

Lockheed Martin Corporation


**2008 Groundwater Monitoring
Report**

Former American Beryllium Company Site

July 7, 2008



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Report**

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Company Site

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1. Introduction

Lockheed Martin Corporation (Lockheed Martin) has assumed responsibility for the assessment and cleanup of environmental impacts from the former American Beryllium Company (ABC) facility (Facility) located at 1600 Tallevast Road in Tallevast, Manatee County, Florida. A site location map showing the entire study area (site) is presented as **Figure 1-1** and a map of the surrounding vicinity is presented as **Figure 1-2**. These tasks are being conducted pursuant to the requirements detailed in Consent Order No. 04-1328 executed by and between Lockheed Martin and the Florida Department of Environmental Protection (FDEP), effective July 28, 2004. These assessment activities comply with applicable sections of Chapter 62-780, Florida Administrative Code (F.A.C.), and Section 376.30701 of the Florida Statutes.

Lockheed Martin acquired ownership of the former ABC facility through its 1996 acquisition of Loral Corporation, the parent company of ABC. Lockheed Martin ceased operations in 1997 and, in 2000, sold the former ABC facility to BECSO, LLC, which currently leases it to Lockheed Martin.

A Remedial Action Plan (RAP) was provided by Lockheed Martin on May 4, 2007 in accordance with applicable sections of Chapter 62-780, F.A.C., Contaminated Site Cleanup Criteria. The FDEP provided comments on the RAP in a letter dated July 27, 2007. In response to the FDEP comments on the RAP, on September 11, 2007 Lockheed Martin requested a time extension to respond to the RAP comments. Lockheed Martin proposed supplemental field activities in a meeting with the FDEP on September 27, 2007. In a letter dated October 2, 2007, the FDEP granted the extension request and stipulated the submission of an Interim Data Report to document progress on the proposed supplemental field activities. The proposed supplemental field activities are currently in progress.

1.1 Objectives

This 2008 Groundwater Monitoring Report (GWMR) presents potentiometric contour maps constructed using groundwater elevations measured during December 2007 and January 2008, and constituent of concern (COC) concentration maps constructed using analytical results for samples collected in January/February 2008. The 2008 Interim Data Report (IDR) (ARCADIS, February 2008) described the field work through early January 2008. Historical analytical results are provided and discussed. Data collection activities presented herein were described in two previously submitted work plans:

- Proposed Field Activities Scope of Work (SOW) dated October 5, 2007
- Proposed Pumping Test SOW dated November 16, 2007

1.2 Summary of Activities Included in 2008 GWMR

The groundwater monitoring program described in this report consists of the following primary activities:

- Interim Remedial Action Plan (IRAP) system shutdown and associated water level monitoring. The raw data associated with this task were presented in the IDR (ARCADIS, February 2008). This GWMR presents water level recovery maps associated with the IRAP system shutdown.
- Steady state comprehensive water level monitoring event. This task is referred to hereafter as the December 2007 Comprehensive Water Level Event. The raw data were presented in the IDR (ARCADIS, February 2008), and this GWMR presents potentiometric surface maps for the main monitored water bearing units.
- Arcadia Formation (AF) Gravel aquifer testing. The raw data associated with this task were presented in the IDR (ARCADIS, February 2008). Four AF Gravel wells (EW-UAFG-1, IWI-1, MW-134, and MW-127) were tested as part of this activity, with the most extensive test running fourteen days (seven days of pumping at well EW-UAFG-1 followed by seven days of recovery). The GWMR briefly presents calculated drawdown for each test, and a set of drawdown maps for the main water bearing units resulting from the extended test at well EW-UAFG-1.
- Steady state comprehensive water level monitoring event. This task is referred to hereafter as the January 2008 Comprehensive Water Level Event. Both the raw data and interpreted potentiometric surface maps are presented in this GWMR.
- 2008 Comprehensive Groundwater Sampling Event. The 2008 comprehensive groundwater sampling event was conducted in late January/early February 2008. The 2008 Sampling Event analytical data, associated maps, summaries, and interpretations are presented in this GWMR.

A map showing groundwater monitoring well and private well sample locations is provided as **Figure 1-3**.

1.3 Overview of Site Hydrogeology

The regional geology consists of three main lithostratigraphic units, which are further subdivided into hydrogeologic units and water-bearing zones for monitoring purposes. The regional lithostratigraphic units consist of undifferentiated surficial deposits, the Peace River Formation (PRF), and the Arcadia Formation (AF) (see **Figure 1-4**). The hydrogeologic systems are known as the surficial aquifer system (SAS), which consists of what has been defined as the Upper SAS (USAS) in previous reports. Beneath the SAS is the Intermediate Aquifer System (IAS). Characteristics of these systems are briefly described below.

- Surficial Aquifer System – the unconfined surficial aquifer overlying the Hawthorn Group.
 - USAS – the unconfined surficial aquifer, consisting of unconsolidated Pleistocene to recent siliciclastic sand units with up to 20% fines.
- IAS – the confined aquifers overlying the Floridan Aquifer System. This aquifer system is made up of strata from the Hawthorn Group, which is comprised of the PRF and the AF.
 - Lower Shallow Aquifer System (LSAS) – the uppermost portion of the PRF, the top of which is indurated limestone/calcareous rock known locally as the Hard Streak. The LSAS consists of a series of interbedded limestone, clay, and carbonate mudstone units. The LSAS is generally encountered around 30 feet below ground surface. Previously, the LSAS was defined as the “Lower Surficial Aquifer System”, and was considered part of the SAS. However, recent carbonate content and rock coring data indicate characteristics more consistent with the IAS. The unit itself has not changed since previous reports; rather, additional data has resulted in an updated understanding of its relationship to overlying and underlying aquifer systems.
 - Venice Clay – the lower portion of the PRF, consisting of siliciclastic to calcareous clays with a distinctive greenish-grey color.
 - IAS Clay/Sand Zone 1 – the uppermost subunit of the AF, consisting of a series of low-permeability carbonate mudstones.

- Upper AF “Gravels” (AF Gravel) – a fractured to vuggy carbonate unit located approximately 100 feet below ground surface in the AF. This unit is significantly more permeable than the overlying and underlying AF units, and is usually identified as “wet” in drilling logs.
- IAS Clay/Sand Zone 2 – a subunit of the AF, consisting primarily of low permeability carbonate mudstones.
- Salt & Pepper (S&P) Sand) – a subunit of the AF characterized by increased sand content and dark phosphatic sand grains, which give it a black and white speckled (salt and pepper) appearance. The S&P Sand is more permeable than the overlying and underlying units, but less permeable than the AF Gravel. It is generally found approximately 145 feet below ground surface and is up to 12 feet thick.
- IAS Clay/Sand Zone 3 & 4 – a subunit of the AF, consisting of a series of low-permeability calcareous mudstones.
- Lower AF Sand – a subunit of the AF consisting of carbonate rocks containing an increased percentage of sand sized particles and located approximately 280 feet below ground surface.

In addition to the SAS and IAS, the underlying Floridan Aquifer is monitored in a limited number of locations across the Facility and surrounding properties. The Floridan Aquifer system is a series of limestone to dolomite units which are used for local water supply and irrigation wells.

1.4 Description of Contaminants of Concern

The COCs at the Facility have been defined as 1,4-dioxane; trichloroethene (TCE); tetrachloroethene (PCE); cis-1,2-dichloroethene (cis-1,2-DCE); 1,1-dichloroethene (1,1-DCE); and 1,1-dichloroethane (1,1-DCA). The applicable criteria for each compound are the Florida Groundwater Cleanup Target Levels (GCTLs) and Natural Attenuation Default Criteria (NADC) as listed below.

Constituents of Concern	Groundwater Cleanup Target Levels (ug/L)		Natural Attenuation Default Criteria (ug/L)
	G-II Aquifer	Basis	
1,4-Dioxane	3.2	Minimum Criteria	320
PCE	3	Primary MCL	300
TCE	3	Primary MCL	300
Cis-1,2-DCE	70	Primary MCL	700
1,1-DCE	7	Primary MCL	70
1,1-DCA	70	Minimum Criteria	700

ug/L - Micrograms per liter

MCL – Maximum Contaminant Level

2. Annual 2008 Comprehensive Groundwater Sampling

ARCADIS was onsite at 1600 Tallevast Road on Monday January 21st to begin comprehensive groundwater monitoring and sampling. In teams of two, ARCADIS employees vented the wells in the morning, let the water level stabilize over several hours and then gauged the water level at each well. **Table 2-1** provides the well completion information and the January 2008 groundwater elevation measurements for each well. Most water level measurements were completed within two days (January 21 and 22, 2008); however, property access restrictions required some monitoring wells to be measured on subsequent dates (January 25 to 31, 2008). The groundwater elevations for December 2007 are also provided for comparison purposes, where available.

Groundwater sampling at ten extraction wells, 267 monitoring wells, 10 private wells, and seven piezometers began on Tuesday, January 22nd. Sampling activities were complete by February 4th. The following sections describe the sampling methods, laboratory analytical methods and data validation procedures. MW-203 and MW-218 were not sampled due to property access restrictions.

2.1 Sampling Methodology

Groundwater sampling was conducted in accordance with FDEP Standard Operating Procedure (SOP) methodologies (DEP-SOP-001/01, Revision Date: January 1, 2002). Purging and sampling were accomplished using a Geopump (peristaltic pump) and low flow purging and sampling techniques with dedicated tubing.

FDEP Groundwater Sampling Logs detailing the field measurement data and observations collected during purging and sampling activities are provided as **Appendix A**. Daily health and safety meetings were performed in the morning and periodically during the day, as needed. Field parameter monitoring equipment was calibrated each morning and afternoon.

At a minimum, one volume of the pump, associated tubing, and water quality meter with flow-through cell was pumped from each well prior to taking field parameters, as specified in FDEP SOP FS 2200, Groundwater Sampling. After the initial purge volume was removed, purging was continued and field parameters of pH, specific conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP) were measured periodically, based on volume removed, using a Horiba U22 water quality meter with flow-through cell. Turbidity was measured using a LaMotte

20/20 turbidimeter. Purging continued until three consecutive measurements were within the limits noted on the groundwater sampling log Form FD 9000-24. The volume removed between measurements was based on FDEP SOP for groundwater sampling.

ARCADIS collected 27 equipment blanks and 27 blind duplicate samples. Trip blanks accompanied each team's cooler during the day to demonstrate that collected samples were not cross-contaminated.

Samples were placed into insulated coolers and maintained at temperatures below 4 degrees Celsius. Coolers were sealed and delivered to Test America via courier each morning. The courier hand-delivered the coolers to Test America, Tampa, Florida under appropriate chain of custody procedures. Chain-of-Custody Forms are presented as **Appendix B**.

All groundwater purged during monitoring well sampling was disposed in the Facility's groundwater treatment system.

2.2 Laboratory Analytical Methods

Each monitoring well was sampled for the Volatile Organic Compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method 8260B. In addition, each well was sampled for 1,4-dioxane via USEPA Method 8260C Selective Ion Monitoring by Isotope Dilution (SIM ID). These analytical methods are alternatively called SW-846 Method 8260B and SW-846 8260C SIM ID. Unless otherwise specified, VOC analyses and 1,4-dioxane analyses were performed using these methods. Analytical data from the January 2008 sampling event are summarized in **Table 2-2**, and the Test America analytical laboratory reports are included in the Data Review summaries presented as **Appendix C**.

2.3 Data Validation/ QC Summary

Data were qualified based on the data quality review and all the COC analytical data associated with the January/February 2008 sampling event are usable for the intended purpose. Data review and verification were performed in accordance with *Organic USEPA National Functional Guidelines* (October 1999 and January 2005) and *USEPA*

Region II SOP HW-24, revision 2 (October 2006) Validating Volatile Organic Compounds by SW-846 Method 8260B was also used to supplement the data review process. Details of the data review and verification are presented in the validation report and Data Review summaries provided in **Appendix C**.

3. Groundwater Monitoring Results

The following sections discuss the results of aquifer testing activities, steady state groundwater elevation monitoring, and groundwater sampling. The methods employed in gathering the data were described in detail in the IDR (ARCADIS, February 2008).

3.1 Aquifer Testing Results

This section describes the results of the IRAP system shutdown and AF Gravel aquifer testing activities. These activities were performed as part of the field work for the revised RAP document. The IRAP system was shut down to allow the groundwater system to reach steady state conditions prior to performing the AF Gravel aquifer testing. In addition, the IRAP system shutdown allowed direct measurement of the area influenced by IRAP system operation.

As described in detail in the IDR, there were several goals for the aquifer testing in the AF Gravel. The relationship of each goal to the aquifer testing results is as follows:

- Provide quantitative hydraulic data for incorporation into the 3D modeling. The Groundwater Flow and Transport Model – Interim Report (GeoTrans, March 19, 2008) provided details regarding how the aquifer test data was incorporated into the calibration of the steady state 3D groundwater flow model.
- Determine the degree of hydraulic connection between the LSAS and AF Gravel units, under controlled test conditions with measured flow rates. The drawdown table and maps presented below illustrate the manner in which this goal was achieved.
- Attempt to produce responses that could help identify the location of the former Facility production well. Drawdown was measured in many of the LSAS wells on-Facility during the AF Gravel pumping test. However, there was insufficient resolution on the potentiometric maps to indicate the location of the former production well.

The raw data from the IRAP system shutdown and AF Gravel aquifer testing activities is presented in the IDR (ARCADIS, February 2008). The calculated water level changes for each event are summarized in **Table 3-1**. The changes in potentiometric surfaces due to these activities are described in more detail below. The full details of aquifer testing analysis and results will be presented in the revised RAP document.

3.1.1 Recovery Due to IRAP System Shutdown

The IRAP system was shut down on November 13, 2007. The approximate maximum recovery for each transducer location is listed in **Table 3-1**. Recovery was observed in two zones: the LSAS and the USAS. The observable zone of influence was measured from the centerline of the extraction array to the estimated point where less than 0.1 feet of response to system shutdown was observed in transducer data.

- USAS. The calculated potentiometric recovery in the USAS is shown in **Figure 3-1A**. The IRAP system's observable zone of influence in the USAS, based on the data gathered from transducers, extended approximately 150 feet from the extraction wells.
- LSAS. The calculated potentiometric recovery in the LSAS is shown in **Figure 3-1B**. The IRAP system's observable zone of influence in the LSAS, based on the data gathered from pressure transducers, extended beyond the monitored wells to the north, west, and east. This represents a radius of over 600 feet in these directions. The extent was somewhat less to the south.

The data from the IRAP system shutdown indicates that the IRAP zone of influence just prior to shutdown was smaller in the USAS than in the LSAS.

3.1.2 Drawdown Due to AF Gravel Aquifer Testing

The AF Gravel aquifer testing consisted of tests at five different wells located on the Facility and screened in the AF Gravel zone. The methods employed during each test and the raw data files were presented in the IDR (ARCADIS, February 2008). During each aquifer test, transducers were installed in the pumped well and 51 additional monitoring and stilling wells at and near the Facility, as shown in **Table 3-1**.

As part of the aquifer testing work plan, seven piezometers (PZ-LSAS-1 through 7) were installed in the LSAS on the Facility. These piezometers were screened immediately below the hard streak. Many of the pre-existing LSAS monitoring wells at the Facility were screened near the base of the LSAS, just above the Venice Clay. Thus, the piezometers provided water level monitoring data in the uppermost portion of the LSAS, and the previously installed monitoring wells provide data for the bottom portion of the LSAS. It was observed that there was a marked difference between the drawdown responses in the uppermost five or so feet of the LSAS, compared to the lower portion of the LSAS. This phenomenon is apparently due to the strong vertical

gradients and finely laminated lithology of the LSAS. Thus, for purposes of hydrogeologic data analysis, the uppermost LSAS data has been contoured on a separate map than the lower LSAS.

In brief, five AF Gravel wells were tested: DW-1, EW-UAFG-1, IWI-1, MW-127, and MW-134.

- **Slug Test in DW-1.** A slug test was performed in well DW-1. This slug test resulted in a calculated hydraulic conductivity value of $1.3E-5$ centimeters per second (cm/s), using the Bouwer and Rice (1976) method for slug test analysis. The printout from AQTESOLV (Duffield, 1996) is included as **Figure 3-2**.
- **Specific Capacity Tests.** **Table 3-1** shows the calculated drawdown resulting from 1-hour specific capacity tests on wells MW-134, IWI-1, MW-127, and EW-UAFG-1. Pumping rates ranged from 1.3 to 5.6 gallons per minute (gpm). The specific capacity tests were used to estimate the appropriate pumping rates for the longer-term aquifer tests.
- **24-Hour Pumping Tests.** Wells IWI-1, MW-127, and MW-134 were pumped separately for 24 hours, then allowed to recover for at least 24 hours prior to beginning extraction at the next well. Pumping rates ranged from 2.0 to 2.5 gpm. **Table 3-1** shows the calculated drawdown resulting from each test.
- **7-Day Pumping Test.** Well EW-UAFG-1 was pumped for seven days, and allowed to recover for seven days. **Table 3-1** shows the calculated drawdown resulting from extraction in well EW-UAFG-1 at a rate of 5.6 gpm. The calculated drawdown values were adjusted to account for offsite influences observed during the pumping test; the full details and rationale behind the adjustment process will be presented in the revised RAP document. Drawdown was observed in three zones: USAS (only MW-36), LSAS, and AF Gravel. Monitored wells in zones underlying the AF Gravel (such as the S&P Sand) did not show a response to the AF Gravel pumping.
 - USAS. Upon initial observation, there appeared to be some slight observable drawdown in the USAS. However, analysis of the data preceding the pumping test indicated that water levels in the USAS were already on a downward trend. Hence, the cessation of pumping was used as a marker to determine which wells responded: If a well showed no change in the data trend (i.e., there was no evidence that

recovery began) after the shutoff of well EW-UAFG-1, then it was considered to be unaffected by the pumping. By this metric, only the closest well (MW-36) showed a measureable, though extremely small, response (0.04 feet = 0.5 inch). Hence, no drawdown map has been constructed for the USAS.

- Uppermost LSAS. The drawdown in the uppermost LSAS is shown on **Figure 3-3A**. The transducer-instrumented piezometers and wells that are in the uppermost portion of the LSAS are PZ-LSAS-1 through 7, EW-104, EW-106, and EW-110. The maximum observed drawdown of 0.92 feet was at well EW-106.
- Lower LSAS. The drawdown in the lower LSAS is shown on **Figure 3-3B**. All instrumented wells in this zone responded, with drawdown responses ranging from 1.12 to 2.79 feet.
- AF Gravel. The drawdown in the AF Gravel zone is shown on **Figure 3-3C**. All instrumented wells in this zone responded, with responses ranging from 37 feet at the pumped well to 2.94 feet at well MW-133, which was nearly 700 feet away.

The drawdown measured in the LSAS during the AF Gravel aquifer testing indicates that pressure responses were transmitted upward through the Venice Clay and into the LSAS. The persistent and sizeable response observed in the LSAS during the AF Gravel aquifer testing events indicates that there may be a natural connection between the units in addition to the connection due to boreholes of private wells, which were abandoned prior to this aquifer testing. The natural connections may be caused by local zones of higher vertical hydraulic conductivity as a result of natural variations in lithology in the carbonate rocks of the Hawthorn formation. This hydraulic connection is represented in modeling efforts by GeoTrans (2008).

3.2 Surface Water and Groundwater Elevation Measurements

Two comprehensive water level events were conducted during the time period covered by this GWMR: December 3-7, 2007 and January 21-31, 2008. The groundwater elevations collected during these water level measurement events are shown in **Table 2-1**. Access restrictions ultimately resulted in some limitations on the data collection efforts off-Facility. **Table 2-1** indicates the locations with special access agreements. Historical groundwater elevation data is summarized in **Appendix D**.

This GWMR presents potentiometric surface maps and analysis for the USAS, uppermost LSAS, lower LSAS, AF Gravel, S&P Sand, Lower AF, and Floridan aquifer zones. An effort has been made to incorporate groundwater elevation data on the contoured maps from every well measured. However, in some cases, not every data point could be contoured. Cases in which data were plotted on the map but not used in contouring are noted on the maps. The primary case where data were not included in contouring occurred during the January 2008 monitoring event. During that monitoring event, the IRAP extraction system was briefly turned on for testing at the same time that water level measurements were collected from some wells located on the Facility, resulting in lower hydraulic head measurements in some Facility wells.

The following sections describe the potentiometric surface maps. Salient features of each map are pointed out, and explanations for these features are provided where possible.

3.2.1 USAS Groundwater Elevation Maps

Figures 3-4A and B show the USAS potentiometric surface in December 2007 and January 2008. The surface water elevations in ponds and stilling wells were contoured with the USAS groundwater elevations where appropriate, since the surface water bodies are believed to act as recharge and discharge points to the USAS.

Groundwater elevations ranged from 11.68 to 27.19 feet mean sea level (ft msl) in the December 2007 event, and from 11.83 to 27.09 ft msl in the January 2008 water level measurement event. The lowest hydraulic head occurred at MW-208, in the southeast portion of the contoured area near the Pearce Canal. The USAS potentiometric surface during both measurement events shows a groundwater high beneath the Facility and extending onto the golf course. The horizontal component of groundwater flow is therefore radial, away from the Facility with an approximate gradient of 0.003 to 0.007 feet per foot (ft/ft). However, the primary component of hydraulic gradient is vertical. The average downward gradient from the USAS to the LSAS (not including the uppermost portion of the LSAS) across the monitored area is 0.23 ft/ft, with a downward gradient of approximately 0.3 ft/ft at the Facility.

Some notable features of the USAS potentiometric surface are:

- Groundwater high beneath the golf course and the Boothe pond. The groundwater high under the golf course is likely due to increased recharge in the vicinity of the golf course. The groundwater high beneath the Boothe pond (Stilling Well-3) may be due the pond collecting surface water drainage and thus acting as a recharge feature.
- Groundwater high beneath the Facility. The facility and immediate vicinity are located on a topographic high. The Facility and immediate vicinity are also located in the middle of a regional recharge area between discharge boundaries (ARCADIS-BBL 2007, GeoTrans 2008).
- Potentiometric lows near some ponds and the Tallevast Road ditch. Some of the local ponds and the Tallevast Road ditch appear to act as discharge zones for the USAS. The drainage ditch along Tallevast road and the east side of the airport have the lowest land surface elevations in the contoured area. The water elevation measured at Staff Gauge-7 (installed in the invert of the ditch along Tallevast Road) was approximately 8.4 ft msl, which is three feet lower than the lowest groundwater elevation.

3.2.2 Upper LSAS Groundwater Elevation Maps

Figures 3-5A and B show the uppermost LSAS potentiometric surface in December 2007 and January 2008. Hydraulic heads in the upper portion of the LSAS range from 24.64 to 26.52 ft msl in the December 2007 monitoring event, and from 24.90 to 25.45 ft msl (excluding operating extraction well data) in the January 2008 monitoring event. Limited data points are in the uppermost LSAS; however, the data indicate general flow directions that are consistent with other zones, away from a potentiometric high below the Facility. The wells in this zone are screened just below the interface between the USAS and LSAS, and the downward gradient from the USAS to the uppermost portion of the LSAS is approximately 0.09 ft/ft, as measured between MW-36 and PZ-LSAS-4.

3.2.3 Lower LSAS Groundwater Elevation Maps

Figures 3-6A and B show the lower portion of the LSAS potentiometric surface in December 2007 and January 2008. The hydraulic heads in the lower portion of the LSAS range from 8.44 to 25.61 ft msl in December 2007, and from 8.09 to 25.70 ft msl

in the January 2008 event. In both cases, the highest heads were at well MW-87 (on the golf course), and the lowest heads were at well MW-209 (600 feet south of the contoured area). The lowest contoured hydraulic heads were at well MW-178, located in the northwest corner of the contoured area. The horizontal component of groundwater flow is again radial, away from the Facility. The horizontal gradient ranges from approximately 0.002 to 0.02 ft/ft, depending on direction. The average vertical gradient is approximately 0.07 ft/ft downward to the AF Gravel.

Some notable features of the lower portion of the LSAS potentiometric surface are:

- Groundwater high beneath the golf course. The groundwater high under the golf course is likely due to increased recharge from the golf course.
- Groundwater high beneath the Boothe pond. The groundwater high beneath the Boothe pond may be due to increased recharge from the Boothe pond itself. This explanation is supported by the fact that the USAS and LSAS wells adjacent to the Boothe pond (MW-141 and 142) have very similar hydraulic heads. The similar heads in the two zones suggest that there is a better hydraulic connection between the zones in the vicinity of the Boothe pond,
- Groundwater low near the east parking area of the Facility. There is a small, shallow groundwater low located near the east parking area of the Facility.

3.2.4 AF Gravel Groundwater Elevation Maps

Figures 3-7A and B show the AF Gravel potentiometric surface in December 2007 and January 2008. The hydraulic heads in the AF Gravel ranged from 5.71 to 15.89 ft msl in December 2007, and from 6.21 to 15.48 ft msl in January 2008. In both events, the lowest head was at well MW-247, located in the northwest corner of the contoured area. The highest heads occurred at the Facility and at well MW-232 located just north of the Facility. The horizontal component of groundwater flow is radial, away from the Facility. The horizontal gradient ranges from approximately 0.002 to 0.01 ft/ft, with the strongest gradients toward the north and northwest. Horizontal gradients are smaller toward the east and south. The vertical gradient is downward from the AF Gravel to the S&P Sand in the vicinity of the Facility and toward the northwest, with the maximum gradient of approximately 0.07 ft/ft located near the facility. However, the vertical gradients are upward from the S&P Sand to the AF Gravel in the eastern, southern, and northeastern portion of the contoured area, with a maximum gradient of -0.07 ft/ft.

The main feature of the AF Gravel potentiometric surface is a groundwater high beneath the Facility and golf course area, with radial flow horizontally away from these areas. The Facility and immediate vicinity are located in a regional recharge area between discharge boundaries (ARCADIS-BBL 2007, GeoTrans 2008).

Well DW-1 had an anomalously high hydraulic head in both events discussed here, as well as in previous monitoring events. As noted in the IDR (ARCADIS, February 2008), well DW-1 is suspected to be screened in the IAS Clay/Sand Zone 1, which directly overlies the AF Gravel, rather than in the AF Gravel.

3.2.5 S&P Sands Groundwater Elevation Maps

Figures 3-8A and B show the S&P Sands potentiometric surface in December 2007 and January 2008. The hydraulic heads in the S&P Sands ranged from 6.17 to 13.21 ft msl in the December 2007 event, and from 6.18 to 12.83 ft msl in the January 2008 event. The lowest heads were consistently in the northwest corner of the contoured area, and the highest heads were in the southern portion of the contoured area. The horizontal component of groundwater flow is toward the north, west, and east away from the Facility. The horizontal gradient ranges from approximately 0.0005 to 0.003 ft/ft, with the strongest gradients toward the west and northwest. The vertical gradient at the Facility is slightly downward to the Lower AF Sands at 0.002 ft/ft. Across the contoured area as a whole, however, the vertical gradient is slightly upward from the Lower AF Sands to the S&P Sands at -0.003 ft/ft.

The main feature of the S&P Sands potentiometric surface is a groundwater high beneath the golf course area, and a groundwater low toward the northwest and west. The Facility and immediate vicinity are located in a regional recharge area between discharge boundaries (ARCADIS-BBL 2007, GeoTrans 2008).

3.2.6 Lower AF Sands Groundwater Elevation Maps

Figures 3-9A and B show the Lower AF Sands potentiometric surface in December 2007 and January 2008. Groundwater elevations in the Lower AF Sands ranged from 8.81 to 13.47 ft msl in December 2007, and from 9.78 to 13.33 ft msl in January 2008. The horizontal component of groundwater flow in the vicinity of the Facility is toward the northwest with a gradient of approximately 0.001 ft/ft. The vertical gradient is upward from the Floridan Aquifer System at an average of approximately -0.01 ft/ft. The main feature of the Lower AF Sands potentiometric surface is the overall lower lateral gradient as compared to shallower units.

3.2.7 Floridan Aquifer System Groundwater Elevation Maps

Figures 3-10A and B show the upper Floridan Aquifer potentiometric surface in December 2007 and January 2008. Based on the monitoring data from these two events, the groundwater flow direction varies over time. The horizontal gradient was 0.0003 ft/ft to the northeast in December 2007, and 0.0004 ft/ft to the southeast in January 2008. It is possible that the shift in gradient is due to groundwater extraction activities, since the Floridan Aquifer is locally used as a source of potable water.

3.3 Horizontal and Vertical Distribution of COCs

The following sections describe the horizontal and vertical distribution of COCs in the study area. Recent concentrations (results from the January 2008 sampling event) are compared with previous sampling results (as provided in the Historical Summary of Analytical Results tables of Appendix D-2 and D-4) to provide a historical perspective of the extent of impacts that have exceeded GCTLs. As such, the sections below specifically compare historical results in wells around the perimeter of each COC plume within each aquifer zone. In some cases, historical results of a few COCs in wells on the Facility are discussed below to provide a historical perspective of the area of highest concentrations on the Facility. Several points should be noted with respect to trends in COC concentrations and distribution:

- The method of 1,4-dioxane analysis was modified from USEPA 8270C to USEPA 8260C SIM ID, which was first used in October 2006 (between the preparation of the SARA 3 and RAP). Findings from studies conducted by FDEP and others in 2006 indicate Method 8260C SIM by isotope dilution provides better accuracy over a wider range of 1,4-dioxane concentrations than the previously approved methods. As a result, 1,4-dioxane concentrations analyzed since October 2006 provide a more reliable comparison than earlier results.
- The first monitoring wells were installed and sampled in 2001 and numerous wells have been installed and sampled over the years. Eleven monitoring wells were installed in late 2007 and early 2008. As a result, some wells have more historical results for comparison than others. Generally, the higher the well identification number, the more recent the well was installed and the fewer times it has been sampled. The eleven wells recently installed have only been sampled once so a historical comparison cannot be made.

- Figures presented in the May 2007 RAP showing COC concentrations and interpreted distributions included data from private water supply wells/systems that have since been abandoned. Private well construction details indicate that many private wells were screened across multiple zones, particularly the LSAS and AF Gravel. As a result, data from the private wells cannot be associated with discrete depth intervals as it can be from the discretely screened monitoring wells and comparisons between the two are not reliable.

For purposes of the discussion below, the “parent compounds” are considered to be 1,4-dioxane, TCE, and PCE, and “daughter compounds”, which are likely degradation products of the parent compounds, are cis-1,2-DCE, 1,1-DCE, and 1,1-DCA. All figures have been plotted using the contouring interval of the GCTL, 10x the GCTL, the NADC (which is 10x or 100x the GCTL, depending on the compound), and 10x the NADC.

As detailed below, concentrations of COCs in groundwater have decreased in some instances and increased in others. The overall distribution of COCs at monitoring wells in January/February 2008, however, was similar to that during the December 2006 monitoring event formerly used during the development of the May 2007 RAP (ARCADIS BBL, 2007).

Analytical data from the January 2008 sampling event are summarized in **Table 2-2**, and historical analytical data are presented in **Appendix D**.

As a convention, when discussing historical results below, concentrations in wells along the perimeter of impacts are presented in the following order: south, west, north and east.

3.3.1 COC Distribution in the USAS

The COC distribution in the USAS is shown on **Figures 3-11A through F**. Observed historical variations in distribution and concentrations of COCs are indicated below.

- 1,4-Dioxane. The distribution and concentration of 1,4-dioxane decreased in the southern portion of the contoured area. Concentrations in wells MW-73, MW-74 and MW-75, which are used to define the extent of COCs above GCTLs to the south and southwest, have decreased over the last three sampling events (October 2006, December 2006 and January 2008). The most recent concentrations detected in wells MW-73, MW-74 and MW-75 are

84 ug/L, 130 ug/L and 33 ug/L, respectively. Also, concentrations detected in well MW-100, to the southwest, fluctuate, but there is no upward or downward trend in the results. The concentrations detected at MW-100 in October 2006, December 2006 and January 2008 were 32 ug/L, 12 ug/L and 28 ug/L, respectively. Recent concentrations detected in wells MW-69 and MW-108, used to contour the extent of impacts to the northwest, and recent concentrations in wells MW-109 and MW-110, used to contour the extent of impacts to the north, are similar to concentrations detected in the December 2006 sampling event. The recent concentration detected in well MW-63 (6.7 ug/L), which is used to contour the extent of impacts to the northeast, has had no concentrations detected in past sampling episodes. No concentrations have been detected during any sampling event at wells MW-62 and MW-26, which are north and east (down gradient) of MW-63, respectively. Well MW-95 is used to contour the extent of impacts to the east. Concentrations in well MW-95 increased from 3 ug/L detected in December 2006 to 35 ug/L in January 2008. A concentration of 11 ug/L was detected in well MW-95 when it was first sampled in January 2005. No concentrations have been detected during any sampling event at well MW-107, which is east and down gradient of well MW-95.

- TCE. The extent of TCE above GCTLs to the south has decreased. TCE concentrations have been detected above GCTLs at wells MW-25 and MW-74 in previous sampling events, whereas, concentrations in the recent sampling event have been below GCTLs. TCE impacts above GCTLs do not extend northwest off the Facility. To the north, the recent concentration in well MW-67 (14 ug/L) is similar to concentrations detected in past sampling events. To the east, the recent concentration at well MW-64 (10 ug/L) is similar to concentrations detected in previous sampling events. Also to the east, the recent concentrations at well MW-27 (23 ug/L) is significantly lower than the range in concentrations detected in past sampling episodes (42 ug/L to 120 ug/L). The concentrations in most wells on the Facility were stable; however, some wells exhibited a significant decrease. Most notably, the recent concentration at well MW-42 (1,800 ug/L) is significantly lower than the highest concentration detected at this well (4,600 ug/L), which was sampled in January 2006, prior to initiating the operation of the groundwater IRAP system. One well on Facility, MW-40, has exhibited an increase in concentrations. The recent concentration in well MW-40 is 970 ug/L whereas the lowest concentration detected at this well was 137 ug/L in June 2005. The changes in concentrations exhibited in wells MW-40 and MW-42 are consistent with the

groundwater IRAP recovery system pulling COCs back towards their origin (near extraction wells) and ultimately removing COCs from the USAS. On the Facility, the area where TCE concentrations exceed the GCTLs is larger than the area where 1,4-dioxane exceeds the GCTLs. However, off the facility the area where TCE concentrations exceed the GCTLs is smaller than the area where 1,4-dioxane exceeds the GCTLs.

- PCE. To the south, concentrations detected at well MW-35 have fluctuated between 12 ug/L and 44 ug/L and the most recent concentration detected is 15 ug/L. PCE impacts above GCTLs do not extend north off the Facility. To the east, the recent concentration at well MW-27 is 79 ug/L, which is significantly lower than all the concentrations detected in previous sampling events. Also like TCE, PCE concentrations on Facility have fluctuated, likely a result of the influence of the groundwater IRAP recovery system. It is noted that newly installed well MW-254 at the Facility showed a higher concentration of PCE (11,000 ug/L) than was previously detected at the Facility. This well was located near the center of an area/subsurface volume that exhibited the highest electron capture detector response from membrane interface probes advance using direct push technology in late 2007 and early 2008. Similar to TCE, the area of PCE above GCTLs is also smaller than the area of 1,4-dioxane above GCTLs. Also like TCE, concentrations of PCE appear to have decreased.
- Cis-1,2-DCE. In the recent sampling event, only one well had a cis-1,2-DCE concentration that exceeded the GCTL, MW-42. Well MW-42 is located on Facility and the recent concentration detected is 83 ug/L, which is lower than most of the concentrations detected in previous sampling events.
- 1,1-DCE. There was an overall decrease in concentration and distribution of 1,1-DCE in the recent sampling event. To the south, the recent concentration at well MW-75 is 5.1 ug/L, which is below the GCTL and significantly less than the concentrations measured during the three previous sampling events, which ranged from 41 ug/L to 45 ug/L. To the southwest, the recent concentration at well MW-73 is similar to concentrations measured during previous sampling events, while the recent concentration at well MW-74 (37 ug/L) is significantly lower than the concentrations measured during previous sampling events, which ranged from 85 ug/L to 140 ug/L. To the north, the recent concentration at well MW-110 is similar to concentrations measured during previous sampling events, while the recent concentration at well MW-67 (41 ug/L) is

significantly lower than the concentrations measured during previous sampling events, which ranged from 88 ug/L to 150 ug/L. To the east, recent concentrations at wells MW-29 (7.5 ug/L) and MW-104 (25 ug/L) are similar to concentrations measured during previous sampling events in these wells, whereas the recent concentration at well MW-27 (120 ug/L) is significantly lower than the concentrations measured during previous sampling events, which ranged from 290 ug/L to 600 ug/L.

- 1,1-DCA. In the recent sampling event, only one well had a 1,1-DCA concentration that exceeded the GCTL, MW-74. In previous sampling events, several on Facility and off Facility wells had concentrations detected above GCTLs. Well MW-74 is located off Facility behind the Antique shop. The recent concentration detected is 82 ug/L, which is slightly higher than the GCTL and significantly lower than the range of concentrations measured during previous sampling events (130 ug/L to 300 ug/L).

3.3.2 COC Distribution in the LSAS

The COC distribution in the LSAS is shown on **Figures 3-12A through F**. Observed historical changes in concentrations and distribution of the COCs are indicated below.

- 1,4-Dioxane. Recent concentrations detected in wells MW-82 and MW-85, which are used to contour the extent of impacts to the south, reflect a stable trend when comparing concentrations from the latest three sampling events (i.e. October 2006, December 2006 and January 2008). While concentrations in samples collected from these wells prior to October 2006 are lower, it is important to point out, as discussed above, the analytical methodologies employed prior to October 2006 were different. Recent concentrations in wells MW-101, MW-106 and MW-220, which are south of wells MW-82 and MW-85, are below GCTLs as they have been in past sampling events. The recent concentration detected in well MW-98 (710 ug/L) is significantly lower than the two previous sampling episodes (1,200 ug/L and 900 ug/L) and indicates a decrease in concentration along the southwest edge of the contoured area. To the northwest, the recent concentration detected in well MW-68 is 16 ug/L, whereas the concentration detected in the previous sampling event (December 2006) was 4.3 ug/L. Recent concentrations in wells MW-152, MW-178, and MW-243, which are west and northwest (down gradient) of MW-68 are below GCTLs as they have been in past sampling events. To the north, concentrations in well MW-86 appear to be stable. The recent concentration in

well MW-86 is 13 ug/L and the highest concentration detected in previous sampling events was 18 ug/L, which was collected in December 2006. To the east, the recent concentration detected in well MW-91 is 85 ug/L and this appears to reflect a decreasing trend since October 2006 when the concentration was 130 ug/L. Again, while concentrations in samples collected from this well prior to October 2006 were somewhat lower, the analytical methodologies were different.

On the Facility, historical concentrations detected in wells MW-33, MW-37, MW-41 and MW-43, which are sampled quarterly since October 2006 as part of the groundwater IRAP operation, reflect fluctuating, but stable concentrations.

- TCE. Concentrations detected in well MW-85, which is used to contour the extent of impacts to the south, reflect a stable trend. Concentrations in this well have ranged between 2.1 ug/L and 9.4 ug/L and the most recent concentration is 7.6 ug/L. To the southwest, concentrations detected in well MW-98 have fluctuated between 7.7 ug/L and 73 ug/L and the latest concentration is 47 ug/L, which suggests the plume is relatively stable at this location. To the northwest, the recent concentration detected in well MW-68 is 5.2 ug/L. This recent concentration is slightly higher than the highest concentration detected in the previous sampling event (3.1 ug/L detected in the January 2006). To the north, the extent of impacts are defined by well MW-86 which continues to be non-detect. Impacts to the east appear stable, the concentrations in samples collected from well MW-91 have ranged from 3.5 ug/L to 22 ug/L and the most recent result is 16 ug/L. The area of TCE above GCTLs in the LSAS is similar to the area of 1,4-dioxane above GCTLs in the LSAS.

On the Facility, historical concentrations detected in wells MW-33, MW-37, MW-41 and MW-43, reflect fluctuating concentrations, which generally are higher since the groundwater IRAP recovery system has been operating. Similar to the USAS, the changes in concentrations exhibited in LSAS wells on Facility are consistent with the groundwater IRAP recovery system pulling COCs back towards their origin (near extraction wells) and ultimately removing COCs from the LSAS.

- PCE. To the south and southwest, recent concentrations at wells MW-78, MW-87 and MW-98 are within the range of concentrations detected in these

wells during previous sampling events. For example, the recent concentration detected at well MW-87, which is the most impacted well to the south or southwest, is 61 ug/L and the range of concentrations detected in previous sampling events was 63 ug/L to 150 ug/L. The area of PCE above GCTLs is much smaller than the area of 1,4-dioxane and TCE above GCTLs. PCE concentrations exceeding GCTLs exist primarily below the Facility and to the south and southwest under the golf course.

Concentrations detected in all wells have remained stable, except MW-33, which is on Facility and has a recent concentration of 140 ug/L, which is approximately two times higher than the highest concentration detected during previous sampling events. Well MW-33 is in close proximity to groundwater IRAP extraction wells and is influenced by the recovery system.

- Cis-1,2-DCE. Concentrations exceeding GCTLs exist primarily below the Facility and off Facility at nearby wells MW-78 and MW-79. While concentrations in wells have fluctuated some, the results do not show an upward or downward trend. For example, well MW-79 has concentrations ranging from 67 ug/L to 420 ug/L with the most recent concentration at 140 ug/L. Like PCE, the area of cis-1,2-DCE above GCTLs is much smaller than the area of 1,4-dioxane and TCE above GCTLs.
- 1,1-DCE. The area of 1,1-DCE impacts above GCTLs are slightly smaller than 1,4-dioxane above GCTLs impacts in the LSAS. The 1,1-DCE impacts do not extend as far to the northwest as 1,4-dioxane impacts. Concentrations in wells MW-82 and MW-85 are used to define the extent to the south. While concentrations have fluctuated in both these wells, the recent concentration at MW-82 (17 ug/L) is less than half the previous result (sampled in December 2006) and the recent concentration at MW-85 (92 ug/L) is essentially the same as the previous result. To the west, the recent concentration at MW-98 (480 ug/L) is considerably higher than the concentration in December 2006; however, it is similar to concentrations from all other previous sampling events. To the north, the recent concentration at MW-81 (78 ug/L) is almost two times higher than the concentration measured in the previous sampling event (December 2006). However, the concentrations in well MW-86, which is further north and down gradient of MW-81, has always been below the GCTLs and the recent concentration (1.8 ug/L) is less than half the previous concentration measured in MW-86. To the east, concentrations appear to be

stable in MW-77, the recent concentration is 20 ug/L, which is very similar to concentrations detected in most of the previous sampling events.

- 1,1-DCA. The extent of 1,1-DCA impacts are principally limited to the area south and southwest of the Facility. Wells where concentrations have been detected above GCTLs are similar (remained stable) over all sampling events, with one exception. To the west, concentrations detected at well MW-98 have ranged between 149 ug/L and 200 ug/L, except in December 2006 when the concentration detected was 35 ug/L.

3.3.3 COC Distribution in the AF Gravel

The COC distribution in the AF Gravel is shown on **Figures 3-13A through F**.

Observed changes in concentrations and distribution of COCs are indicated below.

- 1,4-Dioxane. Of all the COCs contoured in all the aquifer zones, the extent of 1,4-dioxane in the AF Gravel appears to fluctuate the most principally because of the low level of concentrations detected around the perimeter of impacts and the relatively high permeability of groundwater flow within the AF Gravel. Concentration detected in well MW-55, which is used to contour the extent of impacts to the south, reflect a stable trend that fluctuates between non-detect and 15 ug/L, illustrating the point made above. For example, the concentrations detected in MW-55 from the latest three sampling events, from oldest to newest, were 15 ug/L, 3 ug/L and 15 ug/L. To the west, the recent concentration detected at MW-130 is 92 ug/L, which is slightly more than the concentration detected in December 2006 (70 ug/L) and slightly less than the concentration detected in October 2006 (110 ug/L). To the north, recent concentrations detected at wells MW-135, MW-232 and MW-239 are similar to previous concentrations obtained from these wells indicating stable concentrations. To the east, the recent concentration detected at well MW-248 is 12 ug/L; however, no 1,4-dioxane was detected in the duplicate sample collected at this well.

Further to the east, there is a detached area of impacts based on concentrations detected in monitor wells MW-158 and MW-250 as well as private supply wells at 2105 and 2411 Tallevast Road. The highest concentration detected in this area was 120 ug/L at well MW-158, which was collected in October 2006. Since then the concentration appears to be decreasing, the recent concentration at MW-158 is 84 ug/L. The recent

concentration at MW-250 is 15 ug/L and is higher than the previous concentration detected (4.4 ug/L) in December 2006. The recent concentrations detected in private supply wells at 2105 and 2411 Tallevast Road are 96 ug/L and 22 ug/L, respectively. These recent results from both wells are higher than the concentrations detected in December 2006; however, the recent concentrations are similar to concentrations detected when the wells were first sampled in 2005 and early 2006. Recent results from all the AF Gravel wells surrounding this area are non-detect confirming the extent of the detached area.

- TCE. The area of TCE impacts above the GCTL in the AF Gravel are limited to wells on Facility and two wells northeast of the Facility, MW-132 and MW-135. The recent concentration at MW-132 is 3.7 ug/L, which is slightly higher than the GCTL. Results from all the previous sampling events at MW-132 have been non-detect. The recent concentration detected at MW-135 is 120 ug/L, which is similar to concentrations detected during previous sampling events conducted between October 2005 and October 2006. Concentrations detected in the sample and duplicate sample collected at MW-135 in December 2006 were 43 ug/L and non-detect,

Recent concentrations detected in wells on Facility are similar to concentrations detected during previous sampling events, except for MW-134. Previous concentrations detected in MW-134 have been 10 ug/L or less and the recent concentration is 190 ug/L.

- PCE. A small, low-concentration area of PCE (up to 6.8 ug/L) is observed based on three on Facility wells. One of these wells (MW-253) was installed and sampled for the first time during the January/February 2008 sampling event. The concentrations at the other two wells are similar to previous data.
- Cis-1,2-DCE. The area of cis-1,2-DCE above the GCTL are limited to the same three wells on Facility as PCE plus one off Facility well, MW-135. The concentrations detected in MW-135 have fluctuated, but appear stable. The recent concentration detected at MW-135 is 93 ug/L and the concentrations detected during previous sampling events ranged from non-detect to 130 ug/L. The recent concentrations detected at the wells on Facility are similar to concentrations detected during previous sampling events.

- 1,1-DCE. The area of 1,1-DCE above GCTLs is limited to five wells on Facility. One of these wells, MW-253 is a new well and has only been sampled once. The recent concentrations in the other four wells on the Facility are similar to previous concentrations, except MW-134. Previous concentrations in MW-134 have been 2.7 ug/L or less and the recent concentration is 23 ug/L.
- 1,1-DCA. New well MW-253 installed at the Facility is the only well with concentrations detected slightly above the GCTL (70 ug/L); the detected concentration was 75 ug/L.

3.3.4 COC Distribution in the S&P Sands

The COC distribution in the S&P Sands is shown on **Figures 3-14A through F**. Observed changes in the concentrations and distribution of COCs are indicated below.

- 1,4-Dioxane. Recent concentrations were detected above GCTLs in three wells, one on the Facility (MW-128) and two off Facility (MW-23 and MW-24). The recent concentration detected at MW-128 is 7.6 ug/L and the concentrations detected during previous sampling events ranged from non-detect to 5 ug/L. The recent concentration detected at MW-23 is 4.9 ug/L and the concentrations detected during previous sampling events ranged from non-detect to 2.4 ug/L. The recent concentration detected at MW-44 is 4.8 ug/L and the concentrations detected during previous sampling events ranged from non-detect to 3 ug/L. Concentrations and distribution have increased slightly during the recent sampling event.
- TCE. Only one well MW-128 (on Facility) had TCE detected above the GCTL during the recent sampling event. The recent concentration is 35 ug/L and concentrations detected during previous sampling events ranged from 12 ug/L to 33 ug/L.
- PCE. No PCE concentrations were detected above GCTLs in the S&P Sand during the recent sampling event. PCE was detected in well MW-44 at 5.7 ug/L (above the GCTL) during a previous sampling event, which was conducted in June 2006.
- Cis-1,2-DCE. No cis-1,2-DCE concentrations were detected above GCTLs in the S&P Sand.

- 1,1-DCE. No 1,1-DCE concentrations were detected above GCTLs in the S&P Sand during the recent sampling event. However, 1,1-DCE has been detected above the GCTL in well MW-44 during three previous sampling events, twice in 2005 and once in 2006. The highest concentration detected was 12 ug/L.
- 1,1-DCA. No 1,1-DCA concentrations were detected above GCTLs in the S&P Sand.

3.3.5 COC Distribution in the Lower AF Sands and Floridan Aquifer System

No COCs were detected above GCTLs in either the Lower AF Sands or Floridan Aquifer System.

3.4 Data Plots for Individual Wells

The concentrations over time at 33 representative wells distributed throughout the aquifer zones are provided in **Appendix E**. The wells were selected based on the following criteria:

- At least one COC detected above GCTLs at some point in time.
- Location on the boundary of a contoured area of elevated COC concentrations in groundwater.
- Location in an area representative of the higher range of detected COC concentrations.
- Not located near another monitoring well that has very similar results. This criterion was intended to prevent multiple graphs of similar concentration patterns in a very small area.
- Not an active extraction well. Extraction well concentrations are often affected by temporal changes in pumping rate or other operational conditions.

Data are plotted for 14 USAS wells, nine LSAS wells, seven AF Gravel wells, and one S&P Sand well. Concentrations of 1,4-dioxane resulting from analytical methods other than USEPA Method 8260C SIM ID were not plotted; hence, the 1,4-dioxane data extend from October 2006 to present.

4. Discussion

The conceptual site model has been refined based on the results of aquifer testing and data analysis. In addition, variations in COC distribution and concentrations have been discussed.

4.1 Conceptual Site Model Refinement

The original conceptual site model involved a series of layered, partially consolidated to unconsolidated units beginning with the USAS and extending down to the Lower AF Sands. The main connections between units were thought to be primarily private water supply wells with open-borehole construction or long screened intervals.

- The current site conceptual model, described in Section 1.3, indicates that consolidated to partially consolidated carbonate rocks with some siliciclastic components are present from the hard streak downward. This observation resulted in the re-assignment of the LSAS to the IAS, rather than the SAS.
- The LSAS, the uppermost consolidated unit, has a strong vertical hydraulic gradient below the Facility between the upper and lower portions of this unit. In addition, thin laminations are present within the calcareous rock of the LSAS. Hence, for purposes of aquifer test data and potentiometric surface analysis, it was necessary to represent the uppermost portion of the LSAS on separate maps from the remainder of the LSAS. However, the LSAS COC data appear to be internally consistent and have therefore been grouped as a single unit, as in all previous reports.
- A hydraulic connection exists between the LSAS and underlying units based on aquifer pumping test responses discussed in Section 3.1.2. This is apparently natural, since identified privately owned wells (i.e., man-made connections between the units) have been plugged and abandoned. This hydraulic connection is represented in modeling efforts by GeoTrans (2008).

4.2 COC Distribution

While comparisons of specific historical results in monitoring wells were discussed in Section 3.3 above, the overall distribution of COCs in groundwater during January 2008 is similar to that observed during the December 2006 sampling event, which was previously used during development of the May 2007 RAP (ARCADIS BBL, 2007). As a result, the areas that will be addressed in the revised RAP that will be submitted on or before September 1, 2008 will be similar to the May 2007 RAP.

5. References

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Tables

**Table 2-1
Well Construction Summary with Groundwater and Surface Water Evaluations
2008 Groundwater Monitoring Report
Former American Beryllium Company Site
Tallevast, FL**

Well ID	Installation Date	Zone	Total Well Depth (ft bgs)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Top of Inner Casing (ft msl)	December 28, 2006		December 3-6, 2007		December 7, 2007		January 21-22, 2008		January 25-31, 2008		Comprehensive Water Level Event Notes
							Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	
DW-1	1/15/2002	AF Gravel	99	82	92	31.00	13.87	17.13	13.15	17.85	13.25	17.75	14.54	16.46	NM	NM	
EW-102	10/26/2007	LSAS	41	31	36	30.52	NM	NM	8.08	22.44	8.2	22.32	NM	NM	11.82	18.7	
EW-103	5/31/2006	USAS	25	5	20	29.86	NM	NM	3.73	26.13	3.77	26.09	NM	NM	9.3	20.56	
EW-104	5/31/2006	LSAS	36	26	31	29.77	NM	NM	5.13	24.64	5.18	24.59	NM	NM	16.5	13.27	
EW-105	5/3/2006	USAS	30	5	25	30.4	NM	NM	4.12	26.28	4.16	26.24	NM	NM	15.31	15.09	
EW-106	5/3/2006	LSAS	36	26	31	30.33	NM	NM	5.57	24.76	5.64	24.69	NM	NM	22.47	7.86	
EW-107	10/24/2007	USAS	32	7	27	29.64	NM	NM	3.32	26.32	3.39	26.25	NM	NM	3.48	26.16	
EW-109	5/2/2006	USAS	30	5	25	30.1	NM	NM	3.3	26.8	3.38	26.72	NM	NM	3.48	26.62	
EW-110	5/2/2006	LSAS	40	30	35	30.12	NM	NM	3.6	26.52	3.69	26.43	NM	NM	14.8	15.32	
EW-UAFG-1	6/2/2006	AF Gravel	108	98	108	31.66	NM	NM	16.09	15.57	15.91	15.75	NM	NM	16.84	14.82	
EXL-1 (EW-108)	8/31/2005	LSAS	NA	35.5	40.5	30.09	NM	NM	8.28	21.81	8.38	21.71	NM	NM	16.5	13.59	
EXU-1 (EW-101)	8/30/2005	USAS	NA	15	30	30.31	NM	NM	3.99	26.32	4.04	26.27	NM	NM	15.92	14.39	
IWI-1	9/2/2005	AF Gravel	110	100	110	31.71	16.52	15.19	16.25	15.46	16.28	15.43	16.45	15.26	NM	NM	
IWI-2	9/12/2005	Zone 3-4 Clay	175	162	172	31.62	18.40	13.22	18.68	12.94	18.79	12.83	19.97	11.65	NM	NM	
MW-2	2/1/2001	USAS	18.51	5	20	29.85	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	destroyed
MW-3	2/1/2001	USAS	17.95	5	20	30.52	3.65	26.87	4.11	26.41	4.16	26.36	4.32	26.20	NM	NM	
MW-4	2/1/2001	USAS	18.87	4	19	31.50	4.68	26.82	5.10	26.40	5.17	26.33	5.50	26.00	NM	NM	
MW-5	2/1/2003	USAS	10.32	4	10	32.17	4.91	27.26	5.44	26.73	5.53	26.64	5.72	26.45	NM	NM	
MW-6	2/1/2003	USAS	10.25	4	10	31.92	4.88	27.04	5.41	26.51	5.47	26.45	5.78	26.14	NM	NM	
MW-7D	2/1/2003	USAS	19.96	15	20	31.30	3.43	27.87	4.12	27.18	4.22	27.08	4.21	27.09	NM	NM	
MW-7S	2/1/2003	USAS	9.99	4	10	31.50	3.63	27.87	4.31	27.19	NM	NM	4.41	27.09	NM	NM	
MW-8D	2/1/2003	USAS	18.6	15	20	30.96	3.40	27.56	4.01	26.95	4.09	26.87	4.06	26.90	NM	NM	
MW-8S	2/1/2003	USAS	10.47	4	10	30.99	3.44	27.55	4.06	26.93	NM	NM	4.13	26.86	NM	NM	
MW-9D	2/1/2003	USAS	20	15	20	30.21	3.61	26.60	4.31	25.90	4.35	25.86	4.60	25.61	NM	NM	
MW-9S	2/1/2003	USAS	10	4	10	30.24	3.65	26.59	4.33	25.91	NM	NM	4.65	25.59	NM	NM	
MW-10	2/1/2003	USAS	20.21	15	20	31.74	5.35	26.39	5.40	26.34	5.46	26.28	5.65	26.09	11.25	20.49	
MW-11	2/1/2003	USAS	19.43	15	20	31.87	4.82	27.05	5.20	26.67	5.25	26.62	5.46	26.41	NM	NM	
MW-12	2/1/2003	USAS	20.36	15	20	31.04	4.49	26.55	4.90	26.14	4.93	26.11	5.17	25.87	NM	NM	
MW-13D	2/1/2003	USAS	19.85	15	20	30.85	4.30	26.55	4.96	25.89	5.01	25.84	5.30	25.55	NM	NM	
MW-13S	2/1/2003	USAS	9.97	4	10	30.66	4.10	26.56	4.91	25.75	4.81	25.85	5.12	25.54	NM	NM	
MW-14D	2/1/2003	USAS	19.89	15	20	29.75	3.99	25.76	4.06	25.69	4.12	25.63	4.36	25.39	NM	NM	
MW-14S	2/1/2003	USAS	9.76	4	10	29.74	3.32	26.42	4.04	25.70	NM	NM	4.35	25.39	NM	NM	
MW-15D	2/1/2003	USAS	18.71	15	20	30.20	3.76	26.44	4.48	25.72	4.54	25.66	4.87	25.33	NM	NM	
MW-15S	2/1/2003	USAS	9.8	4	10	30.09	3.63	26.46	4.36	25.73	NM	NM	4.74	25.35	NM	NM	
MW-16D	2/1/2003	USAS	18.26	15	20	27.26	2.36	24.90	3.04	24.22	NM	NM	3.16	24.10	NM	NM	
MW-16S	2/1/2003	USAS	9.73	4	10	27.26	2.49	24.77	3.15	24.11	NM	NM	3.24	24.02	NM	NM	
MW-17D	10/1/2003	USAS	19	15	20	30.23	3.79	26.44	4.57	25.66	4.63	25.60	4.91	25.32	NM	NM	
MW-17S	10/1/2003	USAS	9.3	4	10	30.09	3.63	26.46	4.40	25.69	NM	NM	4.74	25.35	NM	NM	
MW-18D	10/1/2003	USAS	18.83	15	20	28.04	2.75	25.29	NM	NM	NM	NM	NM	3.04	25.00	special access	
MW-18S	10/1/2003	USAS	9.59	4	10	28.00	2.67	25.33	NM	NM	NM	NM	NM	2.97	25.03	special access	
MW-19	11/22/2004	Lower AF	302	277.5	297.5	31.25	17.65	13.60	18.61	12.64	18.69	12.56	19.25	12.00	NM	NM	
MW-20	12/1/2004	USAS	39.7	35	40	30.29	4.88	25.41	5.76	24.53	NM	NM	5.87	24.42	NM	NM	
MW-21	12/4/2004	S&P Sand	148.8	135	145	28.88	16.63	12.25	NM	NM	NM	NM	NM	17.95	10.93	special access	
MW-22	12/17/2004	Lower AF	294.15	277	297	28.71	19.19	9.52	16.16	12.55	NM	NM	16.94	11.77	NM	NM	
MW-23	12/6/2004	S&P Sand	171.91	152	172	28.70	15.68	13.02	15.54	13.16	NM	NM	17.05	11.65	NM	NM	
MW-24	12/17/2004	USAS	34.93	30.5	35.5	30.01	NM	NM	5.87	24.14	NM	NM	5.82	24.19	NM	NM	
MW-25	12/17/2004	USAS	43.38	36.4	43.4	29.58	3.64	25.94	4.16	25.42	NM	NM	4.29	25.29	NM	NM	
MW-26	12/18/2004	USAS	23.72	21.5	26.5	26.76	3.49	23.27	NM	NM	NM	NM	NM	3.58	23.18	special access	
MW-27	12/17/2004	USAS	34.58	30	35	27.06	2.63	24.43	NM	NM	NM	NM	NM	2.90	24.16	special access	
MW-28	12/17/2004	USAS	29.69	25	30	27.81	2.65	25.16	NM	NM	NM	NM	NM	3.00	24.81	special access	

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Former American Beryllium Company Site
Tallevast, FL

Well ID	Installation Date	Zone	Total Well Depth (ft bgs)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Top of Inner Casing (ft msl)	December 28, 2006		December 3-6, 2007		December 7, 2007		January 21-22, 2008		January 25-31, 2008		Comprehensive Water Level Event Notes
							Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	
MW-29	12/17/2004	USAS	29.83	25	30	27.73	2.61	25.12	NM	NM	NM	NM	NM	NM	2.87	24.86	special access
MW-30	12/15/2004	USAS	28.47	23.5	28.5	29.24	NM	NM	3.99	25.25	NM	NM	4.26	24.98	NM	NM	
MW-31	12/15/2004	Lower AF	213.41	275	295	28.49	15.24	13.25	NM	NM	NM	NM	NM	NM	16.75	11.74	special access
MW-32	12/18/2004	USAS	30.17	24.5	29.5	31.00	4.39	26.61	4.67	26.33	4.68	26.32	4.82	26.18	NM	NM	
MW-33	12/18/2004	LSAS	41.9	35.5	40.5	31.00	11.16	19.84	9.27	21.73	9.37	21.63	10.40	20.60	NM	NM	
MW-34	12/20/2004	S&P Sand	157.72	145	155	29.99	NM	NM	17.09	12.90	NM	NM	18.64	11.35	NM	NM	
MW-35	12/16/2004	USAS	30.39	25	30	29.88	NM	NM	2.83	27.05	2.93	26.95	3.02	26.86	NM	NM	
MW-36	1/8/2005	USAS	27.85	23	28	31.71	6.33	25.38	5.58	26.13	5.64	26.07	5.89	25.82	NM	NM	
MW-37	12/19/2004	LSAS	40.55	35.5	40.5	31.60	11.91	19.69	9.90	21.70	10.00	21.60	11.09	20.51	NM	NM	
MW-38	1/8/2005	USAS	27.98	23	28	31.15	NM	NM	4.99	26.16	5.06	26.09	5.29	25.86	NM	NM	
MW-39	12/19/2004	LSAS	40.42	35.5	40.5	31.18	NM	NM	8.83	22.35	8.94	22.24	9.96	21.22	NM	NM	
MW-40	1/8/2005	USAS	27.75	23	28	31.32	4.82	26.50	5.17	26.15	5.24	26.08	5.46	25.86	NM	NM	
MW-41	12/21/2004	LSAS	40.97	35.5	40.5	31.22	11.42	19.80	9.49	21.73	9.60	21.62	9.67	21.55	NM	NM	
MW-42	12/21/2004	USAS	26.97	23	28	31.49	5.28	26.21	5.43	26.06	5.50	25.99	5.74	25.75	NM	NM	
MW-43	12/21/2004	LSAS	40.15	35.5	40.5	31.48	11.69	19.79	9.76	21.72	9.91	21.57	10.96	20.52	NM	NM	
MW-44	12/19/2004	S&P Sand	150.25	142	152	30.88	18.00	12.88	NM	NM	NM	NM	NM	NM	19.13	11.75	special access
MW-45	1/3/2005	S&P Sand	162.79	150	160	30.58	17.85	12.73	17.89	12.69	NM	NM	19.45	11.13	NM	NM	
MW-46	12/21/2004	Lower AF	299.7	280	300	27.33	13.51	13.82	14.58	12.75	NM	NM	15.23	12.10	NM	NM	
MW-47	12/20/2004	USAS	26.81	22	27	29.42	4.06	25.36	4.68	24.74	NM	NM	5.06	24.36	NM	NM	
MW-48	12/20/2004	LSAS	38.45	33.5	38.5	30.40	12.00	18.40	NM	NM	NM	NM	11.09	19.31	NM	NM	
MW-49	1/3/2005	S&P Sand	153.22	146	156	29.37	16.84	12.53	17.57	11.80	NM	NM	18.41	10.96	NM	NM	
MW-50	1/11/2005	Lower AF	252.35	245	255	27.56	14.06	13.50	NM	NM	NM	NM	NM	NM	15.71	11.85	special access
MW-51	1/11/2005	Lower AF	271.75	261.6	271.6	26.89	13.28	13.61	NM	NM	NM	NM	NM	NM	14.90	11.99	special access
MW-52	1/7/2005	S&P Sand	156.44	147	157	27.11	14.19	12.92	NM	NM	NM	NM	NM	NM	15.62	11.49	special access
MW-53	1/7/2005	S&P Sand	150.06	141	151	27.77	14.82	12.95	NM	NM	NM	NM	NM	NM	16.24	11.53	special access
MW-54	12/30/2004	S&P Sand	155.79	145	155	26.88	13.86	13.02	NM	NM	NM	NM	NM	NM	15.30	11.58	special access
MW-55	1/8/2005	AF Gravel	138.63	127	137	30.03	NM	NM	16.58	13.45	NM	NM	17.42	12.61	NM	NM	
MW-56	1/10/2005	S&P Sand	157.88	145	155	27.28	14.84	12.44	14.60	12.68	NM	NM	16.18	11.10	NM	NM	
MW-57	1/9/2005	S&P Sand	149.14	136	146	30.35	17.55	12.80	17.34	13.01	NM	NM	19.29	11.06	NM	NM	
MW-58	12/17/2004	S&P Sand	152.71	140	150	31.26	18.41	12.85	18.68	12.58	NM	NM	19.95	11.31	NM	NM	
MW-59	1/4/2005	S&P Sand	157.73	140	150	28.48	17.04	11.44	NM	NM	NM	NM	NM	NM	16.89	11.59	special access
MW-60	1/7/2005	S&P Sand	158.45	145	155	28.33	17.59	10.74	NM	NM	NM	NM	NM	NM	17.11	11.22	special access
MW-61	1/11/2005	S&P Sand	147.97	135	145	27.50	20.12	7.38	17.10	10.40	NM	NM	17.45	10.05	NM	NM	
MW-62	1/5/2005	USAS	22.11	18	23	27.35	3.04	24.31	3.42	23.93	NM	NM	3.75	23.60	NM	NM	
MW-63	1/3/2005	USAS	30.64	25	30	27.37	2.70	24.67	3.33	24.04	NM	NM	3.54	23.83	NM	NM	
MW-64	1/3/2005	USAS	30.98	25	30	27.38	2.61	24.77	NM	NM	NM	NM	NM	NM	2.76	24.62	special access
MW-65	1/3/2005	USAS	22.75	19	24	28.76	NM	NM	NM	NM	NM	NM	NM	NM	3.35	25.41	special access
MW-66	1/4/2005	USAS	22.72	18.5	23.5	29.20	3.02	26.18	3.71	25.49	NM	NM	4.10	25.10	NM	NM	
MW-67	1/4/2005	USAS	28.31	24	29	30.79	4.56	26.23	5.36	25.43	NM	NM	NM	NM	5.11	25.68	
MW-68	1/3/2005	LSAS	41.41	35.5	40.5	28.60	11.61	16.99	NM	NM	NM	NM	NM	NM	10.90	17.70	special access
MW-69	1/4/2005	USAS	28.45	23	28	26.91	4.86	22.05	5.38	21.53	NM	NM	4.67	22.24	NM	NM	
MW-70	12/29/2004	USAS	27.41	23	29	31.89	5.19	26.70	5.78	26.11	5.85	26.04	6.16	25.73	NM	NM	
MW-71	12/29/2004	USAS	28.28	24	29	31.23	4.94	26.29	5.25	25.98	5.32	25.91	5.60	25.63	NM	NM	
MW-72	12/19/2004	USAS	28.77	23.5	28.5	30.97	3.61	27.36	4.17	26.80	4.26	26.71	4.39	26.58	NM	NM	
MW-73	1/4/2005	USAS	26.84	22	27	26.03	NM	NM	3.04	22.99	NM	NM	3.20	22.83	NM	NM	
MW-74	1/4/2005	USAS	33.34	27.5	32.5	27.90	2.38	25.52	2.67	25.23	NM	NM	2.82	25.08	NM	NM	
MW-75	1/3/2005	USAS	43.95	39.5	44.5	31.38	NM	NM	5.94	25.44	NM	NM	5.76	25.62	NM	NM	
MW-76	1/4/2005	USAS	27.79	23	28	30.84	4.40	26.44	4.82	26.02	4.90	25.94	5.13	25.71	NM	NM	
MW-77	1/5/2005	LSAS	37.84	36	41	29.73	4.55	25.18	5.27	24.46	5.33	24.40	6.19	23.54	NM	NM	

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Former American Beryllium Company Site
Tallevast, FL**

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Well ID	Installation Date	Zone	Total Well Depth (ft bgs)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Top of Inner Casing (ft msl)	December 28, 2006		December 3-6, 2007		December 7, 2007		January 21-22, 2008		January 25-31, 2008		Comprehensive Water Level Event Notes
							Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	
MW-78	1/6/2005	LSAS	40.1	36	41	30.23	6.80	23.43	NM	NM	NM	NM	NM	NM	8.02	22.21	special access
MW-79	1/7/2005	LSAS	40.41	36	41	30.11	10.62	19.49	8.29	21.82	8.35	21.76	9.26	20.85	NM	NM	
MW-80	1/8/2005	LSAS	41.57	36	41	30.99	9.84	21.15	8.65	22.34	8.83	22.16	9.41	21.58	NM	NM	
MW-81	1/7/2005	LSAS	41.09	36	41	31.01	12.61	18.40	10.51	20.50	10.52	20.49	11.71	19.30	NM	NM	
MW-82	1/11/2005	LSAS	41.63	37	42	27.24	3.97	23.27	3.85	23.39	NM	NM	4.70	22.54	NM	NM	
MW-83	1/11/2005	AF Gravel	112	102	112	25.51	NM	NM	12.57	12.94	NM	NM	13.81	11.70	NM	NM	special access
MW-84	1/11/2005	LSAS	41.65	35.5	40.5	31.15	9.93	21.22	8.90	22.95	9.07	22.08	9.58	21.57	NM	NM	
MW-85	1/11/2005	LSAS	54.7	50	55	29.55	5.51	24.04	5.35	24.20	NM	NM	5.58	23.97	NM	NM	
MW-86	1/11/2005	LSAS	35.62	30	35	28.77	11.52	17.25	NM	NM	NM	NM	NM	NM	11.25	17.52	special access
MW-87	1/11/2005	LSAS	41.55	36	41	30.26	NM	NM	4.65	25.61	4.77	25.49	4.56	25.70	NM	NM	
MW-88	1/10/2005	Zone 1 Clay	87	76	86	27.28	12.35	14.93	11.41	15.87	NM	NM	13.50	13.78	NM	NM	
MW-89	1/11/2005	USAS	32.8	27	32	29.50	3.41	26.09	4.00	25.50	NM	NM	4.43	25.07	NM	NM	
MW-90	1/17/2005	USAS	30.05	25.5	30.5	27.95	2.74	25.21	3.25	24.70	NM	NM	3.66	24.29	NM	NM	
MW-91	1/17/2005	LSAS	38.91	32.5	37.5	27.66	9.01	18.65	NM	NM	NM	NM	NM	NM	7.95	19.71	special access
MW-92	1/17/2005	LSAS	37.95	32.5	37.5	27.35	11.73	15.62	11.40	15.95	NM	NM	12.54	14.81	NM	NM	
MW-93	1/18/2005	LSAS	37.49	32.5	37.5	27.73	11.80	15.93	11.62	16.11	NM	NM	NM	NM	12.54	15.19	special access
MW-94	1/19/2005	USAS	29.36	24.5	29.5	25.40	NM	NM	3.11	22.29	NM	NM	3.09	22.31	NM	NM	
MW-95	1/19/2005	USAS	27.69	23	28	24.85	NM	NM	2.91	21.94	NM	NM	2.92	21.93	NM	NM	
MW-96	2/3/2005	Zone 3-4 Clay	NA	196	206	25.14	12.81	12.33	13.47	11.67	NM	NM	14.14	11.00	NM	NM	
MW-97	2/5/2005	Zone 3-4 Clay	NA	208.6	226.6	25.29	13.05	12.24	14.11	11.18	NM	NM	14.75	10.54	NM	NM	
MW-98	2/4/2005	LSAS	NA	33	38	25.75	NM	NM	3.61	22.14	NM	NM	3.83	21.92	NM	NM	
MW-99	2/6/2005	Zone 1 Clay	NA	71	81	25.26	10.07	15.19	9.03	16.23	NM	NM	11.60	13.66	NM	NM	
MW-100	2/6/2005	USAS	30	24.5	29.5	25.23	5.04	20.19	3.56	21.67	NM	NM	5.13	20.10	NM	NM	
MW-101	2/7/2005	LSAS	58	52.7	57.7	30.09	NM	NM	7.04	23.05	NM	NM	7.33	22.76	NM	NM	
MW-102	2/8/2005	AF Gravel	99.8	89.8	99.8	26.10	12.50	13.60	12.57	13.53	NM	NM	13.31	12.79	NM	NM	
MW-103	2/8/2005	USAS	30	25	30	26.19	4.07	22.12	4.34	21.85	NM	NM	4.61	21.58	NM	NM	
MW-104	2/9/2005	USAS	30.4	25.4	30.4	26.39	2.42	23.97	NM	NM	NM	NM	NM	NM	2.74	23.65	special access
MW-105	2/9/2005	LSAS	46.8	41.8	46.8	26.41	5.41	21.00	NM	NM	NM	NM	NM	NM	4.93	21.48	special access
MW-106	3/16/2005	LSAS	45	40	45	28.31	6.72	21.59	6.36	21.95	NM	NM	7.04	21.27	NM	NM	
MW-107	4/4/2005	USAS	26	21	26	24.72	NM	NM	3.62	21.10	NM	NM	3.75	20.97	NM	NM	
MW-108	3/15/2005	USAS	28	23	28	24.36	NM	NM	3.10	21.26	NM	NM	3.68	20.68	NM	NM	
MW-109	3/15/2005	USAS	28	23	28	28.45	4.52	23.93	4.96	23.49	NM	NM	NM	NM	4.45	24.00	
MW-110	3/15/2005	USAS	28	23	28	28.80	3.95	24.85	NM	NM	NM	NM	NM	NM	3.80	25.00	special access
MW-111	3/15/2005	USAS	28	23	28	26.37	2.61	23.76	NM	NM	NM	NM	NM	NM	2.82	23.55	special access
MW-112	3/16/2005	Zone 1 Clay	86	76	86	28.28	19.46	8.82	13.70	14.58	NM	NM	12.78	15.50	NM	NM	
MW-113	3/15/2005	LSAS	42	37	42	26.31	10.62	15.69	NM	NM	NM	NM	NM	NM	11.52	14.79	special access
MW-114	4/4/2005	USAS	40	35	40	24.79	NM	NM	3.00	21.79	NM	NM	3.11	21.68	NM	NM	
MW-115	5/23/2005	USAS	25	20	25	30.21	6.74	23.47	7.02	23.19	NM	NM	7.01	23.20	NM	NM	
MW-116	5/23/2005	USAS	26	21	26	21.84	NM	NM	2.70	19.14	NM	NM	2.19	19.65	NM	NM	
MW-117	5/24/2005	LSAS	42	37	42	21.56	NM	NM	NM	NM	NM	NM	NM	NM	6.60	14.96	special access
MW-118	5/24/2005	USAS	25	20	25	21.47	NM	NM	NM	NM	NM	NM	NM	NM	5.95	15.52	special access
MW-119	5/24/2005	LSAS	36	31	36	21.18	NM	NM	NM	NM	NM	NM	NM	NM	9.33	11.85	special access
MW-120	5/24/2005	USAS	25	20	25	21.18	NM	NM	NM	NM	NM	NM	NM	NM	2.85	18.33	special access
MW-121	5/24/2005	USAS	23	18	23	21.35	7.92	13.43	7.93	13.42	NM	NM	8.02	13.33	NM	NM	
MW-122	5/24/2005	USAS	26	21	26	20.06	6.49	13.57	6.12	13.94	NM	NM	6.53	13.53	NM	NM	
MW-123	6/20/2005	Floridan	395	375	395	30.90	16.19	14.71	16.84	14.06	17.37	13.53	NM	NM	18.38	12.52	
MW-124	7/20/2005	Zone 2 Clay	137	127	137	28.97	15.62	13.35	16.44	12.53	NM	NM	13.42	15.55	NM	NM	
MW-125	7/21/2005	Venice Clay	35	30	35	29.52	6.93	22.59	8.21	21.31	NM	NM	7.93	21.59	NM	NM	
MW-126	7/20/2005	USAS	32	27	32	28.32	7.50	20.82	6.95	21.37	NM	NM	7.48	20.84	NM	NM	

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Well ID	Installation Date	Zone	Total Well Depth (ft bgs)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Top of Inner Casing (ft msl)	December 28, 2006		December 3-6, 2007		December 7, 2007		January 21-22, 2008		January 25-31, 2008		Comprehensive Water Level Event Notes
							Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	
MW-127	8/30/2005	AF Gravel	NA	100	110	31.74	16.39	15.35	16.21	15.53	16.02	15.72	16.26	15.48	NM	NM	
MW-128	9/1/2005	S&P Sand	NA	140	150	31.59	18.63	12.96	18.70	12.89	18.80	12.79	20.08	11.51	NM	NM	
MW-129	9/7/2005	AF Gravel	NA	103	113	31.41	16.45	14.96	16.25	15.16	13.50	17.91	17.09	14.32	NM	NM	
MW-130	9/8/2005	AF Gravel	NA	100	110	30.37	15.20	15.17	14.87	15.50	14.92	15.45	15.92	14.45	NM	NM	
MW-131	9/9/2005	AF Gravel	NA	100	110	27.33	14.15	13.18	14.35	12.98	NM	NM	15.56	11.77	NM	NM	
MW-132	9/10/2005	AF Gravel	NA	101	111	30.07	15.61	14.46	15.53	14.54	15.73	14.34	16.26	13.81	NM	NM	
MW-133	9/13/2005	AF Gravel	NA	100	110	27.68	14.22	13.46	NM	NM	NM	NM	NM	NM	15.11	12.57	special access
MW-134	9/14/2005	AF Gravel	NA	103	113	31.10	16.28	14.82	15.95	15.15	16.35	14.75	16.83	14.27	NM	NM	
MW-135	9/15/2005	AF Gravel	NA	94	104	27.64	NM	NM	14.67	12.97	NM	NM	NM	NM	15.58	12.06	special access
MW-136	10/27/2005	AF Gravel	NA	98.5	108.5	25.23	NM	NM	14.01	11.22	NM	NM	15.01	10.22	NM	NM	
MW-137	12/28/2005	USAS	22	17	22	25.49	2.31	23.18	2.80	22.69	NM	NM	2.95	22.54	NM	NM	
MW-138	12/28/2005	LSAS	43	38	43	25.49	8.95	16.54	9.70	15.79	NM	NM	10.01	15.48	NM	NM	
MW-139	12/28/2005	S&P Sand	157	147	157	25.46	14.78	10.68	14.35	11.11	NM	NM	15.26	10.20	NM	NM	
MW-140	12/28/2005	Lower AF	300	280	300	25.52	12.23	13.29	13.40	12.12	NM	NM	13.98	11.54	NM	NM	
MW-141	12/27/2005	USAS	20	15	20	25.55	2.09	23.46	2.82	22.73	NM	NM	2.75	22.80	NM	NM	
MW-142	12/27/2005	LSAS	31	26	31	25.64	2.14	23.50	2.88	22.76	NM	NM	3.85	21.79	NM	NM	
MW-143	12/27/2005	AF Gravel	106	96	106	25.60	12.63	12.97	12.90	12.70	NM	NM	14.00	11.60	NM	NM	
MW-144	12/27/2005	S&P Sand	150	140	150	25.51	13.40	12.11	14.00	11.51	NM	NM	14.97	10.54	NM	NM	
MW-145	12/27/2005	Lower AF	300	280	300	25.45	14.11	11.34	12.50	12.95	NM	NM	13.21	12.24	NM	NM	
MW-146	12/19/2005	USAS	24.5	19.5	24.5	26.06	12.32	13.74	3.35	22.71	NM	NM	3.19	22.87	NM	NM	
MW-147	12/19/2005	LSAS	34.5	29.5	34.5	25.94	12.78	13.16	3.21	22.73	NM	NM	3.11	22.83	NM	NM	
MW-148	12/19/2005	AF Gravel	105.5	95.5	105.5	25.90	13.91	11.99	13.36	12.54	NM	NM	14.15	11.75	NM	NM	
MW-149	12/19/2005	S&P Sand	155	145	155	26.20	2.90	23.30	14.33	11.87	NM	NM	15.05	11.15	NM	NM	
MW-150	12/19/2005	Lower AF	305	285	305	26.09	1.32	24.77	13.40	12.69	NM	NM	14.10	11.99	NM	NM	
MW-151	1/8/2006	USAS	22	17	22	22.44	3.97	18.47	4.03	18.41	NM	NM	4.36	18.08	NM	NM	
MW-152	1/8/2006	LSAS	42.5	37.5	42.5	22.21	4.98	17.23	4.97	17.24	NM	NM	5.41	16.80	NM	NM	
MW-153	1/12/2006	AF Gravel	107	97	107	22.50	9.41	13.09	8.35	14.15	NM	NM	10.54	11.96	NM	NM	
MW-154	1/8/2006	S&P Sand	154.5	144.5	154.5	22.25	10.57	11.68	11.22	11.03	NM	NM	11.55	10.70	NM	NM	
MW-155	1/8/2006	Lower AF	304	284	304	22.34	9.25	13.09	10.24	12.10	NM	NM	10.87	11.47	NM	NM	
MW-156	1/9/2006	USAS	20	15	20	24.81	2.51	22.30	3.47	21.34	NM	NM	2.44	22.37	NM	NM	
MW-157	1/9/2006	LSAS	38	33	38	24.74	8.26	16.48	10.02	14.72	NM	NM	9.69	15.05	NM	NM	
MW-158	1/9/2006	AF Gravel	110	100	110	24.78	11.62	13.16	11.81	12.97	NM	NM	13.08	11.70	NM	NM	
MW-159	1/9/2006	S&P Sand	150	140	150	24.68	NM	NM	12.59	12.09	NM	NM	13.45	11.23	NM	NM	
MW-160	1/9/2006	Lower AF	300	280	300	24.72	10.81	13.91	11.72	13.00	NM	NM	12.68	12.04	NM	NM	
MW-161	1/20/2006	Floridan	401	381	401	24.91	10.54	14.37	11.42	13.49	NM	NM	12.56	12.35	NM	NM	
MW-162	1/19/2006	USAS	16	11	16	25.38	2.01	23.37	2.55	22.83	NM	NM	2.75	22.63	NM	NM	
MW-163	1/19/2006	LSAS	35	30	35	25.60	8.88	16.72	9.70	15.90	NM	NM	9.90	15.70	NM	NM	
MW-164	1/18/2006	AF Gravel	102	92	102	25.59	14.27	11.32	14.40	11.19	NM	NM	15.74	9.85	NM	NM	
MW-165	2/15/2006	S&P Sand	152	142	152	25.35	14.52	10.83	14.54	10.81	NM	NM	15.13	10.22	NM	NM	
MW-166	1/24/2006	Lower AF	301	281	301	25.69	12.25	13.44	13.45	12.24	NM	NM	14.02	11.67	NM	NM	
MW-167	1/31/2006	USAS	25	20	25	27.05	3.74	23.31	3.54	23.51	NM	NM	3.73	23.32	NM	NM	
MW-168	1/31/2006	LSAS	47	42	47	27.41	5.77	21.64	6.25	21.16	NM	NM	6.55	20.86	NM	NM	
MW-169	1/25/2006	AF Gravel	116	106	116	27.48	16.48	11.00	14.12	13.36	NM	NM	12.68	14.80	NM	NM	
MW-170	2/1/2006	Lower AF	300	280	300	27.50	17.11	10.39	14.91	12.59	NM	NM	16.52	10.98	NM	NM	
MW-171	1/19/2006	LSAS	40	35	40	21.49	10.27	11.22	9.90	11.59	NM	NM	8.22	13.27	NM	NM	
MW-172	1/19/2006	AF Gravel	110	100	110	21.53	11.59	9.94	11.25	10.28	NM	NM	12.33	9.20	NM	NM	
MW-173	1/18/2006	S&P Sand	152	142	152	21.42	11.87	9.55	12.39	9.03	NM	NM	12.96	8.46	NM	NM	
MW-174	1/23/2006	Lower AF	295	275	295	21.39	13.33	8.06	10.69	10.70	NM	NM	10.77	10.62	NM	NM	
MW-175	1/17/2006	AF Gravel	108.3	98.3	108.3	27.80	18.24	9.56	21.39	6.41	NM	NM	18.84	8.96	NM	NM	

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							Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	
MW-176	1/17/2006	S&P Sand	160	150	160	29.01	19.79	9.22	19.55	9.46	NM	NM	21.11	7.90	NM	NM	
MW-177	1/16/2006	Lower AF	305	285	305	29.28	16.50	12.78	17.29	11.99	NM	NM	18.27	11.01	NM	NM	
MW-178	1/22/2006	LSAS	36.5	31.5	36.5	21.82	13.03	8.79	13.30	8.52	NM	NM	12.80	9.02	NM	NM	
MW-179	1/22/2006	AF Gravel	103	93	103	21.87	12.84	9.03	13.87	8.00	NM	NM	13.54	8.33	NM	NM	
MW-180	1/21/2006	S&P Sand	150.3	145.3	150.3	21.97	15.13	6.84	15.08	6.89	NM	NM	15.79	6.18	NM	NM	
MW-181	1/19/2006	Lower AF	295	275	295	22.09	12.52	9.57	12.31	9.78	NM	NM	12.31	9.78	NM	NM	
MW-182	2/2/2006	S&P Sand	174	164	174	27.19	16.38	10.81	14.65	12.54	NM	NM	14.36	12.83	NM	NM	
MW-183	2/2/2006	USAS	20	15	20	24.20	2.98	21.22	3.86	20.34	NM	NM	3.52	20.68	3.54	20.66	
MW-184	2/7/2006	LSAS	33	28	33	24.22	8.61	15.61	9.24	14.98	NM	NM	9.75	14.47	10.72	13.50	
MW-185	2/15/2006	AF Gravel	95	85	95	24.30	11.67	12.63	11.95	12.35	NM	NM	13.25	11.05	13.07	11.23	
MW-186	2/14/2006	S&P Sand	160	150	160	24.37	11.96	12.41	12.64	11.73	NM	NM	13.80	10.57	13.50	10.87	
MW-187	2/7/2006	Lower AF	300	280	300	24.34	10.10	14.24	11.41	12.93	NM	NM	12.00	12.34	NM	NM	
MW-188	2/28/2006	USAS	18.08	12	17	21.97	3.41	18.56	4.30	17.67	NM	NM	4.21	17.76	NM	NM	
MW-189	2/17/2006	LSAS	32.24	28	33	22.21	6.96	15.25	7.48	14.73	NM	NM	8.08	14.13	NM	NM	
MW-190	2/28/2006	AF Gravel	99.2	90	100	22.11	11.32	10.79	10.74	11.37	NM	NM	12.42	9.69	NM	NM	
MW-191	2/28/2006	S&P Sand	156	146	156	21.97	10.03	11.94	10.62	11.35	NM	NM	12.09	9.88	NM	NM	
MW-192	2/21/2006	Lower AF	300	280	300	21.85	13.12	8.73	8.69	13.16	NM	NM	8.52	13.33	NM	NM	
MW-193	2/17/2006	AF Gravel	100	90	100	21.77	10.44	11.33	12.78	8.99	NM	NM	11.93	9.84	12.39	9.38	
MW-194	2/21/2006	S&P Sand	155	145	155	21.70	9.52	12.18	10.06	11.64	NM	NM	11.15	10.55	12.32	9.38	
MW-195	2/20/2006	Lower AF	300	280	300	22.08	9.54	12.54	10.22	11.86	NM	NM	10.20	11.88	10.27	11.81	
MW-196	3/7/2006	AF Gravel	100	90	100	26.67	13.08	13.59	17.30	9.37	NM	NM	17.29	9.38	NM	NM	
MW-197	3/8/2006	AF Gravel	116	106	116	28.99	19.86	9.13	20.67	8.32	NM	NM	21.39	7.60	NM	NM	
MW-198	3/6/2006	USAS	16	11	16	20.55	3.98	16.57	3.46	17.09	NM	NM	3.27	17.28	NM	NM	
MW-199	3/6/2006	LSAS	35	30	35	20.42	7.82	12.60	8.23	12.19	NM	NM	9.26	11.16	NM	NM	
MW-200	3/5/2006	AF Gravel	100	90	100	20.62	8.51	12.11	8.94	11.68	NM	NM	10.10	10.52	NM	NM	
MW-201	3/4/2006	S&P Sand	160	150	160	20.54	8.55	11.99	8.88	11.66	NM	NM	10.20	10.34	NM	NM	
MW-202	3/3/2006	Lower AF	300	280	300	20.62	7.05	13.57	8.17	12.45	NM	NM	9.02	11.60	NM	NM	
MW-203	3/8/2006	Floridan	410	390	410	27.20	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	irrigation well
MW-204	3/7/2006	USAS	16	11	16	21.14	4.03	17.11	4.07	17.07	NM	NM	4.27	16.87	NM	NM	
MW-205	3/7/2006	LSAS	35	30	35	21.21	8.43	12.78	8.49	12.72	NM	NM	9.39	11.82	NM	NM	
MW-206	3/7/2006	AF Gravel	100	90	100	21.24	9.92	11.32	10.94	10.30	NM	NM	11.41	9.83	NM	NM	
MW-207	3/16/2006	Lower AF	301	281	301	21.57	3.21	18.36	8.10	13.47	NM	NM	9.74	11.83	NM	NM	
MW-208	4/3/2006	USAS	21	16	21	15.43	3.03	12.40	3.75	11.68	NM	NM	3.60	11.83	NM	NM	
MW-209	3/27/2006	LSAS	46	41	46	15.24	5.70	9.54	6.80	8.44	NM	NM	7.15	8.09	NM	NM	
MW-210	3/13/2006	AF Gravel	103	93	103	15.52	6.11	9.41	6.34	9.18	NM	NM	8.06	7.46	NM	NM	
MW-211	3/27/2006	S&P Sand	150	140	150	15.39	5.81	9.58	4.29	11.10	NM	NM	7.73	7.66	NM	NM	
MW-212	3/17/2006	Lower AF	301	281	301	15.56	9.59	5.97	6.75	8.81	NM	NM	5.39	10.17	NM	NM	
MW-213	3/19/2006	USAS	20	15	20	25.28	NM	NM	NM	NM	NM	NM	NM	2.27	23.01		special access
MW-214	3/19/2006	LSAS	35	30	35	25.19	NM	NM	NM	NM	NM	NM	NM	9.92	15.27		special access
MW-215	3/18/2006	AF Gravel	100	90	100	25.16	NM	NM	NM	NM	NM	NM	NM	13.48	11.68		special access
MW-216	3/18/2006	S&P Sand	150	140	150	25.20	NM	NM	NM	NM	NM	NM	NM	14.64	10.56		special access
MW-217	3/16/2006	Lower AF	300	280	300	25.14	NM	NM	NM	NM	NM	NM	NM	13.04	12.10		special access
MW-218	4/2/2006	Floridan	NA	365	385	26.03	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	irrigation well
MW-219	3/14/2006	USAS	27	22	27	21.91	3.83	18.08	3.34	18.57	NM	NM	4.00	17.91	NM	NM	

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MW-220	3/14/2006	LSAS	44	39	44	22.04	10.71	11.33	6.83	15.21	NM	NM	5.20	16.84	NM	NM	
MW-221	3/14/2006	AF Gravel	107	97	107	22.24	10.03	12.21	7.60	14.64	NM	NM	9.29	12.95	NM	NM	
MW-222	3/15/2006	S&P Sand	143	133	143	22.23	13.28	8.95	9.02	13.21	NM	NM	10.61	11.62	NM	NM	
MW-223	3/19/2006	Hardstreak Clay	15	10	15	17.11	5.30	11.81	5.96	11.15	NM	NM	5.63	11.48	NM	NM	
MW-224	3/19/2006	Venice Clay	30	25	30	17.22	5.35	11.87	5.70	11.52	NM	NM	5.92	11.30	NM	NM	
MW-225	3/18/2006	Venice Clay	45	40	45	17.13	4.45	12.68	5.22	11.91	NM	NM	5.48	11.65	NM	NM	
MW-226	3/17/2006	AF Gravel	100	90	100	17.14	3.28	13.86	5.92	11.22	NM	NM	5.42	11.72	NM	NM	
MW-227	3/18/2006	S&P Sand	155	145	155	17.40	10.98	6.42	4.67	12.73	NM	NM	7.19	10.21	NM	NM	
MW-228	3/17/2006	AF Gravel	108	98	108	20.73	NM	NM	11.13	9.60	NM	NM	13.13	7.60	NM	NM	
MW-229	3/19/2006	USAS	22.5	17.5	22.5	30.14	6.35	23.79	6.69	23.45	NM	NM	6.87	23.27	NM	NM	
MW-230	3/18/2006	LSAS	36	31	36	30.02	9.20	20.82	6.90	23.12	NM	NM	7.21	22.81	NM	NM	
MW-231	3/18/2006	AF Gravel	107	97	107	29.97	19.65	10.32	20.77	9.20	NM	NM	20.66	9.31	NM	NM	
MW-232	3/20/2006	AF Gravel	108	98	108	29.51	14.00	15.51	13.62	15.89	NM	NM	14.24	15.27	NM	NM	
MW-233	3/20/2006	AF Gravel	100	90	100	30.49	15.35	15.14	15.29	15.20	NM	NM	16.21	14.28	NM	NM	
MW-234	3/21/2006	USAS	20	15	20	24.68	NM	NM	NM	NM	NM	NM	NM	2.57	22.11	special access	
MW-235	3/21/2006	LSAS	40	35	40	24.71	NM	NM	NM	NM	NM	NM	NM	10.33	14.38	special access	
MW-236	3/21/2006	AF Gravel	100	90	100	24.77	NM	NM	NM	NM	NM	NM	NM	15.56	9.21	special access	
MW-237	3/31/2006	S&P Sand	155	145	155	24.76	NM	NM	NM	NM	NM	NM	NM	14.48	10.28	special access	
MW-238	3/30/2006	Lower AF	300	280	300	24.54	NM	NM	NM	NM	NM	NM	NM	12.86	11.68	special access	
MW-239	3/21/2006	AF Gravel	108	98	108	28.43	14.75	13.68	15.43	13.00	NM	NM	15.69	12.74	NM	NM	
MW-240	3/27/2006	S&P Sand	166.5	156.5	166.5	27.58	20.83	6.75	21.41	6.17	NM	NM	14.83	12.75	NM	NM	
MW-241	4/3/2006	Lower AF	301	281	301	17.28	5.14	12.14	4.95	12.33	NM	NM	5.96	11.32	NM	NM	
MW-242	3/30/2006	USAS	25	20	25	22.60	3.19	19.41	3.34	19.26	NM	NM	3.58	19.02	NM	NM	
MW-243	3/29/2006	LSAS	38	33	38	22.62	11.98	10.64	11.55	11.07	NM	NM	12.14	10.48	NM	NM	
MW-244	3/29/2006	AF Gravel	116	106	116	22.66	13.19	9.47	12.45	10.21	NM	NM	13.08	9.58	NM	NM	
MW-245	4/3/2006	Hardstreak Clay	22	17	22	18.92	4.67	14.25	4.67	14.25	NM	NM	5.35	13.57	NM	NM	
MW-246	4/3/2006	LSAS	45	40	45	18.96	13.05	5.91	8.89	10.07	NM	NM	9.49	9.47	NM	NM	
MW-247	4/2/2006	AF Gravel	108	98	108	19.01	12.07	6.94	13.30	5.71	NM	NM	12.80	6.21	NM	NM	
MW-248	4/4/2006	AF Gravel	113	103	113	26.57	13.20	13.37	NM	NM	NM	NM	NM	14.23	12.34	special access	
MW-249	1/31/2007	AF Gravel	98	88	98	22.60	NI	NI	NM	NM	NM	NM	NM	11.26	11.34	special access	
MW-250	2/1/2007	AF Gravel	NA	90	100	24.83	NI	NI	NM	NM	NM	NM	NM	12.67	12.16	special access	
MW-251	4/14/2007	Floridan	NA	380	400	27.37	NI	NI	13.34	14.03	NM	NM	14.28	13.09	NM	NM	
MW-252	11/20/2007	S&P Sand	155	145	155	31.56	NI	NI	18.81	12.75	NM	NM	20.17	11.39	NM	NM	
MW-253	11/21/2007	AF Gravel	110	100	110	31.48	NI	NI	15.93	15.55	NM	NM	16.42	15.06	NM	NM	
MW-254 (MW-BT-1)	12/17/2007	USAS	29.5	24	29	31.39	NI	NI	NM	NM	NM	NM	5.23	NM	NM	NM	
PZ-LSAS-1	11/26/2007	LSAS	35.45	30	35	31.12	NI	NI	5.46	25.66	5.53	25.59	5.98	25.14	NM	NM	
PZ-LSAS-2	11/26/2007	LSAS	36.50	30	35	31.44	NI	NI	5.76	25.68	5.82	25.62	6.24	25.20	NM	NM	
PZ-LSAS-3	11/27/2007	LSAS	33.57	29	34	32.16	NI	NI	6.46	25.70	6.39	25.77	6.71	25.45	NM	NM	
PZ-LSAS-4	11/27/2007	LSAS	35.44	30	35	31.60	NI	NI	6.19	25.41	6.13	25.47	6.65	24.95	NM	NM	
PZ-LSAS-5	11/27/2007	LSAS	32.87	28	33	31.61	NI	NI	6.18	25.43	6.09	25.52	6.59	25.02	NM	NM	
PZ-LSAS-6	11/27/2007	LSAS	35.75	30	35	32.73	NI	NI	7.40	25.33	7.25	25.48	7.83	24.90	NM	NM	
PZ-LSAS-7	11/29/2007	LSAS	33.74	28	33	31.90	NI	NI	6.20	25.70	6.12	25.78	6.66	25.24	NM	NM	
RW-1	NA	USAS	NA	15	20	30.68	5.33	25.35	5.49	25.19	5.53	25.15	5.76	24.92	NM	NM	
RW-2	NA	USAS	NA	15	20	29.98	4.58	25.40	4.95	25.03	5.02	24.96	5.25	24.73	NM	NM	

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Table 2-1
Well Construction Summary with Groundwater and Surface Water Evaluations
2008 Groundwater Monitoring Report
Former American Beryllium Company Site
Tallevast, FL

DRAFT

Well ID	Installation Date	Zone	Total Well Depth (ft bgs)	Screen Top (ft bgs)	Screen Bottom (ft bgs)	Top of Inner Casing (ft msl)	December 28, 2006		December 3-6, 2007		December 7, 2007		January 21-22, 2008		January 25-31, 2008		Comprehensive Water Level Event Notes
							Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	Depth To Water (ft toc)	Water Elevation (ft msl)	
Staff Gauge-1	NA	Unassigned	NA	NA	NA	23.29	NM	NM	NM	NM	NM	NM	0.65	22.64	NM	NM	
Staff Gauge-2	NA	Unassigned	NA	NA	NA	25.62	NM	NM	NM	NM	4.26	21.36	0.76	24.86	NM	NM	
Staff Gauge-3	NA	Unassigned	NA	NA	NA	14.41	NM	NM	NM	NM	NM	NM	0.98	13.43	NM	NM	
Staff Gauge-4	NA	Unassigned	NA	NA	NA	21.18	NM	NM	NM	NM	NM	NM	0.72	20.46	NM	NM	
Staff Gauge-5	NA	Unassigned	NA	NA	NA	23.91	NM	NM	NM	NM	NM	NM	0.7	23.21	NM	NM	
Staff Gauge-8	11/13/2007	Unassigned	NA	NA	NA	23.38	NI	NI	4.26	21.36	NM	NM	NM	NM	NM	NM	
Staff Gauge-9	11/17/2007	Unassigned	NA	NA	NA	21.93	NI	NI	NM	NM	NM	NM	NM	NM	0.72	21.21	
Stilling Well-1	11/6/2007	Unassigned	NA	NA	NA	30.83	NI	NI	NM	NM	NM	NM	4.46	26.37	NM	NM	
Stilling Well-2	11/7/2007	Unassigned	NA	NA	NA	14.55	NI	NI	NM	NM	NM	NM	1.76	12.79	NM	NM	
Stilling Well-3	11/13/2007	Unassigned	NA	NA	NA	26.04	NI	NI	NM	NM	NM	NM	2.88	20.32	NM	NM	
Stilling Well-4	11/17/2007	Unassigned	NA	NA	NA	26.96	NI	NI	NM	NM	NM	NM	NM	NM	4.3	22.66	
TW-84-A	10/11/2007	USAS	NA	2	12	32.10	NI	NI	NM	NM	NM	NM	6.85	25.25	NM	NM	
TW-84-B	10/11/2007	USAS	NA	2	12	32.07	NI	NI	NM	NM	NM	NM	7.18	24.89	NM	NM	

Notes:
AF Gravel = Arcadia Formation Gravels
ft bgs = feet below ground level
ft msl = feet above mean sea level
ft toc = feet below top of casing
LSAS = Lower Shallow Aquifer System
Lower AF = Lower Arcadia Formation
NA = Not available
NI = Not installed
NM = Not measured
S&P Sand = Salt & Pepper sands
USAS = Upper Surficial Aquifer System
NA = Not available
Special Access = special access requirements
Irrigation Well = well is currently in use as irrigation well

**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MONITORING WELLS								
DW-1	AF Gravel	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
EW-UAFG-1	AF Gravel	2/1/2008	200	34	250 D	3,000 D	0.5 U	19
IWI-1	AF Gravel	2/1/2008	300	60	370 D	190 D	6.8	4,900 D
IWI-2	Zone 3-4 Clay	2/1/2008	19	0.64 I	0.83 I	4.1	0.5 U	0.99 I
MW-3	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-4	USAS	1/25/2008	1 U	6.1	1.7	0.65 U	0.5 U	5.9
MW-5	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-6	USAS	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-7D	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-7S	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-8D	USAS	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-8S	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-9D	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-9S	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-10	USAS	1/31/2008	1 U	5.3	1	0.65 U	1.5	1.8 U
MW-11	USAS	1/24/2008	1 U	9.1	1.5	0.65 U	1.4	17
MW-12	USAS	1/24/2008	23	10	6.9	5.1	58	190 D
MW-13D	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-13S	USAS	1/29/2008	4.5	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-14D	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-14S	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-15D	USAS	1/24/2008	7.5	4.9	0.45 U	3	0.5 U	4
MW-15S	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-16D	USAS	1/29/2008	6	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-16S	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-17D	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-17S	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-18D	USAS	1/28/2008	2.6	0.74 I	0.45 U	2.1	0.5 UJ	0.52 J
MW-18S	USAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-19	Lower AF	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-20	USAS	1/24/2008	6.1	1.1	0.94 I	0.65 U	0.5 U	1.3
MW-21	S&P Sand	1/28/2008	1 U [2.6]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-22	Lower AF	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-23	S&P Sand	1/25/2008	4 [4.9]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-24	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-25	USAS	1/24/2008	7.7	14	7.5	0.65 U	0.5 U	2.3
MW-26	USAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-27	USAS	1/28/2008	69	69	120	11	79 J	23 J
MW-28	USAS	1/28/2008	28	3.1	1.4	0.65 U	0.5 UJ	0.5 UJ
MW-29	USAS	1/28/2008	91	10	7.5	12	0.5 UJ	91 J
MW-30	USAS	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-31	Lower AF	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.7 I	0.5 U

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**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MW-32	USAS	1/24/2008	2.6	9.9	8.6	0.65 U	3.5	8.3
MW-33	LSAS	1/31/2008	590 J	160 EJ	580 DJ	22 J	140 J	410 EJ
MW-34	S&P Sand	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-35	USAS	1/30/2008	1 U	0.52 U	3.7	0.65 U	15	11
MW-36	USAS	1/31/2008	15	20	54	5.8	1.3	190 EJ
MW-37	LSAS	1/31/2008	760 DJ	49	230 DJ	420 EJ	24	9,400 DJ
MW-38	USAS	2/1/2008	24	20	27	6.5 U	450	600
MW-39	LSAS	2/1/2008	160	5.7	22	44	2 U	190
MW-40	USAS	1/31/2008	20 UJ	30	25	8.2	160 EJ	970 EJ
MW-41	LSAS	1/31/2008	450 J	22	68	96	0.59 I	250 EJ
MW-42	USAS	2/1/2008	72	59	89	83	14	1,800 D
MW-43	LSAS	2/1/2008	570 [560]	36 [31]	150 D [140]	19 [16]	0.5 U [5 U]	190 D [150]
MW-44	S&P Sand	1/28/2008	4.8	5.1	2.9	0.65 U	0.5 UJ	0.5 UJ
MW-45	S&P Sand	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-46	Lower AF	1/31/2008	1 U [1 UJ]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-47	USAS	1/30/2008	39	2.2	0.45 U	0.65 U	0.5 U	0.5 U
MW-48	LSAS	1/30/2008	6.1	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-49	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-50	Lower AF	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-51	Lower AF	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-52	S&P Sand	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-53	S&P Sand	1/28/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 UJ [0.5 U]	0.5 UJ [0.5 U]
MW-54	S&P Sand	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-55	AF Gravel	1/29/2008	14 [15]	1.9 [1.6]	0.44 U [0.44 U]	0.64 U [0.64 U]	0.5 UJ [0.5 U]	0.5 U [0.5 U]
MW-56	S&P Sand	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-57	S&P Sand	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-58	S&P Sand	1/30/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-59	S&P Sand	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-60	S&P Sand	1/28/2008	2.5	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-61	S&P Sand	1/30/2008	1 U [1.3]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-62	USAS	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-63	USAS	1/31/2008	6.7	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-64	USAS	1/28/2008	19	1.7	0.79 I	2	0.5 UJ	10 J
MW-65	USAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-66	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-67	USAS	1/28/2008	54	25	41	2.3	0.5 U	14
MW-68	LSAS	1/28/2008	16	0.52 U	1.8	1.6	0.5 U	5.2
MW-69	USAS	1/30/2008	7.4	1.1	0.45 U	0.65 U	0.5 U	0.5 U
MW-70	USAS	1/30/2008	3.1	17	4.6	0.65 I	0.5 U	20
MW-71	USAS	1/30/2008	5.6	9.5	2	70	0.5 U	32
MW-72	USAS	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	1.7	2.5

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**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MW-73	USAS	1/25/2008	84	53	91	0.65 U	7.9	11
MW-74	USAS	1/29/2008	130	82	37	3.3 U	2.4 U	2.4 U
MW-75	USAS	1/30/2008	33	16	5.1	0.65 U	0.5 U	0.5 U
MW-76	USAS	1/24/2008	9.9	3.5	3.1	0.65 U	3.1	51
MW-77	LSAS	1/24/2008	150 [220]	39 [45]	18 [20]	3.5 [3.8]	1.3 [1.4]	24 [26]
MW-78	LSAS	1/28/2008	99	340 D	320 D	110	6.4 J	48 J
MW-79	LSAS	1/23/2008	52	4	14	140	0.5 U	100
MW-80	LSAS	1/30/2008	95	17	170 D	6.2	4.5	23
MW-81	LSAS	1/30/2008	150	8.1	78	49	0.5 U	890 EJ
MW-82	LSAS	1/29/2008	580	73	17	6.4 U	5 U	5 U
MW-83	AF Gravel	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-84	LSAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-85	LSAS	1/24/2008	590	98	92	34	0.5 U	7.6
MW-86	LSAS	1/28/2008	13	1.6	1.8	0.65 U	0.5 U	0.5 U
MW-87	LSAS	1/30/2008	400 DJ	190 EJ	970 EJ	8.5	61	360 EJ
MW-88	Zone 1 Clay	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-89	USAS	1/23/2008	2.9	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-90	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-91	LSAS	1/28/2008	85	3.8	3.1	7	0.5 UJ	16 J
MW-92	LSAS	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-93	LSAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-94	USAS	1/24/2008	19	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-95	USAS	1/24/2008	35	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-96	Zone 3-4 Clay	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-97	Zone 3-4 Clay	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-98	LSAS	1/25/2008	710	170 D	480 D	3.6	13	47
MW-99	Zone 1 Clay	1/25/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-100	USAS	1/25/2008	28	7.5	2.2	0.65 U	0.5 U	0.5 U
MW-101	LSAS	1/29/2008	2.5	0.52 U	0.44 U	0.64 U	0.5 UJ	0.5 U
MW-102	AF Gravel	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-103	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-104	USAS	1/28/2008	91	23	25	0.65 U	0.5 UJ	0.85 J
MW-105	LSAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-106	LSAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-107	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-108	USAS	1/29/2008	12	1.3	0.44 U	0.64 U	0.5 UJ	0.5 U
MW-109	USAS	1/28/2008	15	0.77 I	0.45 U	0.65 U	0.5 U	0.5 U
MW-110	USAS	1/28/2008	62	15	15	0.65 U	0.5 U	0.5 U
MW-111	USAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ
MW-112	Zone 1 Clay	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-113	LSAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 UJ	0.5 UJ

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**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MW-114	USAS	1/24/2008	1.1	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-115	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-116	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-117	LSAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-118	USAS	1/25/2008	2.3	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-119	LSAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-120	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-121	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-122	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-123	Floridan	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-124	Zone 2 Clay	1/24/2008	2.3	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-125	Venice Clay	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-126	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-127	AF Gravel	1/31/2008	300 DJ	34	270 DJ	100	3.3	3,300 DJ
MW-128	S&P Sand	1/31/2008	7.2 [7.6]	2.3 [2.6]	3.6 [4]	2.5 [2.5]	0.5 U [0.5 U]	34 [35]
MW-129	AF Gravel	1/30/2008	4.2	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-130	AF Gravel	1/30/2008	92	10	28	1.1	0.5 U	3.7
MW-131	AF Gravel	1/31/2008	2.9	0.52 U	0.45 U	0.65 U	0.5 U	3.2 U
MW-132	AF Gravel	1/23/2008	2.8 [2.1]	0.52 U [0.52 U]	2.6 [0.9 I]	0.65 U [0.65 U]	0.5 U [0.5 U]	3.7 [1.7]
MW-133	AF Gravel	1/28/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 UJ [0.5 U]	0.5 UJ [0.5 U]
MW-134	AF Gravel	2/1/2008	28	5.4	23	5.9	0.5 U	190 D
MW-135	AF Gravel	1/28/2008	29 [33]	0.72 I [0.98 I]	1.2 [2.1]	63 [93]	0.5 U [0.5 U]	80 [120]
MW-136	AF Gravel	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-137	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-138	LSAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-139	S&P Sand	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-140	Lower AF	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-141	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-142	LSAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-143	AF Gravel	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-144	S&P Sand	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-145	Lower AF	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-146	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-147	LSAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 UJ	0.5 U
MW-148	AF Gravel	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 UJ	0.5 U
MW-149	S&P Sand	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-150	Lower AF	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 UJ	0.5 U
MW-151	USAS	1/23/2008	2.8	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-152	LSAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-153	AF Gravel	1/24/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-154	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U

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**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MW-155	Lower AF	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-156	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-157	LSAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-158	AF Gravel	1/24/2008	84	4.7	4.6	0.65 U	0.5 U	0.5 U
MW-159	S&P Sand	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-160	Lower AF	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-161	Floridan	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-162	USAS	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-163	LSAS	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-164	AF Gravel	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-165	S&P Sand	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-166	Lower AF	1/30/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-167	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-168	LSAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-169	AF Gravel	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-170	Lower AF	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-171	LSAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-172	AF Gravel	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-173	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-174	Lower AF	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-175	AF Gravel	1/29/2008	1 U [1 U]	0.52 U [0.52 U]	0.44 U [0.44 U]	0.64 U [0.64 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-176	S&P Sand	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-177	Lower AF	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-178	LSAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-179	AF Gravel	1/25/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-180	S&P Sand	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-181	Lower AF	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-182	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-183	USAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-184	LSAS	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-185	AF Gravel	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-186	S&P Sand	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-187	Lower AF	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-188	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-189	LSAS	1/23/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-190	AF Gravel	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-191	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-192	Lower AF	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-193	AF Gravel	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-194	S&P Sand	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-195	Lower AF	1/24/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]

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**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MW-196	AF Gravel	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	2.2
MW-197	AF Gravel	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-198	USAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-199	LSAS	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-200	AF Gravel	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-201	S&P Sand	1/28/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-202	Lower AF	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-204	USAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-205	LSAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-206	AF Gravel	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-207	Lower AF	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-208	USAS	1/23/2008	1 U	0.52 U	0.45 U	11	0.5 U	0.5 U
MW-209	LSAS	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-210	AF Gravel	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-211	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	1.1	0.5 U	0.53 U
MW-212	Lower AF	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-213	USAS	1/31/2008	1 UJ	0.52 UJ	0.45 UJ	0.65 UJ	0.5 UJ	0.5 UJ
MW-214	LSAS	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-215	AF Gravel	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-216	S&P Sand	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-217	Lower AF	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-219	USAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-220	LSAS	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	NA
MW-221	AF Gravel	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-222	S&P Sand	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-223	Hardstreak Clay	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-224	Venice Clay	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-225	Venice Clay	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-226	AF Gravel	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-227	S&P Sand	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-228	AF Gravel	1/23/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-229	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-230	LSAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 UJ	0.5 U
MW-231	AF Gravel	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-232	AF Gravel	1/30/2008	7.6 [7.6]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-233	AF Gravel	1/24/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-234	USAS	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-235	LSAS	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-236	AF Gravel	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-237	S&P Sand	1/31/2008	1 U [1 UJ]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-238	Lower AF	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U

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FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
MW-239	AF Gravel	1/23/2008	6.7	0.52 U	0.45 U	2.1	0.5 U	2.9
MW-240	S&P Sand	1/23/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-241	Lower AF	1/25/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-242	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-243	LSAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-244	AF Gravel	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-245	Hardstreak Clay	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-246	LSAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
MW-247	AF Gravel	1/29/2008	1 U [1 U]	0.52 U [0.52 U]	0.44 U [0.44 U]	0.64 U [0.64 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-248	AF Gravel	1/28/2008	12 J [1 UJ]	1.1 [0.52 U]	0.68 I [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
MW-249	AF Gravel	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-250	AF Gravel	1/31/2008	15	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-251	Floridan	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-252	S&P Sand	1/31/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
MW-253	AF Gravel	2/1/2008	350	75	400 D	130	5.4	6,200 D
MW-254 (MW-BT-1)	USAS	2/1/2008	10 U	6 I	37	6.5 U	11,000 D	760
PZ-LSAS-1	LSAS	1/31/2008	660 EJ	3.3	48	120	0.5 U	310 EJ
PZ-LSAS-2	LSAS	1/31/2008	580 DJ	18	77	680 EJ	1.7	1,000 EJ
PZ-LSAS-3	LSAS	1/31/2008	100	11	37	56	13	2,500 EJ
PZ-LSAS-4	LSAS	1/31/2008	600 DJ	8.8	100	730 EJ	0.5 U	4,100 EJ
PZ-LSAS-5	LSAS	1/31/2008	380 J	18	110	690 EJ	0.5 U	3,400 DJ
PZ-LSAS-6	LSAS	1/31/2008	350 J	33	150	510 EJ	3.1	8,900 DJ
PZ-LSAS-7	LSAS	1/31/2008	50 UJ	49	65	480 EJ	6.3	2,300 DJ
RW-1	USAS	2/1/2008	1 U	2	0.45 U	0.65 U	0.5 U	1.5
RW-2	USAS	1/24/2008	1 U	4.1	0.56 I	15	21	9.7
TW-84-A	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
TW-84-B	USAS	1/29/2008	1 U	0.52 U	0.44 U	0.64 U	0.5 U	0.5 U
EXTRACTION WELLS								
EW-102	LSAS	1/31/2008	120 DJ	6.3	55	0.65 U	0.5 U	1.8 U
EW-103	USAS	1/30/2008	1 U	18	4.2	14	1	31
EW-104	LSAS	1/30/2008	25	49	14	71	4.9	1,000 EJ
EW-105	USAS	1/30/2008	3.9	1.3	1.3	1.4	0.79 I	19
EW-106	LSAS	1/30/2008	20	24	43	580 EJ	26	1,500 EJ
EW-107	USAS	1/31/2008	1 UJ [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	6.1 [4.2]
EW-109	USAS	1/30/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
EW-110	LSAS	1/30/2008	27	28	68	5.4	4	73
EXL-1 (EW-108)	LSAS	1/31/2008	540 J	46	140	930 EJ	0.5 U	78
EXU-1 (EW-101)	USAS	1/30/2008	1 U	3.7	3.2	14	7.3	140

Notes on Page 8

**TABLE 2-2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS FOR 2008 ANNUAL GROUNDWATER MONITORING EVENT**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Location ID:	Zone	Date Collected	1,4-Dioxane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	Tetrachloroethene (ug/L)	Trichloroethene (ug/L)
GCTL			3.2	70	7	70	3	3
PRIVATE WELLS								
1107 TALLEVAST RD	AF Gravel	2/4/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
1201 TALLEVAST RD	AF Gravel	2/4/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
2105 TALLEVAST RD	AF Gravel	2/1/2008	96	3.4	4.9	0.93 I	0.5 U	0.5 U
2400 TALLEVAST RD	AF Gravel	1/24/2008	1 U [1 U]	0.52 U [0.52 U]	0.45 U [0.45 U]	0.65 U [0.65 U]	0.5 U [0.5 U]	0.5 U [0.5 U]
2411 TALLEVAST RD	AF Gravel	1/31/2008	22	0.52 U	0.55 I	0.65 U	0.5 U	0.5 U
7500 26TH CT E	Floridan	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
7524 COMMERCE PLACE	AF Gravel	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
7561/7571 15TH ST E	AF Gravel	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U
7851 15TH ST E	Floridan	1/30/2008	1.6	0.52 U	0.45 U	0.65 U	0.5 U	2.2
7851 15TH ST E	Floridan	1/30/2008	1.7	0.52 U	0.45 U	0.65 U	0.5 U	1.9
8005 15TH ST E	AF Gravel	2/1/2008	1 U	0.52 U	0.45 U	0.65 U	0.5 U	0.5 U

Notes:

AF Gravel = Arcadia Formation Gravels

D = The value is the result of a secondary dilution.

E = Sample result is greater than calibration range.

I = Detected but below reporting limit. Result is an estimated concentration.

J = Estimated value.

LSAS = Lower Shallow Aquifer System

Lower AF = Lower Arcadia Formation

S&P Sand = Salt & Pepper sands

U = The analyte was analyzed for, but not detected.

ug/L = micrograms per liter

UJ = The analyte was analyzed for, but not detected. The reporting limit is an estimated value.

USAS = Upper Surficial Aquifer System

[] = Duplicate sample result.

**TABLE 3-1
OBSERVED WATER LEVEL RESPONSES DURING AQUIFER TESTING ACTIVITIES**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Well ID	Zone	System Recovery	Slug Test Water Level Change (ft)	One-Hour Specific Capacity Tests Maximum Drawdown (ft)				24-Hour Pumping Tests Maximum Drawdown (ft)			7-Day Pumping Test at EW-UAFG-1 (Q=5.6 gpm)		
		Change (ft of water)	DW-1 Test	MW-134 Test (Q=1.3 gpm)	IWI-1 Test (Q=1.5 gpm)	MW-127 Test (Q=1.5 gpm)	EW-UAFG-1 Test (Q=5.6 gpm)	MW-134 Test (Q=2.1 gpm)	IWI-1 Test (Q=2.0 gpm)	MW-127 Test (Q=2.5 gpm)	Drawdown (ft)	Drawdown Due to Offsite Influences (ft)	Calculated Actual Drawdown (ft)
1975/2003 Tallevast Rd	Surface water	*	--	--	--	--	--	--	--	--	--	--	--
Boothe Pond	Surface water	--	--	--	--	--	--	--	--	--	--	--	--
On-site Pond	Surface water	0.24	--	--	--	--	--	--	--	--	--	--	--
EW-101 / EXU-1	USAS	*	--	--	--	--	--	--	--	--	--	--	--
EW-103	USAS	11.20	--	--	--	--	--	--	--	--	--	--	--
EW-105	USAS	7.39	--	--	--	--	--	--	--	--	--	--	--
EW-107	USAS	*	--	--	--	--	--	--	--	--	--	--	--
EW-109	USAS	*	--	--	--	--	--	--	--	--	--	--	--
MW-10	USAS	0.55	--	--	--	--	--	--	--	--	--	--	--
MW-13S	USAS	--	--	--	--	--	--	--	--	--	--	--	--
MW-18S	USAS	--	--	--	--	--	--	--	--	--	--	--	--
MW-35	USAS	--	--	--	--	--	--	--	--	--	--	--	--
MW-36	USAS	1.88	--	--	--	--	--	--	--	--	0.04	--	0.04
MW-38	USAS	0.62	--	--	--	--	--	--	--	--	--	--	--
MW-40	USAS	0.20	--	--	--	--	--	--	--	--	--	--	--
MW-42	USAS	0.45	--	--	--	--	--	--	--	--	--	--	--
MW-71	USAS	*	--	--	--	--	--	--	--	--	--	--	--
MW-72	USAS	--	--	--	--	--	--	--	--	--	--	--	--
MW-8D	USAS	--	--	--	--	--	--	--	--	--	--	--	--
EW-102	LSAS	*	--	--	--	--	0.28	0.13	0.45	0.38	2.17	0.37	1.80
EW-104	LSAS	7.36	--	--	--	--	0.10	0.07	--	0.14	0.86	0.17	0.69
EW-106	LSAS	16.3	--	--	--	--	0.12	0.08	0.19	0.15	0.92	0.17	0.75
EW-108 / EXL-1	LSAS	*	--	0.04	0.05	0.10	0.42	0.22	0.58	0.50	2.77	0.47	2.30
EW-110	LSAS	10.6	--	--	--	--	--	0.03	--	--	0.18	0.09	0.09
MW-33	LSAS	1.25	--	0.04	0.05	0.09	0.43	0.22	0.58	0.51	2.72	0.46	2.26
MW-37	LSAS	1.27	--	0.03	0.07	0.09	0.43	0.23	0.59	0.51	2.79	0.47	2.32
MW-39	LSAS	1.54	--	0.03	0.03	0.05	0.30	0.20	0.46	0.43	2.34	0.36	1.98
MW-41	LSAS	1.23	--	0.03	0.05	0.08	0.39	0.22	0.56	0.50	2.72	0.47	2.25
MW-43	LSAS	1.24	--	0.05	0.06	0.11	0.43	0.25	0.59	0.50	2.77	0.46	2.31
MW-80	LSAS	0.89	--	--	--	--	0.11	0.15	0.40	0.36	2.03	0.37	1.66
MW-81	LSAS	1.27	--	--	--	--	0.16	*	0.65	0.50	2.73	0.51	2.22
MW-87	LSAS	--	--	--	--	--	--	--	0.16	--	1.12	0.48	0.64
MW-91	LSAS	0.69	--	--	--	--	0.12	0.13	0.30	0.20	1.58	0.69	0.89
PZ-LSAS-1	LSAS	*	--	--	--	--	0.05	0.05	0.08	--	0.43	0.09	0.34
PZ-LSAS-2	LSAS	*	--	--	--	--	0.05	0.07	0.08	0.05	0.45	0.09	0.36
PZ-LSAS-3	LSAS	*	--	--	--	--	0.06	0.04	0.10	0.06	0.46	0.08	0.38
PZ-LSAS-4	LSAS	*	--	--	--	--	0.06	0.05	0.10	0.06	0.50	0.09	0.41
PZ-LSAS-5	LSAS	*	--	--	--	--	0.05	0.04	0.09	0.05	0.45	0.09	0.36
PZ-LSAS-6	LSAS	*	--	--	--	--	0.08	0.06	0.14	0.12	0.72	0.12	0.60
PZ-LSAS-7	LSAS	*	--	--	--	*	0.05	0.05	0.10	0.04	0.43	0.09	0.34

Notes on page 2

**TABLE 3-1
OBSERVED WATER LEVEL RESPONSES DURING AQUIFER TESTING ACTIVITIES**

**2008 GROUNDWATER MONITORING REPORT
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA**

Well ID	Zone	System Recovery	Slug Test Water Level Change (ft)	One-Hour Specific Capacity Tests Maximum Drawdown (ft)				24-Hour Pumping Tests Maximum Drawdown (ft)			7-Day Pumping Test at EW-UAFG-1 (Q=5.6 gpm)		
		Change (ft of water)	DW-1 Test	MW-134 Test (Q=1.3 gpm)	IWI-1 Test (Q=1.5 gpm)	MW-127 Test (Q=1.5 gpm)	EW-UAFG-1 Test (Q=5.6 gpm)	MW-134 Test (Q=2.1 gpm)	IWI-1 Test (Q=2.0 gpm)	MW-127 Test (Q=2.5 gpm)	Drawdown (ft)	Drawdown Due to Offsite Influences (ft)	Calculated Actual Drawdown (ft)
DW-1	AF Gravel	--	12.1	--	--	--	--	--	--	--	2.45		2.45
EW-UAFG-1	AF Gravel	*	--	1.19	2.32	3.58	32.4	1.43	4.54	6.00	37.00	1.41	35.59
IWI-1	AF Gravel	*	--	1.24	9.92	2.66	8.68	1.55	14.37	4.86	11.98	1.26	10.72
MW-127	AF Gravel	*	--	1.06	2.21	8.13	10.7	1.45	4.08	15.10	13.78	1.27	12.51
MW-130	AF Gravel	*	--	*	*	--	0.75	0.38	1.40	1.05	5.21	2.31	2.90
MW-133	AF Gravel	*	--	--	--	--	--	0.13	0.72	0.39	2.94	1.13	1.81
MW-134	AF Gravel	*	--	18.4	1.15	1.23	3.60	18.75	2.49	2.34	7.62	1.58	6.04
IWI-2	Zone 3-4 Clay	--	--	--	--	--	--	--	--	--	--	0.89	--
MW-128	S&P Sand	--	--	--	--	--	--	--	--	--	--	0.48	--
MW-52	S&P Sand	--	--	--	--	--	--	--	--	--	--	0.29	--
MW-19	Lower AF	--	--	--	--	--	--	--	--	--	--	*	--
MW-123	Floridan	--	--	--	--	--	--	--	--	--	--	*	--

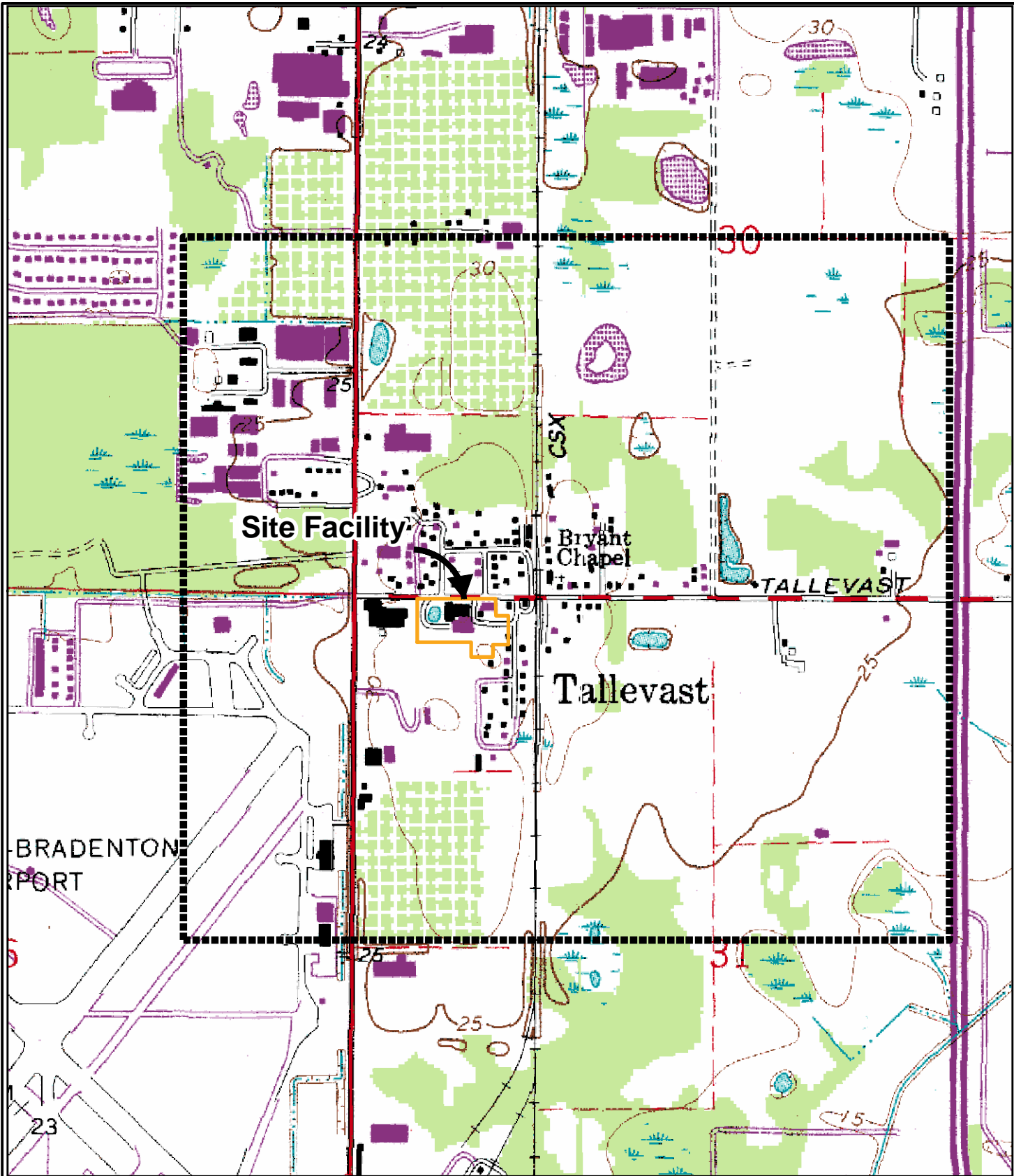
-- No visually discernable response in data gathered from data loggers.

* Magnitude of response unknown. Reasons include: (1) well not installed prior to testing activity, (2) well not instrumented, (3) magnitude of potential response is similar in magnitude to known barometric pressure variations during test, (4) well was influenced by pumping in the Floridan aquifer, or (5) significant recharge events occurred during test, masking response to pumping.

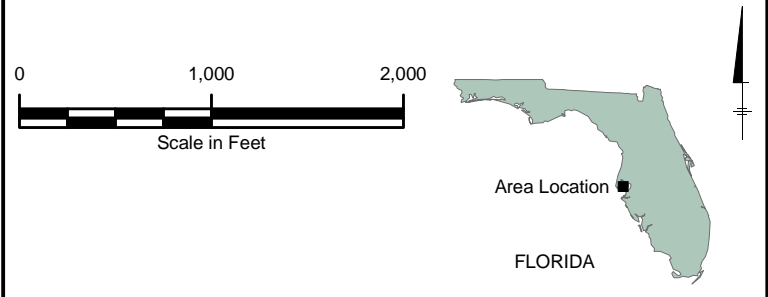
AF Gravel = Arcadia Formation Gravels
 LSAS = Lower Shallow Aquifer System
 Lower AF = Lower Arcadia Formation
 S&P Sands = Salt & Pepper sands
 USAS = Upper Surficial Aquifer System
 Q = pumping rate
 gpm = gallons per minute
 ft = feet

ARCADIS

Figures



REFERENCE: BASE MAP USGS 7.5 MINUTE QUAD BRADENTON, FL, 1964, PHOTOREVISED 1987.



FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

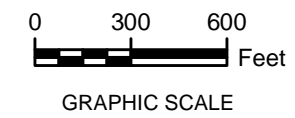
SITE LOCATION MAP

 **ARCADIS** | **FIGURE 1-1**



- FORMER ABC FACILITY
- PARCELS
- PONDS

NOTE:
 1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE.
 AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE
 COLOR FORMAT.



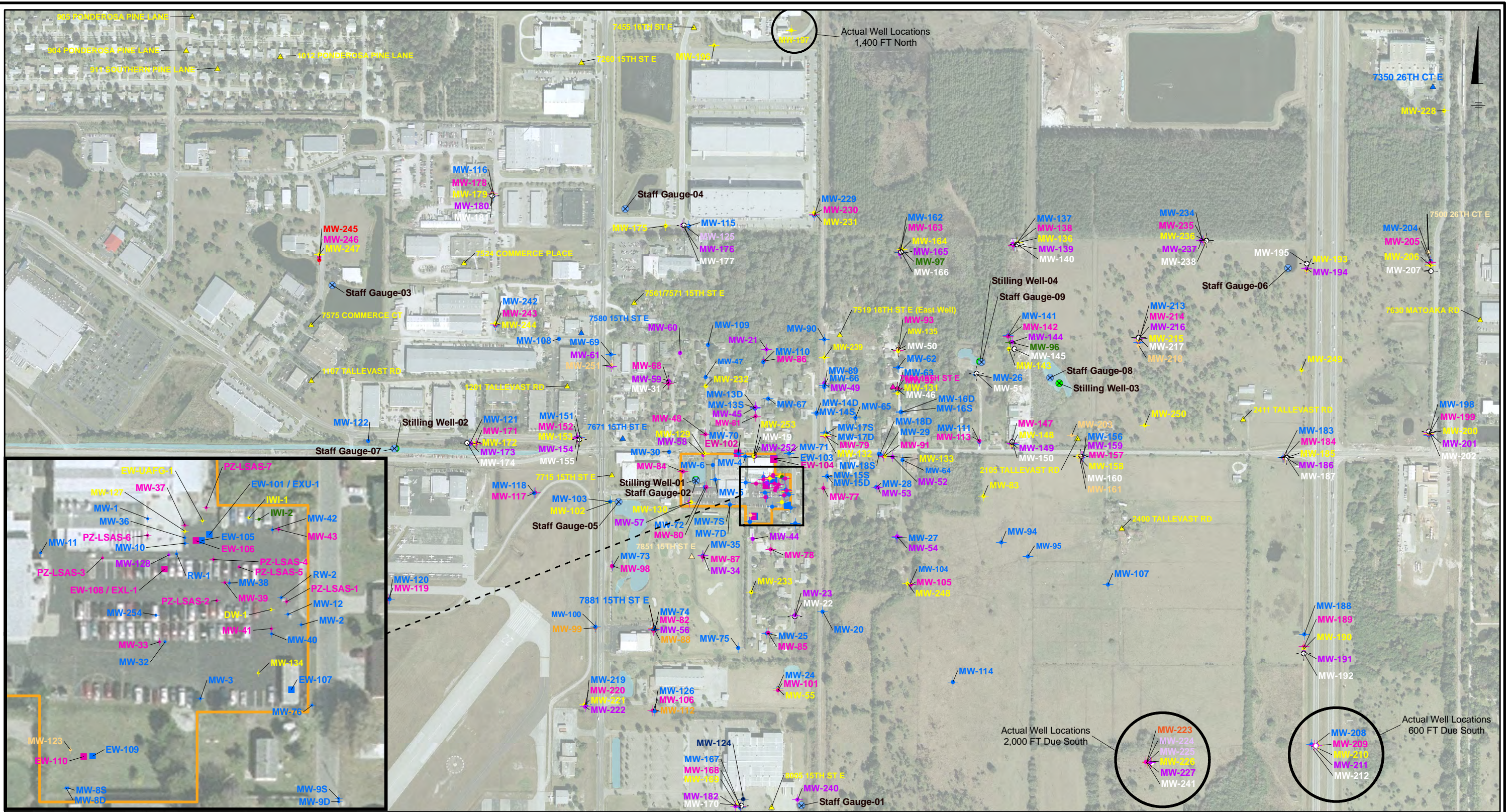
FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

VICINITY MAP



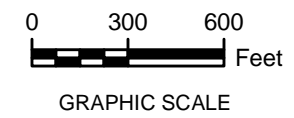
FIGURE
1-2

DEN-080 MSS
 Project #: B008055.0000
 Y:\GIS\LockheedMartin\GWMR2008\Report\MXD\Monitoring_Private_Wells.mxd - 7/7/2008 @ 11:16:44 AM



LEGEND

- | | | | | |
|-----------------------------|--------------------------------|--------------------------------------|------------------------------------|-----------------------|
| ▲ Private Wells (AF Gravel) | ⊗ Staff Gauges | ◆ Monitoring Wells (Hardstreak Clay) | ◆ Monitoring Wells (Zone 2 Clay) | ▭ Former ABC Facility |
| ▲ Private Wells (Floridan) | ■ Extraction Wells (USAS) | ◆ Monitoring Wells (LSAS) | ◆ Monitoring Wells (S&P Sand) | ■ Ponds |
| ▲ Private Wells (LSAS) | ■ Extraction Wells (LSAS) | ◆ Monitoring Wells (Venice Clay) | ◆ Monitoring Wells (Zone 3-4 Clay) | |
| ▲ Private Wells (USAS) | ■ Extraction Wells (AF Gravel) | ◆ Monitoring Wells (Zone 1 Clay) | ○ Monitoring Wells (Lower AF) | |
| ● Stilling Wells (Surface) | ◆ Monitoring Wells (USAS) | ◆ Monitoring Wells (AF Gravel) | ◆ Monitoring Wells (Floridan) | |



FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

MONITORING AND PRIVATE WELL LOCATION MAP



FIGURE 1-3

TERTIARY		QUATERNARY	SYSTEM		
MIocene	PLIOCENE	PLEISTOCENE	SERIES		
HAWTHORN GROUP	PEACE RIVER FORMATION	UNDIFFERENTIATED SURFICIAL DEPOSITS (USD)	LITHO-STRATIGRAPHIC UNIT		
ARCADIA FORMATION		SURFICIAL AQUIFER SYSTEM	HYDRO-STARTIGRAPHIC UNIT		
INTERMEDIATE AQUIFER SYSTEM The uppermost portion of the Peace River Formation (PRF) is represented by indurated moldic carbonate (" Hard Streak "), followed by a series of interbedded limestone, clay, and carbonate mudstone units (" Lower Shallow Aquifer System " or LSAS). These units are often fragmented into angular gravels during drilling. The LSAS is underlain by a siliciclastic to calcareous clay unit with a distinctive greenish-grey to olive color (" Venice Clay "). A correlated calcirudite/calclutite unit within the Peace River Formation (" Lower PRF Gravels ") carries a natural gamma spike believed to result from a high phosphatic content. There is a transitional contact with the underlying Arcadia formation. IAS SAND AND CLAY ZONE 1 – The top of the Arcadia Formation (AF) is comprised of a series of inter-bedded carbonate (calcitic/dolomitic) calcilutite, calcarenite and calcirudites. Vugs, pits and fractures are present within the well-consolidated sections of carbonate beds. UPPER AF GRAVELS – Beneath the upper AF, a lateral correlation can be made of a calcirudite/calclutite (clayey gravel/gravelly clay) unit ranging from approximately 78 to 138 feet below land surface (bls) in the surveyed area. The unit can produce significant groundwater yields, and is associated with a distinctive natural gamma spike which is believed to result from a high phosphatic content. IAS SAND AND CLAY ZONE 2 – Underlying the Upper AF Gravels is another series of inter-bedded carbonate (calcitic/dolomitic) calcilutite, calcarenite and calcirudites. Vugs, pits and fractures are present within the well-consolidated sections of carbonate beds. UPPER AF S & P SANDS – Located in the middle of the AF is a laterally continuous sand unit which is quartz rich and has a high/moderate phosphatic content. This unit ranges from approximately 112 to 168 feet bls in the surveyed area. Due to the colorless quartz and black phosphatic sand, the unit has a "salt & pepper" appearance. This "salt & pepper" (S & P) sand unit is fine to medium grained and has varying silt and clay content ranging from well sorted sand to cohesive clayey sands. IAS SAND AND CLAY ZONE 3 – The Arcadia Formation (AF) is comprised of a series of inter-bedded carbonate (calcitic/dolomitic) calcilutite, calcarenite and calcirudites. Vugs, pits and fractures are present within the well-consolidated sections of carbonate beds. LOWER AF GRAVELS – Beneath the sands of the S & P zone, a lateral correlation can be made of a calcirudites/calclutite (clayey gravel/gravelly clay) unit. This unit carries a distinctive natural gamma spike which is believed to result from a high phosphatic content. IAS SAND AND CLAY ZONE 4 – Underlying the Lower AF Gravels is a final The Arcadia Formation (AF) is comprised of a series of interbedded carbonate (calcitic/dolomitic) calcilutite, calcarenite and calcirudites. LOWER AF SANDS – Located at the base of the AF, is a laterally continuous sand unit which is quartz rich and appears to have a high phosphatic content. The sand unit is fine to medium grained and has varying silt and clay content ranging from poorly sorted to clayey sands.		<p>UPPER SAS – The USAS ("Upper Surficial Aquifer System") is a series of undifferentiated (unconsolidated) silica sands with variable clay content and shell fragments. The sands are fine to medium grained and sub-rounded to rounded. Basal sections of the unit contain fine, horizontal laminations of silts and clays.</p>	LITHOLOGY		
		20-55	6-36	5-35	Unit Thickness (ft)
		15-50	5-15	10-55	
		5-15	100-150		
		1-15			

**FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT**

STRATIGRAPHIC COLUMN


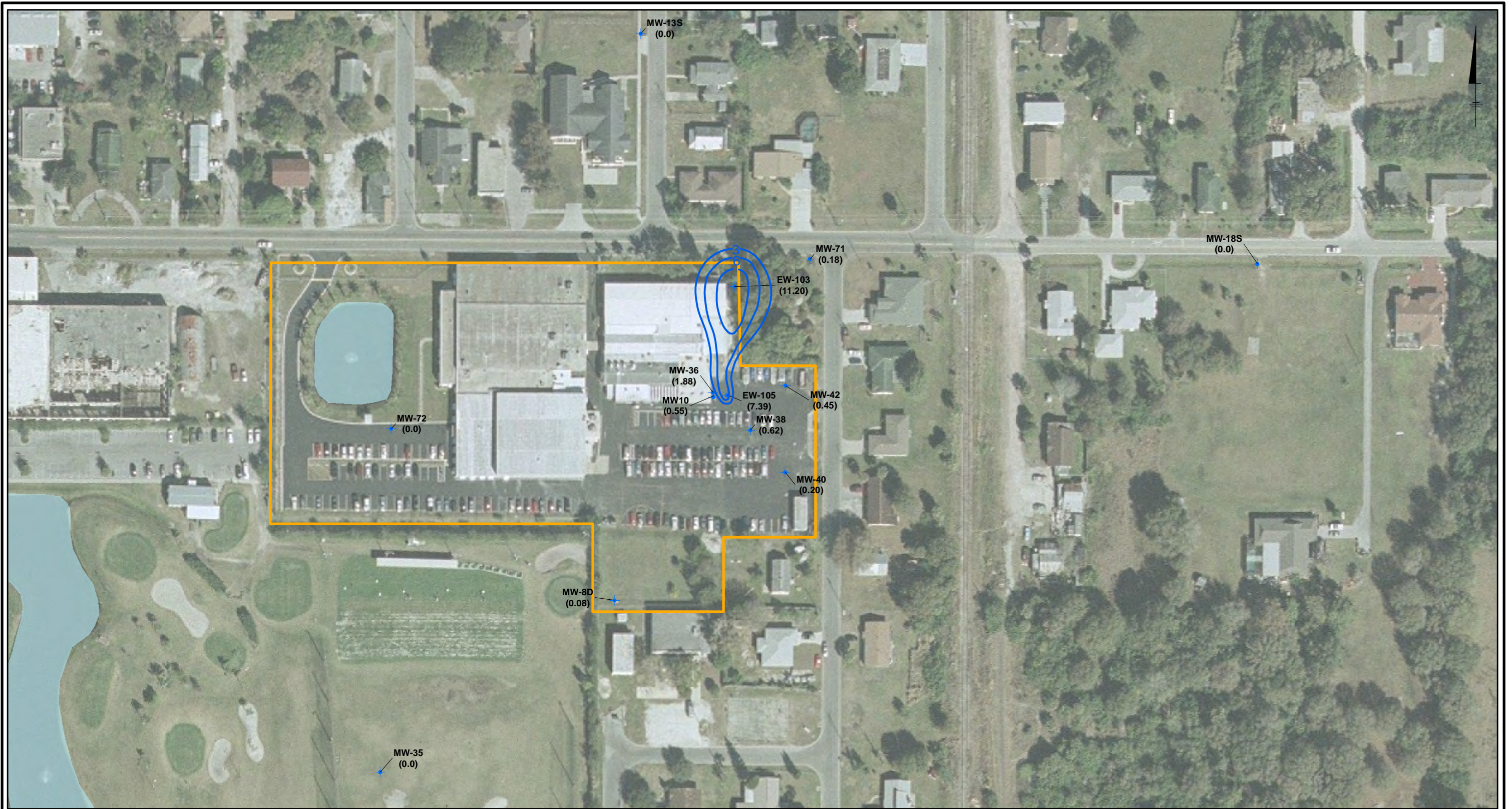


FIGURE
1-4

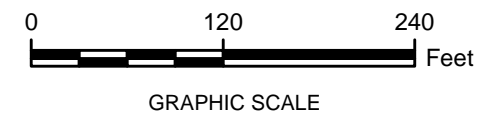


LEGEND:

- + Monitoring Well Location - USAS
- Former ABC Facility Boundary
- Ponds
- Recovery Contour (Contour Interval = 3 feet)
- MW-36 (0.55) Monitoring Well ID
Change (feet of water)

NOTE:

1. Positive recovery values indicate an increase in water level after the system shut off.

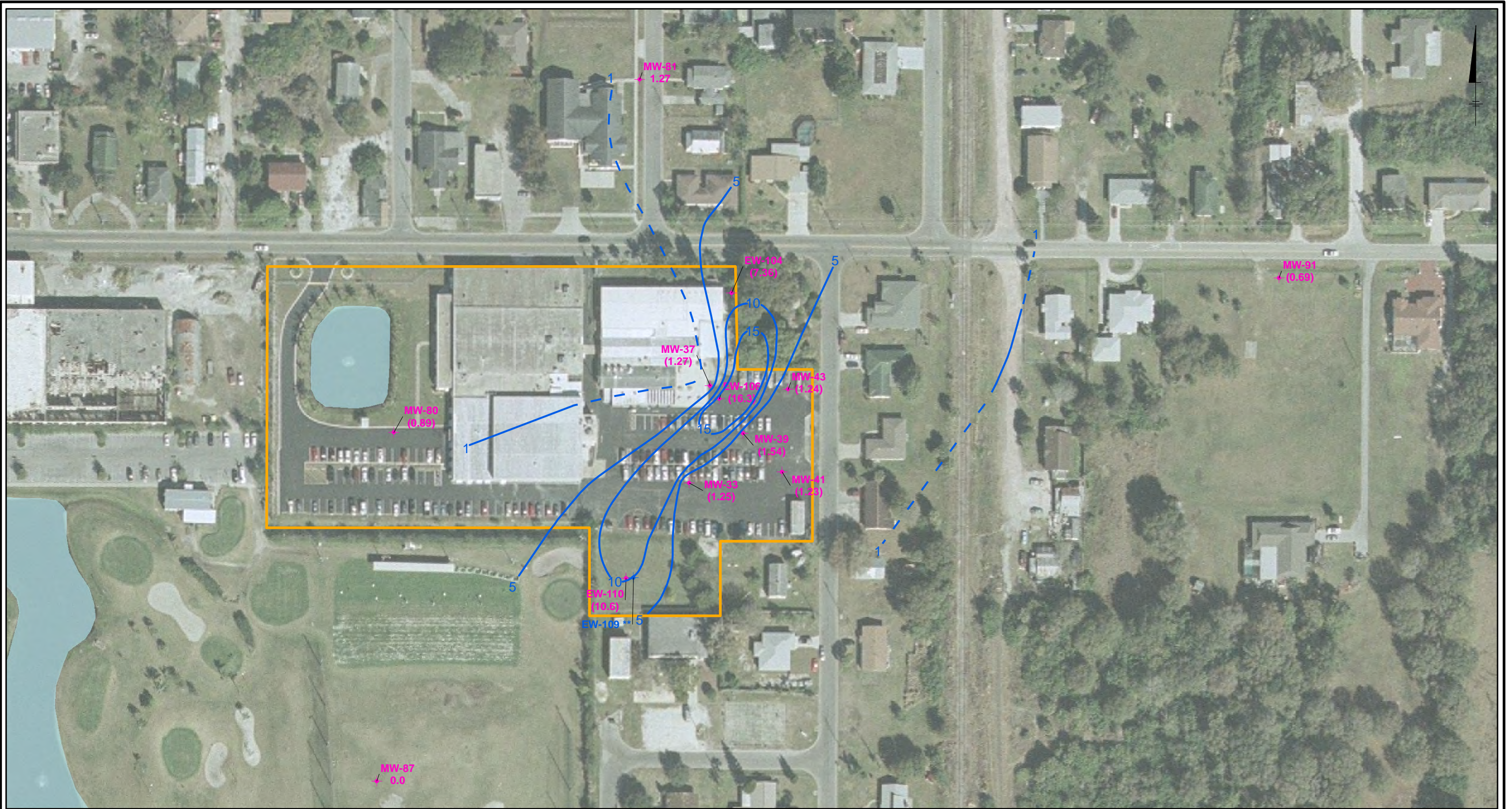


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**SYSTEM SHUTDOWN RECOVERY MAP
(USAS RECOVERY - DECEMBER 2007)**



FIGURE
3-1A

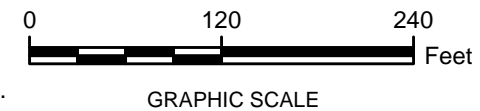


LEGEND:

- + Monitoring Well Location - LSAS
- Former ABC Facility Boundary
- Ponds
- Recovery Contour (Contour Interval = 5 feet)
- MW-37 (1.27) Monitoring Well ID Change (feet of water)

NOTE:

1. Positive recovery values indicate an increase in water level after the system shut off.
2. ** - EW-109 was turned off during system shutdown.

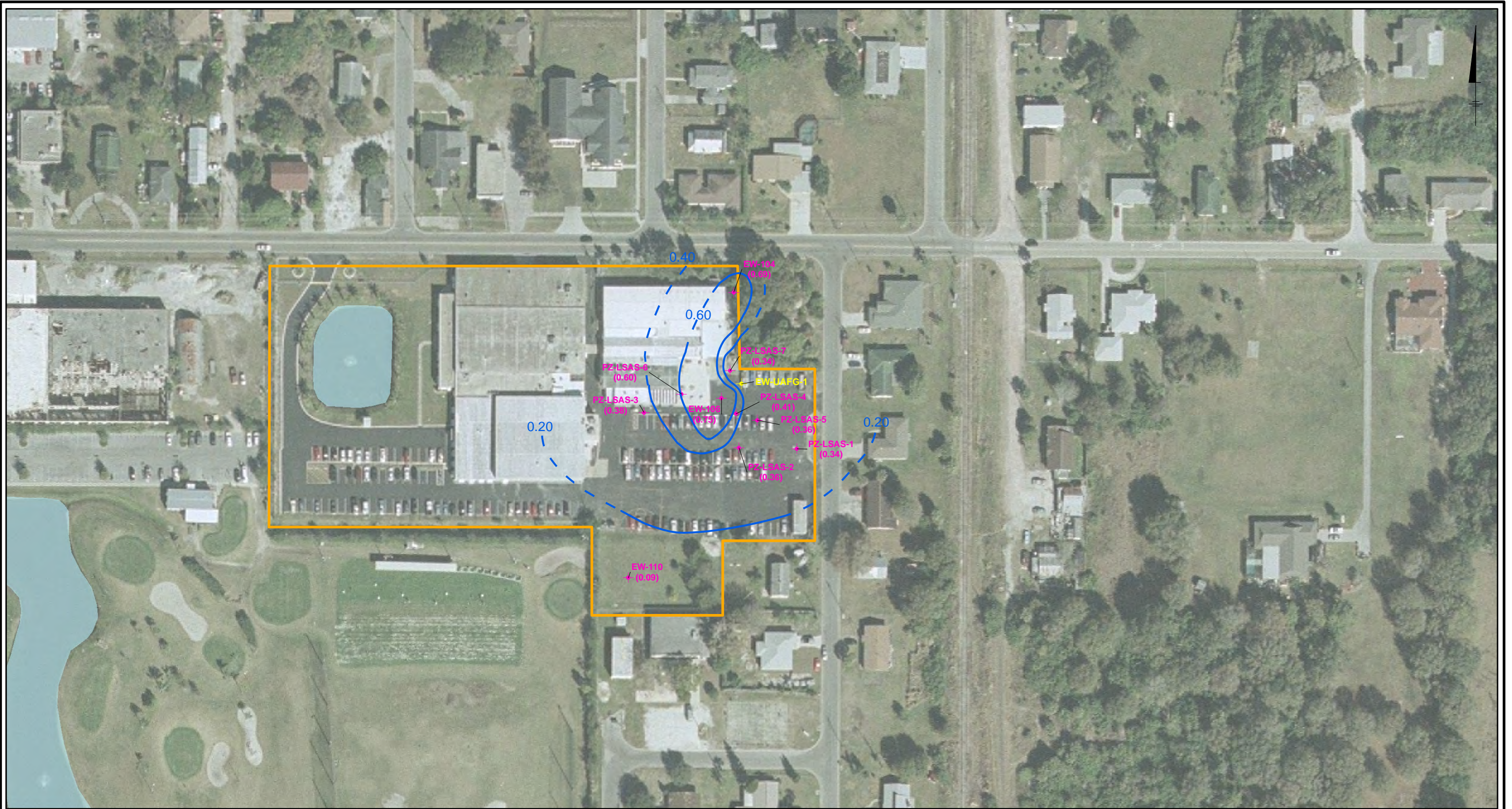


FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

**SYSTEM SHUTDOWN RECOVERY MAP
 (LSAS RECOVERY - DECEMBER 2007)**



FIGURE
3-1B

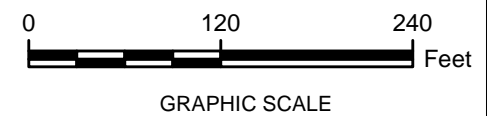


LEGEND:

- ★ Monitoring Well Location - Upper LSAS
- ★ Location of EW-UAFG-1
- Former ABC Facility Boundary
- Ponds
- Drawdown Contour (Contour Interval = 0.3 feet)
- EW-106 Monitoring Well ID
(0.75) Drawdown (feet)

NOTE:

1. Positive drawdown values indicate a decrease in water level due to pumping.

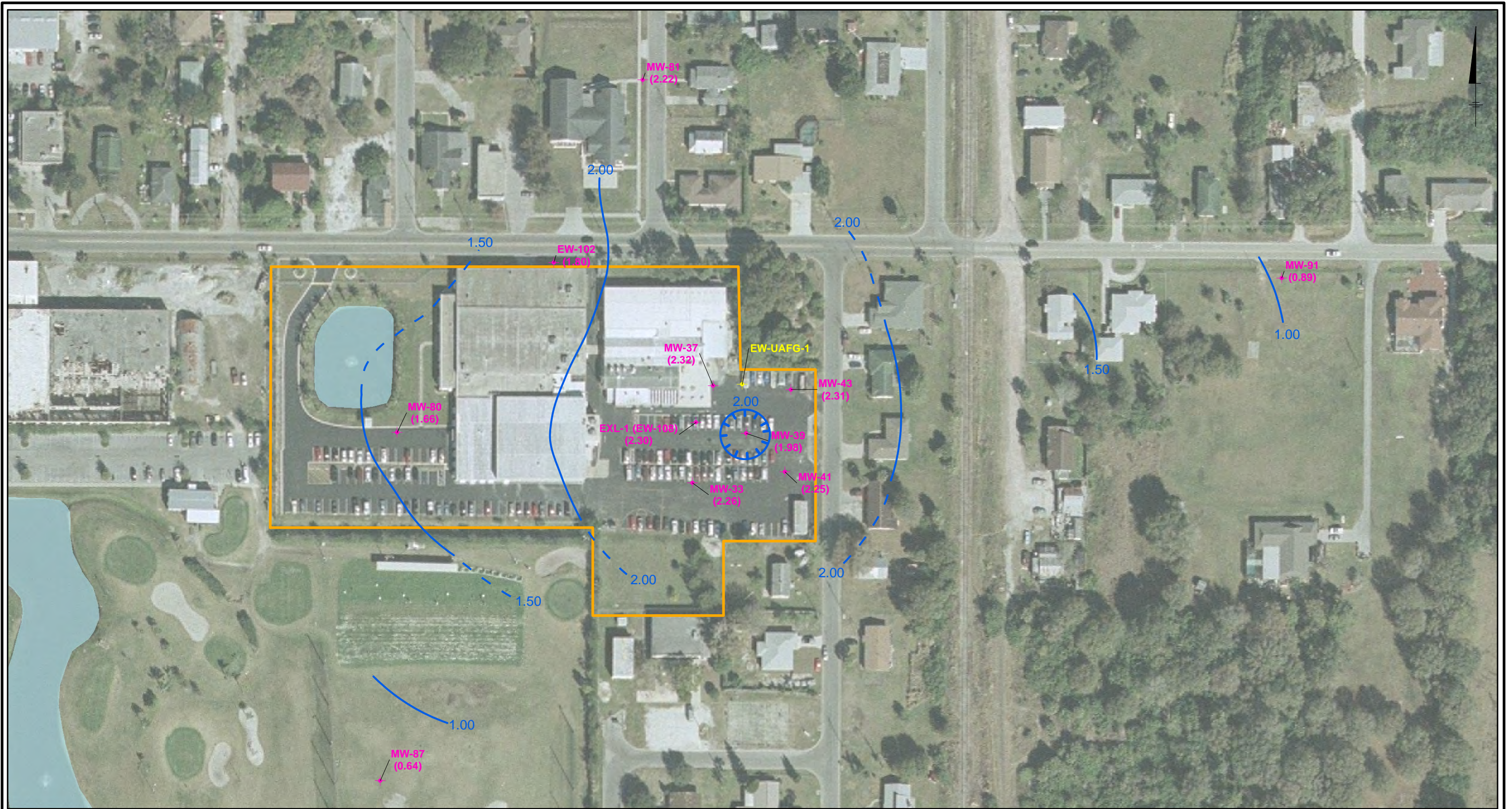


FORMER AMERICAN BERYLLIUM COMPANY SITE
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2008 GROUNDWATER MONITORING REPORT

**7-DAY PUMPING TEST AT EW-UAFG-1
(UPPER LSAS DRAWDOWN
DECEMBER 2007)**



FIGURE
3-3A

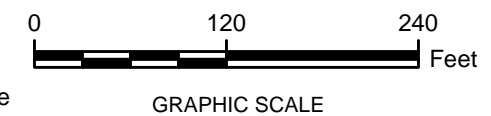


LEGEND:

- ★ Monitoring Well Location - Lower LSAS
- ★ Location of EW-UAFG-1
- Former ABC Facility Boundary
- Ponds
- Drawdown Contour (Contour Interval = 0.5 feet)
- ▨ Groundwater Depression
- MW-33 Monitoring Well ID
(2.26) Drawdown (feet)

NOTE:

1. Positive drawdown values indicate a decrease in water level due to pumping.



FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**7-DAY PUMPING TEST AT EW-UAFG-1
(LOWER LSAS DRAWDOWN
DECEMBER 2007)**



FIGURE
3-3B



LEGEND:

- Monitoring Well Location - AF Gravel
- Former ABC Facility Boundary
- Ponds
- Drawdown Contour (Contour Interval = 5 feet)
- MW-127 Monitoring Well ID (13.78) Drawdown (feet)

NOTE:

1. Positive drawdown values indicate a decrease in water level due to pumping.

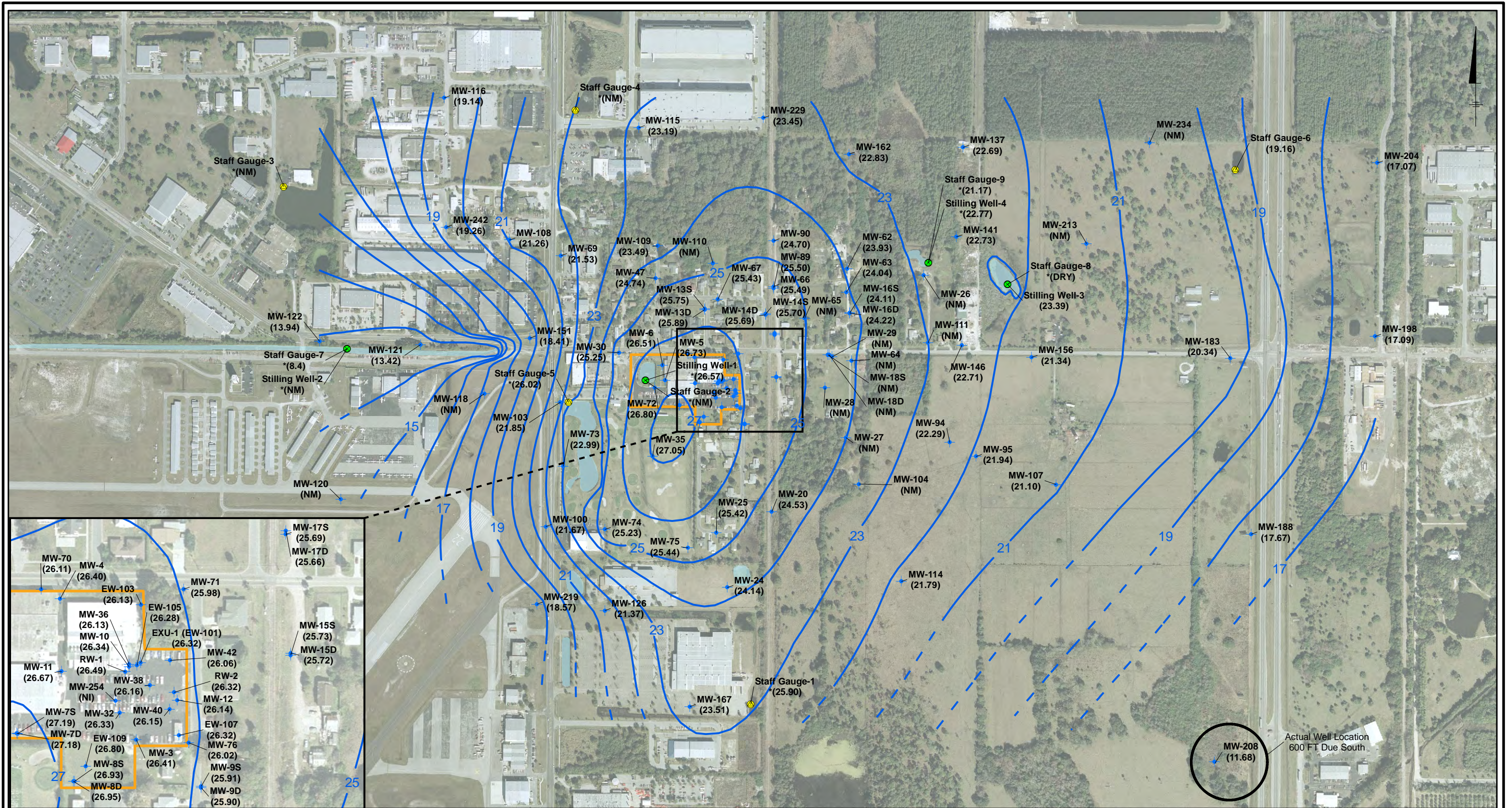


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**7-DAY PUMPING TEST AT EW-UAFG-1
(AFG DRAWDOWN
DECEMBER 2007)**



FIGURE
3-3C



DEN-080 MSS
Project #: B0038055.0000

LEGEND:

- + Monitoring Well Location - USAS
- Staff Gauge Location
- Stilling Well Location
- Former ABC Facility Boundary
- Ponds
- Potentiometric Elevation Contour (Feet MSL)
- MW-24 (24.14) Monitoring Well ID
Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the December 2007 monitoring event.
4. MSL - Mean Sea Level
5. NM - Not Measured, Inaccessible
6. NI - Well not installed at time of data collection
7. * - Data not used in contouring

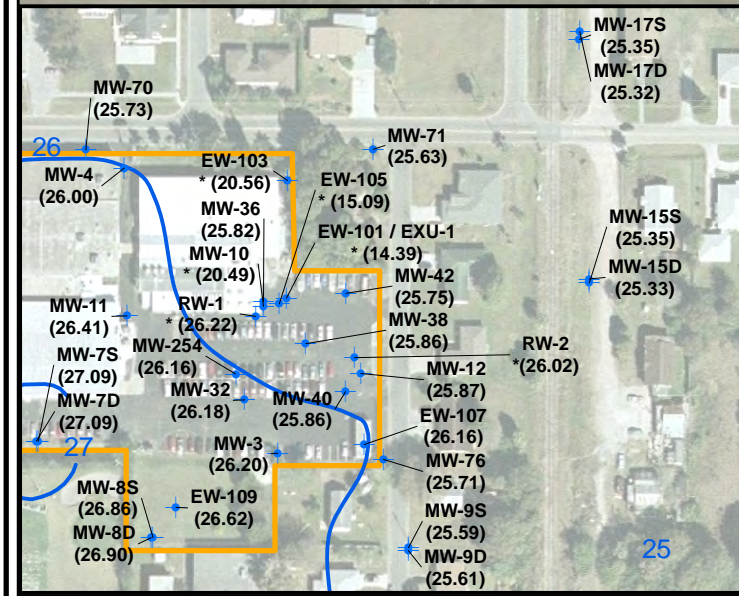
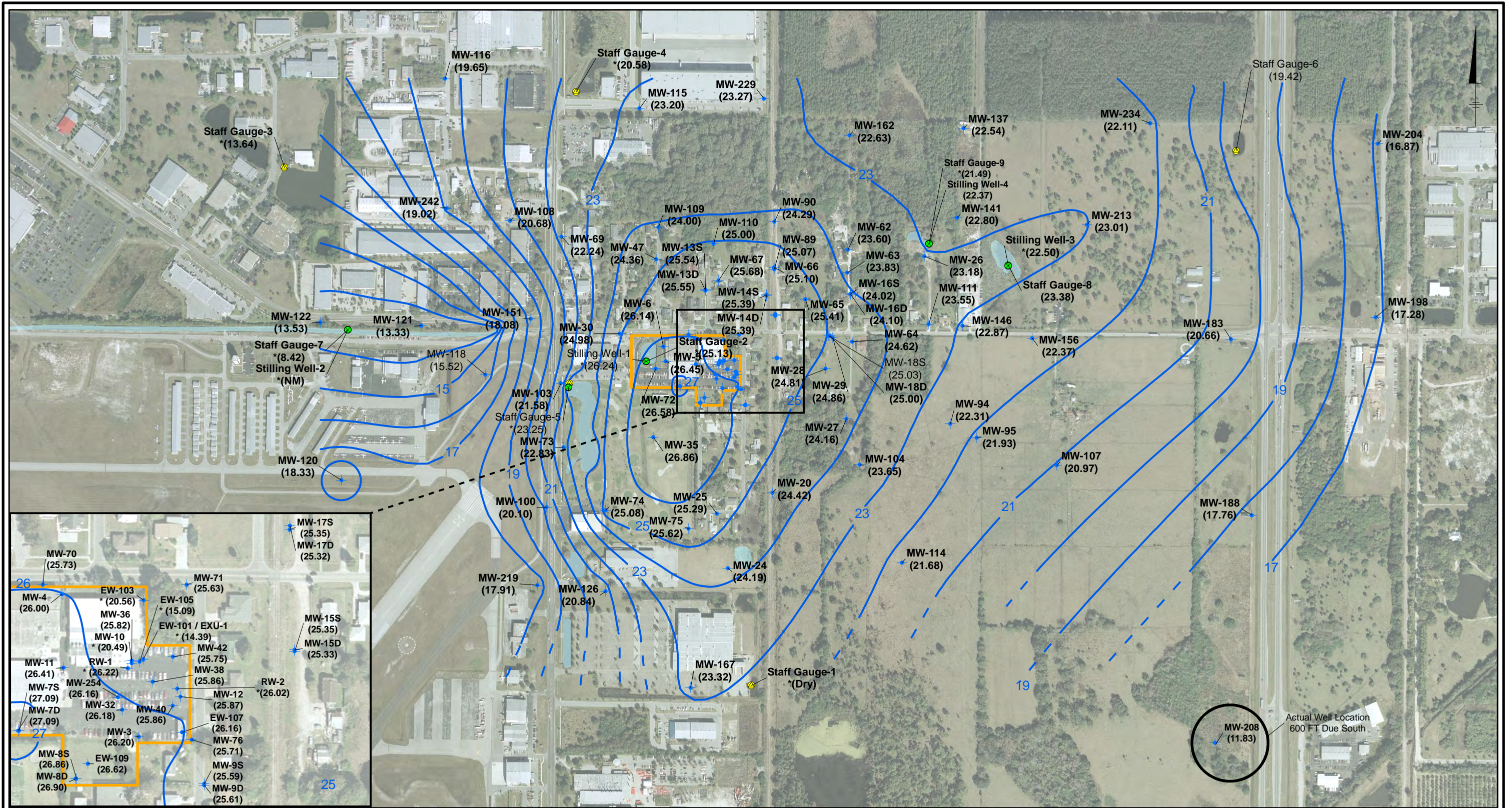


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(USAS - DECEMBER 2007)**



FIGURE
3-4A

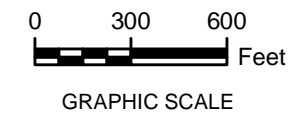


LEGEND:

- + Monitoring Well Location - USAS
- Staff Gauge Location
- Stilling Well Location
- Former ABC Facility Boundary
- Ponds
- Potentiometric Elevation Contour (Feet MSL)
- MW-219 (17.91) Monitoring Well ID
- (17.91) Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level
5. * - Data not used in contouring
6. Groundwater extraction system was turned on during the depth to groundwater measurements, and elevations for MW-3, MW-8D, MW-10, MW-26, MW-27, MW-32, MW-35, MW-36, MW-38, MW-40, MW-42, MW-64, MW-65, MW-67, MW-104, MW-109, MW-110, MW-111, EXU-1 (EW-101), EW-103, EW-105, EW-107, and EW-109 were affected.

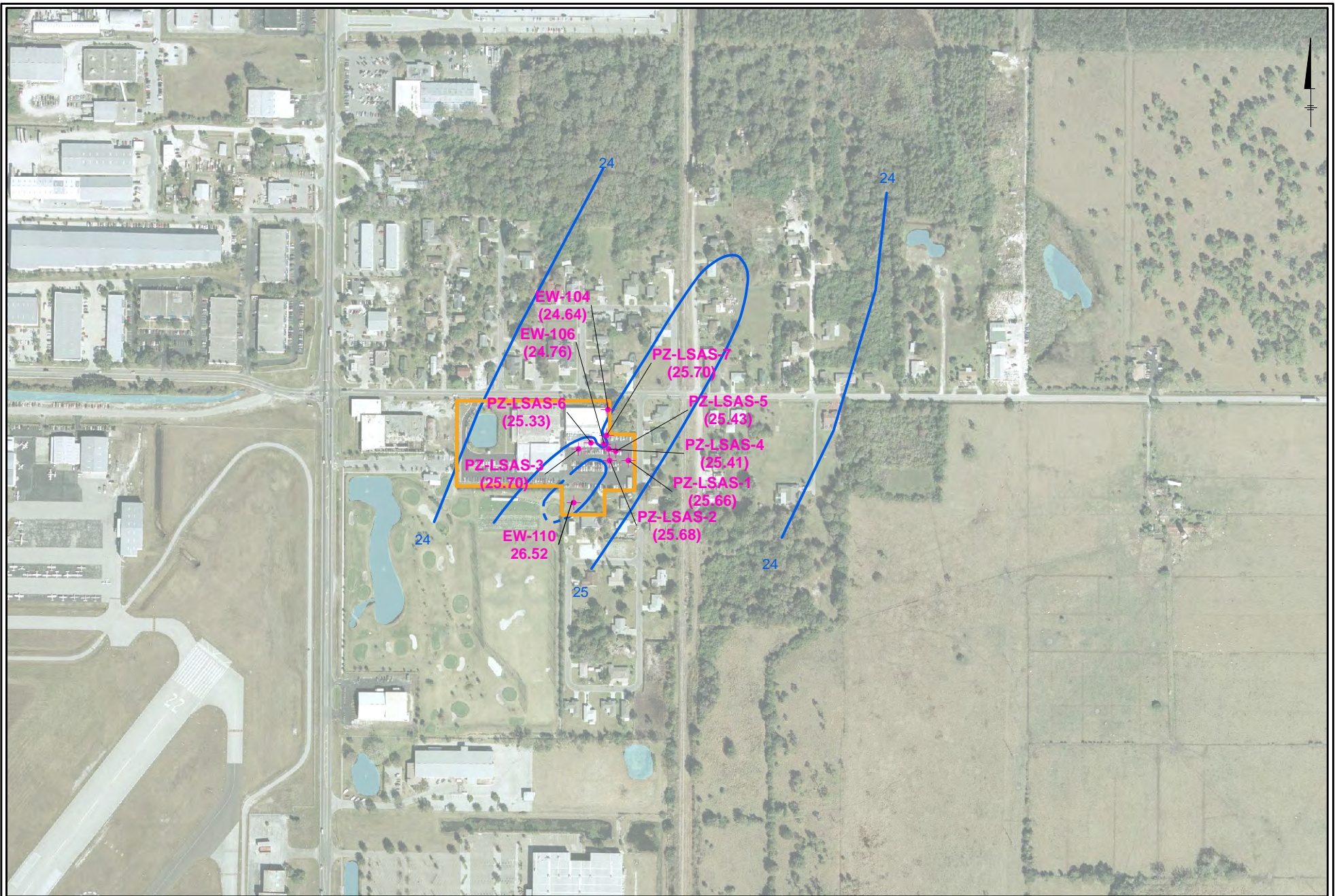


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(USAS - JANUARY 2008)**



FIGURE
3-4B



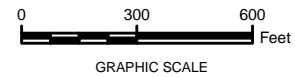
LEGEND:

- + Monitoring Well Location - Upper LSAS
- Former ABC Facility Boundary
- Ponds

- Potentiometric Elevation Contour (Feet MSL)
- MW-109 Monitoring Well ID (23.49)
- Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the December 2007 monitoring event.
4. MSL - Mean Sea Level

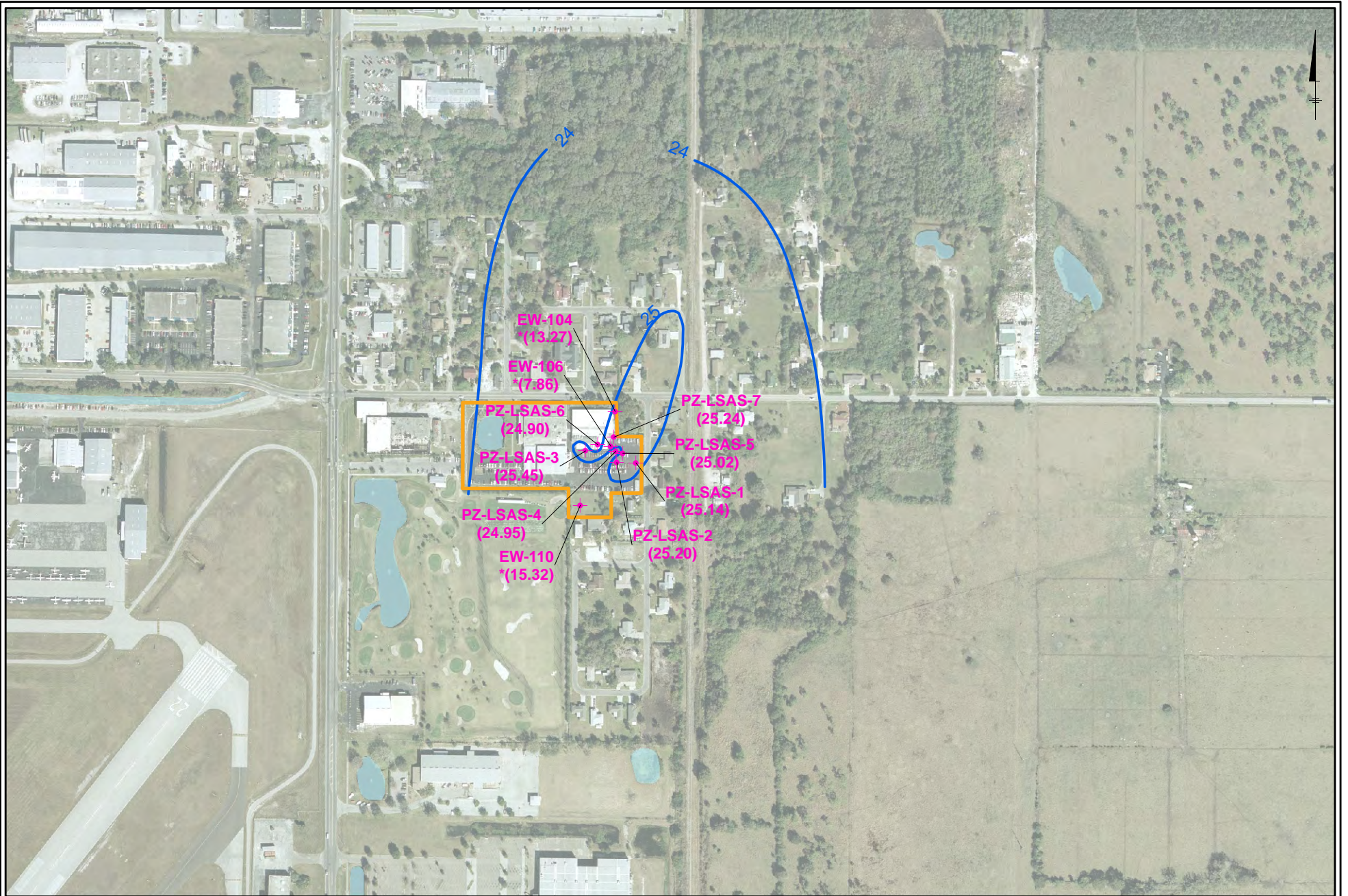


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(UPPER LSAS - DECEMBER 2007)**



FIGURE
3-5A



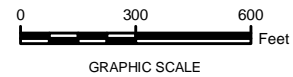
LEGEND:

- + Monitoring Well Location - Upper LSAS
- Former ABC Facility Boundary
- Ponds

- Potentiometric Elevation Contour (Feet MSL)
- MW-109 Monitoring Well ID (24.0)
- Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level
5. * Data not used in contouring
6. Groundwater extraction system was turned on during the depth to groundwater measurements, and elevations for PZ-LSAS-1 through PZ-LSAS-7, EW-104, EW-106, EW-110, and EW-109 were affected.

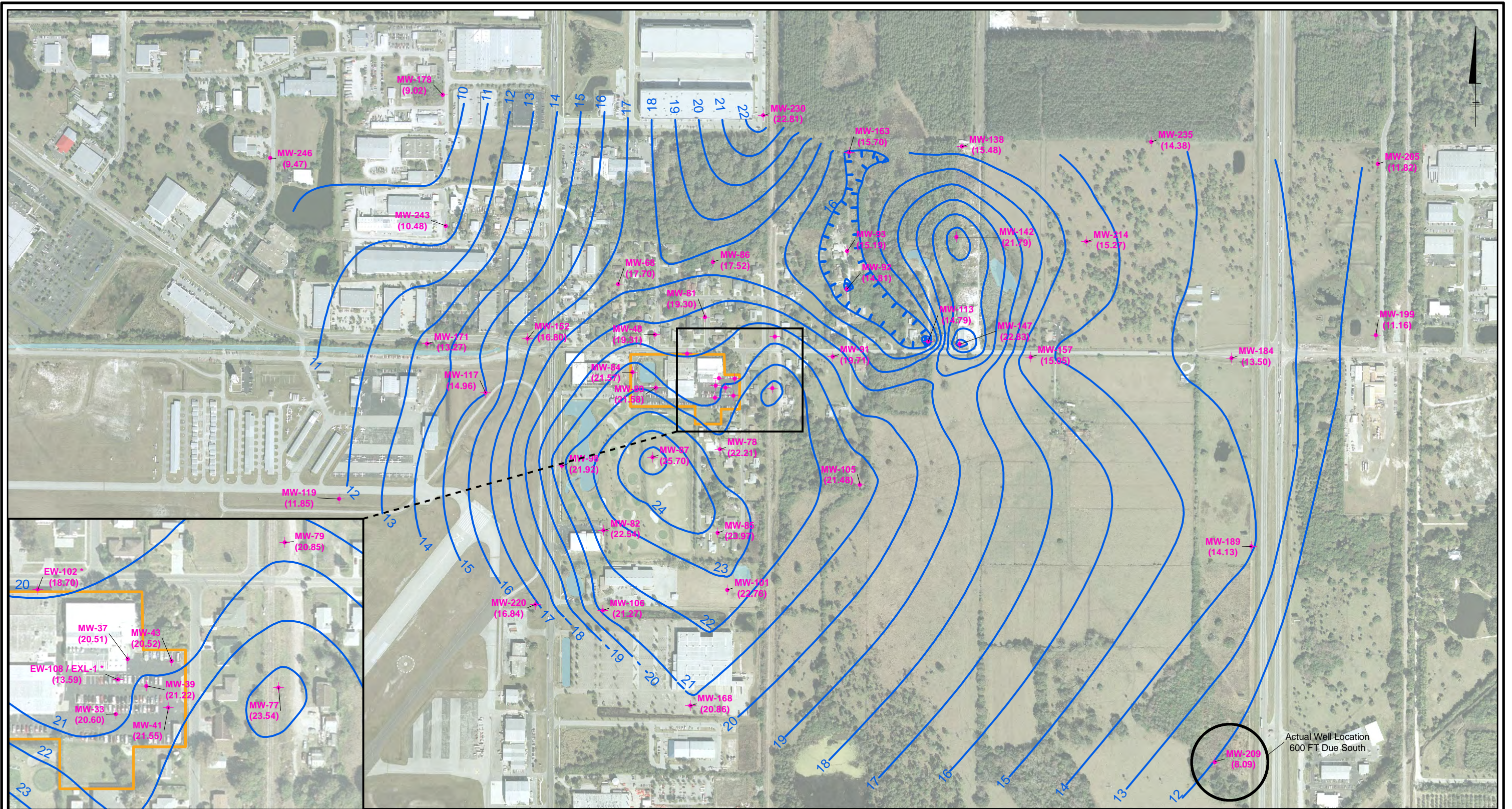


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(UPPER LSAS - JANUARY 2008)**



FIGURE
3-5B



LEGEND:

- + Monitoring Well Location - Lower LSAS
- Former ABC Facility Boundary
- Ponds
- Potentiometric Elevation Contour (Feet MSL)
- - - Groundwater Depression
- MW-168 Monitoring Well ID
- (21.16) Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level
5. NM - Not Measured
6. * Data not used in contouring

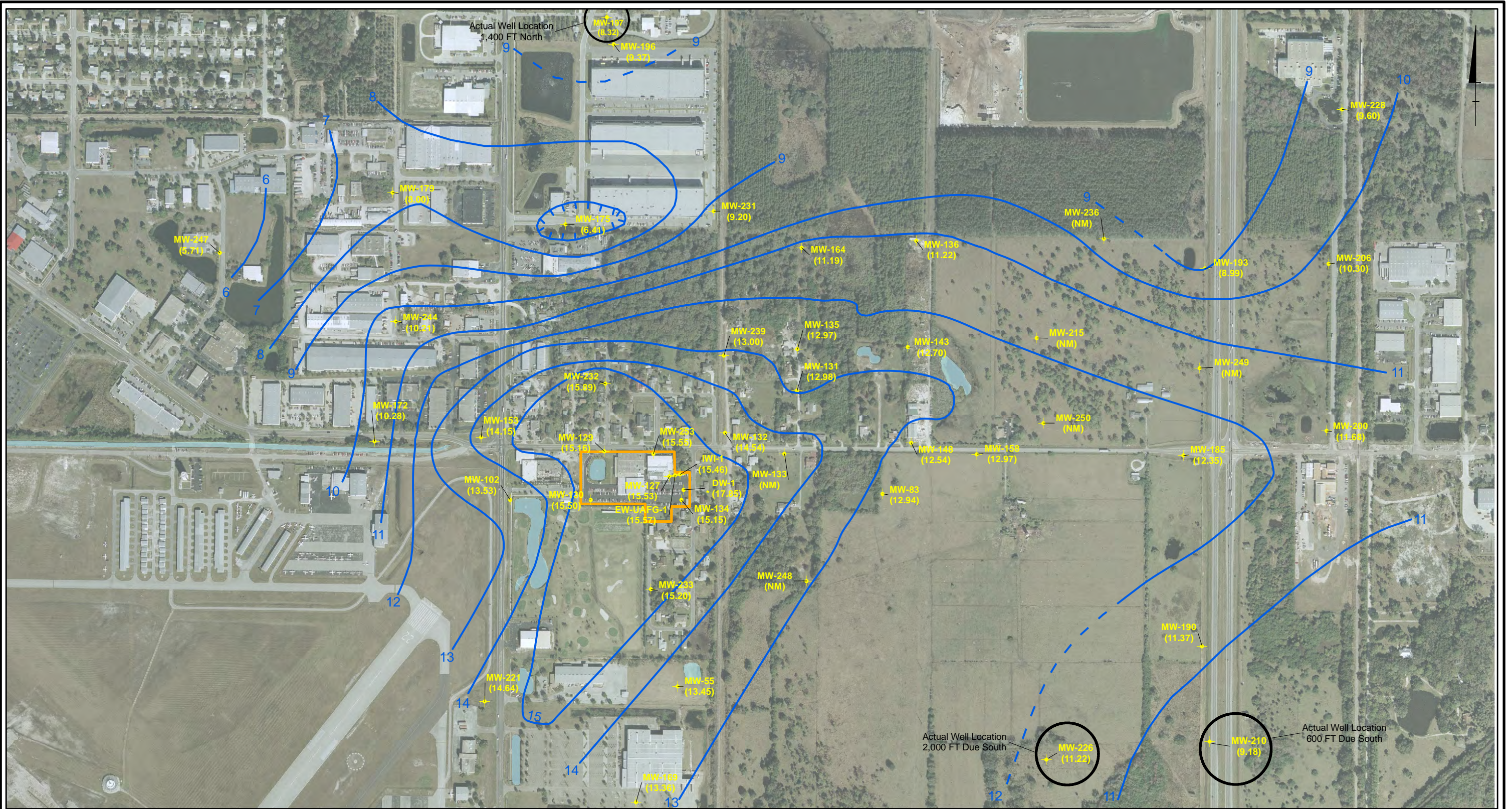


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(LOWER LSAS - JANUARY 2008)**



FIGURE
3-6B



LEGEND:

- Monitoring Well Location - AF Gravel
- Potentiometric Elevation Contour (Feet MSL)
- Former ABC Facility Boundary
- MW-55 Monitoring Well ID
- Ponds
- (13.45) Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the December 2007 monitoring event.
4. MSL - Mean Sea Level



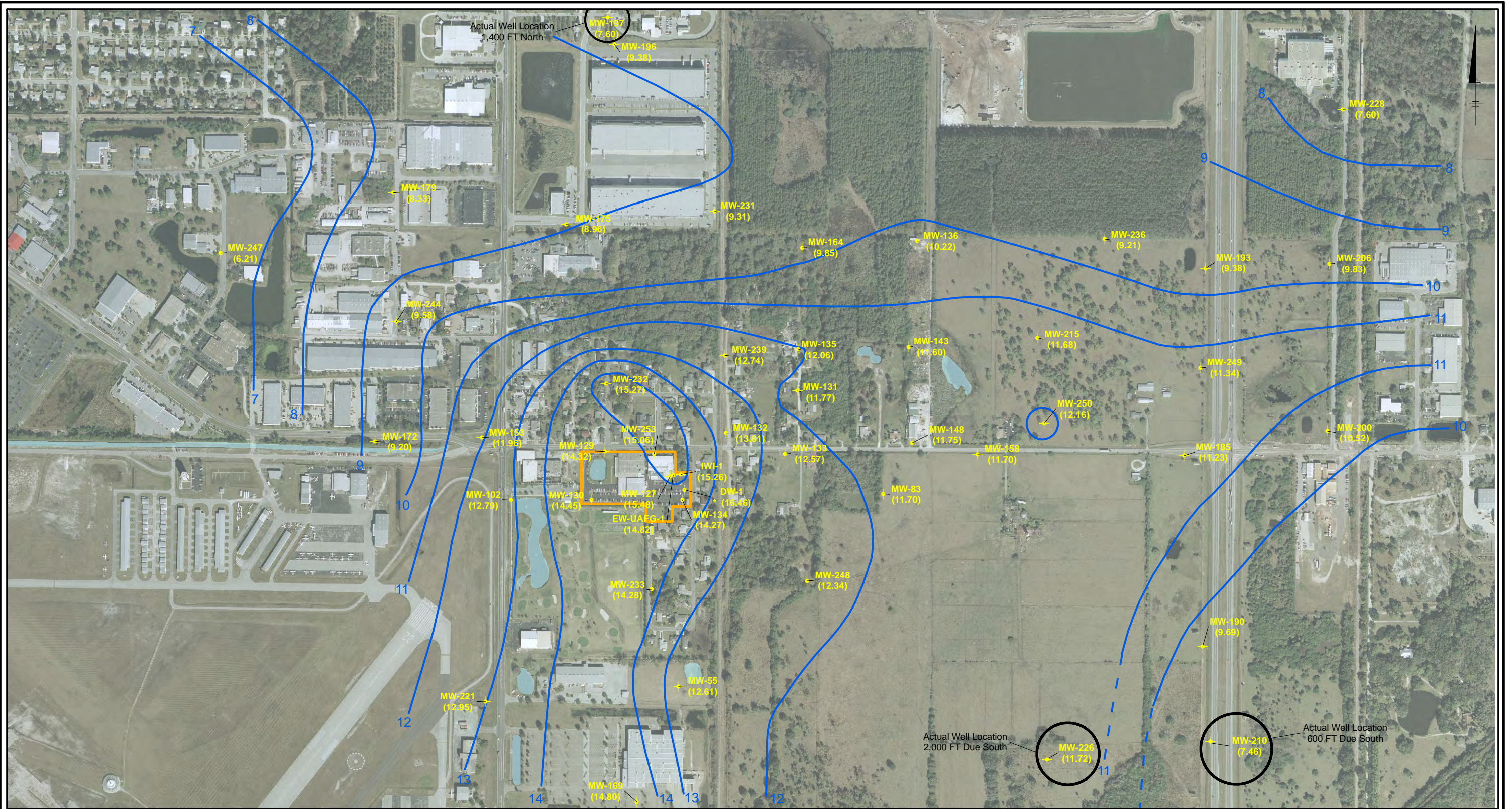
5. NM - Not Measured, Inaccessible
6. * - Data not used in contouring

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TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(AF GRAVEL - DECEMBER 2007)**



FIGURE
3-7A

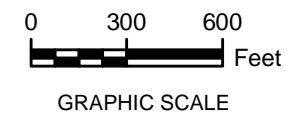


LEGEND:

- Monitoring Well Location - AF Gravel
- Potentiometric Elevation Contour (Feet MSL)
- Former ABC Facility Boundary
- MW-221 (12.95) Monitoring Well ID
- MW-221 (12.95) Potentiometric Elevation (Feet MSL)
- Ponds

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level
5. * Data not used in contouring



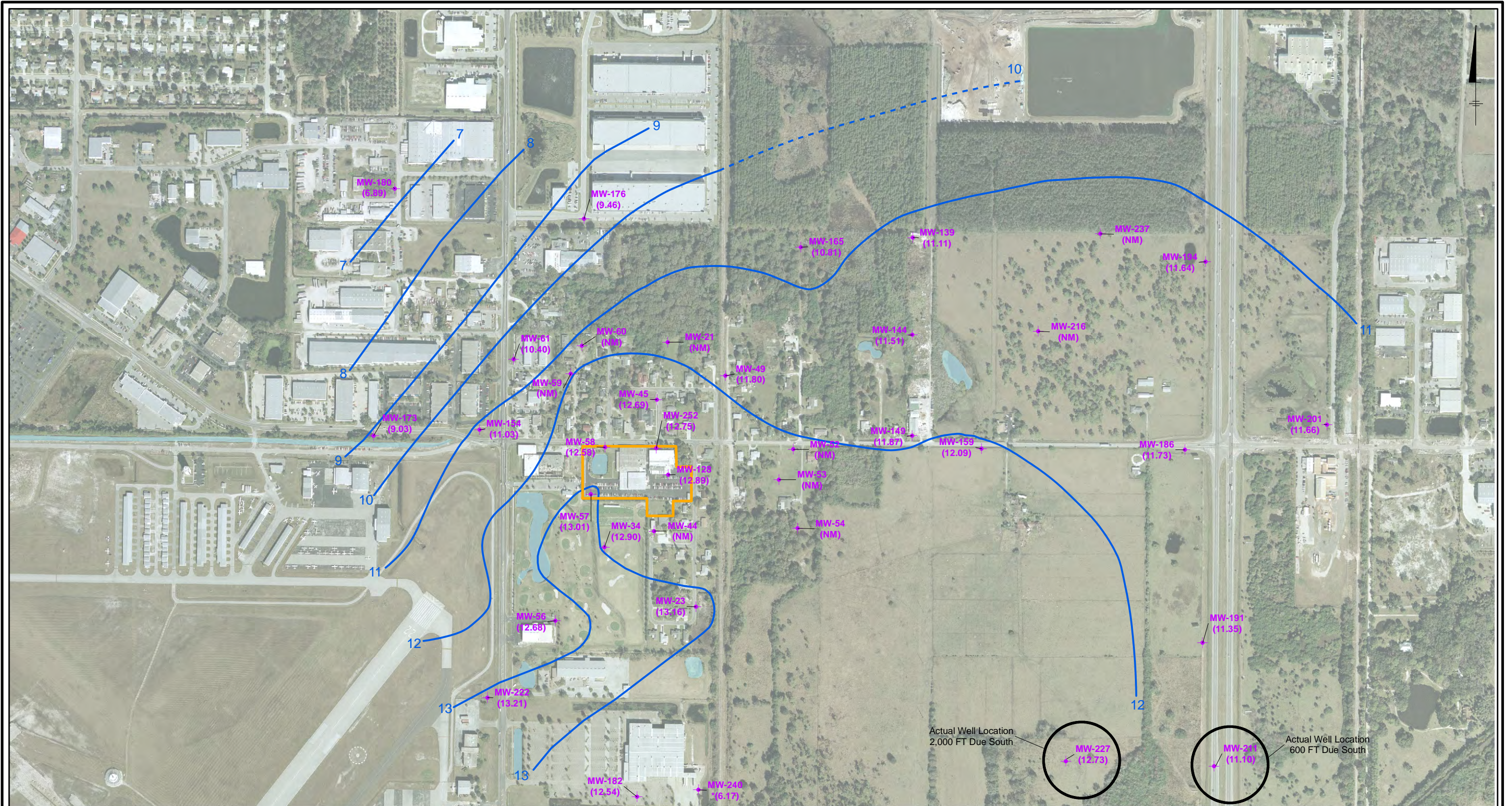
6. Groundwater extraction system was turned on during the depth to groundwater measurements, and elevations for EW-UAFG-1, MW-135, MW-248, DW-1, IW-1 and MW-127 were affected.

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TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(AF GRAVEL - JANUARY 2008)**



FIGURE
3-7B



LEGEND:

- ✦ Monitoring Well Location - S&P Sand
- Potentiometric Elevation Contour (Feet MSL)
- ▭ Former ABC Facility Boundary
- MW-222 Monitoring Well ID
- ▭ Ponds
- (13.21) Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the December 2007 monitoring event.
4. MSL - Mean Sea Level
5. NM - Not Measured, Inaccessible
6. * Data not used in contouring

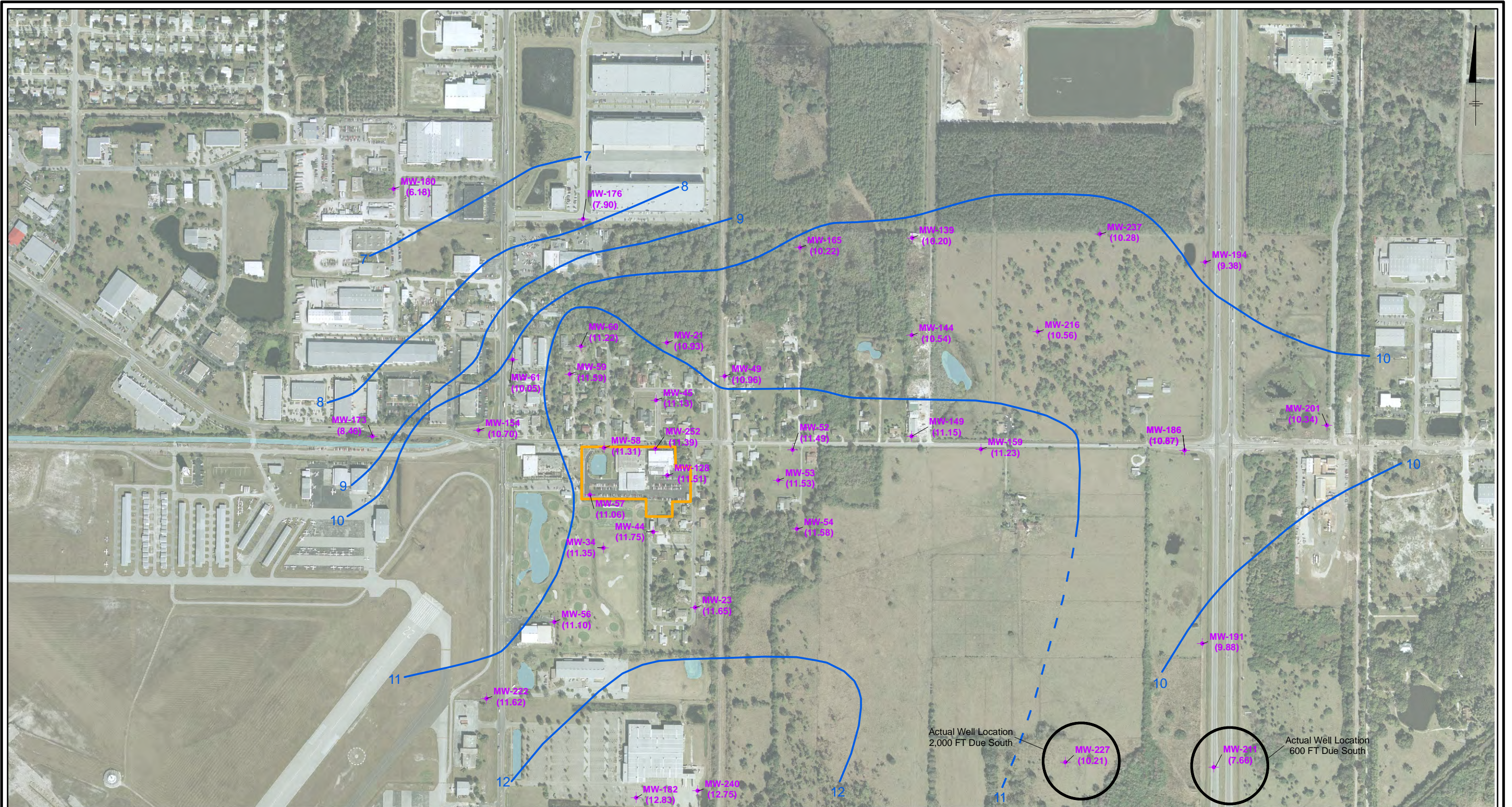


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TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(S&P SAND - DECEMBER 2007)**



FIGURE
3-8A

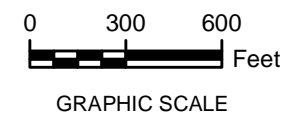


LEGEND:

- + Monitoring Well Location - S&P Sand
- Former ABC Facility Boundary
- Ponds
- Potentiometric Elevation Contour (Feet MSL)
- MW-222 (11.62) Monitoring Well ID
- (11.62) Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level
5. NM - Not Measured, Inaccessible



6. Groundwater extraction system was turned on during the depth to groundwater measurements, and elevations for MW-21, MW-44, MW-54, MW-59, MW-60, and MW-128 were affected.

FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(S&P SAND - JANUARY 2008)**



FIGURE
3-8B

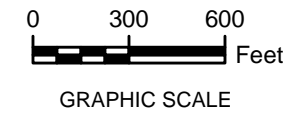


LEGEND:

- Monitoring Well Location - Lower AF
- Potentiometric Elevation Contour (Feet MSL)
- Former ABC Facility Boundary
- MW-22 (12.55) Monitoring Well ID
- Potentiometric Elevation (Feet MSL)
- Ponds

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the December 2007 monitoring event.
4. MSL - Mean Sea Level
5. NM - Not Measured, Inaccessible

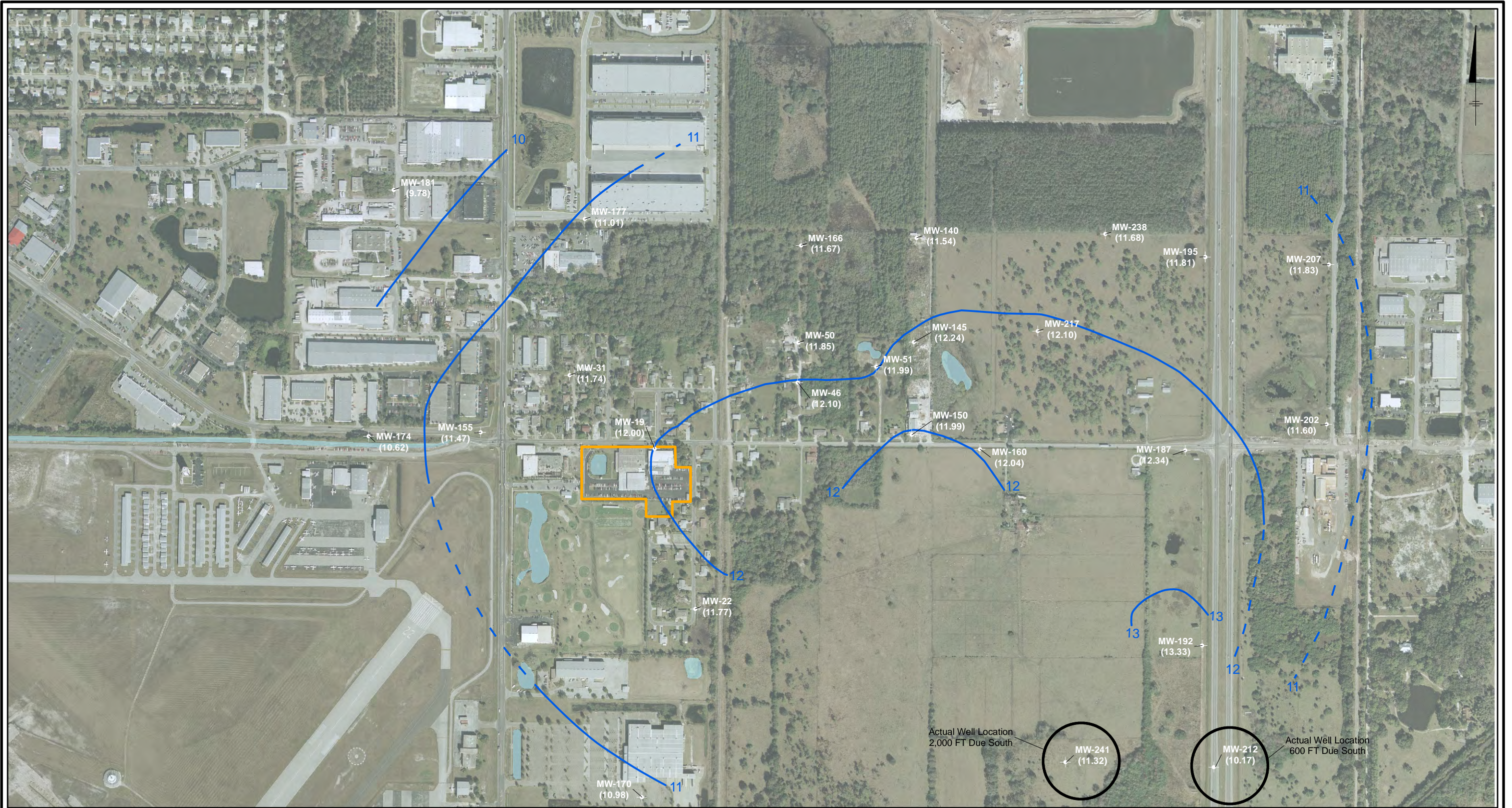


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(LOWER AF SAND - DECEMBER 2007)**



FIGURE
3-9A

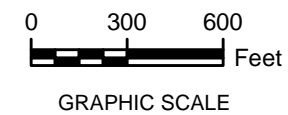


LEGEND:

- Monitoring Well Location - Lower AF
- Potentiometric Elevation Contour (Feet MSL)
- Former ABC Facility Boundary
- Ponds
- MW-22 (11.77) Monitoring Well ID
- Potentiometric Elevation (Feet MSL)

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level



6. Groundwater extraction system was turned on during the depth to groundwater measurements, and elevations for MW-19, MW-31, MW-50, and MW-51 were affected.

FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(LOWER AF SAND - JANUARY 2008)**



FIGURE
3-9B

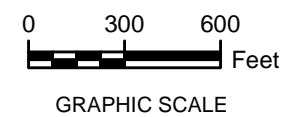


LEGEND:

-
-
-

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the December 2007 monitoring event.
4. MSL - Mean Sea Level
5. NM - Not Measured



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TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(FLORIDAN - DECEMBER 2007)**

**FIGURE
3-10A**



LEGEND:

-
- Monitoring Well Location - Floridan
 MW-161 Monitoring Well ID (12.35)
MW-123 Monitoring Well ID (12.52)
MW-251 Monitoring Well ID (13.09)
- Former ABC Facility Boundary
 Potentiometric Elevation (Feet MSL)
- Ponds

NOTES:

1. Aerial photos were obtained from the Manatee County GIS website. Aerial photos were taken in 2003 at a 1-foot resolution in true color format.
2. Vertical datum is in NAVD88.
3. Potentiometric elevations were obtained during the January 2008 monitoring event.
4. MSL - Mean Sea Level

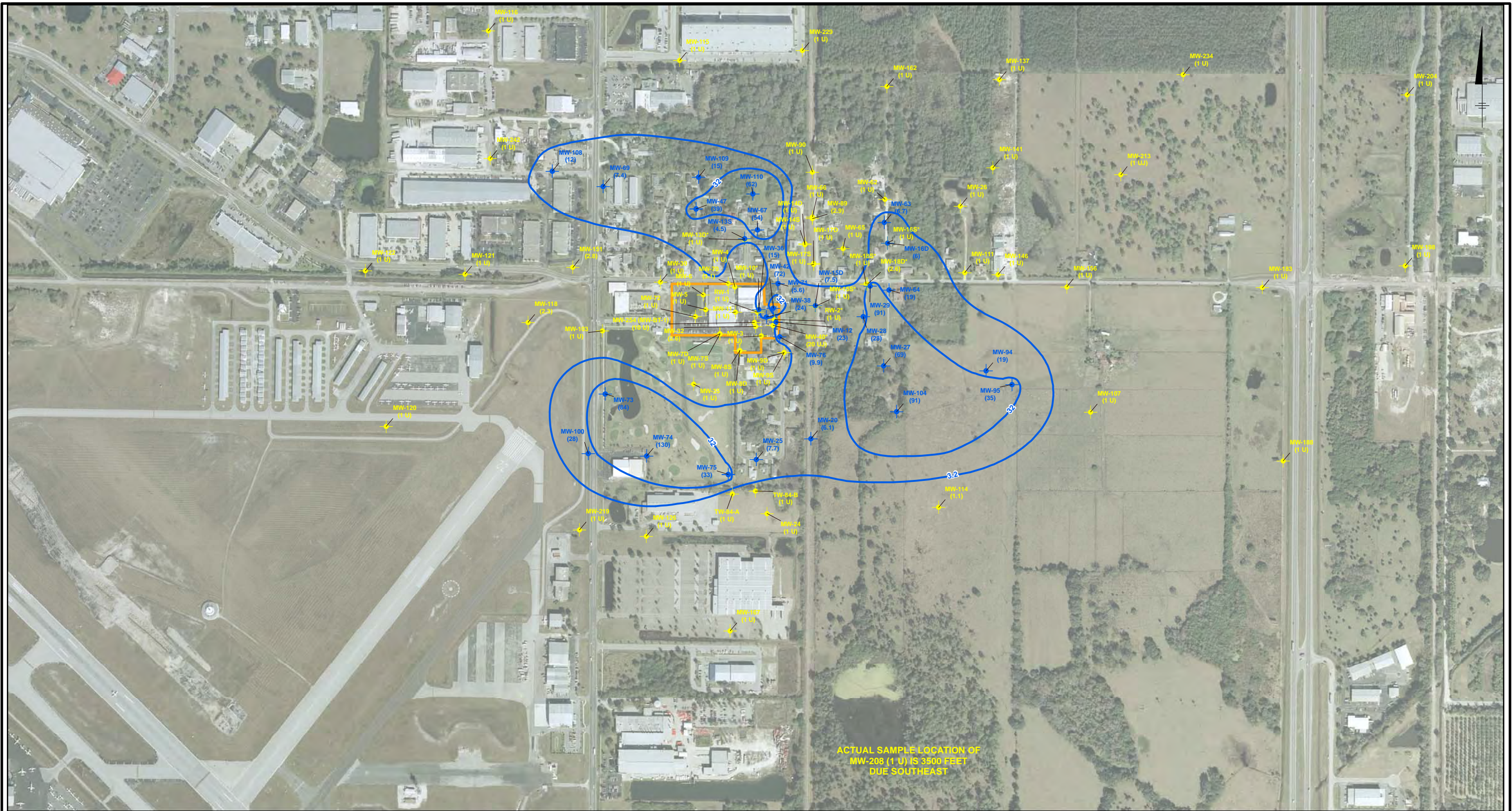


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**POTENTIOMETRIC CONTOUR MAP
(FLORIDAN - JANUARY 2008)**



FIGURE
3-10B



LEGEND:

- ▲ MW-100 MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3.2 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 1,4-DIOXANE CONTOUR
- (3) 1,4-DIOXANE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 MW-223 = HARDSTREAK CLAY
 MW-245 = HARDSTREAK CLAY



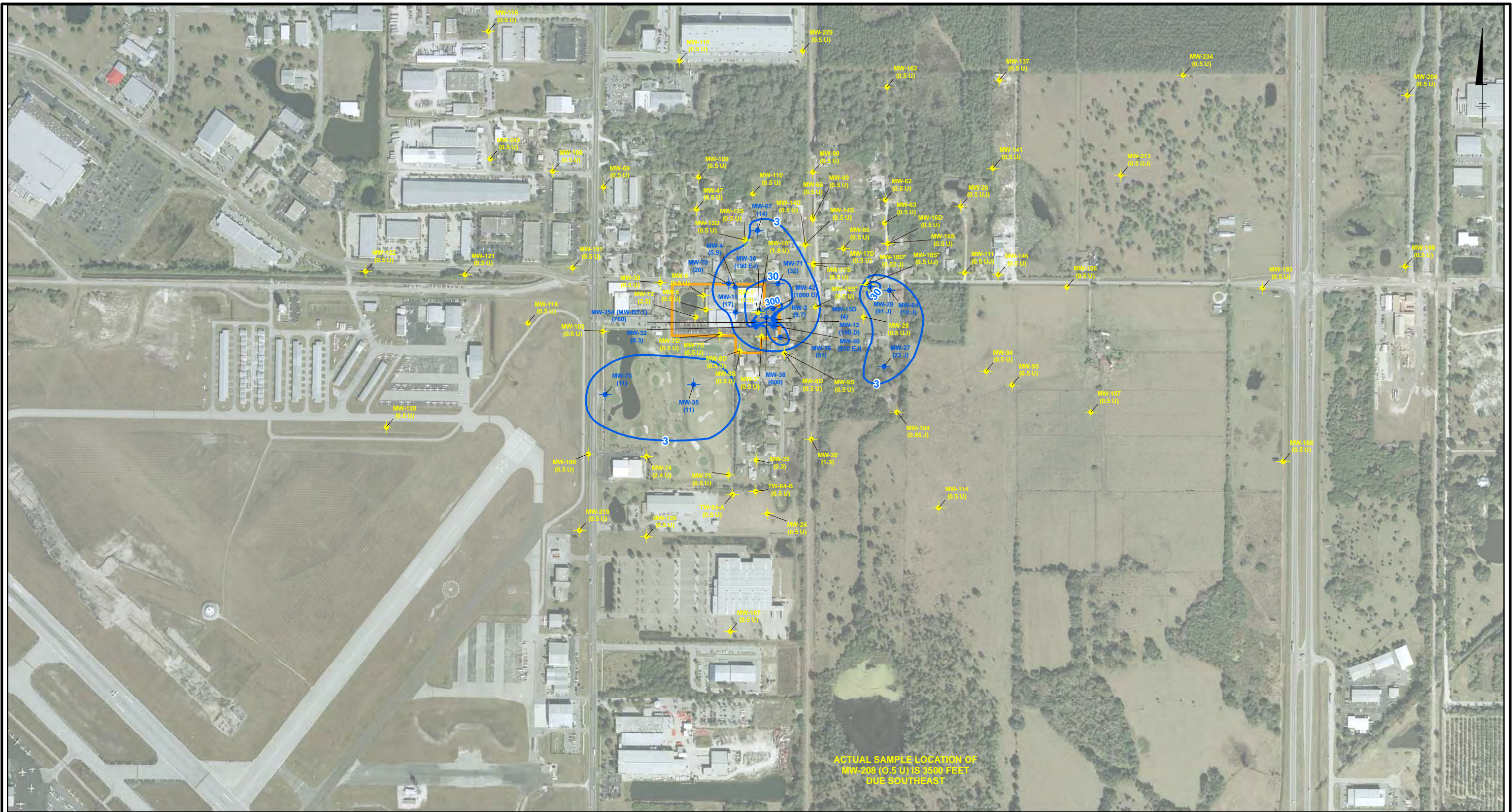
- 4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- J - ESTIMATED VALUE.
- µg/L = MICROGRAMS PER LITER
- * INDICATES DATA NOT USED IN CONTOURING.

FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

**1,4-DIOXANE CONCENTRATIONS IN THE
 USAS, JANUARY/FEBRUARY 2008
 SAMPLING EVENT**



FIGURE
3-11A



LEGEND:

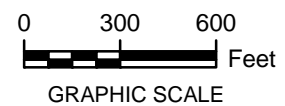
- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
- MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3 UG/L SCREENING CRITERION

- FORMER ABC FACILITY BOUNDARY
- TCE CONTOUR
- TCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 MW-223 = HARDSTREAK CLAY
 MW-245 = HARDSTREAK CLAY

4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
- U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
- J - ESTIMATED VALUE.
- µg/L = MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.

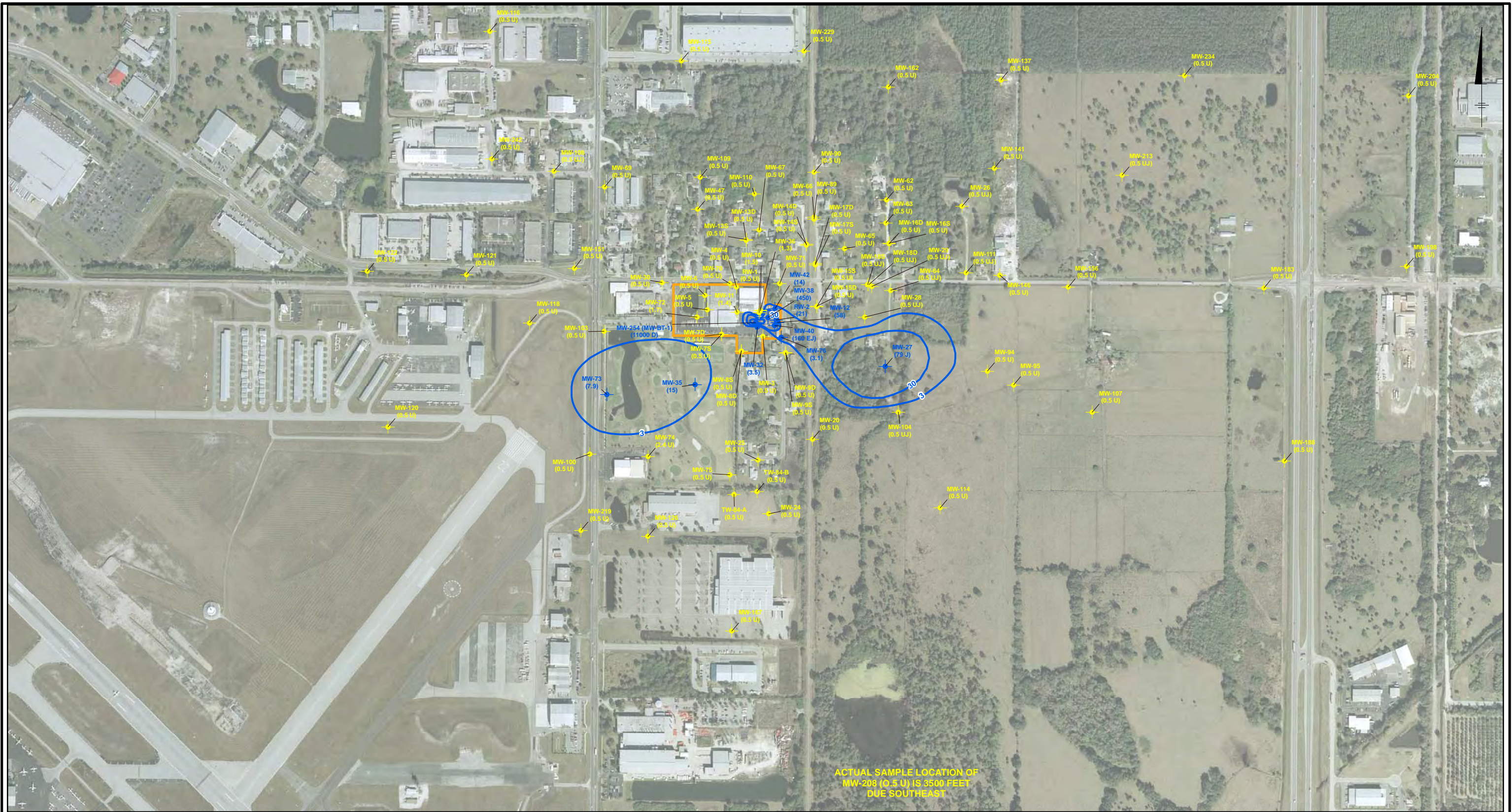


FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

**TCE CONCENTRATIONS IN THE USAS
 JANUARY/FEBRUARY 2008
 SAMPLING EVENT**



FIGURE
3-11B



LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
- MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- PCE CONTOUR
- (3) PCE RESULT VALUE (µg/L)

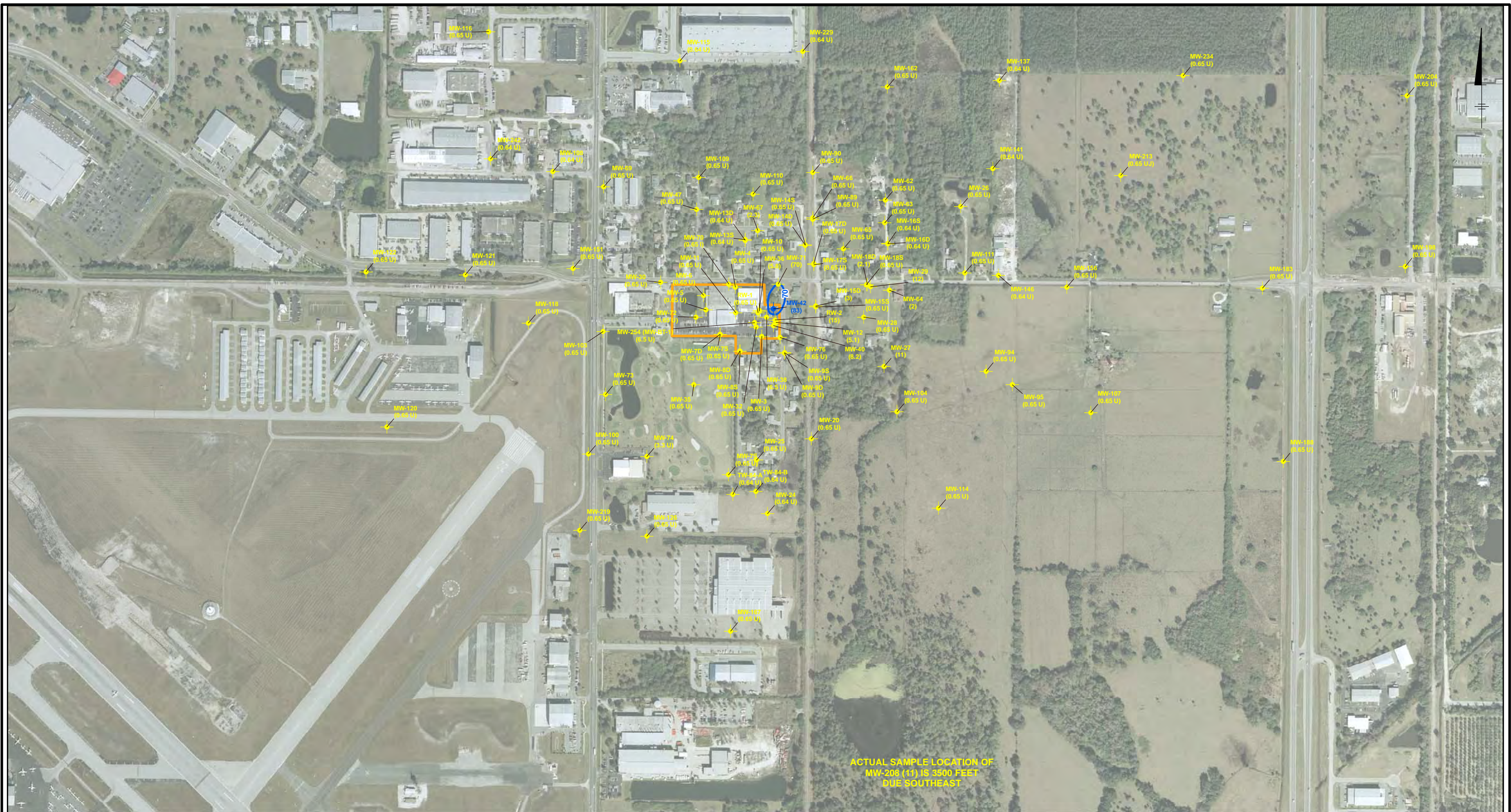
NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
MW-223 = HARDSTREAK CLAY
MW-245 = HARDSTREAK CLAY

4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
J - ESTIMATED VALUE.
µg/L = MICROGRAMS PER LITER



FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT
**PCE CONCENTRATIONS IN THE USAS
JANUARY/FEBRUARY 2008
SAMPLING EVENT**



ACTUAL SAMPLE LOCATION OF MW-208 (11) IS 3500 FEET DUE SOUTHEAST

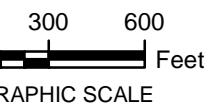
LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
- MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 70 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- CIS-1,2-DCE CONTOUR
- CIS-1,2-DCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
MW-223 = HARDSTREAK CLAY
MW-245 = HARDSTREAK CLAY

4. I - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.



U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.

J - ESTIMATED VALUE.

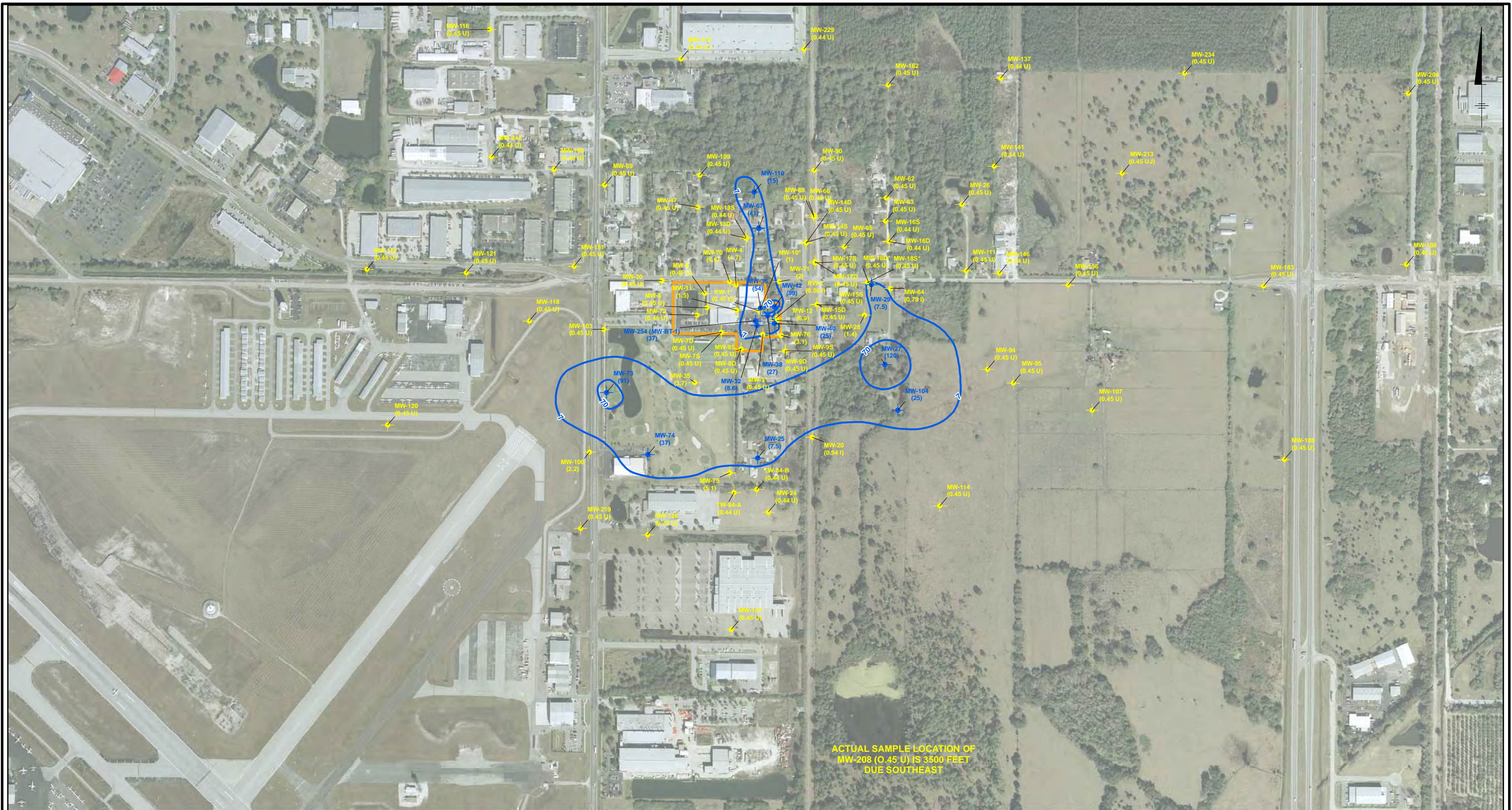
µg/L = MICROGRAMS PER LITER

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TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**CIS-1,2-DCE CONCENTRATIONS IN THE
USAS, JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-11D

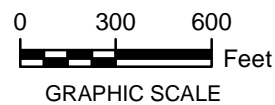


LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 7 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 7 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 1,1-DCE CONTOUR
- 1,1-DCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
MW-223 = HARDSTREAK CLAY
MW-245 = HARDSTREAK CLAY
4. I - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.
U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
J - ESTIMATED VALUE.
µg/L = MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.

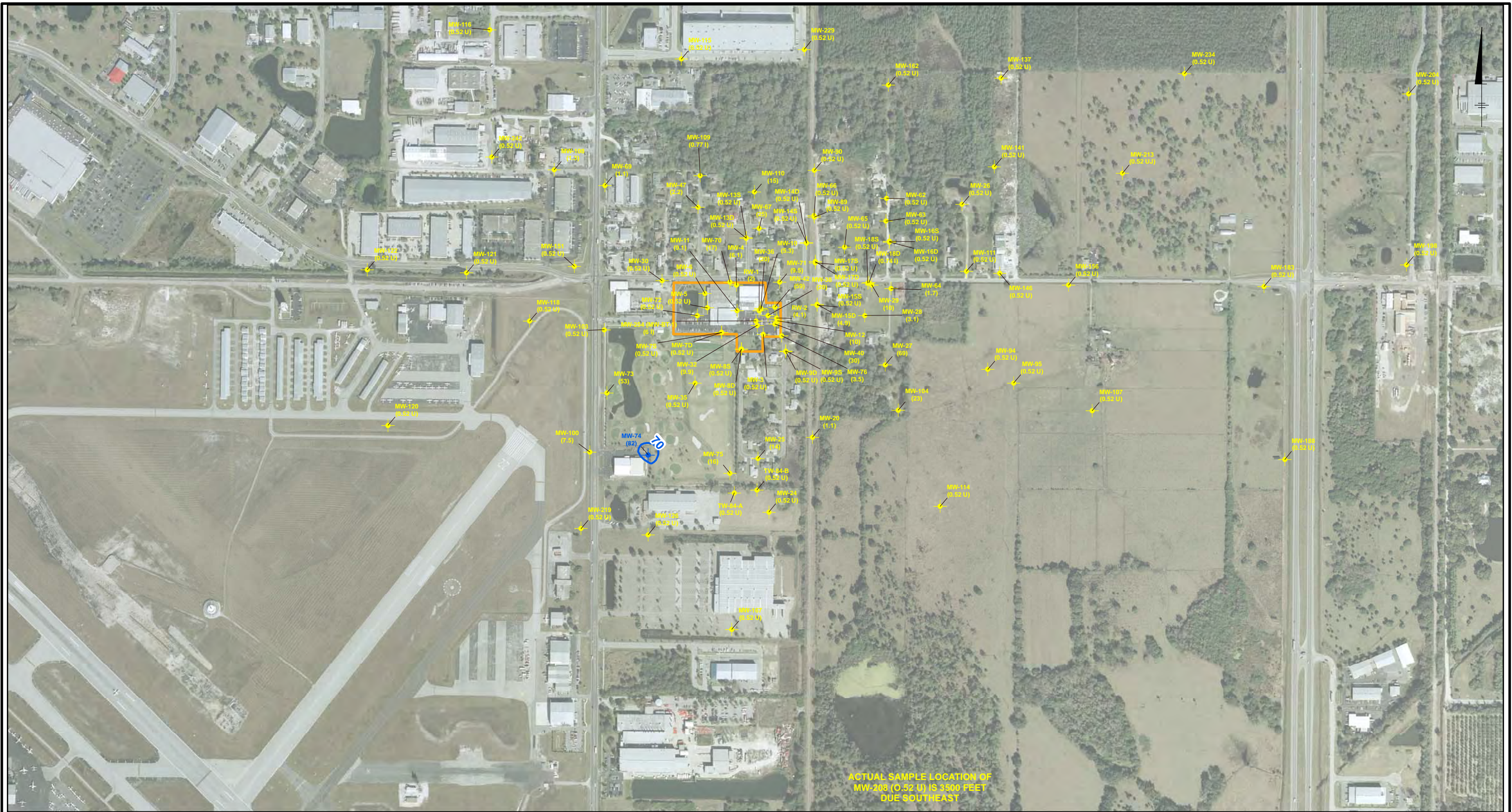


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**1,1-DCE CONCENTRATIONS IN THE USAS
JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-11E



LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 70 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 70 1,1-DCA CONTOUR
- 1,1-DCA RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 MW-223 = HARDSTREAK CLAY
 MW-245 = HARDSTREAK CLAY



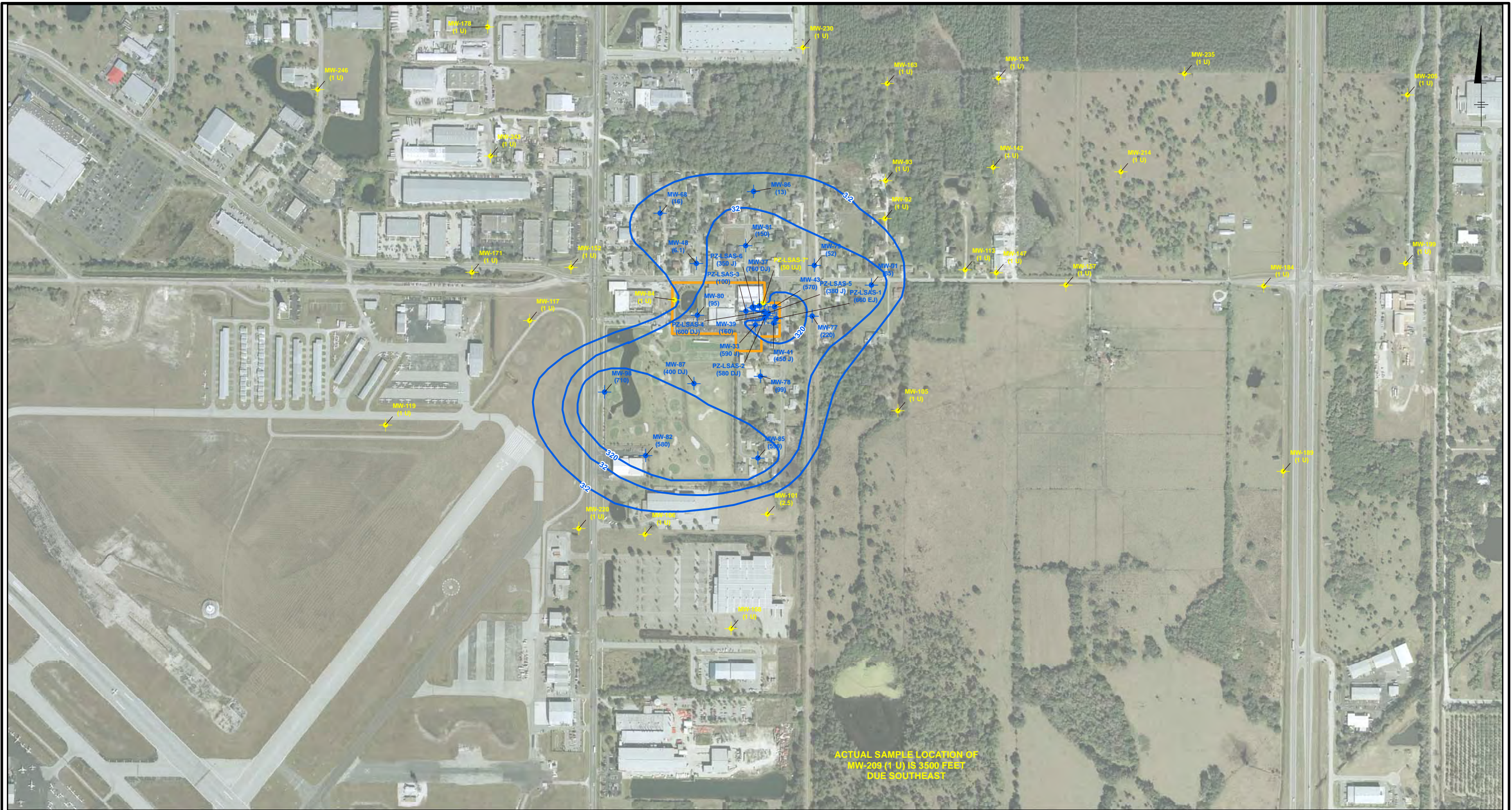
4. I - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.
 U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER

FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

**1,1-DCA CONCENTRATIONS IN THE USAS
 JANUARY/FEBRUARY 2008
 SAMPLING EVENT**



FIGURE
3-11F



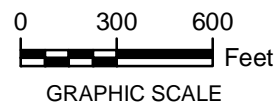
LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3.2 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3.2 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 1,4-DIOXANE CONTOUR
- (3) 1,4-DIOXANE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:

MW-68 = VENICE CLAY
 MW-125 = VENICE CLAY
 MW-224 = VENICE CLAY
 MW-225 = VENICE CLAY
 MW-235 = VENICE CLAY



4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
- U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
- J - ESTIMATED VALUE.
- µg/L = MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.

FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

**1,4-DIOXANE CONCENTRATIONS IN THE
 LSAS, JANUARY/FEBRUARY 2008
 SAMPLING EVENT**



FIGURE
3-12A

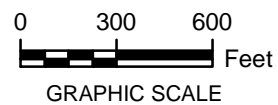


LEGEND:

- MW-# (U) MONITORING WELL
- # PRIVATE WELL
- MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
- MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3 UG/L SCREENING CRITERION
- SAMPLED PRIOR TO 2008. DATA NOT INCORPORATED INTO CONTOURS
- FORMER ABC FACILITY BOUNDARY
- TCE CONTOUR
- (3) TCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 MW-68 = VENICE CLAY
 MW-125 = VENICE CLAY
 MW-224 = VENICE CLAY
 MW-225 = VENICE CLAY
 MW-235 = VENICE CLAY
4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
 U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER



FORMER AMERICAN BERYLLIUM COMPANY SITE
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





**TCE CONCENTRATIONS IN THE LSAS
JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-12B

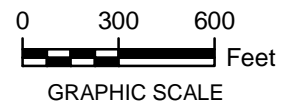


LEGEND:

-  MONITORING WELL
-  PRIVATE WELL
-  MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
-  MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3 UG/L SCREENING CRITERION
-  FORMER ABC FACILITY BOUNDARY
-  PCE CONTOUR
-  (3) PCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 MW-68 = VENICE CLAY
 MW-125 = VENICE CLAY
 MW-224 = VENICE CLAY
 MW-225 = VENICE CLAY
 MW-235 = VENICE CLAY
4. I - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.
 U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER

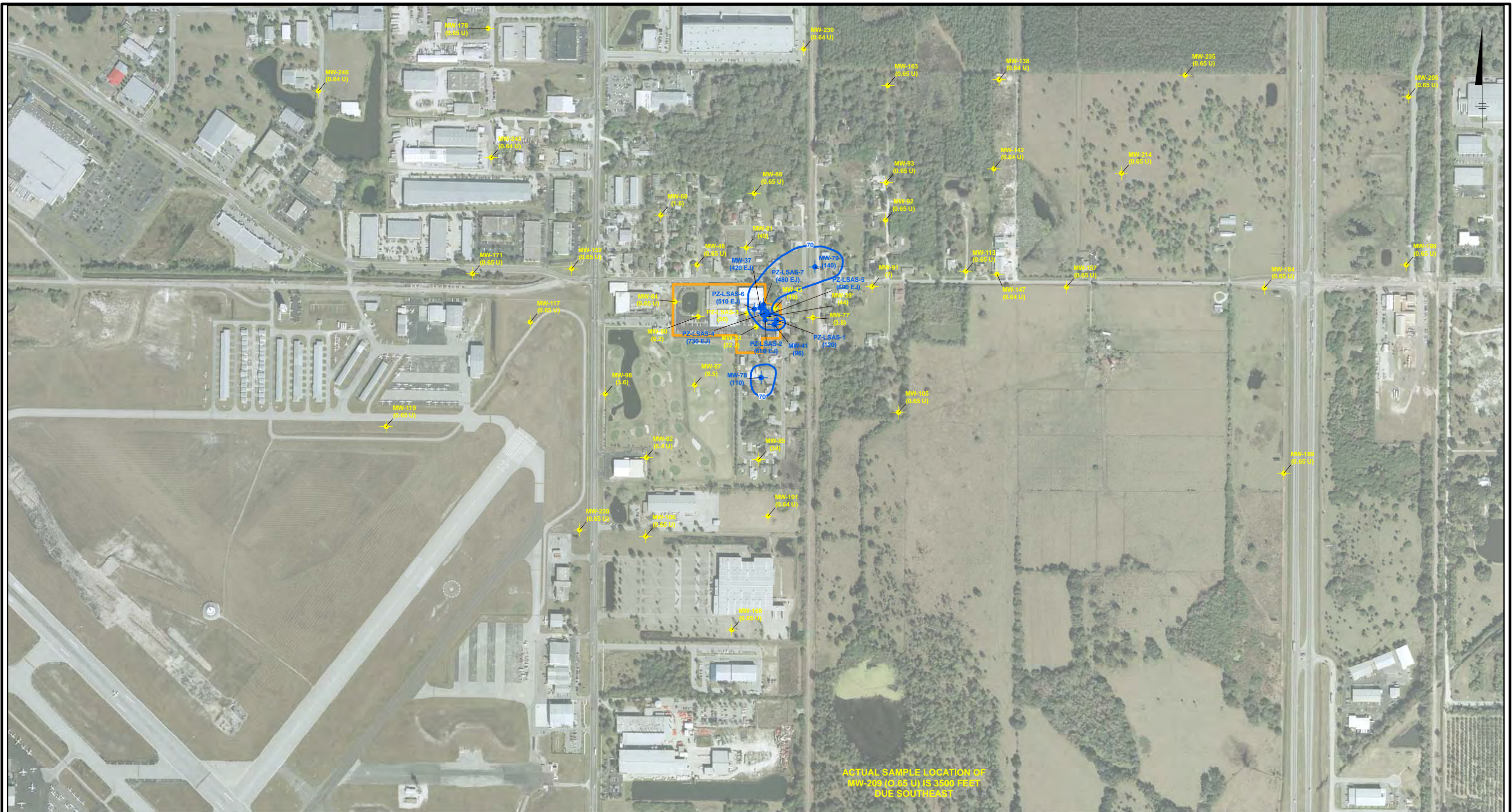


FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT








**PCE CONCENTRATIONS IN THE LSAS
JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-12C



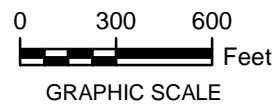
LEGEND:

-  MONITORING WELL
-  PRIVATE WELL
-  MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 7 UG/L SCREENING CRITERION
-  MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 7 UG/L SCREENING CRITERION
-  FORMER ABC FACILITY BOUNDARY
-  CIS-1,2-DCE CONTOUR
-  (3) CIS-1,2-DCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 MW-68 = VENICE CLAY
 MW-125 = VENICE CLAY
 MW-224 = VENICE CLAY
 MW-225 = VENICE CLAY
 MW-235 = VENICE CLAY

4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
- U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- J - ESTIMATED VALUE.
- µg/L = MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.



FORMER AMERICAN BERYLLIUM COMPANY SITE
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**CIS-1,2-DCE CONCENTRATIONS IN THE
LSAS, JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-12D



LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 7 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 7 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 1,1-DCE CONTOUR
- (3) 1,1-DCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:

MW-68 = VENICE CLAY
 MW-125 = VENICE CLAY
 MW-224 = VENICE CLAY
 MW-225 = VENICE CLAY
 MW-235 = VENICE CLAY

4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
 - U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 - D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
 - J - ESTIMATED VALUE.
- µg/L = MICROGRAMS PER LITER

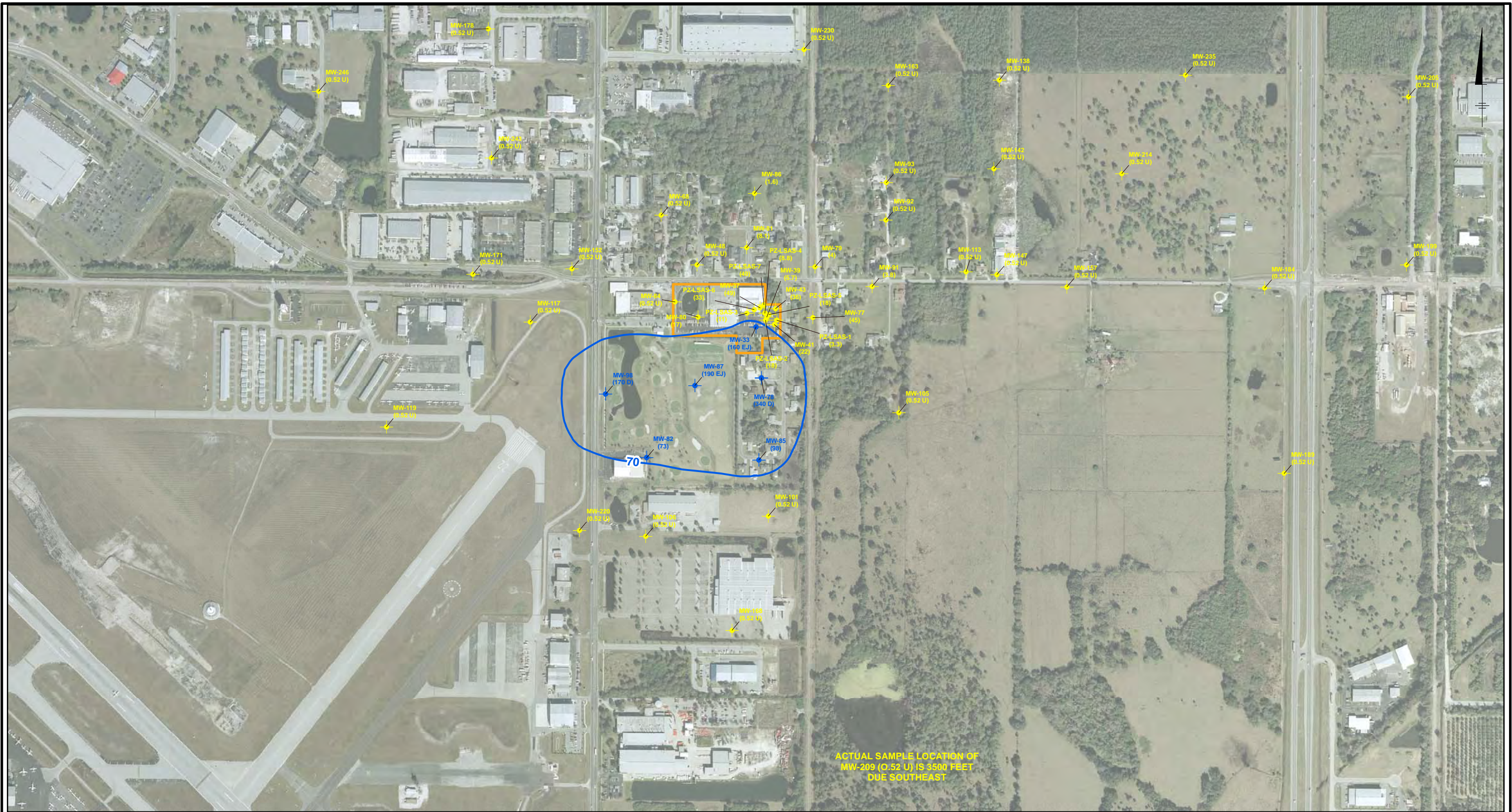


FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

**1,1-DCE CONCENTRATIONS IN THE LSAS
 JANUARY/FEBRUARY 2008
 SAMPLING EVENT**



FIGURE
3-12E



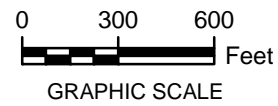
ACTUAL SAMPLE LOCATION OF MW-209 (0.52 U) IS 3500 FEET DUE SOUTHEAST

LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 70 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 70 1,1-DCA CONTOUR
- (70) 1,1-DCA RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 - MW-68 = VENICE CLAY
 - MW-125 = VENICE CLAY
 - MW-224 = VENICE CLAY
 - MW-225 = VENICE CLAY
 - MW-235 = VENICE CLAY



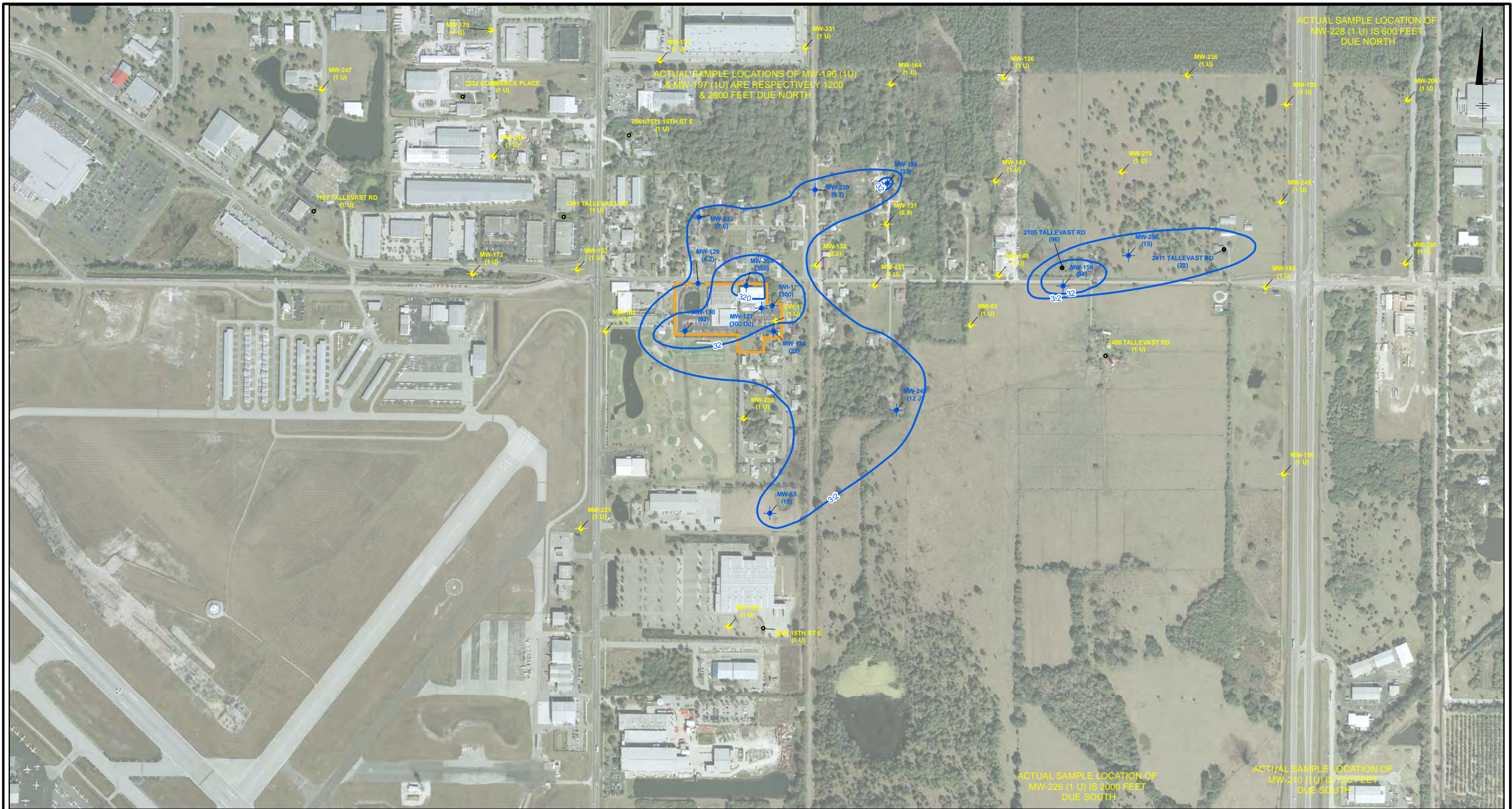
4. E - SAMPLE RESULT IS GREATER THAN CALIBRATION RANGE.
 - U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 - D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
 - J - ESTIMATED VALUE.
- µg/L = MICROGRAMS PER LITER

FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**1,1-DCA CONCENTRATIONS IN THE LSAS
JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-12F

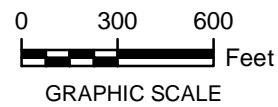


LEGEND:

- MW-196 MONITORING WELL
- (U) PRIVATE WELL
- MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 70 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 1,4-DIOXANE CONTOUR
- (3) 1,4-DIOXANE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 DW-1 = ZONE 1 CLAY
 MW-88 = ZONE 1 CLAY
 MW-99 = ZONE 1 CLAY
 MW-112 = ZONE 1 CLAY
4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.



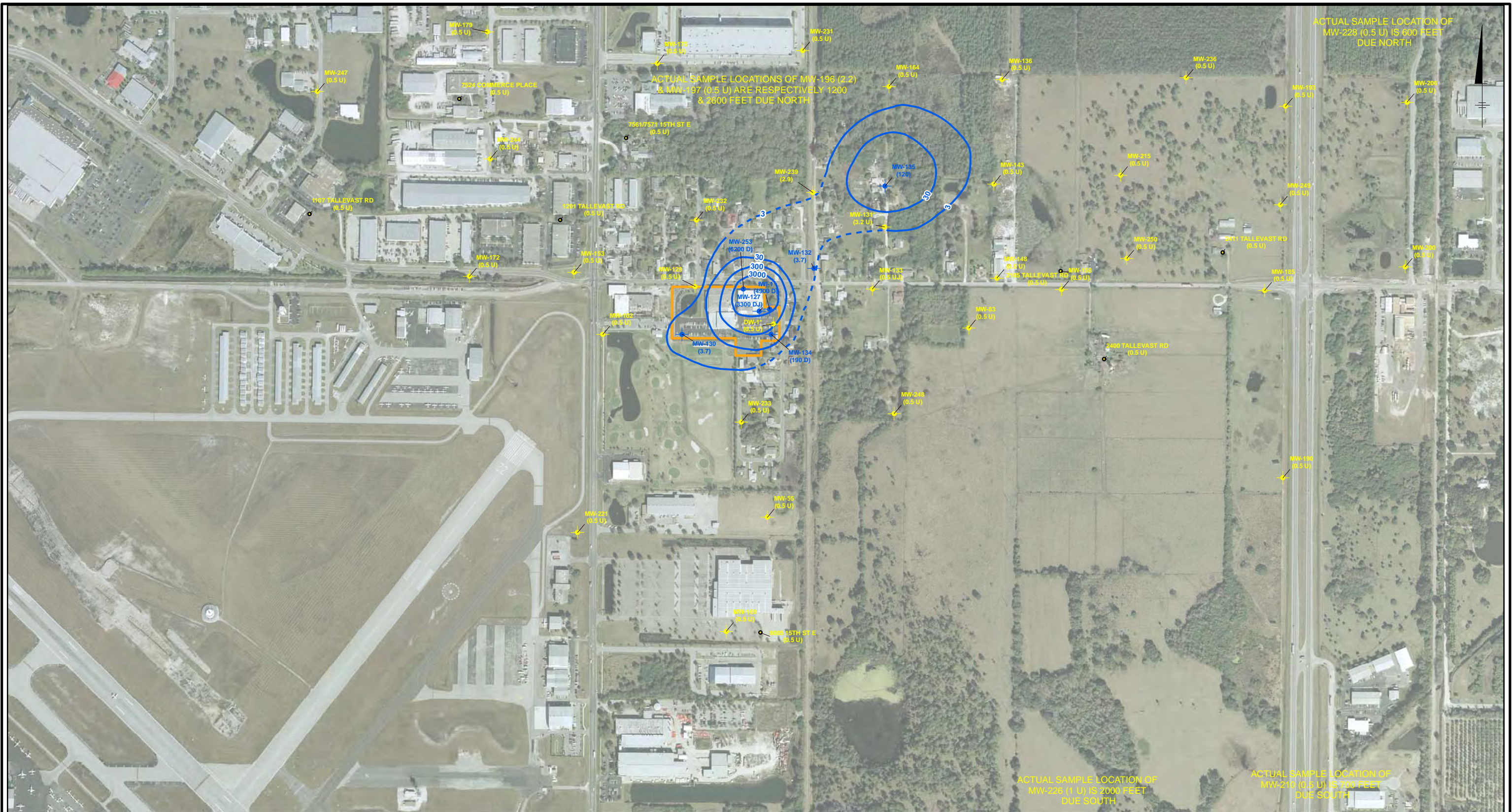
FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**1,4-DIOXANE CONCENTRATIONS IN THE
AF GRAVEL, JANUARY/FEBRUARY
2008 SAMPLING EVENT**

ARCADIS

**FIGURE
3-13A**

DEN-080 MSS
Project #: B0038055.0000



LEGEND:

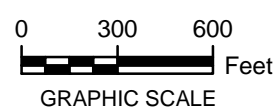
- MW-100
MONITORING WELL
- U
PRIVATE WELL
- MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
- MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3 UG/L SCREENING CRITERION

- FORMER ABC FACILITY BOUNDARY
- TCE CONTOUR (DASHED WHERE INFERRED)
- (3) TCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 DW-1 = ZONE 1 CLAY
 MW-88 = ZONE 1 CLAY
 MW-99 = ZONE 1 CLAY
 MW-112 = ZONE 1 CLAY

- 4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
- J - ESTIMATED VALUE.
- µg/L - MICROGRAMS PER LITER
- 5. * INDICATES DATA NOT USED IN CONTOURING.



FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
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TCE CONCENTRATIONS IN THE AF GRAVEL, JANUARY/FEBRUARY 2008 SAMPLING EVENT



FIGURE
3-13B

DEN-060 MSS
Project #: B0038055.0000










ACTUAL SAMPLE LOCATIONS OF MW-196 (0.5 U) & MW-197 (0.5 U) ARE RESPECTIVELY 1200 & 2800 FEET DUE NORTH

ACTUAL SAMPLE LOCATION OF MW-228 (0.5 U) IS 600 FEET DUE NORTH

ACTUAL SAMPLE LOCATION OF MW-228 (0.5 U) IS 2000 FEET DUE SOUTH

ACTUAL SAMPLE LOCATION OF MW-210 (0.5 U) IS 300 FEET DUE SOUTH

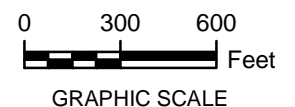
LEGEND:

-  MONITORING WELL
-  PRIVATE WELL
-  MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3.2 UG/L SCREENING CRITERION
-  MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3.2 UG/L SCREENING CRITERION
-  FORMER ABC FACILITY BOUNDARY
-  PCE CONTOUR
-  PCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 DW-1 = ZONE 1 CLAY
 MW-88 = ZONE 1 CLAY
 MW-99 = ZONE 1 CLAY
 MW-112 = ZONE 1 CLAY

4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER



FORMER AMERICAN BERYLLIUM COMPANY SITE
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PCE CONCENTRATIONS IN THE AF GRAVEL, JANUARY/FEBRUARY 2008 SAMPLING EVENT



FIGURE
3-13C

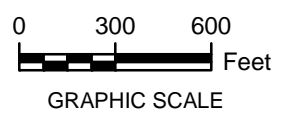


LEGEND:

- MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION
- MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 70 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- CIS-1,2-DCE CONTOUR
- CIS-1,2-DCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 DW-1 = ZONE 1 CLAY
 MW-88 = ZONE 1 CLAY
 MW-99 = ZONE 1 CLAY
 MW-112 = ZONE 1 CLAY
4. I - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.
 U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
 µg/L = MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.

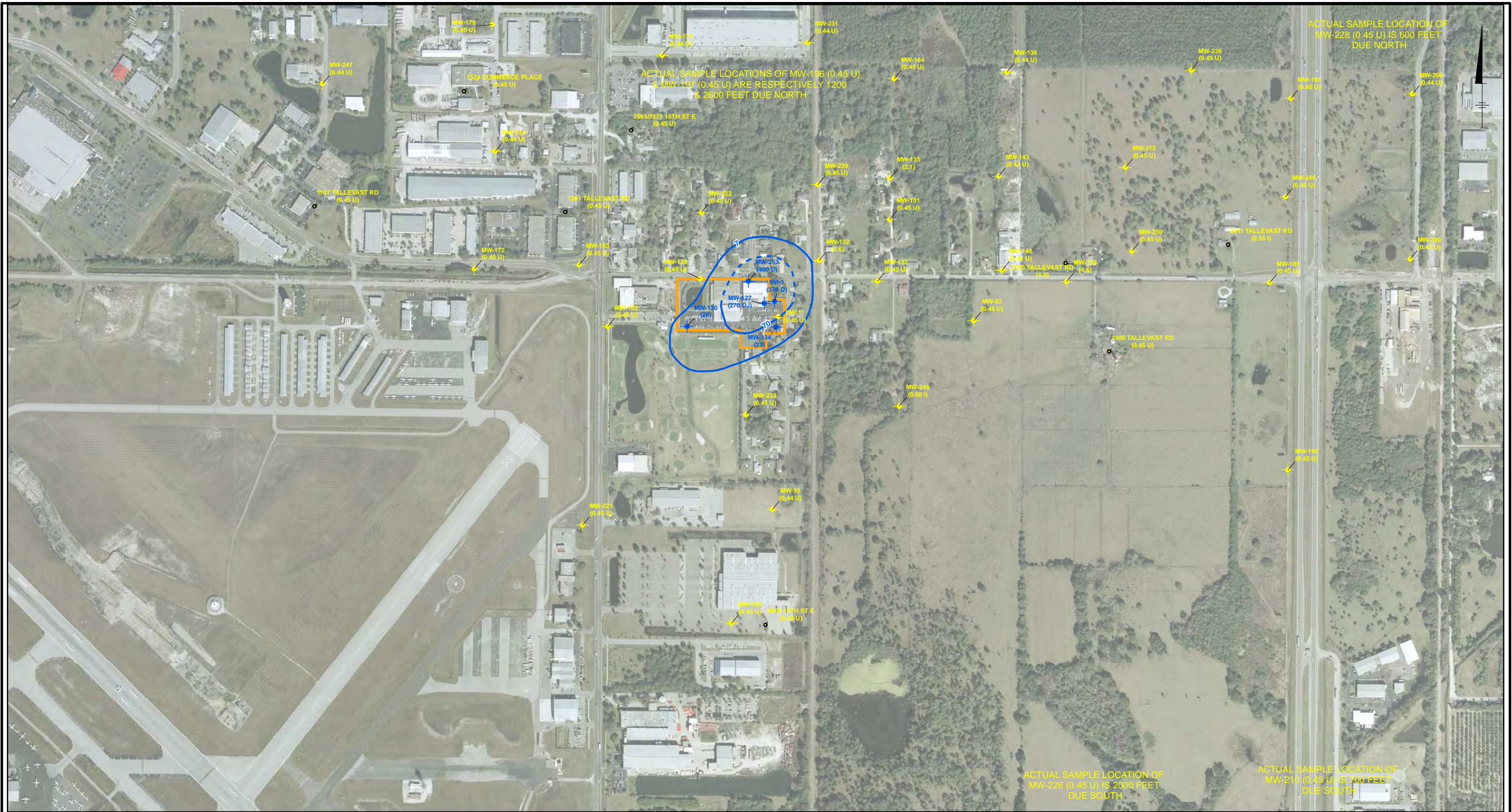


FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
 2008 GROUNDWATER MONITORING REPORT

CIS-1,2-DCE CONCENTRATIONS IN AF GRAVEL, JANUARY/FEBRUARY 2008 SAMPLING EVENT

FIGURE 3-13D

DEN-060 MSS Project #: B0038055.0000

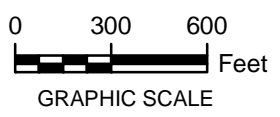


LEGEND:

- MW-100 MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 7 UG/L SCREENING CRITERION
- MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 7 UG/L SCREENING CRITERION
- FORMER ABC FACILITY BOUNDARY
- 1,1-DCE CONTOUR
- (3) 1,1-DCE RESULT VALUE (µg/L)

NOTE:

- AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
- SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
- THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 DW-1 = ZONE 1 CLAY
 MW-88 = ZONE 1 CLAY
 MW-99 = ZONE 1 CLAY
 MW-112 = ZONE 1 CLAY
- 1 - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.
 U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 D - THE VALUE IS THE RESULT OF A SECONDARY DILUTION.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER
- * INDICATES DATA NOT USED IN CONTOURING.

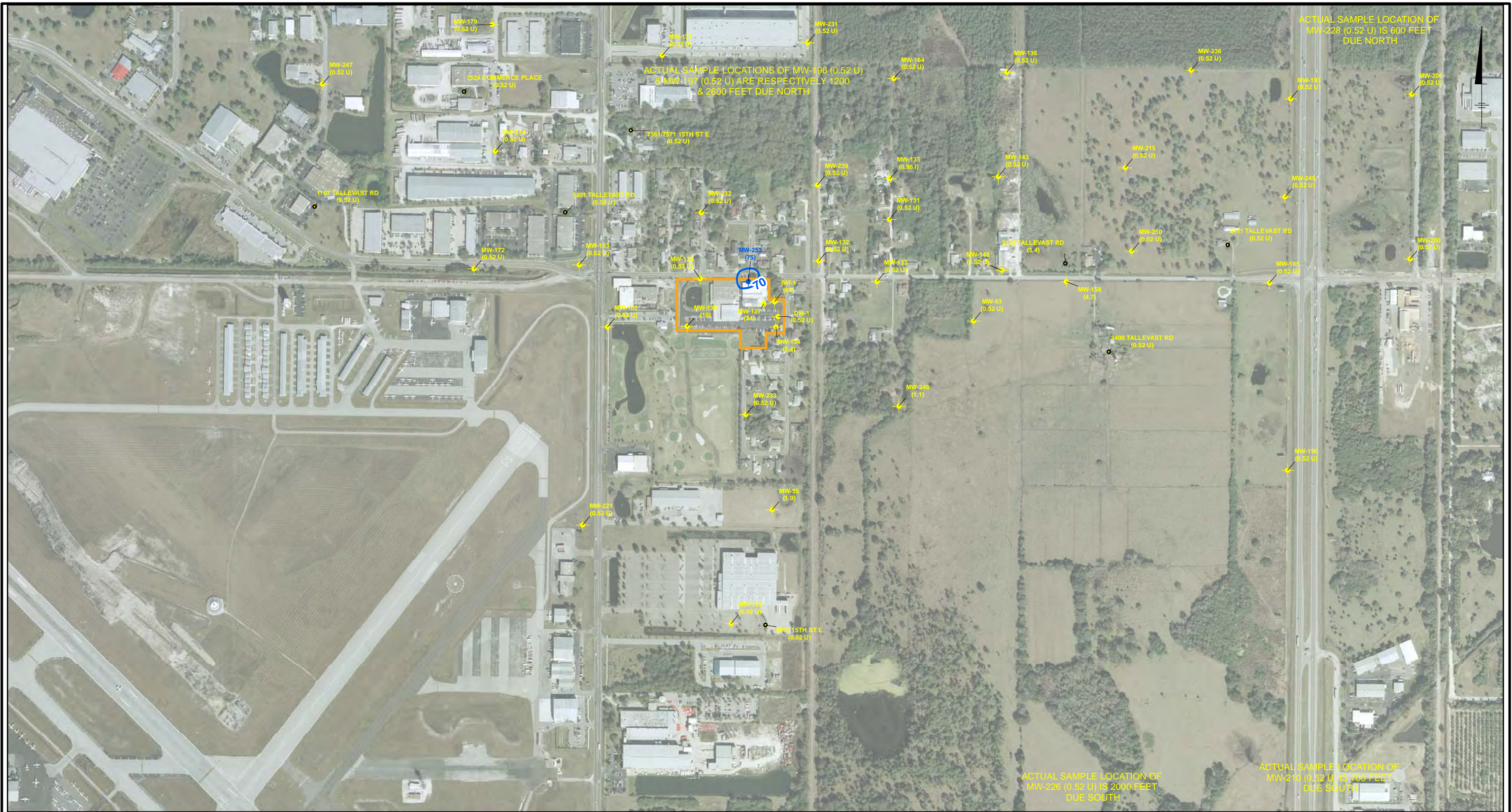


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




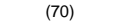
1,1-DCE CONCENTRATIONS IN THE AF GRAVEL, JANUARY/FEBRUARY 2008 SAMPLING EVENT

FIGURE 3-13E

DEN-060 MSS Project #: B0038055.0000

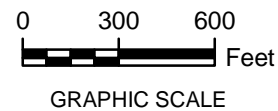


LEGEND:

-  MONITORING WELL
-  PRIVATE WELL
-  MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION
-  MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 70 UG/L SCREENING CRITERION
-  FORMER ABC FACILITY BOUNDARY
-  1,1-DCA CONTOUR (70)
-  1,1-DCA RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 DW-1 = ZONE 1 CLAY
 MW-88 = ZONE 1 CLAY
 MW-99 = ZONE 1 CLAY
 MW-112 = ZONE 1 CLAY



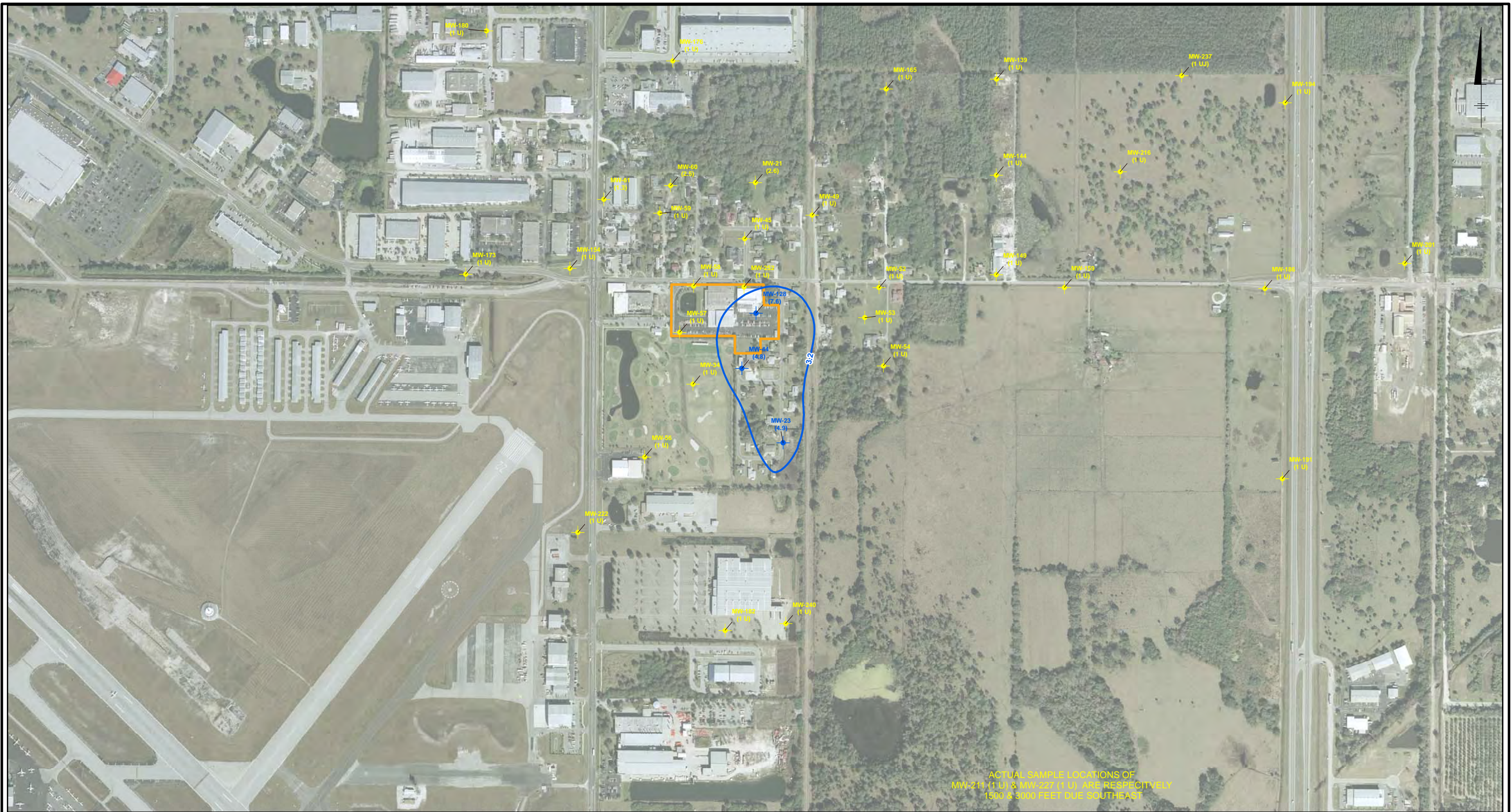
4. I - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION.
 - U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- µg/L = MICROGRAMS PER LITER

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
1,1-DCA CONCENTRATIONS IN THE AF GRAVEL, JANUARY/FEBRUARY 2008 SAMPLING EVENT



FIGURE
3-13F

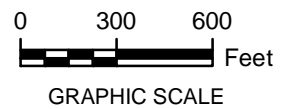


LEGEND:

-  MONITORING WELL
-  PRIVATE WELL
-  MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3.2 UG/L SCREENING CRITERION
-  MAXIMUM DETECTED 1,4-DIOXANE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3.2 UG/L SCREENING CRITERION
-  FORMER ABC FACILITY BOUNDARY
-  1,4-DIOXANE CONTOUR
-  (3.2) 1,4-DIOXANE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 IW-2 = ZONE 3-4 CLAY
 MW-93 = HARDSTREAK CLAY
 MW-96/97 = ZONE 3-4 CLAY
 MW-124 = ZONE 2 CLAY
 MW-201 = ZONE 3-4 CLAY
 MW-216 = ZONE 3-4 CLAY
4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER

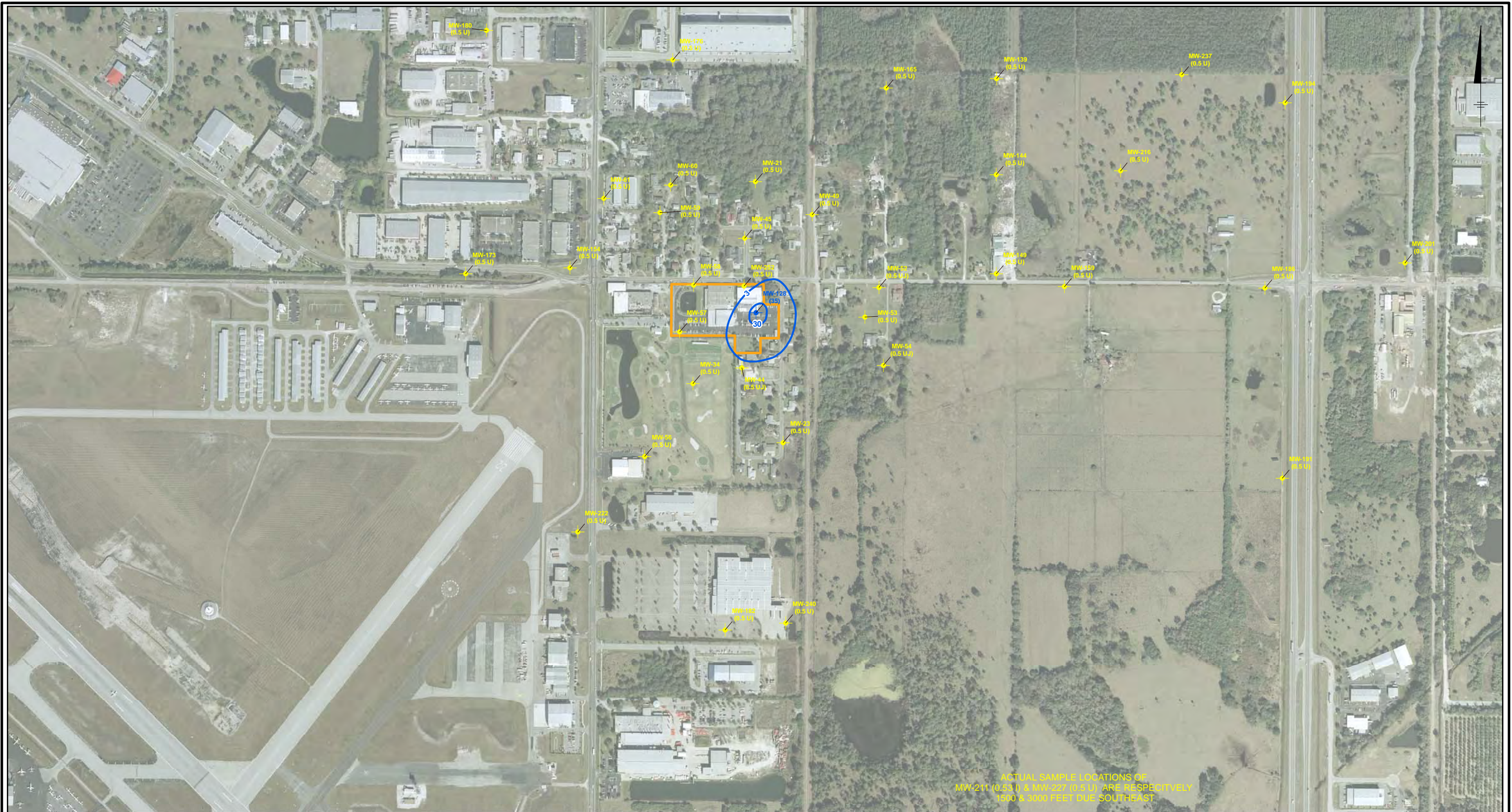


FORMER AMERICAN BERYLLIUM COMPANY SITE
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
**1,4-DIOXANE CONCENTRATIONS IN THE
S&P SAND, JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-14A

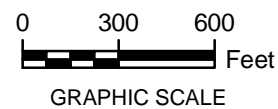


LEGEND:

-  MONITORING WELL
-  PRIVATE WELL
-  MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION
-  MAXIMUM DETECTED TCE VALUE FROM MOST RECENT ARCADIS SAMPLING IN EXCEEDANCE OF 3 UG/L SCREENING CRITERION
-  FORMER ABC FACILITY BOUNDARY
-  TCE CONTOUR
-  TCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 - IW-2 = ZONE 3-4 CLAY
 - MW-93 = HARDSTREAK CLAY
 - MW-96/97 = ZONE 3-4 CLAY
 - MW-124 = ZONE 2 CLAY
 - MW-201 = ZONE 3-4 CLAY
 - MW-216 = ZONE 3-4 CLAY



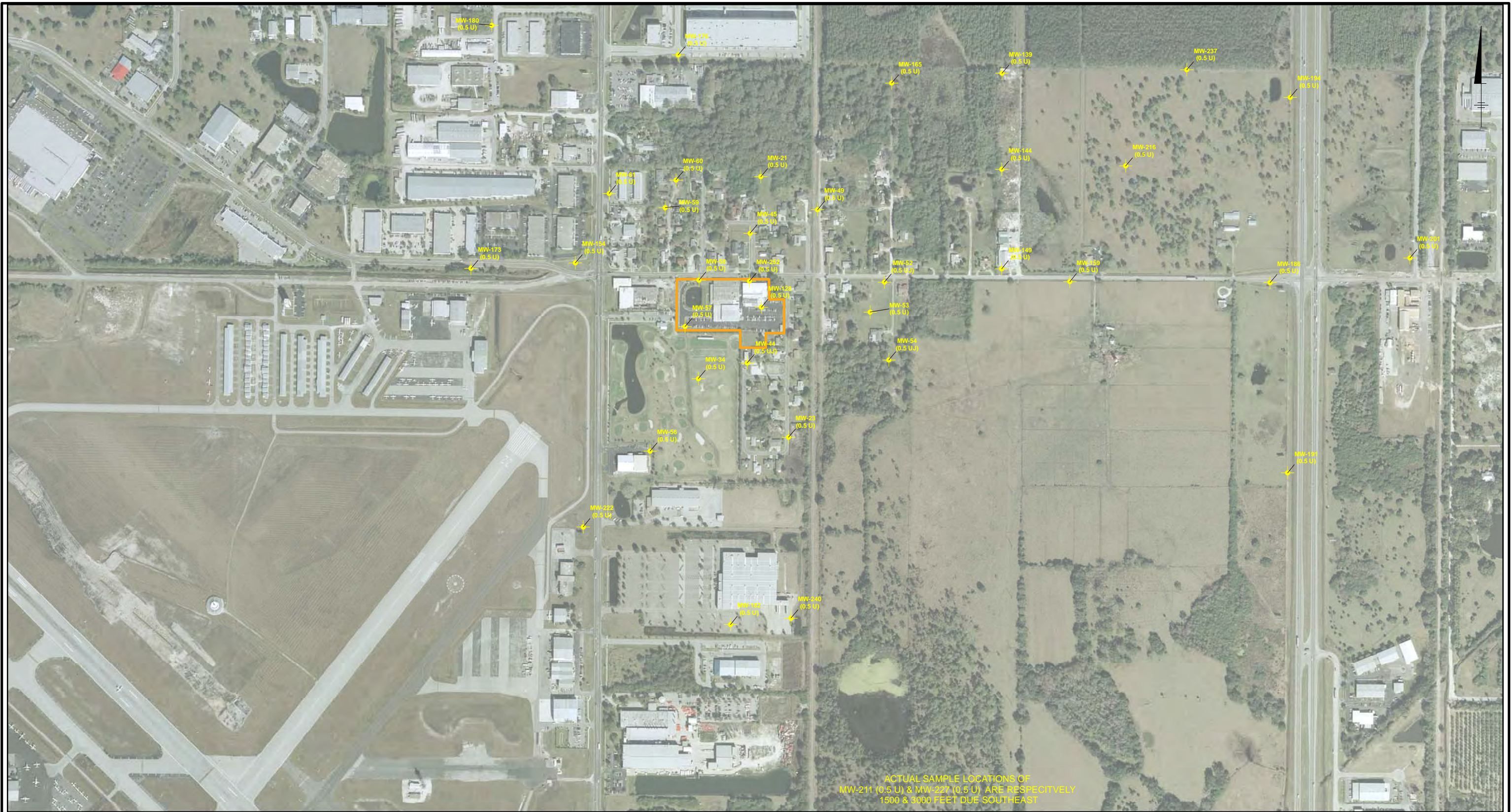
4. 1 - DETECTED BUT BELOW REPORTING LIMIT. RESULT IS AN ESTIMATED CONCENTRATION. (THIS DEFINITION IS DIRECTLY FROM THE DATABASE. SPECIFICALLY, THIS MEANS THAT THE DETECTED VALUE IS BETWEEN THE MDL AND THE REPORTING LIMIT AND THEREFORE ESTIMATED.)
- U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
- J - ESTIMATED VALUE.
- µg/L - MICROGRAMS PER LITER
5. * INDICATES DATA NOT USED IN CONTOURING.

FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

**TCE CONCENTRATIONS IN THE S&P
SAND, JANUARY/FEBRUARY 2008
SAMPLING EVENT**



FIGURE
3-14B



LEGEND:

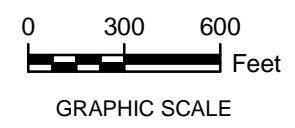
- MW-124 MONITORING WELL
- PRIVATE WELL
- MAXIMUM DETECTED PCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 3 UG/L SCREENING CRITERION

FORMER ABC FACILITY BOUNDARY

(3) PCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 IW-2 = ZONE 3-4 CLAY
 MW-93 = HARDSTREAK CLAY
 MW-96/97 = ZONE 3-4 CLAY
 MW-124 = ZONE 2 CLAY
 MW-201 = ZONE 3-4 CLAY
 MW-216 = ZONE 3-4 CLAY
4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 J - ESTIMATED VALUE.
 µg/L = MICROGRAMS PER LITER

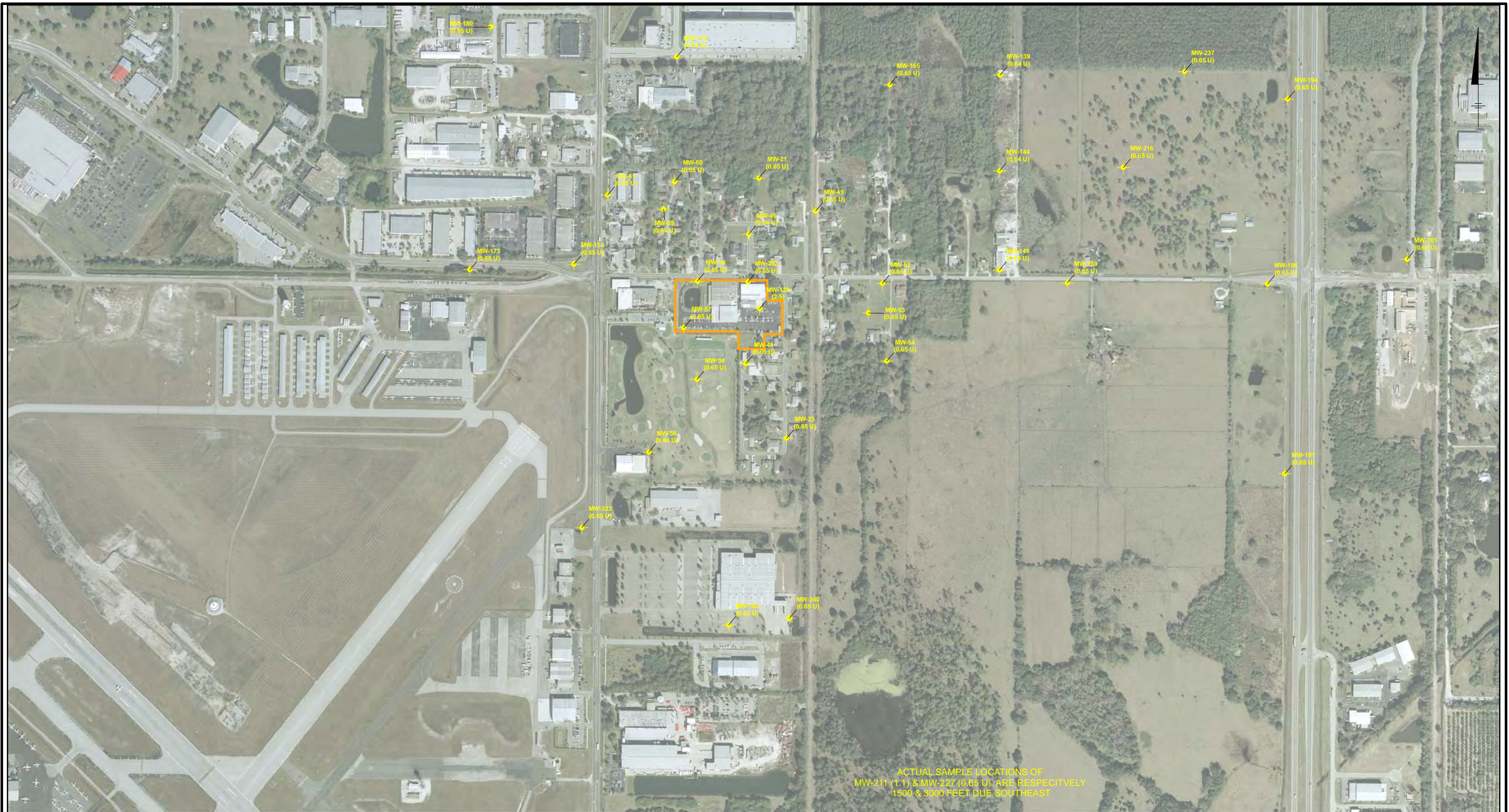


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PCE CONCENTRATIONS IN THE S&P SAND, JANUARY/FEBRUARY 2008 SAMPLING EVENT

FIGURE 3-14C

DEN-080 MSS Project #: B0038055.0000

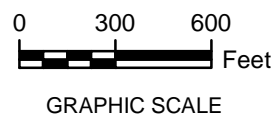


ACTUAL SAMPLE LOCATIONS OF MW-211 (1.1) & MW-227 (0.65 U) ARE RESPECTIVELY 1500 & 3000 FEET DUE SOUTHEAST

LEGEND:
 MONITORING WELL
 PRIVATE WELL
 MAXIMUM DETECTED CIS-1,2-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION

FORMER ABC FACILITY BOUNDARY
 (70) CIS-1,2-DCE RESULT VALUE (µg/L)

NOTE:
 1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
 2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
 3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
 IW-2 = ZONE 3-4 CLAY
 MW-93 = HARDSTREAK CLAY
 MW-96/97 = ZONE 3-4 CLAY
 MW-124 = ZONE 2 CLAY
 MW-201 = ZONE 3-4 CLAY
 MW-216 = ZONE 3-4 CLAY



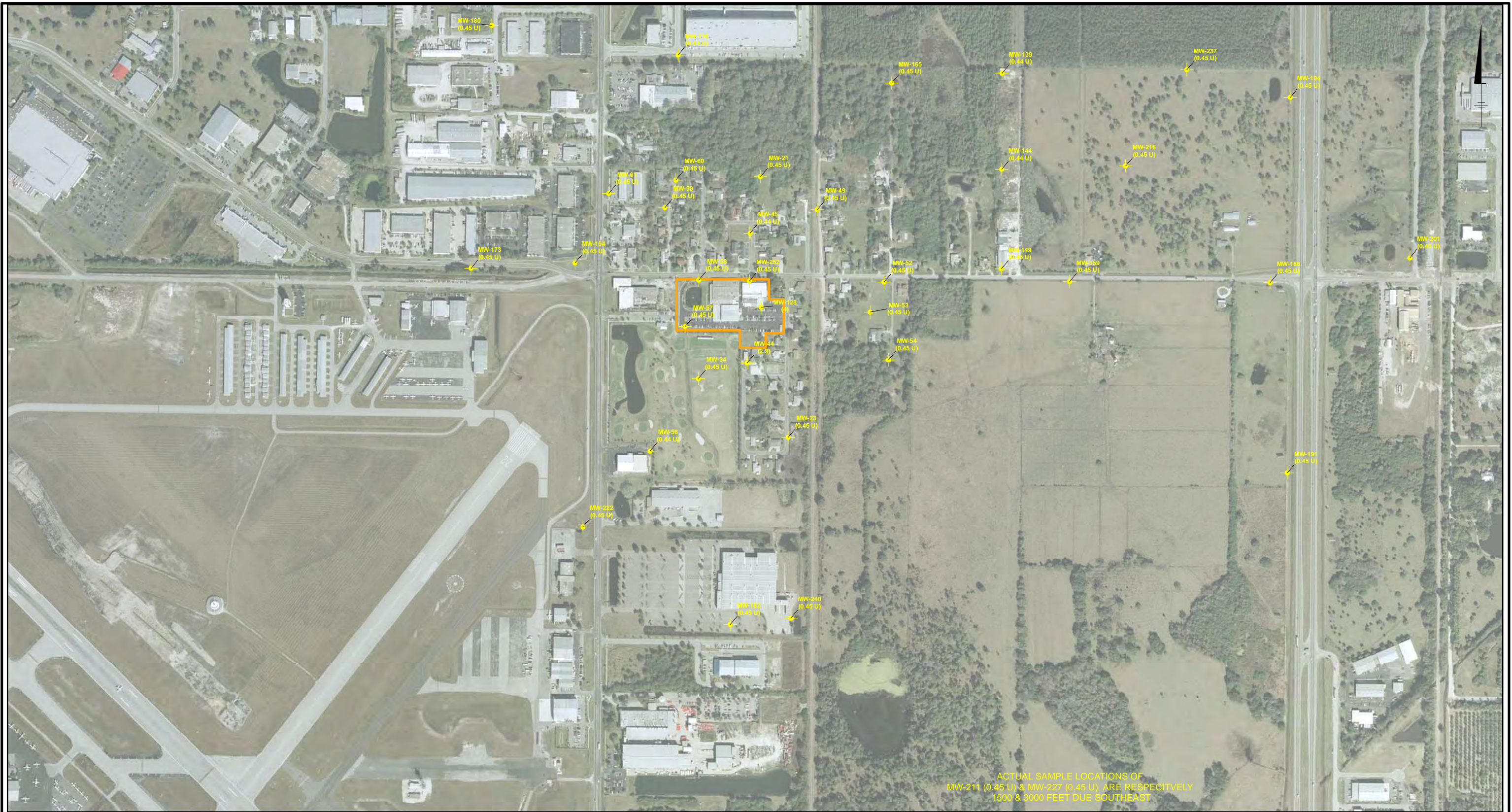
4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
 µg/L = MICROGRAMS PER LITER

FORMER AMERICAN BERYLLIUM COMPANY SITE
 TALLEVAST, FLORIDA
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CIS-1,2-DCE CONCENTRATIONS IN THE S&P SAND, JANUARY/FEBRUARY 2008 SAMPLING EVENT



FIGURE
3-14D



LEGEND:

MW-110 MONITORING WELL

PRIVATE WELL

MAXIMUM DETECTED 1,1-DCE VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 7 UG/L SCREENING CRITERION

FORMER ABC FACILITY BOUNDARY

1,1-DCE CONTOUR

(7) 1,1-DCE RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.

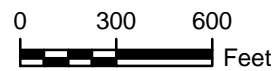
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.

3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:

- MW-2 = ZONE 3-4 CLAY
- MW-93 = HARDSTREAK CLAY
- MW-96/97 = ZONE 3-4 CLAY
- MW-124 = ZONE 2 CLAY
- MW-201 = ZONE 3-4 CLAY
- MW-216 = ZONE 3-4 CLAY

4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.

µg/L = MICROGRAMS PER LITER



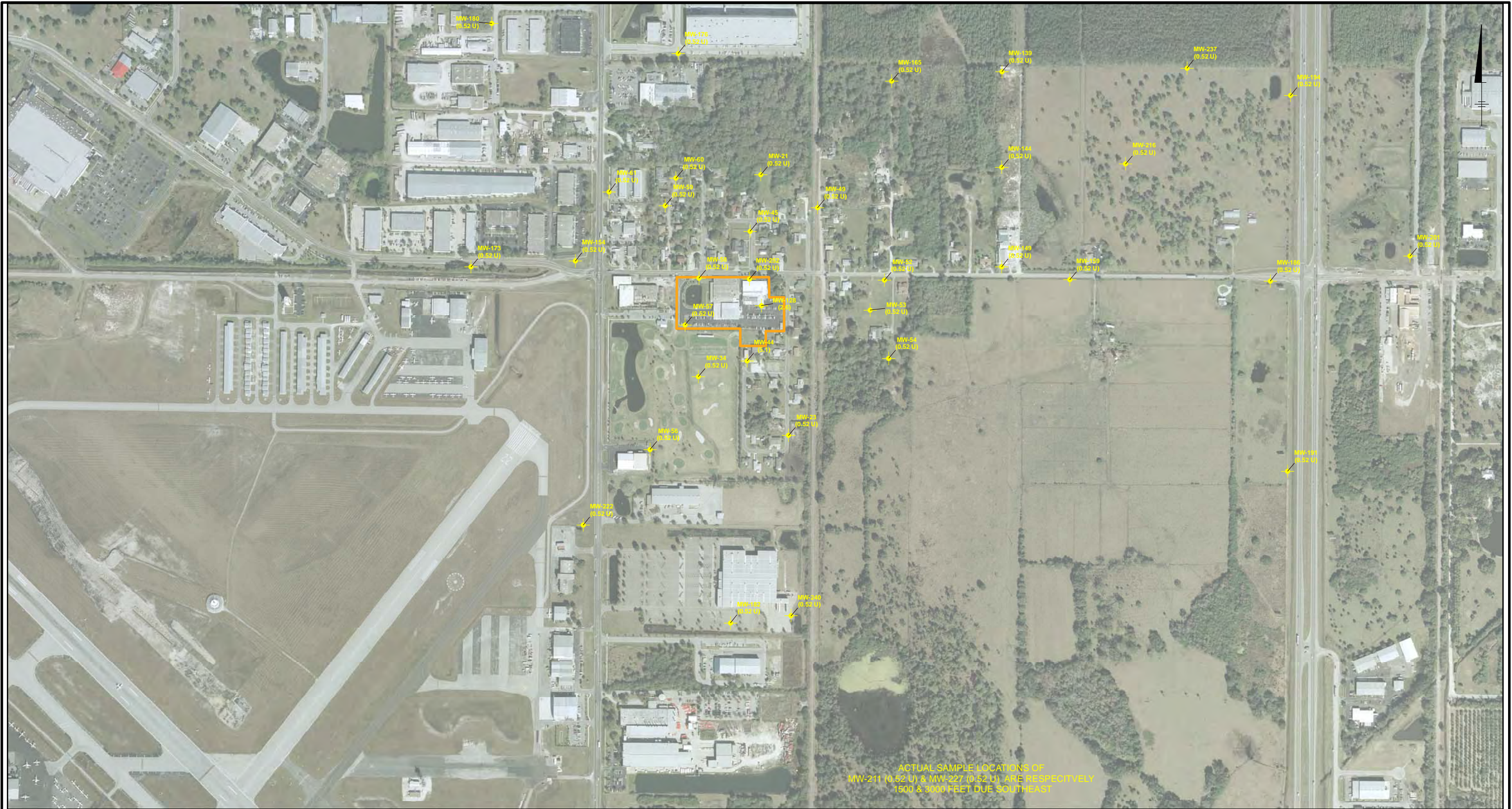
GRAPHIC SCALE

FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
2008 GROUNDWATER MONITORING REPORT

1,1-DCE CONCENTRATIONS IN THE S&P SAND, JANUARY/FEBRUARY 2008 SAMPLING EVENT



FIGURE
3-14E



LEGEND:

MW-180
MONITORING WELL

10
PRIVATE WELL

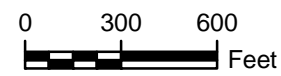
YELLOW
MAXIMUM DETECTED 1,1-DCA VALUE FROM MOST RECENT ARCADIS SAMPLING BELOW 70 UG/L SCREENING CRITERION

FORMER ABC FACILITY BOUNDARY

(70) 1,1-DCA RESULT VALUE (µg/L)

NOTE:

1. AERIAL PHOTOS WERE OBTAINED FROM THE MANATEE COUNTY GIS WEBSITE. AERIAL PHOTOS WERE TAKEN IN 2003 AT A 1-FOOT RESOLUTION IN TRUE COLOR FORMAT.
2. SOME WELLS FOR THIS AQUIFER AND ANALYTE ARE NOT SHOWN IN THIS EXTENT.
3. THE FOLLOWING WELLS LISTED WERE NOT SCREENED IN THE ASSIGNED WATER-BEARING UNIT; INSTEAD, THE WELLS WERE SCREENED IN THE SCREEN DESIGNATIONS GIVEN BELOW:
IW-2 = ZONE 3-4 CLAY
MW-93 = HARDSTREAK CLAY
MW-96/97 = ZONE 3-4 CLAY
MW-124 = ZONE 2 CLAY
MW-201 = ZONE 3-4 CLAY
MW-216 = ZONE 3-4 CLAY



GRAPHIC SCALE

4. U - THE ANALYTE WAS ANALYZED FOR, BUT NOT DETECTED.
µg/L = MICROGRAMS PER LITER

FORMER AMERICAN BERYLLIUM COMPANY SITE
TALLEVAST, FLORIDA
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1,1-DCA CONCENTRATIONS IN THE S&P SAND, JANUARY/FEBRUARY 2008 SAMPLING EVENT



FIGURE
3-14F