

## Operable Unit 2 Data and Status

**Table 1:** Dec 2021-Jan 2022 – OU2 GWTP Statistics

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
Dec 2021	42,851,298	960	100	2.1
Jan 2022	41,039,672	919	100	2.2
Total since October 1995	8.853 billion			931

**Table 2:** Dec 2021-Jan 2022 – OU2 Analytical Results at TS-OU2-INJ-01

COC	Discharge Limit ( $\mu\text{g/L}$ )	Analytical Results ( $\mu\text{g/L}$ )	
		1/19/2022	
1,1-dichloroethane (1,1-DCA)	5.0*	0.37 J	
1,2-dichloroethane (1,2-DCA)	0.5	0.16 J	
1,2-dichloropropane (1,2-DCP)	0.5	ND (0.25)	
Benzene	0.5	ND (0.25)	
Carbon tetrachloride (CT)	0.5	ND (0.25)	
Chloroform	2.0*	0.31 J	
Cis-1,2-dichloroethene (cis-1,2-DCE)	6.0*	1.0	
Methylene Chloride	0.5	ND (0.50)	
Tetrachloroethene (PCE)	0.5	ND (0.25)	
Trichloroethene (TCE)	0.5	ND (0.25)	
Vinyl chloride (VC)	0.1	ND (0.05)	

**Notes:**

COC: chemical of concern

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

ND: The analyte was not detected above the limit of detection (LOD).

NS: not sampled.

J: Estimated results below the limit of quantitation (LOQ).

TS-OU2-INJ: Injection point of compliance, the OU2 effluent pipeline.

\*Discharge limits for low carbon affinity compounds were increased to the Aquifer Cleanup Level (ACL).

Results in italics are above the discharge limit, and results in **bold** and shaded are concentrations above the ACL

Results in gray are ND

### December 2021, January 2022, and Future 2022 Key Events

- Dec 6-10: Fourth Quarter 2021 Groundwater Monitoring Program event.
- Dec 8: Replaced failed pump/motor and restarted EW-OU2-20-A.
- Dec 9: Replaced failed pumps/motors and restarted EW-OU2-18-A and -19-A.
- Dec 14: Sampled EW-OU2-18-A, 19-A, and 20-A.
- Dec 21: EW-OU2-18-A offline due to failed isolation valve. Valve replaced on Jan 3 and restarted on Jan 4.
- Jan 1: EW-OU2-02-180R offline due to VFD fault. Online Jan 3.
- Jan 4: EW-OU2-20-A offline due to a pipeline crack in the vault. Repaired and restarted on Jan 7.
- Jan 17-Feb 8: Test operations at EW-OU2-08-180 to capture TCE plume east of EW-OU2-05-180 and EW-OU2-06-180. EW-OU2-08-180 now online.
- Coordinate with Sea Haven on adjustment/survey of MW-OU2-04-A, -05-AR, -07-A, -84-180, and -07-400 (Sea Haven recovered well location on Dec 3, redevelop and surface completion Jan 17-18).
- Feb 28-Mar 4: First Quarter 2022 Groundwater Monitoring Program event.
- Repair and restart EW-OU2-05-A (downhole wiring or pump issue).

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**Table 3.** OU2 A-Aquifer Select Extraction/Monitoring Well Data

OU2 Hydraulic Zone <sup>1</sup>	Well Identification <sup>2</sup>	Select COC Concentrations (µg/L)									
		3Q 2021					4Q 2021				
		TCE	PCE	1,1-DCA	1,2-DCA	VC	TCE	PCE	1,1-DCA	1,2-DCA	VC
	<b>ACL:</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>0.5</b>	<b>0.1</b>	<b>5</b>	<b>3</b>	<b>5</b>	<b>0.5</b>	<b>0.1</b>
1	EW-OU2-16-A	2.4	2	4.7	<b>1.6</b>	<b>0.47</b>	1.8	1.3	3.5	<b>1.5</b>	<b>0.42</b>
1	EW-OU2-17-A	<b>8.2</b>	<b>5.5</b>	0.97	0.31 J	ND (0.05)	<b>6.6</b>	<b>3.9</b>	0.80	0.25 J	ND (0.05)
1	EW-OU2-18-A	NS	NS	NS	NS	NS	<b>10.5</b>	<b>6.0</b>	4.2	<b>0.65</b>	<b>0.41</b>
1	EW-OU2-19-A	NS	NS	NS	NS	NS	5.0	<b>6.0</b>	<b>9.5</b>	<b>1.1</b>	<b>1.6</b>
1	EW-OU2-20-A	NS	NS	NS	NS	NS	1.7	1.7	<b>5.1</b>	<b>0.69</b>	<b>1.1 J+</b>
1	MW-OU2-02-A	1.1	<b>3.1</b>	3.3	<b>0.60</b>	<b>6.2</b>	1.1	<b>3.7</b>	3.3	<b>0.67</b>	<b>9.0</b>
1	MW-OU2-44-A	<b>5.9 J-</b>	<b>5.0 J-</b>	<b>9.2 J-</b>	<b>2.2 J-</b>	<b>0.41 J-</b>	<b>5.1</b>	<b>4.4</b>	<b>7.6</b>	<b>1.8</b>	<b>0.15</b>
1	MW-OU2-73-A	0.42 J	1.4	3.6	0.49 J	<b>3.4</b>	0.48 J	1.6 J+	4.1 J+	<b>0.53 J+</b>	<b>4.4 J+</b>
2	EW-OU2-15-A	1.7	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	1.7 J+	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
2	MW-OU2-27-A	0.11 J	<b>4.6</b>	0.35 J	ND (0.25)	ND (0.05)	0.11 J	<b>4.5</b>	0.39 J	ND (0.25)	ND (0.05)
3	EW-OU2-09-A	0.11 J	0.21 J	ND (0.25)	ND (0.25)	0.055 J	0.13 J	0.18 J	ND (0.25)	0.12 J	ND (0.05)
3	EW-OU2-10-A	1.0	0.75	0.30 J	0.48 J	0.063 J	0.81	0.55	0.22 J	0.44 J	0.056 J
3	EW-OU2-11-AR	2.6	1.4	2.8	0.42 J	ND (0.05)	2.0	0.91	1.9	0.32 J	ND (0.05)
3	EW-OU2-12-A	<b>6.7</b>	<b>3.8</b>	3.6	<b>1.8</b>	0.083 J	5.0	2.9	2.6	<b>1.5</b>	0.055 J
3	EW-OU2-13-A	<b>5.5</b>	2.1	1.0	<b>3.2</b>	ND (0.05)	4.7	1.5	0.81	<b>3.0</b>	ND (0.05)
3	MW-OU2-12-A	<b>12.6</b>	<b>6.9</b>	<b>15.6</b>	<b>1.8</b>	<b>0.14</b>	<b>11.7</b>	<b>7.3</b>	<b>10.5</b>	<b>2.9</b>	<b>0.20</b>
3	MW-OU2-25-A	0.76	0.34 J	0.28 J	0.43 J	ND (0.05)	0.73	0.36 J	0.26 J	0.44 J	ND (0.05)

**Notes:**

ACL: Aquifer Cleanup Level

COC: chemical of concern

1,2-DCA: 1,2-dichloroethane

TCE: trichloroethene

PCE: tetrachloroethene

1,1-DCA: 1,1-dichloroethane

µg/L: micrograms per liter

NS: not sampled

ND: The analyte was not detected above the detection limit.

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

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

<sup>2</sup> Extraction wells not listed have met the QAPP decision rules to no longer operate.

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

Results in gray are ND

Results in brackets from a second deeper passive diffusion bag

\* Preliminary data

**Table 4.** OU2 A-Aquifer Select Extraction/Monitoring Well Data

OU2 Hydraulic Zone <sup>1</sup>	Well Identification <sup>2</sup>	Select COC Concentrations ( $\mu\text{g/L}$ )									
		3Q 2021					4Q 2021				
		TCE	PCE	1,1-DCA	1,2-DCA	VC	TCE	PCE	1,1-DCA	1,2-DCA	VC
ACL:		5	3	5	0.5	0.1	5	3	5	0.5	0.1
4	EW-OU2-02-A	0.35 J	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	0.33 J	ND (0.25)	0.11 J	ND (0.25)	ND (0.05)
4	EW-OU2-04-A	1.7	ND (0.25)	0.57	ND (0.25)	ND (0.05)	1.9	0.14 J	0.55	ND (0.25)	ND (0.05)
4	EW-OU2-05-A	4.0	0.34 J	0.60	ND (0.25)	ND (0.05)	NS	NS	NS	NS	NS
4	EW-OU2-06-A	3.2	0.40 J	0.22 J	0.10 J	ND (0.05)	2.7	0.23 J	0.13 J	ND (0.25)	ND (0.05)
4	MW-OU2-40-A	<b>10.1</b>	0.38 J	0.25 J	ND (0.25)	ND (0.05)	<b>16.7</b>	0.52	0.22 J	ND (0.25)	ND (0.05)
5	MW-OU2-04-A	2.1 J+	0.77 J+	0.68 J+	<b>0.61 J+</b>	ND (0.05)	2.0	0.58	0.65	<b>0.59</b>	ND (0.05)
5	MW-OU2-06-AR	<b>5.4</b>	2.1	1.9	<b>0.70</b>	ND (0.05)	<b>6.0 J+</b>	<b>3.2 J+</b>	1.8 J+	<b>0.88 J+</b>	ND (0.05)
5	MW-OU2-07-A	NS	NS	NS	NS	NS	1.9	0.63	<b>11.4</b>	<b>0.62</b>	<b>0.30</b>
5	MW-OU2-08-A	<b>7.2</b>	<b>5.4</b>	<b>20.5</b>	<b>2.3</b>	<b>0.34</b>	<b>9.3</b>	<b>8.1</b>	<b>26 J+</b>	<b>2.6</b>	<b>0.36</b>
5	MW-OU2-75-A	<b>6.0 J-</b>	<b>9.8 J-</b>	<b>9.3 J-</b>	0.11 J	0.090 J	<b>6.1</b>	<b>9.2</b>	<b>9.1</b>	0.11 J	<b>0.11</b>
5	MW-OU2-81-A	<b>19.4</b>	<b>9</b>	2.6	<b>0.84</b>	ND (0.05)	<b>16.0</b>	<b>6.1</b>	2.0	<b>0.64</b>	ND (0.05)
5	MW-OU2-83-A	2.7	2.6	<b>10</b>	0.47 J	<b>0.21</b>	3.5 J+	<b>3.9 J+</b>	<b>11.7 J+</b>	<b>0.59 J+</b>	<b>0.32 J+</b>
5	MW-BW-50-A	0.70	<b>3.5</b>	0.75	ND (0.25)	ND (0.05)	0.92 J+	<b>4.2 J+</b>	1.0 J+	ND (0.25)	ND (0.05)
5	MW-BW-71-A	NS	NS	NS	NS	NS	0.11 J [ND (0.25)]	0.16 J [0.10 J]	ND (0.25) [0.66]	ND (0.25) [ND (0.25)]	ND (0.05) [ND (0.05)]
N/A	MW-OU2-05-AR	NS	NS	NS	NS	NS	0.15 J	ND (0.25)	1.6	ND (0.25)	ND (0.05)
N/A	MW-OU2-76-A	NS	NS	NS	NS	NS	ND (0.25)	ND (0.25)	0.13 J	ND (0.25)	ND (0.05)

**Notes:**

ACL: Aquifer Cleanup Level

COC: chemical of concern

1,2-DCA: 1,2-dichloroethane

TCE: trichloroethene

PCE: tetrachloroethene

1,1-DCA: 1,1-dichloroethane

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

NS: not sampled

ND: The analyte was not detected above the detection limit.

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

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

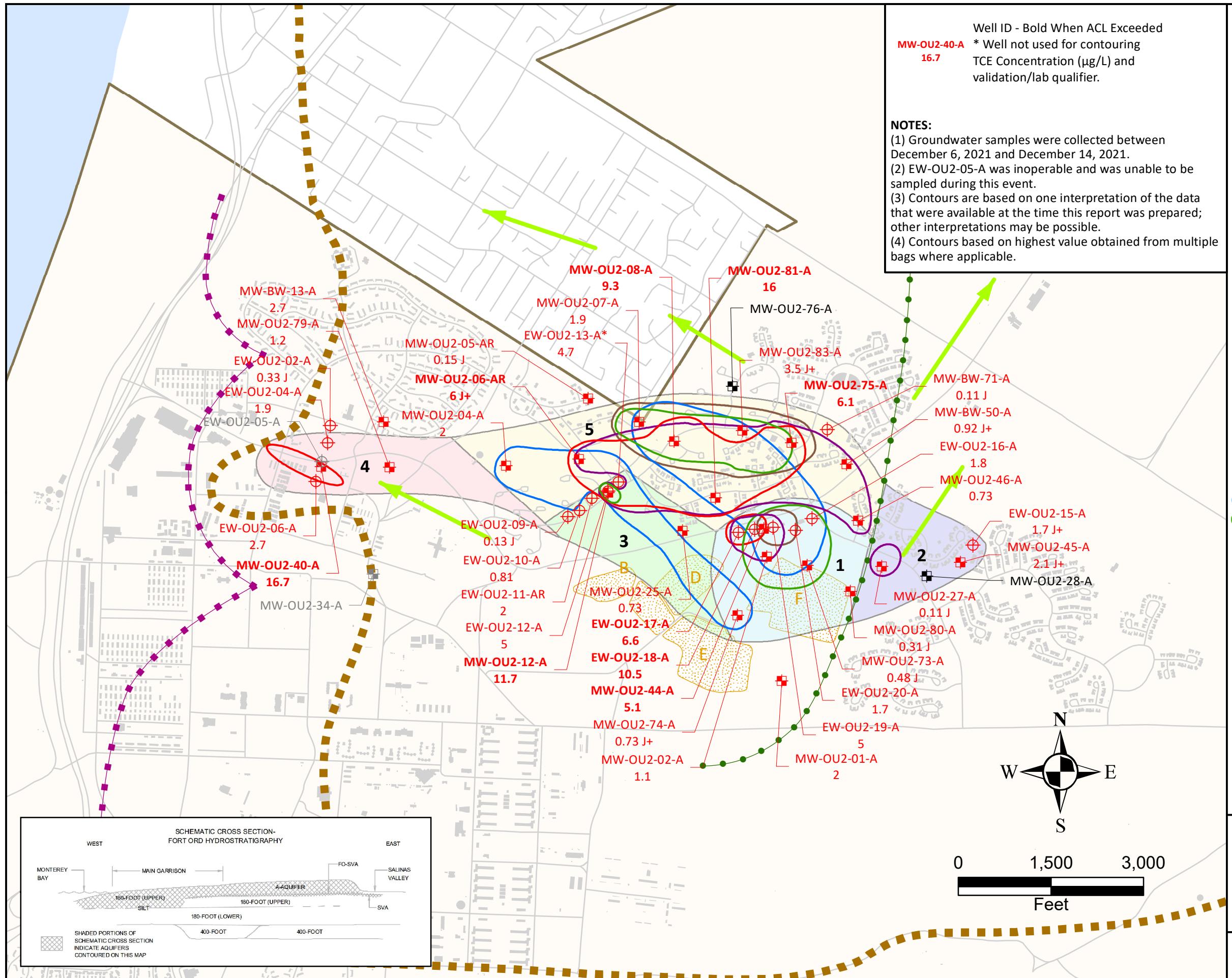
<sup>2</sup> Extraction wells not listed have met the QAPP decision rules to no longer operate.

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

Results in gray are ND

Results in brackets from a second deeper passive diffusion bag

\* Preliminary data

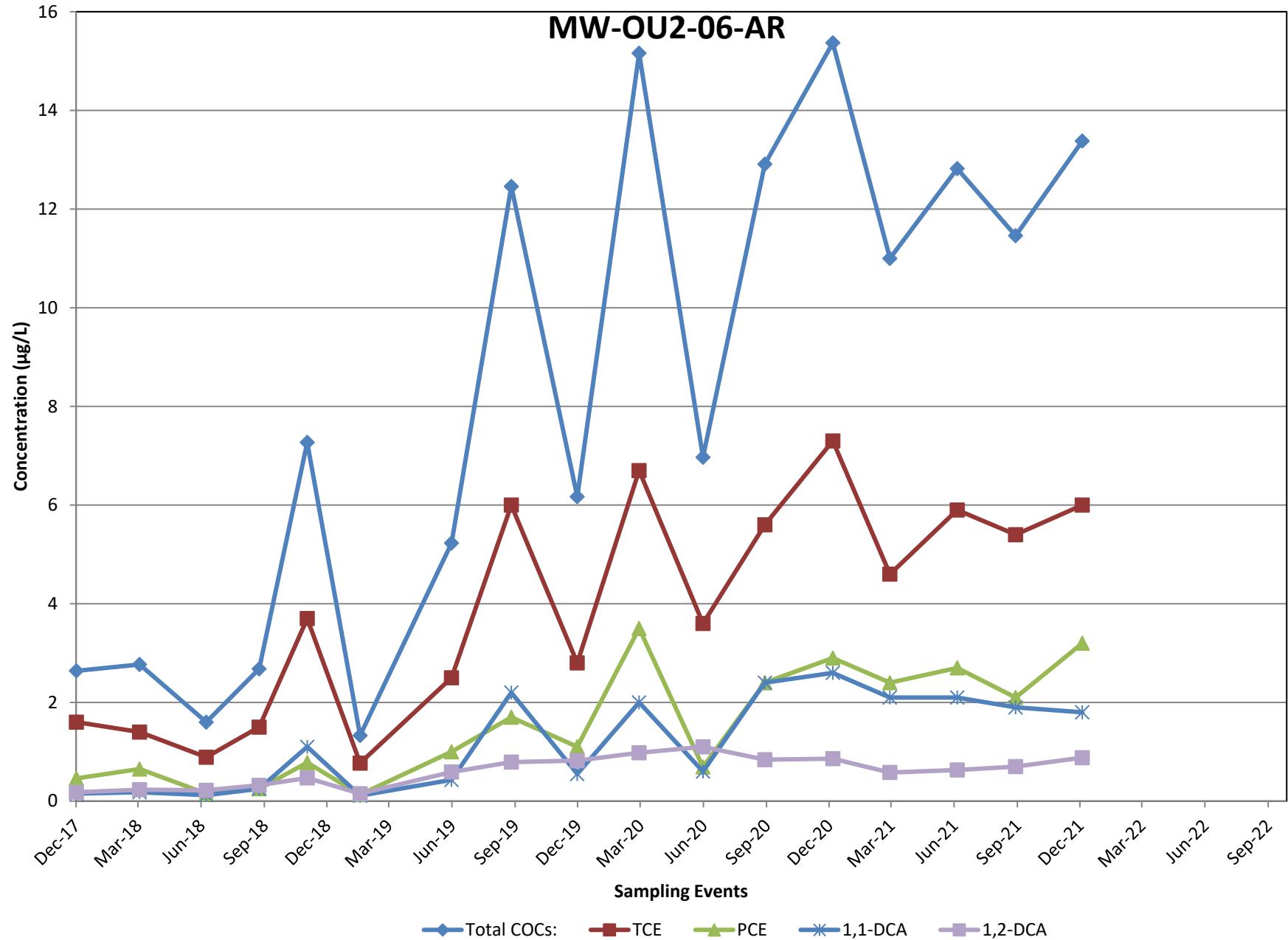


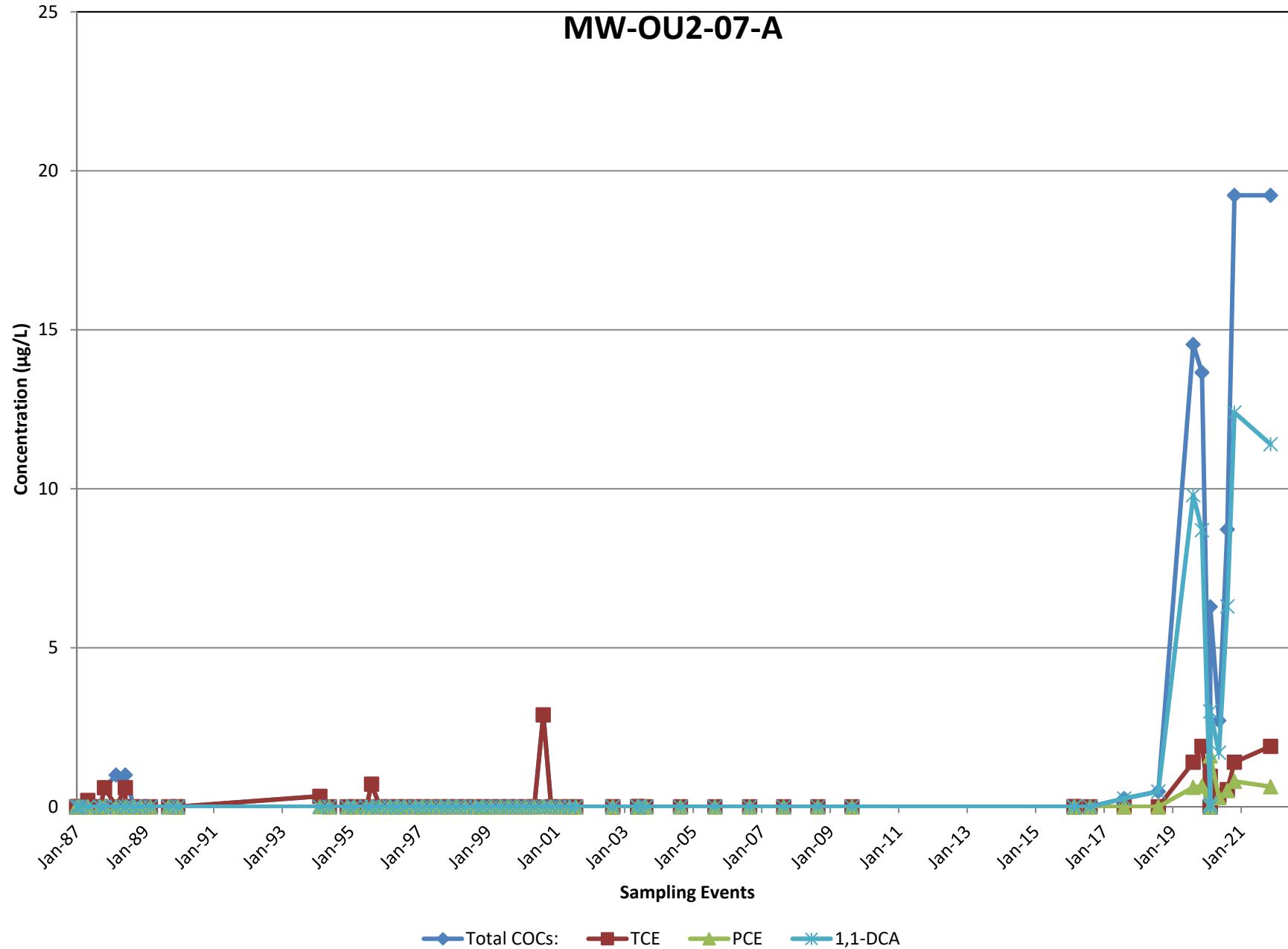
## EXPLANATION

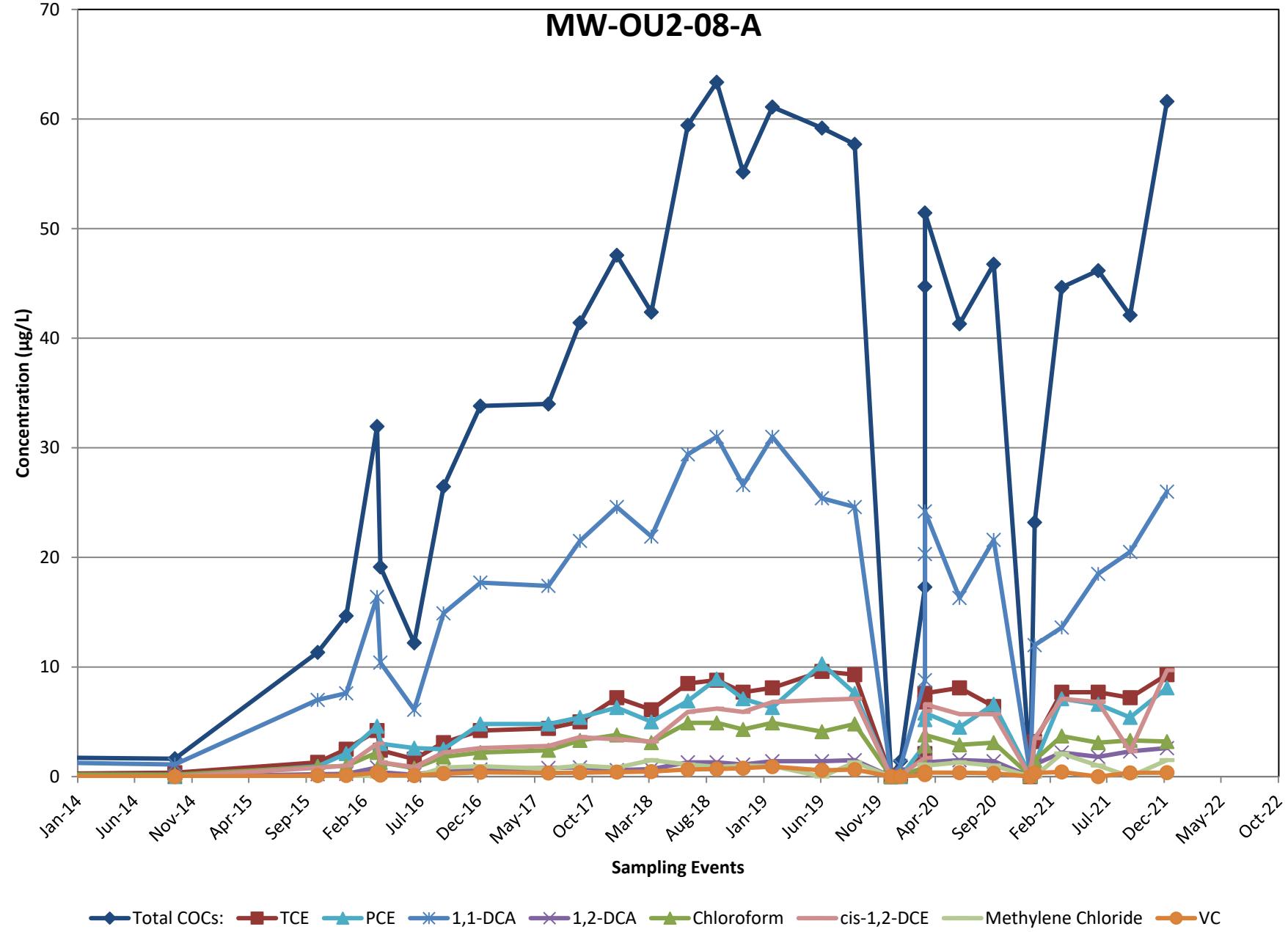
- Roads
- Approximate edge of the Fort Ord-Salinas Valley Aquitard (FO-SVA)
- General groundwater flow direction
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Former Fort Ord boundary
- Well Type and COC Detection**
- Extraction well with trichloroethene (TCE) detection
- Extraction well not
- Monitoring well with TCE detection
- Monitoring well not sampled
- Monitoring well non-detect (ND) for TCE and no COC ACL exceedance
- Chemical of concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in  $\mu\text{g/L}$ . Contour line is dashed when inferred.**
- 5 Trichloroethene (TCE) plume extent
- 3 Tetrachloroethene (PCE) plume extent
- 5 1,1-Dichloroethane (1,1-DCA) plume extent
- 0.5 1,2-Dichloroethane (1,2-DCA) plume extent
- 0.1 Vinyl Chloride (VC) plume extent
- Groundwater Aquifer Divide**
- Approximate location of the Upper 180-Foot Aquifer groundwater divide
- Approximate location of the A-Aquifer groundwater divide
- OU2 A-Aquifer Hydraulic Zone**
- 1
- 2
- 3
- 4
- 5

**TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES**  
**A-AQUIFER**  
**FOURTH QUARTER 2021**  
 Operable Unit 2, Fourth Quarter 2021 Groundwater Monitoring and Treatment System Report  
 Former Fort Ord, California

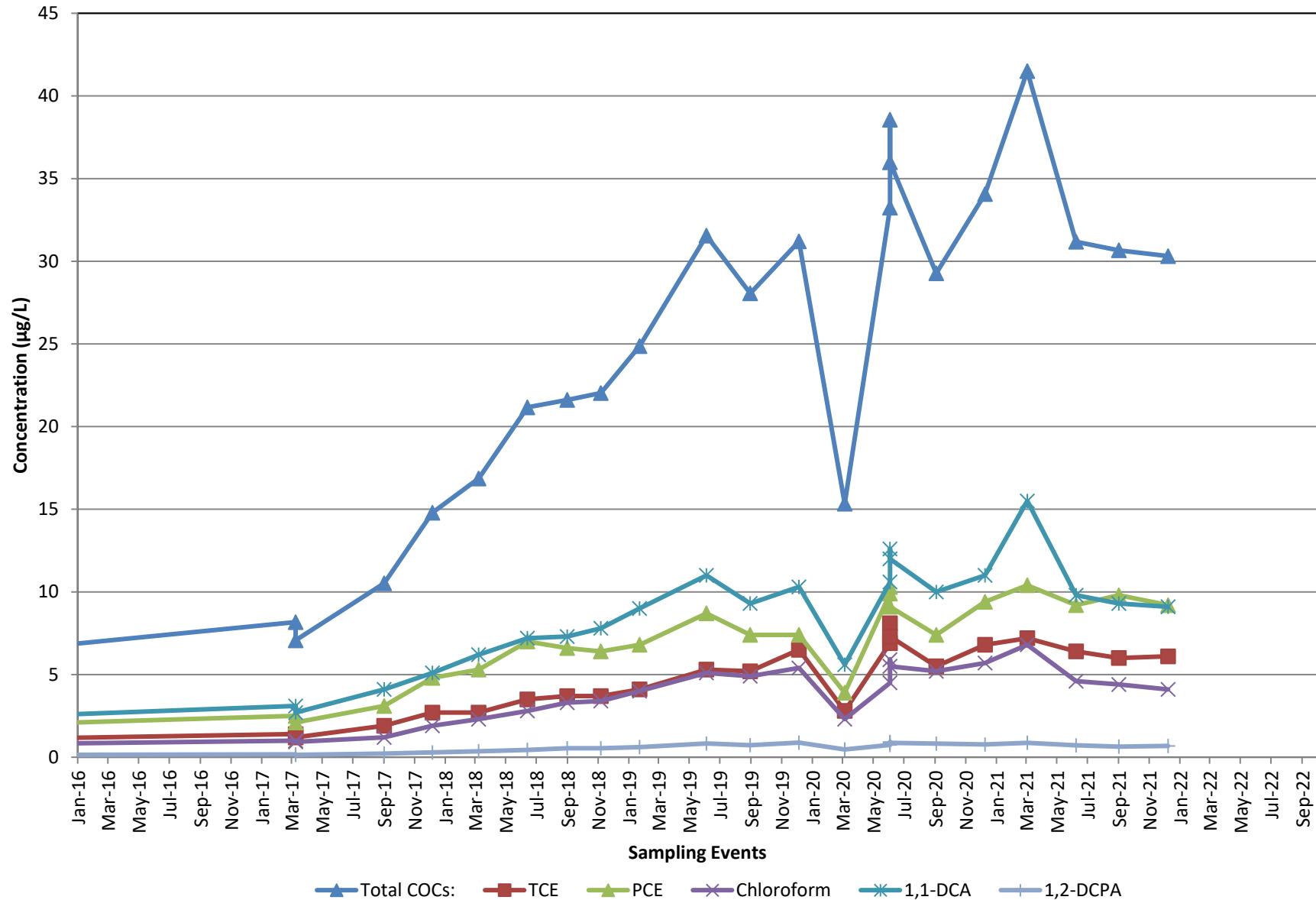
*Ahtna* Date: 2/7/2022 Figure: 9







## MW-OU2-75-A



**Table 5.** OU2 Upper 180-Foot Select Extraction/Monitoring Well Data

OU2 Hydraulic Zone <sup>1</sup>	Well Identification <sup>2</sup>	TCE Concentration (µg/L)			
		1Q 2021	2Q 2021	3Q 2021	4Q 2021
<b>ACL:</b>		5			
6	EW-OU2-03-180	6.7	7.1	7.7	8.1
6	MW-OU2-23-180	<b>14.9 J</b>	<b>13.3 J-</b>	<b>12.4</b>	<b>13.5 J+</b>
6	MW-OU2-50-180	<b>9.8 J</b>	<b>8.9 J-</b>	<b>11</b>	<b>15.9 J+</b>
6	MW-OU2-51-180	1.4 J	0.69	0.62	0.72 J+
7	EW-OU2-05-180	2.2 J+	2.4	2.7 J+	2.0
7	EW-OU2-06-180	3.9 J+	3.6	4.2	3.3
7	EW-OU2-10-180	NS	<b>8.2</b>	<b>8.9</b>	<b>6.8</b>
7	EW-OU2-11-180	3.9 J	4.0 J+	4.8	3.8
7	EW-OU2-12-180	NS	<b>7.5</b>	<b>7.9</b>	<b>7.0</b>
7	MW-OU2-81-180	3.9 J+	3.6 J+	3.3	4.5
7	MW-OU2-44-180	<b>9.1 J</b>	<b>14.5 J+</b>	<b>15.1</b>	<b>12.4</b>
7	MW-OU2-56-180	<b>5.8 J+</b>	5.0	<b>6.3</b>	<b>7.0 J+</b>
8	EW-OU2-08-180	1.3	1.2	2.7	2.6
8	MW-OU2-28-180	4.5 J+	4.4	<b>6.0</b>	<b>5.2 J+</b>
8	MW-OU2-62-180	4.7 J+	4.5	1.8	1.9
9	EW-OU2-01-180	4.2	3.9	<b>7.3</b>	<b>9.7</b>
9	EW-OU2-02-180R	4.8	5.0	<b>5.7</b>	4.9
9	MW-OU2-06-180R2	0.65 J+	0.67	0.89	1.2
9	MW-OU2-24-180	<b>8.9 J+</b>	<b>10.9</b>	<b>11.1</b>	<b>9.5</b>
9	MW-OU2-43-180	1.5 J+	2.4	2.5	2.4 J+
N/A	MW-OU2-84-180	ND (0.25)	ND (0.25)	NS	ND (0.25)

**Notes:**

ACL: Aquifer Cleanup Level

COC: chemical of concern

TCE: trichloroethene

µg/L: micrograms per liter

NS: not sampled

ND: The analyte was not detected above the detection limit.

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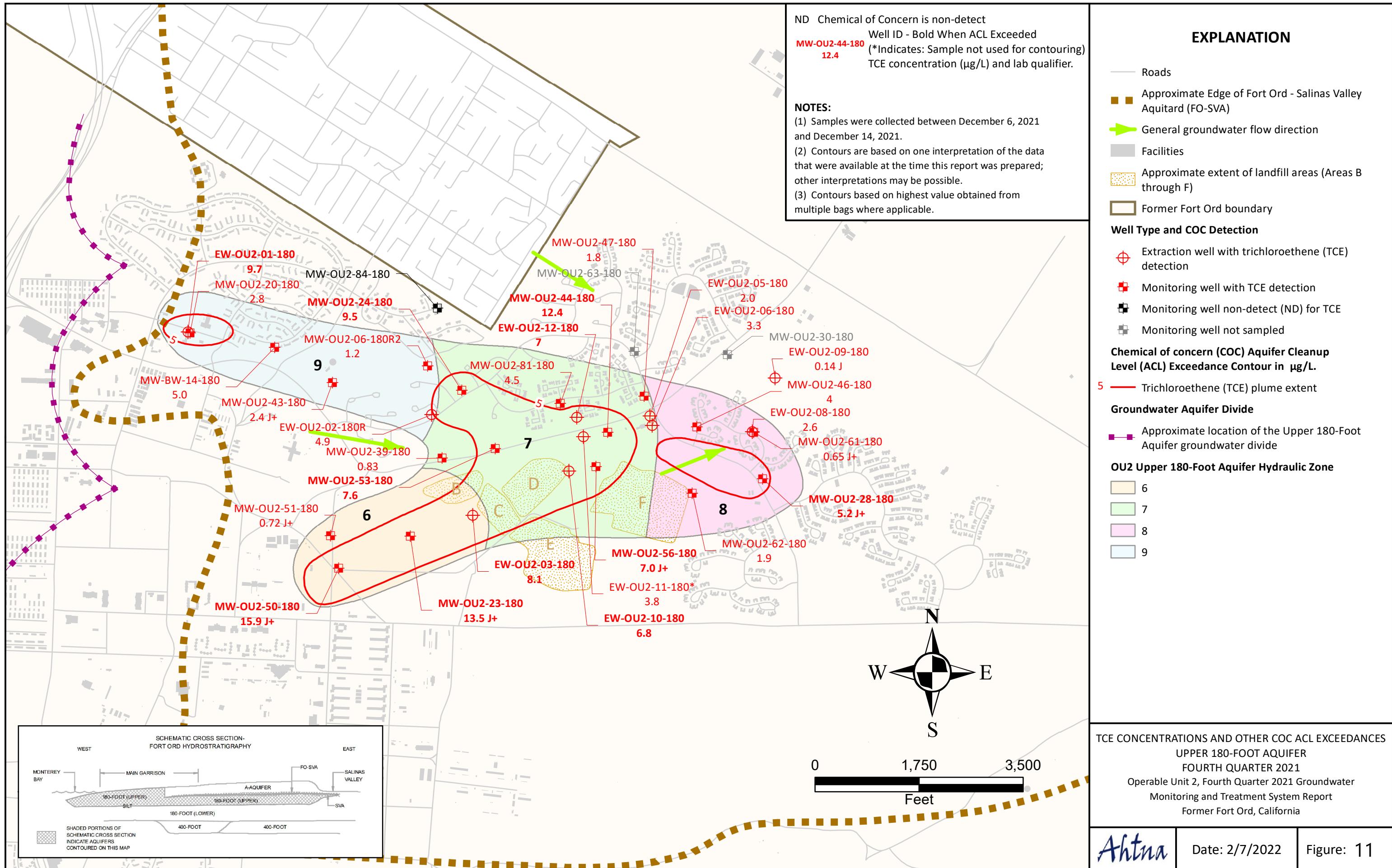
<sup>2</sup> Extraction wells not listed have met the QAPP decision rules to no longer operate.

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Results in gray are ND

Results in brackets from a second deeper passive diffusion bag

\* Preliminary data



## MW-OU2-28-180

