REPORT

Voluntary Remediation Program Application
Former Miller Can Manufacturing Plant
Moultrie, Georgia
HSI #10425

Miller Brewing Company
Moultrie, Georgia

December 2013

O'BRIEN & GERE

TABLE OF CONTENTS

Tables

Figures

Appendices

1.0 INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Miller Brewing Company (Miller) has prepared this Voluntary Remediation Program (VRP) application for the former Miller canning facility (site) in Moultrie, Georgia for the Georgia Department of Natural Resources, Environmental Protection Division (GAEPD). The facility is currently undergoing corrective action under the Georgia Hazardous Site Response Act (HSRA). The Voluntary Remediation Plan Application and Checklist are provided in Appendix A.

1.2 SITE LOCATION AND DESCRIPTION

The Moultrie facility is located in Colquitt County on Highway 319 South in Moultrie, Georgia (Figure 1) on approximately 28 acres. Miller constructed the facility in 1980 and owned and operated it until 1993, when the property was purchased by Reynolds Metal Company (Reynolds). Reynolds sold the property to the Ball Corporation (Ball) on August 10, 1998. The property was then sold to GBA Associates on November 3, 2003 and transferred to the Joint Development Authority of Moultrie on March 26, 2004. Icehouse America currently leases the property, where they manufacture, store and distribute ice vending machines.

The facility is located south of Moultrie along Highway 319 and is surrounded residential, agricultural, and commercial operations. The closest residences to the facility are approximately 500 feet northwest of the site (Appendix B). Icehouse America currently occupies the site and uses it for the manufacture and storage of ice vending machines.

2.0 SUMMARY OF PREVIOUS INVESTIGATIONS AND CORRECTIVE ACTIONS

2.1 PREVIOUS INVESTIGATION

In September 1988, four underground storage tanks (USTs) were removed from the site. These consisted of two No. 2 fuel oil USTs, a waste oil UST, and a waste solvent UST. During the removal, a release was discovered from a portion of the piping that was connected to the waste solvent UST. In response to this release, the following activities and investigations were performed:

- 1988 - Closure and removal of four USTs. Removal of piping associated with the former waste solvent tank, and excavation and disposal of solids contaminated with chlorinated solvents. (Westinghouse Environmental Services, 1988);
- 1993 - Phase II Site Assessment performed in support of the property transfer from Miller to Reynolds Metal Company (CH2M Hill, 1993);
- 1994 - Site Investigation performed (The Earth Technology Corp., 1994);
- 1995 - Supplemental Site Investigation performed (Earth Tech, 1995);
- 1995 – Release notification submitted to Georgia EPD;
- 1998 - Phase II Subsurface Investigation was performed as part of the property transfer from Reynolds to Ball. Soil and sediment samples were collected (McLaren/Hart, 1998);
- 1998 - Compliance status investigation performed (CH2MHill, 1998); and
- 2000, 2001, and 2004 - Supplemental compliance status investigations performed.

The final Revised Compliance Status Report (CSR) was submitted to GAEPD in June 2004 (O'Brien & Gere, 2004). Analytical data provided in the CSR delineated the nature and extent of chlorinated ethenes in soil and groundwater and defined the area of groundwater affected by the concentrations of chlorinated aliphatic hydrocarbons (CAHs) above the RRS. Site soil meets the Type 4 site-specific, non-residential property RRS and has been certified as doing so in the CSR. No further action is required with respect to site soil.

CAHs, and in particular, chlorinated ethenes, have been detected in groundwater at concentrations above the RRS in a number of wells surrounding the former waste solvent tank piping (Figure 2). The migration of these constituents has been limited because of the extremely low hydraulic conductivity of the soil. It is likely that these constituents are derived from a historic release from the waste solvent tank piping.

The conservative risk evaluation performed for the site groundwater constituents indicates that site groundwater meets neither non-residential nor residential RRS. The area of groundwater constituents that exceed non-residential RRS is well constrained, and extends approximately 80 ft downgradient of the suspected source area (Figures 2 and 3).

2.2 CORRECTIVE ACTIONS

Corrective Action at the Moultrie facility was prompted by the understanding that site groundwater does not meet Georgia RRS. In January 2004, the Corrective Action Plan (CAP) was submitted to GAEPD (O'Brien & Gere, 2004), and with minor amendments, approved by GAEPD in March 2004. The approved CAP details the selected remedial measures and provides the basis for corrective action at the site. As described in the CAP, there are two components to the groundwater corrective action.

The first component was enhanced bioremediation consisting of injection of a lactate formulation, ABC©, into groundwater with concentrations of CAHs above RRS. The lactate formulation accelerates microbial activity, which in turn facilitates reductive dechlorination of the CAHs. Injection was performed with a Geoprobe® at injection nodes laid out on a grid pattern. The injection events occurred two years apart in October 2004 and October 2006. During the second injection event, in October 2006, zero valent iron was added to the lactate

solution in order to improve its efficacy by further enhancing reducing conditions. These injection events were followed by semiannual monitoring which took place in April 2005, October 2005, April 2006, April 2007, and October 2007. The goal of the lactate injection was to bring site groundwater into compliance with non-residential (Type 4) RRS. These were calculated for the CSR following the requirements as set forth in Chapter 391-3-19 of the HSRA. The RRS values represent an acceptable level of theoretical human health risk associated with analytes found in soil and groundwater at the site. The lactate injection at the site has reduced most VOCs to levels below the Type 4 RRS.

Once the Type 4 RRS are achieved, the approved CAP identifies the second component of the corrective action as MNA to bring site groundwater into compliance with Type 1/3 RRS. The October 2007 groundwater monitoring event identified two constituents (trichloroethene and vinyl chloride) that remained above the Type 4 RRS; however, for these constituents, the Type 4 RRS are the same as the Type 1/3 RRS. Following the October 2007 monitoring event, the *Corrective Action Monitoring and Evaluation Report* (O'Brien & Gere, April 2008) recommended the implementation of MNA at the site. This recommendation was accepted by GAEPD for a five year evaluation period. This evaluation period continued until submittal of this remediation plan.

3.0 CONCEPTUAL SITE MODEL

3.1 GEOLOGY

The Moultrie Facility is located in the Coastal Plain physiographic province. Surficial soils in Colquitt County are generally thin and poorly developed. Soils near the site belong to the Tifton series, which is characterized as sandy clay or silty clay. Underlying the surficial soils is the Miocene Age Hawthorne formation, which functions as a semi-confining unit for the underlying limestone formation. The Hawthorne occurs near ground surface and extends to a depth of up to 300 feet below surface (fbs). This formation is composed primarily of interbedded clays and similar fine-grained materials of low permeability. The Hawthorne is underlain by limestone and the Floridan Aquifer, the primary source of potable water for the region.

Native soils at the site consist of clayey sand, sandy clay, and clay to a depth of at least 50 fbs. Boreholes installed during previous investigations were not extended beyond 50 fbs and the total depth of the overburden at the site was not determined. Fill consisting of poorly graded sand is present across the site, and extends up to 8 fbs in some areas (Figures 4 and 5).

3.2 GROUNDWATER FLOW DIRECTION

Overburden groundwater at the site is unconfined and encountered at depths ranging from less than 1 to greater than 16 fbs (Table 1). The low hydraulic conductivity at the site (ranging from 0.0004 to 0.0210 ft/day impedes the groundwater levels in the wells from reaching equilibrium and accentuates the effects of transient events such as recharge, barometric pressure changes, and pumping (The Earth Technology Corp., 2003). Historically, the groundwater flow direction has been to the east; however, the 2011 and 2012 potentiometric surfaces identified a high in the source area, with groundwater flow to the north, east, and west (Figure 6).

Most of the monitoring wells at the site are screened in the upper portion of the overburden groundwater (1 to 15 fbs). Two monitoring wells onsite are screened at greater depths within the overburden groundwater. Monitoring well CH2MW-4D is screened from 36 to 46 fbs, and is located next to shallow monitoring well CH2PP-1. Monitoring well CH2MW-114D is screened from 17.5 to 22.5 fbs and is paired with shallow monitoring well ETCMW-114. Comparison of the shallow and deep water levels measured in these monitoring well pairs indicates a pronounced and consistent downward hydraulic gradient.

Because of the low hydraulic conductivity and consequent low groundwater flow velocity, well yields are limited in the overburden groundwater in vicinity of the site, and the overburden aquifer in the area is unlikely to be used for groundwater supply.

As identified in the 1998 CSR, a wind-shield survey identified 22 private water supply wells within a ½ mile radius of the site. The facility currently obtains all water from the City of Moultrie and it is understood that the facility has obtained water from the City of Moultrie for the 33-year duration of operations there. The 1998 CSR identified the closest private water supply wells approximately 2,100 feet north-northeast of the release area and approximately 1,300 feet southwest of the release area. These wells are believed to be obtaining water from the Floridan aquifer, located 300 feet below ground surface. The surficial aquifer where the release occurred is separated from the Floridan aquifer by the Hawthorn formation, which is a semi-confining unit that extends from ground surface to the Floridan aquifer.

Two small ponds are located approximately 0.4 miles and 0.25 miles to the southwest and southeast of the Moultrie Facility, respectively (Figure 1). Damming of an ephemeral creek that originates near the Moultrie Facility formed the pond to the southeast. It is possible that groundwater discharges to this creek and pond; however, given the low hydraulic conductivity calculated (0.0004 – 0.0210 ft/day, as discussed above) for the site, it is unlikely that shallow site groundwater would migrate to this surface water in less than 100 years.

3.3 GROUNDWATER ANALYTICAL CONCENTRATIONS

The Georgia Voluntary Remediation Program Act identifies residential cleanup standards as the default site delineation concentration criteria [12-8-108 (1)(E)]. The 2012 groundwater monitoring data indicate seven constituents exceed the Type 1 RRS in the overburden groundwater at the site (Table 2). These constituents include chloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, isobutyl alcohol, tetrachloroethene, trichloroethene, and vinyl chloride. Concentrations in excess of the Type 1 RRS extend approximately 80 feet downgradient of the source area (Table 3). Additional information about the extent of contaminants in groundwater can be found in the *2012 Annual Monitoring Report* (O'Brien & Gere, 2013).

The concentrations of CAHs measured in 2012 represent a nearly idealized distribution for chlorinated ethenes undergoing biodegradation via reductive dechlorination, with PCE or TCE highest in the source area, elevated cis-1,2-DCE and vinyl chloride concentrations in the source area and extending downgradient, and ethenes present in the source area with increasing concentrations near the downgradient extent of the plume (Figures 7 through 10).

VOCs appear to be limited in extent vertically. Monitoring well CH2MW-114D is located in the source area and screened from 17.5 to 22.5 fbs and paired with shallow monitoring well ETCMW-114. With the exception of 1,1-dichloroethene, the concentration of all constituents detected at CH2MW-114D in 2012 (cis-1,2-dichloroethene and trichloroethene) are an order of magnitude lower than the concentration detected at ETCMW-114(O'Brien & Gere, 2013). Furthermore, there were no constituents detected in 2012 at CH2MW-4D, which is located downgradient of the source area and screened from 36 to 46 fbs. Historically, there have been no detections at this well with the exception of sporadic low level detections of acetone, methylene chloride, and toluene below the RRS (Appendix C). Given the low frequency and concentrations, these detections are not suggestive of contaminant migration from the source area.

3.4 POTENTIAL RECEPTORS AND EXPOSURE PATHWAYS

An evaluation of potential receptors and exposure pathways was conducted for the site. The following were evaluated to identify exposure pathways:

- Geologic conditions at the site;
- Current and future operations at the facility;
- Current and future land use at the surrounding properties;
- Historical CAH concentrations in overburden groundwater;
- Groundwater flow and transport modeling results; and
- Vapor intrusion modeling results.

This evaluation was based on available site information, including data from historical soil and groundwater investigation conducted at the site. The evaluation identified exposure pathways through three media: groundwater, surface water, and vapor intrusion. A summary of these pathways and their potential receptors is included below.

3.4.1 Groundwater

Groundwater migration is the primary pathway for contaminant migration at the site. To further evaluate the groundwater exposure pathway, a steady-state groundwater flow model and transport model were developed to provide a representation of the site groundwater flow and transport processes. Groundwater concentrations were modeled for 60 years (2011 through 2071). The United States Geological Survey (USGS) groundwater flow model code MODFLOW® was used to develop the groundwater flow model. The transport model RT3D (Clement, 2001) was used for the solute transport simulations. The Visual MODFLOW® modeling platform was employed for the modeling effort. A detailed summary of model inputs and assumptions is provided as Appendix E.

Forward simulations generated from the model were used to evaluate the possible future contaminant migrations and concentrations at the site. These simulations indicate concentrations in excess of the RRS standards will not migrate off site. A detailed summary of the model calibration and results is included in Appendix E.

Therefore, human consumption of groundwater at the site is considered to be an incomplete exposure pathway because:

- Hydraulic conductivity is extremely low (approximately 0.003 ft/day), and it is estimated that contaminants would take more than 1,000 years to reach the nearest receptor (a water supply well approximately 1300 feet southwest of the site), even assuming there is no degradation (which is contradicted by more than 14 years of groundwater monitoring data showing clear evidence of degradation).
- The nearest receptor is a water supply well that is likely installed in the Floridan Aquifer, which is more than 300 fbs beneath a sequence of low permeability sediment that comprises the Hawthorne Formation.

3.4.2 Surface Water

As identified in Section 3.2, two small ponds are located to the southwest and southeast of the facility. The damming of an ephemeral creek that originates near the Moultrie Facility formed the pond to the southeast. It is possible that groundwater discharges to this creek and pond; however, because of the limited groundwater productivity observed, it is likely that that precipitation is the predominant source of surface water in the creek and the pond. Furthermore, given the low hydraulic conductivity at the site and the demonstrated limit of the contaminant plume, and minimal observed migration, it is unlikely to affect these surface water bodies.

3.4.3 Vapor Intrusion

A potential pathway of human exposure at the site is the infiltration of vapors from volatile compounds in the groundwater below the building. These vapors could enter the indoor air space through small cracks in the slab of the building where they could subsequently be inhaled by humans. Two quantitative models developed by the United States Environmental Protection Agency (USEPA) were used to evaluate the potential for vapor intrusion to occur at the building. One of these models is the Vapor Intrusion Screening Level (VISL) Calculator, a Microsoft Excel-based screening-level tool that can be used to calculate carcinogenic risks and non-carcinogenic hazards and/or target screening concentrations for various media through the application of conservative default exposure assumptions.

Five VOCs were detected in the groundwater at ETCMW-113, beneath the building in December 2012. These VOCs included 1,1-dichloroethane (1,1-DCA), 1-1-dichloroethene (1,1-DCE), cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and vinyl chloride. A commercial (rather than residential) exposure scenario was assumed to approximate current and probably future land use conditions at the site.

The following results were obtained from the VISL Screening Calculator (Appendix D):

- Non-carcinogenic indoor air hazards were determined to be acceptable for all five constituents detected beneath the building
- Carcinogenic indoor air risks were determined to be acceptable for four of the five detected constituents; the screening-level cancer risk of 2.7×10^{-6} for vinyl chloride is above the 1×10^{-6} acceptable cancer risk for individual compounds
- Although the excess cancer risk for vinyl chloride exceeds 1×10^{-6}, the cumulative cancer risk for all detected constituents is within USEPA's 1×10^{-6} to 1×10^{-4} acceptable range for cumulative risk

To build on the VISL Screening Calculator results and to provide a more comprehensive, site-specific evaluation of vapor intrusion at the building, the USEPA's Johnson & Ettinger (J&E) Groundwater-Advanced (GW-ADV) Model was employed (Appendix D). This Excel-based model allows for manipulation of exposure assumptions, building dimensions, depth to groundwater, and vadose zone soil type, as well as other site-specific parameters to calculate non-carcinogenic hazards and carcinogenic risks associated with inhalation of volatile vapors from

contaminated subsurface media. The model assumes steady-state (infinite source) conditions; that is, the source of emissions is not depleted over time.

For the evaluation of vapor intrusion at the building, the following assumptions were made in the J&E GW-ADV Model:

- Sandy clay soil type, based on the predominance of clayey sand or sandy clay soil types at the Site
- A depth to groundwater of three feet, a conservative assumption given that the water table is typically encountered at a depth exceeding three feet
- Site-specific building dimensions
- A non-residential (commercial/industrial) exposure scenario
- An air exchange rate of 0.25/hr, a conservative assumption typically applied for a poorly ventilated residence

The following results were obtained from the Johnson & Ettinger Model runs:

- Non-carcinogenic indoor air hazards were determined to be acceptable for all five constituents detected beneath the building
- Carcinogenic indoor air risks were determined to be acceptable for all five constituents detected beneath the building

Based on groundwater concentrations from the December 2012 sampling event, risks and hazards from potential vapor intrusion are acceptable based on the USEPA-derived vapor intrusion models. Additionally, J&E modeling results are likely conservative given that the default air exchange rate (0.25/hr) was applied. Air exchange at the building is likely substantively higher in the area of the groundwater plume beneath the building due to the presence of loading dock doors that are open to the outside for periods of time daily. As such, hazards and risks are likely to be lower than those reported by the J&E Model.

4.0 PROPOSED VOLUNTARY REMEDIATION PLAN

Site soil meets the Type 4 site-specific, non-residential property RRS and has been certified as doing so in the CSR. No further action is required with respect to site soil.

Modeling results (Section 3.4.1) indicate no potential for offsite migration of constituents of concern at concentrations in excess of the RRS. Based on these results, an environmental covenant (in accordance with O.C.G.A. § 44-16-1) restricting the use of groundwater on site will be sufficient to prevent potential exposures and is therefore protective of human health and the environment. Following establishment of the environmental covenant, Miller intends to suspend groundwater monitoring at the site, and pursue delisting the site from the Hazardous Sites Inventory.

5.0 SCHEDULE

Date	Event
December 2013	Submit VRP Application. Enrollment in the VRP Program
June 2, 2014	Environmental Covenant placed on the property. Facility is delisted from the HSI.

6.0 REFERENCES

CH2M Hill. *Compliance Status Report. Former Miller Brewing Company Can Plant. Moultrie, Georgia.* Prepared for: Miller Brewing Company. September 1998.

CH2M Hill. *Field Investigation Report of the Miller Brewing Company Container Plant, Moultrie, Georgia.* Prepared for: Reynolds Metal Company. October 1993.

Earth Tech. *Supplemental Site Investigation Report of the Former Miller Brewing Company Container Plant in Moultrie, Georgia*. Prepared for: Miller Brewing Company. August 1995

McLaren/Hart, Inc. *Phase II Subsurface Investigation. Reynolds Metal Company, Moultrie Can Plant, Moultrie, Georgia 31768.* Prepared for: Ball Corporation. May 21, 1998.

O'Brien & Gere. *2012 Annual Monitoring Report. Miller Brewing Company Can Plant. Moultrie, Georgia.* April 16, 2013.

O'Brien & Gere. *Corrective Action Monitoring and Evaluation Report. Miller Brewing Company Can Plant. Moultrie, Georgia.* April 2008.

O'Brien & Gere. *Revised Compliance Status Report. Miller Brewing Company, Moultrie, Georgia.* June 2004.

The Earth Technology Corporation. *Site Investigation Report for the Former Miller Brewing Company Moultrie Container Division Facility.* TETC Project No. 94-4130-04. March 22, 1994.

The Earth Technology Corporation. *Summary Report (Step 1) Moultrie Container Division Facility.* TETC Project No. 94-4124-01. December 10, 1993.

Westinghouse Environmental Services. *Soil Sampling & Analysis Report for Miller Brewing Company, Red Label Pipe Area, Moultrie Can Plant, Moultrie, Georgia.* WES Job No. 4125-88-150. October 1988.

Tables

Table 1
Summary of Well Construction Details and Ground Water Elevations
Former Miller Brewing Can Plant
Moultrie, Georgia

Well	Ground Surface Elevation[1] (ft msl)	TOC Elevation[1] (ft msl)	Total Well Depth from Ground Surface (ft)	Screened Interval (ft bgs)	Well Diameter (in)	Depth to Water Below Top of Casing (ft)										
						4/6/2004	4/25/2005	10/24/2005	4/17/2006	4/16/2007	10/22/2007	12/8/2008	12/14/2009	12/6/2010	12/5/2011	12/3/2012
CH2MW-1	293.62	293.84	10	5 - 10	1	6.45	4.55	8.13	5.43	7.33	3.18	2.62	1.22	5.16	5.72	6.79
CH2MW-1A[2]	292.87	293.01	15	5 - 15	2	11.21	6.38	13.36	8.75	11.67	5.02	4.78	--	--	--	--
CH2MW-2[2]	295.34	295.43	13.5	3.5 - 13.5	2	4.86	3.55	8.48	3.98	5.53	9.87	3.97	--	--	--	--
CH2MW-3	295.45	295.53	13	3 -13	2	4.92	3.55	8.10	4.72	5.85	0.97	3.69	2.08	9.96	8.11	9.51
CH2MW-4D	293.65	293.54	45.93	36 - 46	2	16.05	16.10	19.44	15.62	16.71	18.88	13.79	13.88	19.31	17.87	19.41
CH2MW-5[2]	295.28	295.44	15	5 - 15	2	7.43	2.90	9.66	5.35	7.79	3.80	4.91	--	--	--	--
ETCMW-113	296.32	296.32	12	2 - 12	2	6.25	4.40	7.07	5.58	5.75	5.94	5.12	4.93	6.51	6.48	7.47
ETCMW-114	294.02	297.66	11.7	1.7 - 11.7	4	7.78	6.60	8.15	7.36	7.94	6.52	6.67	5.89	7.61	7.76	8.19
CH2MW-114D	294.16	297.45	22.5	17.5 - 22.5	1	8.54	7.00	9.88	8.40	9.32	9.99	8.64	8.55	11.13	9.64	10.24
ETCMW-115	293.22	296.10	11.5	1.5 - 11.5	2	6.19	5.14	6.96	5.39	6.49	4.79	4.72	3.76	5.85	6.51	6.90
ETMW-116	292.29	292.29	11	1 - 11	4	1.98	0.70	1.81	1.16	1.46	0.89	0.70	0.52	1.37	1.95	1.34
ETMW-117	292.30	292.30	11	1 - 11	2	2.40	0.89	2.71	1.29	2.42	0.71	1.30	0.24	1.90	1.81	1.94
ETMW-118	292.34	292.34	11	1 - 11	2	2.90	0.40	3.42	2.15	1.61	1.73	2.20	1.54	3.32	2.69	3.15
ETMW-119	294.26	297.05	11	1 - 11	2	6.86	5.70	8.02	6.31	6.65	5.66	5.32	4.14	6.38	6.86	7.73
ETMW-120	293.76	296.84	11	1 - 11	2	6.69	4.50	9.42	5.46	7.18	4.77	4.56	3.69	6.27	7.29	8.32
ETMW-121	294.84	298.02	11	1 - 11	2	7.70	5.78	11.72	6.43	8.72	6.75	4.53	2.91	11.48	10.12	12.31
OBGMW-122[2]	NA	295.98	15	5 - 15	2	8.13	6.40	10.58	7.02	9.01	6.00	6.17	--	--	--	--
OBGMW-123[2]	NA	296.09	13	3 - 13	2	6.45	4.70	9.28	5.40	6.80	8.44	3.24	--	--	--	--
OBGMW-124[2]	NA	NA	14	4 - 14	2	NA	5.70	10.08	7.29	8.78	7.43	4.90	--	--	--	--
CH2PP-1	293.56	293.72	12	7 - 12	1	7.67	5.55	9.45	7.63	8.81	6.00	3.56	2.87	9.22	8.61	9.20
Well	Ground Surface Elevation[1] (ft msl)	TOC Elevation[1] (ft msl)	Total Well Depth from Ground Surface (ft)	Screened Interval (ft bgs)	Well Diameter (in)	Water Level Elevation (ft msl)										
						4/6/2004	4/25/2005	10/24/2005	4/17/2006	4/16/2007	10/22/2007	12/8/2008	12/14/2009	12/6/2010	12/5/2011	12/3/2012
CH2MW-1	293.62	293.84	10	5 - 10	1	287.39	289.29	285.71	288.41	286.51	290.66	291.22	292.62	288.68	288.12	287.05
CH2MW-1A[2]	292.87	293.01	15	5 - 15	2	281.80	286.63	279.65	284.26	281.34	287.99	288.23	--	--	--	--
CH2MW-2[2]	295.34	295.43	13.5	3.5 - 13.5	2	290.57	291.88	286.95	291.45	289.90	285.56	291.46	--	--	--	--
CH2MW-3	295.45	295.53	13	3 -13	2	290.61	291.98	287.43	290.81	289.68	294.56	291.84	293.45	285.57	287.42	286.02
CH2MW-4D	293.65	293.54	45.93	36 - 46	2	277.49	277.44	274.10	277.92	276.83	274.66	279.75	279.66	274.23	275.67	274.13
CH2MW-5[2]	295.28	295.44	15	5 - 15	2	288.01	292.54	285.78	290.09	287.65	291.64	290.53	--	--	--	--
ETCMW-113	296.32	296.32	12	2 - 12	2	290.07	291.92	289.25	290.74	290.57	290.38	291.20	291.39	289.81	289.84	288.85
ETCMW-114	294.02	297.66	11.7	1.7 - 11.7	4	289.88	291.06	289.51	290.30	289.72	291.14	290.99	291.77	290.05	289.90	289.47
CH2MW-114D	294.16	297.45	22.5	17.5 - 22.5	1	288.91	290.45	287.57	289.05	288.13	287.46	288.81	288.90	286.32	287.81	287.21
ETCMW-115	293.22	296.10	11.5	1.5 - 11.5	2	289.91	290.96	289.14	290.71	289.61	291.31	291.38	292.34	290.25	289.59	289.20
ETMW-116	292.29	292.29	11	1 - 11	4	290.31	291.59	290.48	291.13	290.83	291.40	291.59	291.77	290.92	290.34	290.95
ETMW-117	292.3	292.30	11	1 - 11	2	289.90	291.41	289.59	291.01	289.88	291.59	291.00	292.06	290.40	290.49	290.36
ETMW-118	292.34	292.34	11	1 - 11	2	289.44	291.94	288.92	290.19	290.73	290.61	290.14	290.80	289.02	289.65	289.19
ETMW-119	294.26	297.05	11	1 - 11	2	290.19	291.35	289.03	290.74	290.40	291.39	291.73	292.91	290.67	290.19	289.32
ETMW-120	293.76	296.84	11	1 - 11	2	290.15	292.34	287.42	291.38	289.66	292.07	292.28	293.15	290.57	289.55	288.52
ETMW-121	294.84	298.02	11	1 - 11	2	290.32	292.24	286.30	291.59	289.30	291.27	293.49	295.11	286.54	287.90	285.71
OBGMW-122[2]	NA	295.98	15	5 - 15	2	287.85	289.58	285.40	288.96	286.97	289.98	289.81	--	--	--	--
OBGMW-123[2]	NA	296.09	13	3 - 13	2	289.64	291.39	286.81	290.69	289.29	287.65	292.85	--	--	--	--
OBGMW-124[2]	NA	NA	14	4 - 14	2	NA	NA	NA	NA	NA	NA	NA	--	--	--	--
CH2PP-1	293.56	293.72	12	7 - 12	1	286.05	288.17	284.27	286.09	284.91	287.72	290.16	290.85	284.50	285.11	284.52

Notes

[1]Elevations based on a survey performed by H.J. Griffen and Associates in June 1998. Elevations reference a DOT benchmark.
Monitoring wells OBGMW-122 and OBGMW-123 surveyed ack to CH2MW-4D and CH2MW-3, respectively.

[2]Wells CH2MW-1A, CH2MW-2, CH2MW-5, OBGMW-122, OBGMW-123 and OBGMW-124 were abandoned on 12/8/2008.

Table 2
Summary of Groundwater Delineation Criteria
and Risk Reduction Standards
Former Miller Brewing Facility
Moultrie, GA

Constituent	CAS	Type 1/3 RRS (mg/L)	Type 4 RRS (mg/L)
Chloroethane	75-00-3	0.001	1.23
1,1-dichloroethene	75-35-4	0.007	--
Cis-1,2-dichloroethene	156-59-2	0.07	1.02
Isobutyl Alcohol	78-83-1	10	--
Tetrachloroethene	127-18-4	0.005	0.005
Trichloroethene	79-01-6	0.005	0.005
Vinyl Chloride	75-01-4	0.002	0.002

Note: Type 1/3 RRS is identified as the delineation standards for the Georgia Voluntary Remediation Program. Type 4 RRS were calculated for compounds exceeding the Type 1/3 RRS.

Table 3
Summary of Groundwater Sampling Results
December 2012

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	CH2MW-1	CH2MW-3	CH2MW-4D	ETCMW-113	ETCMW-114	CH2MW-114D	ETCMW-115	ETMW-116	ETMW-117	ETMW-118	ETMW-119	ETMW-120	ETMW-121	CH2PP-1
					12/10/2012	12/10/2012	12/4/2012	12/4/2012	12/3/2012	12/10/2012	12/6/2012	12/4/2012	12/4/2012	12/3/2012	12/4/2012	12/3/2012	12/10/2012	12/10/2012
Acetone	67-64-1	mg/L	4		< 0.010	< 0.010	< 0.010	< 0.010	< 0.100	**0.340**	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.010	< 0.010	< 0.010	< 0.100	< 0.100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	**0.00065**	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	**0.0045**	**0.002**	**0.0011**	< 0.00050	< 0.00050	< 0.00050	< 0.00050
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.00050	< 0.00050	< 0.00050	**0.0099**	**0.034**	< 0.0050	**0.0034**	**0.0080**	**0.0061**	**0.0054**	< 0.00050	< 0.00050	< 0.00050	< 0.00050
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.00050	< 0.00050	< 0.00050	**0.0037**	**0.0070**	**0.013**	< 0.00050	< 0.00050	**0.00056**	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07	1.02	< 0.00050	< 0.00050	< 0.00050	**0.15**	**1.300**	**0.400**	**0.042**	**0.0024**	**0.027**	**0.0054**	**0.00054**	**0.0018**	**0.00096**	< 0.00050
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Isobutyl Alcohol	78-83-1	mg/L	10		< 0.050	< 0.050	< 0.050	< 0.050	< 0.500	< 0.500	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.00050	< 0.00050	< 0.00050	< 0.00050	**0.024**	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.00098**	< 0.00050	< 0.00050	**0.00098**	**0.450**	**0.0079**	**0.016**	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.00050	< 0.00050	< 0.00050	**0.0066**	< 0.0050	< 0.0050	**0.0022**	**0.100**	**0.042**	**0.037**	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.0050	< 0.0050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

Figures

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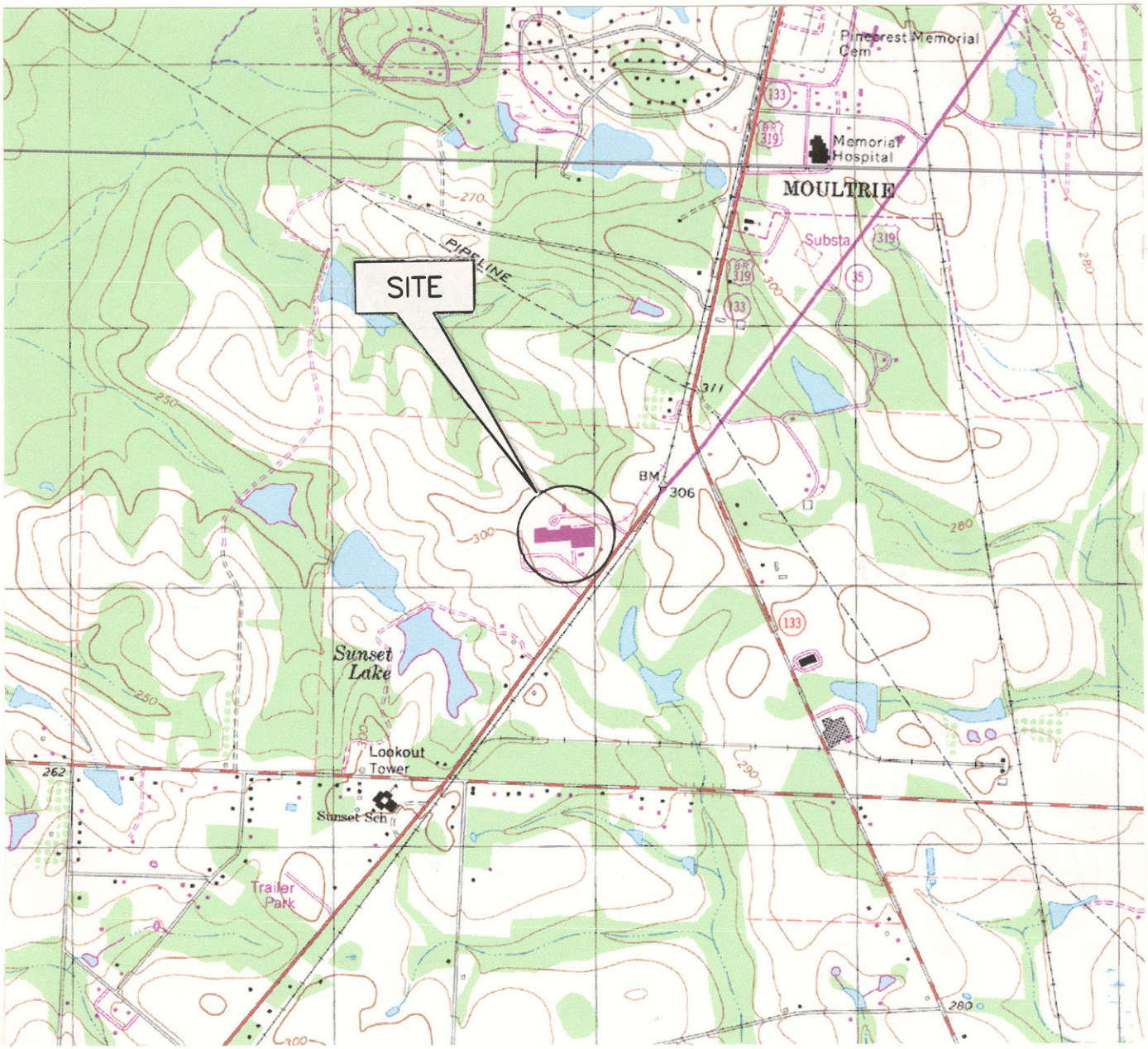
FIGURE 1



SITE LOCATION MAP

FORMER MILLER BREWING
COMPANY CAN PLANT
MOULTRIE, GA.

MAP SOURCE: USGS 7.5-MIN. SERIES TOPOGRAPHIC QUADRANGLE "COOLIDGE, GA" AND "MOULTRIE, GA".

1 0 1/2 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 0 5 1 KILOMETER

SCALE: 1:24000

O'BRIEN & GERE ENGINEERS, INC.

FILE NO. 26765

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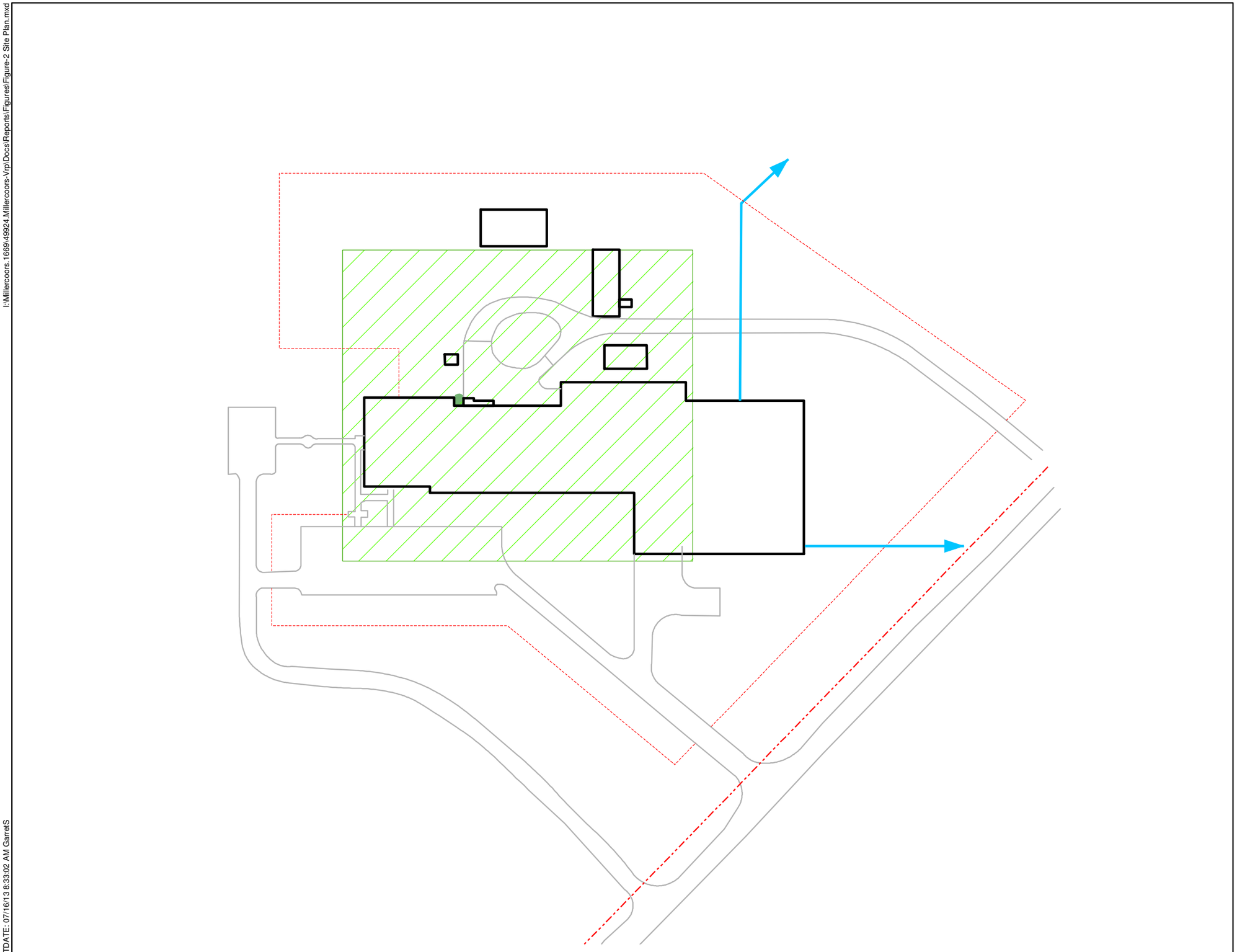
FIGURE 2



N

- Chain Linked Fence
- Property Boundary
- road
- Storm Water Drainage
- Area shown on Figure 3
- Former Waste Solvent Tank Piping Release

Miller Brewing
Moultrie, GA

SITE PLAN

0 75 150 300
Feet

7/16/13
49924

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PLOTDATE: 07/16/13 8:33:02 AM GarretS

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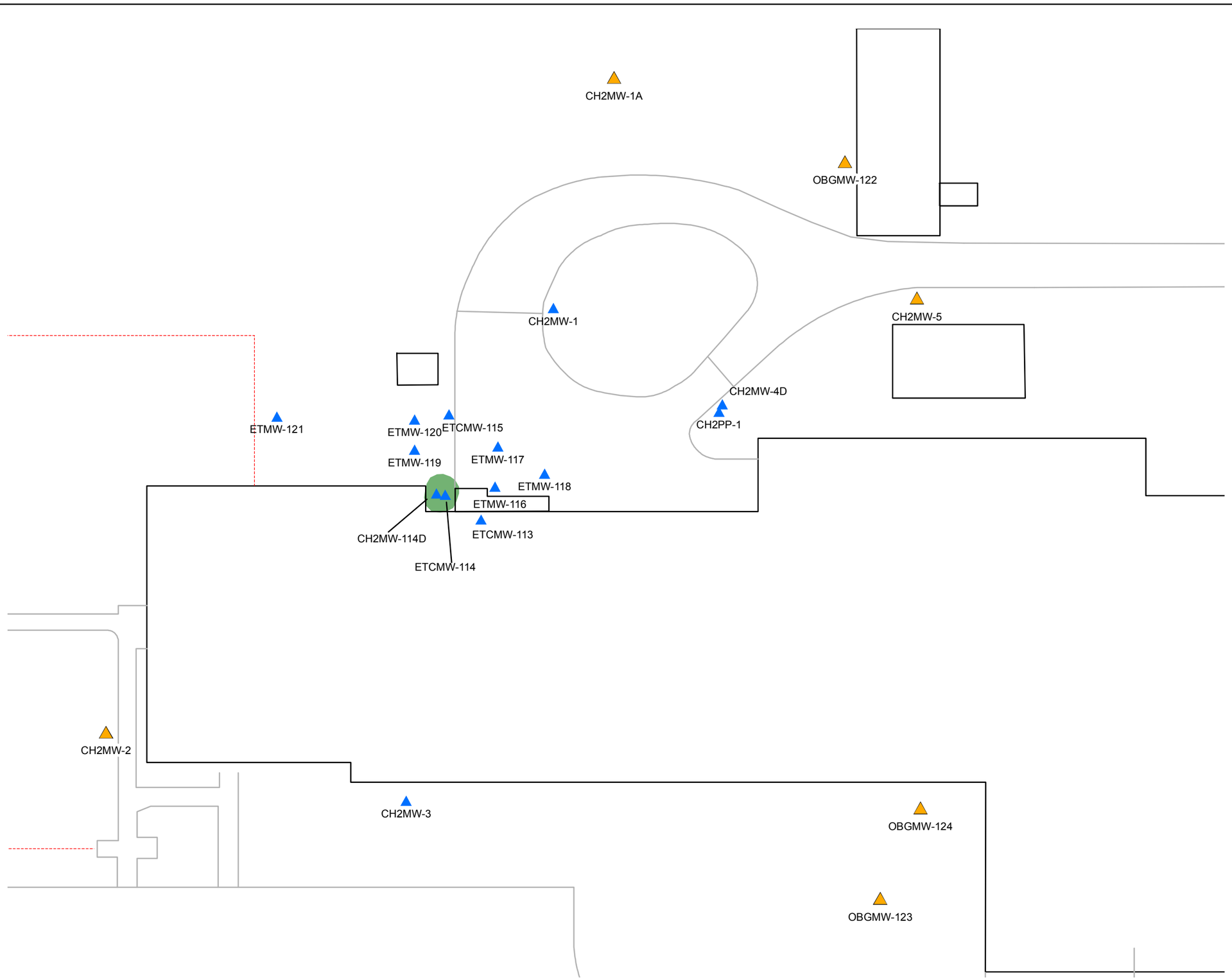
FIGURE 3

LEGEND

- Existing Monitoring Well
- Abandoned Monitoring Well
- Main Plant Metal Building
- building
- Chain Linked Fence
- Road
- Former Waste Solvent Tank Piping Release

Miller Brewing
Moultrie, GA

DETAILED SITE PLAN



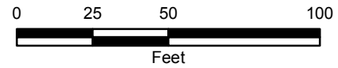


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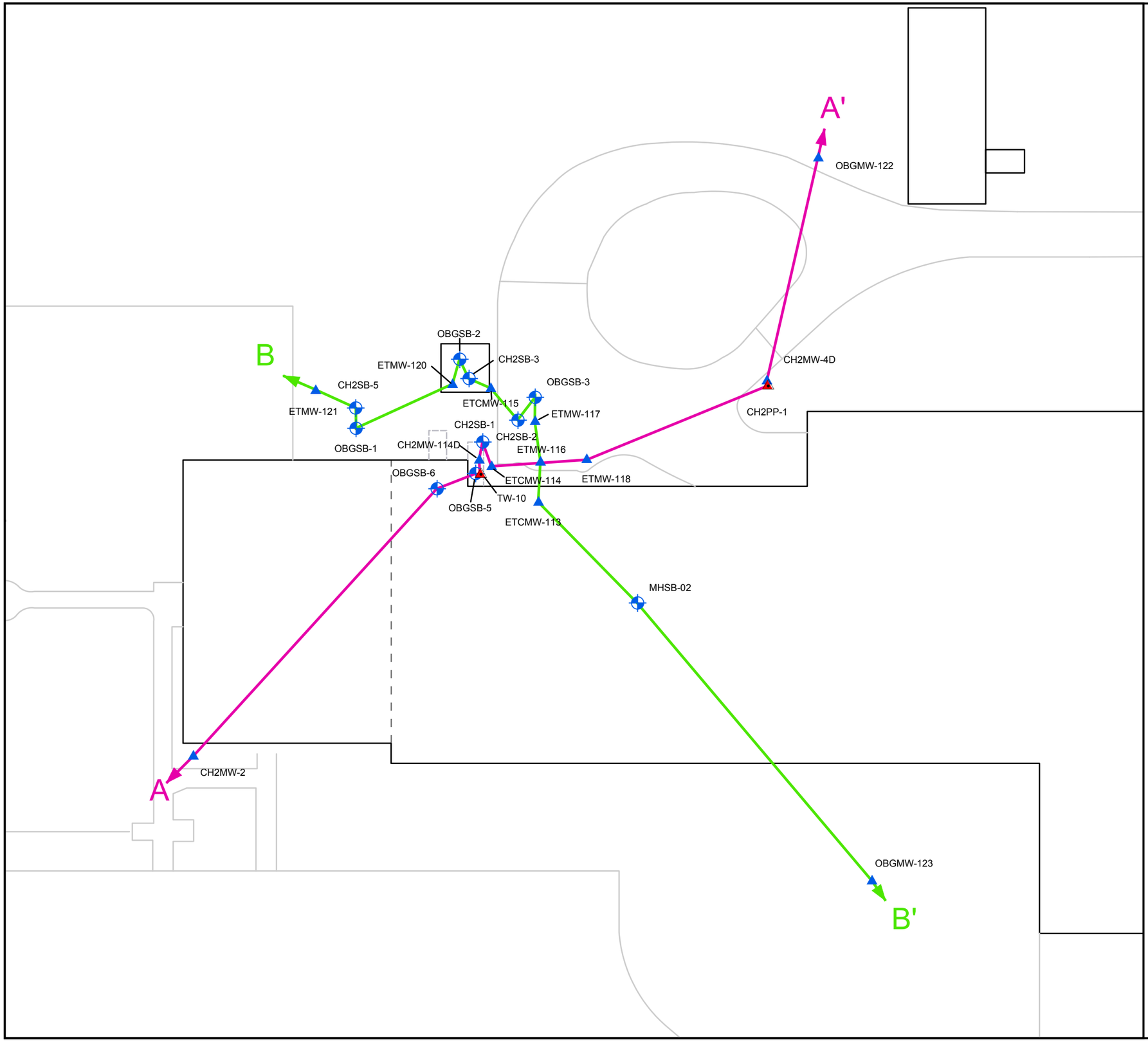
FIGURE 4



Monitoring Well

Temporary Well

Soil Boring

A-A'

B-B'

N

FORMER MILLER BREWING COMPANY CAN PLANT
MOULTRIE, GEORGIA

LINES OF SECTION

Feet

0 50 100

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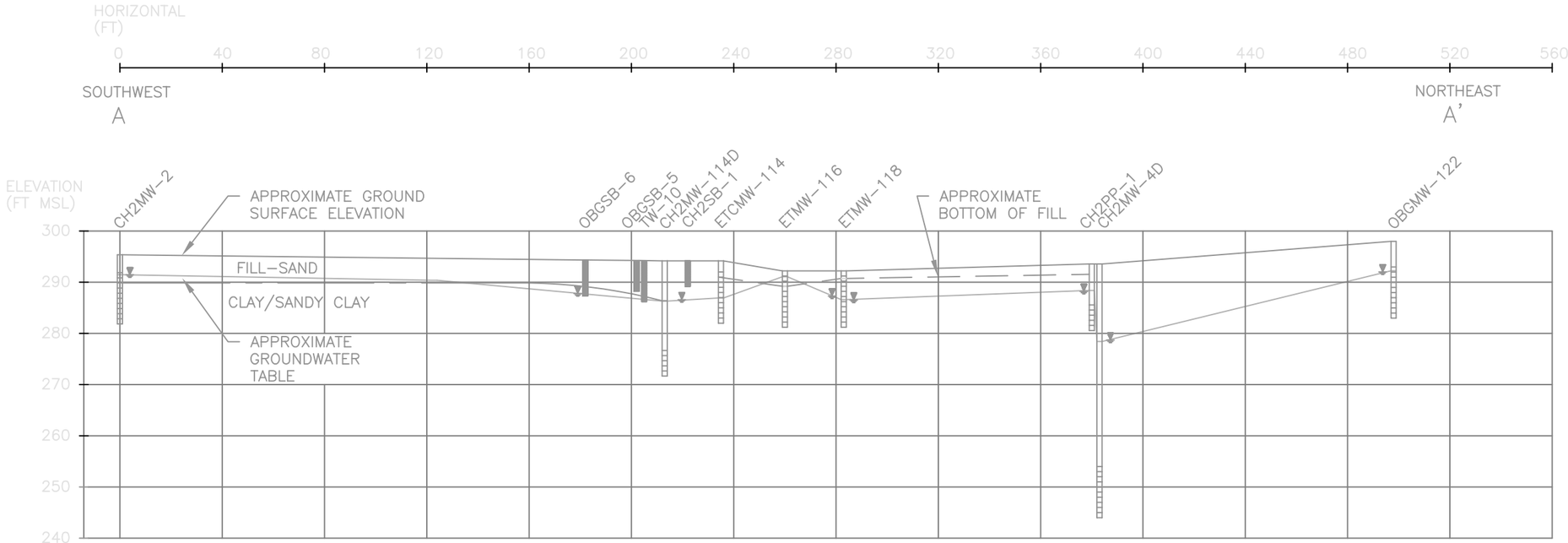
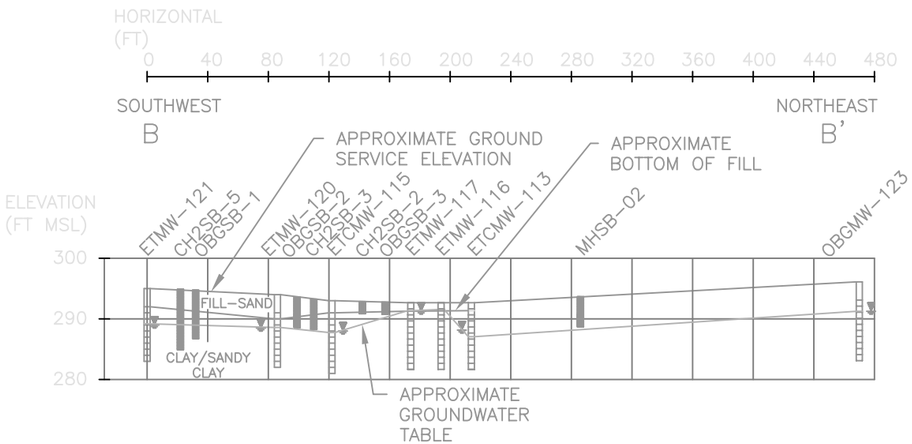
FIGURE 5





LEGEND

- GROUNDWATER ELEVATION
- SCREENED INTERVAL
- SOIL BORING
- GROUNDWATER TABLE

NOTES

1. The depth and thickness of the subsurface strata and affected soil limits indicated on the sections were generalized from and interpolated between test locations. Information on actual subsurface conditions exist only at the specific locations and dates indicated. Subsurface conditions and water levels at other locations may differ from conditions occurring at the indicated locations.

2. Elevations based on a study performed by H.J. Griffin & Associates in June 1998. Elevations reference a DOT benchmark.

3. Soil descriptions were taken from boring wells completed by Earth Tech in 1994 and 1995 and CH2M HILL in 1998.

4. Ground water levels and other data were collected on Jan. 19 2001.

FORMER MILLER
BREWING COMPANY
CAN PLANT
MOULTRIE, GA.

GEOLOGIC CROSS SECTIONS A–A' AND B–B'

FILE NO. 1669.32883.004
MAY 2003

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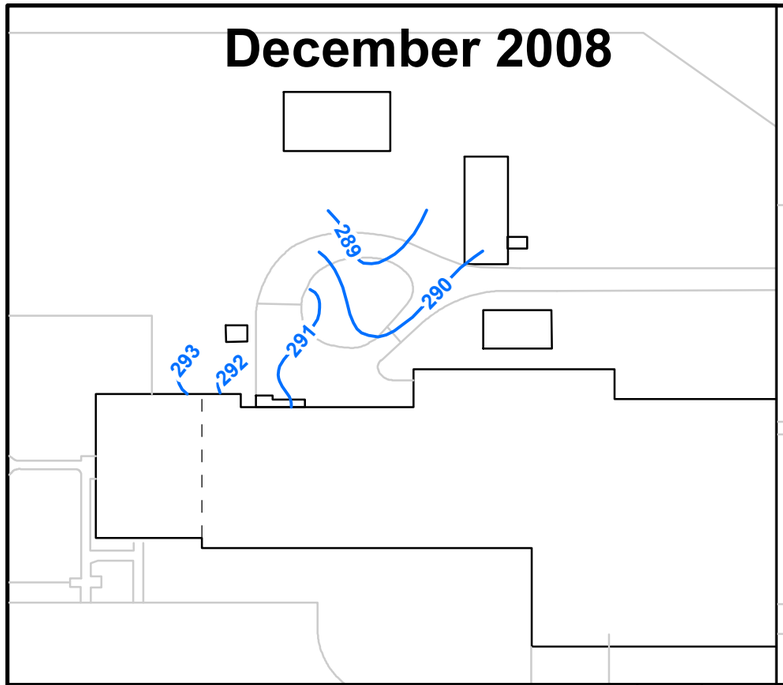

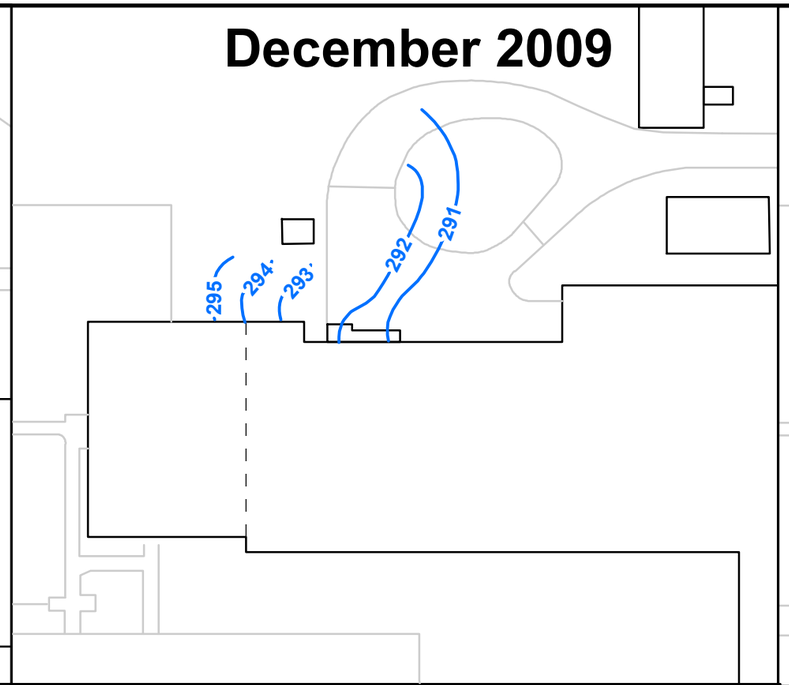

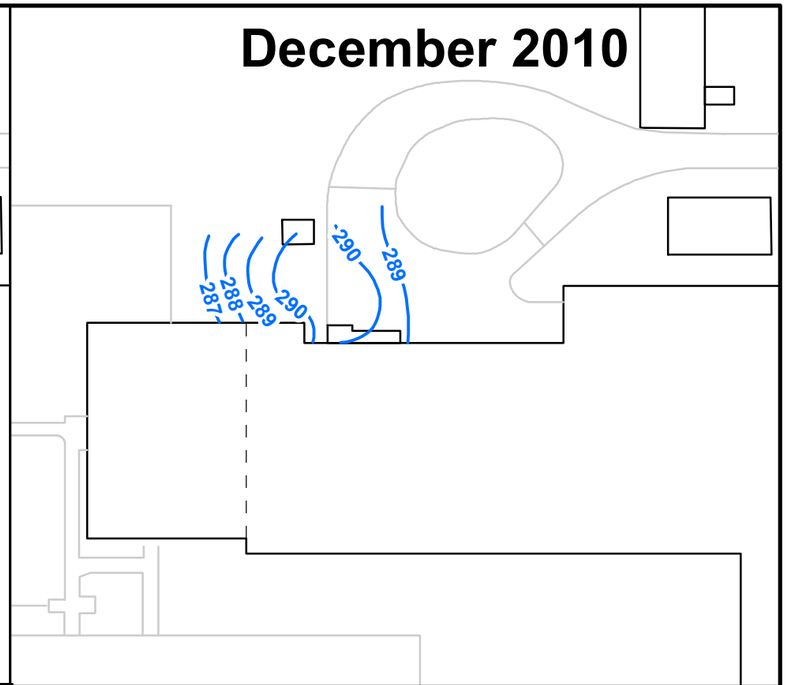

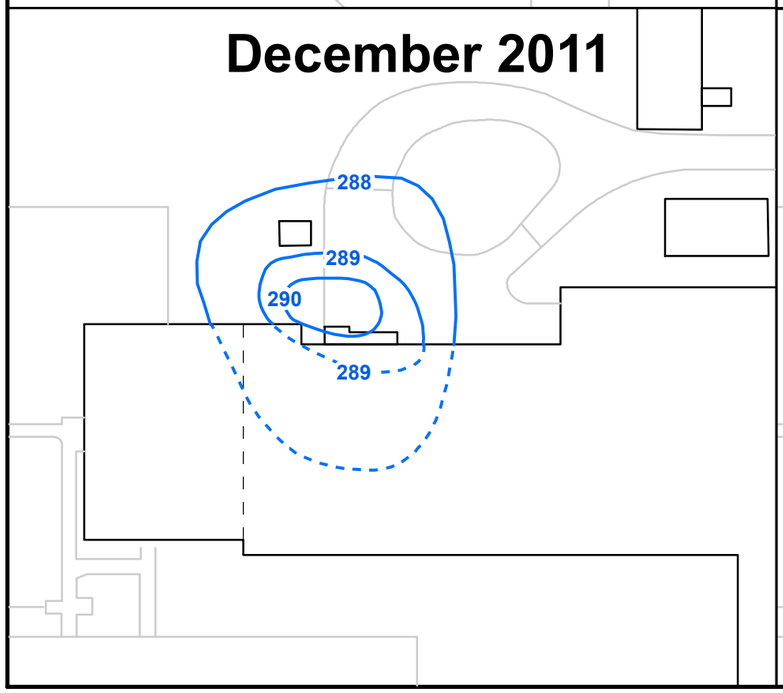

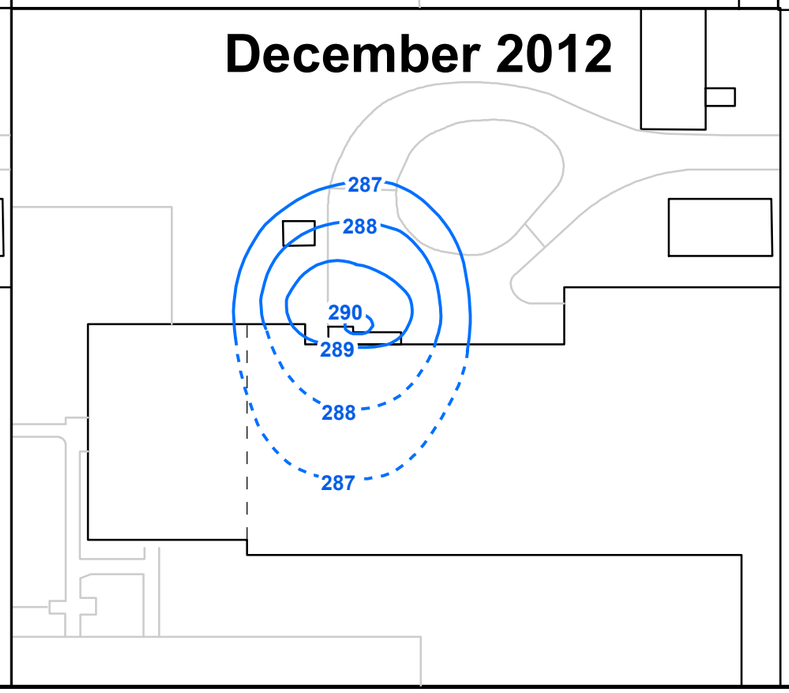

FIGURE 6

HISTORICAL SUMMARY OF
POTENTIOMETRIC SURFACES

2008 - 2012

FORMER MILLER BREWING
CANNING FACILITY
MOULTRIE, GA

Groundwater Elevation (ft msl)

Inferred Groundwater Elevation (ft msl)

Feet
0 50 100 200

N

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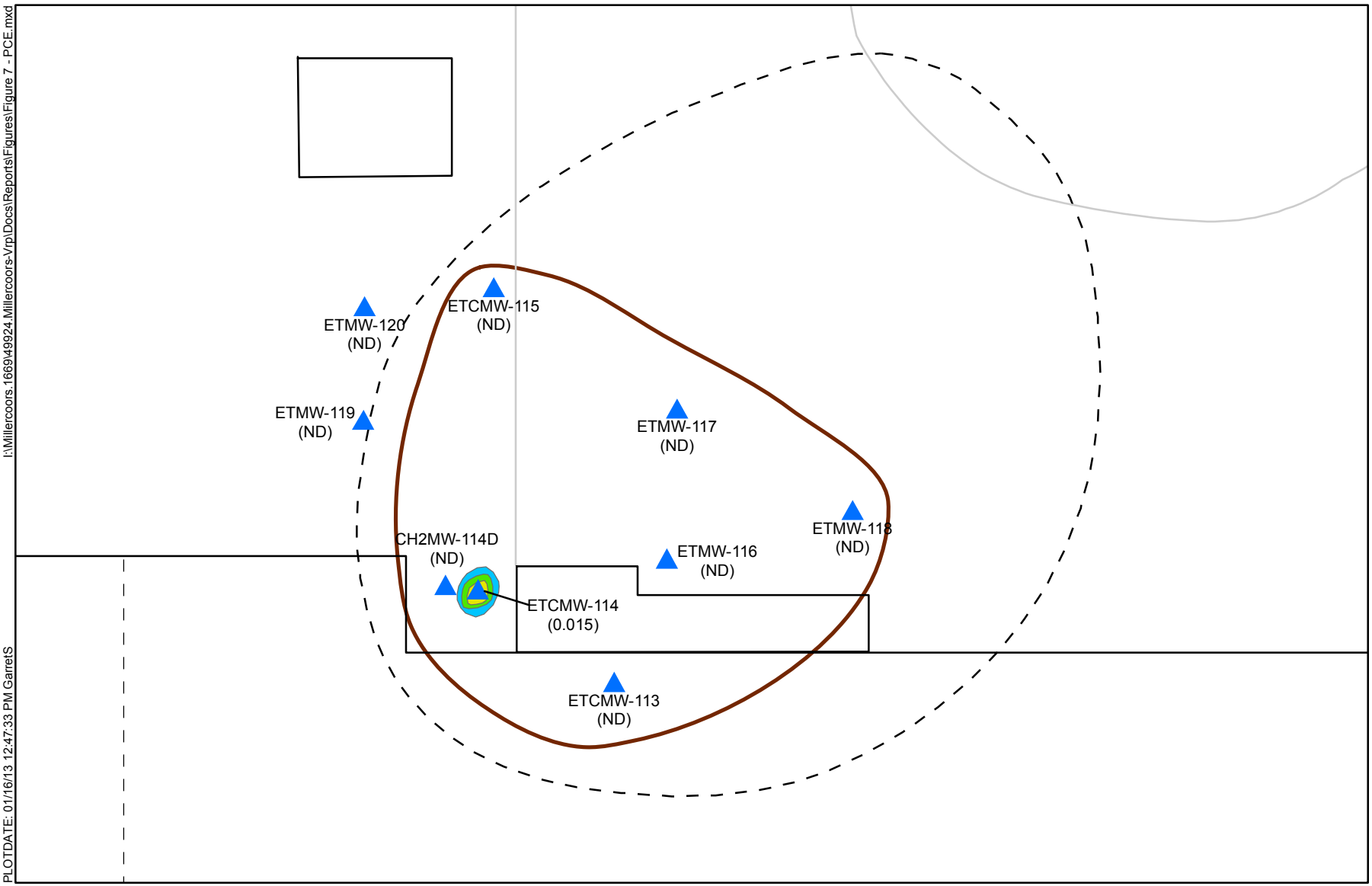

Tetrachloroethene (PCE) concentration above RRS (mg/L)

- 0.0100-0.0999
- 0.0010-0.0099
- 0.0001-0.0009

Monitoring Well

Treatment Area

Groundwater Delineation

ND indicates that PCE was not detected at concentrations above the Type 1/3 RRS.

PCE Type 1/3 RRS = 0.005 mg/L

FORMER MILLER BREWING
CANNING FACILITY
MOULTRIE, GA

TETRACHLOROETHENE CONCENTRATION ABOVE RRS

0 10 20 40
Feet

N

FIGURE 7

11/11/13
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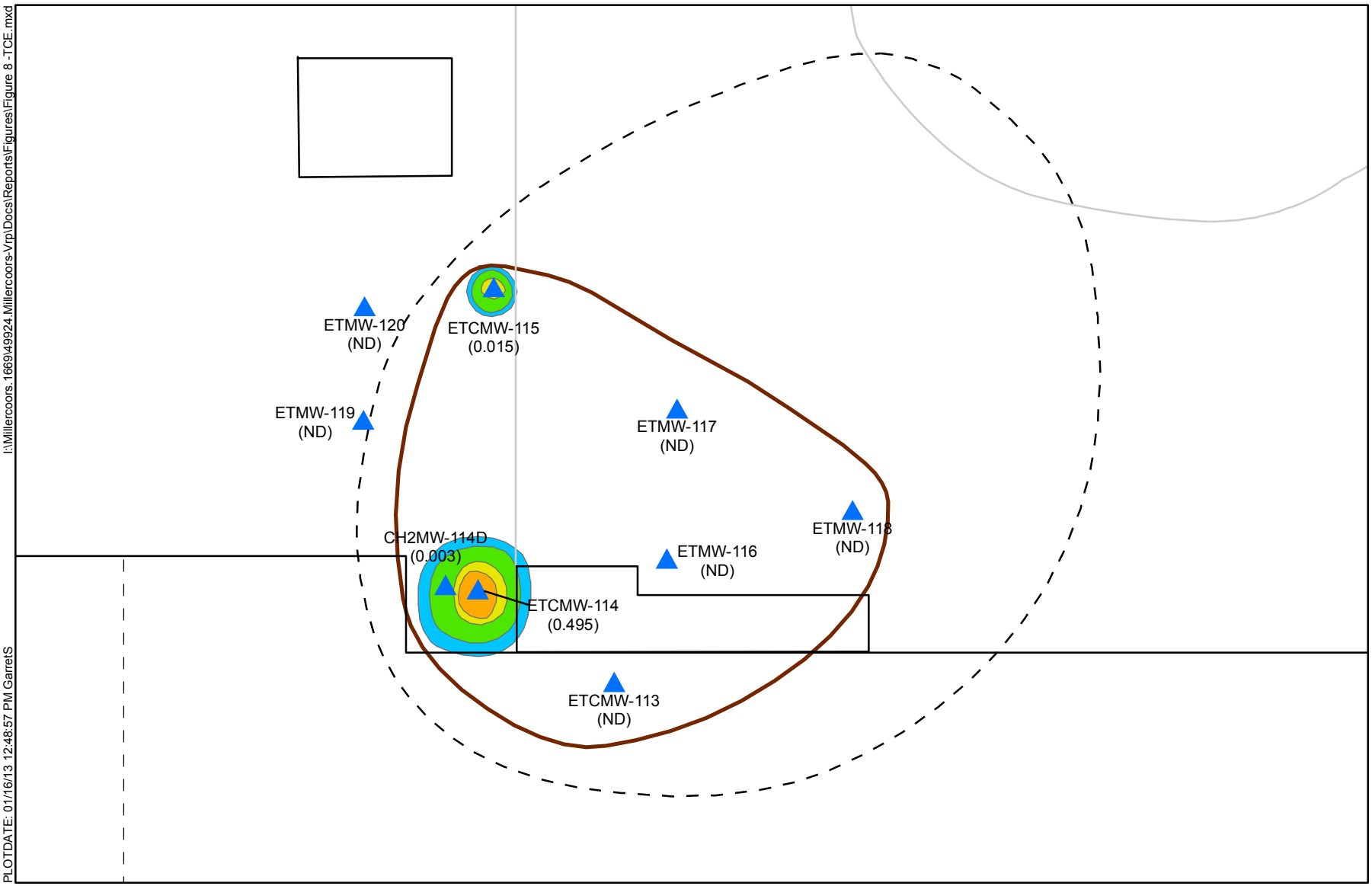

Trichloroethene (TCE)
concentration above RRS (mg/L)

- 0.1000-0.9999
- 0.0100-0.0999
- 0.0010-0.0099
- 0.0001-0.0009

Monitoring Well
Treatment Area
Groundwater Delineation

ND indicates that TCE was not detected at concentrations above the Type 1/3 RRS.

TCE Type 1/3 RRS = 0.005 mg/L

FORMER MILLER BREWING
CANNING FACILITY
MOULTRIE, GA

TRICHLOROETHENE CONCENTRATION ABOVE RRS

0 10 20 40
Feet

N

FIGURE 8

11/11/13
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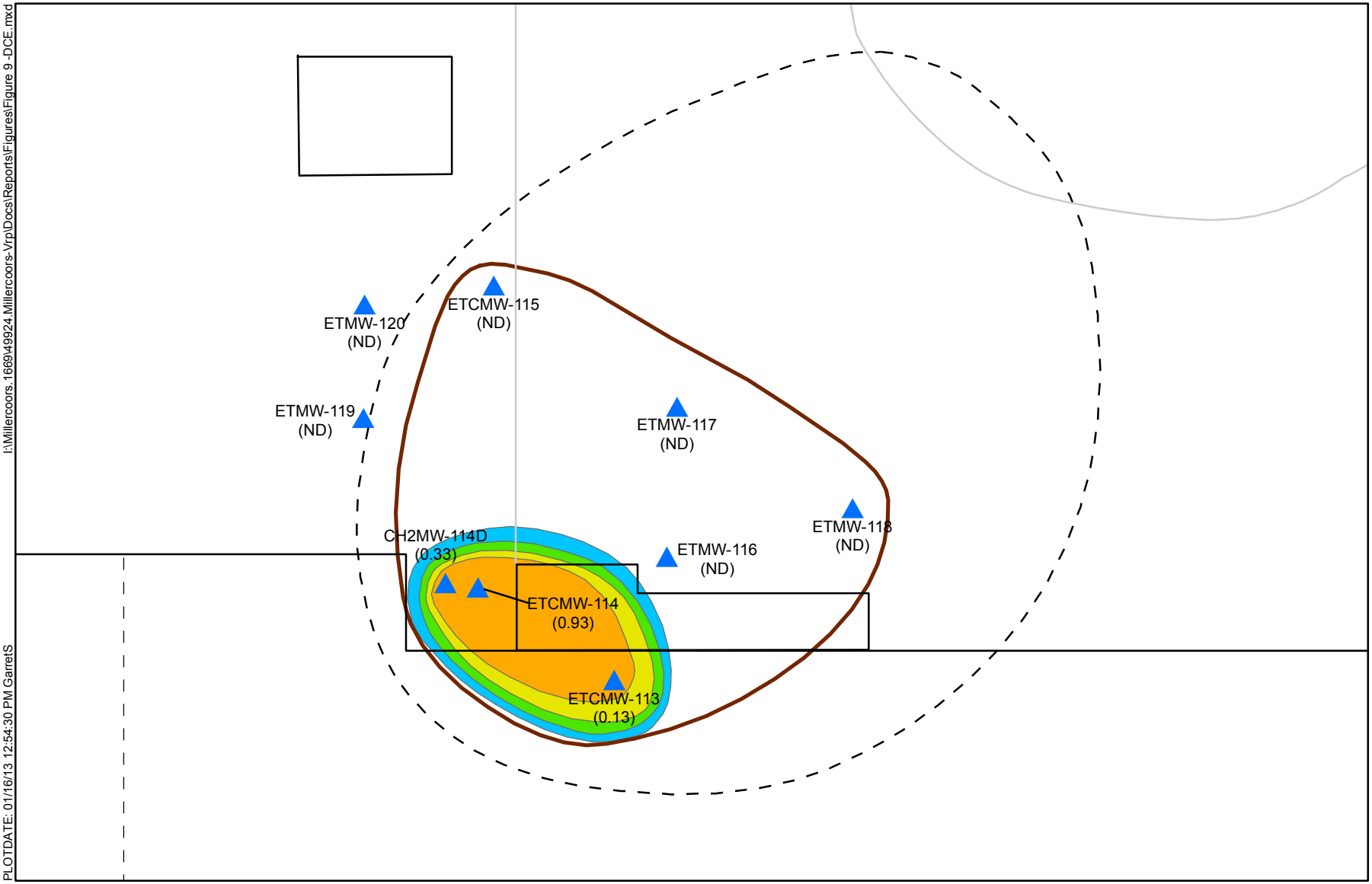

cis-1,2-Dichloroethene (cis-1,2-DCE) concentration above RRS (mg/L)

- >1.0000
- 0.1000-0.9999
- 0.0100-0.0999
- 0.0010-0.0099
- 0.0001-0.0009

Monitoring Well

Treatment Area

Groundwater Delineation

ND indicates that cis-1,2-DCE was not detected at concentrations above the Type 1/3 RRS.

cis-1,2-DCE Type 1/3 RRS = 0.07 mg/L

FORMER MILLER BREWING
CANNING FACILITY
MOULTRIE, GA

CIS-1,2-DICHLOROETHENE CONCENTRATION ABOVE RRS

0 10 20 40

Feet

N

FIGURE 9

11/11/13
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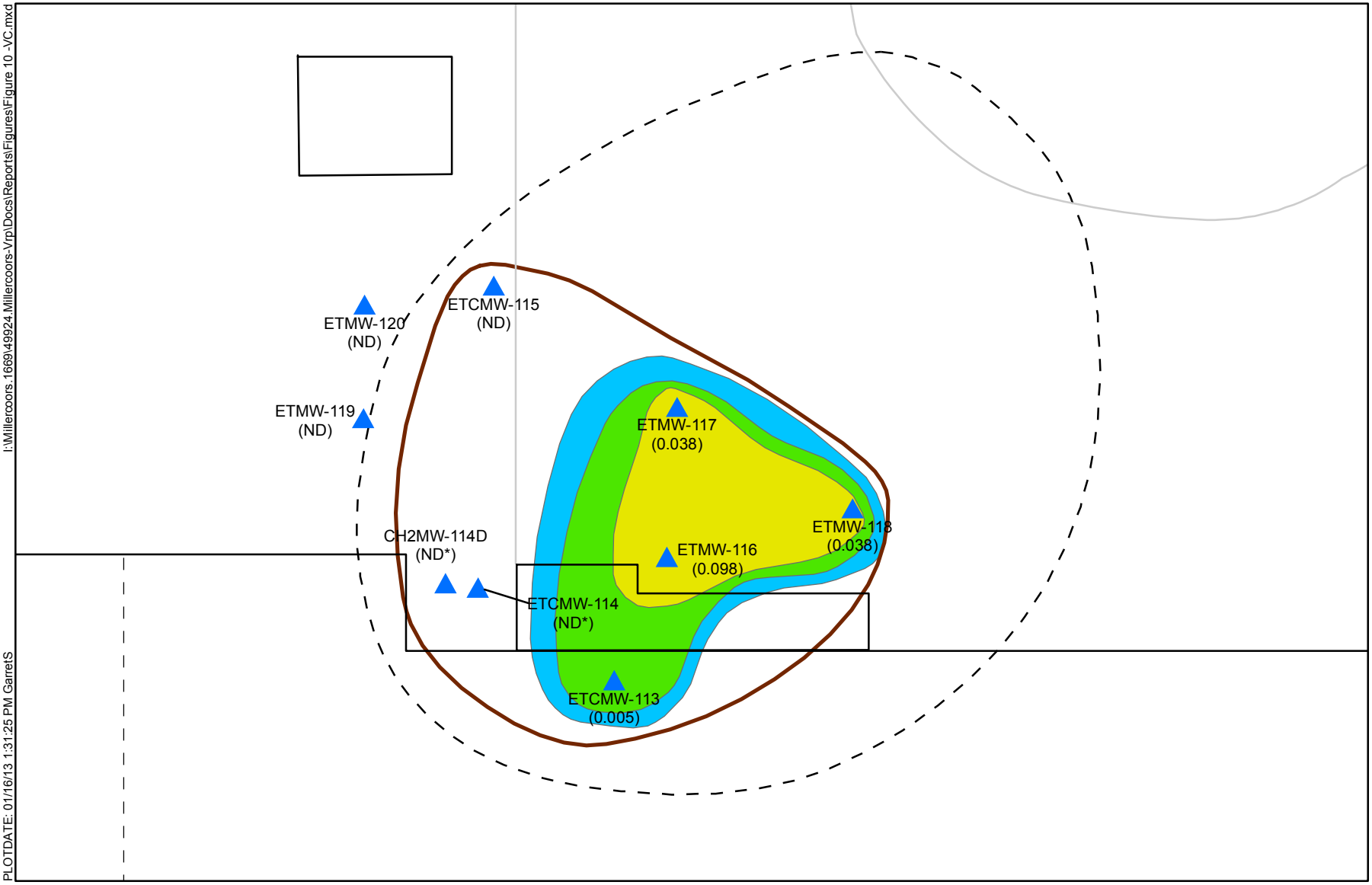

Vinyl Chloride (VC)
concentration above RRS (mg/L)

- 0.0100-0.0999
- 0.0010-0.0099
- 0.0001-0.0009
- Monitoring Well
- Treatment Area
- Groundwater Delineation

ND indicates that cis-1,2-DCE was not detected at concentrations above the Type 1/3 RRS.

ND* indicates vinyl cloride was not detected; however, the detection limit was greater than the Type 1/3 RRS.

cis-1,2-DCE Type 1/3 RRS = 0.07 mg/L

FORMER MILLER BREWING
CANNING FACILITY
MOULTRIE, GA

VC CONCENTRATION ABOVE RRS IN 2012

0 10 20 40
Feet

N

FIGURE 10

11/11/13
49924

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Appendices

Voluntary Remediation Plan Application Form and Checklist

Voluntary Investigation and Remediation Plan Application Form and Checklist

VRP APPLICANT INFORMATION					
COMPANY NAME	Miller Brewing Company				
CONTACT PERSON/TITLE	Stephen Rogers				
ADDRESS	3939 West Highland Blvd., Milwaukee, WI 53201				
PHONE	414-931-4599	**FAX**	414-931-6867	**E-MAIL**	Rogers.steve@mbco.com

GEORGIA CERTIFIED PROFESSIONAL GEOLOGIST OR PROFESSIONAL ENGINEER OVERSEEING CLEANUP					
NAME	Mike Hall, PG			**GA PE/PG NUMBER**	001625
COMPANY	O'Brien & Gere				
ADDRESS	2610 Wycliff Rd. Suite 104 Raleigh, NC 27607				
PHONE	919-783-7777 x26	**FAX**	919-783-0757	**E-MAIL**	Michael.hall@obg.com

APPLICANT'S CERTIFICATION

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

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

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

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

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

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

APPLICANT'S SIGNATURE			
APPLICANT'S NAME/TITLE (PRINT)	**Stephen Rogers, President**	**DATE**	**December 19, 2013**

QUALIFYING PROPERTY INFORMATION (For additional qualifying properties, please refer to the last page of application form)			
HAZARDOUS SITE INVENTORY INFORMATION (if applicable)			
HSI Number	10425	Date HSI Site listed	10/9/96
HSI Facility Name	Reynolds Metal Co.	NAICS CODE	332431
PROPERTY INFORMATION			
TAX PARCEL ID	M052 012	PROPERTY SIZE (ACRES)	28.03
PROPERTY ADDRESS	278 Hwy 319 S.		
CITY	Moultrie	COUNTY	Colquitt
STATE	Georgia	ZIPCODE	31768-1299
LATITUDE (decimal format)	31.1117° N	LONGITUDE (decimal format)	83.7908° W
PROPERTY OWNER INFORMATION			
PROPERTY OWNER(S)	Joint Development Authority of Brook, Colquitt, Grady, Mitchell, and Thomas Counties	PHONE #	229-985-2131
MAILING ADDRESS	PO Box 487		
CITY	Moultrie	STATE/ZIPCODE	Georgia 31775-0487

ITEM #	DESCRIPTION OF REQUIREMENT	Location in VRP (i.e. pg., Table #, Figure #, etc.)	For EPD Comment Only (Leave Blank)
1.	**$5,000 APPLICATION FEE** IN THE FORM OF A CHECK PAYABLE TO THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. (PLEASE LIST CHECK DATE AND CHECK NUMBER IN COLUMN TITLED "LOCATION IN VRP." PLEASE DO NOT INCLUDE A SCANNED COPY OF CHECK IN ELECTRONIC COPY OF APPLICATION.)	**Check # 180400**	
2.	**WARRANTY DEED(S)** FOR QUALIFYING PROPERTY.	**Appendix B**	
3.	**TAX PLAT** OR OTHER FIGURE INCLUDING QUALIFYING PROPERTY BOUNDARIES, ABUTTING PROPERTIES, AND TAX PARCEL IDENTIFICATION NUMBER(S).	**Appendix B**	
4.	**ONE (1) PAPER COPY AND TWO (2) COMPACT DISC (CD) COPIES** OF THE VOLUNTARY REMEDIATION PLAN IN A SEARCHABLE PORTABLE DOCUMENT FORMAT (PDF).	**Attached**	
5.	The VRP participant's initial plan and application must include, using all reasonably available current information to the extent known at the time of application, a graphic three-dimensional preliminary conceptual site model (CSM) including a preliminary remediation plan with a table of delineation standards, brief supporting text, charts, and figures (no more than 10 pages, total) that illustrates the site's surface and subsurface setting, the known or suspected source(s) of contamination, how contamination might move within the environment, the potential human health and ecological receptors, and the complete or incomplete exposure pathways that may exist at the site; the preliminary CSM must be updated as the investigation and remediation progresses and an up-to-date CSM must be included in each semi-annual status report submitted to the director by the participant; a **PROJECTED MILESTONE SCHEDULE** for investigation and remediation of the site, and after enrollment as a participant, must update the schedule in each semi-	**Sections 3.0 and 4.0.** **Figures 5, 7, 8, 9, and 10.**	

	annual status report to the director describing implementation of the plan during the preceding period. A Gantt chart format is preferred for the milestone schedule. The following four (4) generic milestones are required in all initial plans with the results reported in the participant's next applicable semi-annual reports to the director. The director may extend the time for or waive these or other milestones in the participant's plan where the director determines, based on a showing by the participant, that a longer time period is reasonably necessary:		
5.a.	Within the first 12 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern on property where access is available at the time of enrollment;	**Section 3.3, Figures 7 – 10**	
5.b.	Within the first 24 months after enrollment, the participant must complete horizontal delineation of the release and associated constituents of concern extending onto property for which access was not available at the time of enrollment;	**NA**	
5.c.	Within 30 months after enrollment, the participant must update the site CSM to include vertical delineation, finalize the remediation plan and provide a preliminary cost estimate for implementation of remediation and associated continuing actions; and	**Section 3.3**	
5.d.	Within 60 months after enrollment, the participant must submit the compliance status report required under the VRP, including the requisite certifications.		
6.	**SIGNED AND SEALED PE/PG CERTIFICATION** AND SUPPORTING DOCUMENTATION: "I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances. Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division. The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations." MICHAEL S. HALL #1625 12/20/13 Printed Name and GA PE/PG Number Date Signature and Stamp MICHAEL S. HALL No. 1625 REGISTERED PROFESSIONAL GEOLOGIST		

ADDITIONAL QUALIFYING PROPERTIES (COPY THIS PAGE AS NEEDED)

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

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

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

Warranty Deed and Tax Plat

BOOK PG
0816 0037

GEORGIA, COLQUITT COUNTY
CLERK'S OFFICE, SUPERIOR COURT
RECORDED IN BOOK 816 FOLIO 37-39
ON 26th DAY OF March, 2004
Margie Skinner DEPUTY CLERK

FILED
CLERK OF SUPERIOR COURT
COLQUITT COUNTY, GA
2004 MAR 26 PM 4:52
CAROLYN M. BRAZEL, CLERK

RTD 2

NTD

SPACE ABOVE THIS LINE IS FOR RECORDING DATA

After Recording, Return To:
FALLIN & McINTOSH
P.O. Box 250
Moultrie, GA 31776
229-985-5881

LIMITED WARRANTY DEED AND BILL OF SALE

GEORGIA, COLQUITT COUNTY NTD

THIS INDENTURE, made this 26th day of **March, 2004**, between **G. B. A. ASSOCIATES, LLC**, a Georgia corporation (hereinafter referred to as "Grantor") , and **JOINT DEVELOPMENT AUTHORITY OF BROOKS, COLQUITT, GRADY, MITCHELL AND THOMAS COUNTIES**, a public body corporate and politic of the State of Georgia (hereinafter referred to as "Grantee").

WITNESSETH:

FOR AND IN CONSIDERATION of the sum of **Ten and 00/100 ($10.00) Dollars** in hand paid at and before the execution, sealing and delivery hereof, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor has granted, bargained, sold, aliened, conveyed and confirmed, and by these presents does grant, bargain, sell, alien, convey and confirm unto Grantee, its successors and assigns, all that tract(s) or parcel(s) of land lying and being in Mitchell County, Georgia, and being more particularly described on Exhibit "A", attached hereto and incorporated herein by this reference (the "Property").

GRANTOR SHALL warrant and forever defend the right and title to said tract or parcel of land unto Grantee, and the successors, legal representatives and assigns of Grantee, against the claims of all persons claiming, owning or holding by, through or under Grantor, except for claims arising under or by virtue of the Permitted Exceptions.

GRANTEE, for the benefit of itself and its successors and assigns, accepts the Property AS IS, WHERE IS, with all faults related to its environmental condition and shall forever discharge and release the Grantor from all causes of action and claims under any environmental, health or safety law, rule, regulation, ordinance or common law theory, including, without limitation, any cause of action for contribution or

otherwise under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. Sec. 9601, et. seq., arising out of or resulting from the environmental condition of the Property.

GRANTOR also hereby sells, conveys and sets over unto Grantee, in "as is condition" and without warranty, all of its right, title and interest in and to all fixtures, trade fixtures, equipment and tangible personal property located on the Property on the date hereof.

IN WITNESS WHEREOF, the undersigned officers of Grantor have executed this instrument in the name of and on behalf of Grantor, under seal, on the day and year first above written.

Signed, sealed and delivered
in the presence of:

Unofficial Witness

Linda T. Gay
Notary Public

(OFFICIAL SEAL)
NOTARY PUBLIC, GEORGIA
LINDA T. GAY
COUNTY OF COLQUITT
My Commission Expires Sept 26, 2004

GRANTOR:

G. B. A. ASSOCIATES, LLC

By: _____
K. GREGORY ISAACS, Manager

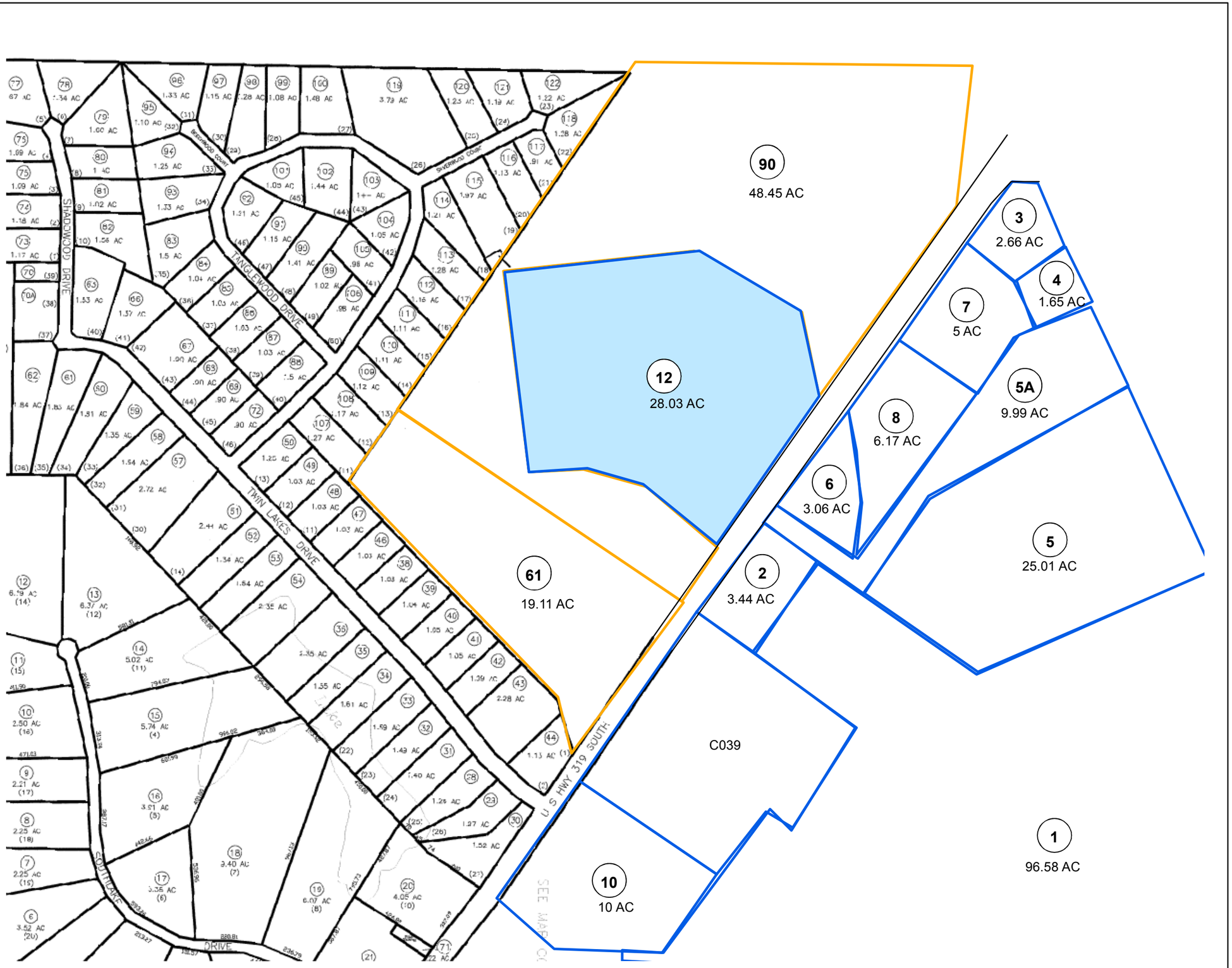
By: _____
DANIEL L. DUNN, Manager

EXHIBIT "A"

All that tract or parcel of land situate, lying ad being in Land Lot 400 in the Eighth (8th) Land District in Colquitt County, Georgia, being 28.03 acres as shown by that plat dated January 30, 2004, designated as "Plat of Survey for G.B.A. Associates, LLC", and recorded in Plat Book 37, Page 182-A, Colquitt County Records; the property being more specifically described as follows:

To locate the point of beginning commence at the Northwest corner of Land Lot 400 and run thence along the North line of the Land Lot North 89 degrees 55 minutes 00 seconds East a distance of 2401.87 feet to a point; run thence South 09 degrees 48 minutes 00 seconds West a distance of 367.19 feet to a point; run thence South 14 degrees 28 minutes 02 seconds West an arc length distance of 458.58 feet (a chord distance of 458.07 feet with a radius of 2814.79 feet) to a point; run thence South 33 degrees 01 minute 02 seconds West a distance of 271.98 feet to a point; run thence South 33 degrees 43 minutes 49 seconds West a distance of 186.74 feet to a point; run thence South 33 degrees 29 minutes 14 seconds West a distance of 313.11 feet to a point on the Northwesterly margin of the right of way of U. S. Highway 319 (State Route 35), this being the point of beginning; run thence South 33 degrees 29 minutes 14 seconds West along the Northwesterly margin of the right of way of U. S. Highway 319 a distance of 817.61 feet to a point; continue thence South 32 degrees 18 minutes 59 seconds West along the Northwesterly margin of the right of way of U. S. Highway 319 a distance of 10.80 feet to a point; run thence North 54 degrees 53 minutes 01 seconds West a distance of 53.73 feet to a point; run thence North 45 degrees 56 minutes 07 seconds West a distance of 138.51 feet to a point; run thence North 56 degrees 25 minutes 19 seconds West a distance of 207.63 feet to a point; run thence North 77 degrees 18 minutes 24 seconds West an arc length distance of 238.01 feet (a chord distance of 232.78 feet with a radius of 326.48 feet) to a point; run thence South 81 degrees 48 minutes 31 seconds West a distance of 281.65 feet to a point; run thence North 08 degrees 18 minutes 07 seconds West a distance of 906.97 feet to a point; run thence North 81 degrees 41 minutes 53 seconds East a distance of 870.82 feet to a point; run thence South 61 degrees 14 minutes 16 seconds East a distance of 533.03 feet to a point; run thence South 13 degrees 52 minutes 31 seconds East a distance of 338.68 feet to a point on the Northwesterly margin of the right of way of U. S. Highway 319, this being the point of beginning.

I:\Millercoors.166949924.Millercoors-Vrp\Docs\Reports\AppendicesB - Warranty Deed and Tax Plat\Tax Plat.mxd



This document was developed in color. Reproduction in B/W may not represent the data as intended.

PLOTDATE: never never GarretS

N

Property Boundary

Tax Map Number

M052X

C039X

C039A

5 — Tax Parcel Number
25.01 AC — Acreage

Former Miller Brewing
Canning Facility
Moultrie, GA

TAX PARCEL MAP

0 500 1,000
Feet

12/9/13
49924

O'BRIEN & GERE

Historical Groundwater Analytical Results

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Downgradient												Downgradient						
					CH2MW-1												CH2MW-1A						
					5/29/1998	4/29/2002	4/7/2004	4/28/2005	10/25/2005	4/18/2006	4/17/2007	10/24/2007	12/8/2008	12/16/2009	12/8/2010	12/7/2011	12/10/2012	6/4/1998	4/29/2002	4/7/2004	4/28/2005	10/26/2005	4/18/2006	4/18/2007
Acetone	67-64-1	mg/L	4		-		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.010	-		< 0.01	< 0.01	**0.031**	< 0.01	< 0.01
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	-	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.01	< 0.010	-	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	71-43-2	mg/L	0.005		-		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Carbon Disulfide	75-15-0	mg/L	4		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Chloroethane	75-00-3	mg/L	0	1.23	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chloromethane	74-87-3	mg/L	0		-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	74-95-3	mg/L	0.0005		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.001	-	**0.0015**	**0.0013**	< 0.001	**0.00059**	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	**0.00284**	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[1]	1.02	**0.00107**	**0.003**	**0.0013**	**0.0011**	**0.0011**	**0.00052**	< 0.0005	< 0.0005	< 0.0005	< 0.0025	**0.00059**	< 0.0005	< 0.00050	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	**0.003**	-	-	-	-	-	-	-	-	-	-	-	-	< 0.0005	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.25	< 0.050	< 0.050	< 0.050	-	-	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		-	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		-	-	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005
Naphthalene	91-20-3	mg/L	0.02		-	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Toluene	108-88-3	mg/L	1		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.001	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.001	**0.0012**	**0.0039**	**0.0041**	**0.0044**	**0.00202**	**0.00176**	**0.00082**	**0.0012**	< 0.0025	**0.0023**	**0.00069**	**0.00098**	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Vinyl Acetate	108-05-4	mg/L	0.00		-	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes (total)	1330-20-7	mg/L	0.01		-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0025	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument
calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Upgradient											
					CH2MW-2											
					5/29/1998	6/4/1998	8/23/2000	11/9/2000	1/24/2001	4/6/2004	4/28/2005	10/25/2005	4/18/2006	4/18/2006 DUP1	4/18/2007	4/18/2007 DUP-02
Acetone	67-64-1	mg/L	4		-	-	**0.003**	< 0.003	< 0.003	< 0.01	< 0.01	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	-	-	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.1	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	71-43-2	mg/L	0.005		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Carbon Disulfide	75-15-0	mg/L	4		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Chloroethane	75-00-3	mg/L	0	1.23	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chloromethane	74-87-3	mg/L	0		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0001	< 0.001	< 0.0001	< 0.0001	< 0.001	< 0.001
Dibromomethane	74-95-3	mg/L	0.0005		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	< 0.001	< 0.001	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		-	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	-	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		-	-	**0.0007**	**0.0006**	< 0.0005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		-	-	< 0.003	< 0.003	< 0.003	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	< 0.005
Naphthalene	91-20-3	mg/L	0.02		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Toluene	108-88-3	mg/L	1		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Vinyl Acetate	108-05-4	mg/L	0.00		-	-	-	-	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	< 0.002
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes (total)	1330-20-7	mg/L	0.01		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Upgradient																
					CH2MW-3																
					5/29/1998	6/4/1998	8/23/2000	11/9/2000	11/9/2000 DUP	1/24/2001	4/6/2004	4/27/2005	4/27/2005 DUP2	10/26/2005	4/19/2006	4/17/2007	10/24/2007	12/11/2008	12/16/2009	12/9/2010	12/7/2011	12/10/2012
Acetone	67-64-1	mg/L	4		-	-	< 0.003	< 0.003	**0.003**	**0.003**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	-	-	< 0.003	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
Benzene	71-43-2	mg/L	0.005		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		-	-	**0.0007**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloromethane	74-87-3	mg/L	0		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	< 0.0005	**0.0006**	**0.0005**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07 [3]	1.02	< 0.001	< 0.001	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		-	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	-	-	< 0.050	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		-	-	**0.0006**	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		-	-	< 0.003	< 0.003	< 0.003	< 0.003	< 0.005	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	< 0.0005	**0.002**	**0.0009**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	< 0.0005	**0.001**	**0.0006**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	< 0.0005	**0.0007**	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	**< 0.0005**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		-	-	-	-	-	-	< 0.002	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Xylenes (total)	1330-20-7	mg/L	0.01		-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Cross Gradient CH2MW-4D															Cross Gradient CH2MW-5							
					8/6/1998	8/23/2000	11/9/2000	1/25/2001	4/8/2004	4/26/2005	4/26/2005 DUP1	10/25/2005	4/18/2006	4/18/2007	10/24/2007	12/10/2008	12/15/2009	12/8/2010	12/8/2010 DUP-1	12/7/2011	12/4/2012	8/5/1998	4/7/2004	4/27/2005	10/26/2005	10/26/2005 DUP 2	4/20/2006	4/20/2006 DUP2	4/17/2007
Acetone	67-64-1	mg/L	4		-	**0.007**	**0.003 B**	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	< 0.010	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	71-43-2	mg/L	0.005		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Carbon Disulfide	75-15-0	mg/L	4		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Chloroethane	75-00-3	mg/L	0	1.23	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chloromethane	74-87-3	mg/L	0		-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	74-95-3	mg/L	0.0005		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	< 0.005	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	< 0.050	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.1	< 0.1	< 0.1	< 0.1	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		-	**0.0008**	< 0.0005	< 0.0005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		-	< 0.003	< 0.003	< 0.003	< 0.005	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	< 0.005	< 0.005	< 0.01	< 0.01	< 0.01	< 0.01	< 0.005
Naphthalene	91-20-3	mg/L	0.02		-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Toluene	108-88-3	mg/L	1		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	**0.00071**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	**< 0.0005**
Trichlorofluoromethane	75-69-4	mg/L	2		-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005
Vinyl Acetate	108-05-4	mg/L	0.00		-	-	-	-	< 0.002	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	-	< 0.002	< 0.002	< 0.005	< 0.005	< 0.005	< 0.005	< 0.002
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes (total)	1330-20-7	mg/L	0.01		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	In Plume															
					ETCMW-113															
					1/21/1994	11/3/1994	3/31/1995	5/27/1998	9/7/2000	11/9/2000	1/25/2001	4/6/2004	4/26/2005	10/26/2005	4/19/2006	4/18/2007	10/24/2007	12/11/2008	12/16/2009	12/9/2010	12/7/2011	12/4/2012
Acetone	67-64-1	mg/L	4		< 0.100	< 0.001	< 0.050	-	**0.007**	**0.026**	< 0.003	< 0.01	< 0.04	< 0.01	< 0.01	**0.235 D**	**0.448 D**	**0.038**	< 0.01	< 0.01	**0.028**	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.100	< 0.001	< 0.050	-	< 0.003	< 0.025	< 0.003	< 0.01	< 0.04	< 0.01	< 0.01	**0.191 D**	**0.380 D**	**0.014**	< 0.01	< 0.01	< 0.01	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.005	< 0.001	-	**0.0006**	< 0.005	**0.002**	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	**0.0016**	**0.00052**	**0.00092**	**0.00069**	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.100	< 0.005	< 0.005	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	**0.0056 D**	< 0.001	< 0.0005	**0.00810 D**	< 0.005	**0.00072**	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.010	< 0.001	< 0.001	-	**0.001**	< 0.005	**0.002**	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.01	< 0.01	**0.0057**	< 0.0005	**0.0024**	< 0.0005	< 0.00050
Chloromethane	74-87-3	mg/L	0		< 0.005	< 0.010	< 0.001	-	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.01	< 0.01	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	< 0.010	-	-	-	< 0.0005	< 0.005	< 0.0005 [6]	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.01	< 0.01	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		< 0.005	-	-	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		**0.063**	**0.035**	**0.026**	**0.01006**	**0.056 D**	**0.024**	**0.036 D**	**0.022**	**0.018 D**	**0.011**	**0.00884**	**0.0173 D**	**0.0117 D**	**0.0089**	**0.0069**	**0.019**	**0.020**	**0.0099**
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.005	< 0.001	-	**0.0008**	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	**0.017**	< 0.005	**0.003**	**0.00244**	**0.027 E**	< 0.005	**0.020 D**	**0.007**	**0.0051 D**	**0.003**	**0.00274**	**0.0083 D**	< 0.005	**0.0055**	**0.0032**	**0.0042**	**0.0085**	**0.0037**
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07 [3]	1.02	-	**0.017**	**0.022**	**0.02213**	-	-	**0.100 D**	**0.066 D**	**0.091 D**	**0.058**	**0.0554 D**	**0.178 D**	**0.147 D**	**0.200**	**0.120**	**0.280**	**0.300**	**0.15**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.005	< 0.001	-	-	-	0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	**0.00058**	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	< 0.0005	< 0.005	**0.110 D**	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.005	< 0.001	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	< 0.0005	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		< 0.100	-	-	-	-	-	-	< 0.050	< 0.200	< 0.1	< 0.050	**1.45 D**	< 0.5	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.005	< 0.001	-	**0.002**	< 0.005	**0.0006**	< 0.002	< 0.0008	< 0.002	< 0.002	< 0.02	< 0.02	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.050	< 0.001	< 0.050	-	< 0.003	< 0.025	< 0.003	< 0.005	< 0.02	< 0.01	< 0.005	< 0.050	< 0.05	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	-	-	< 0.0005	< 0.005	< 0.0005 [6]	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.01	< 0.01	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.005	< 0.001	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.05	< 0.005	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	**0.028**	**0.014**	**0.0084**	**0.00649**	**0.044 D**	**0.013**	**0.035 E**	**0.016**	**0.0078 D**	**0.0061**	**0.00361**	**0.00640 D**	< 0.005	< 0.0005	**0.00053**	**0.0022**	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.005	< 0.001	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	< 0.002	-	< 0.0005	< 0.005	< 0.0005 [6]	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.01	< 0.01	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	< 0.003	-	< 0.0005	< 0.005	< 0.0005 [6]	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.01	< 0.01	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.005	< 0.004	< 0.001	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.290**	**0.062**	< 0.005	**0.06938**	**0.530 D**	**0.150**	**0.240 D**	**0.16 D**	**0.056 D**	**0.059**	**0.0246**	**0.0406 D**	< 0.0005	**0.0025**	**0.0028**	**0.0035**	**0.0016**	**0.00098**
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	< 0.006	-	**0.0009**	< 0.005	**0.001**	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.010	< 0.01	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		< 0.005	-	< 0.007	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.005	< 0.005	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.100	< 0.005	< 0.008	-	-	-	-	< 0.002	< 0.0008	< 0.005	< 0.002	< 0.0200	< 0.020	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	< 0.001	< 0.009	**0.00137**	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.0004	< 0.001	< 0.001	< 0.010	< 0.01	**0.0092**	**0.006**	**0.0068**	**0.027**	**0.0066**
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.005	< 0.010	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0002	< 0.001	< 0.0005	< 0.010	< 0.01	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	In Plume																										
					ETCMW-114																										
					1/21/1994	1/21/1994 DUP	11/3/1994	11/3/1994 DUP	3/31/1995	3/31/1995 DUP	5/27/1998	8/23/2000	11/10/2000	1/24/2001	1/24/2001 DUP	4/29/2002	4/29/2002 DUP	4/7/2004	4/7/2004 DUP	4/28/2005	10/27/2005	4/20/2006	4/17/2007	4/17/2007 DUP-01	10/24/2007	10/24/2007 DUP-02	12/10/2008	12/16/2009	12/9/2010	12/9/2010 DUP-2	12/5/2011	12/3/2012
Acetone	67-64-1	mg/L	4		**3.300**	**2.300**	**0.060**	< 0.010	< 5	< 5	-	**1.8**	< 0.089	< 0.003	< 0.003	-	-	< 0.001	< 0.01	< 0.1	< 0.5	< 0.1	< 0.50	<2	< 0.01	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.100
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	**2.600**	**1.500**	**0.030**	**0.020**	< 5	< 5	-	**3.9**	< 0.089	< 0.003	< 0.003	< 0.003	< 0.003	< 0.001	< 0.01	< 0.1	< 0.5	< 0.1	< 0.50	<2	< 0.01	< 0.01	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.100
Benzene	71-43-2	mg/L	0.005		**0.0075**	**0.018**	**0.011**	**0.008**	< 0.10	< 0.10	-	< 0.042	< 0.018	**0.003**	**0.003**	-	-	**0.0016**	**0.0017**	< 0.005	< 0.005	< 0.005	< 0.025	< 0.10	**0.00170**	**0.00165**	< 0.005	**0.0029**	< 0.005	< 0.005	**0.00096**	< 0.0050
Carbon Disulfide	75-15-0	mg/L	4		< 0.100	< 0.100	< 0.005	< 0.005	< 0.5	< 0.5	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.005	< 0.0050
Chloroethane	75-00-3	mg/L	0	1.23	**0.410**	**1.300**	**1.2**	< 0.010	**0.930**	**1.200**	-	< 0.042	**0.120**	**0.061 E**	**0.062 E**	-	-	**0.0053**	**0.0053**	< 0.010	< 0.001	< 0.010	< 0.05	< 0.20	**0.0149**	**0.0143**	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0050
Chloromethane	74-87-3	mg/L	0		< 0.005	< 0.005	< 0.010	**1.100**	< 0.100	< 0.100	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.001	< 0.001	< 0.010	< 0.001	< 0.010	< 0.05	< 0.20	< 0.001	< 0.001	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	< 0.010	< 0.010	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.001	< 0.001	< 0.01	< 0.05	< 0.010	< 0.050	< 0.20	< 0.001	< 0.001	-	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		< 0.0005	< 0.0005	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	< 0.0005	< 0.0005	-	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		**0.690**	**1.200**	**0.710**	**0.580**	**0.400**	**0.450**	**0.09321**	**0.230**	**0.200**	**0.12 D**	**0.12 D**	-	-	**0.11 D**	**0.11 D**	**0.062 D**	**0.13**	**0.0839 D**	**0.102 D**	< 0.10	**0.0520 E**	**0.0505 E**	**0.045**	**0.033**	**0.055 D**	**0.052 D**	**0.043**	**0.034**
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		**0.011**	**0.015**	< 0.005	< 0.005	< 0.100	< 0.100	-	< 0.042	< 0.018	**0.004**	**0.004**	-	-	**0.0029**	**0.0029**	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	**0.00082**	**0.00080**	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	**0.019**	**0.110**	**0.570**	**0.260**	**0.310**	**0.330**	**0.20412**	**0.260**	**0.120**	**0.12 D**	**0.11 D**	**0.39 D**	**0.33 D**	**0.13 D**	**0.13 D**	**0.100 D**	**0.24**	**0.138 D**	< 0.025	< 0.10	**0.00691**	**0.00642**	**0.066**	**0.053**	**0.085 D**	**0.081 D**	**0.085**	**0.0070**
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	-	-	**15**	**12**	**11**	**12**	**4.841**	-	-	**3.4 D**	**3.3 D**	**3.8 D**	**3.7 D**	**2.4 D**	**2.4 D**	**1.7 D**	**4.4**	**3.160 D**	**1.830 D**	**1.760 D**	**0.185 E**	**0.179 E**	**1.1**	**0.820**	**1.500 D**	**1.400 D**	**1.500 D**	**1.300**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.005	< 0.005	< 0.005	< 0.1	< 0.1	-	-	-	**0.004**	**0.003**	**0.009**	**0.007**	**0.0025**	**0.0025**	< 0.005	< 0.05	**0.0314 D**	< 0.025	< 0.10	**0.00331**	**0.00313**	< 0.005	**0.0014**	< 0.005	< 0.005	**0.0032**	< 0.0050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	-	-	-	< 0.042	< 0.018	**3.1 D**	**3.1 D**	**3.9 D**	**3.8 D**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		**0.0085**	**0.020**	**0.007**	**0.005**	< 0.100	< 0.100	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	< 0.0005	< 0.0005	-	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		**0.310**	**0.330**	-	-	-	-	-	-	-	-	-	-	-	< 0.050	< 0.050	< 0.500	< 5	< 0.5	<2.5	<10	< 0.050	< 0.050	< 0.5	< 0.050	< 0.5	< 0.5	< 0.05	< 0.500
Methylene Chloride	75-09-2	mg/L	0.005		**0.0088**	**0.0052**	< 0.005	< 0.005	< 0.100	< 0.100	-	< 0.042	< 0.018	**0.001**	**0.003**	-	-	< 0.002	< 0.002	< 0.020	< 0.1	< 0.0200	< 0.10	< 0.40	< 0.002	< 0.002	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		**0.077**	**0.080**	**0.018**	**0.015**	< 5	< 5	-	< 0.210	< 0.089	< 0.003	< 0.003	-	-	< 0.005	< 0.005	< 0.05	< 0.5	< 0.050	< 0.25	< 1.0	< 0.005	< 0.005	-	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.01	< 0.05	< 0.010	< 0.05	< 0.2	< 0.001	< 0.001	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.001	< 0.001	< 0.005	< 0.005	< 0.100	< 0.100	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.1	< 0.0005	< 0.0005	-	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	**0.039**	**0.120**	**0.013**	**0.012**	< 0.100	< 0.100	**0.03293**	**0.140**	**0.036**	**0.039 E**	**0.039 E**	-	-	**0.11 D**	**0.12 D**	**0.074 D**	**0.13**	**0.101 D**	< 0.025	< 0.10	< 0.0005	< 0.0005	**0.006**	**0.0092**	**0.021 D**	**0.020 D**	**0.026**	**0.024**
Toluene	108-88-3	mg/L	1		**0.072**	**0.150**	**0.057**	**0.049**	< 0.100	< 0.1 00	-	< 0.042	< 0.018	**0.008**	**0.008**	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	**0.00222**	**0.00202**	< 0.005	**0.00099**	< 0.005	< 0.005	< 0.0005	< 0.0050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.001	< 0.001	< 0.01	< 0.05	< 0.010	< 0.025	< 0.10	< 0.001	< 0.001	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.001	< 0.001	< 0.01	< 0.05	< 0.01	< 0.050	< 0.20	< 0.001	< 0.001	-	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		**0.041**	**0.170**	< 0.005	< 0.005	< 0.100	< 0.100	< 0.001	< 0.042	< 0.018	**0.002**	**0.002**	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.420**	**0.670**	**0.14**	**0.120**	**0.400**	**0.440**	**0.662**	**3.100 D**	**0.740**	**0.82 D**	**0.79 D**	**4.5 D**	**4.0 D**	**1.6 D**	**1.7 D**	**1.0 D**	**2.2**	**1.480 D**	< 0.025	< 0.10	**0.00897**	**0.00823**	**0.44**	**0.34**	**0.520 D**	**0.500 D**	**0.590 D**	**0.450**
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.001	< 0.001	< 0.010	< 0.05	< 0.010	< 0.05	< 0.001	< 0.001	< 0.001	< 0.005	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		< 0.0057	< 0.0058	-	-	-	-	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.005	< 0.025	< 0.10	< 0.0005	< 0.0005	-	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		**3.800**	**3.600**	< 0.005	< 0.010	< 1.000	< 1.0	-	-	-	-	-	-	-	< 0.002	< 0.002	< 0.020	< 0.1	< 0.0200	< 0.10	< 0.40	< 0.002	< 0.002	-	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	< 0.001	< 0.01	< 0.01	< 0.100	< 0.100	**0.01956**	< 0.042	< 0.018	**0.001**	**0.001**	-	-	< 0.001	< 0.001	< 0.010	**0.026**	**0.0236 D**	**3.740 D**	**3.550 D**	**.524 E**	**0.547 E**	< 0.005	**0.0052**	**0.047 D**	**0.040 D**	**0.0033**	< 0.0050
Xylenes (total)	1330-20-7	mg/L	0.01		**0.045**	**0.095**	**0.024**	**0.020**	< 0.300	< 0.300	-	< 0.042	< 0.018	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.005	< 0.05	< 0.010	< 0.05	< 0.20	**0.00169**	**0.00165**	< 0.005	**0.00057**	< 0.005	< 0.005	< 0.0005	< 0.0050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents
in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	In Plume												In Plume											
					CH2MW-114D												ETCMW-115											
					6/4/1998	4/7/2004	4/28/2005	10/26/2005	4/20/2006	4/18/2007	10/24/2007	12/11/2008	12/16/2009	12/8/2010	12/7/2011	12/10/2012	11/3/1994	3/31/1995	4/7/2004	4/28/2005	10/25/2005	4/18/2006	4/18/2007	10/23/2007	12/10/2008	12/16/2009	12/8/2010	12/7/2011	12/6/2012
Acetone	67-64-1	mg/L	4		-	< 0.01	**0.190 D**	**0.52**	< 0.01	< 0.1	**0.123 E**	< 0.010	**0.53**	**0.390**	**0.410**	**0.340**	< 0.01	< 0.05	< 0.010	< 0.010	< 0.01	< 0.010	< 0.025	< 0.025	< 0.010	< 0.010	< 0.010	**0.012**	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	-	< 0.01	**0.430 D**	< 0.1	< 0.01	< 0.1	**0.0442**	**0.063**	< 0.01	**0.120**	**0.096**	< 0.100	< 0.01	< 0.05	< 0.010	< 0.010	< 0.01	< 0.010	< 0.025	< 0.025	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzene	71-43-2	mg/L	0.005		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.005	< 0.001	< 0.0005	**0.00062**	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	**0.00074**	**0.00076**	**0.0015**	< 0.0005	< 0.0050	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloromethane	74-87-3	mg/L	0		-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	-	-	-	-	-	< 0.010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		**0.0018**	**0.0077**	**0.00830 D**	< 0.01	< 0.001	< 0.005	**0.00249**	**0.0007**	**0.00098**	**0.0012**	**0.00078**	< 0.0050	**0.042**	**0.025**	**0.0064**	**0.0063**	**0.0076**	**0.00367**	**0.00848 D**	**0.00308 D**	**0.00087**	**0.0011**	**0.0039**	**0.0038**	**0.0034**
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		-	< 0.0005	< 0.0005	< 0.005 J	< 0.001	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	**0.0046**	**0.0053**	**0.0060 D**	< 0.01	< 0.001	**0.00580 D**	**0.00395**	**0.0051**	**0.0081**	**0.013**	**0.012**	**0.013**	< 0.005	< 0.001	< 0.0005	< 0.0025	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	**0.0161**	**0.088 D**	**0.120 D**	**0.097**	< 0.001	**0.204 D**	**0.146 E**	**0.120**	**0.280**	**0.400**	**0.400 D**	**0.400**	**0.210**	**0.120**	**0.086 D**	**0.041 D**	**0.094**	**0.0346**	**0.120 D**	**0.0318 D**	**0.0078**	**0.011**	**0.040**	**0.046 D**	**0.042**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	< 0.0005	< 0.0005	**0.00076**	**0.00051**	< 0.0050	< 0.005	< 0.001	< 0.0005	**0.00067**	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	-	-	-	-	-	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	< 0.050	< 0.500	< 1	< 0.1	< 0.005	**0.622 E**	**1.300**	< 0.050	**0.079**	< 0.050	< 0.500	-	-	< 0.050	< 0.250	< 0.1	< 0.050	< 0.125	< 0.125	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		-	< 0.002	< 0.002	< 0.02	< 0.002	< 0.0200	< 0.002	-	-	-	-	-	< 0.005	< 0.001	< 0.002	< 0.002	< 0.002	< 0.002	< 0.005	< 0.005	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		-	< 0.005	< 0.005	< 0.1	< 0.01	< 0.050	< 0.005	-	-	-	-	-	< 0.01	< 0.50	< 0.005	< 0.005	< 0.01	< 0.005	< 0.0125	< 0.0125	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	-	-	-	-	-	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	**0.011**	**0.010**	**0.0072 D**	< 0.01	< 0.001	**0.00530 D**	**0.00288**	**0.0042**	**0.0038**	**0.0046**	**0.00055**	< 0.0050	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	-	-	-	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.001	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0025	< 0.00125	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.105**	**0.200 D**	**0.230 D**	**0.240**	< 0.001	**0.135 D**	**0.056 E**	**0.140**	**0.087**	**0.076**	**0.025**	**0.0079**	**0.170**	**0.120**	**0.016**	**0.0057**	**0.0039**	**0.00901**	**0.0214 D**	**0.0079 D**	**0.0027**	**0.0032**	**0.0068**	**0.014 D**	**0.016**
Trichlorofluoromethane	75-69-4	mg/L	2		-	< 0.001	< 0.001	< 0.01	< 0.001	< 0.010	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.005	< 0.0005	-	-	-	-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.00125	< 0.00125	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		-	< 0.002	< 0.002	< 0.05	< 0.005	< 0.0200	< 0.002	-	-	-	-	-	< 0.005	< 0.010	< 0.002	< 0.002	< 0.005	< 0.002	< 0.005	< 0.005	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	< 0.001	< 0.001	< 0.005 J	< 0.001	< 0.010	< 0.001	< 0.0005	< 0.0005	**0.00068**	**0.0025**	< 0.0050	< 0.001	< 0.001	**0.0015**	**0.025**	**0.014**	**0.00346**	**0.00915 D**	< 0.0025	**0.0011**	< 0.0005	**0.0010**	**0.0029**	**0.0022**
Xylenes (total)	1330-20-7	mg/L	0.01		-	< 0.0005	< 0.0005	< 0.01	< 0.001	< 0.010	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.005	< 0.003	< 0.0005	**0.00061**	< 0.001	< 0.0005	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument
calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	In Plume															
					ETMW-116															
					12/20/1994	3/31/1995	5/26/1998	8/23/2000	8/23/2000 DUP	11/10/2000	1/24/2001	4/8/2004	4/26/2005	10/25/2005	4/18/2006	4/18/2007	10/24/2007	12/10/2008	12/16/2009	12/7/2010	12/6/2011	12/4/2012
Acetone	67-64-1	mg/L	4		< 0.010	< 0.25	-	**0.010**	**0.011**	**0.036 B**	< 0.003	< 0.01	**0.360 D**	**1.6**	**0.968 D**	**0.398 D**	< 0.05	**0.29**	< 0.01	< 0.01	< 0.01	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.25	-	< 0.003	< 0.003	< 0.025	< 0.003	< 0.01	**0.053 D**	**0.38**	**0.163 D**	< 0.1	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.005	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.005	< 0.025	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	**0.0037 D**	< 0.01	< 0.005	< 0.005	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.010	< 0.005	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	**0.007**	**0.0088**	**0.0079**	**0.0049**	**0.0045**
Chloromethane	74-87-3	mg/L	0		< 0.010	< 0.005	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	-	**0.0007**	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		**0.062**	**0.045**	**0.03585**	**0.045 D**	**0.039 D**	**0.012**	**0.012**	**0.018**	**0.023 D**	< 0.01	**0.00870 D**	**0.00910 D**	**0.00660 D**	**0.0065**	**0.0084**	**0.0099**	**0.0089**	**0.0080**
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.005	-	**0.0007**	**0.0007**	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.005 J	< 0.005	< 0.005	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	**0.008**	**0.012**	**0.01349**	**0.016**	**0.018**	< 0.005	**0.004**	**0.0055**	**0.0090 D**	< 0.007 J	**0.00540 D**	< 0.005	< 0.0025	< 0.0005	< 0.0005	**0.00082**	< 0.0005	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	**0.085**	**0.074**	**0.05735**	-	-	-	**0.026 D**	**0.039**	**0.100 D**	**0.18**	**0.221 D**	**0.0831 D**	< 0.0025	**0.011**	**0.0043**	**0.014**	**0.0026 D**	**0.0024**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.005	-	-	-	-	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	< 0.0005	< 0.0005	< 0.005	**0.024**	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.005	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	-	-	-	< 0.050	**1.8**	**1.5**	< 0.5	< 0.005	< 0.25	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.005	-	**0.001**	**0.0009**	< 0.005	< 0.0005	< 0.002	< 0.001	< 0.002	< 0.005	< 0.0200	< 0.01	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.010	< 0.25	-	< 0.003	< 0.003	< 0.025	< 0.003	< 0.005	< 0.025	< 0.1	< 0.05	< 0.050	< 0.025	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	-	-	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.005	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	**0.034**	**0.022**	**0.018**	**0.024**	**0.022 D**	**0.007**	**0.005**	**0.011**	**0.012 D**	**0.0062 J**	< 0.005	< 0.005	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.005	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	**0.0025**	< 0.0005	< 0.0005	**0.00065**	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	-	-	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	-	-	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.560**	**0.420**	**0.26512**	**0.420 D**	**0.350 D**	**0.130**	**0.100 D**	**0.15 D**	**0.170 D**	**0.12**	< 0.005	**0.0291 D**	< 0.0025	< 0.0005	< 0.0005	**0.0017**	< 0.0005	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	-	**0.001**	**0.001**	< 0.0005	< 0.0005	< 0.001	< 0.005	< 0.01	< 0.01	< 0.010	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	-	-	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.005	< 0.005	< 0.0025	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.010	< 0.050	-	-	-	-	-	< 0.002	< 0.01	< 0.05	< 0.020	< 0.020	< 0.01	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.010	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.001	< 0.005	< 0.005 J	**0.0171 D**	**0.0581 D**	**0.0384 D**	**0.120**	**0.170**	**0.130**	**0.120**	**0.100**
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.015	-	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.0025	< 0.01	< 0.01	< 0.010	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:
(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS
Data Qualifiers:
B - Compound Detected in Method Blank or Trip Blank
J - Estimated Value
E - Concentration exceeds upper level of the instrument calibration range for the analysis
D- Dilution analysis result
mg/L Milligram per liter
NA Not Available
- Not Analyzed
Detected concentration
Concentration exceeds Type 1 RRS.
Detection limit exceeds Type 1 RRS.
Concentration exceeds Type 4 RRS.
** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	In Plume																
					ETMW-117																
					12/21/1994	3/31/1995	8/23/2000	11/10/2000	1/24/2001	4/8/2004	4/26/2005	10/25/2005	4/20/2006	4/18/2007	10/25/2007	12/9/2008	12/9/2008 DUP-2	12/15/2009	12/15/2009 DUP-2	12/8/2010	12/6/2011	12/4/2012
Acetone	67-64-1	mg/L	4		< 0.010	< 0.1	< 0.018	< 0.003	**0.003**	< 0.01	< 0.04	< 0.01	< 0.01	**2.090 D**	**0.513 ED**	**0.016**	**0.012**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.1	< 0.018	< 0.003	< 0.003	< 0.01	< 0.04	< 0.01	< 0.01	**0.213 D**	**0.0785 D**	< 0.01	< 0.01	< 0.0005	< 0.01	< 0.01	< 0.01	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.002	< 0.004	**0.0008**	**0.002**	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	**0.0015**	**0.0017**	**0.0014**	**0.0013**	**0.0010**	**0.00069**	**0.00065**
Carbon Disulfide	75-15-0	mg/L	4		< 0.005	< 0.010	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	**0.00054**	**0.0007**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.010	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	**0.0027**	**0.0029**	< 0.0005	**0.003**	< 0.0005	**0.0011**	**0.002**
Chloromethane	74-87-3	mg/L	0		< 0.010	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	-	-	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	-	-	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		**0.012**	**0.025**	**0.017**	**0.017**	**0.008**	**0.0098**	**0.014 D**	**0.013**	**0.0105**	**0.00935 D**	**0.00825 D**	**0.0048**	**0.0056**	**0.0043**	**0.004**	**0.0066**	**0.0049**	**0.0061**
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.005	**0.005**	< 0.004	**0.003**	**0.002**	**0.0022**	**0.0038 D**	**0.0026**	**0.00075**	**0.00305 D**	< 0.0025	< 0.0005	**0.0010**	< 0.0005	< 0.0005	**0.00078**	< 0.0005	**0.00056**
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07 [3]	1.02	**0.014**	`	-	-	**0.016**	**0.02**	**0.030 D**	**0.03**	**0.0225**	**0.0315 D**	**0.0762 D**	**0.041**	**0.050**	**0.021**	**0.018**	**0.027**	**0.019**	**0.027**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.002	-	-	< 0.0005	< 0.0005	< 0.002	< 0.001	**0.00213**	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	< 0.004	< 0.0005	**0.015**	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	-	-	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	-	< 0.050	< 0.2	< 0.1	< 0.050	**2.930 D**	< 0.25	< 0.0005	< 0.0005	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.002	< 0.004	**0.0006**	**0.002**	< 0.002	< 0.008	< 0.002	< 0.002	< 0.010	< 0.010	-	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.010	< 0.1	< 0.018	< 0.003	< 0.003	< 0.005	< 0.02	< 0.01	< 0.005	< 0.025	< 0.025	-	-	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.005	**0.008**	**0.005**	**0.005**	**0.002**	**0.0032**	**0.0050 D**	**0.0042**	**0.00378**	**0.00435 D**	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	-	-	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.130**	**0.210**	**0.120**	**0.070**	**0.050 D**	**0.064 D**	**0.094 D**	**0.098**	**0.079 D**	**0.0744 D**	**0.0302 D**	**0.00056**	**0.00066**	< 0.0005	< 0.0005	**0.0017**	< 0.0005	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.0025	< 0.0025	-	-	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.010	< 0.020	-	-	-	< 0.002	< 0.008	< 0.005	< 0.002	< 0.010	< 0.010	-	-	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.010	< 0.002	< 0.004	< 0.0005	< 0.0005	< 0.001	< 0.004	< 0.001	< 0.001	< 0.005	< 0.005	**0.024**	**0.025**	**0.044**	**0.050**	**0.045**	**0.047**	**0.042**
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.006	< 0.004	< 0.0005	< 0.0005	< 0.0005	< 0.002	< 0.001	< 0.0005	< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	In Plume														
					ETMW-118														
					12/20/1994	3/31/1995	5/26/1998	4/8/2004	4/26/2005	10/25/2005	4/18/2006	4/18/2007	10/24/2007	10/24/2007 DUP-01	12/9/2008	12/15/2009	12/9/2010	12/6/2011	12/6/2011 DUP-2	12/3/2012	12/3/2012 DUP-001
Acetone	67-64-1	mg/L	4		< 0.005	< 0.05	-	< 0.01	**0.021**	< 0.02	< 0.01	**0.192 D**	< 0.5	< 0.5	**0.37**	**0.56**	**0.37**	**0.066**	**0.065**	< 0.010	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.05	-	< 0.01	< 0.01	< 0.02	< 0.01	< 0.050	< 0.5	< 0.5	**0.26**	**0.49**	**0.22**	**0.031**	**0.028**	< 0.010	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.005	< 0.005	-	< 0.0005	**0.00079**	< 0.002	< 0.0005	**0.00370 D**	< 0.025	< 0.025	**0.0028**	**0.0012**	**0.0010**	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.005	< 0.001	-	< 0.001	< 0.001	**0.0038**	**0.00437**	< 0.005	< 0.05	< 0.05	**0.0032**	**0.0019**	**0.0013**	**0.00071**	< 0.0005	**0.0011**	**0.0016**
Chloromethane	74-87-3	mg/L	0		< 0.010	< 0.001	-	< 0.001	< 0.001	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	-	< 0.001	< 0.001	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	-	-	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	-	-	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		**0.014**	**0.021**	**0.01884**	**0.0033**	**0.014**	**0.011**	**0.00961**	**0.0139 D**	< 0.025	< 0.025	**0.014**	**0.012**	**0.0064**	**0.0065**	**0.0062**	**0.0054**	**0.0055**
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.005	**0.0046**	**0.00292**	**0.00061**	**0.0037**	**0.0054**	**0.00489**	**0.00575 D**	< 0.025	< 0.025	**0.003**	**0.0024**	**0.00081**	< 0.0005	< 0.0005	< 0.00050	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[1]	1.02	**0.012**	**0.023**	**0.01722**	**0.0057**	**0.120 D**	**0.13**	**0.127 D**	**0.117 D**	**0.108 D**	**0.111 D**	**0.088**	**0.096**	**0.050**	**0.0085**	**0.0080**	**0.0054**	**0.0053**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0050	< 0.0050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	-	-	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	< 0.050	< 0.050	< 0.2	< 0.050	**25.6 DH**	**13.0 D**	**13.2 D**	**0.069**	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.001	-	< 0.002	< 0.002	< 0.004	< 0.002	< 0.010	< 0.100	< 0.100	-	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.010	< 0.05	-	< 0.005	< 0.005	< 0.02	< 0.005	< 0.025	< 0.25	< 0.25	-	-	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	-	< 0.001	< 0.001	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.010	**0.009**	**0.008**	**0.0019**	< 0.0005	**0.0032**	**0.00257**	**0.00460 D**	< 0.025	< 0.025	**0.0032**	**0.0015**	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	-	< 0.001	< 0.001	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	-	< 0.001	< 0.001	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	-	-	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0025	< 0.025	< 0.025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	**0.069**	**0.110**	**0.08682**	**0.021**	**0.0031**	**0.049**	**0.0316**	**0.0489 D**	**0.0390 D**	**0.0400 D**	**0.037**	**0.018**	**0.002**	**0.00083**	**0.00069**	< 0.00050	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	-	< 0.001	< 0.001	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.0025	< 0.025	< 0.025	-	-	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.010	< 0.010	-	< 0.002	< 0.002	< 0.01	< 0.002	< 0.010	< 0.100	< 0.100	-	-	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.010	< 0.001	< 0.001	< 0.001	**< 0.001**	< 0.002	< 0.001	< 0.005	< 0.05	< 0.05	**0.033**	**0.031**	**0.016**	**0.044**	**0.041**	**0.037**	**0.037**
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.003	-	< 0.0005	< 0.0005	< 0.002	< 0.0005	< 0.005	< 0.05	< 0.05	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Cross Gradient														
					ETMW-119														
					12/20/1994	3/31/1995	4/7/2004	4/28/2005	10/25/2005	10/25/2005 DUP 1	4/18/2006	4/17/2007	10/25/2007	12/9/2008	12/9/2008 DUP-1	12/14/2009	12/14/2009 DUP-1	12/9/2010	12/5/2011	12/4/2012	12/4/2012 DUP-002
Acetone	67-64-1	mg/L	4		< 0.005	< 0.050	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0212**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.01	< 0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	**0.0998 DH**	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	< 0.01	< 0.01	< 0.010	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.005	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Chloromethane	74-87-3	mg/L	0		< 0.010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[1]	1.02	< 0.05	**0.0016**	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00064**	< 0.0005	**0.00054**	**0.00053**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	< 0.050	< 0.050	< 0.1	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.001	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.010	< 0.05	< 0.005	< 0.005	< 0.01	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.010	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.005	**0.0034**	< 0.0005	**0.00061**	< 0.001	< 0.001	**0.00053**	**0.00074**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.010	< 0.010	< 0.002	< 0.002	< 0.005	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.003	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.00050

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Cross Gradient														
					ETMW-120														
					12/20/1994	3/31/1995	5/26/1998	5/26/1998 DUP	4/7/2004	4/28/2005	10/25/2005	4/18/2006	4/17/2007	10/23/2007	12/11/2008	12/14/2009	12/9/2010	12/5/2011	12/3/2012
Acetone	67-64-1	mg/L	4		< 0.005	< 0.05	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.05	-	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.005	< 0.005	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.005	< 0.001	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloromethane	74-87-3	mg/L	0		< 0.010	< 0.001	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.005	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.005	< 0.001	**0.00184**	**0.00166**	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	< 0.05	**0.0048**	**0.00543**	**0.00525**	**0.0011**	**0.0012**	**0.0052**	< 0.0005	**0.00135**	**0.00094**	**0.00056**	**0.00073**	**0.0032**	**0.0014**	**0.0018**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.001	-	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.010	< 0.05	-	-	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.010	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	**0.0018**	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.005	**0.0017**	**0.00138**	**0.00128**	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0021**	< 0.0005	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	-	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.010	< 0.010	-	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.010	< 0.010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.003	-	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:
(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS
Data Qualifiers:
B - Compound Detected in Method Blank or Trip Blank
J - Estimated Value
E - Concentration exceeds upper level of the instrument calibration range for the analysis
D- Dilution analysis result
mg/L Milligram per liter
NA Not Available
- Not Analyzed
Detected concentration
Concentration exceeds Type 1 RRS.
Detection limit exceeds Type 1 RRS.
Concentration exceeds Type 4 RRS.
** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Upgradient																	
					ETMW-121																	
					12/20/1994	3/31/1995	5/27/1998	8/23/2000	11/10/2000	1/24/2001	4/7/2004	4/28/2005	10/26/2005	4/19/2006	4/18/2007	10/23/2007	12/11/2008	12/14/2009	12/6/2010	12/6/2011	12/6/2011 DUP-1	12/10/2012
Acetone	67-64-1	mg/L	4		< 0.005	< 0.05	-	**0.009**	**0.003 B**	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.010	< 0.05	-	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Carbon Disulfide	75-15-0	mg/L	4		< 0.005	< 0.005	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloroethane	75-00-3	mg/L	0	1.23	< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Chloromethane	74-87-3	mg/L	0		< 0.010	< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07[3]	1.02	< 0.05	< 0.001	< 0.001	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.00096**
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.005	< 0.001	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	-	-	-	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		< 0.005	< 0.001	-	**0.0009**	< 0.0005	< 0.0005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.010	< 0.05	-	< 0.003	< 0.003	< 0.003	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-
Naphthalene	91-20-3	mg/L	0.02		-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.010	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Toluene	108-88-3	mg/L	1		< 0.005	< 0.001	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.005	< 0.001	< 0.001	**0.0005**	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Trichlorofluoromethane	75-69-4	mg/L	2		-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.010	< 0.010	-	-	-	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.010	< 0.010	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.005	< 0.003	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050

Notes:
(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS
Data Qualifiers:
B - Compound Detected in Method Blank or Trip Blank
J - Estimated Value
E - Concentration exceeds upper level of the instrument calibration range for the analysis
D- Dilution analysis result
mg/L Milligram per liter
NA Not Available
- Not Analyzed
Detected concentration
Concentration exceeds Type 1 RRS.
Detection limit exceeds Type 1 RRS.
Concentration exceeds Type 4 RRS.
** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Cross Gradient OBGMW-122								Cross Gradient OBGMW-123								
					8/23/2000	11/9/2000	1/24/2001	4/6/2004	4/28/2005	10/25/2005	4/18/2006	4/18/2007	9/8/2000	11/9/2000	1/24/2001	4/29/2002	4/6/2004	4/6/2004 DUP	4/27/2005	10/25/2005	4/20/2006	4/18/2007
Acetone	67-64-1	mg/L	4		**0.016**	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.003	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	71-43-2	mg/L	0.005		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Carbon Disulfide	75-15-0	mg/L	4		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	**0.003**	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Chloroethane	75-00-3	mg/L	0	1.23	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Chloromethane	74-87-3	mg/L	0		< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	< 0.0005	**0.0006**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Dibromomethane	74-95-3	mg/L	0.0005		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07 [3]	1.02	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Isobutyl Alcohol	78-83-1	mg/L	10		-	-	-	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	-	-	-	-	< 0.050	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050
Methylene Chloride	75-09-2	mg/L	0.005		**0.001**	< 0.0005	< 0.0005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	**0.001**	< 0.0005	< 0.0005	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.003	< 0.003	< 0.003	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.003	< 0.003	< 0.003	-	< 0.005	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005
Naphthalene	91-20-3	mg/L	0.02		< 0.0005	**0.001**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.0005	**0.0006**	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Toluene	108-88-3	mg/L	1		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	< 0.0005	**0.002**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		< 0.0005	**0.0009**	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Trichlorofluoromethane	75-69-4	mg/L	2		< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		< 0.0005	**0.0006**	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005
Vinyl Acetate	108-05-4	mg/L	0.00		-	-	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	-	-	-	-	< 0.002	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

APPENDIX C
Historical Summary of Volatile Organic Constituents in Ground Water
Former Miller Brewing Company Can Plant
Moultrie, Georgia

Parameters	CAS No.	Units	Type 1/Type 3 RRS	Type 4 RRS [1]	Down Gradient					Cross Gradient											Upgradient		In Plume	
					OBGMW-124					CH2PP-1											CH2PP-2	CH2PP-3 [B]	Sump 1	Sump 2
					4/21/2004	4/27/2005	10/26/2005	4/20/2006	4/18/2007	6/30/1998	4/7/2004	4/26/2005	10/25/2005	4/19/2006	4/17/2007	10/24/2007	12/10/2008	12/15/2009	12/8/2010	12/10/2012	5/29/1998	(not sampled)	11/3/1994	11/3/1994
Acetone	67-64-1	mg/L	4		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	**0.021**	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	-	-	**0.790**	< 0.010
2-Butanone (MEK)	78-93-3	mg/L	2	2.79	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.010	-	-	**0.420**	< 0.010
Benzene	71-43-2	mg/L	0.005		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.005	< 0.005
Carbon Disulfide	75-15-0	mg/L	4		**0.00063**	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.005	< 0.005
Chloroethane	75-00-3	mg/L	0	1.23	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.010	< 0.010
Chloromethane	74-87-3	mg/L	0		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	**1.3**	< 0.010
1,2-Dibromo-3-chloropropane (DBCP)	96-12-8	mg/L	0.0002	0.00058	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
Dibromomethane	74-95-3	mg/L	0.0005		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-
1,1-Dichloroethane (1,1-DCA)	75-34-3	mg/L	4		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.005	**0.00057**	**0.00055**	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	**0.240**	< 0.005
1,2-Dichloroethane (1,2-DCA)	107-06-2	mg/L	0.005		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.005	< 0.005
1,1-Dichloroethene (1,1-DCE)	75-35-4	mg/L	0.007	0.55	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	**0.046**	< 0.005
cis-1,2-dichloroethene (cis-1,2-DCE)	156-59-2	mg/L	0.07 [1]	1.02	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	**0.013**	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	**1.5**	< 0.005
trans-1,2-dichloroethene (trans-1,2-DCE)	156-60-5	mg/L	0.1		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.005	< 0.005
1,2-Dichloroethene (total) (1,2-DCE-total)	540-59-0	mg/L	0.07	0.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	100-41-4	mg/L	0.7		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	< 0.005	< 0.005
Isobutyl Alcohol	78-83-1	mg/L	10		< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	-	< 0.050	< 0.050	< 0.1	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	-	-	-	-
Methylene Chloride	75-09-2	mg/L	0.005		< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	< 0.005	< 0.005
4-methyl-2-pentanone (MIBK)	108-10-1	mg/L	0		< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	-	< 0.005	< 0.005	< 0.01	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	< 0.010	< 0.010
Naphthalene	91-20-3	mg/L	0.02		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	0.0002	0.02	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	< 0.005	< 0.005
Tetrachloroethene (PCE)	127-18-4	mg/L	0.005	0.005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0021**	< 0.00050	< 0.001	-	**0.077**	< 0.005
Toluene	108-88-3	mg/L	1		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	**0.018**	< 0.005
1,2,3-Trichlorobenzene	87-61-6	mg/L	0.001	0.01	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	120-82-1	mg/L	0.07		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-
1,1,1-Trichloroethane (TCA)	71-55-6	mg/L	0.2		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	**0.140**	< 0.005
Trichloroethene (TCE)	79-01-6	mg/L	0.005	0.005	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	**0.0017**	< 0.00050	< 0.001	-	**0.250**	**0.016**
Trichlorofluoromethane	75-69-4	mg/L	2		< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	-	-
1,2,3-Trichloropropane	96-18-4	mg/L	0.04		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.0005	< 0.0005	-	-	-	-	-	-	-	-
Vinyl Acetate	108-05-4	mg/L	0.00		< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	-	< 0.002	< 0.002	< 0.005	< 0.002	< 0.002	< 0.002	-	-	-	-	-	-	< 0.010	< 0.010
Vinyl Chloride	75-01-4	mg/L	0.002	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.005	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.00050	< 0.001	-	< 0.010	< 0.010
Xylenes (total)	1330-20-7	mg/L	0.01		< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	-	< 0.0005	< 0.0005	< 0.001	< 0.0005	< 0.001	< 0.001	< 0.0005	< 0.0005	< 0.0005	< 0.00050	-	-	< 0.005	< 0.005

Notes:

(1) Type 4 RRS calculated for compounds exceeding Type 1 RRS

Data Qualifiers:

B - Compound Detected in Method Blank or Trip Blank

J - Estimated Value

E - Concentration exceeds upper level of the instrument calibration range for the analysis

D- Dilution analysis result

mg/L Milligram per liter

NA Not Available

\- Not Analyzed

Detected concentration

Concentration exceeds Type 1 RRS.

Detection limit exceeds Type 1 RRS.

Concentration exceeds Type 4 RRS.

** - Sum of detected isomer and PQL of undetected isomer+Q2

Vapor Intrusion Evaluation

VISL Model

Table 1
Hazard and Risk Summary for Detected Constituents in Groundwater
Vapor Intrusion Screening Calculator (VISL) Results
Former Miller Brewing Can Plant
Moultrie, Georgia

Chemical	Groundwater Concentration[1] (µg/L)	Non-Carcinogenic Hazard	Excess Cancer Risk
1,1-Dichloroethane	9.9	NA	3.0E-07
1,1-Dichloroethylene	3.7	0.0045	NA
cis-1,2-Dichloroethylene	150	NA	NA
Trichloroethylene	0.98	0.045	1.3E-07
Vinyl chloride	6.6	0.017	2.7E-06
Cumulative Hazard/Risk:		**0.07**	**3E-06**

Notes:
[1]Concentrations from monitoring well ETCMW-113 on Dec. 4, 2012.
NA - Not applicable.

OSWER VAPOR INTRUSION ASSESSMENT

Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 3.1, June 2013 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-06	Enter target risk for carcinogens (for comparison to the calculated VI carcinogenic risk in column F)
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens (for comparison to the calculated VI hazard in column G)
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

	CAS	Chemical Name	Site Groundwater Concentration Cgw (ug/L)	Calculated Indoor Air Concentration Cia (ug/m^3)	VI Carcinogenic Risk CR	VI Hazard HQ	Inhalation Unit Risk IUR (ug/m^3)$^{-1}$	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i
	83-32-9	Acenaphthene		--	--	--					
	75-07-0	Acetaldehyde		--	--	--	2.20E-06	I	9.00E-03	I	
	67-64-1	Acetone		--	--	--			3.10E+01	A	
	75-86-5	Acetone Cyanohydrin		--	--	--			2.00E-03	X	
	75-05-8	Acetonitrile		--	--	--			6.00E-02	I	
	98-86-2	Acetophenone		--	--	--					
	107-02-8	Acrolein		--	--	--			2.00E-05	I	
	107-13-1	Acrylonitrile		--	--	--	6.80E-05	I	2.00E-03	I	
	107-05-1	Allyl Chloride		--	--	--	6.00E-06	CA	1.00E-03	I	
	120-12-7	Anthracene		--	--	--					
	11104-28-2	Aroclor 1221		--	--	--	5.70E-04	S			
	11141-16-5	Aroclor 1232		--	--	--	5.70E-04	S			
	103-33-3	Azobenzene		--	--	--	3.10E-05	I			
	100-52-7	Benzaldehyde		--	--	--					
x	71-43-2	Benzene		--	--	--	7.80E-06	I	3.00E-02	I	
	108-98-5	Benzenethiol		--	--	--					
	98-07-7	Benzotrichloride		--	--	--					
	100-44-7	Benzyl Chloride		--	--	--	4.90E-05	CA	1.00E-03	P	
	92-52-4	Biphenyl, 1,1'-		--	--	--			4.00E-04	X	
	108-60-1	Bis(2-chloro-1-methylethyl) ether		--	--	--	1.00E-05	H			
	111-44-4	Bis(2-chloroethyl)ether		--	--	--	3.30E-04	I			
	542-88-1	Bis(chloromethyl)ether		--	--	--	6.20E-02	I			
	107-04-0	Bromo-2-chloroethane, 1-		--	--	--	6.00E-04	X			
	108-86-1	Bromobenzene		--	--	--			6.00E-02	I	
	74-97-5	Bromochloromethane		--	--	--			4.00E-02	X	
	75-27-4	Bromodichloromethane		--	--	--	3.70E-05	CA			
	74-83-9	Bromomethane		--	--	--			5.00E-03	I	
	106-99-0	Butadiene, 1,3-		--	--	--	3.00E-05	I	2.00E-03	I	
	104-51-8	Butylbenzene, n-		--	--	--					
	135-98-8	Butylbenzene, sec-		--	--	--					
	98-06-6	Butylbenzene, tert-		--	--	--					
x	75-15-0	Carbon Disulfide		--	--	--			7.00E-01	I	
	56-23-5	Carbon Tetrachloride		--	--	--	6.00E-06	I	1.00E-01	I	
	75-68-3	Chloro-1,1-difluoroethane, 1-		--	--	--			5.00E+01	I	
	126-99-8	Chloro-1,3-butadiene, 2-		--	--	--	3.00E-04	I	2.00E-02	I	
	107-20-0	Chloroacetaldehyde, 2-		--	--	--					
	108-90-7	Chlorobenzene		--	--	--			5.00E-02	P	
	98-56-6	Chlorobenzotrifluoride, 4-		--	--	--			3.00E-01	P	
	109-69-3	Chlorobutane, 1-		--	--	--					
	75-45-6	Chlorodifluoromethane		--	--	--			5.00E+01	I	
	67-66-3	Chloroform		--	--	--	2.30E-05	I	9.80E-02	A	
x	74-87-3	Chloromethane		--	--	--			9.00E-02	I	
	107-30-2	Chloromethyl Methyl Ether		--	--	--	6.90E-04	CA			
	91-58-7	Chloronaphthalene, Beta-		--	--	--					
	95-57-8	Chlorophenol, 2-		--	--	--					
	76-06-2	Chloropicrin		--	--	--			4.00E-04	CA	
	95-49-8	Chlorotoluene, o-		--	--	--					
	106-43-4	Chlorotoluene, p-		--	--	--					
	123-73-9	Crotonaldehyde, trans-		--	--	--					
	98-82-8	Cumene		--	--	--			4.00E-01	I	
	57-12-5	Cyanide (CN-)		--	--	--			8.00E-04	S	
	460-19-5	Cyanogen		--	--	--					
	506-68-3	Cyanogen Bromide		--	--	--					
	506-77-4	Cyanogen Chloride		--	--	--					

OSWER VAPOR INTRUSION ASSESSMENT

Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 3.1, June 2013 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-06	Enter target risk for carcinogens (for comparison to the calculated VI carcinogenic risk in column F)
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens (for comparison to the calculated VI hazard in column G)
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

	CAS	Chemical Name	Site Groundwater Concentration Cgw (ug/L)	Calculated Indoor Air Concentration Cia (ug/m^3)	VI Carcinogenic Risk CR	VI Hazard HQ	Inhalation Unit Risk IUR (ug/m^3)$^{-1}$	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i
	110-82-7	Cyclohexane		--	--	--			6.00E+00	I	
	110-83-8	Cyclohexene		--	--	--			1.00E+00	X	
	132-64-9	Dibenzofuran		--	--	--					
	96-12-8	Dibromo-3-chloropropane, 1,2-		--	--	--	6.00E-03	P	2.00E-04	I	Mut
	124-48-1	Dibromochloromethane		--	--	--	2.70E-05	CA			
	106-93-4	Dibromoethane, 1,2-		--	--	--	6.00E-04	I	9.00E-03	I	
	74-95-3	Dibromomethane (Methylene Bromide)		--	--	--			4.00E-03	X	
	764-41-0	Dichloro-2-butene, 1,4-		--	--	--	4.20E-03	P			
	1476-11-5	Dichloro-2-butene, cis-1,4-		--	--	--	4.20E-03	P			
	110-57-6	Dichloro-2-butene, trans-1,4-		--	--	--	4.20E-03	P			
	95-50-1	Dichlorobenzene, 1,2-		--	--	--			2.00E-01	H	
x	106-46-7	Dichlorobenzene, 1,4-		--	--	--	1.10E-05	CA	8.00E-01	I	
x	75-71-8	Dichlorodifluoromethane		--	--	--			1.00E-01	X	
x	75-34-3	Dichloroethane, 1,1-	9.9E+00	2.27E+00	3.0E-07	No RfC	1.60E-06	CA			
	107-06-2	Dichloroethane, 1,2-		--	--	--	2.60E-05	I	7.00E-03	P	
x	75-35-4	Dichloroethylene, 1,1-	3.7E+00	3.95E+00	No IUR	4.5E-03			2.00E-01	I	
x	540-59-0	Dichloroethylene, 1,2- (Mixed Isomers)		--	--	--					
	156-59-2	Dichloroethylene, 1,2-cis-	1.5E+02	2.50E+01	No IUR	No RfC					
	156-60-5	Dichloroethylene, 1,2-trans-		--	--	--			6.00E-02	P	
	78-87-5	Dichloropropane, 1,2-		--	--	--	1.00E-05	CA	4.00E-03	I	
	142-28-9	Dichloropropane, 1,3-		--	--	--					
	542-75-6	Dichloropropene, 1,3-		--	--	--	4.00E-06	I	2.00E-02	I	
	77-73-6	Dicyclopentadiene		--	--	--			7.00E-03	P	
	75-37-6	Difluoroethane, 1,1-		--	--	--			4.00E+01	I	
	94-58-6	Dihydrosafrole		--	--	--	1.30E-05	CA			
	108-20-3	Diisopropyl Ether		--	--	--			7.00E-01	P	
	1445-75-6	Diisopropyl Methylphosphonate		--	--	--					
	121-69-7	Dimethylaniline, N,N-		--	--	--					
	120-61-6	Dimethylterephthalate		--	--	--					
	513-37-1	Dimethylvinylchloride		--	--	--	1.30E-05	CA			
	505-29-3	Dithiane, 1,4-		--	--	--					
	106-89-8	Epichlorohydrin		--	--	--	1.20E-06	I	1.00E-03	I	
	106-88-7	Epoxybutane, 1,2-		--	--	--			2.00E-02	I	
	759-94-4	EPTC		--	--	--					
	141-78-6	Ethyl Acetate		--	--	--					
x	140-88-5	Ethyl Acrylate		--	--	--					
	75-00-3	Ethyl Chloride		--	--	--			1.00E+01	I	
	60-29-7	Ethyl Ether		--	--	--					
	97-63-2	Ethyl Methacrylate		--	--	--			3.00E-01	P	
	100-41-4	Ethylbenzene		--	--	--	2.50E-06	CA	1.00E+00	I	
	75-21-8	Ethylene Oxide		--	--	--	8.80E-05	CA	3.00E-02	CA	
	151-56-4	Ethyleneimine		--	--	--	1.90E-02	CA			
	86-73-7	Fluorene		--	--	--					
	110-00-9	Furan		--	--	--					
	822-06-0	Hexamethylene Diisocyanate, 1,6-		--	--	--			1.00E-05	I	
	110-54-3	Hexane, N-		--	--	--			7.00E-01	I	
	591-78-6	Hexanone, 2-		--	--	--			3.00E-02	I	
	74-90-8	Hydrogen Cyanide		--	--	--			8.00E-04	I	
	NA (JP-7)	JP-7		No HLC	--	--			3.00E-01	A	
	7439-97-6	Mercury (elemental)		--	--	--			3.00E-04	I	
	126-98-7	Methacrylonitrile		--	--	--			3.00E-02	P	
	79-20-9	Methyl Acetate		--	--	--					
	96-33-3	Methyl Acrylate		--	--	--			2.00E-02	P	
	78-93-3	Methyl Ethyl Ketone (2-Butanone)		--	--	--			5.00E+00	I	

OSWER VAPOR INTRUSION ASSESSMENT

Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 3.1, June 2013 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-06	Enter target risk for carcinogens (for comparison to the calculated VI carcinogenic risk in column F)
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens (for comparison to the calculated VI hazard in column G)
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

	CAS	Chemical Name	Site Groundwater Concentration Cgw (ug/L)	Calculated Indoor Air Concentration Cia (ug/m^3)	VI Carcinogenic Risk CR	VI Hazard HQ	Inhalation Unit Risk IUR (ug/m^3)$^{-1}$	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i
	108-10-1	Methyl Isobutyl Ketone (4-methyl-2-pentanone)		--	--	--			3.00E+00	I	
	624-83-9	Methyl Isocyanate		--	--	--			1.00E-03	CA	
	80-62-6	Methyl Methacrylate		--	--	--			7.00E-01	I	
	25013-15-4	Methyl Styrene (Mixed Isomers)		--	--	--			4.00E-02	H	
	1634-04-4	Methyl tert-Butyl Ether (MTBE)		--	--	--	2.60E-07	CA	3.00E+00	I	
	75-09-2	Methylene Chloride		--	--	--	1.00E-08	I	6.00E-01	I	Mut
	90-12-0	Methylnaphthalene, 1-		--	--	--					
	91-57-6	Methylnaphthalene, 2-		--	--	--					
	98-83-9	Methylstyrene, Alpha-		--	--	--					
	8012-95-1	Mineral oils		--	--	--					
	64724-95-6	Naphtha, High Flash Aromatic (HFAN)		No HLC	--	--			1.00E-01	P	
	91-20-3	Naphthalene		--	--	--	3.40E-05	CA	3.00E-03	I	
	98-95-3	Nitrobenzene		--	--	--	4.00E-05	I	9.00E-03	I	
	75-52-5	Nitromethane		--	--	--	9.00E-06	P	2.00E-02	P	
	79-46-9	Nitropropane, 2-		--	--	--	2.70E-03	H	2.00E-02	I	
	924-16-3	Nitroso-di-N-butylamine, N-		--	--	--	1.60E-03	I			
	88-72-2	Nitrotoluene, o-		--	--	--					
	111-84-2	Nonane, n-		--	--	--			2.00E-01	P	
	109-66-0	Pentane, n-		--	--	--			1.00E+00	P	
	75-44-5	Phosgene		--	--	--			3.00E-04	I	
	123-38-6	Propionaldehyde		--	--	--			8.00E-03	I	
	103-65-1	Propyl benzene		--	--	--			1.00E+00	X	
	115-07-1	Propylene		--	--	--			3.00E+00	CA	
	75-56-9	Propylene Oxide		--	--	--	3.70E-06	I	3.00E-02	I	
	129-00-0	Pyrene		--	--	--					
	110-86-1	Pyridine		--	--	--					
	100-42-5	Styrene		--	--	--			1.00E+00	I	
	630-20-6	Tetrachloroethane, 1,1,1,2-		--	--	--	7.40E-06	I			
x	79-34-5	Tetrachloroethane, 1,1,2,2-		--	--	--	5.80E-05	CA			
x	127-18-4	Tetrachloroethylene		--	--	--	2.60E-07	I	4.00E-02	I	
	811-97-2	Tetrafluoroethane, 1,1,1,2-		--	--	--			8.00E+01	I	
	109-99-9	Tetrahydrofuran		--	--	--			2.00E+00	I	
x	108-88-3	Toluene		--	--	--			5.00E+00	I	
	76-13-1	Trichloro-1,2,2-trifluoroethane, 1,1,2-		--	--	--			3.00E+01	H	
	87-61-6	Trichlorobenzene, 1,2,3-		--	--	--					
	120-82-1	Trichlorobenzene, 1,2,4-		--	--	--			2.00E-03	P	
x	71-55-6	Trichloroethane, 1,1,1-		--	--	--			5.00E+00	I	
x	79-00-5	Trichloroethane, 1,1,2-		--	--	--	1.60E-05	I	2.00E-04	X	
x	79-01-6	Trichloroethylene	9.8E-01	3.95E-01	1.3E-07	4.5E-02	see note	I	2.00E-03	I	TCE
	75-69-4	Trichlorofluoromethane		--	--	--			7.00E-01	H	
	598-77-6	Trichloropropane, 1,1,2-		--	--	--					
	96-18-4	Trichloropropane, 1,2,3-		--	--	--			3.00E-04	I	Mut
	96-19-5	Trichloropropene, 1,2,3-		--	--	--			3.00E-04	P	
	121-44-8	Triethylamine		--	--	--			7.00E-03	I	
	526-73-8	Trimethylbenzene, 1,2,3-		--	--	--			5.00E-03	P	
	95-63-6	Trimethylbenzene, 1,2,4-		--	--	--			7.00E-03	P	
	108-67-8	Trimethylbenzene, 1,3,5-		--	--	--					
	108-05-4	Vinyl Acetate		--	--	--			2.00E-01	I	
	593-60-2	Vinyl Bromide		--	--	--	3.20E-05	H	3.00E-03	I	
x	75-01-4	Vinyl Chloride	6.6E+00	7.50E+00	**2.7E-06**	1.7E-02	4.40E-06	I	1.00E-01	I	VC
	108-38-3	Xylene, m-		--	--	--			1.00E-01	S	
x	95-47-6	Xylene, o-		--	--	--			1.00E-01	S	
x	106-42-3	Xylene, P-		--	--	--			1.00E-01	S	
x	1330-20-7	Xylenes		--	--	--			1.00E-01	I	

OSWER VAPOR INTRUSION ASSESSMENT
Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 3.1, June 2013 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-06	Enter target risk for carcinogens (for comparison to the calculated VI carcinogenic risk in column F)
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens (for comparison to the calculated VI hazard in column G)
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Site Groundwater Concentration Cgw (ug/L)	Calculated Indoor Air Concentration Cia (ug/m^3)	VI Carcinogenic Risk CR	VI Hazard HQ	Inhalation Unit Risk IUR (ug/m^3)$^{-1}$	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i

Notes:

(1) **Inhalation Pathway Exposure Parameters (RME):**

Exposure Scenario	Units	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario) Symbol	Selected (based on scenario) Value
Averaging time for carcinogens	(yrs)	ATc_R_GW	70	ATc_C_GW	70	ATc_GW	70
Averaging time for non-carcinogens	(yrs)	ATnc_R_GW	30	ATnc_C_GW	25	Atnc_GW	25
Exposure duration	(yrs)	ED_R_GW	30	ED_C_GW	25	ED_GW	25
Exposure frequency	(days/yr)	EF_R_GW	350	EF_C_GW	250	EF_GW	250
Exposure time	(hr/day)	ET_R_GW	24	ET_C_GW	8	ET_GW	8

(2) **Generic Attenuation Factors:**

Source Medium of Vapors	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario) Symbol	Selected (based on scenario) Value
Groundwater (-)	AFgw_R_GW	0.001	AFgw_C_GW	0.001	AFgw_GW	0.001
Sub-Slab and Exterior Soil Gas (-)	AFss_R_GW	0.1	AFss_C_GW	0.1	AFss_GW	0.1

(3) **Formulas**

Cia, target = MIN(Cia,c; Cia,nc)
Cia,c (ug/m3) = TCR x ATc x (365 days/yr) x (24 hrs/day) / (ED x EF x ET x IUR)
Cia,nc (ug/m3) = THQ x ATnc x (365 days/yr) x (24 hrs/day) x RfC x (1000 ug/mg) / (ED x EF x ET)

(4) **Special Case Chemicals**

Trichloroethylene	Residential Symbol	Residential Value	Commercial Symbol	Commercial Value	Selected (based on scenario) Symbol	Selected (based on scenario) Value
m	IURTCE_R_GW	1.00E-06	IURTCE_C_GW	0.00E+00	mIURTCE_GW	0.00E+00
	IURTCE_R_GW	3.10E-06	IURTCE_C_GW	4.10E-06	IURTCE_GW	4.10E-06

Mutagenic Chemicals — The exposure durations and age-dependent adjustment factors for mutagenic-mode-of-action are listed in the table below:

Note: This section applies to trichloroethylene and other mutagenic chemicals, but not to vinyl chloride.

Age Cohort	Exposure Duration	Age-dependent adjustment factor
0 - 2 years	2	10
2 - 6 years	4	3
6 - 16 years	10	3
16 - 30 years	14	1

Mutagenic-mode-of-action (MMOA) adjustment factor 25 — This factor is used in the equations for mutagenic chemicals.

Vinyl Chloride — See the Navigation Guide equation for Cia,c for vinyl chloride.

Notation:
I = IRIS: EPA Integrated Risk Information System (IRIS). Available online at: http://www.epa.gov/iris/subst/index.html
P = PPRTV. EPA Provisional Peer Reviewed Toxicity Values (PPRTVs). Available online at: http://hhpprtv.ornl.gov/pprtv.shtml
A = Agency for Toxic Substances and Disease Registry (ATSDR) Minimum Risk Levels (MRLs). Available online at: http://www.atsdr.cdc.gov/mrls/index.html
CA = California Environmental Protection Agency/Office of Environmental Health Hazard Assessment assessments. Available online at: http://www.oehha.ca.gov/risk/ChemicalDB/index.asp
H = HEAST. EPA Superfund Health Effects Assessment Summary Tables (HEAST) database. Available online at: http://epa-heast.ornl.gov/heast.shtml
S = See RSL User Guide, Section 5
X = PPRTV Appendix
Mut = Chemical acts according to the mutagenic-mode-of-action, special exposure parameters apply (see footnote (4) above).
VC = Special exposure equation for vinyl chloride applies (see Navigation Guide for equation).
TCE = Special mutagenic and non-mutagenic IURs for trichloroethylene apply (see footnote (4) above).

OSWER VAPOR INTRUSION ASSESSMENT

Groundwater Concentration to Indoor Air Concentration (GWC-IAC) Calculator Version 3.1, June 2013 RSLs

Parameter	Symbol	Value	Instructions
Exposure Scenario	Scenario	Commercial	Select residential or commercial scenario from pull down list
Target Risk for Carcinogens	TCR	1.00E-06	Enter target risk for carcinogens (for comparison to the calculated VI carcinogenic risk in column F)
Target Hazard Quotient for Non-Carcinogens	THQ	1	Enter target hazard quotient for non-carcinogens (for comparison to the calculated VI hazard in column G)
Average Groundwater Temperature (°C)	Tgw	25	Enter average of the stabilized groundwater temperature to correct Henry's Law Constant for groundwater target concentrations

CAS	Chemical Name	Site Groundwater Concentration Cgw (ug/L)	Calculated Indoor Air Concentration Cia (ug/m^3)	VI Carcinogenic Risk CR	VI Hazard HQ

Inhalation Unit Risk IUR ($(ug/m^3)^{-1}$)	IUR Source*	Reference Concentration RfC (mg/m^3)	RFC Source*	Mutagenic Indicator i

Yellow highlighting indicates site-specific parameters that may be edited by the user.

Blue highlighting indicates exposure factors that are based on Risk Assessment Guidance for Superfund (RAGS) or EPA vapor intrusion guidance, which generally should not be changed.

Pink highlighting indicates VI carcinogenic risk greater than the target risk for carcinogens (TCR) or VI Hazard greater than or equal to the target hazard quotient for non-carcinogens (THQ).

Johnson and Ettinger Model

Table 1
Hazard and Risk Summary for Detected Constituents in Groundwater
Johnson and Ettinger Model Results
Former Miller Brewing Can Plant
Moultrie, Georgia

Chemical	Groundwater Concentration[1] (µg/L)	Non-Carcinogenic Hazard	Excess Cancer Risk
1,1-Dichloroethane	9.9	NA	1.1E-08
1,1-Dichloroethylene	3.7	0.00019	NA
cis-1,2-Dichloroethylene	150	NA	NA
Trichloroethylene	0.98	0.0016	4.7E-09
Vinyl chloride	6.6	0.0008	1.3E-07
Cumulative Hazard/Risk:		**0.003**	**1E-07**

Notes:
[1]Concentrations from monitoring well ETCMW-113 on Dec. 4, 2012.
NA - Not applicable.

DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
75343	9.90E+00	1,1-Dichloroethane

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of L_{WT} (cell G28)							
10	15	91	91	0	0	A	SC	SC		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
Lookup Soil Parameters				Lookup Soil Parameters				Lookup Soil Parameters			
SC	1.43	0.459	0.215								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	6553	1372	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	5.06E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-08	NA

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

1,1-Dichloroethane

SCROLL DOWN TO "END"

END

DATA ENTRY SHEET

GW-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)		Chemical
75354	3.70E+00		1,1-Dichloroethylene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of L_{WT} (cell G28)							
10	15	91	91	0	0	A	SC	SC		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
Lookup Soil Parameters				Lookup Soil Parameters				Lookup Soil Parameters			
SC	1.43	0.459	0.215								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	6553	1372	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	2.25E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.9E-04

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

1,1-Dichloroethylene

SCROLL DOWN TO "END"

END

DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES: X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
156592	1.50E+02	cis-1,2-Dichloroethylene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28): Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
10	15	91	91	0	0	A	SC	SC		

MORE ↓

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
SC	1.43	0.459	0.215								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm\text{-}s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	6553	1372	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1

Used to calculate risk-based groundwater concentration.

END

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	3.50E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	NA

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

cis-1,2-Dichloroethylene

SCROLL DOWN TO "END"

END

DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
79016	9.80E-01	Trichloroethylene

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
			Totals must add up to value of L_{WT} (cell G28)							
10	15	91	91	0	0	A	SC	SC		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
Lookup Soil Parameters				Lookup Soil Parameters				Lookup Soil Parameters			
SC	1.43	0.459	0.215								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm-s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	6553	1372	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	1.47E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.7E-09	1.6E-03

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

Trichloroethylene

SCROLL DOWN TO "END"

END

DATA ENTRY SHEET

GW-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

MORE ↓

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
75014	6.60E+00	Vinyl chloride (chloroethene)

MORE ↓

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
10	15	91	91	0	0	A	SC	SC		

MORE ↓

ENTER Stratum A SCS soil type	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
Lookup Soil Parameters				Lookup Soil Parameters				Lookup Soil Parameters			
SC	1.43	0.459	0.215								

MORE ↓

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm-s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	40	6553	1372	366	0.1	0.25	

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	25	25	250	1.0E-06	1
				Used to calculate risk-based groundwater concentration.	

END

RESULTS SHEET

RISK-BASED GROUNDWATER CONCENTRATION CALCULATIONS:

Indoor exposure groundwater conc., carcinogen (µg/L)	Indoor exposure groundwater conc., noncarcinogen (µg/L)	Risk-based indoor exposure groundwater conc., (µg/L)	Pure component water solubility, S (µg/L)	Final indoor exposure groundwater conc., (µg/L)
NA	NA	NA	8.80E+06	NA

INCREMENTAL RISK CALCULATIONS:

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-07	8.0E-04

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)

Vinyl Chloride

SCROLL DOWN TO "END"

END

Groundwater Modeling Evaluation and Summary

In order to evaluate potential future plume migration, a steady state groundwater flow model and a transient solute transport model were developed in 2012. The groundwater flow model was developed to provide the flow system required to complete the solute transport simulations. Both models were developed based on the conceptual site model (CSM) for the site. The CSM incorporates the following:

- The small size of the plume;
- The potential influence of utilities on plume development;
- The low hydraulic conductivity of the groundwater zone;
- The injection remedial efforts; and
- The overall apparent limited plume migration during the period of site monitoring.

The United States Geological Survey (USGS) groundwater flow model code MODFLOW® (Harbaugh et. al., 2000) was used to develop the groundwater flow model. The transport model RT3D (Clement, 2001) was used for the solute transport simulations. The Visual MODFLOW® modeling platform was employed for the modeling effort.

MODEL INPUTS AND ASSUMPTIONS

The groundwater flow and solute transport models were developed to provide a representation of the site groundwater flow and transport processes. To the extent possible, site data were used as the basis for the model input parameters. Where site data were not available, input parameters consistent with the CSM were developed based on values available in professional literature. Some input parameters were later revised during the model calibration process based on evaluation of the preliminary modeling results. The initial, pre-calibration model input parameters are presented below. These parameters are also summarized in Table 1.

- Horizontal Extent – The area modeled is 1,600 ft by 1,600 ft (Figure 1). This area encompasses the portion of the site where the plume is present, but extends beyond the existing plume, which is approximately 120 ft long, to allow for future contaminant transport and minimize potential boundary conditions affecting the plume transport area.
- Vertical extent – The site boring logs show 1-3 ft of fill overlying a clay unit that is over 100 ft thick. Across the majority of the site, the fill is unsaturated. The majority of the site wells are shallow and extend to depths between 11 and 15 ft. Two deep wells are present, ETCMW-114D is approximately 23 ft deep and CH2MW-4D is approximately 50 ft deep. Since the majority of the wells are shallow with approximately 10 ft of saturated thickness, a single 10 ft thick model layer is considered to be representative of the site.
- Cell size – Model cell size is 5 ft by 5 ft in the area of the plume and then expands to a maximum size of 40 ft by 40 ft outside of the plume area (Figure 1).
- Hydraulic conductivity
  - Horizontal – Horizontal hydraulic conductivity was estimated to be 1×10^{-6} cm/sec (0.003 ft/day). There is limited hydraulic conductivity data available for the site because of the low permeability of the clay. Available hydraulic conductivity ranges from 1.4×10^{-7} cm/sec to 7.5×10^{-6} cm/sec (EarthTech Summary Report, 1993) with a mean hydraulic conductivity of 1×10^{-6} cm/sec. Hydraulic conductivities were modified during the calibration process.
  - Vertical – There is no site data on vertical hydraulic conductivity. Since it is a one layer model, the vertical hydraulic conductivity is assumed to be the same as the horizontal hydraulic conductivity.
- Boundary Conditions
  - Groundwater recharge – There is no site information on groundwater recharge. An estimated recharge rate was developed during flow model calibration.
  - Constant head cells – Constant head cells were included to provide groundwater flow and were located along the northern and southern edges of the model area to be consistent when observed area drainage features. The constant head cell location and elevations were modified during the calibration process.

- Target Groundwater Elevations – Target groundwater elevations for groundwater flow model calibrations were based on average groundwater elevations between the years 1998 and 2008. This range of dates includes the most complete selection of wells and the average elevations are similar to the average elevations for 1998 to 2001 (Table 2).
- Porosity – There is no site data on porosity. A specified value of 0.40 was used in the model based on typical values for clay (Brady & Kunkel, 2003).
- Effective Porosity – There is no site data for effective porosity. A specified value of 0.06 was used in the model based on typical clay values (Brady & Kunkel, 2003).
- Storage – There is no site data on storage. A specified value of 0.06 was used to be consistent with the effective porosity of clay.
- Initial CAH Concentrations – Initial CAH concentrations are based on the April 2004 groundwater sampling event, which was the last sampling event prior to the lactate injections (Figures 2 and 3). The assigned initial CAH concentrations reflected the general CAH distribution without matching the concentration at each monitoring well. Initial concentrations of TCE and cis-1,2-DCE were specified in the model. Vinyl chloride was not present in 2004. TCE, cis-1,2-DCE, and VC were the CAH parameters modeled since they are the most prevalent compounds with the largest plumes and the greatest potential for plume expansion.
- Biodegradation Rates – There are no site data for biodegradation rates. The biodegradation rates were estimated based on evaluation of output from the calibration process, and adjusted to fit observed site conditions.
- Dispersivity – The area no site dispersivity data. A value of 1 ft was specified in the model, which is about 0.1 times the plume length of 120 ft (Aziz et. al, 2000).
- Bulk density – There is no site data for bulk density. A value of 1.6 kg/L was specified in the model based on Biochlor references (Aziz et. al., 2000).
- Retardation – There is no site data for retardation. Values for the distribution coefficients (K_d) were set so that retardation values were 1. This provides a conservative evaluation with respect to plume migration because it assumes no effective retardation of the plume.

With regards to the solute transport modeling, CAH compounds were first documented in the groundwater in 1994. It is not known when the release occurred or the nature of the release. As noted above, lactate was injected into the subsurface in 2004 and 2006. These injection encouraged CAH degradation; however, some monitoring wells showed significant declines in CAH concentrations prior to 2004. Based on the results of the site investigations, the distribution of CAH concentrations, and observed concentration declines, it was assumed that the site CAH concentrations reflect a dissolved plume, and not a separate liquid phase.

MODEL CALIBRATION

As noted above, the steady state flow model was calibrated to the average groundwater elevations between 1998 and 2998. Figure 4 presents the calibrated groundwater flow contours.

The calibrated flow model statistics are:

- Residual Mean = -0.077
- Absolute Residual Mean = 0.457 ft
- Root Mean Squared = 0.583 ft
- Normalized RMS = 8.597%
- Correlation Coefficient = 0.948
- Mass Balance = 0.2%

Table 2 provides the target groundwater elevations and the simulated groundwater elevations from the calibrated model. This flow model calibration does not include upgradient wells CH2MW-2, CH2MW-3, and

OBGMW-123, which were located to the south and west of the building (and were abandoned in 2008). The simulated heads in these wells are higher than observed and could not be reduced during the calibration effort. Since these wells are located upgradient and do not directly affect the area of the plume migration, the removal of the wells from the calibration is not considered critical to the solute transport simulations.

During the flow model calibration process, hydraulic conductivity values were adjusted and boundary conditions of recharge and constant head cells were revised to adjust the model output to match the measured historical water levels. Figure 5 presents the calibrated distribution of hydraulic conductivities, which included K_1 = 0.006 ft/day and K_2 = 0.23 ft/day. The calibrated flow model included recharge of 0.022 in/yr. Constant head cells located in the south of the site were set at an elevation of 278 ft. Constant head cells located to the north of the site were set at an elevation of 275 ft.

For solute transport model calibration, a 2,555 day simulation was completed to represent the time period between 2004 and 2011, which was the most recent data set available at the time the modeling was performed. CAH degradation rates were adjusted to provide calibration of model outputs for TCE, cis-1,2-DCE, and VC to measure historical levels. Figure 6 and Table 3 present the results of the calibration simulations. Relatively good calibration was achieved with the correlation coefficients for TCE, cis-1,2-DCE, and VC of 0.9999, 0.9696, and0.942, respectively. The calibrated degradation rates for TCE, cis-1,2-DCE, and VC are presented in the table. These values are generally within the range of values reported in the professional literature for these CAHs.

Biodegradation Zone	TCE to cis-1,2-DCE	Cis-1,2-DCE to VC	VC to Ethene
1	0.003	0.001	0.0006
2	0.0011	0.0011	0.1
3	0.0045	0.001	0.0006
4	0.0003	0.001	0.01
5	0.0045	0.02	0.0007
6	0.0045	0.02	0.0006
7	0.0045	0.001	0.0001

Note: Degradation rates in day^{-1}

The calibration of both the flow and solute transport model indicate that the models provide reasonable representations of groundwater flow and solute transport processes at the site and can be used to evaluate the possible future CAH migration and concentrations at the site.

SENSITIVITY EVALUATION

The groundwater flow and solute transport models were evaluated for input parameter sensitivity. For the flow model, hydraulic conductivity and recharge are sensitive parameters and are closely linked. Higher hydraulic conductivity requires higher recharge to calibrate to the target elevations. Conversely, a low hydraulic conductivity requires a low recharge rate. While there are no site data to constrain the recharge rate, there are data to constrain the hydraulic conductivity values. In addition, the limited distribution of the plume and the general lack of migration observed since monitoring began in 1994 suggest that the hydraulic conductivity is low. CAH degradation is a sensitive parameter for the solute transport model. Degradation rates were calibrated based on plume concentration changes between 2004 and 2011. The site data demonstrate that CAH degradation is occurring and it is reasonable to assume that it will continue to occur in the future. Since many site wells show more significant concentration declines prior to 2004, calibration of the model to degradation rates between 2004 and 2011 may provide for less aggressive attenuation of the plume than was observed prior to 2004.

The Corrective Measures Study recognizes that the 2004 CAH plume dimensions may be partially the result of facilitated migration along site utilities. Given the small plume area, potential heterogeneity caused by utilities,

low volume of groundwater flow resulting from low site hydraulic conductivity, and potential anthropologic affects from injections and sampling in low hydraulic conductivity materials, the groundwater flow and solute transport models have to be recognized as approximations with limited information to constrain the model.

FORWARD SIMULATIONS

The calibration of both the flow and solute transport model indicate that the models provide a reasonable representation of groundwater flow and solute transport processes at the site and can be used to evaluate the possible future CAH migration and concentrations at the site. Solute transport simulations were performed beyond 2011 for up to 60 years (2071) to evaluate plume migration and CAH concentrations. These simulations indicate that CAH concentrations in excess of the RRS standards will not migrate off site. The sections below provide a summary of the model results, by constituent.

TCE

Model simulations show concentrations of TCE, which was located predominately around the source area (ETCMW-114 and CH2MW-114D) in 2011 (Figure 7), steadily decreased. Model simulations indicate that in 2041, TCE concentrations will decrease to concentrations less than 0.100 mg/L (Figure 10). By 2071, only a small area of TCE will remain present around ETCMW-115 and concentrations of TCE across the site will be below 0.010 mg/L, although this concentration remains above the Type 4 RRS of 0.005 mg/L (Figure 13).

Cis-1,2-DCE

Similar to TCE, model simulations of cis-1,2-DCE concentrations show a steady decrease from the concentrations generated by the model for 2011. By 2041, the cis-1,2-DCE plume, which had extended towards CH2MW-1 and CH2PP-1 in 2011 (Figure 8), will be present in a much smaller area surrounding the source area (Figure 11). Extending the model simulations to 2071, only a small area of cis-1,2-DCE will be present immediately north of the source area, at concentrations below the Type 1/3 RRS (Figure 15).

VC

Because vinyl chloride is a daughter product of cis-1,2-DCE, model simulations indicate increasing concentrations of vinyl chloride as cis-1,2-DCE degrades; however, by 2041 (Figure 12), vinyl chloride concentration have decreased from the model simulation for 2011 (Figure 9), and simulations show vinyl chloride is no longer present in the groundwater by 2071.

Overall, modeling results show concentrations of TCE, cis-1,2-DCE, and vinyl chloride decrease dramatically from 2011 to 2071. Simulations show that across the site, cis-1,2-DCE has decreased to concentrations below the Type 1/3 RRS and VC is no longer detected by 2071. While model simulations show TCE is the only constituent with concentrations above the Type 1/3 RRS in 2071, it is only present in a small area surrounding ETCMW-115 (Figure 13).

REFERENCES

Aziz, C.E., C.J. Newell, J.R. Gonzales, P. Haaz, T.P. Clement, and Y. Sun, 2000, Biochlor Natural Attenuation Decision Support System User's Manual, USEPA EPA/600/R-00/008.

Brady MM, and LA Kunkel, 2003, Practical Technique for Quantifying Drainage Porosity in Ground Water; in Groundwater: Prevention, Assessment, and Remediation, 20th Conference and Exposition, Costa Mesa, California, pp. 146-151.

Clement, TP, RT3D v2.5, A Modular Computer Code for Simulating Reactive Multispecies Transport in 3-Dimensional Groundwater Systems; Pacific Northwest National Laboratory, PNNL-SA-11720, 2001.

Harbaugh, A.W., E.R. Banta, M.C. Hill, and M.G. McDonald, 2000, MODFLOW-2000, the U.S. Geological Survey Modular Ground Water Model – User Guide to Modularization Concepts and the Ground-Water Flow Process: U.S. Geological Survey Open-File Report 00-92, 121p.

Tables

Figures

Table 1
Summary of Model Input Parameters

PARAMETER	INITIAL VALUE	CALIBRATED VALUE
Horizontal Extent	1,600 x 1,600 ft	1,600 x 1,600 ft
Vertical Extent	10 ft	10 ft
Cell Size	5 ft x 5 ft - 40 ft x 40 ft	5 ft x 5 ft - 40 ft x 40 ft
Horizontal Hydraulic Conductivity	0.003 ft/day	0.006 ft/day - 0.23 ft/day
Vertical Hydraulic Conductivity	0.003 ft/day	0.006 ft/day - 0.23 ft/day
Groundwater Recharge	--	0.022 in/yr
Constant Head Cells	--	275 ft - 278 ft
Porosity	0.40	0.40
Effective Porosity	0.06	0.06
Storage	0.06	0.06
Dispersivity	1 ft	1 ft
Bulk Density	1.6 kg/L	1.6 kg/L
Retardation	1	1

Table 2
Groundwater Elevations
1998 - 2011
Former Miller Canning Facility
Moultrie, Georgia

Well	Average Elevations (ft)	Simulated Elevations (ft)	Elevation Difference (ft)
CH2MW-1	288.41	287.44	0.97
CH2MW-1A	284.28	284.39	-0.11
CH2MW-2*	289.92	294.14	-4.22
CH2MW-3*	290.94	293.21	-2.27
CH2MW-5	289.11	290.54	-1.43
ETCMW-113	290.45	290.71	-0.26
ETCMW-114	290.27	290.75	-0.48
ETCMW-115	290.41	289.85	0.56
ETMW-116	290.70	290.21	0.49
ETMW-117	290.46	289.73	0.73
ETMW-118	289.76	289.58	0.18
ETMW-119	290.69	290.54	0.15
ETMW-120	290.65	290.20	0.45
ETMW-121	291.06	291.31	-0.25
OBGMW-122	289.39	289.18	0.21
OBGMW-123*	290.72	293.79	-3.07
CH2PP-1	287.00	287.14	-0.14

Notes:
* - Well not used for calibration

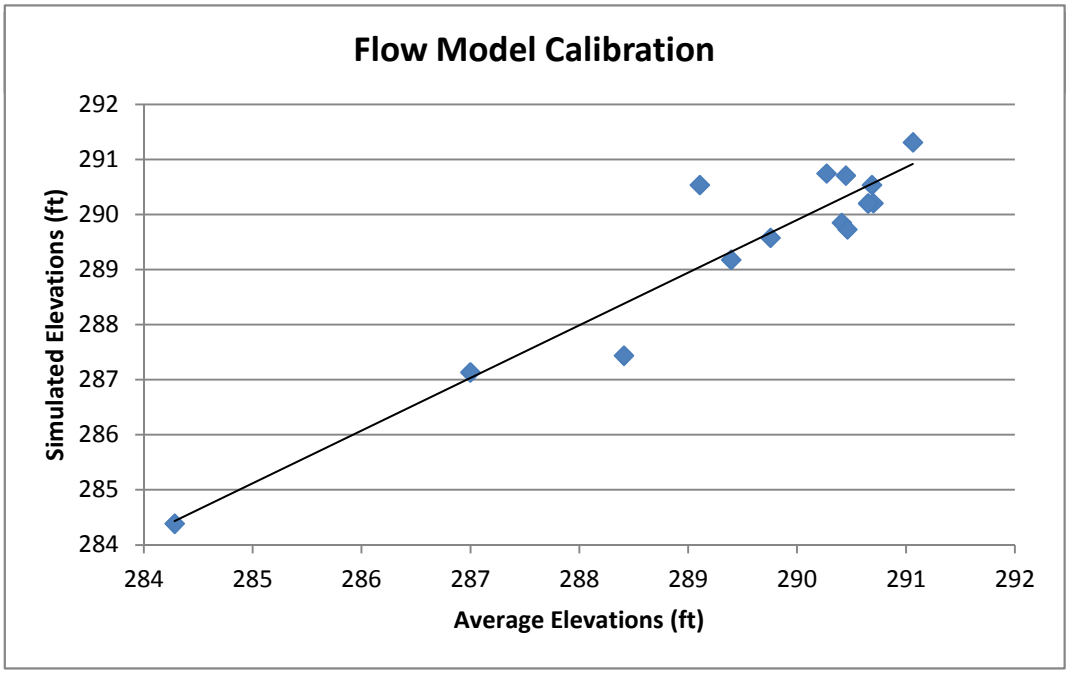


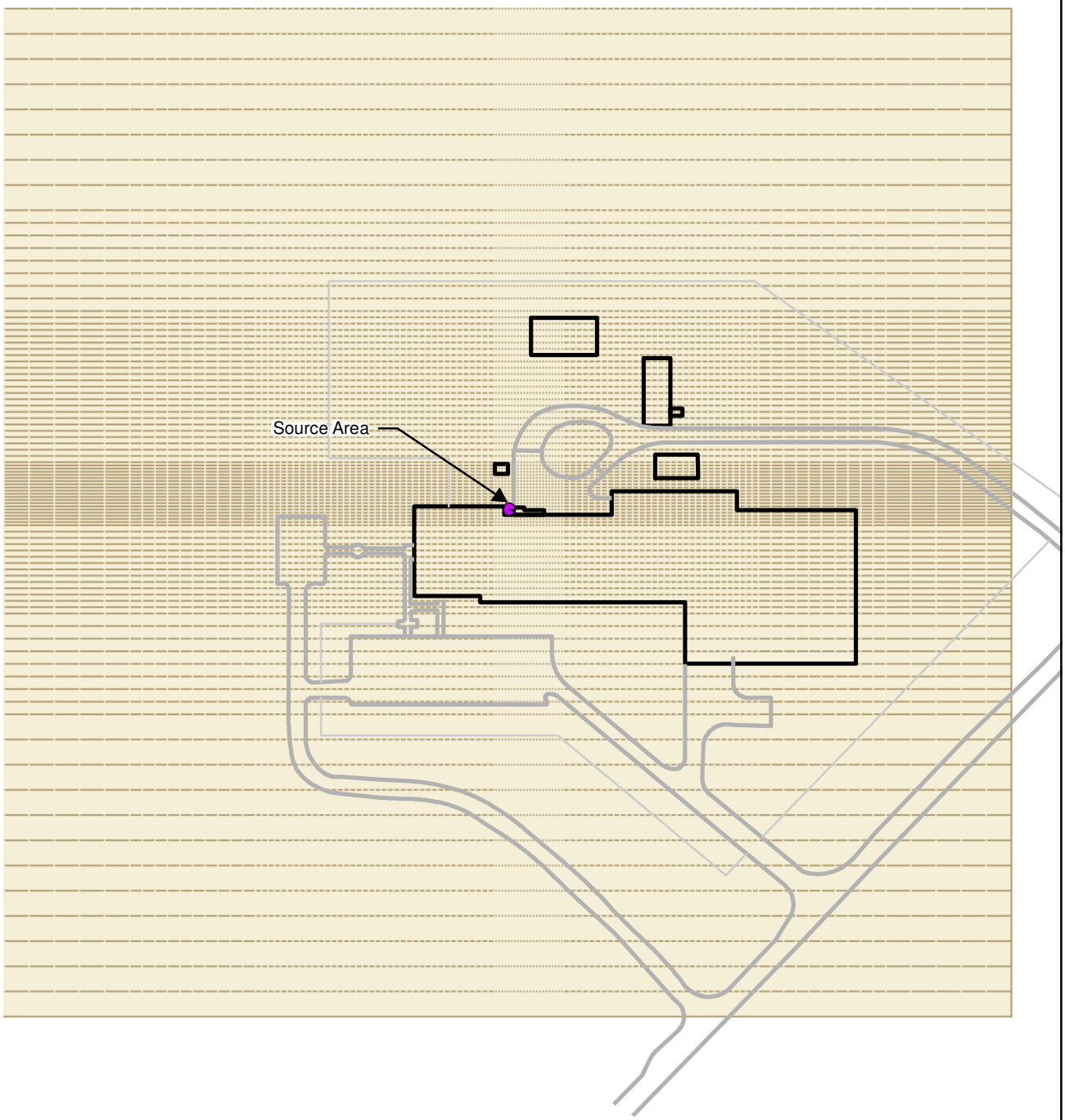
Table 3
Model Calibration Results
Former Miller Canning Facility
Moultrie, GA

Initial Model Conditions - 2004						
	TCE (mg/L)		TCE (mg/L)		TCE (mg/L)	
Well	Observed	Specified	Observed	Specified	Observed	Specified
ETCMW-114	1.600	1.600	2.400	2.400	ND	ND
ETCMW-113	0.056	0.060	0.091	0.090	ND	ND
ETMW-116	0.15	0.15	0.039	0.030	ND	ND
ETMW-118	0.021	0.020	0.006	0.005	ND	ND
ETMW-117	0.064	0.060	0.020	0.030	ND	ND
ETCMW-115	0.016	0.020	0.086	0.090	0.0015	ND
CH2MW-1	0.004	0.005	0.001	0.002	ND	ND
CH2PP-1	ND	ND	ND	ND	ND	ND

Model Calibration to 2011 Data						
	TCE (mg/L)		TCE (mg/L)		TCE (mg/L)	
Well	Observed	Simulated	Observed	Simulated	Observed	Simulated
ETCMW-114	0.590	0.677	1.500	1.474	0.003	0.010
ETCMW-113	0.002	0.002	0.300	0.052	0.027	0.024
ETMW-116	ND	0.01	0.003	0.045	0.120	0.131
ETMW-118	0.001	0.001	0.009	0.011	0.044	0.019
ETMW-117	ND	0.002	0.019	0.023	0.047	0.045
ETCMW-115	0.014	0.015	0.046	0.047	0.0030	0.003
CH2MW-1	0.007	0.004	ND	0.002	ND	0.001
CH2PP-1*	0.002	0.0015	ND	ND	ND	ND

Notes: * Simulated TCE concentration si between ND and 3 ug/L in adjacent cells

FIGURE 1



This document was developed in color. Reproduction in B/W may not represent the data as intended.

Buildings
Fencline
Roadway
Model Cells

MILLER BREWING COMPANY
MOULTRIE, GA

MODEL AREA

N

0 125 250 500
Feet

07/31/2012
49078

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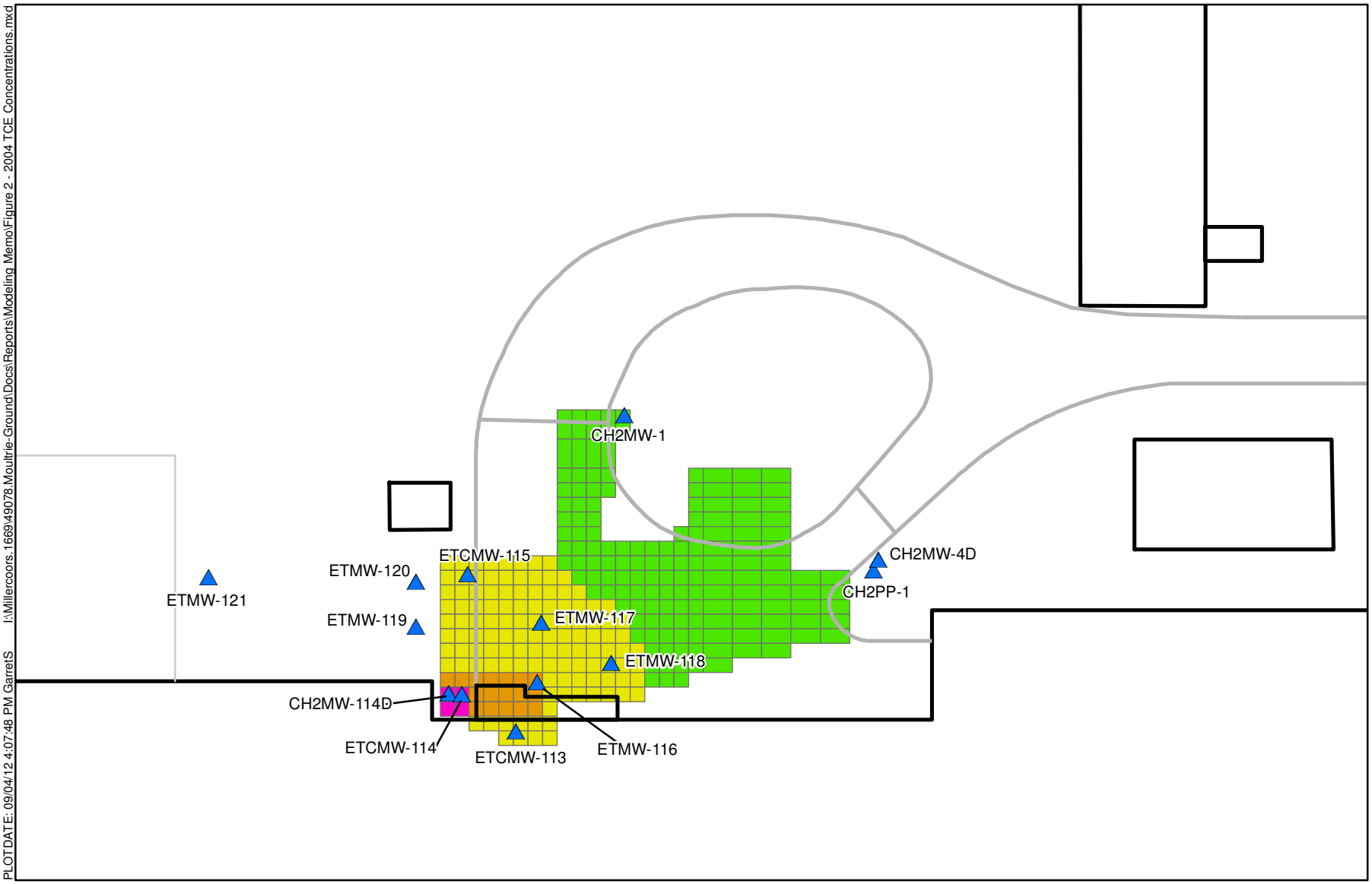
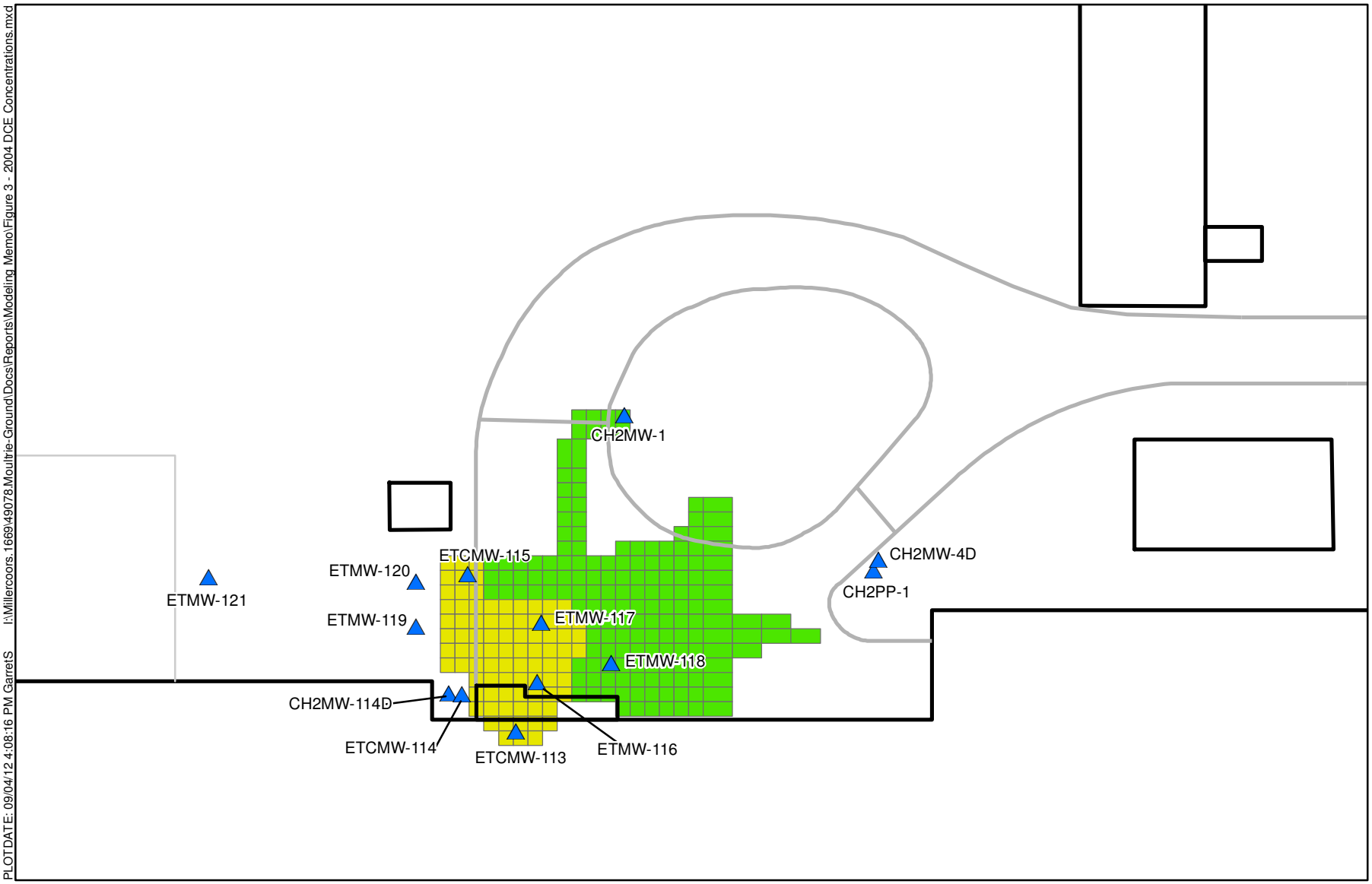
I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 1 - Model Area.mxd

PLOTDATE: 09/04/12 4:07:19 PM GarretS


PLOTDATE: 09/04/12 4:07:48 PM GarretS I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 2 - 2004 TCE Concentrations.mxd
CH2MW-1
CH2MW-4D
CH2PP-1
ETCMW-115
ETMW-120
ETMW-121
ETMW-119
ETMW-117
ETMW-118
CH2MW-114D
ETCMW-114
ETCMW-113
ETMW-116
2004 TCE Concentration (mg/L)
< 0.010
0.010-0.099
0.100-0.999
>1.000
Monitoring Wells
Buildings
Fencline
Roadway
MILLER BREWING COMPANY
MOULTRIE, GA
2004 TCE CONCENTRATION PRIOR TO INJECTION
0 25 50 100
Feet
N
FIGURE 2
08/02/12
49078
O'BRIEN & GERE



MILLER BREWING COMPANY
MOULTRIE, GA

2004 DCE CONCENTRATION PRIOR TO INJECTION

FIGURE 3

08/02/12
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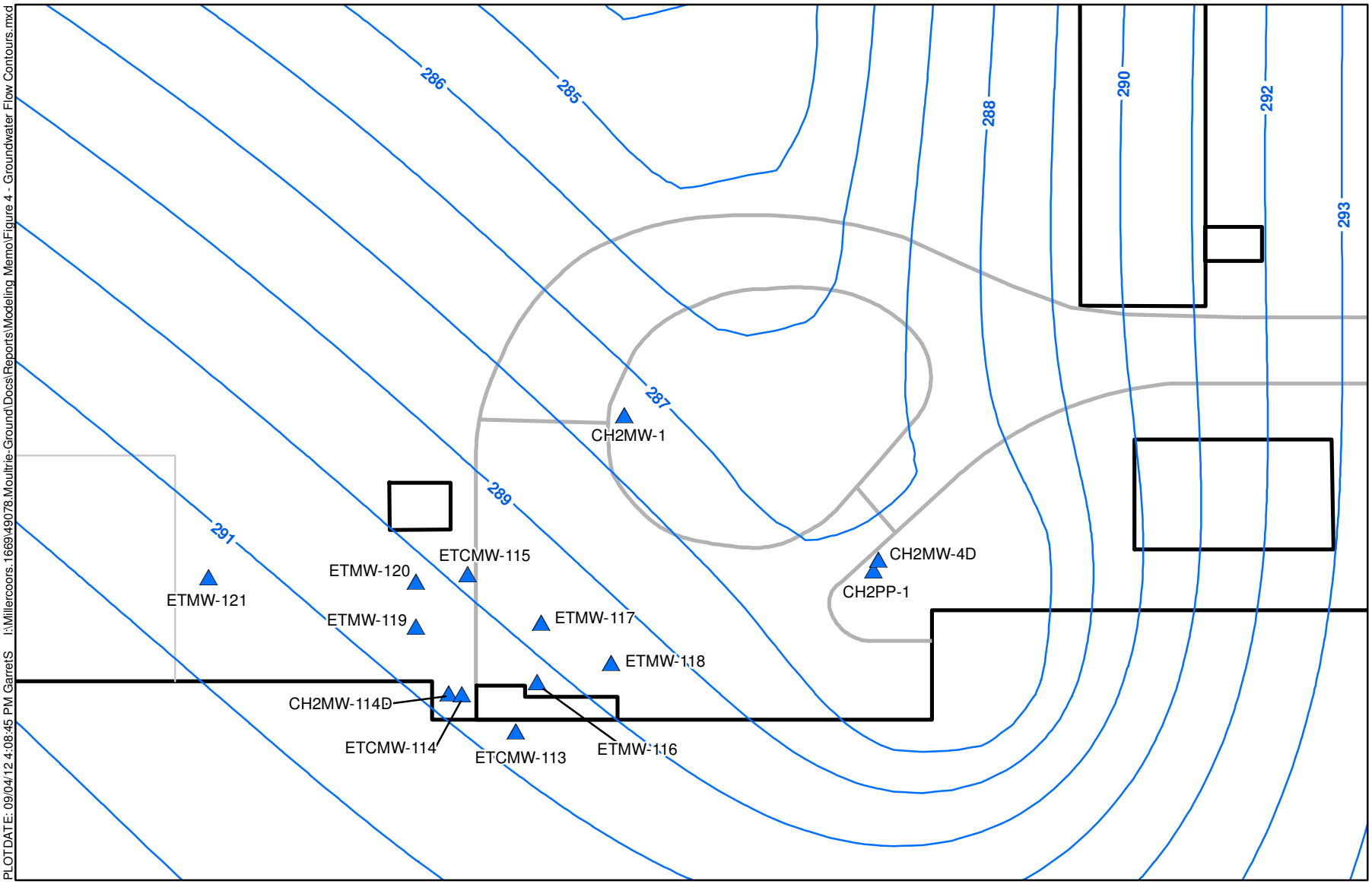

MILLER BREWING COMPANY
MOULTRIE, GA

GROUNDWATER FLOW CONTOURS

FIGURE 4

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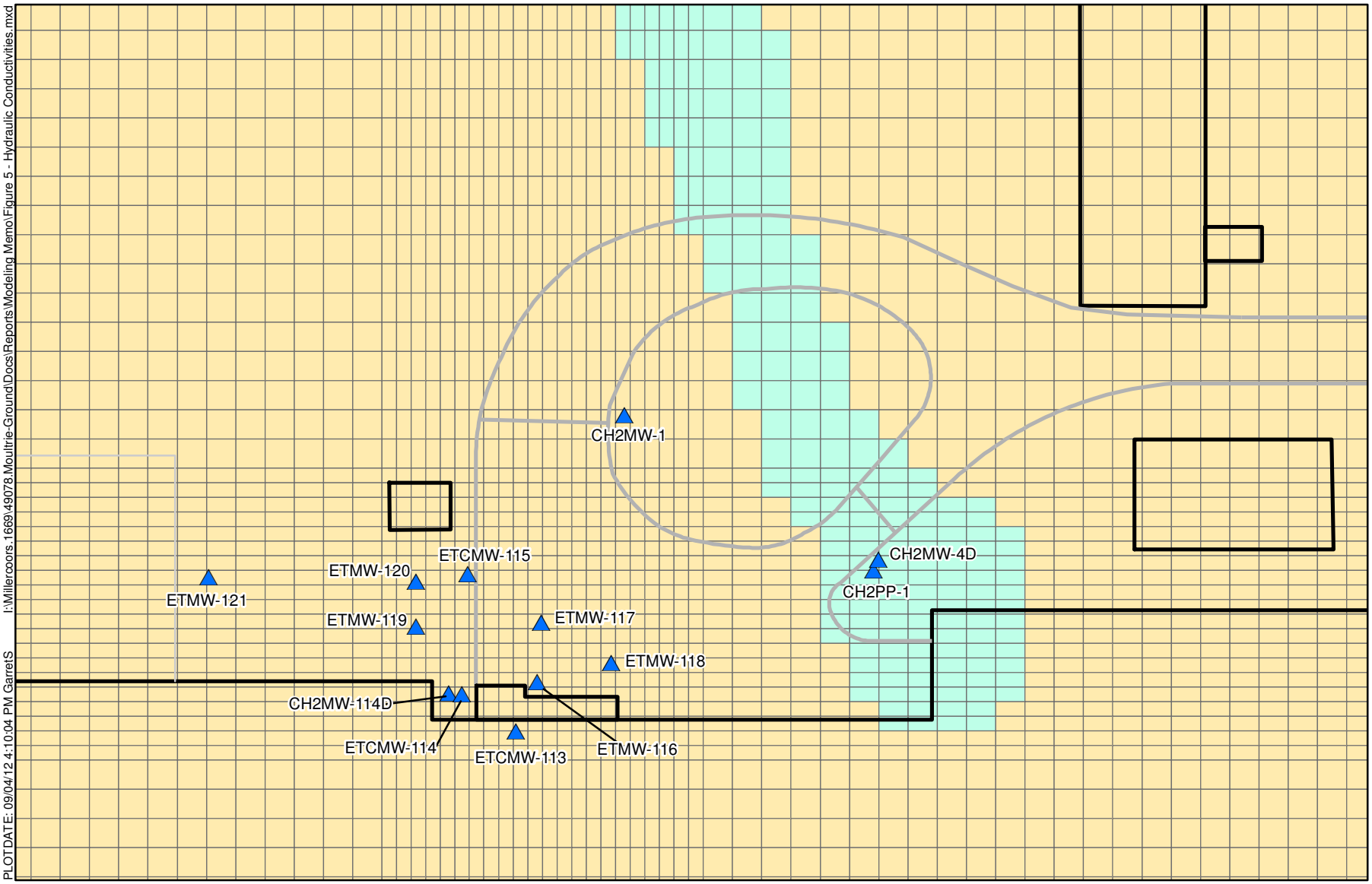
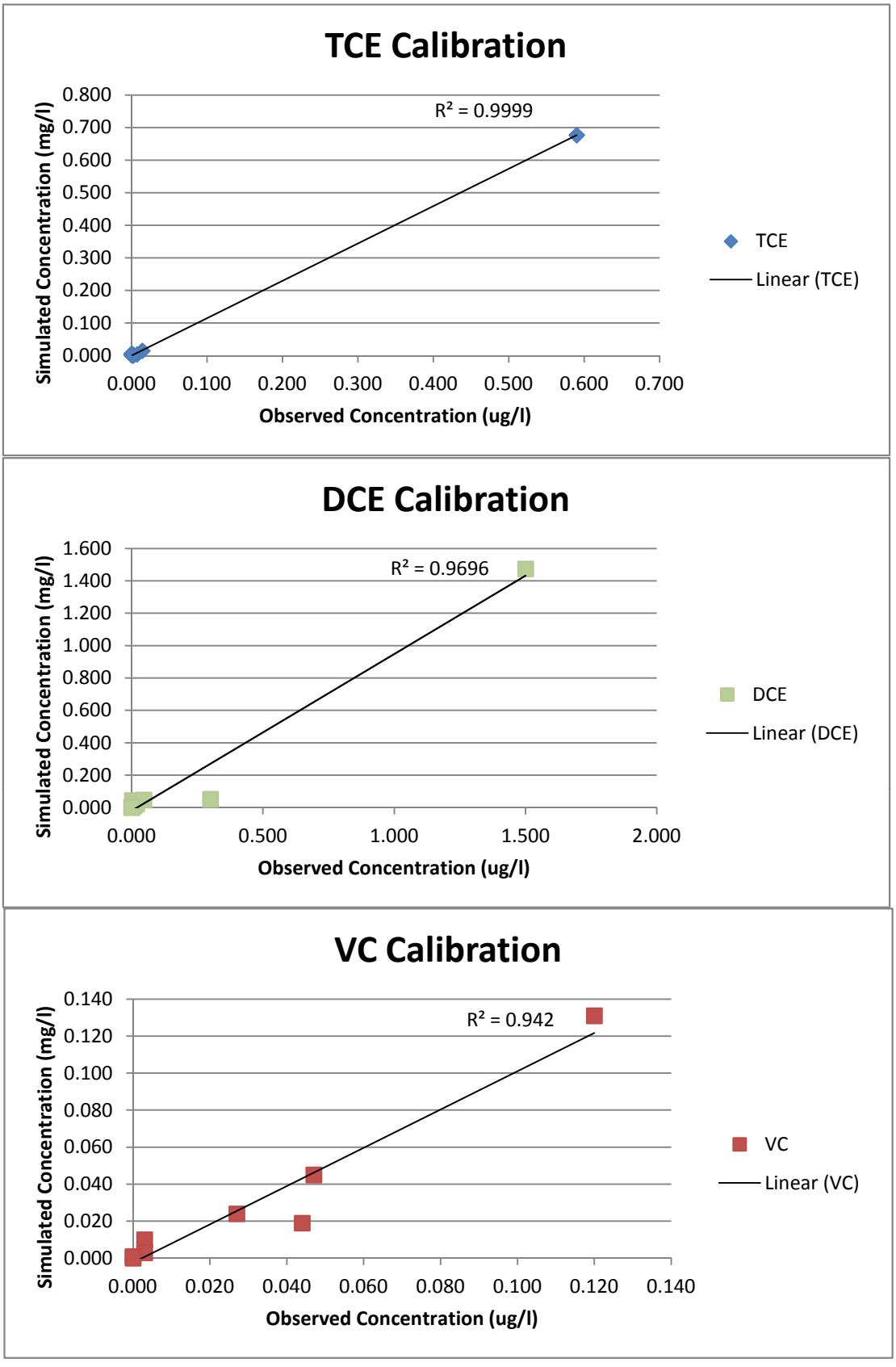
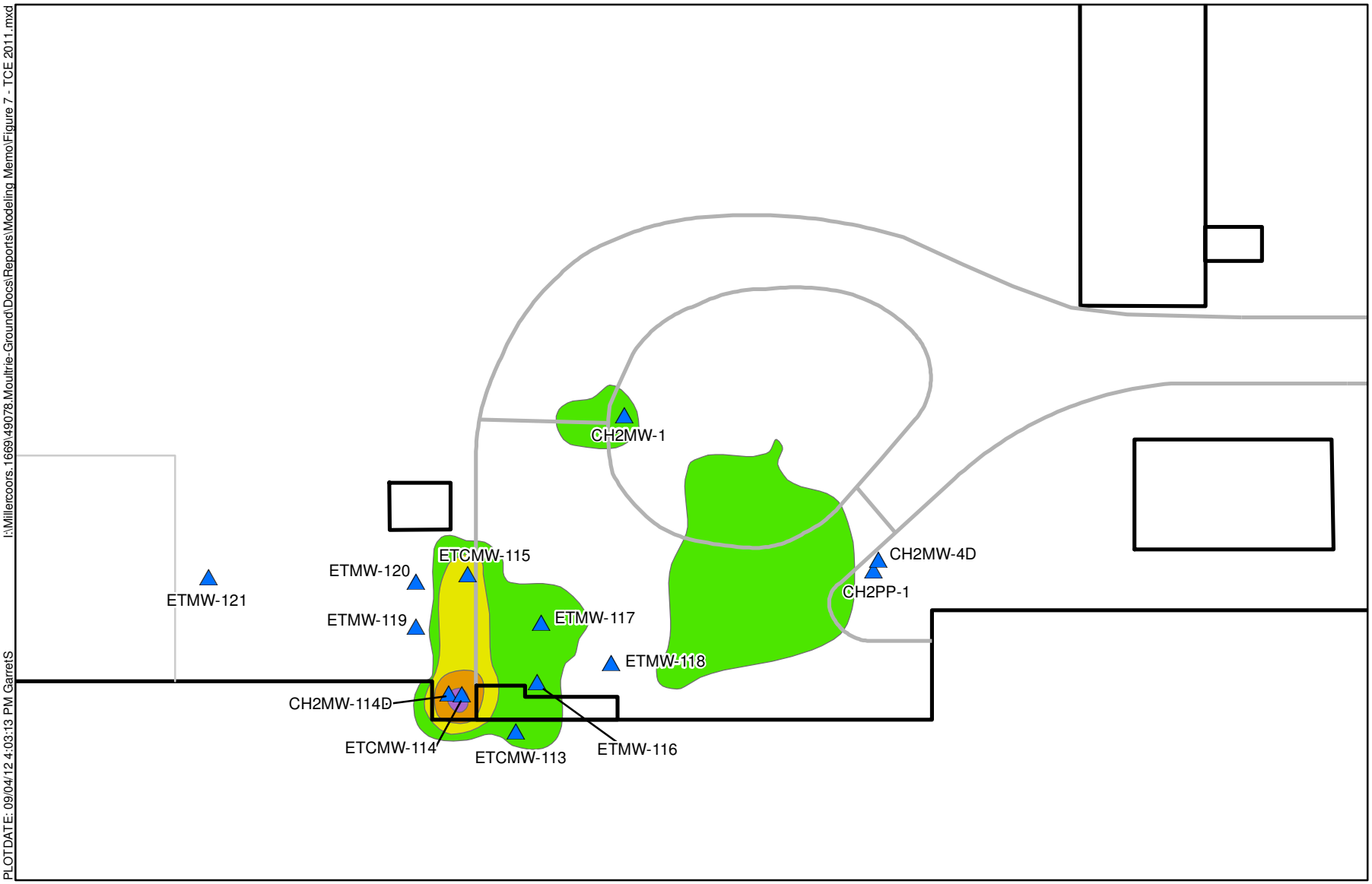
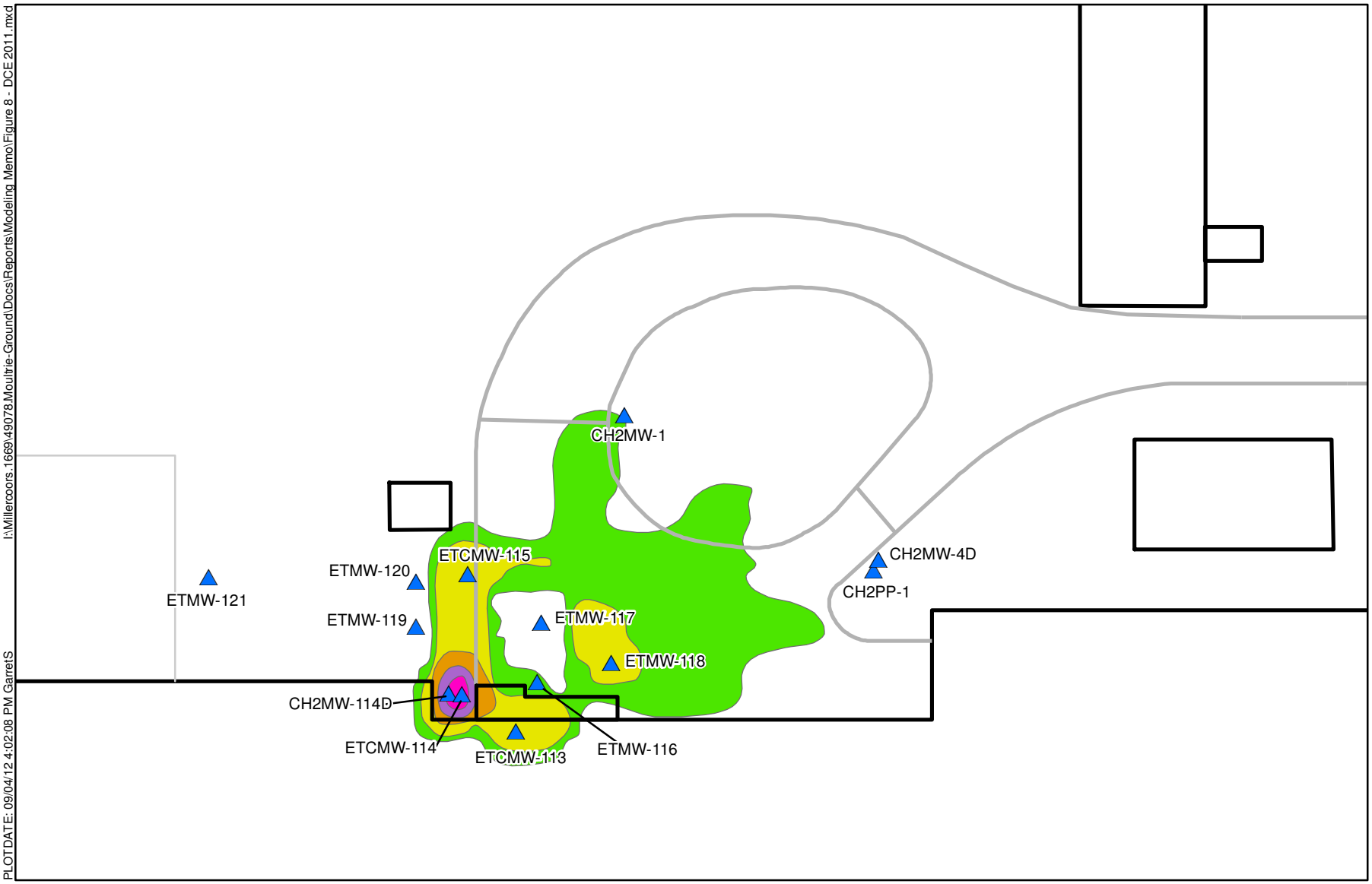
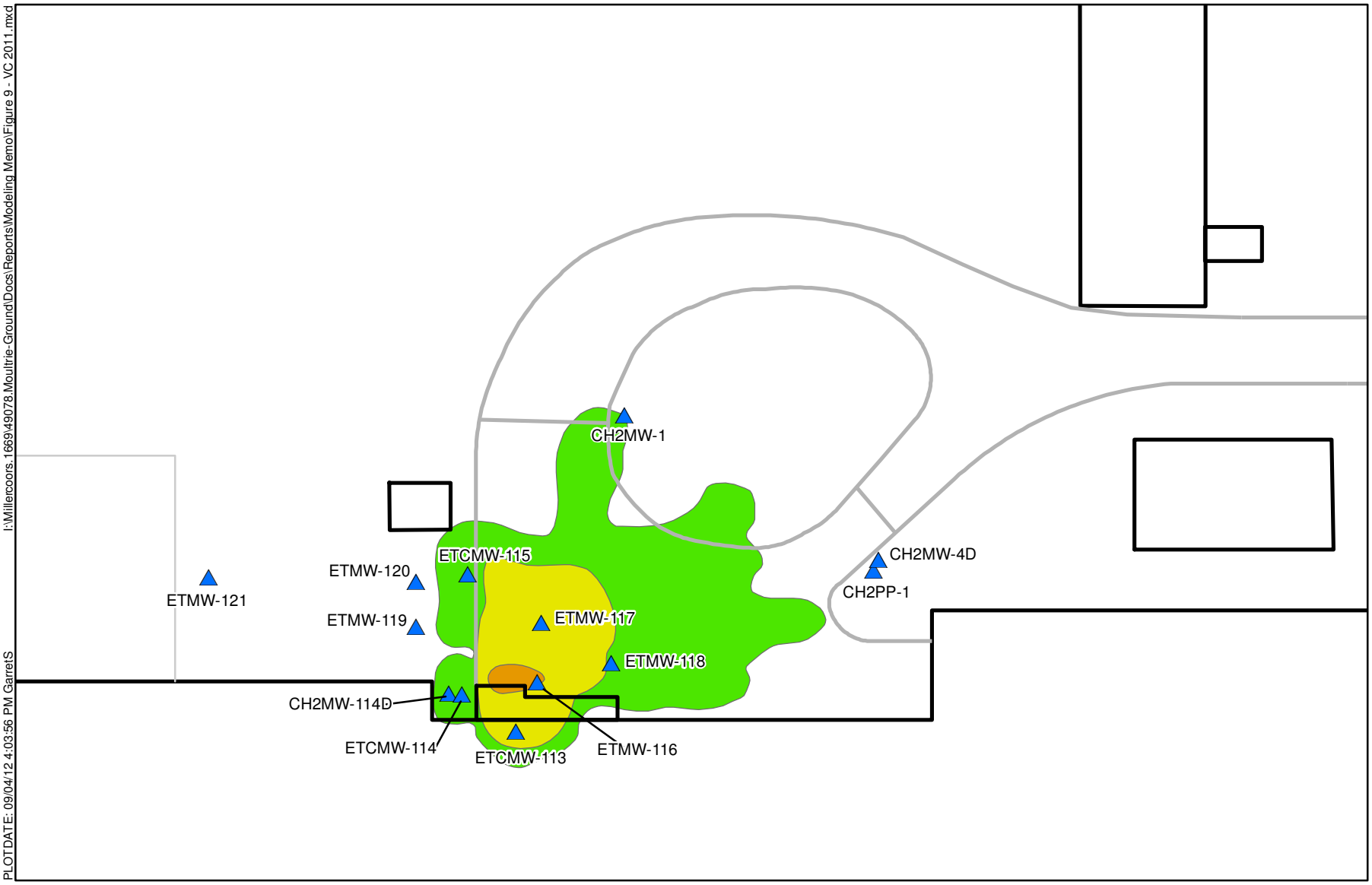

I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 5 - Hydraulic Conductivities.mxd
PLOTDATE: 09/04/12 4:10:04 PM GarretS
CH2MW-1
ETCMW-115
ETMW-120
ETMW-121
ETMW-119
ETMW-117
CH2MW-4D
CH2PP-1
ETMW-118
CH2MW-114D
ETCMW-114
ETCMW-113
ETMW-116
Hydraulic Conductivity (ft/day)
0.006
0.23
Monitoring Wells
Buildings
Fencline
Roadway
MILLER BREWING COMPANY
MOULTRIE, GA
HYDRAULIC CONDUCTIVITIES
0
25
50
100
Feet
N
FIGURE 5
08/02/12
49078
O'BRIEN & GERE

Figure 6
Calibration Results
Former Miller Canning Facility
Moultrie, GA




I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 7 - TCE 2011.mxd
PLOTDATE: 09/04/12 4:03:13 PM GarretS
CH2MW-1
CH2MW-4D
CH2PP-1
ETCMW-115
ETMW-120
ETMW-121
ETMW-119
ETMW-117
ETMW-118
CH2MW-114D
ETCMW-114
ETCMW-113
ETMW-116
2011 TCE Concentration
(mg/L)
0.001-0.009
0.010-0.099
0.100-0.499
> 0.500
Monitoring Wells
Buildings
Fencline
Roadway
TCE Type 1/3 RRS = 0.005 mg/L
MILLER BREWING COMPANY
MOULTRIE, GA
TCE CONCENTRATION
MODEL RESULTS
2011
0
25
50
100
Feet
N
FIGURE 7
08/02/12
49078
O'BRIEN & GERE


I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 8 - DCE 2011.mxd
PLOTDATE: 09/04/12 4:02:08 PM GarretS
CH2MW-1
ETCMW-115
ETMW-120
ETMW-121
ETMW-119
ETMW-117
ETMW-118
CH2MW-4D
CH2PP-1
CH2MW-114D
ETCMW-114
ETCMW-113
ETMW-116
2011 DCE Concentration (mg/L)
0.001-0.009
0.010-0.099
0.0100-0.499
0.500-0.999
>1.000
Monitoring Wells
Buildings
Fencline
Roadway
DCE Type 1/3 RRS = 0.07 mg/L
MILLER BREWING COMPANY
MOULTRIE, GA
DCE CONCENTRATION MODEL RESULTS 2011
0
25
50
100
Feet
N
FIGURE 8
08/02/12
49078
O'BRIEN & GERE


I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 9 - VC 2011.mxd
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CH2MW-1
ETCMW-115
ETMW-120
ETMW-121
ETMW-119
ETMW-117
ETMW-118
CH2MW-4D
CH2PP-1
CH2MW-114D
ETCMW-114
ETCMW-113
ETMW-116
2011 VC Concentration (mg/L)
0.001-0.009
0.010-0.099
0.100-0.499
Monitoring Wells
Buildings
Fencline
Roadway
VC Type 1/3 RRS = 0.002 mg/L
MILLER BREWING COMPANY
MOULTRIE, GA
VC CONCENTRATION MODEL RESULTS 2011
0
25
50
100
Feet
N
FIGURE 9
08/02/12
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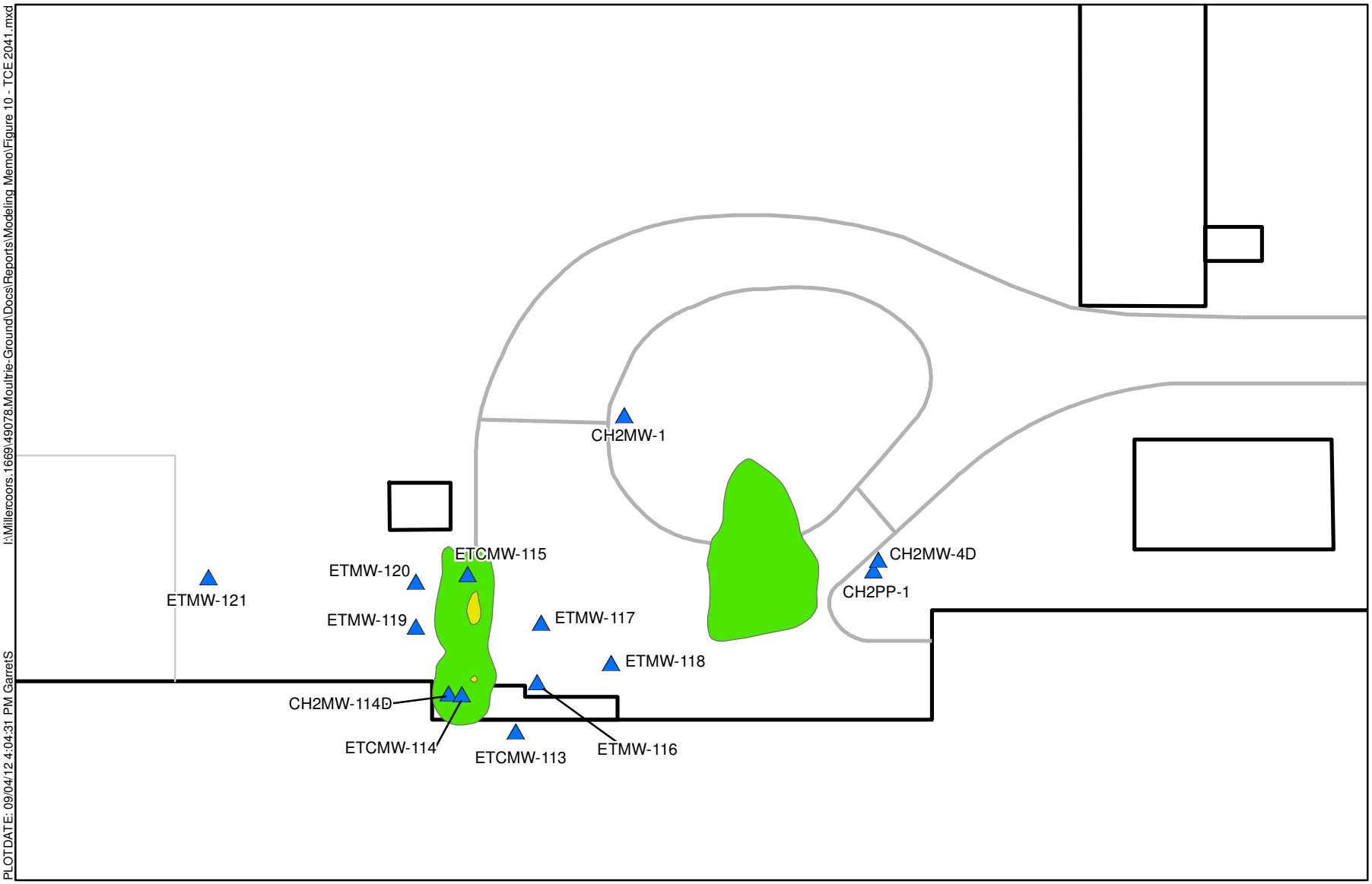
O'BRIEN & GERE



2041 TCE Concentration (mg/L)

- 0.001-0.009
- 0.010-0.099

- Monitoring Wells
- Buildings
- Fencline
- Roadway

TCE Type 1/3 RRS = 0.005 mg/L

MILLER BREWING COMPANY
MOULTRIE, GA

PROJECTED TCE CONCENTRATION 2041

0 25 50 100
Feet

N

FIGURE 10

08/02/12
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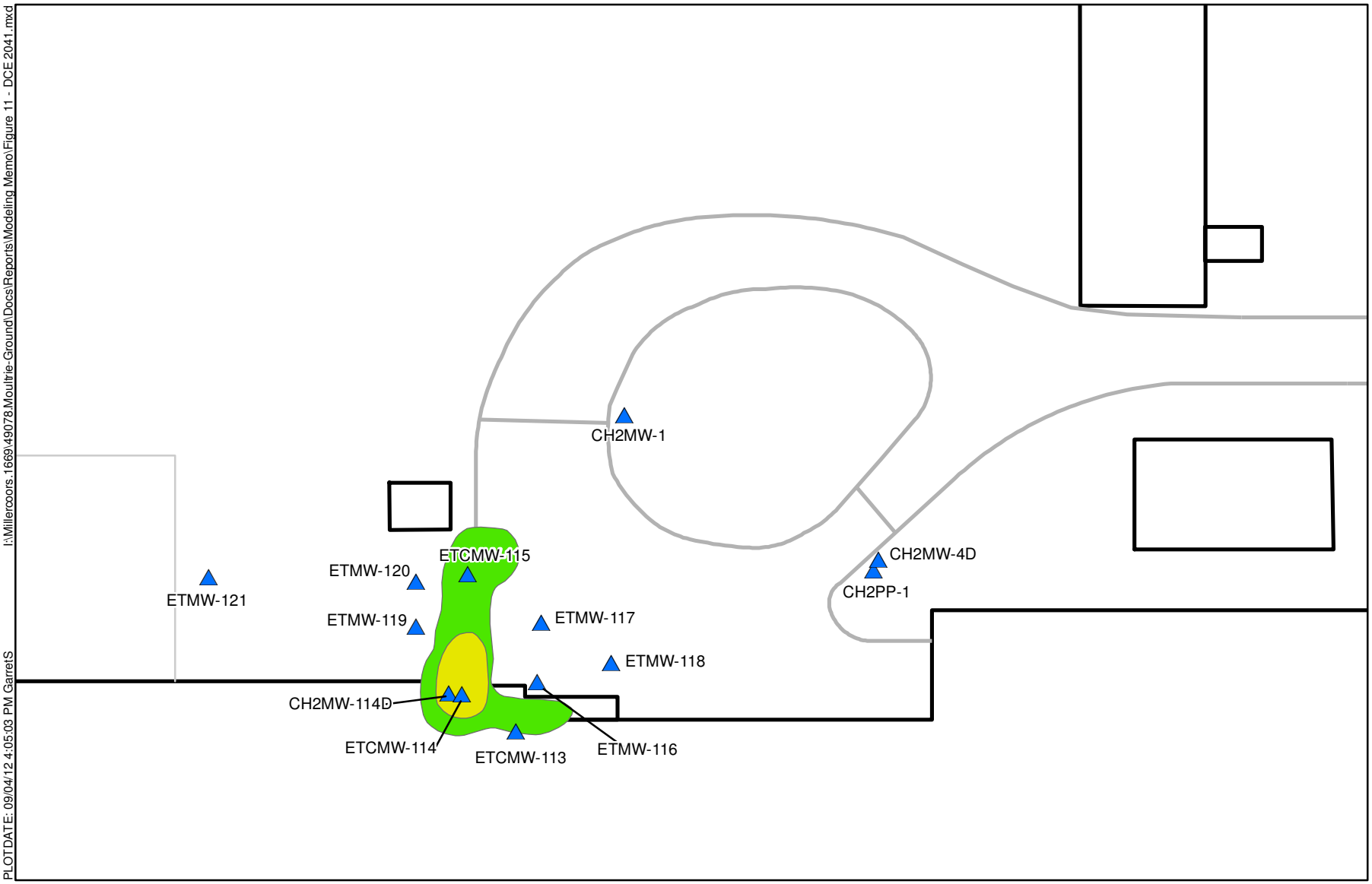

2041 DCE Concentration (mg/L)

- 0.001-0.009
- 0.010-0.099

- Monitoring Wells
- Buildings
- Fencline
- Roadway

DCE Type 1/3 RRS = 0.07 mg/L

MILLER BREWING COMPANY
MOULTRIE, GA

PROJECTED DCE CONCENTRATION 2041

0 25 50 100
Feet

N

FIGURE 11

08/02/12
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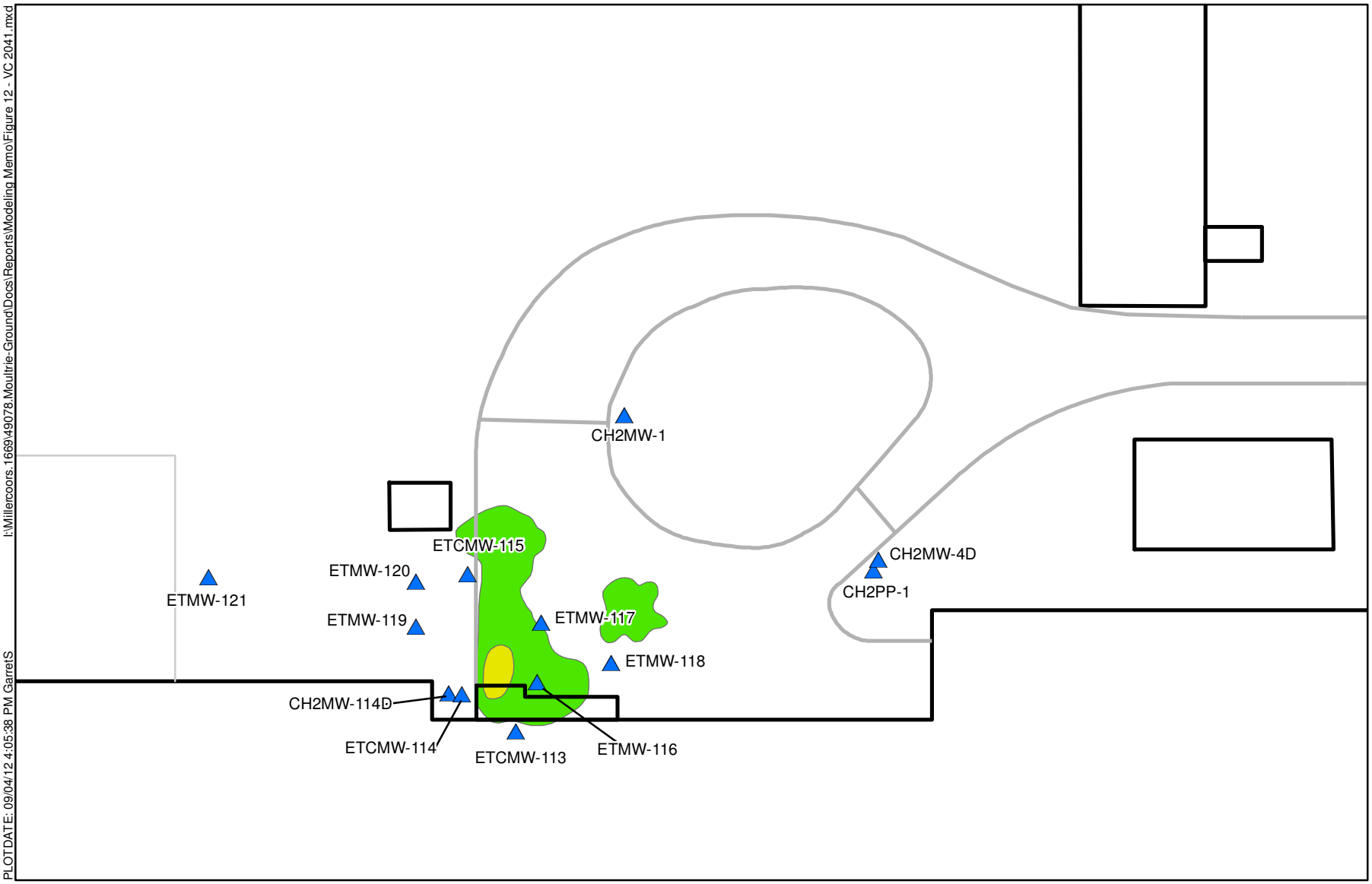
I:\Millercoors.1669\49078.Moultrie-Ground\Docs\Reports\Modeling Memo\Figure 12 - VC 2041.mxd
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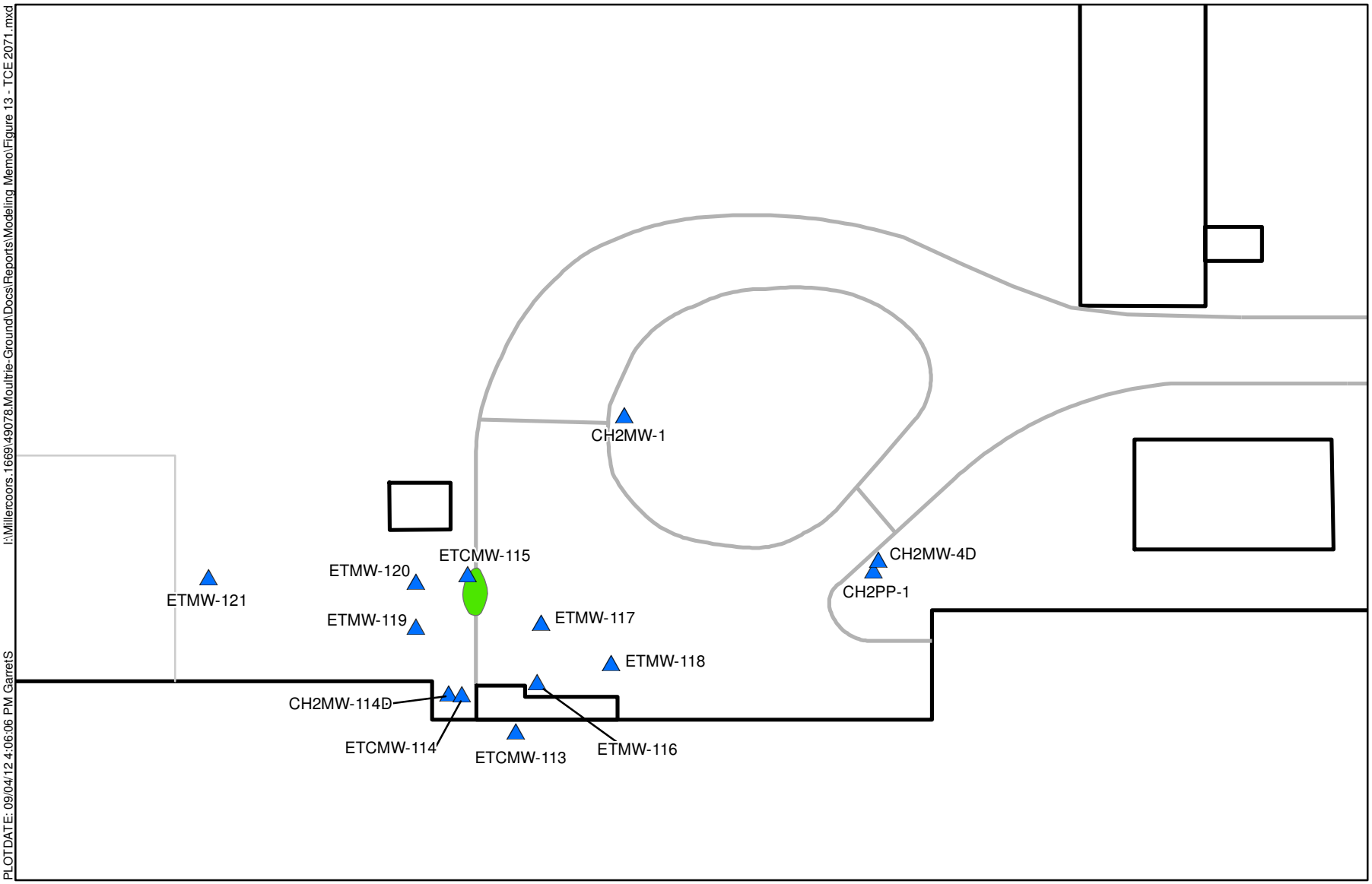
CH2MW-1
ETCMW-115
ETMW-120
ETMW-121
ETMW-119
ETMW-117
CH2MW-4D
CH2PP-1
ETMW-118
CH2MW-114D
ETCMW-114
ETCMW-113
ETMW-116
2041 VC Concentration (mg/L)
0.001-0.009
0.010-0.099
Monitoring Wells
Buildings
Fencline
Roadway
VC Type 1/3 RRS = 0.002 mg/L
MILLER BREWING COMPANY
MOULTRIE, GA
PROJECTED VC CONCENTRATION 2041
0
25
50
100
Feet
N
FIGURE 12
08/02/12
49078
O'BRIEN & GERE



2071 TCE Concentration (mg/L)

0.001-0.009

Monitoring Wells

Buildings

Fencline

Roadway

TCE Type 1/3 RRS = 0.005 mg/L

MILLER BREWING COMPANY
MOULTRIE, GA

PROJECTED TCE CONCENTRATION 2071

0 25 50 100

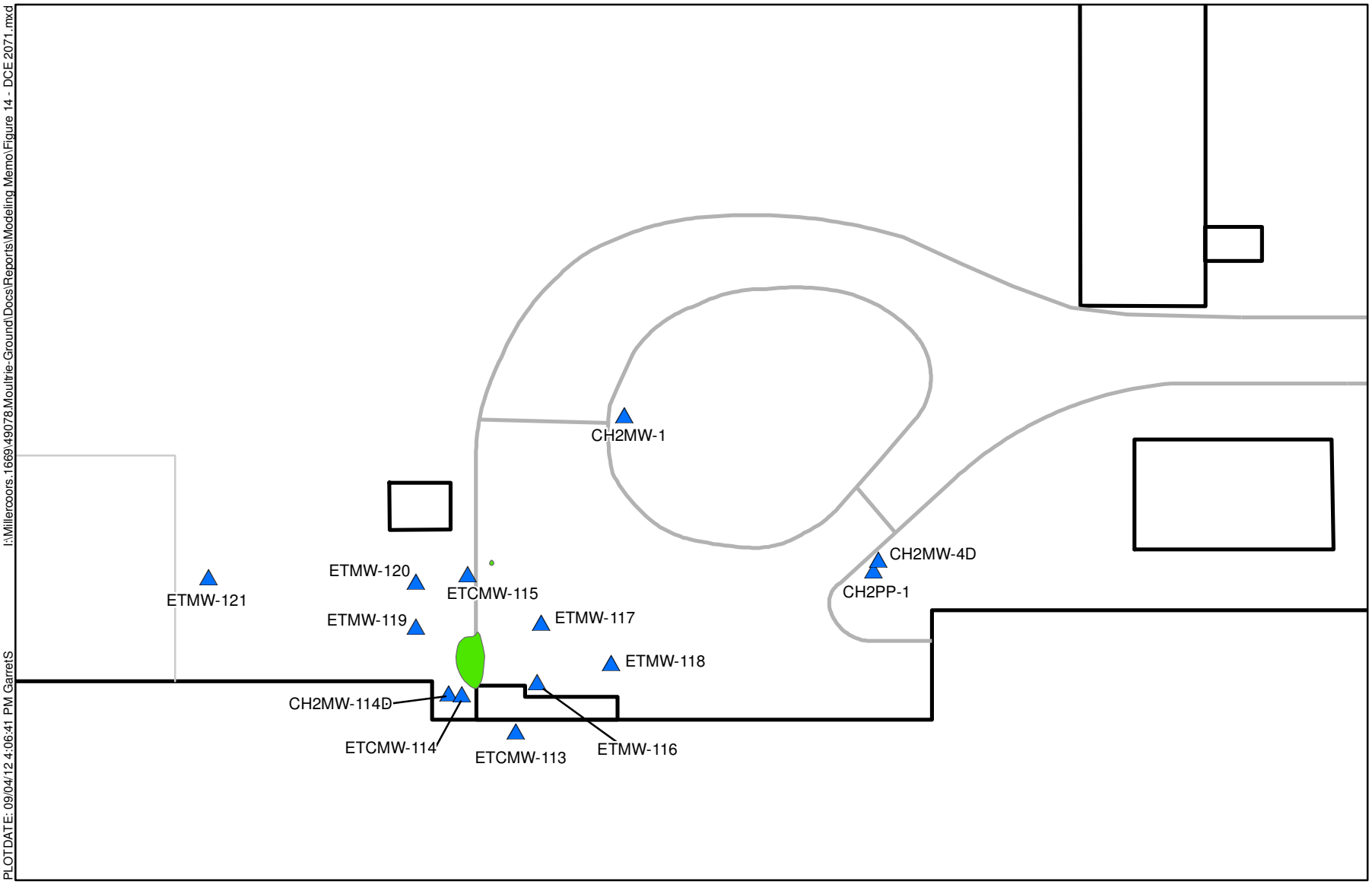
Feet

N

FIGURE 13

08/02/12
49078

O'BRIEN & GERE



2071 DCE Concentration (mg/L)

0.001-0.009

Monitoring Wells

Buildings

Fencline

Roadway

DCE Type 1/3 RRS = 0.07 mg/L

MILLER BREWING COMPANY
MOULTRIE, GA

PROJECTED DCE CONCENTRATION 2071

0 25 50 100

Feet

N

FIGURE 14

08/02/12
49078

O'BRIEN & GERE