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November 30, 2012

Mr. Greg Gilmore
Response and Remediation Program
2 Martin Luther King, Jr. Drive SE
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Atlanta, Georgia 30334

Subject: December 2012 Semi-Annual Voluntary Remediation Program Progress Report
Former Manchester Tank Company (HSI No. 10765)
Cedartown, Polk County, Georgia

Dear Mr. Gilmore:

This Progress Report documents the activities completed for the Former Manchester Tank Company (Manchester Tank) site in Cedartown, Georgia from June 2012 through November 2012. This reporting schedule follows that prescribed by the Georgia Environmental Protection Division (EPD) in a letter dated June 4, 2010. This Progress Report includes the following:

- Work Performed This Period;
- Site Investigation Summary;
- Current Site Conceptual Model;
- Receptor Survey;
- Work Anticipated for the Next Period;
- Updated Schedule; and
- Professional Certification.

Work Performed This Period

The following work was performed from June 2012 through November 2012:

- As summarized in the following section, three phases of additional assessment activities were completed.





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- A meeting was held with representatives from EPD on November 15, 2012 to discuss the latest results and planned next steps.
- An access agreement was executed on October 2, 2012 with the service station property located northeast of the Manchester Tank and Missouri Machine and Plow (Missouri M&P) properties. Attempts to gain access to an additional property located northeast of Missouri M&P and owned by Geo Specialty Chemicals were unsuccessful.
- CDM Smith coordinated access to the residential properties east of Missouri M&P through the City of Cedartown. Door hangers were created and used for residences adjacent to drilling activities.

Site Investigation Summary

During the current period, three additional phases of assessment activities were completed as follows:

Phase 1 (June - July 2012)

- Thirteen new wells (4 Unit A/B wells, 8 Unit C wells, and 1 Unit D well) were installed on site and off site. These wells are shown on **Figure 1** and include MW-30A, -31C, -32B, -33A, -34B, -35D, -36C, -37C, -38C, -39C, -40C, -41C, -42C. The letter designation after each well number corresponds to the stratigraphic unit.
- Water levels and groundwater samples were collected from new and existing wells on both the Manchester Tank and Missouri M&P sites. Samples were analyzed for volatile organic compounds (VOCs). A summary of analytical results is provided in **Table 1**.
- An evaluation of metals was performed using background data from nearby sites.
- A receptor survey was completed that included verifying a previously conducted water survey; evaluating site security and accessibility; identifying potentially sensitive receptors; evaluating structures for vapor intrusion potential; and searching for any nearby groundwater wells.

Phase 2 (August 2012)

- Additional geophysical surveys were conducted using ground penetrating radar and seismic techniques. The objectives of these surveys were to provide bedrock topography data and identify any preferential groundwater flow paths. Geophysical survey transect locations are shown on Figure 1, and interpreted top of bedrock elevations are shown on **Figure 2**. No significant fractures were observed.

Phase 3 (September - November 2012)

- Ten new wells (9 Unit C wells and 1 Unit D well) were installed on site and off site. These wells are shown on Figure 1 and include MW-43D, -44C, -45C, -46C, -47C, -48C, -49C, -50C, -51C, and -52C.
- Twelve direct push (i.e., Geoprobe®) borings were completed in the residential neighborhood east of Missouri M&P. A groundwater sample was collected from each boring if groundwater was encountered in the residuum prior to drilling refusal.
- Groundwater sampling was performed for the new wells and water level measurements were collected from all onsite and offsite wells. Table 1 contains a summary of analytical results, and **Table 2** provides a well summary along with the most recently measured groundwater elevations. Only the most recent groundwater elevations are shown as these are believed to be the most representative of equilibrated conditions (i.e., sufficient time has passed for newly installed and slowly responding wells to recharge).

Current Site Conceptual Model

CDM Smith has revised the site conceptual model (SCM) based on the investigations conducted during the current period. **Figures 3 and 4** depict interpolated potentiometric surface maps and trichloroethene (TCE) distributions in groundwater for Units A/B and C/D, respectively, based on the most recent data. These figures also identify which wells have concentrations of any VOC that exceed the Type 1 Risk Reduction Standards (RRSs), which are based on standard residential exposure assumptions. TCE was selected for presentation since it has the highest number of Type 1 RRS exceedances and in general, is detected in higher concentrations than other VOCs. **Figure 5** shows an example depiction of the site stratigraphy.

The bedrock beneath the site is limestone that is overlain by a thin veneer of weathered limestone residuum, and the bedrock is present at land surface at several locations. The residuum ranges from sandy clay to clayey sand, has an average 12-foot thickness, and has a maximum observed thickness of 25 feet. The borings near Cedar Creek and a reconnaissance along the creek did not identify any alluvial deposits west of the creek. Rather, the west creek bank is composed of weathered limestone residuum and limestone. It appears that the channel of Cedar Creek has not historically migrated any further to the west than its present position.

The limestone bedrock, believed to be the Newalla Limestone, is dense, hard, light gray to dark gray, and contains numerous stylolites. Rock quality designations (RQDs) from cores obtained at MW-43D averaged 96% with no observed fractures. The bedding planes observed in the rock cores were horizontal.



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The site hydrogeology has been classified on a site-specific basis as shown on Figure 5 to include Units A, B, C, and D. Unit A is the residuum and is typically unsaturated but may contain groundwater under water table conditions where it is thick enough. Unit B is the uppermost bedrock and typically contains groundwater under water table conditions. A definitive demarcation between Units B and C does not exist but Unit B is assumed to be limited to within approximately 30 feet of land surface. The Unit B limestone has few fractures, which tend to be thin and produce little groundwater. Unit A and B are mapped together and represent the uppermost groundwater. Unit C is similar to Unit B except that the fractures tend to be less frequent, and groundwater in Unit C is presumed to be confined to some extent. A definitive demarcation between Units C and D does not exist but Unit C is assumed to be limited to within approximately 95 feet of land surface. Drilling of deep exploratory well MW-43D indicated no fractures from this depth until approximately 225 feet below land surface.

The bedrock topography shown on Figure 2 indicates a subtle bedrock valley from southwest to northeast from the former soil removal area on the Manchester Tank site, and this valley generally corresponds with observed groundwater flow patterns shown on Figures 3 and 4. As shown on Figure 3, the TCE plume in groundwater appears to be split into a north flow component toward MW-18B and a northwest flow component toward MW-5B. As described in the last Progress Report (June 2012), the source of VOCs has been assumed to be the former disposal pit located on the Manchester Tank site. In general, the recent investigation data supports this assumption. The November 2012 water levels indicate groundwater mounding in the vicinity of MW-3B, and the resulting groundwater flow patterns and TCE distribution correlate well. The extent of TCE is limited to the Manchester Tank and Missouri M&P properties with the exception of a small area near GP-2A.

TCE in Unit C groundwater follows a similar pattern as Unit A/B groundwater except that the interpolated plume is shown as discontinuous. Whether this is true cannot be answered based on the current data. Concentrations observed in MW-51C, for example, may be attributable to the former disposal pit or to a small source near MW-51C. While the plume may or may not be continuous, delineation to Type 1 RRS delineation appears complete in the north, south, and east directions, with clean wells located in each of these areas. To the west and upgradient of the former disposal pit, it is unclear if concentrations in MW-41C are attributable to the former disposal pit or a potential offsite source.

Vertical delineation of VOCs in groundwater also appears incomplete based on current data. No VOCs have been detected in MW-35D off site. However, MW-43D, which was completed to a depth of 250 feet near the formal disposal pit, has detected VOCs. It is possible that VOCs migrated downward during installation of this well, and this well will be resampled to evaluate whether concentrations decrease and whether additional vertical exploration is needed.



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During the current period, CDM Smith also evaluated metals data. While the primary chemicals of concern for the Manchester Tank site are VOCs, previously collected soil samples indicated metals concentrations greater than Type 1 RRSs. Preliminary comparisons to nearby site data show that many but not all metals detected on the Manchester Tank site can be attributable to background conditions. Additional analyses and potential additional sampling will be conducted during the next period to complete delineation to the Type 1 RRSs.

Receptor Survey

CDM Smith has completed an initial receptor survey for the site that included reviewing the previous receptor surveys for the Manchester Tank site and the Missouri M&P site, verifying the pertinent findings, evaluating structures for vapor intrusion potential, and updating the water use surveys.

CDM Smith updated the water use survey through the USGS Nation Water Information System. As shown on **Figure 6**, nine water wells have been located near the site with the Zartic well to the south being the closest well. This well is no longer used because the Zartic facility burned and the structure is no longer present, although the well house remains. The City of Cedartown obtains its water supply from a natural spring located east of the site, and the municipal supply is available to the entire site vicinity.

The site is in an industrial area with residential properties located to the east of the Missouri M&P site. Additional sensitive receptors such as schools, day care facilities, and hospitals are located to the east beyond Cedar Creek. Access to the Manchester Tank site is restricted by fencing but the gates generally remain open because Hon uses the facility for storage and operates 24 hours per day. Access to the Missouri M&P site is controlled by fences as well.

Based on CDM Smith's current understanding of the site environmental conditions and the findings of the receptor survey, the following potential receptors should be considered:

- Onsite building occupants for vapor intrusion;
- Offsite building occupants for vapor intrusion;
- Cedar Creek from potential future groundwater discharge; and
- Potential future offsite groundwater users.



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Work Anticipated for the Next Period

To address the remaining SCM data gaps, Textron and CDM Smith plan to complete the following activities during the next 6-month period:

- Install groundwater wells upgradient from and west of the Manchester Tank property. Two wells are initially planned, and installation will require securing another access agreement.
- Resample well MW-43D to determine if concentrations are declining, increasing, or remaining steady. Pending the results of this analysis, an additional Unit D well will be installed with the purpose of completing vertical delineation to Type 1 RRSs.
- Complete a vapor intrusion evaluation for potentially affected residences near GP-2A.
- Complete delineation of metals to Type 1 RRSs and/or demonstrate that observed concentrations are attributable to background conditions.

Updated Schedule

As discussed during the November 15th meeting at EPD, the investigations completed during the current period have provided critical information regarding site geology, hydrogeology, extent of VOCs in groundwater, and potential receptors. However, the additional work outlined in the previous section is recommended prior to preparing a Remedial Action Plan. The original schedule showed a Remedial Action Plan being submitted with this Progress Report. Textron and CDM Smith are requesting a 9-month extension to this deadline. An updated project schedule through September 2013 is presented in **Figure 7**.

Professional Certification

Attachment A contains the professional certification and summary of incurred professional engineer and geologist hours for the period from May 20, 2012 through November 24, 2012.

If you have any questions regarding this Progress Report, please do not hesitate to contact me at (423) 771-4495.

Sincerely,

Andrew P. Romanek, P.E., BCEE
Associate
CDM Smith Inc.

Attachments

cc: Jamie Schiff, Textron

Figures

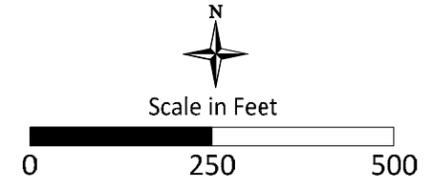
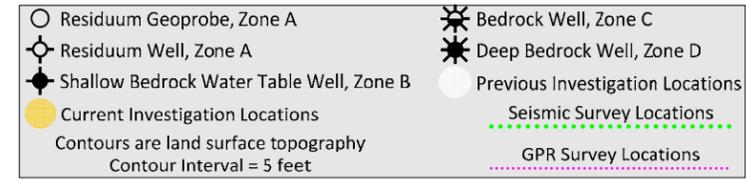
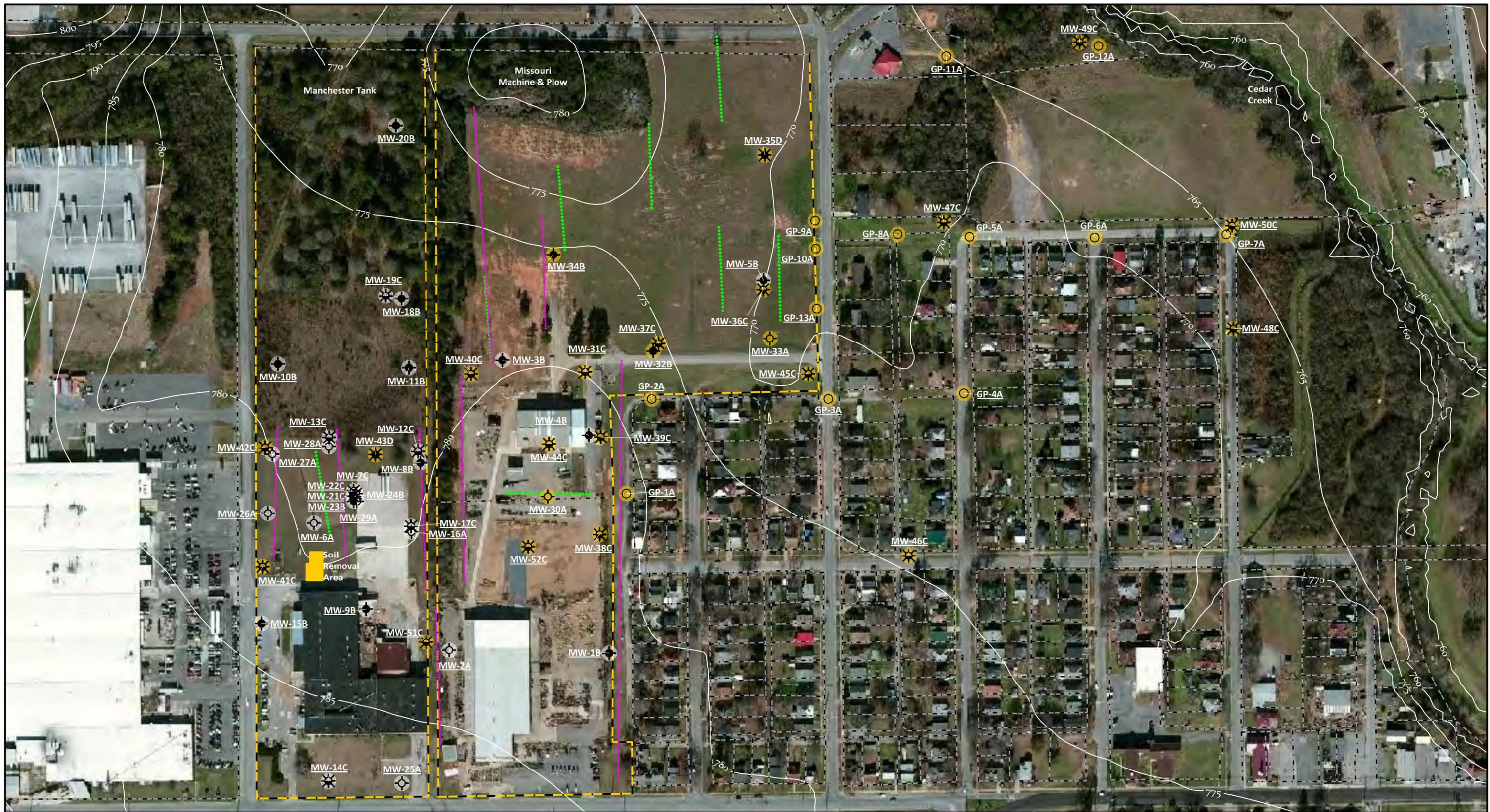
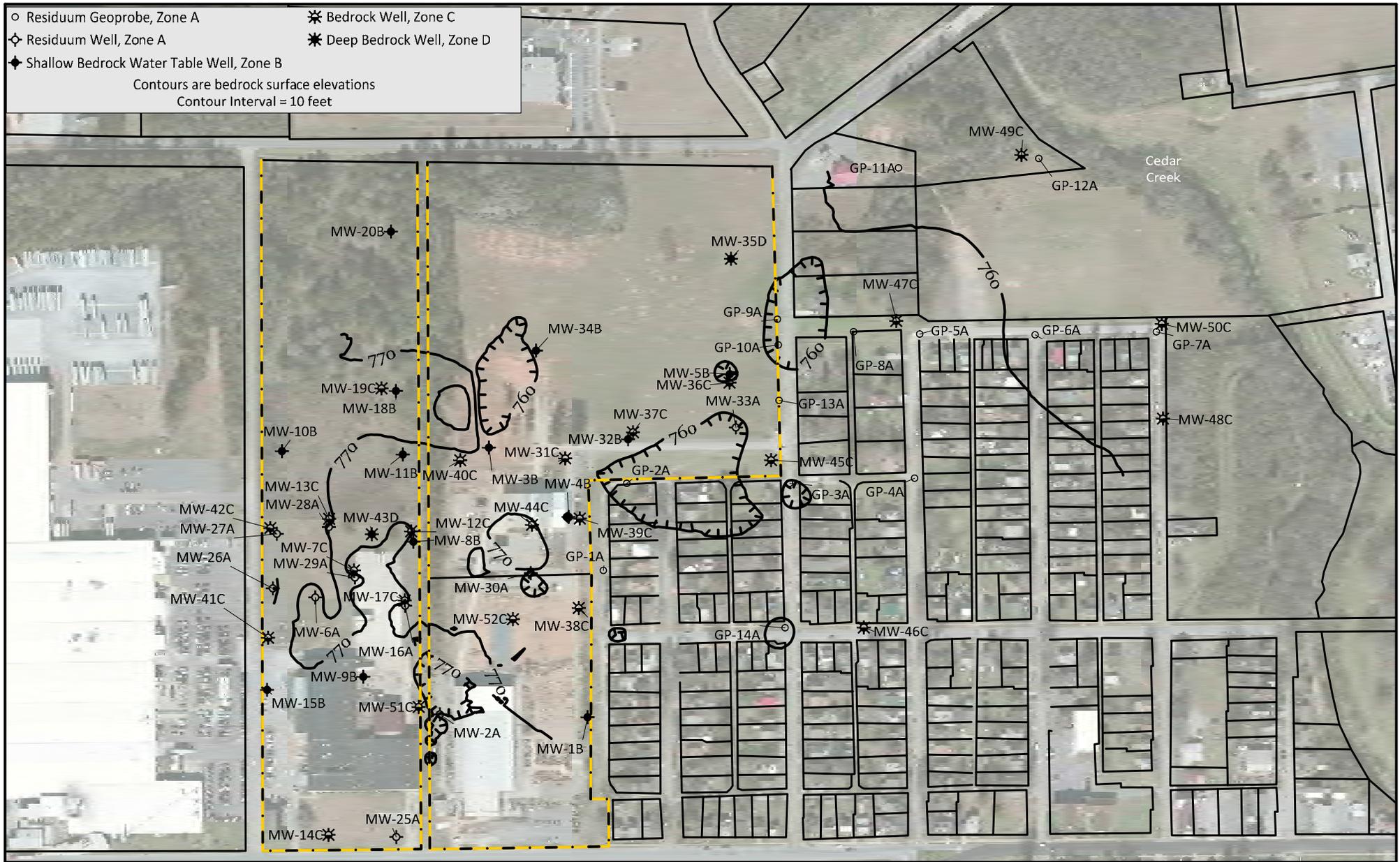


Figure 1: Recent Site Investigations
 December 2012 Status Report
 Former Manchester Tank Company Site
 (HSI #10765)
 Cedartown, Polk County, Georgia



Scale in Feet



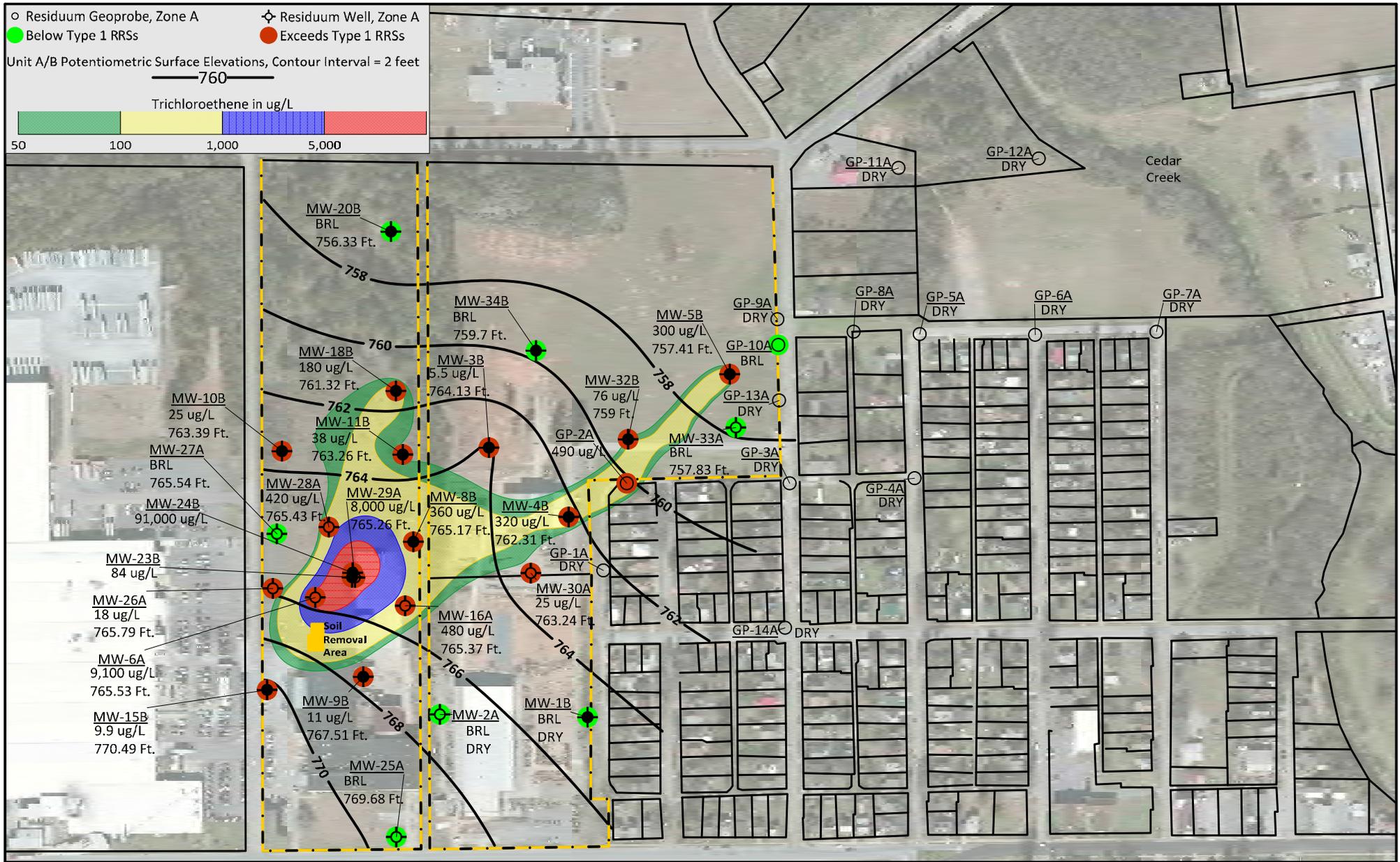
Figure 2: Bedrock Topography

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Cedartown, Polk County, Georgia



NOTE: Posted values are trichloroethene in groundwater and potentiometric surface.
 Sampling was performed from 6/2012 to 8/2012 and water levels were recorded during 11/2012.



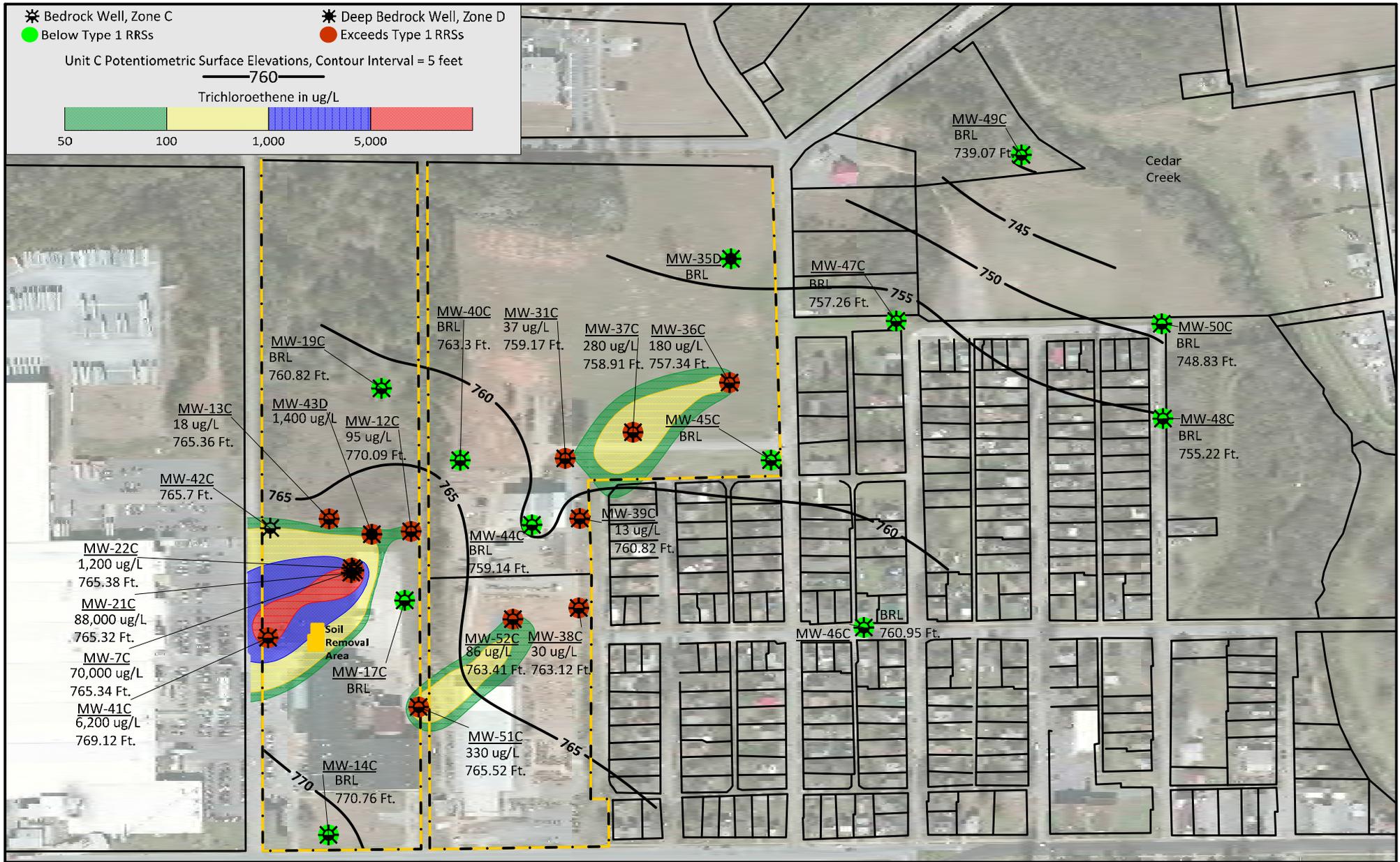
Scale in Feet



Figure 3: Unit A/B Investigation Results
 December 2012 Status Report
 Former Manchester Tank Company Site
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 Cedartown, Polk County, Georgia



WATER + ENVIRONMENT + TRANSPORTATION + ENERGY + FACILITIES



NOTE: Posted values are trichloroethene in groundwater and potentiometric surface. Sampling was performed from 6/2012 to 8/2012 and water levels were recorded during 11/2012.



Scale in Feet



Figure 4: Unit C/D Investigation Results
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 Cedartown, Polk County, Georgia

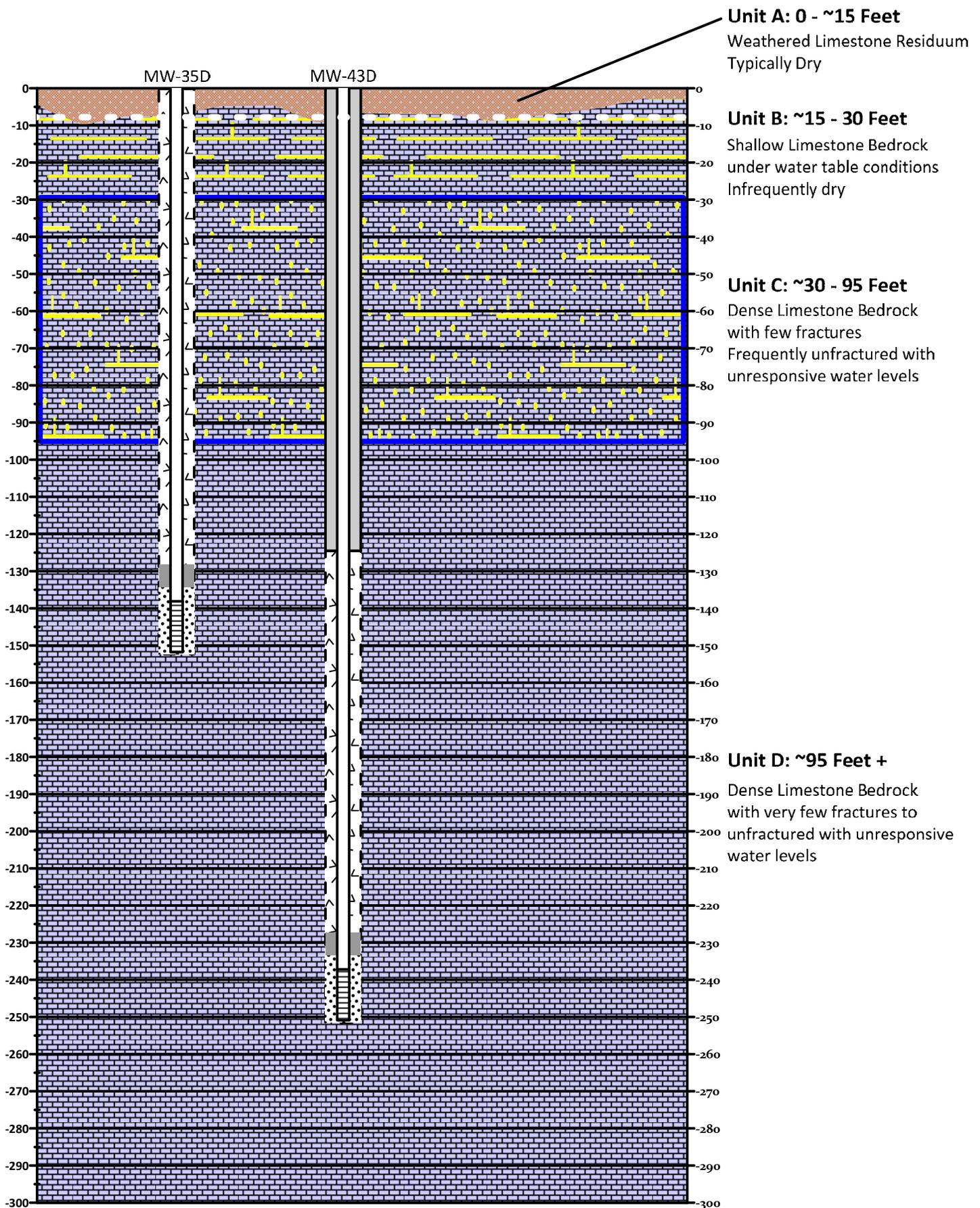


Figure 5: Site Stratigraphy

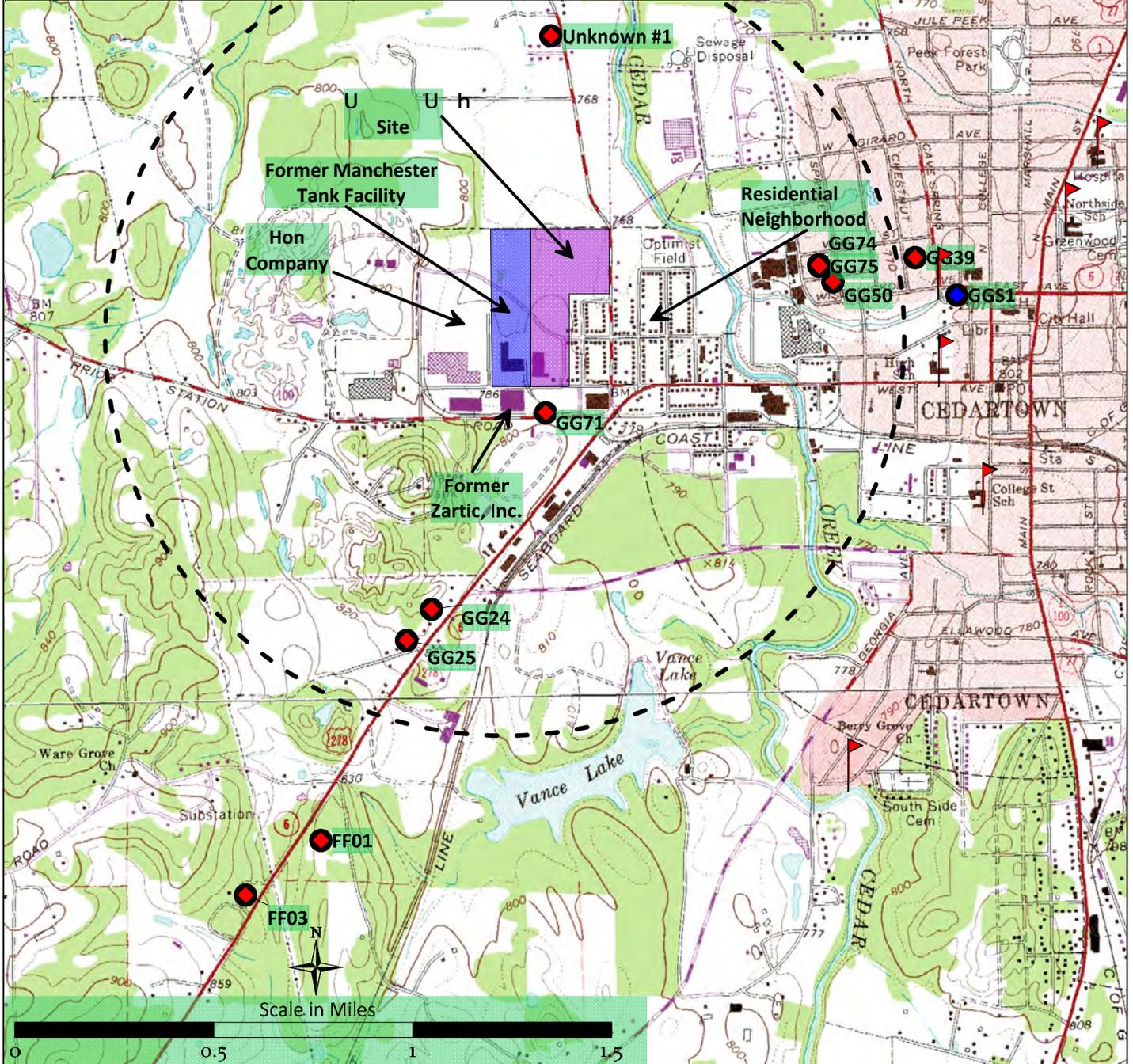
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Name	Casing Depth feet	Total Depth feet	Source	Owner	Use	Install Date	Flow
FF01	Unknown	155	Newala Formation	Unknown	Unknown	Unknown	Unknown
FF03	Unknown	70	Knox Group	Unknown	Unknown	Unknown	Unknown
GG24	57	84	Newala Formation	Thompson	Domestic	1961	15 GPM
GG25	25	80	Newala Formation	Sprayberry	Unknown	1942	Unknown
GG39	Unknown	73	Newala Formation	Unknown	Unknown	Unknown	Unknown
GG50	Unknown	73	Newala Formation	Unknown	Unknown	Unknown	Unknown
GG71	140	386	Unknown	Zartic	Industrial	1969	280 GPM
GG74	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
GG75	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
GG51	NA	NA	Unknown	Cedartown	Public Supply	Unknown	~4 MGD
Unknown #1	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown



- Non-Public Water Supply Well
- City of Cedartown Public Water Supply Spring
- ▲ Schools, Hospitals, & Day Care

Figure 6: Receptor Survey

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 Cedartown, Polk County, Georgia



Tables

Table 1
Groundwater Sampling Results Summary

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 Former Manchester Tank Site
 Cedartown, Georgia

Well ID	Sample Date	Compounds and Type 1 Risk Reduction Standards in ug/L														
		1,1,1-TCA 200	1,1,2-TCA 5	1,1-DCA 4,000	1,1-DCE 7	1,2-DCA 5	cis-1,2-DCE 70	trans-1,2-DCE 100	Acetone 4,000	Isopropylbenzene *	MEK 2,000	PCE 5	Toluene 1,000	TCE 5	Vinyl Chloride 2	Xylenes 10,000
Unit A / B Wells and Borings																
GP-2A	10/2/12	86			16		320	5.6					490			
GP-10A	10/3/12															
MW-1B	7/17/12															
MW-4B	7/17/12	43			9.7		170						320			
MW-5B	7/16/12	34			13		180						300			
MW-6A	7/18/12	49	11	110	440	5.2	11,000	160			7.3		9,100	93		
MW-8B	7/18/12	33			18		480	7					360			
MW-9B	7/18/12						190						11			
MW-10B	7/16/12						8.8						25			
MW-10B Duplicate							6.6						24			
MW-11B	7/16/12						130						38			
MW-15B	7/18/12						52						9.9			
MW-16A	7/18/12	37			25		830	11					480			
MW-18B	7/16/12	5.8		5.3	10		620	6					180			
MW-20B	7/16/12															
MW-24B	7/19/12	1,200	81	520	2,300	35	140,000	2,100			19	57	91,000	330	33.3	
MW-25A	7/17/12						6.4									
MW-26A	7/18/12						73						18			
MW-27A	7/18/12															
MW-27A Duplicate																
MW-28A	7/18/12	23			17		210						420			
MW-29A	7/18/12	300	6	74	270		13,000	210					8,000	2.7		
MW-29A Duplicate		340	7.5	100	330		15,000	240					8,100	3		
MW-30A	7/3/12						11						21			
	7/17/12						12						25			
MW-32B	7/1/12	16					80						96	2.6		
	7/17/12	21		5			160						76	3.4		
MW-33A	6/27/12															
	7/17/12															
MW-34B	7/17/12															
Unit C																
MW-7C	7/18/12	200	24	510	1,400	17	63,000	600			6.8	7.7	70,000	50		
MW-12C	7/18/12						80						95			
MW-13C	7/18/12						21						18			
MW-14C	7/18/12															
MW-17C	7/18/12															
MW-19C	7/16/12															
MW-21C	7/19/12	98	12	340	1,000	9.3	29,000	270				22	88,000	62		

Table 1
Groundwater Sampling Results Summary

December 2012 Progress Report
 Former Manchester Tank Site
 Cedartown, Georgia

Well ID	Sample Date	Compounds and Type 1 Risk Reduction Standards in ug/L														
		1,1,1-TCA 200	1,1,2-TCA 5	1,1-DCA 4,000	1,1-DCE 7	1,2-DCA 5	cis-1,2-DCE 70	trans-1,2-DCE 100	Acetone 4,000	Isopropylbenzene *	MEK 2,000	PCE 5	Toluene 1,000	TCE 5	Vinyl Chloride 2	Xylenes 10,000
MW-22C	7/19/12	20		16	14		960	5.7	680				260		1,200	
MW-31C	7/1/12						16								19	
	7/17/12	5.7					25								37	
MW-31C Duplicate (7/17)							23								40	
MW-36C	7/16/12				9.2		55								180	
MW-37C	7/1/12						9.4								15	
	7/17/12	21					130								280	
MW-38C	7/2/12	20			10		150								290	
	7/17/12						17								30	
MW-39C	7/1/12				7.6		51								180	
	7/2/12															
	7/18/12														13	
MW-40C	7/17/12															
MW-41C	7/18/12	5.6		86	320		7,900	88							9,200	310
	10/30/12			86	270		6,300	65							6,200	150
MW-44C	10/30/12															
MW-45C	10/30/12															
MW-46C	10/15/12															
MW-47C	10/15/12															
MW-48C	10/15/12															
MW-49C	10/15/12															
MW-50C	10/15/12															
MW-51C	10/15/12						250			9.9				330	35	
MW-52C	10/15/12						21							86		
Unit D																
MW-35D	7/2/12															
	7/17/12															
MW-43D	10/15/12	26		10	54		290						20	1,400		20.4

Notes:

DCA - Dichloroethane PCE - Tetrachloroethene
 DCE - Dichloroethene TCA - Trichloroethane
 MEK - Methy Ethyl Ketone TCE - Trichloroethene

All units are micrograms per liter (ug/L)

Blank cells indicate that the compound was not detected above the practical quantitation limit (PQL). The PQL for all samples is 5 ug/L with the exception of acetone (50 ug/L), MEK (50 ug/L), and vinyl chloride (2 ug/L).

Highlighted cells indicate the concentration is greater than the EPD Type 1 Risk Reduction Standard (residential, standard exposure assumptions).

* A Risk Reduction Standard does not exist for isopropylbenzene. In this case, the RRS is the PQL, or 5 ug/L.

Table 2
Monitoring Well Summary and Recent Water Levels

December 2012 Progress Report
Former Manchester Tank Site
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Well ID	Previous ID	Installed By	Installation Date	Location	Well Type	Unit Code	Top of Casing Elevation (ft AMSL)	Well Diameter (inches)	Surface Casing		Open Interval		Total Depth (ft bgs)	Depth to Water - 11/15/12 (ft bgs)	Groundwater Elevation (ft AMSL)	Remarks
									Diameter (inches)	Depth (ft bgs)	From (ft bgs)	To (ft bgs)				
MW-1B	MW-1	B&C	2/16/10	Missouri M&P	Residuum Well	A	784.42	2	NA	NA	8	20	20.2	DRY	-	
MW-2A	MW-2	B&C	2/17/10	Missouri M&P	Residuum Well	A	781.25	2	NA	NA	2	13	12.2	DRY	-	
MW-3B	MW-3	B&C	2/17/10	Missouri M&P	Residuum Well	A	778.88	2	NA	NA	3	15	15.0	14.8	764.13	
MW-4B	MW-4	B&C	2/18/10	Missouri M&P	Residuum Well	A	779.82	2	NA	NA	10	22	21.3	17.5	762.31	
MW-5B	MW-5	B&C	2/18/10	Missouri M&P	Residuum Well	A	767.07	2	NA	NA	4	16	16.3	9.7	757.41	
MW-6A	MW-6	G&A	8/22/06	Manchester Tank	Residuum Well	A	776.63	2	NA	NA	8	20	22.4	11.1	765.53	
MW-7C	MW-7D	G&A	5/28/07	Manchester Tank	Bedrock Well	C	776.67	2	4	10.5	68	73.5	74.2	11.3	765.34	Screen set in open-rock bore
MW-8B	MW-8	G&A	5/22/07	Manchester Tank	Shallow Rock Well	B	776.02	2	NA	NA	8.5	20	19.4	10.9	765.17	
MW 9B	MW 9	G&A	5/22/07	Manchester Tank	Shallow Rock Well	B	778.63	2	NA	NA	16	28.5	28.1	11.1	767.51	Screen set in open rock bore
MW-10B	MW-10	G&A	5/23/07	Manchester Tank	Shallow Rock Well	B	774.08	2	NA	NA	4	23.5	23.9	10.7	763.39	
MW-11B	MW-11	G&A	5/24/07	Manchester Tank	Shallow Rock Well	B	775.45	2	NA	NA	23.5	33	33.4	12.2	763.26	Screen set in open-rock bore
MW-12C	MW-12D	G&A	4/18/08	Manchester Tank	Bedrock Well	C	775.93	2	4	50	69	75	75.3	5.8	770.09	Screen set in open-rock bore
MW-13C	MW-13D	G&A	4/18/08	Manchester Tank	Bedrock Well	C	775.16	2	4	50	69	75	75.4	9.8	765.36	Screen set in open-rock bore
MW-14C	MW-14D	G&A	2/24/11	Manchester Tank	Bedrock Well	C	783.66	2	4	50	67	75	75.4	12.9	770.76	No screen, diffuser 70'-75'
MW-15B	IP/EP-15	G&A	2/23/11	Manchester Tank	Shallow Rock Well	B	783.39	2	NA	NA	8	25	25.2	12.9	770.49	
MW-16A	IP/EP-16	G&A	2/23/11	Manchester Tank	Residuum Well	A	776.92	2	NA	NA	8	15	14.9	11.6	765.37	Residuum Injection Well
MW-17C	IP/EP-17D	G&A	2/24/11	Manchester Tank	Bedrock Well	C	776.92	2	4	50	67	75	72.0	61.2	715.68	No screen, diffuser 70'-75'
MW-18B	MW-18	G&A	2/23/11	Manchester Tank	Shallow Rock Well	B	772.92	2	NA	NA	6	18	18.2	11.6	761.32	
MW-19C	MW-19D	G&A	4/28/11	Manchester Tank	Bedrock Well	C	773.40	2	4	50	72	80	79.5	12.6	760.82	No screen, diffuser 75'-80'
MW 20B	MW 20	G&A	2/23/11	Manchester Tank	Shallow Rock Well	B	769.20	2	NA	NA	66	18	19.2	12.9	756.33	
MW-21C	DIP-1	G&A		Manchester Tank	Bedrock Well	C	777.13	1	Unknown	Unknown	Unknown	Unknown	72.0	11.8	765.32	Deep Injection Point
MW-22C	DIP-2	G&A		Manchester Tank	Bedrock Well	C	776.78	1	Unknown	Unknown	Unknown	Unknown	75.5	11.4	765.38	Deep Injection Point
MW-23B	SIP-1	G&A		Manchester Tank	Shallow Rock Well	B	777.04	1	Unknown	Unknown	Unknown	Unknown	19.5	-	-	Shallow Injection Point
MW-24B	SIP-2	G&A		Manchester Tank	Shallow Rock Well	B	776.87	1	Unknown	Unknown	Unknown	Unknown	18.9	-	-	Shallow Injection Point
MW-25A	MW-1	G&A	8/21/06	Manchester Tank	Shallow Rock Well	B	782.26	2	NA	NA	88	20	20.4	12.6	769.68	
MW-26A	MW-2	G&A	8/22/06	Manchester Tank	Residuum Well	A	778.32	2	NA	NA	8	20	21.8	12.5	765.79	
MW-27A	MW-3	G&A	8/23/06	Manchester Tank	Shallow Rock Well	B	775.43	2	NA	NA	8	20	20.4	9.9	765.54	
MW-28A	MW-4	G&A	8/23/06	Manchester Tank	Shallow Rock Well	B	775.00	2	NA	NA	8	20	20.6	9.6	765.43	
MW-29A	MW-5	G&A	8/23/06	Manchester Tank	Shallow Rock Well	B	776.66	2	NA	NA	8	20	20.4	11.4	765.26	
MW-30A		CDM Smith	7/2/12	Missouri M&P	Residuum Well	A	780.44	2	NA	NA	23.8	33.8	33.8	17.2	763.24	Pre-Pack Screen
MW-31C		CDM Smith	7/1/12	Missouri M&P	Bedrock Well	C	779.53	2	NA	NA	35.3	45.3	45.3	20.4	759.17	
MW-32B		CDM Smith	6/27/12	Missouri M&P	Shallow Rock Well	B	772.97	2	NA	NA	9.0	19.0	19.0	14.0	759.00	
MW-33A		CDM Smith	6/25/12	Missouri M&P	Residuum Well	A	767.08	1	NA	NA	8.6	13.6	13.6	9.3	757.83	
MW-34B		CDM Smith	7/15/12	Missouri M&P	Shallow Rock Well	B	775.59	2	NA	NA	48	58	58.0	15.9	759.70	
MW-35D		CDM Smith	7/1/12	Missouri M&P	Deep Bedrock Well	D	769.93	2	NA	NA	100	120	120.0	13.5	756.39	
MW-36C		CDM Smith	7/2/12	Missouri M&P	Bedrock Well	C	766.71	2	6	21.5	79	69	79.0	9.4	757.34	Pre-Pack Screen
MW-37C		CDM Smith	6/28/12	Missouri M&P	Bedrock Well	C	773.11	6	6	25	Open Borehole		101.0	14.2	758.91	
MW-38C		CDM Smith	6/29/12	Missouri M&P	Bedrock Well	C	779.77	6	6	25	Open Borehole		50.0	16.7	763.12	
MW-39C		CDM Smith	7/1/12	Missouri M&P	Bedrock Well	C	779.35	6	6	25	Open Borehole		100.0	18.5	760.82	

Table 2
Monitoring Well Summary and Recent Water Levels

December 2012 Progress Report
Former Manchester Tank Site
Cedartown, Georgia

Well ID	Previous ID	Installed By	Installation Date	Location	Well Type	Unit Code	Top of Casing Elevation (ft AMSL)	Well Diameter (inches)	Surface Casing		Open Interval		Total Depth (ft bgs)	Depth to Water - 11/15/12 (ft bgs)	Groundwater Elevation (ft AMSL)	Remarks
									Diameter (inches)	Depth (ft bgs)	From (ft bgs)	To (ft bgs)				
MW-40C		CDM Smith	7/15/12	Missouri M&P	Bedrock Well	C	779.06	6	6	25	Open Borehole		60.0	15.8	763.30	
MW-41C		CDM Smith	7/13/12	Manchester Tank	Bedrock Well	C	781.38	2	6	25	65.3	75.3	75.3	12.3	769.12	
MW-42C		CDM Smith	7/16/12	Manchester Tank	Bedrock Well	C	776.67	6	6	25	Open Borehole		160.0	11.0	765.70	
MW-43D		CDM Smith	10/8/12	Manchester Tank	Deep Bedrock Well	D	776.78	2	6	125	241	251	251.0	13.6	763.20	
MW-44C		CDM Smith	10/11/12	Missouri M&P	Bedrock Well	C	780.37	2	NA	NA	30.5	40.5	40.5	21.2	759.14	
MW-45C		CDM Smith	10/11/12	Missouri M&P	Bedrock Well	C	767.26	2	NA	NA	25.4	35.4	35.4	25.3	741.93	
MW-46C		CDM Smith	10/10/12	Off site	Bedrock Well	C	770.49	2	NA	NA	25.5	35.5	35.5	9.5	760.95	
MW-47C		CDM Smith	10/9/12	Off site	Bedrock Well	C	762.93	2	NA	NA	25.5	35.5	35.5	5.7	757.26	
MW-48C		CDM Smith	10/10/12	Off site	Bedrock Well	C	766.75	2	NA	NA	35.7	25.7	35.7	11.5	755.22	
MW-49C		CDM Smith	10/9/12	Off site	Bedrock Well	C	764.38	2	NA	NA	35.4	25.4	35.4	25.3	739.07	
MW-50C		CDM Smith	10/9/12	Off site	Bedrock Well	C	765.25	2	NA	NA	35.4	25.4	35.4	16.4	748.83	
MW-51C		CDM Smith	10/11/12	Manchester Tank	Bedrock Well	C	779.73	2	NA	NA	25.4	15.4	25.4	14.2	765.52	
MW-52C		CDM Smith	10/11/12	Missouri M&P	Bedrock Well	C	780.05	2	NA	NA	30.5	40.5	40.5	16.6	763.41	

Notes:
B&C - Brown & Caldwell
G&A - Gallett & Associates
Missouri M&P - Missouri Machine and Plow
bgs - below ground surface
ft AMSL - feet above mean sea level (NAVD 1988)
NA - Not Applicable

Attachment A
Professional Certification

Professional Certification

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

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

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

Andrew Romanek

Andrew P. Romanek, P.E.
Associate
CDM Smith



November 30, 2012

Date

Summary of Oversight Provided by Georgia Licensed Engineers and Geologists

Engineer / Geologist	License Type and No.	Week Ending Date	Number of Hours	Description of Hours
Tom Duffey	Geologist PG000899	6/2/12	16	Oversight of field investigations and data analysis and interpretation. This work includes, but is not limited to, work plan preparation; access agreement support; health and safety; subcontracting; field work coordination and oversight; data review; updates to the site conceptual model; and reporting.
		6/9/12	1.5	
		6/16/12	2	
		6/23/12	3.5	
		6/30/12	2.5	
		7/7/12	5.5	
		7/14/12	15	
		7/21/12	15.5	
		7/28/12	3.5	
		8/4/12	1	
		8/18/12	1	
		8/25/12	7	
		9/1/12	6	
		9/8/12	1.5	
		9/15/12	2	
		9/29/12	3	
		10/6/12	4.5	
		10/13/12	12	
		10/27/12	4	
11/3/12	4			
11/10/12	6			
11/17/12	8			
11/24/12	7.5			
John Reichling	Engineer PE017367	5/26/12	1	CDM Smith Officer in Charge and person overall responsible for project execution and quality. This includes oversight of field investigations and reporting, and adherence to CDM Smith's quality management procedures.
		6/9/12	1	
		6/23/12	2	
		6/30/12	1	
		7/7/12	1	
		7/21/12	2	
		8/4/12	1	
		8/25/12	1	
		9/22/12	1	
		9/29/12	1	
		10/6/12	1	
		10/13/12	1	
		10/27/12	2	
		11/10/12	1	
11/24/12	1			

Summary of Oversight Provided by Georgia Licensed Engineers and Geologists

Engineer / Geologist	License Type and No.	Week Ending Date	Number of Hours	Description of Hours
Andrew Romanek	Engineer PE029287	5/26/12	4	Oversight of field investigations and data analysis and interpretation. This work includes, but is not limited to, work plan preparation; access agreement support; health and safety; subcontracting; field work coordination and oversight; data review; updates to the site conceptual model; reporting; and project management.
		6/2/12	3.5	
		6/9/12	2	
		6/16/12	1	
		6/23/12	3	
		6/30/12	1.5	
		7/7/12	1	
		7/14/12	2	
		7/21/12	6	
		7/28/12	4	
		8/4/12	1.5	
		8/18/12	2.5	
		8/25/12	2	
		9/1/12	4.5	
		9/15/12	2.5	
		9/22/12	4	
		9/29/12	1	
		10/6/12	3	
		10/13/12	2	
		10/20/12	2.5	
10/27/12	3.5			
11/3/12	0.5			
11/10/12	2			
11/17/12	12			
11/24/12	11.5			