

Former Fort Ord Operable Unit 2 Data and Status

HTW BCT Meeting, June 19, 2019

Table 1: OU2 GWTP Statistics as of May 31, 2019

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
May 2019	39,505,954	885	98.6	2.56
Total since October 1995	7.657 billion			856

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

COC	Discharge Limit (µg/L)	Analytical Results (µg/L)	
		5/6/2019	5/27/2019
1,1-dichloroethane (1,1-DCA)	5.0*	ND (0.25)	ND (0.25)
1,2-dichloroethane (1,2-DCA)	0.5	ND (0.25)	ND (0.25)
1,2-dichloropropane (1,2-DCP)	0.5	ND (0.25)	ND (0.25)
Benzene	0.5	ND (0.25)	ND (0.25)
Carbon tetrachloride (CT)	0.5	ND (0.25)	ND (0.25)
Chloroform	2.0*	ND (0.25)	ND (0.25)
Cis-1,2-dichloroethene (cis-1,2-DCE)	6.0*	ND (0.25)	ND (0.25)
Methylene Chloride	0.5	ND (0.50)	ND (0.50)
Tetrachloroethene (PCE)	0.5	ND (0.25)	ND (0.25)
Trichloroethene (TCE)	0.5	ND (0.25)	ND (0.25)
Vinyl chloride (VC)	0.1	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

May 2019 Key Events for OU2

- May 3: OU2 GWTP shut down for 2 hours for communications work.
- May 7: OU2 GWTP shut down for 3 hours due to communications loss.
- May 13: OU2 GWTP shut down for 3 hours to repair leak at Sites 2/12.
- May 16: Grading of OU2 GWTP-E site complete.
- May 21: OU2 GWTP shut down for 1 hour for maintenance.
- May 23: EW-OU2-12-180 offline due to electrical issue.
- May 24: OU2 GWTP shut down for 45 minutes due to communications loss.
- May 29: Eastern network offline all day for planned electrical work. OU2 GWTP shut down for 40 minutes for electrical work. EW-OU2-02-180R would not restart due to PLC issue.

June 2019 Key Events for OU2

- June 3-7: Second Quarter 2019 Groundwater Monitoring.
- Prepare for Western Network and EW-OU2-09-A connection and operation.
- Repair and restart EW-OU2-02-180R and EW-OU2-12-180.

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

OU2 Hydraulic Zone ¹	Well Identification ²	Select COC Concentrations ($\mu\text{g}/\text{L}$)									
		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

$\mu\text{g}/\text{L}$: 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 ($\mu\text{g}/\text{L}$)	
		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

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

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