0040

WATER QUALITY
MEMORANDUM

Utah Coal Regulatory Program

OK

October 12, 2004

TO: Internal File

THRU: D. Wayne Hedberg, Permit Supervisor DWH

FROM: Gregg A. Galecki, Reclamation Specialist III GAG

RE: 2004 Second Quarter Water Monitoring, Canyon Fuel Company, LLC, Skyline Mine, C/007/0005-WQ04-2, Task ID #1946

1. Was data submitted for all of the MRP required sites? YES [x] NO [ ]

Identify sites not monitored and reason why, if known:

Data was submitted for all surface-water, groundwater, and UPDES sites. A majority of the sites are inaccessible during winter and the MRP follows a three (3) season monitoring plan. All sites were monitored during the 2nd quarter 2004.

2. On what date does the MRP require a five-year resampling of baseline water data.

Renewal of the permit is April 30, 2007. The MRP makes no commitment to sampling baseline water parameters one year prior to the renewal date. No baseline parameters are even outlined. Operational parameters are the only parameters ever collected.

Permit Renewal date 30April07

3. Were all required parameters reported for each site? YES [x] NO [ ]

4. Were irregularities found in the data? YES [x] NO [ ]

Mine #3 is no longer pumping water, as evident by CS-12 having No Flow since September 2003. MD-1, which is a composite of CS-12 and CS-14 averaged flows of 1,785 gpm for the quarter (with a TDS of 722 mg/l), which is down from 5,230 gpm in the 4th quarter 2003.

Stream site CS-2, located adjacent to the highway, illustrated elevated concentrations of dissolved Ca, SO4 and TDS while flows are approximately ¼ to ½ the flows noted in the last year. Sites CS-4 and CS-11, which had elevated concentrations of sodium and chloride in the samples collected in the 4th quarter 2003have returned to normal concentrations. The elevated values may be attributed to UDOT and possibly adding salt to the road. The condition will continue to be monitored.

With mining being temporarily suspended, and the flooding of mine workings, mine discharge to Eccles Creek has been significantly decreased. Notable flow reductions include CS-2 8120 gpm (Sept03) to 2490 gpm, and CS-14 4050 gpm (Nov03) to 1760gpm. The monitoring of Mud Creek has also seen similar reductions in flow, which are 1/3 to ½ the flows seen last fall. No changes in water quality have been observed with the decreased flows. This condition will continue to be monitored.

To monitor whether there is any correlation between the performance of Electric Lake and the streams, springs, and wells being monitored in the Upper Huntington Creek basin by Skyline Mine, graphs have been developed by the Division and attached to this report. The flows noted in the streams and springs do not show any significant reductions in flow that cannot be explained by the currently dry conditions observed over the last few years. It would be anticipated that if systematic draining of the Blackhawk Formation were occurring, it would be observed in the streams, springs, and Electric Lake. The wells monitored within the Starpoint Sandstone or beneath the coal seam have all shown decreases in elevations over the last few years. As the mine has been flooding many of the wells are starting to recover. These conditions will continue to be monitored in the future.

5. Were DMR forms submitted for all required sites?

1st month, YES [x] NO [ ]
2nd month, YES [x] NO [ ]
3rd month, YES [x] NO [ ]

All the information was submitted electronically.

6. Were all required DMR parameters reported? YES [x] NO [ ]

Discharges were recorded only from the Portal (001) during the 2nd quarter 2004. Discharge was continuous. Weekly sampling produced an average flow of 744 gpm, average TDS of approximately 650 mg/l, and an average T-Fe value of 0.42 mg/l. The Skyline permit requires TDS to be below 500 mg/l with unlimited flow or a total daily load of less than 7-tons TDS. No exceedances of the permit were noted during the quarter.

Based on continuous flow data supplied by Skyline Mine personnel, discharge to Eccles Creek averaged 900 gpm (1,017 gpm 1st quarter), while pumping of JC-1 averaged 4,038 gpm (3,902 gpm 1st quarter), and JC-3 averaged 2,132 gpm (3,117 gpm 1st quarter) to Electric Lake (6,170 gpm total). JC-1 is a 'mine dewatering' well and does not require a UPDES permit.

7. Were irregularities found in the DMR data? YES [ ] NO [x]

The sediment pond discharges continually and is sampled, at a minimum, once a week. Discharge fluctuated widely during the quarter based on JC-3 being activated to discharge water to Electric Lake, and the flooding of the mine workings. Discharges into Eccles Creek ranged from approximately 1,720 gpm when JC-3 was not pumping, to as low as approximately 0 gpm when it was pumping. However, this does not fully reflect the continued flooding of the mine.

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

No further action is necessary for the 2004 2nd (04-2) Quarter Water Monitoring data.

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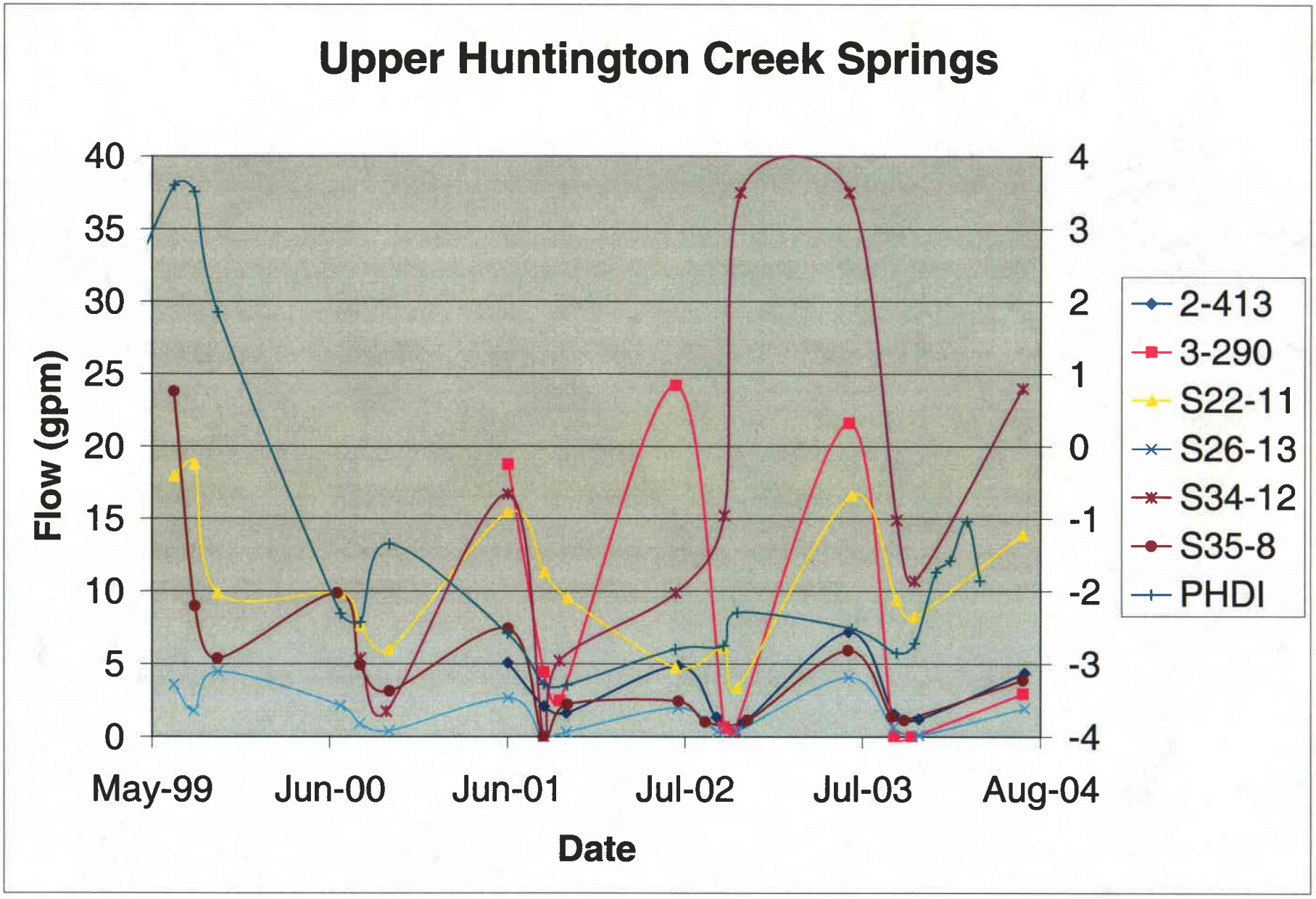
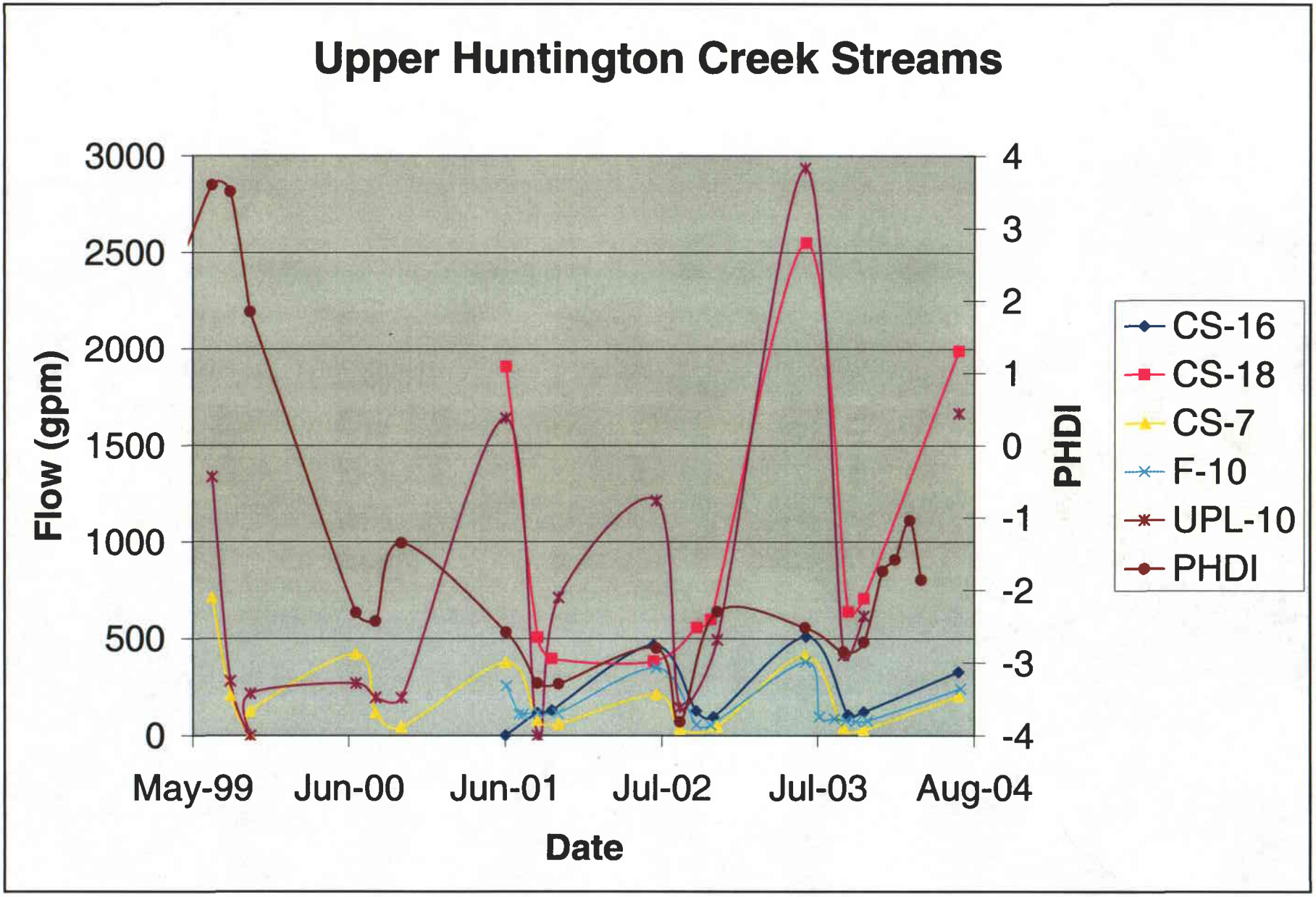
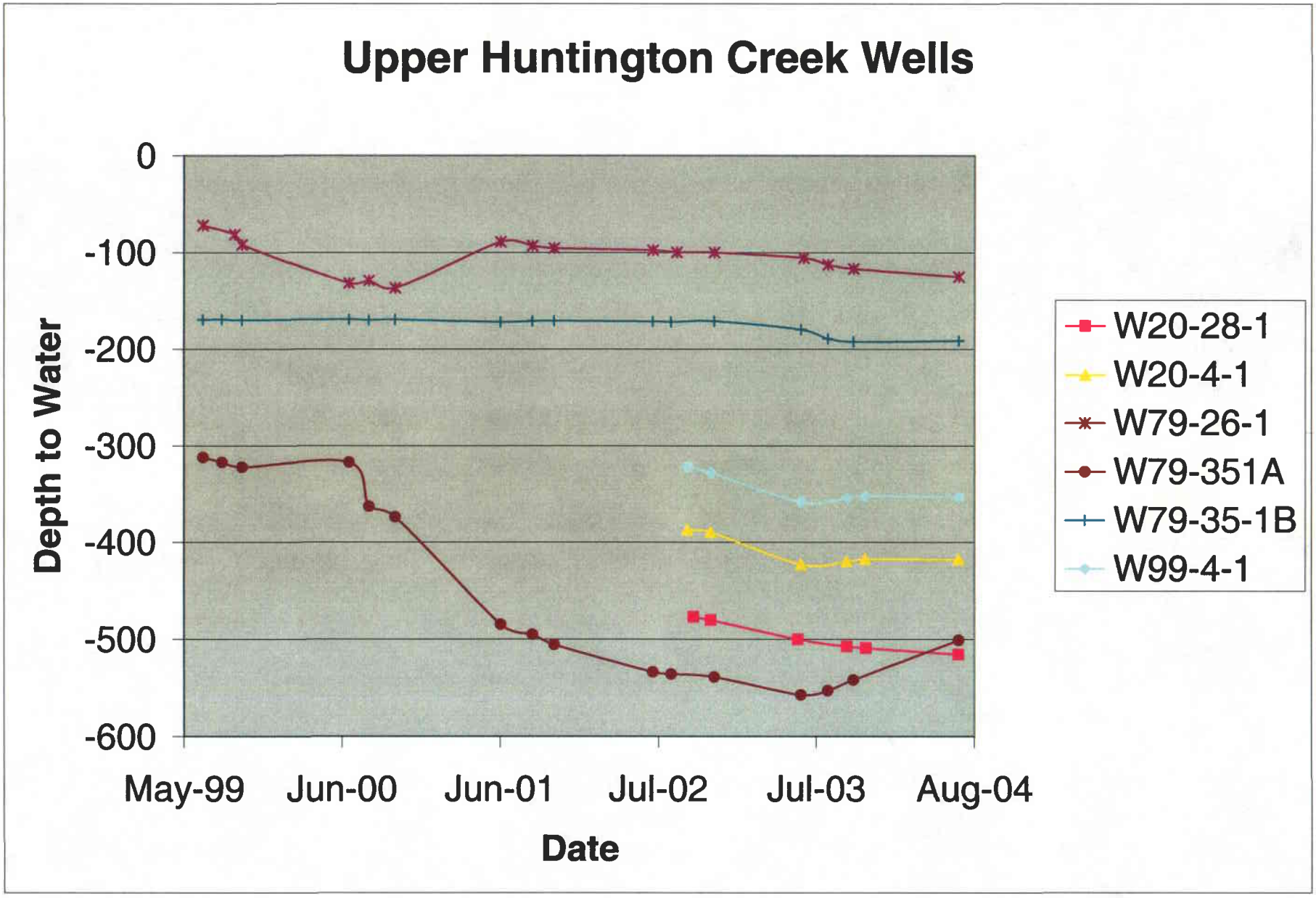
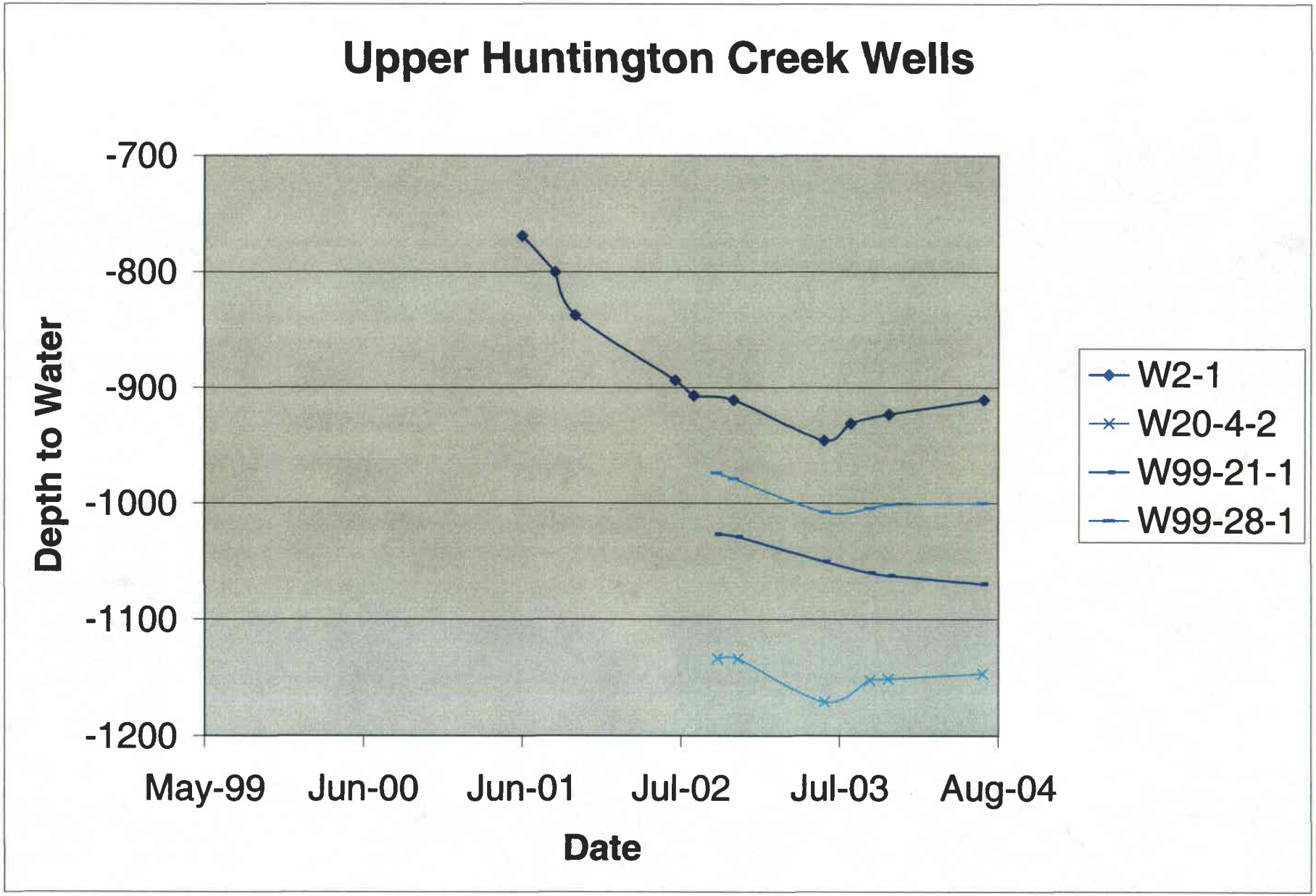

Upper Huntington Creek Springs
Flow (gpm)
40
35
30
25
20
15
10
5
0
4
3
2
1
0
-1
-2
-3
-4
May-99
Jun-00
Jun-01
Jul-02
Jul-03
Aug-04
Date
2-413
3-290
S22-11
S26-13
S34-12
S35-8
PHDI


Upper Huntington Creek Streams
Flow (gpm)
3000
2500
2000
1500
1000
500
0
4
3
2
1
0
-1
-2
-3
-4
PHDI
May-99
Jun-00
Jun-01
Jul-02
Jul-03
Aug-04
Date
CS-16
CS-18
CS-7
F-10
UPL-10
PHDI


Upper Huntington Creek Wells
0
-100
-200
-300
-400
-500
-600
Depth to Water
May-99
Jun-00
Jun-01
Jul-02
Jul-03
Aug-04
Date
W20-28-1
W20-4-1
W79-26-1
W79-351A
W79-35-1B
W99-4-1


Upper Huntington Creek Wells
-700
-800
-900
-1000
-1100
-1200
Depth to Water
May-99
Jun-00
Jun-01
Jul-02
Jul-03
Aug-04
Date
W2-1
W20-4-2
W99-21-1
W99-28-1