LAKELAND 4705 Old Highway 37
Lakeland, FL 33813
PHONE 863-646-1402

WINTER HAVEN 351 3rd Street NW
Winter Haven, FL 33881
PHONE 863-875-6986

MAIL Post Office Box 5710
Lakeland, FL 33807-5710

August 25, 2016

Ms. Allison Amram, PG
Brownfields Coordinator
Environmental Protection Commission of Hillsborough County
Waste Management Division
3629 Queen Palm Drive, 2nd Floor South
Tampa, Florida 33619

RE: Community Redevelopment Agency (CRA) of the City of Plant City
FAC Chapter 62-780.680 Risk Management Options Level III – CNFAP Update
Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber
Brownfield Site Nos. BF291002002 and BF291002001
CSI File No. 9680.24C

Dear Ms. Amram:

As you know, in correspondence dated July 8, 2015, the Environmental Protection Commission of Hillsborough County (EPC) generally indicated the following based upon the information and data provided in the Natural Attenuation Monitoring Plan dated June 9, 2015, prepared by PPM Consultants, Inc. for the above referenced Sites: 1) the full extent of groundwater impacts with respect to iron, ammonia-nitrogen, and manganese has not been determined; 2) a revised NAM should be submitted that addresses the full extent of these contaminants of concern (COCs); and 3) the revised NAM will need to address the 62-780.690 (3) criteria if surface water may be exposed to contaminated groundwater.

Since that time, and based upon subsequent meetings and discussions with EPC and FDEP, the CRA further evaluated F.A.C. Chapter 62-780 Risk Management Options (RMOs) and intends to proceed with a RMO III closure (i.e. utilization of institutional controls) for the groundwater contamination associated with the Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber Brownfield Sites. As such, and as documented below, additional groundwater and surface water testing/evaluation activities with respect to iron, ammonia-nitrogen, and manganese were conducted in May and July 2016. Based upon these results, additional well construction, groundwater sampling, and survey activities are scheduled to begin on August 26, 2016, to further delineate the extent of groundwater impacts with respect to iron and manganese and further evaluate groundwater/surface water elevations and flow directions within the western portion of the area of investigation.

The CRA would like to clarify that all other contaminants have been resolved to facilitate site redevelopment. Consequently, the CRA respectfully requests that EPC provide a No Further Assessment or similar type of “comfort letter” regarding the Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber Brownfield Sites and the Midtown Redevelopment CRA owned parcels as depicted in **Exhibit 1** based upon the following:

- The CRA intends to issue a Request for Qualifications (RFQ) to open discussions with developers in order to proceed with the redevelopment of the CRA owned parcels within the Midtown Redevelopment Area in October 2016.

- Based upon discussions and correspondence with FDEP and EPC, Plant City Ordinance Article II, Division 1, Sections 74-31 and 74-32, and SWFWMD rules provide an acceptable alternative institutional control to provide the necessary degree of restriction to the contaminated groundwater associated with these Sites.

- With the exception of the implementation of the proposed alternative institutional control, no additional site rehabilitation activities should be required for the Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber Brownfield Sites for the CRA owned parcels as depicted in **Exhibit 1**.

- As you know, the additional groundwater assessment activities that will be completed to further delineate the extent of groundwater impacts with respect to iron and manganese within the western portion of the area of investigation do not include the CRA owned parcels.

Accordingly, Chastain-Skillman, Inc. (CS) is providing this Conditional No Further Action Proposal (CNFAP) Update for the above-referenced Sites. Information within this CNFAP Update includes a summary with supporting documentation of the following:

1. Results from the recent collection of groundwater samples from selected existing monitoring wells for laboratory analyses of Iron and Manganese to update and further evaluate the level, extent, and stability of the Iron and Manganese plumes.
2. Collection of surface water samples from 3 locations within the wetland and/or stormwater pond system located to the southwest of MW-32 for laboratory analyses of Iron.
3. Installation of one additional well to the west/southwest of MW-32 (i.e. downgradient) and collection of groundwater samples for laboratory analyses of Iron and Manganese.
4. An overview of previous site rehabilitation activities by others.
5. An evaluation of F.A.C. 62-780.680 Risk Management Options (RMOs) based upon information available at this time.
6. CS's summary, conclusions, and recommendations.

WELL CONSTRUCTION AND GROUNDWATER/SURFACE WATER SAMPLING (2016)

Groundwater samples were collected from nine existing monitoring wells (MW-7, MW-1R, MW-16, MW-105, MW-23, MW-28, MW-31, MW-32, and MW-106) on May 31, 2016. Each groundwater sample was analyzed for Iron and Manganese by EPA method 6010 C.

Monitoring well MW-33 was installed to the west/southwest of MW-32 (i.e. downgradient). This well was installed using a direct push drilling rig on July 5, 2016. Groundwater samples were collected from new well MW-33 and five additional existing monitoring wells (MW-30, MW-101, MW-10, MW-17, and PMW-18) on July 5 and 6, 2016. Each groundwater sample was analyzed for Iron and/or Manganese by EPA method 6010 C.

Surface water samples SW-001 and SW-002 were collected on July 5, 2016, and SW-003 was collected on July 22, 2016. Sample SW-001 was collected from the drainage ditch just north of Ball

Street, sample SW-002 was collected from Pond B outfall, and SW-003 was collected from the drainage ditch located west of Pond B. Each sample was analyzed for Iron by EPA method 6010 C.

Figure 1 provides an updated site plan of the area of investigation, **Figures 2** and **3** depict the inferred extent of the dissolved iron and manganese groundwater plumes based upon the most recent results for these parameters, and **Table 1** provides an updated summary of the groundwater contaminants of concern (COCs). Well construction documentation for MW-33 is included in **Attachment A** and laboratory reports associated with CSI's groundwater and surface water sampling activities from May through July 2016, are included in **Attachment B**.

OVERVIEW OF PREVIOUS SITE REHABILITATION ACTIVITIES/RESULTS

A. Brownfield Site Assessment Report for the Former Gro-Mor Fertilizer Site (Cardno TBE August 2011). **Attachment C** includes selected figures and tables from this report. A brief summary of conclusions included within this report is as follows:

- Groundwater flow was to the southwest.
- Lithology consist of sand to depths ranging from 5 to 11 feet below ground surface (fbgs) followed by clay to at least 20 fbgs.
- Nitrate concentrations in groundwater had decreased, but still exceed its GCTL and NADSC over significant portions of the site.
- Cadmium concentrations were lower in more recent samples, but still exceeded GCTLs.
- Ammonia-nitrogen concentrations remained above its GCTL and NADSC throughout much of the site.
- The nitrate, cadmium, and ammonia-nitrogen groundwater plumes require further delineation.
- The dieldrin concentration at the former TMW-3 (now designated MW-3) historically exceeded its GCTL. Groundwater samples collected from MW-3 were not analyzed for dieldrin in June 2011.
- Nitrate concentrations exceeds its GCTL and ammonia-nitrogen exceeds its NADSC at monitor well DW-1 (screened from 24 to 29 fbgs).
- Residential direct-exposure SCTL exceedances of BaP equivalent compounds require further delineation at the 0.5 to 1.0 fbgs interval and 2.0 to 3.0 fbgs interval.
- Residential direct-exposure SCTL exceedances of arsenic require further delineation at the 0.5 to 1.0 fbgs interval and 2.0 to 3.0 fbgs interval.
- Concentrations of chromium in soils continue to exceed its leachability SCTL; however, chromium in groundwater has not historically exceeded its GCTL. Chromium leachability exceedances have been defined at the 2.0 to 3.0 fbgs interval. Leachability SCTL exceedances of BHC-B were defined at the 0.5 to 1.0 foot BGS interval and 2.0 to 3.0 fbgs interval.
- BaP equivalent compounds, arsenic, chromium, and BHC-B SCTL exceedances were randomly distributed throughout the site and do not appear to be related to historical site activities.
- Arsenic and chromium may represent naturally occurring background concentrations, while BaP concentrations are likely the result of diffuse anthropogenic background concentrations.

B. Brownfield Site Assessment Report for the Former McGinnes Lumber Site (Cardno TBE August 2011). **Attachment D** includes selected figures and tables from this report. A brief summary of conclusions included within this report is as follows:

- Groundwater flow is generally to the west/southwest.
- The concentration of nitrogen as ammonia in groundwater exceeds Chapter 62-777, FAC, Table V, NADSCs and/or Chapter 62-777, FAC, Table I, GCTLs in the southeast corner and the northwest corner of the study area, as well as the adjacent city owned property to the west. This is attributed to the former fertilizer plants located to the northwest and southeast portion of the site (former Gro-Mor site).
- Nitrate concentrations in groundwater exceed NADSCs and/or GCTLs in monitor wells along the western and northwestern boundaries of the site. These impacts are likely from the former Gro-Mor site to the northwest.
- Sulfate concentrations in groundwater exceed the GCTL in a single sample (MW-1) along the western boundary of the site.
- Iron concentrations in groundwater exceed the GCTL in the southwest portion of the site.
- Manganese concentrations in groundwater exceed GCTLs on Parcel D.
- Gross alpha and combined Radium 226 and 228 concentrations in groundwater exceed drinking water standards in two wells in the center of the site.
- Nitrogen as ammonia, nitrate, iron, and manganese dissolved phase plumes may require further delineation.
- BaP impacts to soil are primarily limited to the northwest portion of the study area, in Parcel A. The highest BaP impact corresponds to the only total recoverable petroleum hydrocarbon (TRPH) exceedance in soil
- Minor arsenic impacts to soil are randomly distributed throughout the study area, and are limited to the top 0.5 feet of soil. While arsenic can occur naturally, further delineation was recommended.

C. Source Area Removal Report – Former Gro-Mor Fertilizer Plant (PPM Consultants, Inc. December 19, 2012). **Attachment E** includes selected figures and tables from this report. A brief summary of this report is as follows:

- Conceptual RAP approved by Hillsborough County Environmental Protection Commission (EPC) on August 12, 2012.
- PPM conducted source area soil remediation activities at the former Gro-Mor facility in August and September 2012.
- The purpose of the excavation was to remove all onsite soil impacted with arsenic and BaP above SCTLs to a minimum depth of the water table interface or to a maximum of 3.0 feet BGS.
- Secondary benefits realized from these efforts included the remediation of fertilizer impacted soils near the former plant.
- A total of 2,442.41 tons of impacted soil was excavated and disposed from the east and west parcels at the former Gro-Mor.
- The only post-excavation soil samples with arsenic or BaP exceeding SCTLs were from exterior sidewalls along property boundaries or from the bottom of the excavations at depths that were at the groundwater interface.
- PPM's contaminant source evaluation indicated that the source of the Arsenic and BaP is off-site and likely the result of overflow from the adjoining streets and the railroad.
- PPM concluded the source area removal phase of this project is complete.

D. Source Area Removal Report – Former Stock Lumber Facility (PPM Consultants, December 19, 2012). **Attachment F** includes selected figures and tables from this report. A brief summary of this report is as follows:

- Conceptual RAP approved by Hillsborough County EPC on August 12, 2012.
- PPM conducted source area soil remediation activities at the former Stock Lumber facility in August and September 2012.
- The purpose of the excavation was to remove all onsite soil impacted with arsenic and BaP above SCTLs to a minimum depth of the water table interface or to a maximum of 2.0 feet BGS.
- A total of 542 tons of impacted soil was excavated from the former Stock Lumber facility.
- The only post-excavation soil samples with arsenic or BaP exceeding SCTLs are from exterior sidewalls along property boundaries or from the bottom of the excavations at depths that are at the groundwater interface.
- PPM's contaminant source evaluation indicated that the source of the Arsenic and BaP is off-site and likely the result of overflow from the adjoining streets.
- PPM concluded the source area removal phase of this project is complete.

E. Revised Remedial Action Plan (RAP) – Former Gro-Mor and Former Stock Building Supply/McGinnnes Lumber Company (PPM Consultants, Inc. August 5, 2014). **Attachment G** includes selected figures and tables from this report. The Revised RAP included the following:

- A summary of previous assessment and source area soil remediation activities.
- Figures depicting and tables summarizing the most current and relevant contaminants of concern (COCs) concentrations in groundwater.
- A discussion and summary of nitrate soil data.
- A Cleanup Alternative Evaluation.
- An overview of the proposed groundwater remediation design (i.e. phytoremediation), Institutional and Engineering Controls, and Natural Attenuation processes expected to be required to achieve the cleanup objectives.

F. Natural Attenuation Monitoring Plan (NAMP) – Former Gro-Mor and Former Stock Building Supply/McGinnnes Lumber Company (PPM Consultants, Inc. June 4, 2015). **Attachment H** includes selected figures and tables from this report. The NAMP included the following:

- Discussion of additional well installation and groundwater sampling in August/September 2014 and April 2015.
- Discussion and depiction of groundwater analytical results for the following groundwater COCs:
    - Cadmium (Figure 4) – Defined in downgradient direction and below NADSC.
    - Nitrate (Figure 5) – Defined in downgradient direction, above NADSC in a number of wells, and increasing concentrations in some downgradient wells from 2012 to 2014.
    - Ammonia-Nitrogen (Figure 6) – Not defined in downgradient direction, above NADSC in a number of wells, and increasing concentrations in some downgradient wells from 2012 to 2014.

- Manganese (Figure 7) – Not defined in downgradient direction, above NADSC in a number of wells, and increasing concentrations at downgradient well MW-18R from 2012 to 2014.
- Sulfate (Figure 8) – Defined in downgradient direction and below NADSC.
- Iron (Figure 9) – Not defined in downgradient direction or to the south and above NADSC in a number of wells.
- Gross Alpha (Figure 10) – Defined in downgradient direction and below NADSC.
- Combined Radium 226/228 (Figure 11) - Defined in downgradient direction and below NADSC.
- An evaluation of downgradient hydraulic barriers (i.e. stormwater ponds).
- An evaluation of potential water receptors.
- No large public supply wells (>150,000 gpd) within ½ mile or small private potable wells within ¼ mile radius of the sites.
- City restricts the use of private potable wells in the City per municipal code Article II, Division I, Section 74-32.
- A Proposed NAM Plan

G. A brief summary of EPC Correspondence dated July 8, 2015, is as follows:

- The full extent of groundwater impacts with respect to iron, ammonia-nitrogen, and manganese has not been determined.
- A revised NAM should be submitted that addresses the full extent of these COCs.
- The revised NAM will need to address the following criteria of 62-780.690 (3) if surface water may be exposed to contaminated groundwater:

  - *where surface water is or may be exposed to contaminated groundwater, the point of measuring compliance with the surface water standards shall be in the groundwater from the landward side immediately adjacent to the surface water body.*

EVALUATION OF F.A.C. 62-780.680 RISK MANAGEMENT OPTION (RMO) CRITERIA

Risk Management Option (RMO) Level I

(a) Free product is not present and no fire or explosive hazard exists as a result of a release of non-aqueous phase liquids.

- There is currently no free product or explosion hazards identified at the Sites.

(b) Contaminated soil is not present in the unsaturated zone, as demonstrated by the analyses of soil samples collected from representative sampling locations (unless the Department has concurred that soil sampling is unnecessary based on the site-specific conditions), that show that one or more of the criteria for direct exposure and one or more of the criteria for leachability are met.

- As documented within PPM Consultants Source Area Removal Reports dated December 19, 2012, a total of 2,442.41 tons of impacted soil was excavated and disposed from the east and west parcels at the former Gro-Mor facility and a total of 542 tons of impacted soil was excavated from the former Stock Lumber facility.

- The only post-excavation soil samples with arsenic or BaP exceeding SCTLs were from exterior sidewalls along property boundaries or from the bottom of the excavations at depths that were at the groundwater interface.
- PPM's contaminant source evaluation indicated that the source of the Arsenic and BaP is off-site and likely the result of overflow from the adjoining streets and/or the railroad.
- PPM concluded the source area removal phase of this project is complete.

Risk Management Options Level III

(c) Alternative groundwater CTLs have been established by the PRSR depending on the current and projected use of groundwater in the vicinity of the site, and the following criteria are met:

1. Groundwater contaminant concentrations do not exceed the alternative groundwater CTLs established pursuant to paragraph 62-780.650(1)(d), F.A.C. [apportioned, if applicable; refer to Appendix E of the technical report referenced in subsection 62-780.100(2), F.A.C., for guidance on apportioning groundwater CTLs], and the plume has not affected, and will not affect, a freshwater or marine surface water body pursuant to subparagraph 62-780.680(1)(c)2., F.A.C., and;

2. It has been demonstrated to the Department by a minimum of one year of groundwater monitoring data and, if applicable, fate and transport modeling results, that the plume is stable or shrinking, and groundwater contaminant concentrations at the institutional control boundary do not, and will not, exceed the appropriate groundwater CTLs pursuant to paragraph 62-780.680(1)(c), F.A.C., and, if applicable, the appropriate surface water CTLs pursuant to paragraph 62-780.680(1)(d), F.A.C.

<u>Groundwater Criteria</u>

As indicated in EPC's correspondence dated July 8, 2015, the full extent of groundwater impacts with respect to iron, ammonia-nitrogen, and manganese has not been determined. The following provides an update of the RMO Level III criteria for these parameters based upon the additional evaluation and data collection that has been completed since the submittal of the NAM dated June 4, 2015:

- Ammonia-Nitrogen in Groundwater - In correspondence dated September 1, 2015, the University of Florida calculated alternative groundwater cleanup target levels (AGCTLs) for total ammonia based on water temperature and pH (**Attachment I**). As depicted on the FDEP markup of Figure 6 in **Attachment I**, the AGCTL for MW-32 is approximately 160 mg/l and the AGCTL for MW-33 is approximately 350 mg/l. A tabular summary of the total ammonia AGCTLs for the most recent data (September 2014 and April 2015) is also included in **Attachment I**. Based upon these AGCTLs, the only total ammonia concentrations identified in concentration greater than the target levels were at MW-15 and MW-16. The total ammonia concentrations identified at the down gradient perimeter wells (i.e. MW-32 and MW-33) were less than the AGCTLs. Based on these results, the extent of Ammonia impacts greater than target levels has been defined and additional delineation of ammonia-nitrogen in groundwater does not appear to be required.

- Iron in Groundwater - **Figure 2** depicts the inferred extent of the dissolved iron groundwater plume based upon the most recent sampling results. Based upon these results, the full extent of groundwater impacts with respect to iron has not been determined.

- Manganese in Groundwater - **Figure 3** depicts the inferred extent of the dissolved manganese groundwater plume based upon the most recent sampling results. Based upon these results, the full extent of groundwater impacts with respect to manganese has not been determined.

Surface Water Criteria

Based upon discussions with FDEP, wetlands would be covered by Chapter 62-302, and most likely would be classified as Class III. The following provides an update of the RMO-III surface water criteria with respect to ammonia-nitrogen, iron, and manganese.

- The Class III surface water quality criteria for un-ionized ammonia is < 0.02 mg/l. One option for measuring compliance with the surface water standards shall be in the groundwater from the landward side immediately adjacent to the surface water body. As such, the total ammonia-nitrogen and sampling data from the April 10, 2015, sampling event was utilized to calculate the un-ionized ammonia concentration at MW-32. As indicated in **Attachment I**, the calculated un-ionized ammonia concentration was 0.006231 mg/l, which is less than the Class III surface water criteria for un-ionized ammonia.

- The Class III surface water quality criteria for iron is < 1.0 mg/l. The most recent iron in groundwater results from MW-32 (i.e. 11.6 mg/l) were greater than the Class III surface water quality criteria. However, the surface water samples collected on July 5 and July 22, 2016, from the inflow to the wetland area, outflow from Pond B, and outflow from the wetland were less than the Class III surface water criteria for iron (i.e. SW001/Inflow was 0.184 mg/l, SW002/Outflow was 0.167 mg/l, and SW003/Outflow was 0.123 mg/l).

- Chapter 62-302 does not have a Class III surface water quality criteria for manganese.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

1. A Site Rehabilitation Completion Order dated April 7, 2014, was issued for the June 20, 2011, non-program discharge for FDEP Facility ID# 298944505.

2. The Remedial Action Plan (RAP) dated August 5, 2014, which was prepared by PPM Consultants, Inc., did not receive regulatory approval and is no longer being considered by the Community Redevelopment Agency (CRA) of the City Plant City to obtain closure pursuant to FAC Chapter 62-780.

3. The Natural Attenuation Monitoring Plan (NAMP) dated June 4, 2015, which was prepared by PPM Consultants, Inc., did not receive regulatory approval and is no longer being considered by the CRA to obtain closure pursuant to FAC Chapter 62-780.

4. Based upon Hillsborough County EPC correspondence dated July 8, 2015, and subsequent discussions with EPC and FDEP, additional data collection and/or analysis is required to address groundwater and/or surface water-related issues for the following contaminants of concern (COCs): ammonia; iron; and manganese.

5. Based upon discussions and correspondence with FDEP and EPC, Plant City Ordinance Article II, Division 1, Sections 74-31 and 74-32, and SWFWMD rules provide an acceptable alternative institutional control to provide the necessary degree of restriction to the contaminated groundwater associated with these Sites.

6. Based upon the May and July 2016 groundwater sampling results, the full extent of groundwater impacts with respect to iron and manganese has not been determined. As such, additional monitoring wells will be constructed as follows to further delineate the extent of groundwater impacts with respect to iron and manganese and further evaluate groundwater/surface water elevations and flow directions within the western portion of the area of investigation:

    - One monitoring well generally to the south of MW-32 within the West Ball Street right-of-way.
    - One monitoring well generally to the north of MW-31 within the West Renfro Street right-of-way.
    - One monitoring well generally to the northwest of MW-31 within the S. Daniels Street right-of-way.
    - One monitoring well generally to the west of MW-31 within the S. Howard Street right-of-way.

7. The CRA requests that EPC provide a No Further Assessment or similar type of "comfort letter" regarding the Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber Brownfield Sites and the Midtown Redevelopment CRA owned parcels as depicted in **Exhibit 1** based upon the following:

    - The CRA intends to issue a Request for Qualifications (RFQ) to open discussions with developers in order to proceed with the redevelopment of the CRA owned parcels within the Midtown Redevelopment Area in October 2016.
    - The CRA has evaluated F.A.C. Chapter 62-780 Risk Management Options (RMOs) and intends on proceeding with a RMO III closure (i.e. utilization of institutional controls) for the groundwater contamination associated with the Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber Brownfield Sites.
    - With the exception of the implementation of the proposed alternative institutional control, no additional site rehabilitation activities should be required in regards to the Former GRO-MOR Fertilizer and Stock Building Supply/McGinnes Lumber Brownfield Sites for the CRA owned parcels as depicted in **Exhibit 1**.
    - The additional groundwater assessment activities that will be completed to further delineate the extent of groundwater impacts with respect to iron and manganese within the western portion of the area of investigation do not include the CRA owned parcels.

If you have any questions or require additional information, please contact our office at your earliest convenience.

Sincerely,

CHASTAIN-SKILLMAN, INC.

Charles Browning
8-25-16

Charles Browning, PG
Senior Project Manager

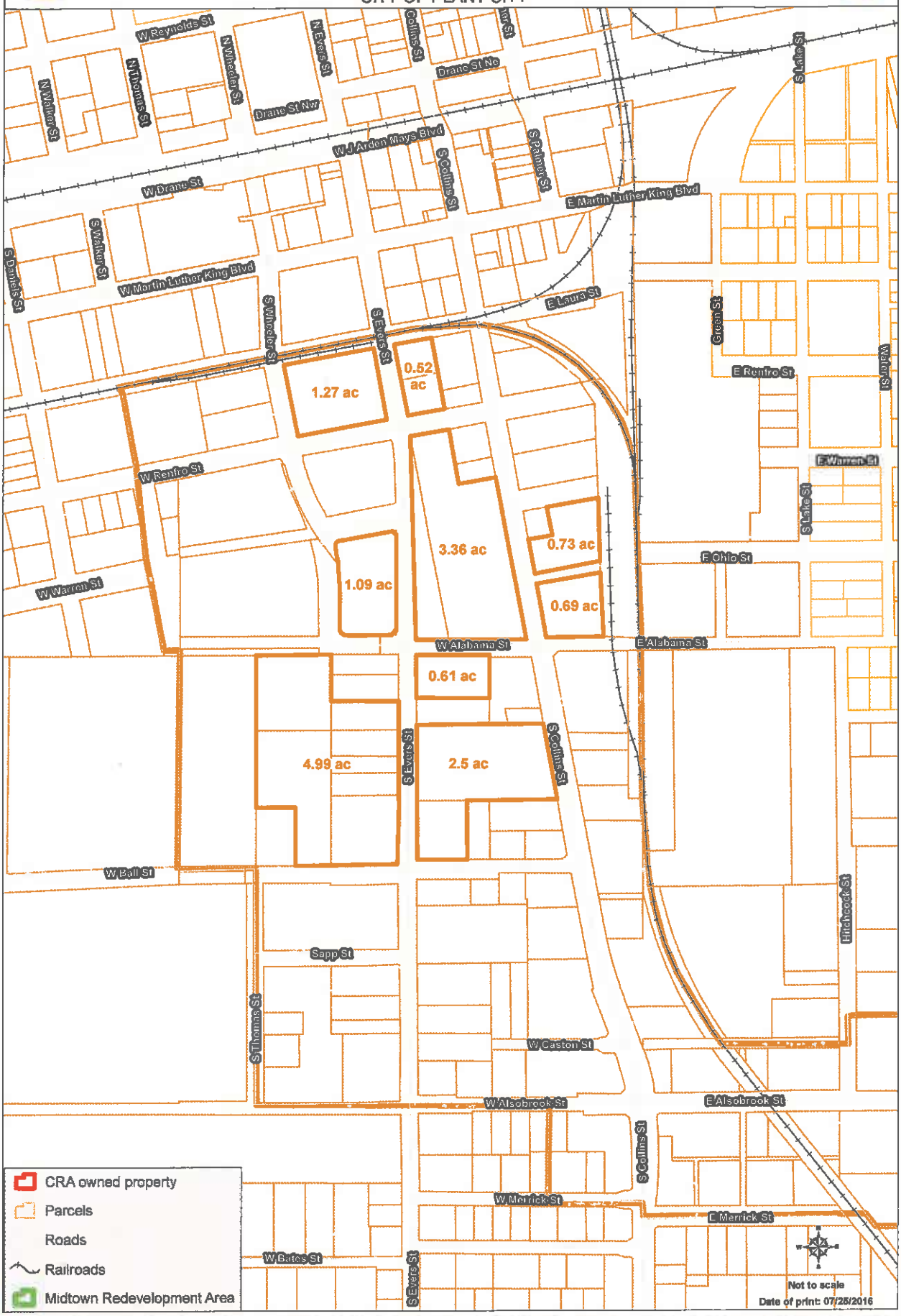
Greg Lassi

Greg J. Lassi, PG, MPH
Senior Consultant

xc: Kenneth W. Buchman, City Attorney, City of Plant City
Mr. Michael A Schenk, P.E., City Engineer
Frank Hearne, Esquire

MIDTOWN REDEVELOPMENT
REQUEST FOR PROPOSAL
CITY OF PLANT CITY

EXHIBIT 1



CHASTAIN SKILLMAN

CHASTAIN SKILLMAN INC.
PO BOX 5916 LAKELAND FLORIDA 33803 (863)644-1402
C.A. NO. 202

REVISION NO.	REVISION DATE	REVISION DESCRIPTION
	/ /	

REV.	DATE:
P-0	07/25/16

DRAWN BY: BLF

CITY OF PLANT CITY
RISK MANAGEMENT OPTION EVALUATION

SITE PLAN

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PROJECT NO. 9680.24A

SHEET NO. FIGURE 1

\\csilkdfsv001\Projects\Projects\9680224A\CAD\Risk\9680224A-CBB-16-SAMPLE LOCATIONS-7_21_16.dwg FIG 1 Jul 25, 2016 11:21am by: rcoyce

CHASTAIN SKILLMAN

CHASTAIN SKILLMAN INC.
PO BOX 8818, 1401 HERMAN ST, LAKELAND FLORIDA, 33803, (863)682-1602
C.A. NO. 202

REVISION DESCRIPTION	REVISION DATE	REVISION NO.
	/ /	

REV.	DATE:
P-0	07/25/16

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CITY OF PLANT CITY
RISK MANAGEMENT OPTION EVALUATION

IRON CONCENTRATIONS IN GROUNDWATER (µg/L)

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PROJECT NO. 9680.24A

SHEET NO. FIGURE 2

\\csilkdfsv001\Projects\Projects\9680.24A\CAD\Risk\9680.24A-CBB-16-SAMPLE LOCATIONS-7_21_16.dwg FIG 2 Jul 25, 2016 11:21am by: rcoyce

CHASTAIN SKILLMAN

CHASTAIN SKILLMAN INC.
PO BOX 8816 LAKELAND FL 33802 863-644-1402
C.A. NO. 202

REVISION NO.	REVISION DATE	REVISION DESCRIPTION
	/ /	

REV.	DATE:
P-0	07/25/16

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CITY OF PLANT CITY
RISK MANAGEMENT OPTION EVALUATION

MANGANESE CONCENTRATIONS IN GROUNDWATER (µg/L)

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PROJECT NO. 9680.24A

SHEET NO. FIGURE 3

\\csikdfsv001\Projects\Projects\9680.24A\CAD\Risk\9680.24A-CBB-16-SAMPLE LOCATIONS-7_21_16.dwg FIG 3 Jul 25, 2016 11:27am by: rcoyce

Table 1. Ground-Water Analytical Results
Combined Gro Mor Fertilizer & Stock-McGinnes Lumber
Plant City, Florida

Sample		Ammonia Nitrogen	Nitrate	Cadmium	Iron	Manganese	Sulfate	Gross Alpha	Radium 226+228
Location	Date	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(pC_i/L)	(pC_i/L)
	GCTL--->	2.8	10	5	300	50	250	15	5
	NADC--->	28	100	50	3000	500	2500	150	50
MW-1	Mar-Apr 2010	123	570	2.3					
	Apr 2011	0.094	760	7.5					
	07/17/12	1,300	1,100	30					
MW-1R	09/18/14	460	950	3.8					
	05/31/16				36.5	572			
MW-2	Mar-Apr 2010	109	86	7.8					
	04/14/11	0.067	91	3.7					
	07/17/12	220	370	8.8					
		WELL HEAD NEEDS REPAIR							
MW-3	Mar-Apr 2010	1.340	1.6	0.6					
	04/14/11	0.088	0.3	0.6					
	07/16/12								
MW-4R	Mar-Apr 2010	326	2,400	16					
	Jun 2011	680	3,700	28					
	07/16/12	1,000	1,700	18					
	09/18/14	1,100	1,600	11					
MW-5	Mar-Apr 2010	28.9	3,100	29					
	04/14/11	0.83	1,400	28					
	07/16/12	1,000	880	10					
		NOT LOCATED							
MW-7	Mar-Apr 2010	0.690	0.14 U	0.6 U					
	04/14/11	0.049	1.1	0.6 U					
	05/31/16				158	2.00 U			
MW-9	04/19/10	1.350	220	8.5					
	04/14/11	0.037	7.5	2.5					
	07/26/12		27	3.0 I		820 V	110	2.5±1.5 U	1.0±0.73 U
		DESTROYED							
MW-10	04/19/10	106	1.7	0.6 U					
	04/14/11	0.036	0.018 U	0.6 U					
	07/16/12	0.072							
	07/05/16					14.9			
MW-11	04/19/10	45.2	36	0.6 U					
	04/14/11	0.12	4.1	0.6 U					
	07/17/12	0.36	0.049 I						
	09/18/14	2.5	1.8	0.93 U					
MW-12	06/15/11	0.210	21	0.6 U					
	07/16/12		0.10						

Table 1. Ground-Water Analytical Results
Combined Gro Mor Fertilizer & Stock-McGinnes Lumber
Plant City, Florida

Sample		Ammonia Nitrogen	Nitrate	Cadmium	Iron	Manganese	Sulfate	Gross Alpha	Radium 226+228
Location	Date	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(pC_i/L)	(pC_i/L)
	GCTL--->	2.8	10	5	300	50	250	15	5
	NADC--->	28	100	50	3000	500	2500	150	50
MW-13	06/16/11	14	7.4	0.6 U					
	07/17/12	62	68	1.8 I					
	09/25/14	0.019 I	400	7.8					
MW-14	06/16/11	11	2.5	0.6 U					
	07/26/12	10 V	8.6	1.1 U	710	520	320	25±5.1	3.0±0.75
		DESTROYED							
MW-15	04/19/10		6.0						
	Jun 2011	590	790	27					
	07/16/12	420	650	11	500	2,100	920	100±4.7	15.6±1.18
	09/18/14	100	140	0.93 U	1,900	2,400	760	48±7.1	12.7±0.89
MW-16	07/26/12	2,200	2,000	15		2,200	3,800	79±4.2	7.7±0.96
	09/18/14	1,700	0.54	12		1,900	250	35±3.2	15.2±1.07
	05/31/16				294	1,280			
MW-17	07/26/12	0.90	0.14	1.1 U					
	09/18/14	41	64			200			
	04/10/15			0.70 I					
	07/06/15				55.7	1,110			
MW-18	07/26/12	24 V	63						
MW-18R	09/19/12				8.8 I	140	120	21±4	
	09/16/14	95	170		74	590		38±3.2	
MW-20	07/26/12	0.50 V	0.062 I		680	220	46		
MW-20R	09/16/14	0.079			12,000	53			
MW-21	07/26/12					79			
MW-22	07/26/12	3.1						5.6±3.1	2.4±0.31 U
	09/18/14	4.2							
MW-23	09/19/12					32			
	09/16/14	0.064			120	23			
	05/31/16				162	5.70			
MW-24	09/19/12					8.7			
	09/18/14	0.022 I							
MW-25	09/18/14	1.9	0.55	0.93 U	260	65	250	40±8.82	2.8±0.7 U
MW-26	09/25/14	0.064 I		0.50 U	1,320	35.1			
MW-27	09/25/14	0.12			2,200	12.0 I			

Table 1. Ground-Water Analytical Results
Combined Gro Mor Fertilizer & Stock-McGinnes Lumber
Plant City, Florida

Sample		Ammonia Nitrogen	Nitrate	Cadmium	Iron	Manganese	Sulfate	Gross Alpha	Radium 226+228
Location	Date	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(pC_i/L)	(pC_i/L)
	GCTL--->	2.8	10	5	300	50	250	15	5
	NADC--->	28	100	50	3000	500	2500	150	50
MW-28	**05/31/16**				1,060	23.9			
MW-30	**07/05/16**				22.4				
MW-31	04/10/15	6.3	0.050 U	0.50 U		272		4.9±1.2	
	05/31/16				18,600	230			
MW-32	04/10/15	4.5	0.050 U		6,300	83.0		6.2±1.5	
	05/31/16				11,600	97.6			
MW-33	**07/06/15**				357	11.2			
DW-1	06/15/11	32	39	1.9					
	07/16/12	0.93	0.79						
		NOT LOCATED							
MW-101	04/03/08			3.4 I	600	120	510	41±2	25±3.6
	04/14/11	0.022	130		47	100	410	49±8.4	10±4.2
	07/26/12	120	110		18 I	91	360	24±5.3	10.3±0.97
	09/18/14	200	120	5.1	180	160	360	74±4.2	37.6±1.1
	07/05/16				52	87.1			
MW-102	04/03/08			18					
	06/27/08			1.0 U					
	Apr 2011		4.9					16.6±6.5	17±0.2
	07/27/12							43±6.6	4.4±0.8
MW-103	04/02/08			0.71 U	4,500	47	26	18±2.0	2.2±1.7
	04/14/11		1.1		40			3.7±2.7	
	07/27/12				28			3.2±2.6	4.1±0.19
MW-104	04/01/08		18	0.71 U			280		
	06/16/11	29	6.8	0.6 U			110	10±3.8	3.0±0.23
	07/27/12	32							
	09/18/14	26							
MW-105	Apr 2008			0.76 I	2,300	72	100	9.1±1.7	6.8±2.5
	06/16/11	11	8.6	0.6 U	1,800	92	67	7.4±3.7	1.3±0.19
	07/27/12	5.8			120	40		6.5±2.6	2.8±0.77
	09/18/14	0.0071 U				16			
	05/31/16				54.8	8.50			
MW-106	06/16/11	8.3	0.490	0.6 U			0.620	2.2±2.2 U	1.7±0.45
	07/27/12	5.5			38,000	230		2.5±1.7 U	1.5±0.22
	09/16/14	2.0	0.3		26,000	170	3.7		2.2±0.57
	05/31/16				38,600	263			

Table 1. Ground-Water Analytical Results
Combined Gro Mor Fertilizer & Stock-McGinnes Lumber
Plant City, Florida

Sample		Ammonia Nitrogen	Nitrate	Cadmium	Iron	Manganese	Sulfate	Gross Alpha	Radium 226+228
Location	Date	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(pC_i/L)	(pC_i/L)
	GCTL--->	2.8	10	5	300	50	250	15	5
	NADC--->	28	100	50	3000	500	2500	150	50
MW-107	06/16/11	3.8	33	0.6 U			38	8.1±3.7	0.9±0.13
	07/27/12	0.78	0.11						
MW-108	04/19/10	0.438	0.14 U						
	Apr 2011	0.097	0.031 I	0.6 U	1,400	8.6		9.4±3.3	0.8±0.21
	07/27/12	0.024 I	0.018 I		410	7.7			
		DESTROYED							
PMW-11	09/19/12				1,600	11			
PMW-18	09/19/12	7.7	0.018 U		16,000		1.1		
	09/16/14	8.7	0.34		15,000	290		5.8±4.3	
	07/06/16				12,100	266			

Red indicates the concentration is greater than the Groundwater Cleanup Target Level (GCTL)

Attachment A

BORING LOG

Boring / Well Number:	Permit Number:	FDEP Facility Identification Number:
MW-33	852671	

Site Name:	Borehole Start Date: 7/5/2016	Borehole Start Time: 8:00 ■ AM ☐ PM
Former Gro-Mor Facility	Borehole End Date: 7/5/2016	Borehole End Time: 9:30 ■ AM ☐ PM

Environmental Contractor:	Geologist's Name:	Environmental Technician's Name:
Chastain-Skillman, Inc	Charles Browning	

Drilling Company:	Pavement Thickness (inches):	Borehole Diameter (inches):	Borehole Depth (feet):
NET	none	4	12.5

Drilling Methods:	Apparent Borehole DTW (in feet from soil moisture content):	Measured well DTW (in feet below casing after recharge):	OVA (list model and check type):
Hand Auger/ Direct Push	2.0	1.8	NA ☐ FID ☐ PID

Disposition of Drill Cuttings [check methods]: ☐ Drum ■ Spread ☐ Backfill ☐ Stockpile ☐ Other

Borehole Completion (check one): ■ Well ☐ Grout ☐ Bentonite ☐ Backfill ☐ Other (describe)

Sample Type	Sample Depth Interval	Organic Vapor Unfiltered	Organic Vapor Filtered	Organic Vapor Net	Depth (feet)	Sample Description (include grain size, odors, staining, and other remarks)	USCS Symbol	Moisture Content	Lab Soil and Groundwater Samples (list sample ID number and depth)
Hand Auger					0	Grass surface cover			
	0-1				1	Sand: black to dark grey, fine grained to silty with	SM	M	
	1-2				2	roots and organic debris, loose, no odor		W	
	2-3				3	Sand: grey to olive grey, fine to medium grained,	SP	W	
	3-4				4	loose, slight methane odor		W	
	4-5				5			S	
Direct Push	5-6				6	Sand: dark grey, fine grained, well sorted, loose,	SW	S	
	6-7				7	slight methane odor		S	
	7-8				8			S	
	8-9				9			S	
	9-10				10			S	
	10-11				11	Sand: light grey, fine grained to silty, loose to slightly	SM	S	
	11-12				12	plastic, methane odor		S	
								S	

Sample Type Codes: PH = Post Hole; HA = Hand Auger; SS = Split Spoon; ST = Shelby Tube; DP = Direct Push; SC = Sonic Core; DC = Drill Cuttings

Moisture Content Codes: D = Dry; M = Moist; W = Wet; S = Saturated

NT: not tested

Florida Department of Environmental Protection - Division of Waste Management - Bureau of Petroleum Storage Systems

WELL CONSTRUCTION AND DEVELOPMENT LOG

WELL CONSTRUCTION DATA

Well Number: MW - 33	Site Name: Former Gro-Mor Facility	FDEP Facility I.D. Number:	Well Install Date(s): 7/5/2016

Well Location and Type (check appropriate boxes):
- ☐ On-Site
- ☑ Right-of-Way
- ☐ Off-Site Private Property
- ☐ Above Grade (AG)
- ☑ Flush-to-Grade

If AG, list feet of riser above land surface:

Well Purpose:
- ☐ Perched Monitoring
- ☑ Shallow (Water-Table) Monitoring
- ☐ Intermediate or Deep Monitoring
- ☐ Remediation or Other (describe)

Well Install Method: Direct Push

Surface Casing Install Method: none

Borehole Depth (feet): 12.5	Well Depth (feet): 12	Borehole Diameter (inches): 4	Manhole Diameter (inches): 8	Well Pad Size: 2 feet by 2 feet

Riser Diameter and Material: 1.0 inch PVC	Riser/Screen Connections: ☑ Flush-Threaded ☐ Other (describe)	Riser Length: 2 feet from 2 feet to 0 feet
Screen Diameter and Material: 1.0 inch PVC	Screen Slot Size: 0.010	Screen Length: 10 feet from 12 feet to 2 feet
1st Surface Casing Material: na also check: ☐ Permanent ☐ Temporary	1st Surface Casing I.D. (inches): na	1st Surface Casing Length: ____ feet from ____ feet to ____ feet
2nd Surface Casing Material: na also check: ☐ Permanent ☐ Temporary	2nd Surface Casing I.D. (inches): na	2nd Surface Casing Length: ____ feet from ____ feet to ____ feet
3rd Surface Casing Material: na also check: ☐ Permanent ☐ Temporary	3rd Surface Casing I.D. (inches): na	3rd Surface Casing Length: ____ feet from ____ feet to ____ feet
Filter Pack Material and Size: 20/40 silica sand	Prepacked Filter Around Screen (check one): ☑ Yes ☐ No	Filter Pack Length: 11 feet from 12 feet to 1 feet
Filter Pack Seal Material and Size: 30/65 fine sand		Filter Pack Seal Length: 0.5 feet from 1 feet to 0.5 feet
Surface Seal Material: portland cement		Surface Seal Length: 0.5 feet from 0.5 feet to 0 feet

WELL DEVELOPMENT DATA

Well Development Date: 07/05/16	Well Development Method (check one): ☐ Surge/Pump ☑ Pump ☐ Compressed Air ☐ Other (describe)	
Development Pump Type (check): ☐ Centrifugal ☑ Peristaltic ☐ Submersible ☐ Other (describe)	Depth to Groundwater (before developing in feet): 2	
Pumping Rate (gallons per minute): 0.25 - 0.2	Maximum Drawdown of Groundwater During Development (feet): 1.0	Well Purged Dry (check one): ☐ Yes ☑ No
Pumping Condition (check one): ☑ Continuous ☐ Intermittent	Total Development Water Removed (gallons): 6.5	Development Duration (minutes): 30
Development Water Drummed (check one): ☐ Yes ☑ No		
Water Appearance (color and odor) At Start of Development: slight brown tint, no odor	Water Appearance (color and odor) At End of Development: clear, no sediment, no odor	

WELL CONSTRUCTION OR DEVELOPMENT REMARKS

STATE OF FLORIDA WELL COMPLETION REPORT

☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River
☐ DEP
☐ Delegated Authority (If Applicable) _____

PLEASE, FILL OUT ALL APPLICABLE FIELDS
(*Denotes Required Fields Where Applicable)

Date Stamp
Received:
Jul 5, 2016 1:48 pm
Official Use Only

1. *Permit Number 852671 *CUP/WUP Number _____ *DID Number _____ 62-524 Delineation No. _____

2. *Number of permitted wells constructed, repaired, or abandoned 3 *Number of permitted wells not constructed, repaired, or abandoned 0

3. *Owner's Name CITY OF PLANT CITY 4. *Completion Date 07/05/2016 5. Florida Unique ID _____

6. HOWARD STREET PLANT CITY
*Well Location - Address, Road Name or Number, City, ZIP

7. *County HILLSBOROUGH *Section 32 Land Grant _____ *Township 28 *Range 22

8. Latitude 28 00 36.98 Longitude 82 07 37.38

9. Data Obtained From: ___ GPS X Map ___ Survey Datum: ___ NAD 27 X NAD 83 ___ WGS 84

10. *Type of Work: X Construction ___ Repair ___ Modification ___ Abandonment

11. *Specify Intended Use(s) of Well(s):
___ Domestic
___ Bottled Water Supply
___ Public Water Supply (Limited Use/DOH)
___ Public Water Supply (Community or Non-Community/DEP)
___ Class I Injection
___ Landscape Irrigation
___ Recreation Area Irrigation
___ Agricultural Irrigation
___ Livestock
___ Nursery Irrigation
___ Commercial/Industrial
___ Golf Course Irrigation
___ Site Investigation
X Monitoring
___ Test
___ Earth-Coupled Geothermal
___ HVAC Supply
___ HVAC Return

Class V Injection: ___ Recharge ___ Commercial/Industrial Disposal ___ Aquifer Storage and Recovery ___ Drainage
Remediation: ___ Recovery ___ Air Sparge ___ Other (Describe) _____
___ Other (Describe) _____

12. *Drill Method: ___ Auger ___ Cable Tool ___ Rotary ___ Combination (Two or More Methods) ___ Jetted ___ Sonic
___ Horizontal Drilling X Hydraulic Point (Direct Push) ___ Other _____

13. *Measured Static Water Level 2.0 ft. Measured Pumping Water Level 5 ft. After 5 Hours at 1 GPM

14. *Measuring Point (Describe) TOP OF CAS Which is 0.3 ft. ___ Above X Below Land Surface *Flowing: ___ Yes ___ No

15. *Casing Material: ___ Black Steel ___ Galvanized X PVC ___ Stainless Steel ___ Not Cased ___ Other _____

16. *Total Well Depth 12.0 ft. Cased Depth 2.0 ft. *Open Hole: From ___ To ___ ft. *Screen: From 2 To 12 ft. Slot Size _____

17. *Abandonment: ___ Other (Explain) _____
From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___

18. *Surface Casing Diameter and Depth:
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___

19. *Primary Casing Diameter and Depth:
Dia 1.00 in. From 0.00 ft. To 2.00 ft. No. of Bags 1.00 Seal Material (Check One): X Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___

20. *Liner Casing Diameter and Depth:
Dia 1.00 in. From 2.00 ft. To 12.00 ft. No. of Bags 2.00 Seal Material (Check One): ___ Neat Cement ___ Bentonite X Other Sand
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___

21. *Telescope Casing Diameter and Depth:
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___
Dia ___ in. From ___ ft. To ___ ft. No. of Bags ___ Seal Material (Check One): ___ Neat Cement ___ Bentonite ___ Other ___

22. Pump Type (If Known):
___ Centrifugal ___ Jet ___ Submersible ___ Turbine
Horsepower _____ Pump Capacity (GPM) _____
Pump Depth ___ ft. Intake Depth ___ ft.

23. Chemical Analysis (When Required):
Iron ___ ppm Sulfate ___ ppm Chloride ___ ppm
___ Laboratory Test ___ Field Test Kit

24. Water Well Contractor:

*Contractor Name Ross A. Chinander *License Number 11093 E-mail Address netross@tampabay.rr.com

*Contractor's Signature Digitally Signed *Driller's Name (Print or Type) WILLIAM D TENNANT
(I certify that the information provided in this report is accurate and true.)

FORM LEG-R.005.02 (06/10) Rule 40D-3.411 (1)(a), F.A.C. EFFECTIVE DATE: 9/12/2010

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
2379 BROAD STREET, BROOKSVILLE, FL 34604-6899
PHONE: (352) 796-7211 or (800) 423-1476
WWW.SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
4049 REID STREET, PALATKA, FL 32178-1429
PHONE: (386) 329-4500
WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)
PHONE: (850) 539-5999
WWW.NWFWMD.STATE.FL.US

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P.O. BOX 24680
3301 GUN CLUB ROAD
WEST PALM BEACH, FL 33416-4680
PHONE: (561) 686-8800
WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT
9225 CR 49
LIVE OAK, FL 32060
PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)
WWW.MYSUWANNEERIVER.COM

***DRILL CUTTINGS LOG** (Examine cuttings every 20 ft. or at formation changes. Note cavities and depth to producing zone. Grain Size: F=Fine, M=Medium, and C=Coarse)

From	To	Color	Grain Size (F, M, C)	Material
0.0 ft.	12.0 ft.	BROWN	VERY FINE	SAND
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			
ft.	ft.			

Comments. Finish: SCREENED OR SANDPOINT

INSTALLATION OF MW-1.

***Detailed Site Map of Well Location**

N

Give distances from all reference points or structures, septic systems, sanitary hazards, and contamination sources within 500 ft. of well.

STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT, REPAIR, MODIFY, OR ABANDON A WELL

☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River
☐ DEP
☐ Delegated Authority (If Applicable) _____

PLEASE FILL OUT ALL APPLICABLE FIELDS
(*Denotes Required Fields Where Applicable)

The water well contractor is responsible for completing this form and forwarding the permit application to the appropriate delegated authority where applicable.

Permit No. 852671
Florida Unique ID _____
Permit Stipulations Required (See Attached) 23, 39
62-524 Quad No. Q3318 Delineation No. _____
CUP/WUP Application No. _____

ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. CITY OF PLANT CITY (*Owner, Legal Name if Corporation) | 302 W. REYNOLDS STREET (*Address) | PLANT CITY (*City) | FL (*State) | 33563 (*ZIP) | (813) 659-4125 (*Telephone Number)
2. HOWARD STREET (*Well Location - Address, Road Name or Number, City) PLANT CITY
3. _____ (*Parcel ID No. (PIN) or Alternate Key (Circle One)) Lot _____ Block _____ Unit _____
4. 32 (*Section or Land Grant) | 28 (*Township) | 22 (*Range) | HILLSBOROUGH (*County) | _____ (Subdivision) Check if 62-524: ___ Yes _X_ No
5. Ross A. Chinander (*Water Well Contractor) | 11093 (*License Number) | (813) 655-3612 (*Telephone Number) | netross@tampabay.rr.com (E-mail Address)
6. 12435 JESS WALDEN ROAD (*Water Well Contractor's Address) | DOVER (City) | FL (State) | 33527 (ZIP)
7. *Type of Work: _X_ Construction ___Repair ___Modification ___Abandonment _____ (*Reason for Repair, Modification, or Abandonment)
8. *Number of Proposed Wells 3
9. *Specify Intended Use(s) of Well(s):

___Domestic ___Bottled Water Supply ___Public Water Supply (Limited Use/DOH) ___Public Water Supply (Community or Non-Community/DEP) ___Class I Injection
___Landscape Irrigation ___Recreation Area Irrigation
___Agricultural Irrigation ___Livestock ___Nursery Irrigation ___Commercial/Industrial ___Golf Course Irrigation
___Site Investigation _X_ Monitoring ___Test ___Earth-Coupled Geothermal ___HVAC Supply ___HVAC Return

Class V Injection: ___Recharge ___Commercial/Industrial Disposal ___Aquifer Storage and Recovery ___Drainage

Remediation: ___Recovery ___Air Sparge ___Other (Describe) _____

___Other (Describe) _____ (Note. Not all types of wells are permitted by a given permitting authority)

Date Stamp
Received:
Jun 29, 2016 8:42 pm
Official Use Only

10. *Distance from Septic System if ≤200 ft. 0 11. Facility Description STREET ROW 12. Estimated Start Date 07/06/2016
13. *Estimated Well Depth 12 ft. *Estimated Casing Depth 2.0 ft. *Primary Casing Diameter 1 in. Open Hole: From ___ To ___ ft.
14. Estimated Screen Interval. From 2.0 To 12.0 ft.
15. *Primary Casing Material: ___Black Steel ___Galvanized _X_ PVC ___Stainless Steel ___Not Cased ___Other: _____
16. Secondary Casing: ___Telescope Casing ___Liner ___Surface Casing Diameter ___ in.
17. Secondary Casing Material: ___Black Steel ___Galvanized ___PVC ___Stainless Steel ___Other _____
18. *Method of Construction, Repair, or Abandonment: ___Auger ___Cable Tool ___Jetted ___Rotary ___Sonic ___Combination (Two or More Methods) ___Hand Driven (Well Point, Sand Point) _X_ Hydraulic Point (Direct Push) ___Horizontal Drilling ___Plugged by Approved Method ___Other (Describe) _____
19. Proposed Grouting Interval for the Primary, Secondary, and Additional Casing:
From 0.0 To 2.0 Seal Material (___Bentonite _X_ Neat Cement ___Other ___)
From ___ To ___ Seal Material (___Bentonite ___Neat Cement ___Other ___)
From ___ To ___ Seal Material (___Bentonite ___Neat Cement ___Other ___)
From ___ To ___ Seal Material (___Bentonite ___Neat Cement ___Other ___)
20. Indicate total number of existing wells on site 0 List number of existing unused wells on site 0
21. *Is this well or any existing well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? ___Yes _X_ No If yes, complete the following: CUP/WUP No. ___ District Well ID No. ___
22. Latitude 28 00 36.99 Longitude 82 07 37.19
23. Data Obtained From: ___GPS _X_ Map ___Survey Datum: ___NAD 27 _X_ NAD 83 ___WGS 84

I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well construction. I further certify that all information provided in the application is accurate and that I will obtain necessary approval from other federal, state, or local governments, if applicable. I agree to provide a well completion report to the District within 30 days after completion of the construction, repair, modification, or abandonment authorized by this permit, or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am the agent for the owner that the information provided is accurate, and that I have informed the owner of his responsibilities as stated above. Owner consents to allowing personnel of this WMD or Delegated Authority access to the well site during the construction, repair, modification, or abandonment authorized by this permit.

Digitally Signed (*Signature of Contractor) | 11093 (*License No.) | Digitally Signed (*Signature of Owner or Agent) | 6/29/2016 (*Date)

DO NOT WRITE BELOW THIS LINE - FOR OFFICIAL USE ONLY

Approval Granted By Automatically Issued Issue Date 06/29/2016 Expiration Date 09/27/2016 Hydrologist Approval ___ Initials
Fee Received $50.00 Receipt No. 26072881 Check No. ___

THIS PERMIT IS NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD OR DELEGATED AUTHORITY. THE PERMIT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL CONSTRUCTION, REPAIR, MODIFICATION, OR ABANDONMENT ACTIVITIES.

 This permit is valid for 90 days from the date of Issue.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
2379 BROAD STREET, BROOKSVILLE, FL 34604-6899
PHONE: (352) 796-7211 or (800) 423-1476
WWW.SWFWMD.STATE.FL.US

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
4049 REID STREET, PALATKA, FL 32178-1429
PHONE: (386) 329-4500
WWW.SJRWMD.COM

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
152 WATER MANAGEMENT DR., HAVANA, FL 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)
PHONE: (850) 539-5999
WWW.NWFWMD.STATE.FL.US

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
P.O. BOX 24680
3301 GUN CLUB ROAD
WEST PALM BEACH, FL 33416-4680
PHONE: (561) 686-8800
WWW.SFWMD.GOV

SUWANNEE RIVER WATER MANAGEMENT DISTRICT
9225 CR 49
LIVE OAK, FL 32060
PHONE: (386) 362-1001 or (800) 226-1066 (Florida only)
WWW.MYSUWANNEERIVER.COM

Comments:

INSTALLATION OF 1 - 1" DIA. MONITORING WELL TO 12' IN DEPTH WITH 10' OF PREPACKED SCREEN + 2 EXTRA WELLS IF NEEDED.

General Site Map of Proposed Well Location

N

US-301 SOUTH TO MARTIN LUTHER KING BLVD EAST TO PLANT CITY TO COLLINS STREET SOUTH TO BALL STREET WEST TO S. HOWARD STREET NORTH 300 FEET TO SITE. SITE IS IN EAST ROW OF HOWARD STREET.

Identify known roads and landmarks. Give distances from all reference points or structures, septic systems, sanitary hazards, and contamination sources, if applicable.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

STIPULATION # 23 - TEST/MONITOR WELL

A. This well is to be used as a test/monitor well. If it is to be converted into a production well, an additional permit shall be obtained.

B. There shall be no injection of fluids into the monitor well without prior written approval from the Florida Department of Environmental Protection (DEP) or the District. This includes, but is not limited to treated ground water, or the introduction of microbes for in-situ aquifer restoration.

C. The well shall be constructed in such a manner to prevent the unauthorized interchange of water between different water bearing zones (i.e., breaching of confining beds, clays or hardpan intervals) as per Chapter 62-532.500 (3)(e), Florida Administrative Code (F.A.C.).

D. Prior written approval from the District shall be required if the monitor well will be pumped for use in hydrodynamic control and/or contaminant plume management, if quantities reach or exceed requirement of a Water Use Permit.

E. All monitor wells constructed at any facility which has been designated as a ground water contamination site, or a possible ground water contamination site, shall adhere to the construction standards set forth by the DEP and other applicable rules.

F. In the event the well needs to be abandoned, an abandonment permit shall be obtained prior to commencing with abandonment operations.

G. An observer from our Regulation Department is required on all abandonments to ensure compliance with applicable 40D-3 regulations. Please contact the Field Service Supervisor in the Tampa Office at (813) 985-7481 for additional information.

Permit No. 852671

COPY TO OWNER TO BE PROVIDED BY CONTRACTOR

(11/03)

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

STIPULATION NUMBER 39 - WELL AND DRILLHOLE ABANDONMENT

It will be the **water well contractor's** responsibility to have any incomplete well or drillhole attempted under this permit properly abandoned.
Any incomplete or abandoned well or drill hole as described in Chapter 40D-3, Florida Administrative Code (F.A.C.), shall be abandoned as follows:

A. The well shall be examined from land surface to the original depth of construction for debris or obstructions (any debris or obstruction shall be removed prior to abandonment).

B. The well shall be plugged from bottom to top by an approved method of grouting with either Portland neat cement grout or an approved Bentonite product as specified in Rule 40D-3.517(2)(b), F.A.C.

It will be the **owner's** responsibility to have any well completed under this permit, or any existing well on this property, which meets the definition of an abandoned well as defined in Rule 40D-3.021(1), F.A.C., properly abandoned in accordance with Rule 40D-3.531, F.A.C.

If any well constructed under this permit will replace any existing well deemed abandoned per Rule 40D-3.021 (1), F.A.C., or triggers an unauthorized Water Use situation, then the existing well must be plugged within 30 days of new well completion. A plugging permit will be required.

It will be the **owner's** responsibility to have any inactive well, which does not meet the above criteria and is no threat to the water resource properly capped in an air and watertight manner with a threaded, welded or bolted cover or valve. If the pump and well seal are water tight, the pump may be left in place. If practical, a protective cover two (2) feet in height shall be placed around the well casing.

A. Wells with a diameter of six (6) inches or more without pumping equipment shall have the well casing extended a minimum of two (2) feet above land surface.

B. Wells with a diameter of less than six (6) inches without pumping equipment shall be securely set in a concrete slab and have either the well casing extended a minimum height of two (2) feet above land surface or a protective cover centered over the well casing. The concrete slab shall be a minimum of four (4) inches in thickness by two (2) feet by two (2) feet square. The protective cover shall be set in the concrete slab and extend a minimum of two (2) feet above land surface.

In flood prone areas all wells shall extend a minimum of one (1) foot above the 100 year flood elevation, if practical, in accordance with Rule 40D-3.521(4), F.A.C.

Any plugging operations shall be permitted separately from this permit by the Southwest Florida Water Management District and be witnessed by a designated District representative. Arrangement for a District representative shall be made with the local District Field Services office a minimum of 24 hours in advance of these operations. A District representative will be available for assignment during normal working hours (8:00 AM - 4:30 PM), Monday through Friday. Travel time must be taken into consideration. Exemptions may be made for extenuating circumstances. For scheduling, please contact the Field Service Supervisor in the Tampa office at (813) 985-7481.

Permit No: 852671

COPY TO OWNER TO BE PROVIDED BY CONTRACTOR
(Updated 12/12)

City of Plant City
Engineering Division
302 West Reynolds Street
Plant City, FL 33563
(813) 659-4200, ext4125

PERMIT NUMBER
1701
Exp. Date: 06/22/2017

Permit Type: **OTHER**

Location Description: NORTHEAST END OF S. HOWARD ST.
Street Address: RIGHT OF WAY
Folio/Parcel Number: ROW

Owner Information		Applicant Information	
Owner:	THE CITY OF PLANT CITY	Applicant:	CHASTAIN SKILLMAN INC
Owner Address:	P O BOX C PLANT CITY, FL 33564-0003	Applicant Address:	P O BOX 5710 LAKELAND, FL 33807
Phone:		Phone:	863-646-1402

Project Description

MONITOR WELL

Comments/Conditions

City Engineer

06/22/2016
Date

Application Number	1416	TOTAL FEES:	$

RIGHT OF WAY USE PERMIT

City of Plant City

ROW Permit #	1701
Approved By	Charles Clark
Permit Issue Date	22 June 2016
Expiration Date	22 June 2017
Inspection Required	Yes____ No ✓
MOT Required	Yes____ No ✓

Engineering Department
302 W. Reynolds St
Plant City, Florida 33563

TYPES OF ACTIVITIES WHICH NORMALLY REQUIRE THE APPLICATION FOR THIS PERMIT WOULD INCLUDE THE PLACEMENT OR REPAIR OF ANY OBJECT, STRUCTURE, OR FACILITY WITHIN A PUBLIC DEDICATED RIGHT-OF-WAY OR EASEMENT, CITY OWNED PROPERTY, WHETHER ABOVE GROUND OR UNDERGROUND AND ROAD CLOSURES.

Applicant name: Charles Browning Company: Chastain-Skillman, Inc.

Applicant address: P.O. Box 5710, Lakeland, FL 33807 Email address: cbrowning@chastainskillman.com

Applicant telephone: (863) 646-1402 Fax: (863) 647-3806

Emergency phone number 24 hours a day 7 days a week (863) 581-1939

****

Owner name: City of Plant City

Address/Job Site: Right-of-Way at the northeast end of South Howard Street

Telephone: (813) 659-4200, Ext. 4154

Will the project require a Roadway Closure? YES [ ] NO [X]

IF YES, A DETOUR ROUTE MUST BE APPROVED AND WARNING SIGNS AND IN CERTAIN CASES VARIABLE MESSAGE BOARDS INSTALLED AT LEAST ONE (1) WEEK IN ADVANCE.

Check all that apply

Nature of Work

Utilities:	[ ] Potable Water	[ ] Sanitary Sewer (Gravity)	[ ] Sanitary Sewer (Force Main)
	[ ] Sewage Lift Station	[ ] Reclaimed Water	[ ] Gas
	[ ] Telephone	[ ] Cable TV	[ ] Buried Electric
	[ ] Overhead Electric	[ ] Jack & Bore	[ ] Horizontal Directional Bore
Drainage:	[ ] Culverts	[ ] Drainage Structures	[ ] Ditches/Swales
Paving:	[ ] Sidewalks	[ ] Curb & Gutter	[ ] Concrete Driveways
	[ ] Asphalt Repair	[ ] Flowable fill	[X] Other: Monitor Well

Road Closure [ ]

Capital Project: ______________________ **City Projects Only**

All work and maintenance of traffic shall be carried out according to the plans attached in this application and the FDOT INDEX Series 600. Any exceptions must be approved by the City Engineer.

RIGHT OF WAY USE PERMIT

Road Closures will be approved with no less than five (5) business days' notice. City Departments and Hillsborough County Agencies must have no less than five (5) business days' notice to time of closure. The following agencies will be notified by email prior to any road closure and proof of notification included in the permit application:

Agencies to be notified for Road Closures

Department	E-mail Address	Phone Number
City Manager Office	lmclemore@plantcitygov.com	813-659-4200 ext. 4157
Fire Department	dazzariti@plantcitygov.com	813-757-9131
Police Department	police@plantcitygov.com	813-757-9200
Utilities Maintenance	weverhart@plantcitygov.com	813-757-9288 ext. 4730
Hillsborough County EMS	fernandezf@hillsboroughcounty.org	813-272-6600
Hillsborough County Sheriff's Dept.	msullivan@hcso.tampa.fl.us	813 247-8555
Hillsborough County School Board	Christine.Hughes@sdhc.k12.fl.us	813-707-7318
Plant City Courier	dnicholson@tampatrib.com	813-394-5103
Planning & Zoning	pscearce@plantcitygov.com	813-659-4200 ext. 4231
Stormwater/Traffic	drainard@plantcitygov.com	813-707-7200 ext. 4505
Building Dept.	jcarr@plantcitygov.com	813-659-4200 ext. 4145
Plant City Observer	ajurgensen@plantcityobserver.com	813-704-6850

Road To Be Closed: Not Applicable.				
Between:	And:			
Beginning Date:	Time:			
Ending Date:	Time:			
Cross Streets Affected:	Closed:	One Lane:	Flagger:	Other:
Cross Streets Affected:	Closed:	One Lane:	Flagger:	Other:
Type of Work:				
Contractor: (Include name, address, and emergency phone number)				
Emergency phone number 24 hours a day 7 days a week (____)_____				
Will The Road Be Completely Closed?	Yes:		No: X	

ALL WORK PERFORMED AS PART OF THIS PERMIT SHALL INCLUDE A "MAINTENANCE OF TRAFFIC PLAN" PREPARED BY A PERSON WHO HAS SATISFACTORILLY COMPLETED THE "FDOT ADVANCED MAINTENANCE OF TRAFFIC COURSE" AND HAS A CURRENT QUALIFICATION, AND SHALL AT A MINIMUM BE CONSISTENT WITH FLORIDA DEPARTMENT OF TRANSPORTATION INDEX SERIES 600.

A copy of this sheet shall be emailed to all of the entities listed above and a copy of the MOT and detour route included. A copy of an email with this page will serve as proof the agency was contacted.

RIGHT OF WAY USE PERMIT

GENERAL CONDITIONS

THE ENTITY OR COMPANY NAMED IN THIS PERMIT AS THE APPLICANT IS SUBJECT TO ALL OF THE FOLLOWING GENERAL CONDITIONS:

1. The applicant certifies that prior to filling out this application that said applicant has ascertained the location of all existing utilities both aerial and underground and the accurate locations are shown on the plans. Contractor to verify location of all utilities. The applicant further certifies that each utility company, public and private within the rights-of-way have been contacted and a **copy** of their response has been attached as part of this permit application. Not required
2. The construction and maintenance of such utility shall not interfere with the property and rights of a prior occupant.
3. All work shall be done in keeping with the standards approved by the City Engineer of the City of Plant City and under the supervision of said City Engineer or representative.
4. All materials & equipment shall be subject to inspection by said City Engineer or their representative.
5. All construction shall be performed in a manner meeting the approval of the City Engineer of the City of Plant City and Safety Standards as prescribed by the Manual on Uniform Traffic Control Devices and FDOT Roadway and Bridge Design Standards. The City of Plant City shall be relieved of all responsibility from damages of any nature arising from issuance of this permit.
6. It is understood and agreed that the rights and privileges herein set out are granted only to the extent of the City's right, title and interest in the land to be entered upon and used by the Permittee and the Permittee will, at all times, assume all risk of and indemnity, defend, and save harmless the City from and against all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercises by said Permittee of the aforesaid rights & privileges.
7. The City requires photos of proposed location when applying for permit and post photo's upon closing the permit.
8. All City of Plant City property and/or rights-of-way shall be restored to original condition as far as practicable and meeting the approval of the City Engineer or representative, this includes the removal of locating flags and resodding.
9. The permittee shall maintain BMP's and erosion control measures throughout the duration of the project. This shall include obtaining a Notice of Intent through the Florida Department of Environmental Protection for projects over one (1) acre. No dewatering shall be done as part of this permit without an approved dewatering plan. If dewatering is contemplated a plan shall be submitted with the project plans.
10. All overhead installations shall conform to clearance standards of the Florida Department of Transportation (FDOT), and all underground crossings installations shall be installed at a minimum depth of thirty-six (36)" under the **road base** and at least thirty (36)" under below ditch invert grade. Variations and exceptions may be made by authority from the City Engineer or representative.
11. The attached sketch or sets of plans covering details of this installation shall be made a part of this permit. A copy of this permit must be on site at all times.
12. It is expressly stipulated that this permit is a licenses for permissive use only and that placing of facilities upon public property pursuant to this permit shall not operate to create or vest any property rights in said holder.
13. Whenever necessary for the construction, repair, improvement, alteration, relocation of any portion of a City facility as determined by the City Engineer, any or all poles, wires, pipes, cables, or other facilities and appurtenances authorized hereunder, shall be removed from said right-of-way, or reset or relocated thereon as required by the City Engineer, and shall be done at the expense of the holder. The minimum notice of the requirement for non-emergency removal is ten (10) days: for emergency removal, the city reserves the right to remove improvements without notice.
14. It is agreed that in the event of relocation of said utility, facilities are scheduled to be done simultaneously with a City improvement project, the Permittee will coordinate with the City before proceeding, shall cooperate with the City's contractor to arrange the sequence of work so as to not unnecessarily delay the work of the City's contractor, defend any legal claims of the City's contractor due to delays caused be the Permittee's failure to comply with the approved scheduled and shall comply with all provisions of the law and Rule 14-46, Florida Administrative Code. The Permittee shall not be responsible for delays beyond its control. The permittee shall furnish a relocation schedule if the work will fall into the time frame the capital project is under construction. The City **shall** be notified at

RIGHT OF WAY USE PERMIT

least three (3) business days and not more than five (5) business days prior to starting construction at 813-659-4200 ext. 4124 after the permit is issued.

15. Notify Sunshine State One Call of Florida at 1-800-432-4770 at least two (2) full business days and not more than five (5) business days prior to starting construction.
16. Area of construction shall be marked in white paint and the locate flags removed during restoration.
17. Proposed work must be started within thirty (30) calendar days from the date of approval. The extension of said time may be extended through written request only.
18. Execute and return three (3) copies of this permit with the Permit Closure Section completed and Record Drawings to the City stating that the job is completed in accordance with the permit and all changes have been noted in the record Drawings
19. At no time will this permit exceed 1 year.
20. This permit may be terminated by the City of Plant City when the City has determined the Permittee has violated **any** provision contained herein and/or fails to promptly correct such violation within five (5) days of notice from the City.
21. Permittee is responsible for providing an emergency contact person and phone number for 24 hours a day/ 7 days a week. Inability to make contact in the event of an emergency may result in the penalty such as revocation of permit and/or back charge as result of damages.
22. The City requires a $2500.00 bond or 10% of the total cost of the project be submitted as security for this permit. Upon satisfactory completion of the work including removal of all signs and restoration of the work area the bond will be released. Upon request the City reserves the right to waive the bond requirement.
23. Comments:_____

This application shall, upon appropriate City signatures, become the permit. All work shall conform to City of Plant City Standards. Permission is hereby granted to:

Permittee & Title (typed or printed): Charles Browning, Project Manager

Permittee Signature & Title: Charles Browning, Project Manager

Address: 4705 Old Highway 37

Lakeland, FL 33813

For the construction and maintenance of: monitor well

see plans attached.

For City use only

Approved by: _____ Date: 6/22/16
City Engineer or Designee

PERMIT COMPLETION OF WORK

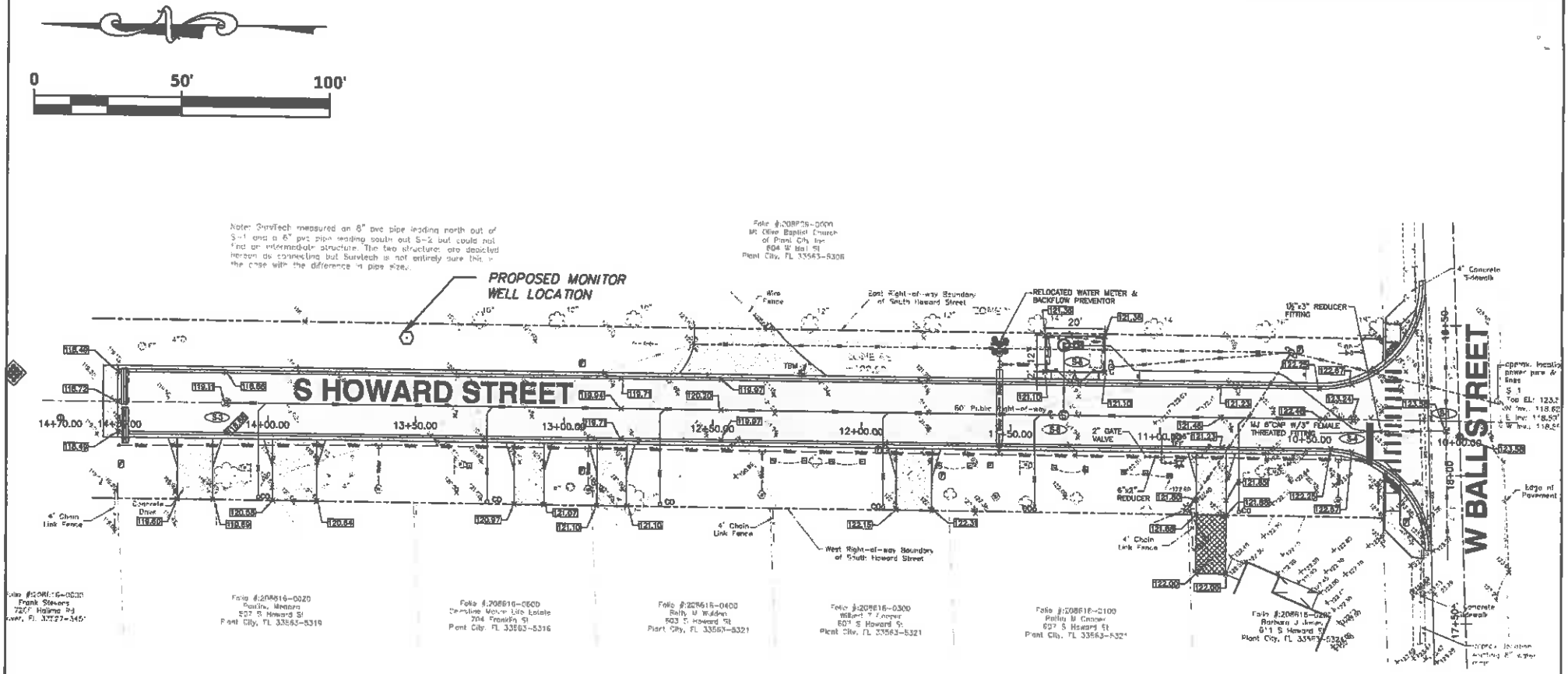
I, the undersigned, do hereby attest that the construction approved by the subject Permit was installed in Accordance with the permit requirements and in accordance with the City's Rights-of-Way Use Procedures and that all changes have been noted in the Record Drawings.

Signature: _____ Title: _____

Date: _____

For City Use Only

Accepted By:
City of Plant City: _____
Signature, Title, Date



BASEMAP FROM CITY OF PLANT CITY
HOWARD STREET, SHEET NO. 6
BY BOGGS ENGINEERING LLC (7/23/13)

P:\9680.24A\CAD\Misc\9680.24A-CBB-16.dwg Fl Jun 21, 2016 12:50pm by: bflisher

engineers | surveyors | environmental

chastain SKILLMAN

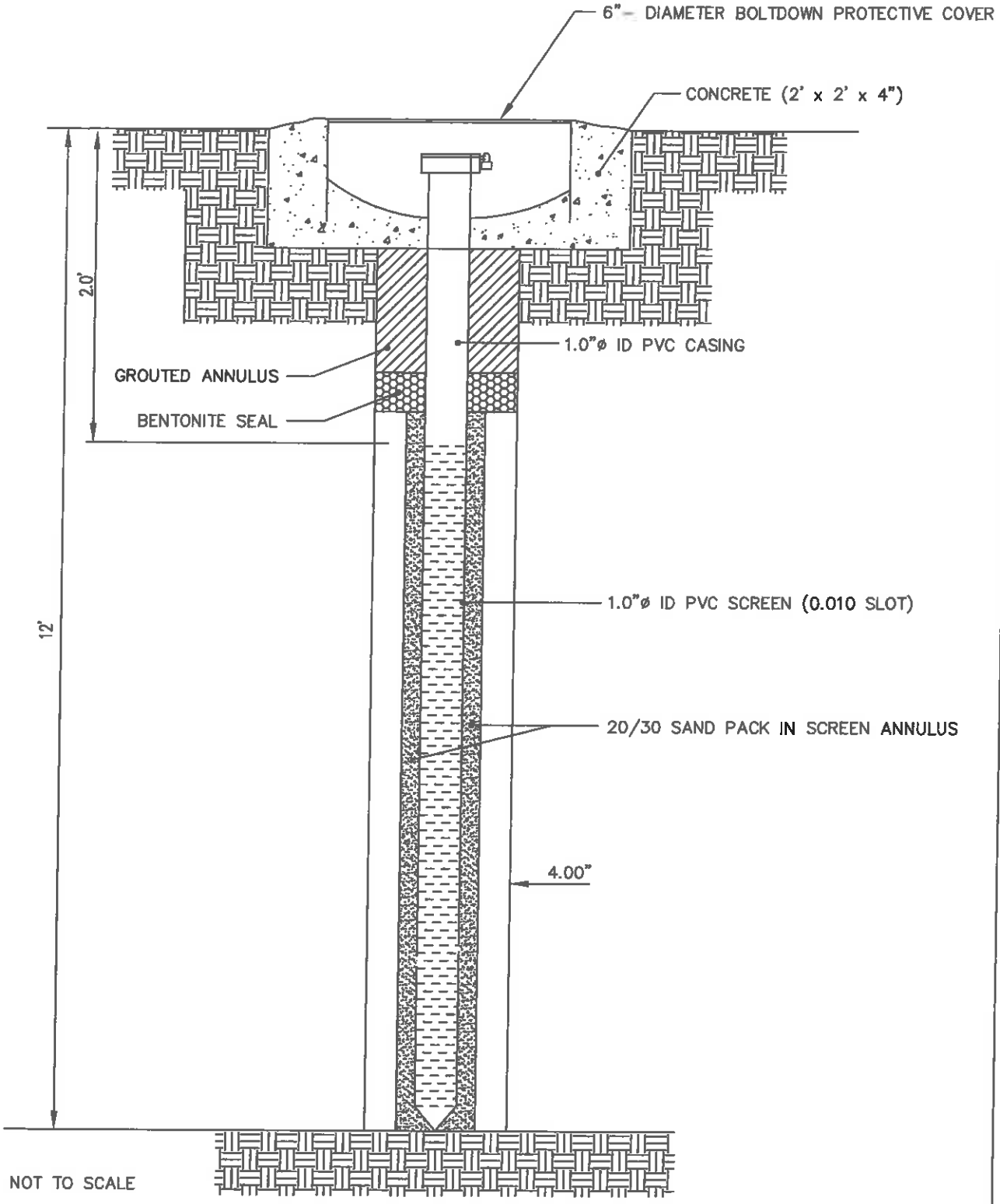
C.A. No. 267

Design Office: 4705 Old Highway 37, P.O. Box 5710 Lakeland, Florida 33807-5710 (863) 646-1402
Corporate Headquarters: 4705 Old Hwy 37, P.O. Box 5710, Lakeland, FL 33807-5710 (863) 646-1402

CITY OF PLANT CITY

PROPOSED MONITOR WELL LOCATION MAP

DRAFTED BY: BLF	APPROVED BY: C.B.B.	DATE: 06-21-16	C.S.I. PROJ. NO. 9680.24A	FIGURE 1



GRO-MOR FERTILIZER & STOCK BUILDING / McGINNES LUMBER CITY OF PLANT CITY		TYPICAL MONITOR WELL CONSTRUCTION DESIGN
CHASTAIN-SKILLMAN, INC.	DRAFTED: 6/2016 REVIEWED/APPROVED BY: C.B.B.	C.S.I. PROJ. NO. 9680.24A FIG. NO. 2

Attachment B

NELAP Certificate No. E84880

LAKELAND LABORATORIES

1910 Harden Boulevard
Suite 101
Lakeland, FL 33803
(863) 686-4271 Phone
(863) 686-4389 Fax

Charles B. Browning, PG
Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

06 June 2016
Lab Work Order (COC): 1605129

RE: **Former Gro-Mor Facility**
Project Location: **Plant City, FL**
Project Number: **9680.24A**

Dear Charles B. Browning, PG:

This report details the analytical results of samples collected at the above-referenced project location as well as the results of any associated quality control samples. These samples were taken into custody by Lakeland Laboratories at **01-Jun-16 08:35**.

The work detailed herein has been conducted in accordance with generally accepted professional standards using recognized testing methodologies and quality control measures. It must be noted that the results detailed within this final report apply only to those samples submitted for analysis and reported here. When the NELAP logo is affixed to this report, these test results meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Your samples will be retained by Lakeland Laboratories for a period of at least 30 days following sample receipt or until the longest of the preparation and/or analytical hold times expires, whichever is shorter. After that time, they will be properly disposed without further notice, unless there exists an explicit contractual agreement to the contrary. We reserve the right to return any unused samples, extracts, or related materials or solutions to you if we consider it necessary. Examples might include those samples identified as hazardous wastes, submissions where the sample sizes significantly exceed those required for analysis, samples containing controlled substances, etc.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full. We will maintain a copy of this report, electronic or otherwise, in our files for at least five years, after which time it may be destroyed without further notice, unless there exists an explicit contractual agreement to the contrary.

We thank you for selecting Lakeland Laboratories to serve your analytical needs. Should you have any questions or require additional information regarding any of the information in this report, please feel free to contact us at any time. We appreciate the opportunity to be of service.

Sincerely,

Technical Director
Jim Crawford For Garrick Johnson

NELAP Certificate No. E84880

LAKELAND LABORATORIES

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Suite 101
Lakeland, FL 33803
(863) 686-4271 Phone
(863) 686-4389 Fax

Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GW001 MW-7	1605129-01	Ground Water	31-May-16 08:08	01-Jun-16 08:35
GW002 MW-1R	1605129-02	Ground Water	31-May-16 08:48	01-Jun-16 08:35
GW003 MW-16	1605129-03	Ground Water	31-May-16 09:30	01-Jun-16 08:35
GW004 MW-105	1605129-04	Ground Water	31-May-16 10:09	01-Jun-16 08:35
GW005 MW-23	1605129-05	Ground Water	31-May-16 10:42	01-Jun-16 08:35
GW006 MW-28	1605129-06	Ground Water	31-May-16 11:14	01-Jun-16 08:35
GW007 MW-31	1605129-07	Ground Water	31-May-16 11:51	01-Jun-16 08:35
GW008 MW-32	1605129-08	Ground Water	31-May-16 12:23	01-Jun-16 08:35
GW009 MW-106	1605129-09	Ground Water	31-May-16 12:56	01-Jun-16 08:35

NELAP Certificate No. E84880

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Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW001 MW-7

1605129-01 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 12:51**			Batch: B606017
Iron	**158**	25.0	7.00	ug/L	1			
Manganese	2.00 U	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

LAKELAND LABORATORIES

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Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW002 MW-1R

1605129-02 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 12:54**		Batch: B606017	
Iron	**36.5**	25.0	7.00	ug/L	1			
Manganese	**572**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

LAKELAND LABORATORIES

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Suite 101
Lakeland, FL 33803
(863) 686-4271 Phone
(863) 686-4389 Fax

Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW003 MW-16

1605129-03 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 12:57**			Batch: B606017
Iron	**294**	25.0	7.00	ug/L	1			
Manganese	**1280**	50.0	20.0	ug/L	10			

NELAP Certificate No. E84880

LAKELAND LABORATORIES

1910 Harden Boulevard
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Lakeland, FL 33803
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(863) 686-4389 Fax

Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW004 MW-105

1605129-04 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 13:01**			Batch: B606017
Iron	**54.8**	25.0	7.00	ug/L	1			
Manganese	**8.50**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW005 MW-23

1605129-05 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 13:04**		Batch: B606017	
Iron	**162**	25.0	7.00	ug/L	1			
Manganese	**5.70**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

LAKELAND LABORATORIES

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(863) 686-4271 Phone
(863) 686-4389 Fax

Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW006 MW-28

1605129-06 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 13:07**		Batch: B606017	
Iron	**1060**	250	70.0	ug/L	10			
Manganese	**23.9**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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(863) 686-4271 Phone
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P.O. Box 5710
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Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW007 MW-31

1605129-07 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 13:10**			Batch: B606017
Iron	**18600**	1250	350	ug/L	50			
Manganese	**230**	5.00	2.00	ug/L	1			

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P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW008 MW-32

1605129-08 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 13:13**			Batch: B606017
Iron	**11600**	625	175	ug/L	25			
Manganese	**97.6**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

GW009 MW-106

1605129-09 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**02-Jun-16 16:08**			
EPA Method 6010C - Metals by ICP				Analyzed:	**03-Jun-16 13:16**			Batch: B606017
Iron	**38600**	1250	350	ug/L	50			
Manganese	**263**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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Lakeland, FL 33803
(863) 686-4271 Phone
(863) 686-4389 Fax

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P.O. Box 5710
Lakeland, FL 33807

Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

EPA Method 6010C - Metals by ICP - Quality Control

Lakeland Laboratories, LLC

Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%Rec	%Rec Limits	RPD	RPD Limit	Qualifiers
Batch: B606017 - Prep Method: 3010A											
Blank (B606017-BLK1)				Prepared: **02-Jun-16 16:08**			Analyzed: **03-Jun-16 12:32**				
Iron	7.00 U	25.0	7.00	ug/L							
Manganese	2.00 U	5.00	2.00	ug/L							
LCS (B606017-BS1)				Prepared: **02-Jun-16 16:08**			Analyzed: **03-Jun-16 12:36**				
Iron	480	25.0	7.00	ug/L	500		96	80-120			
Manganese	485	5.00	2.00	ug/L	500		97	80-120			
LCS Dup (B606017-BSD1)				Prepared: **02-Jun-16 16:08**			Analyzed: **03-Jun-16 12:39**				
Iron	476	25.0	7.00	ug/L	500		95	80-120	0.8	20	
Manganese	485	5.00	2.00	ug/L	500		97	80-120	0.06	20	
Matrix Spike (B606017-MS1)		**Source: 1605004-01**		Prepared: **02-Jun-16 16:08**			Analyzed: **03-Jun-16 12:42**				
Iron	2640	25.0	7.00	ug/L	500	2220	83	75-125			
Manganese	596	5.00	2.00	ug/L	500	150	89	75-125			
Matrix Spike Dup (B606017-MSD1)		**Source: 1605004-01**		Prepared: **02-Jun-16 16:08**			Analyzed: **03-Jun-16 12:45**				
Iron	2690	25.0	7.00	ug/L	500	2220	94	75-125	2	20	
Manganese	605	5.00	2.00	ug/L	500	150	91	75-125	1	20	

NELAP Certificate No. E84880

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Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
06-Jun-16 11:10
Lab Work Order (COC): 1605129

Notes and Definitions

DET	Analyte DETECTED
U	Analyte NOT DETECTED at or above the MDL
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
MRL	Method Reporting Limit

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.

Lakeland Laboratories, LLC
1910 Harden Boulevard, Suite 101
Lakeland, FL 33803-1829
Phone: (863) 686-4271 Fax: (863) 686-4389

CHAIN OF CUSTODY

Page 1 of 2

NELAP ACCREDITED TNI LABORATORY

Lab Work Order Number: 1605129

Client Name Chastain-Skillman, Inc.	**Project Name** Former Gro-Mor Facility
Project Manager Charles B. Browning, PG	**Project Number** 9680.24A
Client Address P.O. Box 5710	**Project Location** Plant City, FL
City Lakeland	**PO Number**
State/Zip FL, 33807	**Shipped By**
Phone (863) 646-1402 **Fax** (863) 646-8023	**Tracking Number**
Sampler Charles B. Browning, PG	**Sampler Signature** Charles Browning

Requested Analyses: Fe::Mn

Requested Turn Around

FDEP Facility No.:

Rush requests subject to additional charge.

Rush requests subject to lab approval.

Standard (days): 5

Expedited (days):

Requested Due Date: —

Sample Name or Field ID	Sampled Date	Sampled Time	Sample Type (Grab / Composite)	Matrix Code	Container Count	Preservation Code: HNO3	Sample Comments	Lab ID
GW001 MW-7	5-31-16	8:08	G	GW	1	1		1605129-01
GW002 MW-1R	5-31-16	8:48	G	GW	1	1		1605129-02
GW003 MW-16	5-31-16	9:30	G	GW	1	1		1605129-03
GW004 MW-105	5-31-16	10:09	G	GW	1	1		1605129-04
GW005 MW-23	5-31-16	10:42	G	GW	1	1		1605129-05
GW006 MW-28	5-31-16	11:14	G	GW	1	1		1605129-06
GW007 MW-31	5-31-16	11:51	G	GW	1	1		1605129-07
GW008 MW-32	5-31-16	12:23	G	GW	1	1		1605129-08
GW009 MW-106	5-31-16	12:56	G	GW	1	1		1605129-09
GW010			G	GW	1	1		1605129-10
GW011			G	GW	1	1		1605129-11
GW012			G	GW	1	1		1605129-12

Item Numbers	Relinquished By	Received By	Date/Time
1-12	[signature]	C Browning	5/27/16 1400
1-9	[signature]	[signature]	6-1-16 835

Sample Kit Prepared By: [signature] Date/Time: 5/27/16

Comments:

Cooler Numbers and Temperatures: 1.2°C Wet Ice

Total # of Containers: 12

Matrix Codes: W=Ground Water

Preserv. Codes: HNO3=pH<2 w/ HNO3+Store 4°C

NELAP Certificate No. E84880

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(863) 686-4271 Phone
(863) 686-4389 Fax

Charles B. Browning, PG
Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

08 July 2016
Lab Work Order (COC): 1607017

RE: **Former Gro-Mor Facility**
Project Location: **Plant City, FL**
Project Number: **9680.24A**

Dear Charles B. Browning, PG:

This report details the analytical results of samples collected at the above-referenced project location as well as the results of any associated quality control samples. These samples were taken into custody by Lakeland Laboratories at **06-Jul-16 10:22.**

The work detailed herein has been conducted in accordance with generally accepted professional standards using recognized testing methodologies and quality control measures. It must be noted that the results detailed within this final report apply only to those samples submitted for analysis and reported here. When the NELAP logo is affixed to this report, these test results meet all requirements of the National Environmental Laboratory Accreditation Conference (NELAC).

Your samples will be retained by Lakeland Laboratories for a period of at least 30 days following sample receipt or until the longest of the preparation and/or analytical hold times expires, whichever is shorter. After that time, they will be properly disposed without further notice, unless there exists an explicit contractual agreement to the contrary. We reserve the right to return any unused samples, extracts, or related materials or solutions to you if we consider it necessary. Examples might include those samples identified as hazardous wastes, submissions where the sample sizes significantly exceed those required for analysis, samples containing controlled substances, etc.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full. We will maintain a copy of this report, electronic or otherwise, in our files for at least five years, after which time it may be destroyed without further notice, unless there exists an explicit contractual agreement to the contrary.

We thank you for selecting Lakeland Laboratories to serve your analytical needs. Should you have any questions or require additional information regarding any of the information in this report, please feel free to contact us at any time. We appreciate the opportunity to be of service.

Sincerely,

Technical Director
Jim Crawford For Garrick Johnson

NELAP Certificate No. E84880

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1910 Harden Boulevard
Suite 101
Lakeland, FL 33803
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(863) 686-4389 Fax

Chastain-Skillman, Inc.
P.O. Box 5710
Lakeland, FL 33807

Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-30	1607017-01	Ground Water	05-Jul-16 14:23	06-Jul-16 10:22
MW-101	1607017-02	Ground Water	05-Jul-16 15:12	06-Jul-16 10:22
MW-10	1607017-03	Ground Water	05-Jul-16 15:41	06-Jul-16 10:22
MW-17	1607017-04	Ground Water	06-Jul-16 07:35	06-Jul-16 10:22
PMW-18	1607017-05	Ground Water	06-Jul-16 08:14	06-Jul-16 10:22
MW-33	1607017-06	Ground Water	06-Jul-16 08:45	06-Jul-16 10:22
SW001	1607017-07	Ground Water	05-Jul-16 10:20	06-Jul-16 10:22
SW002	1607017-08	Ground Water	05-Jul-16 10:40	06-Jul-16 10:22

NELAP Certificate No. E84880

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Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

MW-30
1607017-01 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:03**				Batch: B607025
Iron	**22.4**	25.0	7.00	ug/L	1			I

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Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

MW-101
1607017-02 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared:	**06-Jul-16 13:18**			
EPA Method 6010C - Metals by ICP				Analyzed:	**07-Jul-16 17:06**		Batch: B607025	
Iron	**52.0**	25.0	7.00	ug/L	1			
Manganese	**87.1**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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Lakeland, FL 33807

Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

MW-10
1607017-03 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:09**			Batch: B607025	
Manganese	**14.9**	5.00	2.00	ug/L	1			

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Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

MW-17
1607017-04 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:12**				Batch: B607025
Iron	**55.7**	25.0	7.00	ug/L	1			
Manganese	**1110**	5.00	2.00	ug/L	1			

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Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
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Project Manager:	Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

PMW-18
1607017-05 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:15**			Batch: B607025	
Iron	**12100**	625	175	ug/L	25			
Manganese	**266**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

MW-33
1607017-06 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:19**			Batch: B607025	
Iron	**357**	25.0	7.00	ug/L	1			
Manganese	**11.2**	5.00	2.00	ug/L	1			

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Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

SW001
1607017-07 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:22**				Batch: B607025
Iron	**184**	25.0	7.00	ug/L	1			
Manganese	**15.4**	5.00	2.00	ug/L	1			

NELAP Certificate No. E84880

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Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

SW002
1607017-08 (Ground Water)

Analyte	Result	PQL	MDL	Units	Dilution	%Rec	%Rec Limits	Qualifiers
				Prepared: **06-Jul-16 13:18**				
EPA Method 6010C - Metals by ICP				Analyzed: **07-Jul-16 17:25**				Batch: B607025
Iron	**167**	25.0	7.00	ug/L	1			
Manganese	**21.1**	5.00	2.00	ug/L	1			

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Project Name: Former Gro-Mor Facility
Project Number: 9680.24A
Project Location: Plant City, FL
Project Manager: Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

EPA Method 6010C - Metals by ICP - Quality Control

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Analyte	Result	PQL	MDL	Units	Spike Level	Source Result	%Rec	%Rec Limits	RPD	RPD Limit	Qualifiers
Batch: B607025 - Prep Method: 3010A											
Blank (B607025-BLK1)				Prepared: **06-Jul-16 13:18**			Analyzed: **07-Jul-16 15:46**				
Iron	7.00 U	25.0	7.00	ug/L							
Manganese	2.00 U	5.00	2.00	ug/L							
LCS (B607025-BS1)				Prepared: **06-Jul-16 13:18**			Analyzed: **07-Jul-16 15:49**				
Iron	477	25.0	7.00	ug/L	500		95	80-120			
Manganese	481	5.00	2.00	ug/L	500		96	80-120			
LCS Dup (B607025-BSD1)				Prepared: **06-Jul-16 13:18**			Analyzed: **07-Jul-16 16:24**				
Iron	482	25.0	7.00	ug/L	500		96	80-120	1	20	
Manganese	489	5.00	2.00	ug/L	500		98	80-120	2	20	
Matrix Spike (B607025-MS1)	**Source: 1606059-01**			Prepared: **06-Jul-16 13:18**			Analyzed: **07-Jul-16 16:27**				
Iron	780	25.0	7.00	ug/L	500	352	86	75-125			
Manganese	469	5.00	2.00	ug/L	500	23.6	89	75-125			
Matrix Spike Dup (B607025-MSD1)	**Source: 1606059-01**			Prepared: **06-Jul-16 13:18**			Analyzed: **07-Jul-16 16:41**				
Iron	789	25.0	7.00	ug/L	500	352	87	75-125	1	20	
Manganese	477	5.00	2.00	ug/L	500	23.6	91	75-125	2	20	

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P.O. Box 5710
Lakeland, FL 33807

Project Name:	Former Gro-Mor Facility
Project Number:	9680.24A
Project Location:	Plant City, FL
Project Manager:	Charles B. Browning, PG

Reported:
08-Jul-16 17:30
Lab Work Order (COC): 1607017

Notes and Definitions

I	Result is between LOQ/PQL and LOD/MDL.
DET	Analyte DETECTED
U	Analyte NOT DETECTED at or above the MDL
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
MRL	Method Reporting Limit

Results of liquid samples are reported on a wet-weight basis unless otherwise indicated. Results of solid samples are reported on a dry-weight basis unless otherwise indicated.

Lakeland Laboratories, LLC
1910 Harden Boulevard, Suite 101
Lakeland, FL 33803-1829
Phone: (863) 686-4271 Fax: (863) 686-4389

CHAIN OF CUSTODY

Page 1 of 2

Lab Work Order Number: ~~1605129~~ 160710

Client Name Chastain-Skillman, Inc.	**Project Name** Former Gro-Mor Facility
Project Manager Charles B. Browning, PG	**Project Number** 9680.24A
Client Address P.O. Box 5710	**Project Location** Plant City, FL
City Lakeland	**PO Number**
State/Zip FL, 33807	**Shipped By**
Phone (863) 646-1402 **Fax** (863) 646-8023	**Tracking Number**
Sampler Charles B. Browning, PG	**Sampler Signature** Charles Browning

Requested Analyses: Fe::Mn; Fe only; Mn only

Requested Turn Around: FDEP Facility No.:

Rush requests subject to additional charge.

Rush requests subject to lab approval.

Standard (days): 5

Expedited (days):

Requested Due Date:

Sample Name or Field ID	Sampled Date	Sampled Time	Sample Type (Grab / Composite)	Matrix Code	Container Count	Preservation Code HNO3	Fe only	Mn only	Sample Comments	Lab ID
GW001			G	GW	1	1				1605129-01
GW002			G	GW	1	1				1605129-02
GW003			G	GW	1	1				1605129-03
GW004			G	GW	1	1				1605129-04
GW005			G	GW	1	1				1605129-05
GW006			G	GW	1	1				1605129-06
GW007			G	GW	1	1				1605129-07
GW008			G	GW	1	1				1605129-08
GW009			G	GW	1	1				1605129-09
GW010 MW-30	7-5-16	14:23	G	GW	1	*	1		1607017-01	1605129-10
GW011 MW-101	7-5-16	15:12	G	GW	1	1			-02	1605129-11
GW012 MW-10	7-5-16	15:41	G	GW	1	*		1	-03	1605129-12

Item Numbers	Relinquished By	Received By	Date/Time
1-12	[signature]	Browning	5-27-16 14:00
10-12	Charles Browning	[signature]	7-6-16 10:22

Sample Kit Prepared By: [signature] Date/Time: 5/27/16

Comments:

Cooler Numbers and Temperatures: 0.7°C Wet Ice

Total # of Containers: 12

Matrix Codes: GW=Ground Water

Preserv. Codes: HNO3=pH<2 w/ HNO3+Store 4°C

Lakeland Laboratories, LLC
1910 Harden Boulevard, Suite 101
Lakeland, FL 33803-1829
Phone: (863) 686-4271 Fax: (863) 686-4389

CHAIN OF CUSTODY

Page 2 of 2

Lab Work Order Number: ~~1605129~~ 160701

Client Name Chastain-Skillman, Inc.	**Project Name** Former Gro-Mor Facility
Project Manager Charles B. Browning, PG	**Project Number** 9680.24A
Client Address P.O. Box 5710	**Project Location** Plant City, FL
City Lakeland	**PO Number**
State/Zip FL, 33807	**Shipped By**
Phone (863) 646-1402 **Fax** (863) 646-8023	**Tracking Number**
Sampler Charles B. Browning, PG	**Sampler Signature** Charles Browning

Requested Analyses: Fe::Mn

Requested Turn Around

FDEP Facility No.:

Rush requests subject to additional charge.

Rush requests subject to lab approval.

Standard (days): 5

Expedited (days):

Requested Due Date: —

Preservation Code: HNO3

Sample Name or Field ID	Sampled Date	Sampled Time	Sample Type (Grab / Composite)	Matrix Code	Container Count	HNO3	Sample Comments	Lab ID
GW013 MW-17	7-6-16	7:35	G	GW	1	1	160701 7-04	1605129-13
GW014 PMW-18	7-6-16	8:14	G	GW	1	1	-05	1605129-14
GW015 MW-33	7-6-16	8:45	G	GW	1	1	-06	1605129-15
SW001	7-5-16	10:20	G	SW	1	1	-07	
SW002	7-5-16	10:40	G	SW	1	1	-08	

Item Numbers	Relinquished By	Received By	Date/Time
13-15	[signature]	C Browning	5-27-16 14:00
13-17	Charles Browning	[signature]	7-6-16 10:22

Sample Kit Prepared By: [signature] Date/Time: 5/27/16

Comments:

Cooler Numbers and Temperatures: 0.7°C Wet Ice

Total # of Containers: 3

Matrix Codes: GW=Ground Water

Preserv. Codes: HNO3=pH<2 w/ HNO3+Store 4°C

Report To:
Garrick Johnson
Lakeland Laboratories
1910 Harden Boulevard Suite 101
Lakeland FL, 33803-1829

Report Printed: 7/27/2016
Work Order # 16G0699
Project:
Former Gro-Mor Facility

1607113

Lab ID: 16G0699-01
Client Sample ID: 1607113-01 (SW-003)
Matrix: Surface Water

Collection Date: 07/22/16 10:15
Received Date: 07/26/16 09:40
Collected By: Charles B. Browning, PG

Laboratory Analysis Report

Parameter	Result	QC	Units	Dil	MDL	PQL	Method	Date Ext.	Date Analy.	Analyst
Metals by EPA 6000/7000 Series Methods										
Iron	123		ug/L	1	2.00	10.0	EPA 6010	07/26 14:00	07/26 14:46	MAZ

Report To:
Garrick Johnson
Lakeland Laboratories
1910 Harden Boulevard Suite 101
Lakeland FL, 33803-1829

Report Printed: 7/27/2016
Work Order # 16G0699
Project:
Former Gro-Mor Facility

1607113

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1607756 - EPA 3010A										
Blank (1607756-BLK1)				Prepared & Analyzed: 07/26/2016						
Iron	ND	10.0	ug/L							U
LCS (1607756-BS1)				Prepared & Analyzed: 07/26/2016						
Iron	506.7	10.0	ug/L	500.0		101	80-120			
Matrix Spike (1607756-MS1)		**Source: 16G0722-02**		Prepared & Analyzed: 07/26/2016						
Iron	475.3	10.0	ug/L	500.0	13.08	92.4	75-125			
Matrix Spike Dup (1607756-MSD1)		**Source: 16G0722-02**		Prepared & Analyzed: 07/26/2016						
Iron	476.8	10.0	ug/L	500.0	13.08	92.7	75-125	0.337	20	

Report To:
Garrick Johnson
Lakeland Laboratories
1910 Harden Boulevard Suite 101
Lakeland FL, 33803-1829

Report Printed: 7/27/2016
Work Order # 16G0699
Project:
Former Gro-Mor Facility

1607113

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the detection limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
V	Indicated that the analyte was detected in both the sample and the associated method blank.
I	The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
Z	Too many colonies were present for accurate counting.

QC=Qualifier Codes as defined by DEP 62-160
Unless indicated, soil results are reported on actual (wet) weight basis.
Work performed by outside (subcontracted) labs denoted by SUB in Analyst Field.

Results relate only to this sample.

Suresh (Bobby) Supan - CSM

x

Authorized CSM Signature (954) 978-6400
Florida-Spectrum Environmental Services,Inc.
Certification# E86006

All NELAP certified analysis are performed in accordance with Chapter 64E-1 Florida Administrative code, which has been determined to be equivalent to NELAC standards. Analysis certified by programs other than NELAP are designated with a "~".

SUBCONTRACT ORDER

Lakeland Laboratories, LLC

1660699

1607113

SENDING LABORATORY:

Lakeland Laboratories, LLC
1910 Harden Boulevard, Suite 101
Lakeland, FL 33803
Phone: 863-686-4271
Fax: 863-686-4389
Project Manager: Garrick Johnson

RECEIVING LABORATORY:

FSES - Ft Lauderdale
1460 West McNab Road
Fort Lauderdale, FL 33309
Phone :(954) 978-6400
Fax: (954) 978-2233

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: 1607113-01	**Surface V**	**Sampled:22-Jul-16 10:15**		
EPA 6010C - Iron (Fe)	29-Jul-16 00:00	18-Jan-17 10:15		
Containers Supplied: JH				

Released By	Date	Received By	Date
	7-25-16	7768 3638 1730	
Released By	Date	Received By	Date
		7/26/16	940

Lakeland Laboratories, LLC
1910 Harden Boulevard, Suite 101
Lakeland, FL 33803-1829
Phone: (863) 686-4271 Fax: (863) 686-4389

CHAIN OF CUSTODY

NELAP ACCREDITED TNI LABORATORY

Lab Work Order Number: 1607113

Client Name Chastain-Skillman, INC	**Project Name** FORMER GRO-MOR
Project Manager Charles Browning	**Project Number** 9680.24A
Client Address P.O. Box 5710	**Project Location** Plant City
City Lakeland	**PO Number**
State/Zip FL 33807	**Shipped By**
Phone (863) 646-1402 **Fax** (863) 646-8023	**Tracking Number**
Sampler Charles Browning	**Sampler Signature** Charles Browning

Requested Analyses: IRON

Requested Turn Around
FDEP Facility No.:
Rush requests subject to additional charge.
Rush requests subject to lab approval.
Standard (days)
Expedited (days)
Requested Due Date

Sample Name or Field ID	Sampled Date	Sampled Time	Sample Type (Grab / Composite)	Matrix Code	Container Count	Preservation Code 1	Sample Comments	Lab ID
SW-003	7.22.16	10:15	G	SW	1	X		

Item Numbers	Relinquished By	Received By	Date/Time	Sample Kit Prepared By	Date/Time
1		Charles Browning	7.22.16 930		
1	Charles Browning	[illegible]	7.22.16 1045	Comments	
Item Numbers	Relinquished By	Received By	Date/Time		
Item Numbers	Relinquished By	Received By	Date/Time		

Cooler Numbers and Temperatures: 1.2°C wet

Total # of Containers: 0 1

Matrix Codes: A=Air, D=Drywall, GW=Ground Water, SW=Surface Water, W=Water, SO=Soil, SOL=Solid Material, Wi=Wipe, Oi=Oil, P=Paint Chips, SE=Sediment, SL=Sludge, OL=Organic Liquid, WW=Waste Water

Preserv. Codes: ICE=Store at 4°C, ICE+=Store at 4°C+No Headspace, ICE&=Store at 4°C&in Dark, HNO3=pH<2 w/ HNO3+ICE, HCl=pH<2 w/ HCl+ICE, H2SO4=pH<2 w/ H2SO4+ICE, MeOH=Frozen -10°C+MeOH, N/A=No preservative required, Sub=Subcontracted(see bottle for preservative)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-7	SAMPLE ID: # GW001		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 1.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 4.98	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 4.98 feet) X 0.04 gallons/foot = 0.28 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.0	PURGING INITIATED AT: 7:46	PURGING ENDED AT: 8:08	TOTAL VOLUME PURGED (gallons): 1.10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
7:57	0.55	0.6	0.05	6.1	6.1	26.4	79.8	0.57	4.91	clear	-139
8:03	0.30	0.9	0.05	6.1	6.0	26.4	83.3	0.55	4.92	clear	-118
8:08	0.25	1.1	0.05	6.1	6.0	26.4	83.1	0.53	4.67	clear	-112

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Char B Browning	SAMPLING INITIATED AT: 8:08	SAMPLING ENDED AT: 8:09
PUMP OR TUBING DEPTH IN WELL (feet): 7.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW001	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	189

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-1R	SAMPLE ID: # GW002		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 2.84	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 2.84 feet) X 0.16 gallons/foot = 1.47 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	PURGING INITIATED AT: 8:23	PURGING ENDED AT: 8:47	TOTAL VOLUME PURGED (gallons): 2.40

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/l or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
8:38	1.50	1.5	0.1	3.1	4.9	26.2	6420	0.18	0.82	clear	54
8:42	0.40	1.9	0.10	3.1	4.9	26.3	6470	0.15	0.65	clear	57
8:47	0.50	2.4	0.10	3.1	4.9	26.3	6440	0.16	0.73	clear	58

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 8:48	SAMPLING ENDED AT: 8:49
PUMP OR TUBING DEPTH IN WELL (feet): 4.5	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW002	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	378

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME:	Former Gro-Mor	SITE LOCATION:	Plant City, Fl
WELL NO: MW-16	SAMPLE ID: # GW003	DATE: 05/31/16	

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 10.3 feet	STATIC DEPTH TO WATER (feet): 2.82	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (10 feet - 2.82 feet) X 0.16 gallons/foot = 1.20 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	PURGING INITIATED AT: 9:06	PURGING ENDED AT: 9:30	TOTAL VOLUME PURGED (gallons): 2.30

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) umhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
9:16	1.00	1.0	0.1	3.3	6.4	26.9	1418	0.35	7.68	clear	34
9:20	0.40	1.4	0.1	3.3	6.3	26.5	3999	0.34	5.81	clear	16
9:23	0.30	1.7	0.1	3.3	6.2	26.3	7500	0.30	4.67	clear	18
9:26	0.30	2.0	0.1	3.3	6.2	26.3	7600	0.29	5.00	clear	20
9:29	0.30	2.3	0.1	3.3	6.2	26.3	7750	0.31	5.05	clear	16

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 9:30	SAMPLING ENDED AT: 9:31
PUMP OR TUBING DEPTH IN WELL (feet): 4.5	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW003	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	378

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-105	SAMPLE ID: # GW004		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 1.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 4 feet to 14 feet	STATIC DEPTH TO WATER (feet): 5.04	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (14 feet - 5.04 feet) X 0.04 gallons/foot = 0.36 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7.0	PURGING INITIATED AT: 9:46	PURGING ENDED AT: 10:09	TOTAL VOLUME PURGED (gallons): 0.88

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
9:58	0.48	0.5	0.04	6.8	5.9	28.6	247.5	0.90	10.56	clear	44
10:03	0.20	0.7	0.04	6.8	5.7	28.7	243.5	0.87	10.03	clear	82
10:08	0.20	0.9	0.04	6.8	5.8	28.7	241.0	0.78	9.38	clear	85

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 10:09	SAMPLING ENDED AT: 10:10
PUMP OR TUBING DEPTH IN WELL (feet): 7.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW004	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	151

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene **S** = Silicone; T= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-23	SAMPLE ID: # GW005		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 3.36	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (11 feet - 3.36 feet) X 0.16 gallons/foot = 1.22 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	PURGING INITIATED AT: 10:23	PURGING ENDED AT: 10:41	TOTAL VOLUME PURGED (gallons): 1.80

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
10:35	1.20	1.2	0.1	4.3	5.8	24.7	121.8	0.40	2.20	clear	44
10:38	0.30	1.5	0.1	4.3	5.8	24.6	122.5	0.42	1.88	clear	37
10:41	0.30	1.8	0.1	4.3	5.8	24.6	123.4	0.39	1.93	clear	35

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 10:42	SAMPLING ENDED AT: 10:43
PUMP OR TUBING DEPTH IN WELL (feet): 5.5	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW005	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	378

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene **S** = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: **MW-28**	SAMPLE ID: # GW006		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 4.38	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 4.38 feet) X 0.16 gallons/foot = 1.22 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 6.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6.0	PURGING INITIATED AT: 10:52	PURGING ENDED AT: 11:13	TOTAL VOLUME PURGED (gallons): 2.10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
11:05	1.30	1.3	0.1	5.2	6.4	25.6	250.2	0.53	12.80	clear	-73
11:08	0.30	1.6	0.1	5.2	6.3	25.6	250.9	0.53	12.00	clear	-80
11:13	0.50	2.1	0.1	5.2	6.3	25.6	255.1	0.48	11.63	clear	-77

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 11:14	SAMPLING ENDED AT: 11:15
PUMP OR TUBING DEPTH IN WELL (feet): 6.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW006	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	378

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene **S** = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-31	SAMPLE ID: # GW007		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 3 feet to 13 feet	STATIC DEPTH TO WATER (feet): 5.88	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (13 feet - 5.88 feet) X 0.16 gallons/foot = 1.14 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.0	PURGING INITIATED AT: 11:30	PURGING ENDED AT: 11:51	TOTAL VOLUME PURGED (gallons): 2.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
11:42	1.20	1.2	0.1	7.1	6.5	24.7	400.9	0.30	1.03	clear	-162
11:45	0.30	1.5	0.1	7.1	6.5	24.7	410.6	0.31	1.15	clear	-158
11:50	0.50	2.0	0.1	7.1	6.5	24.6	411.7	0.33	1.20	clear	-153

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 11:51	SAMPLING ENDED AT: 11:52
PUMP OR TUBING DEPTH IN WELL (feet): 8.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW007	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	378

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME:	Former Gro-Mor	SITE LOCATION:	Plant City, Fl
WELL NO: MW-32	SAMPLE ID: # GW008	DATE: 05/31/16	

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 3.92	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 3.92 feet) X 0.16 gallons/foot = 1.29 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.0	PURGING INITIATED AT: 12:02	PURGING ENDED AT: 12:23	TOTAL VOLUME PURGED (gallons): 2.00

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
12:15	1.30	1.3	0.1	4.4	6.4	27.0	436.9	0.23	1.72	clear	-155
12:18	0.30	1.6	0.1	4.4	6.4	27.0	440.6	0.26	1.88	clear	-142
12:22	0.40	2.0	0.1	4.4	6.4	27.0	440.0	0.27	1.80	clear	-146

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: B = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 12:23	SAMPLING ENDED AT: 12:24
PUMP OR TUBING DEPTH IN WELL (feet): 5.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW008	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	378

REMARKS:

MATERIAL CODES: AG = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: **MW-106**	SAMPLE ID: # GW009		DATE: 05/31/16

PURGING DATA

WELL DIAMETER(inches): 1.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 4 feet to 14 feet	STATIC DEPTH TO WATER (feet): 3.41	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (14 feet - 3.41 feet) X 0.04 gallons/foot = 0.42 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 5.5	PURGING INITIATED AT: 12:35	PURGING ENDED AT: 12:55	TOTAL VOLUME PURGED (gallons): 0.80

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
12:46	0.44	0.4	0.04	4.2	6.9	25.4	572	0.22	1.58	clear	-238
12:50	0.16	0.6	0.04	4.2	6.9	25.3	588	0.16	1.67	clear	-243
12:55	0.20	0.8	0.04	4.2	6.9	25.2	592	0.13	1.58	clear	-244

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 12:56	SAMPLING ENDED AT: 12:57
PUMP OR TUBING DEPTH IN WELL (feet): 5.5	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW009	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	151

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; T= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: **1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-30	SAMPLE ID: # GW010		DATE: 07/05/16

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 1.84	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 1.84 feet) X 0.16 gallons/foot = 1.63 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.0	PURGING INITIATED AT: 13:55	PURGING ENDED AT: 14:23	TOTAL VOLUME PURGED (gallons): 2.43

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
14:15	1.80	1.8	0.09	2.1	6.2	27.5	196.6	1.79	4.65	clear	-25
14:18	0.27	2.1	0.09	2.1	6.1	27.5	193.2	1.78	4.05	clear	-27
14:22	0.36	2.4	0.09	2.1	6.1	27.5	191.8	1.75	4.06	clear	-33

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: B = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 14:23	SAMPLING ENDED AT: 14:24
PUMP OR TUBING DEPTH IN WELL (feet): 4.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW010	1	HDPE	250 ml	HNO3	na		Fe EPA 6010C	APP	340

REMARKS:

MATERIAL CODES: AG = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME:	Former Gro-Mor	SITE LOCATION:	Plant City, Fl
WELL NO: MW-101	SAMPLE ID: # GW011	DATE: 07/05/16	

PURGING DATA

WELL DIAMETER(inches): 1.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 5 feet to 15 feet	STATIC DEPTH TO WATER (feet): 1.42	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (15 feet - 1.42 feet) X 0.04 gallons/foot = 0.54 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.5	PURGING INITIATED AT: 14:52	PURGING ENDED AT: 15:12	TOTAL VOLUME PURGED (gallons): 1.33

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/l or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
15:00	0.56	0.6	0.07	1.6	6.3	30.8	2177	0.60	10.88	clear	60
15:04	0.28	0.8	0.07	1.6	5.8	30.6	2199	0.56	8.40	clear	73
15:08	0.28	1.1	0.07	1.6	5.8	30.4	2211	0.55	7.73	clear	79
15:11	0.21	1.3	0.07	1.6	5.8	30.4	2212	0.56	6.55	clear	81

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 15:12	SAMPLING ENDED AT: 15:13
PUMP OR TUBING DEPTH IN WELL (feet): 3.5	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW011	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	265

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-10	SAMPLE ID: # GW012		DATE: 07/05/16

PURGING DATA

WELL DIAMETER(inches): 1.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 2.99	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 2.99 feet) X 0.04 gallons/foot = 0.36 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 6.0	PURGING INITIATED AT: 15:24	PURGING ENDED AT: 15:41	TOTAL VOLUME PURGED (gallons): 0.96

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
15:32	0.48	0.5	0.06	4.2	5.2	32.8	253.7	1.15	6.18	clear	23
15:36	0.24	0.7	0.06	4.2	5.1	32.7	252.1	1.10	5.37	clear	28
15:40	0.24	1.0	0.06	4.2	5.1	32.7	252.3	1.07	4.57	clear	30

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 15:41	SAMPLING ENDED AT: 15:42
PUMP OR TUBING DEPTH IN WELL (feet): 6.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW012	1	HDPE	250 ml	HNO3	na		Mn EPA 6010C	APP	227

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME:	Former Gro-Mor	SITE LOCATION:	Plant City, Fl
WELL NO: **MW-17**	SAMPLE ID: # GW013	DATE: 07/06/16	

PURGING DATA

WELL DIAMETER(Inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 1 feet to 11 feet	STATIC DEPTH TO WATER (feet): 1.75	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (11 feet - 1.75 feet) X 0.16 gallons/foot = 1.48 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 2.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.0	PURGING INITIATED AT: 7:04	PURGING ENDED AT: 7:35	TOTAL VOLUME PURGED (gallons): 2.10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
7:28	1.68	1.7	0.07	2.0	6.2	25.4	5000	1.84	2.34	clear	40
7:31	0.21	1.9	0.07	2.0	6.2	25.4	5100	1.80	2.00	clear	52
7:34	0.21	2.1	0.07	2.0	6.2	25.4	5100	1.83	1.66	clear	51

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charl Browning	SAMPLING INITIATED AT: 7:35	SAMPLING ENDED AT: 7:36
PUMP OR TUBING DEPTH IN WELL (feet): 3.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
GW013	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	265

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: PMW-18	SAMPLE ID: # GW014		DATE: 07/06/16

PURGING DATA

WELL DIAMETER(inches): 2.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2.5 feet to 10 feet	STATIC DEPTH TO WATER (feet): 2.45	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (10 feet - 2.45 feet) X 0.16 gallons/foot = 1.21 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 4.5	PURGING INITIATED AT: 7:46	PURGING ENDED AT: 8:14	TOTAL VOLUME PURGED (gallons): 1.89

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
8:05	1.33	1.3	0.07	2.6	6.9	32.0	561	0.38	2.46	clear	-269
8:09	0.28	1.6	0.07	2.6	6.8	32.1	567	0.37	2.50	clear	-277
8:13	0.28	1.9	0.07	2.6	6.8	32.1	574	0.40	2.33	clear	-279

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 8:14	SAMPLING ENDED AT: 8:15
PUMP OR TUBING DEPTH IN WELL (feet): 4.5	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW014	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	265

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; **T**= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

DEP Form FD 9000-24: GROUNDWATER SAMPLING LOG

SITE NAME: Former Gro-Mor		SITE LOCATION: Plant City, Fl	
WELL NO: MW-33	SAMPLE ID: # GW015		DATE: 07/06/16

PURGING DATA

WELL DIAMETER(inches): 1.0	TUBING DIAMETER (inches): 1/8	WELL SCREEN INTERVAL DEPTH: 2 feet to 12 feet	STATIC DEPTH TO WATER (feet): 1.32	PURGE PUMP TYPE OR BAILER: PP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable) = (12 feet - 1.32 feet) X 0.04 gallons/foot = 0.43 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 3.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 3.0	PURGING INITIATED AT: 8:26	PURGING ENDED AT: 8:45	TOTAL VOLUME PURGED (gallons): 0.85

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard Units)	TEMP. (°C)	COND. (circle units) ~~µmhos/cm~~ or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or %saturation	TURBIDITY (NTUs)	COLOR (describe)	ORP (mV)
8:36	0.50	0.5	0.05	1.5	5.8	26.5	183.4	0.31	2.05	clear	-34
8:40	0.20	0.7	0.05	1.5	5.8	26.5	187.0	0.28	2.00	clear	-40
8:43	0.15	0.9	0.05	1.5	5.8	26.5	187.5	0.33	2.19	clear	-44

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37 **4"** = 0.65; **5"** = 1.02 **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (gal/ft): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump: **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump: **O** = Other (specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Charles Browning / Chastain-Skillman, Inc	SAMPLER(S) SIGNATURES(S): Charles Browning	SAMPLING INITIATED AT: 8:45	SAMPLING ENDED AT: 8:46
PUMP OR TUBING DEPTH IN WELL (feet): 3.0	TUBING MATERIAL CODE: HDPE/S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ___ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION (including wet ice)			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL	FINAL p H			
GW015	1	HDPE	250 ml	HNO3	na		Fe, Mn, EPA 6010C	APP	189

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **HDPE** = High Density Polyethylene; **LDPE**=Low Density Polyethylene; **PP** = Polypropylene
S = Silicone; T= Teflon **O** = Other (specify)

SAMPLING EQUIPMENT CODES: **APP** = After (Through) Peristaltic Pump: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump
RFPP = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (specify)

NOTES: 1. **The above do not constitute all of the information required by Chapter 62-160, F.A.C.**
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ±0.2 units **Temperature:** ±0.2 °C **Specific Conductance:** ±5% **Dissolved Oxygen:** all readings ≤20% saturation (see Table FS 2200-2); optionally, ±0.2 mg/L or ±10% (whichever is greater) **Turbidity:** all readings ≤20 NTU; optionally ±5 NTU or ± 10% (whichever is greater)

CSI Water Quality Sample Field Data Form

Location:	Former Gro-Mor	Facility No.:	
	Plant City	CSI Job No. :	9680.24A
Point ID:	**Inflow-1**	Sample ID:	SW-001

Sample Type: ☐ Groundwater ■ Surface water ☐ Drinking water
☐ Treatment System ☐ Field Filtered ☐ QA/QC

Sample Location: In pool below culvert on North side of Ball St. just east of Church driveway

Sampling Method: Teflon dipping bucket

CONTAINERS SOURCE: Lakeland Labs

No.	Size	Type	Preservative	Check	Analyses
1	250 ml	HDPE	HNO3		Fe, Mn, EPA 6010C

PURGE DATA

Start: _____ Stop: _____ Totalizer: _____

Volume	Time	T ° C	Conductivity	DO (ppm)	pH	Salinity	Appearance

Remarks: Water is flowing out of the culvert into the ditch and then North

Sample Time/Date: 10:20 AM 7/5/2016

Signed: Charles Browning

CSI Water Quality Sample Field Data Form

Location:	Former Gro-Mor	Facility No.:	
	Plant City	CSI Job No. :	9680.24A
Point ID:	**Outflow-1**	Sample ID:	SW-002

Sample Type: ☐ Groundwater ■ Surface water ☐ Drinking water
☐ Treatment System ☐ Field Filtered ☐ QA/QC

Sample Location: In Pond B just before entry into drainage structure, south of Warren Street and west of Kash-N-Karry

Sampling Method: Teflon dipping bucket

CONTAINERS SOURCE: Lakeland Labs

No.	Size	Type	Preservative	Check	Analyses
1	250 ml	HDPE	HNO3		Fe, Mn, EPA 6010C

PURGE DATA

Start: _____ Stop: _____ Totalizer: _____

Volume	Time	T ° C	Conductivity	DO (ppm)	pH	Salinity	Appearance

Remarks: Water is flowing out of the Pond and into the drainage structure and then North

Sample Time/Date: 10:40 AM 7/5/2016

Signed: Charles Browning

CSI Water Quality Sample Field Data Form

Location:	Former Gro-Mor	Facility No.:	
	Plant City	CSI Job No. :	9680.24A
Point ID:	**Outflow-2**	Sample ID:	SW-003

Sample Type: ☐ Groundwater ■ Surface water ☐ Drinking water
☐ Treatment System ☐ Field Filtered ☐ QA/QC

Sample Location: In drainage ditch just before entry into drainage structure south of Warren Street and west of Pond B

Sampling Method: Teflon dipping bucket

CONTAINERS SOURCE: Lakeland Labs

No.	Size	Type	Preservative	Check	Analyses
1	250 ml	HDPE	HNO3		Fe, EPA 6010C

PURGE DATA

Start: _____ Stop: _____ Totalizer: _____

Volume	Time	T ° C	Conductivity	DO (ppm)	pH	Salinity	Appearance

Remarks: Water is flowing out of the ditch and into the drainage structure and then North

Sample Time/Date: 10:15 AM 7/22/2016

Signed: Charles Browning

Attachment C

BROWNFIELDS SITE ASSESSMENT REPORT
for the
FORMER GRO-MOR FERTILIZER SITE

Conducted under EPA Brownfields Cooperative Agreement #BF-95441809-0

Prepared for:

City of Plant City
Jim McDaniel
302 West Reynolds Street
Plant City, Florida 33664

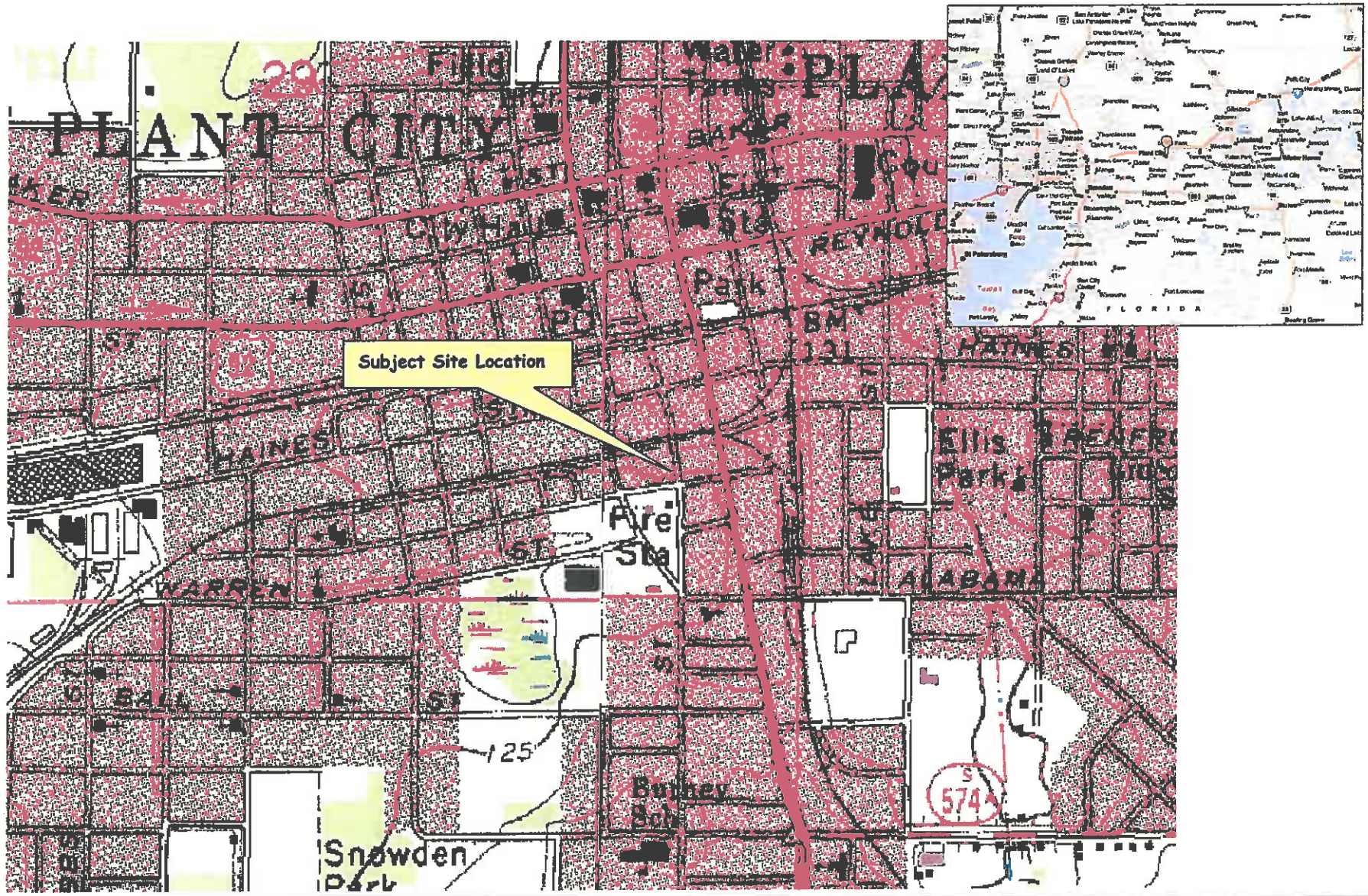
Prepared by:

Cardno TBE
380 Park Place Boulevard, Suite 300
Clearwater, Florida 33759

August 2011

Cardno TBE Project No. 00194-010-10

FIGURES



Gardno TBE

Gro Mor Fertilizer Plant Site
307 & 306 South Evers and Adjacent Parcel
Plant City, Hillsborough County, Florida
Section 29, Township 28S, Range 22E

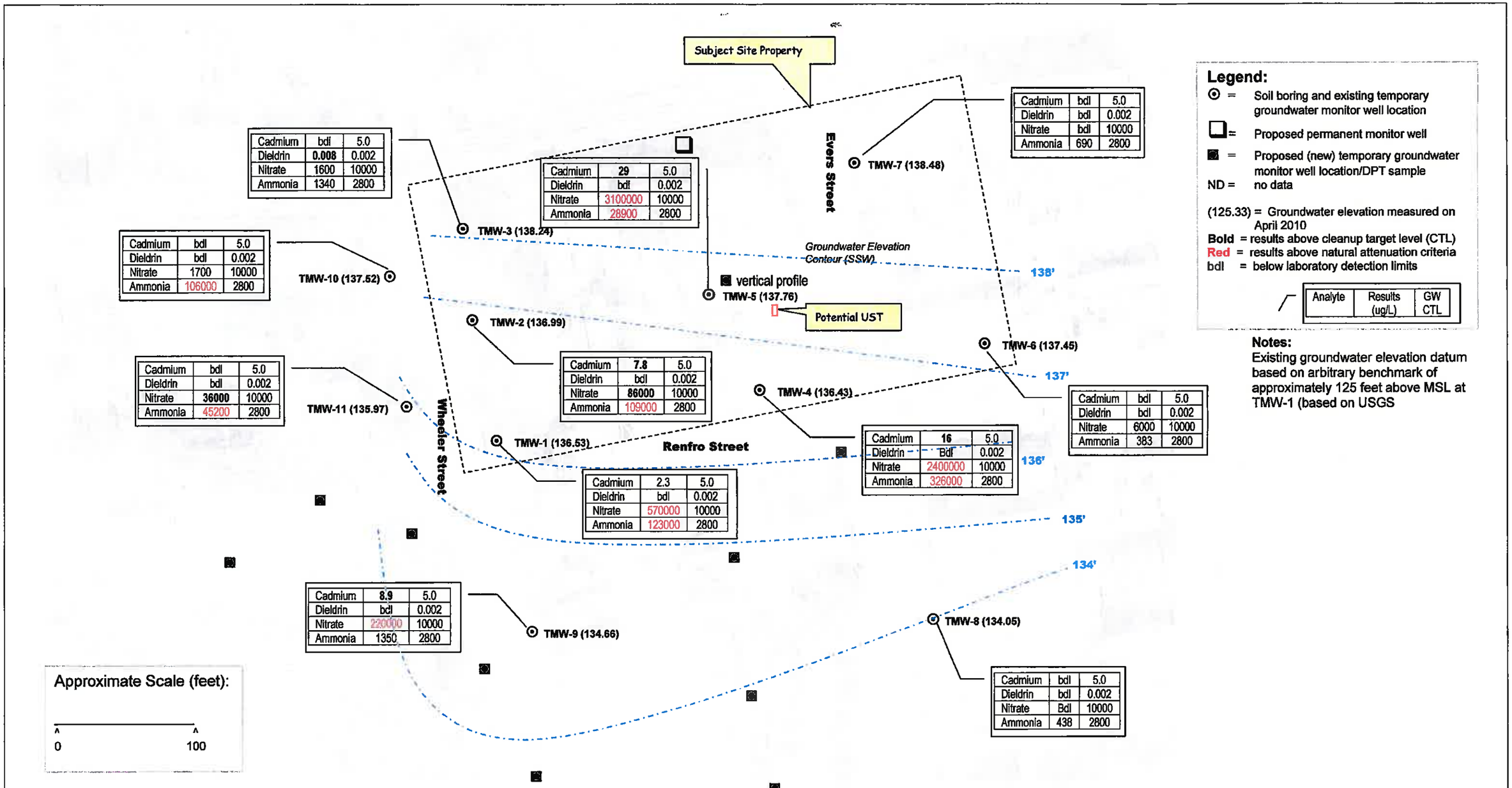
Figure 1
USGS / Site Location Map

Legend: Red line = approximate site boundary (less roadway & easements) For reference purposes only – not a surveyed boundary.

Cardno TBE

Gro Mor Fertilizer Plant Site
307 & 306 South Evers and Adjacent Parcel
Plant City, Hillsborough County, Florida
Section 29, Township 28S, Range 22E

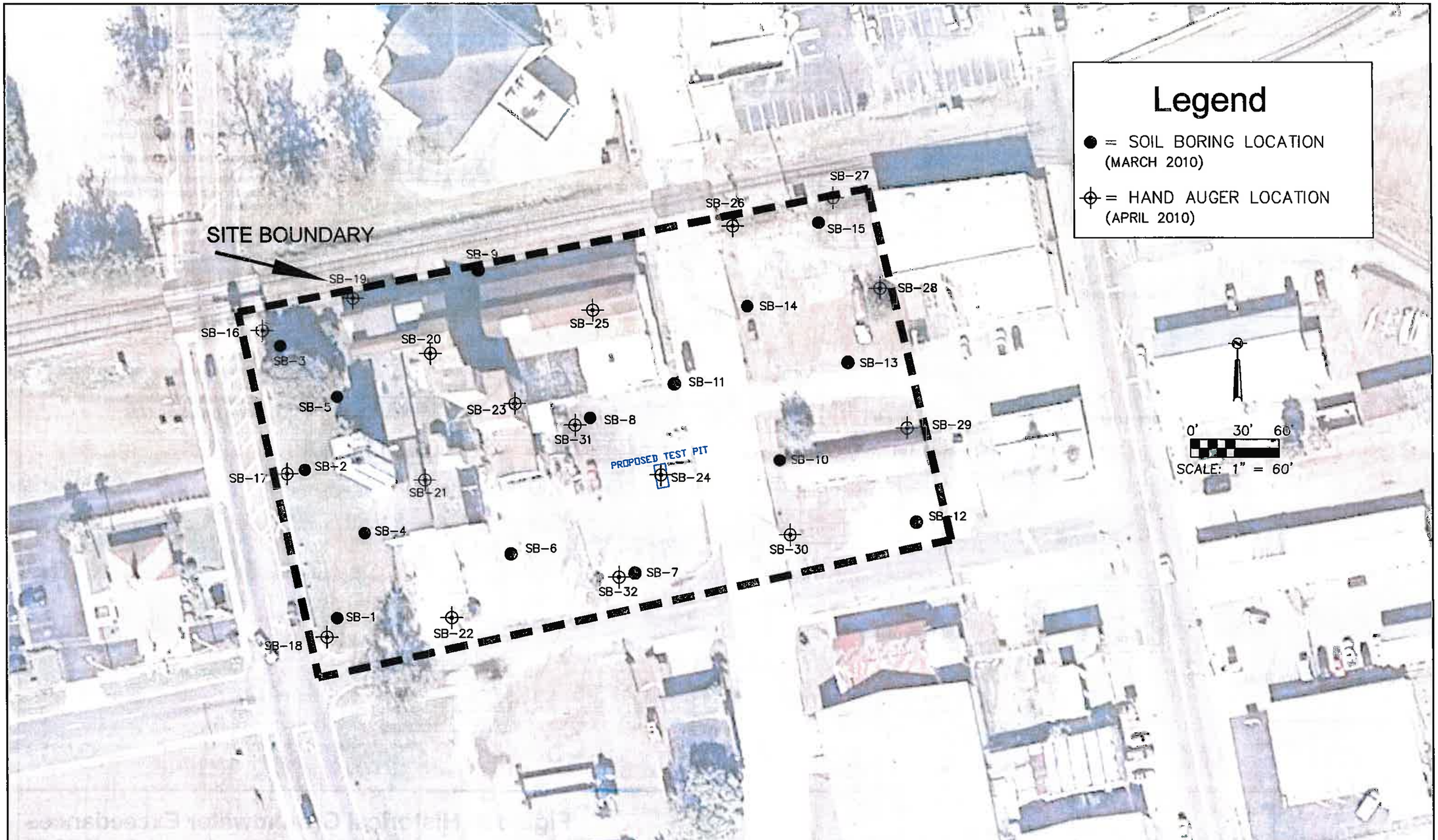
Figure 2
Site Boundary Map



Cardno TBE

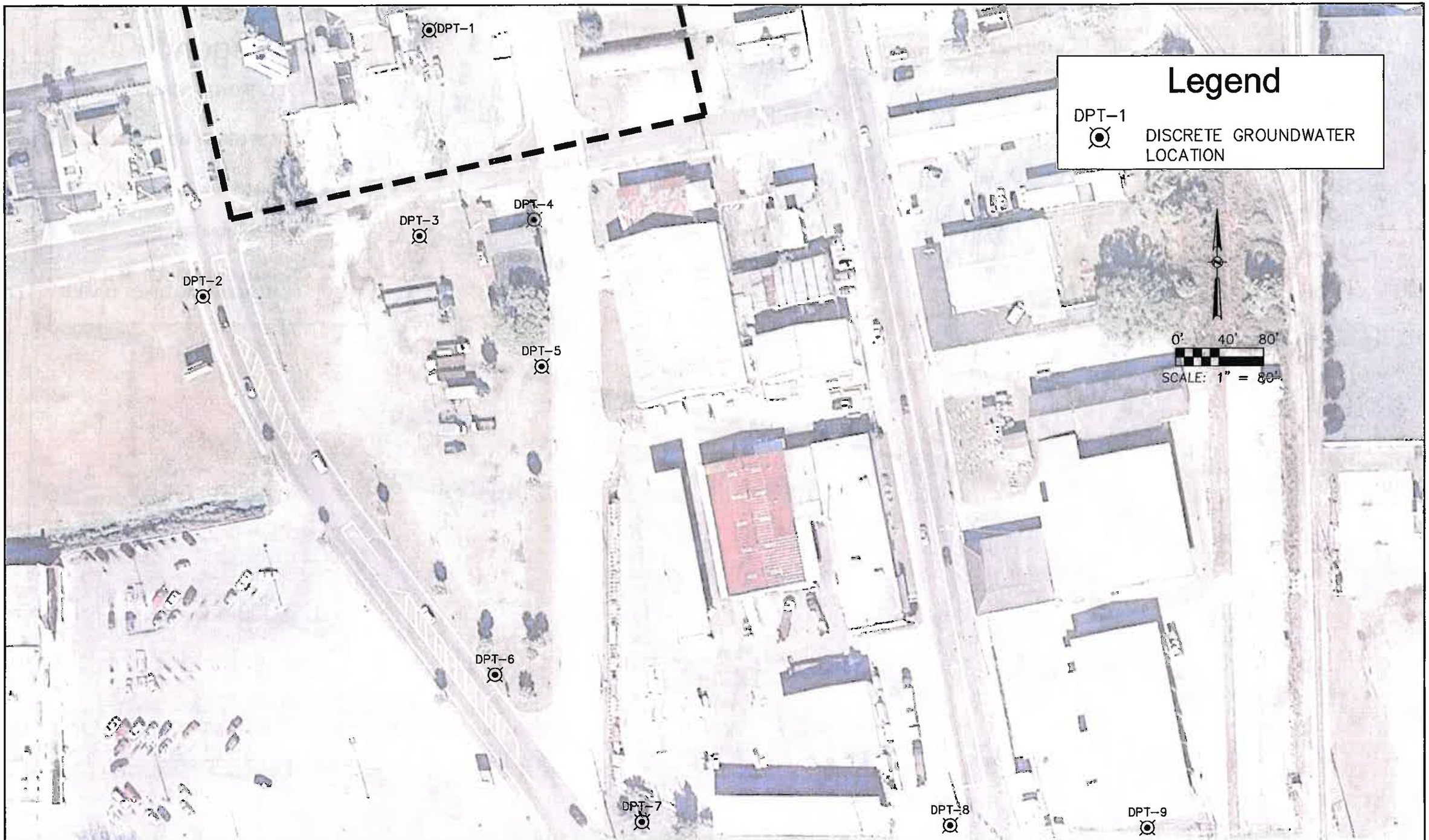
Gro Mor Fertilizer Plant Site
307 & 306 South Evers and Adjacent Parcel
Plant City, Hillsborough County, Florida
Section 29, Township 28S, Range 22E

Figure 3: Historical Groundwater Exceedances March and April 2010



	GRO-MOR FERTILIZER PLANT SITE 306, 307 SOUTH EVERS STREET, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 350 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3643	LIC. NO.: DATE		FIGURE 4 SOIL BORING LOCATIONS	PROJECT NO: DATE: 8/19/2010 SHEET NO:

FILE: J:\0919\48016\4010.10\CAD\dwg\Gro-mor-BAR_rasover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:14p BY: jkm



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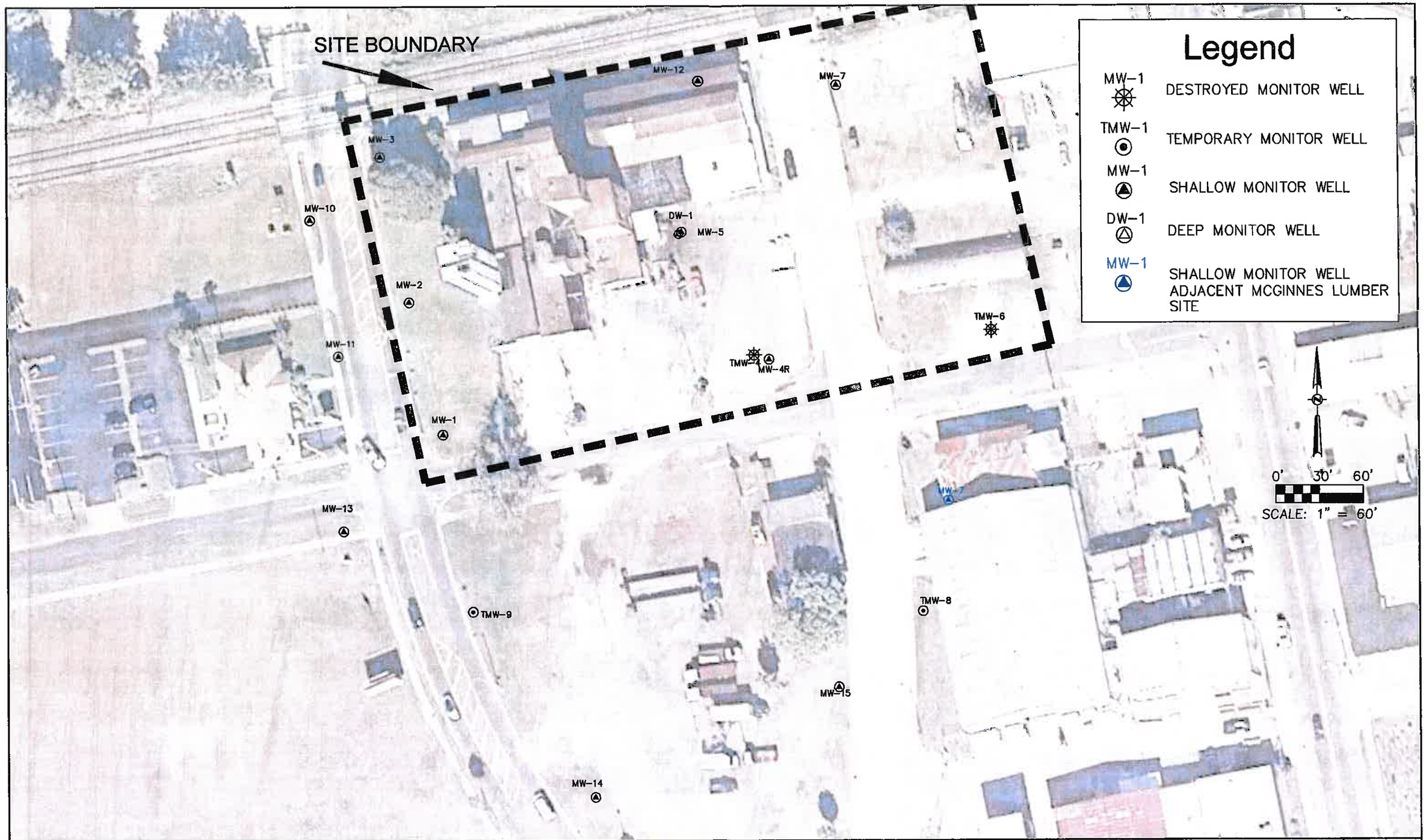
FILE: J:\00194\00194010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fd, 08/05/11 3:45p PLOTTED: Fri, 08/05/11 4:15p BY: jbm



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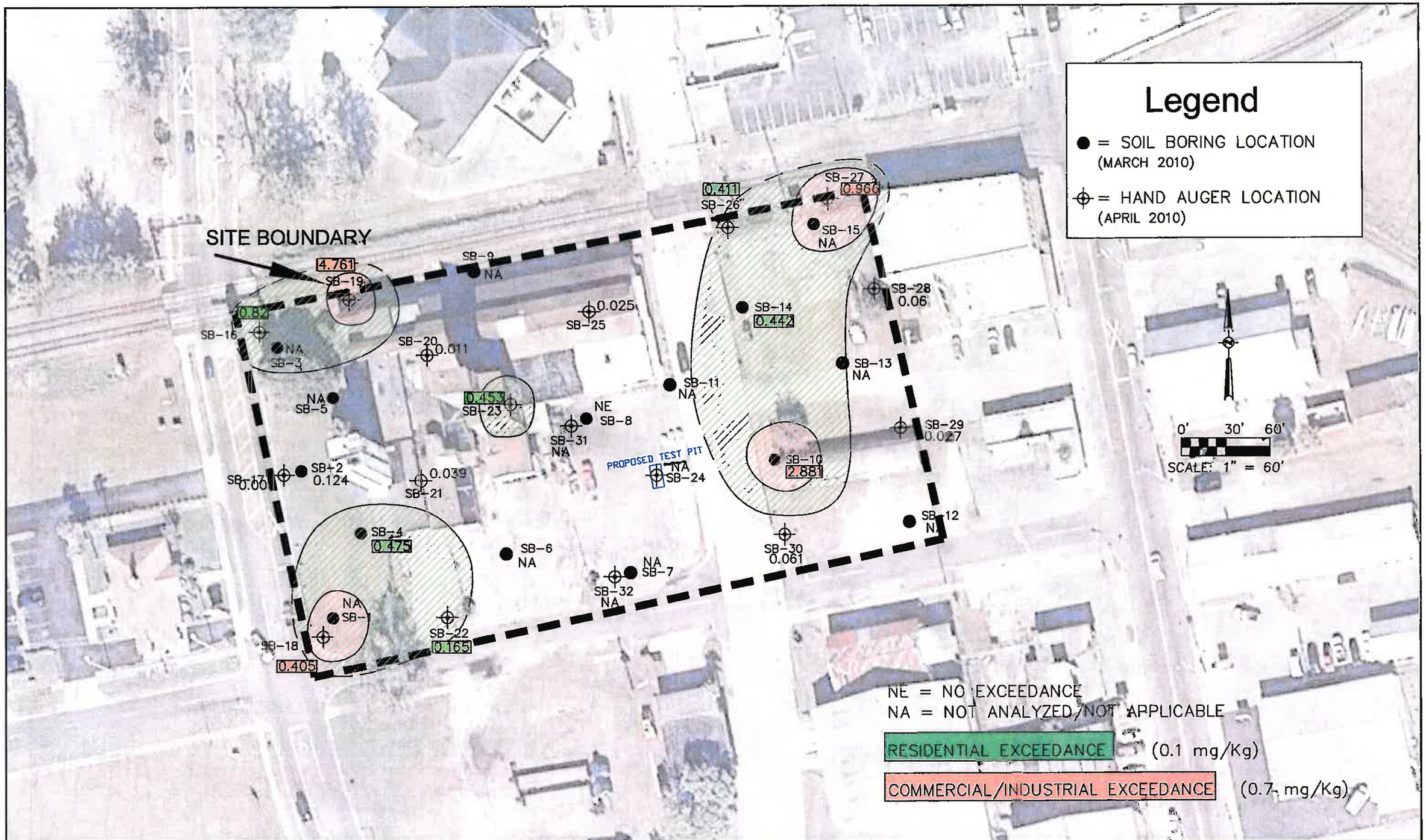
LIC. NO.: DATE

FIGURE 6
MONITOR WELL LOCATIONS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\0019\009\94010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:46p PLOTTED: Fri, 08/05/11-4:14p BY: jen



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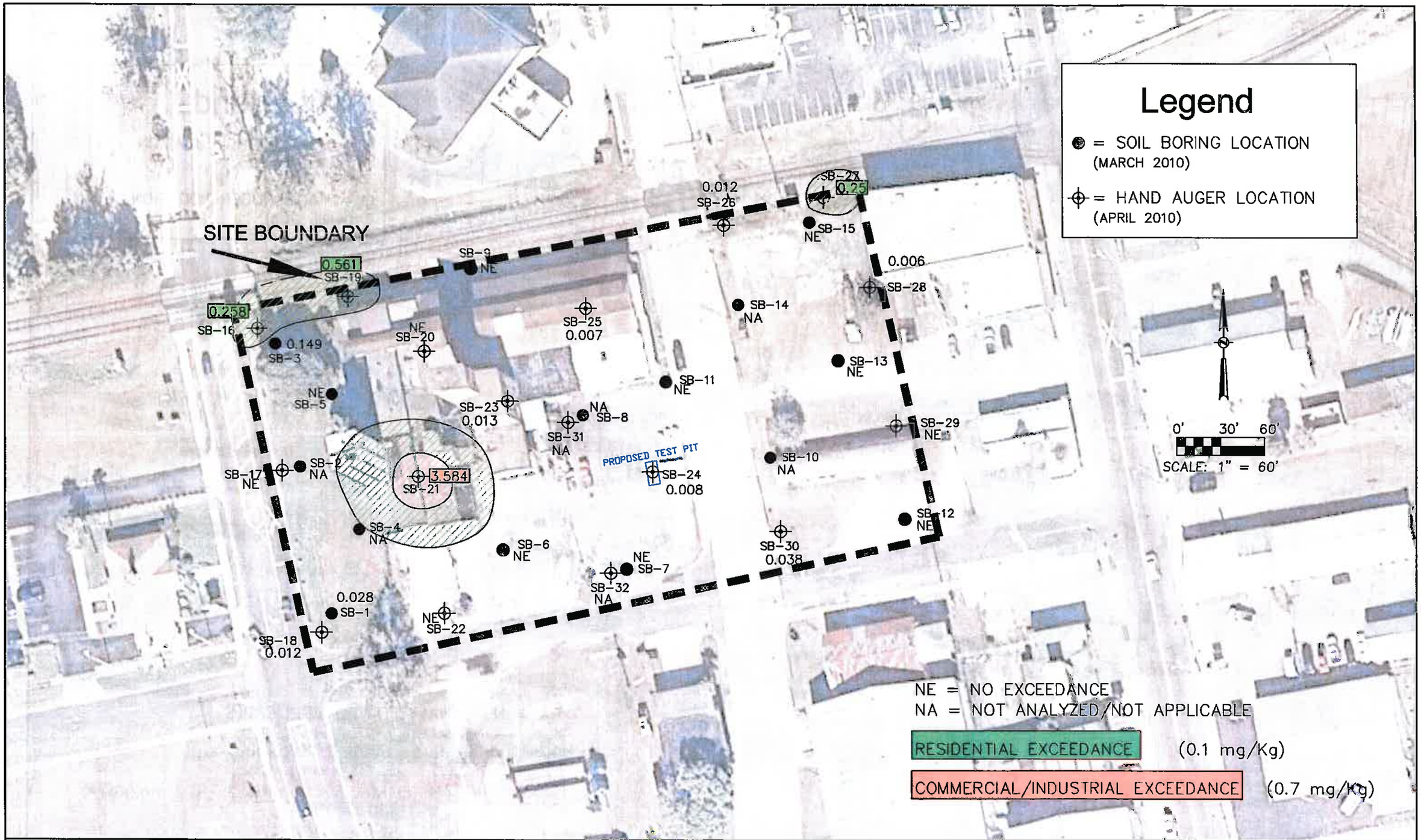

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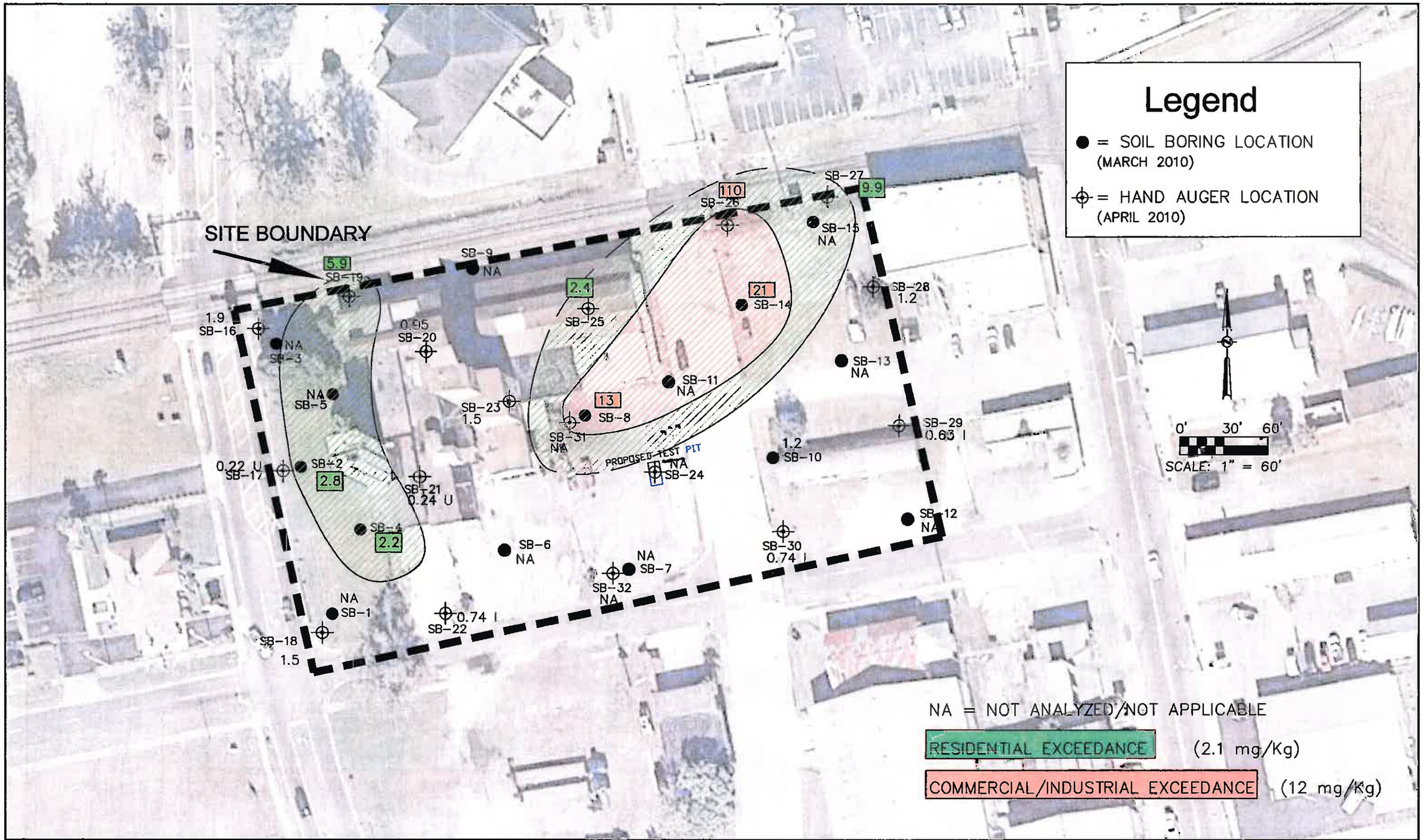
FIGURE 7B
BENZO(A)PYRENE
SOIL RESULTS 2'-3' BLS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\30194-00194010.10\ACAD\dwg\Gro-mor-BAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:15p BY: jim



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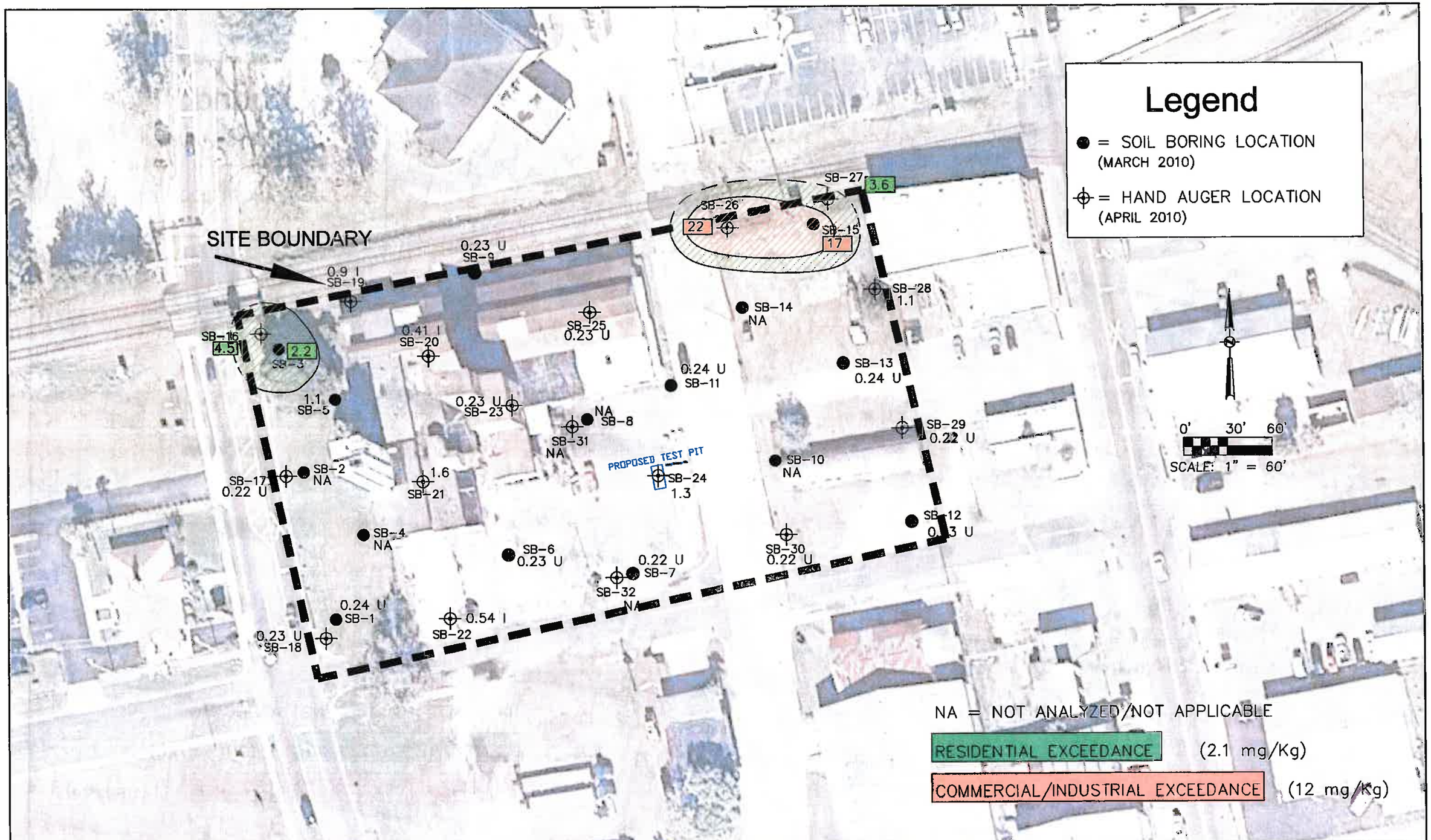
FILE: J:\06194\001B4010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:16p BY: jlm



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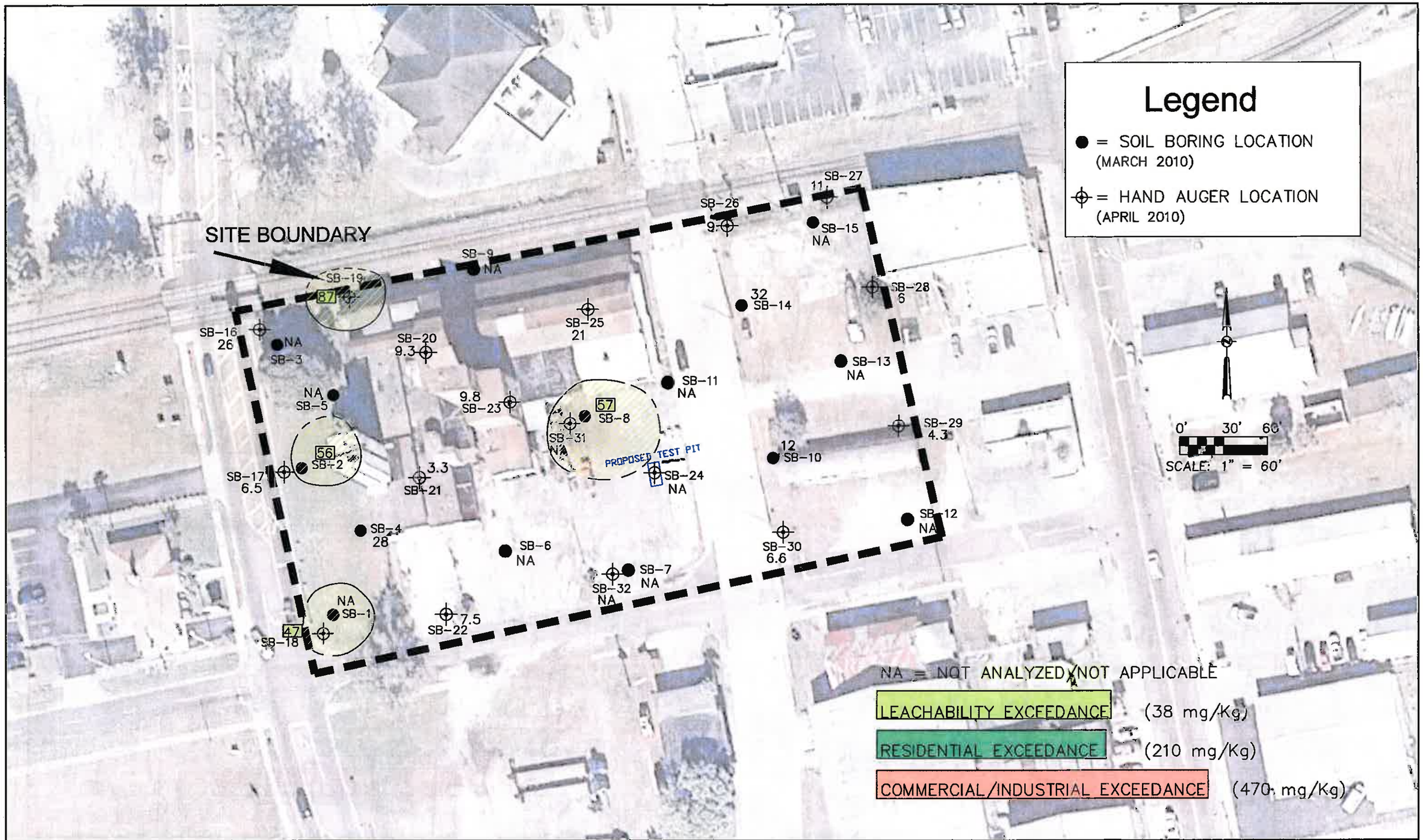
FILE: J:\0019\00194010.10\CAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11 3:45p PLOTTED: Fri, 08/05/11 4:10p BY: jkm



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LIC. NO.: DATE

FIGURE 9A
CHROMIUM
SOIL RESULTS 0.5'-1' BLS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\00194\00194010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:17p BY: jkm

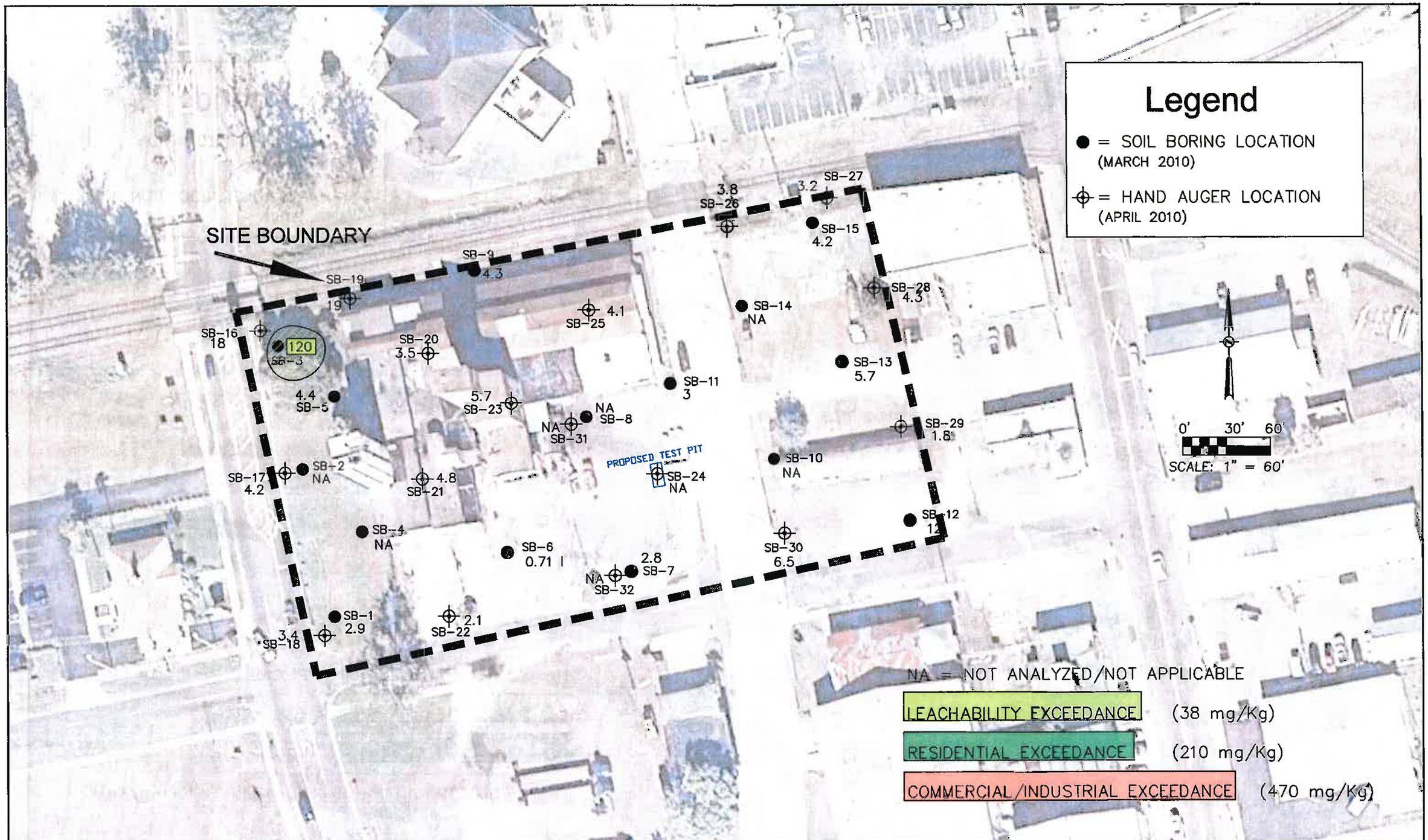

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FIGURE 9B
CHROMIUM
SOIL RESULTS 2'-3' BLS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\0016-\0019\0010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 05/05/11-3:46p PLOTTED: Fri, 05/05/11-4:17p BY: Jun

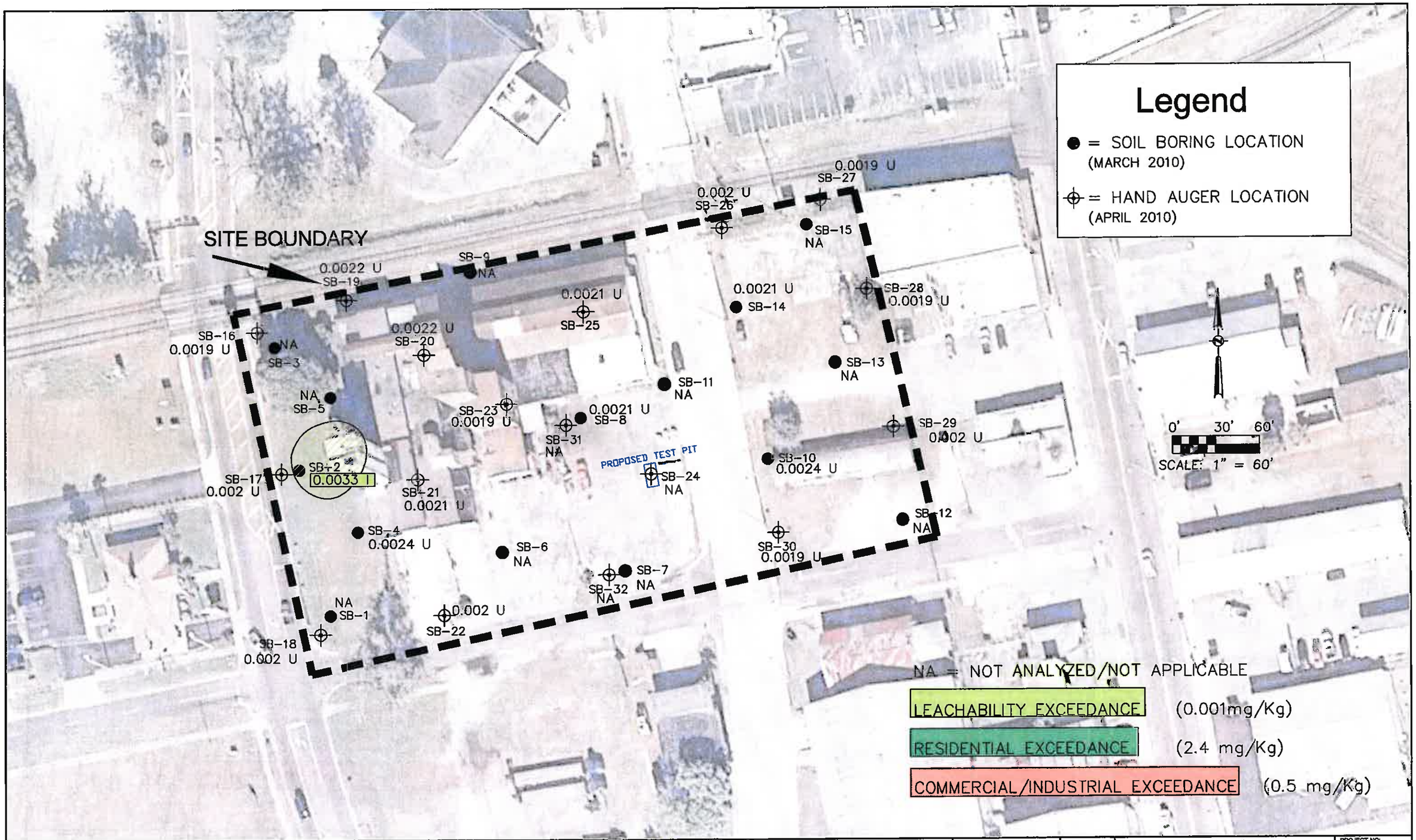

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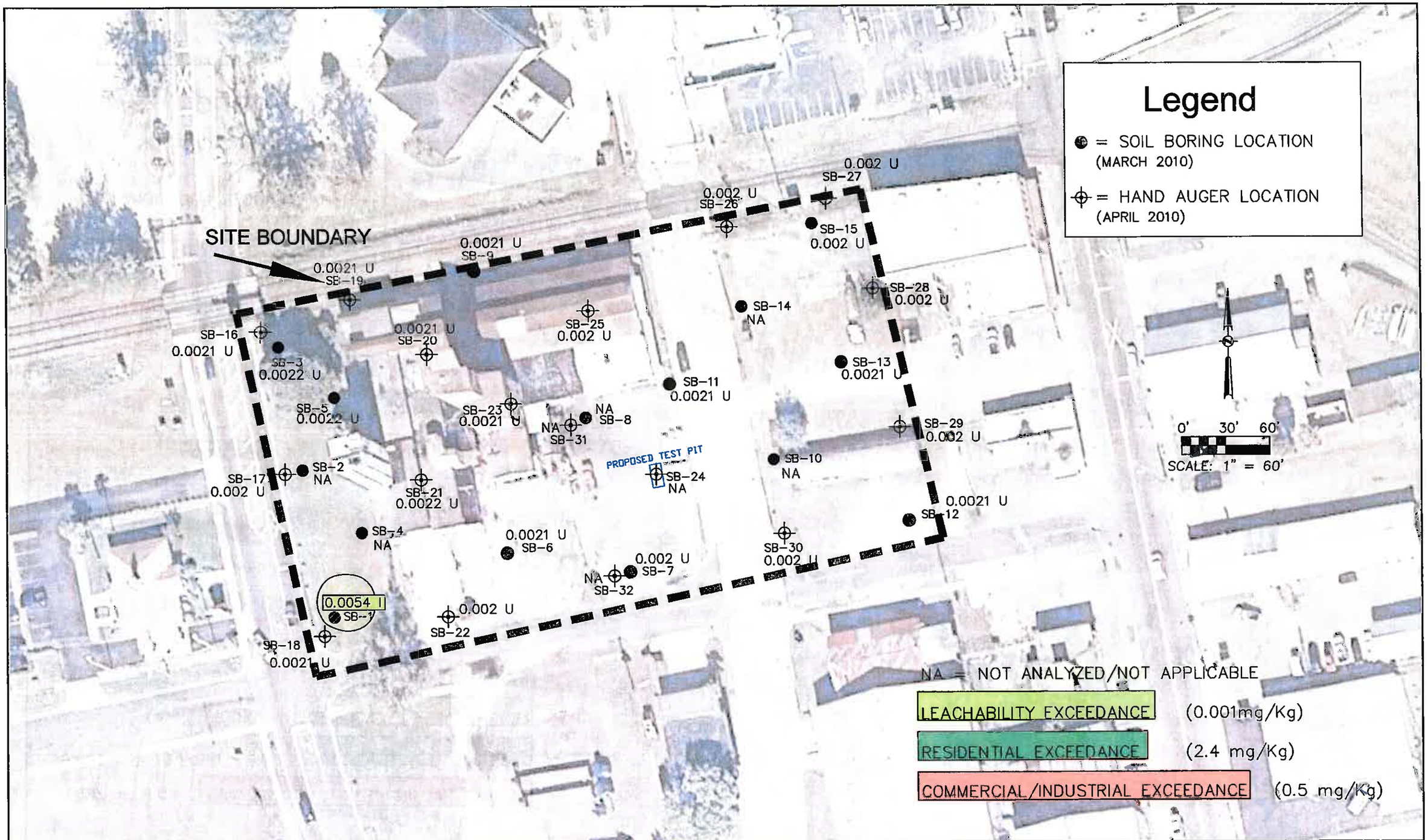
FIGURE 10A
BHC-B
SOIL RESULTS 0.5'-1' BLS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\00194\00194010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:18p BY: jcm



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FILE: J:\0019480019-01G.10\ACAD\dwg\Site-mor-SAR_receiver (2).dwg LAST SAVED: Fri, 08/05/11-3:46p PLOTTED: Fri, 08/05/11-4:18p BY: jkm

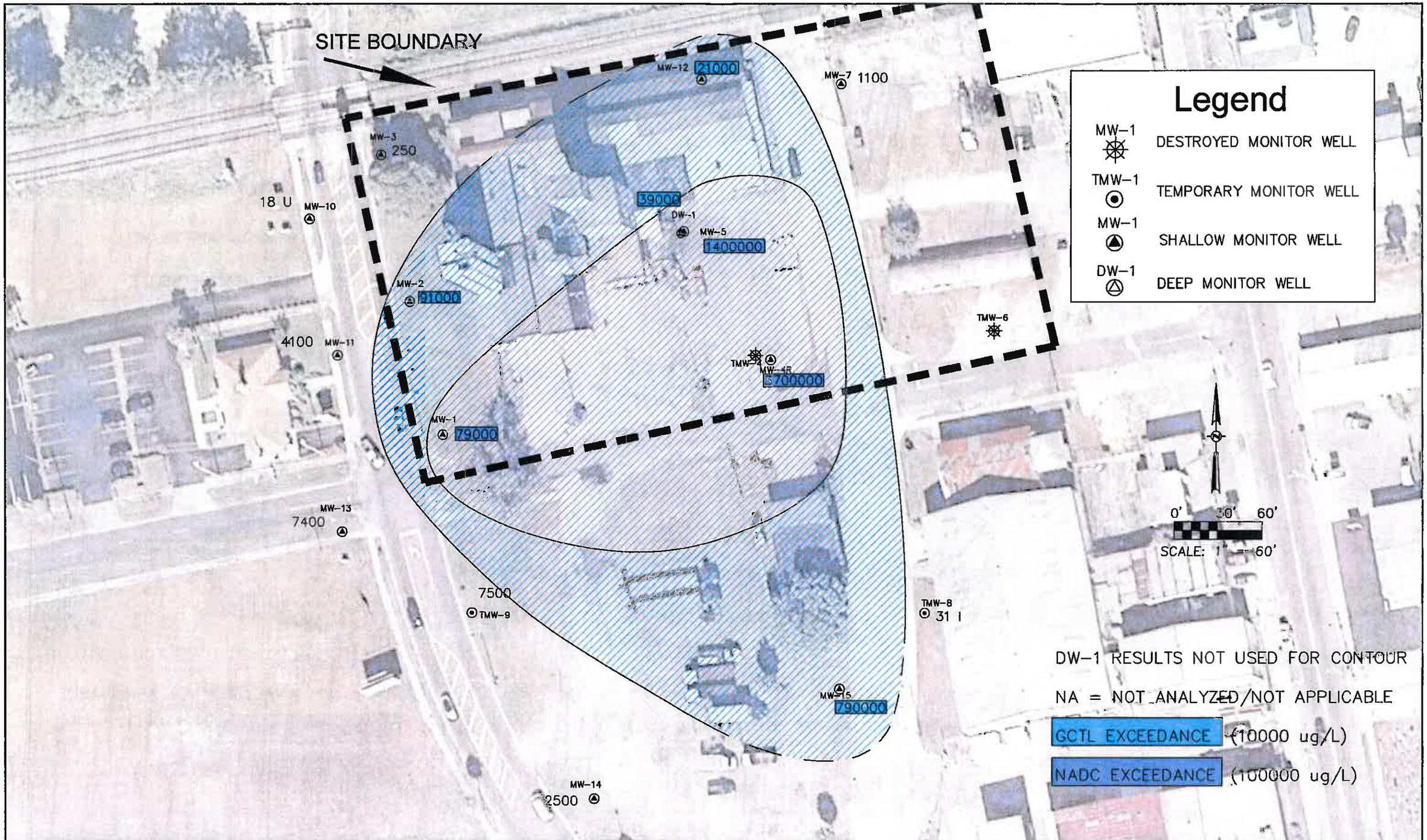

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FIGURE 11
NITRATE GROUNDWATER RESULTS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\0018\40018\4010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:19p BY: jkm

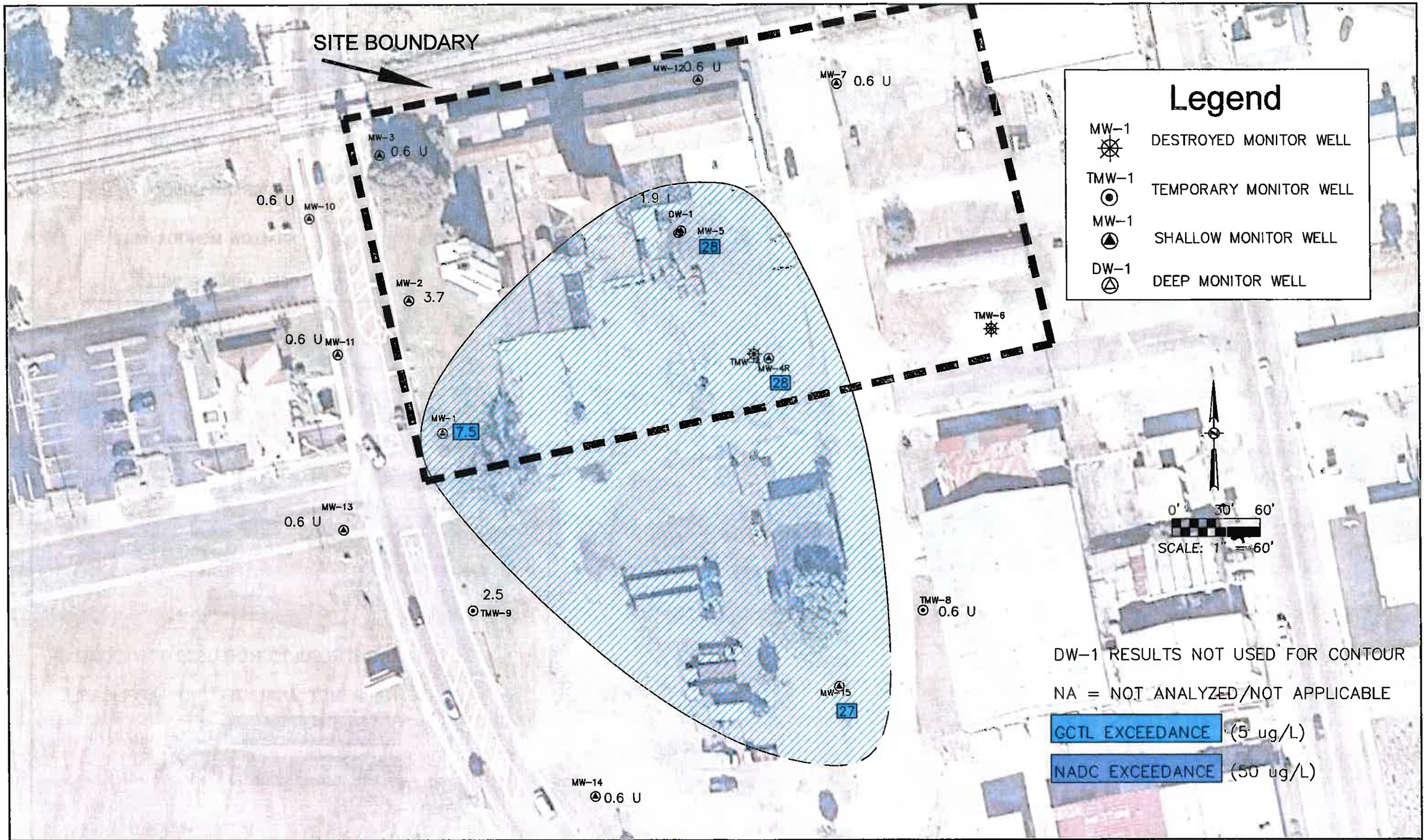

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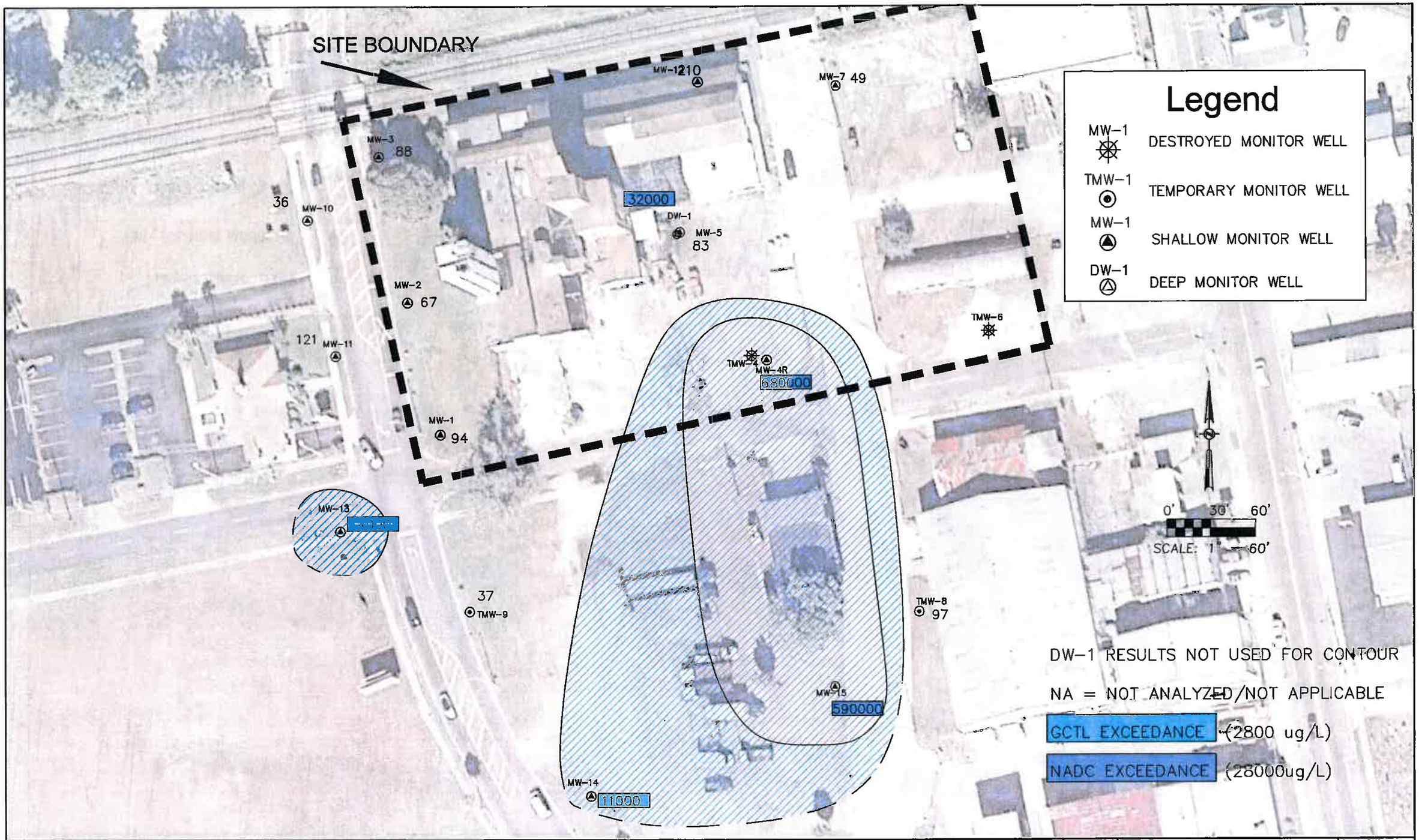
FIGURE 12
CADMIUM GROUNDWATER RESULTS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\2019\2019-4010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/06/11-3:45p PLOTTED: Fri, 08/05/11-4:19p BY: jkm



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PLANT CITY, FL

PREPARED FOR:
THE CITY OF PLANT CITY

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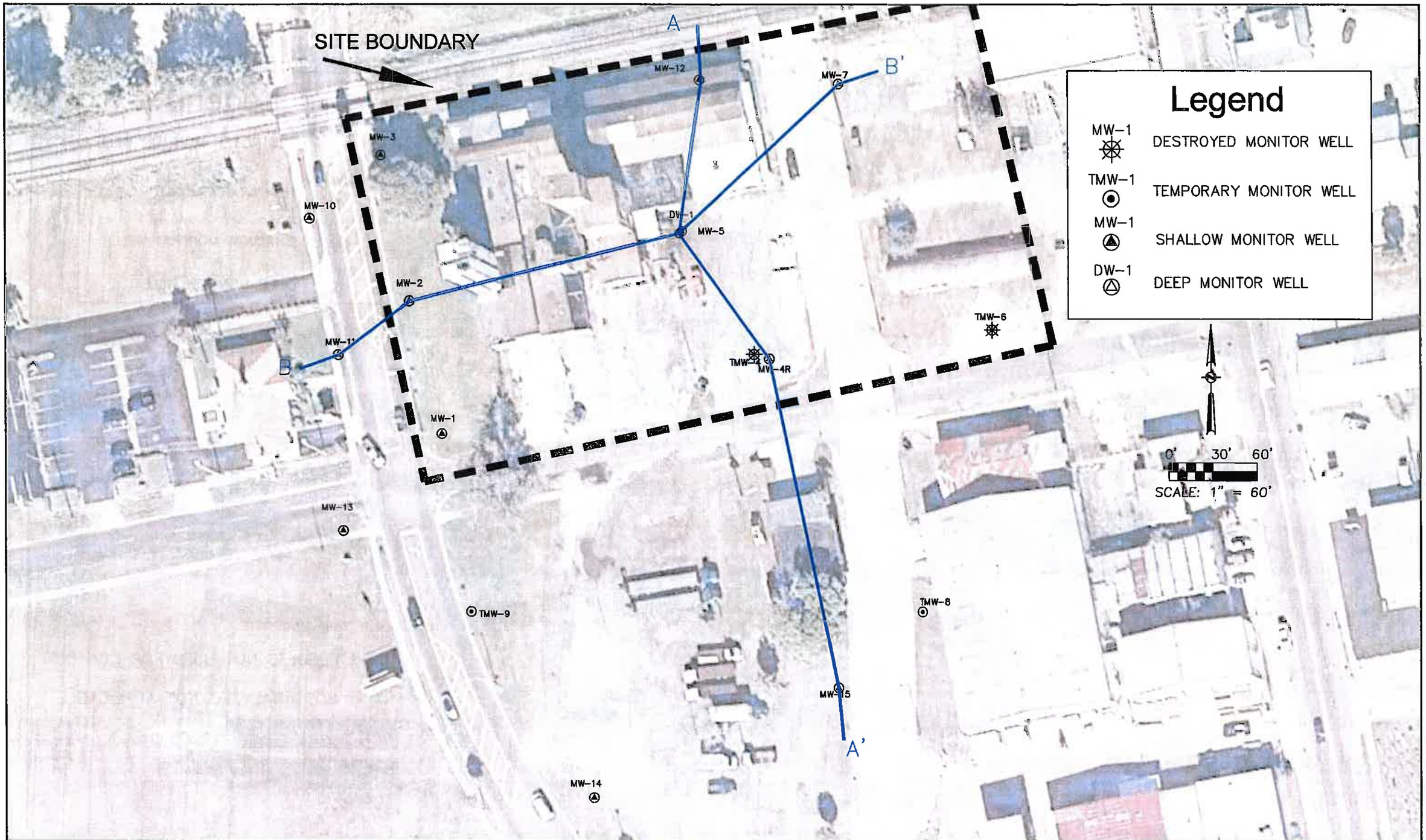
Certificate of Authorization No. 3843

LIC. NO.: DATE

FIGURE 13
AMMONIA NITROGEN GROUNDWATER RESULTS

PROJECT NO:
DATE: 8/19/2010
SHEET NO:



GRO-MOR FERTILIZER PLANT SITE
306, 307 SOUTH EVERS STREET,
PLANT CITY, FL

PREPARED FOR:
THE CITY OF PLANT CITY

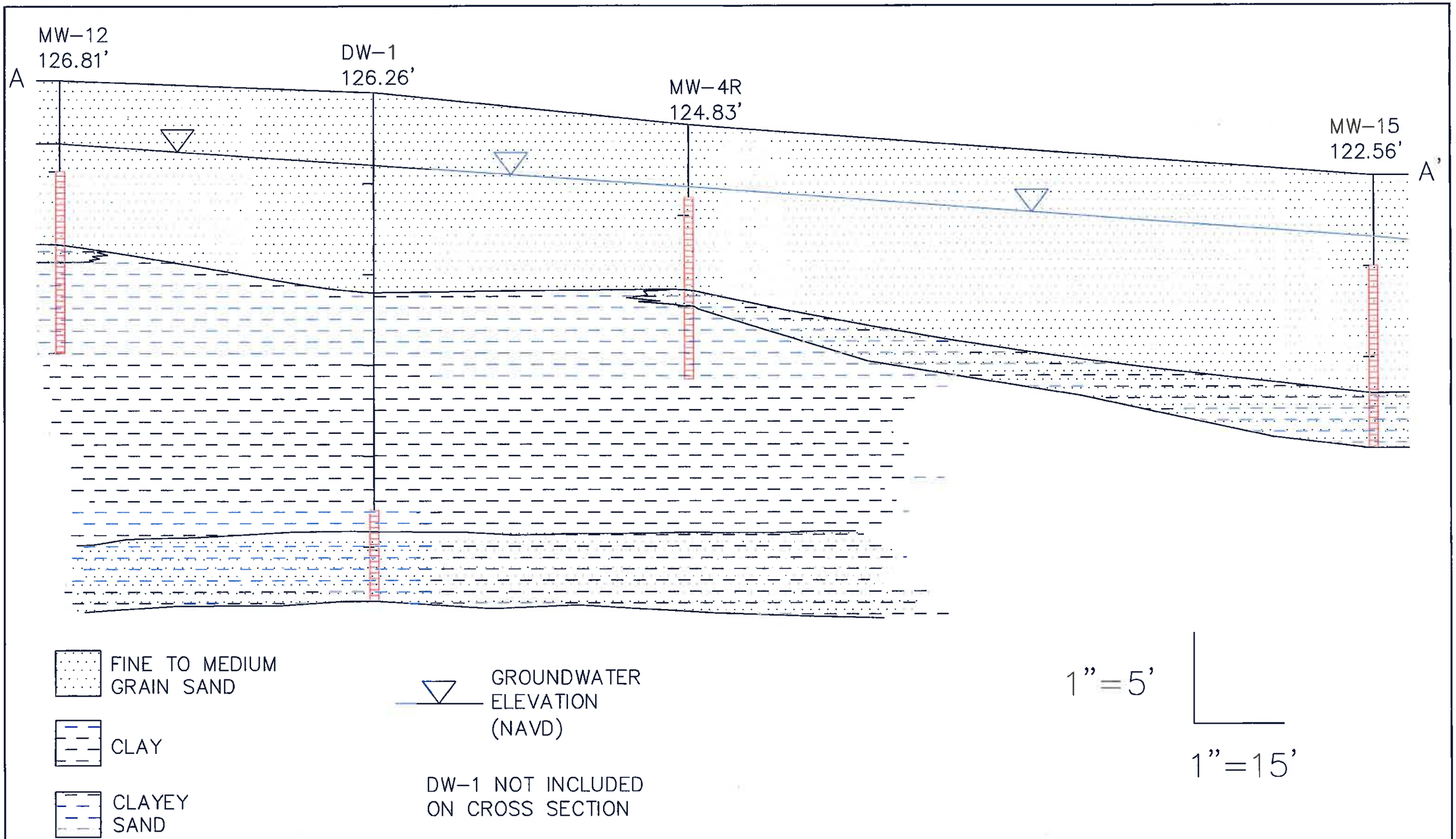
Cardno TBE
380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardnotbe.com - 727.531.3505
Certificate of Authorization No. 3843

LIC. NO : DATE

FIGURE 14
CROSS SECTION LOCATIONS

PROJECT NO:
DATE: 6/19/2010
SHEET NO:

FILE: J:\2019\00194010,10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 06/05/11-3:45p PLOTTED: Fri, 06/05/11-4:20p BY: jcm



GRO-MOR FERTILIZER PLANT SITE
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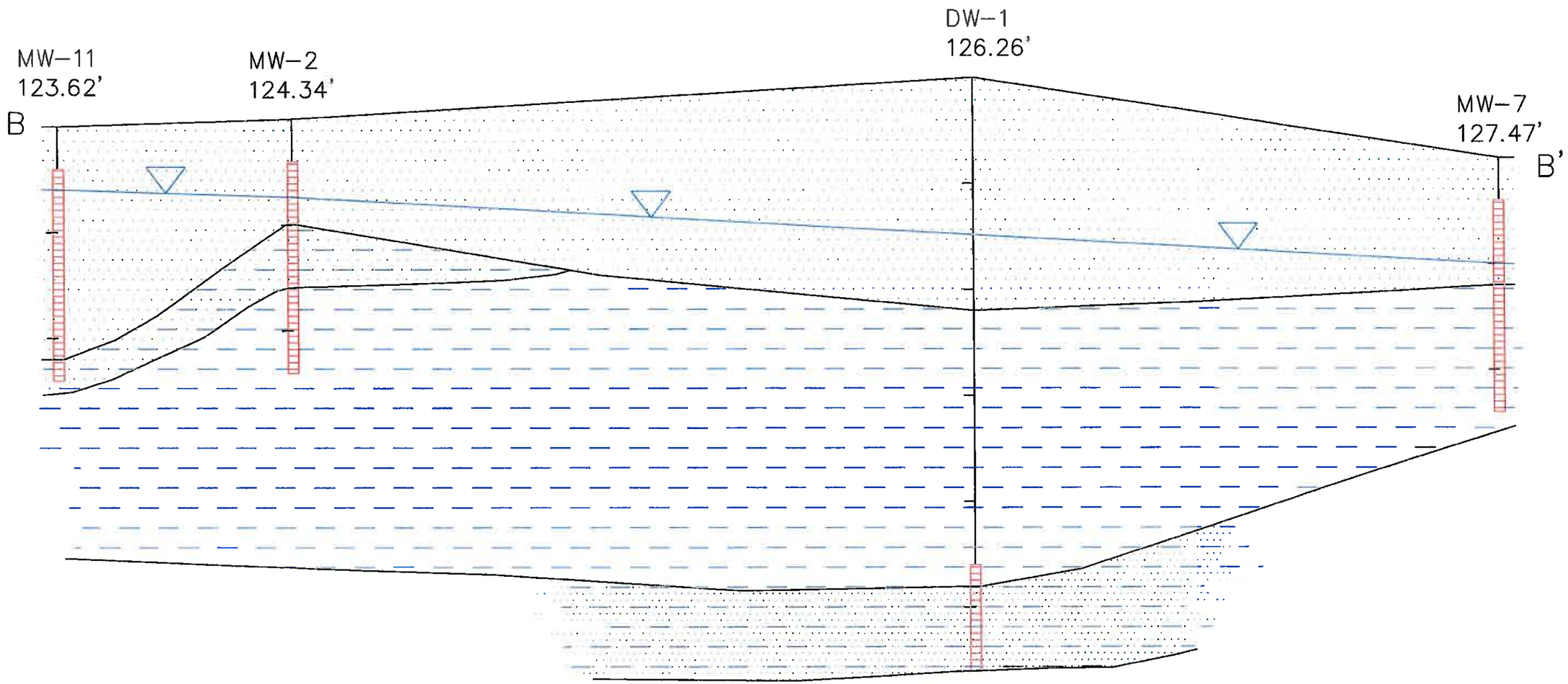
Certificate of Authorization No. 3843

LIC. NO.: DATE

FIGURE 15
NORTH-SOUTH (A-A')
GEOLOGIC CROSS SECTION

PROJECT NO:
DATE: 8/19/2010
SHEET NO:

FILE: J:\00194\00194010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:21p BY: jbm



FINE TO MEDIUM GRAIN SAND

CLAY

CLAYEY SAND

GROUNDWATER ELEVATION (NAVD)

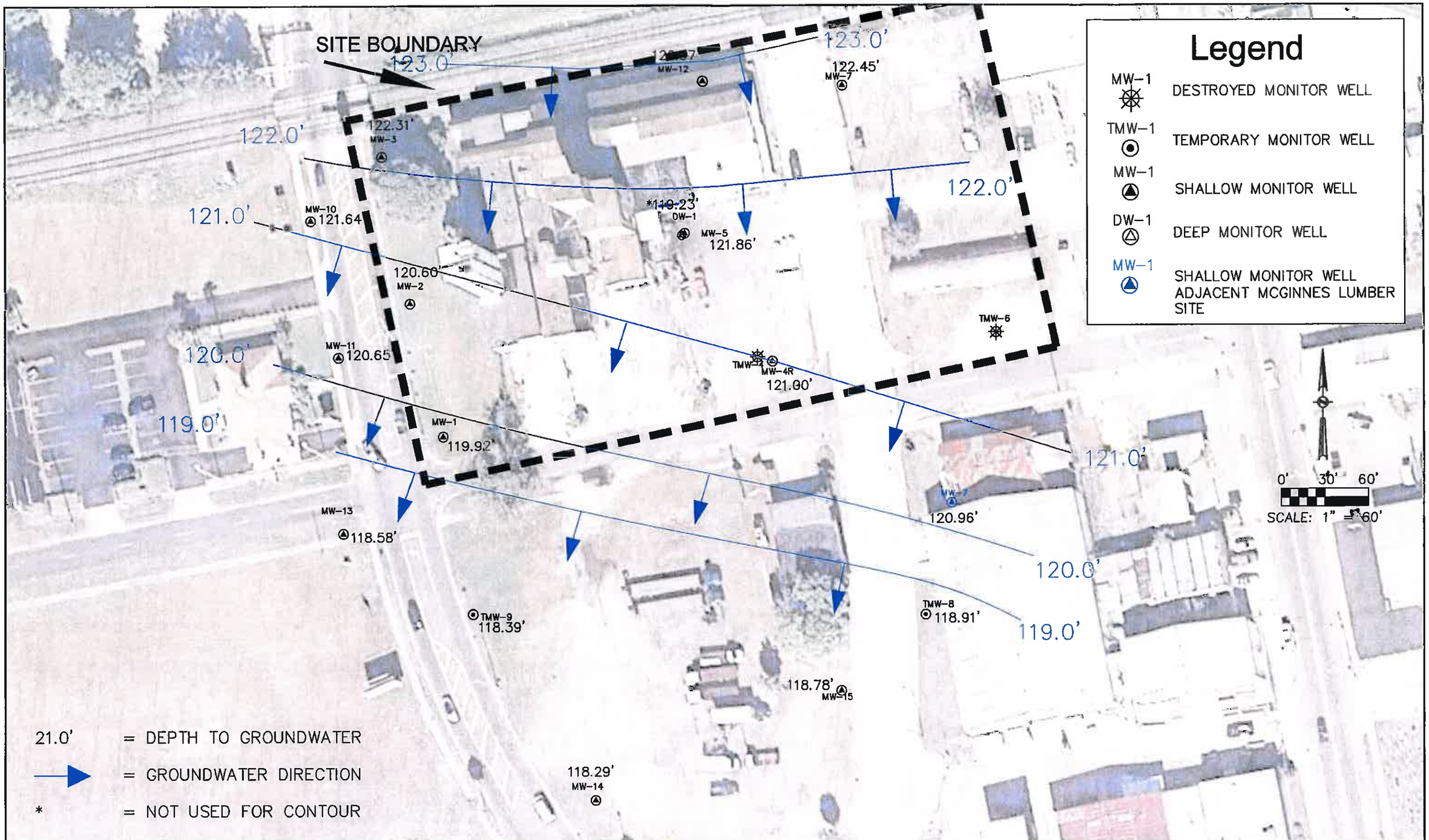
DW-1 NOT INCLUDED ON CROSS SECTION

1"=5'

1"=15'

	GRO-MOR FERTILIZER PLANT SITE 306, 307 SOUTH EVERS STREET, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3643	LIC. NO.: DATE		FIGURE 16 WEST-EAST (B-B') GEOLOGIC CROSS SECTION	PROJECT NO. DATE: 8/19/2010 SHEET NO:

FILE: J:\0019\00184010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:21p BY: jrm



	GRO-MOR FERTILIZER PLANT SITE 306, 307 SOUTH EVERS STREET, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE		FIGURE 17 GROUNDWATER CONTOUR 06-21-2011	PROJECT NO: DATE: 8/19/2010 SHEET NO:

FILE: J:\00194\00194010.10\ACAD\dwg\Gro-mor-SAR_recover (2).dwg LAST SAVED: Fri, 08/05/11-3:45p PLOTTED: Fri, 08/05/11-4:21p BY: jlen

TABLES

Table 1A
Historical Groundwater Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	GCTL	NADSC	TMW-1		TMW-2		TMW-3		TMW-4		TMW-5		TMW-6		TMW-7	
	Date Collected				3/10/2010		3/10/2010		3/10/2010		3/9/2010		3/9/2010		3/10/2010		3/9/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
6010	Antimony	ug/L	6	60	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U	3.4	U
6010	Arsenic	ug/L	10	100	4.8	U	4.8	U	4.8	U	4.8	U	4.8	U	4.8	U	4.8	U
6010	Beryllium	ug/L	4	40	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
6010	Cadmium	ug/L	5	50	2.3	I	7.8		0.6	U	16		29		0.6	U	0.6	U
6010	Chromium	ug/L	100	1000	3.5	U	7.8	I	3.5	U	3.5	U	6.3	I	3.5	U	3.5	U
6010	Copper	ug/L	1000	10000	1.9	U	1.9	U	1.9	U	1.9	U	9		1.9	U	1.9	U
6010	Lead	ug/L	15	150	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U	4.4	U
6010	Nickel	ug/L	100	1000	35		30		2.5	U	55		79		2.5	U	2.5	U
6010	Selenium	ug/L	NE	NE	4.7	U	4.7	U	4.7	U	4.7	U	4.7	U	4.7	U	4.7	U
6010	Silver	ug/L	NE	NE	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U	3.3	U
6010	Thallium	ug/L	NE	NE	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U	1.4	U
6010	Zinc	ug/L	5000 *	NE	680		290		48		980		1800		5.2	I	4.7	I
7470	Mercury	ug/L	2	20	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
8081	Aldrin	ug/L	0.002	0.2	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
8081	BHC, a-	ug/L	0.006	0.6	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U
8081	BHC, b-	ug/L	0.02	2	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U
8081	BHC, d-	ug/L	2.1	21	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U
8081	Chlordane, a-	ug/L	2***	NE	0.0019	U	0.0019	U	0.078		0.0019	U	0.0048	I	0.0019	U	0.0019	U
8081	Chlordane, g-	ug/L	2***	NE	0.0021	U	0.0021	U	0.041		0.0021	U	0.014		0.0058	I	0.0065	I
8081	DDD, 4,4'-	ug/L	0.1	10	0.0016	U	0.0016	U	0.0051	I	0.0016	U	0.0016	U	0.0016	U	0.0016	U
8081	DDE, 4,4'-	ug/L	0.1	10	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U	0.0017	U
8081	DDT, 4,4'-	ug/L	0.1	10	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
8081	Dieldrin	ug/L	0.002	0.2	0.0014	U	0.0014	U	0.0077		0.0014	U	0.0014	U	0.0014	U	0.0014	U
8081	Endosulfan I	ug/L	NE	NE	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U
8081	Endosulfan II	ug/L	NE	NE	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U
8081	Endosulfan sulfate	ug/L	NE	NE	0.0027	U	0.0027	U	0.0027	U	0.0027	U	0.0027	U	0.0027	U	0.0027	U
8081	Endrin	ug/L	2	20	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U
8081	Endrin aldehyde	ug/L	NE	NE	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.059		0.0019	U	0.0019	U
8081	Endrin ketone	ug/L	NE	NE	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U	0.0016	U
8081	Heptachlor	ug/L	0.4	4	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U
8081	Heptachlor epoxide	ug/L	0.2	20	0.0022	U	0.0022	U	0.0022	U	0.0022	U	0.0022	U	0.0022	U	0.0022	U
8081	Lindane	ug/L	0.2	2	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0024	U
8081	Methoxychlor	ug/L	40	400	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U
8081	Mirex	ug/L	1.4	14	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U	0.015	U

Table 1A
Historical Groundwater Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	GCTL	NADSC	TMW-1		TMW-2		TMW-3		TMW-4		TMW-5		TMW-6		TMW-7	
	Date Collected				3/10/2010		3/10/2010		3/10/2010		3/9/2010		3/9/2010		3/10/2010		3/9/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
8081	Toxaphene	ug/L	3	300	0.044	U	0.044	U	0.044	U	0.044	U	0.044	U	0.044	U	0.044	U
8082	PCB 1016	ug/L	NE	NE	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
8082	PCB 1221	ug/L	NE	NE	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
8082	PCB 1232	ug/L	NE	NE	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
8082	PCB 1242	ug/L	NE	NE	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
8082	PCB 1248	ug/L	NE	NE	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
8082	PCB 1254	ug/L	NE	NE	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8082	PCB 1260	ug/L	NE	NE	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
8270	Acenaphthene	ug/L	20	200	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U
8270	Acenaphthylene	ug/L	210	2100	0.022	U	0.022	U	0.022	U	0.022	U	0.022	U	0.022	U	0.022	U
8270	Anthracene	ug/L	2100	21000	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270	Azinphos methyl	ug/L	11	NE	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U	0.53	U
8270	Benzo(a)anthracene	ug/L	0.05	5	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
8270	Benzo(a)pyrene	ug/L	0.2	20	0.009	U	0.009	U	0.009	U	0.009	U	0.009	U	0.009	U	0.009	U
8270	Benzo(b)fluoranthene	ug/L	0.05	5	0.007	U	0.007	U	0.007	U	0.007	U	0.007	U	0.007	U	0.007	U
8270	Benzo(g,h,i)perylene	ug/L	210	2100	0.012	U	0.012	U	0.012	U	0.012	U	0.012	U	0.012	U	0.012	U
8270	Benzo(k)fluoranthene	ug/L	0.5	50	0.017	U	0.017	U	0.017	U	0.017	U	0.017	U	0.017	U	0.017	U
8270	Carbophenothion	ug/L	0.9	9	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
8270	Chlorfenvinphos	ug/L	NE	NE	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
8270	Chrysene	ug/L	4.8	480	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
8270	Coumaphos	ug/L	1.8	18	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
8270	Crotoxyphos	ug/L	NE	NE	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270	Demeton-O+S	ug/L	NE	NE	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270	Dibenzo(a,h)anthracene	ug/L	0.005	0.5	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
8270	Dichlorvos	ug/L	0.1	10	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
8270	Dicrotophos	ug/L	0.7	7	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U	0.16	U
8270	Dimethoate	ug/L	1.4	14	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
8270	Disulfoton	ug/L	0.3	3	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
8270	EPN	ug/L	0.07	0.7	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
8270	Ethion	ug/L	3.5	35	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
8270	Famphur	ug/L	3.5	35	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U	0.12	U
8270	Fensulfothion	ug/L	1.8	18	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8270	Fenthion	ug/L	NE	NE	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U

Table 1A
Historical Groundwater Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	GCTL	NADSC	TMW-1		TMW-2		TMW-3		TMW-4		TMW-5		TMW-6		TMW-7	
	Date Collected				3/10/2010		3/10/2010		3/10/2010		3/9/2010		3/9/2010		3/10/2010		3/9/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
8270	Fluoranthene	ug/L	280	2800	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270	Fluorene	ug/L	280	2800	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U	0.03	U
8270	Indeno(1,2,3-cd)pyrene	ug/L	0.05	5	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U	0.011	U
8270	Leptophos	ug/L	NE	NE	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U	0.26	U
8270	Malathion	ug/L	140	1400	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
8270	Merphos	ug/L	0.2	2	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270	Methylnaphthalene, 1-	ug/L	28	280	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U	0.028	U
8270	Methylnaphthalene, 2-	ug/L	28	280	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U	0.025	U
8270	Mevinphos	ug/L	1.8	18	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270	Monocrotophos	ug/L	NE	NE	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270	Naled	ug/L	14	140	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
8270	Naphthalene	ug/L	14**	140	0.031	U	0.031	U	0.031	U	0.031	U	0.031	U	0.031	U	0.031	U
8270	Parathion	ug/L	4.2**	42	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
8270	Parathion methyl	ug/L	1.8	18	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270	Phenanthrene	ug/L	210	2100	0.026	U	0.026	U	0.026	U	0.026	U	0.026	U	0.026	U	0.026	U
8270	Phorate	ug/L	1.4	14	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U	0.04	U
8270	Phosmet	ug/L	140	1400	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U	0.14	U
8270	Phosphamidon	ug/L	NE	NE	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
8270	Pyrene	ug/L	210	2100	0.022	U	0.022	U	0.022	U	0.022	U	0.022	U	0.022	U	0.022	U
8270	Stirofos	ug/L	NE	NE	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8270	Sulfotepp	ug/L	3.5	35	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8270	TEPP	ug/L	NE	NE	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270	Terbufos	ug/L	0.2	2	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
8270	Thionazin	ug/L	NE	NE	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270 SLI	Ametryn	ug/L	63	630	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8270 SLI	Atraton	ug/L	NE	NE	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8270 SLI	Atrazine	ug/L	3	30	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
8270 SLI	Prometon	ug/L	110	1100	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8270 SLI	Prometryn	ug/L	28	280	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
8270 SLI	Propazine	ug/L	14**	140	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8270 SLI	Secbumeton	ug/L	NE	NE	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U	0.3	U
8270 SLI	Simazine	ug/L	4	40	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
8270 SLI	Simetryn	ug/L	NE	NE	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U

Table 1A
Historical Groundwater Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	GCTL	NADSC	TMW-1		TMW-2		TMW-3		TMW-4		TMW-5		TMW-6		TMW-7	
	Date Collected				3/10/2010		3/10/2010		3/10/2010		3/9/2010		3/9/2010		3/10/2010		3/9/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
8270 SLI	Terbuthylazine	ug/L	NE	NE	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8270 SLI	Terbutryn	ug/L	7	70	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
8270SLI	Aspon	ug/L	NE	NE	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
8270SLI	Azinphos ethyl	ug/L	NE	NE	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
8270SLI	Bolstar	ug/L	NE	NE	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U	0.09	U
8270SLI	Chlorpyrifos	ug/L	21	210	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8270SLI	Chlorpyrifos methyl	ug/L	70	700	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8270SLI	Diazinon	ug/L	6.3	63	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270SLI	Dichlofenthion	ug/L	NE	NE	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U	0.07	U
8270SLI	Ethoprop	ug/L	0.7	7	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U	0.02	U
8270SLI	Fenitrothion	ug/L	NE	NE	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270SLI	Fonophos	ug/L	14	140	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8270SLI	Ronnel	ug/L	350	3500	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
8270SLI	Tokuthion	ug/L	NE	NE	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U	0.06	U
8270SLI	Trichloronate	ug/L	NE	NE	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U	0.08	U
8321	D, 2,4-	ug/L	70	700	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U	0.31	U
8321	DB, 2,4-	ug/L	56	560	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U	1.1	U
8321	Dicamba	ug/L	210	2100	0.35	U	0.35	U	0.35	U	0.35	U	0.35	U	0.35	U	0.35	U
8321	Dichlorprop	ug/L	35	350	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U	0.32	U
8321	MCPA	ug/L	3.5	35	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U	0.21	U
8321	MCPP	ug/L	7	70	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U	0.15	U
8321	T, 2,4,5-	ug/L	70	700	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U	0.23	U
8321	TP, 2,4,5-	ug/L	50	500	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U	0.28	U
FLPRO	Petroleum Range Organics	ug/L	5000	50000	46	U	46	U	46	U	46	U	46	U	46	U	46	U

NOTES:

This summary is provided for the convenience of our clients. The signed, hardcopy report is the official report.

Regulatory and Guidance Limits are taken from FAC 62-770.

Unless noted by ", units have been converted to ug/L (water) or mg/kg (solids) for ease of comparison with Chapter 62-770 Cleanup Target Levels.

Other units: air = mg/m3 TCLP = mg/L SPLP = ug/L

" Units for results labelled " have NOT been converted to ug/L or ug/kg. See original report for units.

** Allowed contaminant level per Standard Chapter 62-520

*** Maximum Contaminant Level for Synthetic Organics

Table 1B
Parameters with Groundwater CTL Exceedances

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

March 2010 On-Site Investigation Summary

Method	Parameter	Units	GCTL	NADSC	TMW-1		TMW-2		TMW-3		TMW-4		TMW-5		TMW-6		TMW-7	
	Date Collected				3/10/2010		3/10/2010		3/10/2010		3/9/2010		3/9/2010		3/10/2010		3/9/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
6010	Cadmium	ug/L	5	50	2.3	I	7.8		0.6	U	16		29		0.6	U	0.6	U
8081	Dieldrin	ug/L	0.002	0.2	0.0014	U	0.0014	U	0.0077		0.0014	U	0.0014	U	0.0014	U	0.0014	U

April 2010 On-Site Investigation Summary

Method	Parameter	Units	GCTL	NADSC	TMW-1		TMW-2		TMW-3		TMW-4		TMW-5		TMW-6		TMW-7	
	Date Collected				4/19/2010		4/19/2010		4/19/2010		4/19/2010		4/19/2010		4/19/2010		4/19/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
300	Nitrate as N	ug/L	10000	100000	570000		86000		1600		2400000		3100000		6000		14	U
300	Nitrite as N	ug/L	1000	10000	16	U	16	U	16	U	16	U	16	U	60	I	16	U
350.1	Nitrogen Ammonia (as N)	ug/L	2800	28000	123000		109000		1340		326000		28900		383		690	

April 2010 Off-Site Investigation Summary

Method	Parameter	Units	GCTL	NADSC	TMW-8		TMW-9		TMW-10		TMW-11	
	Date Collected				4/19/2010		4/19/2010		4/19/2010		4/19/2010	
					Result	Qual	Result	Qual	Result	Qual	Result	Qual
6010	Cadmium	ug/L	5	50	0.6	U	8.9		0.6	U	0.6	U
8081	Dieldrin	ug/L	0.002	0.2	0.0014	U	0.0014	U	0.0014	U	0.0014	U
300	Nitrate as N	ug/L	10000	100000	14	U	220000		1700		36000	
300	Nitrite as N	ug/L	1000	10000	16	U	140		16	U	240	
350.1	Nitrogen Ammonia (as N)	ug/L	2800	28000	438		1350		106000		45200	

LEGEND:
U = Compound was analyzed for, but not detected above analysis detection limits
I = Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit

NOTES:
This summary is provided for the convenience of our clients. The signed, hardcopy report is the official report.
Regulatory and Guidance Limits are taken from FAC 62-770.
Unless noted by [a], units have been converted to ug/L (water) or mg/kg (solids) for ease of comparison with Chapter 62-770 Cleanup Target Levels.

** Allowed contaminant level per Standard Chapter 62-520
*** Maximum Contaminant Level for Synthetic Organics

Table 2
Historical Soil Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	DE-Residential	DE-Commindust	Leach-GW	SB-1 @ 2 FT		SB-10 @ 0_5 FT		SB-11 @ 2 FT		SB-12 @ 2 FT		SB-13 @ 2 FT		SB-14 @ 0_5 FT		SB-15 @ 2 FT		SB-2 @ 0_5 FT		SB-3 @ 2 FT		SB-4 @ 0_5 FT		SB-5 @ 2 FT		SB-6 @ 2 FT		SB-7 @ 2 FT		SB-8 @ 0_5 FT		SB-9 @ 2 FT	
	Date Collected					3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010	
						Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
6010	Antimony	mg/kg	27	370	5.4	0.37	U	4.3		0.36	U	0.35	U	0.35	U	0.36	U	0.33	U	0.43	U	1.5		0.4	U	0.36	U	0.35	U	0.34	U	0.35	U	0.35	U
6010	Arsenic	mg/kg	2.1	12	***	0.24	U	1.2		0.24	U	0.23	U	0.24	U	21		17		2.8		2.2		2.2		1.1		0.23	U	0.22	U	13		0.23	U
6010	Beryllium	mg/kg	120	1400	63	0.024	U	0.14		0.024	U	0.19		0.024	U	0.27		0.022	U	0.47		0.19		0.11		0.024	U	0.023	U	0.022	U	0.08	I	0.023	U
6010	Cadmium	mg/kg	82	1700	7.5	0.037	U	0.6		0.036	U	0.035	U	0.035	U	0.94		0.033	U	0.9		0.74		0.74		0.11	I	0.035	U	0.034	U	1.1		0.035	U
6010	Chromium	mg/kg	210	470	38	2.9		12		3		12		5.7		32		4.2		56		120		28		4.4		0.71	I	2.8		57		4.3	
6010	Copper	mg/kg	150**	89000	***	3.4		16		0.22	I	0.51		0.58		34		0.6		12		46		37		3.2		0.07	U	0.16	I	9.4		6.4	
6010	Lead	mg/kg	400	1400	***	13		95		3		4.9		3.9		220		3.7		14		31		19		4.1		1.4		2.4		5.3		4.3	
6010	Nickel	mg/kg	340**	35000	130	0.92		2.6		1.3		5.2		1.5		4.7		1.1		3.1		4.8		5.1		1.6		0.12	U	0.7		7		0.85	
6010	Selenium	mg/kg	440	11000	5.2	0.24	U	0.26	U	0.24	U	0.23	U	0.24	U	0.24	U	0.22	U	0.29	U	0.24	U	0.27	U	0.24	U	0.23	U	0.22	U	0.24	U	0.23	U
6010	Silver	mg/kg	410	8200	17	0.24	U	0.26	U	0.24	U	0.23	U	0.24	U	0.25	I	0.22	U	0.29	U	0.42	I	0.27	U	0.24	U	0.23	U	0.22	U	0.24	U	0.23	U
6010	Thallium	mg/kg	6.1	150	2.8	0.12	U	0.13	U	0.12	U	0.12	U	0.12	U	0.12	U	0.11	U	0.14	U	0.12	U	0.13	U	0.12	U	0.12	U	0.11	U	0.12	U	0.12	U
6010	Zinc	mg/kg	26000	630000	***	10		110		13		4.4		3.3		200		2.2		62		79		72		10		1.8		5.3		29		2.8	
7471	Mercury	mg/kg	3	17	2.1	0.049	U	0.053	U	0.048	U	0.047	U	0.047	U	0.21		0.043	U	0.057	U	0.08	I	0.08	I	0.054	I	0.047	U	0.045	U	0.047	U	0.047	U
8081	Aldrin	mg/kg	0.06	0.3	0.2	0.0027	U	0.0029	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0024	U	0.0031	U	0.0027	U	0.0029	U	0.0027	U	0.0026	U	0.0025	U	0.0026	U	0.0026	U
8081	BHC, a-	mg/kg	0.1	0.6	0.0003	0.0035	U	0.0038	U	0.0035	U	0.0034	U	0.0034	U	0.0035	U	0.0032	U	0.0041	U	0.0035	U	0.0039	U	0.0035	U	0.0034	U	0.0033	U	0.0034	U	0.0034	U
8081	BHC, b-	mg/kg	0.5	2.4	0.001	0.0054	I	0.0024	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.002	U	0.0033	I	0.0022	U	0.0024	U	0.0022	U	0.0021	U	0.002	U	0.0021	U	0.0021	U
8081	BHC, d-	mg/kg	24	490	0.2	0.0027	U	0.0029	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0024	U	0.0031	U	0.0027	U	0.0029	U	0.0027	U	0.0026	U	0.0025	U	0.0026	U	0.0026	U
8081	Chlordane, a-	mg/kg	NE	NE	NE	0.0028	U	0.014		0.0027	U	0.0027	U	0.0027	U	0.11		0.0025	U	0.0033	U	0.25		0.051		0.017		0.0027	U	0.0026	U	0.0027	U	0.0027	U
8081	Chlordane, g-	mg/kg	NE	NE	NE	0.0021	U	0.0022	U	0.002	U	0.002	U	0.002	U	0.024		0.0018	U	0.0024	U	0.16		0.027		0.012		0.002	U	0.0019	U	0.002	U	0.002	U
	Total Chlordane	mg/kg	0.8	14	9.6	n/a		0.014		n/a		n/a		n/a		0.134		n/a		n/a		0.41		0.078		0.029		n/a		n/a		n/a		n/a	
8081	DDD, 4,4'-	mg/kg	4.2	22	5.8	0.0022	U	0.02		0.0021	U	0.0021	U	0.0021	U	0.042		0.002	U	0.0026	U	0.0022	U	0.043		0.0042	I	0.0021	U	0.002	U	0.0021	U	0.0021	U
8081	DDE, 4,4'-	mg/kg	2.9	15	18	0.0021	U	0.0022	U	0.002	U	0.002	U	0.002	U	0.002	U	0.0018	U	0.0024	U	0.0021	U	0.0023	U	0.002	U	0.002	U	0.0019	U	0.002	U	0.002	U
8081	DDT, 4,4'-	mg/kg	2.9	15	11	0.00078	U	0.025		0.00076	U	0.00074	U	0.00075	U	0.33		0.0007	U	0.00091	U	0.00078	U	0.00085	U	0.00077	U	0.00074	U	0.00072	U	0.00075	U	0.00074	U
8081	Dieldrin	mg/kg	0.06	0.3	0.002	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0017	U	0.0023	U	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U
8081	Endosulfan I (alpha)	mg/kg	NE	NE	NE	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0019	U	0.36		0.0017	U	0.0023	U	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U
8081	Endosulfan II (beta)	mg/kg	NE	NE	NE	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0017	U	0.0023	U	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U
8081	Endosulfan sulfate	mg/kg	NE	NE	NE	0.0015	U	0.0016	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0013	U	0.0017	U	0.0015	U	0.0016	U	0.0014	U	0.0014	U	0.0013	U	0.0014	U	0.0014	U
	Total Endosulfan	mg/kg	450	7600	8.8	n/a		n/a		n/a		n/a		n/a		0.36		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a	
8081	Endrin	mg/kg	25	510	1	0.0021	U	0.0022	U	0.002	U	0.002	U	0.002	U	0.002	U	0.0018	U	0.0024	U	0.0021	U	0.0023	U	0.002	U	0.002	U	0.0019	U	0.002	U	0.002	U
8081	Endrin aldehyde	mg/kg	NE	NE	NE	0.002	U	0.018		0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0017	U	0.0023	U	0.002	U	0.0021	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U
8081	Endrin ketone	mg/kg	NE	NE	NE	0.0016	U	0.0017	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0014	U	0.0019	U	0.0016	U	0.0017	U	0.0016	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U
8081	Heptachlor	mg/kg	0.2	1	23	0.0023	U	0.0025	U	0.0023	U	0.0022	U	0.0022	U	0.0023	U	0.0021	U	0.0027	U	0.0023	U	0.0025	U	0.0023	U	0.0022	U	0.0021	U	0.0022	U	0.0022	U
8081	Heptachlor epoxide	mg/kg	0.1	0.5	0.6	0.0021	U	0.0022	U	0.002	U	0.002	U	0.002	U	0.002	U	0.0018	U	0.0024	U	0.0021	U	0.0023	U	0.002	U	0.002	U	0.0019	U	0.002	U	0.002	U
8081	Lindane	mg/kg	0.7	2.5	0.009	0.00073	U	0.00078	U	0.00071	U	0.0007	U	0.00071	U	0.00071	U	0.00065	U	0.00086	U	0.00073	U	0.0008	U	0.00072	U	0.0007	U	0.00067	U	0.00071	U	0.0007	U
8081	Methoxychlor	mg/kg	420	8800	160	0.0023	U	0.0025	U	0.0023	U	0.0022	U	0.0022	U	0.0023	U	0.0021	U	0.0027	U	0.0023	U	0.0025	U	0.0023	U	0.0022	U	0.0021	U	0.0022	U	0.0022	U
8081	Mirex	mg/kg	NE	NE	NE	0.0078	U	0.0084	U	0.0076	U	0.0074	U	0.0075	U	0.0076	U	0.007	U	0.0091	U	0.0078	U	0.0085	U	0.0077	U	0.0074	U	0.0072	U	0.0075	U	0.0074	U
8081	Toxaphene	mg/kg	0.9	4.5	31	0.26	U	0.3	U	0.27	U	0.27	U	0.27	U	0.27	U	0.25	U	0.33	U	0.28	U	0.31	U	0.28	U	0.27	U	0.26	U	0.27	U	0.27	U
8082	PCB 1016	mg/kg	NE	NE	NE	0.037	U	0.039	U	0.036	U	0.035	U	0.035	U	0.036	U	0.033	U	0.043	U	0.037	U	0.04	U	0.036	U	0.035	U	0.034	U	0.035	U	0.035	U
8082	PCB 1221	mg/kg	NE	NE	NE	0.037	U	0.039	U	0.036	U	0.035	U	0.035	U	0.036	U	0.033	U	0.043	U	0.037	U	0.04	U	0.036	U	0.035	U	0.034	U	0.035	U	0.035	U
8082	PCB 1232	mg/kg	NE	NE	NE	0.024	U	0.026	U	0.024	U	0.023	U	0.024	U	0.024	U	0.022	U	0.029	U	0.024	U	0.027	U	0.024	U	0.023	U	0.022	U	0.024	U	0.023	U
8082	PCB 1242	mg/kg	NE	NE	NE	0.037	U	0.039	U	0.036	U	0.035	U	0.035	U	0.036	U	0.033	U	0.043	U	0.037	U	0.04	U	0.036	U	0.035	U	0.034	U	0.035	U	0.035	U
8082	PCB 1248	mg/kg	NE	NE	NE	0.024	U	0.026	U	0.024	U	0.023	U	0.024	U	0.024	U	0.022	U	0.029	U	0.024	U	0.027	U	0.024	U	0.023	U	0.022	U	0.024	U	0.023	U
8082	PCB 1254	mg/kg	NE	NE	NE	0.049	U	0.25		0.048	U	0.047	U	0.047	U	0.048	U	0.043	U	0.057	U	0.049	U	0.053	U	0.048	U	0.047	U	0.045	U	0.047	U	0.047	U
8082	PCB 1260	mg/kg	NE	NE	NE	0.024	U	0.026	U	0.024	U	0.023	U	0.024	U	0.024	U	0.022	U	0.029	U	0.024	U	0.027	U	0.024	U	0.023	U	0.022	U	0.024	U	0.023	U

Table 2
Historical Soil Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	DE-Residential	DE-Comm/Indust	Leach-GW	SB-1 @ 2 FT		SB-10 @ 0_5 FT		SB-11 @ 2 FT		SB-12 @ 2 FT		SB-13 @ 2 FT		SB-14 @ 0_5 FT		SB-15 @ 2 FT		SB-2 @ 0_5 FT		SB-3 @ 2 FT		SB-4 @ 0_5 FT		SB-5 @ 2 FT		SB-6 @ 2 FT		SB-7 @ 2 FT		SB-8 @ 0_5 FT		SB-9 @ 2 FT	
	Date Collected					3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010	
						Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
	Total PCBs	mg/kg	0.5	2.6	17	n/a		0.25		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a		n/a	
8270	Acenaphthene	mg/kg	2400	20000	2.1	0.0026	U	0.046	I	0.0025	U	0.0024	U	0.0025	U	0.012		0.0023	U	0.003	U	0.0065	I	0.055		0.0025	U	0.0024	U	0.0024	U	0.0025	U	0.0024	U
8270	Acenaphthylene	mg/kg	1800	20000	27	0.0027	U	6.53		0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0024	U	0.0031	U	0.0027	U	0.0029	U	0.0027	U	0.0026	U	0.0025	U	0.0026	U	0.0026	U
8270	Anthracene	mg/kg	21000	300000	2500	0.0021	U	0.37		0.002	U	0.002	U	0.002	U	0.055		0.0018	U	0.0051	I	0.028		0.14		0.002	U	0.002	U	0.0019	U	0.002	U	0.002	U
8270	Azinphos methyl	mg/kg	120	2400	0.2	0.016	U	0.017	U	0.015	U	0.015	U	0.015	U	0.015	U	0.014	U	0.019	U	0.016	U	0.017	U	0.016	U	0.015	U	0.015	U	0.015	U	0.015	U
8270	Benzo(a)anthracene	mg/kg	#	#	0.8	0.019		1.3		0.0018	U	0.0017	U	0.0018	U	0.26		0.0016	U	0.083		0.1		0.44		0.004	I	0.0017	U	0.0017	U	0.0029	I	0.0017	U
8270	Benzo(a)pyrene	mg/kg	0.1	0.7	8	0.017		1.9		0.0024	U	0.0023	U	0.0024	U	0.3		0.0022	U	0.079		0.085		0.29		0.0024	U	0.0023	U	0.0022	U	0.0024	U	0.0023	U
8270	Benzo(b)fluoranthene	mg/kg	#	#	2.4	0.029		3.5		0.0032	U	0.0031	U	0.0032	U	0.51		0.0042	I	0.13		0.17		0.55		0.0054	I	0.0031	U	0.003	U	0.0032	U	0.0031	U
8270	Benzo(g,h,i)perylene	mg/kg	2500	52000	32000	0.013	I	1.3		0.0082	U	0.008	U	0.0081	U	0.2		0.0075	U	0.063		0.07		0.21		0.0083	U	0.008	U	0.0078	U	0.0081	U	0.008	U
8270	Benzo(k)fluoranthene	mg/kg	#	#	24	0.0077	I	0.84		0.0023	U	0.0022	U	0.0022	U	0.17		0.0021	U	0.041		0.056		0.12		0.0023	U	0.0022	U	0.0021	U	0.0022	U	0.0022	U
8270	Carbophenothion	mg/kg	11	250	13	0.0073	U	0.0079	U	0.0071	U	0.007	U	0.0071	U	0.0071	U	0.0065	U	0.0086	U	0.0073	U	0.008	U	0.0072	U	0.007	U	0.0067	U	0.0071	U	0.007	U
8270	Chlorfenvinphos	mg/kg	NE	NE	NE	0.013	U	0.014	U	0.013	U	0.013	U	0.013	U	0.013	U	0.012	U	0.016	U	0.013	U	0.015	U	0.013	U	0.013	U	0.012	U	0.013	U	0.013	U
8270	Chrysene	mg/kg	#	#	77	0.025		1.7		0.0014	U	0.0014	U	0.0014	U	0.34		0.0041	I	0.1		0.12		0.45		0.0048	I	0.0014	U	0.0013	U	0.0049	I	0.0014	U
8270	Coumaphos	mg/kg	21	450	0.3	0.021	U	0.022	U	0.02	U	0.02	U	0.02	U	0.02	U	0.018	U	0.024	U	0.021	U	0.023	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U
8270	Crotoxyphos	mg/kg	NE	NE	NE	0.021	U	0.022	U	0.02	U	0.02	U	0.02	U	0.02	U	0.018	U	0.024	U	0.021	U	0.023	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U
8270	Demeton-O+S	mg/kg	NE	NE	NE	0.027	U	0.029	U	0.026	U	0.026	U	0.026	U	0.026	U	0.024	U	0.031	U	0.027	U	0.029	U	0.027	U	0.026	U	0.025	U	0.026	U	0.026	U
8270	Dibenzo(a,h)anthracene	mg/kg	#	#	0.7	0.0089	U	0.37	I	0.0087	U	0.0085	U	0.0086	U	0.044		0.0079	U	0.017	I	0.02	I	0.063		0.0088	U	0.0085	U	0.0082	U	0.0086	U	0.0085	U
8270	Dichlorvos	mg/kg	0.3	0.4	0.0006	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	Dicrotophos	mg/kg	7.4	120	0.005	0.016	U	0.017	U	0.015	U	0.015	U	0.015	U	0.015	U	0.014	U	0.019	U	0.016	U	0.017	U	0.016	U	0.015	U	0.015	U	0.015	U	0.015	U
8270	Dimethoate	mg/kg	13	170	0.006	0.011	U	0.012	U	0.011	U	0.01	U	0.011	U	0.011	U	0.0098	U	0.013	U	0.011	U	0.012	U	0.011	U	0.01	U	0.01	U	0.011	U	0.01	U
8270	Disulfoton	mg/kg	3.3	66	0.09	0.026	U	0.028	U	0.025	U	0.024	U	0.025	U	0.025	U	0.023	U	0.03	U	0.026	U	0.028	U	0.025	U	0.024	U	0.024	U	0.025	U	0.024	U
8270	EPN	mg/kg	0.8	18	0.02	0.013	U	0.014	U	0.013	U	0.013	U	0.013	U	0.013	U	0.012	U	0.016	U	0.013	U	0.015	U	0.013	U	0.013	U	0.012	U	0.013	U	0.013	U
8270	Ethion	mg/kg	42	920	1.7	0.016	U	0.017	U	0.015	U	0.015	U	0.015	U	0.015	U	0.014	U	0.019	U	0.016	U	0.017	U	0.016	U	0.015	U	0.015	U	0.015	U	0.015	U
8270	Famphur	mg/kg	NE	NE	NE	0.022	U	0.024	U	0.021	U	0.021	U	0.021	U	0.021	U	0.02	U	0.026	U	0.022	U	0.024	U	0.022	U	0.021	U	0.02	U	0.021	U	0.021	U
8270	Fensulfothion	mg/kg	19	310	0.01	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	Fenthion	mg/kg	NE	NE	NE	0.012	U	0.013	U	0.012	U	0.012	U	0.012	U	0.012	U	0.011	U	0.014	U	0.012	U	0.013	U	0.012	U	0.012	U	0.011	U	0.012	U	0.012	U
8270	Fluoranthene	mg/kg	3200	59000	1200	0.027		1.7		0.0027	U	0.0027	U	0.0027	U	0.4		0.0065	I	0.13		0.15		0.85		0.0077	I	0.0027	U	0.0026	U	0.0042	I	0.0027	U
8270	Fluorene	mg/kg	2600	33000	160	0.0022	U	0.053	I	0.0021	U	0.0021	U	0.0021	U	0.019		0.002	U	0.0026	U	0.0051	I	0.048		0.0022	U	0.0021	U	0.002	U	0.0021	U	0.0021	U
8270	Indeno(1,2,3-cd)pyrene	mg/kg	#	#	8.6	0.012	I	1.2		0.0086	U	0.0084	U	0.0085	U	0.19		0.0078	U	0.057		0.066		0.21		0.0087	U	0.0084	U	0.0081	U	0.0085	U	0.0084	U
8270	Leptophos	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	Malathion	mg/kg	1500	24000	4.2	0.013	U	0.014	U	0.013	U	0.013	U	0.013	U	0.013	U	0.012	U	0.016	U	0.013	U	0.015	U	0.013	U	0.013	U	0.012	U	0.013	U	0.013	U
8270	Methyl Parathion	mg/kg	20	370	0.06	0.0085	U	0.0092	U	0.0083	U	0.0081	U	0.0082	U	0.0083	U	0.0076	U	0.01	U	0.0085	U	0.0093	U	0.0084	U	0.0081	U	0.0079	U	0.0082	U	0.0081	U
8270	Methylnaphthalene, 1-	mg/kg	200	1800	3.1	0.004	U	0.043	U	0.0039	U	0.0038	U	0.0039	U	0.048		0.0036	U	0.0047	U	0.01	I	0.011	I	0.004	U	0.0038	U	0.0037	U	0.0039	U	0.0038	U
8270	Methylnaphthalene, 2-	mg/kg	210	2100	8.5	0.0034	U	0.037	U	0.0033	U	0.0033	U	0.0033	U	0.055		0.003	U	0.004	U	0.011	I	0.012	I	0.0034	U	0.0033	U	0.0031	U	0.0033	U	0.0033	U
8270	Mevinphos	mg/kg	18	270	0.01	0.012	U	0.013	U	0.012	U	0.012	U	0.012	U	0.012	U	0.011	U	0.014	U	0.012	U	0.013	U	0.012	U	0.012	U	0.011	U	0.012	U	0.012	U
8270	Monocrotophos	mg/kg	NE	NE	NE	0.013	U	0.014	U	0.013	U	0.013	U	0.013	U	0.013	U	0.012	U	0.016	U	0.013	U	0.015	U	0.013	U	0.013	U	0.012	U	0.013	U	0.013	U
8270	Naled	mg/kg	150	2400	0.1	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	Naphthalene	mg/kg	55	300	1.2	0.0067	U	0.072	U	0.0065	U	0.0064	U	0.0065	U	0.045		0.005	U	0.0079	U	0.0067	U	0.015	I	0.0066	U	0.0064	U	0.0062	U	0.0065	U	0.0064	U
8270	Parathion	mg/kg	500	11000	1	0.0096	U	0.011	U	0.0095	U	0.0093	U	0.0094	U	0.0095	U	0.0087	U	0.011	U	0.0098	U	0.011	U	0.0096	U	0.0093	U	0.009	U	0.0094	U	0.0093	U
8270	Phenanthrene	mg/kg	2200	36000	250	0.0074	I	1.1		0.0033	U	0.0033	U	0.0033	U	0.22		0.003	U	0.031		0.077		0.61		0.0034	U	0.0033	U	0.0031	U	0.0052	I	0.0033	U
8270	Phorate	mg/kg	16	320	0.3	0.0024	U	0.0026	U	0.0024	U	0.0023	U	0.0024	U	0.0024	U	0.0022	U	0.0029	U	0.0024	U	0.0027	U	0.0024	U	0.0023	U	0.0022	U	0.0024	U	0.0023	U
8270	Phosmet	mg/kg	1600	33000	5	0.0085	U	0.0092	U	0.0083	U	0.0081	U	0.0082	U	0.0083	U	0.0076	U	0.01	U	0.0085	U	0.0093	U	0.0084	U	0.0081	U	0.0079	U	0.0082	U	0.0081	U
8270	Phosphamidon	mg/kg	NE	NE	NE	0.021	U	0.022	U	0.02	U	0.02	U	0.02	U	0.02	U	0.018	U	0.024	U	0.021	U	0.023	U	0.02	U	0.02	U	0.019	U	0.02	U	0.02	U
8270	Pyrene	mg/kg	2400	45000	880	0.026	I	1.6		0.0082	U	0.008	U	0.0081	U	0.41		0.0075	U	0.12		0.15		0.73		0.0083	U	0.008	U	0.0078	U	0.0081	U	0.008	U

Table 2
Historical Soil Analytical Results, March 2010

Facility: Gro-Mor Fertilizer Plant Site, Plant City, Hillsborough County, Florida

Method	Parameter	Units	DE-Residential	DE-Commlrdust	Leach-GW	SB-1 @ 2 FT		SB-10 @ 0_5 FT		SB-11 @ 2 FT		SB-12 @ 2 FT		SB-13 @ 2 FT		SB-14 @ 0_5 FT		SB-15 @ 2 FT		SB-2 @ 0_5 FT		SB-3 @ 2 FT		SB-4 @ 0_5 FT		SB-5 @ 2 FT		SB-6 @ 2 FT		SB-7 @ 2 FT		SB-8 @ 0_5 FT		SB-9 @ 2 FT	
	Date Collected					3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010		3/5/2010	
						Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual	Result	Qual
8270	Stirofos	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	Sulfotepp	mg/kg	35	510	0.1	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	TEPP	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270	Terbufos	mg/kg	1.9	29	0.02	0.0024	U	0.0026	U	0.0024	U	0.0023	U	0.0024	U	0.0024	U	0.0022	U	0.0029	U	0.0024	U	0.0027	U	0.0024	U	0.0023	U	0.0022	U	0.0024	U	0.0023	U
8270	Thionazin	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270 SLI	Ametryn	mg/kg	670	11000	0.8	0.049	U	0.053	U	0.048	U	0.047	U	0.047	U	0.048	U	0.043	U	0.057	U	0.049	U	0.053	U	0.048	U	0.047	U	0.045	U	0.047	U	0.047	U
8270 SLI	Atraton	mg/kg	NE	NE	NE	0.061	U	0.066	U	0.06	U	0.058	U	0.059	U	0.06	U	0.054	U	0.071	U	0.061	U	0.067	U	0.06	U	0.058	U	0.056	U	0.059	U	0.058	U
8270 SLI	Atrazine	mg/kg	4.3	19	0.06	0.017	U	0.018	U	0.017	U	0.016	U	0.016	U	0.017	U	0.015	U	0.02	U	0.017	U	0.019	U	0.017	U	0.016	U	0.016	U	0.016	U	0.016	U
8270 SLI	Prometon	mg/kg	1200	23000	2.4	0.061	U	0.066	U	0.06	U	0.058	U	0.059	U	0.06	U	0.054	U	0.071	U	0.061	U	0.067	U	0.06	U	0.058	U	0.056	U	0.059	U	0.058	U
8270 SLI	Prometryn	mg/kg	320	6100	0.7	0.039	U	0.042	U	0.038	U	0.037	U	0.038	U	0.038	U	0.035	U	0.046	U	0.039	U	0.043	U	0.039	U	0.037	U	0.036	U	0.038	U	0.037	U
8270 SLI	Propazine	mg/kg	1600	28000	0.2	0.073	U	0.079	U	0.071	U	0.07	U	0.071	U	0.071	U	0.065	U	0.086	U	0.073	U	0.08	U	0.072	U	0.07	U	0.067	U	0.071	U	0.07	U
8270 SLI	Secbumeton	mg/kg	NE	NE	NE	0.049	U	0.053	U	0.048	U	0.047	U	0.047	U	0.048	U	0.043	U	0.057	U	0.049	U	0.053	U	0.048	U	0.047	U	0.045	U	0.047	U	0.047	U
8270 SLI	Simazine	mg/kg	7.8	35	0.08	0.016	U	0.017	U	0.015	U	0.015	U	0.015	U	0.015	U	0.014	U	0.019	U	0.016	U	0.017	U	0.016	U	0.015	U	0.015	U	0.015	U	0.015	U
8270 SLI	Simetryn	mg/kg	NE	NE	NE	0.049	U	0.053	U	0.048	U	0.047	U	0.047	U	0.048	U	0.043	U	0.057	U	0.049	U	0.053	U	0.048	U	0.047	U	0.045	U	0.047	U	0.047	U
8270 SLI	Terbuthylazine	mg/kg	NE	NE	NE	0.073	U	0.079	U	0.071	U	0.07	U	0.071	U	0.071	U	0.065	U	0.086	U	0.073	U	0.08	U	0.072	U	0.07	U	0.067	U	0.071	U	0.07	U
8270 SLI	Terbutryn	mg/kg	88	2200	0.2	0.085	U	0.092	U	0.083	U	0.081	U	0.082	U	0.083	U	0.076	U	0.1	U	0.085	U	0.093	U	0.084	U	0.081	U	0.079	U	0.082	U	0.081	U
8270SLI	Aspon	mg/kg	NE	NE	NE	0.0073	U	0.0079	U	0.0071	U	0.007	U	0.0071	U	0.0071	U	0.0065	U	0.0086	U	0.0073	U	0.008	U	0.0072	U	0.007	U	0.0067	U	0.0071	U	0.007	U
8270SLI	Azinphos ethyl	mg/kg	NE	NE	NE	0.024	U	0.026	U	0.024	U	0.023	U	0.024	U	0.024	U	0.022	U	0.029	U	0.024	U	0.027	U	0.024	U	0.023	U	0.022	U	0.024	U	0.023	U
8270SLI	Bolstar	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270SLI	Chlorpyrifos	mg/kg	250	5000	15	0.022	U	0.024	U	0.021	U	0.021	U	0.021	U	0.021	U	0.02	U	0.026	U	0.022	U	0.024	U	0.022	U	0.021	U	0.02	U	0.021	U	0.021	U
8270SLI	Chlorpyrifos Methyl	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270SLI	Diazinon	mg/kg	70	1200	0.2	0.017	U	0.018	U	0.017	U	0.016	U	0.016	U	0.017	U	0.015	U	0.02	U	0.017	U	0.019	U	0.017	U	0.016	U	0.016	U	0.016	U	0.016	U
8270SLI	Dichlofenthion	mg/kg	NE	NE	NE	0.0024	U	0.0026	U	0.0024	U	0.0023	U	0.0024	U	0.0024	U	0.0022	U	0.0029	U	0.0024	U	0.0027	U	0.0024	U	0.0023	U	0.0022	U	0.0024	U	0.0023	U
8270SLI	Ethoprop	mg/kg	7.4	120	0.005	0.012	U	0.013	U	0.012	U	0.012	U	0.012	U	0.012	U	0.011	U	0.014	U	0.012	U	0.013	U	0.012	U	0.012	U	0.011	U	0.012	U	0.012	U
8270SLI	Fenitrothion	mg/kg	NE	NE	NE	0.12	U	0.12	U	0.11	U	0.11	U	0.11	U	0.11	U	0.1	U	0.14	U	0.12	U	0.13	U	0.11	U	0.11	U	0.11	U	0.11	U	0.11	U
8270SLI	Fonofos	mg/kg	140	2100	0.4	0.012	U	0.013	U	0.012	U	0.012	U	0.012	U	0.012	U	0.011	U	0.014	U	0.012	U	0.013	U	0.012	U	0.012	U	0.011	U	0.012	U	0.012	U
8270SLI	Merphos	mg/kg	2.5	52	0.5	0.02	U	0.021	U	0.019	U	0.019	U	0.019	U	0.019	U	0.017	U	0.023	U	0.02	U	0.021	U	0.019	U	0.019	U	0.018	U	0.019	U	0.019	U
8270SLI	Ronnel	mg/kg	4200	88000	1300	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8270SLI	Tokuthion	mg/kg	NE	NE	NE	0.016	U	0.017	U	0.015	U	0.015	U	0.015	U	0.015	U	0.014	U	0.019	U	0.016	U	0.017	U	0.016	U	0.015	U	0.015	U	0.015	U	0.015	U
8270SLI	Trichloronate	mg/kg	NE	NE	NE	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8321	D, 2,4-	mg/kg	770	13000	0.7	0.016	U	0.017	U	0.015	U	0.015	U	0.015	U	0.015	U	0.014	U	0.019	U	0.016	U	0.017	U	0.016	U	0.015	U	0.015	U	0.015	U	0.015	U
8321	DB, 2,4-	mg/kg	NE	NE	NE	0.044	U	0.047	U	0.043	U	0.042	U	0.042	U	0.043	U	0.039	U	0.051	U	0.044	U	0.048	U	0.043	U	0.042	U	0.04	U	0.042	U	0.042	U
8321	Dicamba	mg/kg	2300	40000	2.6	0.048	U	0.051	U	0.046	U	0.045	U	0.046	U	0.046	U	0.042	U	0.056	U	0.048	U	0.052	U	0.047	U	0.045	U	0.044	U	0.046	U	0.045	U
8321	Dichlorprop	mg/kg	370	5300	0.3	0.032	U	0.034	U	0.031	U	0.03	U	0.031	U	0.031	U	0.028	U	0.037	U	0.032	U	0.035	U	0.031	U	0.03	U	0.029	U	0.031	U	0.03	U
8321	MCPA	mg/kg	35	500	0.02	0.022	U	0.024	U	0.021	U	0.021	U	0.021	U	0.021	U	0.02	U	0.026	U	0.022	U	0.024	U	0.022	U	0.021	U	0.02	U	0.021	U	0.021	U
8321	MCPP	mg/kg	84	800	0.03	0.015	U	0.016	U	0.014	U	0.014	U	0.014	U	0.014	U	0.013	U	0.017	U	0.015	U	0.016	U	0.014	U	0.014	U	0.013	U	0.014	U	0.014	U
8321	Silvex	mg/kg	660	14000	5.4	0.094	U	0.1	U	0.092	U	0.09	U	0.091	U	0.092	U	0.084	U	0.11	U	0.094	U	0.1	U	0.093	U	0.09	U	0.087	U	0.091	U	0.09	U
8321	T, 2,4,5-	mg/kg	690	9500	0.4	0.066	U	0.071	U	0.064	U	0.063	U	0.064	U	0.064	U	0.059	U	0.077	U	0.066	U	0.072	U	0.065	U	0.063	U	0.061	U	0.064	U	0.063	U
FLPRO	Petroleum Range Organics	mg/kg	460	2700	340	5.9	U	130		5.7	U	5.6	U	5.6	U	290		5.2	U	15	I	5.9	U	170		5.8	U	5.6	U	5.4	U	5.6	U	5.6	U

Notes: NE = Not Established

*** = Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present

I = The reported value is between the laboratory limit of detection (MDL) and the laboratory limit of quantitation (PQL).

U = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.

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Table 3A
Gro Mor: Soil Analytical Results, 2011

Sample Location							SB-16 0.5'-1'		SB-16 2'-3'		SB-17 0.5'-1'		SB-17 2'-3'		SB-18 0.5'-1'		SB-18 2'-3'		SB-19 0.5'-1'		SB-19 2'-3'		SB-20 0.5'-1'		SB-20 2'-3'		SB-21 0.5'-1'		SB-21 2'-3'	
Collection Date							4/19/11		4/19/11		4/19/11		4/19/11		4/19/11		4/19/11		4/19/11		4/19/11		4/18/11		4/18/11		4/18/11		4/18/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust	Leach. -GW	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8081	Aldrin	309-00-2	mg/Kg	0.06	0.3	0.2	0.0023	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0027	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0027	U
8081	alpha-BHC	319-84-8	mg/Kg	0.1	0.6	0.0003	0.0031	U	0.0033	U	0.0033	U	0.0033	U	0.0033	U	0.0033	U	0.0035	U	0.0034	U	0.0035	U	0.0035	U	0.0035	U	0.0036	U
8081	beta-BHC	319-85-7	mg/Kg	0.5	2.4	0.001	0.0019	U	0.0021	U	0.002	U	0.002	U	0.002	U	0.0021	U	0.0022	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0022	U
8081	delta-BHC	319-86-8	mg/Kg	24	490	0.2	0.0023	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0025	U	0.0027	U	0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0027	U
8081	alpha-Chlordane	5103-71-9	mg/Kg	NE	NE	NE	0.0024	U	0.0026	U	0.0026	U	0.0026	U	0.032		0.0026	U	0.034		0.0027	U	0.0027	U	0.0027	U	0.0027	U	0.0028	U
8081	gamma-Chlordane	5103-74-2	mg/Kg	NE	NE	NE	0.0018	U	0.002	U	0.0019	U	0.0019	U	0.014		0.002	U	0.012		0.002	U	0.002	U	0.002	U	0.002	U	0.0021	U
8081	Chlordane	57-74-9 or 12789-03-6	mg/Kg	2.8	14	9.6	0.019	U	0.021	U	0.02	U	0.02	U	0.22		0.021	U	0.71		0.021	U	0.021	U	0.021	U	0.021	U	0.022	U
8081	4,4'-DDD	72-54-8	mg/Kg	4.2	22	5.8	0.0019	U	0.0021	U	0.002	U	0.002	U	0.002	U	0.0021	U	0.0022	U	0.0021	U	0.0021	U	0.0021	U	0.0021	U	0.0022	U
8081	4,4'-DDE	72-55-9	mg/Kg	2.9	15	18	0.0018	U	0.002	U	0.0019	U	0.0019	U	0.0019	U	0.002	U	0.028		0.002	U	0.002	U	0.002	U	0.002	U	0.0021	U
8081	4,4'-DDT	50-29-3	mg/Kg	2.9	15	11	0.00068	U	0.00074	U	0.00072	U	0.00072	U	0.00073	U	0.00074	U	0.047	U	0.00074	U	0.00076	U	0.00076	U	0.00076	U	0.00079	U
8081	Dieldrin	60-57-1	mg/Kg	0.06	0.3	0.002	0.0017	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.002	U
8081	Endosulfan I (alpha)	959-98-8	mg/Kg	NE	NE	NE	0.0017	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.002	U
8081	Endosulfan II (beta)	33213-65-9	mg/Kg-	NE	NE	NE	0.0017	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.002	U
8081	Endosulfan sulfate	1031-07-8	mg/Kg	NE	NE	NE	0.0013	U	0.0014	U	0.0013	U	0.0013	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0015	U
8081	Endrin	72-20-8	mg/Kg	25	510	1	0.0018	U	0.002	U	0.0019	U	0.0019	U	0.0019	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.0021	U
8081	Endrin Aldehyde	7421-93-4	mg/Kg	NE	NE	NE	0.0017	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0018	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.0019	U	0.002	U
8081	Endrin Ketone	53494-70-5	mg/Kg	NE	NE	NE	0.0014	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0016	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0016	U
8081	Heptachlor	76-44-8	mg/Kg	0.2	1	23	0.002	U	0.0022	U	0.0021	U	0.0021	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U
8081	Heptachlor epoxide	1024-57-3	mg/Kg	0.1	0.5	0.6	0.0018	U	0.002	U	0.0019	U	0.0019	U	0.0019	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.0021	U
8081	gamma-BHC (Lindane)	58-89-9	mg/Kg	0.7	2.5	0.009	0.00064	U	0.00069	U	0.00067	U	0.00067	U	0.00068	U	0.00069	U	0.00072	U	0.0007	U	0.00071	U	0.00071	U	0.00071	U	0.00074	U
8081	Methoxychlor	72-43-5	mg/Kg	420	8800	160	0.002	U	0.0022	U	0.0021	U	0.0021	U	0.0022	U	0.0022	U	0.0023	U	0.0022	U	0.0023	U	0.0023	U	0.0023	U	0.0023	U
8081	Mirex	2385-85-5	mg/kg	NE	NE	NE	0.0068	U	0.0074	U	0.0072	U	0.0072	U	0.0073	U	0.0074	U	0.0077	U	0.0074	U	0.0076	U	0.0076	U	0.0076	U	0.0078	U
8081	Toxaphene	8001-35-2	mg/Kg	0.9	4.5	31	0.031	U	0.033	U	0.033	U	0.033	U	0.033	U	0.033	U	0.035	U	0.034	U	0.035	U	0.035	U	0.035	U	0.036	U
8270	Acenaphthene	83-32-9	mg/Kg	2400	20000	2.1	0.0044	U	0.0024	U	0.0024	U	0.0024	U	0.034		0.0024	U	0.6		0.11		0.0025	U	0.0025	U	0.0037	I	0.75	
8270	Acenaphthylene	208-96-8	mg/Kg	1800	20000	27	0.1		0.0025	U	0.0025	U	0.0025	U	0.028		0.0025	U	0.57		0.0026	U	0.0026	U	0.0026	U	0.0026	U	0.0027	U
8270	Anthracene	120-12-7	mg/Kg	21000	300000	2500	0.12		0.061		0.0019	U	0.0019	U	0.11		0.002	U	1.6		0.3		0.0022	I	0.002	U	0.0089		1.1	
8270	Benz(a)Anthracene	56-55-3	mg/Kg	#	#	0.8	0.74		0.32		0.0056	I	0.0017	U	0.41		0.0082		5.1		0.74		0.0094		0.0018	U	0.047		3.3	
8270	Benzo(a)pyrene	50-32-8	mg/Kg	0.1	0.7	8	0.51		0.14		0.003	I	0.0022	U	0.25		0.0052	I	3		0.34		0.0045	I	0.0024	U	0.023		2.5	
8270	Benzo(b)fluoranthene	205-99-2	mg/Kg	#	#	2.4	1.1		0.37		0.0079	I	0.003	U	0.58		0.013		6.5		0.66		0.011	I	0.0032	U	0.054		4.2	
8270	Benzo(g,h,i)perylene	191-24-2	mg/Kg	2500	52000	32000	0.4		0.14		0.0078	U	0.0078	U	0.2		0.0079	U	2		0.26		0.0082	U	0.0082	U	0.0099	I	1.2	
8270	Benzo(k)fluoranthene	207-08-9	mg/Kg	#	#	24	0.27		0.082		0.0021	U	0.0021	U	0.11		0.0036	I	1.8		0.17		0.0024	I	0.0023	U	0.013		1.2	
8270	Chrysene	218-01-9	mg/Kg	#	#	77	0.7		0.37		0.0044	I	0.0013	U	0.3		0.0078		3.4		0.46		0.0061		0.0014	U	0.033		2.3	
8270	Dibenz(a,h)Anthracene	53-70-3	mg/Kg	#	#	0.7	0.086		0.035		0.0082	U	0.0082	U	0.038	I	0.0084	U	0.47	I	0.064		0.0087	U	0.0087	U	0.0087	U	0.21	
8270	Fluoranthene	206-44-0	mg/Kg	3200	59000	1200	1.4		0.53		0.0071	I	0.0026	U	0.79		0.014		7.9		1.2		0.014		0.0027	U	0.074		6.4	
8270	Fluorene	86-73-7	mg/Kg	2600	38000	160	0.0038	U	0.019		0.002	U	0.002	U	0.028		0.0021	U	0.48		0.11		0.0021	U	0.0021	U	0.0043	I	0.55	
8270	Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	#	#	6.6	0.37		0.13		0.0081	U	0.0081	U	0.17		0.0083	U	2.1		0.25		0.0086	U	0.0086	U	0.011	I	1.1	
8270	1-Methylnaphthalene	90-12-0	mg/Kg	200	1800	3.1	0.022	I	0.12		0.0037	U	0.018		0.013	I	0.0038	U	0.38		0.086		0.048		0.0039	U	0.018		0.075	
8270	2-Methylnaphthalene	91-57-6	mg/Kg	210	2100	6.5	0.027		0.11		0.0031	U	0.037		0.015	I	0.0032	U	0.35		0.087		0.093		0.0033	I	0.042		0.079	
8270	Naphthalene	91-20-3	mg/Kg	55	300	1.2	0.023	I	0.08		0.0062	U	0.027		0.015	I	0.0063	U	0.41		0.099		0.073		0.0065	I	0.038		0.16	
8270	Phenanthrene	85-01-8	mg/Kg	2200	36000	250	0.37		0.36		0.0031	U	0.0031	U	0.52		0.0054	I	6.8		1.1		0.025		0.0033	U	0.042		4.7	
8270	Pyrene	129-00-0	mg/Kg	2400	46000	880	1.2		0.51		0.0078	U	0.0078	U	0.64		0.011	I	7.2		0.97		0.0097	I	0.0082	U	0.058		4.8	
8270	BaP Equivalents	No CAS #	mg/Kg	0.1	0.7	NE	0.82		0.268		0.009		NC		0.405		0.012		4.761		0.561		0.011		NC		0.039		3.584	
6010	Arsenic	No CAS #	mg/Kg	2.1	12	***	1.9		4.5		0.22	U	0.22	U	1.6		0.23	U	5.9		0.9	I	0.96		0.41	I	0.24	U	1.6	
6010	Cadmium	7440-43-9	mg/kg	82	1700	7.5	NA		NA		NA		NA		NA		NA		NA		NA		0.036	U	0.036	U	0.036	U	0.037	U
6010	Chromium	7440-47-3	mg/kg	210	470	38	26		18		6.5		4.2		47		3.4		87		19		9.3		3.5		3.3		4.8	
HASL 300	Radium 226	No CAS #	pCi/g	NE	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA		0.659 ±0.150		0.0 ±0.109	IU	0.615 ±0.130		0.657 ±0.122	
300	Radium 228	No CAS #	pCi/g	NE	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA		0.0877 ±0.114	U	0.0735 ±0.183	U	0.494 ±0.142		0.164 ±0.126	U
SM4500	Ammonia Nitrogen as N	No CAS #	mg/kg	NE	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA		1970		366		92.4		146	
300	Nitrate-N	14797-55-8	mg/kg	140000	*	***	NA		NA		NA		NA		NA		NA		NA		NA		1400		330		0.67		190	
300	Sulfate	14808-79-8	mg/kg	NE	NE	NE	NA		NA		NA		NA		NA		NA		NA		NA		19000		940		0.43	U	570	

Notes: NE = Not Established
* All data has been previously provided and approved in the SARA IV, dated February 2009. Tables have been reformatted for ease of use, however, data included reflects the contents as provided by the previous consultant
NA = Not Analyzed
U = Analyte was analyzed for, but not detected above the MDL, MDA, or LOD
I = The reported value is between the laboratory method detection minit and the reporting limits
* = contaminant is not a health concern for this exposure scenario
*** = leachability values may be derived using SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event city wastes are present
< = indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.
UI = Gamma Spectroscopy - Uncertain Identification

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Table 3A
Gro Mor: Soil Analytical Results, 2011

Sample Location							SB-22 0.5'-1'		SB-22 2'-3'		SB-23 0.5'-1'		SB-23 2'-3'		SB-25 0.5'-1'		SB-25 2'-3'		SB-26 0.5'-1'		SB-26 2'-3'		SB-27 0.5'-1'		SB-27 2'-3'		SB-28 0.5'-1'		SB-28 2'-3'	
Collection Date							4/19/11		4/19/11		4/18/11		4/18/11		4/18/11		4/18/11		4/19/11		4/19/11		4/19/11		4/19/11		4/19/11		4/19/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8081	Aldrin	309-00-2	mg/Kg	0.06	0.3	0.2	0.0025	U	0.0025	U	0.0024	U	0.0025	U	0.0026	U	0.0025	U	0.0025	U	0.0024	U	0.0024	U	0.0024	U	0.0023	U	0.0024	U
8081	alpha-BHC	319-84-6	mg/Kg	0.1	0.6	0.0003	0.0033	U	0.0033	U	0.0031	U	0.0033	U	0.0034	U	0.0033	U	0.0033	U	0.0032	U	0.0031	U	0.0032	U	0.003	U	0.0032	U
8081	beta-BHC	319-85-7	mg/Kg	0.5	2.4	0.001	0.002	U	0.002	U	0.0019	U	0.0021	U	0.0021	U	0.002	U	0.002	U	0.002	U	0.0019	U	0.002	U	0.0019	U	0.002	U
8081	delta-BHC	319-86-8	mg/Kg	24	490	0.2	0.0025	U	0.0025	U	0.0024	U	0.0025	U	0.0026	U	0.0025	U	0.0025	U	0.0024	U	0.0024	U	0.0024	U	0.0023	U	0.0024	U
8081	alpha-Chlordane	5103-71-9	mg/Kg	NE	NE	NE	0.027		0.0026	U	0.071		0.46		0.0027	U	0.0026	U	0.0026	U	0.0025	U	0.0025	U	0.0025	U	0.0024	U	0.0025	U
8081	gamma-Chlordane	5103-74-2	mg/Kg	NE	NE	NE	0.017		0.0019	U	0.041		0.033		0.002	U	0.0019	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U
8081	Chlordane	57-74-9 or 12789-03-6	mg/Kg	2.8	14	9.6	0.28		0.02	U	0.64		0.39		0.021	U	0.02	U	0.02	U	0.02	U	0.019	U	0.02	U	0.019	U	0.02	U
8081	4,4'-DDD	72-54-8	mg/Kg	4.2	22	5.8	0.002	U	0.002	U	0.0019	U	0.0021	U	0.0021	U	0.002	U	0.002	U	0.002	U	0.0019	U	0.002	U	0.0019	U	0.002	U
8081	4,4'-DDE	72-55-9	mg/Kg	2.9	15	18	0.01		0.0019	U	0.036		0.002	U	0.002	U	0.0019	U	0.0019	U	0.0019	U	0.035		0.0019	U	0.0038	I	0.0018	U
8081	4,4'-DDT	50-29-3	mg/Kg	2.9	15	11	0.0055		0.00073	U	0.046		0.00074	U	0.00074	U	0.00073	U	0.00073	U	0.0007	U	0.042		0.003		0.0074		0.0007	U
8081	Dieldrin	60-57-1	mg/Kg	0.06	0.3	0.002	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0017	U	0.0017	U
8081	Endosulfan I (alpha)	959-98-8	mg/Kg	NE	NE	NE	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0017	U	0.0017	U
8081	Endosulfan II (beta)	33213-65-9	mg/Kg	NE	NE	NE	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0017	U	0.0017	U
8081	Endosulfan sulfate	1031-07-8	mg/Kg	NE	NE	NE	0.0013	U	0.0014	U	0.0013	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0013	U	0.0013	U	0.0013	U	0.0012	U	0.0013	U
8081	Endrin	72-20-8	mg/Kg	25	510	1	0.0019	U	0.0019	U	0.0018	U	0.002	U	0.002	U	0.0019	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U
8081	Endrin Aldehyde	7421-93-4	mg/Kg	NE	NE	NE	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U	0.0018	U	0.0017	U	0.0018	U	0.0017	U	0.0017	U
8081	Endrin Ketone	53494-70-5	mg/Kg	NE	NE	NE	0.0015	U	0.0015	U	0.0014	U	0.0015	U	0.0015	U	0.0015	U	0.0015	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U	0.0014	U
8081	Heptachlor	76-44-8	mg/Kg	0.2	1	23	0.0021	U	0.0022	U	0.002	U	0.0022	U	0.0022	U	0.0022	U	0.0022	U	0.0021	U	0.002	U	0.0021	U	0.002	U	0.0021	U
8081	Heptachlor epoxide	1024-57-3	mg/Kg	0.1	0.5	0.6	0.0019	U	0.0019	U	0.0018	U	0.002	U	0.002	U	0.0019	U	0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0018	U	0.0018	U
8081	gamma-BHC (Lindane)	58-89-9	mg/Kg	0.7	2.5	0.009	0.00067	U	0.00068	U	0.00065	U	0.00069	U	0.0007	U	0.00068	U	0.00068	U	0.00066	U	0.00065	U	0.00066	U	0.00062	U	0.00065	U
8081	Methoxychlor	72-43-5	mg/Kg	420	8800	160	0.0021	U	0.0022	U	0.002	U	0.0022	U	0.0022	U	0.0022	U	0.0022	U	0.0021	U	0.002	U	0.0021	U	0.002	U	0.0021	U
8081	Mirex	2385-85-5	mg/Kg	NE	NE	NE	0.0072	U	0.0073	U	0.0069	U	0.0074	U	0.0074	U	0.0073	U	0.0073	U	0.007	U	0.0069	U	0.007	U	0.0067	U	0.007	U
8081	Toxaphene	8001-35-2	mg/Kg	0.9	4.5	31	0.033	U	0.033	U	0.031	U	0.033	U	0.034	U	0.033	U	0.033	U	0.032	U	0.031	U	0.032	U	0.03	U	0.032	U
8270	Acenaphthene	83-32-9	mg/Kg	2400	20000	2.1	0.0033	I	0.0024	U	0.059		0.0024	U	0.0024	U	0.0024	U	0.0024	U	0.0023	U	0.012	U	0.0023	U	0.0022	U	0.0023	U
8270	Acenaphthylene	208-96-8	mg/Kg	1800	20000	27	0.0025	U	0.0025	U	0.0024	U	0.0025	U	0.0026	U	0.0025	U	0.0025	U	0.0024	U	0.17		0.049		0.0023	U	0.0024	U
8270	Anthracene	120-12-7	mg/Kg	21000	300000	2600	0.024		0.0019	U	0.13		0.002	I	0.0031	I	0.0019	U	0.07		0.0019	U	0.21		0.065		0.037		0.0018	U
8270	Benz(a)Anthracene	56-55-3	mg/Kg	#	#	0.8	0.19		0.0017	U	0.42		0.0097		0.018		0.0028	I	0.41		0.0061	I	0.69		0.2		0.049		0.0021	I
8270	Benzo(a)pyrene	50-32-8	mg/Kg	0.1	0.7	8	0.097		0.0023	U	0.29		0.0052	I	0.014		0.0023	U	0.23		0.0055	I	0.53		0.13		0.034		0.0022	U
8270	Benzo(b)fluoranthene	205-99-2	mg/Kg	#	#	2.4	0.19		0.0031	U	0.53		0.022		0.037		0.0061	I	0.47		0.017		1.3		0.36		0.13		0.0063	I
8270	Benzo(g,h,i)perylene	191-24-2	mg/Kg	2500	52000	32000	0.073		0.0076	U	0.17		0.0079	U	0.012	I	0.0078	U	0.26		0.0076	U	0.5		0.12		0.04		0.0075	U
8270	Benzo(k)fluoranthene	207-08-9	mg/Kg	#	#	24	0.06		0.0022	U	0.12		0.0039	I	0.0078	I	0.0022	U	0.12		0.0031	I	0.35		0.095		0.033		0.0021	U
8270	Chrysene	218-01-9	mg/Kg	#	#	77	0.13		0.0014	U	0.32		0.0084		0.022		0.0017	I	0.37		0.0063		0.57		0.21		0.061		0.0023	I
8270	Dibenz(a,h)Anthracene	53-70-3	mg/Kg	#	#	0.7	0.022	I	0.0083	U	0.048		0.0084	U	0.0085	U	0.0083	U	0.067		0.008	U	0.19		0.051		0.0076	U	0.0079	U
8270	Fluoranthene	206-44-0	mg/Kg	3200	59000	1200	0.26		0.0026	U	0.56		0.019		0.031		0.0026	U	0.69		0.0077	I	1		0.26		0.07		0.0025	U
8270	Fluorene	86-73-7	mg/Kg	2600	33000	160	0.002	U	0.002	U	0.039		0.0021	U	0.0021	U	0.002	U	0.002	U	0.002	U	0.0095	U	0.002	U	0.0019	U	0.002	U
8270	Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	#	#	6.6	0.074		0.0082	U	0.18		0.0083	U	0.0085	I	0.0082	U	0.24		0.0079	U	0.43		0.12		0.039		0.0078	U
8270	1-Methylnaphthalene	90-12-0	mg/Kg	200	1800	3.1	0.0059	I	0.0038	U	0.047		0.026		0.036		0.0038	U	0.36		0.0036	U	0.088		0.022		0.0043	I	0.0036	U
8270	2-Methylnaphthalene	91-57-6	mg/Kg	210	2100	8.5	0.0093	I	0.0032	U	0.068		0.046		0.04		0.0032	U	0.42		0.0031	U	0.09		0.025		0.0044	I	0.003	U
8270	Naphthalene	91-20-3	mg/Kg	55	300	1.2	0.0088	I	0.0062	U	0.064		0.039		0.024	I	0.0062	U	0.33		0.006	U	0.059	I	0.019	I	0.0057	U	0.006	U
8270	Phenanthrene	85-01-8	mg/Kg	2200	36000	250	0.07		0.0032	U	0.48		0.021		0.031		0.0032	U	0.49		0.0031	U	0.36		0.069		0.02		0.003	U
8270	Pyrene	129-00-0	mg/Kg	2400	45000	880	0.2		0.0078	U	0.45		0.012	I	0.024	I	0.0078	U	0.57		0.0076	U	0.88		0.22		0.064		0.0075	U
8270	BaP Equivalents	No CAS #	mg/Kg	0.1	0.7	NE	0.195		NC		0.453		0.013		0.025		0.007		0.411		0.012		0.956		0.25		0.08		0.006	
6010	Arsenic	No CAS #	mg/Kg	2.1	12	***	0.74	I	0.64	I	1.5		0.23	U	2.4		0.23	U	110		22		9.9		3.6		1.2		1.1	
6010	Cadmium	7440-43-9	mg/kg	82	1700	7.5	NA		NA		0.84		0.082	I	0.2		0.034	U	NA		NA		NA		NA		NA		NA	
6010	Chromium	7440-47-3	mg/kg	210	470	38	7.5		2.1		9.8		5.7		21		4.1		9		3.8		11		3.2		6		4.3	
HASL 300	Radium 226	No CAS #	pCi/g	NE	NE	NE	NA		NA		1.16 ±0.170		0.505 ±0.0984		0.798 ±0.128		0.365 ±0.126		NA		NA		NA		NA		NA		NA	
300	Radium 228	No CAS #	pCi/g	NE	NE	NE	NA		NA		0.167 ±0.102		0.250 ±0.131		0.179 ±0.148		0.00 ±0.137	UI	NA		NA		NA		NA		NA		NA	
SM4500	Ammonia Nitrogen as N	No CAS #	mg/kg	NE	NE	NE	NA		NA		785		2060		0.87		1.6		NA		NA		NA		NA		NA		NA	
300	Nitrate-N	14797-55-8	mg/kg	140000	*	***	NA		NA		1100		750		81		34		NA		NA		NA		NA		NA		NA	
300	Sulfate	14808-79-8	mg/kg	NE	NE	NE	NA		NA		4600		1200		290		240		NA		NA		NA		NA		NA		NA	

Notes: NE = Not Established
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NA = Not Analyzed
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< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.
UI = Gamma Spectroscopy - Uncertain Identification

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Table 3A
Gro Mor: Soil Analytical Results, 2011

Sample Location							SB-29 0.5'-1'		SB-29 2'-3'		SB-30 0.5'-1'		SB-30 2'-3'		SB-31 0.5'-1'		SB-32 2'-3'	
Collection Date							4/19/11		4/19/11		4/19/11		4/19/11		4/18/11		4/18/11	
Method	Parameter	CAS No	Units	DE Residential	DE-Comm./ Indust.	Leach -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8081	Aldrin	309-00-2	mg/Kg	0.06	0.3	0.2	0.0024	U	0.0025	U	0.0024	U	0.0024	U	NA		NA	
8081	alpha-BHC	319-84-6	mg/Kg	0.1	0.5	0.0003	0.0032	U	0.0033	U	0.0031	U	0.0032	U	NA		NA	
8081	beta-BHC	319-85-7	mg/Kg	0.5	2.4	0.001	0.002	U	0.002	U	0.0019	U	0.002	U	NA		NA	
8081	delta-BHC	319-86-8	mg/Kg	24	490	0.2	0.0024	U	0.0025	U	0.0024	U	0.0024	U	NA		NA	
8081	alpha-Chlordane	5103-71-9	mg/Kg	NE	NE	NE	0.0025	U	0.0026	U	0.0025	U	0.0025	U	NA		NA	
8081	gamma-Chlordane	5103-74-2	mg/Kg	NE	NE	NE	0.0018	U	0.0019	U	0.0018	U	0.0019	U	NA		NA	
8081	Chlordane	57-74-9 or 12789-03-6	mg/Kg	2.8	14	9.6	0.02	U	0.02	U	0.019	U	0.02	U	NA		NA	
8081	4,4'-DDD	72-54-8	mg/Kg	4.2	22	5.8	0.002	U	0.002	U	0.0019	U	0.002	U	NA		NA	
8081	4,4'-DDE	72-55-9	mg/Kg	2.9	15	18	0.0018	U	0.0019	U	0.0018	U	0.0019	U	NA		NA	
8081	4,4'-DDT	50-29-3	mg/Kg	2.9	15	11	0.0007	U	0.00072	U	0.00069	U	0.0007	U	NA		NA	
8081	Dieldrin	60-57-1	mg/Kg	0.06	0.3	0.002	0.0017	U	0.0018	U	0.0017	U	0.0018	U	NA		NA	
8081	Endosulfan I (alpha)	959-98-8	mg/Kg	NE	NE	NE	0.0017	U	0.0018	U	0.0017	U	0.0018	U	NA		NA	
8081	Endosulfan II (beta)	33213-65-9	mg/Kg	NE	NE	NE	0.0017	U	0.0018	U	0.0017	U	0.0018	U	NA		NA	
8081	Endosulfan sulfate	1031-07-8	mg/Kg	NE	NE	NE	0.0013	U	0.0013	U	0.0013	U	0.0013	U	NA		NA	
8081	Endrin	72-20-8	mg/Kg	25	510	1	0.0018	U	0.0019	U	0.0018	U	0.0019	U	NA		NA	
8081	Endrin Aldehyde	7421-93-4	mg/Kg	NE	NE	NE	0.0017	U	0.0018	U	0.0017	U	0.0018	U	NA		NA	
8081	Endrin Ketone	53494-70-5	mg/Kg	NE	NE	NE	0.0014	U	0.0015	U	0.0014	U	0.0014	U	NA		NA	
8081	Heptachlor	76-44-8	mg/Kg	0.2	1	23	0.0021	U	0.0021	U	0.002	U	0.0021	U	NA		NA	
8081	Heptachlor epoxide	1024-57-3	mg/Kg	0.1	0.5	0.6	0.0018	U	0.0019	U	0.0018	U	0.0019	U	NA		NA	
8081	gamma-BHC (Lindane)	58-89-9	mg/Kg	0.7	2.5	0.009	0.00065	U	0.00067	U	0.00065	U	0.00066	U	NA		NA	
8081	Methoxychlor	72-43-5	mg/Kg	420	8800	180	0.0021	U	0.0021	U	0.002	U	0.0021	U	NA		NA	
8081	Mirex	2385-85-5	mg/kg	NE	NE	NE	0.007	U	0.0072	U	0.0069	U	0.007	U	NA		NA	
8081	Toxaphene	8001-35-2	mg/Kg	0.9	4.5	31	0.032	U	0.033	U	0.031	U	0.032	U	NA		NA	
8270	Acenaphthene	83-32-9	mg/Kg	2400	20000	2.1	0.0023	U	0.0024	U	0.0023	U	0.0023	U	NA		NA	
8270	Acenaphthylene	208-96-8	mg/Kg	1800	20000	27	0.0024	U	0.0025	U	0.0024	U	0.0052	I	NA		NA	
8270	Anthracene	120-12-7	mg/Kg	21000	300000	2500	0.003	I	0.0019	U	0.0066	I	0.0075		NA		NA	
8270	Benz(a)Anthracene	56-55-3	mg/Kg	#	#	0.8	0.021		0.0017	U	0.047		0.029		NA		NA	
8270	Benzo(a)pyrene	50-32-8	mg/Kg	0.1	0.7	8	0.016		0.0022	U	0.038		0.025		NA		NA	
8270	Benzo(b)fluoranthene	205-99-2	mg/Kg	#	#	2.4	0.036		0.003	U	0.076		0.035		NA		NA	
8270	Benzo(g,h,i)perylene	191-24-2	mg/Kg	2500	52000	32000	0.011	I	0.0076	U	0.024	I	0.024	I	NA		NA	
8270	Benzo(k)fluoranthene	207-08-9	mg/Kg	#	#	24	0.0088		0.0021	U	0.014		0.016		NA		NA	
8270	Chrysene	218-01-9	mg/Kg	#	#	77	0.017		0.0013	U	0.04		0.037		NA		NA	
8270	Dibenz(a,h)Anthracene	53-70-3	mg/Kg	#	#	0.7	0.0079	U	0.0082	U	0.006	I	0.008	U	NA		NA	
8270	Fluoranthene	206-44-0	mg/Kg	3200	59000	1200	0.026		0.0026	U	0.064		0.053		NA		NA	
8270	Fluorene	86-73-7	mg/Kg	2600	33000	160	0.002	U	0.002	U	0.0019	U	0.002	U	NA		NA	
8270	Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	#	#	6.6	0.011	I	0.0081	U	0.025	I	0.019	I	NA		NA	
8270	1-Methylnaphthalene	90-12-0	mg/Kg	200	1600	3.1	0.008	I	0.0037	U	0.017		0.0066	I	NA		NA	
8270	2-Methylnaphthalene	91-57-6	mg/Kg	210	2100	8.5	0.009	I	0.0031	U	0.015		0.0074	I	NA		NA	
8270	Naphthalene	91-20-3	mg/Kg	55	300	1.2	0.006	U	0.0062	U	0.0082	I	0.0064	I	NA		NA	
8270	Phenanthrene	85-01-8	mg/Kg	2200	36000	250	0.016		0.0031	U	0.047		0.037		NA		NA	
8270	Pyrene	129-00-0	mg/Kg	2400	45000	660	0.022	I	0.0078	U	0.06		0.049		NA		NA	
8270	BaP Equivalents	No CAS #	mg/Kg	0.1	0.7	NE	0.027		NC		0.061		0.038		NA		NA	
6010	Arsenic	No CAS #	mg/Kg	2.1	12	***	0.63	I	0.22	U	0.74	I	0.22	U	NA		NA	
6010	Cadmium	7440-43-9	mg/kg	82	1700	7.5	NA		NA		NA		NA		NA		NA	
6010	Chromium	7440-47-3	mg/kg	210	470	38	4.3		1.8		6.6		6.5		NA		NA	
HASL 300	Radium 226	No CAS #	pCi/g	NE	NE	NE	NA		NA		NA		NA		2.16 ±0.357		1.3 ±0.216	
300	Radium 228	No CAS #	pCi/g	NE	NE	NE	NA		NA		NA		NA		0.243 ±0.199	U	0.282 ±0.192	U
SM4500	Ammonia Nitrogen as N	No CAS #	mg/kg	NE	NE	NE	NA		NA		NA		NA		0.12	I	22.2	
300	Nitrate-N	14797-55-8	mg/kg	140000	*	***	NA		NA		NA		NA		120		120	
300	Sulfate	14808-79-8	mg/kg	NE	NE	NE	NA		NA		NA		NA		2600		470	

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Attachment D

BROWNFIELDS SITE ASSESSMENT REPORT
for the
FORMER MCGINNES LUMBER SITE

Conducted under EPA Brownfields Cooperative Agreement #BF-95441809-0

Prepared for:

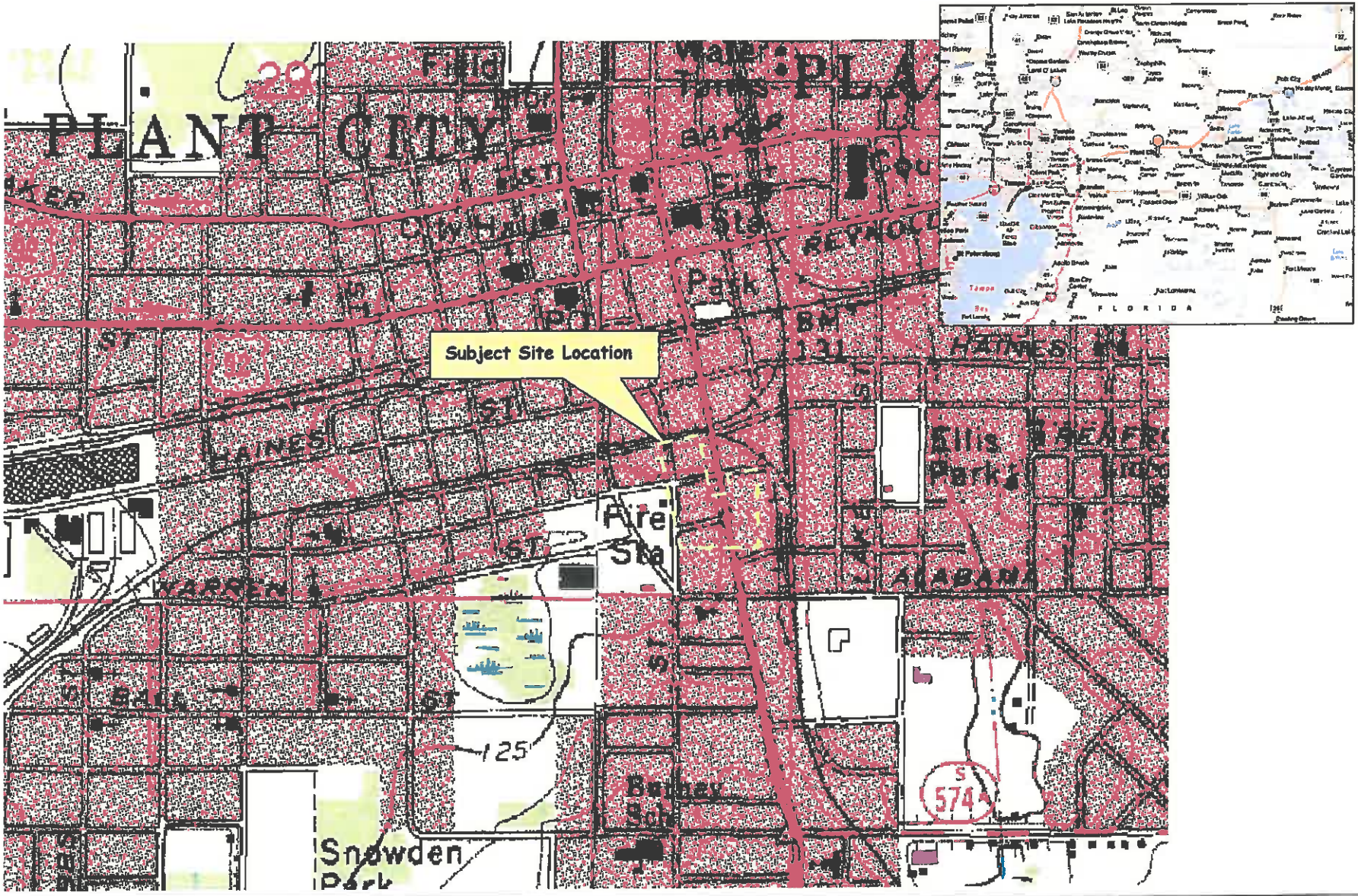
City of Plant City
Jim McDaniel
302 West Reynolds Street
Plant City, Florida 33664

Prepared by:

Cardno TBE
380 Park Place Boulevard, Suite 300
Clearwater, Florida 33759

August 2011

Cardno TBE Project No. 00194-010-09



Cardno TBE

511 S Collins Street
Former Stock Lumber / McGinnis Lumber Site
Parcel ID No. P-29-28-22-5DF-000015-00001.0
Plant City, Hillsborough County, Florida

Figure 1
USGS Site Location Map

Above – more recent/lower quality photo

Left photo -
Approximate Scale (feet):

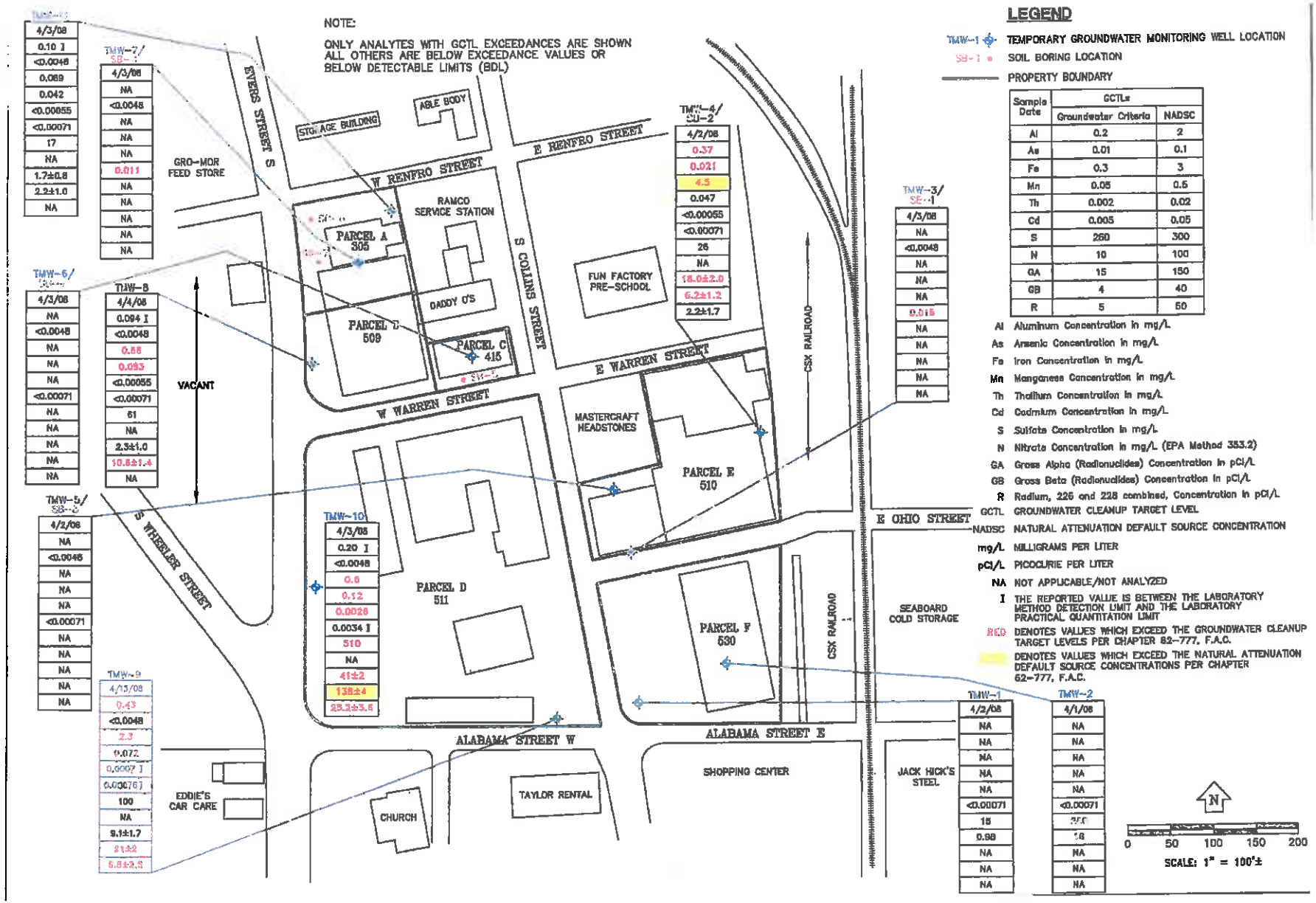
0 200

Legend: Yellow line = approximate site boundary less roadways and rights-of-way (for reference purposes only – not a surveyed boundary)

Cardno TBE

511 S Collins Street
Former Stock Lumber / McGinnis Lumber Site
Parcel ID No. P-29-28-22-5DF-000015-00001.0
Plant City, Hillsborough County, Florida

Figure 2
Site Boundary Map



Sample Date	GCTLs	
	Groundwater Criteria	NADSC
Al	0.2	2
As	0.01	0.1
Fe	0.3	3
Mn	0.05	0.5
Th	0.002	0.02
Cd	0.005	0.05
S	250	300
N	10	100
GA	15	150
GB	4	40
R	5	50

FIGURE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

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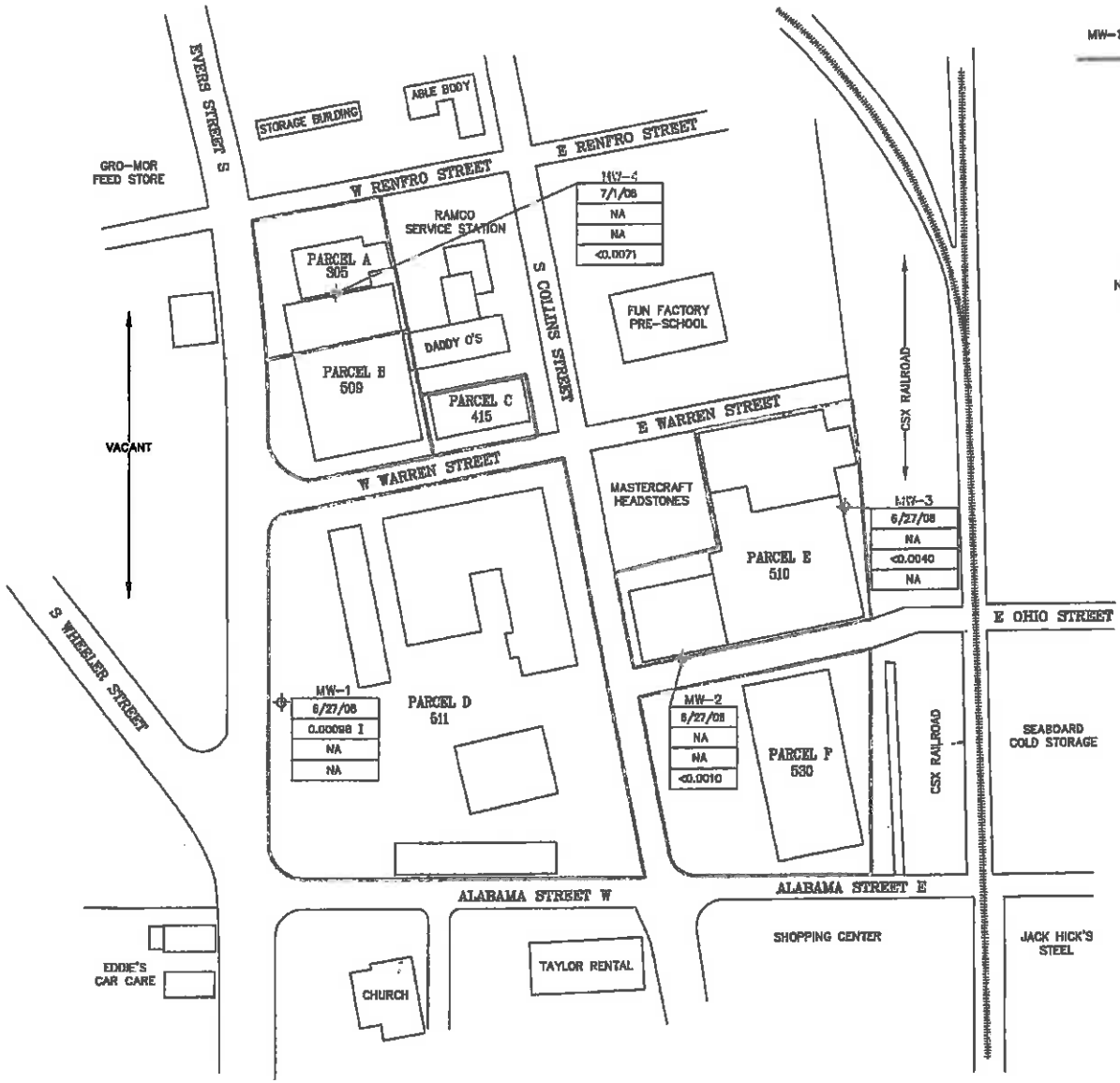
HISTORICAL GROUNDWATER RESULTS (2008)

FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL

PROVIDED BY HSA

FIGURE 3A



LEGEND

MW-1 GROUNDWATER MONITORING WELL LOCATION

PROPERTY BOUNDARY

Sample Date	GCTLs	
	Groundwater Criteria	NADSC
Th	0.002	0.02
As	0.01	0.1
Cd	0.005	0.05

Th Thallium Concentration in mg/L
As Arsenic Concentration in mg/L
Cd Cadmium Concentration in mg/L
GCTL GROUNDWATER CLEANUP TARGET LEVEL
NADSC NATURAL ATTENUATION DEFAULT SOURCE CONCENTRATION
mg/L MILLIGRAMS PER LITER
NA NOT APPLICABLE/NOT ANALYZED
I THE REPORTED VALUE IS BETWEEN THE LABORATORY METHOD DETECTION LIMIT AND THE LABORATORY PRACTICAL QUANTITATION LIMIT

N

0 50 100 150 200

SCALE: 1" = 100'±

FIGURE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

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HISTORICAL GROUNDWATER RESULTS (2008)

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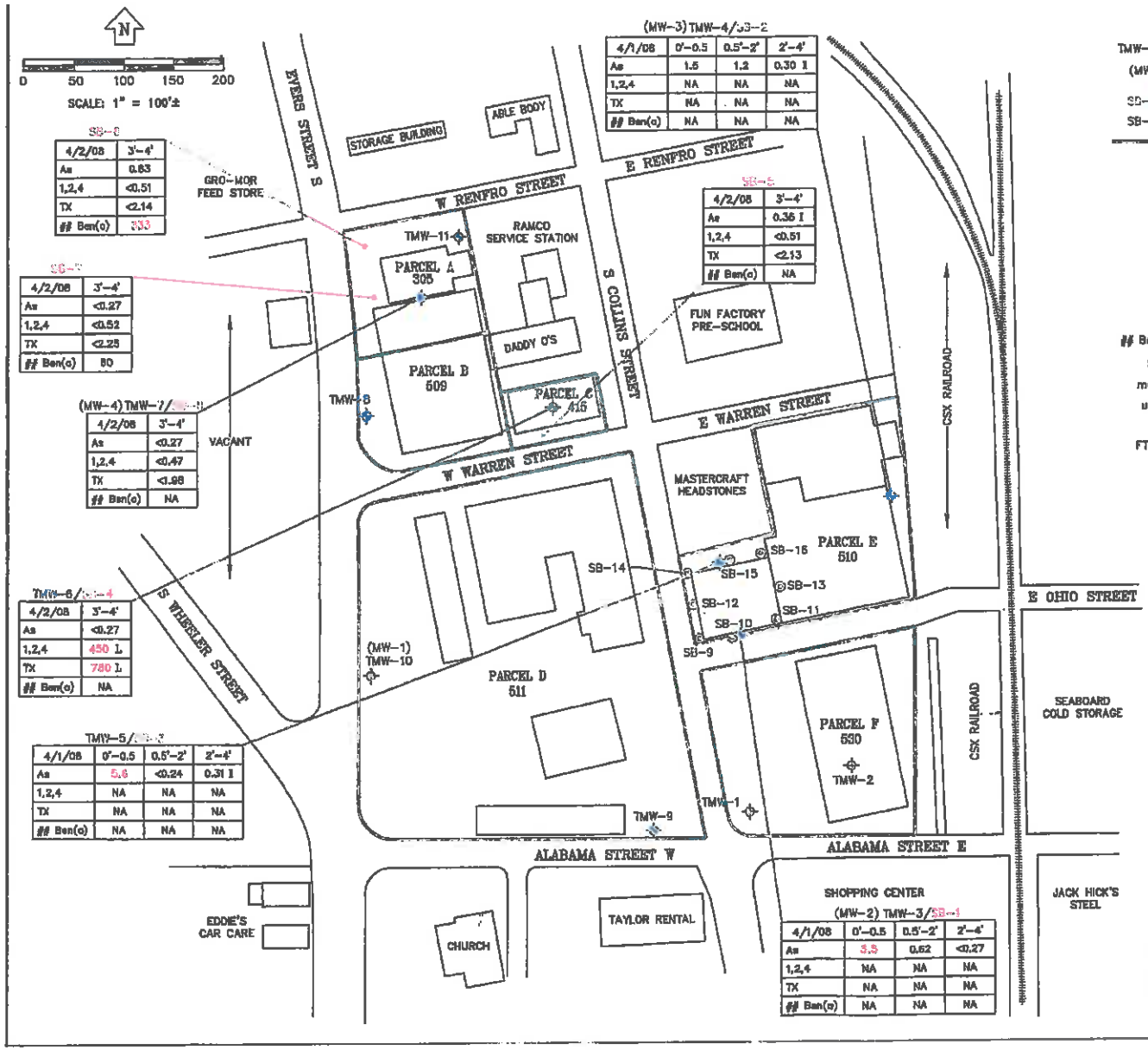
PROVIDED BY HSA

FIGURE 3B



4/2/08	3'-4'
As	0.83
1,2,4	<0.51
TX	<2.14
## Ben(a)	133

4/2/08	3'-4'
As	<0.27
1,2,4	<0.52
TX	<2.25
## Ben(a)	80

(MW-4) TMW-7/SB-8

4/2/08	3'-4'
As	<0.27
1,2,4	<0.47
TX	<1.98
## Ben(a)	NA

TMW-6/SB-4

4/2/08	3'-4'
As	<0.27
1,2,4	450 L
TX	780 L
## Ben(a)	NA

TMW-5/SB-3

4/1/08	0'-0.5	0.5'-2'	2'-4'
As	5.6	<0.24	0.31 I
1,2,4	NA	NA	NA
TX	NA	NA	NA
## Ben(a)	NA	NA	NA

(MW-3) TMW-4/SB-2

4/1/08	0'-0.5	0.5'-2'	2'-4'
As	1.5	1.2	0.30 I
1,2,4	NA	NA	NA
TX	NA	NA	NA
## Ben(a)	NA	NA	NA

SB-5

4/2/08	3'-4'
As	0.36 I
1,2,4	<0.51
TX	<2.13
## Ben(a)	NA

(MW-2) TMW-3/SB-1

4/1/08	0'-0.5	0.5'-2'	2'-4'
As	3.3	0.62	<0.27
1,2,4	NA	NA	NA
TX	NA	NA	NA
## Ben(a)	NA	NA	NA

LEGEND

TMW-1 — TEMPORARY GROUNDWATER MONITORING WELL LOCATION

(MW-1) — PERMANENT GROUNDWATER MONITORING WELL LOCATION (NOT YET INSTALLED)

SB-1 — SOIL BORING LOCATION

SB-9 — FUTURE SOIL BORING LOCATION

PROPERTY BOUNDARY

SAMPLE DATE	FT. BLS
As	2.5
1,2,4	NA
TX	780 L
## Ben(a)	34

As — Arsenic Concentration in mg/kg

1,2,4 — 1,2,4-Trimethylbenzene Concentration in ug/kg

TX — Total Xylenes Concentration in ug/kg

Ben(a) — ## Benzo(a)pyrene equivalents Concentration in ug/kg

SCTL — SOIL CLEANUP TARGET LEVEL

mg/kg — MILLIGRAMS PER KILOGRAM

ug/kg — MICROGRAMS PER KILOGRAM

NA — NOT APPLICABLE

FT. BLS — FEET BELOW LAND SURFACE

I — THE REPORTED VALUE IS BETWEEN THE LABORATORY METHOD DETECTION LIMIT AND THE LABORATORY PRACTICAL QUANTITATION LIMIT

L — OFF SCALE HIGH. ACTUAL VALUE IS KNOWN TO BE GREATER THAN THE VALUE GIVEN. TO BE USED WHEN CONCENTRATION OF THE ANALYTE IS ABOVE THE ACCEPTABLE LIMIT FOR QUANTITATION AND THE CALIBRATION CURVE IS KNOWN TO EXHIBIT A NEGATIVE DEFLECTION.

RED — DENOTES VALUES WHICH EXCEED THE SOIL CLEANUP TARGET LEVELS PER CHAPTER 62-777, F.A.C.

*** — LEACHABILITY VALUES MAY BE DERIVED USING THE SPLP TEST TO CALCULATE SITE SPECIFIC SCTL's OR MAY BE DETERMINED USING TCLP IF ONLY WASTES ARE PRESENT

— TOXIC EQUIVALENT FACTORS WERE USED TO CONVERT INDIVIDUAL CARCINOGENIC PAHs INTO A SINGLE CONCENTRATION OF THE INDEX PAH Benzo(a)pyrene

Analyte	SCTLs		
	Direct Exposure		Leachability
	Residential	Industrial	to Groundwater
As	2.1	12	***
1,2,4	18,000	95,000	300
TX	130,000	700,000	200
## Ben(a)	100	700	NA

NOTE:

ONLY ANALYTES WITH SCTL EXCEEDANCES ARE SHOWN ALL OTHERS ARE BELOW EXCEEDANCE VALUES OR BELOW DETECTABLE LIMITS (BDL)

FIGURE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

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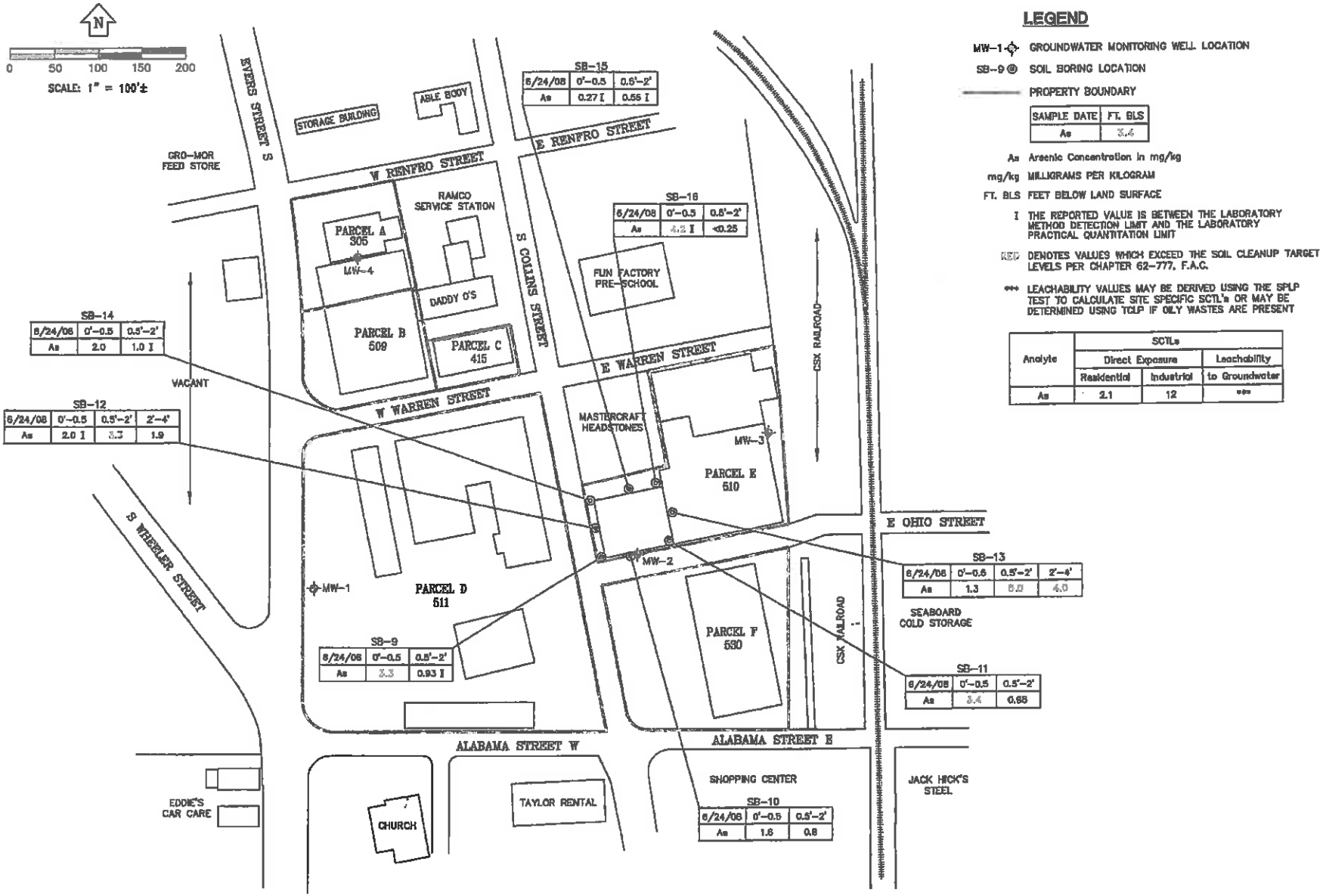
HISTORICAL SOIL RESULTS (2008)

FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL

PROVIDED BY HSA

FIGURE 4A



LEGEND

MW-1 GROUNDWATER MONITORING WELL LOCATION

SB-9 SOIL BORING LOCATION

PROPERTY BOUNDARY

SAMPLE DATE	FT. BLS
As	3.4

As Arsenic Concentration in mg/kg

mg/kg MILLIGRAMS PER KILOGRAM

FT. BLS FEET BELOW LAND SURFACE

I THE REPORTED VALUE IS BETWEEN THE LABORATORY METHOD DETECTION LIMIT AND THE LABORATORY PRACTICAL QUANTITATION LIMIT

RED DENOTES VALUES WHICH EXCEED THE SOIL CLEANUP TARGET LEVELS PER CHAPTER 62-777, F.A.C.

*** LEACHABILITY VALUES MAY BE DERIVED USING THE SPLP TEST TO CALCULATE SITE SPECIFIC SCTL's OR MAY BE DETERMINED USING TCLP IF OILY WASTES ARE PRESENT

Analyte	SCTLs		
	Direct Exposure		Leachability
	Residential	Industrial	to Groundwater
As	2.1	12	***

FIGURE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

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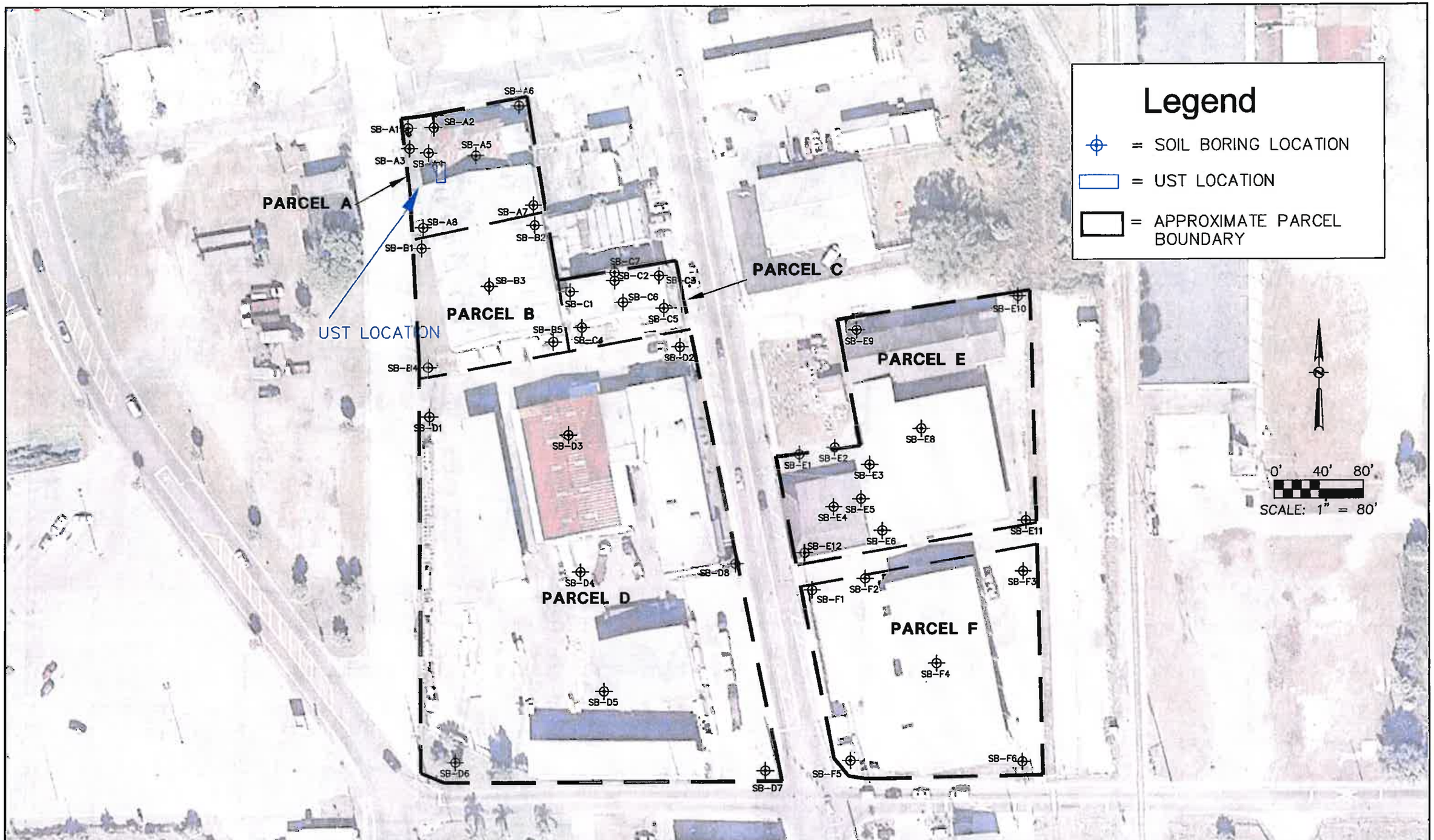
HISTORICAL SOIL RESULTS (2008)

FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL.

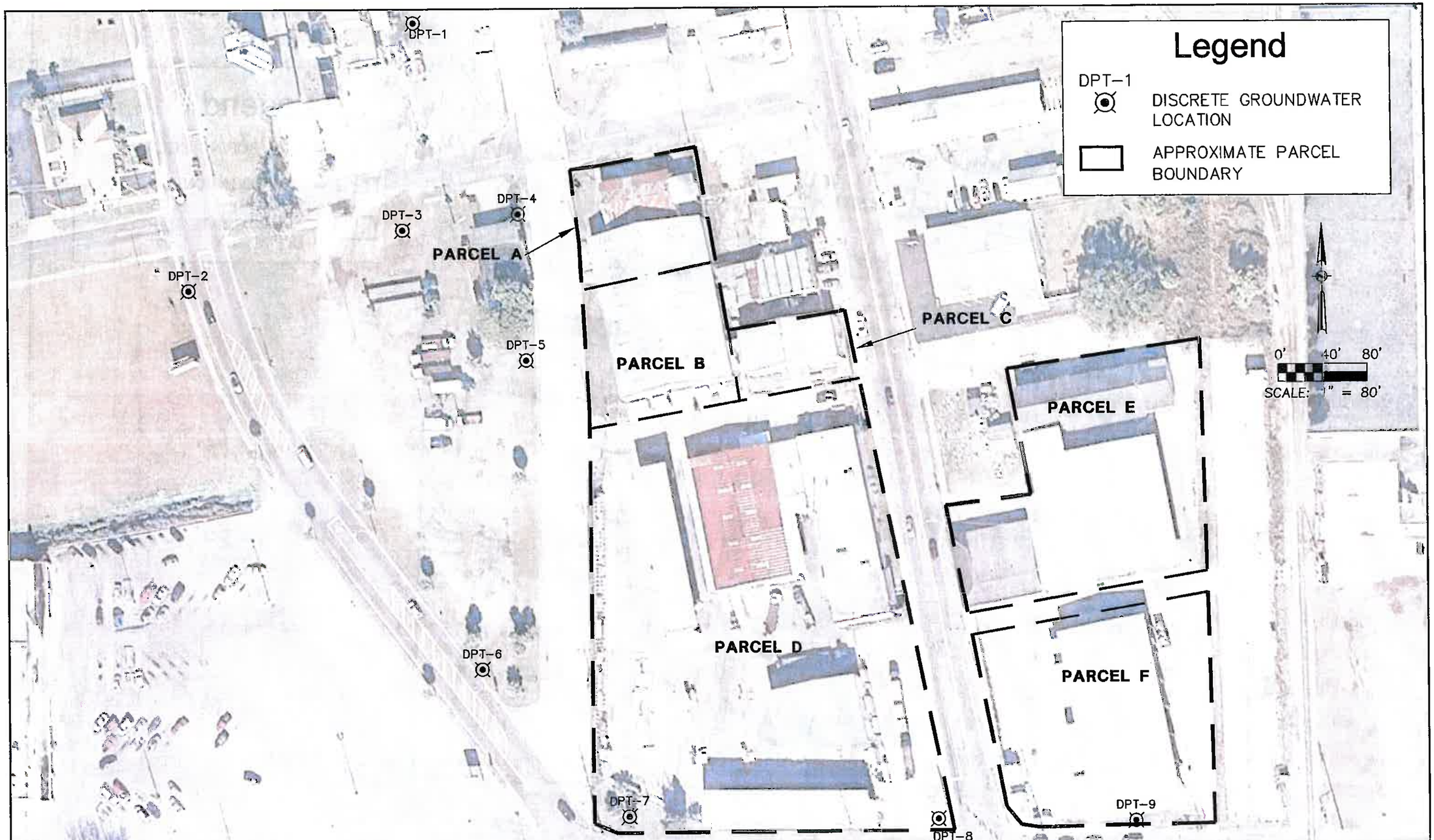
PROVIDED BY HSA

FIGURE 4B



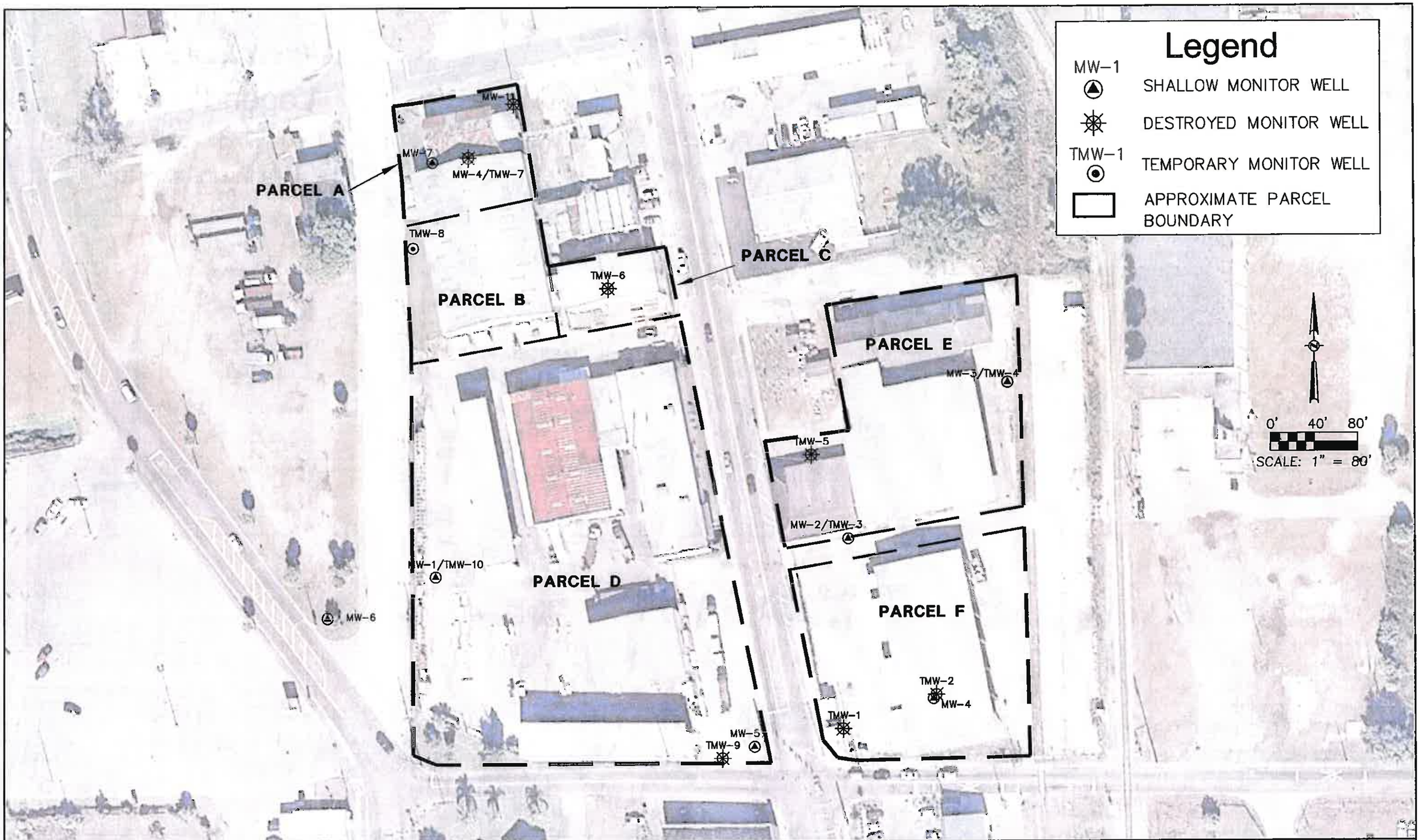
	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE		FIGURE 5 SOIL BORING LOCATIONS	PROJECT NO: DATE: 9/19/2010 SHEET NO:

FILE: J:\00194\00194010.09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 08/05/11-3:26p PLOTTED: Fri, 08/05/11-4:28p BY: jam



	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE	FIGURE 6 DISCRETE GROUNDWATER SAMPLE LOCATIONS	PROJECT NO: DATE: 9/19/2010 SHEET NO:

FILE: J:\C0194\00194010.00\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/22/11-3:28p PLOTTED: Fri, 09/23/11-4:28p BY: jem



	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE		FIGURE 7 MONITOR WELL LOCATIONS	PROJECT NO: DATE: 9/19/2010 SHEET NO:

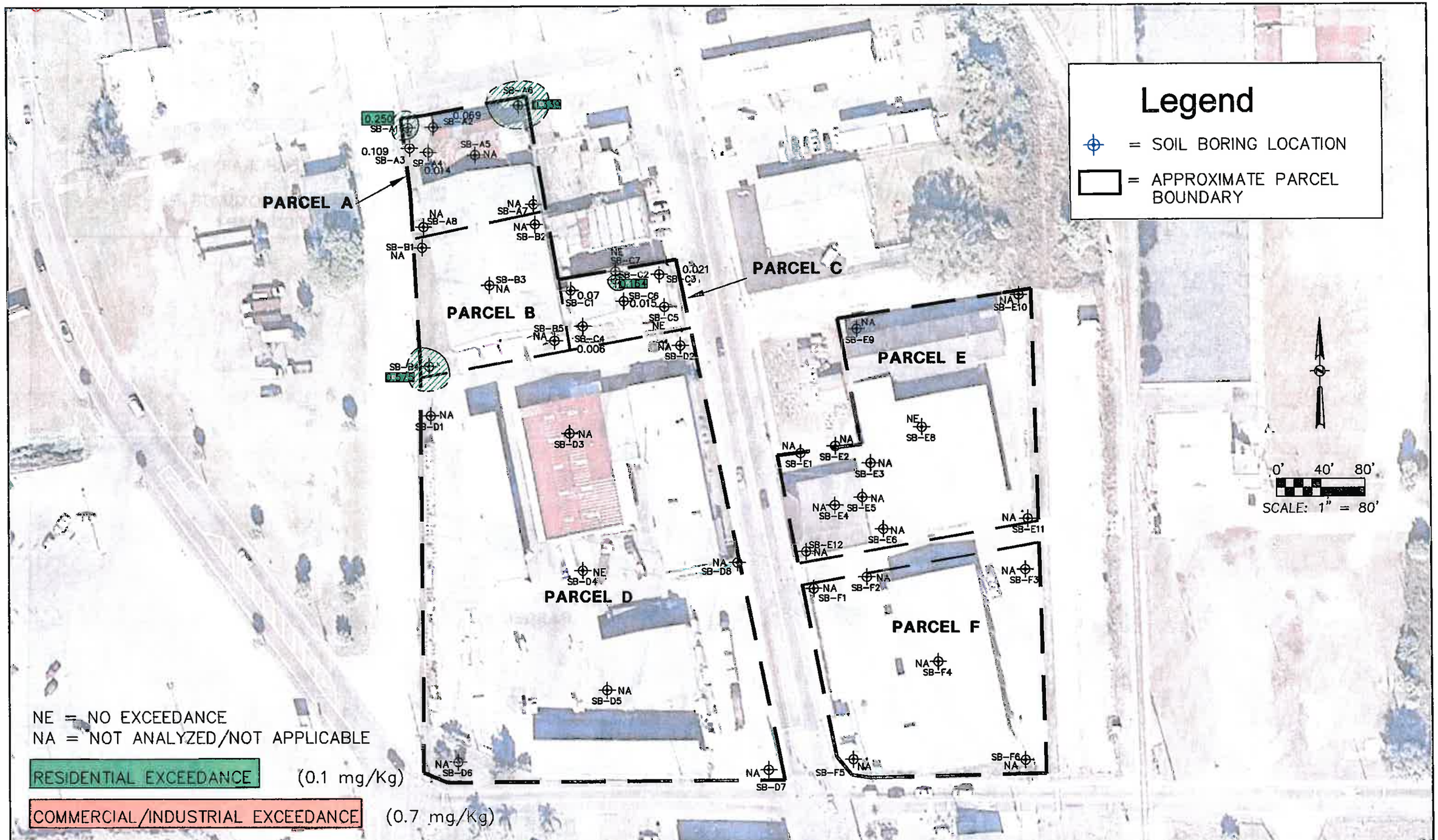


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FIGURE 8A
BENZO(A)PYRENE
SOIL RESULTS 0.5'-1' BLS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\0019-0001\9-4010.00\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/05/11-9:28p PLOTTED: Fri, 09/09/11-4:30p BY: jem

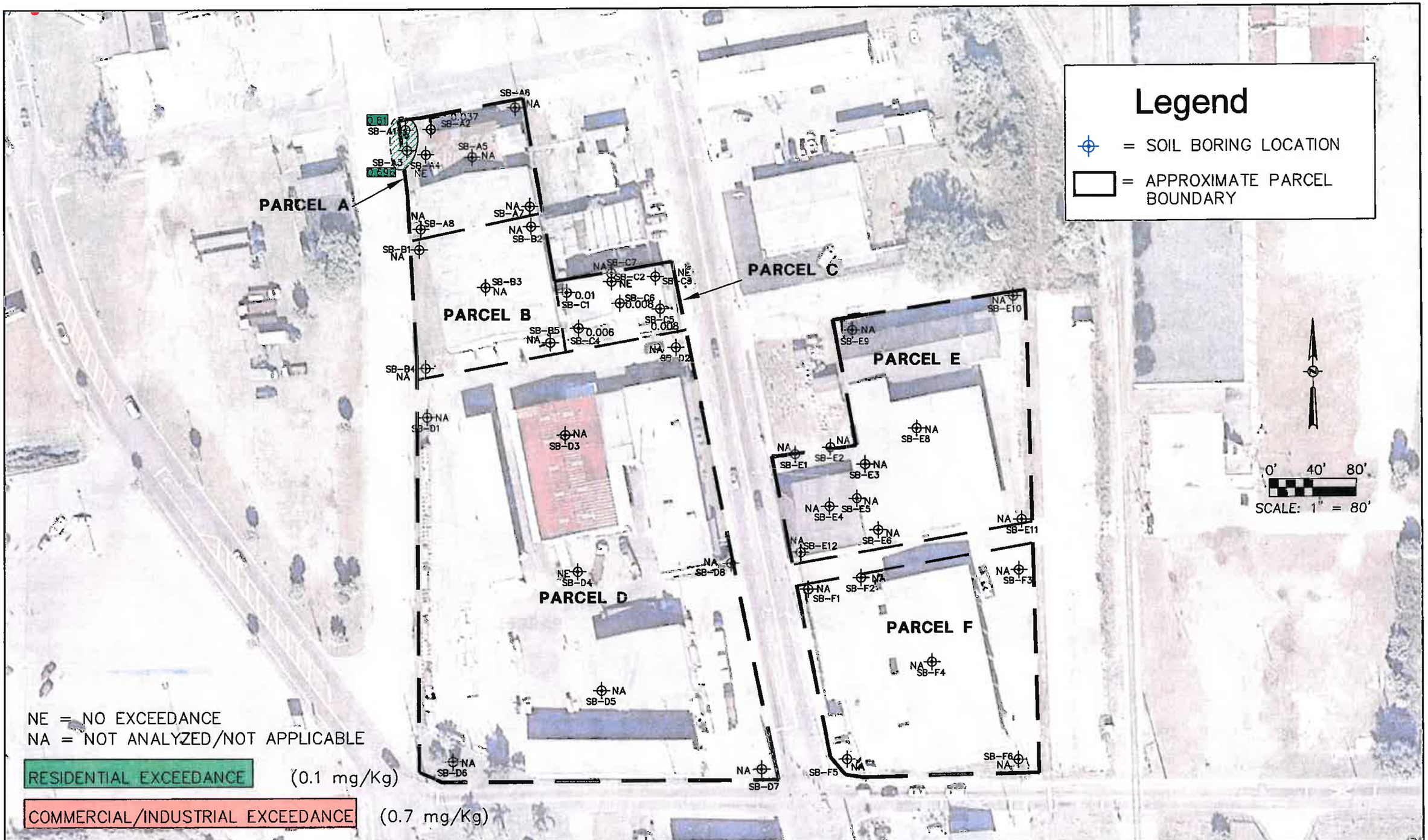

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FIGURE 8B
BENZO(A)PYRENE
SOIL RESULTS 2' BLS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\00194\00194010.09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/05/11-3:28p PLOTTED: Fri, 09/05/11-4:31p BY: jon

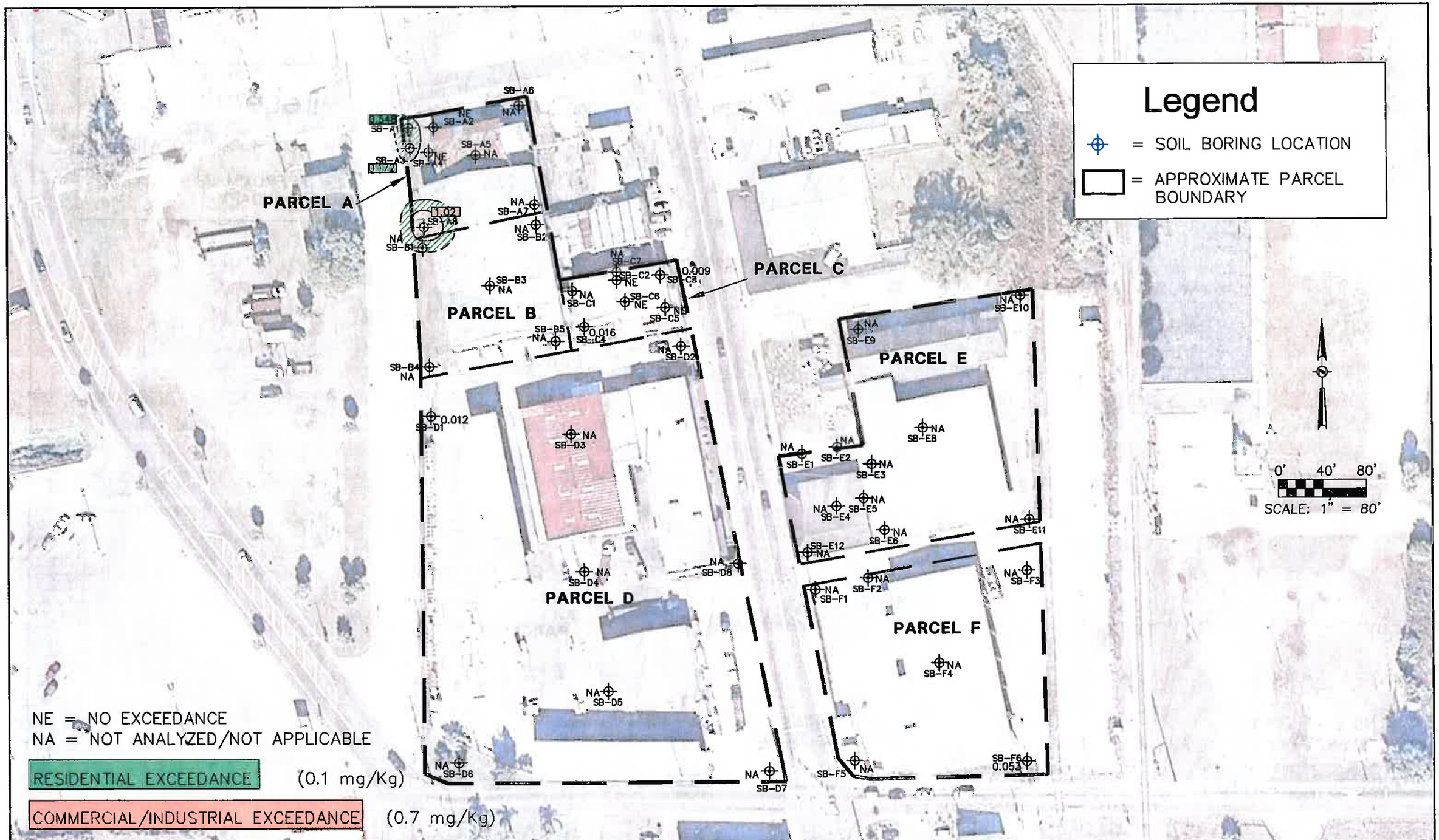

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FIGURE 8C
BENZO(A)PYRENE
SOIL RESULTS 3'-4' BLS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\0019\0019-007C.009\CAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/09/11-3:20p PLOTTED: Fri, 09/09/11-4:01p BY: jos

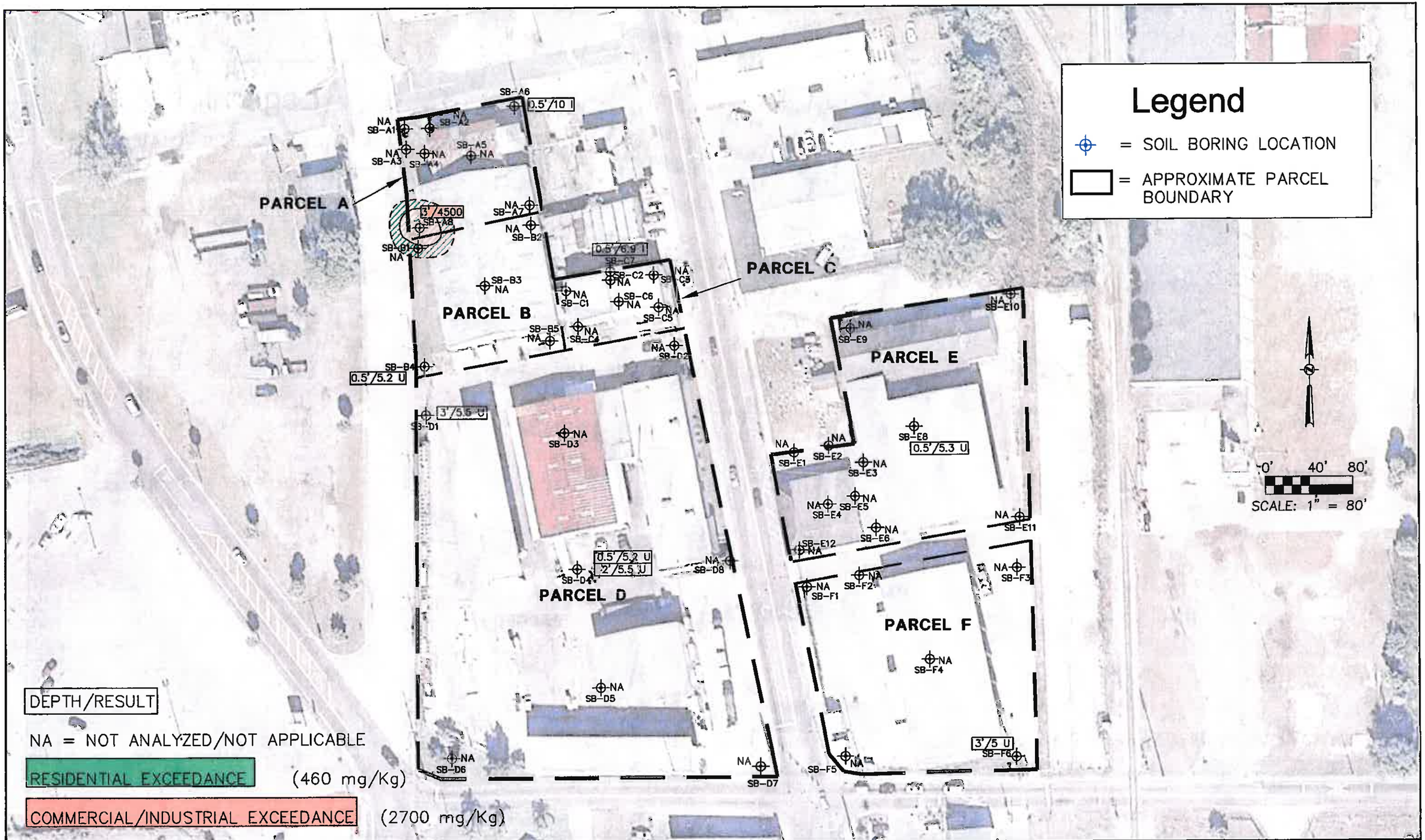

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FIGURE 9
TRPH
SOIL RESULTS

PROJECT NO:
DATE: 9/19/2010
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FILE: J:\00184\00194010.09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/09/11-3:28p PLOTTED: Fri, 09/9/11-4:32p BY: jen

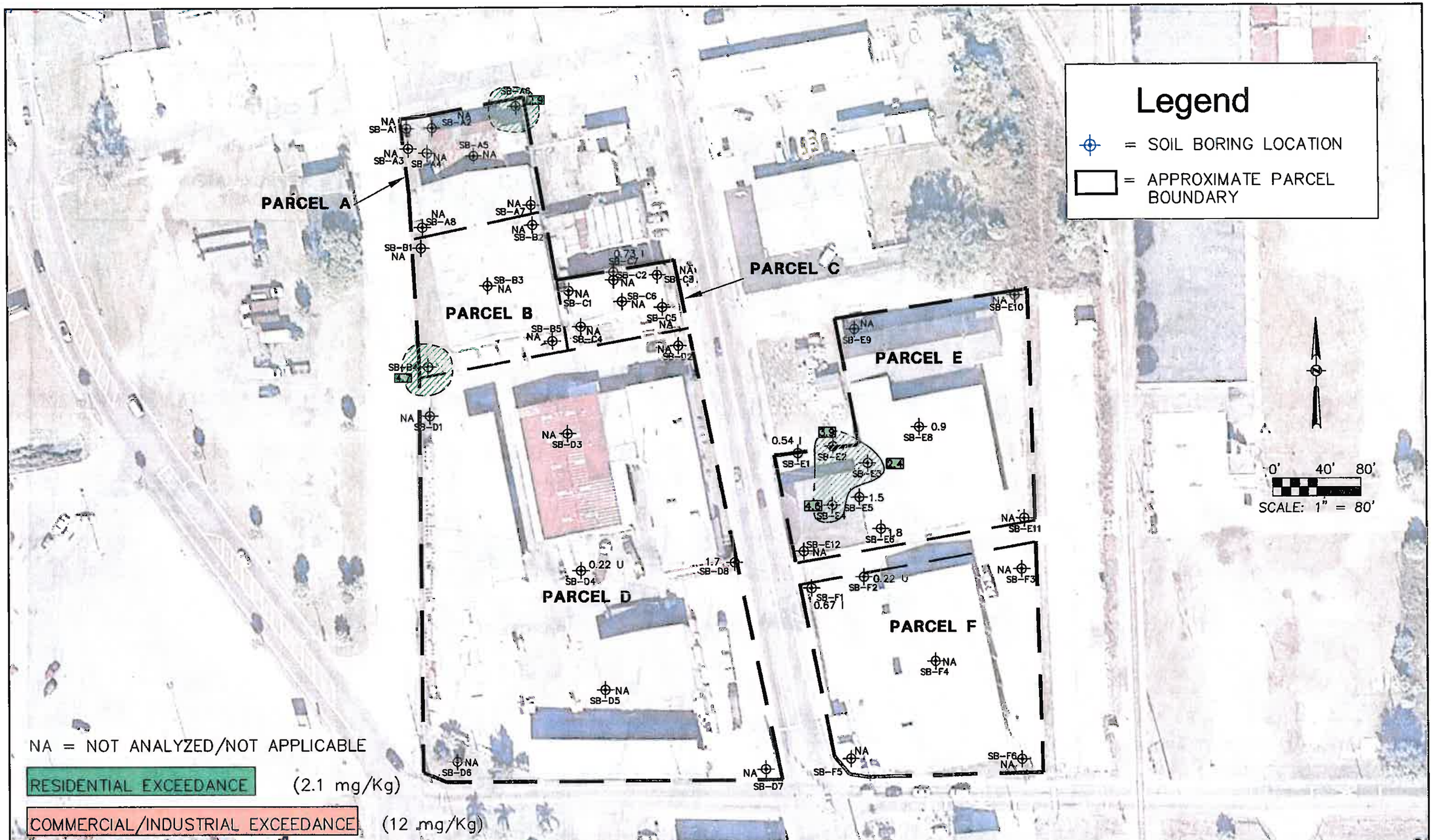

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FIGURE 10
ARSENIC SOIL RESULTS
0.5' BLS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\2009\40019401\0\CAD\Mcg\McGinnis SAR.dwg LAST SAVED: Fri, 09/05/11-3:24p PLOTTED: Fri, 09/05/11-4:33p BY: jim

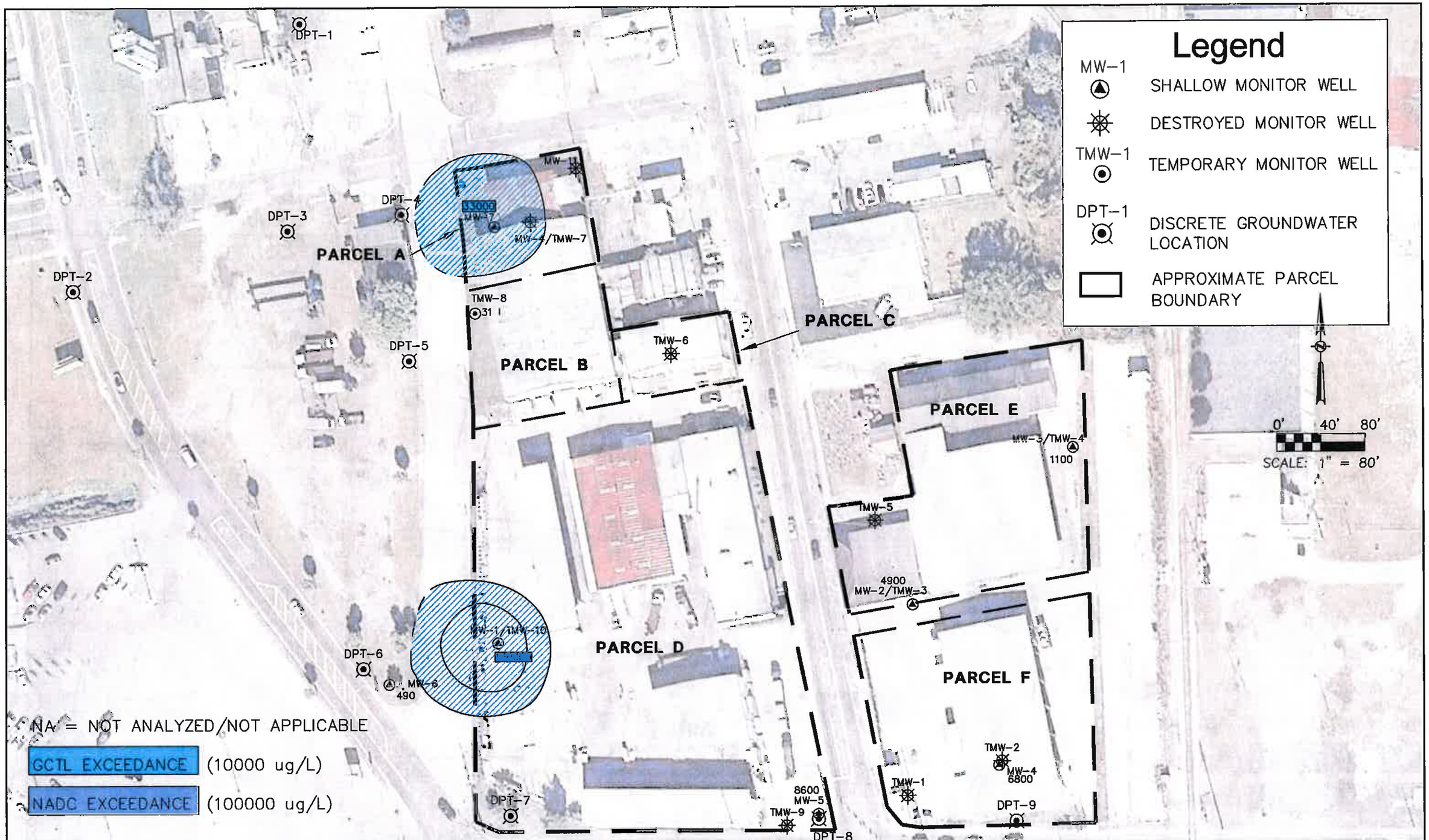

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FIGURE 11
NITRATE GROUNDWATER RESULTS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\0019400\19400 09\CAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 08/05/11-3:28p PLOTTED: Fri, 08/05/11-4:33p BY: jrm

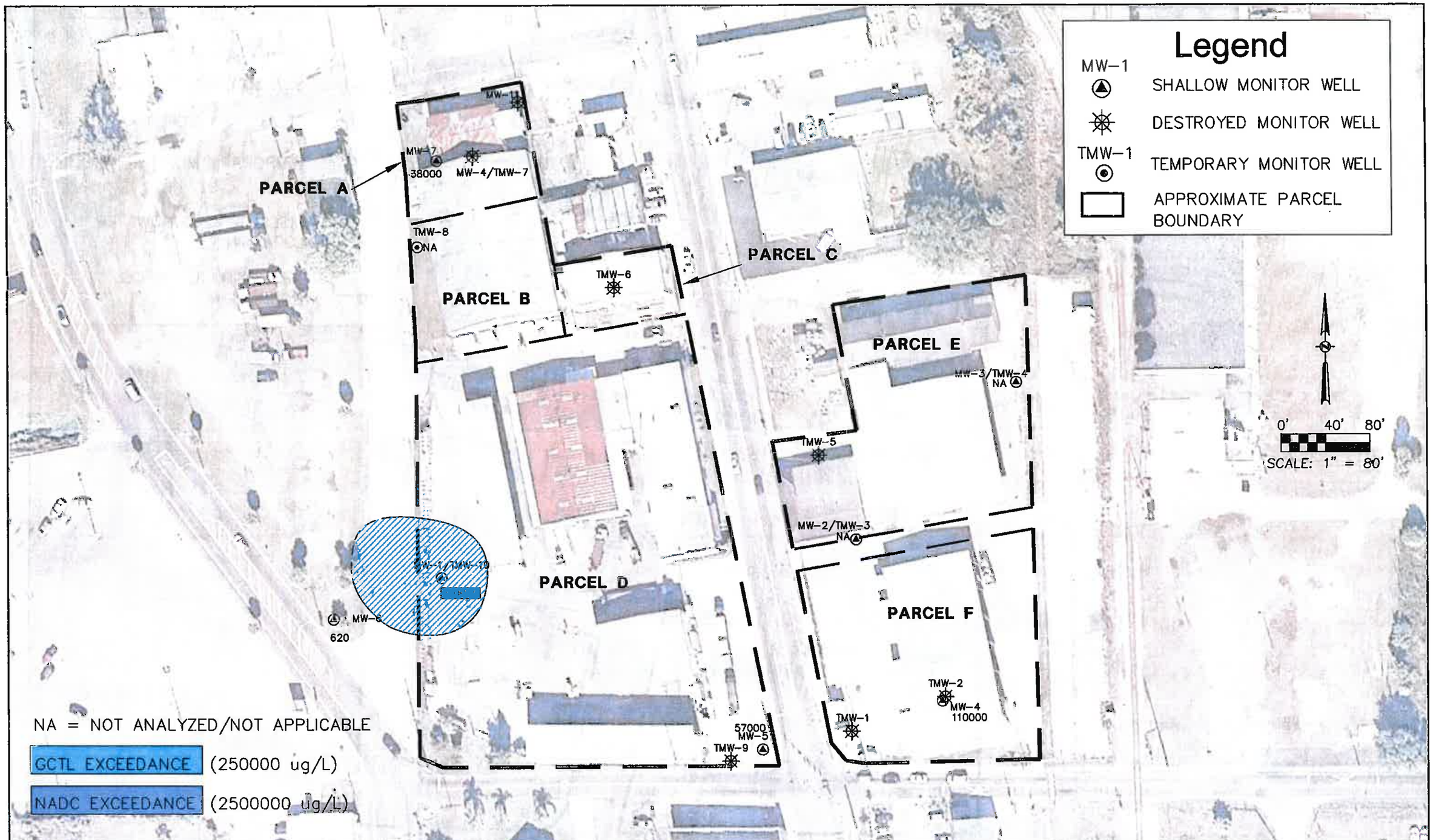

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FIGURE 12
SULFATE GROUNDWATER RESULTS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\0018\0018491C.09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/05/11-3:28p PLOTTED: Fri, 09/09/11-4:33p BY: jim

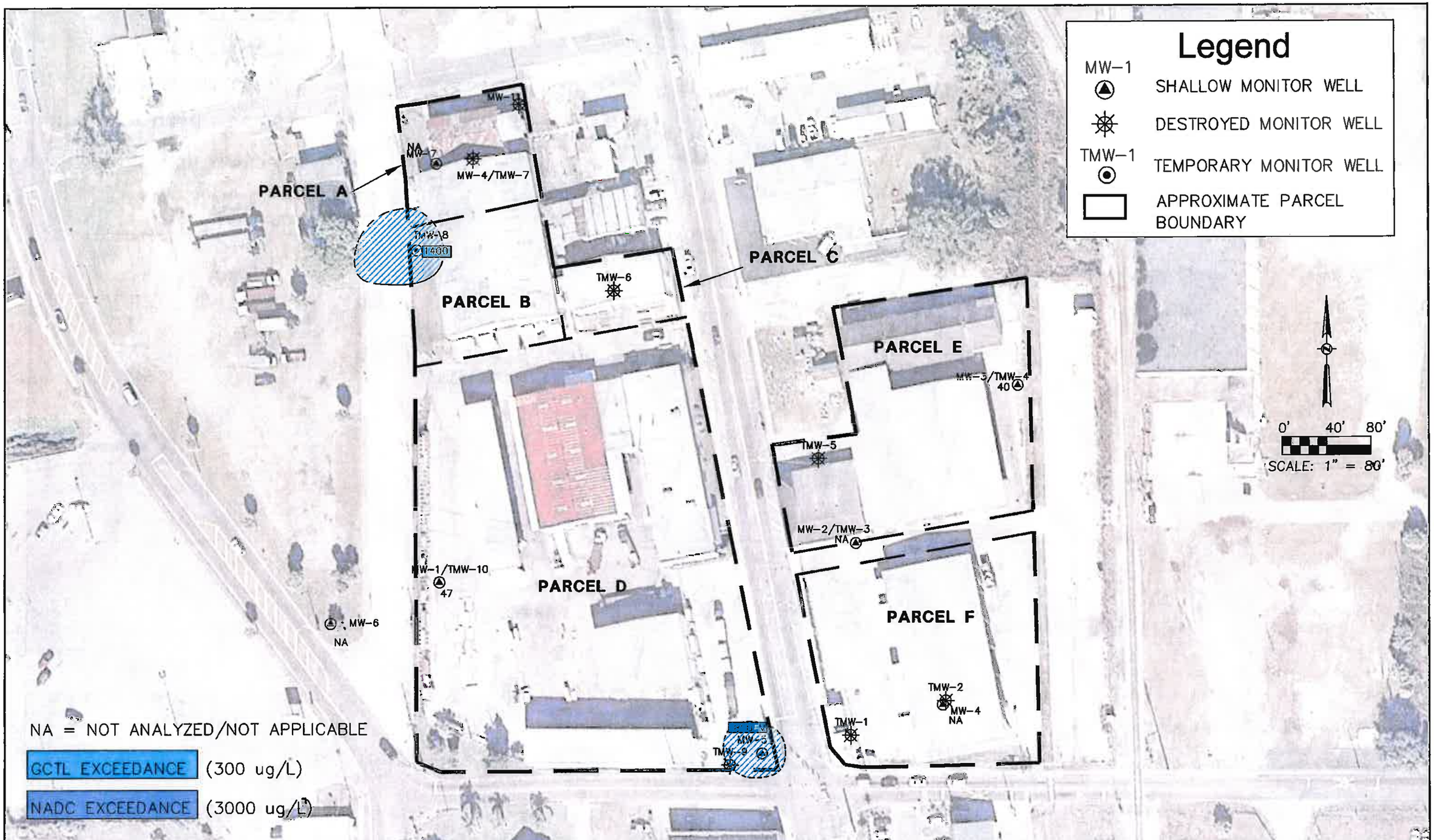

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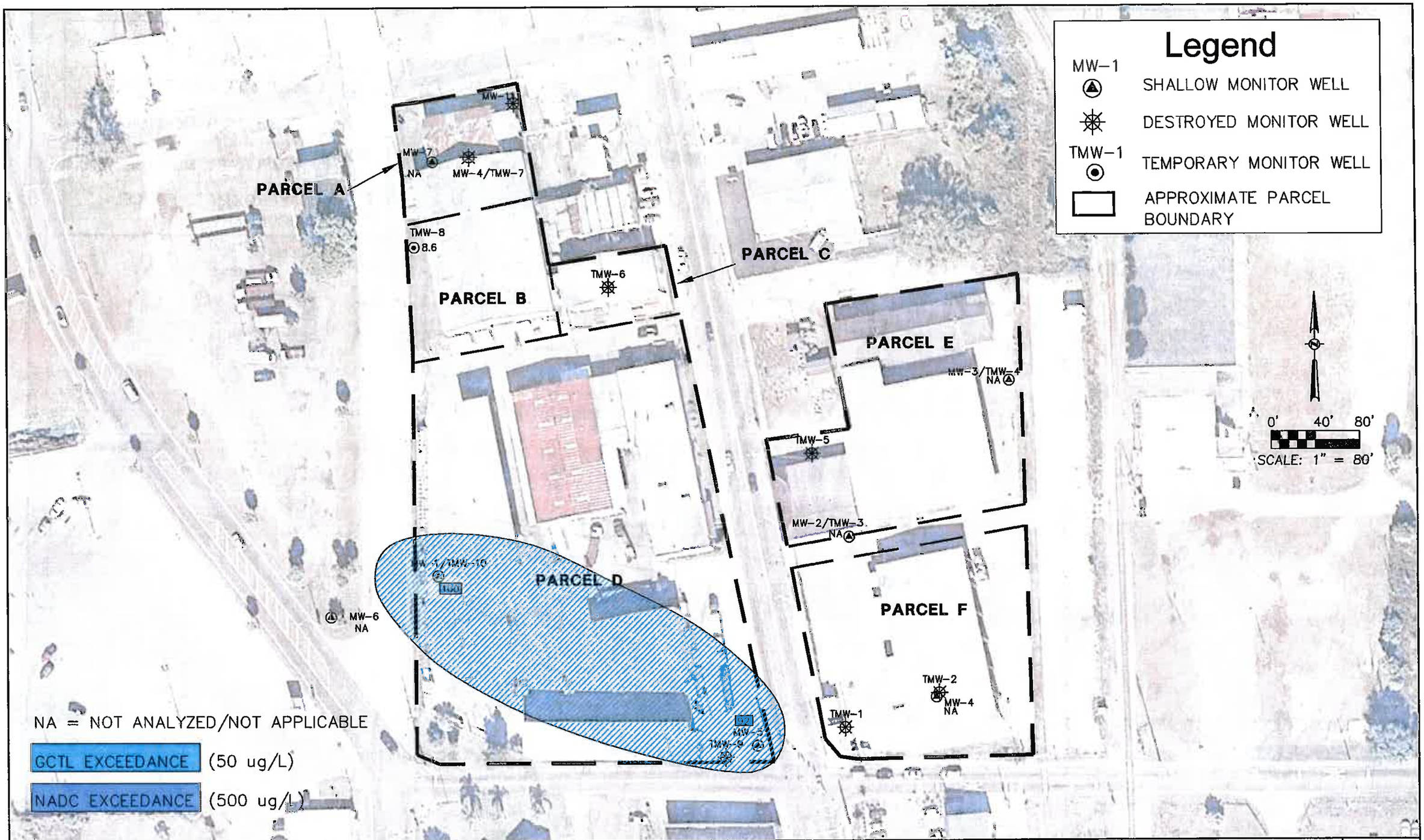
FIGURE 13
IRON GROUNDWATER RESULTS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\00104\0018\4010 09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/09/11-3:26p PLOTTED: Fri, 09/09/11-4:34p BY: jbm



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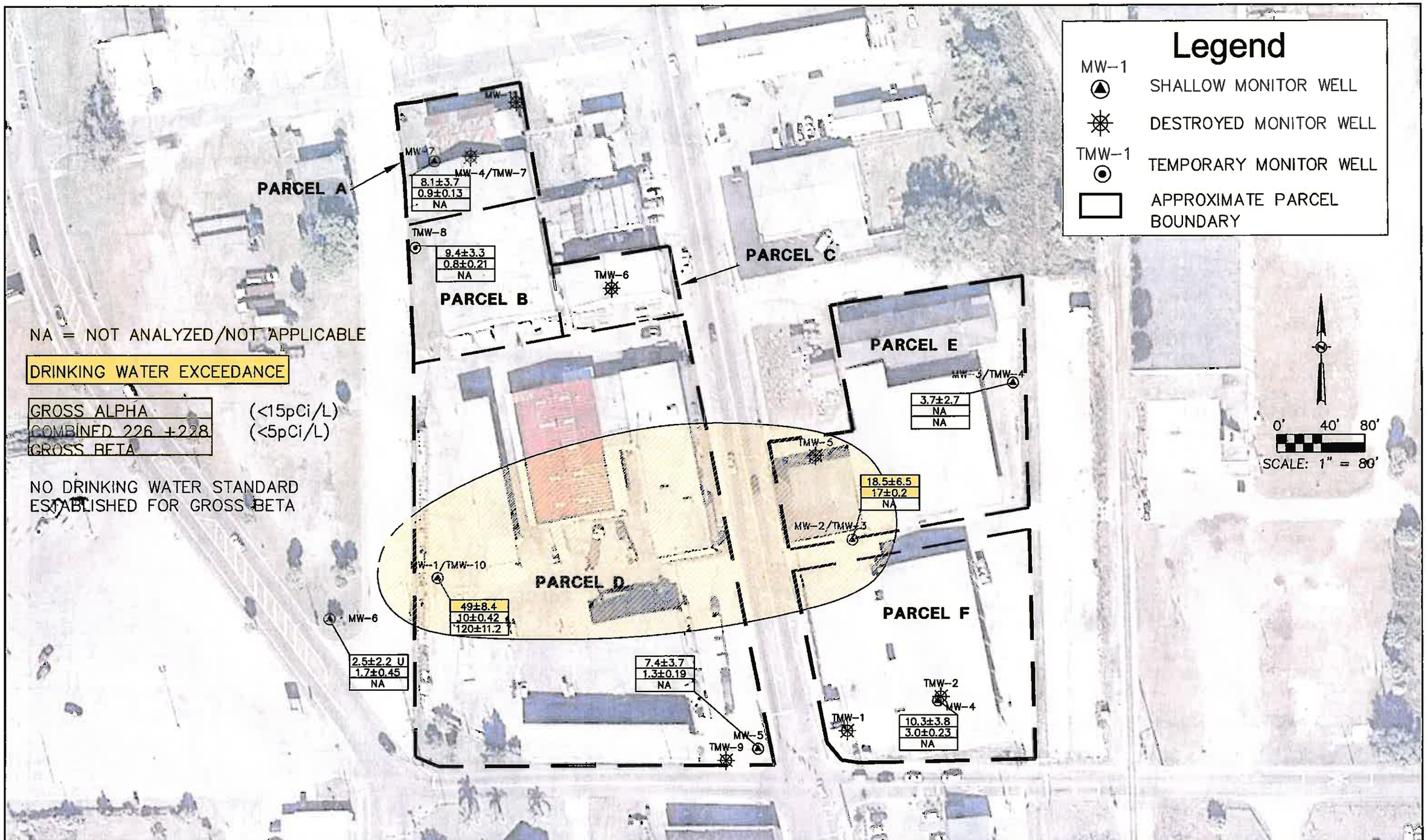
LIC. NO.: DATE

FIGURE 14
MANGANESE GROUNDWATER RESULTS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\00194\00194010\04\CAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 08/05/11-3:38p PLOTTED: Fri, 08/05/11-4:34p BY: jim



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FILE: J:\0019\00194010.00\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/05/11-3:28p PLOTTED: Fri, 09/05/11-4:36p BY: jim

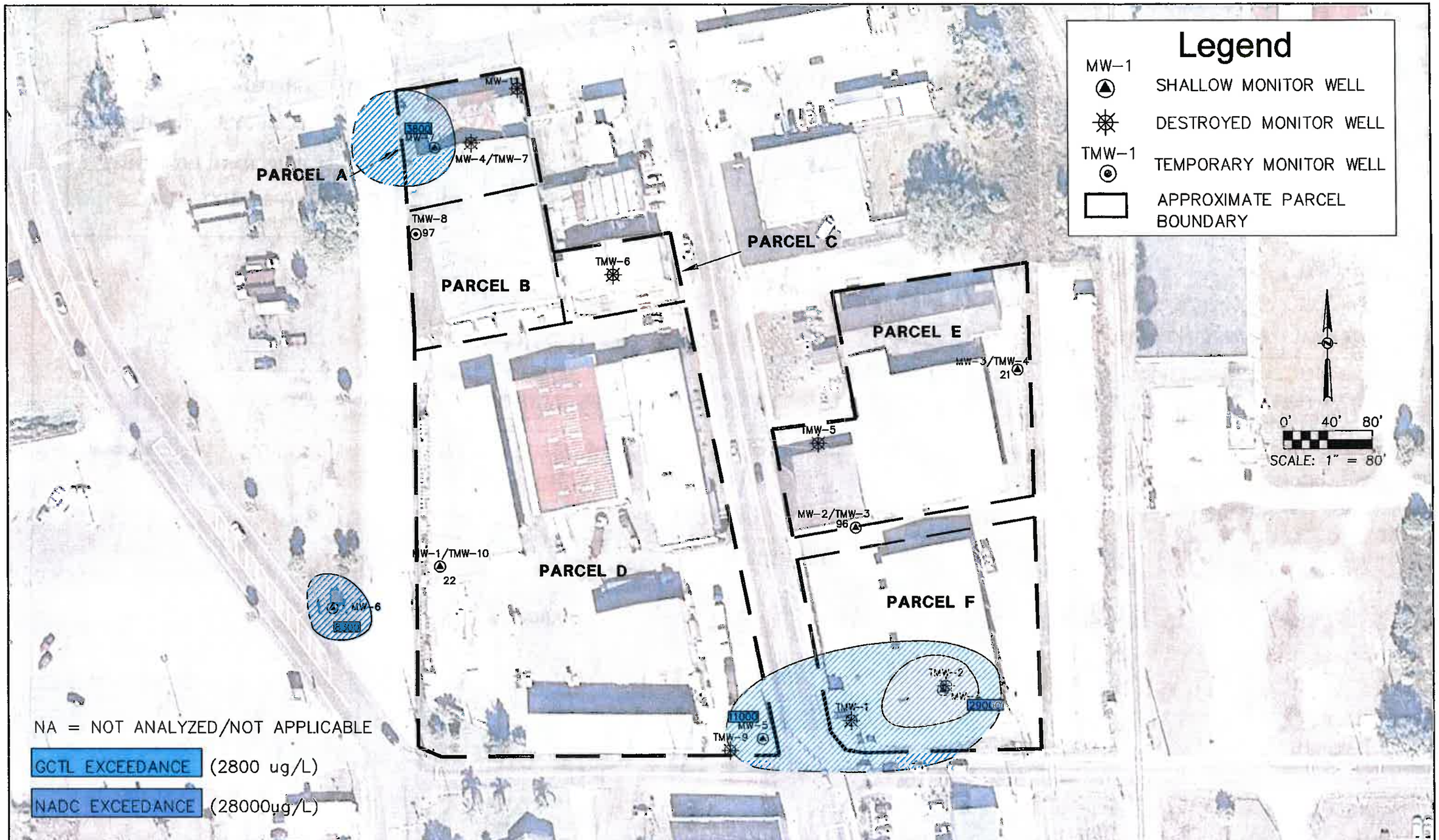

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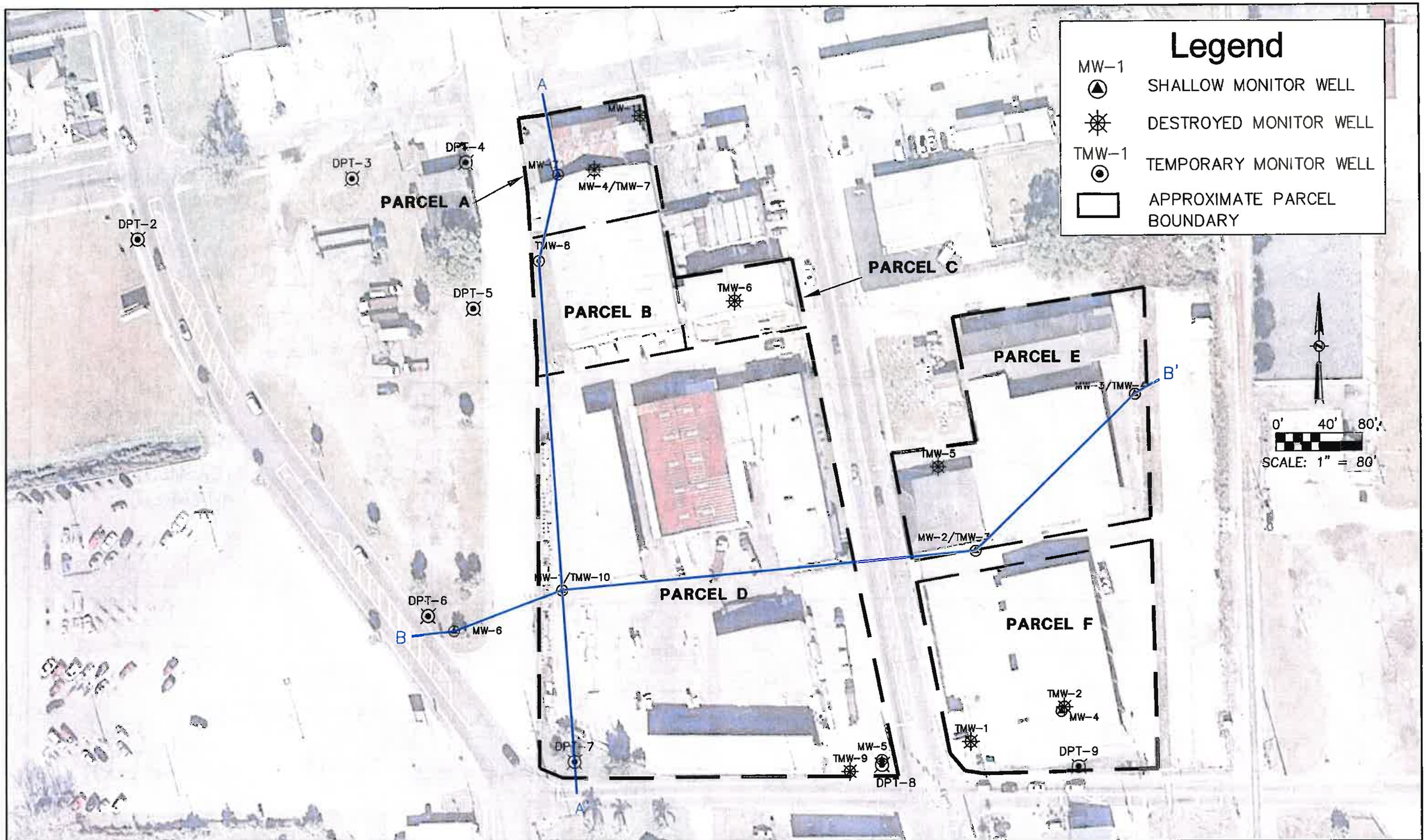
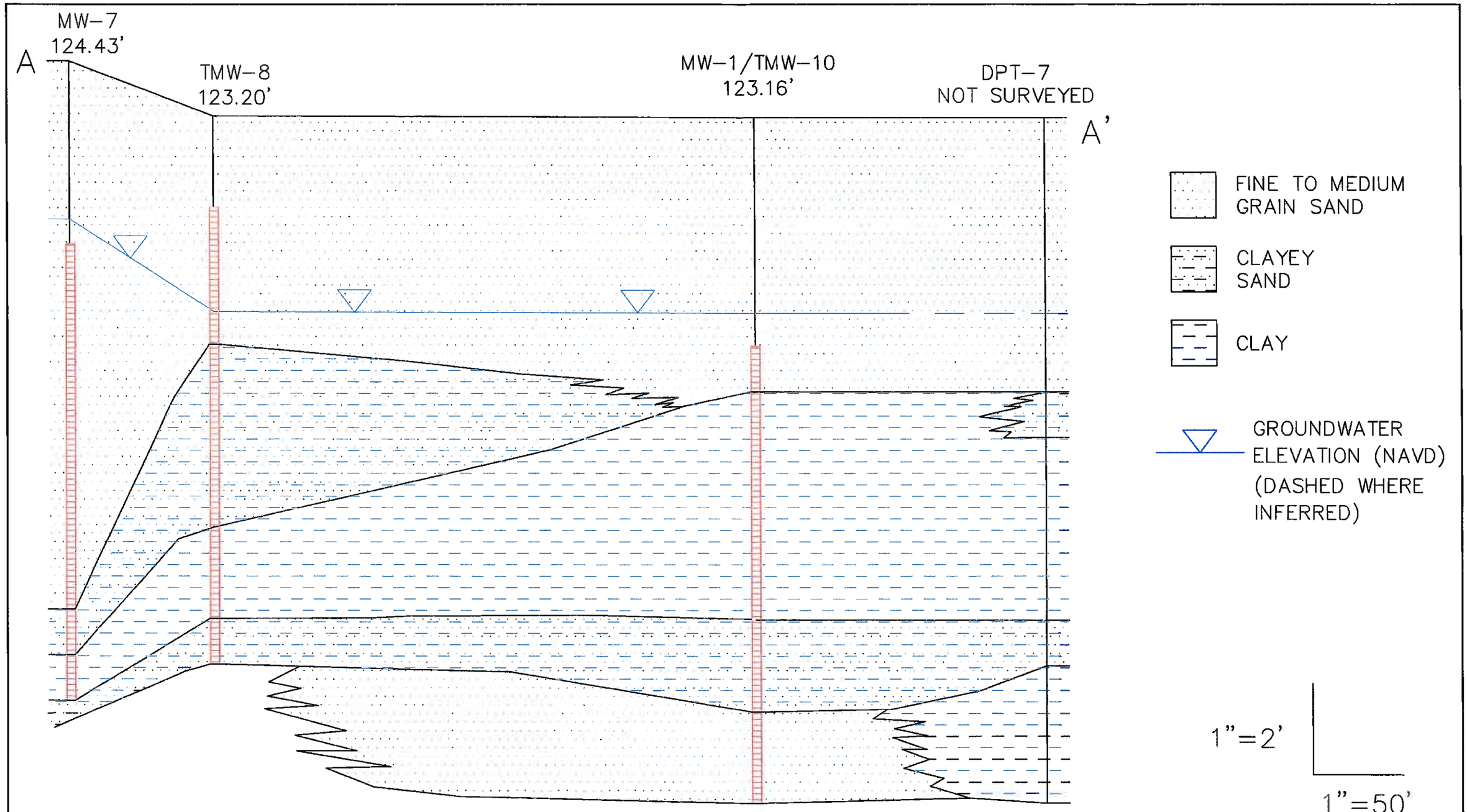
FIGURE 16
AMMONIA NITROGEN GROUNDWATER RESULTS

PROJECT NO:
DATE: 9/19/2010
SHEET NO:

FILE: J:\0018\0018-018.09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/05/11-3:26p PLOTTED: Fri, 09/05/11-4:35p BY: jkm



	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE		FIGURE 17 CROSS SECTION LOCATIONS	PROJECT NO: DATE: 9/19/2010 SHEET NO:



	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE	FIGURE 18 NORTH-SOUTH (A-A') CROSS SECTION	PROJECT NO: DATE: 9/19/2010 SHEET NO:

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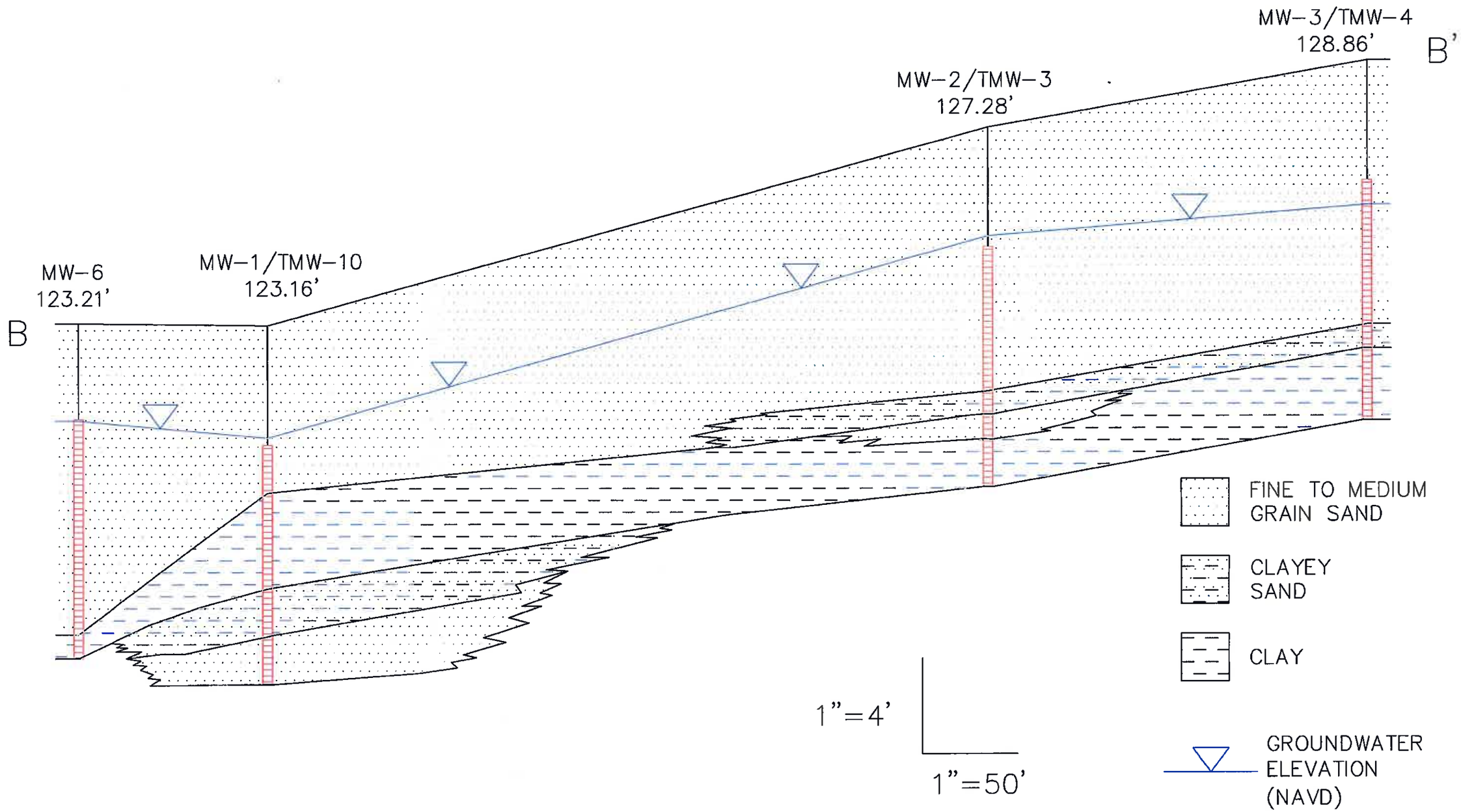
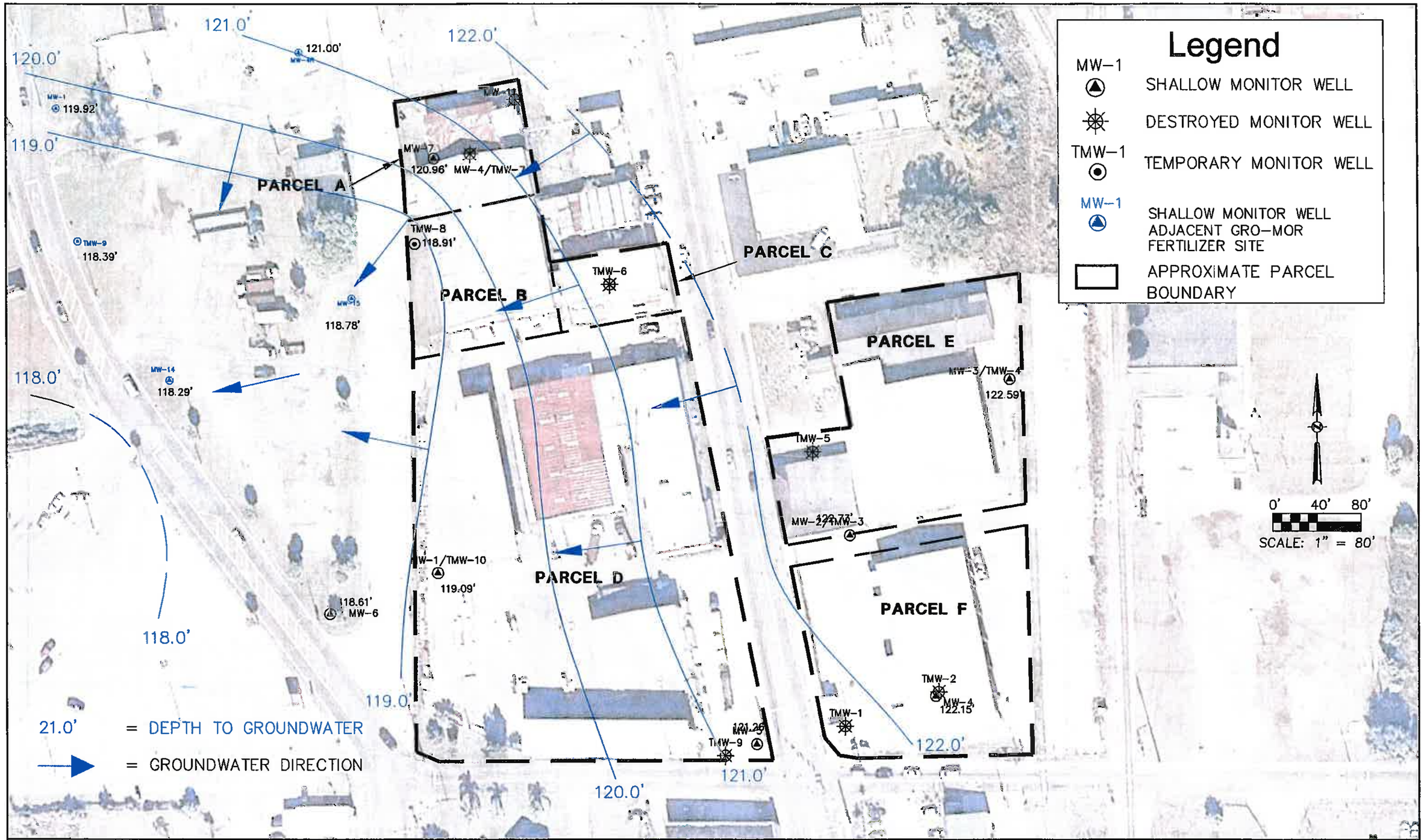


	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE	FIGURE 19 WEST-EAST (B-B') CROSS SECTION	PROJECT NO: DATE: 9/19/2010 SHEET NO:

FILE: J:\00184\00184010.09\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 09/09/11-3:28p PLOTTED: Fri, 09/09/11-4:36p BY: jkm



	FORMER McGINNIS LUMBER SITE 305 S. EVERS ST and 415, 508 THROUGH 511 and 530 S. COLLINS ST, PLANT CITY, FL	PREPARED FOR: THE CITY OF PLANT CITY	Cardno TBE 380 Park Place Blvd., Suite 300, Clearwater, Florida 33759 www.cardnotbe.com - 727.531.3505 Certificate of Authorization No. 3843	LIC. NO.: DATE	FIGURE 20 GROUNDWATER CONTOUR 6-21-11	PROJECT NO: DATE: 9/19/2010 SHEET NO:

FILE: J:\00194\2019\4010 99\ACAD\dwg\McGinnis-SAR.dwg LAST SAVED: Fri, 06/05/11-3:28p PLOTTED: Fri, 06/05/11-4:39p BY: jim

TABLES

Parameter	Units	FDEP GCTLs																
		Groundwater Criteria	NAD&C	TMW-1	TMW-2	TMW-3	MW-2	TMW-4	MW-3	TMW-5	TMW-6	TMW-7	MW-4	TMW-8	TMW-9	TMW-10	MW-1	TMW-11
Area of Investigation				Parcel F - Bulk Fertilizer Plant		Parcel E - Paint Center and Lumber Yard CCA Vat	*Permanent Well for TMW-3*	Parcel E - Lumber Yard CCA Vat and Water Quality	*Permanent Well for TMW-4*	Parcel E - Lumber Yard CCA Vat	Parcel C - Laundry and Gasoline Tank	Parcel A - Vehicle Maintenance Area	*Permanent Well for TMW-7*	Parcel D - General Water Quality	Parcel D - General Water Quality		*Permanent Well for TMW-10*	Parcel A - General Water Quality
Sample Date				4/27/2003	4/5/2003	4/3/2003	7/1/2003	7/1/2003	7/1/2003	4/2/2003	4/3/2003	4/3/2003	7/1/2003	4/3/2008	4/3/2008	4/3/2008	7/1/2003	4/3/2008
Metals-Total (EPA Method 200.7)																		
Aluminum	mg/L	0.2	2	NA	NA	NA	NA	0.37	NA	NA	NA	NA	NA	0.094 I	0.43	0.20 I	NA	0.10 I
Arsenic (EPA Method 6010B)	mg/L	0.01	0.1	NA	NA	NA	NA	0.021*	<0.0040	<0.0048	NA	NA	NA	<0.0048	<0.0048	<0.0048	NA	<0.0048
Barium	mg/L	2	20	NA	NA	NA	NA	0.0028 I	NA	0.079	NA	NA	NA	0.016	0.0068 I	0.011	NA	0.0091 I
Beryllium	mg/L	0.004	0.04	NA	NA	NA	NA	<0.00074	NA	NA	NA	NA	NA	<0.00074	<0.00074	<0.00074	NA	<0.00074
Cadmium	mg/L	0.005	0.05	NA	NA	NA	NA	<0.00071	NA	<0.00071	NA	NA	NA	<0.00071	0.00076 I	0.0034 I	NA	<0.00071
Chromium	mg/L	0.1	1	NA	NA	NA	NA	<0.0017	NA	0.014	NA	NA	NA	<0.0017	0.0018 I	0.0018 I	NA	<0.0017
Iron	mg/L	0.3	3	NA	NA	NA	NA	4.5	NA	NA	NA	NA	NA	0.66	2.3	0.6	NA	0.069
Lead	mg/L	0.015	0.15	NA	NA	NA	NA	NA	NA	0.0079	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/L	0.05	0.5	NA	NA	NA	NA	0.047	NA	NA	NA	NA	NA	0.093	0.072	0.12	NA	0.042
Nickel	mg/L	0.1	1	NA	NA	NA	NA	<0.0047	NA	NA	NA	NA	NA	<0.0047	<0.0047	0.012 I	NA	<0.0047
Sodium	mg/L	160	1,600	NA	NA	NA	NA	20	NA	NA	NA	NA	NA	8.9	7.9	17	NA	8.7
Zinc	mg/L	5	50	NA	NA	NA	NA	<0.0059	NA	NA	NA	NA	NA	0.0097 I	0.01 I	0.015 I	NA	<0.0059
Metals-Total (EPA Method 200.8)																		
Antimony	mg/L	0.006	0.06	NA	NA	NA	NA	<0.00036	NA	NA	NA	NA	NA	0.0013 I	<0.00036	<0.00036	NA	0.002 I
Lead	mg/L	0.015	0.15	NA	NA	NA	NA	0.00012 IV	NA	NA	NA	NA	NA	0.00065 IV	0.00019 IV	0.00098 IV	NA	0.00072 IV
Selenium	mg/L	0.05	0.5	NA	NA	NA	NA	<0.0006	NA	NA	NA	NA	NA	0.00073 I	<0.0006	<0.0006	NA	<0.0006
Thallium (EPA Method 6020)	mg/L	0.002	0.02	NA	NA	NA	NA	<0.00055	NA	NA	NA	NA	NA	<0.00055	0.0007 I	0.0036*	0.00098 I	<0.00055
RCRA 8 Metals-Total (EPA Method 6010/6010B)																		
Arsenic	mg/L	0.01	0.1	NA	NA	<0.0048	NA	NA	NA	NA	<0.0048	<0.0048	NA	NA	NA	NA	NA	NA
Barium	mg/L	2	20	NA	NA	0.18	NA	NA	NA	NA	0.0061 I	0.049	NA	NA	NA	NA	NA	NA
Cadmium	mg/L	0.005	0.05	<0.00071	<0.00071	0.018*	<0.0010	NA	<0.0010	NA	<0.00071	0.011*	<0.00071	NA	NA	NA	NA	NA
Chromium	mg/L	0.1	1	NA	NA	0.069	NA	NA	NA	NA	<0.0017	0.0082 I	NA	NA	NA	NA	NA	NA
Lead	mg/L	0.015	0.15	NA	NA	0.014	NA	NA	NA	NA	<0.0016	0.0024 I	NA	NA	NA	NA	NA	NA
Selenium	mg/L	0.05	0.5	NA	NA	<0.0059	NA	NA	NA	NA	<0.0059	<0.0059	NA	NA	NA	NA	NA	NA
Silver	mg/L	0.1	1	NA	NA	<0.0019	NA	NA	NA	NA	<0.0019	<0.0019	NA	NA	NA	NA	NA	NA
RCRA 8 Metal Mercury (EPA Method 7470A)																		
Mercury	µg/L	2	20	NA	NA	<0.072	NA	NA	NA	NA	<0.072	<0.072	NA	NA	NA	NA	NA	NA
Mercury (EPA Method 245.1)																		
Mercury	µg/L	2	20	NA	NA	NA	NA	<0.072	NA	0.089 I	NA	NA	NA	<0.072	<0.072	<0.072	NA	<0.072
FL-PRO - TPH (C8- C40)																		
TPH	mg/L	5	50	NA	NA	NA	NA	NA	NA	NA	<0.40	<0.40	NA	NA	NA	NA	NA	NA

See notes at end of table

TABLE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

HISTORICAL GROUNDWATER ANALYTICAL RESULTS (2008)

FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL

PROVIDED BY HSA

TABLE 1, PAGE 1

Cardno TBE
380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardnotbe.com - 727.531.3535
Certificate of Authorization No. 3043

PLANT CITY, FLORIDA

Parameter	Units	GCTLs Groundwater Criteria	GCTLs NADSC	TMW-1	TMW-2	TMW-3	MW-2	TMW-4	MW-3	TMW-5	TMW-6	TMW-7	MW-4	TMW-8	TMW-9	TMW-10	MW-1	TMW-11
Area of investigation				Parcel F - Bulk Fertilizer Plant		Parcel E - Paint Center and Lumber Yard CCA Vat	*Permanent Well for TMW-3*	Parcel E - Lumber Yard CCA Vat and Water Quality	*Permanent Well for TMW-4*	Parcel E - Lumber Yard CCA Vat	Parcel C - Laundry and Gasoline Tank	Parcel A - Vehicle Maintenance Area	*Permanent Well for TMW-7*	Parcel B - General Water Quality	Parcel D - General Water Quality		*Permanent Well for TMW-10*	Parcel A - General Water Quality
Sample Date				4/2/2008	4/1/2008	4/3/2008	7/1/2008	4/2/2008	7/1/2008	4/2/2008	4/3/2008	4/3/2008	7/1/2008	4/3/2008	4/3/2008	4/3/2008	7/1/2008	4/3/2008
Volatile Organics (Method EPA 8260)																		
All 8260 target analytes not detected		NA	NA	ND	ND	ND	NA	ND	NA	ND	ND	ND	NA	ND	ND	ND	NA	ND
Semi-volatile Organics (EPA Method 8270)																		
Bis(2-ethylhexyl)phthalate	µg/L	6	600	NA	NA	2.9 I	NA	NA	NA	NA	2.7 I	2.2 I	NA	NA	NA	NA	NA	NA
All other 8270 target analytes not detected	µg/L	NA	NA	NA	NA	ND	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA
Purgeable Organics (EPA Method 524.2)																		
Dichloromethane	µg/L	5	500	NA	NA	NA	NA	0.28 I	NA	NA	NA	NA	NA	0.43 I	<0.21	0.26 I	NA	0.25 I
Toluene	µg/L	40	400	NA	NA	NA	NA	<0.21	NA	NA	NA	NA	NA	0.29 I	<0.21	<0.21	NA	1.3
All other 524.2 target analytes not detected	µg/L	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND
EDB & DBCP (EPA Method 504.1)																		
All 504.1 target analytes not detected	µg/L	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND
Chlorinated Pesticides (EPA Method 508)																		
All 508 target analytes not detected	µg/L	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND
Chlorinated Acids (EPA Method 515.1)																		
All 515.1 target analytes not detected	µg/L	NA	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	ND	ND	ND	NA	ND
General Chemistry (EPA Method 300 Series)																		
Chloride	mg/L	250	2,500	NA	NA	NA	NA	3.5 I	NA	NA	NA	NA	NA	10	15	66	NA	6.1
Fluoride	mg/L	2	20	NA	NA	NA	NA	<0.5	NA	NA	NA	NA	NA	0.90 I	<0.5	0.53 I	NA	1.3 I
Sulfate	mg/L	250	2,500	15	280	NA	NA	26	NA	NA	NA	NA	NA	61	100	510	NA	17
Nitrate (EPA Method 353.2)	mg/L	10	100	0.98	18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrite (EPA Method SM426)	mg/L	1	10	<0.1	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trace Level Organic Compounds (EPA Method 1613 B)																		
2,3,7,8-TCDD	pg/L	30	3,000	NA	NA	NA	NA	<5.0	NA	NA	NA	NA	NA	<5.0	<5.0	<5.0	NA	<5.0
Radionuclides																		
Gross Alpha	pCi/L	15	150	NA	NA	NA	NA	18.0 ± 2	NA	NA	NA	NA	NA	2.3 ± 1.0	9.1 ± 1.7	41 ± 2	NA	1.7 ± 0.8
Gross Beta	pCi/L	4	40	NA	NA	NA	NA	6.2 ± 1.2	NA	NA	NA	NA	NA	10.6 ± 1.4	21 ± 2	130 ± 4	NA	2.2 ± 1.0
Radium, 226 and 228 combined	pCi/L	5	50	NA	NA	NA	NA	2.2 ± 1.7	NA	NA	NA	NA	NA	NA	6.8 ± 2.5	25.2 ± 3.6	NA	NA

Notes:

Some analytes were omitted from the table because their value did not exceed the laboratory reporting limit for that particular method. All 8260, 504.1, 508, and 515.1 analytes were below laboratory reporting limit. The full laboratory report is included in the Appendix.

Depth interval in feet below land surface (ft bls)

GCTL - Groundwater cleanup target level.

NADSC – Natural Attenuation Default Source Concentration.

I - The reported value is between the laboratory method detection limit and the laboratory pr

ug/l - micrograms per liter - liquid

mg/l - milligrams per liter - liquid

* - Groundwater sample reanalyzed from a permanently installed monitoring well

pg/l - picogram per liter

pCi/l - picocurie per liter

NA - Not applicable/ Not analyzed

ND- Not detected

NS - Not specified

Red indicates the value exceeds the GCTL.

Bold indicates the laboratory reporting limit exceeds the GCTL.

Blue indicates the value exceeds the NADSC value.

TABLE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

HISTORICAL GROUNDWATER ANALYTICAL RESULTS (2008)

FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL

PROVIDED BY HSA

TABLE 1, PAGE 2

Cardno TBE
380 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardnotbe.com - 727.531.3505
Certificate of Authorization No. 3843

Parameter	Units	SCTLs: Direct Exposure: Residential	SCTLs: Direct Exposure: Trades	SCTLs: Leachability: to Groundwater	FS/W-3/SD-1			SB-2			SB-3			SB-4	SB-5	SB-6	SB-7	SB-8
Area of Investigation					Parcel E - Paint Center and Lumber Yard CCA Vat									Parcel C - Laundry and Gasoline Tank		Parcel A - Tank Area		Drainage
Sample Date					4/1/2008			4/1/2008			4/1/2008			4/1/2008	4/1/2008	4/1/2008	4/1/2008	4/1/2008
Sample Depth (ft bls)					0 - 0.5	4.5 - 5	4 - 6	0 - 0.5	0.5 - 2	4 - 6	0 - 0.5	0.5 - 2	2 - 4	3 - 4	3 - 4	5 - 6	3 - 4	3 - 4
RCRA 8 Metals (EPA Method 6010)																		
Arsenic	mg/kg	2.1	12	***	3.5	0.62	<0.27	1.5	1.2	0.30 I	5.6	<0.24	0.31 I	<0.27	0.35 I	0.83	<0.27	<0.27
Barium	mg/kg	120	130,000	1,600	14	7.5	11	23	23	19	35	5.8	39	13	44	39	13	9.7
Cadmium	mg/kg	82	1700	7.5	0.11 I	<0.1	<0.1	<0.1	<0.11	<0.1	10	<0.092	<0.1	<0.1	<0.099	0.21 I	<0.1	<0.1
Chromium	mg/kg	210	470	38	29	5.5	1.6	3.9	3.2	4.0	47	0.39 I	4.8	1.9	5.9	4.4	1.3	1.6
Lead	mg/kg	400	1,400	***	1.9 I	1.4 I	1.0	16	16	2.0	41	1.3	4.6	1.1	3.3	98	3.6	0.86
Selenium	mg/kg	440	11,000	5.2	<3.9	<1.3	<0.44	<0.85	0.50 I	<0.44	<11	<0.39	<0.42	<0.43	<0.42	<0.44	<0.44	<0.44
Silver	mg/kg	410	8,200	17	<0.2	<0.22	<0.23	<0.22	<0.25	<0.23	<1.1	<0.20	<0.22	<0.22	<0.22	<0.22	<0.23	<0.22
Total Petroleum Hydrocarbons (FL-PRO)																		
TRPH	mg/kg	460	2700	340	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.8	<5.6	<5.9	14	7.2 I
Mercury (EPA Method 7471)																		
Mercury	mg/kg	3	17	2.1	<0.0061	0.0086 I	<0.0069	0.082	0.057	<0.0070	0.097	0.0089 I	0.0068 I	<0.0067	0.0072 I	0.054	0.0086 I	<0.0068
Volatile Organics (Method EPA 8260)																		
1,2,4-Trimethylbenzene	µg/kg	18,000	95,000	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	450 L	<0.51	<0.51	<0.52	<0.47
1,3,5-Trimethylbenzene	µg/kg	15,000	80,000	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	280 L	<0.84	<0.84	<0.85	<0.77
p-Isopropyltoluene	µg/kg	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	20	<0.48	<0.48	<0.49	<0.44
Benzene	µg/kg	1,200	1,700	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.1	<0.76	<0.76	<0.77	<0.70
Carbon Disulfide	µg/kg	270,000	1,500,000	5,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	<0.49	<0.49	<0.50	1.0 I
Ethylbenzene	µg/kg	1,500,000	9,200,000	600	NA	NA	NA	NA	NA	NA	NA	NA	NA	210 L	<0.72	<0.72	<0.73	<0.66
Isopropylbenzene (Cumene)	µg/kg	220,000	1,200,000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	50	<0.48	<0.48	<0.49	<0.44
Methylene Chloride	µg/kg	17,000	26,000	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.2 I	3.0	5.2	8.7	12
n-Butylbenzene	µg/kg	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	140 L	<0.54	<0.54	<0.55	<0.49
n-Propylbenzene	µg/kg	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	200 L	<0.49	<0.49	<0.50	<0.45
Total Xylenes	µg/kg	130,000	700,000	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	780 L	<2.13	<2.14	<2.25	<1.98
sec-Butylbenzene	µg/kg	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	27	<0.69	<0.69	<0.70	<0.63
Toluene	µg/kg	7,500,000	60,000,000	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	23	<0.76	<0.76	<0.77	<0.70
All other 8260 target analytes not detected	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND
Semi-volatile Organics (EPA Method 8270)																		
Acenaphthene	µg/kg	2,400,000	20,000,000	2,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20	<20	25 I	<21	<20
Anthracene	µg/kg	21,000,000	300,000,000	2,500,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<42	<41	65 I	<44	<43
Benzo(a)anthracene	µg/kg	#	#	800	NA	NA	NA	NA	NA	NA	NA	NA	NA	<46	<45	230 I	<47	<46
Benzo(a)pyrene	µg/kg	#	#	8,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20	<20	240 I	35 I	<20
Benzo(b)fluoranthene	µg/kg	#	#	2,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	<54	<53	180 I	<56	<55
Benzo(g,h,i)perylene	µg/kg	2,500,000	52,000,000	32,000,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<29	<29	160 I	<30	<30
Benzo(k)fluoranthene	µg/kg	#	#	24,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<35	<34	180 I	<36	<36
Chrysene	µg/kg	#	#	77,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	<49	250 I	<52	<51

See notes at end of table.

TABLE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

Cardno TBE
360 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardnotbe.com - 727.531.3505
Certificate of Authorization No 3643

HISTORICAL SOIL ANALYTICAL RESULTS (2008)

FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL

PROVIDED BY HSA

TABLE 2, PAGE 1

Parameter	Units	SCTLs			TMW-3/SB-1			SB-2			SB-3			SB-4	SB-5	SB-6	SB-7	SB-8
		Direct Exposure		Leachability to Groundwater														
		Residential	Industrial															
Area of Investigation					Parcel E - Paint Center and Lumber Yard CCA Vat									Parcel C - Laundry and Gasoline Tank		Parcel A - Vehicle Maintenance Area		
Sample Date					4/1/2008			4/1/2008			4/1/2008			4/2/2008	4/2/2008	4/2/2008	4/2/2008	4/2/2008
Sample Depth (ft bls)					0-0.5	0.5-2	2-4	0-0.5	0.5-2	2-4	0-0.5	0.5-2	2-4	0-1	0-1	0-1	0-1	0-1
Semi-volatile Organics (EPA Method 8270) *Continued*																		
Fluoranthene	µg/kg	3,200,000	59,000,000	1,200,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<28	<28	490	57 I	<29
Indeno(1,2,3-cd) pyrene	µg/kg	#	#	6,600	NA	NA	NA	NA	NA	NA	NA	NA	NA	<28	<28	140 I	<29	<29
Naphthalene	µg/kg	55,000	300,000	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	33 I	<25	<26	<27	<26
Phenanthrene	µg/kg	2,200,000	36,000,000	250,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<50	<49	280 I	<52	<51
Pyrene	µg/kg	2,400,000	45,000,000	880,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20	<20	360 I	55 I	<20
## Benzo(a)pyrene equivalents	µg/kg	100	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	555	60	NA
All other 8270 target analytes not detected	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND

Parameter	Units	SCTLs			SB-9 (SS-4)		SB-10 (SS-5)		SB-11 (SS-6)		SB-12 (SS-7)			SB-13 (SS-9)			SB-14 (SS-10)	
		Direct Exposure		Leachability to Groundwater														
		Residential	Industrial															
Sample Date					6/24/2008		6/24/2008		6/24/2008		6/24/2008			6/24/2008			6/24/2008	
Sample Depth (ft bls)					0-0.5	0.5-2	0-0.5	0.5-2	0-0.5	0.5-2	0-0.5	0.5-2	2-4	0-0.5	0.5-2	2-4	0-0.5	0.5-2
RCRA 8 Metals (EPA Method 6010B - ICP)																		
Arsenic	mg/kg	2.1	12	***	3.3	0.93 I	1.6	0.8	3.4	0.98	2.0 I	3.3	1.9	1.3	8.0	4.0	2.0	1.0 I

Parameter	Units	SCTLs			SB-15 (SS-11)		SB-16 (SS-12)	
		Direct Exposure		Leachability to Groundwater				
		Residential	Industrial					
Sample Date					6/24/2008		6/24/2008	
Sample Depth (ft bls)					0-0.5	0.5-2	0-0.5	0.5-2
RCRA 8 Metals (EPA Method 6010B - ICP)								
Arsenic	mg/kg	2.1	12	***	0.27 I	0.55 I	4.2 I	<0.25

Notes:
Some analytes were omitted from the table because their value did not exceed the laboratory reporting limit for that particular method. The full laboratory report is included in the Appendix.
Depth interval given in feet below land surface (ft bls)
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
L - Off scale high. Actual value is know to be greater than the value given. To be used when the concentration of the analyte is above the acceptable limit for quantitation and the calibration curve is known to exhibit a negative deflection.
mg/kg - milligrams per kilogram - solid
µg/kg - micrograms per kiligram - solid
***Leachability values may be derived using the SPLP test to calculate site specific SCTLs or may be determined using TCLP if oily wastes are present
- Concentration must be converted to Benzo(a)pyrene equivalents before comparison with appropriate direct exposure SCTL for Benzo(a)pyrene.
- Toxic equivalent factors were used to convert individual carcinogenic PAHs into a single concentration of the index PAH benzo(a) pyrene.
ND - Not detected
NA - Not applicable
Red indicates the laboratory reporting limit exceeds either the direct exposure industrial or leachability to groundwater SCTL.

TABLE REPRODUCED FROM HSA ENGINEERS AND SCIENTISTS, JULY 2008

Cardno TBE
300 Park Place Blvd., Suite 300, Clearwater, Florida 33759
www.cardnotbe.com - 727.531.5505
Certificate of Authorization No. 3643

HISTORICAL SOIL ANALYTICAL RESULTS (2008)
FORMER MCGINNES LUMBER PROPERTY, PLANT CITY, FL
PROVIDED BY HSA
TABLE 2, PAGE 2

Cardno TBE
Shaping the Future

Table 3A: VOCs Soil Sampling Results

McGinnes Lumber

Sample Location							SB-C1 0.5'		SB-C1 2'		SB-C2 0.5'		SB-C2 2'		SB-C2 3'		SB-C3 0.5'		SB-C3 2'		SB-C3 3'		SB-C4 0.5'		SB-C4 2'		SB-C4 3'		SB-C5 0.5'		SB-C5 2'		SB-C5 3'	
Collection Date							04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm/ Indust.	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260	Acetone	67-64-1	mg/kg	11000	68000	25	0.018	U	0.12		0.012	I	0.015	I	0.012	U	0.014	I	0.012	U	0.018	I	0.015	I	0.019	I	0.016	U	0.013	U	0.013	U	0.011	U
8260	Benzene	71-43-2	mg/kg	1.2	1.7	0.007	0.00048	U	0.00047	U	0.00036	U	0.00034	U	0.00038	U	0.00044	U	0.00038	U	0.00039	U	0.00044	U	0.00048	U	0.00051	U	0.0004	U	0.00041	U	0.00035	U
8260	Bromochloromethane	74-97-5	mg/kg	95	530	0.6	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Bromodichloromethane	75-27-4	mg/kg	1.5	2.2	0.004	0.00048	U	0.00047	U	0.00036	U	0.00034	U	0.00038	U	0.00044	U	0.00038	U	0.00039	U	0.00044	U	0.00048	U	0.00051	U	0.0004	U	0.00041	U	0.00035	U
8260	Bromoform	75-25-2	mg/kg	48	93	0.03	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Bromomethane	74-83-9	mg/kg	3.1	16	0.05	0.01	U	0.011	U	0.008	U	0.0078	U	0.0083	U	0.0097	U	0.0085	U	0.0084	U	0.0097	U	0.01	U	0.011	U	0.0088	U	0.0088	U	0.0078	U
8260	Butanone, 2-	78-93-3	mg/kg	16000	110000	17	0.013	U	0.012	I	0.0094	U	0.009	U	0.0095	U	0.011	U	0.01	U	0.01	U	0.011	U	0.013	U	0.013	U	0.01	U	0.011	U	0.0089	U
8260	Carbon disulfide	75-15-0	mg/kg	270	1500	5.6	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Carbon tetrachloride	56-23-5	mg/kg	0.5	0.7	0.04	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Chlorobenzene	108-90-7	mg/kg	120	650	1.3	0.00057	U	0.00057	U	0.00043	U	0.00042	U	0.00045	U	0.00053	U	0.00046	U	0.00047	U	0.00053	U	0.00057	U	0.00061	U	0.00048	U	0.00049	U	0.00042	U
8260	Chloroethane	75-00-3	mg/kg	3.9	5.4	0.05	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Chloroform	67-66-3	mg/kg	0.4	0.6	0.4	0.00057	U	0.00057	U	0.00043	U	0.00042	U	0.00045	U	0.00053	U	0.00046	U	0.00047	U	0.00053	U	0.00057	U	0.00061	U	0.00048	U	0.00049	U	0.00042	U
8260	Chloromethane	74-87-3	mg/kg	4	5.7	0.01	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Dibromochloromethane	124-48-1	mg/kg	1.5	2.3	0.003	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Dibromomethane	74-95-3	mg/kg	96	550	0.3	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Dichlorobenzene, 1,2-	95-50-1	mg/kg	880	5000	17	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Dichlorobenzene, 1,3-	541-73-1	mg/kg	380	2200	7	0.00084	U	0.00082	U	0.00065	U	0.0006	U	0.0007	U	0.00078	U	0.00068	U	0.0007	U	0.00078	U	0.00085	U	0.00091	U	0.00072	U	0.00073	U	0.0006	U
8260	Dichlorobenzene, 1,4-	106-46-7	mg/kg	6.4	9.9	2.2	0.00084	U	0.00082	U	0.00065	U	0.0006	U	0.0007	U	0.00078	U	0.00068	U	0.0007	U	0.00078	U	0.00085	U	0.00091	U	0.00072	U	0.00073	U	0.0006	U
8260	Dichlorodifluoromethane	75-71-8	mg/kg	77	410	44	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Dichloroethane, 1,1-	75-34-3	mg/kg	390	2100	0.4	0.00084	U	0.00082	U	0.00065	U	0.0006	U	0.0007	U	0.00078	U	0.00068	U	0.0007	U	0.00078	U	0.00085	U	0.00091	U	0.00072	U	0.00073	U	0.0006	U
8260	Dichloroethane, 1,2-	107-06-2	mg/kg	0.5	0.7	0.01	0.00038	U	0.00038	U	0.00028	U	0.00028	U	0.0003	U	0.00035	U	0.00031	U	0.00031	U	0.00035	U	0.00038	U	0.00041	U	0.00032	U	0.00033	U	0.00028	U
8260	Dichloroethene, 1,1-	75-35-4	mg/kg	95	510	0.06	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Dichloroethene, cis-1,2-	156-59-2	mg/kg	33	180	0.4	0.00057	U	0.00057	U	0.00043	U	0.00042	U	0.00045	U	0.00053	U	0.00046	U	0.00047	U	0.00053	U	0.00057	U	0.00061	U	0.00048	U	0.00049	U	0.00042	U
8260	Dichloroethene, trans-1,2-	156-60-5	mg/kg	53	290	0.7	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Dichloropropane, 1,2-	78-87-5	mg/kg	0.6	0.9	0.03	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Dichloropropene, 1,3-	542-75-6	mg/kg	1.4	2.2	0.002	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Ethylbenzene	100-41-4	mg/kg	1500	9200	0.6	0.00038	U	0.00038	U	0.00029	U	0.00028	U	0.0003	U	0.00035	U	0.00031	U	0.00031	U	0.00035	U	0.00038	U	0.0014	I	0.00032	U	0.00033	U	0.00028	U
8260	Hexanone, 2-	591-78-6	mg/kg	24	130	1.4	0.0092	U	0.0098	U	0.0074	U	0.0066	U	0.0076	U	0.0089	U	0.0078	U	0.0077	U	0.0089	U	0.0094	U	0.01	U	0.0081	U	0.0081	U	0.0072	U
8260	Isopropylbenzene	98-82-8	mg/kg	220	1200	0.2	0.00038	U	0.00038	U	0.00029	U	0.00028	U	0.0003	U	0.00035	U	0.00031	U	0.00031	U	0.00035	U	0.00038	U	0.0014	I	0.00032	U	0.00033	U	0.00028	U
8260	Methyl-2-pentanone, 4-	108-10-1	mg/kg	4300	44000	2.8	0.0076	U	0.0076	U	0.0057	U	0.0055	U	0.006	U	0.0069	U	0.0061	U	0.0063	U	0.007	U	0.0077	U	0.0081	U	0.0064	U	0.0066	U	0.0055	U
8260	Methylene chloride	75-09-2	mg/kg	17	26	0.02	0.0019	U	0.0019	U	0.0015	U	0.0014	U	0.0015	U	0.0018	U	0.0015	U	0.0015	U	0.0018	U	0.0019	U	0.002	U	0.0016	U	0.0016	U	0.0014	U
8260	MTBE	1634-04-4	mg/kg	4400	24000	0.09	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Styrene	100-42-5	mg/kg	3600	23000	3.6	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Tetrachloroethane, 1,1,2,2-	79-34-5	mg/kg	0.7	1.2	0.001	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Tetrachloroethene	127-18-4	mg/kg	8.8	18	0.03	0.00048	U	0.00047	U	0.00036	U	0.00034	U	0.00038	U	0.00044	U	0.00038	U	0.00039	U	0.00044	U	0.00048	U	0.00051	U	0.0004	U	0.00041	U	0.00035	U
8260	Toluene	108-88-3	mg/kg	7500	60000	0.5	0.0028	U	0.0029	U	0.0021	U	0.002	U	0.0023	U	0.0026	U	0.0023	U	0.0024	U	0.0026	U	0.0029	U	0.003	U	0.0024	U	0.0025	U	0.0021	U
8260	Total Xylenes	1330-20-7	mg/kg	130	700	0.2	0.0028	U	0.0029	U	0.0021	U	0.002	U	0.0023	U	0.0026	U	0.0023	U	0.0024	U	0.0026	U	0.0029	U	0.003	U	0.0024	U	0.0025	U	0.0021	U
8260	Trichloroethane, 1,1,1-	71-55-6	mg/kg	730	3900	1.9	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Trichloroethane, 1,1,2-	79-00-5	mg/kg	1.4	2	0.03	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Trichloroethene	79-01-6	mg/kg	6.4	9.3	0.03	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Trichlorofluoromethane	75-69-4	mg/kg	270	1500	33	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U
8260	Trimethylbenzene, 1,2,4-	95-63-6	mg/kg	18	95	0.3	0.00092	U	0.00098	U	0.00074	U	0.00066	U	0.00076	U	0.00089	U	0.00078	U	0.00077	U	0.00089	U	0.00094	U	0.001	U	0.00081	U	0.00081	U	0.00072	U
8260	Trimethylbenzene, 1,3,5-	108-67-8	mg/kg	15	80	0.3	0.00067	U	0.00066	U	0.0005	U	0.00048	U	0.00053	U	0.00061	U	0.00053	U	0.00055	U	0.00061	U	0.00067	U	0.00071	U	0.00056	U	0.00058	U	0.00048	U
8260	Vinyl acetate	108-05-4	mg/kg	320	1700	0.4	0.00057	U	0.00057	U	0.00043	U	0.00042	U	0.00045	U	0.00053	U	0.00046	U	0.00047	U	0.00053	U	0.00057	U	0.00061	U	0.00048	U	0.00049	U	0.00042	U
8260	Vinyl chloride	75-01-4	mg/kg	0.2	0.8	0.007	0.00076	U	0.00076	U	0.00057	U	0.00055	U	0.0006	U	0.00069	U	0.00061	U	0.00063	U	0.0007	U	0.00077	U	0.00081	U	0.00064	U	0.00066	U	0.00055	U

Notes: NE = Not Established
NA = Not Analyzed
D = Surrogates could not be calculated due to sample dilutions
I = The reported value is between the laboratory limit of detection (MDL) and the laboratory limit of quantitation (PQL).
< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.
V = Indicates blank contamination (i.e. the compound was detected in the sample and the associated method blanks).
L = Off scale high and the actual value is known to be greater than the reported value. Used when the sample concentration of the analyte exceeds the linear range or highest calibration standard and the calibration curve is known to exhibit a negative deflection
J = Estimated value may not be accurate. May be used for the following situations: 1) Exceedance of the surrogate recovery limits. 2) Existence of no quality control criteria for a component. 3) Failure to meet the established precision and accuracy criteria. 4) Matrix interference. 5) Questionable data due to improper field or lab protocols.

Cardno TBE
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Table 3A: VOCs Soil Sampling Results

McGinnes Lumber

Sample Location							SB-C6 0.5'		SB-C6 2'		SB-C6 3'		SB-A6 0.5'		SB-A6 3'		SB-B4 0.5'		SB-C7 0.5'		SB-D1 3'		SB-D4 0.5'		SB-D4 2'		SB-E6 0.5'		SB-F6 3'	
Collection Date							04/20/11		04/20/11		04/20/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm/ Indust	Leach -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8260	Acetone	67-64-1	mg/kg	11000	68000	25	0.017	U	0.013	U	0.013	U	0.016	U	0.05		0.014	U	0.011	U	0.012	U	0.039	I	0.011	U	0.014	U	0.012	U
8260	Benzene	71-43-2	mg/kg	1.2	1.7	0.007	0.00053	U	0.00041	U	0.00039	U	0.00056	U	0.00035	U	0.00046	U	0.00035	U	0.00037	U	0.00037	U	0.00035	U	0.00043	U	0.00037	U
8260	Bromochloromethane	74-97-5	mg/kg	95	530	0.6	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Bromodichloromethane	75-27-4	mg/kg	1.5	2.2	0.004	0.00053	U	0.00041	U	0.00039	U	0.00056	U	0.00035	U	0.00046	U	0.00035	U	0.00037	U	0.00037	U	0.00035	U	0.00043	U	0.00037	U
8260	Bromoform	75-25-2	mg/kg	49	93	0.03	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Bromomethane	74-83-9	mg/kg	3.1	16	0.05	0.012	U	0.0093	U	0.0085	U	0.012	U	0.0077	U	0.01	U	0.0073	U	0.0079	U	0.0083	U	0.0074	U	0.0094	U	0.0078	U
8260	Butanone, 2-	78-93-3	mg/kg	16000	110000	17	0.014	U	0.011	U	0.0099	U	0.014	U	0.0089	U	0.012	U	0.0091	U	0.0098	U	0.0097	U	0.0093	U	0.011	U	0.0099	U
8260	Carbon disulfide	75-15-0	mg/kg	270	1500	5.6	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Carbon tetrachloride	56-23-5	mg/kg	0.5	0.7	0.04	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Chlorobenzene	108-90-7	mg/kg	120	650	1.3	0.00063	U	0.00049	U	0.00047	U	0.00067	U	0.00042	U	0.00055	U	0.00041	U	0.00045	U	0.00045	U	0.00042	U	0.00052	U	0.00044	U
8260	Chloroethane	75-00-3	mg/kg	3.9	5.4	0.06	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Chloroform	67-66-3	mg/kg	0.4	0.6	0.4	0.00063	U	0.00049	U	0.00047	U	0.00067	U	0.00042	U	0.00055	U	0.00041	U	0.00045	U	0.00045	U	0.00042	U	0.00052	U	0.00044	U
8260	Chloromethane	74-87-3	mg/kg	4	5.7	0.01	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Dibromochloromethane	124-48-1	mg/kg	1.5	2.3	0.003	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Dibromomethane	74-95-3	mg/kg	96	550	0.3	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Dichlorobenzene, 1,2-	95-50-1	mg/kg	880	5000	17	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Dichlorobenzene, 1,3-	541-73-1	mg/kg	380	2200	7	0.00095	U	0.00073	U	0.0007	U	0.001	U	0.0006	U	0.00082	U	0.00061	U	0.00066	U	0.00068	U	0.00062	U	0.00078	U	0.00066	U
8260	Dichlorobenzene, 1,4-	106-46-7	mg/kg	6.4	9.9	2.2	0.00095	U	0.00073	U	0.0007	U	0.001	U	0.0006	U	0.00082	U	0.00061	U	0.00066	U	0.00068	U	0.00062	U	0.00078	U	0.00066	U
8260	Dichlorodifluoromethane	75-71-8	mg/kg	77	410	44	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Dichloroethane, 1,1-	75-34-3	mg/kg	390	2100	0.4	0.00095	U	0.00073	U	0.0007	U	0.001	U	0.0006	U	0.00082	U	0.00061	U	0.00066	U	0.00068	U	0.00062	U	0.00078	U	0.00066	U
8260	Dichloroethane, 1,2-	107-06-2	mg/kg	0.5	0.7	0.01	0.00042	U	0.00032	U	0.00031	U	0.00045	U	0.00028	U	0.00037	U	0.00027	U	0.0003	U	0.0003	U	0.00028	U	0.00035	U	0.0003	U
8260	Dichloroethene, 1,1-	75-35-4	mg/kg	95	510	0.06	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Dichloroethene, cis-1,2-	156-59-2	mg/kg	33	180	0.4	0.00063	U	0.00049	U	0.00047	U	0.00067	U	0.00042	U	0.00055	U	0.00041	U	0.00045	U	0.00045	U	0.00042	U	0.00052	U	0.00044	U
8260	Dichloroethene, trans-1,2-	156-60-5	mg/kg	53	290	0.7	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Dichloropropane, 1,2-	78-87-5	mg/kg	0.6	0.9	0.03	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Dichloropropane, 1,3-	542-75-6	mg/kg	1.4	2.2	0.002	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Ethylbenzene	100-41-4	mg/kg	1500	9200	0.9	0.00042	U	0.00032	U	0.00031	U	0.00045	U	0.00028	U	0.00037	U	0.00027	U	0.0003	U	0.0003	U	0.00028	U	0.00035	U	0.0003	U
8260	Hexanone, 2-	591-78-6	mg/kg	24	130	1.4	0.011	U	0.0085	U	0.0078	U	0.011	U	0.0072	U	0.0094	U	0.0067	U	0.0072	U	0.0076	U	0.0068	U	0.0087	U	0.0071	U
8260	Isopropylbenzene	98-82-8	mg/kg	220	1200	0.2	0.00042	U	0.00032	U	0.00031	U	0.00045	U	0.00028	U	0.00037	U	0.00027	U	0.0003	U	0.0003	U	0.00028	U	0.00035	U	0.0003	U
8260	Methyl-2-pentanone, 4-	108-10-1	mg/kg	4300	44000	2.6	0.0084	U	0.0065	U	0.0062	U	0.0089	U	0.0055	U	0.0073	U	0.0055	U	0.006	U	0.006	U	0.0056	U	0.0069	U	0.0059	U
8260	Methylene chloride	75-09-2	mg/kg	17	26	0.02	0.0021	U	0.0016	U	0.0018	U	0.0023	U	0.0014	U	0.0019	U	0.0014	U	0.0015	U	0.0015	U	0.0014	U	0.0017	U	0.0015	U
8260	MTBE	1634-04-4	mg/kg	4400	24000	0.09	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Styrene	100-42-5	mg/kg	3600	23000	3.6	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Tetrachloroethane, 1,1,2,2-	79-34-5	mg/kg	0.7	1.2	0.001	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Tetrachloroethene	127-18-4	mg/kg	8.8	18	0.03	0.00053	U	0.00041	U	0.00039	U	0.00056	U	0.00035	U	0.00046	U	0.00035	U	0.00037	U	0.00037	U	0.00035	U	0.00043	U	0.00037	U
8260	Toluene	108-88-3	mg/kg	7500	60000	0.5	0.0032	U	0.0025	U	0.0023	U	0.0033	U	0.0021	U	0.0027	U	0.0021	U	0.0022	U	0.0023	U	0.0021	U	0.0026	U	0.0022	U
8260	Total Xylenes	1330-20-7	mg/kg	130	700	0.2	0.0032	U	0.0025	U	0.0023	U	0.0033	U	0.0021	U	0.0027	U	0.0021	U	0.0022	U	0.0023	U	0.0021	U	0.0026	U	0.0022	U
8260	Trichloroethane, 1,1,1-	71-55-6	mg/kg	730	3900	1.9	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Trichloroethane, 1,1,2-	79-00-5	mg/kg	1.4	2	0.03	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Trichloroethene	79-01-6	mg/kg	6.4	9.3	0.03	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Trichlorofluoromethane	75-69-4	mg/kg	270	1500	33	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U
8260	Trimethylbenzene, 1,2,4-	95-63-6	mg/kg	19	95	0.3	0.0011	U	0.00085	U	0.00078	U	0.0011	U	0.00072	U	0.00094	U	0.00067	U	0.00072	U	0.00076	U	0.00068	U	0.00087	U	0.00071	U
8260	Trimethylbenzene, 1,3,5-	108-67-8	mg/kg	15	80	0.3	0.00074	U	0.00057	U	0.00055	U	0.00078	U	0.00048	U	0.00064	U	0.00048	U	0.00052	U	0.00053	U	0.00049	U	0.00061	U	0.00052	U
8260	Vinyl acetate	108-05-4	mg/kg	320	1700	0.4	0.00063	U	0.00049	U	0.00047	U	0.00067	U	0.00042	U	0.00055	U	0.00041	U	0.00045	U	0.00045	U	0.00042	U	0.00052	U	0.00044	U
8260	Vinyl chloride	75-01-4	mg/kg	0.2	0.8	0.007	0.00084	U	0.00065	U	0.00062	U	0.00089	U	0.00055	U	0.00073	U	0.00055	U	0.0006	U	0.0006	U	0.00056	U	0.00069	U	0.00059	U

Notes:
NE = Not Established
NA = Not Analyzed
D = Surrogates could not be calculated due to sample dilutions
I = The reported value is between the laboratory limit of detection (MDL) and the laboratory limit of quantitation (PQL).
< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.
V = Indicates blank contamination (i.e. the compound was detected in the sample and the associated method blanks).
L = Off scale high and the actual value is known to be greater than the reported value. Used when the sample concentration of the analyte exceeds the linear range or highest calibration standard and the calibration curve is known to exhibit a negative deflection
J = Estimated value may not be accurate. May be used for the following situations: 1) Exceedance of the surrogate recovery limits. 2) Existence of no quality control criteria for a component. 3) Failure to meet the established precision and accuracy criteria. 4) Matrix interference. 5) Questionable data due to improper field or lab protocols.

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Table 3B: Metals Soil Sampling Results

McGinnes Lumber

Sample Location							SB-E1 0_5		SB-E1 2		SB-E1 3		SB-E2 0_5		SB-E2 2		SB-E2 3		SB-E3 0_5		SB-E3 2		SB-E3 3		SB-E4 0_5		SB-E4 2		SB-E4 3		SB-E5 0_5		SB-E5 2		SB-E5 3	
Collection Date							04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm/ Indust.	Lesch. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
6010	Arsenic	NE	mg/Kg	2.1	12	***	0.54	I	0.24	U	0.24	U	3.9		0.23	U	0.22	U	2.4		0.22	U	0.22	U	4.6		0.23	U	0.24	U	1.5		0.22	U	0.24	U
6010	Copper	7440-50-8	mg/kg	150	98000	***	5		0.071	U	0.22	I	24		0.07	U	0.067	U	12		0.45		0.066	U	57		0.07	U	0.072	U	35		0.4		0.071	U
6010	Lead	7439-92-1	mg/kg	400	1400	***	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
6010	Chromium	7440-47-3	mg/kg	210	470	38	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
6010	Cadmium	7440-43-9	mg/kg	82	1700	7.5	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
6010	Selenium	7782-49-2	mg/kg	440	11000	5.2	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
6010	Barium	7440-39-3	mg/kg	120	130000	1600	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
7471	Mercury	7439-97-6	mg/kg	3	17	2.1	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	
6010	Silver	7440-22-4	mg/kg	410	8200	17	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	

Notes: NE = Not Established

* All data has been previously provided and approved in the SARA IV, dated February 2009. Tables have been reformatted for ease of use, however, data included reflects the contents as provided by the previous consultant

NA = Not Analyzed

*** = Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present

I = The reported value is between thelaboratory method detection limit and the reporting

< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.

V = Indicates blank contamination (i.e. the compound was detected in the sample and the associated method blanks). The value of the method blank is not subtracted from the assocaited sample

BDL = All parameters contributing to the sum value were below the respective detection limit

D = Surrogates could not be calculated due to sample dilutions

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Table 3B: Metals Soil Sampling Results

McGinnes Lumber

Sample Location							SB-E6 0_5		SB-E6 2		SB-E6 3		SB-F1 0_5		SB-F1 2		SB-F1 3		SB-F2 0_5		SB-F2 2		SB-F2 3		SB-D8 0.5'		SB-D8 2'		SB-D8 3'		SB-A6 0.5'		SB-A8 3'		SB-B4 0.5'	
Collection Date							04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/21/11		04/20/11		04/20/11		04/20/11		05/18/11		05/18/11		05/18/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust.	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
6010	Arsenic	NE	mg/Kg	21	12	***	1.8		0.22	U	0.24	U	0.67	I	0.23	U	0.23	U	0.22	U	0.23	U	0.24	U	1.7		0.21	U	0.79	I	2.9		1		4.7	
6010	Copper	7440-50-8	mg/kg	150	98000	***	23		0.28		0.35		7.5		0.44		0.26	I	6.1		0.066	U	0.072	U	9.7		0.74		0.71		22		8.2		12	
6010	Lead	7439-92-1	mg/kg	400	1400	***	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		150		56		79	
6010	Chromium	7440-47-3	mg/kg	210	470	38	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		22		5.6		24	
6010	Cadmium	7440-43-9	mg/kg	82	1700	7.5	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		1		0.21		1.5	
6010	Selenium	7782-49-2	mg/kg	440	11000	5.2	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		0.22	U	0.23	U	0.22	U
6010	Barium	7440-39-3	mg/kg	120	130000	1600	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		42		40		68	
7471	Mercury	7439-97-6	mg/kg	3	17	2.1	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		0.079		0.064		0.084	
6010	Silver	7440-22-4	mg/kg	410	8200	17	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		0.22	U	0.23	U	0.22	U

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BDL = All parameters contributing to the sum value were below the respective detection limit
D = Surrogates could not be calculated due to sample dilutions

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Table 3B: Metals Soil Sampling Results

McGinnes Lumber

Sample Location							SB-C7 0.5'		SB-D1 3'		SB-D4 0.5'		SB-D4 2'		SB-E8 0.5'		SB-F6 3'	
Collection Date							05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust.	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
6010	Arsenic	NE	mg/Kg	2.1	12	***	0.73	I	0.23	U	0.22	U	0.52	I	0.9		1.2	
6010	Copper	7440-50-8	mg/kg	150	98000	***	0.7		0.44		0.41		0.068	U	0.43		0.94	
6010	Lead	7439-92-1	mg/kg	400	1400	***	1.8		2.7		1.7		1.2		1.8		2.8	
6010	Chromium	7440-47-3	mg/kg	210	470	38	2.9		2.9		0.97		2.6		1.7		4.9	
6010	Cadmium	7440-43-9	mg/kg	82	1700	7.5	0.034	U	0.034	U	0.033	U	0.034	U	0.033	U	0.031	U
6010	Selenium	7782-49-2	mg/kg	440	11000	5.2	0.23	U	0.23	U	0.22	U	0.23	U	0.22	U	0.21	U
6010	Barium	7440-39-3	mg/kg	120	130000	1600	20		21		6.5		14		7.1		30	
7471	Mercury	7439-97-6	mg/kg	3	17	2.1	0.07		0.023	I	0.0091	I	0.0068	U	0.015	I	0.0062	U
6010	Silver	7440-22-4	mg/kg	410	8200	17	0.23	U	0.23	U	0.22	U	0.23	U	0.22	U	0.21	U

Notes: NE = Not Established
* All data has been previously provided and approved in the SARA IV, dated February 2009. Tables have been reformatted for ease of use, however, data included reflects the contents as provided by the previous consultant
NA = Not Analyzed
*** = Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present
I = The reported value is between thelaboratory method detection limit and the reporting
< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.

V = Indicates blank contamination (i.e. the compound was detected in the sample and the associated method blanks). The value of the method blank is not subtracted from the assocaited sample
BDL = All parameters contributing to the sum value were below the respective detection limit
D = Surrogates could not be calculated due to sample dilutions

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Table 3C: SVOCs and TRPH Soil Sampling Results

McGinnes Lumber

Sample Location							SB-A1 0.5'		SB-A1 2'		SB-A1 4'		SB-A2 0.5'		SB-A2 2'		SB-A2 3'		SB-A3 0.5'		SB-A3 2'		SB-A3 3'		SB-A4 0.5'		SB-A4 2'		SB-A4 4'		SB-C1 0.5'		SB-C1 2'	
Collection Date							04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/19/11		04/20/11		04/20/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust.	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8270	Acenaphthene	83-32-9	mg/Kg	2400	20000	2.1	0.0022	U	0.029	I	0.0075	I	0.011	U	0.0023	U	0.0024	U	0.011	U	0.02		0.0037	I	0.0022	U	0.0024	U	0.0025	U	0.0024	U	0.0024	U
8270	Acenaphthylene	208-96-8	mg/Kg	1800	20000	27	0.2		0.29		0.44		0.022	I	0.0024	U	0.0025	U	0.027	I	0.18		0.055		0.0023	U	0.0025	U	0.0026	U	0.0058	I	0.0026	U
8270	Anthracene	120-12-7	mg/Kg	21000	300000	2500	0.042		0.087		0.095		0.009	U	0.0039	I	0.0019	U	0.014	I	0.13		0.03		0.0028	I	0.0019	U	0.002	U	0.0066	I	0.002	U
8270	Benz(a)Anthracene	56-55-3	mg/Kg	#	#	0.8	0.17		0.59		0.42		0.053		0.024		0.0017	U	0.09		0.63		0.14		0.013		0.0017	U	0.0018	U	0.028		0.0045	I
8270	Benzo(a)pyrene	50-32-8	mg/Kg	0.1	0.7	8	0.17		0.58		0.4		0.034	I	0.023		0.0023	U	0.063		0.43		0.11		0.0061	I	0.0022	U	0.0024	U	0.037		0.0046	I
8270	Benzo(g,h,i)perylene	191-24-2	mg/Kg	2500	52000	32000	0.12		0.38		0.2		0.037	U	0.015	I	0.0078	U	0.1	I	0.26		0.08		0.0081	I	0.0078	U	0.0082	U	0.075		0.0093	I
8270	Benzo(b)fluoranthene	205-99-2	mg/Kg	#	#	2.4	0.27		0.95		0.5		0.085		0.057		0.0031	U	0.13		1.2		0.21		0.022		0.003	U	0.0032	U	0.067		0.0073	I
8270	Benzo(k)fluoranthene	207-08-9	mg/Kg	#	#	24	0.084		0.21		0.2		0.023	I	0.01		0.0022	U	0.032	I	0.18		0.059		0.005	I	0.0021	U	0.0023	U	0.034		0.0029	I
8270	Chrysene	218-01-9	mg/Kg	#	#	77	0.16		0.45		0.37		0.039		0.02		0.0014	U	0.065		0.67		0.11		0.011		0.0013	U	0.0014	U	0.042		0.0063	
8270	Dibenz(a,h)Anthracene	53-70-3	mg/Kg	#	#	0.7	0.024	I	0.08	U	0.035		0.039	U	0.0081	U	0.0083	U	0.038	U	0.057		0.019	I	0.0078	U	0.0082	U	0.0087	U	0.017	I	0.0085	U
8270	Fluoranthene	206-44-0	mg/Kg	3200	59000	1200	0.19		0.78		0.48		0.059		0.032		0.0026	U	0.13		1.2		0.22		0.018		0.0026	U	0.0027	U	0.025		0.0065	I
8270	Fluorene	86-73-7	mg/Kg	2600	33000	160	0.018		0.04	I	0.039		0.0096	U	0.002	U	0.002	U	0.0095	U	0.053		0.0079	I	0.0019	U	0.002	U	0.0021	U	0.002	U	0.0021	U
8270	Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	#	#	6.6	0.11		0.33		0.19		0.038	U	0.013	I	0.0082	U	0.051	I	0.24		0.077		0.0077	U	0.0081	U	0.0086	U	0.064		0.0084	U
8270	1-Methylnaphthalene	90-12-0	mg/Kg	200	1800	3.1	0.029		0.044	I	0.5		0.019	I	0.014	I	0.0038	U	0.024	I	0.09		0.013	I	0.0035	U	0.0037	U	0.0039	U	0.0038	U	0.0038	U
8270	2-Methylnaphthalene	91-57-6	mg/Kg	210	2100	8.5	0.042		0.05	I	0.062		0.038	I	0.027		0.0032	U	0.048	I	0.13		0.015		0.0036	I	0.0031	U	0.0033	U	0.0032	U	0.0033	U
8270	Naphthalene	91-20-3	mg/Kg	55	300	1.2	0.027		0.06	U	0.044		0.041	I	0.019	I	0.0062	U	0.057	I	0.097		0.015	I	0.0059	U	0.0062	U	0.0065	U	0.0062	U	0.0064	U
8270	Phenanthrene	85-01-8	mg/Kg	2200	36000	250	0.1		0.53		0.3		0.041	I	0.015		0.0032	U	0.061		0.75		0.13		0.003	U	0.0031	U	0.0033	U	0.018		0.0037	I
8270	Pyrene	129-00-0	mg/Kg	2400	45000	880	0.27		0.88		0.75		0.063	I	0.03	I	0.0078	U	0.11	I	1.3		0.24		0.018	I	0.0078	U	0.0082	U	0.029	I	0.008	U
8270	BaP Equivalent	NE	mg/Kg	0.1	0.7	NA	0.25		0.81		0.548		0.069		0.037		NC		0.109		0.696		0.172		0.014		NC		NC		0.07		0.01	
Total	TRPH	NE	mg/Kg	460	2700	340	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	

Notes: NE = Not Established
D = Surrogates could not be caluclated due to sample dilutions
I = The reported value is between the laboratory limit of detection (MDL) and the laboratory limit of quantitation (PQL).
< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.
= Site concentrations for carcinogenic polycyclic aromatic hydrocarbons must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL

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Table 3C: SVOCs and TRPH Soil Sampling Results

McGinnes Lumber

Sample Location							SB-C2 0.5'		SB-C2 2'		SB-C2 3'		SB-C3 0.5'		SB-C3 2'		SB-C3 3'		SB-C4 0.5'		SB-C4 2'		SB-C4 3'		SB-C5 0.5'		SB-C5 2'		SB-C5 3'		SB-C6 0.5'		SB-C6 2'	
Collection Date							04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11		04/20/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust.	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8270	Acenaphthene	83-32-9	mg/Kg	2400	20000	2.1	0.0023	U	0.0024	U	0.0025	U	0.0023	U	0.0025	I	0.0024	U	0.0023	U	0.0032	I	0.0023	U	0.0023	U	0.0024	U	0.0024	U	0.0022	U	0.0022	U
8270	Acenaphthylene	208-96-8	mg/Kg	1800	20000	27	0.013		0.0025	U	0.0026	U	0.0024	U	0.0023	U	0.0025	U	0.0024	U	0.0025	U	0.0024	U	0.0024	U	0.0025	U	0.0026	U	0.0023	U	0.0023	U
8270	Anthracene	120-12-7	mg/Kg	21000	300000	2500	0.013		0.002	U	0.002	U	0.0018	U	0.0018	U	0.0019	U	0.0018	U	0.0019	U	0.0021	I	0.0019	U	0.0019	U	0.002	U	0.0024	I	0.0018	U
8270	Benz(a)Anthracene	56-55-3	mg/Kg	#	#	0.8	0.078		0.0017	U	0.0018	U	0.011		0.0016	U	0.0036	I	0.0044	I	0.0017	U	0.012		0.0016	U	0.0042	I	0.0017	U	0.0093		0.0041	I
8270	Benzo(a)pyrene	50-32-8	mg/Kg	0.1	0.7	8	0.095		0.0023	U	0.0024	U	0.013		0.0021	U	0.0033	I	0.0022	U	0.0022	U	0.0091		0.0022	U	0.0029	I	0.0023	U	0.0072	I	0.0029	I
8270	Benzo(g,h,i)perylene	191-24-2	mg/Kg	2500	52000	32000	0.17		0.0079	U	0.0082	U	0.011	I	0.0073	U	0.0078	U	0.0074	U	0.0078	U	0.0074	U	0.0076	U	0.0078	U	0.008	U	0.013	I	0.0073	U
8270	Benzo(b)fluoranthene	205-99-2	mg/Kg	#	#	2.4	0.16		0.0031	U	0.0032	U	0.017		0.0029	U	0.0036	I	0.0063	I	0.0033	I	0.013		0.003	U	0.0039	I	0.0031	U	0.015		0.0063	I
8270	Benzo(k)fluoranthene	207-08-9	mg/Kg	#	#	24	0.06		0.0022	U	0.0023	U	0.0072	I	0.002	U	0.0021	U	0.002	U	0.0021	U	0.0071	I	0.0021	U	0.0021	U	0.0022	U	0.0052	I	0.0032	I
8270	Chrysene	218-01-9	mg/Kg	#	#	77	0.097		0.0014	U	0.0014	U	0.015		0.0013	U	0.0026	I	0.0051	I	0.0013	U	0.015		0.0013	U	0.0042	I	0.0014	U	0.013		0.0047	I
8270	Dibenz(a,h)Anthracene	53-70-3	mg/Kg	#	#	0.7	0.032		0.0084	U	0.0087	U	0.0078	U	0.0078	U	0.0082	U	0.0078	U	0.0082	U	0.0078	U	0.008	U	0.0082	U	0.0085	U	0.0077	U	0.0077	U
8270	Fluoranthene	206-44-0	mg/Kg	3200	59000	1200	0.0025	U	0.0026	U	0.0027	U	0.0025	U	0.0024	U	0.0026	U	0.0054	I	0.0042	I	0.015		0.0025	U	0.0052	I	0.0029	I	0.019		0.0041	I
8270	Fluorene	86-73-7	mg/Kg	2600	33000	160	0.0019	U	0.0021	U	0.0021	U	0.0019	U	0.0019	U	0.002	U	0.0019	U	0.002	U	0.0019	U	0.002	U	0.002	U	0.0021	U	0.0019	U	0.0019	U
8270	Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	#	#	6.6	0.13		0.0083	U	0.0086	U	0.01	I	0.0077	U	0.0081	U	0.0077	U	0.0081	U	0.0077	U	0.0079	U	0.0081	U	0.0084	U	0.0096	I	0.0076	U
8270	1-Methylnaphthalene	90-12-0	mg/Kg	200	1800	3.1	0.0047	I	0.0038	U	0.0039	U	0.0035	U	0.017		0.0037	U	0.0035	U	0.0046	I	0.0046	I	0.0036	U	0.0037	U	0.0045	I	0.0035	U	0.0035	U
8270	2-Methylnaphthalene	91-57-6	mg/Kg	210	2100	8.5	0.0045	I	0.0032	U	0.0033	U	0.0041	I	0.03		0.0031	U	0.003	U	0.0063	I	0.0076	I	0.0031	U	0.0031	U	0.0078	I	0.0029	U	0.0029	U
8270	Naphthalene	91-20-3	mg/Kg	55	300	1.2	0.0059	U	0.0063	U	0.0065	U	0.0059	U	0.01	I	0.0062	U	0.0059	U	0.0072	I	0.0063	I	0.006	U	0.0062	U	0.0089	I	0.0058	U	0.0058	U
8270	Phenanthrene	85-01-8	mg/Kg	2200	36000	250	0.029		0.0032	U	0.0033	U	0.0076	I	0.003	U	0.0031	U	0.0034	I	0.0068	I	0.0067	I	0.0031	U	0.0043	I	0.0033	U	0.018		0.0031	I
8270	Pyrene	129-00-0	mg/Kg	2400	45000	880	0.088		0.0079	U	0.0082	U	0.0074	U	0.0073	U	0.0078	U	0.0074	U	0.0078	U	0.013	I	0.0076	U	0.0078	U	0.008	U	0.018	I	0.0073	U
8270	BaP Equivalent	NE	mg/Kg	0.1	0.7	NA	0.184		NC		NC		0.021		NC		0.009		0.006		0.006		0.016		NC		0.008		NC		0.015		0.008	
Total	TRPH	NE	mg/Kg	460	2700	340	NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA		NA	

Notes: NE = Not Established
D = Surrogates could not be caluclated due to sample dilutions
I = The reported value is between the laboratory limit of detection (MDL) and the laboratory limit of quantitation (PQL).
< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.

= Site concentrations for carcinogenic polycyclic aromatic hydrocarbons must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL

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Table 3C: SVOCs and TRPH Soil Sampling Results

McGinnes Lumber

Sample Location							SB-C6 3'		SB-A6 0.5'		SB-A8 3'		SB-B4 0.5'		SB-C7 0.5'		SB-D1 3'		SB-D4 0.5'		SB-D4 2'		SB-E8 0.5'		SB-F6 3'	
Collection Date							04/20/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11		05/18/11	
Method	Parameter	CAS No	Units	DE-Residential	DE-Comm./ Indust.	Leach. -GC	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
8270	Acenaphthene	83-32-9	mg/Kg	2400	20000	2.1	0.0023	U	0.023	U	0.0024	U	0.023	U	0.0024	U	0.0024	U	0.0023	U	0.0024	U	0.0023	U	0.0022	U
8270	Acenaphthylene	208-96-8	mg/Kg	1800	20000	27	0.0024	U	0.024	U	0.0026	U	0.18		0.0025	U	0.0025	U	0.0024	U	0.0025	U	0.0024	U	0.0023	U
8270	Anthracene	120-12-7	mg/Kg	21000	300000	2500	0.0019	U	0.052	I	0.14		0.08		0.0019	U	0.0019	U	0.0018	U	0.0019	U	0.0019	U	0.0098	
8270	Benz(a)Anthracene	56-55-3	mg/Kg	#	#	0.8	0.0016	U	0.22		0.45		0.3		0.0017	U	0.003	I	0.0016	U	0.0017	U	0.0016	U	0.022	
8270	Benzo(a)pyrene	50-32-8	mg/Kg	0.1	0.7	8	0.0022	U	0.26		0.61		0.38		0.0023	U	0.0067	I	0.0022	U	0.0023	U	0.0022	U	0.016	
8270	Benzo(g,h,i)perylene	191-24-2	mg/Kg	2500	52000	32000	0.0076	U	0.22	I	0.95		0.36		0.0078	U	0.0078	U	0.0075	U	0.0078	U	0.0076	U	0.034	
8270	Benzo(b)fluoranthene	205-99-2	mg/Kg	#	#	2.4	0.003	U	0.31		0.64		0.45		0.0031	U	0.0031	U	0.0029	U	0.0031	U	0.003	U	0.019	
8270	Benzo(k)fluoranthene	207-08-9	mg/Kg	#	#	24	0.0021	U	0.15		0.022	U	0.18		0.0022	U	0.006	I	0.0021	U	0.0022	U	0.0021	U	0.016	
8270	Chrysene	218-01-9	mg/Kg	#	#	77	0.0013	U	0.26		0.52		0.36		0.0014	U	0.0044	I	0.0013	U	0.0014	U	0.0013	U	0.018	
8270	Dibenz(a,h)Anthracene	53-70-3	mg/Kg	#	#	0.7	0.008	U	0.078	U	0.23	I	0.088	I	0.0083	U	0.0083	U	0.0079	U	0.0083	U	0.008	U	0.031	
8270	Fluoranthene	206-44-0	mg/Kg	3200	59000	1200	0.0025	U	0.52		0.13		0.52		0.0026	U	0.0041	I	0.0025	U	0.0026	U	0.0025	U	0.016	
8270	Fluorene	86-73-7	mg/Kg	2600	33000	160	0.002	U	0.019	U	0.0021	U	0.019	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.0041	I
8270	Indeno(1,2,3-cd)pyrene	193-39-5	mg/Kg	#	#	6.6	0.0079	U	0.2	I	0.71		0.3	I	0.0082	U	0.0082	U	0.0078	U	0.0082	U	0.0079	U	0.021	I
8270	1-Methylnaphthalene	90-12-0	mg/Kg	200	1800	3.1	0.0036	U	0.035	U	0.0038	U	0.035	U	0.0038	U	0.0038	U	0.0036	U	0.0038	U	0.0036	U	0.0034	U
8270	2-Methylnaphthalene	91-57-6	mg/Kg	210	2100	8.5	0.0031	U	0.03	U	0.0033	U	0.03	U	0.0032	U	0.0032	U	0.003	U	0.0032	U	0.0031	U	0.0029	U
8270	Naphthalene	91-20-3	mg/Kg	55	300	1.2	0.006	U	0.059	U	0.0064	U	0.059	U	0.0062	U	0.0062	U	0.006	U	0.0062	U	0.006	U	0.0057	U
8270	Phenanthrene	85-01-8	mg/Kg	2200	36000	250	0.0031	U	0.34		0.15		0.22		0.0032	U	0.0041	I	0.003	U	0.0032	U	0.0031	U	0.012	
8270	Pyrene	129-00-0	mg/Kg	2400	45000	880	0.0076	U	0.46		1		0.6		0.0078	U	0.0083	I	0.0075	U	0.0078	U	0.0076	U	0.017	I
8270	BaP Equivalent	NE	mg/Kg	0.1	0.7	NA	NC		0.339		1.02		0.575		NC		0.011		NC		NC		NC		0.053	
Total	TRPH	NE	mg/Kg	460	2700	340	NA		10	I	4500		5.2	U	6.9	I	5.5	U	5.2	U	5.5	U	5.3	U	5	U

Notes: NE = Not Established

D = Surrogates could not be caluclated due to sample dilutions

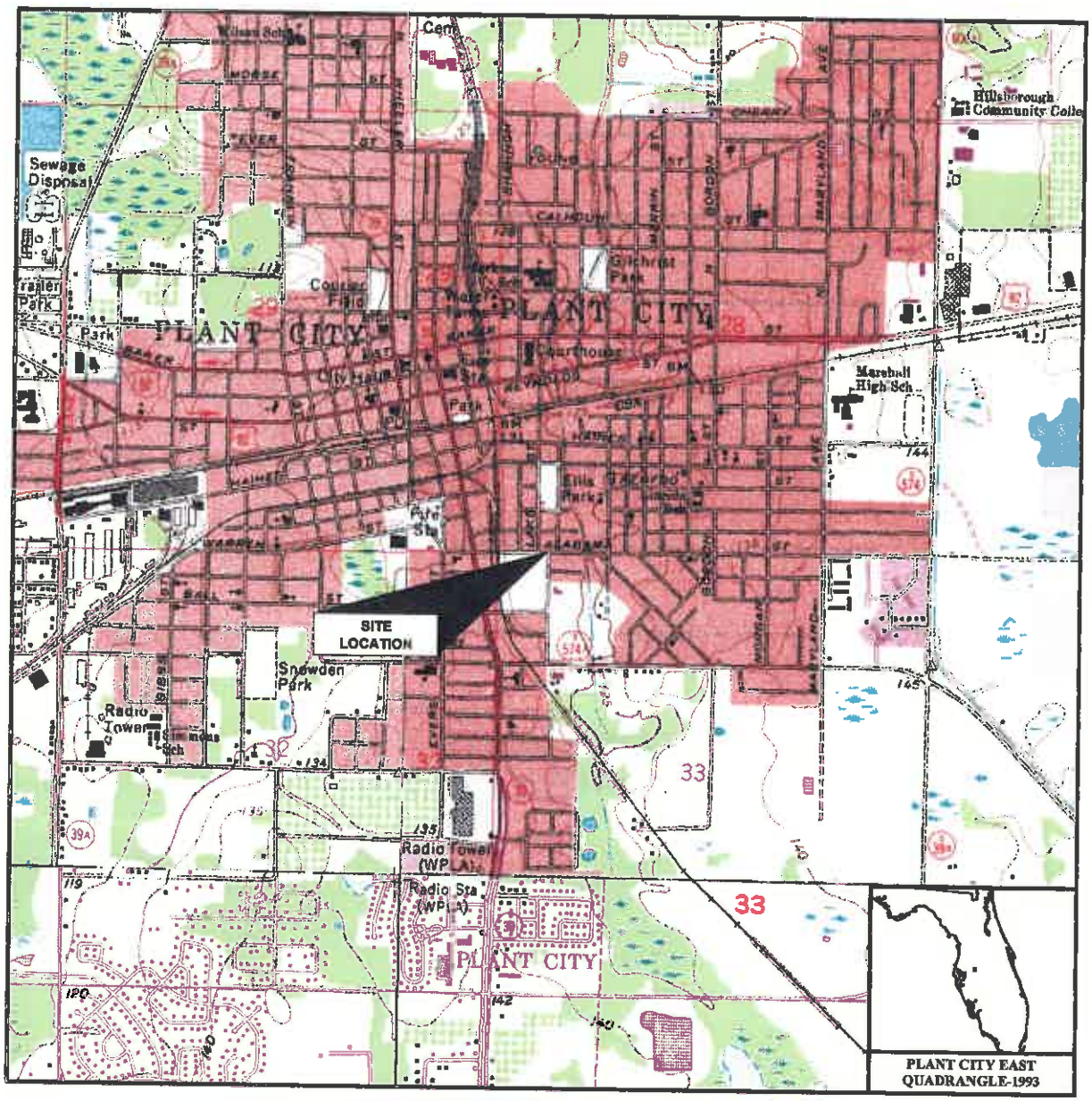
I = The reported value is between the laboratory limit of detection (MDL) and the laboratory limit of quantitation (PQL).

< = Indicates that a specific compound was analyzed for but not detected. The reported value shall be the MDL.

= Site concentrations for carcinogenic polycyclic aromatic hydrocarbons must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL

Attachment E

ATTACHMENT A
FIGURES



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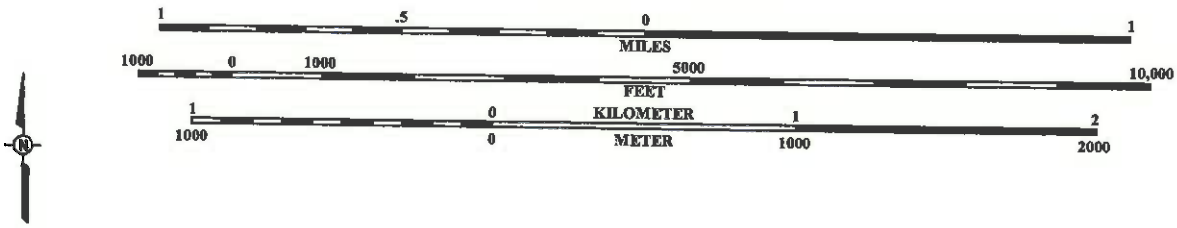

PPM CONSULTANTS, INC.		CITY OF PLANT CITY **FORMER GRO-MOR FERTILIZER PLANT** 307 SOUTH EVERS STREET PLANT CITY, FLORIDA	SITE LOCATION MAP	FIGURE NUMBER
DRAWN BY: BWH	DRAWN DATE: 12/05/12			1
PROJECT NUMBER: 716810	BILLING GROUP: SR			

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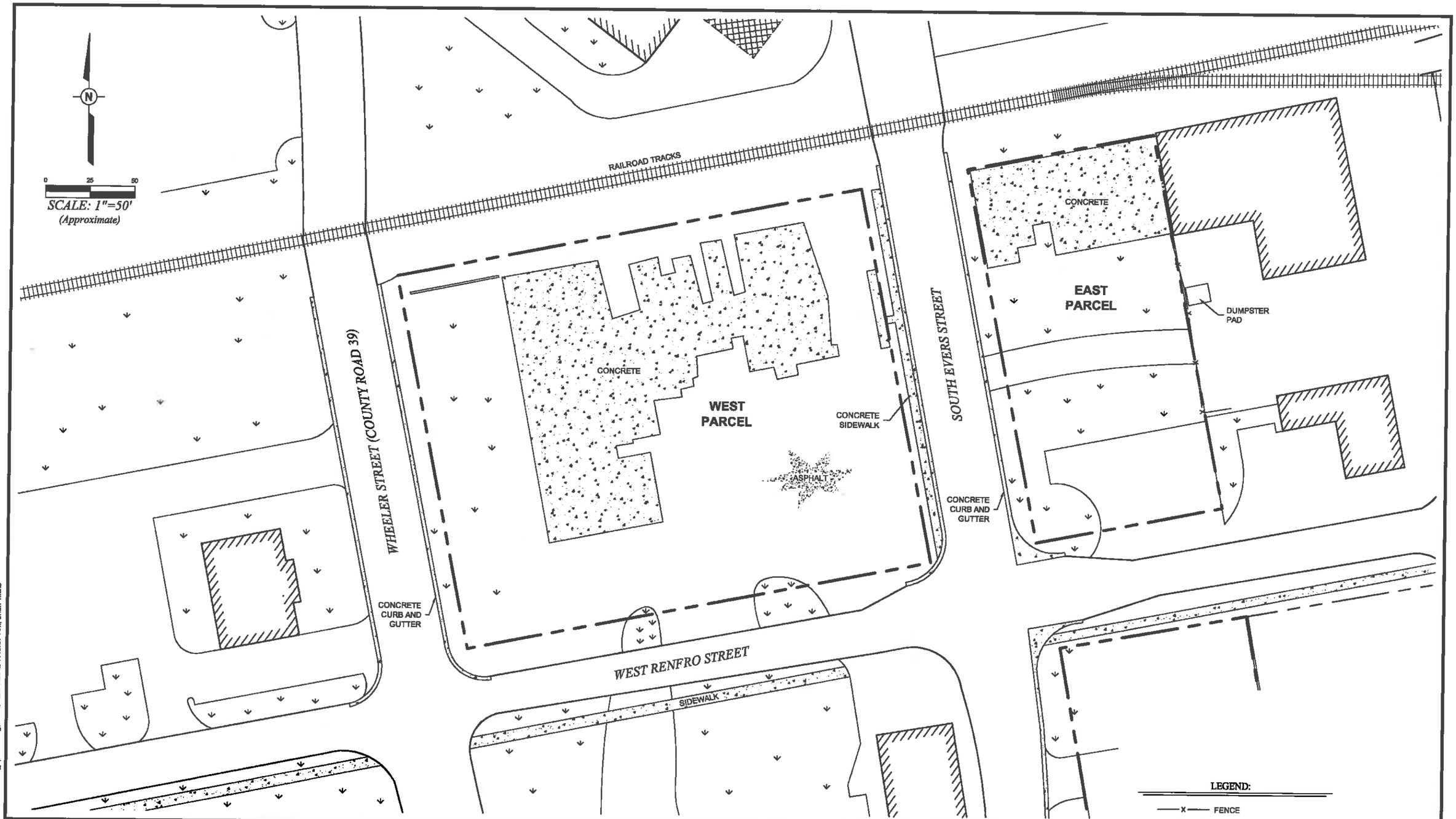

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PROJECT NUMBER: 716810	BILLING GROUP: SR		FIGURE NUMBER 2

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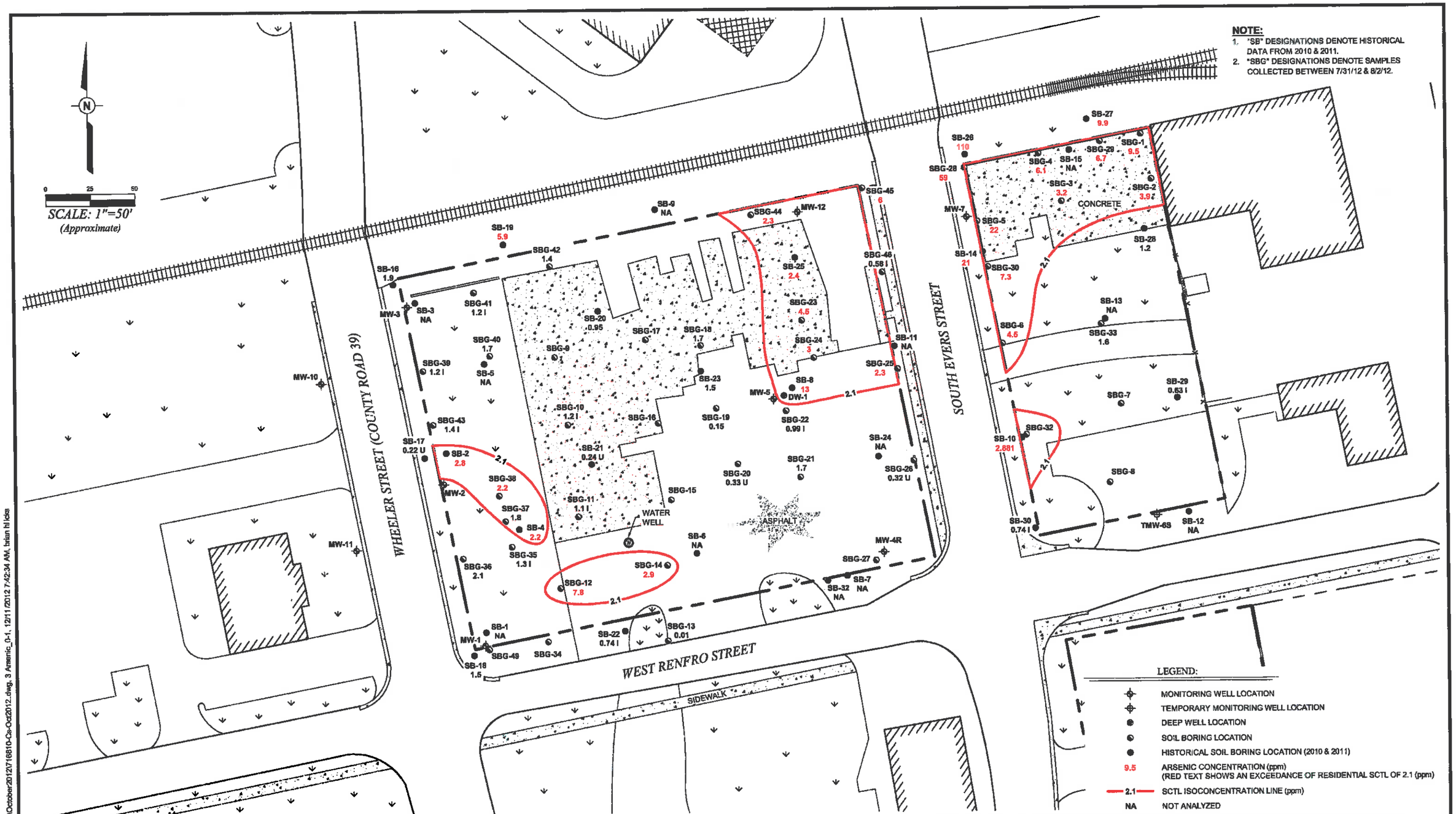

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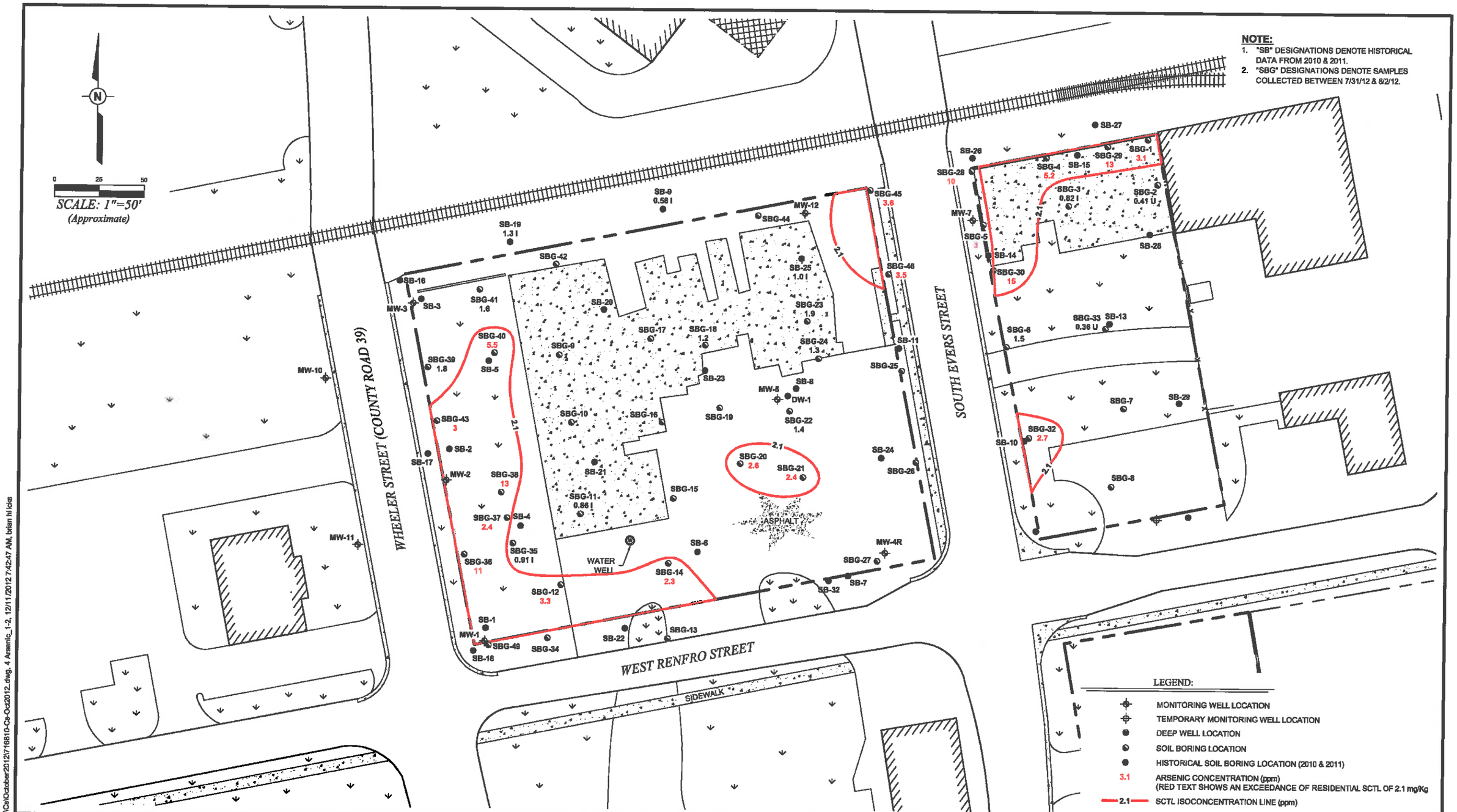
PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	10/31/12
PROJECT NUMBER:	BILLING GROUP:
716810	CS

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

PRE-EXCAVATION ARSENIC SOIL MAP
(0-1 FOOT INTERVAL)

FIGURE NUMBER
3



PPM CONSULTANTS, INC.			
DRAWN BY: BWH	DRAWN DATE: 10/31/12	CITY OF PLANT CITY **FORMER GRO-MOR FERTILIZER PLANT** 307 SOUTH EVERS STREET PLANT CITY, FLORIDA	PRE-EXCAVATION ARSENIC SOIL MAP (1-2 FOOT INTERVAL)
PROJECT NUMBER: 716810	BILLING GROUP: CS		FIGURE NUMBER 4

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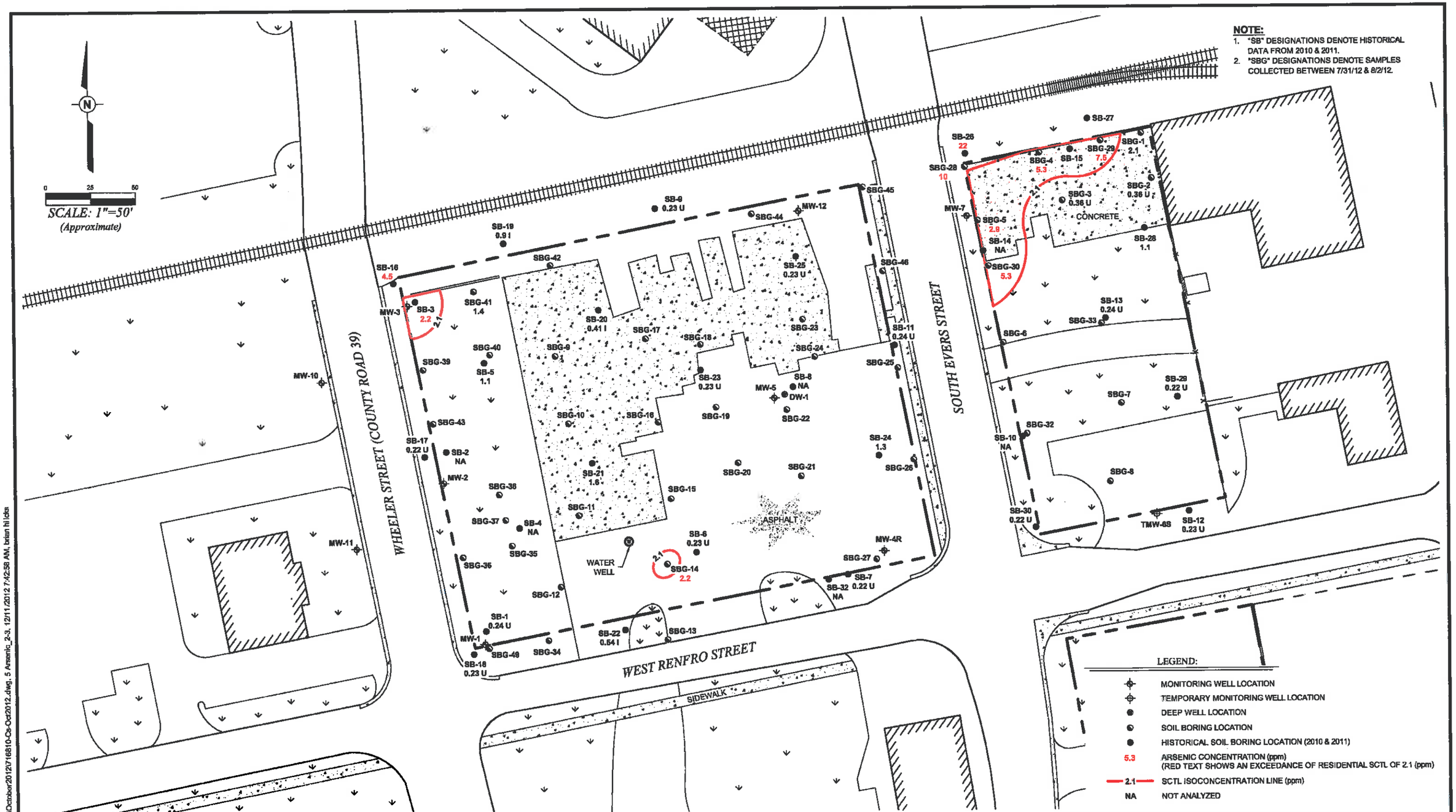

PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	10/31/12
PROJECT NUMBER:	BILLING GROUP:
716810	CS

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

PRE-EXCAVATION ARSENIC SOIL MAP
(2-3 FOOT INTERVAL)

FIGURE NUMBER
5

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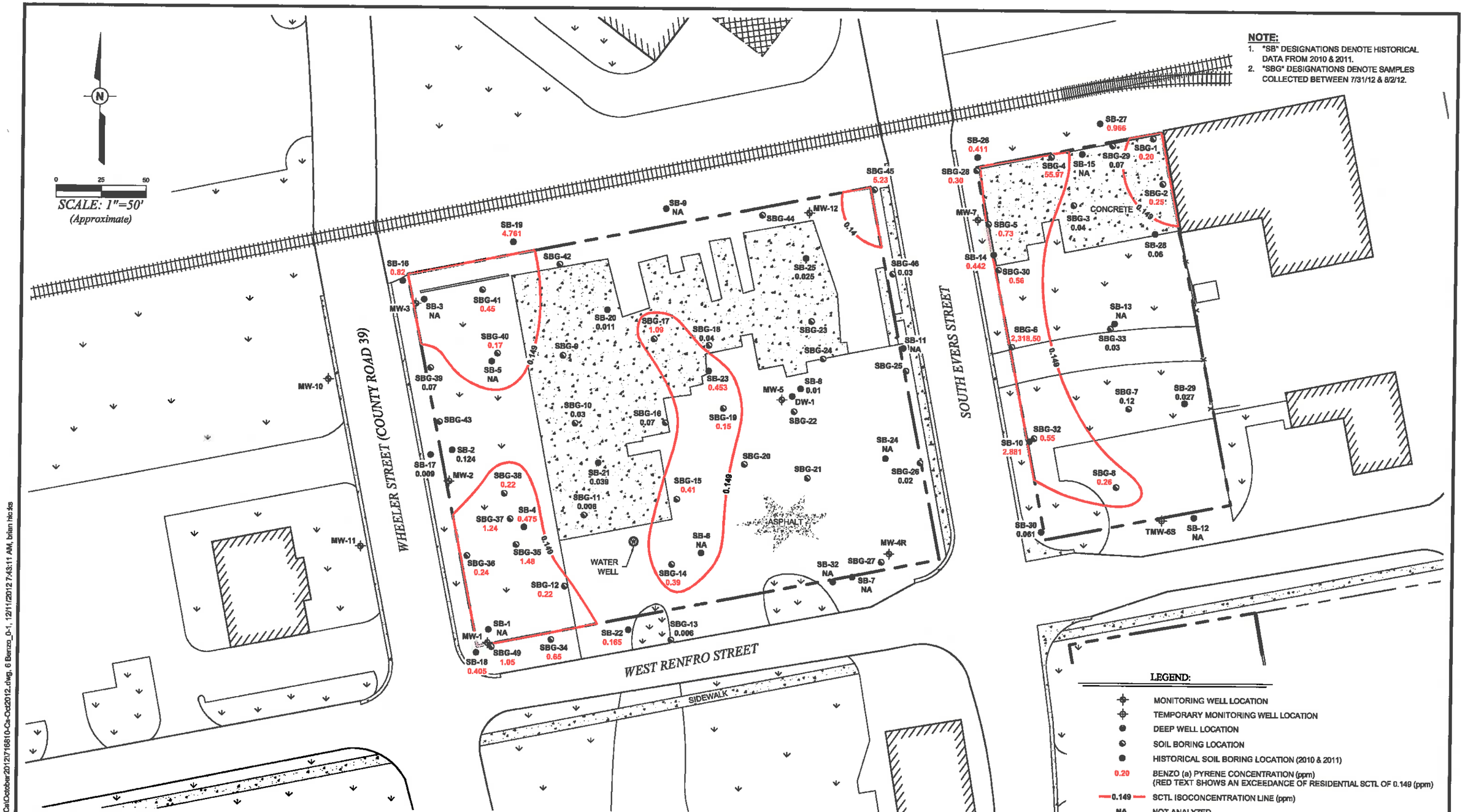

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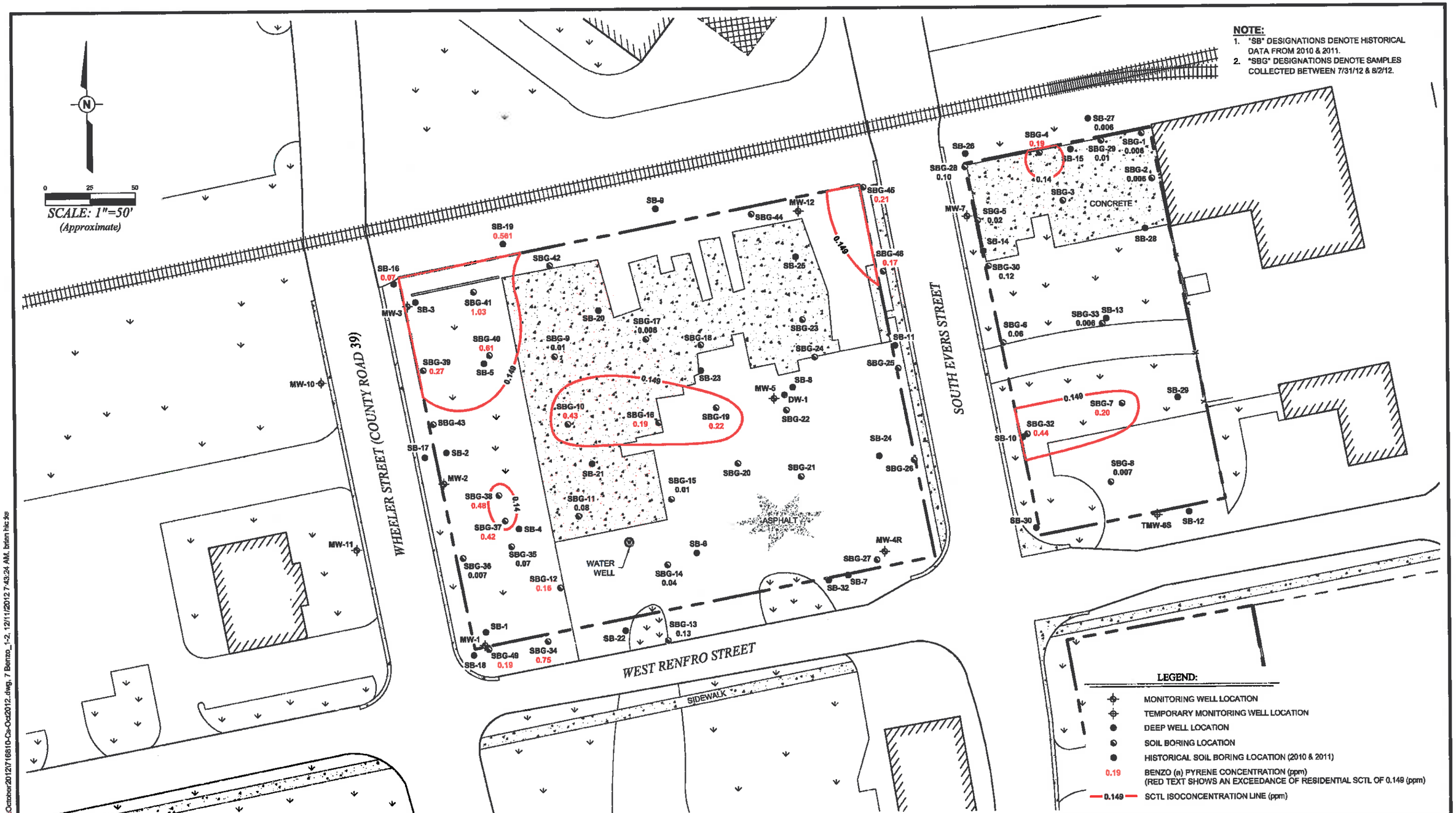
PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	10/31/12
PROJECT NUMBER:	BILLING GROUP:
716810	CS

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

PRE-EXCAVATION BENZO (a) PYRENE EQUIVALENT SOIL MAP
(0-1 FOOT INTERVAL)

FIGURE NUMBER
6



PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	10/31/12
PROJECT NUMBER:	BILLING GROUP:
716810	CS

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

PRE-EXCAVATION BENZO (a) PYRENE EQUIVALENT SOIL MAP
(1-2 FOOT INTERVAL)

FIGURE NUMBER
7

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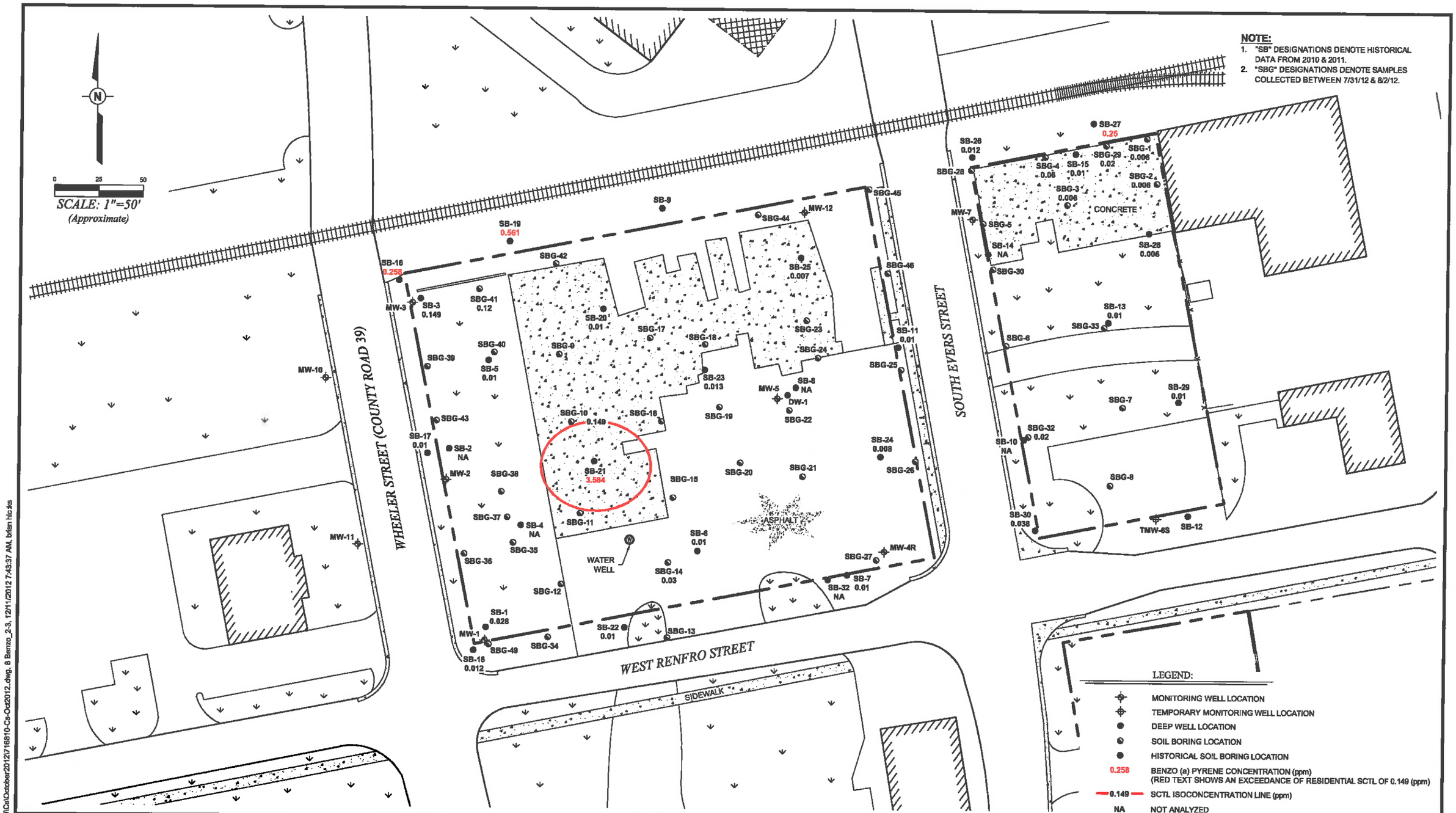

PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	10/31/12
PROJECT NUMBER:	BILLING GROUP:
716810	CS

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

PRE-EXCAVATION BENZO (a) PYRENE EQUIVALENT SOIL MAP
(2-3 FOOT INTERVAL)

FIGURE NUMBER
8

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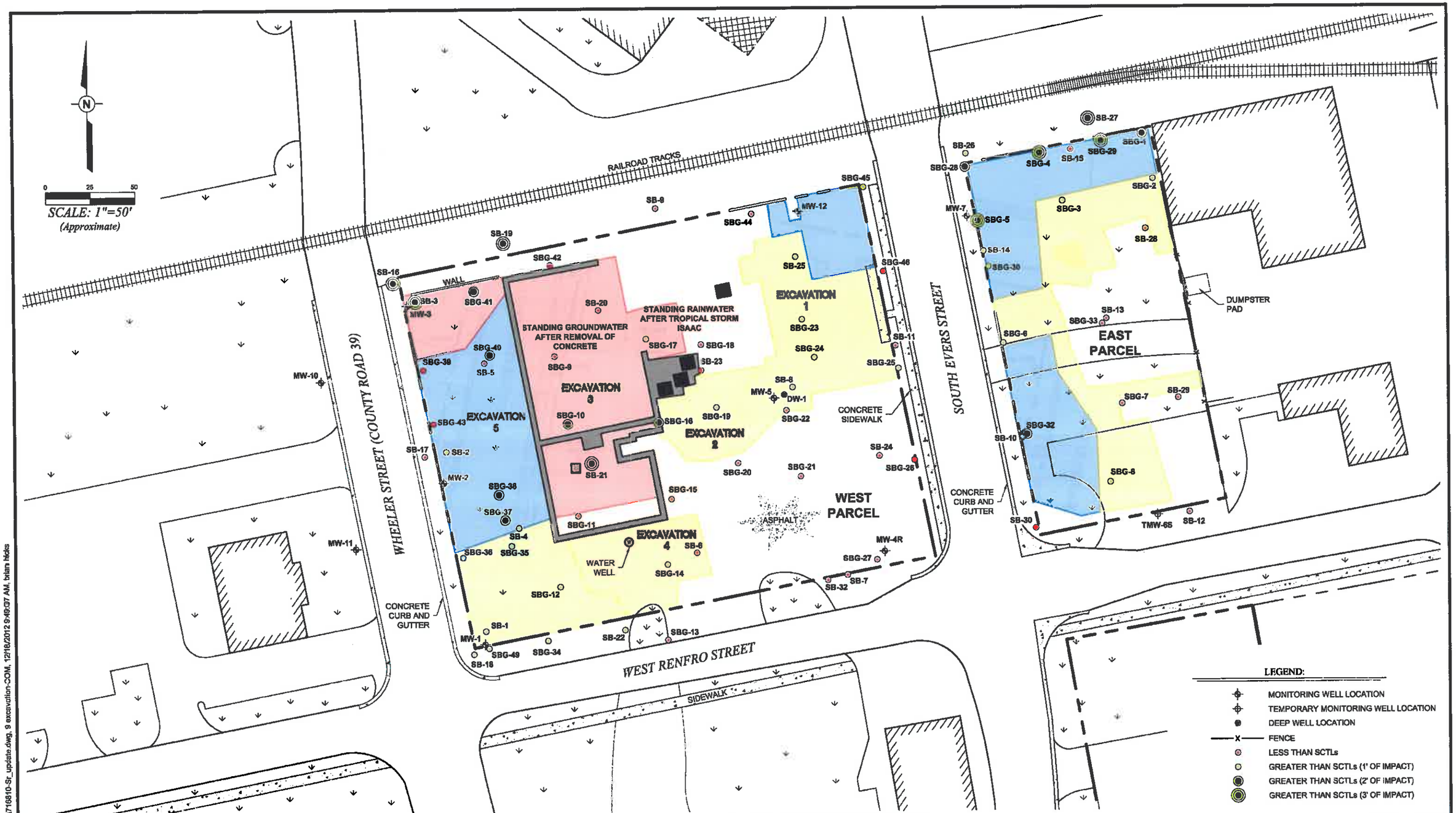

LEGEND:

- MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP WELL LOCATION
- FENCE
- LESS THAN SCTLs
- GREATER THAN SCTLs (1' OF IMPACT)
- GREATER THAN SCTLs (2' OF IMPACT)
- GREATER THAN SCTLs (3' OF IMPACT)

PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	9/13/12
PROJECT NUMBER:	BILLING GROUP:
716810	SR

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

FINAL EXCAVATION MAP
COMPARED TO ASSESSMENT DATA POINTS

FIGURE NUMBER
9

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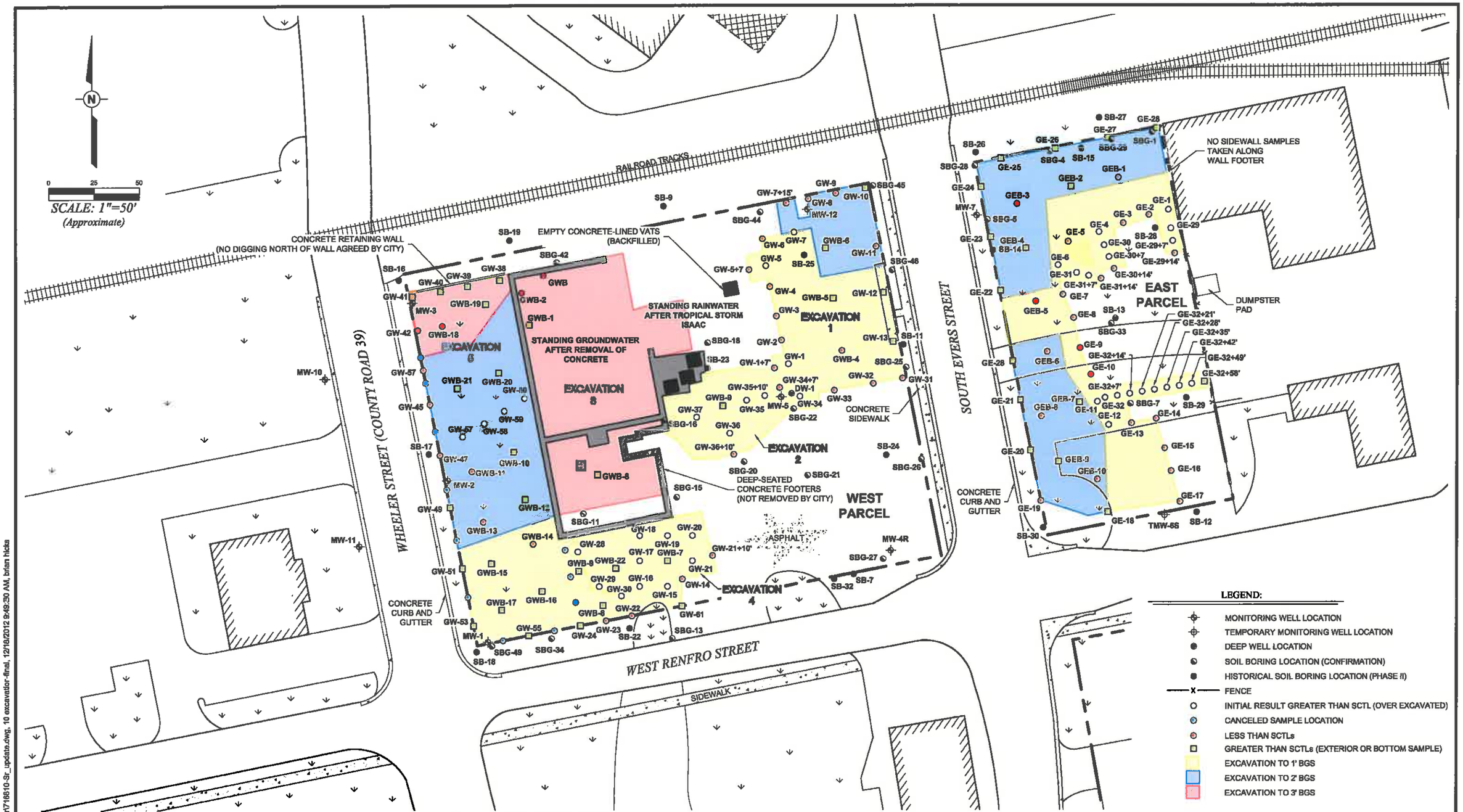

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PPM CONSULTANTS, INC.			
DRAWN BY: BWH	DRAWN DATE: 9/13/12	CITY OF PLANT CITY **FORMER GRO-MOR FERTILIZER PLANT** 307 SOUTH EVERS STREET PLANT CITY, FLORIDA	FINAL EXCAVATION MAP COMPARED TO POST-EXCAVATION SAMPLES
PROJECT NUMBER: 716810	BILLING GROUP: SR		FIGURE NUMBER 10

ATTACHMENT B
TABLES

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: Plant City Brownfield Cleanup Sites - Former Gro-Mor Fertilizer and Stock Lumber

WELL ID	MW-1			MW-2			MW-3			MW-4R		
DATE INSTALLED	03/05/10			03/05/10			03/05/10			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			15		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			4.0 - 14.0		
GROUND ELEVATION (Feet)	123.4			124.6			126.9			125.4		
TOC ELEVATION (feet)	122.88			124.34			126.57			124.83		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	119.92	2.96	0.00	120.60	3.74	0.00	122.31	4.26	0.00	121.00	3.83	0.00
07/16/12		NM			NM		125.03	1.54	0.00	122.86	1.97	0.00
07/17/12	122.78	0.10	0.00	124.14	0.20	0.00		NM			NM	
07/18/12		NM			NM		126.33	0.24	0.00	123.31	1.52	0.00
07/25/12	122.28	0.60	0.00	123.34	1.00	0.00	124.27	2.30	0.00	122.60	2.23	0.00
07/31/12	121.74	1.14	0.00	122.75	1.59	0.00	123.66	2.91	0.00	122.17	2.66	0.00
08/20/12		@TOC		123.99	0.35	0.00	124.95	1.62	0.00	122.86	1.97	0.00
08/25/12	122.28	0.60	0.00		NM		124.42	2.15	0.00	122.75	2.08	0.00
08/28/12		@TOC		123.94	0.40	0.00	124.90	1.67	0.00	122.84	1.99	0.00
09/04/12	121.68	1.20	0.00	122.71	1.63	0.00	123.73	2.84	0.00		NM	
10/12/12	121.97	0.91	0.00		NM			NM			NM	

WELL ID	MW-5			MW-7			MW-9			MW-10		
DATE INSTALLED	03/05/10			03/05/10			04/15/10			04/15/10		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			12		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			1.0 - 12.0		
GROUND ELEVATION (Feet)	126.6			127.9			122.9			126.2		
TOC ELEVATION (feet)	126.11			127.47			122.55			126.09		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	121.86	4.25	0.00	122.45	5.02	0.00	118.39	4.16	0.00	121.64	4.45	0.00
07/16/12	124.27	1.84	0.00		NM			NM		123.63	2.46	0.00
07/18/12		NM			2.32			under water			NM	
07/25/12	123.86	2.25	0.00	124.24	3.23	0.00	121.30	1.25	0.00	123.22	2.87	0.00
07/31/12	123.27	2.84	0.00	123.76	3.71	0.00		NM			NM	
08/20/12		NM		124.63	2.84	0.00		NM			NM	
08/23/12		NM		124.93	2.54	0.00		NM			NM	
08/25/12	124.06	2.05			NM			NM			NM	
08/28/12	124.43	1.68		125.21	2.26	0.00		NM			NM	
10/12/12		Destroyed		124.03	3.44	0.00		NM			NM	

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: Plant City Brownfield Cleanup Sites - Former Gro-Mor Fertilizer and Stock Lumber

WELL ID	MW-11			MW-12			MW-13			MW-14		
DATE INSTALLED	04/15/10			06/13/11			06/14/11			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			14			13			15		
SCREEN INTERVAL (feet)	2.0 - 12.0			4.0 - 14.0			3.0 - 13.0			5.0 - 15.0		
GROUND ELEVATION (Feet)	123.9			127.0			123.2			122.7		
TOC ELEVATION (feet)	123.63			126.81			122.78			122.48		
DATE	ELEV	DTW	FP		DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	120.66	2.97	0.00	122.97	3.84	0.00	118.58	4.20	0.00	118.29	4.19	0.00
07/16/12		NM		125.32	1.49	0.00		NM			NM	
07/17/12	122.58	1.05	0.00	125.53	1.28	0.00	121.78	1.00	0.00		NM	
07/18/12		NM		126.48	0.33	0.00		NM			NM	
07/25/12	122.04	1.59	0.00	124.71	2.10	0.00	120.86	1.92	0.00	119.59	2.89	0.00
07/31/12		NM		124.14	2.67	0.00		NM			NM	
08/20/12		NM		125.26	1.55	0.00		NM			NM	
08/25/12		NM		124.76	2.05	0.00		NM			NM	
08/28/12		NM		125.50	1.31	0.00		NM			NM	
10/12/12		NM		124.60	2.21	0.00		NM			NM	

WELL ID	MW-15			DW-1			MW-16			MW-17		
DATE INSTALLED	06/13/11			06/14/11			07/18/12			07/19/12		
DIAMETER (inches)	1			1			2			2		
WELL DEPTH (feet)	14			29			11			11		
SCREEN INTERVAL (feet)	4.0 - 14.0			24.0 - 29.0			1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (Feet)	122.9			126.6			124.1			122.2		
TOC ELEVATION (feet)	122.56			126.26			123.60			121.86		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP			
06/21/11	118.78	3.78	0.00	119.23	7.03	0.00		NI			NI	
07/16/12		NM		121.72	4.54	0.00		NI			NI	
07/18/12		0.10	0.00		NM		NM	0.51	0.00	NM	NM	
07/25/12	121.38	1.18	0.00	122.26	4.00	0.00	121.55	2.05	0.00	120.01	1.85	0.00
08/28/12		NM			NM			1.92			NM	

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: Plant City Brownfield Cleanup Sites - Former Gro-Mor Fertilizer and Stock Lumber

WELL ID	MW-18			MW-19			MW-20			MW-21		
DATE INSTALLED	07/19/12						07/18/12			07/17/12		
DIAMETER (inches)	2						1			2		
WELL DEPTH (feet)	11			Was not installed			11			11		
SCREEN INTERVAL (feet)	1.0 - 11.0						1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (Feet)	122.4						124.0			125.7		
TOC ELEVATION (feet)	122.03						123.65			125.23		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12		NI						NM			1.87	0.00
07/25/12	119.32	2.71	0.00				121.53	2.12	0.00	123.05	2.18	0.00

WELL ID	MW-22			MW-23			MW-24					
DATE INSTALLED	07/17/12			07/18/12			07/18/12					
DIAMETER (inches)	2			2			2					
WELL DEPTH (feet)	12			11			11					
SCREEN INTERVAL (feet)	2.0 - 12.0			1.0 - 11.0			1.0 - 11.0					
GROUND ELEVATION (Feet)	NM			125.1			126.5					
TOC ELEVATION (feet)	128.50			124.53			126.00					
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12	125.62	2.88	0.00	NM	NM		NM	NM				
07/25/12	125.11	3.39		122.91	1.62		124.03	1.97				

WELL ID	MW-101			MW-102			MW-103			MW-104		
DATE INSTALLED	06/26/11			06/26/08			06/26/08			06/14/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	15			15			15			14		
SCREEN INTERVAL (feet)	5.0 - 15.0			5.0 - 15.0			4.5 - 14.5			4.0 - 14.0		
GROUND ELEVATION (Feet)	123.4			127.6			129.0			128.8		
TOC ELEVATION (feet)	123.16			127.28			128.66			128.48		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/01/08	120.73	2.43	0.00	124.04	3.24	0.00	124.24	4.42	0.00	124.98	3.50	0.00
06/21/11	119.09	4.07	0.00	122.73	4.55	0.00	122.59	6.07	0.00	122.15	6.33	0.00
07/18/12	122.42	0.74	0.00	124.81	2.47	0.00	125.22	3.44	0.00	125.28	3.20	0.00
07/25/12	122.16	1.00	0.00	124.70	2.58	0.00	125.72	2.94	0.00	125.18	3.30	0.00
08/28/12		NM		Destroyed			126.86	1.80	0.00		NM	

TABLE 2: SOIL ANALYTICAL DATA - BENZO(A)PYRENE EQUIVALENT COMPOUNDS

Facility Name: Former Gro Mor Fertilizer Plant
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	B(a)P Equivalent*
Direct Exposure ResidentialSCTL		**#**	**0.1**	**#**	**#**	**#**	**#**	**#**	**0.1**
Direct Exposure Industrial SCTL		**#**	**0.7**	**#**	**#**	**#**	**#**	**#**	**0.7**
Leachability SCTL		**0.8**	**8**	**2.4**	**24**	**77**	**0.7**	**6.6**	**8**
SBG-1@0-0.5'	07/31/12	0.15	**0.18**	0.22	0.13	0.18	0.0083 U	0.11	**0.20**
SBG-1@1-2'	07/31/12	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0084 U	0.0083 U	0.006
SBG-1@2-3'	07/31/12	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.006
SBG-2@0-0.5'	07/31/12	0.18	**0.19**	0.2	0.15	0.24	0.0092 U	0.13	**0.25**
SBG-2@1-2'	07/31/12	0.0019 U	0.0025 U	0.0034 U	0.0024 U	0.0015 U	0.0092 U	0.0091 U	0.006
SBG-2@2-3'	07/31/12	0.0018 U	0.0024 U	0.0032 U	0.0023 U	0.0014 U	0.0087 U	0.0086 U	0.006
SBG-3@0-0.5'	07/31/12	0.032	0.023	0.028	0.027	0.04	0.0086 U	0.028 I	0.04
SBG-3@1-2'	07/31/12	0.026	0.0023 U	0.023	0.013	0.033	0.0085 U	0.0084 U	0.011
SBG-3@2-3'	07/31/12	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.006
SBG-4@0-0.5'	07/31/12	0.46	**0.24**	550	0.11	590	0.076	0.21	**55.97**
SBG-4@1-2'	07/31/12	0.18	0.1	0.2	0.055	0.24	0.039	0.12	**0.19**
SBG-4@2-3'	07/31/12	0.059	0.035	0.086	0.021	0.1	0.0085 U	0.022 I	0.06
SBG-5@0-0.5'	07/31/12	0.69	**0.44**	1	0.15	0.71	0.091	0.27	**0.73**
SBG-5@1-2'	07/31/12	0.028	0.0096	0.019	0.0078 I	0.046	0.0082 U	0.029 I	0.02
SBG-6@0-0.5'	07/31/12	**1,500**	**1,600**	**2,000**	**670**	**1,800**	**260**	**1,000**	**2,318.50**
SBG-6@1-2'	07/31/12	0.088	0.024	0.04	0.017	0.11	0.013 I	0.059	0.06
SBG-7@0-0.5'	07/31/12	0.075	0.071	0.19	0.042	0.11	0.016 I	0.055	0.12
SBG-7@1-2'	07/31/12	0.33	0.083	0.24	0.087	0.66	0.045	0.18	**0.20**
SBG-8@0-0.5'	07/31/12	0.2	**0.15**	0.34	0.09	0.22	0.037	0.16	**0.26**
SBG-8@1-2'	07/31/12	0.0048 I	0.0025 U	0.0033 U	0.0023 U	0.0061	0.0090 U	0.0089 U	0.007
SBG-10@0-0.5'	08/01/12	0.031	0.02	0.031	0.011	0.032	0.0089 U	0.015 I	0.03
SBG-10@1-2'	08/01/12	0.31	**0.29**	0.39	0.11	0.35	0.05	0.2	**0.43**
SBG-11@0-0.5'	08/01/12	0.0022 I	0.0023 U	0.0036 I	0.0022 U	0.0026 I	0.0085 U	0.0084 U	0.006
SBG-11@1-2'	08/01/12	0.06	0.052	0.078	0.027	0.064	0.0097 I	0.035	0.08
SBG-12@0-0.5'	08/01/12	0.13	**0.14**	0.27	0.06	0.21	0.026 I	0.11	**0.22**
SBG-12@1-2'	08/01/12	0.11	0.098	0.18	0.044	0.17	0.023 I	0.086	**0.16**
SBG-13@0-0.5'	08/01/12	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0084 U	0.0083 U	0.006
SBG-13@1-2'	08/01/12	0.11	0.081	0.14	0.048	0.14	0.017 I	0.054	0.13
SBG-14@0-0.5'	08/01/12	0.29	**0.3**	0.43	0.14	0.25	0.0084 U	0.15	**0.39**
SBG-14@1-2'	08/01/12	0.021	0.025	0.04	0.012	0.028	0.0088 U	0.023 I	0.04
SBG-14@2-3'	08/01/12	0.016	0.021	0.032	0.011	0.023	0.0086 U	0.018 I	0.03
SBG-15@0-0.5'	08/01/12	0.17	**0.36**	0.17	0.18	0.2	0.019 U	0.051 I	**0.41**
SBG-15@1-2'	08/01/12	0.0043 I	0.0039 I	0.0065 I	0.0022 U	0.0047 I	0.0084 U	0.0083 U	0.01

TABLE 2: SOIL ANALYTICAL DATA - BENZO(A)PYRENE EQUIVALENT COMPOUNDS

Facility Name: Former Gro Mor Fertilizer Plant
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	B(a)P Equivalent*
Direct Exposure ResidentialSCTL		**#**	**0.1**	**#**	**#**	**#**	**#**	**#**	**0.1**
Direct Exposure Industrial SCTL		**#**	**0.7**	**#**	**#**	**#**	**#**	**#**	**0.7**
Leachability SCTL		**0.8**	**8**	**2.4**	**24**	**77**	**0.7**	**6.6**	**8**
SBG-16@0-0.5'	08/01/12	0.055	0.049	0.078	0.029	0.066	0.0084 U	0.030 I	0.07
SBG-16@1-2'	08/01/12	0.15	**0.14**	0.2	0.061	0.15	0.0095 U	0.091	**0.19**
SBG-17@0-0.5'	08/01/12	**1.1 L**	0.72 L	0.94 L	0.33	1.0 L	0.12	0.41	**1.09**
SBG-17@1-2'	08/01/12	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.006
SBG-18@0-0.5'	08/01/12	0.024	0.023	0.043	0.012	0.034	0.0085 U	0.017 I	0.04
SBG-19@0-0.5'	08/01/12	0.12	0.12	0.12	0.05	0.17	0.017 U	0.017 U	**0.15**
SBG-19@1-2'	08/01/12	0.15	**0.16**	0.17	0.099	0.23	0.042 U	0.042 U	**0.22**
SBG-26@(0-.5)	08/02/12	0.0070 I	0.0072 I	0.0095 I	0.0050 I	0.0094 I	0.016 U	0.016 U	0.02
SBG-28@0-0.5'	07/31/12	0.21	**0.2**	0.47	0.11	0.3	0.0088 U	0.21	**0.30**
SBG-28@1-2'	07/31/12	0.076	0.062	0.15	0.045	0.1	0.0091 U	0.072	0.10
SBG-29@0-0.5'	07/31/12	0.068	0.052	0.057	0.039	0.073	0.0087 U	0.04	0.07
SBG-29@1-2'	07/31/12	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.006
SBG-29@2-3'	07/31/12	0.015	0.012	0.0078 I	0.0070 I	0.014	0.0090 U	0.011 I	0.02
SBG-30@0-0.5'	07/31/12	0.65	**0.39**	0.74	0.18	0.74	0.016 U	0.2	**0.56**
SBG-30@1-2'	07/31/12	0.092	0.085	0.1	0.08	0.081	0.0084 U	0.071	0.12
SBG-32 0-0.5'	07/31/12	0.43	**0.41**	540	0.17	0.45	63	0.28	**0.55**
SBG-32@1-2'	07/31/12	0.43	**0.31**	0.62	0.15	0.47	0.0083 U	0.22	**0.44**
SBG-32@2-3'	07/31/12	0.04	0.0074 I	0.017	0.0040 I	0.046	0.0083 U	0.017 I	0.02
SBG-33@0-0.5'	07/31/12	0.025	0.016	0.026	0.02	0.025	0.0081 U	0.022 I	0.03
SBG-33@1-2'	07/31/12	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0083 U	0.0082 U	0.006
SBG-34@0-0.5'	08/01/12	0.44	**0.43**	0.69 L	0.23	0.49	0.076	0.3	**0.65**
SBG-34@1-2'	08/01/12	0.59	**0.31**	0.52	0.16	0.68	0.057	0.21	**0.75**
SBG-35@0-0.5'	08/01/12	**1.2 L**	1.1 L	1.8 L	0.59	1.3 L	0.0088 U	0.70 L	**1.48**
SBG-35@1-1.5'	08/01/12	0.054	0.045	0.075	0.025	0.058	0.0085 U	0.036	0.07
SBG-36@0-0.5'	08/01/12	0.15	**0.16**	0.25	0.07	0.18	0.030 I	0.12	**0.24**
SBG-36@1-1.5'	8/1/2012	0.0034 I	0.0024 U	0.0043 I	0.0023 U	0.0030 I	0.0088 U	0.0087 U	0.007
SBG-37@0-0.5'	08/01/12	**0.93 L**	**0.88 L**	1.8 L	1.8 L	0.97 L	0.0089 U	0.62 L	**1.24**
SBG-37@1-1.5'	08/01/12	0.35	**0.3**	0.54	0.14	0.4	0.0090 U	0.24	**0.42**
SBG-38@0-0.5'	08/01/12	0.13	**0.16**	0.26	0.069	0.17	0.0091 U	0.14	**0.22**
SBG-38@1-1.5'	08/01/12	0.38	**0.34**	0.6	0.16	0.44	0.0087 U	0.31	**0.48**
SBG-39@0-0.5'	08/01/12	0.14	0.014	0.25	0.068	0.19	0.0089 U	0.12	0.07
SBG-39@1-1.5'	08/01/12	0.21	**0.17**	0.28	0.079	0.27	0.037	0.13	**0.27**
SBG-40 (0-.5)	08/02/12	0.13	**0.12**	0.21	0.052	0.17	0.0097 U	0.064	**0.17**

TABLE 2: SOIL ANALYTICAL DATA - BENZO(A)PYRENE EQUIVALENT COMPOUNDS

Facility Name: Former Gro Mor Fertilizer Plant
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	B(a)P Equivalent*
Direct Exposure ResidentialSCTL		**#**	**0.1**	**#**	**#**	**#**	**#**	**#**	**0.1**
Direct Exposure Industrial SCTL		**#**	**0.7**	**#**	**#**	**#**	**#**	**#**	**0.7**
Leachability SCTL		**0.8**	**8**	**2.4**	**24**	**77**	**0.7**	**6.6**	**8**
SBG-40@(1-2)	08/02/12	0.57	**0.45**	0.65 L	0.23	0.65 L	0.0090 U	0.28	**0.61**
SBG-41 (0-.5)	08/02/12	0.32	**0.29**	0.52	0.15	0.41	0.052	0.18	**0.45**
SBG-41@(1-2)	08/02/12	**0.87 L**	**0.65 L**	1.2 L	0.44	0.92 L	0.13	0.4	**1.03**
SBG-41@(2-3)	08/02/12	0.1	0.082	0.13	0.081	0.12	0.011 I	0.038	0.12
SBG-45 (0-.5)	08/02/12	3.9 L	**3.8 L**	7.1 L	1.8 L	4.9 L	0.017 U	3.0 L	**5.23**
SBG-45@(1-2)	08/02/12	0.19	**0.15**	0.33	0.029	0.28	0.0083 U	0.079	**0.21**
SBG-46 (0-.5)	08/02/12	0.017	0.018	0.029	0.0086	0.023	0.0077 U	0.010 I	0.03
SBG-46@(1-2)	08/02/12	0.14	0.13	0.19	0.078	0.19	0.016 U	0.077	**0.17**
SBG-49@0-0.5'	08/01/12	**1.0 L**	0.68 L	0.99 L	0.32	1.0 L	0.12	0.43	**1.05**
SBG-49@1-1.5'	08/01/12	0.16	0.12	0.21	0.051	0.2	0.026 I	0.092	**0.19**
QA/QC Samples									
Dup Group 1 (G5@0-0.5')	07/31/12	0.38	**0.37**	0.45	0.18	0.41	0.083	0.29	**0.57**
Dup Group 2 (G49@0-0.5')	08/01/12	**2.1**	**1.6**	2	0.64	2.1	0.011 U	1.1	**2.13**
Dup Group 3 (G11@0-0.5')	08/01/12	0.0026 I	0.0026 I	0.0036 I	0.0021 U	0.0028 I	0.0081 U	0.0080 U	0.008
Duplicate (Dup-4) (G41@0-0.5')	08/02/12	0.38	**0.34**	0.60 L	0.16	0.47	0.0085 U	0.21	**0.47**

= Site concentrations for carcinogenic polycyclic aromatic hydrocarbons must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL for Benzo(a)pyrene using the approach described in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

*Benzo(a)Pyrene conversion tables are attached

ppm = parts per million = mg/L = milligrams per liter

Concentrations in **bold/red** type exceed SCTLs.

SCTL = Soil Cleanup Target Level per Chapter 62-777, F.A.C., Table II

BGS = Below ground surface

I = Estimated value below the lowest calibration point. Confidence correlates with concentration.

U = Non Detect

TABLE 3: SOIL ANALYTICAL DATA - ARSENIC

Facility Name: Former Gro Mor Fertilizer Plant
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Depth Interval (feet below ground surface)	Arsenic (ppm)
Direct Exposure Residential SCTL			**2.1**
Direct Exposure Industrial SCTL			**12**
Leachability SCTL			*****
SBG-1@0-0.5'	07/31/12	0 - 0.5	**9.5**
SBG-1@1-2'	07/31/12	1 - 2	**3.1**
SBG-1@2-3'	07/31/12	2 - 3	2.1
SBG-2@0-0.5'	07/31/12	0 - 0.5	**3.9**
SBG-2@1-2'	07/31/12	1 - 2	0.41 U
SBG-2@2-3'	07/31/12	2 - 3	0.36 U
SBG-3@0-0.5'	07/31/12	0 - 0.5	**3.2**
SBG-3@1-2'	07/31/12	1 - 2	0.82 I
SBG-3@2-3'	07/31/12	2 - 3	0.36 U
SBG-4@0-0.5'	07/31/12	0 - 0.5	**6.1**
SBG-4@1-2'	07/31/12	1 - 2	**5.2**
SBG-4@2-3'	07/31/12	2 - 3	**5.3**
SBG-5@0-0.5'	07/31/12	0 - 0.5	**22**
SBG-5@1-2'	07/31/12	1 - 2	**3**
SBG-5@2-3'	07/31/12	2 - 3	**2.9**
SBG-6@0-0.5'	07/31/12	0 - 0.5	**4.5**
SBG-6@1-2'	07/31/12	1 - 2	1.5
SBG-10@0-0.5'	08/01/12	0 - 0.5	1.2 I
SBG-10@1-2'	08/01/12	1 - 2	**2.7**
SBG-11@0-0.5'	08/01/12	0 - 0.5	1.1 I
SBG-11@1-2'	08/01/12	1 - 2	0.86 I
SBG12@0-0.5'	08/01/12	0 - 0.5	**7.8**
SBG12@1-2'	08/01/12	1 - 2	**3.3**
SBG-14@0-0.5'	08/01/12	0 - 0.5	**2.9**
SBG-14@1-2'	08/01/12	1 - 2	**2.3**

Sample ID	Date Collected	Depth Interval (feet below ground surface)	Arsenic (ppm)
Direct Exposure Residential SCTL			**2.1**
Direct Exposure Industrial SCTL			**12**
Leachability SCTL			*****
SBG-14@2-3'	08/01/12	2 - 3	**2.2**
SBG-18@0-0.5'	08/01/12	0 - 0.5	1.7
SBG-18@1-2'	08/01/12	1 - 2	1.2
SBG-20@0-0.5'	08/01/12	0 - 0.5	0.33 U
SBG-20@1-2'	08/01/12	1 - 2	**2.6**
SBG-21@0-0.5'	08/01/12	0 - 0.5	1.7
SBG-21@1-2'	08/01/12	1 - 2	**2.4**
SBG-22@0-0.5'	08/01/12	0 - 0.5	0.99 I
SBG-22@1-2'	08/01/12	1 - 2	1.4
SBG-23@(0-.5)	08/02/12	0 - 0.5	4.5
SBG-23@(1-2)	08/02/12	1 - 2	**1.9**
SBG-24@(0-.5)	08/02/12	0 - 0.5	3
SBG-24@(1-2)	08/02/12	1 - 2	**1.3**
SBG-25@(0-.5)	08/02/12	0 - 0.5	2.3
SBG-25@(1-2)	08/02/12	1 - 2	1.0 I
SBG-26@(0-.5)	08/02/12	0 - 0.5	**0.32 U**
SBG-28@0-0.5'	07/31/12	0 - 0.5	**59**
SBG-28@1-2'	07/31/12	1 - 2	**10**
SBG-28@2-3'	07/31/12	2 - 3	**10**
SBG-29@0-0.5'	07/31/12	0 - 0.5	**6.7**
SBG-29@1-2'	07/31/12	1 - 2	**13**
SBG-29@2-3'	07/31/12	2 - 3	**7.5**
SBG-30@0-0.5'	07/31/12	0 - 0.5	**7.3**
SBG-30@1-2'	07/31/12	1 - 2	**15**
SBG-30@2-3'	07/31/12	2 - 3	5.3

TABLE 3: SOIL ANALYTICAL DATA - ARSENIC

Facility Name: Former Gro Mor Fertilizer Plant
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Depth Interval (feet below ground surface)	Arsenic (ppm)
Direct Exposure Residential SCTL			**2.1**
Direct Exposure Industrial SCTL			**12**
Leachability SCTL			*****
SBG-33@0-0.5'	07/31/12	0 - 0.5	1.6
SBG-33@1-2'	07/31/12	1 - 2	0.36 U
SBG-35@0-0.5'	08/01/12	0 - 0.5	1.3 I
SBG-35@1-1.5'	08/01/12	1 - 1.5	0.91 I
SBG-36@0-0.5'	08/01/12	0 - 0.5	2.1
SBG-36@1-1.5'	08/01/12	1 - 1.5	**11**
SBG-37@0-0.5'	08/01/12	0 - 0.5	1.8
SBG-37@1-1.5'	08/01/12	1 - 1.5	**2.4**
SBG-38@0-0.5'	08/01/12	0 - 0.5	**2.2**
SBG-38@1-1.5'	08/01/12	1 - 1.5	13
SBG-39@0-0.5'	08/01/12	0 - 0.5	1.2 I
SBG-39@1-1.5'	08/01/12	1 - 1.5	**1.8**
SBG-40@(0-.5)	08/02/12	0 - 0.5	1.7
SBG-40@(1-2)	08/02/12	1 - 2	5.5
SBG-41@(0-.5)	08/02/12	0 - 0.5	1.2 I
SBG-41@(1-2)	08/02/12	1 - 2	1.6

Sample ID	Date Collected	Depth Interval (feet below ground surface)	Arsenic (ppm)
Direct Exposure Residential SCTL			**2.1**
Direct Exposure Industrial SCTL			**12**
Leachability SCTL			*****
SBG-41@(2-3)	08/02/12	2 - 3	1.4
SBG-42@(0-.5)	08/02/12	0 - 0.5	1.4
SBG-42@(1-2)	08/02/12	1 - 2	1.3 I
SBG-43@(0-.5)	08/02/12	0 - 0.5	**1.4 I**
SBG-43@(1-2)	08/02/12	1 - 2	**3**
SBG-44@(0-.5)	08/02/12	0 - 0.5	2.3
SBG-44@(1-2)	08/02/12	1 - 2	**0.58 I**
SBG-45@(0-.5)	08/02/12	0 - 0.5	**6**
SBG-45@(1-2)	08/02/12	1 - 2	3.6
SBG-46@(0-.5)	08/02/12	0 - 0.5	**0.58 I**
SBG-46@(1-2)	08/02/12	1 - 2	3.5
QA/QC Samples			
Dup Group 1 (G5@0-0.5')	07/31/12		**16**
Dup Group 3 (G11@0-0.5')	08/01/12		0.37 U
DUP(DUP-4) (G41@0-0.5')	08/02/12		1.3 I

* Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.

ppm = parts per million = mg/L = milligrams per liter

Concentrations in **bold/red** type exceed SCTLs.

SCTL = Soil Cleanup Target Level per Chapter 62-777, F.A.C., Table II

BGS = Below ground surface

I = Estimated value below the lowest calibration point. Confidence correlates with concentration.

U = Non Detect

TABLE 4
Post-excavation Analytical Summary - Soil
Gro Mor Fertilizer, PPM Project No. 716810.SR

Sample ID	Sample Depth (ft.-BGS)	Date Collected	Arsenic	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	BaP Equivalents	Comment
Direct Exposure Residential			2.1	#	0.1	#	#	#	#	#	0.1	see
Leachability			***	0.8	8	2.4	24	77	0.7	6.6	8	notes
EAST PARCEL												
GE-1	1'	8/22/2012	17	2.0 L	**0.67 L**	1.2 L	0.56	1.9 L	0.16	0.58 L	1.22	○
GE-2	1'	8/22/2012	1.4	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
GE-3	1'	8/22/2012	1.4	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
GE-4	1'	8/22/2012	2.5	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	○
GE-5	1'	8/22/2012	1.4	0.017	0.012	0.0084 I	0.024	0.055	0.0085 U	0.030 I	0.02	●
GE-6	1'	8/22/2012	12	0.024	0.04	0.05	0.025	0.051	0.0084 U	0.05	0.06	○
GE-7	1'	8/22/2012	1.7	0.0043 I	0.0023 U	0.0060 I	0.0063 I	0.014	0.0083 U	0.0082 U	0.01	●
GE-8	1'	8/22/2012	1.2 I	0.0020 I	0.0022 U	0.0030 U	0.0021 U	0.0013 U	0.0082 U	0.0081 U	0.01	●
GE-9	1'	8/23/2012	0.37 U	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
GE-10	1'	8/23/2012	0.35 U	0.0027 I	0.0028 I	0.0051 I	0.0022 U	0.0035 I	0.0084 U	0.0083 U	0.01	●
GE-11	1'	8/23/2012	47	0.092	0.087	0.13	0.043	0.1	0.014 I	0.053	0.13	○
GE-12	1'	8/23/2012	32	0.063	0.074	0.13	0.032	0.092	0.012 I	0.048	0.11	○
GE-13	1'	8/23/2012	1.4	0.0018 I	0.0023 U	0.0057 I	0.0022 U	0.0030 I	0.0084 U	0.0083 U	0.01	●
GE-14	1'	8/23/2012	0.37 U	0.0078	0.0076 I	0.015	0.0039 I	0.0096	0.0084 U	0.0083 U	0.01	●
GE-15	1'	8/23/2012	0.43 U	0.011	0.013	0.023	0.0069 I	0.015	0.010 U	0.010 U	0.02	●
GE-16	1'	8/23/2012	0.37 U	0.0071	0.0091	0.015	0.0044 I	0.0088	0.0082 U	0.0081 U	0.02	●
GE-17	1'	8/23/2012	0.35 U	0.0017 U	0.0022 U	0.0030 U	0.0021 U	0.0013 U	0.0082 U	0.0081 U	0.01	●
GE-18	1'	8/24/2012	4.1	0.65	**2**	2.5	0.7	0.86	0.54	1.6	3.02	■
GE-19	1'	8/24/2012	1.6 I	0.075	0.079	0.13	0.036	0.097	0.011 U	0.07	0.11	●
GE-20	1'	8/24/2012	1.2 I	260	**0.27**	0.38	0.11	0.36	0.054 I	0.21	26.38	■
GE-21	1'	8/24/2012	17	0.18	**0.19**	0.31	0.097	0.22	0.037	0.15	0.29	■
GE-22	1'	8/24/2012	8.6	0.49	**0.6**	0.8	0.2	0.6	0.12 I	0.44	0.90	■
GE-23	1'	8/24/2012	5	0.097	0.09	0.16	0.045	0.12	0.020 I	0.073	0.14	■
GE-24	1'	8/24/2012	2.2	0.0018 U	0.0024 U	0.0032 U	0.0023 U	0.0019 I	0.0087 U	0.0086 U	0.01	■
GE-25	1'	8/24/2012	5.7	0.037	0.041	0.073	0.022	0.058	0.0097 U	0.032 I	0.04	■
GE-26	1'	8/24/2012	9.3	0.045	0.037	0.064	0.016	0.055	0.0092 U	0.029 I	0.06	■
GE-27	1'	8/24/2012	28	0.074	0.052	0.073	0.05	0.08	0.0099 U	0.0097 U	0.07	■
GE-28*	1'	8/24/2012	4.9	0.011	0.0023 U	0.014	0.0079 I	0.011	0.0084 U	0.0083 U	0.01	■
GE-28*	2'	8/30/2012	6	0.72	**0.79**	1	0.28	0.88	0.13	0.45	1.14	■
GE-29	1'	8/30/2012	8.1	0.033	0.039	0.062	0.021	0.039	0.0079 U	0.021 I	0.05	○
GE-29 +7'	1'	9/12/2012	34	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-29 +14'	1'	9/18/2012	2.0	NA	NA	NA	NA	NA	NA	NA	NA	●
GE-30	1'	8/30/2012	13	0.024	0.025	0.057	0.0085 I	0.038	0.0084 U	0.020 I	0.04	○
GE-30 +7'	1'	9/12/2012	2.9	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-30 +14'	1'	9/18/2012	1.9	NA	NA	NA	NA	NA	NA	NA	NA	●
GE-31	2'	8/30/2012	7.5	0.21	**0.15**	0.32	0.076	0.22	0.029 I	0.08	0.24	○
GE-31 +7'	1'	9/12/2012	5.9	0.12	**0.11**	0.24	0.09	0.13	0.0084 U	0.061	0.16	○
GE-31 +14'	1'	9/18/2012	0.37 U	0.0068	0	0.0072	0.013	0.01	0	0	0.01	●
GE-32	2'	8/30/2012	27	0.2	**0.24**	0.55	0.14	0.27	0.046	0.15	0.38	○
GE-32 +7'	1'	9/12/2012	7.8	0.072	**0.11**	0.26	0.066	0.11	0.0085 U	0.058	0.15	○
GE-32 +14'	1'	9/18/2012	5.6	0.098	0.063	0.11	0.036	0.13	0.04	0.1	0.13	○
GE-32 +21'	1'	9/18/2012	13	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-32 +28'	1'	9/18/2012	4.5	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-32 +35'	1'	9/25/2012	14	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-32 +42'	1'	9/25/2012	8.2	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-32 +49'	1'	9/25/2012	3.8	NA	NA	NA	NA	NA	NA	NA	NA	○
GE-32 +58'	1'	9/25/2012	20	NA	NA	NA	NA	NA	NA	NA	NA	■
GEB-1	2'	8/24/2012	0.34 U	0.018	0.019	0.024	0.018	0.027	0.0089 U	0.018 I	0.03	●
GEB-2	2'	8/24/2012	2.3	0.11	**0.13**	0.17	0.061	0.12	0.0087 U	0.07	0.17	■
GEB-3	2'	8/24/2012	0.40 U	0.0019 U	0.0026 U	0.0035 U	0.0024 U	0.0015 U	0.0094 U	0.0092 U	0.01	●
GEB-4	2'	8/24/2012	14	0.035	0.034	0.061	0.023	0.048	0.010 U	0.030 I	0.05	■
GEB-5	1'	8/24/2012	0.71 I	0.0042 I	0.0026 U	0.0035 U	0.0024 U	0.0015 U	0.0094 U	0.0092 U	0.01	●
GEB-6	2'	8/30/2012	1.2 I	0.021	0.024	0.038	0.011	0.026	0.0083 U	0.013 I	0.04	●
GEB-7	1'	8/24/2012	2.3	0.038	0.046	0.1	0.029	0.063	0.0083 U	0.029 I	0.07	■
GEB-8	2'	8/24/2012	1.1 I	0.049	0.041	0.051	0.03	0.054	0.0090 U	0.021 I	0.06	●
GEB-9	2'	8/24/2012	5.9	0.15	**0.14**	0.23	0.065	0.18	0.033 I	0.081	0.22	■
GEB-10	1'	8/24/2012	0.40 U	0.0019 U	0.0025 U	0.0034 U	0.0024 U	0.0015 U	0.0092 U	0.0091 U	0.01	●

Notes: *All concentrations are in milligrams per kilogram (mg/kg) or parts per million (ppm)*
NA - Not analyzed because parameter was not a site chemical of concern per previous investigations
U - Below method detection limits
I - Estimated value
** Sample number was used twice. Sample collected 8/24/12 was from northeast corner of site and 8/30/12 from west boundary of site.*

● *All sample results are below SCTLs*

○ *Interior sidewall sample result was above SCTL, but sample location was over excavated later in project*

■ *Exterior sidewall or bottom sample result is above SCTL*

□ *Interior sidewall sample result is above SCTL, but sample location was not over excavated due to time constraints*

Carcinogenic polycyclic aromatic hydrocarbons were converted to Benzo(a)pyrene equivalents using the approach described in the February 2005 Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.

TABLE 4
Post-excavation Analytical Summary - Soil
Gro Mor Fertilizer, PPM Project No. 716810.SR

Sample ID	Sample Depth (ft.-BGS)	Date Collected	Arsenic	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	BaP Equivalents	Comment
Direct Exposure Residential			2.1	#	0.1	#	#	#	#	#	0.1	see
Leachability			***	0.8	8	2.4	24	77	0.7	6.6	8	notes
WEST PARCEL - Excavation 1												
GW-1	1'	8/25/2012	1.0 I	0.26	**0.26**	0.31	0.12	0.22	0.05	0.13	**0.38**	○
GW-1 +7'	1'	9/7/2012	NA	0.0018 U	0.0024 U	0.0032 U	0.0023 U	0.0014 U	0.0087 U	0.0086 U	0.01	●
GW-2	1'	8/25/2012	0.81 I	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.01	●
GW-3	1'	8/25/2012	0.65 I	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
GW-4	1'	8/25/2012	0.84 I	0.088	0.07	0.11	0.037	0.096	0.013 I	0.039	0.11	●
GW-5	1'	8/25/2012	**2.4**	0.06	0.066	0.11	0.033	0.071	0.015 I	0.038	0.10	○
GW-5 +7'	1'	9/7/2012	0.86 I	NA	NA	NA	NA	NA	NA	NA	**NA**	●
GW-6	1'	8/25/2012	**2.1**	0.044	0.039	0.064	0.018	0.065	0.0090 U	0.024 I	0.06	●
GW-7	1'	8/25/2012	**2.4**	0.15	**0.12**	0.19	0.053	0.17	0.017 I	0.041	**0.18**	○
GW-7 +15'	1'	9/7/2012	0.98 I	0.025	0.025	0.056	0.018	0.034	0.0085 U	0.019 I	0.04	●
GW-8	1'	8/25/2012	0.79 I	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.01	●
GW-9	1'	8/25/2012	1.0 I	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0083 U	0.0082 U	0.01	●
GW-10	1'	8/25/2012	**5.3**	0.054	0.034	0.063	0.029	0.069	0.0085 U	0.046	0.05	■
GW-11	1'	8/25/2012	0.86 I	0.012	0.0023 U	0.010 I	0.014	0.018	0.0083 U	0.0082 U	0.01	●
GW-12	1'	8/25/2012	1.1 I	0.71	**0.6**	0.81	0.54	0.66	0.082 U	0.38	**0.84**	■
GW-13	1'	8/25/2012	**2.4**	0.65	**0.63**	0.95	0.32	0.7	0.15	0.35 I	**0.98**	■
GW-31	1'	8/29/2012	0.96 I	0.088	0.065	0.12	0.049	0.078	0.0085 U	0.059	0.10	●
GW-32	2'	8/29/2012	1.1 I	0.016	0.016	0.024	0.0082 I	0.016	0.0081 U	0.011 I	0.03	●
GW-33	1'	8/29/2012	0.35 U	0.0016 U	0.0022 U	0.0029 U	0.0021 U	0.0013 U	0.0079 U	0.0078 U	0.01	●
GW-34	1'	8/29/2012	0.87 I	0.15	**0.17**	0.26	0.067	0.17	0.024 I	0.089	**0.24**	○
GW-34 +7'	1'	9/12/2012	NA	0.018	0.018	0.024	0.013	0.02	0.0078 U	0.012 I	0.03	●
GWB-4	1'	8/25/2012	0.78 I	0.029	0.018	0.024	0.015	0.035	0.0078 U	0.0077 U	0.03	●
GWB-5	1'	8/25/2012	0.96 I	0.27	**0.16**	0.18	0.31	0.33	0.0079 U	0.099	**0.22**	■
GWB-6	2'	8/25/2012	**2.9**	0.22	**0.15**	0.17	0.14	0.21	0.0087 U	0.11	**0.21**	■
WEST PARCEL - Excavation 2												
GW-35	1'	8/31/2012	**4.2**	0.84	**0.61**	0.92	0.27	0.83	0.11	0.33	**0.93**	○
GW-35 +10'	1'	9/12/2012	**2.1**	0.28	**0.27**	0.45	0.13	0.30	0.042	0.16	**0.40**	○
GW-36	1'	8/31/2012	**3.0**	0.46	**0.18**	0.45	0.088	0.31	0.021 I	0.14	**0.31**	○
GW-36 +10'	1'	9/12/2012	1.6	0.042	0.052	0.069	0.025	0.042	0.0084 U	0.029 I	0.07	●
GW-37	1'	8/31/2012	**4.3**	0.43	**0.29**	0.59	0.11	0.38	0.032 I	0.14	**0.44**	○
GWB-9**	1'	8/31/2012	**4.5**	0.014	0.015	0.023	0.0079 I	0.015	0.0087 U	0.0092 I	0.02	■
WEST PARCEL - Excavation 3												
GWB-1	3'	8/24/2012	0.76 I	0.48	**0.36**	0.57	0.21	0.47	0.069	0.22	**0.56**	■
GWB-2	3'	8/24/2012	0.68 I	0.054	0.042	0.066	0.026	0.052	0.0090 U	0.017 I	0.06	●
GWB-3	3'	8/24/2012	1.9	0.035	0.027	0.033	0.012	0.046	0.0095 U	0.015 I	0.04	●
GWB-8*	2'	8/31/2012	0.94 I	5.7	**3.6**	4.9	1.7	5.4	0.46	2.6	**5.40**	■
WEST PARCEL - Excavation 4												
GW-14	1'	8/29/2012	1.3	0.038	0.046	0.089	0.023	0.053	0.0086 U	0.028 I	0.07	●
GW-15	1'	8/29/2012	**3.6**	0.0067 I	0.0087 I	0.011 I	0.0036 I	0.0065	0.0090 U	0.0089 U	0.02	○
GW-16	1'	8/29/2012	**7.3**	0.15	**0.17**	0.33	0.09	0.13	0.0086 U	0.036	**0.23**	○
GW-17	1'	8/29/2012	**2.8**	0.051	0.068	0.17	0.039	0.044	0.0084 U	0.0083 U	0.10	○
GW-18	1'	8/29/2012	**4.3**	0.11	0.074	0.2	0.063	0.1	0.0088 U	0.032 I	0.11	○
GW-19	1'	8/29/2012	**5.1**	0.53	**0.47**	0.54	0.23	0.5	0.044	0.15	**0.64**	○
GW-20	1'	8/29/2012	1.3 I	0.28	**0.19**	0.36	0.075	0.21	0.034	0.091	**0.30**	○
GW-21	1'	8/29/2012	2.0	5.0	**2.8**	3.7	1.7	4.7	0.47	1.7	**4.33**	○
GW-21 +10'	1'	9/12/2012	1.6	0.091	0.097	0.14	0.041	0.1	0.020 I	0.068	0.147	●
GW-61	1'	9/12/2012	0.97 I	4.0	**3.0**	3.7	2.4	3.7	0.84 U	1.7 I	**4.39**	■
GWB-7	1'	8/29/2012	**7.8**	0.22	**0.20**	0.37	0.087	0.19	0.021 I	0.062	**0.29**	■
GWB-22	1'	9/12/2012	**6.3**	0.41	**0.36**	0.55	0.21	0.41	0.055	0.19	**0.53**	■

Notes: *All concentrations are in milligrams per kilogram (mg/kg) or parts per million (ppm)*
NA - Not analyzed because parameter was not a site chemical of concern per previous investigations
U - Below method detection limits
I - Estimated value
** Sample number was used twice. GWB-8 collected on 8/29/12 was from excavation 5 and on 8/31/12 from Excavation 3*
*** Sample number was used twice. GWB-9 collected on 8/29/12 was from excavation 5 and on 8/31/12 from Excavation 2*

● *All sample results are below SCTLs*

○ *Interior sidewall sample result was above SCTL, but sample location was over excavated later in project*

■ *Exterior sidewall or bottom sample result is above SCTL*

□ *Interior sidewall sample result is above SCTL, but sample location was not over excavated due to time constraints*

Carcinogenic polycyclic aromatic hydrocarbons were converted to Benzo(a)pyrene equivalents using the approach described in the February 2005 Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.

TABLE 4
Post-excavation Analytical Summary - Soil
Gro Mor Fertilizer, PPM Project No. 716810.SR

Sample ID	Sample Depth (ft.-BGS)	Date Collected	Arsenic	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	BaP Equivalents	Comment
Direct Exposure Residential			2.1	#	0.1	#	#	#	#	#	0.1	see
Leachability			***	0.8	8	2.4	24	77	0.7	6.6	8	notes
WEST PARCEL - Excavation 5												
GW-22	1'	8/29/2012	0.34 U	0.0064 I	0.0024 U	0.0088 I	0.0048 I	0.0097	0.0086 U	0.0085 U	0.01	●
GW-23	1'	8/29/2012	1.1 I	0.042	0.031	0.062	0.017	0.04	0.0088 U	0.0087 U	0.05	●
GW-24	1'	8/29/2012	1.9	1.1	**0.52**	0.85	0.42	1.2	0.089 U	0.37	**0.80**	■
GW-28	1'	8/29/2012	**2.8**	0.22	**0.16**	0.37	0.057	0.19	0.025 I	0.077	**0.25**	○
GW-29	1'	8/29/2012	**4.4**	1.1	0.46 I	1.1 I	0.58	1.1	0.061	0.19	**0.77**	○
GW-30	1'	8/29/2012	**2.1**	1.1	**0.77**	0.91	0.43	1	0.1	0.36	**1.11**	○
GW-38	2'	9/4/2012	**2.3**	1.7	**0.98**	1.8	0.45	1.8	0.27	0.82	**1.69**	■
GW-39	2'	9/4/2012	**2.3**	0.27	**0.23**	0.48	0.15	0.39	0.065	0.2	**0.39**	■
GW-40	2'	9/4/2012	**17**	0.25	**0.22**	0.39	0.14	0.3	0.049	0.16	**0.35**	■
GW-41	2'	9/4/2012	2.0	0.39	**0.46**	0.99	0.23	0.5	0.13	0.42	**0.77**	■
GW-42	2'	9/4/2012	1.4	0.037	0.03	0.055	0.0094	0.044	0.0088 I	0.022 I	0.05	●
GW-45	2'	9/4/2012	0.68 I	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0016 I	0.0085 U	0.0084 U	0.01	●
GW-47	1'	9/4/2012	0.38 U	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
GW-49	1'	9/4/2012	**2.4**	0.028	0.025	0.043	0.014	0.039	0.0087 U	0.024 I	0.04	■
GW-51	1'	9/4/2012	**3.0**	0.14	**0.11**	0.19	0.048	0.16	0.021 I	0.081	**0.17**	■
GW-53	1'	9/4/2012	1.9	0.56	**0.47**	0.71	0.19	0.62	0.1	0.36	**0.74**	■
GW-55	1'	9/4/2012	**2.5**	1.3	**1.1**	1.7	0.51	1.5	0.27	0.6	**1.74**	■
GW-57***	2'	9/5/2012	**3.3**	0.84	**0.75**	1.2	0.39	0.96	0.17	0.61	**1.19**	○
GW-57***	2'	9/10/2012	0.34 U	0.0085	0.0083 I	0.013	0.0058 I	0.0095	0.0085 U	0.0084 U	0.02	●
GW-58	2'	9/5/2012	**5.3**	3.3	**2.6**	3.6	1.2	3.3	0.44	1.4	**3.89**	○
GW-59	2'	9/5/2012	1.7	1	**0.74**	1.2	0.42	1.1	0.13	0.58	**1.15**	○
GW-60	2'	9/5/2012	**5.7**	150	**110**	160	55	140	20	59	**167.59**	○
Tree East 20'	1'	9/4/2012	0.82 I	0.0018 U	0.0024 U	0.0032 U	0.0023 U	0.0014 U	0.0087 U	0.0086 U	0.01	○
Tree East 5'	1'	9/4/2012	1.0 I	0.47	**0.38**	0.75	0.28	0.6	0.14	0.33	**0.68**	○
Tree North 20'	1'	9/4/2012	**15**	1.2	**0.9**	1.2	0.34	1.2	0.22	0.75	**1.44**	○
Tree North 5'	1'	9/4/2012	1.1 I	0.61	**0.57**	0.76	0.33	0.67	0.012 U	0.37	**0.75**	○
Tree South 20'	1'	9/4/2012	1.8	0.0018 U	0.0024 U	0.016	0.0078 I	0.0014 U	0.0087 U	0.0086 U	0.02	○
Tree South 5'	1'	9/4/2012	1.5 I	0.38	**0.38**	0.52	0.29	0.45	0.0099 U	0.25	**0.50**	○
Tree West 20'	1'	9/4/2012	0.37 U	0.0067 I	0.011	0.0087 I	0.0068 I	0.0076	0.0085 U	0.0084 U	0.01	○
Tree West 5'	1'	9/4/2012	1.4 I	0.43	**0.43**	0.65	0.19	0.55	0.1	0.32	**0.67**	○
GWB-8*	1'	8/29/2012	**7.2**	0.12	0.088	0.2	0.046	0.095	0.0088 U	0.053	0.13	■
GWB-9**	1'	8/29/2012	**4.1**	0.095	0.0026 U	0.13	0.043	0.062	0.0094 U	0.032 I	0.04	■
GWB-10	2'	9/5/2012	**2.8**	0.65	**0.54**	0.71	0.23	0.66	0.12	0.34	**0.83**	■
GWB-11	2'	9/5/2012	0.36 U	0.027	0.025	0.038	0.013	0.031	0.0084 U	0.023 I	0.03	●
GWB-12	2'	9/5/2012	**6.1**	1.6	**1.4**	2.3	0.73	1.9	0.26	0.82	**2.14**	■
GWB-13	2'	9/5/2012	0.80 I	0.0018 I	0.0023 U	0.0031 U	0.0022 U	0.0017 I	0.0085 U	0.0084 U	0.01	●
GWB-14	1'	9/6/2012	1.1 I	0.027	0.025	0.046	0.015	0.034	0.0089 U	0.018 I	0.04	●
GWB-15	1'	9/6/2012	1.0 I	0.28	**0.29**	0.54	0.12	0.36	0.05	0.17	**0.44**	■
GWB-16	1'	9/6/2012	1.2 I	0.96	**0.82**	1.5	0.41	1.1	0.18	0.49	**1.30**	■
GWB-17	1'	9/6/2012	0.61 I	0.36	**0.26**	0.49	0.13	0.43	0.048	0.15	**0.41**	■
GWB-18	3'	9/11/2012	1.7	0.065	0.076	0.1	0.037	0.081	0.012 I	0.042	0.11	●
GWB-19	3'	9/11/2012	**3.4**	6.0	**5.6**	8.5	2.8	6.1	1.0	2.9	**8.37**	■
GWB-20	2'	9/11/2012	**6.5**	1.3	**1.1**	1.8	0.54	1.5	0.22	0.68	**1.70**	■
GWB-21	2'	9/11/2012	**4.5**	0.21	**0.21**	0.33	0.14	0.27	0.034 I	0.12	**0.31**	■

Notes: *All concentrations are in milligrams per kilogram (mg/kg) or parts per million (ppm)*
NA - Not analyzed because parameter was not a site chemical of concern per previous investigations
U - Below method detection limits
I - Estimated value
** Sample number was used twice. GWB-8 collected on 8/29/12 was from excavation 5 and on 8/31/12 from Excavation 3*
*** Sample number was used twice. GWB-9 collected on 8/29/12 was from excavation 5 and on 8/31/12 from Excavation 2*
**** Sample number was used twice. GW-7 on 9/5/12 was from interior sidewall and on 9/10/12 from an exterior sidewall*

● *All sample results are below SCTLs*

○ *Interior sidewall sample result was above SCTL, but sample location was over excavated later in project*

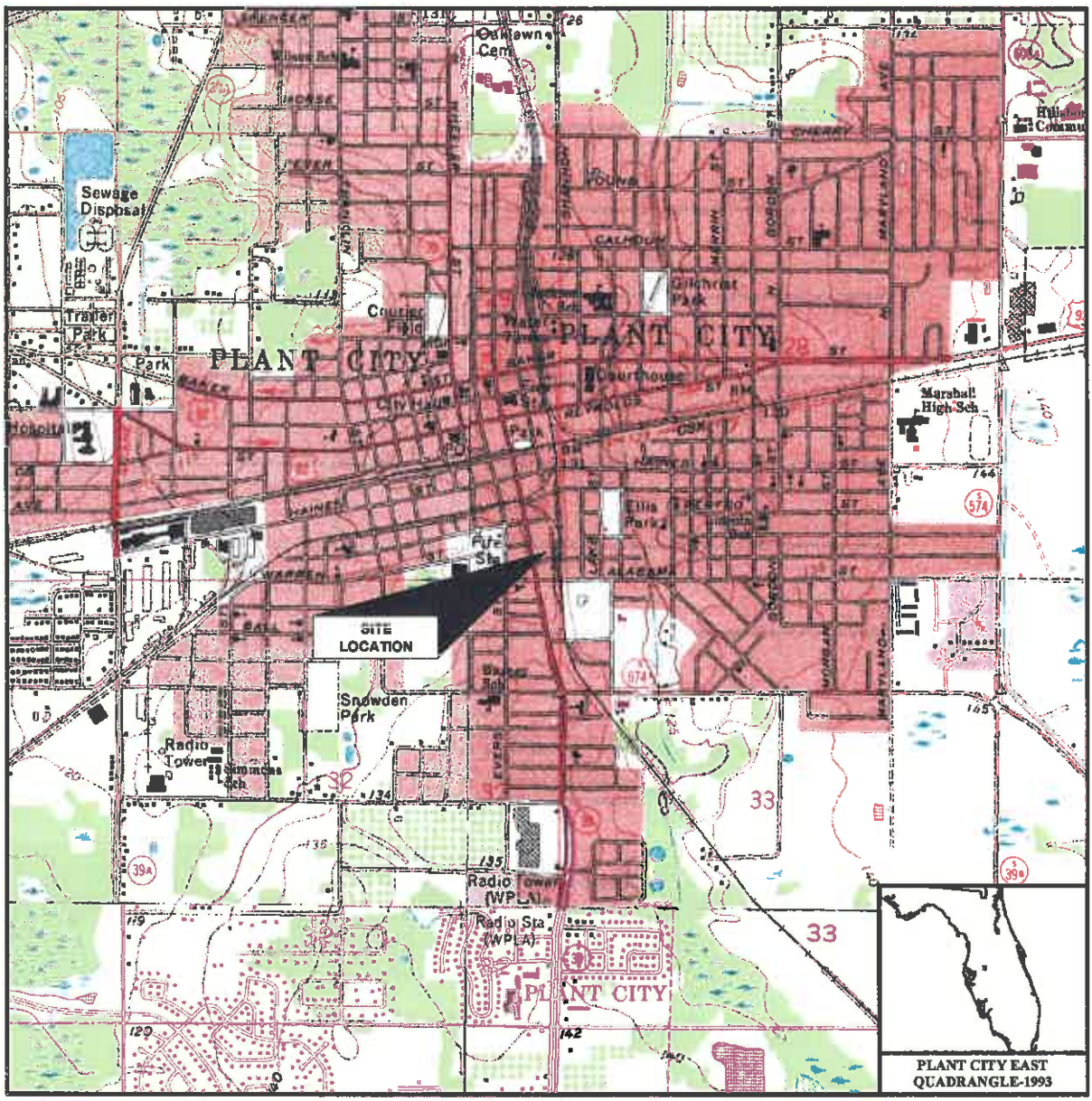
■ *Exterior sidewall or bottom sample result is above SCTL*

□ *Interior sidewall sample result is above SCTL, but sample location was not over excavated due to time constraints*

Carcinogenic polycyclic aromatic hydrocarbons were converted to Benzo(a)pyrene equivalents using the approach described in the February 2005 Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.

Attachment F

ATTACHMENT A
FIGURES



SCALE: 1 : 24,000

1 .5 0 1 MILES

1000 0 1000 5000 10,000 FEET

1 0 1 2 KILOMETER

1000 0 1000 2000 METER

PPM CONSULTANTS, INC.		CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	SITE LOCATION MAP
DRAWN BY: BWH	DRAWN DATE: 12/05/12		FIGURE NUMBER 1
PROJECT NUMBER: 716811	BILLING GROUP: SR		

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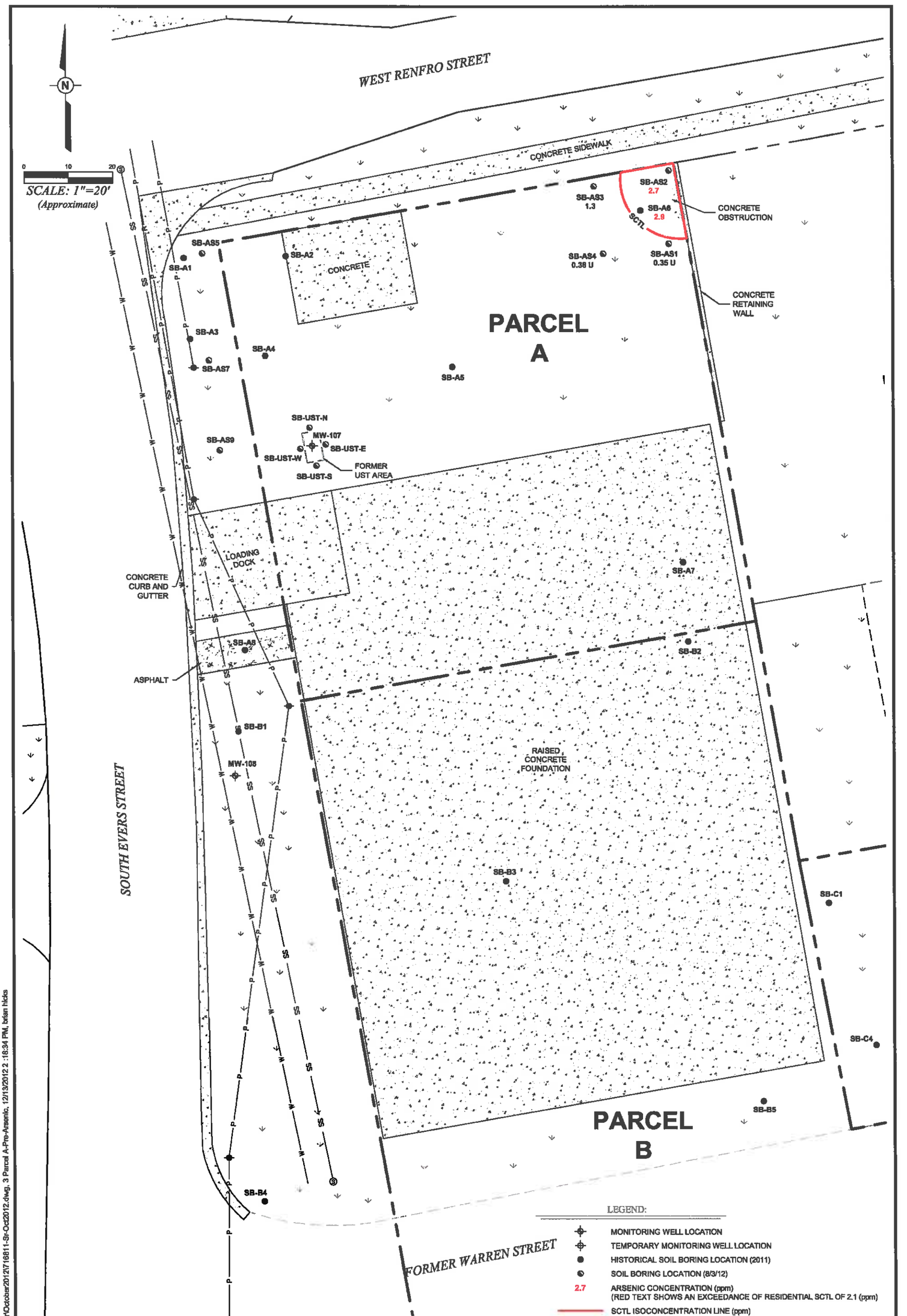
SOURCE: GOOGLE EARTH

Z:\City of Plant City\716811\SrOctober2012\716811-Sr-Oct2012.dwg, 2 sm, 12/13/2012 2:46:11 PM, brian hicks

PPM CONSULTANTS, INC.			
DRAWN BY: BWH	DRAWN DATE: 12/13/12	CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	SITE MAP
PROJECT NUMBER: 716811	BILLING GROUP: SR		FIGURE NUMBER 2



PPM CONSULTANTS, INC.		CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	PRE-EXCAVATION PARCEL A ARSENIC SOIL MAP (0'-1' INTERVAL)	FIGURE NUMBER
DRAWN BY: BWH	DRAWN DATE: 11/09/12			3
PROJECT NUMBER: 716811	BILLING GROUP: SR			

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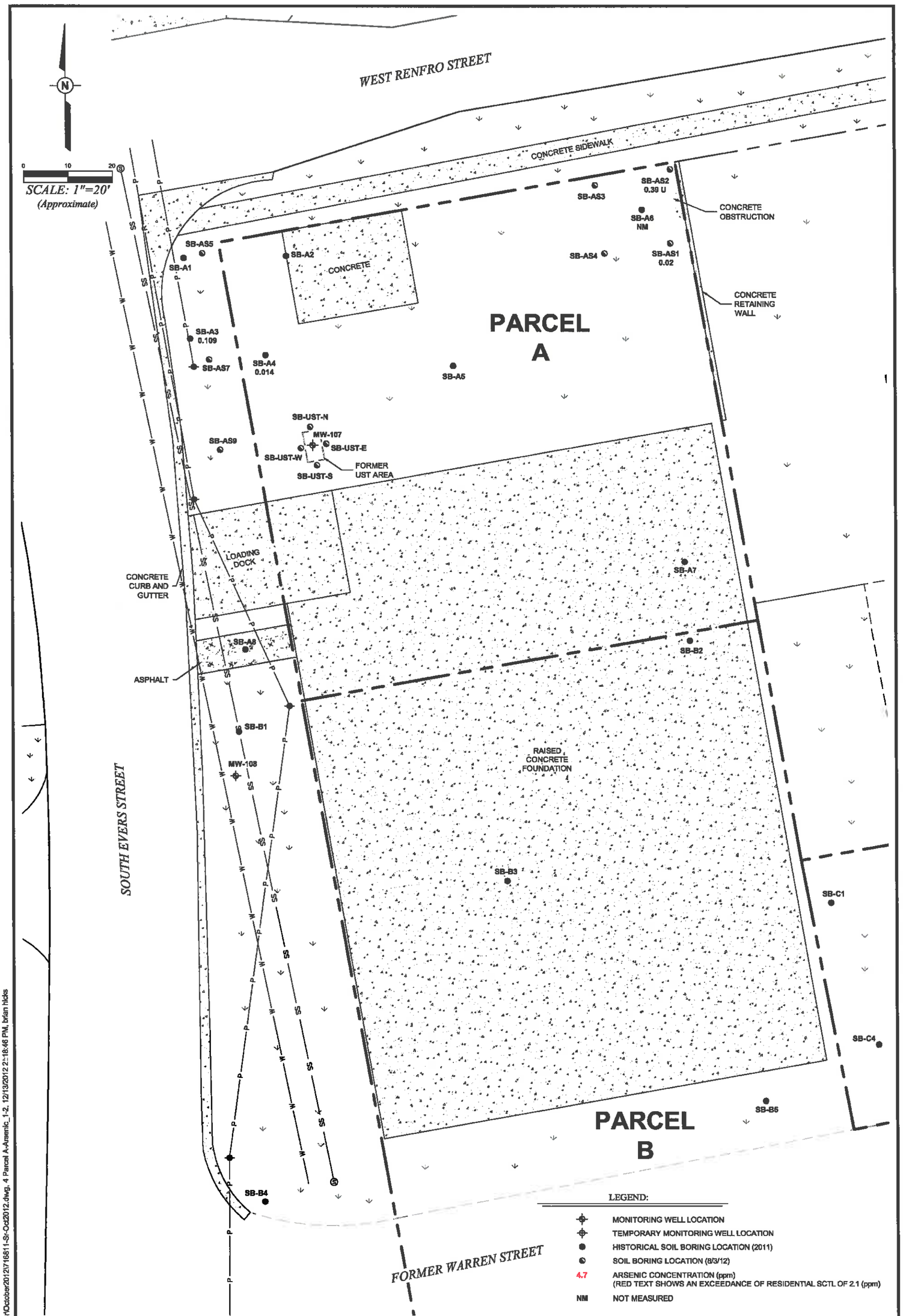

PPM CONSULTANTS, INC.		CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	PRE-EXCAVATION PARCEL A ARSENIC SOIL MAP (1'-2' INTERVAL)	FIGURE NUMBER
DRAWN BY: BWH	DRAWN DATE: 11/09/12			4
PROJECT NUMBER: 716811	BILLING GROUP: SR			

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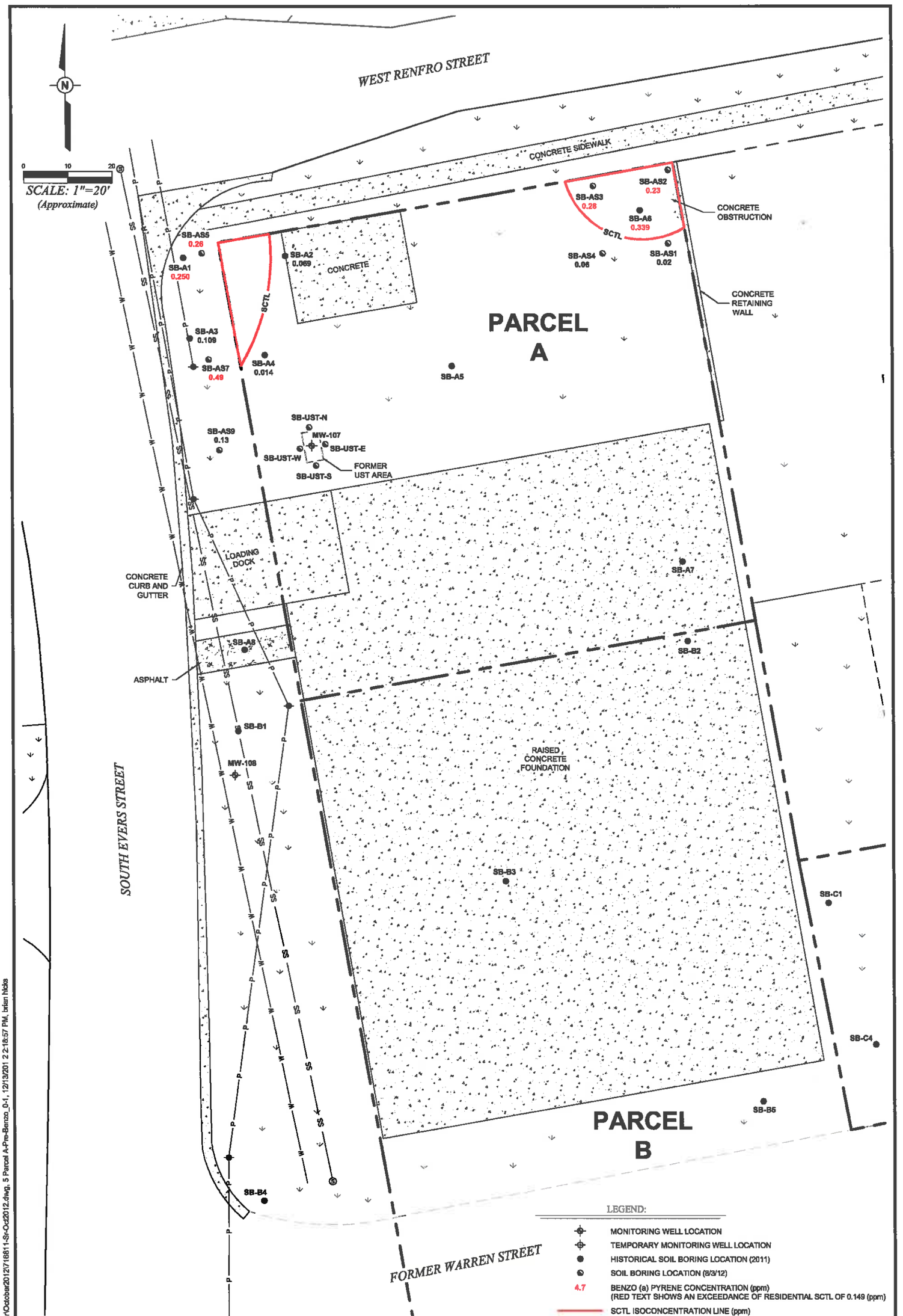

PPM CONSULTANTS, INC.		CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	PRE-EXCAVATION PARCEL A BENZO (a) PYRENE EQUIVALENT SOIL MAP (0'-1' INTERVAL)
DRAWN BY: BWH	DRAWN DATE: 11/09/12		FIGURE NUMBER 5
PROJECT NUMBER: 716811	BILLING GROUP: SR		

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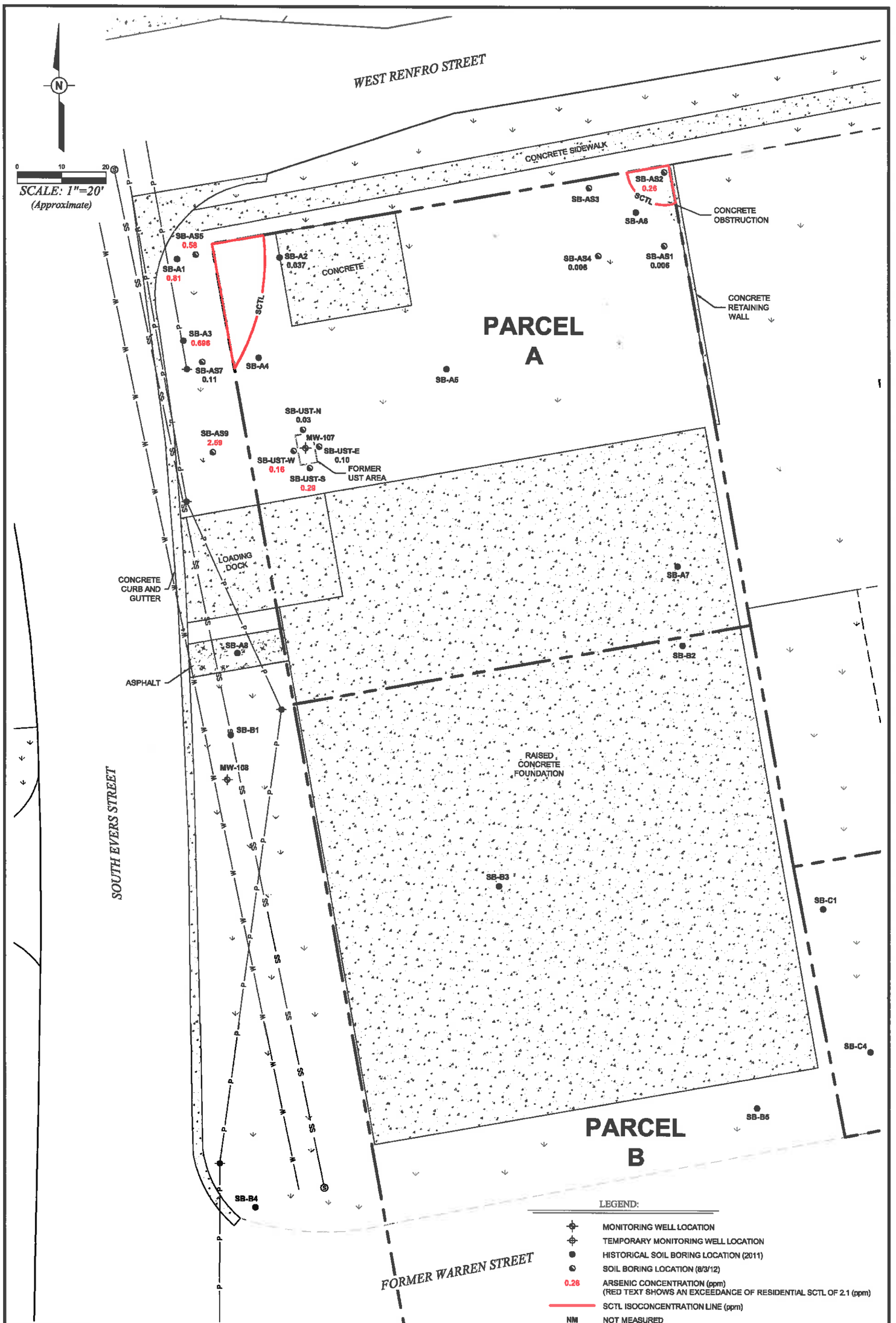

PPM CONSULTANTS, INC.		CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	PRE-EXCAVATION PARCEL A BENZO (a) PYRENE EQUIVALENT SOIL MAP (1'-2' INTERVAL)
DRAWN BY: BWH	DRAWN DATE: 11/09/12		FIGURE NUMBER 6
PROJECT NUMBER: 716811	BILLING GROUP: SR		

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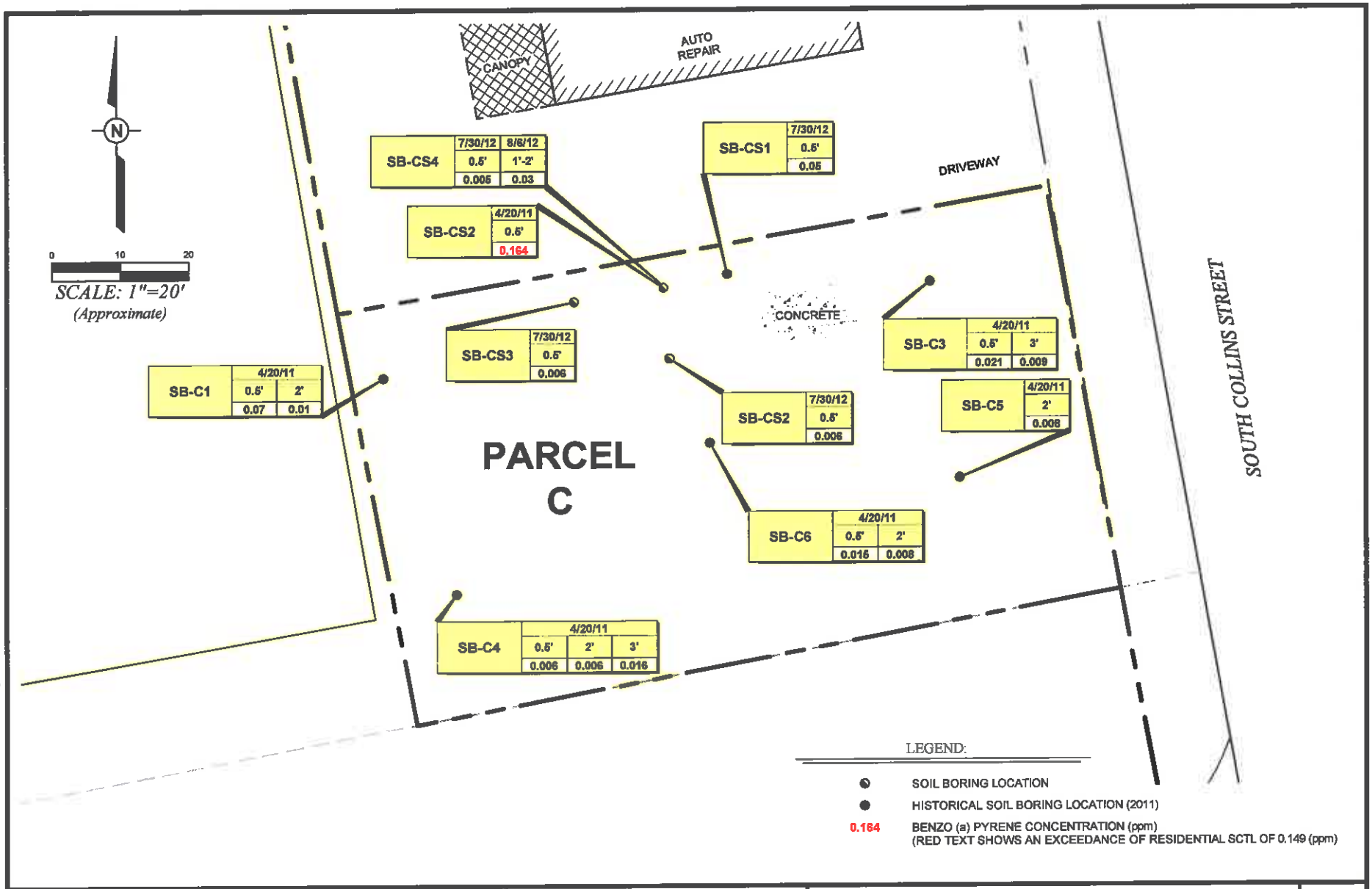

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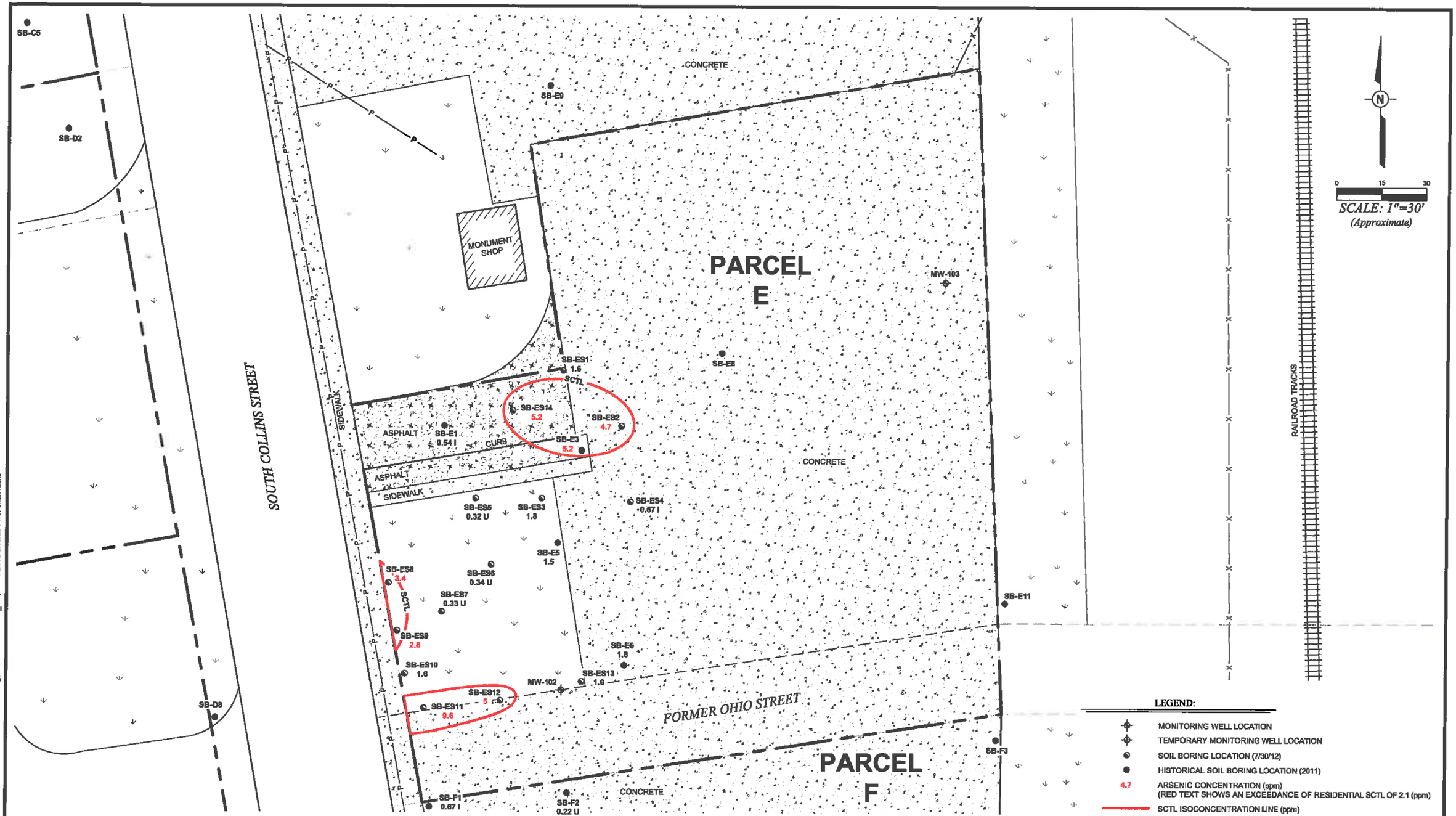
PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	11/07/12
PROJECT NUMBER:	BILLING GROUP:
716811	SR

CITY OF PLANT CITY
STOCK LUMBER
511 SOUTH COLLINS
PLANT CITY, FLORIDA

PARCEL C
BENZO (a) PYRENE EQUIVALENT SOIL MAP

FIGURE NUMBER
7



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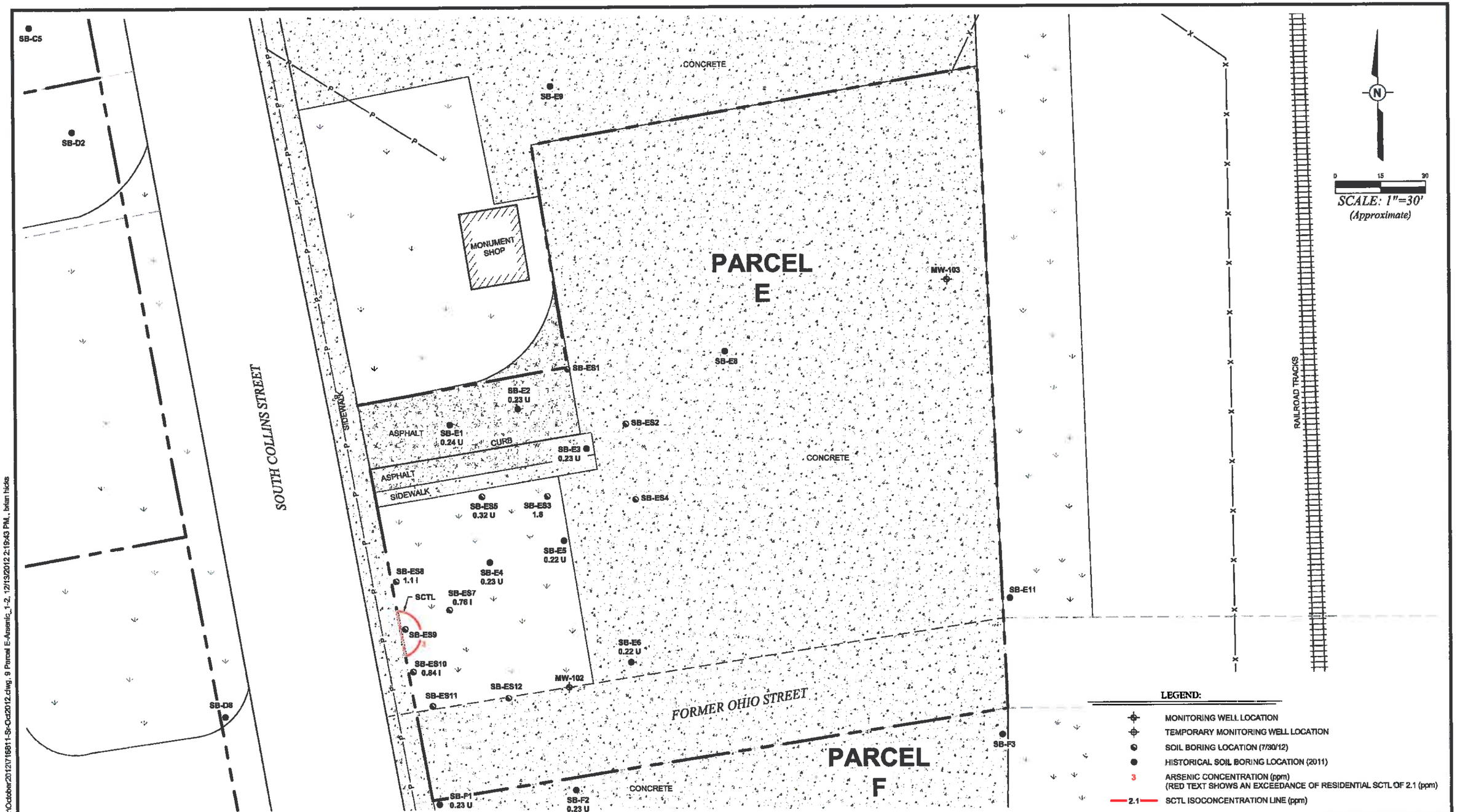
PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	11/01/12
PROJECT NUMBER:	BILLING GROUP:
716811	SR

CITY OF PLANT CITY
STOCK LUMBER
511 SOUTH COLLINS
PLANT CITY, FLORIDA

PRE-EXCAVATION ARSENIC SOIL MAP
(0'-1' INTERVAL)

FIGURE NUMBER
8



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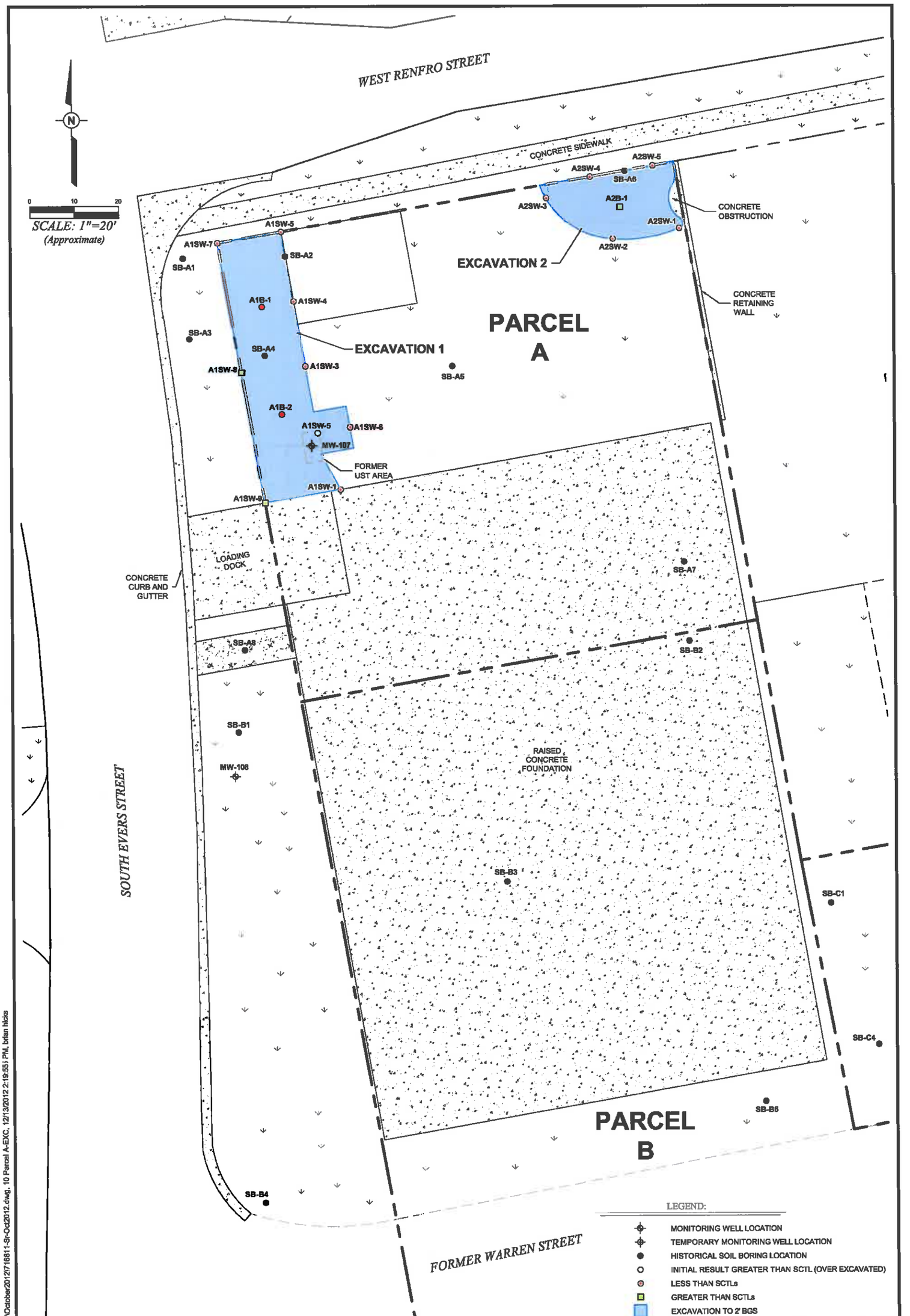
PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	11/01/12
PROJECT NUMBER:	BILLING GROUP:
716811	SR

CITY OF PLANT CITY
STOCK LUMBER
511 SOUTH COLLINS
PLANT CITY, FLORIDA

PRE-EXCAVATION ARSENIC SOIL MAP
(1'-2' INTERVAL)

FIGURE NUMBER
9



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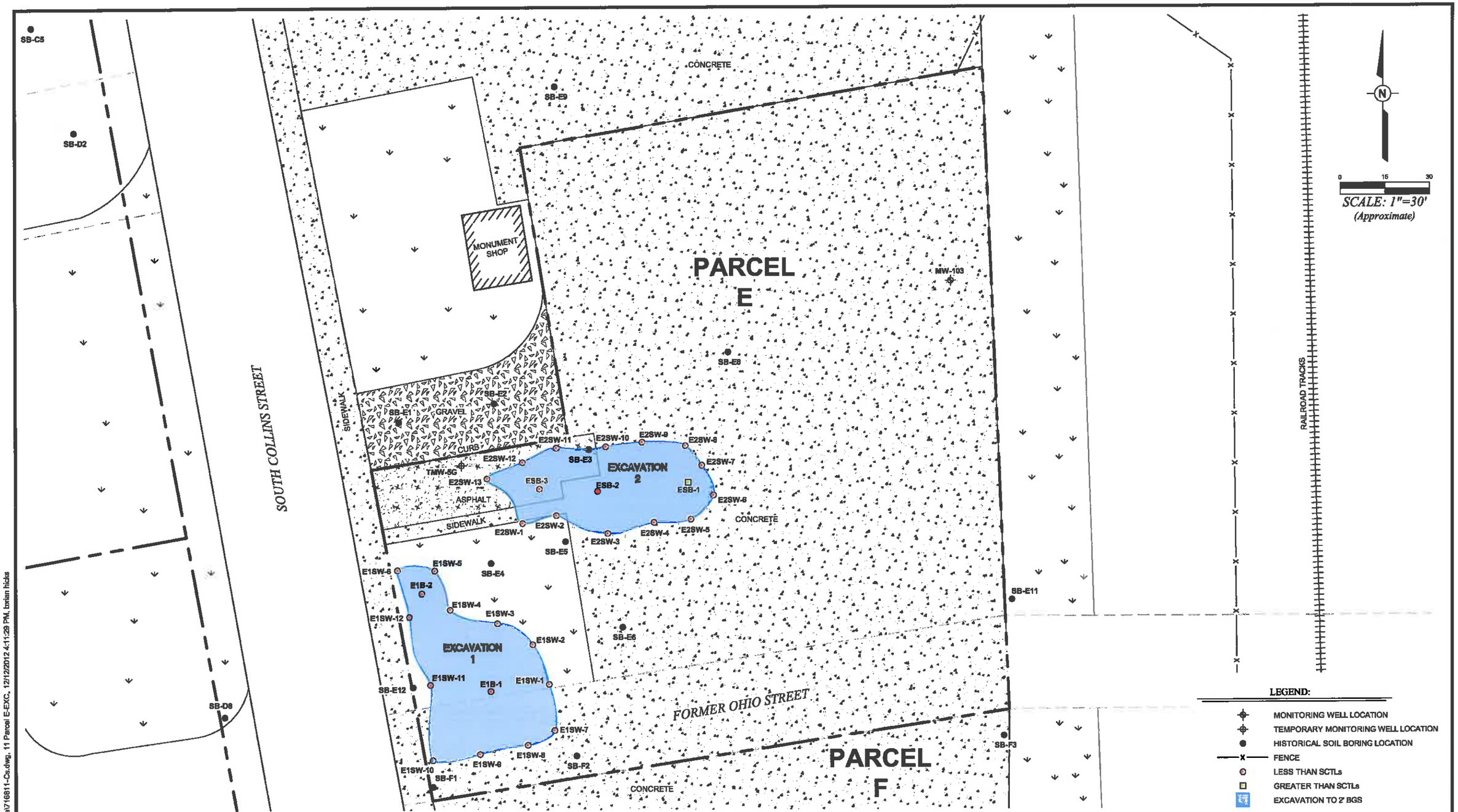
PPM CONSULTANTS, INC.		CITY OF PLANT CITY **STOCK LUMBER** 511 SOUTH COLLINS PLANT CITY, FLORIDA	PARCEL A EXCAVATION MAP
DRAWN BY: BWH	DRAWN DATE: 10/31/12		FIGURE NUMBER 10
PROJECT NUMBER: 716811	BILLING GROUP: SR		



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PPM CONSULTANTS, INC.

DRAWN BY:	DRAWN DATE:
BWH	9/14/12
PROJECT NUMBER:	BILLING GROUP:
716811	CS

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT
307 SOUTH EVERS STREET
PLANT CITY, FLORIDA

PARCEL E SITE MAP

FIGURE NUMBER
11

ATTACHMENT B
TABLES

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: Plant City Brownfield Cleanup Sites - Former Gro-Mor Fertilizer and Stock Lumber

WELL ID	MW-1			MW-2			MW-3			MW-4R		
DATE INSTALLED	03/05/10			03/05/10			03/05/10			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			15		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			4.0 - 14.0		
GROUND ELEVATION (Feet)	123.4			124.6			126.9			125.4		
TOC ELEVATION (feet)	122.88			124.34			126.57			124.83		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	119.92	2.96	0.00	120.60	3.74	0.00	122.31	4.26	0.00	121.00	3.83	0.00
07/16/12		NM			NM		125.03	1.54	0.00	122.86	1.97	0.00
07/17/12	122.78	0.10	0.00	124.14	0.20	0.00		NM			NM	
07/18/12		NM			NM		126.33	0.24	0.00	123.31	1.52	0.00
07/25/12	122.28	0.60	0.00	123.34	1.00	0.00	124.27	2.30	0.00	122.60	2.23	0.00
07/31/12	121.74	1.14	0.00	122.75	1.59	0.00	123.66	2.91	0.00	122.17	2.66	0.00
08/20/12		@TOC		123.99	0.35	0.00	124.95	1.62	0.00	122.86	1.97	0.00
08/25/12	122.28	0.60	0.00		NM		124.42	2.15	0.00	122.75	2.08	0.00
08/28/12		@TOC		123.94	0.40	0.00	124.90	1.67	0.00	122.84	1.99	0.00
09/04/12	121.68	1.20	0.00	122.71	1.63	0.00	123.73	2.84	0.00		NM	
10/12/12	121.97	0.91	0.00		NM			NM			NM	

WELL ID	MW-5			MW-7			MW-9			MW-10		
DATE INSTALLED	03/05/10			03/05/10			04/15/10			04/15/10		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			12		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			1.0 - 12.0		
GROUND ELEVATION (Feet)	126.6			127.9			122.9			126.2		
TOC ELEVATION (feet)	126.11			127.47			122.55			126.09		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	121.86	4.25	0.00	122.45	5.02	0.00	118.39	4.16	0.00	121.64	4.45	0.00
07/16/12	124.27	1.84	0.00		NM			NM		123.63	2.46	0.00
07/18/12		NM			2.32			under water			NM	
07/25/12	123.86	2.25	0.00	124.24	3.23	0.00	121.30	1.25	0.00	123.22	2.87	0.00
07/31/12	123.27	2.84	0.00	123.76	3.71	0.00		NM			NM	
08/20/12		NM		124.63	2.84	0.00		NM			NM	
08/23/12		NM		124.93	2.54	0.00		NM			NM	
08/25/12	124.06	2.05			NM			NM			NM	
08/28/12	124.43	1.68		125.21	2.26	0.00		NM			NM	
10/12/12		Destroyed		124.03	3.44	0.00		NM			NM	

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: Plant City Brownfield Cleanup Sites - Former Gro-Mor Fertilizer and Stock Lumber

WELL ID	MW-11			MW-12			MW-13			MW-14		
DATE INSTALLED	04/15/10			06/13/11			06/14/11			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			14			13			15		
SCREEN INTERVAL (feet)	2.0 - 12.0			4.0 - 14.0			3.0 - 13.0			5.0 - 15.0		
GROUND ELEVATION (Feet)	123.9			127.0			123.2			122.7		
TOC ELEVATION (feet)	123.63			126.81			122.78			122.48		
DATE	ELEV	DTW	FP		DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	120.66	2.97	0.00	122.97	3.84	0.00	118.58	4.20	0.00	118.29	4.19	0.00
07/16/12		NM		125.32	1.49	0.00		NM			NM	
07/17/12	122.58	1.05	0.00	125.53	1.28	0.00	121.78	1.00	0.00		NM	
07/18/12		NM		126.48	0.33	0.00		NM			NM	
07/25/12	122.04	1.59	0.00	124.71	2.10	0.00	120.86	1.92	0.00	119.59	2.89	0.00
07/31/12		NM		124.14	2.67	0.00		NM			NM	
08/20/12		NM		125.26	1.55	0.00		NM			NM	
08/25/12		NM		124.76	2.05	0.00		NM			NM	
08/28/12		NM		125.50	1.31	0.00		NM			NM	
10/12/12		NM		124.60	2.21	0.00		NM			NM	

WELL ID	MW-15			DW-1			MW-16			MW-17		
DATE INSTALLED	06/13/11			06/14/11			07/18/12			07/19/12		
DIAMETER (inches)	1			1			2			2		
WELL DEPTH (feet)	14			29			11			11		
SCREEN INTERVAL (feet)	4.0 - 14.0			24.0 - 29.0			1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (Feet)	122.9			126.6			124.1			122.2		
TOC ELEVATION (feet)	122.56			126.26			123.60			121.86		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP			
06/21/11	118.78	3.78	0.00	119.23	7.03	0.00		NI			NI	
07/16/12		NM		121.72	4.54	0.00		NI			NI	
07/18/12		0.10	0.00		NM		NM	0.51	0.00	NM	NM	
07/25/12	121.38	1.18	0.00	122.26	4.00	0.00	121.55	2.05	0.00	120.01	1.85	0.00
08/28/12		NM			NM			1.92			NM	

TABLE 1: GROUNDWATER ELEVATION DATA

Facility Name: Plant City Brownfield Cleanup Sites - Former Gro-Mor Fertilizer and Stock Lumber

WELL ID	MW-18			MW-19			MW-20			MW-21		
DATE INSTALLED	07/19/12						07/18/12			07/17/12		
DIAMETER (inches)	2						1			2		
WELL DEPTH (feet)	11			Was not installed			11			11		
SCREEN INTERVAL (feet)	1.0 - 11.0						1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (Feet)	122.4						124.0			125.7		
TOC ELEVATION (feet)	122.03						123.65			125.23		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12		NI						NM			1.87	0.00
07/25/12	119.32	2.71	0.00				121.53	2.12	0.00	123.05	2.18	0.00

WELL ID	MW-22			MW-23			MW-24					
DATE INSTALLED	07/17/12			07/18/12			07/18/12					
DIAMETER (inches)	2			2			2					
WELL DEPTH (feet)	12			11			11					
SCREEN INTERVAL (feet)	2.0 - 12.0			1.0 - 11.0			1.0 - 11.0					
GROUND ELEVATION (Feet)	NM			125.1			126.5					
TOC ELEVATION (feet)	128.50			124.53			126.00					
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12	125.62	2.88	0.00	NM	NM		NM	NM				
07/25/12	125.11	3.39		122.91	1.62		124.03	1.97				

WELL ID	MW-101			MW-102			MW-103			MW-104		
DATE INSTALLED	06/26/11			06/26/08			06/26/08			06/14/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	15			15			15			14		
SCREEN INTERVAL (feet)	5.0 - 15.0			5.0 - 15.0			4.5 - 14.5			4.0 - 14.0		
GROUND ELEVATION (Feet)	123.4			127.6			129.0			128.8		
TOC ELEVATION (feet)	123.16			127.28			128.66			128.48		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/01/08	120.73	2.43	0.00	124.04	3.24	0.00	124.24	4.42	0.00	124.98	3.50	0.00
06/21/11	119.09	4.07	0.00	122.73	4.55	0.00	122.59	6.07	0.00	122.15	6.33	0.00
07/18/12	122.42	0.74	0.00	124.81	2.47	0.00	125.22	3.44	0.00	125.28	3.20	0.00
07/25/12	122.16	1.00	0.00	124.70	2.58	0.00	125.72	2.94	0.00	125.18	3.30	0.00
08/28/12		NM		Destroyed			126.86	1.80	0.00		NM	

TABLE 2: SOIL ANALYTICAL DATA - BENZO(A)PYRENE EQUIVALENT COMPOUNDS

Facility Name: Former Stock Lumber
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Depth Interval	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	B(a)P Equivalent*
Direct Exposure ResidentialSCTL			**#**	**0.1**	**#**	**#**	**#**	**#**	**#**	**0.1**
Direct Exposure Industrial SCTL			**#**	**0.7**	**#**	**#**	**#**	**#**	**#**	**0.7**
Leachability SCTL			**0.8**	**8**	**2.4**	**24**	**77**	**0.7**	**6.6**	**8**
PARCEL A										
SB-AS1 (0-0.5)	08/03/12	0 - 0.5'	0.0086	0.0091 I	0.013	0.0078 I	0.011	0.0084 U	0.011 I	0.02
SB-AS1 (1-2)	08/03/12	1 - 2'	0.0015 U	0.0021 U	0.0028 U	0.0020 U	0.0012 U	0.0075 U	0.0074 U	0.006
SB-AS2 (0-0.5)	08/03/12	0 - 0.5'	0.12	0.15	0.19	0.11	0.14	0.078 U	0.12 I	**0.23**
SB-AS2 (1-2)	08/03/12	1 - 2'	0.17	0.2	0.24	0.19	0.25	0.0090 U	0.14	**0.26**
SB-AS3 (0-0.5)	08/03/12	0 -0.5'	0.15	0.22	0.28	0.12	0.19	0.0075 U	0.15	**0.28**
SB-AS4 (0-.5)	08/03/12	0 - 0.5'	0.022	0.031	0.04	0.016	0.031	0.0083 U	0.020 I	0.04
SB-AS4 (1-2)	08/03/12	1 - 2'	0.0017 U	0.0022 U	0.0030 U	0.0021 U	0.0013 U	0.0081 U	0.0080 U	0.006
SB-AS5 (0-.5)	08/03/12	0 - 0.5'	0.11	0.17	0.23	0.057 I	0.13	0.084 U	0.17 I	**0.26**
SB-AS5 (1-2)	08/03/12	1 - 2'	0.27	0.43	0.49	0.22	0.36	0.0079 U	0.28	**0.54**
SB-AS5 (2-3)	08/03/12	2 - 3'	0.46	0.42	0.63	0.31	0.54	0.0081 U	0.42	**0.58**
SB-AS7 (0-0.5)	08/03/12	0 - 0.5'	0.28	0.35	0.48	0.12	0.27	0.078 U	0.21 I	**0.49**
SB-AS7 (1-2)	08/03/12	1 - 2'	0.057	0.085	0.1	0.044	0.073	0.0079 U	0.05	0.11
SB-AS7 (2-3)	08/03/12	2 - 3'	0.063	0.078	0.098	0.046	0.075	0.0090 U	0.06	0.11
SB-AS9 (0-0.5)	08/03/12	0 - 0.5'	0.039 I	0.074 I	0.088 I	0.032 I	0.056	0.078 U	0.077 U	0.13
SB-AS9 (1-2)	08/03/12	1 - 2'	1.2	2	2.2	0.97	1.5	0.081 U	1.40	**2.53**
SB-AS9 (2-3)	08/03/12	2 - 3'	0.076	1	1.1	0.49	1	0.14	0.60	**1.32**
SB-UST-N 1-2'	08/03/12	1 - 2'	0.014	0.018	0.036	0.014	0.023	0.0089 U	0.016 I	0.03
SB-UST-S 1-2'	08/03/12	1 - 2'	0.25	0.18	0.33	0.1	0.3	0.041 I	0.13	**0.29**
SB-UST-E 1-2'	08/03/12	1 - 2'	0.09	0.054	0.12	0.033	0.11	0.019 I	0.073	0.10
SB-UST-W 1-2'	08/03/12	1 - 2'	0.15	0.098	0.17	0.064	0.21	0.021 I	0.094	**0.16**
DUP-UST (UST -N 1-2')	08/03/12	1 - 2'	0.022	0.016	0.033	0.009	0.032	0.0081 U	0.017 I	0.03

TABLE 2: SOIL ANALYTICAL DATA - BENZO(A)PYRENE EQUIVALENT COMPOUNDS

Facility Name: Former Stock Lumber
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Depth Interval	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	B(a)P Equivalent*
Direct Exposure ResidentialSCTL			**#**	**0.1**	**#**	**#**	**#**	**#**	**#**	**0.1**
Direct Exposure Industrial SCTL			**#**	**0.7**	**#**	**#**	**#**	**#**	**#**	**0.7**
Leachability SCTL			**0.8**	**8**	**2.4**	**24**	**77**	**0.7**	**6.6**	**8**
PARCEL C										
SB-CS1 0-0.5' bls	07/30/12	0 - 0.5'	0.029	0.037	0.057	0.023	0.039	0.0081 U	0.05	0.05
SB-CS2 0-0.5' bls	07/30/12	0 - 0.5'	0.0016 U	0.0022 U	0.0029 U	0.0021 U	0.0013 U	0.0079 U	0.0078 U	0.006
SB-CS3 0-0.5' bls	07/30/12	0 - 0.5'	0.0018 U	0.0024 U	0.0032 U	0.0023 U	0.0014 U	0.0087 U	0.0086 U	0.006
SB-CS4 0-0.5' bls	07/30/12	0 - 0.5'	0.038	0.032	0.078	0.046	0.051	0.0078 U	0.054	0.05
SB-CS4, 1-2'	08/06/12	1 - 2'	0.014	0.015	0.055	0.0087 I	0.017	0.0087 U	0.029 I	0.03

= Site concentrations for carcinogenic polycyclic aromatic hydrocarbons must be converted to Benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL for Benzo(a)pyrene using the approach described in the February 2005 'Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.'

*Benzo(a)Pyrene conversion tables are attached

ppm = parts per million = mg/L = milligrams per liter

Concentrations in **bold/red** type exceed SCTLs.

SCTL = Soil Cleanup Target Level per Chapter 62-777, F.A.C., Table II

BGS = Below ground surface

I = Estimated value below the lowest calibration point. Confidence correlates with concentration.

U = Non Detect

TABLE 3: SOIL ANALYTICAL DATA - ARSENIC

Facility Name: Former Stock Lumber
FDEP Brownfield ID: BF291002002

Sample ID	Date Collected	Depth Interval (feet below ground surface)	Arsenic (ppm)
Direct Exposure Residential SCTL			**2.1**
Direct Exposure Industrial SCTL			**12**
Leachability SCTL			*****
PARCEL E			
SB-ES1 0-0.5' bls	07/30/12	0 - 0.5'	1.6
SB-ES2 0-0.5' bls	07/30/12	0 - 0.5'	**4.7**
SB-ES3 0-0.5' bls	07/30/12	0 - 0.5'	1.8
SB-ES4 0-0.5' bls	07/30/12	0 - 0.5'	0.67 I
SB-ES5 0-0.5' bls	07/30/12	0 - 0.5'	0.32 U
SB-ES6 0-0.5' bls	07/30/12	0 - 0.5'	0.34 U
SB-ES7 0-0.5' bls	07/30/12	0 - 0.5'	0.33 U
SB-ES7 1-2' bls	07/30/12	1 - 2'	0.76 I
SB-ES8 0-0.5' bls	07/30/12	0 - 0.5'	**3.4**
SB-ES8 1-2' bls	07/30/12	1 - 2'	1.1 I
SB-ES9 0-0.5' bls	07/30/12	0 - 0.5'	**2.8**
SB-ES9 1-2' bls	07/30/12	1 - 2'	**3**
SB-ES10 0-0.5' bls	07/30/12	0 - 0.5'	1.6
SB-ES10 1-2' bls	07/30/12	1 - 2'	0.84 I
SB-ES11 0-0.5' bls	07/30/12	0 - 0.5'	**9.6**
SB-ES12 0-0.5' bls	07/30/12	0 - 0.5'	**5**
SB-ES13 0-0.5' bls	07/30/12	0 - 0.5'	1.6
SB-ES14 0-0.5' bls	07/30/12	0 - 0.5'	**5.2**
Dup 1 (SB-ES3 (0-0.5)	07/30/12	0 - 0.5'	**4.8**

Sample ID	Date Collected	Depth Interval (feet below ground surface)	Arsenic (ppm)
Direct Exposure Residential SCTL			**2.1**
Direct Exposure Industrial SCTL			**12**
Leachability SCTL			*****
PARCEL A			
SB-AS1 (0-0.5)	08/03/12	0 - 0.5'	0.35 U
SB-AS1 (1-2)	08/03/12	1 - 2'	0.33 U
SB-AS2 (0-0.5)	08/03/12	0 - 0.5'	**2.7**
SB-AS2 (1-2)	08/03/12	1 - 2'	0.39 U
SB-AS3 (0-0.5)	08/03/12	0 - 0.5'	1.3
SB-AS4 (0-.5)	08/03/12	0 - 0.5'	0.38 U
SB-AS4 (1-2)	08/03/12	1 - 2'	0.35 U

* Leachability values may be derived using the SPLP Test to calculate site-specific SCTLs or may be determined using TCLP in the event oily wastes are present.

ppm = parts per million = mg/L = milligrams per liter

Concentrations in **bold/red** type exceed SCTLs.

SCTL = Soil Cleanup Target Level per Chapter 62-777, F.A.C., Table II

I = Estimated value below the lowest calibration point. Confidence correlates with concentration.

U = Non Detect

TABLE 4
Analytical Summary - Soil
Stock Lumber, PPM Project No. 716810.SR

Sample ID	Sample Depth (ft.-BGS)	Date Collected	Arsenic	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	BaP Equivalents	Comment
Direct Exposure Residential			2.1	#	0.1	#	#	#	#	#	0.1	see
Leachability			***	0.8	8	2.4	24	77	0.7	6.6	8	notes
PARCEL A - EXCAVATION 1												
A1SW-1	2'	8/21/2012	0.35 U	0.013	0.024	0.012 I	0.0097	0.014	0.0086 U	0.0085 U	0.03	●
A1SW-2	2'	8/21/2012	0.80 I	0.039	0.099	0.073	0.055	0.056	0.06	0.037	**0.17**	○
A1SW-3	2'	8/21/2012	0.38 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0084 U	0.0083 U	0.01	●
A1SW-4	2'	8/21/2012	0.37 U	0.0018 U	0.0024 U	0.0032 U	0.0023 U	0.0014 U	0.0087 U	0.0086 U	0.01	●
A1SW-5	2'	8/21/2012	0.56 I	0.0049 I	0.011	0.014	0.0073 I	0.0064	0.0088 U	0.0087 U	0.02	●
A1SW-6	2'	8/29/2012	0.35 U	0.0024 I	0.0023 U	0.0048 I	0.0022 U	0.0023 I	0.0085 U	0.0084 U	0.01	●
A1SW-7	2'	9/12/2012	0.36 U	0.0020 I	0.0022 U	0.0035 I	0.0021 U	0.0019 I	0.0082 U	0.0081 U	0.01	●
A1SW-8	2'	9/12/2012	1.6	0.86	**1.2**	1.4	0.52	1	0.19	0.58	**1.68**	■
A1SW-9	2'	9/12/2012	1.8	0.19	**0.2**	0.29	0.097	0.2	0.0091 U	0.11	**0.26**	■
A1B-1	2'	8/29/2012	0.35 U	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
A1B-2	2'	8/29/2012	0.77 I	0.028	0.043	0.065	0.015	0.037	0.0086 U	0.025 I	0.06	●
PARCEL A - EXCAVATION 2												
A2SW-1	2'	8/21/2012	0.37 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.01	●
A2SW-2	0.5'	8/21/2012	0.37 U	0.0043 I	0.0023 U	0.0095 I	0.0060 I	0.013	0.0085 U	0.0084 U	0.01	●
A2SW-3	2'	8/21/2012	0.34 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.01	●
A2SW-4	2'	8/29/2012	0.40 U	0.0019 U	0.0025 U	0.0033 U	0.0023 U	0.0015 U	0.0090 U	0.0089 U	0.01	●
A2SW-5	2'	8/29/2012	0.39 U	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
A2B-1	2'	8/29/2012	0.32 U	0.091	**0.11**	0.16	0.043	0.12	0.016 I	0.056	**0.16**	■

Notes:

All concentrations are in milligrams per kilogram (mg/kg) or parts per million (ppm)
NA - Not analyzed because parameter was not a site chemical of concern per previous investigations
U - Below method detection limits
I - Estimated value
● *All sample results are below SCTLs*
○ *Interior sidewall sample result was above SCTL, but sample location was over excavated later in project*
■ *Exterior sidewall or base sample result is above SCTL*

Carcinogenic polycyclic aromatic hydrocarbons were converted to Benzo(a)pyrene equivalents using the approach described in the February 2005 Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.

TABLE 4
Analytical Summary - Soil
Stock Lumber, PPM Project No. 716810.SR

Sample ID	Sample Depth (ft.-BGS)	Date Collected	Arsenic	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Indeno(1,2,3-cd)pyrene	BaP Equivalents	Comment
_Direct Exposure Residential			2.1	#	0.1	#	#	#	#	#	0.1	see
_Leachability			***	0.8	8	2.4	24	77	0.7	6.6	8	notes
PARCEL E - EXCAVATION 1												
E1SW-1	2'	8/21/2012	1.1 I	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.01	●
E1SW-2	2'	8/21/2012	0.36 U	0.0018 U	0.0024 U	0.0032 U	0.0022 U	0.0014 U	0.0086 U	0.0085 U	0.01	●
E1SW-3	2'	8/21/2012	0.38 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0083 U	0.0082 U	0.01	●
E1SW-4	2'	8/21/2012	0.36 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0083 U	0.0082 U	0.01	●
E1SW-5	2'	8/21/2012	0.37 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0085 U	0.0084 U	0.01	●
E1SW-6	2'	8/21/2012	0.36 U	0.0017 U	0.0023 U	0.0031 U	0.0022 U	0.0014 U	0.0084 U	0.0083 U	0.01	●
E1SW-7	2'	8/23/2012	0.36 U	0.0020 I	0.0022 U	0.0035 I	0.0021 U	0.0019 I	0.0082 U	0.0081 U	0.01	●
E1SW-8	2'	8/23/2012	1.6	NA	NA	NA	NA	NA	NA	NA	NA	●
E1SW-9	2'	8/23/2012	1.8	NA	NA	NA	NA	NA	NA	NA	NA	●
E1SW-10	2'	8/23/2012	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E1SW-11	2'	8/24/2012	0.37 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E1SW-12	2'	8/24/2012	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E1B-1	2'	8/24/2012	0.36 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E1B-2	2'	8/24/2012	0.34 U	NA	NA	NA	NA	NA	NA	NA	NA	●
PARCEL E - EXCAVATION 2												
E2SW-1	2'	8/23/2012	0.37 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-2	2'	8/23/2012	0.36 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-3	2'	8/23/2012	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-4	2'	8/23/2012	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-5	2'	8/23/2012	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-6	2'	8/23/2012	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-7	2'	8/23/2012	1.8	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-8	2'	8/23/2012	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-9	2'	8/23/2012	1.1 I	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-10	2'	8/23/2012	0.4 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-11	2'	8/23/2012	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-12	2'	8/23/2012	0.37 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2SW-13	2'	8/23/2012	0.38 U	NA	NA	NA	NA	NA	NA	NA	NA	●
E2B-1	2'	8/24/2012	**3.0**	NA	NA	NA	NA	NA	NA	NA	NA	■
E2B-2	2'	8/24/2012	1.3 I	NA	NA	NA	NA	NA	NA	NA	NA	●
E2B-3	2'	8/24/2012	0.42 I	NA	NA	NA	NA	NA	NA	NA	NA	●

Notes:

All concentrations are in milligrams per kilogram (mg/kg) or parts per million (ppm)
NA - Not analyzed because parameter was not a site chemical of concern per previous investigations
U - Below method detection limits
I - Estimated value
● *All sample results are below SCTLs*
○ *Interior sidewall sample result was above SCTL, but sample location was over excavated later in project*
■ *Exterior sidewall or base sample result is above SCTL*

Carcinogenic polycyclic aromatic hydrocarbons were converted to Benzo(a)pyrene equivalents using the approach described in the February 2005 Final Technical Report: Development of Cleanup Target Levels (CTLs) for Chapter 62-777, F.A.C.

Attachment G

REVISED REMEDIAL ACTION PLAN

FORMER GRO-MOR FERTILIZER PLANT (306 AND 307 SOUTH EVERS STREET) AND FORMER STOCK BUILDING SUPPLY / MCGINNES LUMBER COMPANY (511 SOUTH COLLINS) PLANT CITY, FLORIDA

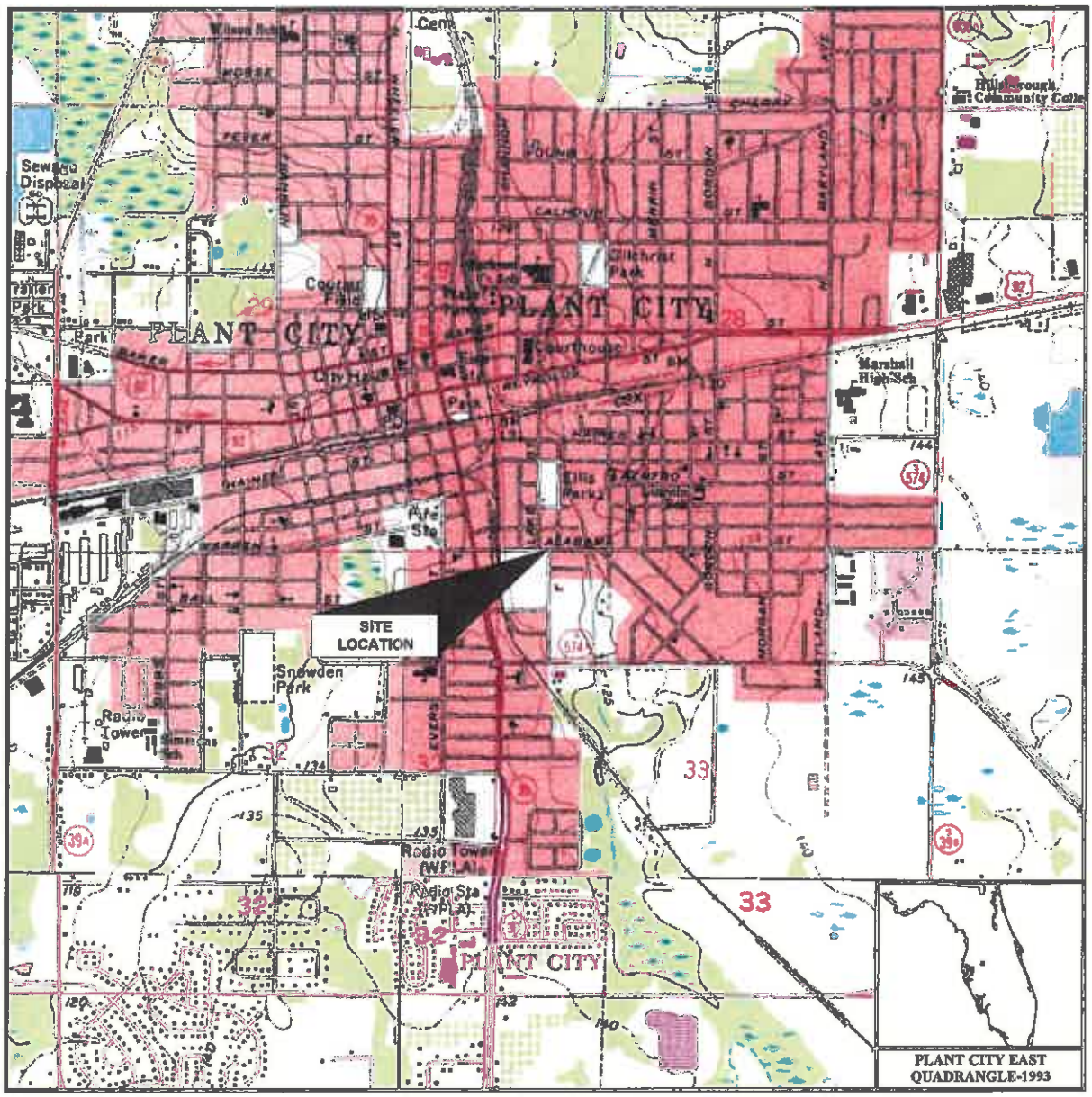
USEPA BROWNFIELDS GRANT AGREEMENT BF-95481711
FDEP FACILITY IDS:
FORMER GRO-MOR FERTILIZER PLANT - BF291002002
FORMER STOCK LUMBER SITE - BF291002001

PPM PROJECT NO. 716810-CG-RAP

AUGUST 5, 2014

Environmental Science and Engineering

PPM CONSULTANTS



SCALE: 1 : 24,000

1 .5 0 1 MILES

1000 0 1000 5000 10,000 FEET

1 0 1 2 KILOMETER

1000 0 1000 2000 METER

N

PPM CONSULTANTS, INC. www.ppmco.com	CITY OF PLANT CITY FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD SOUTH EVERS STREET AND WHEELER STREET PLANT CITY, FLORIDA	SITE LOCATION MAP	FIGURE NUMBER
DRAWN BY: BWH / DRAWN DATE: 5/29/14			1
PROJECT NUMBER: 716810 / BILLING GROUP: TASK 4C			

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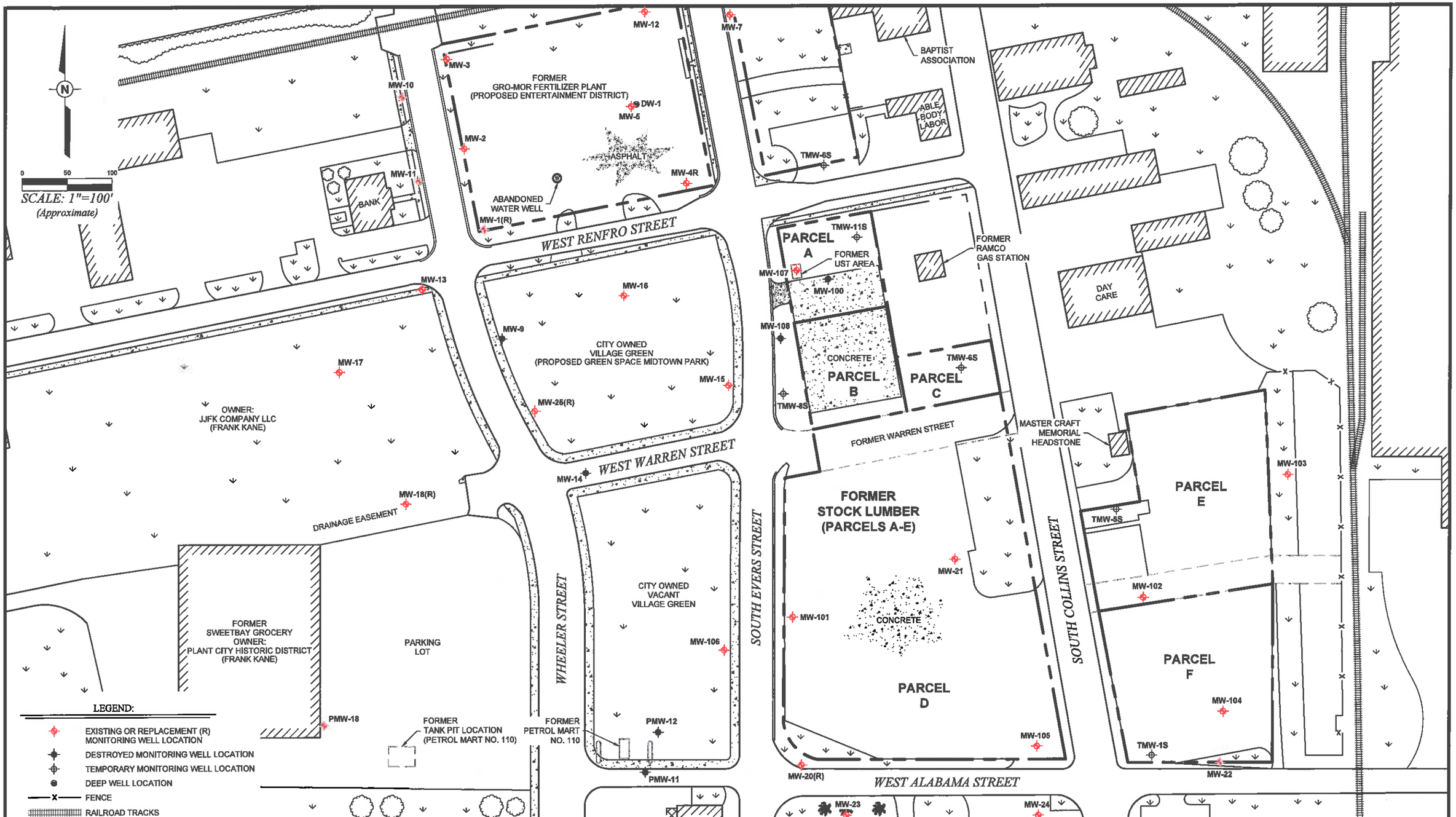

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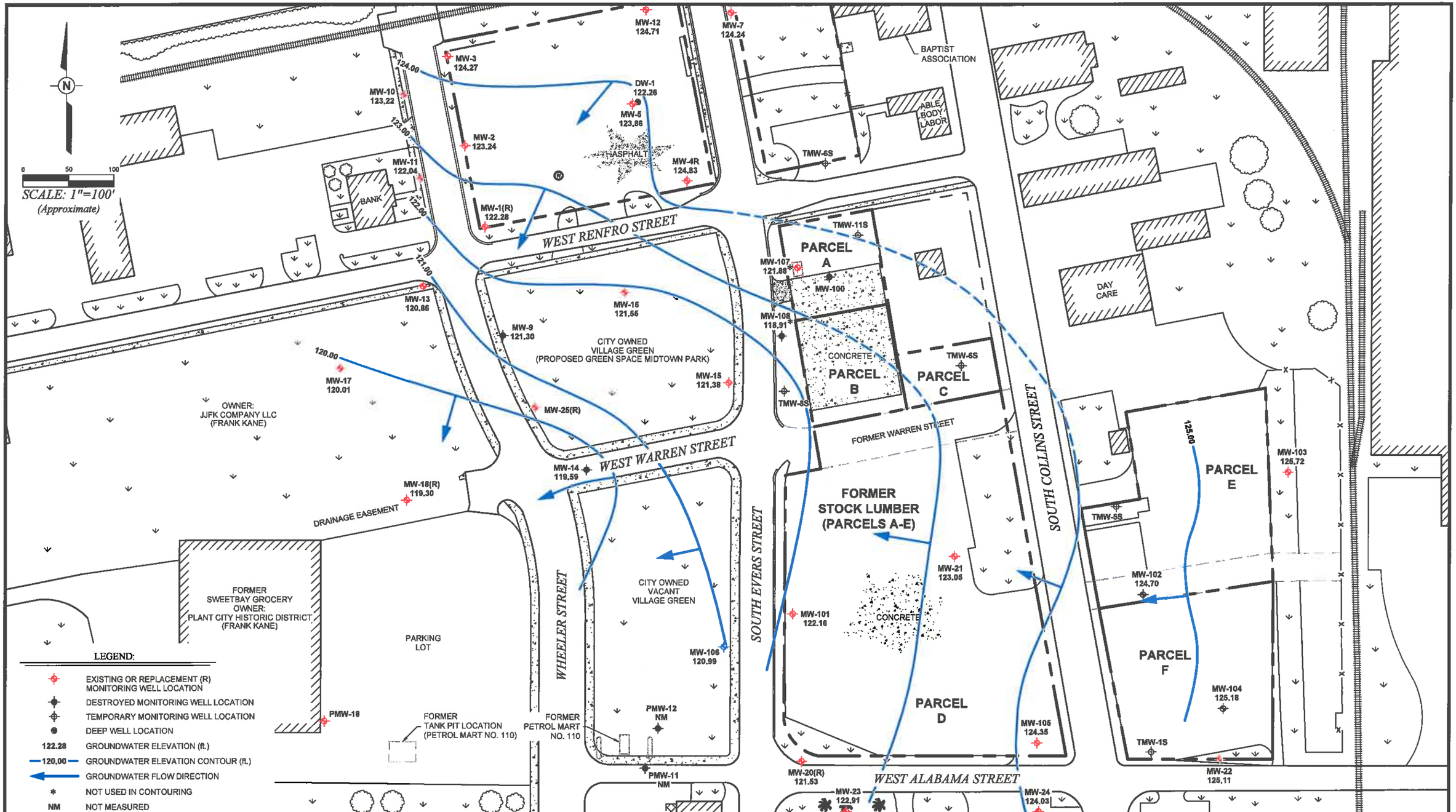
DRAWN BY:	DRAWN DATE:
BWH	5/29/14
PROJECT NUMBER:	BILLING GROUP:
716810	TASK 4C

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

SITE MAP

FIGURE NUMBER
2



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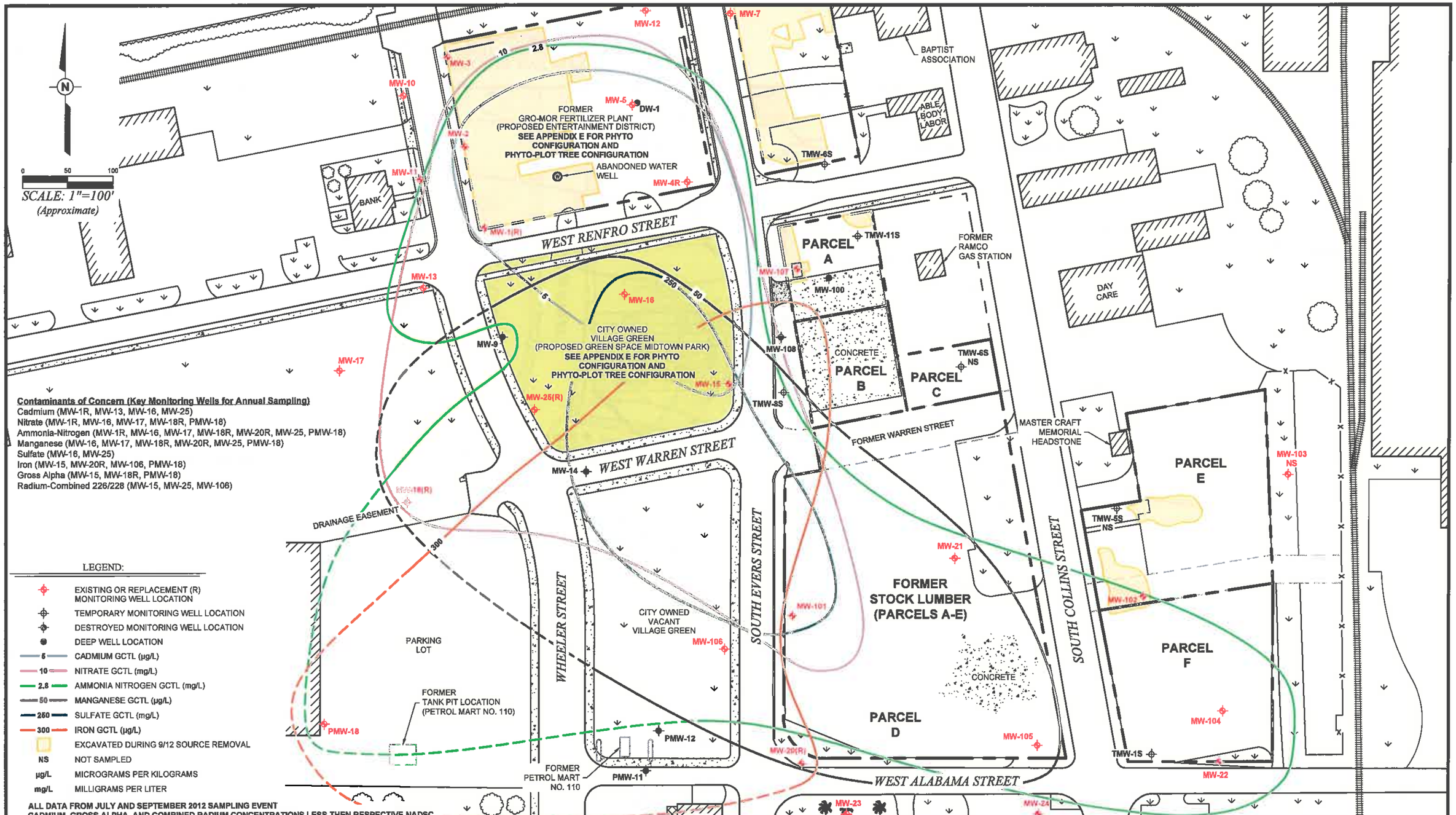
DRAWN BY:	DRAWN DATE:
BWH	5/29/14
PROJECT NUMBER:	BILLING GROUP:
716810	TASK 4C

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

GROUNDWATER CONTOUR MAP - GRO-MOR FERTILIZER AND STOCK LUMBER
(JULY 25, 2012)

FIGURE NUMBER
3



Contaminants of Concern (Key Monitoring Wells for Annual Sampling)
Cadmium (MW-1R, MW-13, MW-16, MW-25)
Nitrate (MW-1R, MW-16, MW-17, MW-18R, PMW-18)
Ammonia-Nitrogen (MW-1R, MW-16, MW-17, MW-18R, MW-20R, MW-25, PMW-18)
Manganese (MW-16, MW-17, MW-18R, MW-20R, MW-25, PMW-18)
Sulfate (MW-16, MW-25)
Iron (MW-15, MW-20R, MW-106, PMW-18)
Gross Alpha (MW-15, MW-18R, PMW-18)
Radium-Combined 226/228 (MW-15, MW-25, MW-106)

LEGEND:

- EXISTING OR REPLACEMENT (R) MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- DEEP WELL LOCATION
- 5 CADMIUM GCTL (µg/L)
- 10 NITRATE GCTL (mg/L)
- 2.8 AMMONIA NITROGEN GCTL (mg/L)
- 50 MANGANESE GCTL (µg/L)
- 250 SULFATE GCTL (mg/L)
- 300 IRON GCTL (µg/L)
- EXCAVATED DURING 9/12 SOURCE REMOVAL
- NS NOT SAMPLED
- µg/L MICROGRAMS PER KILOGRAMS
- mg/L MILLIGRAMS PER LITER

ALL DATA FROM JULY AND SEPTEMBER 2012 SAMPLING EVENT
CADMIUM, GROSS ALPHA, AND COMBINED RADIUM CONCENTRATIONS LESS THEN RESPECTIVE NADSC.

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SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

COC CONCENTRATIONS ABOVE GCTLS

FIGURE NUMBER
4A

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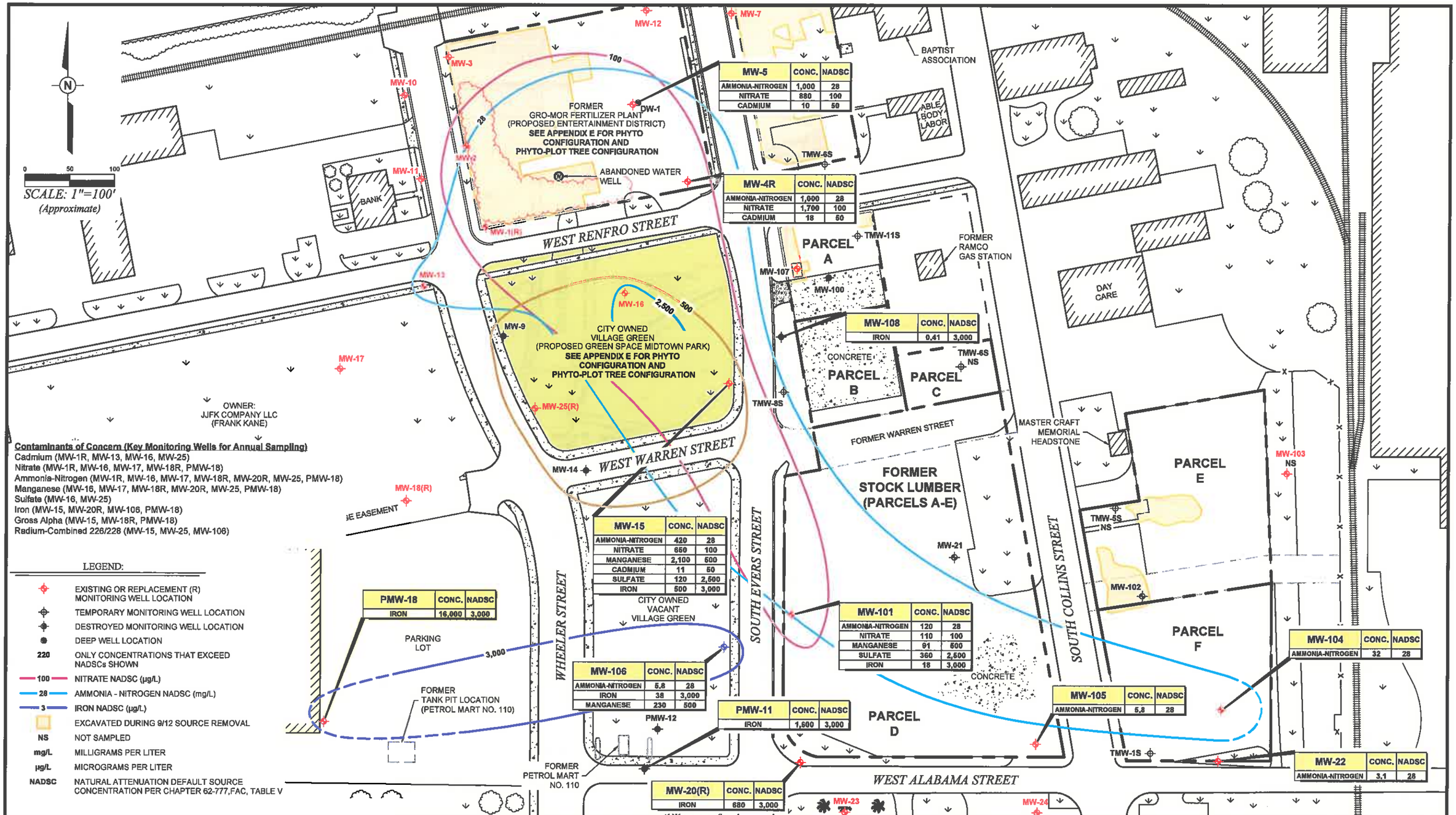

MW-5	CONC.	NADSC
AMMONIA-NITROGEN	1,000	28
NITRATE	880	100
CADMIUM	10	50

MW-4R	CONC.	NADSC
AMMONIA-NITROGEN	1,000	28
NITRATE	1,700	100
CADMIUM	18	50

MW-108	CONC.	NADSC
IRON	0.41	3,000

MW-15	CONC.	NADSC
AMMONIA-NITROGEN	420	28
NITRATE	650	100
MANGANESE	2,100	500
CADMIUM	11	50
SULFATE	120	2,500
IRON	500	3,000

PMW-18	CONC.	NADSC
IRON	16,000	3,000

MW-101	CONC.	NADSC
AMMONIA-NITROGEN	120	28
NITRATE	110	100
MANGANESE	91	500
SULFATE	360	2,500
IRON	18	3,000

MW-106	CONC.	NADSC
AMMONIA-NITROGEN	5.8	28
IRON	38	3,000
MANGANESE	230	500

MW-105	CONC.	NADSC
AMMONIA-NITROGEN	5.8	28

MW-104	CONC.	NADSC
AMMONIA-NITROGEN	32	28

PMW-11	CONC.	NADSC
IRON	1,600	3,000

MW-22	CONC.	NADSC
AMMONIA-NITROGEN	3.1	28

MW-20(R)	CONC.	NADSC
IRON	680	3,000

Contaminants of Concern (Key Monitoring Wells for Annual Sampling)

Cadmium (MW-1R, MW-13, MW-16, MW-25)
Nitrate (MW-1R, MW-16, MW-17, MW-18R, PMW-18)
Ammonia-Nitrogen (MW-1R, MW-16, MW-17, MW-18R, MW-20R, MW-25, PMW-18)
Manganese (MW-16, MW-17, MW-18R, MW-20R, MW-25, PMW-18)
Sulfate (MW-16, MW-25)
Iron (MW-15, MW-20R, MW-106, PMW-18)
Gross Alpha (MW-15, MW-18R, PMW-18)
Radium-Combined 226/228 (MW-15, MW-25, MW-106)

LEGEND:

- EXISTING OR REPLACEMENT (R) MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- DEEP WELL LOCATION
- 220 — ONLY CONCENTRATIONS THAT EXCEED NADSCs SHOWN
- 100 — NITRATE NADSC (µg/L)
- 28 — AMMONIA - NITROGEN NADSC (mg/L)
- 3 — IRON NADSC (µg/L)
- EXCAVATED DURING 9/12 SOURCE REMOVAL
- NS — NOT SAMPLED
- mg/L — MILLIGRAMS PER LITER
- µg/L — MICROGRAMS PER LITER
- NADSC — NATURAL ATTENUATION DEFAULT SOURCE CONCENTRATION PER CHAPTER 62-777,FAC, TABLE V

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SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

COC CONCENTRATIONS ABOVE NADSCS AND PROPOSED PHYTO-PLOTS

FIGURE NUMBER
4B

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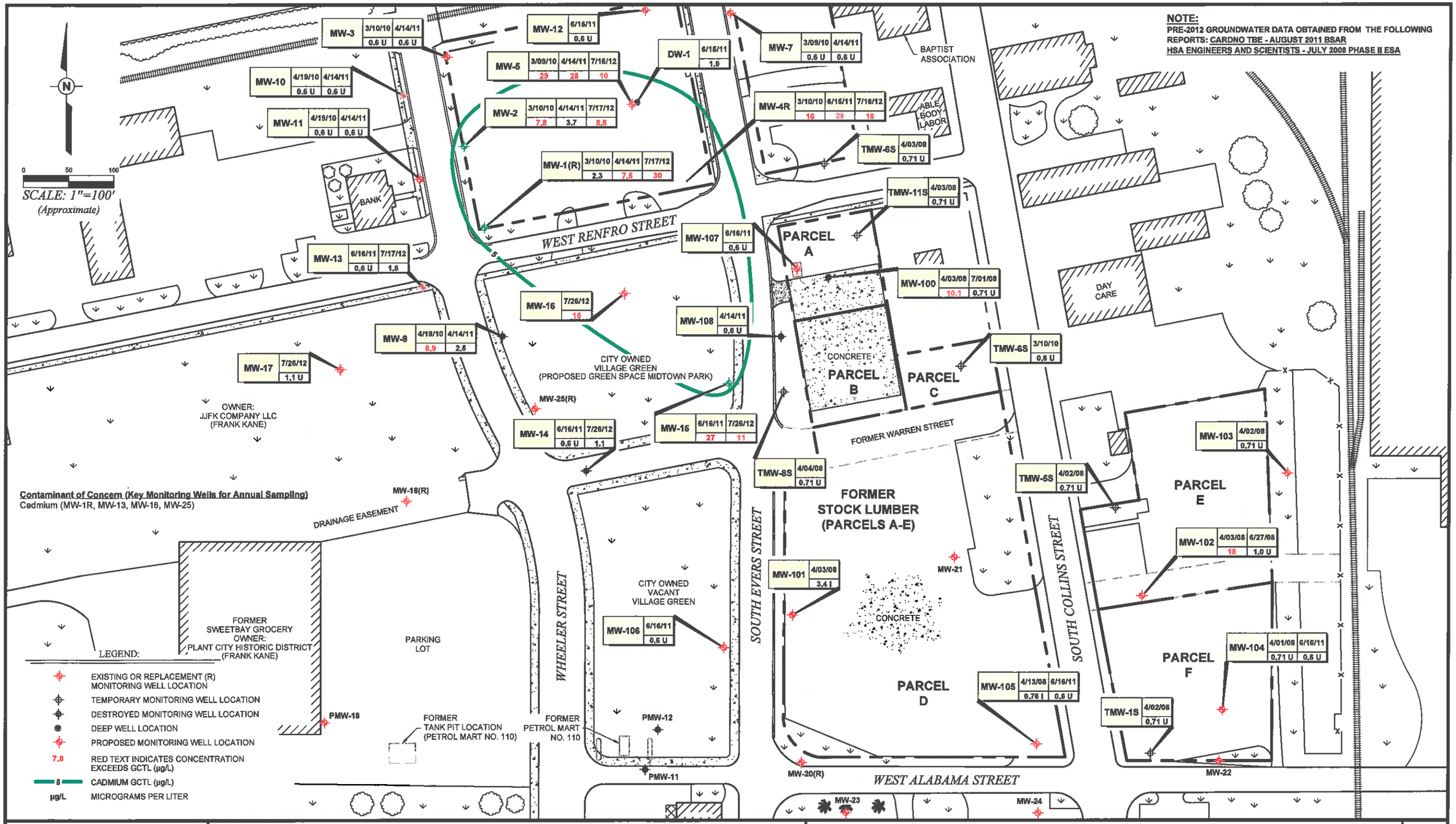

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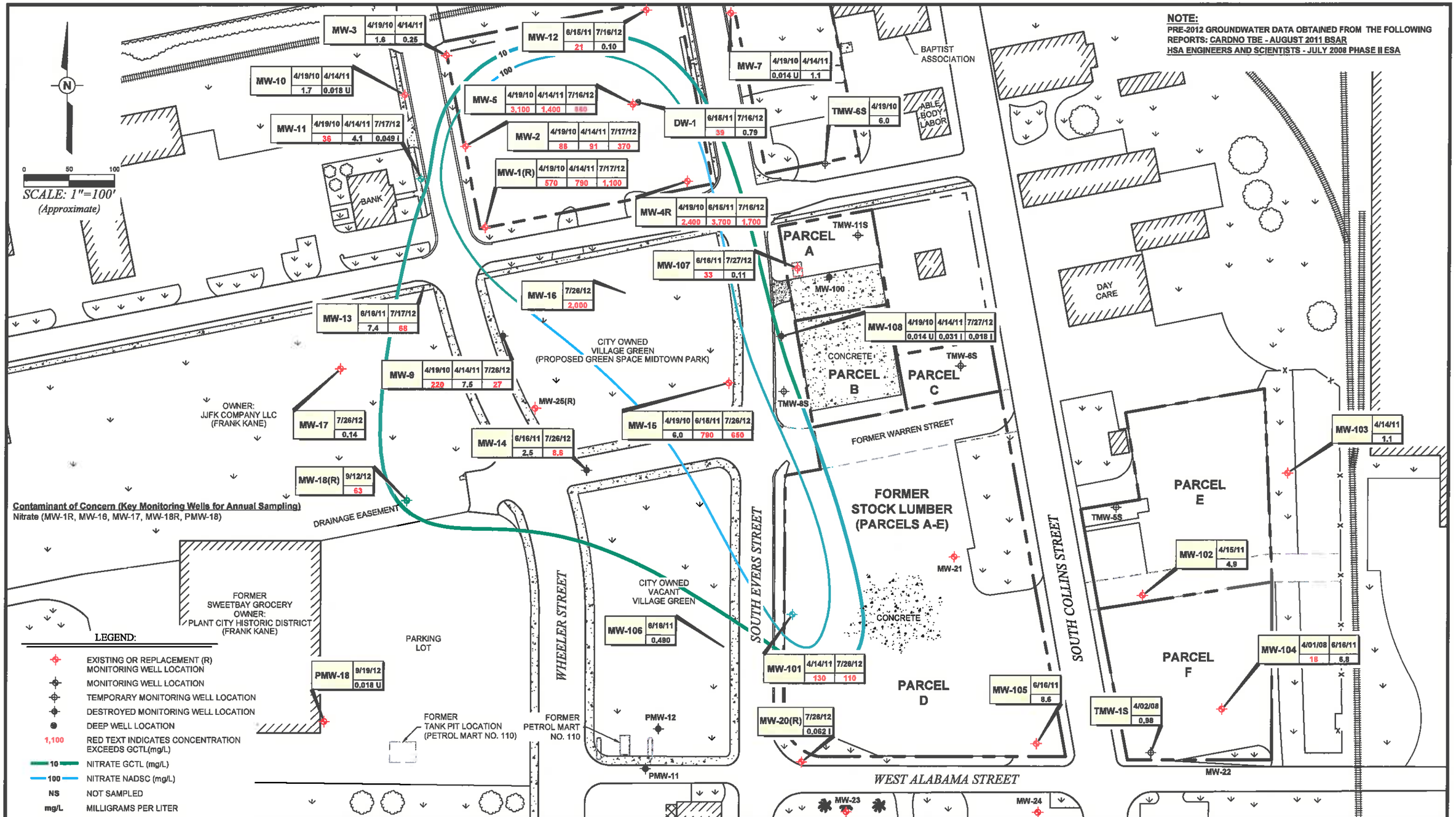
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

CADMIUM IN GROUNDWATER

FIGURE NUMBER
5



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SOUTH EVERS STREET AND WHEELER STREET
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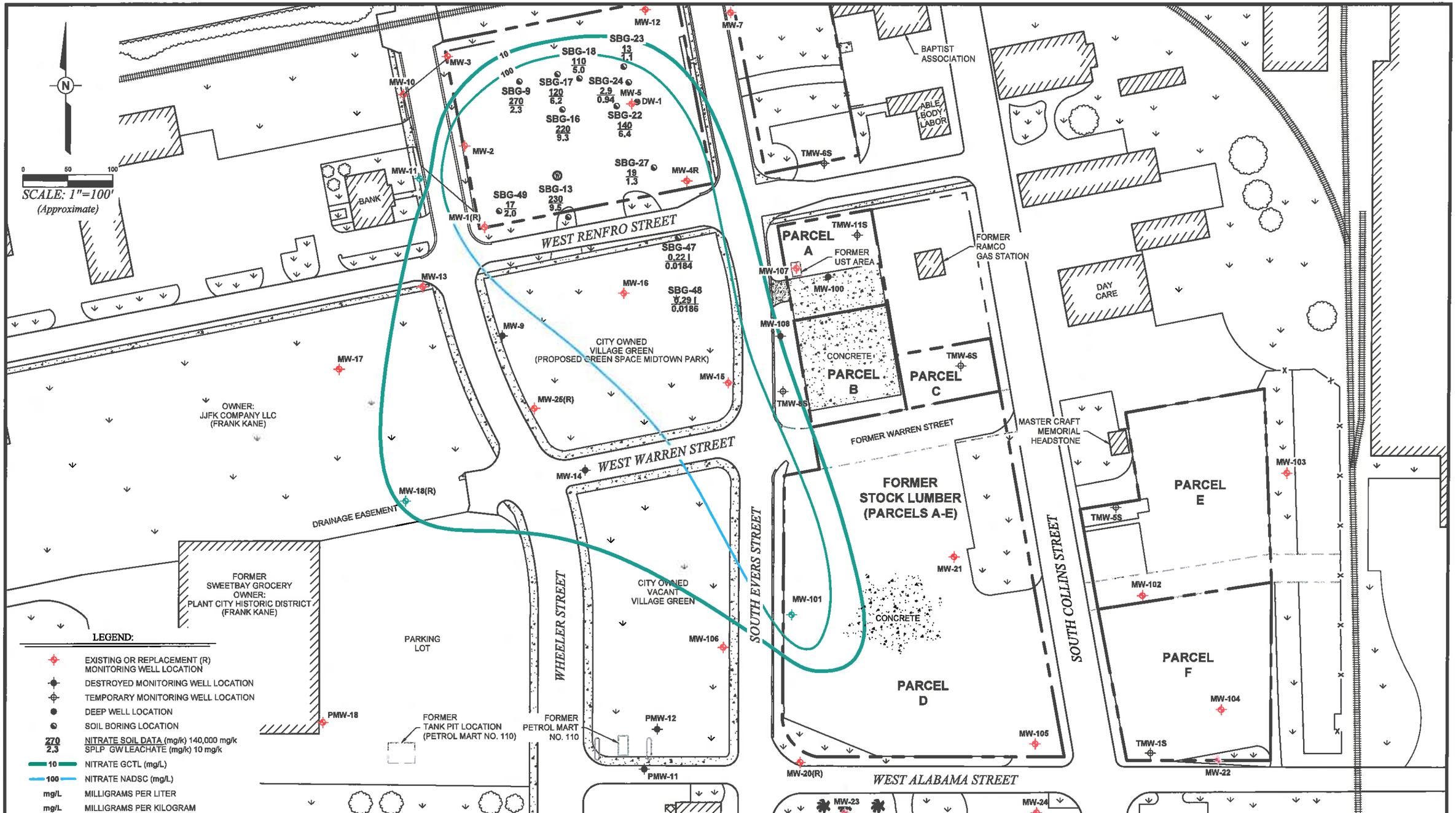
NITRATE IN GROUNDWATER

FIGURE NUMBER
6A

Z:\City of Plant City\716810\Task-4C\July2014\716810-Task4C-July2014_update.dwg, 6A Nitrate, 8/4/2014 3:45:29 PM, brian hicks



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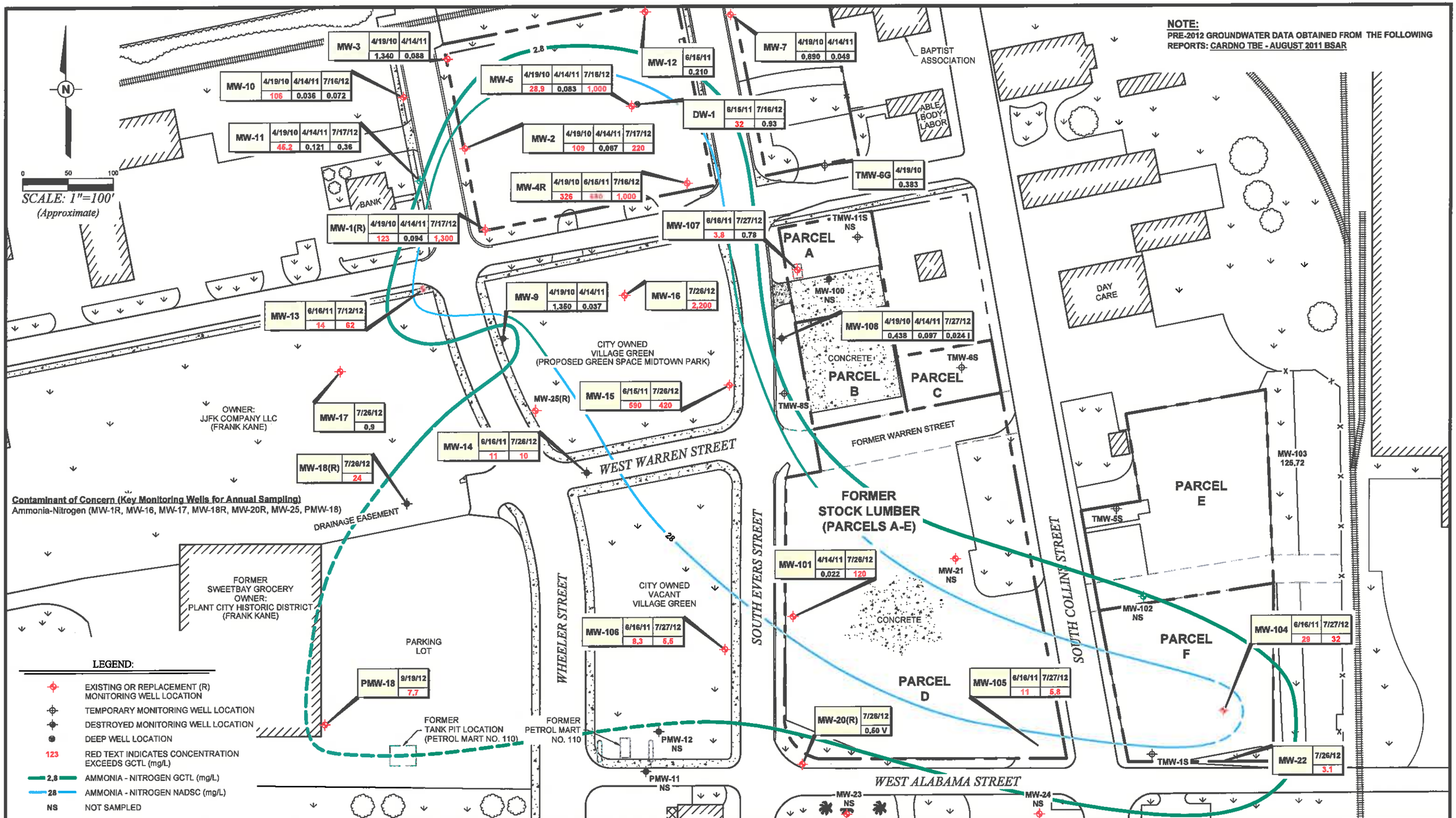
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

NITRATE IN GROUNDWATER AND NITRATE SOIL SAMPLING

FIGURE NUMBER
6B

Z:\City of Plant City\716810\Task-4C\July2014\716810-Task4C-July2014_update.dwg, 6B Nitrate, 8/4/2014 3:45:33 PM, brian hicks



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SOUTH EVERS STREET AND WHEELER STREET
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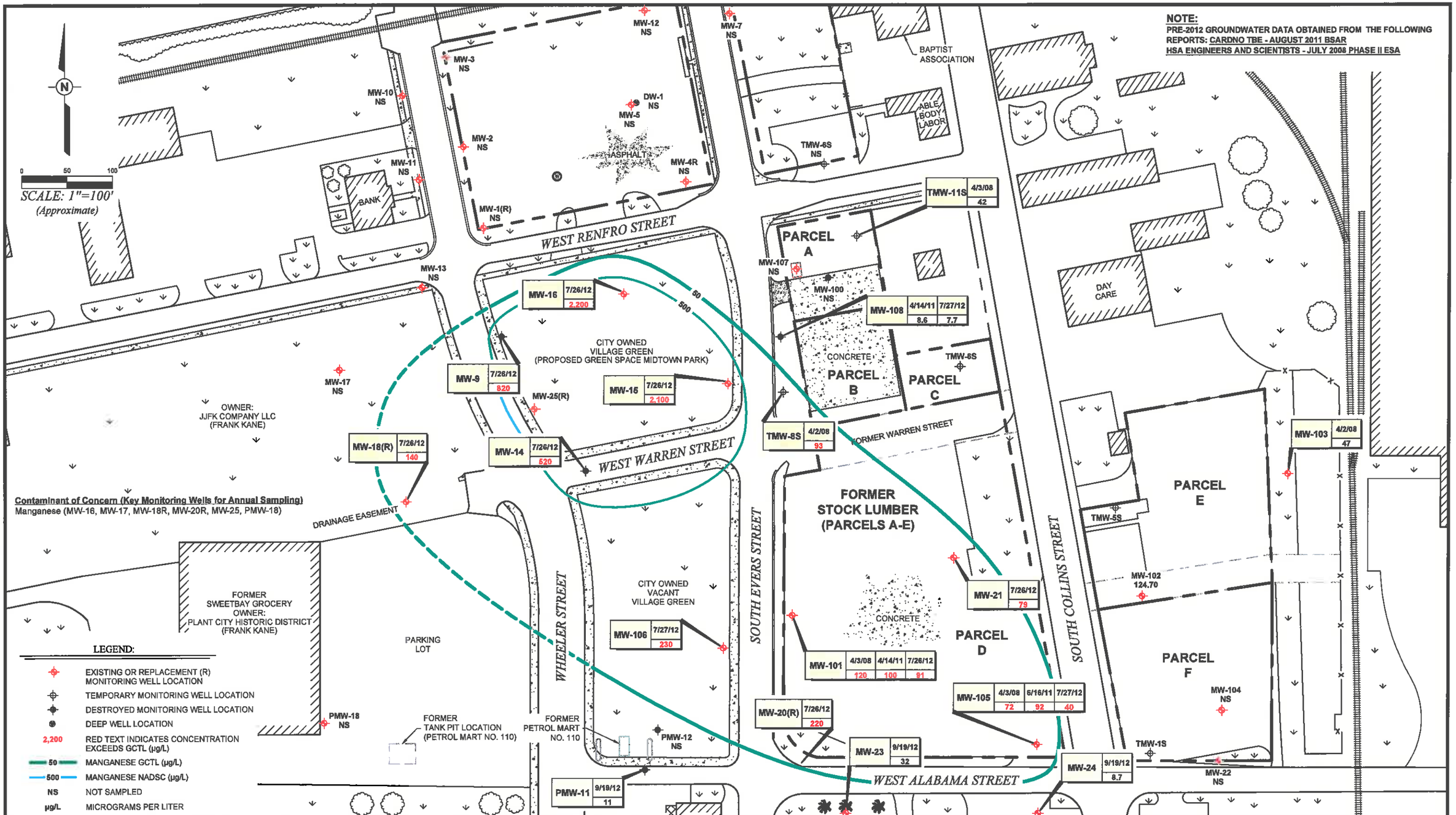
AMMONIA - NITROGEN IN GROUNDWATER

FIGURE NUMBER
7

Z:\City of Plant City\716810\Task-4C\July2014\716810-Task4C-July2014_upate.dwg, 7 Ammonia_Nitrogen, 8/4/2014 3:45:36 PM, brian hicks



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MANGANESE IN GROUNDWATER

FIGURE NUMBER
8

Z:\City of Plant City\716810\Task-4C\July2014\716810-Task4C-July2014_update.dwg, 8 Manganese, 8/4/2014 3:45:40 PM, brian hicks

NOTE:
PRE-2012 GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS: CARDNO TBE - AUGUST 2011 BSAR
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA

N

SCALE: 1"=100'
(Approximate)
0 50 100

MW-12 NS
MW-7 NS
MW-3 NS
DW-1 NS
MW-5 NS
MW-10 NS
MW-2 NS
MW-11 NS
MW-4R NS
MW-1(R) NS
ASPHALT
BANK
BAPTIST ASSOCIATION
ABLE BODY LABOR
TMW-6S
WEST RENFRO STREET
MW-13 NS
MW-107 6/16/11 38
TMW-11S 4/3/08 11
PARCEL A
MW-100 NS
MW-108 NS
CONCRETE
PARCEL B
PARCEL C
TMW-6S NS
DAY CARE
MW-16 7/26/12 3,800
250
2,500
CITY OWNED VILLAGE GREEN (PROPOSED GREEN SPACE MIDTOWN PARK)
MW-9 7/26/12 110
MW-25(R)
MW-15 7/26/12 920
MW-17 NS
OWNER: JJFK COMPANY LLC (FRANK KANE)
TMW-8S 4/2/08 61
FORMER WARREN STREET
WEST WARREN STREET
MW-103 4/2/08 26
PARCEL E
MW-18(R) 9/19/12 120
DRAINAGE EASEMENT
MW-14 7/26/12 920
CITY OWNED VACANT VILLAGE GREEN
FORMER STOCK LUMBER (PARCELS A-E)
TMW-5S
MW-101 4/3/08 510 4/14/11 410 7/26/12 360
MW-21 NS
MW-102 NS
SOUTH EVERS STREET
SOUTH COLLINS STREET
WHEELER STREET
CONCRETE
PARCEL D
PARCEL F
MW-104 4/1/08 240 6/16/11 110
MW-106 6/16/11 0,620
MW-105 4/3/08 100 6/16/11 57
TMW-1S 4/2/08 15
FORMER SWEETBAY GROCERY OWNER: PLANT CITY HISTORIC DISTRICT (FRANK KANE)
PARKING LOT
PMW-18 9/19/12 1.1
FORMER TANK PIT LOCATION (PETROL MART NO. 110)
FORMER PETROL MART NO. 110
PMW-12 NS
MW-20(R) 7/26/12 46
PMW-11 NS
WEST ALABAMA STREET
MW-23 NS
MW-24 NS
MW-22 NS

Contaminant of Concern (Key Monitoring Wells for Annual Sampling)
Sulfate (MW-16, MW-25)

LEGEND:

- EXISTING OR REPLACEMENT (R) MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- DEEP WELL LOCATION
- 3,800 — RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (mg/L)
- 250 — SULFATE GCTL (mg/L)
- 2,500 — SULFATE NADSC (mg/L)
- NS — NOT SAMPLED
- mg/L — MILLIGRAMS PER LITER

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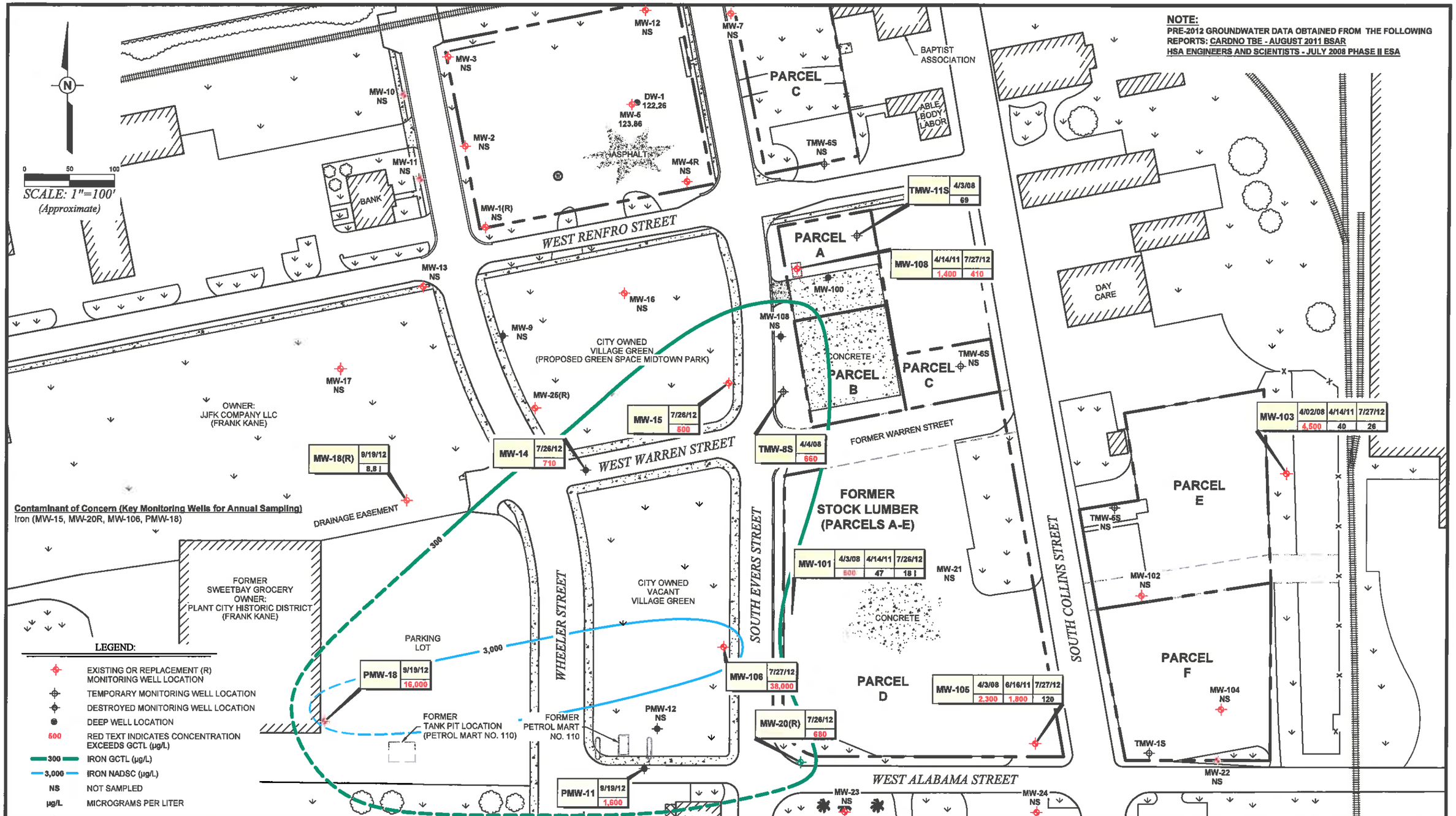
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

SULFATE IN GROUNDWATER

FIGURE NUMBER
9

Z:\City of Plant City\716810\Task-4C\July2014\716810-Task4C-July2014_update.dwg, 9 Sulfate, 8/4/2014 3:45:44 PM, brian hicks



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SOUTH EVERS STREET AND WHEELER STREET
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IRON IN GROUNDWATER

FIGURE NUMBER
10

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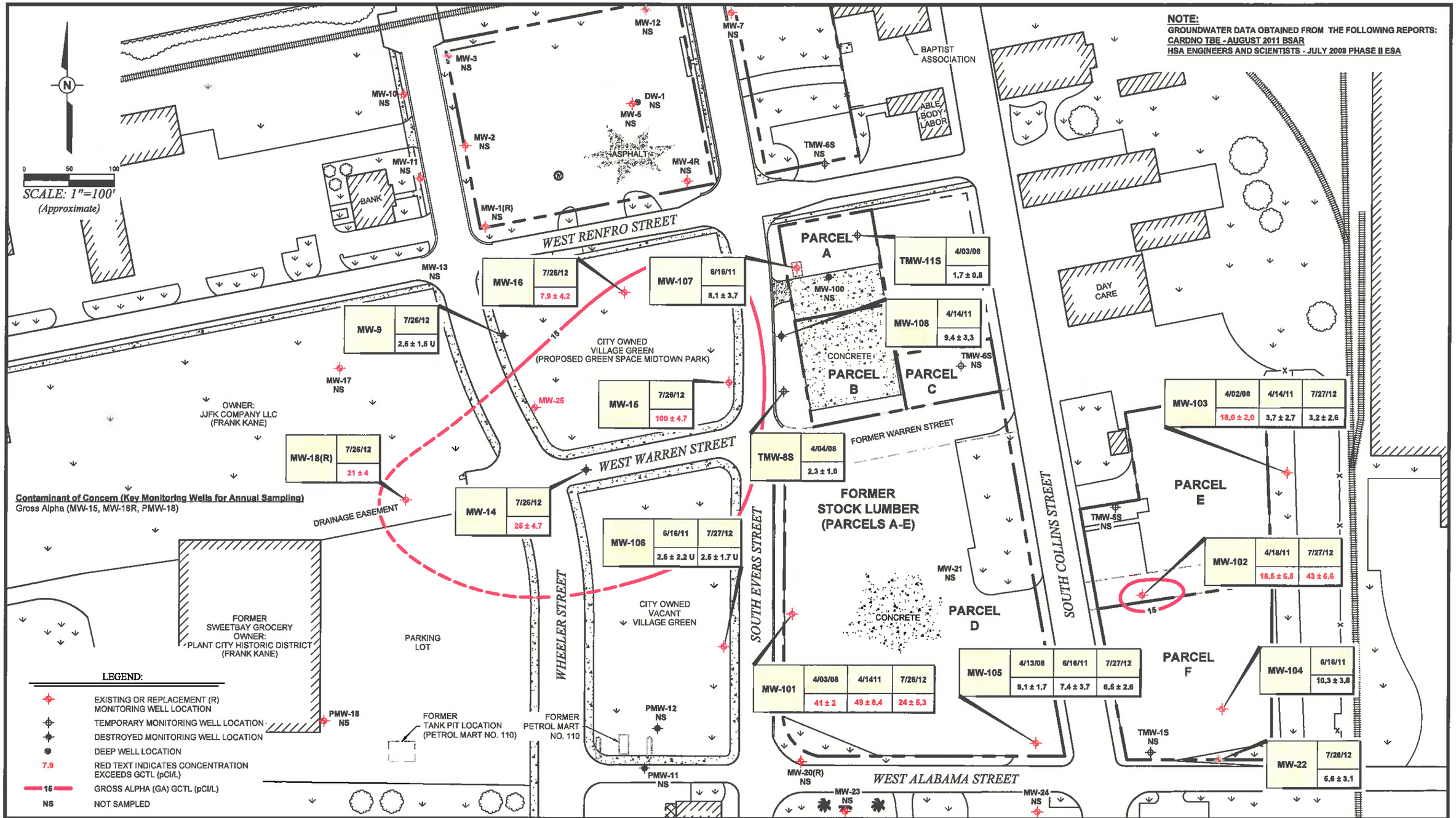

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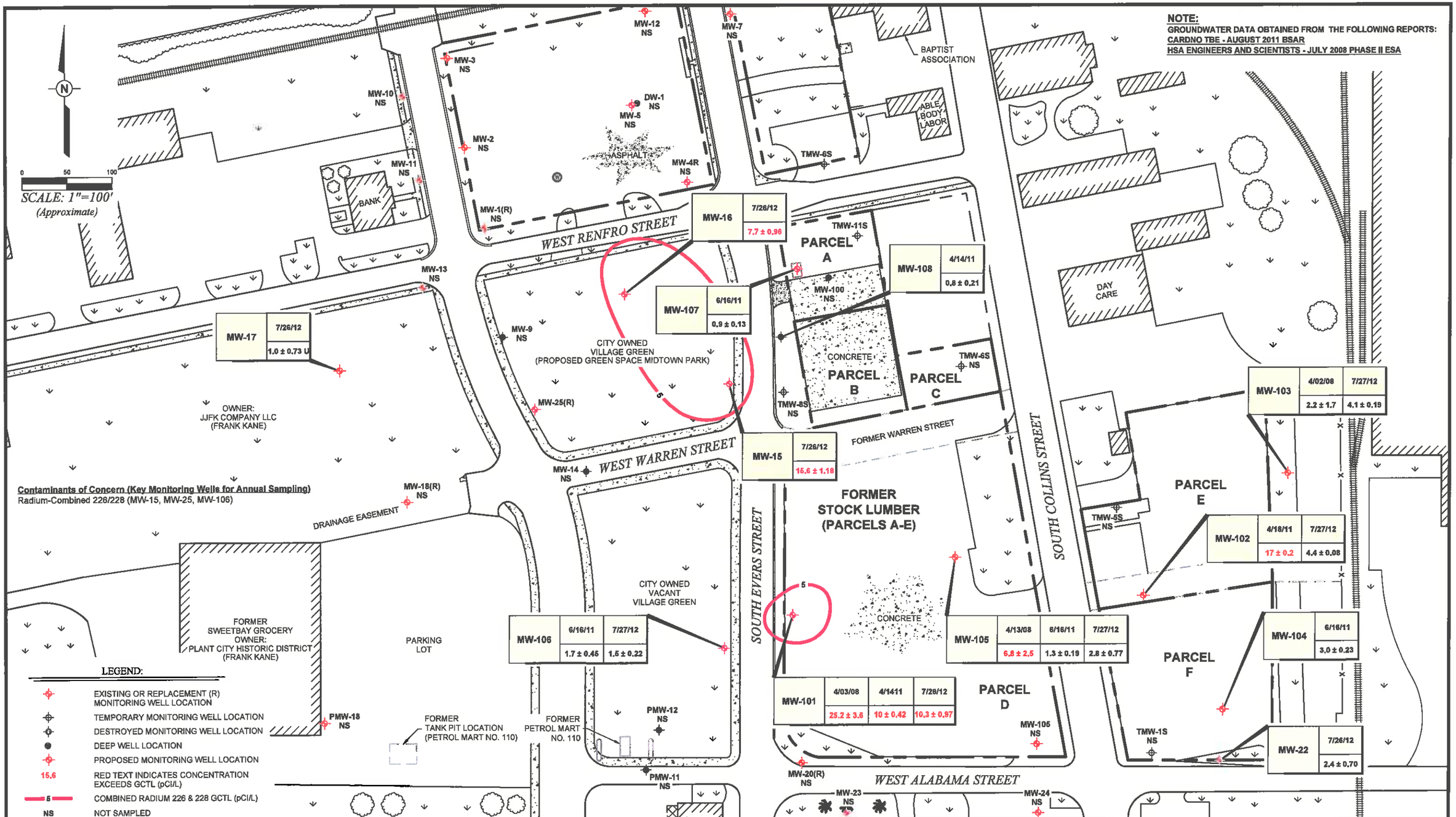
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

RADIONUCLIDES IN GROUNDWATER
(GROSS ALPHA)

FIGURE NUMBER
11



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SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

RADIONUCLIDES IN GROUNDWATER
(COMBINED RADIUM)

FIGURE NUMBER
12

Z:\City of Plant City\716810\Task-4C\July2014\716810-Task4C-July2014_upate.dwg, 12 Radionuclides-COMB, 8/4/2014 3:45:55 PM, brian hicks

APPENDIX B – TABLES

TABLE 1: WELL CONSTRUCTION TABLE

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City FL
Facility ID: BF291002002 and BF 291002001

ORIGINAL WELL ID	CURRENT WELL MAP ID	DATE INSTALLED	INSTALLATION METHOD	Location	Status	TOTAL WELL DEPTH (FEET)	SCREENED INTERVAL (BGS)	WELL DIAMETER (IN.)
DW-1	DW-1	06/14/11	Direct Push	Gro-Mor	Existing	29.0	24.0 - 29.0	1
TMW-1/MW-1	MW-1	03/05/10	Direct Push	Gro-Mor	Destroyed 2013	12.0	2.0 - 12.0	1
TMW-2/MW-2	MW-2	03/05/10	Direct Push	Gro-Mor	Existing	12.0	2.0 - 12.0	1
TMW-3/MW-3	MW-3	03/05/10	Direct Push	Gro-Mor	Existing	12.0	2.0 - 12.0	1
TMW-4/MW-4	MW-4R	06/13/11	Direct Push	Gro-Mor	Existing	14.0	4.0 - 14.0	1
TMW-5/MW-5	MW-5	03/05/10	Hand Auger	Gro-Mor	Existing	12.0	2.0 - 12.0	1
TMW-7/MW-7	MW-7	03/05/10	Direct Push	Gro-Mor	Existing	12.0	2.0 - 12.0	1
TMW-9/MW-9	MW-9	04/15/10	Direct Push	Offsite - Village Green	Destroyed 2013	12.0	2.0 - 12.0	1
TMW-10/MW-10	MW-10	04/15/10	Direct Push	Offsite W. ROW - Wheeler St	Existing	12.0	2.0 - 12.0	1
TMW-11/MW-11	MW-11	04/15/10	Direct Push	Offsite W. ROW - Wheeler St	Existing	12.0	2.0 - 12.0	1
MW-12	MW-12	06/13/11	Direct Push	Gro-Mor	Existing	14.0	4.0 - 14.0	1
MW-13	MW-13	06/14/11	Direct Push	Offsite S. ROW - Renfro St.	Existing	13.0	3.0 - 13.0	1
MW-14	MW-14	06/13/11	Direct Push	Offsite - Village Green	Destroyed 2013	15.0	5.0 - 15.0	1
MW-15	MW-15	06/13/11	Direct Push	Offsite - Village Green	Existing	14.0	4.0 - 14.0	1
MW-16	MW-16	07/17/12	Hollow Stem Auger	Offsite - Village Green	Existing	11.0	1.0 - 11.0	2
MW-17	MW-17	07/19/12	Hollow Stem Auger	Offsite - Kane Property	Existing	11.0	1.0 - 11.0	2
MW-18	MW-18	07/19/12	Hollow Stem Auger	Offsite - Kane Property	Destroyed 2013	11.0	1.0 - 11.0	2
MW-20	MW-20	07/19/12	Direct Push	Stock - Parcel D	Destroyed 2013	11.0	1.0 - 11.0	1
MW-21	MW-21	07/17/12	Hollow Stem Auger	Stock - Parcel D	Existing	11.0	1.0 - 11.0	2
MW-22	MW-22	07/17/12	Hollow Stem Auger	Stock - Parcel F	Existing	12.0	2.0 - 12.0	2
MW-23	MW-23	07/18/12	Hollow Stem Auger	Offsite - S. ROW Alabama St.	Existing	11.0	1.0 - 11.0	2
MW-24	MW-24	07/18/12	Hollow Stem Auger	Offsite - S. ROW Alabama St.	Existing	11.0	1.0 - 11.0	2
TMW-7/MW-4	MW-100	Jun 2008	Direct Push	Stock-Parcel F	Lost/destroyed ~2008	12.5	2.5 - 12.5	1
TMW-10/MW-1	MW-101	Jun 2008	Direct Push	Stock-Parcel D	Existing	15.0	5.0 - 15.0	1
TMW-3/MW-2	MW-102	Jun 2008	Direct Push	Stock-Parcel E	Existing	15.0	5.0 - 15.0	1
TMW-4/MW-3	MW-103	Jun 2008	Direct Push	Stock-Parcel E	Existing	15.0	5.0 - 15.0	1
TMW-2/MW-4	MW-104	06/14/11	Direct Push	Stock-Parcel F	Existing	14.0	4.0 - 14.0	1

TABLE 1: WELL CONSTRUCTION TABLE

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City FL
Facility ID: BF291002002 and BF 291002001

ORIGINAL WELL ID	CURRENT WELL MAP ID	DATE INSTALLED	INSTALLATION METHOD	Location	Status	TOTAL WELL DEPTH (FEET)	SCREENED INTERVAL (BGS)	WELL DIAMETER (IN.)
TMW-9/MW-5	**MW-105**	06/14/11	Direct Push	Stock-Parcel D	Existing	14.0	4.0 - 14.0	1
MW-6	**MW-106**	06/13/11	Direct Push	Offsite - Village Green	Existing	14.0	4.0 - 14.0	1
MW-7	**MW-107**	06/14/12	Direct Push	Stock Parcel A - Tank Pit	Existing	14.0	4.0 - 14.0	1
TMW-8/MW-8	**MW-108**	04/15/10	Direct Push	Stock - Parcel B	Destroyed 2013	12.0	2.0 - 12.0	1
MW-11	**PMW-11**	12/01/93	Hollow Stem Auger	Petrol Mart No. 110/Sweetbay Grocery	Destroyed 2013	10.0	2.5 - 10.0	2
MW-12	**PMW-12**	11/30/93	Hollow Stem Auger	Petrol Mart No. 110/Sweetbay Grocery	Destroyed 2013	10.0	2.5 - 10.0	2
MW-17	**PMW-18**	12/02/93	Hollow Stem Auger	Petrol Mart No. 110/Sweetbay Grocery	Existing	10.0	2.5 - 10.0	2

Data Sources: **HSA Engineers and Scientists – July 2008 Phase II ESA for Stock-McGinness Lumber**
Cardno TBE - March 2010 Limited Phase II Environmental Site Assessment for Gro-Mor Bulk Fertilizer Plant
Cardno TBE - May 2010 Limited Phase II Supplemental Environmental Site Assessment for Gro-Mor Bulk Fertilizer Plant
Cardno TBE - August 2011 Brownfield Site Assessment Report for gro-Mor Bulk Fertilizer Plant
Brown and Root - 1994 Contamination Assessment Report for Gas World (former Petrol Mart No. 110)

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City

Facility ID: BF291002002 and BF 291002001

WELL ID	MW-1			MW-2			MW-3			MW-4R		
DATE INSTALLED	03/05/10			03/05/10			03/05/10			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			15		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			4.0 - 14.0		
GROUND ELEVATION (Feet)	123.4			124.6			126.9			125.4		
TOC ELEVATION (feet)	122.88			124.34			126.57			124.83		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	119.92	2.96	0.00	120.60	3.74	0.00	122.31	4.26	0.00	121.00	3.83	0.00
07/16/12		NM			NM		125.03	1.54	0.00	122.86	1.97	0.00
07/17/12	122.78	0.10	0.00	124.14	0.20	0.00		NM			NM	
07/18/12		NM			NM		126.33	0.24	0.00	123.31	1.52	0.00
07/25/12	122.28	0.60	0.00	123.34	1.00	0.00	124.27	2.30	0.00	122.60	2.23	0.00
07/31/12	121.74	1.14	0.00	122.75	1.59	0.00	123.66	2.91	0.00	122.17	2.66	0.00
08/20/12		@TOC		123.99	0.35	0.00	124.95	1.62	0.00	122.86	1.97	0.00
08/25/12	122.28	0.60	0.00		NM		124.42	2.15	0.00	122.75	2.08	0.00
08/28/12		@TOC		123.94	0.40	0.00	124.90	1.67	0.00	122.84	1.99	0.00
09/04/12	121.68	1.20	0.00	122.71	1.63	0.00	123.73	2.84	0.00		NM	
10/12/12	121.97	0.91	0.00		NM			NM			NM	

WELL ID	MW-5			MW-7			MW-9			MW-10		
DATE INSTALLED	03/05/10			03/05/10			04/15/10			04/15/10		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			12		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			1.0 - 12.0		
GROUND ELEVATION (Feet)	126.6			127.9			122.9			126.2		
TOC ELEVATION (feet)	126.11			127.47			122.55			126.09		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	121.86	4.25	0.00	122.45	5.02	0.00	118.39	4.16	0.00	121.64	4.45	0.00
07/16/12	124.27	1.84	0.00		NM			NM		123.63	2.46	0.00
07/18/12		NM			2.32			under water			NM	
07/25/12	123.86	2.25	0.00	124.24	3.23	0.00	121.30	1.25	0.00	123.22	2.87	0.00
07/31/12	123.27	2.84	0.00	123.76	3.71	0.00		NM			NM	
08/20/12		NM		124.63	2.84	0.00		NM			NM	
08/23/12		NM		124.93	2.54	0.00		NM			NM	
08/25/12	124.06	2.05			NM			NM			NM	
08/28/12	124.43	1.68		125.21	2.26	0.00		NM			NM	
10/12/12		NM		124.03	3.44	0.00		NM			NM	

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City

Facility ID: BF291002002 and BF 291002001

WELL ID	MW-11			MW-12			MW-13			MW-14		
DATE INSTALLED	04/15/10			06/13/11			06/14/11			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			14			13			15		
SCREEN INTERVAL (feet)	2.0 - 12.0			4.0 - 14.0			3.0 - 13.0			5.0 - 15.0		
GROUND ELEVATION (Feet)	123.9			127.0			123.2			122.7		
TOC ELEVATION (feet)	123.63			126.81			122.78			122.48		
DATE	ELEV	DTW	FP		DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	120.66	2.97	0.00	122.97	3.84	0.00	118.58	4.20	0.00	118.29	4.19	0.00
07/16/12		NM		125.32	1.49	0.00		NM			NM	
07/17/12	122.58	1.05	0.00	125.53	1.28	0.00	121.78	1.00	0.00		NM	
07/18/12		NM		126.48	0.33	0.00		NM			NM	
07/25/12	122.04	1.59	0.00	124.71	2.10	0.00	120.86	1.92	0.00	119.59	2.89	0.00
07/31/12		NM		124.14	2.67	0.00		NM			NM	
08/20/12		NM		125.26	1.55	0.00		NM			NM	
08/25/12		NM		124.76	2.05	0.00		NM			NM	
08/28/12		NM		125.50	1.31	0.00		NM			NM	
10/12/12		NM		124.60	2.21	0.00		NM			NM	

WELL ID	MW-15			DW-1			MW-16			MW-17		
DATE INSTALLED	06/13/11			06/14/11			07/18/12			07/19/12		
DIAMETER (inches)	1			1			2			2		
WELL DEPTH (feet)	14			29			11			11		
SCREEN INTERVAL (feet)	4.0 - 14.0			24.0 - 29.0			1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (Feet)	122.9			126.6			124.1			122.2		
TOC ELEVATION (feet)	122.56			126.26			123.60			121.86		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP			
06/21/11	118.78	3.78	0.00	119.23	7.03	0.00		NI			NI	
07/16/12		NM		121.72	4.54	0.00		NI			NI	
07/18/12		0.10	0.00		NM		NM	0.51	0.00	NM	NM	
07/25/12	121.38	1.18	0.00	122.26	4.00	0.00	121.55	2.05	0.00	120.01	1.85	0.00
07/27/12	121.21	1.35	0.00		NM			NM			NM	
08/28/12		NM			NM			1.92			NM	

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City

Facility ID: BF291002002 and BF 291002001

WELL ID	MW-18			MW-19			MW-20			MW-21		
DATE INSTALLED	07/19/12						07/18/12			07/17/12		
DIAMETER (inches)	2						1			2		
WELL DEPTH (feet)	11			Was not installed			11			11		
SCREEN INTERVAL (feet)	1.0 - 11.0						1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (Feet)	122.4						124.0			125.7		
TOC ELEVATION (feet)	122.03						123.65			125.23		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12		NI						NM			1.87	0.00
07/25/12	119.32	2.71	0.00				121.53	2.12	0.00	123.05	2.18	0.00
07/27/12		NM					121.36	2.29	0.00	122.93	2.30	0.00

WELL ID	MW-22			MW-23			MW-24					
DATE INSTALLED	07/17/12			07/18/12			07/18/12					
DIAMETER (inches)	2			2			2					
WELL DEPTH (feet)	12			11			11					
SCREEN INTERVAL (feet)	2.0 - 12.0			1.0 - 11.0			1.0 - 11.0					
GROUND ELEVATION (Feet)	NM			125.1			126.5					
TOC ELEVATION (feet)	128.50			124.53			126.00					
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12	125.62	2.88	0.00	NM	NM		NM	NM				
07/25/12	125.11	3.39	0.00	122.91	1.62	0.00	124.03	1.97	0.00			
07/27/12	125.00	3.50	0.00	122.31	2.22	0.00	124.19	1.81	0.00			

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City

Facility ID: BF291002002 and BF 291002001

WELL ID	MW-101			MW-102			MW-103			MW-104		
DATE INSTALLED	06/26/11			06/26/08			06/26/08			06/14/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	15			15			15			14		
SCREEN INTERVAL (feet)	5.0 - 15.0			5.0 - 15.0			4.5 - 14.5			4.0 - 14.0		
GROUND ELEVATION (Feet)	123.4			127.6			129.0			128.8		
TOC ELEVATION (feet)	123.16			127.28			128.66			128.48		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/01/08	120.73	2.43	0.00	124.04	3.24	0.00	124.24	4.42	0.00	124.98	3.50	0.00
06/21/11	119.09	4.07	0.00	122.73	4.55	0.00	122.59	6.07	0.00	122.15	6.33	0.00
07/18/12	122.42	0.74	0.00	124.81	2.47	0.00	125.22	3.44	0.00	125.28	3.20	0.00
07/25/12	122.16	1.00	0.00	124.70	2.58	0.00	125.72	2.94	0.00	125.18	3.30	0.00
07/27/12	122.10	1.06	0.00	124.57	2.71	0.00	125.61	3.05	0.00	124.99	3.49	0.00
08/28/12		NM		Destroyed			126.86	1.80	0.00		NM	

WELL ID	MW-105			MW-106			MW-107			MW-108		
DATE INSTALLED	06/14/11			06/14/11			06/14/11			04/15/10		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	14			14			14			12		
SCREEN INTERVAL (feet)	4.0 - 14.0			4.0 - 14.0			4.0 - 14.0			1.0 - 12.0		
GROUND ELEVATION (Feet)	127.8			123.4			124.6			123.4		
TOC ELEVATION (feet)	127.34			123.21			124.43			123.20		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	121.26	6.08	0.00	118.61	4.60	0.00	120.96	3.47	0.00	118.91	4.29	0.00
07/18/12	123.86	3.48	0.00		NM			~0.1		119.03	4.17	0.00
07/25/12	124.35	2.99	0.00	120.99	2.22	0.00	121.88	2.55	0.00	118.91	4.29	0.00
07/27/12	124.29	3.05	0.00	120.69	2.52	0.00	121.73	2.70	0.00	119.93	3.27	0.00
08/28/12		NM			NM		122.84	1.59	0.00		NM	
10/12/12		NM			NM		121.89	2.54	0.00		NM	
04/02/13		NM			NM		120.50	3.93	0.00		NM	

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City

Facility ID: BF291002002 and BF 291002001

WELL ID	PMW-11			PMW-12			PMW-18					
DATE INSTALLED	12/01/93			11/30/93			12/02/93					
DIAMETER (inches)	2			2			2					
WELL DEPTH (feet)	10			10			10					
SCREEN INTERVAL (feet)	2.5 - 10.0			2.5 - 10.0			2.5 - 10.0					
GROUND ELEVATION (Feet)	NM			123.4			NM					
TOC ELEVATION (feet)	NM			123.22			NM					
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
05/17/94		2.90	0.00		3.73	0.00		NM				
09/02/94		3.05	0.00		2.72	0.00		NM				
02/17/95		2.77	0.00		3.61	0.00		NM				
07/31/01		2.69	0.00		NM			NM				
07/25/12		1.64	0.00		2.35	0.00		NM				
08/28/12		1.36	0.00		1.59	0.00		NM				

Historical data (1993 to 2011) obtained from the following reports: HSA 2008 Phase II ESA (Stock); Cardno-TBE 2011 BSAR (Gro Mor); Cardno TBE 2011 BSAR); Brown & Root 1994 CAR; Enviro-Logical Solutions 2001 RAPMOD.

Elevation = TOC Elevation - DTW
DTW = Depth to water in feet below TOC
FP = Thickness of free product measured in feet

BGS = Below Ground Surface
NM = Not Measured
TOC = Top of Casing

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City FL

Facility ID: BF291002002 and BF 291002001

Sample ID	Date Collected	Ammonia Nitrogen (as N) - mg/L	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Dieldrin (µg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**0.002**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**0.2**	**150**	**50**
MW-1	07/17/12	**1300**	**1,100**	**30**	---	---	---	---	---	---
MW-2	07/17/12	**220**	**370**	**8.8**	---	---	---	---	---	---
MW-3	07/16/12	---	---	---	---	---	---	**0.0035 I**	---	---
MW-4R	07/16/12	**1,000**	**1,700**	**18**	---	---	---	---	---	---
MW-5	07/16/12	**1,000**	**880**	**10**	---	---	---	---	---	---
MW-9	07/26/12	---	**27**	3.0 I	---	**820 V**	110	---	2.5 +-1.5 U	1.0 +- 0.73 U
MW-10	07/16/12	0.072	---	---	---	---	---	---	---	---
MW-11	07/17/12	0.36	0.049 I	---	---	---	---	---	---	---
MW-12	07/16/12	---	0.10	---	---	---	---	---	---	---
MW-13	07/17/12	**62**	**68**	1.8 I	---	---	---	---	---	---
MW-14	07/26/12	**10 V**	8.6	1.1 U	**710**	**520**	**320**	---	**25 +- 5.1**	3.0 +- 0.75
MW-15	07/26/12	**420**	**650**	**11**	**500**	**2,100**	**920**	---	**100 +- 4.7**	**15.6 +-1.18**
MW-16	07/26/12	**2,200**	**2,000**	**15**	---	**2,200**	**3,800**	---	**79 +- 4.2**	**7.7 +- 0.96**
MW-17	07/26/12	0.9	0.14	1.1 U	---	---	---	---		---
MW-18	07/26/12	**24 V**	**63**	---	---	---	---	---		---
	09/19/12	---	---	---	8.8 I	**140**	120	---	**21 +-4**	---
MW-20	07/26/12	0.50 V	0.062 I	---	**680**	**220**	46	---	---	---
MW-21	07/26/12	---	---	---	---	**79**	---	---	---	---
MW-22	07/26/12	**3.1**	---	---	---		---	---	5.6 +- 3.1	2.4 +- 0.78 U
MW-23	09/19/12	---	---	---	---	32	---	---	---	---
MW-24	09/19/12	---	---	---	---	8.7	---	---	---	---
DW-1	07/16/12	0.93	0.79	---	---	---	---	---	---	---
MW-101	07/26/12	**120**	**110**	---	18 I	**91**	**360**	---	**24 +- 5.3**	**10.3 +- 0.97 U**

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Name: Former Gro-Mor Fertilizer Plant and Former Stock Building Supply / McGinnis Lumber Yard, Plant City FL

Facility ID: BF291002002 and BF 291002001

Sample ID	Date Collected	Ammonia Nitrogen (as N) - mg/L	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Dieldrin (µg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**0.002**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**0.2**	**150**	**50**
MW-102	07/27/12	---	---	---	---	---	---	---	**43 +- 6.6**	4.4 +- 0.8
MW-103	07/27/12	---	---	---	26	---	---	---	3.2 +- 2.6	4.1 +- 0.19 U
MW-104	07/27/12	**32**	---	---	---	---	---	---		
MW-105	07/27/12	**5.8**	---	---	120	40	---	---	6.5 +- 2.6	2.8 +- 0.77
MW-106	07/27/12	**5.5**	---	---	**38,000**	**230**	---	---	2.5 +- 1.7 U	1.5 +- 0.22
MW-107	07/27/12	0.78	0.11	---	---	---	---	---	---	---
MW-108	07/27/12	0.024 I	0.018 I	---	**410**	7.7	---	---	---	---
PMW-11	09/19/12	---	---	---	**1,600**	11	---	---	---	---
PMW-18	09/19/12	**7.7**	0.018U	---	**16,000**	---	1.1	---	---	---

mg/L = milligrams per Liter µg/ = micorgrams per Liter pCi/L = picocuries per Liter

--- = Not analyzed

GCTL = FDEP Groundwater Cleanup Target Level per Chapter 62-777, Table I of the Florida Administrative Code (F.A.C.)

NADSC = FDEP Natural Attenuation Default Source Concentration per Chapter 62-777, Table V of the F.A.C.

Attachment H

NATURAL ATTENUATION MONITORING PLAN

CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER (GRO-MOR) AND FORMER STOCK BUILDING SUPPLY / MCGINNES LUMBER YARD (STOCK LUMBER)
PLANT CITY, FLORIDA 33563

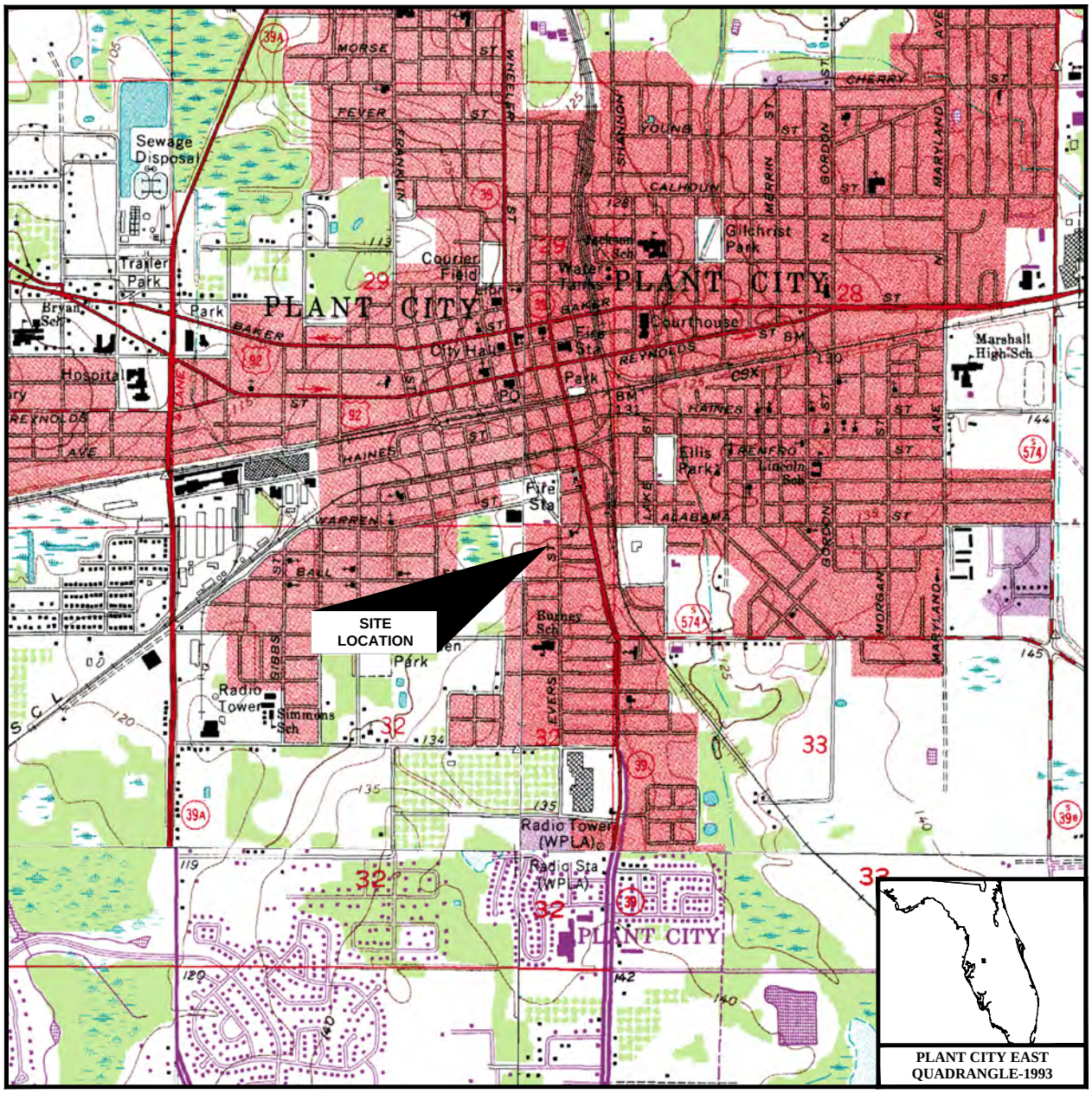
FDEP BROWNFIELD SITE NOS. BF291002002 AND BF291002001
PPM PROJECT NO. 716810.TASK2F

JUNE 4, 2015

Environmental Science and Engineering

PPM CONSULTANTS

APPENDIX A - FIGURES



SCALE: 1 : 24,000

1 .5 0 1 MILES

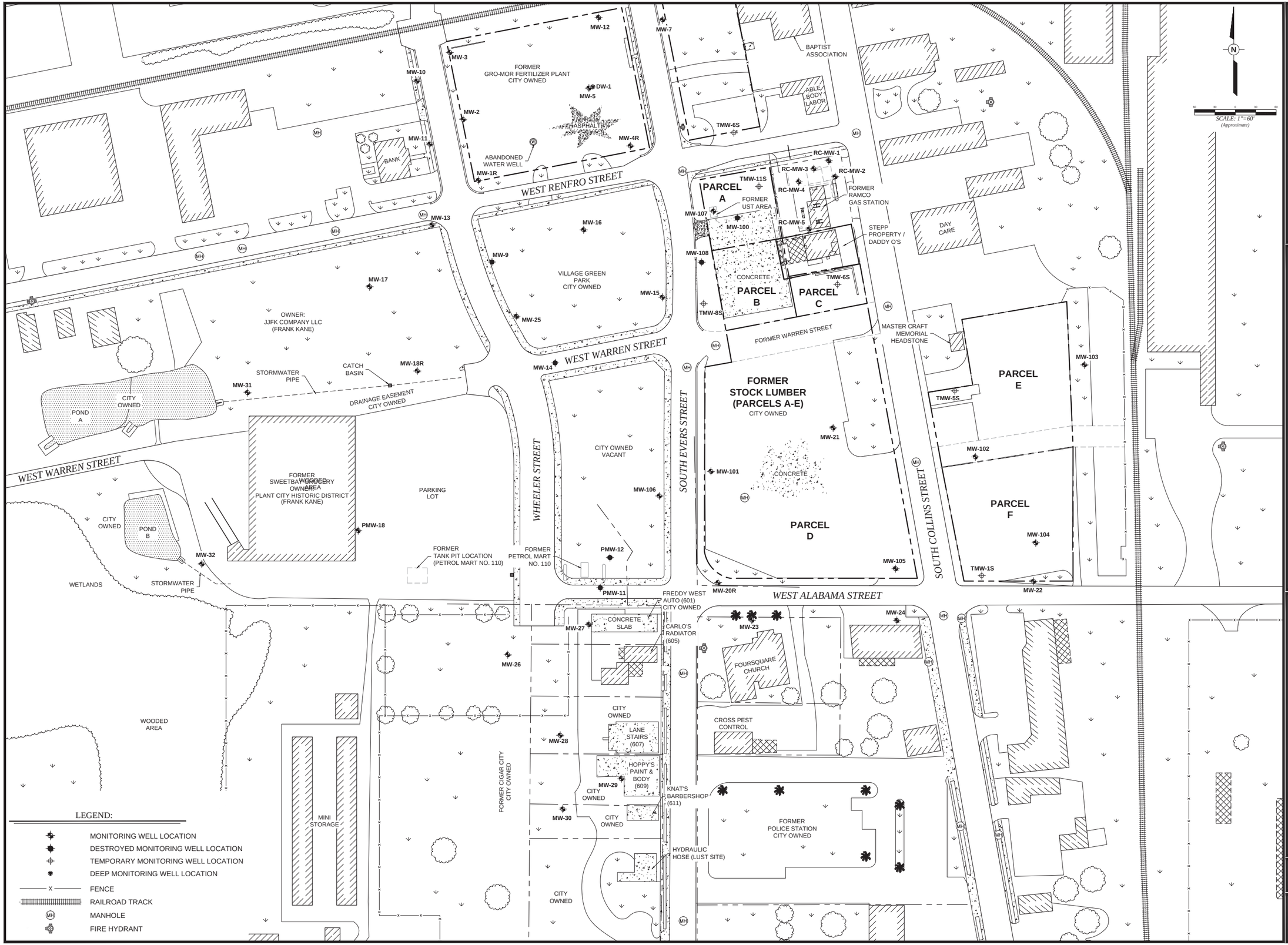
1000 0 1000 5000 10,000 FEET

1 0 KILOMETER 1 2

1000 0 METER 1000 2000

N

PPM — PPM CONSULTANTS, INC. www.ppmco.com		CITY OF PLANT CITY **SITES FROM 601 T0 611** SOUTH EVERS STREET AND WHEELER STREET PLANT CITY, FLORIDA	SITE LOCATION MAP
DRAWN BY: BWH	DRAWN DATE: 04/23/15		FIGURE NUMBER 1
PROJECT NUMBER: 716810	BILLING GROUP: TASK 2F		



REVISION HISTORY

DRAWN BY	DATE	DESCRIPTION	APPROVED

SITE MAP

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CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

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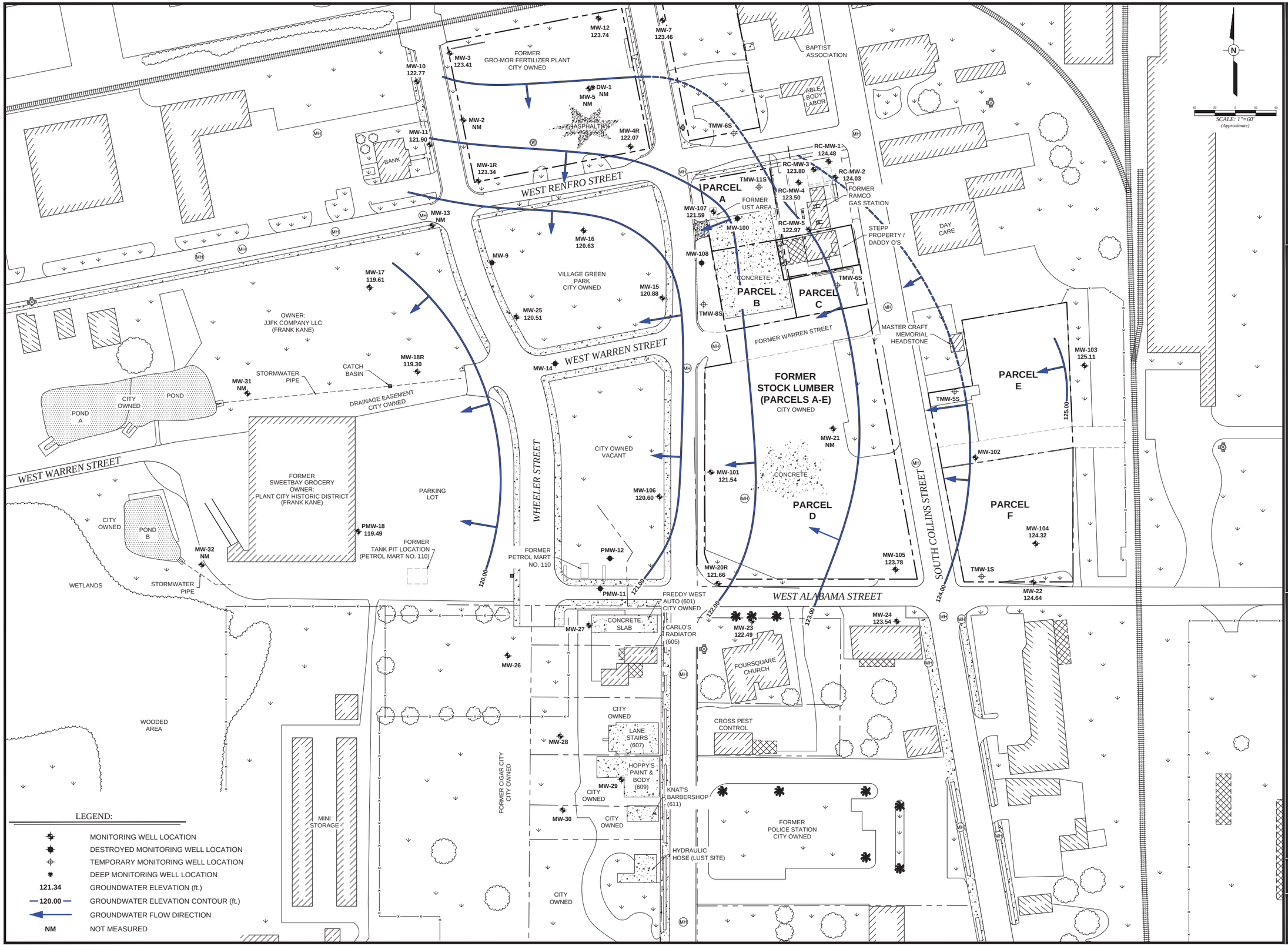
DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	2
BILLING GROUP 2F	



LEGEND:

- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 121.34 GROUNDWATER ELEVATION (ft.)
- 120.00 GROUNDWATER ELEVATION CONTOUR (ft.)
- GROUNDWATER FLOW DIRECTION
- NM NOT MEASURED

REVISION HISTORY

DRAWN BY	DATE	DESCRIPTION	APPROVED

GROUNDWATER CONTOUR MAP
PLANT CITY MID-TOWN REDEVELOPMENT AREA
(SEPTEMBER 16, 2014)

PPM CONSULTANTS, INC.
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CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

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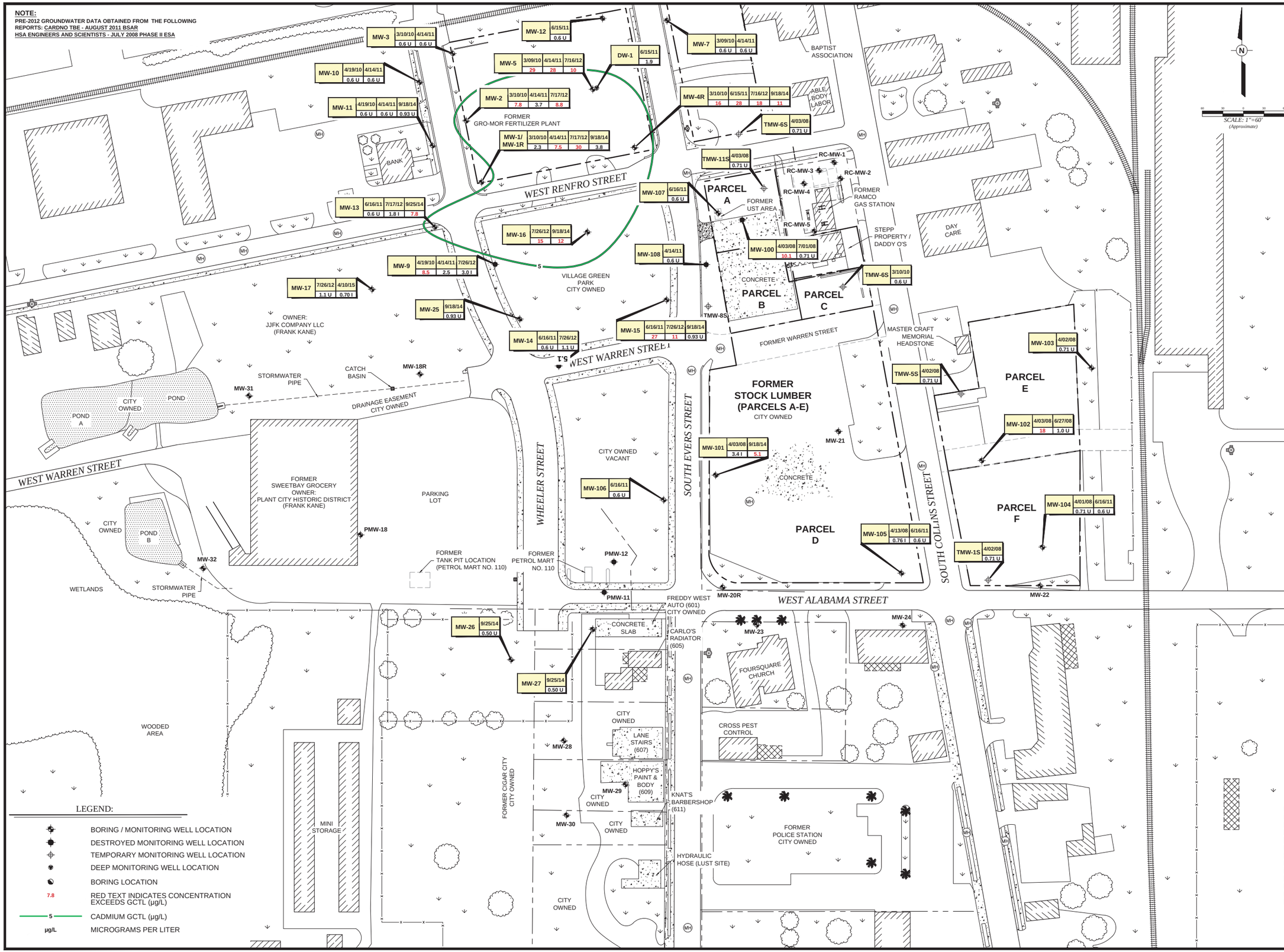
DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	3
BILLING GROUP 2F	

NOTE:
PRE-2012 GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS: CARDNO TBE - AUGUST 2011 BSAR
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA



LEGEND:

- BORING / MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- BORING LOCATION
- 7.8 RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (µg/L)
- 5 CADMIUM GCTL (µg/L)
- µg/L MICROGRAMS PER LITER

REVISION HISTORY

DRAWN BY	DATE	DESCRIPTION	APPROVED

CADMIUM IN GROUNDWATER

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CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

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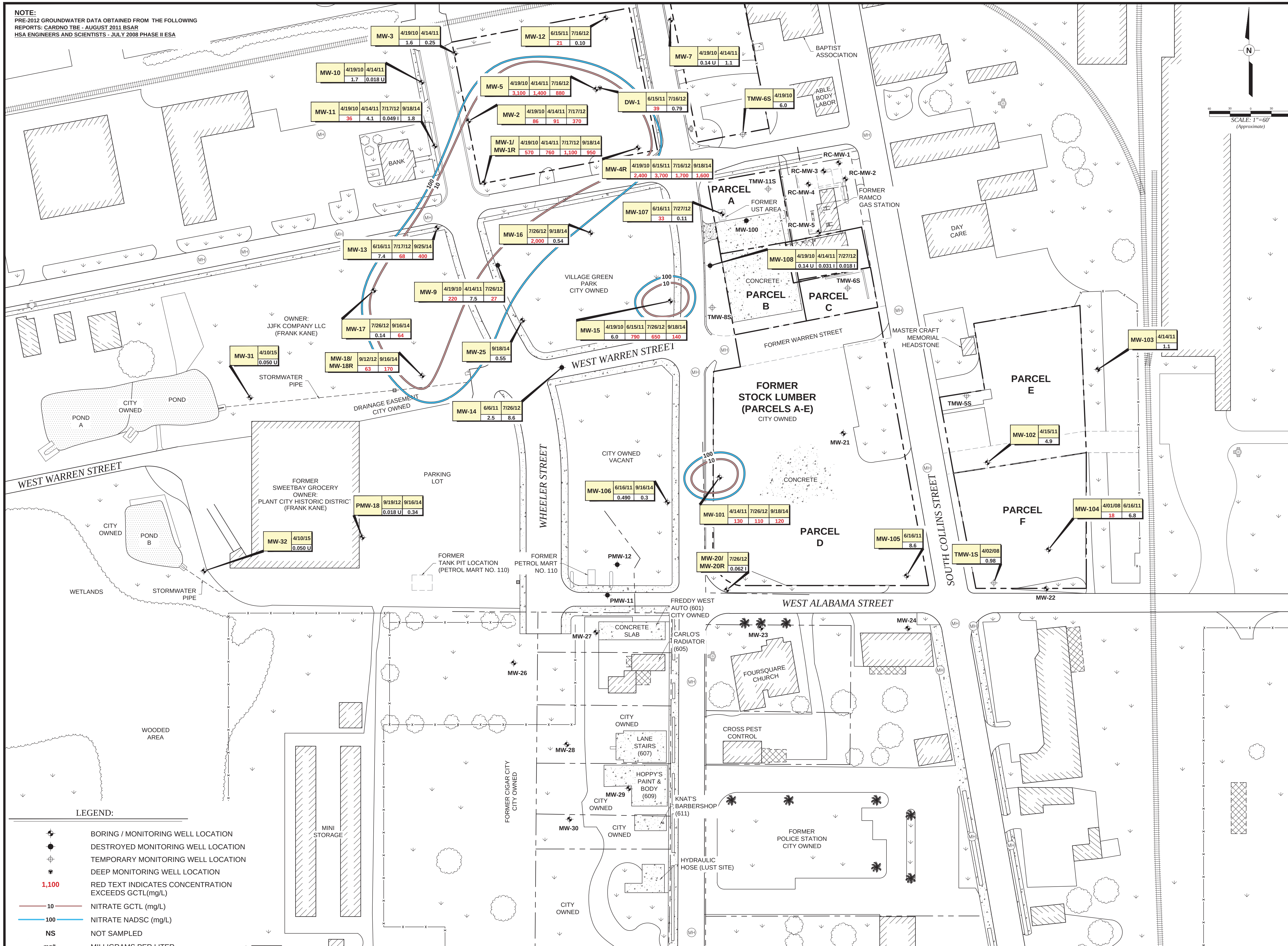
DRAWING SCALE
1" = 60'

PROJECT NUMBER 716810
BILLING GROUP 2F
FIGURE NUMBER 4



REVISION HISTORY			
DRAWN BY	DATE	DESCRIPTION	APPROVED

NITRATE IN GROUNDWATER

PPM

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FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA

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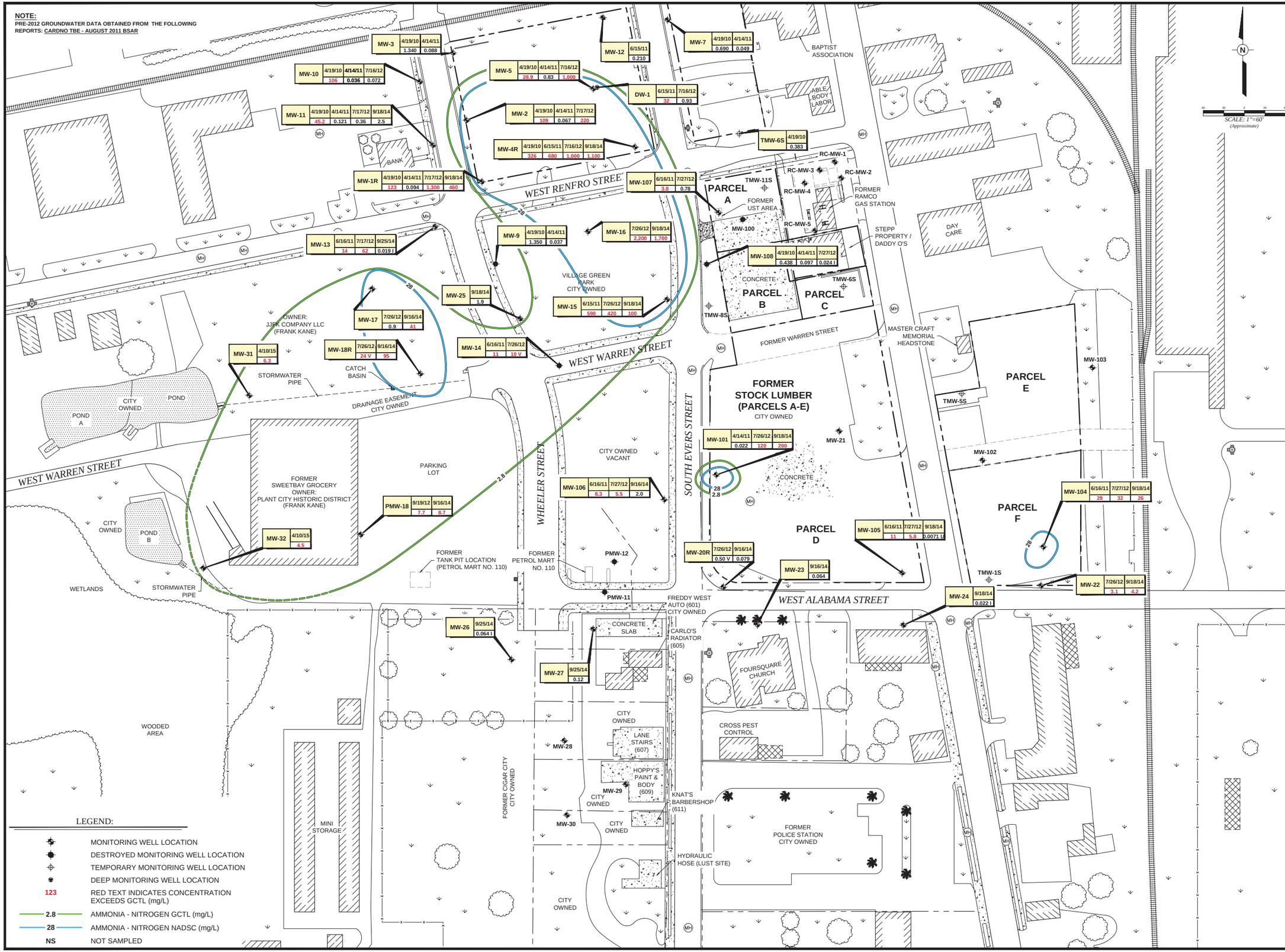
DRAWING SCALE
1" = 60'

PROJECT NUMBER
716810

BILLING GROUP
2F

FIGURE NUMBER
5

NOTE:
PRE-2012 GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS: CARDNO TBE - AUGUST 2011 BSAR



REVISION HISTORY			
DRAWN BY	DATE	DESCRIPTION	APPROVED

AMMONIA - NITROGEN IN GROUNDWATER

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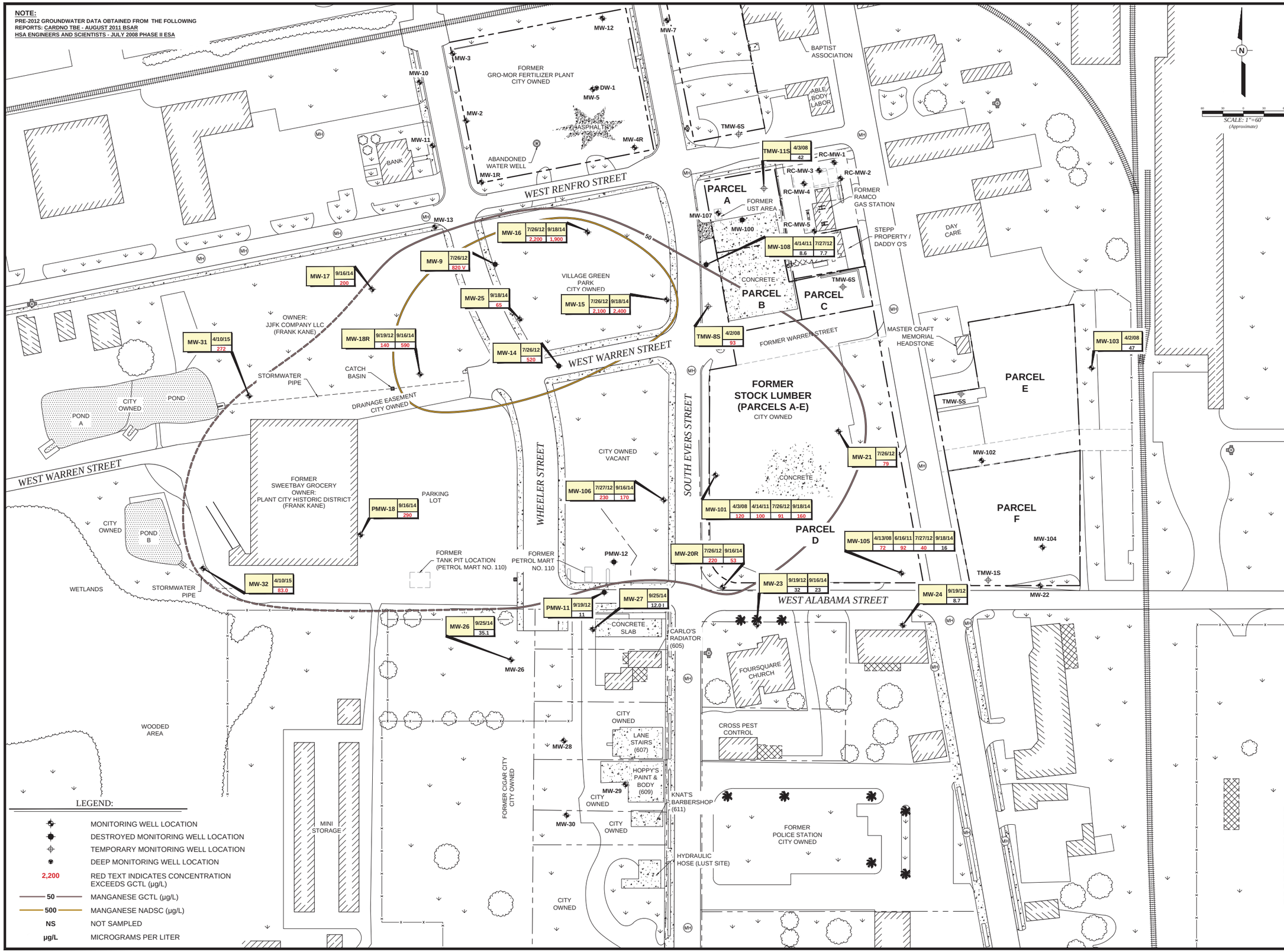
DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	6
BILLING GROUP 2F	

NOTE:
PRE-2012 GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS: CARDNO TBE - AUGUST 2011 BSAR
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA



LEGEND:

- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 2,200 — RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (µg/L)
- 50 — MANGANESE GCTL (µg/L)
- 500 — MANGANESE NADSC (µg/L)
- NS — NOT SAMPLED
- µg/L — MICROGRAMS PER LITER

REVISION HISTORY

DRAWN BY	DATE	DESCRIPTION	APPROVED

MAGANESE IN GROUNDWATER

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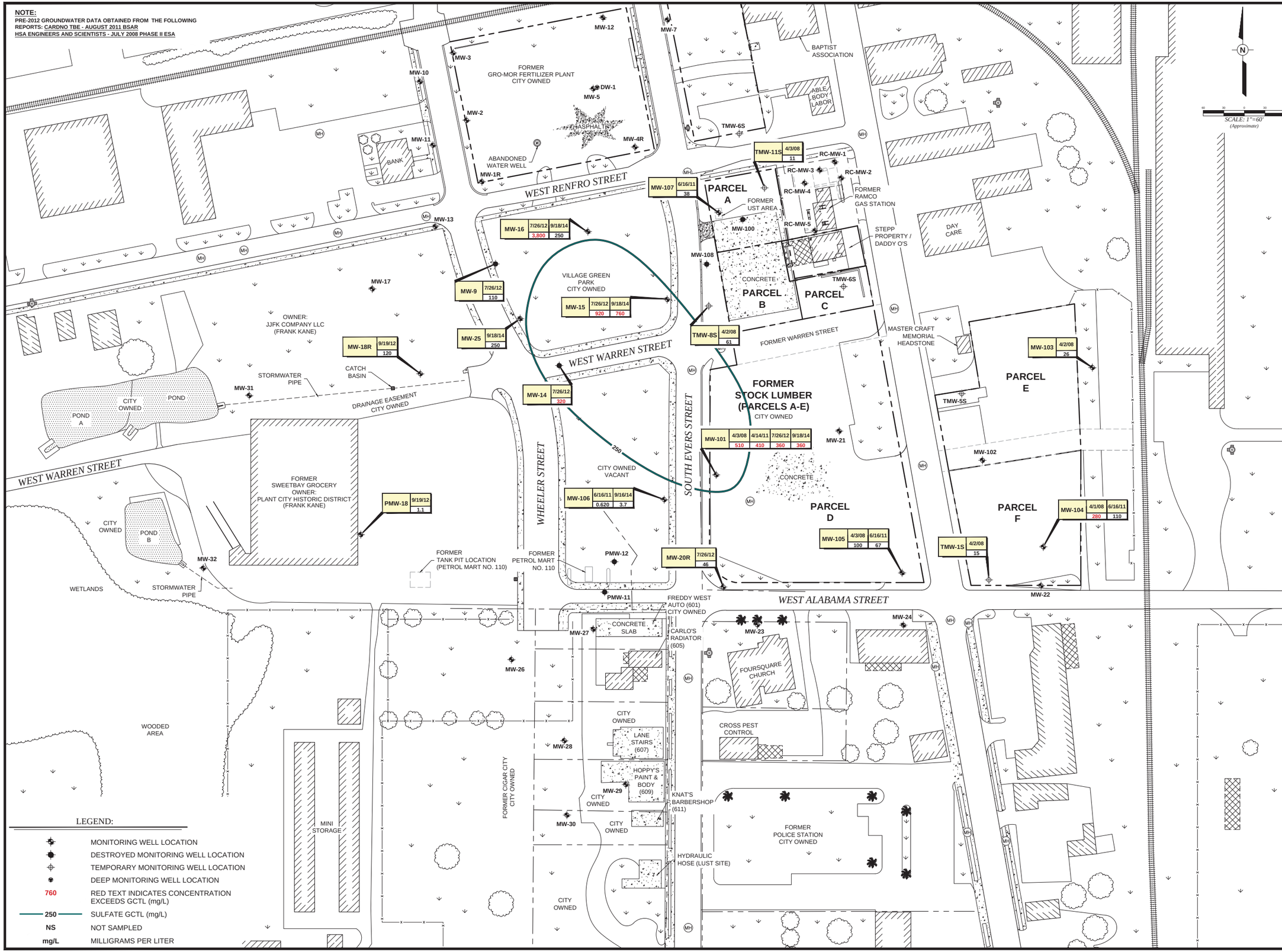
DRAWING SCALE
1" = 60'

PROJECT NUMBER 716810
BILLING GROUP 2F
FIGURE NUMBER 7

NOTE:
PRE-2012 GROUNDWATER DATA OBTAINED FROM THE FOLLOWING
REPORTS: CARDNO TBE - AUGUST 2011 BSAR
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA



LEGEND:

- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 760 — RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (mg/L)
- 250 — SULFATE GCTL (mg/L)
- NS — NOT SAMPLED
- mg/L — MILLIGRAMS PER LITER

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SULFATE IN GROUNDWATER

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DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	8
BILLING GROUP 2F	

NOTE:
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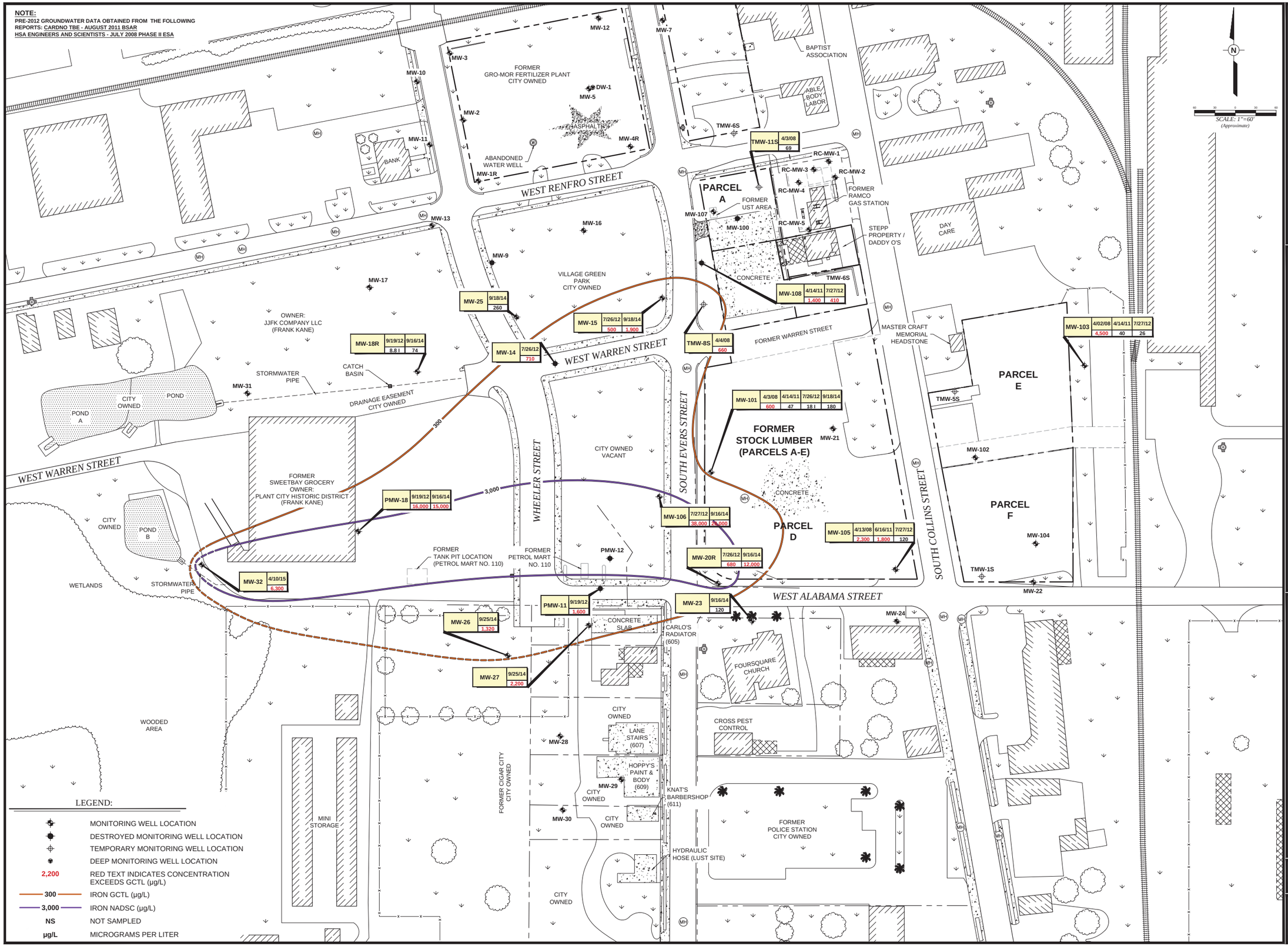
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA



LEGEND:

- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 2,200 — RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (µg/L)
- 300 — IRON GCTL (µg/L)
- 3,000 — IRON NADSC (µg/L)
- NS — NOT SAMPLED
- µg/L — MICROGRAMS PER LITER

REVISION HISTORY

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IRON IN GROUNDWATER

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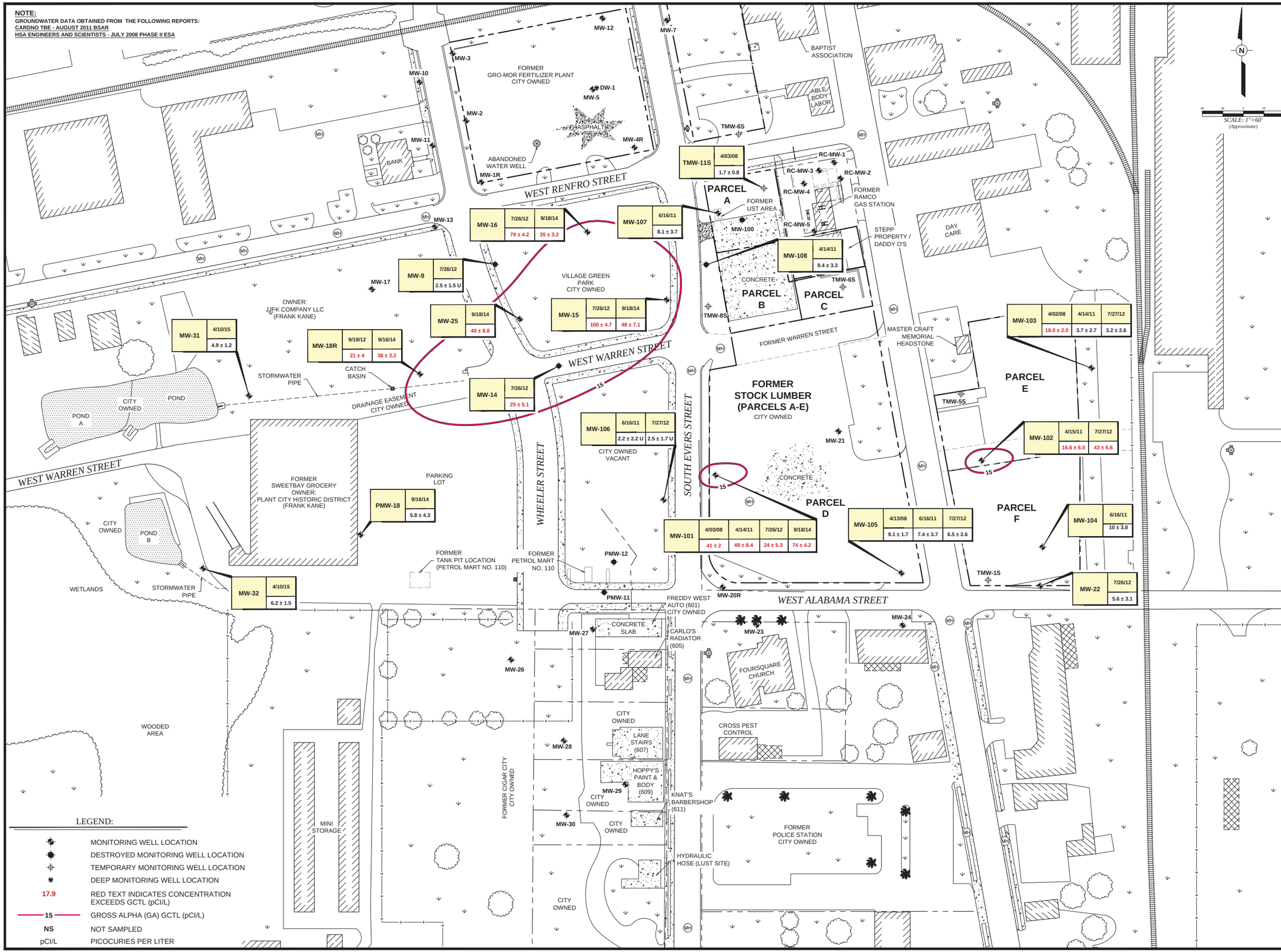
DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	9
BILLING GROUP 2F	

NOTE:
GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS:
CARDNO TBE - AUGUST 2011 BSAR
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA



LEGEND:

- MONITORING WELL LOCATION
- DESTROYED MONITORING WELL LOCATION
- TEMPORARY MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- 17.9 — RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (pCI/L)
- 15 — GROSS ALPHA (GA) GCTL (pCI/L)
- NS — NOT SAMPLED
- pCI/L — PICOCURIES PER LITER

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RADIONUCLIDES IN GROUNDWATER (GROSS ALPHA)

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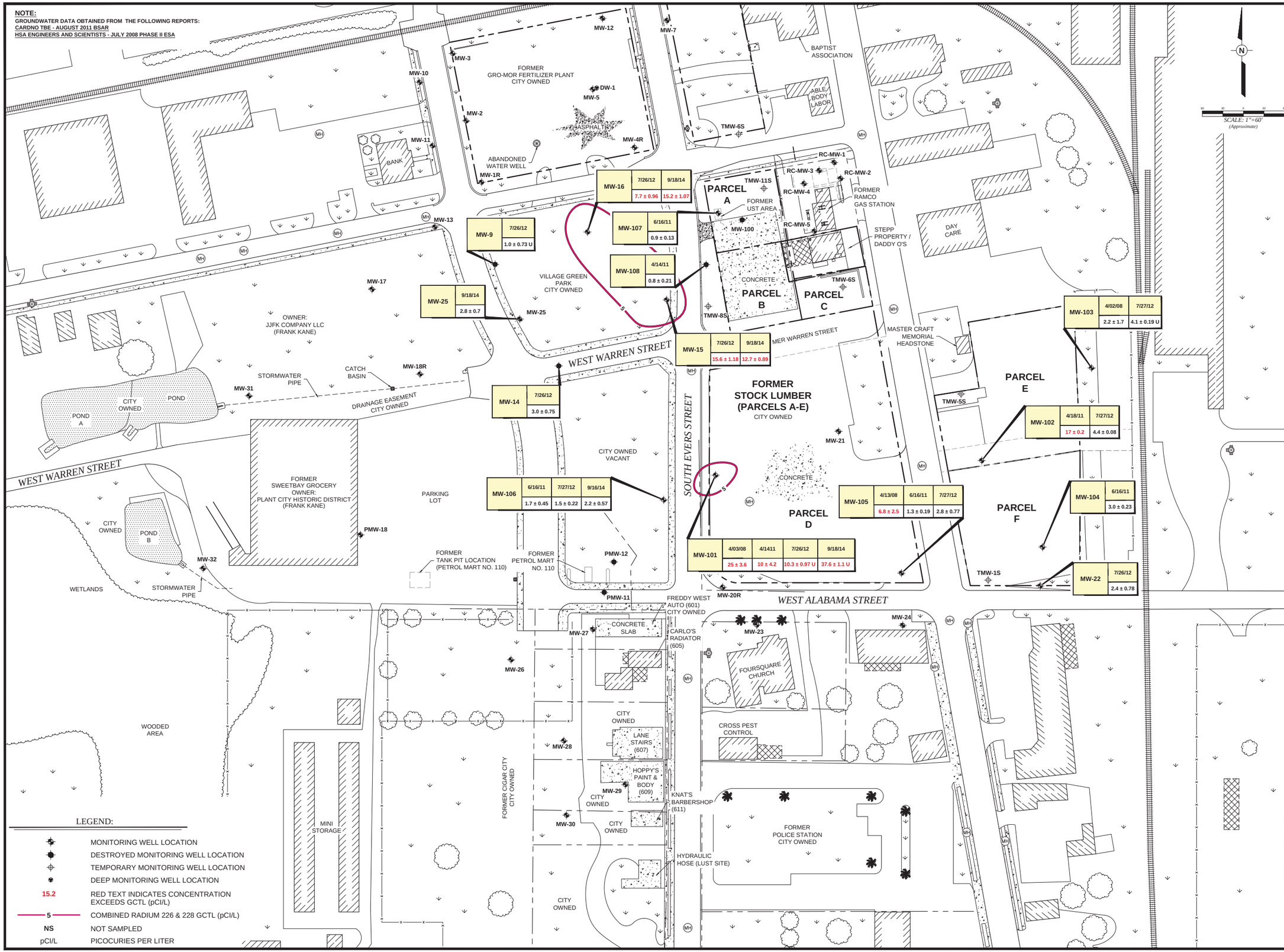
DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	10
BILLING GROUP 2F	

NOTE:
GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS:
CARDNO TBE - AUGUST 2011 BSAR
HSA ENGINEERS AND SCIENTISTS - JULY 2008 PHASE II ESA



LEGEND:

	MONITORING WELL LOCATION
	DESTROYED MONITORING WELL LOCATION
	TEMPORARY MONITORING WELL LOCATION
	DEEP MONITORING WELL LOCATION
15.2	RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (pCI/L)
5	COMBINED RADIUM 226 & 228 GCTL (pCI/L)
NS	NOT SAMPLED
pCI/L	PICOCURIES PER LITER

REVISION HISTORY

DRAWN BY	DATE	DESCRIPTION	APPROVED

RADIONUCLIDES IN GROUNDWATER (COMBINED RADIUM)

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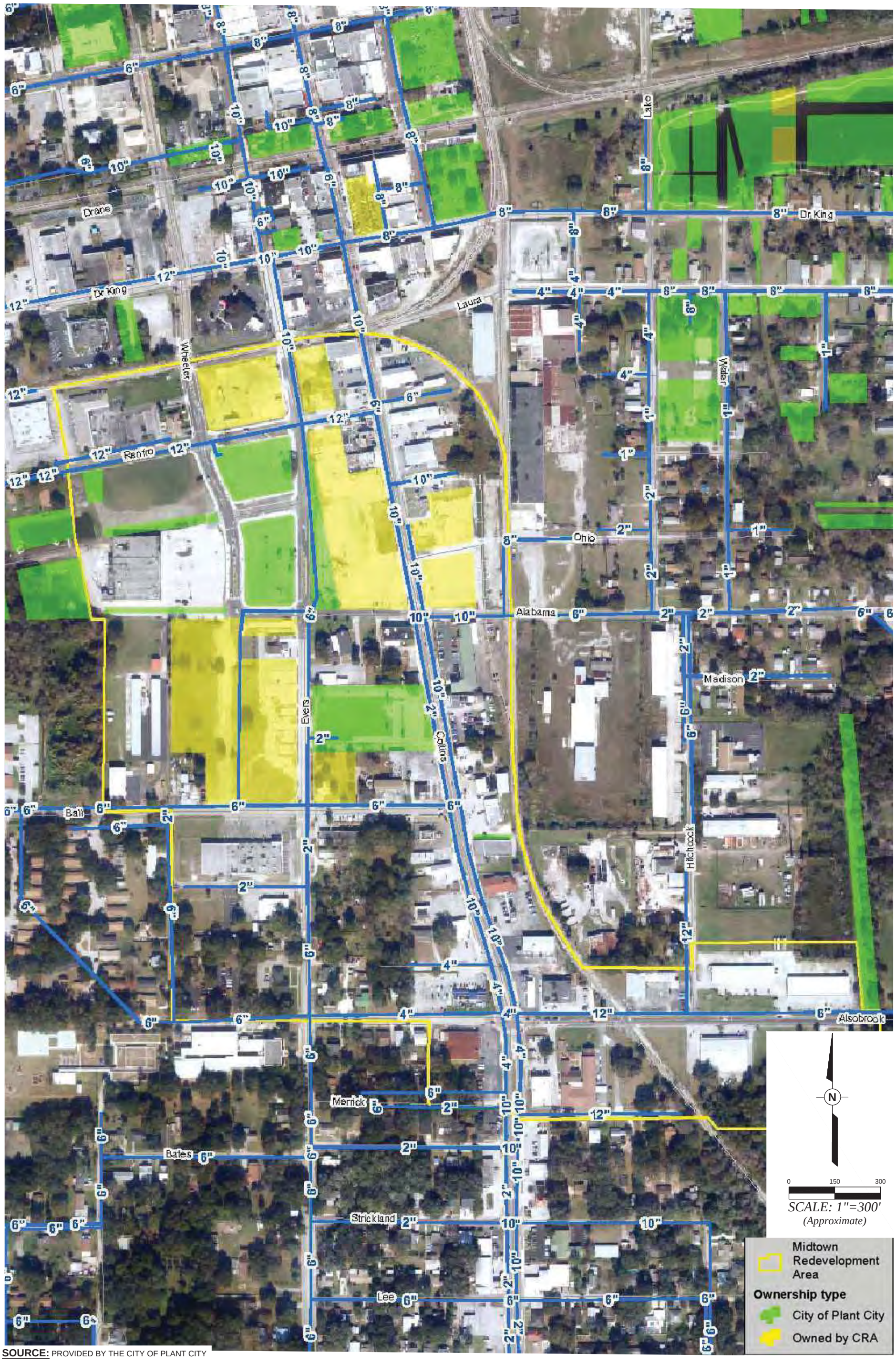
DRAWING SCALE
1" = 60'

PROJECT NUMBER	FIGURE NUMBER
716810	11
BILLING GROUP 2F	



SOURCE: PROVIDED BY THE CITY OF PLANT CITY

PPM — PPM CONSULTANTS, INC. www.ppmco.com	CITY OF PLANT CITY MIDTOWN REDEVELOPMENT AREA	MIDTOWN REDEVELOPMENT AREA PARCEL OWNERSHIP	FIGURE NUMBER 12
DRAWN BY: BWH / DRAWN DATE: 05/21/15			
PROJECT NUMBER: 716810 / BILLING GROUP: TASK 2F			

APPENDIX B - TABLES

TABLE 1: WELL CONSTRUCTION TABLE

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL
Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

ORIGINAL WELL ID	CURRENT WELL MAP ID	DATE INSTALLED	INSTALLATION METHOD	Site / Location	Status	TOTAL WELL DEPTH (FEET)	SCREENED INTERVAL (BGS)	WELL DIAMETER (IN.)
	DW-1	06/14/11	Direct Push	Gro-Mor	Not found Sept 2014	29.0	24.0 - 29.0	1
TMW-1/MW-1	MW-1	03/05/10	Direct Push	Gro-Mor	Destroyed 2013	12.0	2.0 - 12.0	1
	MW-1R	08/27/14	Hollow Stem Auger	Gro-Mor	Existing	12.0	2.0 - 12.0	2
TMW-2/MW-2	MW-2	03/05/10	Direct Push	Gro-Mor	Destroyed	12.0	2.0 - 12.0	1
TMW-3/MW-3	MW-3	03/05/10	Direct Push	Gro-Mor	Existing	12.0	2.0 - 12.0	1
TMW-4/MW-4	MW-4R	06/13/11	Direct Push	Gro-Mor	Existing	14.0	4.0 - 14.0	1
TMW-5/MW-5	MW-5	03/05/10	Hand Auger	Gro-Mor	Not found Sept 2014	12.0	2.0 - 12.0	1
TMW-7/MW-7	MW-7	03/05/10	Direct Push	Gro-Mor	Existing	12.0	2.0 - 12.0	1
TMW-9/MW-9	MW-9	04/15/10	Direct Push	Offsite - Village Green	Destroyed 2013	12.0	2.0 - 12.0	1
TMW-10/MW-10	MW-10	04/15/10	Direct Push	Offsite W. ROW - Wheeler St	Existing	12.0	2.0 - 12.0	1
TMW-11/MW-11	MW-11	04/15/10	Direct Push	Offsite W. ROW - Wheeler St	Existing	12.0	2.0 - 12.0	1
	MW-12	06/13/11	Direct Push	Gro-Mor	Existing	14.0	4.0 - 14.0	1
	MW-13	06/14/11	Direct Push	Offsite S. ROW - Renfro St.	Existing	13.0	3.0 - 13.0	1
	MW-14	06/13/11	Direct Push	Offsite - Village Green	Destroyed 2013	15.0	5.0 - 15.0	1
	MW-15	06/13/11	Direct Push	Offsite - Village Green	Existing	14.0	4.0 - 14.0	1
	MW-16	07/17/12	Hollow Stem Auger	Offsite - Village Green	Existing	11.0	1.0 - 11.0	2
	MW-17	07/19/12	Hollow Stem Auger	Offsite - Kane Property	Existing	11.0	1.0 - 11.0	2
	MW-18	07/19/12	Hollow Stem Auger	Offsite - Kane Property	Destroyed 2013	11.0	1.0 - 11.0	2
	MW-18R	08/27/14	Hollow Stem Auger	Offsite - Kane Property	Existing	12.0	2.0 - 12.0	2
	MW-20	07/19/12	Direct Push	Stock - Parcel D	Destroyed 2013	11.0	1.0 - 11.0	1
	MW-20R	08/27/14	Hollow Stem Auger	Stock - Parcel D	Existing	12.0	2.0 - 12.0	1
	MW-21	07/17/12	Hollow Stem Auger	Stock - Parcel D	Not found Sept 2014	11.0	1.0 - 11.0	2
	MW-22	07/17/12	Hollow Stem Auger	Stock - Parcel F	Existing	12.0	2.0 - 12.0	2
	MW-23	07/18/12	Hollow Stem Auger	Offsite - S. ROW Alabama St.	Existing	11.0	1.0 - 11.0	2
	MW-24	07/18/12	Hollow Stem Auger	Offsite - S. ROW Alabama St.	Existing	11.0	1.0 - 11.0	2
	MW-25	08/27/14	Hollow Stem Auger	Offsite - Village Green	Existing	12.0	2.0 - 12.0	2
	MW-26	09/19/14	Hollow Stem Auger	601 Evers Street	Lost	12.0	2.0 - 12.0	2
	MW-27	09/19/14	Hollow Stem Auger	605 Evers St./West ROW Wheeler St.	Existing	12.0	2.0 - 12.0	2
	MW-28	09/19/14	Hollow Stem Auger	607 Evers Street	Existing	12.0	2.0 - 12.0	2
	MW-29	09/19/14	Hollow Stem Auger	609 Evers Street	Existing	12.0	2.0 - 12.0	2
	MW-30	09/19/14	Hollow Stem Auger	611 Evers Street	Existing	12.0	2.0 - 12.0	2
	MW-31	04/08/15	Hollow Stem Auger	Offsite - Behind/West of Sweetbay	Existing	13.00	3.0 - 13.0	2

TABLE 1: WELL CONSTRUCTION TABLE

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL
Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

ORIGINAL WELL ID	CURRENT WELL MAP ID	DATE INSTALLED	INSTALLATION METHOD	Site / Location	Status	TOTAL WELL DEPTH (FEET)	SCREENED INTERVAL (BGS)	WELL DIAMETER (IN.)
	MW-32	04/08/15	Hollow Stem Auger	Offsite - Behind/West of Sweetbay	Existing	12.0	2.0 - 12.0	2
TMW-7/MW-4	MW-100	Jun 2008	Direct Push	Stock-Parcel F	Lost/destroyed ~2008	12.5	2.5 - 12.5	1
TMW-10/MW-1	MW-101	Jun 2008	Direct Push	Stock-Parcel D	Existing	15.0	5.0 - 15.0	1
TMW-3/MW-2	MW-102	Jun 2008	Direct Push	Stock-Parcel E	Not found Sept 2014	15.0	5.0 - 15.0	1
TMW-4/MW-3	MW-103	Jun 2008	Direct Push	Stock-Parcel E	Existing	15.0	5.0 - 15.0	1
TMW-2/MW-4	MW-104	06/14/11	Direct Push	Stock-Parcel F	Existing	14.0	4.0 - 14.0	1
TMW-9/MW-5	MW-105	06/14/11	Direct Push	Stock-Parcel D	Existing	14.0	4.0 - 14.0	1
MW-6	MW-106	06/13/11	Direct Push	Offsite - Village Green	Existing	14.0	4.0 - 14.0	1
MW-7	MW-107	06/14/12	Direct Push	Stock Parcel A - Tank Pit	Existing	14.0	4.0 - 14.0	1
TMW-8/MW-8	MW-108	04/15/10	Direct Push	Stock - Parcel B	Destroyed 2013	12.0	2.0 - 12.0	1
MW-11	PMW-11	12/01/93	Hollow Stem Auger	Petrol Mart No. 110/Sweetbay Grocery	Destroyed 2013	10.0	2.5 - 10.0	2
MW-12	PMW-12	11/30/93	Hollow Stem Auger	Petrol Mart No. 110/Sweetbay Grocery	Destroyed 2013	10.0	2.5 - 10.0	2
MW-18	PMW-18	12/02/93	Hollow Stem Auger	Petrol Mart No. 110/Sweetbay Grocery	Destroyed 2013	10.0	2.5 - 10.0	2
	RC-MW-1	07/23/86	Hollow Stem Auger	Ramco Service Center	Existing	11.0	1.0 - 11.0	1
	RC-MW-2	07/23/86	Hollow Stem Auger	Ramco Service Center	Existing	11.0	1.0 - 11.0	1
	RC-MW-3	Dec 2009	Hollow Stem Auger	Ramco Service Center	Existing	12.0	2.0 - 12.0	2
	RC-MW-4	Dec 2009	Hollow Stem Auger	Ramco Service Center	Existing	12.0	2.0 - 12.0	2
	RC-MW-5	Dec 2009	Hollow Stem Auger	Ramco Service Center	Existing	12.0	2.0 - 12.0	2

Pre-2012 Data Sources:

HSA Engineers and Scientists – July 2008 Phase II ESA for Stock-McGinness Lumber
Cardno TBE - March 2010 Limited Phase II Environmental Site Assessment for Gro-Mor Bulk Fertilizer Plant
Cardno TBE - May 2010 Limited Phase II Supplemental Environmental Site Assessment for Gro-Mor Bulk Fertilizer Plant
Cardno TBE - August 2011 Brownfield Site Assessment Report for Gro-Mor Bulk Fertilizer Plant
Cardno TBE - August 2011 Brownfield Site Assessment Report for Stock-McGinnes Lumber
Brown and Root - 1994 Contamination Assessment Report for Gas World (former Petrol Mart No. 110)

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	**MW-1**			**MW-2**			**MW-3**			**MW-4R**		
DATE INSTALLED	03/05/10			03/05/10			03/05/10			06/13/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	12			12			12			15		
SCREEN INTERVAL (feet)	1.0 - 12.0			1.0 - 12.0			1.0 - 12.0			4.0 - 14.0		
GROUND ELEVATION (f'eet)	123.4			124.6			126.9			125.4		
TOC ELEVATION (feet)	122.88			124.34			126.57			124.83		
DATE	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**
06/21/11	119.92	2.96	0.00	120.60	3.74	0.00	122.31	4.26	0.00	121.00	3.83	0.00
07/16/12		NM			NM		125.03	1.54	0.00	122.86	1.97	0.00
07/17/12	122.78	0.10	0.00	124.14	0.20	0.00		NM			NM	
07/18/12		NM			NM		126.33	0.24	0.00	123.31	1.52	0.00
07/25/12	122.28	0.60	0.00	123.34	1.00	0.00	124.27	2.30	0.00	122.60	2.23	0.00
07/31/12	121.74	1.14	0.00	122.75	1.59	0.00	123.66	2.91	0.00	122.17	2.66	0.00
08/20/12		@TOC		123.99	0.35	0.00	124.95	1.62	0.00	122.86	1.97	0.00
08/25/12	122.28	0.60	0.00		NM		124.42	2.15	0.00	122.75	2.08	0.00
08/28/12		@TOC		123.94	0.40	0.00	124.90	1.67	0.00	122.84	1.99	0.00
09/04/12	121.68	1.20	0.00	122.71	1.63	0.00	123.73	2.84	0.00		NM	
10/12/12	121.97	0.91	0.00		NM			NM			NM	
09/16/14	Destroyed			Bent casing			123.41	3.16	0.00	122.07	2.76	0.00

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	**MW-5**	**MW-7**	**MW-9**	**MW-10**
DATE INSTALLED	03/05/10	03/05/10	04/15/10	04/15/10
DIAMETER (inches)	1	1	1	1
WELL DEPTH (feet)	12	12	12	12
SCREEN INTERVAL (feet)	1.0 - 12.0	1.0 - 12.0	1.0 - 12.0	1.0 - 12.0
GROUND ELEVATION (f'eet)	126.6	127.9	122.9	126.2
TOC ELEVATION (feet)	126.11	127.47	122.55	126.09

DATE	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**
06/21/11	121.86	4.25	0.00	122.45	5.02	0.00	118.39	4.16	0.00	121.64	4.45	0.00
07/16/12	124.27	1.84	0.00		NM			NM		123.63	2.46	0.00
07/18/12		NM			2.32		under water				NM	
07/25/12	123.86	2.25	0.00	124.24	3.23	0.00	121.30	1.25	0.00	123.22	2.87	0.00
07/31/12	123.27	2.84	0.00	123.76	3.71	0.00		NM			NM	
08/20/12		NM		124.63	2.84	0.00		NM			NM	
08/23/12		NM		124.93	2.54	0.00		NM			NM	
08/25/12	124.06	2.05			NM			NM			NM	
08/28/12	124.43	1.68		125.21	2.26	0.00		NM			NM	
10/12/12		NM		124.03	3.44	0.00		NM			NM	
09/16/14	Not located			123.46	4.01	0.00	Destroyed			122.77	3.32	0.00

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	MW-11	MW-12	MW-13	MW-14
DATE INSTALLED	04/15/10	06/13/11	06/14/11	06/13/11
DIAMETER (inches)	1	1	1	1
WELL DEPTH (feet)	12	14	13	15
SCREEN INTERVAL (feet)	2.0 - 12.0	4.0 - 14.0	3.0 - 13.0	5.0 - 15.0
GROUND ELEVATION (f'eet)	123.9	127.0	123.2	122.7
TOC ELEVATION (feet)	123.63	126.81	122.78	122.48

DATE	ELEV	DTW	FP		DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	120.66	2.97	0.00	122.97	3.84	0.00	118.58	4.20	0.00	118.29	4.19	0.00
07/16/12		NM		125.32	1.49	0.00		NM			NM	
07/17/12	122.58	1.05	0.00	125.53	1.28	0.00	121.78	1.00	0.00		NM	
07/18/12		NM		126.48	0.33	0.00		NM			NM	
07/25/12	122.04	1.59	0.00	124.71	2.10	0.00	120.86	1.92	0.00	119.59	2.89	0.00
07/31/12		NM		124.14	2.67	0.00		NM			NM	
08/20/12		NM		125.26	1.55	0.00		NM			NM	
08/25/12		NM		124.76	2.05	0.00		NM			NM	
08/28/12		NM		125.50	1.31	0.00		NM			NM	
10/12/12		NM		124.60	2.21	0.00		NM			NM	
09/16/14	121.90	1.73	0.00	123.74	3.07	0.00		NM		Destroyed		

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	**MW-15**			**DW-1**			**MW-16**			**MW-17**		
DATE INSTALLED	06/13/11			06/14/11			07/18/12			07/19/12		
DIAMETER (inches)	1			1			2			2		
WELL DEPTH (feet)	14			29			11			11		
SCREEN INTERVAL (feet)	4.0 - 14.0			24.0 - 29.0			1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (f'eet)	122.9			126.6			124.1			122.2		
TOC ELEVATION (feet)	122.56			126.26			123.60			121.86		
DATE	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**			
06/21/11	118.78	3.78	0.00	119.23	7.03	0.00		NI			NI	
07/16/12		NM		121.72	4.54	0.00		NI			NI	
07/18/12		0.10	0.00		NM		NM	0.51	0.00	NM	NM	
07/25/12	121.38	1.18	0.00	122.26	4.00	0.00	121.55	2.05	0.00	120.01	1.85	0.00
07/27/12	121.21	1.35	0.00		NM			NM			NM	
08/28/12		NM			NM			1.92			NM	
09/16/14	120.88	1.68	0.00	Not located			120.63	2.97	0.00	119.61	2.25	0.00
04/10/15		NM						NM		118.95	2.91	0.00

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	MW-18			MW-19			MW-20			MW-21		
DATE INSTALLED	07/19/12						07/18/12			07/17/12		
DIAMETER (inches)	2						1			2		
WELL DEPTH (feet)	11			Was not installed			11			11		
SCREEN INTERVAL (feet)	1.0 - 11.0						1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (f'eet)	122.4						124.0			125.7		
TOC ELEVATION (feet)	122.03						123.65			125.23		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12		NI						NM			1.87	0.00
07/25/12	119.32	2.71	0.00				121.53	2.12	0.00	123.05	2.18	0.00
07/27/12		NM					121.36	2.29	0.00	122.93	2.30	0.00
09/16/14	Destroyed						Destroyed			Not located		

WELL ID	MW-22			MW-23			MW-24			MW-25R		
DATE INSTALLED	07/17/12			07/18/12			07/18/12			08/27/14		
DIAMETER (inches)	2			2			2			2		
WELL DEPTH (feet)	12			11			11			12		
SCREEN INTERVAL (feet)	2.0 - 12.0			1.0 - 11.0			1.0 - 11.0			2.0 - 12.0		
GROUND ELEVATION (f'eet)	NM			125.1			126.5			NM		
TOC ELEVATION (feet)	128.50			124.53			126.00			122.25		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/18/12	125.62	2.88	0.00	NM	NM		NM	NM			NI	
07/25/12	125.11	3.39	0.00	122.91	1.62	0.00	124.03	1.97	0.00		NI	
07/27/12	125.00	3.50	0.00	122.31	2.22	0.00	124.19	1.81	0.00		NI	
09/16/14	124.16	4.34	0.00	122.49	2.04	0.00	123.54	2.46	0.00	120.51	1.74	0.00

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	MW-101			MW-102			MW-103			MW-104		
DATE INSTALLED	06/26/11			06/26/08			06/26/08			06/14/11		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	15			15			15			14		
SCREEN INTERVAL (feet)	5.0 - 15.0			5.0 - 15.0			4.5 - 14.5			4.0 - 14.0		
GROUND ELEVATION (f'eet)	123.4			127.6			129.0			128.8		
TOC ELEVATION (feet)	123.16			127.28			128.66			128.48		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
07/01/08	120.73	2.43	0.00	124.04	3.24	0.00	124.24	4.42	0.00	124.98	3.50	0.00
06/21/11	119.09	4.07	0.00	122.73	4.55	0.00	122.59	6.07	0.00	122.15	6.33	0.00
07/18/12	122.42	0.74	0.00	124.81	2.47	0.00	125.22	3.44	0.00	125.28	3.20	0.00
07/25/12	122.16	1.00	0.00	124.70	2.58	0.00	125.72	2.94	0.00	125.18	3.30	0.00
07/27/12	122.10	1.06	0.00	124.57	2.71	0.00	125.61	3.05	0.00	124.99	3.49	0.00
08/28/12		NM		Not located			126.86	1.80	0.00		NM	
09/16/14	121.54	1.62	0.00				125.11	3.55	0.00	124.32	4.16	0.00

WELL ID	MW-105			MW-106			MW-107			MW-108		
DATE INSTALLED	06/14/11			06/14/11			06/14/11			04/15/10		
DIAMETER (inches)	1			1			1			1		
WELL DEPTH (feet)	14			14			14			12		
SCREEN INTERVAL (feet)	4.0 - 14.0			4.0 - 14.0			4.0 - 14.0			1.0 - 12.0		
GROUND ELEVATION (f'eet)	127.8			123.4			124.6			123.4		
TOC ELEVATION (feet)	127.34			123.21			124.43			123.20		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
06/21/11	121.26	6.08	0.00	118.61	4.60	0.00	120.96	3.47	0.00	118.91	4.29	0.00
07/18/12	123.86	3.48	0.00		NM			~0.1		119.03	4.17	0.00
07/25/12	124.35	2.99	0.00	120.99	2.22	0.00	121.88	2.55	0.00	118.91	4.29	0.00
07/27/12	124.29	3.05	0.00	120.69	2.52	0.00	121.73	2.70	0.00	119.93	3.27	0.00
08/28/12		NM			NM		122.84	1.59	0.00		NM	
10/12/12		NM			NM		121.89	2.54	0.00		NM	
04/02/13		NM			NM		120.50	3.93	0.00		NM	
09/16/14	123.78	3.56	0.00	120.60	2.61	0.00	121.59	2.84	0.00	Destroyed		

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	PMW-11			PMW-12			PMW-18			MW-1R		
DATE INSTALLED	12/01/93			11/30/93			12/02/93			08/27/14		
DIAMETER (inches)	2			2			2			2		
WELL DEPTH (feet)	10			10			10			12		
SCREEN INTERVAL (feet)	2.5 - 10.0			2.5 - 10.0			2.5 - 10.0			2.0 - 12.0		
GROUND ELEVATION (f'eet)	NM			123.4			NM			NM		
TOC ELEVATION (feet)	NM			123.22			122.04			122.88		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
05/17/94		2.90	0.00		3.73	0.00		NM			NI	
09/02/94		3.05	0.00		2.72	0.00		NM			NI	
02/17/95		2.77	0.00		3.61	0.00		NM			NI	
07/31/01		2.69	0.00		NM			NM			NI	
07/25/12		1.64	0.00		2.35	0.00		NM	0.00		NI	
08/28/12		1.36	0.00		1.59	0.00		NM	0.00		NI	
09/16/14	Destroyed			Destroyed			119.49	2.55	0.00	121.34	1.54	0.00

WELL ID	MW-18R			MW-20R			RC-MW-1			RC-MW-2		
DATE INSTALLED	08/27/14			08/27/14			Jul 1986			Jul 1986		
DIAMETER (inches)	2			2			2			2		
WELL DEPTH (feet)	12			12			11			11		
SCREEN INTERVAL (feet)	2.0 - 12.0			2.0 - 12.0			1.0 - 11.0			1.0 - 11.0		
GROUND ELEVATION (f'eet)	NM			NM			NM			NM		
TOC ELEVATION (feet)	120.97			123.99			126.93			126.43		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
12/11/09		NI			NI		123.48	3.45		122.93	3.50	
09/16/14	119.30	1.67	0.00	121.66	2.33	0.00	124.03	2.90	0.00	123.48	2.95	0.00
09/19/14		NM			NM		124.51	2.42	0.00	123.98	2.45	0.00
04/08/15	119.36	1.61			NM			NM			NM	
04/29/15	119.09	1.88			NM			NM			NM	

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	RC-MW-3			RC-MW-4			RC-MW-5			MW-26		
DATE INSTALLED	Dec 2009			Dec 2009			Dec 2009			09/19/14		
DIAMETER (inches)	2			2			2			2		
WELL DEPTH (feet)	12			12			12			12		
SCREEN INTERVAL (feet)	2.0 - 12.0			2.0 - 12.0			2.0 - 12.0			2.0 - 12.0		
GROUND ELEVATION (f'eet)	NM			NM			NM			NM		
TOC ELEVATION (feet)	126.65			126.22			126.75			123.48		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
12/11/09	123.22	3.43		122.36	3.86		122.15	4.60			NI	
09/16/14	123.80	2.85	0.00	123.32	2.90	0.00	123.50	3.25	0.00		NI	
09/19/14	124.38	2.27	0.00	124.00	2.22	0.00	124.45	2.30	0.00		NI	
09/25/14		NM			NM			NM		121.98	1.50	0.00

WELL ID	MW-27			MW-28			MW-29			MW-30		
DATE INSTALLED	09/19/14			09/19/14			09/19/14			09/19/14		
DIAMETER (inches)	2			2			2			2		
WELL DEPTH (feet)	12			12			12			12		
SCREEN INTERVAL (feet)	2.0 - 12.0			2.0 - 12.0			2.0 - 12.0			2.0 - 12.0		
GROUND ELEVATION (f'eet)	NM			NM			NM			NM		
TOC ELEVATION (feet)	124.16			NM			NM			NM		
DATE	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP	ELEV	DTW	FP
09/25/14	122.66	1.50	0.00		1.83	0.00		1.70	0.00		1.07	0.00

TABLE 2: GROUNDWATER ELEVATION DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Ramco Service Center; Evers St Sites, Plant City FL

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

WELL ID	**MW-31**			**North Pond West of**			**MW-32**			**South Pond**		
DATE INSTALLED	04/08/15			**Sweetbay Building**			04/08/15			**NW of Sweetbay Building**		
DIAMETER (inches)	2			**Benchmark on top of**			2			**Benchmark on top of**		
WELL DEPTH (feet)	13			**Concrete Endwall**			12			**Metal Overflow Structure**		
SCREEN INTERVAL (feet)	3.0 - 13.0						2.0 - 12.0					
GROUND ELEVATION (f'eet)	121.5						121.6					
TOC ELEVATION (feet)	121.38			116.37			121.48			120.71		
DATE	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**	**ELEV**	**DTW**	**FP**
04/10/15	114.55	6.83	0.00	113.72	2.65	0.00	118.14	3.34	0.00	118.71	2.00	0.00
04/29/15	114.66	6.72	0.00	114.32	2.05	0.00	118.85	2.63	0.00	119.31	1.40	0.00

Historical data (1993 to 2011) obtained from the following reports: HSA 2008 Phase II ESA (Stock); Cardno-TBE 2011 BSAR (Gro Mor); Cardno TBE 2011 BSAR); Brown & Root 1994 CAR; Enviro-Logical Solutions 2001 RAPMOD.

Existing well elevations surveyed to National Geodetic Vertical datum in July 2012 by Brooks Land Surveying, Inc. of Plant City, Florida. TOCs for subsequently installed wells surveyed by PPM Consultants and tied into the existing monitoring well network.

Elevation = TOC Elevation - DTW
DTW = Depth to water in feet below TOC
FP = Thickness of free product measured in feet

BGS = Below Ground Surface
NM = Not Measured
TOC = Top of Casing

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Ammonia Nitrogen (mg/L)	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**150**	**50**
MW-1	Mar-Apr 2010	**123**	**570**	2.3	---	---	---	---	---
	Apr 2011	0.094	**760**	**7.5**	---	---	---	---	---
	07/17/12	**1,300**	**1,100**	**30**	---	---	---	---	---
MW-1R	09/18/14	**460**	**950**	3.8	---	---	---	---	---
MW-2	Mar-Apr 2010	**109**	**86**	**7,8**	---	---	---	---	---
	04/14/11	0.067	**91**	3.7	---	---	---	---	---
	07/17/12	**220**	**370**	**8.8**	---	---	---	---	---
	WELL HEAD NEEDS REPAIR								
MW-3	Mar-Apr 2010	1.340	1.6	0.6	---	---	---	---	---
	04/14/11	0.088	0.25	0.6	---	---	---	---	---
MW-3	07/16/12	---	---	---	---	---	---	---	---
MW-4R	Mar-Apr 2010	**326**	**2,400**	**16**	---	---	---	---	---
	Jun 2011	**680**	**3,700**	**28**	---	---	---	---	---
	07/16/12	**1,000**	**1,700**	**18**	---	---	---	---	---
	09/18/14	**1,100**	**1,600**	**11**	---	---	---	---	---
MW-5	Mar-Apr 2010	**28.9**	**3,100**	**29**	---	---	---	---	---
	04/14/11	0.83	**1,400**	**28**	---	---	---	---	---
	07/16/12	**1,000**	**880**	**10**	---	---	---	---	---
	NOT LOCATED								
MW-7	Mar-Apr 2010	0.690	0.14 U	0.6 U	---	---	---	---	---
	04/14/11	0.049	1.1	0.6 U	---	---	---	---	---

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Ammonia Nitrogen (mg/L)	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**150**	**50**
MW-9	04/19/10	**1.350**	**220**	**8.5**	---	---	---	---	---
	04/14/11	0.037	7.5	2.5	---	---	---	---	---
	07/26/12	---	**27**	3.0 I	---	**820 V**	110	2.5 +-1.5 U	1.0 +- 0.73 U
	DESTROYED								
MW-10	04/19/10	**106**	1.7	0.6 U	---	---	---	---	---
	04/14/11	0.036	0.018 U	0.6 U	---	---	---	---	---
	07/16/12	0.072	---	---	---	---	---	---	---
MW-11	04/19/10	**45.2**	**36**	0.6 U	---	---	---	---	---
	04/14/11	0.121	4.1	0.6 U	---	---	---	---	---
	07/17/12	0.36	0.049 I	---	---	---	---	---	---
	09/18/14	2.5	1.8	0.93 U	---	---	---	---	---
MW-12	06/15/11	0.210	**21**	0.6 U	---	---	---	---	---
	07/16/12	---	0.10	---	---	---	---	---	---
MW-13	06/16/11	**14**	7.4	0.6 U	---	---	---	---	---
	07/17/12	**62**	**68**	1.8 I	---	---	---	---	---
	09/25/14	0.019 I	**400**	**7.8**	---	---	---	---	---
MW-14	06/16/11	**11**	2.5	0.6 U	---	---	---	---	---
	07/26/12	**10 V**	8.6	1.1 U	**710**	**520**	**320**	**25 +- 5.1**	3.0 +- 0.75
	DESTROYED								

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Ammonia Nitrogen (mg/L)	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**150**	**50**
MW-15	04/09/10	---	6.0	---	---	---	---	---	---
	Jun 2011	**590**	790	**27**	---	---	---	---	---
	07/26/12	**420**	**650**	**11**	**500**	**2,100**	**920**	**100 +- 4.7**	**15.6 +-1.18**
	09/18/14	**100**	**140**	0.93 U	**1,900**	**2,400**	**760**	**48 +- 7.1**	**12.7 +- 0.89**
MW-16	07/26/12	**2,200**	**2,000**	**15**	---	**2,200**	**3,800**	**79 +- 4.2**	**7.7 +- 0.96**
	09/18/14	**1,700**	0.54	**12**	---	**1,900**	250	**35 +- 3.2**	**15.2 +- 1.07**
MW-17	07/26/12	0.9	0.14	1.1 U	---	---	---	---	---
	09/16/14	**41**	**64**	---	---	**200**	---	---	---
	04/10/15	---	---	0.70 I	---	---	---	---	---
MW-18	07/26/12	**24 V**	**63**	---	---	---	---		---
MW-18R	09/19/12	---	---	---	8.8 I	**140**	120	**21 +- 4**	---
	09/16/14	**95**	**170**	---	74	**590**	---	**38 +- 3.2**	---
MW-20	07/26/12	0.50 V	0.062 I	---	**680**	**220**	46	---	---
MW-20R	09/16/14	0.079	---	---	**12,000**	**53**	---	---	---
MW-21	07/26/12	---	---	---	---	**79**	---	---	---
MW-22	07/26/12	**3.1**	---	---	---	---	---	5.6 +- 3.1	2.4 +- 0.78 U
	09/18/14	**4.2**	---	---	---	---	---	---	---
MW-23	09/19/12	---	---	---	---	32	---	---	---
	09/16/14	0.064	---	---	120	23	---	---	---

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Ammonia Nitrogen (mg/L)	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**150**	**50**
MW-24	09/19/12	---	---	---	---	8.7	---	---	---
	09/18/14	0.022 I	---	---	---	---	---	---	---
MW-25	09/18/14	1.9	0.55	0.93 U	260	**65**	250	**40 +- 8.8**	2.8 +- 0.7
MW-26	09/25/14	0.064I	---	0.50U	**1,320**	35.1	---	---	---
MW-27	09/25/14	0.12	---	---	**2,200**	12.0 I	---	---	---
MW-31	04/10/15	**6.3**	0.050 U	0.50U	---	**272**	---	4.9 +- 1.2	---
MW-32	04/10/15	**4.5**	0.050 U	---	**6,300**	**83.0**	---	6.2 +- 1.5	---
DW-1	06/15/11	**32**	**39**	1.9	---	---	---	---	---
	07/16/12	0.93	0.79	---	---	---	---	---	---
	NOT LOCATED								
MW-101	04/03/08	---	---	3.4 I	**600**	**120**	**510**	**41 +- 2**	**25 +- 3.6**
	04/14/11	0.022	**130**		47	**100**	**410**	**49 +_ 8.4**	**10 +- 4.2**
	07/26/12	**120**	**110**	---	18 I	**91**	**360**	**24 +- 5.3**	**10.3 +- 0.97 U**
	09/18/14	**200**	**120**	5.1	180	**160**	**360**	**74 +- 4.2**	**37.6 +- 1.1U**
MW-102	04/03/08	---	---	**18**	---	---	---	---	---
	06/27/08	---	---	1.0 U	---	---	---	---	---
	Apr 2011		4.9		---	---	---	**16.6 +_ 6.5**	17 +- 0.2
	07/27/12	---	---	---	---	---	---	**43 +- 6.6**	4.4 +- 0.8

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Ammonia Nitrogen (mg/L)	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**150**	**50**
MW-103	04/02/08	---	---	0.71 U	**4,500**	47	26	**18 +- 2.0**	2.2 +- 1.7
	04/14/11	---	1.1	---	40	---	---	3.7 +- 2.7	---
	07/27/12	---	---	---	26	---	---	3.2 +- 2.6	4.1 +- 0.19 U
MW-104	04/01/08	---	**18**	0.71 U	---	---	**280**		
	06/16/11	**29**	6.8	0.6 U	---	---	110	10 +- 3.8	3.0 +- 0.23
	07/27/12	**32**	---	---	---	---	---	---	---
	09/18/14	**26**	---	---	---	---	---	---	---
MW-105	Apr 2008	---	---	0.76 I	**2,300**	**72**	100	9.1 +- 1.7	**6.8 +- 2.5**
	06/16/11	**11**	8.6	0.6 U	**1,800**	**92**	67	7.4 +- 3.7	1.3 +- 0.19
	07/27/12	**5.8**	---	---	120	**40**	---	6.5 +- 2.6	2.8 +- 0.77
	09/18/14	0.0071 U	---	---	---	16	---	---	---
MW-106	06/16/11	**8.3**	0.490	0.6 U	---	---	0.620	2.2 +- 2.2 U	1.7 +- 0.45
	07/27/12	**5.5**	---	---	**38,000**	**230**	---	2.5 +- 1.7 U	1.5 +- 0.22
	09/16/14	2.0	0.3	---	**26,000**	**170**	3.7	---	2.2 +- 0.57
MW-107	06/16/11	**3.8**	**33**	0.6U	---	---	38	8.1 +- 3.7	0.9 +- 0.13
	07/27/12	0.78	0.11	---	---	---	---	---	---
MW-108	04/19/10	0.438	0.14 U	---	---	---	---	---	---
	Apr 2011	0.097	0.031 I	0.6 U	**1,400**	8.6	---	9.4 +- 3.3	0.8 +- 0.21
	07/27/12	0.024 I	0.018 I	---	**410**	7.7	---	---	---
	DESTROYED								

TABLE 3: GROUNDWATER ANALYTICAL DATA

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Ammonia Nitrogen (mg/L)	Nitrate (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L)	Radium 226 + 228 (pCi/L)
GCTL		**2.8**	**10**	**5**	**300**	**50**	**250**	**15**	**5**
NADSC		**28**	**100**	**50**	**3,000**	**500**	**2,500**	**150**	**50**
PMW-11	09/19/12	---	---	---	**1,600**	11	---	---	---
PMW-18	09/19/12	**7.7**	0.018U	---	**16,000**	---	1.1	---	---
	09/16/14	**8.7**	0.34	---	**15,000**	**290**	---	5.8 +- 4.3	---

Pre-2012 Data Sources:

HSA Engineers and Scientists – July 2008 Phase II ESA for Stock-McGinness Lumber

Cardno TBE - August 2011 Brownfield Site Assessment Report for Gro-Mor Bulk Fertilizer Plant

Cardno TBE - August 2011 Brownfield Site Assessment Report for Stock-McGinnes Lumber

GCTL = Groundwater Cleanup Target Level per Chapter 62-777, Table I of the Florida Administrative Code (F.A.C.)

NADSC = Natural Attenuation Default Source Concentration per Chapter 62-777, Table V of the F.A.C.

Red/Bold type indicates that the concentration exceeds FDEP Groundwater Cleanup Target Levels

I - (EPA) Estimated value below the lowest calibration point. Confidence correlates with concentration.

V -Indicates that the analyte was detected in both the sample and the associated method blank.

mg/L = milligrams per Liter

ug/L = micorgrams pe Liter

pCi/L = picocuries per Liter

--- = Not analyzed

TABLE 4: COC CONCENTRATION CHANGES IN KEY WELLS BETWEEN 2012 AND 2014

Facility Names: Former Gro-Mor Fertilizer Plant; Former Stock Building Supply / McGinnes Lumber Yard; Evers St Sites, Plant City Florida

Facility ID: Gro Mor (BF291002002) and Stock-McGinnes (BF 291002001)

Sample ID	Date Collected	Nitrate (mg/L)	Ammonia Nitrogen (mg/L)	Cadmium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Sulfate (mg/L)	Gross Alpha (pCi/L))	Radium 226 + 228 (pCi/L)
GCTL		10	2.8	5	300	50	250	15	5
NADSC		100	28	50	3,000	500	2,500	150	50
MW-1	07/17/12	1,100	1,300	30					
MW-1R	09/18/14	950	460	3.8					
	Percentage Change Over 2 Years	-13.6%	-64.6%	-87.3%					
MW-4R	07/16/12	1,700	1,000	18					
	09/18/14	1,600	1,100	11					
	Percentage Change Over 2 Years	-5.9%	10.0%	-94.8%					
MW-15	07/26/12	650	420	11	500	2,100	920	100 +- 4.7	15.6 +-1.18
	09/18/14	140	100	0.93	1,900	2,400	760	48 +- 7.1	12.7 +- 0.89
	Percentage Change Over 2 Years	-78.5%	-76.2%	-91.5%	280.0%	14.3%	-17.4%	-52.0%	-18.6%
MW-16	07/26/12	2,000	2,200	15		2,200	3,800	79 +- 4.2	7.7 +- 0.96
	09/18/14	0.54	1,700	12		1,900	250	35 +- 3.2	15.2 +- 1.07
	Percentage Change Over 2 Years	-99.97%	-22.7%	-20.0%		-13.6%	-93.4%	-43.0%	104.2%
MW-101	07/26/12	110	120		18	91	360	24 +- 5.3	10.3 +- 0.97 U
	09/18/14	120	200		180	160	360	74 +- 4.2	37.6 +- 1.1U
	Percentage Change Over 2 Years	9.1%	66.7%		900.0%	75.8%	0.0%	208.3%	306.8%
MW-106	07/27/12		5.5		38,000	230			1.5 +- 0.22
	09/16/14		2.0		26,000	170			2.2 +- 0.57
	Percentage Change Over 2 Years		-63.6%		-31.6%	-26.1%			40.0%

2012 Total Concentration in Key Wells	5,560	5,046	74	38,518	4,621	5,080	203	35
2014 Total Concentration in Key Wells	2,811	3,562	28	28,080	4,630	1,370	157	68
Change in Concentrations	**-2,749**	**-1,484**	**-46**	**-10,438**	**9**	**-3,710**	**-46**	**33**
2-Year Average Percentage Change Based on Concentration in Key Wells	-49.5%	-29.4%	-62.5%	-27.1%	0.2%	-73.0%	-22.7%	92.9%
Annual Average Percentage Change Based on Concentration in Key Wells	-24.7%	-14.7%	-31.3%	-13.5%	0.1%	-36.5%	-11.3%	46.4%

Key wells selected from plume areas at Gro-Mor (MW-1R and MW-4R), Village Green Park (MW-15 and MW-16) and Stock Parcel D (MW-101 and MW-106)

Attachment I

UF UNIVERSITY of FLORIDA

Center for Environment & Human Toxicology

PO Box 110885
Gainesville, FL 32611-0885
352-392-2243 Tel
352-392-4707 Fax

September 1, 2015

Brian Dougherty, PhD
Office of District and Business Support
Division of Waste Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Calculation of an alternative groundwater cleanup target level for un-ionized ammonia

Dear Dr. Dougherty:

At your request, we have calculated alternative groundwater cleanup target levels (AGCTL) for total ammonia based on water temperature and pH. As you know, calculation of an AGCTL necessitates consideration of exposure from oral, dermal, and inhalation pathways (Chapter 62-780, FAC). The GCTL equation promulgated in Chapter 62-777, FAC calculates a criterion for groundwater based on the oral route, but does not consider other routes of exposure. The FDEP has not specified a preferred methodology for calculating exposure for the inhalation and dermal routes from groundwater. Therefore, to aid our calculation, we utilized the USEPA regional screening level (RSL) tap water equation, which includes exposure from the inhalation and dermal routes.

We reviewed current toxicity values available for ammonia using the hierarchy of toxicity sources promulgated in Chapter 62-780, FAC. No oral reference dose (RfD_o) is currently available for ammonia. An inhalation reference concentration (RfC) of 0.1 mg/m^3 is available from the USEPA's IRIS database.[1] This value was based on a lack of decreased pulmonary function or changes in subjective symptomatology in humans (USEPA, 1991). As this effect is route specific to inhalation, an RfD_o cannot be extrapolated from the RfC. Without an oral reference dose, the toxicity from exposure by the oral and dermal routes cannot be estimated. While it is possible for ammonia to cause direct irritation of the skin due to its alkaline properties, quantitative data are lacking and it is not possible to calculate with any certainty the concentration of ammonia in groundwater that would cause irritation from direct contact (ATSDR, 2004). Therefore, the AGCTL was calculated based on inhalation exposure to ammonia volatilized from groundwater.

[1] The USEPA has recently proposed an updated RfC of 0.3 mg/m^3, but this has not been approved or posted on IRIS. The time frame for completing this update is unknown.

To calculate an AGCTL for total ammonia, it was first necessary to estimate the risk-based concentration of un-ionized ammonia that would be of concern (since this is the fraction that will volatilize). We utilized the USEPA equation for tap water for non-carcinogenic effects by the inhalation route to calculate a risk-based concentration for un-ionized ammonia (Figure 1). Calculation of an AGCTL under Chapter 62-780, FAC also requires the consideration of sensitive sub-populations. Because ammonia is a non-carcinogen, children are the appropriate receptor of concern.

Figure 1: USEPA RSL equation for inhalation exposure from tap water for a non-carcinogen

$$NH_3\left(\frac{\mu g}{L}\right) = \frac{THQ \times AT \times CF}{EF \times ED \times ET \times \left(\frac{1\,day}{24\,hours}\right) \times \left(\frac{1}{RfC}\right) \times K}$$

Parameter	Definition (units)	Default Value
NH_3	un-ionized ammonia (µg/L)	--
THQ	target hazard quotient	1
AT	child averaging time (days)	2190
CF	conversion factor (µg/mg)	1000
EF	exposure frequency (d/y)	350
ED	exposure duration (years)	6
ET	resident water exposure time (hours/day)	24
RfC	inhalation reference concentration (mg/m^3)	0.1
K	Andelman Volatilization Factor (L/m^3)	0.5

The risk-based concentration of un-ionized ammonia was calculated as:

$$NH_3\left(\frac{\mu g}{L}\right) = \frac{1 \times 2190 \times 1000}{350 \times 6 \times 24 \times \left(\frac{1\,day}{24\,hours}\right) \times \left(\frac{1}{0.1}\right) \times 0.5}$$

$$NH_3\left(\frac{\mu g}{L}\right) = 208.57\ (rounded\ to\ 210)$$

In groundwater, ammonia concentrations are reported as total ammonia. The reported value is the sum of both the un-ionized (NH_3) and ionized (NH_4^+) forms. The FDEP has a manual for the calculation of un-ionized ammonia based on total ammonia concentrations in fresh water, pH, and temperature (FDEP, 2001). The concentration of unionized ammonia can be calculated using the FDEP Unionized Ammonia Calculator v1.2 or using the equations below. Based on the methodology presented in the FDEP manual, the mole fraction of un-ionized ammonia is calculated using the following equations:

$$f = 1/(10^{(pKa-pH)} + 1)$$

$$pKa = 0.0901821 + 2729.92/T_k$$

$$T_k = °C + 273.2$$

where:
f = the mole fraction of un-ionized ammonia
T_k = temperature in degrees Kelvin
°C = temperature in degrees Celsius

The mole fraction of un-ionized ammonia is used to determine the concentration of un-ionized ammonia using the following equation:

$$Ammonia_{total} \times f \times \left(\frac{17}{14}\right) = NH_3$$

where:
$Ammonia_{total}$ = total ammonia (μg/L)
NH_3 = un-ionized ammonia (μg/L)

Table 1 (attached) lists AGCTLs for total ammonia based on a range of common pH values and temperatures for Florida groundwater. The AGCTLs listed in Table 1 do not consider organoleptic effects. The odor threshold for total ammonia in tap water is 1,500 μg/L and for taste is 35,000 μg/L (ATSDR, 2004). Based on Table 1, the risk-based concentration of total ammonia will likely exceed the odor threshold and will exceed the taste threshold at pH less than 7.0.

Because the concentration of un-ionized ammonia increases with water temperature, showering/bathing represents an acute exposure scenario where residents are exposed for short periods of time to relatively higher concentrations of un-ionized ammonia in air. We could not find any published data regarding the average temperature of water used for showering. However, 120°F (48.9°C) is considered a safe hot water temperature (Shields et al., 2013). Exposure to 48.9°C water takes 10 minutes to cause a serious burn and therefore can be used as the maximum likely shower temperature (Shields et al., 2013). Using the equations above, at water temperature of 48.9°C and a pH of 7.5 (chosen because it produces the largest fraction of un-ionized ammonia), the fraction of un-ionized ammonia available for inhalation would be 7.9%. The maximum airborne concentration of ammonia below which it is believed nearly all individuals could be exposed for up to one hour without experiencing anything other than mild, transient effects or without perceiving a defined odor is 25 ppm (AIHA, 2015). Using maximum allowable air concentration of 25 ppm for un-ionized ammonia and a water temperature of 48.9°C results in an acute AGCTL of 260,000 μg/L. Therefore, the AGCTLs in Table 1 were limited to a maximum concentration of 260,000 μg/L to protect against acute exposures.

Please let us know if you have any questions regarding the derivation of this AGCTL.

Sincerely,

Leah D. Stuchal, Ph.D.

Hannah M. Neeley, MPH

Stephen M. Roberts, Ph.D.

References:

AIHA (2015) *2015 ERPG Levels.* American Industrial Hygiene Association, Emergency Response Planning Guidelines, Falls Church, VA.

ATSDR (2004) *Toxicological Profile for Ammonia.* US Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry.

FDEP (2001) *Calculation of Un-Ionized Ammonia in Fresh Water.* Florida Department of Environmental Protection, Chemistry Laboratory Methods Manual, Tallahassee.

Shields, WC, McDonald, E, Frattaroli, S, Zhu, J, Perry, EC, and Gielen, AC. (2013) Still too hot: Examination of water temperature and water heater characteristics 24 years after manufacturers adopt voluntary temperature setting. *J Burn Care Res.* 34(2): 281-287.

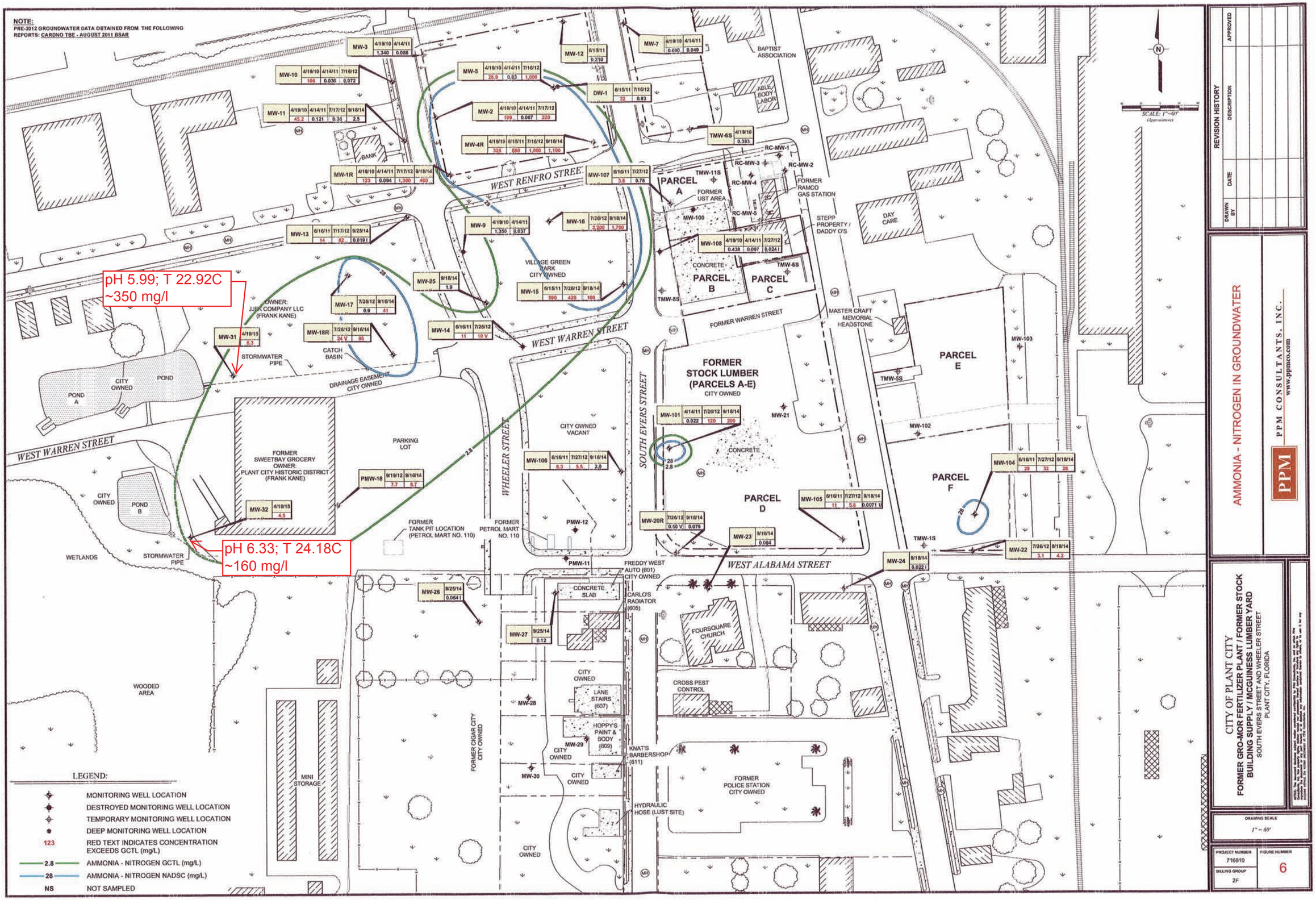
USEPA (1991) *Ammonia (CASRN 7664-41-7).* United States Environmental Protection Agency, Integrated Risk Information System, http://www.epa.gov/iris/subst/0422.htm

Table 1 – AGCTLs in µg/L (ppb) for total ammonia based on a range of common pH and temperatures for Florida groundwater

pH	20°C	21°C	22°C	23°C	24°C	25°C	26°C	27°C	28°C	29°C	30°C
5.5	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*
5.6	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*
5.7	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*
5.8	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*
5.9	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*
6.0	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	260,000*	250,000	230,000	210,000
6.1	260,000*	260,000*	260,000*	260,000*	260,000*	240,000	230,000	210,000	200,000	180,000	170,000
6.2	260,000*	260,000*	240,000	220,000	210,000	190,000	180,000	170,000	160,000	150,000	130,000
6.3	220,000	200,000	190,000	180,000	160,000	150,000	140,000	130,000	120,000	120,000	110,000
6.4	170,000	160,000	150,000	140,000	130,000	120,000	110,000	110,000	98,000	92,000	86,000
6.5	140,000	130,000	120,000	110,000	100,000	96,000	90,000	84,000	78,000	73,000	68,000
6.6	110,000	100,000	95,000	88,000	82,000	77,000	71,000	67,000	62,000	58,000	54,000
6.7	87,000	81,000	75,000	70,000	65,000	61,000	57,000	53,000	49,000	46,000	43,000
6.8	69,000	64,000	60,000	56,000	52,000	48,000	45,000	42,000	39,000	37,000	34,000
6.9	55,000	51,000	48,000	44,000	41,000	38,000	36,000	33,000	31,000	29,000	27,000
7.0	44,000	41,000	38,000	35,000	33,000	31,000	28,000	27,000	25,000	23,000	22,000
7.1	35,000	32,000	30,000	28,000	26,000	24,000	23,000	21,000	20,000	18,000	17,000
7.2	28,000	26,000	24,000	22,000	21,000	19,000	18,000	17,000	16,000	15,000	14,000
7.3	22,000	20,000	19,000	18,000	17,000	15,000	14,000	13,000	13,000	12,000	11,000
7.4	18,000	16,000	15,000	14,000	13,000	12,000	11,000	11,000	10,000	9,300	8,700
7.5	14,000	13,000	12,000	11,000	10,000	9,800	9,200	8,500	8,000	7,500	7,000

* - acute exposure AGCTL

AGCTLs were calculated using an f value rounded to 5 significant digits and an un-ionized ammonia concentration of 210 µg/L


NOTE:
PRE-2012 GROUNDWATER DATA OBTAINED FROM THE FOLLOWING REPORTS: CARONO TBE - AUGUST 2011 BSAR
pH 5.99; T 22.92C
~350 mg/l
pH 6.33; T 24.18C
~160 mg/l
WEST RENFRO STREET
WEST WARREN STREET
WEST ALABAMA STREET
WHEELER STREET
SOUTH EVERS STREET
FORMER WARREN STREET
PARCEL A
PARCEL B
PARCEL C
PARCEL D
PARCEL E
PARCEL F
FORMER STOCK LUMBER (PARCELS A-E)
CITY OWNED
FORMER RAMCO GAS STATION
STEPP PROPERTY / DADDY O'S
DAY CARE
BAPTIST ASSOCIATION
ABLE BODY LABOR
BANK
VILLAGE GREEN PARK CITY OWNED
OWNER: JJBK COMPANY LLC (FRANK KANE)
STORMWATER PIPE
CATCH BASIN
DRAINAGE EASEMENT CITY OWNED
POND A
POND B
WETLANDS
WOODED AREA
FORMER SWEETBAY GROCERY OWNER: PLANT CITY HISTORIC DISTRICT (FRANK KANE)
PARKING LOT
FORMER TANK PIT LOCATION (PETROL MART NO. 110)
FORMER PETROL MART NO. 110
CITY OWNED VACANT
CONCRETE SLAB
FREDDY WEST AUTO (601) CITY OWNED
CARLO'S RADIATOR (605)
LANE STAIRS (607)
HOPPY'S PAINT & BODY (609)
KNAT'S BARBERSHOP (611)
HYDRAULIC HOSE (LUST SITE)
FOURSQUARE CHURCH
CROSS PEST CONTROL
FORMER POLICE STATION CITY OWNED
FORMER CIGAR CITY CITY OWNED
MINI STORAGE
MASTER CRAFT MEMORIAL HEADSTONE
FORMER UST AREA
CONCRETE
SCALE: 1"=60' (Approximate)
LEGEND:
MONITORING WELL LOCATION
DESTROYED MONITORING WELL LOCATION
TEMPORARY MONITORING WELL LOCATION
DEEP MONITORING WELL LOCATION
123 RED TEXT INDICATES CONCENTRATION EXCEEDS GCTL (mg/L)
2.8 AMMONIA - NITROGEN GCTL (mg/L)
28 AMMONIA - NITROGEN NADSC (mg/L)
NS NOT SAMPLED
REVISION HISTORY
DRAWN BY
DATE
DESCRIPTION
APPROVED
AMMONIA - NITROGEN IN GROUNDWATER
PPM CONSULTANTS, INC.
www.ppmco.com
PPM
CITY OF PLANT CITY
FORMER GRO-MOR FERTILIZER PLANT / FORMER STOCK BUILDING SUPPLY / MCGUINESS LUMBER YARD
SOUTH EVERS STREET AND WHEELER STREET
PLANT CITY, FLORIDA
DRAWING SCALE
1" = 60'
PROJECT NUMBER
716810
BILLING GROUP
2F
FIGURE NUMBER
6

Ground-Water Analytical Results , Total Ammonia
Combined Gro Mor & Stock-McGinnes Lumber

Sample		Ammonia Nitrogen	Temperature	pH	pKa	f	AGCTL *
Location	Date	(mg/L)	(°C)	(S.U.)		(mole fraction)	(mg/L)
MW-1R	9/18/2014	460	28.1	5.04	9.150653	0.000078	2,231
MW-2	7/17/2012	220	NA	NA			
MW-4R	9/18/2014	1100	29.9	4.65	9.096847	0.000036	4,839
MW-5	7/16/2012	1000	NA	NA			
MW-11	9/18/2014	2.5	30.5	6.44	9.079053	0.002291	76
MW-14	7/26/2012	10	NA	NA			
MW-15	9/18/2014	100	29.5	6.7	9.108748	0.003887	44
MW-16	9/18/2014	1700	27.6	5.59	9.165714	0.000266	651
MW-17	9/18/2014	41	26.9	5.85	9.186883	0.000460	376
MW-18R	9/18/2014	95	30.4	6.22	9.082013	0.001372	126
PMW-18	9/16/2014	8.7	33.1	6.47	9.002751	0.002924	59
MW-20R	9/16/2014	0.08	28.4	5.48	9.141641	0.000218	794
MW-22	9/18/2014	4.2	31.1	5.35	9.061329	0.000194	890
MW-23	9/16/2014	0.06	27.1	5.76	9.180825	0.000379	456
MW-24	9/18/2014	0.02	31.0	6.55	9.064278	0.003051	57
MW-25R	9/18/2014	1.9	28.2	6.75	9.147647	0.003987	43
MW-31	4/10/2015	6.3	22.92	5.99	9.309147	0.000479	361
MW-32	4/10/2015	4.5	24.2	6.33	9.269469	0.001148	151
MW-101	9/18/2014	200	30.5	5.9	9.079053	0.000662	261
MW-104	9/18/2014	26	34.6	5.27	8.959318	0.000204	846
MW-105	9/18/2014	0.007	32.3	6.12	9.026090	0.001240	139
MW-106	9/18/2014	2	29.2	6.18	9.117695	0.001153	150

* Alternative Groundwater Cleanup Target Level for Total Ammonia:

$$\text{Ammonia}_{total} \times f \times (17/14) = NH_3$$

calculated using the risk-based concentration for un-ionized ammonia (NH_3) of 210 µg/L and:

f = 1/(10^pKa-ph)+1

pKa = 0.0901821+2729.92/°C deg+273.2

Reference : FDEP (2001) *Calculation of Un-Ionized Ammonia in Fresh Water.* Florida Department of Environmental Protection, Chemistry Laboratory Methods Manual, Tallahassee

Shaded concentration exceeds AGCTL

NA - Not Available

Unionized Ammonia Calculator v1.2;
after original by Dr. Landon Ross
Florida Department of Environmental Protection

Enter values into yellow cells

pH (SU)	6.33
Temperature (°C)	24.18
Salinity (ppt)	0.28
Total ammonia (mg/L as N)	4.5

Unionized Ammonia (mg/L as NH3)	**0.006231**

See attached Groundwater sampling Log for MW-32 4-10-15

Form FD 9000-24

GROUNDWATER SAMPLING LOG

SITE NAME: GroMor-Stock, Plant City Brownfield Grant	SITE LOCATION: Evers St, Collins St, Plant City, Florida	
WELL NO: ~~MW-32~~ ~~MW-31~~ MW-31	SAMPLE ID: ~~MW-32~~ ~~MW-31~~ MW-32	DATE: 4-10-15

PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 1/8"	WELL SCREEN INTERVAL DEPTH: 2.0 ft to 12.0 ft	STATIC DEPTH TO WATER (feet): 3.34 ~~6.83~~	PURGE PUMP TYPE OR BAILER: Peristaltic

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (12 feet – ~~6.83~~ 3.34 feet) X 0.16 gallons/foot = 1.38 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): ~~8.8'~~ 8'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8'	PURGING INITIATED AT: 10:15	PURGING ENDED AT: 10:47	TOTAL VOLUME PURGED (gallons): 3.10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:26	1.50	1.50	0.14	4.24	6.27	23.92	509	3.18	8.88	None	None
10:29	0.42	1.92	0.14	4.26	6.27	23.91	520	3.15	7.51	"	"
10:32	0.42	2.34	0.14	4.27	6.28	24.00	536	3.13	7.00	"	"
10:35	0.16	2.50	0.05	4.29	6.28	24.05	545	3.02	6.98	"	"
10:38	0.15	2.65	0.05	4.33	6.29	23.98	556	3.06	6.77	"	"
10:41	0.15	2.80	0.05	4.33	6.30	24.14	554	2.95	5.59	"	"
10:44	0.15	2.95	0.05	4.36	6.32	24.20	569	2.87	4.87	"	"
10:47	0.15	3.10	0.05	4.36	6.33	24.18	571	2.78	4.58	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: PPM Consultants Daniel Glambrone / PPM	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 10:49	SAMPLING ENDED AT: 10:54
PUMP OR TUBING DEPTH IN WELL (feet): 8'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL. ADDED IN FIELD (mL)	FINAL pH			
~~MW-32~~ MW-32	1	PE	250 ml	HNO3	–	–	Iron, Manganese	APP	300
~~MW-32~~ MW-32	1	PE	125 ml	None	–	–	Nitrate	APP	300
~~MW-32~~ MW-32	1	PE	125 ml	H2SO4	–	–	Ammonia-Nitrogen	APP	300
~~MW-32~~ MW-32	1	PE	1000 ml	HNO3	–	–	Gross Alpha	APP	300

REMARKS: Final turbidity reading before iron & manganese sample – 4.40

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone, T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009