

# Former Fort Ord Operable Unit Carbon Tetrachloride Plume Data and Status

HTW BCT, April 14, 2021

**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	COC Concentrations ( $\mu\text{g/L}$ )			
			2Q 2020	3Q 2020	4Q 2020	1Q 2021*
			CT			
ACL:			0.5			
1	1C	EW-BW-109-A	<b>1.2</b>	<b>0.63</b>	<b>0.58</b>	<b>1.4</b>
1	N/A	MW-BW-24-A	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.25)
2	3A	MW-BW-58-A	<b>0.53</b>	<b>0.62</b>	0.33	0.26 J
2	3A	MW-BW-87-A	<b>2.3</b>	<b>1.5</b>	<b>2.1</b>	<b>3.9</b>
2	3A	MW-BW-91-A	<b>0.94</b>	<b>0.97</b>	<b>0.57</b>	<b>1.3</b>
2	N/A	MW-BW-94-AR	<b>0.52</b>	<b>0.64</b>	0.48	<b>0.56</b>
N/A	3A	MW-BW-90-A	<b>1.4</b>	<b>1.9</b>	<b>1.3</b>	<b>1.4</b>
2	3A	EW-BW-160-A	<b>2.1</b>	<b>1.4</b>	<b>1.8</b>	<b>2.1</b>
3	3A	EW-BW-166-A	ND (0.25)	ND (0.25)	0.029 J	ND (0.25)
3	N/A	MW-BW-88-A	<b>1.0</b>	0.44 J	<b>0.74</b>	<b>0.63</b>
3	N/A	MW-BW-93-A	0.23 J	0.33 J	0.28	0.34 J
3	N/A	MW-BW-95-A	<b>1.1</b>	<b>1.2</b>	<b>1.1</b>	<b>1.4</b>

**Notes:**

CT: carbon tetrachloride

$\mu\text{g/L}$ : 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.

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

#### January 2021 Key Events

- None.

#### February 2021 Key Events

- None.

#### March 2021 Key Events

- March 1-5: First Quarter 2021 Groundwater Monitoring event.

#### April 2021 Key Events

- None scheduled.

#### June 2021 Key Events

- June 7-11: Second Quarter 2021 Groundwater Monitoring event.

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**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	COC Concentrations ( $\mu\text{g/L}$ )			
			2Q 2020	3Q 2020	4Q 2020	1Q 2021*
			CT <b>0.5</b>			
4	2A	EW-BW-124-A	ND (0.25)	0.33 J	0.41	<b>0.94</b>
4	2A	EW-BW-129-A	<b>2.0</b>	<b>2.2</b>	<b>4.1</b>	<b>4.0</b>
4	2A	EW-BW-140-A	0.28 J	0.27 J	0.48	<b>0.97</b>
4	2A	MW-BW-26-A <sup>^</sup>	<b>3.6</b>	<b>3.3</b>	<b>3.7</b>	<b>3.3</b>
4	N/A	MW-B-12-A	0.49 J	<b>0.55</b>	0.46	0.32 J
4	2B	MW-B-14-A	<b>0.52</b>	0.49 J	<b>0.55</b>	<b>0.52</b>
4	2B	EW-BW-155-A	0.12 J	0.22 J	<b>0.95</b>	0.11 J
4	N/A	MW-BW-31-A	0.45 J	0.33 J	<b>0.64</b>	<b>0.84</b>
4	N/A	MW-BW-32-A	<b>1.5</b>	<b>1.0</b>	<b>0.90</b>	<b>1.2</b>
4	N/A	MW-BW-35-A	0.12 J	0.20 J	0.095 J	ND (0.25)
4	N/A	MW-BW-36-A	0.21 J	<b>0.71</b>	<b>0.65</b>	0.46 J
4	N/A	MW-BW-42-A	ND (0.25)	0.12 J	NS	NS
4	N/A	MW-BW-89-A	<b>0.66</b>	<b>0.69</b>	<b>0.67</b>	<b>0.73</b>
4	N/A	MW-BW-92-A	<b>0.83</b>	<b>0.64</b>	<b>0.95</b>	<b>1.2</b>
5	Pilot	EISB-EW-01	0.36 J	0.22 J	0.26	0.28 J
5	Pilot	EISB-EW-09	<b>1.2</b>	<b>0.90</b>	<b>1.1</b>	<b>1.1</b>
5	N/A	MW-BW-49-A	0.39 J	0.33 J	0.42	0.47 J
5	N/A	MW-BW-65-A	0.27 J	0.32 J	0.25	0.43 J
5	Pilot	MW-BW-66-A	<b>0.91</b>	0.35 J	0.50	<b>0.53</b>
5	N/A	MW-BW-74-A	ND (0.25) [0.11 J]	ND (0.25) [ND (0.25)]	0.063 J [0.091 J]	0.18 J [0.23 J]
5	N/A	MW-BW-75-A	<b>1.7</b>	<b>2.2</b>	<b>2.4</b>	<b>2.9</b>
5	N/A	MW-BW-78-A	ND (0.25) [0.15 J]	ND (0.25) [0.12 J]	0.11 J [0.22]	ND (0.25) [0.16 J]
5	N/A	MW-BW-80-A	<b>2.0</b>	<b>3.0</b>	<b>2.4</b>	<b>2.9</b>
5	N/A	MW-BW-82-A	<b>1.1</b>	1.2	1.1	<b>1.4</b>

**Notes:**

CT: carbon tetrachloride

$\mu\text{g/L}$ : 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.

Results in **bold** and shaded are concentrations above the ACL

Results in gray are ND

COC: chemical of concern

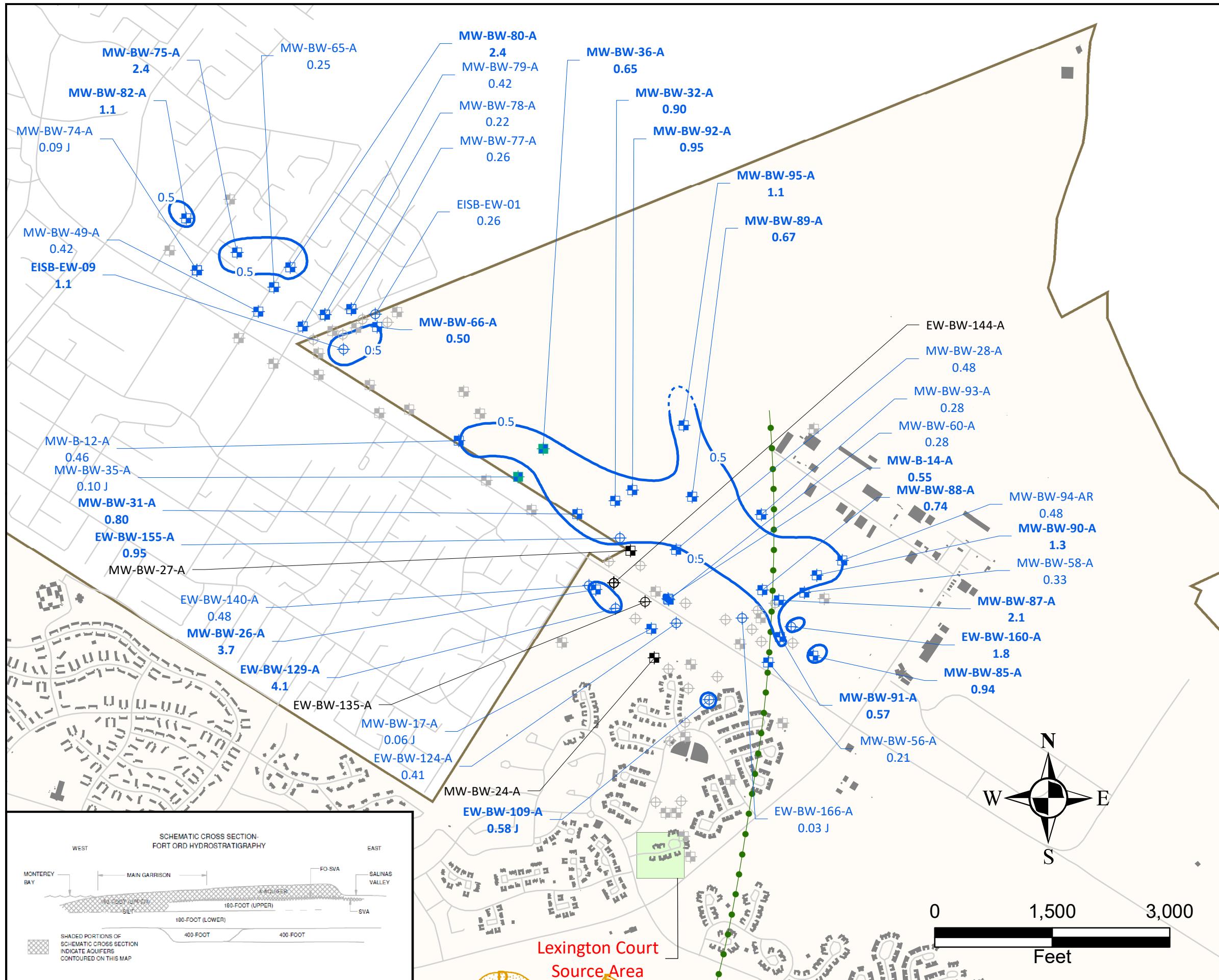
[Results in brackets are from a second deeper passive diffusion bag]

<sup>^</sup> Downgradient monitoring well MW-BW-30-A sampled annually: ND.

\* Preliminary data

† Qualified as estimated (J) due to field duplicate imprecision.

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## EXPLANATION

- ⊕ Extraction Well with CT Detection.
- ⊕ Monitoring Well with CT Detection.
- ⊕ Monitoring Well with Chloroform above ACL and CT Detection.
- ⊕ Extraction Well with No CT Detection.
- ⊖ Monitoring Well with No CT Detection
- ⊕ Extraction Well Not Sampled
- ⊖ Monitoring Well Not Sampled
- MW-BW-90-A** Well ID - Bold When CT Exceeds the ACL.  
1.3 CT Concentrations ( $\mu\text{g/L}$ ) and validation/lab qualifier.
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in  $\mu\text{g/L}$ .
- 0.5 Carbon Tetrachloride (CT) Plume Extent
- 0.5 - - - Estimated Carbon Tetrachloride (CT) Plume Extent
- ← General Groundwater Flow Direction
- ● Approximate location of the A-Aquifer Groundwater Divide
- Former Fort Ord Boundary
- Facilities
- Approximate extent of landfill areas

### NOTES:

- (1) Groundwater samples were collected between December 7, 2020 and December 11, 2020.
- (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.

### CT CONCENTRATIONS

A-AQUIFER

Fourth Quarter

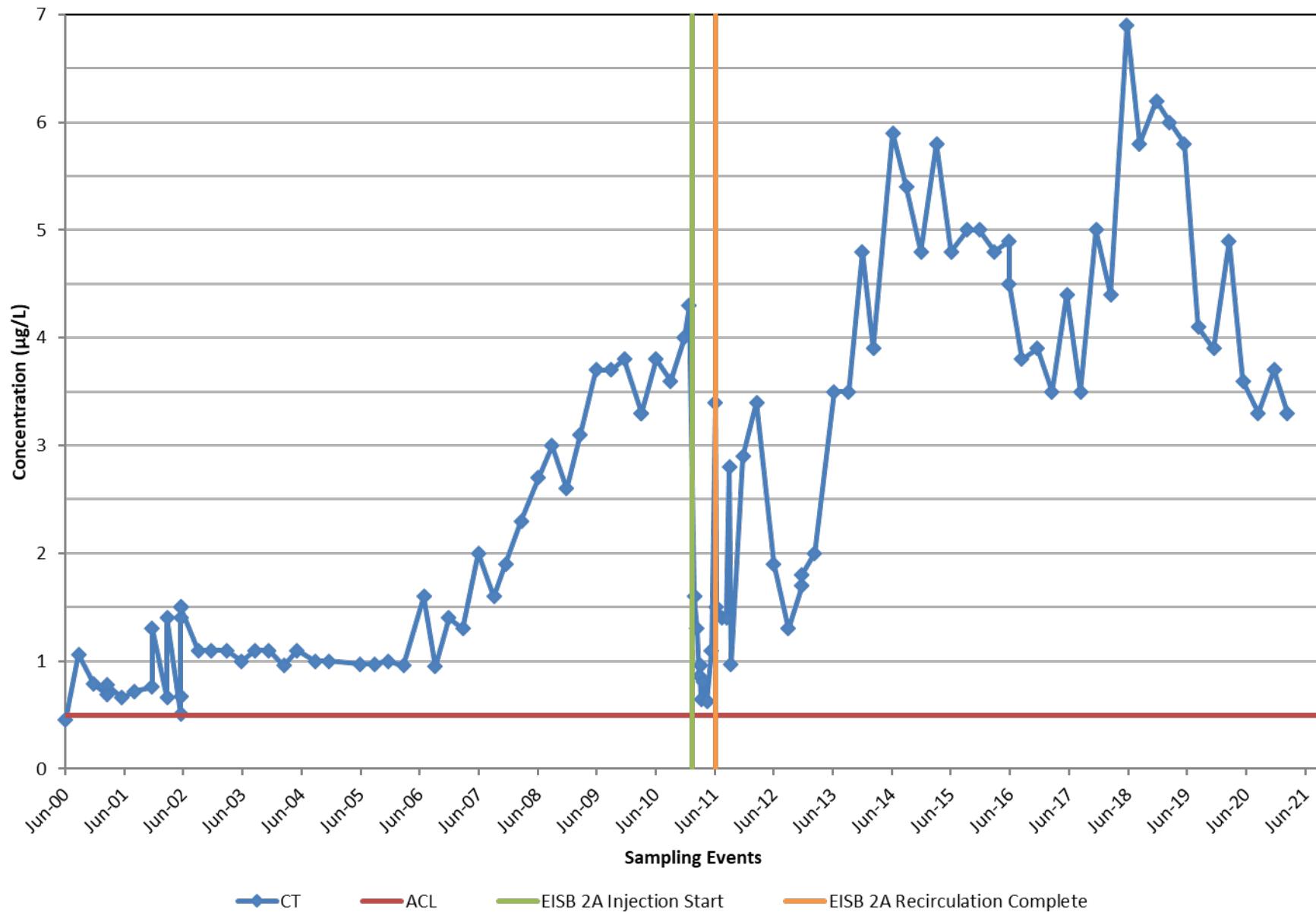
Operable Unit Carbon Tetrachloride Plume  
Groundwater Monitoring Report  
Former Fort Ord, California

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Date: 3/8/2021

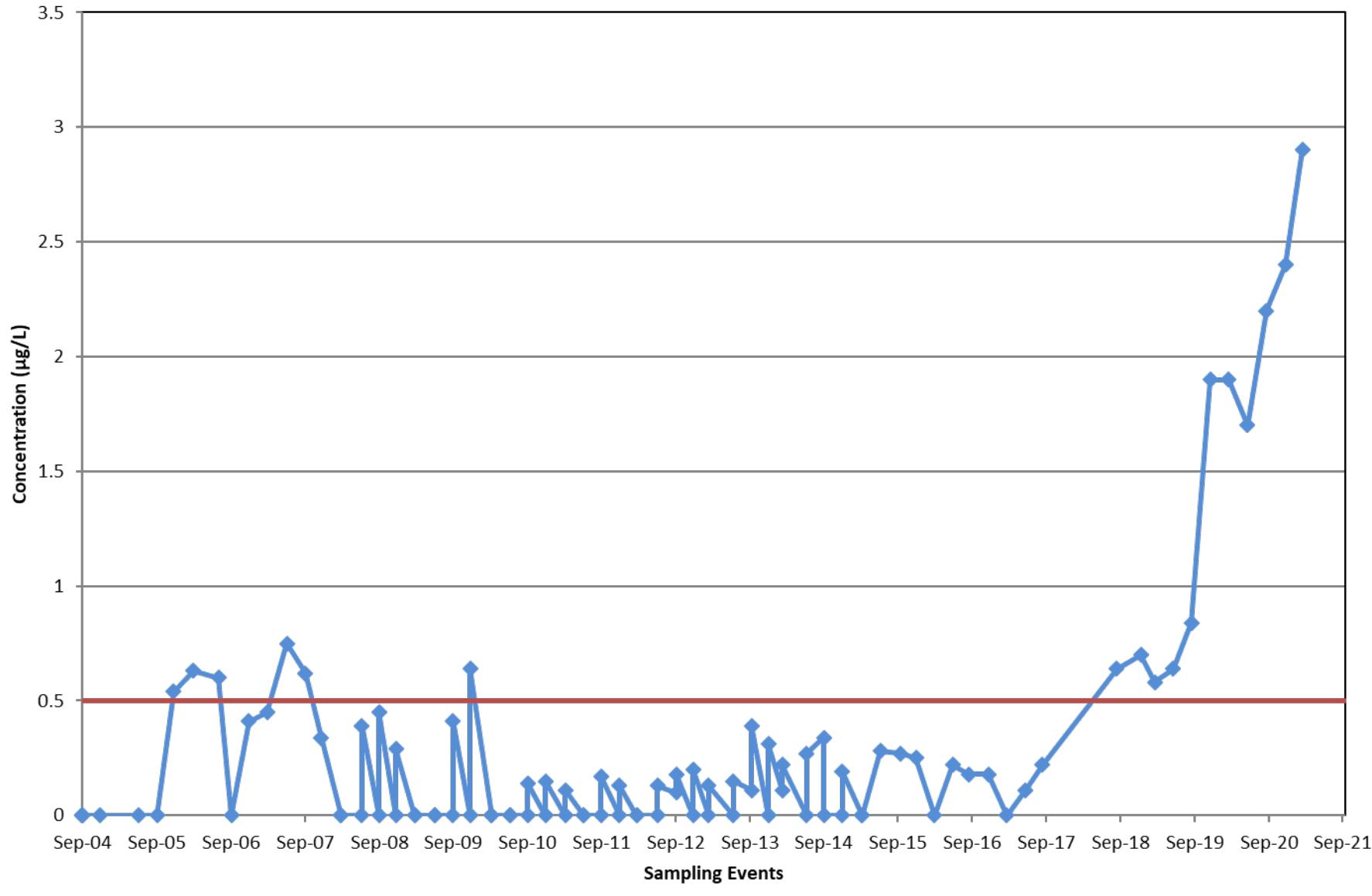
Figure: 4

## MW-BW-26-A



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## MW-BW-75-A



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

OUCTP Hydraulic Zone <sup>1</sup>	Well Identification	CT Concentration ( $\mu\text{g}/\text{L}$ ) <sup>2</sup>			
		2Q 2020	3Q 2020	4Q 2020	1Q 2021*
<b>ACL:</b>		<b>0.5</b>			
6	EW-OU2-09-180 <sup>3</sup>	ND (0.25)	ND (0.25)	0.025 J	ND (0.25)
6	MP-BW-46-170	<b>4.5</b>	<b>4.0</b>	<b>5.2</b>	<b>6.4</b>
N/A	MW-BW-21-180	0.15	ND (0.25)	0.044 J	0.16 J
N/A	MW-BW-43-180	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.25)
6	MW-BW-52-180	<b>0.62</b>	<b>0.52</b>	<b>0.70</b>	<b>0.67</b>
6	MW-BW-57-180	<b>0.96</b>	<b>0.96</b>	<b>0.82</b>	<b>0.70</b>
6	MW-BW-58-180	ND (0.25)	ND (0.25)	NS	NS
6	MW-OU2-64-180	<b>4.3</b>	<b>6.6</b>	<b>6.8</b>	<b>8.7</b>
6	MW-OU2-67-180 <sup>5</sup>	ND (0.25)	ND (0.25)	ND (0.025)	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

$\mu\text{g}/\text{L}$ : 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.

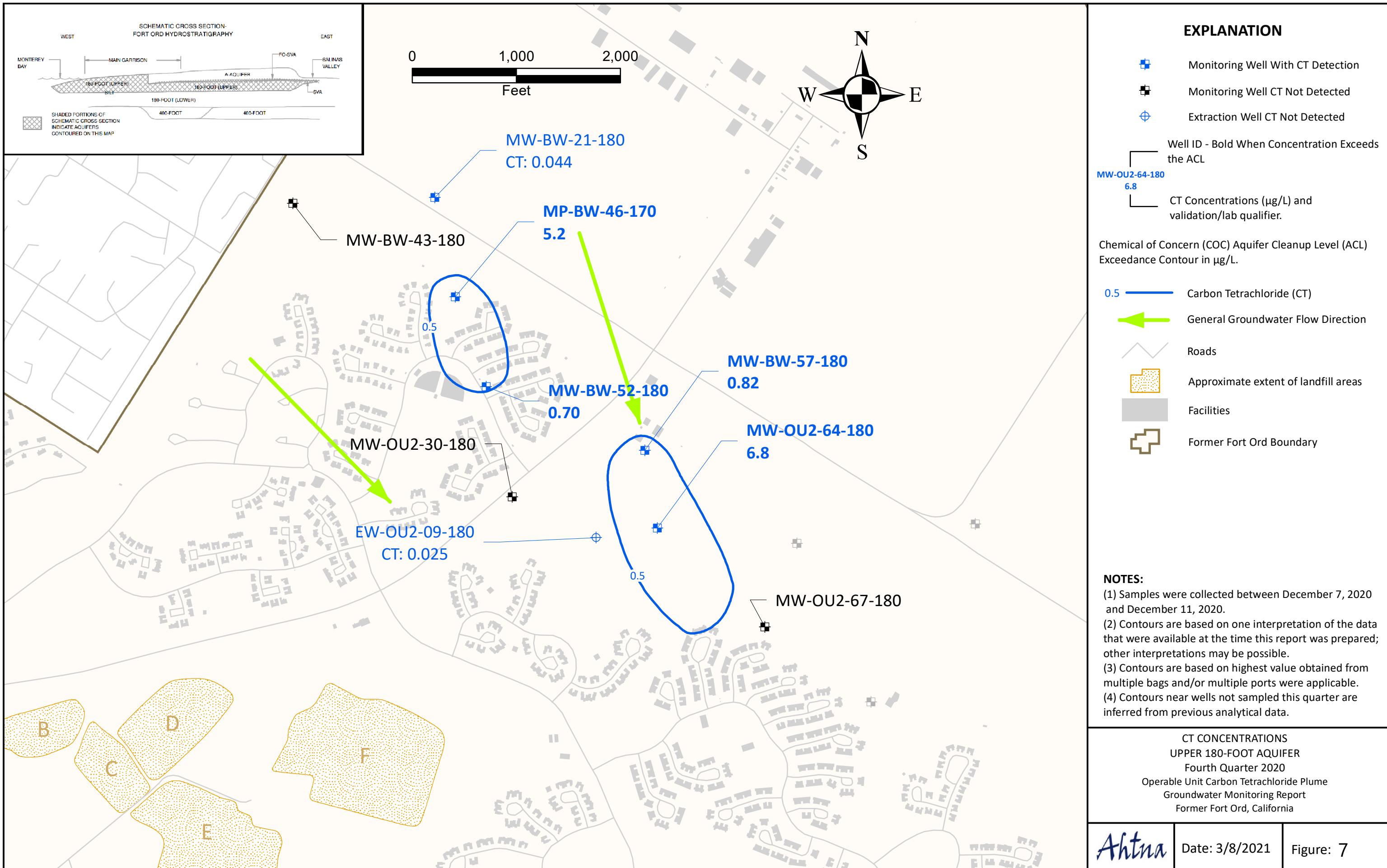
<sup>3</sup> EW-OU2-09-180 is operated as part of the remedy for the OUCTP Upper 180-Foot Aquifer and is connected to the OU2 GWTP.

<sup>4</sup> 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)

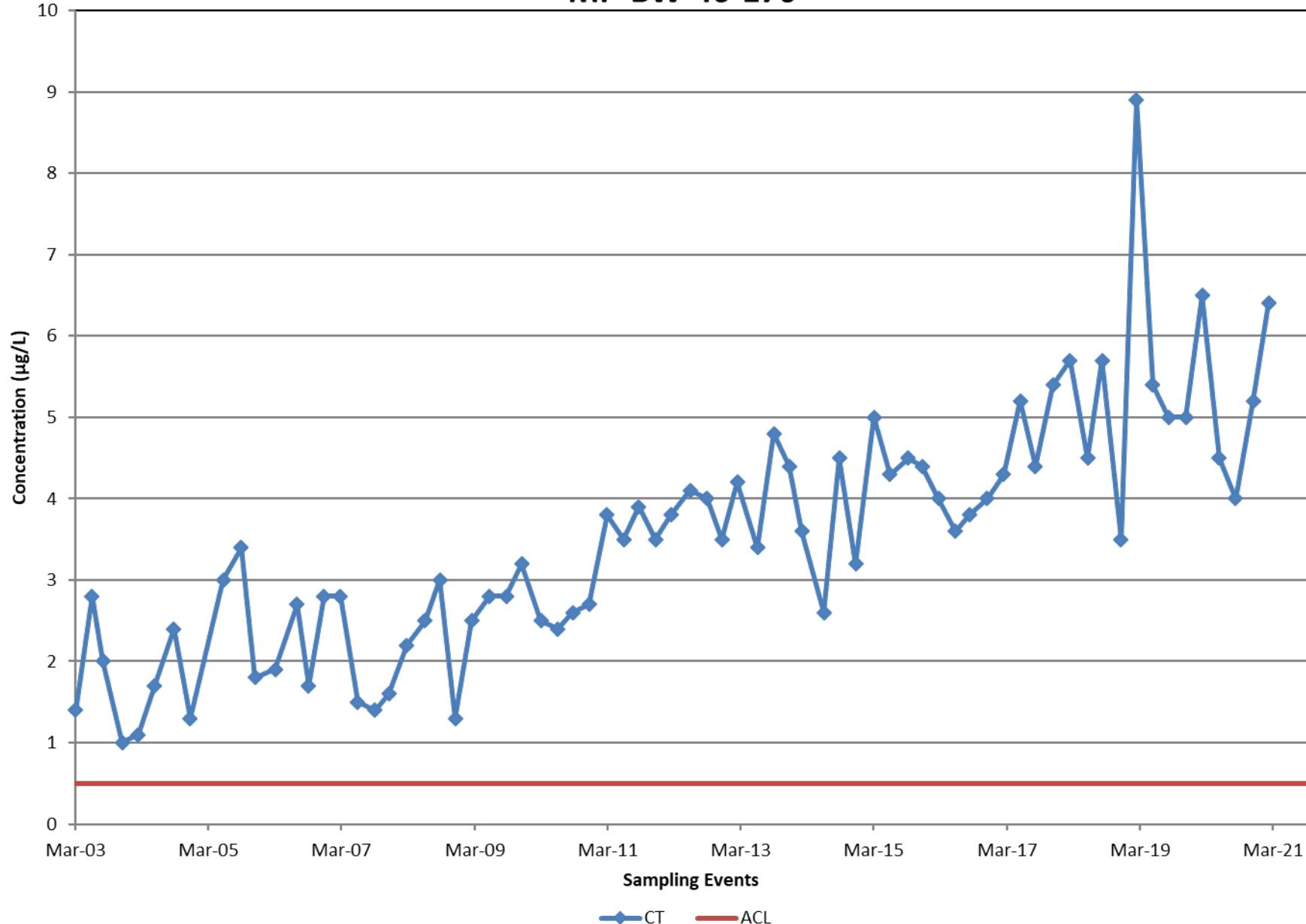
<sup>5</sup> Downgradient well MW-OU2-70-180 sampled annually: ND.

\* Preliminary data

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## MP-BW-46-170



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**Table 5.** OUCTP Lower 180-Foot Aquifer Select Monitoring Well Data

OUCTP Hydraulic Zone <sup>1</sup>	Well Identification	Select COC Concentrations ( $\mu\text{g}/\text{L}$ ) <sup>2</sup>							
		2Q 2020	3Q 2020	4Q 2020	1Q 2021*	2Q 2020	3Q 2020	4Q 2020	1Q 2021*
		CT				TCE <sup>4</sup>			
Limit:		ACL 0.5				MCL 5.0			
7	MP-BW-49-316	<b>3.1</b>	<b>2.2</b>	<b>1.9</b>	<b>4.1</b>	ND (0.25)	ND (0.25)	ND (0.066)	ND (0.25)
7	MP-BW-49-400	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.025)	4.4	3.7	4.0	<b>5.4</b>
7	MP-BW-50-339	<b>1.2</b>	<b>0.95</b>	0.31	<b>0.56</b>	ND (0.25)	ND (0.25)	ND (0.066)	0.23 J
7	MP-BW-50-384	ND (0.25)	ND (0.25)	0.058 J	0.11 J	1.4	1.6	1.6	2.5
7	MP-BW-51-405	0.13 J	0.13 J	0.13 J	0.12 J	1.7	1.3	1.7	1.2
7	MW-OU2-69-180	<b>0.91</b>	<b>1.1</b>	<b>0.96</b>	<b>1.4</b>	ND (0.25)	ND (0.25)	ND (0.066)	ND (0.25)
8	AIRFIELD	0.44 J	0.30 J	ND (0.025)	0.37 J	ND (0.25)	ND (0.25)	ND (0.066)	ND (0.25)
9	EW-OU2-07-180	ND (0.25)	ND (0.25)	0.030 J	ND (0.25)	2.8	3.0	3.0	3.6
N/A	FO-29	0.23 J	0.15 J	0.18 J	0.27 J	1.8	1.8	1.7	1.8
N/A	FO-30	0.24 J	0.21 J	0.17 J	0.19 J	0.52	0.45 J	0.38	0.55
N/A	FO-31	0.14 J	0.13 J	0.11 J	0.15 J	0.85	0.84	0.75	0.95
N/A	MP-BW-41-318	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.25)	0.67	ND (0.25)	ND (0.066)	0.59
N/A	MP-BW-41-353	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.025)	1.3	ND (0.25)	ND (0.066)	1.5
9	MW-BW-59-180	0.13 J	0.10 J	0.076 J	0.12 J	<b>10.9</b>	<b>9.8</b>	<b>8.9</b>	<b>9.7</b>
N/A	MW-OU2-72-180	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.25)	1.3	1.1	1.4	1.4
9	MW-OU2-78-180	ND (0.25)	ND (0.25)	ND (0.025)	ND (0.25)	2.0	2.2	2.1	2.5
9	MW-OU2-82-180	ND (0.25)	ND (0.25)	0.041 J	ND (0.25)	3.7	4.5	4.0	4.2

**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

$\mu\text{g}/\text{L}$ : micrograms per liter

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

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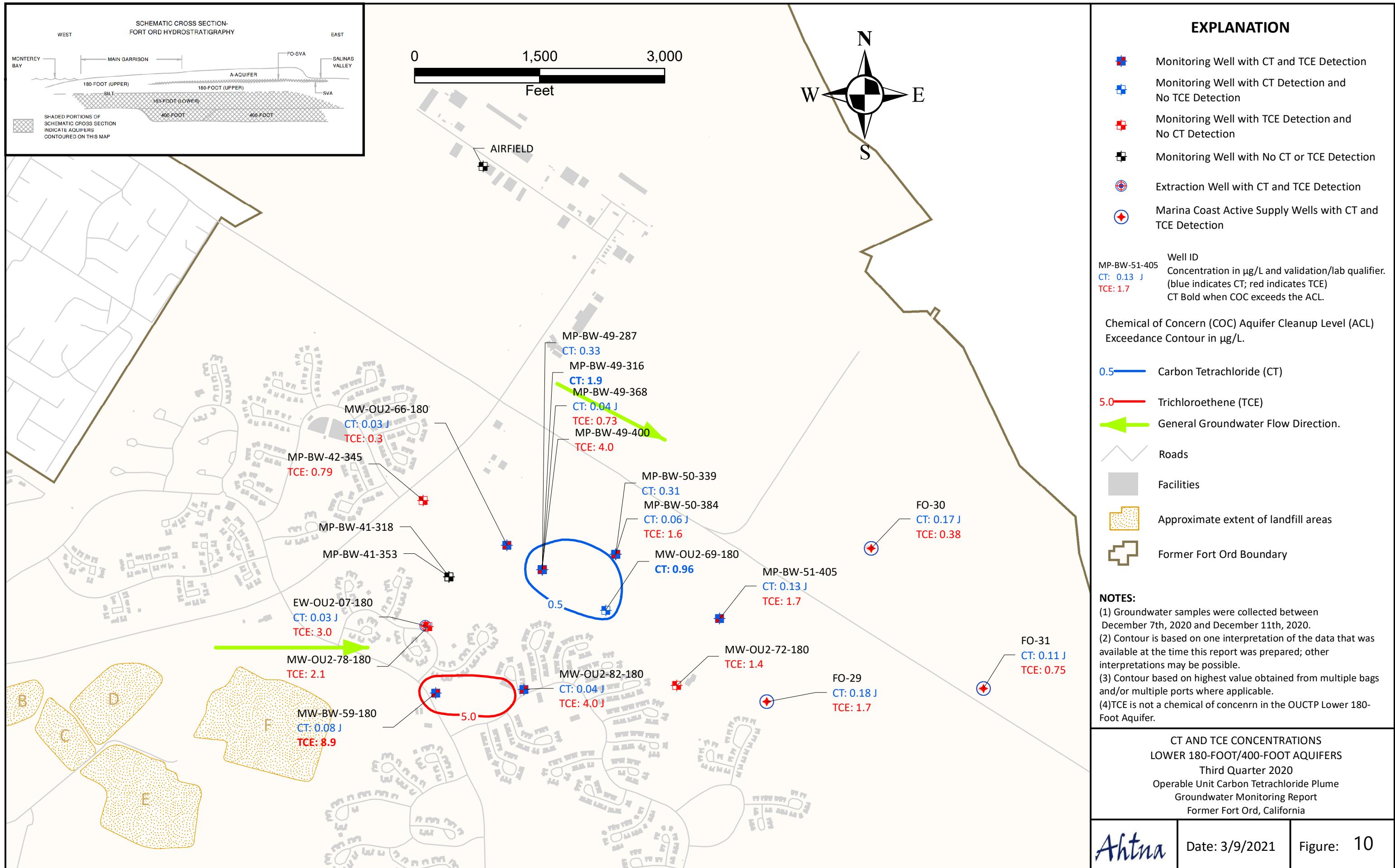
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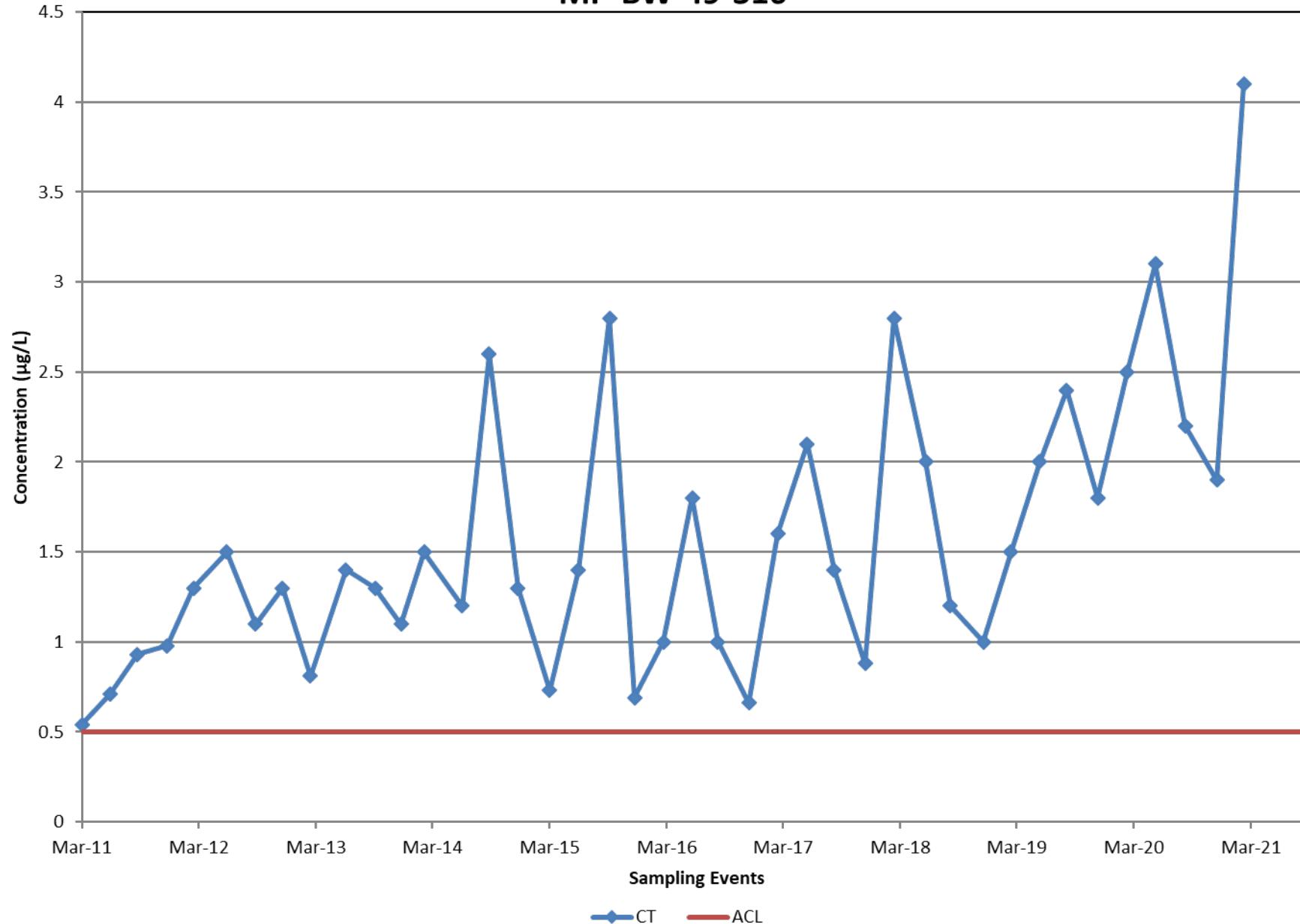
<sup>5</sup> Downgradient well MW-OU2-70-180 sampled annually: ND.

\* Preliminary data

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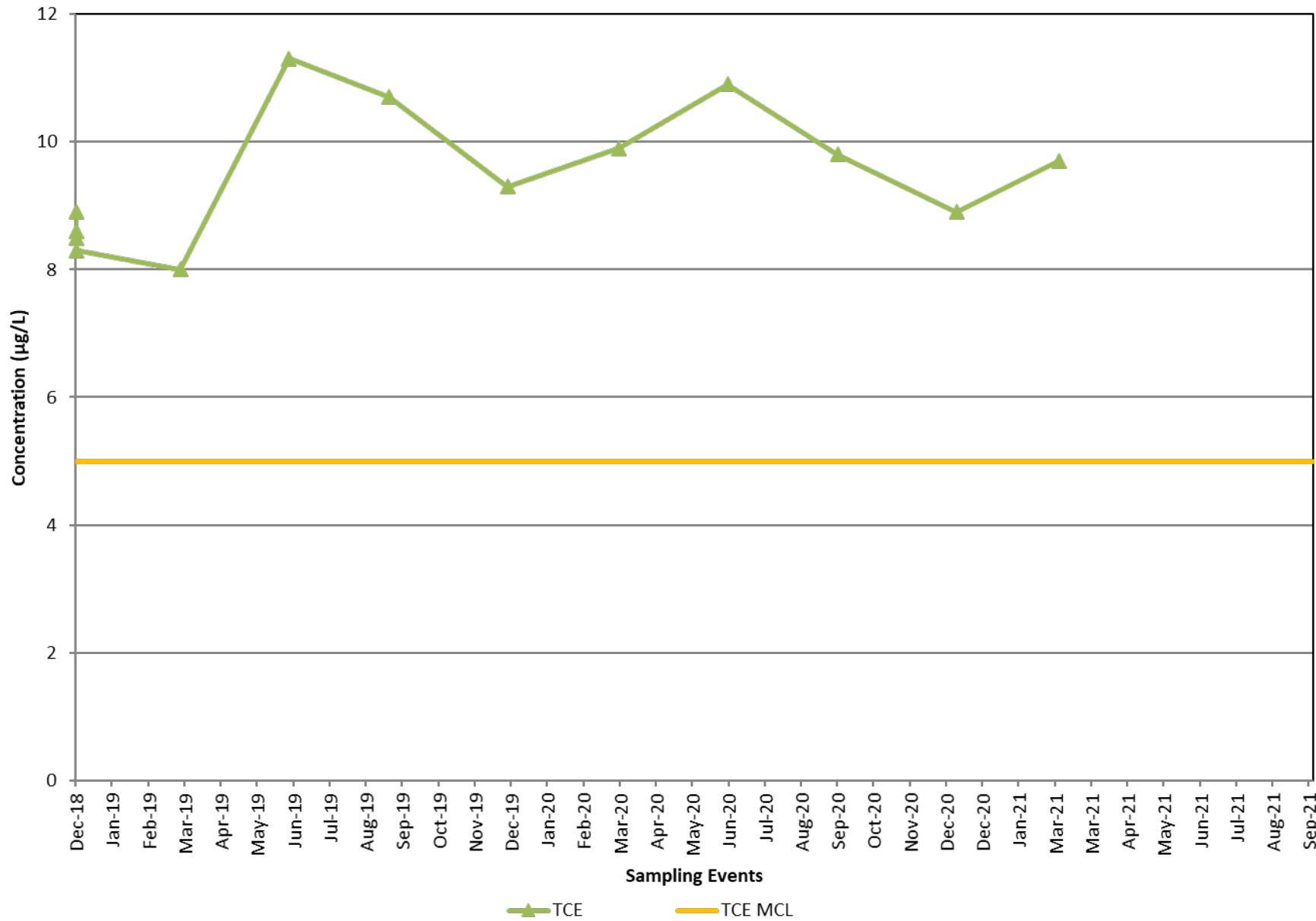


## MP-BW-49-316



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## MW-BW-59-180



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