

HTW BCT Meeting, October 9, 2019

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

Monthly Statistics	Volume Treated (gallons)	Average Flow (gallons per minute)	Percent of Time Online	COC Mass Removed (pounds)
September 2019	32,015,614	865	100	2.41
Total since October 1995	7.811 billion			863

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

COC	Discharge Limit (µg/L)	Analytical Results (µg/L)
		9/3/2019
1,1-dichloroethane (1,1-DCA)	5.0*	0.39 J
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*	0.11 J
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

September Key Events for OU2

- Sept 10: EW-OU2-03-180 restarted (offline since Aug 30 for JV work on GWTS influent pipeline).
- Sept 16: Third Quarter 2019 Annual Groundwater Monitoring Event completed.
- Sept 16: Lose communication to EW-OU2-09-180 due to a faulty fiber optic messenger. Repaired Sept 30.

October 9019 Key Events for OU2

- Oct 28 – Nov 1: EW-OU2-05-A and EW-OU2-06-A redevelopment, video log, and pump replacement.
- JV setup leak detection system in Western Network.
- JV to repair/replace failed flow meter in EW-OU2-02-180R.
- 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)									
		2Q 2019					3Q 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	2.8	2.7	6.2	2.1	0.78	2.6	2.4	5.8	1.9	0.67
1	EW-OU2-17-A	12.1	8.1	3.0	ND (0.25)	0.12	13.6	6.4	2.3	ND (0.25)	ND (0.05)
1	EW-OU2-18-A	7.0	6.3	9.0	1.3	0.66	8.1	5.7	8.0	1.1	0.60
1	EW-OU2-19-A	6.4	7.7	15.4	2.2	1.3	5.9	6.3	14.2	2.0	1.2
1	EW-OU2-20-A	2.1	2.2	8.3	1.1	0.68	1.5	1.6	5.8	0.71	0.59
1	MW-OU2-02-A	0.73	2.0	5.5	1.3	9.4	0.48 J	1.8	5.5	1.3	8.9
1	MW-OU2-44-A	1.3	1.2	4.7	0.89	0.27	0.67	0.47 J	2.6	0.42 J	0.095 J
1	MW-OU2-73-A	ND (0.25)	1.2	6.6	0.91	7.2	ND (0.25)	1.6	3.6	0.51	6.1
2	EW-OU2-15-A	1.4	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)	1.2	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.05)
2	MW-OU2-27-A	ND (0.25)	1.9	0.28 J	ND (0.25)	ND (0.05)	0.15 J	3.3	0.30 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	1.0	0.81	0.40 J	0.59	ND (0.05)	0.89	0.66	0.31 J	0.47 J	ND (0.05)
3	EW-OU2-11-AR	1.6	0.80	1.0	0.26 J	ND (0.05)	1.6	0.75	1.0	0.24 J	ND (0.05)
3	EW-OU2-12-A	7.6	4.9	5.6	2.2	0.10	7.3	4.4	5.6	1.9	0.11
3	EW-OU2-13-A	6.0	2.3	1.4	3.3	ND (0.05)	5.7	2.0	1.4	3.1	ND (0.05)
3	MW-OU2-25-A	0.89	0.37 J	0.41 J	0.53	ND (0.05)	0.96	0.29 J	0.49 J	0.59	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	13.7	0.61	0.30 J	ND (0.25)	ND (0.05)	17.2	0.48 J	0.20 J	ND (0.25)	ND (0.05)
5	MW-OU2-04-A	2.6	0.46 J	0.73	0.80	ND (0.05)	3.3	1.0	0.71	0.75	ND (0.05)
5	MW-OU2-06AR	2.5	1.0	0.43 J	0.59	ND (0.05)	6.0	1.7	2.2	0.79	ND (0.05)
5	MW-OU2-08-A	9.6	10.3	25.4	1.4	0.57	9.3	7.6	24.6	1.5	0.64
5	MW-OU2-75-A	5.3	8.7	11.0	0.13 J	0.15	5.2	7.4	9.3	0.11 J	0.11
5	MW-OU2-81-A	7.0	14.5	3.0	0.30 J	ND (0.05)	12.9	10.8	2.7	0.26 J	ND (0.05)
5	MW-OU2-83-A	0.50	0.74	2.3	ND (0.25)	ND (0.05)	0.66	0.56	3.4	ND (0.25)	ND (0.05)
5	MW-BW-50-A	0.83	6.1	0.81	ND (0.25)	ND (0.05)	1.3	2.8	2.1	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)	
		2Q 2019	3Q 2019*
ACL:		5.0	
6	EW-OU2-03-180	9.2	7.8
6	MW-OU2-50-180	8.9	9.3
6	MW-OU2-51-180	0.76	0.25 J
7	EW-OU2-05-180	3.1	2.9
7	EW-OU2-06-180	4.1	4.0
7	EW-OU2-10-180	7.5	8.1
7	EW-OU2-11-180	NS	3.9
7	EW-OU2-12-180	10.6	7.0
7	MW-OU2-81-180	5.1	5.7
7	MW-OU2-44-180	12.2	12.1
8	EW-OU2-08-180	1.3	2.2
8	MW-OU2-28-180	3.6	4.7
8	MW-OU2-62-180	11.6	4.7
9	EW-OU2-01-180	3.6	3.7
9	EW-OU2-02-180R	6.0	5.5
9	MW-OU2-06-180R2	3.0	1.4
9	MW-OU2-43-180	2.0	1.8

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