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WATER QUALITY MEMORANDUM

Utah Coal Regulatory Program

May 25, 2006

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor DWH

FROM: Dana Dean, P.E., Senior Reclamation Hydrologist

RE: 2005 Second Quarter Water Monitoring, Canyon Fuel Company, LLC, Skyline Mine, C/007/0005, Task #2265

The Skyline Mine is an operating longwall mine. Current operations are in the North Lease area of the mine. Many mined-out areas of the mine have been sealed-off. Water monitoring requirements can be found in Section 2, especially pages 2-36, 2-36a, 2-36b, 2-37, 2-37a, and 2-39aa of the MRP.

1. Was data submitted for all of the MRP required sites? YES ☐ NO ☒

Springs

The MRP requires spring sampling at 25 springs (S10-1, S12-1, S13-2, S13-7, S14-4, S15-3, S17-2, S22-5, S22-11, S23-4, S24-1, S24-12, S26-13, S34-12, S35-8, S36-12, 2-413, 3-290,8-253, WQ1-39, WQ3-6, WQ3-26, WQ3-41, WQ3-43, and WQ4-12).

The Permittee submitted all required samples for the spring sites.

Streams

The MRP requires spring sampling at 43 stream-sites (CS-1, CS-3, CS-4, CS-6, CS-7, CS-8, CS-9, CS-10, CS-11, CS-12, CS-13, CS-14, CS-15, CS-16, CS-17, CS-18, CS-19, CS-20, CS-21, CS-22, CS-23, MD-1, SRD-1, F-9, F-10, UP&L-10, VC-6, VC-9, VC-10, VC-11, VC-12, MC-1, MC-2, MC-3, MC-4, MC-5, MC-6, WRDS-1, WRDS-2, WRDS-3, WRDS-4, EL-2, and EL-2).

The Permittee submitted all required samples for the stream sites.

Wells

The MRP requires spring sampling at 17 wells (JC-1, JC-3, ELD-1, W79-10-1-B, W79-14-2A, W79-26-1, W79-35-1A, W79-35-1B, W2-1, W20-4-1, W20-4-2, W99-4-1, W99-21-1, W99-28-1, W20-28-1, 91-26-1, and 91-35-1).

The Permittee submitted all required samples for the well sites.

UPDES

The UPDES Permit/MRP require weekly monitoring of 3 outfalls: 001, Sedimentation Pond Discharge to Eccles Creek at the Portal; 002, Sedimentation Pond Discharge to Eccles Creek at the Loadout; and 003, the Sedimentation Discharge at the Waste Rock Disposal Site. Well JC-3 is permitted as a UPDES point, but PacifiCorp is the Permittee, and JC-3 has not discharged since July of 2004.

The Permittee did not submit samples for the first or third week of April for site 002. This omission was included in N06-39-3-1 (April 25, 2006). The Permittee then submitted the samples on April 26, 2006 as part of the NOV abatement.

2. Were all required parameters reported for each site? YES ☐ NO ☒

The Permittee failed to report several parameters, as listed on the attached sheets. These omissions were included in N06-39-3-1 (April 25, 2006). The Permittee indicated in a letter dated April 26, 2006 that they did not believe they had any of these missing parameters, and therefore would not be able to submit them.

3. Were any irregularities found in the data? YES ☒ NO ☐

Several parameters fell outside of two standard deviations from the mean encountered at the respective sites. They were:

Site	Parameter	Value	Standard Deviations from Mean	Mean
CS-6	Dissolved Calcium	122 mg/L	2.43	79.17 mg/L
CS-7	Orthophosphate	0.91 mg/L	2.39	0.11 mg/L
CS-8	Total Alkalinity	92 mg/L	2.69	161.53 mg/L
CS-10	Total Alkalinity	60 mg/L	2.68	108.22 mg/L
CS-10	Total Dissolved Solids	80 mg/L	2.30	146.95 mg/L
CS-12	Specific Conductivity	2480 µmhos/cm	2.76	1026.23 µmhos/cm
CS-12	Dissolved Calcium	220 mg/L	2.41	93.34 mg/L
CS-12	Dissolved Magnesium	148 mg/L	2.55	55.57 mg/L
CS-12	Dissolved Potassium	23.6 mg/L	2.24	9.83 mg/L
CS-12	Sulfate	1136 mg/L	3.30	232.13 mg/l
CS-12	Total Dissolved Solids	2170 mg/L	3.17	424.82 mg/L
CS-16	Specific Conductivity	214 µmhos/cm	2.88	315.08 µmhos/cm

CS-16	Flow	2700 gpm	16.54	189.31 gpm
CS-16	Total Alkalinity	111 mg/L	2.12	113.30 mg/L
CS-16	Turbidity	10 NTU	3.10	4.51 NTU
CS-17	Specific Conductivity	179 µmhos/cm	2.28	293.58 µmhos/cm
CS-17	Flow	713 gpm	7.48	91.39 gpm
CS-17	Dissolved Magnesium	3.65 mg/L	2.00	7.25 mg/L
CS-17	Turbidity	13 NTU	6.25	3.08 NTU
CS-17	Total Dissolved Solids	109 mg/L	2.95	172.75 mg/L
CS-18	Flow	12835 gpm	11.66	990.27 gpm
CS-18	Dissolved Magnesium	5.4 mg/L	3.15	7.28 mg/L
CS-18	Turbidity	17 NTU	2.43	5.68 NTU
CS-18	Total Dissolved Solids	101 mg/L	2.27	150.58 mg/L
CS-20	Flow	2800 gpm	2.85	579.88 gpm
CS-21	Flow	1795 gpm	2.23	640.69 gpm
F-9	Flow	503 gpm	3.97	98.88 gpm
F-10	Flow	834 gpm	4.22	163.5 gpm
F-10	Dissolved Magnesium	18.8 mg/L	2.63	13.19 mg/L
F-10	Dissolved Sodium	24 mg/L	3.71	3.93 mg/L
UPL-10	Total Alkalinity	92 mg/L	2.84	147.29 mg/L
VC-6	Dissolved Calcium	138 mg/L	2.04	87.09 mg/L
MC-5	Total Dissolved Solids	205 mg/L	2.26	321.45 mg/L
S13-7	Total Suspended Solids	196 mg/L	2.92	46.9 mg/L
S14-4	pH	7.96	2.21	6.94
S15-3	Total Alkalinity	110 mg/L	2.11	178.01 mg/L
S22-5	Specific Conductivity	881 µmhos/cm	2.11	516.86 µmhos/cm
S22-5	Dissolved Calcium	130 mg/L	2.57	87.07 mg/L
S22-5	Dissolved Sodium	42 mg/L	2.39	16.35 mg/L
S22-5	Total Dissolved Solids	626 mg/L	3.54	305.49 mg/L
S23-4	Flow	9.3 gpm	3.48	1.54 gpm
S26-13	Total Alkalinity	178 mg/L	2.33	203.56 mg/L
S34-12	Flow	69.2 gpm	5.71	11.43 mg/L
S34-12	Dissolved Calcium	75.5 mg/L	2.68	65.69 mg/L
S35-8	Dissolved Calcium	86.9 mg/L	2.01	74.56 mg/L
S36-12	Specific Conductivity	292 µmhos/cm	2.07	407.87 µmhos/cm
S36-12	Total Alkalinity	172 mg/L	2.90	207.09 mg/L
2-413	Flow	9.09 gpm	2.40	3.17 gpm
WQ1-39	Flow	26.3 gpm	2.51	6.57 gpm
WQ3-26	Flow	13.8 gpm	2.79	3.02 gpm
WQ3-41	Flow	16 gpm	3.22	2.54 gpm
WQ3-41	Dissolved Calcium	111 mg/L	2.09	95.85 mg/L
WQ3-41	Total Dissolved Solids	469 mg/L	2.18	408.42 mg/L
WQ3-43	Flow	14.9 gpm	3.23	2.05 gpm

WQ4-12	Specific Conductivity	267 µmhos/cm	2.12	357.27 µmhos/cm
WQ4-12	Total Alkalinity	117 mg/L	2.01	158.73 mg/L
WQ4-12	Sulfate	25 mg/L	2.02	33.82 mg/L
W20-4-2	Depth	1116.6 feet	2.24	1145.78 feet

There is a slight upward trend in dissolved calcium at VC-6, CS-6, and S34-12 (R^2 = 0.019, 0.028, and 0.074 respectively). There is a somewhat stronger upward trend at CS-12, S35-8, WQ3-41, and S22-5 (R^2= 0.304, 0.433, 0.645, and 0.711). There is a very weak negative correlation to flow at CS-6, and VC-6; a weak negative correlation to flow at S22-5 and S35-8; a weak positive correlation to flow at CS-12; and a fairly strong positive correlation to flow at WQ3-41. There are no criteria for this metal, but it does contribute to water hardness. The Permittee has not sampled for hardness since 1996, so the Division had to use calculated hardness for subsequent samples. The hardness at these sites has always fallen into the hard (150-300 mg/l) to very hard (>300 mg/l) classifications. It is not completely clear why the calcium level has been increasing, but this does not represent a degradation of water quality.

There is a fairly strong upward trend in the dissolved magnesium at CS-12, and F-10 (R^2= 0.1952, and 0.4255) and a weak downward trend at CS-17, and CS-18 (R^2= 0.2266, and 0.0351). The dissolved magnesium has a strong negative correlation to flow at CS-17 and CS-18, a strong positive correlation to flow at F-10, and a weak positive correlation to flow at CS-12. There are no criteria for this metal, but it does contribute to water hardness. The Permittee has not sampled for hardness since 1996, so the Division had to use calculated hardness for subsequent samples. The hardness at CS-12 and F-10 has always fallen into the hard (150-300 mg/l) to very hard (>300 mg/l) classifications. It is not completely clear why the magnesium level has been increasing at these two sites, but this does not represent a degradation of water quality. Similarly, it is unclear why the magnesium levels are dropping at CS-17 and CS-18, but a drop in magnesium means a drop in the hardness of the water, and therefore is a benefit to the water quality.

There is a strong upward trend in the dissolved potassium at CS-12 (R^2= 0.495). There is a very weak positive correlation to flow. There are no standards for this metal, and 23.6 mg/L is still a relatively low number and does not represent degradation of water quality.

There is a weak to very weak upward trend in the dissolved sodium at F-10 and S22-5 (R^2= 0.0888 and 0.1867). There is a strong positive correlation to flow at F-10, and no real correlation to flow at S22-5. There is no water quality standard for sodium, but it does affect water hardness (making it "soft"), and water with more sodium than calcium + magnesium can negatively affect plant growth. This condition has never occurred (so far) at F-10, or S22-5.

For the majority of the sites with flows outside 2 standard deviations from the mean (all but S23-4, and S34-12), monitoring began in or after June of 2001. Both the Palmer Hydrologic Drought Index (PHDI) and Surface Water Supply Index (SWSI) show June 2005 as the wettest

period after June 2001. A plot of the flows vs. both the SWSI and PHDI shows an agreement. For spring S23-4 no significant flows were recorded until August of 1998. Again, June of 2005 is the wettest period since that date, and the plot shows agreement. For spring S34-12, it is unclear why the flow was so much higher in June 2005 than other monitored periods with similar PHDI and SWSI numbers, however the plot of flow vs. the SWSI and PHDI is in agreement. Higher than average flows are not a sign of negative impact from mining; on the contrary, they are a welcome sight, especially as this area emerges from a long drought.

The orthophosphate at CS-7 has a very slight upward trend (R^2= 0.136), with a weak correlation to flow. This is the highest reading ever recorded at the site (out of 29 readings), with all other readings at or below 0.05 mg/L. Orthophosphate is a measure of the soluble reactive phosphorous, or the amount of phosphorous available for direct uptake by plants. There is no water quality standard for phosphorous, but the EPA recommends that the level be kept below 0.05 mg/L where streams directly enter reservoirs and lakes to prevent eutrophication. It recommends that phosphorous be kept below 0.1 mg/L in streams where they do not directly enter reservoirs or lakes. Since this is the only time that the orthophosphate has been at such a high level, it is not a concern at this time. However, it will be closely watched in the future to make sure that eutrophication does not become concern.

The pH at S14-4 has a very slight upward trend (R^2= 0.156), with no real correlation to flow. This is the highest reading ever recorded at the site (out of 73 readings), though two samples in 1982 had a pH of 8.2. A pH of 8.31 is still in an acceptable range for natural waters and is not of concern at this time.

There is a strong to fairly strong upward trend in the specific conductivity at S22-5, and CS-12 (R^2= 0.838, and 0.354), with no real correlation to flow at either site. There is a fairly strong downward trend in the specific conductivity at CS-16 (R^2= 0.366), with a fairly weak negative correlation to flow. At CS-17, WQ4-12, and S36-12 there is no real trend in the specific conductivity (R^2= 0.085, 0.0307, and 0.013), but at CS-17 and WQ4-12 there is a fairly strong negative correlation to flow. There is no standard for specific conductivity, but it is closely related to total dissolved solids (TDS), especially at CS-12 and S22-5 (R^2= 0.898, and 0.719). Where the readings are below the average recorded at the site (CS-16, CS-17, WQ4-12, and S36-12), the number of samples is low, and a lower number of TDS is an improvement in water quality. The TDS at CS-12 and S22-5 will be discussed in the next paragraph.

There is a strong to fairly strong upward trend in TDS at S22-5, WQ3-41, and CS-12 (R^2= 0.694, 0.498, and 0.420); of the three only WQ3-41 has a strong correlation to flow (positive). There is no real trend in the TDS at MC-5, CS-10, CS-17, or CS-18. Of the sites where the TDS is outside of 2 standard deviations from the mean, only CS-12, S22-5, and WQ3-41 are *above* the mean. There is no concern where the TDS is lower than average. The TDS at CS-12 has almost always been above the secondary drinking water standard of 500 mg/L (75% of the 154 samples), and periods of high TDS have generally been followed by periods of low TDS. At S22-5 only 3 of the 68 samples taken have been over 500mg/L, and at WQ3-41 all 11

samples taken have been below 500 mg/L.

There is a weak upward trend in sulfate at CS-12, and no trend at WQ4-12 (R^2= 0.241, and 0.008). The sulfate at CS-12 does not seem to correlate to flow, but at WQ4-12 there is a strong negative correlation to flow, which explains why the reading this quarter is below average. Though the sulfate reading at CS-12 is high, there is no indication of acid mine drainage (AMD), since the pH has remained at or above 6.8, the alkalinity is fairly high (574 mg/L), and the levels of iron, manganese and aluminum have remained low. Sulfate is not toxic to plants or animals (even at very high concentration), but has a cathartic effect on humans in concentrations over 500 mg/L. For this reason, the EPA has set the secondary standard as 250 mg/L. The sulfate at CS-12 has been greater than 250 mg/L in 65% of the samples, mostly since 1986. The sulfate tends to dilute when introduced into Eccles Creek and by the time it gets to CS-6 is about 30% of the value at CS-12, while the alkalinity remains at about 61% of the CS-12 value. The Division will continue to closely monitor the trend of this parameter.

The total alkalinity is below average this quarter at CS-8, CS-10, CS-16, UPL-10, S15-3, S26-13, S36-12, and WQ4-12. There is no strong trend in the alkalinity at any of these sites (R^2< 0.22), and the weak trends are all downward, except at S15-3. There is a fairly strong to strong negative correlation to flow at sites CS-10, CS-8, UPL-10, WQ4-12, and S15-3 (R^2= 0.35, 0.50, 0.57, 0.64, and 0.66), which explains the low alkalinity readings this quarter (much higher than normal flows). There is a weak negative correlation to flow at S26-13 and CS-16 (R^2= 0.25, and 0.20). There is little correlation to flow at S36-12 (R^2= 0.01). Alkalinity is an important measure of buffering capacity (ability to absorb acids without lowering pH), and the Division will continue to monitor the trend of this parameter.

There is a fairly strong upward trend in total suspended solids (TSS) at S13-7 (R^2= 0.337) with a fairly strong negative correlation to flow and flow was just 1.39 gpm. There are no water quality standards for TSS, but the Division will continue to monitor this trend.

There is no real trend in the turbidity readings at CS-16, CS-17, and CS-8, though their values were well above the mean this quarter. Part of the reason may be that there is a small sample size for each site (n=14). There is a strong positive correlation to flow at each site, and the flows for these sites were well above average this quarter as well. There is no water quality standard for turbidity, but it closely relates to the amount of solids in the water, particularly TSS. The TSS at each of these sites was within acceptable ranges this quarter.

The water elevation at W20-4-2 was higher than usual this quarter. There is a fairly strong upward trend (R^2= 0.494), and the Permittee suggests that it is possibly due to recovery of the Storr's Sandstone after the mine was flooded. This well has been monitored only since 2002 where the initial level was measured at 8420.53 feet. This quarter's elevation is 8437.4 feet. This is a positive sign for the hydrologic balance in the area.

Several routine Reliability Checks were outside of standard values. They were:

Site	Reliability Check	Value Should Be...	Value is...
CS-1	K/(Na + K)	< 20%	22%
CS-3	Na/(Na + Cl)	> 50%	22%
CS-4	Na/(Na + Cl)	> 50%	48%
CS-6	Mg/(Ca + Mg)	< 40 %	49%
CS-7	K/(Na + K)	< 20%	25%
CS-10	K/(Na + K)	< 20%	21%
CS-11	Na/(Na + Cl)	> 50%	43%
CS-12	TDS/Conductivity	>0.55 & <0.75	0.88
CS-12	Mg/(Ca + Mg)	< 40 %	53%
CS-12	Ca/ (Ca + SO4)	> 50 %	32%
CS-14	TDS/Conductivity	>0.55 & <0.75	0.76
CS-14	Mg/(Ca + Mg)	< 40 %	48%
CS-14	Ca/ (Ca + SO4)	> 50 %	46%
CS-16	K/(Na + K)	< 20%	25%
CS-17	K/(Na + K)	< 20%	23%
CS-18	TDS/Conductivity	>0.55 & <0.75	0.46
CS-19	TDS/Conductivity	>0.55 & <0.75	0.75
CS-20	K/(Na + K)	< 20%	23%
CS-21	TDS/Conductivity	>0.55 & <0.75	0.76
MD-1	TDS/Conductivity	>0.55 & <0.75	0.80
MD-1	Mg/(Ca + Mg)	< 40 %	50%
MD-1	Ca/ (Ca + SO4)	> 50 %	43%
UPL-10	Na/(Na + Cl)	> 50%	44%
VC-6	Mg/(Ca + Mg)	< 40 %	47%
VC-9	Mg/(Ca + Mg)	< 40 %	49%
S10-1	TDS/Conductivity	>0.55 & <0.75	0.87
S10-1	K/(Na + K)	< 20%	21%
S10-1	Na/(Na + Cl)	> 50%	32%
S13-7	Na/(Na + Cl)	> 50%	45%
S14-4	K/(Na + K)	< 20%	21%
S14-4	Na/(Na + Cl)	> 50%	27%
S15-3	TDS/Conductivity	>0.55 & <0.75	0.52
S15-3	Na/(Na + Cl)	> 50%	47%
S22-5	Na/(Na + Cl)	> 50%	32%
S23-4	K/(Na + K)	< 20%	22%
S24-1	Mg/(Ca + Mg)	< 40 %	43%
S24-12	K/(Na + K)	< 20%	26%
S26-13	K/(Na + K)	< 20%	47%

S34-12	TDS/Conductivity	>0.55 & <0.75	0.50
S34-12	K/(Na + K)	< 20%	22%
S35-8	TDS/Conductivity	>0.55 & <0.75	0.79
S35-8	K/(Na + K)	< 20%	22%
S36-12	TDS/Conductivity	>0.55 & <0.75	0.78
3-290	TDS/Conductivity	>0.55 & <0.75	0.97
WQ1-39	TDS/Conductivity	>0.55 & <0.75	1.05
WQ1-39	K/(Na + K)	< 20%	20%
WQ3-26	TDS/Conductivity	>0.55 & <0.75	0.98
WQ3-26	K/(Na + K)	< 20%	29%
WQ3-41	TDS/Conductivity	>0.55 & <0.75	0.76
WQ3-43	TDS/Conductivity	>0.55 & <0.75	0.79
WQ4-12	TDS/Conductivity	>0.55 & <0.75	0.77
92-91-03	TDS/Conductivity	>0.55 & <0.75	0.76
UT0023540-001 4/8	TDS/Conductivity	>0.55 & <0.75	0.76
UT0023540-001 4/19	TDS/Conductivity	>0.55 & <0.75	0.76
UT0023540-001 5/4	TDS/Conductivity	>0.55 & <0.75	0.77
UT0023540-001 5/18	TDS/Conductivity	>0.55 & <0.75	0.76
UT0023540-001 6/14	TDS/Conductivity	>0.55 & <0.75	0.82

These inconsistencies do not necessarily mean that a sample is wrong, but it does indicate that something is unusual. An analysis and explanation of the inconsistencies by the Permittee would help to increase the Division's confidence in the samples. The Permittee should work with the lab to make sure that samples pass all quality checks so that the reliability of the samples does not come into question. The Permittee can learn more about these reliability checks and some of the geological and other factors that could influence them by reading Chapter 4 of *Water Quality Data: Analysis and Interpretation* by Arthur W. Hounslow.

The Utah Division of Water Quality (DWQ) issued the current UPDES permit on Nov. 23, 2004. It allows for a daily maximum of total dissolved solids discharged (TDS) of 1310 mg/l and a 30-day average of 500 mg/l. There is no tons per day (tpd) daily maximum, unless the 30-day average exceeds 500 mg/l; then a 7.1-tpd limit is imposed. The permit also states:

Upon determination by the Executive Secretary that the permittee is not able to meet the 500 mg/L 30-day average or the 7.1 tons per day loading limit, the permittee is required to participate in and/or fund a salinity offset project to include TDS offset credits, within six (6) months of the effective date of this permit.

For the second quarter of 2005, the Permittee has not exceeded the daily max of 1310 mg/L for TDS. However, the 20-day average has remained well above 500 mg/l and the tons per day are greater than 25. The Division of Water Quality approved a Salinity Offset Plan for the Skyline Mine on January 5, 2005, which is retroactive to September 2004. Canyon Fuel

Company is in compliance with the salinity offset program.

4. On what date does the MRP require a five-year re-sampling of baseline water data.

There is no commitment in the MRP to resample for baseline parameters.

5. Based on your review, what further actions, if any, do you recommend?

No further actions are necessary at this time.

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Parameters missing from Skyline Mine water monitoring data for second quarter, 2005 as of the end of business on 4/14/06.

3-290
dissolved iron
dissolved manganese

S10-1
dissolved iron
dissolved manganese

S12-1
dissolved iron
dissolved manganese

S13-2
dissolved iron
dissolved manganese

S13-7
dissolved iron
dissolved manganese

S14-4
dissolved iron
dissolved manganese

S17-2
dissolved iron
dissolved manganese

S22-11
dissolved iron
dissolved manganese

S22-5
dissolved iron
dissolved manganese

S23-4
dissolved iron
dissolved manganese

S24-12
dissolved iron
dissolved manganese

S26-13
dissolved iron
dissolved manganese

S34-12
dissolved iron
dissolved manganese

S35-8
dissolved iron
dissolved manganese

S36-12
dissolved iron
dissolved manganese

WQ1-39
dissolved iron
dissolved manganese

WQ3-26
dissolved iron
dissolved manganese

WQ3-41
dissolved iron
dissolved manganese

WQ3-43
dissolved iron
dissolved manganese

WQ3-6
dissolved iron
dissolved manganese

WQ4-12
dissolved iron
dissolved manganese

CS-16
dissolved iron
dissolved manganese

CS-17
dissolved iron
dissolved manganese

CS-18
dissolved iron
dissolved manganese

CS-19
dissolved iron
dissolved manganese

CS-20
dissolved iron
dissolved manganese

CS-7
dissolved iron
dissolved manganese

CS-8
dissolved iron
dissolved manganese

UP&L-10

dissolved iron
dissolved manganese

CS-21
dissolved iron
dissolved manganese

2-413
dissolved iron
dissolved manganese
nitrate
tritium (Permittee has not received this data from the lab)

S24-1
dissolved iron
dissolved manganese

CS-12
dissolved iron
dissolved manganese

CS-13
dissolved iron
dissolved manganese

CS-14
dissolved iron
dissolved manganese

VC-10
dissolved iron
dissolved manganese

CS-6
dissolved iron
dissolved manganese

VC-9
dissolved iron
dissolved manganese

VC-6
dissolved iron
dissolved manganese

CS-1
dissolved iron
dissolved manganese

CS-11
dissolved iron
dissolved manganese

CS-3
dissolved iron
dissolved manganese

CS-4
dissolved iron
dissolved manganese

CS-9
dissolved iron
dissolved manganese
nitrate

F-10
dissolved iron
dissolved manganese

92-91-03
lab specific conductivity

UT0023540-002
permit calls for weekly monitoring, still missing 1st and 3rd week of April if the entire month were "no flow," then one sample stating that it was no flow, with 1 month as the flow period would suffice but the site flowed the last week of March and during the fourth week of April.