

Operable Unit 2 Data and Status

Table 1: August 2021 – OU2 GWTP Statistics

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
Aug 2021	41,377,114	927	100	2.0
Total since October 1995	8.653 billion			921

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

COC	Discharge Limit ($\mu\text{g/L}$)	Analytical Results ($\mu\text{g/L}$)	
		8/2/2021	
1,1-dichloroethane (1,1-DCA)	5.0*	ND (0.25)	
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*	ND (0.25)	
Cis-1,2-dichloroethene (cis-1,2-DCE)	6.0*	ND (0.25)	
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

August and Future 2021 Key Events

- Aug 2: optimized SCADA display.
- Aug 9: Western Network radio lost configuration and communications to the Western Network. Back online Aug 10.
- Aug 16: reset high-pressure shutoff at EW-OU2-04-A.
- Aug 20: Western Network extraction wells offline due to leak in isolation vault on Abrams Drive. Repairs are pending.
- Aug 23: Secondary isolation valve closed and EW-OU2-09-A shut down to further isolate the leak.
- Aug 30 – Sep 3: Third Quarter 2021 Groundwater Monitoring event.
- Sep 21-22: Repair isolation vault pipeline and restart Western Network.
- Failed pump replacement at EW-OU2-18-A, 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.



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

OU2 Hydraulic Zone ¹	Well Identification ²	Select COC Concentrations ($\mu\text{g/L}$)									
		2Q 2021					3Q 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 J+	2.2 J+	5.3 J+	1.8 J+	0.056 J	2.4	2.0	4.7	1.6	0.47
1	EW-OU2-17-A	5.0 J+	6.1 J+	0.58 J+	ND (0.25)	ND (0.05)	8.2	5.5	0.97	0.31 J	ND (0.05)
1	EW-OU2-18-A	10.4 J+	5.7 J+	5.5 J+	0.87 J+	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	1.1	7.5	1.1	3.1	3.3	0.60	6.2
1	MW-OU2-44-A	4.9	4.4	9.1	2.3	ND (0.05)					
1	MW-OU2-73-A	0.37 J	1.3	3.8	0.51	3.8	0.42 J	1.4	3.6	0.49 J	3.4
2	EW-OU2-15-A	1.3	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)					
2	MW-OU2-27-A	0.10 J	4.2	0.33 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)					
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	6.2	3.6	3.9	1.4	ND (0.05)	6.7	3.8	3.6	1.8	0.083 J
3	EW-OU2-13-A	5.7	2.0	1.2 J+	3.4	ND (0.05)	5.5	2.1	1.0	3.2	ND (0.05)
3	MW-OU2-12-A	0.93 J+	0.25	0.16 J	ND (0.25)	ND (0.05)					
3	MW-OU2-25-A	0.86 J+	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

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

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 ($\mu\text{g/L}$)									
		2Q 2021					3Q 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	0.45 J	ND (0.25)	0.12 J	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)					
4	EW-OU2-05-A	3.8	0.22 J	0.46 J	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)					
4	MW-OU2-40-A	7.0	0.34 J	0.22 J	ND (0.25)	ND (0.05)	10.1	0.38 J	0.25 J	ND (0.25)	ND (0.05)
5	MW-OU2-04-A	2.2	0.68	0.72	0.67	ND (0.05)					
5	MW-OU2-06AR	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+	6.6 J+	18.5	1.8 J+	ND (0.05)					
5	MW-OU2-75-A	6.4	9.2	9.2	0.13 J	ND (0.05)					
5	MW-OU2-81-A	15.7 J+	9.3 J+	2.4 J+	0.93 J+	ND (0.05)					
5	MW-OU2-83-A	2.3	2.3	8.9	0.40 J	ND (0.05)					
5	MW-BW-50-A	0.73	4.1	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)					

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.

¹ Hydraulic zones are identified in the Groundwater QAPP.

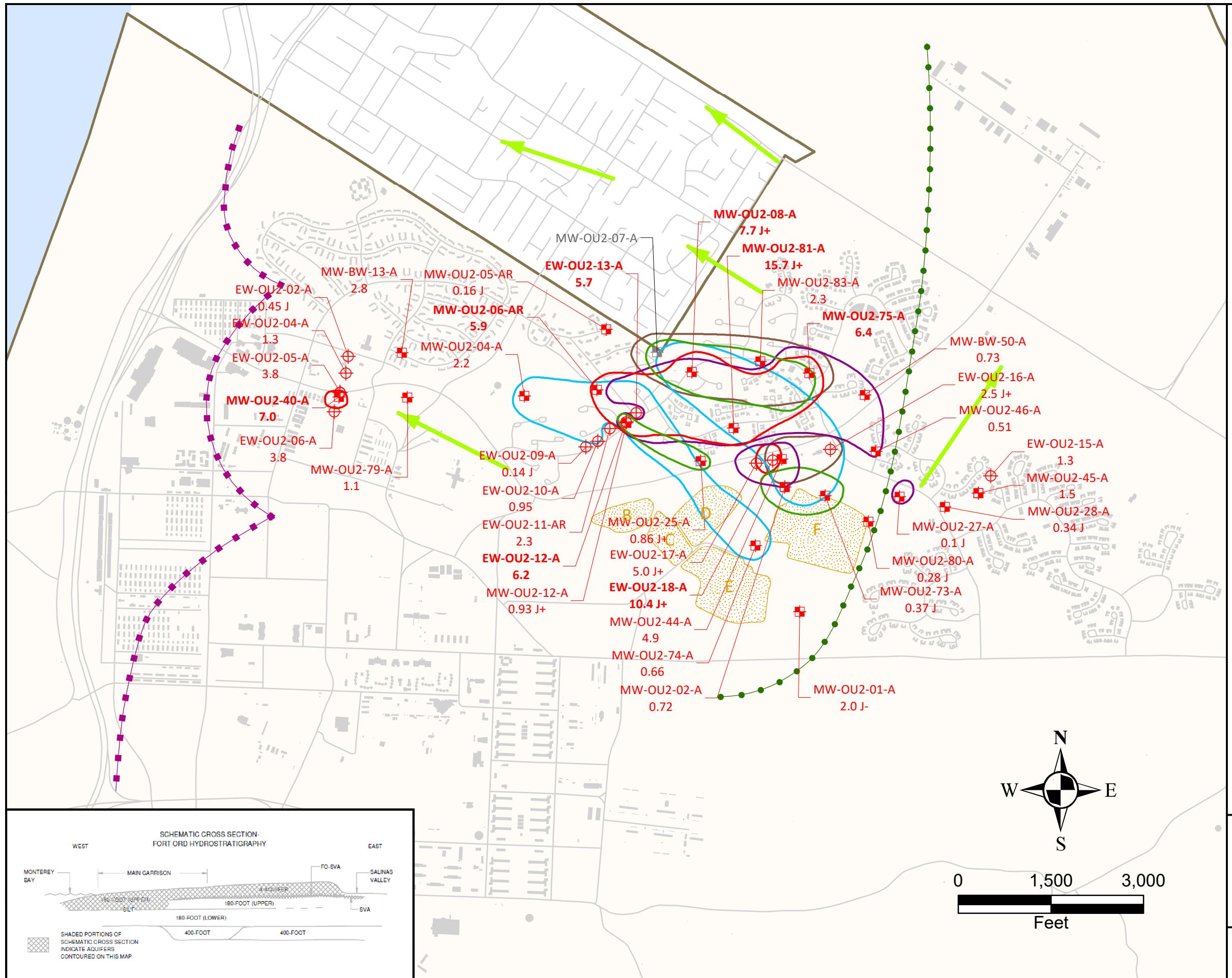
² Extraction wells not listed have met the QAPP decision rules to no longer operate.

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

- GroundwaterFlow
- Roads
- Facilities
- Approximate Extent of Landfill Areas
- Former Fort Ord Boundary
- Well Type and Detection**
 - Monitoring well with TCE detection
 - Monitoring well not sampled
 - Extraction well with TCE detection
- 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
- TCE Concentration (µg/L) and validation/lab qualifier.

NOTES:

- (1) Groundwater samples were collected between June 7, 2021 and June 11, 2021.
- (2) MW-OU2-07-A was not sampled due to construction.
- (3) MW-OU2-12-A Bag placement was too shallow in the water column.
- (4) Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- (5) Contours based on highest value obtained from multiple bags where applicable.

TCE CONCENTRATIONS AND OTHER COC ACL EXCEEDANCES

A-AQUIFER

Operable Unit 2, Second Quarter 2021, Groundwater Monitoring and Treatment System Report, Former Fort Ord, California

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Date: 8/3/2021

Figure: 9

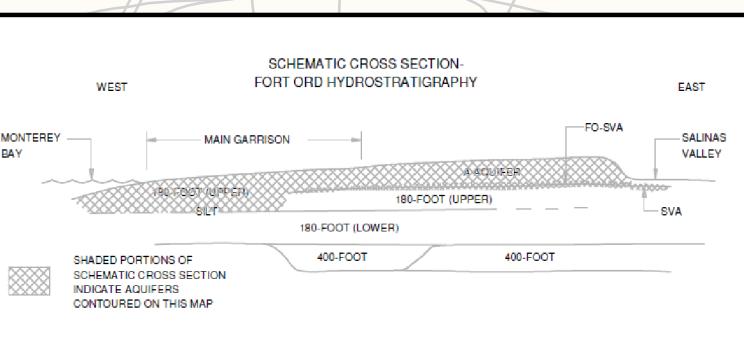


Table 5. OU2 Upper 180-Foot Select Extraction/Monitoring Well Data

OU2 Hydraulic Zone ¹	Well Identification ²	TCE Concentration (µg/L)			
		4Q 2020	1Q 2021	2Q 2021	3Q 2021*
ACL:		5.0			
6	EW-OU2-03-180	7.4	6.7	7.1	7.7
6	MW-OU2-23-180	16.0	14.9 J	13.3 J-	
6	MW-OU2-50-180	13.0	9.8 J	8.9 J-	11.0
6	MW-OU2-51-180	0.79	1.4 J	0.69	
7	EW-OU2-05-180	2.4	2.2 J+	2.4	2.7
7	EW-OU2-06-180	3.6	3.9 J+	3.6	4.2
7	EW-OU2-10-180	7.1	NS	8.2	8.9
7	EW-OU2-11-180	4.5	3.9 J	4.0 J+	4.8
7	EW-OU2-12-180	NS	NS	7.5	7.9
7	MW-OU2-81-180	4.9	3.9 J+	3.6 J+	
7	MW-OU2-44-180	12.0	9.1 J	14.5 J+	
7	MW-OU2-56-180	8.1	5.8 J+	5.0	6.3
8	EW-OU2-08-180	1.7	1.3	1.2	2.7
8	MW-OU2-28-180	6.1	4.5 J+	4.4	
8	MW-OU2-62-180	5.3	4.7 J+	4.5	1.8
9	EW-OU2-01-180	3.8	4.2	3.9	7.3
9	EW-OU2-02-180R	6.5	4.8	5.0	5.7
9	MW-OU2-06-180R2	0.97	0.65 J+	0.67	
9	MW-OU2-24-180	9.3	8.9 J+	10.9	
9	MW-OU2-43-180	2.4	1.5 J+	2.4	
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.

¹ Hydraulic zones are identified in the Groundwater QAPP.

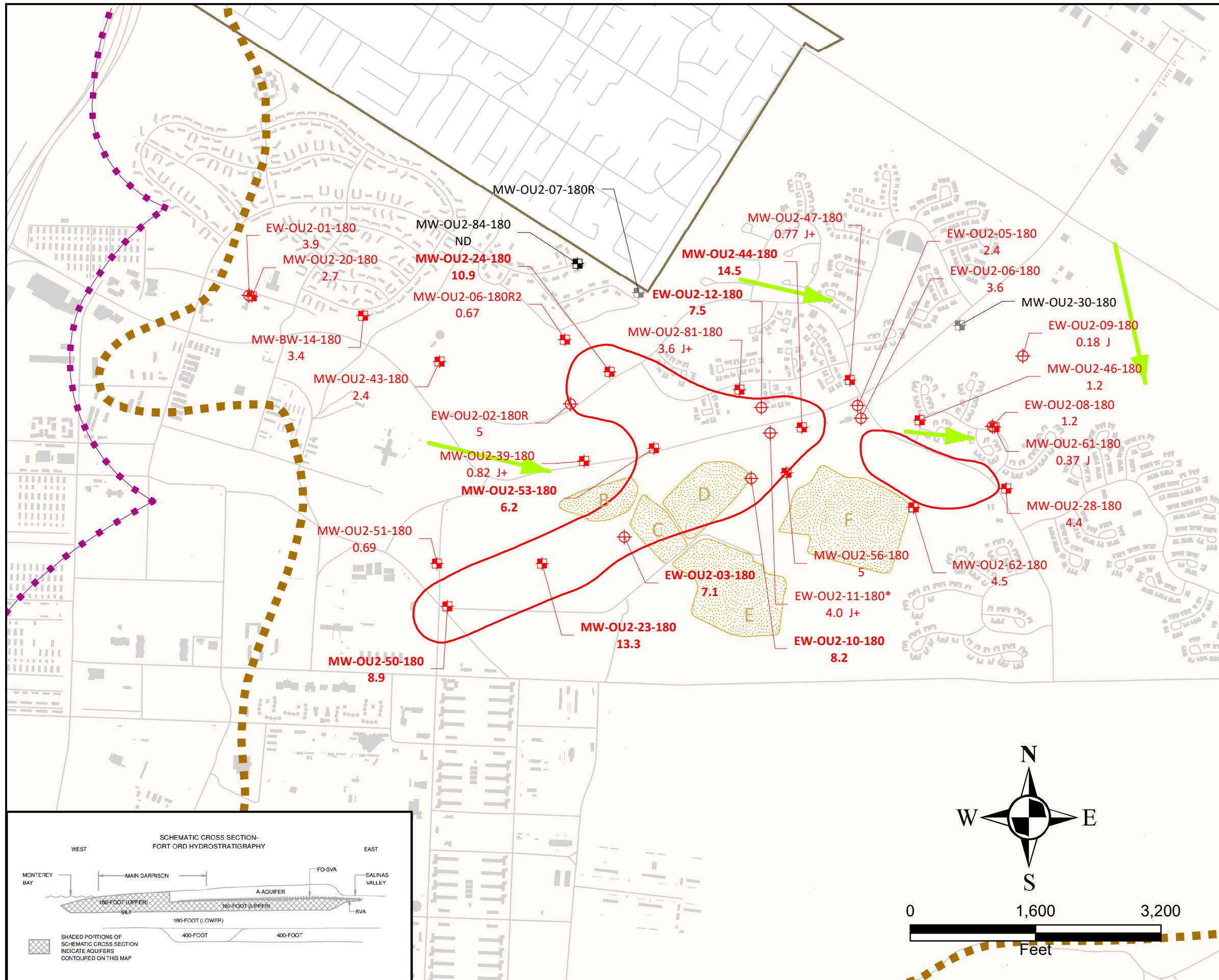
² Extraction wells not listed have met the QAPP decision rules to no longer operate.

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
 - Monitoring well with TCE detection
 - Monitoring well non-detect for TCE
 - Monitoring well not sampled
- Chemical of Concern (COC) Aquifer Cleanup Level (ACL) Exceedance Contour in µg/L.**
 - 5 — Trichloroethene (TCE)
- ND — Non-detect
- Well ID - Bold When ACL Exceeded (*Indicates: Sample not used for contouring)
- MW-OU2-44-180 — 9.1 J
- TCE concentration (µg/L) and lab qualifier.

NOTES:

- Samples were collected between June 7, 2021 and June 11, 2021.
- Contours are based on one interpretation of the data that were available at the time this report was prepared; other interpretations may be possible.
- 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, Second Quarter 2021 Groundwater Monitoring and Treatment System Report, Former Fort Ord, California

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Date: 8/3/2021

Figure: 11

MW-OU2-62-180

