EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS®

EarthCon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, Georgia 30062

P: 770-973-2100
F: 770-973-7395
www.earthcon.com

December 16, 2015

Mr. Jason Metzger
Unit Coordinator
Response and Remediation Program
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King, Jr. Drive, SE, Suite 1054 East
Atlanta, Georgia 30334

Subject: **Submittal of Second VIRP Progress Report**
Apollo Industries, Inc., HSI No. 10333
1850 South Cobb Industrial Boulevard SE, Smyrna, Cobb County, Georgia

Dear Mr. Metzger:

EarthCon Consultants, Inc. ("EarthCon"), on behalf of our client AMC Cobb Holdings, LLC ("AMC Cobb") is pleased to submit to the Georgia Environmental Protection Division ("EPD") the Second Voluntary Investigation and Remediation ("VIRP") Progress Report for the Apollo Industries, Inc. Site (HSI No. 10333) located in Smyrna, Cobb County, Georgia, which is enclosed with this letter. If you have any questions regarding the Second VIRP Progress Report, please feel free to contact the undersigned at (770) 973-2100.

Sincerely,

Kristen R. Rivera, P.G.
Senior Geologist

Carol D. Northern, P.G.
Principal Geologist

Attachment: Second VIRP Progress Report

Cc: Ms. Robin Futch, Georgia EPD
Ms. Maria Callas, AMC Cobb Holdings, LLC
Mr. Adam Sowatzka, King & Spalding

SECOND VIRP PROGRESS REPORT

APOLLO INDUSTRIES, INC.
1850 SOUTH COBB INDUSTRIAL BOULEVARD SE
SMYRNA, COBB COUNTY, GEORGIA
HSI SITE NUMBER 10333

PREPARED FOR:

AMC COBB HOLDINGS, LLC
1850 SOUTH COBB INDUSTRIAL BOULEVARD SE
SMYRNA, GA 30082

PREPARED BY:

EARTHCON CONSULTANTS, INC.
1880 WEST OAK PARKWAY
BUILDING 100, SUITE 106
MARIETTA, GEORGIA 30062
770-973-2100

EarthCon Project No. 02.20140391.00

DECEMBER 2015

Contents

PG CERTIFICATION iii
1.0 INTRODUCTION 1
2.0 SUMMARY OF SITE ACTIVITIES 1
2.1 Soil 2
2.2 Surface Water and Sediment 3
2.3 Groundwater 3
2.3.1 Monitoring Well Redevelopment, Well Abandonment, and Well Installation 3
2.3.2 Groundwater Sampling 3
3.0 ANALYTICAL RESULTS 4
3.1 Soil Analytical Results 4
3.2 Surface Water and Sediment Analytical Results 4
3.3 Groundwater Analytical Results 5
3.4 SVE Evaluation 5
4.0 CONCEPTUAL SITE MODEL 6
4.1 Source Areas 6
4.2 Groundwater Flow 6
4.3 Extent of Impacts – Soil, Surface Water and Sediment 7
4.4 Extent of Groundwater Impacts and Plume Stability Evaluation 8
5.0 RECOMMENDATIONS 16
6.0 MONTHLY INVOICE SUMMARY 16
7.0 SCHEDULE 17

TABLES

Table 1	Monitoring Well Construction Details
Table 2	Water Level Measurements
Table 3	Field Parameters
Table 4	Summary of Groundwater Analytical Results
Table 5	Groundwater MNA Results
Table 6	Summary of Monthly Invoices
Table 7	Projected Milestone Schedule

FIGURES

Figure 1	Site Location
Figure 2	Facility Layout and Sample Locations
Figure 3	Potentiometric Surface Map – October 16, 2015
Figure 4	Soil Delineation Map
Figure 5	Soil Cross Section Locations
Figure 6	Cross Section A – A’
Figure 7	Cross Section B – B’
Figure 8	Groundwater Cross Section Locations
Figure 9	Cross Section C – C’
Figure 10	Cross Section D – D’
Figure 11	Total VOCs October 2015
Figure 12	Apollo Plume 1,1,1-Trichloroethane (1,1,1-TCA) Oct-2015
Figure 13	Apollo Plume 1,1-Dichlorothene (1,1-DCE) Oct-2015
Figure 14	Apollo Plume cis-1,2-Dichloroethene (cis-1,2-DCE) Oct-2015
Figure 15	Apollo Plume Tetrachloroethene (PCE) Oct-2015
Figure 16	Apollo Plume Trichloroethene (TCE) Oct-2015
Figure 17	Apollo Plume Vinyl Chloride (VC) Oct-2015
Figure 18	Apollo Plume Acetone Oct-2015
Figure 19	Total CVOC Molar Analysis October 2015
Figure 20	Total CVOC Molar Analysis Summary and Trends – Apollo Plume Area
Figure 21	Total CVOC Molar Analysis Summary and Trends – MW-6, MW-7, MW-8

APPENDICES

Appendix A	Summary of Field Procedures
Appendix B	Soil Boring Logs and Monitoring Well Construction Diagrams
Appendix C	Laboratory Analytical Reports
Appendix D	Field Sampling Forms
Appendix E	Groundwater Trend Graphs and Historical Data Summary
Appendix F	Technical Memorandum - Updated: Plume Analytics Evaluation Including a Ricker Method® Plume Stability Analysis

PG CERTIFICATION

"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 seg.). 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."



Kristen R. Rivera, P.G.
Senior Geologist

Registration No. 2049
State of Georgia

Date: December 16, 2015

1.0 INTRODUCTION

The Voluntary Investigation and Remediation Plan (VIRP) Application for the Apollo Industries, Inc. Hazardous Site Inventory (HSI) Site Number 10333 located at 1850 South Cobb Industrial Boulevard SE in Smyrna, Cobb County, Georgia (Site), was submitted to the Georgia Environmental Protection Division (EPD) on March 4, 2014. The Site is currently owned by AMC Cobb Holdings, LLC (AMC Cobb) and is operated by Apollo Technologies, Inc. (Apollo). The site location is shown on Figure 1. The VIRP was approved by EPD in a letter dated June 4, 2014. On December 15, 2015, AMC Cobb submitted a letter to EPD notifying EPD that as of that date, AMC Cobb is responsible for performing the work under the VIRP. This Second VIRP Progress Report is being submitted by EarthCon on behalf of AMC Cobb and provides a summary of activities conducted at the Site from May 2014 through October 2015.

2.0 SUMMARY OF SITE ACTIVITIES

During this reporting period, the following occurred/activities were conducted:

- An evaluation of the soil vapor extraction (SVE) system;
- Soil investigations east of the production area and adjacent to monitoring well MW-8;
- A site wide sampling event including 16 groundwater monitoring wells, two surface water locations, and one sediment location;
- Analyses of soil, surface water, and sediment samples for volatile organic compounds (VOCs);
- Analyses of groundwater samples for VOCs and monitored natural attenuation (MNA) parameters;
- A meeting with EPD on October 13, 2015;
- Abandonment of wells MW-6, RW-1, and RW-2; installation of replacement monitoring well MW-6R and supplemental monitoring well MW-17;
- A survey of soil boring locations and top of casing elevations for MW-6R and MW-17; and
- An update of the plume analytics evaluation.

In a letter dated August 12, 2015, EPD provided comments on the May 2015 First VIRP Progress Report. Apollo responded in a letter dated September 9, 2015, which addressed many of EPD's comments and requested a meeting to discuss the remaining comments. Representatives of Apollo and EPD met on October 13, 2015. During the meeting, Apollo discussed the results of the plume analytics evaluation, particularly regarding the groundwater contamination migrating onto the property in the area of monitoring well MW-8. EPD requested that Apollo collect soil samples upgradient and downgradient of well MW-8 to verify whether there is a contaminant

source in the soil that could be contributing to the groundwater contamination. Apollo also discussed the vertical and horizontal groundwater delineation. Apollo agreed that the need for any additional delineation would be further evaluated after the October sampling event was completed. Additionally, EPD agreed that Apollo could abandon wells RW-1 and RW-2 due to their compromised condition and that Apollo would install a new well between wells DW-1 and MW-4.

This Second Progress Report addresses the proposed items as presented in the May 2015 First VIRP Progress Report with the exception of preparing a groundwater model. The groundwater model will be addressed in the next progress report, as additional soil and groundwater investigations conducted during this reporting period were needed to scope the model.

2.1 Soil

On September 16, 2015, EarthCon conducted a soil investigation east of the manufacturing building to complete soil delineation. A total of four soil samples and one duplicate were collected from soil borings SB-6 and SB-7 at depths of 2.5 and 15 feet below ground surface (bgs).

On October 21, 2015, EarthCon conducted a soil investigation to the northwest and southeast of well MW-8 to determine whether there was a source in soil. A total of four soil samples and one duplicate were collected from soil borings SB-8 and SB-9 at depths of 1 and 3 feet bgs.

The boring locations are shown on Figure 2. A description of the field procedures is provided in Appendix A. Boring logs are provided in Appendix B. The laboratory analytical results are provided in Appendix C. The results of the sampling are described in Section 3.0.

SVE System Evaluation

A soil vapor extraction (SVE) system has been operating at the facility since 1998 (17 years) to assist with reducing soil and dissolved-phase VOC concentrations. The SVE system is connected to six SVE wells (SV-1 through SV-6) and is located at the south edge of the main manufacturing building and approximately 25 feet north of MW-1. Based on historical well construction details, the SVE wells were installed to a depth of approximately 17 feet with approximately 15 feet of well screen. The SVE system is equipped with a regenerative blower to induce a vacuum on the SVE wells to extract soil vapors. Soil vapors are transferred through two vapor-phase granular activated carbon (GAC) vessels for treatment prior to being discharged into the atmosphere.

In May 2015, EarthCon reviewed the SVE system operation and performance. Results of the performance evaluation are discussed in Section 3.4, along with the recommendation to shut down the system in Section 5.0.

2.2 Surface Water and Sediment

On October 8, 2015, EarthCon collected surface water samples at locations SW-1 and SW-2 and sediment sample SED-3 from the stormwater retention pond. The sample locations are shown on Figure 2. A description of the field procedures is provided in Appendix A while the laboratory analytical results are provided in Appendix C. The results of the sampling are described in Section 3.0.

2.3 Groundwater

2.3.1 Monitoring Well Redevelopment, Well Abandonment, and Well Installation

Due to siltation, EarthCon redeveloped monitoring wells MW-1, MW-3, MW-4, MW-15, and DW-1 in October 2015. Wells MW-6, RW-1, and RW-2 were also proposed for redevelopment. However, based on a site visit conducted on September 11, 2015, EarthCon noted that well MW-6 had been significantly damaged. The well pad had been dislodged from the ground and the internal casing was broken. Therefore, monitoring well MW-6 was abandoned on September 16, 2015. Additionally, during well redevelopment, EarthCon determined that wells RW-1 and RW-2 were compromised and surface water was observed infiltrating the wells from the surrounding saturated soils below grade. Wells RW-1 and RW-2 were abandoned on October 26, 2015. Notes documenting these activities are provided along with the field sampling forms in Appendix D.

Monitoring well MW-6R was installed on September 16, 2015 to replace well MW-6 (Figure 2). The total depth of MW-6R is 27 feet and it is screened from approximately 16 to 26 feet bgs. Monitoring well MW-17 was installed on October 26, 2015 as an additional data point to supplement the well network after abandoning wells RW-1 and RW-2. Note that well MW-17 was initially identified as well RW-1R on the laboratory analytical reports in Appendix C and on the field forms in Appendix D. The total depth of MW-17 is 24 feet and it is screened from approximately 13 to 23 feet bgs. Monitoring well construction diagrams are provided in Appendix B.

2.3.2 Groundwater Sampling

EarthCon sampled sixteen (16) monitoring wells during the site-wide monitoring event conducted in October 2015. The locations of the monitoring wells are shown on Figure 2. The monitoring well construction details are presented in Table 1 and the groundwater elevation data are presented in Table 2. Field parameters are presented in Table 3. A description of the field procedures is provided in Appendix A and the groundwater sampling field forms are provided in Appendix D. The results of the sampling are described in Section 3.0.

Static water level elevations were measured for most wells on October 16, 2015. Groundwater elevations were calculated using top of casing elevations presented in the VIRP (O'Brien & Gere,

March 2014) as well as subsequent surveys for MW-9 on April 8, 2015 and MW-6R and MW-17 on November 3, 2015.

3.0 ANALYTICAL RESULTS

The soil, surface water, sediment, and groundwater analytical results for the September and October 2015 sampling events are discussed below. The groundwater analytical results are summarized in Tables 4 and 5. The laboratory analytical reports are provided in Appendix C. In addition, the results of the SVE evaluation are also set forth below.

3.1 Soil Analytical Results

On September 16, 2015, EarthCon collected four soil samples and one duplicate sample from soil borings SB-6 and SB-7 located east of the manufacturing building (Figure 2). Samples were collected from the 2.5 and 15 feet bgs intervals. On October 21, 2015, EarthCon collected four soil samples and one duplicate from soil borings SB-8 and SB-9 located northwest and southeast of well MW-8. These samples were collected from the 1 and 3 feet bgs intervals. The soil samples were analyzed for VOCs using EPA Method 8260B.

Analytical results for soil samples collected from borings SB-6, SB-7, and SB-9 were below laboratory reporting limits. Acetone was detected in the soil sample collected from SB-8 at 3 feet bgs at a concentration of 0.1 milligram per kilogram (mg/kg), which is above the laboratory reporting limit but below both the notification concentration of 2.74 mg/kg and the delineation criteria of 400 mg/kg (Type 1 risk reduction standard [RRS]). Based on the sample results for borings SB-8 and SB-9, there is no source of contamination in soil at the MW-8 location contributing to the groundwater contamination detected at this location.

3.2 Surface Water and Sediment Analytical Results

On October 8, 2015, EarthCon collected surface water samples at locations SW-1 and SW-2. EarthCon also collected one sediment sample SED-3 from the western edge of the stormwater retention pond near the location of the stormwater inflow (Figure 2). These samples were analyzed for VOCs using EPA Method 8260B. VOCs were not detected in surface water sample SW-2 or sediment sample SED-3 at concentrations above the laboratory reporting limits. 1,1-dichloroethane (1,1-DCA) was detected in the surface water sample collected from location SW-1 at a concentration of 0.006 milligrams per liter (mg/L). No other VOCs were detected in this sample. There are currently no Georgia instream water quality standards (ISWQS) for 1,1-DCA.

Surface water sample location SW-1 is directly downstream of the corrugated pipe that transports stormwater onto the Site. The detection of 1,1-DCA in surface water at this location is attributed to an off-site source.

3.3 Groundwater Analytical Results

EarthCon completed a site wide sampling event in October 2015 and included the collection of groundwater samples from sixteen (16) monitoring wells. The groundwater samples were analyzed for VOCs using EPA Method 8260B and for the following MNA parameters: total organic carbon (TOC) by Method 9060A; sulfide by Method 9030B; chloride, nitrate, and sulfate by Method 9056A; ethane, ethylene, and methane by Method RSK-175; and total alkalinity by Method 2320B. The groundwater samples were also field tested for the presence of ferrous iron using a field test kit. A summary of the VOC analyses is provided in Table 4 while the MNA parameter results are summarized in Table 5.

The October 2015 groundwater sampling event resulted in detections of the 13 reported regulated substances at concentrations above laboratory reporting limits (Table 4). Of those, 11 constituents were detected at concentrations above the delineation criteria including: 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), acetone, chloroethane, cis-1,2-dichloroethene (cis-1,2-DCE), cyclohexane, methylene chloride, tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride (VC). These 11 regulated substances were then compared to EPD-approved Type 1/3 or Type 4 risk reduction standards (RRS). Six of the 11 constituents were detected at concentrations above the applicable RRS, including: 1,1-DCE, 1,2-DCA, cis-1,2-DCE, PCE, TCE, and VC.

3.4 SVE Evaluation

EarthCon completed an evaluation of the operation and performance of the SVE system in May 2015. The SVE system was operational and extracting from the six SVE wells. The applied vacuum and air flowrate of the blower was recorded to be approximately four inches of mercury and 179 standard cubic feet per minute (scfm). Vapor readings were collected using a photo-ionization detector (PID) which detected influent blower concentration of 9.8 parts per million by volume (ppmV).

Based on historical groundwater and vapor sampling data, the SVE system appears to have contributed to the remediation efforts at the Site. The dissolved phase VOC concentrations from the nearest monitoring well (MW-1) to the SVE system have been reduced by more than two to three orders of magnitude since 1997. However, considering the years of operation of the SVE system, along with the decreasing trend of dissolved phase concentrations in the vicinity, the SVE system has surpassed its useful life. As a result, we will be shutting down the SVE system by the end of 2015.

4.0 CONCEPTUAL SITE MODEL

4.1 Source Areas

Historic on-site source areas include the former outdoor and current indoor batching operations and filling processes, as well as the former tank farm and former stormwater collection basin near monitoring wells MW-1 and MW-3. Monitoring well MW-4 had been used as a recovery well from its installation in 2005 until September 2014, which appears to have pulled contaminant mass away from the source area (MW-1 and MW-3) and downgradient toward MW-4. The facility layout is presented on Figure 2.

During the October 13, 2015 meeting, EPD requested that Apollo collect soil samples upgradient and downgradient of well MW-8 to verify whether there is a contaminant source in the soil that could be contributing to the groundwater contamination. On October 21, 2015, EarthCon collected four soil samples and one duplicate from soil borings SB-8 and SB-9 located northwest and southeast of well MW-8. Analytical results for soil samples collected from boring SB-9 were below laboratory reporting limits. Acetone was detected in the soil sample collected from SB-8 at 3 feet bgs at a concentration of 0.1 mg/kg, which is above the reporting limit but below both the notification concentration and delineation criteria. Therefore, there is no contamination source in soil at the MW-8 location contributing to the groundwater contamination detected there.

Potential off-site source areas include industrial and chemical facilities upgradient and north/northwest of the Site. The contaminant concentrations detected in wells MW-7 and MW-8 are attributed to these upgradient, off-site source area(s). As described in Section 4.4, the molar signatures of the constituents detected in MW-8 are very different than the molar signatures of the constituents detected in the wells located within the historic on-site source area, indicating a separate plume from an upgradient, off-site source area.

4.2 Groundwater Flow

EarthCon used the water level measurements that it collected on October 16, 2015 to develop a potentiometric surface map for the Site. As shown on Figure 3, the groundwater flow direction is to the southeast. Current groundwater flow is consistent with historic groundwater flow. Elevation data from the bedrock well DW-1 was not used in the groundwater contouring.

4.3 Extent of Impacts – Soil, Surface Water and Sediment

Soil

As presented in the May 2015 First Progress Report, concentrations of regulated substances were below delineation criteria in soil samples collected from borings MW-16, SB-2, SB-4, and SB-5 from all depth intervals. Data from samples collected at historical boring locations S-5, S-8, S-17, OBG-14, and S-12 delineate soils to the north, west, and south of the production area and batch room sump area, which EPD concurred with in their letter dated August 12, 2015. A soil delineation is shown on Figure 4. A soil cross section location figure is shown on Figure 5 and soil cross sections are provided on Figures 6 and 7.

Soil borings SB-6 and SB-7 were installed in September 2015 at EPD's request to complete soil delineation to the east of the manufacturing/production building. The soil borings were installed east of the warehouse building. Locations closer to the manufacturing/production building were assessed. However, the narrow strip of land located between the manufacturing/production building and the warehouse steeply slopes down approximately 10 feet (Figure 6). Historically, this area was heavily vegetated. The trees have been removed but many large tree stumps and shallow root systems are still in place. Additionally, electrical lines are present throughout this area. Therefore, due to the many difficulties of accessing the area between the manufacturing/production building and the warehouse, the borings were located in a grassy strip east of the warehouse. EarthCon collected soil samples from 2.5 and 15 feet bgs. Analytical results for the soil samples were below the laboratory reporting limits, which completes horizontal and vertical delineation to the east (Figure 4).

As shown on Figures 6 and 7, vertical delineation has also been achieved east, west, and north of the manufacturing/production building (SB-6, SB-7, S-11, OBG-14, S-21, SB-5, respectively). The presence of shallow bedrock encountered within and to the south of the manufacturing/production building provides vertical delineation for soils in those areas.

Surface Water and Sediment

As described in Section 3.2, the detection of 1,1-DCA at location SW-1 is attributed to an off-site, upgradient source. Previous releases of regulated substances at the Site have not impacted the small segment of stormwater flow that daylights on the property between the stormwater culverts.

4.4 Extent of Groundwater Impacts and Plume Stability Evaluation

The October 2015 groundwater sampling event resulted in detections of the 13 reported regulated substances at concentrations above laboratory reporting limits (Table 4). Of those, 11 constituents were detected at concentrations above the delineation criteria including: 1,1,1-TCA, 1,1-DCE, 1,2-DCA, acetone, chloroethane, cis-1,2-DCE, cyclohexane, methylene chloride, PCE, TCE, and VC. Six of the 11 constituents were detected at concentrations above the applicable RRS, including: 1,1-DCE, 1,2-DCA, cis-1,2-DCE, PCE, TCE, and VC, which is consistent with previous sampling events. A groundwater cross section location map is provided on Figure 8. Groundwater cross sections are shown on Figures 9 and 10. October 2015 groundwater plume isoconcentration maps for total VOCs and seven of the primary constituents (1,1,1,-TCA, 1,1-DCE, cis-1,2-DCE, PCE, TCE, VC, and acetone) documented in the Apollo Plume Area are provided as Figures 11 through 18, respectively. A summary of historical groundwater data collected since 2001, along with trend graphs, is provided in Appendix E.

Horizontal delineation of groundwater is demonstrated by wells MW-2, MW-5, MW-9, MW-10, MW-11, MW-12, MW-13, and MW-15. Although delineation has not been achieved at well DW-1, the Facility is located in an industrialized area where chlorinated compounds are likely to be encountered. Because the use of those constituents is widespread, attribution of those constituents in fractures to a particular source is problematic. Since there are multiple plumes at the Site, one of which is associated with off-site sources, further vertical delineation would not be useful.

An updated plume analytics evaluation was conducted for Site groundwater constituent plumes including 1,1,1,-TCA, PCE, TCE, 1,1-DCE, cis-1,2-DCE, VC, and acetone, as well as for the total chlorinated volatile organic compounds (CVOCs). The updated plume analytics evaluation was conducted to help provide an understanding of the stability of the various plumes in terms of area, average concentration, and mass indicator for the constituents, as well as to evaluate the overall molar characteristics of the plumes. The updated Technical Memorandum for the Plume Analytics Evaluation including a Ricker Method® Plume Stability Analysis, along with the supporting tables, figures, and appendices, is presented in Appendix F.

The updated plume analytics evaluation was performed using historical groundwater analytical data from January 2005 through October 2015. The 2005 through 2015 data set provides 19 sampling events over a 10-year period. The data used for the plume analytics evaluation for 1,1,1,-TCA, PCE, TCE, 1,1-DCE, cis-1,2-DCE, VC, acetone, and total CVOCs are summarized in Appendix F Tables 1 through 7, respectively.

The updated plume analytics evaluation included the following elements:

- A Ricker Method® plume stability analysis;
- Total molar trend and molar ratio analysis for chlorinated ethenes and ethanes;
- Molar ratio (pie chart) analysis (temporal and spatial) for chlorinated ethenes and ethanes; and

EarthCon performed the plume stability analysis using procedures described in *A Practical Method to Evaluate Ground Water Contaminant Plume Stability* (Ricker, 2008). The Ricker Method® plume stability analysis compares relative changes in contaminant plume characteristics over time, including area, average concentration, and mass indicator. The area, average concentration, and mass indicator for each year were plotted to observe changes in each parameter from event to event. To demonstrate that a plume is decreasing or stable, temporal changes in these calculated values should result in an overall decreasing or stable trend. An increasing trend in any of these values may indicate that the plume is not stable and/or may be expanding.

EarthCon also evaluated the groundwater data on a molar basis. During reductive dechlorination, a parent compound degrades to a daughter compound and the mass based concentration of total VOCs decreases because one chlorine atom is released in each sequential reaction. However, the number of moles does not decrease since one molecule of a parent compound (e.g., PCE) produces one molecule of its respective daughter compound (e.g., TCE). The molar concentration only decreases once the parent constituent has been completely mineralized to benign end products (i.e., carbon dioxide, water, and chloride ion). Therefore, the total plume decrease (or increase) for constituents can be estimated by calculating the molar concentration (in nmol/L) of each species and then adding all the concentrations together for a total molar concentration of the plume. The molar concentration evaluations can demonstrate complete mineralization of VOC compounds, as well as assist in evaluating and detecting potential new, separate, and/or episodic release sources within a plume.

Many of the plume analytics procedures consist of a statistical evaluation of a static well network over time to establish trends and patterns. When the well network is substantially changed, it is recommended to start a new series of plume analytics evaluations with the new well network. The trends and analysis for the former well network are still valid. However, with the abandonment of two former monitoring points (RW-1 and RW-2) in October 2015 and the recent installation of a new monitoring point (MW-17), the plume analytics well network has changed substantially enough to recommend re-setting the plume analytics network. Thus, going forward, we will reset the trends over time in accordance with the new well network. This change will be noted on the Ricker Method® plume stability analysis and the plume difference over time evaluation. We have annotated the figures accordingly to indicate where the change in well network evaluations occur. It should be noted that changing the well network does not change the integrity of the data, just the measuring points.

The following are observations made from the total CVOC molar analysis (in nmol/L) that was conducted on the October 2015 data (Figure 19): As discussed below, the October 2015 molar patterns appear to be generally similar to the April 2015 molar patterns for the three separate plumes in the Site area: 1) Apollo Plume Area, 2) Western Plume Area, and 3) MW-6 Plume Area.

Apollo Plume Area

- A unique characteristic of the Apollo Plume Area, when compared to the other plume areas, is the presence of 1,1,1-TCA and 1,1-DCE in all of the five monitoring wells along with other chlorinated hydrocarbons. One of the accepted degradation pathways for the generation of 1,1-DCE is the abiotic degradation of 1,1,1-TCA. 1,1-DCE can also be generated through the anaerobic reductive dechlorination/abiotic degradation of TCE. On a molar percent basis, 1,1-DCE is more prevalent in the southern or downgradient portion of the Apollo Plume Area. A differentiator between the Apollo Plume Area molar ratios and what is seen in MW-6 is that, except for some very low level hits near detection limits in 2011-2013, 1,1,1-TCA is typically not detected in MW-6. Whereas 1,1,1-TCA is historically observed in the wells within the Apollo Plume Area.

- Generally, the Apollo Plume Area has higher molar concentrations on a molar concentration basis than the other two plume areas.

Western Plume Area

- On the surface, the molar ratio patterns of the April 2015 and October 2015 data for the Western Plume Area indicate a classic degradation pathway going from mostly PCE and TCE at upgradient MW-8 to cis-1,2-DCE and VC downgradient at MW-7 and finally to almost all VC at MW-15, which is downgradient from MW-7. Additionally, supporting this interpretation is the observation that the molar concentrations overall continue to decrease in a downgradient direction from MW-8 to MW-15. This difference was more pronounced in the April 2015 data when the total molar concentration in MW-7 was less than what was observed in October 2015. The October 2015 data show that total molar concentration in MW-7 was greater than MW-8; however, MW-15 total molar concentration was orders of magnitude less than MW-8 and MW-7. The historical data set is limited for well MW-8. As we add to the MW-8 data set, we will continue to monitor and evaluate total molar concentration trends and correlations between MW-8, MW-7, and MW-15.

- As mentioned above, by looking at the molar ratio pattern data, a case can be made for a downgradient sequenced reductive dechlorination scenario where PCE and TCE degrade to mostly daughter products cis-1,2-DCE and VC in a downgradient direction all the while losing molar mass. Possible explanations for the relatively quick transition from parent compounds to daughter compounds between MW-8 and the downgradient MW-7 is that there is a zone of reducing conditions between these two wells that drive the reductive

dechlorination process. This zone could be due to the presence of natural (geochemical, biological) or anthropogenic carbon sources (carbon based compounds, acetone, toluene, etc.) in the subsurface or other factors that can produce reducing conditions that drive reductive dechlorination.

- The fact that the Western Plume Area is located side-gradient to the Apollo Plume Area, that the Western Plume Area shows a classic degradation pathway in a downgradient direction, and that 1,1-DCE does not appear to be a significant component of the Western Plume Area are strong lines of evidence that the Western Plume Area and the Apollo Plume Area are two distinct plumes sourced from different locations. The evidence supports that the source of the Western Plume Area is coming from an area upgradient or proximal to MW-8. Recent soil sampling conducted in October 2015 proximal to well MW-8 support the hypothesis that the compounds detected in MW-8 are being sourced from an upgradient/off-site location.

MW-6 Area

- The off-site MW-6 Area located south of the Site is predominantly 1,1-DCE and VC. Although its molar signature more resembles the Apollo Plume Area due to the relatively high percentage of 1,1-DCE, it appears this plume is separate from the Apollo Plume Area based on data obtained from MW-15, which is located between the Apollo Plume Area and the MW-6 Area. MW-15, located on the Site upgradient and north of MW-6, contains predominantly VC. Historically, MW-15 has consistently had lower concentrations of CVOCs than MW-6, at times an order of magnitude lower. Additionally, one compound that has been consistently detected in the Apollo Plume Area is 1,1,1-TCA which, except for some very low level hits near detection limits in 2011-2013, is typically not detected in MW-6. Therefore, based on groundwater flow direction and historical data, the source of CVOCs detected at MW-6 remains unclear at this time.

Because the data indicated three separate plume areas, it was important to look at the Apollo Plume Area separately from the possible influence of the other plumes. To accomplish this, a plume "window" was drawn around the Apollo Plume Area based on historical results that were either non-detect or below delineation criteria as well as groundwater flow direction. Doing so focused the past plume stability analysis, and will focus future plume stability analyses, on the Apollo Plume Area to separate it from other potentially unrelated contaminant source influences (i.e. the Western Plume Area).

As described in the May 2015 Technical Memorandum, the Ricker Method® Plume Stability Analysis was conducted for the Apollo Plume Area using groundwater data for each of the six CVOCs, acetone, and total CVOCs for years 2005 through April 2015. The Ricker Method® Plume Stability Analysis for each of the constituents evaluated resulted in the following trends (Appendix F: Figures 2 – 9):

Constituent	Area	Average Concentration	Mass Indicator
1,1,1-TCA	Decreasing	Decreasing	Decreasing
PCE	Decreasing	Decreasing	Decreasing
TCE	Decreasing	Decreasing	Decreasing
1,1-DCE	Decreasing	Decreasing	Decreasing
cis-1,2-DCE	Decreasing	Decreasing	Decreasing
VC	Stable	Decreasing	Decreasing
Acetone	Decreasing	Decreasing	Decreasing
Total CVOCs	Decreasing	Decreasing	Decreasing

- Average concentration and mass indicator for all constituents have a decreasing trend over the last 10 years. All constituents have a decreasing trend for area over the last 10 years except for VC, which has a stable trend. No plume stability metrics indicated an increasing trend for the Apollo Plume Area.

- When comparing plume area between January 2005 and April 2015, 1,1,1-TCA decreases by 92% and cis-1,2-DCE decreases by 73%. Except for VC, the remaining CVOC constituents decrease in area by 20-35%. VC increases in area by 15%, which is likely due to the generation of this compound by active reductive dechlorination processes. The VC data trend for the last 10 years, however, is stable. Additionally, the total CVOC plume area is showing a 33% decrease over this 10-year time period.

- When comparing plume average concentration between January 2005 and April 2015, 1,1,1-TCA, TCE, 1,1-DCE, cis-1,2-DCE, and total CVOCs have decreased by more than 75%, while PCE and VC have decreased by more than 50%.

- When comparing plume mass indicator between January 2005 and April 2015, 1,1,1-TCA and cis-1,2-DCE have decreased by more than 95%. PCE, TCE, 1,1-DCE, and total CVOCs have decreased by more than 70%. VC has decreased by more than 50%.

- When comparing the total molar trend between January 2005 and April 2015, the total number of moles has decreased by approximately 87%.

Additionally, as mentioned herein, a new well network was established in October 2015 with the abandonment of RW-1 and RW-2 and the installation of MW-17. As such, continuing with the plume stability analysis of the former well network is not possible. Going forward, plume stability trends for the new well network will be evaluated as new data becomes available during future sampling events.

Figure 20 presents a summary of the total CVOC molar and molar ratio trends on a well-by-well basis for the Apollo Plume Area. Figure 21 presents a summary of total CVOC molar and molar ratio trends for the Western Plume Area as well as the MW-6 Area. Molar trend charts for each well are also presented on Figures 20 and 21. Total molar concentration (nmol/L) is plotted on the primary y-axis, while the percentage of the molar ratio is plotted on the secondary y-axis. The yellow shaded area represents the total molar concentration, while the line graphs represent the percentage each CVOC contributes to the total molar concentration. The green-shaded background of the charts represents the years in which the groundwater remediation system operated.

Apollo Plume Area (Figure 20)

- MW-1: Based upon the increasing total molar concentration (yellow shaded area) in this well from 2005 to 2011 and the relative magnitude of the concentration in comparison to the other monitoring wells, MW-1 seems to be located in or near the primary source area of the Apollo Plume Area. During the period of increasing molar concentration mentioned above, the primary constituent was cis-1,2-DCE representing upwards of 70-90% of the total molar concentration. Cis-1,2-DCE is typically generated through reductive dechlorination of a parent compound, typically PCE/TCE. Since 2012, we observe, subsequent to a rapid decrease in total molar concentration, a gradual decrease in the molar ratio of cis-1,2-DCE in conjunction with an increase in the molar ratio of VC. This molar ratio pattern of increasing VC with decreasing cis-1,2-DCE suggests that reductive dechlorination is occurring at MW-1. As mentioned, the total molar concentration has decreased significantly from 2010 through 2015, indicating the parent constituents have or are undergoing complete mineralization or removal via historical pumping or some combination of both. The continued decrease in total molar concentration also demonstrates there is no significant continuing sourcing of contamination in the area monitored by MW-1. That is, the total molar concentration does not show observable increases that would indicate contributive sourcing post 2011.

- MW-4: Prior to September 2014, MW-4 was a recovery well. During the time MW-4 operated as a recovery well, the molar concentration and molar ratios are very consistent. The molar ratio of 1,1-DCE ranges generally between 80-90% during this time period. 1,1,1-TCA ranges from 5 to 15% and PCE consistently trends at approximately 5%. 1,1-DCE is known to be generated through the anaerobic degradation and/or abiotic dechlorination of 1,1,1-TCA and TCE. The trends and ratios observed during the period

of pumping on this well are carried through the subsequent period of non-pumping. It appears that during the previous pumping and subsequent non-pumping period, geochemical conditions favor the dechlorination of parent compounds to 1,1-DCE.

- RW-1: Prior to September 2014, RW-1 was a recovery well. During the period of pumping, 1,1-DCE was the primary constituent consisting of approximately 60-70% of the molar ratio through approximately 2013. During this same time period 1,1,1-TCA generally decreased on a molar ratio basis from just less than 30% to 5%. VC was fairly consistent at less than 10% before increasing after 2010. Since 2012 we see 1,1-DCE decrease with a concurrent increase in the VC ratio. This is a typical pattern of reductive dechlorination. The total molar concentration decreases over the sampling period and the more recent trends and ratios support that reductive dechlorination is occurring. This well was abandoned in October 2015 due to well integrity issues.

- DW-1: Prior to September 2014, DW-1 was a recovery well. During the period of pumping 1,1-DCE was generally trending around 50% of the molar ratio. There was a period of time between approximately 2006 and 2010 when VC ranged as high as 35% of the molar ratio. The observed decrease of 1,1-DCE that corresponds with an observed increase in VC from 2005 to 2010 suggests reductive dechlorination was occurring. This is also supported by the gradual decrease in molar concentration during this period. More recently PCE as a percent of molar concentration has increased but the total molar concentration shows a decreasing trend. The data does not indicate that there is ongoing sourcing occurring proximal to DW-1.

- RW-2: Prior to September 2014, RW-2 was a recovery well. The molar ratio of recent detections in RW-2 was mainly comprised of cis-1,2-DCE, TCE, and PCE at approximately 58%, 21%, and 12%, respectively. However, total molar concentrations were very low during the sampling period going back to 2005. In fact, sampling results for RW-2 were non-detect in January 2015. RW-2 could not be sampled in April 2015 because it was submerged in a pool of surface water. In October 2015, this well was abandoned due to well integrity issues.

- MW-3: Prior to September 2014, MW-3 was a recovery well. Two observations are made during the period of pumping from approximately 2005 until 2014: the total molar concentration shows a subtle decrease over this time; and 1,1-DCE shows a gradual decrease on a percentage basis while cis-1,2-DCE and VC show a corresponding increase. TCA over this timeframe tends to oscillate generally between 10-30%. The more recent data indicates that cis-1,2-DCE and VC combined make up approximately 80% of the molar concentration of the constituents detected. These compounds are typically the byproduct of biological reductive dechlorination of parent compounds. Therefore, due to the prevalence of daughter compounds and a continuing decline in

molar concentration, it appears reductive dechlorination is occurring in the area monitored by this well.

- MW-17: MW-17 was installed in October 2015 as a new monitoring well located approximately halfway between DW-1 and MW-4. Similar to those wells, 1,1-DCE is the constituent that appears at the highest molar ratio, approximately 58%. Due to only having one sample result since well installation, a comment on trends cannot be made at this time.

MW-8, MW-7, and MW-6 (Figure 21)

- MW-8: The molar ratios observed in MW-8 are unlike any other molar ratios observed in monitoring wells sampled at the Site. Since sampling began in late 2012 the molar ratio is comprised mainly of TCE and PCE at generally 65-75% and 25-30%, respectively. The total molar concentration has remained fairly consistent since monitoring began. The predominance of parent products in this well, as opposed to mostly daughter products in the other monitoring wells, indicates MW-8 is monitoring a separate groundwater plume from an off-site, upgradient source not associated with the Apollo Plume Area, which is supported by the recent soil sampling proximal to MW-8.

- MW-7: The constituents detected over time in this well are nearly all cis-1,2-DCE and VC. Generally, cis-1,2-DCE was a greater percent of the total CVOCs until the last two sampling events where VC is found at a higher ratio than cis-1,2-DCE. It appears the total molar concentration has shown an overall gradual decline over time. The high molar ratio of cis-1,2-DCE and VC indicate the generation of daughter products from reductive dechlorination. As previously described, the cis-1,2-DCE and VC in MW-7 may be the result of reductive dechlorination from the parent compounds PCE and TCE observed in the upgradient MW-8 that passes through an area very conducive to biological reductive dechlorination.

- MW-6: The samples obtained from this well are typically of low concentration and predominantly 1,1-DCE and VC. The last several sampling results show that 1,1-DCE is between 65-75% and VC is 18-26%. This well appears to be an outlier in the context of the site area. While the presence of 1,1-DCE seems to indicate similarity with the Apollo Plume Area, the presence of an upgradient well (MW-15) at lower concentrations and with no significant 1,1-DCE disassociates this well from the Apollo Plume Area. Additionally, a further upgradient well (MW-13) is non-detect for CVOCs. The presence of 1,1-DCE in MW-6 is possibly an indication of subsurface geochemistry that is favorable to the generation of 1,1-DCE from parent compounds, whether originating either on the MW-6 property or from another source. Based on this uncertainty, we consider this well separate from the Apollo Plume Area.

Based on the results of a Ricker Method® Plume Stability Analysis conducted on data from 2005 through April 2015 and discussed in the May 2015 Technical Memorandum, there was strong evidence that the total CVOC plume is stable and decreasing. This statement is supported by the stable to decreasing trends in area, average concentration, and mass indicator for all six CVOCs, acetone, as well as total CVOCs. The increase in plume area between 2005 and April 2015 for VC is attributed to active reductive dechlorination processes, which is generating the VC daughter compound. Despite the 15% increase in VC plume area, the VC average concentration has decreased by 56% and the mass of the VC plume has decreased by 50% over this time period.

Based on the plume analytics evaluation conducted on the October 2015 dataset, it appears that general findings and conclusions presented in the May 2015 Technical Memorandum are still valid with the following key points: 1) there appear to be three separate plumes in the site area (Apollo Plume Area, Western Plume Area and MW-6 Area); 2) the Apollo Plume Area appears to remain stable to decreasing; 3) no obvious areas of new sourcing of the Apollo Plume Area have been observed; 4) the Western Plume Area appears to be sourced from an area upgradient of MW-8; and 5) the MW-6 Area is not connected to the Apollo Plume Area suggesting an unknown off-site source.

5.0 RECOMMENDATIONS

Based on the evaluation conducted during this reporting period, and considering the years of operation of the SVE system, the cost/benefit of continuing to operate the system is minimal. Because the concentrations of contaminants in soil are within the footprint of the manufacturing/production building, and the water table is at much lower elevation than the depth of soil contamination, leaching by infiltration or fluctuations in water table elevations are no longer pathways of migration from soil to groundwater. Therefore, we plan to deactivate the SVE system.

6.0 MONTHLY INVOICE SUMMARY

EPD requires that a professional engineer or geologist oversee the implementation of the VIRP in accordance with the provisions, purposes, standards and policies of the Georgia Voluntary Remediation Program Act. From May 1, 2015 through October 31, 2015, Ms. Kristen Ritter Rivera, P.G., invoiced 122.75 hours to this project. A monthly summary of hours invoiced and a description of services provided is shown in Table 6.

7.0 SCHEDULE

A project schedule for activities is provided in Table 7. AMC Cobb expects to conduct the following activities during the next 6-month reporting period (November 2015 through April 2016):

- Site-wide groundwater sampling event in March 2016;
- Update the plume analytics evaluation;
- Shut down SVE system; and
- Prepare groundwater model.

The Third VIRP Progress Report will be submitted by AMC on or before May 20, 2016.

TABLES

TABLE 1. MONITORING WELL CONSTRUCTION DETAILS

Monitoring Well	Installation Date	Total Depth feet, bgs	Screened Interval feet, bgs		Screen Length feet	Screened Zone	Top of Casing Elevation feet
			Top	Bottom			
DW-1	11/3/1997	50.0	45	50	5	BDRK	862.44
MW-1	3/18/1994	35.0	20	35	15	OVB	885.30
MW-2	5/1/1995	35.0	20	35	15	OVB	896.38
MW-3	5/1/1995	49.0	19	49	30	OVB	883.43
MW-4	1/1/2005	34.0	14	34	20	OVB	857.57
MW-5	2/1/2007	19.5	9.5	19.5	10	OVB	861.75
MW-6R	9/16/2015	27.0	16.8	26.4	9.6	OVB	859.61
MW-7	2/1/2007	14.5	4.5	14.5	10	OVB	865.47
MW-8	9/1/2012	43.0	28	43	15	OVB	892.91
MW-9	9/1/2012	19.0	4	19	15	OVB	859.86
MW-10	10/4/2012	29.0	19	29	10	OVB	901.05
MW-11	10/4/2012	30.0	20	30	10	OVB	892.84
MW-12	10/3/2012	34.0	19	34	15	OVB	891.30
MW-13	10/3/2012	13.0	3	13	10	OVB	864.72
MW-15	10/3/2012	14.5	4.5	14.5	10	OVB	858.14
MW-17	10/21/2015	24.0	13.47	22.97	9.5	OVB	862.75

Notes

BGS - below ground surface

OVB - overburden

BDRK - bedrock

Prepared by: SNW 11/05/2015

Checked by: KRR 11/11/2015

TABLE 2. WATER LEVEL MEASUREMENTS

Monitoring Well	Top of Casing Elevation feet, MSL	October 16, 2015	
		Depth to Water feet	Groundwater Elevation feet, MSL
DW-1	862.44	3.68	858.76
MW-1	885.30	23.70	861.60
MW-2	896.38	25.96	870.42
MW-3	883.43	22.48	860.95
MW-4	857.57	2.57	855.00
MW-5	861.75	6.45	855.30
MW-6R	859.61	7.82	851.79
MW-7	865.47	7.04	858.43
MW-8	892.91	26.27	866.64
MW-9	859.86	8.55	851.31
MW-10	901.05	19.76	881.29
MW-11	892.84	22.45	870.39
MW-12	891.30	26.36	864.94
MW-13	864.72	8.38	856.34
MW-15	858.14	6.33	851.81
*MW-17	862.75	7.08	855.67

Notes

NM - not measured

NC - not calculated

MSL - mean sea level

*MW-17 was measured on 10/30/2015

Prepared by: SNW 11/05/2015

Checked by: KRR 11/11/2015

TABLE 3. FIELD PARAMETERS

Sample Location	Temperature °C	pH Standard Units	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm	Turbidity NTU
October 2015						
DW-1	19.77	6.25	0.91	26.8	367	4.61
MW-1	20.92	6.50	0.76	-44.6	600	3.08
MW-2	21.03	5.85	2.94	119.3	61	9.65
MW-3	19.32	6.24	0.57	-61.1	809	5.26
MW-4	21.01	5.87	0.32	111.8	304	0.28
MW-5	23.13	5.24	0.96	190.1	57	0.32
MW-6R	19.87	5.98	0.89	133.4	99	15.1
MW-7	20.01	5.99	0.49	-6.8	315	4.26
MW-8	19.83	5.24	0.91	169.3	54	2.30
MW-9	20.42	5.25	0.34	180.8	69	0.50
MW-10	20.10	6.38	0.31	-55.0	196	1.24
MW-11	21.46	6.01	0.29	-21.3	179	4.82
MW-12	17.41	4.60	0.68	202.8	45	1.83
MW-13	18.48	5.61	0.68	17.2	168	4.54
MW-15	21.52	5.80	0.56	-1.3	486	1.33
MW-17	17.42	6.74	0.65	-442.3	483	9.90
Surface Water Locations - October 2015						
SW-1	19.10	6.98	7.87	--	140	8.38
SW-2	20.05	7.16	7.82	--	138	3.34

Notes

Prepared by: SNW 10/30/2015

Checked by: KRR 11/11/2015

-- not measured

mg/L - milligrams per liter

mV - millivolts

µs/cm - microsiemens per centimeter

NTU - nephelometric turbidity units

TABLE 4. SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

Constituent (mg/L)		1,1,1-TCA	1,1-DCA	1,1-DCE	1,2-DCA	Acetone	Chloroethane	cis-1,2-DCE	Cyclohexane	Methylene chloride	PCE	trans-1,2-DCE	TCE	Vinyl Chloride
Delineation Criteria (mg/L)		0.2	4	0.007	0.005	4	DL/0.01	0.07	DL/0.005	0.005	0.005	0.1	0.005	0.002
Type 1/3 RRS (mg/L)		0.2	4*	0.007	0.005*	4	DL/0.01	0.07	DL/0.005	0.005	0.005	0.1	0.005	0.002
Type 4 RRS (mg/L)		13.6*	NC	0.524*	NC	45.6*	29.2*	0.204*	17.5*	0.454*	0.0981*	0.161*	0.00524*	0.00327*
DW-1	10/8/15	0.088	0.46	**0.68**	0.005	< 0.050	**0.49**	**0.079**	< 0.005	**0.015**	**0.54**	< 0.005	**0.086**	**0.11**
MW-1	10/8/15	0.10	0.37	**0.015**	< 0.005	3.6	**0.056**	**0.13**	**0.008**	< 0.005	< 0.005	< 0.005	**0.008**	**0.082**
MW-2	10/8/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-3	10/8/15	**1.2**	1.8	**0.90**	**0.008**	**10**	**0.42**	**4.9**	**0.007**	0.005	**0.020**	0.006	**0.097**	**1.7**
MW-4	10/8/15	**1.6**	< 0.50	**19**	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	**2.0**	< 0.50	< 0.50	< 0.20
MW-5	10/7/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-6R	10/7/15	< 0.005	0.016	**0.21**	< 0.005	< 0.050	< 0.010	0.007	< 0.005	< 0.005	**0.013**	< 0.005	**0.006**	**0.031**
MW-7	10/7/15	< 0.005	< 0.005	0.006	< 0.005	< 0.050	< 0.010	**0.82**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.001	**0.60**
MW-8	10/7/15	0.006	< 0.005	**0.020**	< 0.005	< 0.050	< 0.010	0.033	< 0.005	< 0.005	**0.52**	< 0.005	**1.2**	< 0.002
MW-9	10/7/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-10	10/7/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-11	10/7/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-12	10/7/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-13	10/7/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-15	10/8/15	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	**0.078**	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.002
MW-17	10/30/15	0.006	0.047	**0.22**	< 0.005	0.009	< 0.010	**0.089**	< 0.005	< 0.005	**0.045**	< 0.005	**0.019**	**0.024**

Notes

Prepared by: SNW 10/26/2015
Checked by: CDN 10/27/2015

Delineation Criteria equals Type 1 Risk Reduction Standard (RRS)

mg/L - miligrams per liter

DL - Detection Limit

NC - not calculated; comparing to Type 1 RRS

*applicable RRS

BOLD - Concentration exceeds delineation criteria

BOLD and SHADED - Concentration exceeds applicable RRS

TABLE 5. GROUNDWATER MNA RESULTS

Monitoring Well	Date	TOC mg/L	Sulfide mg/L	Chloride mg/L	Nitrogen, Nitrate mg/L	Sulfate mg/L	Ethane mg/L	Ethylene mg/L	Methane mg/L	Alkalinity mg/L	Ferrous Iron mg/L
DW-1	10/8/15	< 1.00	< 1.00	42	< 0.25	< 1.0	0.011	0.25	1.8	104	2.08
MW-1	10/8/15	18.3	< 1.00	63	< 0.25	15	0.015	0.021	0.021	155	1.74
MW-2	10/8/15	< 1.00	< 1.00	2.0	0.63	87	< 0.0090	< 0.0070	< 0.0040	21.0	0.00
MW-3	10/8/15	25.9	< 1.00	100	< 0.25	2.8	0.12	0.22	1.5	175	1.97
MW-4	10/8/15	< 1.00	< 1.00	52	< 0.25	< 1.0	< 0.0090	< 0.0070	0.0012	53.0	0.03
MW-5	10/7/15	<1.00	< 1.00	5.4	0.47	1.3	< 0.0090	< 0.0070	< 0.0040	27.0	0.00
MW-6R	10/7/15	<1.00	< 1.00	4.9	0.62	1.3	< 0.0090	< 0.0070	0.32	37.0	0.08
MW-7	10/7/15	1.83	< 1.00	11	< 0.25	< 1.0	0.046	0.16	3.1	120	3.28
MW-8	10/7/15	<1.00	< 1.00	5.3	0.30	< 1.0	< 0.0090	< 0.0070	0.12	29.0	0.09
MW-9	10/7/15	1.33	< 1.00	6.0	< 0.25	2.4	< 0.0090	< 0.0070	0.080	33.0	0.02
MW-10	10/7/15	<1.00	< 1.00	7.1	< 0.25	< 1.0	< 0.0090	< 0.0070	4.7	62.0	1.58
MW-11	10/7/15	<1.00	< 1.00	7.5	< 0.25	3.7	< 0.0090	< 0.0070	2.8	55.0	3.20
MW-12	10/7/15	<1.00	< 1.00	6.5	0.50	< 1.0	< 0.0090	< 0.0070	0.010	17.0	0.04
MW-13	10/7/15	<1.00	< 1.00	8.8	< 0.25	< 1.0	0.20	< 0.0070	4.1	65.0	0.37
MW-15	10/8/15	2.30	< 1.00	32	< 0.25	< 1.0	0.031	< 0.0070	10	168	2.39
MW-17	10/30/15	6.88	< 1.00	14	< 0.25	23	NA	NA	NA	220	0.34

Notes

mg/L - milligrams per liter

Prepared by: SNW 10/26/2015

Checked by: CDN 10/27/2015

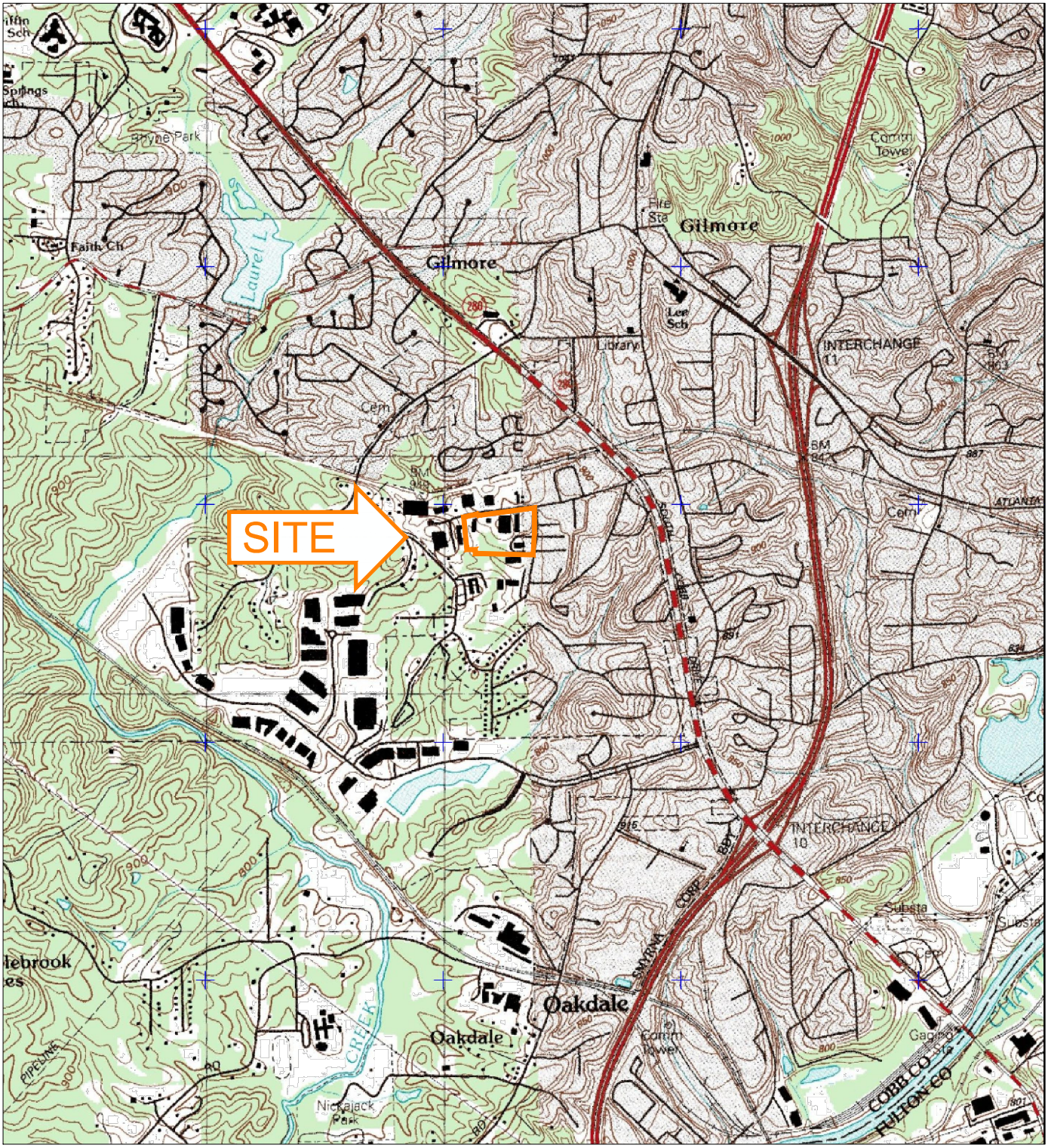
TABLE 6: SUMMARY OF MONTHLY INVOICES

Month	Hours Billed by Kristen Rivera, P.G.	Description of Activities
May 2015	69.5	– Reviewed historical data – Plume Stability Analysis – Prepare and submit First VIRP Progress Report
June 2015	0.5	– Project Management/Coordination
July 2015	0.25	– Project Management/Coordination
August 2015	5	– Prepared Response to EPD Comments on First VIRP Progress Report
September 2015	23.5	– Finalized and submitted response to EPD Comments on First VIRP Progress Report – Field Work Preparation – Site Meeting – Soil sampling, monitoring well redevelopment, replacement of well MW-6
October 2015	24	– Semi-annual sampling event, soil sampling near MW-8, abandonment of wells RW-1 and RW-2, installation of MW-17 – Meeting with EPD – Data assessment – Plume Stability Analysis – Prepare Second VIRP Progress Report

TABLE 7: PROJECTED MILESTONE SCHEDULE

Date	Activity
June 4, 2014	*VRP Application Approved*
May 2015	*First VIRP Progress Report*
October 2015	*Site wide groundwater sampling event*
December 2015	*Second VIRP Progress Report*
March 2016	Site wide groundwater sampling event
May 2016	Third VIRP Progress Report
September 2016	Site wide groundwater sampling event
November 2016	Fourth VIRP Progress Report
March 2017	Site wide groundwater sampling event
May 2017	Fifth VIRP Progress Report
September 2017	Site wide groundwater sampling event
November 2017	Sixth VIRP Progress Report
March 2018	Site wide groundwater sampling event
May 2018	Seventh VIRP Progress Report
September 2018	Site wide groundwater sampling event
November 2018	Eighth VIRP Progress Report
March 2019	Site wide groundwater sampling event
May 2019	Ninth VIRP Progress Report
July 28, 2019	Compliance Status Report

FIGURES



SOURCE: MAPCARD TOPOGRAPHIC MAP, SMYRNA, GEORGIA

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

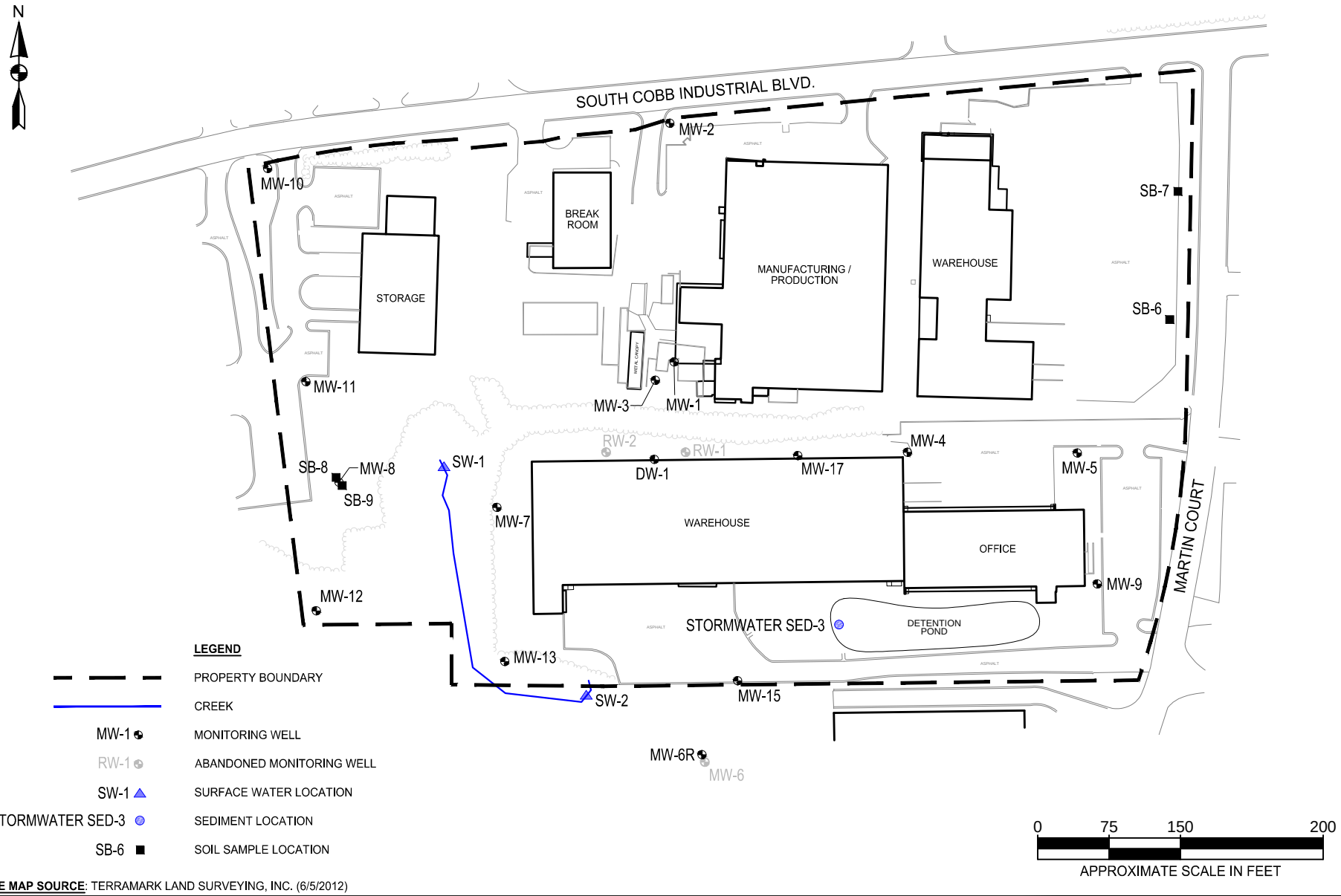
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

SITE LOCATION

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	1

FILENAME: site location.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved



BASE MAP SOURCE: TERRAMARK LAND SURVEYING, INC. (6/5/2012)

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

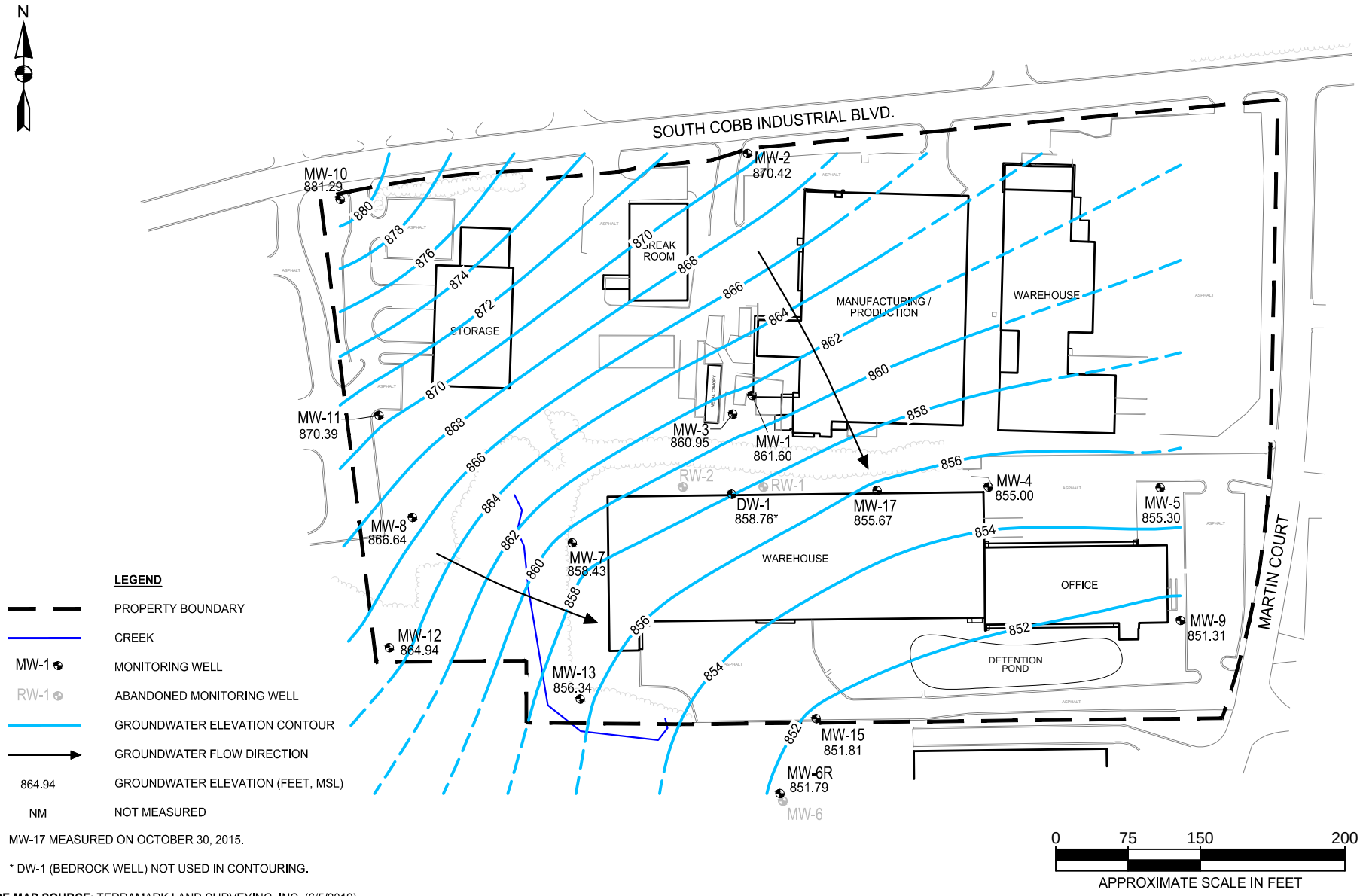
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

FACILITY LAYOUT AND SAMPLE LOCATIONS

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	NOV 12, 2015	2

FILENAME: site map.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved



APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

POTENTIOMETRIC SURFACE MAP
OCTOBER 16, 2015

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	NOV 12, 2015	3

FILENAME: site map.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved

N

LEGEND

MW-1 — MONITORING WELL

SB-1 — SOIL BORING LOCATIONS ABOVE DELINEATION CRITERIA

SB-2 — SOIL BORING LOCATIONS BELOW DELINEATION CRITERIA

BDC / 2.3 / 4.7 — TOTAL VOC CONCENTRATION ABOVE DELINEATION CRITERIA FROM SHALLOW TO DEEP DEPTHS

BDC — BELOW DELINEATION CRITERIA (TYPE 1 RISK REDUCTION STANDARDS)

DELINEATION LINE

SOUTH COBB INDUSTRIAL BLVD.

ASPHALT

MANUFACTURING / PRODUCTION

BREAK ROOM

METAL CANOPY

WAREHOUSE

ASPHALT

MARTIN COURT

S-20 S-5 S-6 S-1 197.6 / 161.3 / 110 / BDC / 70.6 SB-5 TREATED WATER TANKS SB-7 FTUA-B1 S-19 S-2 3.4 / BDC / BDC / BDC SB-4 OBG-12 2,310 / 5,710 CLOSED SUMP FTUA-B4 FTUA-B2 S-21 S-18 S-8 OBG-7 1091 S-3 2,176 / 1,500 SB-2 FTUA-B3 S-7 BDC / 2.3 / 4.7 OBG-13 3,610 SB-3 1.5 / BDC SB-6 S-17 OBG-5 1,076 S-9 56.1 S-4 1,120 / 683.7 SB-1 26.9 / 102.66 S-10 OBG-14 MW-1 OBG-9 11,733 / 4,620 S-22 CSA-B5 OBG-2 15.3 MW-3 MW-16 S-12 S-16 S-11 CSA-B6 CSA-B7 S-13 S-15 CSA-B8 S-14 S-23

0 25 50 100

APPROXIMATE SCALE IN FEET

BASE MAP SOURCE: TERRAMARK LAND SURVEYING, INC. (6/5/2012)

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

SOIL DELINEATION MAP

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	NOV 12, 2015	4

FILENAME: soil results.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved

N

LEGEND

MW-1 MONITORING WELL

RW-1 ABANDONED MONITORING WELL

SB-1 SOIL BORING LOCATIONS ABOVE DELINEATION CRITERIA

SB-2 SOIL BORING LOCATIONS BELOW DELINEATION CRITERIA

SOUTH COBB INDUSTRIAL BLVD.

ASPHALT

MANUFACTURING / PRODUCTION

BREAK ROOM

WAREHOUSE

ASPHALT

MARTIN COURT

METAL CANOPY

TREATED WATER TANKS

CLOSED SUMP

A

A'

B

B'

S-1 S-2 S-3 S-4 S-5 S-6 S-7 S-8 S-9 S-10 S-11 S-12 S-13 S-14 S-15 S-16 S-17 S-18 S-19 S-20 S-21 S-22 S-23 S-24 S-25 S-26 S-27

SB-1 SB-2 SB-3 SB-4 SB-5 SB-6 SB-7

OBG-2 OBG-5 OBG-7 OBG-9 OBG-12 OBG-13 OBG-14

MW-1 MW-3 MW-4 MW-5 MW-16 MW-17

RW-1 RW-2

DW-1

FTUA-B1 FTUA-B2 FTUA-B3 FTUA-B4

CSA-B5 CSA-B6 CSA-B7 CSA-B8

0 25 50 100

APPROXIMATE SCALE IN FEET

BASE MAP SOURCE: TERRAMARK LAND SURVEYING, INC. (6/5/2012)

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD

HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

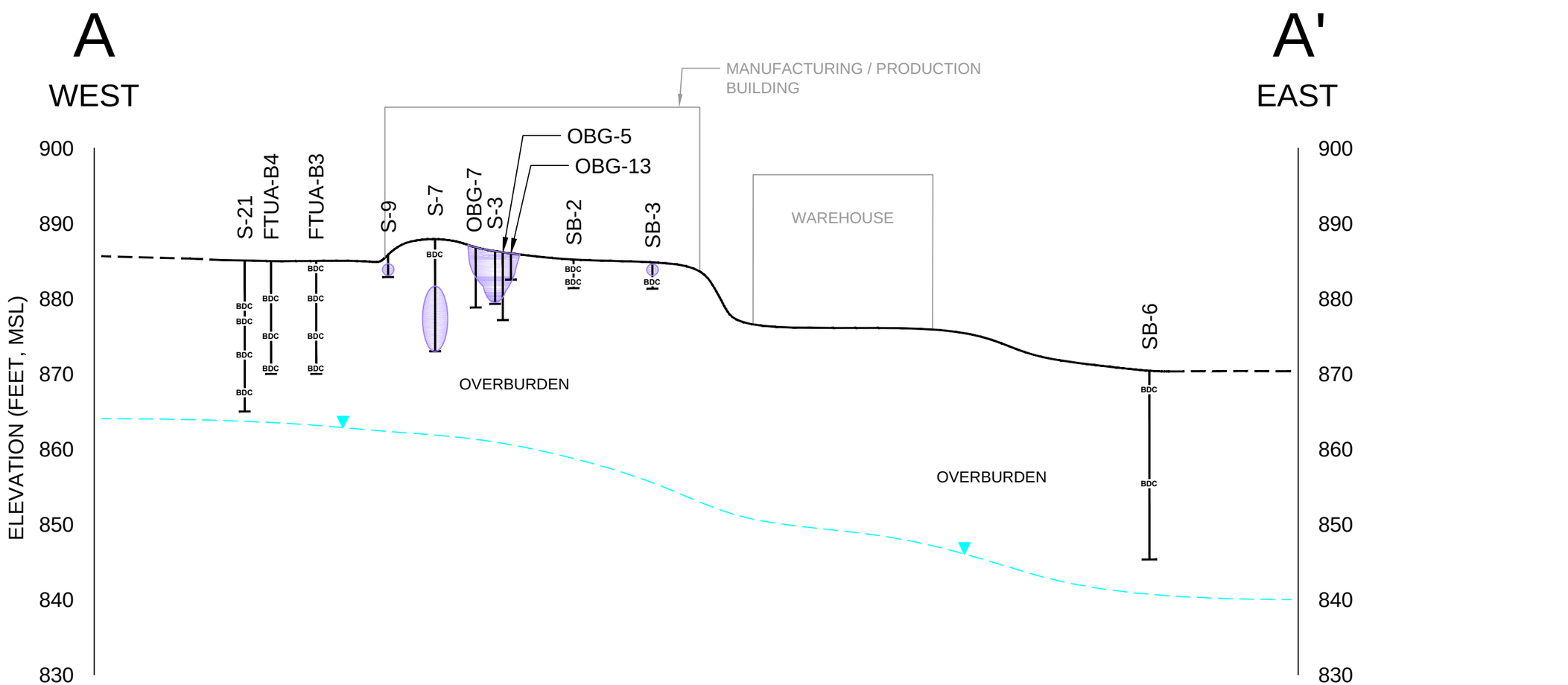
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

SOIL CROSS SECTION LOCATIONS

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	5

FILENAME: soil results.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved



20

APPROXIMATE SCALE IN FEET

100

LEGEND

DC	DELINEATION CRITERIA
BDC	BELOW DC
– — — –	DASHED WHERE INFERRED
	TOTAL CVOC IMPACTED SOIL GREATER THAN DC

OVERBURDEN = FINE-GRAINED MATERIAL (SAND, SILT, CLAY)

BORING

GROUNDWATER ELEVATION INFERRED FROM OCTOBER 2015 POTENTIOMETRIC SURFACE MAP

APOLLO INDUSTRIES, INC.
1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®
EarthCon Consultants, Inc.
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

CROSS SECTION A-A'

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	6

FILENAME: cross sections.dwg

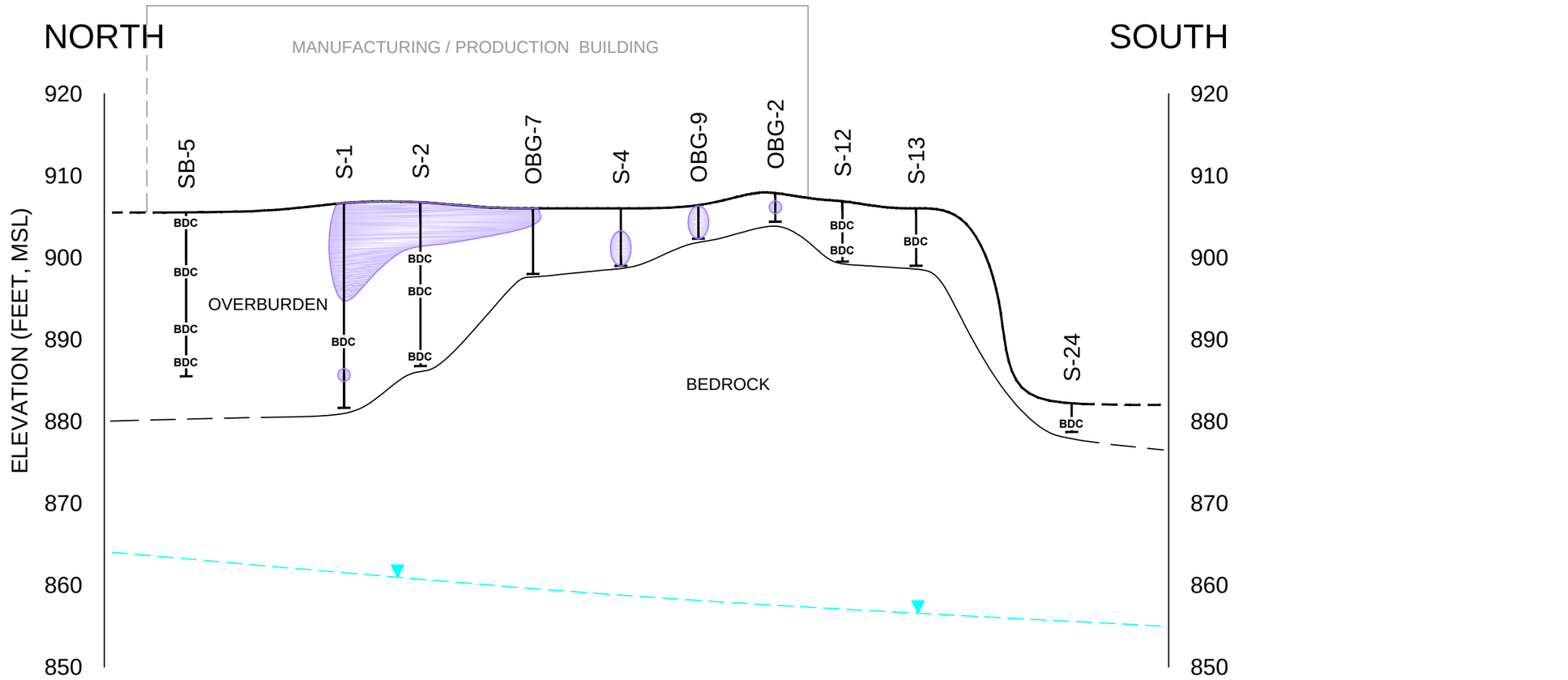
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved

B

NORTH

B'

SOUTH



LEGEND

DC	DELINEATION CRITERIA
BDC	BELOW DC
– — – —	DASHED WHERE INFERRED
	TOTAL CVOC IMPACTED SOIL GREATER THAN DC

OVERBURDEN = FINE-GRAINED MATERIAL (SAND, SILT, CLAY)

BORING

GROUNDWATER ELEVATION INFERRED FROM OCTOBER 2015 POTENTIOMETRIC SURFACE MAP

20

APPROXIMATE SCALE IN FEET

40

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD

HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

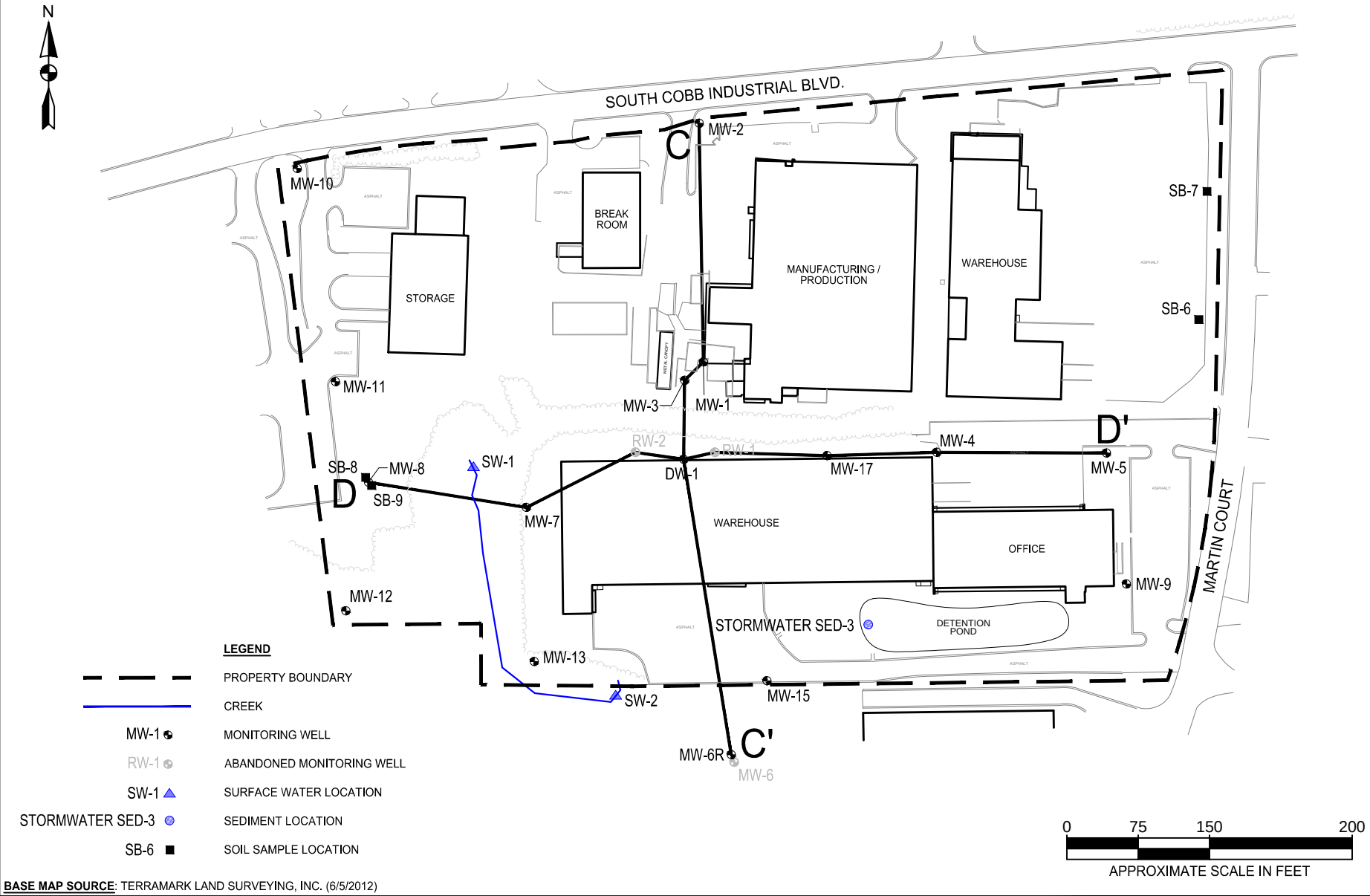
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

CROSS SECTION B-B'

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	7

FILENAME: cross sections.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved



BASE MAP SOURCE: TERRAMARK LAND SURVEYING, INC. (6/5/2012)

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

GROUNDWATER CROSS SECTION LOCATIONS

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	8

FILENAME: site map.dwg

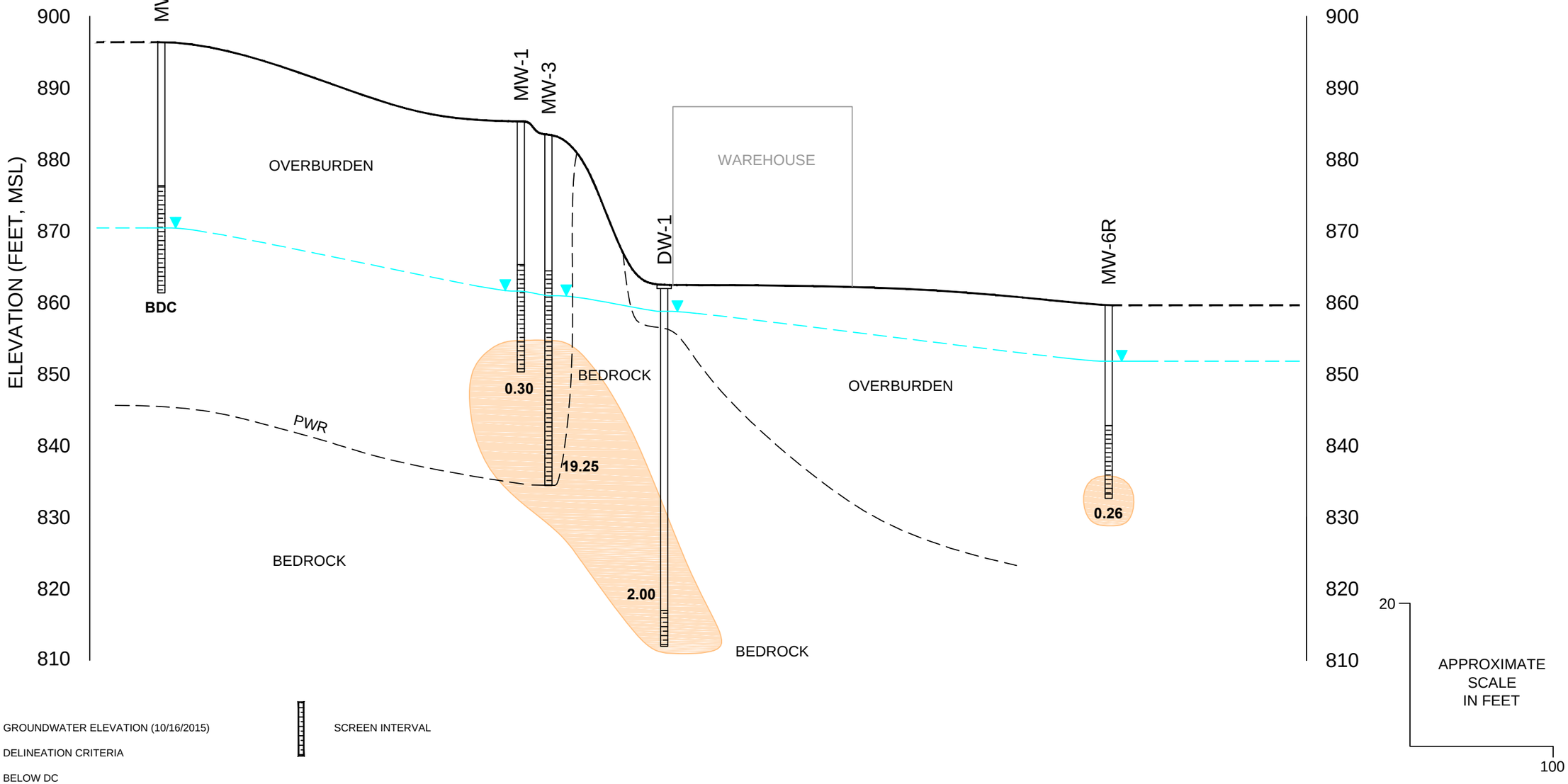
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved

C

NORTH

C'

SOUTH



LEGEND

▼	GROUNDWATER ELEVATION (10/16/2015)
DC	DELINEATION CRITERIA
BDC	BELOW DC
ND	NOT DETECTED
– – – –	DASHED WHERE INFERRED
	0.30 TOTAL CVOC CONCENTRATION (mg/L) IN GROUNDWATER GREATER THAN DC (OCTOBER 2015)

SCREEN INTERVAL

OVERBURDEN = FINE-GRAINED MATERIAL (SAND, SILT, CLAY)

PWR = PARTIALLY WEATHERED ROCK

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD

HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

CROSS SECTION C-C'

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	9

FILENAME: CROSS SECTIONS.DWG

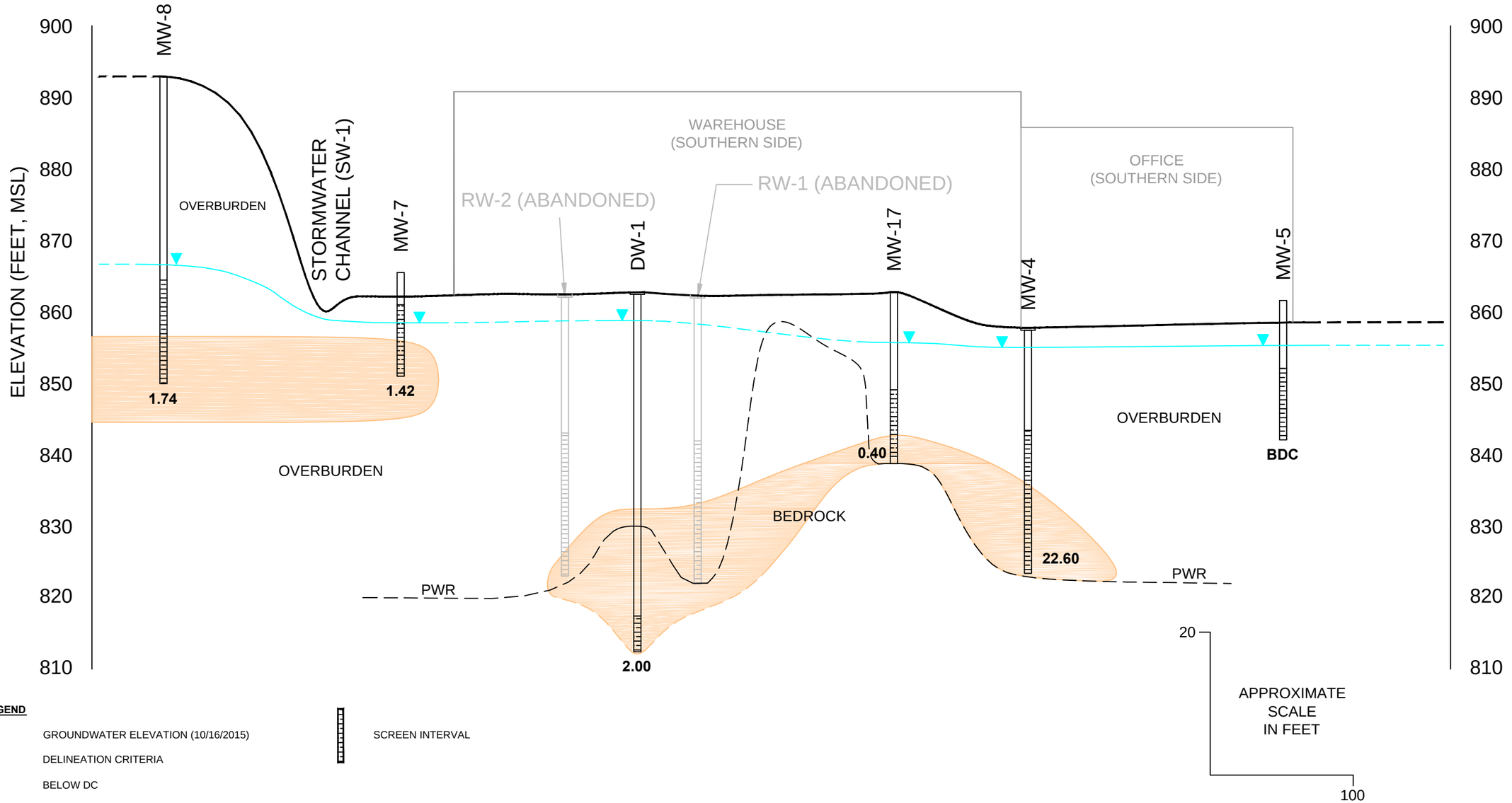
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved

D

WEST

D'

EAST



LEGEND

▼	GROUNDWATER ELEVATION (10/16/2015)		SCREEN INTERVAL
DC	DELINEATION CRITERIA		
BDC	BELOW DC		
ND	NOT DETECTED		
– — – —	DASHED WHERE INFERRED		
	0.40 TOTAL CVOC CONCENTRATION (mg/L) IN GROUNDWATER GREATER THAN DC (OCTOBER 2015)		

OVERBURDEN = FINE-GRAINED MATERIAL (SAND, SILT, CLAY)

PWR = PARTIALLY WEATHERED ROCK

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

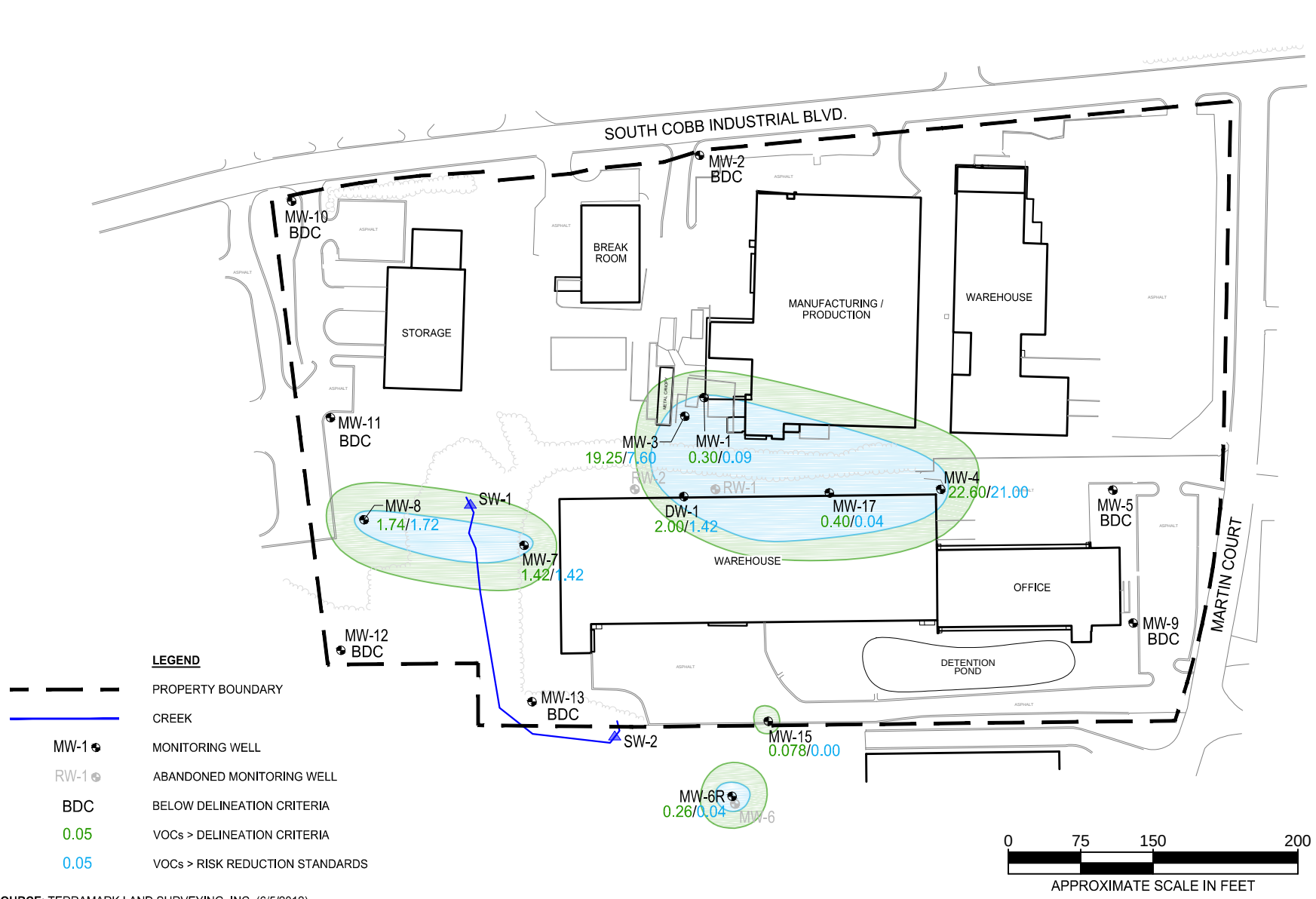
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

CROSS SECTION D-D'

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	DEC 4, 2015	10

FILENAME: cross sections.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved



BASE MAP SOURCE: TERRAMARK LAND SURVEYING, INC. (6/5/2012)

APOLLO INDUSTRIES, INC.

1850 SOUTH COBB INDUSTRIAL BLVD
HSI SITE NUMBER 10333

PROJECT NO. 02.20140391.00

EARTHCON®

EarthCon Consultants, Inc.

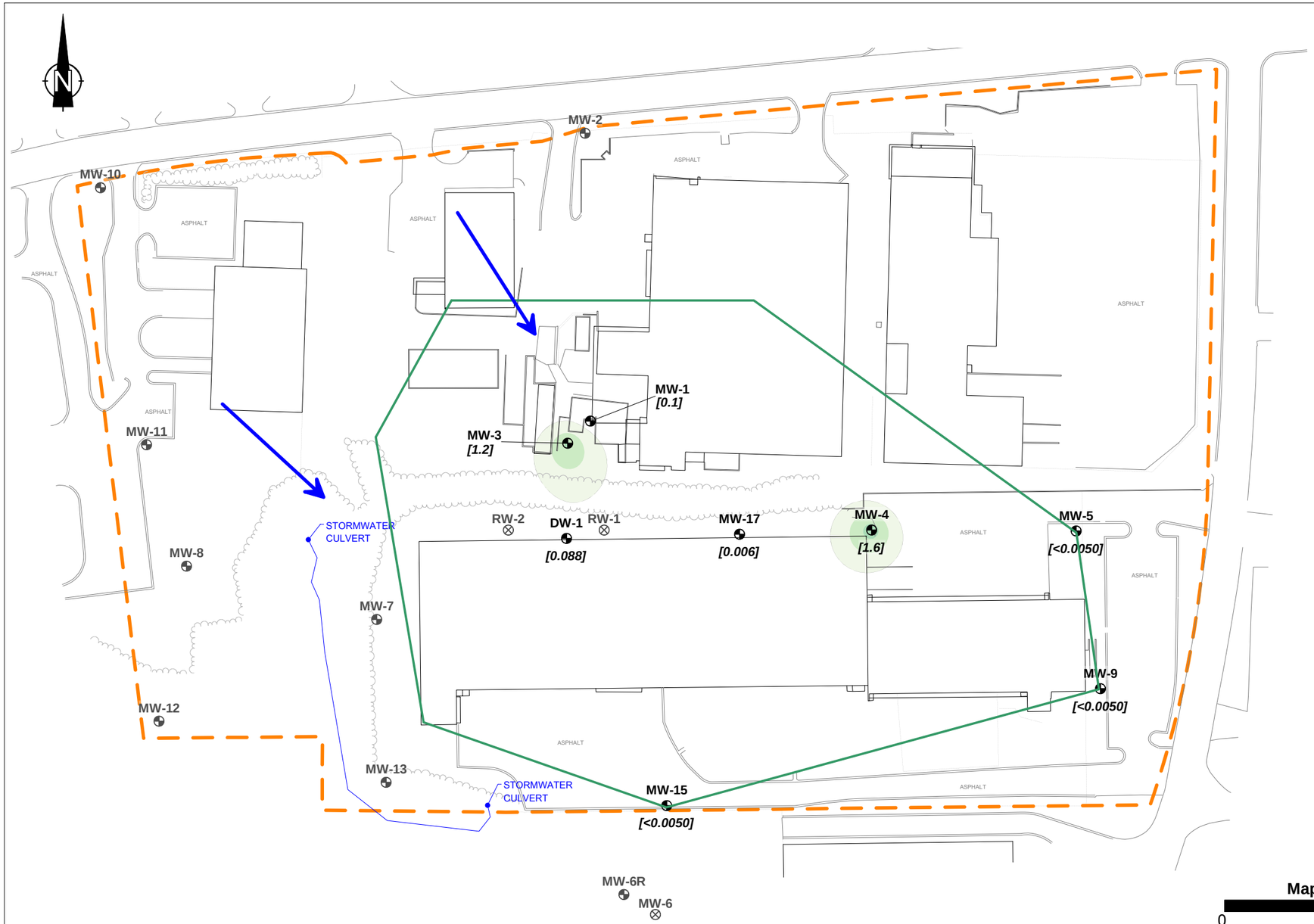
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

TOTAL VOCs
OCTOBER 2015

DRAWN:	CHECKED:	DATE:	FIGURE:
SNW	KRR	NOV 12, 2015	11

FILENAME: site map.dwg

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved



Plume Characteristics:

Plume Area: 0.15 acres
Plume Average Concentration: 0.41 mg/L
Plume Mass Indicator: 2.1 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

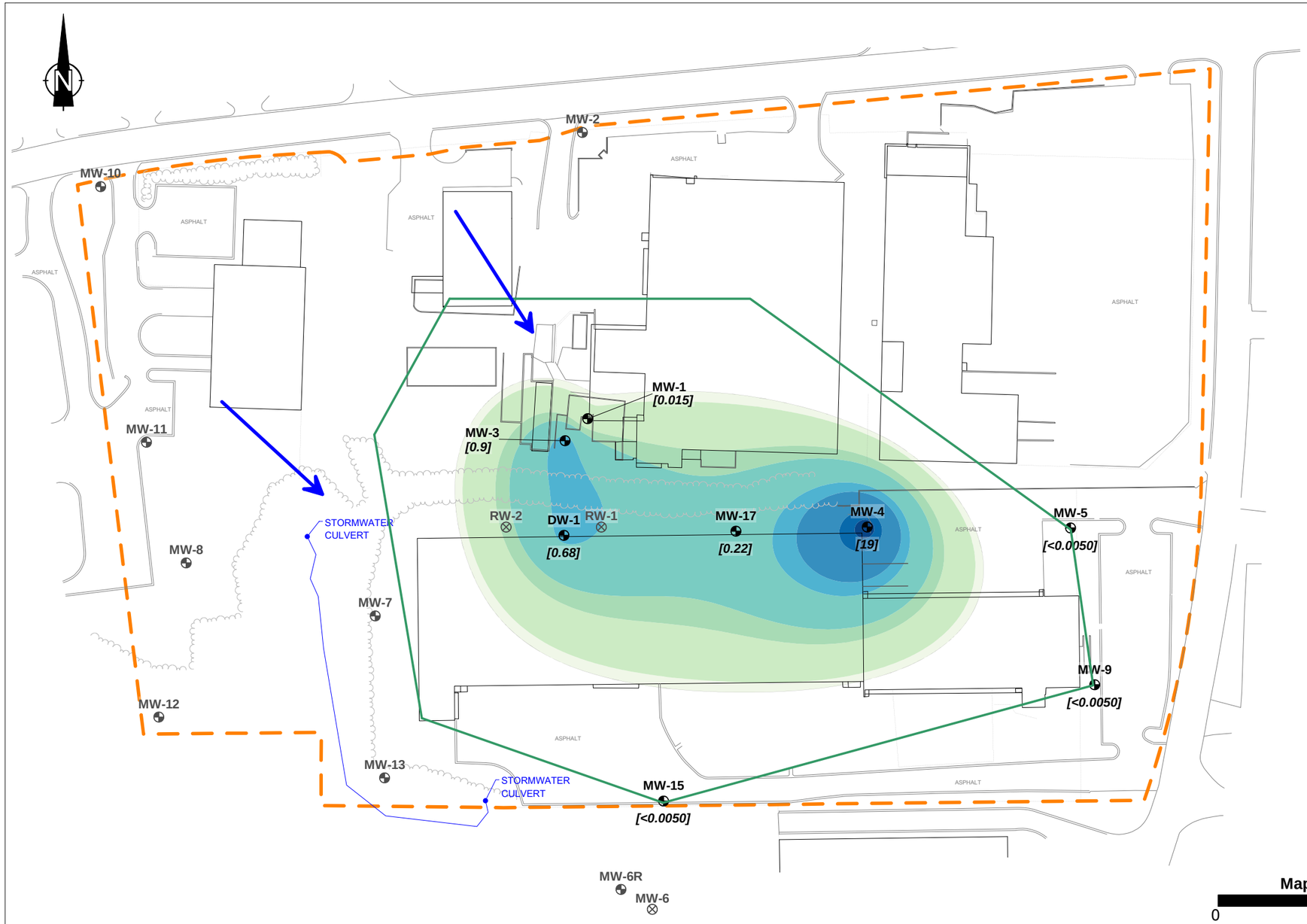
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Oct-2015

Prepared by: SSW Checked by: DW Figure: 12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.32 mg/L
Plume Mass Indicator: 25 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

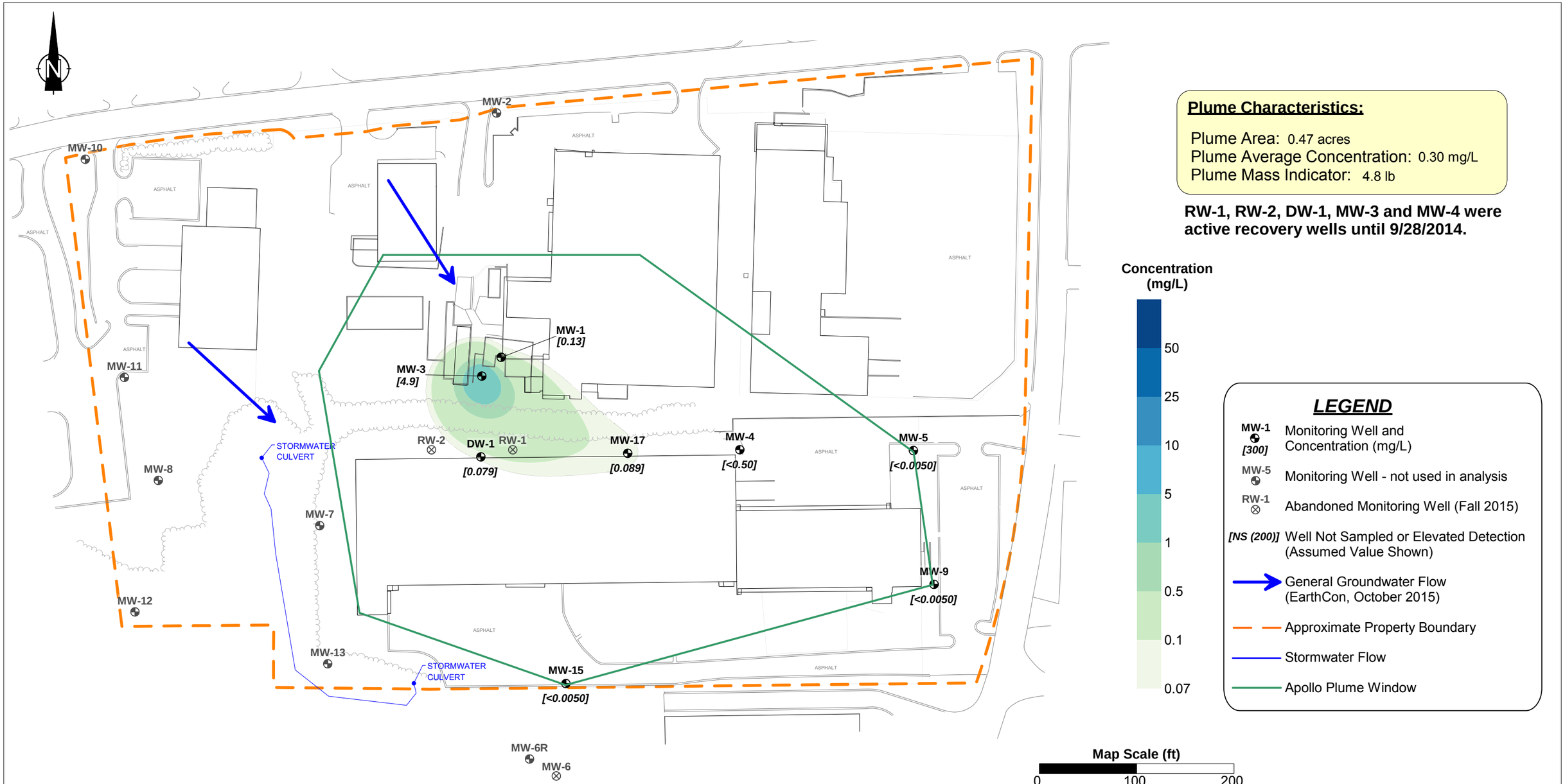
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: 13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.47 acres
Plume Average Concentration: 0.30 mg/L
Plume Mass Indicator: 4.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

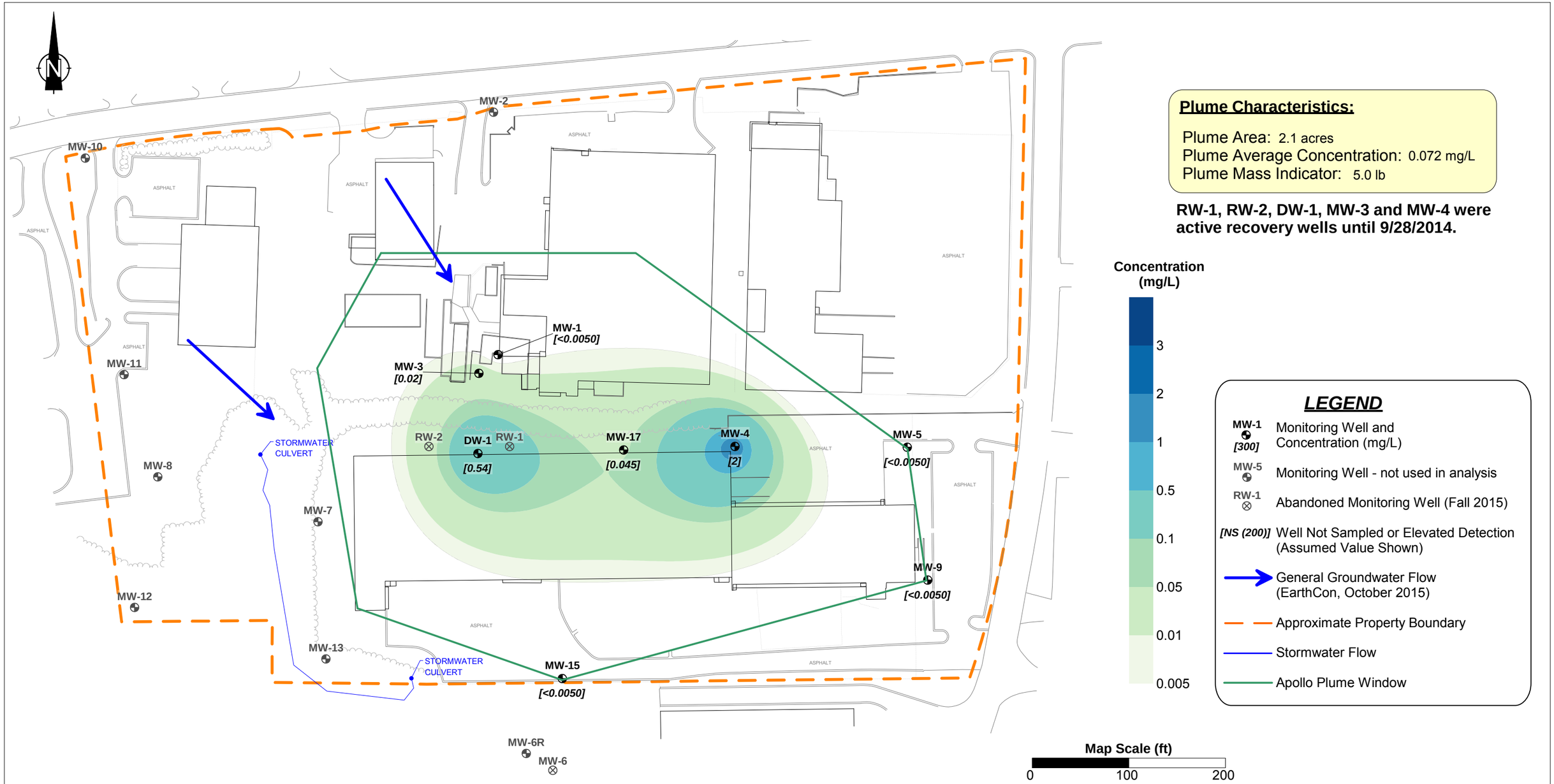
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: 14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.072 mg/L
Plume Mass Indicator: 5.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

MW-1 [300]	Monitoring Well and Concentration (mg/L)
MW-5	Monitoring Well - not used in analysis
RW-1	Abandoned Monitoring Well (Fall 2015)
[NS (200)]	Well Not Sampled or Elevated Detection (Assumed Value Shown)
	General Groundwater Flow (EarthCon, October 2015)
	Approximate Property Boundary
	Stormwater Flow
	Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

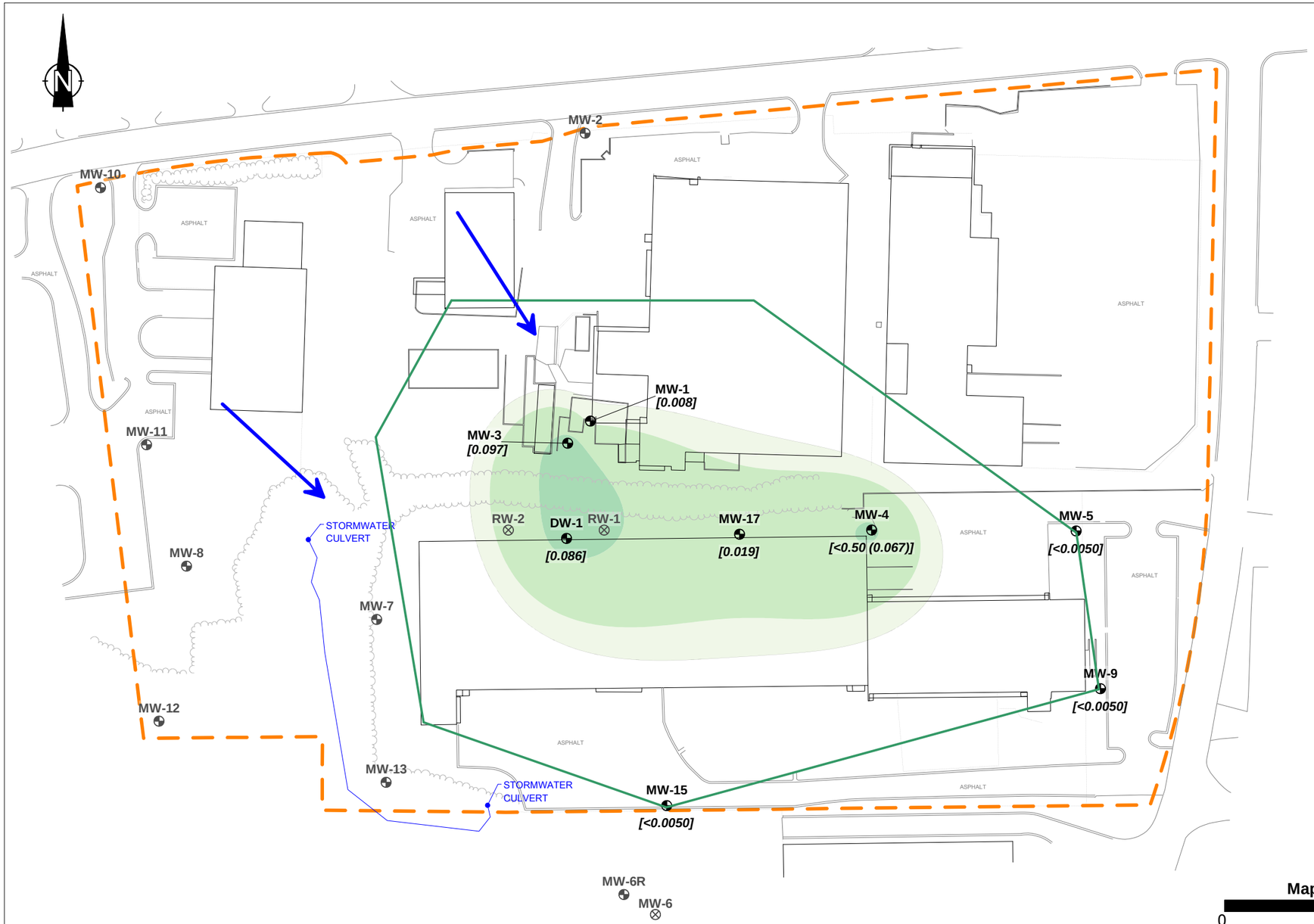
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: 15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.7 acres
Plume Average Concentration: 0.021 mg/L
Plume Mass Indicator: 1.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 / [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

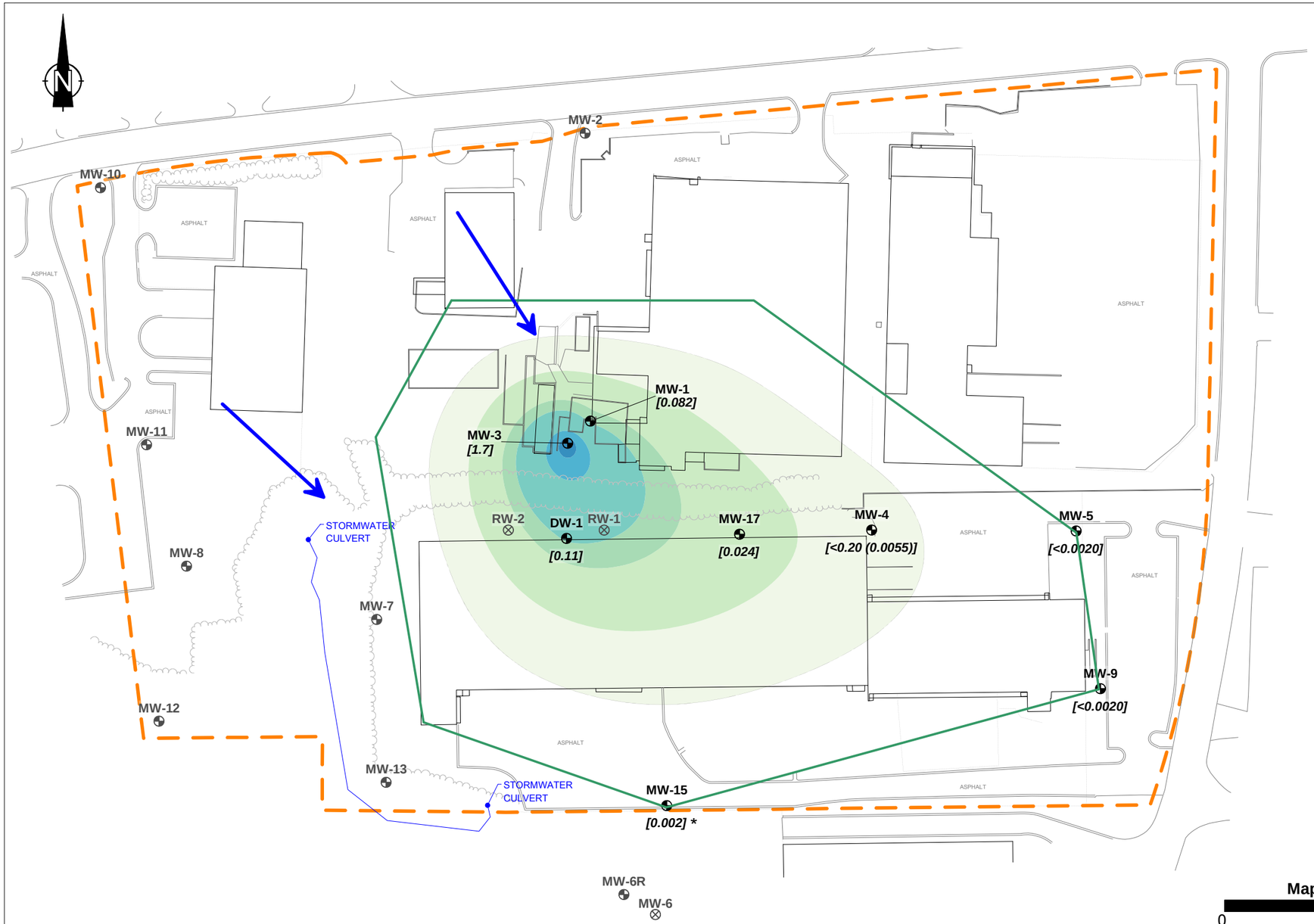
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: 16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.4 acres
Plume Average Concentration: 0.041 mg/L
Plume Mass Indicator: 3.3 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

Map Scale (ft)

0 100 200

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

* Not used in contouring.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

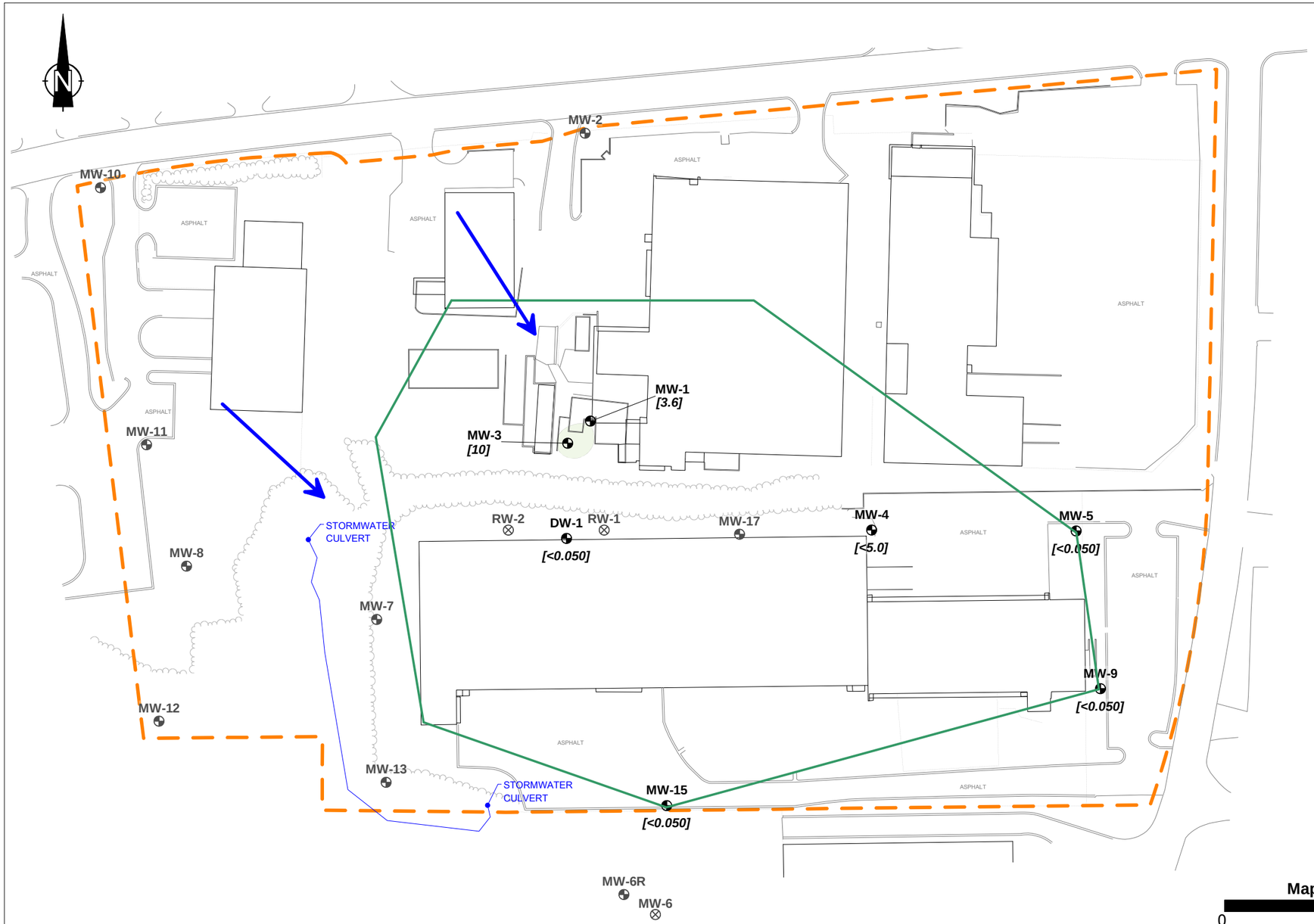
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Oct-2015

Prepared by: SSW Checked by: DW Figure: 17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.49 acres
Plume Average Concentration: 34 mg/L
Plume Mass Indicator: 558 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

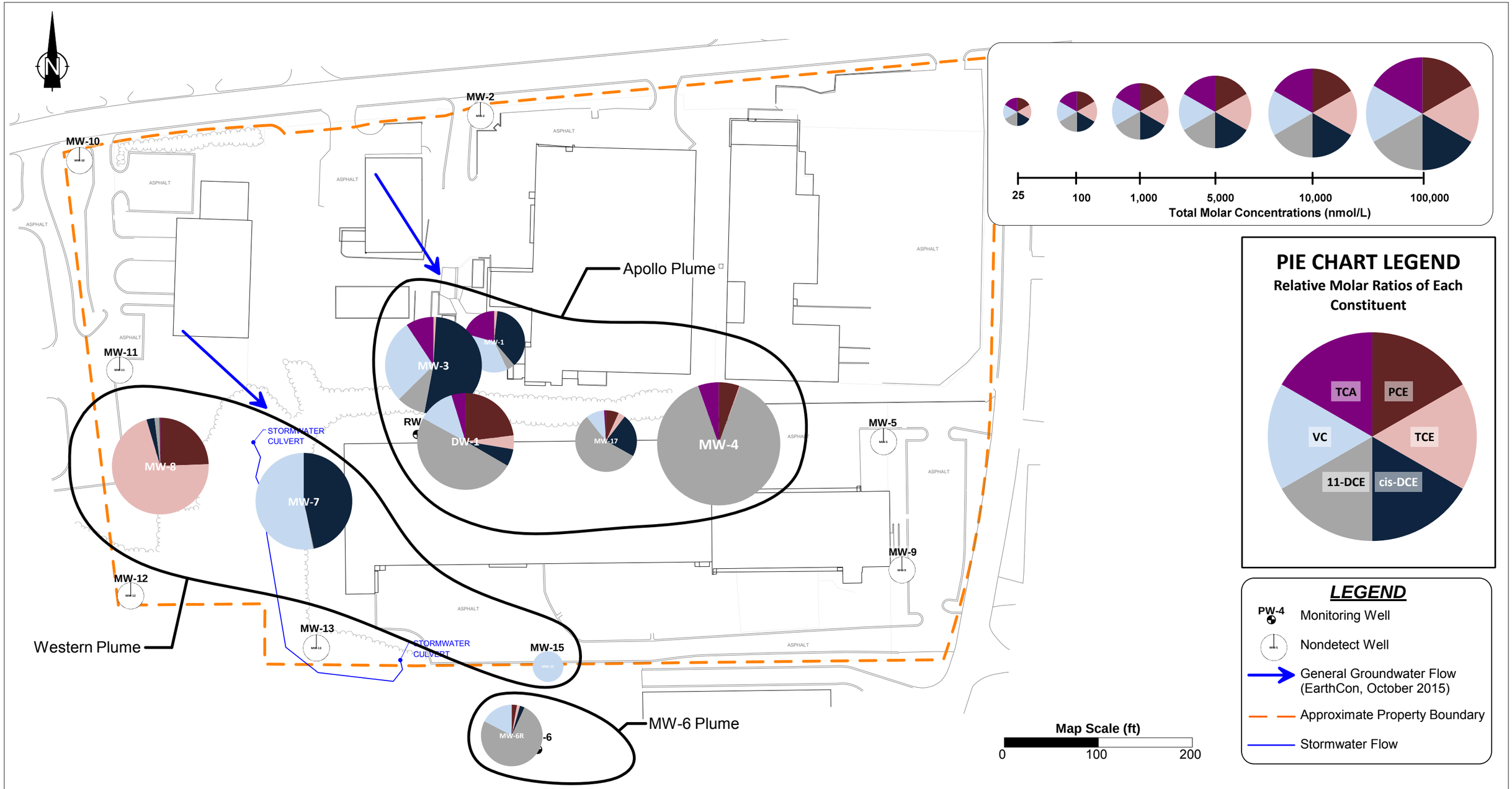
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Oct-2015

Prepared by: SSW Checked by: DW Figure: 18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

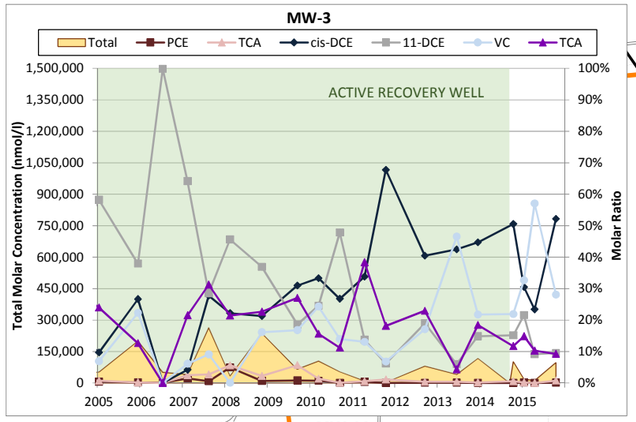
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

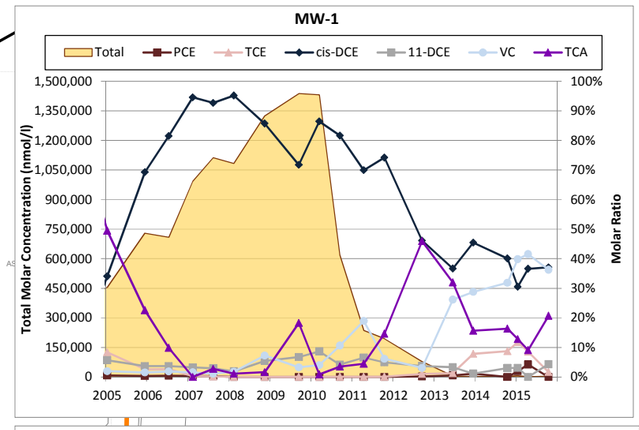
Total CVOC Molar Analysis

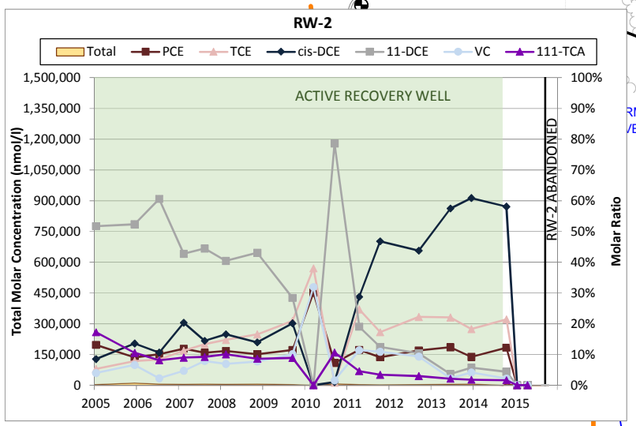
October 2015

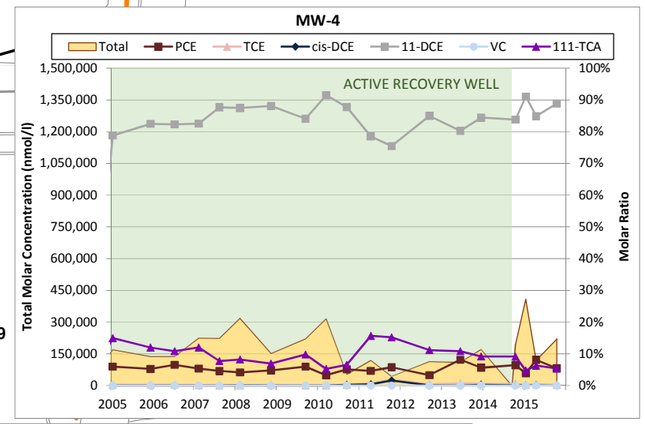
Prepared by: SSW Checked by: DW Figure: 19

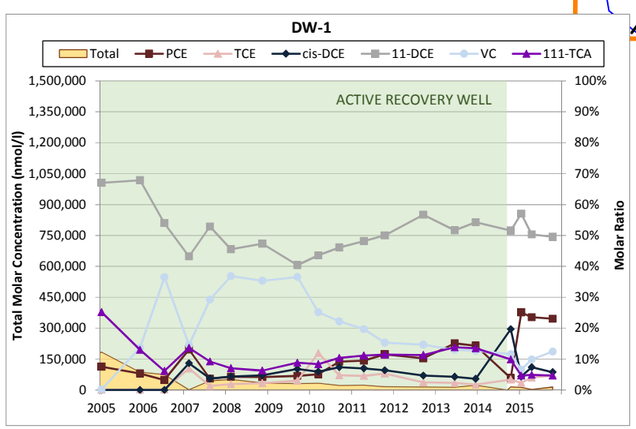
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

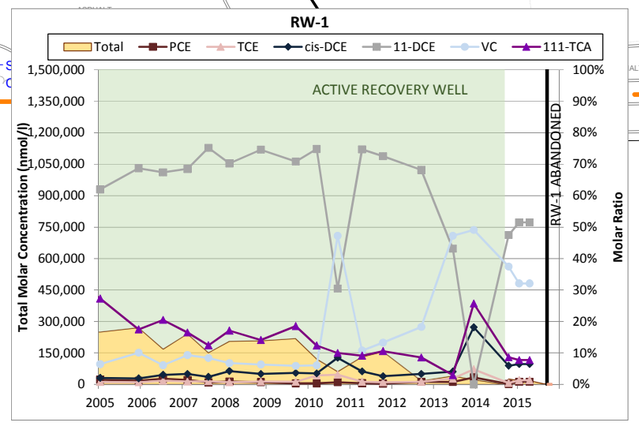


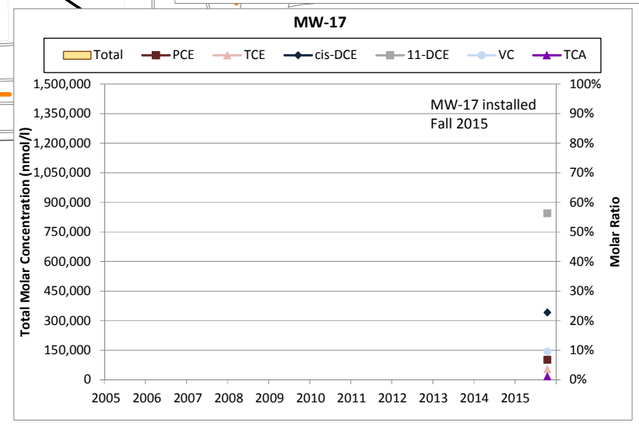












Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

Map Scale (ft)
0 100 200

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Total CVOC Molar Analysis Summary and Trends Apollo Plume Area

Prepared by: SSW Checked by: DW Figure: 20

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDICES

APPENDIX A

SUMMARY OF FIELD PROCEDURES

APPENDIX A: SUMMARY OF FIELD PROCEDURES

Sampling events were conducted in September 2015 and October 2015 at the Apollo Industries, Inc. HSI Site Number 10333 (Site). Laboratory analytical reports are provided in Appendix C. The field activities are described in the following sections. Field sampling forms are provided in Appendix D.

GROUNDWATER SAMPLING

A site wide groundwater sampling event was conducted in October 2015. During the site-wide event, all monitoring wells, with the exception of RW-1 and RW-2, were sampled. RW-1 was submerged in a pool of surface water that had collected in that area. Water was present inside the vaults of RW-1 and RW-2. As the water was bailed out of the RW-2 vault it continued to seep back into the vault from the surrounding saturated ground.

Groundwater sampling was conducted in general accordance with the United States Environmental Protection Agency (USEPA) Region 4 Science and Ecosystem Support Division (SESD) Operating Procedure (OP) for *Groundwater Sampling* (SESDPROC-301-R3, March 2013). Prior to sampling, water level measurements were collected from each well and water quality parameters were measured (with the exception of RW-1 and RW-2). Water level measurements are presented in Table 2. The field parameters measured at the time of groundwater sampling are provided on the field forms in Appendix D. Field parameters collected during the October groundwater sampling event are presented in Table 3.

Sample Containers

The laboratory provided sample containers met the sampling requirements of the study. The laboratory verified the cleanliness of each batch of containers prior to use. The laboratory supplied the necessary preservation solutions and shipped these with the sample containers.

The field sampler took responsibility for properly identifying the location of each sample taken; and for recording the sample date, the type of sample, the preservative used, and the applicable project number. This information was documented in the field book/field form. This same information was then placed on the sample identification label and the chain-of-custody record. Sample labels were filled out with indelible ink. If the field sampler determined that additional information was pertinent to a sample being taken, such data was recorded in the field book/field form.

Groundwater Level Measurement

Prior to well sampling, depth to groundwater and total well depth were measured using an electronic tape or water level indicator. A fixed point was marked with an indelible marker on each well to serve as a reference point for measurement. Depths were measured to the nearest 0.01 foot and recorded on the field sheet. The tape was cleaned with phosphate-free laboratory detergent and water, and rinsed with distilled water prior to each use.

Well Purging

The monitoring wells were purged using a low flow/low volume method with a peristaltic or bladder pump and dedicated, disposable, Teflon-lined tubing. The pumps were decontaminated before use and between each well. The groundwater parameters of temperature, pH, specific conductivity, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were measured during purging.

Purging continued until a minimum of three consecutive stable readings were measured with five-minute intervals between readings. For the October 2015 monitoring event, the turbidity criterion of 10 NTUs was met for all wells with the exception of MW-6R. Pumping rates were reduced as much as possible to reduce the amount of drawdown in the wells. After purging began, drawdown stabilized and was generally less than 0.33 feet for the majority of the wells.

Purging was considered complete after the depth to water and water quality parameters stabilized. Purge water from the wells was temporarily placed in five-gallon buckets and emptied into the facility's waste water storage container. Additional information regarding the purging and sampling activities including the volume of water in each well, purge rate, and depth to water during the purge process are provided in the field sampling forms (Appendix D).

Groundwater Sampling and Analysis

Groundwater samples were collected after the water level, the pH, and the specific conductance measurements appeared stabilized. The groundwater samples were placed in laboratory supplied pre-preserved containers. The containers were labeled, placed in a cooler on ice, and transported to Analytical Environmental Services, Inc. (AES) located in Norcross, Georgia. This laboratory is NELAC-certified. Groundwater samples were analyzed for VOCs by EPA Method 8260B and for monitored natural attenuation (MNA) parameters including total organic carbon (TOC), alkalinity, sulfide, chloride, nitrate, sulfate, ethane, ethene, and methane. The groundwater samples were also field tested for the presence of ferrous iron using a field test kit.

Decontamination Procedures

Decontamination procedures consisted of the use of dedicated, disposable tubing at each sampling location. Equipment such as the water level indicator and field measurement instrumentation were cleaned with phosphate-free laboratory detergent and rinsed with distilled water in general accordance with the EPA SESD OP for *Field Equipment Cleaning and Decontamination* (SESDPROC-205-R2, December 2011). The equipment was allowed to air dry. Nitrile gloves were also worn and changed between each sampling location.

Equipment Calibration

Equipment used to perform field testing on groundwater samples included the following: a YSI 556 with flow thru cell to measure pH, specific conductivity, temperature, dissolved oxygen, ORP; a Scientific Micro TPW, HF Scientific, or Hach turbidity meter to measure turbidity; and a Hach DR-890 to measure ferrous iron. Equipment calibration was verified on a daily basis.

Field Sampling Forms

Field personnel maintained a permanently bound, water resistant field notebook. Field activities were recorded with indelible ink. Additionally, sampling field forms were completed for each sample. The notebook, sampling forms, and chain-of-custody records contain sufficient information to allow reconstruction of the sample collection and handling procedures at a later time.

Chain-of-Custody

Sample custody was documented from the time of sample collection when the labeled sample was placed into an iced cooler in the possession of the sampling technician. A corresponding line item on the chain-of-custody record was filled out and initialed by the sampling technician. The chain-of-custody record is used to track custody of samples during transport and shipping. Upon completion of appropriate line items, or upon sample pick-up, the field representative signed, dated, listed the time, and confirmed the completeness of descriptive information contained on the form. The chain-of-custody form accompanied the samples and terminated upon laboratory receipt of samples. Entries were recorded in ink and individual samples had a corresponding entry on a chain-of-custody record.

Analytical Procedures and QA/QC

The groundwater samples were transported to AES in Norcross, Georgia under chain-of-custody protocol. The samples were analyzed for VOCs by EPA Method 8260B. Quality control samples, consisting of blind duplicates, trip blanks, and laboratory method blanks were also collected and analyzed.

SURFACE WATER AND SEDIMENT SAMPLING

On October 8,, 2015, surface water samples were collected at locations SW-1 and SW-2 and sediment sample STORMWATER SED-3 was collected at the detention pond on the southeastern portion of the property. Surface water sampling was conducted in general accordance with the EPA SESD OP for *Surface Water Sampling* (SESDPROC-201-R3, February 2013). Each sample was collected by dipping a clean, dedicated Teflon® bottle into the creek while facing upstream and without disturbing the stream bed. With as little agitation as possible, the surface water samples were decanted from the Teflon bottle into pre-preserved 40 milliliter (ml) glass vials with Teflon septa. The vials were labeled, placed in a cooler on ice and transported to AES where they were analyzed for VOCs using EPA Method 8260B.

Sediment sampling was conducted in general accordance with the EPA SESD OP for *Sediment Sampling* (SESDPROC-200-R3, August 2014). Sediment was collected from the sample location using a dedicated stainless steel scoop. Approximately five grams of sediment was collected from the scoop using a dedicated syringe and placed in 40-ml pre-prepared vials. Samples were placed in a cooler on ice and delivered to AES. The sediment samples were analyzed for VOCs using EPA Method 8260B.

MONITORING WELL REDEVELOPMENT, ABANDONMENT, AND INSTALLATION

Due to siltation and high turbidity levels, the following monitoring wells were redeveloped in October 2015: DW-1, MW-1, MW-3, MW-4, MW-6R, and MW-15.

Monitoring well MW-6 was abandoned on September 16, 2015. Monitoring wells RW-1 and RW-2 were abandoned on October 26, 2015. The well pads were demolished and the casings were sawn off below ground surface. The screen, riser, and vault of each monitoring well were grouted with a bentonite grout mixture.

Monitoring well MW-6R was installed on September 16, 2015 and well MW-17 was installed on October 21, 2015. MW-6R was installed to replace abandoned well MW-6. MW-17 was installed as an additional data point to supplement the well network after abandoning wells RW-1 and RW-2. A summary of monitoring well construction details for MW-6R and MW-17 are provided in Table 1. Monitoring well boring logs and construction diagrams are provided in Appendix B. Copies of the field notes recorded during well redevelopment, abandonment, and installation are provided with the field forms in Appendix D. Note that well MW-17 was initially identified as well RW-1R on the laboratory analytical reports in Appendix C and on the field forms in Appendix D.

SOIL SAMPLING

During the September 2015 sampling event, four soil samples were collected from two soil borings east of the warehouse on the northeast portion of the property. During the October 2015 sampling event, four soil samples were collected from two soil borings located upgradient and downgradient of well MW-8 on the western portion of the property. The soil borings (SB-6, SB-7, SB-8, and SB-9) were installed using direct push technology at locations shown on Figure 2. Continuous soil cores were collected in five-foot acetate sleeves and soil samples were collected from multiple depth intervals at each boring location. To determine sampling depth intervals, the soil cores were screened with a photoionization detector (PID). If the PID readings were inconclusive, the soil depth intervals were determined based on previous analytical data or based on visual observation of the soil core. Soil samples from throughout the soil column were collected. Soil sample depths are shown on the boring logs presented in Appendix B.

Soil samples were collected consistent with EPD guidance and in general accordance with the EPA SESD OP for *Soil Sampling* (SESDPROC-300-R3, August 2014). Approximately five grams of soil was collected for each sample from a specific depth interval of each boring from the sleeve using a dedicated syringe and placed in 40-ml pre-prepared vials. The vials were labeled and placed in a cooler on ice. Samples were delivered to AES and analyzed for VOCs using EPA Method 8260B.

After soil sample collection, the soil borings were backfilled with bentonite and patched with concrete. Investigation derived waste (IDW) generated during soil boring activities was placed in 55-gallon drums, labeled, and staged near the facility's loading dock.

APPENDIX B

SOIL BORING LOGS AND MONITORING WELL CONSTRUCTION DIAGRAMS

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS®

Earthcon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, GA 30062

BORING LOG

BORING NO.: SB-6

TOTAL DEPTH: 25'

PROJECT INFORMATION

PROJECT:	Apollo Industries, Inc.
SITE LOCATION:	Apollo Industries, Inc. Smyrna, GA
JOB NO.:	02.20140391.00
PROJECT MANAGER:	K. Rivera
LOGGED BY:	J. McKinnney

DRILLING INFORMATION

DRILLING CO.:	EMServices
DRILLING METHOD:	Direct Push
DATE:	9/16/2015
GPS LOCATION	ACCURACY: N/A
LAT.: Not Measured	LONG.: Not Measured

DEPTH (FEET)	LITHOLOGIC SYMBOLS	USCS	SOIL DESCRIPTION	ANALYTICAL DEPTH	ANALYTICAL SAMPLE ID	PID (ppm)
0						
-1			FILL : Dark brown sand/asphalt/gravel.			
-2		ML				
-3			SANDY SILT: Gray tan fine sandy silt. Dry. Medium Stiff.	2.25'-2.75'	SB-6: 2.25'-2.75'	0.0
-4						
-5			CLAYEY SILT: Red gray silty clay to clayey silt. Moist. Stiff.			0.0
-6		ML				
-7						0.0
-8						
-9			PWR: Tan gray white mottled PWR with relic metamorphic foliation. Dry. Stiff.			
-10						0.0
-11						
-12						0.0
-13			CLAYEY SILT: Red silty clay to clayey silt. Moist. Medium stiff.			
-14						
-15		ML		14.75'-15.25'	SB-6: 14.75'-15.25'	0.0
-16						
-17						
-18		ML	CLAYEY SILT: Gray micaceous silty clay to clayey silt.			0.0
-19						
-20		ML	SANDY SILT: Gray sandy silt with rounded gravel. Alluvium. Wet.			0.0
-21						
-22						
-23			PWR: Gray tan PWR with relic foliation mixed with micaceous sandy silt. Wet.			
-24						
-25						

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS®

Earthcon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, GA 30062

BORING LOG

BORING NO.: SB-7

TOTAL DEPTH: 25'

PROJECT INFORMATION

PROJECT:	Apollo Industries, Inc.
SITE LOCATION:	Apollo Industries, Inc. Smyrna, GA
JOB NO.:	02.20140391.00
PROJECT MANAGER:	K. Rivera
LOGGED BY:	J. McKinnney

DRILLING INFORMATION

DRILLING CO.:	EMServices
DRILLING METHOD:	Direct Push
DATE:	9/16/2015
GPS LOCATION	ACCURACY: N/A
LAT.: Not Measured	LONG.: Not Measured

DEPTH (FEET)	LITHOLOGIC SYMBOLS	USCS	SOIL DESCRIPTION	ANALYTICAL DEPTH	ANALYTICAL SAMPLE ID	PID (ppm)
0						
-1			FILL : Gray black silty sand/asphalt/gravel.			
-2						
-3			CLAYEY SILT: Red micaceous clayey silt. Dry. Soft.		SB-7: 2.25'-2.75'	0.0
-4		ML				
-5						0.0
-6						
-7						0.0
-8			SANDY SILT: PWR mixed with gray white mottled fine sandy silt. Grades to gray red tan clayey silt at 9'. Dry. Soft to stiff.			
-9						
-10						0.0
-11		ML				
-12						0.0
-13						
-14						
-15					SB-7: 14.75'-15.25'	0.0
-16			CLAYEY SILT: White light gray slightly tan mottled clayey silt with sand. Moist. Stiff.			
-17		ML				
-18						0.0
-19						
-20						0.0
-21			SANDY SILT: PWR mixed with gray white tan mottled sandy silt. Soft. Wet.			
-22		ML				
-23						0.0
-24						
-25						0.0

Earthcon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, GA 30062

BORING LOG

BORING NO.: MW-6R

TOTAL DEPTH: 27'

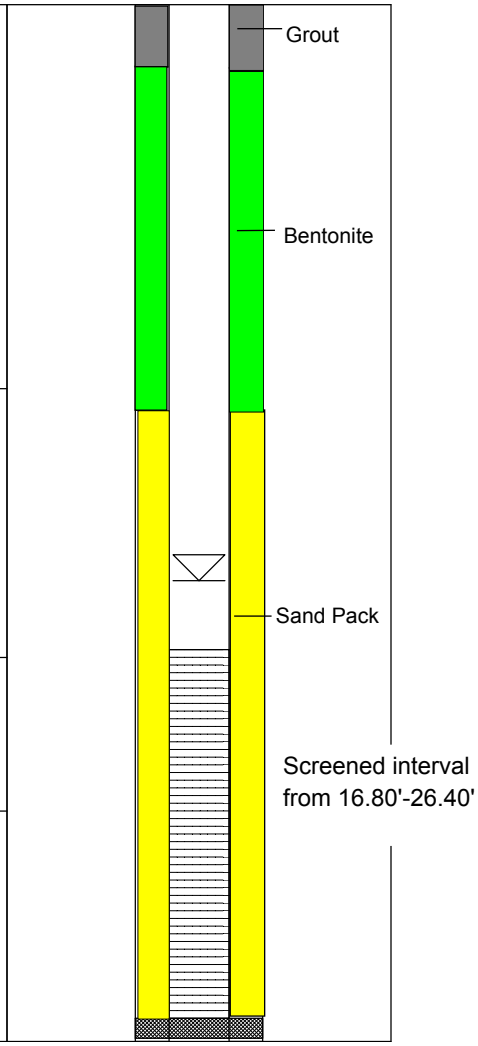
PROJECT INFORMATION

PROJECT:	Smyrna, GA
SITE LOCATION:	Apollo Industries, Inc.
	Apollo Industries, Inc.
JOB NO.:	02.20140391.00
PROJECT MANAGER:	K. Rivera
LOGGED BY:	J. McKinney

DRILLING INFORMATION

DRILLING CO.:	EMServices
DRILLING METHOD:	HSA
DATE:	9/16/2015
GPS LOCATION	ACCURACY: N/A
LAT.: Not Measured	LONG.: Not Measured

DEPTH (FEET)	LITHOLOGIC SYMBOLS	USCS	SOIL DESCRIPTION
0 to -10		ML	CLAYEY SILT: Red clayey silt.
-10 to -17		ML	SANDY SILT: Brown tan micaceous sandy silt. Saprolitic.
-17 to -21		PT	PEAT: Black organic layer.
-21 to -27		ML	CLAYEY SILT: Gray clayey silt.



EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS®

Earthcon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, GA 30062

BORING LOG

BORING NO.: SB-8

TOTAL DEPTH: 3.1'

PROJECT INFORMATION

PROJECT:	Apollo Industries, Inc.
SITE LOCATION:	Apollo Industries, Inc. Smyrna, GA
JOB NO.:	02.20140391.00
PROJECT MANAGER:	K. Rivera
LOGGED BY:	K. Davis

DRILLING INFORMATION

DRILLING CO.:	EMServices
DRILLING METHOD:	Direct Push
DATE:	10/21/2015
GPS LOCATION	ACCURACY: N/A
LAT.: Not Measured	LONG.: Not Measured

DEPTH (FEET)	LITHOLOGIC SYMBOLS	SOIL DESCRIPTION	ANALYTICAL DEPTH	ANALYTICAL SAMPLE ID	PID (ppm)
0		TOPSOIL: Brown TOPSOIL.			0.0
-1		FILL: Consisting of brown micaceous slightly clayey SILT with rock fragments.		SB-8: 0.75'-1.25'	0.0
-2					
-3		SILT: Red brown micaceous SILT with some rock fragments.		SB-8: 2.6'-3.1'	0.0

EARTHCON®
Environmental Challenges
BUSINESS SOLUTIONS®

Earthcon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, GA 30062

BORING LOG

BORING NO.: SB-9

TOTAL DEPTH: 3.0'

PROJECT INFORMATION

PROJECT:	Apollo Industries, Inc.
SITE LOCATION:	Apollo Industries, Inc. Smyrna, GA
JOB NO.:	02.20140391.00
PROJECT MANAGER:	K. Rivera
LOGGED BY:	K. Davis

DRILLING INFORMATION

DRILLING CO.:	EMServices
DRILLING METHOD:	Direct Push
DATE:	10/21/2015
GPS LOCATION	ACCURACY: N/A
LAT.: Not Measured	LONG.: Not Measured

DEPTH (FEET)	LITHOLOGIC SYMBOLS	SOIL DESCRIPTION	ANALYTICAL DEPTH	ANALYTICAL SAMPLE ID	PID (ppm)
0		TOPSOIL: Brown TOPSOIL.			
-1		FILL: Consisting of brown red micaceous slightly clayey SILT with rock fragments.		SB-9: 0.75'-1.25'	0.0
-2					
-3				SB-9: 2.5'-3.0'	0.0

Earthcon Consultants, Inc.
1880 West Oak Parkway
Building 100, Suite 106
Marietta, GA 30062

BORING LOG

BORING NO.: MW-17

TOTAL DEPTH: 24'

PROJECT INFORMATION

PROJECT:	Smyrna, GA
SITE LOCATION:	Apollo Industries, Inc.
	Apollo Industries, Inc.
JOB NO.:	02.20140391.00
PROJECT MANAGER:	K. Rivera
LOGGED BY:	K. Davis

DRILLING INFORMATION

DRILLING CO.:	EMServices
DRILLING METHOD:	HSA
DATE:	10/21/2015
GPS LOCATION	ACCURACY: N/A
LAT.: Not Measured	LONG.: Not Measured

DEPTH (FEET)	LITHOLOGIC SYMBOLS	SOIL DESCRIPTION	PID (ppm)	WELL INSTALLATION	COMMENTS
0 to -15		FILL: Consisting of gravel and brown silt. SILT: Tan gray red brown micaceous slightly clayey SILT. Damp/wet with relic structures at 5'.	0.0 0.0 0.0	Grout Bentonite	
-15 to -19		SAND: Gray SAND with rock fragments. Dry.	0.0	Sand Pack Screened interval from 13.47-22.97.	
-19 to -24					

Note: DPT refusal at 19'. Hollow stem auger (HSA) refusal at 24'.

APPENDIX C

LABORATORY ANALYTICAL REPORTS

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

September 24, 2015

Kristen Rivera
EarthCon Consultants, Inc.
1880 West Oak Parkway
Marietta GA 30062

TEL: (770) 973-2100
FAX: (770) 973-7395

RE: Apollo Smyrna

Dear Kristen Rivera: Order No: 1509E05

Analytical Environmental Services, Inc. received 6 samples on 9/16/2015 5:00:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

CRKanhai

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

1507E05

Work Order: ~~1509E06~~ CK

Date: 9/16/15 Page 1 of 1

COMPANY: EarthCon	ADDRESS: 1880 Wiseoak Pkwy Bldg 100 Ste 106 Marietta GA 30062
PHONE: 770-973-2100	FAX:
SAMPLED BY: J. McKinney	SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	ANALYSIS REQUESTED: TCL VOC	TCL VOC	PRESERVATION (See codes): S/M+I	I	REMARKS	No # of Containers
1	SB6-2.5	9/16/15	0840	X		SO			3	1		4
2	SB6-15	9/16/15	0850	X		SO			3	1		4
3	SB7-2.5	9/16/15	0910	X		SO			3	1		4
4	SB7-15	9/16/15	0920	X		SO			3	1		4
5	DUP-1	9/16/15		X		SO			3	1		4
6	Trip blank								2			2
7												
8												
9												
10												
11												
12												
13												
14												

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	9/16/15 1600	1: Krista Rivera	9/16/15 1600
2: Krista Rivera	9/16/15 1700	2: Tanya Gelias	9/16/15 1700
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / /
VIA:
IN 9/16/15
VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Apollo Smyrna
PROJECT #: 02.20140391.00
SITE ADDRESS: 1850 S. Cobb Ind Blvd Smyrna, GA
SEND REPORT TO: K. Rivera
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 22

Turnaround Time Request
- (X) Standard 5 Business Days
- ( ) 2 Business Day Rush
- ( ) Next Business Day Rush
- ( ) Same Day Rush **(auth req.)**
- ( ) Other

STATE PROGRAM (if any): HSRA/GA
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB6-2.5
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 8:40:00 AM
Lab ID:	1509E05-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,1,2,2-Tetrachloroethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,1,2-Trichloroethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,1-Dichloroethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,1-Dichloroethene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,2,4-Trichlorobenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,2-Dibromo-3-chloropropane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,2-Dibromoethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,2-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,2-Dichloroethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,2-Dichloropropane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,3-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
1,4-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
2-Butanone	BRL	0.032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
2-Hexanone	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
4-Methyl-2-pentanone	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Acetone	BRL	0.063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Benzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Bromodichloromethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Bromoform	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Bromomethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Carbon disulfide	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Carbon tetrachloride	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Chlorobenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Chloroethane	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Chloroform	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Chloromethane	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
cis-1,2-Dichloroethene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
cis-1,3-Dichloropropene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Cyclohexane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Dibromochloromethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Dichlorodifluoromethane	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Ethylbenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Freon-113	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Isopropylbenzene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
m,p-Xylene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Methyl acetate	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Methyl tert-butyl ether	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Methylcyclohexane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Methylene chloride	BRL	0.013		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
o-Xylene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB6-2.5
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 8:40:00 AM
Lab ID:	1509E05-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Styrene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Tetrachloroethene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Toluene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
trans-1,2-Dichloroethene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
trans-1,3-Dichloropropene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Trichloroethene	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Trichlorofluoromethane	BRL	0.0032		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Vinyl chloride	BRL	0.0063		mg/Kg-dry	213141	1	09/17/2015 18:23	CG
Surr: 4-Bromofluorobenzene	80.4	70-128		%REC	213141	1	09/17/2015 18:23	CG
Surr: Dibromofluoromethane	102	78.2-128		%REC	213141	1	09/17/2015 18:23	CG
Surr: Toluene-d8	97.4	76.5-116		%REC	213141	1	09/17/2015 18:23	CG
PERCENT MOISTURE D2216								
Percent Moisture	21.6	0		wt%	R300472	1	09/22/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB6-15
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 8:50:00 AM
Lab ID:	1509E05-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,1,2,2-Tetrachloroethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,1,2-Trichloroethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,1-Dichloroethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,1-Dichloroethene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,2,4-Trichlorobenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,2-Dibromo-3-chloropropane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,2-Dibromoethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,2-Dichlorobenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,2-Dichloroethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,2-Dichloropropane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,3-Dichlorobenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
1,4-Dichlorobenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
2-Butanone	BRL	0.031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
2-Hexanone	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
4-Methyl-2-pentanone	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Acetone	BRL	0.061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Benzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Bromodichloromethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Bromoform	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Bromomethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Carbon disulfide	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Carbon tetrachloride	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Chlorobenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Chloroethane	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Chloroform	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Chloromethane	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
cis-1,2-Dichloroethene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
cis-1,3-Dichloropropene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Cyclohexane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Dibromochloromethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Dichlorodifluoromethane	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Ethylbenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Freon-113	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Isopropylbenzene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
m,p-Xylene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Methyl acetate	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Methyl tert-butyl ether	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Methylcyclohexane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Methylene chloride	BRL	0.012		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
o-Xylene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB6-15
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 8:50:00 AM
Lab ID:	1509E05-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Styrene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Tetrachloroethene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Toluene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
trans-1,2-Dichloroethene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
trans-1,3-Dichloropropene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Trichloroethene	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Trichlorofluoromethane	BRL	0.0031		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Vinyl chloride	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:00	CG
Surr: 4-Bromofluorobenzene	82.2	70-128		%REC	213141	1	09/17/2015 14:00	CG
Surr: Dibromofluoromethane	99.8	78.2-128		%REC	213141	1	09/17/2015 14:00	CG
Surr: Toluene-d8	99	76.5-116		%REC	213141	1	09/17/2015 14:00	CG
PERCENT MOISTURE D2216								
Percent Moisture	18.6	0		wt%	R300472	1	09/22/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB7-2.5
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 9:10:00 AM
Lab ID:	1509E05-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,1,2,2-Tetrachloroethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,1,2-Trichloroethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,1-Dichloroethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,1-Dichloroethene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,2,4-Trichlorobenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,2-Dibromo-3-chloropropane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,2-Dibromoethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,2-Dichlorobenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,2-Dichloroethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,2-Dichloropropane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,3-Dichlorobenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
1,4-Dichlorobenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
2-Butanone	BRL	0.033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
2-Hexanone	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
4-Methyl-2-pentanone	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Acetone	BRL	0.065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Benzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Bromodichloromethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Bromoform	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Bromomethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Carbon disulfide	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Carbon tetrachloride	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Chlorobenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Chloroethane	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Chloroform	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Chloromethane	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
cis-1,2-Dichloroethene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
cis-1,3-Dichloropropene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Cyclohexane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Dibromochloromethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Dichlorodifluoromethane	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Ethylbenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Freon-113	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Isopropylbenzene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
m,p-Xylene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Methyl acetate	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Methyl tert-butyl ether	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Methylcyclohexane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Methylene chloride	BRL	0.013		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
o-Xylene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB7-2.5
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 9:10:00 AM
Lab ID:	1509E05-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Styrene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Tetrachloroethene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Toluene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
trans-1,2-Dichloroethene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
trans-1,3-Dichloropropene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Trichloroethene	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Trichlorofluoromethane	BRL	0.0033		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Vinyl chloride	BRL	0.0065		mg/Kg-dry	213141	1	09/17/2015 14:24	CG
Surr: 4-Bromofluorobenzene	81.5	70-128		%REC	213141	1	09/17/2015 14:24	CG
Surr: Dibromofluoromethane	101	78.2-128		%REC	213141	1	09/17/2015 14:24	CG
Surr: Toluene-d8	101	76.5-116		%REC	213141	1	09/17/2015 14:24	CG
PERCENT MOISTURE D2216								
Percent Moisture	19.7	0		wt%	R300472	1	09/22/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB7-15
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 9:20:00 AM
Lab ID:	1509E05-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,1,2,2-Tetrachloroethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,1,2-Trichloroethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,1-Dichloroethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,1-Dichloroethene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,2,4-Trichlorobenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,2-Dibromo-3-chloropropane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,2-Dibromoethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,2-Dichlorobenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,2-Dichloroethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,2-Dichloropropane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,3-Dichlorobenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
1,4-Dichlorobenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
2-Butanone	BRL	0.030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
2-Hexanone	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
4-Methyl-2-pentanone	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Acetone	BRL	0.061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Benzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Bromodichloromethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Bromoform	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Bromomethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Carbon disulfide	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Carbon tetrachloride	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Chlorobenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Chloroethane	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Chloroform	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Chloromethane	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
cis-1,2-Dichloroethene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
cis-1,3-Dichloropropene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Cyclohexane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Dibromochloromethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Dichlorodifluoromethane	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Ethylbenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Freon-113	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Isopropylbenzene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
m,p-Xylene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Methyl acetate	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Methyl tert-butyl ether	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Methylcyclohexane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Methylene chloride	BRL	0.012		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
o-Xylene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB7-15
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015 9:20:00 AM
Lab ID:	1509E05-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Styrene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Tetrachloroethene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Toluene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
trans-1,2-Dichloroethene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
trans-1,3-Dichloropropene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Trichloroethene	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Trichlorofluoromethane	BRL	0.0030		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Vinyl chloride	BRL	0.0061		mg/Kg-dry	213141	1	09/17/2015 14:48	CG
Surr: 4-Bromofluorobenzene	79.2	70-128		%REC	213141	1	09/17/2015 14:48	CG
Surr: Dibromofluoromethane	100	78.2-128		%REC	213141	1	09/17/2015 14:48	CG
Surr: Toluene-d8	100	76.5-116		%REC	213141	1	09/17/2015 14:48	CG
PERCENT MOISTURE D2216								
Percent Moisture	16.0	0		wt%	R300472	1	09/22/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	DUP-1
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015
Lab ID:	1509E05-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,1,2,2-Tetrachloroethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,1,2-Trichloroethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,1-Dichloroethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,1-Dichloroethene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,2,4-Trichlorobenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,2-Dibromo-3-chloropropane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,2-Dibromoethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,2-Dichlorobenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,2-Dichloroethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,2-Dichloropropane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,3-Dichlorobenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
1,4-Dichlorobenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
2-Butanone	BRL	0.035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
2-Hexanone	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
4-Methyl-2-pentanone	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Acetone	BRL	0.069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Benzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Bromodichloromethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Bromoform	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Bromomethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Carbon disulfide	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Carbon tetrachloride	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Chlorobenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Chloroethane	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Chloroform	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Chloromethane	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
cis-1,2-Dichloroethene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
cis-1,3-Dichloropropene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Cyclohexane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Dibromochloromethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Dichlorodifluoromethane	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Ethylbenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Freon-113	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Isopropylbenzene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
m,p-Xylene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Methyl acetate	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Methyl tert-butyl ether	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Methylcyclohexane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Methylene chloride	BRL	0.014		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
o-Xylene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	DUP-1
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015
Lab ID:	1509E05-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Styrene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Tetrachloroethene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Toluene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
trans-1,2-Dichloroethene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
trans-1,3-Dichloropropene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Trichloroethene	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Trichlorofluoromethane	BRL	0.0035		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Vinyl chloride	BRL	0.0069		mg/Kg-dry	213141	1	09/17/2015 15:11	CG
Surr: 4-Bromofluorobenzene	80.2	70-128		%REC	213141	1	09/17/2015 15:11	CG
Surr: Dibromofluoromethane	97.7	78.2-128		%REC	213141	1	09/17/2015 15:11	CG
Surr: Toluene-d8	99.8	76.5-116		%REC	213141	1	09/17/2015 15:11	CG
PERCENT MOISTURE D2216								
Percent Moisture	22.1	0		wt%	R300472	1	09/22/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015
Lab ID:	1509E05-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,1,2,2-Tetrachloroethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,1,2-Trichloroethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,1-Dichloroethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,1-Dichloroethene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,2,4-Trichlorobenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,2-Dibromo-3-chloropropane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,2-Dibromoethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,2-Dichlorobenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,2-Dichloroethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,2-Dichloropropane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,3-Dichlorobenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
1,4-Dichlorobenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
2-Butanone	BRL	0.050		mg/L	213252	1	09/21/2015 23:15	AR
2-Hexanone	BRL	0.010		mg/L	213252	1	09/21/2015 23:15	AR
4-Methyl-2-pentanone	BRL	0.010		mg/L	213252	1	09/21/2015 23:15	AR
Acetone	BRL	0.050		mg/L	213252	1	09/21/2015 23:15	AR
Benzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Bromodichloromethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Bromoform	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Bromomethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Carbon disulfide	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Carbon tetrachloride	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Chlorobenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Chloroethane	BRL	0.010		mg/L	213252	1	09/21/2015 23:15	AR
Chloroform	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Chloromethane	BRL	0.010		mg/L	213252	1	09/21/2015 23:15	AR
cis-1,2-Dichloroethene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
cis-1,3-Dichloropropene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Cyclohexane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Dibromochloromethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Dichlorodifluoromethane	BRL	0.010		mg/L	213252	1	09/21/2015 23:15	AR
Ethylbenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Freon-113	BRL	0.010		mg/L	213252	1	09/21/2015 23:15	AR
Isopropylbenzene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
m,p-Xylene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Methyl acetate	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Methyl tert-butyl ether	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Methylcyclohexane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Methylene chloride	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
o-Xylene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 24-Sep-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Apollo Smyrna	**Collection Date:**	9/16/2015
Lab ID:	1509E05-006	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Tetrachloroethene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Toluene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
trans-1,2-Dichloroethene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
trans-1,3-Dichloropropene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Trichloroethene	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Trichlorofluoromethane	BRL	0.005		mg/L	213252	1	09/21/2015 23:15	AR
Vinyl chloride	BRL	0.002		mg/L	213252	1	09/21/2015 23:15	AR
Surr: 4-Bromofluorobenzene	86.4	70.6-123		%REC	213252	1	09/21/2015 23:15	AR
Surr: Dibromofluoromethane	102	78.7-124		%REC	213252	1	09/21/2015 23:15	AR
Surr: Toluene-d8	98.2	81.3-120		%REC	213252	1	09/21/2015 23:15	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Below reporting limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- > Greater than Result value
- E Estimated (value above quantitation range)
- S Spike Recovery outside limits due to matrix
- Narr See case narrative
- NC Not confirmed
- < Less than Result value
- J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

1509E05 ck

Client Earth Con Work Order Number ~~1509E05~~

Checklist completed by Alanna Xia 9/16/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.5 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted X ck 9/17/15 Yes ✓ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213141

Sample ID: **MB-213141** Client ID: Units: **ug/Kg** Prep Date: **09/17/2015** Run No: **300193**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213141** Analysis Date: **09/17/2015** Seq No: **6415269**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	100									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	10									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213141

Sample ID: **MB-213141** Client ID: Units: **ug/Kg** Prep Date: **09/17/2015** Run No: **300193**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213141** Analysis Date: **09/17/2015** Seq No: **6415269**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	42.20	0	50.00		84.4	70	128				
Surr: Dibromofluoromethane	50.40	0	50.00		101	78.2	128				
Surr: Toluene-d8	49.79	0	50.00		99.6	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213141

Sample ID: **LCS-213141** Client ID: Units: **ug/Kg** Prep Date: **09/17/2015** Run No: **300193**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213141** Analysis Date: **09/17/2015** Seq No: **6415270**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	62.69	5.0	50.00		125	69.9	145				
Benzene	47.79	5.0	50.00		95.6	72.3	130				
Chlorobenzene	51.89	5.0	50.00		104	69	130				
Toluene	46.06	5.0	50.00		92.1	71.1	130				
Trichloroethene	51.21	5.0	50.00		102	71.7	136				
Surr: 4-Bromofluorobenzene	40.35	0	50.00		80.7	70	128				
Surr: Dibromofluoromethane	49.45	0	50.00		98.9	78.2	128				
Surr: Toluene-d8	46.76	0	50.00		93.5	76.5	116				

Sample ID: **1509E02-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **09/17/2015** Run No: **300193**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213141** Analysis Date: **09/17/2015** Seq No: **6415271**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.06679	0.0062	62.43		107	56.6	151				
Benzene	0.05638	0.0062	62.43		90.3	70.4	130				
Chlorobenzene	0.06132	0.0062	62.43		98.2	67.5	132				
Toluene	0.05770	0.0062	62.43		92.4	70.4	130				
Trichloroethene	0.05845	0.0062	62.43		93.6	70.1	137				
Surr: 4-Bromofluorobenzene	0.05173	0	62.43		82.9	70	128				
Surr: Dibromofluoromethane	0.06136	0	62.43		98.3	78.2	128				
Surr: Toluene-d8	0.06136	0	62.43		98.3	76.5	116				

Sample ID: **1509E02-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **09/17/2015** Run No: **300193**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213141** Analysis Date: **09/17/2015** Seq No: **6415272**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.07155	0.0062	62.43		115	56.6	151	66.79	6.88	20.4	
Benzene	0.05605	0.0062	62.43		89.8	70.4	130	56.38	0.578	16.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213141

Sample ID: **1509E02-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **mg/Kg-dry** Prep Date: **09/17/2015** Run No: **300193**
BatchID: **213141** Analysis Date: **09/17/2015** Seq No: **6415272**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	0.06258	0.0062	62.43		100	67.5	132	61.32	2.04	14.6	
Toluene	0.05599	0.0062	62.43		89.7	70.4	130	57.70	3.01	16.6	
Trichloroethene	0.05906	0.0062	62.43		94.6	70.1	137	58.45	1.04	17	
Surr: 4-Bromofluorobenzene	0.05155	0	62.43		82.6	70	128	51.73	0	0	
Surr: Dibromofluoromethane	0.05950	0	62.43		95.3	78.2	128	61.36	0	0	
Surr: Toluene-d8	0.06227	0	62.43		99.7	76.5	116	61.36	0	0	

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213252

Sample ID: **MB-213252** Client ID: Units: **mg/L** Prep Date: **09/21/2015** Run No: **300394**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213252** Analysis Date: **09/21/2015** Seq No: **6420101**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.005									
1,1,2,2-Tetrachloroethane	BRL	0.005									
1,1,2-Trichloroethane	BRL	0.005									
1,1-Dichloroethane	BRL	0.005									
1,1-Dichloroethene	BRL	0.005									
1,2,4-Trichlorobenzene	BRL	0.005									
1,2-Dibromo-3-chloropropane	BRL	0.005									
1,2-Dibromoethane	BRL	0.005									
1,2-Dichlorobenzene	BRL	0.005									
1,2-Dichloroethane	BRL	0.005									
1,2-Dichloropropane	BRL	0.005									
1,3-Dichlorobenzene	BRL	0.005									
1,4-Dichlorobenzene	BRL	0.005									
2-Butanone	BRL	0.050									
2-Hexanone	BRL	0.010									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.050									
Benzene	BRL	0.005									
Bromodichloromethane	BRL	0.005									
Bromoform	BRL	0.005									
Bromomethane	BRL	0.005									
Carbon disulfide	BRL	0.005									
Carbon tetrachloride	BRL	0.005									
Chlorobenzene	BRL	0.005									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.005									
Chloromethane	BRL	0.010									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213252

Sample ID: **MB-213252** Client ID: Units: **mg/L** Prep Date: **09/21/2015** Run No: **300394**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213252** Analysis Date: **09/21/2015** Seq No: **6420101**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	0.005									
cis-1,3-Dichloropropene	BRL	0.005									
Cyclohexane	BRL	0.005									
Dibromochloromethane	BRL	0.005									
Dichlorodifluoromethane	BRL	0.010									
Ethylbenzene	BRL	0.005									
Freon-113	BRL	0.010									
Isopropylbenzene	BRL	0.005									
m,p-Xylene	BRL	0.005									
Methyl acetate	BRL	0.005									
Methyl tert-butyl ether	BRL	0.005									
Methylcyclohexane	BRL	0.005									
Methylene chloride	BRL	0.005									
o-Xylene	BRL	0.005									
Styrene	BRL	0.005									
Tetrachloroethene	BRL	0.005									
Toluene	BRL	0.005									
trans-1,2-Dichloroethene	BRL	0.005									
trans-1,3-Dichloropropene	BRL	0.005									
Trichloroethene	BRL	0.005									
Trichlorofluoromethane	BRL	0.005									
Vinyl chloride	BRL	0.002									
Surr: 4-Bromofluorobenzene	0.04217	0	50.00		84.3	70.6	123				
Surr: Dibromofluoromethane	0.05205	0	50.00		104	78.7	124				
Surr: Toluene-d8	0.04974	0	50.00		99.5	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213252

Sample ID: **LCS-213252** Client ID: Units: **mg/L** Prep Date: **09/21/2015** Run No: **300394**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213252** Analysis Date: **09/21/2015** Seq No: **6420100**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.02072	0.005	20.00		104	64.2	137				
Benzene	0.02031	0.005	20.00		102	72.8	128				
Chlorobenzene	0.02101	0.005	20.00		105	72.3	126				
Toluene	0.01947	0.005	20.00		97.4	74.9	127				
Trichloroethene	0.01893	0.005	20.00		94.6	70.5	134				
Surr: 4-Bromofluorobenzene	0.05055	0	50.00		101	70.6	123				
Surr: Dibromofluoromethane	0.05160	0	50.00		103	78.7	124				
Surr: Toluene-d8	0.05125	0	50.00		102	81.3	120				

Sample ID: **1509E02-004AMS** Client ID: Units: **mg/L** Prep Date: **09/21/2015** Run No: **300394**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213252** Analysis Date: **09/22/2015** Seq No: **6420103**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.02577	0.005	20.00		129	60.5	156				
Benzene	0.02372	0.005	20.00		119	70	135				
Chlorobenzene	0.02211	0.005	20.00		111	70.5	132				
Toluene	0.02259	0.005	20.00		113	70.5	137				
Trichloroethene	0.02253	0.005	20.00		113	71.8	139				
Surr: 4-Bromofluorobenzene	0.05271	0	50.00		105	70.6	123				
Surr: Dibromofluoromethane	0.04955	0	50.00		99.1	78.7	124				
Surr: Toluene-d8	0.05297	0	50.00		106	81.3	120				

Sample ID: **1509E02-004AMSD** Client ID: Units: **mg/L** Prep Date: **09/21/2015** Run No: **300394**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **213252** Analysis Date: **09/22/2015** Seq No: **6420107**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.02472	0.005	20.00		124	60.5	156	25.77	4.16	20	
Benzene	0.02362	0.005	20.00		118	70	135	23.72	0.422	20	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1509E05

ANALYTICAL QC SUMMARY REPORT

BatchID: 213252

Sample ID: **1509E02-004AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **mg/L** Prep Date: **09/21/2015** Run No: **300394**
BatchID: **213252** Analysis Date: **09/22/2015** Seq No: **6420107**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	0.02187	0.005	20.00		109	70.5	132	22.11	1.09	20	
Toluene	0.02227	0.005	20.00		111	70.5	137	22.59	1.43	20	
Trichloroethene	0.02236	0.005	20.00		112	71.8	139	22.53	0.757	20	
Surr: 4-Bromofluorobenzene	0.05273	0	50.00		105	70.6	123	52.71	0	0	
Surr: Dibromofluoromethane	0.05033	0	50.00		101	78.7	124	49.55	0	0	
Surr: Toluene-d8	0.05173	0	50.00		103	81.3	120	52.97	0	0	

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 21, 2015

Kristen Rivera
EarthCon Consultants, Inc.
1880 West Oak Parkway
Marietta GA 30062

TEL: (770) 973-2100
FAX: (770) 973-7395

RE: Apollo Smyrna

Dear Kristen Rivera: Order No: 1510644

Analytical Environmental Services, Inc. received 9 samples on 10/8/2015 7:45:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

CRKanhai

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1510644

Date: 10/7/2015 Page 1 of 1

COMPANY: Earth Con Consultants, Inc.

ADDRESS: 1880 West Oak Parkway Bldg 100, Ste 106 Marietta, GA 30062

PHONE: (770)-973-2100

FAX: (770)-973-7395

SAMPLED BY: Samantha Woolf, Keaton Hong

SIGNATURE: SWoolf, KH

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs	GC Analysis	Ion Scan	TOC	Alkalinity	Sulfide	REMARKS	No # of Containers
							PRESERVATION (See codes)							
							H	H	NA	S	NA	N		
1	MW-13	10/7/15	0930	X		GW	2	2	1	1	1	1		8
2	MW-7	10/7/15	1045	X		GW	2	2	1	1	1	1		8
3	MW-9	10/7/15	0945	X		GW	2	2	1	1	1	1		8
4	MW-5	10/7/15	1125	X		GW	2	2	1	1	1	1		8
5	MW-8	10/7/15	1400	X		GW	2	2	1	1	1	1		8
6	MW-11	10/7/15	1520	X		GW	2	2	1	1	1	1		8
7	MW-12	10/7/15	1700	X		GW	2	2	1	1	1	1		8
8	MW-10	10/7/15	1425	X		GW	2	2	1	1	1	1		8
9	Trip Blank	10/7/15	—			W	2							2
10														
11														
12														
13														
14														

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY: DATE/TIME
1: 10/7/15 1906

RECEIVED BY: DATE/TIME
1: 10/8/15 7:45

2:

3:

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Apollo Smyrna
PROJECT #: 02.20140391.00
SITE ADDRESS: 1850 S. Cobb Industrial Blvd SE Smyrna, GA 30082
SEND REPORT TO: Kristen Rivera
INVOICE TO: krivera@earthcon.com
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 66

Turnaround Time Request
X Standard 5 Business Days
O 2 Business Day Rush
O Next Business Day Rush
O Same Day Rush (auth req.)
O Other
STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-13
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 9:30:00 AM
Lab ID:	1510644-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	BRL		0.270	1.00	mg/L	R302043	1	10/13/2015 19:03	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/15/2015 02:25	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 02:25	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 02:25	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:25	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 02:25	NP
Surr: 4-Bromofluorobenzene	74.1		0	70.6-123	%REC	214391	1	10/15/2015 02:25	NP
Surr: Dibromofluoromethane	110		0	78.7-124	%REC	214391	1	10/15/2015 02:25	NP
Surr: Toluene-d8	99.5		0	81.3-120	%REC	214391	1	10/15/2015 02:25	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	8.8		0.37	1.0	mg/L	R302071	1	10/08/2015 12:16	JW
Nitrate	BRL		0.11	0.25	mg/L	R302071	1	10/08/2015 12:16	JW
Sulfate	BRL		0.54	1.0	mg/L	R302071	1	10/08/2015 12:16	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	0.20		0.0017	0.0090	mg/L	214186	1	10/09/2015 16:22	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214186	1	10/09/2015 16:22	SM
Methane	4.1		0.068	0.20	mg/L	214186	50	10/09/2015 16:28	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	65.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-7
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 10:45:00 AM
Lab ID:	1510644-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	1.83		0.270	1.00	mg/L	R302043	1	10/13/2015 19:37	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
1,1-Dichloroethene	0.006		0.002	0.005	mg/L	214391	1	10/15/2015 02:52	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 02:52	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 02:52	NP
cis-1,2-Dichloroethene	0.82		0.008	0.050	mg/L	214391	10	10/15/2015 13:50	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
trans-1,2-Dichloroethene	0.001	J	0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 02:52	NP
Vinyl chloride	0.60		0.007	0.020	mg/L	214391	10	10/15/2015 13:50	NP
Surr: 4-Bromofluorobenzene	83		0	70.6-123	%REC	214391	1	10/15/2015 02:52	NP
Surr: 4-Bromofluorobenzene	76.4		0	70.6-123	%REC	214391	10	10/15/2015 13:50	NP
Surr: Dibromofluoromethane	113		0	78.7-124	%REC	214391	1	10/15/2015 02:52	NP
Surr: Dibromofluoromethane	111		0	78.7-124	%REC	214391	10	10/15/2015 13:50	NP
Surr: Toluene-d8	94.2		0	81.3-120	%REC	214391	1	10/15/2015 02:52	NP
Surr: Toluene-d8	95.7		0	81.3-120	%REC	214391	10	10/15/2015 13:50	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	11		0.37	1.0	mg/L	R302071	1	10/08/2015 12:31	JW
Nitrate	BRL		0.11	0.25	mg/L	R302071	1	10/08/2015 12:31	JW
Sulfate	0.69	J	0.54	1.0	mg/L	R302071	1	10/08/2015 12:31	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	0.046		0.0017	0.0090	mg/L	214186	1	10/09/2015 16:44	SM
Ethylene	0.16		0.0012	0.0070	mg/L	214186	1	10/09/2015 16:44	SM
Methane	3.1		0.027	0.080	mg/L	214186	20	10/09/2015 17:12	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	120		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-9
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 9:45:00 AM
Lab ID:	1510644-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	1.33		0.270	1.00	mg/L	R302043	1	10/13/2015 20:08	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/15/2015 03:18	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 03:18	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 03:18	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:18	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 03:18	NP
Surr: 4-Bromofluorobenzene	70.6		0	70.6-123	%REC	214391	1	10/15/2015 03:18	NP
Surr: Dibromofluoromethane	108		0	78.7-124	%REC	214391	1	10/15/2015 03:18	NP
Surr: Toluene-d8	96.3		0	81.3-120	%REC	214391	1	10/15/2015 03:18	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	6.0		0.37	1.0	mg/L	R302071	1	10/08/2015 13:18	JW
Nitrate	BRL		0.11	0.25	mg/L	R302071	1	10/08/2015 13:18	JW
Sulfate	2.4		0.54	1.0	mg/L	R302071	1	10/08/2015 13:18	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214186	1	10/09/2015 16:48	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214186	1	10/09/2015 16:48	SM
Methane	0.080		0.0014	0.0040	mg/L	214186	1	10/09/2015 16:48	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	33.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-5
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 11:25:00 AM
Lab ID:	1510644-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	0.385	J	0.270	1.00	mg/L	R302043	1	10/13/2015 20:39	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/15/2015 03:44	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 03:44	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 03:44	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 03:44	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 03:44	NP
Surr: 4-Bromofluorobenzene	76.1		0	70.6-123	%REC	214391	1	10/15/2015 03:44	NP
Surr: Dibromofluoromethane	120		0	78.7-124	%REC	214391	1	10/15/2015 03:44	NP
Surr: Toluene-d8	98.1		0	81.3-120	%REC	214391	1	10/15/2015 03:44	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	5.4		0.37	1.0	mg/L	R302071	1	10/08/2015 13:33	JW
Nitrate	0.47		0.11	0.25	mg/L	R302071	1	10/08/2015 13:33	JW
Sulfate	1.3		0.54	1.0	mg/L	R302071	1	10/08/2015 13:33	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214186	1	10/09/2015 16:57	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214186	1	10/09/2015 16:57	SM
Methane	BRL		0.0014	0.0040	mg/L	214186	1	10/09/2015 16:57	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	27.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-8
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 2:00:00 PM
Lab ID:	1510644-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	BRL		0.270	1.00	mg/L	R302043	1	10/13/2015 21:08	YS
TCL VOLATILE ORGANICS SW8260B (SW5030B)									
1,1,1-Trichloroethane	0.006		0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
1,1-Dichloroethane	0.003	J	0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
1,1-Dichloroethene	0.020		0.002	0.005	mg/L	214391	1	10/15/2015 04:11	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 04:11	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 04:11	NP
cis-1,2-Dichloroethene	0.033		0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
Tetrachloroethene	0.52		0.009	0.050	mg/L	214391	10	10/15/2015 04:37	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 04:11	NP
Trichloroethene	1.2		0.008	0.050	mg/L	214391	10	10/15/2015 04:37	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 04:11	NP
Surr: 4-Bromofluorobenzene	71.7		0	70.6-123	%REC	214391	1	10/15/2015 04:11	NP
Surr: 4-Bromofluorobenzene	73.6		0	70.6-123	%REC	214391	10	10/15/2015 04:37	NP
Surr: Dibromofluoromethane	114		0	78.7-124	%REC	214391	1	10/15/2015 04:11	NP
Surr: Dibromofluoromethane	119		0	78.7-124	%REC	214391	10	10/15/2015 04:37	NP
Surr: Toluene-d8	98.7		0	81.3-120	%REC	214391	1	10/15/2015 04:11	NP
Surr: Toluene-d8	101		0	81.3-120	%REC	214391	10	10/15/2015 04:37	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	5.3		0.37	1.0	mg/L	R302071	1	10/08/2015 13:47	JW
Nitrate	0.30		0.11	0.25	mg/L	R302071	1	10/08/2015 13:47	JW
Sulfate	0.56	J	0.54	1.0	mg/L	R302071	1	10/08/2015 13:47	JW
GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)									
Ethane	BRL		0.0017	0.0090	mg/L	214186	1	10/09/2015 17:17	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214186	1	10/09/2015 17:17	SM
Methane	0.12		0.0014	0.0040	mg/L	214186	1	10/09/2015 17:17	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	29.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-11
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 3:20:00 PM
Lab ID:	1510644-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	0.758	J	0.270	1.00	mg/L	R302043	1	10/13/2015 21:38	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/15/2015 05:54	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 05:54	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 05:54	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 05:54	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 05:54	NP
Surr: 4-Bromofluorobenzene	73.2		0	70.6-123	%REC	214391	1	10/15/2015 05:54	NP
Surr: Dibromofluoromethane	120		0	78.7-124	%REC	214391	1	10/15/2015 05:54	NP
Surr: Toluene-d8	101		0	81.3-120	%REC	214391	1	10/15/2015 05:54	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	7.5		0.37	1.0	mg/L	R302071	1	10/08/2015 14:02	JW
Nitrate	BRL		0.11	0.25	mg/L	R302071	1	10/08/2015 14:02	JW
Sulfate	3.7		0.54	1.0	mg/L	R302071	1	10/08/2015 14:02	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214186	1	10/09/2015 17:23	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214186	1	10/09/2015 17:23	SM
Methane	2.8		0.027	0.080	mg/L	214186	20	10/09/2015 17:32	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	55.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-12
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 5:00:00 PM
Lab ID:	1510644-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	0.304	J	0.270	1.00	mg/L	R302043	1	10/13/2015 22:07	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/15/2015 06:20	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 06:20	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 06:20	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:20	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 06:20	NP
Surr: 4-Bromofluorobenzene	72.5		0	70.6-123	%REC	214391	1	10/15/2015 06:20	NP
Surr: Dibromofluoromethane	120		0	78.7-124	%REC	214391	1	10/15/2015 06:20	NP
Surr: Toluene-d8	99.9		0	81.3-120	%REC	214391	1	10/15/2015 06:20	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	6.5		0.37	1.0	mg/L	R302071	1	10/08/2015 14:17	JW
Nitrate	0.50		0.11	0.25	mg/L	R302071	1	10/08/2015 14:17	JW
Sulfate	BRL		0.54	1.0	mg/L	R302071	1	10/08/2015 14:17	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214186	1	10/09/2015 17:27	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214186	1	10/09/2015 17:27	SM
Methane	0.010		0.0014	0.0040	mg/L	214186	1	10/09/2015 17:27	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	17.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-10
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 2:25:00 PM
Lab ID:	1510644-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	0.483	J	0.270	1.00	mg/L	R302043	1	10/13/2015 22:34	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
1,1-Dichloroethane	0.001	J	0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/15/2015 06:46	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/15/2015 06:46	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/15/2015 06:46	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/15/2015 06:46	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/15/2015 06:46	NP
Surr: 4-Bromofluorobenzene	76.3		0	70.6-123	%REC	214391	1	10/15/2015 06:46	NP
Surr: Dibromofluoromethane	120		0	78.7-124	%REC	214391	1	10/15/2015 06:46	NP
Surr: Toluene-d8	102		0	81.3-120	%REC	214391	1	10/15/2015 06:46	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	7.1		0.37	1.0	mg/L	R302071	1	10/08/2015 14:32	JW
Nitrate	BRL		0.11	0.25	mg/L	R302071	1	10/08/2015 14:32	JW
Sulfate	0.89	J	0.54	1.0	mg/L	R302071	1	10/08/2015 14:32	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214302	1	10/13/2015 10:22	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214302	1	10/13/2015 10:22	SM
Methane	4.7		0.068	0.20	mg/L	214302	50	10/13/2015 10:42	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	62.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015
Lab ID:	1510644-009	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214391	1	10/14/2015 22:57	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
Acetone	BRL		0.003	0.050	mg/L	214391	1	10/14/2015 22:57	NP
Chloroethane	BRL		0.001	0.010	mg/L	214391	1	10/14/2015 22:57	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214391	1	10/14/2015 22:57	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214391	1	10/14/2015 22:57	NP
Surr: 4-Bromofluorobenzene	76.5		0	70.6-123	%REC	214391	1	10/14/2015 22:57	NP
Surr: Dibromofluoromethane	109		0	78.7-124	%REC	214391	1	10/14/2015 22:57	NP
Surr: Toluene-d8	98.6		0	81.3-120	%REC	214391	1	10/14/2015 22:57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Earthcon Consultants Work Order Number 1510644

Checklist completed by [signature] 10/8/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 4.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by [signature]

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 20-Oct-15

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Lab Order: 1510644

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1510644-001A	MW-13	10/7/2015 9:30:00AM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-001B	MW-13	10/7/2015 9:30:00AM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-001C	MW-13	10/7/2015 9:30:00AM	Groundwater	ION SCAN			10/08/2015
1510644-001D	MW-13	10/7/2015 9:30:00AM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-001E	MW-13	10/7/2015 9:30:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-001F	MW-13	10/7/2015 9:30:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-002A	MW-7	10/7/2015 10:45:00AM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-002B	MW-7	10/7/2015 10:45:00AM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-002C	MW-7	10/7/2015 10:45:00AM	Groundwater	ION SCAN			10/08/2015
1510644-002D	MW-7	10/7/2015 10:45:00AM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-002E	MW-7	10/7/2015 10:45:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-002F	MW-7	10/7/2015 10:45:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-003A	MW-9	10/7/2015 9:45:00AM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-003B	MW-9	10/7/2015 9:45:00AM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-003C	MW-9	10/7/2015 9:45:00AM	Groundwater	ION SCAN			10/08/2015
1510644-003D	MW-9	10/7/2015 9:45:00AM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-003E	MW-9	10/7/2015 9:45:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-003F	MW-9	10/7/2015 9:45:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-004A	MW-5	10/7/2015 11:25:00AM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-004B	MW-5	10/7/2015 11:25:00AM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-004C	MW-5	10/7/2015 11:25:00AM	Groundwater	ION SCAN			10/08/2015
1510644-004D	MW-5	10/7/2015 11:25:00AM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-004E	MW-5	10/7/2015 11:25:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-004F	MW-5	10/7/2015 11:25:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-005A	MW-8	10/7/2015 2:00:00PM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-005B	MW-8	10/7/2015 2:00:00PM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-005C	MW-8	10/7/2015 2:00:00PM	Groundwater	ION SCAN			10/08/2015
1510644-005D	MW-8	10/7/2015 2:00:00PM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-005E	MW-8	10/7/2015 2:00:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015

Analytical Environmental Services, Inc

Date: 20-Oct-15

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Lab Order: 1510644

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1510644-005F	MW-8	10/7/2015 2:00:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-006A	MW-11	10/7/2015 3:20:00PM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-006B	MW-11	10/7/2015 3:20:00PM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-006C	MW-11	10/7/2015 3:20:00PM	Groundwater	ION SCAN			10/08/2015
1510644-006D	MW-11	10/7/2015 3:20:00PM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-006E	MW-11	10/7/2015 3:20:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-006F	MW-11	10/7/2015 3:20:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-007A	MW-12	10/7/2015 5:00:00PM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-007B	MW-12	10/7/2015 5:00:00PM	Groundwater	GC Analysis of Gaseous Samples		10/9/2015 3:13:48PM	10/09/2015
1510644-007C	MW-12	10/7/2015 5:00:00PM	Groundwater	ION SCAN			10/08/2015
1510644-007D	MW-12	10/7/2015 5:00:00PM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-007E	MW-12	10/7/2015 5:00:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-007F	MW-12	10/7/2015 5:00:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-008A	MW-10	10/7/2015 2:25:00PM	Groundwater	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/15/2015
1510644-008B	MW-10	10/7/2015 2:25:00PM	Groundwater	GC Analysis of Gaseous Samples		10/12/2015 4:30:00PM	10/13/2015
1510644-008C	MW-10	10/7/2015 2:25:00PM	Groundwater	ION SCAN			10/08/2015
1510644-008D	MW-10	10/7/2015 2:25:00PM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510644-008E	MW-10	10/7/2015 2:25:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510644-008F	MW-10	10/7/2015 2:25:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510644-009A	TRIP BLANK	10/7/2015 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		10/14/2015 10:03:00PM	10/14/2015

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: 214186

Sample ID: **MB-214186** Client ID: Units: **mg/L** Prep Date: **10/09/2015** Run No: **302025**
SampleType: **MBLK** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214186** Analysis Date: **10/09/2015** Seq No: **6460424**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	BRL	0.0090									
Ethylene	BRL	0.0070									
Methane	BRL	0.0040									

Sample ID: **LCS-214186** Client ID: Units: **mg/L** Prep Date: **10/09/2015** Run No: **302025**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214186** Analysis Date: **10/09/2015** Seq No: **6460425**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1433	0.0090	200.0		71.6	41.2	115				
Ethylene	0.09337	0.0070	200.0		46.7	26.5	115				
Methane	0.1453	0.0040	200.0		72.7	45.1	115				

Sample ID: **LCSD-214186** Client ID: Units: **mg/L** Prep Date: **10/09/2015** Run No: **302025**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214186** Analysis Date: **10/09/2015** Seq No: **6460426**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1350	0.0090	200.0		67.5	41.2	115	143.3	5.95	20	
Ethylene	0.08915	0.0070	200.0		44.6	26.5	115	93.37	4.62	20	
Methane	0.1370	0.0040	200.0		68.5	45.1	115	145.3	5.94	20	

Sample ID: **1510644-007BMS** Client ID: **MW-12** Units: **mg/L** Prep Date: **10/09/2015** Run No: **302025**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214186** Analysis Date: **10/09/2015** Seq No: **6460429**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1291	0.0090	200.0		64.5	40.5	115				
Ethylene	0.08436	0.0070	200.0		42.2	25.1	115				
Methane	0.1453	0.0040	200.0	10.11	67.6	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: 214186

Sample ID: **1510644-007BMSD** Client ID: **MW-12** Units: **mg/L** Prep Date: **10/09/2015** Run No: **302025**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214186** Analysis Date: **10/09/2015** Seq No: **6460430**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1332	0.0090	200.0		66.6	40.5	115	129.1	3.13	20	
Ethylene	0.08803	0.0070	200.0		44.0	25.1	115	84.36	4.25	20	
Methane	0.1504	0.0040	200.0	10.11	70.1	40.4	115	145.3	3.44	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: 214302

Sample ID: **MB-214302** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **MBLK** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461462**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	BRL	0.0090									
Ethylene	BRL	0.0070									
Methane	BRL	0.0040									

Sample ID: **LCS-214302** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461463**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1587	0.0090	200.0		79.4	41.2	115				
Ethylene	0.1046	0.0070	200.0		52.3	26.5	115				
Methane	0.1691	0.0040	200.0		84.6	45.1	115				

Sample ID: **LCSD-214302** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461464**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1447	0.0090	200.0		72.3	41.2	115	158.7	9.27	20	
Ethylene	0.09584	0.0070	200.0		47.9	26.5	115	104.6	8.76	20	
Methane	0.1538	0.0040	200.0		76.9	45.1	115	169.1	9.54	20	

Sample ID: **1510791-002BMS** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302063**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/13/2015** Seq No: **6461478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1475	0.0090	200.0	31.53	58.0	40.5	115				
Ethylene	0.1201	0.0070	200.0	37.38	41.4	25.1	115				
Methane	0.1882	0.0040	200.0	43.01	72.6	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: 214302

Sample ID: **1510791-002BMSD** Client ID:
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**
Units: **mg/L** Prep Date: **10/12/2015** Run No: **302063**
BatchID: **214302** Analysis Date: **10/13/2015** Seq No: **6461479**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1478	0.0090	200.0	31.53	58.2	40.5	115	147.5	0.243	20	
Ethylene	0.1204	0.0070	200.0	37.38	41.5	25.1	115	120.1	0.271	20	
Methane	0.1890	0.0040	200.0	43.01	73.0	40.4	115	188.2	0.438	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: 214391

Sample ID: **MB-214391** Client ID: Units: **mg/L** Prep Date: **10/14/2015** Run No: **302147**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214391** Analysis Date: **10/14/2015** Seq No: **6464055**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.005									
1,1-Dichloroethane	BRL	0.005									
1,1-Dichloroethene	BRL	0.005									
1,2-Dichloroethane	BRL	0.005									
Acetone	BRL	0.050									
Chloroethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.005									
Cyclohexane	BRL	0.005									
Methylene chloride	BRL	0.005									
Tetrachloroethene	BRL	0.005									
trans-1,2-Dichloroethene	BRL	0.005									
Trichloroethene	BRL	0.005									
Vinyl chloride	BRL	0.002									
Surr: 4-Bromofluorobenzene	0.03862	0	50.00		77.2	70.6	123				
Surr: Dibromofluoromethane	0.05579	0	50.00		112	78.7	124				
Surr: Toluene-d8	0.04800	0	50.00		96.0	81.3	120				

Sample ID: **LCS-214391** Client ID: Units: **mg/L** Prep Date: **10/14/2015** Run No: **302147**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214391** Analysis Date: **10/14/2015** Seq No: **6464056**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.06800	0.005	50.00		136	64.2	137				
Trichloroethene	0.05382	0.005	50.00		108	70.5	134				
Surr: 4-Bromofluorobenzene	0.03861	0	50.00		77.2	70.6	123				
Surr: Dibromofluoromethane	0.05213	0	50.00		104	78.7	124				
Surr: Toluene-d8	0.04693	0	50.00		93.9	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: 214391

Sample ID: **1510644-002AMS**	Client ID: **MW-7**	Units: **mg/L**	Prep Date: **10/14/2015**	Run No: **302162**
SampleType: **MS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **214391**	Analysis Date: **10/15/2015**	Seq No: **6464869**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.5731	0.050	500.0	5.640	113	60.5	156				
Trichloroethene	0.5060	0.050	500.0		101	71.8	139				
Surr: 4-Bromofluorobenzene	0.3973	0	500.0		79.5	70.6	123				
Surr: Dibromofluoromethane	0.5464	0	500.0		109	78.7	124				
Surr: Toluene-d8	0.4618	0	500.0		92.4	81.3	120				

Sample ID: **1510644-002AMSD**	Client ID: **MW-7**	Units: **mg/L**	Prep Date: **10/14/2015**	Run No: **302162**
SampleType: **MSD**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **214391**	Analysis Date: **10/15/2015**	Seq No: **6464995**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.5693	0.050	500.0	5.640	113	60.5	156	573.1	0.665	20	
Trichloroethene	0.4995	0.050	500.0		99.9	71.8	139	506.0	1.29	20	
Surr: 4-Bromofluorobenzene	0.3900	0	500.0		78.0	70.6	123	397.3	0	0	
Surr: Dibromofluoromethane	0.5319	0	500.0		106	78.7	124	546.4	0	0	
Surr: Toluene-d8	0.4429	0	500.0		88.6	81.3	120	461.8	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: R302019

Sample ID: **MB-R302019**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302019**
SampleType: **MBLK**	TestCode: **Alkalinity by SM2320B**				BatchID: **R302019**		Analysis Date: **10/13/2015**		Seq No: **6460206**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	BRL	3.00									

Sample ID: **LCS-R302019**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302019**
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**				BatchID: **R302019**		Analysis Date: **10/13/2015**		Seq No: **6460207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	123.0	3.00	125.0		98.4	75	125				

Sample ID: **1510365-001ADUP**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302019**
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**				BatchID: **R302019**		Analysis Date: **10/13/2015**		Seq No: **6460258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	280.0	30.0						280.0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: R302032

Sample ID: **MB-R302032**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **302032**
SampleType: **MBLK**	TestCode: **Sulfide by SM4500-S2-F**			BatchID: **R302032**	Analysis Date: **10/13/2015**		Seq No: **6460572**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	BRL	1.00									

Sample ID: **LCS-R302032**	Client ID:			Units: **mg/L**	Prep Date:		Run No: **302032**
SampleType: **LCS**	TestCode: **Sulfide by SM4500-S2-F**			BatchID: **R302032**	Analysis Date: **10/13/2015**		Seq No: **6460573**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	388.0	1.00	388.0		100	90	110				

Sample ID: **1510644-001FMS**	Client ID: **MW-13**			Units: **mg/L**	Prep Date:		Run No: **302032**
SampleType: **MS**	TestCode: **Sulfide by SM4500-S2-F**			BatchID: **R302032**	Analysis Date: **10/13/2015**		Seq No: **6460586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	17.80	1.00	19.40		91.8	80	120				

Sample ID: **1510644-001FMSD**	Client ID: **MW-13**			Units: **mg/L**	Prep Date:		Run No: **302032**
SampleType: **MSD**	TestCode: **Sulfide by SM4500-S2-F**			BatchID: **R302032**	Analysis Date: **10/13/2015**		Seq No: **6460587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	18.00	1.00	19.00		94.7	80	120	17.80	1.12	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: R302043

Sample ID: **MB-R302043**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **MBLK**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/13/2015**		Seq No: **6460782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	BRL	1.00									

Sample ID: **LCS-R302043**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **LCS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/13/2015**		Seq No: **6460781**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	26.48	1.00	25.00		106	90	110				

Sample ID: **1510788-005BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **MS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/14/2015**		Seq No: **6460800**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	87.82	1.00	25.00	64.64	92.7	80	120				

Sample ID: **1510788-005BMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **MSD**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/14/2015**		Seq No: **6460801**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	88.14	1.00	25.00	64.64	94.0	80	120	87.82	0.364	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: R302071

Sample ID: **MB-R302071** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	BRL	1.0									
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R302071** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461691**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	9.316	1.0	10.00		93.2	90	110				
Nitrate	4.634	0.25	5.000		92.7	90	110				
Sulfate	23.83	1.0	25.00		95.3	90	110				

Sample ID: **1510719-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461706**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	141.8	10	100.0	46.89	94.9	90	110				
Nitrate	49.40	2.5	50.00	2.419	94.0	90	110				
Sulfate	280.9	10	250.0	33.51	99.0	90	110				

Sample ID: **1510721-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461712**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	133.1	10	100.0	40.17	92.9	90	110				
Nitrate	66.08	2.5	50.00	17.05	98.0	90	110				
Sulfate	263.1	10	250.0	32.97	92.1	90	110				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510644

ANALYTICAL QC SUMMARY REPORT

BatchID: R302071

Sample ID: **1510719-002BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **302071**
BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461707**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	136.0	10	100.0	46.89	89.1	90	110	141.8	4.16	20	S
Nitrate	54.07	2.5	50.00	2.419	103	90	110	49.40	9.02	20	
Sulfate	286.5	10	250.0	33.51	101	90	110	280.9	1.97	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 21, 2015

Kristen Rivera
EarthCon Consultants, Inc.
1880 West Oak Parkway
Marietta GA 30062

TEL: (770) 973-2100
FAX: (770) 973-7395

RE: Apollo Smyrna

Dear Kristen Rivera: Order No: 1510645

Analytical Environmental Services, Inc. received 1 samples on 10/8/2015 7:45:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

CRKanhai

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

AES

CHAIN OF CUSTODY

Work Order: 15106645

Date: 10/7/2015 Page 1 of 1

COMPANY:	ADDRESS:
EarthCon Consultants, Inc.	1880 West Oak Parkway Bldg 100, Ste 106 Marietta, GA 30062
PHONE: (770) 973-2100	FAX: (770)-973-7395
SAMPLED BY: Samantha Woolf, Kristen Hem.	SIGNATURE: SWoolf, KH

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs	GC Analysis	Ion Scan	TOC	Alkalinity	Sulfide							REMARKS	No # of Containers
							PRESERVATION (See codes)													
							H	H	NA	S	NA	N								
1	MW-6R	10/7/15	1655	X		GW	2	2	1	1	1	1								8
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Kristen Rivera	10/7/15 1900	1:	10/8/15 7:45
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Apollo Smyrna
PROJECT #: 02.20141391.00
SITE ADDRESS: 1850 S. Cobb Industrial Blvd SE Smyrna, GA 30082
SEND REPORT TO: Kristen Rivera
INVOICE TO: krivera@earthcon.com
(IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT

Total # of Containers: 8

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush **(auth req.)**
- [ ] Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: EarthCon Consultants, Inc.
Project: Apollo Smyrna
Lab ID: 1510645

Case Narrative

Volatile Organic Compounds Analysis by Method 8260B:

1,1-Dichloroethene values for the QC samples 1510791-007AMS/MSD are "E" qualified indicating estimated values over linear calibration range due to the level of target analyte present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-6R
Project Name:	Apollo Smyrna	**Collection Date:**	10/7/2015 4:55:00 PM
Lab ID:	1510645-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	0.627	J	0.270	1.00	mg/L	R302043	1	10/13/2015 23:00	YS
TCL VOLATILE ORGANICS SW8260B (SW5030B)									
1,1,1-Trichloroethane	0.004	J	0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
1,1-Dichloroethane	0.016		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
1,1-Dichloroethene	0.21		0.015	0.050	mg/L	214354	10	10/14/2015 14:38	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/14/2015 06:02	NP
Chloroethane	BRL		0.001	0.010	mg/L	214354	1	10/14/2015 06:02	NP
cis-1,2-Dichloroethene	0.007		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
Tetrachloroethene	0.013		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
Trichloroethene	0.006		0.001	0.005	mg/L	214354	1	10/14/2015 06:02	NP
Vinyl chloride	0.031		0.001	0.002	mg/L	214354	1	10/14/2015 06:02	NP
Surr: 4-Bromofluorobenzene	75.8		0	70.6-123	%REC	214354	1	10/14/2015 06:02	NP
Surr: 4-Bromofluorobenzene	81.8		0	70.6-123	%REC	214354	10	10/14/2015 14:38	NP
Surr: Dibromofluoromethane	118		0	78.7-124	%REC	214354	1	10/14/2015 06:02	NP
Surr: Dibromofluoromethane	101		0	78.7-124	%REC	214354	10	10/14/2015 14:38	NP
Surr: Toluene-d8	100		0	81.3-120	%REC	214354	1	10/14/2015 06:02	NP
Surr: Toluene-d8	94.2		0	81.3-120	%REC	214354	10	10/14/2015 14:38	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	4.9		0.37	1.0	mg/L	R302071	1	10/08/2015 15:30	JW
Nitrate	0.62		0.11	0.25	mg/L	R302071	1	10/08/2015 15:30	JW
Sulfate	1.3		0.54	1.0	mg/L	R302071	1	10/08/2015 15:30	JW
GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)									
Ethane	0.0087	J	0.0017	0.0090	mg/L	214302	1	10/13/2015 11:11	SM
Ethylene	0.0032	J	0.0012	0.0070	mg/L	214302	1	10/13/2015 11:11	SM
Methane	0.32		0.014	0.040	mg/L	214302	10	10/13/2015 11:17	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	37.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EarthCon Work Order Number 1510645

Checklist completed by Signature 10/8/15 Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 4.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 20-Oct-15

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Lab Order: 1510645

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1510645-001A	MW-6R	10/7/2015 4:55:00PM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510645-001B	MW-6R	10/7/2015 4:55:00PM	Groundwater	GC Analysis of Gaseous Samples		10/12/2015 4:30:00PM	10/13/2015
1510645-001C	MW-6R	10/7/2015 4:55:00PM	Groundwater	ION SCAN			10/08/2015
1510645-001D	MW-6R	10/7/2015 4:55:00PM	Groundwater	Total Organic Carbon (TOC)			10/13/2015
1510645-001E	MW-6R	10/7/2015 4:55:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510645-001F	MW-6R	10/7/2015 4:55:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: 214302

Sample ID: **MB-214302** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **MBLK** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461462**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	BRL	0.0090									
Ethylene	BRL	0.0070									
Methane	BRL	0.0040									

Sample ID: **LCS-214302** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461463**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1587	0.0090	200.0		79.4	41.2	115				
Ethylene	0.1046	0.0070	200.0		52.3	26.5	115				
Methane	0.1691	0.0040	200.0		84.6	45.1	115				

Sample ID: **LCSD-214302** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461464**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1447	0.0090	200.0		72.3	41.2	115	158.7	9.27	20	
Ethylene	0.09584	0.0070	200.0		47.9	26.5	115	104.6	8.76	20	
Methane	0.1538	0.0040	200.0		76.9	45.1	115	169.1	9.54	20	

Sample ID: **1510791-002BMS** Client ID: Units: **mg/L** Prep Date: **10/12/2015** Run No: **302063**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/13/2015** Seq No: **6461478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1475	0.0090	200.0	31.53	58.0	40.5	115				
Ethylene	0.1201	0.0070	200.0	37.38	41.4	25.1	115				
Methane	0.1882	0.0040	200.0	43.01	72.6	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: 214302

Sample ID: **1510791-002BMSD** Client ID:
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175**
Units: **mg/L** Prep Date: **10/12/2015** Run No: **302063**
BatchID: **214302** Analysis Date: **10/13/2015** Seq No: **6461479**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	0.1478	0.0090	200.0	31.53	58.2	40.5	115	147.5	0.243	20	
Ethylene	0.1204	0.0070	200.0	37.38	41.5	25.1	115	120.1	0.271	20	
Methane	0.1890	0.0040	200.0	43.01	73.0	40.4	115	188.2	0.438	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: 214354

Sample ID: **MB-214354**	Client ID:		Units: **mg/L**	Prep Date: **10/13/2015**	Run No: **302075**
SampleType: **MBLK**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **214354**	Analysis Date: **10/13/2015**	Seq No: **6461837**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.005									
1,1-Dichloroethane	BRL	0.005									
1,1-Dichloroethene	BRL	0.005									
1,2-Dichloroethane	BRL	0.005									
Acetone	BRL	0.050									
Chloroethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.005									
Cyclohexane	BRL	0.005									
Methylene chloride	BRL	0.005									
Tetrachloroethene	BRL	0.005									
trans-1,2-Dichloroethene	BRL	0.005									
Trichloroethene	BRL	0.005									
Vinyl chloride	BRL	0.002									
Surr: 4-Bromofluorobenzene	0.03727	0	50.00		74.5	70.6	123				
Surr: Dibromofluoromethane	0.05968	0	50.00		119	78.7	124				
Surr: Toluene-d8	0.04974	0	50.00		99.5	81.3	120				

Sample ID: **LCS-214354**	Client ID:		Units: **mg/L**	Prep Date: **10/13/2015**	Run No: **302088**
SampleType: **LCS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**		BatchID: **214354**	Analysis Date: **10/14/2015**	Seq No: **6462133**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.06462	0.005	50.00		129	64.2	137				
Trichloroethene	0.05628	0.005	50.00		113	70.5	134				
Surr: 4-Bromofluorobenzene	0.03947	0	50.00		78.9	70.6	123				
Surr: Dibromofluoromethane	0.04760	0	50.00		95.2	78.7	124				
Surr: Toluene-d8	0.04631	0	50.00		92.6	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: 214354

Sample ID: **1510791-007AMS** Client ID:
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **mg/L** Prep Date: **10/13/2015** Run No: **302075**
BatchID: **214354** Analysis Date: **10/14/2015** Seq No: **6461840**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	28.41	0.50	5000	20320	162	60.5	156				SE
Trichloroethene	6.030	0.50	5000		121	71.8	139				
Surr: 4-Bromofluorobenzene	3.794	0	5000		75.9	70.6	123				
Surr: Dibromofluoromethane	5.609	0	5000		112	78.7	124				
Surr: Toluene-d8	4.756	0	5000		95.1	81.3	120				

Sample ID: **1510791-007AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **mg/L** Prep Date: **10/13/2015** Run No: **302075**
BatchID: **214354** Analysis Date: **10/14/2015** Seq No: **6461841**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	28.05	0.50	5000	20320	154	60.5	156	28410	1.30	20	E
Trichloroethene	5.914	0.50	5000		118	71.8	139	6030	1.94	20	
Surr: 4-Bromofluorobenzene	3.922	0	5000		78.4	70.6	123	3794	0	0	
Surr: Dibromofluoromethane	5.347	0	5000		107	78.7	124	5609	0	0	
Surr: Toluene-d8	4.726	0	5000		94.5	81.3	120	4756	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: R302019

Sample ID: **MB-R302019**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302019**
SampleType: **MBLK**	TestCode: **Alkalinity by SM2320B**				BatchID: **R302019**		Analysis Date: **10/13/2015**		Seq No: **6460206**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	BRL	3.00									

Sample ID: **LCS-R302019**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302019**
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**				BatchID: **R302019**		Analysis Date: **10/13/2015**		Seq No: **6460207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	123.0	3.00	125.0		98.4	75	125				

Sample ID: **1510365-001ADUP**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302019**
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**				BatchID: **R302019**		Analysis Date: **10/13/2015**		Seq No: **6460258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	280.0	30.0						280.0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: R302032

Sample ID: **MB-R302032**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302032**
SampleType: **MBLK**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460572**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	BRL	1.00									

Sample ID: **LCS-R302032**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302032**
SampleType: **LCS**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460573**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	388.0	1.00	388.0		100	90	110				

Sample ID: **1510644-001FMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302032**
SampleType: **MS**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460586**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	17.80	1.00	19.40		91.8	80	120				

Sample ID: **1510644-001FMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302032**
SampleType: **MSD**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	18.00	1.00	19.00		94.7	80	120	17.80	1.12	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: R302043

Sample ID: **MB-R302043**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **MBLK**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/13/2015**		Seq No: **6460782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	BRL	1.00									

Sample ID: **LCS-R302043**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **LCS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/13/2015**		Seq No: **6460781**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	26.48	1.00	25.00		106	90	110				

Sample ID: **1510788-005BMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **MS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/14/2015**		Seq No: **6460800**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	87.82	1.00	25.00	64.64	92.7	80	120				

Sample ID: **1510788-005BMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302043**
SampleType: **MSD**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302043**		Analysis Date: **10/14/2015**		Seq No: **6460801**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	88.14	1.00	25.00	64.64	94.0	80	120	87.82	0.364	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: R302071

Sample ID: **MB-R302071** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461692**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	BRL	1.0									
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R302071** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461691**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	9.316	1.0	10.00		93.2	90	110				
Nitrate	4.634	0.25	5.000		92.7	90	110				
Sulfate	23.83	1.0	25.00		95.3	90	110				

Sample ID: **1510719-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461706**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	141.8	10	100.0	46.89	94.9	90	110				
Nitrate	49.40	2.5	50.00	2.419	94.0	90	110				
Sulfate	280.9	10	250.0	33.51	99.0	90	110				

Sample ID: **1510721-002BMS** Client ID: Units: **mg/L** Prep Date: Run No: **302071**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461712**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	133.1	10	100.0	40.17	92.9	90	110				
Nitrate	66.08	2.5	50.00	17.05	98.0	90	110				
Sulfate	263.1	10	250.0	32.97	92.1	90	110				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510645

ANALYTICAL QC SUMMARY REPORT

BatchID: R302071

Sample ID: **1510719-002BMSD** Client ID:
SampleType: **MSD** TestCode: **ION SCAN SW9056A**
Units: **mg/L** Prep Date: Run No: **302071**
BatchID: **R302071** Analysis Date: **10/08/2015** Seq No: **6461707**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	136.0	10	100.0	46.89	89.1	90	110	141.8	4.16	20	S
Nitrate	54.07	2.5	50.00	2.419	103	90	110	49.40	9.02	20	
Sulfate	286.5	10	250.0	33.51	101	90	110	280.9	1.97	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 21, 2015

Kristen Rivera
EarthCon Consultants, Inc.
1880 West Oak Parkway
Marietta GA 30062

TEL: (770) 973-2100
FAX: (770) 973-7395

RE: Apollo Smyrna

Dear Kristen Rivera: Order No: 1510791

Analytical Environmental Services, Inc. received 11 samples on 10/8/2015 4:57:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

CRKanhai

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1510791

Date: 10/8/15 Page 1 of 1

COMPANY: Earth Con Consultants Inc
ADDRESS: 1080 West Oak Ridge Blvd 100 STE 106 Marietta, GA 30062
PHONE: 770-973-2100
FAX: 770-973-7395
SAMPLED BY: Kent Davis Samantha Woolf
SIGNATURE: Kent Davis S Woolf

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)												No # of Containers
	ANALYSIS REQUESTED						VOCs	MEK Gasses	TOC	Iron	Alkalinity	Sulfide		VOCs	Wet Chem				
							H	H	S	F	I			S/M+I	I				
1	MW-3	10/8/15	0940	X		GW	2	2	1	1	1	1							8
2	Dup-1		—	X		GW	2	2	1	1	1	1							8
3	MW-5		0900	X		GW	2	2	1	1	1	1							8
4	MW-1		1125	X		GW	2	2	1	1	1	1							8
5	MW-2		1040	X		GW	2	2	1	1	1	1							8
6	DW-1		1430	X		GW	2	2	1	1	1	1							8
7	MW-4		1415	X		GW	2	2	1	1	1	1							8
8	SW-2		1455	X		SW	2												2
9	SW-1		1500	X		SW	2												2
10	Stormwater Sed-3		1530	X		SE								3	1				4
11	Trip Blank		—	X		W	2												2
12																			
13																			
14																			

REMARKS

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY: 1: Kent Davis 10/8/15 1657
RECEIVED BY: 1: Pamfaddas 10/8/15 1657
DATE/TIME

2:
3:

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Apollo Smyrna
PROJECT #: 02.20140396.00
SITE ADDRESS: 1850 S Cobb Ind. Blvd
SEND REPORT TO: Kristen Arnold
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 66

Turnaround Time Request
(X) Standard 5 Business Days
( ) 2 Business Day Rush
( ) Next Business Day Rush
( ) Same Day Rush (auth req.)
( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: EarthCon Consultants, Inc.
Project: Apollo Smyrna
Lab ID: 1510791

Case Narrative

Sample Receiving Nonconformance:

The collection dates for samples 1510791-002 through -010 were not listed on the Chain of Custody (COC). The dates were reported as listed on the sample containers.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, sample 1510791-007A required dilution during preparation and/or analysis resulting in elevated reporting limits.

1,1-Dichloroethene values for the QC samples 1510791-007AMS/MSD are "E" qualified indicating estimated values over linear calibration range due to the level of target analyte present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-3
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 9:40:00 AM
Lab ID:	1510791-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	25.9		0.270	1.00	mg/L	R302290	1	10/14/2015 21:26	YS
TCL VOLATILE ORGANICS SW8260B (SW5030B)									
1,1,1-Trichloroethane	1.2		0.033	0.25	mg/L	214354	50	10/14/2015 03:52	NP
1,1-Dichloroethane	1.8		0.046	0.25	mg/L	214354	50	10/14/2015 03:52	NP
1,1-Dichloroethene	0.90		0.076	0.25	mg/L	214354	50	10/14/2015 03:52	NP
1,2-Dichloroethane	0.008		0.001	0.005	mg/L	214354	1	10/14/2015 16:49	NP
Acetone	10		0.16	2.5	mg/L	214354	50	10/14/2015 03:52	NP
Chloroethane	0.42		0.046	0.25	mg/L	214354	50	10/14/2015 03:52	NP
cis-1,2-Dichloroethene	4.9		0.040	0.25	mg/L	214354	50	10/14/2015 03:52	NP
Cyclohexane	0.007		0.001	0.005	mg/L	214354	1	10/14/2015 16:49	NP
Methylene chloride	0.005		0.001	0.005	mg/L	214354	1	10/14/2015 16:49	NP
Tetrachloroethene	0.020		0.001	0.005	mg/L	214354	1	10/14/2015 16:49	NP
trans-1,2-Dichloroethene	0.006		0.001	0.005	mg/L	214354	1	10/14/2015 16:49	NP
Trichloroethene	0.097		0.001	0.005	mg/L	214354	1	10/14/2015 16:49	NP
Vinyl chloride	1.7		0.037	0.10	mg/L	214354	50	10/14/2015 03:52	NP
Surr: 4-Bromofluorobenzene	104		0	70.6-123	%REC	214354	1	10/14/2015 16:49	NP
Surr: 4-Bromofluorobenzene	76.2		0	70.6-123	%REC	214354	50	10/14/2015 03:52	NP
Surr: Dibromofluoromethane	114		0	78.7-124	%REC	214354	1	10/14/2015 16:49	NP
Surr: Dibromofluoromethane	124		0	78.7-124	%REC	214354	50	10/14/2015 03:52	NP
Surr: Toluene-d8	98.3		0	81.3-120	%REC	214354	1	10/14/2015 16:49	NP
Surr: Toluene-d8	98.2		0	81.3-120	%REC	214354	50	10/14/2015 03:52	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	100		3.7	10	mg/L	R302110	10	10/09/2015 12:08	JW
Nitrate	BRL		0.11	0.25	mg/L	R302110	1	10/09/2015 09:53	JW
Sulfate	2.8		0.54	1.0	mg/L	R302110	1	10/09/2015 09:53	JW
GC Analysis of Gaseous Samples SOP-RSK 175 (RSK175)									
Ethane	0.12		0.0017	0.0090	mg/L	214302	1	10/13/2015 11:43	SM
Ethylene	0.22		0.0012	0.0070	mg/L	214302	1	10/13/2015 11:43	SM
Methane	1.5		0.014	0.040	mg/L	214302	10	10/13/2015 11:49	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	175		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	DUP-1
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015
Lab ID:	1510791-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	15.7		0.270	1.00	mg/L	R302290	1	10/14/2015 22:58	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	0.11		0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
1,1-Dichloroethane	0.38		0.046	0.25	mg/L	214354	50	10/14/2015 04:18	NP
1,1-Dichloroethene	0.018		0.002	0.005	mg/L	214354	1	10/14/2015 15:56	NP
1,2-Dichloroethane	0.001	J	0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
Acetone	3.6		0.16	2.5	mg/L	214354	50	10/14/2015 04:18	NP
Chloroethane	0.061		0.001	0.010	mg/L	214354	1	10/14/2015 15:56	NP
cis-1,2-Dichloroethene	0.14		0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
Cyclohexane	0.008		0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
Methylene chloride	0.002	J	0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
Tetrachloroethene	0.002	J	0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
Trichloroethene	0.010		0.001	0.005	mg/L	214354	1	10/14/2015 15:56	NP
Vinyl chloride	0.090		0.001	0.002	mg/L	214354	1	10/14/2015 15:56	NP
Surr: 4-Bromofluorobenzene	84.8		0	70.6-123	%REC	214354	1	10/14/2015 15:56	NP
Surr: 4-Bromofluorobenzene	76.2		0	70.6-123	%REC	214354	50	10/14/2015 04:18	NP
Surr: Dibromofluoromethane	122		0	78.7-124	%REC	214354	1	10/14/2015 15:56	NP
Surr: Dibromofluoromethane	121		0	78.7-124	%REC	214354	50	10/14/2015 04:18	NP
Surr: Toluene-d8	99.7		0	81.3-120	%REC	214354	1	10/14/2015 15:56	NP
Surr: Toluene-d8	102		0	81.3-120	%REC	214354	50	10/14/2015 04:18	NP
Sulfide by SM4500-S2-F									
Sulfide	0.800	J	0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	63		3.7	10	mg/L	R302110	10	10/09/2015 12:23	JW
Nitrate	BRL		0.11	0.25	mg/L	R302110	1	10/09/2015 10:08	JW
Sulfate	16		0.54	1.0	mg/L	R302110	1	10/09/2015 10:08	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	0.032		0.0017	0.0090	mg/L	214302	1	10/13/2015 12:03	SM
Ethylene	0.037		0.0012	0.0070	mg/L	214302	1	10/13/2015 12:03	SM
Methane	0.043		0.0014	0.0040	mg/L	214302	1	10/13/2015 12:03	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	170		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-15
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 9:00:00 AM
Lab ID:	1510791-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	2.30		0.270	1.00	mg/L	R302290	1	10/14/2015 23:23	YS
TCL VOLATILE ORGANICS SW8260B					**(SW5030B)**				
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
1,1-Dichloroethane	0.004	J	0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214354	1	10/14/2015 01:42	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/14/2015 01:42	NP
Chloroethane	0.078		0.001	0.010	mg/L	214354	1	10/14/2015 01:42	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 01:42	NP
Vinyl chloride	0.002		0.001	0.002	mg/L	214354	1	10/14/2015 01:42	NP
Surr: 4-Bromofluorobenzene	74.8		0	70.6-123	%REC	214354	1	10/14/2015 01:42	NP
Surr: Dibromofluoromethane	117		0	78.7-124	%REC	214354	1	10/14/2015 01:42	NP
Surr: Toluene-d8	97.8		0	81.3-120	%REC	214354	1	10/14/2015 01:42	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	32		1.8	5.0	mg/L	R302110	5	10/09/2015 13:23	JW
Nitrate	BRL		0.11	0.25	mg/L	R302110	1	10/09/2015 10:23	JW
Sulfate	BRL		0.54	1.0	mg/L	R302110	1	10/09/2015 10:23	JW
GC Analysis of Gaseous Samples SOP-RSK 175					**(RSK175)**				
Ethane	0.031		0.0017	0.0090	mg/L	214302	1	10/13/2015 12:12	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214302	1	10/13/2015 12:12	SM
Methane	10		0.14	0.40	mg/L	214302	100	10/13/2015 12:18	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	168		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-1
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 11:25:00 AM
Lab ID:	1510791-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	18.3		0.270	1.00	mg/L	R302290	1	10/14/2015 23:48	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	0.10		0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
1,1-Dichloroethane	0.37		0.018	0.10	mg/L	214354	20	10/14/2015 15:30	NP
1,1-Dichloroethene	0.015		0.002	0.005	mg/L	214354	1	10/14/2015 02:08	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
Acetone	3.6		0.065	1.0	mg/L	214354	20	10/14/2015 15:30	NP
Chloroethane	0.056		0.001	0.010	mg/L	214354	1	10/14/2015 02:08	NP
cis-1,2-Dichloroethene	0.13		0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
Cyclohexane	0.008		0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
Methylene chloride	0.002	J	0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
Tetrachloroethene	0.002	J	0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
Trichloroethene	0.008		0.001	0.005	mg/L	214354	1	10/14/2015 02:08	NP
Vinyl chloride	0.082		0.001	0.002	mg/L	214354	1	10/14/2015 02:08	NP
Surr: 4-Bromofluorobenzene	82.2		0	70.6-123	%REC	214354	1	10/14/2015 02:08	NP
Surr: 4-Bromofluorobenzene	75.8		0	70.6-123	%REC	214354	20	10/14/2015 15:30	NP
Surr: Dibromofluoromethane	121		0	78.7-124	%REC	214354	1	10/14/2015 02:08	NP
Surr: Dibromofluoromethane	116		0	78.7-124	%REC	214354	20	10/14/2015 15:30	NP
Surr: Toluene-d8	100		0	81.3-120	%REC	214354	1	10/14/2015 02:08	NP
Surr: Toluene-d8	93.8		0	81.3-120	%REC	214354	20	10/14/2015 15:30	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	63		3.7	10	mg/L	R302110	10	10/09/2015 13:38	JW
Nitrate	BRL		0.11	0.25	mg/L	R302110	1	10/09/2015 10:38	JW
Sulfate	15		0.54	1.0	mg/L	R302110	1	10/09/2015 10:38	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	0.015		0.0017	0.0090	mg/L	214349	1	10/14/2015 13:04	SM
Ethylene	0.021		0.0012	0.0070	mg/L	214349	1	10/14/2015 13:04	SM
Methane	0.021		0.0014	0.0040	mg/L	214349	1	10/14/2015 13:04	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	155		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-2
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 10:40:00 AM
Lab ID:	1510791-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	BRL		0.270	1.00	mg/L	R302290	1	10/15/2015 00:10	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214354	1	10/14/2015 02:34	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/14/2015 02:34	NP
Chloroethane	BRL		0.001	0.010	mg/L	214354	1	10/14/2015 02:34	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 02:34	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214354	1	10/14/2015 02:34	NP
Surr: 4-Bromofluorobenzene	76		0	70.6-123	%REC	214354	1	10/14/2015 02:34	NP
Surr: Dibromofluoromethane	112		0	78.7-124	%REC	214354	1	10/14/2015 02:34	NP
Surr: Toluene-d8	98.8		0	81.3-120	%REC	214354	1	10/14/2015 02:34	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	2.0		0.37	1.0	mg/L	R302110	1	10/09/2015 10:54	JW
Nitrate	0.63		0.11	0.25	mg/L	R302110	1	10/09/2015 10:54	JW
Sulfate	8.7		0.54	1.0	mg/L	R302110	1	10/09/2015 10:54	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214349	1	10/14/2015 13:09	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214349	1	10/14/2015 13:09	SM
Methane	BRL		0.0014	0.0040	mg/L	214349	1	10/14/2015 13:09	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	21.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	DW-1
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 2:30:00 PM
Lab ID:	1510791-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	BRL		0.270	1.00	mg/L	R302290	1	10/15/2015 00:31	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	0.088		0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
1,1-Dichloroethane	0.46		0.018	0.10	mg/L	214354	20	10/14/2015 05:10	NP
1,1-Dichloroethene	0.68		0.030	0.10	mg/L	214354	20	10/14/2015 05:10	NP
1,2-Dichloroethane	0.005	J	0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/14/2015 16:23	NP
Chloroethane	0.49		0.018	0.20	mg/L	214354	20	10/14/2015 05:10	NP
cis-1,2-Dichloroethene	0.079		0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
Methylene chloride	0.015		0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
Tetrachloroethene	0.54		0.019	0.10	mg/L	214354	20	10/14/2015 05:10	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
Trichloroethene	0.086		0.001	0.005	mg/L	214354	1	10/14/2015 16:23	NP
Vinyl chloride	0.11		0.001	0.002	mg/L	214354	1	10/14/2015 16:23	NP
Surr: 4-Bromofluorobenzene	89.5		0	70.6-123	%REC	214354	1	10/14/2015 16:23	NP
Surr: 4-Bromofluorobenzene	75.3		0	70.6-123	%REC	214354	20	10/14/2015 05:10	NP
Surr: Dibromofluoromethane	118		0	78.7-124	%REC	214354	1	10/14/2015 16:23	NP
Surr: Dibromofluoromethane	111		0	78.7-124	%REC	214354	20	10/14/2015 05:10	NP
Surr: Toluene-d8	95.7		0	81.3-120	%REC	214354	1	10/14/2015 16:23	NP
Surr: Toluene-d8	97.9		0	81.3-120	%REC	214354	20	10/14/2015 05:10	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	42		1.8	5.0	mg/L	R302110	5	10/09/2015 13:53	JW
Nitrate	0.20	J	0.11	0.25	mg/L	R302110	1	10/09/2015 11:09	JW
Sulfate	BRL		0.54	1.0	mg/L	R302110	1	10/09/2015 11:09	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	0.011		0.0017	0.0090	mg/L	214349	1	10/14/2015 13:15	SM
Ethylene	0.25		0.0012	0.0070	mg/L	214349	1	10/14/2015 13:15	SM
Methane	1.8		0.027	0.080	mg/L	214349	20	10/14/2015 13:26	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	104		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-4
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 2:15:00 PM
Lab ID:	1510791-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	BRL		0.270	1.00	mg/L	R302290	1	10/15/2015 00:51	YS
TCL VOLATILE ORGANICS SW8260B						**(SW5030B)**			
1,1,1-Trichloroethane	1.6		0.067	0.50	mg/L	214354	100	10/14/2015 00:23	NP
1,1-Dichloroethane	BRL		0.091	0.50	mg/L	214354	100	10/14/2015 00:23	NP
1,1-Dichloroethene	19		0.76	2.5	mg/L	214354	500	10/14/2015 15:04	NP
1,2-Dichloroethane	BRL		0.079	0.50	mg/L	214354	100	10/14/2015 00:23	NP
Acetone	BRL		0.32	5.0	mg/L	214354	100	10/14/2015 00:23	NP
Chloroethane	BRL		0.091	1.0	mg/L	214354	100	10/14/2015 00:23	NP
cis-1,2-Dichloroethene	BRL		0.080	0.50	mg/L	214354	100	10/14/2015 00:23	NP
Cyclohexane	BRL		0.12	0.50	mg/L	214354	100	10/14/2015 00:23	NP
Methylene chloride	BRL		0.094	0.50	mg/L	214354	100	10/14/2015 00:23	NP
Tetrachloroethene	2.0		0.093	0.50	mg/L	214354	100	10/14/2015 00:23	NP
trans-1,2-Dichloroethene	BRL		0.089	0.50	mg/L	214354	100	10/14/2015 00:23	NP
Trichloroethene	BRL		0.080	0.50	mg/L	214354	100	10/14/2015 00:23	NP
Vinyl chloride	BRL		0.074	0.20	mg/L	214354	100	10/14/2015 00:23	NP
Surr: 4-Bromofluorobenzene	76.7		0	70.6-123	%REC	214354	500	10/14/2015 15:04	NP
Surr: 4-Bromofluorobenzene	72.9		0	70.6-123	%REC	214354	100	10/14/2015 00:23	NP
Surr: Dibromofluoromethane	104		0	78.7-124	%REC	214354	500	10/14/2015 15:04	NP
Surr: Dibromofluoromethane	122		0	78.7-124	%REC	214354	100	10/14/2015 00:23	NP
Surr: Toluene-d8	93.8		0	81.3-120	%REC	214354	500	10/14/2015 15:04	NP
Surr: Toluene-d8	100		0	81.3-120	%REC	214354	100	10/14/2015 00:23	NP
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R302032	1	10/13/2015 11:00	PF
ION SCAN SW9056A									
Chloride	52		1.8	5.0	mg/L	R302110	5	10/09/2015 14:08	JW
Nitrate	BRL		0.11	0.25	mg/L	R302110	1	10/09/2015 11:24	JW
Sulfate	BRL		0.54	1.0	mg/L	R302110	1	10/09/2015 11:24	JW
GC Analysis of Gaseous Samples SOP-RSK 175						**(RSK175)**			
Ethane	BRL		0.0017	0.0090	mg/L	214349	1	10/14/2015 13:20	SM
Ethylene	BRL		0.0012	0.0070	mg/L	214349	1	10/14/2015 13:20	SM
Methane	0.012		0.0014	0.0040	mg/L	214349	1	10/14/2015 13:20	SM
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	53.0		0.672	3.00	mg/L	R302019	1	10/13/2015 15:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SW-2
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 2:55:00 PM
Lab ID:	1510791-008	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5030B)**				
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
1,1-Dichloroethane	0.001	J	0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214354	1	10/14/2015 03:00	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/14/2015 03:00	NP
Chloroethane	BRL		0.001	0.010	mg/L	214354	1	10/14/2015 03:00	NP
cis-1,2-Dichloroethene	0.001	J	0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
Trichloroethene	0.002	J	0.001	0.005	mg/L	214354	1	10/14/2015 03:00	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214354	1	10/14/2015 03:00	NP
Surr: 4-Bromofluorobenzene	77.5		0	70.6-123	%REC	214354	1	10/14/2015 03:00	NP
Surr: Dibromofluoromethane	117		0	78.7-124	%REC	214354	1	10/14/2015 03:00	NP
Surr: Toluene-d8	101		0	81.3-120	%REC	214354	1	10/14/2015 03:00	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SW-1
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 3:00:00 PM
Lab ID:	1510791-009	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
1,1-Dichloroethane	0.006		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214354	1	10/14/2015 03:26	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/14/2015 03:26	NP
Chloroethane	BRL		0.001	0.010	mg/L	214354	1	10/14/2015 03:26	NP
cis-1,2-Dichloroethene	0.001	J	0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/14/2015 03:26	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214354	1	10/14/2015 03:26	NP
Surr: 4-Bromofluorobenzene	76.5		0	70.6-123	%REC	214354	1	10/14/2015 03:26	NP
Surr: Dibromofluoromethane	118		0	78.7-124	%REC	214354	1	10/14/2015 03:26	NP
Surr: Toluene-d8	96.5		0	81.3-120	%REC	214354	1	10/14/2015 03:26	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	STORMWATER SED-3
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015 3:30:00 PM
Lab ID:	1510791-010	**Matrix:**	Sediment

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**				
1,1,1-Trichloroethane	BRL		0.00066	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
1,1-Dichloroethane	BRL		0.00081	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
1,1-Dichloroethene	BRL		0.00071	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
1,2-Dichloroethane	BRL		0.00040	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Acetone	BRL		0.0047	0.062	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Chloroethane	BRL		0.0011	0.0062	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
cis-1,2-Dichloroethene	BRL		0.00087	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Cyclohexane	BRL		0.0011	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Methylene chloride	BRL		0.0017	0.012	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Tetrachloroethene	BRL		0.00051	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
trans-1,2-Dichloroethene	BRL		0.0012	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Trichloroethene	BRL		0.00072	0.0031	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Vinyl chloride	BRL		0.0011	0.0062	mg/Kg-dry	214206	1	10/12/2015 23:00	CG
Surr: 4-Bromofluorobenzene	89.3		0	70-128	%REC	214206	1	10/12/2015 23:00	CG
Surr: Dibromofluoromethane	112		0	78.2-128	%REC	214206	1	10/12/2015 23:00	CG
Surr: Toluene-d8	105		0	76.5-116	%REC	214206	1	10/12/2015 23:00	CG
PERCENT MOISTURE D2216									
Percent Moisture	14.8		0	0	wt%	R302100	1	10/14/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 21-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Apollo Smyrna	**Collection Date:**	10/8/2015
Lab ID:	1510791-011	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214354	1	10/13/2015 23:57	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
Acetone	BRL		0.003	0.050	mg/L	214354	1	10/13/2015 23:57	NP
Chloroethane	BRL		0.001	0.010	mg/L	214354	1	10/13/2015 23:57	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
Cyclohexane	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
Methylene chloride	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
Trichloroethene	BRL		0.001	0.005	mg/L	214354	1	10/13/2015 23:57	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	214354	1	10/13/2015 23:57	NP
Surr: 4-Bromofluorobenzene	78.3		0	70.6-123	%REC	214354	1	10/13/2015 23:57	NP
Surr: Dibromofluoromethane	121		0	78.7-124	%REC	214354	1	10/13/2015 23:57	NP
Surr: Toluene-d8	99.9		0	81.3-120	%REC	214354	1	10/13/2015 23:57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EarthCon Work Order Number 1510791

Checklist completed by Signature 10/8/15 Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 4.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 20-Oct-15

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Lab Order: 1510791

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1510791-001A	MW-3	10/8/2015 9:40:00AM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-001B	MW-3	10/8/2015 9:40:00AM	Groundwater	GC Analysis of Gaseous Samples		10/12/2015 4:30:00PM	10/13/2015
1510791-001C	MW-3	10/8/2015 9:40:00AM	Groundwater	Total Organic Carbon (TOC)			10/14/2015
1510791-001D	MW-3	10/8/2015 9:40:00AM	Groundwater	ION SCAN			10/09/2015
1510791-001E	MW-3	10/8/2015 9:40:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510791-001F	MW-3	10/8/2015 9:40:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-002A	DUP-1	10/8/2015 12:00:00AM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-002B	DUP-1	10/8/2015 12:00:00AM	Groundwater	GC Analysis of Gaseous Samples		10/12/2015 4:30:00PM	10/13/2015
1510791-002C	DUP-1	10/8/2015 12:00:00AM	Groundwater	Total Organic Carbon (TOC)			10/14/2015
1510791-002D	DUP-1	10/8/2015 12:00:00AM	Groundwater	ION SCAN			10/09/2015
1510791-002E	DUP-1	10/8/2015 12:00:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510791-002F	DUP-1	10/8/2015 12:00:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-003A	MW-15	10/8/2015 9:00:00AM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-003B	MW-15	10/8/2015 9:00:00AM	Groundwater	GC Analysis of Gaseous Samples		10/12/2015 4:30:00PM	10/13/2015
1510791-003C	MW-15	10/8/2015 9:00:00AM	Groundwater	Total Organic Carbon (TOC)			10/14/2015
1510791-003D	MW-15	10/8/2015 9:00:00AM	Groundwater	ION SCAN			10/09/2015
1510791-003E	MW-15	10/8/2015 9:00:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510791-003F	MW-15	10/8/2015 9:00:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-004A	MW-1	10/8/2015 11:25:00AM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-004B	MW-1	10/8/2015 11:25:00AM	Groundwater	GC Analysis of Gaseous Samples		10/14/2015 11:03:46AM	10/14/2015
1510791-004C	MW-1	10/8/2015 11:25:00AM	Groundwater	Total Organic Carbon (TOC)			10/14/2015
1510791-004D	MW-1	10/8/2015 11:25:00AM	Groundwater	ION SCAN			10/09/2015
1510791-004E	MW-1	10/8/2015 11:25:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510791-004F	MW-1	10/8/2015 11:25:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-005A	MW-2	10/8/2015 10:40:00AM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-005B	MW-2	10/8/2015 10:40:00AM	Groundwater	GC Analysis of Gaseous Samples		10/14/2015 11:03:46AM	10/14/2015
1510791-005C	MW-2	10/8/2015 10:40:00AM	Groundwater	Total Organic Carbon (TOC)			10/15/2015
1510791-005D	MW-2	10/8/2015 10:40:00AM	Groundwater	ION SCAN			10/09/2015
1510791-005E	MW-2	10/8/2015 10:40:00AM	Groundwater	Alkalinity by SM2320B			10/13/2015

Analytical Environmental Services, Inc

Date: 20-Oct-15

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Lab Order: 1510791

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1510791-005F	MW-2	10/8/2015 10:40:00AM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-006A	DW-1	10/8/2015 2:30:00PM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-006B	DW-1	10/8/2015 2:30:00PM	Groundwater	GC Analysis of Gaseous Samples		10/14/2015 11:03:46AM	10/14/2015
1510791-006C	DW-1	10/8/2015 2:30:00PM	Groundwater	Total Organic Carbon (TOC)			10/15/2015
1510791-006D	DW-1	10/8/2015 2:30:00PM	Groundwater	ION SCAN			10/09/2015
1510791-006E	DW-1	10/8/2015 2:30:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510791-006F	DW-1	10/8/2015 2:30:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-007A	MW-4	10/8/2015 2:15:00PM	Groundwater	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-007B	MW-4	10/8/2015 2:15:00PM	Groundwater	GC Analysis of Gaseous Samples		10/14/2015 11:03:46AM	10/14/2015
1510791-007C	MW-4	10/8/2015 2:15:00PM	Groundwater	Total Organic Carbon (TOC)			10/15/2015
1510791-007D	MW-4	10/8/2015 2:15:00PM	Groundwater	ION SCAN			10/09/2015
1510791-007E	MW-4	10/8/2015 2:15:00PM	Groundwater	Alkalinity by SM2320B			10/13/2015
1510791-007F	MW-4	10/8/2015 2:15:00PM	Groundwater	Sulfide by SM4500-S2-F			10/13/2015
1510791-008A	SW-2	10/8/2015 2:55:00PM	Surface Water	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-009A	SW-1	10/8/2015 3:00:00PM	Surface Water	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/14/2015
1510791-010A	STORMWATER SED-3	10/8/2015 3:30:00PM	Sediment	TCL VOLATILE ORGANICS		10/12/2015 11:50:00AM	10/12/2015
1510791-010B	STORMWATER SED-3	10/8/2015 3:30:00PM	Sediment	PERCENT MOISTURE			10/14/2015
1510791-011A	TRIP BLANK	10/8/2015 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		10/13/2015 11:30:00PM	10/13/2015

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214206

Sample ID: **MB-214206** Client ID: Units: **ug/Kg** Prep Date: **10/12/2015** Run No: **301914**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214206** Analysis Date: **10/12/2015** Seq No: **6458096**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Acetone	BRL	100									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
Cyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
Tetrachloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	51.26	0	50.00		103	70	128				
Surr: Dibromofluoromethane	52.95	0	50.00		106	78.2	128				
Surr: Toluene-d8	51.37	0	50.00		103	76.5	116				

Sample ID: **LCS-214206** Client ID: Units: **ug/Kg** Prep Date: **10/12/2015** Run No: **301914**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214206** Analysis Date: **10/12/2015** Seq No: **6458095**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	38.03	5.0	50.00		76.1	69.9	145				
Trichloroethene	46.08	5.0	50.00		92.2	71.7	136				
Surr: 4-Bromofluorobenzene	51.42	0	50.00		103	70	128				
Surr: Dibromofluoromethane	53.77	0	50.00		108	78.2	128				
Surr: Toluene-d8	51.66	0	50.00		103	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214206

Sample ID: **1510524-005AMS** Client ID:
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **10/12/2015** Run No: **301970**
BatchID: **214206** Analysis Date: **10/12/2015** Seq No: **6459267**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	57.82	6.8	68.08		84.9	56.6	151				
Trichloroethene	70.60	6.8	68.08		104	70.1	137				
Surr: 4-Bromofluorobenzene	63.11	0	68.08		92.7	70	128				
Surr: Dibromofluoromethane	73.33	0	68.08		108	78.2	128				
Surr: Toluene-d8	70.00	0	68.08		103	76.5	116				

Sample ID: **1510524-005AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **10/12/2015** Run No: **301970**
BatchID: **214206** Analysis Date: **10/12/2015** Seq No: **6459268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	60.49	6.8	68.08		88.8	56.6	151	57.82	4.51	20.4	
Trichloroethene	71.28	6.8	68.08		105	70.1	137	70.60	0.960	17	
Surr: 4-Bromofluorobenzene	64.73	0	68.08		95.1	70	128	63.11	0	0	
Surr: Dibromofluoromethane	74.04	0	68.08		109	78.2	128	73.33	0	0	
Surr: Toluene-d8	70.00	0	68.08		103	76.5	116	70.00	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214302

Sample ID: **MB-214302** Client ID: Units: **ug/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **MBLK** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461462**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	BRL	9.0									
Ethylene	BRL	7.0									
Methane	BRL	4.0									

Sample ID: **LCS-214302** Client ID: Units: **ug/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461463**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	158.7	9.0	200.0		79.4	41.2	115				
Ethylene	104.6	7.0	200.0		52.3	26.5	115				
Methane	169.1	4.0	200.0		84.6	45.1	115				

Sample ID: **LCSD-214302** Client ID: Units: **ug/L** Prep Date: **10/12/2015** Run No: **302062**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/12/2015** Seq No: **6461464**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	144.7	9.0	200.0		72.3	41.2	115	158.7	9.27	20	
Ethylene	95.84	7.0	200.0		47.9	26.5	115	104.6	8.76	20	
Methane	153.8	4.0	200.0		76.9	45.1	115	169.1	9.54	20	

Sample ID: **1510791-002BMS** Client ID: **DUP-1** Units: **ug/L** Prep Date: **10/12/2015** Run No: **302063**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/13/2015** Seq No: **6461478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	147.5	9.0	200.0	31.53	58.0	40.5	115				
Ethylene	120.1	7.0	200.0	37.38	41.4	25.1	115				
Methane	188.2	4.0	200.0	43.01	72.6	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214302

Sample ID: **1510791-002BMSD** Client ID: **DUP-1** Units: **ug/L** Prep Date: **10/12/2015** Run No: **302063**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214302** Analysis Date: **10/13/2015** Seq No: **6461479**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	147.8	9.0	200.0	31.53	58.2	40.5	115	147.5	0.243	20	
Ethylene	120.4	7.0	200.0	37.38	41.5	25.1	115	120.1	0.271	20	
Methane	189.0	4.0	200.0	43.01	73.0	40.4	115	188.2	0.438	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214349

Sample ID: **MB-214349** Client ID: Units: **ug/L** Prep Date: **10/14/2015** Run No: **302197**
SampleType: **MBLK** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214349** Analysis Date: **10/14/2015** Seq No: **6464933**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	BRL	9.0									
Ethylene	BRL	7.0									
Methane	BRL	4.0									

Sample ID: **LCS-214349** Client ID: Units: **ug/L** Prep Date: **10/14/2015** Run No: **302197**
SampleType: **LCS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214349** Analysis Date: **10/14/2015** Seq No: **6464934**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	126.1	9.0	200.0		63.1	41.2	115				
Ethylene	84.44	7.0	200.0		42.2	26.5	115				
Methane	128.6	4.0	200.0		64.3	45.1	115				

Sample ID: **LCSD-214349** Client ID: Units: **ug/L** Prep Date: **10/14/2015** Run No: **302197**
SampleType: **LCSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214349** Analysis Date: **10/14/2015** Seq No: **6464935**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	114.2	9.0	200.0		57.1	41.2	115	126.1	9.93	20	
Ethylene	77.13	7.0	200.0		38.6	26.5	115	84.44	9.05	20	
Methane	116.7	4.0	200.0		58.4	45.1	115	128.6	9.68	20	

Sample ID: **1510791-005BMS** Client ID: **MW-2** Units: **ug/L** Prep Date: **10/14/2015** Run No: **302197**
SampleType: **MS** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214349** Analysis Date: **10/14/2015** Seq No: **6464942**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	141.9	9.0	200.0		71.0	40.5	115				
Ethylene	93.27	7.0	200.0		46.6	25.1	115				
Methane	143.3	4.0	200.0		71.7	40.4	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214349

Sample ID: **1510791-005BMSD** Client ID: **MW-2** Units: **ug/L** Prep Date: **10/14/2015** Run No: **302197**
SampleType: **MSD** TestCode: **GC Analysis of Gaseous Samples SOP-RSK 175** BatchID: **214349** Analysis Date: **10/14/2015** Seq No: **6464943**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethane	138.0	9.0	200.0		69.0	40.5	115	141.9	2.79	20	
Ethylene	90.71	7.0	200.0		45.4	25.1	115	93.27	2.78	20	
Methane	139.4	4.0	200.0		69.7	40.4	115	143.3	2.78	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214354

Sample ID: **MB-214354** Client ID: Units: **ug/L** Prep Date: **10/13/2015** Run No: **302075**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214354** Analysis Date: **10/13/2015** Seq No: **6461837**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Acetone	BRL	50									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
Cyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
Tetrachloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	37.27	0	50.00		74.5	70.6	123				
Surr: Dibromofluoromethane	59.68	0	50.00		119	78.7	124				
Surr: Toluene-d8	49.74	0	50.00		99.5	81.3	120				

Sample ID: **LCS-214354** Client ID: Units: **ug/L** Prep Date: **10/13/2015** Run No: **302088**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214354** Analysis Date: **10/14/2015** Seq No: **6462133**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	64.62	5.0	50.00		129	64.2	137				
Trichloroethene	56.28	5.0	50.00		113	70.5	134				
Surr: 4-Bromofluorobenzene	39.47	0	50.00		78.9	70.6	123				
Surr: Dibromofluoromethane	47.60	0	50.00		95.2	78.7	124				
Surr: Toluene-d8	46.31	0	50.00		92.6	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: 214354

Sample ID: **1510791-007AMS**	Client ID: **MW-4**	Units: **ug/L**	Prep Date: **10/13/2015**	Run No: **302075**
SampleType: **MS**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **214354**	Analysis Date: **10/14/2015**	Seq No: **6461840**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	28410	500	5000	20320	162	60.5	156				SE
Trichloroethene	6030	500	5000		121	71.8	139				
Surr: 4-Bromofluorobenzene	3794	0	5000		75.9	70.6	123				
Surr: Dibromofluoromethane	5609	0	5000		112	78.7	124				
Surr: Toluene-d8	4756	0	5000		95.1	81.3	120				

Sample ID: **1510791-007AMSD**	Client ID: **MW-4**	Units: **ug/L**	Prep Date: **10/13/2015**	Run No: **302075**
SampleType: **MSD**	TestCode: **TCL VOLATILE ORGANICS SW8260B**	BatchID: **214354**	Analysis Date: **10/14/2015**	Seq No: **6461841**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	28050	500	5000	20320	154	60.5	156	28410	1.30	20	E
Trichloroethene	5914	500	5000		118	71.8	139	6030	1.94	20	
Surr: 4-Bromofluorobenzene	3922	0	5000		78.4	70.6	123	3794	0	0	
Surr: Dibromofluoromethane	5347	0	5000		107	78.7	124	5609	0	0	
Surr: Toluene-d8	4726	0	5000		94.5	81.3	120	4756	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: R302019

Sample ID: **MB-R302019**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **302019**
SampleType: **MBLK**	TestCode: **Alkalinity by SM2320B**			BatchID: **R302019**	Analysis Date: **10/13/2015**	Seq No: **6460206**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	BRL	3.00									

Sample ID: **LCS-R302019**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **302019**
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**			BatchID: **R302019**	Analysis Date: **10/13/2015**	Seq No: **6460207**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	123.0	3.00	125.0		98.4	75	125				

Sample ID: **1510365-001ADUP**	Client ID:			Units: **mg/L**	Prep Date:	Run No: **302019**
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**			BatchID: **R302019**	Analysis Date: **10/13/2015**	Seq No: **6460258**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	280.0	30.0						280.0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: R302032

Sample ID: **MB-R302032**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **302032**	
SampleType: **MBLK**	TestCode: **Sulfide by SM4500-S2-F**					BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460572**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	BRL	1.00									

Sample ID: **LCS-R302032**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **302032**	
SampleType: **LCS**	TestCode: **Sulfide by SM4500-S2-F**					BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460573**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	388.0	1.00	388.0		100	90	110				

Sample ID: **1510644-001FMS**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **302032**	
SampleType: **MS**	TestCode: **Sulfide by SM4500-S2-F**					BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460586**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	17.80	1.00	19.40		91.8	80	120				

Sample ID: **1510644-001FMSD**	Client ID:					Units: **mg/L**		Prep Date:		Run No: **302032**	
SampleType: **MSD**	TestCode: **Sulfide by SM4500-S2-F**					BatchID: **R302032**		Analysis Date: **10/13/2015**		Seq No: **6460587**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	18.00	1.00	19.00		94.7	80	120	17.80	1.12	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: R302110

Sample ID: **MB-R302110** Client ID: Units: **mg/L** Prep Date: Run No: **302110**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R302110** Analysis Date: **10/09/2015** Seq No: **6462757**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	BRL	1.0									
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R302110** Client ID: Units: **mg/L** Prep Date: Run No: **302110**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R302110** Analysis Date: **10/09/2015** Seq No: **6462756**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	4.555	1.0	5.000		91.1	90	110				
Nitrate	4.715	0.25	5.000		94.3	90	110				
Sulfate	23.27	1.0	25.00		93.1	90	110				

Sample ID: **1510791-005DMS** Client ID: **MW-2** Units: **mg/L** Prep Date: Run No: **302110**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R302110** Analysis Date: **10/09/2015** Seq No: **6462775**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	6.657	1.0	5.000	1.988	93.4	90	110				
Nitrate	5.656	0.25	5.000	0.6260	101	90	110				
Sulfate	34.25	1.0	25.00	8.694	102	90	110				

Sample ID: **1510791-005DMSD** Client ID: **MW-2** Units: **mg/L** Prep Date: Run No: **302110**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R302110** Analysis Date: **10/09/2015** Seq No: **6462776**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	6.662	1.0	5.000	1.988	93.5	90	110	6.657	0.069	20	
Nitrate	5.655	0.25	5.000	0.6260	101	90	110	5.656	0.017	20	
Sulfate	34.10	1.0	25.00	8.694	102	90	110	34.25	0.432	20	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: EarthCon Consultants, Inc.
Project Name: Apollo Smyrna
Workorder: 1510791

ANALYTICAL QC SUMMARY REPORT

BatchID: R302290

Sample ID: **MB-R302290**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302290**
SampleType: **MBLK**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302290**		Analysis Date: **10/14/2015**		Seq No: **6467012**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	BRL	1.00									

Sample ID: **LCS-R302290**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **302290**
SampleType: **LCS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302290**		Analysis Date: **10/14/2015**		Seq No: **6467010**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	24.89	1.00	25.00		99.6	90	110				

Sample ID: **1510791-003CMS**	Client ID: **MW-15**				Units: **mg/L**		Prep Date:		Run No: **302290**
SampleType: **MS**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302290**		Analysis Date: **10/15/2015**		Seq No: **6467031**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	25.42	1.00	25.00	2.305	92.5	80	120				

Sample ID: **1510791-003CMSD**	Client ID: **MW-15**				Units: **mg/L**		Prep Date:		Run No: **302290**
SampleType: **MSD**	TestCode: **Total Organic Carbon (TOC) SW9060A**				BatchID: **R302290**		Analysis Date: **10/15/2015**		Seq No: **6467032**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	25.94	1.00	25.00	2.305	94.5	80	120	25.42	2.02	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

October 30, 2015

Kristen Rivera
EarthCon Consultants, Inc.
1880 West Oak Parkway
Marietta GA 30062

TEL: (770) 973-2100
FAX: (770) 973-7395

RE: Apollo Ind

Dear Kristen Rivera: Order No: 1510J07

Analytical Environmental Services, Inc. received 7 samples on 10/21/2015 3:15:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

CRKanhai

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3080 Presidential Drive, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1510J07

Date: 10/21/15 Page 1 of 1

COMPANY: Earth Con Consultants, Inc
ADDRESS: 1080 West Oak Pkwy Bldg 100 STE 106 Marietta, GA 30062
PHONE: 770-973-2100
FAX: 770-973-7345
SAMPLED BY: Kent Davis
SIGNATURE:

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) H+I	VOCs	No # of Containers	REMARKS
1	MW-1R	10/21/15	1350	X		GW	2		2	Next DAY. RUSH
2	SB-8 1.0'		1415	X		SO	4		4	
3	SB-8 3.0'		1430	X		SO	4		4	
4	Dup-1		-	X		SO	4		4	
5	SB-9 1.0'		1440	X		SO	4		4	
6	SB-9 3.0'		1445	X		SO	4		4	
7	Trip Blank		-	X		W	2		2	
8										
9										
10										
11										
12										
13										
14										

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY / DATE/TIME
1: Kristen Rivera 10/21/15 1512
2:
3:

RECEIVED BY / DATE/TIME
1: Chantelle Kanhai 10/21/15 15:15
2:
3:

SPECIAL INSTRUCTIONS/COMMENTS:
24 Hr TURN on Water Sample

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
(CLIENT) FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Apollo Ind
PROJECT #: 02.20140391.00
SITE ADDRESS: Smyrna, GA
SEND REPORT TO: Kristen Rivera
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

Turnaround Time Request
(●) Standard 5 Business Days - Soil
( ) 2 Business Day Rush
(●) Next Business Day Rush - GW
( ) Same Day Rush (auth req.)
( ) Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-1R
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015 1:50:00 PM
Lab ID:	1510J07-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
1,1-Dichloroethane	0.030		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
1,1-Dichloroethene	0.099		0.002	0.005	mg/L	214832	1	10/22/2015 04:48	AR
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
Acetone	0.018	J	0.003	0.050	mg/L	214832	1	10/22/2015 04:48	AR
Chloroethane	BRL		0.001	0.010	mg/L	214832	1	10/22/2015 04:48	AR
cis-1,2-Dichloroethene	0.053		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
Cyclohexane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
Methylene chloride	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
Tetrachloroethene	0.029		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
Trichloroethene	0.009		0.001	0.005	mg/L	214832	1	10/22/2015 04:48	AR
Vinyl chloride	0.012		0.001	0.002	mg/L	214832	1	10/22/2015 04:48	AR
Surr: 4-Bromofluorobenzene	85.4		0	70.6-123	%REC	214832	1	10/22/2015 04:48	AR
Surr: Dibromofluoromethane	104		0	78.7-124	%REC	214832	1	10/22/2015 04:48	AR
Surr: Toluene-d8	96.4		0	81.3-120	%REC	214832	1	10/22/2015 04:48	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB-8 1.0'
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015 2:15:00 PM
Lab ID:	1510J07-002	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**				
1,1,1-Trichloroethane	BRL		0.00070	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
1,1-Dichloroethane	BRL		0.00085	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
1,1-Dichloroethene	BRL		0.00074	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
1,2-Dichloroethane	BRL		0.00042	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Acetone	BRL		0.0050	0.065	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Chloroethane	BRL		0.0011	0.0065	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
cis-1,2-Dichloroethene	BRL		0.00091	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Cyclohexane	BRL		0.0012	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Methylene chloride	0.0032	J	0.0018	0.013	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Tetrachloroethene	BRL		0.00054	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
trans-1,2-Dichloroethene	BRL		0.0013	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Trichloroethene	BRL		0.00076	0.0033	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Vinyl chloride	BRL		0.0012	0.0065	mg/Kg-dry	214844	1	10/22/2015 14:53	CG
Surr: 4-Bromofluorobenzene	89.7		0	70-128	%REC	214844	1	10/22/2015 14:53	CG
Surr: Dibromofluoromethane	114		0	78.2-128	%REC	214844	1	10/22/2015 14:53	CG
Surr: Toluene-d8	109		0	76.5-116	%REC	214844	1	10/22/2015 14:53	CG
PERCENT MOISTURE D2216									
Percent Moisture	14.3		0	0	wt%	R302990	1	10/27/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB-8 3.0'
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015 2:30:00 PM
Lab ID:	1510J07-003	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**				
1,1,1-Trichloroethane	BRL		0.00070	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
1,1-Dichloroethane	BRL		0.00085	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
1,1-Dichloroethene	BRL		0.00074	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
1,2-Dichloroethane	BRL		0.00042	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Acetone	0.100		0.0050	0.066	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Chloroethane	BRL		0.0011	0.0066	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
cis-1,2-Dichloroethene	BRL		0.00091	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Cyclohexane	BRL		0.0012	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Methylene chloride	BRL		0.0018	0.013	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Tetrachloroethene	BRL		0.00054	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
trans-1,2-Dichloroethene	BRL		0.0013	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Trichloroethene	BRL		0.00076	0.0033	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Vinyl chloride	BRL		0.0012	0.0066	mg/Kg-dry	214844	1	10/22/2015 15:21	CG
Surr: 4-Bromofluorobenzene	94.1		0	70-128	%REC	214844	1	10/22/2015 15:21	CG
Surr: Dibromofluoromethane	116		0	78.2-128	%REC	214844	1	10/22/2015 15:21	CG
Surr: Toluene-d8	109		0	76.5-116	%REC	214844	1	10/22/2015 15:21	CG
PERCENT MOISTURE D2216									
Percent Moisture	13.0		0	0	wt%	R302990	1	10/27/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	DUP-1
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015
Lab ID:	1510J07-004	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**				
1,1,1-Trichloroethane	BRL		0.00066	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
1,1-Dichloroethane	BRL		0.00081	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
1,1-Dichloroethene	BRL		0.00071	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
1,2-Dichloroethane	BRL		0.00040	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Acetone	0.045	J	0.0047	0.062	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Chloroethane	BRL		0.0011	0.0062	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
cis-1,2-Dichloroethene	BRL		0.00087	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Cyclohexane	BRL		0.0011	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Methylene chloride	0.0040	J	0.0017	0.012	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Tetrachloroethene	BRL		0.00051	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
trans-1,2-Dichloroethene	BRL		0.0012	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Trichloroethene	BRL		0.00072	0.0031	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Vinyl chloride	BRL		0.0011	0.0062	mg/Kg-dry	214844	1	10/22/2015 15:44	CG
Surr: 4-Bromofluorobenzene	91.6		0	70-128	%REC	214844	1	10/22/2015 15:44	CG
Surr: Dibromofluoromethane	113		0	78.2-128	%REC	214844	1	10/22/2015 15:44	CG
Surr: Toluene-d8	108		0	76.5-116	%REC	214844	1	10/22/2015 15:44	CG
PERCENT MOISTURE D2216									
Percent Moisture	14.9		0	0	wt%	R302990	1	10/27/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB-9 1.0'
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015 2:40:00 PM
Lab ID:	1510J07-005	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**				
1,1,1-Trichloroethane	BRL		0.00079	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
1,1-Dichloroethane	BRL		0.00097	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
1,1-Dichloroethene	BRL		0.00085	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
1,2-Dichloroethane	BRL		0.00048	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Acetone	0.056	J	0.0056	0.075	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Chloroethane	BRL		0.0013	0.0075	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
cis-1,2-Dichloroethene	BRL		0.0010	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Cyclohexane	BRL		0.0014	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Methylene chloride	BRL		0.0021	0.015	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Tetrachloroethene	BRL		0.00062	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
trans-1,2-Dichloroethene	BRL		0.0015	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Trichloroethene	BRL		0.00086	0.0037	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Vinyl chloride	BRL		0.0013	0.0075	mg/Kg-dry	214844	1	10/22/2015 16:08	CG
Surr: 4-Bromofluorobenzene	90.2		0	70-128	%REC	214844	1	10/22/2015 16:08	CG
Surr: Dibromofluoromethane	116		0	78.2-128	%REC	214844	1	10/22/2015 16:08	CG
Surr: Toluene-d8	109		0	76.5-116	%REC	214844	1	10/22/2015 16:08	CG
PERCENT MOISTURE D2216									
Percent Moisture	16.0		0	0	wt%	R302990	1	10/27/2015 11:00	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	SB-9 3.0'
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015 2:45:00 PM
Lab ID:	1510J07-006	**Matrix:**	Soil

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**				
1,1,1-Trichloroethane	BRL		0.00074	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
1,1-Dichloroethane	BRL		0.00090	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
1,1-Dichloroethene	BRL		0.00079	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
1,2-Dichloroethane	BRL		0.00044	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Acetone	BRL		0.0053	0.070	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Chloroethane	BRL		0.0012	0.0070	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
cis-1,2-Dichloroethene	BRL		0.00097	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Cyclohexane	BRL		0.0013	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Methylene chloride	BRL		0.0019	0.014	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Tetrachloroethene	BRL		0.00057	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
trans-1,2-Dichloroethene	BRL		0.0014	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Trichloroethene	BRL		0.00080	0.0035	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Vinyl chloride	BRL		0.0012	0.0070	mg/Kg-dry	214844	1	10/22/2015 16:31	CG
Surr: 4-Bromofluorobenzene	88.5		0	70-128	%REC	214844	1	10/22/2015 16:31	CG
Surr: Dibromofluoromethane	114		0	78.2-128	%REC	214844	1	10/22/2015 16:31	CG
Surr: Toluene-d8	110		0	76.5-116	%REC	214844	1	10/22/2015 16:31	CG
PERCENT MOISTURE D2216									
Percent Moisture	12.3		0	0	wt%	R302990	1	10/27/2015 11:00	PF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 30-Oct-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Apollo Ind	**Collection Date:**	10/21/2015
Lab ID:	1510J07-007	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	214832	1	10/22/2015 02:15	AR
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
Acetone	BRL		0.003	0.050	mg/L	214832	1	10/22/2015 02:15	AR
Chloroethane	BRL		0.001	0.010	mg/L	214832	1	10/22/2015 02:15	AR
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
Cyclohexane	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
Methylene chloride	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
Tetrachloroethene	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
Trichloroethene	BRL		0.001	0.005	mg/L	214832	1	10/22/2015 02:15	AR
Vinyl chloride	BRL		0.001	0.002	mg/L	214832	1	10/22/2015 02:15	AR
Surr: 4-Bromofluorobenzene	81.8		0	70.6-123	%REC	214832	1	10/22/2015 02:15	AR
Surr: Dibromofluoromethane	106		0	78.7-124	%REC	214832	1	10/22/2015 02:15	AR
Surr: Toluene-d8	99.1		0	81.3-120	%REC	214832	1	10/22/2015 02:15	AR

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Earthcon Consultants Work Order Number 1510J07

Checklist completed by _____ 10-21-15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition?	Yes ✓	No __	Not Present __
Custody seals intact on shipping container/cooler?	Yes __	No __	Not Present ✓
Custody seals intact on sample bottles?	Yes __	No __	Not Present ✓
Container/Temp Blank temperature in compliance? (0°≤6°C)*	Yes ✓	No __	

Cooler #1 3.8°C Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present?	Yes ✓	No __
Chain of custody signed when relinquished and received?	Yes ✓	No __
Chain of custody agrees with sample labels?	Yes ✓	No __
Samples in proper container/bottle?	Yes ✓	No __
Sample containers intact?	Yes ✓	No __
Sufficient sample volume for indicated test?	Yes ✓	No __
All samples received within holding time?	Yes ✓	No __
Was TAT marked on the COC?	Yes ✓	No __
Proceed with Standard TAT as per project history?	Yes __	No __ Not Applicable ✓
Water - VOA vials have zero headspace?	No VOA vials submitted __	Yes ✓ No __
Water - pH acceptable upon receipt?	Yes ✓	No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind
Workorder: 1510J07

ANALYTICAL QC SUMMARY REPORT

BatchID: 214832

Sample ID: **MB-214832** Client ID: Units: **ug/L** Prep Date: **10/21/2015** Run No: **302647**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214832** Analysis Date: **10/21/2015** Seq No: **6475592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Acetone	BRL	50									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
Cyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
Tetrachloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	44.27	0	50.00		88.5	70.6	123				
Surr: Dibromofluoromethane	51.72	0	50.00		103	78.7	124				
Surr: Toluene-d8	47.95	0	50.00		95.9	81.3	120				

Sample ID: **LCS-214832** Client ID: Units: **ug/L** Prep Date: **10/21/2015** Run No: **302647**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214832** Analysis Date: **10/21/2015** Seq No: **6475591**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	19.01	5.0	20.00		95.0	64.2	137				
Trichloroethene	19.76	5.0	20.00		98.8	70.5	134				
Surr: 4-Bromofluorobenzene	49.54	0	50.00		99.1	70.6	123				
Surr: Dibromofluoromethane	52.87	0	50.00		106	78.7	124				
Surr: Toluene-d8	51.57	0	50.00		103	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind
Workorder: 1510J07

ANALYTICAL QC SUMMARY REPORT

BatchID: 214832

Sample ID: **1510I45-001AMS** Client ID:
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **10/21/2015** Run No: **302647**
BatchID: **214832** Analysis Date: **10/22/2015** Seq No: **6475594**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	22.80	5.0	20.00		114	60.5	156				
Trichloroethene	22.87	5.0	20.00		114	71.8	139				
Surr: 4-Bromofluorobenzene	50.88	0	50.00		102	70.6	123				
Surr: Dibromofluoromethane	54.93	0	50.00		110	78.7	124				
Surr: Toluene-d8	53.14	0	50.00		106	81.3	120				

Sample ID: **1510I45-001AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/L** Prep Date: **10/21/2015** Run No: **302647**
BatchID: **214832** Analysis Date: **10/22/2015** Seq No: **6475598**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	21.30	5.0	20.00		106	60.5	156	22.80	6.80	20	
Trichloroethene	21.26	5.0	20.00		106	71.8	139	22.87	7.30	20	
Surr: 4-Bromofluorobenzene	49.50	0	50.00		99.0	70.6	123	50.88	0	0	
Surr: Dibromofluoromethane	51.58	0	50.00		103	78.7	124	54.93	0	0	
Surr: Toluene-d8	52.98	0	50.00		106	81.3	120	53.14	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind
Workorder: 1510J07

ANALYTICAL QC SUMMARY REPORT

BatchID: 214844

Sample ID: **MB-214844** Client ID: Units: **ug/Kg** Prep Date: **10/22/2015** Run No: **302669**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214844** Analysis Date: **10/22/2015** Seq No: **6476821**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
Acetone	BRL	100									
Chloroethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
Cyclohexane	BRL	5.0									
Methylene chloride	BRL	20									
Tetrachloroethene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
Trichloroethene	BRL	5.0									
Vinyl chloride	BRL	10									
Surr: 4-Bromofluorobenzene	44.40	0	50.00		88.8	70	128				
Surr: Dibromofluoromethane	56.46	0	50.00		113	78.2	128				
Surr: Toluene-d8	54.43	0	50.00		109	76.5	116				

Sample ID: **LCS-214844** Client ID: Units: **ug/Kg** Prep Date: **10/22/2015** Run No: **302669**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **214844** Analysis Date: **10/22/2015** Seq No: **6476823**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	64.14	5.0	50.00		128	69.9	145				
Trichloroethene	56.78	5.0	50.00		114	71.7	136				
Surr: 4-Bromofluorobenzene	44.03	0	50.00		88.1	70	128				
Surr: Dibromofluoromethane	55.17	0	50.00		110	78.2	128				
Surr: Toluene-d8	52.90	0	50.00		106	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind
Workorder: 1510J07

ANALYTICAL QC SUMMARY REPORT

BatchID: 214844

Sample ID: **1510G49-005AMS** Client ID:
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **10/22/2015** Run No: **302669**
BatchID: **214844** Analysis Date: **10/22/2015** Seq No: **6476824**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	82.72	6.6	65.71		126	56.6	151				
Trichloroethene	76.78	6.6	65.71		117	70.1	137				
Surr: 4-Bromofluorobenzene	58.63	0	65.71		89.2	70	128				
Surr: Dibromofluoromethane	72.46	0	65.71		110	78.2	128				
Surr: Toluene-d8	69.87	0	65.71		106	76.5	116				

Sample ID: **1510G49-005AMSD** Client ID:
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B**
Units: **ug/Kg-dry** Prep Date: **10/22/2015** Run No: **302669**
BatchID: **214844** Analysis Date: **10/22/2015** Seq No: **6476825**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	80.53	6.6	65.71		123	56.6	151	82.72	2.69	20.4	
Trichloroethene	72.56	6.6	65.71		110	70.1	137	76.78	5.65	17	
Surr: 4-Bromofluorobenzene	58.20	0	65.71		88.6	70	128	58.63	0	0	
Surr: Dibromofluoromethane	74.48	0	65.71		113	78.2	128	72.46	0	0	
Surr: Toluene-d8	69.09	0	65.71		105	76.5	116	69.87	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 06, 2015

Kristen Rivera
EarthCon Consultants, Inc.
1880 West Oak Parkway
Marietta GA 30062

TEL: (770) 973-2100
FAX: (770) 973-7395

RE: Apollo Ind.

Dear Kristen Rivera: Order No: 1510R78

Analytical Environmental Services, Inc. received 3 samples on 10/30/2015 11:00:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

CRKanhai

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1510[illegible]

Date: 10/30/15 Page 1 of 1

COMPANY:	ADDRESS:
EarthCon Consultants, Inc	1880 West Oak Pkwy Bld 100 STE 106 Marietta, GA 30062
PHONE: 770-973-2100	FAX: 770-973-7395
SAMPLED BY: Kent Davis	SIGNATURE: ~~770-973-2100~~ Kent Davis

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	TCK	Alkalinity	Sulfide	VOCs	Fe2+	PRESERVATION (See codes)													REMARKS	No # of Containers
												SHE	I	O	HCl	I										
1	Rep-1R	10/30/15	1000	X		GW	1		1	2	1															6
2	Dup-1	↓	—	X		GW				2																2
3	Trip Blank	↓	—	X		W				2																2
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Kent Davis	10/30/15 1100	1: Katie Jones	10/30/15 11:00
2:		2:	
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Apollo Ind.

PROJECT #: 02.201.40396.00

SITE ADDRESS: 1820 S. Cobb Dr. Ind. Blvd Smyrna, GA

SEND REPORT TO: Kaston Rucker

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 10

Turnaround Time Request

- ⊗ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

(CLIENT) FedEx UPS MAIL COURIER

GREYHOUND OTHER _____

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 6-Nov-15

Client: EarthCon Consultants, Inc.
Project: Apollo Ind.
Lab ID: 1510R78

Case Narrative

Per Kristen Rivera on 11/4/15 via email, the sample ID of "RW-1R" was changed to "MW-17".

Analytical Environmental Services, Inc **Date:** 6-Nov-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	MW-17
Project Name:	Apollo Ind.	**Collection Date:**	10/30/2015 10:00:00 AM
Lab ID:	1510R78-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Total Organic Carbon (TOC) SW9060A									
Organic Carbon, Total	6.88		0.270	1.00	mg/L	R303675	1	11/05/2015 02:41	YS
TCL VOLATILE ORGANICS SW8260B (SW5030B)									
1,1,1-Trichloroethane	0.006		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
1,1-Dichloroethane	0.047		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
1,1-Dichloroethene	0.22		0.015	0.050	mg/L	215438	10	11/04/2015 16:41	JE
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
Acetone	0.009	J	0.003	0.050	mg/L	215438	1	11/04/2015 00:13	NP
Chloroethane	BRL		0.001	0.010	mg/L	215438	1	11/04/2015 00:13	NP
cis-1,2-Dichloroethene	0.089		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
Cyclohexane	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
Methylene chloride	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
Tetrachloroethene	0.045		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
Trichloroethene	0.019		0.001	0.005	mg/L	215438	1	11/04/2015 00:13	NP
Vinyl chloride	0.024		0.001	0.002	mg/L	215438	1	11/04/2015 00:13	NP
Surr: 4-Bromofluorobenzene	79.7		0	70.6-123	%REC	215438	1	11/04/2015 00:13	NP
Surr: 4-Bromofluorobenzene	98.6		0	70.6-123	%REC	215438	10	11/04/2015 16:41	JE
Surr: Dibromofluoromethane	105		0	78.7-124	%REC	215438	1	11/04/2015 00:13	NP
Surr: Dibromofluoromethane	98.7		0	78.7-124	%REC	215438	10	11/04/2015 16:41	JE
Surr: Toluene-d8	91.7		0	81.3-120	%REC	215438	1	11/04/2015 00:13	NP
Surr: Toluene-d8	97.3		0	81.3-120	%REC	215438	10	11/04/2015 16:41	JE
Sulfide by SM4500-S2-F									
Sulfide	BRL		0.513	1.00	mg/L	R303533	1	11/03/2015 11:00	PF
ION SCAN SW9056A									
Chloride	14		0.37	1.0	mg/L	R303604	1	10/31/2015 21:15	JW
Nitrate	BRL		0.11	0.25	mg/L	R303604	1	10/31/2015 21:15	JW
Sulfate	23		0.54	1.0	mg/L	R303604	1	10/31/2015 21:15	JW
Alkalinity by SM2320B									
Alkalinity, Total (As CaCO3)	220		6.72	30.0	mg/L	R303699	10	11/05/2015 11:20	PF

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 6-Nov-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	DUP-1
Project Name:	Apollo Ind.	**Collection Date:**	10/30/2015
Lab ID:	1510R78-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	0.011		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
1,1-Dichloroethane	0.072		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
1,1-Dichloroethene	0.40		0.015	0.050	mg/L	215438	10	11/04/2015 17:05	JE
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
Acetone	BRL		0.003	0.050	mg/L	215438	1	11/04/2015 00:39	NP
Chloroethane	BRL		0.001	0.010	mg/L	215438	1	11/04/2015 00:39	NP
cis-1,2-Dichloroethene	0.15		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
Cyclohexane	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
Methylene chloride	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
Tetrachloroethene	0.070		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
Trichloroethene	0.032		0.001	0.005	mg/L	215438	1	11/04/2015 00:39	NP
Vinyl chloride	0.037		0.001	0.002	mg/L	215438	1	11/04/2015 00:39	NP
Surr: 4-Bromofluorobenzene	80.4		0	70.6-123	%REC	215438	1	11/04/2015 00:39	NP
Surr: 4-Bromofluorobenzene	99.7		0	70.6-123	%REC	215438	10	11/04/2015 17:05	JE
Surr: Dibromofluoromethane	108		0	78.7-124	%REC	215438	1	11/04/2015 00:39	NP
Surr: Dibromofluoromethane	97		0	78.7-124	%REC	215438	10	11/04/2015 17:05	JE
Surr: Toluene-d8	96.2		0	81.3-120	%REC	215438	1	11/04/2015 00:39	NP
Surr: Toluene-d8	98.1		0	81.3-120	%REC	215438	10	11/04/2015 17:05	JE

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 6-Nov-15

Client:	EarthCon Consultants, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Apollo Ind.	**Collection Date:**	10/30/2015
Lab ID:	1510R78-003	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**					
1,1,1-Trichloroethane	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
1,1-Dichloroethane	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
1,1-Dichloroethene	BRL		0.002	0.005	mg/L	215438	1	11/03/2015 23:21	NP
1,2-Dichloroethane	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
Acetone	BRL		0.003	0.050	mg/L	215438	1	11/03/2015 23:21	NP
Chloroethane	BRL		0.001	0.010	mg/L	215438	1	11/03/2015 23:21	NP
cis-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
Cyclohexane	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
Methylene chloride	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
Tetrachloroethene	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
trans-1,2-Dichloroethene	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
Trichloroethene	BRL		0.001	0.005	mg/L	215438	1	11/03/2015 23:21	NP
Vinyl chloride	BRL		0.001	0.002	mg/L	215438	1	11/03/2015 23:21	NP
Surr: 4-Bromofluorobenzene	77.5		0	70.6-123	%REC	215438	1	11/03/2015 23:21	NP
Surr: Dibromofluoromethane	105		0	78.7-124	%REC	215438	1	11/03/2015 23:21	NP
Surr: Toluene-d8	93.9		0	81.3-120	%REC	215438	1	11/03/2015 23:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Earthcon Work Order Number 1510R78

Checklist completed by [signature] 10/30/15
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition?	Yes ✓	No __	Not Present __
Custody seals intact on shipping container/cooler?	Yes __	No __	Not Present ✓
Custody seals intact on sample bottles?	Yes __	No __	Not Present ✓
Container/Temp Blank temperature in compliance? (0°≤6°C)*	Yes ✓	No __	

Cooler #1 3.8 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present?	Yes ✓	No __
Chain of custody signed when relinquished and received?	Yes ✓	No __
Chain of custody agrees with sample labels?	Yes ✓	No __
Samples in proper container/bottle?	Yes ✓	No __
Sample containers intact?	Yes ✓	No __
Sufficient sample volume for indicated test?	Yes ✓	No __
All samples received within holding time?	Yes ✓	No __
Was TAT marked on the COC?	Yes ✓	No __
Proceed with Standard TAT as per project history?	Yes __	No __ Not Applicable ✓
Water - VOA vials have zero headspace?	No VOA vials submitted __	Yes ✓ No __
Water - pH acceptable upon receipt?	Yes ✓	No __ Not Applicable __

Adjusted? _____ Checked by JB

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 6-Nov-15

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Lab Order: 1510R78

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1510R78-001A	MW-17	10/30/2015 10:00:00AM	Groundwater	TCL VOLATILE ORGANICS		11/3/2015 2:36:00 PM	11/04/2015
1510R78-001B	MW-17	10/30/2015 10:00:00AM	Groundwater	Total Organic Carbon (TOC)			11/05/2015
1510R78-001C	MW-17	10/30/2015 10:00:00AM	Groundwater	Alkalinity by SM2320B			11/05/2015
1510R78-001D	MW-17	10/30/2015 10:00:00AM	Groundwater	Sulfide by SM4500-S2-F			11/03/2015
1510R78-001E	MW-17	10/30/2015 10:00:00AM	Groundwater	ION SCAN			10/31/2015
1510R78-002A	DUP-1	10/30/2015 12:00:00AM	Groundwater	TCL VOLATILE ORGANICS		11/3/2015 2:36:00 PM	11/04/2015
1510R78-003A	TRIP BLANK	10/30/2015 12:00:00AM	Aqueous	TCL VOLATILE ORGANICS		11/3/2015 2:36:00 PM	11/03/2015

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: 215438

Sample ID: **MB-215438** Client ID: Units: **mg/L** Prep Date: **11/03/2015** Run No: **303514**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **215438** Analysis Date: **11/03/2015** Seq No: **6497824**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.005									
1,1-Dichloroethane	BRL	0.005									
1,1-Dichloroethene	BRL	0.005									
1,2-Dichloroethane	BRL	0.005									
Acetone	BRL	0.050									
Chloroethane	BRL	0.010									
cis-1,2-Dichloroethene	BRL	0.005									
Cyclohexane	BRL	0.005									
Methylene chloride	BRL	0.005									
Tetrachloroethene	BRL	0.005									
trans-1,2-Dichloroethene	BRL	0.005									
Trichloroethene	BRL	0.005									
Vinyl chloride	BRL	0.002									
Surr: 4-Bromofluorobenzene	0.04262	0	50.00		85.2	70.6	123				
Surr: Dibromofluoromethane	0.05139	0	50.00		103	78.7	124				
Surr: Toluene-d8	0.04855	0	50.00		97.1	81.3	120				

Sample ID: **LCS-215438** Client ID: Units: **mg/L** Prep Date: **11/03/2015** Run No: **303636**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **215438** Analysis Date: **11/04/2015** Seq No: **6498953**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.06740	0.005	50.00		135	64.2	137				
Trichloroethene	0.06544	0.005	50.00		131	70.5	134				
Surr: 4-Bromofluorobenzene	0.04199	0	50.00		84.0	70.6	123				
Surr: Dibromofluoromethane	0.04845	0	50.00		96.9	78.7	124				
Surr: Toluene-d8	0.04580	0	50.00		91.6	81.3	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: 215438

Sample ID: **1510R05-009AMS** Client ID: Units: **mg/L** Prep Date: **11/03/2015** Run No: **303514**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **215438** Analysis Date: **11/03/2015** Seq No: **6497923**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	5.844	0.50	5000		117	60.5	156				
Trichloroethene	5.455	0.50	5000		109	71.8	139				
Surr: 4-Bromofluorobenzene	4.794	0	5000		95.9	70.6	123				
Surr: Dibromofluoromethane	4.574	0	5000		91.5	78.7	124				
Surr: Toluene-d8	4.522	0	5000		90.4	81.3	120				

Sample ID: **1510R05-009AMSD** Client ID: Units: **mg/L** Prep Date: **11/03/2015** Run No: **303514**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **215438** Analysis Date: **11/03/2015** Seq No: **6497924**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	5.877	0.50	5000		118	60.5	156	5844	0.563	20	
Trichloroethene	5.358	0.50	5000		107	71.8	139	5455	1.79	20	
Surr: 4-Bromofluorobenzene	4.754	0	5000		95.1	70.6	123	4794	0	0	
Surr: Dibromofluoromethane	4.725	0	5000		94.5	78.7	124	4574	0	0	
Surr: Toluene-d8	4.629	0	5000		92.6	81.3	120	4522	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: R303533

Sample ID: **MB-R303533**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303533**
SampleType: **MBLK**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R303533**		Analysis Date: **11/03/2015**		Seq No: **6496647**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	BRL	1.00									

Sample ID: **LCS-R303533**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303533**
SampleType: **LCS**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R303533**		Analysis Date: **11/03/2015**		Seq No: **6496648**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	260.0	1.00	260.0		100	90	110				

Sample ID: **1510O19-003FMS**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303533**
SampleType: **MS**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R303533**		Analysis Date: **11/03/2015**		Seq No: **6496657**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	15.20	1.00	13.00		117	80	120				

Sample ID: **1510O19-003FMSD**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303533**
SampleType: **MSD**	TestCode: **Sulfide by SM4500-S2-F**				BatchID: **R303533**		Analysis Date: **11/03/2015**		Seq No: **6496659**
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Sulfide	15.00	1.00	13.00		115	80	120	15.20	1.32	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: R303604

Sample ID: **MB-R303604** Client ID: Units: **mg/L** Prep Date: Run No: **303604**
SampleType: **MBLK** TestCode: **ION SCAN SW9056A** BatchID: **R303604** Analysis Date: **10/31/2015** Seq No: **6498204**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	BRL	1.0									
Nitrate	BRL	0.25									
Sulfate	BRL	1.0									

Sample ID: **LCS-R303604** Client ID: Units: **mg/L** Prep Date: Run No: **303604**
SampleType: **LCS** TestCode: **ION SCAN SW9056A** BatchID: **R303604** Analysis Date: **10/31/2015** Seq No: **6498203**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	9.852	1.0	10.00		98.5	90	110				
Nitrate	4.868	0.25	5.000		97.4	90	110				
Sulfate	23.96	1.0	25.00		95.8	90	110				

Sample ID: **1510R78-001EMS** Client ID: **MW-17** Units: **mg/L** Prep Date: Run No: **303604**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R303604** Analysis Date: **10/31/2015** Seq No: **6498217**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	116.7	10	100.0	14.05	103	90	110				
Nitrate	48.26	2.5	50.00		96.5	90	110				
Sulfate	271.7	10	250.0	23.82	99.1	90	110				

Sample ID: **1510S17-001EMS** Client ID: Units: **mg/L** Prep Date: Run No: **303604**
SampleType: **MS** TestCode: **ION SCAN SW9056A** BatchID: **R303604** Analysis Date: **11/01/2015** Seq No: **6498224**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	511.3	50	500.0		102	90	110				
Nitrate	247.8	12	250.0		99.1	90	110				
Sulfate	1584	50	1250	329.1	100	90	110				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: R303604

Sample ID: **1510R78-001EMSD** Client ID: **MW-17** Units: **mg/L** Prep Date: Run No: **303604**
SampleType: **MSD** TestCode: **ION SCAN SW9056A** BatchID: **R303604** Analysis Date: **10/31/2015** Seq No: **6498218**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloride	118.1	10	100.0	14.05	104	90	110	116.7	1.23	20	
Nitrate	49.18	2.5	50.00		98.4	90	110	48.26	1.88	20	
Sulfate	274.3	10	250.0	23.82	100	90	110	271.7	0.967	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: R303675

Sample ID: **MB-R303675** Client ID: Units: **mg/L** Prep Date: Run No: **303675**
SampleType: **MBLK** TestCode: **Total Organic Carbon (TOC) SW9060A** BatchID: **R303675** Analysis Date: **11/04/2015** Seq No: **6500249**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	BRL	1.00									

Sample ID: **LCS-R303675** Client ID: Units: **mg/L** Prep Date: Run No: **303675**
SampleType: **LCS** TestCode: **Total Organic Carbon (TOC) SW9060A** BatchID: **R303675** Analysis Date: **11/04/2015** Seq No: **6500247**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	24.13	1.00	25.00		96.5	90	110				

Sample ID: **1510Q08-006BMS** Client ID: Units: **mg/L** Prep Date: Run No: **303675**
SampleType: **MS** TestCode: **Total Organic Carbon (TOC) SW9060A** BatchID: **R303675** Analysis Date: **11/05/2015** Seq No: **6500279**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	26.68	1.00	25.00	1.070	102	80	120				

Sample ID: **1510Q08-006BMSD** Client ID: Units: **mg/L** Prep Date: Run No: **303675**
SampleType: **MSD** TestCode: **Total Organic Carbon (TOC) SW9060A** BatchID: **R303675** Analysis Date: **11/05/2015** Seq No: **6500281**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Organic Carbon, Total	25.90	1.00	25.00	1.070	99.3	80	120	26.68	2.99	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: EarthCon Consultants, Inc.
Project Name: Apollo Ind.
Workorder: 1510R78

ANALYTICAL QC SUMMARY REPORT

BatchID: R303699

Sample ID: **MB-R303699**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303699**
SampleType: **MBLK**	TestCode: **Alkalinity by SM2320B**				BatchID: **R303699**		Analysis Date: **11/05/2015**		Seq No: **6500581**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	BRL	3.00									

Sample ID: **LCS-R303699**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303699**
SampleType: **LCS**	TestCode: **Alkalinity by SM2320B**				BatchID: **R303699**		Analysis Date: **11/05/2015**		Seq No: **6500582**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	123.0	3.00	125.0		98.4	75	125				

Sample ID: **1510O73-001EDUP**	Client ID:				Units: **mg/L**		Prep Date:		Run No: **303699**
SampleType: **DUP**	TestCode: **Alkalinity by SM2320B**				BatchID: **R303699**		Analysis Date: **11/05/2015**		Seq No: **6500615**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Alkalinity, Total (As CaCO3)	19.00	3.00						17.00	11.1	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX D

FIELD SAMPLING FORMS

EARTHCON

Apollo Smyrna 02.20140391.00
Water Levels
Date: 10/6/15

Monitoring Well	Top of Casing Elevation feet, MSL	Time	Depth to Water feet	Total Depth feet	Groundwater Elevation feet, MSL
Dobbs Area					
RW-1	861.98				
RW-2	862.01				
DW-1	862.44	10:49	3.68	49.20	
MW-1	885.30	11:18	23.70	31.60	
MW-2	896.38	11:38	[redacted] 25.96	46.80	
MW-3	883.43	11:22	22.48	47.75	
MW-4	857.57	11:02	2.57	33.44	
MW-5	861.75	11:08	6.45	19.72	
MW-6R		10:35	7.82	26.51	
MW-7	865.47	12:39	7.04	16.69	
MW-8	892.91	12:08	26.27	44.52	
MW-9	859.86	12:28	8.55	19.91	
MW-10	901.05	11:51	19.76	29.00	
MW-11	892.84	11:55	22.45	24.60	
MW-12	891.30	12:05	26.36	37.85	
MW-13	864.72	12:35	8.38	15.25	
MW-15	858.14	10:15	6.33	14.14	

MW-3- water is tannish color. Soft bottom

EARTHCON®

Groundwater Sampling Record

WELL No. DW-1	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/8/15
SAMPLE No. DW-1	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY R. Davis	/EarthCon
SAMPLE TIME: 1430	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny 78°	

Well Condition Inspection (circle one)

cover: locked (not locked)
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- potable water and phosphate-free soap ✓
- potable water rinse
- water rinse: (distilled ✓) deionized
- solvent rinse: acetone hexane
- air dry

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: ($\pi r^2 h$)(7.48 gal/ft^3)
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	3.68	Measuring Point Elevation (feet):	
Depth of Well (feet):	99.20	Groundwater Surface Elevation:	
Water Column (feet):	45.52	LNAPL present:	thickness:
Casing Volume (gallons/liters):	7.42	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	22.3	Remarks:	
Actual Purge Volume (gallons/liters):	1.25		
Pump Intake Depth (feet):	~ 45'	Ferrous Iron (mg/L):	2.08 No Dilution

Well Evacuation

Water level recovery is: very slow (slow) moderate fast Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1319	0								PURGE START
1325	—	20.05	6.31	10.46	27.1	373	5.93	4.65	
1335	0.4	19.81	6.26	1.37	28.4	367	4.68	5.83	
1345	0.7	19.93	6.26	1.01	33.1	363	3.68	6.77	
1355	~~0.8~~ 0.9	19.82	6.29	0.92	32.1	365	5.22	7.36	
1405	1.1	19.77	6.25	0.91	26.8	367	4.61	7.71	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	YSI	556	10/8/15
Turbidity	Lamotte	2020 we	10/8/15
Peri Pump	Aquasys	Electra	—

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
2	VOCs	40ml	HCl	
2	MNA Gases	40ml	HCl	
1	TOC	250 ml	H_2SO_4	
1	Ions	250 ml	~	
1	Alkalinity	500ml	~	
1	Sulfide	500ml	ZN+NaOH	

Start purge - 1319
End purge - 1405
Sample - 1430

EARTHCON

Groundwater Sampling Record

WELL No. MW-1	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/8/15
SAMPLE No. MW-1	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY K. Davis	/EarthCon
SAMPLE TIME: 1125	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny 66°	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- potable water and phosphate-free soap ✓
- potable water rinse
- water rinse: distilled ✓ deionized
- solvent rinse: acetone hexane
- air dry

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: ($\pi r^2 h$)/7.48 gal/ft^3)
Casing Volume (gallons/ft) for: (2") = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	23.70	Measuring Point Elevation (feet):	
Depth of Well (feet):	31.60	Groundwater Surface Elevation:	
Water Column (feet):	7.9'	LNAPL present:	thickness:
Casing Volume (gallons/liters):	1.28	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	3.86	Remarks:	
Actual Purge Volume (gallons/liters):	1.0		
Pump Intake Depth (feet):	≈ 30'	Ferrous Iron (mg/L):	1.74 no dilution

Well Evacuation
Water level recovery is: very slow slow (moderate) fast
Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1012	0								PURGE START
1021	—	20.26	6.47	6.34	-42.5	627	15.4	24.02	
1030	0.2	20.39	6.45	1.27	-35.4	618	5.44	24.12	
1040	0.4	20.65	6.47	1.01	-38.7	612	5.14	24.24	
1050	0.7	20.73	6.49	0.80	-41.8	606	5.02	24.31	
1100	0.9	20.92	6.50	0.76	-44.6	600	3.08	24.36	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	YSI	556	10/8/15
Turbidity	Eamonte	2020 we	10/8/15
Peri Pump	Aquasus	Electra	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
2	VOCs	40 ml	HCl	Dup-1
2	MNA Gases	40 ml	HCl	
	TOC	250 ml	H_2SO_4	
1	Ions	250 ml	—	
1	Alkalinity	500 ml	—	
1	Sulfide	500 ml	2ml + NaOH	

Start Purge - 1012
End Purge - 1101
Sample - 1125

EARTHCON®

Groundwater Sampling Record

WELL No. MW-2	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/8/15
SAMPLE No. MW-2	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 1040	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny, 65°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- potable water and phosphate-free soap
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
- air dry

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	25.91	Measuring Point Elevation (feet):	—
Depth of Well (feet):	46.80 (measured 10/6/15)	Groundwater Surface Elevation:	—
Water Column (feet):	20.89	LNAPL present: NO	thickness:
Casing Volume (gallons/liters):	3.41	DNAPL present: NO	thickness:
Calculated Purge Volume (gallons/liters):	10.22	Remarks: 15-ft screen	
Actual Purge Volume (gallons/liters):	2.00		
Pump Intake Depth (feet):	~35.00 feet	Ferrous Iron (mg/L):	0.00 mg/L no dilution

Well Evacuation

Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0930	0								PURGE START
0935	0.1	20.92	6.09	4.96	88.2	65	27.80	26.08	clear
0940	0.2	20.94	5.67	3.99	97.1	63	20.40	26.12	" "
0945	0.5	21.04	5.78	3.61	95.0	62	15.70	26.12	" "
0950	0.7	21.10	5.84	3.42	93.7	61	11.80	26.13	" "
0955	0.8	21.04	5.86	3.33	101.4	61	12.40	26.14	" "
1000	1.0	20.95	5.85	3.23	101.5	61	11.60	26.17	" "
1005	1.2	21.01	5.84	3.17	107.2	61	10.94	26.18	" "
1010	1.4	21.07	5.85	3.08	112.1	61	11.30	26.17	" "
1015	1.6	21.11	5.84	3.06	110.2	62	11.50	26.18	" "
1020	1.7	20.98	5.85	3.02	115.7	61	9.97	26.18	" "
1025	1.8	21.05	5.83	2.98	117.1	61	9.98	26.19	" "
1030	1.9	20.98	5.84	2.96	118.0	61	9.89	26.19	" "
1035	2.0	21.03	5.85	2.94	119.3	61	9.65	26.19	" "
1040	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556 MPS	08K1003392	10/8/15
Turbidimeter	LaMotte	Serial No - 3674-3813	10/8/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-2	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide	1-250mL HDPE	NaOH	

EARTHCON

Groundwater Sampling Record

WELL No. MW-3	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/8/15
SAMPLE No. MW-3	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY K. Davis	/EarthCon
SAMPLE TIME: 0940	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Clear 63° Sunny	

Well Condition Inspection (circle one)

cover: locked (not locked)
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- potable water and phosphate-free soap ✓
- potable water rinse
- water rinse: distilled ✓ deionized
- solvent rinse: acetone hexane
- air dry

Casing Diameter: (circle one) 2" (4") 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; (4" = 0.653); 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	22.98	Measuring Point Elevation (feet):	
Depth of Well (feet):	47.75	Groundwater Surface Elevation:	
Water Column (feet):	25.27	LNAPL present:	thickness:
Casing Volume (gallons/liters):	16.5	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	49.5	Remarks:	
Actual Purge Volume (gallons/liters):	1.5		
Pump Intake Depth (feet):	~ 44'	Ferrous Iron (mg/L):	1.97 via Chemets

Well Evacuation

Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0818	0								PURGE START
0829	—	17.52	6.16	9.31	-51.6	793	5.42	22.74	
0840	0.3	17.63	6.21	2.17	-53.8	803	5.41	22.84	
0850	0.6	17.82	6.22	1.51	-51.2	807	5.18	22.86	
0900	0.9	18.11	6.23	1.17	-52.5	809	4.76	22.89	
0910	1.1	18.73	6.24	0.97	-57.2	808	6.68	22.89	
0920	1.4	19.32	6.24	0.57	-61.1	809	5.26	22.89	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	YSI	556	10/8/15
Turbidity	Lamotte	2020 we	10/8/15
Peri Pump	Pegasus	Electra	—

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/ PRESERVATIVES	QA REMARKS
2	VOC	40ml / HCl	
2	MNA Gases	40ml / HCl	
1	TOC	250ml / H_2SO_4	
1	Ions	250ml / —	
1	Alkalinity	500ml / —	
1	Sulfide	500ml / 2N+ NaOH	

START Purge -0818
END Purge -0921

Sample -0940

EARTHCON®

Groundwater Sampling Record

WELL No. MW-4	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/8/15
SAMPLE No. MW-4	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 1415	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny, 78°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- (potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
- (air dry)

Casing Diameter: (circle one) 2" (4") 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; (4" = 0.653); 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	2.60	Measuring Point Elevation (feet):	—
Depth of Well (feet):	33.44 (measured 10/6/15)	Groundwater Surface Elevation:	—
Water Column (feet):	30.84	LNAPL present: ND	thickness:
Casing Volume (gallons/liters):	20.14	DNAPL present: ND	thickness:
Calculated Purge Volume (gallons/liters):	60.42	Remarks: 20-ft screen, black fragments in water initially	
Actual Purge Volume (gallons/liters):	2.80		
Pump Intake Depth (feet):	~24.00 ft	Ferrous Iron (mg/L):	0.03 mg/L no dilution

Well Evacuation
Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1305	0								PURGE START
1310	0.1	22.91	6.19	3.21	146.6	313	7.19	2.78	black fragments
1315	0.25	22.27	6.02	1.13	124.4	314	2.25	2.90	clear
1320	0.5	22.22	5.99	0.78	119.1	313	2.41	2.95	" "
1325	0.7	22.20	5.99	0.60	117.5	313	0.87	2.99	" "
1330	0.8	22.23	6.00	0.50	116.5	313	0.64	3.01	" "
1335	1.1	22.03	5.97	0.38	112.4	312	0.56	3.01	" "
1340	1.35	22.10	5.97	0.36	114.1	313	0.36	3.03	" "
1345	1.5	22.15	6.03	0.36	104.7	313	0.47	3.03	" "
1350	1.75	21.65	5.98	0.35	104.7	310	0.41	3.08	" "
1355	2.0	21.43	5.94	0.32	104.4	309	0.44	3.13	" "
1400	2.25	21.14	5.86	0.33	109.3	306	0.26	3.14	" "
1405	2.5	20.99	5.86	0.34	111.1	305	0.29	3.15	" "
1410	2.8	21.01	5.87	0.32	111.8	304	0.28	3.16	
1415	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556 MPS	06K100392	10/8/15
Turbidimeter	LaMotte	Serial No - 3674 - 3813	10/8/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-4	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide	1-250mL HDPE	NaOH	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-5	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-5	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY Keaton Henry	/EarthCon
SAMPLE TIME: 11:25	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny, 70's	

Well Condition Inspection (circle one)

cover: locked / not locked
number: legible / not legible
outer casing: good / fair / poor
inner casing: good / fair / poor
well photographed: yes / no

Equipment Cleaning Procedures

potable water and phosphate-free soap
- potable water rinse
- water rinse: distilled / deionized
- solvent rinse: acetone / hexane
- air dry

Casing Diameter: (circle one) 2" / 4" / 6" / Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	6.47	Measuring Point Elevation (feet):	
Depth of Well (feet):	14.72	Groundwater Surface Elevation:	
Water Column (feet):	8.25	LNAPL present:	thickness:
Casing Volume (gallons/liters):	1.34	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	4.02	Remarks:	
Actual Purge Volume (gallons/liters):	1.95		
Pump Intake Depth (feet):	12'	Ferrous Iron (mg/L):	0.00 mg/L no dilution

Well Evacuation

Water level recovery is: very slow / slow / moderate / fast
Bailed dry: yes / no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
10:32	0								PURGE START
10:40	0.40	23.46	5.46	3.28	175.5	59	2.43	6.89	clear
10:45	0.75	23.27	5.30	1.84	178.0	56	0.52	6.80	"
10:50	0.95	23.18	5.25	1.19	180.9	57	0.41	6.80	"
10:55	1.15	23.17	5.24	0.73	184.4	57	0.12	6.79	"
11:00	1.40	23.17	5.25	0.63	185.9	57	0.25	6.75	"
11:05	1.55	23.07	5.24	0.85	186.8	57	0.11	6.73	"
11:10	1.75	23.12	5.24	0.89	189.0	57	0.10	6.73	"
11:15	1.95	23.13	5.24	0.96	190.1	57	0.32	6.72	"

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
[redacted] Water Quality Mdv	YSI	556 MPS	10/7/15
Turbidimeter	LaMotte	2020 We	10/7/15
Colorimeter	HACH	DR/850	—

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-5	VOC	40 mL	HCl	
"	MNA	40 mL	HCl	
"	TOC	250 mL	H_2SO_4	
"	Ion	250 mL	—	
"	Sulfide	250 mL	Zn+NaOH	
"	Alkalinity	500 mL	—	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-6R	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-6R	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY Keaton Henry	/EarthCon
SAMPLE TIME: 16:55	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny, 80's	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- (potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
- (air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	7.91	Measuring Point Elevation (feet):	
Depth of Well (feet):	26.51	Groundwater Surface Elevation:	
Water Column (feet):	18.6	LNAPL present:	thickness:
Casing Volume (gallons/liters):	3.03	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	9.09	Remarks:	
Actual Purge Volume (gallons/liters):	4.00		
Pump Intake Depth (feet):	23'	Ferrous Iron (mg/L):	0.08

Well Evacuation

Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
15:36	0								PURGE START
15:40	0.20	21.15	6.04	2.16	128.9	97	46.0	8.05	cloudy
15:45	0.45	21.42	6.02	1.39	128.0	96	39.5	8.05	"
15:50	0.65	21.67	5.96	1.32	131.7	96	37.6	8.05	"
15:55	0.95	20.74	5.99	1.39	134.2	95	51.2	8.16	"
16:00	1.25	20.69	5.98	1.40	133.9	94	44.1	8.11	"
16:05	1.55	20.38	6.01	1.32	132.3	95	37.8	8.11	"
16:10	1.95	20.15	5.98	1.21	130.3	97	31.2	8.11	"
16:15	2.25	20.04	5.97	1.18	131.2	96	32.6	8.11	"
16:25	2.90	19.93	5.94	1.06	132.0	97	22.1	8.13	"
16:35	3.40	20.11	5.98	0.92	134.4	99	17.1	8.05	sl cloudy
16:45	3.75	19.87	5.98	0.84	133.4	94	15.1	8.04	"

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality Meter	YSI	556 MPS	10/7/15
Turbidimeter	LaMotte	2020 We	10/7/15
Colorimeter	HACH	DR/820	—

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-6R	VOC	40 mL	HCl	
"	MNA	40 mL	HCl	
"	TOC	250 mL	H_2SO_4	
"	Ion Scan	250 mL	—	
"	Sulfide	250 mL	Zn + NaOH	
"	Alkalinity	500 mL	—	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-7	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-7	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 1045	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER sunny, 75°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

(potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
(air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: (2" = 0.163); 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	7.03	Measuring Point Elevation (feet):	—
Depth of Well (feet):	16.69 (measured 10/6/15)	Groundwater Surface Elevation:	—
Water Column (feet):	9.66	LNAPL present:	NO thickness:
Casing Volume (gallons/liters):	1.57	DNAPL present:	NO thickness:
Calculated Purge Volume (gallons/liters):	4.72	Remarks:	10-ft screen
Actual Purge Volume (gallons/liters):	1.80		
Pump Intake Depth (feet):	~11.00	Ferrous Iron (mg/L):	~~0.00 mg/L~~ SKW 3.28 mg/L

Well Evacuation

Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0955	0								PURGE START
1000	0.1	19.39	5.75	1.84	38.5	208	8.55	7.20	clear
1005	0.25	19.58	5.77	1.01	33.5	226	12.40	7.23	" "
1010	0.5	19.69	5.84	0.77	19.9	262	10.50	—	" "
1015	0.8	19.71	5.86	0.74	9.3	278	8.82	7.25	" "
1020	1.0	19.77	5.90	0.76	2.6	282	6.83	7.14	" "
1025	1.2	19.83	5.92	0.72	-4.6	298	6.39	7.15	" "
1030	1.4	19.86	5.95	0.65	-5.8	305	6.82	7.20	" "
1035	1.6	19.93	5.97	0.50	-4.8	313	7.16	7.20	" "
1040	1.8	20.01	5.99	0.49	-6.8	315	4.26	7.20	" "
1045	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556MPS	08K1086392	10/7/15
Turbidimeter	LaMotte	Serial No - 3674 - 3813	10/7/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-7	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide	1-250mL HDPE	NaOH	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-8	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-8	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 1400	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER sunny, 80°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

(- potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
(- air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: (2" = 0.163); 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	25.23	Measuring Point Elevation (feet):	—
Depth of Well (feet):	49.52 (measured 10/6/15)	Groundwater Surface Elevation:	—
Water Column (feet):	19.29	LNAPL present:	NO thickness:
Casing Volume (gallons/liters):	3.14	DNAPL present:	NO thickness:
Calculated Purge Volume (gallons/liters):	9.43	Remarks:	15-ft Screen
Actual Purge Volume (gallons/liters):	1.00		
Pump Intake Depth (feet):	~40.00 feet	Ferrous Iron (mg/L):	0.09 mg/L no dilution

Well Evacuation

Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1315	0								PURGE START
1320	0.1	19.45	5.59	4.13	169.4	55	28.80	25.42	clear
1325	0.2	19.49	4.87	1.68	198.4	56	10.11	26.38	" "
1330	0.35	19.81	5.18	1.22	175.8	57	8.24	26.36	" "
1335	0.5	19.93	5.30	1.08	164.6	57	4.55	26.37	" "
1340	0.6	19.89	5.34	0.99	159.4	56	4.29	26.36	" "
1345	0.7	19.80	5.29	0.98	164.8	55	4.06	26.36	" "
1350	0.8	19.86	5.27	0.92	168.2	55	2.85	26.35	" "
1355	1.0	19.83	5.24	0.91	169.3	54	2.30	26.36	" "
1400	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556 MPS	08K100392	10/7/15
Turbidimeter	LaMotte	Serial No - 3674-3813	10/7/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-8	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide, O	1-250mL HDPE	NaOH	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-9	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-9	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY Keaton Howy	/EarthCon
SAMPLE TIME: 9:45	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Partly Cloudy, 60's	

Well Condition Inspection (circle one)

cover: locked / not locked
number: legible / not legible
outer casing: good / fair / poor
inner casing: good / fair / poor
well photographed: yes / no

Equipment Cleaning Procedures

- potable water and phosphate-free soap
- potable water rinse
- water rinse: distilled / deionized
- solvent rinse: acetone / hexane
- air dry

Casing Diameter: (circle one) 2" / 4" / 6" / Other:___

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	8.62	Measuring Point Elevation (feet):	
Depth of Well (feet):	19.91	Groundwater Surface Elevation:	
Water Column (feet):	11.29	LNAPL present:	thickness:
Casing Volume (gallons/liters):	1.84	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	5.52	Remarks:	
Actual Purge Volume (gallons/liters):	2.65		
Pump Intake Depth (feet):	15'	Ferrous Iron (mg/L):	0.02

Well Evacuation

Water level recovery is: very slow / slow / moderate / fast — Bailed dry: yes / no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
8:35	0								PURGE START
8:40	0.20	19.02	5.46	0.90	140.2	117	1.06	8.76	clear
8:45	0.50	14.86	5.39	0.97	182.0	100	1.14	8.80	"
8:50	0.75	20.12	5.31	1.50	181.1	92	0.96	8.81	"
8:55	0.90	20.18	5.30	1.75	181.4	79	0.87	8.81	"
9:00	1.10	20.24	5.28	1.31	184.1	77	0.96	8.83	"
9:05	1.40	20.30	5.28	0.93	185.9	75	0.82	8.84	"
9:10	1.60	20.33	5.27	0.85	184.0	73	0.72	8.84	"
9:15	1.90	20.38	5.27	0.63	183.7	69	0.67	8.85	"
9:20	2.10	20.37	5.26	0.47	182.0	68	0.55	8.83	"
9:30	2.50	20.42	5.25	0.34	180.8	69	0.50	8.86	"

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality Meter	YSI	556 MPS	10/7/15
Turbidimeter	LaMotte	2020 We	10/7/15
Colorimeter	HACH	DR1820	—

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-9	VOC	40 mL	HCl	
"	MNA	40 mL	HCl	
"	TOC	250 mL	H_2SO_4	
"	Ions	250 mL	—	
"	Alkalinity	500 mL	—	
"	Sulfide	~~500~~ mL 250	Zn+ NaOH	

Sample 9145

EARTHCON®

Groundwater Sampling Record

WELL No. MW-10	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-10	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY Keaton Henry	/EarthCon
SAMPLE TIME: 14:00 25	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny, 70's	

Well Condition Inspection (circle one)

cover: locked / not locked
number: legible / not legible
outer casing: good / fair / poor
inner casing: good / fair / poor
well photographed: yes / no

~~Equipment Cleaning Procedures~~

- potable water and phosphate-free soap
- potable water rinse
- water rinse: distilled / deionized
- solvent rinse: acetone / hexane
- air dry

Casing Diameter: (circle one) 2" / 4" / 6" / Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	14.73	Measuring Point Elevation (feet):	
Depth of Well (feet):	29.00	Groundwater Surface Elevation:	
Water Column (feet):	9.27	LNAPL present:	thickness:
Casing Volume (gallons/liters):	1.51	DNAPL present:	thickness:
Calculated Purge Volume (gallons/liters):	4.53	Remarks: Diluted Ferrous Iron 5 times	
Actual Purge Volume (gallons/liters):	2.35		
Pump Intake Depth (feet):	~25'	Ferrous Iron (mg/L): 1.58	

Well Evacuation

Water level recovery is: very slow / slow / moderate / fast

Bailed dry: yes / no

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
323 ~~1054~~	0								PURGE START
330 ~~1057~~	0.25	20.32	6.30	0.61	-73.5	196	4.48	20.15	clear
1335	0.60	20.18	6.36	0.49	-64.3	191	2.70	20.25	"
1340	0.90	20.41	6.33	0.80	-64.1	191	2.10	20.27	"
1345	1.15	20.27	6.35	0.43	-63.2	194	1.56	20.28	"
1350	1.45	20.37	6.38	0.30	-62.8	195	1.18	20.28	"
1355	1.75	20.22	6.36	0.27	-55.5	196	1.91	20.30	"
1400	2.0	20.10	6.38	0.31	-55.0	196	1.24	20.30	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality Meter	YSI	556 MPS	10/7/15
Turbidimeter	LaMotte	2020 We	10/7/15
Colorimeter	HACH	DR/820	

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-10	VOC	40 mL	HCl	
"	MNA	40 mL	HCl	
"	TOC	250 mL	H_2SO_4	
"	Ion Scan	250 mL	=	
"	Sulfide	250 mL	Zn + NaOH	
"	Alkalinity	500 mL	=	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-11	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-11	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 1520	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER Sunny, 80°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- (potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
- (air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for (2" = 0.163); 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	20.49	Measuring Point Elevation (feet):	—
Depth of Well (feet):	24.60 (measured 10/6/15)	Groundwater Surface Elevation:	—
Water Column (feet):	4.11	LNAPL present: ND	thickness:
Casing Volume (gallons/liters):	0.67	DNAPL present: ND	thickness:
Calculated Purge Volume (gallons/liters):	2.01	Remarks: 10-ft screen	
Actual Purge Volume (gallons/liters):	1.50		
Pump Intake Depth (feet):	~22.00	Ferrous Iron (mg/L):	3.20 mg/L no dilution

Well Evacuation

Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1430	0								PURGE START
1445	0.1	21.83	6.11	0.82	-15.7	176	3.01	20.92	clear
1450	0.25	21.66	6.06	0.61	-17.7	173	2.03	20.97	" "
1455	0.5	21.60	6.05	0.44	-20.2	169	2.39	21.01	" "
1500	0.7	21.62	6.04	0.37	-20.7	173	3.09	21.04	" "
1505	1.0	21.56	6.03	0.33	-21.2	176	3.48	21.07	" "
1510	1.2	21.47	6.01	0.30	-21.6	181	3.83	21.08	" "
1515	1.5	21.46	6.01	0.29	-21.3	179	4.82	21.09	" "
1520	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556 MPS	08K1003902	10/7/15
Turbidimeter	LaMotte	Serial No – 3674-3813	10/7/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-11	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide	1-250mL HDPE	NaOH	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-12	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-12	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 1700	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER sunny, 85°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- (potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
- (air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 26.30
Depth of Well (feet): 37.85 (measured 10/6/15)
Water Column (feet): 11.55
Casing Volume (gallons/liters): 1.88
Calculated Purge Volume (gallons/liters): 5.65
Actual Purge Volume (gallons/liters): 1.70
Pump Intake Depth (feet): ~32.00

Measuring Point Elevation (feet): —
Groundwater Surface Elevation: —
LNAPL present: NO thickness:
DNAPL present: NO thickness:
Remarks: 15-ft Screen

Ferrous Iron (mg/L): 0.04 mg/L no dilution

Well Evacuation

Water level recovery is: very slow slow moderate (fast)
Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
1615	0								PURGE START
1620	0.1	17.39	5.26	3.01	175.3	49	5.75	26.58	clear
1625	0.25	17.48	4.79	2.16	190.8	49	4.78	—	" "
1630	0.6	17.71	4.39	1.51	213.3	48	—	26.85	" "
1635	0.75	17.78	4.53	1.09	203.4	47	3.80	26.89	" "
1640	1.0	17.64	4.60	0.92	200.9	46	2.42	26.88	" "
1645	1.2	17.47	4.55	0.77	203.4	46	1.63	26.90	" "
1650	1.5	17.42	4.56	0.67	203.6	45	1.97	—	" "
1655	1.7	17.41	4.60	0.68	202.8	45	1.83	26.90	" "
1700	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556 MPS	08K100392	10/7/15
Turbidimeter	LaMotte	Serial No - 3674-3813	10/7/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-12	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide	1-250mL HDPE	NaOH	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-13	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/7/15
SAMPLE No. MW-13	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 0930	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER sunny, 70°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

(potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
(- air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: (2" = 0.163); 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet):	8.36	Measuring Point Elevation (feet):	—
Depth of Well (feet):	15.25 (measured 10/6/15)	Groundwater Surface Elevation:	—
Water Column (feet):	6.89	LNAPL present:	ND thickness:
Casing Volume (gallons/liters):	1.12	DNAPL present:	NO thickness:
Calculated Purge Volume (gallons/liters):	3.37	Remarks:	"soap-like" bubbles in bucket
Actual Purge Volume (gallons/liters):	2.30		10-ft screen
Pump Intake Depth (feet):	12.00	Ferrous Iron (mg/L):	0.37 mg/L No dilution

Well Evacuation
Water level recovery is: very slow slow moderate (fast) Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0850	0								PURGE START
0854	0.1	18.99	5.90	4.67	71.1	166	2.33	8.61	slight odor
0900	0.6	18.65	~~1.095~~	1.03	23.8	164	5.40	8.90	" "
0905	1.1	18.61	5.59	0.78	18.9	165	3.39	9.01	clear
0910	1.4	18.53	5.60	0.69	23.5	166	2.29	9.08	" "
0915	1.75	18.51	5.60	0.74	21.0	167	3.01	9.10	" "
0920	2.0	18.49	5.61	0.71	18.9	167	4.61	9.10	" "
0925	2.3	18.48	5.61	0.68	17.2	168	4.54	9.12	" "
0930	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	GeoTech	GeoPump	—
Water Quality	YSI 556MPS	08K1005392	10/7/15
Turbidimeter	LaMotte	Serial No - 3674-3813	10/7/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-13	VOCs	2-40-mL VOA	HCl	
	GC Analysis	2-40-mL VOA	HCl	
	Ion Scan	1-500-mL HDPE	n/a	
	TOC	1-250-mL HDPE	H_2SO_4	
	Alkalinity	1-250-mL HDPE	n/a	
	Sulfide	1-250-mL HDPE	NaOH	

EARTHCON®

Groundwater Sampling Record

WELL No. MW-15	PROJECT # 02.20140391.00	LOCATION 1850 S Cobb Industrial Blvd SE, Smyrna, GA 30082	DATE 10/8/15
SAMPLE No. MW-15	PROJECT NAME Apollo Smyrna	FIELD PERSONNEL/COMPANY S. Woolf	/EarthCon
SAMPLE TIME: 0900	SITE Smyrna, GA	FIELD CONDITIONS/WEATHER sunny, 50-60°F	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

(potable water and phosphate-free soap)
- potable water rinse
- water rinse: (distilled) deionized
- solvent rinse: acetone hexane
(air dry)

Casing Diameter: (circle one) (2") 4" 6" Other:____

Casing Volume Calculation: $(\pi r^2 h)(7.48\ gal/ft^3)$
Casing Volume (gallons/ft) for: 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 6.46
Depth of Well (feet): 14.14 (measured 10/6/15)
Water Column (feet): 7.68
Casing Volume (gallons/liters): 1.25
Calculated Purge Volume (gallons/liters): 3.76
Actual Purge Volume (gallons/liters): 2.00
Pump Intake Depth (feet): ~10.00 feet

Measuring Point Elevation (feet): —
Groundwater Surface Elevation: —
LNAPL present: NO thickness:
DNAPL present: NO thickness:
Remarks: 10-ft Screen
Ferrous Iron (mg/L): 2.39 mg/L no dilution

Well Evacuation

Water level recovery is: very slow slow moderate (fast)
Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0815	0								PURGE START
0820	0.1	21.26	5.73	3.02	6.2	457	3.92	6.64	Clear
0825	0.5	21.33	5.77	1.69	3.5	467	4.02	6.68	" "
0830	0.75	21.37	5.77	1.12	2.7	473	3.94	6.73	" "
0835	1.0	21.39	5.78	0.77	0.5	476	1.95	6.79	" "
0840	1.2	21.44	5.78	0.64	1.8	480	1.49	6.79	" "
0845	1.4	21.48	5.79	0.62	-0.9	484	1.12	6.83	" "
0850	1.7	21.47	5.79	0.58	-1.5	486	1.57	6.88	" "
0855	2.0	21.52	5.80	0.56	-1.3	486	1.33	6.90	" "
0900	SAMPLE								

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Peristaltic Pump	Geo Tech	GeoPump	—
Water Quality	YSI 556 MPS	08K100392	10/8/15
Turbidimeter	LaMotte	Serial No. - 3674-3813	10/8/15

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
MW-15	VOCs	2-40mL VOA	HCl	
	GC Analysis	2-40mL VOA	HCl	
	Ion Scan	1-500mL HDPE	n/a	
	TOC	1-250mL HDPE	H_2SO_4	
	Alkalinity	1-250mL HDPE	n/a	
	Sulfide	1-250mL HDPE	NaOH	

EARTHCON

Groundwater Sampling Record

WELL No. RW-1R	PROJECT # 02.2581.403 91.000	LOCATION Smyrna, GA	DATE 10/30/15
SAMPLE No.	PROJECT NAME Apollo Ind.	FIELD PERSONNEL/COMPANY R. Davis	/EarthCon
SAMPLE TIME: 1000	SITE	FIELD CONDITIONS/WEATHER Clear 50°	

Well Condition Inspection (circle one)

cover: (locked) not locked
number: (legible) not legible
outer casing: (good) fair poor
inner casing: (good) fair poor
well photographed: yes (no)

Equipment Cleaning Procedures

- potable water and phosphate-free soap ✓
- potable water rinse
- water rinse: distilled ✓ deionized
- solvent rinse: acetone hexane
- air dry

Casing Diameter: (circle one) (2") 4" 6" Other:___

Casing Volume Calculation: ($\pi r^2 h$)/7.48 gal/ft^3)
Casing Volume (gallons/ft) for 2" = 0.163; 4" = 0.653; 6" = 1.47
Casing Volume (liters/ft) for: 2" = 0.618; 4" = 2.47; 6" = 5.56

Depth to Water (feet): 7.08
Depth of Well (feet): ~~23.84~~ ~~25.30~~ 23.31
Water Column (feet): 16.23
Casing Volume (gallons/liters): 2.65
Calculated Purge Volume (gallons/liters): 7.94
Actual Purge Volume (gallons/liters): 2.0
Pump Intake Depth (feet): ≈ 20'

Measuring Point Elevation (feet): ___
Groundwater Surface Elevation: ___
LNAPL present: ___ thickness: ___
DNAPL present: ___ thickness: ___
Remarks: ___
Ferrous Iron (mg/L): 0.34 mg/L

Well Evacuation

Water level recovery is: very slow slow (moderate) fast
Bailed dry: yes (no)

TIME 2400 hrs	CUMULATIVE VOLUME (gal)	TEMPERATURE (°C)	pH	DISSOLVED OXYGEN (mg/L)	ORP (mV)	CONDUCTIVITY (µs/cm)	TURBIDITY (NTU)	Depth to Water (Feet)	ODOR/COLOR/ REMARKS
0836	0								PURGE START
0842	—	16.54	6.52	4.32	-189.7	515	31.16	7.64	
0850	0.25	17.18	6.54	2.15	-239.7	494	46.01	7.97	
0900	0.55	17.27	6.59	1.63	-366.8	488	45.51	8.03	
0910	0.85	17.17	6.64	1.32	-426.8	486	29.50	7.99	
0920	1.20	17.27	6.68	1.19	-432.9	485	20.06	8.03	
0930	1.50	17.29	6.70	0.97	-439.7	482	12.46	8.09	
0940	1.80	17.42	6.74	0.65	-442.3	483	9.90	8.12	

Measurement and Sampling Equipment

Type	Manufacturer	Model #	Calibration Date
Water Quality	YSI	556	10/30/15
Turbidity	HF Scientific	MICRO TPW 20000	10/30/15
Peri Pump	Geotech		

SAMPLE NUMBER	ANALYTICAL METHOD	BOTTLE TYPE/	PRESERVATIVES	QA REMARKS
1	TOC	250ml	Plastic / H_2SO_4	
1	Alkalinity	250 ml	Plastic / —	
1	Sulfide	250ml	Plastic / NaOH + ZnAc	
2	VOCs	40ml	/ HCl	
1	Ions	500ml	Plastic / —	

Start Purge -0836 Sample-1000 Dup-1
End Purge -0941

Surface Water Sampling Field Data Form

STATION IDENTIFICATION: SW-1	PROJECT NAME: Apollo Smyrna	DATE: 10/8/15
FACILITY NUMBER: 1850 S. Cobb Industrial Blvd Smyrna, GA 30082	LOCATION: Smyrna, GA	TIME: 1500
SAMPLING CONTACT/COMPANY: Apollo	SAMPLER'S PROJECT NUMBER: 02.20140391.00	

FIELD CONDITIONS/ WEATHER:

FIELD TEAM (signature/company): Kent Davis and Samantha Woolf / Earthcon Consultants, Inc

FIELD MEASUREMENTS

Gauge Height: — Substrate Level on Gauge: — pH: 6.98

Dissolved Oxygen (ppm): 7.87 Water Temperature (°C): 19.10

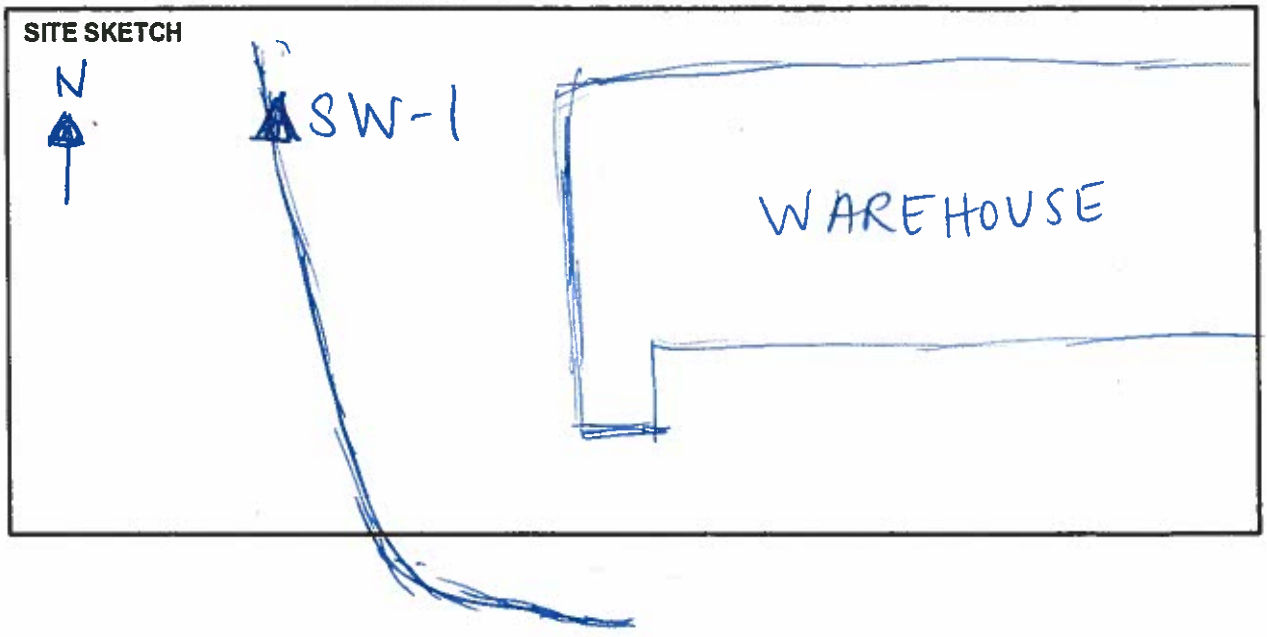
SC @ Field Temperature (microhos/cm): 140 Estimated Streamflow (cfs): —

Turbidity: 8.38 NTU

WATER QUALITY SAMPLES

	SAMPLE No.	DATE / TIME	STATION	CONTAINER TYPE	FILTERED	PRESERVATIVE	ANALYSIS
1.	SW-1	10/8/15 / 1500		40-mL VOA	NO	HCl	VOCs
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

SITE SKETCH



Surface Water Sampling Field Data Form

STATION IDENTIFICATION: SW-2	PROJECT NAME: Apollo Smyrna	DATE: 10/8/15
FACILITY NUMBER: 1850 S. Cobb Industrial Blvd Smyrna, GA 30082	LOCATION: Smyrna, GA	TIME: 1455
SAMPLING CONTACT/COMPANY:	SAMPLER'S PROJECT NUMBER: 02.20140391.00	

FIELD CONDITIONS/ WEATHER:

FIELD TEAM (signature/company): Kent Davis and Samantha Wood / Earthcon Consultants, Inc.

FIELD MEASUREMENTS

Gauge Height: — Substrate Level on Gauge: — pH: 7.16

Dissolved Oxygen (ppm): 7.82 Water Temperature (°C): 20.05

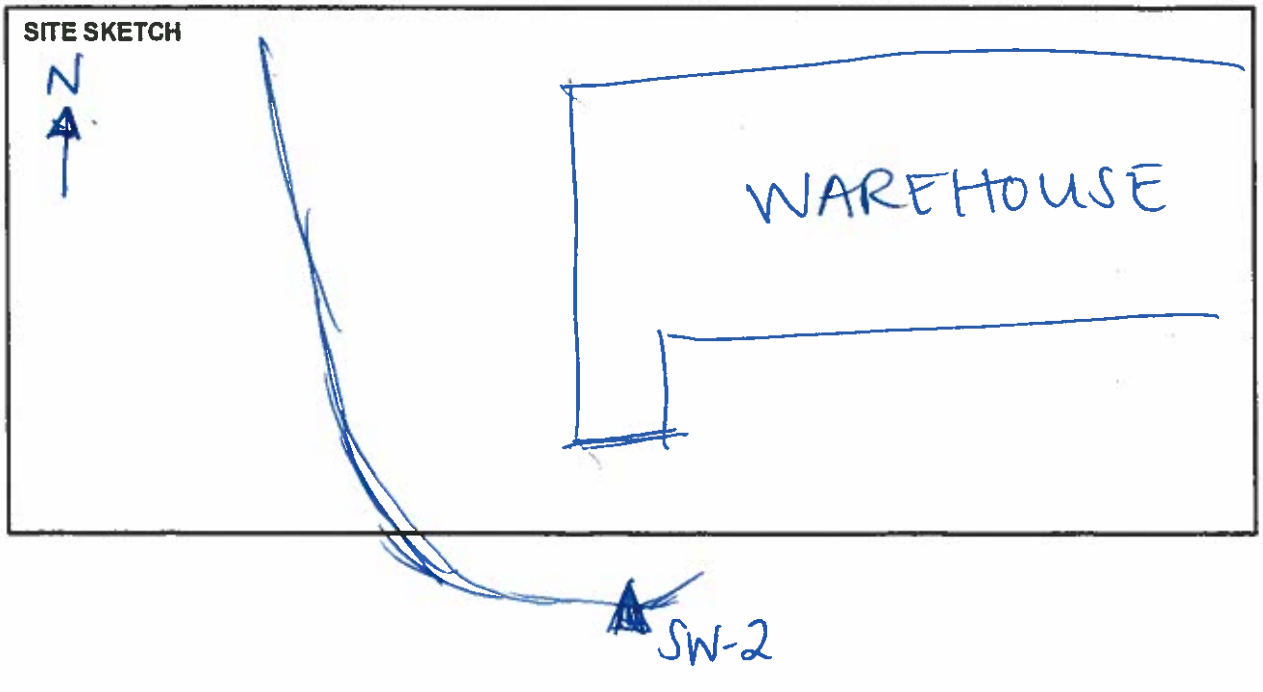
SC @ Field Temperature (microhos/cm): 138 Estimated Streamflow (cfs): —

Turbidity: 3.34 NTU

WATER QUALITY SAMPLES

	SAMPLE No.	DATE / TIME	STATION	CONTAINER TYPE	FILTERED	PRESERVATIVE	ANALYSIS
1.	SW-2	10/8/15 1455		40mL VOa	NO	HCl	VOCs
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

SITE SKETCH



Thursday 4/9/15 67°

0620 - Arrive on Site
0635 - Set up on MW-8
0700 - Calibrate equipment
- DO - OK
- Cond - 1409
- pH, 4, 7, 10
0719 - START purge
0930 - End purge
0945 - Sample MW-8
- Collect SW-2 + SED-2
1125 - SW-2
1130 - SED-2
1145 - SW-1
- Pack equipment
1225 - Depart Site
1405 - Drop Samples @ AES

KMD

September 16, 2015

0800 J. McKenney onsite @ Apollo EM Services (J. Williams, R. Young) onsite
anticipated activities: install soil borings east of the warehouse and rehabilitate MW-6.
weather: overcast, low 70's
0810 meet with Justin Baskin to discuss work activities.
0815 EMS setting up on boring location SB-6 (southern most of the 2 borings).
0900 complete SB6 to 25', mob to SB7
0930 complete SB7 to 25'
0935 mob to MW6 to begin well repair.
MW6 is silted up to 15.6' below surface, contact Apollo & EarthCon (K. Rivera, C. Northern, J. Baskin) recommend abandoning well
1030 Waiting for authorization to abandon well & re-install
1040 EM Services offsite to get well materials after getting authorized by Apollo/EPD

Rite in the Rain

9/16/15 (cont.)

0840 Collect SB6-2.5

0850 collect SB6-15

0910 collect SB7-2.5

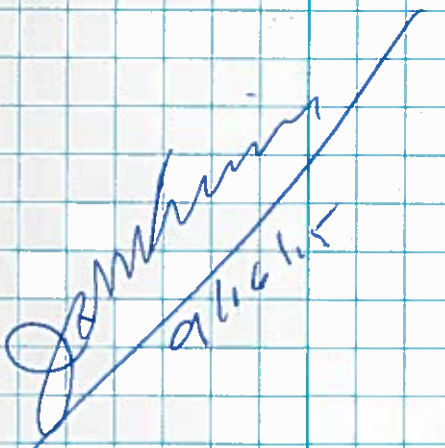
0920 collect SB7-15
& collect DUP-1

1140 McKinney contacts K. Rivera to discuss well construction & well location details - will move well ~5' north of old MW-6. Prepared to install to 30' BGS to try to maximize production / recovery of groundwater. well will be developed during later mobilization. No soil sampling will be conducted.

1205 Em Services on site. Prepare to set MW6R
red clayey silt to ~10'
brn to tan sandy silt ~10-micaceous, saprolite
water @ ~15' 17-21. bladder pump
1234 Boring advanced to 27' ↓ auger
21-27 gray clayey silt

September 16, 2015 (continued)

add 7.5, 50 lb bags of sand 20/40
add 4 bags bentonite pellets, 50# ea.
1315 Hydrate pellets
1340 McKinney marks locations of SB6 & SB7. Note: SB6 is 5' East of arrow mark
1400 Abandon MW-6
1.25 bags, 50# ea, of bentonite to 0.5' from surface, concrete at surface to 0.5' BGS
1430 well pad & vault installed
~~all~~ Em services off site
1500 McKinney off site



Rite in the Rain

Apollo, Smyrna 10/6/15

Keaton, Henry
Kent Davis
Cloudy - Partly Cloudy, 60's - 70's

- Arrived on-site at 10:00 (Keaton)
- Spoke to Justin from Apollo. Dropped off 3 drums at 2 locations for purge water
- Spoke to rep for lawn service off-site letting them know that we will be on property sampling MW-6R this week C 10:10

- From 10:05 - 12:45 collected H_2O levels
  - RW-1 · RW-2 Vaults are under water and/or filled w/ water

- Left for lunch at 12:45
- Arrived at 13:[illegible]5 Kent Davis arrived on-site at approx same time

- [illegible]

1305 - KwD departed on Site
Sugar will @ Front

Rite in the Rain

1330 - Stage equipment inside Bld @ loading Dock

1355 - Set up on DW-1
- Tried to pump out the Vault Filled up water but water comes in as fast as we can pump out.
- DW-2 was taken when took Vault Lid cover. Cannot Pump out would have to dewater entire area.

1415 - Set up on DW-1 45.52' water
- Pumped ≈ 8.5 gal - Dry
- let Recover
- 7.42 gal standing water
- 3 volumes = 22.3 gal
5 vol = 37.1 gal
- 10.75 - day
- 12.5 - day
- 13.5 - day
- 14.5 - day

1510 - End day.

1530 - Set up on DW-3

1548 - Begin Dev. Black

1620 - 15 gal
1622 - 18.5
1627 - 22.5
1629 - 26 gal
1633 - 31 gal
1636 - 34.5 gal
1640 - 38.5 gal
1643 - 42 gal
1645 - 46 gal
1650 - 51 gal Stop Dev. DW-3
1745 - Dev pump
1730 - Set up on DW-1
1805 - Depart Site

1 Key

Rite in the Rain

Apollo Smyrna 10/7/15

K Henry
S. Woolt
K Davis

- Arrived on-site at 6:50
- Calibrated YSI 556 MPS and LaMotte 2020 we at 7:10 (see calibration sheet)

- Arrived at MW-9 at 8:10

- Began pumping at 8:35
- Began sampling at 9:45

- Left well at 10:20

- Arrived at MW-5 at 10:25
- Began ~~sampling~~ purging at 10:32
- Sampled at 11:25
- Left at 11:55

Apollo Smyrna 10/7/15

- Went to lunch at 11:55
- Arrived back on-site at 13:00

- Arrived at MW-10 at 1303

- Began pumping at 13:20
- Ferrous Iron diluted 5 times (1.58 mg/L)
- Sampled at 14:25
- Left well at 15:04

- Arrived at MW-6R at 15:25
- Began purging at 15:36
- Sampled at 16:55
  - turbidity stabalized at ~26-15 NTU
- Left well at 17:01

Rite in the Rain

Wednesday 10/7/15 Sunny 58°

0615 - Arrive on Site
0700 - Sam + Lauren Arrive
- Collect sample equip.
- Decode bottles + wells, equip.
0800 - Setup on MW-1 to Dev.
- 7.9' water
1.3 gal x 3 = 3.9 gal - 6.5 gal
0825 - START Dev.
0826 - Dry 1.25 gal Black water
- Dry 2.00 gal
0839 - Dry 2.75 gal
0848 - Dry 3.5 gal Sheen on water
0858 - Dry 4.25 gal
0925 - Dry 5.25 gal - clear.
0928 - Dry 5.75 gal
0938 - Dry 6.4 gal Cloudy Tint
0940 - End Dev.

1020 - Setup on MW-6R
1029 - START Dev.
- 18.7' water = 3.05 gal -
9.15 gal - 15.25 gal
- 3.5 gal ||||| ||||| |||||
Brown-Red Turbid
Decon Mud

1305 - Setup on MW-15
1317 - START Dev.
7.81' water = 1.27 gal x 3 =
3.82 gal - 6.35 gal
- 3.5 gal [illegible] Turbid Brown
1320 - 5.75 gal dry ||||
1324 - 7.0 gal dry
- 11.25 gal dry
- 14.0 gal dry
1447 - 31.5 gal total
- Done
Decon Pump
1510 - Setup on MW-4
.653
30.81' = 20.15 gal x 3 = 60.47
1520 - 100.5 gal
- 3.5 gal ||||| ||||| ||||| ||||| |||| ||||
1625 - End

1815 - Depart Site
1907 - Drop Samples @ AES

VKW

Rite in the Rain

Apollo Smyrna 10/7/2015

0700 Met Kent Davis and Keaton Henry on site and signed in at the front office.

0815 Calibrated YSI 556MPS
Model No - 08K100392

	Start	Cal To	End
pH4	3.98	4.00	4.00
pH7	7.07	7.00	7.00
pH10	9.94	10.00	9.99
Cond.	1.372	1.409	1.410

D.O. @ 742.0 mmHg
ORP @ ~20°C @ 237.5 mV

Calibrated turbidimeter -
LaMotte 2020we - 3674 - 3813

SNW

Apollo Smyrna 10/7/15

Well	Start Purge	Sample
MW-13	0850	0930
MW-7	0955	1045
MW-8	1315	1400
MW-11	1440	1520
MW-12	1615	1700

1830 Departed Site; Kent Davis to AES to drop off samples

SNW

Apollo Smyrna 10/8/15

0715 Met Kent Davis on site

0755 Calibrated YSI 556 MPS Model No. - 08K100392

	Start	Cal To	End
pH4	4.10	4.00	4.00
pH7	6.96	7.00	7.00
pH10	9.95	10.00	10.01
Cond.	1411	1409	1409

DO @ 743.1 mmHg

ORP @ ~21°C @ 236.5mV

Calibrated turbidimeter - LaMotte 2020we -3674-3813

SNW

Apollo Smyrna 10/8/15

Well	Start Purge	Sample
MW-15	0815	0900
MW-2	0930	1040
MW-4	1305	1415

1200 Left site for lunch

1250 Returned from lunch and set up on MW-4

1450

~~1500~~ Gathered materials for surface water sampling

1455 Collected and sampled SW-2 for VOCs — collected by Kent Davis and logged by S. Woolf

1500 Collected and sampled SW-1 for VOCs

Apollo Smyrna 10/8/15

SNW

1530 ~~START - SED 3~~

STORMWATER SED-3 collected at Stormwater detention pond on south side of building (on side slope about 2 feet from inlet)

1545 Packed up equipment

1615 S. Woolf departed site to office and Kent Davis to lab to drop off samples.

SNW

Thursday 10/8/15 Clear 630

0625 - Arrived on Site
0500 - Calibrate equipment
pH - 4, 7, 10 - OK
sp. cond - 1409 - OK
Turbidity - 804.0 - OK
DO - + ORP - OK
0745 - Set up on MW-3
0818 - Start purge
0921 - End purge
0940 - Sample MW-3

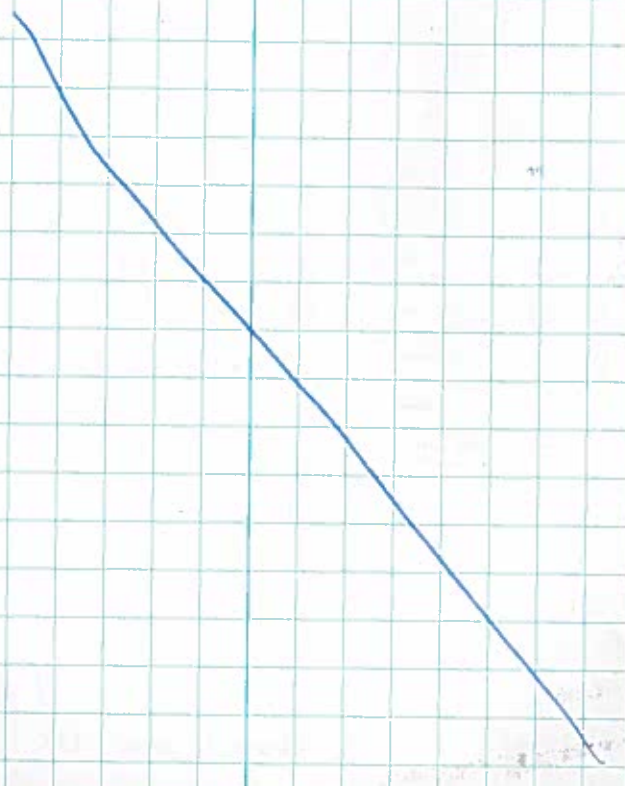
1000 - Set up on MW-1
1012 - Start purge
1101 - End purge
1125 - Sample MW-1 (Dup-1)

1300 - Set up on DW-1
1319 - Start purge
1405 - End purge
1430 - Sample DW-1

- Collect 2 SW Samples
- Collect 1 Sed Sample from SW Reference point

1605 - Depart Site
1700 - Drop Samples @ AES

KWD

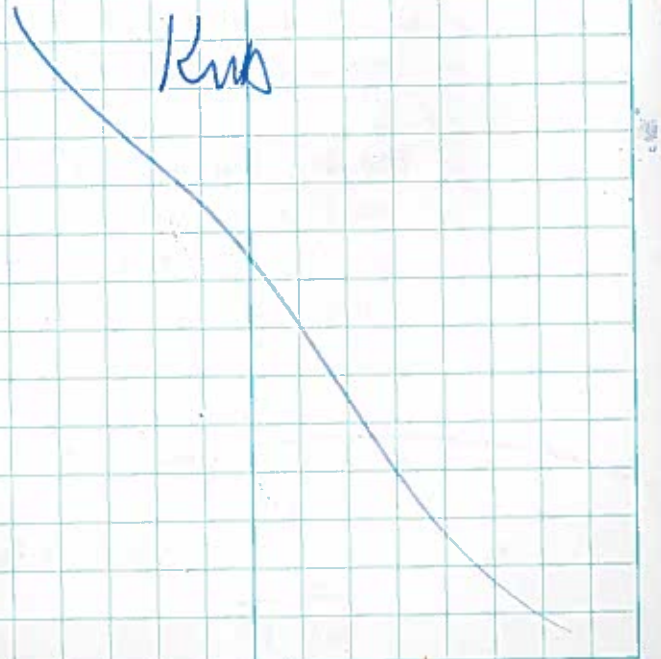


Rite in the Rain

Wednesday 10/21/15 Clear 48°

0620 - Arrive on Site
- Unload supplies & Store inside BB.
0745 - Em Services Arrive
- They do not have a pump to remove grout.
- Call Kevin - They will come back next week to grout new Rw.2
- Em Set up to Remove Vaults From Rw-2 & Rw-1
0945 - Finish Removing Vaults
1000 - Set up on MW-1R
0945 - Field Arrive & cal Rental equipment
1000 - Begin dumping MW-1R
- Rental DAT @ 19'
- Auger Refusal @ 24'
- Take Lunch & Come back to See where rock is on Augers
1130 - Drive 10.2' From GS.
1250 - Install MW-1R
1335 - DTW MW-1R = 8.83'
1350 - Sample MW-1R

1400 - Set up on SB-8
- push to 5'
1415 - push SB-9 to 5'
- Collect Soil Sample & DUP
- Kristen to Samples @ 1450 to take to Lab
1505 - Depart Site



Rite in the Rain

Monday 10/26/15 Rain 67°

0610 - Arrived on Site -
0758 - Em Services Arrive
- Unload equipment
- Set up on RW-2 to grout
0900 - Pump is not working - cannot Fix
- Sent Em Serv. Remove / backfill get Trash pump on Pump project
0930 - Set up on RW-1R
- Refusal @ 3.5'
0950 - Moved location closer to RW-1
- offset 3 Times - Refusal before 5'
- We are within 15 to 8' of RW-1
- Tried 2 more times never BE within 17' + 9' Refusal before 5'
1130 - TD of RW-1 + 2 ≈ 34'
1130 - Begin grouting RW-2
- Finish grouting RW-1+2
- Filling Vaults and Covers
- Install Flush Cover + Pad on ~~RW-2~~ RW-1R,
1550 - Depart Site
KMA

Thursday 10/29/15 Clear 56°

0615 - Arrive on Site
- Set up on RW-1R
- DTW = 7.08 TD = 22.57' + 0.27 22.84'
- 15.79' = 2.57 gal x 5 = 12.85 gal
0825 - Begin day
- 2.75 gal / day
- 3.0 day
- 3.75 + ~~5~~ +
0930 - ~~8.75~~ 12.5 gal
0945 - Depart Site

KMA

Rite in the Rain

Friday 10/30/15 Sunny 50°

0645 - Arrive on Site
0515 - Calibrate equipment
pH - 4, 7, 10 - OK
Sp cond 1409 - OK
Turb. 1000, 10, 0.02 - OK
DO + ORP - OK

0800 - Set up RW-1R
0836 - Start purge
0941 - End purge
1000 - Sample RW-1R
Dup-1 collected

1030 - Depart Site
1100 - Dropped Samples at AES

KMS

Rite in the Rain

APPENDIX E

GROUNDWATER TREND GRAPHS AND HISTORICAL DATA SUMMARY

Figure E1A. Apollo Plume Area Monitoring Wells - Tetrachloroethene

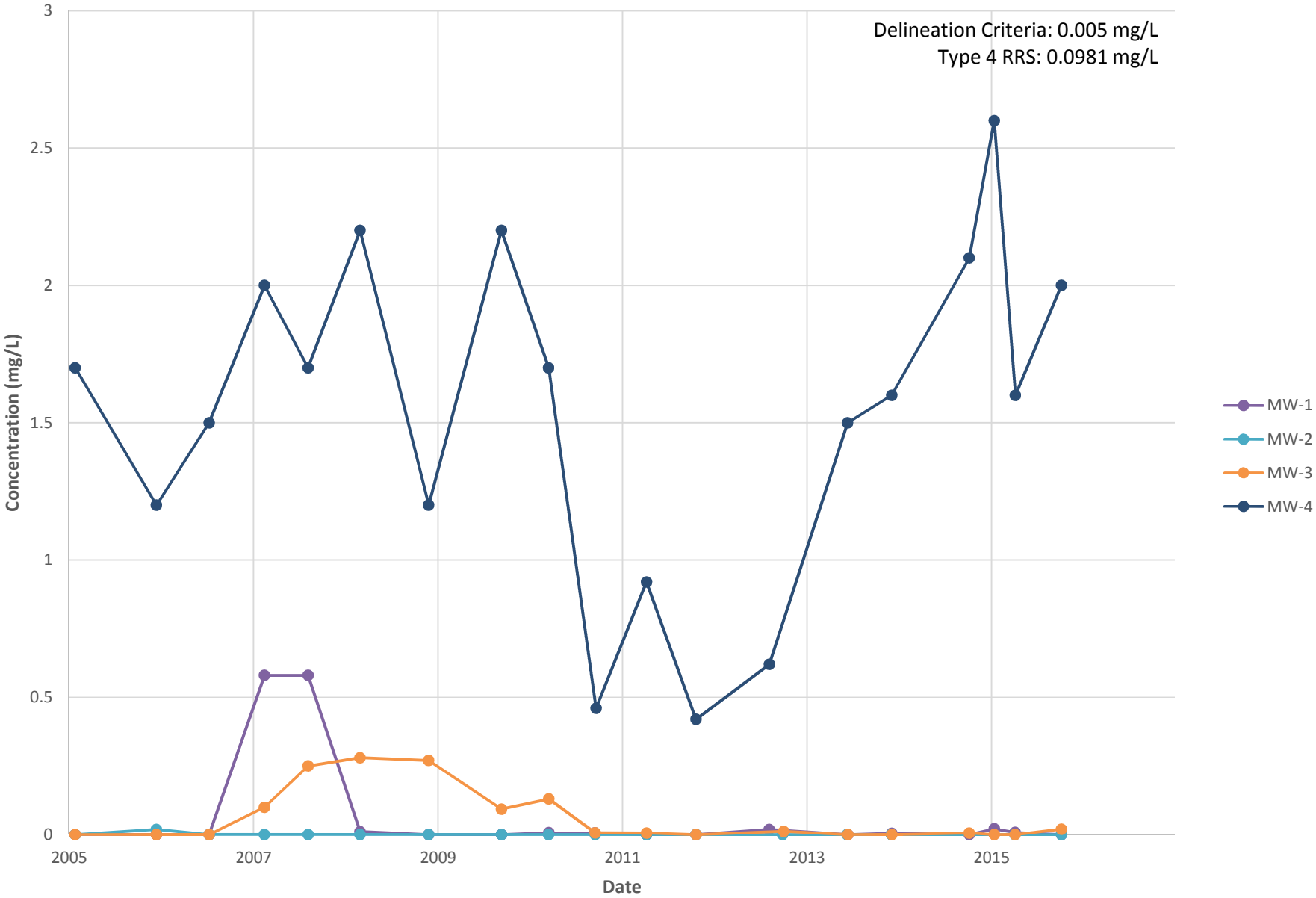


Figure E2A. Apollo Plume Area Monitoring Wells - Trichloroethene

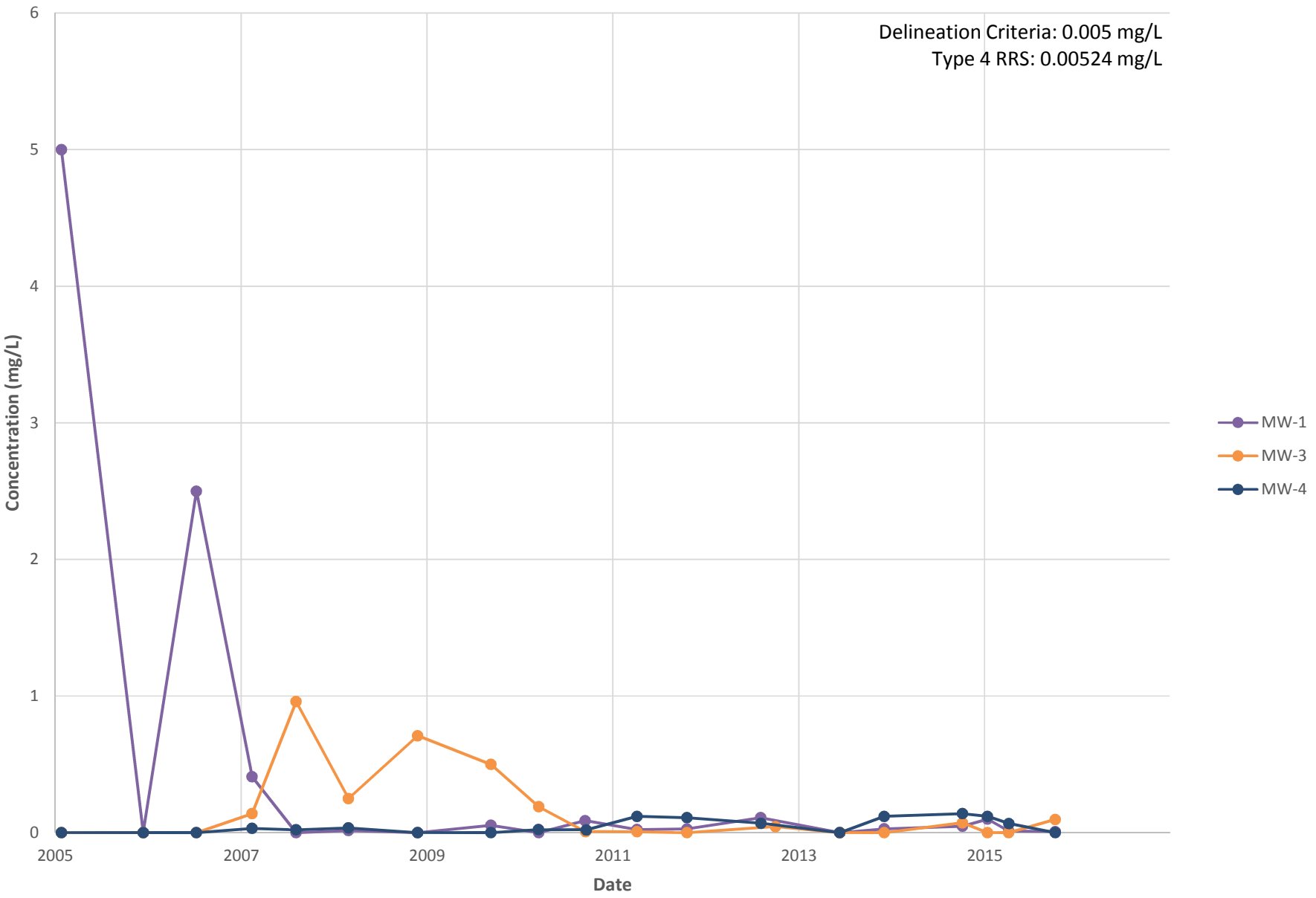


Figure E3A. Apollo Plume Area Monitoring Wells - 1,1-Dichloroethene

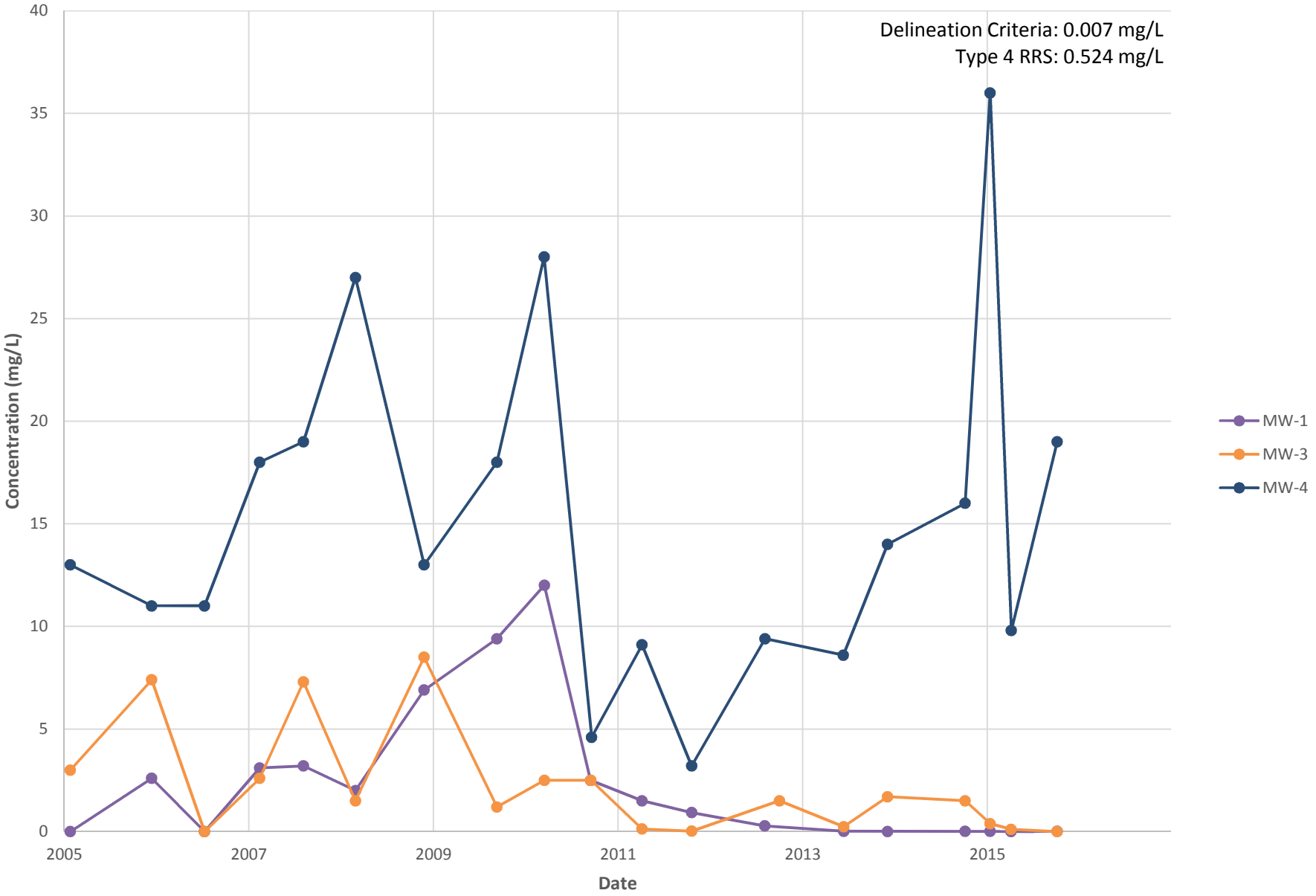


Figure E4A. Apollo Plume Area Monitoring Wells - cis-1,2-Dichloroethene

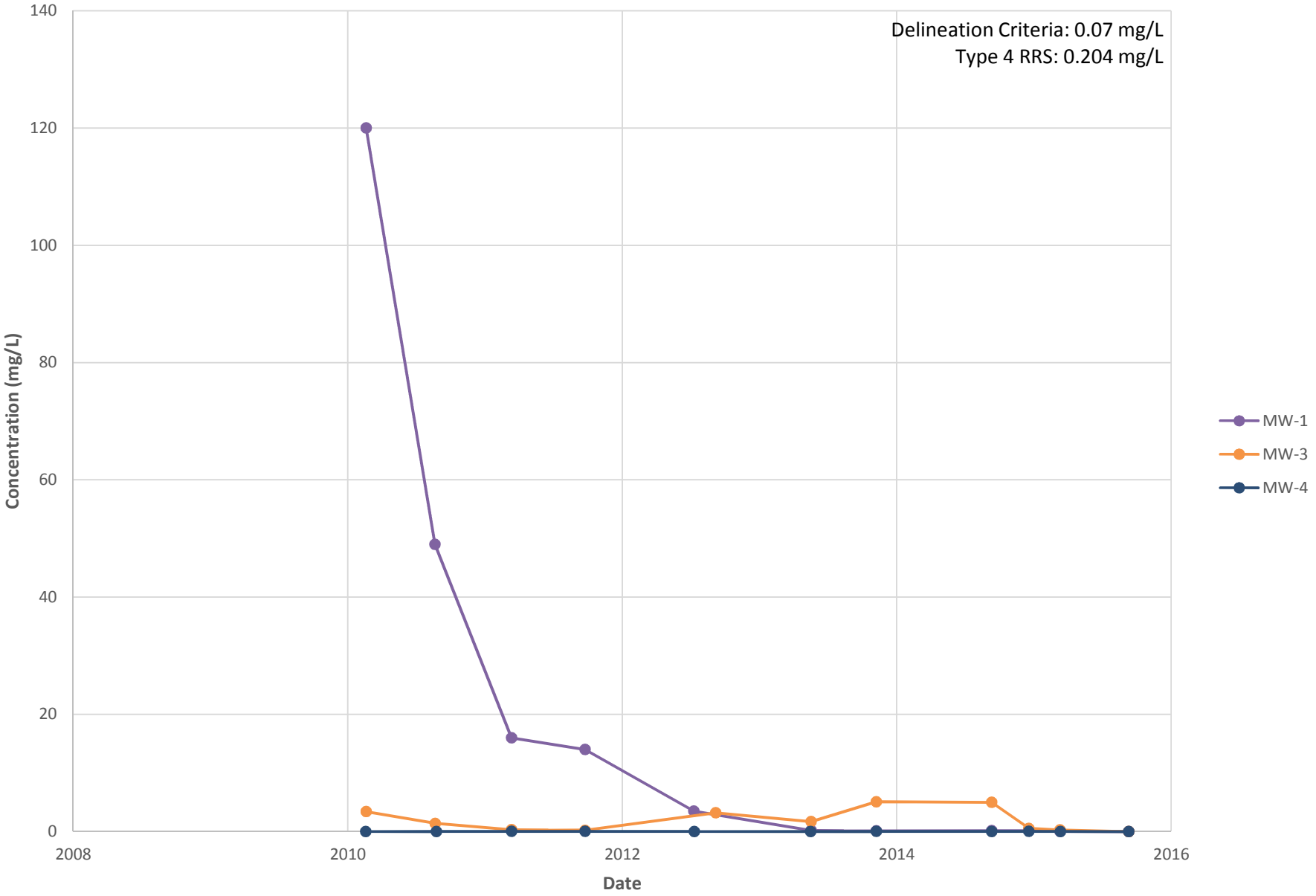


Figure E5A. Apollo Plume Area Monitoring Wells - Vinyl Chloride

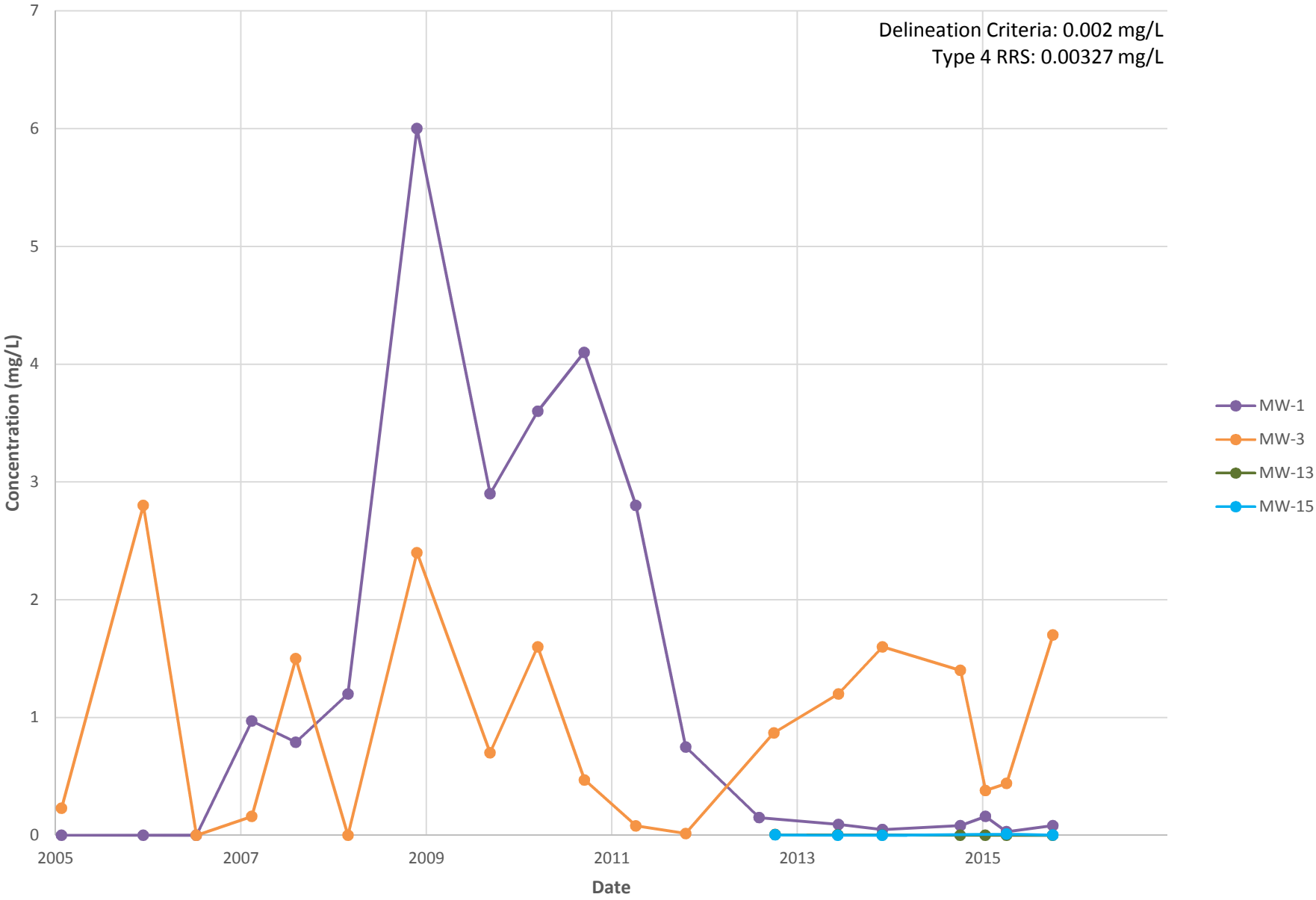


Figure E6A. Apollo Plume Area Monitoring Wells - 1,1,1-Trichloroethane

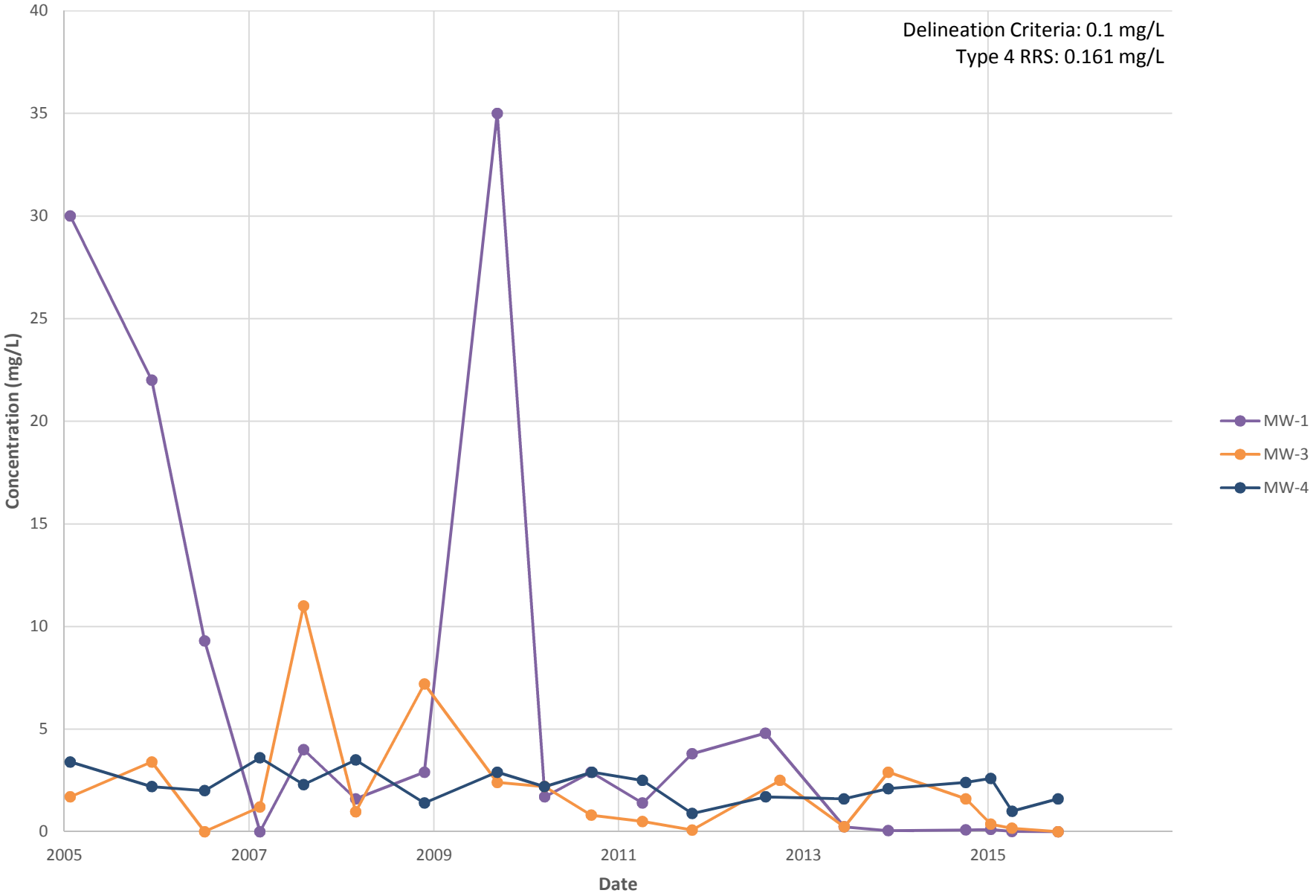


Figure E1B. Offsite/Upgradient Source Area Monitoring Wells - Tetrachloroethene

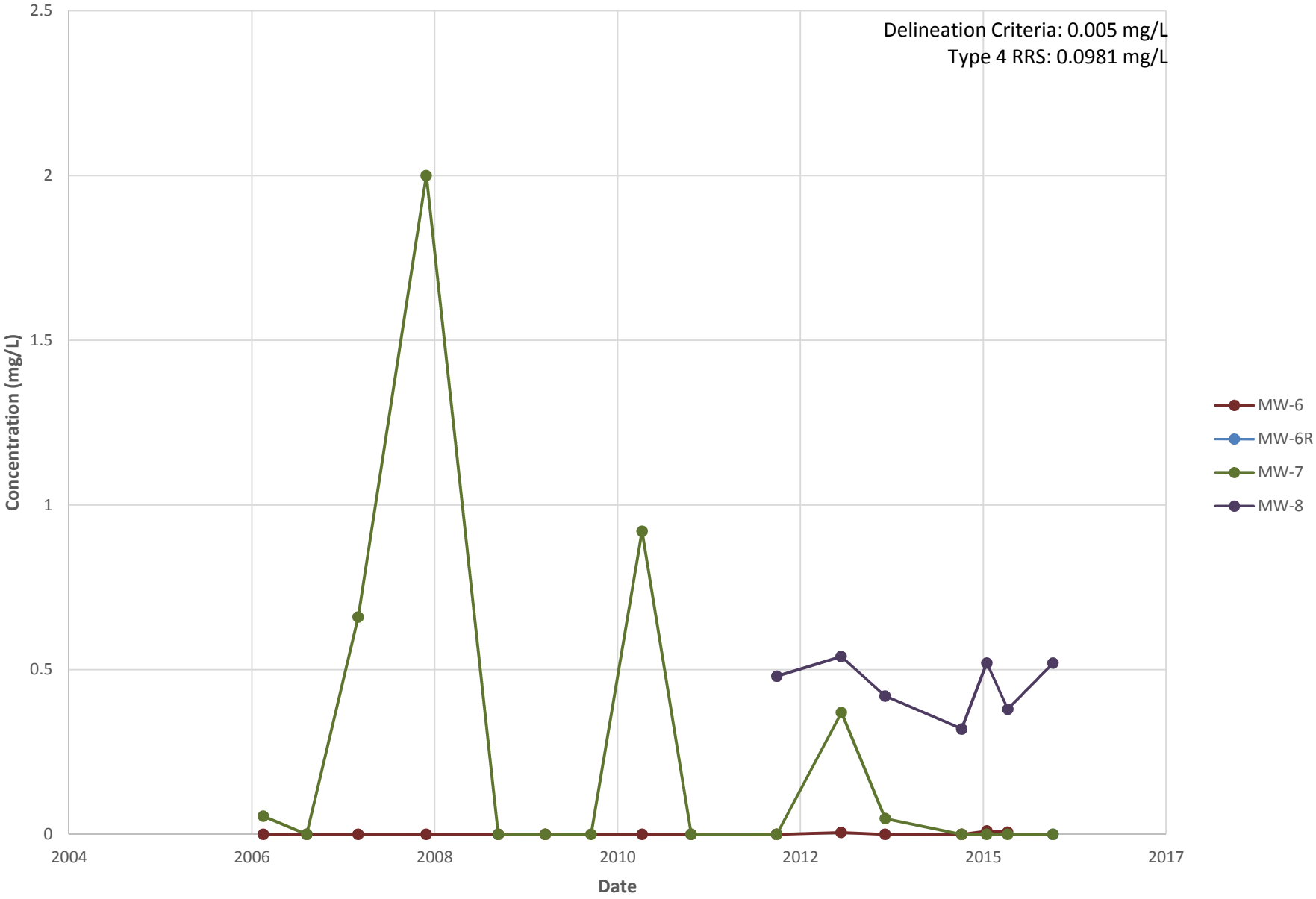


Figure E2B. Offsite/Upgradient Source Area Monitoring Wells - Trichloroethene

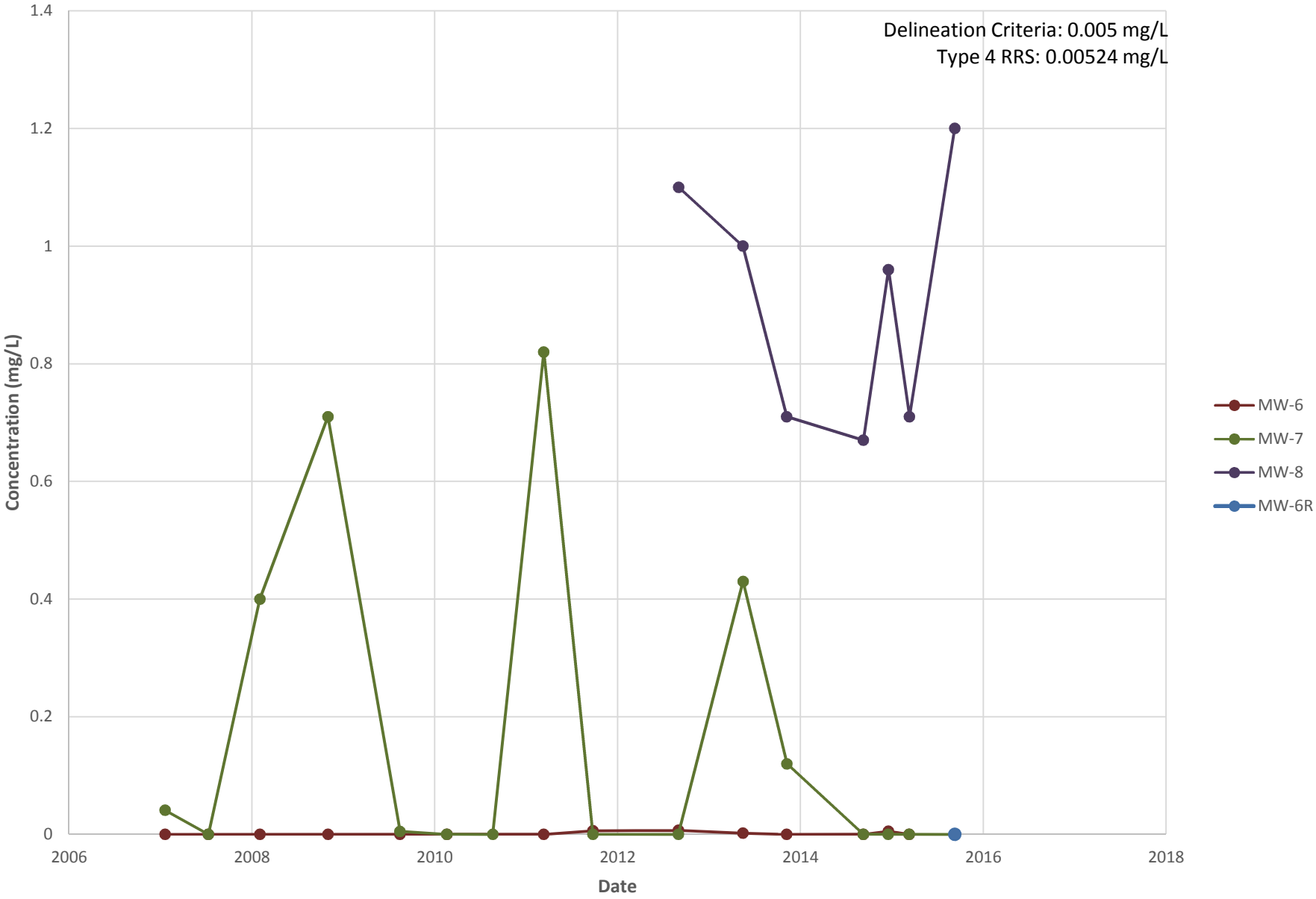


Figure E3B. Offsite/Upgradient Source Area Monitoring Wells - 1,1-Dichloroethene

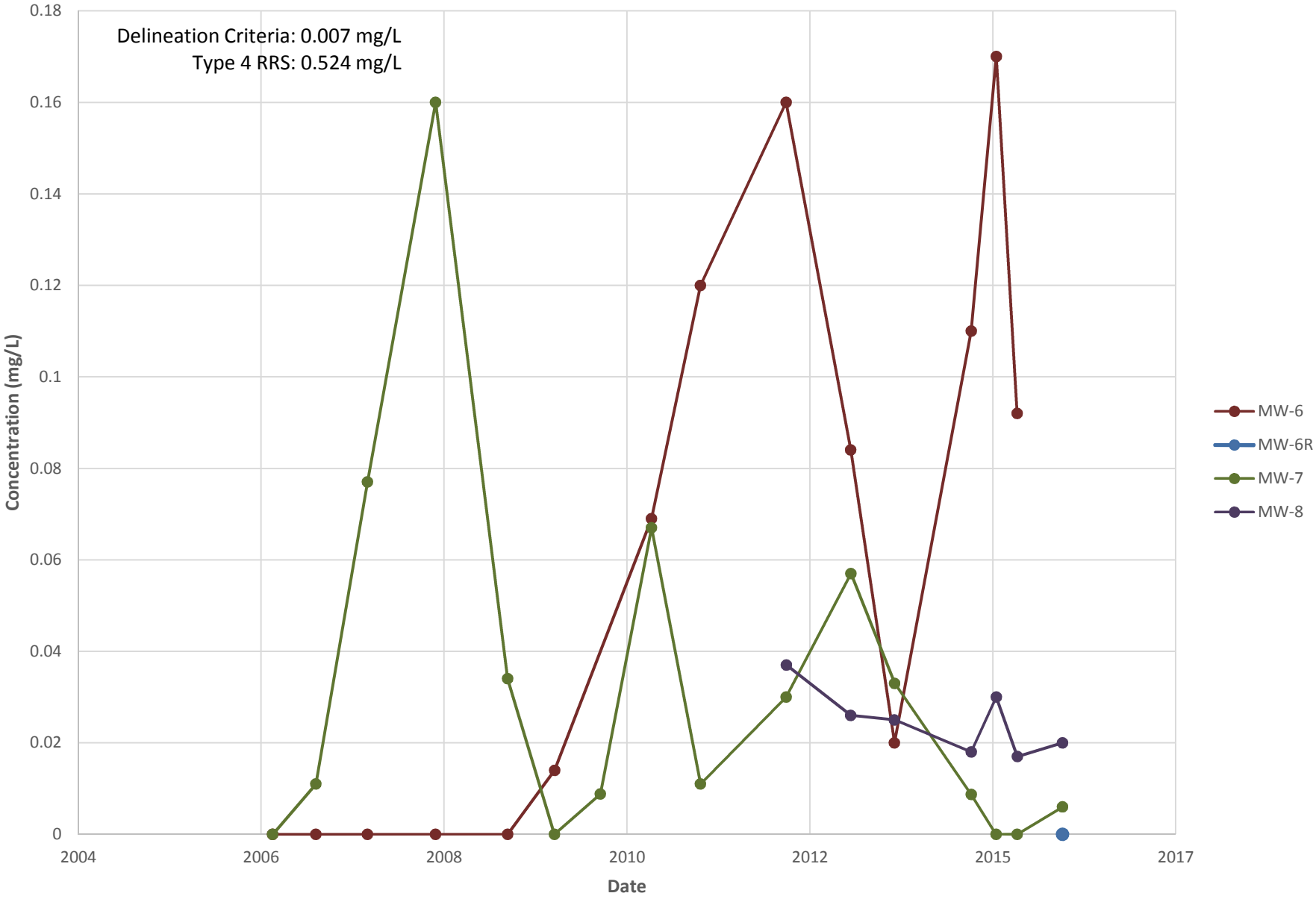


Figure E4B. Offsite/Upgradient Source Area Monitoring Wells - cis-1,2-Dichloroethene

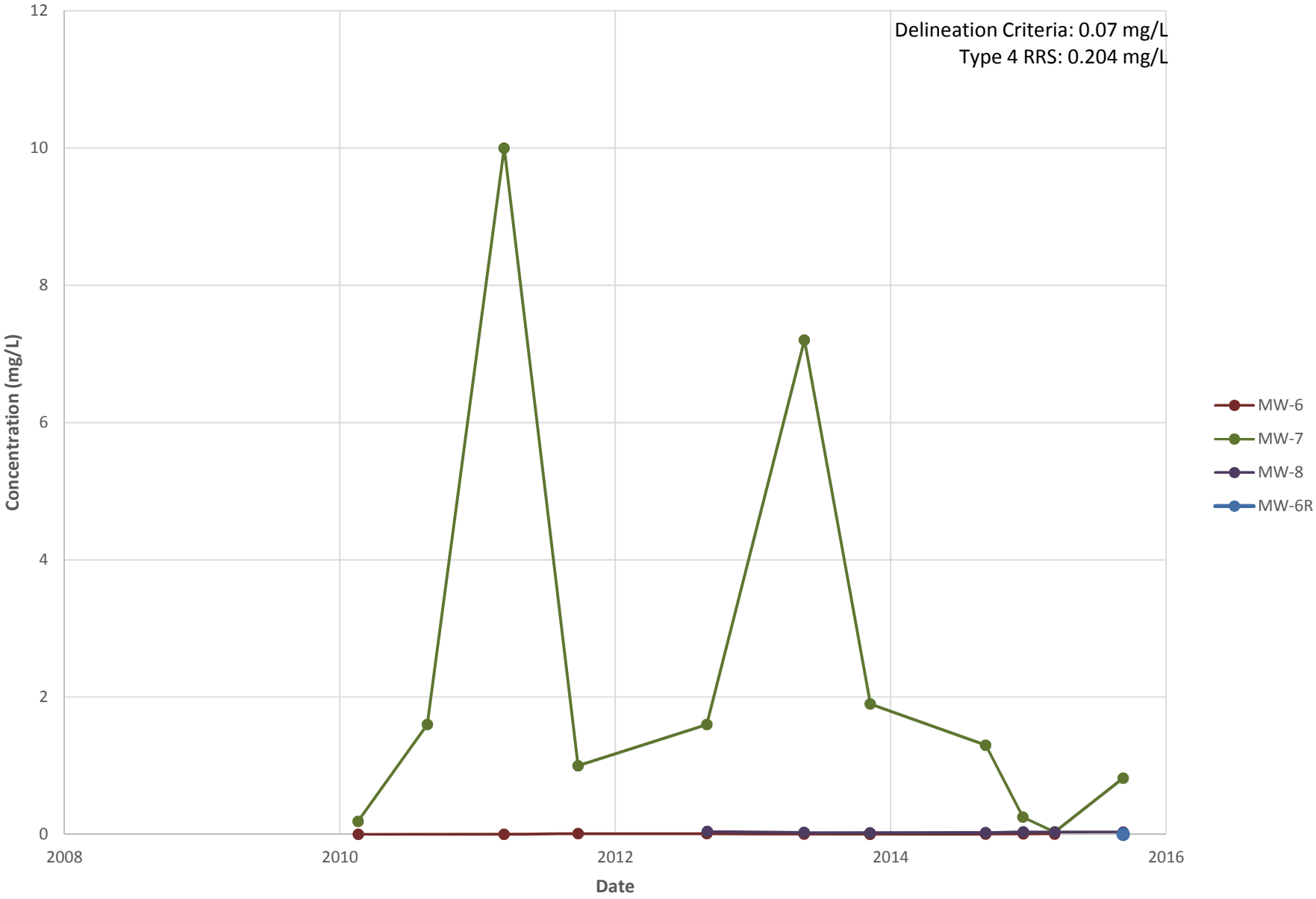


Figure E5B. Offsite/Upgradient Source Area Monitoring Wells - Vinyl Chloride

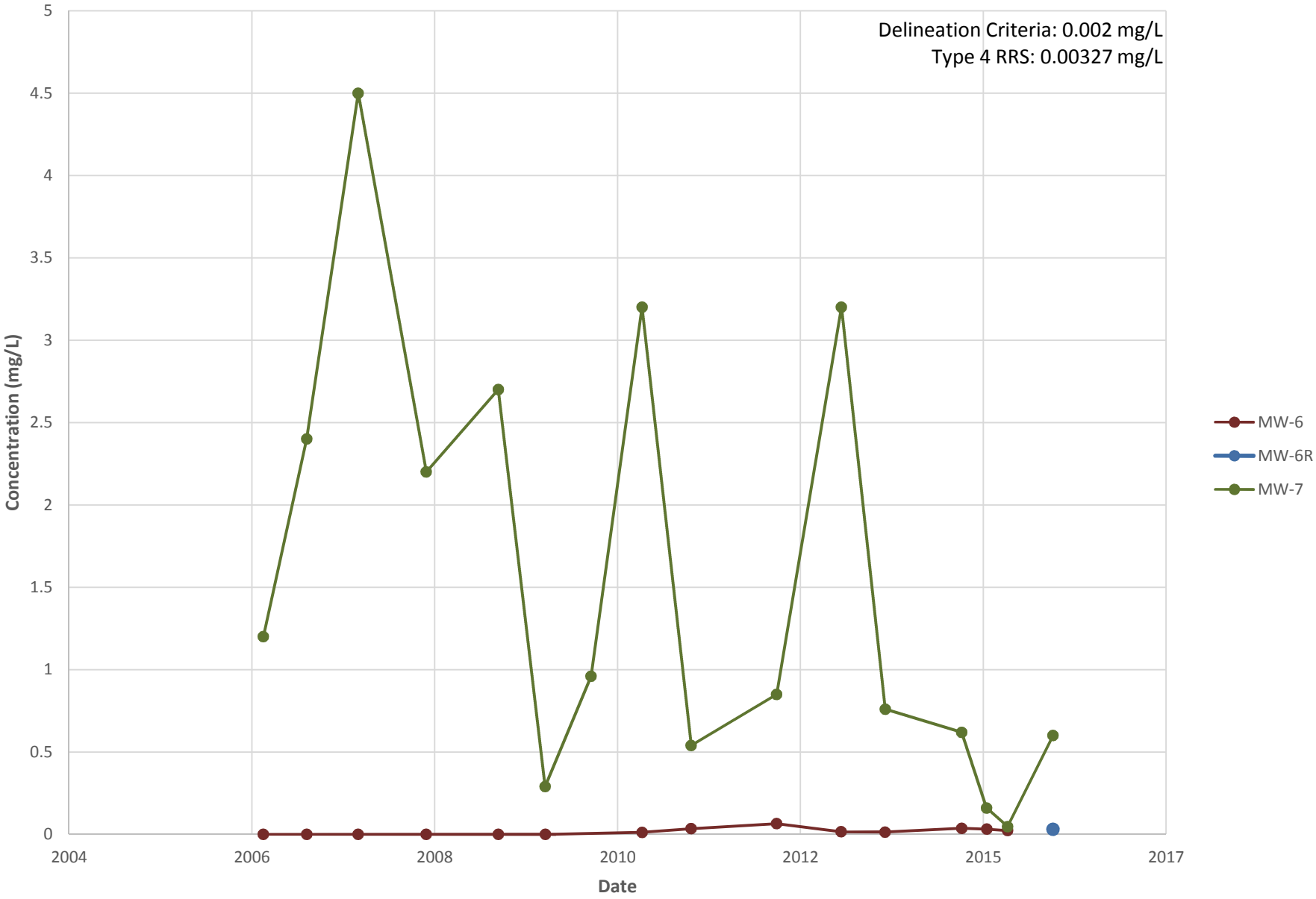


Figure E6B. Offsite/Upgradient Source Area Monitoring Wells - 1,1,1-Trichloroethane

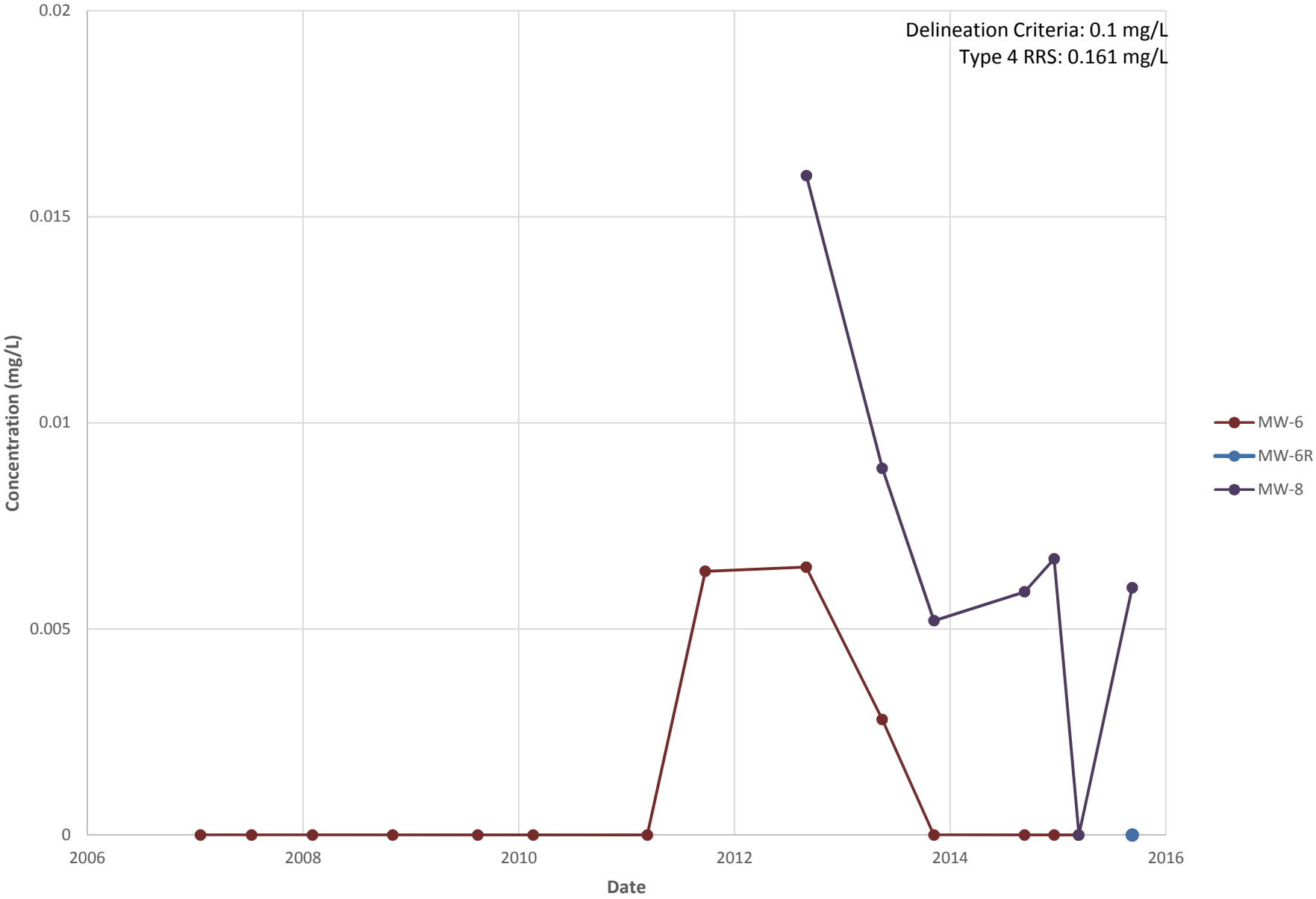


TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
RW-1	7/13/1995	16.249	4.435	9.113	9.113	3.705	< 0.5	--	--	11.604	--	--	< 0.05	< 0.5
RW-1	3/22/1996	13	2.2	6.4	0.001	0.12	--	--	--	3.8	0.47	--	0.033	--
RW-1	8/15/1997	0.68	0.16	0.16	< 0.005	< 0.5	< 0.005	--	--	< 0.05	0.13	--	< 0.025	< 0.005
RW-1	11/5/1997	18	4.5	11	< 0.005	77	< 0.005	--	--	61	1.1	--	< 0.25	< 0.005
RW-1	11/27/2000	11	8.4	16	0.032	23	0.72	--	--	21	1	--	0.48	1.7
RW-1	7/20/2001	0.28	0.21	0.49	< 0.005	< 0.005	0.03	--	--	0.1	0.11	--	0.081	0.043
RW-1	2/5/2002	6	4.1	10	< 0.005	0.8	0.65	--	--	1.2	0.8	--	0.36	1
RW-1	7/23/2002	10	6.5	17	0.011	< 0.005	< 0.005	--	--	0.61	0.27	--	0.35	0.93
RW-1	12/18/2002	13	6.9	21	0.011	< 0.005	1.2	--	--	1.1	0.72	--	0.26	1
RW-1	6/5/2003	6.6	5.2	15	0.013	< 0.005	0.65	--	--	0.32	0.93	--	0.38	< 0.005
RW-1	12/10/2003	12	11	14	0.013	< 0.02	< 1	0.63	--	0.19	0.94	--	< 0.5	2.5
RW-1	6/17/2004	11	5.7	14	0.014	< 0.02	0.17	0.51	--	0.27	0.48	--	0.3	0.97
RW-1	1/25/2005	9.1	6.9	15	< 0.5	< 2	< 1	<0.5	--	< 0.5	0.63	--	< 0.5	1
RW-1	12/13/2005	6.3	11	18	< 0.5	17	< 1	<0.5	--	1.4	0.52	--	< 0.5	1.7
RW-1	7/10/2006	4.6	5.2	11	< 0.5	15	< 1	<0.5	--	0.86	< 0.5	--	< 0.5	0.64
RW-1	2/14/2007	5.3	7.9	16	0.019	37	1.5	0.78	--	1.7	0.56	--	0.3	1.4
RW-1	8/6/2007	2.5	5.4	11	0.015	55	1.6	0.35	--	2.3	0.16	--	0.19	0.79
RW-1	2/28/2008	4.7	4.7	14	0.017	53	3	0.85	--	2.2	0.31	--	0.19	0.87
RW-1	11/26/2008	3.9	3.4	15	< 0.5	43	3.7	0.67	--	4.4	< 0.5	--	< 0.5	0.82
RW-1	9/10/2009	5.4	3.2	15	0.017	50	< 0.01	0.77	--	3.2	0.11	--	0.23	0.8
RW-1	3/17/2010	2	1.4	8.8	0.0086	19	2.9	0.41	< 0.005	2.2	0.07	< 0.005	0.46	0.46
RW-1	9/20/2010	0.81	1.8	1.8	< 0.5	49	3.9	< 0.5	< 0.5	1.6	< 0.5	< 0.5	< 0.5	1.8
RW-1	4/8/2011	1.6	2.4	9.5	0.014	53	2.9	0.53	< 0.005	4	0.078	< 0.005	0.15	0.88
RW-1	10/21/2011	2.2	2.3	11	0.012	37	3.5	0.4	< 0.005	3.1	0.06	< 0.005	0.15	1.3
RW-1	10/3/2012	0.19	0.21	1.1	< 0.005	1.9	0.32	0.054	--	0.25	0.022	< 0.005	0.019	0.19
RW-1	6/13/2013	0.16	1.2	1.7	< 0.1	10	1.1	0.16	--	1.2	< 0.1	< 0.1	< 0.1	1.2
RW-1	12/5/2013	0.76	1.4	< 0.001	0.012	2.5	1.4	0.39	0.019	0.2	0.082	0.0026	0.14	0.68
RW-1	10/8/2014	0.3	1.8	1.2	0.015	1.7	0.78	0.15	< 0.005	0.2	0.0072	< 0.005	0.014	0.61
RW-1	1/16/2015	0.18	0.47	0.87	0.0086	4.5	0.89	0.11	0.02	0.018	0.023	< 0.005	0.031	0.35

Notes

mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
RW-2	7/13/1995	0.377	0.062	0.192	0.192	3.792	< 0.5	--	--	1.306	0.335	--	< 0.05	< 0.5
RW-2	3/22/1996	0.084	0.028	0.044	--	0.76	--	--	--	0.37	0.015	--	0.008	--
RW-2	8/15/1997	0.17	0.02	0.039	< 0.005	< 0.1	< 0.005	--	--	0.065	0.015	--	< 0.005	< 0.005
RW-2	11/5/1997	0.54	0.082	0.31	< 0.005	< 0.5	< 0.005	--	--	0.6	0.05	--	< 0.025	< 0.005
RW-2	11/27/2000	0.063	0.0079	0.054	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.044	--	< 0.005	< 0.005
RW-2	7/20/2001	0.025	< 0.005	0.027	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.021	--	< 0.005	< 0.005
RW-2	2/5/2002	0.058	0.012	0.06	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.053	--	< 0.005	< 0.005
RW-2	7/23/2002	0.033	0.024	0.043	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.035	--	< 0.005	< 0.005
RW-2	12/18/2002	0.13	< 0.005	0.13	< 0.005	< 0.005	0.0061	--	--	< 0.005	1.209	--	0.0054	0.0062
RW-2	6/5/2003	0.048	0.13	0.11	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.11	--	0.0068	< 0.005
RW-2	12/10/2003	0.12	0.29	0.25	< 0.005	0.21	0.019	0.021	--	0.0063	0.2	--	0.011	0.0045
RW-2	6/17/2004	0.16	0.23	0.33	< 0.005	< 0.02	0.047	0.036	--	0.038	0.18	--	0.041	0.01
RW-2	1/25/2005	0.092	0.18	0.2	< 0.005	< 0.02	0.033	0.033	--	0.032	0.087	--	0.028	0.01
RW-2	12/13/2005	0.15	0.54	0.54	< 0.005	< 0.05	0.071	0.14	--	0.015	0.16	--	0.11	0.044
RW-2	7/10/2006	0.059	0.18	0.32	< 0.005	< 0.05	0.03	0.056	--	0.0085	0.091	--	0.06	0.0077
RW-2	2/14/2007	0.061	0.28	0.21	< 0.005	0.34	0.043	0.1	--	0.012	0.1	--	0.075	0.015
RW-2	8/6/2007	0.077	0.22	0.27	< 0.005	0.6	0.026	0.088	--	< 0.005	0.11	--	0.11	0.031
RW-2	2/28/2008	0.065	0.22	0.19	< 0.005	< 0.05	0.017	0.078	--	< 0.005	0.09	--	0.094	0.021
RW-2	11/26/2008	0.069	0.14	0.25	< 0.005	0.99	0.021	0.081	--	0.274	0.1	--	0.13	0.029
RW-2	9/10/2009	0.043	0.093	0.1	< 0.005	< 0.05	< 0.01	0.071	--	< 0.005	0.069	--	0.1	0.023
RW-2	3/17/2010	< 0.005	< 0.005	< 0.005	< 0.005	0.19	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
RW-2	9/17/2010	0.095	0.037	0.51	< 0.005	< 0.05	0.01	0.0066	< 0.005	0.0058	0.081	< 0.005	0.0075	0.0067
RW-2	4/8/2011	0.019	0.089	0.057	< 0.005	0.077	< 0.01	0.086	< 0.005	< 0.005	0.059	< 0.005	0.1	0.022
RW-2	10/21/2011	0.012	0.081	0.032	< 0.005	< 0.05	< 0.01	0.12	< 0.005	< 0.005	0.04	< 0.005	0.06	0.018
RW-2	10/2/2012	0.015	0.1	0.038	< 0.005	< 0.05	0.041	0.16	--	< 0.005	0.071	< 0.005	0.11	0.022
RW-2	6/13/2013	0.013	0.038	0.016	< 0.001	< 0.05	0.015	0.25	--	< 0.005	0.092	< 0.001	0.13	0.0065
RW-2	12/4/2013	0.013	0.046	0.03	< 0.001	< 0.05	0.036	0.32	< 0.001	< 0.005	0.083	< 0.001	0.13	0.014
RW-2	10/8/2014	0.014	0.036	0.027	< 0.005	< 0.05	0.022	0.36	< 0.005	< 0.005	0.13	< 0.005	0.18	0.0088
RW-2	1/16/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002

Notes

mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
DW-1	11/5/1997	3	< 0.25	1.9	< 0.005	54	< 0.005	--	--	28	0.32	--	< 0.25	< 0.005
DW-1	11/27/2000	0.78	< 0.005	0.85	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.14	--	< 0.005	< 0.005
DW-1	7/20/2001	0.49	0.011	0.54	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.14	--	0.0084	< 0.005
DW-1	2/5/2002	1.2	0.0092	1.7	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.3	--	0.0054	< 0.005
DW-1	7/23/2002	0.46	< 0.005	0.75	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.15	--	< 0.005	< 0.005
DW-1	12/18/2002	1	1.6	1.6	< 0.005	< 0.005	< 0.005	--	--	< 0.005	0.24	--	< 0.005	< 0.005
DW-1	6/5/2003	5	0.1	11	0.0076	< 0.005	< 0.005	--	--	0.014	2	--	0.04	< 0.005
DW-1	12/10/2003	12	< 0.5	15	< 0.5	< 2	< 1	< 0.5	--	< 0.5	3.6	--	< 0.5	< 0.2
DW-1	6/17/2004	4.2	0.12	6.5	< 0.005	< 0.02	< 0.01	0.0055	--	< 0.005	1.2	--	0.023	< 0.002
DW-1	1/25/2005	6.2	< 0.5	12	< 0.5	< 2	< 1	< 0.5	--	< 0.5	2.3	--	< 0.5	< 0.2
DW-1	12/13/2005	1.5	5.8	5.7	< 0.5	39	< 1	< 0.5	--	3.6	0.76	--	< 0.5	0.74
DW-1	7/10/2006	0.61	12	3.9	< 0.5	150	< 1	< 0.5	--	6.3	< 0.5	--	< 0.5	1.7
DW-1	2/14/2007	0.026	0.16	0.06	< 0.005	0.38	< 0.01	0.012	--	< 0.005	0.031	--	0.013	0.013
DW-1	8/6/2007	0.55	7.3	2.3	0.0091	330	0.86	0.16	--	3.9	0.27	--	0.079	0.82
DW-1	2/28/2008	0.49	7.1	2.3	0.015	150	16	0.22	--	2	0.37	--	0.13	1.2
DW-1	11/26/2008	0.29	3.6	1.6	0.0097	140	1.3	0.16	--	0.85	0.24	--	0.1	0.77
DW-1	9/10/2009	0.36	3.4	1.2	0.0079	48	< 0.01	0.2	--	0.43	0.23	--	0.12	0.7
DW-1	3/17/2010	0.37	2.1	1.4	0.0062	14	1.7	0.19	< 0.005	0.26	0.28	< 0.005	0.52	0.52
DW-1	9/17/2010	0.31	1.4	1	0.0058	11	1	0.16	< 0.5	0.13	0.34	< 0.005	0.14	0.31
DW-1	4/8/2011	0.35	1.5	1.1	< 0.005	10	0.73	0.16	< 0.005	0.12	0.37	< 0.005	0.14	0.29
DW-1	10/21/2011	0.24	0.78	0.76	< 0.005	3.5	0.63	0.097	< 0.005	0.046	0.3	< 0.005	0.11	0.15
DW-1	10/2/2012	0.23	0.68	0.84	0.0054	2.5	1.2	0.069	--	0.032	0.26	< 0.005	0.049	0.14
DW-1	6/13/2013	0.25	0.53	0.68	0.007	0.77	0.88	0.056	--	0.024	0.34	0.0011	0.04	0.11
DW-1	12/5/2013	0.41	0.93	1.2	0.0095	0.077	1.4	0.08	0.0019	0.037	0.54	0.001	0.051	0.18
DW-1	10/8/2014	0.2	0.5	0.76	0.0091	0.36	0.89	0.29	< 0.005	0.022	0.097	< 0.005	0.067	0.11
DW-1	1/16/2015	0.077	0.28	0.69	0.0067	0.093	0.76	0.052	< 0.005	0.019	0.52	< 0.005	0.038	0.051
DW-1	4/8/2015	0.02	0.088	0.15	<0.005	< 0.05	0.48	0.022	< 0.005	0.0053	0.12	< 0.005	0.016	0.019
DW-1	10/8/2015	0.088	0.46	0.68	0.005	<0.05	0.49	0.079	< 0.005	0.015	0.54	< 0.005	0.086	0.11

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-1	7/13/1995	140	1.69	53.816	1.69	95.204	< 0.5	--	--	141.054	16.293	--	0.358	< 0.05
MW-1	3/22/1996	200	4.5	13	--	55	0.26	--	--	160	2.3	--	0.017	< 0.05
MW-1	8/15/1997	500	< 25	26	< 0.005	< 500	< 0.005	--	--	390	< 25	--	< 2.5	< 10
MW-1	11/27/2000	64	1.9	7.6	< 0.005	8.1	0.011	--	--	29	1.1	--	0.41	< 0.005
MW-1	7/20/2001	74	1.1	6.7	< 0.005	< 0.005	< 0.005	--	--	8.3	1.1	--	0.94	< 0.005
MW-1	2/5/2002	6.1	1.8	6.8	< 0.005	9	< 0.005	--	--	4.3	0.57	--	2.6	< 0.005
MW-1	7/23/2002	65	0.75	4.9	0.011	2.9	< 0.005	--	--	16	0.91	--	0.67	< 0.005
MW-1	12/18/2002	96	1.2	6.4	< 0.005	19	< 0.005	--	--	15	1.8	--	1.4	0.0071
MW-1	6/5/2003	45	0.55	3.4	< 0.005	< 0.005	< 0.005	--	--	3.5	0.81	--	2.4	< 0.005
MW-1	12/10/2003	73	< 2.5	15	< 2.5	< 10	< 5	5.4	--	4.8	2.9	--	< 2.5	< 1
MW-1	6/17/2004	42	0.32	2.2	< 0.005	< 0.02	< 0.01	4.7	--	5.9	0.32	--	0.93	< 0.002
MW-1	1/25/2005	30	15	< 2.5	< 2.5	< 10	< 5	15	--	< 2.5	< 2.3	--	5	< 1
MW-1	12/13/2005	22	9.7	2.6	< 2.5	480	< 5	49	--	3.4	< 2.5	--	< 2.5	< 1
MW-1	7/10/2006	9.3	9.6	< 2.5	< 2.5	1000	< 5	56	--	< 2.5	< 2.5	--	2.5	< 2.5
MW-1	2/14/2007	< 0.005	18	3.1	< 0.005	3900	< 0.01	91	--	< 0.005	0.58	--	0.41	0.97
MW-1	8/6/2007	4	22	3.2	< 0.25	12000	< 0.5	100	--	7.5	0.58	--	< 0.25	0.79
MW-1	2/28/2008	1.6	18	2	< 0.005	900	< 0.01	100	--	< 0.005	0.011	--	0.016	1.2
MW-1	11/26/2008	2.9	27	6.9	< 0.25	7000	< 0.5	110	--	0.98	< 0.25	--	< 0.25	6
MW-1	9/10/2009	35	25	9.4	0.038	3200	< 0.0099	100	--	4.4	< 0.0086	--	0.054	2.9
MW-1	3/17/2010	1.7	36	12	< 0.005	2600	0.017	120	0.027	0.065	0.0073	0.11	< 0.005	3.6
MW-1	9/16/2010	2.9	8.5	2.5	< 0.005	1200	< 0.01	49	0.023	< 0.005	0.0064	0.089	0.088	4.1
MW-1	4/8/2011	1.4	9.4	1.5	0.009	420	< 0.01	16	0.038	0.23	< 0.005	0.016	0.023	2.8
MW-1	10/21/2011	3.8	6.8	0.93	< 0.005	460	< 0.01	14	< 0.005	0.49	< 0.005	< 0.005	0.027	0.75
MW-1	8/6/2012	4.8	1.5	0.28	< 0.005	92	< 0.01	3.5	--	0.19	0.019	0.0094	0.11	0.15
MW-1	6/14/2013	0.24	0.56	0.018	< 0.01	0.78	< 0.05	0.2	--	< 0.05	< 0.01	< 0.01	< 0.01	0.092
MW-1	12/5/2013	0.057	0.12	0.0031	< 0.001	0.26	< 0.005	0.12	0.0093	< 0.005	0.0051	< 0.001	0.028	0.049
MW-1	10/8/2014	0.09	0.19	0.012	< 0.005	0.17	< 0.01	0.16	< 0.005	< 0.005	< 0.005	< 0.005	0.047	0.082
MW-1	1/15/2015	0.11	0.57	0.019	< 0.005	4.5	0.057	0.19	0.011	< 0.005	0.021	< 0.005	0.1	0.16
MW-1	4/8/2015	0.014	0.084	< 0.005	< 0.005	< 0.05	0.01	0.041	< 0.005	< 0.005	0.0081	< 0.005	0.013	0.03
MW-1	10/8/2015	0.10	0.37	0.015	< 0.005	3.6	0.056	0.13	0.008	< 0.005	< 0.005	< 0.005	0.008	0.082

Notes

mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-2	7/13/1995	0.016	0.013	0.0071	--	0.262	< 0.01	--	--	0.047	--	--	0.0012	< 0.001
MW-2	3/22/1996	0.003	0.002	< 0	--	0.017	--	--	--	0.009	0.003	--	< 0.01	< 0.01
MW-2	8/15/1997	< 0.005	< 0.005	< 0.005	< 0.005	< 0.1	< 0.005	--	--	< 0.01	< 0.005	--	< 0.005	< 0.002
MW-2	11/27/2000	--	< 0.005	< 0.005	< 0.005	--	< 0.005	--	--	< 0.005	< 0.005	--	< 0.005	< 0.005
MW-2	7/20/2001	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	--	--	< 0.005	< 0.005	--	< 0.005	< 0.005
MW-2	2/5/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	--	--	< 0.005	< 0.005	--	< 0.005	< 0.005
MW-2	7/23/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	--	--	< 0.005	< 0.005	--	< 0.005	< 0.005
MW-2	12/18/2002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	--	--	< 0.005	< 0.005	--	< 0.005	< 0.005
MW-2	6/5/2003	< 0.005	< 0.005	0.029	< 0.005	0.029	< 0.005	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.005
MW-2	12/10/2003	< 0.005	< 0.005	< 0.02	< 0.005	< 0.02	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	6/17/2004	< 0.005	< 0.005	< 0.02	< 0.005	< 0.02	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	1/25/2005	< 0.005	< 0.005	< 0.02	< 0.005	< 0.02	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	12/13/2005	< 0.005	< 0.005	< 0.05	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	0.019	--	< 0.005	< 0.002
MW-2	7/10/2006	< 0.005	< 0.005	< 0.05	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	2/14/2007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	8/6/2007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	2/28/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	11/26/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	9/10/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-2	3/16/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-2	9/17/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-2	4/8/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-2	10/21/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-2	9/28/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-2	6/11/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-2	12/3/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-2	4/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-2	10/8/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002

Notes

mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-3	7/13/1995	203.981	4.298	34.101	34.101	89.065	< 0.5	--	--	77.212	0.721	--	< 0.05	< 0.05
MW-3	3/22/1996	25	0.56	4.5	0.051	46	0.012	--	--	1	2.1	--	0.79	< 0.01
MW-3	8/15/1997	43	3.6	9.5	< 0.005	100	< 0.005	--	--	110	< 2.5	--	< 2.5	< 1
MW-3	11/27/2000	11	10	6.6	0.029	42	0.35	--	--	52	0.56	--	0.66	0.73
MW-3	7/20/2001	34	25	16	0.072	< 0.005	1.1	--	--	130	0.53	--	1.4	1.4
MW-3	2/5/2002	29	24	11	< 0.005	560	1.4	--	--	160	0.37	--	1.7	1.4
MW-3	7/23/2002	13	33	13	0.074	110	2.7	--	--	150	0.23	--	1.1	3.6
MW-3	12/18/2002	3.4	7.2	1.6	0.02	83	0.19	--	--	28	0.08	--	0.18	0.13
MW-3	6/5/2003	2.9	0.007	6.1	0.0069	< 0.005	0.16	--	--	1.2	0.31	--	0.14	0.57
MW-3	12/10/2003	0.7	0.78	1.8	< 0.005	< 0.02	0.018	0.06	--	0.26	0.046	--	0.026	0.064
MW-3	6/17/2004	1.4	1.9	1.5	< 0.005	3.1	0.31	0.58	--	2.2	0.018	--	0.05	0.19
MW-3	1/25/2005	1.7	2.5	3	< 0.5	< 2	< 1	< 0.5	--	< 0.5	< 0.5	--	< 0.5	0.23
MW-3	12/13/2005	3.4	17	7.4	< 0.5	59	1.6	5.2	--	6.5	< 0.5	--	< 0.5	2.8
MW-3	7/10/2006	< 0.005	0.008	< 5	< 0.005	4.3	< 0.01	< 0.005	--	0.0093	< 0.005	--	< 0.005	< 0.002
MW-3	2/14/2007	1.2	1.6	2.6	0.0073	18	0.21	0.17	--	0.44	0.1	--	0.14	0.16
MW-3	8/6/2007	11	15	7.3	0.022	270	0.84	7.1	--	14	0.25	--	0.96	1.5
MW-3	2/28/2008	0.97	2.3	1.5	0.0074	85	0.88	0.73	--	1.9	0.28	--	0.25	< 0.002
MW-3	11/26/2008	7.2	9.8	8.5	< 0.1	150	1.7	4.9	--	17	0.27	--	0.71	2.4
MW-3	9/10/2009	2.4	3.2	1.2	< 0.005	44	< 0.01	2	--	0.28	0.093	--	0.5	0.7
MW-3	3/17/2010	2.2	5.3	2.5	0.011	160	2	3.4	< 0.005	2.2	0.13	< 0.005	0.19	1.6
MW-3	9/17/2010	0.81	1.9	2.5	< 0.005	19	0.12	1.4	< 0.005	0.027	0.0064	< 0.005	0.0077	0.47
MW-3	4/8/2011	0.5	0.41	0.13	< 0.005	0.72	0.028	0.32	< 0.005	< 0.005	0.0058	< 0.005	0.0074	0.08
MW-3	10/21/2011	0.085	0.17	0.021	< 0.005	86	< 0.01	0.23	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.015
MW-3	10/3/2012	2.5	2.3	1.5	0.0061	39	0.24	3.2	--	< 0.005	0.012	0.0051	0.045	0.87
MW-3	6/14/2013	0.24	4	0.24	< 0.05	15	0.27	1.7	--	< 0.25	< 0.05	< 0.05	< 0.05	1.2
MW-3	12/5/2013	2.9	2.9	1.7	< 0.25	--	< 1.2	5.1	< 0.25	< 1.2	< 0.25	< 0.25	< 0.25	1.6
MW-3	10/8/2014	1.6	3	1.5	0.0093	53	0.24	5	0.013	< 0.005	0.0057	0.0065	0.073	1.4
MW-3	1/15/2015	0.37	0.76	0.39	< 0.005	18	0.29	0.55	0.0055	0.018	< 0.005	0.0067	< 0.005	0.38
MW-3	4/8/2015	0.17	0.83	0.11	< 0.005	20	0.6	0.28	< 0.005	0.0087	< 0.005	< 0.005	< 0.005	0.44
MW-3	10/8/2015	1.2	1.8	0.90	0.008	10	0.42	4.9	0.007	0.005	0.020	0.006	0.097	1.7

Notes

mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-4	1/25/2005	3.4	< 0.5	13	< 0.5	< 0.5	< 1	< 0.5	--	< 0.5	1.7	--	< 0.5	< 0.2
MW-4	12/13/2005	2.2	< 0.5	11	< 0.5	7	< 1	< 0.5	--	< 0.5	1.2	--	< 0.5	< 0.2
MW-4	7/10/2006	2	< 0.5	11	< 0.5	< 5	< 1	< 0.005	--	< 0.5	1.5	--	< 0.5	< 0.2
MW-4	2/14/2007	3.6	< 0.005	18	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	2	--	0.032	< 0.002
MW-4	8/6/2007	2.3	0.033	19	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	1.7	--	0.021	< 0.002
MW-4	2/28/2008	3.5	0.063	27	0.0075	< 0.05	< 0.01	0.022	--	< 0.005	2.2	--	0.035	< 0.002
MW-4	11/26/2008	1.4	< 0.5	13	< 0.5	< 5	< 1	< 0.5	--	< 0.5	1.2	--	< 0.5	< 0.2
MW-4	9/10/2009	2.9	< 0.013	18	0.024	< 0.55	< 0.02	< 0.5	--	< 0.096	2.2	--	< 0.012	< 0.019
MW-4	3/16/2010	2.2	0.046	28	< 0.005	< 0.05	< 0.01	< 0.005	0.012	< 0.005	1.7	< 0.005	0.023	< 0.002
MW-4	9/20/2010	2.9	0.023	4.6	< 0.005	< 0.05	< 0.01	0.015	< 0.005	< 0.005	0.46	< 0.005	0.02	< 0.002
MW-4	4/8/2011	2.5	0.09	9.1	< 0.005	< 0.05	< 0.01	0.042	< 0.005	< 0.005	0.92	< 0.005	0.12	< 0.002
MW-4	10/21/2011	0.89	0.088	3.2	< 0.005	< 0.05	< 0.01	0.069	< 0.005	< 0.005	0.42	< 0.005	0.11	< 0.002
MW-4	8/7/2012	1.7	0.061	9.4	< 0.005	< 0.05	< 0.01	0.013	--	< 0.005	0.62	< 0.005	0.069	< 0.002
MW-4	6/13/2013	1.6	< 0.2	8.6	< 0.2	< 10	< 1	< 0.2	--	< 1	1.5	< 0.2	< 0.2	< 0.2
MW-4	12/5/2013	2.1	0.12	14	< 0.025	< 1.2	< 0.12	0.039	< 0.025	< 0.12	1.6	< 0.025	0.12	< 0.025
MW-4	10/8/2014	2.4	0.075	16	< 0.005	< 0.05	< 0.01	0.011	0.011	< 0.005	2.1	< 0.005	0.14	< 0.002
MW-4	1/15/2015	2.6	0.083	36	< 0.005	< 0.05	< 0.01	0.037	0.016	< 0.005	2.6	< 0.005	0.12	< 0.002
MW-4	4/9/2015	1	0.056	9.8	< 0.005	< 0.05	< 0.01	0.019	0.0091	< 0.005	1.6	< 0.005	0.067	0.0055
MW-4	10/8/2015	1.6	< 0.50	19	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	2.0	< 0.50	< 0.50	< 0.20

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-5	2/14/2007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-5	8/6/2007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-5	2/28/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-5	11/26/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-5	9/10/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-5	3/16/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-5	9/17/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-5	4/8/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-5	10/21/2011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-5	9/27/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-5	6/11/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-5	12/3/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-5	4/8/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-5	10/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-6	2/14/2007	< 0.005	< 0.005	< 0.005	--	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-6	8/6/2007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-6	2/28/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-6	11/26/2008	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-6	9/10/2009	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	--	< 0.005	< 0.002
MW-6	3/17/2010	< 0.005	< 0.005	0.014	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-6	4/8/2011	< 0.005	0.0051	0.069	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.012
MW-6	10/21/2011	0.0064	0.012	0.12	< 0.005	< 0.05	< 0.01	0.012	< 0.005	< 0.005	< 0.005	< 0.005	0.006	0.035
MW-6	9/27/2012	0.0065	0.021	0.16	< 0.005	< 0.05	< 0.01	0.01	--	< 0.005	< 0.005	< 0.005	0.007	0.065
MW-6	6/12/2013	0.0028	0.0053	0.084	< 0.001	< 0.05	< 0.005	0.0033	--	< 0.005	0.0059	< 0.001	0.002	0.016
MW-6	12/4/2013	< 0.001	0.0043	0.02	< 0.001	< 0.05	< 0.005	0.0016	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	0.014
MW-6	10/7/2014	< 0.005	0.015	0.11	< 0.005	< 0.05	< 0.01	0.0058	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.037
MW-6	1/15/2015	< 0.005	0.014	0.17	< 0.005	< 0.05	< 0.01	0.0064	< 0.005	< 0.005	0.01	< 0.005	0.0052	0.032
MW-6	4/8/2015	< 0.005	0.01	0.092	< 0.005	< 0.05	< 0.01	0.0052	< 0.005	< 0.005	0.0069	< 0.005	< 0.005	0.023
MW-6R	10/7/2015	< 0.005	0.016	0.21	< 0.005	< 0.050	< 0.010	0.007	< 0.005	< 0.005	0.013	< 0.005	0.006	0.031

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-7	2/14/2007	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	4.7	--	< 0.005	0.055	--	0.041	1.2
MW-7	8/6/2007	0.0063	0.0065	0.011	< 0.005	4.2	< 0.01	4.8	--	< 0.005	< 0.005	--	< 0.005	2.4
MW-7	2/28/2008	< 0.005	< 0.005	0.077	< 0.005	< 0.05	< 0.01	16	--	< 0.005	0.66	--	0.4	4.5
MW-7	11/26/2008	< 0.005	< 0.005	0.16	< 0.005	< 0.05	< 0.01	4.5	--	< 0.005	2	--	0.71	2.2
MW-7	9/10/2009	< 0.005	< 0.005	0.034	< 0.005	< 0.05	< 0.01	4.3	--	< 0.005	< 0.005	--	0.0051	2.7
MW-7	3/16/2010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	0.19	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29
MW-7	9/16/2010	< 0.005	< 0.005	0.0088	< 0.005	< 0.05	< 0.01	1.6	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.96
MW-7	4/8/2011	< 0.005	< 0.005	0.067	< 0.005	< 0.05	< 0.01	10	< 0.005	< 0.005	0.92	0.019	0.82	3.2
MW-7	10/21/2011	< 0.005	< 0.005	0.011	< 0.005	< 0.05	< 0.01	1	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.54
MW-7	9/27/2012	< 0.005	< 0.005	0.03	< 0.005	< 0.05	< 0.01	1.6	--	< 0.005	< 0.005	< 0.005	< 0.005	0.85
MW-7	6/13/2013	< 0.001	< 0.001	0.057	< 0.001	< 0.05	< 0.005	7.2	--	< 0.005	0.37	0.013	0.43	3.2
MW-7	12/5/2013	< 0.001	< 0.001	0.033	< 0.001	< 0.05	< 0.005	1.9	0.0016	< 0.005	0.048	0.0058	0.12	0.76
MW-7	10/7/2014	< 0.005	< 0.005	0.0087	< 0.005	< 0.05	< 0.01	1.3	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.62
MW-7	1/14/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	0.25	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	0.16
MW-7	4/8/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	0.035	< 0.005	0.005	< 0.005	< 0.005	< 0.005	0.047
MW-7	10/7/2015	< 0.005	< 0.005	0.006	< 0.005	< 0.050	< 0.010	0.82	< 0.005	< 0.005	< 0.005	< 0.005	< 0.001	0.6

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-8	9/28/2012	0.016	< 0.005	0.037	< 0.005	< 0.05	< 0.01	0.041	--	< 0.005	0.48	< 0.005	1.1	< 0.002
MW-8	6/12/2013	0.0089	0.0033	0.026	< 0.001	< 0.05	< 0.005	0.028	--	< 0.005	0.54	< 0.001	1	< 0.001
MW-8	12/4/2013	0.0052	0.0022	0.025	< 0.001	< 0.05	< 0.005	0.022	< 0.001	< 0.005	0.42	< 0.001	0.71	< 0.001
MW-8	10/7/2014	0.0059	< 0.005	0.018	< 0.005	< 0.05	< 0.01	0.025	< 0.005	< 0.005	0.32	< 0.005	0.67	< 0.002
MW-8	1/15/2015	0.0067	< 0.005	0.03	< 0.005	< 0.05	< 0.01	0.037	< 0.005	< 0.005	0.52	< 0.005	0.96	< 0.002
MW-8	4/9/2015	< 0.005	< 0.005	0.017	< 0.005	< 0.05	< 0.01	0.033	< 0.005	< 0.005	0.38	< 0.005	0.71	< 0.002
MW-8	10/7/2015	0.006	< 0.005	0.020	< 0.005	< 0.050	< 0.010	0.033	< 0.005	< 0.005	0.52	< 0.005	1.2	< 0.002
MW-9	9/27/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-9	6/11/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-9	12/3/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-9	10/7/2014	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-9	1/14/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.002
MW-9	4/8/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-9	10/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-10	10/8/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-10	6/12/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-10	12/4/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-10	4/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-10	10/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-11	10/8/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-11	6/12/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-11	12/4/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-11	4/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-11	10/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-12	10/8/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-12	6/12/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-12	12/3/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-12	4/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-12	10/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

TABLE E1. HISTORICAL GROUNDWATER DATA

Monitoring Well	Date	1,1,1-Trichloroethane mg/L	1,1-Dichloroethane mg/L	1,1-Dichloroethene mg/L	1,2-Dichloroethane mg/L	Acetone mg/L	Chloroethane mg/L	cis-1,2-Dichloroethene mg/L	Cyclohexane mg/L	Methylene chloride mg/L	Tetrachloroethene mg/L	trans-1,2-Dichloroethene mg/L	Trichloroethene mg/L	Vinyl Chloride mg/L
MW-13	10/8/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	0.0055	--	< 0.005	< 0.005	< 0.005	< 0.005	0.0059
MW-13	6/12/2013	< 0.001	< 0.001	< 0.001	< 0.001	< 0.05	< 0.005	0.011	--	< 0.005	< 0.001	< 0.001	< 0.001	0.0041
MW-13	12/4/2013	< 0.001	0.001	< 0.001	< 0.001	< 0.05	< 0.005	0.009	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	0.0035
MW-13	10/7/2014	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-13	1/14/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.002
MW-13	4/8/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	< 0.01	< 0.005	< 0.005	0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-13	10/7/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
MW-15	10/8/2012	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	0.078	< 0.005	--	< 0.005	< 0.005	< 0.005	< 0.005	0.0037
MW-15	6/12/2013	< 0.001	0.0017	< 0.001	< 0.001	< 0.05	0.042	< 0.001	--	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-15	12/4/2013	< 0.001	0.0014	< 0.001	< 0.001	< 0.05	0.064	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001
MW-15	4/8/2015	< 0.005	0.0081	< 0.005	< 0.005	< 0.05	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.01
MW-15	10/8/2015	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	0.078	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.002
MW-17	10/30/15	0.006	0.047	0.22	< 0.005	0.009	< 0.010	0.089	< 0.005	< 0.005	0.045	< 0.005	0.019	0.024

Notes
mg/L - milligrams per liter
< - less than reporting limit
-- no data

Prepared by: KAH 11/06/2015
Checked by: KRR 12/11/2015

APPENDIX F

TECHNICAL MEMORANDUM - UPDATED: PLUME ANALYTICS EVALUATION INCLUDING A RICKER METHOD® PLUME STABILITY ANALYSIS

TECHNICAL MEMORANDUM - UPDATED

PLUME ANALYTICS EVALUATION INCLUDING A RICKER METHOD® PLUME STABILITY ANALYSIS

APOLLO INDUSTRIES, INC.
1850 SOUTH COBB INDUSTRIAL BLVD.
SMYRNA, GEORGIA
HSI SITE NUMBER 10333

PREPARED FOR:

AMC COBB HOLDINGS, LLC
1850 SOUTH COBB INDUSTRIAL BOULEVARD SE
SMYRNA, GA 30082

PREPARED BY:

EARTHCON CONSULTANTS, INC.
1880 WEST OAK PARKWAY
BUILDING 100, SUITE 106
MARIETTA, GEORGIA 30062
770-973-2100

EarthCon Project No. 02.20140391.00

DECEMBER 2015

Contents

1.0 INTRODUCTION AND PURPOSE 1
2.0 PLUME ANALYTICS METHODOLOGY 2
2.1 Change in Well Network 4
2.2 Data Assessment and Input File Development 4
2.3 Groundwater Plume Map Development 6
2.4 Statistical Methodology 7
3.0 PLUME ANALYTICS RESULTS 8
4.0 SUMMARY AND CONCLUSIONS 16
5.0 LIMITATIONS 16
6.0 REFERENCES 17

TABLES

Table 1: Summary of Analytical Data – 1,1,1-Trichloroethane (1,1,1-TCA)
Table 2: Summary of Analytical Data – Tetrachloroethene (PCE)
Table 3: Summary of Analytical Data – Trichloroethene (TCE)
Table 4: Summary of Analytical Data – 1,1-Dichloroethene (1,1-DCE)
Table 5: Summary of Analytical Data – cis-1,2-Dichloroethene (cis-1,2-DCE)
Table 6: Summary of Analytical Data – Vinyl Chloride (VC)
Table 7: Summary of Analytical Data – Acetone

FIGURES

Figure 1: Total CVOC Molar Analysis– October 2015
Figure 2: 1,1,1-Trichloroethane (1,1,1-TCA) Plume Stability Analysis Summary
Figure 3: Tetrachloroethene (PCE) Plume Stability Analysis Summary
Figure 4: Trichloroethene (TCE) Plume Stability Analysis Summary
Figure 5: 1,1-Dichloroethene (1,1-DCE) Plume Stability Analysis Summary
Figure 6: cis-1,2-Dichloroethene (cis-1,2-DCE) Plume Stability Analysis Summary
Figure 7: Vinyl Chloride (VC) Plume Stability Analysis Summary
Figure 8: Acetone Plume Stability Analysis Summary
Figure 9: Total CVOC Plume Stability Analysis Summary
Figure 10: Total CVOC Molar Analysis Summary and Trends – Apollo Plume Area
Figure 11: Total CVOC Molar Analysis Summary and Trends – MW-6, MW-7, MW-8

APPENDICES (on CD)

Appendix A: Apollo Plume Series Isopleth Maps – 1,1,1-Trichloroethane (1,1,1-TCA)
Appendix B: Apollo Plume Series Isopleth Maps – Tetrachloroethene (PCE)
Appendix C: Apollo Plume Series Isopleth Maps – Trichloroethene (TCE)
Appendix D: Apollo Plume Series Isopleth Maps – 1,1-Dichloroethene (1,1-DCE)
Appendix E: Apollo Plume Series Isopleth Maps – cis-1,2-Dichloroethene (cis-1,2-DCE)
Appendix F: Apollo Plume Series Isopleth Maps – Vinyl Chloride (VC)
Appendix G: Apollo Plume Series Isopleth Maps – Acetone
Appendix H: Trend Analysis Summary Statistics

1.0 INTRODUCTION AND PURPOSE

EarthCon Consultants, Inc. (EarthCon) prepared this updated Technical Memorandum for AMC Cobb Holdings, LLC (AMC Cobb) to document the results of a Plume Analytics Evaluation including a Ricker Method® Plume Stability Analysis conducted for various groundwater constituent plumes present at the Apollo Industries, Inc. Hazardous Site Inventory (HSI) Site Number 10333 in Smyrna, Georgia (Site). EarthCon performed an initial analysis as an addendum to the May 2015 First VIRP Progress Report (Progress Report). Since that time additional information and sampling data have been obtained and have been incorporated into this updated Technical Memorandum. Background information on the well installation dates and groundwater recovery system shutdown are discussed in the First Progress Report.

Understanding the characteristics of a constituent plume, including plume stability, is an important step in the remedial planning process for a site. For example, an increasing trend in plume contaminant concentration, spatial distribution, and mass may indicate plume migration toward downgradient human or environmental receptors whereas a stable or decreasing plume trend may be an indication that the plume is not migrating downgradient toward potential receptors. A decreasing plume trend may also be an indication that an active remediation system(s) or natural attenuation processes are effective in controlling the plume. Evaluating plume behavior may help ascertain the need for and the type and scale of current and future remedial efforts.

The size of a contaminant plume is influenced by a variety of physical, chemical, and biological processes. Groundwater contaminant plumes are typically affected by one or more of these processes, as well as by other hydrologic and geologic features (streams, clay layers, etc.). With all else being equal, when a groundwater plume has reached a point of hydrodynamic equilibrium (i.e., steady state), the mass loading to the plume from a source is equal to the rate of the mass lost from the plume by physical, chemical, biological, or in some cases anthropogenic processes (e.g., via active remediation).

EarthCon performed this updated plume analytics and plume stability analysis to help provide AMC Cobb with an understanding of the stability of the various site constituent plumes in terms of area, average concentration, and mass indicator for the constituents, as well as to evaluate the overall molar characteristics of the groundwater plume.

2.0 PLUME ANALYTICS METHODOLOGY

EarthCon performed this updated plume analytics evaluation using historical groundwater analytical data. The plume analytics evaluation included the following elements:

- Ricker Method® Plume Stability Analysis;
- Total molar trend and molar ratio analysis for chlorinated ethenes and ethanes;
- Molar ratio (pie chart) analysis (temporal and spatial) for chlorinated ethenes and ethanes; and,
- Plume difference over time evaluation.

A brief description of each of these elements is provided below:

Ricker Method® Plume Stability Analysis

EarthCon performed a plume stability analysis for each of the primary constituents at and proximal to the Site for a new well network (as discussed below) using procedures described in *A Practical Method to Evaluate Ground Water Contaminant Plume Stability* (Ricker, 2008). The Ricker Method® plume stability analysis compares relative changes in contaminant plume characteristics over time, including area, average concentration, and mass indicator. Note that the term "mass indicator" does not necessarily represent the entire mass in the subsurface, but rather an expression of it based on a fixed assumption of aquifer thickness and porosity. Calculation of the actual plume mass is often a very complicated exercise and typically more data/inputs are needed than are available from typical delineation and/or remediation well information. Because the plume mass value is not necessarily an indication of actual contaminant mass, the term "mass indicator" is used to describe this plume characteristic.

To demonstrate that a plume is decreasing or stable, temporal changes in these calculated values should result in an overall decreasing or stable trend. An increasing trend in any of these values may indicate that the plume is not stable and/or is possibly expanding.

Total molar trend, molar ratio analysis, and molar pie chart analysis

When assessing chlorinated volatile organic compound (CVOC) data, it is useful to evaluate the data on a molar basis. This is especially important when evaluating the degradation of parent-daughter sequences, such as the chlorinated ethenes and ethanes observed at the Site. For example, during reductive dechlorination the relative molar fraction of parent compounds progressively decreases through time and the fraction of daughter compounds progressively increases. Further, when a parent compound degrades to a daughter compound, the mass based concentration of total CVOCs decreases because one chlorine atom is released in each

sequential reaction. However, the number of moles[1] does not decrease since one molecule of a parent compound (e.g., tetrachloroethene, or PCE) produces one molecule of its respective daughter compound (e.g., trichloroethene, or TCE) and so on. The molar concentration only decreases once the parent constituent has been completely mineralized to ultimate benign end products (i.e., carbon dioxide, water, and chloride ion). Therefore, the total plume decrease (or increase) for chlorinated ethenes and ethanes can be estimated by calculating the molar concentration (in nmol/L) of each species and then adding all the concentrations together for a total molar concentration of the plume. In addition to demonstrating complete mineralization of CVOC compounds, it is especially important for evaluating and detecting potential new, separate, and/or episodic release sources within a plume.

Typically the molar analysis of chlorinated ethenes and ethanes is broken out separately to evaluate true parent-daughter sequences. However, because 1,1-dichloroethene (1,1-DCE) is prevalent in the Apollo Plume Area and 1,1-DCE can appear as a generated daughter product from the breakdown of TCE and/or 1,1,1-trichloroethane (1,1,1-TCA), a decision was made to look at total CVOCs (i.e. combined ethenes/ethanes) on a molar basis to evaluate molar ratio patterns in each plume area.

EarthCon prepared a series of figures that provide a graphical depiction of molar ratios and molar trends. These figures assist in the overall interpretation and understanding of current and historical site conditions related to patterns and/or changes in molar characteristics.

Plume difference over time evaluation

In addition to evaluating temporal trends in plume characteristics (e.g., area, concentration, and mass indicator), it is also useful to evaluate spatial differences in constituent concentrations over time. To do this, spatial difference maps (or “plume difference maps”) are prepared that illustrate where concentrations increase or decrease between two sample events. Each spatial plume difference map depicts the magnitude and locations where the dissolved constituent plume differed between the two sampling dates. The plume differences are denoted by areas of red shading (areas of concentration increase) and blue shading (areas of concentration decrease). The relative magnitude of plume concentration change is indicated by gradational shading, with darker shading indicating greater change in magnitude in accordance with the provided scale. A new well network was established in October 2015. Therefore, plume difference maps were not prepared for the new well network. These maps may be prepared in the future when a sufficient dataset exists. As described in the May 2015 Technical Memorandum, a plume difference over time evaluation for the former well network was conducted for the following CVOC constituents:

[1] One mole of a substance is 6.02×10^{23} molecules. The mass of one mole is that number times the molecular weight of the substance.

- 1,1,1-TCA
- PCE
- TCE
- 1,1-DCE
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- Vinyl chloride (VC)
- Total CVOCs

2.1 Change in Well Network

In October 2015, former recovery wells RW-1 and RW-2 were abandoned due to well integrity issues (i.e. compromised vaults and casings, surface water infiltration, etc.). Subsequently, a replacement well was attempted to be installed during this same timeframe. After several attempts that resulted in auger refusal at unexpected depths and due to limited site access in the drilling area, a new monitoring well was eventually installed to the east of RW-1. Because this new well was not proximal to either RW-1 or RW-2, it was not designated as a replacement well but rather a new monitoring well identified as MW-17. Additionally, well MW-6 had been significantly damaged and was replaced by well MW-6R in September 2015. Because MW-6R is close and installed to the same specifications as MW-6, it is considered a replacement well.

Many of the plume analytics procedures consist of a statistical evaluation of a static well network over time to establish trends and patterns. When the well network is substantially changed, it is recommended to start a new series of plume analytics evaluations with the new well network. The trends and analysis for the former well network are still valid. However, with the abandonment of two former monitoring points (RW-1 and RW-2) in October 2015 and the recent installation of a new monitoring point (MW-17), the plume analytics well network has changed substantially enough to recommend re-setting the plume analytics network. Thus, going forward, we will reset the trends over time in accordance with the new well network. This change will be noted on the Ricker Method® plume stability analysis and the plume difference over time evaluation. We have annotated the figures accordingly to indicate where the change in well network evaluations occur. It should be noted that changing the well network does not change the integrity of the data, just the measuring points.

2.2 Data Assessment and Input File Development

Historical data is available for the Site from 1994 through 2015. Plume analytics were performed using historical groundwater data from January 2005 through October 2015. This data set includes 19 sampling events over a 10-year period. The data used for plume analytics for 1,1,1,-TCA; PCE; TCE; 1,1-DCE; cis-1,2-DCE; VC, and acetone are summarized in Tables 1 through 7, respectively.

Historically, the monitoring frequency at the Site varied but groundwater was generally sampled on a semi-annual basis. In instances when wells were not sampled or high detection limits were reported, data gaps were filled by either interpolating between those events with available data or by extrapolating prior or subsequent monitoring events with available data. Other scientific and/or statistical assumptions and adjustments to the data, consistent with the Ricker Method®, were necessary to complete the analysis. These adjustments are identified in the Ricker Method® input data set summarized in Tables 1 through 7. The assumptions and adjustments used in the analysis include the following:

- Monitoring wells in which the majority of the data were non-detect for a particular constituent were assumed always to be non-detect for that constituent, even during sampling events when no analytical data were reported. Instances where these non-detect values were assigned are indicated by purple shading in Tables 1 through 7. In most cases, non-detect concentrations were evaluated with an assigned concentration value of one-half or one-tenth of the stated detection limit. One-half the non-detect value was used when wells experienced some detections and one-tenth was used when a well was historically non-detect. In cases where non-detect concentrations had elevated detection limits, professional judgment was used. For example, in some cases the actual elevated detection limit value was used. In others, a fraction of the value was used. In some cases it is assigned the standard detection limit. The values may also have been interpolated between the previous and subsequent monitoring events. However, in every case, the assigned value was based on actual results (detectable value or non-detect at a lower detection limit) from other sampling events for that same well.

- Values for some of the elevated reporting limits were assigned by interpolating between those events with actual data from the previous and subsequent monitoring events. Instances where these values were assigned are indicated by orange shading in Tables 1 through 7.

- Cells not colored in the input data set in Tables 1 through 7 indicate that no assignments or adjustments were made for those respective wells and dates.

- Due to site conditions, wells RW-1 and RW-2 could not be sampled during the April 2015 event. April 2015 values were assigned by extrapolation from the most recent sampling event (January 2015). Instances where these values were assigned are indicated by green shading in Tables 1 through 7.

- To better define the plume boundaries, logarithmic interpolation was conducted between perimeter monitoring wells.

- The groundwater data for October 2014, January 2015, April 2015, and October 2015 were collected by EarthCon. Prior groundwater data were collected and provided by

others. As such, EarthCon did not validate any of the data received from others and makes no warranties or guarantees as to the accuracy or completeness of information provided to EarthCon by others.

- Starting with the October 2015 data set, the well network was reset as described in Section 2.1. The well network prior to October 2015 is referred to as the "former well network" and the well network commencing with the October 2015 dataset is referred to as the "new well network".

2.3 Groundwater Plume Map Development

After the initial evaluation of historical groundwater data and conducting initial plume analytics exercises, three main areas of groundwater impact were identified at the site:

- the "Western Plume Area" located proximal and downgradient of monitoring well MW-8,
- the "Apollo Plume Area" representing the plume detected on the subject site, and
- the "MW-6 Area" located proximal to monitoring well MW-6.

Using techniques described herein, constituent concentration isopleth maps, or plume maps, of the October 2015 data were developed for the Apollo Plume Area and the new well network. Under the new well network the Apollo Plume Area is considered to be defined by monitoring wells MW-1, MW-3, MW-4, MW-17 and DW-1 and bounded by wells MW-5, MW-9 and MW-15. Wells RW-1 and RW-2 were abandoned in October 2015 as described herein. MW-1, MW-4, RW-1, RW-2, and DW-1 were recovery wells prior to September 2014 when the groundwater remediation system (GWRS) was shut down. These wells have had historical detections above delineation criteria and risk reduction standards (RRS). The source area is considered to be in the area of well MW-1 near the former tank farm area and former stormwater catchment basin (historically located between MW-1 and MW-3).

Because the data indicated the presence of three separate plume areas (as will be discussed in more detail below), it was important to look at the Apollo Plume Area separately from the possible influence of the other plumes. To accomplish this, a plume "window" of non-detect values was drawn around the Apollo Plume Area based on historical results that were either non-detect or below delineation criteria as well as groundwater flow direction. Doing so focused the past plume stability analysis, and will focus future plume stability analyses, on the Apollo Plume Area to separate it from other potentially unrelated contaminant source influences (i.e. the Western Plume Area).

The plume maps were delineated to each constituent's respective delineation criteria. The delineation criteria is presented in Table 4 of the December 2015 Second Progress Report. The area of the constituent-specific plume for each year was calculated using the mathematical features of the contouring software used to develop the isopleth maps (i.e., Surfer® by Golden

Software, Inc.). The kriging gridding method was used with the default linear variogram to develop the isopleth maps. Surfer® was also used for the computation of the average concentration of each plume, as described in Ricker (2008). The plume area and average concentrations were then used to calculate the plume mass indicator for each year. To calculate the plume mass indicator, site specific values for porosity and aquifer thickness were used. A porosity of 35% was assumed based on the porosity used previously when calculating the RRS presented in the agency-approved March 2014 VIRP. The aquifer thickness value was based on the average aquifer thickness presented on Site cross sections (March 2014 VIRP).

The mass indicator is not necessarily an indication of the actual total mass of the contaminant in groundwater; rather it is a way to combine the variables of area and concentration into one meaningful indicator variable. Since the main purpose of the plume stability analysis is to observe relative changes in this value between sampling events, applying constants (i.e., porosity and aquifer thickness) to the mass calculation has no bearing on the usefulness of the output of the analysis (i.e., relative rate of change in plume mass).

Concentration isopleth maps for each of the constituents are included in Appendices A through G. As discussed above, plume stability characteristics were calculated for each of the sampling events included in the analysis. The plume stability characteristics of area, average concentration, and mass indicator are also shown on the respective isopleth maps.

2.4 Statistical Methodology

To evaluate the stability of each constituent plume, temporal trends of the characteristics for each plume are evaluated statistically. The area, average concentration, and mass indicator for each year are plotted to observe changes in each parameter from event to event.

The temporal trends in the plume characteristic values are statistically evaluated using both linear regression techniques and the Mann-Kendall Test. Linear regression analyses use the regression analysis utility in Microsoft Excel. The Mann-Kendall Tests also use Microsoft Excel spreadsheets based on procedures described in Gilbert (1987). Linear regression is a parametric statistical procedure that is typically used for analyzing trends in data over time. The Mann-Kendall Test is a non-parametric statistical test; therefore, it is not dependent upon the magnitude of the data, assumptions of distribution, or regularly spaced sampling events.

The Mann-Kendall Test is used to assess whether a data set exhibits an increasing or decreasing trend, at a predetermined level of significance, α. The test requires the calculation of a statistic "S", which is the difference between the number of paired differences that are positive, minus the number that are negative. If S is a large positive value, then there is evidence of an increasing trend in the data. If S is a large negative value, then there is evidence of a decreasing trend in the data. The null hypothesis, H_0, for the Mann-Kendall Test is that there is no temporal trend in the data. The alternative hypothesis, H_A, is that of either an upward trend or a downward trend.

If the null hypothesis is not rejected (i.e., no trend could be established statistically), it is expected that the plume is stable. However, a stable plume may not in fact be evident because the statistical test does not take into account magnitude or variation in the data. For example, a data set can exhibit a large amount of scatter, yet the test could conclude that the plume is stable. A methodology to counter the problem of scatter in the data involves comparing the calculated S statistic, a calculated confidence factor (1-α), and the coefficient of variation for the data set. The S statistic indicates the direction of the trend, the confidence factor shows how strong the trend is, and the coefficient of variation indicates the degree of scatter in the data.

When evaluating trends using linear regression, trends may be obscured by scatter in the data. This condition is typically indicated by a low coefficient of determination (R^2) value. Even with low R^2 values (i.e., high degree of scatter), a confidence interval can still be constructed on the slope of the regression line. As described in AFCEE (2006), assuming the sign (i.e., positive or negative) of the estimated log-slope is correct, a level of confidence that the slope is not zero can be easily determined. The overall trend in the data may thus still be determined, where low levels of confidence correspond to stable or indeterminate trends and higher levels of confidence (e.g., > 90%) indicate the stronger likelihood of a trend.

For the plume stability analysis, significant trends are established when the calculated confidence factor is greater than 90%. If the confidence factor is less than 90%, the plume is considered stable if the coefficient of variation is small (i.e., <1). If the coefficient of variation is high (i.e., >1), then a conclusion of indeterminate trend is made.

In many cases, the statistical results for both linear regression and Mann-Kendall Test agree with each other. In the case where two different results are obtained (e.g., one stable trend and one decreasing trend), both are used to describe the trend.

Historical trend analysis results for the respective constituent plume area, average concentration, and mass indicator are discussed for each constituent below. Statistical analysis summaries are provided in Appendix H.

3.0 PLUME ANALYTICS RESULTS

This section provides a summary of results of the individual plume analytics based on the data set and well networks described above. Our interpretations and opinions of the data outputs are subject to change should additional information become available. Several figures were prepared as part of the analyses of the CVOC constituents, as follows:

- Figure 1: Site wide total CVOC molar ratio (pie chart) evaluation for the October 2015 sampling event.

- Figures 2 through 9: Apollo plume trend analysis results of plume area, average concentration, and mass indicator using data from the former well network (January 2005 through April 2015) for 1,1,1-TCA; PCE; TCE; 1,1-DCE; cis-1,2-DCE; VC; acetone, and total CVOC, respectively, are presented. Additionally, on the same trend graphs we denoted the beginning of the trend evaluations for the new well network (minus RW-1 and RW-2; plus MW-17). Because one data point cannot be trended, no trend lines for the new well network are plotted. However, as sampling data is added during future sampling events, the data will be added to the new well network and trends will be established and evaluated accordingly.

- The spatial difference figures for the former well network depict magnitude and locations where the dissolved contaminant plume differed between the January 2005 and April 2015 monitoring events. These figures were provided in the May 2015 Technical Memorandum. Because the new well network only has one data set, plume difference maps could not be developed with the October 2015 data. However, as future sampling events yield more data, plume difference evaluations can be conducted for the new well network going forward.

- Appendices A through G: Apollo plume series maps for 1,1,1-TCA; PCE; TCE; 1,1-DCE; cis-1,2-DCE; VC, and acetone, respectively.

- Figures 10 and 11: Total CVOC molar analysis summary and trends for the period of January 2005 through October 2015 for the Apollo Plume Area and for the Western Plume Area located proximal to monitoring well MW-8 and including MW-7. A molar evaluation was also conducted for well MW-6 (i.e. the MW-6 Area).

October 2015 Molar Ratio (Pie Chart) Analysis (Figure 1)

The following are observations made from the total CVOC molar analysis (in nmol/L) that was conducted on October 2015 data:

As discussed below, the October 2015 molar patterns appear to be generally similar to the April 2015 molar patterns for the three separate plumes in the Site area: 1) Apollo Plume Area, 2) Western Plume Area, and 3) MW-6 Area.

Apollo Plume Area

A unique characteristic of the Apollo Plume Area, when compared to the other plume areas, is the presence of 1,1,1-TCA and 1,1-DCE in all of the five monitoring wells along with other chlorinated hydrocarbons. One of the accepted degradation pathways for the generation of 1,1-DCE is the abiotic degradation of 1,1,1-TCA. 1,1-DCE can also be generated through the anaerobic reductive dechlorination/abiotic degradation of TCE. On a molar percent basis, 1,1-

DCE is more prevalent in the southern or downgradient portion of the Apollo Plume Area. A differentiator between the Apollo Plume Area molar ratios and what is seen in MW-6 is that, except for some very low level hits near detection limits in 2011-2013, 1,1,1-TCA is typically not detected in MW-6. Whereas 1,1,1-TCA is historically observed in the wells within the Apollo Plume Area.

Generally, the Apollo Plume Area has higher molar concentrations on a molar concentration basis than the other two plume areas. We should note here that 1,1-DCE can also be a manufactured product. However, it is our understanding that 1,1-DCE was not used as a raw product; therefore, its occurrence is assumed to primarily come from a breakdown of a parent compound.

Western Plume Area

On the surface, the molar ratio patterns of the April 2015 and October 2015 data for the Western Plume Area indicate a classic degradation pathway going from mostly PCE and TCE at upgradient MW-8 to cis-1,2-DCE and VC downgradient at MW-7 and finally to almost all VC at MW-15, which is downgradient from MW-7. Additionally, supporting this interpretation is the observation that the molar concentrations overall continue to decrease in a downgradient direction from MW-8 to MW-15. This difference was more pronounced in the April 2015 data when the total molar concentration in MW-7 was less than what was observed in October 2015. The October 2015 data show that total molar concentration in MW-7 was greater than MW-8; however, MW-15 total molar concentration was orders of magnitude less than MW-8 and MW-7. The historical data set is limited for well MW-8. As we add to the MW-8 data set, we will continue to monitor and evaluate total molar concentration trends and correlations between MW-8, MW-7, and MW-15.

As mentioned above, by looking at the molar ratio pattern data, a case can be made for a downgradient sequenced reductive dechlorination scenario where PCE and TCE degrade to mostly daughter products cis-1,2-DCE and VC in a downgradient direction all the while losing molar mass. Possible explanations for the relatively quick transition from parent compounds to daughter compounds between MW-8 and the downgradient MW-7 is that there is a zone of reducing conditions between these two wells that drive the reductive dechlorination process. This zone could be due to the presence of natural (geochemical, biological) or anthropogenic carbon sources (carbon based compounds, acetone, toluene, etc.) in the subsurface or other factors that can produce reducing conditions that drive reductive dechlorination.

The fact that the Western Plume Area is located side-gradient to the Apollo Plume Area, that the Western Plume Area shows a classic degradation pathway in a downgradient direction, and that 1,1-DCE does not appear to be a significant component of the Western Plume Area all point to strong lines of evidence that the Western Plume Area and the Apollo Plume Area are two distinct plumes sourced from different locations. The evidence supports that the source of the Western Plume Area is coming from an area upgradient or proximal to MW-8. Recent soil sampling

conducted in October 2015 proximal to well MW-8 support the hypothesis that the compounds detected in MW-8 are being sourced from an upgradient/offsite location.

MW-6 Area

The offsite MW-6 Area located south of the Site is predominantly 1,1-DCE and VC. Although its molar signature more resembles the Apollo Plume Area due to the relatively high percentage of 1,1-DCE, it appears this plume may be separate from the Apollo Plume Area based on data obtained from MW-15, which is located between the Apollo Plume Area and the MW-6 Area. MW-15, located on the AMC Cobb property upgradient and north of MW-6, contains predominantly VC. Historically, MW-15 has consistently had lower concentrations of CVOCs than MW-6 and at times an order of magnitude lower. Additionally, one compound that has been consistently detected in the Apollo Plume Area is 1,1,1-TCA which, except for some very low level hits near detection limits in 2011-2013, is typically not detected in MW-6. Therefore, based on groundwater flow direction and historical data, the source of CVOCs detected at MW-6 remains unclear at this time.

Ricker Method® Plume Stability Analysis (Figures 2 – 9 and Appendices A – G)

As described in the May 2015 Technical Memorandum, the Ricker Method® Plume Stability Analysis was conducted for the Apollo Plume Area using groundwater data for each the six CVOCs, acetone, and total CVOCs for years 2005 through April 2015. The Ricker Method® Plume Stability Analysis for each of the constituents evaluated resulted in the following trends:

Constituent	Area	Average Concentration	Mass Indicator
1,1,1-TCA	Decreasing	Decreasing	Decreasing
PCE	Decreasing	Decreasing	Decreasing
TCE	Decreasing	Decreasing	Decreasing
1,1-DCE	Decreasing	Decreasing	Decreasing
cis-1,2-DCE	Decreasing	Decreasing	Decreasing
VC	Stable	Decreasing	Decreasing
Acetone	Decreasing	Decreasing	Decreasing
Total CVOCs	Decreasing	Decreasing	Decreasing

- Average concentration and mass indicator for all constituents have a decreasing trend over the last 10 years. All constituents have a decreasing trend for area over the last 10 years except for VC, which has a stable trend. No plume stability metrics indicated an increasing trend for the Apollo Plume Area.

- When comparing plume area between January 2005 and April 2015, 1,1,1-TCA decreases by 92% and cis-1,2-DCE decreases by 73%. Except for VC, the remaining CVOC constituents decrease in area by 20-35%. VC increases in plume area by 15%, which is likely due to the generation of this compound by active reductive dechlorination processes. The VC data trend for the last 10 years, however, is stable. Additionally, the total CVOC plume area is showing a 33% decrease over this 10 year time period.

- When comparing plume average concentration between January 2005 and April 2015, 1,1,1-TCA, TCE, 1,1-DCE, cis-1,2-DCE, and total CVOCs have decreased by more than 75%, while PCE and VC have decreased by more than 50%.

- When comparing plume mass indicator between January 2005 and April 2015, 1,1,1-TCA and cis-1,2-DCE have decreased by more than 95%. PCE, TCE, 1,1-DCE, and total CVOCs have decreased by more than 70%. VC has decreased by more than 50%.

- When comparing the total molar trend between January 2005 and April 2015, the total number of moles has decreased by approximately 87%.

As mentioned herein, a new well network was established in October 2015 with the abandonment of RW-1 and RW-2 and the installation of MW-17. As such, continuing with the plume stability analysis of the former well network is not possible. However, going forward, plume stability trends for the new well network will be evaluated as new data becomes available during future sampling events.

Molar Trend Analysis (Figures 10 and 11)

Figure 10 presents a summary of the total CVOC molar and molar ratio trends on a well-by-well basis for the Apollo Plume Area. Figure 11 presents a summary of the total CVOC molar and molar ratio trends for the Western Plume Area as well as the MW-6 Area on a well-by-well basis. The analyses were not conducted on monitoring wells that were historically mostly non-detect.

The charts on Figures 10 and 11 are based on data sets from January 2005 through October 2015. Total molar concentration (nmol/L) is plotted on the primary y-axis, while the percentage of the molar ratio is plotted on the secondary y-axis. The yellow shaded area represents the total molar concentration, while the line graphs represent the percentage each CVOC contributes to the total molar concentration. The green-shaded background of the charts represents the years in which the GWRS operated. The following summarizes trends and interpretations of the data.

Apollo Plume Area (Figure 10)

- MW-1: Based upon the increasing total molar concentration (yellow shaded area) in this well from 2005 to 2011 and the relative magnitude of the concentration in comparison to the other monitoring wells, MW-1 seems to be located in or near the primary source area of the Apollo groundwater plume. During the period of increasing molar concentration mentioned above, the primary constituent was cis-1,2-DCE representing upwards of 70-90% of the total molar concentration. Cis-1,2-DCE is typically generated through reductive dechlorination of a parent compound, typically PCE/TCE. Since 2012, we observe, subsequent to a rapid decrease in total molar concentration, a gradual decrease in the molar ratio of cis-1,2-DCE in conjunction with an increase in the molar ratio of VC. This molar ratio pattern of increasing VC with decreasing cis-1,2-DCE suggests that reductive dechlorination is occurring at MW-1. As mentioned, the total molar concentration has decreased significantly from 2010 through 2015, indicating the parent constituents have or are undergoing complete mineralization or removal via historical pumping or some combination of both. The continued decrease in total molar concentration also demonstrates there is no significant continuing sourcing of contamination in the area monitored by MW-1. That is, the total molar concentration does not show observable increases that would indicate contributive sourcing post 2011. A point of note is that sporadically over the years of sampling 1,1,1-TCA occasionally appears as evidenced by molar ratio "spikes" of 1,1,1-TCA observed in the molar ratio percent that are followed by a general decrease.

- MW-4: Prior to September 2014, MW-4 was a recovery well. During the time MW-4 operated as a recovery well, the molar concentration and molar ratios are very consistent. The molar ratio of 1,1-DCE ranges generally between 80-90% during this time period. 1,1,1-TCA ranges from 5 to 15% and PCE consistently trends at approximately 5%. 1,1-DCE is known to be generated through the anaerobic degradation and/or abiotic dechlorination of 1,1,1-TCA and TCE. The trends and ratios observed during the period of pumping on this well are carried through the subsequent period of non-pumping. It appears that during the previous pumping and subsequent non-pumping period, geochemical conditions favor the dechlorination of parent compounds to 1,1-DCE.

- RW-1: Prior to September 2014, RW-1 was a recovery well. During the period of pumping, 1,1-DCE was the primary constituent consisting of approximately 60-70% of the molar ratio through approximately 2013. During this same time period 1,1,1-TCA generally decreased on a molar ratio basis from just less than 30% to 5%. VC was fairly consistent at less than 10% before increasing after 2010. Since 2012 we see 1,1-DCE decrease with a concurrent increase in the VC ratio. This is a typical pattern of reductive dechlorination. The total molar concentration decreases over the sampling period and the more recent trends and ratios support that reductive dechlorination is occurring. This well was abandoned in October 2015 due to well integrity issues.

- DW-1: Prior to September 2014, DW-1 was a recovery well. During the period of pumping 1,1-DCE was generally trending around 50% of the molar ratio. There was a period of time between approximately 2006 and 2010 when VC ranged as high as 35% of the molar ratio. The observed decrease of 1,1-DCE that corresponds with an observed increase in VC from 2005 to 2010 suggests reductive dechlorination was occurring. This is also supported by the gradual decrease in molar concentration during this period. More recently PCE as a percent of molar concentration has increased but the total molar concentration shows a decreasing trend. The data does not indicate that there is ongoing sourcing occurring proximal to DW-1.

- RW-2: Prior to September 2014, RW-2 was a recovery well. The molar ratio of recent detections in RW-2 was mainly comprised of cis-1,2-DCE, TCE, and PCE at approximately 58%, 21%, and 12%, respectively. However, total molar concentrations were very low during the sampling period going back to 2005. In fact, sampling results for RW-2 were non-detect in January 2015. RW-2 could not be sampled in April 2015 because it was submerged in a pool of surface water. In October 2015, this well was also abandoned due to well integrity issues.

- MW-3: Prior to September 2014, MW-3 was a recovery well. A couple of observations are made during the period of pumping from approximately 2005 until 2014: the total molar concentration shows a subtle decrease over this time; and 1,1-DCE shows a gradual decrease on a percentage basis while cis-1,2-DCE and VC show a corresponding increase. TCA over this timeframe tends to oscillate generally between 10-30%. The more recent data indicates that cis-1,2-DCE and VC combined make up approximately 80% of the molar concentration of the constituents detected. These compounds are typically the byproduct of biological reductive dechlorination of parent compounds. Therefore, due to the prevalence of daughter compounds and a continuing decline in molar concentration, it appears reductive dechlorination is occurring in the area monitored by this well.

- MW-17: MW-17 was installed in October 2015 as a new monitoring well located approximately halfway between DW-1 and MW-4. Similar to those wells, 1,1-DCE is the constituent that appears at the highest molar ratio, approximately 58%. Due to only having one sample result since well installation, a comment on trends cannot be made at this time.

Wells MW-1, MW-4, RW-1, RW-2, and DW-1 were recovery wells prior to September 2014 when the GWRS was shut down. We caution that the data trends and sampling results from the recovery wells, during the period they operated as recovery wells, be weighed against the limitations of sampling from recovery wells. Recovery wells by their very nature draw water towards them radially. Also, depending on pumping rates, groundwater gradients to a recovery well can vary over time. Additionally, pumping wells, through the agitation and

turbulence of pumping, tend to aerate the groundwater by the pumping agitation. All of these factors lead to increasing degrees of variability. We recommend that as the aquifer re-equilibrates from years of pumping and reaches more of an intrinsic state, that the trends observed in those wells post-pumping bear more weight when interpreting what processes may be occurring in the aquifer.

MW-8, MW-7, and MW-6 (Figure 11)

- MW-8: The molar ratios observed in MW-8 are unlike any other molar ratios observed in monitoring wells sampled at the Site. Since sampling began in late 2012 the molar ratio is comprised mainly of TCE and PCE at generally 65-75% and 25-30%, respectively. The total molar concentration has remained fairly consistent since monitoring began. The predominance of parent products in this well, as opposed to mostly daughter products in the other monitoring wells, indicates MW-8 is monitoring a separate groundwater plume from an offsite, upgradient source not associated with the Apollo Plume Area. Recent soil sampling proximal to MW-8 appears to substantiate this observation/opinion.

- MW-7: The constituents detected over time in this well are nearly all cis-1,2-DCE and VC. Generally, cis-1,2-DCE was a greater percent of the total CVOCs until the last two sampling events where VC is found at a higher ratio than cis-1,2-DCE. It appears the total molar concentration has shown an overall gradual decline over time. The high molar ratio of cis-1,2-DCE and VC indicate the generation of daughter products from reductive dechlorination. As previously described, the cis-1,2-DCE and VC in MW-7 may be the result of reductive dechlorination from the parent compounds PCE and TCE observed in the upgradient MW-8 that passes through an area very conducive to biological reductive dechlorination.

- MW-6: The samples obtained from this well are typically of low concentration and predominantly 1,1-DCE and VC. The last several sampling results show that 1,1-DCE is between 65-75% and VC is 18-26%. This well appears to be an outlier in the context of the site area. While the presence of 1,1-DCE seems to indicate similarity with the Apollo Plume Area, the presence of an upgradient well (MW-15) at lower concentrations and with no significant 1,1-DCE disassociates this well from the Apollo Plume Area. Additionally, a further upgradient well (MW-13) is non-detect for CVOCs. The presence of 1,1-DCE in MW-6 is possibly an indication of subsurface geochemistry that is favorable to the generation of 1,1-DCE from parent compounds, whether originating onsite or from another source. Based on this uncertainty, we consider this well separate from the Apollo plume.

4.0 SUMMARY AND CONCLUSIONS

The following is a general narrative summary of the key findings of this Plume Analytics Evaluation. Additional detail and findings are provided in the previous sections.

Based on the October 2015 sampling results and an updated evaluation of molar ratios and molar concentrations of the total CVOCs, the original hypotheses discussed in the May 2015 Technical Memorandum, that there appear to be three separate and distinct plumes, is still supported.

Based on the results of a Ricker Method® Plume Stability Analysis conducted on data from 2005 through April 2015 and discussed in the May 2015 Technical Memorandum, there was strong evidence that the total CVOC plume is stable and decreasing. This statement is supported by the stable to decreasing trends in area, average concentration, and mass indicator for all six CVOCs and acetone, as well as total CVOCs. The increase in plume area between 2005 and April 2015 for VC is attributed to active reductive dechlorination processes, which is generating the VC daughter compound. Despite the 15% increase in VC plume area, the VC average concentration has decreased by 56% and the mass of the VC plume has decreased by 50% over this time period.

As previously discussed, a new well network was established to continue monitoring the various plumes described herein. Once a sufficient dataset is established from future sampling the plume stability analysis and plume difference evaluations can be updated. Based on the plume analytics evaluation conducted on the October 2015 dataset, it appears that general findings and conclusions presented in the May 2015 Technical Memorandum are still valid with the key points being: 1) there appear to be three separate plumes in the site area (Apollo Plume Area, Western Plume Area, and MW-6 Area); 2) the Apollo Plume Area appears to remain stable to decreasing; 3) no obvious areas of new sourcing of the Apollo Plume Area have been observed; 4) the Western Plume Area appears to be sourced from an area upgradient of MW-8; and 5) the MW-6 Area does not appear to be connected to the Apollo Plume Area suggesting an unknown offsite source.

5.0 LIMITATIONS

Per the terms and conditions under which this scope of work was performed, this report shall be the sole property of AMC Cobb. This report was prepared for the sole and exclusive use and reliance of AMC Cobb and may also be relied upon by any regulatory agency receiving a copy of this report from AMC Cobb. Any person or entity other than such regulatory agency (“third parties”, including any members of the public who may access this report as a public document) receive it in every instance solely for informational purposes and not for any type of reliance. This report presents observations and opinions based solely upon the agreed scope of work outlined in this report and EarthCon Proposal No. 02.01010023.55.01.14284, dated August 6, 2014.

EarthCon makes no warranties or guarantees as to the accuracy or completeness of information, if any, provided or compiled by individuals or entities other than EarthCon. It is possible that, as a result of the limitations imposed on the scope of work, there exists relevant information that was not considered in the findings, observations and opinions as presented in this report. Additional information, which was not found or available to EarthCon at the time of writing this report, may result in modification of the findings, observations, and opinions presented herein. This report is not intended to be and is not a legal opinion. The services performed by EarthCon have been conducted in a manner consistent with the level of care ordinarily exercised by members of our profession currently practicing at the same time under similar conditions. No other warranty, expressed or implied, is made.

6.0 REFERENCES

Air Force Center for Environmental Excellence (AFCEE), March 2006, *Monitoring and Remediation Optimization System (MAROS) Software Version 2.2 User's Guide.*

EarthCon Consultants, Inc., *May 2015, First VIRP Progress Report, Apollo Industries, Inc., 1850 South Cobb Industrial Boulevard SE, Smyrna, Cobb County, Georgia, HSI Site Number 10333*.

Gilbert, R.O. 1987. *Statistical Methods for Environmental Pollution Monitoring*. New York. John Wiley & Sons, Inc.

O-Brien & Gere, March 2014, *Voluntary Investigation and Remediation Plan, Apollo Technologies, Inc., HSI No. 10333*.

Ricker, J.A. 2008. *A Practical Method to Evaluate Ground Water Contaminant Plume Stability*. Groundwater Monitoring & Remediation 28, no. 4: 85–94.

Table 1
Summary of Analytical Data
1,1,1-Trichloroethane (1,1,1-TCA)

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	30	22	9.3	<0.0050	4.0	1.6	2.9	35	1.7	2.9	1.4	3.8	4.8	0.24	0.057	0.090	0.11	0.014	0.10
MW-2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-3	1.7	3.4	<0.0050	1.2	11	0.97	7.2	2.4	2.2	0.81	0.50	0.085	2.5	0.24	2.9	1.6	0.37	0.17	1.2
MW-4	3.4	2.2	2.0	3.6	2.3	3.5	1.4	2.9	2.2	0.47	2.5	0.89	1.7	1.6	2.1	2.4	2.6	1.0	1.6
MW-5	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-6	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NS (ND)	<0.0050	0.0064	0.0065	0.0028	<0.0010	<0.0050	<0.0050	<0.0050	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050
MW-7	NA	NA	NA	<0.0050	0.0063	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.016	0.0089	0.0052	0.0059	0.0067	<0.0050	0.0060
MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
DW-1	6.2	1.5	0.61	0.026	0.55	0.49	0.29	0.36	0.37	0.31	0.35	0.24	0.23	0.25	0.41	0.20	0.077	0.020	0.088
RW-1	9.1	6.3	4.6	5.3	2.5	4.7	3.9	5.4	2.0	0.81	1.6	2.2	0.19	0.16	0.76	0.30	0.18	NS (0.18)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0060
RW-2	0.092	0.15	0.059	0.061	0.077	0.065	0.069	0.043	<0.0050	0.095	0.019	0.012	0.015	0.013	0.013	0.014	<0.0050	NS (ND)	NA

Notes:
All concentrations in mg/l

NA:	Well not installed.
<5.00:	Analyte not detected.
<100 (21.0):	Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.
NS:	Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.
	Non-Sampled well assumed non-detect
	Interpolated between two sampling events.
	Extrapolated from a sampling event.

RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.

Table 2
Summary of Analytical Data
Tetrachloroethene (PCE)

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	<2.3 (0.39)	<2.5 (0.45)	<2.5 (0.52)	0.58	0.58	0.011	<0.25 (0.0098)	<0.0086 (0.0085)	0.0073	0.0064	<0.0050	<0.0050	0.019	<0.010	0.0051	<0.0050	0.021	0.0081	<0.0050
MW-2	<0.0050	0.019	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-3	<0.50 (0.039)	<0.50 (0.059)	<0.0050	0.10	0.25	0.28	0.27	0.093	0.13	0.0064	0.0058	<0.0050	0.012	<0.050 (0.0099)	<0.25 (0.0078)	0.0057	<0.0050	<0.0050	0.020
MW-4	1.7	1.2	1.5	2.0	1.7	2.2	1.2	2.2	1.7	0.46	0.92	0.42	0.62	1.5	1.6	2.1	2.6	1.6	2.0
MW-5	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-6	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NS (ND)	<0.0050	<0.0050	<0.0050	0.0059	<0.0010	<0.0050	0.010	0.0069	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.013
MW-7	NA	NA	NA	0.055	<0.0050	0.66	2.0	<0.0050	<0.0050	<0.0050	0.92	<0.0050	<0.0050	0.37	0.048	<0.0050	<0.0050	<0.0050	<0.0050
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.48	0.54	0.42	0.32	0.52	0.38	0.52
MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
DW-1	2.3	0.76	<0.50 (0.40)	0.031	0.27	0.37	0.24	0.23	0.28	0.34	0.37	0.30	0.26	0.34	0.54	0.097	0.52	0.12	0.54
RW-1	0.63	0.52	<0.50	0.56	0.16	0.31	<0.50	0.11	0.070	<0.50 (0.074)	0.078	0.060	0.022	<0.10	0.082	0.0072	0.023	NS (0.023)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.045
RW-2	0.087	0.16	0.091	0.10	0.11	0.090	0.10	0.069	<0.0050	0.081	0.059	0.040	0.071	0.092	0.083	0.13	<0.0050	NS (ND)	NA

Notes:

All concentrations in mg/l

NA: Well not installed.

<5.00: Analyte not detected.

<100 (21.0): Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.

NS: Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.

Non-Sampled well assumed non-detect

Interpolated between two sampling events.

Extrapolated from a sampling event.

MW-1 January 2005 to Febuary 2007 was interpolated using prior historical data.

MW-3 January 2005 to July 2006 was interpolated using prior historical data.

RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.

Table 3
Summary of Analytical Data
Trichloroethene (TCE)

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	5.0	<2.5	2.5	0.41	<0.25	0.016	<0.25	0.054	<0.0050	0.088	0.023	0.027	0.11	<0.010	0.028	0.047	0.10	0.013	0.0080
MW-2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-3	<0.50	<0.50	<0.0050	0.14	0.96	0.25	0.71	0.50	0.19	0.0077	0.0074	<0.0050	0.045	<0.050	<0.25	0.073	<0.0050	<0.0050	0.097
MW-4	<0.50	<0.50	<0.50	0.032	0.021	0.035	<0.50	<0.012	0.023	0.020	0.12	0.11	0.069	<0.20	0.12	0.14	0.12	0.067	<0.50 (0.067)
MW-5	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-6	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NS (ND)	<0.0050	0.0060	0.0070	0.0020	<0.0010	<0.0050	0.0052	<0.0050	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0060
MW-7	NA	NA	NA	0.041	<0.0050	0.40	0.71	0.0051	<0.0050	<0.0050	0.82	<0.0050	<0.0050	0.43	0.12	<0.0050	<0.0050	<0.0050	<0.0010
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1	1.0	0.71	0.67	0.96	0.71	1.2
MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
DW-1	<0.50 (0.021)	<0.50 (0.018)	<0.50 (0.016)	0.013	0.079	0.13	0.10	0.12	0.52	0.14	0.14	0.11	0.049	0.040	0.051	0.067	0.038	0.016	0.086
RW-1	<0.50	<0.50	<0.50	0.30	0.19	0.19	<0.50	0.23	0.46	<0.50	0.15	0.15	0.019	<1.0	0.14	0.014	0.031	NS (0.031)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.019
RW-2	0.028	0.11	0.060	0.075	0.11	0.094	0.13	0.10	<0.0050	0.0075	0.10	0.060	0.11	0.13	0.13	0.18	<0.0050	NS (ND)	NA

Notes:

All concentrations in mg/l

NA: Well not installed.

<5.00: Analyte not detected.

<100 (21.0): Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.

NS: Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.

Non-Sampled well assumed non-detect

Interpolated between two sampling events.

Extrapolated from a sampling event.

DW-1 January 2005 to Febuary 2007 was interpolated using prior historical data.

RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.

Table 4
Summary of Analytical Data
1,1-Dichloroethene (1,1-DCE)

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	<2.5	2.6	<2.5	3.1	3.2	2.0	6.9	9.4	12	2.5	1.5	0.93	0.28	0.018	0.0031	0.012	0.019	<0.0050	0.015
MW-2	<0.020	<0.050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-3	3.0	7.4	<5.0	2.6	7.3	1.5	8.5	1.2	2.5	2.5	0.13	0.021	1.5	0.24	1.7	1.5	0.39	0.11	0.90
MW-4	13	11	11	18	19	27	13	18	28	4.6	9.1	3.2	9.4	8.6	14	16	36	9.8	19
MW-5	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-6	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.014	NS (0.042)	0.069	0.12	0.16	0.084	0.020	0.11	0.17	0.092	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.21
MW-7	NA	NA	NA	<0.0050	0.011	0.077	0.16	0.034	<0.0050	0.0088	0.067	0.011	0.030	0.057	0.033	0.0087	<0.0050	<0.0050	0.0060
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.037	0.026	0.025	0.018	0.030	0.017	0.020
MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
DW-1	12	5.7	3.9	0.060	2.3	2.3	1.6	1.2	1.4	1.0	1.1	0.76	0.84	0.68	1.2	0.76	0.69	0.15	0.68
RW-1	15	18	11	16	11	14	15	15	8.8	1.8	9.5	11	1.1	1.7	<0.0010	1.2	0.87	NS (0.87)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.22
RW-2	0.20	0.54	0.32	0.21	0.27	0.19	0.25	0.10	<0.0050	0.51	0.057	0.032	0.038	0.016	0.030	0.027	<0.0050	NS (ND)	NA

Notes:
All concentrations in mg/l

NA:	Well not installed.
<5.00:	Analyte not detected.
<100 (21.0):	Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.
NS:	Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.
	Non-Sampled well assumed non-detect
	Interpolated between two sampling events.
	Extrapolated from a sampling event.

RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.

Table 5
Summary of Analytical Data
cis-1,2-Dichloroethene (cis,1,2-DCE)

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	15	49	56	91	100	100	110	100	120	49	16	14	3.5	0.20	0.12	0.16	0.19	0.041	0.13
MW-2	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-3	<0.50	5.2	<0.0050	0.17	7.1	0.73	4.9	2.0	3.4	1.4	0.32	0.23	3.2	1.7	5.1	5.0	0.55	0.28	4.9
MW-4	<0.50	<0.50	<0.0050	<0.0050	<0.0050	0.022	<0.50	<0.50	<0.0050	0.015	0.042	0.069	0.013	<0.20	0.039	0.011	0.037	0.019	<0.50
MW-5	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-6	NA	NA	NA	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	NS (ND)	<0.0050	0.012	0.010	0.0033	0.0016	0.0058	0.0064	0.0052	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0070
MW-7	NA	NA	NA	4.7	4.8	16	4.5	4.3	0.19	1.6	10	1.0	1.6	7.2	1.9	1.3	0.25	0.035	0.82
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.041	0.028	0.022	0.025	0.037	0.033	0.033
MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	<0.0050	<0.0050	<0.0050	<0.0050
MW-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
MW-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0055	0.011	0.0090	<0.0050	<0.0050	<0.0050	<0.0050
MW-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0050	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0050	<0.0050
DW-1	<0.50	<0.50	<0.50	0.012	0.16	0.22	0.16	0.20	0.19	0.16	0.16	0.097	0.069	0.056	0.080	0.29	0.052	0.022	0.079
RW-1	<0.50	<0.50	<0.50	0.78	0.35	0.85	0.67	0.77	0.41	<0.50	0.53	0.40	0.054	0.16	0.39	0.15	0.11	NS (0.11)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.089
RW-2	0.033	0.14	0.056	0.10	0.088	0.078	0.081	0.071	<0.0050	0.0066	0.086	0.12	0.16	0.25	0.32	0.36	<0.0050	NS (ND)	NA

Notes:
All concentrations in mg/l

NA:	Well not installed.
<5.00:	Analyte not detected.
<100 (21.0):	Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.
NS:	Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.
	Non-Sampled well assumed non-detect
	Interpolated between two sampling events.
	Extrapolated from a sampling event.

RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.

Table 6
Summary of Analytical Data
Vinyl Chloride (VC)

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	<1.0 (0.56)	<1.0 (0.69)	<2.5 (0.83)	0.97	0.79	1.2	6.0	2.9	3.6	4.1	2.8	0.75	0.15	0.092	0.049	0.082	0.16	0.030	0.082
MW-2	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0020	<0.0020
MW-3	0.23	2.8	<0.0020	0.16	1.5	<0.0020	2.4	0.70	1.6	0.47	0.080	0.015	0.87	1.2	1.6	1.4	0.38	0.44	1.7
MW-4	<0.20	<0.20	<0.20	<0.0020	<0.0020	<0.0020	<2.0	<0.019	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.20	<0.025	<0.0020	<0.0020	0.0055	<0.20 (0.0055)
MW-5	NA	NA	NA	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0020	<0.0020
MW-6	NA	NA	NA	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	NS (ND)	0.012	0.035	0.065	0.016	0.014	0.037	0.032	0.023	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.031
MW-7	NA	NA	NA	1.2	2.4	4.5	2.2	2.7	0.29	0.96	3.2	0.54	0.85	3.2	0.76	0.62	0.16	0.047	0.60
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0020	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0020
MW-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0020	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0020
MW-10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0020	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0020	<0.0020
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0020	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0020	<0.0020
MW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0020	<0.0010	<0.0010	NS (ND)	NS (ND)	<0.0020	<0.0020
MW-13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0059	0.0041	0.0035	<0.0020	<0.0020	<0.0020	<0.0020
MW-15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0037	<0.0010	<0.0010	NS (ND)	NS (ND)	0.010	0.0020
DW-1	<0.20	0.74	1.7	0.013	0.82	1.2	0.77	0.70	0.52	0.31	0.29	0.15	0.14	0.11	0.18	0.11	0.051	0.019	0.11
RW-1	1.0	1.7	0.64	1.4	0.79	0.87	0.82	0.80	0.46	1.8	0.88	1.3	0.19	1.2	0.68	0.61	0.35	NS (0.35)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.024
RW-2	0.010	0.044	0.0077	0.015	0.031	0.021	0.029	0.023	<0.0020	0.0067	0.022	0.018	0.022	0.0065	0.014	0.0088	<0.0020	NS (ND)	NA

Notes:
All concentrations in mg/l

NA:	Well not installed.
<5.00:	Analyte not detected.
<100 (21.0):	Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.
NS:	Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.
	Non-Sampled well assumed non-detect
	Interpolated between two sampling events.
	Extrapolated from a sampling event.

MW-1 December 2005 to July 2006 was interpolated using prior historical data.
RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.

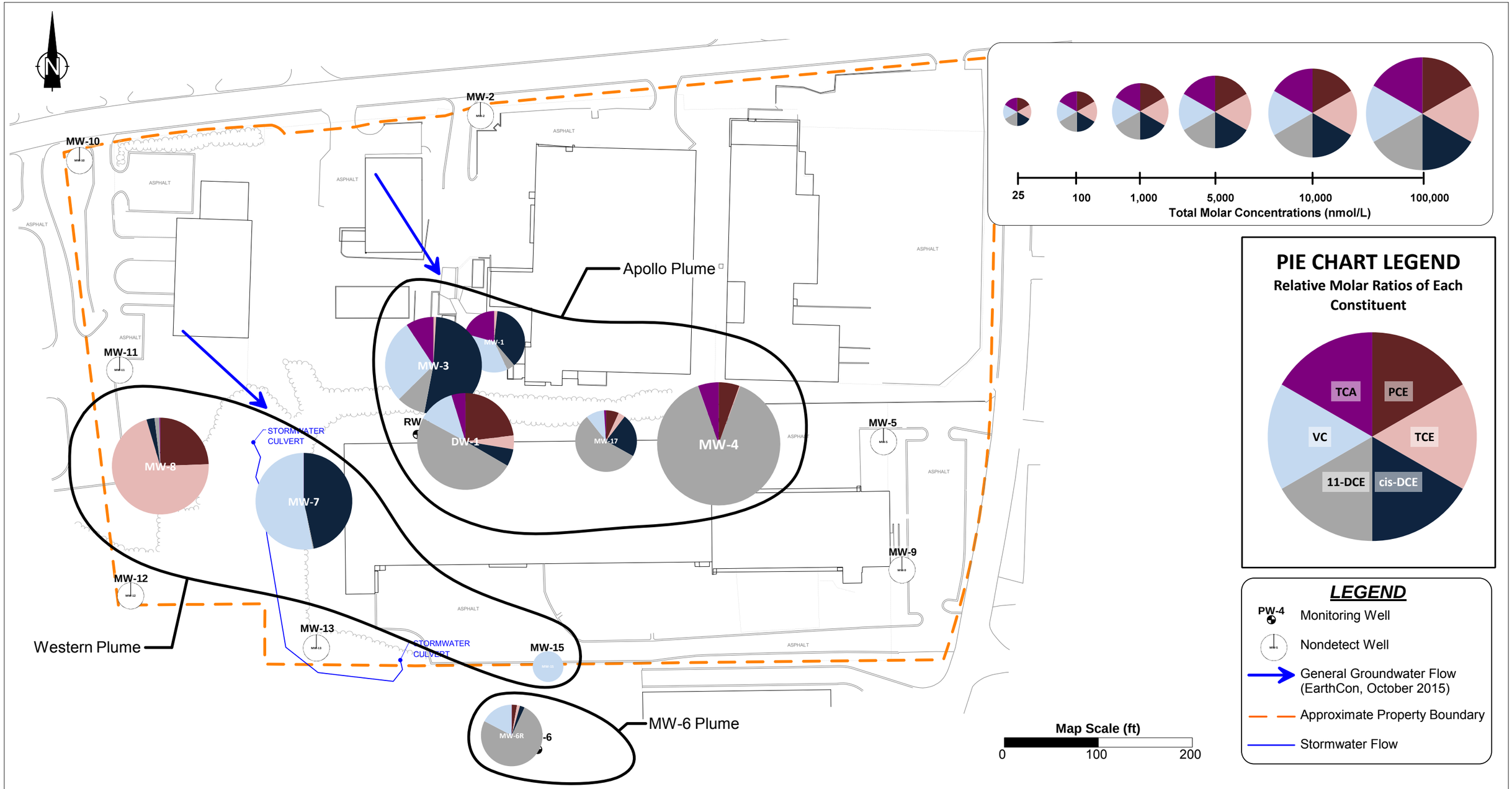
Table 7
Summary of Analytical Data
Acetone

	Jan. 2005	Dec. 2005	Jul. 2006	Feb. 2007	Aug. 2007	Feb. 2008	Nov. 2008	Sep. 2009	Mar. 2010	Sep. 2010	Apr. 2011	Oct. 2011	Sep. 2012	Jun. 2013	Dec. 2013	Oct. 2014	Jan. 2015	Apr. 2015	Oct. 2015
MW-1	<10	480	1,000	3,900	12,000	900	7,000	3,200	2,600	1,200	420	460	92	0.78	0.26	0.17	4.5	<0.050	3.6
MW-2	<0.020	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	NS (ND)	NS (ND)	<0.050	<0.050
MW-3	<2.0	59	4.3	18	270	85	150	44	160	19	0.72	86	39	15	NS (34)	53	18	20	10
MW-4	<0.50	7.0	<5.0	<0.050	<0.050	<0.050	<5.0	<0.55	<0.050	<0.050	<0.050	<0.050	<0.050	<10	<1.2	<0.050	<0.050	<0.050	<5.0
MW-5	NA	NA	NA	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	NS (ND)	NS (ND)	<0.050	<0.050
MW-6	NA	NA	NA	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	NS (ND)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	NA
MW-6R	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.050
MW-7	NA	NA	NA	<0.050	4.2	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MW-9	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MW-10	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	<0.050	<0.050	<0.050	NS (ND)	NS (ND)	NS (ND)	<0.050
MW-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.050	<0.050	<0.050	NS (ND)	NS (ND)	NS (ND)	<0.050
MW-12	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	<0.050	<0.050	<0.050	NS (ND)	NS (ND)	NS (ND)	<0.050
MW-13	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
MW-15	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	<0.050	<0.050	<0.050	NS (ND)	NS (ND)	NS (ND)	<0.050
DW-1	<2.0	39	150	0.38	330	150	140	48	14	11	10	3.5	2.5	0.77	0.077	0.36	0.093	<0.050	<0.050
RW-1	<2.0	17	15	37	55	53	43	50	19	49	53	37	10	NS (5.9)	1.7	4.5	NS (4.5)	NS (4.5)	NA
MW-17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.050
RW-2	<0.020	<0.050	<0.050	0.34	0.60	<0.050	0.99	<0.050	0.19	<0.050	0.077	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	NS (ND)	NA

Notes:
All concentrations in mg/l

NA:	Well not installed.
<5.00:	Analyte not detected.
<100 (21.0):	Analyte not detected. Elevated detection limit, interpolated or extrapolated value shown.
NS:	Well not sampled, interpolated or extrapolated value shown - refer to shading for more specific explanation.
	Non-Sampled well assumed non-detect
	Interpolated between two sampling events.
	Extrapolated from a sampling event.

RW-1 and RW-2 were not sampled in April 2015. Results from the January 2015 sampling event were used for analysis.



Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

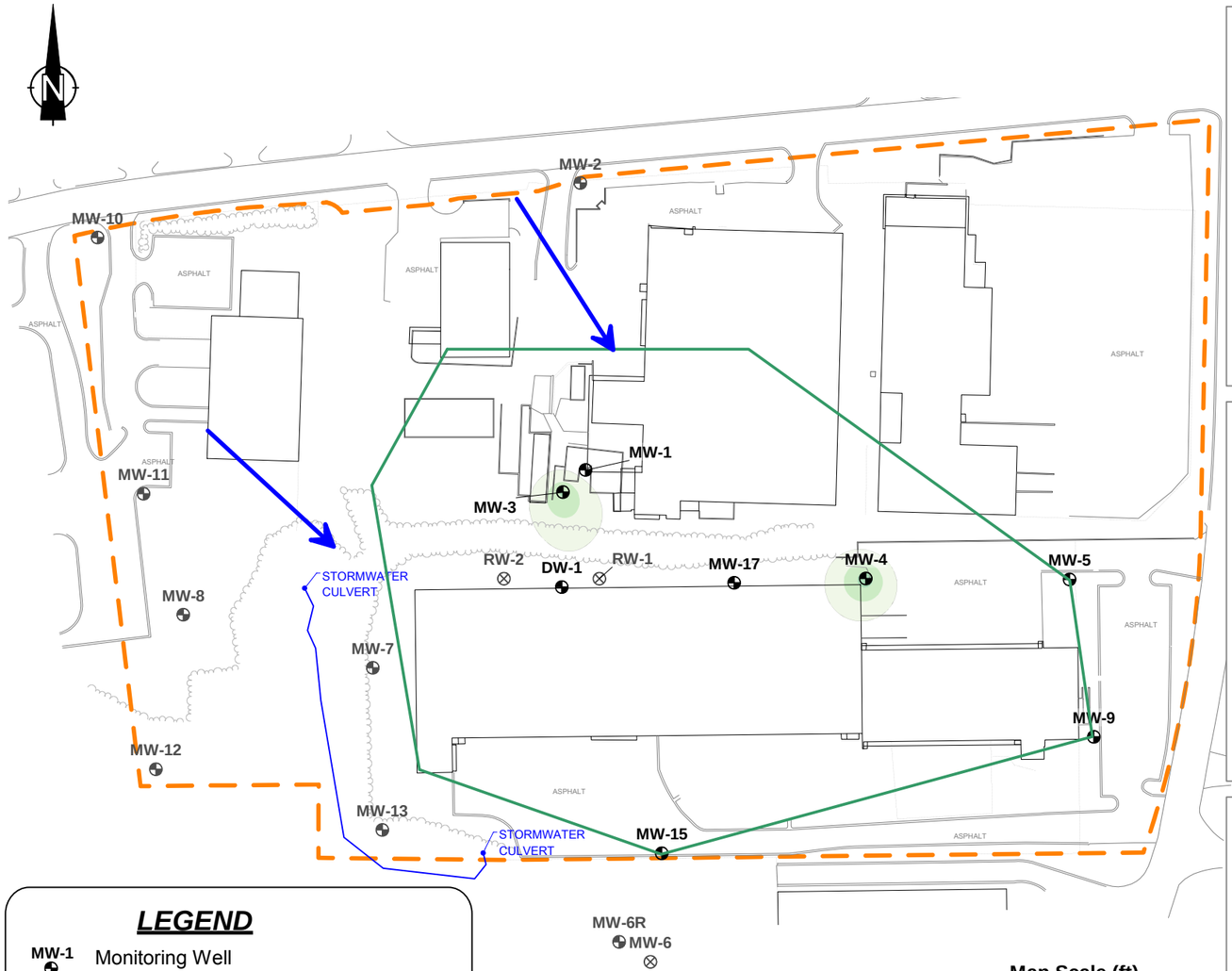
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Total CVOC Molar Analysis

October 2015

Prepared by: SSW Checked by: DW Figure: 1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

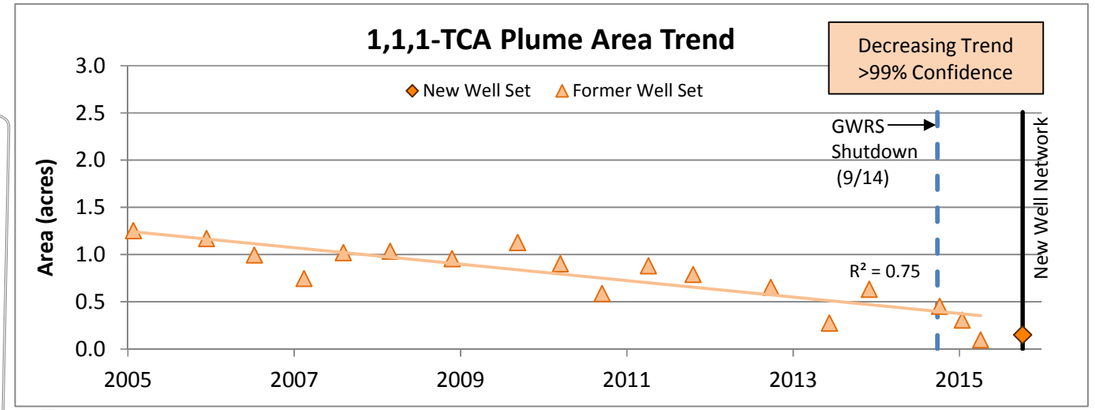


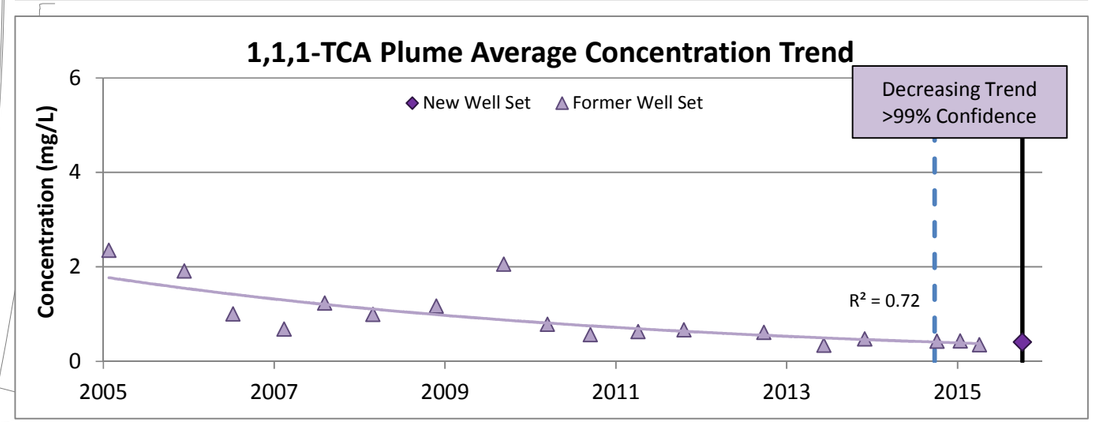
LEGEND

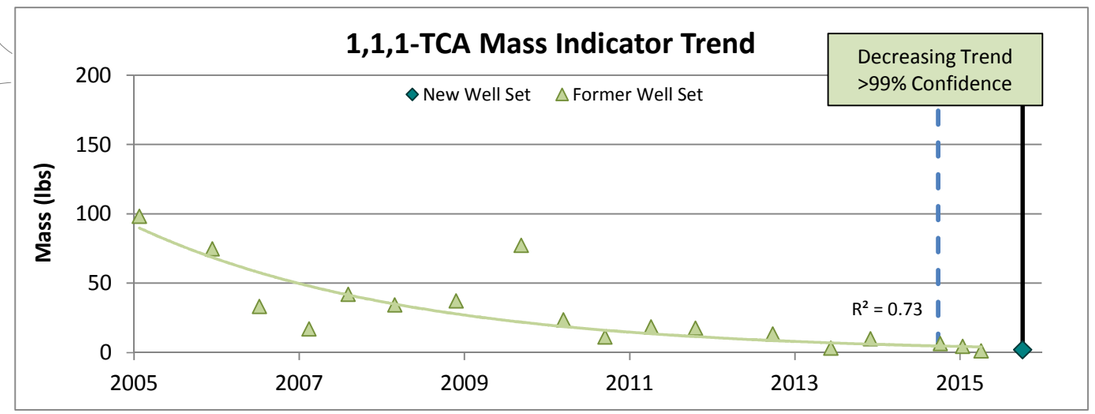
- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.







Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

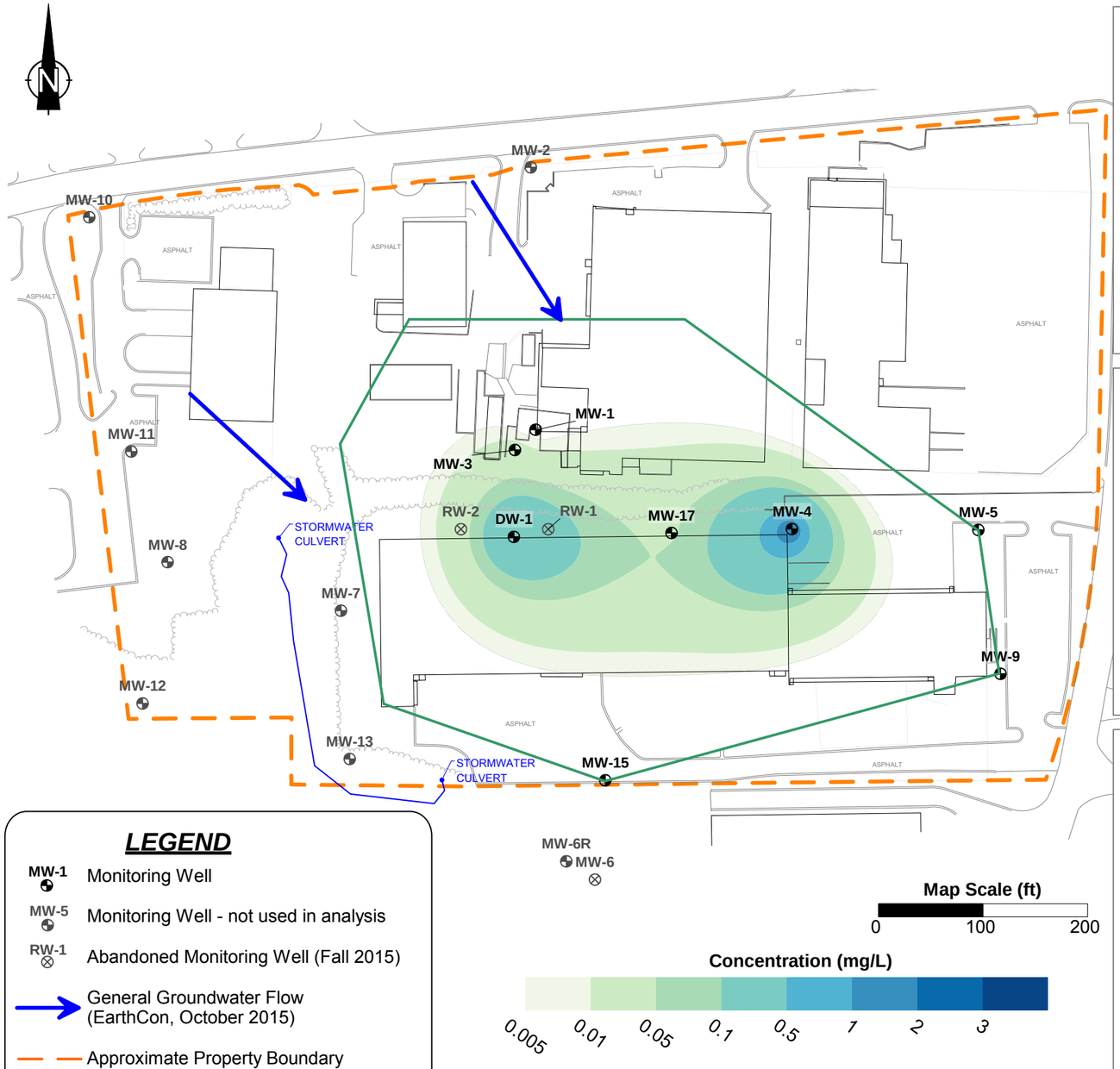
EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

1,1,1-Trichloroethane (1,1,1-TCA) Plume Stability Analysis Summary

Prepared by: SSW Checked by: DW Figure: 2

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

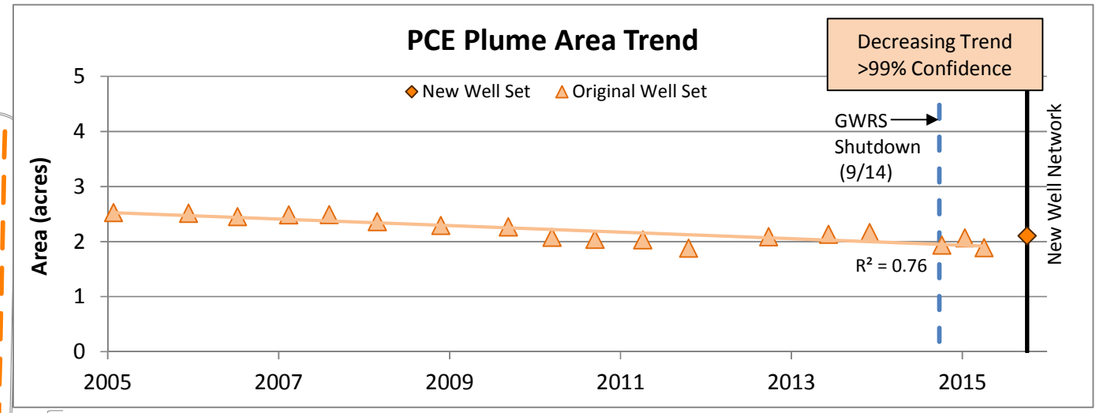


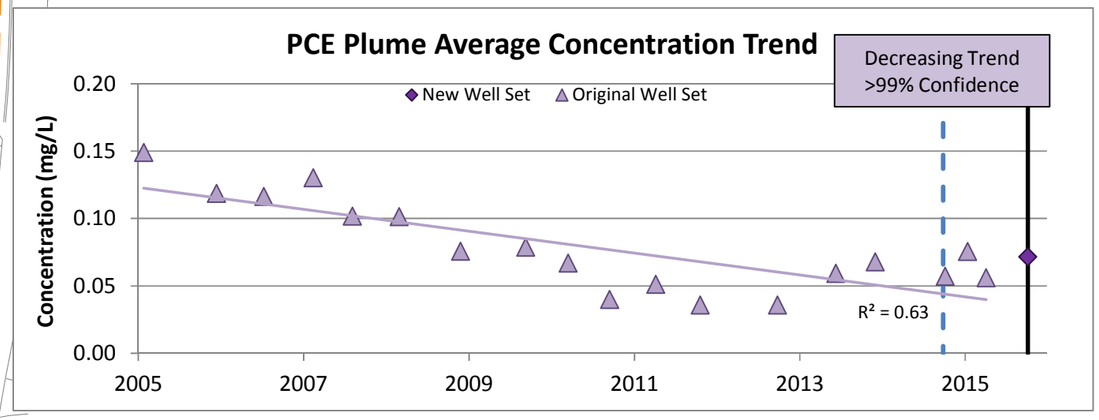
LEGEND

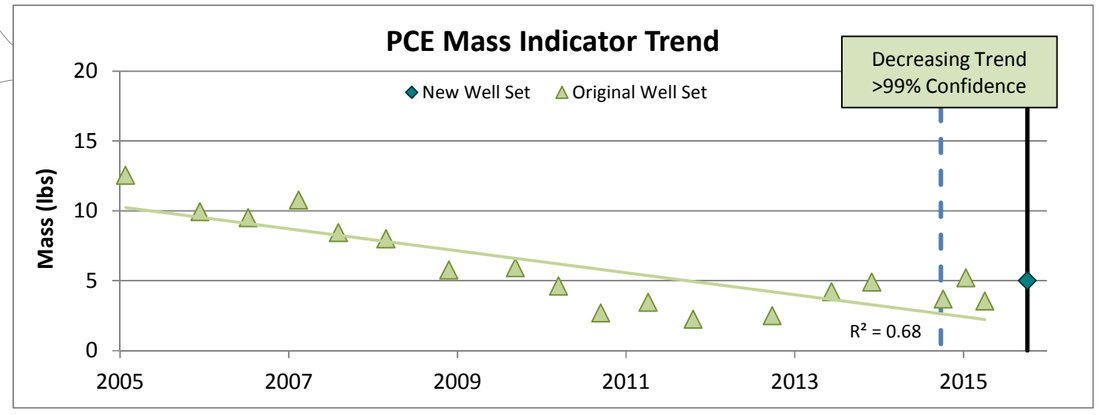
- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)







Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

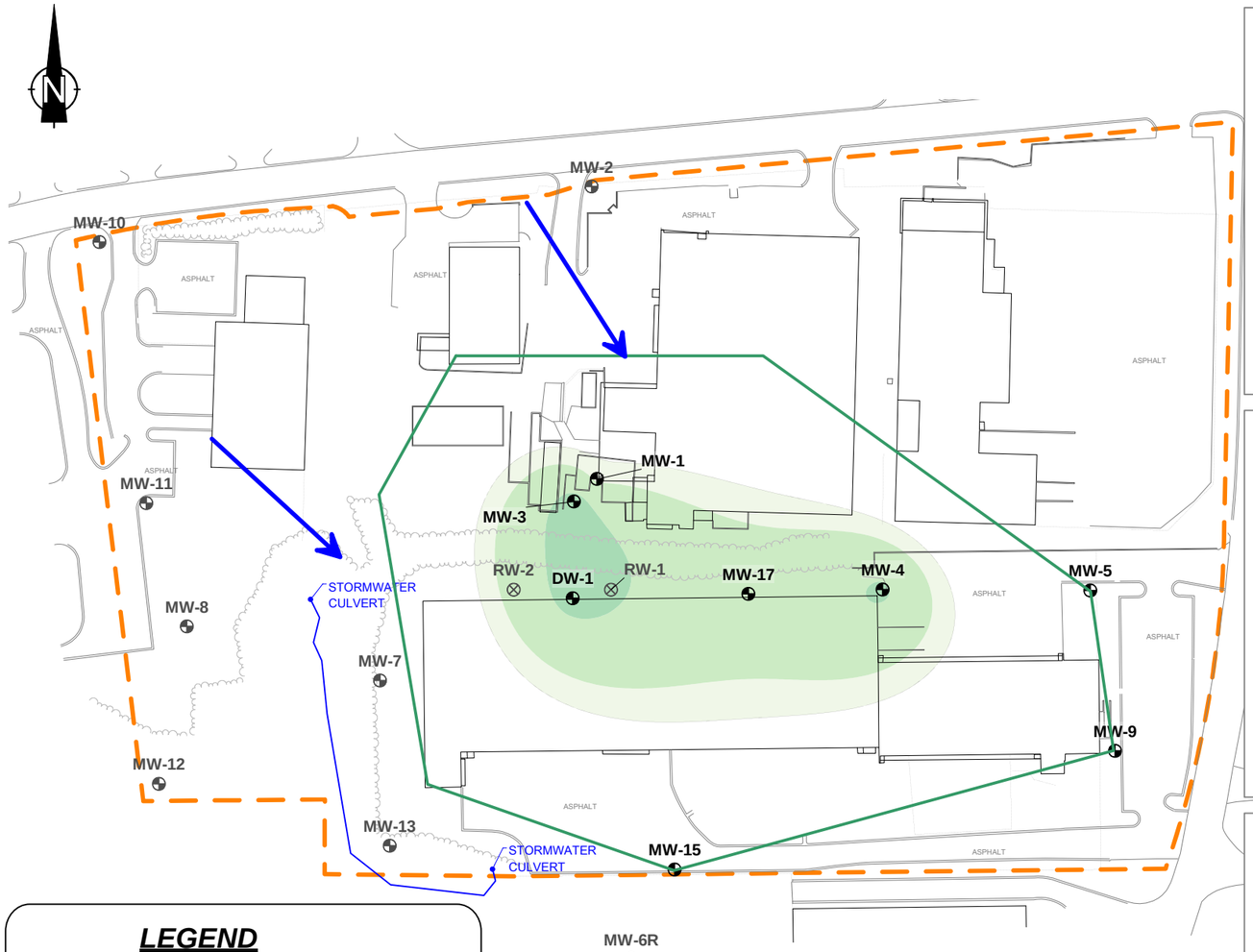
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

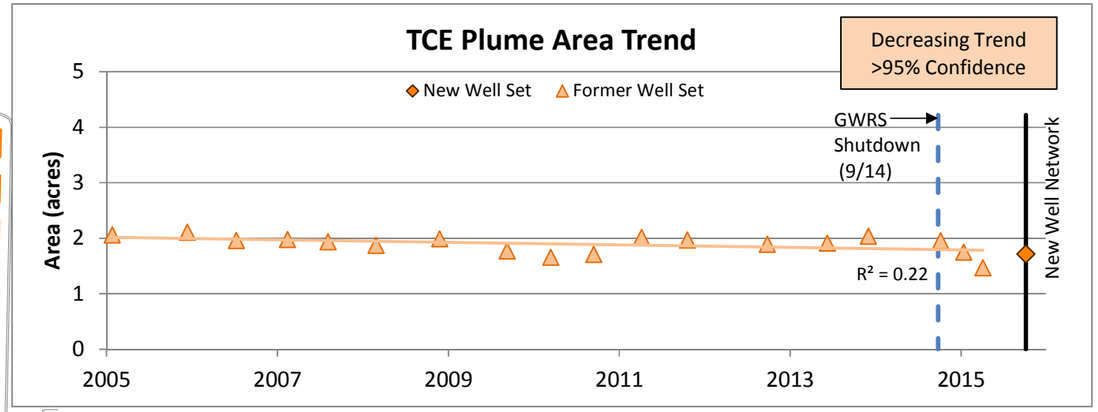
Tetrachloroethene (PCE) Plume Stability Analysis Summary

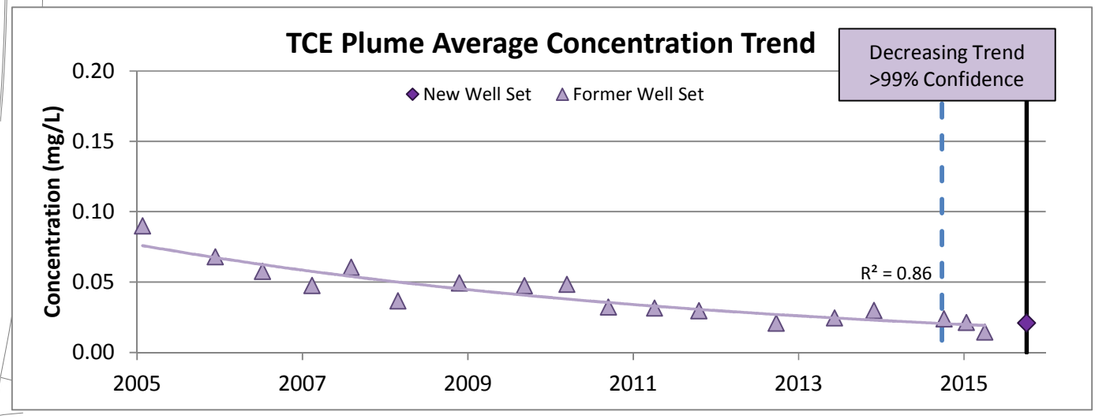
Prepared by: SSW Checked by: DW Figure: 3

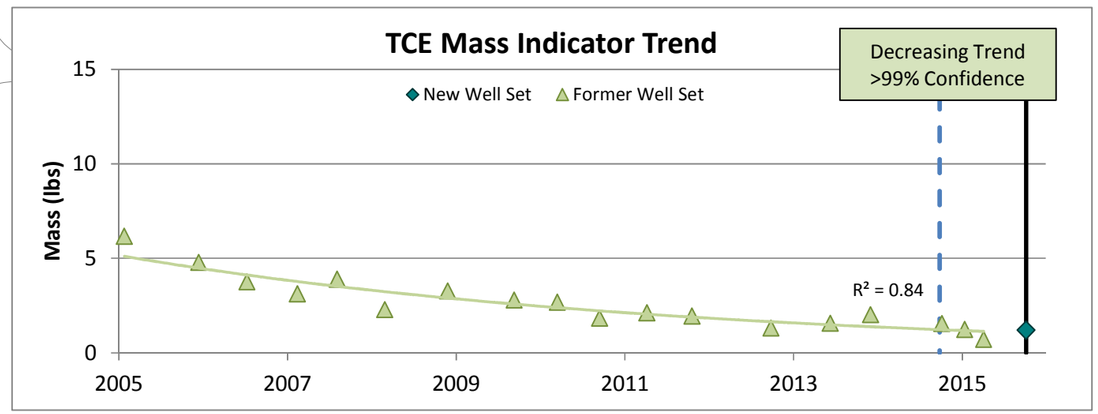
The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.









LEGEND

- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft): 0 100 200

Concentration (mg/L): 0.005 0.01 0.05 0.1 0.5 1 2 3

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

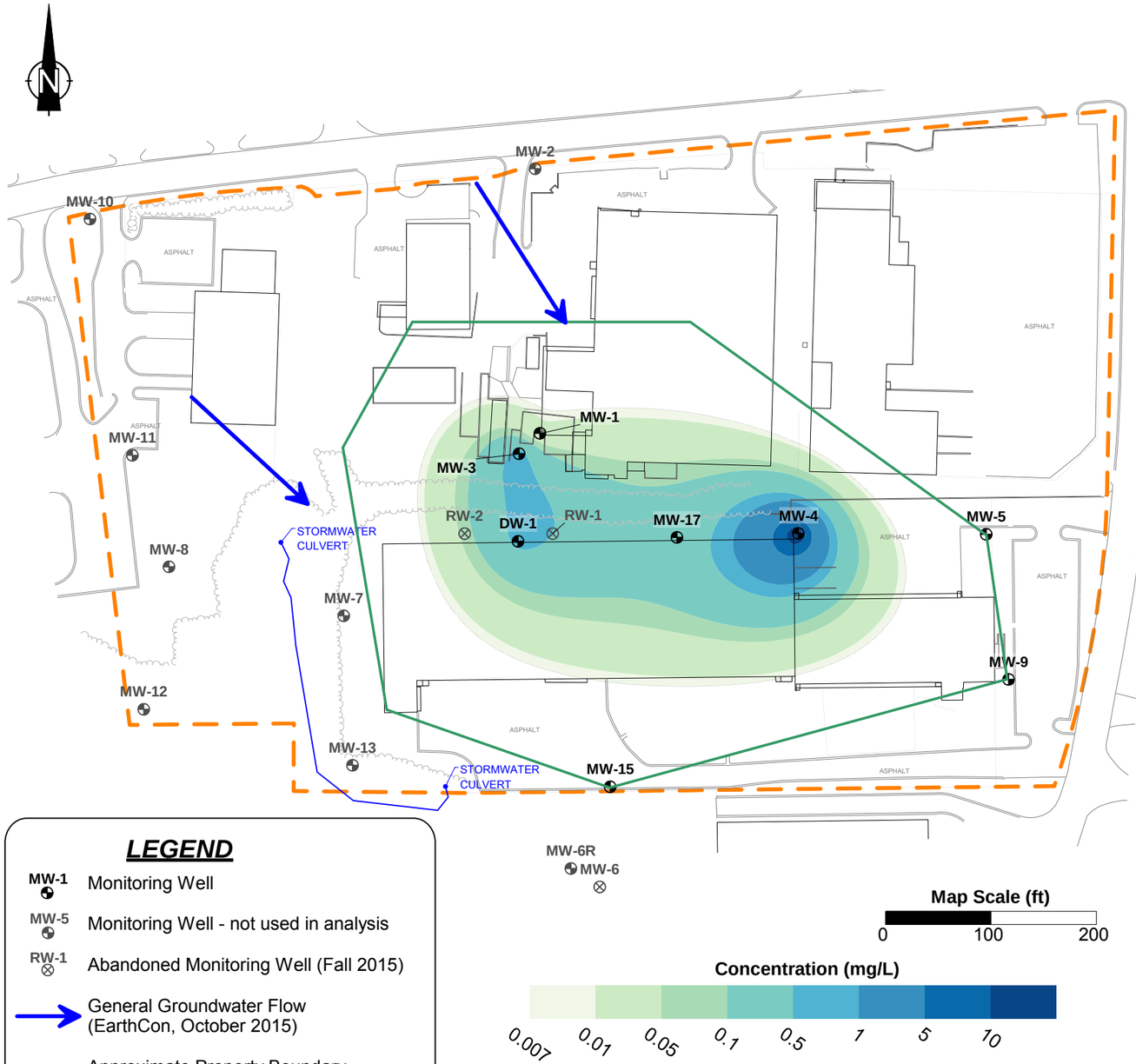
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Trichloroethene (TCE) Plume Stability Analysis Summary

Prepared by: SSW Checked by: DW Figure: 4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

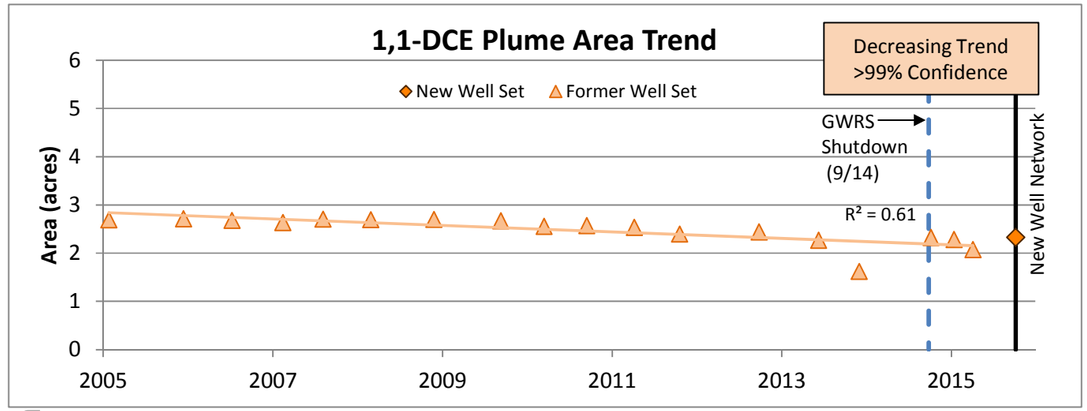


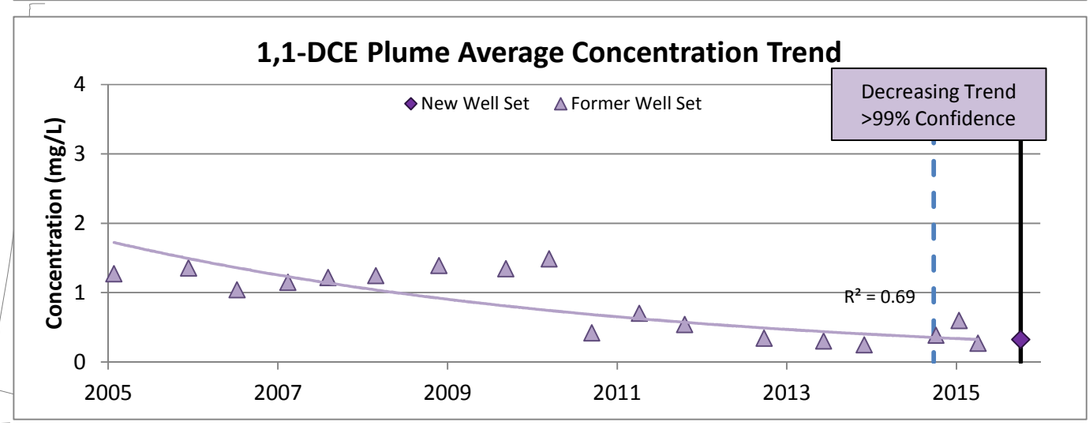
LEGEND

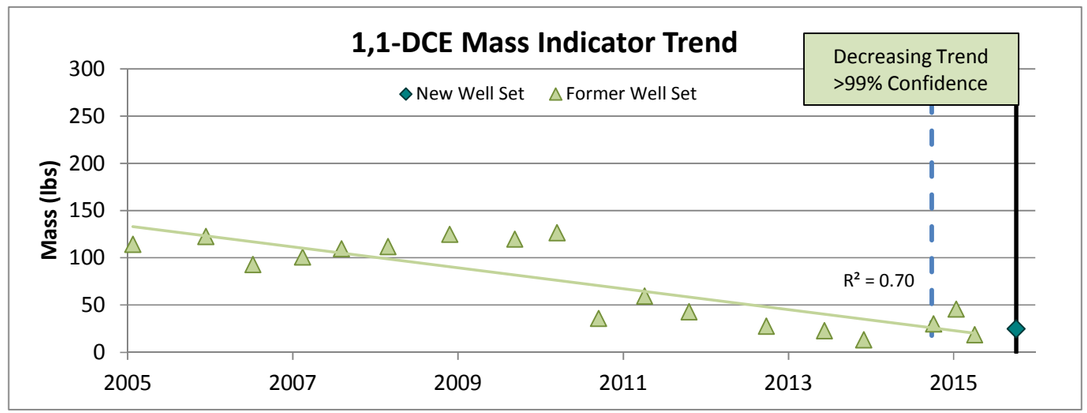
- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.







Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

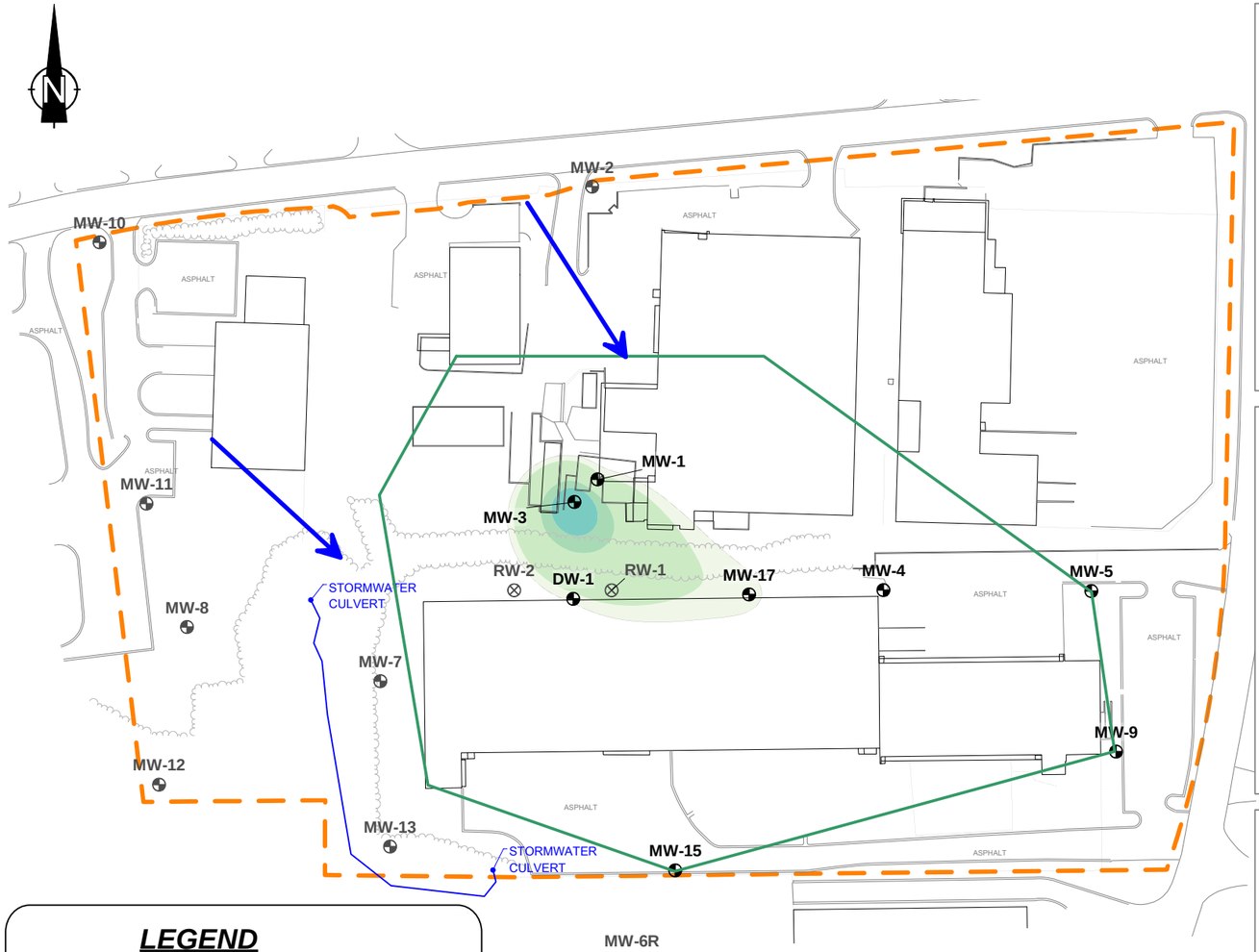
EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

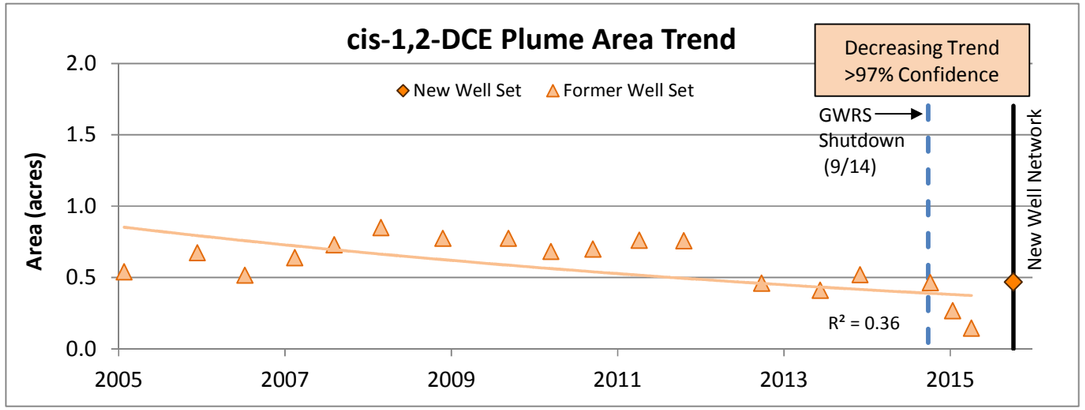
1,1-Dichloroethene (1,1-DCE) Plume Stability Analysis Summary

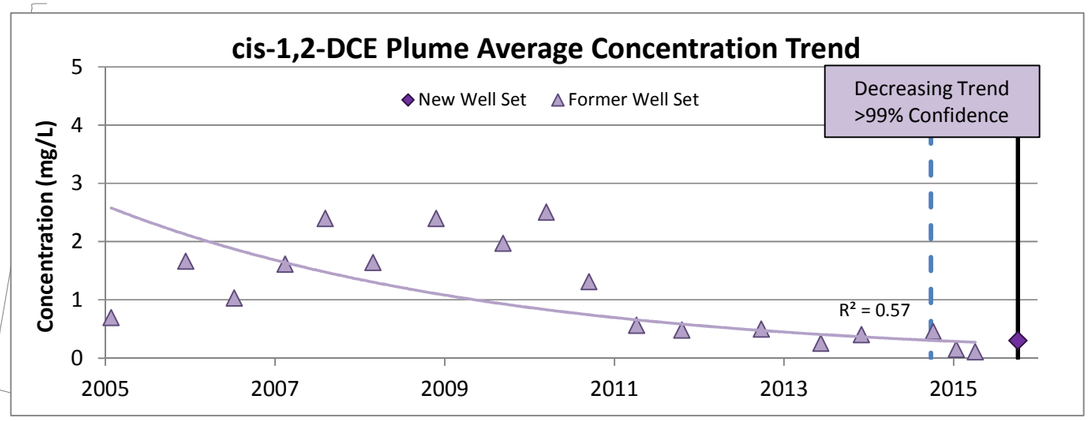
Prepared by: SSW Checked by: DW Figure: 5

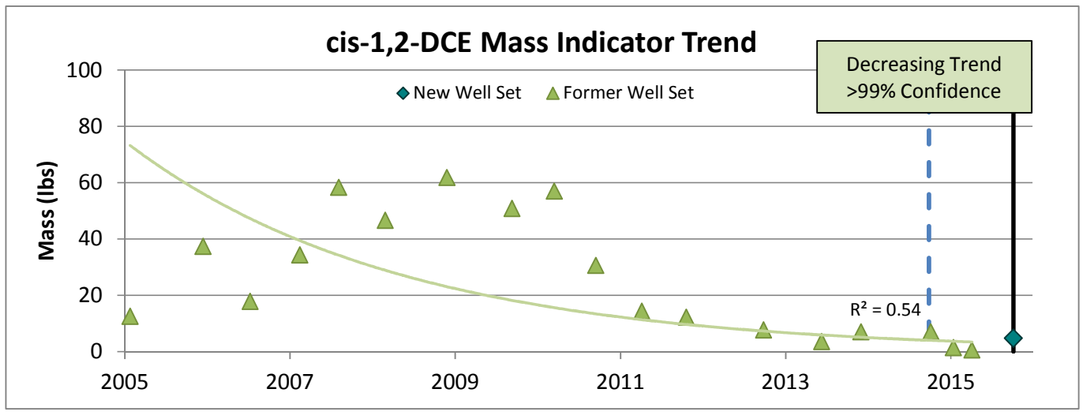
The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

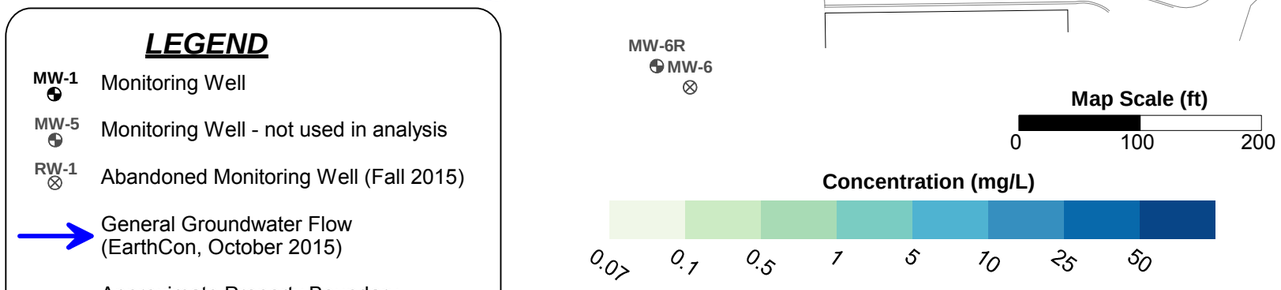
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.











LEGEND

- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

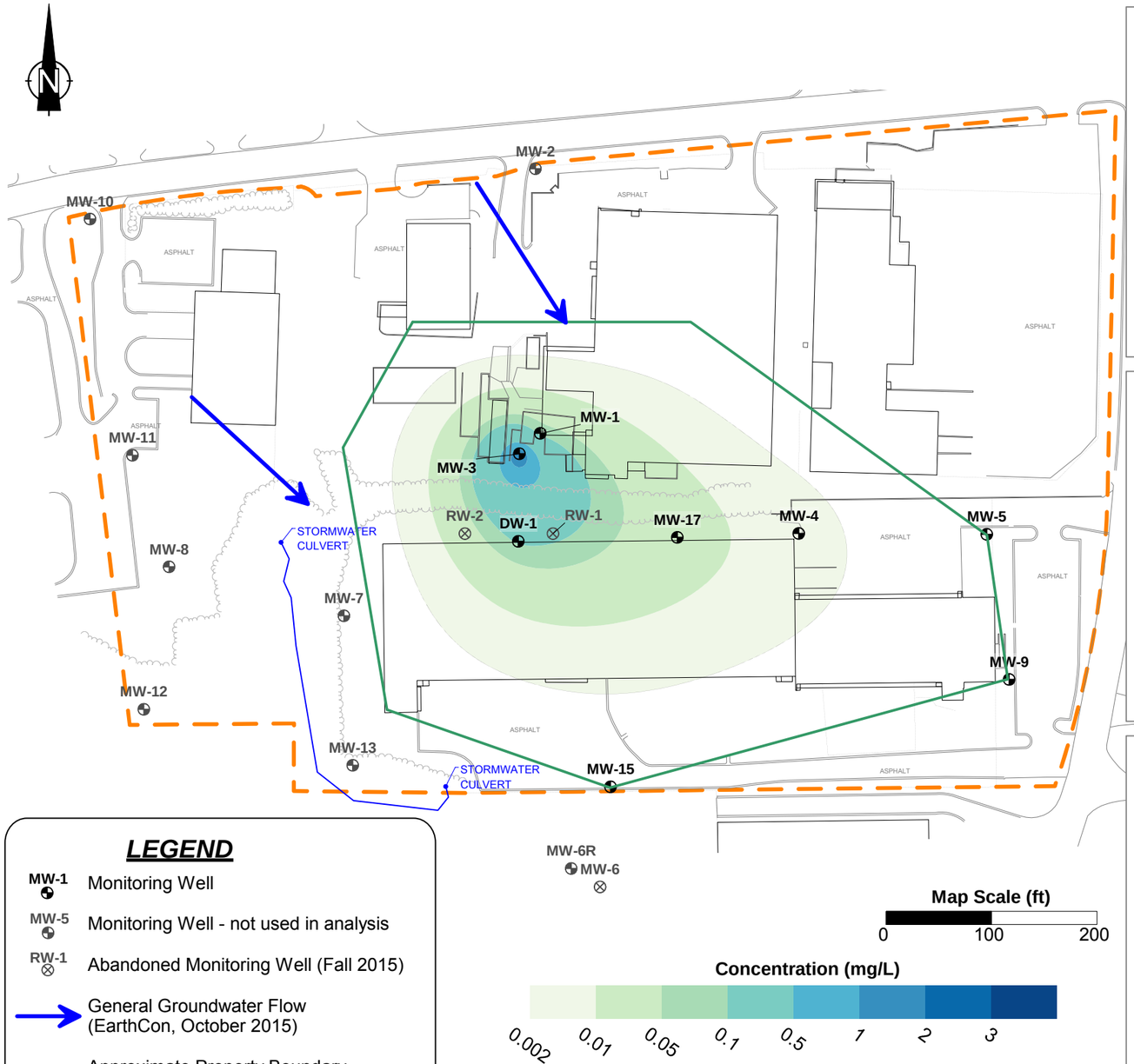
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

cis-1,2-Dichloroethene (cis-1,2-DCE) Plume Stability Analysis Summary

Prepared by: SSW Checked by: DW Figure: 6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

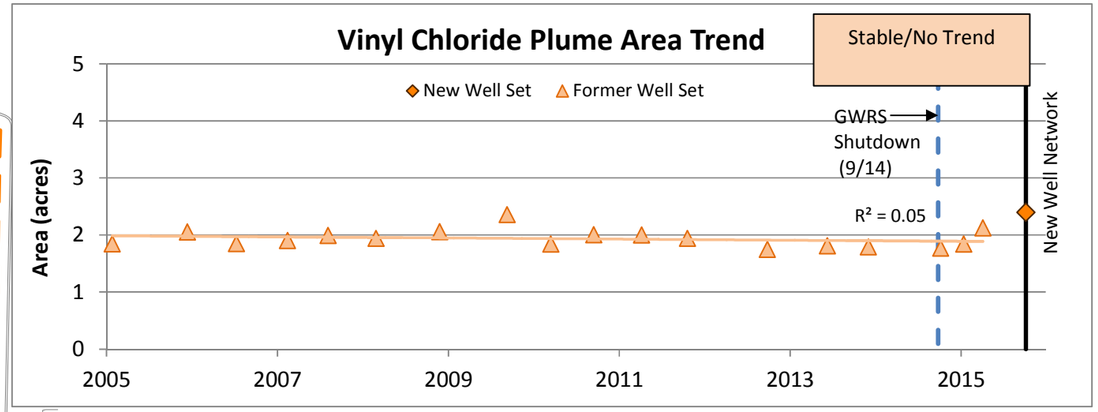


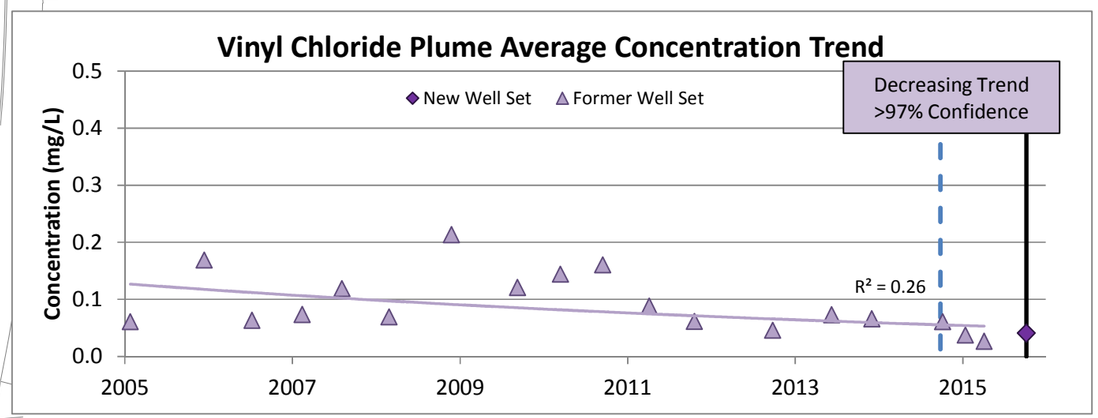
LEGEND

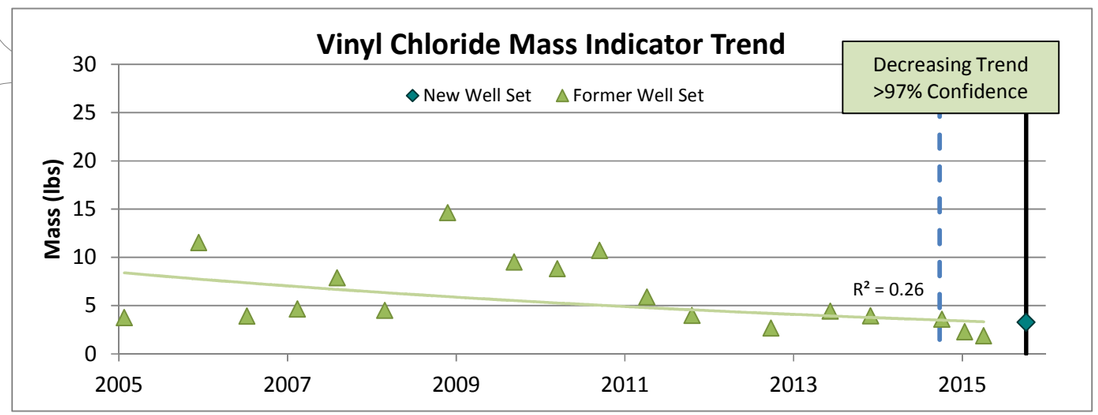
- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.







Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

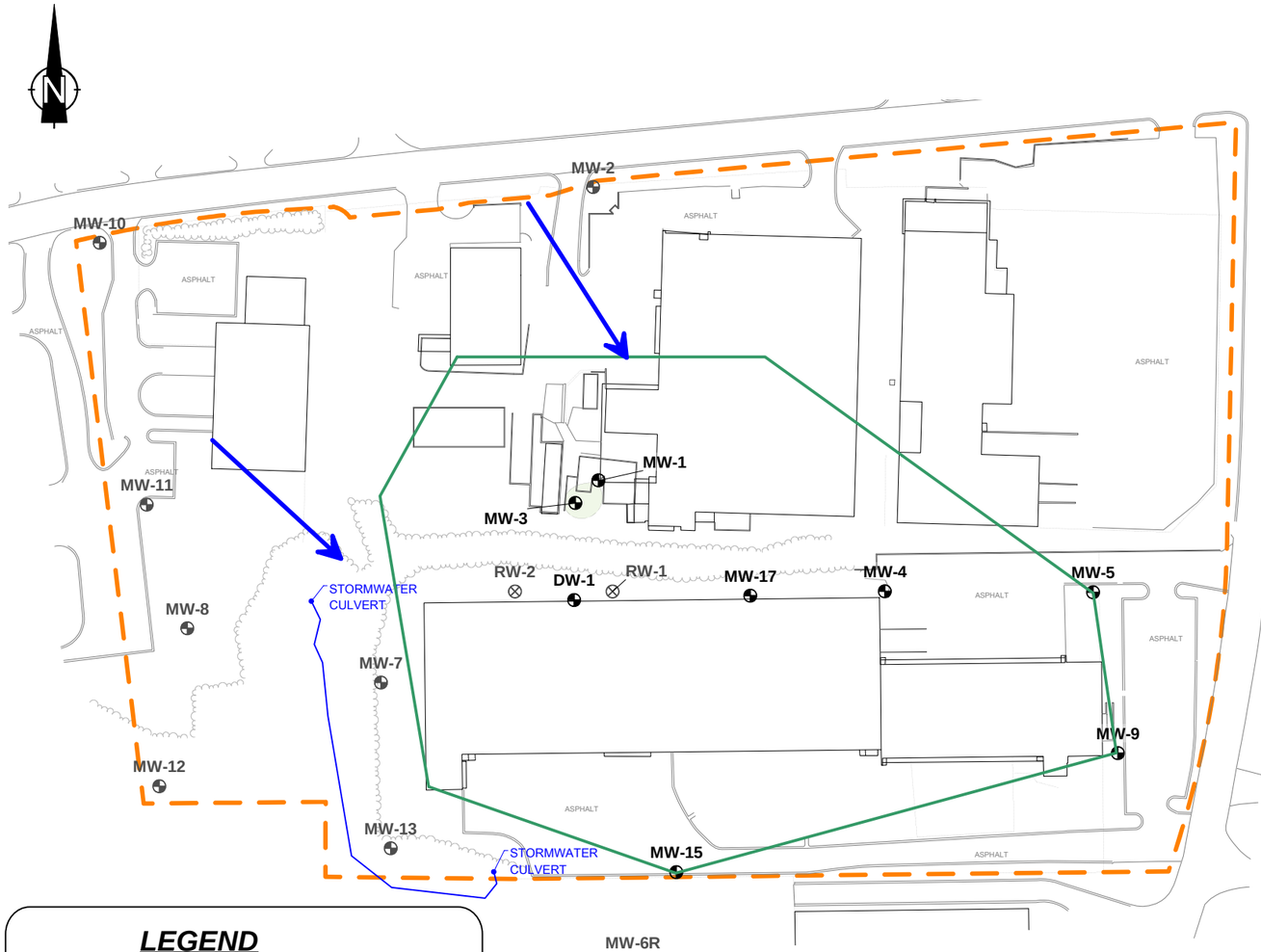
EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

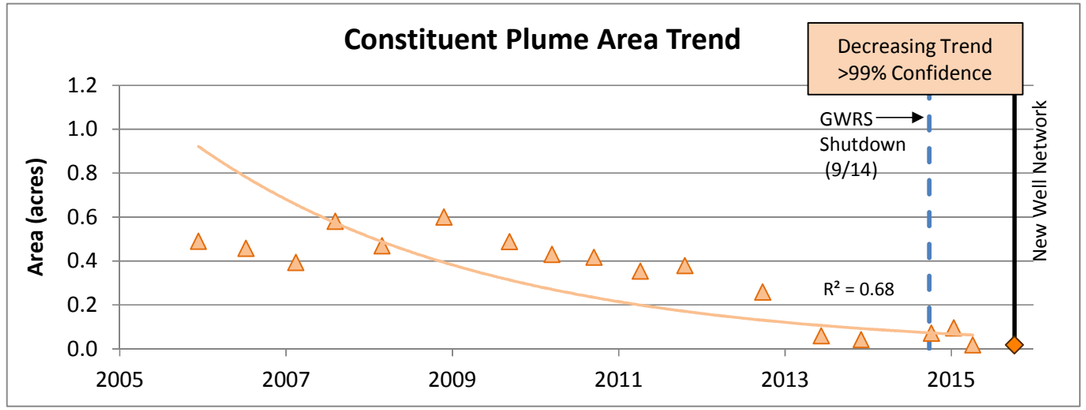
Vinyl Chloride (VC) Plume Stability Analysis Summary

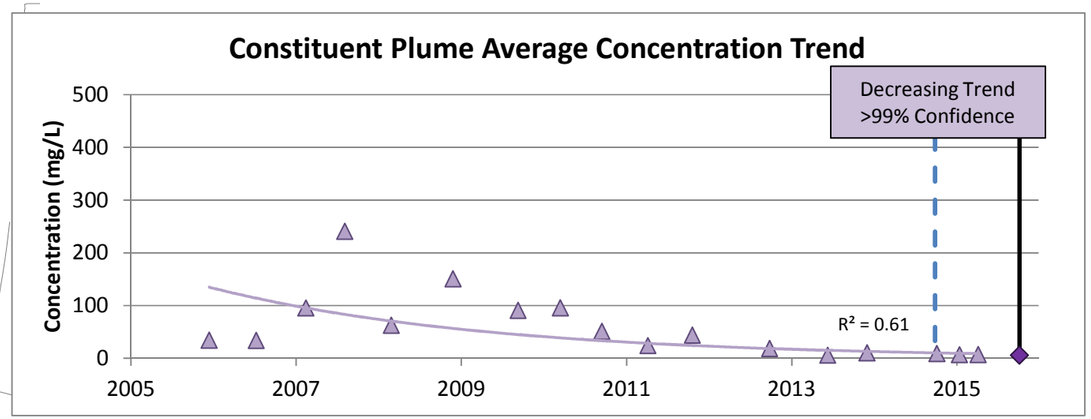
Prepared by: SSW Checked by: DW Figure: 7

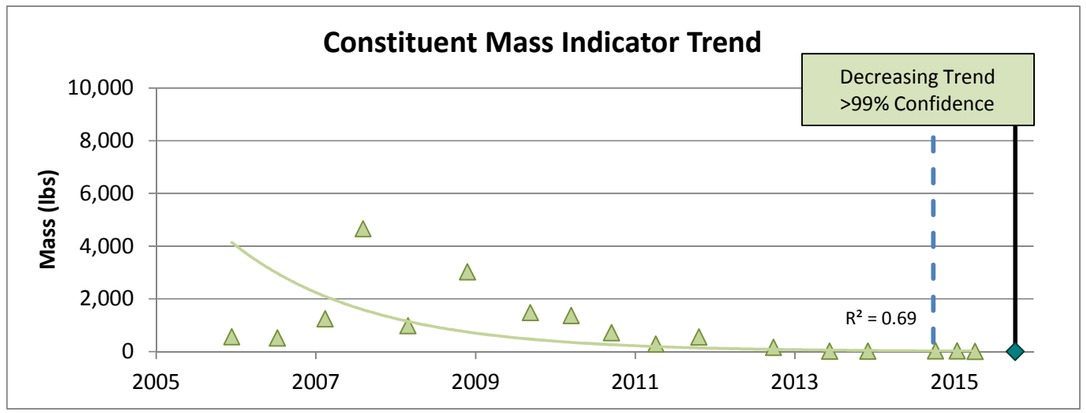
The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

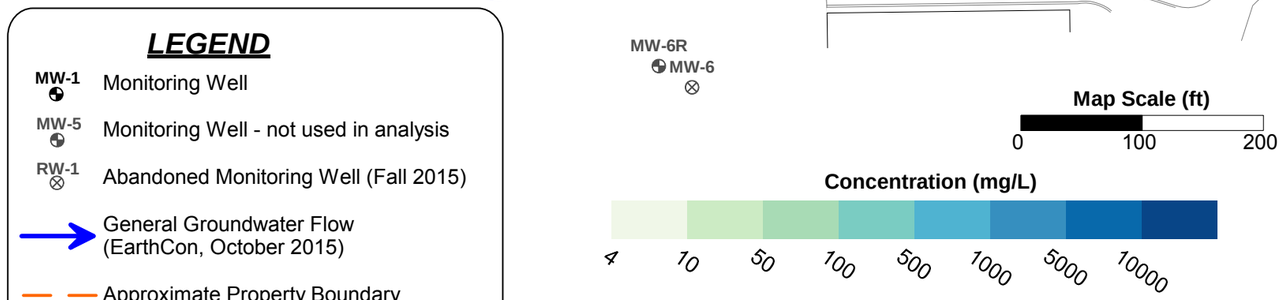
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.











RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

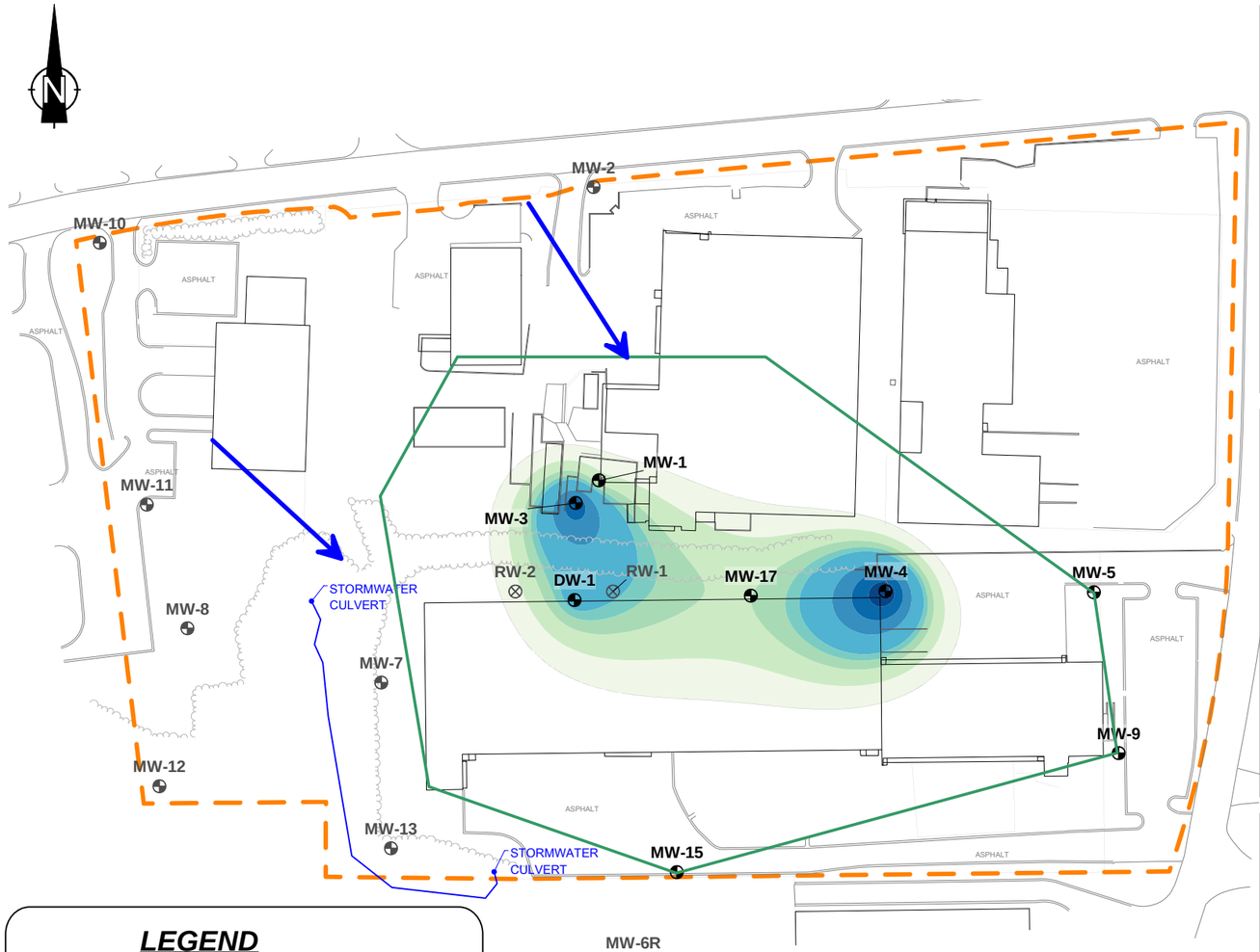
Project Number: 02.20140391.00

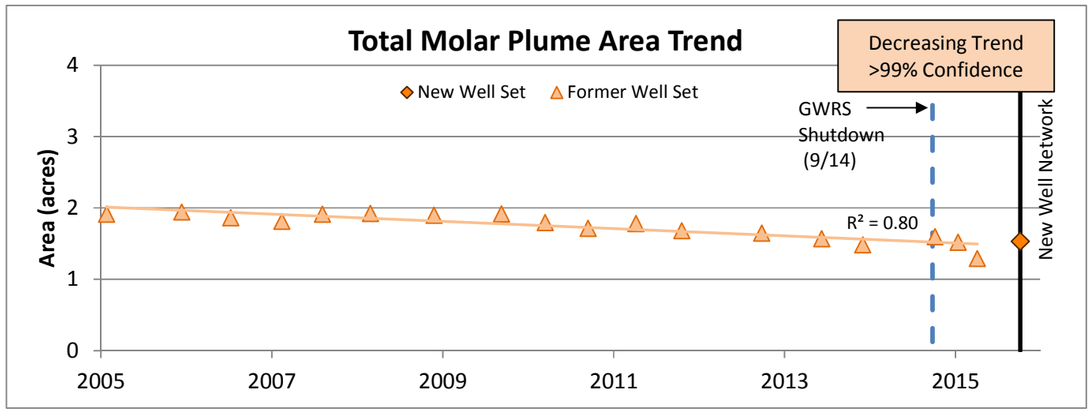
EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

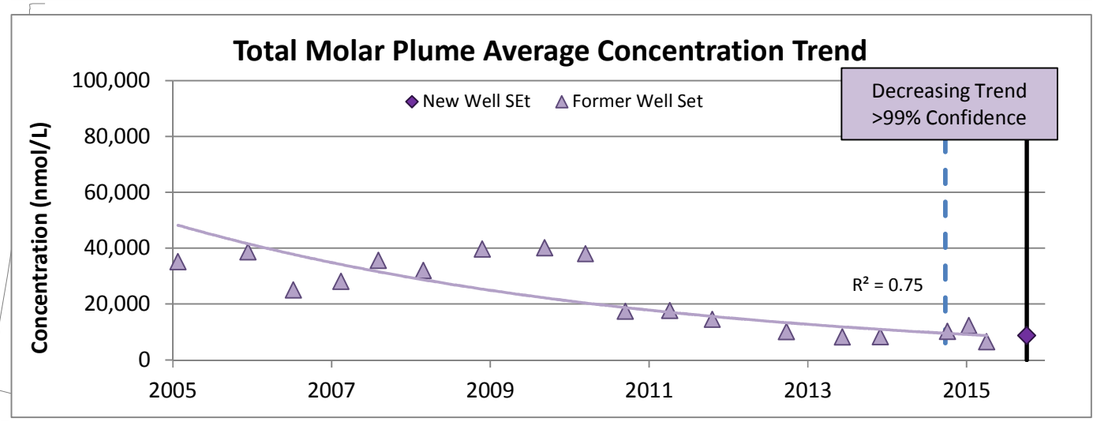
Acetone
Plume Stability Analysis
Summary

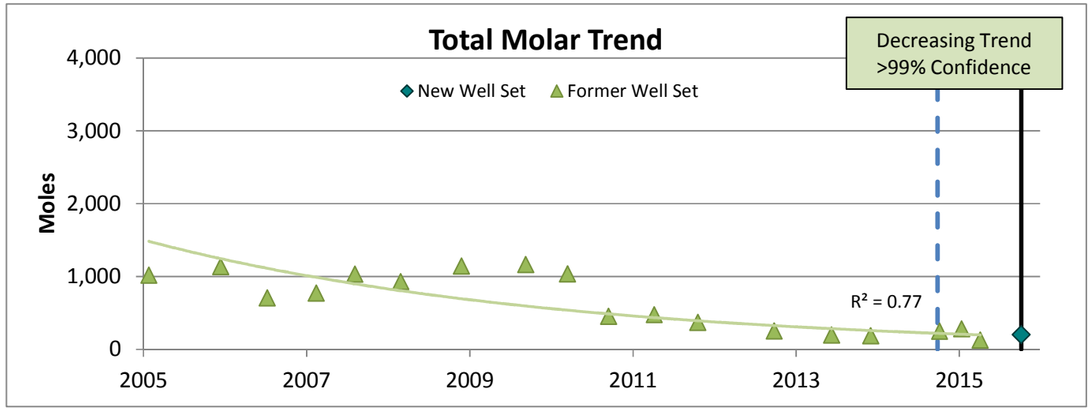
Prepared by: SSW Checked by: DW Figure: 8

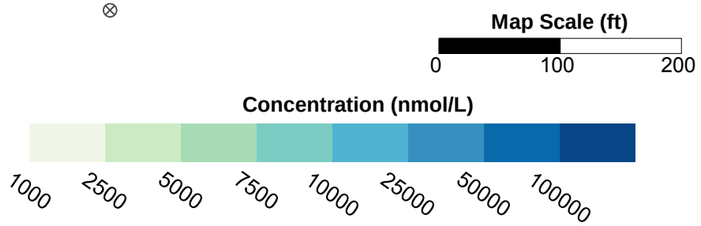
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.











LEGEND

- MW-1 — Monitoring Well
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- General Groundwater Flow (EarthCon, October 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

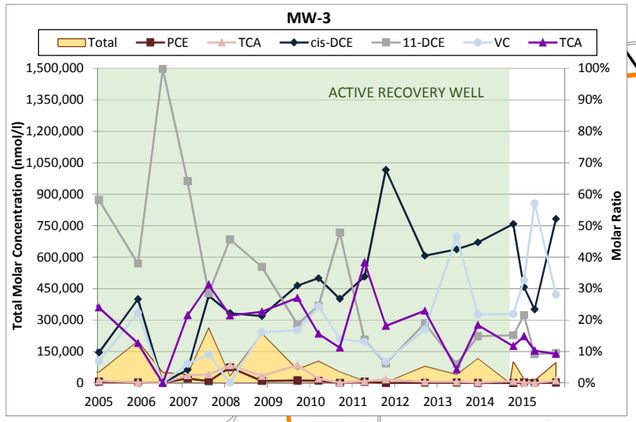
EARTHCON®

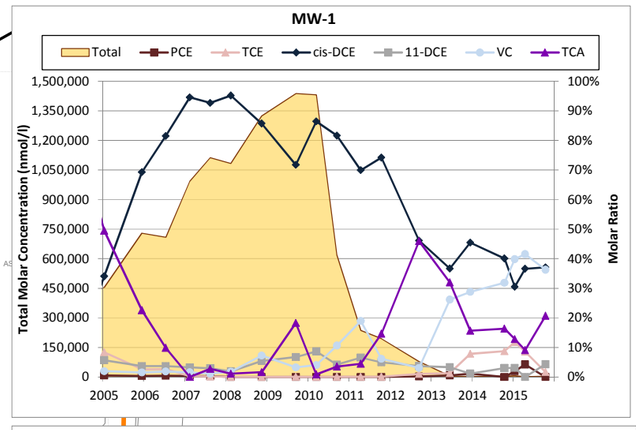
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

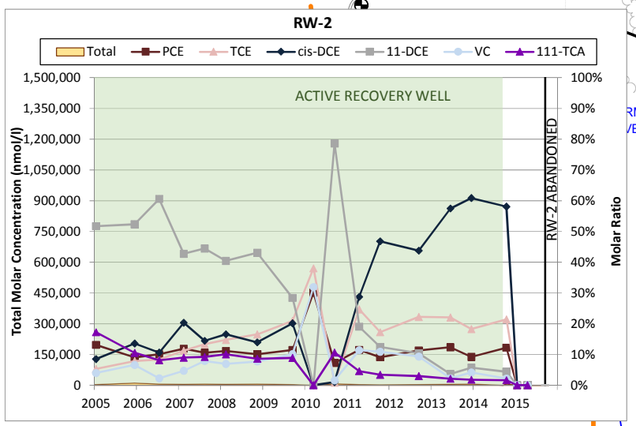
Total CVOC Plume Stability Analysis Summary

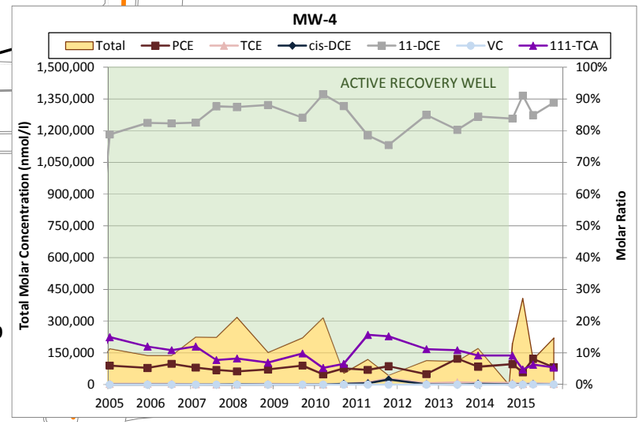
Prepared by: SSW Checked by: DW Figure: 9

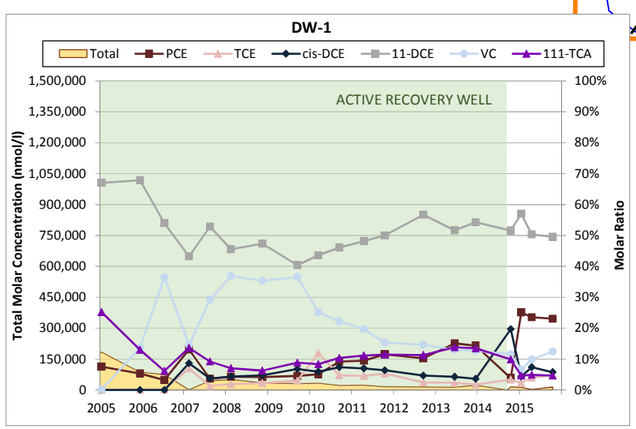
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

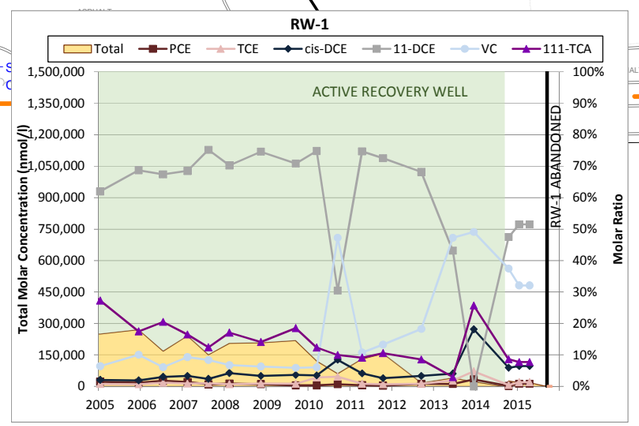


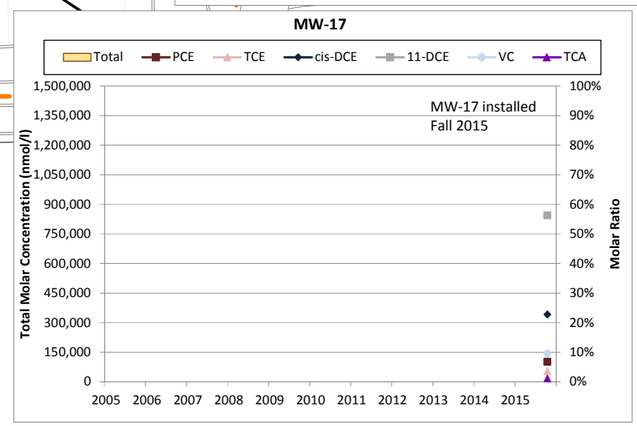












Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

Map Scale (ft)
0 100 200

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

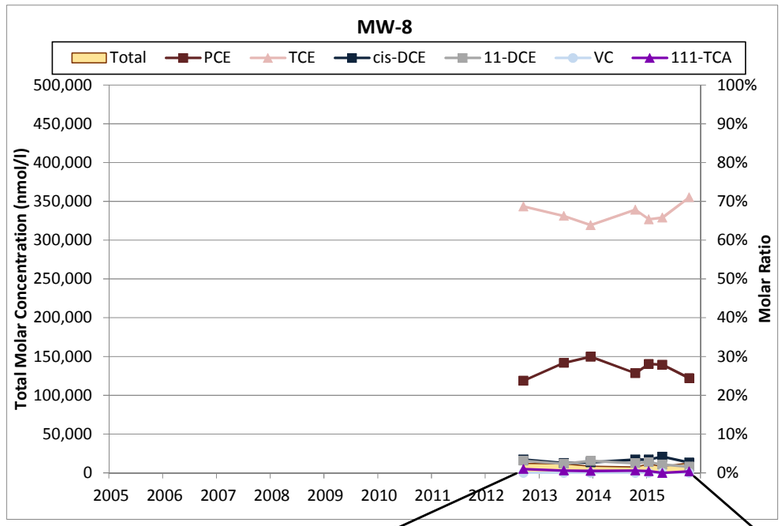
EARTHCON®

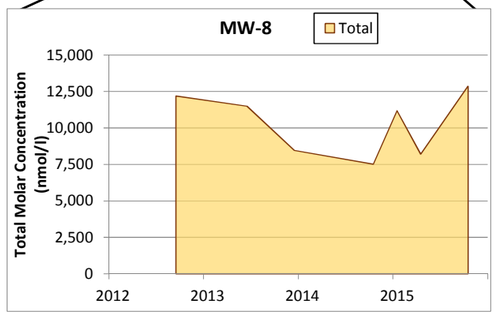
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

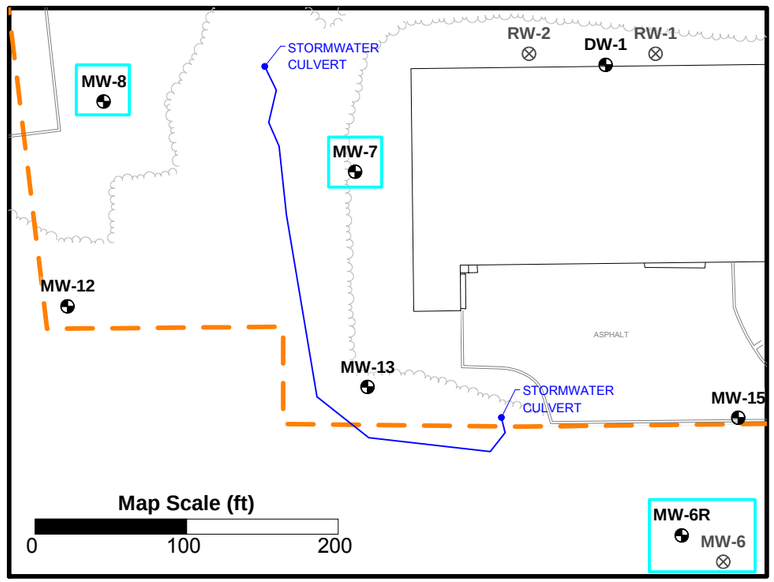
Total CVOC Molar Analysis Summary and Trends Apollo Plume Area

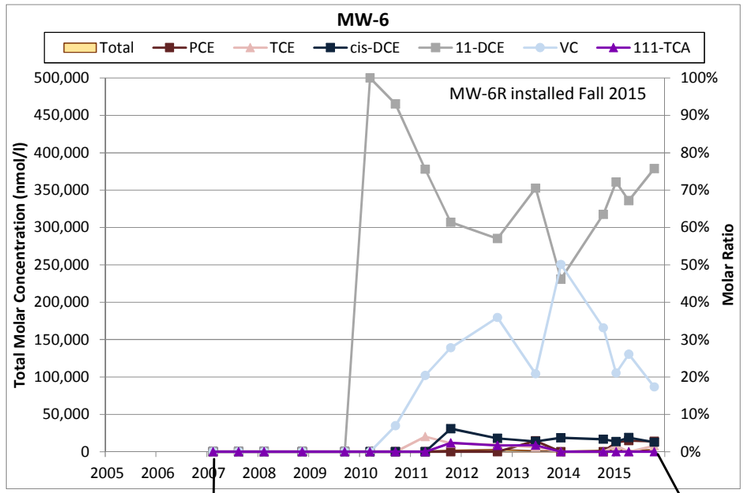
Prepared by: SSW Checked by: DW Figure: 10

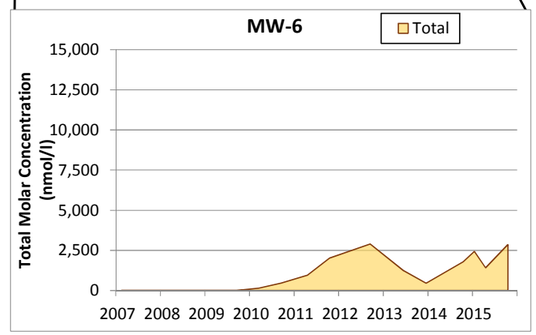
Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

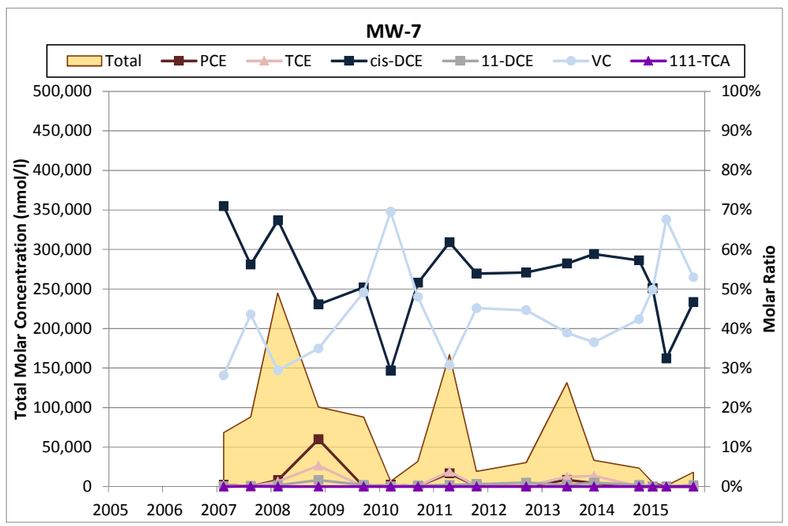












The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Total CVOC Molar Analysis Summary and Trends MW-6, MW-7, MW-8

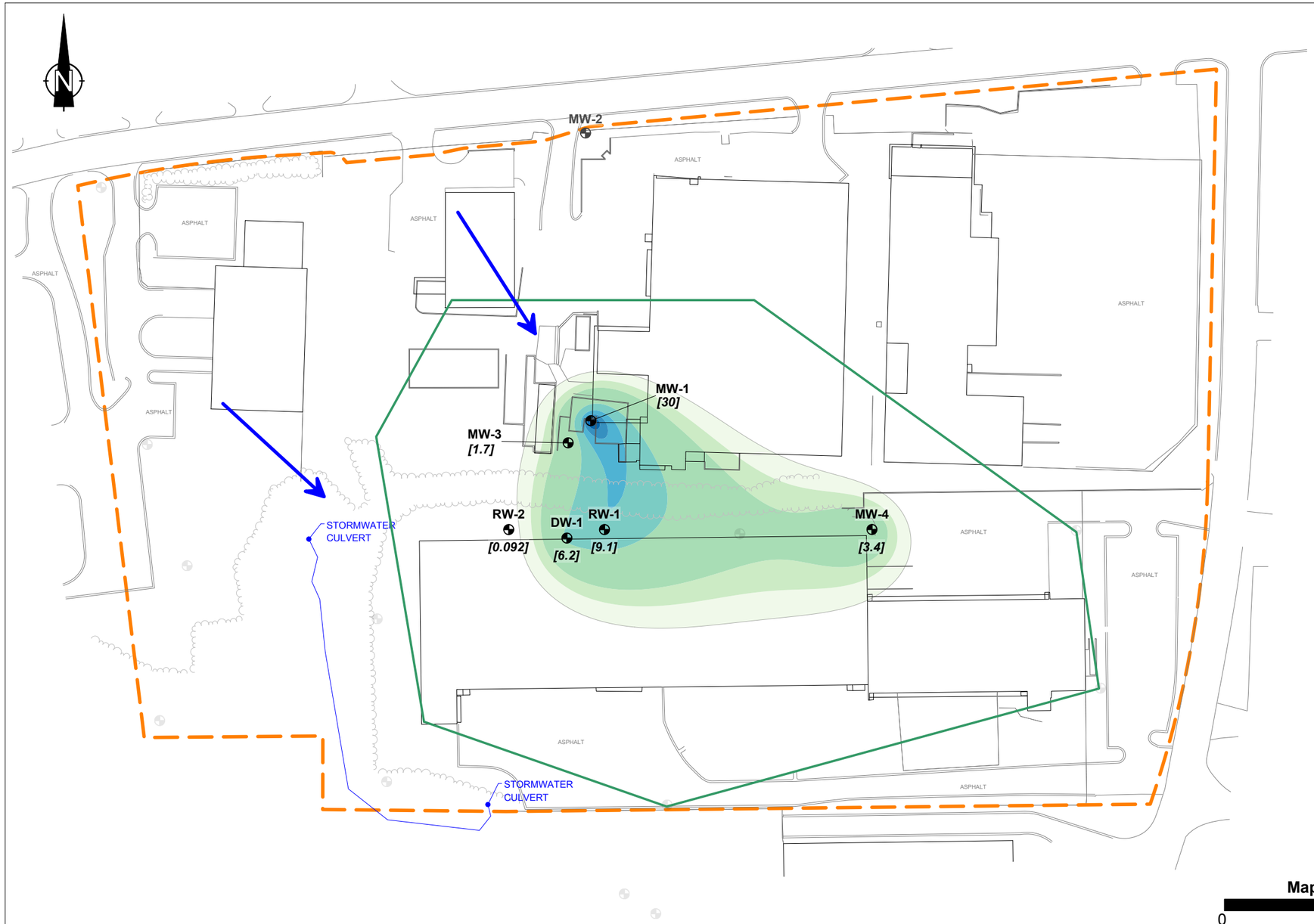
Prepared by: SSW Checked by: DW Figure: 11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix A: Apollo Plume Series Isopleth Maps – 1,1,1-Trichloroethane (1,1,1-TCA)



Plume Characteristics:

Plume Area: 1.3 acres
Plume Average Concentration: 2.4 mg/L
Plume Mass Indicator: 98 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- **MW-1** / ***[300]*** — Monitoring Well and Concentration (mg/L)
- **MW-5** — Monitoring Well - not used in analysis
- **RW-1** — Abandoned Monitoring Well (Fall 2015)
- ***[NS (200)]*** — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

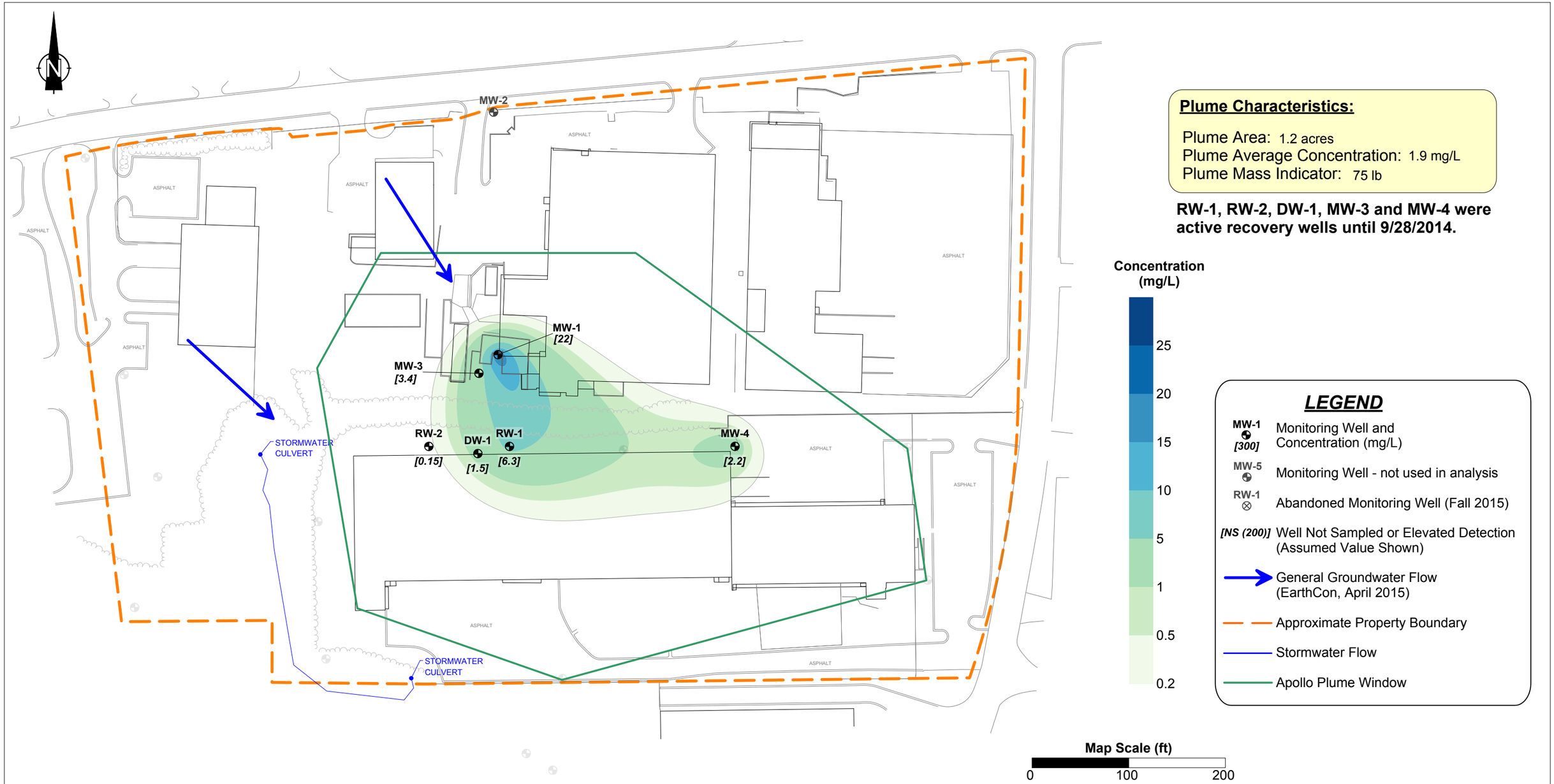
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Jan-2005

Prepared by: SSW Checked by: DW Figure: A1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.2 acres
Plume Average Concentration: 1.9 mg/L
Plume Mass Indicator: 75 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Dec-2005

Prepared by: SSW Checked by: DW Figure: A2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.00 acres
Plume Average Concentration: 1.0 mg/L
Plume Mass Indicator: 33 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

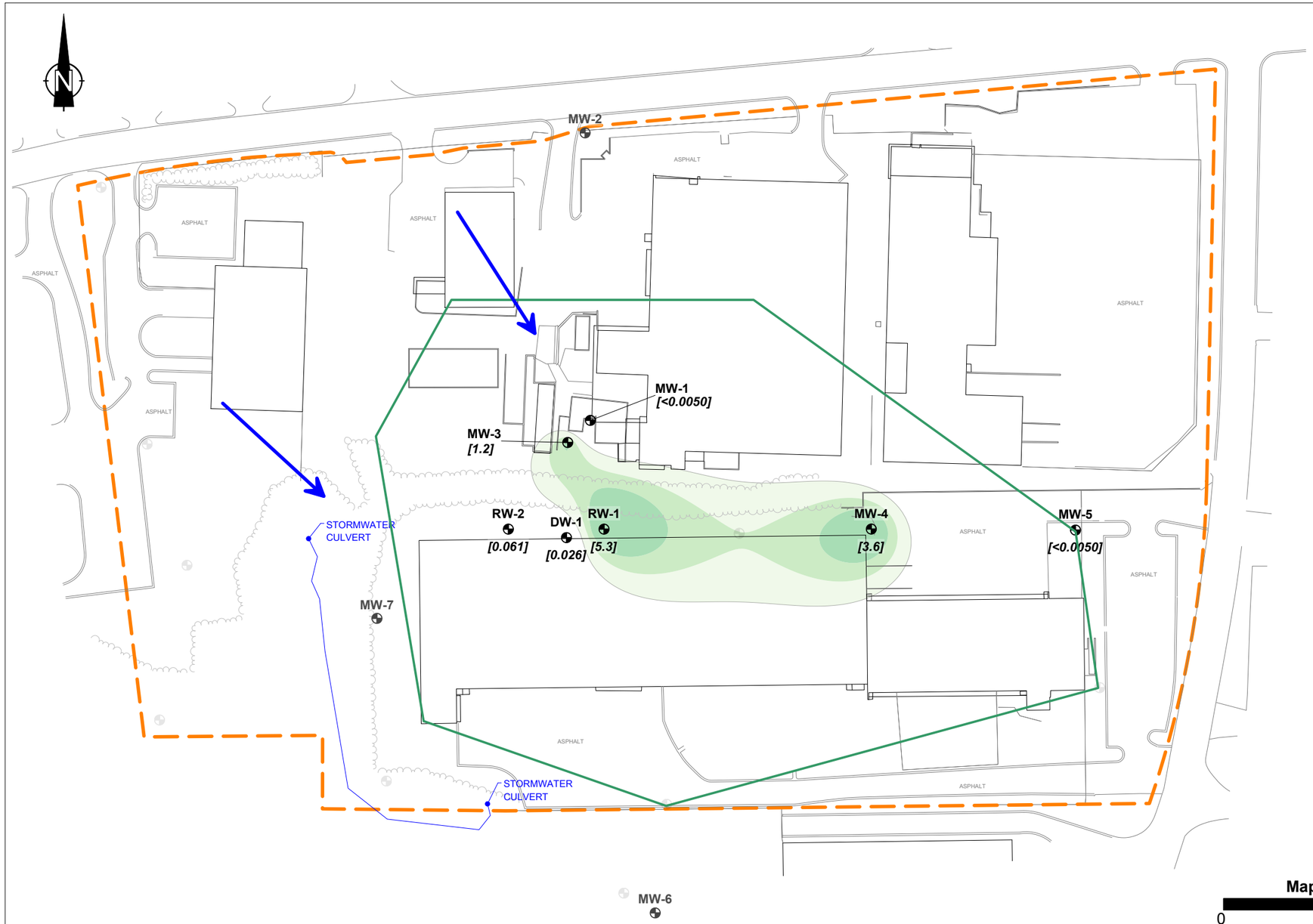
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Jul-2006

Prepared by: SSW Checked by: DW Figure: A3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.75 acres
Plume Average Concentration: 0.68 mg/L
Plume Mass Indicator: 17 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Feb-2007

Prepared by: SSW Checked by: DW Figure: A4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.0 acres
Plume Average Concentration: 1.2 mg/L
Plume Mass Indicator: 42 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

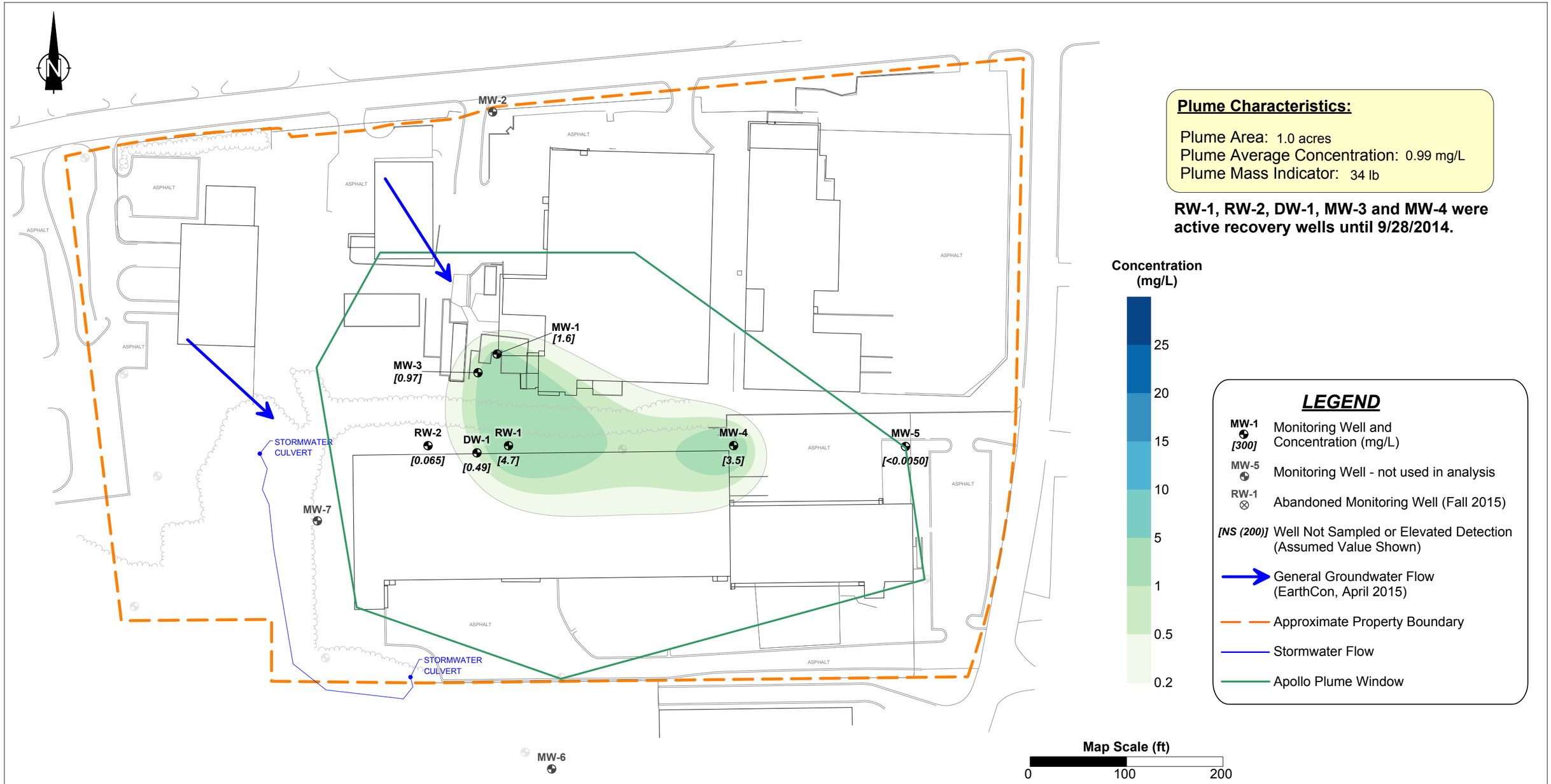
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Aug-2007

Prepared by: SSW Checked by: DW Figure: A5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.0 acres
Plume Average Concentration: 0.99 mg/L
Plume Mass Indicator: 34 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Feb-2008

Prepared by: SSW Checked by: DW Figure: A6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.96 acres
Plume Average Concentration: 1.2 mg/L
Plume Mass Indicator: 37 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

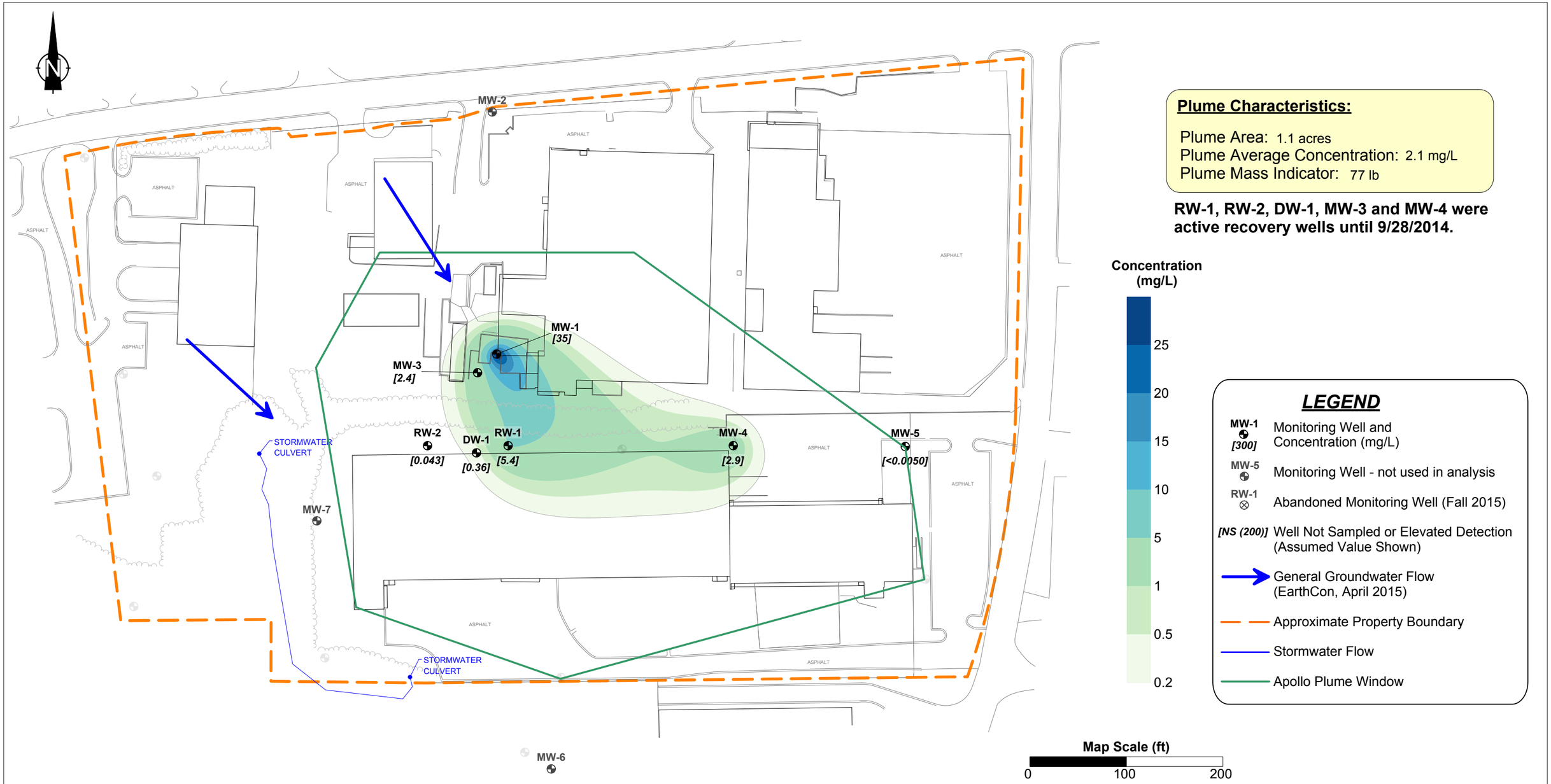
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Nov-2008

Prepared by: SSW Checked by: DW Figure: A7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.1 acres
Plume Average Concentration: 2.1 mg/L
Plume Mass Indicator: 77 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

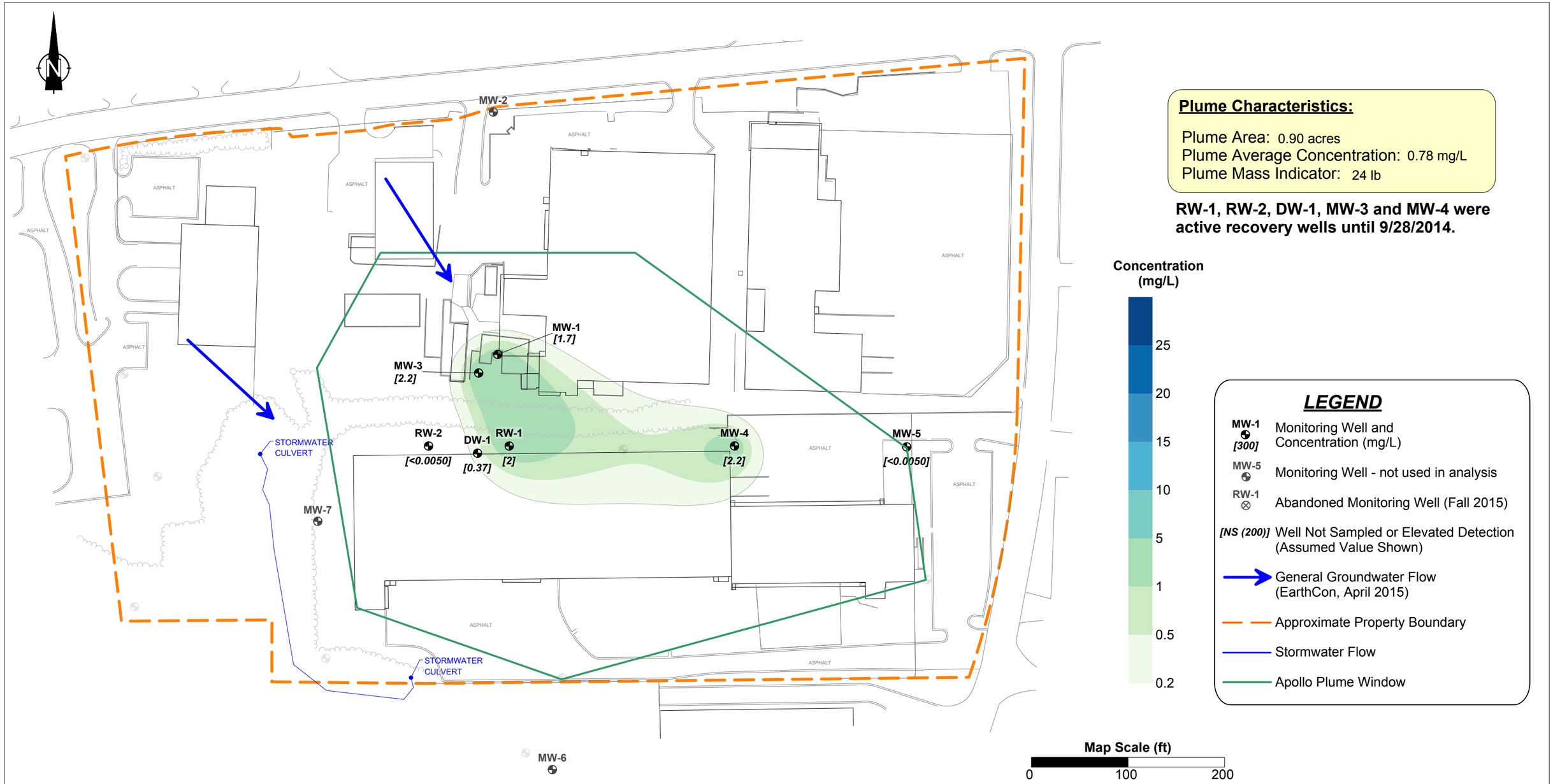
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Sep-2009

Prepared by: SSW Checked by: DW Figure: A8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.90 acres
Plume Average Concentration: 0.78 mg/L
Plume Mass Indicator: 24 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

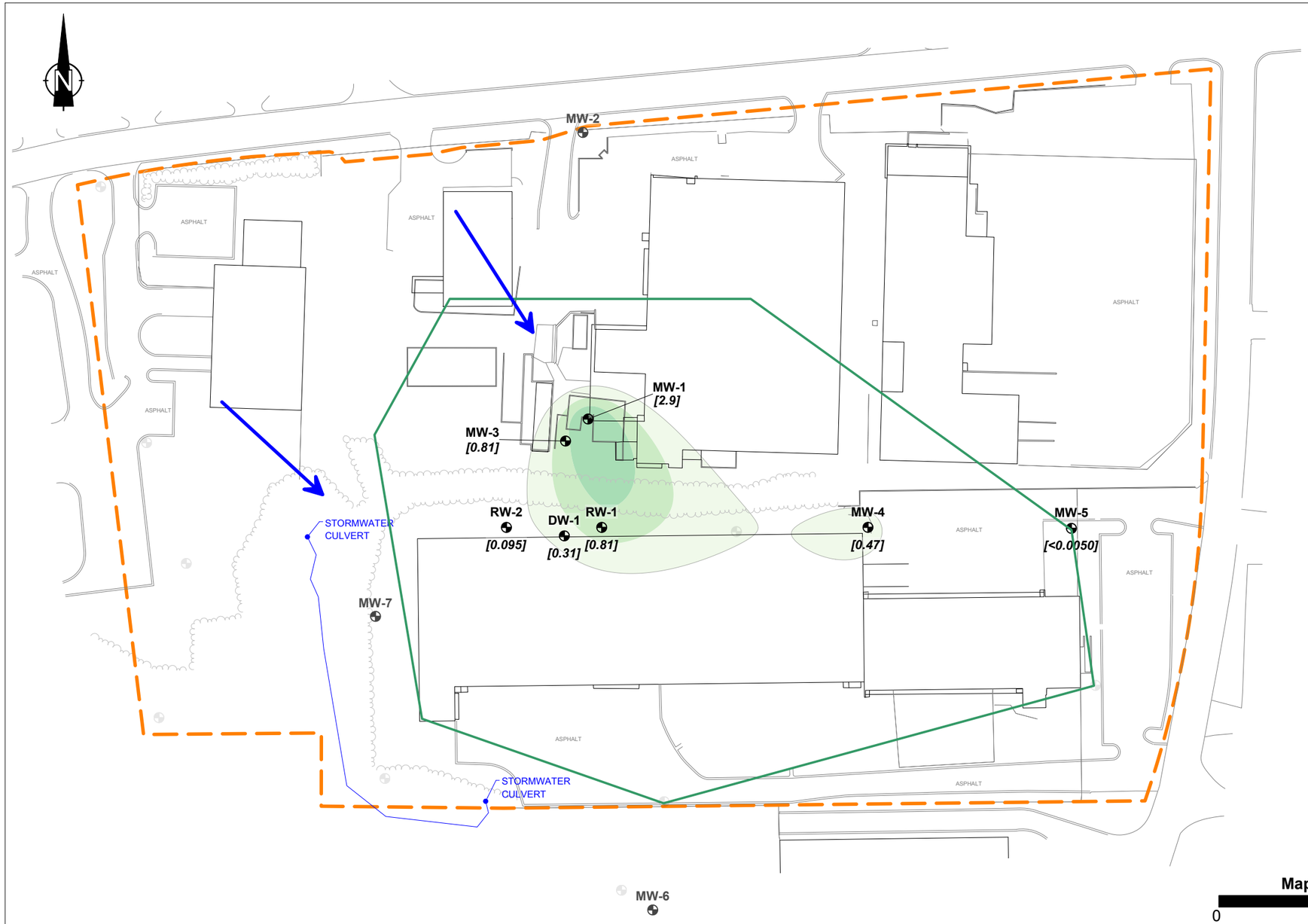
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Mar-2010

Prepared by: SSW Checked by: DW Figure: A9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.59 acres
Plume Average Concentration: 0.57 mg/L
Plume Mass Indicator: 11 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Sep-2010

Prepared by: SSW Checked by: DW Figure: A10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.88 acres
Plume Average Concentration: 0.63 mg/L
Plume Mass Indicator: 19 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

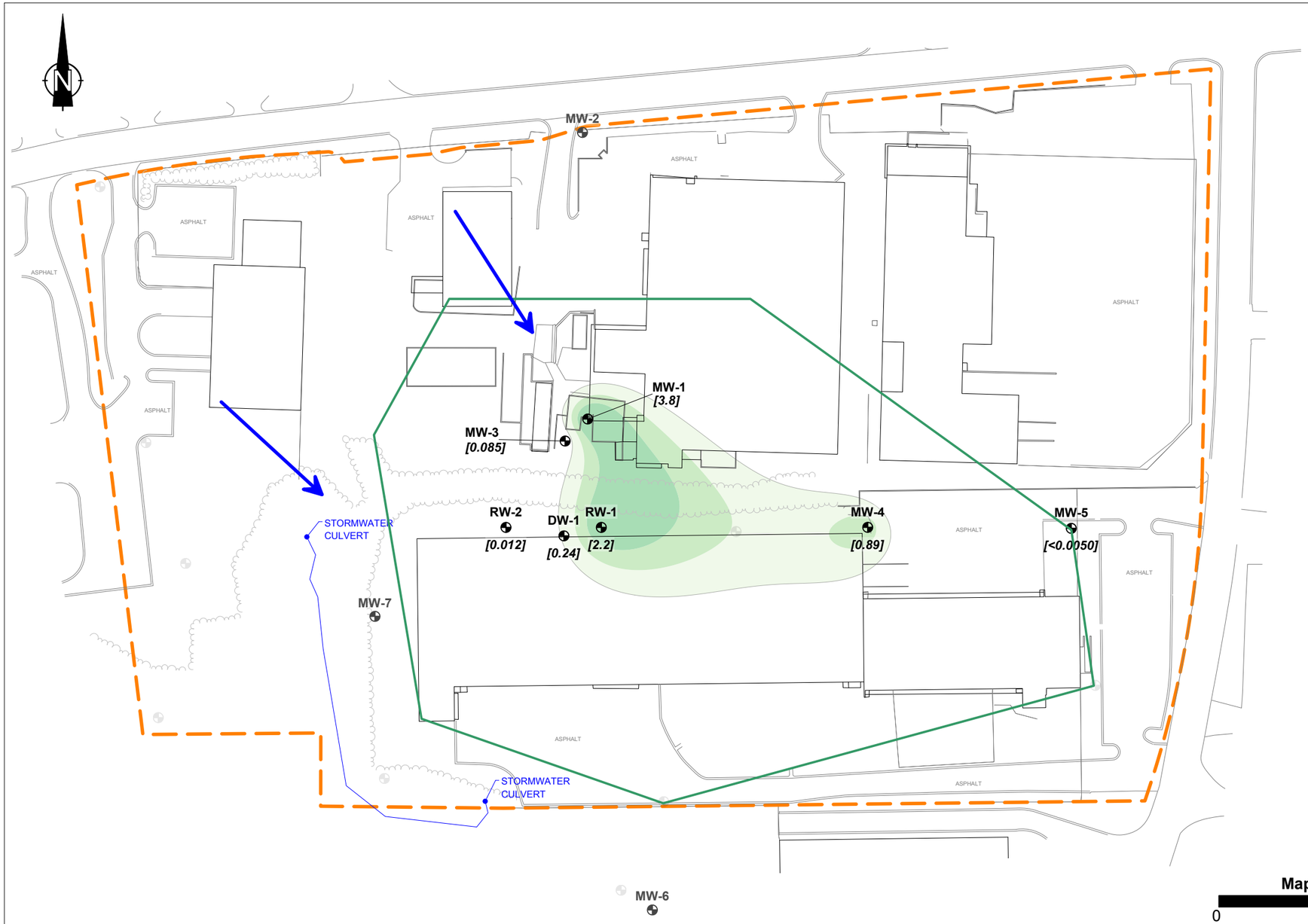
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Apr-2011

Prepared by: SSW Checked by: DW Figure: A11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.79 acres
Plume Average Concentration: 0.67 mg/L
Plume Mass Indicator: 18 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

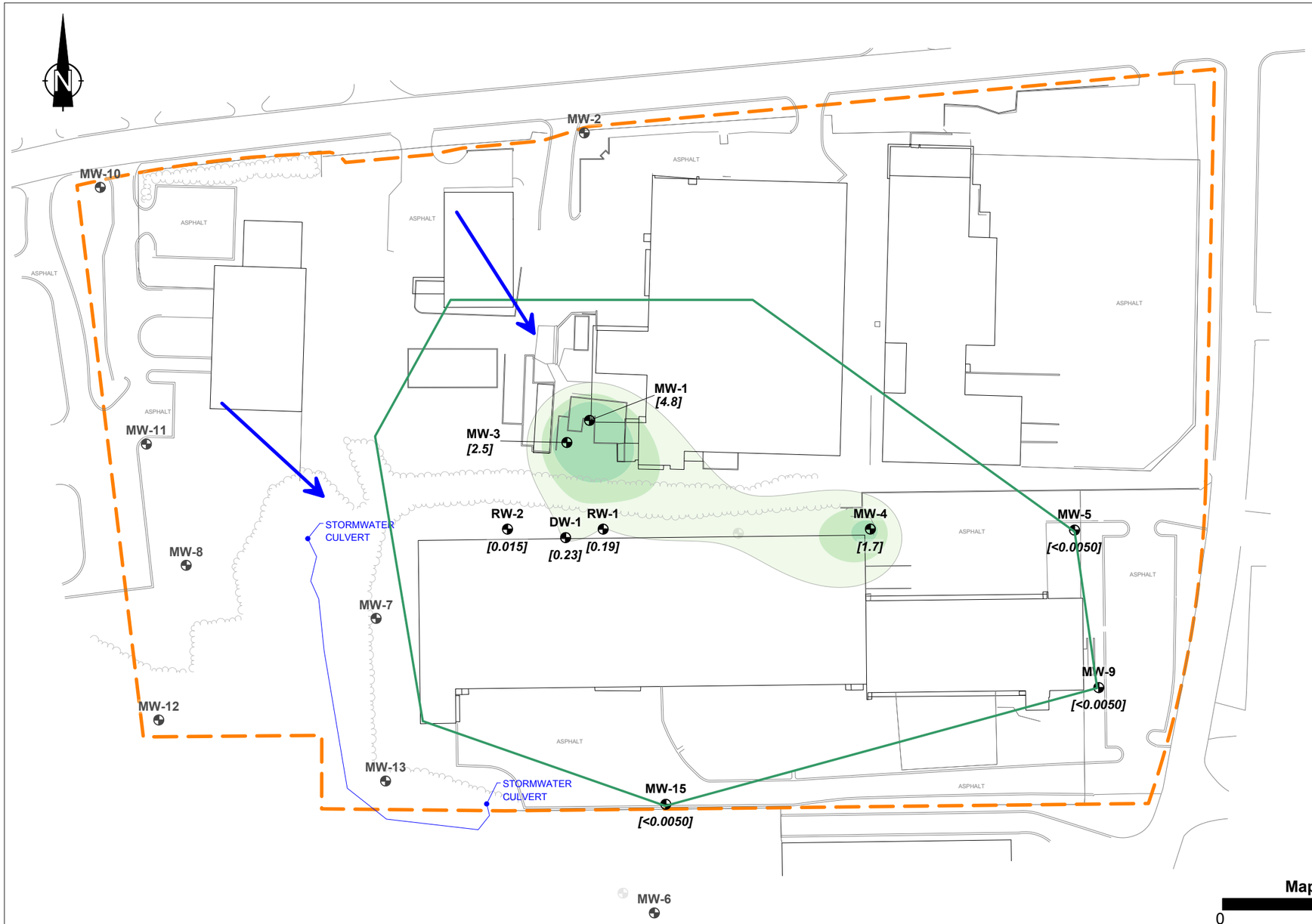
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Oct-2011

Prepared by: SSW Checked by: DW Figure: A12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.65 acres
Plume Average Concentration: 0.62 mg/L
Plume Mass Indicator: 13 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

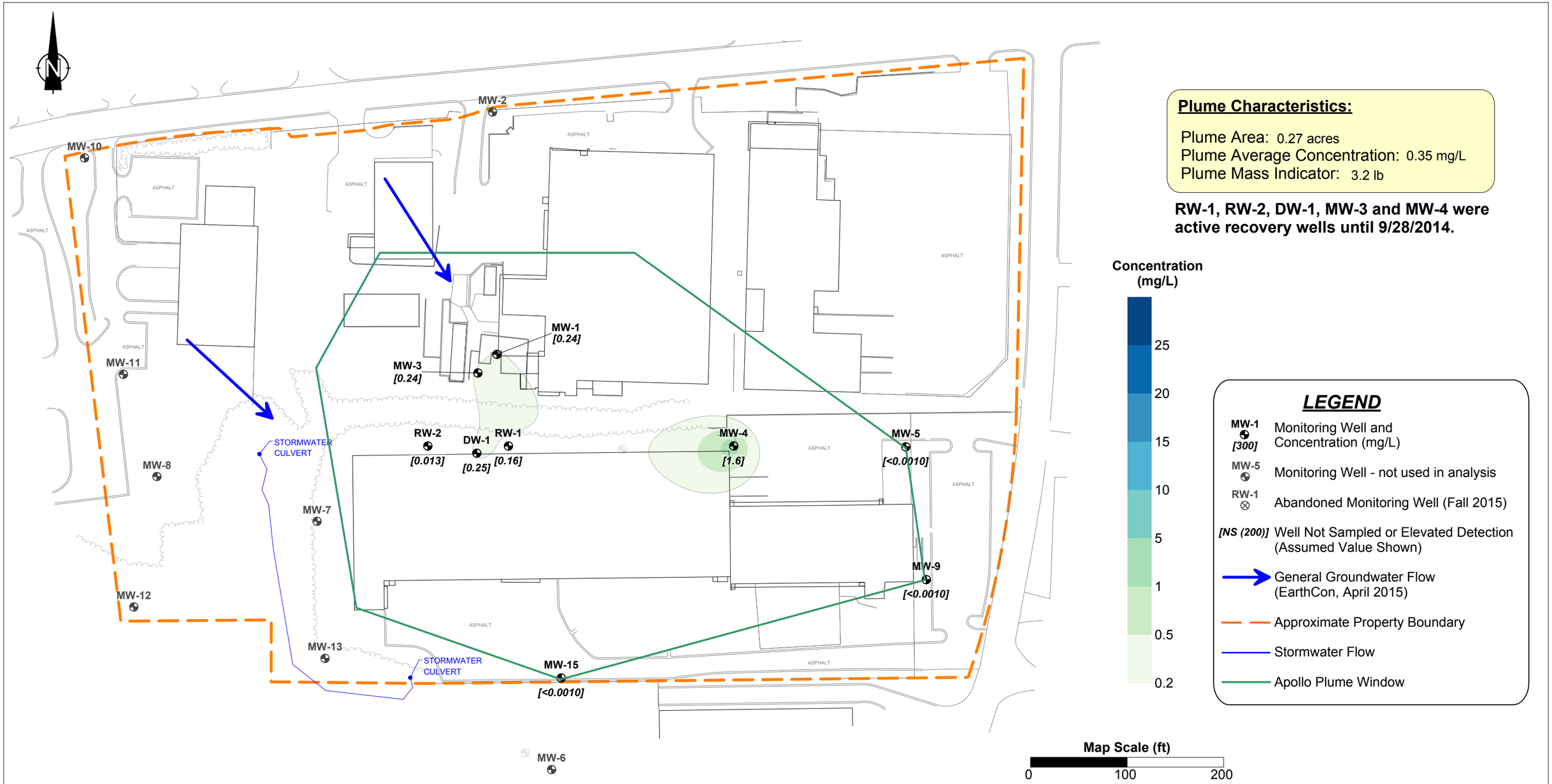
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Sep-2012

Prepared by: SSW Checked by: DW Figure: A13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.27 acres
Plume Average Concentration: 0.35 mg/L
Plume Mass Indicator: 3.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

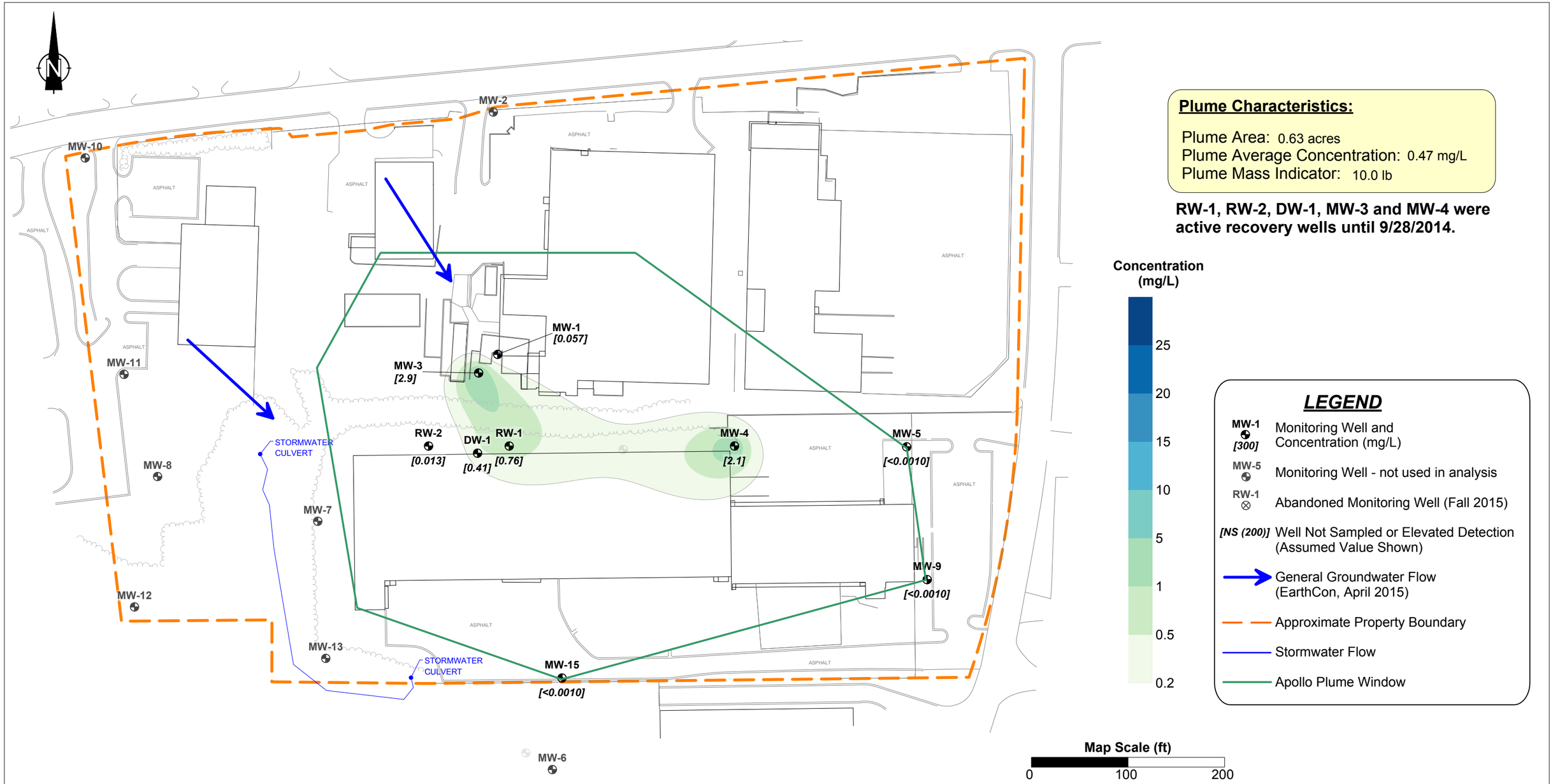
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Jun-2013

Prepared by: SSW Checked by: DW Figure: A14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.63 acres
Plume Average Concentration: 0.47 mg/L
Plume Mass Indicator: 10.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

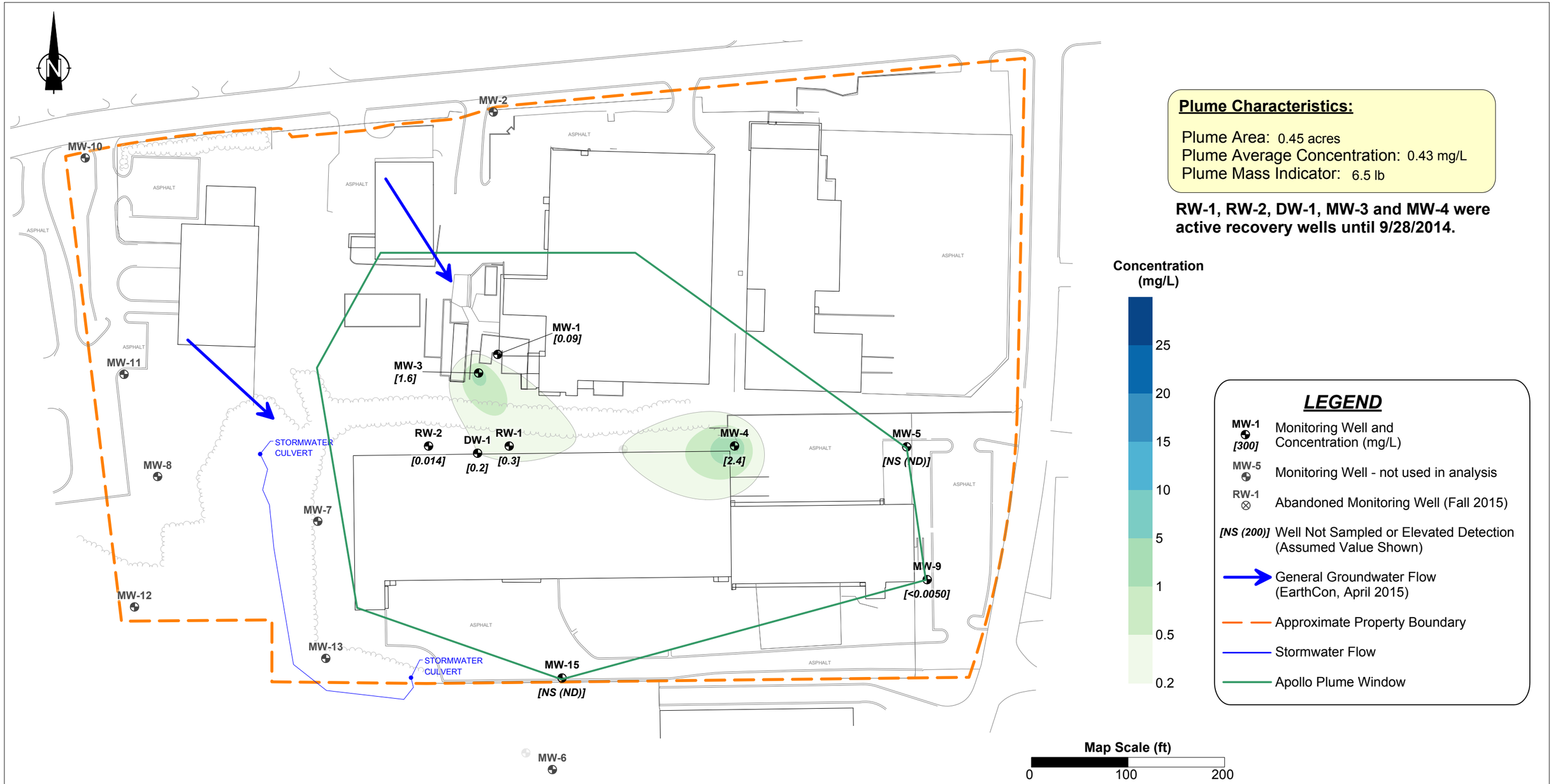
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Dec-2013

Prepared by: SSW Checked by: DW Figure: A15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.45 acres
Plume Average Concentration: 0.43 mg/L
Plume Mass Indicator: 6.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

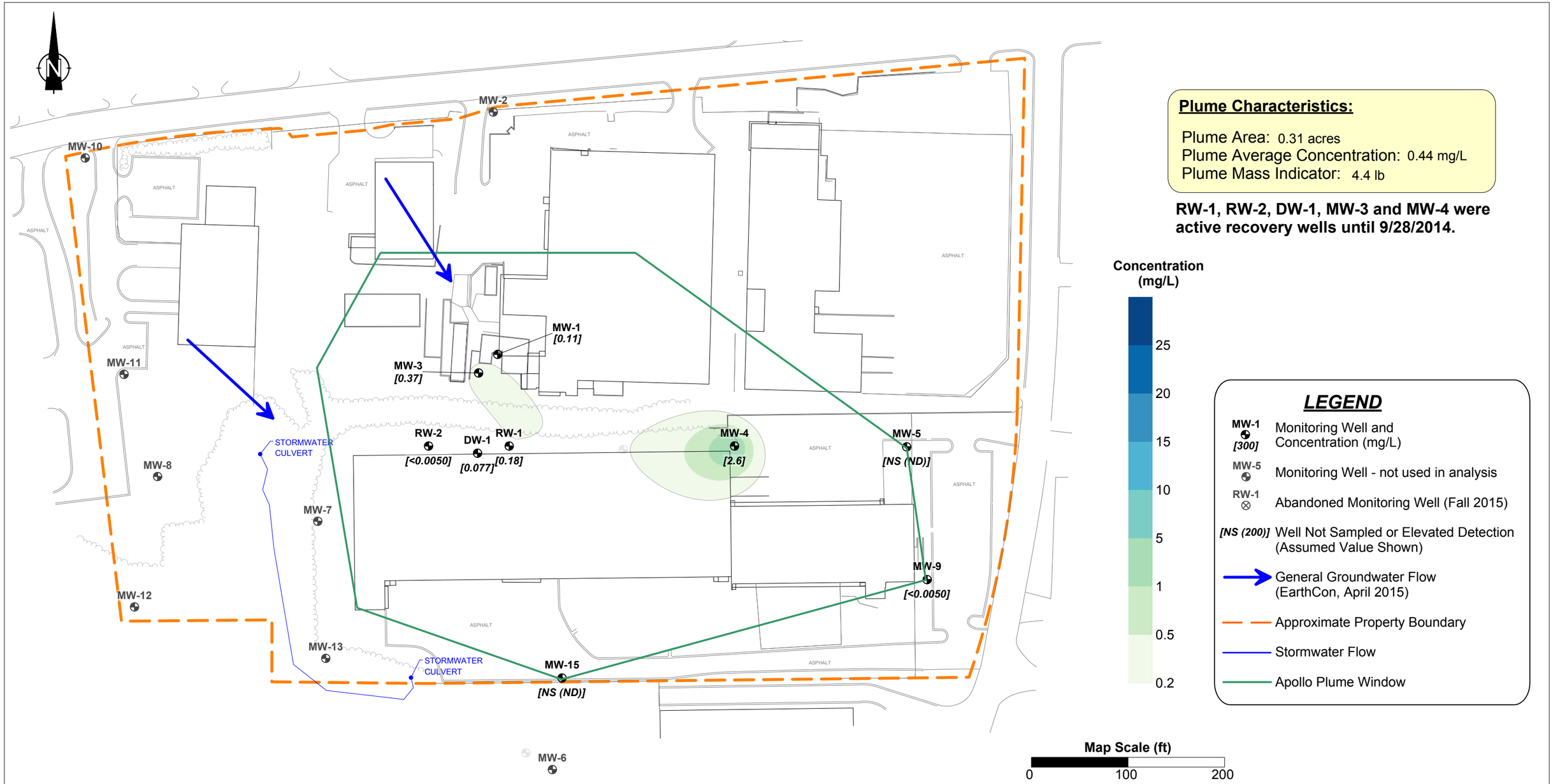
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Oct-2014

Prepared by: SSW Checked by: DW Figure: A16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.31 acres
Plume Average Concentration: 0.44 mg/L
Plume Mass Indicator: 4.4 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

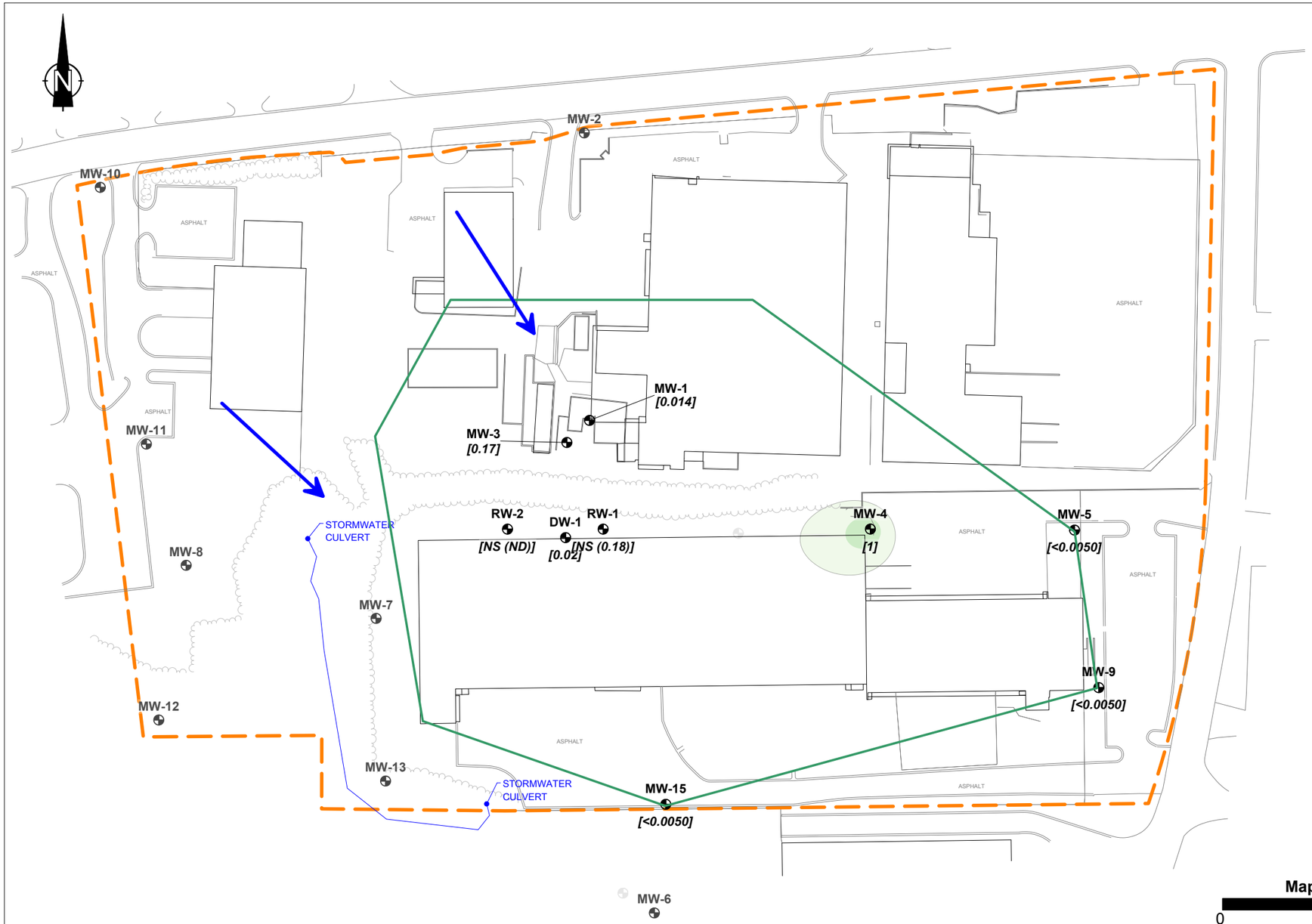
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Jan-2015

Prepared by: SSW Checked by: DW Figure: A17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.097 acres
Plume Average Concentration: 0.35 mg/L
Plume Mass Indicator: 1.1 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

25
20
15
10
5
1
0.5
0.2

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

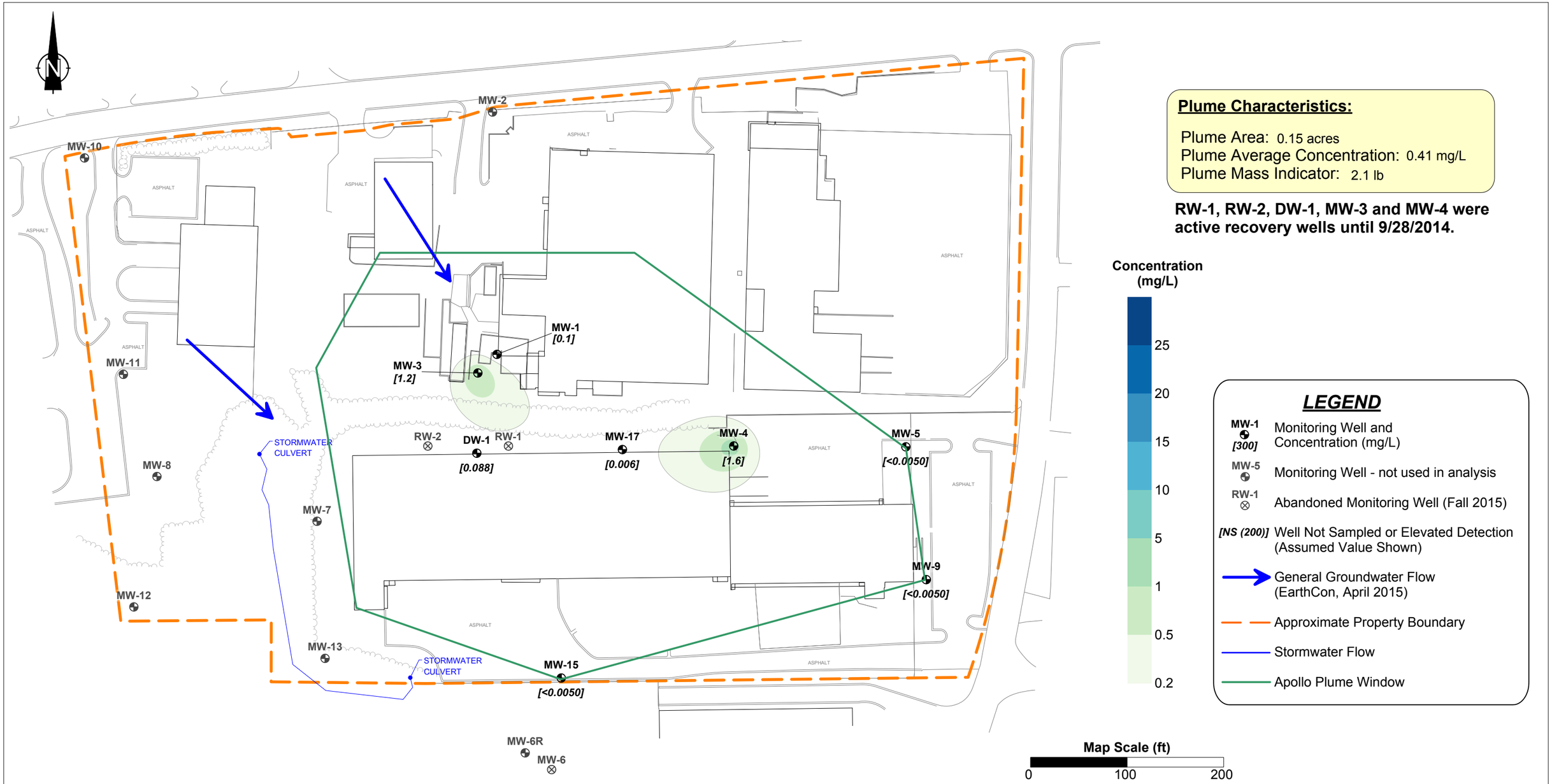
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Apr-2015

Prepared by: SSW Checked by: DW Figure: A18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.15 acres
Plume Average Concentration: 0.41 mg/L
Plume Mass Indicator: 2.1 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

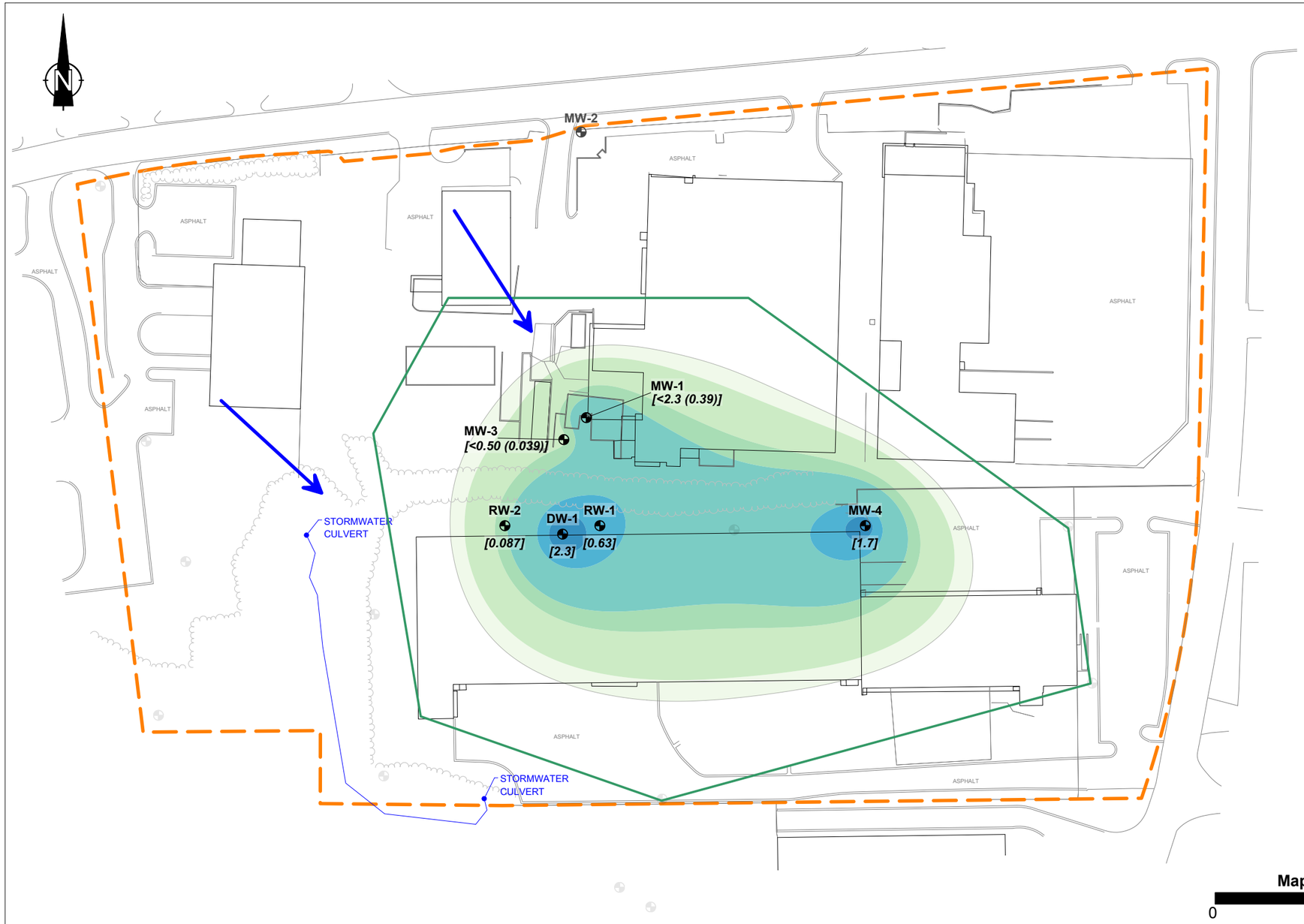
Apollo Plume
1,1,1-Trichloroethane (1,1,1-TCA)
Oct-2015

Prepared by: SSW Checked by: DW Figure: A19

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix B: Apollo Plume Series Isopleth Maps – Tetrachloroethene (PCE)



Plume Characteristics:

Plume Area: 2.5 acres
Plume Average Concentration: 0.15 mg/L
Plume Mass Indicator: 13 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

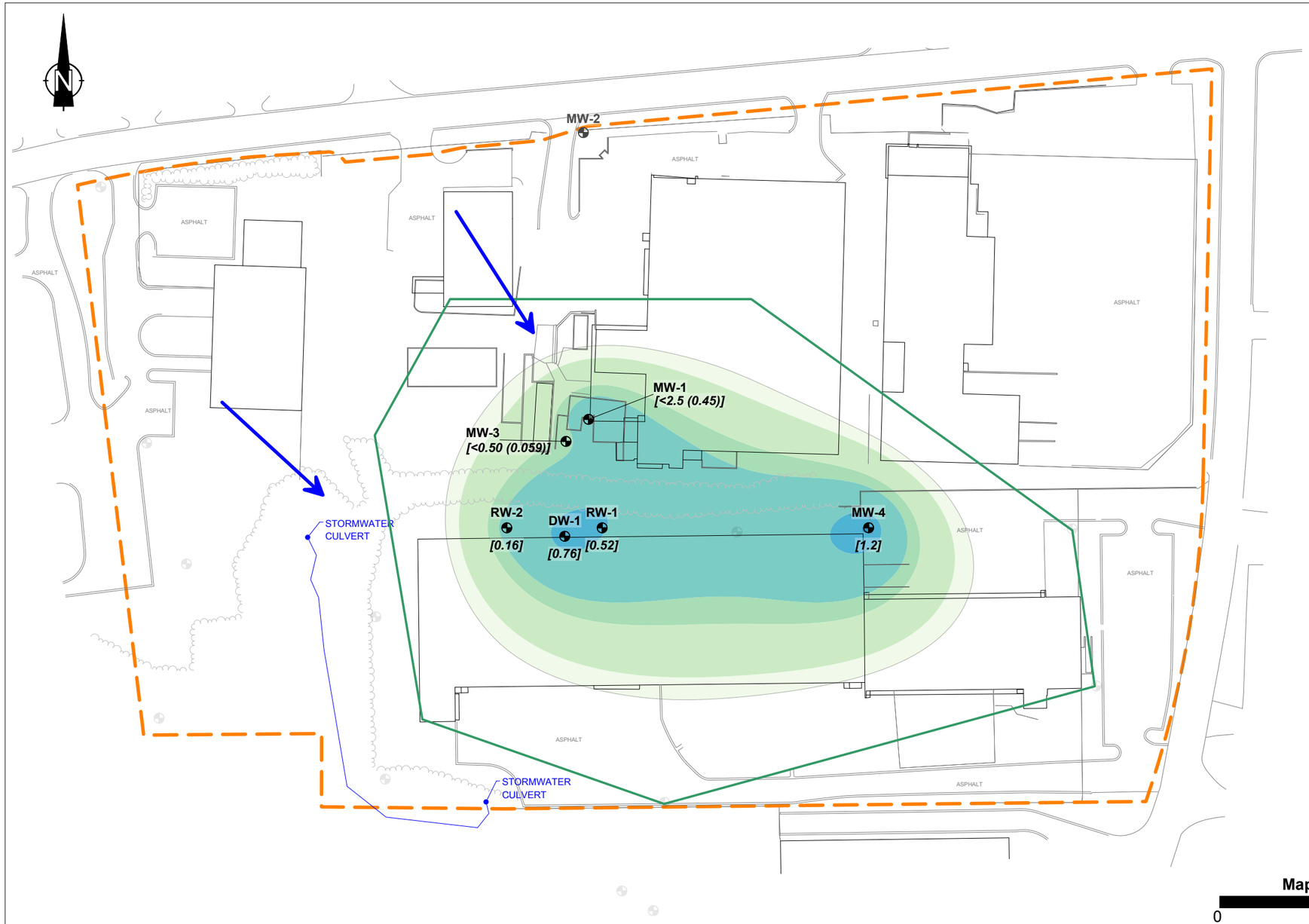
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume Tetrachloroethene (PCE) Jan-2005

Prepared by: SSW Checked by: DW Figure: B1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.5 acres
Plume Average Concentration: 0.12 mg/L
Plume Mass Indicator: 10.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

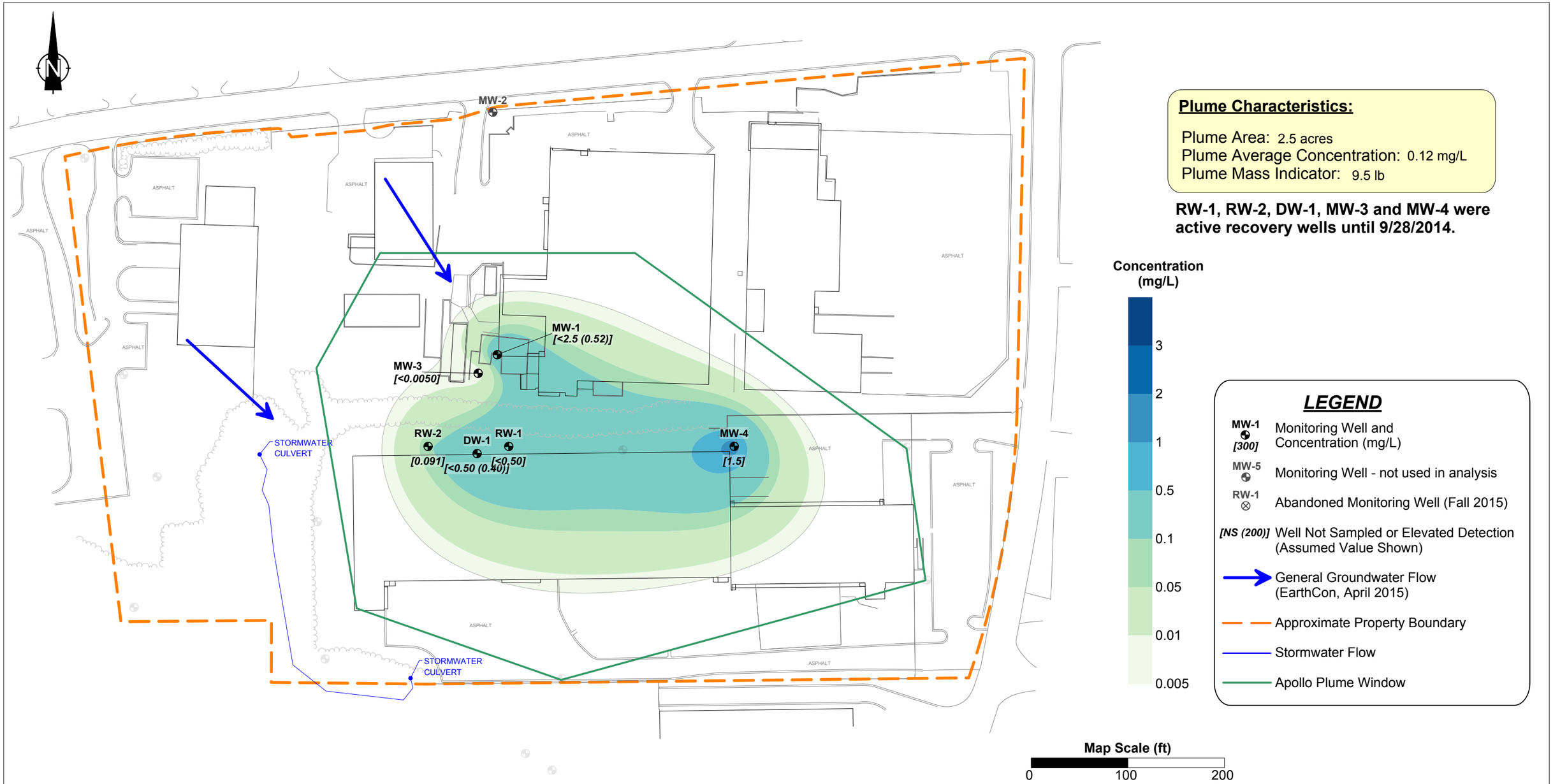
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Dec-2005

Prepared by: SSW Checked by: DW Figure: B2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.5 acres
Plume Average Concentration: 0.12 mg/L
Plume Mass Indicator: 9.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

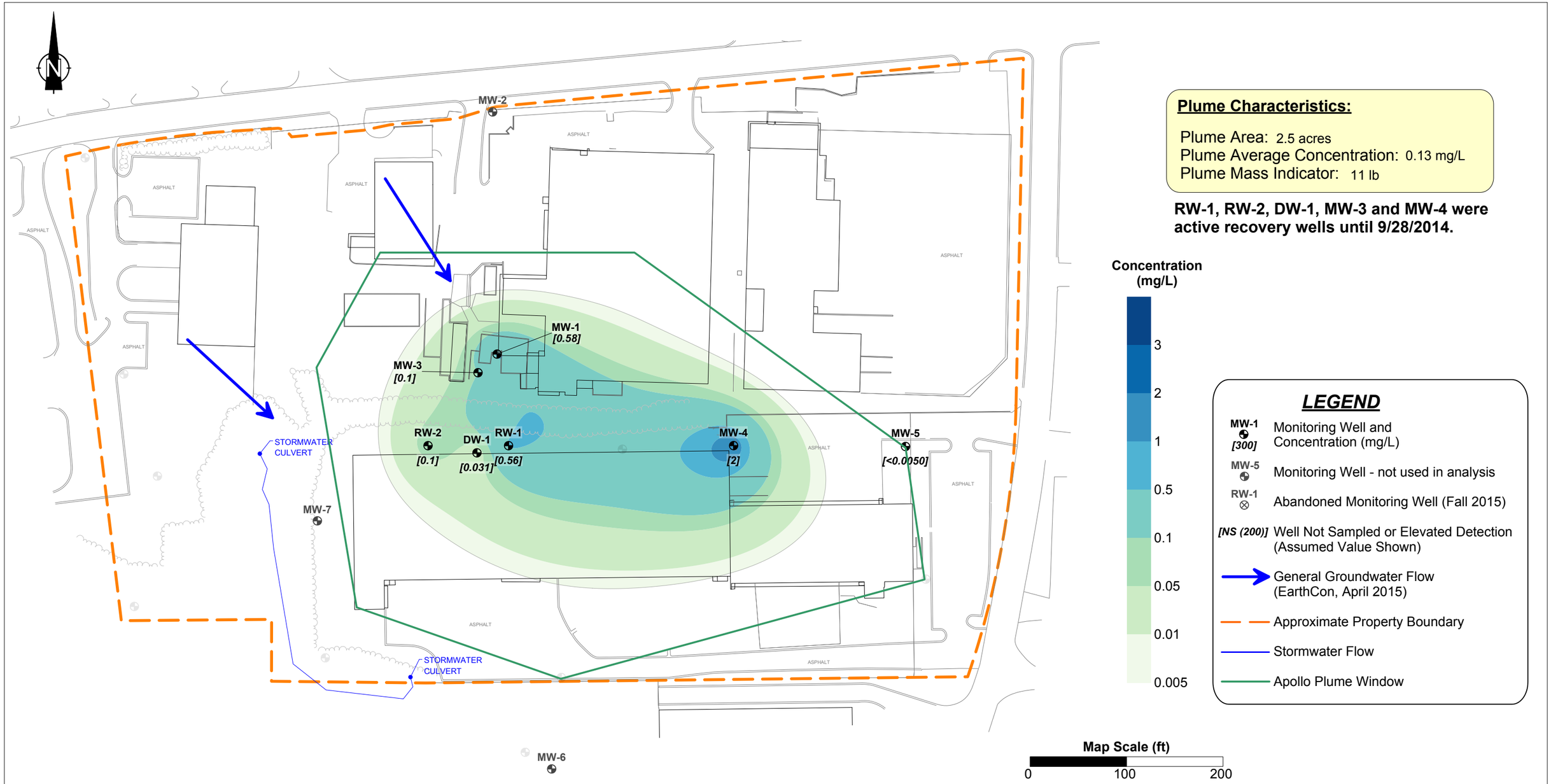
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Jul-2006

Prepared by: SSW Checked by: DW Figure: B3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.5 acres
Plume Average Concentration: 0.13 mg/L
Plume Mass Indicator: 11 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

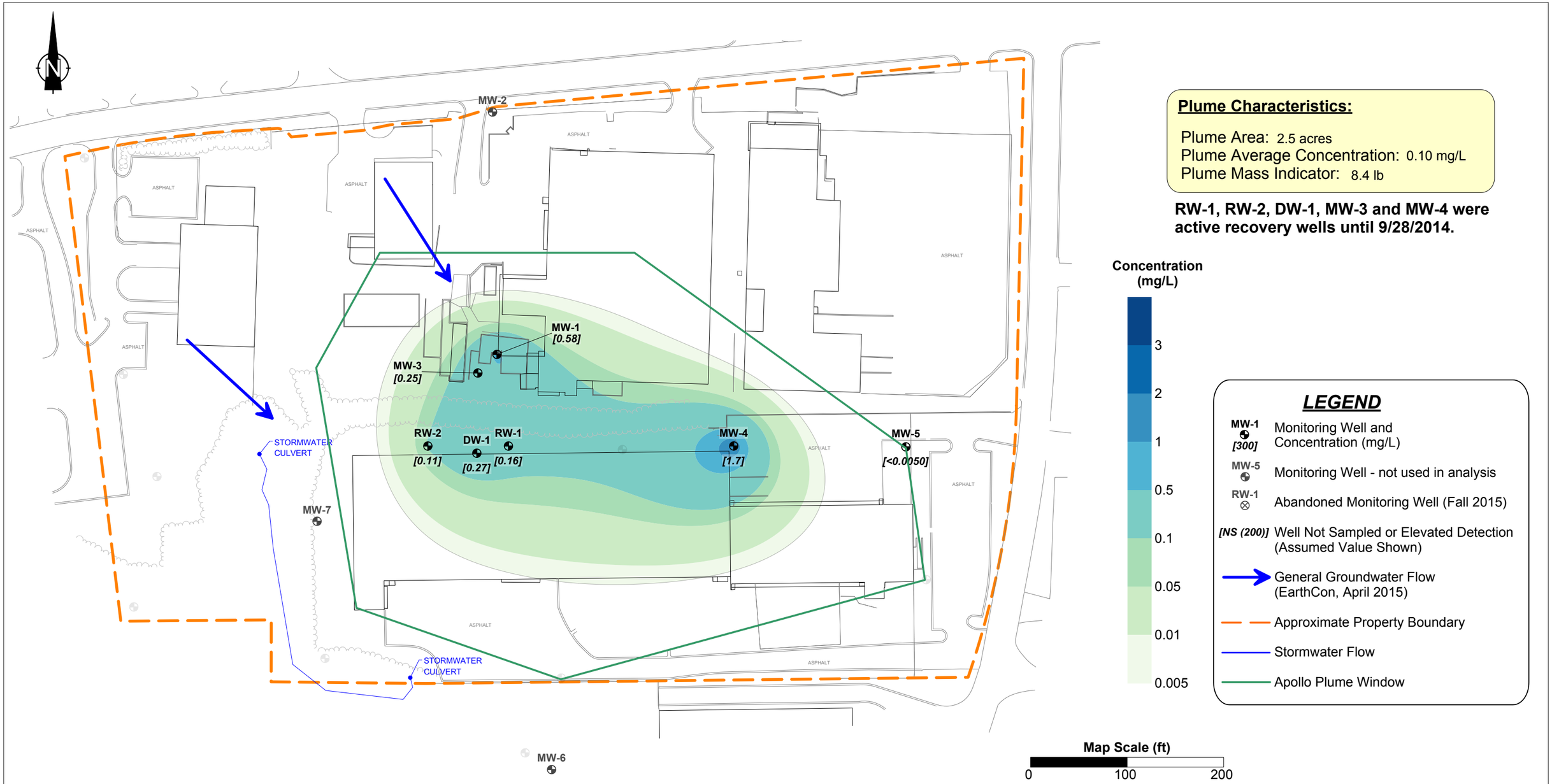
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Feb-2007

Prepared by: SSW Checked by: DW Figure: B4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.5 acres
Plume Average Concentration: 0.10 mg/L
Plume Mass Indicator: 8.4 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

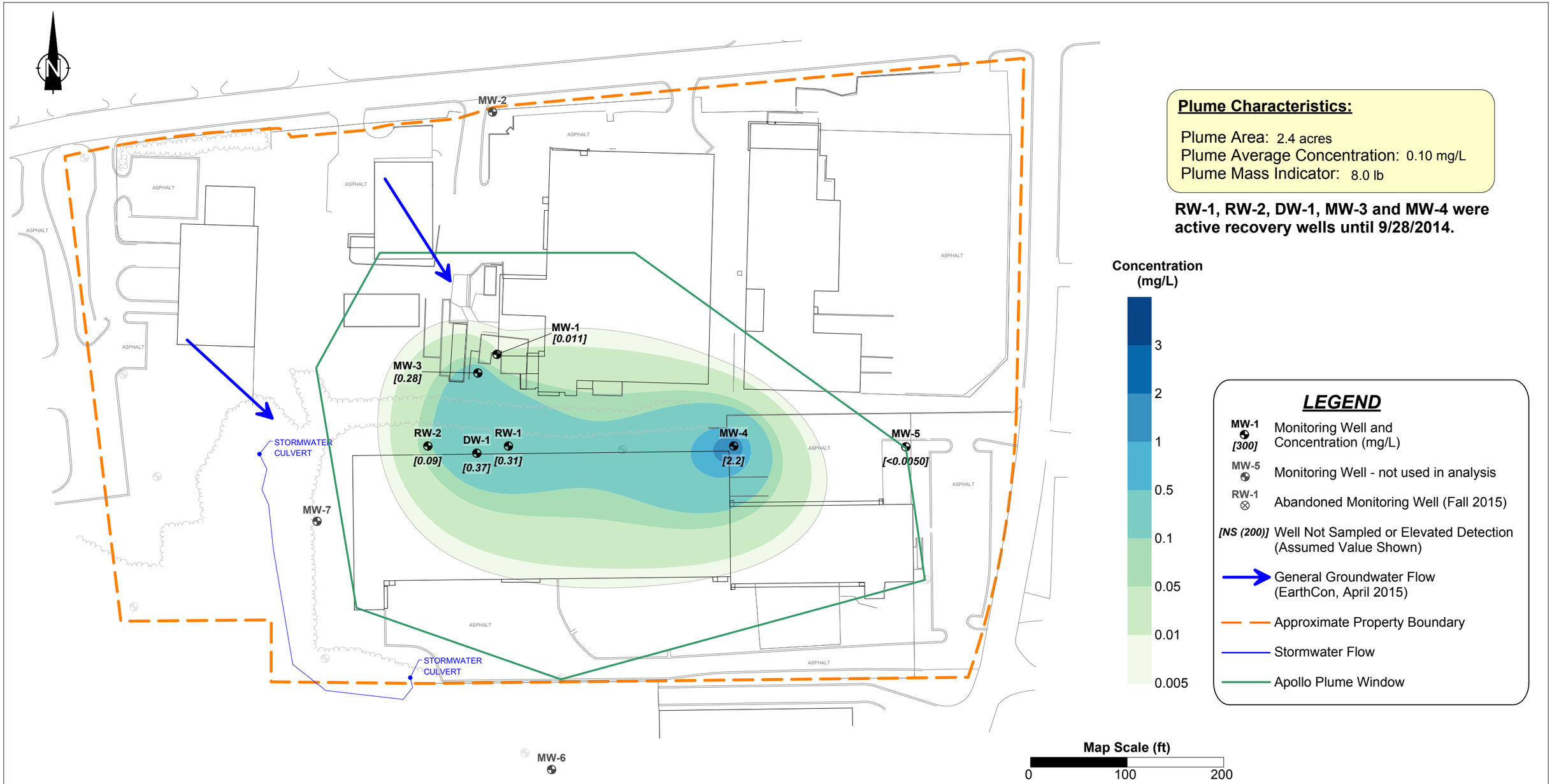
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Aug-2007

Prepared by: SSW Checked by: DW Figure: B5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.4 acres
Plume Average Concentration: 0.10 mg/L
Plume Mass Indicator: 8.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

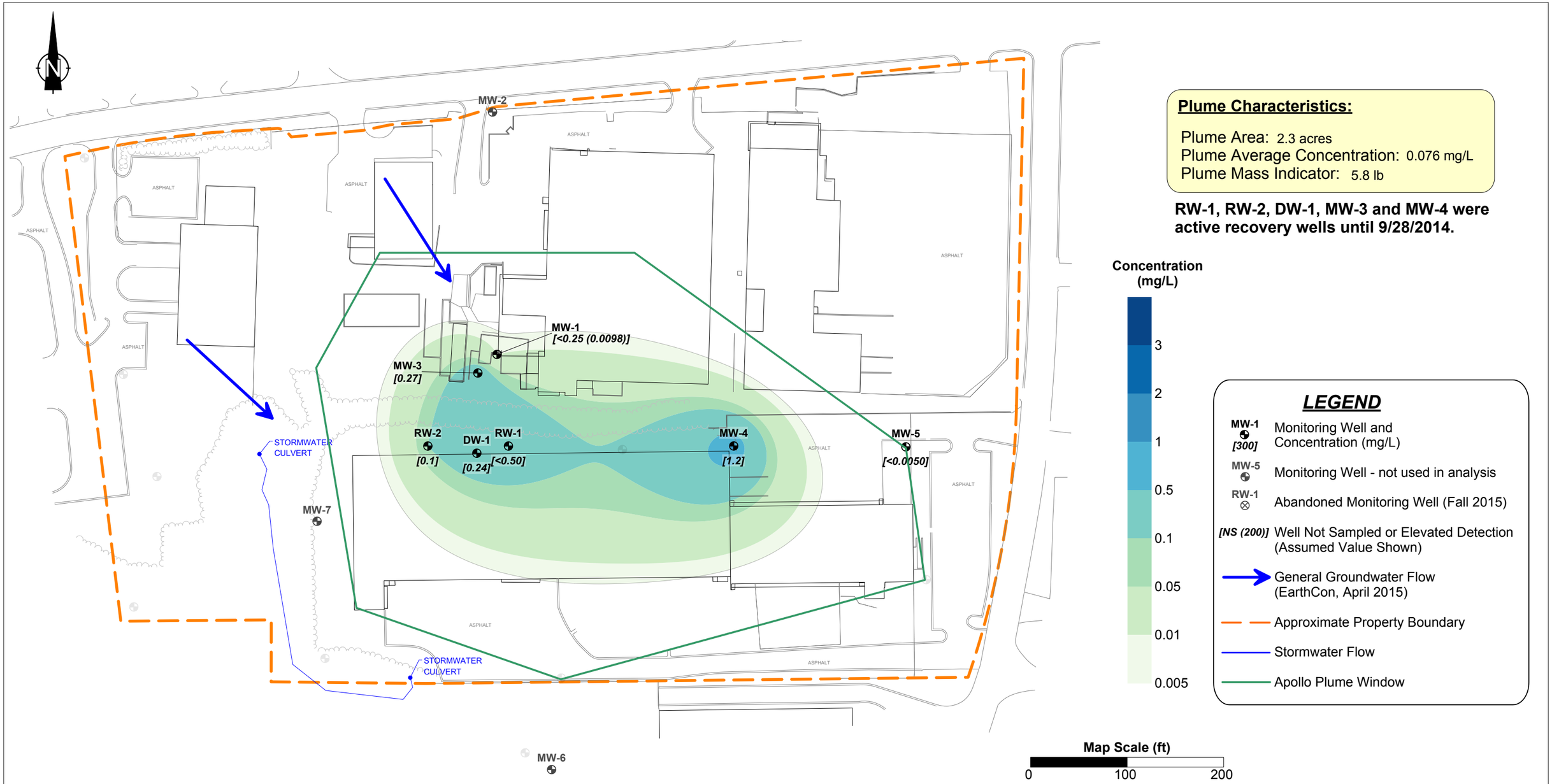
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Feb-2008

Prepared by: SSW Checked by: DW Figure: B6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.076 mg/L
Plume Mass Indicator: 5.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

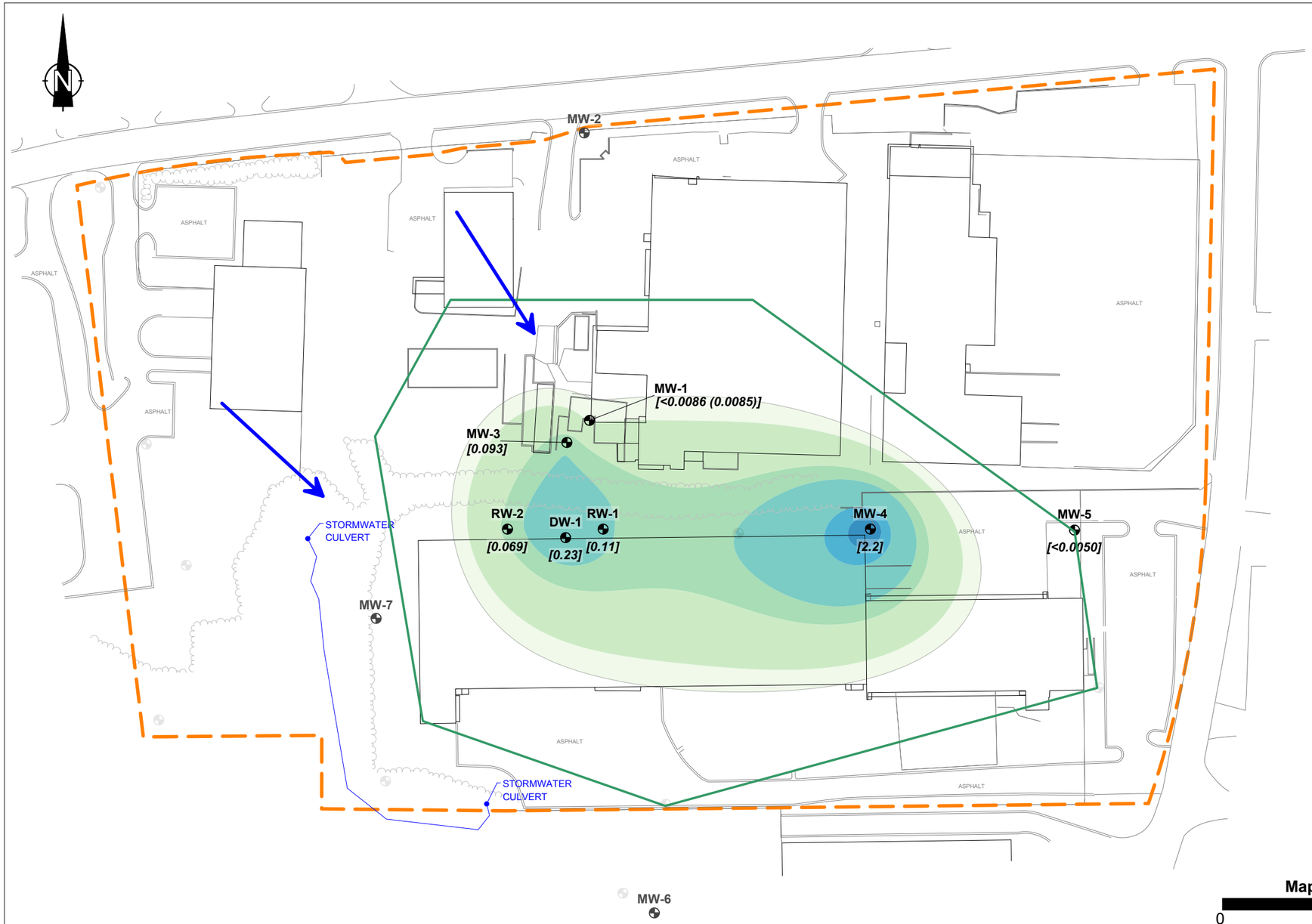
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume Tetrachloroethene (PCE) Nov-2008

Prepared by: SSW Checked by: DW Figure: B7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.079 mg/L
Plume Mass Indicator: 6.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 / [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

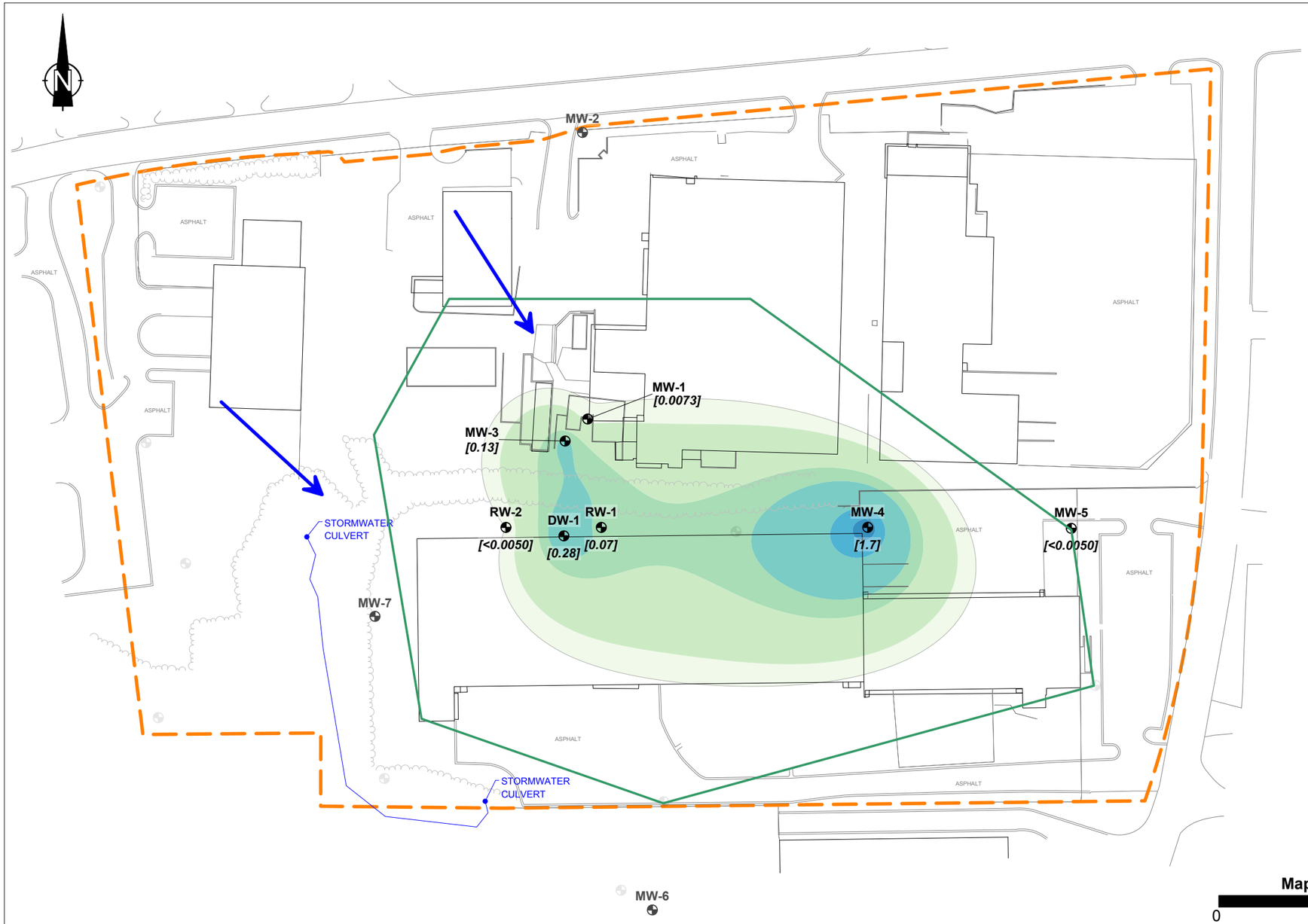
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Sep-2009

Prepared by: SSW Checked by: DW Figure: B8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.067 mg/L
Plume Mass Indicator: 4.6 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

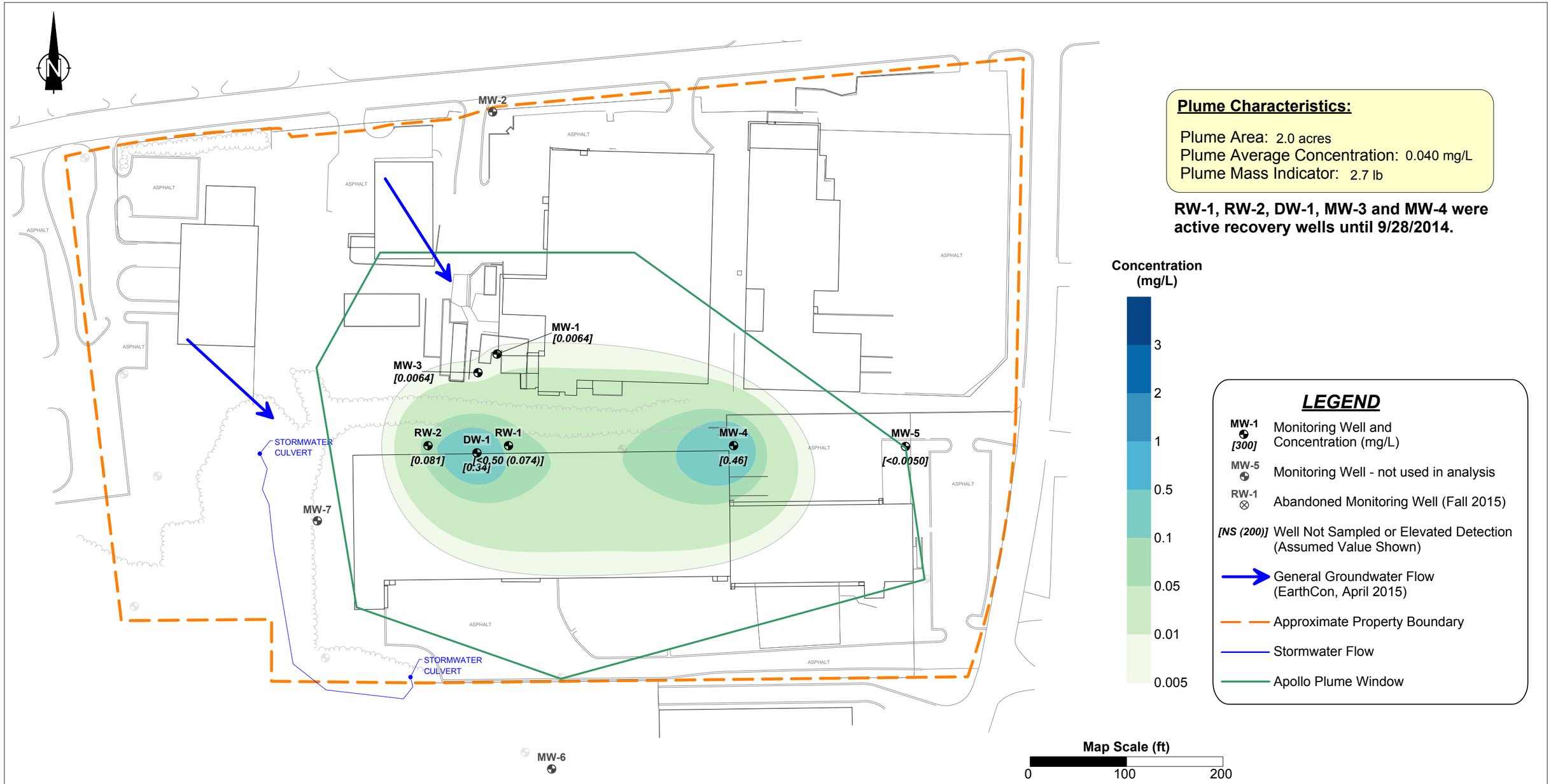
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Mar-2010

Prepared by: SSW Checked by: DW Figure: B9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.040 mg/L
Plume Mass Indicator: 2.7 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

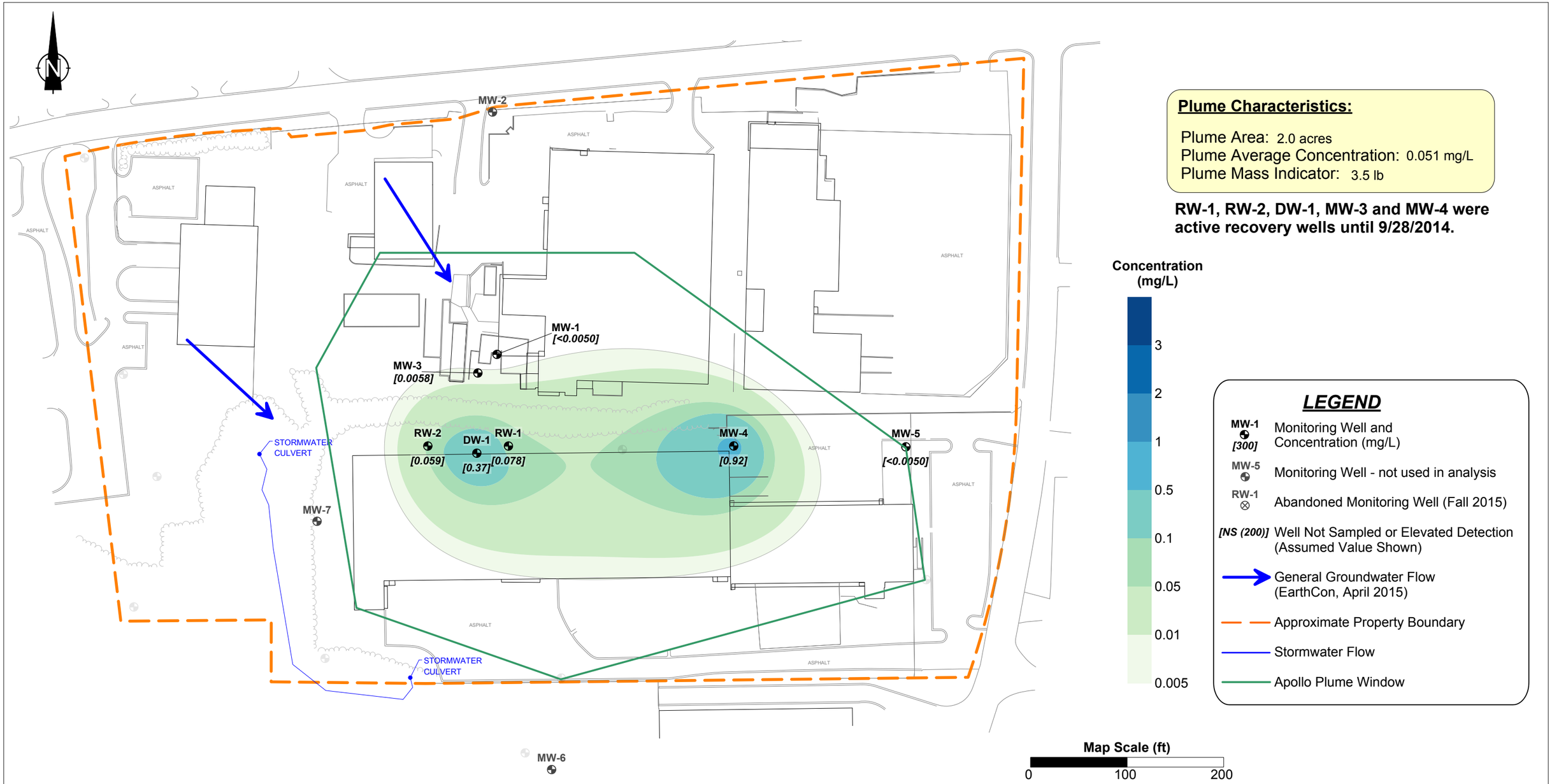
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Sep-2010

Prepared by: SSW Checked by: DW Figure: B10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.051 mg/L
Plume Mass Indicator: 3.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

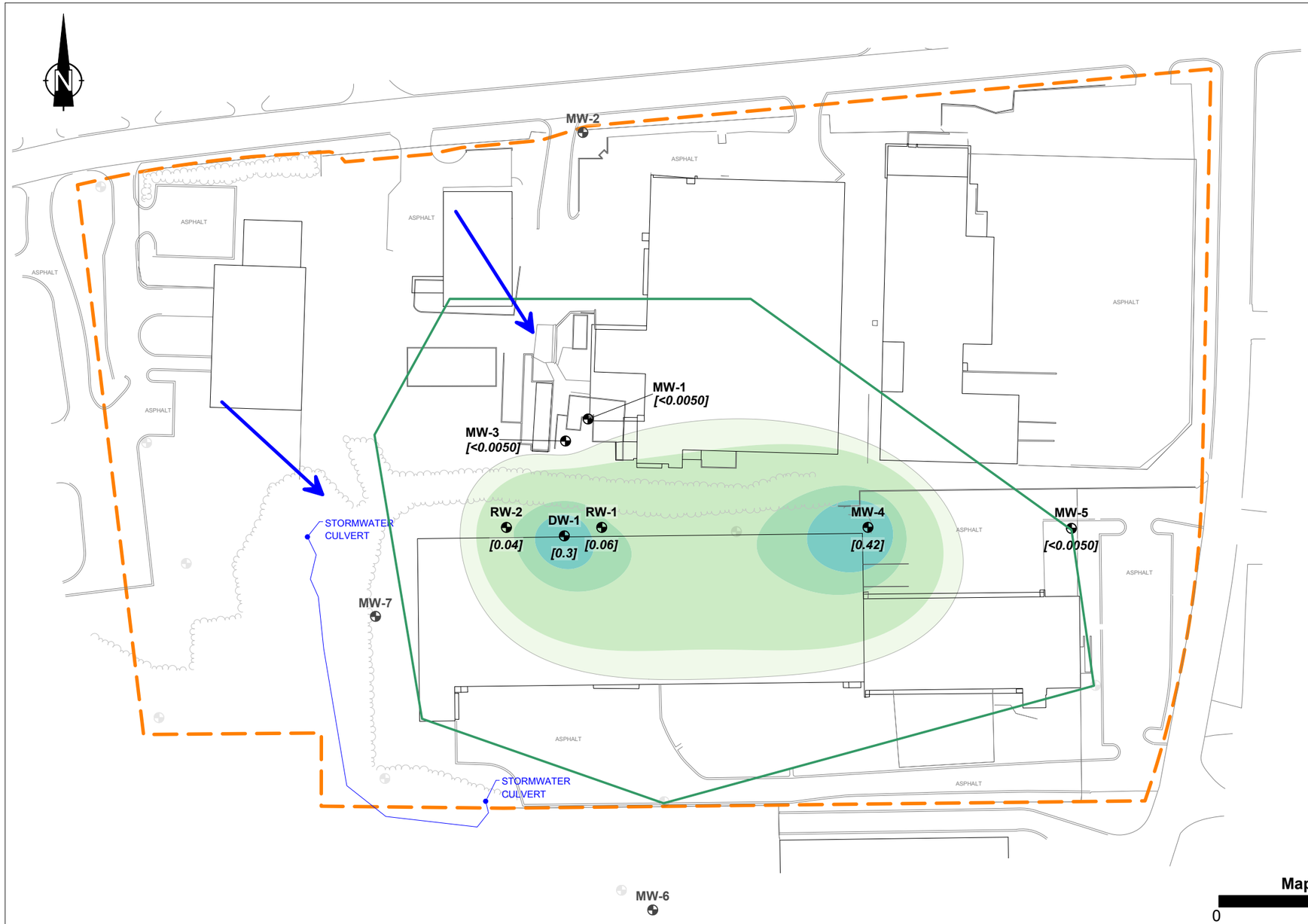
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Apr-2011

Prepared by: SSW Checked by: DW Figure: B11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.036 mg/L
Plume Mass Indicator: 2.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

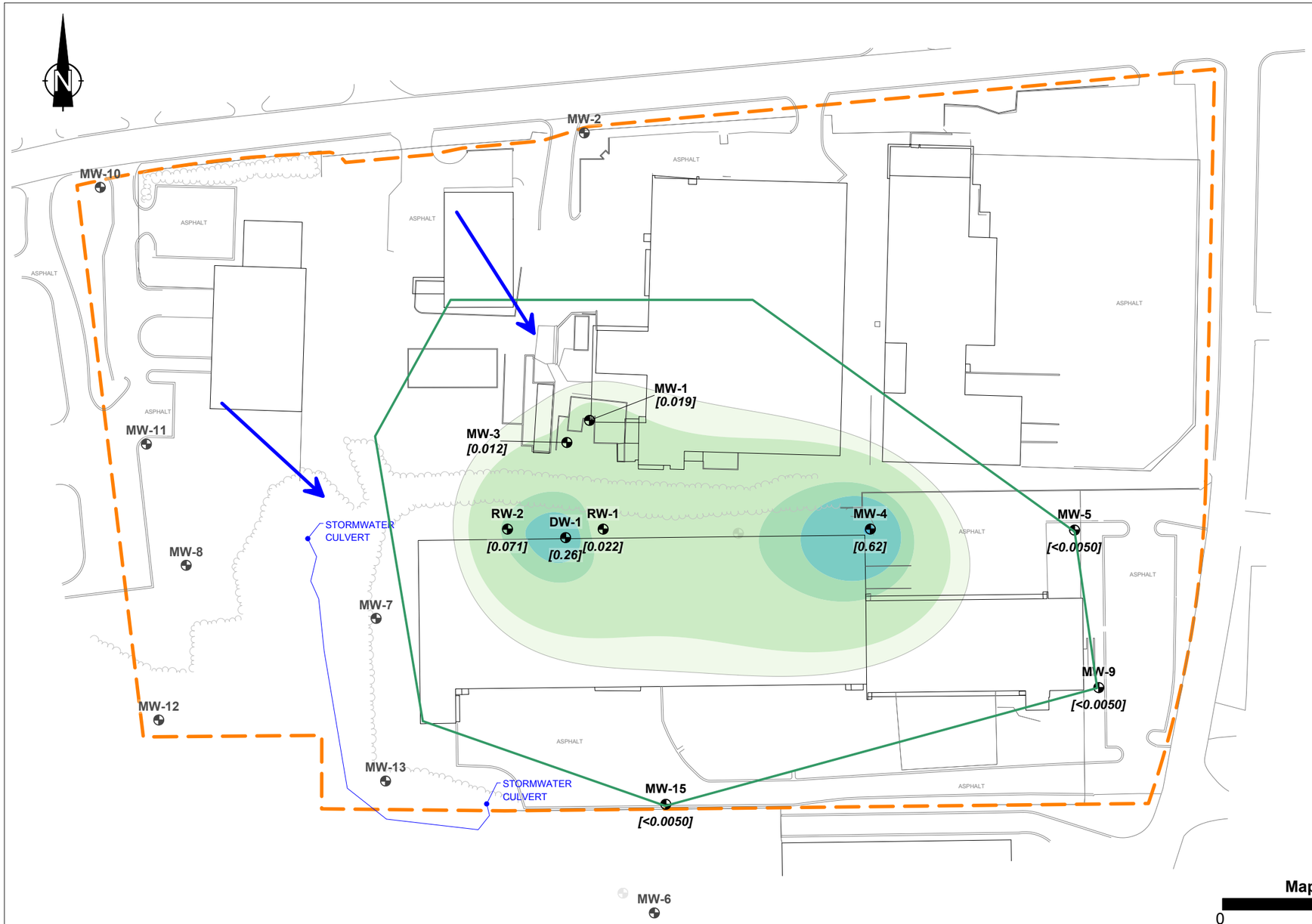
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Oct-2011

Prepared by: SSW Checked by: DW Figure: B12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.036 mg/L
Plume Mass Indicator: 2.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

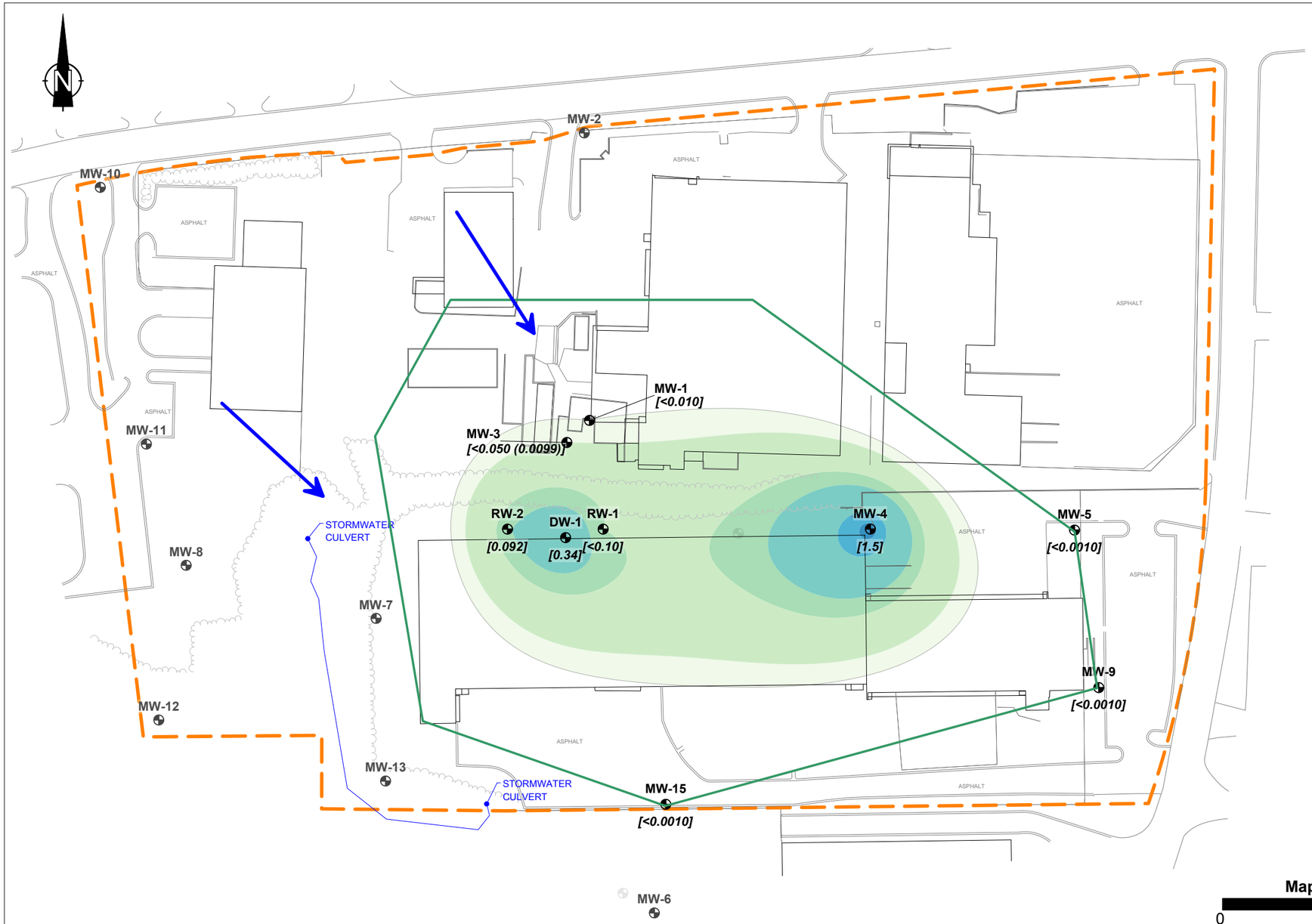
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Sep-2012

Prepared by: SSW Checked by: DW Figure: B13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.059 mg/L
Plume Mass Indicator: 4.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

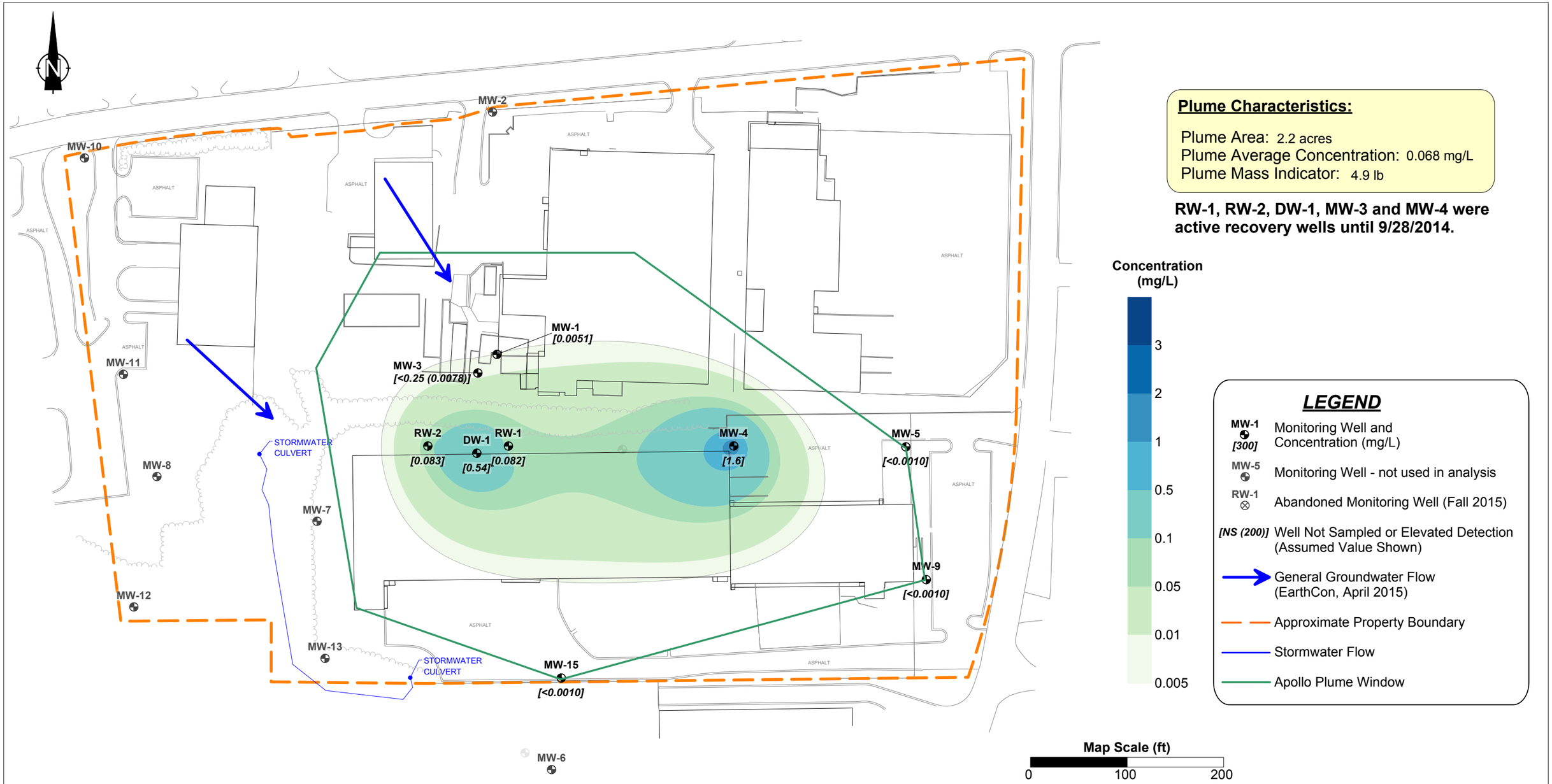
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Jun-2013

Prepared by: SSW Checked by: DW Figure: B14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.2 acres
Plume Average Concentration: 0.068 mg/L
Plume Mass Indicator: 4.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

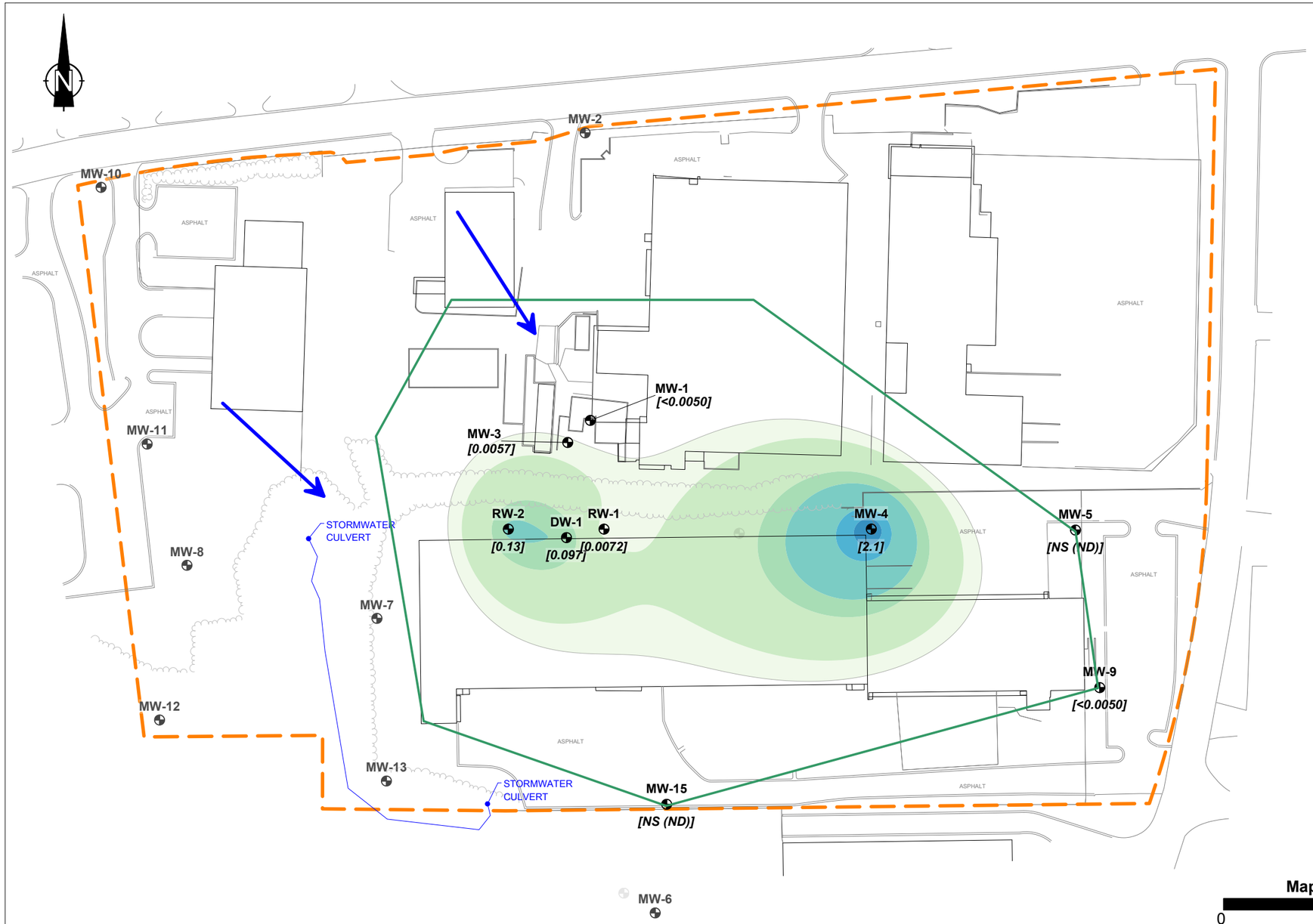
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume Tetrachloroethene (PCE) Dec-2013

Prepared by: SSW Checked by: DW Figure: B15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.057 mg/L
Plume Mass Indicator: 3.7 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

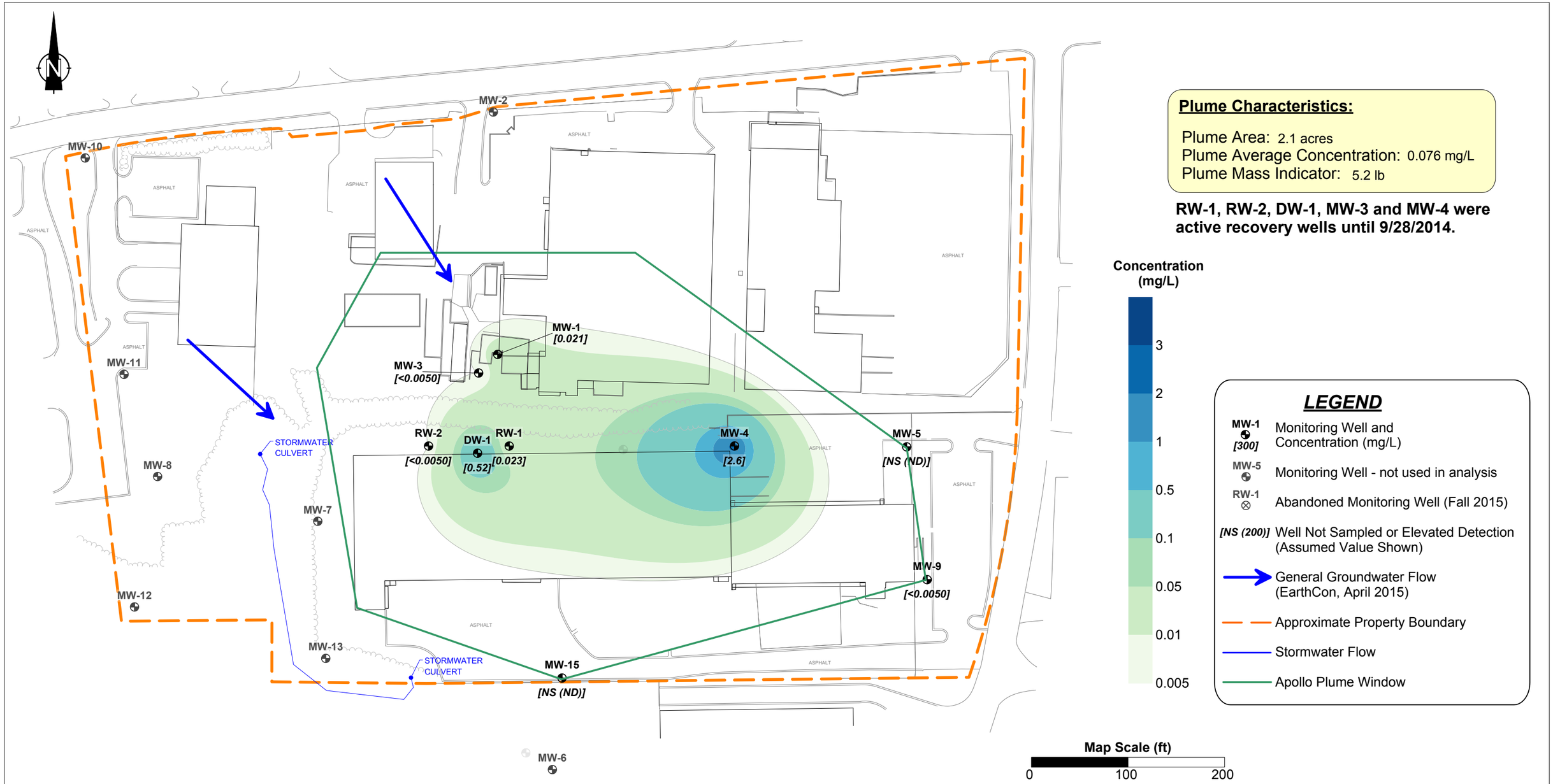
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Oct-2014

Prepared by: SSW Checked by: DW Figure: B16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.076 mg/L
Plume Mass Indicator: 5.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

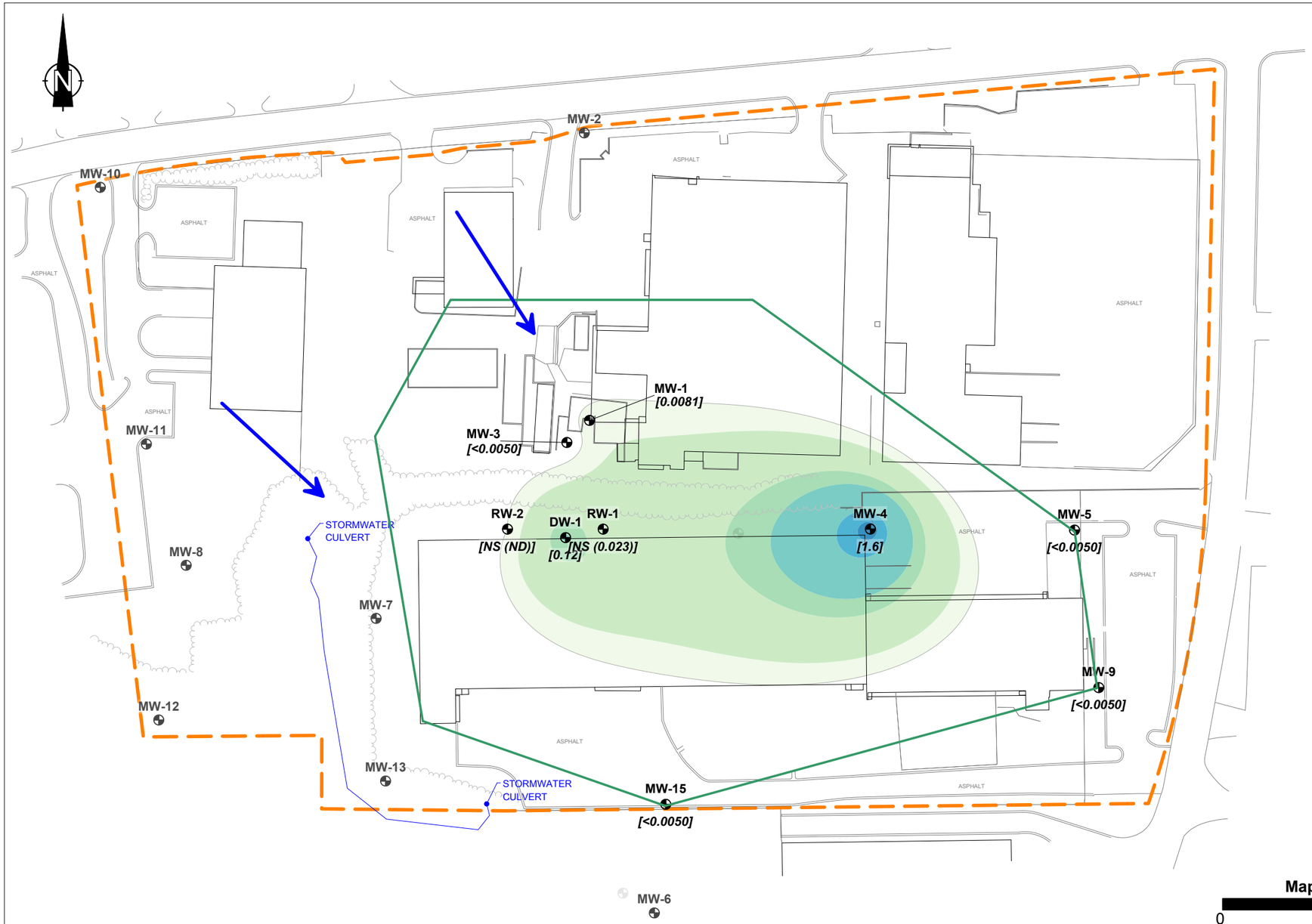
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Jan-2015

Prepared by: SSW Checked by: DW Figure: B17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.056 mg/L
Plume Mass Indicator: 3.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

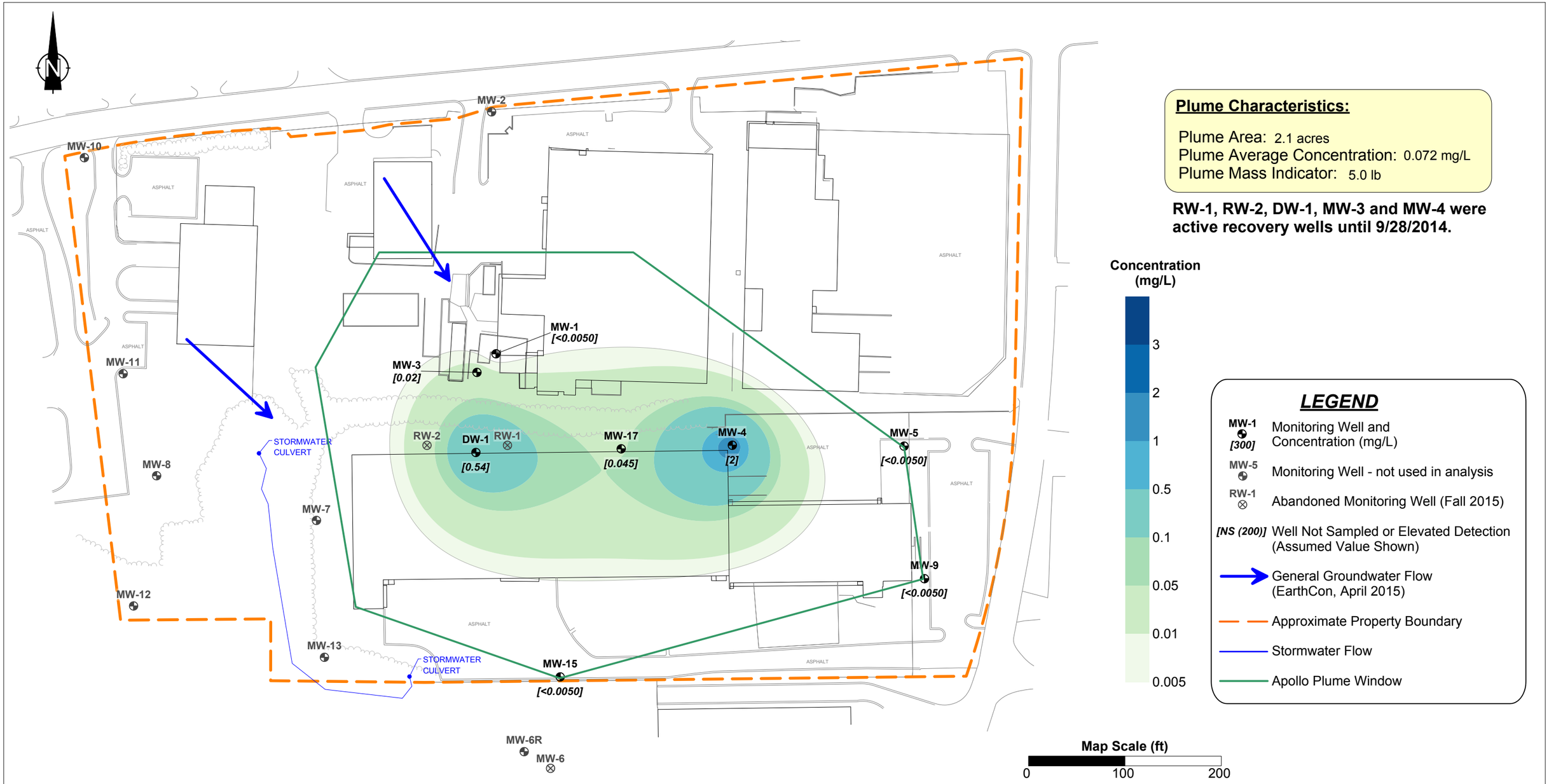
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Tetrachloroethene (PCE)
Apr-2015

Prepared by: SSW Checked by: DW Figure: B18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.072 mg/L
Plume Mass Indicator: 5.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

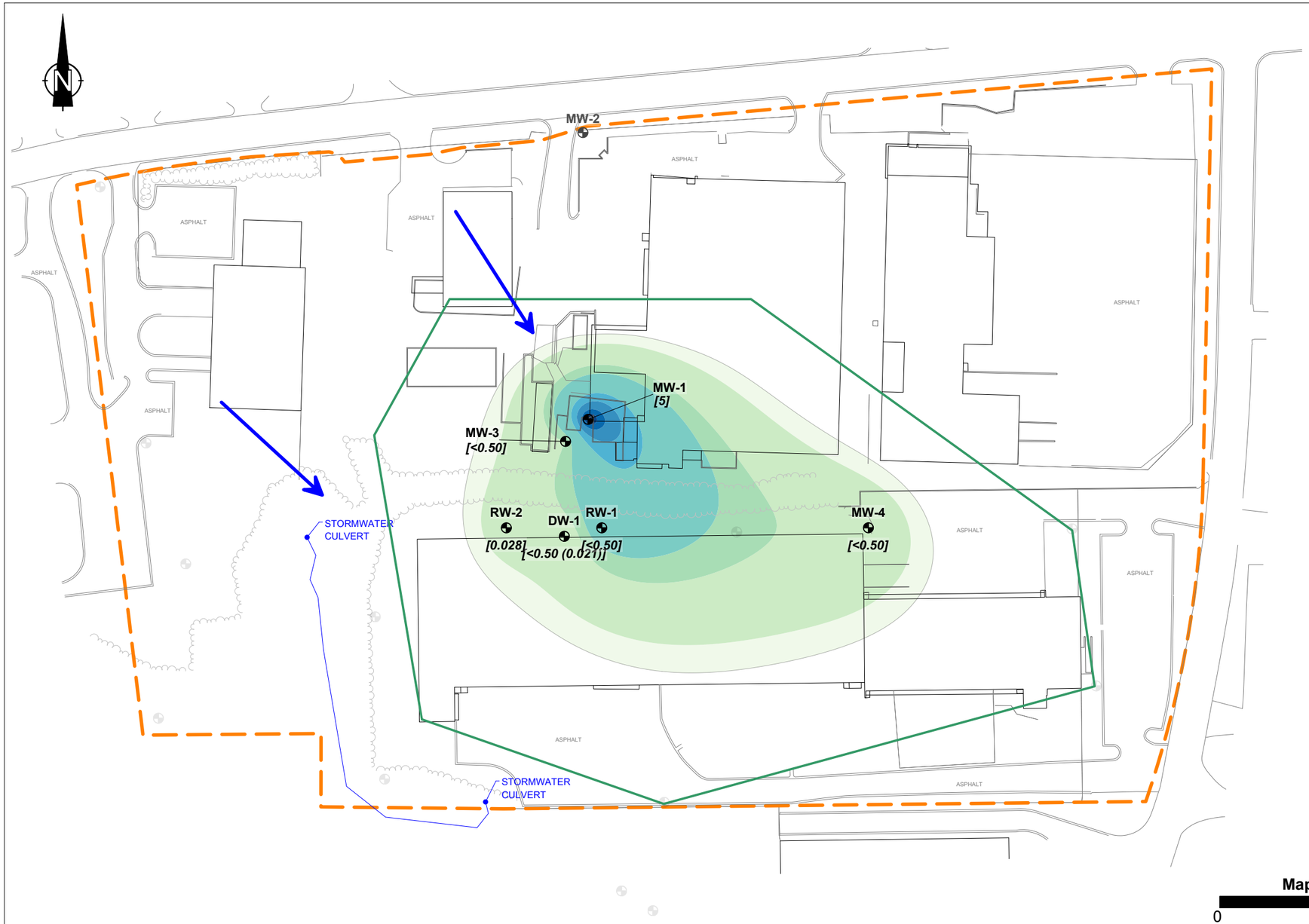
Apollo Plume
Tetrachloroethene (PCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: B19

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix C: Apollo Plume Series Isopleth Maps – Trichloroethene (TCE)



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.090 mg/L
Plume Mass Indicator: 6.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

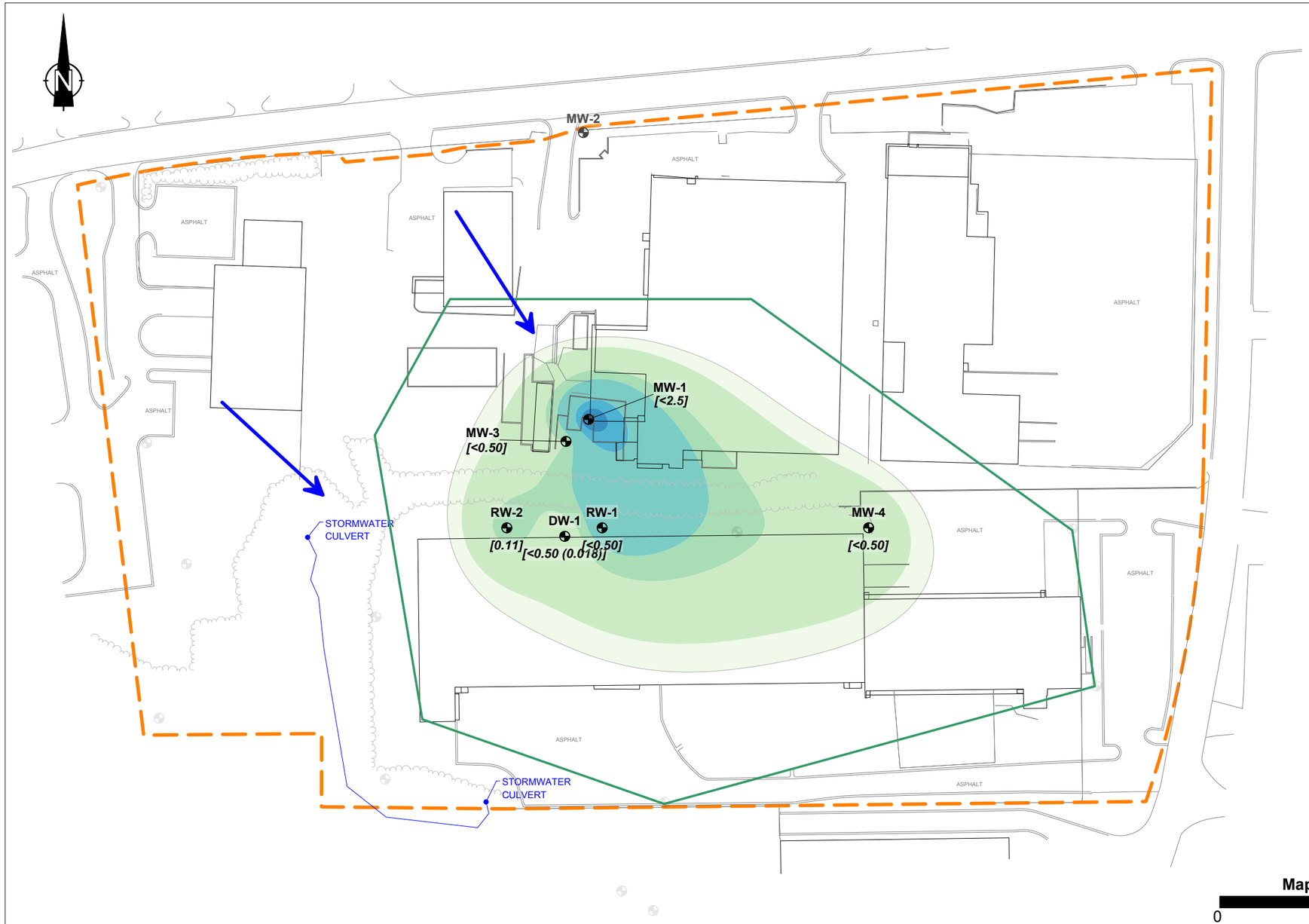
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Jan-2005

Prepared by: SSW Checked by: DW Figure: C1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.068 mg/L
Plume Mass Indicator: 4.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

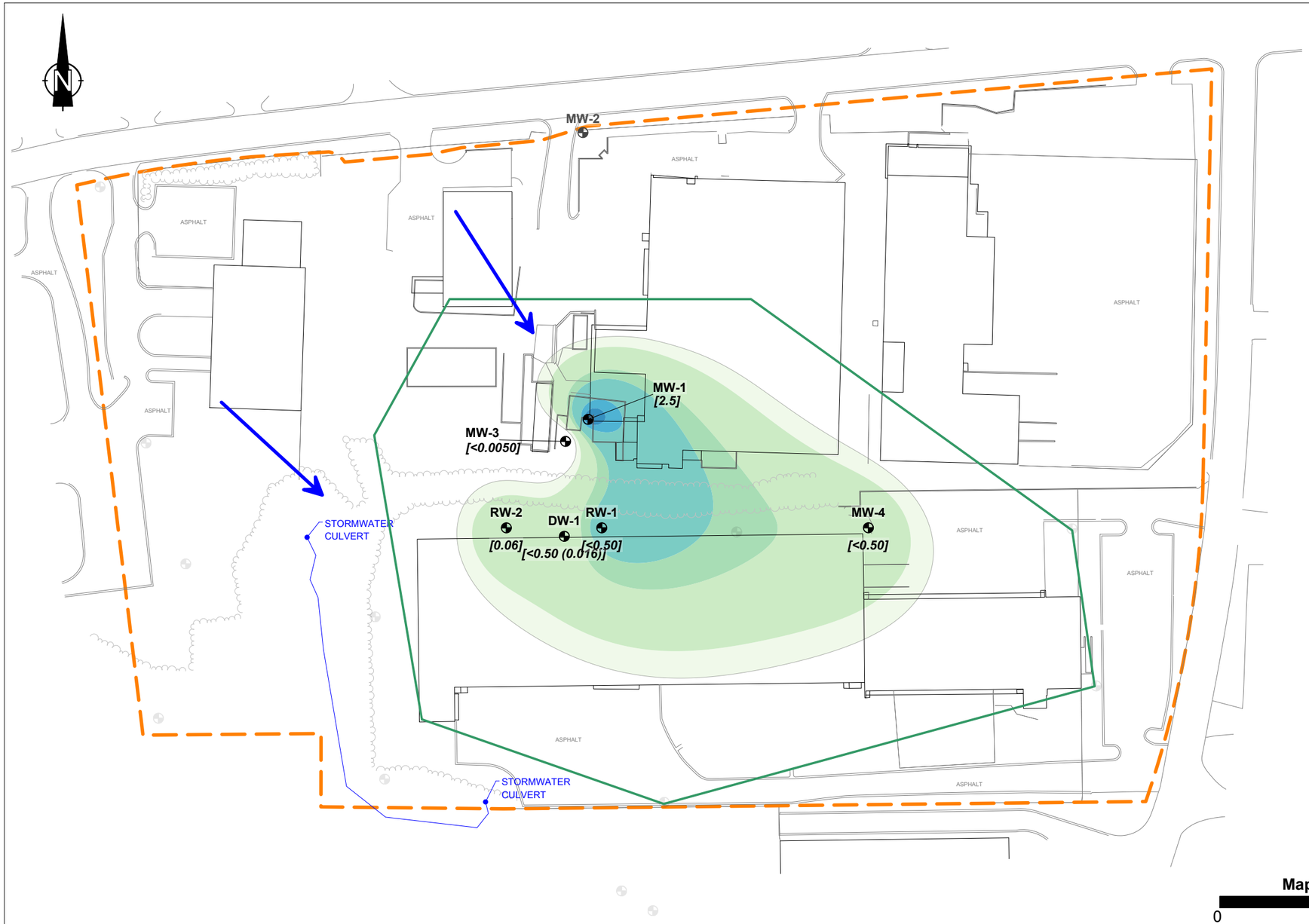
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Dec-2005

Prepared by: SSW Checked by: DW Figure: C2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.058 mg/L
Plume Mass Indicator: 3.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

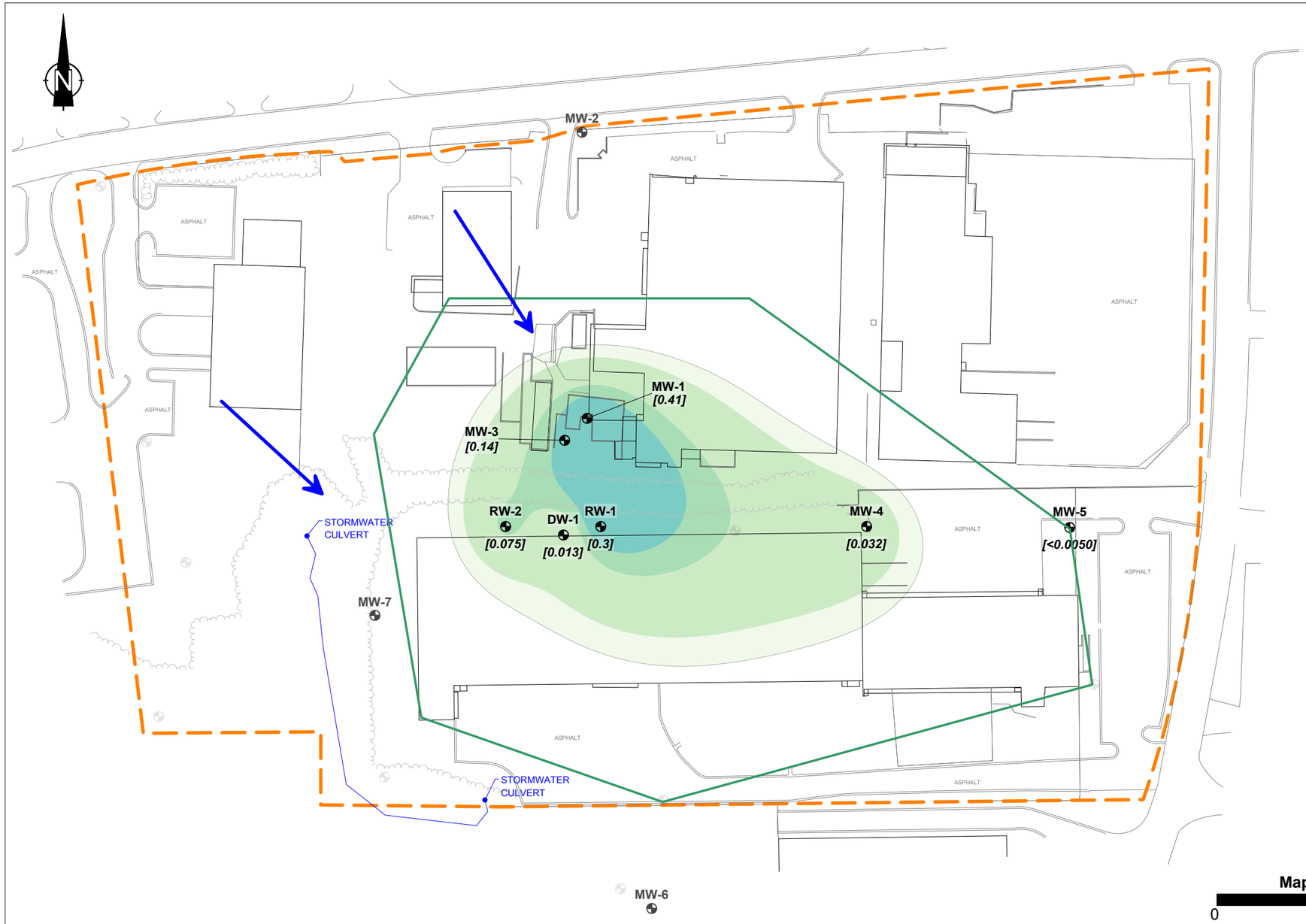
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Jul-2006

Prepared by: SSW Checked by: DW Figure: C3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.048 mg/L
Plume Mass Indicator: 3.1 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

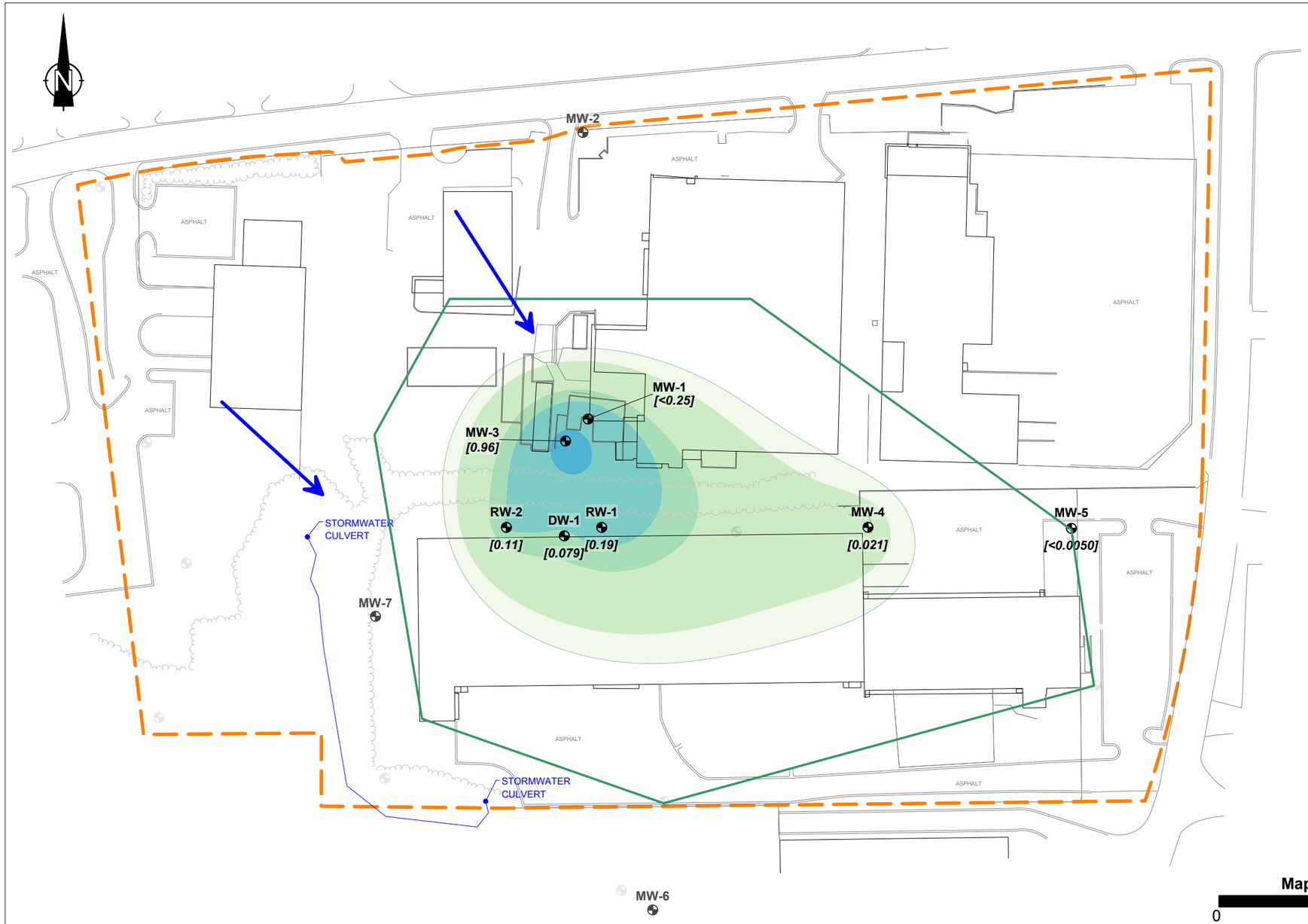
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Feb-2007

Prepared by: SSW Checked by: DW Figure: C4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.061 mg/L
Plume Mass Indicator: 3.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

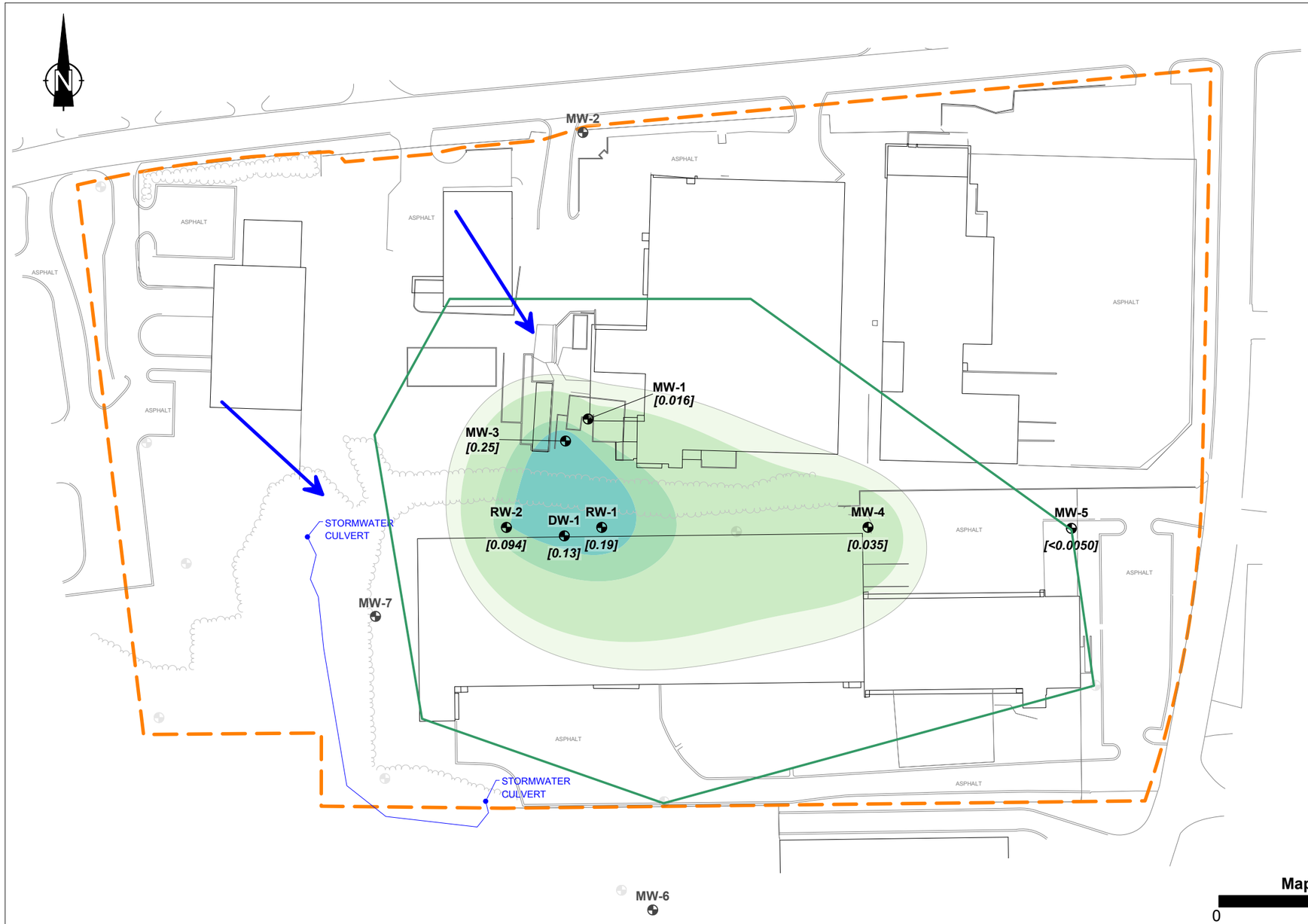
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Aug-2007

Prepared by: SSW Checked by: DW Figure: C5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.037 mg/L
Plume Mass Indicator: 2.3 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

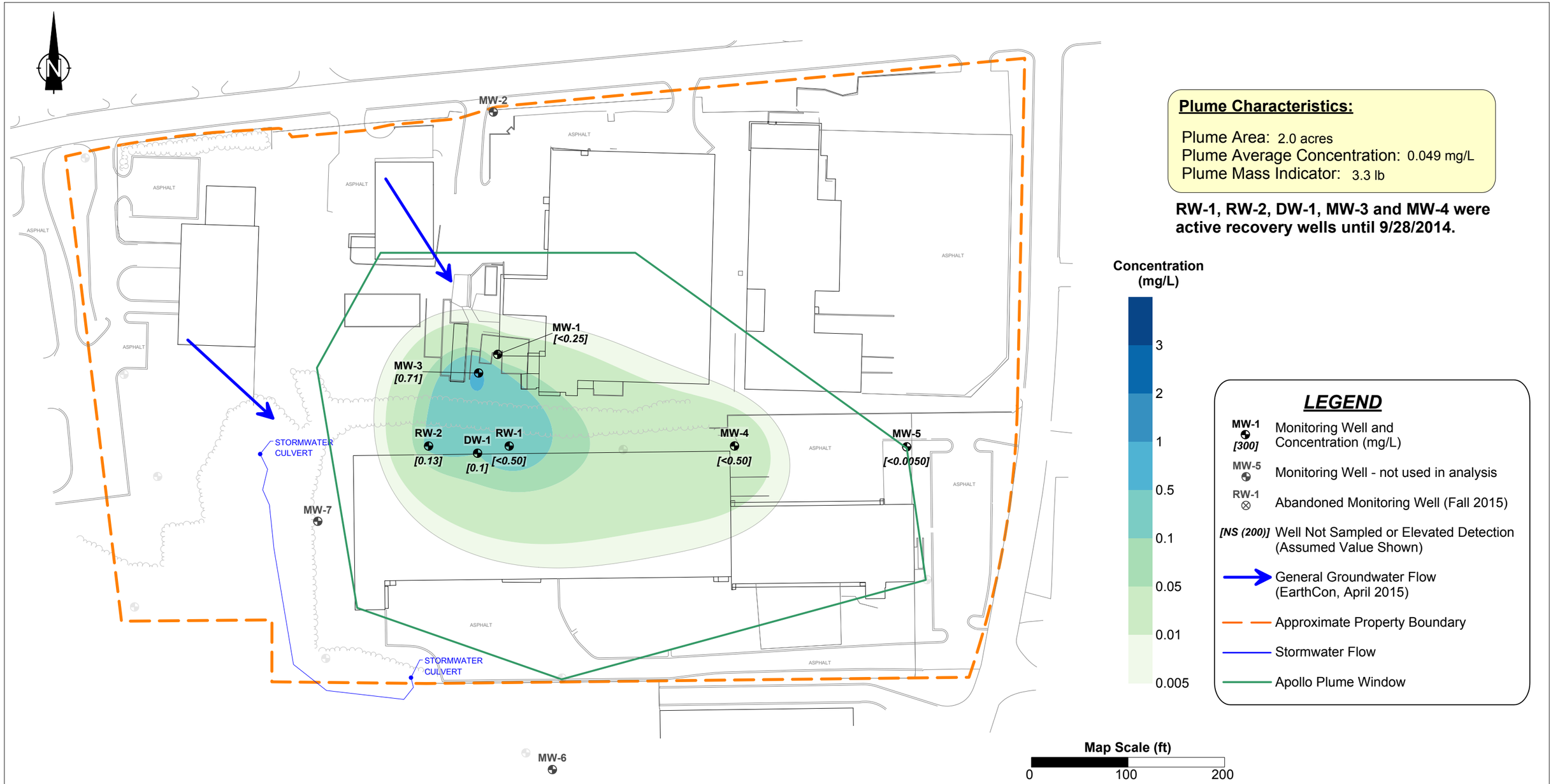
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Feb-2008

Prepared by: SSW Checked by: DW Figure: C6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.049 mg/L
Plume Mass Indicator: 3.3 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

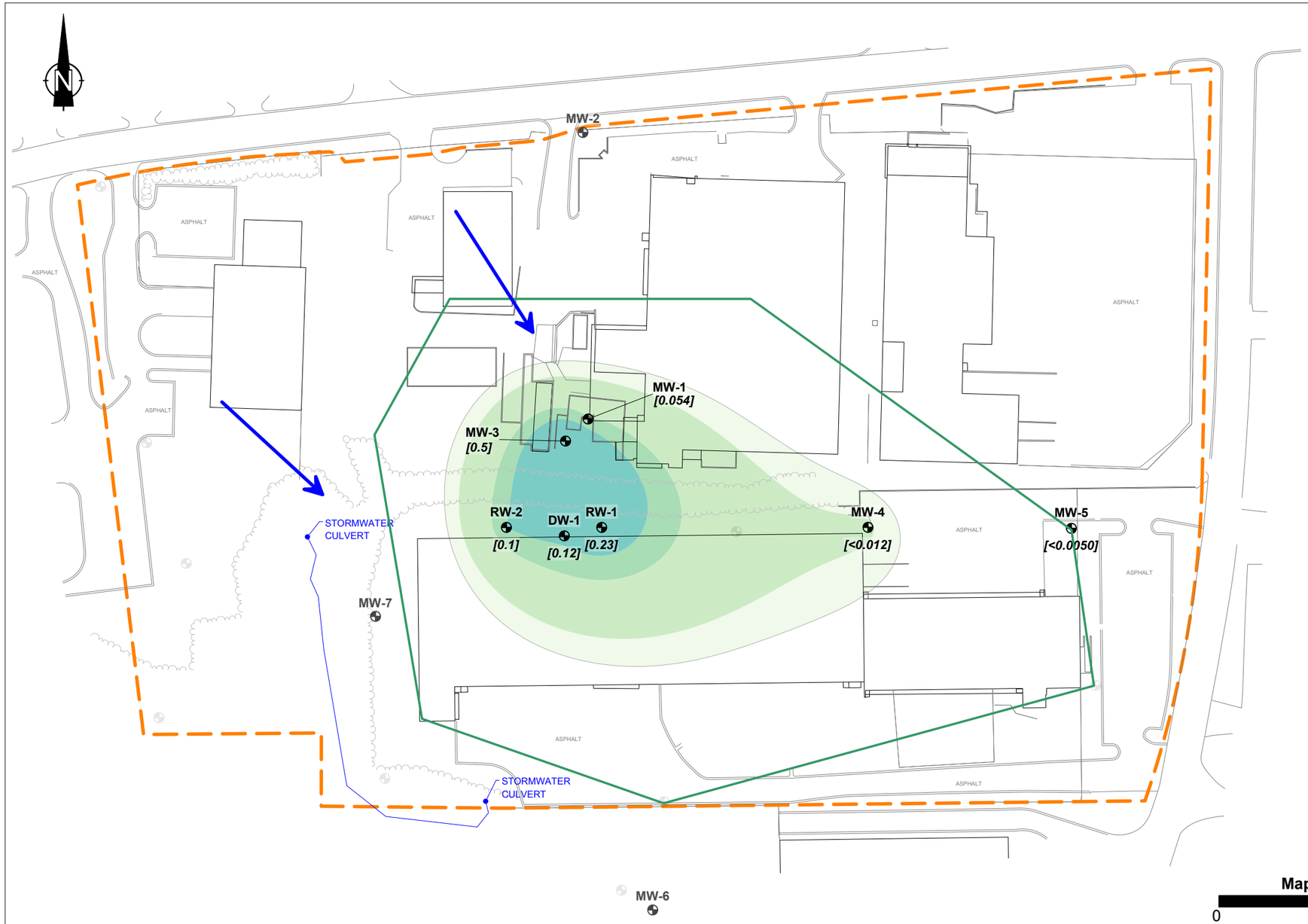
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Nov-2008

Prepared by: SSW Checked by: DW Figure: C7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.047 mg/L
Plume Mass Indicator: 2.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

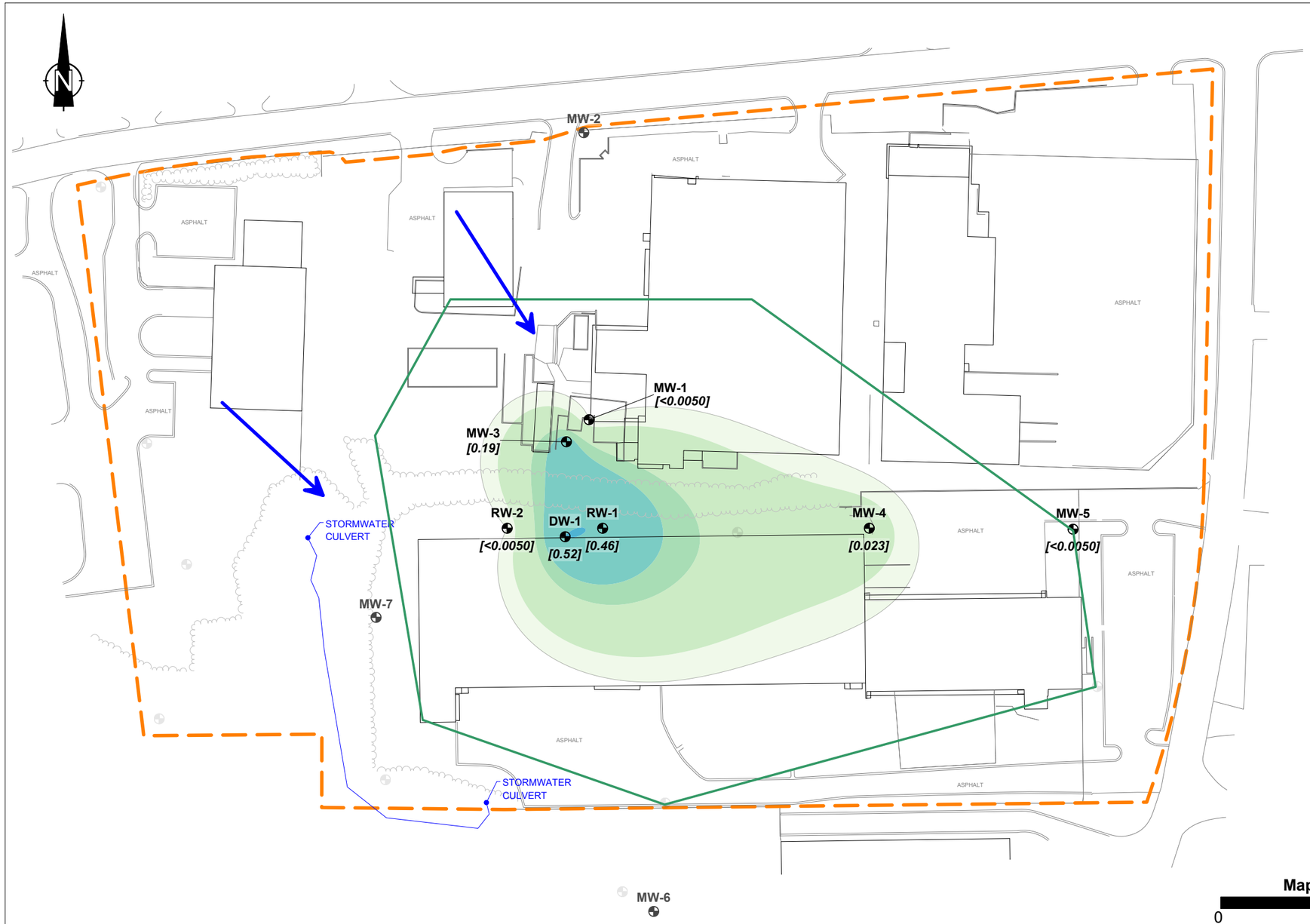
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Sep-2009

Prepared by: SSW Checked by: DW Figure: C8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.7 acres
Plume Average Concentration: 0.048 mg/L
Plume Mass Indicator: 2.7 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

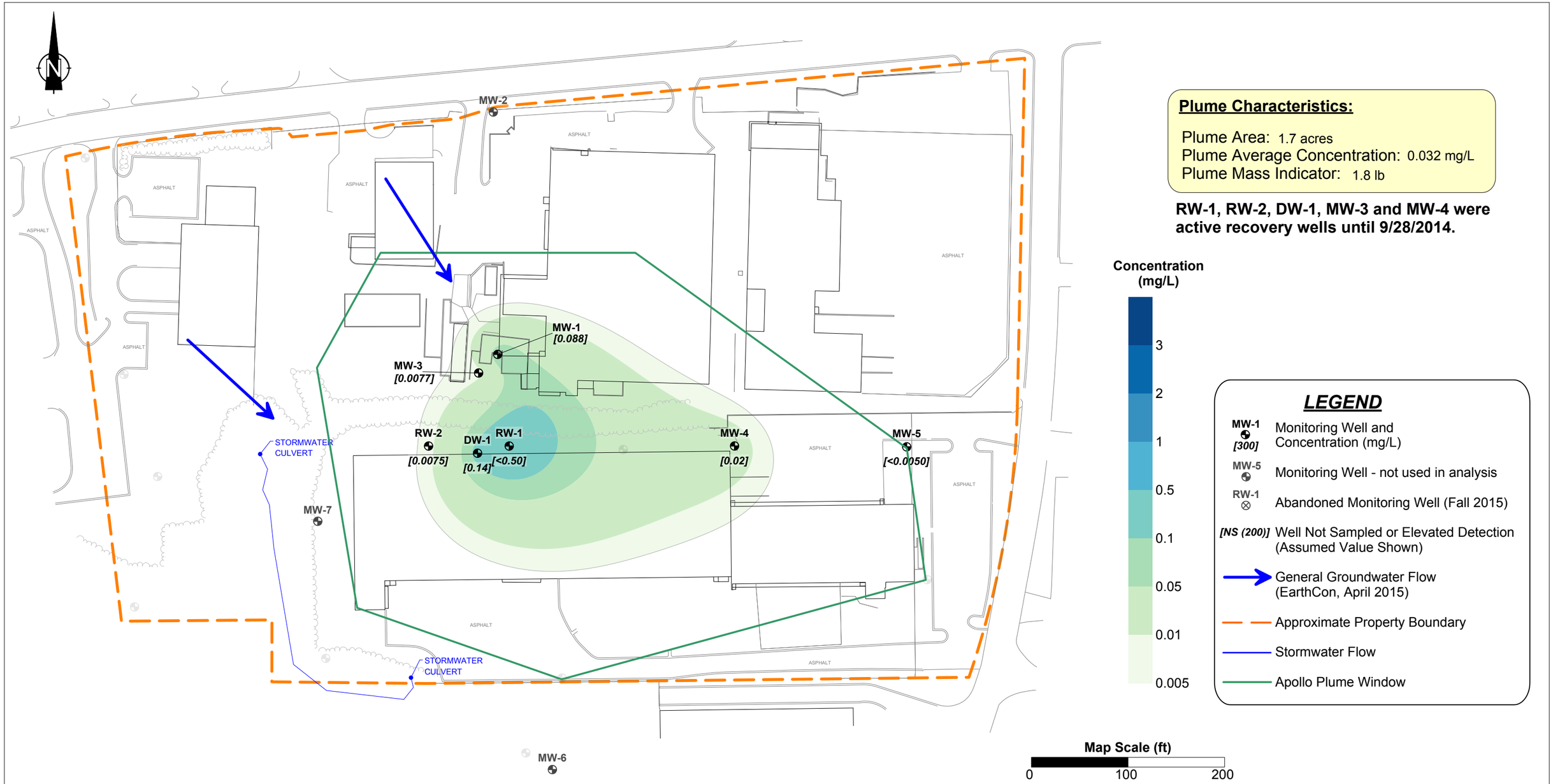
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Mar-2010

Prepared by: SSW Checked by: DW Figure: C9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.7 acres
Plume Average Concentration: 0.032 mg/L
Plume Mass Indicator: 1.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

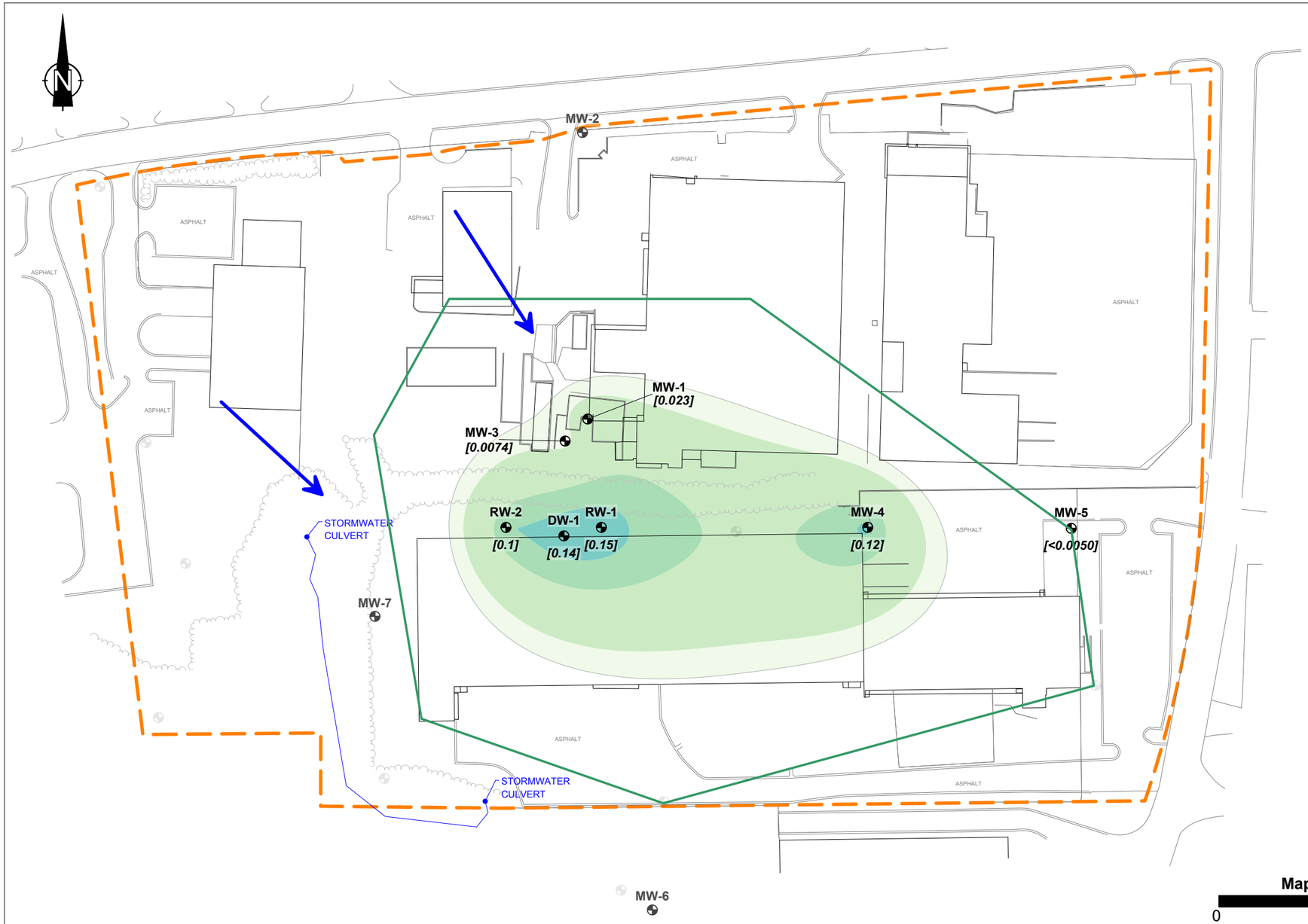
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Sep-2010

Prepared by: SSW Checked by: DW Figure: C10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.032 mg/L
Plume Mass Indicator: 2.1 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

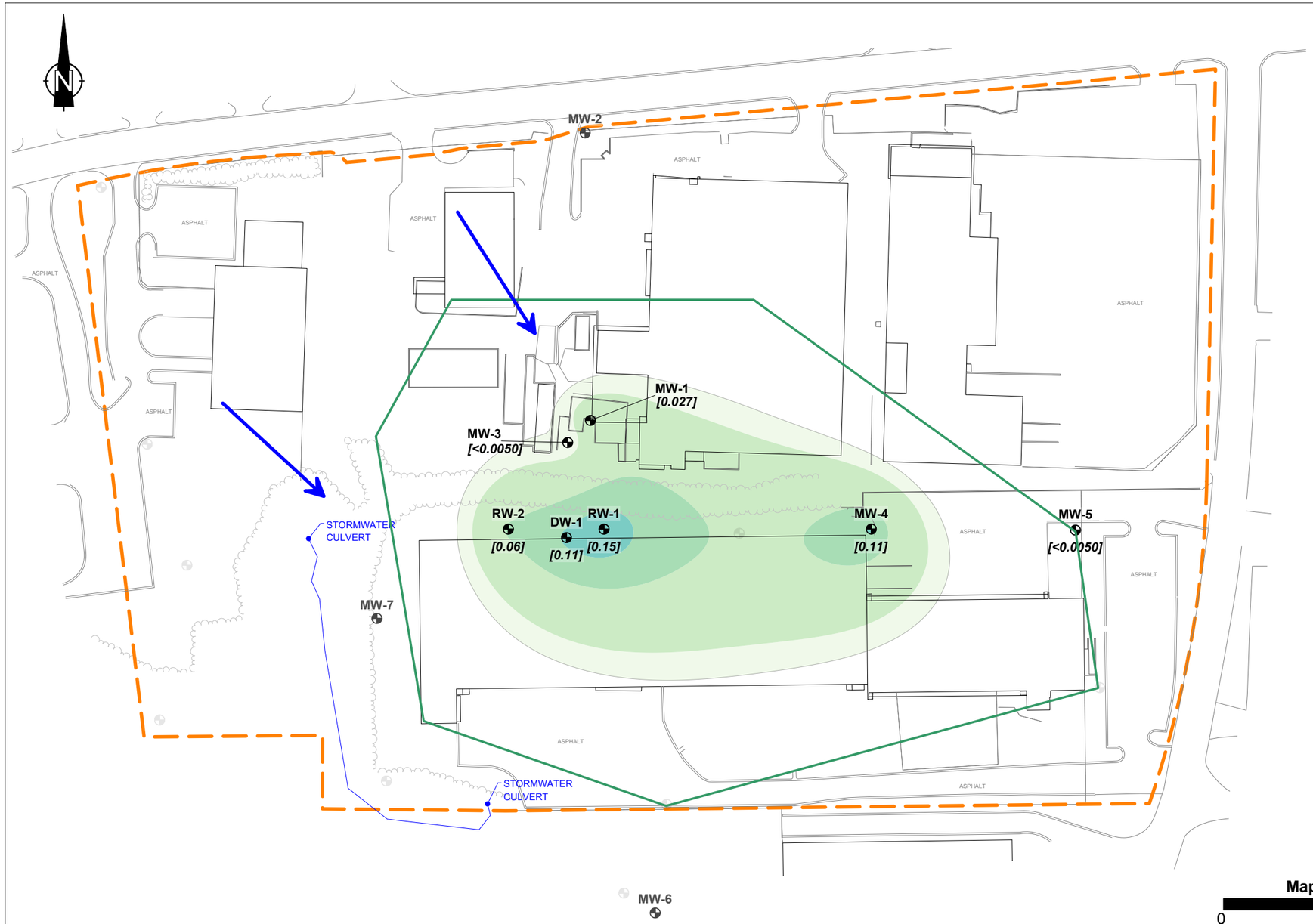
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Apr-2011

Prepared by: SSW Checked by: DW Figure: C11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.030 mg/L
Plume Mass Indicator: 2.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

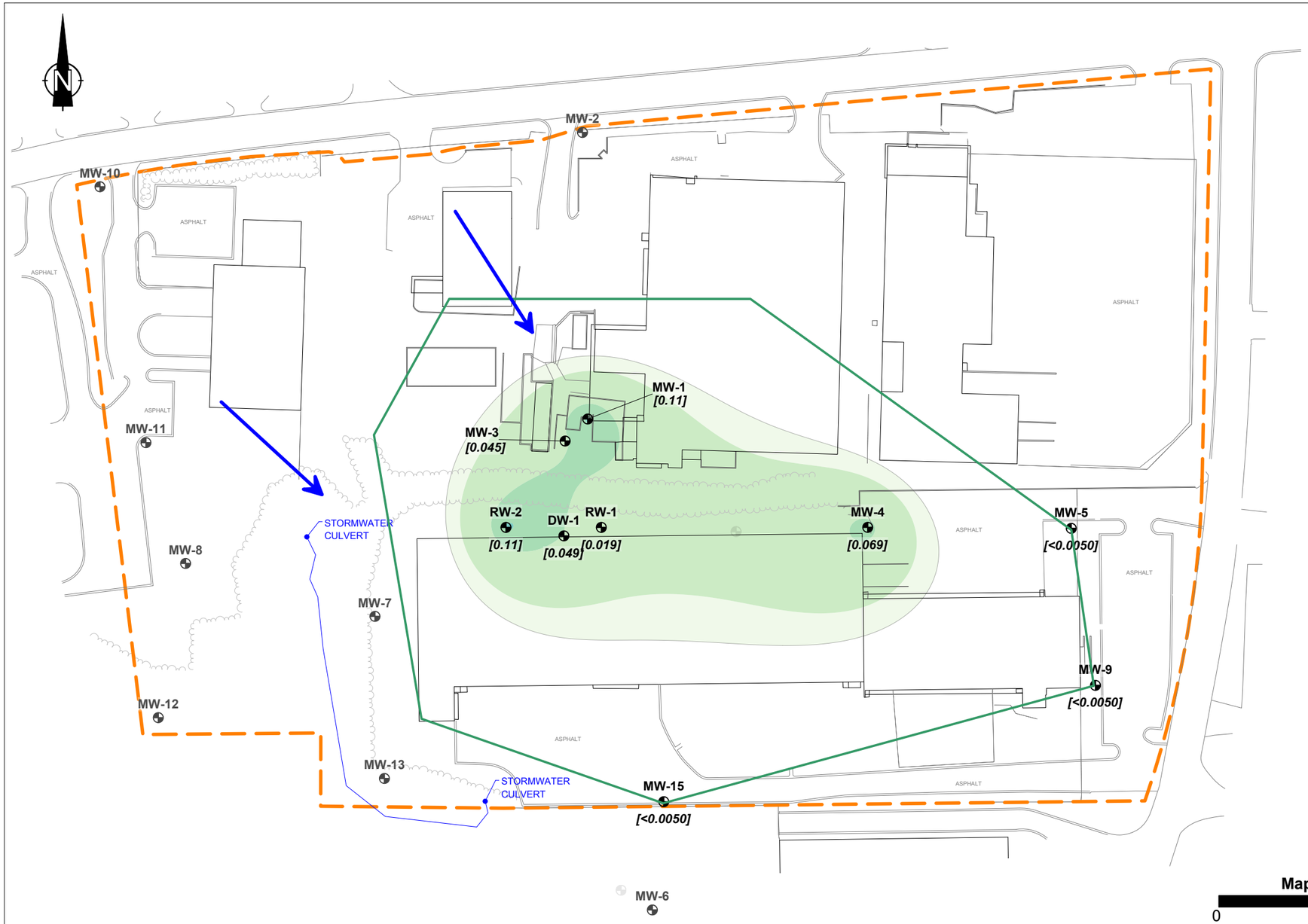
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Oct-2011

Prepared by: SSW Checked by: DW Figure: C12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.021 mg/L
Plume Mass Indicator: 1.3 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

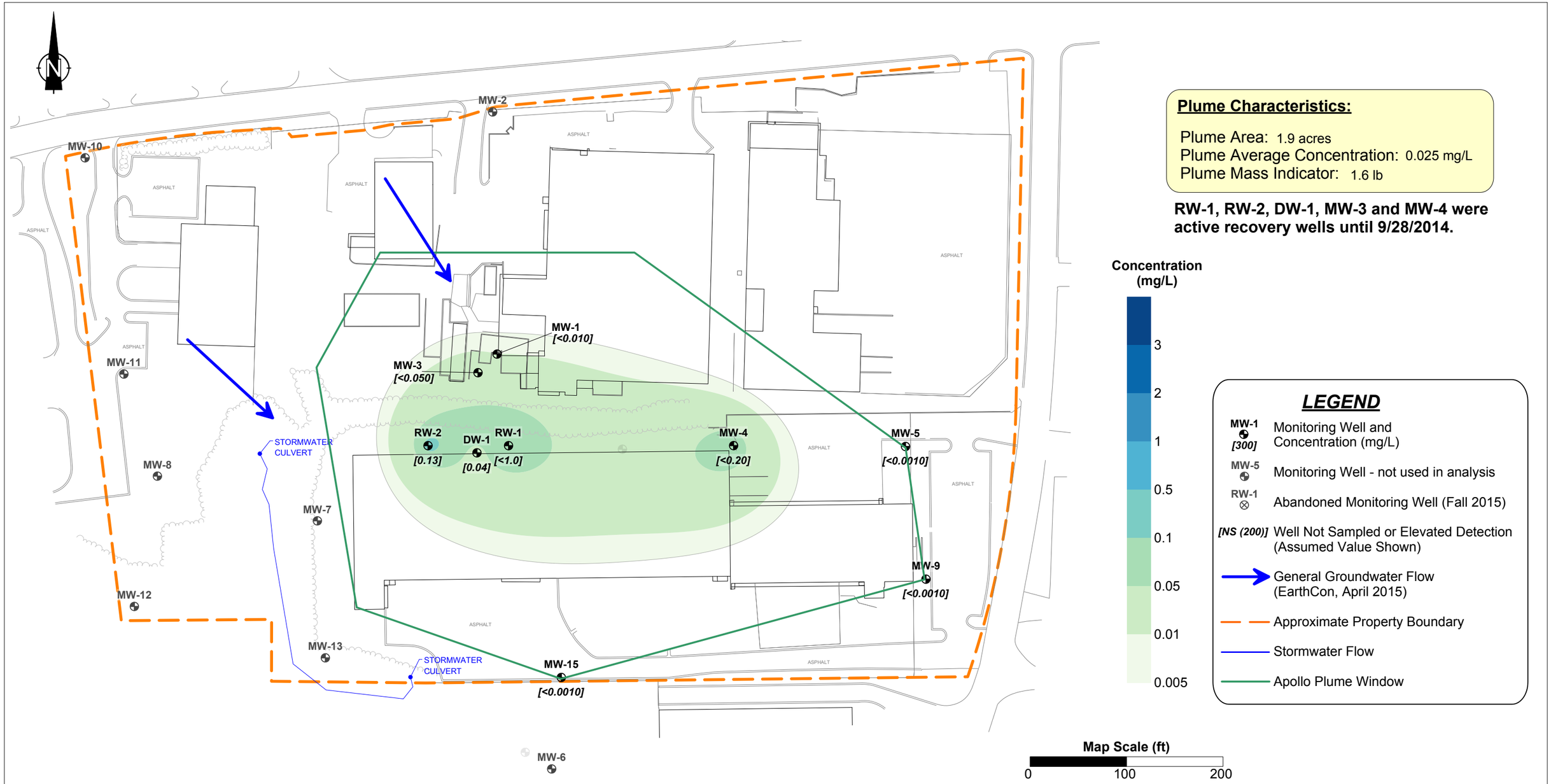
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Sep-2012

Prepared by: SSW Checked by: DW Figure: C13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.025 mg/L
Plume Mass Indicator: 1.6 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

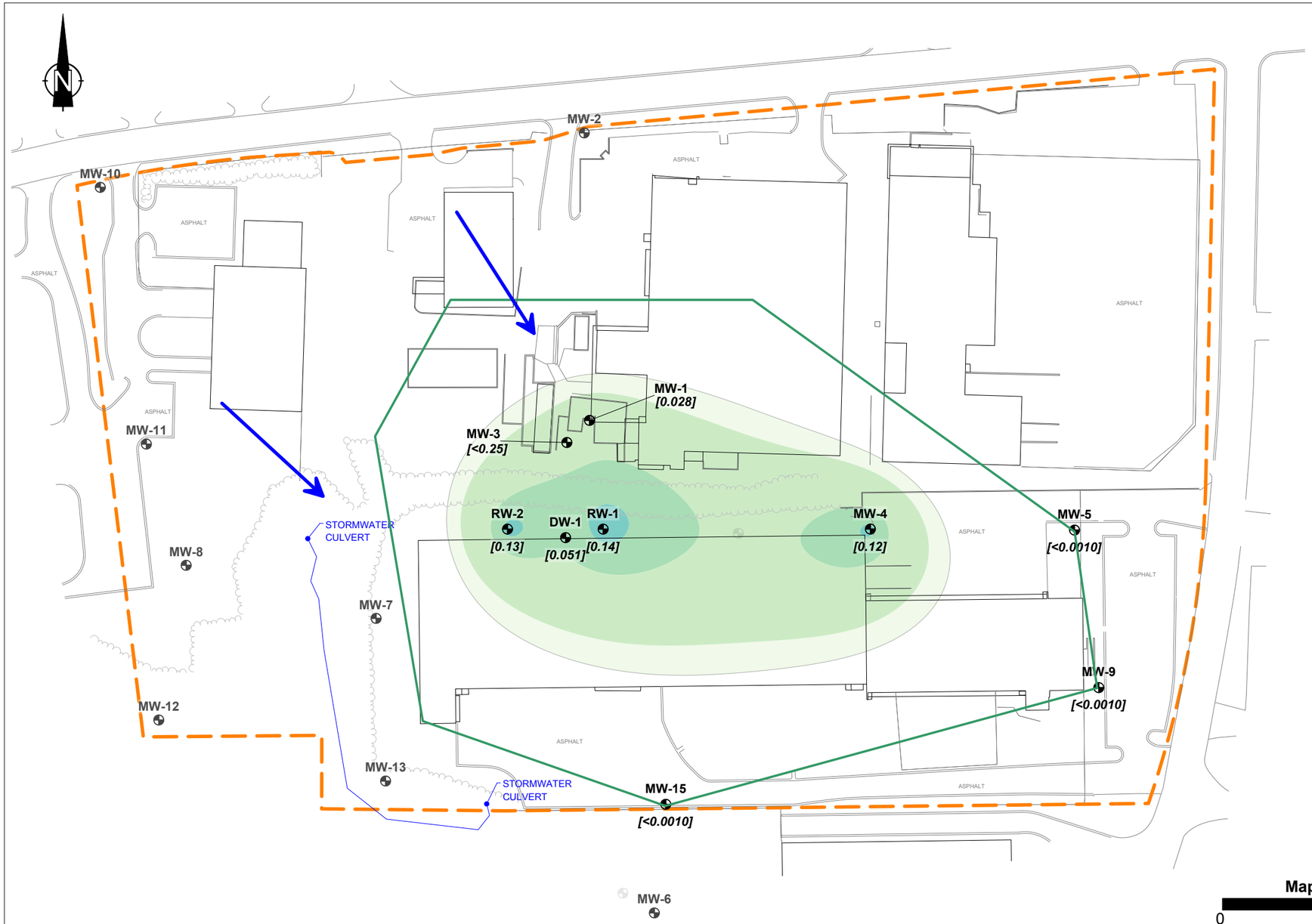
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Jun-2013

Prepared by: SSW Checked by: DW Figure: C14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.030 mg/L
Plume Mass Indicator: 2.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

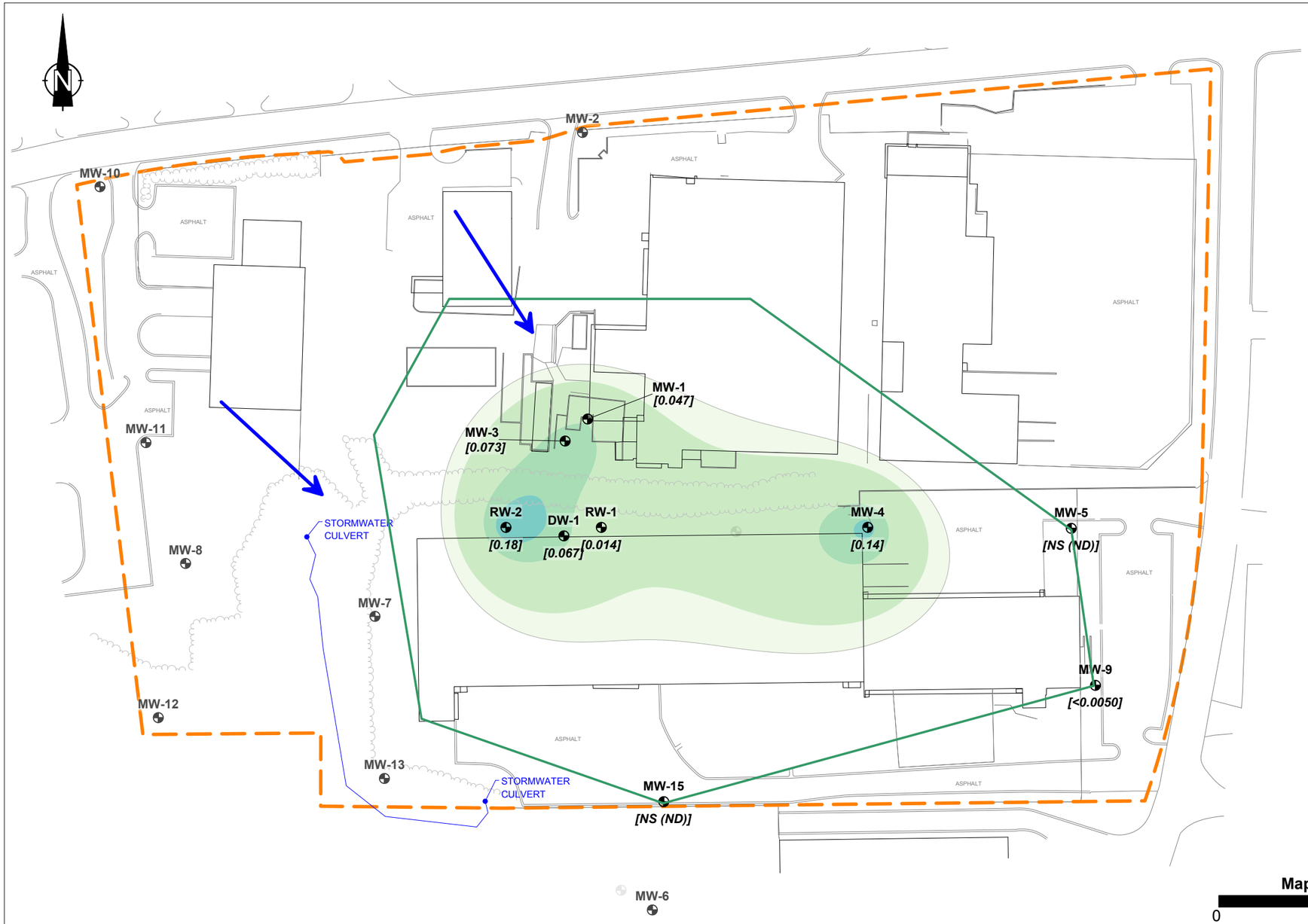
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Dec-2013

Prepared by: SSW Checked by: DW Figure: C15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.024 mg/L
Plume Mass Indicator: 1.6 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

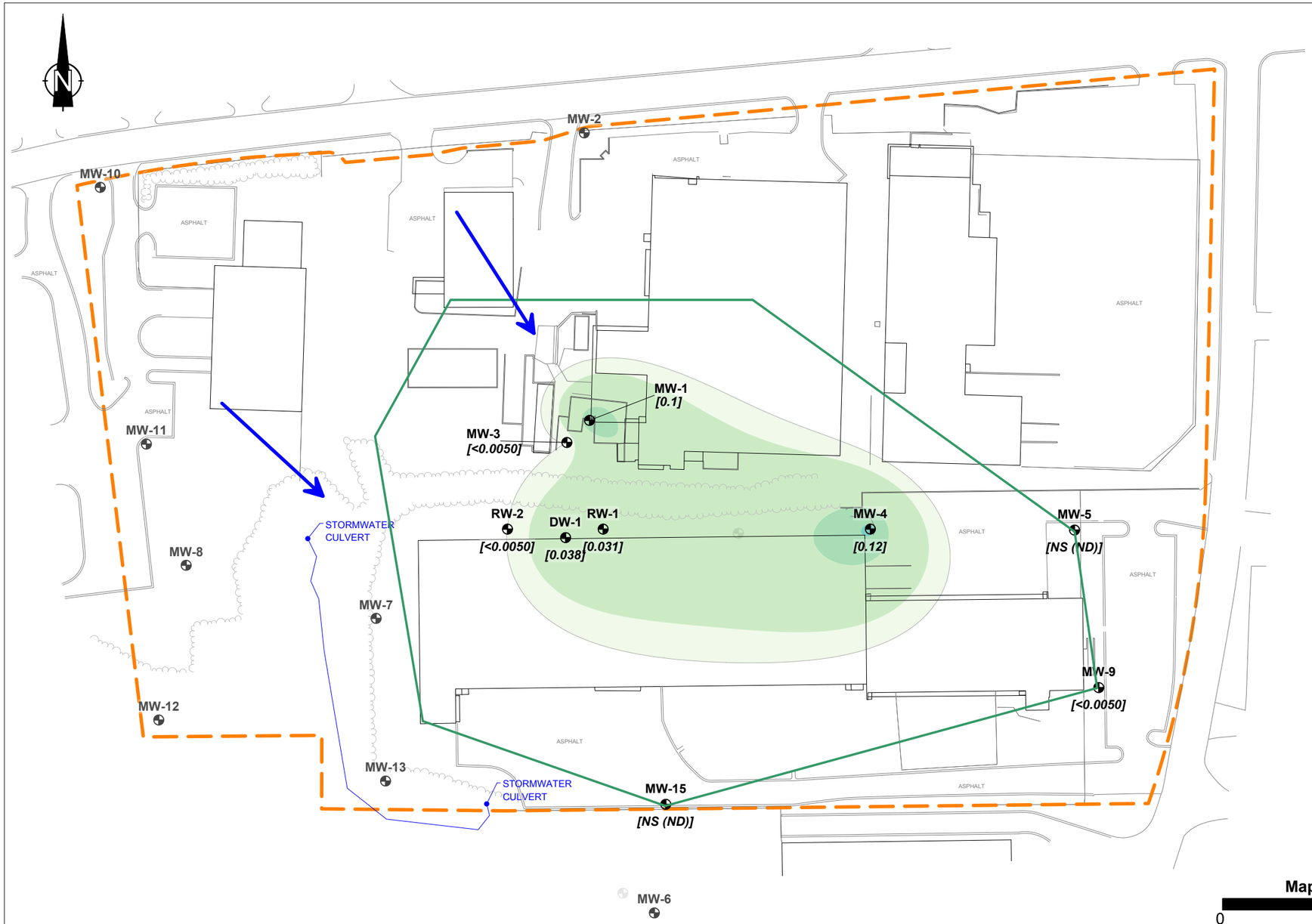
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Oct-2014

Prepared by: SSW Checked by: DW Figure: C16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.7 acres
Plume Average Concentration: 0.021 mg/L
Plume Mass Indicator: 1.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

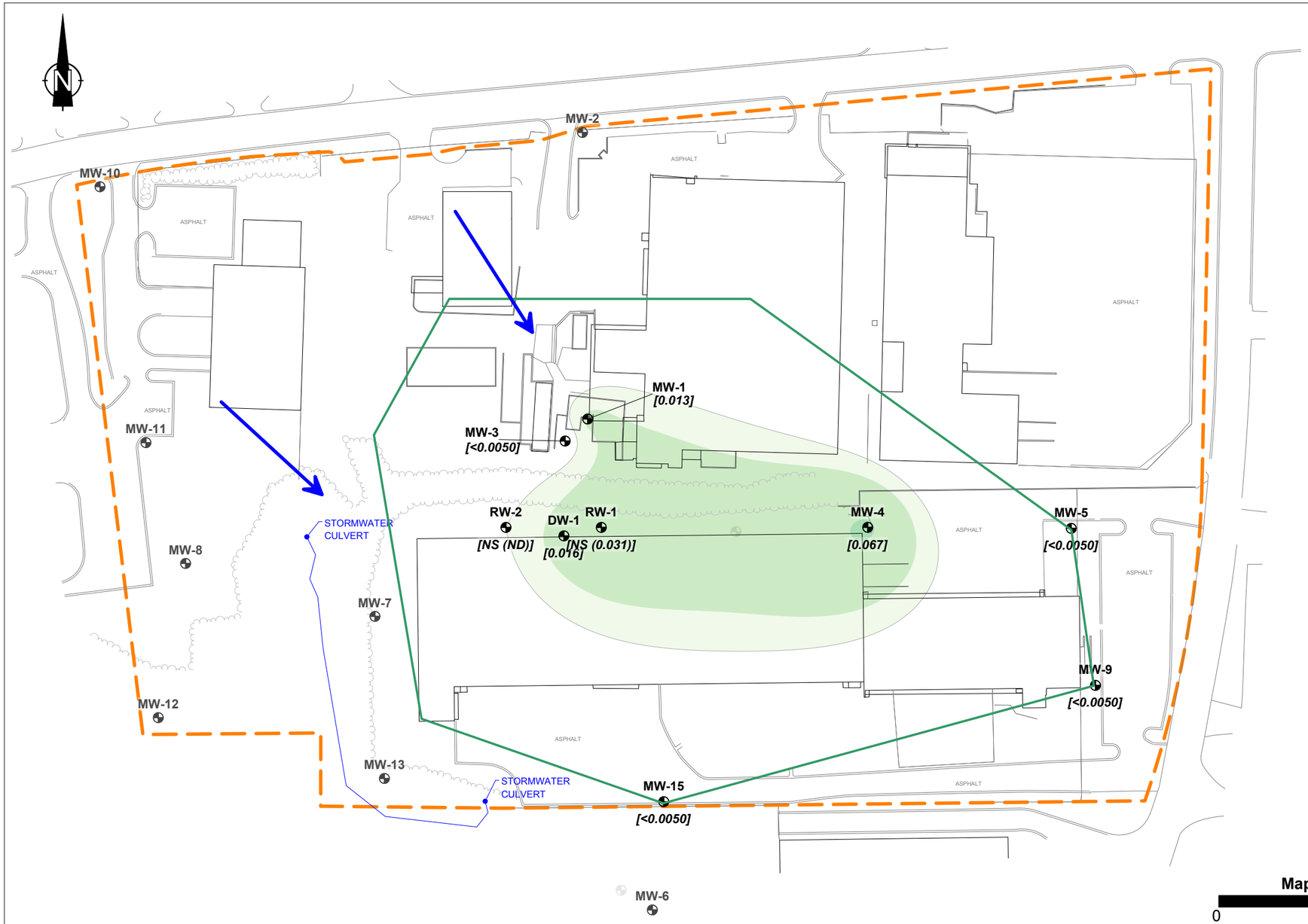
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Jan-2015

Prepared by: SSW Checked by: DW Figure: C17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.5 acres
Plume Average Concentration: 0.015 mg/L
Plume Mass Indicator: 0.72 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

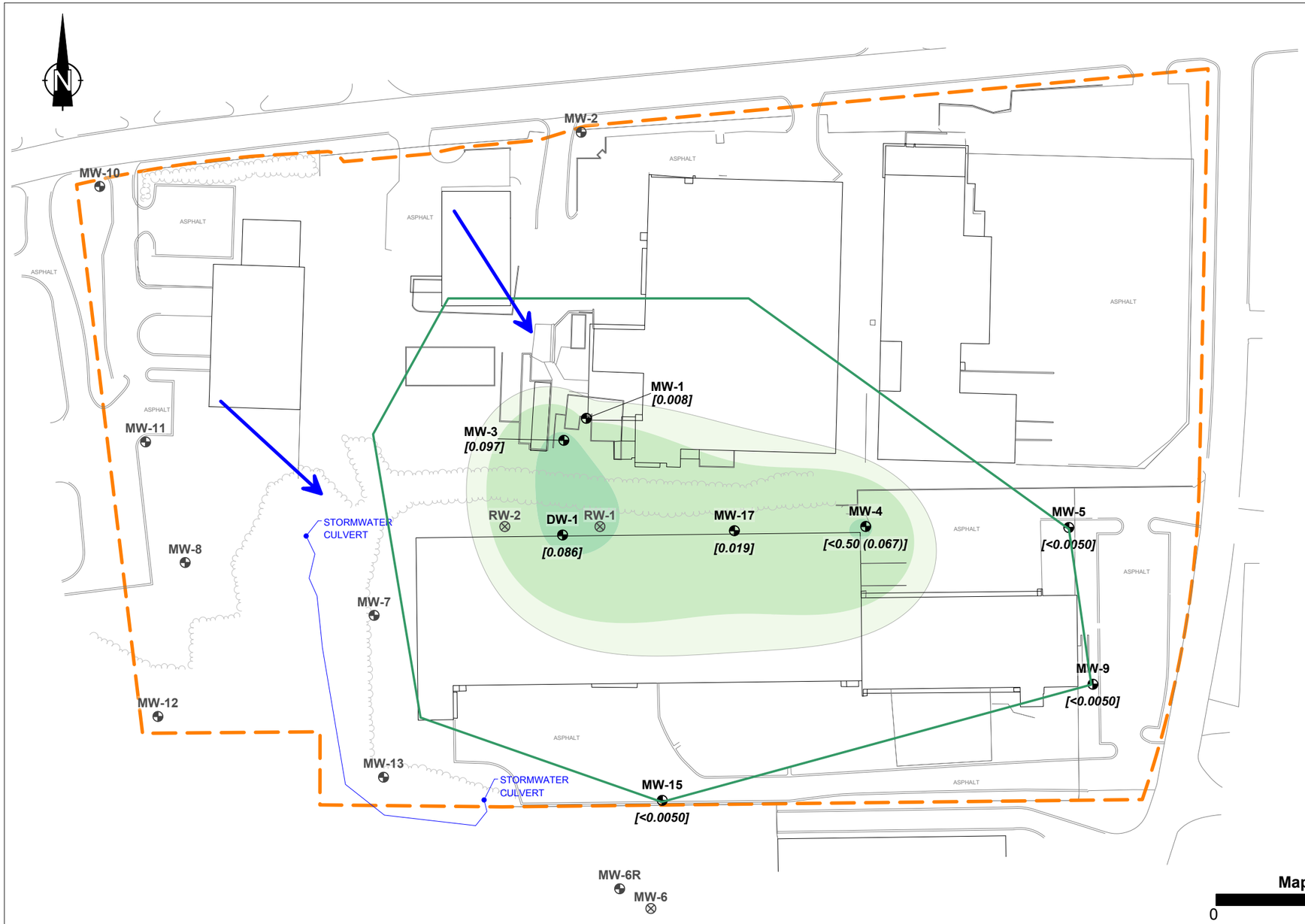
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Trichloroethene (TCE)
Apr-2015

Prepared by: SSW Checked by: DW Figure: C18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.7 acres
Plume Average Concentration: 0.021 mg/L
Plume Mass Indicator: 1.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.005

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

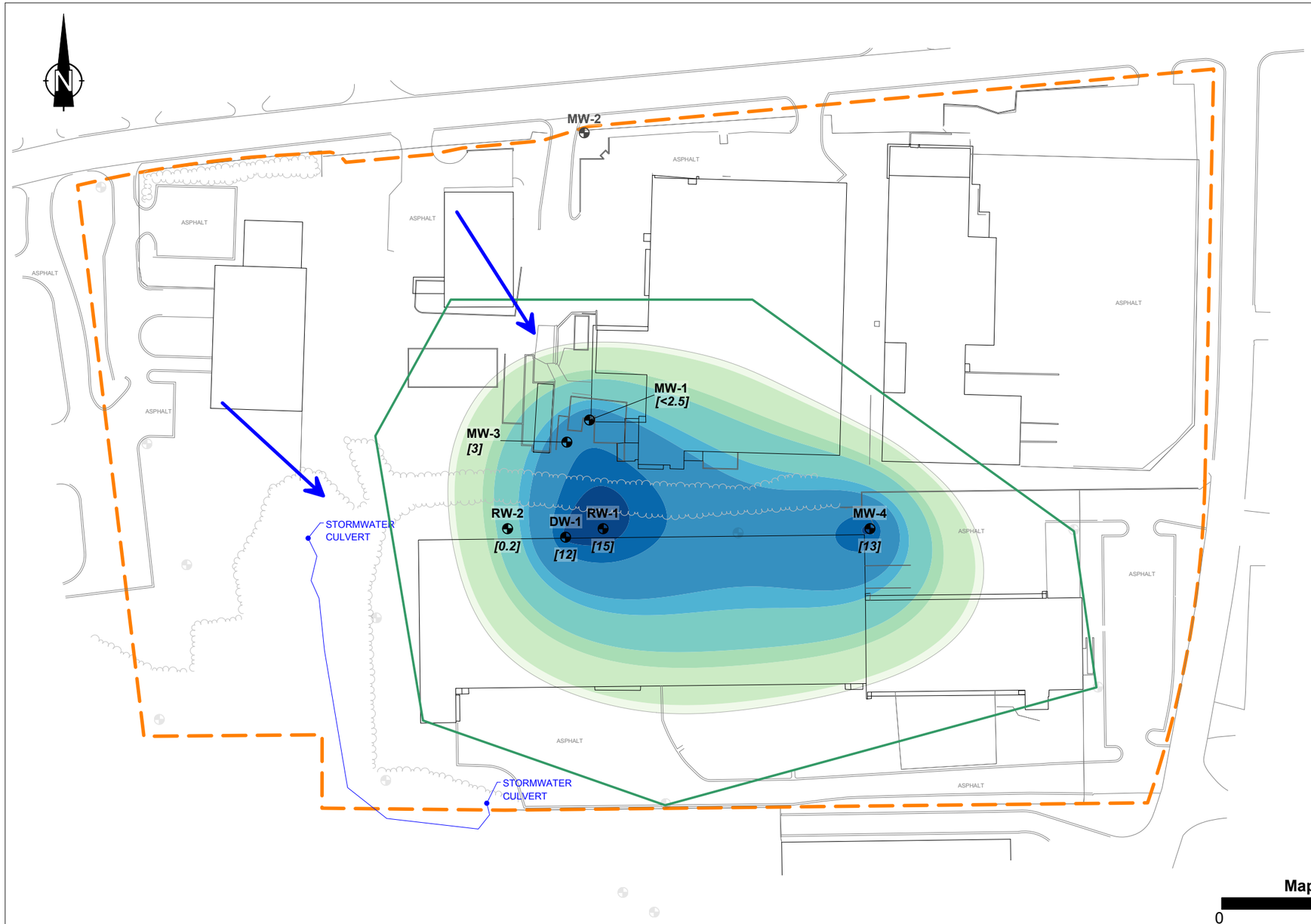
Apollo Plume
Trichloroethene (TCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: C19

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix D: Apollo Plume Series Isopleth Maps – 1,1-Dichloroethene (1,1-DCE)



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.3 mg/L
Plume Mass Indicator: 114 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

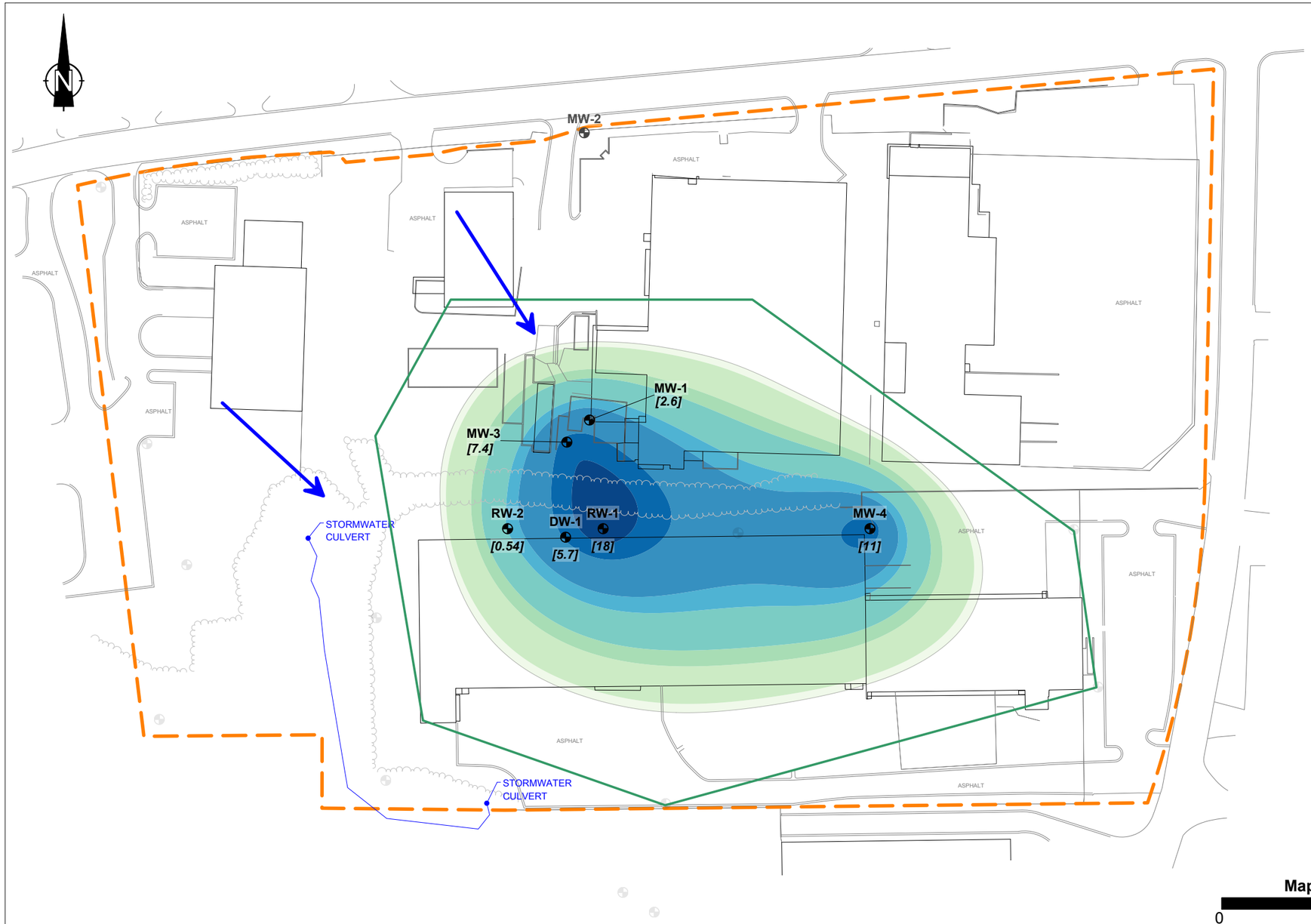
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Jan-2005

Prepared by: SSW Checked by: DW Figure: D1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.4 mg/L
Plume Mass Indicator: 123 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

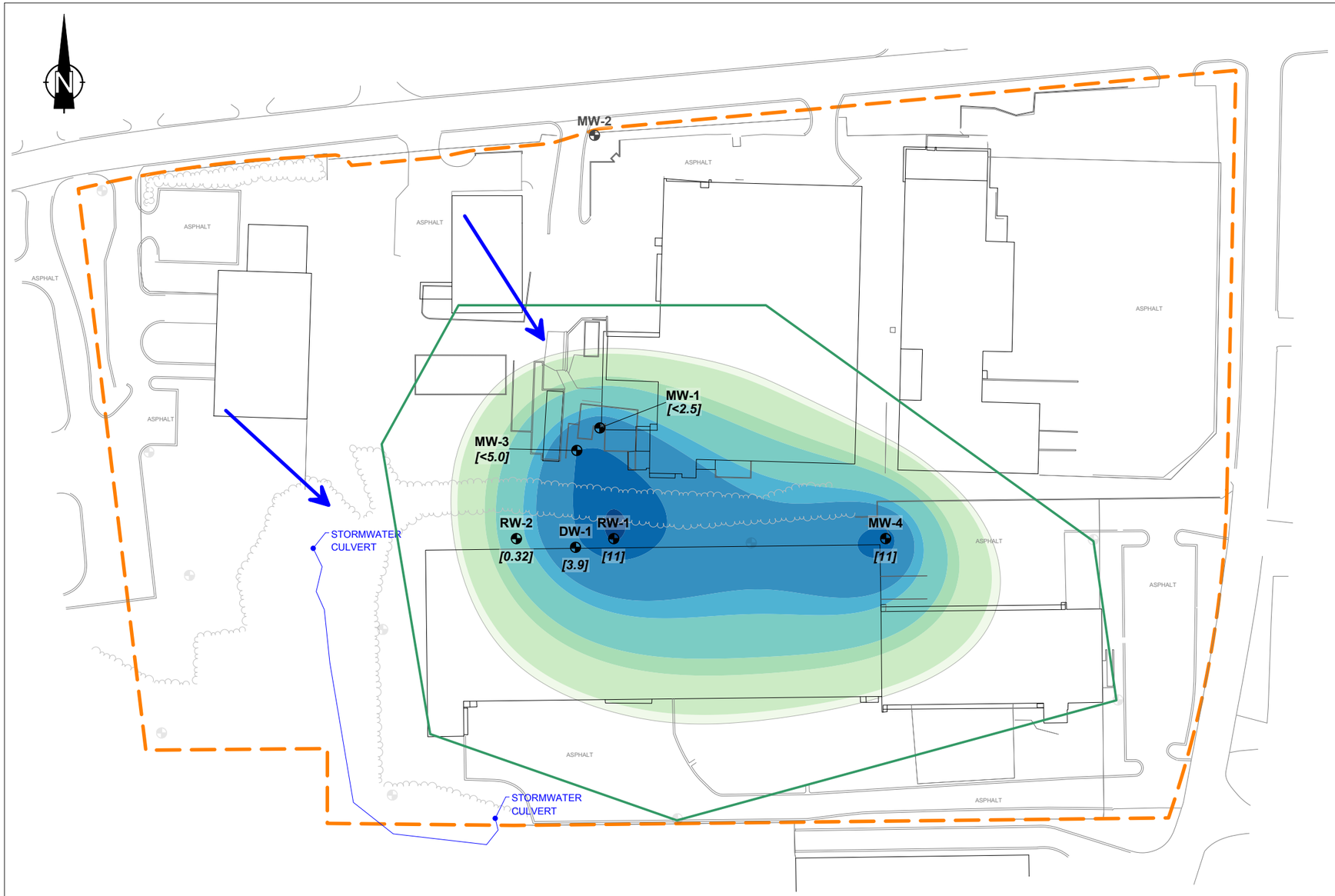
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Dec-2005

Prepared by: SSW Checked by: DW Figure: D2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.0 mg/L
Plume Mass Indicator: 93 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

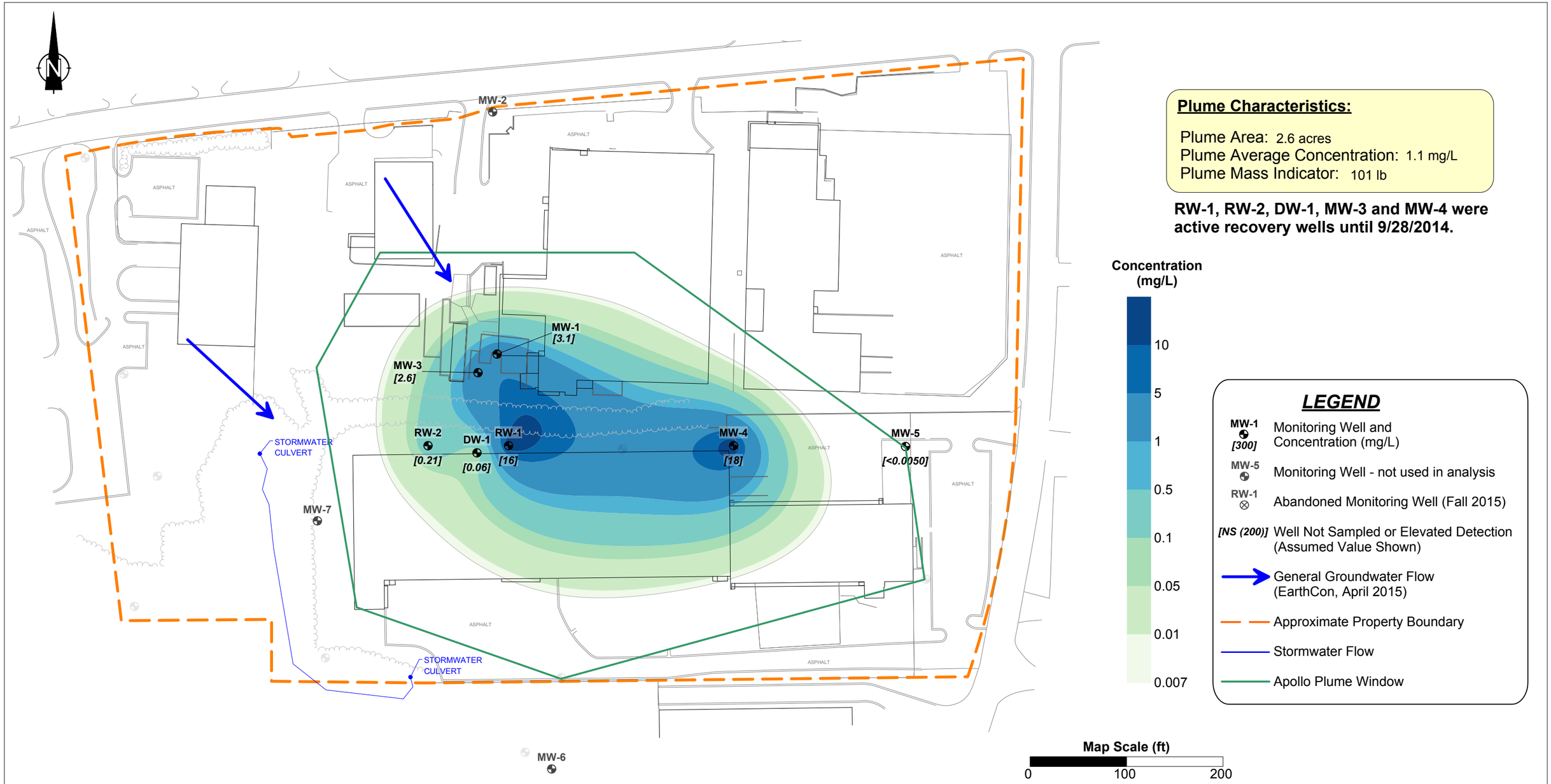
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Jul-2006

Prepared by: SSW Checked by: DW Figure: D3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.6 acres
Plume Average Concentration: 1.1 mg/L
Plume Mass Indicator: 101 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

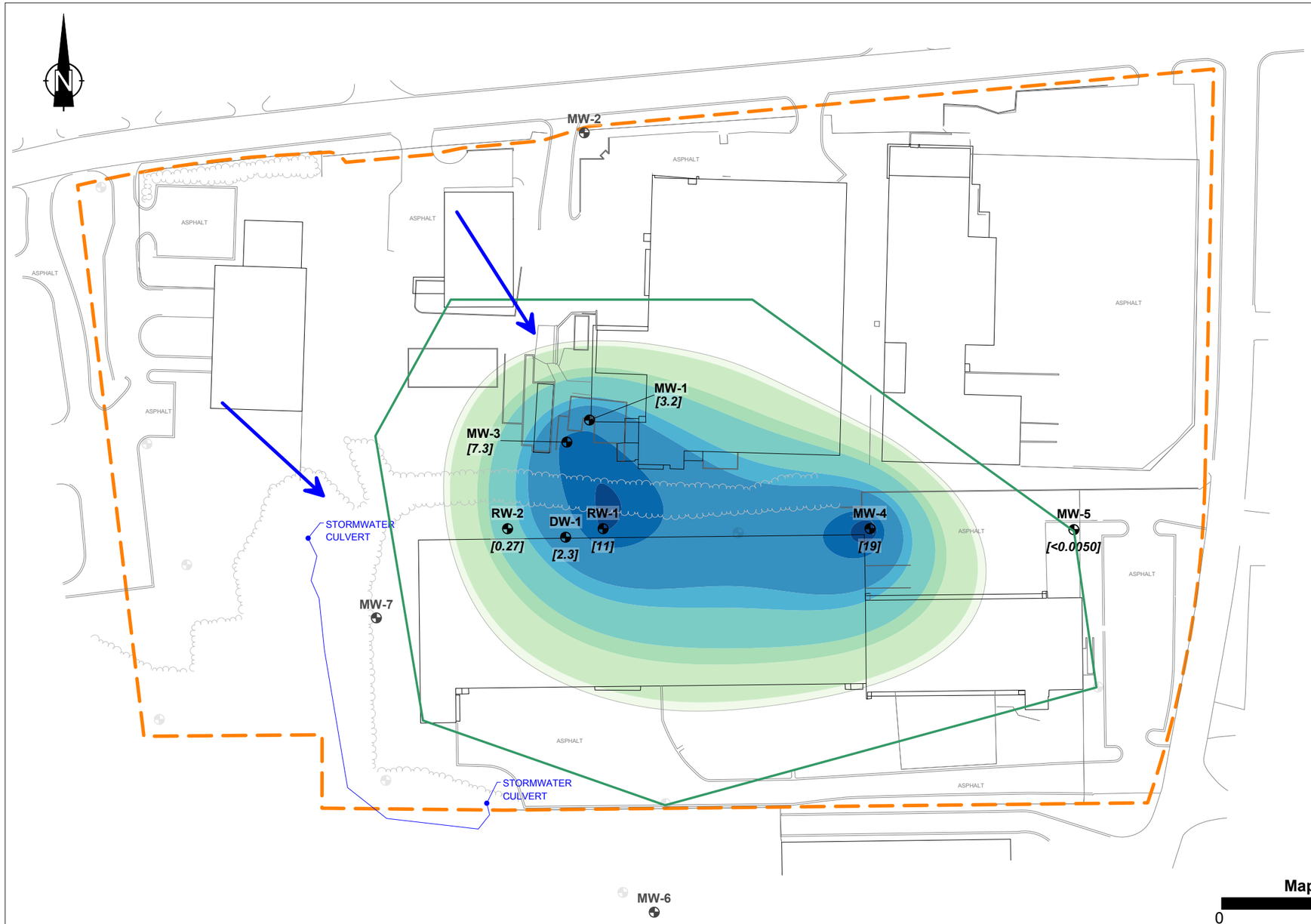
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Feb-2007

Prepared by: SSW Checked by: DW Figure: D4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.2 mg/L
Plume Mass Indicator: 110 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

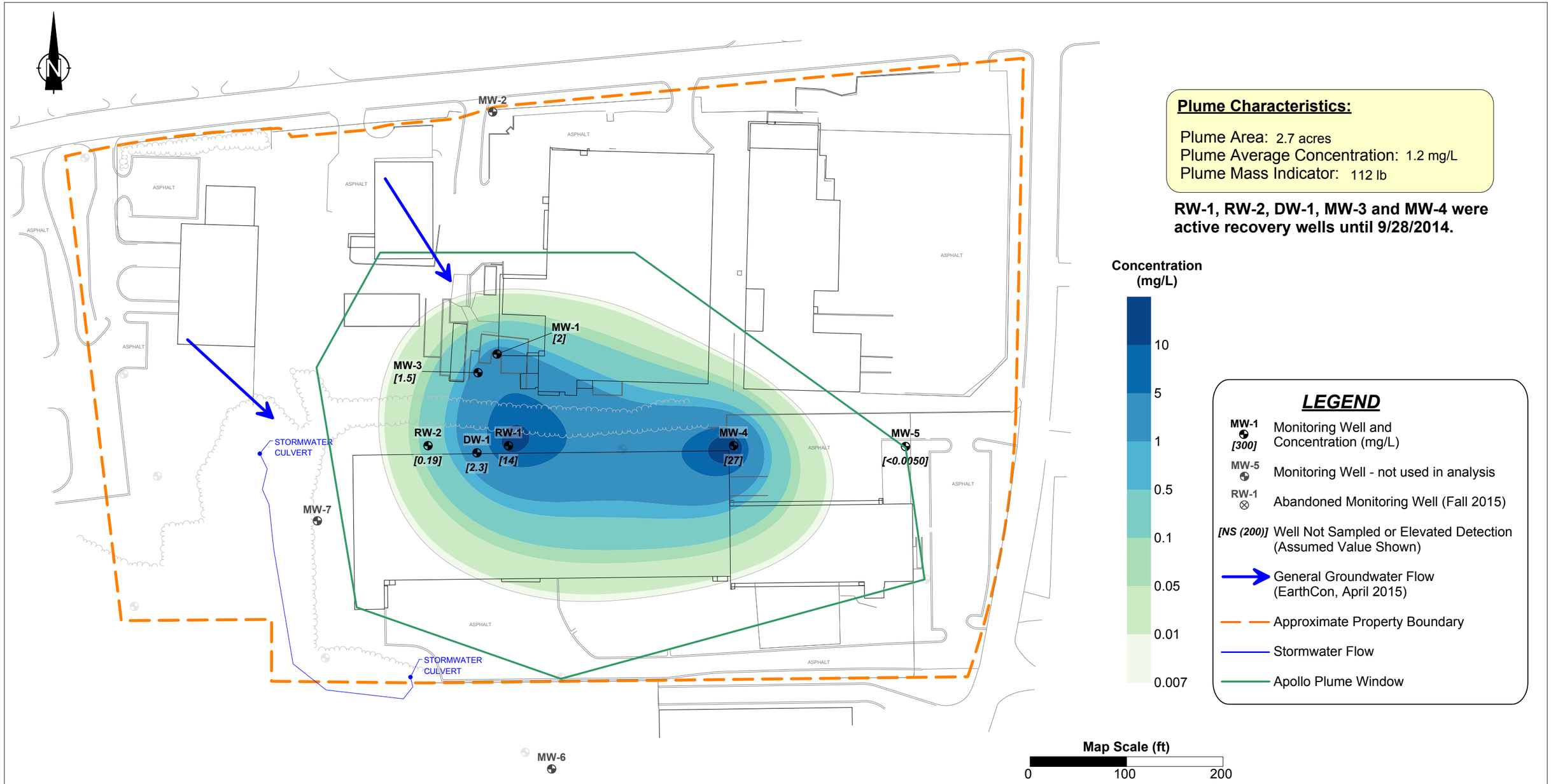
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Aug-2007

Prepared by: SSW Checked by: DW Figure: D5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.2 mg/L
Plume Mass Indicator: 112 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

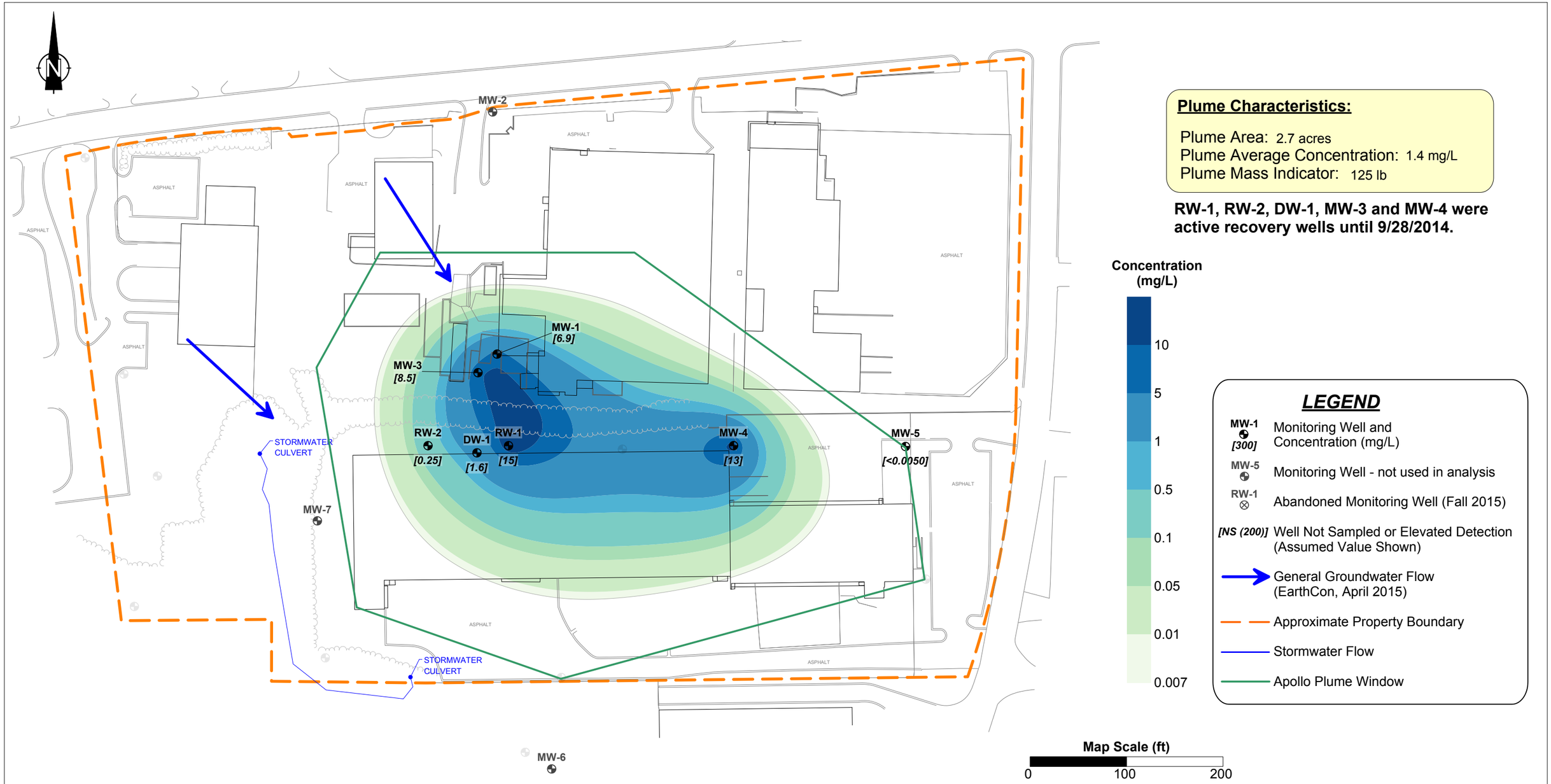
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Feb-2008

Prepared by: SSW Checked by: DW Figure: D6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.4 mg/L
Plume Mass Indicator: 125 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

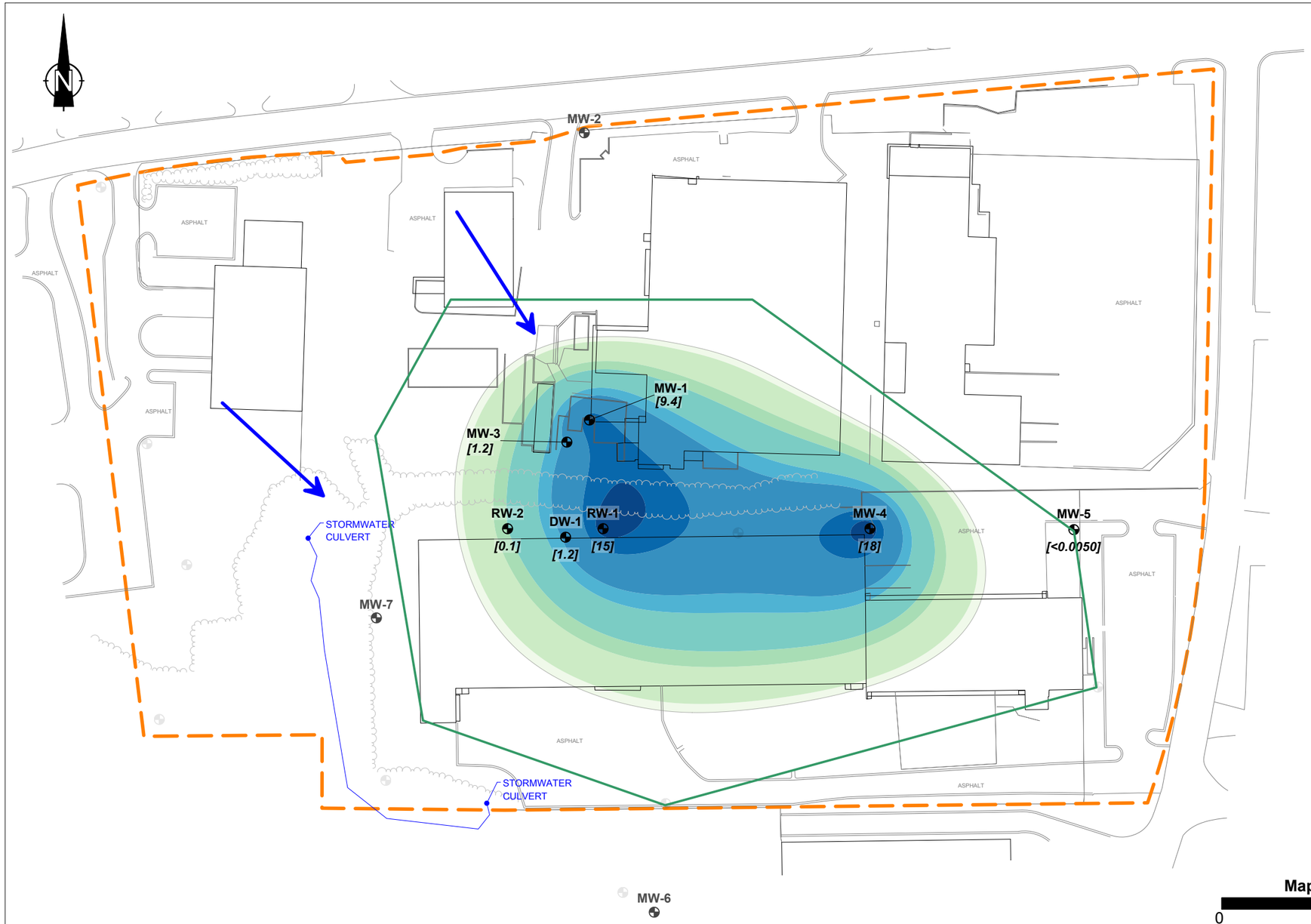
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Nov-2008

Prepared by: SSW Checked by: DW Figure: D7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.7 acres
Plume Average Concentration: 1.3 mg/L
Plume Mass Indicator: 120 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

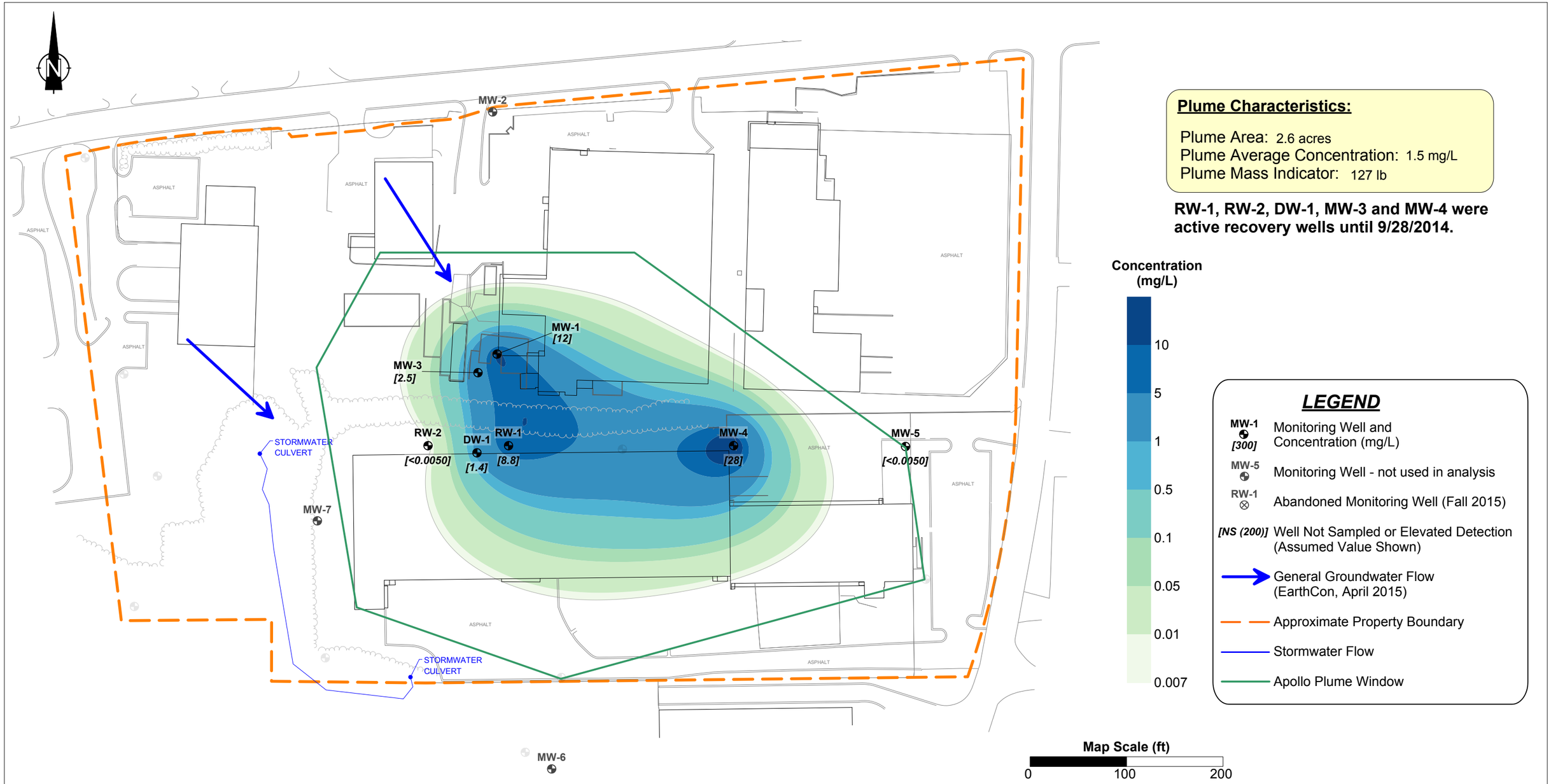
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Sep-2009

Prepared by: SSW Checked by: DW Figure: D8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.6 acres
Plume Average Concentration: 1.5 mg/L
Plume Mass Indicator: 127 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

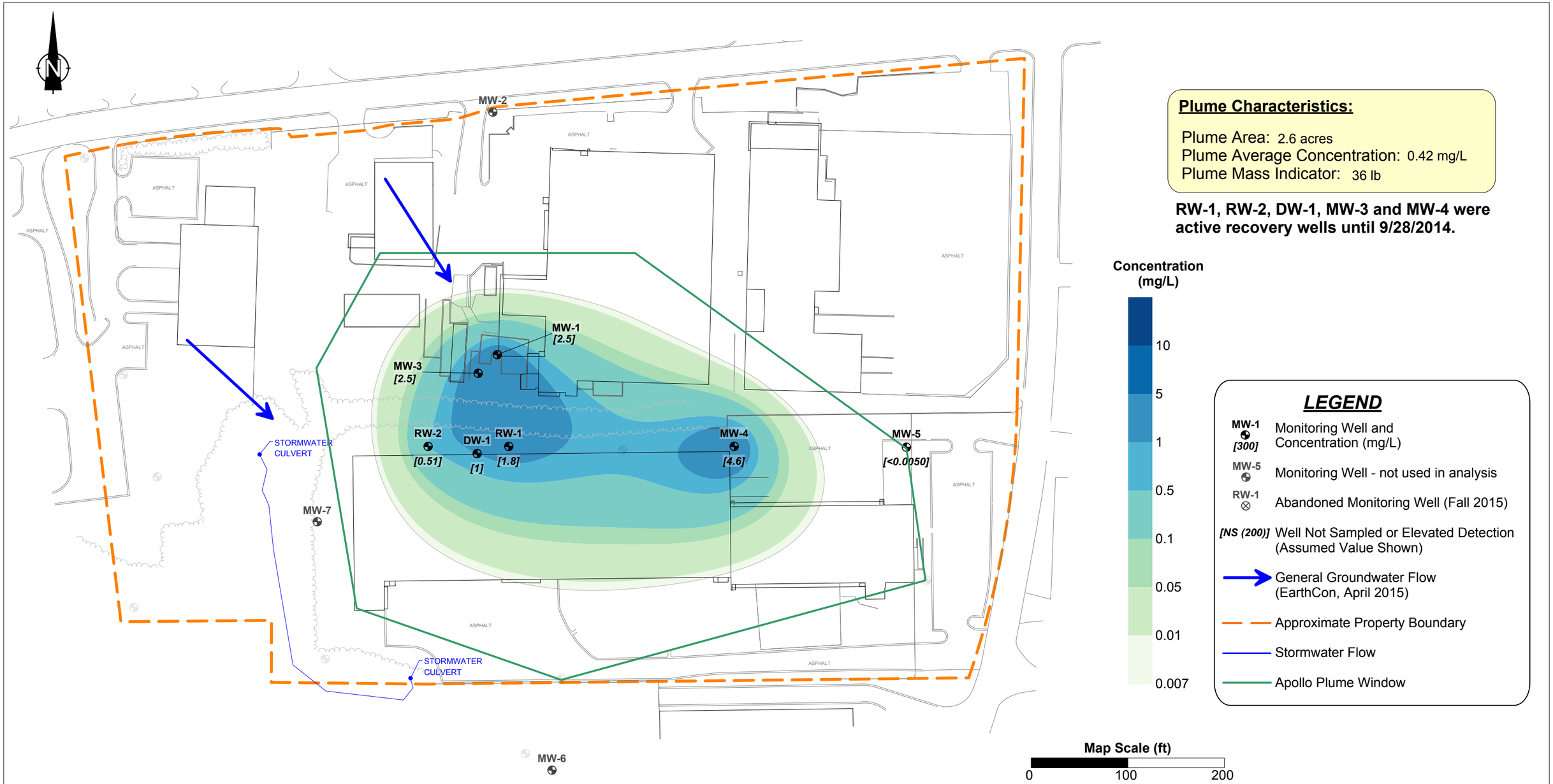
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Mar-2010

Prepared by: SSW Checked by: DW Figure: D9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.6 acres
Plume Average Concentration: 0.42 mg/L
Plume Mass Indicator: 36 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

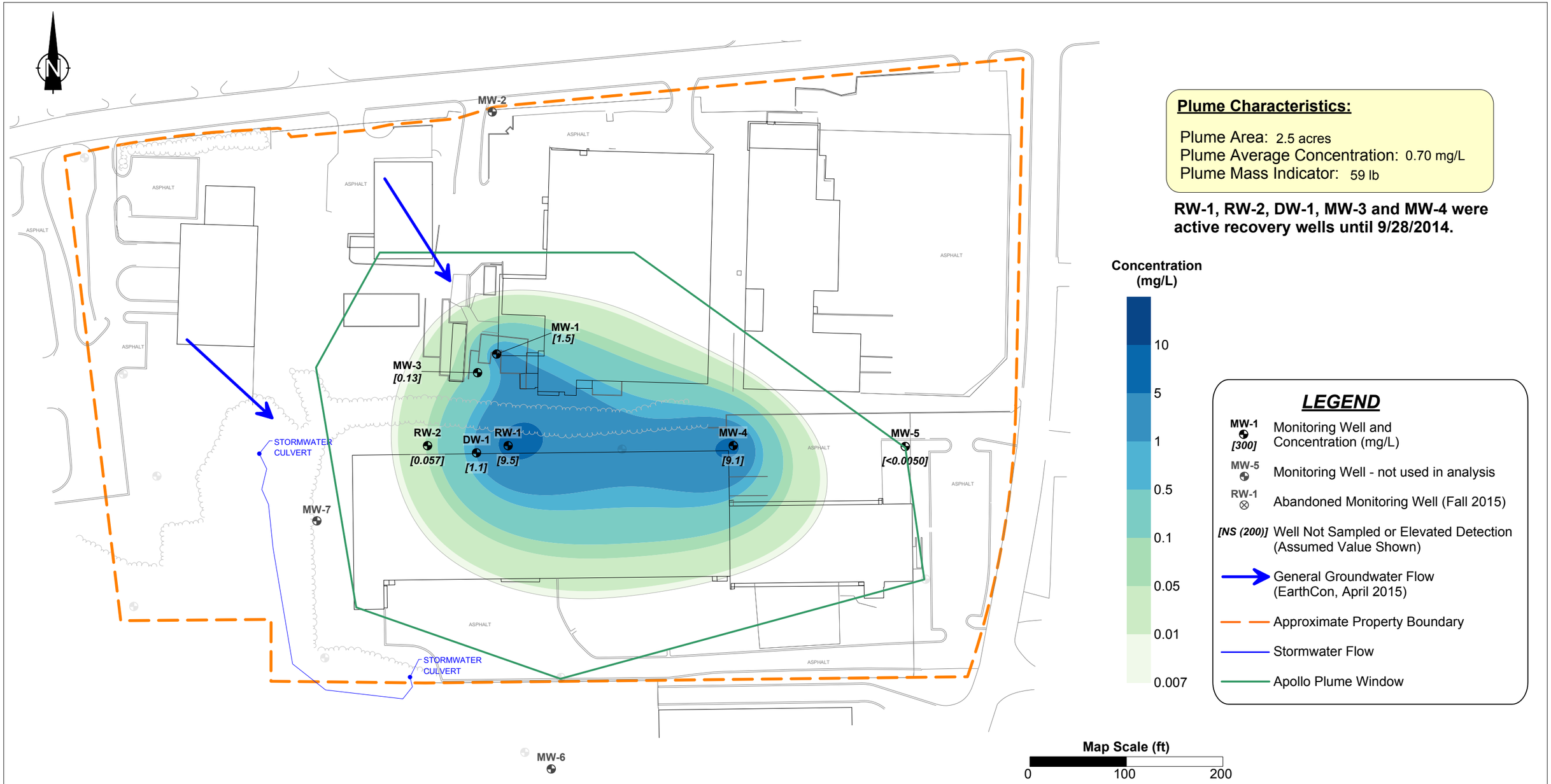
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Sep-2010

Prepared by: SSW Checked by: DW Figure: D10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.5 acres
Plume Average Concentration: 0.70 mg/L
Plume Mass Indicator: 59 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

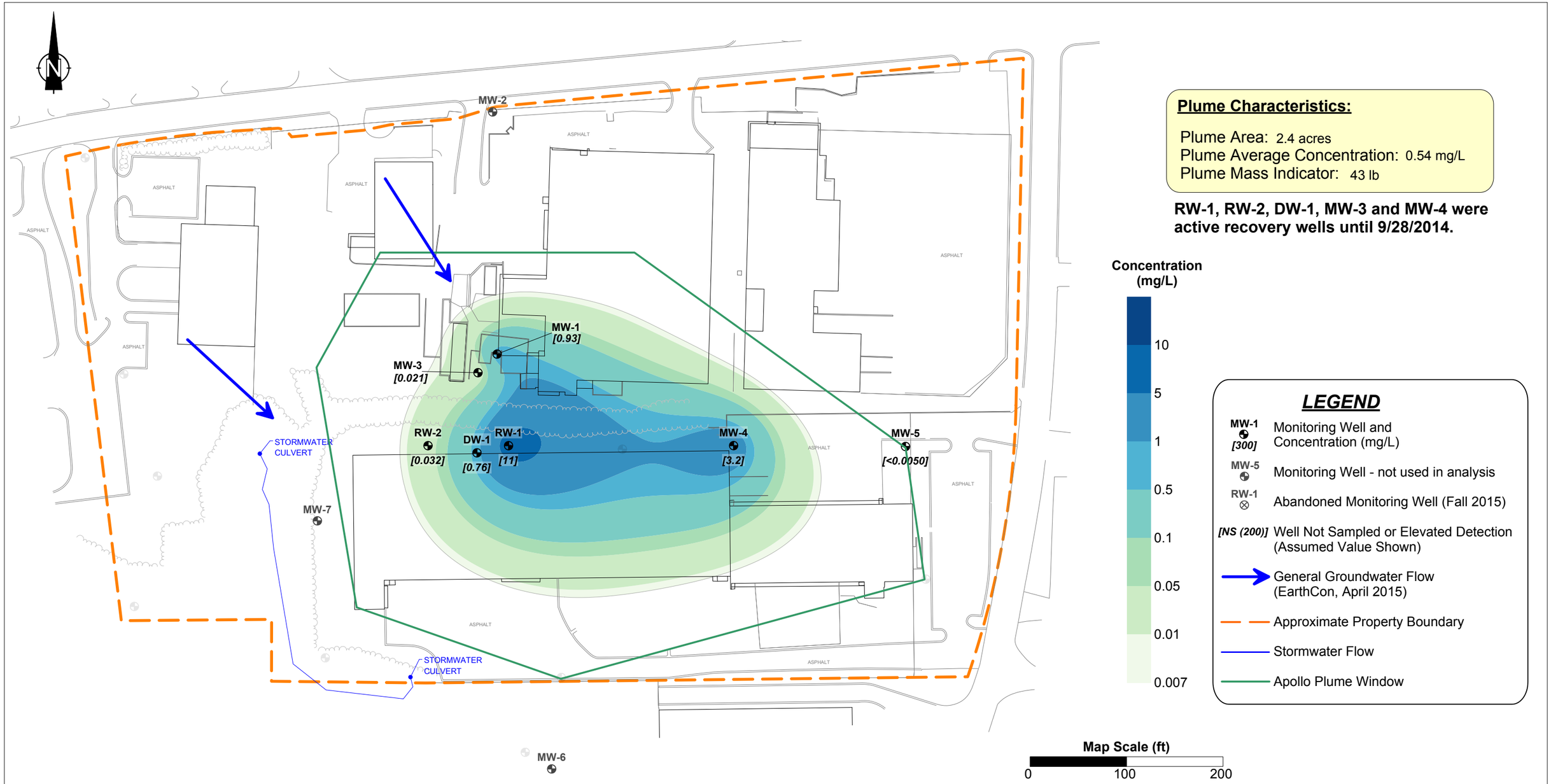
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Apr-2011

Prepared by: SSW Checked by: DW Figure: D11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.4 acres
Plume Average Concentration: 0.54 mg/L
Plume Mass Indicator: 43 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 ⊗ — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

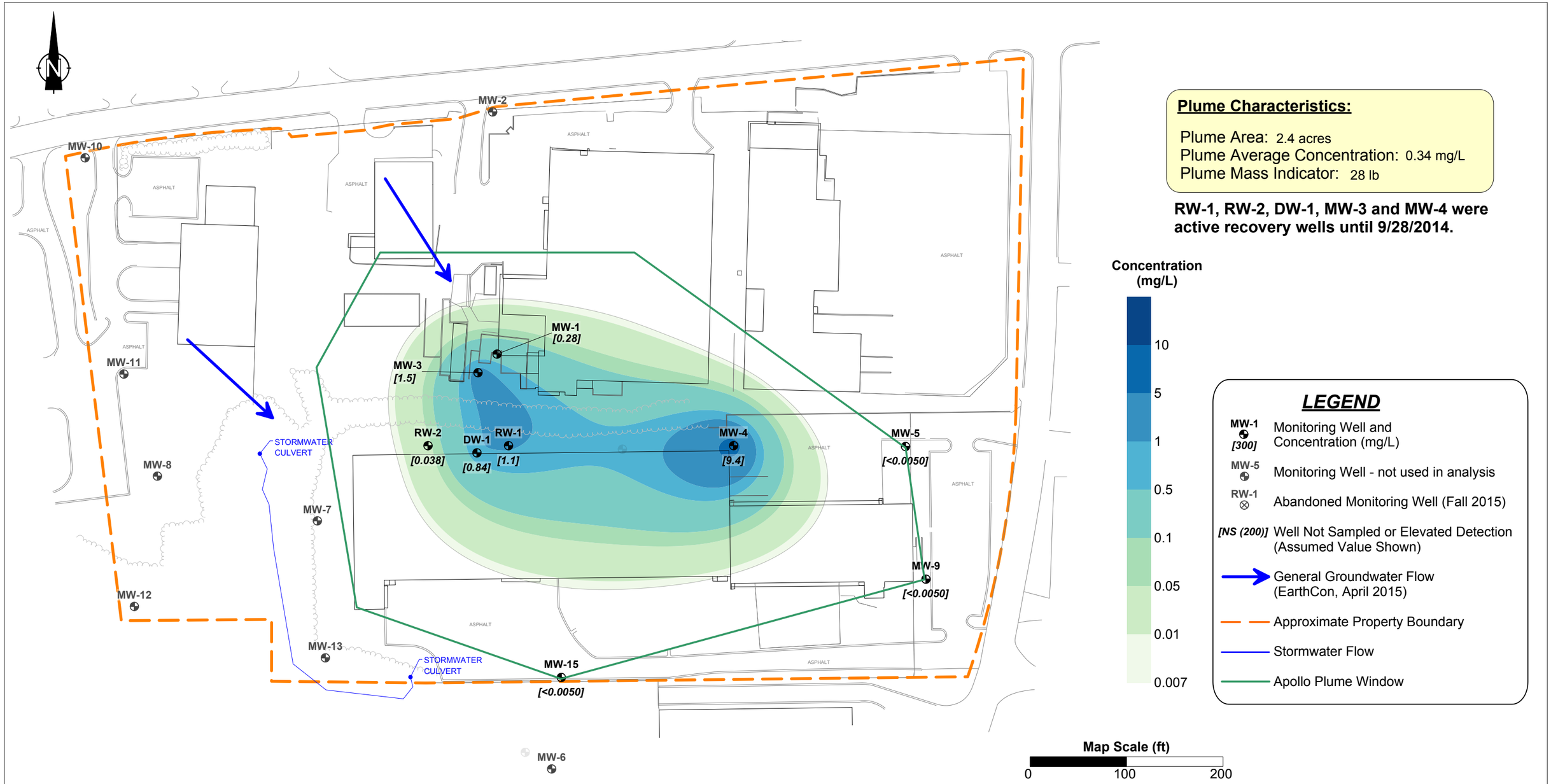
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Oct-2011

Prepared by: SSW Checked by: DW Figure: D12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.4 acres
Plume Average Concentration: 0.34 mg/L
Plume Mass Indicator: 28 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

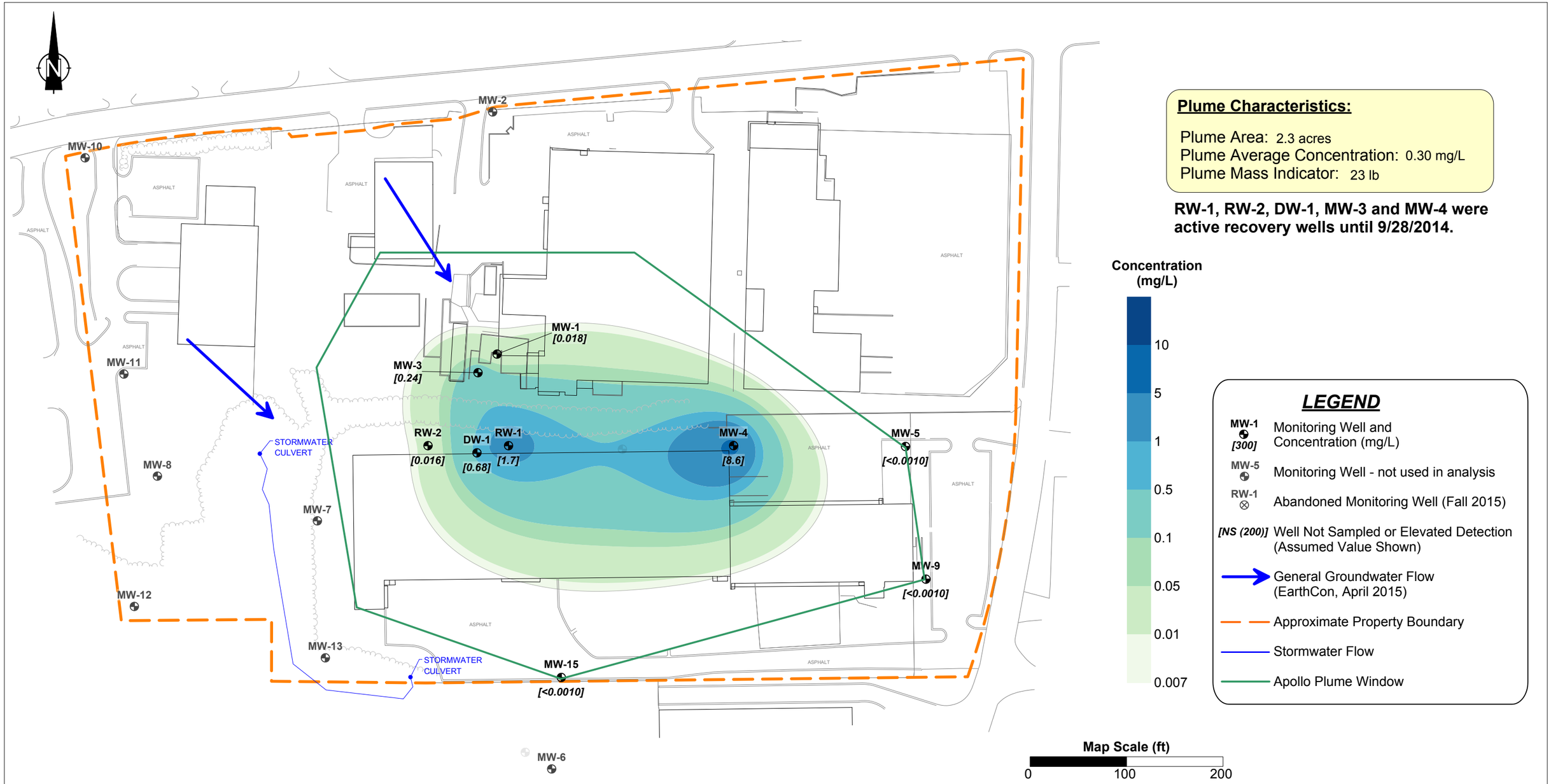
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Sep-2012

Prepared by: SSW Checked by: DW Figure: D13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.30 mg/L
Plume Mass Indicator: 23 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

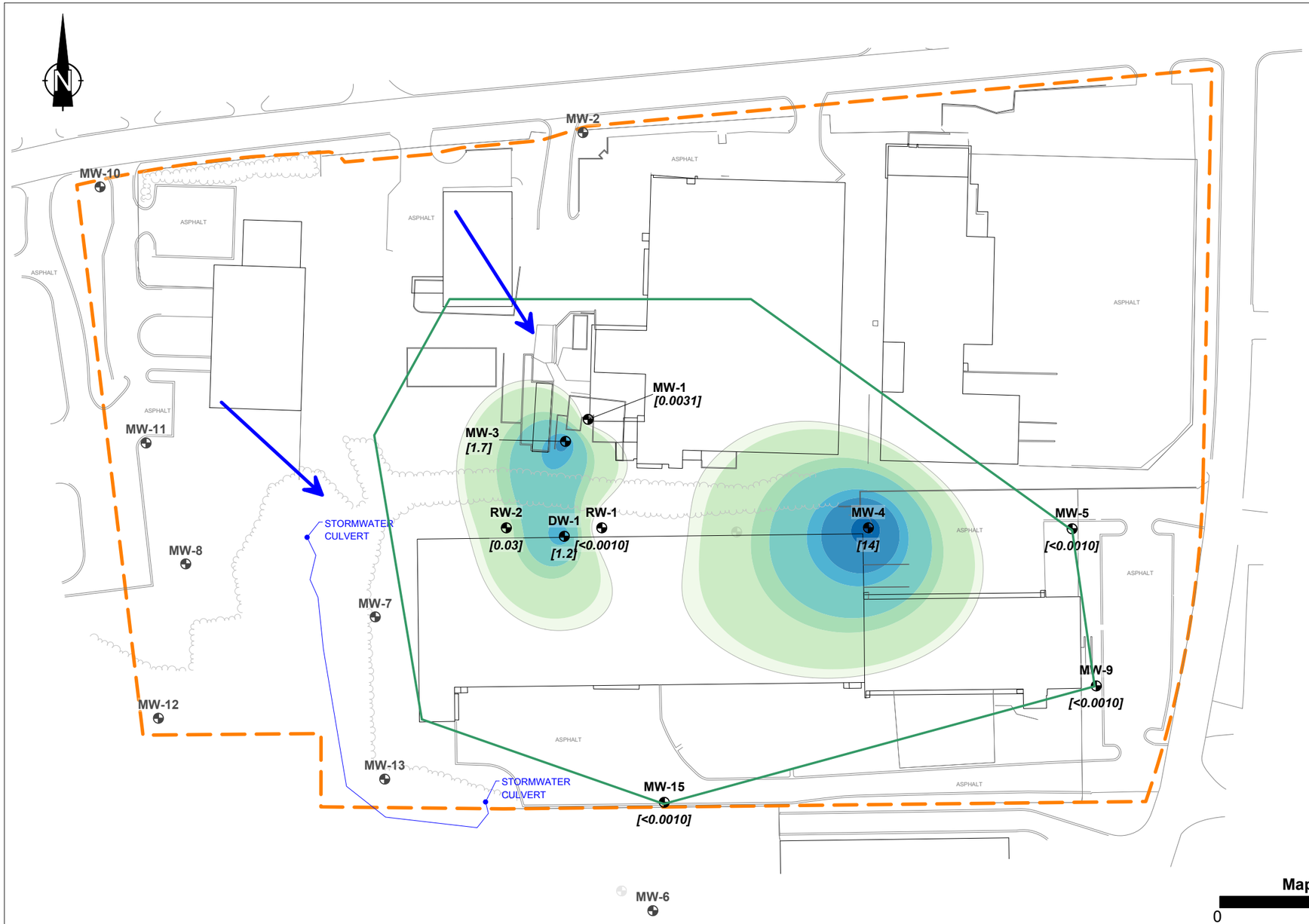
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Jun-2013

Prepared by: SSW Checked by: DW Figure: D14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.6 acres
Plume Average Concentration: 0.25 mg/L
Plume Mass Indicator: 13 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

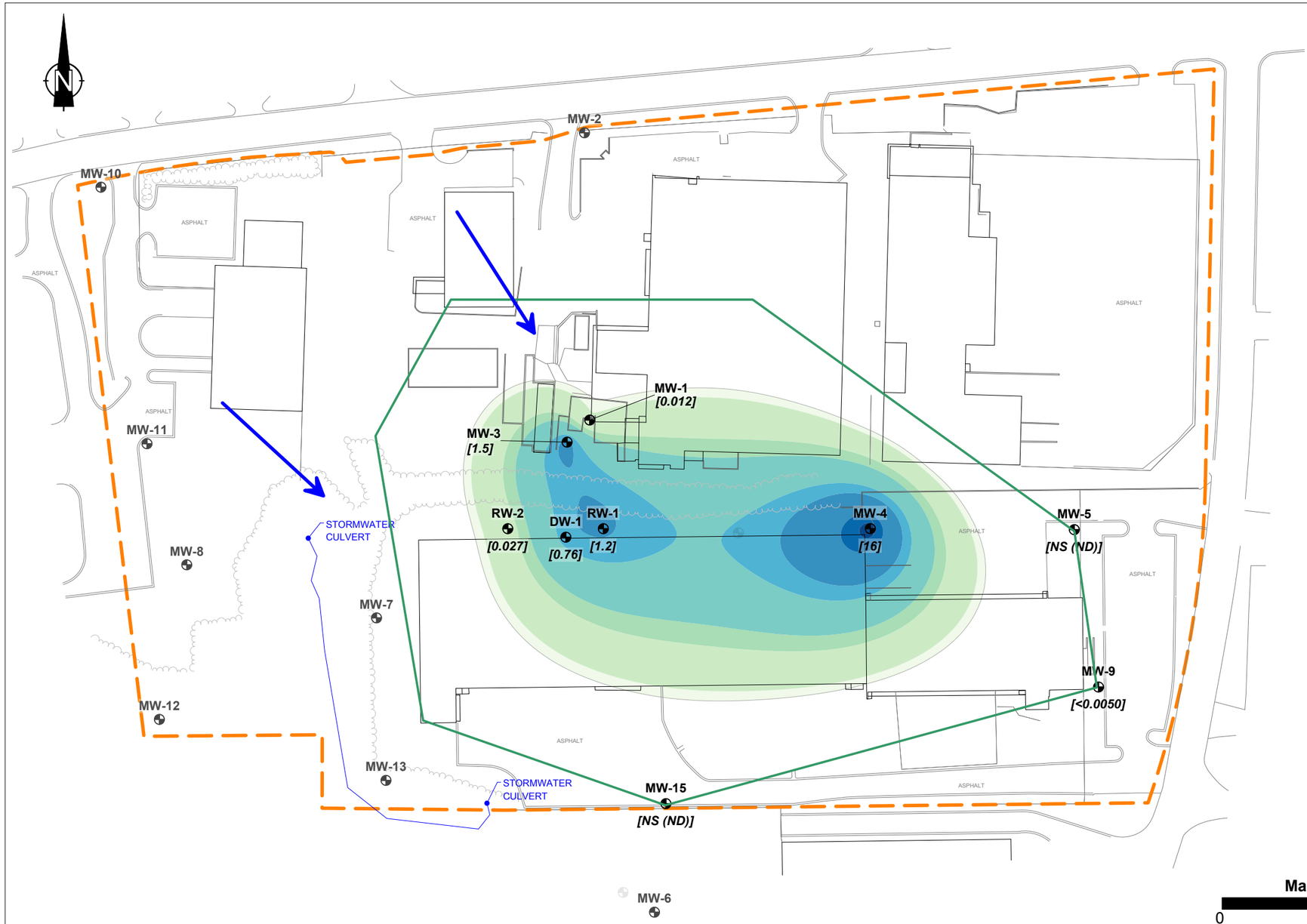
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Dec-2013

Prepared by: SSW Checked by: DW Figure: D15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.39 mg/L
Plume Mass Indicator: 30 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

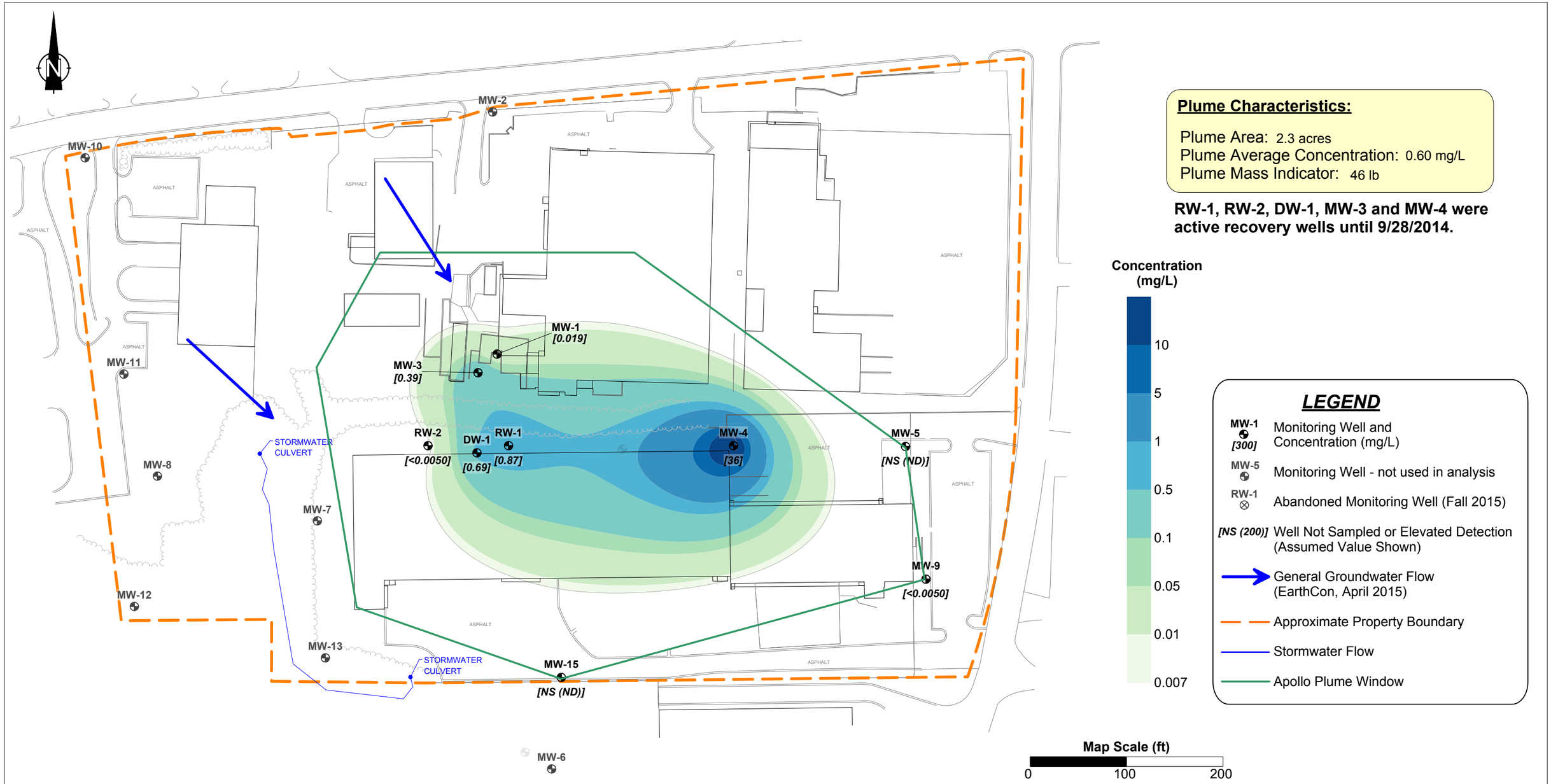
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Oct-2014

Prepared by: SSW Checked by: DW Figure: D16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.60 mg/L
Plume Mass Indicator: 46 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

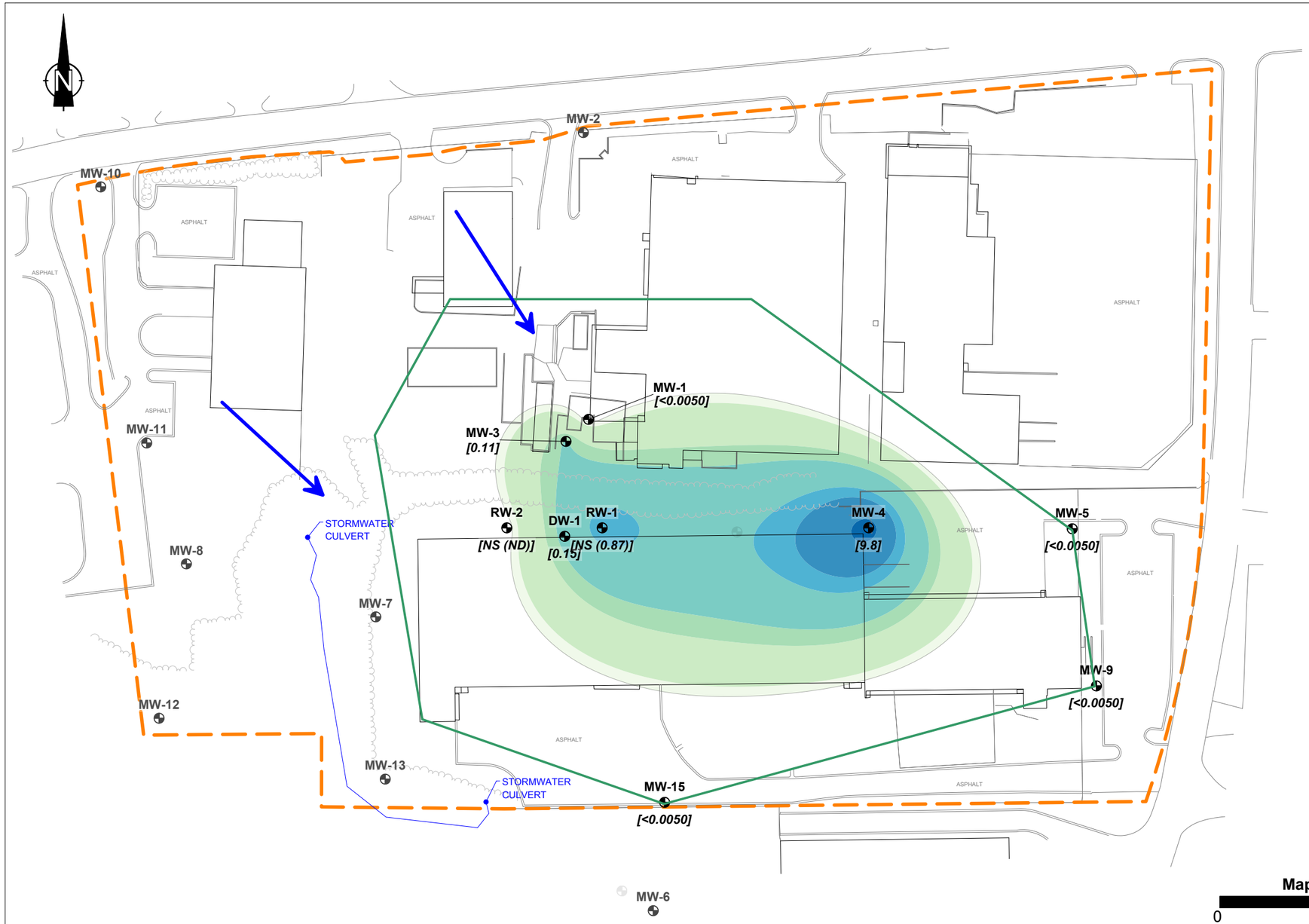
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Jan-2015

Prepared by: SSW Checked by: DW Figure: D17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.27 mg/L
Plume Mass Indicator: 19 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

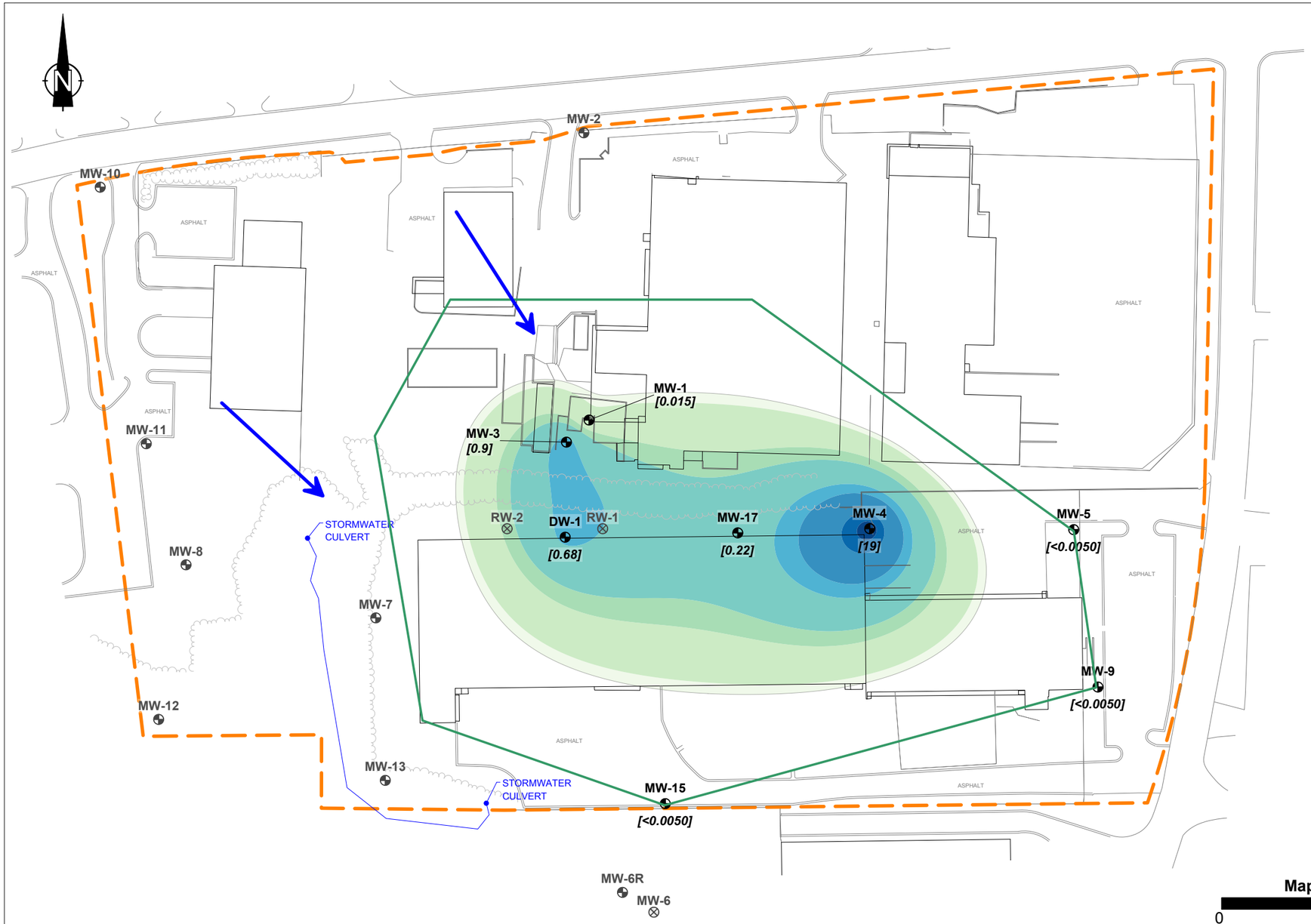
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Apr-2015

Prepared by: SSW Checked by: DW Figure: D18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.3 acres
Plume Average Concentration: 0.32 mg/L
Plume Mass Indicator: 25 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10
5
1
0.5
0.1
0.05
0.01
0.007

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

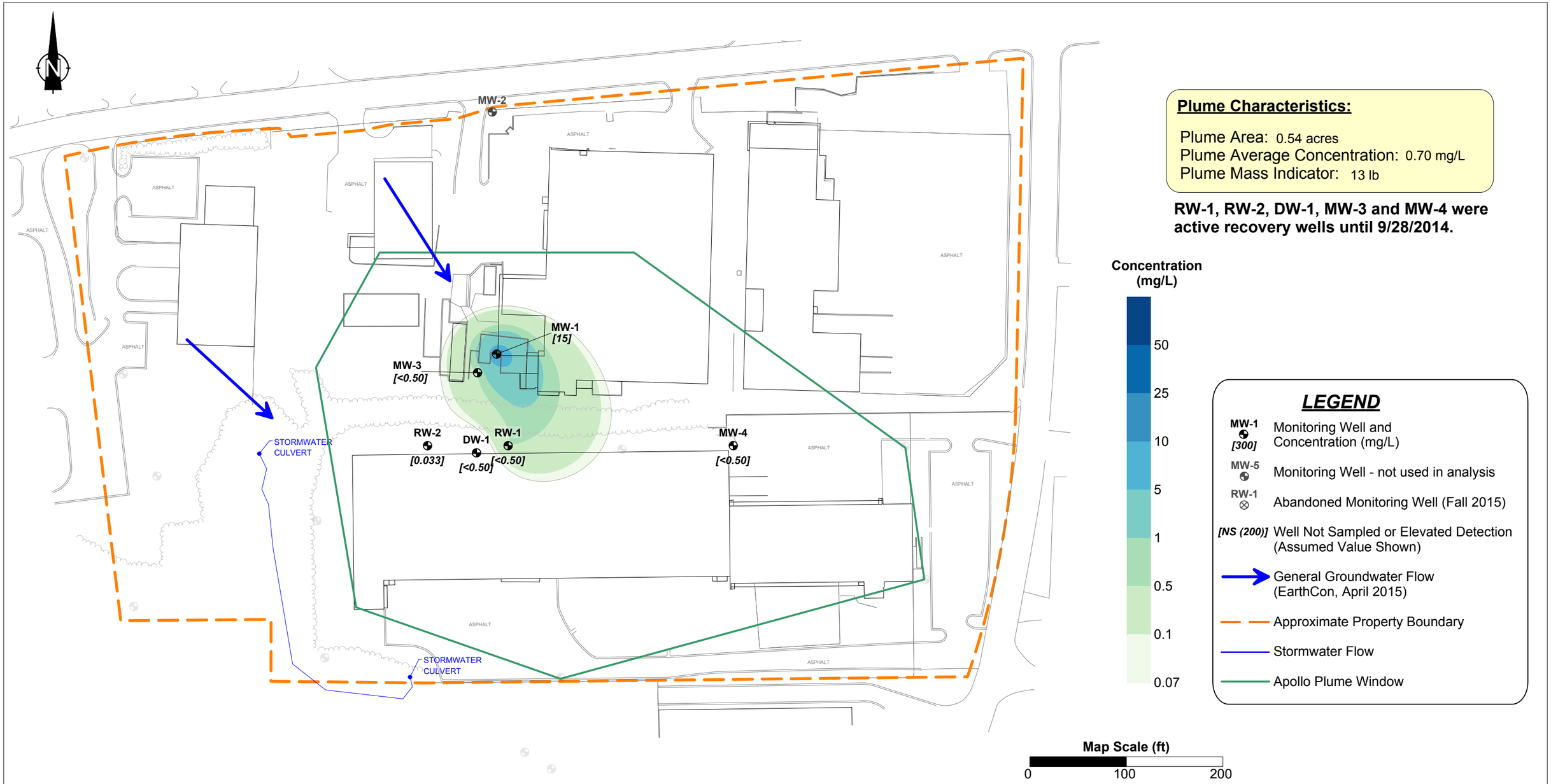
Apollo Plume
1,1-Dichloroethene (1,1-DCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: D19

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix E: Apollo Plume Series Isopleth Maps – cis-1,2-Dichloroethene (cis-1,2-DCE)



Plume Characteristics:

Plume Area: 0.54 acres
Plume Average Concentration: 0.70 mg/L
Plume Mass Indicator: 13 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

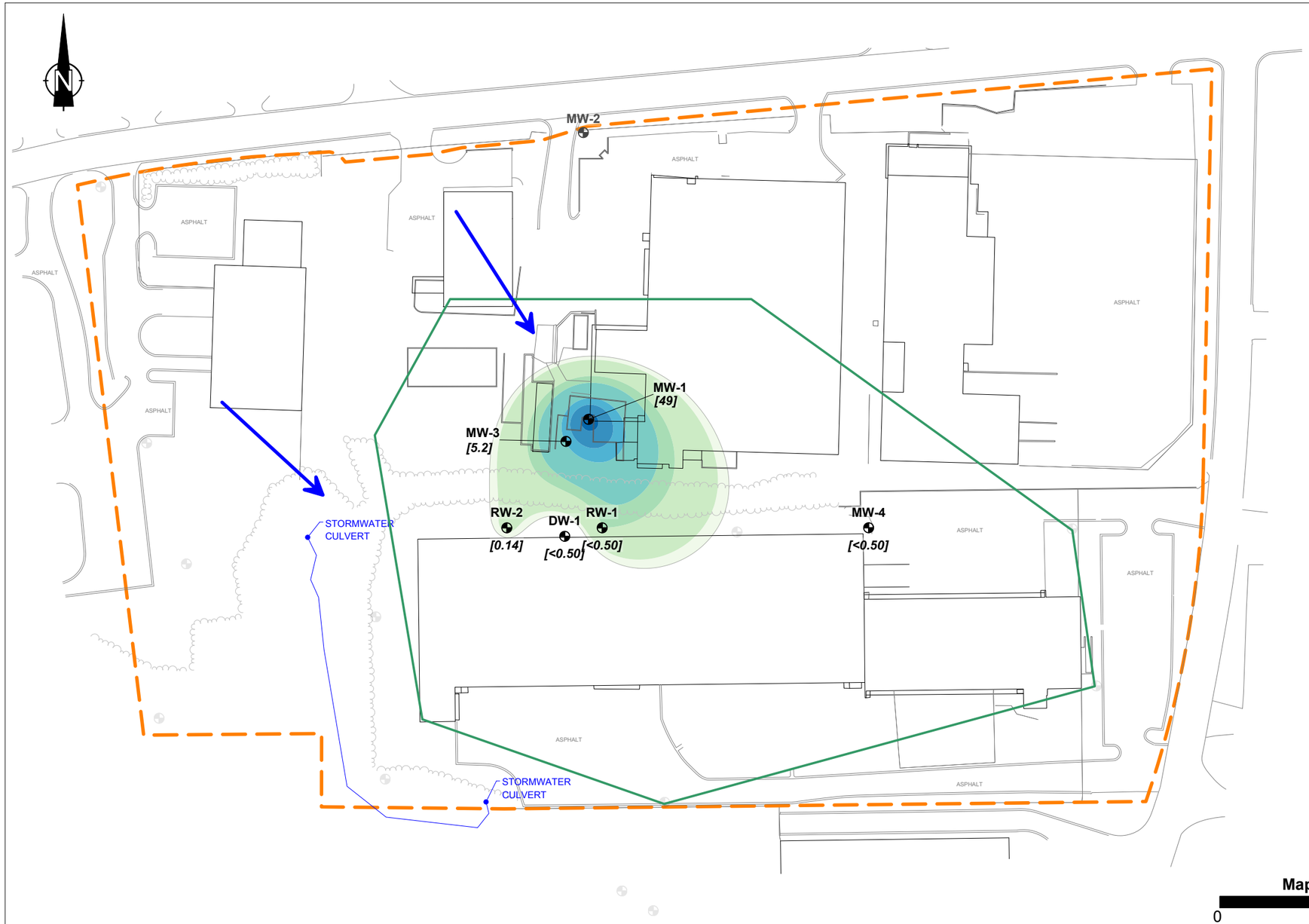
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Jan-2005

Prepared by: SSW Checked by: DW Figure: E1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.67 acres
Plume Average Concentration: 1.7 mg/L
Plume Mass Indicator: 37 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- **MW-1** *[300]* — Monitoring Well and Concentration (mg/L)
- **MW-5** — Monitoring Well - not used in analysis
- **RW-1** — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Dec-2005

Prepared by: SSW Checked by: DW Figure: E2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.52 acres
Plume Average Concentration: 1.0 mg/L
Plume Mass Indicator: 18 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- **MW-1** *[300]* — Monitoring Well and Concentration (mg/L)
- **MW-5** — Monitoring Well - not used in analysis
- **RW-1** — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

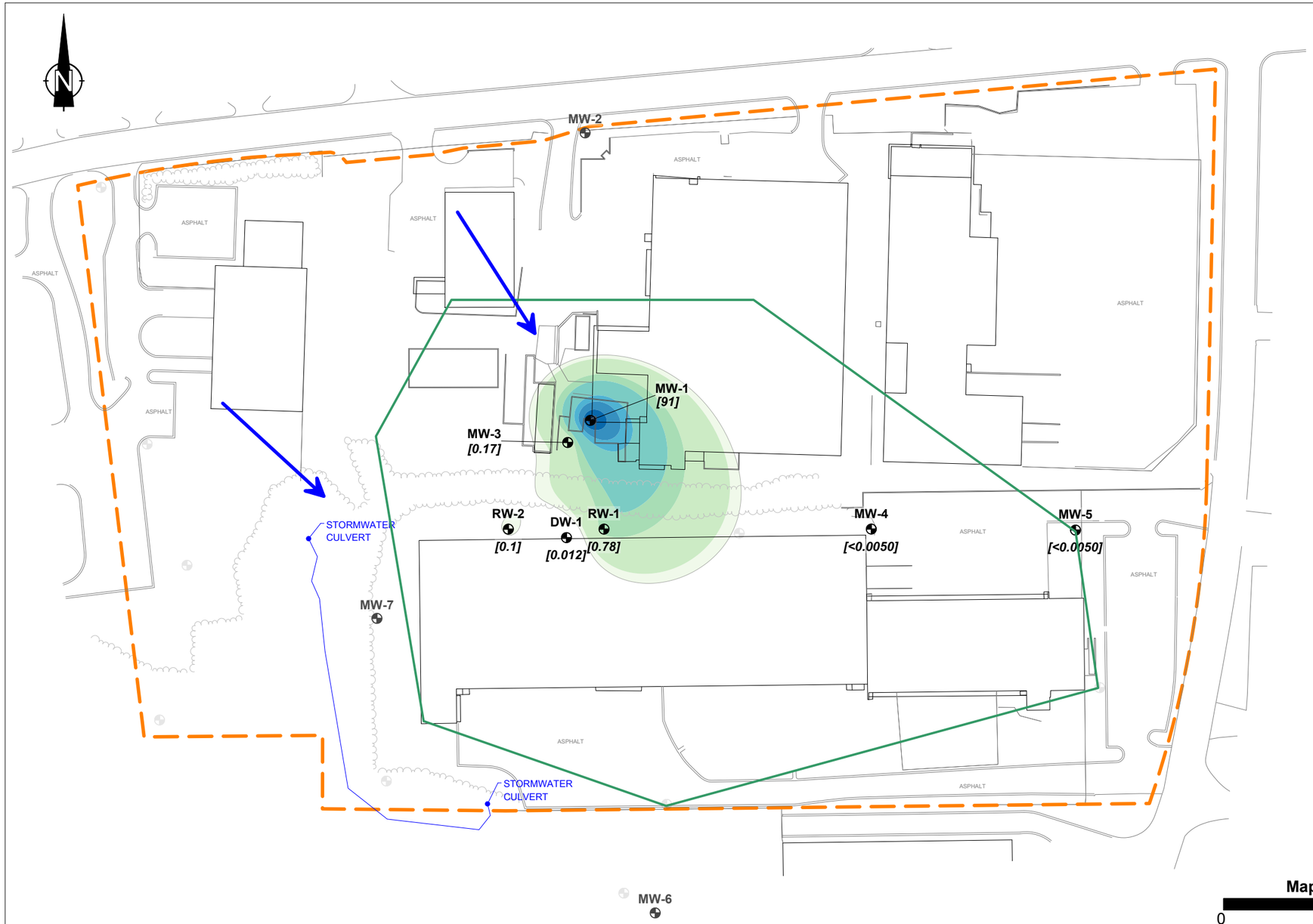
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Jul-2006

Prepared by: SSW Checked by: DW Figure: E3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.64 acres
Plume Average Concentration: 1.6 mg/L
Plume Mass Indicator: 34 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

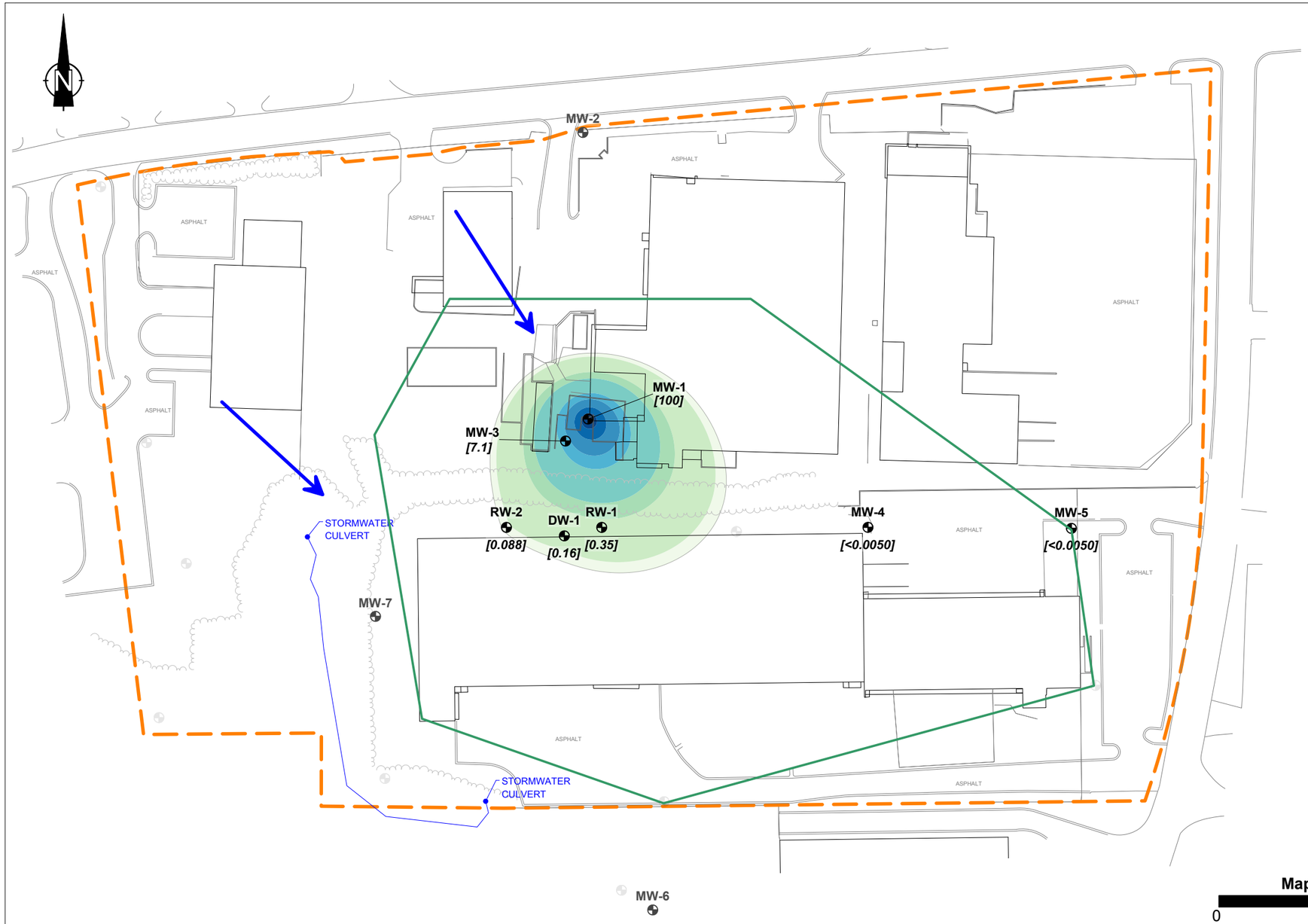
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Feb-2007

Prepared by: SSW Checked by: DW Figure: E4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.73 acres
Plume Average Concentration: 2.4 mg/L
Plume Mass Indicator: 58 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

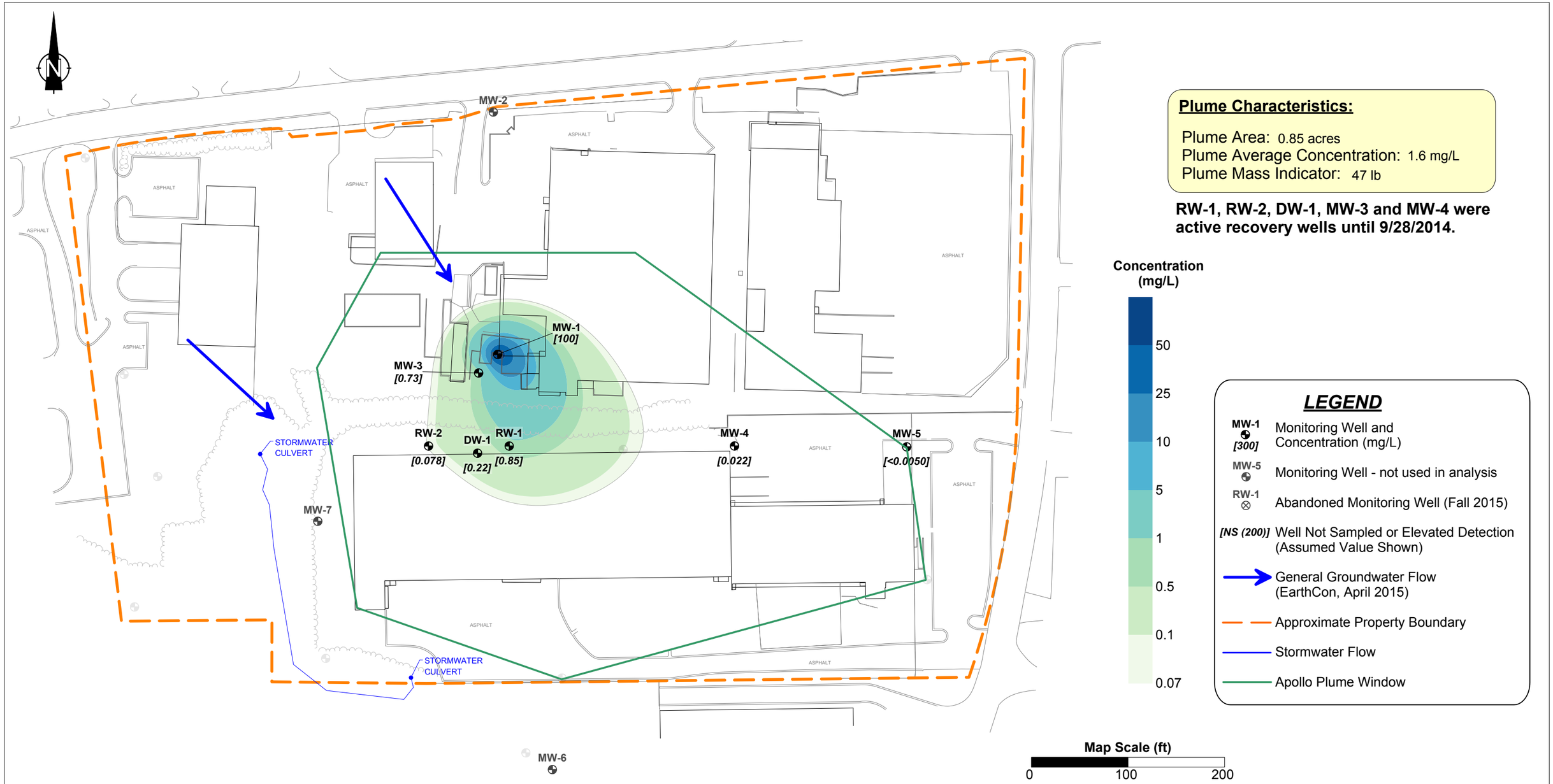
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Aug-2007

Prepared by: SSW Checked by: DW Figure: E5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.85 acres
Plume Average Concentration: 1.6 mg/L
Plume Mass Indicator: 47 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

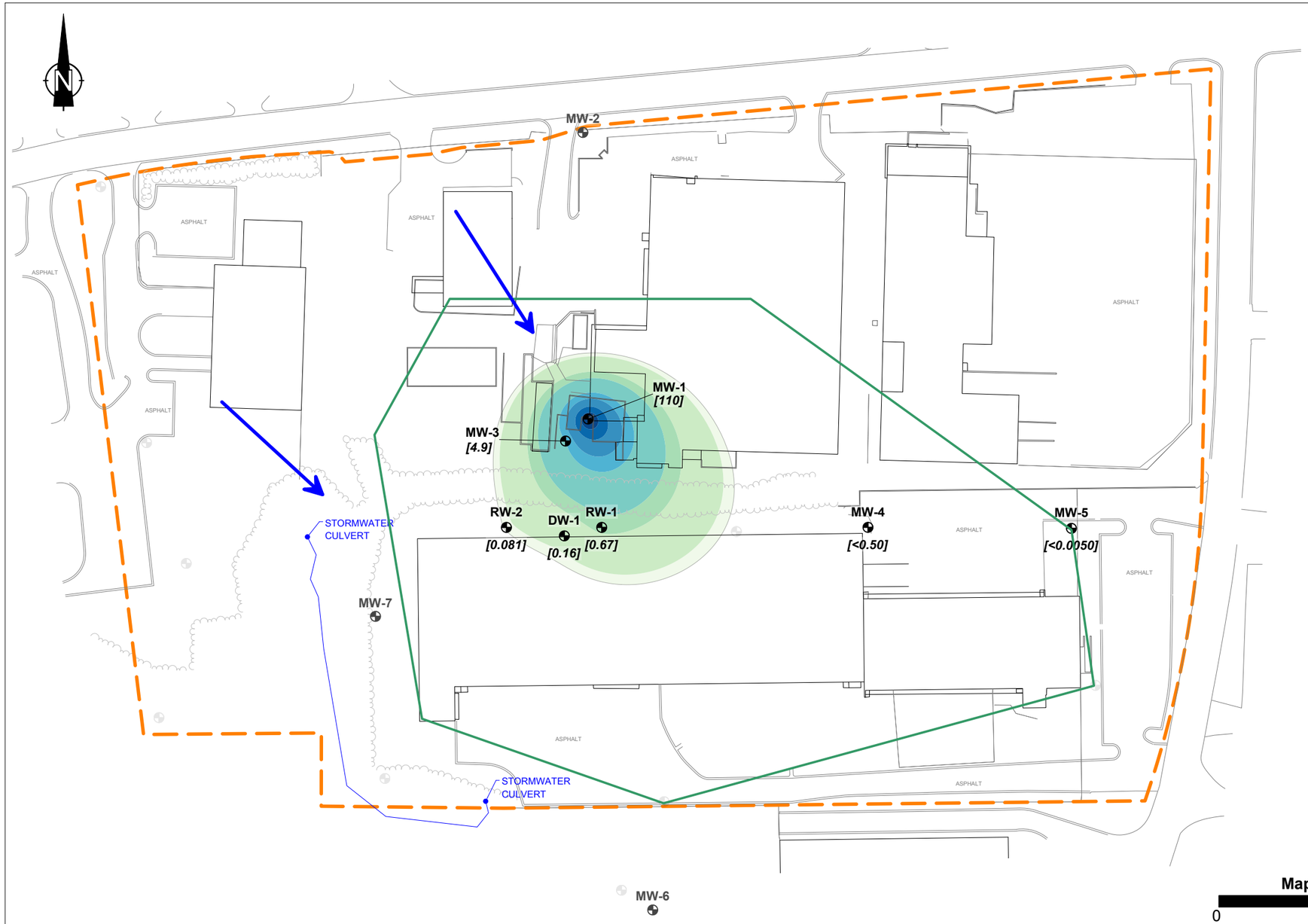
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Feb-2008

Prepared by: SSW Checked by: DW Figure: E6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.77 acres
Plume Average Concentration: 2.4 mg/L
Plume Mass Indicator: 62 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

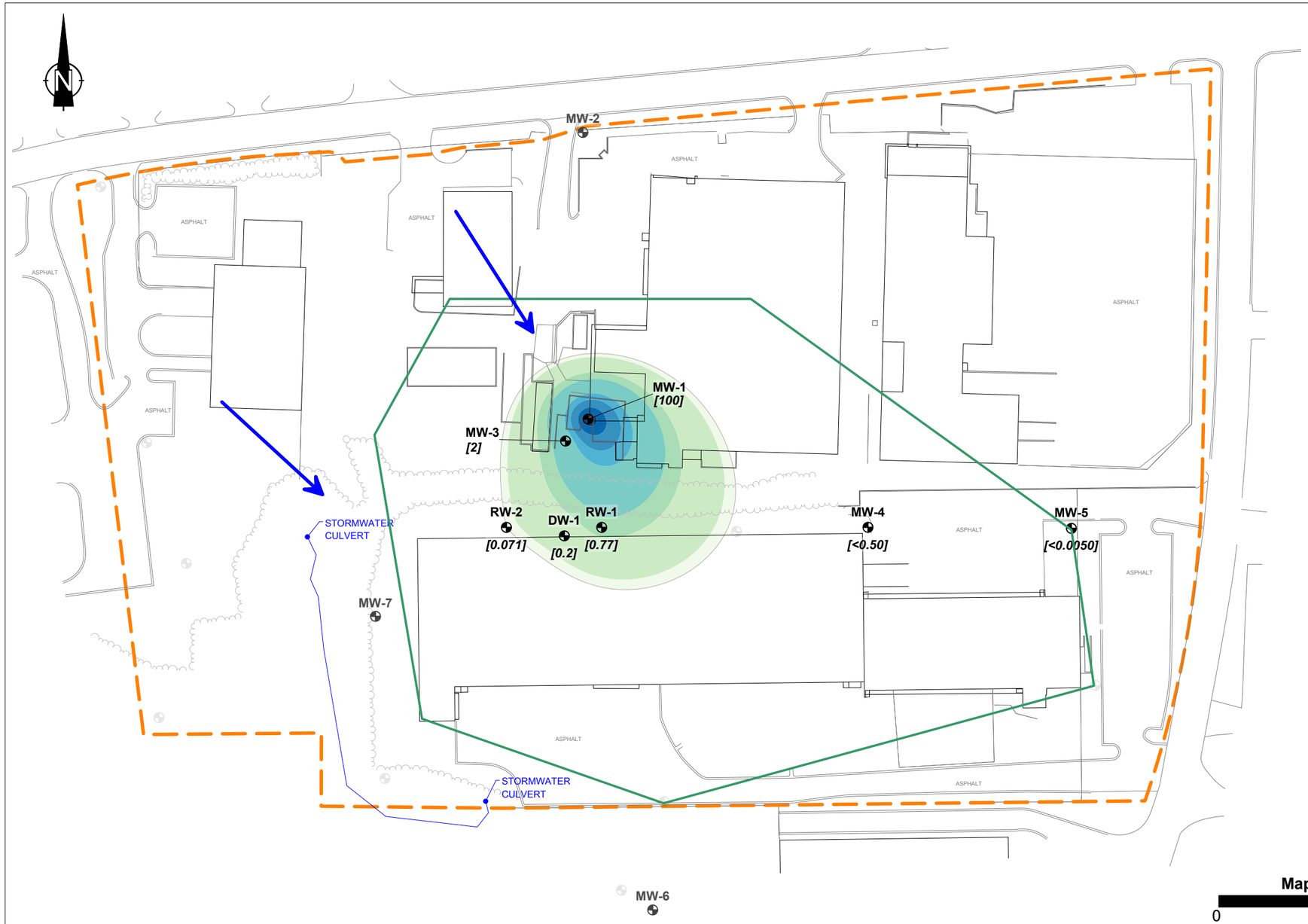
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Nov-2008

Prepared by: SSW Checked by: DW Figure: E7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.77 acres
Plume Average Concentration: 2.0 mg/L
Plume Mass Indicator: 51 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

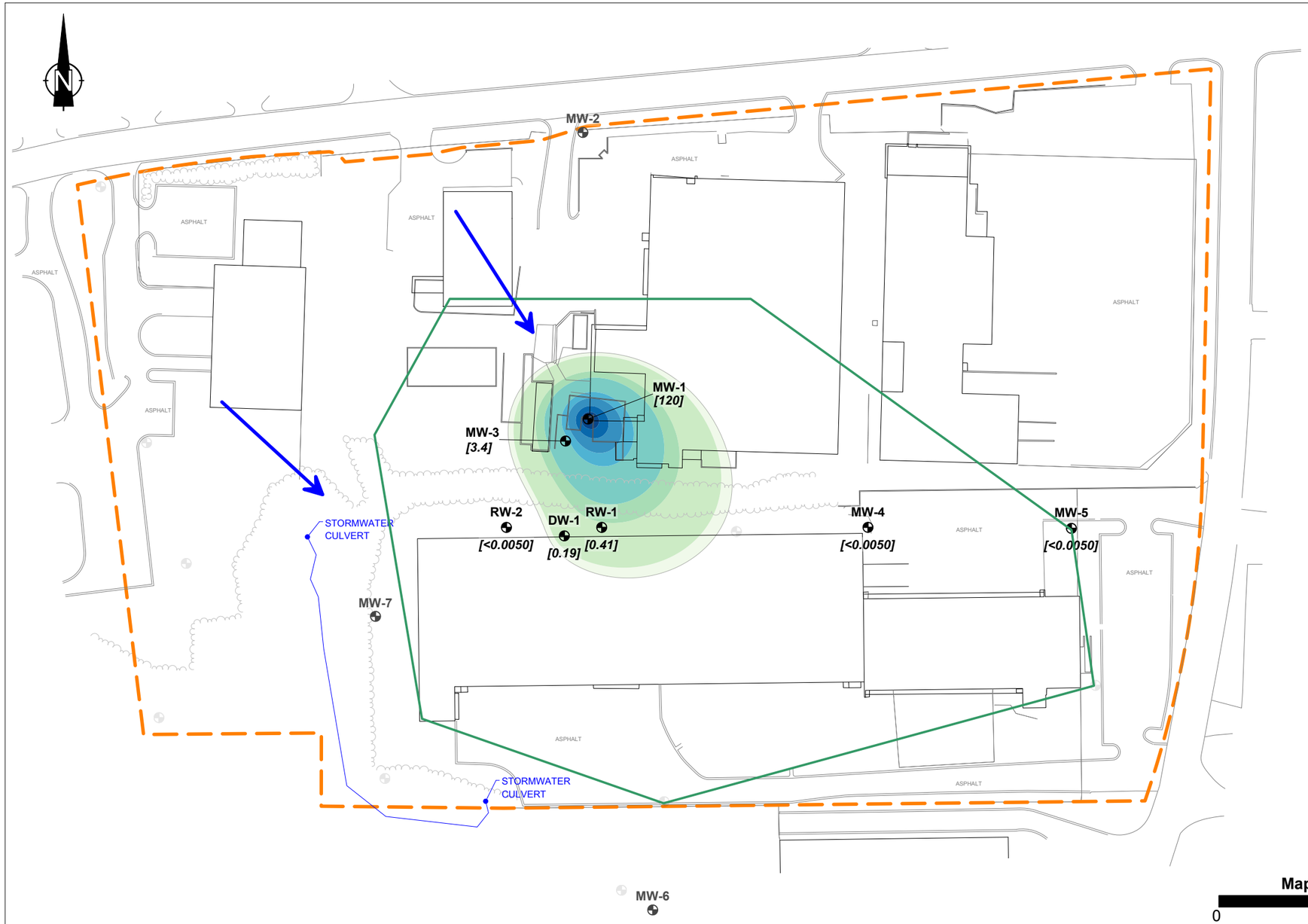
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Sep-2009

Prepared by: SSW Checked by: DW Figure: E8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.68 acres
Plume Average Concentration: 2.5 mg/L
Plume Mass Indicator: 57 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

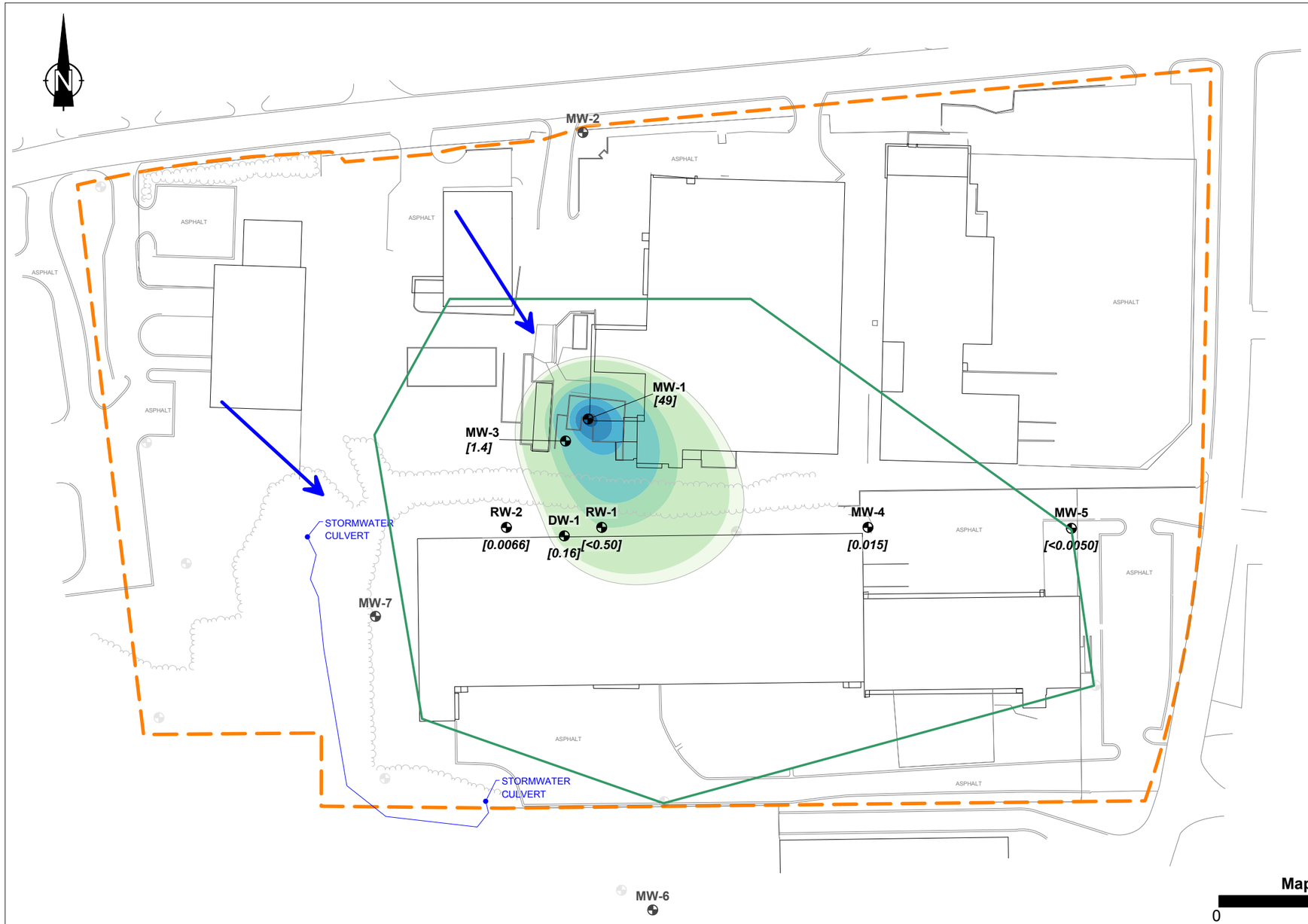
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Mar-2010

Prepared by: SSW Checked by: DW Figure: E9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.70 acres
Plume Average Concentration: 1.3 mg/L
Plume Mass Indicator: 31 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

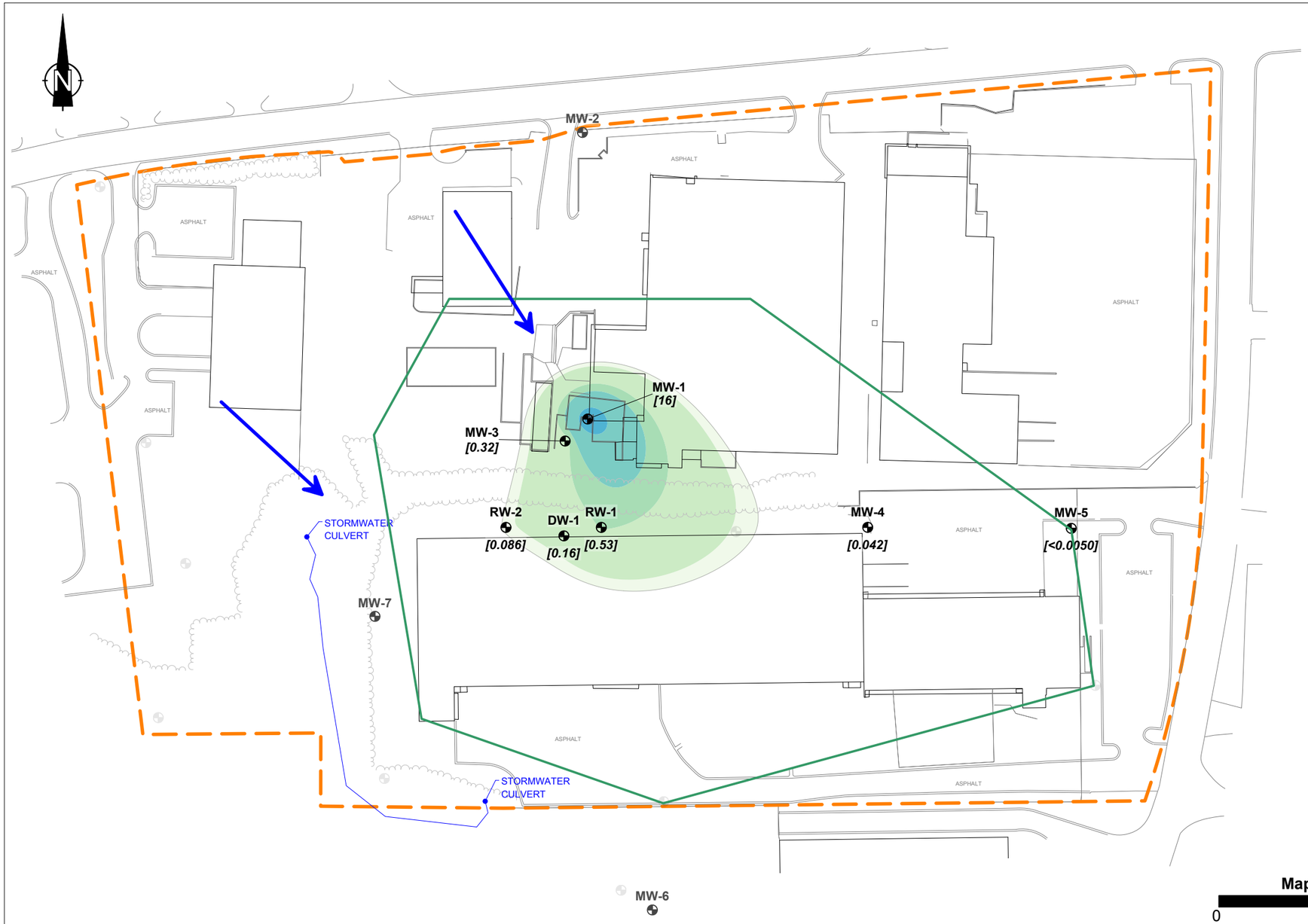
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Sep-2010

Prepared by: SSW Checked by: DW Figure: E10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.76 acres
Plume Average Concentration: 0.57 mg/L
Plume Mass Indicator: 14 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Apr-2011

Prepared by: SSW Checked by: DW Figure: E11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.76 acres
Plume Average Concentration: 0.48 mg/L
Plume Mass Indicator: 12 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

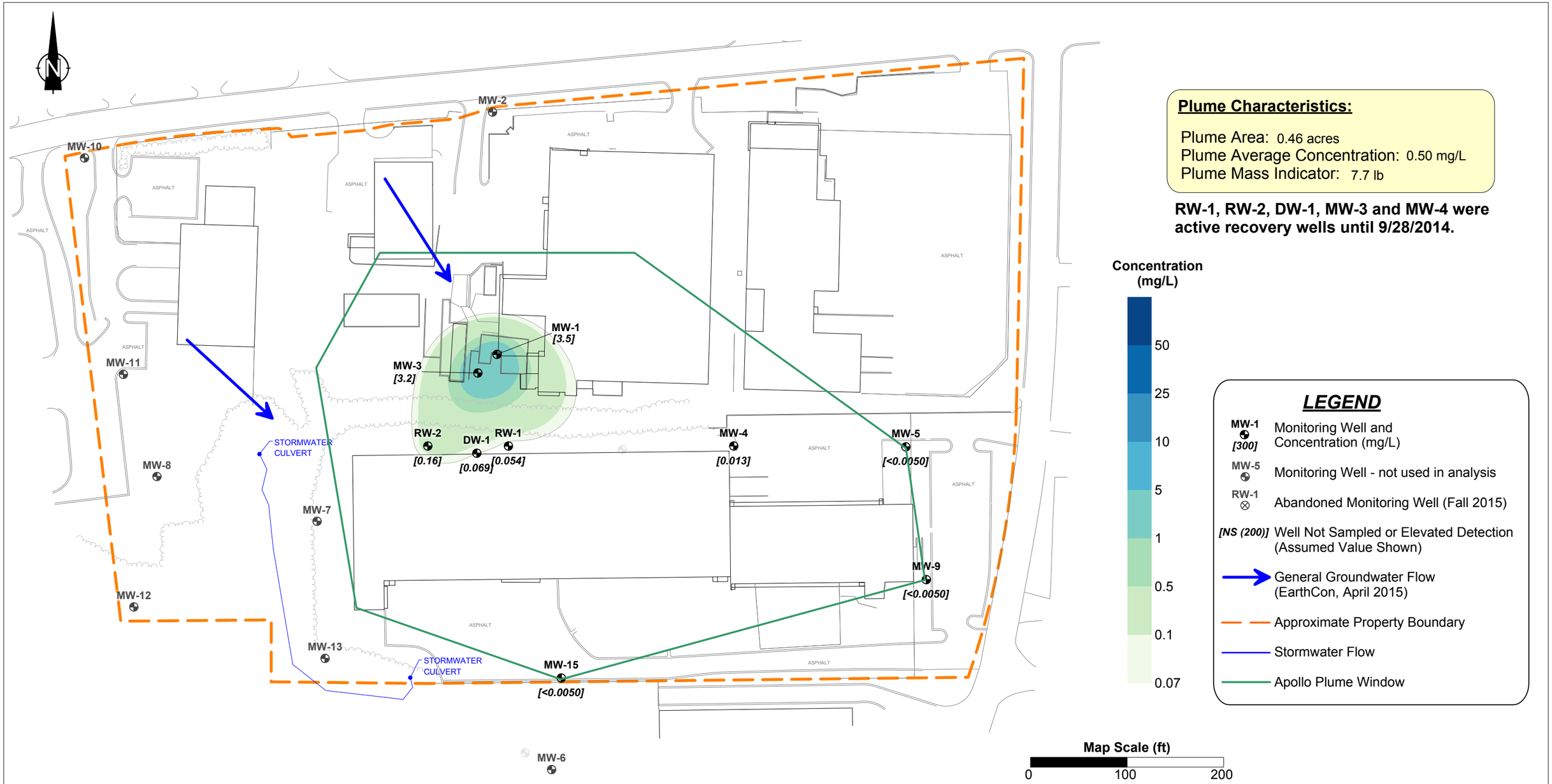
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Oct-2011

Prepared by: SSW Checked by: DW Figure: E12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.46 acres
Plume Average Concentration: 0.50 mg/L
Plume Mass Indicator: 7.7 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

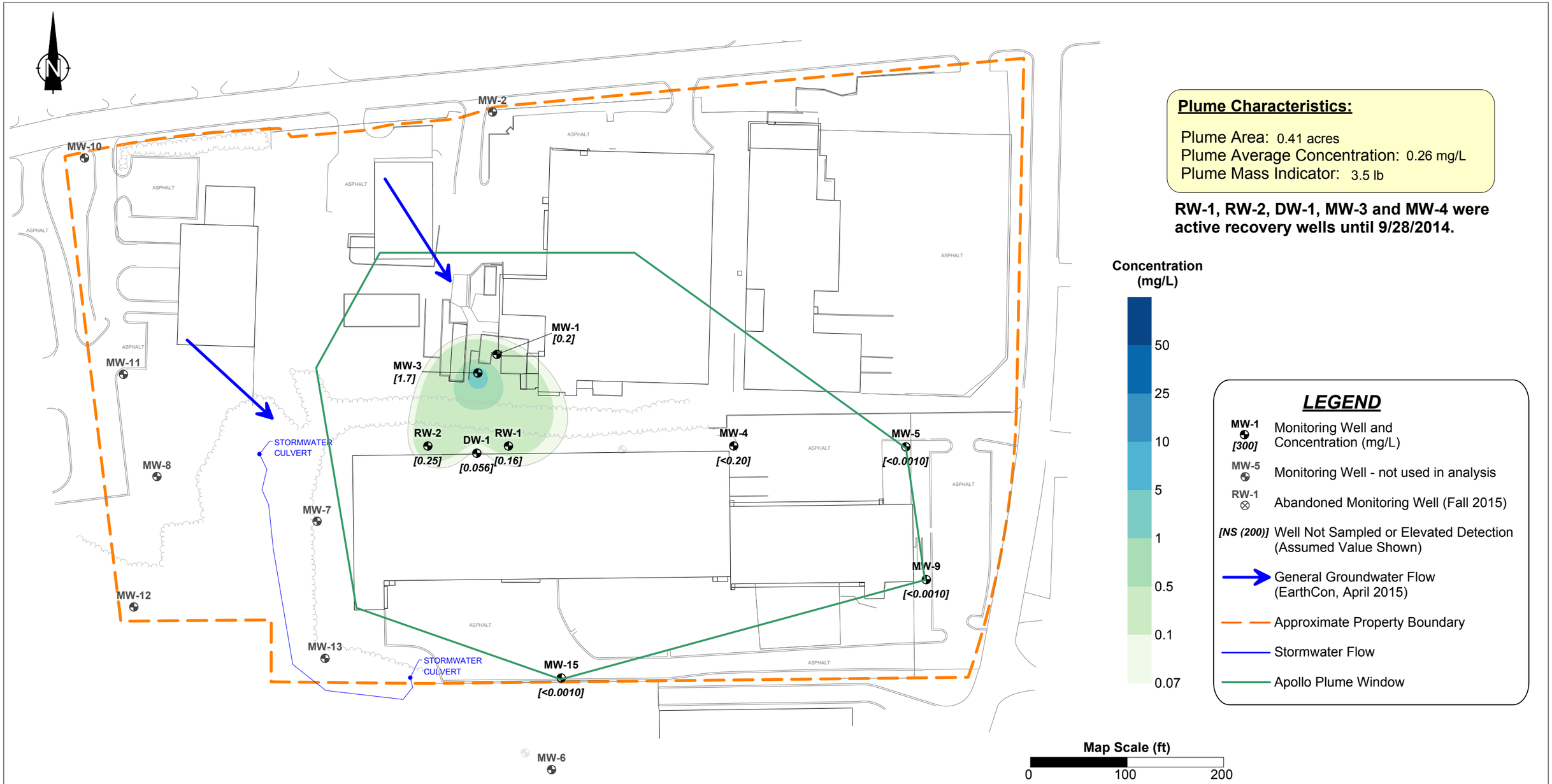
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume cis-1,2-Dichloroethene (cis-1,2-DCE) Sep-2012

Prepared by: SSW Checked by: DW Figure: E13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.41 acres
Plume Average Concentration: 0.26 mg/L
Plume Mass Indicator: 3.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

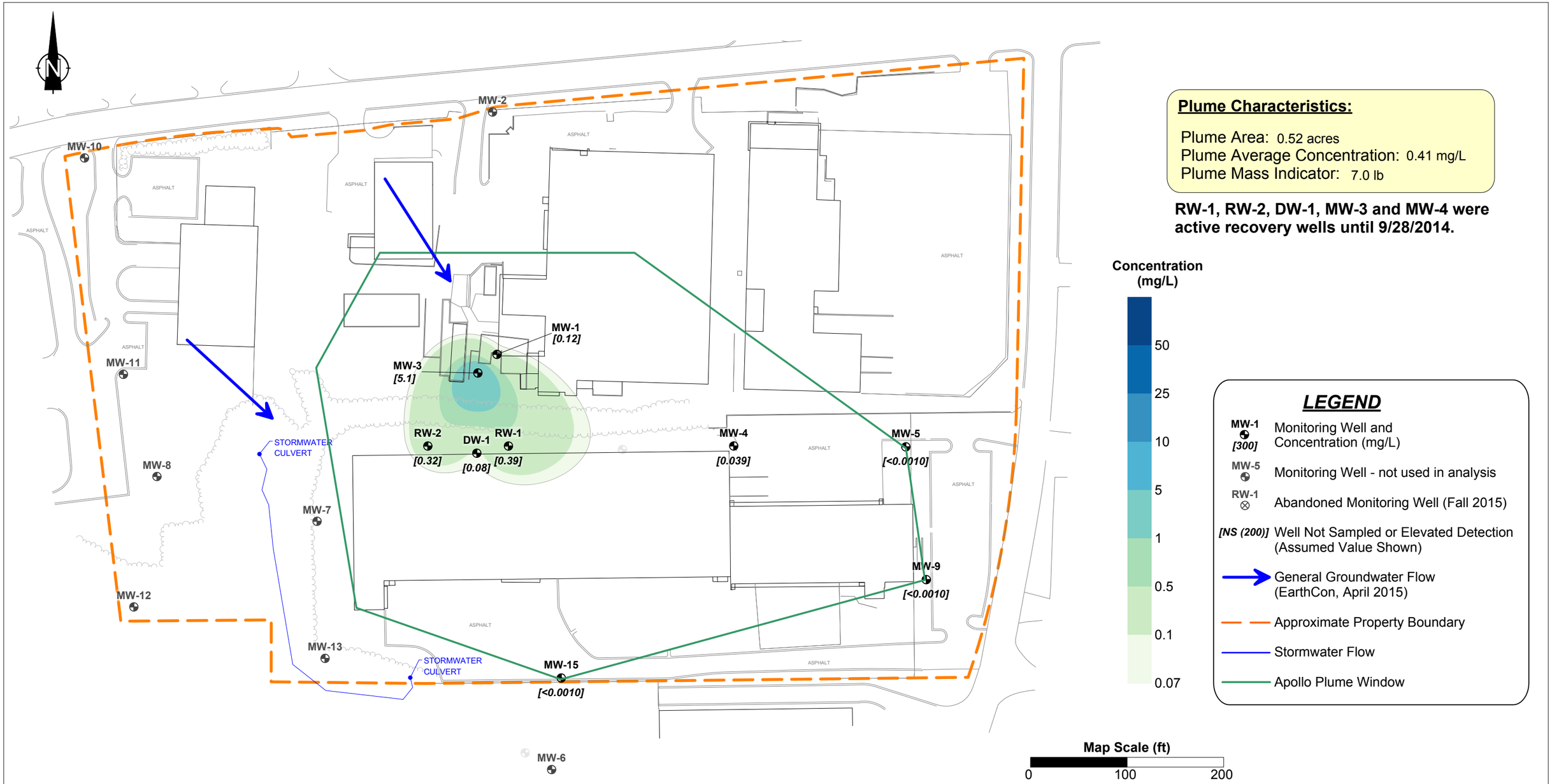
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Jun-2013

Prepared by: SSW Checked by: DW Figure: E14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.52 acres
Plume Average Concentration: 0.41 mg/L
Plume Mass Indicator: 7.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

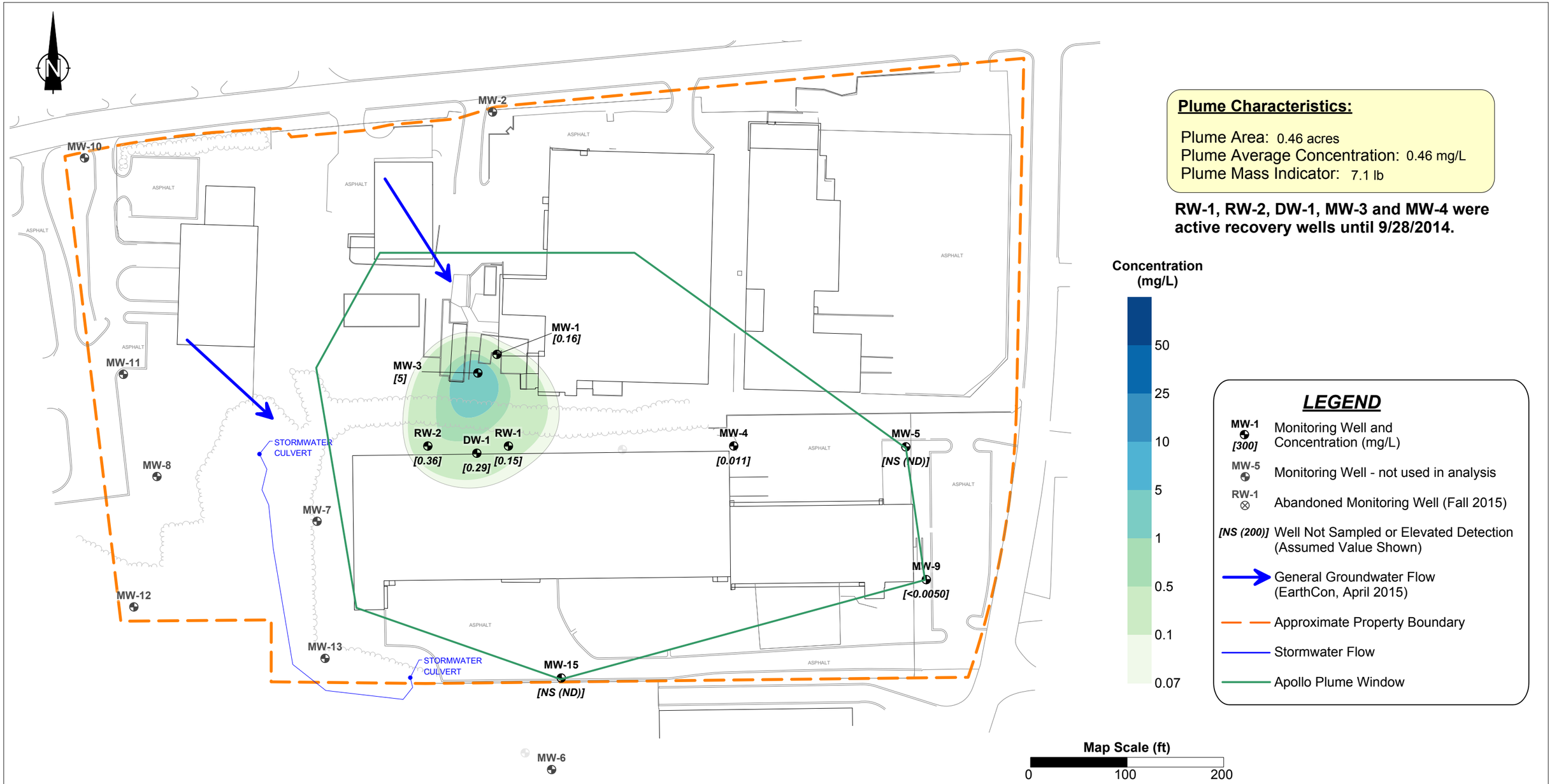
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Dec-2013

Prepared by: SSW Checked by: DW Figure: E15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.46 acres
Plume Average Concentration: 0.46 mg/L
Plume Mass Indicator: 7.1 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

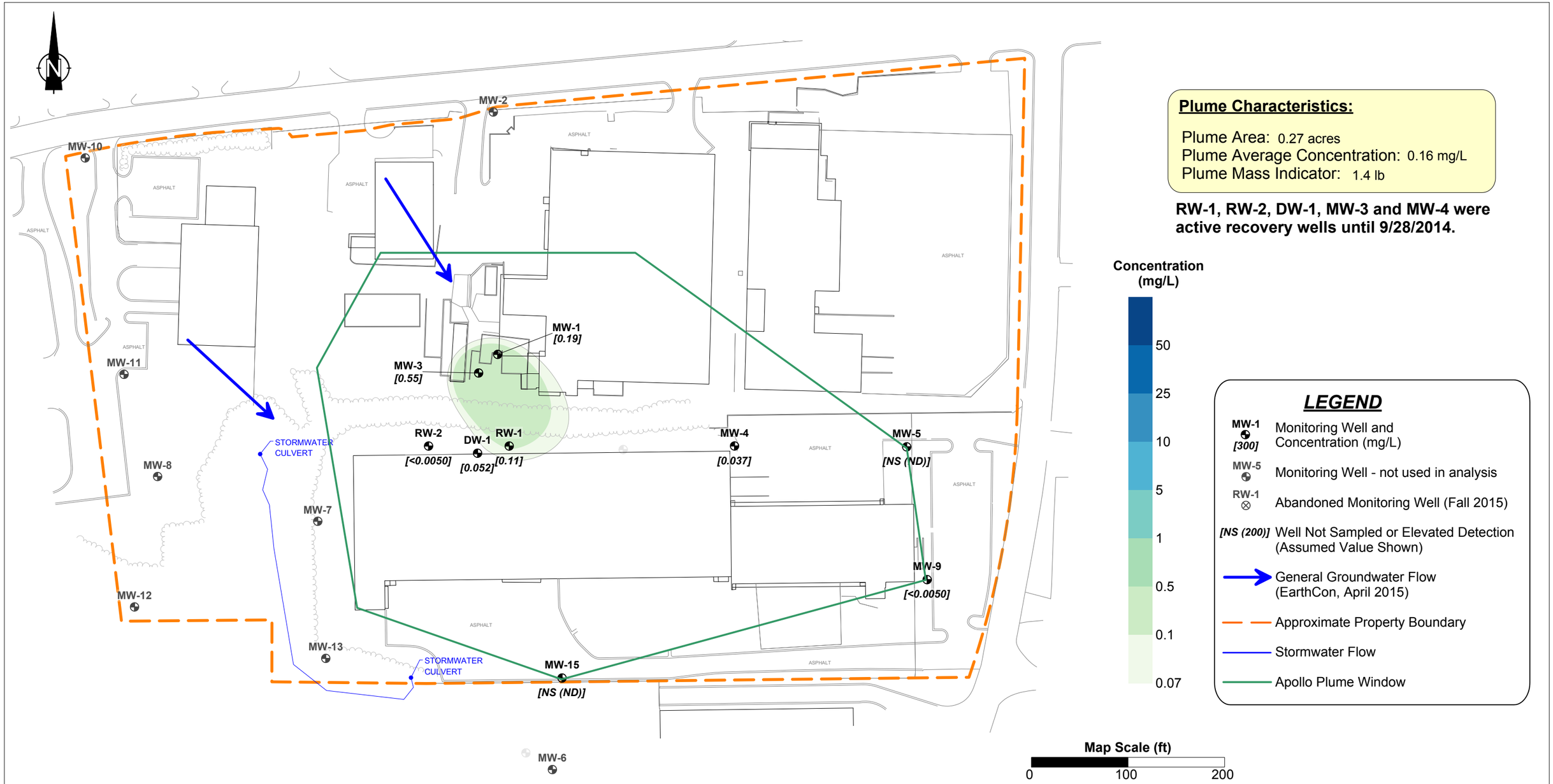
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Oct-2014

Prepared by: SSW Checked by: DW Figure: E16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.27 acres
Plume Average Concentration: 0.16 mg/L
Plume Mass Indicator: 1.4 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

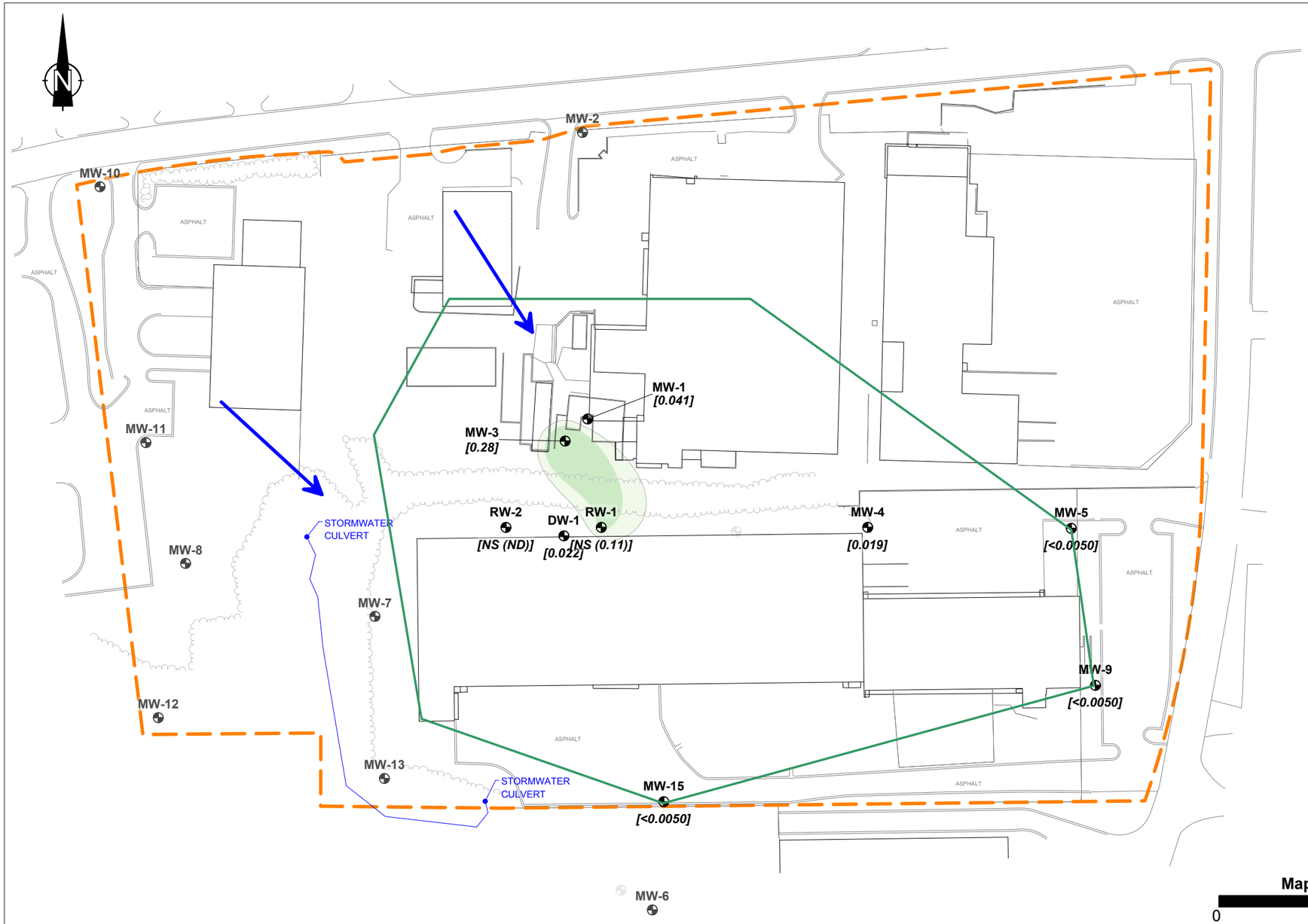
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Jan-2015

Prepared by: SSW Checked by: DW Figure: E17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.15 acres
Plume Average Concentration: 0.11 mg/L
Plume Mass Indicator: 0.53 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

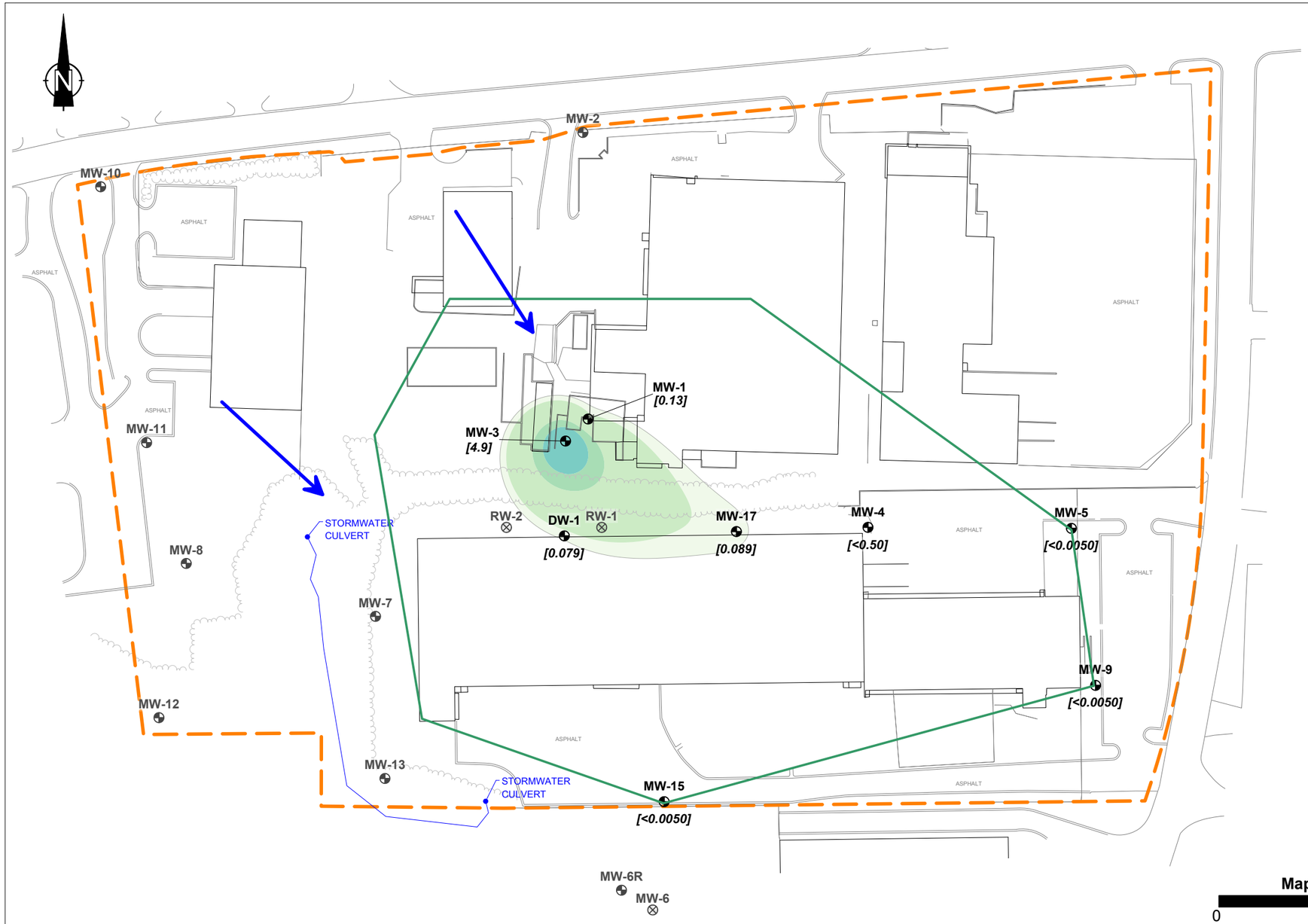
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Apr-2015

Prepared by: SSW Checked by: DW Figure: E18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.47 acres
Plume Average Concentration: 0.30 mg/L
Plume Mass Indicator: 4.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

50
25
10
5
1
0.5
0.1
0.07

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

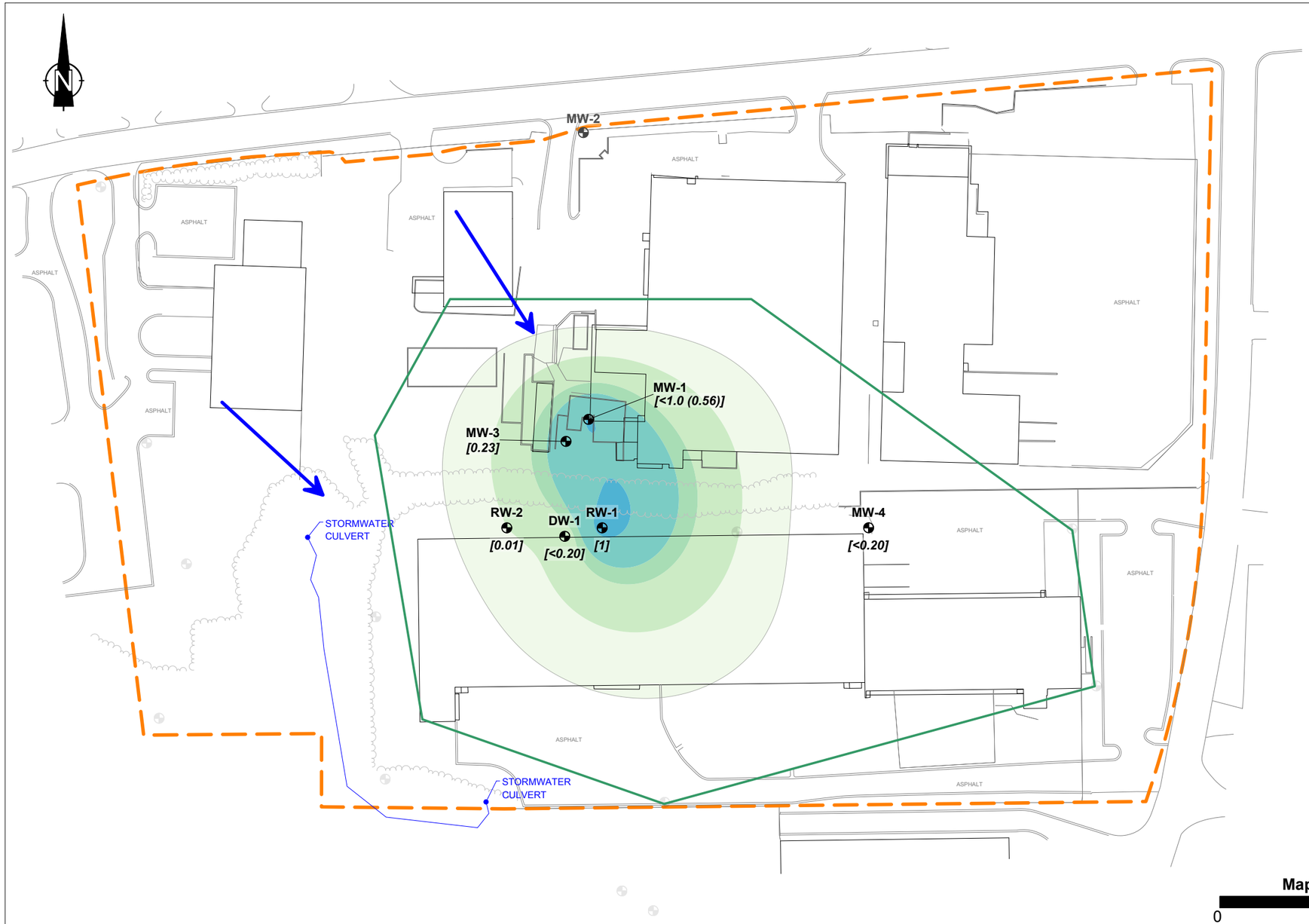
Apollo Plume
cis-1,2-Dichloroethene
(cis-1,2-DCE)
Oct-2015

Prepared by: SSW Checked by: DW Figure: E19

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix F: Apollo Plume Series Isopleth Maps – Vinyl Chloride (VC)



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.061 mg/L
Plume Mass Indicator: 3.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

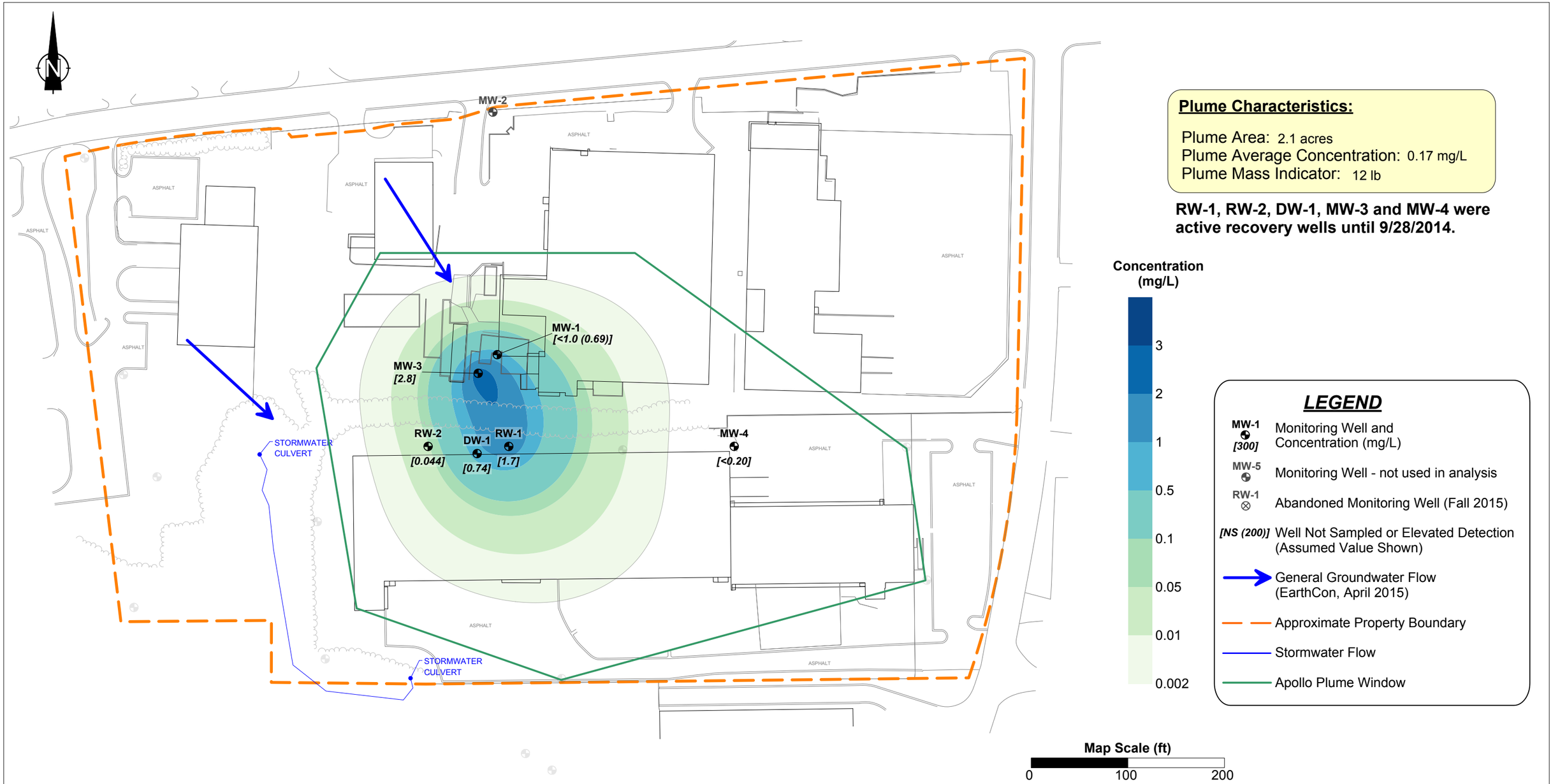
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Jan-2005

Prepared by: SSW Checked by: DW Figure: F1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.17 mg/L
Plume Mass Indicator: 12 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

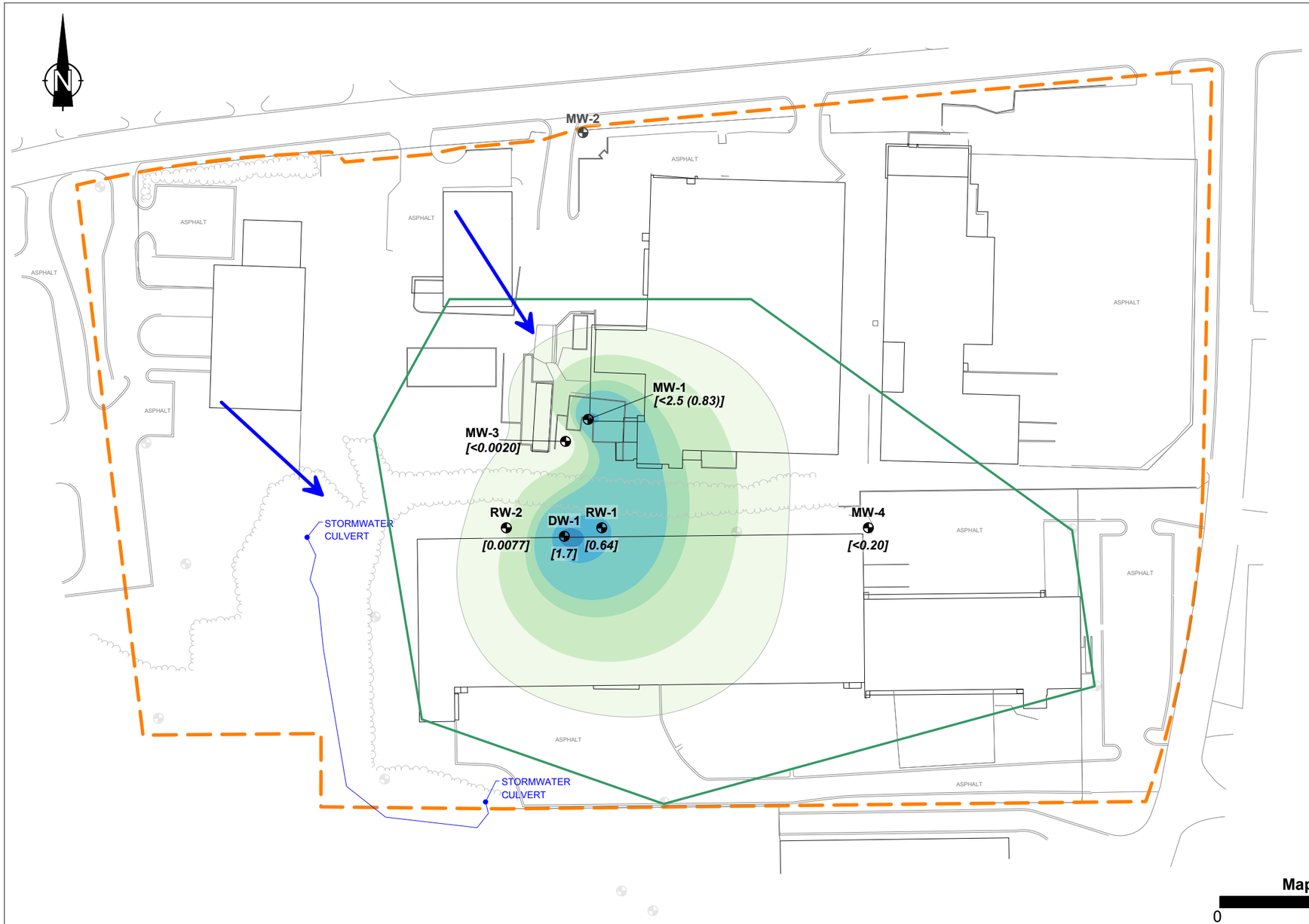
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Dec-2005

Prepared by: SSW Checked by: DW Figure: F2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.064 mg/L
Plume Mass Indicator: 3.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- **MW-1** *[300]* — Monitoring Well and Concentration (mg/L)
- **MW-5** — Monitoring Well - not used in analysis
- **RW-1** — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

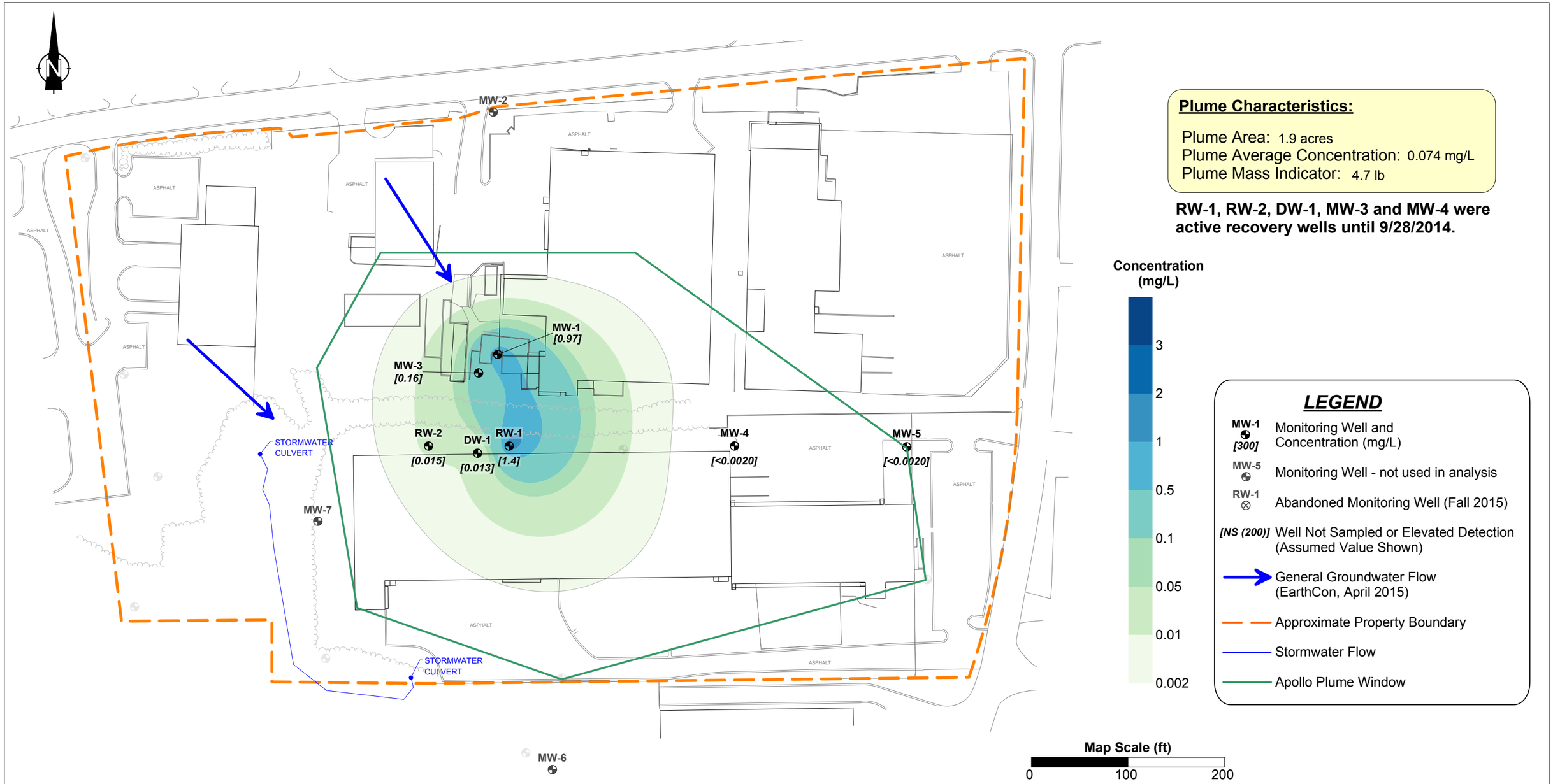
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Jul-2006

Prepared by: SSW Checked by: DW Figure: F3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.074 mg/L
Plume Mass Indicator: 4.7 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

Map Scale (ft)

0 100 200

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

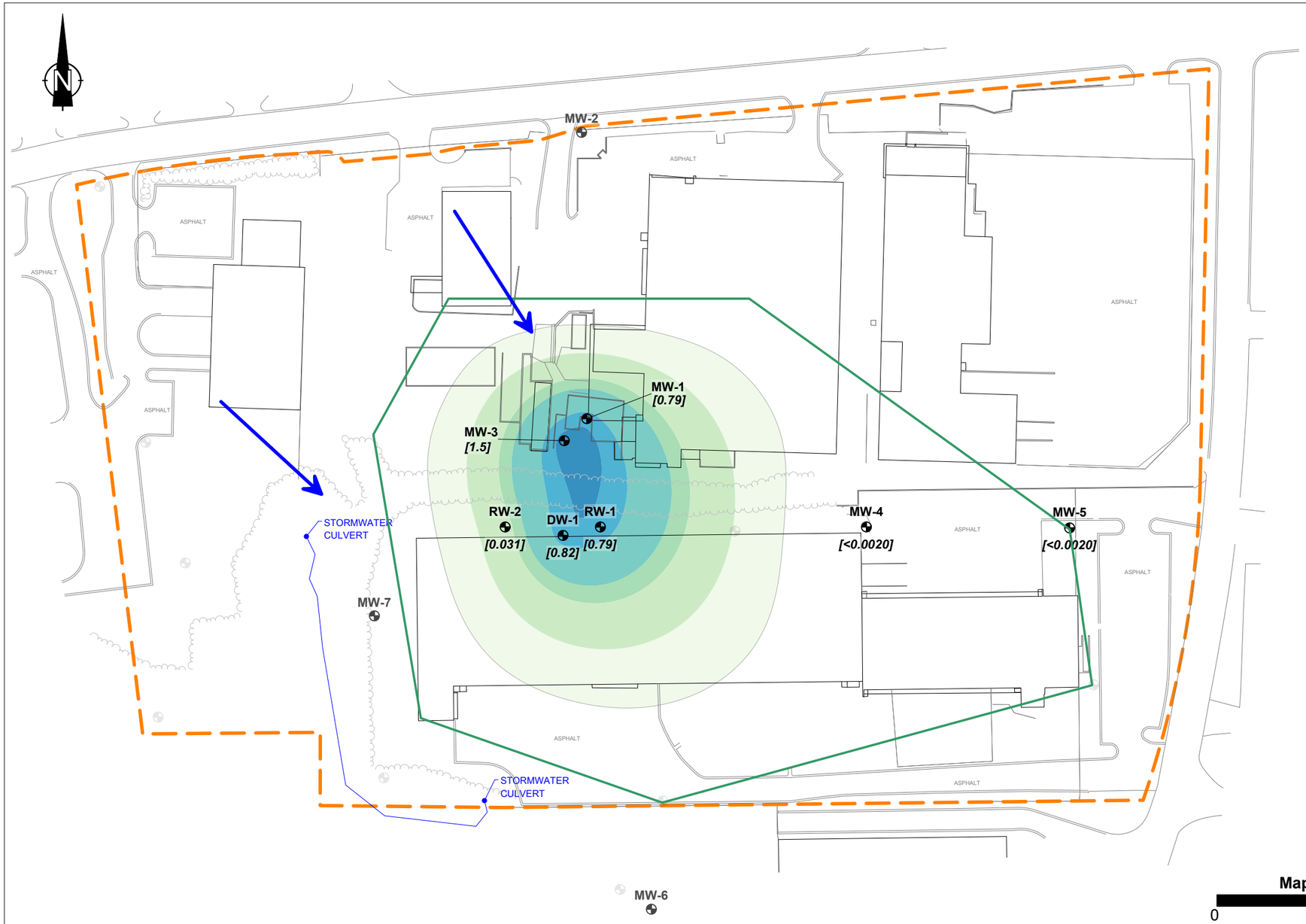
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Feb-2007

Prepared by: SSW Checked by: DW Figure: F4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.12 mg/L
Plume Mass Indicator: 7.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

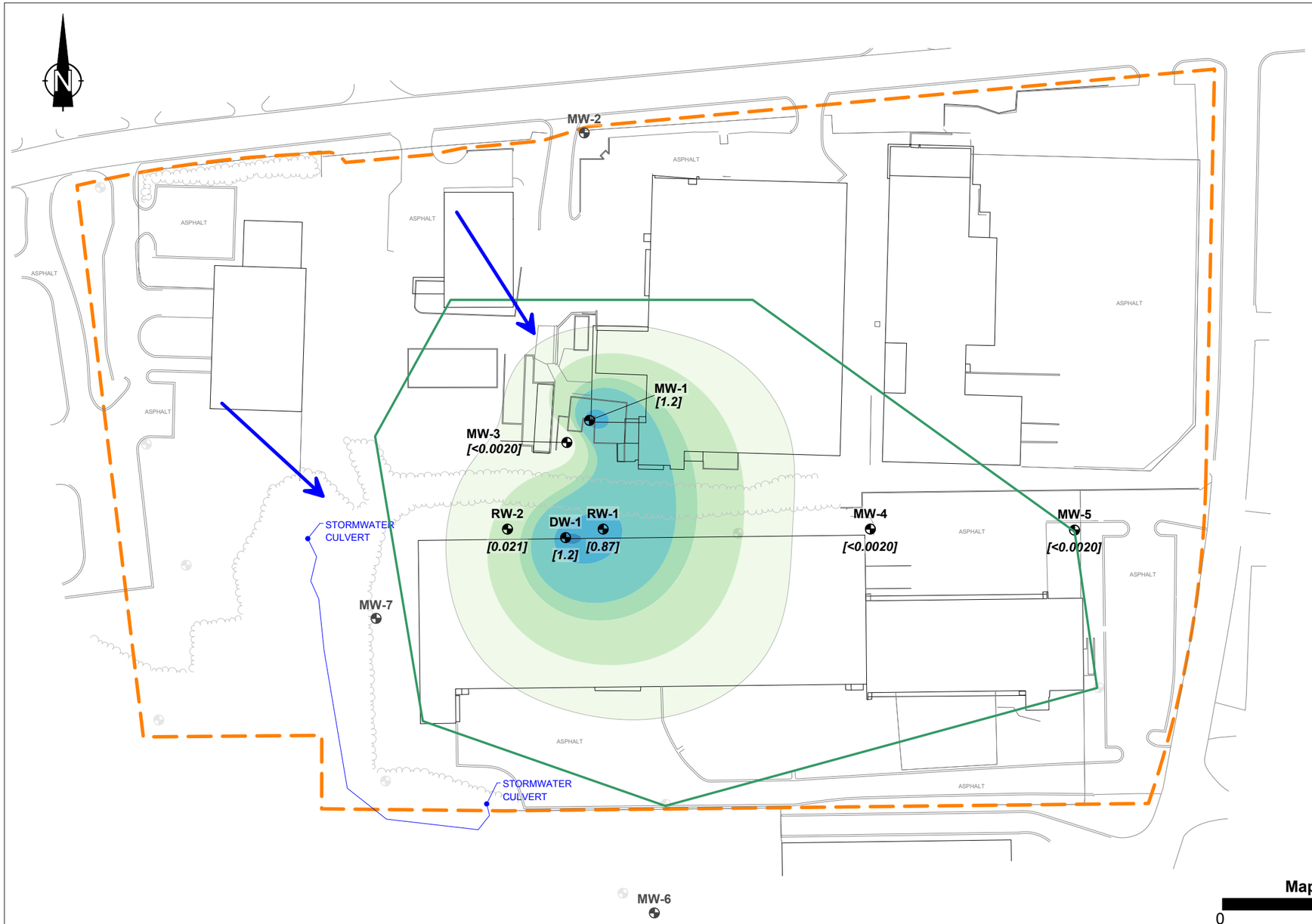
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Aug-2007

Prepared by: SSW Checked by: DW Figure: F5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.070 mg/L
Plume Mass Indicator: 4.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

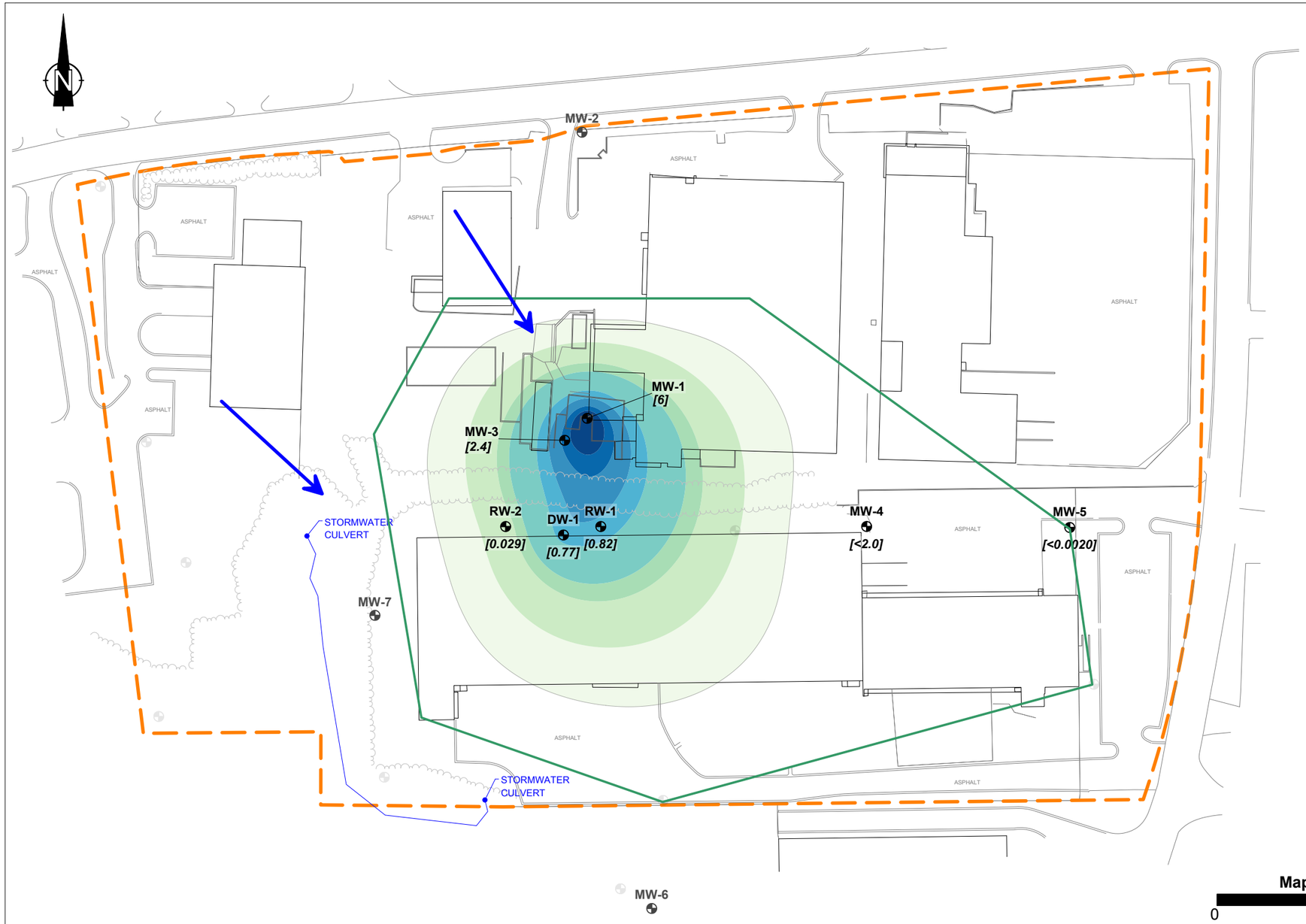
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Feb-2008

Prepared by: SSW Checked by: DW Figure: F6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.21 mg/L
Plume Mass Indicator: 15 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

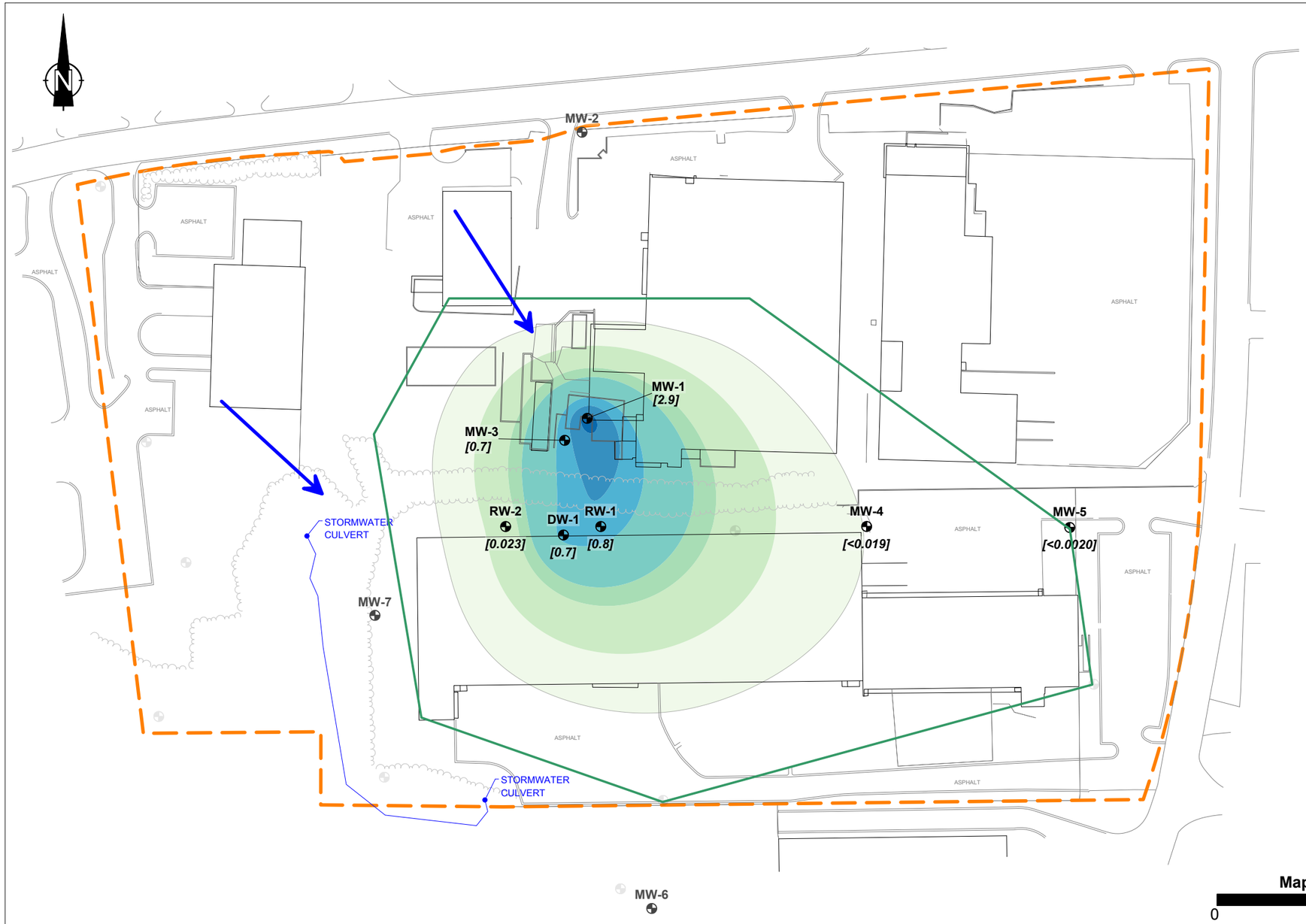
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Nov-2008

Prepared by: SSW Checked by: DW Figure: F7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.4 acres
Plume Average Concentration: 0.12 mg/L
Plume Mass Indicator: 9.5 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

Map Scale (ft)

0 100 200

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

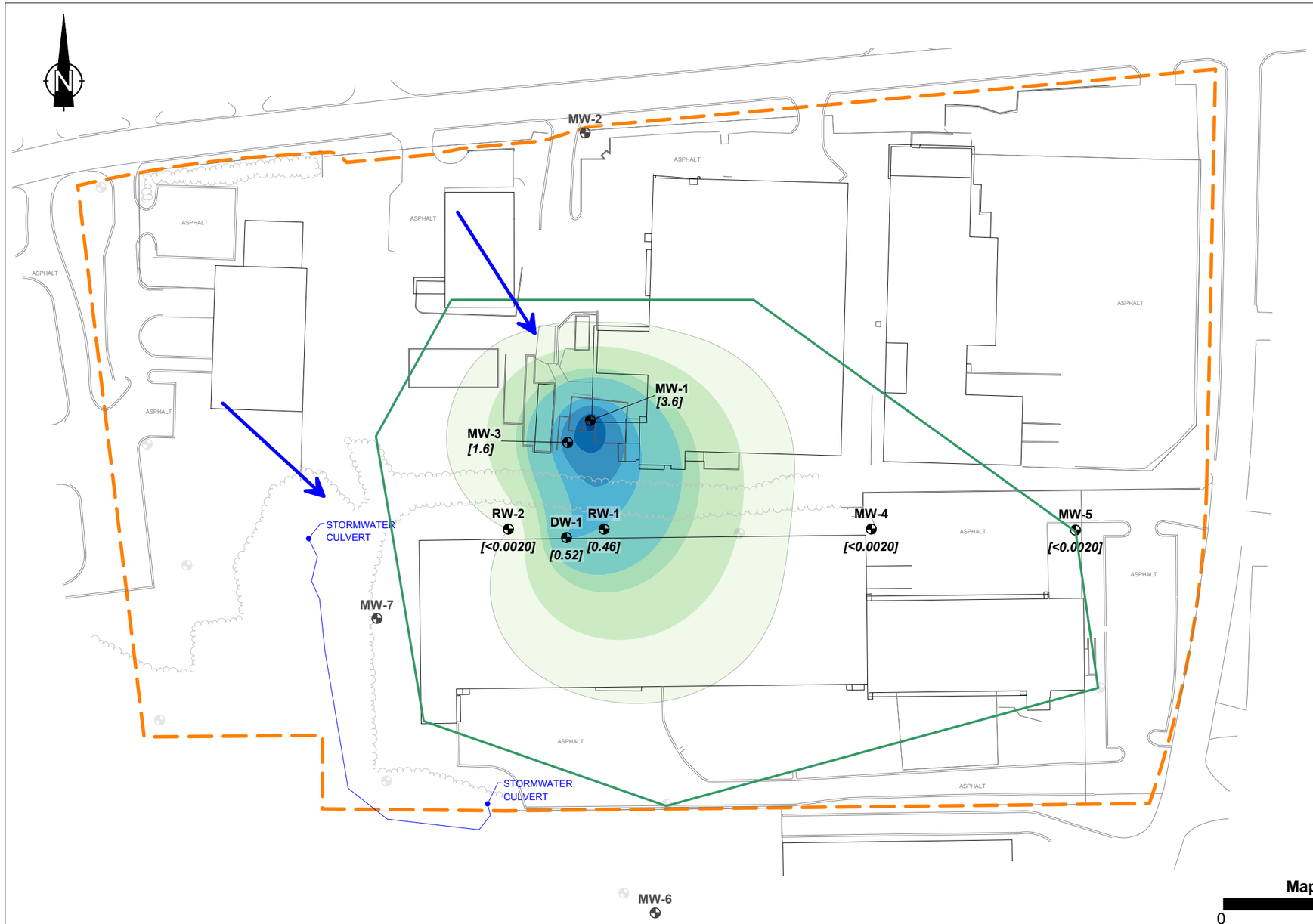
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Sep-2009

Prepared by: SSW Checked by: DW Figure: F8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.14 mg/L
Plume Mass Indicator: 8.8 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

Map Scale (ft)

0 100 200

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

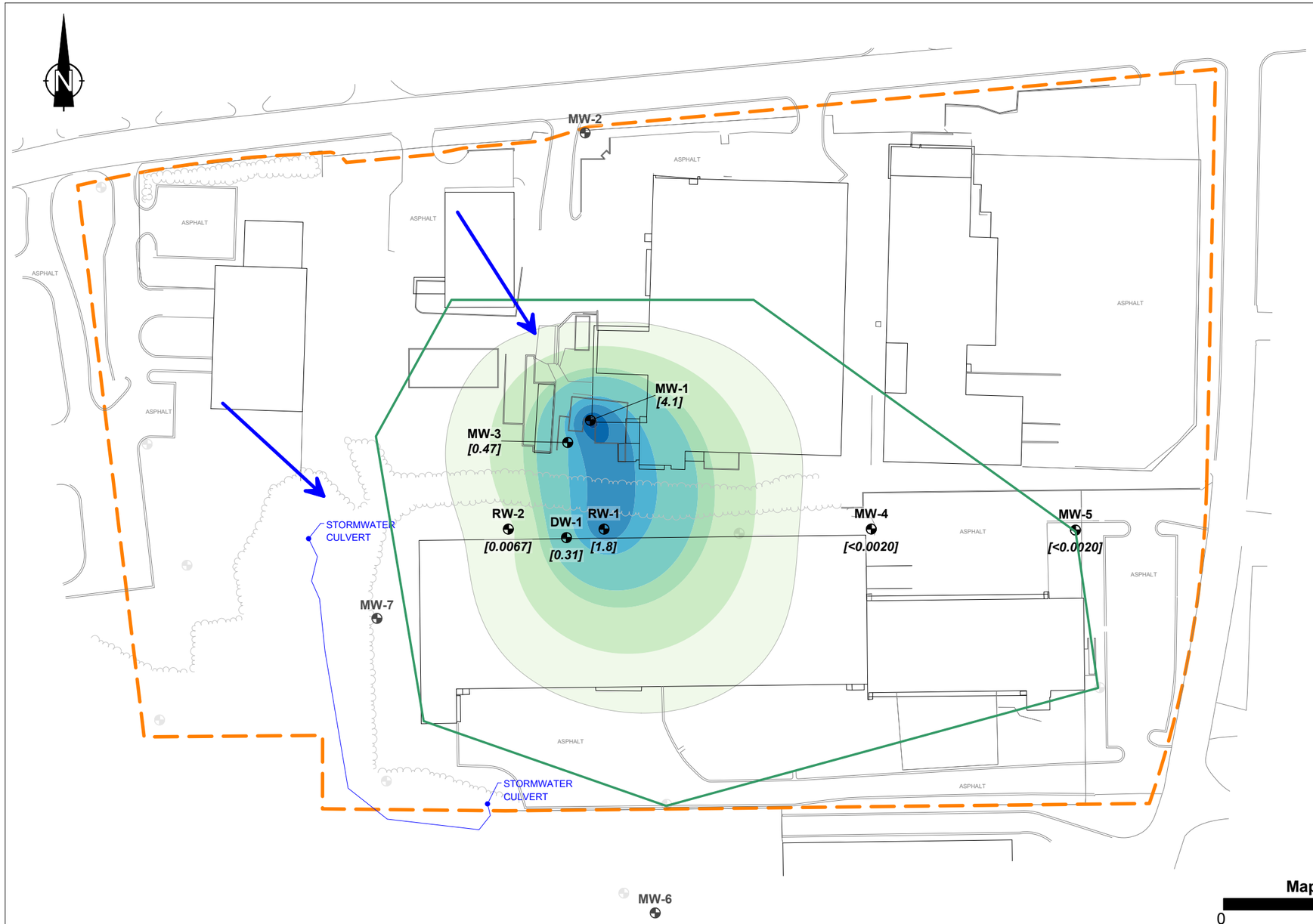
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Mar-2010

Prepared by: SSW Checked by: DW Figure: F9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.16 mg/L
Plume Mass Indicator: 11 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

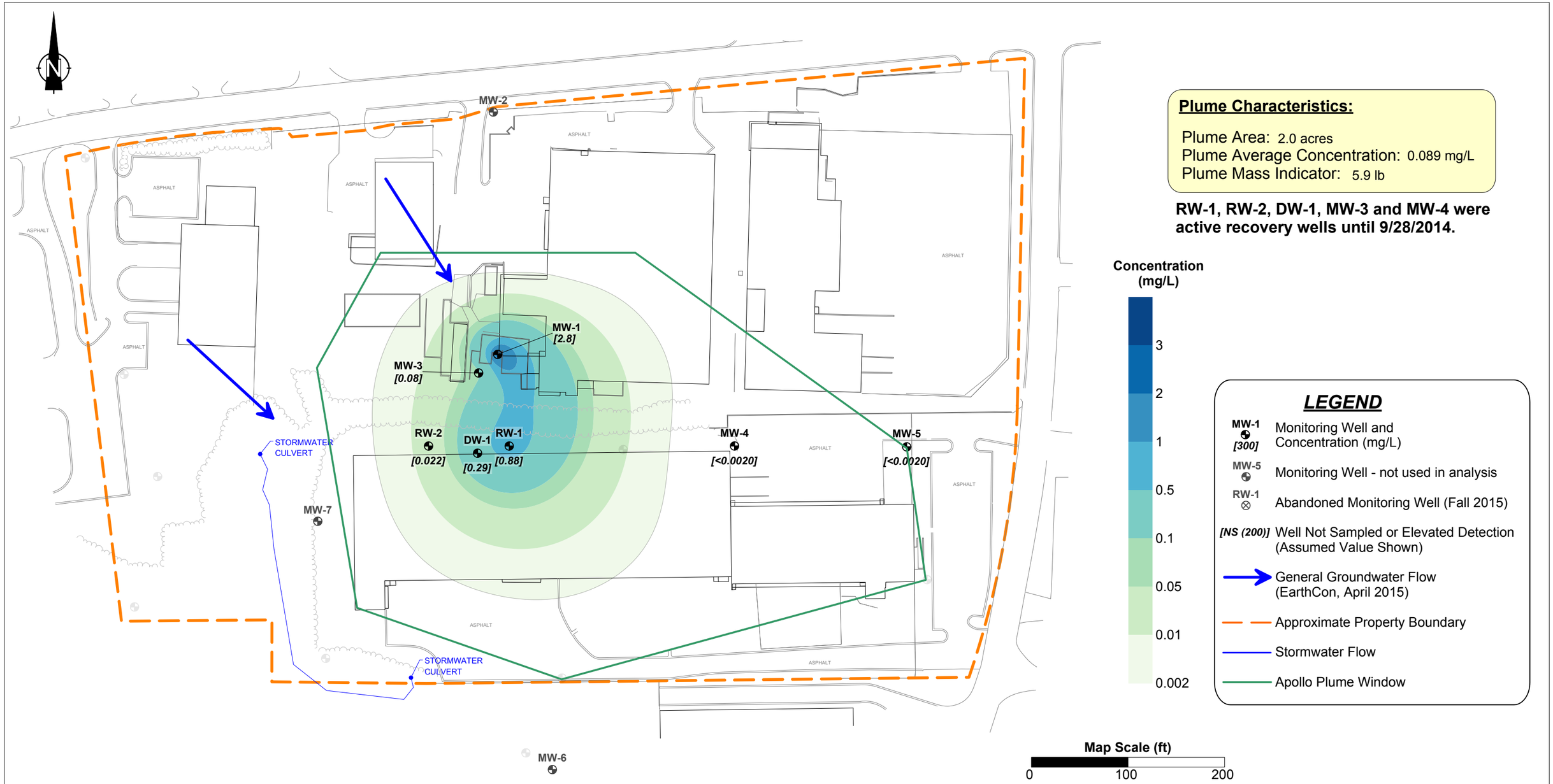
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Sep-2010

Prepared by: SSW Checked by: DW Figure: F10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.0 acres
Plume Average Concentration: 0.089 mg/L
Plume Mass Indicator: 5.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

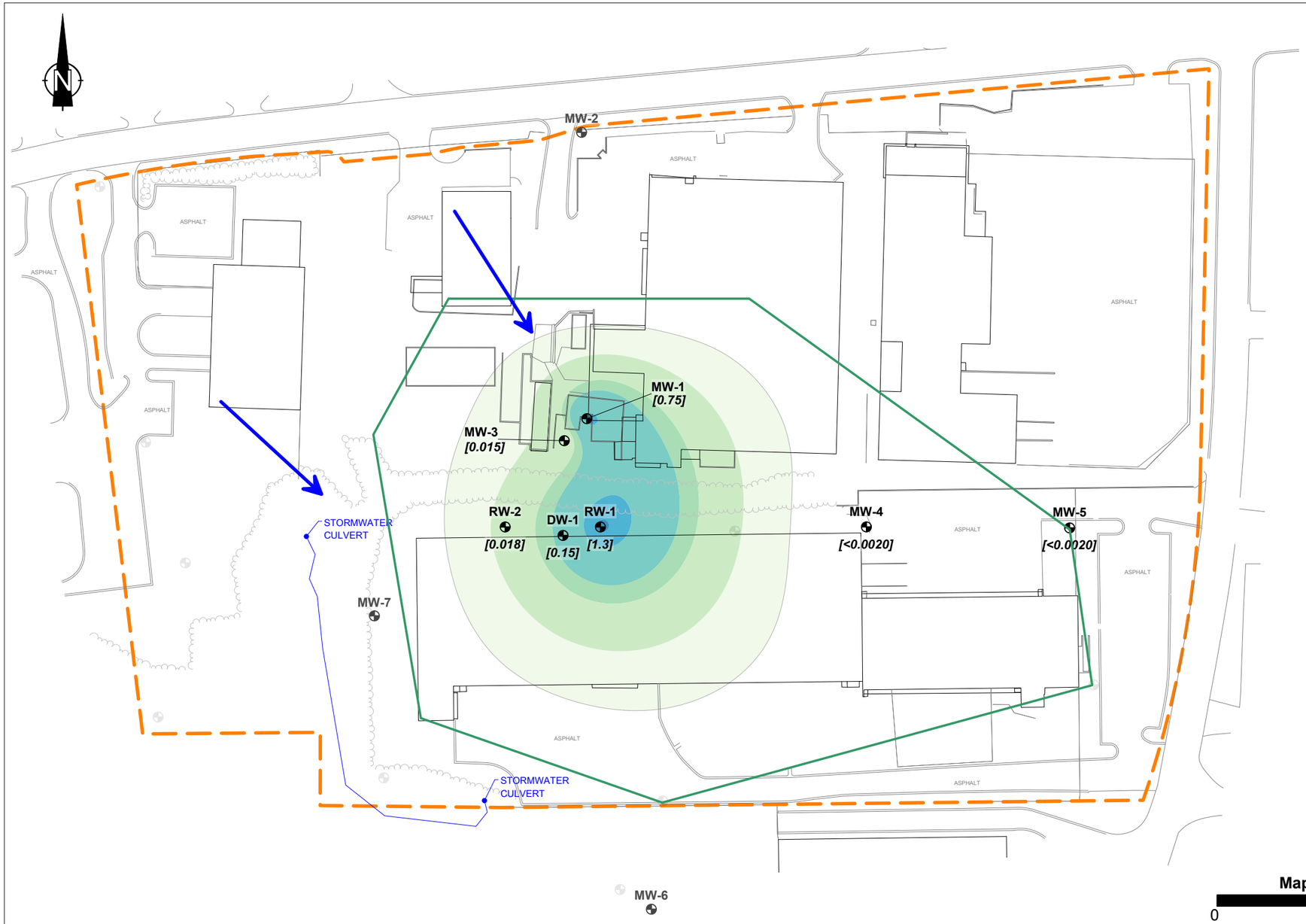
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Apr-2011

Prepared by: SSW Checked by: DW Figure: F11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.9 acres
Plume Average Concentration: 0.061 mg/L
Plume Mass Indicator: 4.0 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

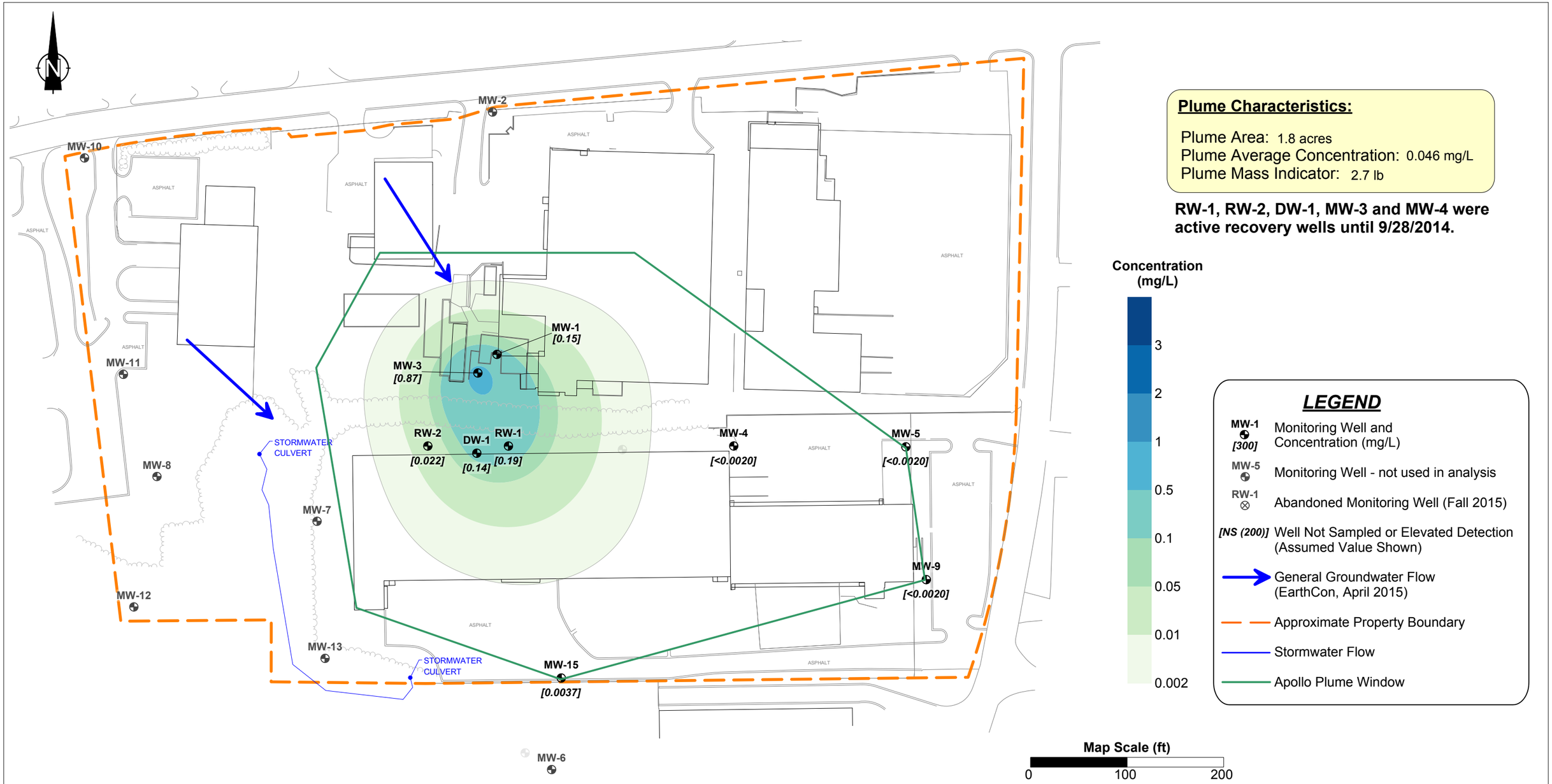
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Oct-2011

Prepared by: SSW Checked by: DW Figure: F12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.046 mg/L
Plume Mass Indicator: 2.7 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

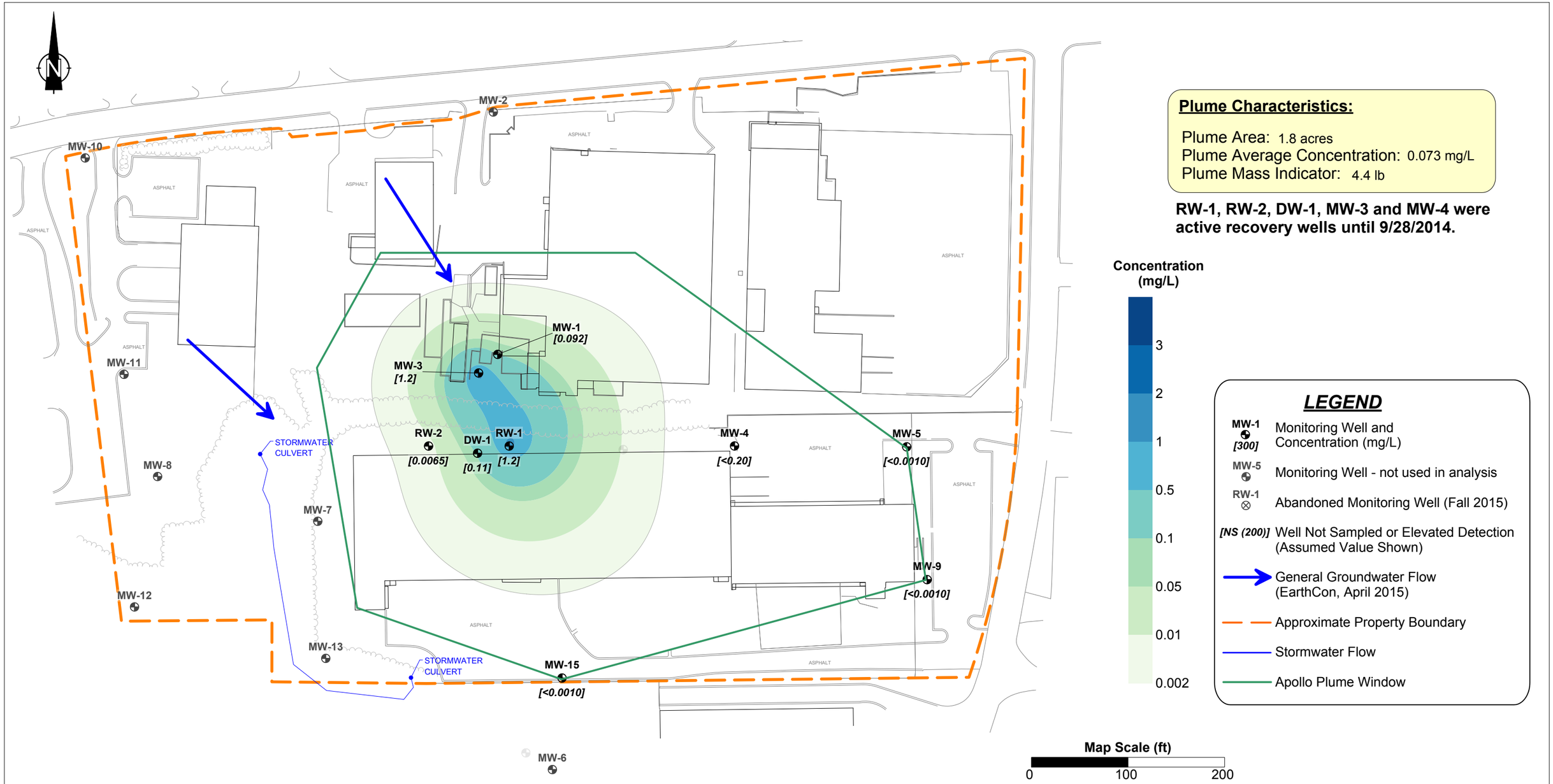
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Sep-2012

Prepared by: SSW Checked by: DW Figure: F13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.073 mg/L
Plume Mass Indicator: 4.4 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

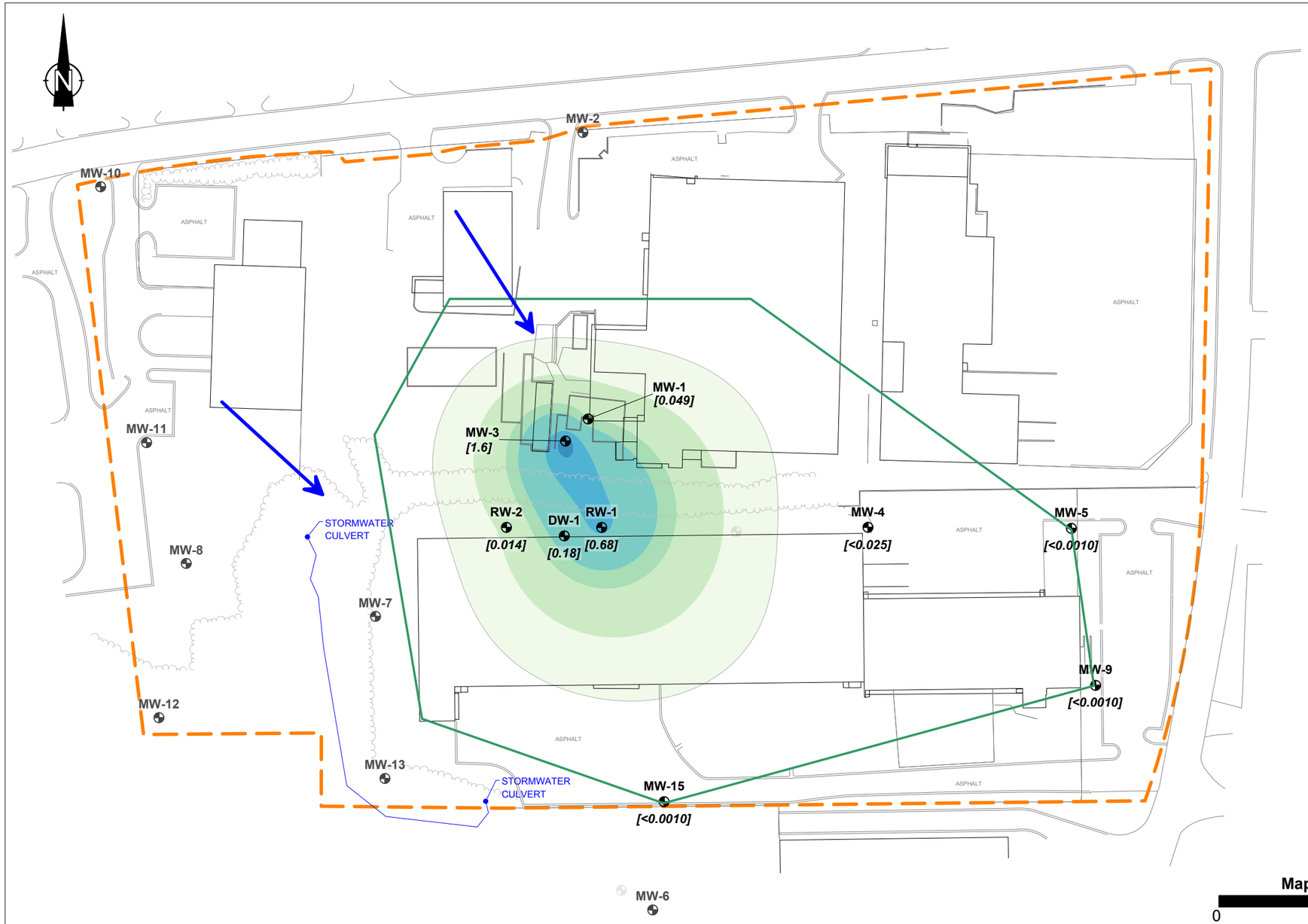
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Jun-2013

Prepared by: SSW Checked by: DW Figure: F14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.066 mg/L
Plume Mass Indicator: 3.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

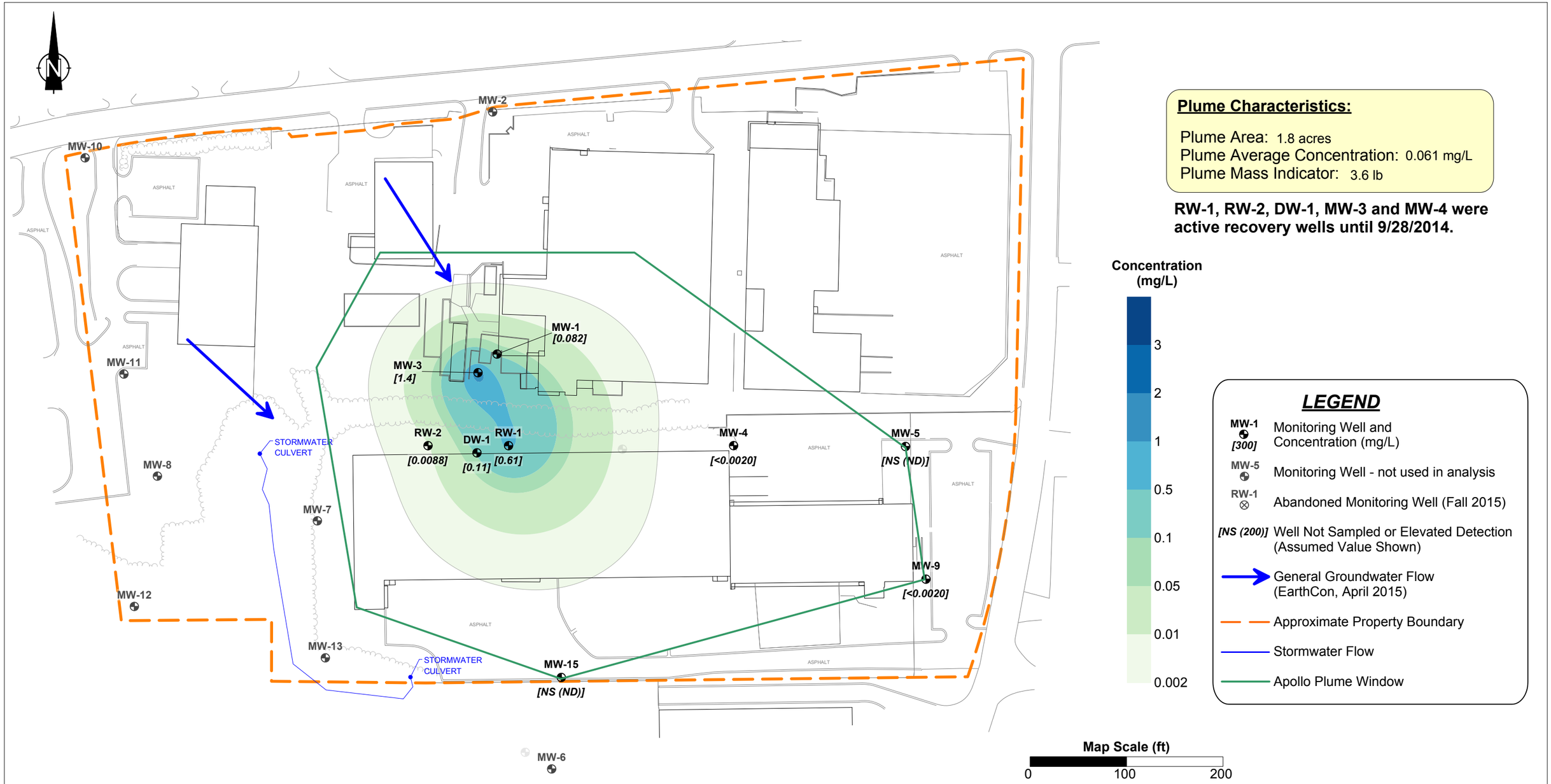
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Dec-2013

Prepared by: SSW Checked by: DW Figure: F15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.061 mg/L
Plume Mass Indicator: 3.6 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

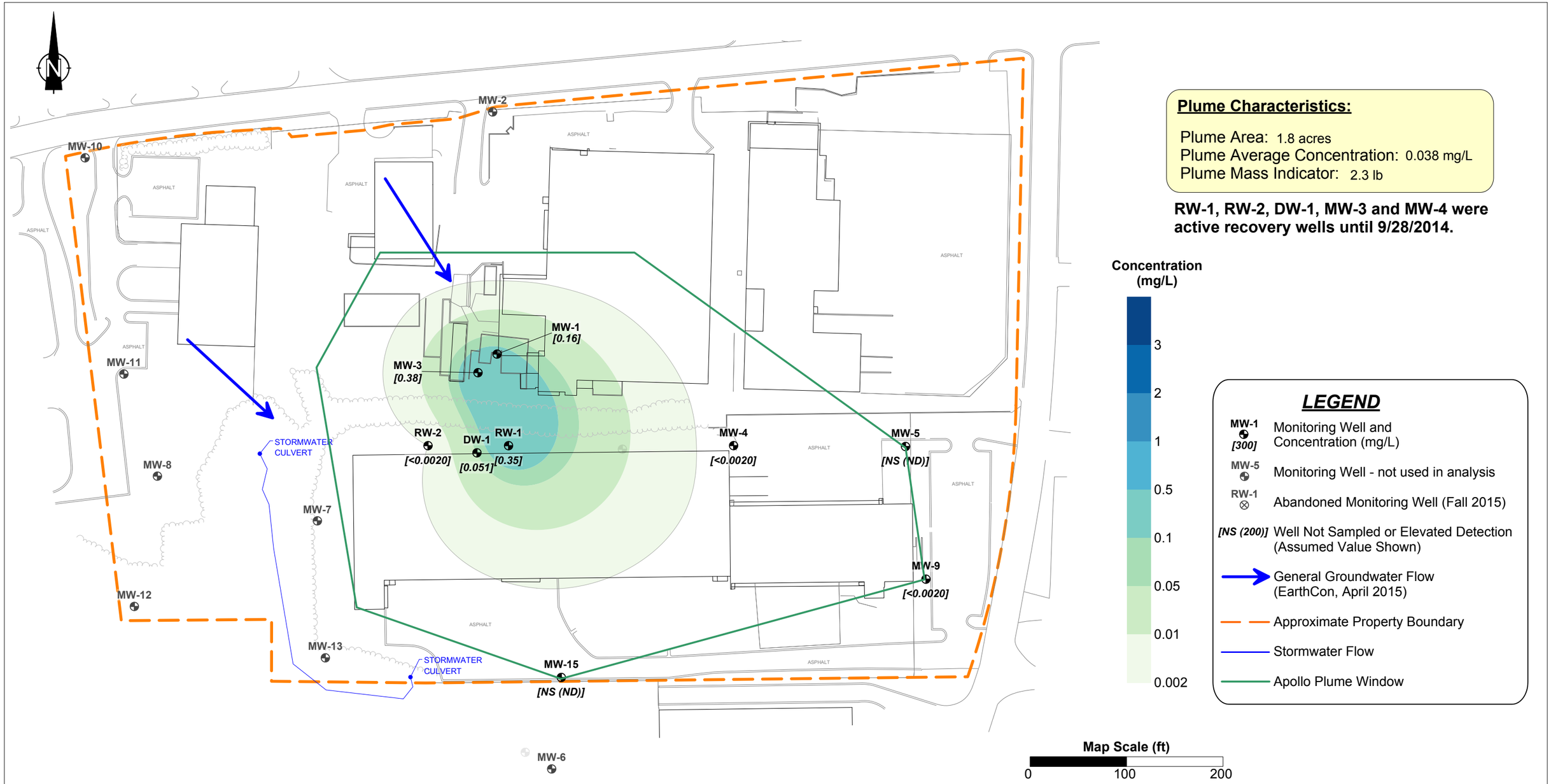
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Oct-2014

Prepared by: SSW Checked by: DW Figure: F16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 1.8 acres
Plume Average Concentration: 0.038 mg/L
Plume Mass Indicator: 2.3 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

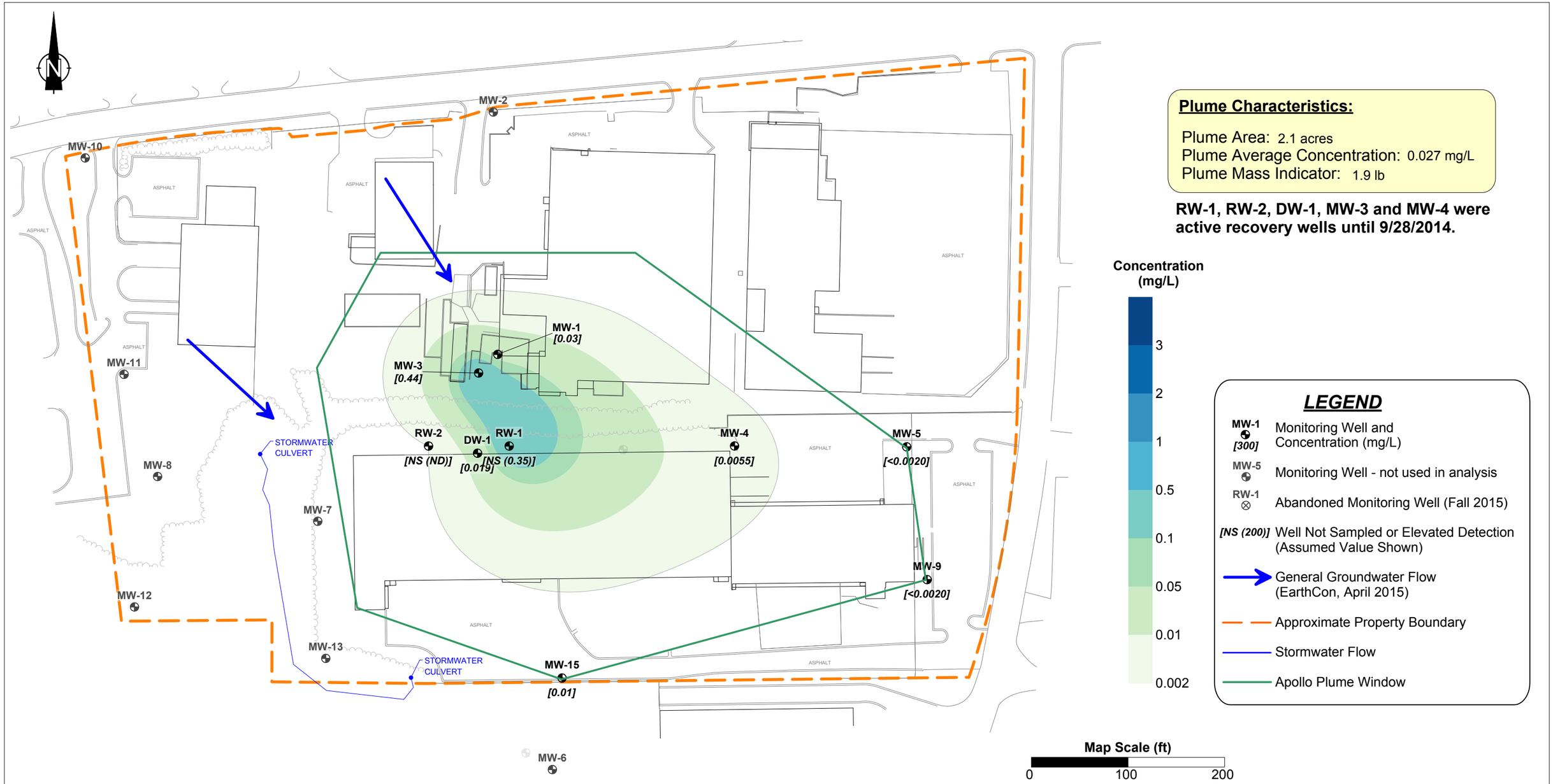
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Jan-2015

Prepared by: SSW Checked by: DW Figure: F17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.1 acres
Plume Average Concentration: 0.027 mg/L
Plume Mass Indicator: 1.9 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

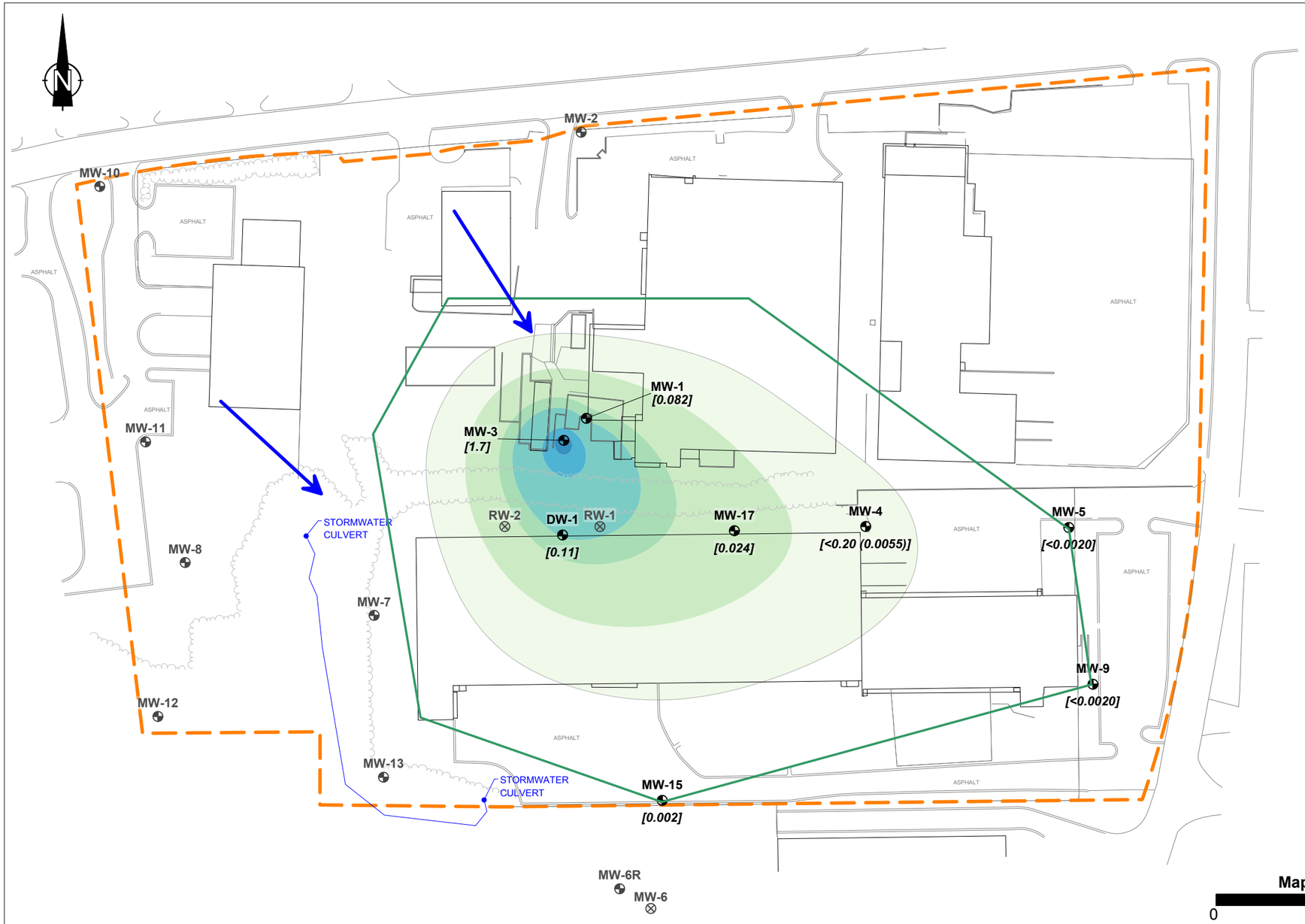
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Vinyl Chloride (VC)
Apr-2015

Prepared by: SSW Checked by: DW Figure: F18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 2.4 acres
Plume Average Concentration: 0.041 mg/L
Plume Mass Indicator: 3.3 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

3
2
1
0.5
0.1
0.05
0.01
0.002

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

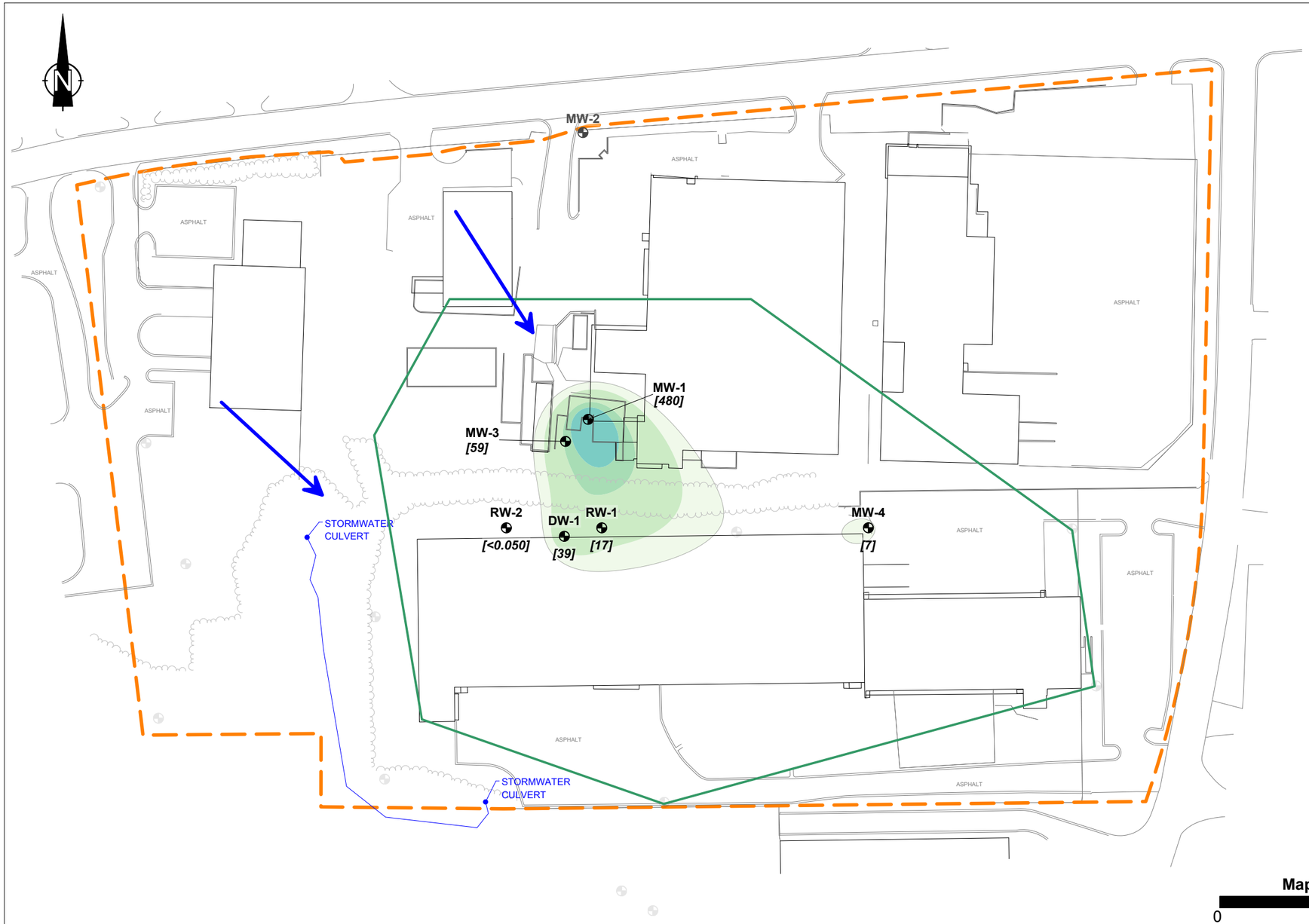
Apollo Plume
Vinyl Chloride (VC)
Oct-2015

Prepared by: SSW Checked by: DW Figure: F19

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix G: Apollo Plume Series Isopleth Maps – Acetone



Plume Characteristics:

Plume Area: 0.49 acres
Plume Average Concentration: 34 mg/L
Plume Mass Indicator: 558 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

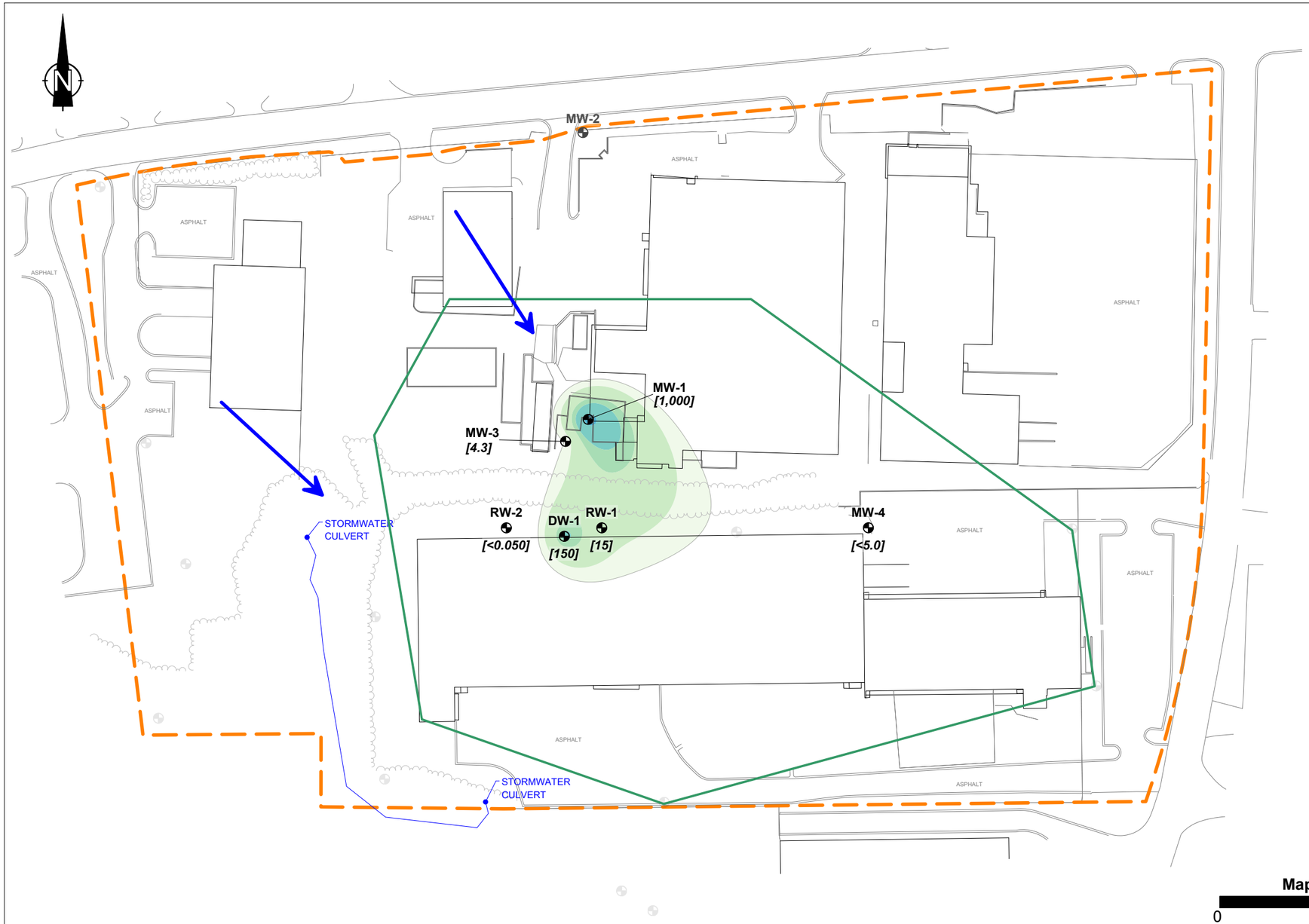
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Dec-2005

Prepared by: SSW Checked by: DW Figure: G1

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.46 acres
Plume Average Concentration: 34 mg/L
Plume Mass Indicator: 515 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Jul-2006

Prepared by: SSW Checked by: DW Figure: G2

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.39 acres
Plume Average Concentration: 95 mg/L
Plume Mass Indicator: 1,246 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

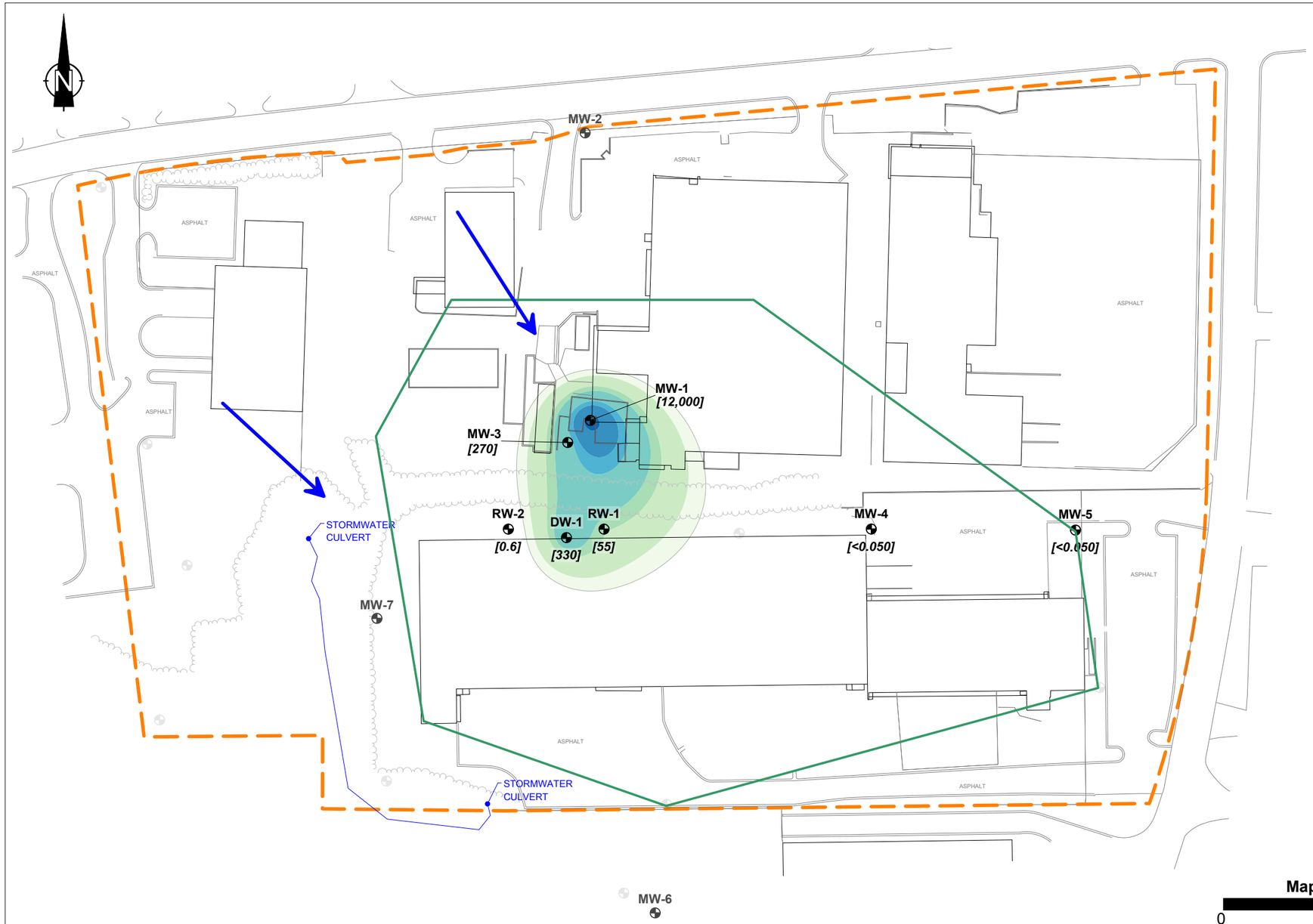
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Feb-2007

Prepared by: SSW Checked by: DW Figure: G3

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.58 acres
Plume Average Concentration: 241 mg/L
Plume Mass Indicator: 4,663 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

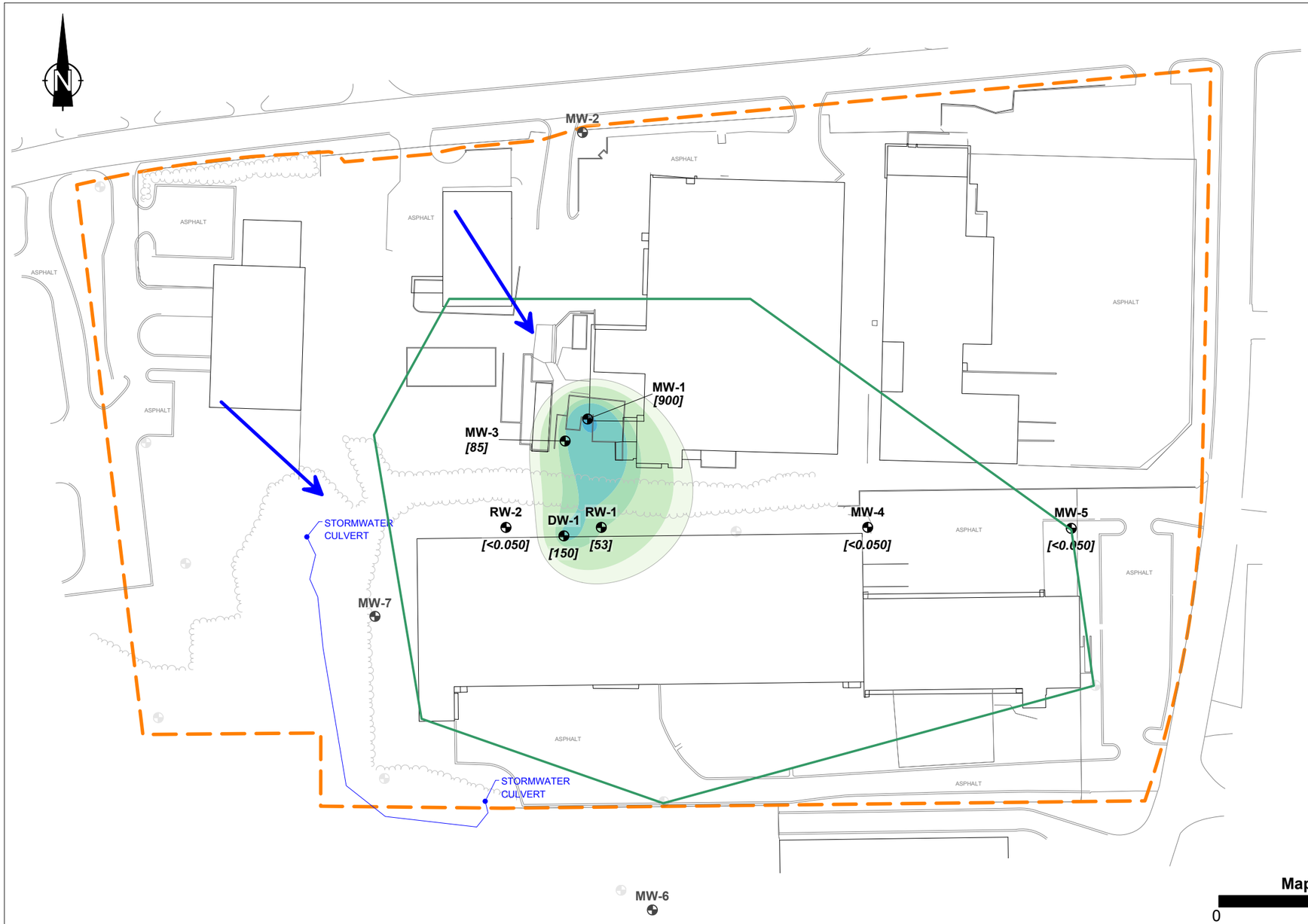
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Aug-2007

Prepared by: SSW Checked by: DW Figure: G4

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.47 acres
Plume Average Concentration: 63 mg/L
Plume Mass Indicator: 979 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

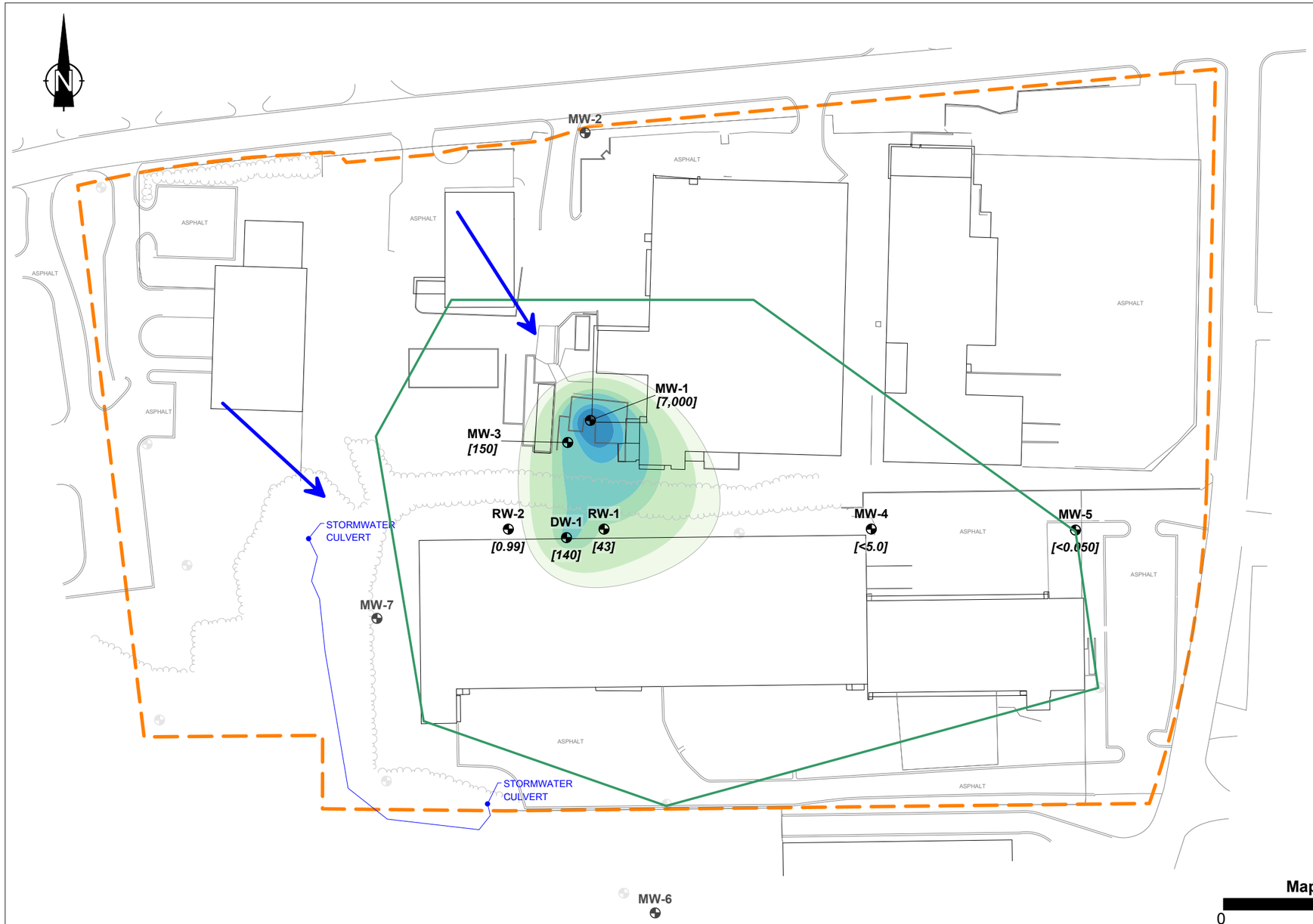
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Feb-2008

Prepared by: SSW Checked by: DW Figure: G5

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.60 acres
Plume Average Concentration: 151 mg/L
Plume Mass Indicator: 3,021 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

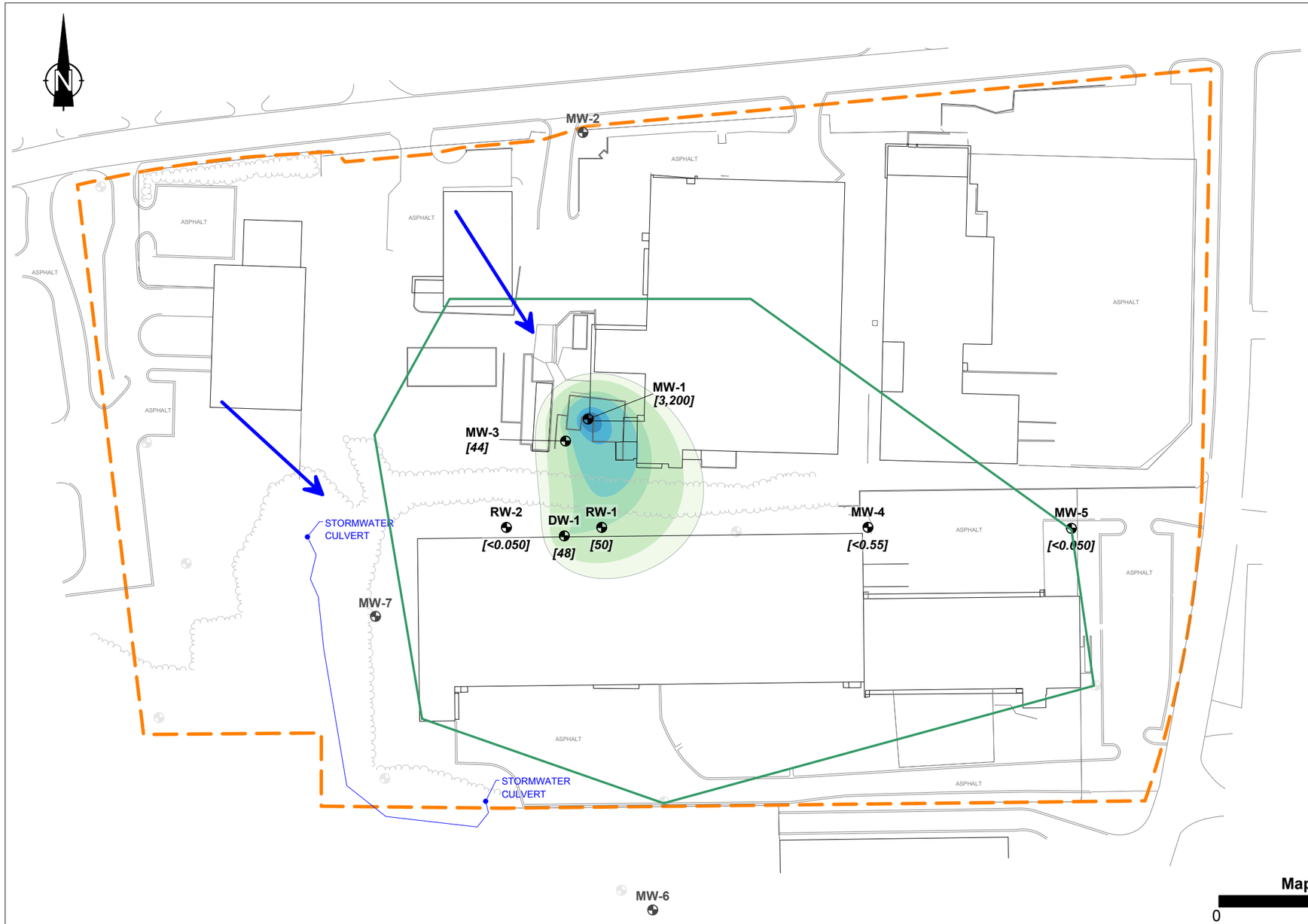
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Nov-2008

Prepared by: SSW Checked by: DW Figure: G6

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.49 acres
Plume Average Concentration: 91 mg/L
Plume Mass Indicator: 1,476 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

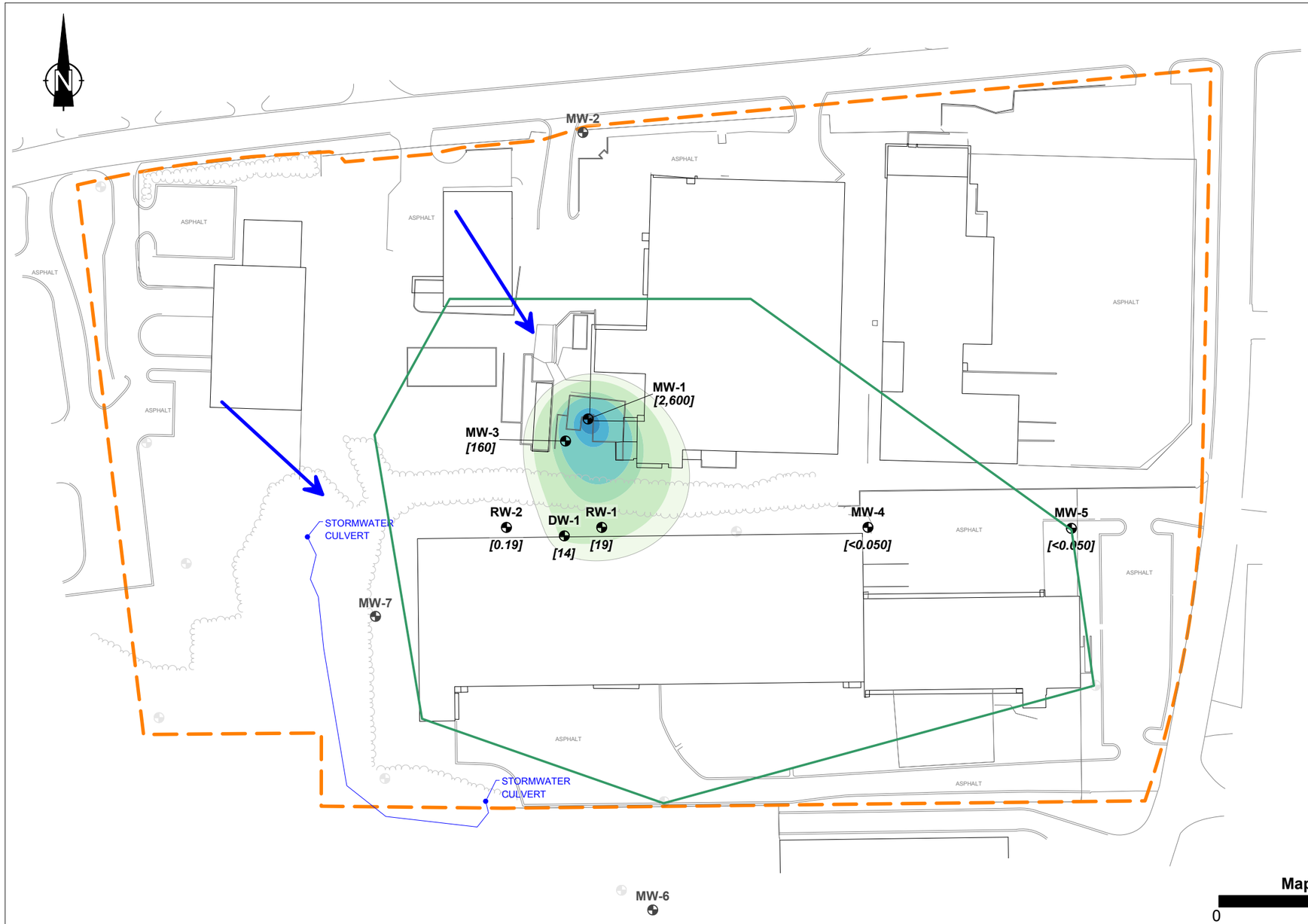
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Sep-2009

Prepared by: SSW Checked by: DW Figure: G7

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.43 acres
Plume Average Concentration: 96 mg/L
Plume Mass Indicator: 1,371 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- **MW-1** *[300]* — Monitoring Well and Concentration (mg/L)
- **MW-5** — Monitoring Well - not used in analysis
- **RW-1** — Abandoned Monitoring Well (Fall 2015)
- *[NS (200)]* — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

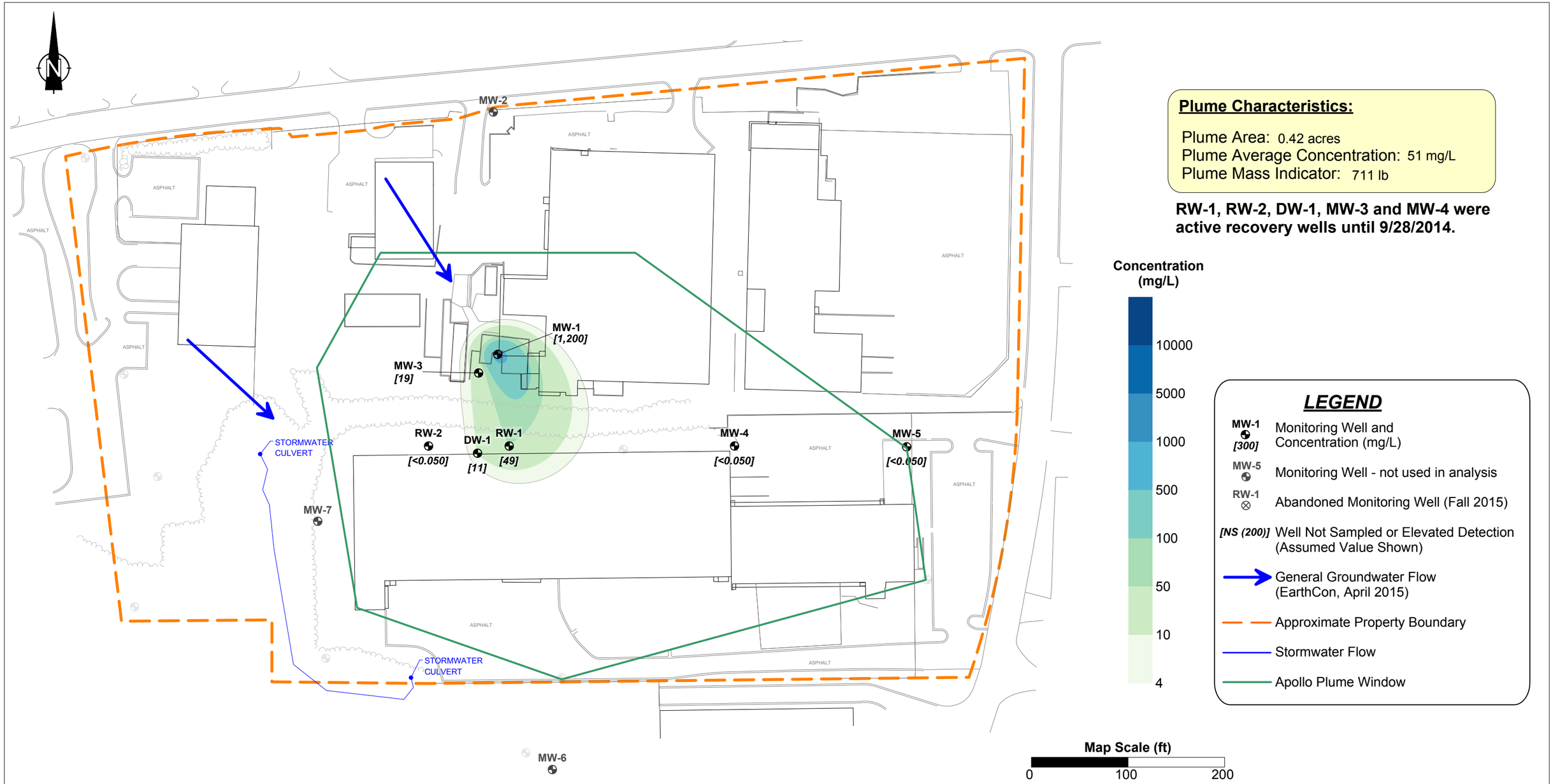
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Mar-2010

Prepared by: SSW Checked by: DW Figure: G8

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.42 acres
Plume Average Concentration: 51 mg/L
Plume Mass Indicator: 711 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

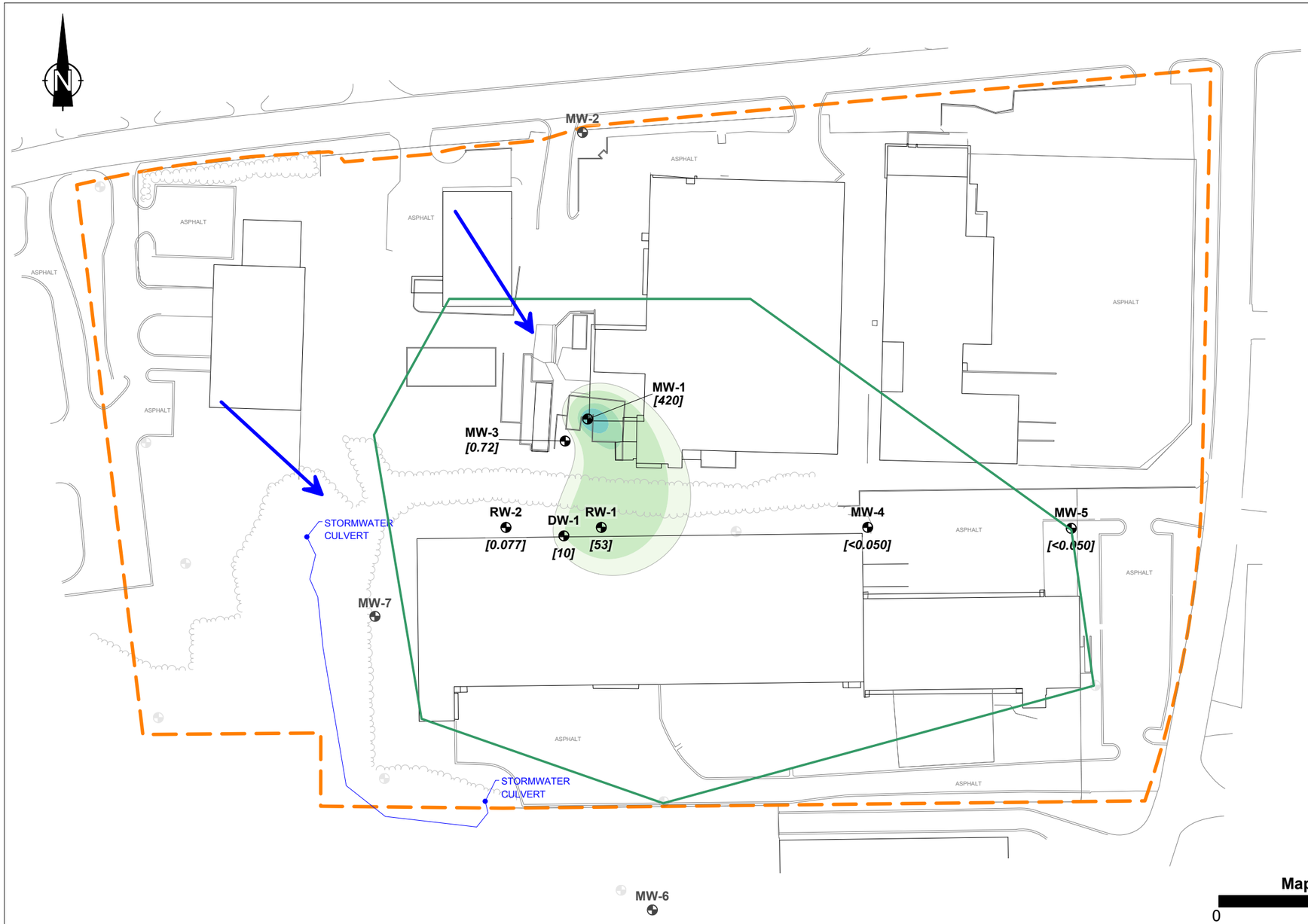
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Sep-2010

Prepared by: SSW Checked by: DW Figure: G9

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.35 acres
Plume Average Concentration: 24 mg/L
Plume Mass Indicator: 284 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

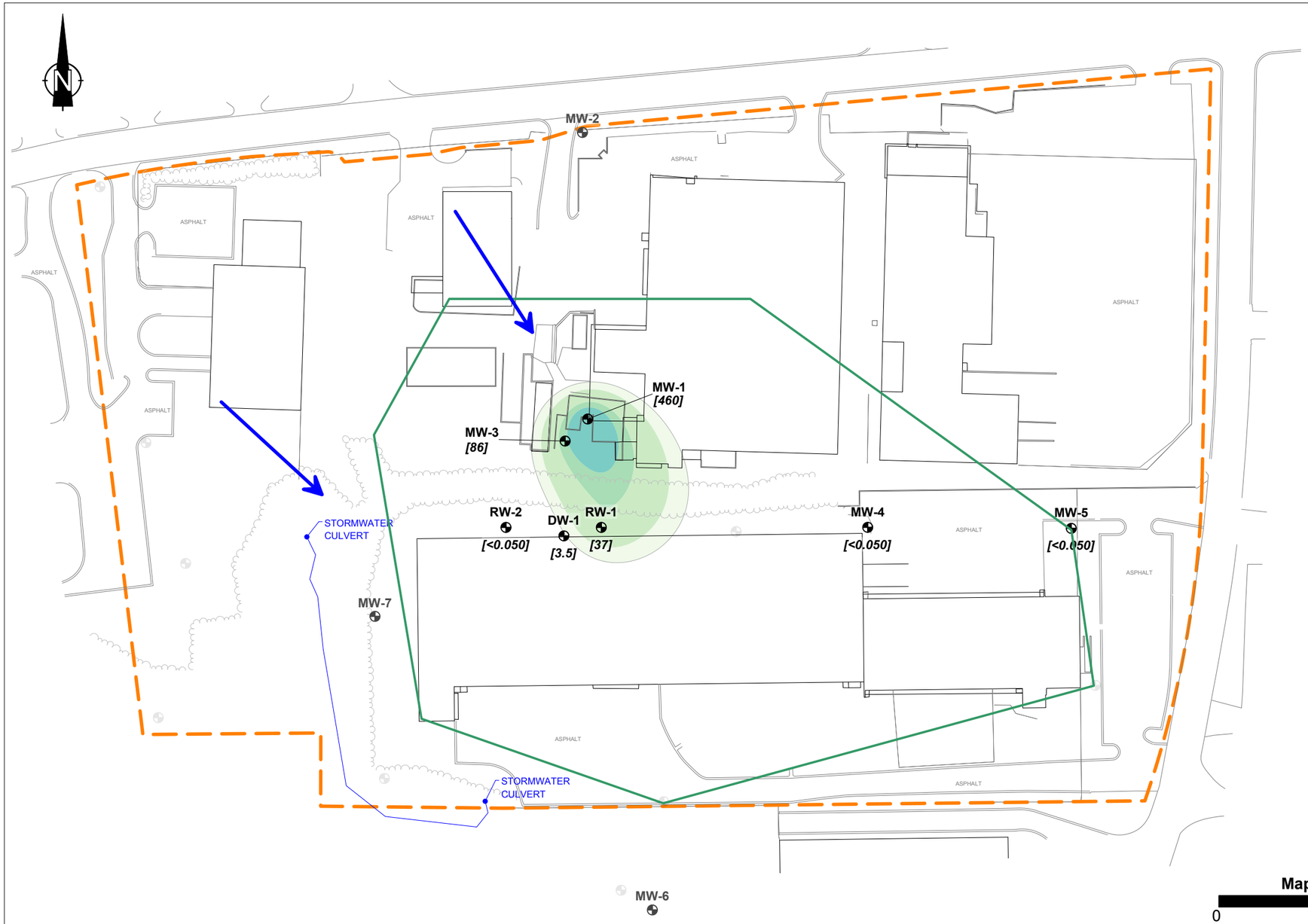
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Apr-2011

Prepared by: SSW Checked by: DW Figure: G10

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.38 acres
Plume Average Concentration: 44 mg/L
Plume Mass Indicator: 554 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

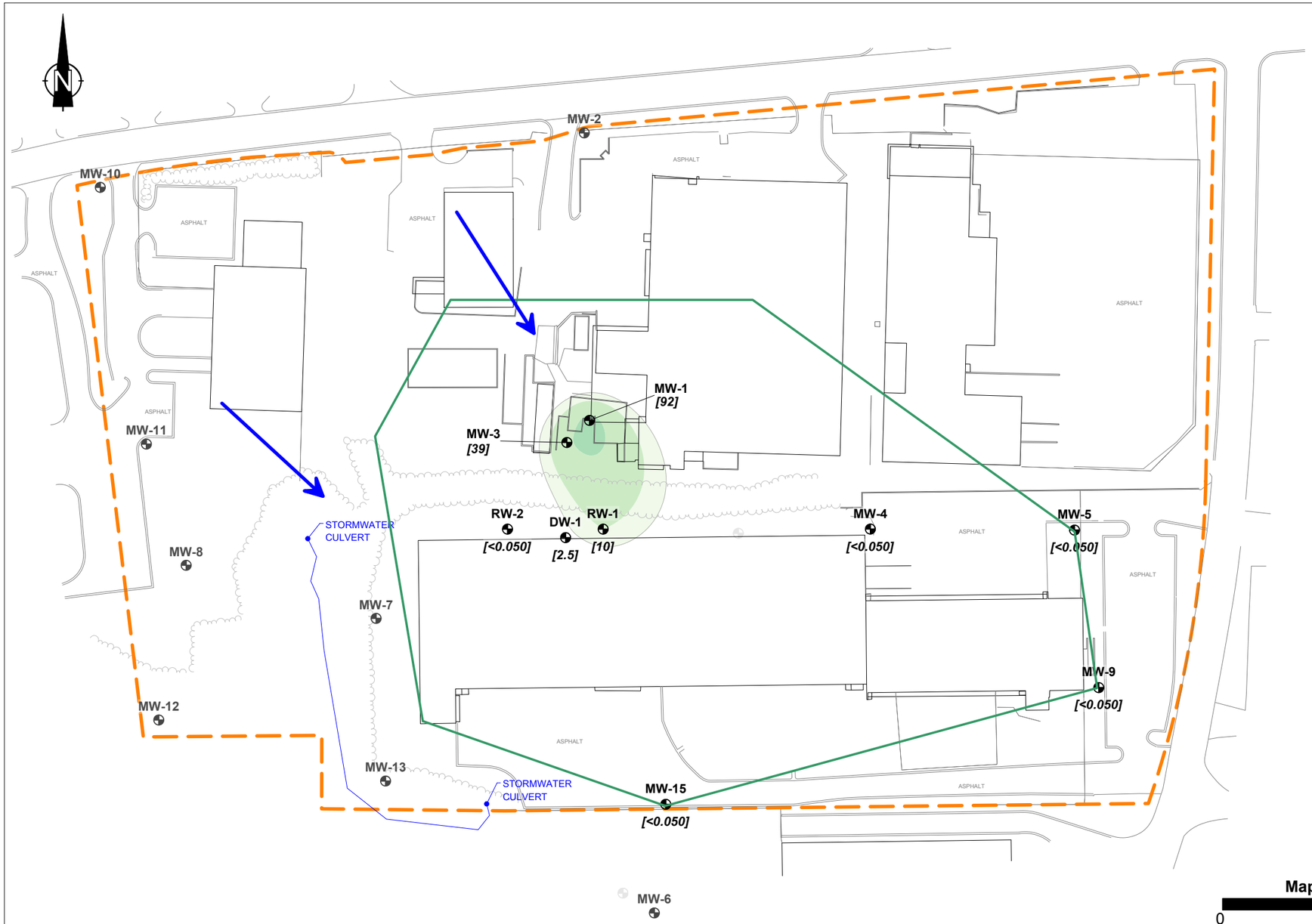
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Oct-2011

Prepared by: SSW Checked by: DW Figure: G11

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.26 acres
Plume Average Concentration: 18 mg/L
Plume Mass Indicator: 157 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

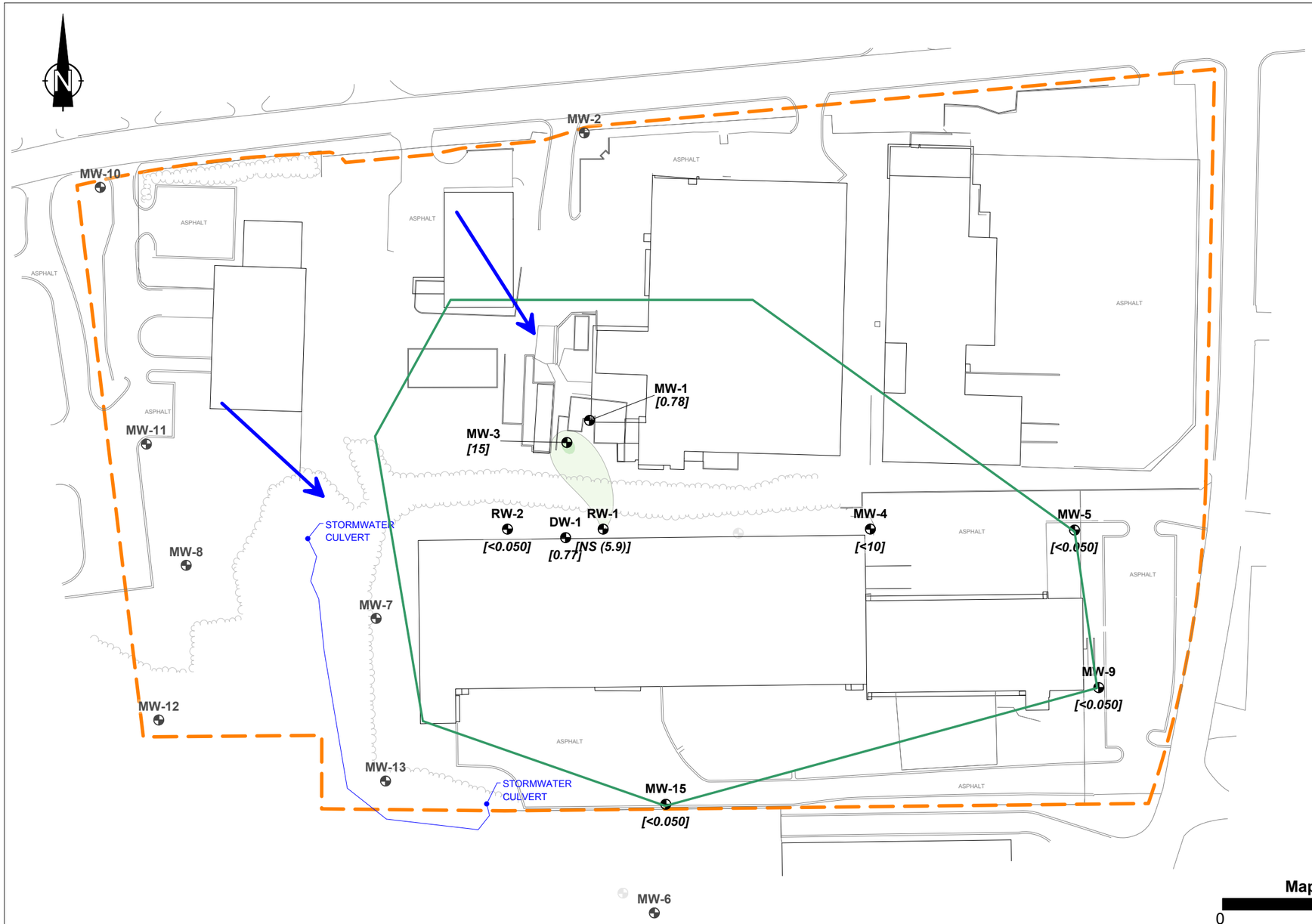
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Sep-2012

Prepared by: SSW Checked by: DW Figure: G12

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.059 acres
Plume Average Concentration: 5.7 mg/L
Plume Mass Indicator: 11 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

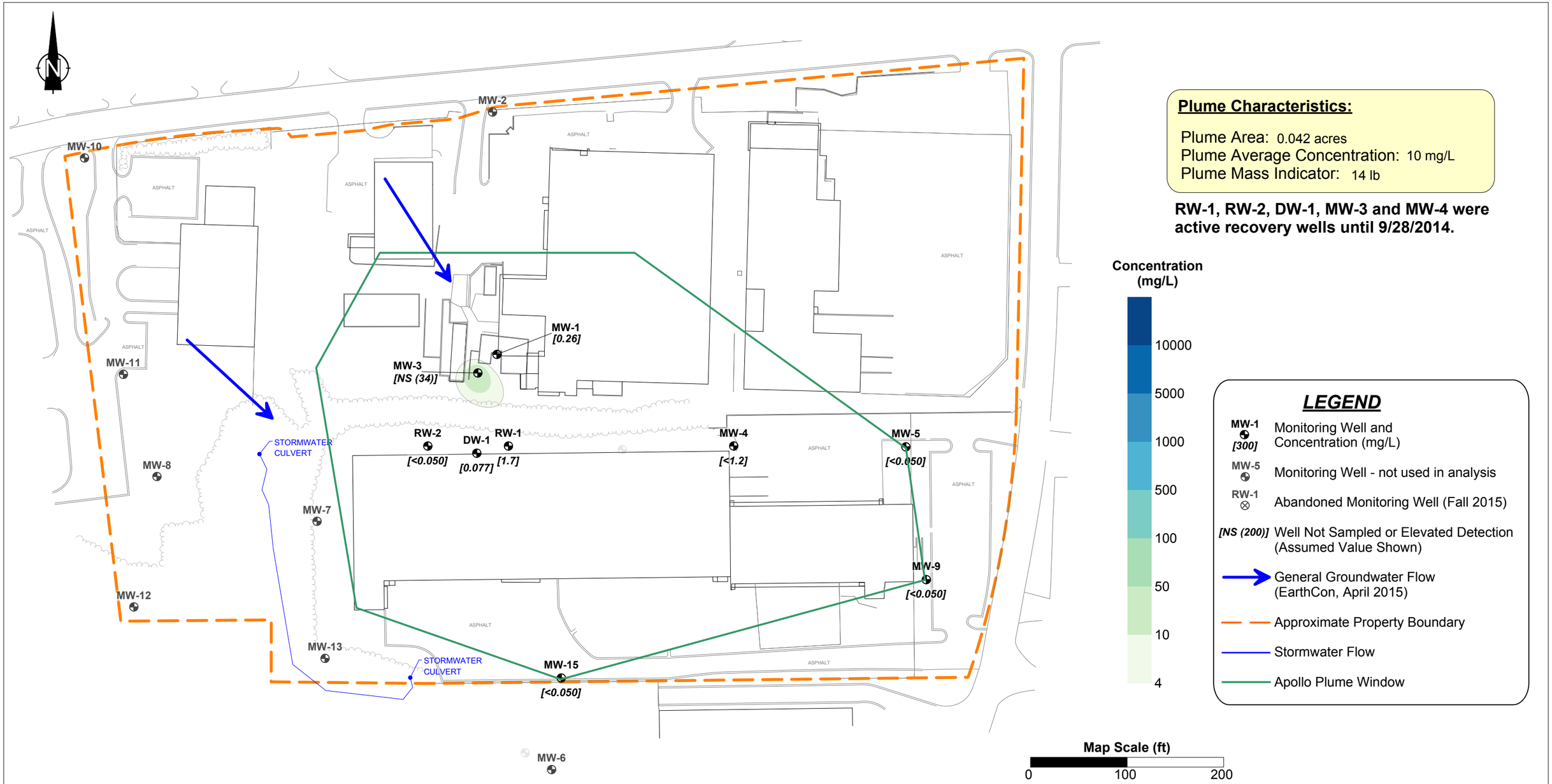
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Jun-2013

Prepared by: SSW Checked by: DW Figure: G13

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.042 acres
Plume Average Concentration: 10 mg/L
Plume Mass Indicator: 14 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

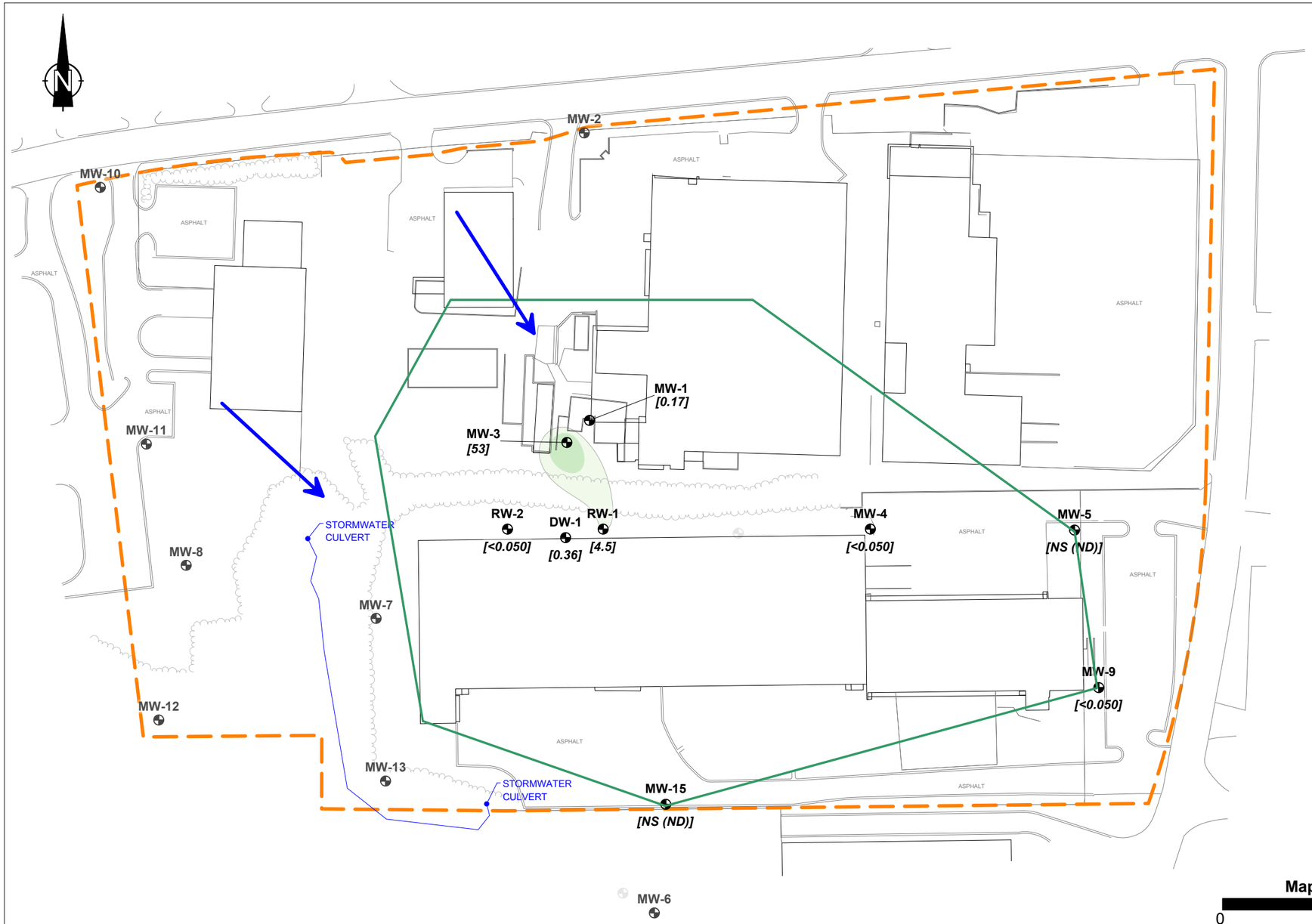
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Dec-2013

Prepared by: SSW Checked by: DW Figure: G14

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.072 acres
Plume Average Concentration: 9.0 mg/L
Plume Mass Indicator: 22 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

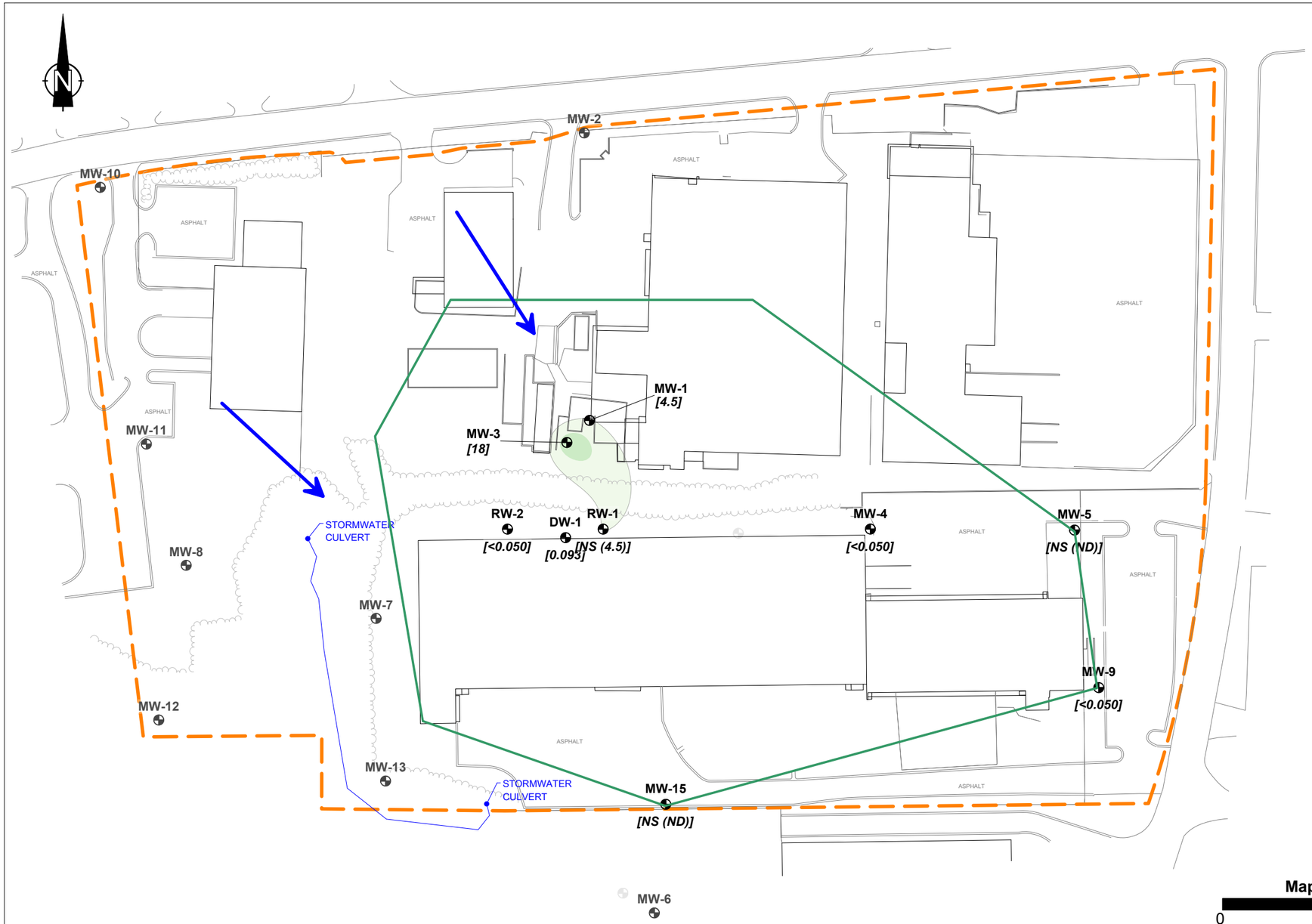
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Oct-2014

Prepared by: SSW Checked by: DW Figure: G15

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.095 acres
Plume Average Concentration: 6.7 mg/L
Plume Mass Indicator: 21 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

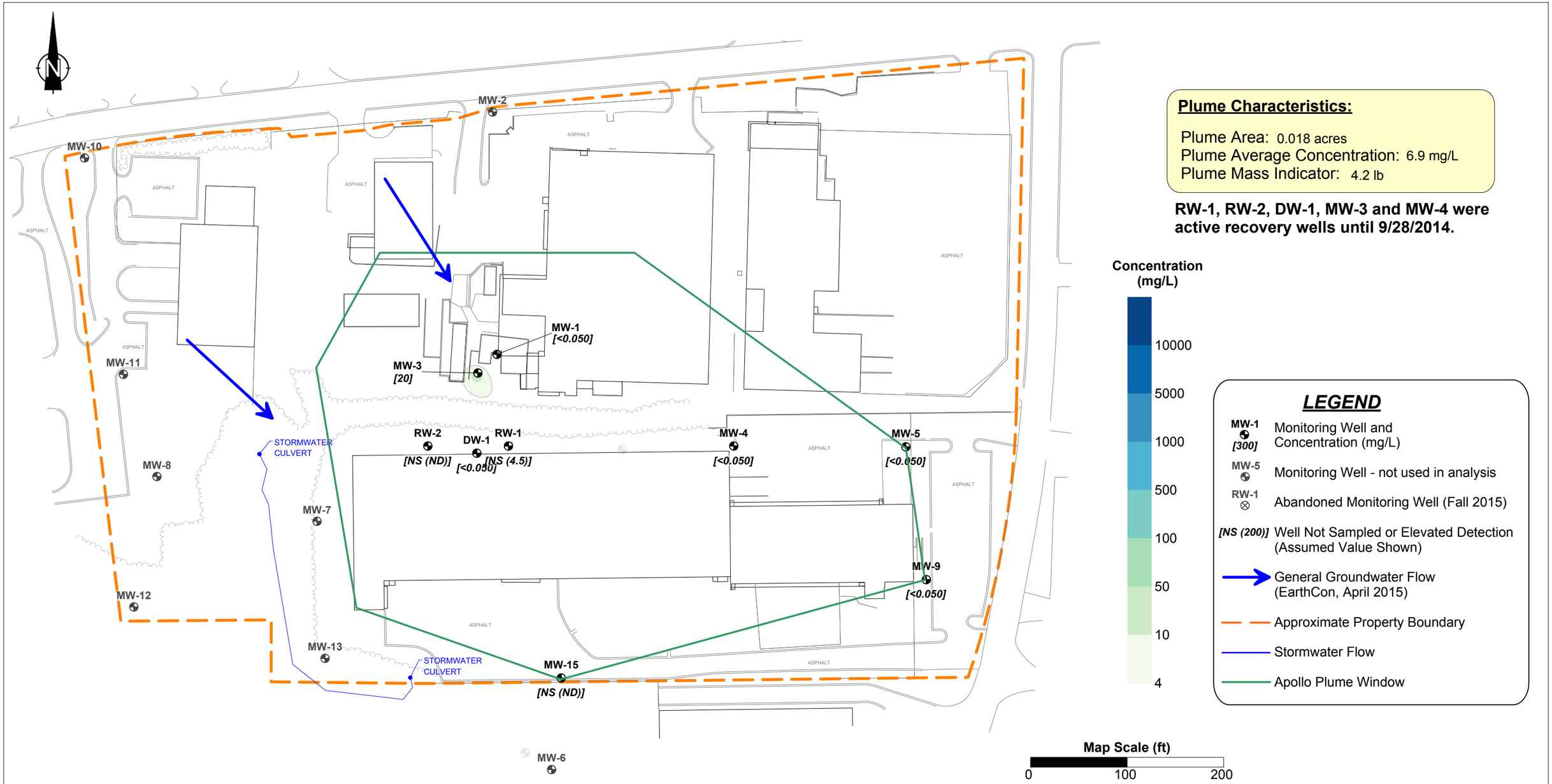
EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Jan-2015

Prepared by: SSW Checked by: DW Figure: G16

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.018 acres
Plume Average Concentration: 6.9 mg/L
Plume Mass Indicator: 4.2 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

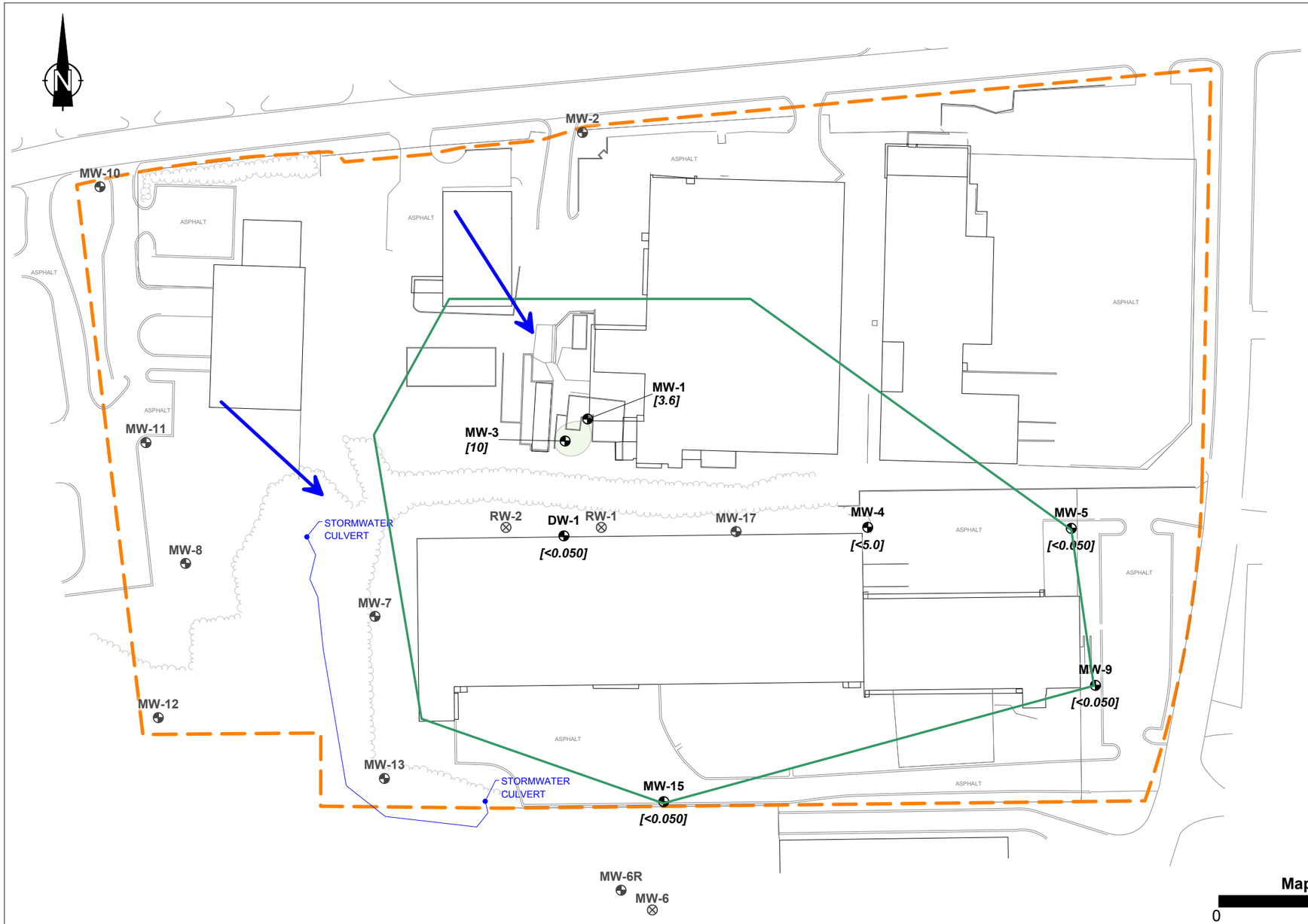
Project Number: 02.20140391.00

EARTHCON®
1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Apr-2015

Prepared by: SSW Checked by: DW Figure: G17

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.



Plume Characteristics:

Plume Area: 0.018 acres
Plume Average Concentration: 5.6 mg/L
Plume Mass Indicator: 3.4 lb

RW-1, RW-2, DW-1, MW-3 and MW-4 were active recovery wells until 9/28/2014.

Concentration (mg/L)

10000
5000
1000
500
100
50
10
4

LEGEND

- MW-1 [300] — Monitoring Well and Concentration (mg/L)
- MW-5 — Monitoring Well - not used in analysis
- RW-1 — Abandoned Monitoring Well (Fall 2015)
- [NS (200)] — Well Not Sampled or Elevated Detection (Assumed Value Shown)
- General Groundwater Flow (EarthCon, April 2015)
- Approximate Property Boundary
- Stormwater Flow
- Apollo Plume Window

Map Scale (ft)

0 100 200

Base Map Source: Terramark Land Surveying, Inc. (6/5/2012)

The material contained in this presentation, including text, graphic representations and the oral description thereof, is the sole and exclusive property of EarthCon Consultants, Inc. and is considered Proprietary and Confidential. This material, or any copy, facsimile, photograph or other reproduction of whatever kind, may not be disseminated to any third party without the express written consent of EarthCon Consultants, Inc.

Apollo Industries, Inc.
1850 South Cobb Industrial Blvd.
HSI Site Number 10333

Project Number: 02.20140391.00

EARTHCON®

1880 West Oak Parkway, Bldg. 100 Suite 106
Marietta, Georgia 30062

Apollo Plume
Acetone
Oct-2015

Prepared by: SSW Checked by: DW Figure: G18

Copyright © 2015 EarthCon Consultants, Inc. All Rights Reserved.

APPENDIX F
TECHNICAL MEMORANDUM APPENDICES (on CD)

Appendix H: Trend Analysis Summary Statistics

Appendix H
Trend Analysis Summary Statistics

1,1,1-TCA Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-111	>99%	0.43	Decreasing Trend
Plume Average Concentration	18	-109	>99%	0.65	Decreasing Trend
Plume Mass Indicator	18	-109	>99%	0.96	Decreasing Trend

1,1,1-TCA Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.09	0.75	>99%	0.43	Decreasing Trend
Plume Average Concentration	18	-0.15	0.72	>99%	0.65	Decreasing Trend
Plume Mass Indicator	18	-0.3	0.73	>99%	0.96	Decreasing Trend

PCE Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-105	>99%	0.10	Decreasing Trend
Plume Average Concentration	18	-93	>99%	0.43	Decreasing Trend
Plume Mass Indicator	18	-91	>99%	0.52	Decreasing Trend

PCE Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.06	0.76	>99%	0.10	Decreasing Trend
Plume Average Concentration	18	-0.01	0.63	>99%	0.43	Decreasing Trend
Plume Mass Indicator	18	-0.79	0.68	>99%	0.52	Decreasing Trend

TCE Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-51	97%	0.09	Decreasing Trend
Plume Average Concentration	18	-125	>99%	0.48	Decreasing Trend
Plume Mass Indicator	18	-125	>99%	0.53	Decreasing Trend

TCE Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.02	0.22	94.8%	0.09	Decreasing Trend
Plume Average Concentration	18	-0.13	0.86	>99%	0.48	Decreasing Trend
Plume Mass Indicator	18	-0.15	0.84	>99%	0.53	Decreasing Trend

Appendix H
Trend Analysis Summary Statistics

1,1-DCE Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-115	>99%	0.11	Decreasing Trend
Plume Average Concentration	18	-77	>99%	0.54	Decreasing Trend
Plume Mass Indicator	18	-77	>99%	0.59	Decreasing Trend

1,1-DCE Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.07	0.61	>99%	0.11	Decreasing Trend
Plume Average Concentration	18	-0.16	0.69	>99%	0.54	Decreasing Trend
Plume Mass Indicator	18	-11.1	0.70	>99%	0.59	Decreasing Trend

cis-1,2-DCE Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-51	97%	0.32	Decreasing Trend
Plume Average Concentration	18	-83	>99%	0.74	Decreasing Trend
Plume Mass Indicator	18	-83	>99%	0.84	Decreasing Trend

cis-1,2-DCE Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.08	0.36	>99%	0.32	Decreasing Trend
Plume Average Concentration	18	-0.22	0.57	>99%	0.74	Decreasing Trend
Plume Mass Indicator	18	-0.3	0.54	>99%	0.84	Decreasing Trend

Vinyl Chloride Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-29	86%	0.08	Stable/No Trend
Plume Average Concentration	18	-57	98%	0.56	Decreasing Trend
Plume Mass Indicator	18	-61	99%	0.60	Decreasing Trend

Vinyl Chloride Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.01	0.05	62.1%	0.08	Stable/No Trend
Plume Average Concentration	18	-0.09	0.26	97.1%	0.56	Decreasing Trend
Plume Mass Indicator	18	-0.09	0.26	97.1%	0.60	Decreasing Trend

Appendix H
Trend Analysis Summary Statistics

Total Molar Mann-Kendall Trend Analysis Summary

Parameter	# of samples, n	S Statistic	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-115	>99%	0.11	Decreasing Trend
Plume Average Concentration	18	-85	>99%	0.55	Decreasing Trend
Plume Mass Indicator	18	-89	>99%	0.61	Decreasing Trend

Total Molar Linear Regression Trend Analysis Summary

Parameter	# of samples, n	Slope (yr^{-1})	R^2	Confidence Factor	Coeff. of Variation	Conclusion
Plume Area	18	-0.05	0.80	>99%	0.11	Decreasing Trend
Plume Average Concentration	18	-0.17	0.75	>99%	0.55	Decreasing Trend
Plume Mass Indicator	18	-0.2	0.77	>99%	0.61	Decreasing Trend