FLORENCE COPPER

FLORENCE COPPER INC.
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November 2, 2020

ADEQ Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007

Attention: Mr. Tracy Bunch

Subject: Weekly Monitoring Report for Week Ending 10/24/2020
Florence Copper, Production Test Facility
Aquifer Protection Permit No. 106360, LTF 61845

Dear Mr. Bunch:

Florence Copper is submitting this report in accordance with Table 4.1-8 and Section 2.7.4.4 of the Production Test Facility Temporary Aquifer Protection Permit (APP) No. 106360.

In accordance with Table 4.1-8 of the APP, this report includes In-Situ Best Available Demonstrated Control Technology (BADCT) compliance monitoring for the PTF that is required to be reported on a weekly basis including:

- Recovered volume to injection volume;
- Inward hydraulic gradient; and
- Maximum injection pressure.

A map showing the location of the PTF injection, recovery, and observation wells is included as Figure 1.

Recovered Volume to Injection Volume

A summary of the injected and recovered volumes for the week of 10/18/2020 to 10/24/2020 is included in Table 1. The total injected and recovered volumes for the PTF, as well as the percent recoveries, are presented on Figure 2.

During the reporting period no exceedance of the alert level was measured for recovered volume to injected volume percent recovery.

Inward Hydraulic Gradient

Table 2 includes a summary of water levels in the recovery and observation well pairs, and the difference in head measurements. Hydrographs showing the water level elevation comparisons for each recovery well and observation well pair are included in Figure 3.

During the reporting period, there were no exceedances of the alert level for the daily average water level comparisons for the inward hydraulic gradient.

Injection Pressure

A summary of the injection pressures during the reporting period is included in Table 3. During the reporting period no alert levels were exceeded for the daily maximum injection pressure.

Please contact me at 520-374-3984 if you require any additional information.

Sincerely,
Florence Copper Inc.

Brent Berg
General Manager

Attachments:
Tables and Figures

cc: Maribeth Greenslade, ADEQ
Nancy Rumrill, United States Environmental Protection Agency

TABLES

Table 1. Injected and recovered volumes (gallons) for the week 10/18/2020 – 10/24/2020

Date	Daily Injection Flow (gal)	Daily Recovery Flow (gal)	% Recovery	AL % Recovery Less than
10/18/2020	296300	336400	114	110
10/19/2020	296300	336700	114	110
10/20/2020	296500	336200	113	110
10/21/2020	296300	336600	114	110
10/22/2020	296400	336300	113	110
10/23/2020	296200	334200	113	110
10/24/2020	296300	334000	113	110
Weekly Average	**296329**	**335771**	113	110
Avg Flow Rate (gpm)	206	233		

Table 2. Average daily water levels in the recovery and observation well pairs (amsl)

Well Pairs Average Daily Elevation & Gradient (feet)														
Well Pairs	10/18/20		10/19/20		10/20/20		10/21/20		10/22/20		10/23/20		10/24/20	
Well	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient	Elev.	Gradient
R-01	1229.53		1229.59		1229.44		1228.42		1227.66		1227.53		1226.19	
O-01	1252.15	22.62	1252.18	22.58	1252.08	22.64	1250.95	22.54	1250.40	22.74	1251.87	24.34	1249.54	23.35
O-07	1247.30	17.77	1247.35	17.76	1247.14	17.70	1246.00	17.58	1245.27	17.62	1246.80	19.27	1244.31	18.12
R-02	1180.67		1180.60		1180.53		1179.24		1178.81		1139.63		1161.61	
O-01	1252.15	71.48	1252.18	71.58	1252.08	71.55	1250.95	71.71	1250.40	71.59	1251.87	112.24	1249.54	87.93
O-02	1247.07	66.41	1247.10	66.50	1247.10	66.57	1245.93	66.68	1245.53	66.72	1245.77	106.14	1244.10	82.49
R-03	1112.04		1112.00		1112.01		1111.74		1111.88		1109.95		1110.69	
O-02	1247.07	135.03	1247.10	135.11	1247.10	135.09	1245.93	134.18	1245.53	133.65	1245.77	135.82	1244.10	133.41
O-03	1245.39	133.35	1234.89	122.89	1245.78	133.77	1244.47	132.73	1244.57	132.69	1231.92	121.97	1241.89	131.20
R-04	1150.28		1150.23		1150.24		1149.96		1151.64		1136.66		1146.61	
O-03	1245.39	95.11	1234.89	84.66	1245.78	95.54	1244.47	94.51	1244.57	92.92	1231.92	95.26	1241.89	95.28
R-05	1159.85		1159.54		1159.20		1157.25		1156.78		1110.06		1139.66	
O-04	1245.98	86.13	1246.02	86.47	1245.70	86.50	1244.25	86.99	1243.87	87.09	1243.45	133.39	1242.18	102.52
R-06	1112.59		1112.54		1112.57		1112.64		1114.12		1112.90		1112.69	
O-04	1245.98	133.39	1246.02	133.47	1245.70	133.13	1244.25	131.60	1243.87	129.75	1243.45	130.55	1242.18	129.49
O-05	1247.57	134.98	1247.63	135.08	1247.29	134.72	1246.12	133.48	1245.43	131.30	1245.70	132.80	1243.96	131.27
R-07	1243.83		1243.91		1243.68		1242.56		1241.84		1242.57		1240.52	
O-05	1247.57	3.74	1247.63	3.71	1247.29	3.61	1246.12	3.56	1245.43	3.59	1245.70	3.13	1243.96	3.44
O-06	1248.20	4.38	1248.26	4.35	1248.06	4.38	1246.98	4.42	1246.25	4.41	1247.22	4.65	1245.10	4.58
R-08	1233.20		1233.37		1233.25		1232.26		1228.61		1204.74		1217.04	
O-06	1248.20	15.00	1248.26	14.89	1248.06	14.81	1246.98	14.72	1246.25	17.64	1247.22	42.48	1245.10	28.06
O-07	1247.30	14.10	1247.35	13.98	1247.14	13.89	1246.00	13.74	1245.27	16.67	1246.80	42.06	1244.31	27.27

Table 3. Injection well pressures (psi)

Date	I-01			I-02			I-03			I-04			AL Max Inj Pressure
	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	
10/18/2020	0.00	0.00	2.44	0.00	0.00	0.00	0.00	0.00	0.00	27.05	0.00	28.09	113
10/19/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.92	25.44	28.36	113
10/20/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.26	24.47	28.41	113
10/21/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.57	0.00	28.22	113
10/22/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.42	24.98	27.79	113
10/23/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	28.42	26.53	29.59	113
10/24/2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.77	25.35	30.15	113

FIGURES

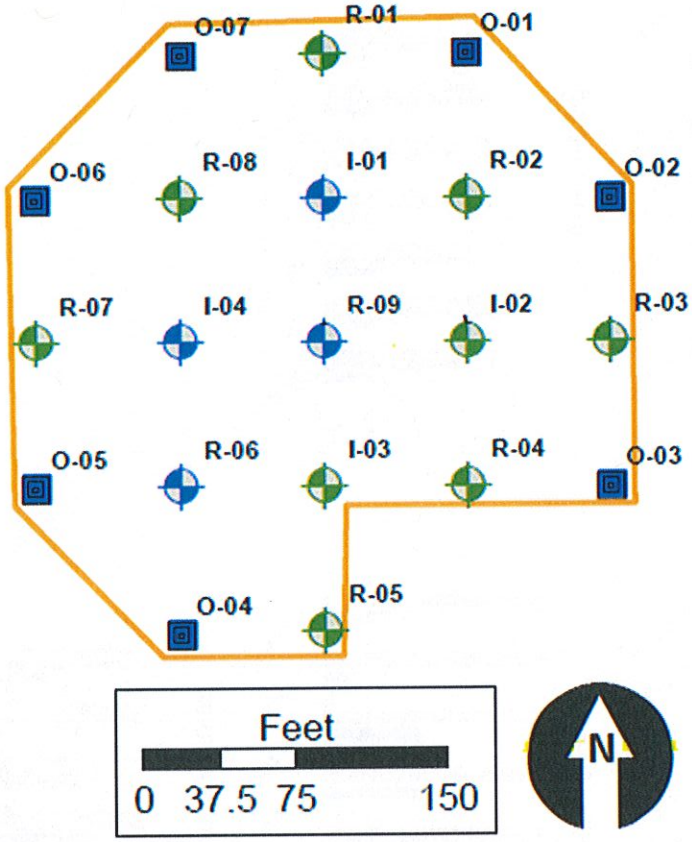

Figure 1. PTF injection, recovery, and observation well locations

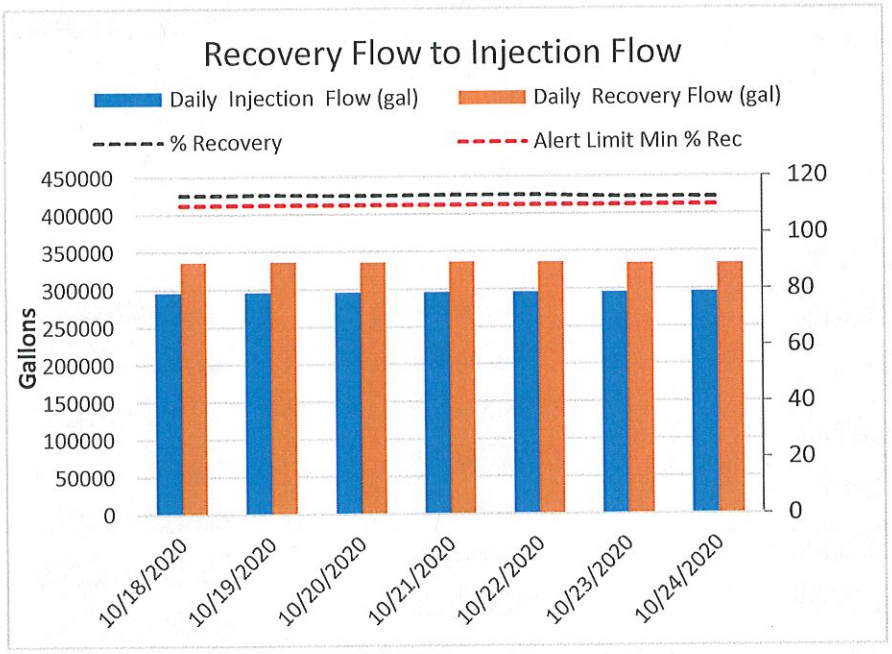

Figure 2. Recovered volume to injected volume

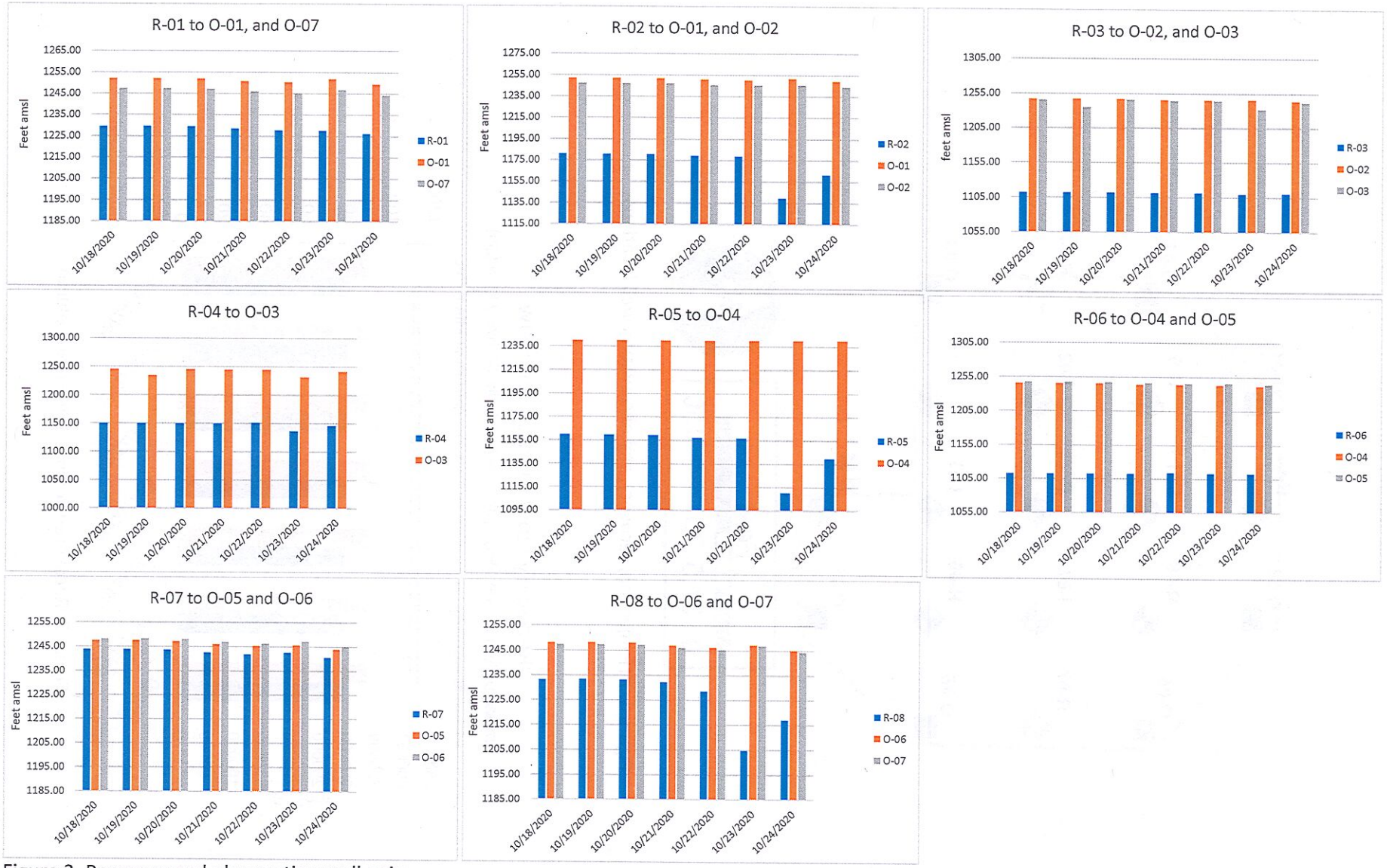

Figure 3. Recovery and observation well pairs.