

HTW BCT Meeting, October 22, 2020

Table 1: July-Sept 2020 – Sites 2/12 GWTP and SVTU Statistics

Monthly Statistics	Volume Treated	Average Flow	Percent of Time Online	COC Mass Removed (pounds)
July 2020 GWTP	6,204,960 gal	139 gpm	100	0.31
Aug 2020 GWTP	5,442,955 gal	122 gpm	88.9	0.27
Sept 2020 GWTP	6,023,808 gal	139 gpm	99.6	0.30
Total since April 1999	2.170 billion gal			492
July 2020 SVTU	0 scf	0 scfm	0	0.0
Aug 2020 SVTU	0 scf	0 scfm	0	0.0
Sept 2020 SVTU	0 scf	0 scfm	0	0.0
Total since September 2015	1.374 billion scf			9.9

Table 2: July-Sept 2020 – Sites 2/12 Treated Water Analytical Results at TS-212-INJ

COC	Discharge Limit (µg/L) ²	Sample Date / Analytical Results
		8/25/20
1,1-Dichloroethene (1,1-DCE)	6.0	ND (0.25)
1,2-Dichloroethane (1,2-DCA)	0.50	0.17 J
1,3-dichloropropene (1,3-DCP) ¹	0.50	ND (0.25)
Chloroform	2.0	0.36 J
cis-1,2-dichloroethene (cis-1,2-DCE)	6.0	1.3
Tetrachloroethene (PCE)	5.0	ND (0.25)
Trichloroethene (TCE)	5.0	ND (0.25)
Vinyl Chloride (VC)	0.10	ND (0.05)

Notes:

¹ The reported value is the sum of both cis- and trans-isomers.

² Discharge limits are the ACLs for injection over the plume.

J: Estimated results below the limit of quantitation (LOQ).

ND: The analyte was not detected at or above the limit of detection (LOD).

gpm: gallon(s) per minute

gal: gallon(s)

COC: chemical of concern

NS: Not sampled

scf: standard cubic foot or feet

scfm: standard cubic feet per minute

µg/L: micrograms per liter

Results in gray are ND

*Preliminary data

July 2020 Key Events for Sites 2/12

- None.

August 2020 Key Events for Sites 2/12

- Aug 15: Sites 2/12 GWTP offline for 66.5 hours due to electrical storm power outages. Power outage damaged injection pump and air stripper blower VFDs. VFDs were replaced and Sites 2/12 GWTP was restarted on Aug 18.
- Aug 18: Sites 2/12 GWTP was shut down for 16 hours as a precaution to protect sensitive equipment from damage due to expected PG&E rolling blackouts. Sites 2/12 GWTP was restarted on Aug 19.
- Aug 31-Sept 4: Third Quarter (Annual) 2020 Groundwater Monitoring Event.

September 2020 Key Events for Sites 2/12

- Sept 9-16: Third Quarter 2020 Soil Gas Monitoring Event, Second Rebound Study Event.
- Sept 17: Communications loss at OU2 GWTP caused 3-hour shut down at Sites 2/12 GWTP.

October 2020 Key Events for Sites 2/12

- Completed annual Third Quarter 2020 Soil Gas Monitoring probe sampling.

November 2020 Key Events for Sites 2/12

- None.



Table 3. Sites 2/12 Soil Gas Monitoring Results

Soil Gas Probe ID	4Q 2019	1Q 2020	2Q 2020	3Q 2020*	4Q 2019	1Q 2020	2Q 2020	3Q 2020*	Schedule
	PCE				TCE				
SG-12-01-30	NS	230	ND	450	NS	ND	ND	ND	RB
SG-12-01-58	NS	230	ND	410	NS	ND	ND	ND	RB
SG-12-01-65	ND	210	ND	330	ND	ND	ND	ND	Q ²
SG-12-02-10	<i>1,200</i>	<i>790</i>	<i>970</i>	<i>1,200</i>	ND	ND	ND	ND	Q ¹
SG-12-02-20	NS	NS	NS		NS	NS	NS		A
SG-12-02-30	NS	NS	NS		NS	NS	NS		A
SG-12-02-40	NS	NS	NS		NS	NS	NS		A
SG-12-02-50	NS	NS	NS		NS	NS	NS		A
SG-12-02-57	NS	NS	NS		NS	NS	NS		A
SG-12-02-65	NS	NS	NS		NS	NS	NS		A
SG-12-04-10	98	120	ND	100	<i>910</i>	1,300	ND	360	Q ¹
SG-12-04-20	NS	110	ND	100	NS	1,100	52 J	350	Q ³
SG-12-04-40	NS	92	ND	83 J	NS	90	ND	ND	INV
SG-12-04-50	NS	92	52 J	85	NS	630	140	180	INV
SG-12-04-58	NS	110	ND	81 J	NS	440	46 J	170	RB
SG-12-04-65	110	97	ND	88	440	<i>890</i>	150	220	Q ²
SG-12-06-10	150	120	ND	110	ND	ND	ND	ND	Q ¹
SG-12-06-70	NS	160	NS	160	NS	ND	NS	ND	RB

Soil Gas Probe ID	4Q 2019	1Q 2020	2Q 2020	3Q 2020*	4Q 2019	1Q 2020	2Q 2020	3Q 2020*	Schedule
	PCE				TCE				
SG-12-07-65	NS	380	NS	170	NS	51 J	NS	ND	RB
SG-12-08-70	NS	160	NS	230	NS	ND	NS	ND	RB
SG-12-14-70	NS	ND	NS	ND	NS	52 J	NS	ND	RB
SG-12-16-70	NS	ND	NS	ND	NS	470	NS	540	RB
SG-12-17-40	NS	NS	NS		NS	NS	NS		A
SG-12-17-60	NS	ND	NS	ND	NS	740	NS	670	RB
SG-12-18-70	NS	ND	NS	ND	NS	ND	NS	ND	RB
SG-12-20-10	NS	NS	NS		NS	NS	NS		A
SG-12-20-20	NS	NS	NS		NS	NS	NS		A
SG-12-20-70	NS	320	NS	300	NS	ND	NS	ND	RB

Notes:

*Preliminary results

A = Annual

J = estimated result below the limit of quantitation (LOQ)

INV = investigation (adjacent probe above SGCL/SG-SL)

ND = not detected above the limit of detection (LOD)

NS = not sampled

Q = Quarterly

R = Removed

RB = Rebound probe

Concentrations in **bold** exceed the SGCL

Concentrations in *italics* exceed the SG-SL

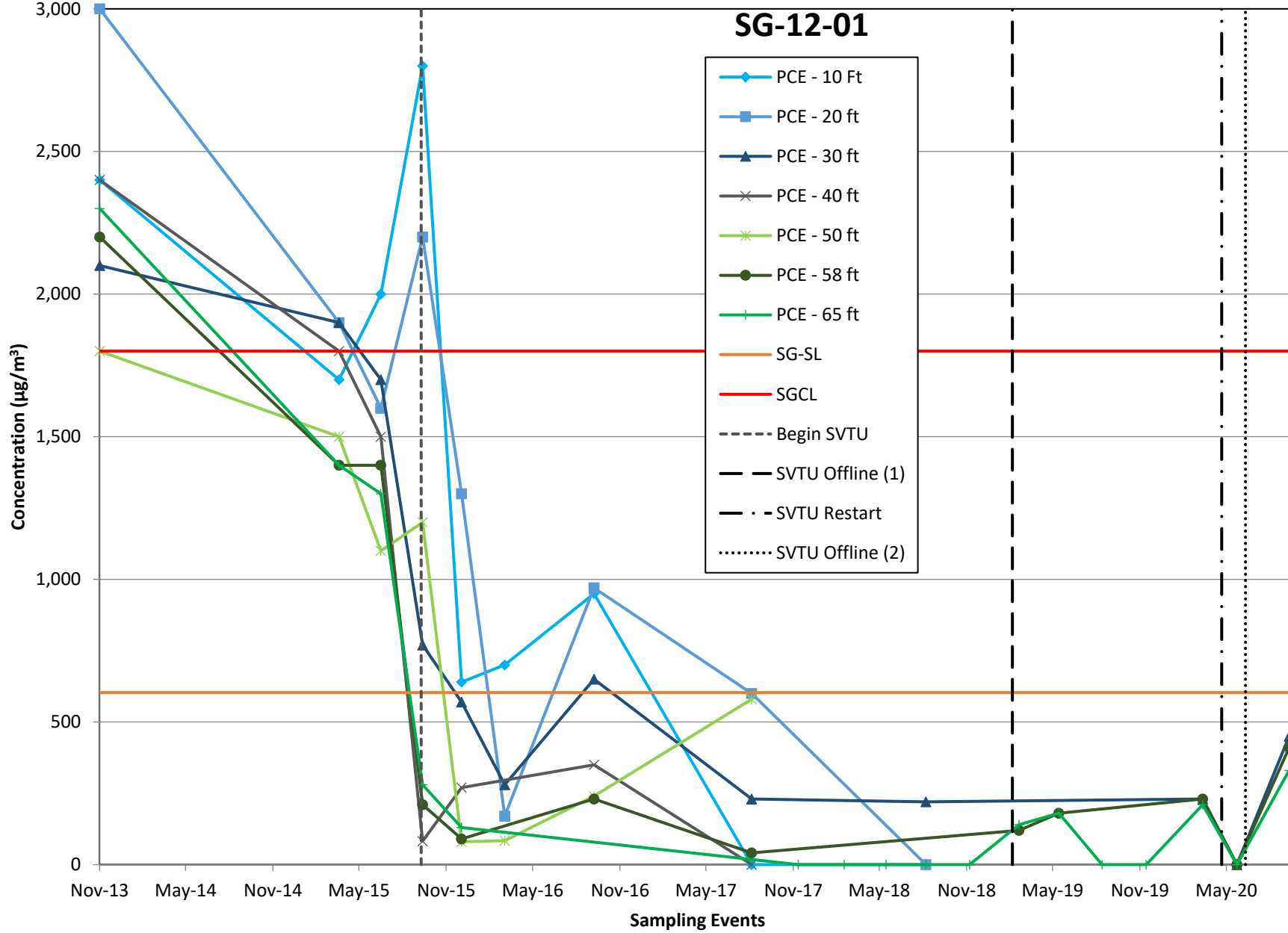
Results reported in micrograms per cubic meter (µg/m³)

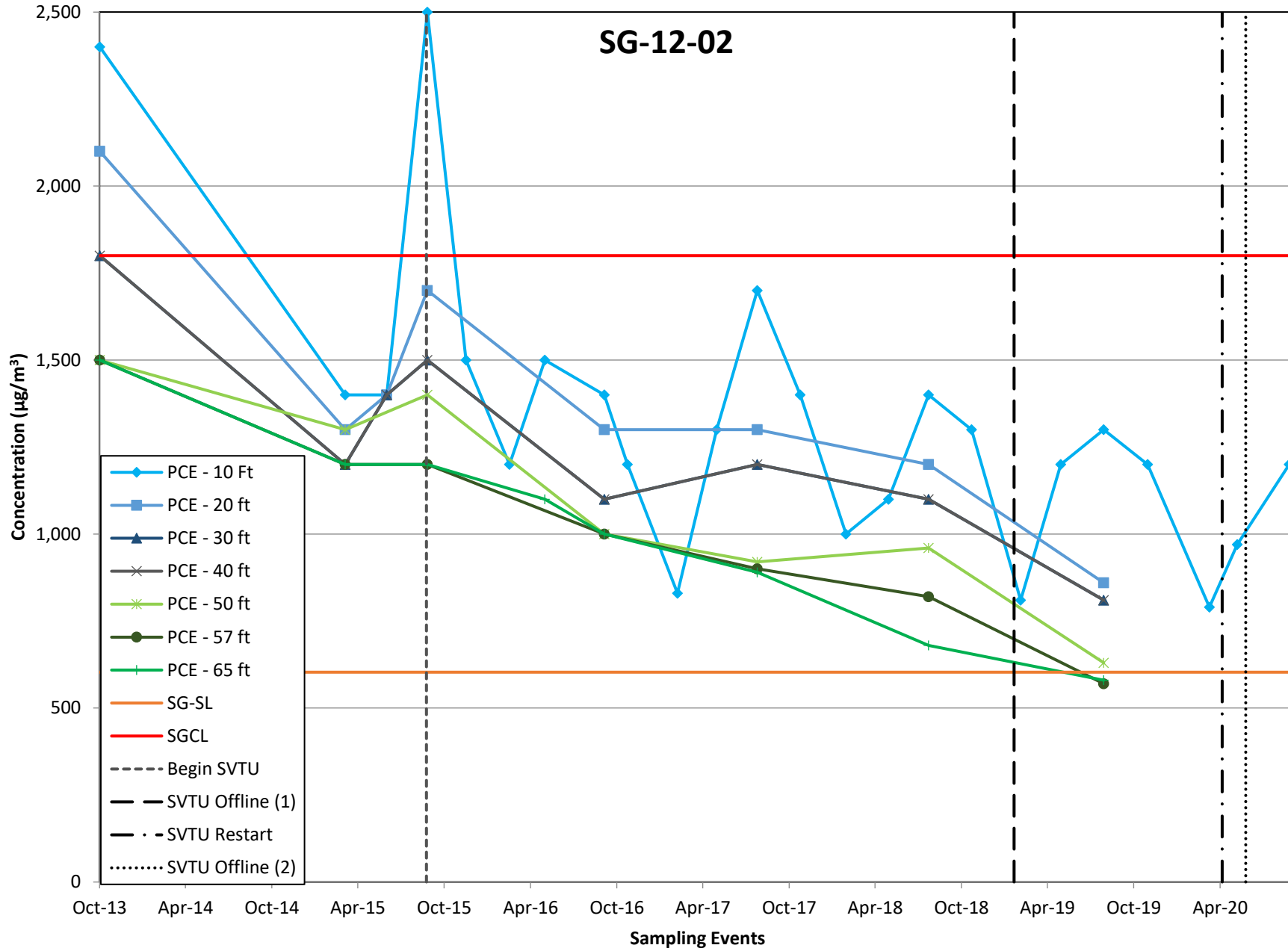
¹ Quarterly probe due to proximity of store front in an area of historic soil gas concentrations above the SGCL.

² Will continue to sample probe quarterly if it is within the vicinity of the current groundwater plume above the ACL (probe adjacent to deepest probe will be sampled in lieu if deepest probe is in saturated zone).

³ Quarterly probe due to concentration above SGCL.

	SGCL (µg/m ³)	SG-SL (µg/m ³)
PCE	1,800	603
TCE	1,000	888





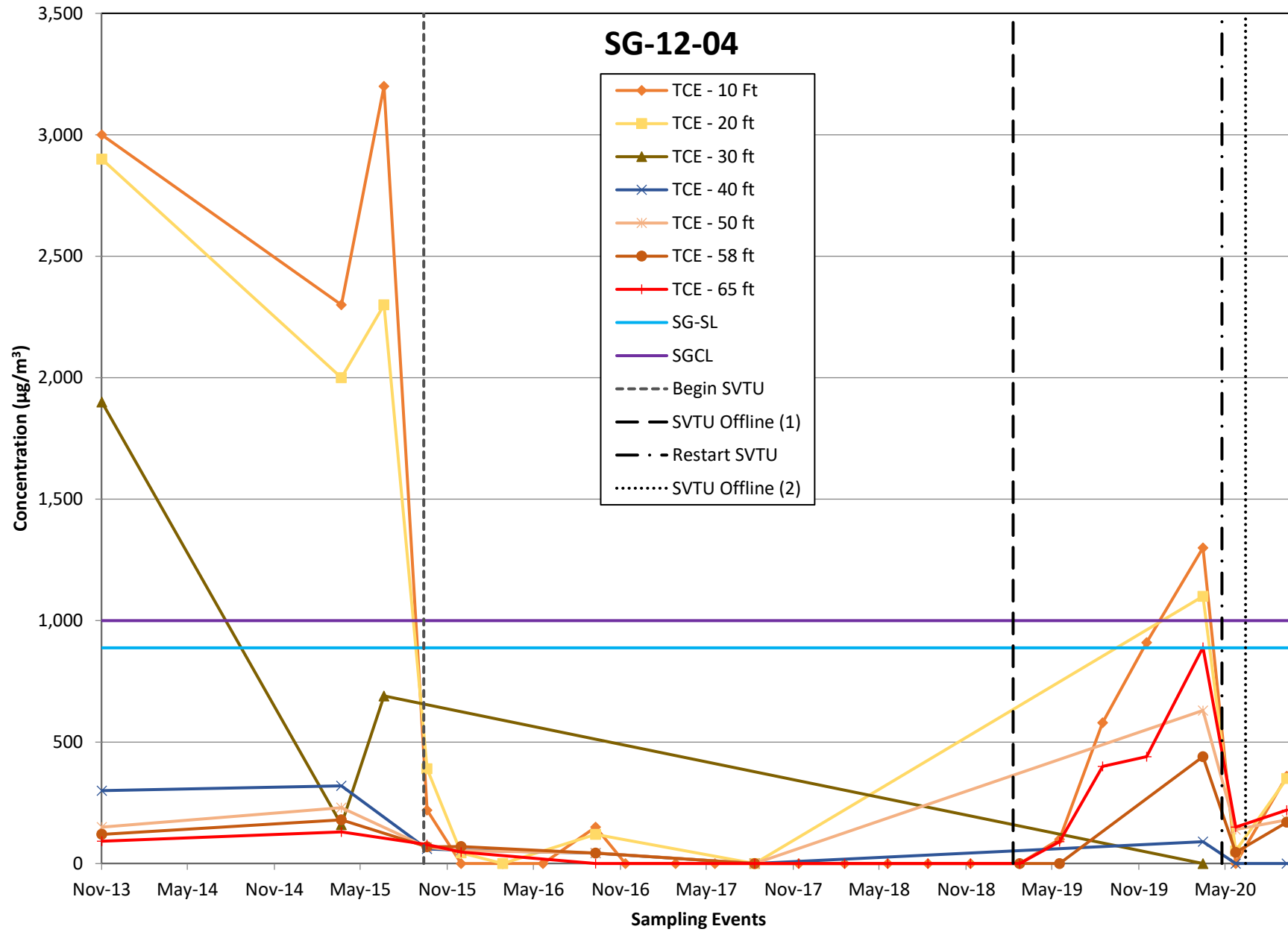


Table 6. Sites 2/12 Select Groundwater Extraction/Monitoring Well Data

Well Identification ³	Select COC Concentrations (µg/L) ⁴							
	4Q 2019	1Q 2020	2Q 2020	3Q 2020*	4Q 2019	1Q 2020	2Q 2020	3Q 2020*
	TCE				PCE			
ACL:	5.0				5.0			
EW-12-03-180M	1.3	2.1	0.62	2.4	0.25 J	ND (0.25)	ND (0.25)	0.18 J
EW-12-05-180M	2.1	0.60	2.1	1.9	0.66	0.68	0.95	0.65
EW-12-07-180M	0.81	0.78	0.63	0.54	0.27 J	0.24 J	0.19 J	0.12 J
EW-12-08-180U	0.36 J	0.31 J	0.35 J	0.36 J	13.5	8.4	13.1	11.6
MW-12-09R-180	1.7	2.3	1.4	1.2	0.29 J	0.34 J	0.30 J	0.21 J
MW-12-14-180M	1.5	1.6	1.9	2.1	0.34 J	0.31 J	0.43 J	0.36 J
MW-12-16-180M	1.5	1.8	1.8	1.7	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
MW-12-20-180U	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	5.6	0.94	2.0	3.1
MW-12-21-180U	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	0.38 J	0.35 J	0.23 J	0.41 J
MW-12-24-180U	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	3.1	0.60	0.94	0.33 J
MW-12-28-180U	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	0.31 J	0.52	0.42 J	0.39 J
MW-12-32-180U	0.54	0.84	0.57	0.64	0.54	0.71	0.48 J	0.64

Notes:

¹ The reported value is the sum of both cis- and trans-isomers.

² Discharge limits are the ACLs for injection over the plume.

³ Extraction wells not listed have met the QAPP decision rules to no longer operate.

⁴ Concentration in **bold** and shaded exceeds the Aquifer Cleanup Level (ACL). Concentrations in gray text are ND.

J: Estimated results below the limit of quantitation (LOQ)

ND: The analyte was not detected at or above the limit of detection (LOD)

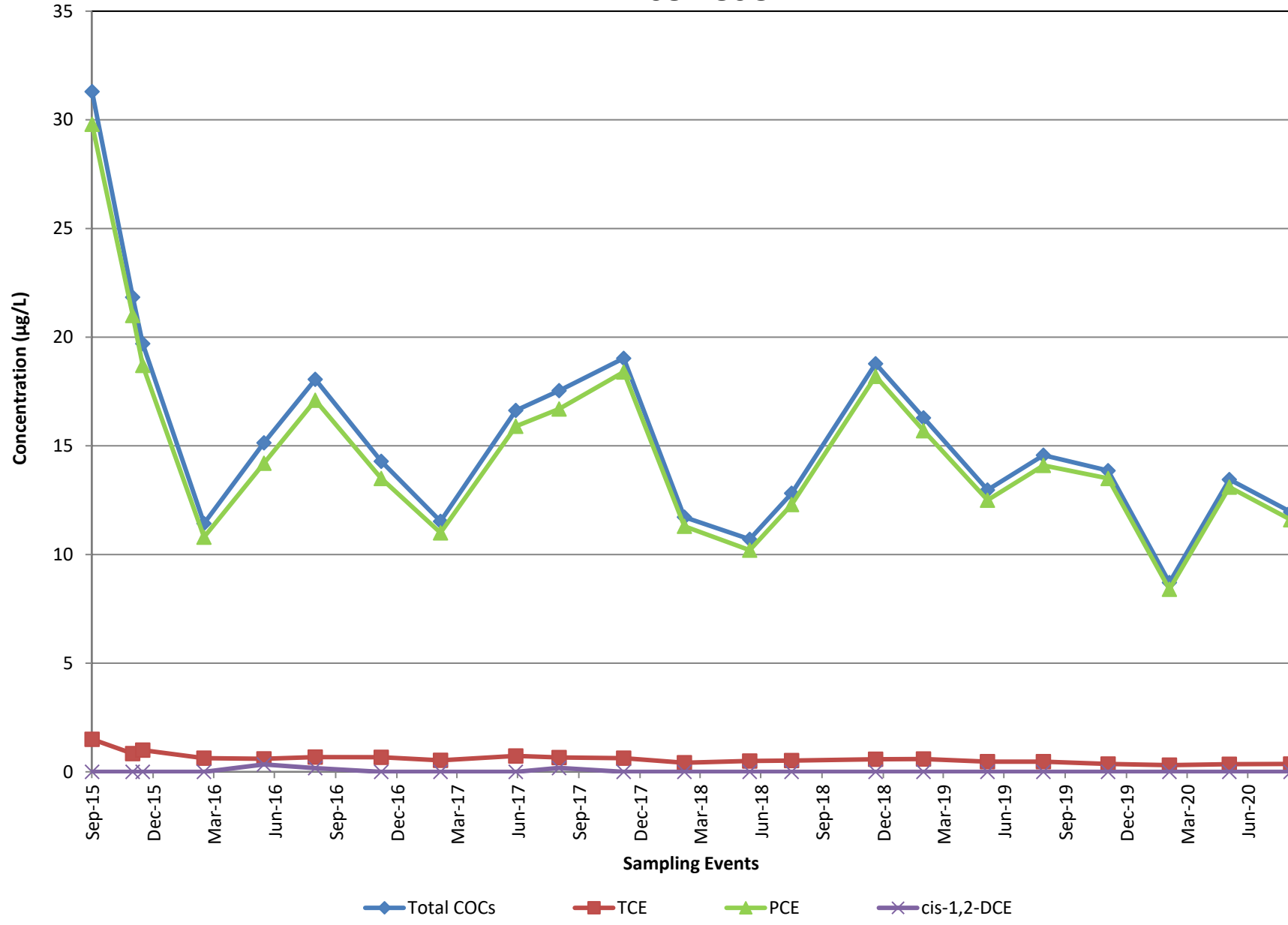
COC: chemical of concern

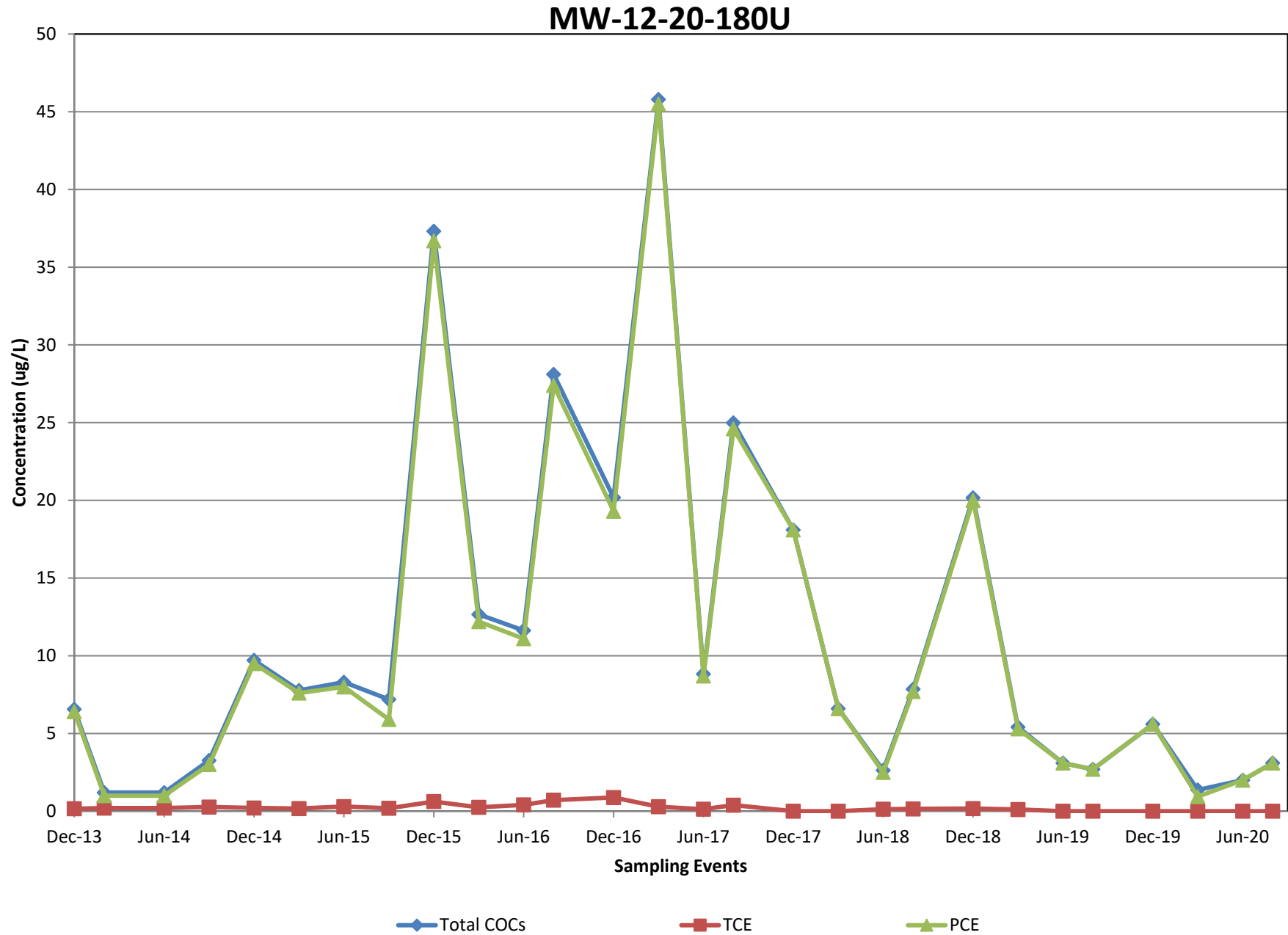
µg/L: micrograms per liter

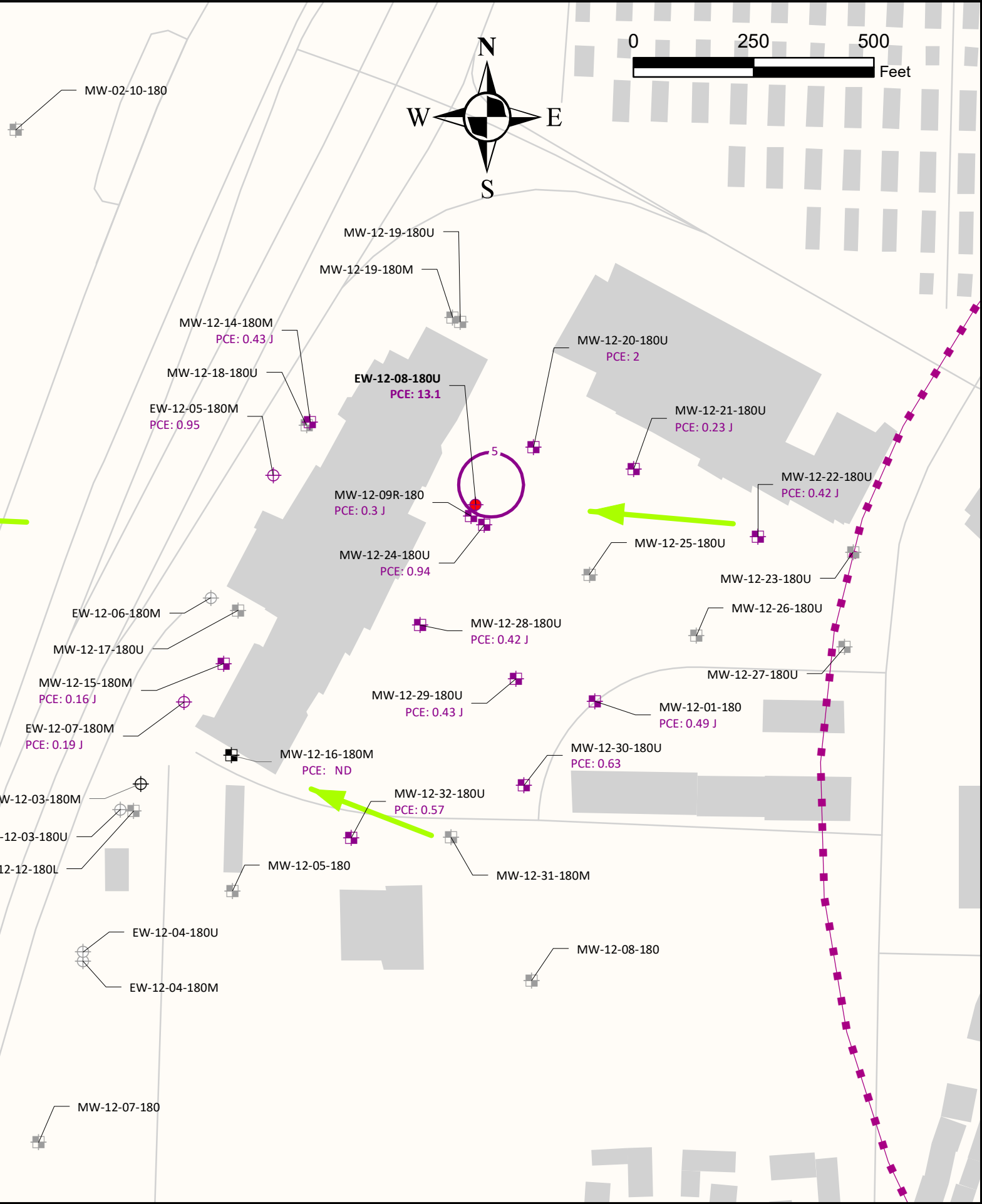
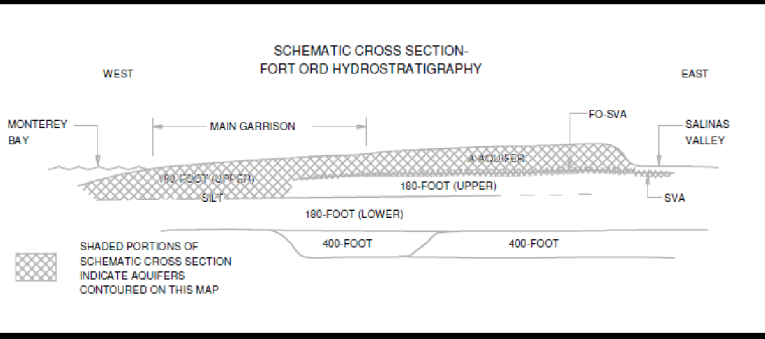
* Preliminary data



EW-12-08-180U







EXPLANATION

- Monitoring Well Not Sampled
- Monitoring Well with No PCE Detection
- Monitoring Well with PCE Less than ACL
- Extraction Well with no detection of PCE
- Extraction Well Not Sampled
- Extraction Well with PCE Less than ACL
- Extraction Well with PCE Detection Above or Equal to ACL
- EW-12-08-180U**
PCE: 13.1
Well ID - Bold when ACL Exceeded
TCE and/or PCE concentration (µg/L)
with validation/lab qualifier.

Chemical of Concern (COC) Aquifer Cleanup Level (ACL)
Exceedance Contour in µg/L.

- 5** — Tetrachloroethene (PCE)
- General Groundwater Flow Direction
- Roads
- Approximate location of the Upper 180-Footer Aquifer Groundwater Divide
- Facilities

NOTES:








- (1) Samples were collected between June 1, 2020 and June 5, 2020.
- (2) Contour is based on one interpretation of the data that was available at the time this report was prepared; other interpretations may be possible.
- (3) Contours based on highest value obtained from multiple bags where applicable.
- (4) Other COC ACL Exceedances detected beyond the extent of the PCE Plume are illustrated when present.

**GROUNDWATER PCE CONCENTRATIONS
UPPER 180-FOOT AQUIFER WEST OF THE SVA
SITES 2 AND 12
Second Quarter 2020**

Groundwater and Soil Gas Monitoring and Treatment
System Report, Former Fort Ord, California

	Date: 8/11/2020	Figure: 13
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EXPLANATION

-  Site 12 Soil Gas Probe: PCE at or above SG-SL and TCE is non-detect
-  Site 12 Soil Gas Probe: PCE and TCE below SG-SL
-  Site 12 Soil Gas Probe: PCE and TCE are non-detect
-  Site 12 Soil Gas Cluster: Probes Not Sampled
-  Site 12 Soil Vapor Extraction Well: Extration Well Not Sampled
-  Roads
-  Facilities

Label Description:

Well ID - Sample Location and Probe Depth
 TCE and PCE concentration (µg/L) with validation/lab qualifier.
 Italics when exceeds the SG-SL
 Bold when exceeds the SG-CL.
 ND Chemical of Concern is non-detect.

NOTES:

(1) Samples were collected between May 26, 2020 and May 29, 2020.

SOIL GAS PCE/TCE CONCENTRATIONS AND SGCL EXCEEDANCES, SITES 2 AND 12
 Second Quarter 2020
 Groundwater and Soil Gas Monitoring and Treatment System Report, Former Fort Ord, California

