

**VOLUNTARY REMEDIATION PROGRAM APPLICATION
FORMER VULCAN PERFORMANCE CHEMICALS
DALTON PLANT**

by

**Haley & Aldrich, Inc.
Greenville, South Carolina**

for

**Legacy Vulcan Corp.
Birmingham, Alabama**

**File No. 37848-003
27 January 2012**

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27 January 2012

VIA OVERNIGHT DELIVERY

Mr. David Brownlee
Acting Program Manager
Response & Remediation Program
Environmental Protection Division
Georgia Department of Natural Resources
2 Martin Luther King Jr., Drive, SE,
Suite 1462, East Tower
Atlanta, Georgia 30334

Subject: Voluntary Remediation Program Application
Former Vulcan Performance Chemicals Dalton Plant
HSI Site No. 10770
File No. 37848-003

Dear Mr. Brownlee:

As follow up to your letter of December 5, 2011, on behalf of Legacy Vulcan Corp., Haley and Aldrich is submitting this Application for the former Vulcan Performance Chemicals Dalton Plant to be enrolled in the Georgia Voluntary Remediation Program (VRP). A check for the \$5,000 application fee is enclosed.

The VRP was previously suggested by EPD as an appropriate regulatory path toward closure for this Site. As detailed in the enclosed VRP remediation plan and conceptual site model and in prior HSRA submittals, the status of delineation and remediation is complete. There are no chemicals of concern in soil and there is one chemical of concern in groundwater. Delineation is complete and groundwater meets the RRS except at one monitoring well where the level remains only slightly above the RRS for one constituent.

Legacy Vulcan Corp.

27 January 2012

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If you have any questions regarding this Application, please contact Carleton Degges (205-298-3063) or me (864-527-0440).

Sincerely yours,
HALEY & ALDRICH, INC.

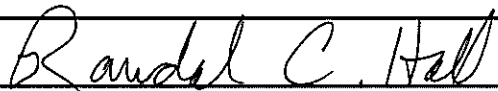
A handwritten signature in blue ink, appearing to read "Daniel E. McDonnell".

Daniel E. McDonnell, P.G.
Project Manager

Enclosures

c: Mowrey, Meezan, Coddington, Cloud LLP; Attn: Douglas E. Cloud
Vulcan Materials Company; Attn: Carleton Degges

Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	LEGACY VULCAN CORP.				
CONTACT PERSON/TITLE	Carleton Degges/Remediation Manager				
ADDRESS	1200 Urban Center Dr., Birmingham, AL 35242				
PHONE	205-298-3063	FAX	205-298-2927	E-MAIL	deggesc@VMCmail.com
GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Daniel McDonnell/Project Manager	GA PE/PG NUMBER	PG 002083		
COMPANY	Haley & Aldrich, Inc.				
ADDRESS	33 Market Point Dr., Greenville, SC 29607				
PHONE	864-527-0440	FAX	864-288-4608	E-MAIL	dmcdonnell@haleyaldrich.com
APPLICANT'S CERTIFICATION					
<p>In order to be considered a qualifying property for the VRP:</p> <p>(1) The property must have a release of regulated substances into the environment;</p> <p>(2) The property shall not be:</p> <p style="margin-left: 20px;">(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.</p> <p style="margin-left: 20px;">(B) Currently undergoing response activities required by an order of the regional administrator of the federal Environmental Protection Agency; or</p> <p style="margin-left: 20px;">(C) A facility required to have a permit under Code Section 12-8-66.</p> <p>(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.</p> <p>(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.</p> <p>In order to be considered a participant under the VRP:</p> <p>(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.</p> <p>(2) The participant must not be in violation of any order, judgment, statute, rule, or regulation subject to the enforcement authority of the director.</p> <p>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.</p> <p>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.</p>					
APPLICANT'S SIGNATURE					
APPLICANT'S NAME/TITLE (PRINT)	Randal Hall / VP SHE & Engineering Services			DATE	1-20-2012

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10770	Date HSI Site listed	9/16/03
HSI Facility Name	Former Vulcan Performance Chemical	NAICS CODE	325199
PROPERTY INFORMATION			
TAX PARCEL ID	ATT-10P-81 44-13-9	PROPERTY SIZE (ACRES)	26.7
PROPERTY ADDRESS	134 Phelps Rd.		
CITY	Dalton	COUNTY	Whitfield
STATE	GA	ZIPCODE	30720
LATITUDE (decimal format)	34°41'49" N	LONGITUDE (decimal format)	84°59'2" N
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Harcros Chemicals, Inc.	PHONE #	706-277-9000
MAILING ADDRESS	134 Phelps Rd.		
CITY	Dalton	STATE/ZIPCODE	GA / 30720
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.)	Appendix A Date: 1/19/12 Check No.: 1800011719	
2.	WARRANTY DEED(S) FOR QUALIFYING PROPERTY.	Appendix B	
3.	TAX PLAT OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	Appendix B	
4.	ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	√	
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-annual status report to the director describing implementation of the plan	Body of Text; Figures 1-6 Tables 1-3 Appendix C	

	<p>during the preceding period. A Gantt chart format is preferred for the milestone schedule.</p> <p>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:</p>		
5.a.	<p>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;</p>	Figure 6	
5.b.	<p>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;</p>	Figure 6	
5.c.	<p>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</p>	Figure 6	
5.d.	<p>Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.</p>	Figure 6	
6.	<p>SIGNED AND SEALED PE/PG CERTIFICATION AND SUPPORTING DOCUMENTATION:</p> <p>"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, <u>et seq.</u>). 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.</p> <p>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.</p> <p>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."</p> <p>DANIEL E. McDONNELL / PG002083 1-25-12 Printed Name and GA PE/PG Number Date</p> <p><i>Daniel E. McDonnell</i> Signature and Stamp</p>		

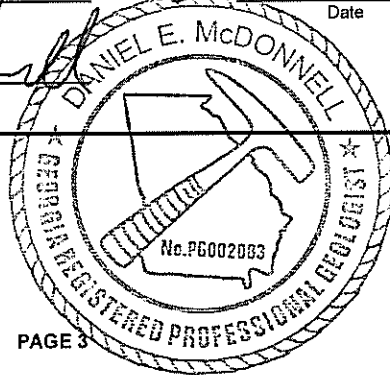


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1. INTRODUCTION

This Voluntary Remediation Program (VRP) Application for the former Vulcan Performance Chemicals Dalton plant (the Site) is being submitted on behalf of Legacy Vulcan Corp. (LVC). The Application includes a completed VRP Application Form and Checklist; a check for the application fee, a Preliminary Voluntary Remediation Plan and Preliminary Conceptual Site Model, and tax map and warranty deed information. A table of delineation standards and brief supporting text, charts, and figures are also attached.

As required by the VRP, the Preliminary Voluntary Remediation Plan and Preliminary Conceptual Site Model provide reasonably available current information to the extent known with regard to:

- The Site's surface and subsurface setting;
- The known or suspected sources of contamination;
- How contamination might move within the environment;
- Potential human health and ecological receptors;
- Complete or incomplete exposure pathways that may exist at the Site; and
- A projected milestone schedule for investigation and remediation of the Site.

The Site is located on an approximately 27-acre parcel at 134 Phelps Road in the City of Dalton, Whitfield County, Georgia (Figure 1). The Site is bordered to the north by Corporate Drive, to the east by railroad tracks, to the south by undeveloped land, and to the west by South Dixie Road. The Site is zoned heavy manufacturing and is surrounded by properties that are zoned either heavy manufacturing or general commercial.

Although historically there have been elevated concentrations of lead in groundwater at the Site, there have been no known releases of lead or lead-containing substances. Former employees recall a release of sodium hydroxide at some unknown point in the past, resulting in a localized, elevated pH in groundwater. The elevated pH in the groundwater was addressed by the addition of sodium bicarbonate, which acted as a buffering agent to neutralize the pH. In addition to causing the localized pH anomaly, the release of sodium hydroxide mobilized naturally occurring lead from native soil to groundwater. Interim corrective actions were conducted, including soil removal and placement of a soil amendment in the backfill material.

1.1 Eligibility

The Site meets the eligibility requirements of Georgia VRP Code Section 12-8-105. The Site was listed by EPD in 2003 on the HSI as site no. 10770. The Site is not listed on the National Priority List, is not currently undergoing response activities required by the EPA, and is not a permitted facility under RCRA. There are no outstanding liens pursuant to OCGA 12-8-96(e) or 12-13-12(b) against the property.

In addition, LVC, as the VRP applicant, meets the eligibility requirements of Georgia VRP Code Section 12-8-105. LVC has express permission to enter the property to perform corrective action and is not in violation of any order, judgment, statute, rule, or regulation subject to enforcement authority of the EPD Director.

1.2 Previous Investigations

The Site underwent a CERCLIS Preliminary Assessment in 1987. From 1996 to 2003, several environmental investigations were performed at the Site, including testing of soil and groundwater, as described in the revised Compliance Status Report (CSR, November 2008)

As a result of these prior environmental investigations, a Release Notification was submitted to EPD in June 2003 for lead in groundwater based on the observed lead detection at one monitoring well (the total reported concentration of 0.044 mg/L in one groundwater sample exceeded the HSRA notification concentration of 0.015 mg/L). Based on this Release Notification, the Site was listed on the Hazardous Site Inventory (HSI) in September 2003. EPD cited the presence of lead, nickel, and beryllium in groundwater at concentrations above the HSRA notification levels (Table 1). However, the groundwater pathway score that resulted in the Site being listed was based on an evaluation of lead only.

Additional soil and groundwater investigations were conducted in 2006 to support development of a HSRA Corrective Action Plan (CAP). In 2006, 14 soil samples were collected at eight boring locations and three new (temporary) monitoring wells were installed and sampled along with four existing monitoring wells. The results of this work were summarized in a report submitted to EPD on 7 September 2006. The summary tables from the September 2006 submittal are included in Appendix C. These summary tables provide a comprehensive overview of metal concentrations in samples of soil and groundwater collected on site from 1996 through 2006. The corresponding data point location map for these samples, also from the September 2006 report, is included in Appendix C.

A HSRA CSR and a HSRA CSR Addendum were submitted to EPD, respectively, on 31 August 2007 and 11 November 2008. The submittals concluded that the Site was in compliance with applicable RRSs for soil but not in compliance with the applicable RRS for lead in groundwater.

The CSR Addendum included a summary of an interim corrective action completed in July 2008. The corrective action consisted of the removal of soil to address lead in groundwater. The excavation extended to bedrock which was observed at 15 feet bgs. During backfilling, a layer of Enviroblend® (a phosphate-based amendment) was added to the bottom of the excavation and then covered with 4-inch gravel. This layering technique of Enviroblend® and gravel was used to backfill the excavation to sufficiently cover the 5-foot saturated zone above the bedrock.

Routine groundwater monitoring was initiated as documented in Annual Reports submitted on 29 October 2009, 29 November 2010 and 30 November 2011. Existing monitoring well locations are shown on Figure 2. Most recent sampling results indicate that lead concentration in only one well (0.0300 mg/L at MW-21) remains slightly above the Type 1 RRS (0.015 mg/L). Current Site conditions are described in more detail in the following section.

1.3 Hydrogeology

The Site is situated in a valley within the Valley and Ridge Physiographic Province. The predominant rocks in the area of the Site are shale and limestone/dolomite of the Conasauga Group (Cambrian). The residual soils present in this area were formed by the in-place chemical and physical weathering of the parent rock types. The typical residual soil profile consists of clayey soils near the ground surface, transitioning to sandy silts and silty sands that typically contain increasing amounts of rock fragments (shale and limestone) with depth. Depth to the top of rock varies at the Site but generally occurs between

10 and 20 feet. Zones of gravel-sized, partially weathered rock have been observed distributed throughout the otherwise predominantly silty material.

Groundwater occurs under unconfined conditions in the overburden. Although appreciable amounts of groundwater may occur in the limestone/dolomite bedrock units, there is generally minimal flow. Within the water table aquifer the direction of groundwater flow is controlled by the local topography: recharge occurs beneath upland areas, and discharge occurs in streams and other perennial water bodies. Flow within the bedrock (especially the limestone/dolomite units) is controlled to a large degree by fracture systems with recharge of the bedrock units coming from the overlying overburden.

Groundwater monitoring has been performed at the Site since 1996 with regularly scheduled routine groundwater monitoring events since 2008. A potentiometric surface map based on water level data from the most recent sampling event (September 2011) is included as Figure 3. Based on these water level data, groundwater flow at the Site is interpreted to be to the south and west.

Hydrogeologic cross sections depicting subsurface hydrogeologic conditions are shown in Figure 4. Cross-section A-A' in Figure 4 is oriented along the groundwater flow path through the area excavated in July 2008. Cross section B-B' in Figure 4 is oriented perpendicular to the flow path, also through the excavated area.

The hydraulic conductivity of the shallow aquifer has been estimated from slug tests conducted at several monitoring wells. The results indicate that the hydraulic conductivity of the shallow aquifer ranges from approximately 1.5×10^{-4} centimeters per second (cm/sec) in silty material to approximately 2.2×10^{-2} cm/sec at wells where gravel zones were encountered. Hydraulic conductivity in bedrock is approximately 1.2×10^{-2} cm/sec. Estimated values of groundwater flow velocity at the Site therefore range from 11 feet per year (ft/yr) in saprolite to 800 ft/yr in bedrock and more than 1000 ft/yr in saprolite when zones of gravel are present.

1.4 Extent of Lead in Groundwater

The historical concentrations of lead in groundwater samples collected at the Site are summarized in Tables 2 and 3. Groundwater samples were most recently collected in September 2011, when the Type 1 RRS for lead was exceeded at only one monitoring location (MW-21). The lead concentration at MW-19, which until October 2010 was greater than the Type 1 RRS, was below the RRS and the laboratory detection limit (0.010 mg/L) for the third consecutive sampling event. The lead concentrations in the other wells sampled in 2011 remain below laboratory detection limits and the RRS.

Lead concentrations are included on the potentiometric surface map (Figure 3) and on the hydrogeological cross-sections (Figure 4). These lead concentration figures support the concept that the source of lead in groundwater was a secondary reaction after a release of caustic material caused geochemical conditions to be altered (the mechanisms involved in this scenario are described in more detail in the following section). The data support that lead concentrations are attenuating, due to natural geochemical conditions in the subsurface, as well as the corrective action conducted in 2008 which included a soil amendment to enhance natural attenuation. The detection of lead in groundwater, above the RRS, has always been very limited and is currently represented by a single point where the concentration remains slightly above the RRS criteria.

2. PRELIMINARY CONCEPTUAL SITE MODEL

A Conceptual Site Model (CSM) is a representation of the environmental system including the physical, chemical, and biological processes that affect the source, transport and fate of contaminants through the subsurface to potential environmental receptors via their most likely exposure pathways. The development of the CSM is intended to:

- facilitate the basic remedial action objectives appropriate for the Site;
- allow informed decisions regarding possible remedial actions;
- better understand the current site conditions; and
- assess the effectiveness of monitored natural attenuation as a long term solution to achieving compliance with risk reduction standards for lead.

In order to develop the CSM, Site geology, hydrogeology, and subsurface geochemical conditions were considered in order to evaluate how these factors affected the environmental fate and transport of lead in groundwater. Site geology and hydrogeology were addressed in Section 1. This section provides an evaluation of source areas, transport and fate mechanisms, and potential receptors and exposure pathways. A graphical representation of the CSM is presented in Figure 5.

2.1 Source Area

There are no historical or anthropogenic sources of lead that are known to have affected soil or groundwater at, or in the vicinity of, the Site. The origin of lead in the groundwater at the Site is most likely due to a release of sodium hydroxide. The resulting high and localized pH anomaly was most likely responsible for solubilizing the naturally occurring lead from the native soils.

The conclusion that naturally occurring lead was introduced to groundwater is supported by analytical results obtained from soil samples taken from borings across the Site, where the concentration of lead varied between 2.5 – 66.5 mg/kg, with an average value of 12.3 mg/kg. This average value is consistent with regional studies for Georgia, which report an average background soil range of lead from 10.3 to 18.7 mg/kg (USGS, 2001¹).

During the early phases of investigation, lead was present in groundwater samples at levels above the RRS in a very localized area, defined by monitoring wells MW-1, TMW-12, TMW-13, and TMW-14 (these wells have since been abandoned but their locations are shown on the map included in Appendix C). In 2008, corrective action was undertaken in order to eliminate any concerns about whether the area was acting as a source. Previous soil sampling conducted in this area did not identify a source of lead and exceedances of soil cleanup standards were not indicated. This is consistent with the sodium hydroxide release previously described.

In 2008, monitoring wells that were abandoned during excavation activities were replaced with MW-17, MW-18, MW-19, and MW-20. Subsequent groundwater samples collected from the new monitoring wells indicated lead was present in groundwater above the RRS within the excavation area, but only at MW-19. Samples from a down-gradient monitoring well installed later in 2008 (MW-21) also exceeded the RRS for lead.

¹ USGS, 2001. Geochemical Landscapes of the Conterminous United States - New Map Presentations for 22 Elements. N. Gustavsson, B. Bølviken, D.B. Smith, and R.C. Severson. U.S. Geological Survey Professional Paper 1648. U.S. Department of the Interior, U.S. Geological Survey. November, 2001.

Since these activities were completed in 2008, the concentration of lead in groundwater has declined. The concentration of lead in MW-19 has shown a significant downward trend from the fall of 2008 to the fall of 2010 and only monitoring well MW-21 exhibits a concentration of lead slightly higher than the RRS. Monitoring well MW-21 is approximately 200 feet down gradient from the excavated area. Considering all of the available information, the detection of the low level of lead in well MW-21 is most likely the result of:

1. A release of sodium hydroxide resulted in a localized area of high pH groundwater. These extremely basic conditions triggered the dissolution of naturally occurring lead in soil via cation exchange with the sodium. The dissolution resulted in the formation of lead hydroxide and/or lead carbonate.
2. Years later, when the high pH groundwater was discovered, the groundwater was buffered with sodium bicarbonate. Although the pH was lowered, the additional sodium may have caused dissolution of more lead, again via cation exchange. Also, the lead hydroxide reacted with the sodium bicarbonate to form additional lead carbonate, which is slightly soluble under the existing (normal) pH/Eh conditions at the Site.
3. The contribution of sodium from both the sodium hydroxide (NaOH) and the sodium bicarbonate (NaHCO_3^-), as well as the presence of lead bound to solubilized [dissolved] organic carbon, kept lead in solution as a colloid (USEPA, 2007²).
4. As the lead (inorganic and organically bound colloidal) migrated, the neutral groundwater pH, combined with the subsurface forces of advection/dispersion, was sufficient to precipitate lead out of solution. This is supported by the steady decrease in lead concentration observed at MW-19 and also at MW-21.

2.2 Lead Fate and Transport

An evaluation of Site hydrogeochemical conditions that affected the environmental fate and transport of lead in soil and groundwater was performed. The evaluation included a thorough review of available literature as well as site-specific data and also utilized geochemical computer modeling software (Geochemist's Workbench Essentials, Version 4.0, Rockware, Inc.) in order to evaluate the potential for lead to migrate within groundwater and to assess whether monitored natural attenuation (MNA) is a sufficient remedial option. This required an assessment of the capacity of the soils to adsorb lead (traditionally measured as cation exchange capacity, or CEC) as well as a review of geochemical conditions of the groundwater, including lead concentrations and various other groundwater parameters (e.g. pH, Eh, alkalinity) that are known to affect the solubility of lead in aqueous systems.

The natural mobility of lead in soil-water systems is negligible primarily due to the low solubility of lead carbonate, hydroxide, phosphate and/or sulfate. The surfaces of fine-grained soil particles, such as the silts and clays encountered in borings at the Site, are very active chemically, and soils with high clay content will exhibit high sorption capacity for metals. Based on data obtained from the Whitfield County USDA Natural Resources Conservation Service, the soils at the Site have a CEC that ranges

² USEPA, 2007. Monitored Natural Attenuation of Inorganic Contaminants in Ground Water. Volume 2: Assessment for Non-Radionuclides Including Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Nitrate, Perchlorate, and Selenium. US Environmental Protection Agency, National Risk Management Research Laboratory, Office of Research and Development, Cincinnati, OH. EPA/600/R-07/140. October 2007.

between 6.9 and 13.1 meq/100 grams. Our calculations indicate that this range of CEC values results in an excess binding capacity that would prevent lead from migrating beyond the boundaries of the Site.

Geochemical modeling predicts a sparingly soluble form of lead (PbCO₃) in Site groundwater. Geochemical conditions at the Site, combined with a generally low hydraulic conductivity and an abundance of silts and clays in the overburden, support the conclusion that Site soils are capable of binding and restricting the movement of dissolved lead in groundwater. Therefore, lead concentrations at well MW-21 that currently exceed the RRS will ultimately decrease to below the RRS without any active remediation.

2.3 Potential Receptors and Exposure Pathways

The land use at the Site and surrounding area is classified as industrial and commercial. The only potential human receptors are onsite personnel. Possible exposure pathways are summarized in Figure 5 and addressed below.

2.3.1 Environmental Media

- No contaminants are present in soils above their respective RRSs and soil gas is not a medium of concern for exposure to lead.
- Groundwater is present under unconfined conditions and is controlled by topography. There is only one well (MW-21) of the surficial aquifer where lead concentration is slightly above the applicable RRS. Vertically, lead contamination was determined to be limited to the groundwater in the overburden (surficial aquifer).
- Surface water on the Site includes a creek that flows offsite to the south toward a drainage way leading to Crown Mill Lake, located approximately 0.5 mile south of the Site.

2.3.2 Exposure Pathways and Potential Human Receptors

- The City of Dalton provides potable and industrial water to the facility through public utility lines. The nearest down-gradient non-public well is more than 3,000 feet from the lead-impacted groundwater. Given that the areal extent of lead-contaminated groundwater is defined, the risk to these receptors via groundwater ingestion is considered negligible.
- The water table in the surficial aquifer is approximately 4 to 16 feet bgs at the Site. There is a limited possibility that construction workers could be exposed for a very limited time to lead in groundwater through incidental ingestion or dermal contact during excavation work. Risk via inhalation, either during utility work or indoors as a result of vapor intrusion, is not a concern for lead.
- Currently, there is limited possibility of human contact with surface water or sediment in the creek.

2.3.3 Exposure Pathways and Potential Ecological Receptors

- Habitat conditions at the Site are, in general, not suitable for the threatened and endangered species for Whitfield County identified by the USFWS. Based on visual assessment of the creek, the quality of the aquatic habitat is moderate. Because the lead-impacted groundwater in the plant production does not extend to the creek, the potential for exposure to contaminants in groundwater, surface water, and sediments is expected to be minimal.
- Other than native soil, there are no known or documented sources of lead at the Site. No complete exposure pathway from groundwater to surface water occurs at the Site because lead attenuates prior to reaching the creek in the southwest corner of the Site, approximately 650 feet down-gradient from MW-21. Therefore, potential surface water receptors will not be impacted by the lead detected in groundwater at MW-21.

3. PRELIMINARY REMEDIAL ACTION PLAN

3.1 Proposed Remedial Action

This Application for enrollment in the VRP follows years of investigative activities and interim corrective action at the Site. The only remaining issue is lead in groundwater and there is now only one location where the RRS is slightly exceeded. The degree to which further remediation may be required, in the form of monitored natural attenuation (MNA), is currently anticipated to be the focus of ongoing VRP activity.

According to US EPA, the key components of a corrective action plan that proposes MNA as a remediation alternative are:

- documentation of adequate source control,
- comprehensive site characterization (as reflected in a detailed conceptual site model),
- evaluation of time frame for meeting remediation objectives,
- long-term performance monitoring, and
- a contingency plan.

As stated in Section 3, no on-site or anthropogenic sources of lead have been identified; therefore, adequate source control is not an issue at this Site. The presence of lead in groundwater is attributable to a release of NaOH that caused a secondary reaction with naturally occurring lead in soil. The CSM presented in this document is based on site-specific data collected during the course of several phases of investigation. It is anticipated that the remediation objective will be met in a relatively short time frame (less than 5 years) based on the low concentrations of lead that currently exist in groundwater.

Haley & Aldrich recommends that a program of MNA be utilized to achieve environmental closure of the Site with regard to the detections of lead in groundwater.

Beginning with calendar year 2012, groundwater monitoring will be performed semi-annually with samples from MW-19, MW-21, and MW-23 analyzed in the field for MNA parameters (DO, ORP, etc.) and in the laboratory for lead. To continue assessing effectiveness of the corrective action, the next groundwater monitoring event is scheduled for April 2012. MNA will be re-evaluated in the event that there are any future exceedances of the Type I RRS for lead in any monitoring well other than MW-21.

In addition, we plan to determine the applicability of a site-specific risk-based RRS for lead in groundwater. This determination will be included in the next report submitted under the VRP.

3.2 Schedule

An initial projected milestone schedule has been prepared and is presented in Figure 6. The first report would be submitted within 6 months of enrollment in the VRP. The schedule would be updated semi-annually.

TABLES

Table 1
Delineation Standards
Former Vulcan Performance Chemicals Dalton Plant

Media	Parameter	Delineation Standard (mg/L)	Comment
Groundwater	Beryllium	0.004	HSRA Type 1 RRS
	Lead	0.015	
	Nickel	0.73	HSRA Type 2 RRS

TABLE 2
SUMMARY OF LEAD CONCENTRATIONS IN GROUNDWATER (mg/L)
1996 - 2007
FORMER VULCAN PERFORMANCE CHEMICALS DALTON SITE

Well	February-96	April-03	May-03	July-03	March-06	May-06	August-06	July-07
TMW-2	0.088							
TMW-3	BDL							
TMW-5	BDL							
TMW-8	BDL							
TMW-9	BDL							
TMW-10	BDL							
TMW-11	BDL							
TMW-12						<0.010		
TMW-13						<0.010		
TMW-14						<0.010		
TMW-15								<0.001
TMW-16								0.00162
TMW-17								<0.001
TMW-18								<0.001
TMW-21								<0.001
B-1		0.011						
B-2		0.026						
B-6		<0.010						
B-7		<0.010						
B-10		0.095						
B-11		<0.010						
B-12		<0.010						
B-13		<0.010						
B-14		<0.010						
B-15		<0.010						
B-16		<0.010						
B-17		<0.010						
B-18		<0.010						
B-19		<0.010						
MW-1			0.044	0.089	0.199		0.200	0.243
MW-2				<0.001				
MW-3D						<0.010		
MW-4						<0.010		
MW-5						<0.010		
MW-7						<0.001		<0.001
MW-8						<0.001		<0.001
MW-9								0.0927
MW-10								0.00108
MW-11								<0.001

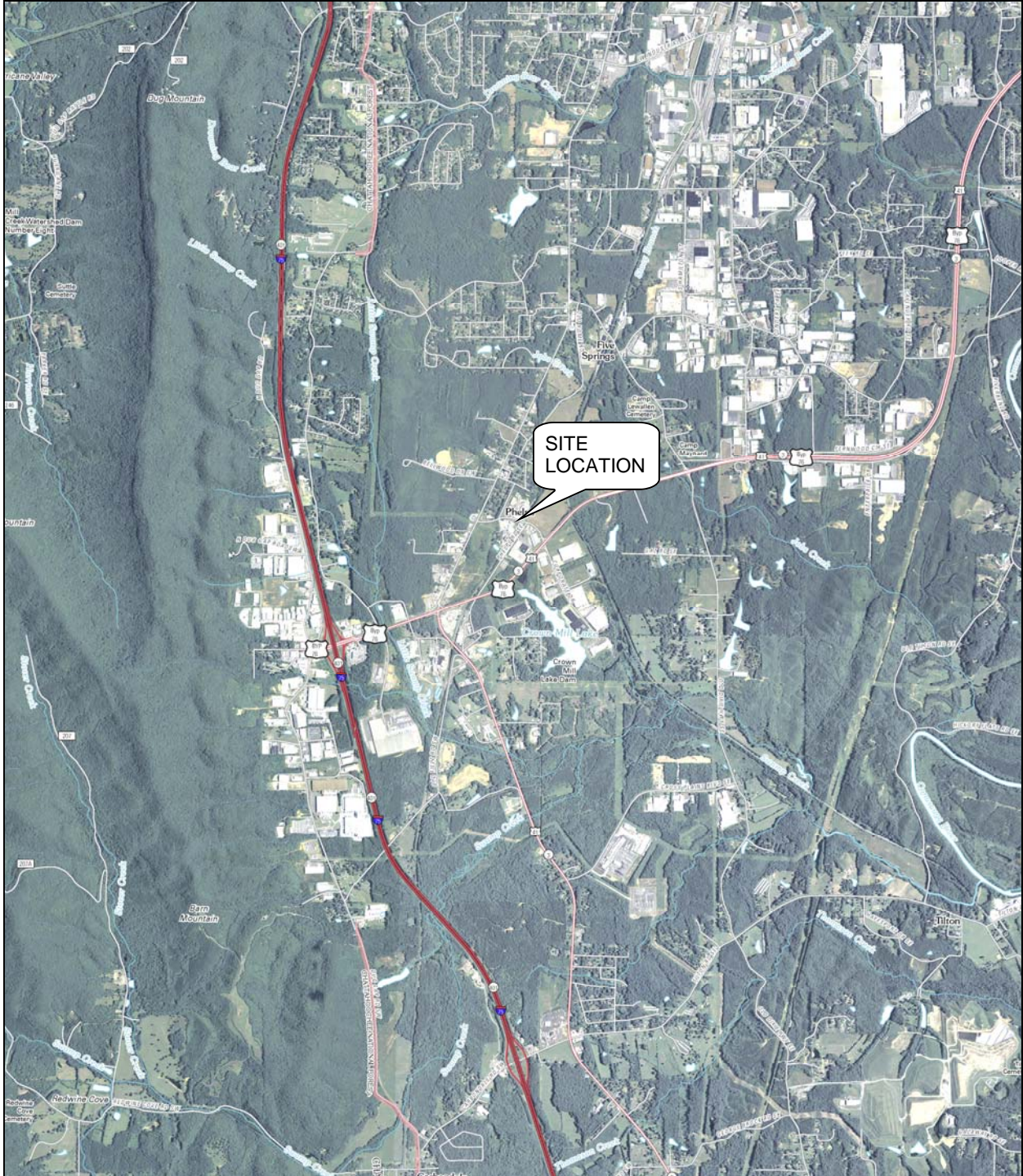
NOTE: Shaded cell indicates an exceedance of the Type 1 RRS for lead (0.015 mg/L)

TABLE 3
SUMMARY OF LEAD CONCENTRATIONS IN GROUNDWATER (mg/L)
2008 - 2011
FORMER VULCAN PERFORMANCE CHEMICALS DALTON SITE

Well	Oct-08	Oct-08*	Apr-09	Oct-09	Apr-10	Oct-10	Apr-11	Sep-11
MW-5							<0.010	<0.010
MW-12	<0.010							
MW-13	<0.010		<0.0100	<0.0100	<0.0100			<0.010
MW-15	<0.010							
MW-16							<0.0100	<0.010
MW-17	<0.010		<0.0100	<0.0100	<0.0100	0.143	<0.0100	<0.010
MW-18	<0.010		<0.0100	<0.0100	<0.0100	<0.0100	<0.0100	<0.010
MW-19	0.103	0.0669	0.0311	0.0523	0.0184	<0.0100	<0.0100	<0.010
MW-20	0.0137	0.0124	<0.0100	<0.0100	<0.0100	<0.0100	0.0027	<0.010
MW-21	0.0402	0.0346	0.0284	0.0332	0.0315	0.0361	0.0305	0.0300
MW-22D								<0.010
MW-23								<0.010

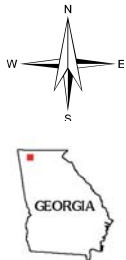
NOTE: Shaded cell indicates an exceedance of the Type 1 RRS for lead (0.015 mg/L)

FIGURES



NOTES:

- 1. ALL LOCATIONS ARE APPROXIMATE.
- 2. BACKGROUND SOURCED FROM THE USGS 7.5 MINUTE SERIES, QUADS: DALTON SOUTH AND VILLANOW, GA 2011.



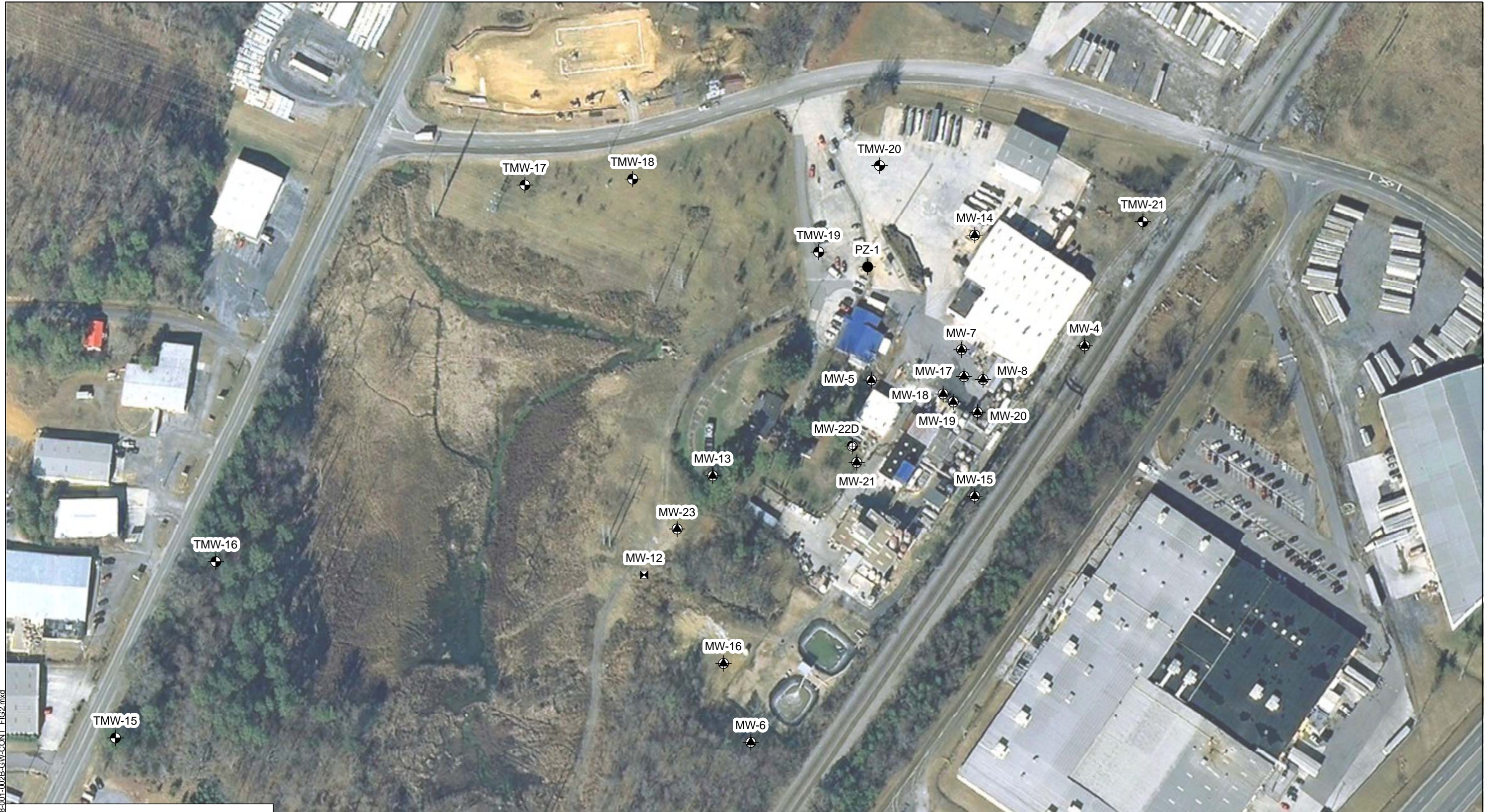
HALEY & ALDRICH

FORMER VULCAN PERFORMANCE CHEMICALS PLANT
DALTON, GA

SITE LOCATION






SCALE: 1:24,000
JANUARY 2012

FIGURE 1

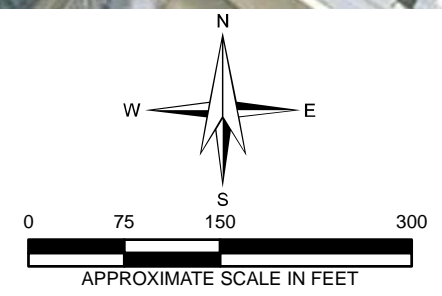


G:\37848\Dalton_GA\Figures_GW\37848-001-002B-GW-CONT_FIG2.mxd

Legend

-  WATER TABLE MONITORING WELL LOCATION
-  BEDROCK MONITORING WELL LOCATION
-  PIEZOMETER LOCATION
-  TMW LOCATION
-  DESTROYED WELL

NOTES:
 1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
 2. IMAGERY SOURCE: I3 IMAGERY PRIME WORLD 2D

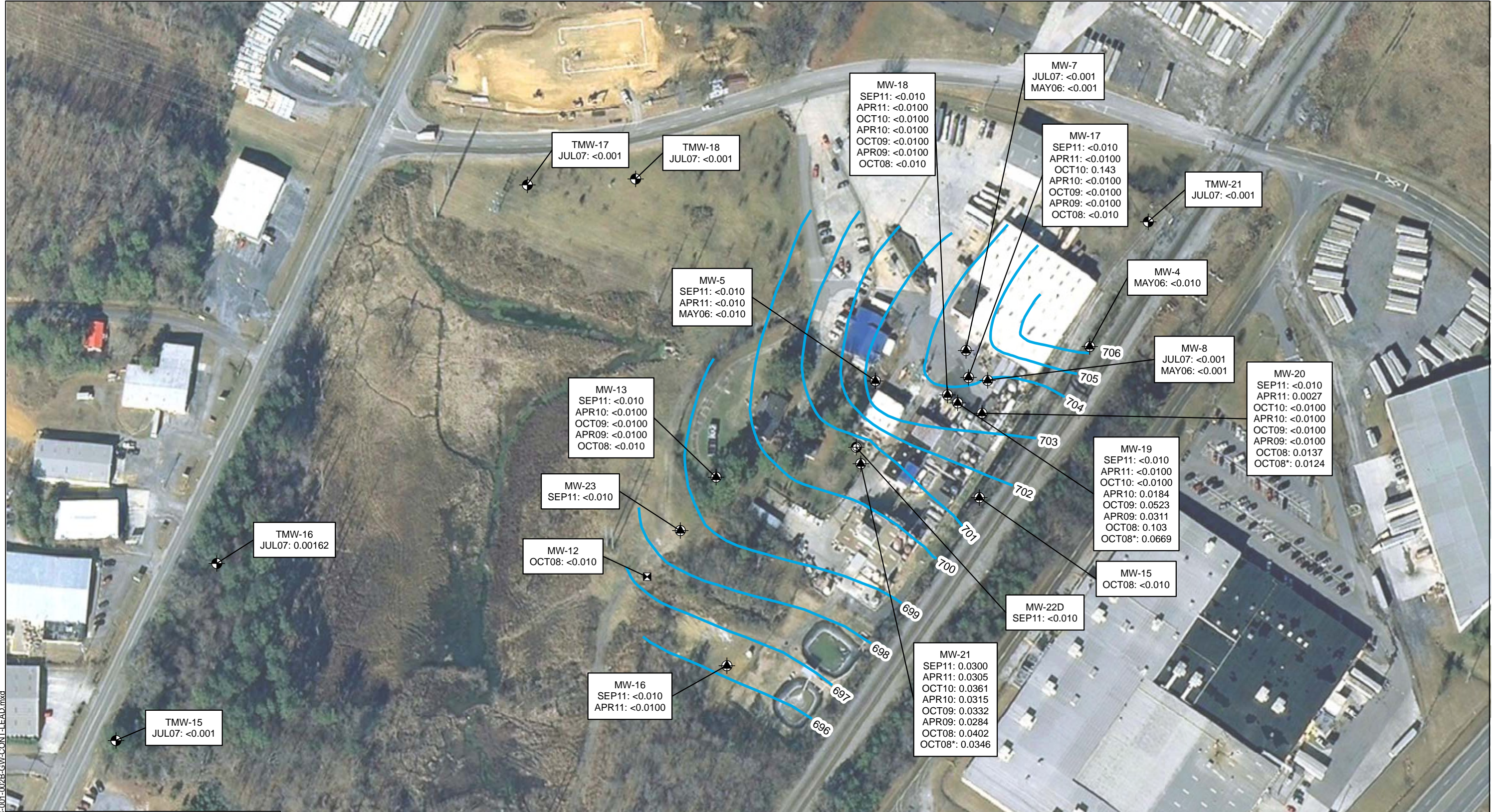


HALEY & ALDRICH FORMER VULCAN PERFORMANCE CHEMICALS PLANT
 DALTON, GEORGIA

MONITORING WELL LOCATIONS

SCALE: AS SHOWN
 JANUARY 2012

FIGURE 2

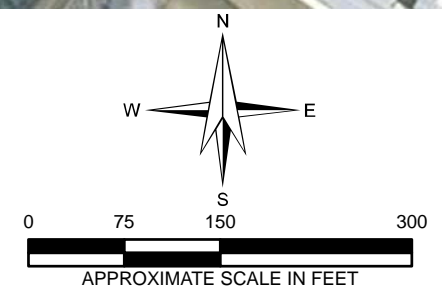


Legend

- WATER TABLE MONITORING WELL LOCATION
- BEDROCK MONITORING WELL LOCATION
- PIEZOMETER LOCATION
- TMW LOCATION
- DESTROYED WELL

NOTES:

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. LABELS INDICATE LEAD CONCENTRATION (mg/L), AND ARE LISTED FROM MOST RECENT TO MOST HISTORIC.
3. IMAGERY SOURCE: I3 IMAGERY PRIME WORLD 2D



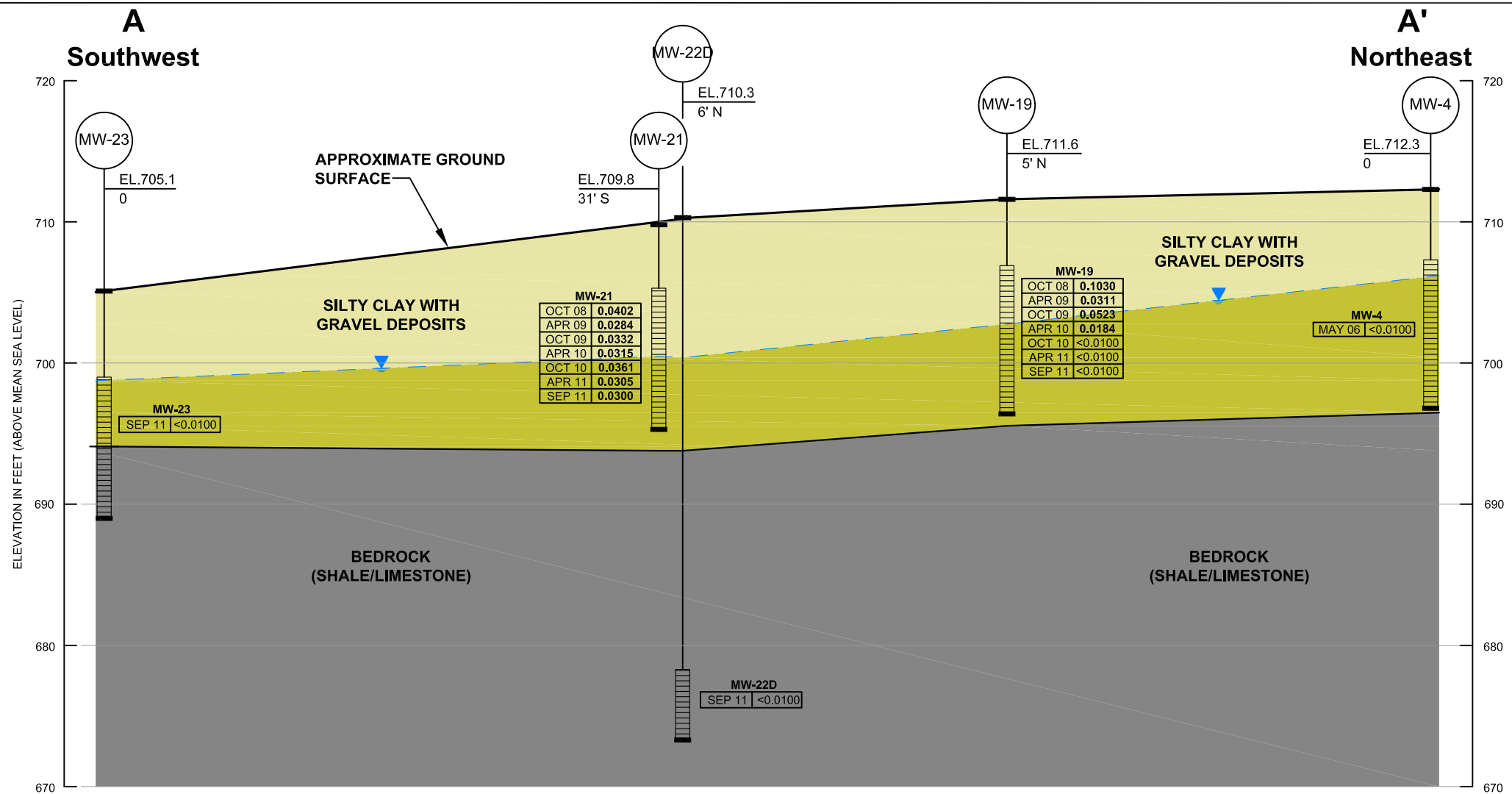
HALEY & ALDRICH FORMER VULCAN PERFORMANCE CHEMICALS PLANT
DALTON, GEORGIA

**WATER TABLE CONFIGURATION
AND LEAD CONCENTRATION**

SCALE: AS SHOWN
JANUARY 2012

FIGURE 3

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LEGEND:

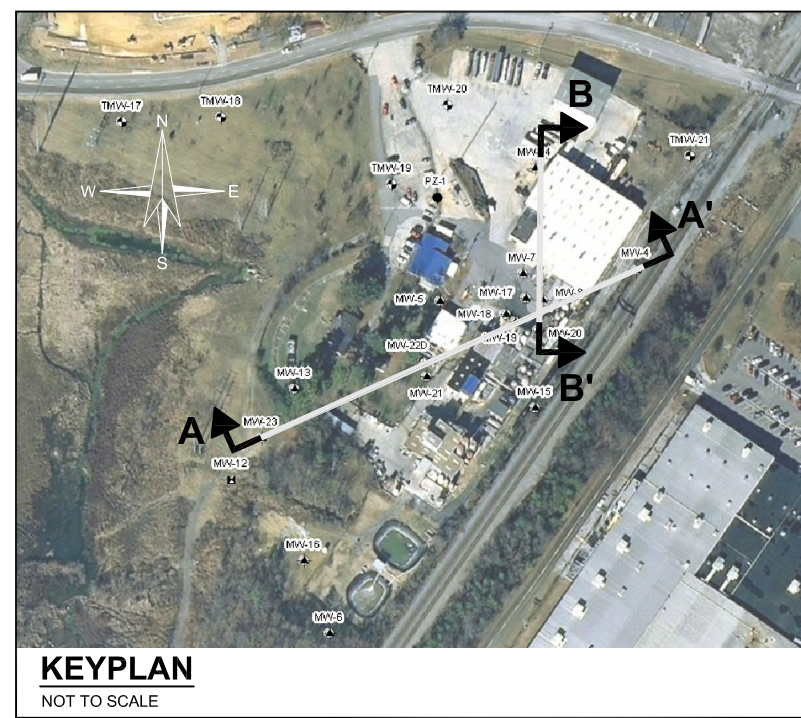
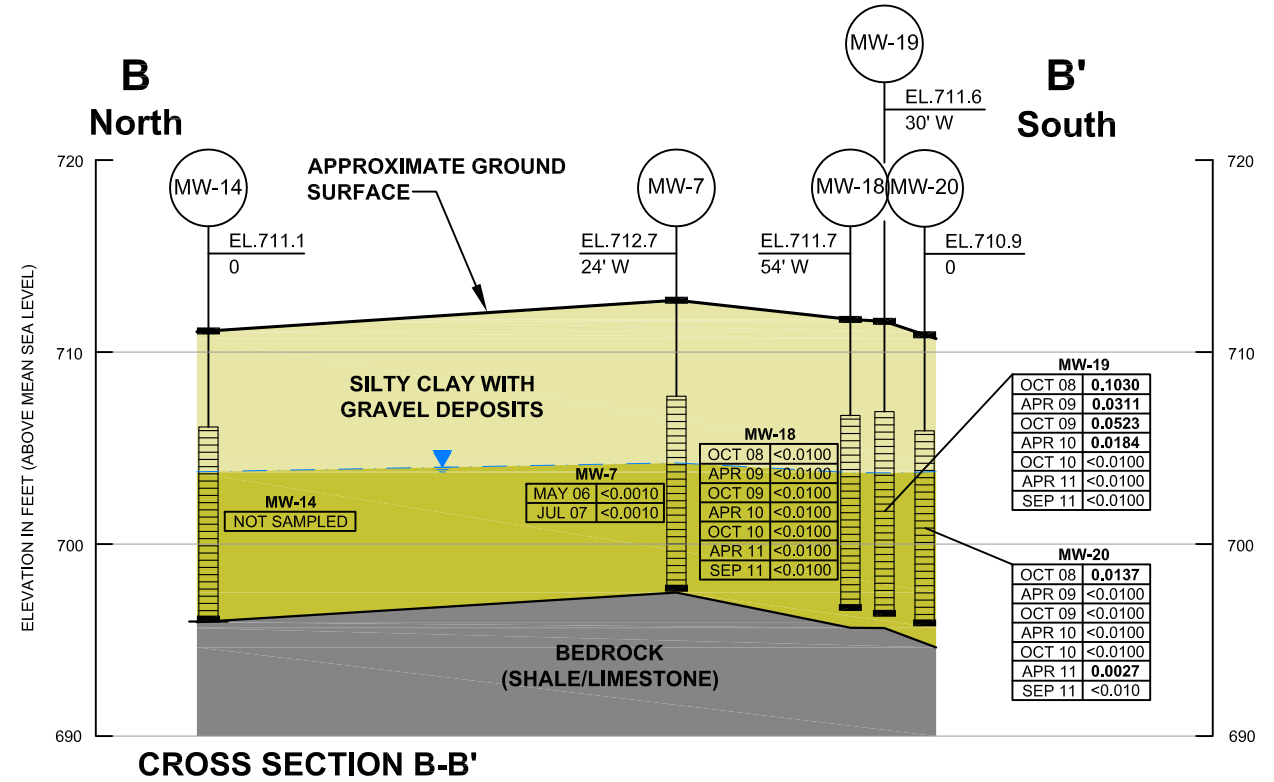
- MW-19 TEST BORING DESIGNATION
- EL.711.6 GROUND SURFACE ELEVATION
- 5' N OFFSET BETWEEN BORING AND LINE OF SUBSURFACE PROFILE
- INTERPRETED GEOLOGIC STRATUM INTERFACE
- APPROXIMATE GROUND WATER LEVEL
- WELL SCREEN
- BOTTOM OF EXPLORATION

DATA BOX LEGEND:

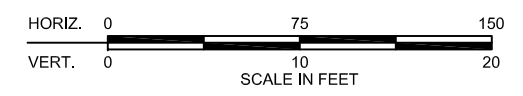
- MW-19 INDICATES SAMPLE DESIGNATION
- INDICATES MONTH AND YEAR SAMPLED

OCT 08	0.1030
APR 09	0.0311
OCT 09	0.0523
APR 10	0.0184
OCT 10	<0.0100
APR 11	<0.0100
SEP 11	<0.0100

- INDICATES LEAD CONCENTRATION IN mg/L AT TIME SAMPLED
- BOLD TEXT INDICATES CONCENTRATION ABOVE DETECTION LIMIT



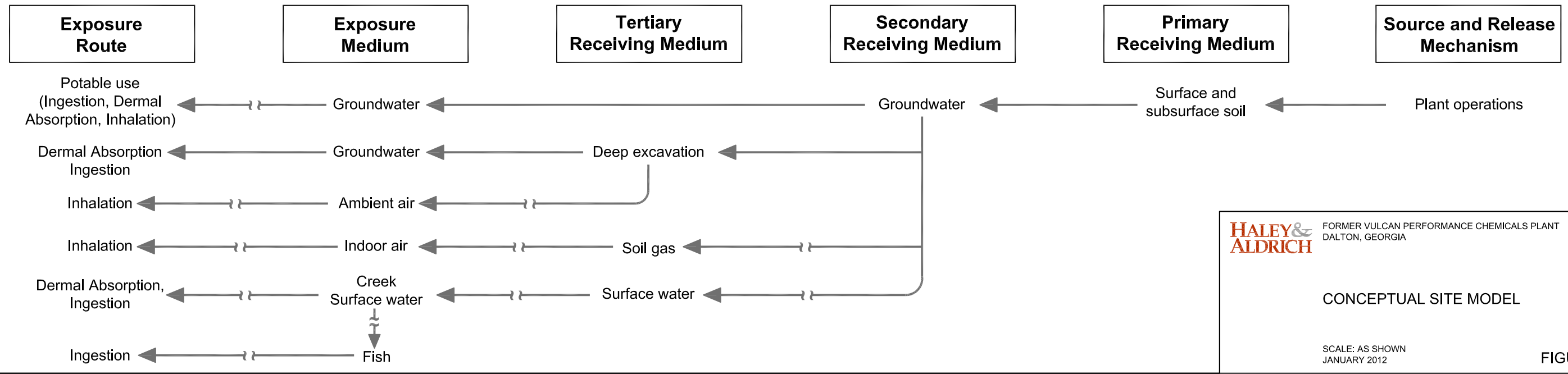
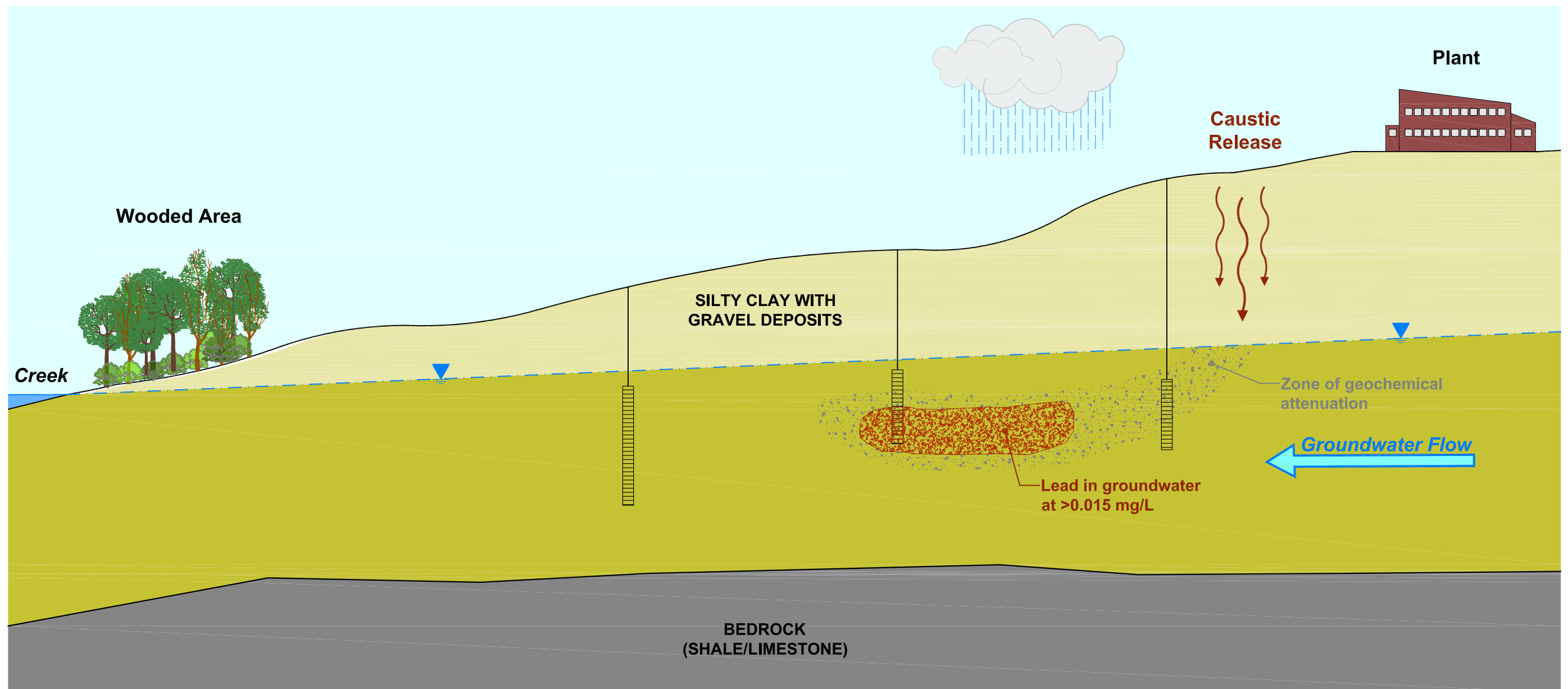
- NOTES:**
- OFFSET DISTANCES INDICATED ARE MEASURED FROM THE PLAN LOCATION OF THE PROFILE LINE, PERPENDICULAR TO THE LINE.
 - SUBSURFACE PROFILES DEPICT THE GENERAL GEOLOGIC CONDITIONS AT THE SITE AND ARE BASED ON INTERPRETATION OF DATA ENCOUNTERED IN THE EXPLORATIONS. LINES REPRESENTING INTERFACES BETWEEN STRATA ON THE PROFILE ARE BASED ON INTERPOLATION BETWEEN ADJACENT BORINGS. THE BORING STICK SHOWS THE INTERPRETED SEQUENCE OF STRATA ENCOUNTERED AT THAT LOCATION. ACTUAL SOIL AND BEDROCK CONDITIONS AND INTERFACES BETWEEN EXPLORATIONS MAY VARY SIGNIFICANTLY FROM THOSE INDICATED ON THE PROFILES.



HALEY & ALDRICH FORMER VULCAN PERFORMANCE CHEMICALS PLANT
DALTON, GEORGIA

**CROSS SECTIONS
A-A' AND B-B'**

SCALE: AS SHOWN
JANUARY 2012



HALEY & ALDRICH FORMER VULCAN PERFORMANCE CHEMICALS PLANT
DALTON, GEORGIA

CONCEPTUAL SITE MODEL

SCALE: AS SHOWN
JANUARY 2012

FIGURE 5

J:\GRAPHICS\37648\37648-003-B004.DWG

FIGURE 6
PROJECT MILESTONE SCHEDULE
FORMER VULCAN PERFORMANCE CHEMICALS DALTON PLANT

No.	TASK	2012				2013				2014			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	VRP Application Submittal												
2	Delineation	COMPLETE											
3	Semi-Annual Progress Report Submittal												
4	Updated CSM Submittal												
5	Remedial Activities												
6	Compliance Status Report Submittal												

NOTE: Assumes VRP application is approved by March 31, 2012

APPENDIX A

VRP Application Fee

Intentionally Left Out of Copies for Security Reasons

APPENDIX B

Tax Map and Warranty Deed

BOOK 3954 OF 0009

FILED & RECORDED

TIME: 2:50

DATE: 6-3-03

DEED BOOK: 3954

PAGE: 9-13

BETTY NELSON, O.S.C.
WHITFIELD COUNTY, GA

After recording, return to:
Kevin T. Caiaccio, Esq.
Schreeder, Wheeler & Flint, LLP
1600 Candler Building
127 Peachtree Street, N.E.
Atlanta, Georgia 30303-1845

174307
2:50
3

Whitfield County, Georgia
Real Estate Transfer Tax
Paid \$ 270.00
Date 6-3-03
Betty Nelson
Clerk of Superior Court

STATE OF GEORGIA
COUNTY OF FULTON

LIMITED WARRANTY DEED

THIS INDENTURE, made and entered into this 28th day of May, 2003 by and between **CALLAWAY CHEMICAL COMPANY**, a New Jersey corporation (herein referred to as "Grantor"), and **LYNX CHEMICAL GROUP, LLC**, a Georgia limited liability company (herein referred to as "Grantee").

WITNESSETH THAT, the said Grantor, for and in consideration of the sum of Ten and no/100 (\$10.00) Dollars, and other good and valuable consideration, in hand paid at or before the delivery of this deed, the receipt and sufficiency of which are hereby acknowledged, and pursuant to proper authority, has granted, bargained, sold and conveyed and by these presents does hereby grant, bargain, sell and convey to the said Grantee, and its successors and assigns, the following described property:

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING in Land Lot(s) 44 of the 13th District, Whitfield County, Georgia being more particularly described on **Exhibit "A"** attached hereto and incorporated herein by this reference.

TOGETHER WITH all fixtures, structures and improvements located on such property and the easements, rights, members and appurtenances thereunto appertaining.

ATL01/11434705v2

BOOK 3954 of 0010


TO HAVE AND TO HOLD the said bargained premises, together with all and singular the rights, privileges, easements, members, appurtenances belonging or thereunto appertaining, to the only proper use and benefit of the Grantee and its successors and assigns forever in FEE SIMPLE.

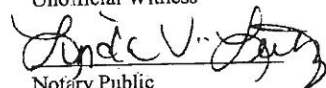
AND EXCEPT for those matters set forth on Exhibit "B" attached hereto and incorporated herein by reference, Grantor will warrant and defend the title to said premises against the claims of all persons claiming by, through or under Grantor, but not otherwise.

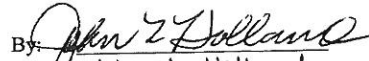
IN WITNESS WHEREOF, the Grantor has caused this instrument to be duly executed, sealed and delivered by its duly authorized officer on the date above written.

Signed, sealed and delivered
in the presence of:

CALLAWAY CHEMICAL COMPANY,
a New Jersey corporation


Unofficial Witness


Notary Public
My commission expires: _____

By: 
Name: John L. Holland
Title: Chairman

(NOTARIAL SEAL)
Notary Public, Gwinnett County, Georgia
My Commission Expires August 8, 2005.

(Corporate Seal)

ATL01/11434705v2

BOOK 3954 OF 0011

EXHIBIT "A"

Whitefield County, Georgia

All that tract or parcel of land lying and being in Land Lot 44 of the 13th District, Whitfield County, Georgia of being more particularly described as follows:

BEGINNING at a point on the West side of the Norfolk Southern Railroad (125-foot R/W) and the Southeast corner of Corporate Drive (80-foot R/W); thence in a Southwesterly direction traveling South 39 degrees 21 minutes 46 seconds West 1,133.64 feet to a 1-inch rebar found on the approximate land lot line of Land Lot 65; thence traveling along approximate land lot line North 86 degrees 43 minutes 40 seconds West 1,093.37 feet to a 1-inch pipe found on the Easterly right-of-way of U.S. Hwy. No. 41 S.R. No. 3 (60-foot R/W); thence traveling along said right-of-way North 30 degrees 22 minutes 29 seconds East 1,059.21 feet to a point located on the Southern right-of-way of Corporate Drive, thence traveling South 82 degrees 44 minutes 16 seconds East 171.69 feet to a point; thence traveling along the arc of a curve to the left an arc distance of 338.20 feet, said curve having a radius of 1,083.64 feet and being subtended by a chord bearing North 87 degrees 30 minutes 57 seconds East 336.83 feet to a point; thence North 74 degrees 35 minutes 03 seconds East 146.57 feet to a point; thence traveling along the arc of a curve to the right an arc distance of 529.78 feet, said curve having a radius of 887.17 feet and being subtended by a chord bearing South 80 degrees 41 minutes 16 seconds East a distance of 521.94 feet to a point; thence along the arc of a curve to the left said arc having a distance of 121.34 feet, said curve having a radius of 3,690.52 feet and being subtended by a chord bearing South 67 degrees 07 minutes 47 seconds East a distance of 121.33 feet to a point said point being the TRUE POINT OF BEGINNING; being shown on that Boundary Topographic Survey for Vulcan Materials Company, dated June 11, 1996, bearing the seal and certification of H. Tate Jones, Georgia Registered Land Surveyor No. 2339.

TOGETHER with the following easements which are appurtenant to and serve the above-described property:

Sewer easement from Crown American, Inc. to Farm & Industrial Chemical Company, dated July 16, 1991, recorded at Deed Book 2270 Page 288, Whitfield County, Georgia Land Records.

Water easement from Crown American, Inc. to Farm & Industrial Chemical Company, dated July 16, 1991, recorded at Deed Book 2270 Page 292, Whitfield County, Georgia Land Records.

Sewer easement from Columbine Warehousing Corp. to Farm & Industrial Chemical Company, dated July 16, 1991, recorded at Deed Book 2270 Page 296, Whitfield County, Georgia Land Records.

BOOK 3954 OF 0012

EXHIBIT "B"

**Permitted Exceptions
Whitfield County, Georgia**

1. Taxes for the year 2003 and subsequent years.
2. Easement to Georgia Power Company as recorded in Deed Book 21 Page 521, Whitfield County, Georgia Land Records.
3. Right of way Deed to Southern Railway Company by instrument dated March 30, 1960, recorded at Deed Book 129 Page 387, Whitfield County, Georgia Land Records.
4. Easement contained in that certain Right of Way Deed from Farm & Industrial Chemical Co. to Whitfield County, dated July 23, 1986, recorded at Deed Book 940 Page 212, Whitfield County, Georgia Land Records.
5. Sewer easement from Crown American, Inc. to Farm & Industrial Chemical Company, dated July 16, 1991, recorded at Deed Book 2270 Page 288, Whitfield County, Georgia Land Records.
6. Water easement from Crown American, Inc. to Farm & Industrial Chemical Company, dated July 16, 1991, recorded at Deed Book 2270 Page 292, Whitfield County, Georgia Land Records.
7. Sewer easement from Columbine Warehousing Corp. to Farm & Industrial Chemical Company, dated July 16, 1991, recorded at Deed Book 2270 Page 296, Whitfield County, Georgia Land Records.
8. Easement from Callaway Chemical Company to the United States of America dated February 7, 2002 and recorded in Deed Book 3644 Page 153, Whitfield County, Georgia Land Records.
9. All matters shown on survey for Lynx Chemical Group, LLC, First American Title Insurance Company, and The CIT Group/Business Credit, Inc., dated May 12, 2003, by Joseph Russell Evans GRLSN 2168 of Joseph R. Evans & Associates Land Surveyors.

ATL01/11434705v2

DOC# 007209
FILED IN OFFICE
07/26/2007 10:53 AM
BK:5049 PG:229-231
MELICA KENDRICK
CLERK OF SUPERIOR COURT
WHITFIELD COUNTY

After Recording Return To:

John C. Crossley
Blackwell Sanders LLP
4801 Main Street
Suite 1000
Kansas City, Missouri 64112

PT 2092

Space above this line for recording data

GEORGIA WARRANTY DEED

STATE OF GEORGIA)
)ss
COUNTY OF FULTON)

CONSIDERATION: THIS DEED IS EXEMPT FROM TRANSFER AND/OR RECORDATION TAXES PURSUANT TO 11 U.S.C. 1146(n) AND THAT CERTAIN "ORDER (1) AUTHORIZING THE DALTON SALE OF ASSETS RELATING TO THE DALTON FACILITY FREE AND CLEAR OF ALL LIENS, CLAIMS, INTERESTS AND ENCUMBRANCES, (B) AUTHORIZING THE ASSUMPTION AND ASSIGNMENT OF CERTAIN EXECUTORY CONTRACTS AND LEASES IN CONNECTION THERewith, (C) EXEMPTING SUCH DALTON SALE AND ASSIGNMENT FROM ANY STAMP TAX OR SIMILAR TAX, AND (D) GRANTING RELATED RELIEF" ENTERED BY THE UNITED STATES BANKRUPTCY COURT FOR THE NORTHERN DISTRICT OF GEORGIA ON JULY 13, 2007, IN CASE NO. 07-41230-PWB, A CERTIFIED COPY OF WHICH HAS BEEN PREVIOUSLY RECORDED IN THIS JURISDICTION.

THIS INDENTURE, made the 18th day of July, 2007, between LYNX CHEMICAL GROUP, LLC, a Georgia limited liability company, of the County of Fulton, and State of Georgia, as party of the first part, hereinafter called "Grantor", and HARCROS CHEMICALS INC., a Kansas corporation, of the County of Wyandotte, and State of Kansas, as party or parties of the second part, hereinafter called "Grantee" (the words "Grantor" and "Grantee" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH that: Grantor, for and in consideration of the sum of Ten Dollars (\$10.00) and other valuable considerations in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, by these presents does grant, convey, bargain, sell, transfer, set-over, alien and confirm unto the said Grantee the following described property to wit:

See Exhibit A attached hereto and incorporated herein by this reference.

TO HAVE AND TO HOLD the said tract or parcel of land, 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 forever in FEE SIMPLE.

AND THE SAID Grantor will warrant and forever defend the right and title to the above described property unto the said Grantee against the claims of all persons whomsoever.

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

GRANTOR:

LYNX CHEMICAL GROUP, LLC, a Georgia limited liability company

By: John R. Bogosian

Name: John R. Bogosian

Title: CEO

Attested, signed, sealed and delivered in the presence of:

[Signature]
Witness

Teresa C. Rauch
Notary Public, State of Georgia

My Commission Expires: Jan. 30, 2009

[AFFIX NOTARIAL SEAL]



EXHIBIT "A"

Legal Description

All that tract or parcel of land lying and being in Land Lot 44 of the 13th District and 3rd Section of Whitfield County, Georgia. Also included is that parcel of land described as being Lot 1 of the Mrs. Ed King Subdivision, Dated October 1941, by R. E. Smith P.I.S. No. 263.

Beginning at the intersection of the East right of way of South Dixie Highway (60' right of way) and the South right of way of Corporate Drive (80 foot right of way).

THENCE South 87 degrees 52 minutes 16 seconds East for a distance of 171.69 feet to a point on the South right of way of Corporate Drive (80 foot right of way); THENCE along a curve to the left having a radius of 1083.64 feet and an arc length of 338.20 feet, being subtended by a chord of North 82 degrees 22 minutes 57 seconds East for a distance of 336.83 feet to a point on the South right of way of Corporate Drive (80 foot right of way); THENCE North 69 degrees 27 minutes 03 seconds East for a distance of 146.57 feet to a point on the South right of way of Corporate Drive (80 foot right of way); THENCE along a curve to the right having a radius of 887.17 feet and an arc length of 529.78 feet, being subtended by a chord of South 85 degrees 49 minutes 16 seconds East for a distance of 521.94 feet to a point on the South right of way of Corporate Drive (80 foot right of way); THENCE along a curve to the left having a radius of 3690.52 feet and an arc length of 121.34 feet, being subtended by a chord of South 72 degrees 15 minutes 47 seconds East for a distance of 121.33 feet to an iron pin at the intersection of the South right of way of Corporate Drive (80 foot right of way) and the West right of way of the Norfolk Southern Railroad (125 foot right of way); THENCE South 34 degrees 13 minutes 46 seconds West for a distance of 1133.64 feet to an iron pin on the West right of way of the Norfolk Southern Railroad (125 right of way); THENCE South 88 degrees 68 minutes 20 seconds West for a distance of 1093.37 feet to an iron pin on the East right of way of South Dixie Highway (60 foot right of way); THENCE North 25 degrees 14 minutes 29 seconds East for a distance of 1059.21 feet to the point of beginning.

Said property contains 26.76 acres.

RESOLVE ENV. ENG. ✓
1444 WATERFORD GREEN DR.
MARIETTA, GA 30068

Deed Doc: AFF
Recorded 02/14/2011 01:01PM
Georgia Intangible Tax Paid: \$0.00
MELICA KENDRICK
Clerk Superior Court, WHITFIELD County, Ga.
Bk 05572 Pg 0031-0032

After Recording Return To:
Joan B. Sasine, Esq.
Bryan Cave LLP
1201 West Peachtree Street, NW
Fourteenth Floor
Atlanta, Georgia 30309

(space above reserved for recorder's use)

STATE OF GEORGIA
COUNTY OF WHITFIELD


Georgia Hazardous Site Response Act Affidavit

James Grantham personally appeared before me and who, upon being first duly sworn, deposes and states as follows:

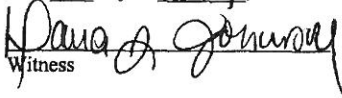
1. I am the Plant Manager of the Harcros Chemicals, Inc. facility in Dalton, Georgia and in such capacity am authorized to make this Affidavit; and
2. Harcros Chemicals, Inc. is the owner of the former Vulcan Performance Chemical property, located at 3452 Corporate Drive, Dalton, Whitfield County, Georgia, Tax Parcel ID NO. 13-044-09-000, Latitude 34° 41' 49" N Longitude 84° 59' 2" W; and
3. This Affidavit is given pursuant to the O.C.G.A. Section 44-2-20 and Ga. Comp. R. & Reg. r. 391-3-19-.08 for the purpose of giving notice to all parties of the facts recited in this document; and
4. 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.

[SIGNATURES ON FOLLOWING PAGE]

Bk 05572 Pg 0032


James Grantham
Plant Manager, Harcros Chemicals, Inc., Dalton,
Georgia

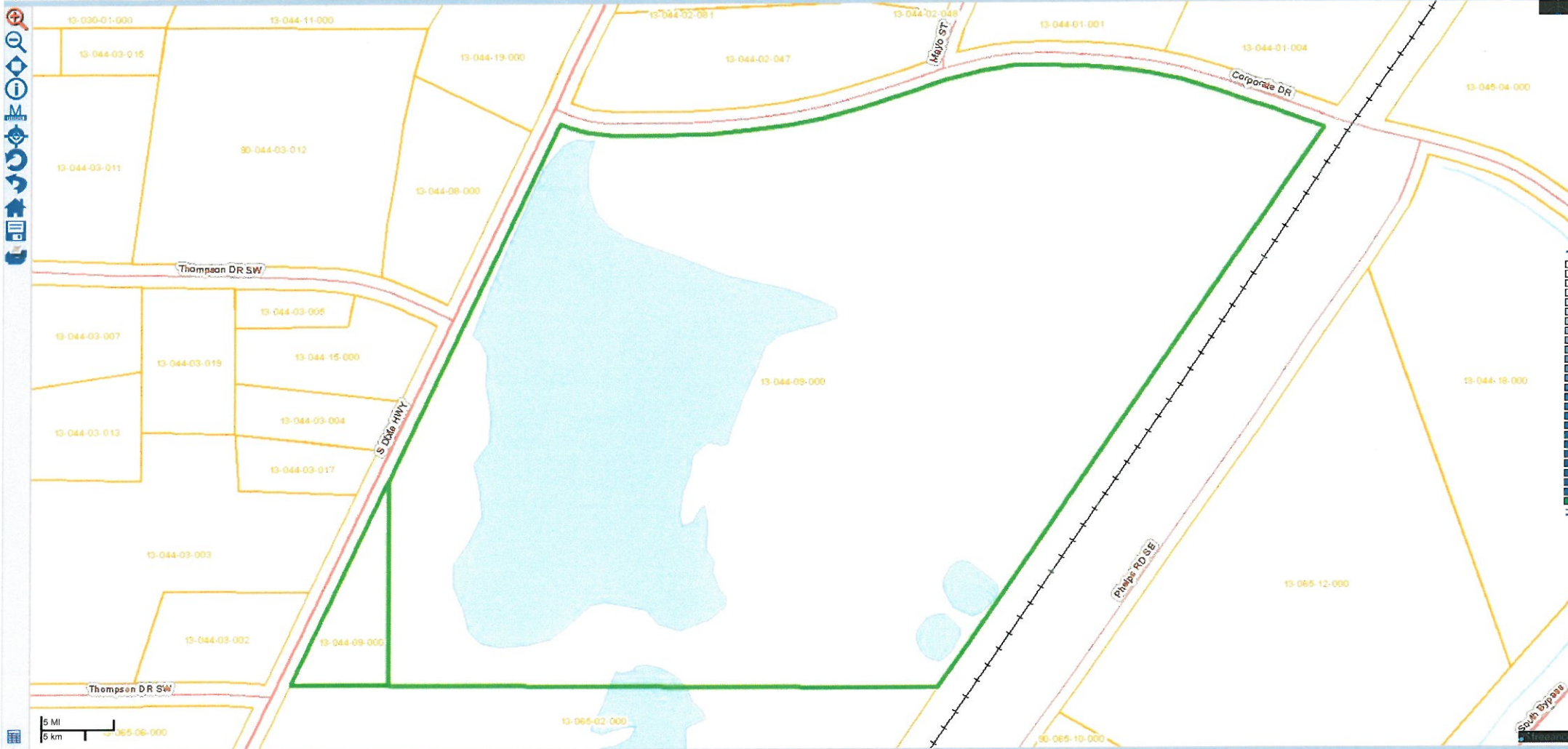
Signed, sealed and delivered
In the presence of, and sworn
To and subscribed before me 2611
This 11th day of February, 2010.


Witness


Notary Public

Exact Date of Execution by
Notary Public: 2-11-2011
Commission Expiration Date: MY COMMISSION EXPIRES
AUGUST 26, 2011

[AFFIX NOTARIAL SEAL]



Mapping		Search	
Show All Selections Clear			
Zoom to selected map feature			
Selected Parcels Feature			
Parcel Number	13-044-09-000		
Zoning	Heavy Manufacturing (M-2)		
Subdivision Name			
Area as Drawn	28596.136606144		
House Number	0		
Street Extension			
Street Direction			
Street Type			
Street Name			
Unit			
Legal Description	26.76A LL 044-13		
Tax District	06		
Assessed Acres	26.76		
Owner Name	HARCROS CHEMICALS INC		
Owner Address	5200 SPEAKER RD		
Owner City	KANSAS CITY		
Owner State	KS		
Owner Zip	66106		
Residential Improvement	33967		
Commercial Improvement	915373		
Accessory Improvement	51094		
Land Value	286600		
Description	County		
Tax Assessor Details (not for use outside of the County)	13-044-09-000		
Public Parcel Details	13-044-09-000		
Subscriber Parcel Details	13-044-09-000		



Parcel Number	Address Number	Street Name	Legal Description	Owner Name
1 13-044-09-000	0		26.76A LL 044-13	HARCROS CHEMICALS INC

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Site Information

APPENDIX C

Analytical Summary Documents (September 2006 Report)

Table 1
Soil Sampling Results
March 1996 through June 2006
Former Vulcan Performance Chemicals Plant, Dalton, Georgia

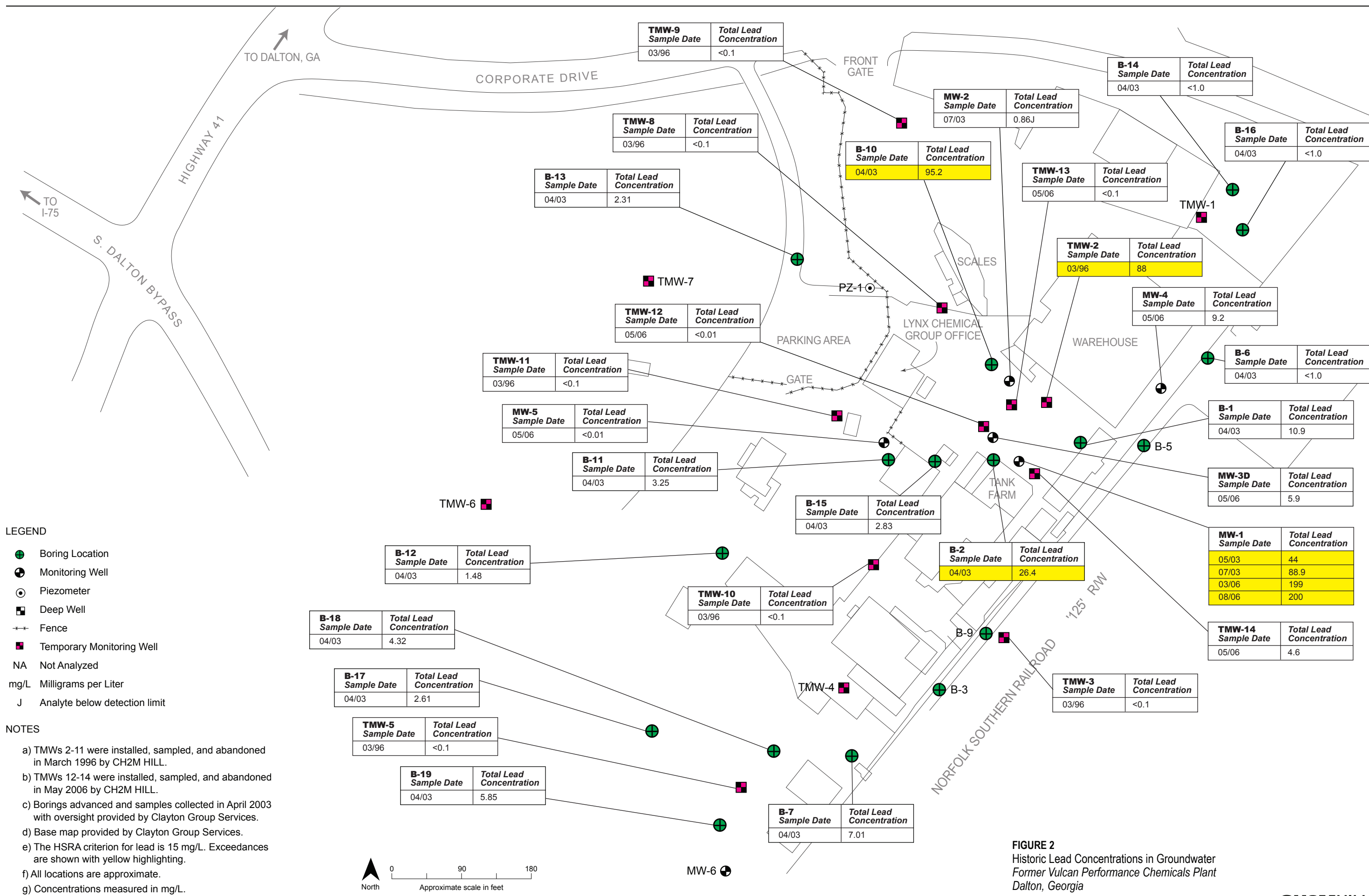
Analyte (mg/kg):	Antimony	Arsenic	Beryllium	Chromium	Chromium (Hexavalent)	Copper	Cyanide	Lead	Nickel	Selenium	Thallium	Zinc
HSRA Notification Concentration (mg/kg):	10	41	3	1,200	--	1,500	10	300	420	36	10 or higher	2,800
Sample Location (ft bgs)												
TMW-1 ^a (4'-7')	<5.0	<3.0	<1.0	6.8	<1.0	5.9	NA	<2.5	7.1	<4.0	<5.0	18.0
TMW-2 ^a (2'-5')	<5.0	<3.0	<1.0	15.0	<1.0	3.1	<0.25	8.0	<2.0	<4.0	<5.0	50.0
TMW-3 ^a (3'-6')	<5.0	3.8	<1.0	13.0	<1.0	2.6	<0.25	10.0	<2.0	<4.0	<5.0	13.0
TMW-5 ^a (6.9'-15')	6.5	<3.0	1.4	32.0	<1.0	18.0	<0.25	13.0	27.0	<4.0	<5.0	57.0
TMW-7 (3'-6')	<5.0	<3.0	<1.0	19.0	<1.0	2.1	<0.25	10.0	4.5	<4.0	<5.0	6.9
TMW8 ^a (5'-8')	5.5	<3.0	1.2	23.0	<1.0	17.0	<0.25	19.0	10.0	<4.0	<5.0	30.0
B-1 ^b (0'-2')	NA	<4.58	<2.29	20.9	NA	9.37	NA	11.7	7.59	<4.58	<4.58	17.4
B-2 ^b (4'-6')	NA	<5.54	<2.77	30.5	NA	16.9	NA	11.1	19.2	<5.54	<5.54	39
B-3 ^b (2'-4')	NA	<5.95	<2.97	34.7	NA	17.8	NA	11.7	16.6	<5.95	7.32	39.5
B-5 ^b (4'-6')	NA	<5.45	<2.72	27.8	NA	11.7	NA	9.22	7.85	<5.45	5.77	34.3
B-6 ^b (2'-4')	NA	3.47	<1.72	35.9	NA	29	NA	11.3	31.8	<3.44	7.64	60.2
B-7 ^b (4'-6')	NA	<5.98	<2.99	41.5	NA	24.3	NA	12.9	19.4	<5.98	7.06	31
B-9 ^b (0'-2')	NA	10.5	<3.00	33.8	NA	30.2	NA	26.2	13.1	<5.99	<5.99	59
B-10 ^b (4'-6')	NA	4.43	<1.92	28	NA	11.7	NA	13.4	22.5	<3.84	5.0	33.5
B-11 ^b (4'-6')	NA	8.41	<1.95	37.7	NA	22.2	NA	10.6	8.25	<3.90	8.25	12.2
B-12 ^b (9'-10')	NA	4.72	<1.80	23.9	NA	10.4	NA	17.6	23.4	<3.59	4.65	48.3
B-13 ^b (2'-4')	NA	<3.95	<1.97	18.5	NA	4.43	NA	9.65	4.53	<3.95	<3.95	9.82
B-14 ^b (4'-6')	NA	<4.50	<2.25	35.8	NA	19.2	NA	14.3	31.2	<4.50	7.77	50.9
B-15 ^b (2'-4')	NA	6.82	<2.78	32.9	NA	11	NA	6.9	5.82	<5.57	6.5	10.6
B-16 ^b (9'-11')	NA	<5.33	<2.67	23.1	NA	17.1	NA	6.38	19.5	<5.33	<5.33	38
B-17 ^b (4'-6')	NA	<4.16	<2.08	127	NA	40	NA	66.5	22.2	<4.16	5.96	556
B-18 ^b (6'-8')	NA	<3.92	3.5	46.7	NA	34.8	NA	8.73	35	4.69	8.36	51.6
B-19 ^b (10'-12')	NA	<5.43	<2.71	36.3	NA	27.8	NA	13.8	19.3	<5.43	6.23	50.2
TMW-12 ^c (4'-6')	NA	NA	NA	NA	NA	NA	NA	4.95	NA	NA	NA	NA
TMW-12 ^c (9'-11')	NA	NA	NA	NA	NA	NA	NA	4.06	NA	NA	NA	NA
TMW-12 ^c (14'-15')	NA	NA	NA	NA	NA	NA	NA	6.57	NA	NA	NA	NA
TMW-13 ^c (4'-6')	NA	NA	NA	NA	NA	NA	NA	7.78	NA	NA	NA	NA
TMW-13 ^c (9'-11')	NA	NA	NA	NA	NA	NA	NA	6.37	NA	NA	NA	NA
TMW-14 ^c (4'-6')	NA	NA	NA	NA	NA	NA	NA	3.74	NA	NA	NA	NA
TMW-14 ^c (9'-11')	NA	NA	NA	NA	NA	NA	NA	5.72	NA	NA	NA	NA
MW-3D ^d (4'-6')	NA	NA	NA	NA	NA	NA	NA	28.9	NA	NA	NA	NA
MW-3D ^d (9'-11')	NA	NA	NA	NA	NA	NA	NA	8.37	NA	NA	NA	NA
MW-3D ^d (14'-15.5')	NA	NA	NA	NA	NA	NA	NA	5.73	NA	NA	NA	NA
B-20 ^e (1'-2')	NA	NA	1.29J	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-21 ^e (1'-2')	NA	NA	1.97J	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-22 ^e (1'-2')	NA	NA	<2.40	NA	NA	NA	NA	NA	NA	NA	NA	NA
B-23 ^e (1'-2')	NA	NA	1.30J	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

- a. TMWs were installed, sampled, and abandoned by CH2M HILL in 1996
- b. Borings were advanced and sampled by Clayton Group Services in 2003
- c. TMWs were installed, sampled, and abandoned by CH2M HILL in 2006
- d. Monitoring wells were installed and sampled by CH2M HILL in 2006
- e. Borings were advanced and sampled by CH2M HILL in 2006
- f. Yellow highlight indicates an exceedence of HSRA criterion in soil

Legend:

- mg/kg milligram per kilogram
- NA Not Analyzed
- TMW Temporary Monitoring Well
- B Boring
- J Value was below the analytical method detection limit



LEGEND

- Boring Location
- ⊕ Monitoring Well
- ⊙ Piezometer
- Deep Well
- Fence
- Temporary Monitoring Well
- NA Not Analyzed
- mg/L Milligrams per Liter
- J Analyte below detection limit

NOTES

- a) TMWs 2-11 were installed, sampled, and abandoned in March 1996 by CH2M HILL.
- b) TMWs 12-14 were installed, sampled, and abandoned in May 2006 by CH2M HILL.
- c) Borings advanced and samples collected in April 2003 with oversight provided by Clayton Group Services.
- d) Base map provided by Clayton Group Services.
- e) The HSRA criterion for lead is 15 mg/L. Exceedances are shown with yellow highlighting.
- f) All locations are approximate.
- g) Concentrations measured in mg/L.

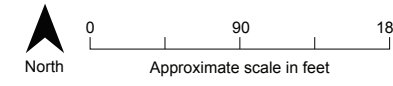


FIGURE 2
 Historic Lead Concentrations in Groundwater
 Former Vulcan Performance Chemicals Plant
 Dalton, Georgia