

Table 1: Apr-June 2021 – OU2 GWTP Statistics

HTW BCT Meeting, July 14, 2021

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
Apr 2021	35,484,968	821	100	2.3
May 2021	37,681,920	844	100	2.3
June 2021	37,778,530	875	100	1.8
Total since October 1995	8.567 billion			917

Table 2: Apr-June 2021 – OU2 Analytical Results at TS-OU2-INJ-01

COC	Discharge Limit (µg/L)	Analytical Results (µg/L)			
		04/05/2021	05/04/2021	06/01/2021	06/24/2021
1,1-dichloroethane (1,1-DCA)	5.0*	0.27 J	0.46 J	0.35 J	0.43 J
1,2-dichloroethane (1,2-DCA)	0.5	ND (0.25)	0.14 J	0.12 J	0.15 J
1,2-dichloropropane (1,2-DCP)	0.5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Benzene	0.5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Carbon tetrachloride (CT)	0.5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Chloroform	2.0*	0.17 J	0.26 J	0.25 J	0.32 J
Cis-1,2-dichloroethene (cis-1,2-DCE)	6.0*	0.31 J	0.60	0.60	0.79
Methylene Chloride	0.5	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)
Tetrachloroethene (PCE)	0.5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Trichloroethene (TCE)	0.5	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Vinyl chloride (VC)	0.1	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)

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.

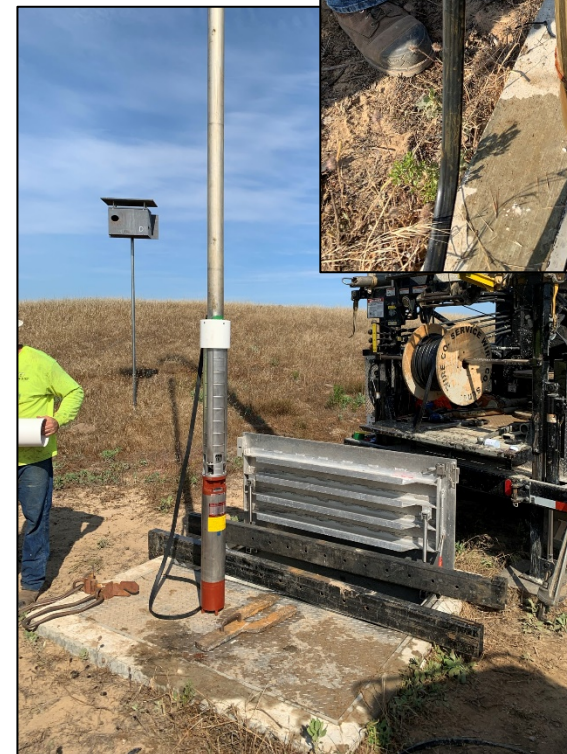
J: Estimated results below the limit of quantitation (LOQ).

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



EW-OU2-10-180

April 2021 Key Events

- April 8: Effluent pump P-1 pump/motor seals and bearings replaced and back online.
- April 12: Shea Homes contractor Teichert stopped taking treated water. Future treated water use for the Shea Homes construction is likely.
- April 14: Increased flow rates at EW-OU2-03-180 (from 146 to 165 gpm) and EW-OU2-09-180 (from 52 to 60 gpm)
- April 20: EW-OU2-12-180 and EW-OU2-12-A redevelopment.
 - EW-OU2-12-A evidence of biofouling. Shock treated with 1/3 gallon of 6.05% chlorine solution. Purged 20 well casing volumes during redevelopment. Online Apr 21 with original pump at 10 gpm (was previously cycling at 4 gpm).
 - EW-OU2-12-180 required repairs and replacement due to damaged threads on drop pipe and couplers. Pending pump replacement.

May 2021 Key Events

- May 11: EW-OU2-19-A offline due to pump motor failure.



June 2021 Key Events

- Jun 2: EW-OU2-17-A offline due to crack in y-strainer in vault. Repaired and restarted June 14.
- Jun 5: EW-OU2-20-A offline due to failed pump motor.
- Jun 7-11: Second Quarter 2021 Groundwater Monitoring Event. Sampling MW-OU2-28-A postponed due to PDB above water level, completed on June 24.
- Jun 14-18: Replaced failed pumps at EW-OU2-02-A, -04-A, -10-180, and -12-180.
- Jun 21: Upper 180-Foot Aquifer extraction wells offline for three hours due to electrical outage. OU2 GWTP remained online in low flow.
- Jun 22: EW-OU2-13-A offline due to broken pipeline in vault, VFD failed due to flooding in vault.
- Jun 22-23: JV addressed issues at EW-OU2-02-180R and EW-OU2-06-A.
- Jun 24: EW-OU2-04-A offline due to broken pipe in vault, EW-OU2-10-180 operating in Auto mode.
- Jun 28: sampled EW-OU2-02-A, -04-A, -10-180, and -12-180.
- Jun 29: EW-OU2-04-A vault piping repaired, back online.
- Jun 30: EW-OU2-04-A offline due to high pressure.

July and Future 2021 Key Events

- Jul 1: EW-OU2-13-A plumbing repaired and VFD replaced, back online.
- Aug 30 – Sep 3: Third Quarter 2021 Groundwater Monitoring event.
- Troubleshoot high pressure at EW-OU2-04-A and restart.
- Failed pump replacement at EW-OU2-19-A and EW-OU2-20-A.
- Coordinate with Sea Haven on adjustment/survey of MW-OU2-04-A, -05-AR, -07-A, -84-180, and -07-400.

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

OU2 Hydraulic Zone ¹	Well Identification ²	Select COC Concentrations (µg/L)									
		1Q 2021					2Q 2021*				
		TCE	PCE	1,1-DCA	1,2-DCA	VC	TCE	PCE	1,1-DCA	1,2-DCA	VC
ACL:		5.0	3.0	5.0	0.5	0.1	5.0	3.0	5.0	0.5	0.1
1	EW-OU2-16-A	2.5	2.4	6.0	1.9	0.54	2.5	2.2	5.3	1.8	0.056 J
1	EW-OU2-17-A	8.7 J+	5.3 J+	1.3 J+	0.28 J	ND (0.05)	5.0	6.1	0.58	ND (0.25)	ND (0.05)
1	EW-OU2-18-A	9.6 J+	5.8 J+	5.7 J+	0.81 J+	0.35 J+	10.4	5.7	5.5	0.87	ND (0.05)
1	EW-OU2-19-A	5.0 J+	5.7 J+	13.5 J+	1.9 J+	1.1 J+	NS	NS	NS	NS	NS
1	EW-OU2-20-A	1.5 J+	1.5 J+	5.8 J+	0.76 J+	1.2 J+	NS	NS	NS	NS	NS
1	MW-OU2-02-A	0.54 J+	3.4 J+	4.2 J+	0.68 J+	8.6 J+	0.12 J	0.42 J	4.5	1.1	7.5
1	MW-OU2-44-A	1.8 J	1.9 J	7.6 J	1.8 J	0.40 J	4.9	4.4	9.1	2.3	ND (0.05)
1	MW-OU2-73-A	ND (0.25)	1.8 J+	3.4 J+	0.48 J	6.5 J+	0.37 J	1.3	3.8	0.51	3.8
2	EW-OU2-15-A	1.5 J+	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	1.3	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
2	MW-OU2-27-A	0.10 J	4.6 J+	0.46 J	ND (0.25)	ND (0.05)	0.10 J	4.2	0.33 J	ND (0.25)	ND (0.05)
3	EW-OU2-09-A	0.15 J	0.27 J	ND (0.25)	0.15 J	0.052 J	0.14 J	0.21 J	ND (0.25)	0.11 J	ND (0.05)
3	EW-OU2-10-A	0.95 J+	0.83 J+	0.32 J	0.57 J+	0.066 J	0.95	0.64	0.31 J	0.39 J	ND (0.05)
3	EW-OU2-11-AR	2.1 J+	0.94 J+	2.2 J+	0.34 J	ND (0.05)	2.3	1.1	3.0	0.30 J	ND (0.05)
3	EW-OU2-12-A	6.1 J+	4.2 J+	4.9 J+	2.2 J+	0.16 J+	6.2	3.6	3.9	1.4	ND (0.05)
3	EW-OU2-13-A	6.4 J+	2.5 J+	1.5 J+	4.2 J+	ND (0.05)	5.7	2.0	1.2	3.4	ND (0.05)
3	MW-OU2-12-A	11.3 J+	9.6 J+	14.1 J+	3.8 J+	0.25 J+	0.93	0.25	0.16 J	ND (0.25)	ND (0.05)
3	MW-OU2-25-A	1.1 J	0.51 J	0.59 J	0.65 J	0.11 J	0.86	0.37 J	0.36 J	0.46 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.

¹ Hydraulic zones are identified in the Groundwater QAPP.² 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 ¹	Well Identification ²	Select COC Concentrations (µg/L)									
		1Q 2021					2Q 2021*				
		TCE	PCE	1,1-DCA	1,2-DCA	VC	TCE	PCE	1,1-DCA	1,2-DCA	VC
ACL:		5.0	3.0	5.0	0.5	0.1	5.0	3.0	5.0	0.5	0.1
4	EW-OU2-02-A	NS	NS	NS	NS	NS	0.45 J	ND (0.25)	0.12 J	ND (0.25)	ND (0.05)
4	EW-OU2-04-A	NS	NS	NS	NS	NS	1.3	ND (0.25)	0.25 J	ND (0.25)	ND (0.05)
4	EW-OU2-05-A	5.2	0.33 J	0.41 J	ND (0.25)	ND (0.05)	3.8	0.22 J	0.46 J	ND (0.25)	ND (0.05)
4	EW-OU2-06-A	3.5	0.30 J	0.20 J	ND (0.25)	ND (0.05)	3.8	0.32 J	0.23 J	ND (0.25)	ND (0.05)
4	MW-OU2-40-A	8.6	0.38 J	0.13 J	ND (0.25)	ND (0.05)	7.0	0.34 J	0.22 J	ND (0.25)	ND (0.05)
5	MW-OU2-04-A	2.7 J+	1.1 J+	1.0 J+	0.98 J+	ND (0.05)	2.2	0.68	0.72	0.67	ND (0.05)
5	MW-OU2-06AR	4.6	2.4	2.1	0.58	ND (0.05)	5.9	2.7	2.1	0.63	ND (0.05)
5	MW-OU2-07-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
5	MW-OU2-08-A	7.7 J+	7.1 J+	13.6 J-	2.2 J+	0.42 J+	7.7	6.6	18.5	1.8	ND (0.05)
5	MW-OU2-75-A	7.2 J+	10.4 J+	15.5 J+	0.17 J	0.16 J+	6.4	9.2	9.2	0.13 J	ND (0.05)
5	MW-OU2-81-A	10.6 J+	8.0 J+	2.1 J+	1.1 J+	ND (0.05)	15.7	9.3	2.4	0.93	ND (0.05)
5	MW-OU2-83-A	2.6 J+	2.8 J+	13.8 J+	0.50 J+	0.26 J+	2.3	2.3	8.9	0.40 J	ND (0.05)
5	MW-BW-50-A	1.1 J+	3.3 J+	2.1 J+	ND (0.25)	ND (0.05)	0.73	4.1	0.75	ND (0.25)	ND (0.05)
N/A	MW-OU2-05AR	0.15 J	ND (0.25)	3.9 J+	ND (0.25)	ND (0.05)	0.16 J	ND (0.25)	2.7	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

µg/L: micrograms per liter

NS: not sampled

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

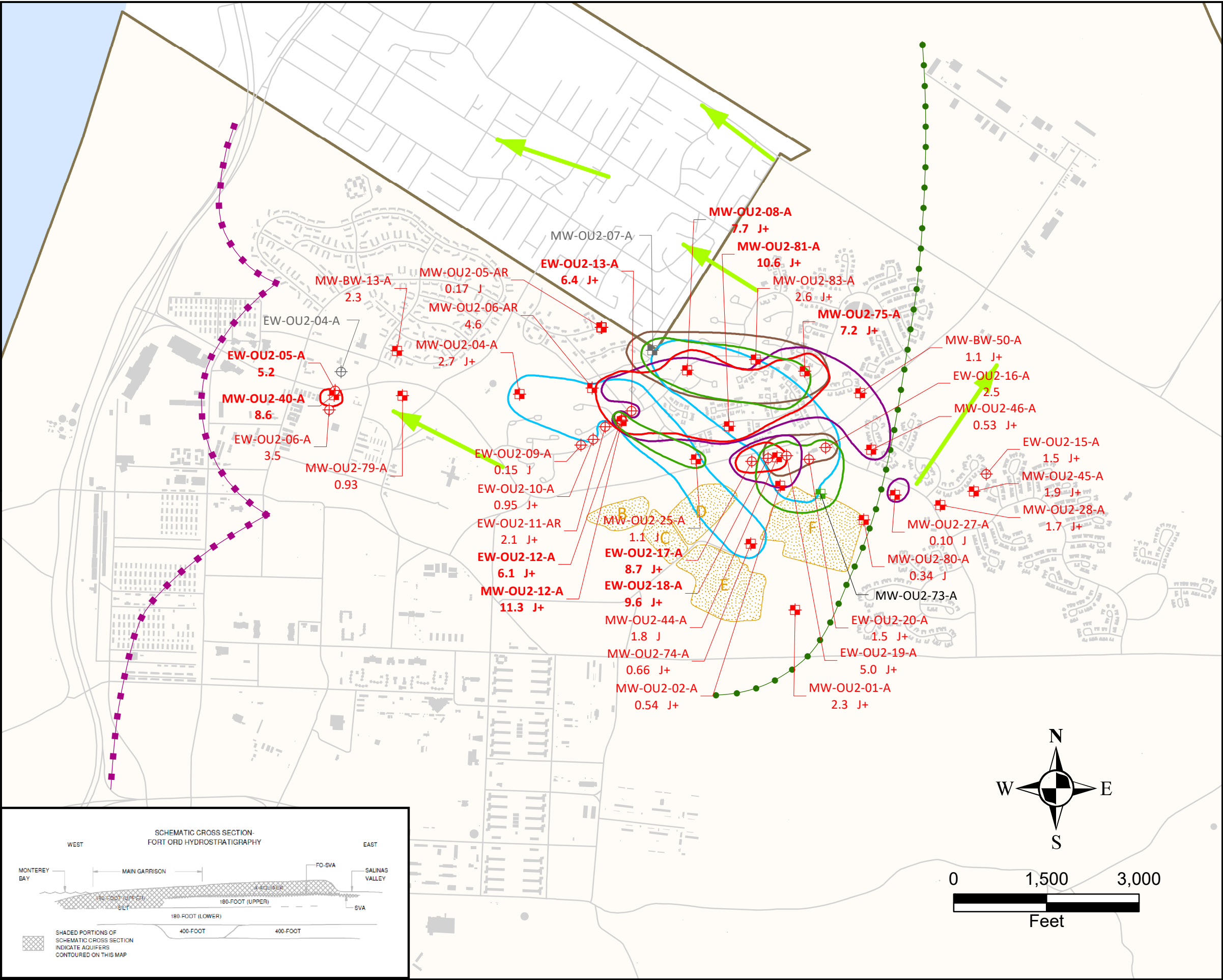
J: Estimated result with a high (+) or low (-) bias.

¹ Hydraulic zones are identified in the Groundwater QAPP.² 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

- Well Type and COC Detection**
- ⊕ Extraction Well with TCE Detection
 - ⊖ Extraction Well not sampled
 - ⊕ Monitoring Well with TCE Detection
 - ⊕ Monitoring Well with COC ACL Exceedance and ND for TCE
 - ⊖ Monitoring Well not sampled

- Roads
- ▒ Facilities
- ▒ Approximate Extent of Landfill Areas
- ▒ Former Fort Ord Boundary

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

- 5 — Trichloroethene (TCE)
- 3 — Tetrachloroethene (PCE)
- 5 — 1,1-Dichloroethane (1,1-DCA)
- 0.5 — 1,2-Dichloroethane (1,2-DCA)
- 0.1 — Vinyl Chloride (VC)

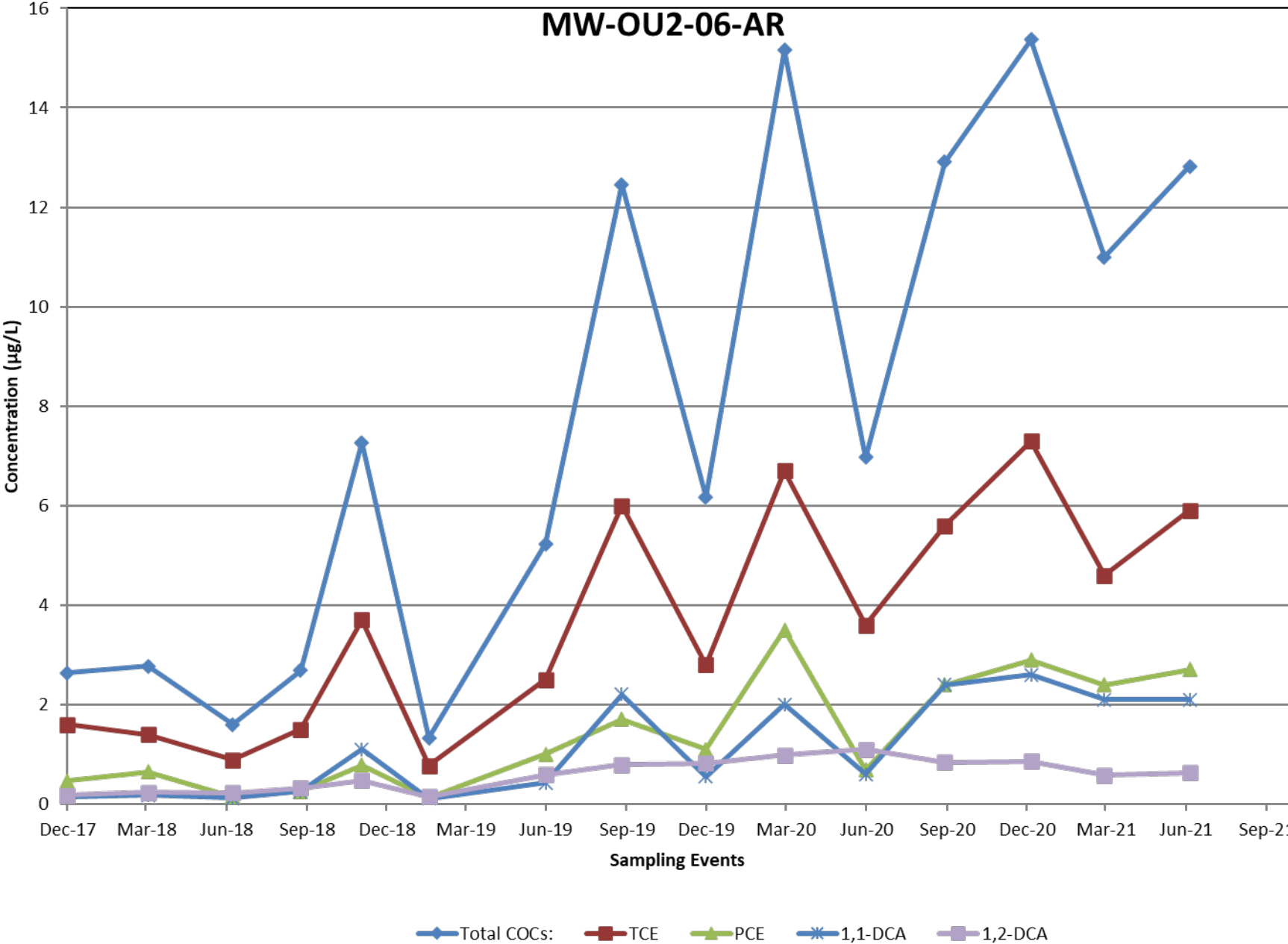
Groundwater Aquifer Divide

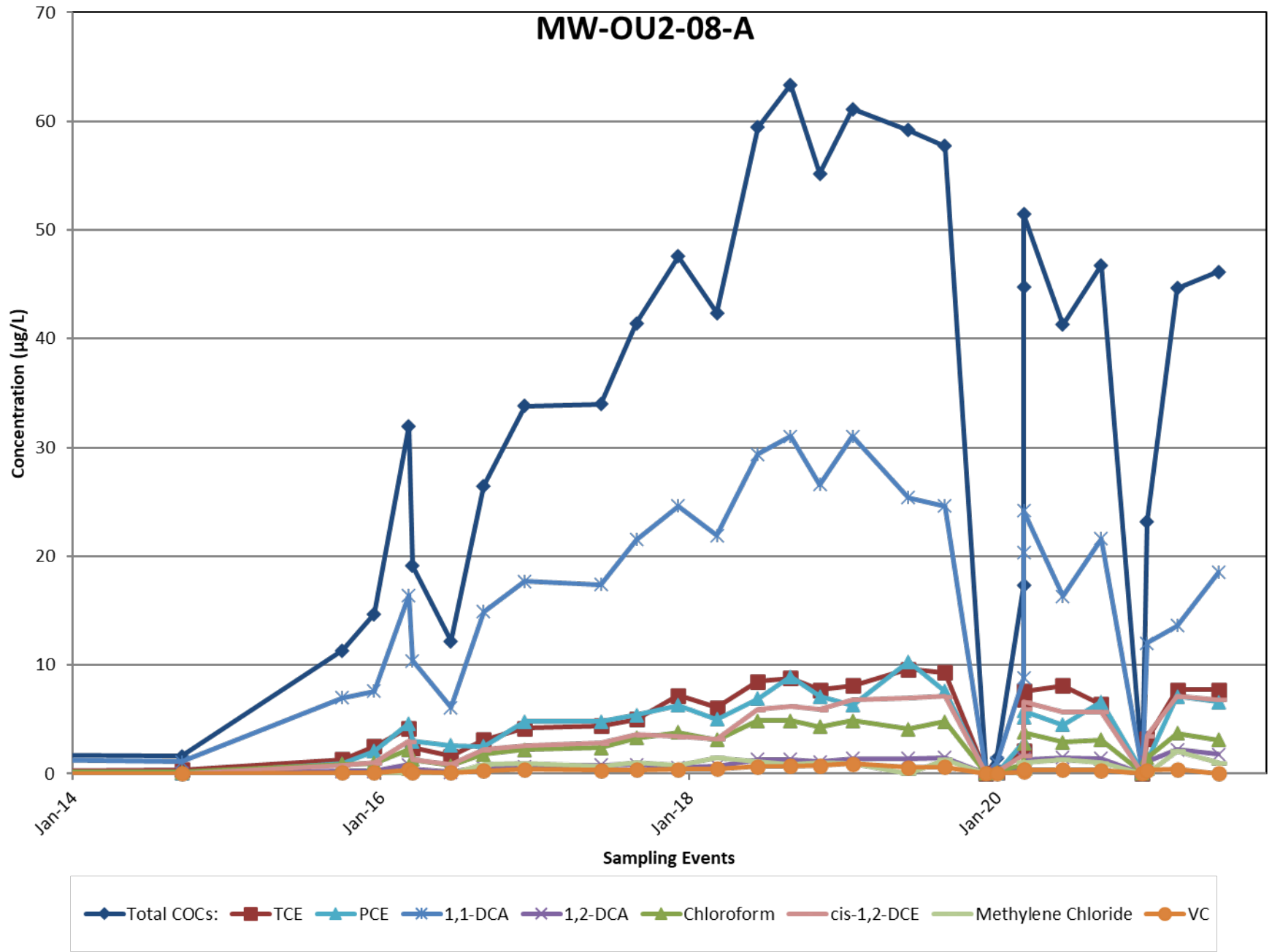
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Approximate location of the A-Aquifer Groundwater Divide

- Well ID - Bold When ACL Exceeded
- * Well not used for contouring
- MW-OU2-40-A** 8.8 TCE Concentration (µg/L) and validation/lab qualifier.

- NOTES:**
- (1) Groundwater samples were collected between March 1, 2021 and March 5, 2021.
 - (2) MW-OU2-07-A was not sampled due to construction.
 - (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.
 - (4) Contours near wells not sampled this quarter are

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





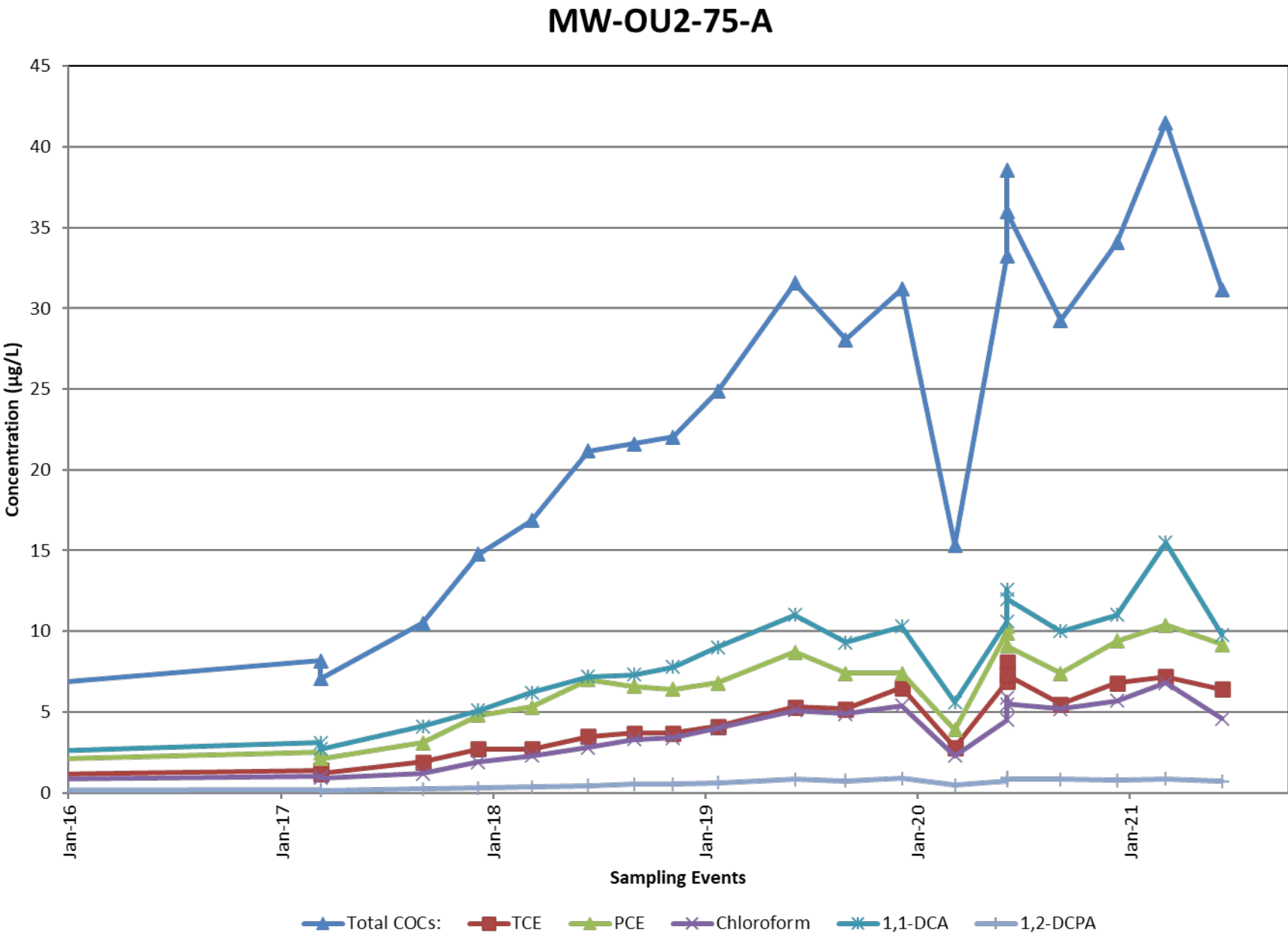


Table 5. OU2 Upper 180-Foot Select Extraction/Monitoring Well Data

OU2 Hydraulic Zone ¹	Well Identification ²	TCE Concentration (µg/L)			
		3Q 2020	4Q 2020	1Q 2021	2Q 2021*
ACL:		5.0			
6	EW-OU2-03-180	7.3	7.4	6.7	7.1
6	MW-OU2-23-180	12.2	16.0	14.9 J	13.3
6	MW-OU2-50-180	8.7	13.0	9.8 J	8.9
6	MW-OU2-51-180	0.56	0.79	1.4 J	0.69
7	EW-OU2-05-180	2.7	2.4	2.2 J+	2.4
7	EW-OU2-06-180	4.2	3.6	3.9 J+	3.6
7	EW-OU2-10-180	7.6	7.1	NS	8.2
7	EW-OU2-11-180	3.5	4.5	3.9 J	4.0
7	EW-OU2-12-180	NS	NS	NS	7.5
7	MW-OU2-81-180	3.7	4.9	3.9 J+	3.6
7	MW-OU2-44-180	13.3	12.0	9.1 J	14.5
7	MW-OU2-56-180	7.0 J+	8.1	5.8 J+	5.0
8	EW-OU2-08-180	1.7	1.7	1.3	1.2
8	MW-OU2-28-180	5.1	6.1	4.5 J+	4.4
8	MW-OU2-62-180	3.1 J+	5.3	4.7 J+	4.5
9	EW-OU2-01-180	4.0	3.8	4.2	3.9
9	EW-OU2-02-180R	5.2	6.5	4.8	5.0
9	MW-OU2-06-180R2	0.82	0.97	0.65 J+	0.67
9	MW-OU2-24-180	9.6	9.3	8.9 J+	10.9
9	MW-OU2-43-180	2.5	2.4	1.5 J+	2.4
N/A	MW-OU2-84-180	NS	NS	ND (0.25)	ND (0.25)

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.

¹ Hydraulic zones are identified in the Groundwater QAPP.

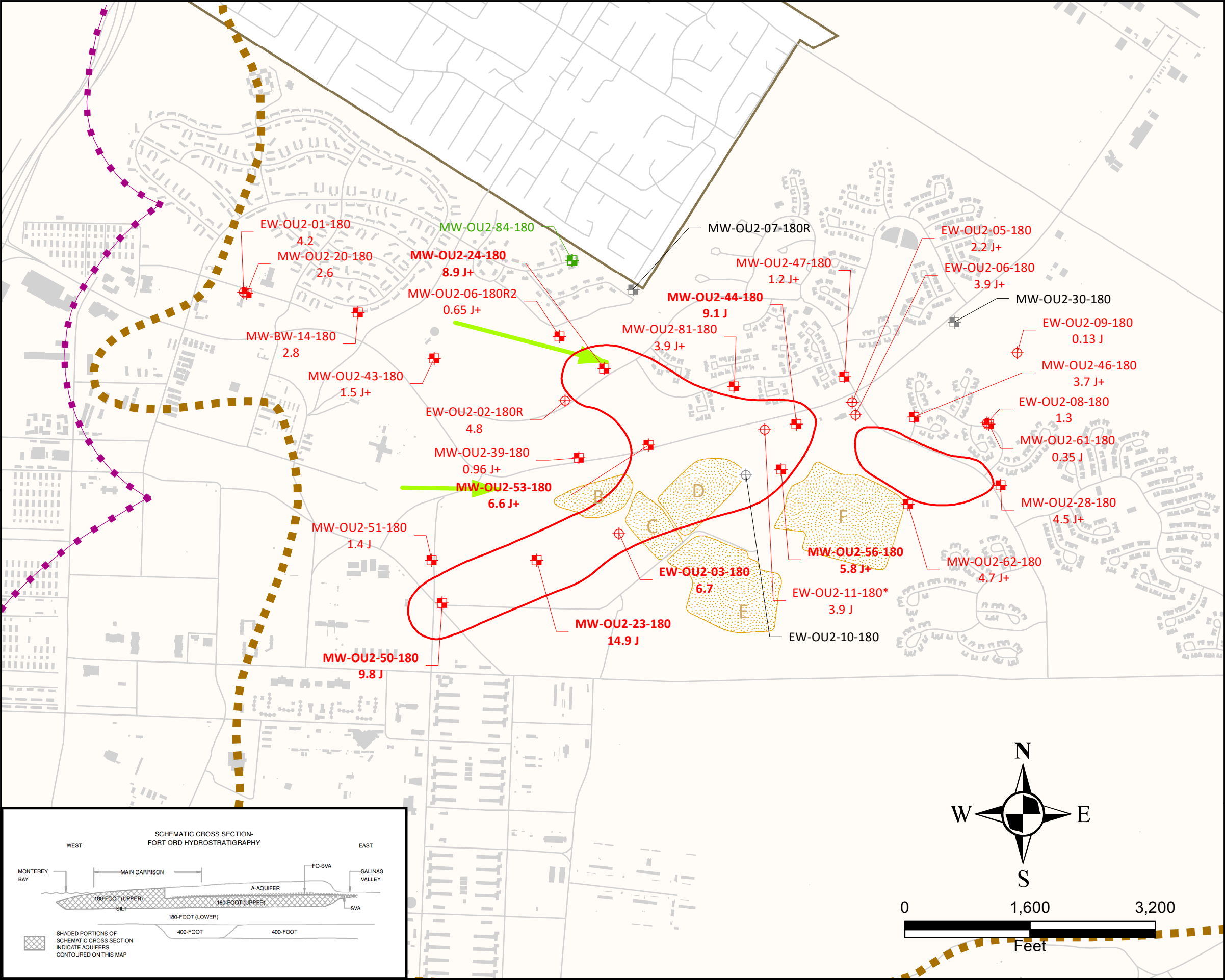
² Extraction wells not listed have met the QAPP decision rules to no longer operate.

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

- General Groundwater Flow Direction
- Approximate location of the Upper 180-Foot Aquifer Groundwater Divide
- Approximate Edge of Fort Ord - Salinas Valley Aquitard
- Roads
- Facilities
- Approximate Extent of Landfill Areas
- Former Fort Ord Boundary

Well Type and COC Detection

- Extraction Well with TCE Detection
- Extraction Well not sampled
- Monitoring Well with TCE Detection
- Monitoring Well not sampled
- Monitoring Well with ACL Exceedance ND for TCE

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

- 5 Trichloroethene (TCE)
- Well ID - Bold When ACL Exceeded (*Indicates: Sample not used for contouring)
- TCE concentration (µg/L) and lab qualifier.

NOTES:

(1) Samples were collected between March 1, 2021 and March 5, 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.

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES
UPPER 180-FOOT AQUIFER
Operable Unit 2, First Quarter 2021 Groundwater Monitoring and Treatment System Report, Former Fort Ord, California

