Inc.

_____

Title: _____

Dated: _____

STATE OF GEORGIA
ENVIRONMENTAL PROTECTION DIVISION

_____
[Name of Person Acknowledging Receipt]
[Title]

Dated: _____

[CORPORATE ACKNOWLEDGMENT]

STATE OF GEORGIA
COUNTY OF CARROLL

On this _____ day of _____, 20__, I certify that _____ personally appeared before me, acknowledged that **he/she** is the _____ of the corporation that executed the within and foregoing instrument, and signed said instrument by free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that **he/she** was authorized to execute said instrument for said corporation.

_____
Notary Public in and for the State of
Georgia, residing at _____.
My appointment expires_____.

Exhibit A
Legal Description