

Former Fort Ord Operable Unit 2 Data and Status

HTW BCT, January 10, 2018

Table 1: OU2 GWTP Statistics as of December 31, 2017

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
December 2017	22,782,653	510	99.5	1.6
Total since October 1995	7.233 Billion			828

Table 2: December 2017 – OU2 Analytical Results at TS-OU2-INJ

COC	Discharge Limit (µg/L)	Analytical Results (µg/L)
		12/21/2017
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

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 **bold** and shaded are concentrations above the ACL

Results in gray are ND

December 2017 Key Events for OU2

- OU2 GWTP continues to operate with two GAC vessels online instead of four due to flange failure in eastern berm on Oct 10.
- Dec 4-8: Fourth Quarter 2017 GWMP event.
 - New Sea Haven wells MW-OU2-06-AR and MW-OU2-06-180R2 sampled.
 - Dec 26: EW-OU2-10-A sampled.
- Dec 5: Coordinated with JV for tie-in of new wells (EW-OU2-11-AR and EW-OU2-02-180R). EW-OU2-10-A, EW-OU2-12-A, and EW-OU2-13-A offline Dec 5 to 13.
- Dec 8: Shoppette offline due to faulty antennae cable until Dec 11.
- Dec 14: Optimization meeting.
- Dec 21: GAC change-out at TK-600C, GWTP offline 4 hours. TK-600D now in the lead position.

January 2018 Key Events for OU2

- Coordinate with JV for treated water use.
- Continue to prepare for GWTP decommissioning.
- Coordinate with Sea Haven developer for extraction well elevation adjustments: EW-OU2-08-A, EW-OU2-09-A, and EW-OU2-10-A.



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

OU2 Hydraulic Zone ¹	Well Identification ²	Select COC Concentrations (µg/L)									
		3Q 2017					4Q 2017*				
		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	3.0	2.9	7.3	2.2	0.73	4.1	3.0	9.0	3.3	1.1
1	MW-OU2-02-A	0.28 J	1.9	6.6	1.6	8.1	0.33 J	2.0	6.8	1.7	8.3
1	MW-OU2-73-A	ND (0.25)	0.48 J	6.3	1.1	11.4	ND (0.25)	0.87	8.5	1.5	11.6
1	MW-OU2-44-A	8.8	11.7	25.8	6.7	1.1	8.3	10.3	19.9	6.0	1.2
2	MW-OU2-27-A	0.12 J	4.3	0.28 J	ND (0.25)	ND (0.05)	ND (0.25)	2.8	0.23 J	ND (0.25)	ND (0.05)
3	EW-OU2-09-A	0.32 J	0.28 J	0.17 J	ND (0.25)	0.092	0.28 J	0.30 J	0.14 J	0.32 J	ND (0.05)
3	EW-OU2-10-A	2.1	1.0	1.1	1.1	0.10	2.2	1.2	0.92	0.96	ND (0.05)
3	EW-OU2-12-A	9.2	7.9	14.7	1.0	0.25	7.4	4.2	7.4	1.3	0.14
3	EW-OU2-13-A	8.6	2.3	2.5	4.3	ND (0.05)	7.9	2.5	2.1	4.0	ND (0.05)
3	MW-OU2-25-A	1.1	0.40 J	0.51	0.67	ND (0.05)	1.1	0.47 J	0.52	0.58	ND (0.05)
3	MW-OU2-75-A	1.9	3.1	4.1	ND (0.25)	ND (0.05)	2.7	4.8	5.1	ND (0.25)	ND (0.05)
3	MW-OU2-81-A	6.6	10.1	4.5	0.16 J	ND (0.05)	8.5	13.4	4.8	0.15 J	ND (0.05)
4	EW-OU2-02-A	0.40 J	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	0.42 J	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
4	EW-OU2-04-A	1.2	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	1.6	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
4	EW-OU2-05-A	4.0	0.18 J	0.26 J	ND (0.25)	ND (0.05)	4.6	0.24 J	0.25 J	ND (0.25)	ND (0.05)
4	EW-OU2-06-A	3.0	0.26 J	0.19 J	ND (0.25)	ND (0.05)	3.3	0.32 J	0.18 J	ND (0.25)	ND (0.05)
4	MW-OU2-04-A	4.4	0.80	0.35 J	0.15 J	ND (0.05)	4.2	0.70	0.34 J	0.13 J	ND (0.05)
4	MW-OU2-06-A	12.7	5.8	11.4	0.21 J	0.13	NS	NS	NS	NS	NS
4	MW-OU2-06AR	NS	NS	NS	NS	NS	1.6	0.46 J	0.15 J	0.18 J	ND (0.05)
4	MW-OU2-40-A	6.1	0.44 J	0.44 J	0.12 J	ND (0.05)	6.1	0.45 J	0.42 J	0.11 J	ND (0.05)
N/A	MW-OU2-08-A	5.0	5.4	21.5	0.84	0.36	7.2	6.3	24.6	0.59	0.41

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

OU2 Hydraulic Zone ¹	Well Identification ²	TCE Concentration (µg/L)	
		3Q 2017	4Q 2017*
ACL:		5.0	
5	EW-OU2-01-180	8.5	11.3
5	MW-OU2-43-180	1.2	3.4
6	EW-OU2-03-180	8.9	9.8
6	MW-OU2-50-180	10.9	11.1
7	EW-OU2-06-180	6.7	6.5
7	MW-OU2-81-180	7.8	8.0
7	MW-OU2-44-180	17.2	18.5
9	MW-OU2-06-180R	2.8	NS
9	MW-OU2-06-180R2	NS	3.2

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
- *Preliminary results

