

HTW BCT, May 19, 2023

Remedial Summary

- **A-Aquifer:**
 - **8 COCs:** 1,1-DCE; Total 1,2-DCE; CT; chloroform; methylene chloride; PCE; TCE; and VC.
 - **Remediation:** EISB.
- **Upper 180-Foot Aquifer:**
 - **1 COC:** CT
 - **Remediation:** Pump and treat with GAC at OU2 GWTP since 2011. Operation split the single plume in half. However, CT never detected above the ACL at EW-OU2-09-180.
- **Lower 180-Foot Aquifer:**
 - **2 COCs:** 1,2-DCA and CT. TCE monitored as well.
 - **Remediation:** MNA with supply wellhead treatment contingency.
- **Monitoring:** Quarterly groundwater monitoring and reporting, including annual 3Q monitoring and reports. Described in the most recent Groundwater QAPP.

Feb-May Key Events

- Feb 13-17: First Quarter 2023 GWMP event.
- May 15-19: Second Quarter 2023 GWMP event.

Future Key Events

- Install three monitoring wells in the A-Aquifer Hydraulic Zone 5 (draft final work plan in review).
- Install three monitoring wells in the A-Aquifer Hydraulic Zone 2 (proposal in progress).
- Install one extraction well in the Upper 180-Foot Aquifer (draft Remedial Design Addendum in progress).

GWM COC Summary

Table 1: OUCTP GWM Summary – A-Aquifer

Quarter	1,1-DCE	T 1,2-DCE	CT	Chloroform	Methylene Chloride	PCE	TCE	VC
2023-1Q	ND	<ACL	>ACL	<ACL	ND	<ACL	<ACL	ND
2022-4Q	ND	<ACL	>ACL	<ACL	<ACL	ND	<ACL	ND
2022-3Q	ND	<ACL	>ACL	>ACL	<ACL	ND	<ACL	ND
2022-2Q	ND	<ACL	>ACL	>ACL	<ACL	ND	<ACL	ND
Max COC/ACL Ratio	-	-	17.8	1.5	-	-	-	-
Hydraulic Zone	-	-	5	4	-	-	-	-

Notes:

>: greater than
<: less than
ACL: Aquifer Cleanup Level
1,1-DCE: 1,1-dichloroethene
T 1,2-DCE: total 1,2-dichloroethene
1,2-DCA: 1,2-dichloroethane
CT: carbon tetrachloride
TCE: trichloroethene
PCE: tetrachloroethene
VC: vinyl chloride
ND: The analyte was not detected above the detection limit.

Table 2: OUCTP GWM Summary – Upper 180-Foot Aquifer

Quarter	CT
2023-1Q	>ACL
2022-4Q	>ACL
2022-3Q	>ACL
2022-2Q	>ACL
Max COC/ACL Ratio	14.6
Hydraulic Zone	6

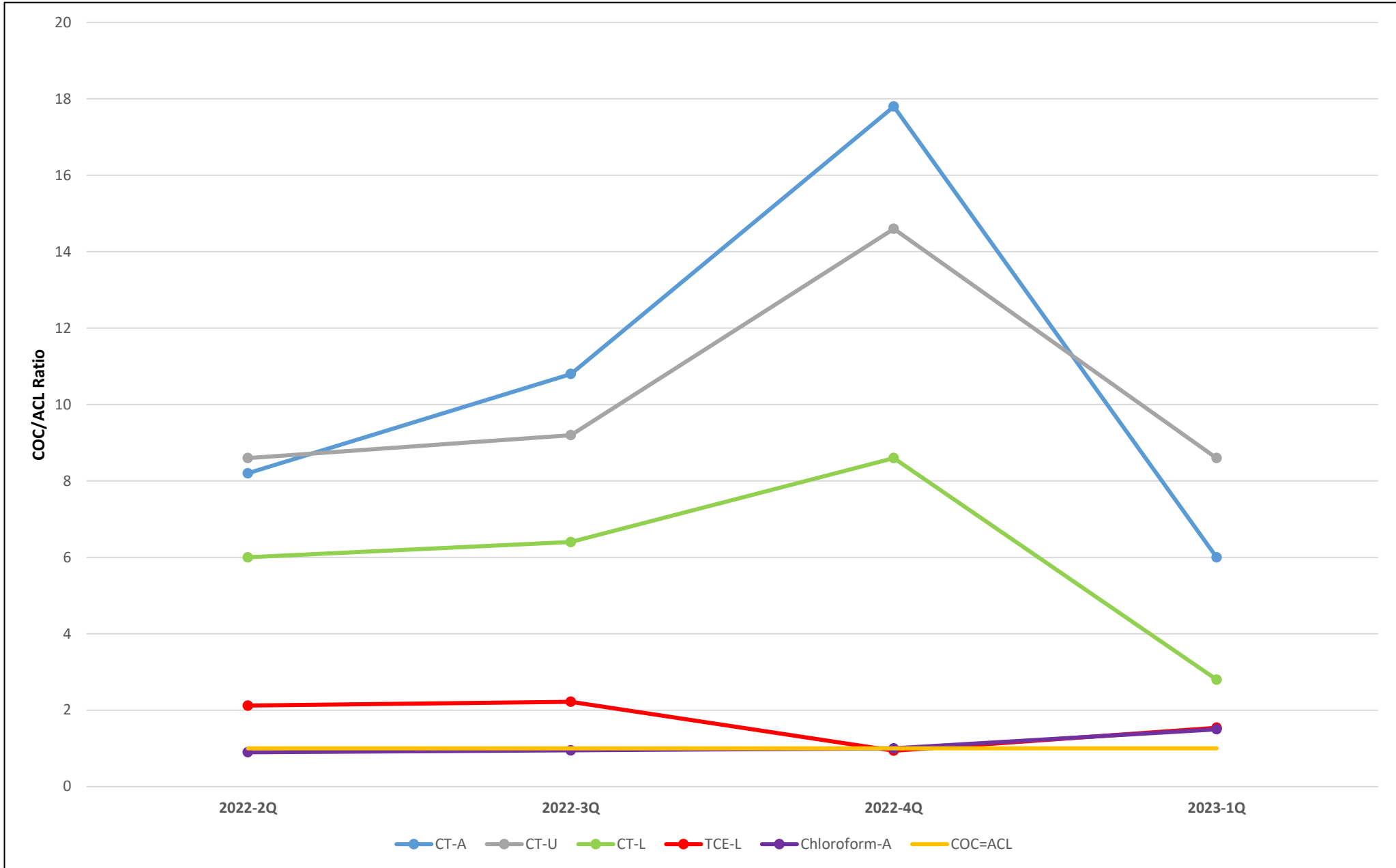
Table 3: OUCTP GWM Summary – Lower 180-Foot Aquifer

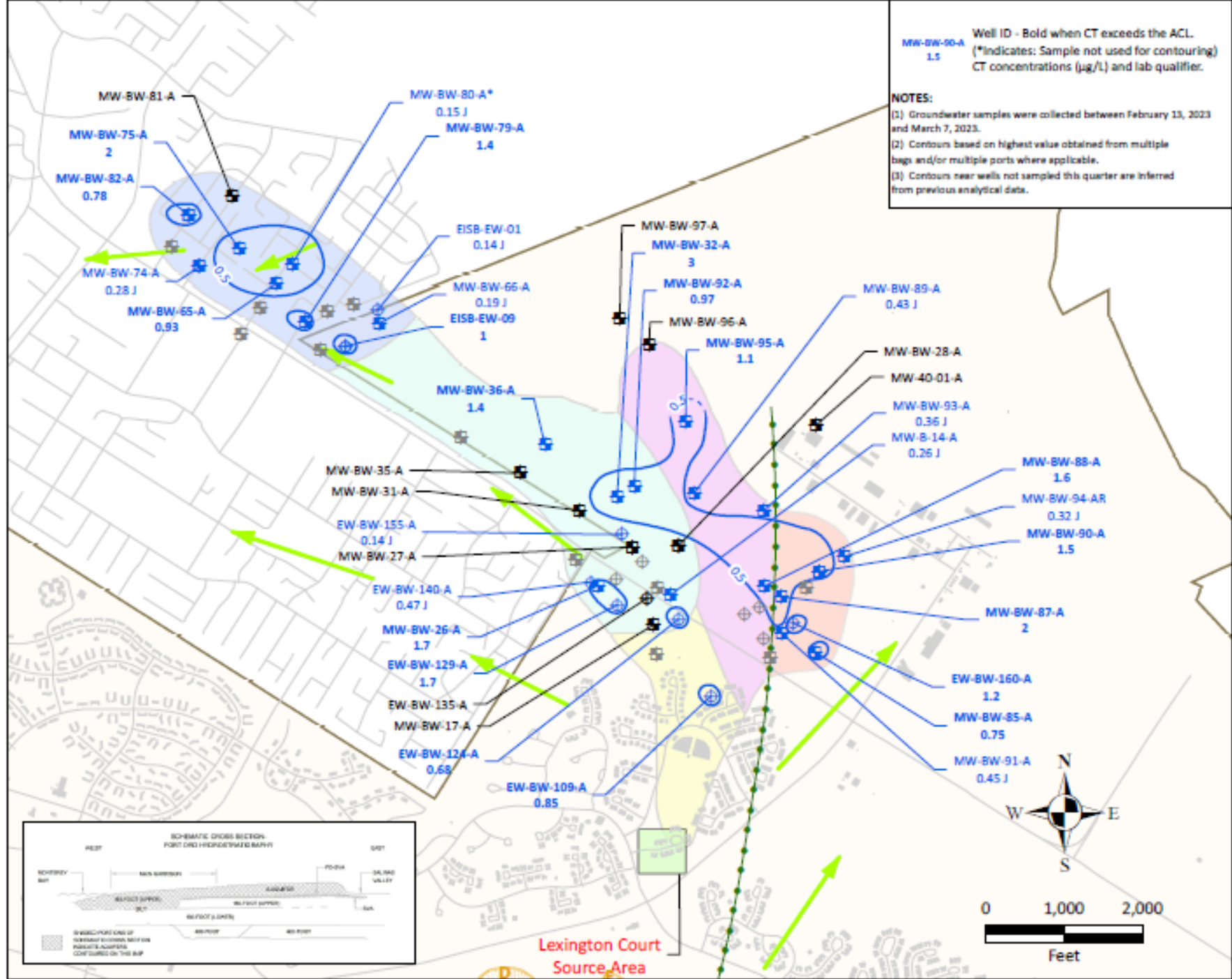
Quarter	CT	TCE	1,2-DCA
2023-1Q	>ACL	>ACL	ND
2022-4Q	>ACL	<ACL	ND
2022-3Q	>ACL	>ACL	ND
2022-2Q	>ACL	>ACL	ND
Max COC/ACL Ratio	8.6	2.2	-
Hydraulic Zone	7	N/A	-

2 COCs in the A-Aquifer, 1 in the Upper 180-Foot Aquifer, and 2 in the Lower 180-Foot Aquifer above the ACLs.



Max Quarterly COC/ACL Ratio Trend





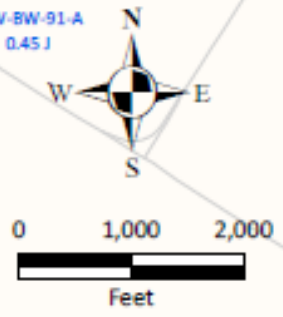
MW-BW-90-A
1.5
Well ID - Bold when CT exceeds the ACL.
(*Indicates: Sample not used for contouring)
CT concentrations (µg/L) and lab qualifier.

NOTES:
(1) Groundwater samples were collected between February 13, 2023 and March 7, 2023.
(2) Contours based on highest value obtained from multiple bags and/or multiple ports where applicable.
(3) Contours near wells not sampled this quarter are inferred from previous analytical data.

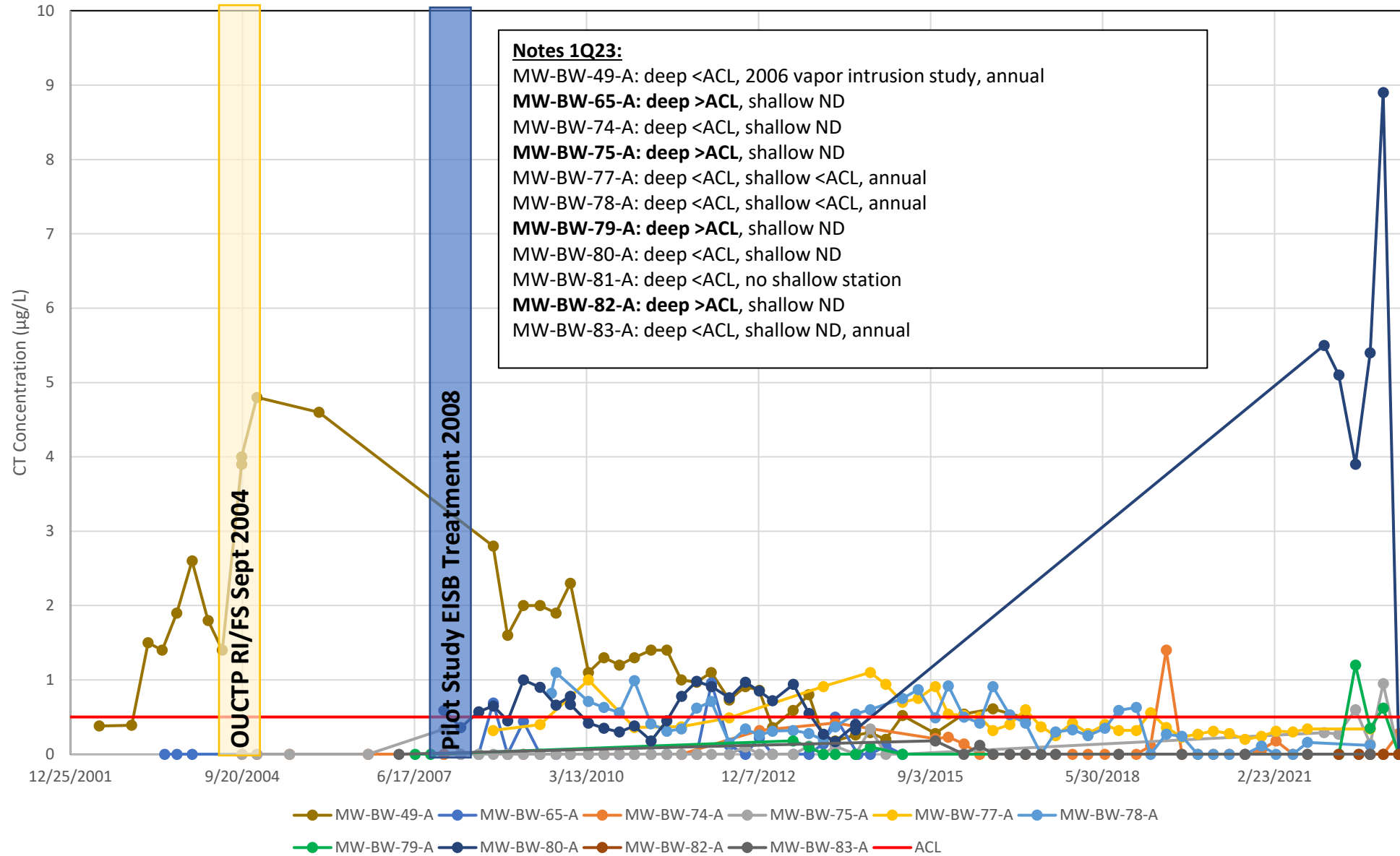
EXPLANATION

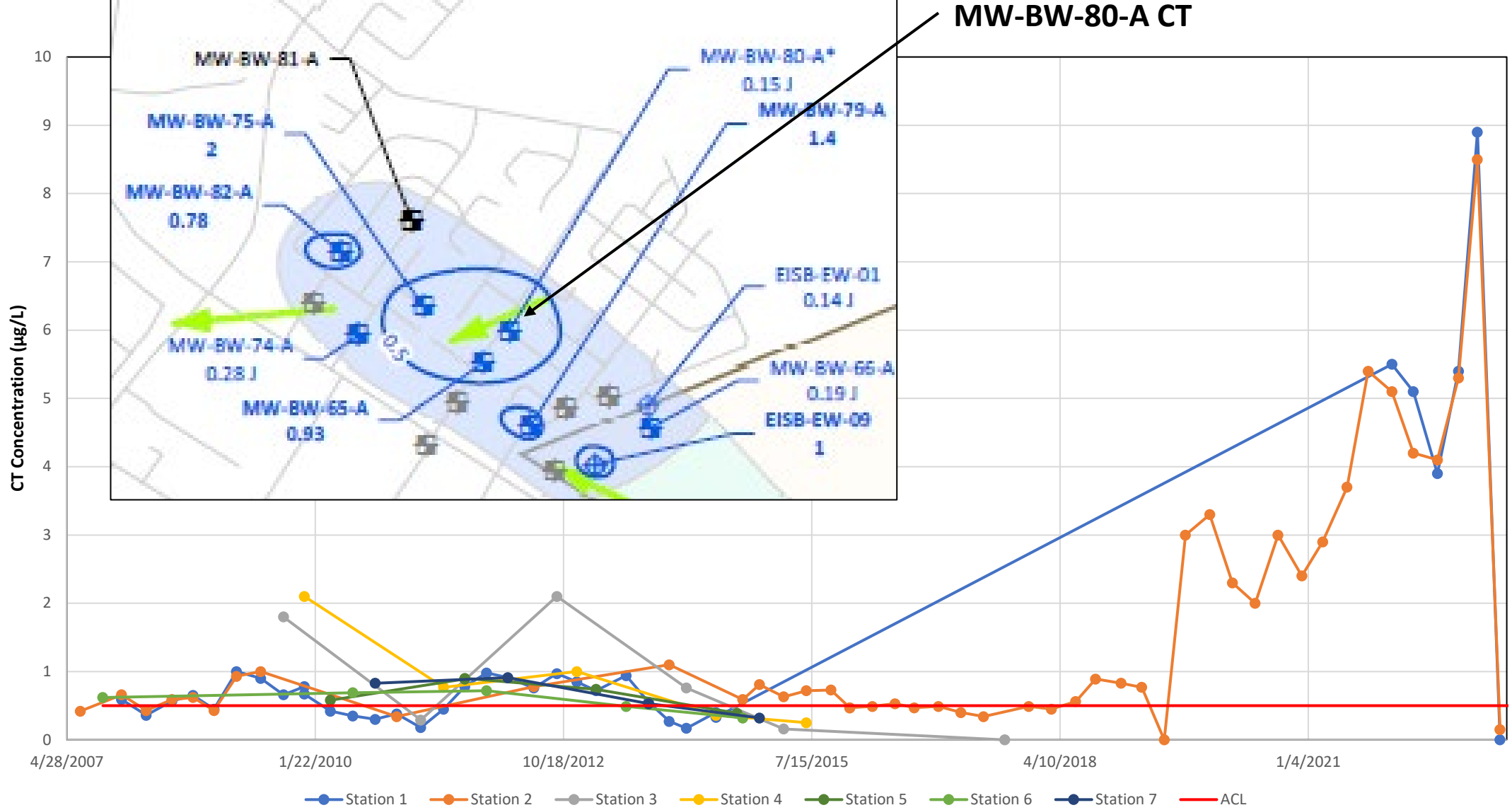
- General groundwater flow direction
- Approximate location of the A-Aquifer groundwater divide
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Lexington Court source area
- Former Fort Ord boundary
- Well Type and COC Detection**
- Extraction well with carbon tetrachloride (CT) detection
- Extraction well with no CT detection
- Extraction well not sampled in 1st quarter
- Monitoring well with CT detection
- Monitoring well with no CT detection
- Monitoring well not sampled in 1st quarter
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L**
- 0.5 — Carbon tetrachloride (CT) plume extent
- 0.5 - - - Estimated CT plume extent
- OUCTP A-Aquifer Hydraulic Zone**
- 1
- 2
- 3
- 4
- 5

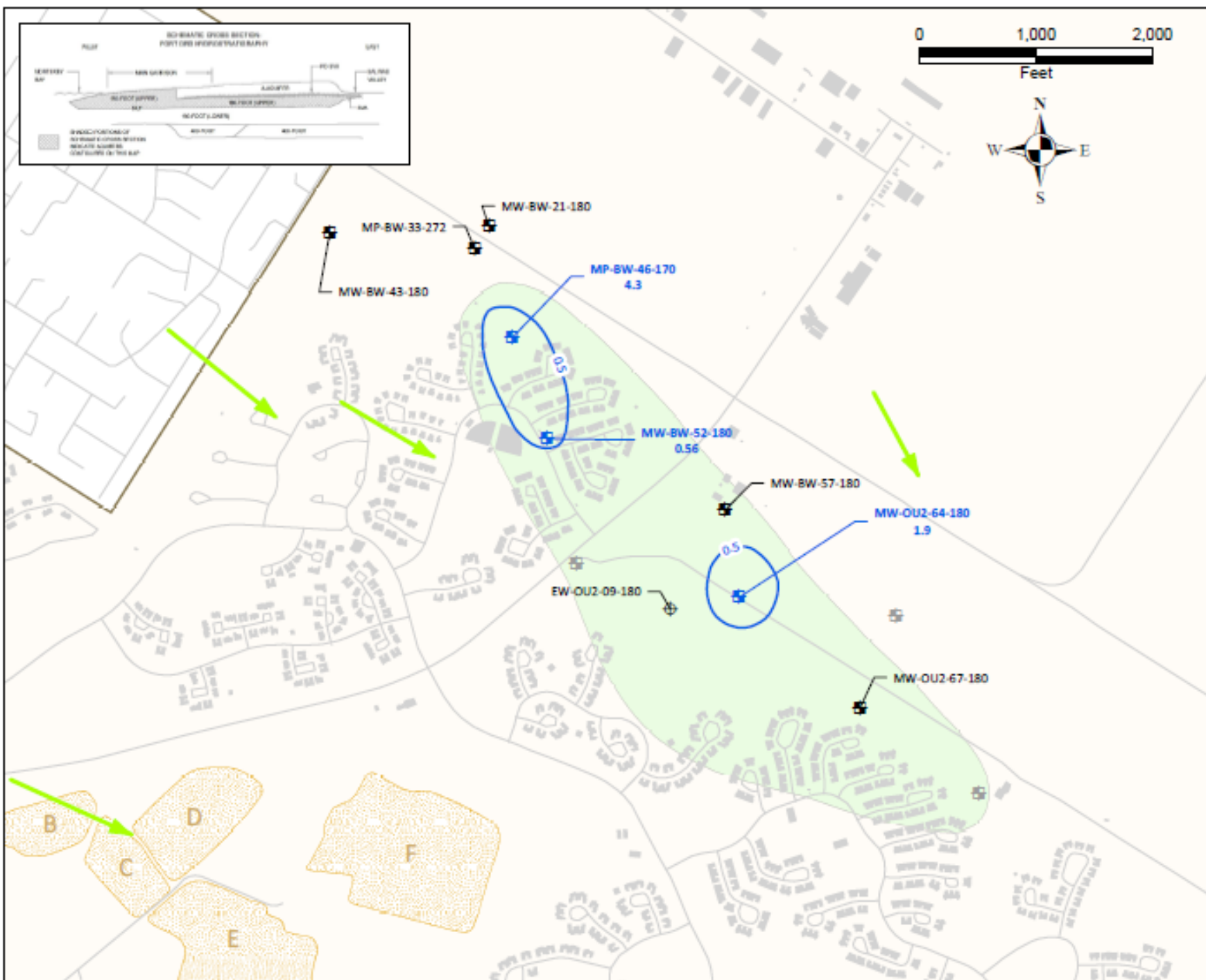
CT CONCENTRATIONS
A-AQUIFER
FIRST QUARTER 2023
Operable Unit Carbon Tetrachloride Plume
First Quarter 2023 Groundwater Monitoring Report
Former Fort Ord, California



CT Shallow Stations: City of Marina HZ 5







EXPLANATION

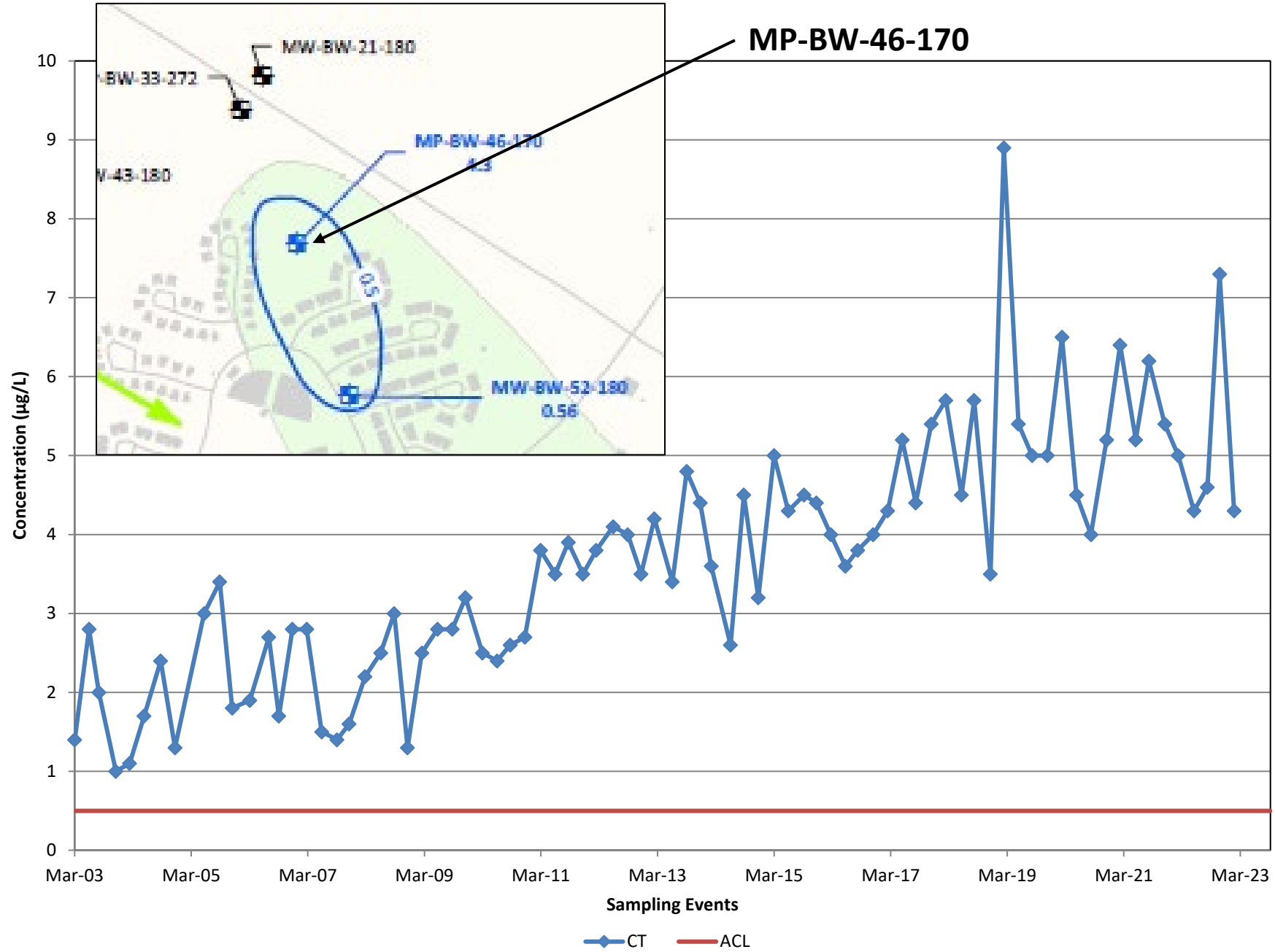
- General groundwater flow direction
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Former Fort Ord boundary
- Well Type and COC Detection**
 - Extraction well with no carbon tetrachloride (CT) detected
 - Monitoring well with CT
 - Monitoring well with no CT detected
 - Monitoring well not sampled
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) exceedance contour in µg/L.**
 - Carbon tetrachloride (CT)
- OUCTP Upper 180-Foot Aquifer Hydraulic Zone**
 - 6

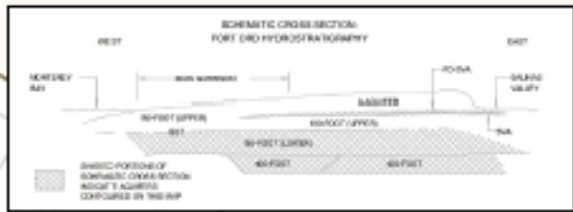
Well ID - Bold When Concentration Exceeds the ACL for CT
MW-OU2-64-180
 1.9
 CT Concentrations (µg/L) and validation/lab qualifier.

NOTES:

- (1) Samples were collected between February 13, 2023 and February 17, 2023.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours are based on highest value obtained from multiple bags and/or multiple ports were applicable.
- (4) Contours near wells not sampled this quarter are inferred from previous analytical data.

CT CONCENTRATIONS
 UPPER 180-FOOT AQUIFER
 FIRST QUARTER 2023
 Operable Unit Carbon Tetrachloride Plume
 First Quarter 2023 Groundwater Monitoring Report
 Former Fort Ord, California



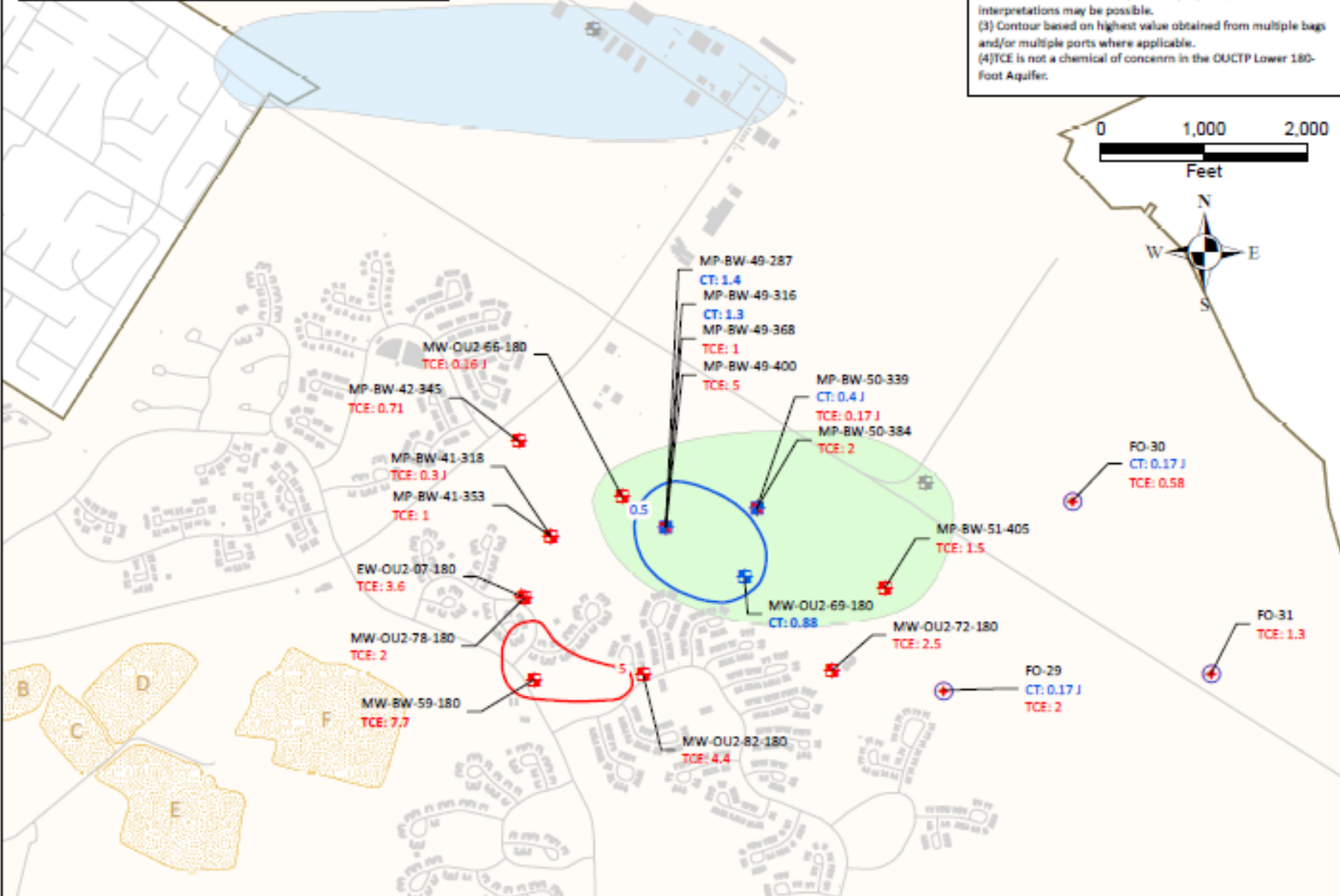
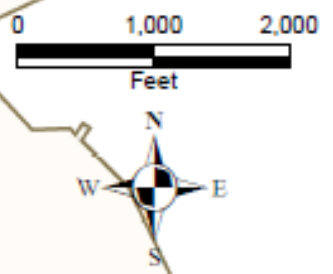


Well ID
MW-BW-59-180
Concentration in µg/L and validation/lab qualifier.
CT: 0.14 J
TCE: 11.1
CT Bold when COC exceeds the ACL.

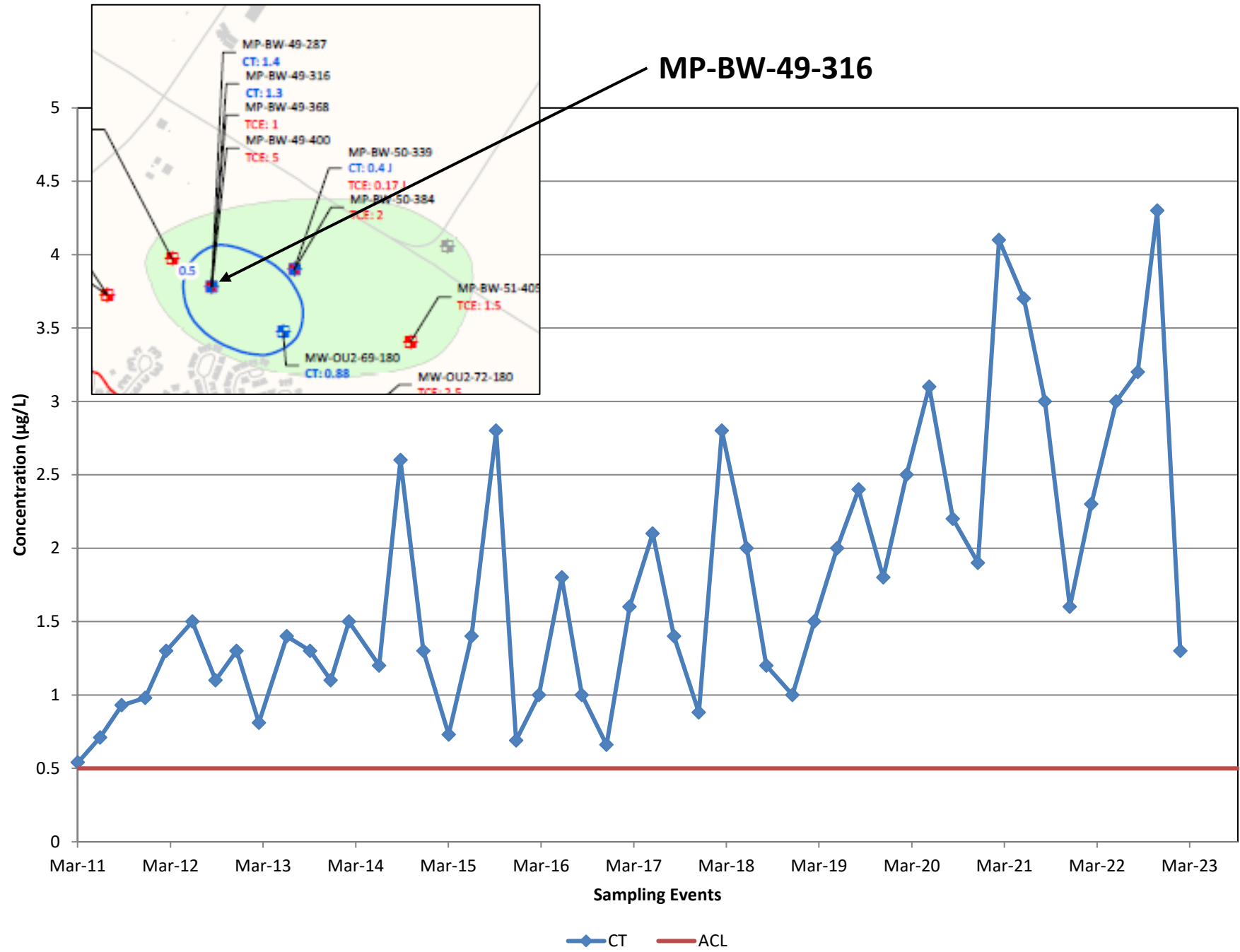
NOTES:
(1) Groundwater samples were collected between February 13, 2023 and February 17, 2023.
(2) Contour is based on one interpretation of the data that was available at the time this report was prepared; other interpretations may be possible.
(3) Contour based on highest value obtained from multiple bags and/or multiple ports where applicable.
(4) TCE is not a chemical of concern in the OUCTP Lower 180-Foot Aquifer.

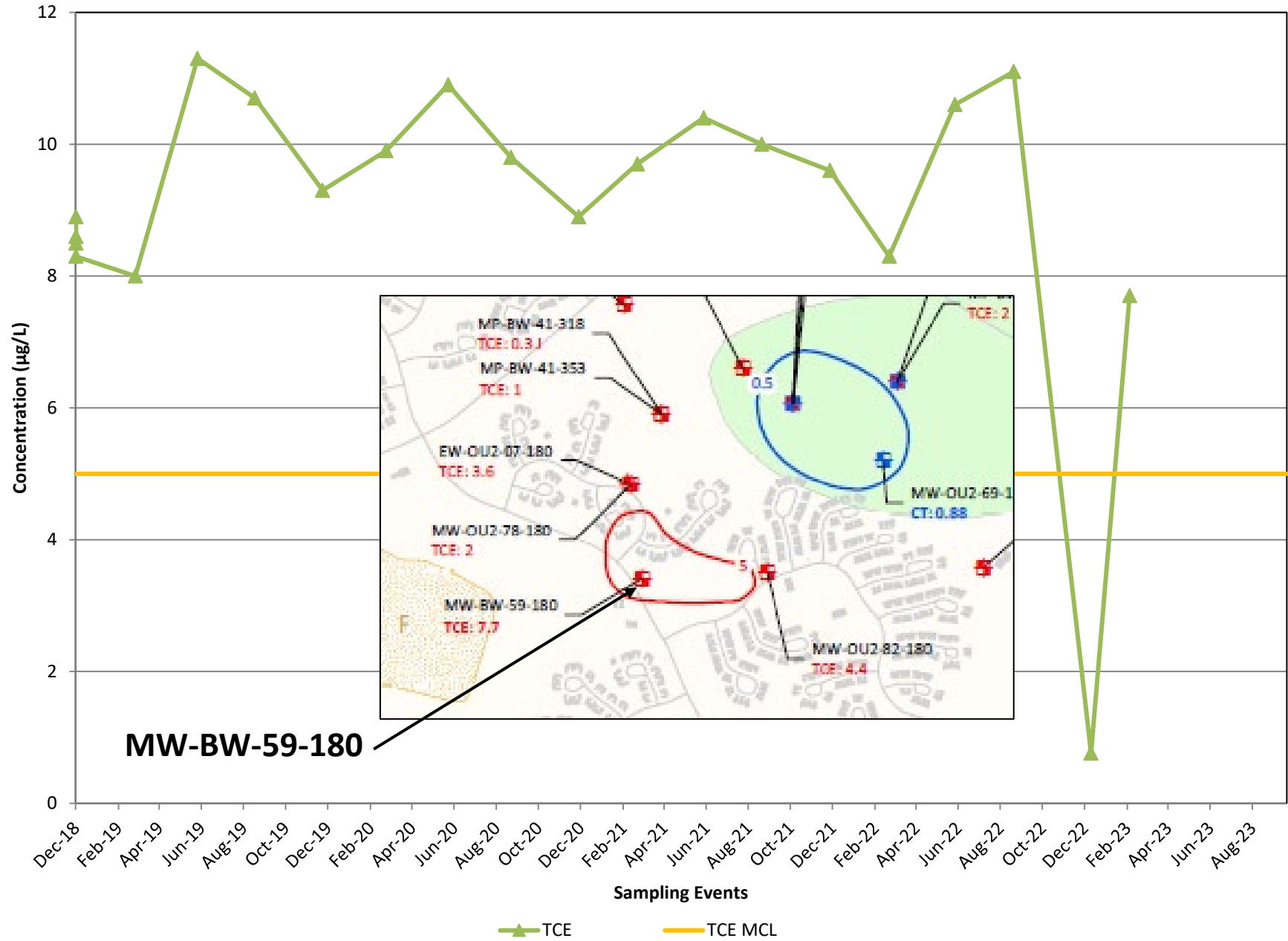
EXPLANATION

- Roads
 - Facilities
 - Approximate extent of landfill areas (Areas B through F)
 - Former Fort Ord boundary
- Well Type and COC Detection
- ⊕ Marina Coast active supply well with trichloroethene (TCE) and carbon tetrachloride (CT) detected
 - ⊕ Extraction well with TCE detected
 - ⊕ Monitoring well with TCE detected
 - ⊕ Monitoring well with CT detected
 - ⊕ Monitoring well with CT and TCE detected
 - ⊕ Monitoring well not sampled
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.
- 0.5 — CT, 1Q2023
 - 5.0 — TCE, 1Q2023
- OUCTP Lower 180-Foot Aquifer Hydraulic Zone
- 7
 - 8



CT AND TCE CONCENTRATIONS
LOWER 180-FOOT/400-FOOT AQUIFERS
FIRST QUARTER 2023
Operable Unit Carbon Tetrachloride Plume
First Quarter 2023 Groundwater Monitoring Report
Former Fort Ord, California





MW-BW-59-180

TCE in the Lower 180-Foot Aquifer

