

## HTW BCT, February 11, 2022

**Table 1.** OUCTP A-Aquifer Select Monitoring Well Data – Hydraulic Zones 1, 2, and 3

OUCTP Hydraulic Zone <sup>1</sup>	EISB Deployment Area	Well Identification	CT Concentrations (µg/L) <sup>2</sup>			
			1Q 2021	2Q 2021	3Q 2021	4Q 2021
<b>ACL:</b>			<b>0.5</b>			
1	1C	EW-BW-109-A	<b>1.4 J+</b>	<b>0.80</b>	0.32 J	<b>0.94</b>
1	N/A	MW-BW-24-A	ND (0.25)	ND (0.25)	ND (0.25)	NS
2	3A	MW-BW-58-A	0.26 J	0.15 J	0.16 J	0.14 J
2	3A	MW-BW-87-A	<b>3.9 J+</b>	<b>3.2</b>	<b>2.4</b>	<b>2.0 J+</b>
2	3A	MW-BW-91-A	<b>1.3</b>	<b>0.87</b>	<b>0.89</b>	<b>0.56 J+</b>
2	N/A	MW-BW-94-AR	<b>0.56</b>	0.28 J	0.43 J	0.30 J
N/A	3A	MW-BW-90-A	<b>1.4</b>	<b>1.1</b>	<b>1.3</b>	<b>0.95</b>
2	3A	EW-BW-160-A	<b>2.1</b>	<b>1.3</b>	<b>1.3</b>	<b>1.5 J+</b>
3	3A	EW-BW-166-A	ND (0.25)	ND (0.25)	ND (0.25)	NS
3	N/A	MW-BW-88-A	<b>0.63</b>	<b>0.92</b>	<b>0.55</b>	<b>0.82</b>
3	N/A	MW-BW-93-A	0.34 J	0.24 J [0.16 J]	0.36 J	0.29 J
3	N/A	MW-BW-95-A	<b>1.4</b>	<b>0.84</b>	<b>1.1</b>	<b>1.0 J+</b>
N/A	N/A	MW-40-01-A	NS	NS	NS	ND (0.25)

**Notes:**

CT: carbon tetrachloride

µg/L: micrograms per liter

ND: The analyte was not detected above the detection limit

NS: not sampled

N/A: not applicable

J: Estimated result with a low (-) or high (+) bias

<sup>1</sup> Hydraulic zones are identified in the Groundwater QAPP.

<sup>2</sup> Results in **bold** and shaded are concentrations above the ACL

Results in gray are ND

COC: chemical of concern

[Results in brackets are from a second deeper passive diffusion bag]

\* Preliminary data

**December and Future 2021 Key Events**

- Dec 6-10: Fourth Quarter 2021 Groundwater Monitoring event.
- Jan 24-27: EW-OU2-09-180 offline intermittently for test operation of EW-OU2-08-180.
- Feb 28-Mar 4: First Quarter 2022 Groundwater Monitoring event.



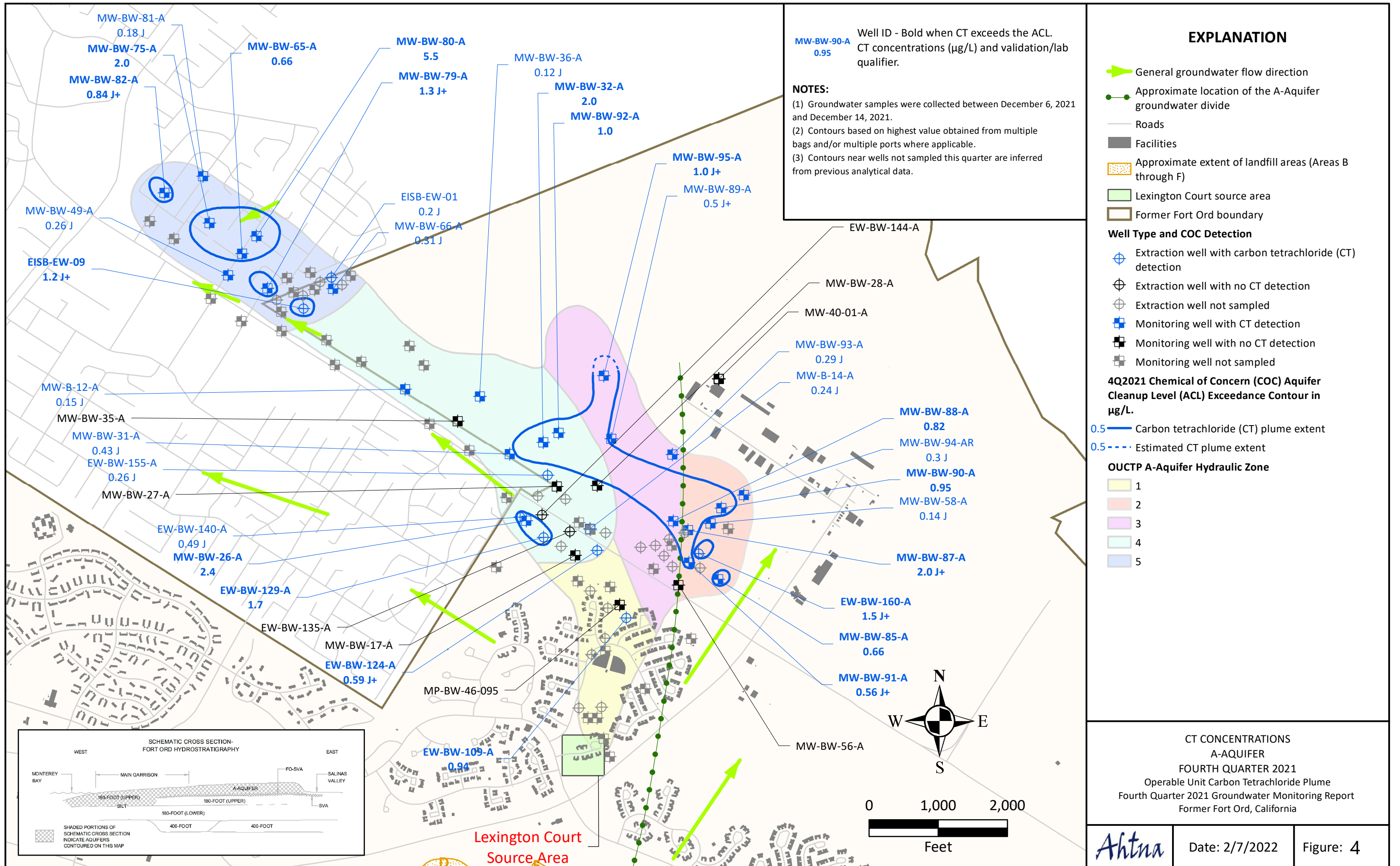
**Table 2.** OUCTP A-Aquifer Select Monitoring Well Data – Hydraulic Zones 4 and 5

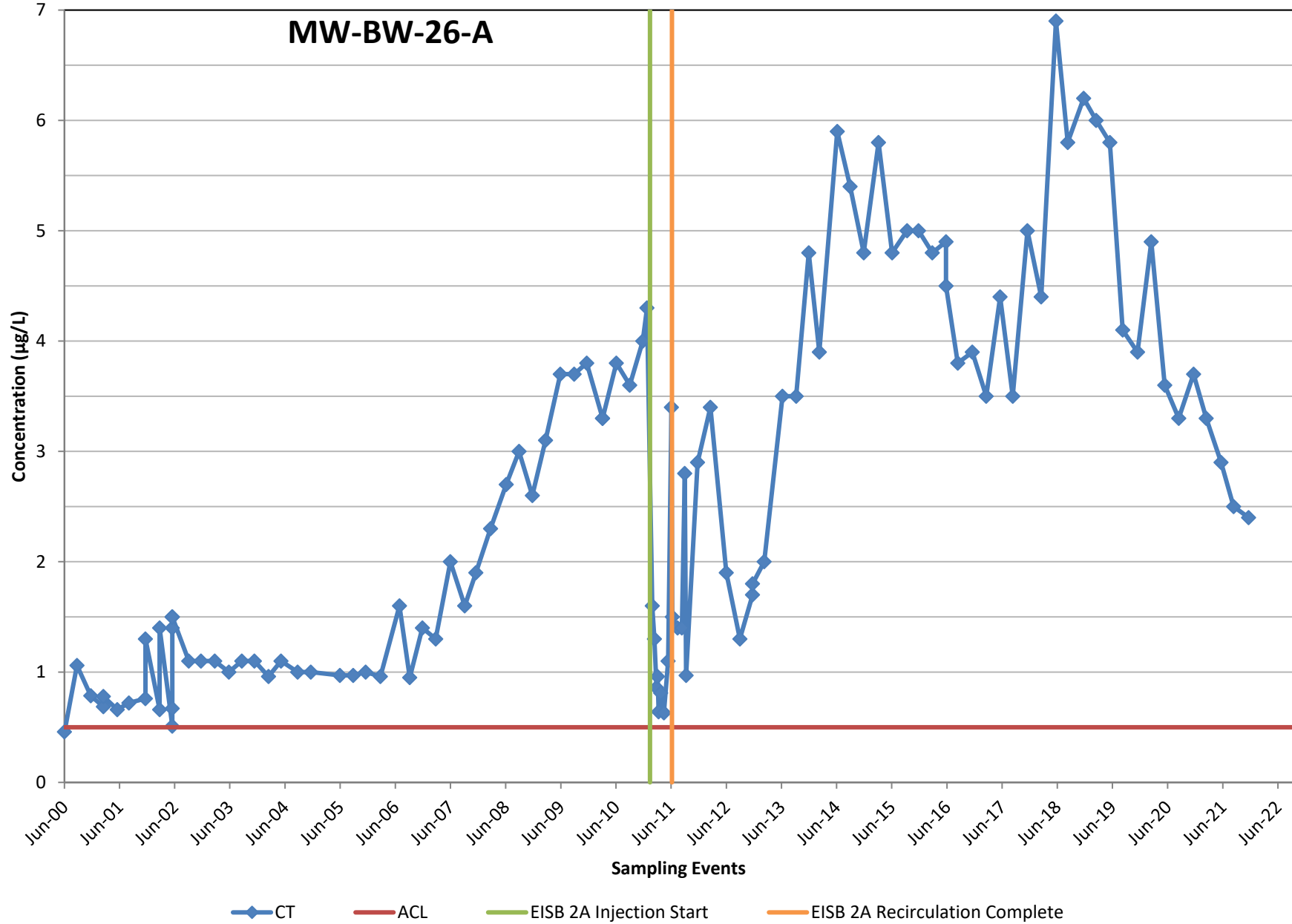
OUCTP Hydraulic Zone <sup>1</sup>	EISB Deployment Area	Well Identification	CT Concentrations (µg/L) <sup>2</sup>			
			1Q 2021	2Q 2021	3Q 2021	4Q 2021
<b>ACL:</b>			<b>0.5</b>			
4	2A	EW-BW-124-A	<b>0.94 J+</b>	<b>0.84 J-</b>	0.43 J	<b>0.59 J+</b>
4	2A	EW-BW-129-A	<b>4.0 J</b>	<b>2.4 J-</b>	<b>2.0</b>	<b>1.7</b>
4	2A	EW-BW-140-A	<b>0.97 J+</b>	<b>0.69 J-</b>	<b>0.52</b>	0.49 J
4	2A	MW-BW-26-A <sup>^</sup>	<b>3.3 J+</b>	<b>2.9 J-</b>	<b>2.5</b>	<b>2.4</b>
4	N/A	MW-B-12-A	0.32 J	0.44 J	0.23 J	0.15 J
4	2B	MW-B-14-A	<b>0.52</b>	0.48 J	0.34 J	0.24 J
4	2B	EW-BW-155-A	0.11 J	0.26 J	0.17 J	0.26 J
4	N/A	MW-BW-31-A	<b>0.84</b>	ND (0.25)	<b>0.88</b>	0.43 J
4	N/A	MW-BW-32-A	<b>1.2</b>	<b>0.98 J-</b>	<b>1.2</b>	<b>2.0</b>
4	N/A	MW-BW-35-A	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
4	N/A	MW-BW-36-A	0.46 J	0.17 J	ND (0.25)	0.12 J
4	N/A	MW-BW-42-A	NS	NS	ND (0.25)	NS
4	N/A	MW-BW-89-A	<b>0.73</b>	0.47 J	0.48 J	0.50 J+
4	N/A	MW-BW-92-A	<b>1.2</b>	<b>0.78</b>	<b>1.0</b>	<b>1.0</b>
5	Pilot	EISB-EW-01	0.28 J	0.25 J [0.27 J]	0.22 J	0.20 J
5	Pilot	EISB-EW-09	<b>1.1</b>	<b>0.97</b>	<b>1.1</b>	<b>1.2 J+</b>
5	N/A	MW-BW-49-A	0.47 J	0.26 J	0.32 J	0.26 J
5	N/A	MW-BW-65-A	0.43 J	0.32 J	<b>0.56</b>	<b>0.66</b>
5	Pilot	MW-BW-66-A	<b>0.53</b>	0.46 J	0.37 J	0.31 J
5	N/A	MW-BW-74-A	0.18 J [0.23 J]	ND (0.25) [0.12 J]	ND (0.25) [0.14 J]	NS
5	N/A	MW-BW-75-A	<b>2.9 J+</b>	<b>2.1 [2.1]</b>	<b>2.3</b>	0.29 J [2.0]
5	N/A	MW-BW-78-A	ND (0.25) [0.16 J]	ND (0.25) [0.17 J]	0.16 J [0.20 J]	NS
5	N/A	MW-BW-79-A	0.47 J	<b>0.54</b>	<b>0.64</b>	<b>1.3 J+</b>
5	N/A	MW-BW-80-A	<b>2.9 J+</b>	<b>3.7</b>	<b>5.4</b>	<b>5.5 [5.1]</b>
5	N/A	MW-BW-81-A	NS	NS	NS	0.18 J
5	N/A	MW-BW-82-A	<b>1.4</b>	<b>0.98</b>	<b>1.1</b>	<b>0.84 J+</b>

**Notes:**

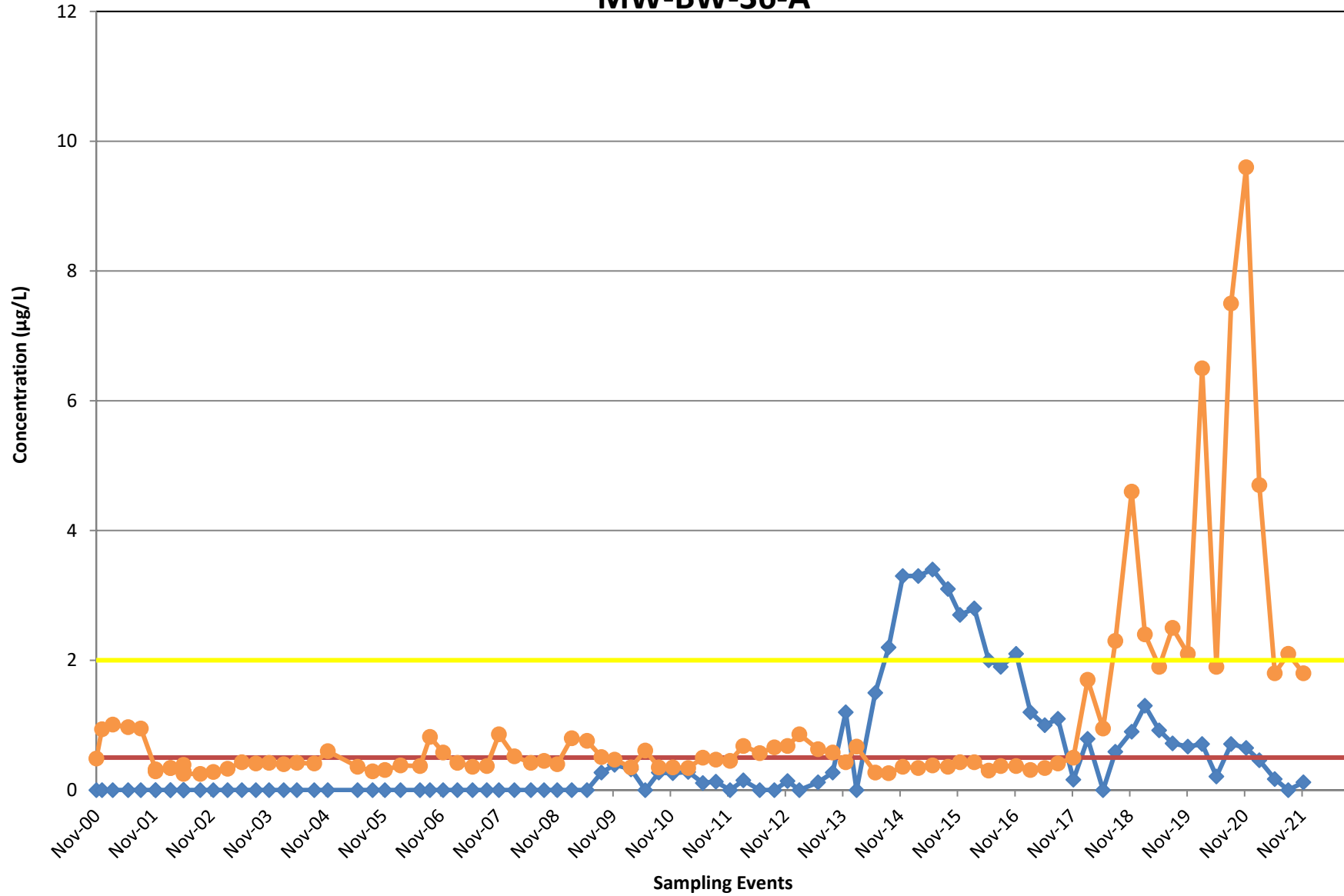
- CT: carbon tetrachloride
- µg/L: micrograms per liter
- ND: The analyte was not detected above the detection limit
- NS: not sampled
- J: Estimated result with a low (-) or high (+) bias
- <sup>1</sup> Hydraulic zones are identified in the Groundwater QAPP.
- <sup>2</sup> Results in **bold** and shaded are concentrations above the ACL
- Results in gray are ND
- COC: chemical of concern
- [Results in brackets are from a second deeper passive diffusion bag]
- <sup>^</sup> Downgradient monitoring well MW-BW-30-A sampled annually: ND.
- \* Preliminary data





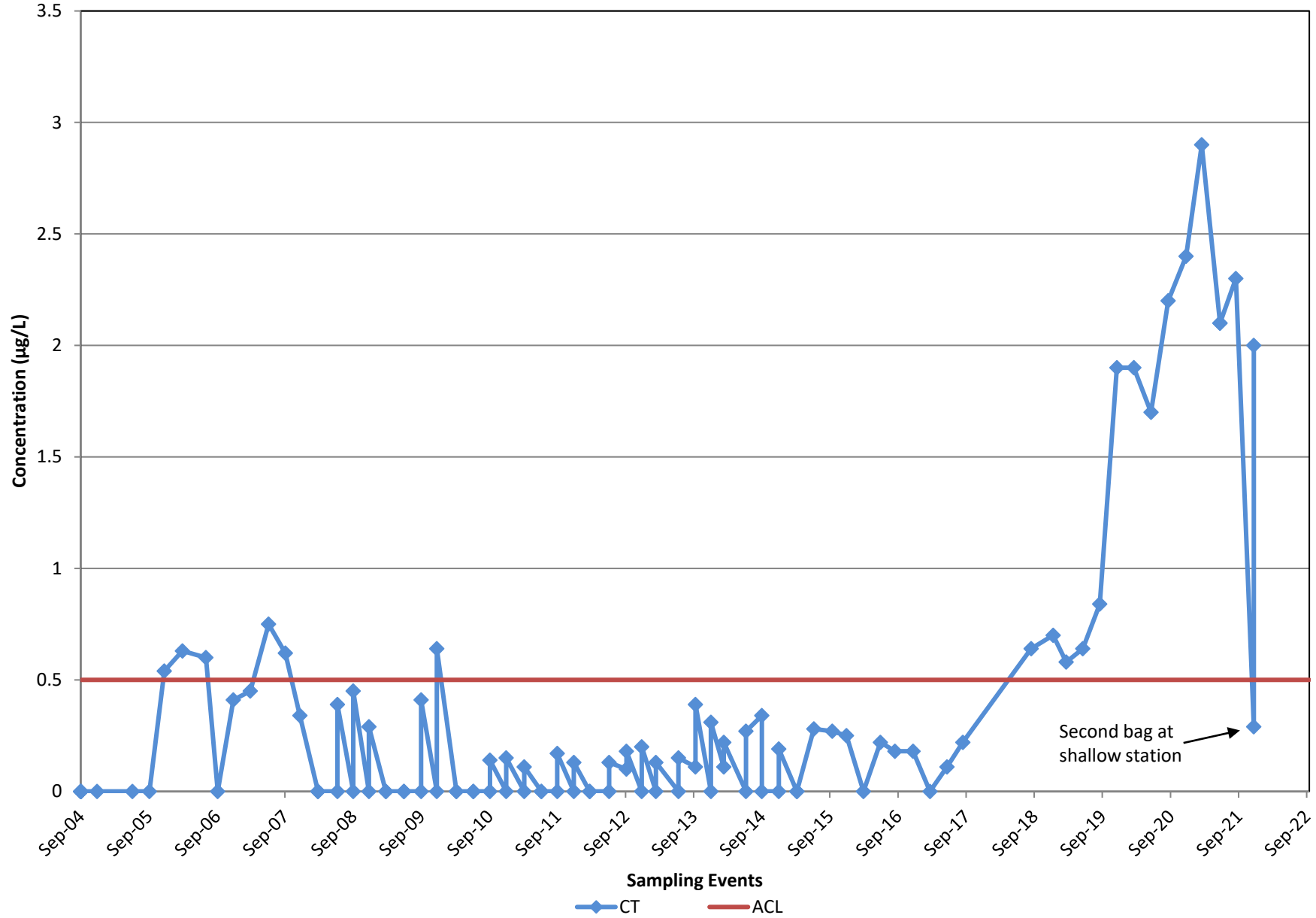


### MW-BW-36-A

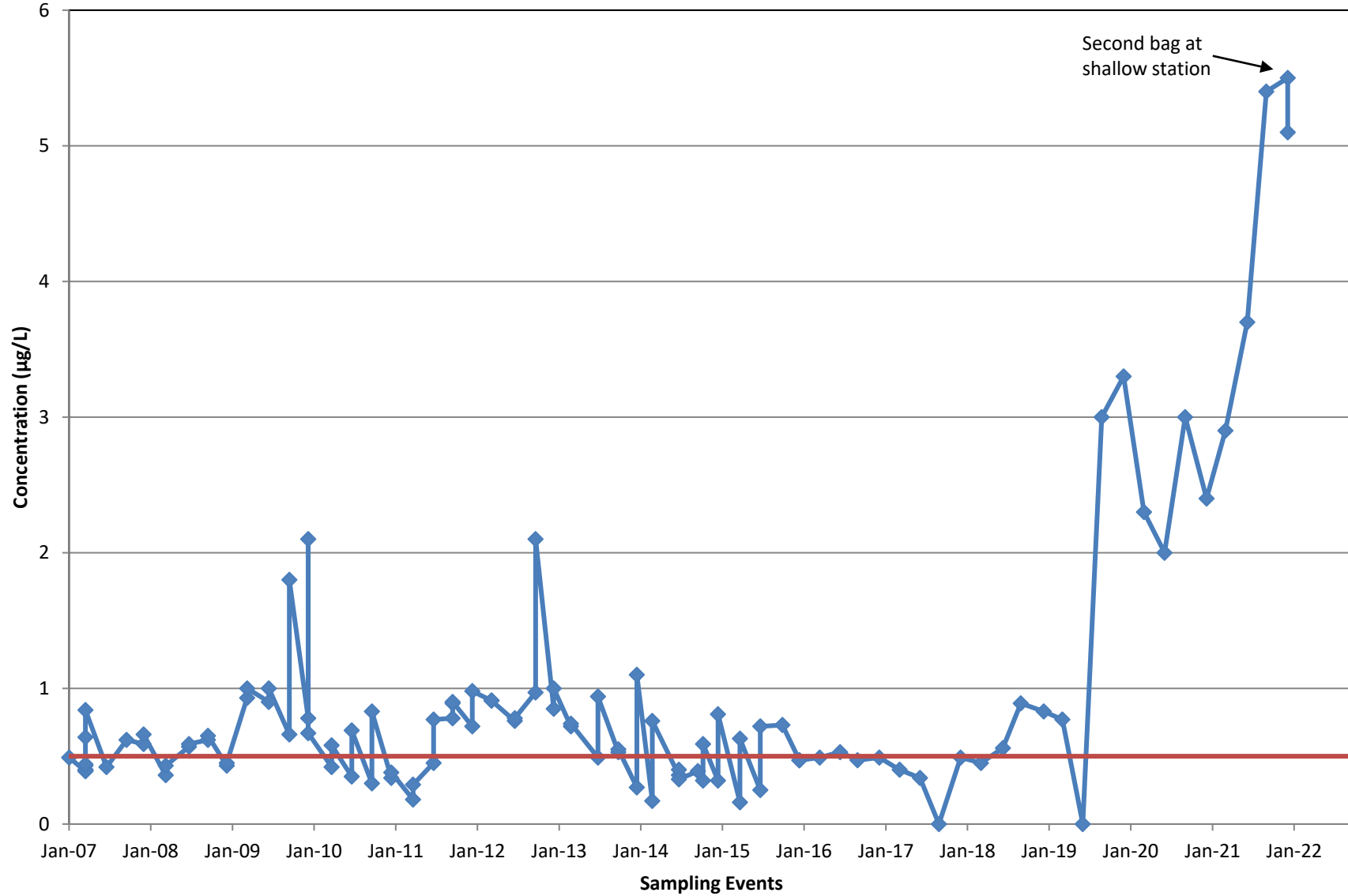


CT CT ACL Chloroform Chloroform ACL

### MW-BW-75-A



### MW-BW-80-A



CT ACL



**Table 3.** OUCTP Upper 180-Foot Aquifer Select Monitoring Well Data

OUCTP Hydraulic Zone <sup>1</sup>	Well Identification	CT Concentrations (µg/L) <sup>2</sup>			
		1Q 2021	2Q 2021	3Q 2021	4Q 2021
ACL:		0.5			
6	EW-OU2-09-180 <sup>3</sup>	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
6	MP-BW-46-170	<b>6.4 J+</b>	<b>5.2</b>	<b>6.2 J+</b>	<b>5.4</b>
N/A	MW-BW-21-180	0.16 J	0.22 J	ND (0.25)	ND (0.25)
N/A	MW-BW-43-180	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
6	MW-BW-52-180	<b>0.67 J+</b>	<b>0.60 J+</b>	<b>0.53</b>	0.47 J
6	MW-BW-57-180	<b>0.7</b>	<b>0.60</b>	0.30 J	0.17 J
6	MW-BW-58-180	NS	NS	ND (0.25)	NS
6	MW-OU2-64-180	<b>8.7 J+</b>	<b>5.3 J+</b>	<b>3.5 J+</b>	<b>2.1 J+</b>
6	MW-OU2-67-180 <sup>4</sup>	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)

**Notes:**

ACL: aquifer cleanup level

COC: chemical of concern

CT: carbon tetrachloride

MCL: maximum contaminant level

ND: The analyte was not detected at or above the detection limit

NS: not sampled

TCE: trichloroethene

µg/L: micrograms per liter

J: Estimated result with a low (-) or high (+) bias

<sup>1</sup> Hydraulic zones are identified in the Groundwater QAPP.

<sup>2</sup> Concentration in **bold** and shaded cell exceeds the Aquifer Cleanup Level (ACL) for CT and the Maximum Contaminant Level (MCL) for TCE. Results in gray are ND.

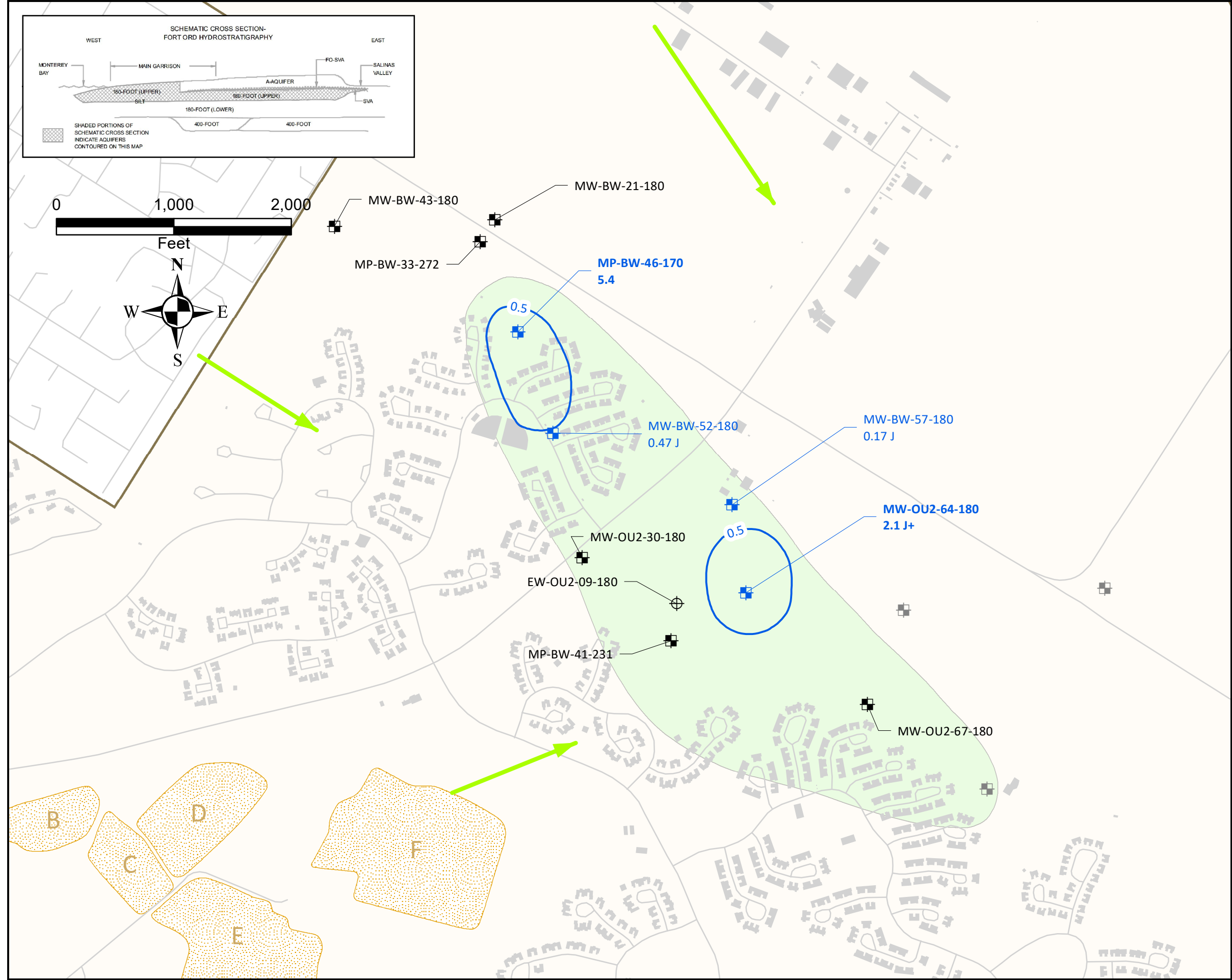
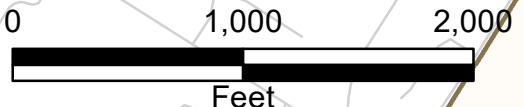
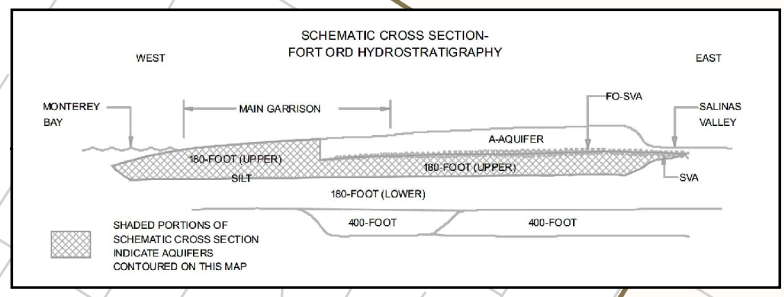
<sup>3</sup> EW-OU2-09-180 is operated as part of the remedy for the OUCTP Upper 180-Foot Aquifer and is connected to the OU2 GWTP.

<sup>4</sup> Downgradient well MW-OU2-70-180 sampled annually: ND.

\* Preliminary data







**EXPLANATION**

- General groundwater flow direction
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Former Fort Ord boundary
- Well Type and CT 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
- OUCTP Upper 180-Foot Aquifer Hydraulic Zone**
  - 6

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

- NOTES:**
- (1) Samples were collected between December 6, 2021 and December 14, 2021.
  - (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.

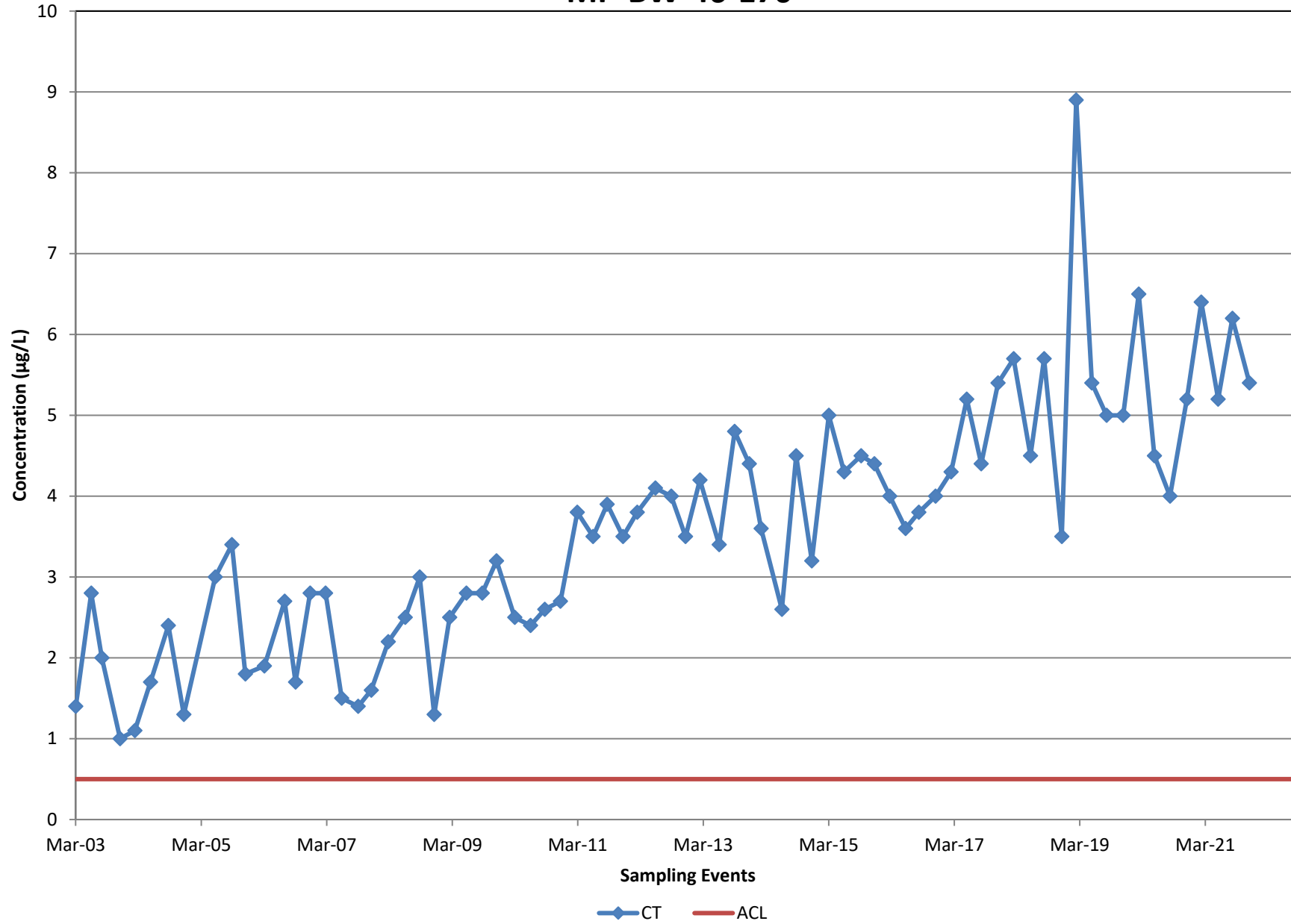
CT CONCENTRATIONS  
 UPPER 180-FOOT AQUIFER  
 FOURTH QUARTER 2021  
 Operable Unit Carbon Tetrachloride Plume  
 Fourth Quarter 2021 Groundwater Monitoring Report  
 Former Fort Ord, California



Date: 2/7/2022

Figure: 7

### MP-BW-46-170



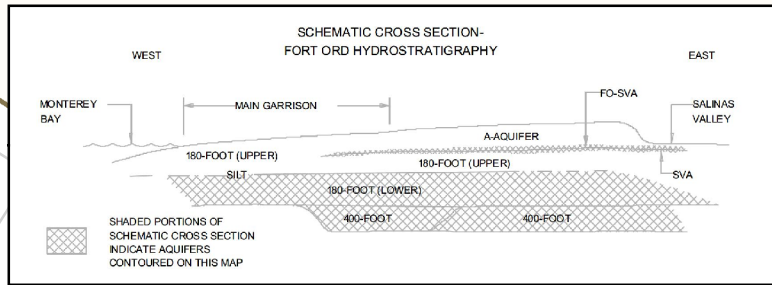
**Table 4.** OUCTP Lower 180-Foot Aquifer Select Monitoring Well Data

OUCTP Hydraulic Zone <sup>1</sup>	Well Identification	Select COC Concentrations (µg/L) <sup>2</sup>							
		1Q 2021	2Q 2021	3Q 2021	4Q 2021	1Q 2021	2Q 2021	3Q 2021	4Q 2021
		CT				TCE <sup>3</sup>			
Limit:	ACL 0.5				MCL 5.0				
7	MP-BW-49-316	<b>4.1 J+</b>	<b>3.7 J+</b>	<b>3.0</b>	<b>1.6</b>	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
7	MP-BW-49-400	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	<b>5.4 J+</b>	4.5 J+	4.0	4.5 J+
7	MP-BW-50-339	<b>0.56 J+</b>	ND (0.25)	<b>1.2</b>	0.39 J	0.23 J	ND (0.25)	ND (0.25)	0.13 J
7	MP-BW-50-384	0.11 J	0.13 J	ND (0.25)	ND (0.25)	2.5	1.8 J+	2.0	2.1 J+
7	MP-BW-51-405	0.12 J	0.15 J	0.16 J	0.11 J	1.2 J+	1.5	1.5	1.3 J+
7	MW-OU2-69-180	<b>1.4 J+</b>	<b>1.1</b>	<b>1.1 J+</b>	<b>0.86</b>	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
8	AIRFIELD	0.37 J	ND (0.25)	0.39 J	NS	ND (0.25)	ND (0.25)	ND (0.25)	NS
N/A	EW-OU2-07-180	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	3.6	3.3	3.6	4.0 J+
N/A	FO-29	0.27 J	0.22 J	0.17 J	0.18 J	1.8	1.8	2.6	2.1
N/A	FO-30	0.19 J	0.27 J	0.24 J	0.19 J	0.55	0.53	0.55	0.57 J+
N/A	FO-31	0.15 J	0.11 J	NS	0.10 J	0.95	0.92	NS	1.0
N/A	MP-BW-41-318	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	0.59 J	0.32 J	0.37 J	0.22 J
N/A	MP-BW-41-353	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	1.5 J+	1.3	1.3	1.2 J+
N/A	MW-BW-59-180	0.12 J	0.14 J	0.14 J	ND (0.25)	<b>9.7 J+</b>	<b>10.4 J+</b>	<b>10.0 J+</b>	<b>9.6 J+</b>
N/A	MW-OU2-72-180	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	1.4 J+	1.3	1.8	1.9
N/A	MW-OU2-78-180	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	2.5 J+	2.6	2.2 J+	2.6 J+
N/A	MW-OU2-82-180	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	4.2 J+	4.2 J+	<b>5.9</b>	4.5

**Notes:**

- ACL: aquifer cleanup level
- COC: chemical of concern
- CT: carbon tetrachloride
- MCL: maximum contaminant level
- ND: The analyte was not detected at or above the detection limit
- NS: not sampled
- TCE: trichloroethene
- µg/L: micrograms per liter
- J: Estimated result with a low (-) or high (+) bias
- <sup>1</sup> Hydraulic zones are identified in the Groundwater QAPP.
- <sup>2</sup> Concentration in **bold** and shaded cell exceeds the Aquifer Cleanup Level (ACL) for CT and the Maximum Contaminant Level (MCL) for TCE. Results in gray are ND.
- <sup>3</sup> TCE is not a COC in the OUCTP Lower 180-Foot Aquifer (reported for Lower 180-Foot Aquifer with respect to protection of supply wells)
- \* Preliminary data



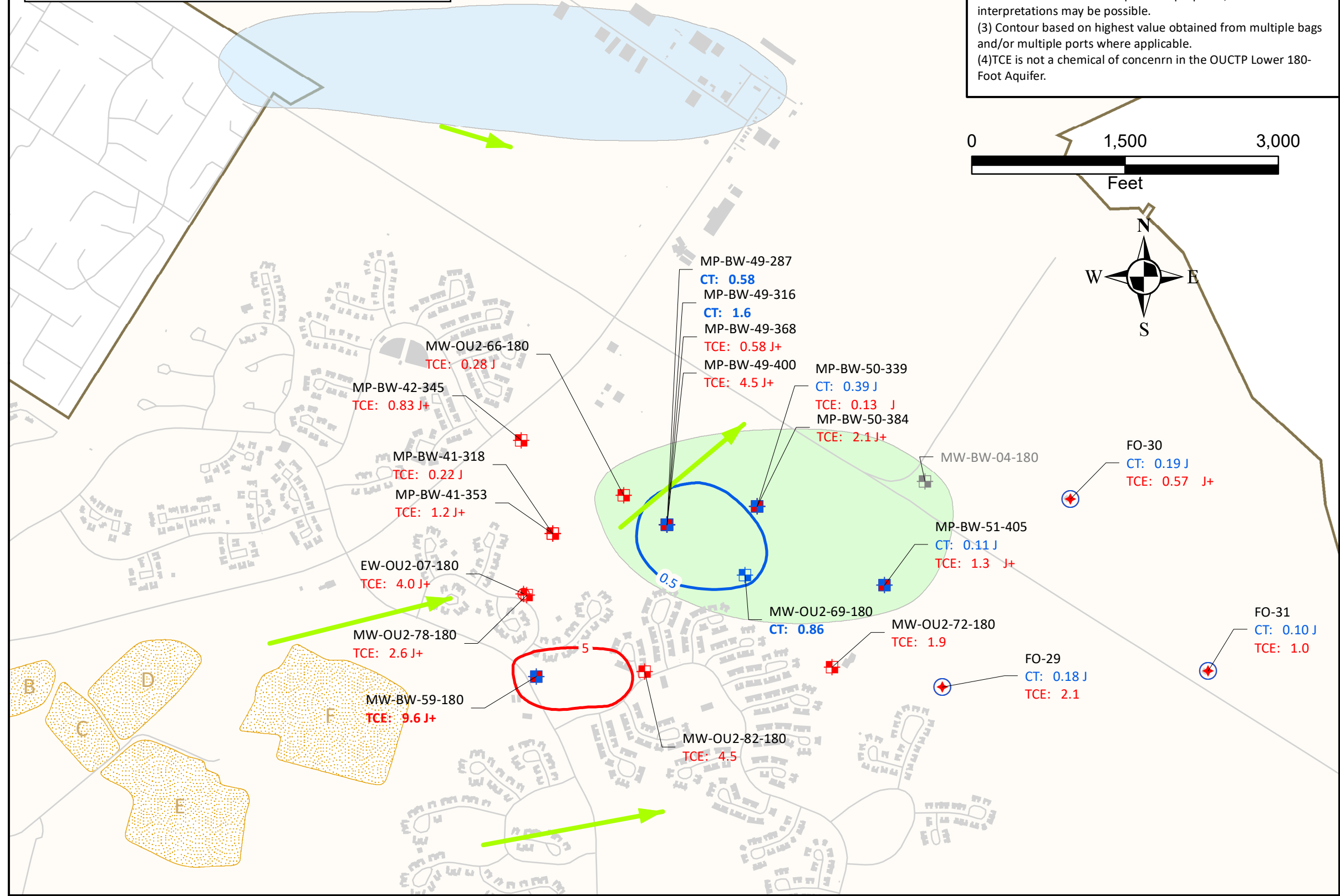
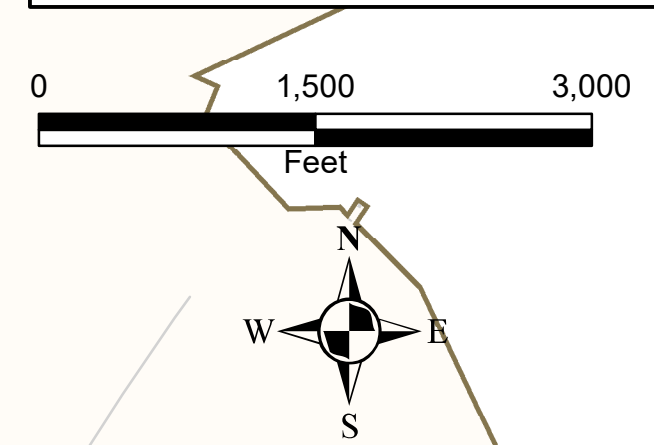


Well ID  
MP-BW-51-405  
Concentration in  $\mu\text{g/L}$  and validation/lab qualifier.  
(blue indicates CT; red indicates TCE)  
CT Bold when COC exceeds the ACL.

**NOTES:**  
(1) Groundwater samples were collected between December 6, 2021 and December 14, 2021.  
(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.

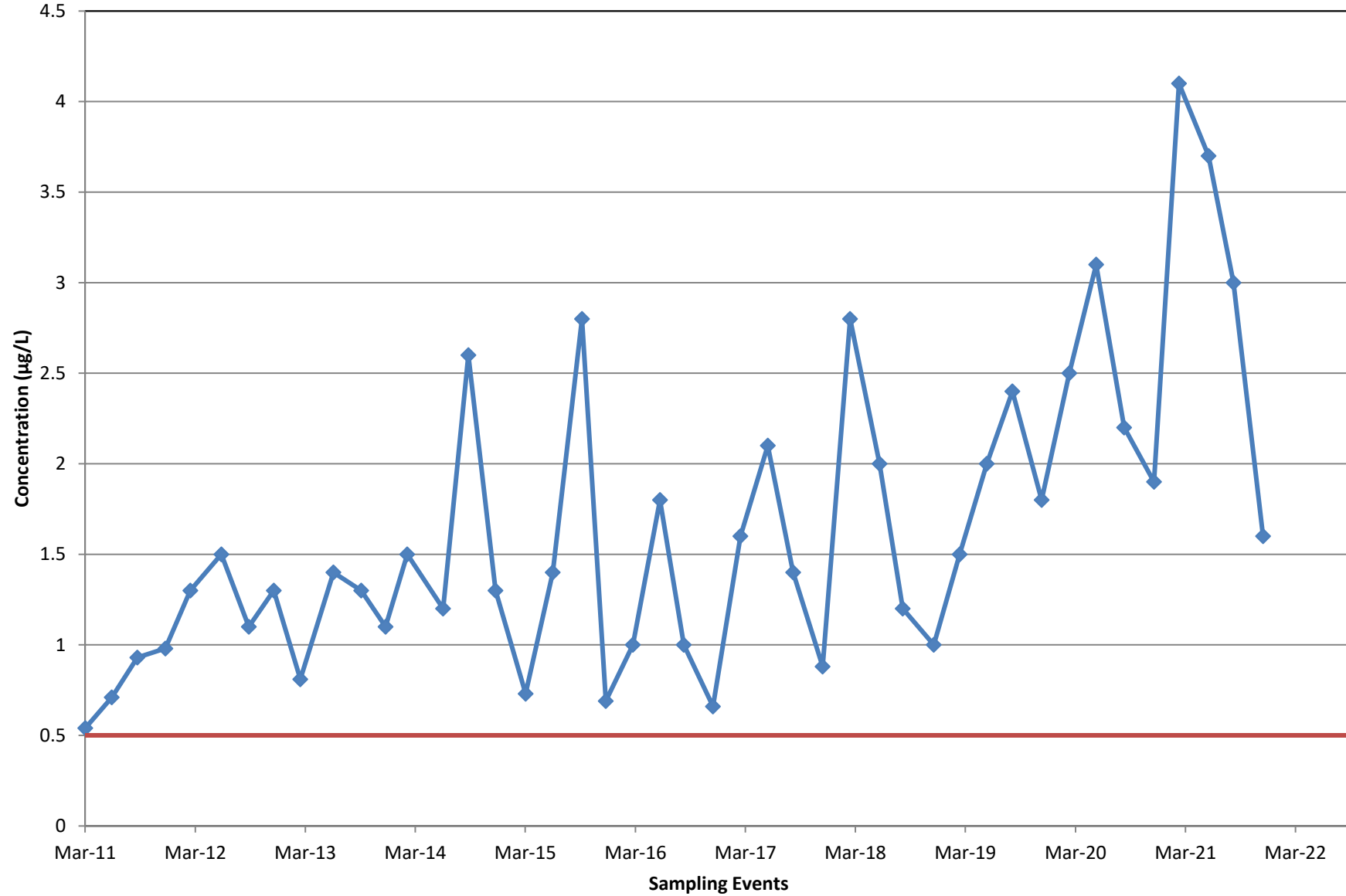
**EXPLANATION**

- General groundwater flow direction
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Former Fort Ord boundary
- Well Type and COC Detection**
  - Extraction well with trichloroethene (TCE) detection
  - Monitoring well with carbon tetrachloride (CT) detection
  - Monitoring well with TCE detection
  - Monitoring well with CT and TCE detection
  - Marina Coast active supply well with CT and TCE detection
  - Monitoring well not sampled
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in  $\mu\text{g/L}$ .**
  - 0.5 Carbon tetrachloride (CT) plume extent
  - 5.0 Trichloroethene (TCE) plume extent
- OUCTP Lower 180-Foot Aquifer Hydraulic Zone**
  - 7
  - 8



CT AND TCE CONCENTRATIONS  
LOWER 180-FOOT/400-FOOT AQUIFERS  
FOURTH QUARTER 2021  
Operable Unit Carbon Tetrachloride Plume  
Fourth Quarter 2021 Groundwater Monitoring Report  
Former Fort Ord, California

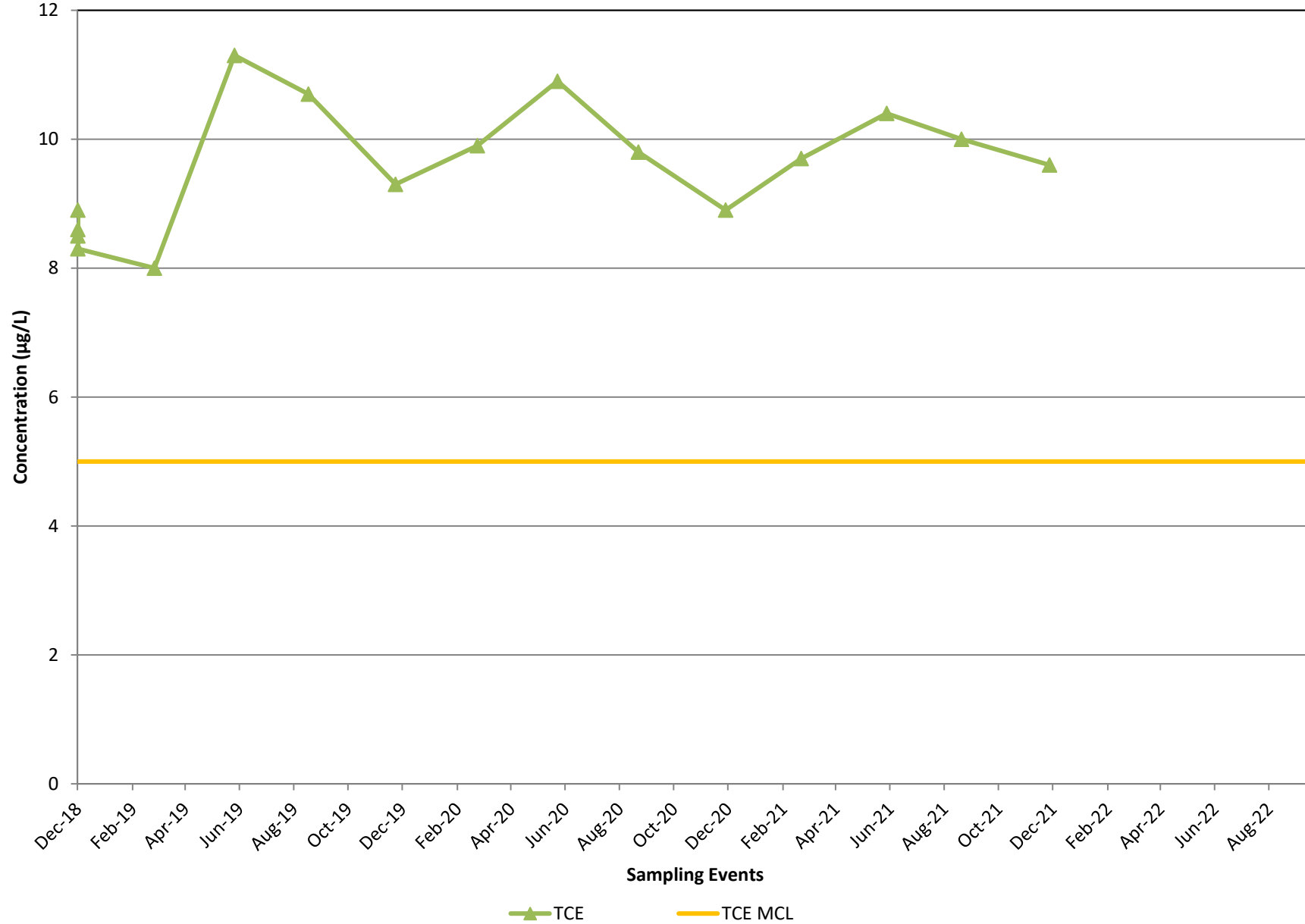
### MP-BW-49-316



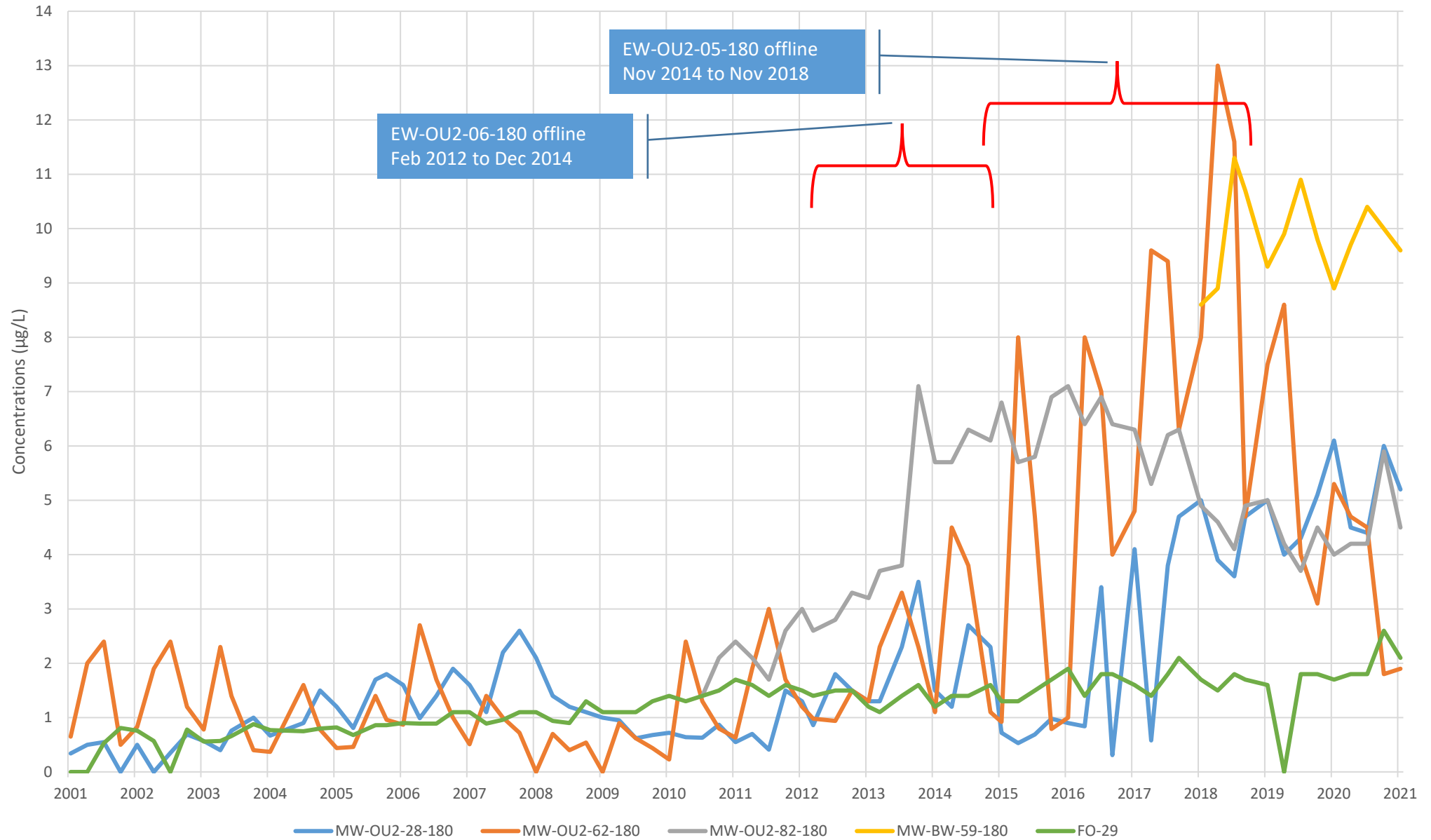
—◆— CT    — ACL



### MW-BW-59-180



### TCE in the Lower 180-Footer Aquifer



# EXPLANATION

## Well Type and Sample Information

- Extraction well with carbon tetrachloride (CT) detection
- Extraction well without CT detection
- Extraction well: Depth to water measurement only
- Monitoring well with carbon tetrachloride (CT) detection
- Monitoring well without CT detection
- Monitoring well: Annual sampling (Water level only for 4Q)
- Monitoring well: Depth to water measurement only

- 4Q2021 Groundwater Contours
- General groundwater flow direction

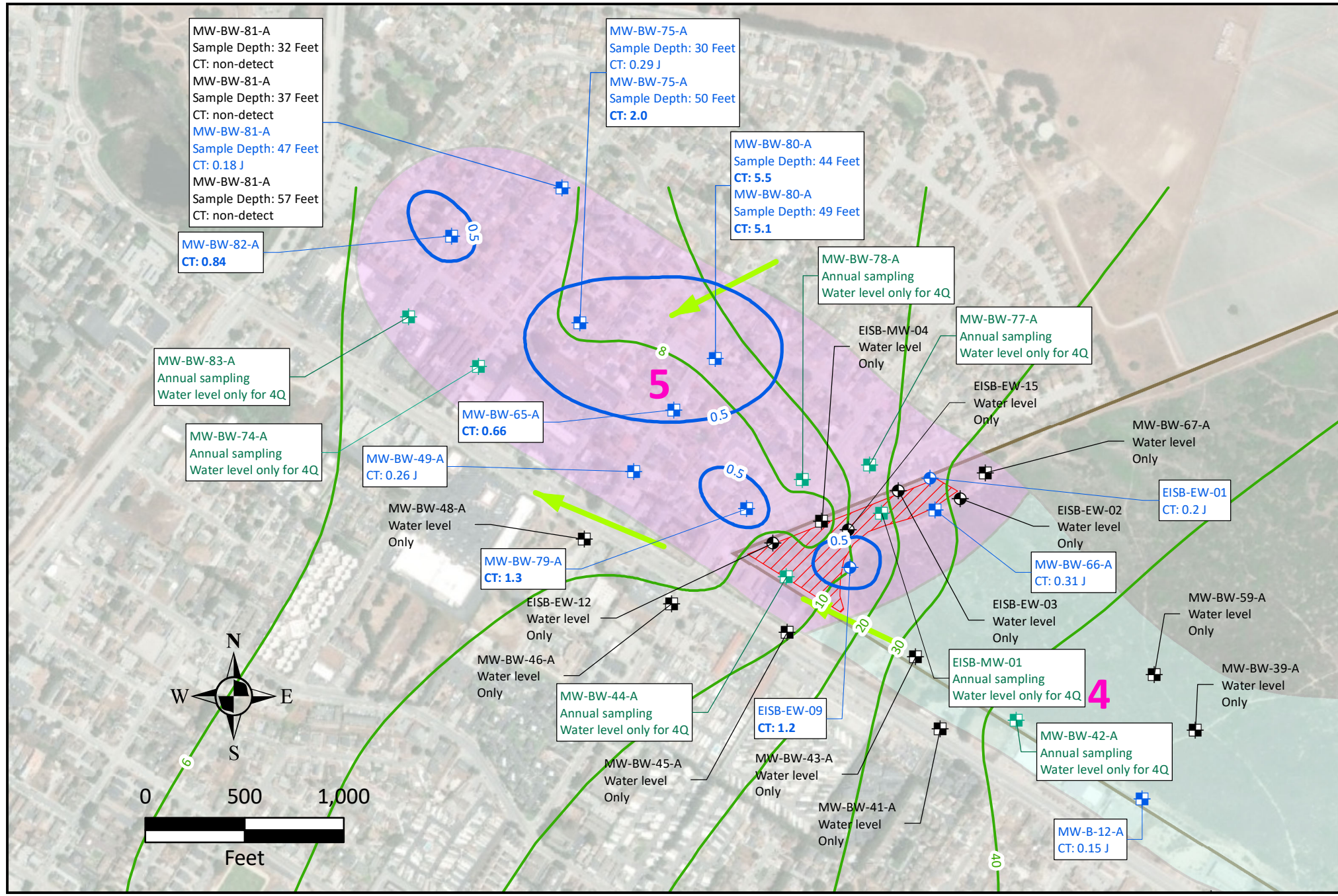
- Enhanced In-Situ Bioremediation (EISB) deployment pilot study area
- Former Fort Ord boundary

**4Q2021 Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.**  
 CT plume extent (0.5 µg/L)

**OUCTP A-Aquifer Hydraulic Zone**

- 4
- 5

**4Q2021 CT CONCENTRATIONS OPERABLE UNIT CARBON TETRACHLORIDE PLUME HYDRAULIC ZONE 5 A-AQUIFER**  
 IPM/BCT Meeting  
 Former Fort Ord, California



MW-BW-81-A  
 Sample Depth: 32 Feet  
 CT: non-detect  
 MW-BW-81-A  
 Sample Depth: 37 Feet  
 CT: non-detect  
 MW-BW-81-A  
 Sample Depth: 47 Feet  
 CT: 0.18 J  
 MW-BW-81-A  
 Sample Depth: 57 Feet  
 CT: non-detect

MW-BW-75-A  
 Sample Depth: 30 Feet  
 CT: 0.29 J  
 MW-BW-75-A  
 Sample Depth: 50 Feet  
 CT: 2.0

MW-BW-80-A  
 Sample Depth: 44 Feet  
 CT: 5.5  
 MW-BW-80-A  
 Sample Depth: 49 Feet  
 CT: 5.1

MW-BW-78-A  
 Annual sampling  
 Water level only for 4Q

MW-BW-77-A  
 Annual sampling  
 Water level only for 4Q

MW-BW-82-A  
 CT: 0.84

MW-BW-83-A  
 Annual sampling  
 Water level only for 4Q

MW-BW-74-A  
 Annual sampling  
 Water level only for 4Q

MW-BW-49-A  
 CT: 0.26 J

MW-BW-65-A  
 CT: 0.66

MW-BW-48-A  
 Water level Only

MW-BW-79-A  
 CT: 1.3

EISB-EW-12  
 Water level Only

MW-BW-46-A  
 Water level Only

MW-BW-44-A  
 Annual sampling  
 Water level only for 4Q

MW-BW-45-A  
 Water level Only

MW-BW-43-A  
 Water level Only

MW-BW-41-A  
 Water level Only

EISB-MW-04  
 Water level Only

EISB-EW-15  
 Water level Only

MW-BW-67-A  
 Water level Only

EISB-EW-02  
 Water level Only

MW-BW-66-A  
 CT: 0.31 J

EISB-EW-03  
 Water level Only

EISB-MW-01  
 Annual sampling  
 Water level only for 4Q

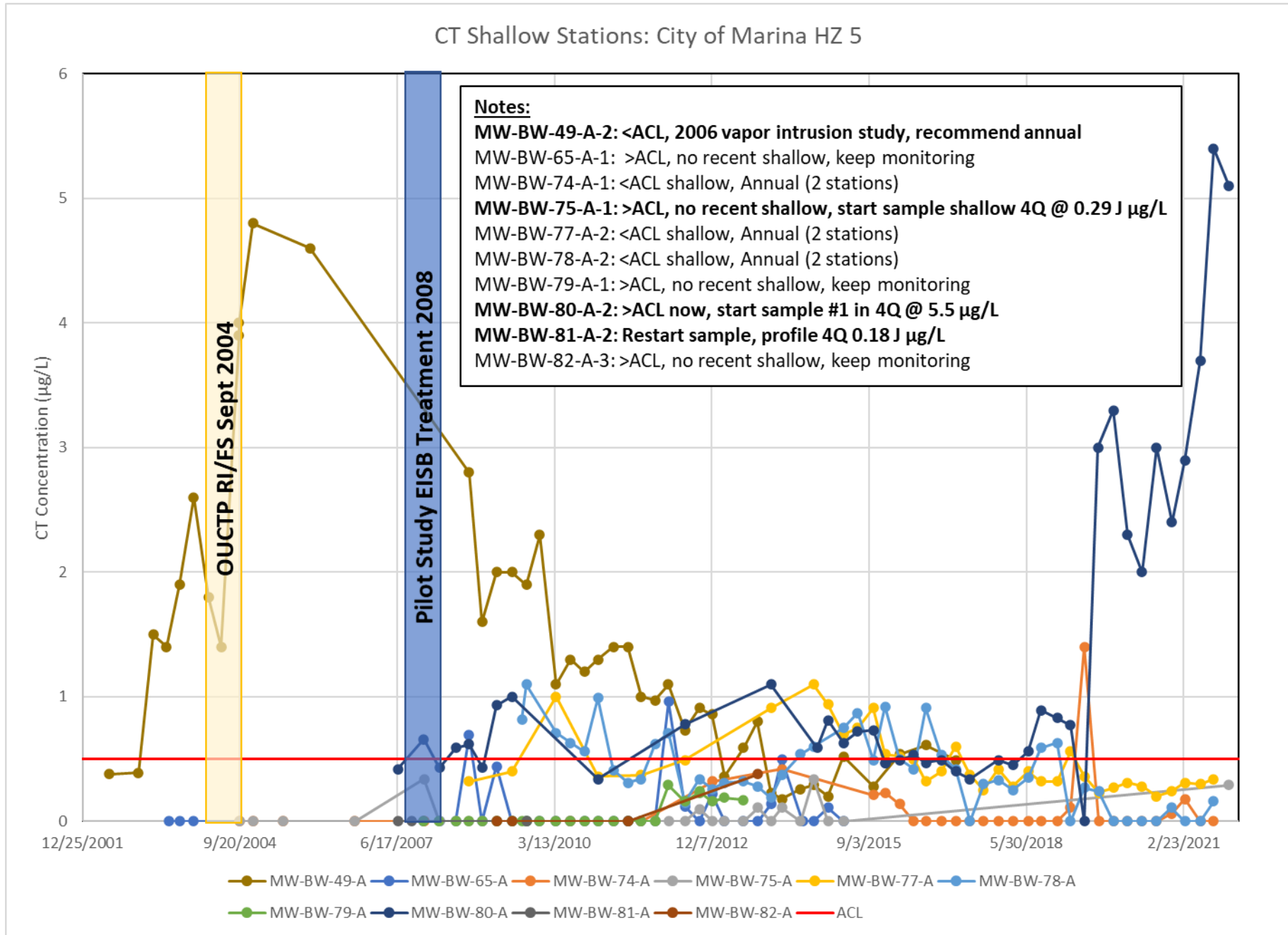
MW-BW-59-A  
 Water level Only

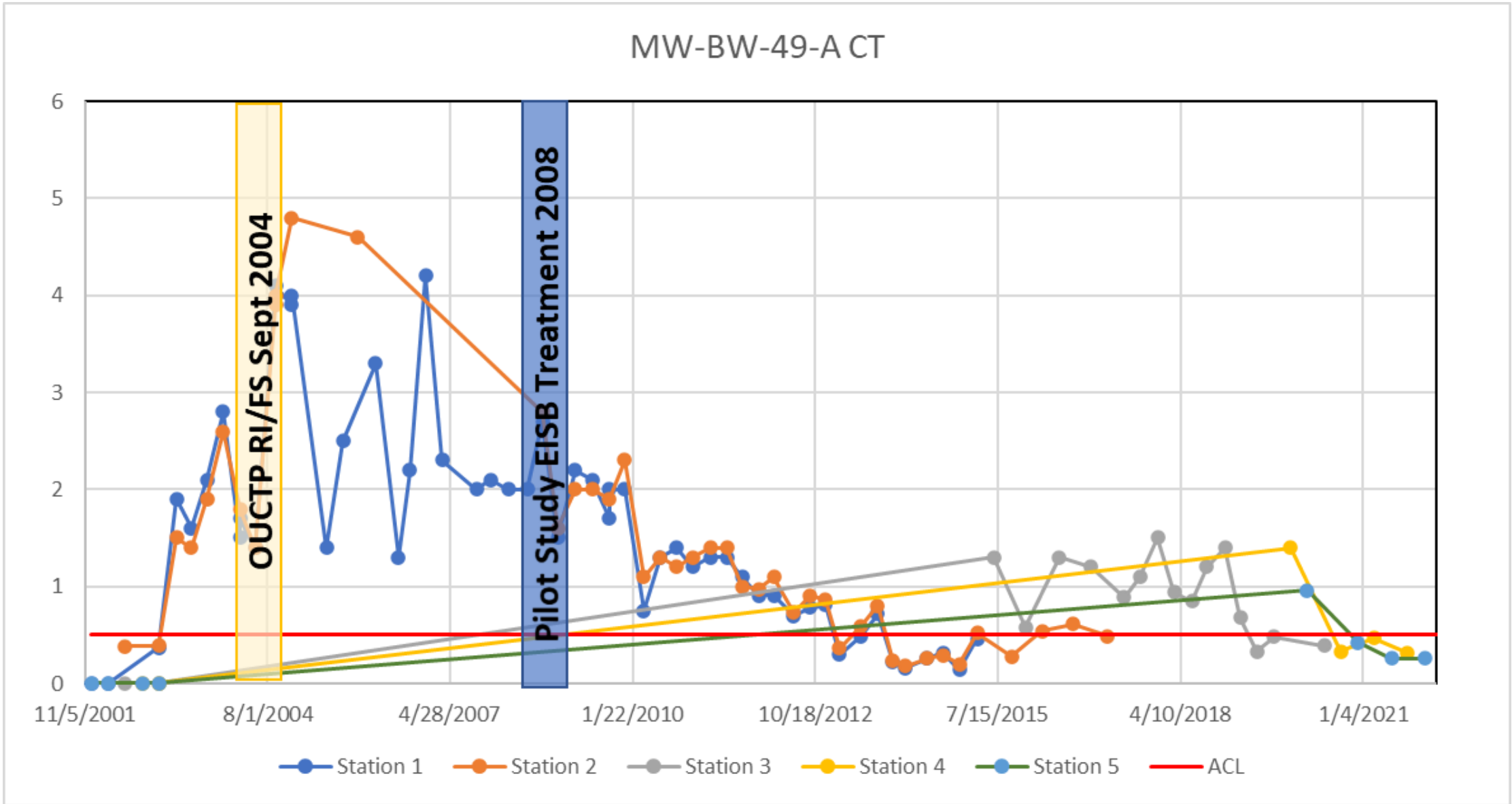
MW-BW-39-A  
 Water level Only

MW-BW-42-A  
 Annual sampling  
 Water level only for 4Q

MW-B-12-A  
 CT: 0.15 J

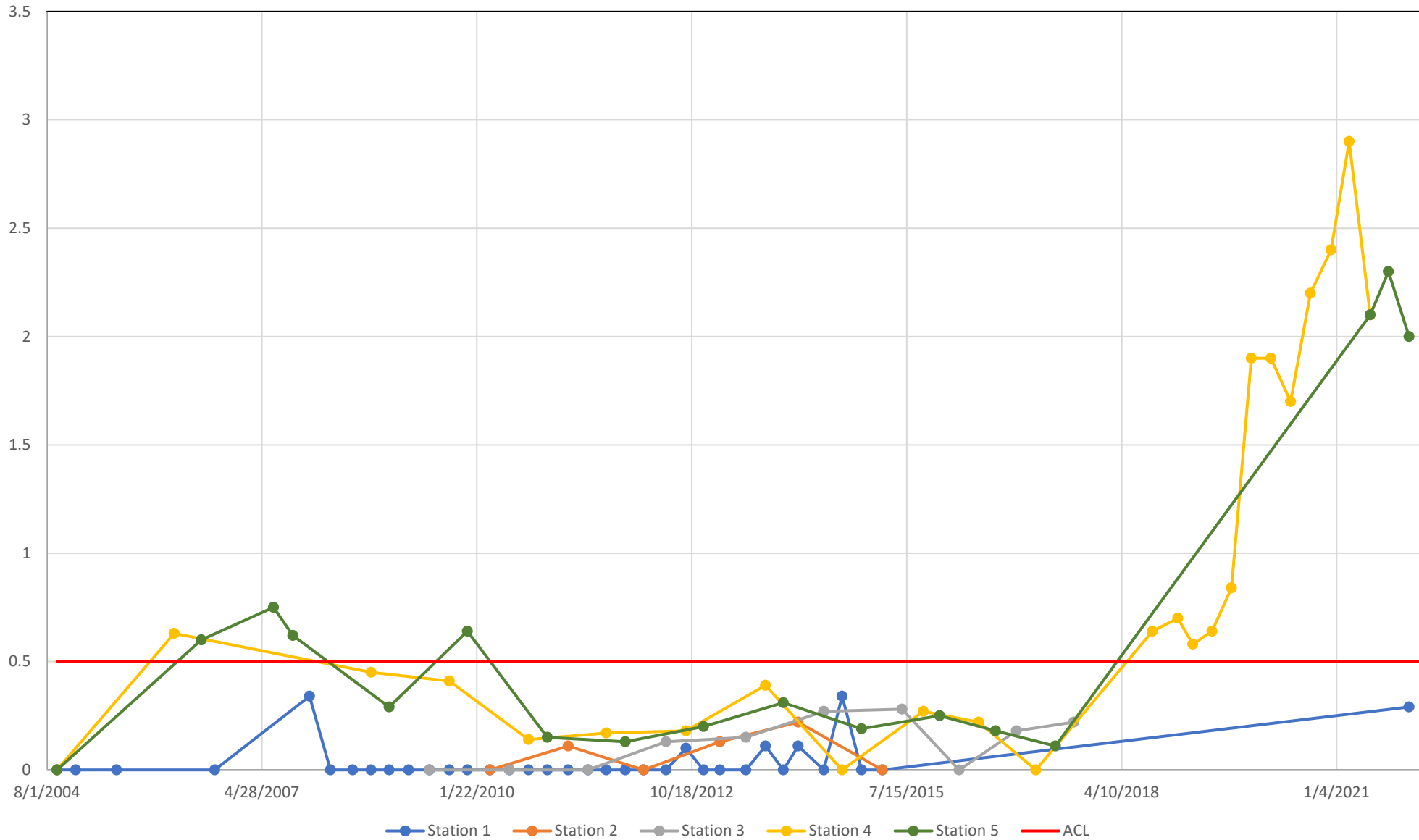






Ahtna

MW-BW-75-A CT



MW-BW-80-A CT

