

Former Fort Ord Operable Unit 2 Data and Status

HTW BCT Meeting, July 12, 2019

Table 1: OU2 GWTP Statistics as of June 30, 2019

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
June 2019	36,389,520	842	100	2.33
Total since October 1995	7.694 billion			858

Table 2: June 2019 – OU2 Analytical Results at TS-OU2-INJ-01

COC	Discharge Limit (µg/L)	Analytical Results (µg/L)
		6/26/2019
1,1-dichloroethane (1,1-DCA)	5.0*	0.16
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

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

June 2019 Key Events for OU2

- June 3-7: Second Quarter 2019 Groundwater Monitoring.
- June 5: Leak in EW-OU2-12-A vault; plumbing repaired and well restarted on June 18.
- June 30: Completed Second Quarter 2019 Groundwater Monitoring event.

July 2019 Key Events for OU2

- July 7-8: Pre-final inspections.
- Prepare for Western Network and EW-OU2-09-A connection and operation.



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

OU2 Hydraulic Zone ¹	Well Identification ²	Select COC Concentrations (µg/L)									
		1Q 2019					2Q 2019*				
		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	2.5	6.2	2.2	0.76	2.8	2.7	6.2	2.1	0.78
1	EW-OU2-17-A	15.1	8.6	3.7	0.17 J	0.17	12.1	8.1	3.0	ND (0.25)	0.12
1	EW-OU2-18-A	8.9	8.6	12.6	1.7	0.88	7.0	6.3	9.0	1.3	0.66
1	EW-OU2-19-A	7.6	9.8	18.5	2.4	1.4	6.4	7.7	15.4	2.2	1.3
1	EW-OU2-20-A	2.7	3.6	8.7	1.1	0.84	2.1	2.2	8.3	1.1	0.68
1	MW-OU2-02-A	1.1	2.9	6.6	1.5	8.8	0.73	2.0	5.5	1.3	9.4
1	MW-OU2-44-A	4.7	5.4	13.5	3.1	1.2					
1	MW-OU2-73-A	ND (0.25)	1.4	4.6	0.73	11.3	ND (0.25)	1.2	6.6	0.91	7.2
2	EW-OU2-15-A	0.67 J+	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	1.4	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
2	MW-OU2-27-A	ND (0.25)	3.1	0.25 J	ND (0.25)	ND (0.05)					
3	EW-OU2-09-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3	EW-OU2-10-A	1.2	0.87	0.47 J	0.66	0.064 J	1.0	0.81	0.40 J	0.59	ND (0.05)
3	EW-OU2-11-AR	1.6 J+	0.76 J+	0.42 J+	0.30 J+	ND (0.05)	1.6	0.80	1.0	0.26 J	ND (0.05)
3	EW-OU2-12-A	8.4 J+	4.9 J+	5.9 J+	2.3 J+	0.14 J+	7.6	4.9	5.6	2.2	0.10
3	EW-OU2-13-A	7.3	2.5	1.9	4.1	ND (0.05)	6.0	2.3	1.4	3.3	ND (0.05)
3	MW-OU2-25-A	1.1 J+	0.44 J+	0.59 J+	0.91 J+	ND (0.05)	0.89	0.37 J	0.41 J	0.53	ND (0.05)
4	EW-OU2-04-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4	EW-OU2-05-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4	EW-OU2-06-A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4	MW-OU2-40-A	14.8	0.50	0.27 J	ND (0.25)	ND (0.05)	13.7	0.61	0.30 J	ND (0.25)	ND (0.05)
5	MW-OU2-04-A	3.4	1.0	0.86	0.73	ND (0.05)					
5	MW-OU2-06AR	0.77	0.13 J	0.11 J	0.15 J	ND (0.05)	2.5	1.0	0.43 J	0.59	ND (0.05)
5	MW-OU2-08-A	8.1	6.3	31.0	1.4	0.91	9.6	10.3	25.4	1.4	0.57
5	MW-OU2-75-A	4.1	6.8	9.0	ND (0.25)	0.11	5.3	8.7	11.0	0.13 J	0.15
5	MW-OU2-81-A	13.4 J+	13.6 J+	4.3 J+	0.23 J+	ND (0.05)	7.0	14.5	3.0	0.30 J	ND (0.05)
5	MW-OU2-83-A	0.86	0.70	4.7	ND (0.25)	0.086 J+	0.50	0.74	2.3	ND (0.25)	ND (0.05)
5	MW-BW-50-A	1.8	5.9	3.0	ND (0.25)	ND (0.05)	0.83	6.1	0.81	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

Table 4. OU2 Upper 180-Foot Select
Extraction/Monitoring Well Data

OU2 Hydraulic Zone ¹	Well Identification ²	TCE Concentration (µg/L)	
		1Q 2019	2Q 2019*
ACL:		5.0	
6	EW-OU2-03-180	9.0	9.2
6	MW-OU2-50-180	10.7	8.9
6	MW-OU2-51-180	2.4	0.76
7	EW-OU2-05-180	3.6	3.1
7	EW-OU2-06-180	4.8	4.1
7	EW-OU2-10-180	6.8	
7	EW-OU2-12-180	10.3	10.6
7	MW-OU2-81-180	6.1 J+	5.1
7	MW-OU2-44-180	13.1	12.2
8	EW-OU2-08-180	2.4	1.3
8	MW-OU2-28-180	3.9	3.6
8	MW-OU2-62-180	13.0	11.6
9	EW-OU2-01-180	3.5	3.6
9	EW-OU2-02-180R	6.4 J+	6.0
9	MW-OU2-06-180R2	3.2 J+	3.0
9	MW-OU2-43-180	3.8	

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