

**SITE MANAGEMENT TEAM MONTHLY CALL SUMMARY**  
**FORMER DEFENSE DEPOT MEMPHIS, TENNESSEE**  
**14 JUNE 2022**  
**11:00 EDT**

Army, Base Realignment and Closure Division (DAIM-ODB): Jay Foster (absent)

CALIBRE BEC: Bill Millar

U.S. EPA, Region 4, DDMT Project Manager – Fernando Martinez Torres

TDEC Division of Remediation, DDMT Project Manager – Jamie Woods

USACE, Mobile – Bob Beacham, Laura Roebuck, Melissa Shirley

Koman Government Solutions: Larry Pannell

HDR EOC: Tom Holmes, Clayton Mokri, Nancy Jepsen

Mr. Millar began the meeting by saying that Mr. Foster would not be able to attend due to a conflict with another meeting.

Mr. Holmes stated that the meeting is being recorded in order to create a call summary that is easier to produce and more accurate. Mr. Martinez Torres sent some documents regarding protocol for recording meetings, which Mr. Holmes and Ms. Jepsen reviewed. The main requirement is to have a records management program. The existing Administrative Record (AR) and Information Repository (IR) are considered to meet the requirements; the call summaries are included in the AR.

Mr. Holmes said the transcript will be used to create the call summary. Once the regulators have had a chance to review the summary, HDR will delete the recording and associated transcript.

## **MAIN INSTALLATION (MI)**

### **Focused Feasibility Study (FFS)**

Mr. Holmes said the Focused Feasibility Study (FFS) is being extensively revised to address comments from USACE. It is near completion and will be submitted within the next two weeks.

Mr. Holmes stated HDR submitted extension requests for submittal of the FFS and the Vapor Intrusion (VI) Conceptual Site Model (CSM). Mr. Woods has not replied, and Mr. Martinez Torres approved the CSM extension but did not reply for the FFS. Mr. Martinez Torres answered that he would revise the approval to include the FFS extension. Mr. Woods stated he had intended to send approval but had been side-tracked. Mr. Holmes said an email response would be fine.

### **Human Health & Ecological Risk Assessment (HHERA) Sampling & Analysis Plan (SAP)**

Mr. Holmes noted the HHERA SAP was approved and the final document was submitted. Field work is scheduled for 13–20 July. Mr. Mokri will be onsite with a biologist to perform a habitat screening and then will collect samples per the SAP.

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**Vapor Intrusion (VI) Study**

Mr. Holmes stated the VI Conceptual Site Model (CSM), Rev1, will be submitted within the next two weeks. It will be followed with a VI Comprehensive Sampling Plan (CSP) in July. HDR plans to submit a comprehensive CSM in July per EPA's request.

**DUNN FIELD**

**Status of Air Sparge (AS)/Soil Vapor Extraction (SVE) Operations**

Mr. Pannell said May was an off month for the AS/SVE system, except for AS wells 91 through 95 which continued to operate. All wells have been operating since 1 June.

Mr. Pannell said the system was down from 14 to 17 May due to a low voltage alarm that was probably related to thunderstorms in the area. The system was restarted on 17 May.

**AS/SVE Reporting**

Mr. Pannell said that the responses to comments and the revised report sections were submitted to regulators for the Year 10 Annual Report on 26 May. Concurrence or additional comments are requested by 27 June.

**OFFSITE INVESTIGATIONS**

**Offsite Groundwater Investigation**

Mr. Holmes noted a letter from EPA replying to the Army responses to EPA comments on the Offsite Groundwater Investigation report was received 6 June. Mr. Holmes shared figures (see attachment) from the OSI and earlier reports via Webex to provide additional information regarding comments in the letter.

One comment was that additional assessment might be needed because an offsite source has not been identified. Mr. Holmes noted the stated goal of the offsite investigation was not to identify a specific source of the plume, but to provide additional lines of evidence that the plume source was not on Dunn Field. Army believes the report shows that the contaminant source is upgradient of Dunn Field.

The first piece of evidence was the investigation by Trinity/Koman Government Solutions in the northwest corner of Dunn Field, including the other side of Hayes Road. The membrane interface probe (MIP) readings and soil samples did not identify contamination. Only one soil sample result had a detected concentration of a groundwater contaminant, tetrachloroethene (PCE), below 1 microgram per kilogram ( $\mu\text{g/kg}$ ).

Mr. Holmes showed figures of trichloroethene (TCE) and 1,1-dichloroethene (DCE) concentrations from the OSI report; TCE is present upgradient (north) of Dunn Field and DCE to the northwest near the former Cintas facility. Mr. Martinez Torres asked if the plume is completely delineated. Mr. Holmes responded that the plume is delineated and indicated the number of wells on the figure with concentrations below the EPA maximum contaminant level

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including non-detect results. The Army has shown the contamination is coming onto Dunn Field and does not consider further assessment their responsibility.

Mr. Woods said TDEC has conducted site assessments of Cintas, Production Specialties and Wabash to locate the source of this plume and appreciates what Army has done to help with this. He anticipates land use restrictions would be put in place for any development of the property and doubts that a cleanup would be done for a low-level contamination such as this.

Mr. Millar said that the BRAC office has gone from having five lawyers to having one. She is doing some research and will provide analysis on Army's position on the offsite plume.

Mr. Holmes said that a second comment was whether contaminated groundwater may be drawn into the Memphis Aquifer within the drawdown area of Allen Well Field, which is located 1-2 miles west of Dunn Field. He stated vertical migration of groundwater contaminants would be indicated by groundwater flow contours and shared the October 2021 DDMT groundwater contour map for the Fluvial Deposits Aquifer (FDAQ). The groundwater flow direction for the Offsite plume on Dunn Field is west-southwest to a trough in the groundwater surface (225 feet elevation) about 1,000 feet west of Dunn Field, at which point groundwater flows to the north. There are no closed contours in the area of the plume indicating vertical leakage. He noted that the Intermediate Aquifer (IAQ) groundwater elevation at the trough is at 176 feet, approximately 50 feet lower than the Fluvial Deposits Aquifer.

As a comparison, Mr. Holmes showed groundwater elevations at the erosional window on the Main Installation. The FDAQ is at 215 feet at the window and the IAQ at 212 feet; there is no clay layer separating the two aquifers in that area.

Mr. Martinez Torres thanked Mr. Holmes for the explanation. He noted his comment cites the language from page 2 of the 2022 Site Management Plan (SMP) where it says groundwater samples were collected from the new wells in June 2020 and in quarterly sampling events from October 2020 through July 2021. Mr. Martinez Torres said the text says the sample results support the presence of the offsite source with contaminant migration onto Dunn Field. Mr. Martinez Torres said his question was that the SMP section 3.2.2.1 contradicts itself and he wanted to clarify if there was an error.

Mr. Holmes said that the results showed that contamination was coming onto Dunn Field, from a source north or northwest of Dunn Field. The contamination is in the FDAQ, not a deeper aquifer and there is no sign of leakage within the plume area.

Mr. Martinez Torres said his other question is whether the offsite investigation covers all the contamination around Dunn Field, specifically anything that comes from offsite. Mr. Holmes answered that it does; upgradient wells on Dunn Field do not show contamination except along the northern boundary. Mr. Holmes added that there were contaminant sources on the west side of Dunn Field with plume migration to the west, but the sources have been cleaned up; the AS/SVE system is operating to complete cleanup of the plume that originated on Dunn Field and is close to meeting the cleanup goal.

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Mr. Holmes noted that there are two issues involved with the planned property transferred: the first being the offsite plume and the OSI report, and the second being the Dunn Field West supplemental investigation, which is covered in a separate report.

Mr. Martinez Torres asked if there would be more investigation in that area where the offsite plume is recognized. Mr. Holmes said that there is no further investigation planned for the offsite plume area, though groundwater monitoring will continue. Army believes that they've provided sufficient support for an offsite source and have provided the information to EPA and TDEC.

Mr. Woods said that if EPA believes additional investigation is necessary, TDEC and EPA can always pursue that in a site assessment. Mr. Holmes said that he questions if the levels of contamination justify the additional effort. Mr. Woods agreed that it is low-level contamination and that TDEC would probably advise land use restrictions rather than cleanup action.

Mr. Holmes said he would like to discuss the comment about OSI plume extent. The OSI report asserts that the plume does not extend past MW-79. Figures from the 2013 and 2019 LTM reports show the plume terminating near MW-79 were shared. PCE and TCE concentrations were slightly above the MCL at MW-79 with non-detect results downgradient (south). The plume does not extend into an area of vertical leakage window where it could reach the Memphis Aquifer. The plume is mainly impacting commercial property, except for the residential area in the upgradient portion of the plume.

Mr. Martinez Torres said he is concerned that government is planning to transfer the property, but the investigation has not determined the source or the full extent of the plume. What will happen 10 or 20 years from now? He said he is working with a team regarding the need to continue investigation of the offsite plume to assure it will not be an issue in the future. His concern is that the contamination does not become a pressing issue down the road, since the source has not been identified. He wants to be sure that future plans are fully prepared if this becomes an issue.

Mr. Holmes said that he's certain more discussions will occur on that topic. He stated that the Explanation of Significant Differences (ESD) and the Environmental Condition of Property (ECP) are being prepared. This information will be available to the buyer along with the Finding of Suitability to Transfer (FOST). Mr. Holmes added that he believes there are plans for additional land use controls (LUCs) for VI.

Mr. Martinez Torres asked for the typical response if agency comments request revisions of a section of text. Is the new text provided in the response to comments? Mr. Holmes answered that brief text revisions are included in the response-to-comments submitted for review; the response for more extensive revisions or where additional study is required would be that the specific report section will be revised. Also EPA and TDEC comments with the Army responses are included as an appendix in the final reports.

Mr. Holmes stated that one of Mr. Martinez Torres' comments was to incorporate text of "additional assessment to further identify the extent of onsite contamination and address any plume contaminant migration may be necessary." Mr. Holmes said that he does not want to imply that Army would be doing the assessment. Mr. Millar said the ELD attorney has taken the

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ESD, the ECP, and the letters from Mr. Martinez Torres and is looking into the matter. Mr. Millar said that he's sure more discussion will take place after the attorney completes her review process.

Mr. Martinez Torres said that any of the team members should feel free to contact him if clarification is needed. He wants to offer a line of communication to facilitate resolution of questions/issues.

**Dunn Field West Post-ROD Supplemental Investigation**

Mr. Holmes said responses to EPA comments on the Dunn Field West report were submitted 25 May.

**LONG TERM (LTM) MONITORING**

**April 2022 LTM**

Mr. Holmes stated that the data from the April 2022 sampling event were consistent with previous reports. The findings will be included in the Annual LTM Report.

**LTM Reporting**

Mr. Holmes said that EPA comments on the Annual LTM Report – 2021 were received. Response to those comments will be prepared for Army review and then submitted to EPA.

**OTHER ISSUES**

Mr. Holmes reported a few calls were received on the Community Information Line in May. One call was from a journalist requesting a site tour; she was referred to the Fort Campbell Public Affairs Office; no further calls have been received from the journalist or Ft. Campbell. Three calls were from people associated with Protect Our Aquifer, a local group in Memphis, to request an extension of the Five-Year Review public comment period. Mr. Holmes said an extension was not granted because comments submitted by local residents are always reviewed and a response provided. The group submitted comments at the end of May. Mr. Holmes added that a comment was received from a former employee from the base who was not aware that DDMT was on the National Priorities List (NPL). Mr. Holmes said HDR responded to the former employee and discussed the site status.

Mr. Holmes stated the annual site inspection was performed in May and the draft report will be submitted to the Army for review this week. The inspection was performed earlier than usual in order to incorporate the findings in the Five-Year Review.

Mr. Holmes stated the Five-Year Review is in progress with the draft report to be submitted to Army later this month.

Mr. Holmes noted Mr. Martinez Torres had sent an email suggesting that HDR interview the executive director of Protect Our Aquifer for the Five-Year Review. He noted the director is not a technical expert and the group's comments were more of a general nature. He asked if Mr.

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Martinez Torres had additional reasons to suggest an interview. Mr. Martinez Torres answered that he wanted to be sure that comments from the community were being received and that community stakeholders have a voice in the progress of the site. Mr. Holmes stated that public comments received since the last Five-Year Review, including those Protect Our Aquifer, would be discussed in the Five-Year Review.

Mr. Holmes stated that the AR/IR has been updated. Compilation discs were sent to team members who could access them, and that the IR website has been updated to match the compilation (<https://ww3.sam.usace.army.mil/DDMT/>).

Mr. Millar replied to a recent email from Mr. Martinez Torres about the status of the PFAS investigations at DDMT. The USACE Baltimore District has been doing preliminary assessments and site investigations at 31 BRAC sites around the country, including DDMT. He said a combined report is expected next year.

Mr. Martinez Torres asked what methodology the USACE is using for the PFAS assessment. Mr. Millar replied that USACE is working with the EPA CERCLA guidance documents. They are interviewing people, collecting aerial photos, and reviewing historical documents as part of the preliminary assessment in order to identify areas of potential interest (AOPs). Mr. Millar said the contract is set up so that groundwater samples can be taken at the AOPs once the preliminary assessments are complete. If compounds are identified during the site investigation phase, then there would be evaluation as to whether a remedial investigation is necessary. At another site that is currently being remediated, recently updated regional screening levels (RSLs) were lower than the healthy advisory numbers, so there is concern that early remedial investigations may have to be revisited.

Mr. Holmes stated the Document Submittal Tracker had been submitted to the team members and will be updated to reflect receipt of EPA comments on the 2021 LTM report. The Action Item & Decision Tracker was not sent because no action items had not been identified by SMT members. Mr. Martinez Torres said the offsite contamination (OSI) and the PFAS assessment could be listed as action items. Mr. Holmes said he would add property transfer, which includes the OSI and the Dunn Field West investigation, PFAS, and alternative remedy selection for the MI as Action Items.

Mr. Martinez Torres said the EPA is going to ask for an extension for the Off Depot AS/SVE Operations Report. He asked if an email was preferred for an extension request or if a letter was needed. Mr. Millar answered that an email was acceptable. Mr. Holmes noted the Federal Facility Agreement provides an automatic 20-day extension period and states extension requests for longer periods should note how the extension will affect follow-on documents.

Mr. Millar concluded the meeting by saying he believed the Webex meeting forum worked well. Mr. Holmes thanked Mr. Martinez Torres for his comments, saying that the discussion was helpful. Mr. Martinez Torres said that the team did a phenomenal job facilitating the meeting.

The next meeting will be on Tuesday, 12 July, at 11 am EDT, 10 am CDT, 9 am MDT, and 8 am PDT. A WebEx meeting invitation will be emailed prior to the meeting.

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**UPCOMING FIELDWORK**

Contractor	Activity	Dates
HDR	HHERA Review SAP Sampling	13–20 July 2022

Prioritized List of Documents for Regulatory Review

Responses to Comments

1. Responses to EPA Comments on Dunn Field West Post-ROD Supplemental Investigation Report (submitted 31 May 2022)
2. Responses to EPA Comments on Off Depot Air Sparge-Soil Vapor Extraction System Annual Operations Report, Year 10 (submitted 26 May 2022)

Reports

None

Documents Requiring Army Revision or Responses

1. EPA Letter dated 6 June 2022, Determination on the Revision 1, Offsite Groundwater Investigation Report,.
2. Comments from EPA (18 April 2022) on Annual LTM Report – 2021 (March 2022)
3. Report completion without approval from EPA (18 April 2022) on Vapor Intrusion Conceptual Site Model (December 2020)

Figure 8

TCE Concentrations,  
July 2021

Offsite Groundwater  
Investigation Report

Dunn Field  
Defense Depot  
Memphis, Tennessee

Legend

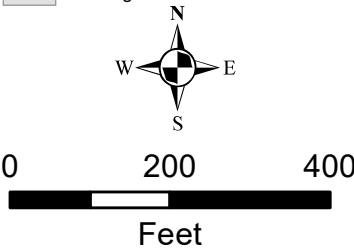
Well Symbol  
(µg/L)

- 0-1
- 1-5
- 5-10
- 10-50
- >50

Contour  
Shading (µg/L)

- 1-5
- 5-10
- 10-50
- 50-100

- Groundwater Flow Direction
- Potentiometric surface of the Fluvial Aquifer 2-ft. contour
- Original Dunn Field Boundary
- Railroad
- Fence
- Property Boundary
- Roads
- Buildings



Projection: NAD 1927 StatePlane Tennessee  
Units: Feet, Elevation Units: Feet, NAVD88

Date: 11/1/2021  
Edition: Rev 0

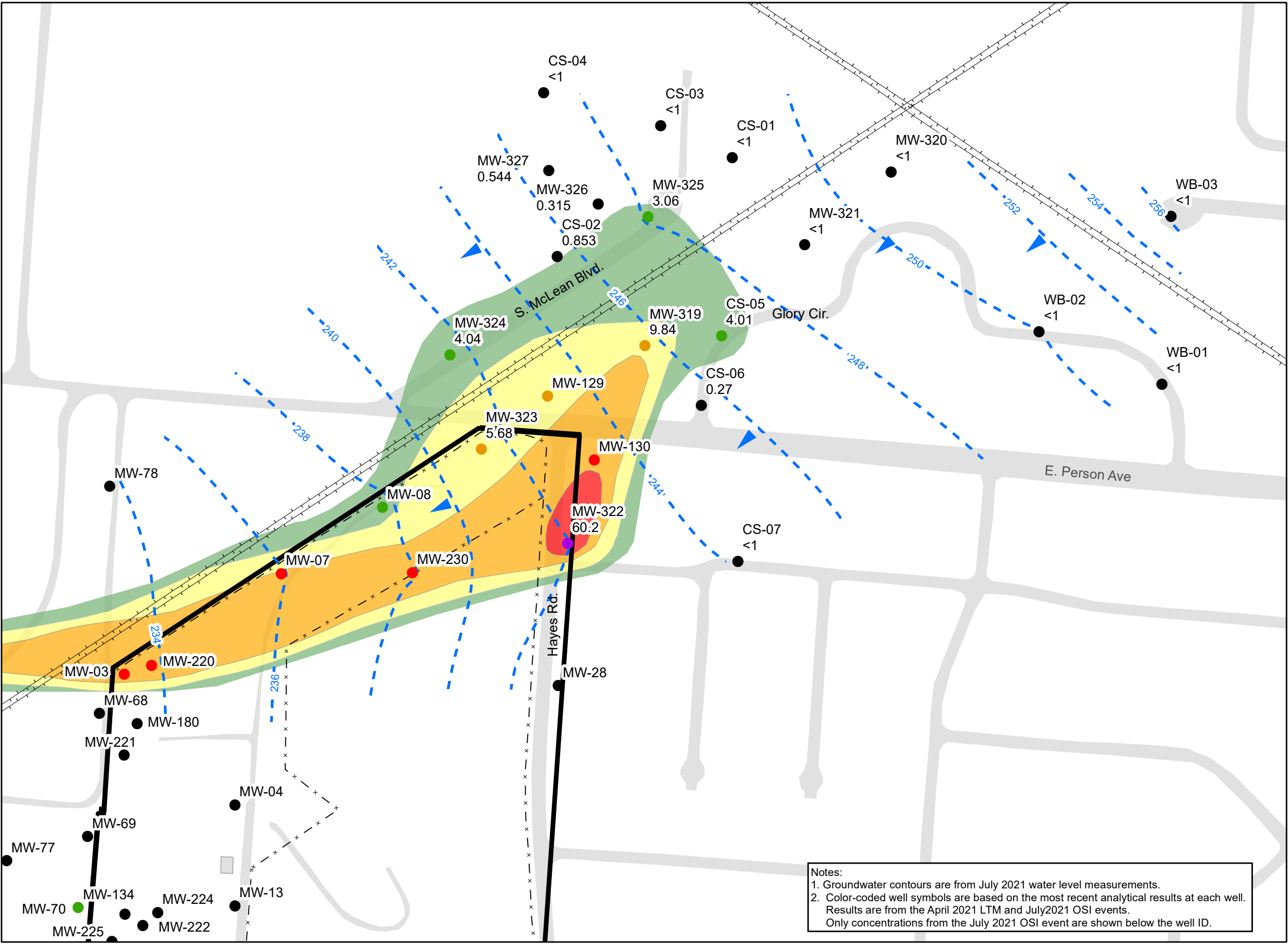




Figure 9

DCE Concentrations,  
July 2021

Offsite Groundwater  
Investigation Report

Dunn Field  
Defense Depot  
Memphis, Tennessee

Legend

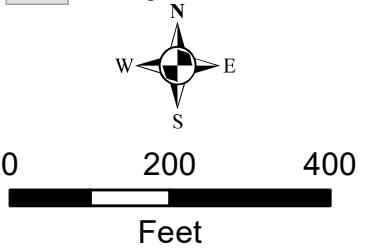
Well Symbol (µg/L)

- 0-1
- 1-7
- 7-10
- 10-50

Contour Shading  
(µg/L)

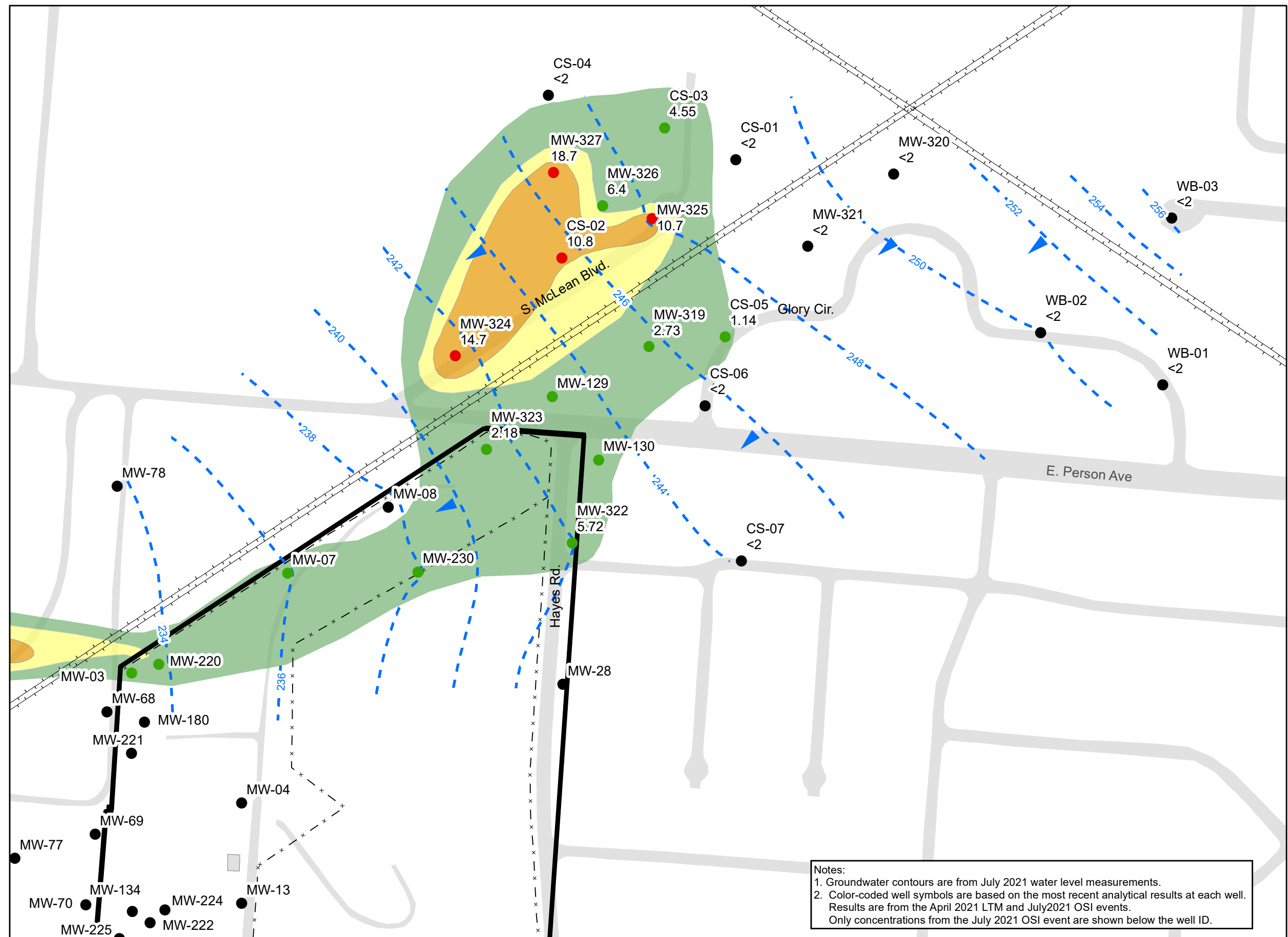
- 1-7
- 7-10
- 10-50

- Groundwater Flow Direction
- Potentiometric surface of the Fluvial Aquifer 2-ft. contour
- Original Dunn Field Boundary
- Railroad
- Fence
- Property Boundary
- Roads
- Buildings

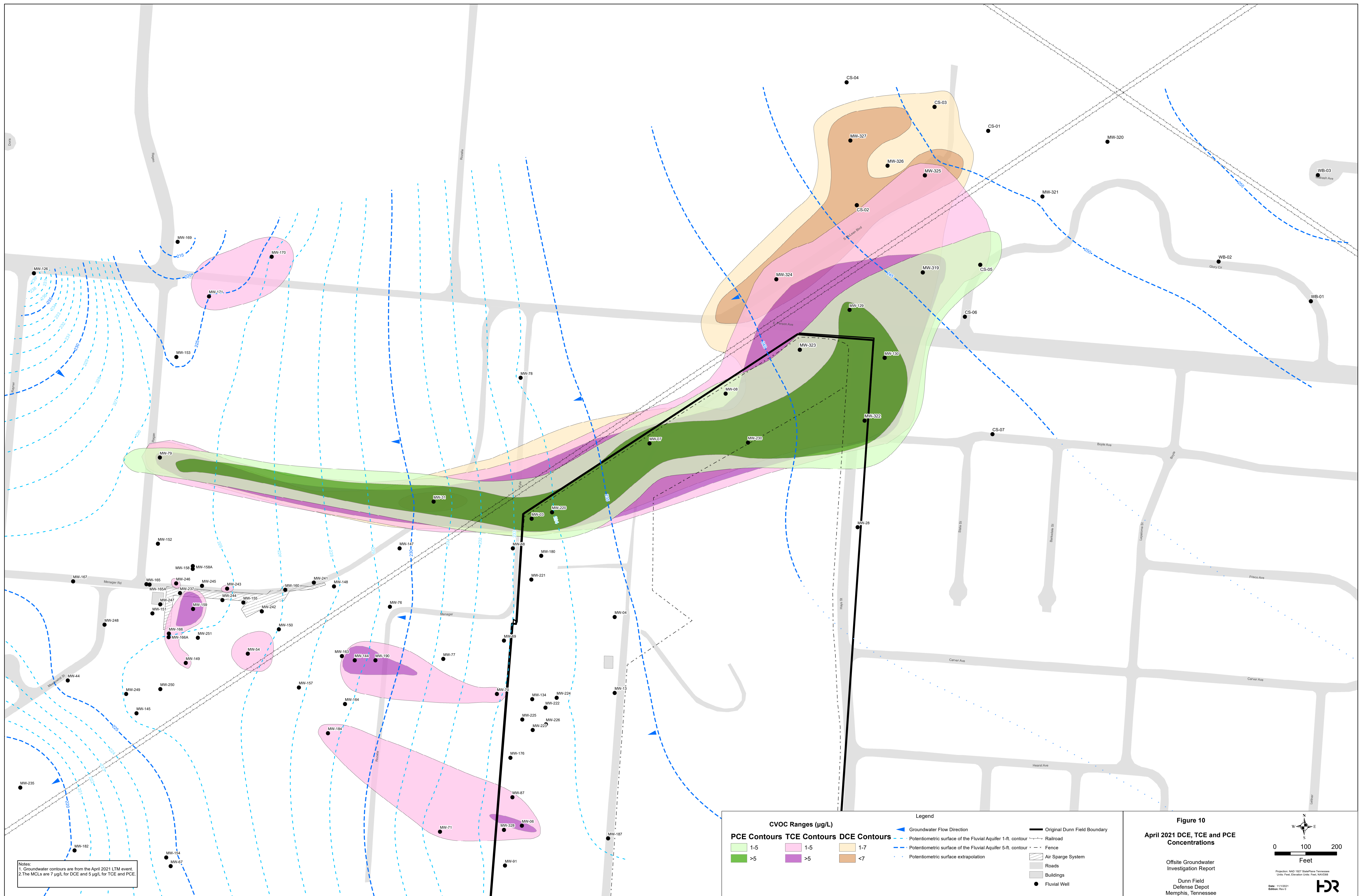


Projection: NAD 1927 StatePlane Tennessee  
Units: Feet, Elevation Units: Feet, NAVD88

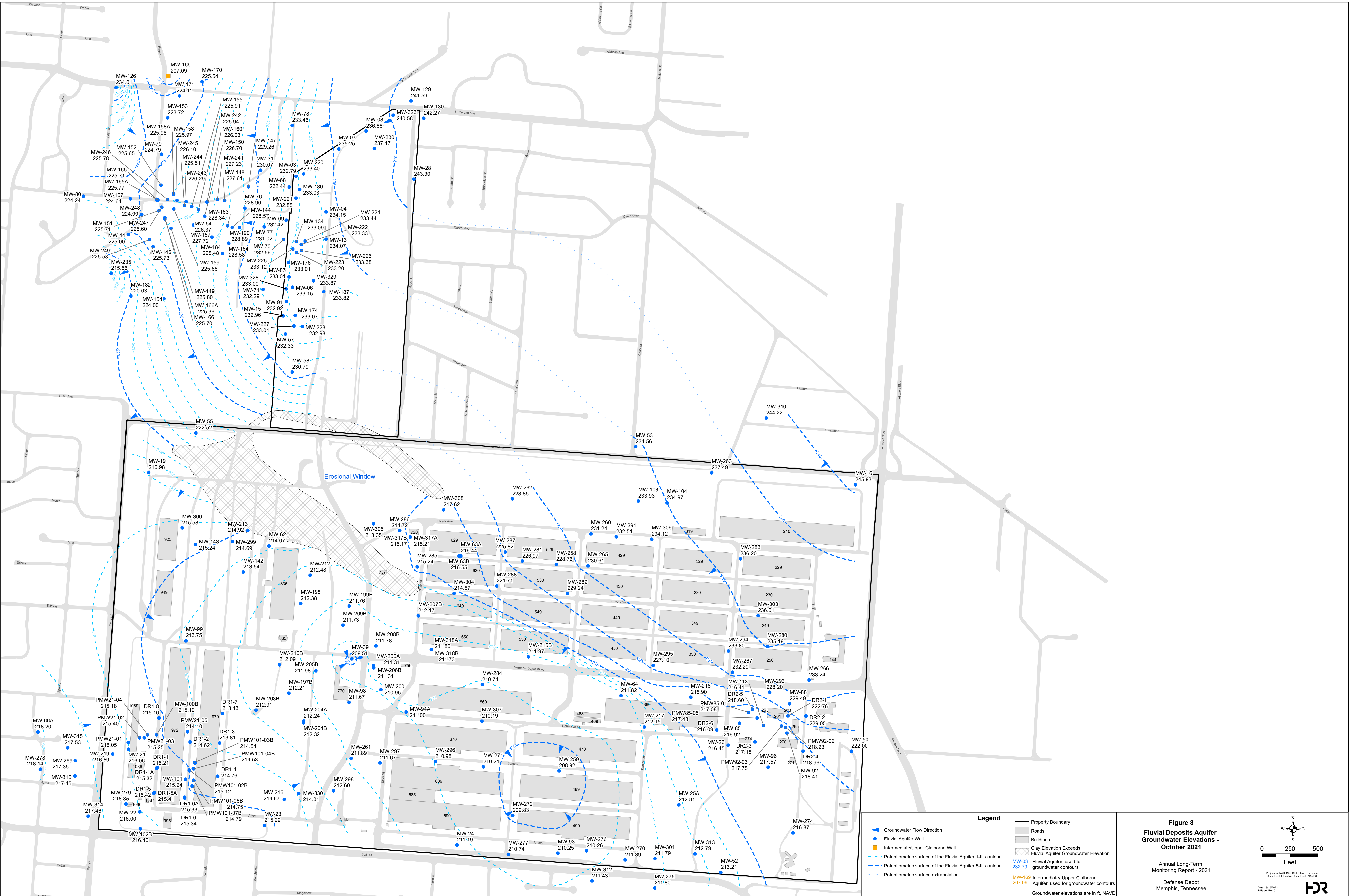
Date: 11/1/2021  
Edition: Rev 0



Notes:  
1. Groundwater contours are from July 2021 water level measurements.  
2. Color-coded well symbols are based on the most recent analytical results at each well. Results are from the April 2021 LTM and July 2021 OSI events. Only concentrations from the July 2021 OSI event are shown below the well ID.







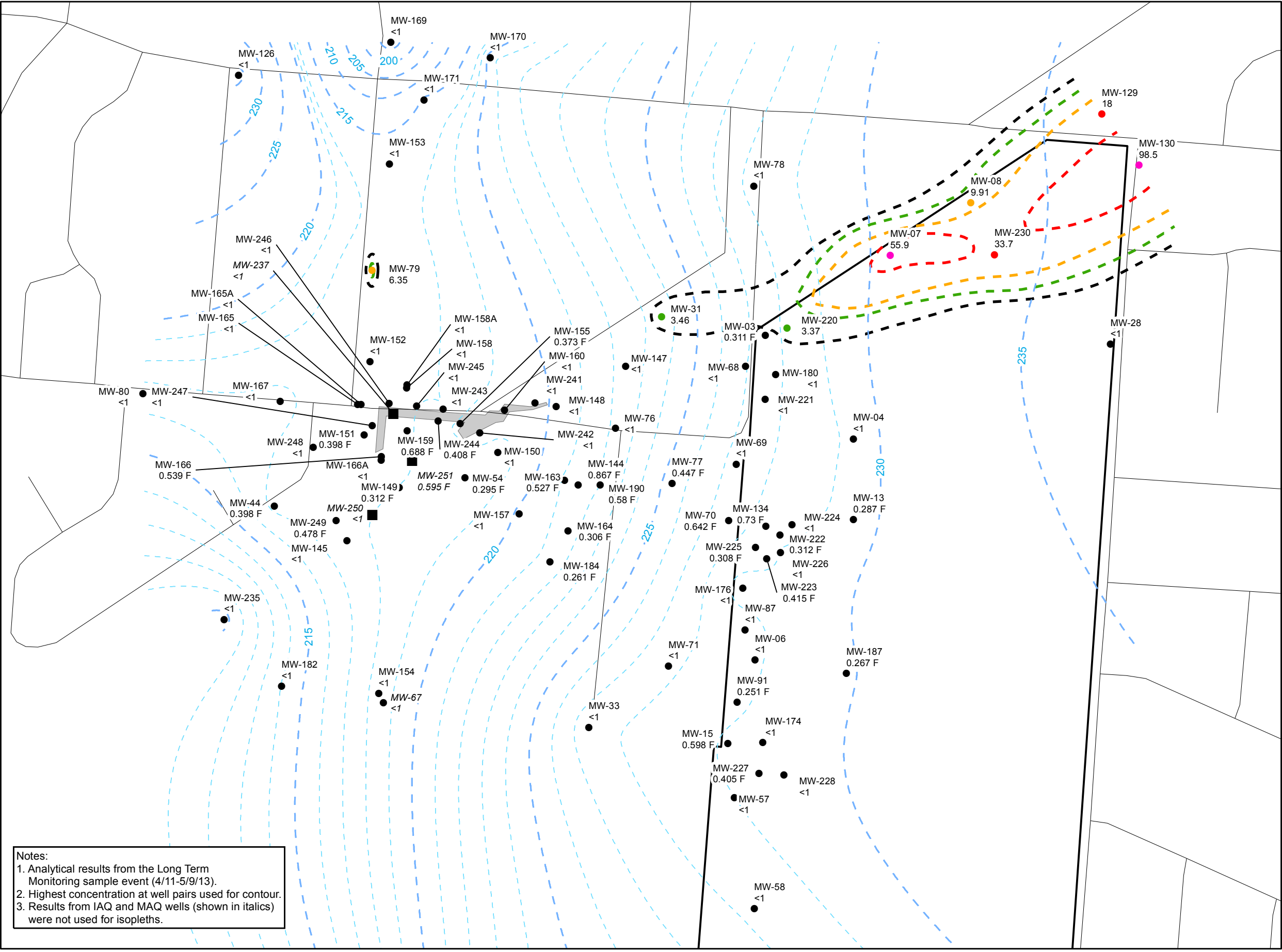








Path: G:\DDMT\LT Reports\2013 October\Figures\Figure 34 DF PCE Apr2013.mxd



Notes:  
1. Analytical results from the Long Term Monitoring sample event (4/11-5/9/13).  
2. Highest concentration at well pairs used for contour.  
3. Results from IAQ and MAQ wells (shown in *italics*) were not used for isopleths.



**Figure 34**  
**DUNN FIELD**  
**PCE**  
**CONCENTRATIONS,**  
**APRIL 2013**  
**ANNUAL LONG**  
**TERM MONITORING**  
**REPORT - 2013**  
**DEFENSE DEPOT**  
**MEMPHIS, TENNESSEE**

**Legend**

**PCE Ranges (ug/L)**

- 0 - 2.5
- 2.5 - 5
- 5 - 10
- 10 - 50
- 50 - 250

**PCE Isopleth (ug/L)**

- 2.5
- 5
- 10
- 50

■ Air Sparge Well Area

— Original Dunn Field Property Boundary

--- Potentiometric surface of the Fluvial Aquifer 1-ft. contour

--- Potentiometric surface of the Fluvial Aquifer 5-ft. contour

0 100 200 300  
Feet



Date: December 2013  
Edition: Rev 0



