

HTW BCT, July 14, 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.

May-Jun Key Events

- May 15-19: Second Quarter 2023 GWMP event.
- June 28: EW-OU2-09-180 offline. Troubleshooting in progress. Possible pump failure.

Future Key Events

- Install three monitoring wells in the A-Aquifer Hydraulic Zone 5 (work plan final).
- Install three monitoring wells in the A-Aquifer Hydraulic Zone 2 (work plan in progress).
- Install one extraction well in the Upper 180-Foot Aquifer (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
2023-2Q	ND	<ACL	>ACL	<ACL	ND	<ACL	<ACL	ND
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
Max COC/ACL Ratio	-	-	17.8	1.5	-	-	-	-
Hydraulic Zone	-	-	5	4	-	-	-	-

Notes:

*Preliminary data
 >: 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
2023-2Q	>ACL
2023-1Q	>ACL
2022-4Q	>ACL
2022-3Q	>ACL
Max COC/ACL Ratio	14.6
Hydraulic Zone	6

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

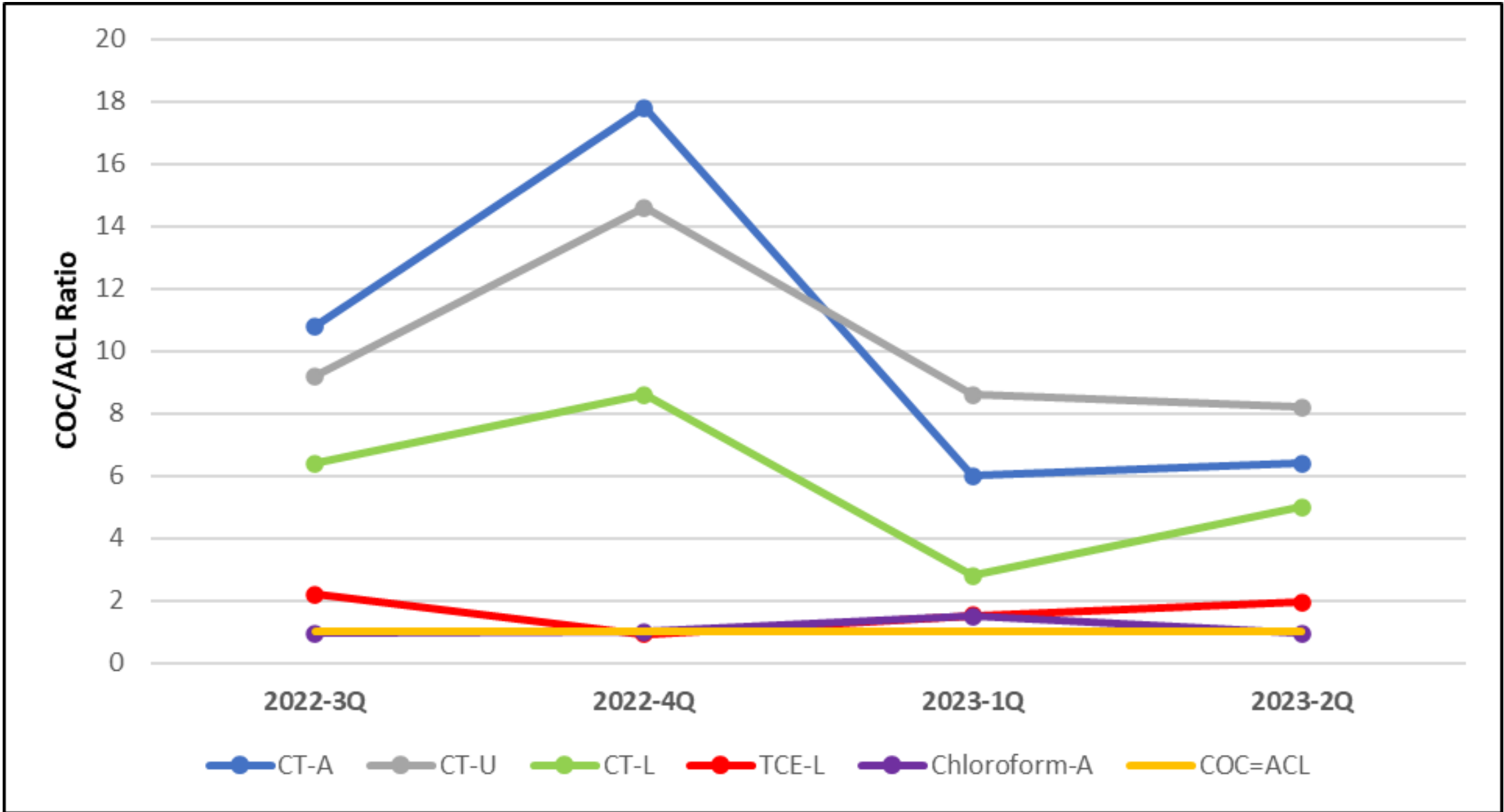
Quarter	CT	TCE	1,2-DCA
2023-2Q	>ACL	>MCL	ND
2023-1Q	>ACL	>MCL	ND
2022-4Q	>ACL	<MCL	ND
2022-3Q	>ACL	>MCL	ND
Max COC/ACL Ratio	8.6	2.2	-
Hydraulic Zone	7	N/A	-

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

No change in max COC/ACL since 2023-1Q.



Max Quarterly COC/ACL Ratio Trend



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MW-BW-90-A
1.1

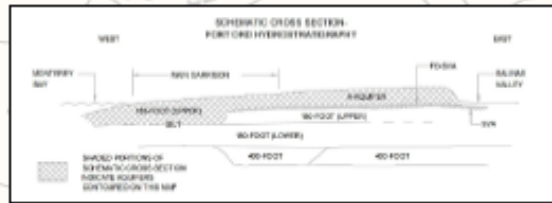
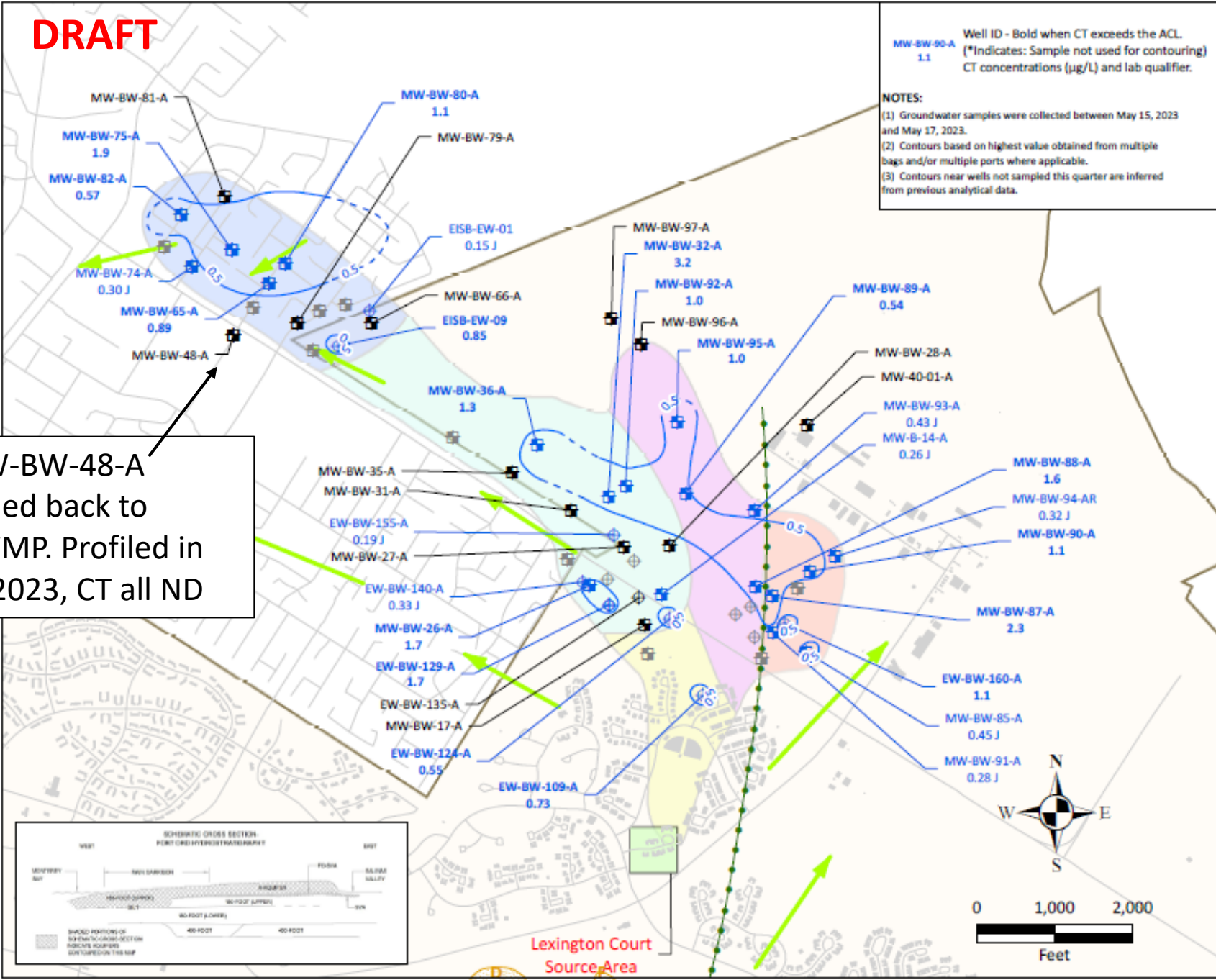
Well ID - Bold when CT exceeds the ACL.
(*Indicates: Sample not used for contouring)
CT concentrations (µg/L) and lab qualifier.

NOTES:
(1) Groundwater samples were collected between May 15, 2023 and May 17, 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.

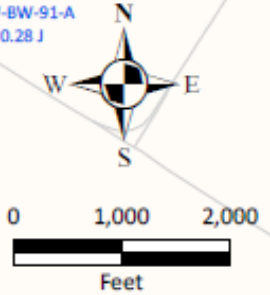
EXPLANATION

- 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 2nd quarter
 - Monitoring well with CT detection
 - Monitoring well with no CT detection
 - Monitoring well not sampled in 2nd quarter
- 2Q2023 Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L**
- 0.5 — Carbon tetrachloride (CT) plume extent
 - 0.5 - - Carbon tetrachloride (CT) plume extent Inferred
- OUCTP A-Aquifer Hydraulic Zone**
- 1
 - 2
 - 3
 - 4
 - 5

MW-BW-48-A added back to GWMP. Profiled in 2Q2023, CT all ND

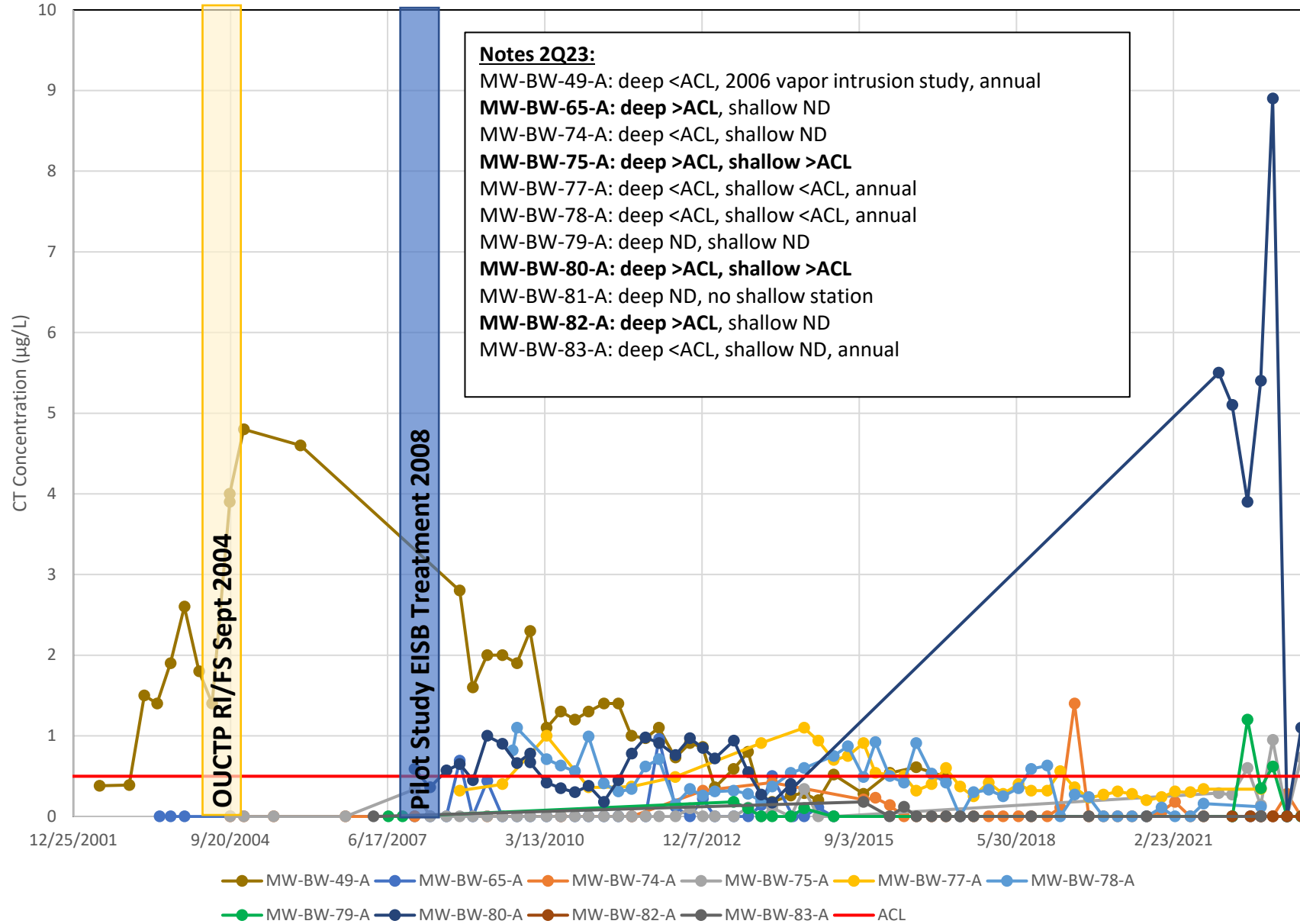


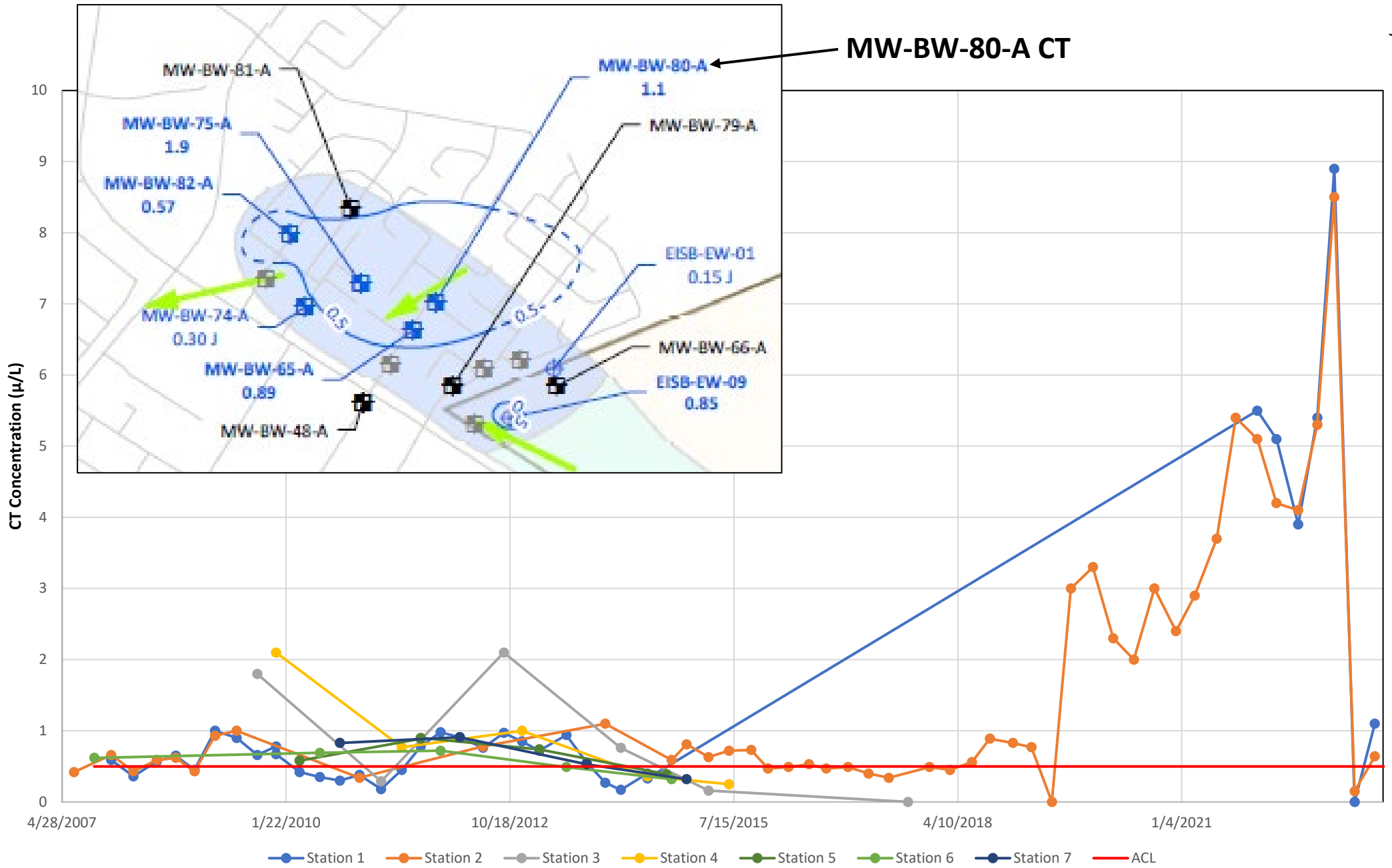
Lexington Court Source Area

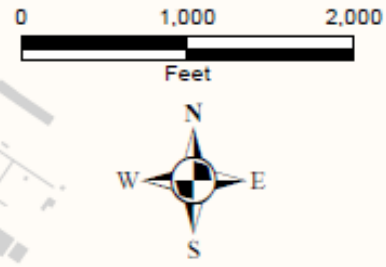
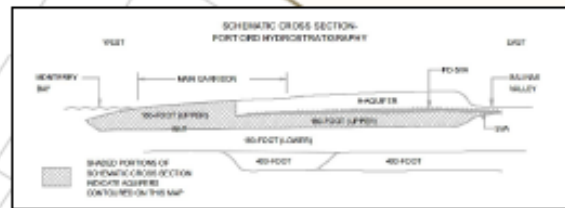


CT CONCENTRATIONS
A-AQUIFER
SECOND QUARTER 2023
Operable Unit Carbon Tetrachloride Plume
Second Quarter 2023 Groundwater Monitoring Report
Former Fort Ord, California

CT Shallow Stations: City of Marina HZ 5







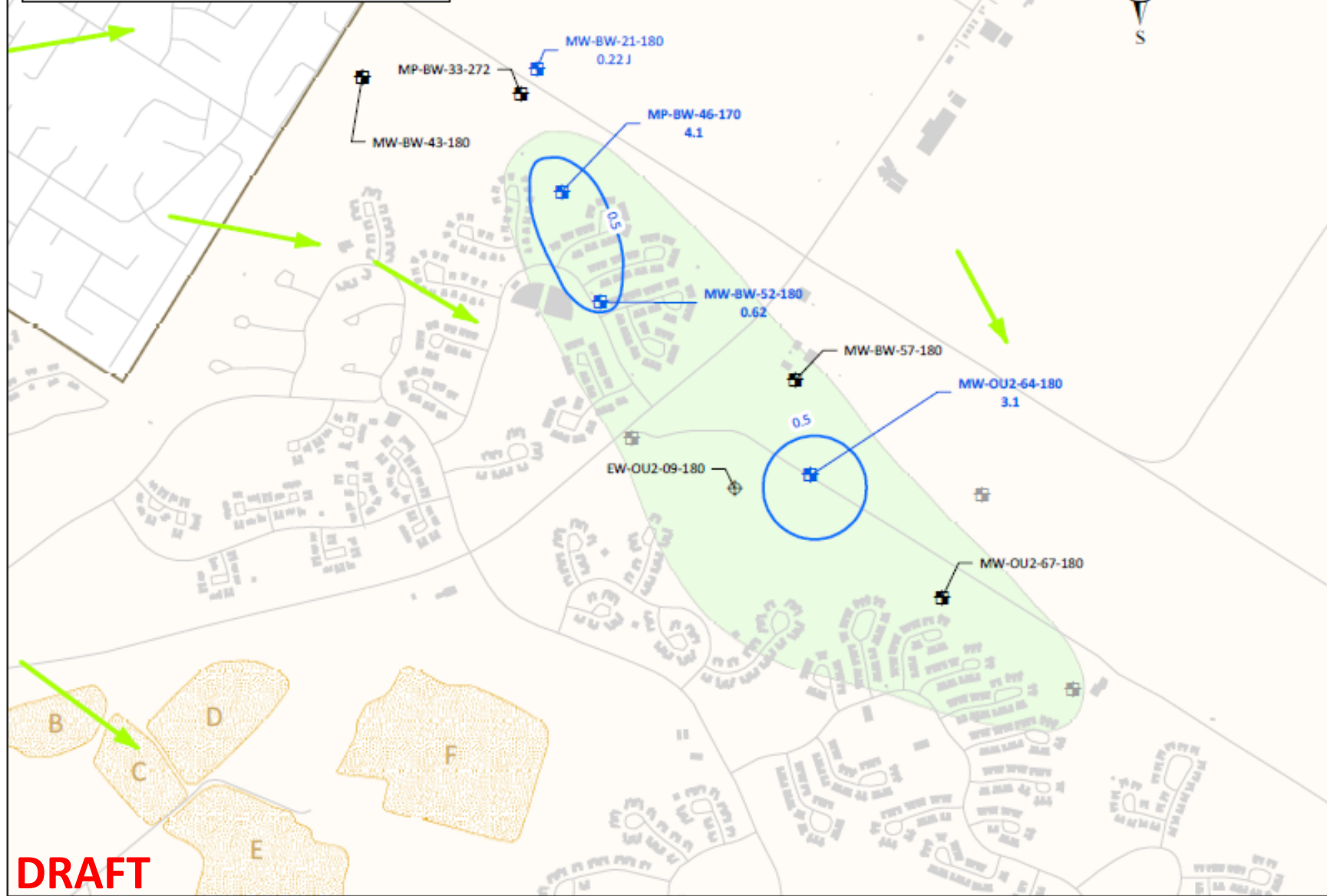
EXPLANATION

- 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 detected
 - Monitoring well with no CT detected
 - Monitoring well not sampled
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) exceedance contour in µg/L.**
 - 0.5 Carbon tetrachloride (CT) plume
 - OUCTP Upper 180-Foot Aquifer Hydraulic Zone
 - 6
- Well ID - Bold When Concentration Exceeds the ACL for CT
MW-OU2-64-180
3.1
CT Concentrations (µg/L) and validation/lab qualifier.

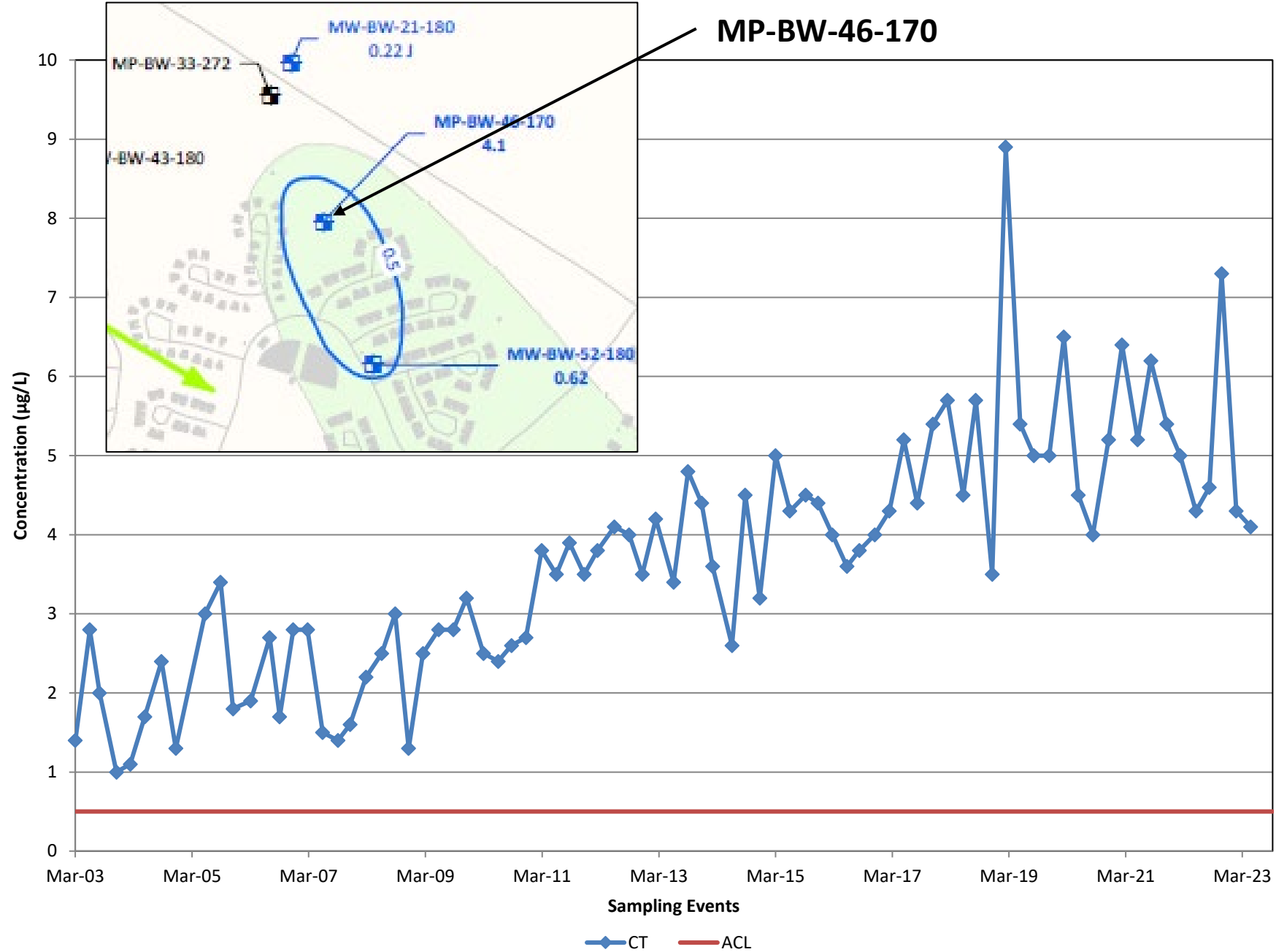
NOTES:

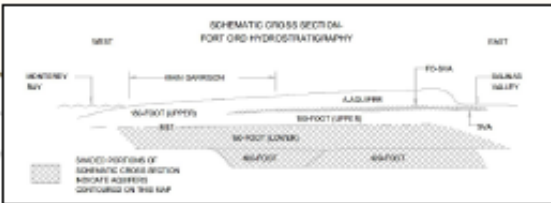
- (1) Samples were collected between April 27, 2023 and June 5, 2023.
- (2) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (3) Contours are based on highest value obtained from multiple bags and/or multiple ports were applicable.
- (4) Contours near wells not sampled this quarter are inferred from previous analytical data.

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



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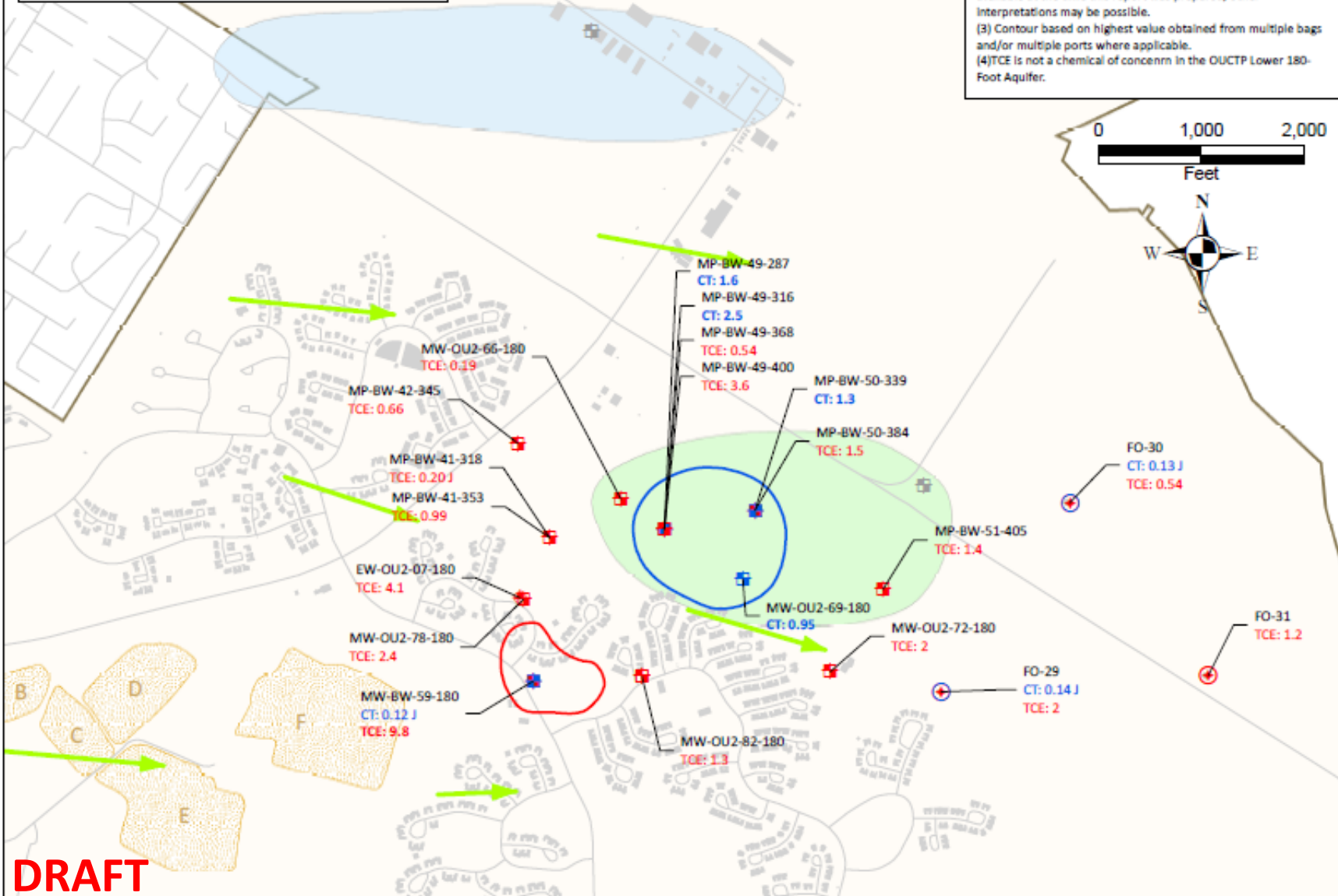
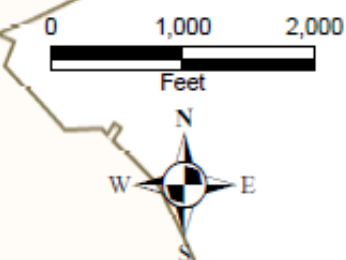


Well ID
 MW-BW-59-180
 CT: 0.12 J
 TCE: 9.8
 Concentration in µg/L and validation/lab qualifier.
 (blue indicates CT; red indicates TCE)
 CT Bold when COC exceeds the ACL.

NOTES:
 (1) Groundwater samples were collected between May 15, 2023 and May 18, 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.

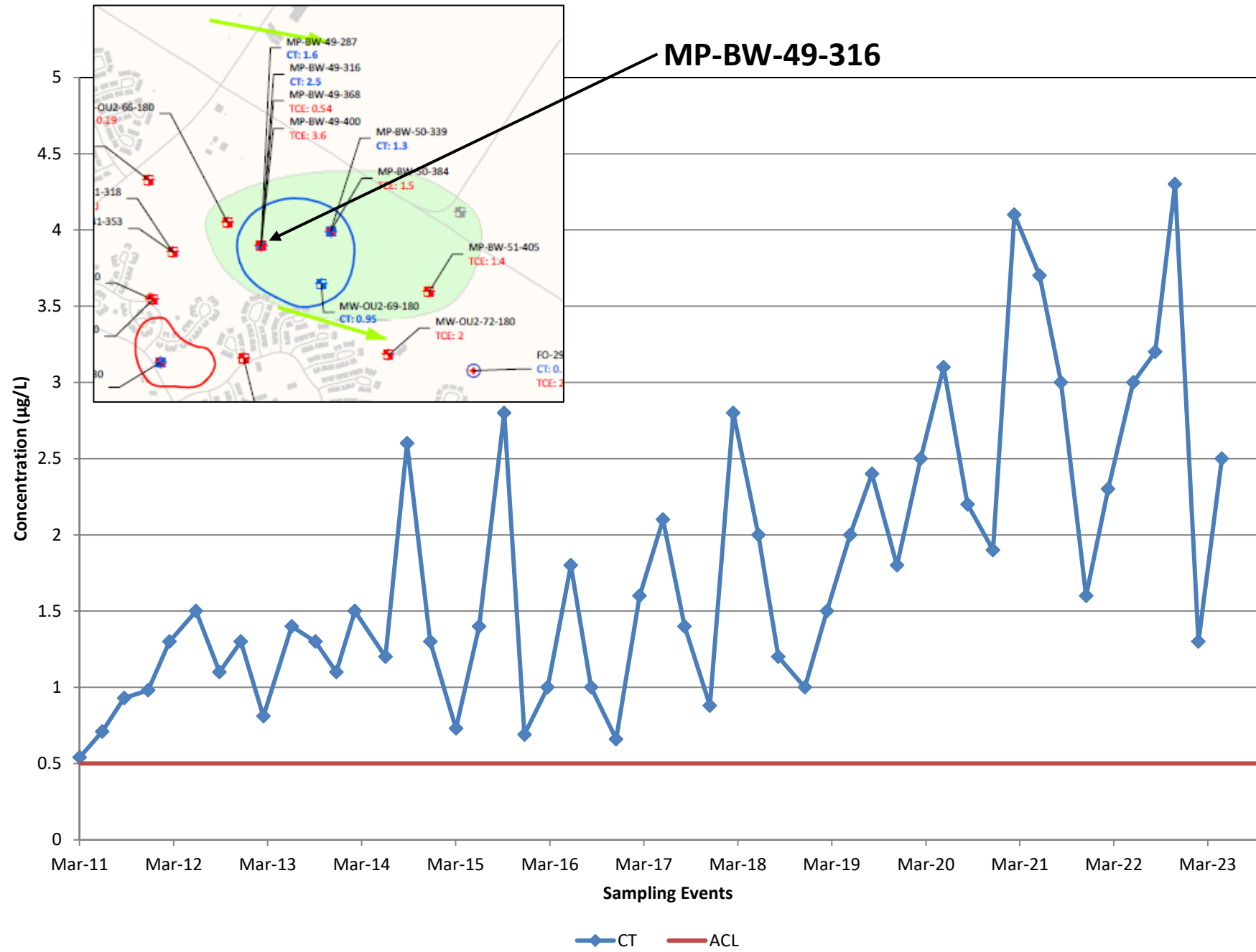
EXPLANATION

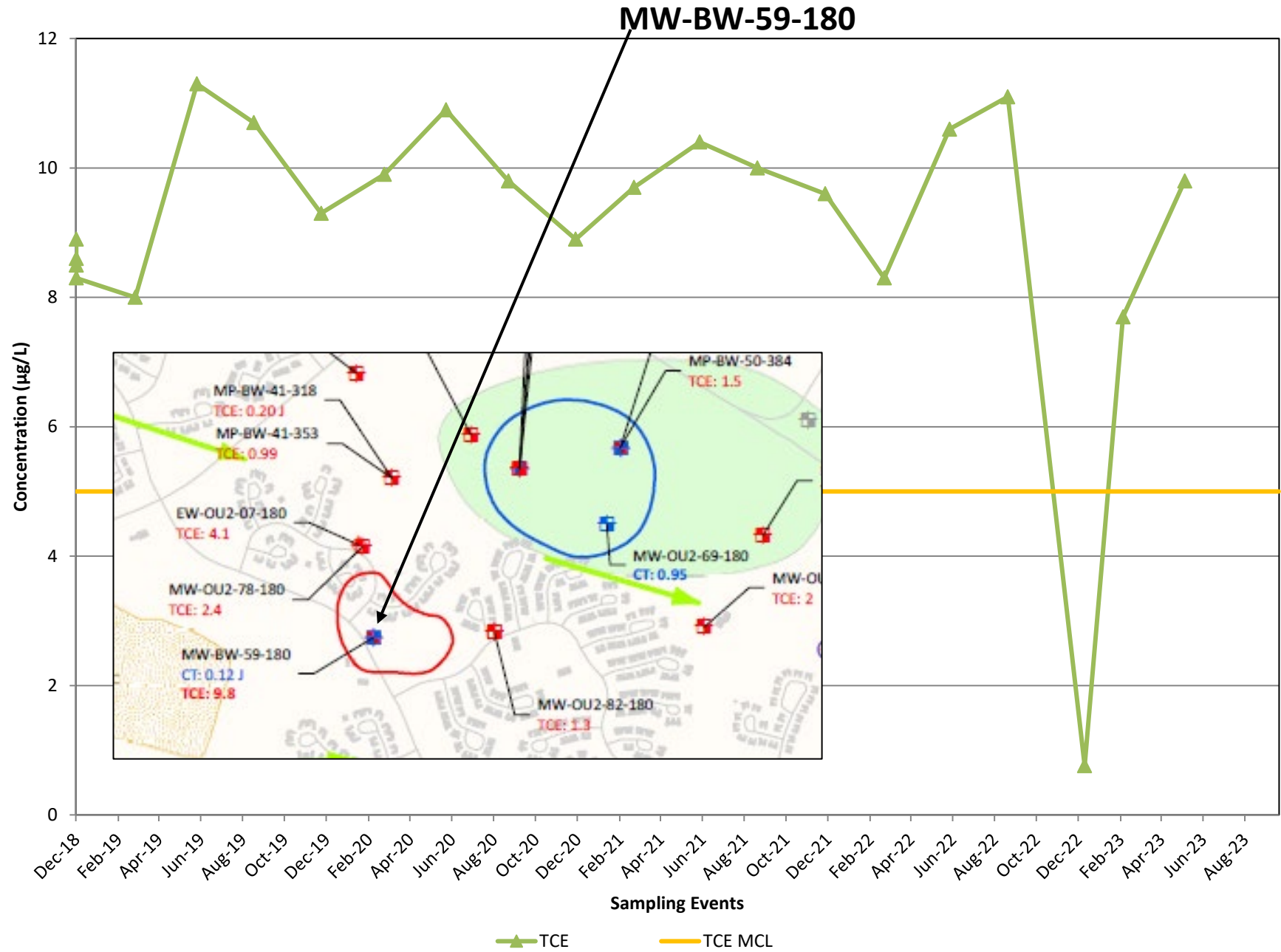
- General groundwater flow direction
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Former Fort Ord boundary
- Well Type and COC Detection**
 - Marina Coast active supply well with trichloroethene (TCE) and carbon tetrachloride (CT) detected
 - Marina Coast active supply well with TCE 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 Carbon Tetrachloride (CT) plume extent
 - 5.0 Trichloroethene (TCE) plume extent
- OUCTP Lower 180-Footer Aquifer Hydraulic Zone**
 - 7
 - 8



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

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TCE in the Lower 180-Foot Aquifer

