

# Operable Unit 2 Data and Status

**Table 1:** October 2021 – OU2 GWTP Statistics

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
Oct 2021	42,773,602	958	100	2.1
Total since October 1995	8.729 billion			924

**Table 2:** Oct 2021 – OU2 Analytical Results at TS-OU2-INJ-01

COC	Discharge Limit (µg/L)	Analytical Results (µg/L)
		10/6/2021
1,1-dichloroethane (1,1-DCA)	5.0*	0.22 J
1,2-dichloroethane (1,2-DCA)	0.5	ND (0.25)
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*	0.16 J
Cis-1,2-dichloroethene (cis-1,2-DCE)	6.0*	ND (0.25)
Methylene Chloride	0.5	ND (0.25)
Tetrachloroethene (PCE)	0.5	ND (0.25)
Trichloroethene (TCE)	0.5	ND (0.25)
Vinyl chloride (VC)	0.1	ND (0.25)

**Notes:**

COC: chemical of concern

µg/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

**October and Future 2021 Key Events**

- Oct 12: Kore Systems performed SCADA server maintenance.
- Oct 27: EW-OU2-05-A offline due to a faulty circuit breaker.
- Nov: Coordinate with Sea Haven on adjustment/survey of MW-OU2-04-A, -05-AR, -07-A, -84-180, and -07-400.
- Dec 6-10: Fourth Quarter 2021 Groundwater Monitoring Program event.
- Dec 6: Failed pump replacement at EW-OU2-18-A, EW-OU2-19-A, and EW-OU2-20-A.



**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)									
		2Q 2021					3Q 2021				
		TCE	PCE	1,1-DCA	1,2-DCA	VC	TCE	PCE	1,1-DCA	1,2-DCA	VC
<b>ACL:</b>		<b>5.0</b>	<b>3.0</b>	<b>5.0</b>	<b>0.5</b>	<b>0.1</b>	<b>5.0</b>	<b>3.0</b>	<b>5.0</b>	<b>0.5</b>	<b>0.1</b>
1	EW-OU2-16-A	2.5 J+	2.2 J+	<b>5.3 J+</b>	<b>1.8 J+</b>	0.056 J	2.4	2.0	4.7	<b>1.6</b>	<b>0.47</b>
1	EW-OU2-17-A	5.0 J+	<b>6.1 J+</b>	0.58 J+	ND (0.25)	ND (0.05)	<b>8.2</b>	<b>5.5</b>	0.97	0.31 J	ND (0.05)
1	EW-OU2-18-A	<b>10.4 J+</b>	<b>5.7 J+</b>	<b>5.5 J+</b>	<b>0.87 J+</b>	ND (0.05)	NS	NS	NS	NS	NS
1	EW-OU2-19-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1	EW-OU2-20-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1	MW-OU2-02-A	0.12 J	0.42 J	4.5	<b>1.1</b>	<b>7.5</b>	1.1	<b>3.1</b>	3.3	<b>0.60</b>	<b>6.2</b>
1	MW-OU2-44-A	4.9	<b>4.4</b>	<b>9.1</b>	<b>2.3</b>	ND (0.05)	<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>
1	MW-OU2-73-A	0.37 J	1.3	3.8	<b>0.51</b>	<b>3.8</b>	0.42 J	1.4	3.6	0.49 J	<b>3.4</b>
2	EW-OU2-15-A	1.3	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	1.7	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
2	MW-OU2-27-A	0.10 J	<b>4.2</b>	0.33 J	ND (0.25)	ND (0.05)	0.11 J	<b>4.6</b>	0.35 J	ND (0.25)	ND (0.05)
3	EW-OU2-09-A	0.14 J	0.21 J	ND (0.25)	0.11 J	ND (0.05)	0.11 J	0.21 J	ND (0.25)	ND (0.25)	0.055 J
3	EW-OU2-10-A	0.95	0.64	0.31 J	0.39 J	ND (0.05)	1.0	0.75	0.30 J	0.48 J	0.063 J
3	EW-OU2-11-AR	2.3	1.1	3.0	0.30 J	ND (0.05)	2.6	1.4	2.8	0.42 J	ND (0.05)
3	EW-OU2-12-A	<b>6.2</b>	<b>3.6</b>	3.9	<b>1.4</b>	ND (0.05)	<b>6.7</b>	<b>3.8</b>	3.6	<b>1.8</b>	0.083 J
3	EW-OU2-13-A	<b>5.7</b>	2.0	1.2 J+	<b>3.4</b>	ND (0.05)	<b>5.5</b>	2.1	1.0	<b>3.2</b>	ND (0.05)
3	MW-OU2-12-A	0.93 J+	0.25	0.16 J	ND (0.25)	ND (0.05)	<b>12.6</b>	<b>6.9</b>	<b>15.6</b>	<b>1.8</b>	<b>0.14</b>
3	MW-OU2-25-A	0.86 J+	0.37 J	0.36 J	0.46 J	ND (0.05)	0.76	0.34 J	0.28 J	0.43 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 (µg/L)									
		2Q 2021					3Q 2021				
		TCE	PCE	1,1-DCA	1,2-DCA	VC	TCE	PCE	1,1-DCA	1,2-DCA	VC
	<b>ACL:</b>	<b>5.0</b>	<b>3.0</b>	<b>5.0</b>	<b>0.5</b>	<b>0.1</b>	<b>5.0</b>	<b>3.0</b>	<b>5.0</b>	<b>0.5</b>	<b>0.1</b>
4	EW-OU2-02-A	0.45 J	ND (0.25)	0.12 J	ND (0.25)	ND (0.05)	0.35 J	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
4	EW-OU2-04-A	1.3	ND (0.25)	0.25 J	ND (0.25)	ND (0.05)	1.7	ND (0.25)	0.57	ND (0.25)	ND (0.05)
4	EW-OU2-05-A	3.8	0.22 J	0.46 J	ND (0.25)	ND (0.05)	4.0	0.34 J	0.60	ND (0.25)	ND (0.05)
4	EW-OU2-06-A	3.8	0.32 J	0.23 J	ND (0.25)	ND (0.05)	3.2	0.40 J	0.22 J	0.10 J	ND (0.05)
4	MW-OU2-40-A	<b>7.0</b>	0.34 J	0.22 J	ND (0.25)	ND (0.05)	<b>10.1</b>	0.38 J	0.25 J	ND (0.25)	ND (0.05)
5	MW-OU2-04-A	2.2	0.68	0.72	<b>0.67</b>	ND (0.05)	2.1 J+	0.77 J+	0.68 J+	<b>0.61 J+</b>	ND (0.05)
5	MW-OU2-06AR	<b>5.9</b>	2.7	2.1	<b>0.63</b>	ND (0.05)	<b>5.4</b>	2.1	1.9	<b>0.70</b>	ND (0.05)
5	MW-OU2-07-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	MW-OU2-08-A	<b>7.7 J+</b>	<b>6.6 J+</b>	<b>18.5</b>	<b>1.8 J+</b>	ND (0.05)	<b>7.2</b>	<b>5.4</b>	<b>20.5</b>	<b>2.3</b>	<b>0.34</b>
5	MW-OU2-75-A	<b>6.4</b>	<b>9.2</b>	<b>9.2</b>	0.13 J	ND (0.05)	<b>6.0 J-</b>	<b>9.8 J-</b>	<b>9.3 J-</b>	0.11 J	0.090 J
5	MW-OU2-81-A	<b>15.7 J+</b>	<b>9.3 J+</b>	2.4 J+	<b>0.93 J+</b>	ND (0.05)	<b>19.4</b>	<b>9.0</b>	2.6	<b>0.84</b>	ND (0.05)
5	MW-OU2-83-A	2.3	2.3	<b>8.9</b>	0.40 J	ND (0.05)	2.7	2.6	<b>10.0</b>	0.47 J	<b>0.21</b>
5	MW-BW-50-A	0.73	<b>4.1</b>	0.75	ND (0.25)	ND (0.05)	0.70	<b>3.5</b>	0.75	ND (0.25)	ND (0.05)
N/A	MW-OU2-05AR	0.16 J	ND (0.25)	2.7	ND (0.25)	ND (0.05)	NS	NS	NS	NS	NS

**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.

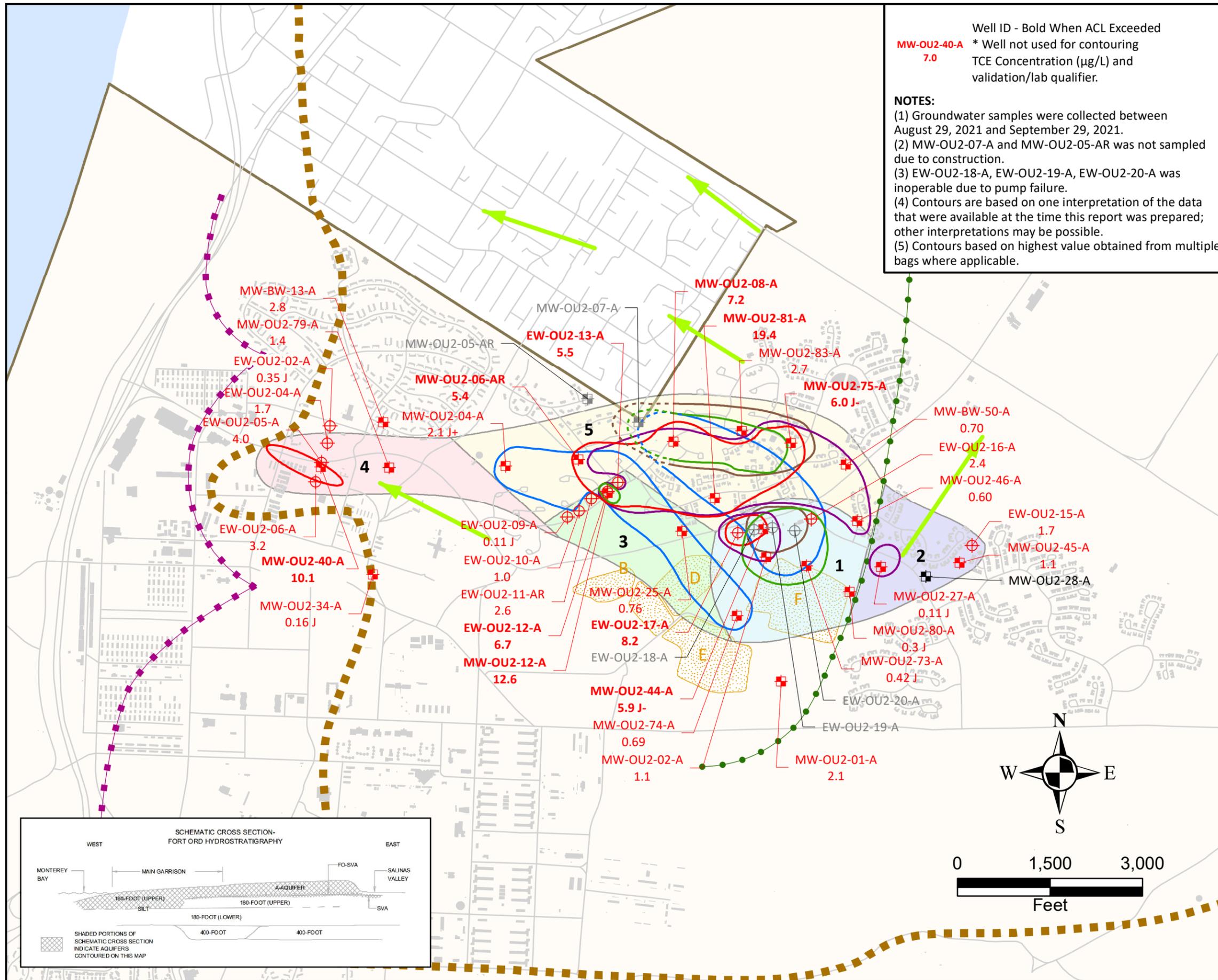
<sup>2</sup> Extraction wells not listed have met the QAPP decision rules to no longer operate.

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



### 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 sampled
- Monitoring well with TCE detection
- Monitoring well non-detect (ND) for TCE and no COC ACL exceedance
- Monitoring well not sampled

**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

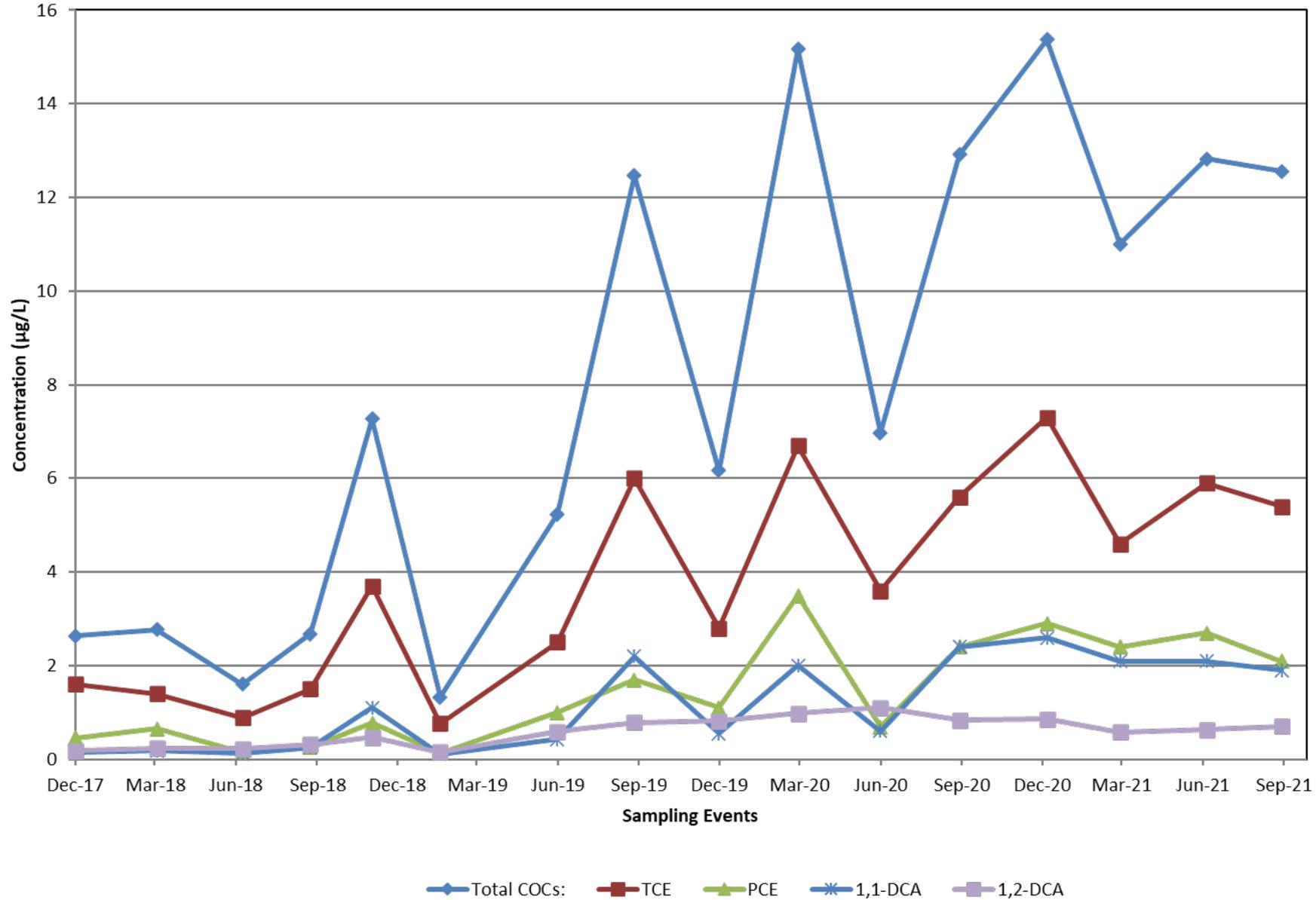
**OU2 A-Aquifer Hydraulic Zone**

- 1
- 2
- 3
- 4
- 5

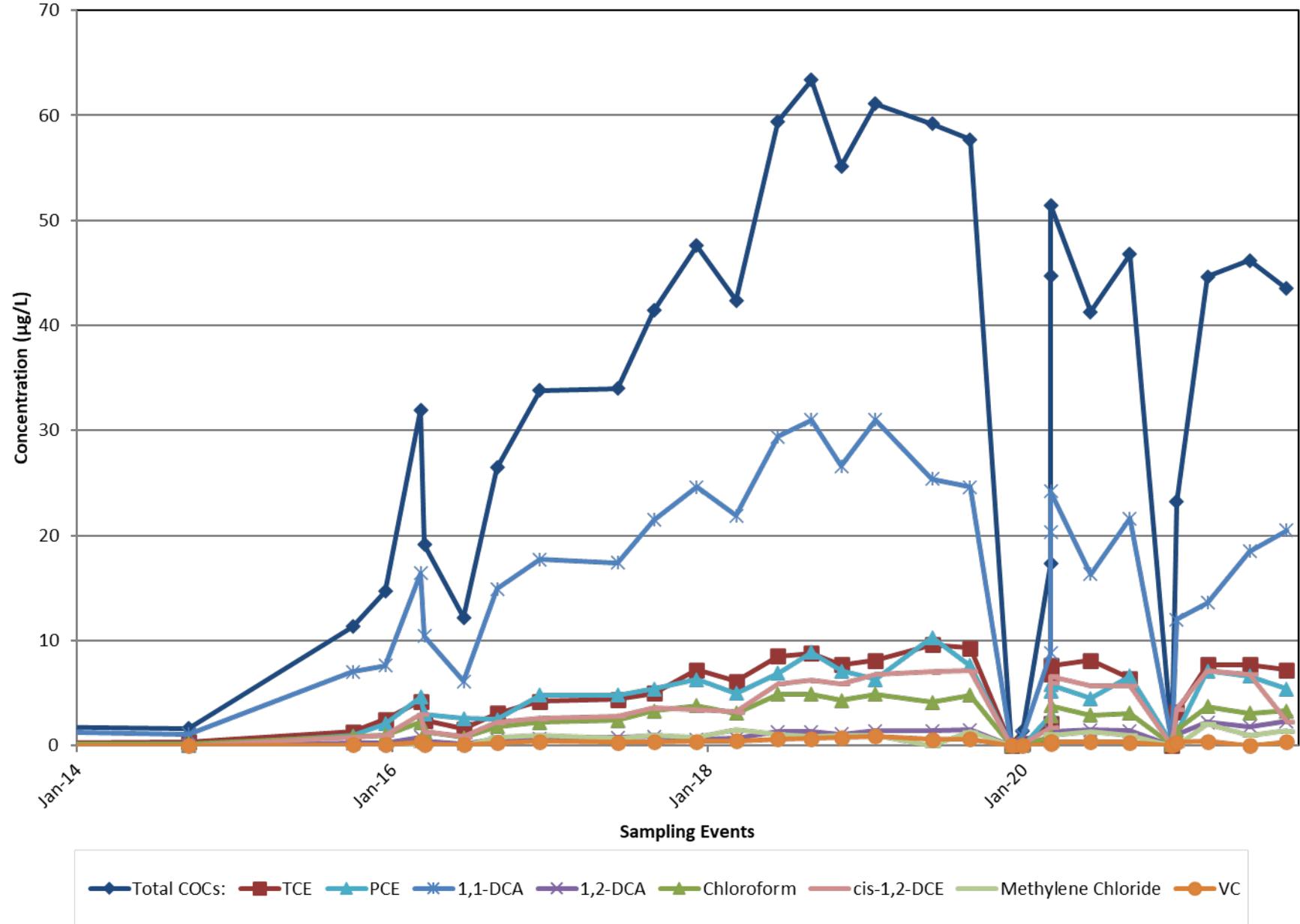
TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES  
 A-AQUIFER  
 THIRD QUARTER 2021  
 Operable Unit 2, Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2020 - Third Quarter 2021  
 Former Fort Ord, California

**Ahtna** Date: 11/1/2021 Figure: 34

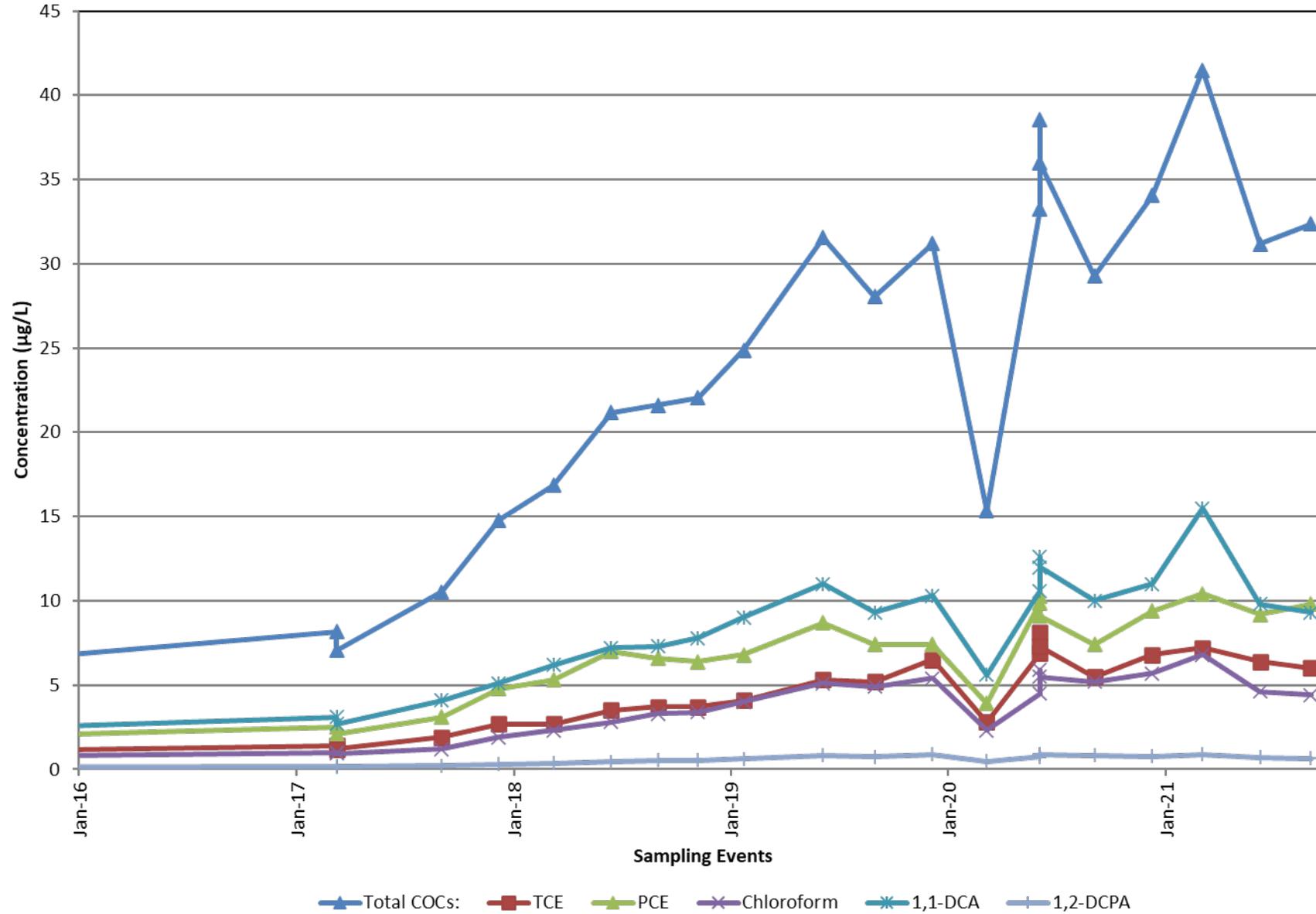
### MW-OU2-06-AR



### MW-OU2-08-A



### 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)			
		4Q 2020	1Q 2021	2Q 2021	3Q 2021
<b>ACL:</b>		<b>5.0</b>			
6	EW-OU2-03-180	<b>7.4</b>	<b>6.7</b>	<b>7.1</b>	<b>7.7</b>
6	MW-OU2-23-180	<b>16.0</b>	<b>14.9 J</b>	<b>13.3 J-</b>	<b>12.4</b>
6	MW-OU2-50-180	<b>13.0</b>	<b>9.8 J</b>	<b>8.9 J-</b>	<b>11.0</b>
6	MW-OU2-51-180	0.79	1.4 J	0.69	0.62
7	EW-OU2-05-180	2.4	2.2 J+	2.4	2.7 J+
7	EW-OU2-06-180	3.6	3.9 J+	3.6	4.2
7	EW-OU2-10-180	<b>7.1</b>	NS	<b>8.2</b>	<b>8.9</b>
7	EW-OU2-11-180	4.5	3.9 J	4.0 J+	4.8
7	EW-OU2-12-180	NS	NS	<b>7.5</b>	<b>7.9</b>
7	MW-OU2-81-180	4.9	3.9 J+	3.6 J+	3.3
7	MW-OU2-44-180	<b>12.0</b>	<b>9.1 J</b>	<b>14.5 J+</b>	<b>15.1</b>
7	MW-OU2-56-180	<b>8.1</b>	<b>5.8 J+</b>	5.0	<b>6.3</b>
8	EW-OU2-08-180	1.7	1.3	1.2	2.7
8	MW-OU2-28-180	<b>6.1</b>	4.5 J+	4.4	<b>6.0</b>
8	MW-OU2-62-180	<b>5.3</b>	4.7 J+	4.5	1.8
9	EW-OU2-01-180	3.8	4.2	3.9	<b>7.3</b>
9	EW-OU2-02-180R	<b>6.5</b>	4.8	5.0	<b>5.7</b>
9	MW-OU2-06-180R2	0.97	0.65 J+	0.67	0.89
9	MW-OU2-24-180	<b>9.3</b>	<b>8.9 J+</b>	<b>10.9</b>	<b>11.1</b>
9	MW-OU2-43-180	2.4	1.5 J+	2.4	2.5
N/A	MW-OU2-84-180	NS	ND (0.25)	ND (0.25)	NS

**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.

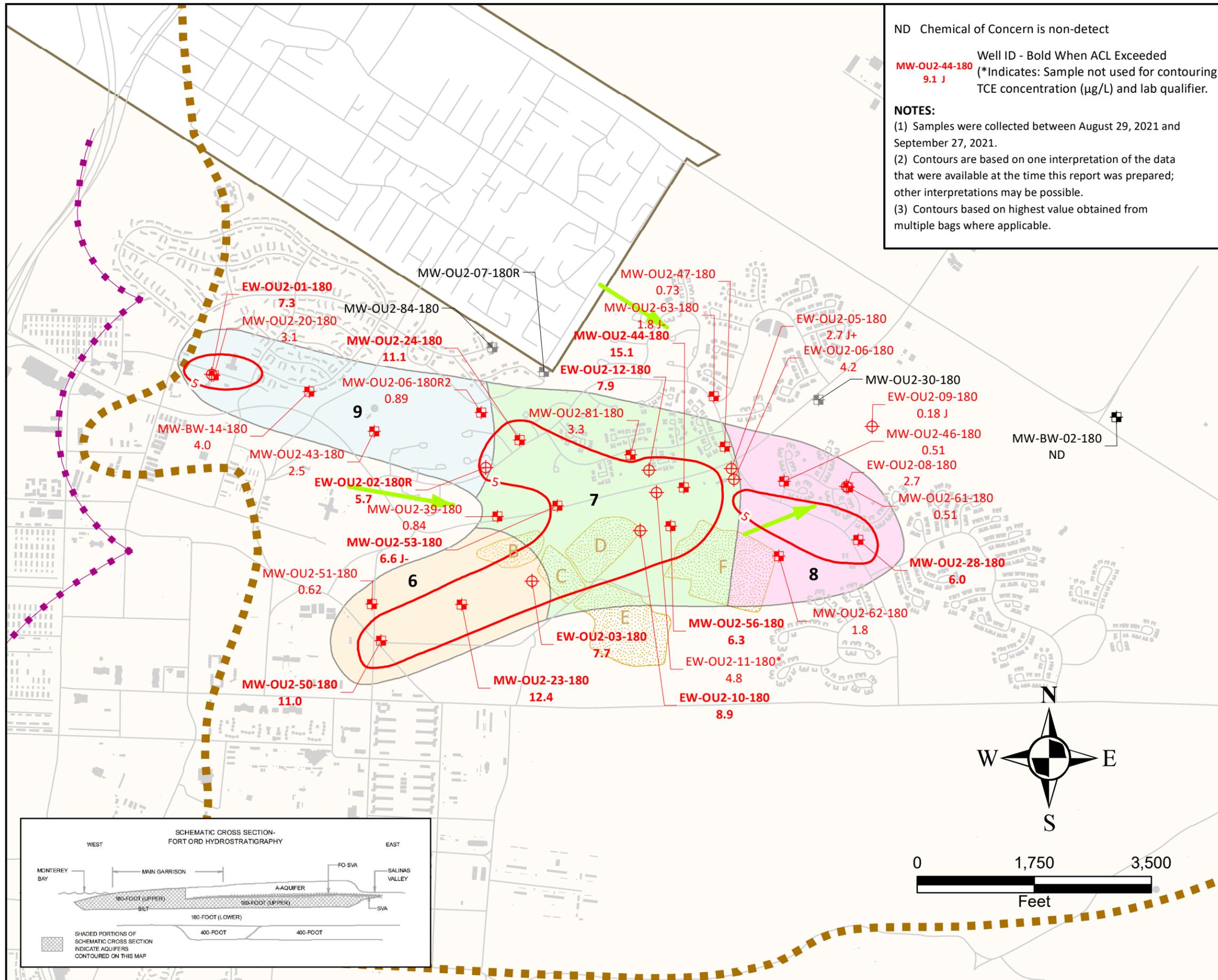
<sup>2</sup> Extraction wells not listed have met the QAPP decision rules to no longer operate.

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



ND Chemical of Concern is non-detect

Well ID - Bold When ACL Exceeded  
**MW-OU2-44-180** 9.1 J (\*Indicates: Sample not used for contouring)  
 TCE concentration (µg/L) and lab qualifier.

**NOTES:**  
 (1) Samples were collected between August 29, 2021 and September 27, 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 based on highest value obtained from multiple bags where applicable.

### EXPLANATION

- Roads
- Approximate Edge of 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
- Monitoring well with TCE detection
- Monitoring well non-detect (ND) for TCE
- Monitoring well not sampled

**Chemical of concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.**

5 Trichloroethene (TCE) plume extent

**Groundwater Aquifer Divide**

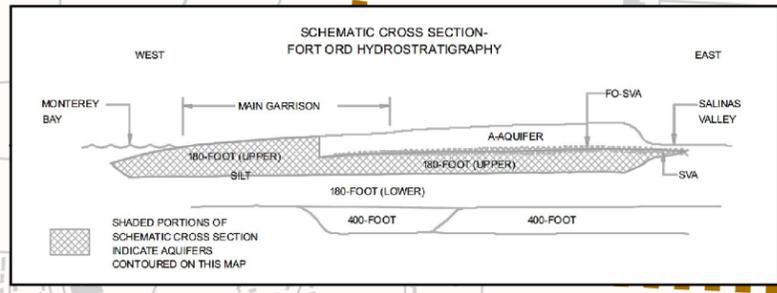
- Approximate location of the Upper 180-Foot Aquifer groundwater divide

**OU2 Upper 180-Foot Aquifer Hydraulic Zone**

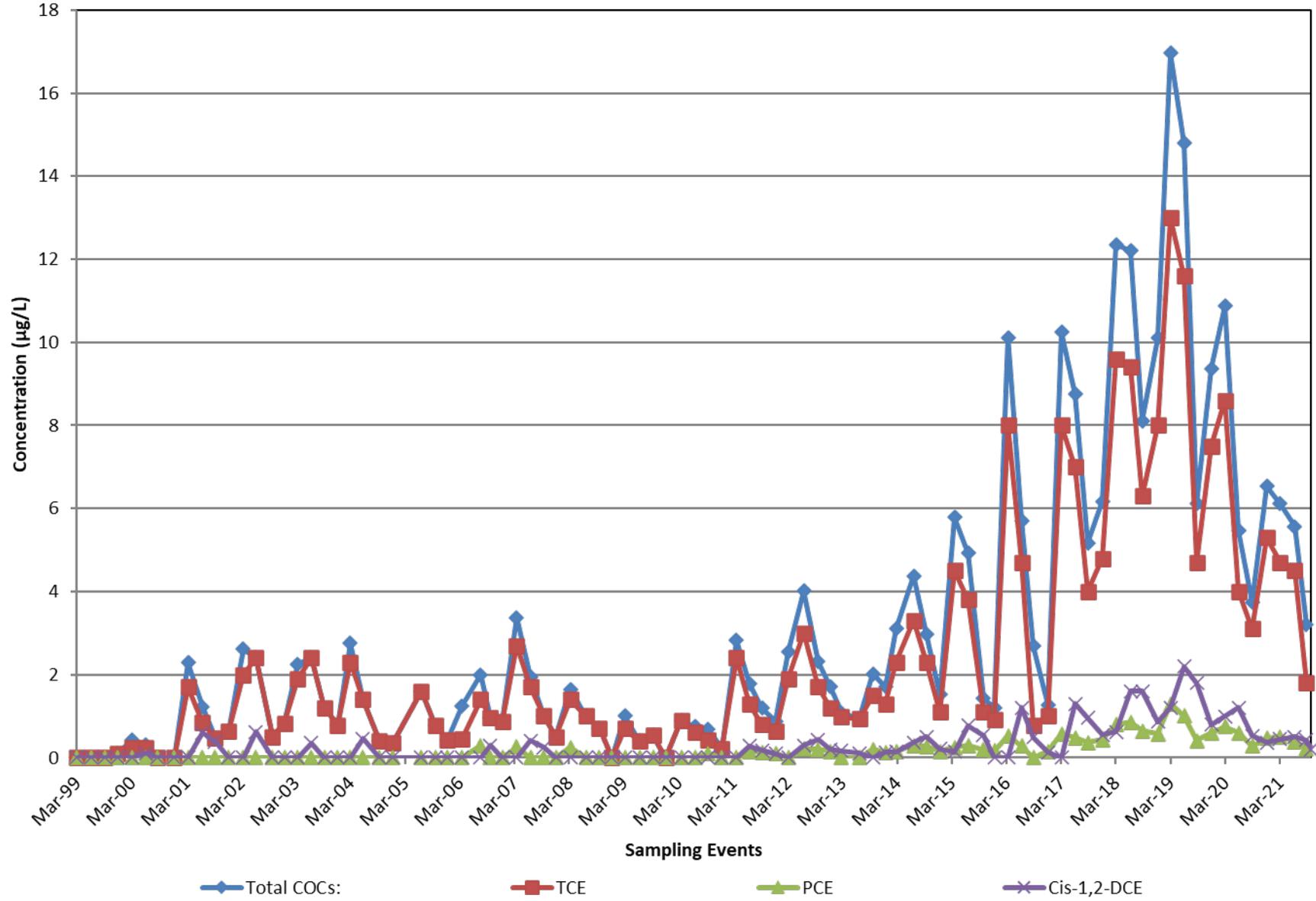
- 6
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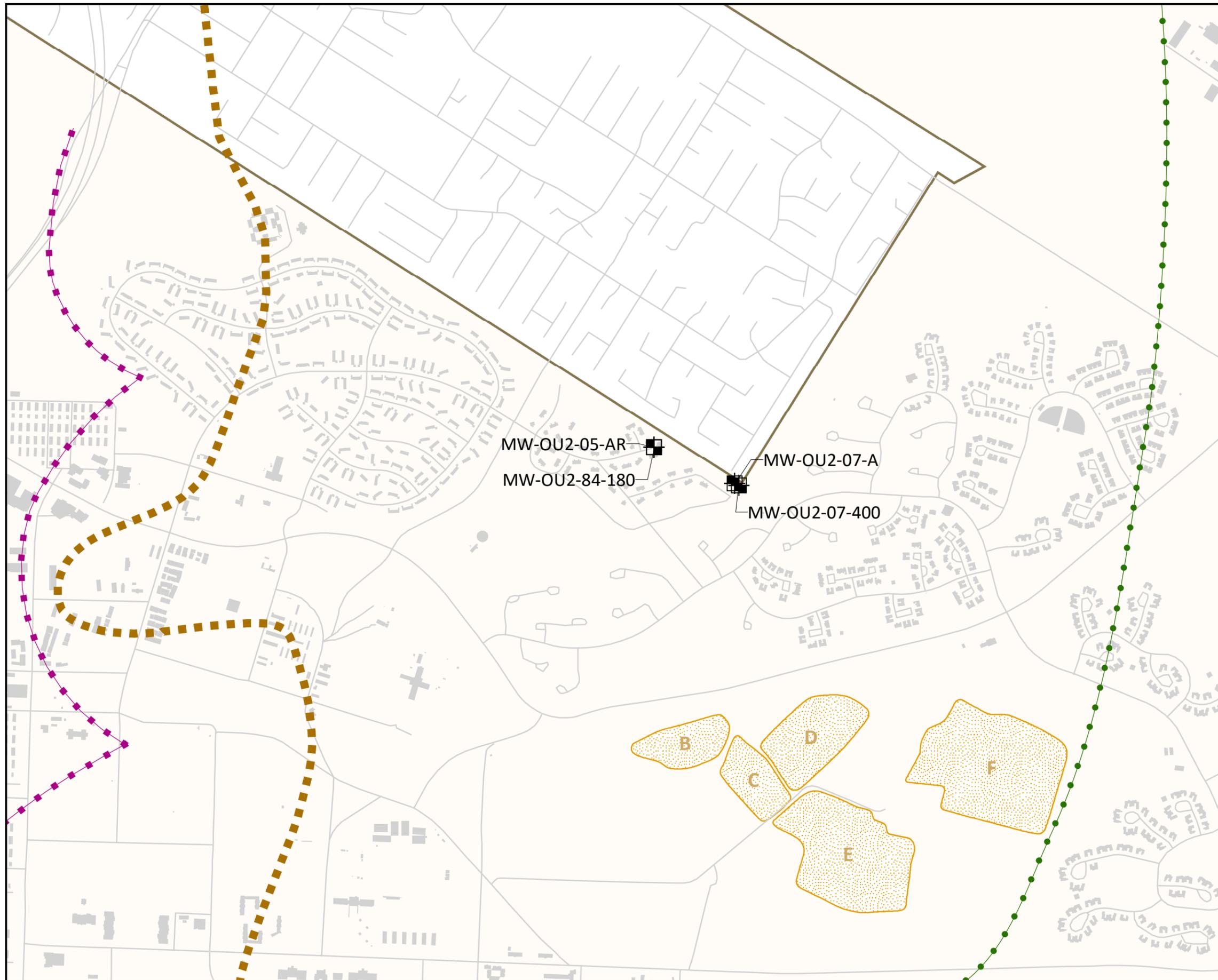
TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES  
 UPPER 180-FOOT AQUIFER  
 THIRD QUARTER 2021  
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2020 through Third Quarter 2021  
 Former Fort Ord, California

*Ahtna* Date: 11/1/2021 Figure: 44



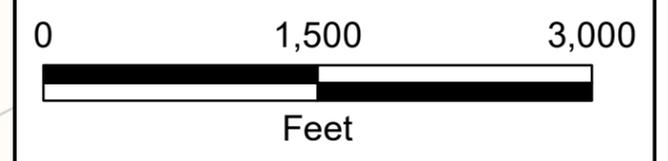
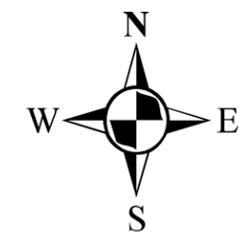
# MW-OU2-62-180





**EXPLANATION**

- Approximate edge of the Fort Ord - Salinas Valley Aquitard (FO-SVA)
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- ▭ Former Fort Ord boundary
- Well**
- Monitoring
- Groundwater Aquifer**
- Approximate location of the A-Aquifer groundwater divide
- Approximate location of the Upper 180-Foot Aquifer groundwater divide



**LOCATION OF MW-OU2-07 WELL CLUSTER**  
Base Closure Team Meeting  
Former Fort Ord, California

**Table H1. QAPP Sampling Frequency Recommended Changes**

Well ID	Current Schedule	Proposed Schedule	Trends Increasing?	Last time above TCE ACL	Last time Sampled	Boundary Well for Plume	2021-3Q TCE Concentration (µg/L)	Figure Number	Graph Number
<b>A-Aquifer</b>									
EW-OU2-07-A	D	R	N/A	1998-3Q	2013-3Q	N/A	N/A	51	N/A
MW-OU2-26-A	R	X	N/A	Never	2002-3Q	N/A	N/A	51	N/A
MW-OU2-34-A	A	D	No	1998-2Q	2021-3Q	No	0.16 J	51	H1
MW-OU2-37-A	R	X	N/A	1996-4Q	2002-3Q	N/A	N/A	51	N/A
<b>Upper 180-Foot Aquifer</b>									
MW-BW-02-180	A	D	No	2007-1Q	2021-3Q	No	ND (0.25)	52	H2
MW-OU2-20-180X	D	R	N/A	Never	Never	N/A	N/A	52	N/A
MW-OU2-37-180	R	X	N/A	Never	2002-3Q	N/A	N/A	52	N/A

**Note:**

Results in gray are not detected concentrations (result reported as <limit of detection [LOD]).

**Acronyms and Abbreviations:**

µg/L: micrograms per liter

A: annual sampling

ACL: aquifer cleanup level

D: depth-to-water only

J: Laboratory qualifier, estimated result between the detection limit (DL) and the limit of quantification (LOQ) with a possible high (+) or low (-) bias.

N/A: not applicable

ND: not detected above the LOD

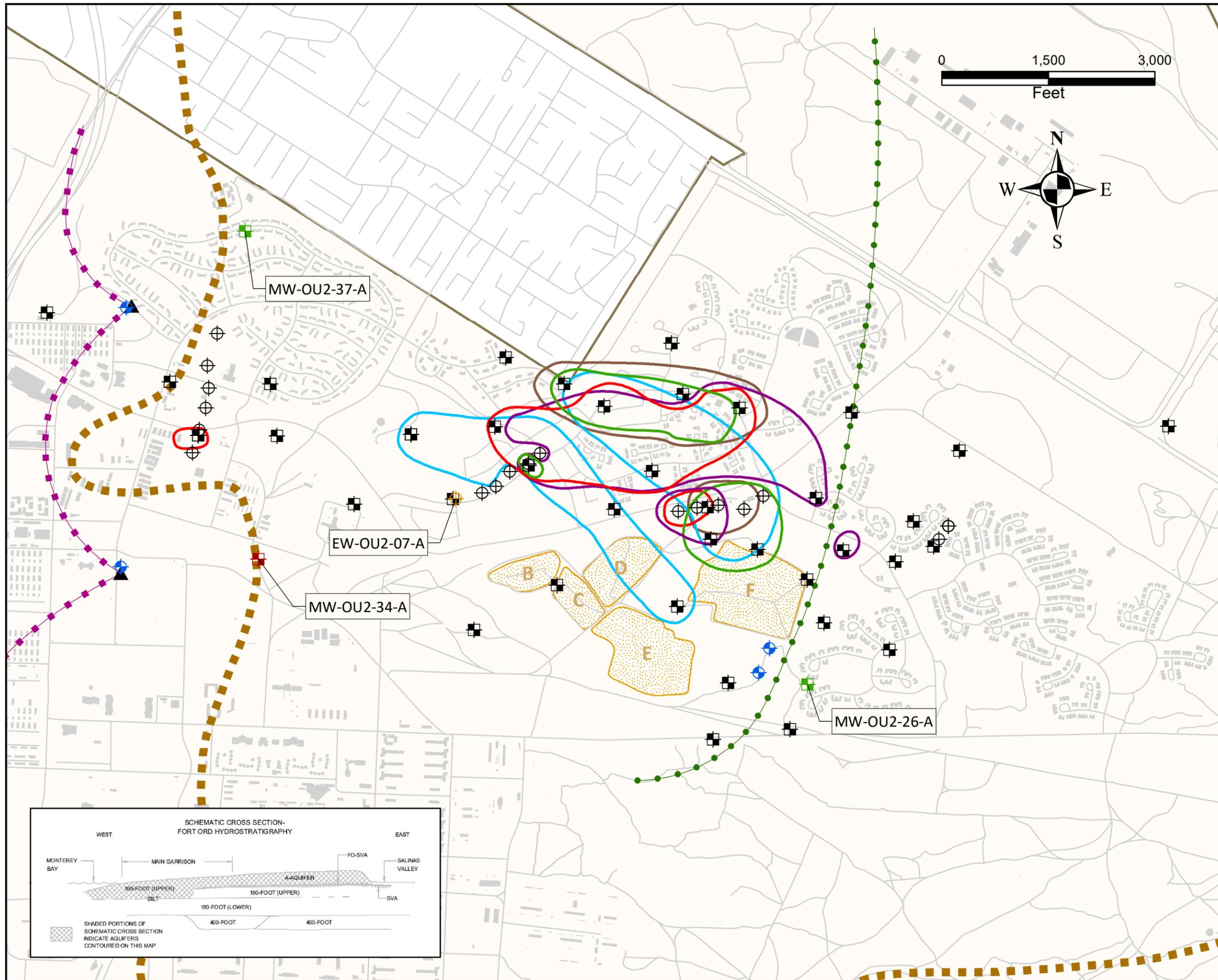
Nearby: other adjacent well

Q: quarterly sampling

R: remove from QAPP, not sampled and depth to water not needed

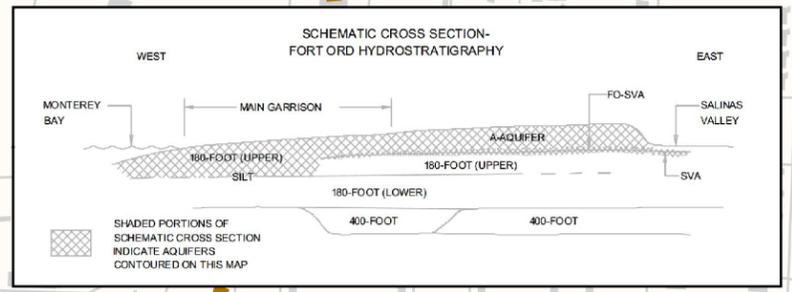
TCE: trichloroethene

X: recommend decommission

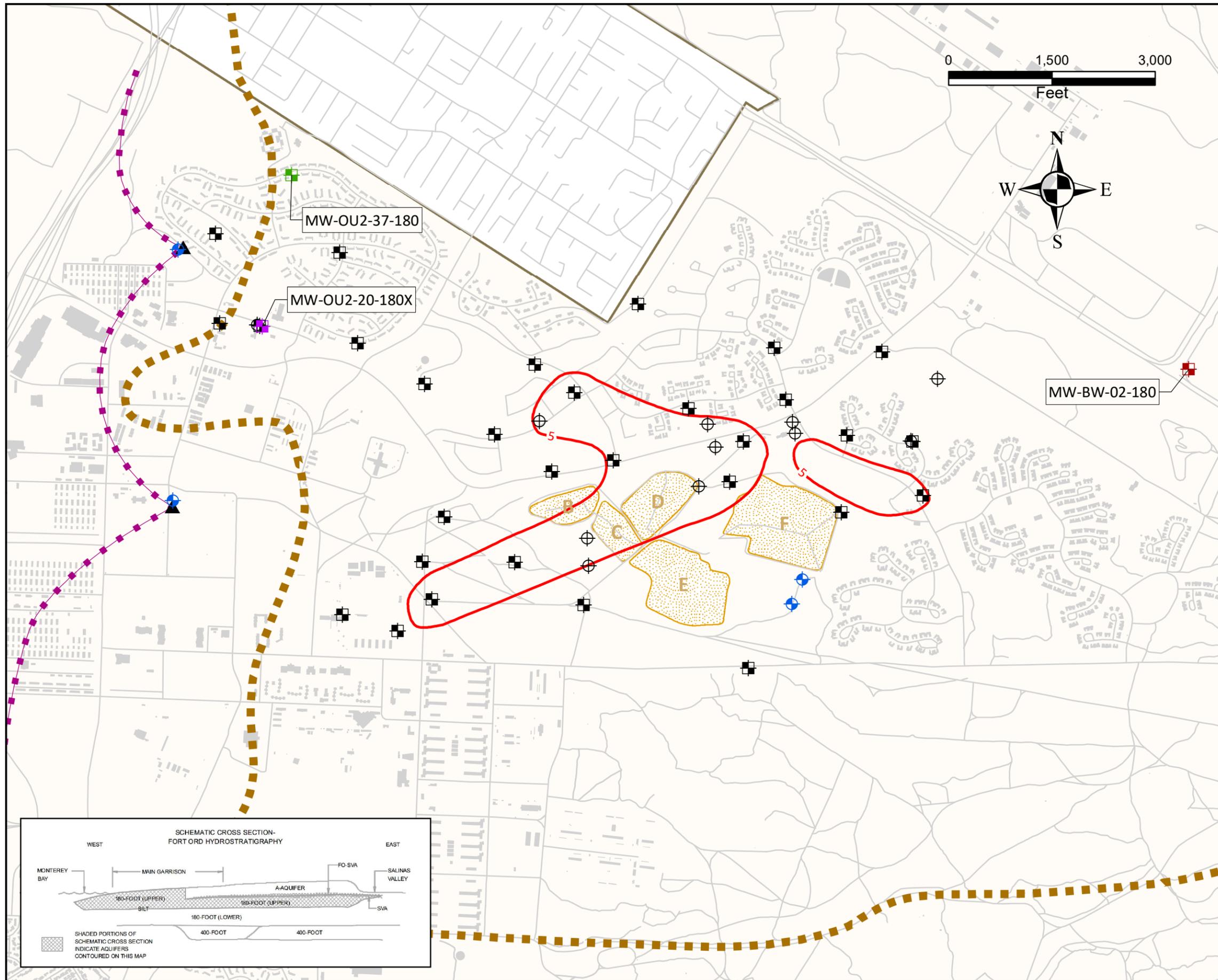


**EXPLANATION**

- Approximate edge of Fort Ord - Salinas Valley Aquitard (FO-SVA)
- Roads
- Facilities
- Approximate extent of landfill areas (Areas B through F)
- Former Fort Ord boundary
- Groundwater Divide**
- Approximate location of the Upper 180-Foot groundwater divide
- Approximate location of the A-Aquifer groundwater divide
- Well Type and Recommendation**
- Extraction well: recommend removal from QAPP DTW measurements not needed
- Monitoring well: recommend removal from monitoring program
- Monitoring well: recommend decommissioning
- Extraction well: recommend no change
- Monitoring well: recommend no change
- Injection well
- Infiltration well
- 3Q2021 Chemical of concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.**
- 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



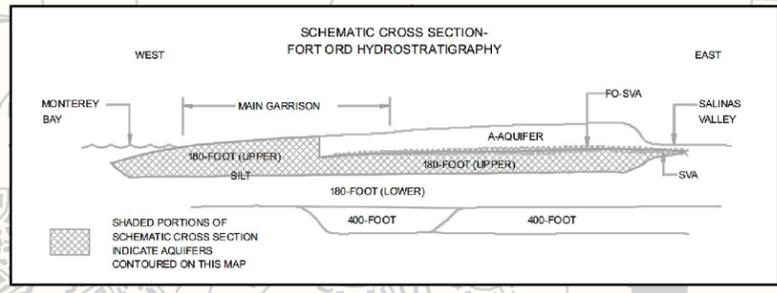
**RECOMMENDED A-AQUIFER MONITORING WELL CHANGES**  
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2020 - Third Quarter 2021  
 Former Fort Ord, California

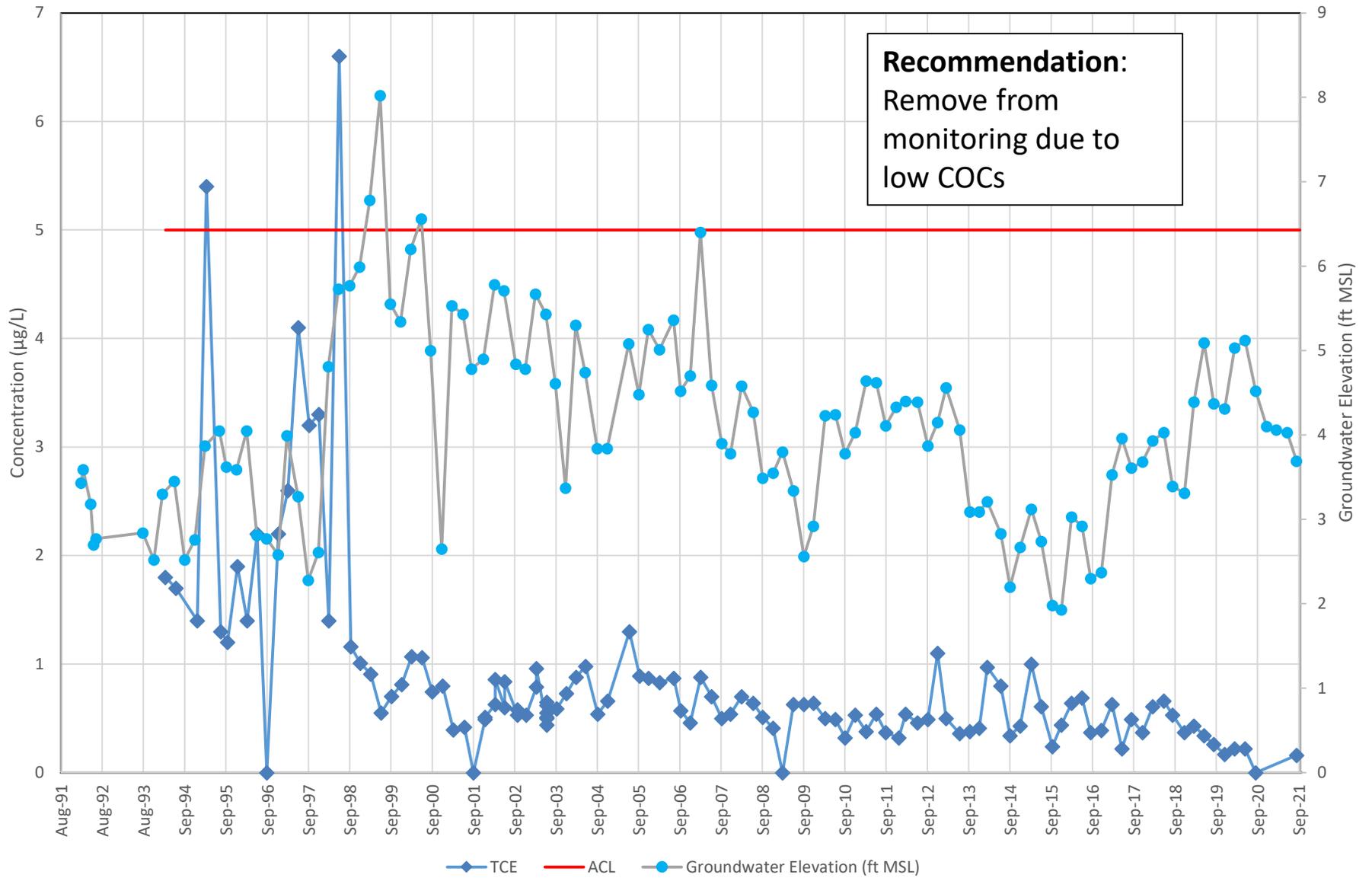


**EXPLANATION**

- Approximate location of the Upper 180-Foot Aquifer groundwater divide
  - Approximate edge of Fort Ord - Salinas Valley Aquitard (FO-SVA)
  - Roads
  - Facilities
  - Approximate extent of landfill areas (Areas B through F)
  - Former Fort Ord boundary
- Well Type and Recommendation**
- Monitoring well: recommend removal from monitoring program
  - Monitoring well: recommend removal from QAPP DTW measurements not needed
  - Monitoring well: recommend decommissioning
  - Extraction well: recommend no change
  - Monitoring well: recommend no change
  - Injection well
  - Infiltration well
- 3Q2021 Chemical of concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.**
- 5 Trichloroethene (TCE)

**RECOMMENDED UPPER 180-FOOT AQUIFER MONITORING WELL CHANGES**  
 Operable Unit 2 Remedy Monitoring and Operations and Maintenance, Fourth Quarter 2020 - Third Quarter 2021  
 Former Fort Ord, California



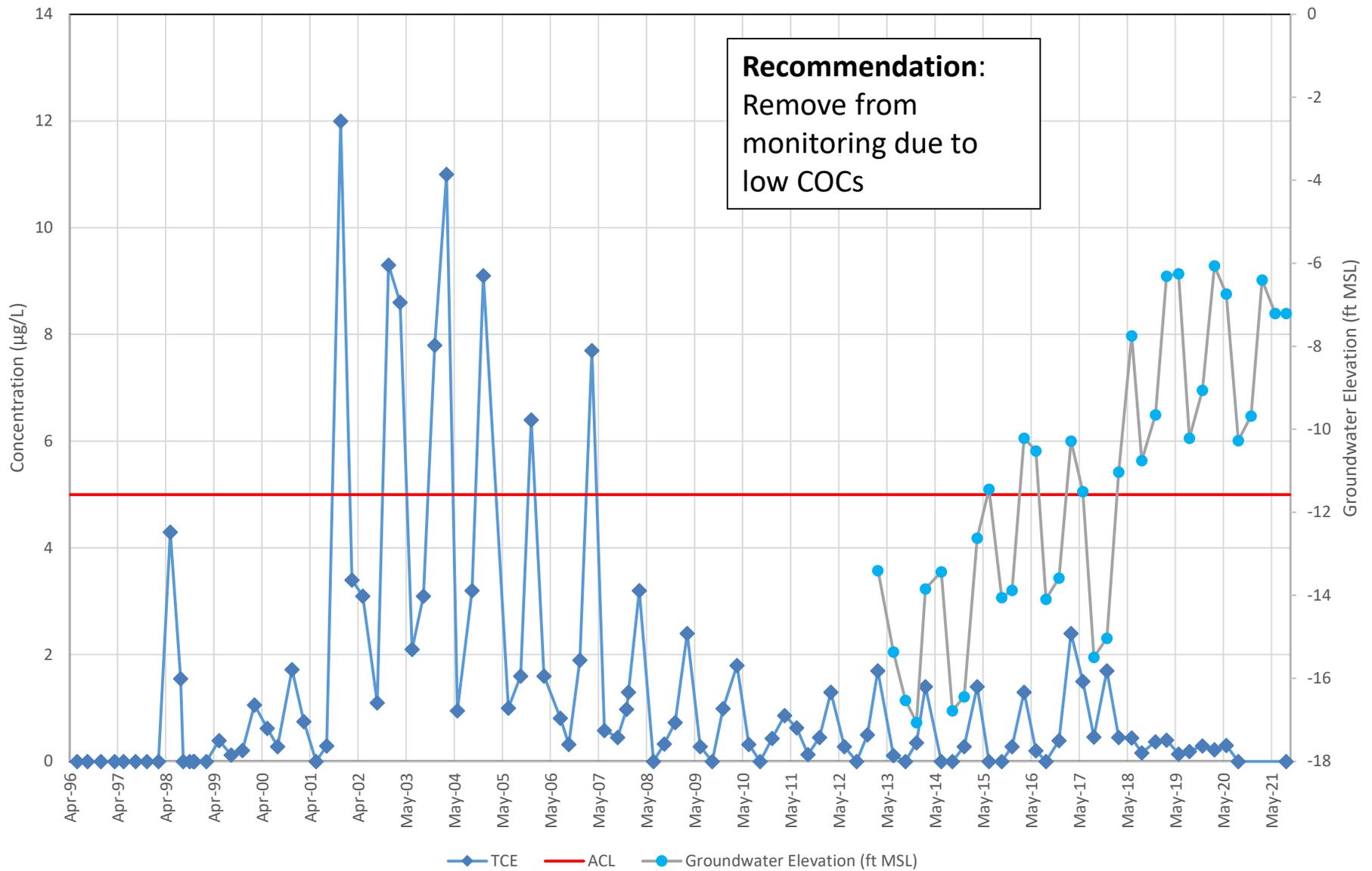


**MW-OU2-34-A**

Operable Unit 2 Remedy Monitoring and Operations and Maintenance  
 Fourth Quarter 2020 through Third Quarter 2021  
 Former Fort Ord, California

Graph:

**H1**



**MW-BW-02-180**

Operable Unit 2 Remedy Monitoring and Operations and Maintenance  
 Fourth Quarter 2020 through Third Quarter 2021  
 Former Fort Ord, California

Graph:

**H2**