

**VOLUNTARY REMEDIATION PLAN  
SEMI-ANNUAL PROGRESS REPORT #2**

**SOUTHERN STATES, LLC  
30 GEORGIA AVENUE  
HAMPTON, GEORGIA**

**HSI No. 10141**

**APRIL 15, 2016**

**Prepared for**

**SOUTHERN STATES, LLC  
30 Georgia Avenue  
Hampton, Georgia**

## TABLE OF CONTENTS

	<u>Page</u>
1.0 PROJECT SUMMARY .....	1
2.0 ACTIONS TAKEN SINCE LAST SUBMITTAL.....	2
2.1 GROUNDWATER PERFORMANCE MONITORING .....	2
2.2 ISCO REMEDIATION .....	3
2.3 POST ISCO MONITORING EVENT .....	4
2.4 DISCUSSION AND CONCLUSIONS .....	5
2.5 SOIL REMOVAL .....	6
3.0 SCHEDULE AND FUTURE SUBMITTALS.....	7
4.0 PROFESSIONAL GEOLOGIST CERTIFICATION STATEMENT .....	8

## LIST OF FIGURES

Following  
Report

- |          |  |
|----------|--|
| FIGURE 1 | PROPERTY LOCATION PLAN                                       |
| FIGURE 2 | SITE LOCATION MAP  |
| FIGURE 3 | GROUNDWATER ELEVATION MAP - DECEMBER 16, 2015                |
| FIGURE 4 | PRE-INJECTION ROUND #2 TOTAL VOC ISO-CONCENTRATION CONTOURS  |
| FIGURE 5 | TREATMENT ZONE INJECTION POINT LOCATIONS                     |
| FIGURE 6 | GROUNDWATER ELEVATION MAP - MARCH 31, 2016                   |
| FIGURE 7 | POST-INJECTION ROUND #2 TOTAL VOC ISO-CONCENTRATION CONTOURS |

## LIST OF TABLES

- |         |  |
|---------|--|
| TABLE 1 | GROUNDWATER LEVEL MEASUREMENTS - DECEMBER 16, 2015           |
| TABLE 2 | GROUNDWATER LEVEL MEASUREMENTS - MARCH 31, 2016              |
| TABLE 3 | SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS |

## LIST OF APPENDICES

APPENDIX A	GROUNDWATER PURGE FORMS & ANALYTICAL LABORATORY REPORTS - DECEMBER 2015 & MARCH 2016
APPENDIX B	TOTAL VOC TREND GRAPHS FOR SELECT PERFORMANCE MONITORING WELLS
APPENDIX C	UPDATED MILESTONE SCHEDULE
APPENDIX D	SUMMARY OF PROFESSIONAL GELOGIST EFFORT

## CERTIFICATION OF GROUNDWATER REPORT

I certify that I am a qualified ground-water scientist who has received a baccalaureate or post-graduate degree in the natural sciences or engineering, and have sufficient training and experience in ground-water hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments regarding ground-water monitoring and contaminant fate and transport. I further certify that this report was prepared by me or by a subordinate working under my direction.

John O. Schwaller

Printed Name (GA Professional Geologist 1617)

  
Signature (Professional Geologist)

## 1.0 PROJECT SUMMARY

On behalf of Southern States, LLC (SS), Environmental Management Associates, LLC (EMA) is submitting this Voluntary Remediation Plan - Semi-Annual Progress Report #2 (Progress Report) to the Georgia Environmental Protection Division for SS's manufacturing facility located at 30 Georgia Avenue, Hampton, Georgia. This Progress Report has been prepared to meet the requirements contained in the Georgia Voluntary Remediation Program Act and covers the activities conducted since the submittal of Progress Report #1 dated October 15, 2015.

The SS site (Site) is located at 30 Georgia Avenue, Hampton, Henry County, Georgia. The surrounding properties are predominantly residential. A topographic map (Property Location Map) of the surrounding area is included as Figure 1. A Site Plan is presented as Figure 2.

SS began manufacturing operations at the Hampton, GA location in 1940. SS manufactures high-voltage electrical switches and fuses at its 30-acre manufacturing facility located in Hampton, Georgia. In 1986, SS conducted a focused groundwater investigation to determine the impact from an existing wastewater sludge impoundment. The results of this and subsequent investigations identified a release of select VOCs had occurred at the Property. In December 1989, SS and the Georgia Environmental Protection Division (EPD) entered into a Consent Order (Order), No. EPD-HW-529. The Property was listed on the Hazardous Site Inventory on June 30, 1997 as Site No. 10141.

Since 1986, the Property has been the subject of a number of investigations which identified the presence of volatile organic compounds in the soil and groundwater.

EMA prepared the VRPAP and submitted to EPD on October 30, 2014. EPD approved the VRPAP with conditions and comments in two letters dated April 10, 2015.

## 2.0 ACTIONS TAKEN SINCE LAST SUBMITTAL

### 2.1 GROUNDWATER PERFORMANCE MONITORING

Groundwater performance monitoring events were conducted prior to and following the second in-situ chemical oxidation injection performed in December 2015 and January 2016. The second injection event was divided into two mini-events to achieve better contact with the groundwater contaminant zone, minimize unintended contaminant movement, and minimize off-gas production. The following select monitoring wells were utilized for the groundwater performance monitoring:

#### Overburden Wells

- MW-9;
- MW-13;
- MW-18;
- MW-21;
- MW-39;
- MW-40;
- MW-41;
- TP-1;
- TP-2; and
- TP-3.

#### Round #2 Pre-Injection Groundwater Monitoring

Groundwater samples were collected prior to any ISCO injection on December 16, 2015 using low-flow purging and sampling technique referenced in USEPA Region IV's SESD Operating Procedures - Groundwater Sampling dated March 6, 2013. Peristaltic pumps using disposable Teflon tubing was used for the purging and sampling. Static groundwater level measurements were recorded at each monitoring well on December 16, 2015. The measurements were made with a pre-cleaned "Slope" electronic water level detector and were reported to the nearest 0.01-foot based on a fixed point on the top of the well casing. A potentiometric contour map for the shallow water table was prepared based on the groundwater elevations presented in Table 1 and is provided as Figure 3. The groundwater flow direction is consistent with historic monitoring events.

During the low-flow purging procedure, field measurements of reduction oxidation potential (redox), dissolved oxygen (D.O.), turbidity, pH, conductivity, and temperature were recorded. Once the field measurements stabilized for

three consecutive readings, samples were collected directly into the pre-preserved laboratory supplied containers. Monitoring well purge records are presented in Appendix A.

The groundwater samples were delivered under standard chain-of-custody (COC) protocols to Analytical Environmental Services, Inc. (AES) located in Atlanta, Georgia. AES is an accredited laboratory under the National Environmental Laboratory Accreditation Program (NELAC) (Accreditation ID: E87582). The groundwater samples were submitted for select target compound list (TCL) volatile organic compounds (VOCs) by SW-846 Method 8260B. As requested by EPD, 1,4-dioxane was also reported.

The detected TCL VOCs for this event, for the baseline event, an interim performance event conducted in September 2015 and the previous semi-annual monitoring round performed in July 2014 are summarized in Table 3. Figure 4 presents the pre-injection total VOC iso-concentration contours. The analytical report is included in Appendix A.

## 2.2 ISCO REMEDIATION

The use of the in-situ chemical oxidation (ISCO) reagent sodium persulfate to reduce the existing groundwater contamination to levels at or below the Type 4 RRS was proposed in the VRP. ISCO application was proposed at three specific areas with the following rationale:

<u>Treatment Area</u>	<u>Rationale</u>
Zone A - MW-39	suspected source zone (~ 200,000 µg/L TCE);
Zone B - TP-1 / TP-2	lateral impact area (~ 2,000 µg/L TCE); and
Zone C - MW-18	pilot study to determine saprolite/shallow bedrock treatment effectiveness on MW-32.

The objective of the ISCO was to reduce the level of TCE in the impacted zones by immediate dechlorination upon contact (residuals are carbon dioxide and water). The chemical oxidant used for this ISCO application was PeroxyChem's (formerly FMC Corporation) Klozur® sodium persulfate mixed with an activator (hydrogen peroxide) to form sulfate and hydroxyl radicals that were injected into the aquifer within the source zone areas at the Site.

Prior to the ISCO injection, a Pilot Study Notification was submitted to EPD's Underground Injection Control Program in correspondence dated June 8, 2015.

In addition, saturated soil and groundwater samples were collected from the Site in 2011 and delivered to the PeroxyChem laboratory to determine the soil oxygen demand (SOD) of the background soils. Peroxychem used this data along with the estimated horizontal and vertical extent of the groundwater contaminant zones and average TCE concentration in each of the three treatment zones to calculate the quantity of sodium persulfate and activator needed to mineralize the existing groundwater TCE contamination. The following amounts of Klorozur were determined:

Zone A - MW-39 Area

3,142 pounds to overcome SOD;  
3,672 pounds to overcome COC demand

Zone B - TP-1/TP-2 Area

826 pounds to overcome SOD;  
15 pounds to overcome COC demand

Zone C - MW-18 Area

1,469 pounds to overcome SOD;  
3 pounds to overcome COC demand

In June 2015, EMA's subcontractors, REM-CON, LLC and Geo Lab Probing Services, installed temporary injection points at each of the three treatment zones. The injection points include open screened areas targeting the contaminant zones from 12 feet (ft) below ground surface (bgs) to 35 ft bgs. The sodium persulfate reagent was injected throughout the overburden aquifer. The injection point locations are illustrated on Figure 5. Please note that only Treatment Zone A was utilized during Round #2 completed in January 2016.

The following approximate amounts of activated sodium persulfate were injected in Zone A during the period December 2015 and January 2016:

Treatment Zone A - MW-39 area -4,236 gallons @ 20% activation (7,700 pounds of Klorozur® sodium persulfate)

## 2.3 POST ISCO MONITORING EVENT

The post-injection Round #2 groundwater samples were collected from select groundwater monitoring wells on March 31, 2016 using the low-flow purging and sampling technique referenced in Section 2.1. The monitoring well purge

forms are presented in Appendix A. Static groundwater level measurements were recorded at each monitoring well on March 31, 2016. The measurements were made with a pre-cleaned "Slope" electronic water level detector and were reported to the nearest 0.01-foot based on a fixed point on the top of the well casing. A potentiometric groundwater contour map for the shallow water table was prepared based on the groundwater elevations presented in Table 2 and is provided as Figure 6. The groundwater flow direction is consistent with historic monitoring events.

Groundwater monitoring wells discussed in Section 2.1 were sampled for select TCL VOCs, including 1,4-dioxane, and were delivered under standard chain of custody protocols to AES. This subset of monitoring wells was only utilized to determine the immediate impact and effectiveness on the groundwater within the treatment areas for TCL VOCs. The detected TCL VOCs for the post-injection monitoring event are summarized in Table 3. Figure 7 presents the post-injection total VOC iso-concentration contours. The analytical report is included in Appendix A.

## 2.4 DISCUSSION AND CONCLUSIONS

### Initial Injection

The initial injection event of June 2015 resulted in a 50 percent decrease in TCE in the groundwater from the baseline event in the heart of Source Zone A (MW-39) from 215,000 micrograms per liter ( $\mu\text{g}/\text{L}$ ) to 100,000  $\mu\text{g}/\text{L}$  demonstrating that effective contact with the contaminant effectively reduced the current concentrations at the suspected source zone. The baseline and post-injection Round #1 total VOC concentrations were similar at both treatment Zone B and Zone C indicating that better contact is required in these areas.

### Second Injection

Review of the groundwater data collected in March 2016 following the Round #2 of ISCO injections indicated favorable results in all three treatment zones even though active injections were performed only within Source Zone A. The following summarizes the reductions observed at representative monitoring wells within each Treatment Zone using the baseline data collected in June 2015 as a reference:

### Treatment Zone A

MW-39: 214,900  $\mu\text{g}/\text{L}$  to 19,000  $\mu\text{g}/\text{L}$  (approximately 91% reduction);  
MW-40: 5,438  $\mu\text{g}/\text{L}$  to 1,964  $\mu\text{g}/\text{L}$  (approximately 64% reduction); and

MW-41: 4,170 µg/L to 3,051 µg/L (approximately 26% reduction).

Treatment Zone B

TP-1: 2,300 µg/L to 1,095 µg/L (approximately 52% reduction); and  
TP-2: 856 µg/L to 615 µg/L (approximately 26% reduction).

Treatment Zone C

MW-18: 106 µg/L to 5.7 µg/L (approximately 95% reduction).

Table 3 presents the summary of analytical data collected since the baseline monitoring event of June 2015. Appendix B presents total VOC trend graphs for each of the performance monitoring wells.

The reduction of contaminant concentrations from within Treatment Zone A has been significant to this point resulting in approximately 90% removal from monitoring well MW-39. This monitoring well has historically exhibited the highest contaminant concentrations on the site. The reduction is likely the result of additional activated sodium persulfate injection. The reduction of contaminant concentrations within Treatment Zones B and C are most likely due to the added time required to effectively treat the groundwater. The TCE analytical results following the second ISCO injection are still above the applicable Type 4 RRS for TCE (5.24 µg/L) at select monitoring wells. Another quarterly groundwater monitoring event is scheduled for June 2016 to monitor the effectiveness of the treatment. After review, groundwater monitoring may revert to semi-annual monitoring and include several other monitoring wells on-site. Review of the data at that time will determine whether additional injection may be required or if monitored natural attenuation (MNA) and groundwater modeling will demonstrate that the contaminant plume is effectively controlled and stabilized.

## 2.5 SOIL REMOVAL

At this time, an evaluation of the need for a stream buffer variance and associated US Army Corps of Engineer permitting is being made in order to remove the soils at location SED-4 which exceed the Type 1 RRS for polychlorinated biphenyls (PCBs). In addition to the soil at SED-4, the soils at SED-3 which also exceed the Type 1 RRS for PCBs will also be removed. It is estimated that less than 3 cubic yards of soil at each location will require removal. All soils will be characterized prior to disposal off-site. Confirmatory soil sampling will be performed at each area to document removal.

### 3.0 SCHEDULE AND FUTURE SUBMITTALS

A groundwater sampling event is scheduled for June 2016 to further assess the impact and any rebound in TCE contamination from the ISCO injections.

Review of the GA EPD watershed regulations and location of soil sample location SED-4 has indicated that a stream buffer variance will be required prior to disturbance and removal of any soil at this location. In addition, soils exceeding the Type 1 RRS of 1.55 mg/kg for PCBs will also be removed from sediment location SED-3. Appropriate applications will be submitted to further this removal.

Based on the low levels of PCBs detected within Little Bear Creek, an ecological risk assessment and encapsulation of the portion of Little Bear Creek is no longer proposed.

Additional activities for 2016 will include groundwater data evaluation and monitoring to pursue development of groundwater ACLs where appropriate to demonstrate that any off-site receptor will not be adversely impacted. Once a groundwater ACL has been agreed upon, a partial cap to cover exposed areas of the former landfill will be initiated to prevent further surface water infiltration and potential movement of any subsurface contaminants.

A Projected Milestone Schedule, showing timelines for the above items, is included in Appendix C.

Semiannual progress reports will continue to be submitted updating the progress and implementation of the VRPAP throughout the program. Additionally the Projected Milestone Schedule will be updated to show progress on the VRP objectives. The VRP Progress Report #3 will be submitted by October 15, 2016.

#### 4.0 PROFESSIONAL GEOLOGIST CERTIFICATION STATEMENT

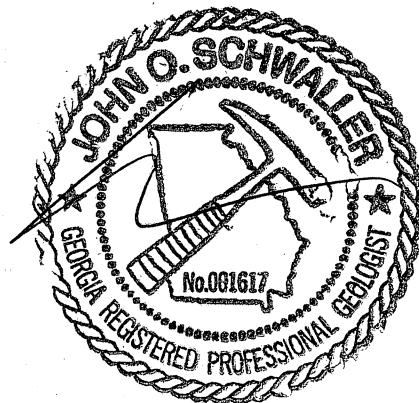
"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board 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.

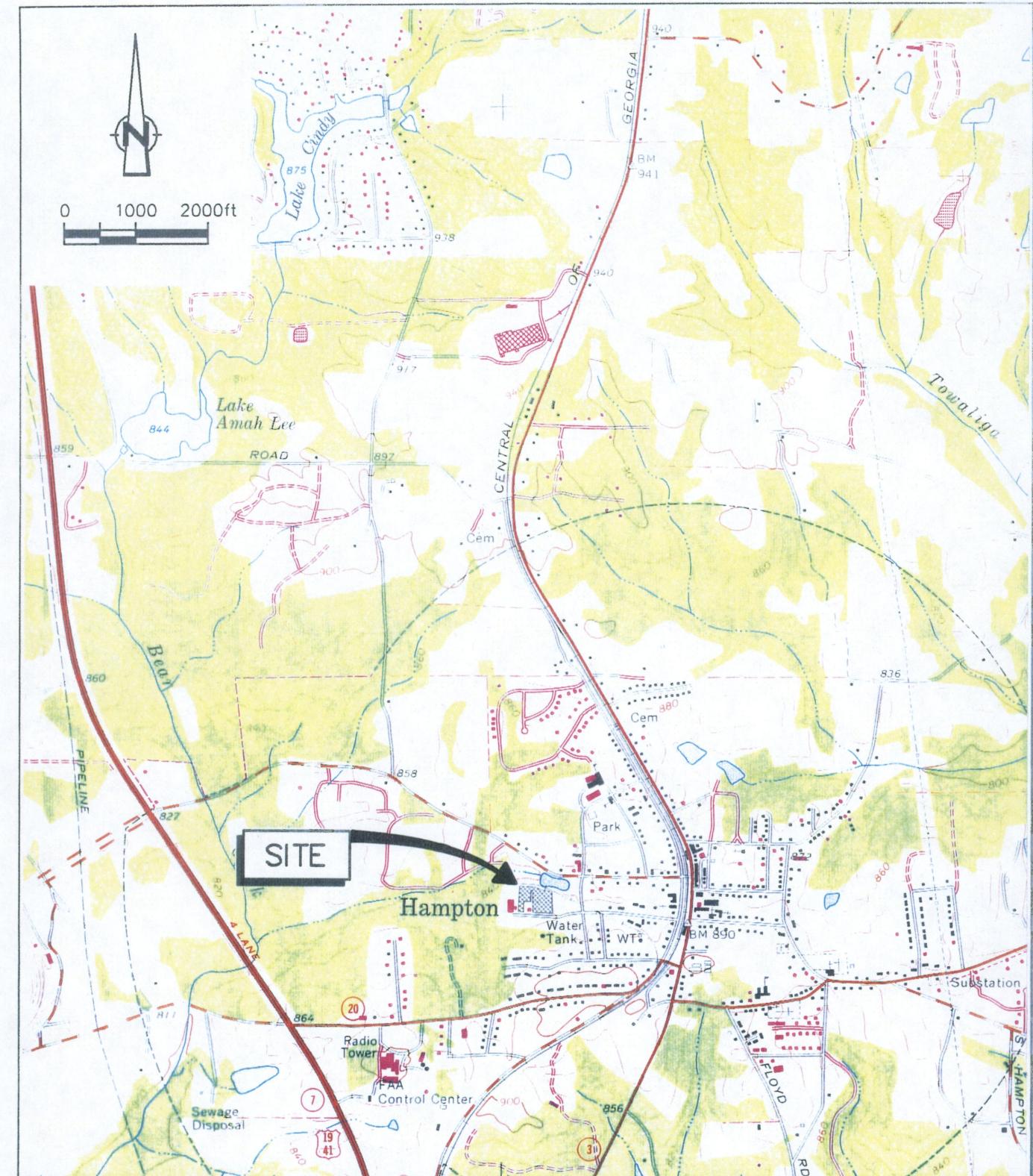
The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Mr. John O. Schwaller, P.G.  
Georgia Registration No. 1617

\_\_\_\_\_  
Signature/Stamp

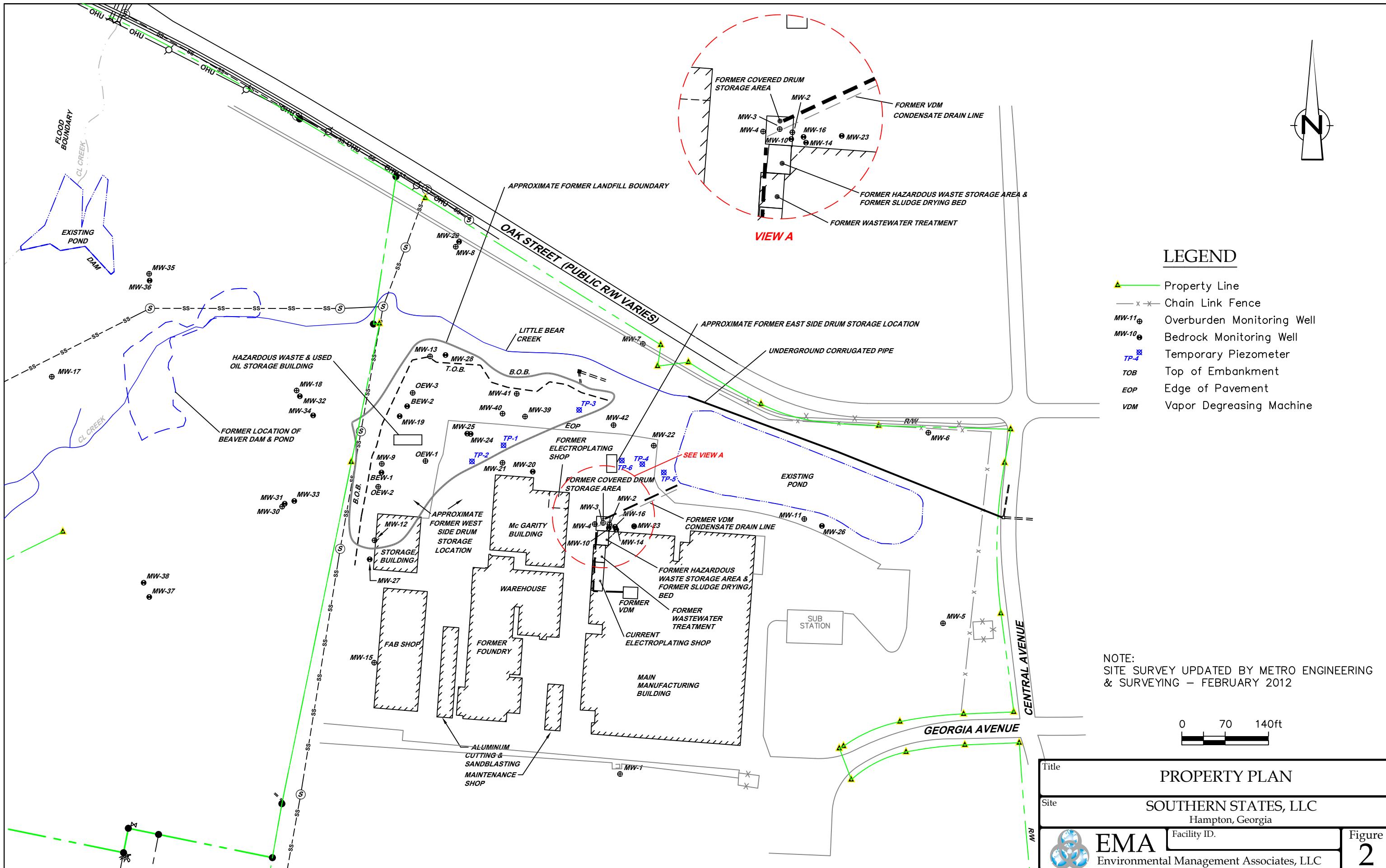


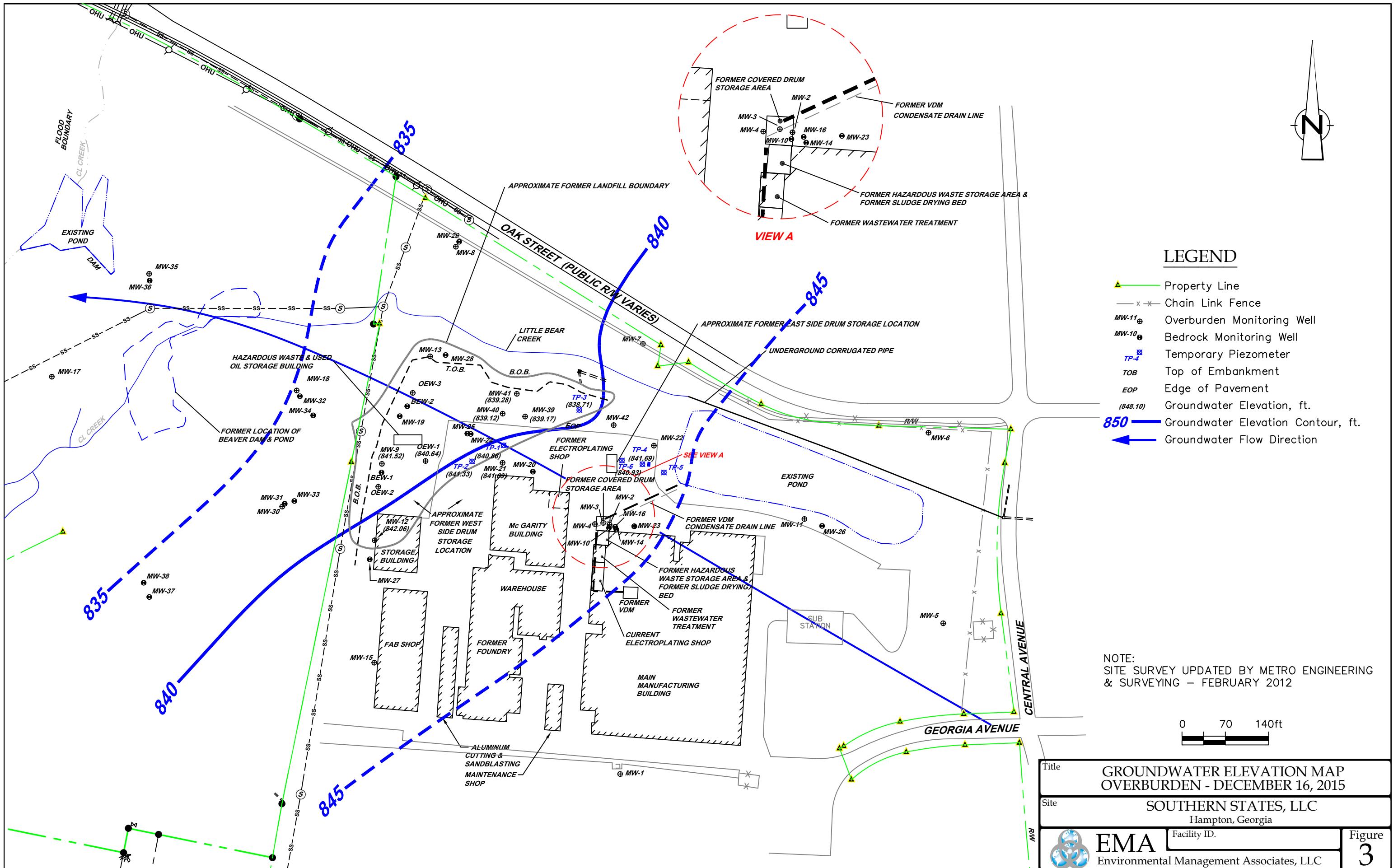
## **FIGURES**

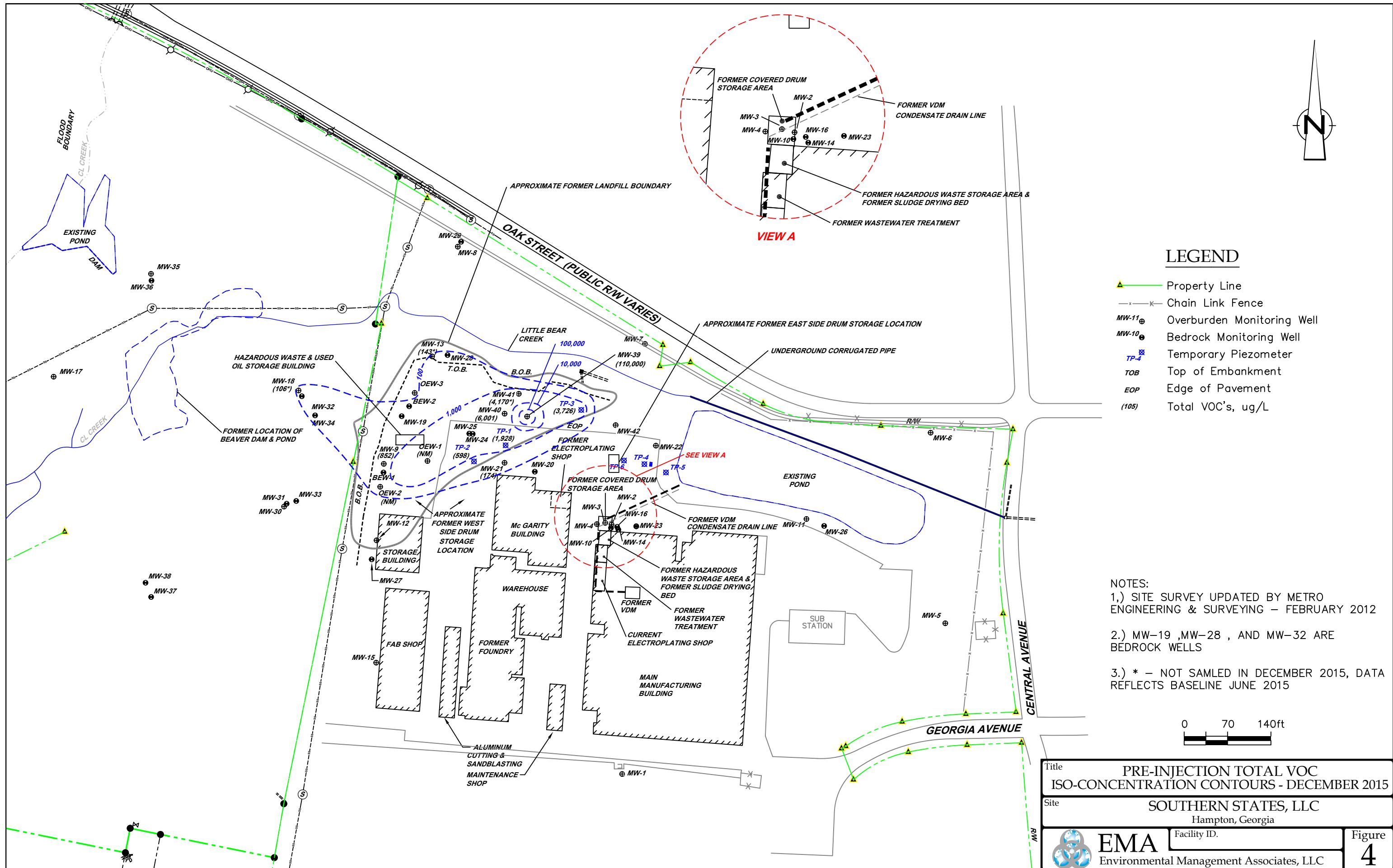


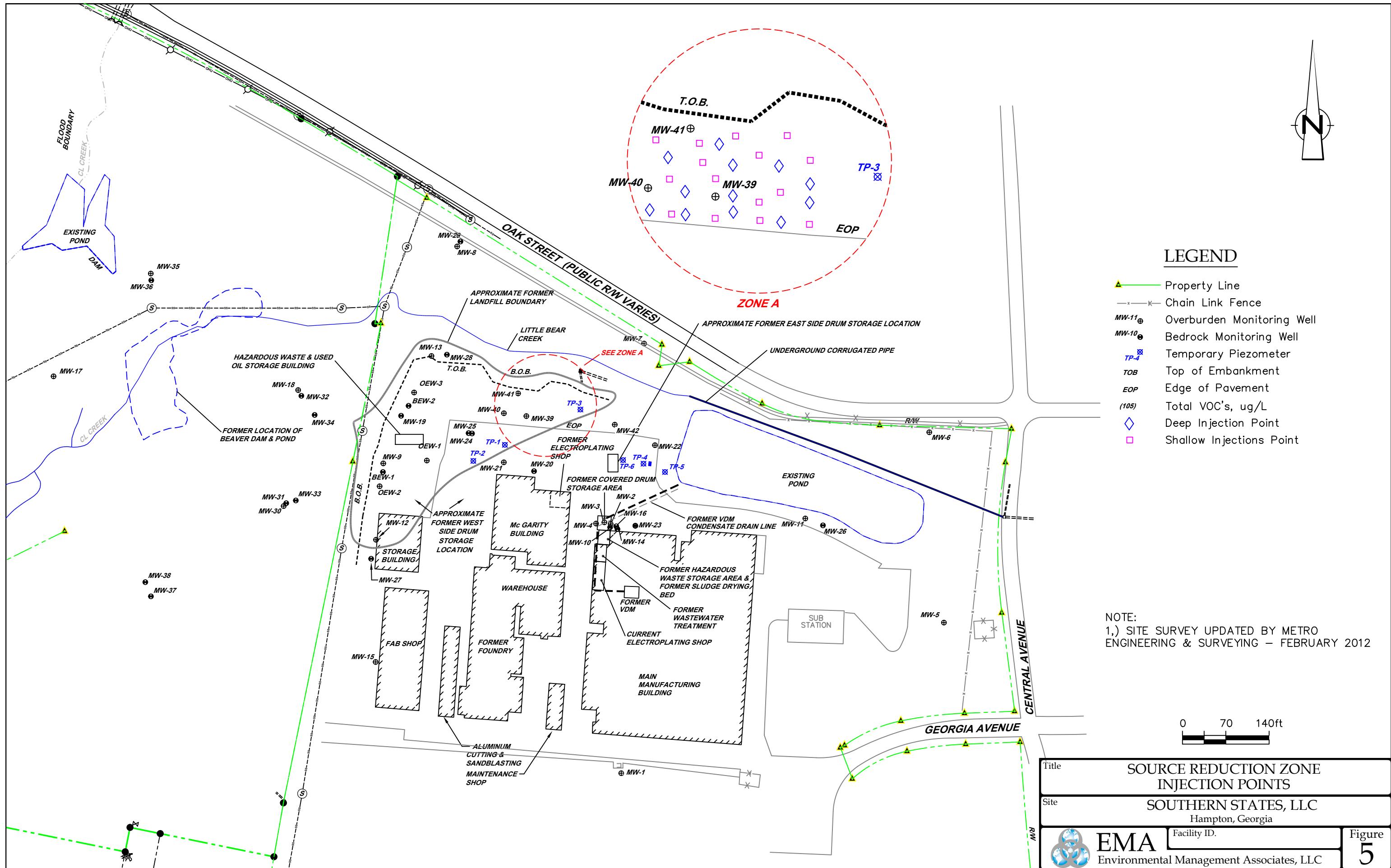
SOURCE: USGS QUADRANGLE;  
HAMPTON, GEORGIA

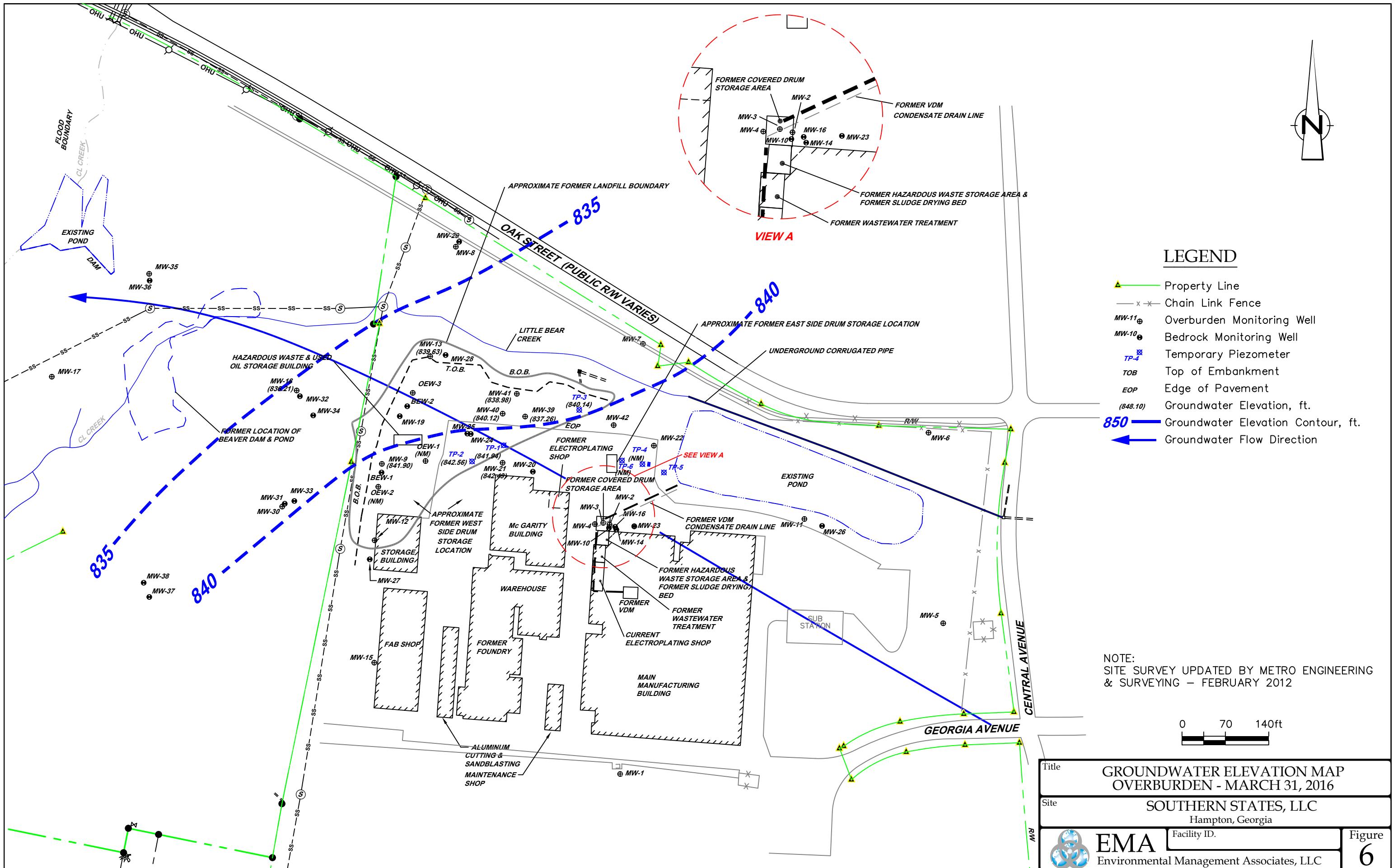
**figure 1**  
**LOCATION MAP**  
**SOUTHERN STATES SITE**  
*Hampton, Georgia*

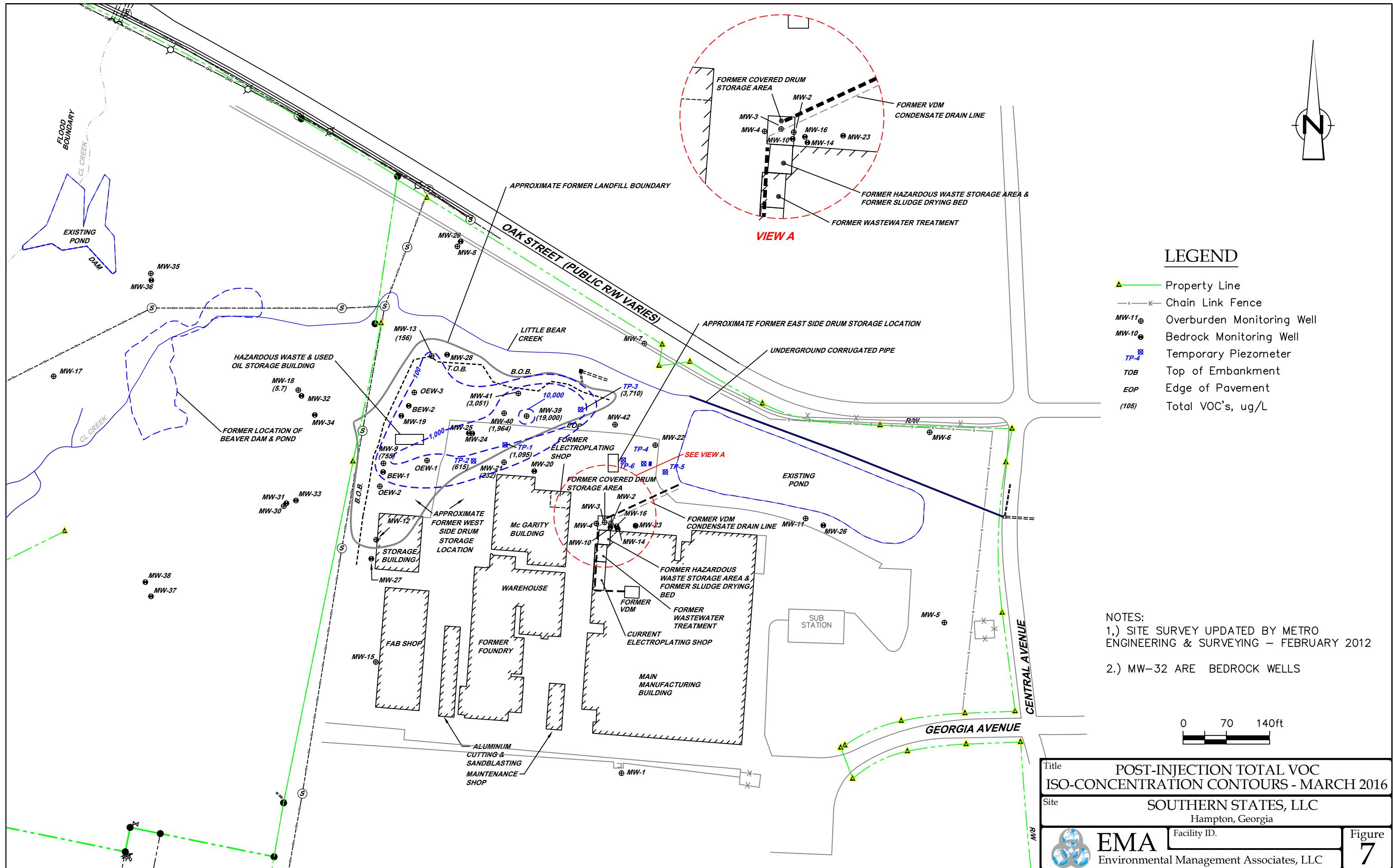












## **TABLES**

**TABLE 1**

**SUMMARY OF GROUNDWATER ELEVATIONS**  
**PERFORMANCE EVALUATION MONITORING WELLS**  
**PRE-INJECTION PERFORMANCE MONITORING ROUND #2**  
**SOUTHERN STATES, LLC.**  
**DECEMBER 16, 2015**

<i>Monitoring Well</i>	<i>Reference Elevation (ft.)</i> <sup>(1)</sup>	<i>Depth to Groundwater (ft.)</i> <sup>(2)</sup>	<i>Groundwater Elevation (ft.)</i>
MW-9	856.50	14.98	841.52
MW-13	850.30	NM	
MW-18	838.03	NM	
MW-19 <sup>(3)</sup>	850.81	NM	
MW-21	851.32	9.63	841.69
MW-28 <sup>(3)</sup>	847.20	NM	
MW-32 <sup>(3)</sup>	838.86	NM	
MW-39	848.47	9.30	839.17
MW-40	851.86	12.78	839.08
MW-41	851.38	NM	
OEW-1	855.66	NM	
OEW-2	856.90	NM	
TP-1	850.44	9.58	840.86
TP-2	851.36	10.03	841.33
TP-3	848.34	9.53	838.81
TP-4	848.96	NM	
TP-6	849.43	NM	

Notes:

<sup>(1)</sup> North Atlantic Vertical Datum in feet

<sup>(2)</sup> Feet below top of casing

<sup>(3)</sup> Bedrock Well

NM - Monitoring wells were not evaluated during this first sample round

**TABLE 2**

**SUMMARY OF GROUNDWATER ELEVATIONS**  
**PERFORMANCE EVALUATION MONITORING WELLS**  
**POST-INJECTION PERFORMANCE MONITORING ROUND #2**  
**SOUTHERN STATES, LLC.**  
**MARCH 31, 2016**

<i>Monitoring Well</i>	<i>Reference Elevation (ft.)</i> <sup>(1)</sup>	<i>Depth to Groundwater (ft.)</i> <sup>(2)</sup>	<i>Groundwater Elevation (ft.)</i>
MW-9	856.50	14.60	841.90
MW-13	850.30	10.67	839.63
MW-18	838.03	1.82	836.21
MW-19 <sup>(3)</sup>	850.81	NM	
MW-21	851.32	8.83	842.49
MW-28 <sup>(3)</sup>	847.20	NM	
MW-32 <sup>(3)</sup>	838.86	NM	
MW-39	848.47	11.21	837.26
MW-40	851.86	11.74	840.12
MW-41	851.38	12.40	838.98
OEW-1	855.66	NM	
OEW-2	856.90	NM	
TP-1	850.44	8.50	841.94
TP-2	851.36	8.8	842.56
TP-3	848.34	8.2	840.14
TP-4	848.96	NM	
TP-6	849.43	NM	

Notes:

<sup>(1)</sup> North Atlantic Vertical Datum in feet

<sup>(2)</sup> Feet below top of casing

<sup>(3)</sup> Bedrock Well

NM - Monitoring wells were not evaluated during this first sample round

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID:		MW-9	MW-9	MW-9	MW-9	MW-9	MW-13	MW-13	MW-13	MW-13	MW-13
Sample Name:		MW-9	MW-9	MW-9	MW-9	MW-9	MW-13	MW-13	MW-13	MW-13	MW-13
Sample Date:		7/1/14	6/18/15	9/3/15	12/16/15	3/31/16	7/1/14	6/18/15	9/3/15	12/16/15	3/31/16
Parameters	Units	Type 4 RRS									
<b>Volatile Organic Compounds</b>											
1,1,1-Trichloroethane	ug/L	13600	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
1,1,2-Trichloroethane	ug/L	5	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
1,1-Dichloroethane	ug/L	4000	8.5	7.2	NS	6.4	5.5	11	8.1	NS	7.6
1,1-Dichloroethene	ug/L	524	6.3	7.2	NS	6.4	5.7	36	24	NS	21
1,4-Dioxane	ug/L	-	-	150 U	NS	150 U	150 U	150 U	NS	NS	150 U
Acetone	ug/L	45620	50 U	50 U	NS	50 U	50 U	50 U	NS	NS	50 U
Carbon tetrachloride	ug/L	10.2	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
Chloroethane	ug/L	29200	10 U	10 U	NS	10 U	10 U	10 U	NS	NS	10 U
Chloroform (Trichloromethane)	ug/L	80	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
cis-1,2-Dichloroethene	ug/L	204	38	35	NS	29	24	170	84	NS	62
Methyl tert butyl ether (MTBE)	ug/L	263	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
Toluene	ug/L	5241	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
trans-1,2-Dichloroethene	ug/L	2044	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
Trichloroethene	ug/L	5.24	690	740	NS	810	720	40	23	NS	61
Vinyl chloride	ug/L	3.27	2.0 U	2.0 U	NS	2.0 U	2.0 U	2.0 U	4	NS	4
Tetrachloroethane	ug/L	98	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS	5.0 U
Total chlorinated VOCs	ug/L	NC	743	789	NS	852	755	262	143	NS	156

Notes:  
ug/L - micrograms per liter  
NC - No established criteria (remediation goal)  
5.0 U - not detected at associated method reporting limit  
100 U - estimated result reported below associated reporting limit  
- - Not analyzed  
ND - not detected  
230 - Above the Type 4 RRS  
NS - Not sampled

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID:		MW-18	MW-18	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19	MW-19	MW-19
Sample Name:		MW-18	MW-18	MW-18	MW-18	MW-18	MW-19	MW-19	MW-19	MW-19	MW-19
Sample Date:		7/2/14	6/18/15	9/3/15	12/16/15	3/31/16	7/2/14	6/18/15	9/3/15	12/16/15	3/31/16
Parameters	Units	Type 4 RRS					Type 4 RRS				
<b>Volatile Organic Compounds</b>											
1,1,1-Trichloroethane	ug/L	13600	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
1,1,2-Trichloroethane	ug/L	5	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
1,1-Dichloroethane	ug/L	4000	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
1,1-Dichloroethene	ug/L	524	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
1,4-Dioxane	ug/L	-		150 U	150 U	NS	150 U	150 U	150 U	NS	NS
Acetone	ug/L	45620	50 U	50 U	50 U	NS	50 U	50 U	50 U	NS	NS
Carbon tetrachloride	ug/L	10.2	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
Chloroethane	ug/L	29200	10 U	10 U	10 U	NS	10 U	10 U	10 U	NS	NS
Chloroform (Trichloromethane)	ug/L	80	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
cis-1,2-Dichloroethene	ug/L	204	120	72	77	NS	5.7	5.0 U	5.0 U	NS	NS
Methyl tert butyl ether (MTBE)	ug/L	263	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
Toluene	ug/L	5241	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
trans-1,2-Dichloroethene	ug/L	2044	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
Trichloroethene	ug/L	5.24	26	22	14	NS	5.0 U	14	14	NS	NS
Vinyl chloride	ug/L	3.27	20	12	14	NS	5.0 U	2.0 U	2.0 U	NS	NS
Tetrachloroethane	ug/L	98	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	NS
Total chlorinated VOCs	ug/L	NC	166	106	105	NS	5.7	14	14	NS	NS

Notes:

ug/L - micrograms per liter

NC - No established criteria (remediation goal)

5.0 U - not detected at associated method reporting limit

100 U - estimated result reported below associated reporting limit

-" - Not analyzed

ND - not detected

230 - Above the Type 4 RRS

NS - Not sampled

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID:	MW-21	MW-21	MW-21	MW-21	MW-21	MW-28	MW-28	MW-28	MW-32	MW-32	MW-32
Sample Name:	MW-21	MW-21	MW-21	MW-21	MW-21	MW-28	MW-28	MW-28	MW-32	MW-32	MW-32
Sample Date:	7/1/14	6/18/15	9/3/15	12/16/15	3/31/16	7/1/14	6/18/15	9/3/15	7/2/14	6/18/15	9/3/15
Parameters	Units	Type 4 RRS	Historic	Baseline	Post-Injection #1	Pre-injection #2	Post-injection #2	Historic	Baseline	Post-Injection #1	Historic
<b>Volatile Organic Compounds</b>											
1,1,1-Trichloroethane	ug/L	13600	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	4000	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	ug/L	524	5.0 U	9.2	NS	6.8	12	5.0 U	5.0 U	5.8	5.0 U
1,4-Dioxane	ug/L	-		150 U	NS	150 U	150 U	150 U	NS		150 U
Acetone	ug/L	45620	50 U	50 U	NS	50 U	50 U	50 U	NS	50 U	50 U
Carbon tetrachloride	ug/L	10.2	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U
Chloroethane	ug/L	29200	10 U	10 U	NS	10 U	10 U	10 U	NS	10 U	10 U
Chloroform (Trichloromethane)	ug/L	80	5.4	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	204	16	8.9	NS	6.7	5.0 U	5.0 U	NS	10	7.4
Methyl tert butyl ether (MTBE)	ug/L	263	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U
Toluene	ug/L	5241	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	2044	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U
Trichloroethene	ug/L	5.24	340	210	NS	160	210	16	15	110	110
Vinyl chloride	ug/L	3.27	2.0 U	2.0 U	NS	2.0 U	2.0 U	2.0 U	NS	2.0 U	2.0 U
Tetrachloroethane	ug/L	98	5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	NS	5.0 U	5.0 U
Total chlorinated VOCs	ug/L	NC	379	228	NS	174	232	16	15	NS	126
											128

Notes:

ug/L - micrograms per liter

NC - No established criteria (remediation goal)

5.0 U - not detected at associated method reporting limit

100 U - estimated result reported below associated reporting limit

~ - Not analyzed

ND - not detected

230 - Above the Type 4 RRS

NS - Not sampled

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID:	MW-39	MW-39	MW-39	MW-39	MW-39	MW-39	MW-40	MW-40	MW-40	MW-40	MW-40
Sample Name:	MW-39	MW-39	MW-39	MW-39	MW-39	MW-39	MW-40	MW-40	MW-40	MW-40	MW-40
Sample Date:	7/2/14	6/18/15	9/3/15	12/16/15	3/31/16	7/1/14	6/18/15	9/3/15	12/16/15	3/31/16	3/31/16
Parameters	Units	Type 4 RRS									
<b>Volatile Organic Compounds</b>											
1,1,1-Trichloroethane	ug/L	13600	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	5.0 U
1,1,2-Trichloroethane	ug/L	5	25000 U	2500 U	25000 U	5000 U	500 U	16	23	250 U	6.1
1,1-Dichloroethane	ug/L	4000	25000 U	2500 U	25000 U	5000 U	500 U	36	44	250 U	14
1,1-Dichloroethene	ug/L	524	25000 U	4900	25000 U	5000 U	500 U	42	61	250 U	61
1,4-Dioxane	ug/L	-	75000 U	750000 U	150000 U	15000 U	1500 U			7500 U	150 U
Acetone	ug/L	45620	50000 U	25000 U	50000 U	5000 U	500 U	50 U	50 U	2500 U	50 U
Carbon tetrachloride	ug/L	10.2	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	5.0 U
Chloroethane	ug/L	29200	25000 U	2500 U	25000 U	10000 U	1000 U	10 U	10 U	500 U	10 U
Chloroform (Trichloromethane)	ug/L	80	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	5.3
cis-1,2-Dichloroethene	ug/L	204	25000 U	2500 U	25000 U	5000 U	500 U	1500	1700	1600	720
Methyl tert butyl ether (MTBE)	ug/L	263	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	5.0 U
Toluene	ug/L	5241	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	5.0 U
trans-1,2-Dichloroethene	ug/L	2044	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	6.9
Trichloroethylene	ug/L	5.24	200,000	210,000	100,000	110,000	19,000	2100	3500	3200	5200
Vinyl chloride	ug/L	3.27	10000 U	1000 U	10000 U	5000 U	500 U	100	110	140	8.8
Tetrachloroethane	ug/L	98	25000 U	2500 U	25000 U	5000 U	500 U	5.0 U	5.0 U	250 U	120
Total chlorinated VOCs	ug/L	NC	200,000	214,900	100,000	110,000	19,000	3794	5438	4940	6001
											1964

Notes:  
ug/L - micrograms per liter  
NC - No established criteria (remediation goal)  
5.0 U - not detected at associated method reporting limit  
100 U - estimated result reported below associated reporting limit  
- - Not analyzed  
ND - not detected  
230 - Above the Type 4 RRS  
NS - Not sampled

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID:	MW-41	MW-41	MW-41	MW-41	MW-41	OEW-1	OEW-1	OEW-1	OEW-2	OEW-2	OEW-2
Sample Name:	MW-41	MW-41	MW-41	MW-41	MW-41	OEW-1	OEW-1	OEW-1	OEW-2	OEW-2	OEW-2
Sample Date:	7/1/14	6/18/15	9/3/15	12/16/15	3/31/16	7/2/14	6/18/15	9/3/15	7/1/14	6/18/15	9/3/15
Parameters	Units	Type 4 RRS	Historic	Baseline	Post-Injection #1	Pre-injection #2	Post-injection #2	Historic	Baseline	Post-Injection #1	Historic
<b>Volatile Organic Compounds</b>											
1,1,1-Trichloroethane	ug/L	13600	5.0 U	250 U	250 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5	5.0 U	250 U	250 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	4000	23	250 U	250 U	NS	16	5.0 U	5.0 U	5.2	5.5
1,1-Dichloroethene	ug/L	524	24	250 U	250 U	NS	24	5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	ug/L	-		7500 U	7500 U	NS	150 U	150 U	NS	150 U	NS
Acetone	ug/L	45620	50 U	250 U	2500 U	NS	50 U	50 U	NS	50 U	50 U
Carbon tetrachloride	ug/L	10.2	5.0 U	250 U	250 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
Chloroethane	ug/L	29200	10 U	250 U	500 U	NS	10 U	10 U	NS	10 U	10 U
Chloroform (Trichloromethane)	ug/L	80	5.0 U	250 U	250 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
cis-1,2-Dichloroethene	ug/L	204	880	670	690	NS	200	110	120	200	220
Methyl tert butyl ether (MTBE)	ug/L	263	5.0 U	250 U	5.0 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
Toluene	ug/L	5241	5.0 U	250 U	5.0 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
trans-1,2-Dichloroethene	ug/L	2044	5.0 U	250 U	5.0 U	NS	5.0 U	5.0 U	NS	5.0 U	5.0 U
Trichloroethene	ug/L	5.24	2800	3500	4400	NS	2800	6.3	7.3	300	220
Vinyl chloride	ug/L	3.27	6.8	100 U	100 U	NS	4.2	28	31	15	17
Tetrachloroethane	ug/L	98	7.3	250 U	250 U	NS	6.3	5.0 U	5.0 U	5.0 U	5.0 U
Total chlorinated VOCs	ug/L	NC	3741	4170	5090	NS	3051	152	158	520	457

Notes:

ug/L - micrograms per liter

NC - No established criteria (remediation goal)

5.0 U - not detected at associated method reporting limit

100 U - estimated result reported below associated reporting limit

“-” Not analyzed

ND - not detected

280 - Above the Type 4 RRS

NS - Not sampled

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID: Sample Name: Sample Date:	Parameters	Units	Type 4 RRS	TP-1 Historic	TP-1 6/18/15	TP-1 9/3/15	TP-1 12/16/15	TP-1 3/31/16	TP-2 Historic	TP-2 6/18/15	TP-2 9/3/15	TP-2 12/16/15	TP-2 3/31/16	
				Baseline	Post-Injection #1	Pre-injection #2	Post-injection #2		Baseline	Post-Injection #1	Pre-injection #2	Post-injection #2		
<b>Volatile Organic Compounds</b>														
1,1,1-Trichloroethane	ug/L	13600	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	ug/L	5	19	250 U	18	12	5.5		5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	ug/L	4000	7.5	250 U	7.8	6	5.3		16	16	13	12	11	
1,1-Dichloroethene	ug/L	524	5.0 U	250 U	6.1	6.1	5.0 U		79	68	47	40	32	
1,4-Dioxane	ug/L	-		7500 U	150 U	150 U	150 U		150 U	150 U	150 U	150 U	150 U	
Acetone	ug/L	45620	50 U	250 U	5.0 U	5.0 U	5.0 U	50 U	50 U	50 U	50 U	50 U	50 U	
Carbon tetrachloride	ug/L	10.2	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Chloroethane	ug/L	29200	10 U	250 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	
Chloroform (Trichloromethane)	ug/L	80	26	250 U	24	17	15	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
cis-1,2-Dichloroethene	ug/L	204	110	250 U	110	87	69	43	46	48	41	37		
Methyl tert butyl ether (MTBE)	ug/L	263	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Toluene	ug/L	5241	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
trans-1,2-Dichloroethene	ug/L	2044	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Trichloroethene	ug/L	5.24	2400	2300	2300	1800	1000	900	720	500	500	500	530	
Vinyl chloride	ug/L	3.27	3.8	250 U	3.3	2.0 U	2.0 U	6.3	5.7	9.8	4.8	5.0		
Tetrachloroethane	ug/L	98	5.0 U	250 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	
Total chlorinated VOCs	ug/L	NC	2566	2300	2469		1928	1095	1044	856	618	598	615	

Notes:

ug/L - micrograms per liter

NC - No established criteria (remediation goal)

5.0 U - not detected at associated method reporting limit

100 U - estimated result reported below associated reporting limit

~ - Not analyzed

ND - not detected

230 - Above the Type 4 RRS

NS - Not sampled

**TABLE 3**  
**SUMMARY OF DETECTED COMPOUNDS - PERFORMANCE MONITORING WELLS**  
**SOUTHERN STATES, LLC.**  
**HAMPTON, GEORGIA**

Location ID: Sample Name: Sample Date:	Parameters	Units	Type 4 RRS	TP-3	TP-3	TP-3	TP-3	TP-3	TP-4	TP-4	TP-4	TP-6	TP-6	TP-6				
				7/2/14	6/18/15	9/3/15	12/16/15	3/31/16	7/2/14	6/18/15	9/3/15	7/2/14	6/18/15	9/3/15				
<b>Volatile Organic Compounds</b>																		
1,1,1-Trichloroethane	ug/L	13600		540	510	NS	830	760	1900	2800	NS	670	3400	NS				
1,1,2-Trichloroethane	ug/L	5		5.0 U	5.0 U	NS	5.0 U	5.0 U	5 U	250 U	NS	5.0 U	500 U	NS				
1,1-Dichloroethane	ug/L	4000		470	660	NS	780	840	650	770	NS	470	2100	NS				
1,1-Dichloroethene	ug/L	524		1000	1300	NS	1300	1300	260	390	NS	370	1200	NS				
1,4-Dioxane	ug/L	-		150 U	NS	150 U	150 U	150 U	NS	150 U	NS	150 U	NS	NS				
Acetone	ug/L	45620		50 U	50 U	NS	50 U	50 U	50 U	2500 U	NS	5.0 U	5000 U	NS				
Carbon tetrachloride	ug/L	10.2		5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	250 U	NS	5.0 U	500 U	NS				
Chloroethane	ug/L	29200		11	11	NS	15	18	10 U	500 U	NS	30	1000 U	NS				
Chloroform (Trichloromethane)	ug/L	80		5.0 U	5.0 U	NS	5.0 U	5.0 U	30	250 U	NS	5.0 U	500 U	NS				
cis-1,2-Dichloroethene	ug/L	204		55	63	NS	56	46	5.0 U	250 U	NS	5.0 U	500 U	NS				
Methyl tert butyl ether (MTBE)	ug/L	263		5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	250 U	NS	5.0 U	500 U	NS				
Toluene	ug/L	5241		5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	250 U	NS	5.0 U	500 U	NS				
trans-1,2-Dichloroethene	ug/L	2044		5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	250 U	NS	5.0 U	500 U	NS				
Trichloroethene	ug/L	5.24		590	760	NS	730	730	5.0 U	250 U	NS	5.0 U	500 U	NS				
Vinyl chloride	ug/L	3.27		13	13	NS	15	16	3.5	100 U	NS	8.1	200 U	NS				
Tetrachloroethane	ug/L	98		5.0 U	5.0 U	NS	5.0 U	5.0 U	5.0 U	250 U	NS	5.0 U	500 U	NS				
Total chlorinated VOCs	ug/L	NC		2679	3317	NS	3726	3710	3113	3960	NS	1548	6700	NS				

Notes:  
ug/L - micrograms per liter  
NC - No established criteria (remediation goal)  
5.0 U - not detected at associated method reporting limit  
100 U - estimated result reported below associated reporting limit  
"-" Not analyzed  
ND - not detected  
230 - Above the Type 4 RRS  
NS - Not sampled

**APPENDIX A**  
**GROUNDWATER PURGE FORMS**  
**&**  
**ANALYTICAL LABORATORY REPORTS**

**MONITORING WELL RECORD FOR LOW-FLOW PURGING**

**Project Data:**

Project Name: Southern States LLC

Ref. No.:

Date: 12/16/05  
Personnel:

**Monitoring Well Data:**

Well No.: MW - 9  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 35  
 Measured Well Depth (ft):  
 Depth of Sediment (ft): N/A

Screen Length (ft):  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 30  
 Well Diameter, D (in): 8.2  
 Well Screen Volume, V<sub>s</sub> (mL):  
 Initial Depth to Water (ft): 27.38

Drawdown								
Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Temperature		ORP (mV)	DO (mg/L)	Turbidity (NTU)
				pH	°C (mS/cm)			
1448	60	14.58		6.17	20.61	2.151	4.00	4.51
1440		15.08		6.18	20.70	2.153	4.40	6.8
1423		15.10		6.20	20.78	2.150	2.55	4.20
1430		15.14		6.23	20.91	2.154	2.38	4.17
1435		15.18		6.21	20.98	2.165	2.80	4.30
1440		15.16		6.20	20.61	2.165	2.70	2.6
1448		15.16		6.21	20.65	2.184	4.22	2.1
Sample ID:	VOCs							

Notes:

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

### MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC  
 Ref. No.: \_\_\_\_\_

 Date: 12/16/16

 Personnel: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Monitoring Well Data:**

Well No.: MW-21  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 24  
 Measured Well Depth (ft): \_\_\_\_\_  
 Depth of Sediment (ft): N/A

Screen Length (ft): \_\_\_\_\_  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 21  
 Well Diameter, D (in): 12  
 Well Screen Volume, V<sub>s</sub> (mL): \_\_\_\_\_  
 Initial Depth to Water (ft): 3.63

*Drawdown*

Time	Pumping Rate (mL/min)	Depth to Water Level (ft)	from Initial		Temperature °C	Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
			pH	Precision Required: ±0.1 Yrto ±1%					
1340	60	9.63	6.41	21.80	0.314	188	3.10	7.6	
1343		9.18	6.32	21.60	0.305	210	2.08	10.4	
1345		9.70	6.25	21.75	0.310	230	2.00	11.2	
1350		9.75	6.28	21.60	0.301	216	2.55	7.4	
1355		9.80	6.20	21.58	0.298	238	2.00	7.6	
1400		9.70	6.21	21.60	0.295	420	1.89	5.4	
1405		9.81	6.25	21.60	0.295	412	1.06	5.4	
1410		9.85	6.26	21.61	0.295	409	1.04	5.7	
Sample ID:									
	VOCS								

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing)

## MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC

Ref. No.:

Date:

 12/16/15  
TJ

Personnel:

<b>Monitoring Well Data:</b>			
Well No.:	MW-39	Screen Length (ft):	1
Measurement Point:	TOC	Depth to Pump Intake (ft) (n):	
Constructed Well Depth (ft):		Well Diameter, D (in):	62
Measured Well Depth (ft):		Well Screen Volume, V <sub>s</sub> (mL):	
Depth of Sediment (ft):	N/A	Initial Depth to Water (ft):	230

**Drawdown**

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level (ft)	from Initial						
				Precision Required:	pH	Temperature (°C)	Conductivity (mS/cm)	ORP (mV)		
1020	55	7.30		±0.1 Yards	6.35	21.38	2143	225	1.76	4.8
1030		7.40			6.30	21.45	2444	220	1.80	4.0
1038		7.45			6.35	21.65	2450	221	1.82	2.6
1040		7.50			6.36	21.80	2475	218	1.78	2.1
1043		7.46			6.31	22.18	2448	220	1.70	2.9
1050		7.40			6.35	21.70	2449	216	1.73	2.5
1053		7.42			6.36	21.37	2449	224	1.75	2.2
Sample ID:										
	VOCS									

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

### MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC  
 Ref. No.: \_\_\_\_\_

Date: 12/16/15

Personnel:  
JJ

**Monitoring Well Data:**

Well No.: MW-40  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 32  
 Measured Well Depth (ft): \_\_\_\_\_  
 Depth of Sediment (ft): N/A

Screen Length (ft): \_\_\_\_\_  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 28  
 Well Diameter, D (in): 82  
 Well Screen Volume, V<sub>s</sub> (mL): \_\_\_\_\_  
 Initial Depth to Water (ft): 12.78

**Drawdown**

Time (mL/min)	Pumping Rate (mL/min)	Depth to Water Level <sup>(2)</sup> (ft)	Water Level <sup>(2)</sup> (ft)	Temperature		Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
				pH	°C				
1100	60	12.78	6.10	20.70	2.905	309	14.38	2.4	
1108	12.5	6.10	20.75	20.910	313	14.40	6.2		
1113	12.50	6.10	20.70	20.917	316	14.30	5.1		
1120	12.58	6.10	20.78	20.918	317	14.35	6.3		
1125	12.50	6.10	20.68	20.917	318	14.30	7.7		
Sample ID:									
	VOCS								

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing)

### MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

 Project Name: Southern States LLC  
 Ref. No.: \_\_\_\_\_

 Date: 12/16/15

 Personnel: J.S.
**Monitoring Well Data:**

 Well No: TQ-1  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 22  
 Measured Well Depth (ft): \_\_\_\_\_  
 Depth of Sediment (ft): N/A

 Screen Length (ft): 15  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 15  
 Well Diameter, D (in): 2  
 Well Screen Volume, V<sub>s</sub> (mL): \_\_\_\_\_  
 Initial Depth to Water (ft): 2.58
*Drawdown*

Time (mL/min)	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Temperature		Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
				pH	°C				
12.70	5.5	5.58		5.50	22.60	0.310	316	2.10	5.6
12.38	1	5.65		5.41	22.40	0.359	713	2.90	5.0
12.45	1	5.70		5.42	22.50	0.358	740	2.10	7.6
12.50	1	5.78		5.40	22.35	0.359	320	2.02	3.2
12.55	1	5.85		5.40	22.37	0.359	723	2.00	3.1
Sample ID:									
	VOCs								

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

## MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC

Ref. No.:

Date:

12/16/15  
JJ

Personnel:

### Monitoring Well Data:

Well No.:

TP-2

Measurement Point:

TOC

Constructed Well Depth (ft):

Well Screen Volume,  $V_s$  (mL):

Measured Well Depth (ft):

N/A

Depth of Sediment (ft):

Initial Depth to Water (ft):

10.03

### Drawdown

Time (mL/min)	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level (ft)	from Initial		Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
				Precision Required: ±0.1 Yards	±3%					
1308	0	10.03		5.56	22.60	0.181	112	2.15	3.8	
1310		10.10		5.60	22.70	0.175	280	2.01	5.2	
1315		10.15		5.58	22.50	0.190	224	1.90	7.4	
1720		10.25		5.56	22.60	0.188	336	0.95	2.8	
1728		10.26		5.58	22.40	0.165	340	0.38	1.6	
1730		10.28		5.56	22.26	0.165	242	0.99	1.8	
Sample ID:										
	VOCs									

**Notes:**

The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.

For conductivity, the average value of three readings <1 mS/cm ± 0.005 mS/cm or where conductivity >1 mS/cm ± 0.01 mS/cm.

Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

**MONITORING WELL RECORD FOR LOW-FLOW PURGING**

**Project Data:**

Project Name: Southern States LLC

Ref. No.: \_\_\_\_\_

Date: 12/11/15

Personnel: \_\_\_\_\_

**Monitoring Well Data:**

Well No.: T8-3  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 30  
 Measured Well Depth (ft): \_\_\_\_\_  
 Depth of Sediment (ft): N/A

Screen Length (ft):  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 20  
 Well Diameter, D (in): 8.2  
 Well Screen Volume, V<sub>s</sub> (mL):  
 Initial Depth to Water (ft): 9.53

*Drawdown*

Time (mL/min)	Rate (ft)	Depth to Water Level <sup>(2)</sup> (ft)	Temperature			Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
			pH	°C	±0.005 or 0.01				
1140	5.5	9.53	6.70	20.50	0.285	180	1.75	16.3	
1143		8.45	6.75	20.58	0.275	173	1.71	11.6	
1145		7.65	6.79	20.63	0.274	160	1.60	4.8	
1155		5.77	6.84	20.70	0.253	148	1.51	6.3	
1200		7.70	6.85	20.86	0.252	140	1.45	7.2	
1205		8.78	6.85	20.91	0.252	144	1.49	6.2	
Sample ID:									
	VOCS								

Notes:

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

### MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

 Project Name: Southern States LLC  
 Ref. No.: \_\_\_\_\_

 Date: 2/31/11  
 Personnel: \_\_\_\_\_

**Monitoring Well Data:**

 Well No.: MW - 9  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 35  
 Measured Well Depth (ft):  
 Depth of Sediment (ft): N/A

 Screen Length (ft):  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 20  
 Well Diameter, D (in): 42  
 Well Screen Volume, V<sub>s</sub> (mL):  
 Initial Depth to Water (ft): 14.60

*Drawdown*

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Precision Required:		Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
				±0.1 Yards	±2%					
1353	55	14.60		5.70	22.25	0.211	180	3.9	14.3	
1255		14.65		5.72	22.10	0.210	165	2.1	11.2	
1400		14.80		5.70	22.15	0.205	170	2.6	6.1	
1408		14.85		5.67	22.16	2.205	168	2.1	5.4	
1413		14.85		5.69	22.17	0.205	172	2.2	2.80	
Sample ID:	100		VOCS							

**Notes:**

- The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (1) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (2) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- (3) Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing)

### MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

 Project Name: Southern States LLC

Ref. No.:

Date:

3/21/16

Personnel:

**Monitoring Well Data:**

Well No.:

MW - 13

Screen Length (ft):

15

 Depth to Pump Intake (ft)<sup>(1)</sup>:

10

Well Diameter, D (in):

42

 Well Screen Volume, V<sub>s</sub> (mL):

10.67

Initial Depth to Water (ft):

10.67
**Drawdown**

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Temperature Conductivity <sup>(3)</sup> ORP DO Turbidity					
				pH	°C	(mS/cm)	(mV)	(mg/L)	
13/0	60	10.67		6.38	20.50	0.500	-10	2.3	16.8
13/8		10.70		6.35	20.75	0.476	-10	1.30	17.4
13/29		10.57		6.30	20.90	0.475	-21	1.70	9.3
13/28		10.55		6.35	20.50	0.476	-20	1.70	8.3
13/43		10.90		6.32	20.13	0.478	-23	1.10	9.4
Sample ID:	VOCs								

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing)

## MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC

Ref. No.:

Date: 2/21/16

Personnel:

**Monitoring Well Data:**

Well No.: MU-18  
 Measurement Point: TOC  
 Constructed Well Depth (ft): 15  
 Measured Well Depth (ft):  
 Depth of Sediment (ft): N/A

Screen Length (ft):  
 Depth to Pump Intake (ft)<sup>(1)</sup>: 10  
 Well Diameter, D (in): 6.2  
 Well Screen Volume, V<sub>s</sub> (mL):  
 Initial Depth to Water (ft): 1.82

Drawdown		Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Temperature		Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
Time	from Initial				pH	<sup>o</sup> C				
1425	5.2	1.82	4.50	16.71	8.02	240	3.05	11.4		
1430	1	1.85	5.02	16.75	8.30	316	2.16	7.8		
1435		1.80	4.85	16.65	8.783	318	2.15	6.4		
1440		2.10	4.80	16.70	9.783	217	2.18	7.6		
1445		2.08	4.80	16.62	9.783	319	2.20	2.80		
Sample ID:	VOCs									

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

# MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC  
Ref. No.: \_\_\_\_\_

Date: 3/21/16  
Personnel: \_\_\_\_\_

**Monitoring Well Data:**

Well No.:	<u>MW-21</u>	Screen Length (ft):	<u>50</u>
Measurement Point:	<u>TOC</u>	Depth to Pump Intake (ft)(n):	<u>26</u>
Constructed Well Depth (ft):	<u>24</u>	Well Diameter, D (in):	<u>6.2</u>
Measured Well Depth (ft):	<u></u>	Well Screen Volume, V <sub>s</sub> (mL):	<u></u>
Depth of Sediment (ft):	<u>N/A</u>	Initial Depth to Water (ft):	<u>8.67</u>

Drawdown

Time (mL/min)	Pumping Rate (ft)	Depth to Water Level <sup>(a)</sup> (ft)	from Initial	Precision Required:	Screen Length (ft):				
			pH	<sup>o</sup> C	(mS/cm)	(mV)	(mg/L)	(NTU)	
1457	60	8.67	6.21	±0.1	6.5	0.201	74	6.55	18.2
1500	70	7.05	6.18	±0.1	6.1	2.50	9.151	55	66.1
1503	71	2.12	6.13	±0.1	5.8	21.80	2.160	50	2.12
1510	75	5.15	6.10	±0.005 or ±0.01	5.5	21.50	21.165	50	2.08
1525	75	3.15	6.10	±0.005 or ±0.01	5.5	21.40	3.185	55	2.16

Temperature <sup>(b)</sup> <sup>o</sup> C	Conductivity <sup>(c)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
6.1	6.55	18.2	1.8	10
5.8	55	55	1.6	20
5.5	55	55	1.5	2.08
5.5	55	55	1.5	2.16

Sample ID:

VOCS

Notes:

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

**MONITORING WELL RECORD FOR LOW-FLOW PURGING**

**Project Data:**

Project Name: Southern States LLC

Ref No.: \_\_\_\_\_

Date: 3/31/16

Personnel: JG

**Monitoring Well Data:**

Well No.: MW-29

Screen Length (ft):

Depth to Pump Intake (ft) (1): 22

Measurement Point: TOC

Well Diameter, D (in): 62

Constructed Well Depth (ft): 32

Measured Well Depth (ft): 32

Measured Well Depth (ft): N/A

Depth of Sediment (ft): \_\_\_\_\_

Depth of Sediment (ft):

Initial Depth to Water (ft): 71.2

*Drawdown*

Time (mL/min)	Rate (ft)	Water Level (2) (ft)	Depth to from Initial		Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
			pH	Precision Required: ±0.1 Yvarσ ±3%					
1010	60	71.21	4.65	22.14	6.85	324	24.02	16.1	
1015		71.30	7.80	22.16	2.56	500	24.60	18.2	
1020		71.40	7.10	22.30	2.58	575	24.10	21.7	
1025		71.48	3.00	22.10	2.55	560	24.50	6.7	
1030		71.45	3.00	22.17	2.55	565	24.43	3.4	
Sample ID:	VOC								

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings < 1 mS/cm ± 0.005 mS/cm or where conductivity > 1 mS/cm ± 0.01 mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

## MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC

Date:

7/31/16

Ref. No.:

Personnel:

**Monitoring Well Data:**

Measurement Point:	TOC	Screen Length (ft):	
Constructed Well Depth (ft):	72	Depth to Pump Intake (ft) <sup>(1)</sup> :	25
Measured Well Depth (ft):		Well Diameter, D (in):	62
Depth of Sediment (ft):	N/A	Well Screen Volume, V <sub>s</sub> (mL):	

Drawdown									
Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup>	from Initial					
				Temperature	Conductivity <sup>(3)</sup>	ORP (mV)	DO (mg/L)		
Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup>	pH	°C	(mS/cm)	(mV)		
10:25	53	11.74		9.40	22.08	0.515	31.7	23.10	12.2
10:38				4.29	22.16	0.651	76.0	23.16	7.6
10:43				4.30	22.25	0.650	76.5	22.90	8.1
10:50				4.28	22.60	0.655	37.0	22.00	5.4
10:55				4.38	22.69	0.655	36.6	23.17	7.9
Sample ID:	VOCs								

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
  - (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
  - (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm.
- Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

**MONITORING WELL RECORD FOR LOW-FLOW PURGING**

**Project Data:**

Project Name: Southern States LLC  
Ref. No.: \_\_\_\_\_

Date: 3/21/16  
Personnel: JF

**Monitoring Well Data:**

Well No.: MW. 41  
Measurement Point: TOC  
Constructed Well Depth (ft): 72  
Measured Well Depth (ft):  
Depth of Sediment (ft): N/A

Screen Length (ft):  
Depth to Pump Intake (ft) (a): 20  
Well Diameter, D (in): 22  
Well Screen Volume, V<sub>s</sub> (mL):  
Initial Depth to Water (ft): 72.40

*Drawdown*

Time (mL/min)	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(a)</sup> (ft)	Temperature				Conductivity <sup>(a)</sup> (mS/cm)		ORP (mV)		DO (mg/L)		Turbidity (NTU)
				pH	°C	±0.1 Yrvar	±2%	±0.005 or 0.01	±10 mV	±10%	±10%	±10%		
11.0	60	72.40	6.10	23.10	0.518	216	6.71	22.10						
11.5	12.50		6.02	22.10	1.18	312	10.10	15.3						
11.8	12.50		5.45	22.16	1.15	348	12.14	7.5						
11.24	50		5.55	22.50	1.20	320	16.00	6.2						
11.70	12.60		5.40	22.41	1.14	365	11.16	3.1						
11.35	12.55		5.45	22.30	1.10	320	11.10	4.5						
11.43	12.60		5.45	22.22	1.13	372	11.08	3.8						

**Sample ID:**

VOCs

**Notes:**

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

**MONITORING WELL RECORD FOR LOW-FLOW PURGING**

**Project Data:**

Project Name: Southern States LLC  
Ref. No.: \_\_\_\_\_

Date: 7/26/16  
Personnel: \_\_\_\_\_

**Monitoring Well Data:**

Well No.: TOC  
Measurement Point: TOC  
Constructed Well Depth (ft): 22  
Measured Well Depth (ft): \_\_\_\_\_  
Depth of Sediment (ft): N/A

Screen Length (ft): 15  
Depth to Pump Intake (ft) (1): 15  
Well Diameter, D (in): 12  
Well Screen Volume,  $V_s$  (mL): 8.570  
Initial Depth to Water (ft): 8.570

**Drawdown**

Time (mL/min)	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level (2) (ft)	Temperature		Conductivity (3) (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
				pH	$^{\circ}$ C				
1155	50	8.570	6.10	22.54	0.510	255	3.15	16.4	
1200	60	8.570	5.02	22.61	0.520	250	3.24	11.6	
1210	61	8.570	4.58	22.18	0.514	274	3.16	5.5	
1218	61	8.570	4.41	22.10	0.533	285	2.10	8.0	
1225	61	8.570	4.40	22.13	0.577	250	3.10	8.1	
1228	61	8.570	4.40	22.23	0.551	285	2.11	8.2	
Sample ID:									
	VOCS								

Notes:

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm  $\pm 0.005$  mS/cm or where conductivity >1 mS/cm  $\pm 0.01$  mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

## MONITORING WELL RECORD FOR LOW-FLOW PURGING

### Project Data:

Project Name: Southern States LLC  
 Ref. No.: \_\_\_\_\_

Date:

2/24/16  
 Personnel: \_\_\_\_\_

### Monitoring Well Data:

Well No.:	TP-2	Screen Length (ft):	_____
Measurement Point:	TOC	Depth to Pump Intake (ft) <sup>(1)</sup> :	15
Constructed Well Depth (ft):	30	Well Diameter, D (in):	82
Measured Well Depth (ft):	_____	Well Screen Volume, V <sub>s</sub> (mL):	_____
Depth of Sediment (ft):	N/A	Initial Depth to Water (ft):	8.88

### Drawdown

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Temperature (°C)		Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
				Precision Required: ±0.1 Yr/r or ±3%	±0.005 or 0.01 ±10%				
12:37	5.6	8.88	8.88	6.72	22.10	2.340	236	10.50	22.4
12:40	1	8.83	8.83	5.40	22.40	0.318	280	11.40	16.8
12:48	1	8.58	8.58	5.35	22.50	0.350	212	14.10	3.4
12:55	1	8.12	8.12	5.20	22.40	0.353	320	13.00	8.0
12:55	1	8.10	8.10	5.36	22.32	2.383	309	13.94	8.1
Sample ID:	VOCs								

### Notes:

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).

## MONITORING WELL RECORD FOR LOW-FLOW PURGING

**Project Data:**

Project Name: Southern States LLC  
Ref. No.: \_\_\_\_\_

Date: 2/21/16  
Personnel: JF

**Monitoring Well Data:**

Well No.: TP-3  
Measurement Point: TOC  
Constructed Well Depth (ft): 70  
Measured Well Depth (ft):  
Depth of Sediment (ft): N/A

Screen Length (ft):  
Depth to Pump Intake (ft)<sup>(1)</sup>: 25  
Well Diameter, D (in): 82  
Well Screen Volume, V<sub>s</sub> (mL):  
Initial Depth to Water (ft): 8.20

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Water Level <sup>(2)</sup> (ft)	Drawdown					
				pH	Temperature °C	Conductivity <sup>(3)</sup> (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)
0730	50	8.20		6.50	20.10	0.310	141	1.70	17.4
0740		5.30		6.72	15.45	0.293	134	1.35	16.8
0745		5.45		6.25	15.78	0.276	129	1.40	14.1
0750		6.51		6.21	15.50	0.280	128	1.32	11.4
0756		6.48		6.20	15.40	0.277	129	1.30	11.3
0806		6.56		6.21	15.35	0.277	124	1.40	8.3
Sample ID:			VOCs						

Notes:

- (1) The pump intake was placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.
- (2) The drawdown from the initial water level should not exceed 0.33 ft. The pumping rate should not exceed 600 mL/min.
- (3) For conductivity, the average value of three readings <1 mS/cm ±0.005 mS/cm or where conductivity >1 mS/cm ±0.01 mS/cm. Purging will continue until stabilization is achieved or until 20 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing or unless stabilization parameters are varying slightly outside of the stabilization criteria and appear to be stabilizing).



## ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 24, 2015

John Schwaller  
Environmental Management Associates, LLC  
5262 Belle Wood Ct.  
Buford GA 30518

TEL: (770) 271-4628  
FAX: (770) 271-8944

RE: Southern States

Dear John Schwaller: Order No: 1512F68

Analytical Environmental Services, Inc. received 10 samples on 12/16/2015 4:30:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES' certifications are as follows:

-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/15-06/30/16.  
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

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

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

Mirzeta Kararic  
Project Manager



ANALYTICAL ENVIRONMENTAL SERVICES, INC

3080 Presidential Drive, Atlanta GA 30340-3704

TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

## CHAIN OF CUSTODY

Work Order: 1512 F68

Date: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

COMPANY: <i>EMX/JJS</i>		ADDRESS:				ANALYSIS REQUESTED										Visit our website <a href="http://www.aesatlanta.com">www.aesatlanta.com</a> to check on the status of your results, place bottle orders, etc.	No # of Containers
						VOC's											
PHONE:		FAX:															
SAMPLED BY: <i>J. Schwaben</i>		SIGNATURE:															
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	PRESERVATION (See codes)										REMARKS
		DATE	TIME				H										
1	MW-9	12/16	1448	X		GW	X										
2	MW-21		1410			I											
3	MW-39		1055														
4	MW-40		1125														
5	MW-41		1018														
6	TP-1		1255														
7	TP-2		1330														
8	TP-3		1205														
9	UP		1515														
10	DUP		1520	X													
11	Tr/P					X											
12																	
13																	
14																	
RELINQUISHED BY		DATE/TIME	RECEIVED BY	DATE/TIME		PROJECT INFORMATION										RECEIPT	
1:		12/16/15 1630	<i>Tammy Doss 12/16/15 1630</i>			PROJECT NAME: SOUTHERN STATES										Total # of Containers	
2:		2:				PROJECT #:										Turnaround Time Request	
3:		3:				SITE ADDRESS:										Standard 5 Business Days	
						SEND REPORT TO: <i>J. Schwaben</i>										2 Business Day Rush	
																Next Business Day Rush	
																Same Day Rush (auth req.)	
																Other _____	
																STATE PROGRAM (if any): _____	
																E-mail? Y/N; Fax? Y/N	
																DATA PACKAGE: I II III IV	
SPECIAL INSTRUCTIONS/COMMENTS:																	
SHIPMENT METHOD																	
OUT		/	/	VIA:		INVOICE TO: (IF DIFFERENT FROM ABOVE)											
IN		/	/	VIA:													
				CLIENT FedEx UPS MAIL COURIER													
				GREYHOUND OTHER _____													
						QUOTE #: _____ PO#: _____											
SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.																	

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

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

Page 2 of 28

White Copy - Original; Yellow Copy - Client

**Client:** Environmental Management Associates, LLC  
**Project:** Southern States  
**Lab ID:** 1512F68

**Case Narrative**

Sample Receiving Nonconformance:

Sample 1512F68-005A Client ID: MW-41 was listed on the chain of custody but not present.

Sample vials are missing collection date/time on client labels

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1512F68003A, -009A, & -010A required dilution during preparation and/or analysis resulting in elevated reporting limits.

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-9
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 2:48:00 PM
<b>Lab ID:</b>	1512F68-001A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
						(SW5030B)		
1,1,1-Trichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,1-Dichloroethane		6.4	5.0	ug/L	217400	1	12/18/2015 20:51	NP
1,1-Dichloroethene		6.4	5.0	ug/L	217400	1	12/18/2015 20:51	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/18/2015 20:51	NP
2-Butanone	BRL	50		ug/L	217400	1	12/18/2015 20:51	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/18/2015 20:51	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/18/2015 20:51	NP
Acetone	BRL	50		ug/L	217400	1	12/18/2015 20:51	NP
Benzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Chloroethane	BRL	10		ug/L	217400	1	12/18/2015 20:51	NP
Chloroform	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Chloromethane	BRL	10		ug/L	217400	1	12/18/2015 20:51	NP
cis-1,2-Dichloroethene		29	5.0	ug/L	217400	1	12/18/2015 20:51	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/18/2015 20:51	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Freon-113	BRL	10		ug/L	217400	1	12/18/2015 20:51	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-9
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 2:48:00 PM
<b>Lab ID:</b>	1512F68-001A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Styrene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Tetrachloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Toluene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Trichloroethene	810	50		ug/L	217400	10	12/18/2015 21:14	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Vinyl chloride	BRL	2.0		ug/L	217400	1	12/18/2015 20:51	NP
1,2-Dichloroethene, Total	29	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/18/2015 20:51	NP
Surr: 4-Bromofluorobenzene	88.4	70.7-125		%REC	217400	10	12/18/2015 21:14	NP
Surr: 4-Bromofluorobenzene	91.1	70.7-125		%REC	217400	1	12/18/2015 20:51	NP
Surr: Dibromofluoromethane	102	82.2-120		%REC	217400	1	12/18/2015 20:51	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	217400	10	12/18/2015 21:14	NP
Surr: Toluene-d8	96.1	81.8-120		%REC	217400	1	12/18/2015 20:51	NP
Surr: Toluene-d8	97.5	81.8-120		%REC	217400	10	12/18/2015 21:14	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-21
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 2:10:00 PM
<b>Lab ID:</b>	1512F68-002A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,1-Dichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,1-Dichloroethene		6.8	5.0	ug/L	217400	1	12/18/2015 21:38	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/18/2015 21:38	NP
2-Butanone	BRL	50		ug/L	217400	1	12/18/2015 21:38	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/18/2015 21:38	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/18/2015 21:38	NP
Acetone	BRL	50		ug/L	217400	1	12/18/2015 21:38	NP
Benzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Chloroethane	BRL	10		ug/L	217400	1	12/18/2015 21:38	NP
Chloroform	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Chloromethane	BRL	10		ug/L	217400	1	12/18/2015 21:38	NP
cis-1,2-Dichloroethene		6.7	5.0	ug/L	217400	1	12/18/2015 21:38	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/18/2015 21:38	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Freon-113	BRL	10		ug/L	217400	1	12/18/2015 21:38	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-21
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 2:10:00 PM
<b>Lab ID:</b>	1512F68-002A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Styrene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Tetrachloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Toluene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Trichloroethene	160	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Vinyl chloride	BRL	2.0		ug/L	217400	1	12/18/2015 21:38	NP
1,2-Dichloroethene, Total	6.7	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/18/2015 21:38	NP
Surr: 4-Bromofluorobenzene	92.7	70.7-125		%REC	217400	1	12/18/2015 21:38	NP
Surr: Dibromofluoromethane	106	82.2-120		%REC	217400	1	12/18/2015 21:38	NP
Surr: Toluene-d8	99.6	81.8-120		%REC	217400	1	12/18/2015 21:38	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-39
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 10:55:00 AM
<b>Lab ID:</b>	1512F68-003A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,1,2,2-Tetrachloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,1,2-Trichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,1-Dichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,1-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2,4-Trichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2-Dibromo-3-chloropropane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2-Dibromoethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2-Dichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2-Dichloropropane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,3-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,4-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
1,4-Dioxane	BRL	150000		ug/L	217400	1000	12/18/2015 18:52	NP
2-Butanone	BRL	50000		ug/L	217400	1000	12/18/2015 18:52	NP
2-Hexanone	BRL	10000		ug/L	217400	1000	12/18/2015 18:52	NP
4-Methyl-2-pentanone	BRL	10000		ug/L	217400	1000	12/18/2015 18:52	NP
Acetone	BRL	50000		ug/L	217400	1000	12/18/2015 18:52	NP
Benzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Bromodichloromethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Bromoform	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Bromomethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Carbon disulfide	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Carbon tetrachloride	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Chlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Chloroethane	BRL	10000		ug/L	217400	1000	12/18/2015 18:52	NP
Chloroform	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Chloromethane	BRL	10000		ug/L	217400	1000	12/18/2015 18:52	NP
cis-1,2-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
cis-1,3-Dichloropropene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Cyclohexane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Dibromochloromethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Dichlorodifluoromethane	BRL	10000		ug/L	217400	1000	12/18/2015 18:52	NP
Ethylbenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Freon-113	BRL	10000		ug/L	217400	1000	12/18/2015 18:52	NP
Isopropylbenzene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
m,p-Xylene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Methyl acetate	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Methyl tert-butyl ether	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Methylcyclohexane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-39
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 10:55:00 AM
<b>Lab ID:</b>	1512F68-003A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
o-Xylene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Styrene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Tetrachloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Toluene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
trans-1,2-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
trans-1,3-Dichloropropene	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Trichloroethene	110000	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Trichlorofluoromethane	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Vinyl chloride	BRL	2000		ug/L	217400	1000	12/18/2015 18:52	NP
1,2-Dichloroethene, Total	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Xylenes, Total	BRL	5000		ug/L	217400	1000	12/18/2015 18:52	NP
Surr: 4-Bromofluorobenzene	92.9	70.7-125	%REC		217400	1000	12/18/2015 18:52	NP
Surr: Dibromofluoromethane	104	82.2-120	%REC		217400	1000	12/18/2015 18:52	NP
Surr: Toluene-d8	97.5	81.8-120	%REC		217400	1000	12/18/2015 18:52	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-40
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 11:25:00 AM
<b>Lab ID:</b>	1512F68-004A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,1,2-Trichloroethane		6.1	5.0	ug/L	217400	1	12/21/2015 18:03	NP
1,1-Dichloroethane		28	5.0	ug/L	217400	1	12/21/2015 18:03	NP
1,1-Dichloroethene		38	5.0	ug/L	217400	1	12/21/2015 18:03	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/21/2015 18:03	NP
2-Butanone	BRL	50		ug/L	217400	1	12/21/2015 18:03	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/21/2015 18:03	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/21/2015 18:03	NP
Acetone	BRL	50		ug/L	217400	1	12/21/2015 18:03	NP
Benzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Chloroethane	BRL	10		ug/L	217400	1	12/21/2015 18:03	NP
Chloroform	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Chloromethane	BRL	10		ug/L	217400	1	12/21/2015 18:03	NP
cis-1,2-Dichloroethene		720	250	ug/L	217400	50	12/21/2015 10:58	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/21/2015 18:03	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Freon-113	BRL	10		ug/L	217400	1	12/21/2015 18:03	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-40
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 11:25:00 AM
<b>Lab ID:</b>	1512F68-004A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Styrene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Tetrachloroethene	14	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Toluene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
trans-1,2-Dichloroethene	6.9	5.0		ug/L	217400	1	12/21/2015 18:03	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Trichloroethene	5200	250		ug/L	217400	50	12/21/2015 10:58	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Vinyl chloride	8.8	2.0		ug/L	217400	1	12/21/2015 18:03	NP
1,2-Dichloroethene, Total	720	250		ug/L	217400	50	12/21/2015 10:58	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/21/2015 18:03	NP
Surr: 4-Bromofluorobenzene	95.1	70.7-125		%REC	217400	50	12/21/2015 10:58	NP
Surr: 4-Bromofluorobenzene	92.1	70.7-125		%REC	217400	1	12/21/2015 18:03	NP
Surr: Dibromofluoromethane	96.7	82.2-120		%REC	217400	50	12/21/2015 10:58	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	217400	1	12/21/2015 18:03	NP
Surr: Toluene-d8	96	81.8-120		%REC	217400	50	12/21/2015 10:58	NP
Surr: Toluene-d8	97.9	81.8-120		%REC	217400	1	12/21/2015 18:03	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-1
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 12:55:00 PM
<b>Lab ID:</b>	1512F68-006A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,1,2-Trichloroethane		12	5.0	ug/L	217400	1	12/21/2015 18:26	NP
1,1-Dichloroethane		6.0	5.0	ug/L	217400	1	12/21/2015 18:26	NP
1,1-Dichloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/21/2015 18:26	NP
2-Butanone	BRL	50		ug/L	217400	1	12/21/2015 18:26	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/21/2015 18:26	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/21/2015 18:26	NP
Acetone	BRL	50		ug/L	217400	1	12/21/2015 18:26	NP
Benzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Chloroethane	BRL	10		ug/L	217400	1	12/21/2015 18:26	NP
Chloroform		17	5.0	ug/L	217400	1	12/21/2015 18:26	NP
Chloromethane	BRL	10		ug/L	217400	1	12/21/2015 18:26	NP
cis-1,2-Dichloroethene		87	5.0	ug/L	217400	1	12/21/2015 18:26	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/21/2015 18:26	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Freon-113	BRL	10		ug/L	217400	1	12/21/2015 18:26	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-1
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 12:55:00 PM
<b>Lab ID:</b>	1512F68-006A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Styrene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Tetrachloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Toluene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Trichloroethene	1800	100		ug/L	217400	20	12/18/2015 20:27	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Vinyl chloride	BRL	2.0		ug/L	217400	1	12/21/2015 18:26	NP
1,2-Dichloroethene, Total	87	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/21/2015 18:26	NP
Surr: 4-Bromofluorobenzene	93.8	70.7-125		%REC	217400	1	12/21/2015 18:26	NP
Surr: 4-Bromofluorobenzene	87.7	70.7-125		%REC	217400	20	12/18/2015 20:27	NP
Surr: Dibromofluoromethane	105	82.2-120		%REC	217400	20	12/18/2015 20:27	NP
Surr: Dibromofluoromethane	105	82.2-120		%REC	217400	1	12/21/2015 18:26	NP
Surr: Toluene-d8	96.9	81.8-120		%REC	217400	1	12/21/2015 18:26	NP
Surr: Toluene-d8	96.5	81.8-120		%REC	217400	20	12/18/2015 20:27	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-2
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 1:30:00 PM
<b>Lab ID:</b>	1512F68-007A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,1-Dichloroethane		12	5.0	ug/L	217400	1	12/21/2015 19:14	NP
1,1-Dichloroethene		40	5.0	ug/L	217400	1	12/21/2015 19:14	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/21/2015 19:14	NP
2-Butanone	BRL	50		ug/L	217400	1	12/21/2015 19:14	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/21/2015 19:14	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/21/2015 19:14	NP
Acetone	BRL	50		ug/L	217400	1	12/21/2015 19:14	NP
Benzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Chloroethane	BRL	10		ug/L	217400	1	12/21/2015 19:14	NP
Chloroform	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Chloromethane	BRL	10		ug/L	217400	1	12/21/2015 19:14	NP
cis-1,2-Dichloroethene		41	5.0	ug/L	217400	1	12/21/2015 19:14	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/21/2015 19:14	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Freon-113	BRL	10		ug/L	217400	1	12/21/2015 19:14	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-2
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 1:30:00 PM
<b>Lab ID:</b>	1512F68-007A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Styrene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Tetrachloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Toluene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Trichloroethene	500	50		ug/L	217400	10	12/21/2015 11:22	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Vinyl chloride	4.8	2.0		ug/L	217400	1	12/21/2015 19:14	NP
1,2-Dichloroethene, Total	41	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/21/2015 19:14	NP
Surr: 4-Bromofluorobenzene	92.5	70.7-125		%REC	217400	1	12/21/2015 19:14	NP
Surr: 4-Bromofluorobenzene	94.2	70.7-125		%REC	217400	10	12/21/2015 11:22	NP
Surr: Dibromofluoromethane	97.9	82.2-120		%REC	217400	10	12/21/2015 11:22	NP
Surr: Dibromofluoromethane	102	82.2-120		%REC	217400	1	12/21/2015 19:14	NP
Surr: Toluene-d8	95.7	81.8-120		%REC	217400	10	12/21/2015 11:22	NP
Surr: Toluene-d8	97.5	81.8-120		%REC	217400	1	12/21/2015 19:14	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-3
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 12:05:00 PM
<b>Lab ID:</b>	1512F68-008A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	830	50		ug/L	217400	10	12/21/2015 11:46	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,1-Dichloroethane	780	50		ug/L	217400	10	12/21/2015 11:46	NP
1,1-Dichloroethene	1300	50		ug/L	217400	10	12/21/2015 11:46	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/21/2015 18:50	NP
2-Butanone	BRL	50		ug/L	217400	1	12/21/2015 18:50	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/21/2015 18:50	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/21/2015 18:50	NP
Acetone	BRL	50		ug/L	217400	1	12/21/2015 18:50	NP
Benzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Chloroethane	15	10		ug/L	217400	1	12/21/2015 18:50	NP
Chloroform	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Chloromethane	BRL	10		ug/L	217400	1	12/21/2015 18:50	NP
cis-1,2-Dichloroethene	56	5.0		ug/L	217400	1	12/21/2015 18:50	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/21/2015 18:50	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Freon-113	BRL	10		ug/L	217400	1	12/21/2015 18:50	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-3
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 12:05:00 PM
<b>Lab ID:</b>	1512F68-008A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Styrene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Tetrachloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Toluene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Trichloroethene	730	50		ug/L	217400	10	12/21/2015 11:46	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Vinyl chloride	15	2.0		ug/L	217400	1	12/21/2015 18:50	NP
1,2-Dichloroethene, Total	56	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/21/2015 18:50	NP
Surr: 4-Bromofluorobenzene	91.8	70.7-125		%REC	217400	10	12/21/2015 11:46	NP
Surr: 4-Bromofluorobenzene	94.3	70.7-125		%REC	217400	1	12/21/2015 18:50	NP
Surr: Dibromofluoromethane	104	82.2-120		%REC	217400	10	12/21/2015 11:46	NP
Surr: Dibromofluoromethane	109	82.2-120		%REC	217400	1	12/21/2015 18:50	NP
Surr: Toluene-d8	97.3	81.8-120		%REC	217400	1	12/21/2015 18:50	NP
Surr: Toluene-d8	97.7	81.8-120		%REC	217400	10	12/21/2015 11:46	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	UP
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 3:15:00 PM
<b>Lab ID:</b>	1512F68-009A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,1,2,2-Tetrachloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,1,2-Trichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,1-Dichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,1-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2,4-Trichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2-Dibromo-3-chloropropane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2-Dibromoethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2-Dichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2-Dichloropropane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,3-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,4-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
1,4-Dioxane	BRL	150000		ug/L	217400	1000	12/18/2015 19:39	NP
2-Butanone	BRL	50000		ug/L	217400	1000	12/18/2015 19:39	NP
2-Hexanone	BRL	10000		ug/L	217400	1000	12/18/2015 19:39	NP
4-Methyl-2-pentanone	BRL	10000		ug/L	217400	1000	12/18/2015 19:39	NP
Acetone	BRL	50000		ug/L	217400	1000	12/18/2015 19:39	NP
Benzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Bromodichloromethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Bromoform	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Bromomethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Carbon disulfide	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Carbon tetrachloride	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Chlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Chloroethane	BRL	10000		ug/L	217400	1000	12/18/2015 19:39	NP
Chloroform	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Chloromethane	BRL	10000		ug/L	217400	1000	12/18/2015 19:39	NP
cis-1,2-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
cis-1,3-Dichloropropene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Cyclohexane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Dibromochloromethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Dichlorodifluoromethane	BRL	10000		ug/L	217400	1000	12/18/2015 19:39	NP
Ethylbenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Freon-113	BRL	10000		ug/L	217400	1000	12/18/2015 19:39	NP
Isopropylbenzene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
m,p-Xylene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Methyl acetate	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Methyl tert-butyl ether	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Methylcyclohexane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	UP
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 3:15:00 PM
<b>Lab ID:</b>	1512F68-009A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
o-Xylene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Styrene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Tetrachloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Toluene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
trans-1,2-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
trans-1,3-Dichloropropene	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Trichloroethene	62000	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Trichlorofluoromethane	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Vinyl chloride	BRL	2000		ug/L	217400	1000	12/18/2015 19:39	NP
1,2-Dichloroethene, Total	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Xylenes, Total	BRL	5000		ug/L	217400	1000	12/18/2015 19:39	NP
Surr: 4-Bromofluorobenzene	92.1	70.7-125	%REC		217400	1000	12/18/2015 19:39	NP
Surr: Dibromofluoromethane	103	82.2-120	%REC		217400	1000	12/18/2015 19:39	NP
Surr: Toluene-d8	97.7	81.8-120	%REC		217400	1000	12/18/2015 19:39	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

## Analytical Environmental Services, Inc

Date: 24-Dec-15

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	DUP
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 3:20:00 PM
<b>Lab ID:</b>	1512F68-010A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,1,2,2-Tetrachloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,1,2-Trichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,1-Dichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,1-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2,4-Trichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2-Dibromo-3-chloropropane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2-Dibromoethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2-Dichloroethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2-Dichloropropane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,3-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,4-Dichlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
1,4-Dioxane	BRL	150000		ug/L	217400	1000	12/18/2015 20:03	NP
2-Butanone	BRL	50000		ug/L	217400	1000	12/18/2015 20:03	NP
2-Hexanone	BRL	10000		ug/L	217400	1000	12/18/2015 20:03	NP
4-Methyl-2-pentanone	BRL	10000		ug/L	217400	1000	12/18/2015 20:03	NP
Acetone	BRL	50000		ug/L	217400	1000	12/18/2015 20:03	NP
Benzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Bromodichloromethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Bromoform	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Bromomethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Carbon disulfide	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Carbon tetrachloride	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Chlorobenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Chloroethane	BRL	10000		ug/L	217400	1000	12/18/2015 20:03	NP
Chloroform	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Chloromethane	BRL	10000		ug/L	217400	1000	12/18/2015 20:03	NP
cis-1,2-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
cis-1,3-Dichloropropene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Cyclohexane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Dibromochloromethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Dichlorodifluoromethane	BRL	10000		ug/L	217400	1000	12/18/2015 20:03	NP
Ethylbenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Freon-113	BRL	10000		ug/L	217400	1000	12/18/2015 20:03	NP
Isopropylbenzene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
m,p-Xylene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Methyl acetate	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Methyl tert-butyl ether	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Methylcyclohexane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	DUP
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015 3:20:00 PM
<b>Lab ID:</b>	1512F68-010A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
o-Xylene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Styrene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Tetrachloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Toluene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
trans-1,2-Dichloroethene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
trans-1,3-Dichloropropene	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Trichloroethene	59000	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Trichlorofluoromethane	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Vinyl chloride	BRL	2000		ug/L	217400	1000	12/18/2015 20:03	NP
1,2-Dichloroethene, Total	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Xylenes, Total	BRL	5000		ug/L	217400	1000	12/18/2015 20:03	NP
Surr: 4-Bromofluorobenzene	92	70.7-125	%REC		217400	1000	12/18/2015 20:03	NP
Surr: Dibromofluoromethane	105	82.2-120	%REC		217400	1000	12/18/2015 20:03	NP
Surr: Toluene-d8	97.7	81.8-120	%REC		217400	1000	12/18/2015 20:03	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TRIP
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015
<b>Lab ID:</b>	1512F68-011A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,1-Dichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,1-Dichloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2-Dibromoethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2-Dichloroethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2-Dichloropropane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
1,4-Dioxane	BRL	150		ug/L	217400	1	12/18/2015 16:31	NP
2-Butanone	BRL	50		ug/L	217400	1	12/18/2015 16:31	NP
2-Hexanone	BRL	10		ug/L	217400	1	12/18/2015 16:31	NP
4-Methyl-2-pentanone	BRL	10		ug/L	217400	1	12/18/2015 16:31	NP
Acetone	BRL	50		ug/L	217400	1	12/18/2015 16:31	NP
Benzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Bromodichloromethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Bromoform	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Bromomethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Carbon disulfide	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Carbon tetrachloride	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Chlorobenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Chloroethane	BRL	10		ug/L	217400	1	12/18/2015 16:31	NP
Chloroform	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Chloromethane	BRL	10		ug/L	217400	1	12/18/2015 16:31	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Cyclohexane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Dibromochloromethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Dichlorodifluoromethane	BRL	10		ug/L	217400	1	12/18/2015 16:31	NP
Ethylbenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Freon-113	BRL	10		ug/L	217400	1	12/18/2015 16:31	NP
Isopropylbenzene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
m,p-Xylene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Methyl acetate	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Methylcyclohexane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TRIP
<b>Lab Order</b>	1512F68	<b>Tag Number:</b>	
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	12/16/2015
<b>Lab ID:</b>	1512F68-011A	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
Methylene chloride	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
o-Xylene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Styrene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Tetrachloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Toluene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Trichloroethene	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Trichlorofluoromethane	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Vinyl chloride	BRL	2.0		ug/L	217400	1	12/18/2015 16:31	NP
1,2-Dichloroethene, Total	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Xylenes, Total	BRL	5.0		ug/L	217400	1	12/18/2015 16:31	NP
Surr: 4-Bromofluorobenzene	93.2	70.7-125		%REC	217400	1	12/18/2015 16:31	NP
Surr: Dibromofluoromethane	103	82.2-120		%REC	217400	1	12/18/2015 16:31	NP
Surr: Toluene-d8	97.2	81.8-120		%REC	217400	1	12/18/2015 16:31	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EMA/JS

Work Order Number 1512 F68

Checklist completed by Cheryl R/H Date 12/17/15  
Signature \_\_\_\_\_ Date \_\_\_\_\_

Carrier name: FedEx  UPS  Courier  Client  US Mail  Other \_\_\_\_\_

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

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

Custody seals intact on sample bottles? Yes  No  Not Present

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

Cooler #1 3.2 Cooler #2 \_\_\_\_\_ Cooler #3 \_\_\_\_\_ Cooler #4 \_\_\_\_\_ Cooler #5 \_\_\_\_\_ Cooler #6 \_\_\_\_\_

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Was TAT marked on the COC? Yes  No

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

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

Water - pH acceptable upon receipt? Yes  No  Not Applicable

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Sample Condition: Good  Other(Explain) \_\_\_\_\_

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

See Case Narrative for resolution of the Non-Conformance.

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

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1512F68

**ANALYTICAL QC SUMMARY REPORT****BatchID: 217400**

Sample ID: MB-217400	Client ID:	Units: ug/L	Prep Date: 12/18/2015	Run No: 306743							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 217400	Analysis Date: 12/18/2015	Seq No: 6579314							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloroethene, Total	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
1,4-Dioxane	BRL	150									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									

Qualifiers: &gt; Greater than Result value

&lt; Less than Result value

B Analyte detected in the associated method blank

BRL Below reporting limit

E Estimated (value above quantitation range)

H Holding times for preparation or analysis exceeded

J Estimated value detected below Reporting Limit

N Analyte not NELAC certified

R RPD outside limits due to matrix

Rpt Lim Reporting Limit

S Spike Recovery outside limits due to matrix

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1512F68

**ANALYTICAL QC SUMMARY REPORT****BatchID: 217400**

Sample ID: MB-217400	Client ID:	Units: ug/L			Prep Date:	12/18/2015	Run No:	306743			
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 217400			Analysis Date:	12/18/2015	Seq No:	6579314			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	47.06	0	50.00		94.1	70.7	125				
Surr: Dibromofluoromethane	51.51	0	50.00		103	82.2	120				

Qualifiers: &gt; Greater than Result value

&lt; Less than Result value

B Analyte detected in the associated method blank

BRL Below reporting limit

E Estimated (value above quantitation range)

H Holding times for preparation or analysis exceeded

J Estimated value detected below Reporting Limit

N Analyte not NELAC certified

R RPD outside limits due to matrix

Rpt Lim Reporting Limit

S Spike Recovery outside limits due to matrix

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1512F68

**ANALYTICAL QC SUMMARY REPORT****BatchID: 217400**

Sample ID: <b>MB-217400</b>	Client ID:				Units: <b>ug/L</b>	Prep Date: <b>12/18/2015</b>	Run No: <b>306743</b>				
SampleType: <b>MBLK</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>				BatchID: <b>217400</b>	Analysis Date: <b>12/18/2015</b>	Seq No: <b>6579314</b>				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Toluene-d8	48.45	0	50.00		96.9	81.8	120				
Sample ID: <b>LCS-217400</b>	Client ID:				Units: <b>ug/L</b>	Prep Date: <b>12/18/2015</b>	Run No: <b>306743</b>				
SampleType: <b>LCS</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>				BatchID: <b>217400</b>	Analysis Date: <b>12/18/2015</b>	Seq No: <b>6579313</b>				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	54.71	5.0	50.00		109	64.2	137				
Benzene	50.09	5.0	50.00		100	72.8	128				
Chlorobenzene	52.93	5.0	50.00		106	72.3	126				
Toluene	52.72	5.0	50.00		105	74.9	127				
Trichloroethene	52.91	5.0	50.00		106	70.5	134				
Surr: 4-Bromofluorobenzene	47.41	0	50.00		94.8	70.7	125				
Surr: Dibromofluoromethane	49.10	0	50.00		98.2	82.2	120				
Surr: Toluene-d8	48.09	0	50.00		96.2	81.8	120				
Sample ID: <b>1512H10-001AMS</b>	Client ID:				Units: <b>ug/L</b>	Prep Date: <b>12/18/2015</b>	Run No: <b>306743</b>				
SampleType: <b>MS</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>				BatchID: <b>217400</b>	Analysis Date: <b>12/18/2015</b>	Seq No: <b>6579319</b>				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	517600	50000	500000		104	60.5	156				
Benzene	446100	50000	500000		89.2	70	135				
Chlorobenzene	468700	50000	500000		93.7	70.5	132				
Toluene	987100	50000	500000	563200	84.8	70.5	137				
Trichloroethene	471500	50000	500000		94.3	71.8	139				
Surr: 4-Bromofluorobenzene	462100	0	500000		92.4	70.7	125				
Surr: Dibromofluoromethane	507900	0	500000		102	82.2	120				
Surr: Toluene-d8	485400	0	500000		97.1	81.8	120				

Qualifiers: &gt; Greater than Result value

&lt; Less than Result value

B Analyte detected in the associated method blank

BRL Below reporting limit

E Estimated (value above quantitation range)

H Holding times for preparation or analysis exceeded

J Estimated value detected below Reporting Limit

N Analyte not NELAC certified

R RPD outside limits due to matrix

Rpt Lim Reporting Limit

S Spike Recovery outside limits due to matrix

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1512F68

**ANALYTICAL QC SUMMARY REPORT****BatchID: 217400**

Sample ID: 1512H10-001AMSD	Client ID:				Units: ug/L	Prep Date: 12/18/2015	Run No: 306743				
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B				BatchID: 217400	Analysis Date: 12/18/2015	Seq No: 6579320				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	509000	50000	500000		102	60.5	156	517600	1.68	20	
Benzene	450100	50000	500000		90.0	70	135	446100	0.893	20	
Chlorobenzene	469000	50000	500000		93.8	70.5	132	468700	0.064	20	
Toluene	994800	50000	500000	563200	86.3	70.5	137	987100	0.777	20	
Trichloroethene	478100	50000	500000		95.6	71.8	139	471500	1.39	20	
Surr: 4-Bromofluorobenzene	456000	0	500000		91.2	70.7	125	462100	0	0	
Surr: Dibromofluoromethane	515200	0	500000		103	82.2	120	507900	0	0	
Surr: Toluene-d8	490200	0	500000		98.0	81.8	120	485400	0	0	

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		Page 28 of 28



## ANALYTICAL ENVIRONMENTAL SERVICES, INC.

April 05, 2016

John Schwaller  
Environmental Management Associates, LLC  
5262 Belle Wood Ct.  
Buford GA 30518

TEL: (770) 271-4628  
FAX: (770) 271-8944

RE: Southern States

Dear John Schwaller: Order No: 1604048

Analytical Environmental Services, Inc. received 12 samples on 4/1/2016 10:00:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.

AES's accreditations are as follows:

- NELAC/Florida State Laboratory ID E87582 for analysis of Non-Potable Water, Solid & Chemical Materials, and Drinking Water Microbiology, effective 07/01/15-06/30/16.
- NELAC/Louisiana Agency Interest No. 100818 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 07/01/15-06/30/16.
- NELAC/Texas Certificate No. T104704509-16-6 for or analysis of Non-Potable Water and Solid & Chemical Materials, effective 03/01/16-02/28/17.
- AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination, effective until 09/01/17.

Mirzeta Kararic  
Project Manager



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

# CHAIN OF CUSTODY

Work Order: 1604048

Date: \_\_\_\_\_ Page \_\_\_\_\_ of \_\_\_\_\_

COMPANY: <i>EMA/JS</i>		ADDRESS:			ANALYSIS REQUESTED										Visit our website <a href="http://www.aesatlanta.com">www.aesatlanta.com</a> to check on the status of your results, place bottle orders, etc.	No # of Containers		
					TCL VOC's													
PHONE:		FAX:			PRESERVATION (See codes)										REMARKS			
SAMPLED BY: <i>J. SCHWALLER</i>		SIGNATURE:																
#	SAMPLE ID	SAMPLED		Grab	Composite	Matrix (See codes)	H										REMARKS	
		DATE	TIME															
1	MW-9	3/31	1415	X	GW	X												
2	MW-13		1343															
3	MW-18		1445															
4	MW-21		1515															
5	MW-39		1030															
6	MW-40		1055															
7	MW-41		1143															
8	TP-1		1228															
9	TP-2		1259															
10	DVP		1415															
11	TRIP BLANK		151530															
12	TP-3		1000	▼		▼	▼	▼										
13																		
14																		
RELINQUISHED BY		DATE/TIME	RECEIVED BY	DATE/TIME	PROJECT INFORMATION										RECEIPT			
1:	<i>4/1/16 1000</i>		1:	<i>Malifer 4/1/16 10:00</i>		PROJECT NAME: <i>SOUTHERN STATES GW</i>										Total # of Containers		
2:			2:			PROJECT #: _____										Turnaround Time Request		
3:			3:			SITE ADDRESS: _____										Standard 5 Business Days		
SPECIAL INSTRUCTIONS/COMMENTS:		SHIPMENT METHOD										SEND REPORT TO: <i>SCHWALLER</i>		2 Business Day Rush				
		OUT / /	VIA:	INVOICE TO: _____ (IF DIFFERENT FROM ABOVE)										Next Business Day Rush				
		IN / /	VIA:											Same Day Rush (auth req.)				
		CLIENT FedEx UPS MAIL COURIER												Other _____				
		GREYHOUND OTHER												STATE PROGRAM (if any): _____				
														E-mail? Y/N; Fax? Y/N	DATA PACKAGE: I II III IV			
SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.															Page 2 of 33			
MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None															White Copy - Original; Yellow Copy - Client			

**Client:** Environmental Management Associates, LLC  
**Project:** Southern States  
**Lab ID:** 1604048

**Case Narrative**

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, sample 1604048-005 required dilution during preparation and/or analysis resulting in elevated reporting limits.

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC		<b>Client Sample ID:</b>	MW-9				
<b>Project Name:</b>	Southern States		<b>Collection Date:</b>	3/31/2016 2:15:00 PM				
<b>Lab ID:</b>	1604048-001		<b>Matrix:</b>	Groundwater				
Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>						<b>(SW5030B)</b>		
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,1-Dichloroethane		5.5	5.0	ug/L	222134	1	04/04/2016 16:00	NP
1,1-Dichloroethene		5.7	5.0	ug/L	222134	1	04/04/2016 16:00	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 16:00	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 16:00	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 16:00	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 16:00	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 16:00	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 16:00	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 16:00	NP
cis-1,2-Dichloroethene		24	5.0	ug/L	222134	1	04/04/2016 16:00	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 16:00	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 16:00	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-9
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 2:15:00 PM
<b>Lab ID:</b>	1604048-001	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Trichloroethene	720	50		ug/L	222134	10	04/04/2016 23:31	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Vinyl chloride	BRL	2.0		ug/L	222134	1	04/04/2016 16:00	NP
1,2-Dichloroethene, Total	24	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 16:00	NP
Surr: 4-Bromofluorobenzene	79.9	70.7-125	%REC		222134	1	04/04/2016 16:00	NP
Surr: 4-Bromofluorobenzene	81.3	70.7-125	%REC		222134	10	04/04/2016 23:31	NP
Surr: Dibromofluoromethane	111	82.2-120	%REC		222134	1	04/04/2016 16:00	NP
Surr: Dibromofluoromethane	112	82.2-120	%REC		222134	10	04/04/2016 23:31	NP
Surr: Toluene-d8	90.9	81.8-120	%REC		222134	1	04/04/2016 16:00	NP
Surr: Toluene-d8	91.9	81.8-120	%REC		222134	10	04/04/2016 23:31	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-13
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 1:43:00 PM
<b>Lab ID:</b>	1604048-002	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,1-Dichloroethane	7.6	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,1-Dichloroethene	21	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 16:24	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 16:24	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 16:24	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 16:24	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 16:24	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 16:24	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 16:24	NP
cis-1,2-Dichloroethene	62	5.0		ug/L	222134	1	04/04/2016 16:24	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 16:24	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 16:24	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-13
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 1:43:00 PM
<b>Lab ID:</b>	1604048-002	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Trichloroethene	61	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Vinyl chloride	5.6	2.0		ug/L	222134	1	04/04/2016 16:24	NP
1,2-Dichloroethene, Total	64	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 16:24	NP
Surr: 4-Bromofluorobenzene	81.7	70.7-125	%REC		222134	1	04/04/2016 16:24	NP
Surr: Dibromofluoromethane	111	82.2-120	%REC		222134	1	04/04/2016 16:24	NP
Surr: Toluene-d8	91.4	81.8-120	%REC		222134	1	04/04/2016 16:24	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-18
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 2:45:00 PM
<b>Lab ID:</b>	1604048-003	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,1-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,1-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 16:47	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 16:47	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 16:47	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 16:47	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 16:47	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 16:47	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 16:47	NP
cis-1,2-Dichloroethene		5.7	5.0	ug/L	222134	1	04/04/2016 16:47	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 16:47	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 16:47	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-18
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 2:45:00 PM
<b>Lab ID:</b>	1604048-003	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Trichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Vinyl chloride	BRL	2.0		ug/L	222134	1	04/04/2016 16:47	NP
1,2-Dichloroethene, Total	5.7	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 16:47	NP
Surr: 4-Bromofluorobenzene	82.8	70.7-125	%REC		222134	1	04/04/2016 16:47	NP
Surr: Dibromofluoromethane	115	82.2-120	%REC		222134	1	04/04/2016 16:47	NP
Surr: Toluene-d8	91.1	81.8-120	%REC		222134	1	04/04/2016 16:47	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-21
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 3:15:00 PM
<b>Lab ID:</b>	1604048-004	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,1-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,1-Dichloroethene	12	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 17:34	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 17:34	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 17:34	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 17:34	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 17:34	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 17:34	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 17:34	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 17:34	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 17:34	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-21
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 3:15:00 PM
<b>Lab ID:</b>	1604048-004	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Trichloroethene	210	50		ug/L	222134	10	04/05/2016 09:09	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Vinyl chloride	BRL	2.0		ug/L	222134	1	04/04/2016 17:34	NP
1,2-Dichloroethene, Total	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 17:34	NP
Surr: 4-Bromofluorobenzene	79	70.7-125	%REC		222134	10	04/05/2016 09:09	NP
Surr: 4-Bromofluorobenzene	80.2	70.7-125	%REC		222134	1	04/04/2016 17:34	NP
Surr: Dibromofluoromethane	109	82.2-120	%REC		222134	1	04/04/2016 17:34	NP
Surr: Dibromofluoromethane	112	82.2-120	%REC		222134	10	04/05/2016 09:09	NP
Surr: Toluene-d8	89.6	81.8-120	%REC		222134	10	04/05/2016 09:09	NP
Surr: Toluene-d8	92	81.8-120	%REC		222134	1	04/04/2016 17:34	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-39
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 10:30:00 AM
<b>Lab ID:</b>	1604048-005	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,1,2,2-Tetrachloroethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,1,2-Trichloroethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,1-Dichloroethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,1-Dichloroethene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,2,4-Trichlorobenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,2-Dibromo-3-chloropropane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,2-Dibromoethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,2-Dichlorobenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,2-Dichloroethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,2-Dichloropropane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,3-Dichlorobenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,4-Dichlorobenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
1,4-Dioxane	BRL	15000		ug/L	222134	100	04/04/2016 18:21	NP
2-Butanone	BRL	5000		ug/L	222134	100	04/04/2016 18:21	NP
2-Hexanone	BRL	1000		ug/L	222134	100	04/04/2016 18:21	NP
4-Methyl-2-pentanone	BRL	1000		ug/L	222134	100	04/04/2016 18:21	NP
Acetone	BRL	5000		ug/L	222134	100	04/04/2016 18:21	NP
Benzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Bromodichloromethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Bromoform	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Bromomethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Carbon disulfide	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Carbon tetrachloride	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Chlorobenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Chloroethane	BRL	1000		ug/L	222134	100	04/04/2016 18:21	NP
Chloroform	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Chloromethane	BRL	1000		ug/L	222134	100	04/04/2016 18:21	NP
cis-1,2-Dichloroethene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
cis-1,3-Dichloropropene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Cyclohexane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Dibromochloromethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Dichlorodifluoromethane	BRL	1000		ug/L	222134	100	04/04/2016 18:21	NP
Ethylbenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Freon-113	BRL	1000		ug/L	222134	100	04/04/2016 18:21	NP
Isopropylbenzene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
m,p-Xylene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Methyl acetate	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Methyl tert-butyl ether	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Methylcyclohexane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Methylene chloride	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-39
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 10:30:00 AM
<b>Lab ID:</b>	1604048-005	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Styrene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Tetrachloroethene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Toluene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
trans-1,2-Dichloroethene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
trans-1,3-Dichloropropene	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Trichloroethene	19000	500		ug/L	222134	100	04/04/2016 18:21	NP
Trichlorofluoromethane	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Vinyl chloride	BRL	200		ug/L	222134	100	04/04/2016 18:21	NP
1,2-Dichloroethene, Total	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Xylenes, Total	BRL	500		ug/L	222134	100	04/04/2016 18:21	NP
Surr: 4-Bromofluorobenzene	81.4	70.7-125	%REC		222134	100	04/04/2016 18:21	NP
Surr: Dibromofluoromethane	112	82.2-120	%REC		222134	100	04/04/2016 18:21	NP
Surr: Toluene-d8	93.3	81.8-120	%REC		222134	100	04/04/2016 18:21	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-40
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 10:55:00 AM
<b>Lab ID:</b>	1604048-006	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,1,2-Trichloroethane		14		ug/L	222134	1	04/04/2016 18:45	NP
1,1-Dichloroethane		14		ug/L	222134	1	04/04/2016 18:45	NP
1,1-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 18:45	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 18:45	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 18:45	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 18:45	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 18:45	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 18:45	NP
Chloroform		5.3		ug/L	222134	1	04/04/2016 18:45	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 18:45	NP
cis-1,2-Dichloroethene		250		ug/L	222134	50	04/04/2016 13:39	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 18:45	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 18:45	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-40
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 10:55:00 AM
<b>Lab ID:</b>	1604048-006	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Trichloroethene	1500	250		ug/L	222134	50	04/04/2016 13:39	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Vinyl chloride	120	2.0		ug/L	222134	1	04/04/2016 18:45	NP
1,2-Dichloroethene, Total	250	50		ug/L	222134	50	04/04/2016 13:39	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 18:45	NP
Surr: 4-Bromofluorobenzene	81.9	70.7-125	%REC		222134	50	04/04/2016 13:39	NP
Surr: 4-Bromofluorobenzene	82.2	70.7-125	%REC		222134	1	04/04/2016 18:45	NP
Surr: Dibromofluoromethane	111	82.2-120	%REC		222134	50	04/04/2016 13:39	NP
Surr: Dibromofluoromethane	111	82.2-120	%REC		222134	1	04/04/2016 18:45	NP
Surr: Toluene-d8	92.4	81.8-120	%REC		222134	50	04/04/2016 13:39	NP
Surr: Toluene-d8	92.9	81.8-120	%REC		222134	1	04/04/2016 18:45	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-41
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 11:43:00 AM
<b>Lab ID:</b>	1604048-007	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,1-Dichloroethane	16	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,1-Dichloroethene	24	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/05/2016 10:02	NP
2-Butanone	BRL	50		ug/L	222134	1	04/05/2016 10:02	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/05/2016 10:02	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/05/2016 10:02	NP
Acetone	BRL	50		ug/L	222134	1	04/05/2016 10:02	NP
Benzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Chloroethane	BRL	10		ug/L	222134	1	04/05/2016 10:02	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Chloromethane	BRL	10		ug/L	222134	1	04/05/2016 10:02	NP
cis-1,2-Dichloroethene	200	50		ug/L	222134	50	04/04/2016 14:03	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/05/2016 10:02	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Freon-113	BRL	10		ug/L	222134	1	04/05/2016 10:02	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP

Qualifiers: \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	MW-41
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 11:43:00 AM
<b>Lab ID:</b>	1604048-007	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Styrene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Tetrachloroethene		6.3	5.0	ug/L	222134	1	04/05/2016 10:02	NP
Toluene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Trichloroethene		2800	250	ug/L	222134	50	04/04/2016 14:03	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Vinyl chloride		4.2	2.0	ug/L	222134	1	04/05/2016 10:02	NP
1,2-Dichloroethene, Total		200	50	ug/L	222134	50	04/04/2016 14:03	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/05/2016 10:02	NP
Surr: 4-Bromofluorobenzene		82.4	70.7-125	%REC	222134	50	04/04/2016 14:03	NP
Surr: 4-Bromofluorobenzene		82.5	70.7-125	%REC	222134	1	04/05/2016 10:02	NP
Surr: Dibromofluoromethane		110	82.2-120	%REC	222134	50	04/04/2016 14:03	NP
Surr: Dibromofluoromethane		114	82.2-120	%REC	222134	1	04/05/2016 10:02	NP
Surr: Toluene-d8		91.7	81.8-120	%REC	222134	50	04/04/2016 14:03	NP
Surr: Toluene-d8		91.9	81.8-120	%REC	222134	1	04/05/2016 10:02	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-1
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 12:28:00 PM
<b>Lab ID:</b>	1604048-008	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,1,2-Trichloroethane		5.5	5.0	ug/L	222134	1	04/04/2016 19:31	NP
1,1-Dichloroethane		5.3	5.0	ug/L	222134	1	04/04/2016 19:31	NP
1,1-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 19:31	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 19:31	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 19:31	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 19:31	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 19:31	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 19:31	NP
Chloroform		15	5.0	ug/L	222134	1	04/04/2016 19:31	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 19:31	NP
cis-1,2-Dichloroethene		69	5.0	ug/L	222134	1	04/04/2016 19:31	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 19:31	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 19:31	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-1
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 12:28:00 PM
<b>Lab ID:</b>	1604048-008	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Trichloroethene	1000	100		ug/L	222134	20	04/04/2016 14:50	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Vinyl chloride	BRL	2.0		ug/L	222134	1	04/04/2016 19:31	NP
1,2-Dichloroethene, Total	72	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 19:31	NP
Surr: 4-Bromofluorobenzene	82.2	70.7-125	%REC		222134	1	04/04/2016 19:31	NP
Surr: 4-Bromofluorobenzene	81.9	70.7-125	%REC		222134	20	04/04/2016 14:50	NP
Surr: Dibromofluoromethane	109	82.2-120	%REC		222134	20	04/04/2016 14:50	NP
Surr: Dibromofluoromethane	112	82.2-120	%REC		222134	1	04/04/2016 19:31	NP
Surr: Toluene-d8	89.6	81.8-120	%REC		222134	1	04/04/2016 19:31	NP
Surr: Toluene-d8	91.6	81.8-120	%REC		222134	20	04/04/2016 14:50	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-2
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 12:59:00 PM
<b>Lab ID:</b>	1604048-009	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,1-Dichloroethane	11	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,1-Dichloroethene	32	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/05/2016 10:26	NP
2-Butanone	BRL	50		ug/L	222134	1	04/05/2016 10:26	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/05/2016 10:26	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/05/2016 10:26	NP
Acetone	BRL	50		ug/L	222134	1	04/05/2016 10:26	NP
Benzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Chloroethane	BRL	10		ug/L	222134	1	04/05/2016 10:26	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Chloromethane	BRL	10		ug/L	222134	1	04/05/2016 10:26	NP
cis-1,2-Dichloroethene	37	5.0		ug/L	222134	1	04/05/2016 10:26	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/05/2016 10:26	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Freon-113	BRL	10		ug/L	222134	1	04/05/2016 10:26	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-2
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 12:59:00 PM
<b>Lab ID:</b>	1604048-009	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Styrene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Toluene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Trichloroethene	530	50		ug/L	222134	10	04/04/2016 15:37	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Vinyl chloride		5.0	2.0	ug/L	222134	1	04/05/2016 10:26	NP
1,2-Dichloroethene, Total	37	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/05/2016 10:26	NP
Surr: 4-Bromofluorobenzene	79.5	70.7-125		%REC	222134	1	04/05/2016 10:26	NP
Surr: 4-Bromofluorobenzene	80.4	70.7-125		%REC	222134	10	04/04/2016 15:37	NP
Surr: Dibromofluoromethane	108	82.2-120		%REC	222134	10	04/04/2016 15:37	NP
Surr: Dibromofluoromethane	112	82.2-120		%REC	222134	1	04/05/2016 10:26	NP
Surr: Toluene-d8	91.3	81.8-120		%REC	222134	10	04/04/2016 15:37	NP
Surr: Toluene-d8	92.2	81.8-120		%REC	222134	1	04/05/2016 10:26	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	DUP
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 2:15:00 PM
<b>Lab ID:</b>	1604048-010	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,1-Dichloroethane		6.1	5.0	ug/L	222134	1	04/04/2016 17:58	NP
1,1-Dichloroethene		5.7	5.0	ug/L	222134	1	04/04/2016 17:58	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 17:58	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 17:58	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 17:58	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 17:58	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 17:58	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 17:58	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 17:58	NP
cis-1,2-Dichloroethene		25	5.0	ug/L	222134	1	04/04/2016 17:58	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 17:58	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 17:58	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	DUP
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 2:15:00 PM
<b>Lab ID:</b>	1604048-010	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Trichloroethene	760	50		ug/L	222134	10	04/05/2016 09:33	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Vinyl chloride	BRL	2.0		ug/L	222134	1	04/04/2016 17:58	NP
1,2-Dichloroethene, Total	25	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 17:58	NP
Surr: 4-Bromofluorobenzene	82.3	70.7-125	%REC		222134	1	04/04/2016 17:58	NP
Surr: 4-Bromofluorobenzene	83.8	70.7-125	%REC		222134	10	04/05/2016 09:33	NP
Surr: Dibromofluoromethane	112	82.2-120	%REC		222134	10	04/05/2016 09:33	NP
Surr: Dibromofluoromethane	113	82.2-120	%REC		222134	1	04/04/2016 17:58	NP
Surr: Toluene-d8	91.7	81.8-120	%REC		222134	10	04/05/2016 09:33	NP
Surr: Toluene-d8	92.6	81.8-120	%REC		222134	1	04/04/2016 17:58	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TRIP BLANK
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016
<b>Lab ID:</b>	1604048-011	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,1-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,1-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 12:28	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 12:28	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 12:28	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 12:28	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 12:28	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Chloroethane	BRL	10		ug/L	222134	1	04/04/2016 12:28	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 12:28	NP
cis-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 12:28	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 12:28	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TRIP BLANK
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016
<b>Lab ID:</b>	1604048-011	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Trichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Vinyl chloride	BRL	2.0		ug/L	222134	1	04/04/2016 12:28	NP
1,2-Dichloroethene, Total	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 12:28	NP
Surr: 4-Bromofluorobenzene	80.7	70.7-125	%REC		222134	1	04/04/2016 12:28	NP
Surr: Dibromofluoromethane	112	82.2-120	%REC		222134	1	04/04/2016 12:28	NP
Surr: Toluene-d8	91.4	81.8-120	%REC		222134	1	04/04/2016 12:28	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

BRL Below reporting limit

H Holding times for preparation or analysis exceeded

N Analyte not NELAC certified

B Analyte detected in the associated method blank

&gt; Greater than Result value

E Estimated (value above quantitation range)

S Spike Recovery outside limits due to matrix

Narr See case narrative

NC Not confirmed

&lt; Less than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-3
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 10:00:00 AM
<b>Lab ID:</b>	1604048-012	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
1,1,1-Trichloroethane	760	50		ug/L	222134	10	04/04/2016 15:13	NP
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,1,2-Trichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,1-Dichloroethane	840	50		ug/L	222134	10	04/04/2016 15:13	NP
1,1-Dichloroethene	1300	50		ug/L	222134	10	04/04/2016 15:13	NP
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,2-Dibromoethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,2-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,2-Dichloroethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,2-Dichloropropane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,3-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,4-Dichlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
1,4-Dioxane	BRL	150		ug/L	222134	1	04/04/2016 20:17	NP
2-Butanone	BRL	50		ug/L	222134	1	04/04/2016 20:17	NP
2-Hexanone	BRL	10		ug/L	222134	1	04/04/2016 20:17	NP
4-Methyl-2-pentanone	BRL	10		ug/L	222134	1	04/04/2016 20:17	NP
Acetone	BRL	50		ug/L	222134	1	04/04/2016 20:17	NP
Benzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Bromodichloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Bromoform	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Bromomethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Carbon disulfide	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Carbon tetrachloride	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Chlorobenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Chloroethane	18	10		ug/L	222134	1	04/04/2016 20:17	NP
Chloroform	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Chloromethane	BRL	10		ug/L	222134	1	04/04/2016 20:17	NP
cis-1,2-Dichloroethene	46	5.0		ug/L	222134	1	04/04/2016 20:17	NP
cis-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Cyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Dibromochloromethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Dichlorodifluoromethane	BRL	10		ug/L	222134	1	04/04/2016 20:17	NP
Ethylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Freon-113	BRL	10		ug/L	222134	1	04/04/2016 20:17	NP
Isopropylbenzene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
m,p-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Methyl acetate	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Methyl tert-butyl ether	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Methylcyclohexane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Methylene chloride	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

**Analytical Environmental Services, Inc**
**Date:** 6-Apr-16

<b>Client:</b>	Environmental Management Associates, LLC	<b>Client Sample ID:</b>	TP-3
<b>Project Name:</b>	Southern States	<b>Collection Date:</b>	3/31/2016 10:00:00 AM
<b>Lab ID:</b>	1604048-012	<b>Matrix:</b>	Groundwater

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
<b>Volatile Organic Compounds by GC/MS SW8260B</b>								
							<b>(SW5030B)</b>	
o-Xylene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Styrene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Tetrachloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Toluene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
trans-1,2-Dichloroethene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
trans-1,3-Dichloropropene	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Trichloroethene	730	50		ug/L	222134	10	04/04/2016 15:13	NP
Trichlorofluoromethane	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Vinyl chloride	16	2.0		ug/L	222134	1	04/04/2016 20:17	NP
1,2-Dichloroethene, Total	46	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Xylenes, Total	BRL	5.0		ug/L	222134	1	04/04/2016 20:17	NP
Surr: 4-Bromofluorobenzene	82.6	70.7-125		%REC	222134	10	04/04/2016 15:13	NP
Surr: 4-Bromofluorobenzene	85.4	70.7-125		%REC	222134	1	04/04/2016 20:17	NP
Surr: Dibromofluoromethane	111	82.2-120		%REC	222134	10	04/04/2016 15:13	NP
Surr: Dibromofluoromethane	129	82.2-120	S	%REC	222134	1	04/04/2016 20:17	NP
Surr: Toluene-d8	89.5	81.8-120		%REC	222134	10	04/04/2016 15:13	NP
Surr: Toluene-d8	93.5	81.8-120		%REC	222134	1	04/04/2016 20:17	NP

**Qualifiers:** \* Value exceeds maximum contaminant level

E Estimated (value above quantitation range)

BRL Below reporting limit

S Spike Recovery outside limits due to matrix

H Holding times for preparation or analysis exceeded

Narr See case narrative

N Analyte not NELAC certified

NC Not confirmed

B Analyte detected in the associated method blank

&lt; Less than Result value

&gt; Greater than Result value

J Estimated value detected below Reporting Limit

## Sample/Cooler Receipt Checklist

Client EMA/JSWork Order Number 1604048Checklist completed by Par Mard 4/01/12  
Signature DateCarrier name: FedEx  UPS  Courier  Client  US Mail  Other \_\_\_\_\_Shipping container/coolers in good condition? Yes  No  Not Present Custody seals intact on shipping container/coolers? Yes  No  Not Present Custody seals intact on sample bottles? Yes  No  Not Present Container/Temp Blank temperature in compliance? (0°≤6°C)\* Yes  No Cooler #1 23°C Cooler #2 \_\_\_\_\_ Cooler #3 \_\_\_\_\_ Cooler #4 \_\_\_\_\_ Cooler #5 \_\_\_\_\_ Cooler #6 \_\_\_\_\_Chain of custody present? Yes  No Chain of custody signed when relinquished and received? Yes  No Chain of custody agrees with sample labels? Yes  No Samples in proper container/bottle? Yes  No Sample containers intact? Yes  No Sufficient sample volume for indicated test? Yes  No All samples received within holding time? Yes  No Was TAT marked on the COC? Yes  No Proceed with Standard TAT as per project history? Yes  No  Not Applicable Water - VOA vials have zero headspace? No VOA vials submitted  Yes  No Water - pH acceptable upon receipt? Yes  No  Not Applicable 

Adjusted? \_\_\_\_\_ Checked by \_\_\_\_\_

Sample Condition: Good  Other(Explain) \_\_\_\_\_(For diffusive samples or AIHA lead) Is a known blank included? Yes  No 

See Case Narrative for resolution of the Non-Conformance.

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

<b>Client:</b>	Environmental Management Associates, LLC	<b>Dates Report</b>				
<b>Project Name:</b>	Southern States					
<b>Lab Order:</b>	1604048					

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1604048-001A	MW-9	3/31/2016 2:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-002A	MW-13	3/31/2016 1:43:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-003A	MW-18	3/31/2016 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-004A	MW-21	3/31/2016 3:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-004A	MW-21	3/31/2016 3:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/05/2016	
1604048-005A	MW-39	3/31/2016 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-006A	MW-40	3/31/2016 10:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-007A	MW-41	3/31/2016 11:43:00AM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-007A	MW-41	3/31/2016 11:43:00AM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/05/2016	
1604048-008A	TP-1	3/31/2016 12:28:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-009A	TP-2	3/31/2016 12:59:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-009A	TP-2	3/31/2016 12:59:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/05/2016	
1604048-010A	DUP	3/31/2016 2:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-010A	DUP	3/31/2016 2:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/05/2016	
1604048-011A	TRIP BLANK	3/31/2016 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	
1604048-012A	TP-3	3/31/2016 10:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS	4/4/2016 11:17:00 AM	04/04/2016	

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1604048

**ANALYTICAL QC SUMMARY REPORT****BatchID: 222134**

Sample ID: MB-222134	Client ID:	Units: ug/L	Prep Date: 04/04/2016	Run No: 313880							
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 222134	Analysis Date: 04/04/2016	Seq No: 6751791							
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloroethene, Total	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
1,4-Dioxane	BRL	150									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									

Qualifiers: &gt; Greater than Result value

&lt; Less than Result value

B Analyte detected in the associated method blank

BRL Below reporting limit

E Estimated (value above quantitation range)

H Holding times for preparation or analysis exceeded

J Estimated value detected below Reporting Limit

N Analyte not NELAC certified

R RPD outside limits due to matrix

Rpt Lim Reporting Limit

S Spike Recovery outside limits due to matrix

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1604048

**ANALYTICAL QC SUMMARY REPORT****BatchID: 222134**

Sample ID: MB-222134	Client ID:	Units: ug/L			Prep Date:	04/04/2016	Run No:	313880			
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 222134			Analysis Date:	04/04/2016	Seq No:	6751791			
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chloroform	BRL	5.0									
Chloromethane	BRL	10									
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Xylenes, Total	BRL	5.0									
Surr: 4-Bromofluorobenzene	40.48	0	50.00		81.0	70.7	125				
Surr: Dibromofluoromethane	53.36	0	50.00		107	82.2	120				

Qualifiers: &gt; Greater than Result value

&lt; Less than Result value

B Analyte detected in the associated method blank

BRL Below reporting limit

E Estimated (value above quantitation range)

H Holding times for preparation or analysis exceeded

J Estimated value detected below Reporting Limit

N Analyte not NELAC certified

R RPD outside limits due to matrix

Rpt Lim Reporting Limit

S Spike Recovery outside limits due to matrix

**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1604048

**ANALYTICAL QC SUMMARY REPORT****BatchID: 222134**

Sample ID: <b>MB-222134</b>	Client ID:				Units: <b>ug/L</b>	Prep Date: <b>04/04/2016</b>	Run No: <b>313880</b>				
SampleType: <b>MBLK</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>				BatchID: <b>222134</b>	Analysis Date: <b>04/04/2016</b>	Seq No: <b>6751791</b>				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Toluene-d8	45.50	0	50.00		91.0	81.8	120				

Sample ID: <b>LCS-222134</b>	Client ID:				Units: <b>ug/L</b>	Prep Date: <b>04/04/2016</b>	Run No: <b>313880</b>				
SampleType: <b>LCS</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>				BatchID: <b>222134</b>	Analysis Date: <b>04/04/2016</b>	Seq No: <b>6751789</b>				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	57.88	5.0	50.00		116	65.3	137				
Benzene	52.74	5.0	50.00		105	74.9	123				
Chlorobenzene	55.77	5.0	50.00		112	73.9	124				
Toluene	52.98	5.0	50.00		106	75	124				
Trichloroethene	52.39	5.0	50.00		105	73.1	128				
Surr: 4-Bromofluorobenzene	41.38	0	50.00		82.8	70.7	125				
Surr: Dibromofluoromethane	50.88	0	50.00		102	82.2	120				
Surr: Toluene-d8	44.13	0	50.00		88.3	81.8	120				

Sample ID: <b>1604048-004AMS</b>	Client ID: <b>MW-21</b>				Units: <b>ug/L</b>	Prep Date: <b>04/04/2016</b>	Run No: <b>313938</b>				
SampleType: <b>MS</b>	TestCode: <b>Volatile Organic Compounds by GC/MS SW8260B</b>				BatchID: <b>222134</b>	Analysis Date: <b>04/05/2016</b>	Seq No: <b>6753694</b>				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

1,1-Dichloroethene	562.1	50	500.0	13.90	110	60	150				
Benzene	466.0	50	500.0		93.2	70.1	132				
Chlorobenzene	511.4	50	500.0		102	70.9	131				
Toluene	477.6	50	500.0		95.5	70.1	133				
Trichloroethene	705.9	50	500.0	209.2	99.3	70	136				
Surr: 4-Bromofluorobenzene	410.1	0	500.0		82.0	70.7	125				
Surr: Dibromofluoromethane	531.9	0	500.0		106	82.2	120				
Surr: Toluene-d8	437.4	0	500.0		87.5	81.8	120				

<b>Qualifiers:</b>	>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
	BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
	J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
	Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		Page 32 of 33

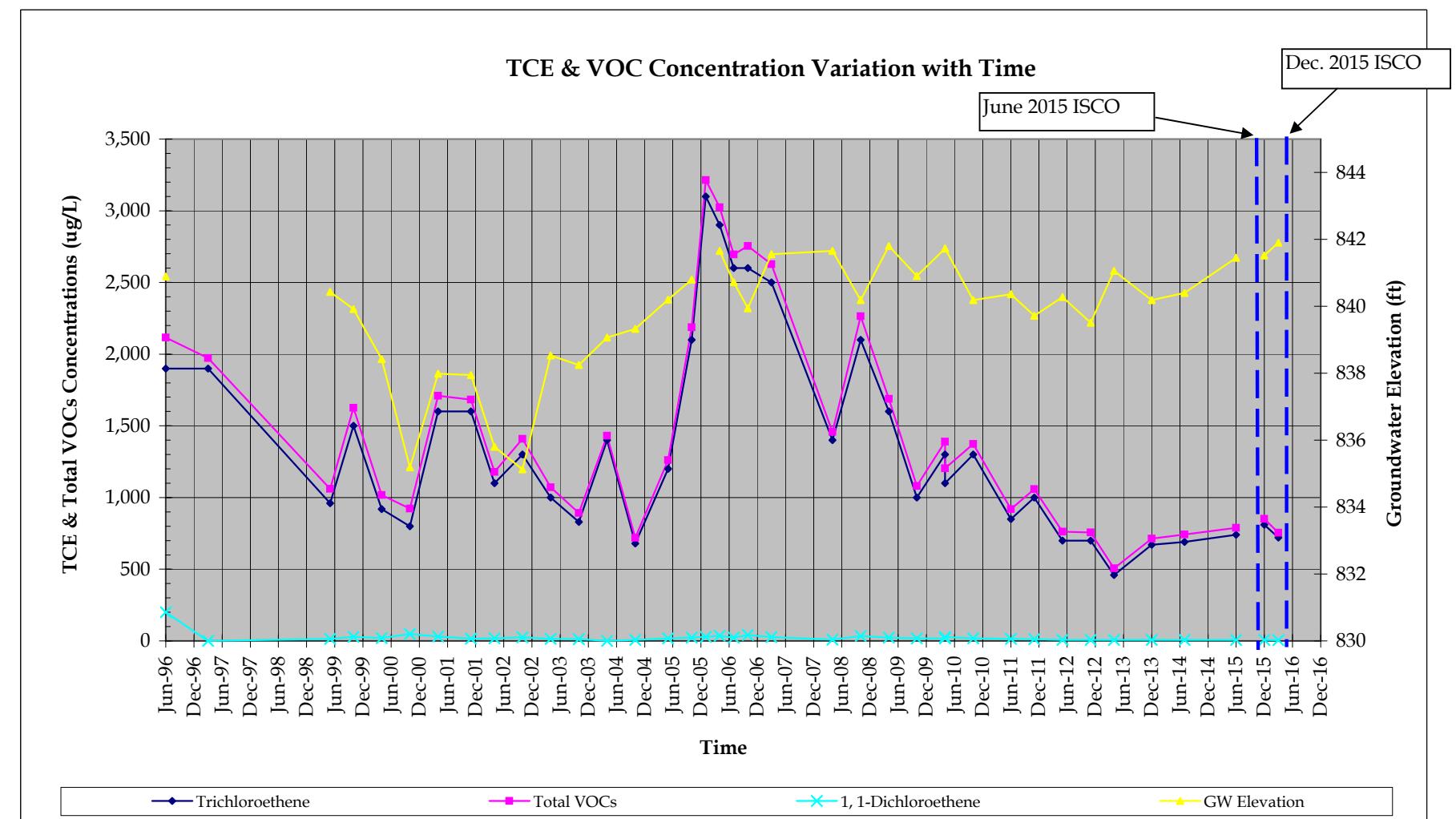
**Client:** Environmental Management Associates, LLC  
**Project Name:** Southern States  
**Workorder:** 1604048

**ANALYTICAL QC SUMMARY REPORT****BatchID: 222134**

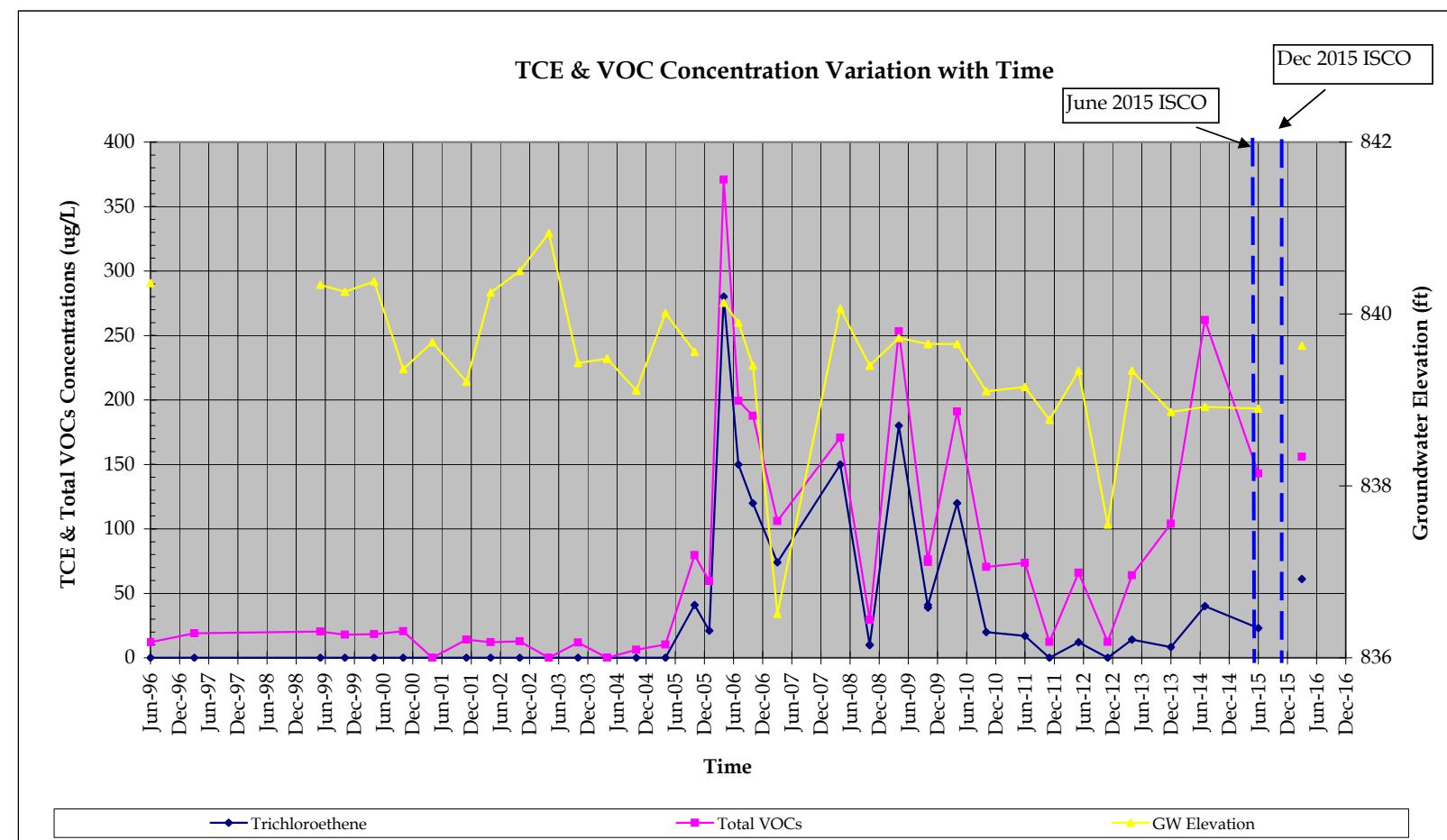
Sample ID: 1604048-004AMSD	Client ID: MW-21				Units: ug/L	Prep Date: 04/04/2016	Run No: 313938				
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B				BatchID: 222134	Analysis Date: 04/05/2016	Seq No: 6753723				
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	517.6	50	500.0	13.90	101	60	150	562.1	8.24	17.7	
Benzene	445.7	50	500.0		89.1	70.1	132	466.0	4.45	20	
Chlorobenzene	475.0	50	500.0		95.0	70.9	131	511.4	7.38	20	
Toluene	455.6	50	500.0		91.1	70.1	133	477.6	4.71	20	
Trichloroethene	653.3	50	500.0	209.2	88.8	70	136	705.9	7.74	20	
Surr: 4-Bromofluorobenzene	410.6	0	500.0		82.1	70.7	125	410.1	0	0	
Surr: Dibromofluoromethane	529.1	0	500.0		106	82.2	120	531.9	0	0	
Surr: Toluene-d8	445.5	0	500.0		89.1	81.8	120	437.4	0	0	

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

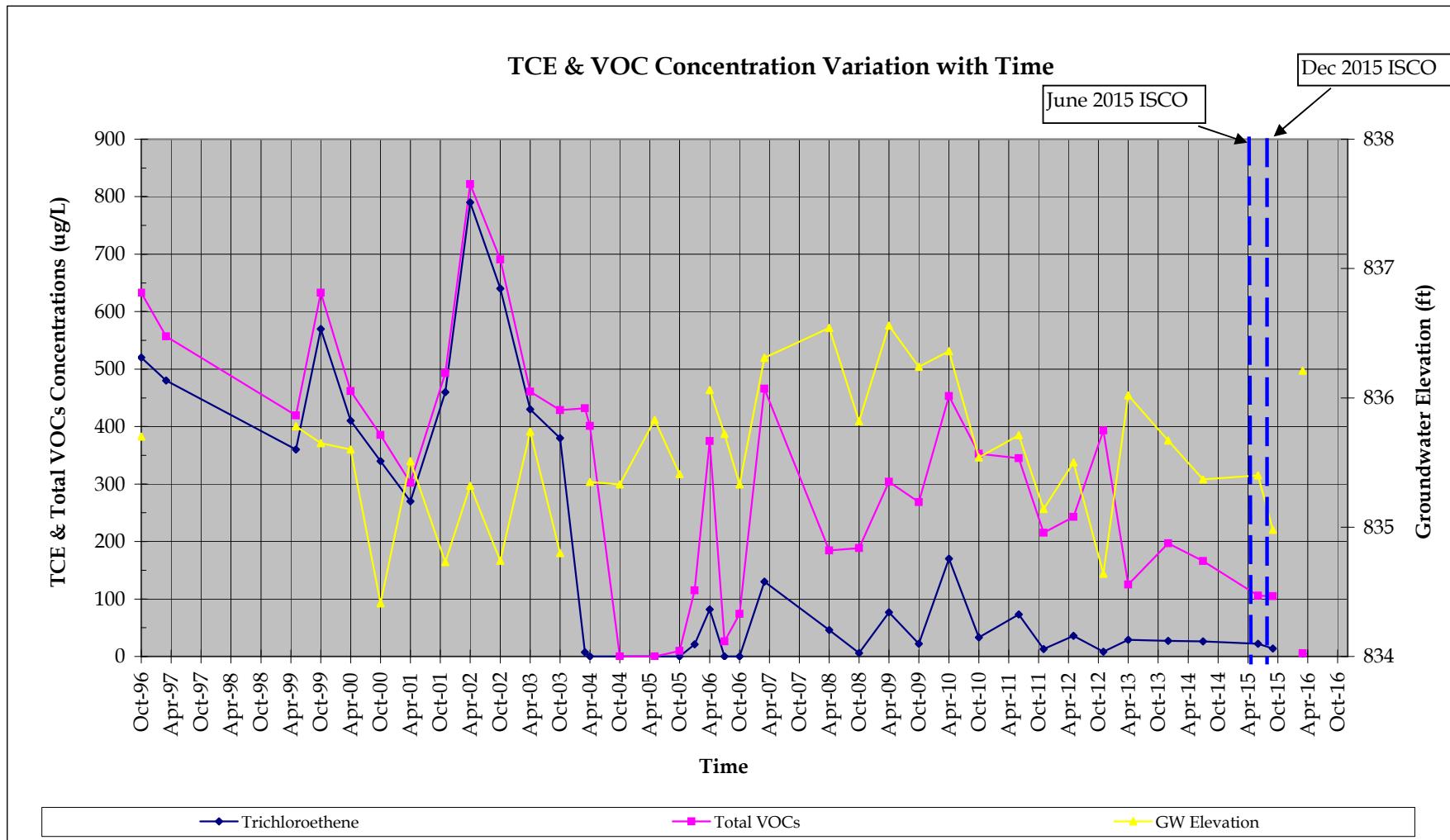
**APPENDIX B**  
**TOTAL VOC TREND GRAPHS FOR SELECT**  
**PERFORMANCE MONITORING WELLS**



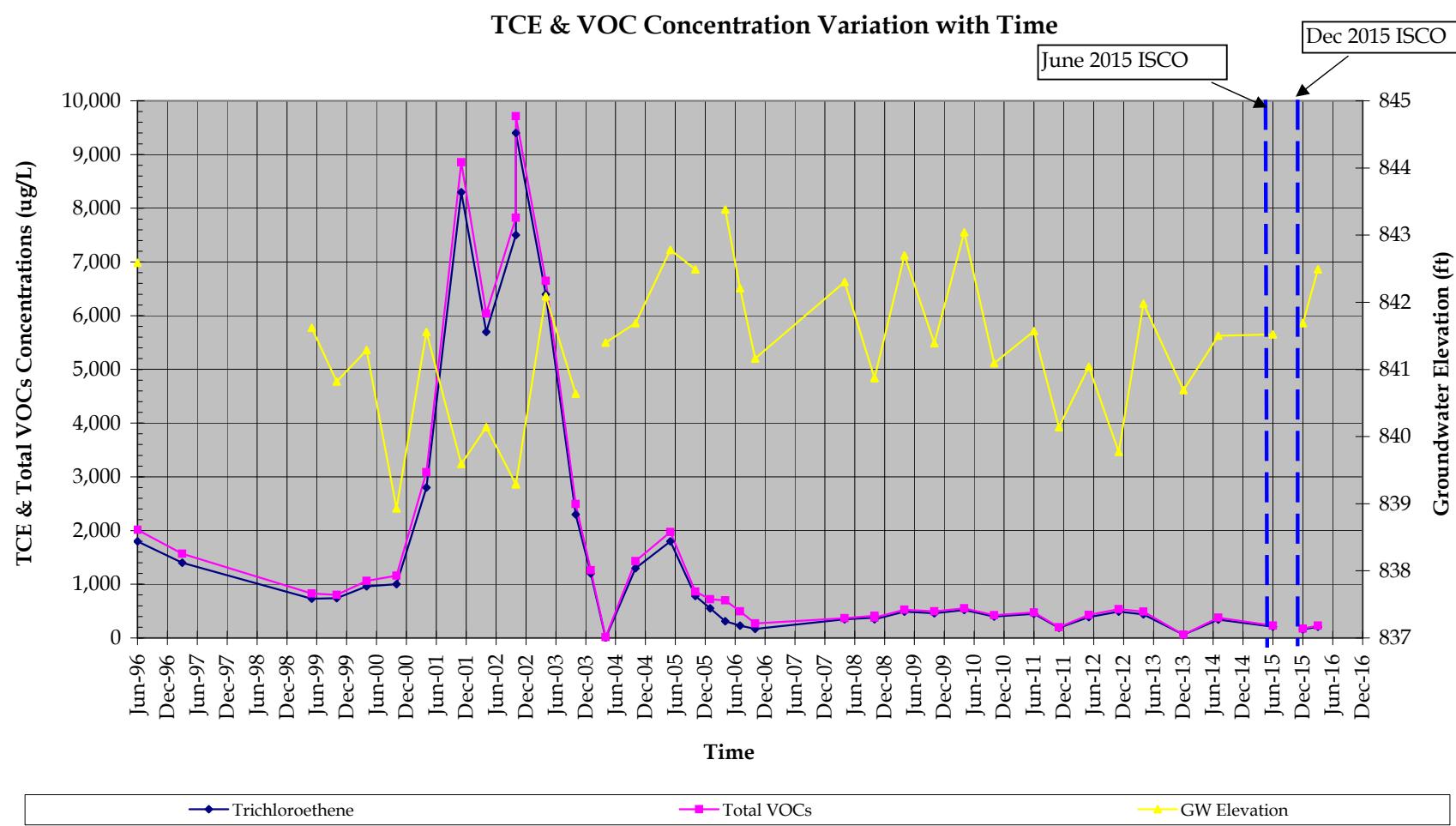
**ORGANIC CONCENTRATIONS AT MW-9  
OVERBURDEN MONITORING WELL  
SOUTHERN STATES, LLC  
Hampton, Georgia**



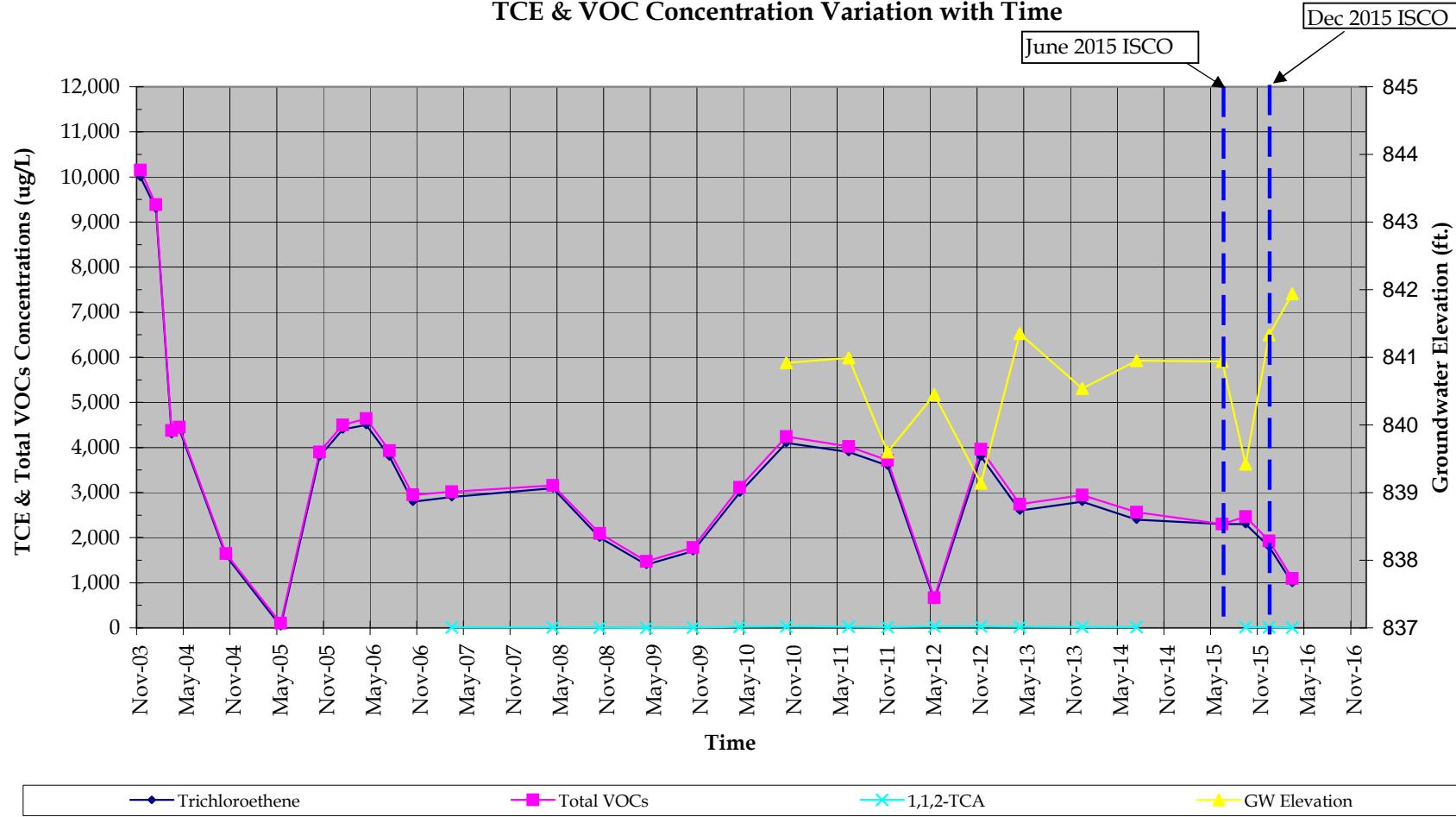
**ORGANIC CONCENTRATIONS AT MW-13  
OVERBURDEN MONITORING WELL  
SOUTHERN STATES, LLC  
*Hampton, Georgia***



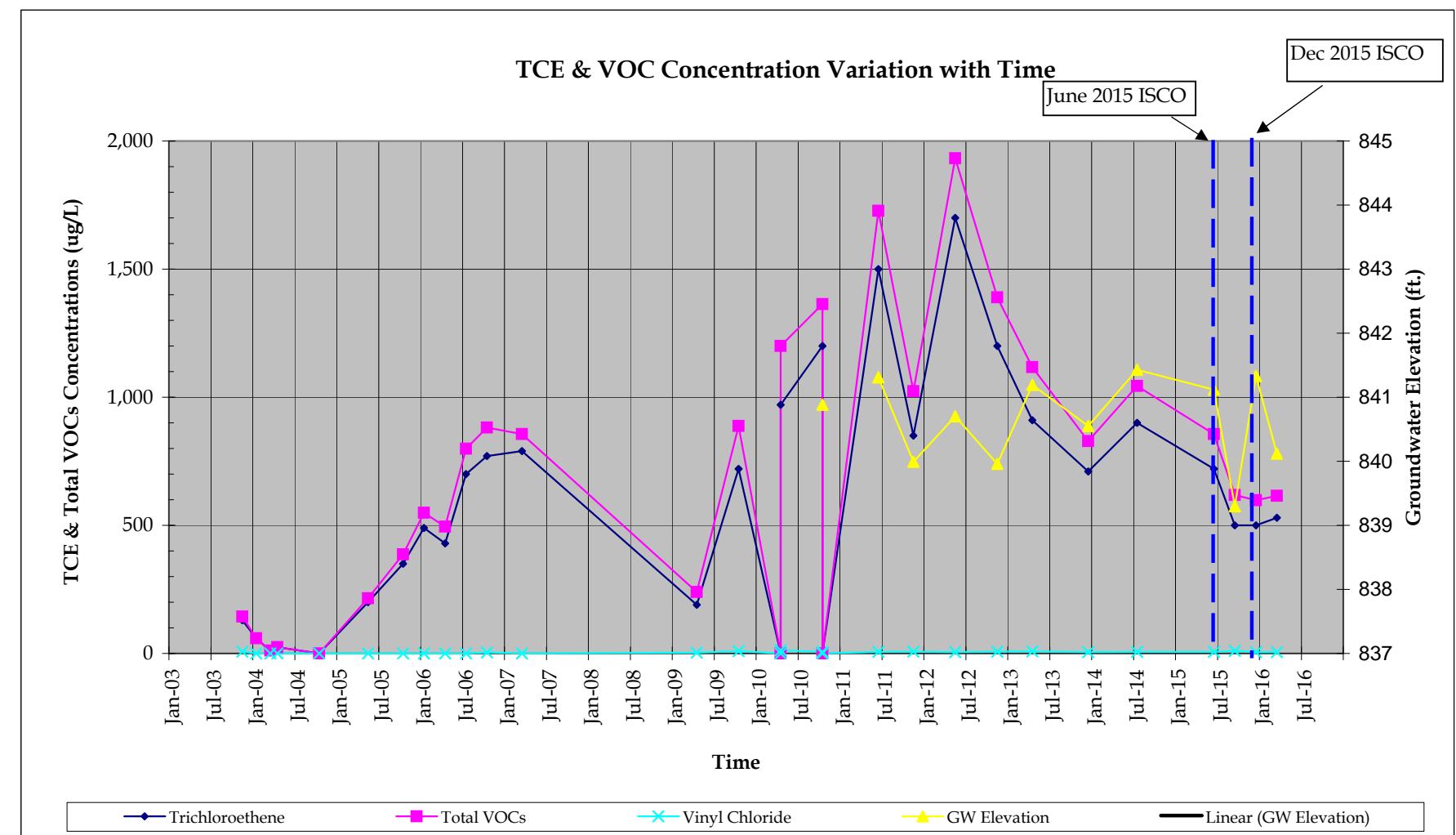
**ORGANIC CONCENTRATIONS AT MW-18  
OVERBURDEN MONITORING WELL  
SOUTHERN STATES, LLC  
*Hampton, Georgia***



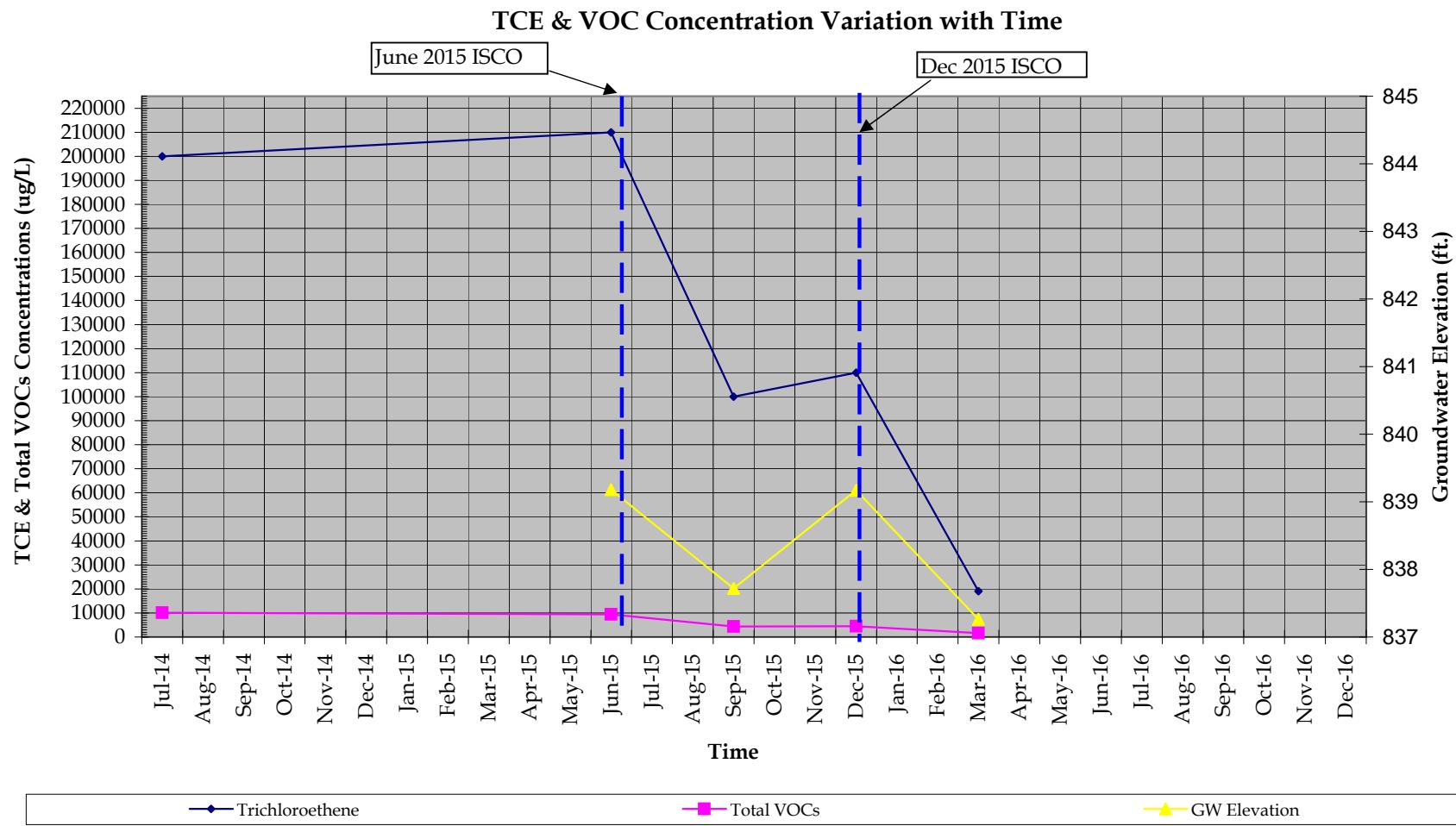
**ORGANIC CONCENTRATIONS AT MW-21  
OVERBURDEN MONITORING WELL  
SOUTHERN STATES, LLC  
*Hampton, Georgia***



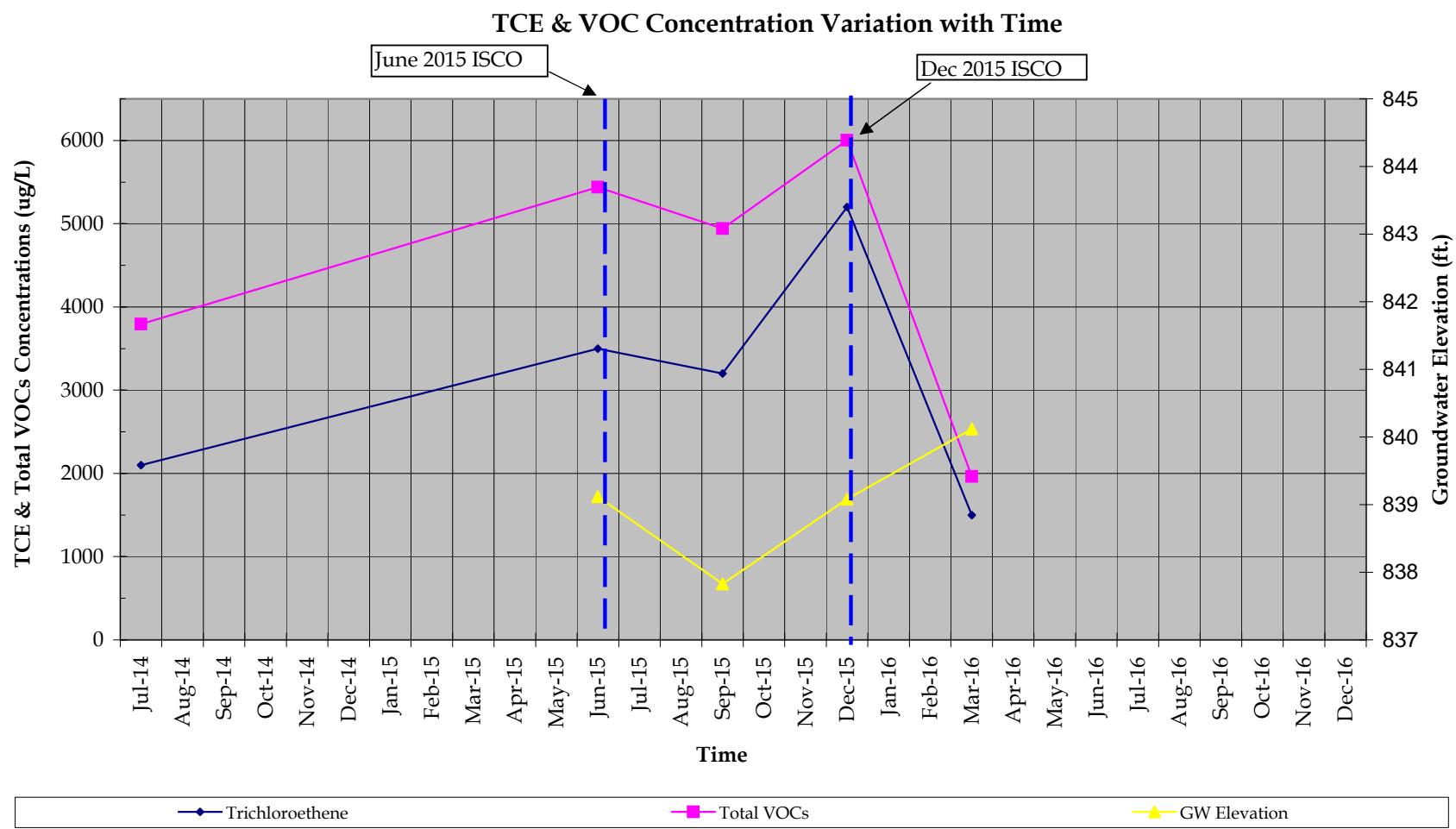
**ORGANIC CONCENTRATIONS AT TP-1  
OVERBURDEN MONITORING WELL  
SOUTHERN STATES, LLC  
*Hampton, Georgia***



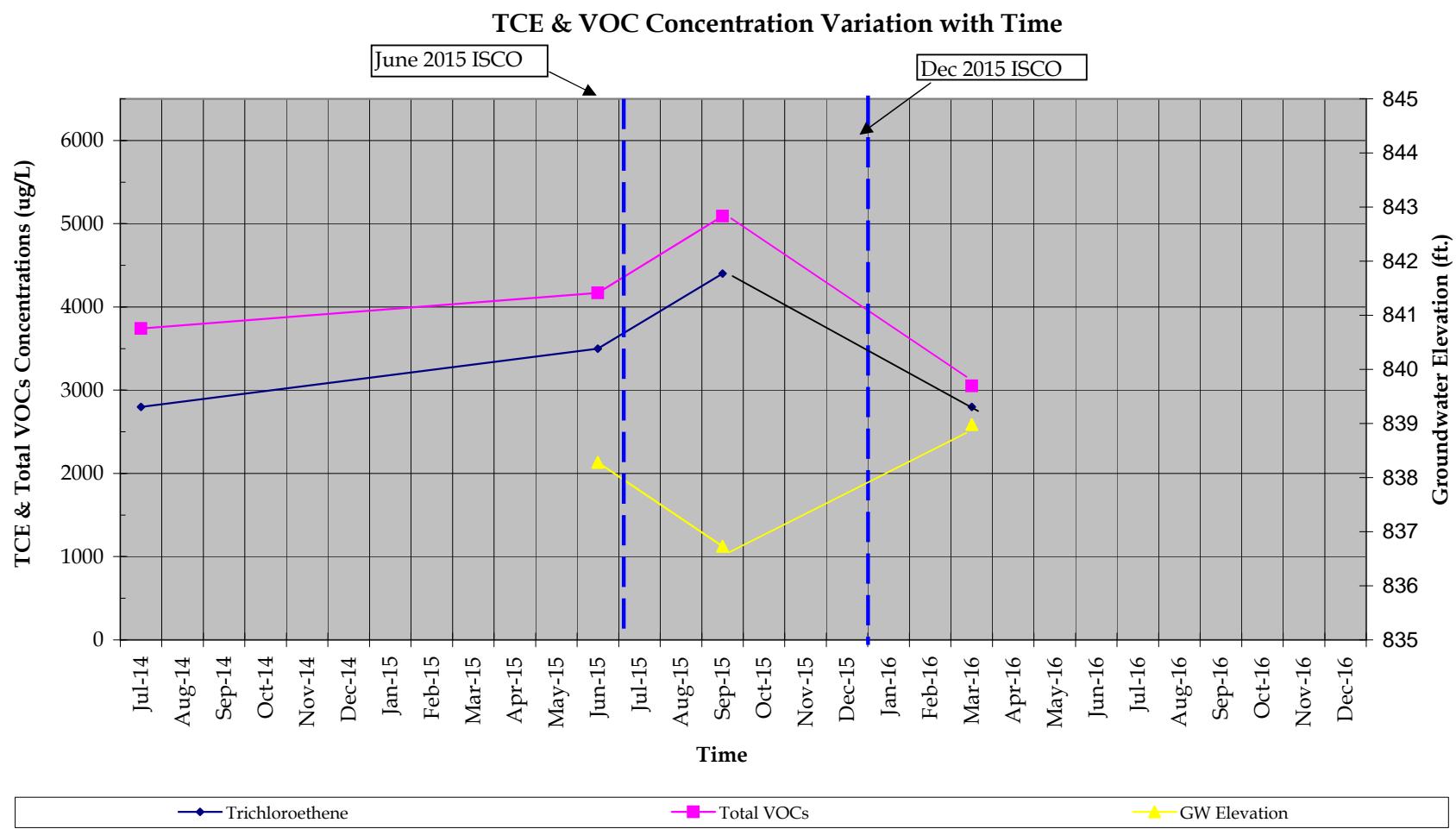
**ORGANIC CONCENTRATIONS AT TP-2  
OVERBURDEN MONITORING WELL  
SOUTHERN STATES, LLC  
*Hampton, Georgia***



**ORGANIC CONCENTRATIONS AT MW-39**  
**OVERBURDEN MONITORING WELL**  
**SOUTHERN STATES, LLC**  
*Hampton, Georgia*



**ORGANIC CONCENTRATIONS AT MW-40**  
**OVERBURDEN MONITORING WELL**  
**SOUTHERN STATES, LLC**  
*Hampton, Georgia*



**ORGANIC CONCENTRATIONS AT MW-41**  
**OVERBURDEN MONITORING WELL**  
**SOUTHERN STATES, LLC**  
*Hampton, Georgia*

**APPENDIX C**  
**UPDATED MILESTONE SCHEDULE**

**MILESTONE SCHEDULE  
SOUTHERN STATES, LLC  
30 GEORGIA AVENUE  
HAMPTON, GEORGIA**

## **Second Year - 2016 / Third Year - 2017**

Note √\* - Anticipated GA EPD Stream Buffer Variance Approval.

**APPENDIX D**  
**SUMMARY OF PROFESSIONAL GEOLOGIST EFFORT**

**PG OVERSIGHT SUMMARY**  
**SOUTHERN STATES, LLC**  
**HAMPTON, GEORGIA**

	Units	Unit Cost	
PG Summary Time	Hours	\$125	Sub-total
10/15/15 - 10/31/15	5	\$125	\$625
11/1/15 - 11/30/15	12	\$125	\$1,500
12/1/15 - 12/31/15	40	\$125	\$5,000
1/1/16 - 1/31/16	15	\$125	\$1,875
2/1/16 - 2/29/16	10	\$125	\$1,250
3/1/16 - 3/31/16	40	\$125	\$5,000
4/1/16 - 4/15/16	20	\$125	\$2,500