

2019 ANNUAL HYDROLOGY REPORT

YOAST MINE

PERMIT C-94-082

APRIL 2020



Submitted To: Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO 80203

Prepared By: Seneca Coal Company
29515 Routt County Road 27
Oak Creek, CO 80467



TABLE OF CONTENTS

1.0 INTRODUCTION.....	4
1.1 BACKGROUND.....	4
2.0 MONITORING PROGRAM	5
2.1 GROUNDWATER.....	5
2.1.1 ANNAND DRAW ALLUVIUM.....	6
2.1.2 GRASSY CREEK ALLUVIUM.....	7
2.1.3 SAGE CREEK ALLUVIUM.....	7
2.1.4 WADGE OVERBURDEN	8
2.1.5 WADGE COAL.....	9
2.1.6 WADGE UNDERBURDEN.....	10
2.1.7 WOLF CREEK COAL	10
2.1.8 WOLF CREEK UNDERBURDEN	11
2.2 SURFACE WATER	12
2.2.1 SAGE CREEK.....	13
2.2.2 ANNAND DRAW	15
2.2.3 GRASSY CREEK.....	16
2.3 SPRINGS.....	17
2.3.1 SPOILS	18
2.4 METEOROLOGICAL	19
3.0 SUMMARY	20
3.1 GROUNDWATER	20
3.2 SURFACE WATER	21
3.3 SPRINGS.....	23

FIGURES

1. Monitoring Site Locations

TABLES

1. Period of Record Precipitation Summary
2. Water Year Climatological Observations

REPORTS

1. YAAL14
2. YGAL16
3. YSAL1
4. YSAL3
5. YOV30
6. YW30
7. YWU30
8. YWC33
9. YWCU33
10. YSSF3
11. NPDES12
12. NPDES13
13. NPDES14
14. YSS2
15. NPDES10
16. NPDES11
17. YSGF5
18. YSG5
19. YSSPG1
20. YSSPG2
21. YSSPG3
22. YSSPG4

1.0 INTRODUCTION

This document constitutes the Annual Hydrology Report (AHR) for the Seneca Coal Company's (SCC) Yoast Mine (Yoast). This AHR presents hydrologic monitoring data for the 2019 water year (October 2018 - September 2019). The AHR fulfills the reporting requirements under the Colorado Division of Reclamation, Mining and Safety (CDRMS) Permit C-94-082. Monitoring results for prior water years are presented in previous AHRs, although selected historical data from prior years are summarized in some of the Figures, Tables and Reports for comparison to the current water year.

1.1 BACKGROUND

The Yoast is a surface coal mine located in Routt County, approximately 25 miles west of Steamboat Springs, Colorado (Figure 1).

The Yoast permit went into effect on August 8, 1995. Overburden removal began in 1996 in the Grassy Creek basin and in 2000 in the Sage Creek basin. The last of the coal at Yoast was removed in February 2006.

2.0 MONITORING PROGRAM

The monitoring program consists of nine groundwater sites, nine surface water sites and four spring sites (Figure 1). Required monitoring frequencies and parameters are listed in CDRMS Permit C-94-082 and NPDES Permit No. CO-0000221.

All field tasks were conducted using appropriate personal protective equipment (PPE); which at a minimum, consisted of nitrile gloves, eye protection and safety toe footwear.

2.1 GROUNDWATER

There are nine groundwater sites monitored at the Yoast.

	Site	Type	Unit
1	YAAL14	Groundwater	Annand Draw Alluvium
2	YGAL16	Groundwater	Grassy Creek Alluvium
3	YSAL1	Groundwater	Sage Creek Alluvium
4	YSAL3	Groundwater	Sage Creek Alluvium
5	YOV30	Groundwater	Wadge Overburden
6	YW30	Groundwater	Wadge Coal
7	YWU30	Groundwater	Wadge Underburden
8	YWC33	Groundwater	Wolf Creek Coal
9	YWCU33	Groundwater	Wolf Creek Underburden

The following reports were prepared for each groundwater site: Period of Record Monitoring Summary, Water Year Monitoring Data, Period of Record Water Level Hydrograph and Period of Record TDS Trend Plot (Reports 1-9).

A Mann-Kendall test, at a 95% confidence level, was utilized to determine a statistical trend of TDS per site. Sen Slope is also represented on the TDS Trend Plots in red as a line passing through the median.

The following discussion of hydrologic data collected during the reporting period is arranged by strata monitored. For each site, the groundwater level and quality were compared to historical data. This year's groundwater quality was also compared against Colorado Department of Public Health & Environment (CDPHE) groundwater agricultural use standards (CDPHE, Reg. 41, 2008).

Groundwater Points of Compliance (GWPOC) have been established for the Yoast (Yoast PAP Attachment 15-1). The groundwater standards are applied to Sage Creek Alluvial Well YSAL3 and Grassy Creek Alluvial Well SGAL70. Well SGAL70 is discussed in the Peabody Sage Creek Mine AHR.

Predictions were made as to the expected TDS increases to be observed at various monitoring wells in the Probable Hydrological Consequences (PHC) for the Yoast (Yoast PAP, PHC Tab 17). Predictions were compared to annual average TDS concentrations for bedrock wells and average TDS values observed May through September for alluvial wells. Predictions were applied to wells: YAAL14, YGAL16, YSAL1, YSAL3, YOV30, YW30 and YWC33.

2.1.1 ANNAND DRAW ALLUVIUM

Groundwater is monitored in the Annand Draw Alluvium at one well: YAAL14.

The groundwater level at well YAAL14 remained within the historical range. The following wells display groundwater level trends:

	Site	Increasing	Decreasing
1	YAAL14	X	

Annand Draw Alluvium groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well.

Well YAAL14 TDS concentrations remained within the historical range. The following wells display a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	YAAL14	X	

TDS concentrations for well YAAL14 remained within the Yoast PHC predictions.

2.1.2 GRASSY CREEK ALLUVIUM

One well is monitored in the Grassy Creek Alluvium: YGAL16.

The groundwater level at Grassy Creek Alluvial well YGAL16 exceeded the historical range. The following wells display groundwater level trends:

	Site	Increasing	Decreasing
1	YGAL16	X	

Grassy Creek Alluvium groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well.

Well YGAL16 TDS concentrations remained within the historical range. The following wells display a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	YGAL16	X	

TDS concentrations for well YGAL16 remained within the Yoast PHC predictions.

2.1.3 SAGE CREEK ALLUVIUM

Two groundwater wells monitored at the Yoast that are completed in the Sage Creek Alluvium: YSAL1 and YSAL3.

Sage Creek Alluvial groundwater levels remained within the historical range at each monitoring well. The following wells display groundwater level trends:

Site	Increasing	Decreasing
1 YSAL3	X	

Groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well.

Groundwater quality concentrations remained within the Yoast GWPOC standard range at monitoring well YSAL3.

Sage Creek Alluvial TDS concentrations remained within the historical range. The following wells display a statistically significant TDS trend:

Site	Increasing	Decreasing
1 YSAL1	X	
2 YSAL3	X	

TDS concentrations remained within the Yoast PHC predictions except for the following:

Site	Parameter	Units	PHC	Result
1 YSAL1	TDS	mg/L	798	1470
2 YSAL3	TDS	Mg/L	798	966

2.1.4 WADGE OVERBURDEN

One well is monitored in the Wedge Overburden: YOV30.

Groundwater levels remained within the historical range at monitoring well YOV30. The following wells display groundwater level trends:

	Site	Increasing	Decreasing
1	YOV30		X

Wadge Overburden groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well.

TDS concentrations at well YOV30 exceeded the historical range. Wadge Overburden well YOV30 does not exhibit a statistically significant TDS trend.

Wadge Overburden groundwater TDS concentrations remained within the Yoast PHC predictions except for the following:

	Site	Parameter	Units	PHC	Result
1	YOV30	TDS	mg/L	3201	5300

2.1.5 WADGE COAL

One well is monitored in the Wadge Coal: YW30.

The groundwater level at Wadge Coal well YW30 exceeded the historical range. The following Wadge Coal wells display groundwater level trends:

	Site	Increasing	Decreasing
1	YW30		X

TDS concentrations remained within the historical range. The following wells display a statistically significant TDS trend :

	Site	Increasing	Decreasing
1	YW30	X	

Wadge Coal groundwater TDS concentrations remained within the Yoast PHC predictions except for the following:

Site	Parameter	Units	PHC	Result
1	YW30	TDS	mg/L	2570

2.1.6 WADGE UNDERBURDEN

One well is monitored in the Wadge Underburden: YWU30.

The groundwater level at well YWU30 remained within the historical range and does not display a groundwater level trend.

Wadge Underburden groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well.

TDS concentrations at well YWU30 remained within the historical range. The following wells display a statistically significant TDS trend:

Site	Increasing	Decreasing
1	YWU30	X

2.1.7 WOLF CREEK COAL

One well is monitored in the Wolf Creek Coal: YWC33.

The groundwater level at well YWC33 remained within the historical range. The following wells display groundwater level trends:

Site	Increasing	Decreasing
1	YWC33	X

Groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well.

TDS concentrations at well YWC33 were below the historical range in 2019. The following wells display a statistically significant TDS trend:

Site	Increasing	Decreasing
1 YWC33		X

Wolf Creek Coal groundwater TDS concentrations remained within the Yoast PHC predictions.

2.1.8 WOLF CREEK UNDERBURDEN

One well is monitored in the Wolf Creek Underburden: YWCU33.

The groundwater level at well YWCU33 remained within the historical range and does not exhibit a groundwater level trend.

Wolf Creek Underburden groundwater quality concentrations remained within the CDPHE agricultural use standard range at each monitoring well except for the following:

Site	Date	Parameter	Units	Standard	Result
1 YWCU33	06/03/19	pH	s.u.	6.5-8.5	8.69

Well YWCU33 exceeded the pH standard with a value of 8.69 in June. Soils found in the Yoast region exhibit a high pH.

TDS concentrations at well YWCU33 exceeded the historical range in 2019. Well YWCU33 does not display a statistically significant TDS trend.

2.2 SURFACE WATER

There are nine surface water sites monitored at the Yoast. Five of the nine surface water sites are NPDES sites.

	Site	Type	Unit
1	YSSF3	Surface Water	Sage Creek
2	NPDES12	NPDES	Sage Creek
3	NPDES13	NPDES	Sage Creek
4	NPDES14	NPDES	Sage Creek
5	YSS2	Surface Water	Sage Creek
6	NPDES10	NPDES	Annand Draw
7	NPDES11	NPDES	Grassy Creek
8	YSGF5	Surface Water	Grassy Creek
9	YSG5	Surface Water	Grassy Creek

The following reports were prepared for each surface water site: Period of Record Monitoring Summary, Water Year Monitoring Data, Period of Record Water Discharge Hydrograph and Period of Record TDS Trend Plot (Reports 10-18).

A Mann-Kendall test, at a 95% confidence level, was utilized to determine a statistical trend of TDS per site. Sen Slope is also represented on the TDS Trend Plots in red as a line passing through the median.

The following discussion of hydrologic data collected during the reporting period is arranged by drainage basin monitored. For each site, the surface water discharge and quality were compared to historical data. This year's surface water quality was also compared against Colorado Department of Public Health & Environment (CDPHE) surface water agricultural use standards (CDPHE, Reg. 31, 2009) and the appropriate CDPHE receiving stream standards: Sage Creek (Yampa Segment 13e, Regulation No. 33, 2015), upper Grassy Creek (Yampa Segment 13i, Regulation No. 33, 2015) and lower Grassy Creek (Yampa Segment 13j, Regulation No. 33, 2015). These standards were based on the presence of fish in the lower portions of the creeks. However, the upper portions that the Yoast discharges into have no fish present.

Predictions were made as to the expected TDS increases to be observed at various surface water sites in the Probable Hydrological Consequences (PHC) for the Yoast (Yoast PAP, PHC Tab 17, Attachment 17-5). Predictions were compared to annual average TDS concentrations for surface water sites observed during the irrigation season of June through September. Predictions were applied to Sage Creek site NPDES12, Annand Draw site NPDES10 and Grassy Creek site YSGF5.

Site WSSF3 is discussed in the Seneca II-W Mine AHR.

The ammonia nitrogen MDL this year was 0.2 mg/L. All test values this year were less than the MDL. The ammonia nitrogen standard is 0.05 mg/L.

The mercury total MDL this year was 1.0 ug/L. All test values this year were less than the MDL. The mercury total standard is 0.01 ug/L.

The nitrite MDL this year was 0.05 ug/L and 0.1 ug/L. All test values this year were less than the MDL. The nitrite standard is 0.05 ug/L.

The sulfide MDL this year was 0.1 mg/L. All test values this year were less than the MDL. The sulfide standard is 0.02 mg/L.

2.2.1 SAGE CREEK

Five surface water sites are monitored at the Yoast within the Sage Creek drainage: YSSF3, NPDES12, NPDES13, NPDES14 and YSS2.

Sage Creek surface water quality concentrations remained within the CDPHE agricultural use standard range at each site except for the following:

	Site	Date	Parameter	Units	Standard	Result
1	NPDES12	12/03/18	Selenium	ug/L	20	35.2
2	NPDES12	01/10/19	Manganese	mg/L	0.2	0.343

Surface water site NPDES12 exceeded the selenium standard in December.

Surface water site NPDES12 exceeded the manganese standard in January. This standard is only appropriate where irrigation water is applied to soils with pH values lower than 6.0. In alkaline soils, as are found in the Yoast region, a more appropriate standard would be 10 mg/l. Pre-mining manganese values often exceeded the 0.2 mg/l standard.

Surface water quality concentrations remained within the CDPHE receiving stream standards range at each monitoring site except for the following:

	Site	Date	Parameter	Units	Standard	Result
1	NPDES12	10/16/18	Selenium PD	ug/L	4.6	6.1
2	NPDES12	12/03/18	Selenium PD	ug/L	4.6	35.2
3	NPDES13	05/01/19	pH	s.u.	6.5-9.0	9.07
4	NPDES13	04/04/19	Selenium PD	ug/L	4.6	5.7
5	NPDES13	04/04/19	Selenium TR	ug/L	4.6	6.2
6	NPDES13	05/01/19	Selenium TR	ug/L	4.6	13
7	NPDES13	05/01/19	Selenium	ug/L	4.6	11.5

Surface water site NPDES12 exceeded the selenium standard in October and December. Surface water site NPDES13 exceeded the selenium standard in April and May.

Sage Creek TDS concentrations remained within the historical range at each site. The following sites display a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	YSSF3		X
2	NPDES12	X	
3	NPDES13	X	
4	NPDES14	X	
5	YSS2	X	

Sage Creek TDS concentrations remained within the Yoast PHC predictions.

2.2.2 ANNAND DRAW

One surface water site is monitored at the Yoast within the Annand Draw drainage: NPDES10.

Annand Draw surface water quality concentrations remained within the CDPHE agricultural use standard range at each site except for the following:

Site	Date	Parameter	Units	Standard	Result
1	NPDES10	03/11/19	Selenium	ug/L	20

Surface water site NPDES10 exceeded the selenium standard in March.

Surface water quality concentrations remained within the CDPHE receiving stream standards range at each monitoring site except for the following:

Site	Date	Parameter	Units	Standard	Result
1	NPDES10	03/11/19	Selenium PD	ug/L	4.6

Surface water site NPDES10 exceeded the selenium standard in March.

Annand Draw TDS concentrations remained within the historical range at each site. The following sites display a statistically significant TDS trend:

Site	Increasing	Decreasing
1	NPDES10	X

Annand Draw TDS concentrations remained within the Yoast PHC predictions.

2.2.3 GRASSY CREEK

Three surface water sites are monitored at the Yoast within the Grassy Creek drainage from upstream to downstream: NPDES11, YSGF5 and YSG5.

Grassy Creek surface water quality concentrations remained within the CDPHE agricultural use standard range at each site except for the following:

Site	Date	Parameter	Units	Standard	Result
1	YSG5	09/03/19	Manganese	mg/L	0.2

Surface water site YSG5 exceeded the manganese standard in September. This standard is only appropriate where irrigation water is applied to soils with pH values lower than 6.0. In alkaline soils, as are found in the Yoast region, a more appropriate standard would be 10 mg/l. Pre-mining manganese values often exceeded the 0.2 mg/l standard.

Surface water quality concentrations remained within the CDPHE receiving stream standards range at each monitoring site except for the following:

Site	Date	Parameter	Units	Standard	Result
1	YSG5	05/02/19	Iron TR	mg/L	1.0

Surface water site YSG5 exceeded the total recoverable iron standard in May. Iron exceedances are likely the result of high-suspended solids, generally observed during snowmelt runoff, and was exceeded in over half of the pre-mining stream samples.

Grassy Creek TDS concentrations remained within the historical range at each site. The following sites display a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	NPDES11	X	
2	YSGF5	X	
3	YSG5	X	

Grassy Creek TDS concentrations remained within the Yoast PHC predictions.

2.3 SPRINGS

There are four springs sites monitored at the Yoast.

	Site	Type	Unit
1	YSSPG1	Spring	Spoils
2	YSSPG2	Spring	Spoils
3	YSSPG3	Spring	Spoils
4	YSSPG4	Spring	Spoils

The following reports were prepared for each spring site: Period of Record Monitoring Summary, Water Year Monitoring Data, Period of Record Water Discharge Hydrograph and Period of Record TDS Trend Plot (Reports 19-22).

A Mann-Kendall test, at a 95% confidence level, was utilized to determine a statistical trend of TDS per site. Sen Slope is also represented on the TDS Trend Plots in red as a line passing through the median.

The following discussion of hydrologic data collected during the reporting period is arranged by unit monitored. For each site, the spring water discharge and quality were compared to historical data. This year's surface water quality was also compared against Colorado Department of Public Health & Environment (CDPHE) surface water agricultural use standards (CDPHE, Reg. 31, 2009) and the appropriate CDPHE receiving stream standards: Sage Creek (Yampa Segment 13e, Regulation No. 33, 2015), upper Grassy Creek (Yampa Segment 13i, Regulation No. 33, 2015) and lower Grassy Creek (Yampa Segment 13j, Regulation No. 33, 2015). These standards were based on the presence of fish in the lower portions of the creeks. However, the upper portions that the Yoast discharges into have no fish present.

The ammonia nitrogen MDL this year was 0.2 mg/L. All test values this year were less than the MDL.

The mercury total MDL this year was 1.0 ug/L. All test values this year were less than the MDL. The mercury total standard is 0.01 ug/L.

The sulfide MDL this year was 0.1 mg/L. All test values this year were less than the MDL. The sulfide standard is 0.02 mg/L.

2.3.1 SPOILS

Four springs are monitored at the Yoast from the Spoils: YSSPG1, YSSPG2, YSSPG3 and YSSPG4.

Discharge flow at all Spoils springs water sites remained within the historical range this water year.

Spoils springs water quality concentrations remained within the CDPHE agricultural use standard range at each site except for the following:

	Site	Date	Parameter	Units	Standard	Result
1	YSSPG1	06/11/19	Manganese	mg/L	0.2	0.248
2	YSSPG3	06/12/19	Manganese	mg/L	0.2	0.201
3	YSSPG4	06/12/19	Manganese	mg/L	0.2	1.46

Spoils springs water sites YSSPG1, YSSPG3 and YSSPG4 exceeded the manganese standard in June. This standard is only appropriate where irrigation water is applied to soils with pH values lower than 6.0. In alkaline soils, as are found in the Yoast region, a more appropriate standard would be 10 mg/l. Pre-mining manganese values often exceeded the 0.2 mg/l standard.

Spoils springs water quality concentrations remained within CDPHE receiving stream standards at each site.

Spoils springs TDS concentrations for each site remained within the historical range this water year. The following sites display a statistically significant TDS trend:

Site	Increasing	Decreasing
1 YSSPG4		X

2.4 METEOROLOGICAL

Meteorological data for 2019, including temperature and precipitation were obtained for Hayden, Colorado from the National Oceanic & Atmospheric Administration. This data from the Hayden Station has been utilized to evaluate the precipitation trend and compare climatological observations for the period of record (Tables 1 & 2).

For this year, 21.83 inches of precipitation was measured, which is 3.56 inches (19.49%) greater than the 1981-2019 average, 18.27 inches. Four months exhibited below average precipitation: April, July, August, and September. Snowpack runoff, as estimated by totaling November through March precipitation values, was 10.23 inches, which was 2.74 inches (36.58%) above the 1981-2019 average, 7.49 inches.

3.0 SUMMARY

No significant hydrology impacts, attributable to activities at the Yoast, were noted during 2019.

3.1 GROUNDWATER

In the area surrounding Yoast, alluvial wells exhibit distinct seasonal water level fluctuations in response to periods of precipitation recharge or the lack of precipitation. Overburden and coal well water levels fluctuate in response to the precipitation recharge and induced groundwater flow to the reclaimed mine pits.

Groundwater is not being pumped for irrigation or livestock watering purposes, nor has the CDPHE classified any aquifer in this region for any use. The included discussion is provided only to serve as a comparative basis to judge groundwater quality. Domestic wells that provide drinking water for mine employees or residents are not from aquifers impacted by mining.

Yoast groundwater sites that exhibit a level trend:

	Site	Increasing	Decreasing
1	YAAL14	X	
2	YGAL16	X	
3	YSAL3	X	
4	YOV30		X
5	YW30		X
6	YWC33	X	

Yoast groundwater sites and associated parameters that exceeded the CDPHE agricultural use standards:

	Site	pH
1	YWCU33	X

Groundwater sites did not exceed the Yoast GWPOC standards.

Yoast groundwater sites that exhibit a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	YAAL14	X	
2	YGAL16	X	
3	YSAL1	X	
4	YSAL3	X	
5	YW30	X	
6	YWU30		X
7	YWC33		X

Yoast groundwater sites that exceeded the PHC TDS predictions:

	Site	TDS
1	YSAL1	X
2	YSAL3	X
3	YOV30	X
4	YW30	X

3.2 SURFACE WATER

Surface water discharged from the Yoast is not directly used for irrigation. Indirectly, although, water discharged from the mine is significantly diluted by water from Grassy Creek, Sage Creek, or the Yampa River before it is diverted and used for irrigation. Due to the relative amount of dilution, the ambient water qualities of Grassy Creek, Sage Creek, and the Yampa River are the dominant factors in determining their suitability for irrigation. Water discharged from the Yoast is, however, used for livestock watering. Surface water discharges are normally suitable for livestock and irrigation, but sometimes exceed water quality standards for aquatic life.

Yoast surface water sites and associated parameters that exceeded the CDPHE agricultural use standards:

	Site	Manganese	Selenium
1	NPDES12	X	X
2	NPDES10		X
3	YSG5	X	

Surface water sites and associated parameters that exceeded the CDPHE receiving stream standards:

	Site	Iron TR	pH	Selenium
1	NPDES12			X
2	NPDES13		X	X
3	NPDES10			X
4	YSG5	X		

Yoast surface water sites that exhibit a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	YSSF3		X
2	NPDES12	X	
3	NPDES13	X	
4	NPDES14	X	
5	YSS2	X	
6	NPDES10	X	
7	NPDES11	X	
8	YSGF5	X	
9	YSG5	X	

Yoast surface water sites did not exceed the PHC TDS predictions in 2019.

3.3 SPRINGS

Springs water discharged from the Yoast is not directly used for irrigation. Springs water discharges are normally suitable for livestock and irrigation, but sometimes exceed water quality standards for aquatic life.

Yoast springs water sites and associated parameters that exceeded the CDPHE agricultural use standards:

	Site	Manganese
1	YSSPG1	X
2	YSSPG3	X
3	YSSPG4	X

Springs water sites and associated parameters did not exceed the CDPHE receiving stream standards in 2019.

Yoast springs sites that exhibit a statistically significant TDS trend:

	Site	Increasing	Decreasing
1	YSSPG4		X

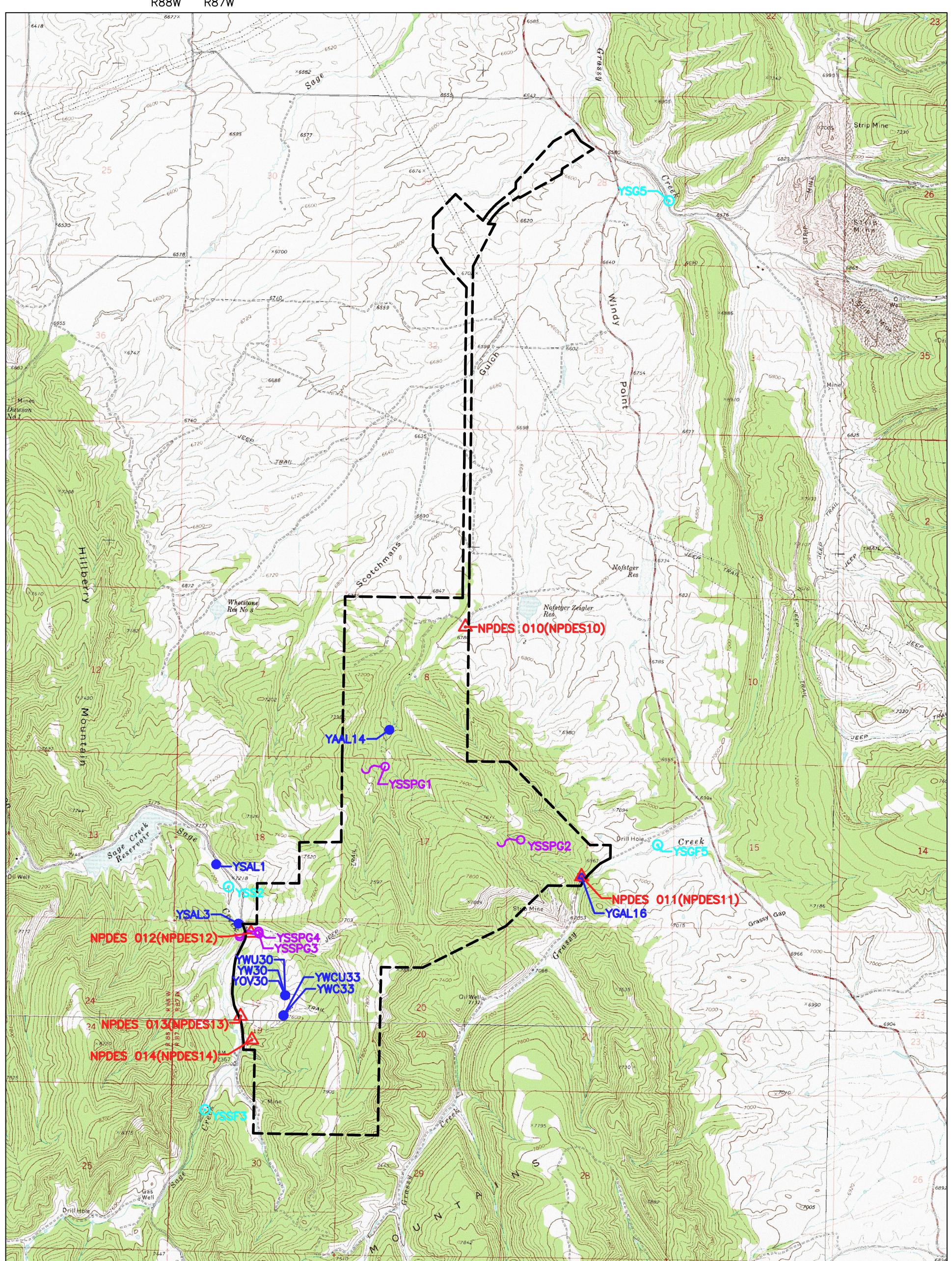


IMAGE SOURCE:
DIGITAL RASTER GRAPHIC COUNTY MOSAIC BY NRCS
OF ROUTT COUNTY, COLORADO FROM GEOSPATIAL
DATA GATEWAY ([HTTPS://GDG.SC.EGOV.USDA.GOV](https://gdg.sc.egov.usda.gov))
DOWNLOADED 10/16

GROUNDWATER
SURFACE WATER
NPDES
SPRING
PERMIT BOUNDARY

0 4000'
SCALE

DESIGNED BY: JAH
DRAWN BY: SDG
CHECKED BY: TNS
DATE: 2019

FIGURE 1
MONITORING SITE LOCATIONS

YOAST MINE
PEABODY SAGE CREEK MINING, LLC
PEABODY ENERGY

WWC ENGINEERING

PERIOD OF RECORD PRECIPITATION SUMMARY

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
2019	2.14	1.81	1.62	2.45	1.46	2.89	1.66	1.88	3.57	0.38	0.44	1.53	21.83
2018	2.45	1.31	1.36	1.65	1.92	1.90	2.95	0.85	0.15	0.15	1.33	0.17	16.19
2017	1.29	0.91	2.06	2.70	1.47	0.84	2.06	1.85	0.13	1.68	0.46	1.74	17.19
2016	1.39	1.9	2.55	2.65	1.16	1.40	3.02	1.94	0.40	0.81	0.19	1.02	18.43
2015	1.60	2.10	1.84	0.55	1.02	1.30	1.60	4.36	0.61	2.36	1.53	0.90	19.77
2014	2.69	1.75	1.42	2.02	0.78	1.96	1.19	2.58	0.72	1.50	3.77	0.87	21.25
2013	0.86	0.46	3.21	1.02	0.73	1.29	3.58	1.67	0.06	0.46	1.48	2.76	17.58
2012	1.41	1.65	0.36	0.87	1.97	0.50	1.13	0.22	0.15	2.43	0.55	1.56	12.80
2011	2.18	1.91	2.98	1.59	2.09	2.52	4.50	3.56	0.85	1.82	0.65	1.14	25.79
2010	1.22	0.77	1.24	0.75	0.90	0.73	1.98	2.80	1.34	1.19	1.56	0.62	15.10
2009	0.53	1.16	1.38	2.80	0.60	1.32	1.40	1.89	2.08	0.51	1.04	0.48	15.19
2008	1.41	0.13	3.36	2.51	1.70	1.64	0.94	1.68	0.37	0.57	0.75	0.91	15.97
2007	2.64	0.76	0.86	1.04	1.34	1.46	0.62	0.87	0.33	0.52	1.12	2.72	14.28
2006	2.27	2.04	2.01	1.78	0.58	1.06	0.95	0.93	0.24	1.48	2.71	2.75	18.80
2005	1.34	1.68	0.50	1.49	0.84	0.99	1.97	1.41	3.36	0.57	1.57	1.30	17.02
2004	0.44	2.90	1.58	0.74	1.64	0.40	1.57	1.26	0.86	1.00	1.44	2.76	16.59
2003	1.88	1.09	1.28	0.74	1.95	0.99	2.57	1.15	1.33	0.47	0.62	1.83	15.90
2002	1.14	1.17	0.54	0.88	0.92	1.06	1.39	0.40	0.37	0.78	1.26	1.94	11.86
2001	0.67	1.60	1.16	0.96	1.41	1.07	1.28	1.15	0.85	1.11	2.06	1.66	14.98
2000	0.43	0.61	1.66	1.66	1.68	1.46	1.84	1.94	0.54	0.75	2.38	2.00	16.95
1999	1.85	0.81	1.13	2.13	0.99	0.57	3.21	2.00	1.39	2.10	1.85	0.78	18.81
1998	2.37	1.08	0.95	1.34	1.93	1.77	1.77	0.62	2.51	1.50	0.48	1.50	17.82
1997	1.79	2.39	1.69	2.88	0.97	0.48	3.19	2.75	1.60	1.05	3.57	5.48	27.84
1996	1.32	2.20	1.26	3.60	2.19	0.99	1.34	2.10	1.00	1.33	0.35	1.37	19.05
1995	0.95	2.09	0.68	1.47	0.97	0.82	3.36	4.48	1.54	1.23	0.73	2.69	21.01
1994	3.02	1.61	1.16	0.69	1.13	0.56	1.85	1.07	0.43	0.24	0.98	0.72	13.46
1993	1.46	1.48	1.33	2.28	1.66	1.53	2.55	1.14	1.29	0.65	1.37	1.39	18.13
1992	1.18	2.79	0.85	0.88	1.16	1.20	1.66	3.08	1.15	4.38	0.95	0.98	20.26
1991	3.20	1.71	1.18	1.75	0.86	2.42	1.09	0.96	1.74	1.59	2.00	1.32	19.82
1990	0.77	1.38	2.08	0.65	1.64	1.54	1.36	1.12	1.38	1.14	0.51	1.22	14.79
1989	0.13	2.79	1.13	1.02	2.50	1.38	0.45	1.39	0.53	1.82	1.33	1.52	15.99
1988	1.27	1.22	2.32	2.80	0.70	1.31	0.83	1.85	1.93	0.60	1.03	2.31	18.17
1987	2.65	1.00	0.56	1.28	1.35	1.50	1.60	1.92	0.64	1.78	1.35	0.46	16.09
1986	3.51	4.19	1.34	0.79	3.01	1.59	2.70	0.99	1.00	1.65	1.96	2.12	24.85
1985	2.61	1.68	1.80	2.40	1.01	2.40	3.77	1.40	0.68	1.28	0.64	1.17	20.84
1984	2.16	2.82	5.03	0.59	0.43	2.31	2.68	1.33	2.36	1.84	2.61	1.31	25.47
1983	1.64	1.52	1.03	1.10	1.66	2.17	2.28	1.57	2.76	1.88	1.08	0.79	19.48
1982	3.76	0.78	2.51	1.71	0.62	2.64	1.92	0.97	0.46	1.60	1.19	2.64	20.80
1981	1.09	0.33	0.43	0.53	0.45	2.50	0.69	3.97	1.65	2.24	1.12	1.33	16.33
AVG	1.71	1.58	1.58	1.56	1.32	1.45	1.96	1.77	1.14	1.29	1.33	1.58	18.27

Data from October 1980 to February 1982, and 2011 Water Year and later, from U.S. Department of Commerce - NOAA - Hayden Station. All other data from Seneca II Mine Meteorological Station with Belfort Weighing Bucket Rain Gage. Site relocated to USGS site on August 31, 1991. Precipitation recorded in inches.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2018	10	01	73	45	67	0.00		0.0		0.0										
2018	10	02	68	44	63	0.01		0.0		0.0										
2018	10	03	67	52	60	0.08		0.0		0.0										
2018	10	04	60	44	49	0.51		0.0		0.0										
2018	10	05	49	36	38	0.21		0.0		0.0										
2018	10	06	55	28	42	0.16		0.0		0.0										
2018	10	07	53	36	47	0.31		0.0		0.0										
2018	10	08	47	32	37	0.46		0.5		0.0										
2018	10	09	49	33	43	0.02		0.0		0.0										
2018	10	10	46	33	34	0.16		T		0.0										
2018	10	11	42	31	41	0.04		0.0		0.0										
2018	10	12	54	29	49	0.09		0.0		0.0										
2018	10	13	58	25	51	T		0.0		0.0										
2018	10	14	51	22	29	0.07		0.5		0.0										
2018	10	15	42	12	37	0.00		0.0		0.0										
2018	10	16	57	20	52	0.00		0.0		0.0										
2018	10	17	64	30	53	0.00		0.0		0.0										
2018	10	18	56	27	48	T		0.0		0.0										
2018	10	19	60	26	52	0.12		0.0		0.0										
2018	10	20	66	29	57	0.00		0.0		0.0										
2018	10	21	68	32	60	0.00		0.0		0.0										
2018	10	22	68	35	58	0.00		0.0		0.0										
2018	10	23	63	41	51	0.02		0.0		0.0										
2018	10	24	58	37	50	0.18		0.0		0.0										
2018	10	25	57	29	50	0.00		0.0		0.0										
2018	10	26	56	31	51	0.00		0.0		0.0										
2018	10	27	65	30	58	0.00		0.0		0.0										
2018	10	28	69	30	60	0.00		0.0		0.0										
2018	10	29	68	30	57	0.00		0.0		0.0										
2018	10	30	57	34	40	0.00		0.0		0.0										
2018	10	31	45	13	38	0.00		0.0		0.0										
Summary			58	31		2.44		1.0												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2018	11	01	41	27	37	0.14		2.0		0.0										
2018	11	02	54	36	50	0.06		0.0		0.0										
2018	11	03	50	34	42	0.01		0.0		0.0										
2018	11	04	42	26	31	0.37		3.0		3.0										
2018	11	05	39	29	33	0.09		1.0		2.0										
2018	11	06	40	26	37	0.00		0.0		1.0										
2018	11	07	41	21	29	T		T		0.0										
2018	11	08	33	19	27	T		T		0.0										
2018	11	09	40	10	27	0.00		0.0		0.0										
2018	11	10	40	14	29	0.00		0.0		0.0										
2018	11	11	31	9	25	T		T		0.0										
2018	11	12	31	4	19	0.00		0.0		0.0										
2018	11	13	40	10	30	0.00		0.0		0.0										
2018	11	14	49	15	38	0.00		0.0		0.0										
2018	11	15	50	17	34	0.00		0.0		0.0										
2018	11	16	52	17	39	0.00		0.0		0.0										
2018	11	17	39	21	24	0.06		1.0		1.0										
2018	11	18	39	13	23	0.00		0.0		1.0										
2018	11	19	43	9	28	0.00		0.0		1.0										
2018	11	20	51	14	35	0.00		0.0		0.0										
2018	11	21	52	16	38	0.00		0.0		0.0										
2018	11	22	40	18	29	0.17		1.5		1.0										
2018	11	23	38	23	32	0.04		1.0		2.0										
2018	11	24	42	22	23	0.30		4.0		4.0										
2018	11	25	31	14	18	0.00		0.0		4.0										
2018	11	26	31	2	21	0.00		0.0		4.0										
2018	11	27	34	6	28	0.00		0.0		3.0										
2018	11	28	37	24	33	0.00		0.0		3.0										
2018	11	29	39	29	32	0.41		4.0		4.0										
2018	11	30	34	28	28	0.16		1.0		4.0										
		Summary	41	18		1.81		18.5												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2018	12	01	34	16	17	0.17		2.5		7.0										
2018	12	02	25	3	15	0.00		0.0		7.0										
2018	12	03	24	6	15	0.12		2.0		9.0										
2018	12	04	22	2	7	0.09		1.0		10.0										
2018	12	05	18	-3	17	0.06		1.0		11.0										
2018	12	06	30	15	24	T		T		11.0										
2018	12	07	36	23	24	0.07		1.0		9.0										
2018	12	08	34	21	29	0.01		0.1		9.0										
2018	12	09	33	18	18	0.01		0.5		9.0										
2018	12	10	32	6	19	0.00		0.0		8.0										
2018	12	11	36	14	17	0.00		0.0		8.0										
2018	12	12	30	7	26	0.08		1.5		10.0										
2018	12	13	30	1	13	0.00		0.0		10.0										
2018	12	14	27	2	18	0.00		0.0		10.0										
2018	12	15	33	8	22	0.00		0.0		10.0										
2018	12	16	39	12	25	0.00		0.0		9.0										
2018	12	17	31	14	27	0.00		0.0		9.0										
2018	12	18	39	22	30	0.00		0.0		8.0										
2018	12	19	37	28	28	T		T		8.0										
2018	12	20	36	9	23	0.00		0.0		8.0										
2018	12	21	33	12	31	0.00		0.0		8.0										
2018	12	22	31	11	12	0.21		2.5		11.0										
2018	12	23	25	-1	16	0.00		0.0		11.0										
2018	12	24	29	16	26	0.33		4.5		15.0										
2018	12	25	36	13	14	0.00		0.0		14.0										
2018	12	26	30	14	22	0.12		1.5		15.0										
2018	12	27	30	6	7	T		0.1		15.0										
2018	12	28	10	-9	0	0.00		0.0		15.0										
2018	12	29	17	-9	14	0.00		0.0		15.0										
2018	12	30	26	11	21	T		0.1		15.0										
2018	12	31	22	3	3	0.35		3.5		17.0										
Summary			30	9		1.62		21.8												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	01	01	3	-14	-5	0.00		0.0		17.0										
2019	01	02	5	-21	-5	0.00		0.0		16.0										
2019	01	03	19	-10	10	0.00		0.0		16.0										
2019	01	04	31	6	22	0.00		0.0		16.0										
2019	01	05	28	2	25	0.00		0.0		15.0										
2019	01	06	39	18	28	0.13		3.0		16.0										
2019	01	07	37	16	25	0.12		1.5		16.0										
2019	01	08	29	12	19	T		T		16.0										
2019	01	09	33	13	21	0.00		0.0		16.0										
2019	01	10	30	9	21	0.00		0.0		16.0										
2019	01	11	30	16	26	0.10		1.5		17.0										
2019	01	12	26	18	20	T		T		17.0										
2019	01	13	20	2	6	0.00		0.0		17.0										
2019	01	14	9	-11	-1	0.00		0.0		17.0										
2019	01	15	34	-9	28	0.00		0.0		16.0										
2019	01	16	35	24	30	0.22		2.0		18.0										
2019	01	17	33	19	29	0.12		1.5		19.0										
2019	01	18	31	25	25	1.08		11.0		28.0										
2019	01	19	25	3	24	0.00		0.0		27.0										
2019	01	20	34	19	23	0.00		0.0		26.0										
2019	01	21	41	14	30	T		T		25.0										
2019	01	22	30	14	16	0.08		1.0		24.0										
2019	01	23	16	-3	15	0.16		5.0		29.0										
2019	01	24	30	15	21	0.29		6.0		33.0										
2019	01	25	32	15	21	0.10		2.0		31.0										
2019	01	26	33	17	17	0.05		1.0		31.0										
2019	01	27	31	12	24	0.00		0.0		30.0										
2019	01	28	26	12	12	0.00		0.0		28.0										
2019	01	29	18	-4	8	0.00		0.0		28.0										
2019	01	30	15	-9	11	0.00		0.0		27.0										
2019	01	31	24	-5	11	0.00		0.0		27.0										
Summary			27	7		2.45		35.5												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	02	01	28	3	19	0.00		0.0		26.0										
2019	02	02	42	10	38	0.00		0.0		25.0										
2019	02	03	43	27	31	0.06		T		23.0										
2019	02	04	40	27	35	0.00		0.0		23.0										
2019	02	05	39	27	28	0.02		0.5		23.0										
2019	02	06	31	14	14	0.17		3.5		25.0										
2019	02	07	16	-1	7	0.09		1.0		25.0										
2019	02	08	17	-9	9	0.00		0.0		25.0										
2019	02	09	20	-2	16	0.00		0.0		25.0										
2019	02	10	32	3	27	0.00		0.0		25.0										
2019	02	11	31	7	7	0.04		0.5		25.0										
2019	02	12	22	-6	17	0.00		0.0		25.0										
2019	02	13	39	14	29	0.08		1.0		25.0										
2019	02	14	41	27	34	0.20		2.0		25.0										
2019	02	15	44	31	36	0.36		0.0		24.0										
2019	02	16	36	19	19	0.14		2.0		25.0										
2019	02	17	23	7	15	T		0.3		25.0										
2019	02	18	21	8	13	T		T		25.0										
2019	02	19	17	-4	4	0.12		1.2		26.0										
2019	02	20	30	-2	13	0.05		0.5		26.0										
2019	02	21	24	8	17	0.00		0.0		26.0										
2019	02	22	24	11	16	0.07		0.8		27.0										
2019	02	23	19	-5	15	T		T		27.0										
2019	02	24	29	8	24	0.00		0.0		26.0										
2019	02	25	32	3	27	0.00		0.0		26.0										
2019	02	26	42	9	32	0.00		0.0		26.0										
2019	02	27	38	12	33	0.00		0.0		26.0										
2019	02	28	44	25	36	0.06		0.3		25.0										
		Summary	31	10		1.46		13.6												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	03	01	38	28	30	0.15		1.5		26.0										
2019	03	02	31	26	26	0.75		7.0		33.0										
2019	03	03	26	11	14	0.21		4.0		36.0										
2019	03	04	18	-2	8	0.01		0.2		34.0										
2019	03	05	34	-3	29	0.00		0.0		33.0										
2019	03	06	37	28	33	0.42		1.5		31.0										
2019	03	07	45	32	36	T		T		29.0										
2019	03	08	39	27	30	0.32		2.0		31.0										
2019	03	09	34	15	24	0.08		1.0		30.0										
2019	03	10	34	21	29	0.07		0.3		29.0										
2019	03	11	34	16	31	0.00		0.0		29.0										
2019	03	12	37	14	31	0.00		0.0		29.0										
2019	03	13	34	25	25	0.71		7.0		36.0										
2019	03	14	27	16	23	0.00		0.0		34.0										
2019	03	15	30	1	26	0.00		0.0		34.0										
2019	03	16	34	5	29	0.00		0.0		34.0										
2019	03	17	35	10	30	0.00		0.0		34.0										
2019	03	18	39	12	32	0.00		0.0		33.0										
2019	03	19	38	8	32	0.00		0.0		32.0										
2019	03	20	40	11	31	0.00		0.0		32.0										
2019	03	21	45	21	35	0.00		0.0		32.0										
2019	03	22	41	21	36	0.08		0.5		31.0										
2019	03	23	45	27	37	0.01		0.0		29.0										
2019	03	24	41	27	37	0.02		0.0		28.0										
2019	03	25	43	25	36	0.01		0.3		27.0										
2019	03	26	49	24	46	0.00		0.0		26.0										
2019	03	27	52	27	46	0.00		0.0		25.0										
2019	03	28	53	28	44	0.00		0.0		24.0										
2019	03	29	44	28	33	0.05		T		24.0										
2019	03	30	39	22	35	0.00		0.0		23.0										
2019	03	31	43	13	35	0.00		0.0		22.0										
Summary			38	18		2.89		25.3												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	04	01	46	19	40	0.00		0.0		20.0										
2019	04	02	47	30	44	0.04		0.7		19.0										
2019	04	03	62	32	37	0.12		0.0		17.0										
2019	04	04	54	31	49	0.00		0.0		14.0										
2019	04	05	60	33	54	0.00		0.0		10.0										
2019	04	06	56	35	47	0.01		0.0		9.0										
2019	04	07	56	27	54	0.07		0.0		4.0										
2019	04	08	65	30	60	0.00		0.0		0.0										
2019	04	09	65	35	59	0.00		0.0		0.0										
2019	04	10	59	32	33	T		T		0.0										
2019	04	11	39	22	34	0.02		T		0.0										
2019	04	12	36	26	33	0.05		T		0.0										
2019	04	13	44	27	40	0.02		T		0.0										
2019	04	14	53	24	50	T		0.0		0.0										
2019	04	15	60	38	58	T		0.0		0.0										
2019	04	16	63	34	56	0.00		0.0		0.0										
2019	04	17	57	36	53	T		0.0		0.0										
2019	04	18	61	38	60	0.00		0.0		0.0										
2019	04	19	70	30	68	0.00		0.0		0.0										
2019	04	20	74	36	59	0.00		0.0		0.0										
2019	04	21	59	36	56	0.05		0.0		0.0										
2019	04	22	63	30	52	0.00		0.0		0.0										
2019	04	23	67	28	63	0.00		0.0		0.0										
2019	04	24	68	37	60	0.00		0.0		0.0										
2019	04	25	68	36	65	0.00		0.0		0.0										
2019	04	26	71	34	52	0.08		0.0		0.0										
2019	04	27	64	34	63	0.37		0.0		0.0										
2019	04	28	66	35	55	0.02		0.0		0.0										
2019	04	29	55	25	36	0.21		1.0		0.0										
2019	04	30	48	34	43	0.60		0.0		0.0										
		Summary	59	31		1.66		1.7												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	05	01	45	23	43	0.42		1.0		0.0										
2019	05	02	54	27	52	0.00		0.0		0.0										
2019	05	03	60	28	59	0.00		0.0		0.0										
2019	05	04	64	28	60	0.00		0.0		0.0										
2019	05	05	68	34	63	0.00		0.0		0.0										
2019	05	06	68	38	60	0.00		0.0		0.0										
2019	05	07	69	39	64	0.00		0.0		0.0										
2019	05	08	64	35	44	0.03		0.0		0.0										
2019	05	09	49	33	43	0.04		0.0		0.0										
2019	05	10	56	33	54	0.00		0.0		0.0										
2019	05	11	63	27	59	0.00		0.0		0.0										
2019	05	12	69	33	66	0.00		0.0		0.0										
2019	05	13	74	36	72	0.00		0.0		0.0										
2019	05	14	76	41	67	0.00		0.0		0.0										
2019	05	15	75	42	68	0.00		0.0		0.0										
2019	05	16	73	46	67	0.00		0.0		0.0										
2019	05	17	68	42	44	0.02		0.0		0.0										
2019	05	18	56	34	54	0.12		0.0		0.0										
2019	05	19	56	32	54	T		0.0		0.0										
2019	05	20	54	36	45	0.05		0.0		0.0										
2019	05	21	45	31	43	0.49		1.0		0.0										
2019	05	22	50	32	48	0.02		0.0		0.0										
2019	05	23	64	34	42	0.17		T		0.0										
2019	05	24	56	38	52	0.00		0.0		0.0										
2019	05	25	69	33	67	0.00		0.0		0.0										
2019	05	26	70	38	61	0.00		0.0		0.0										
2019	05	27	61	41	55	0.03		0.0		0.0										
2019	05	28	55	34	39	0.37		0.0		0.0										
2019	05	29	56	36	55	0.10		0.0		0.0										
2019	05	30	65	35	61	T		0.0		0.0										
2019	05	31	68	39	61	0.02		0.0		0.0										
Summary			62	35		1.88		2.0												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	06	01	73	42	71	0.07		0.0		0.0										
2019	06	02	75	44	58	0.02		0.0		0.0										
2019	06	03	72	41	59	0.06		0.0		0.0										
2019	06	04	75	39	67	0.02		0.0		0.0										
2019	06	05	77	43	74	0.00		0.0		0.0										
2019	06	06	79	45	72	T		0.0		0.0										
2019	06	07	79	49	76	0.00		0.0		0.0										
2019	06	08	76	43	62	0.00		0.0		0.0										
2019	06	09	62	31	62	0.00		0.0		0.0										
2019	06	10	74		71	0.00		0.0		0.0										
2019	06	11	74	35	73	0.00		0.0		0.0										
2019	06	12	76	38	74	0.00		0.0		0.0										
2019	06	13	78	46	65	0.00		0.0		0.0										
2019	06	14	77	44	54	0.08		0.0		0.0										
2019	06	15	73	42	72	0.20		0.0		0.0										
2019	06	16	76	49	73	0.02		0.0		0.0										
2019	06	17	73	50	59	0.08		0.0		0.0										
2019	06	18	65	48	56	0.06		0.0		0.0										
2019	06	19	75	43	75	0.16		0.0		0.0										
2019	06	20	79	44	61	0.12		0.0		0.0										
2019	06	21	61	31	41	2.04		1.0		0.0										
2019	06	22	54	38	51	0.08		0.0		0.0										
2019	06	23	58	33	57	0.51		0.0		0.0										
2019	06	24	71	39	67	0.00		0.0		0.0										
2019	06	25	78	45	73	0.05		0.0		0.0										
2019	06	26	81	48	79	0.00		0.0		0.0										
2019	06	27	82	44	80	0.00		0.0		0.0										
2019	06	28	85	48	84	0.00		0.0		0.0										
2019	06	29	86	52	85	0.00		0.0		0.0										
2019	06	30	85	53	77	T		0.0		0.0										
		Summary	74	43		3.57		1.0												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	07	01	80	43	70	0.12		0.0		0.0										
2019	07	02	72	43	68	0.00		0.0		0.0										
2019	07	03	74	49	73	0.04		0.0		0.0										
2019	07	04	82	43	80	0.00		0.0		0.0										
2019	07	05	81	44	79	0.00		0.0		0.0										
2019	07	06	83	48	80	0.00		0.0		0.0										
2019	07	07	80	38	70	0.02		0.0		0.0										
2019	07	08	75	52	72	0.00		0.0		0.0										
2019	07	09	81	44	80	0.00		0.0		0.0										
2019	07	10	84	45	82	0.00		0.0		0.0										
2019	07	11	88	50	87	0.00		0.0		0.0										
2019	07	12	88	52	86	0.00		0.0		0.0										
2019	07	13	86	53	76	0.00		0.0		0.0										
2019	07	14	88	51	85	0.00		0.0		0.0										
2019	07	15	85	55	78	T		0.0		0.0										
2019	07	16	88	51	84	0.00		0.0		0.0										
2019	07	17	87	51	84	0.00		0.0		0.0										
2019	07	18	86	48	84	0.00		0.0		0.0										
2019	07	19	89	47	86	0.00		0.0		0.0										
2019	07	20	86	49	80	0.00		0.0		0.0										
2019	07	21	88	53	85	0.06		0.0		0.0										
2019	07	22	91	57	68	0.04		0.0		0.0										
2019	07	23	89	50	87	0.00		0.0		0.0										
2019	07	24	88	53	73	0.00		0.0		0.0										
2019	07	25	82	55	79	0.01		0.0		0.0										
2019	07	26	85	51	68	0.06		0.0		0.0										
2019	07	27	83	55	69	T		0.0		0.0										
2019	07	28	83	50	81	0.03		0.0		0.0										
2019	07	29	87	48	84	0.00		0.0		0.0										
2019	07	30	88	53	84	0.00		0.0		0.0										
2019	07	31	84	55	72	0.00		0.0		0.0										
Summary			84	50		0.38		0.0												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time				At Obs. Time	24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth			
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.	
2019	08	01	76	56	75	0.21		0.0		0.0									
2019	08	02	86	53	83	0.00		0.0		0.0									
2019	08	03	89	54	85	0.00		0.0		0.0									
2019	08	04	85	53	71	0.00		0.0		0.0									
2019	08	05	86	50	82	0.06		0.0		0.0									
2019	08	06	90	52	76	0.00		0.0		0.0									
2019	08	07	87	53	67	T		0.0		0.0									
2019	08	08	81	56	74	0.02		0.0		0.0									
2019	08	09	83	54	80	0.05		0.0		0.0									
2019	08	10	85	51	82	0.00		0.0		0.0									
2019	08	11	82	54	61	0.07		0.0		0.0									
2019	08	12	83	47	81	0.00		0.0		0.0									
2019	08	13	84	43	83	0.00		0.0		0.0									
2019	08	14	86	46	81	0.00		0.0		0.0									
2019	08	15	87	44	80	0.00		0.0		0.0									
2019	08	16	86	47	66	0.00		0.0		0.0									
2019	08	17	82	49	71	0.00		0.0		0.0									
2019	08	18	87	46	85	0.00		0.0		0.0									
2019	08	19	89	46	85	0.00		0.0		0.0									
2019	08	20	90	46	86	0.00		0.0		0.0									
2019	08	21	89	45	87	0.00		0.0		0.0									
2019	08	22	87	47	71	0.03		0.0		0.0									
2019	08	23	83	54	77	0.00		0.0		0.0									
2019	08	24	82	41	75	0.00		0.0		0.0									
2019	08	25	88	45	84	0.00		0.0		0.0									
2019	08	26	84	43	78	0.00		0.0		0.0									
2019	08	27	80	36	77	0.00		0.0		0.0									
2019	08	28	86	39	84	0.00		0.0		0.0									
2019	08	29	84	42	80	0.00		0.0		0.0									
2019	08	30	85	49	71	T		0.0		0.0									
2019	08	31	89	48	85	0.00		0.0		0.0									
Summary			85	48		0.44		0.0											

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

Record of Climatological Observations

These data are quality controlled and may not
be identical to the original observations.

Generated on 03/17/2020

Observation Time Temperature: 1800 Observation Time Precipitation: 1800

Year	Month	Day	Temperature (F)		At Observation	Precipitation				At Obs. Time	Evaporation		Soil Temperature (F)							
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time					24 Hour Wind Movement (mi)	Amount of Evap. (in)	4 in. Depth			8 in. Depth				
			Max.	Min.		Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag				Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.		
2019	09	01	90	47	84	0.00		0.0		0.0										
2019	09	02	91	48	87	0.00		0.0		0.0										
2019	09	03	87	42	80	0.00		0.0		0.0										
2019	09	04	88	52	82	0.00		0.0		0.0										
2019	09	05	90	50	78	0.00		0.0		0.0										
2019	09	06	87	51	72	T		0.0		0.0										
2019	09	07	80	48	77	0.10		0.0		0.0										
2019	09	08	77	46	59	0.18		T		0.0										
2019	09	09	73	48	70	0.89		0.0		0.0										
2019	09	10	77	44	60	0.00		0.0		0.0										
2019	09	11	67	48	51	0.17		0.0		0.0										
2019	09	12	64	39	60	0.15		0.0		0.0										
2019	09	13	73	37	70	0.00		0.0		0.0										
2019	09	14	79	40	73	0.00		0.0		0.0										
2019	09	15	81	40	77	0.00		0.0		0.0										
2019	09	16	78	46	73	0.00		0.0		0.0										
2019	09	17	74	45	69	0.00		0.0		0.0										
2019	09	18	77	36	73	0.00		0.0		0.0										
2019	09	19	81	43	75	0.00		0.0		0.0										
2019	09	20	75	44	62	0.00		0.0		0.0										
2019	09	21	64	29	61	0.00		0.0		0.0										
2019	09	22	67	27	61	0.00		0.0		0.0										
2019	09	23	76	34	70	0.00		0.0		0.0										
2019	09	24	75	31	69	0.00		0.0		0.0										
2019	09	25	74	34	68	0.00		0.0		0.0										
2019	09	26	80	36	74	0.00		0.0		0.0										
2019	09	27	75	46	62	0.00		0.0		0.0										
2019	09	28	78	47	70	0.02		0.0		0.0										
2019	09	29	76	50	71	0.00		0.0		0.0										
2019	09	30	71	39	61	0.02		0.0		0.0										
		Summary	78	42		1.53		0.0												

Empty, or blank, cells indicate that a data observation was not reported.

*Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

"s" This data value failed one of NCDC's quality control tests.

"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

loc_report_order Location Code Location Name					1 YAAL14							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	11/18/1990	5/7/2019	54	2780	2640	5760	1030	1080
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	11/18/1990	5/7/2019	54	7.18	7.13	8.7	6.68	0.358
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	11/18/1990	5/4/2018	53	9.55	9.6	15	5.8	2.09
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	5/7/2019	5/7/2019	1	9.6	9.6	9.6	9.6	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	11/18/1990	9/8/2015	46	477	506	659	223	116
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	11/18/1990	9/8/2015	46	0.06	0.05	0.7	0.03	0.1
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	11/18/1990	9/8/2015	46	1	1	3	0.4	0.8
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	11/18/1990	9/8/2015	46	578	605	803	272	141
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	11/18/1990	9/8/2015	46	170	170	320	20	56
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	11/18/1990	9/8/2015	46	7	5	30	3	5
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	11/18/1990	9/8/2015	46	292.6	262.5	879	102	171.1
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	11/18/1990	9/8/2015	46	3	2	41	0	6.7
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	11/18/1990	9/8/2015	46	29.1	25.2	60	7	14.5
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	11/18/1990	9/8/2015	46	20	10	50	10	9
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	11/18/1990	9/8/2015	46	2605	2645	5250	1009	995.1
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	11/18/1990	9/8/2015	46	20	10	50	10	9
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	11/18/1990	5/7/2019	54	0.26	0.3	0.4	0.1	0.078
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	11/18/1990	9/8/2015	46	1490	1340	4260	508	818
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	11/18/1990	5/7/2019	54	0.041	0.02	0.31	0.01	0.053
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	11/18/1990	9/8/2015	46	50	40	200	20	40
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	11/18/1990	9/8/2015	46	187.8	173	502	61.6	97.79
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	11/18/1990	5/7/2019	54	0.75	0.63	2.57	0.01	0.706
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	11/18/1990	9/8/2015	46	0.2	0.2	0.2	0.1	0.04
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	11/18/1990	9/8/2015	46	20	20	50	8	9
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	11/18/1990	5/7/2019	54	0.888	0.3	10.7	0.02	1.84
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	11/18/1990	5/7/2019	54	0.01	0.01	0.05	0.01	0.008
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	11/18/1990	9/8/2015	46	7.6	7.6	8.7	7	0.37
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	11/18/1990	9/8/2015	46	7.46	7.25	11.7	4.7	1.57
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	11/18/1990	5/7/2019	54	1.3	1	10	0.1	1.3
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	11/18/1990	9/8/2015	46	174	192	332	37.6	88.7
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	11/18/1990	9/8/2015	45	1.98	2.13	3.83	0.03	0.98
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	11/18/1990	5/7/2019	54	1370	1410	3380	280	747

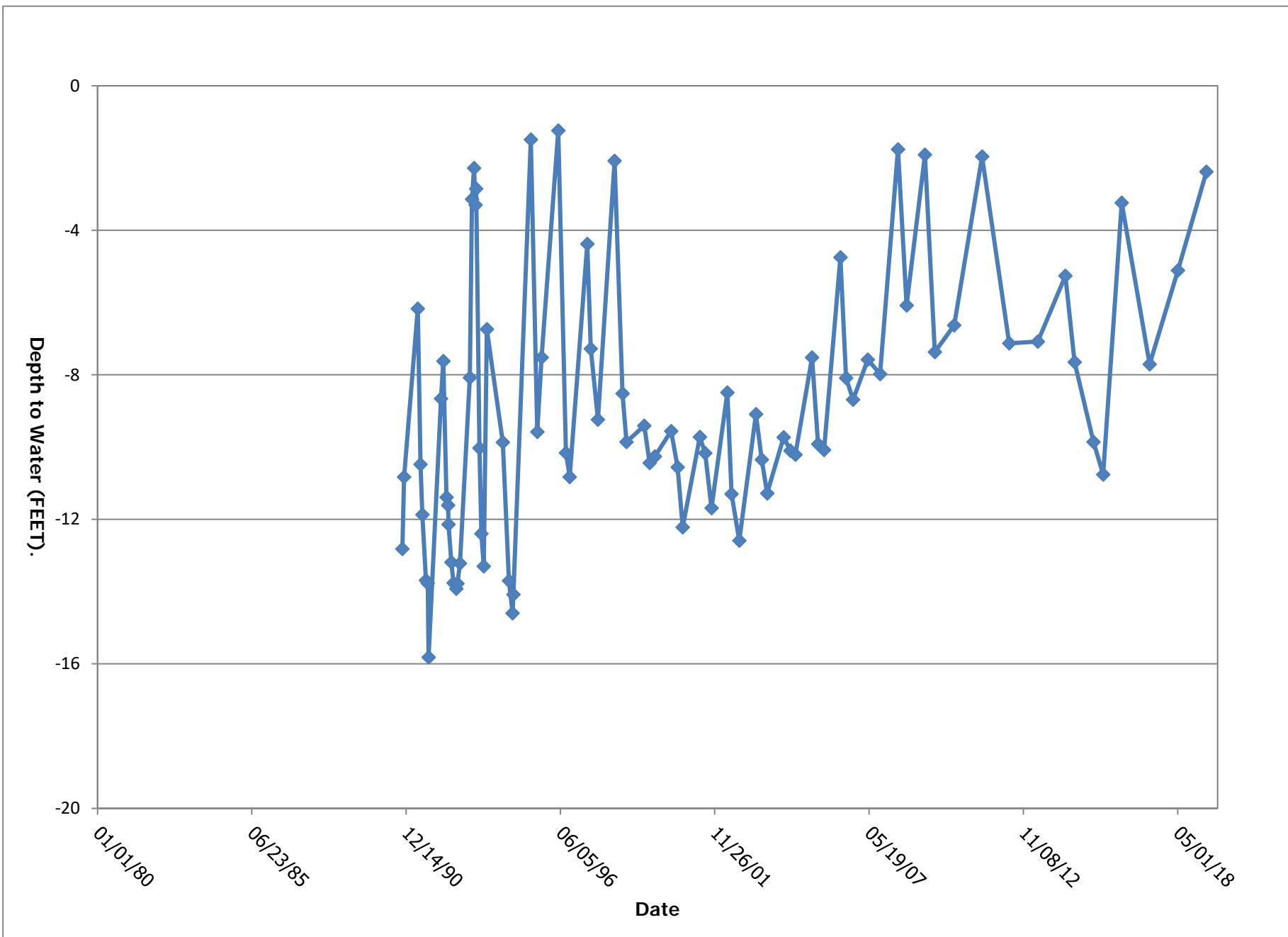
Period of Record Monitoring Summary

YAAL14

Report 1: Page 1 of 5

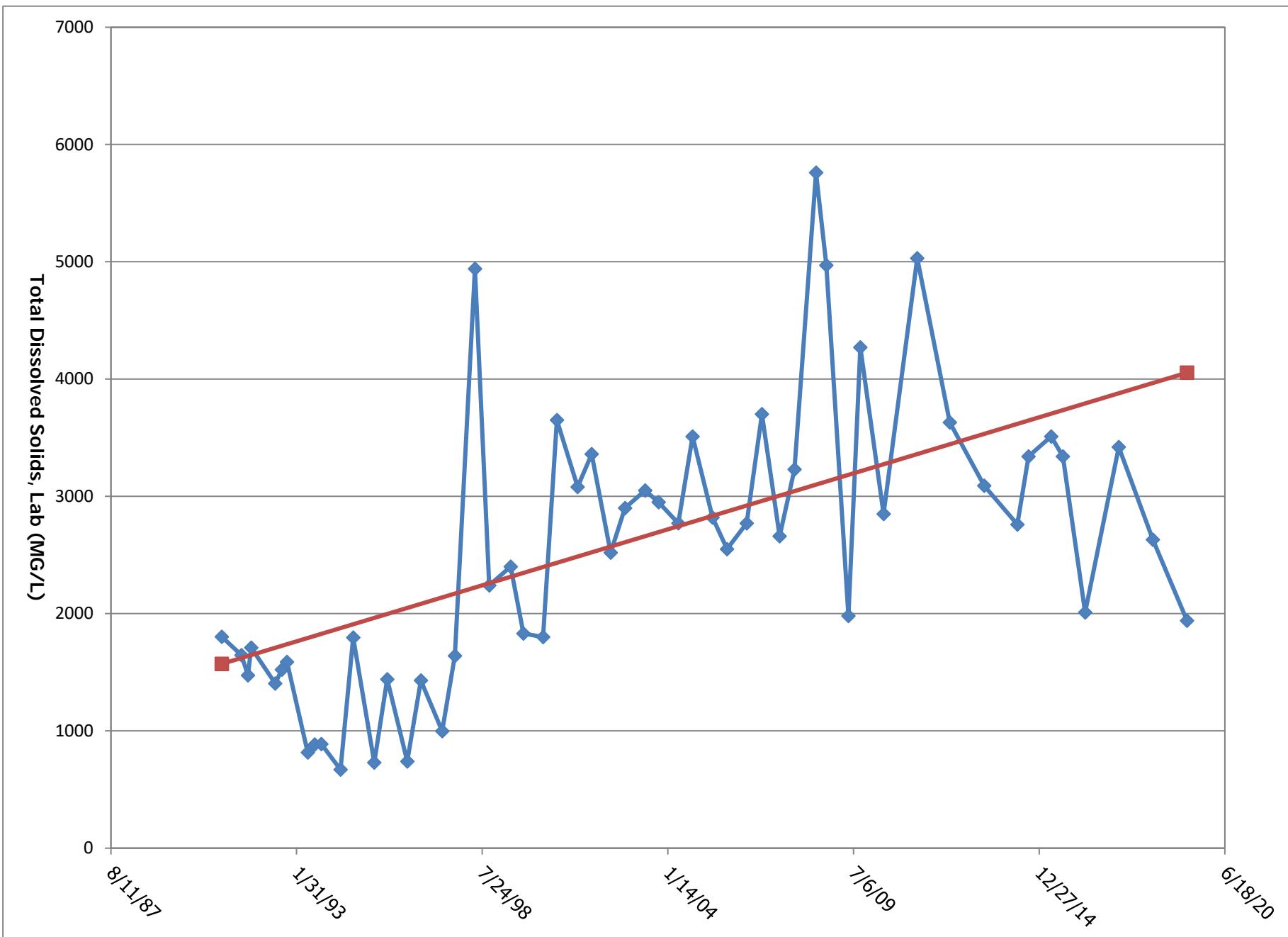
loc_report_order Location Code Location Name					1 YAAL14							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	11/18/1990	9/8/2015	46	0.24	0.05	2.9	0.01	0.55
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	11/18/1990	9/8/2015	46	0.03	0.015	0.65	0.01	0.094
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	11/18/1990	9/8/2015	45	-0.496	0	7.1	-19.1	4.32
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	11/18/1990	5/7/2019	54	2527	2590	5760	670	1187
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	11/18/1990	9/8/2015	45	2277.39	2080	5400	692	1128.72

		loc_report_order	1		
		sys_loc_code	YAAL14		
		Date	5/7/2019		
		Depth to Water (FT)	2.38		
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	2190
2	pH, Field	N	S.U.	Y	7.63
3	Temperature, Field	N	DEG-C	Y	9.6
17	Fluoride	N	MG/L	Y	0.2
19	Iron	D	MG/L	N	0.08
22	Manganese	D	MG/L	Y	0.01
25	Nitrate Nitrogen	N	MG/L	Y	0.76
27	Nitrite Nitrogen	N	MG/L	N	0.05
31	Selenium	D	UG/L	Y	2.5
34	Sulfates	N	MG/L	Y	710
39	Total Dissolved Solids, Lab	N	MG/L	Y	1940



Period of Record Depth to Water Hydrograph

YAAL14



Period of Record TDS Trend Plot

YAAL14

loc_report_order Location Code Location Name					2 YGAL16							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	12/14/1990	5/7/2019	54	1300	1140	2050	760	400
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	12/14/1990	5/7/2019	54	7.29	7.19	8.4	6.94	0.307
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	12/14/1990	5/4/2018	53	9.93	10	13.3	6.3	1.52
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	5/7/2019	5/7/2019	1	9.8	9.8	9.8	9.8	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	12/14/1990	9/8/2015	46	322	323	372	252	26.7
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	12/14/1990	9/8/2015	46	0.04	0.03	0.06	0.03	0.01
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	12/14/1990	9/8/2015	46	0.9	1	2	0.2	0.5
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	12/14/1990	9/8/2015	46	391	392	453	307	31.7
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	12/14/1990	9/8/2015	46	80	80	120	20	18
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	12/14/1990	9/8/2015	46	4	5	7	3	1
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	12/14/1990	9/8/2015	46	149.3	124	264	77.6	53.75
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	12/14/1990	9/8/2015	46	2.5	2	19	0	3.7
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	12/14/1990	9/8/2015	46	9.3	9	18	4	2.59
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	12/14/1990	9/8/2015	46	10	10	20	10	2
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	12/14/1990	9/8/2015	46	1177	1025	1920	753	339.8
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	12/14/1990	9/8/2015	46	10	10	20	10	1
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	12/14/1990	5/7/2019	54	0.23	0.2	0.5	0.1	0.072
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	12/14/1990	9/8/2015	46	697	583	1210	359	245
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	12/14/1990	5/7/2019	54	0.057	0.02	0.34	0.01	0.08
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	12/14/1990	9/8/2015	46	40	40	400	20	50
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	12/14/1990	9/8/2015	46	78.9	65.5	134	40.1	27.3
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	12/14/1990	5/7/2019	54	0.05	0.025	0.3	0.01	0.065
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	12/14/1990	9/8/2015	46	0.2	0.2	0.2	0.1	0.04
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	12/14/1990	9/8/2015	46	10	10	20	8	5
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	12/14/1990	5/7/2019	54	0.437	0.325	2.04	0.02	0.412
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	12/14/1990	5/7/2019	54	0.01	0.01	0.05	0.01	0.006
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	12/14/1990	9/8/2015	46	7.7	7.7	8.6	7	0.41
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	12/14/1990	9/8/2015	46	3.9	3.9	5.5	2.8	0.75
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	12/14/1990	5/7/2019	54	1	1	5	0.5	0.7
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	12/14/1990	9/8/2015	46	26.2	24.6	37.9	17.7	5.03
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	12/14/1990	9/8/2015	46	0.44	0.44	0.67	0.35	0.07
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	12/14/1990	5/7/2019	54	462	355	930	100	272

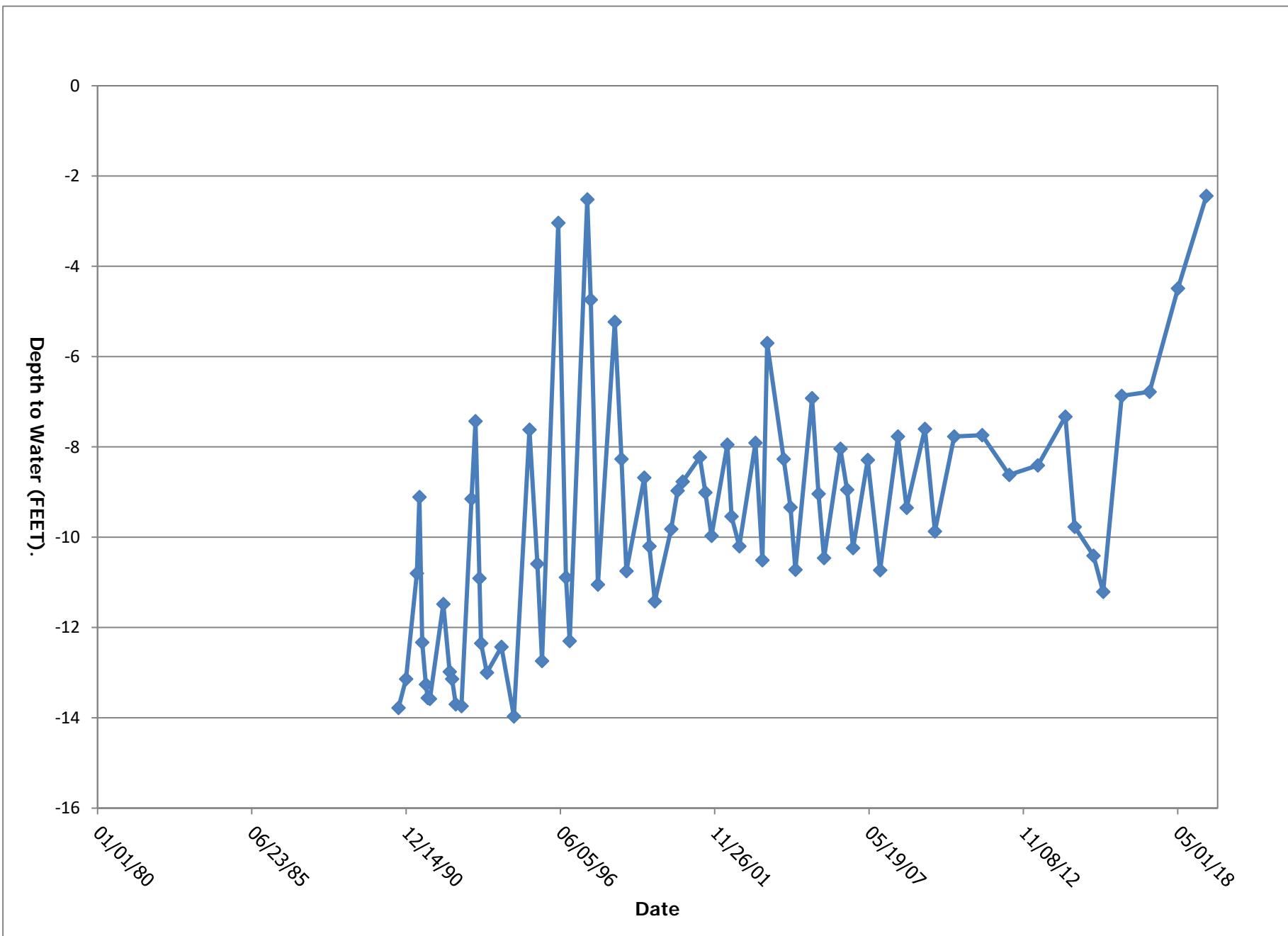
Period of Record Monitoring Summary

YGAL 16

Report 2: Page 1 of 5

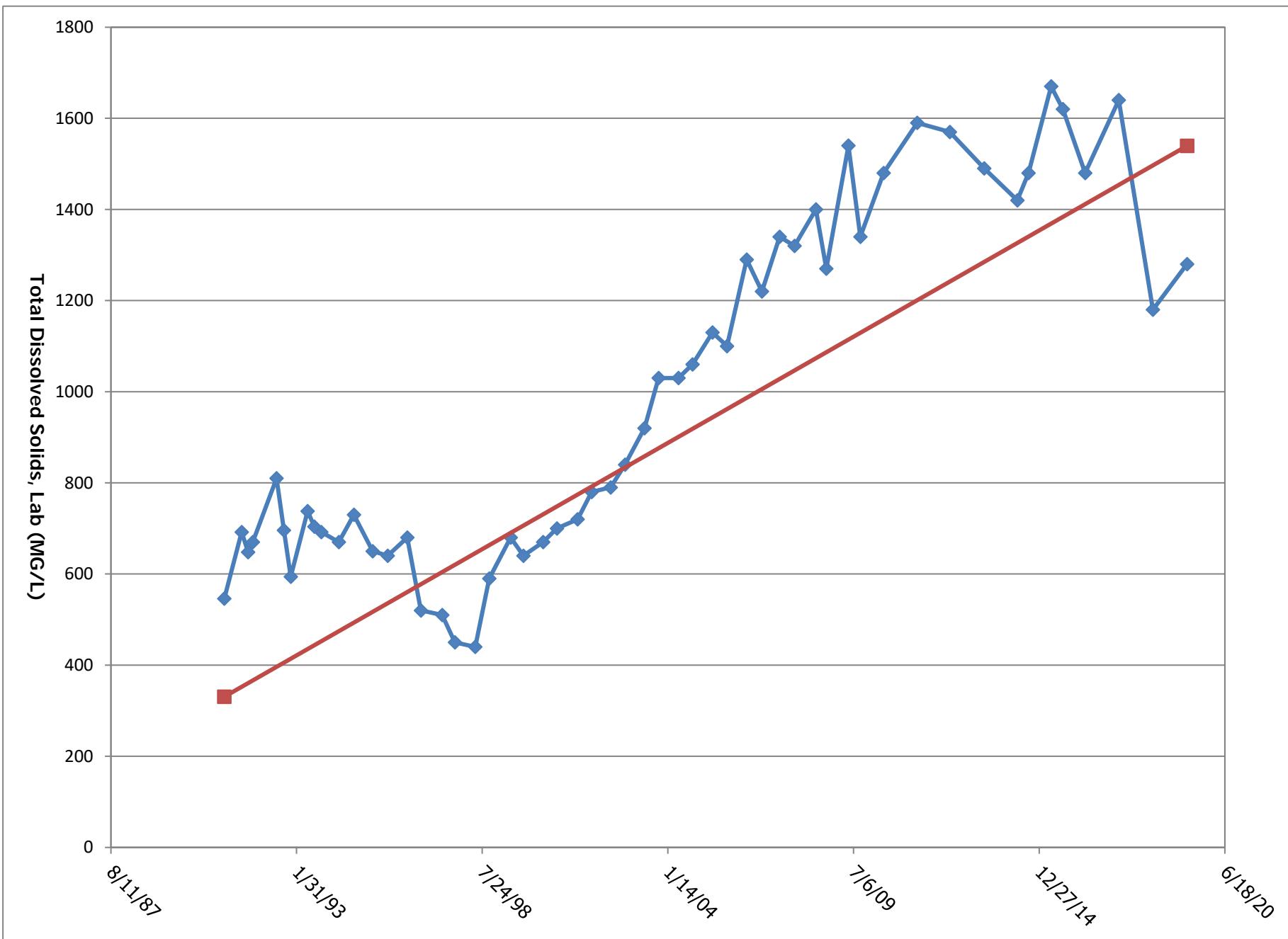
loc_report_order Location Code Location Name					2 YGAL16							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	12/14/1990	9/8/2015	46	0.054	0.04	0.29	0.01	0.059
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	12/14/1990	9/8/2015	46	0.021	0.01	0.26	0.01	0.047
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	12/14/1990	9/8/2015	45	0.269	0	6.6	-5.5	2.36
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	12/14/1990	5/7/2019	54	989	825	1670	440	380
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	12/14/1990	9/8/2015	46	861.24	696.5	1550	442	323.79

		loc_report_order	2		
		sys_loc_code	YGAL16		
		Date	5/7/2019		
		Depth to Water (FT)	2.44		
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	1460
2	pH, Field	N	S.U.	Y	7.58
3	Temperature, Field	N	DEG-C	Y	9.8
17	Fluoride	N	MG/L	Y	0.2
19	Iron	D	MG/L	N	0.08
22	Manganese	D	MG/L	N	0.05
25	Nitrate Nitrogen	N	MG/L	Y	0.14
27	Nitrite Nitrogen	N	MG/L	N	0.05
31	Selenium	D	UG/L	N	5
34	Sulfates	N	MG/L	Y	690
39	Total Dissolved Solids, Lab	N	MG/L	Y	1280



Period of Record Depth to Water Hydrograph

YGAL 16



Period of Record TDS Trend Plot

YGAL 16

Report 2: Page 5 of 5

		loc_report_order	Location Code	Location Name	3 YSAL1							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	8/19/1980	5/14/2019	67	1430	1220	3020	580	559
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	8/19/1980	5/14/2019	67	7.34	7.3	8.03	6.82	0.274
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	8/19/1980	5/4/2018	66	8.57	8.55	15	2	2.62
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	5/14/2019	5/14/2019	1	8.1	8.1	8.1	8.1	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	8/19/1980	9/9/2015	59	323	320	690	194	80.7
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	8/19/1980	9/9/2015	52	0.61	0.03	10	0	2.3
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	8/19/1980	9/9/2015	52	0.9	1	5	0	0.7
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	8/19/1980	9/9/2015	59	390	386	842	209	99.1
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	8/19/1980	9/9/2015	59	84	70	200	30	40
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	8/19/1980	9/9/2015	52	4	5	10	1	2
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	8/19/1980	9/9/2015	59	147.2	121	344	66	65.08
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	8/19/1980	9/9/2015	59	2.3	2	24	0	4.3
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	8/19/1980	9/9/2015	59	11.8	10	63	3.9	8.21
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	6/17/1991	9/9/2015	47	10	10	20	10	3
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	8/19/1980	9/9/2015	59	1315	1130	2870	580	494
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	8/19/1980	9/9/2015	51	10	10	20	2	3
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	8/19/1980	5/14/2019	67	0.22	0.2	0.6	0.1	0.075
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	8/19/1980	9/9/2015	59	723	570	1780	300	355
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	8/19/1980	5/14/2019	67	0.0772	0.02	1.33	0	0.173
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	8/19/1980	9/9/2015	59	28	30	80	0	17
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	8/19/1980	9/9/2015	59	86.4	65.1	225	34	47.6
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	8/19/1980	5/14/2019	67	0.028	0.01	0.16	0	0.033
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	8/19/1980	9/9/2015	52	0.2	0.2	0.2	0	0.06
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	8/19/1980	9/9/2015	52	10	10	20	1	6
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	8/19/1980	5/14/2019	65	0.672	0.24	8.8	0	1.26
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	6/17/1991	5/14/2019	55	0.0291	0.01	1.01	0.01	0.135
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	8/19/1980	9/9/2015	59	7.66	7.6	8.6	6.9	0.414
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	8/19/1980	9/9/2015	59	4.6	4.3	7.3	3	1.1
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	8/19/1980	5/14/2019	67	2.22	1	24.8	0	3.39
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	8/19/1980	9/9/2015	59	55.9	46	267	18	37
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	8/19/1980	9/9/2015	59	0.917	0.85	4.94	0.41	0.598
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	8/19/1980	5/14/2019	67	527	360	1700	120	362

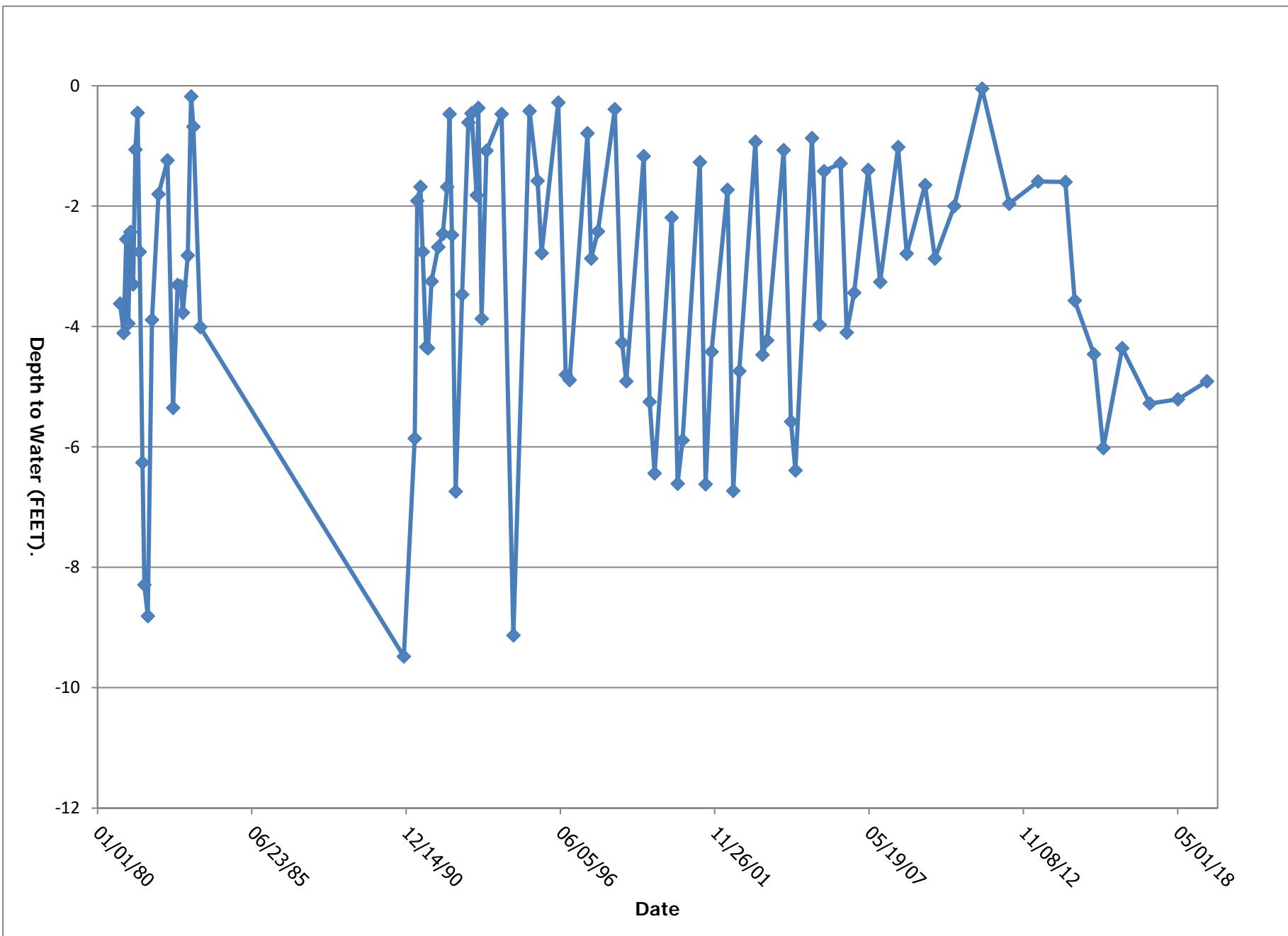
Period of Record Monitoring Summary

YSAL1

Report 3: Page 1 of 5

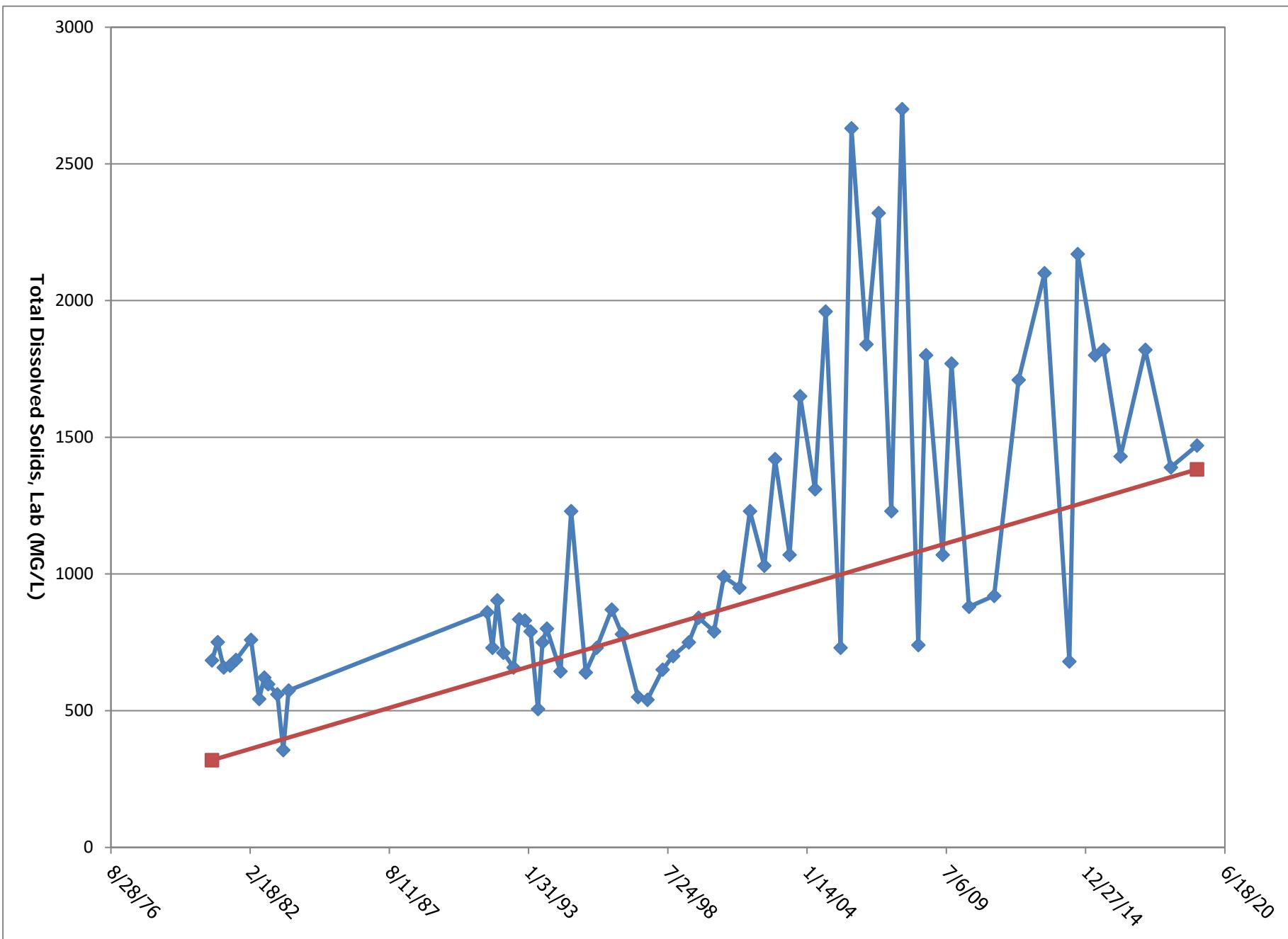
loc_report_order Location Code Location Name					3 YSAL1							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	6/17/1991	9/9/2015	47	0.3	0.04	4.2	0.01	0.813
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	8/19/1980	9/9/2015	59	0.023	0.01	0.59	0	0.075
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	6/17/1991	9/9/2015	46	-0.555	-0.26	4.78	-12.6	2.8
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	8/19/1980	5/14/2019	67	1080	834	2700	356	554
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	8/19/1980	9/9/2015	59	997.5	808	2600	356	510.23

		loc_report_order	3		
		sys_loc_code	YSAL1		
		Date	5/14/2019		
		Depth to Water (FT)	4.91		
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	1630
2	pH, Field	N	S.U.	Y	7.34
3	Temperature, Field	N	DEG-C	Y	8.1
17	Fluoride	N	MG/L	Y	0.2
19	Iron	D	MG/L	Y	0.04
22	Manganese	D	MG/L	N	0.05
25	Nitrate Nitrogen	N	MG/L	Y	1.68
27	Nitrite Nitrogen	N	MG/L	Y	1.01
31	Selenium	D	UG/L	Y	3.6
34	Sulfates	N	MG/L	Y	780
39	Total Dissolved Solids, Lab	N	MG/L	Y	1470



Period of Record Depth to Water Hydrograph

YSAL1



Period of Record TDS Trend Plot

YSAL1

		loc_report_order	Location Code	Location Name	4 YSAL3								
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation	
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	6/14/1991	5/14/2019	55	1460	1420	1960	1190	183	
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	6/14/1991	5/14/2019	55	7.45	7.47	8	7.05	0.215	
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	6/14/1991	5/4/2018	54	8.58	8.4	13.3	5.7	1.87	
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	5/14/2019	5/14/2019	1	7.4	7.4	7.4	7.4	0	
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	6/14/1991	5/11/2016	52	360	359	438	230	29.4	
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	6/14/1991	5/11/2016	52	0.0692	0.03	1.13	0.03	0.159	
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	6/14/1991	5/11/2016	52	0.8	1	2	0.2	0.3	
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	6/14/1991	5/11/2016	52	435	437	520	281	38.8	
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	6/14/1991	5/11/2016	52	130	130	150	100	12	
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	6/14/1991	5/11/2016	52	5	5	6	3	0.9	
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	6/14/1991	5/11/2016	52	92.7	86.7	147	58	22.4	
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	6/14/1991	5/11/2016	52	10.3	2	406	0	56	
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	6/14/1991	5/11/2016	52	8.3	8	17	4	2.2	
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	6/14/1991	5/11/2016	52	10	10	20	10	1	
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	6/14/1991	5/11/2016	52	1400	1380	1820	1020	188.9	
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	6/14/1991	5/11/2016	52	10	10	20	10	2	
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	6/14/1991	5/14/2019	55	0.36	0.4	0.6	0.1	0.1	
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	6/14/1991	5/11/2016	52	445	410	738	276	116	
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	6/14/1991	5/14/2019	55	1.4	1.27	3.81	0.02	0.92	
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	6/14/1991	5/11/2016	52	30	40	40	20	9	
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	6/14/1991	5/11/2016	52	52	47.1	92.5	32	14.6	
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	6/14/1991	5/14/2019	55	0.19	0.19	0.32	0.01	0.065	
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	6/14/1991	5/11/2016	52	0.2	0.2	0.3	0.1	0.04	
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	6/14/1991	5/11/2016	52	10	10	20	8	5	
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	6/14/1991	5/14/2019	55	0.085	0.03	0.66	0.02	0.13	
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	6/14/1991	5/14/2019	55	0.01	0.01	0.05	0.01	0.008	
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	6/14/1991	5/11/2016	52	7.9	7.9	8.6	7.3	0.34	
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	6/14/1991	5/11/2016	52	4.1	4	5	3.4	0.32	
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	6/14/1991	5/14/2019	55	0.9	1	5	0.1	0.7	
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	6/14/1991	5/11/2016	52	180	182.5	217	99.6	17.01	
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	6/14/1991	5/11/2016	52	3.85	3.84	5.47	1.98	0.653	
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	6/14/1991	5/14/2019	55	456	440	720	300	104	

Period of Record Monitoring Summary

YSAL3

Report 4: Page 1 of 5

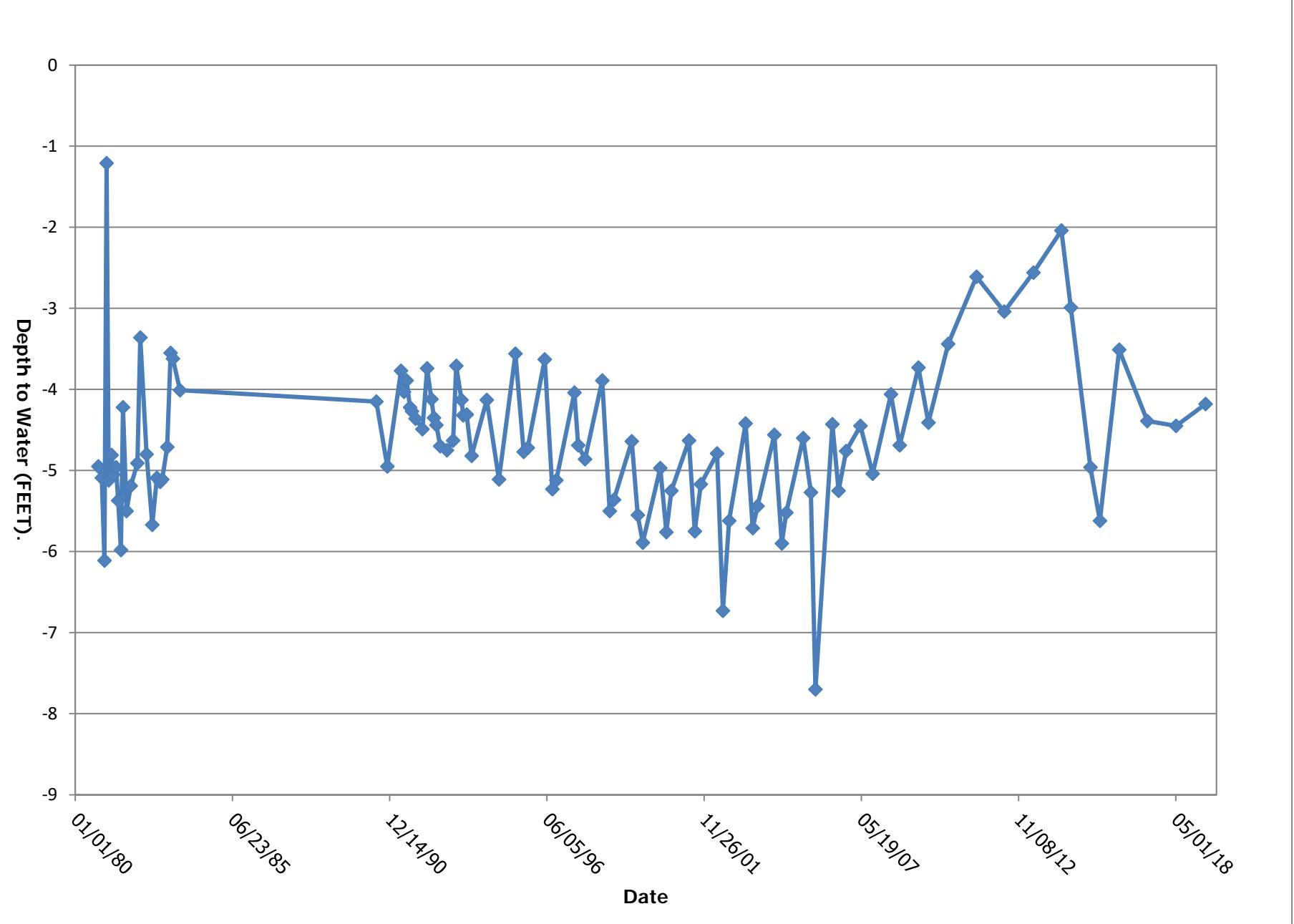
loc_report_order Location Code Location Name					4 YSAL3							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	6/14/1991	5/11/2016	52	0.263	0.11	1.51	0.01	0.315
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	6/14/1991	5/11/2016	52	0.01	0.01	0.04	0.01	0.005
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	6/14/1991	5/11/2016	51	0.224	0	5.7	-4.2	2.13
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	6/14/1991	5/14/2019	55	1011	976	1440	760	150.4
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	6/14/1991	5/11/2016	52	1008.8	957.5	1370	800	144.13

Period of Record Monitoring Summary

YSAL3

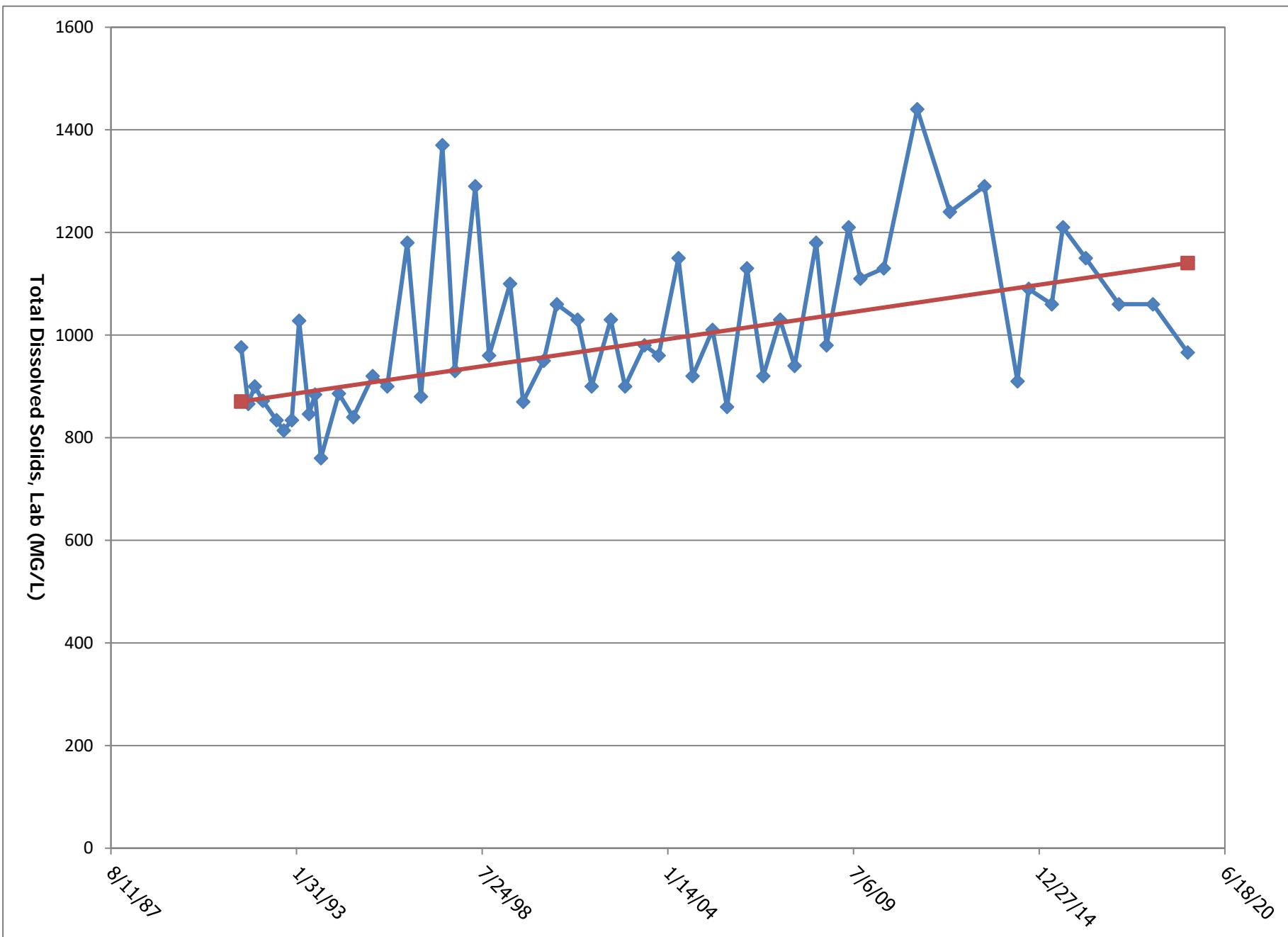
Report 4: Page 2 of 5

		loc_report_order	4		
		sys_loc_code	YSAL3		
		Date	5/14/2019		
		Depth to Water (FT)	4.18		
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	1300
2	pH, Field	N	S.U.	Y	7.21
3	Temperature, Field	N	DEG-C	Y	7.4
17	Fluoride	N	MG/L	Y	0.3
19	Iron	D	MG/L	Y	0.31
22	Manganese	D	MG/L	Y	0.02
25	Nitrate Nitrogen	N	MG/L	Y	0.66
27	Nitrite Nitrogen	N	MG/L	N	0.05
31	Selenium	D	UG/L	N	5
34	Sulfates	N	MG/L	Y	450
39	Total Dissolved Solids, Lab	N	MG/L	Y	966



Period of Record Depth to Water Hydrograph

YSAL3



Period of Record TDS Trend Plot

YSAL3

loc_report_order Location Code Location Name					5 YOV30							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	12/4/1990	6/3/2019	32	3010	2970	4880	1390	954
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	12/4/1990	6/3/2019	32	7.52	7.5	8.8	7.05	0.325
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	12/4/1990	5/8/2018	31	11.1	11.1	16.6	8.6	1.99
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	6/3/2019	6/3/2019	1	9.7	9.7	9.7	9.7	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	12/4/1990	9/3/2015	24	600	603	760	390	81.8
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	12/4/1990	9/3/2015	24	0.086	0.05	0.46	0.03	0.1
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	12/4/1990	9/3/2015	24	1.8	1	10	0.15	2.7
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	12/4/1990	9/3/2015	24	718	729	927	476	105
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	12/4/1990	9/3/2015	24	440	460	540	100	91
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	12/4/1990	9/3/2015	24	6	5	10	3	2
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	12/4/1990	9/3/2015	24	81.3	83.4	181	26.7	36.4
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	12/4/1990	9/3/2015	24	7.6	2	55	0	14
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	12/4/1990	9/3/2015	24	7.2	6	22	4	4.2
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	12/4/1990	9/3/2015	24	10	10	20	10	4
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	12/4/1990	9/3/2015	24	2890	2940	4700	1410	1020
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	12/4/1990	9/3/2015	24	10	10	20	10	4
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	12/4/1990	6/3/2019	32	0.983	1.1	1.6	0.2	0.285
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	12/4/1990	9/3/2015	24	418	421	1080	133	208
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	12/4/1990	6/3/2019	32	0.189	0.115	1.55	0.01	0.289
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	12/4/1990	9/3/2015	24	40	40	80	20	20
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	12/4/1990	9/3/2015	24	52.1	51	152	15.6	28.8
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	12/4/1990	6/3/2019	32	0.054	0.04	0.13	0.02	0.029
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	12/4/1990	9/3/2015	24	0.2	0.2	0.4	0.1	0.06
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	12/4/1990	9/3/2015	24	20	20	20	8	5
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	12/4/1990	6/3/2019	32	0.511	0.185	2.8	0.02	0.68
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	12/4/1990	6/3/2019	32	0.02	0.01	0.08	0.01	0.02
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	12/4/1990	9/3/2015	24	8	8.1	8.7	6.4	0.51
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	12/4/1990	9/3/2015	24	4.3	4.4	6	2.8	1.1
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	12/4/1990	6/3/2019	32	2.1	1	12	0.2	2.7
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	12/4/1990	9/3/2015	24	541	576	920	39.9	238
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	12/4/1990	9/3/2015	24	12.57	13.5	20.39	0.53	5.244
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	12/4/1990	6/3/2019	32	1039	1075	1753	240	502

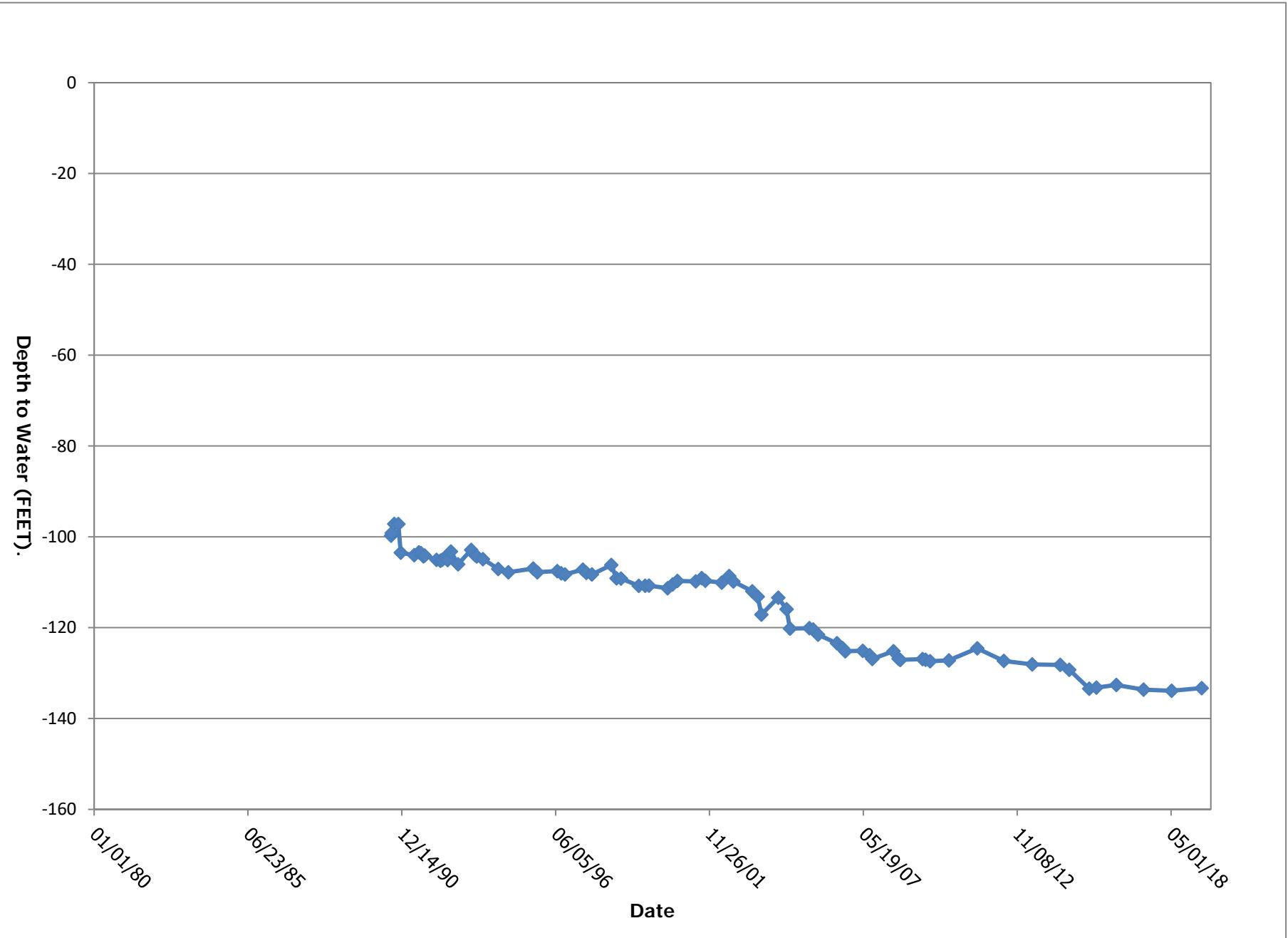
Period of Record Monitoring Summary

YOV30

Report 5: Page 1 of 5

loc_report_order Location Code Location Name					5 YOV30							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	12/4/1990	9/3/2015	24	0.862	0.215	3.6	0.01	1.16
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	12/4/1990	9/3/2015	24	0.035	0.01	0.25	0.01	0.056
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	12/4/1990	9/3/2015	24	-1.54	-0.875	2.45	-8.4	2.58
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	12/4/1990	6/3/2019	32	2244	2418	5300	800	898.3
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	12/4/1990	9/3/2015	24	2052.89	2225	3107	845	782.475

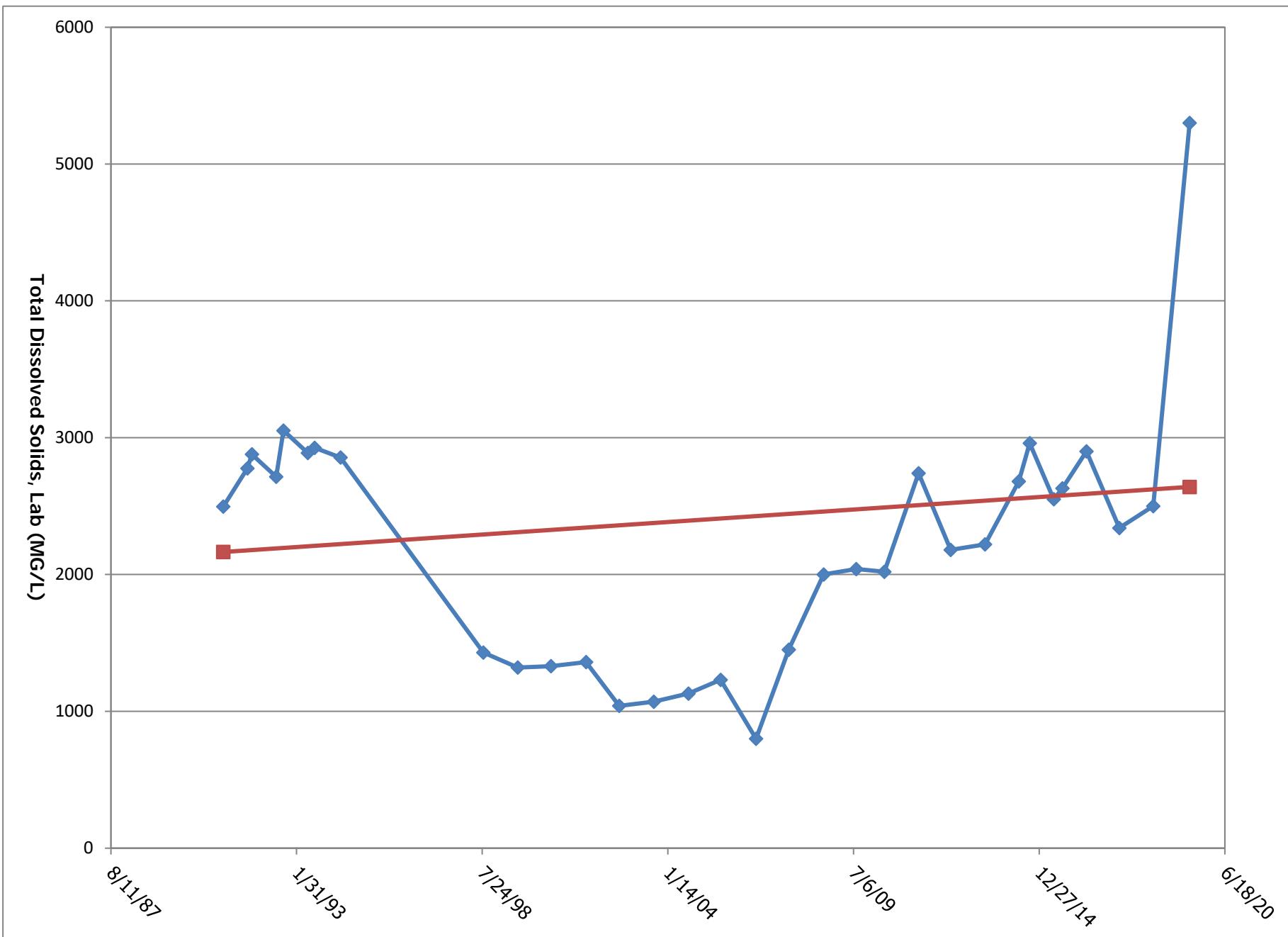
loc_report_order		5			
sys_loc_code		YOV30			
Date		6/3/2019			
Depth to Water (FT)		133.31			
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	2810
2	pH, Field	N	S.U.	Y	7.62
3	Temperature, Field	N	DEG-C	Y	9.7
17	Fluoride	N	MG/L	Y	1.2
19	Iron	D	MG/L	Y	0.24
22	Manganese	D	MG/L	Y	0.04
25	Nitrate Nitrogen	N	MG/L	Y	0.07
27	Nitrite Nitrogen	N	MG/L	Y	0.03
31	Selenium	D	UG/L	Y	1.3
34	Sulfates	N	MG/L	Y	1130
39	Total Dissolved Solids, Lab	N	MG/L	Y	5300



Period of Record Depth to Water Hydrograph

YOV30

Report 5: Page 4 of 5



Period of Record TDS Trend Plot

YOV30

loc_report_order Location Code Location Name					6 YW30							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	12/1/1990	6/3/2019	32	4240	1060	9940	870	3840
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	12/1/1990	6/3/2019	32	7.45	7.46	8.03	6.9	0.254
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	12/1/1990	5/8/2018	31	10.8	10.3	13.4	9	1.41
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	6/3/2019	6/3/2019	1	10.2	10.2	10.2	10.2	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	12/1/1990	9/3/2015	24	599	563	795	394	91.8
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	12/1/1990	9/3/2015	24	0.07	0.05	0.2	0.03	0.06
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	12/1/1990	9/3/2015	24	1.7	1	10	0.2	2
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	12/1/1990	9/3/2015	24	718	687	969	481	116
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	12/1/1990	9/3/2015	24	410	400	600	40	130
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	12/1/1990	9/3/2015	24	9	5	30	3	10
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	12/1/1990	9/3/2015	24	88.5	80.5	140	72	17.8
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	12/1/1990	9/3/2015	24	7.2	2	48	0	13
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	12/1/1990	9/3/2015	24	9.92	6	23	3	6.95
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	12/1/1990	9/3/2015	24	20	10	50	10	10
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	12/1/1990	9/3/2015	24	3030	994	9750	838	3530
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	12/1/1990	9/3/2015	24	20	10	50	10	10
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	12/1/1990	6/3/2019	32	0.49	0.35	1.1	0.1	0.377
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	12/1/1990	9/3/2015	24	482	465	827	395	83.3
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	12/1/1990	6/3/2019	32	0.187	0.1	2.19	0.01	0.384
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	12/1/1990	9/3/2015	24	50	40	200	20	60
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	12/1/1990	9/3/2015	24	63.6	62	116	47	12.9
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	12/1/1990	6/3/2019	32	0.056	0.045	0.4	0.01	0.069
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	12/1/1990	9/3/2015	24	0.2	0.2	0.2	0.1	0.04
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	12/1/1990	9/3/2015	24	20	20	50	8	10
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	12/1/1990	6/3/2019	32	1.43	0.67	5.6	0.02	1.83
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	12/1/1990	6/3/2019	32	0.118	0.01	1.49	0.01	0.322
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	12/1/1990	9/3/2015	24	7.9	7.9	8.7	6.6	0.5
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	12/1/1990	9/3/2015	24	6.18	5	11.6	2	2.53
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	12/1/1990	6/3/2019	32	1	1	5	0.1	0.9
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	12/1/1990	9/3/2015	24	581	60.8	2390	42.2	925
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	12/1/1990	9/3/2015	24	11.6	1.23	46	0.64	18.4
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	12/1/1990	6/3/2019	32	1890	141	5200	10	2200

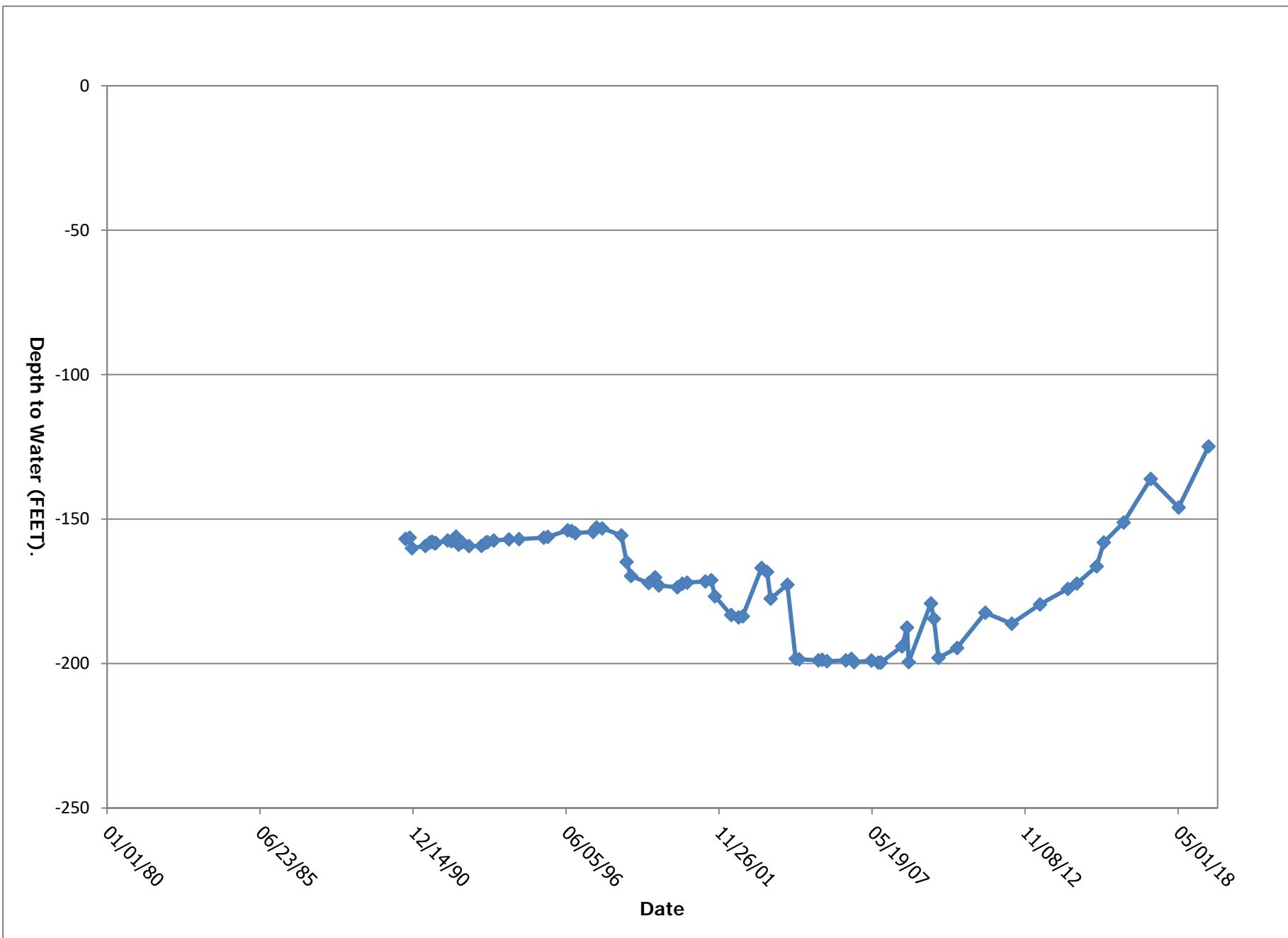
Period of Record Monitoring Summary

YW30

Report 6: Page 1 of 5

loc_report_order Location Code Location Name					6 YW30							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	12/1/1990	9/3/2015	24	0.213	0.02	3.01	0.01	0.614
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	12/1/1990	9/3/2015	24	0.044	0.02	0.31	0.01	0.066
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	12/1/1990	9/3/2015	24	-1.05	-1.11	4.15	-5.8	2.51
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	12/1/1990	6/3/2019	32	3380	740	7900	522	3260
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	12/1/1990	9/3/2015	24	2316.7	599	8120	539	3028.9

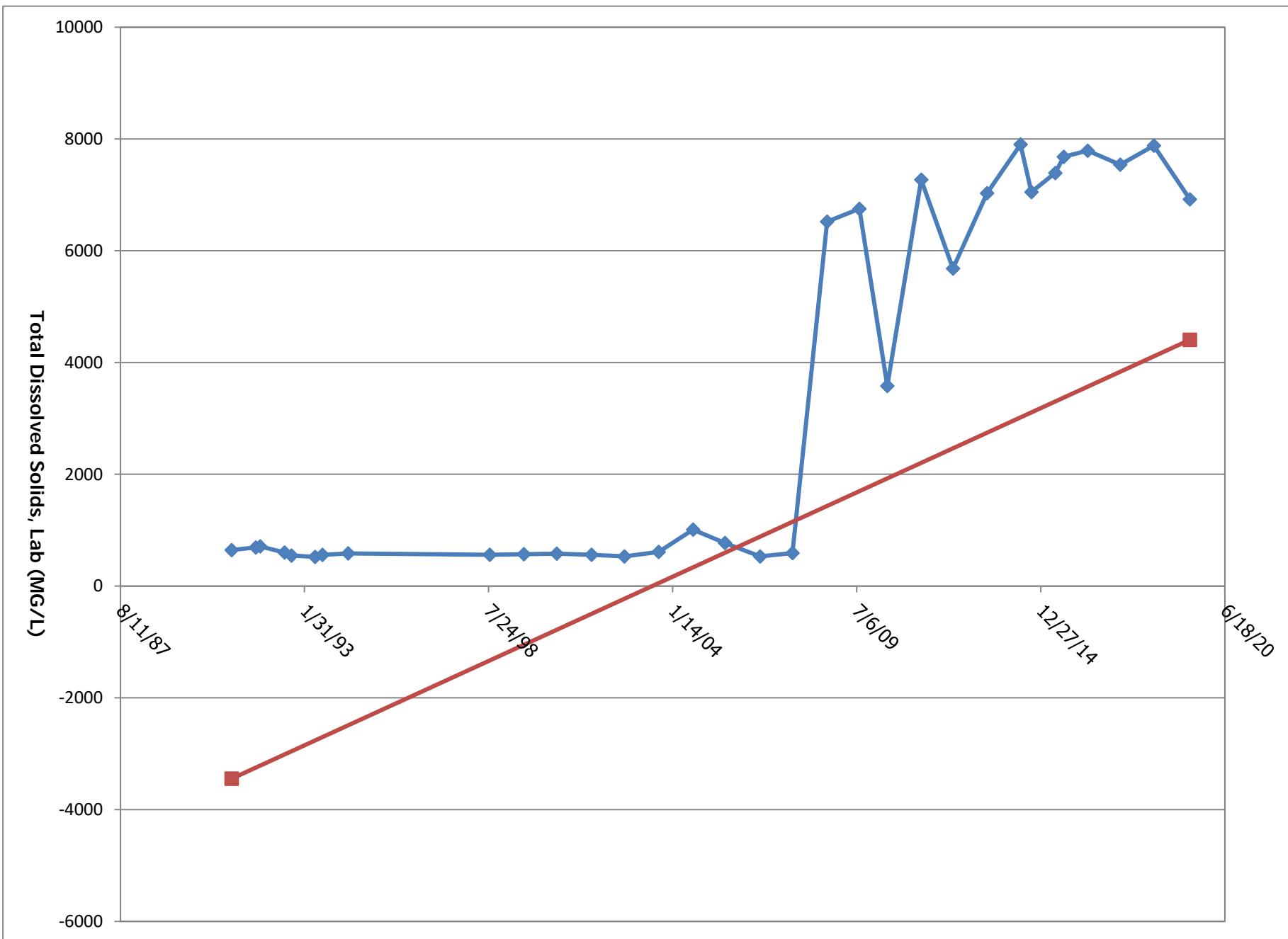
		loc_report_order	6		
		sys_loc_code	YW30		
		Date	6/3/2019		
		Depth to Water (FT)	124.86		
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	7080
2	pH, Field	N	S.U.	Y	7.65
3	Temperature, Field	N	DEG-C	Y	10.2
17	Fluoride	N	MG/L	Y	1.1
19	Iron	D	MG/L	N	0.4
22	Manganese	D	MG/L	Y	0.07
25	Nitrate Nitrogen	N	MG/L	Y	0.79
27	Nitrite Nitrogen	N	MG/L	Y	0.05
31	Selenium	D	UG/L	N	5
34	Sulfates	N	MG/L	Y	4000
39	Total Dissolved Solids, Lab	N	MG/L	Y	6920



Period of Record Depth to Water Hydrograph

YW30

Report 6: Page 4 of 5



Period of Record TDS Trend Plot

YW30

loc_report_order Location Code Location Name					7 YWU30							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	12/3/1990	6/3/2019	29	1270	1160	1830	900	308
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	12/3/1990	6/3/2019	29	7.22	7.21	7.9	6.51	0.387
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	12/3/1990	5/8/2017	28	10.9	10.6	14.4	9.5	1.17
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	6/3/2019	6/3/2019	1	10.1	10.1	10.1	10.1	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	12/3/1990	9/3/2015	22	589	585	701	467	78.6
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	12/3/1990	9/3/2015	22	0.04	0.03	0.08	0.03	0.01
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	12/3/1990	9/3/2015	22	3.06	1	12.1	0.31	3.8
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	12/3/1990	9/3/2015	22	711	714	856	570	95.3
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	12/3/1990	9/3/2015	22	220	200	460	90	100
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	12/3/1990	9/3/2015	22	5	5	5	3	0.7
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	12/3/1990	9/3/2015	22	115	94	182	61.4	42.5
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	12/3/1990	9/3/2015	22	5.17	2	33.7	0	9.41
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	12/3/1990	9/3/2015	22	4.7	4	22	3	4
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	12/3/1990	9/3/2015	22	10	10	10	10	0
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	12/3/1990	9/3/2015	22	1317	1230	2130	865	381
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	12/3/1990	9/3/2015	22	10	10	10	10	0
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	12/3/1990	6/3/2019	30	0.14	0.1	0.4	0.05	0.07
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	12/3/1990	9/3/2015	22	675.8	558.5	1082	310	254.8
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	12/3/1990	6/3/2019	30	0.349	0.09	1.4	0.01	0.475
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	12/3/1990	9/3/2015	22	30	40	40	20	9
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	12/3/1990	9/3/2015	22	94.6	78.7	153	38.1	36.4
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	12/3/1990	6/3/2019	30	0.065	0.06	0.18	0.02	0.032
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	12/3/1990	9/3/2015	22	0.2	0.2	0.8	0.1	0.1
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	12/3/1990	9/3/2015	22	10	10	20	8	5
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	12/3/1990	6/3/2019	29	0.365	0.16	2.22	0.02	0.506
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	12/3/1990	6/3/2019	30	0.01	0.01	0.05	0.01	0.008
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	12/3/1990	9/3/2015	22	7.7	7.8	8.5	6.3	0.58
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	12/3/1990	9/3/2015	22	4.4	4.7	5.1	3.4	0.61
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	12/3/1990	6/3/2019	30	1.1	1	5.5	0.1	0.93
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	12/3/1990	9/3/2015	22	73.2	59.2	450	5	87.3
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	12/3/1990	9/3/2015	22	1.42	1.02	11.3	0.07	2.24
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	12/3/1990	6/3/2019	30	200	120	521	10	179

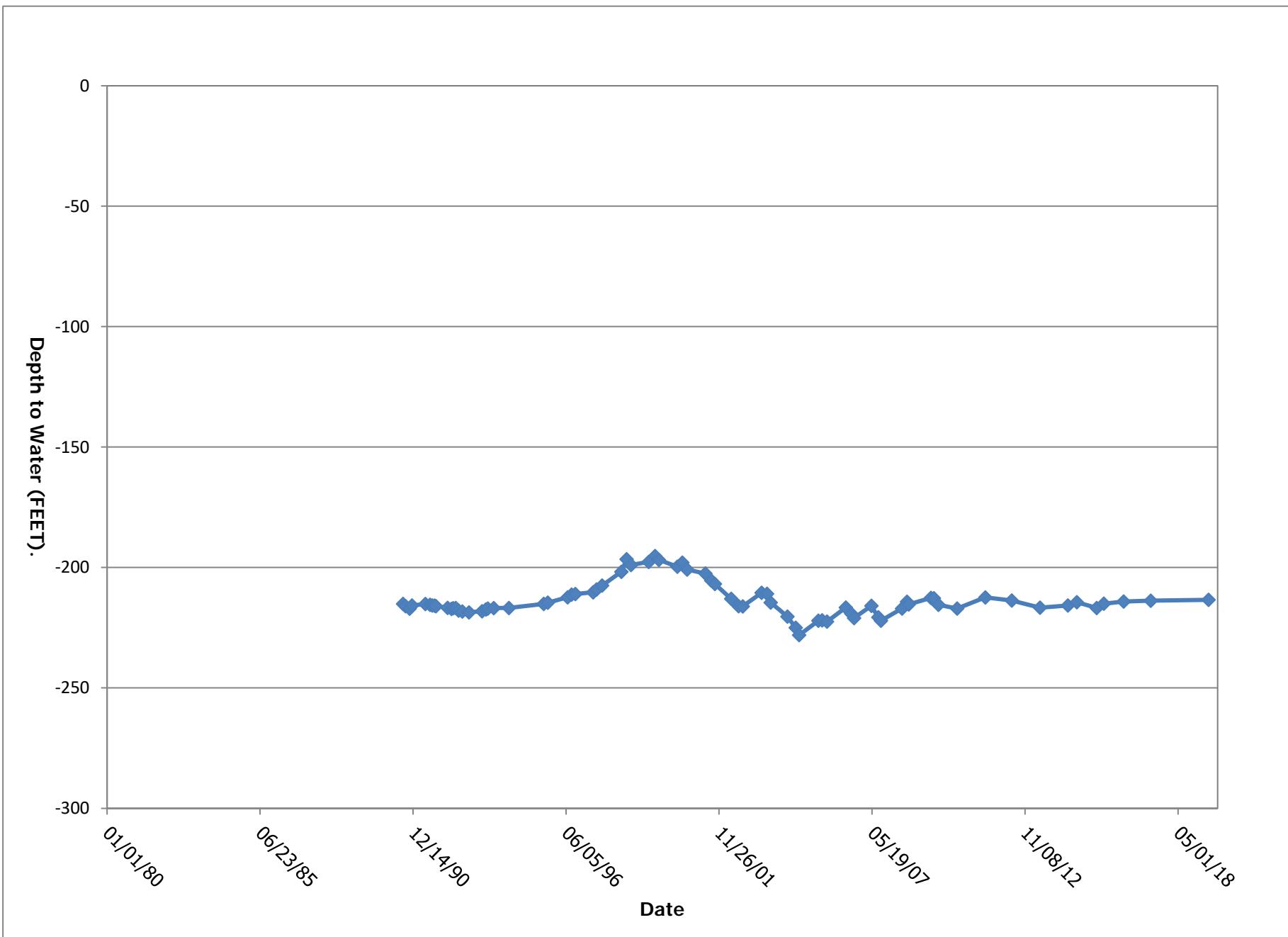
Period of Record Monitoring Summary

YWU30

Report 7: Page 1 of 5

loc_report_order Location Code Location Name					7 YWU30							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	12/3/1990	9/3/2015	22	1.5	0.05	30	0.01	6.4
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	12/3/1990	9/3/2015	22	0.027	0.01	0.25	0.01	0.051
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	12/3/1990	9/3/2015	22	0.362	0	6.7	-4.4	2.9
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	12/3/1990	6/3/2019	30	846.5	754	1406	550	287.6
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	12/3/1990	9/3/2015	22	881.87	750	1410	513	327.65

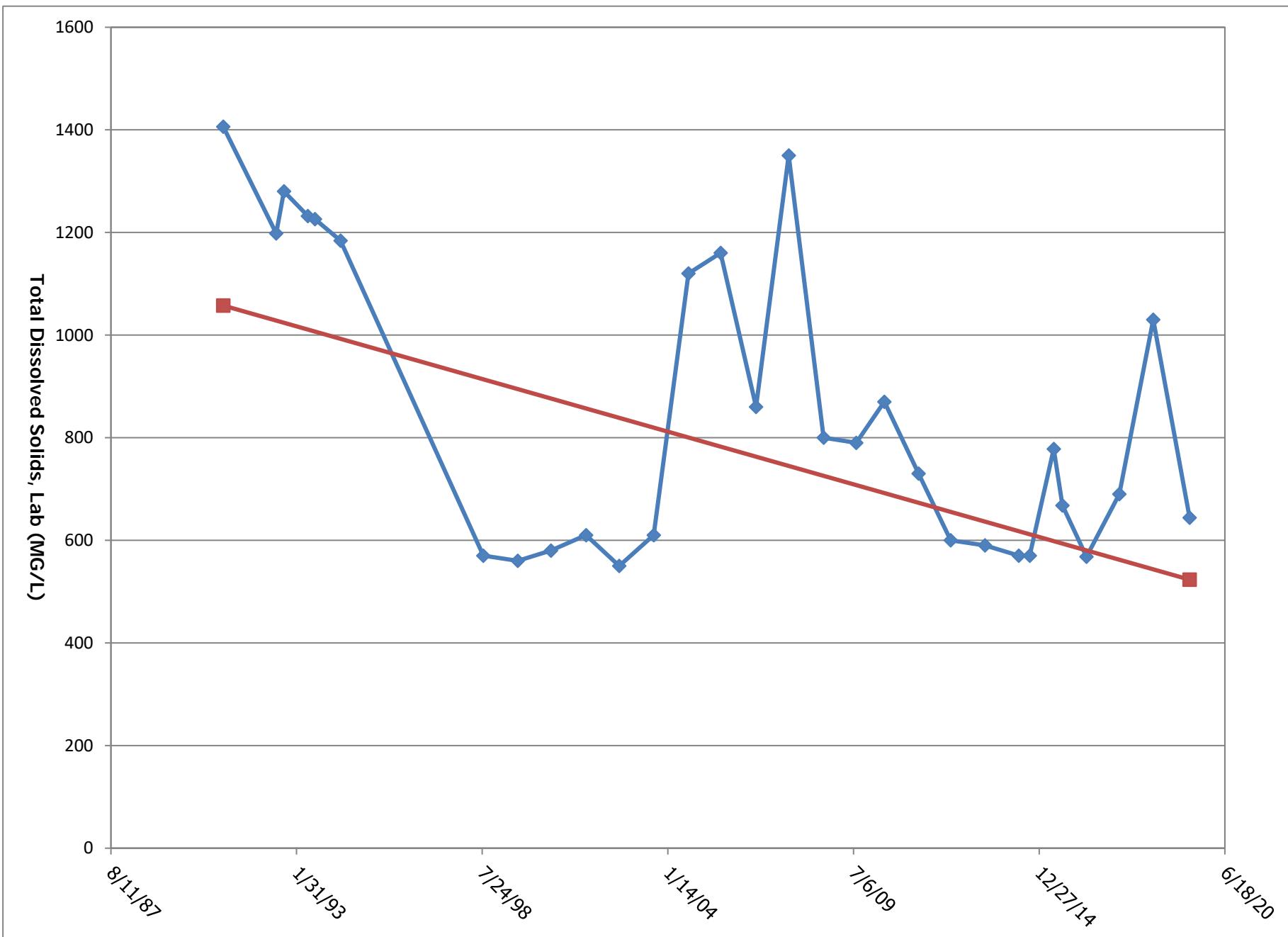
loc_report_order		7			
sys_loc_code		YWU30			
Date		6/3/2019			
Depth to Water (FT)		213.44			
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	990
2	pH, Field	N	S.U.	Y	7.49
3	Temperature, Field	N	DEG-C	Y	10.1
17	Fluoride	N	MG/L	Y	0.2
19	Iron	D	MG/L	N	0.08
22	Manganese	D	MG/L	Y	0.07
25	Nitrate Nitrogen	N	MG/L	Y	0.44
27	Nitrite Nitrogen	N	MG/L	N	0.05
31	Selenium	D	UG/L	Y	1.6
34	Sulfates	N	MG/L	Y	40
39	Total Dissolved Solids, Lab	N	MG/L	Y	644



Period of Record Depth to Water Hydrograph

YWU30

Report 7: Page 4 of 5



Period of Record TDS Trend Plot

YWU30

loc_report_order Location Code Location Name					8 YWC33							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	9/12/2002	6/3/2019	20	1220	1310	1370	560	213
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	9/12/2002	6/3/2019	20	7.79	7.79	8.4	7.21	0.382
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	9/12/2002	5/8/2018	19	10.4	10.3	11.6	9.7	0.45
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	6/3/2019	6/3/2019	1	10.6	10.6	10.6	10.6	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	9/12/2002	9/3/2015	12	679	687	747	562	52.2
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	9/12/2002	9/3/2015	12	0.053	0.035	0.13	0.03	0.034
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	9/12/2002	9/3/2015	12	1.8	1.2	10	0.3	2.7
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	9/12/2002	9/3/2015	12	794	805	872	655	64.3
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	9/12/2002	9/3/2015	12	270	270	290	250	13
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	9/12/2002	9/3/2015	12	5	5	5	5	0
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	9/12/2002	9/3/2015	12	8.21	8.25	11.6	5.2	1.92
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	9/12/2002	9/3/2015	12	17.1	16	34.9	2	10.3
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	9/12/2002	9/3/2015	12	4.4	4	6	2.6	1
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	9/12/2002	9/3/2015	12	10	10	10	10	0
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	9/12/2002	9/3/2015	12	1300	1300	1420	1180	72.1
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	9/12/2002	9/3/2015	12	10	10	10	10	0
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	9/12/2002	9/3/2015	12	2.35	2.56	2.83	0.2	0.731
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	9/12/2002	9/3/2015	12	34	34	48	22	7.2
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	9/12/2002	6/3/2019	20	0.089	0.05	0.4	0.02	0.094
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	9/12/2002	9/3/2015	12	40	40	40	30	5
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	9/12/2002	9/3/2015	12	3.1	3.2	4.5	2.1	0.66
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	9/12/2002	6/3/2019	20	0.04	0.03	0.1	0.01	0.02
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	9/12/2002	9/3/2015	12	0.2	0.2	0.2	0.2	3E-17
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	9/12/2002	9/3/2015	12	10	10	20	8	3
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	9/12/2002	9/3/2015	12	0.03	0.02	0.08	0.02	0.02
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	9/12/2002	9/3/2015	12	0.01	0.01	0.03	0.01	0.008
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	9/12/2002	9/3/2015	12	8.3	8.4	8.6	7.2	0.4
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	9/12/2002	9/3/2015	12	2.3	2.4	3	1.9	0.3
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	9/12/2002	9/3/2015	12	1.8	1	7	0.1	2.1
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	9/12/2002	9/3/2015	12	312	311	345	290	19.2
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	9/12/2002	9/3/2015	12	24.2	23.6	30.4	19.5	3.28
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	9/12/2002	9/3/2015	12	40	40	90	10	20

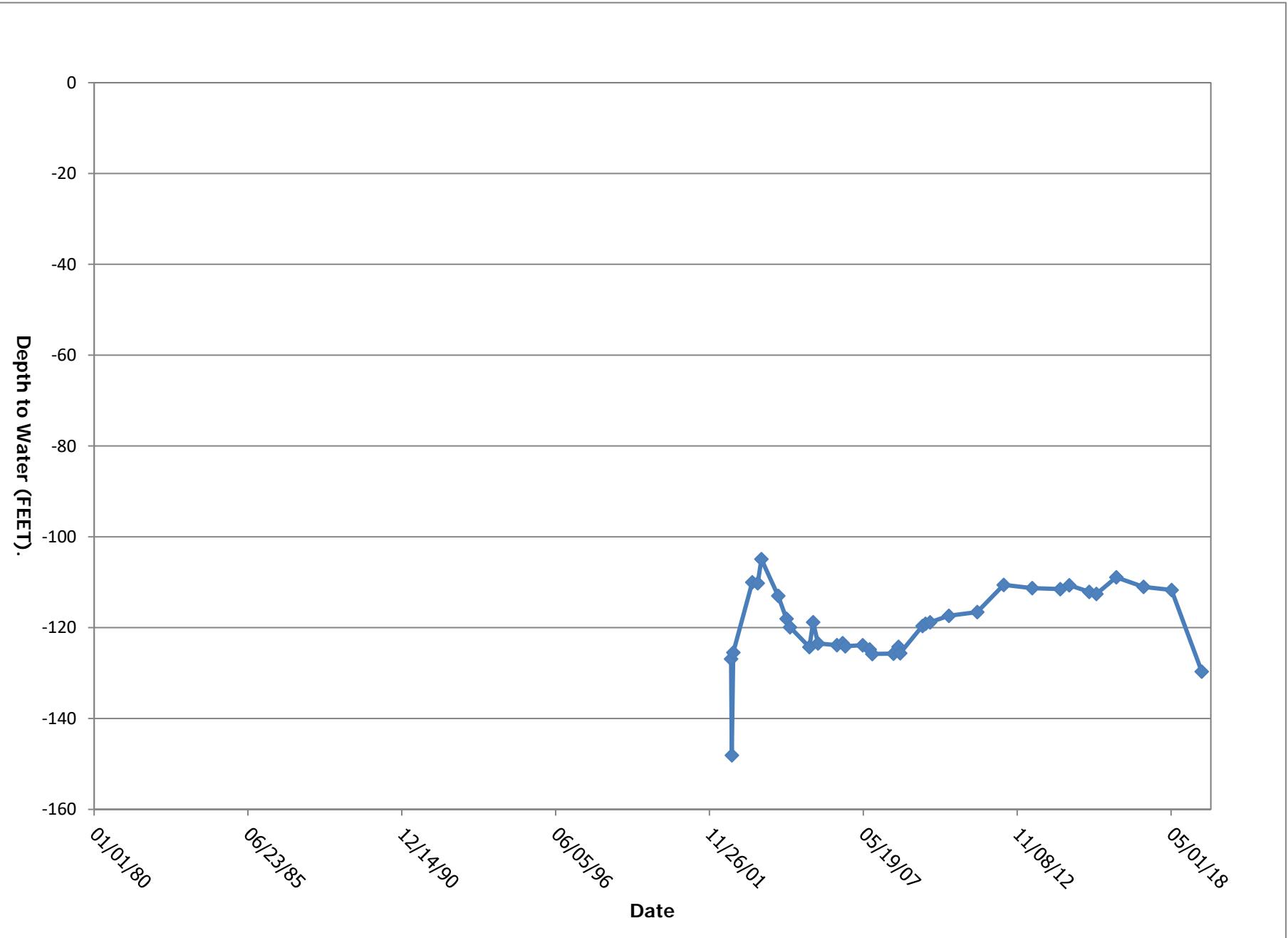
Period of Record Monitoring Summary

YWC33

Report 8: Page 1 of 5

loc_report_order Location Code Location Name					8 YWC33							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	9/12/2002	9/3/2015	12	2.24	1.13	10.6	0.03	3.29
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	9/12/2002	9/3/2015	12	0.01	0.01	0.02	0.01	0.005
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	9/12/2002	9/3/2015	12	-0.41	-0.3	7.7	-6.7	3.8
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	9/12/2002	6/3/2019	20	732	781	850	354	149
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	9/12/2002	9/3/2015	12	786	805	833	691	44.9

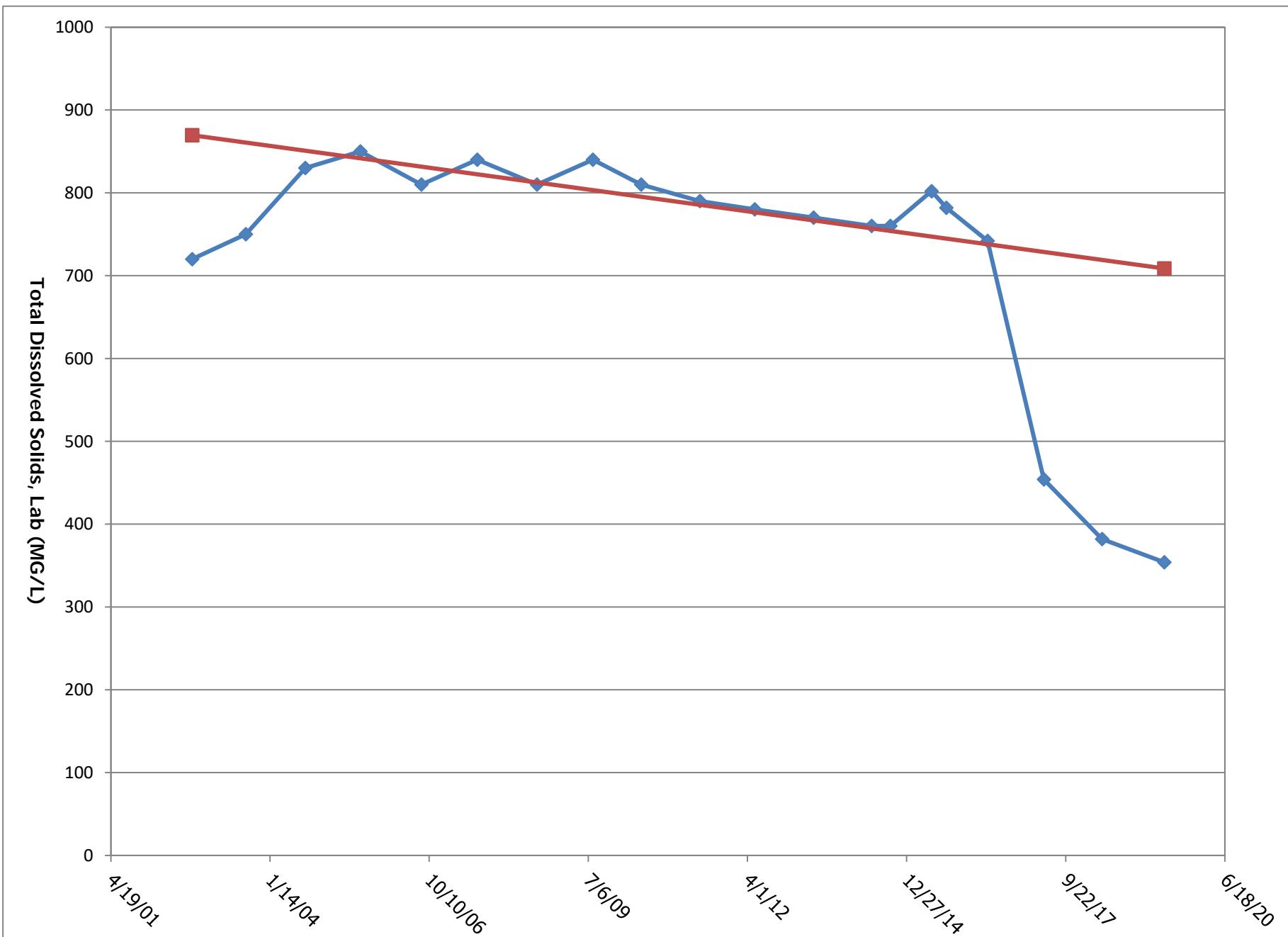
loc_report_order	8				
sys_loc_code	YWC33				
Date	6/3/2019				
Depth to Water (FT)	129.67				
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	560
2	pH, Field	N	S.U.	Y	7.41
3	Temperature, Field	N	DEG-C	Y	10.6
19	Iron	D	MG/L	N	0.08
22	Manganese	D	MG/L	N	0.05
39	Total Dissolved Solids, Lab	N	MG/L	Y	354



Period of Record Depth to Water Hydrograph

YWC33

Report 8: Page 4 of 5



Period of Record TDS Trend Plot

YWC33

loc_report_order Location Code Location Name					9 YWCU33							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
1	3002 - SIIW AHR Wells Long	Specific Conductivity, Field	N	UMHOS/CM	9/12/2002	6/3/2019	20	1430	1430	1590	1310	70.7
2	3002 - SIIW AHR Wells Long	pH, Field	N	S.U.	9/12/2002	6/3/2019	20	8.59	8.67	8.93	7.74	0.277
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	C	9/12/2002	5/8/2018	19	11.4	11.1	12.9	10.6	0.695
3	3002 - SIIW AHR Wells Long	Temperature, Field	N	DEG-C	6/3/2019	6/3/2019	1	11.3	11.3	11.3	11.3	0
4	3002 - SIIW AHR Wells Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	9/12/2002	9/3/2015	12	768	770	819	623	52.6
6	3002 - SIIW AHR Wells Long	Aluminum	D	MG/L	9/12/2002	9/3/2015	12	0.17	0.12	0.6	0.03	0.17
7	3002 - SIIW AHR Wells Long	Arsenic	D	UG/L	9/12/2002	9/3/2015	12	0.67	0.5	3	0.2	0.79
8	3002 - SIIW AHR Wells Long	Bicarbonate as HCO ₃	N	MG/L	9/12/2002	9/3/2015	12	856	846	996	685	84.2
9	3002 - SIIW AHR Wells Long	Boron	D	UG/L	9/12/2002	9/3/2015	12	150	150	160	140	6.2
10	3002 - SIIW AHR Wells Long	Cadmium	D	UG/L	9/12/2002	9/3/2015	12	5	5	5	5	0
11	3002 - SIIW AHR Wells Long	Calcium	D	MG/L	9/12/2002	9/3/2015	12	2.8	2.3	6	1.5	1.4
12	3002 - SIIW AHR Wells Long	Carbonate as CO ₃	N	MG/L	9/12/2002	9/3/2015	12	39.6	45.5	62	2	18.8
13	3002 - SIIW AHR Wells Long	Chloride	N	MG/L	9/12/2002	9/3/2015	12	3.3	3.1	4	3	0.42
14	3002 - SIIW AHR Wells Long	Chromium	D	UG/L	9/12/2002	9/3/2015	12	10	10	10	10	0
15	3002 - SIIW AHR Wells Long	Specific Conductivity, Lab	N	UMHOS/CM	9/12/2002	9/3/2015	12	1410	1390	1550	1340	66.8
16	3002 - SIIW AHR Wells Long	Copper	D	UG/L	9/12/2002	9/3/2015	12	10	10	10	10	0
17	3002 - SIIW AHR Wells Long	Fluoride	N	MG/L	9/12/2002	9/3/2015	12	4.25	4.28	4.5	3.8	0.182
18	3002 - SIIW AHR Wells Long	Hardness	N	MG/L	9/12/2002	9/3/2015	12	15	9.5	46	6.2	13
19	3002 - SIIW AHR Wells Long	Iron	D	MG/L	9/12/2002	6/3/2019	20	0.082	0.055	0.28	0.02	0.077
20	3002 - SIIW AHR Wells Long	Lead	D	UG/L	9/12/2002	9/3/2015	12	40	40	40	30	5
21	3002 - SIIW AHR Wells Long	Magnesium	D	MG/L	9/12/2002	9/3/2015	12	2	0.85	9.2	0.5	2.5
22	3002 - SIIW AHR Wells Long	Manganese	D	MG/L	9/12/2002	6/3/2019	20	0.01	0.01	0.05	0.01	0.009
23	3002 - SIIW AHR Wells Long	Mercury	D	UG/L	9/12/2002	9/3/2015	12	0.2	0.2	0.2	0.2	3E-17
24	3002 - SIIW AHR Wells Long	Nickel	D	UG/L	9/12/2002	9/3/2015	12	9	10	10	8	1
25	3002 - SIIW AHR Wells Long	Nitrate Nitrogen	N	MG/L	9/12/2002	9/3/2015	12	0.063	0.02	0.35	0.02	0.098
27	3002 - SIIW AHR Wells Long	Nitrite Nitrogen	N	MG/L	9/12/2002	9/3/2015	12	0.01	0.01	0.05	0.01	0.01
29	3002 - SIIW AHR Wells Long	pH, Lab	N	S.U.	9/12/2002	9/3/2015	12	8.6	8.7	9	7.6	0.36
30	3002 - SIIW AHR Wells Long	Potassium	D	MG/L	9/12/2002	9/3/2015	12	1.4	1.4	2.1	1.2	0.26
31	3002 - SIIW AHR Wells Long	Selenium	D	UG/L	9/12/2002	9/3/2015	12	0.8	1	2	0.1	0.5
32	3002 - SIIW AHR Wells Long	Sodium	D	MG/L	9/12/2002	9/3/2015	12	350	349	378	324	21.6
33	3002 - SIIW AHR Wells Long	Sodium Adsorption Ratio	N	RATIO	9/12/2002	9/3/2015	12	46.8	51.7	62.9	21	13.5
34	3002 - SIIW AHR Wells Long	Sulfates	N	MG/L	9/12/2002	9/3/2015	12	20	10	70	10	20

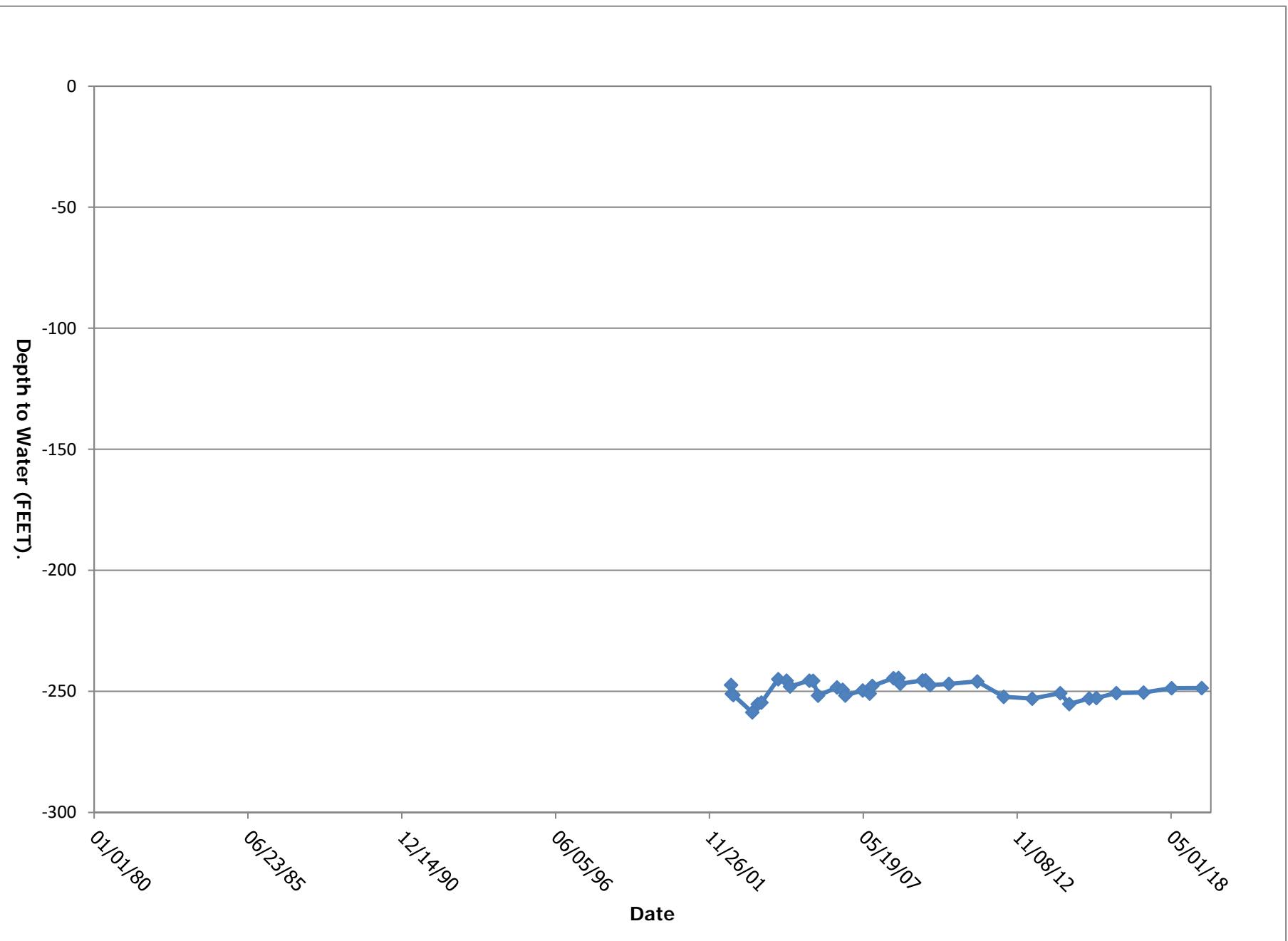
Period of Record Monitoring Summary

YWCU33

Report 9: Page 1 of 5

loc_report_order Location Code Location Name					9 YWCU33							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
35	3002 - SIIW AHR Wells Long	Sulfide	N	MG/L	9/12/2002	9/3/2015	12	0.19	0.03	1.1	0.02	0.32
37	3002 - SIIW AHR Wells Long	Zinc	D	MG/L	9/12/2002	9/3/2015	12	0.01	0.01	0.01	0.01	2E-18
38	3002 - SIIW AHR Wells Long	Cation / Anion Balance	N	%	9/12/2002	9/3/2015	12	-0.77	-1.2	7.1	-6.7	4.3
39	3002 - SIIW AHR Wells Long	Total Dissolved Solids, Lab	N	MG/L	9/12/2002	6/3/2019	20	874	860	1040	790	62.2
40	3002 - SIIW AHR Wells Long	Total Dissolved Solids (Calculated)	N	MG/L	9/12/2002	9/3/2015	12	856	872	924	739	47.6

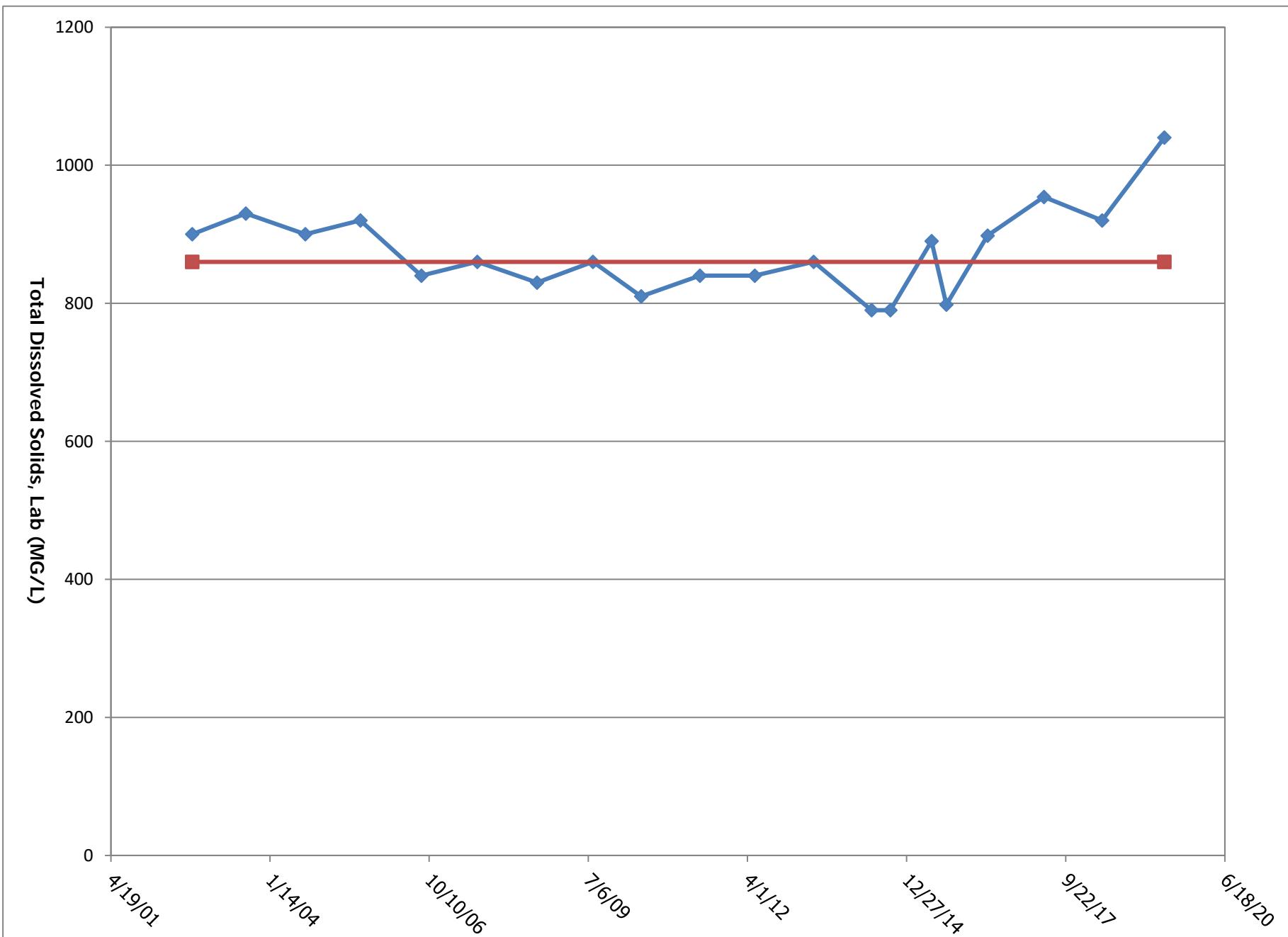
		loc_report_order	9		
		sys_loc_code	YWCU33		
		Date	6/3/2019		
		Depth to Water (FT)	248.63		
report_order	Parameter	Fraction	Units	Detection	Result
1	Specific Conductivity, Field	N	UMHOS/CM	Y	1540
2	pH, Field	N	S.U.	Y	8.69
3	Temperature, Field	N	DEG-C	Y	11.3
19	Iron	D	MG/L	Y	0.1
22	Manganese	D	MG/L	N	0.05
39	Total Dissolved Solids, Lab	N	MG/L	Y	1040



Period of Record Depth to Water Hydrograph

YWCU33

Report 9: Page 4 of 5



Period of Record TDS Trend Plot

YWCU33

loc_report_order Location Code Location Name					1 YSSF3							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	9/4/1990	6/11/2019	155	335.59	59	4960	0	730.62
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	11/14/1990	6/11/2019	132	620.9	595	1180	0.59	196.5
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	11/14/1990	6/11/2019	133	8.22	8.24	8.8	6.97	0.225
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	11/14/1990	6/5/2018	131	9.68	10	21.5	1	5.95
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	5/1/2019	6/11/2019	2	7.6	7.6	9.8	5.4	3.1
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	5/1/1991	9/14/2015	67	249	233	402	146	64
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	5/1/1991	9/14/2015	66	0.97	1	2	0.3	0.42
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	5/1/1991	9/14/2015	66	294	282	456	178	71.8
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	5/1/1991	9/14/2015	66	30	30	50	10	9
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	4/26/2005	9/14/2015	9	0.1	0.1	0.5	0.1	0.1
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	4/26/2005	4/21/2010	13	0.1	0.1	0.1	0.1	0
9	3002 - AHR SW & SPR Long	Cadmium	TR	UG/L	5/1/1991	6/9/2005	48	0.3	0.1	3	0.1	0.5
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	5/1/1991	4/5/2017	68	71.55	67.25	115	45	16.92
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	5/1/1991	9/14/2015	66	5.83	2	31	0	7.11
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	5/1/1991	9/14/2015	67	3.2	3	14	1	1.8
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	4/26/2005	9/14/2015	9	0.4	0.5	0.5	0.1	0.2
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	4/26/2005	4/21/2010	13	0.2	0.1	0.5	0.1	0.2
13	3002 - AHR SW & SPR Long	Chromium	TR	UG/L	5/1/1991	6/9/2005	48	10	10	20	0.1	2
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	5/1/1991	9/14/2015	66	598	562	945	356	142
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	4/26/2005	9/14/2015	9	0.8	0.5	3	0.5	0.8
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	4/26/2005	4/21/2010	13	0.74	0.6	1.3	0.5	0.26
15	3002 - AHR SW & SPR Long	Copper	TR	UG/L	5/1/1991	6/9/2005	48	14	10	110	0.5	16
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	5/1/1991	4/5/2017	67	329	300	545	195	90.2
18	3002 - AHR SW & SPR Long	Iron	D	MG/L	5/1/1991	4/5/2017	53	0.05	0.03	0.33	0.01	0.062
18	3002 - AHR SW & SPR Long	Iron	PD	MG/L	4/9/2014	4/5/2017	6	0.16	0.15	0.35	0.04	0.12
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	5/1/1991	4/21/2010	57	0.469	0.37	1.36	0.09	0.272
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	9/27/1999	6/11/2019	36	0.47	0.39	1.31	0.1	0.263
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	4/26/2005	9/14/2015	9	0.1	0.1	0.5	0.1	0.1
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	4/26/2005	4/21/2010	13	0.2	0.2	0.5	0.1	0.1
19	3002 - AHR SW & SPR Long	Lead	TR	UG/L	5/1/1991	6/9/2005	48	1	1	5	0.1	0.7
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	5/1/1991	4/5/2017	68	36.3	31.5	64.8	20	11.8
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	5/1/1991	6/11/2019	61	0.0799	0.05	0.45	0.0024	0.0907

Period of Record Monitoring Summary

YSSF3

Report 10: Page 1 of 5

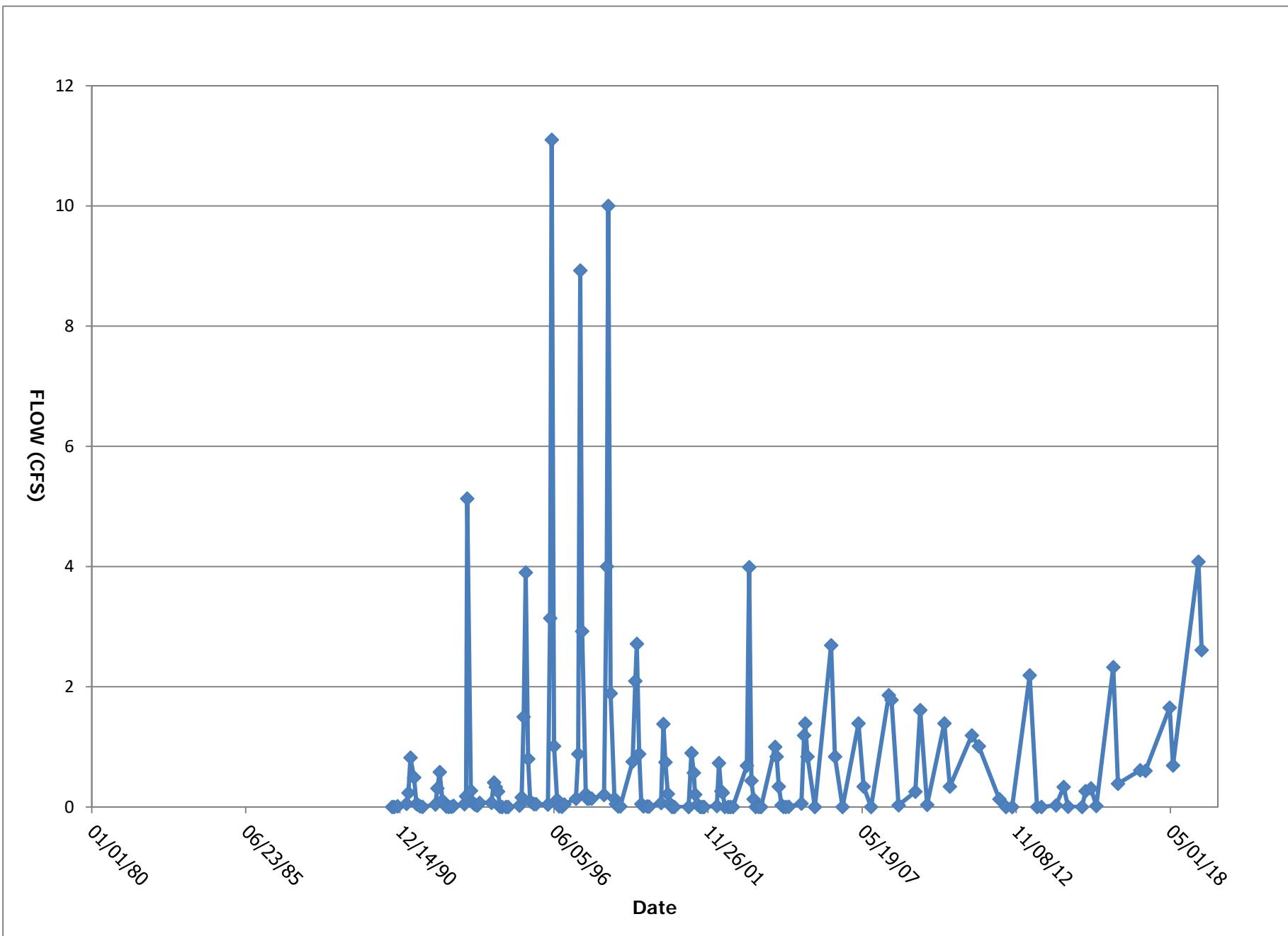
loc_report_order Location Code Location Name					1 YSSF3							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	4/26/2005	6/5/2018	20	0.05	0.04	0.15	0.0038	0.042
21	3002 - AHR SW & SPR Long	Manganese	T	MG/L	5/1/1991	6/9/2005	48	0.12	0.08	0.52	0.02	0.11
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	6/2/2004	9/14/2015	21	0.2	0.2	0.2	0.2	3E-17
22	3002 - AHR SW & SPR Long	Mercury	TR	UG/L	5/1/1991	4/15/2004	45	0.2	0.2	3	0.1	0.4
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	4/26/2005	9/14/2015	9	8	8	10	8	0.9
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	4/26/2005	4/21/2010	13	10	10	10	10	0
23	3002 - AHR SW & SPR Long	Nickel	TR	UG/L	5/1/1991	6/9/2005	48	10	10	20	10	5
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	5/1/1991	9/14/2015	66	0.065	0.05	0.18	0.03	0.03
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	5/1/1991	9/14/2015	65	0.151	0.04	2.21	0.02	0.391
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	5/1/1991	9/14/2015	66	0.01	0.01	0.02	0.01	0.002
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	5/1/1991	9/14/2015	66	8.2	8.3	8.8	7.5	0.26
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	5/1/1991	9/14/2015	67	2	2	3	1	0.56
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	4/26/2005	6/11/2019	19	0.79	0.3	8	0.1	1.8
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	4/26/2005	6/11/2019	22	0.4	0.4	1	0.1	0.3
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	5/1/1991	6/11/2019	64	0.9	1	3	0.1	0.4
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	4/26/2005	9/14/2015	9	0.08	0.05	0.3	0.05	0.08
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	4/26/2005	4/21/2010	13	0.05	0.05	0.05	0.05	0
31	3002 - AHR SW & SPR Long	Silver	TR	UG/L	5/1/1991	6/9/2005	48	0.57	0.5	5	0.05	0.77
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	5/1/1991	9/14/2015	67	10.6	9.6	22.5	5.4	3.67
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	5/1/1991	9/14/2015	66	0.25	0.25	0.45	0.16	0.058
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	5/1/1991	9/14/2015	68	93.9	81	220	30	45.2
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	5/1/1991	9/14/2015	65	0.02	0.02	0.1	0.01	0.01
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	4/26/2005	9/14/2015	9	0.01	0.01	0.02	0.01	0.003
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	4/26/2005	4/21/2010	13	0.01	0.01	0.02	0.01	0.003
37	3002 - AHR SW & SPR Long	Zinc	TR	MG/L	5/1/1991	6/9/2005	48	0.02	0.01	0.09	0.01	0.02
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	5/1/1991	9/14/2015	66	0.115	0	9.8	-5.1	2.79
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	5/1/1991	6/11/2019	83	364	332	640	230	98.4
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	5/1/1991	9/14/2015	66	371.27	334.5	616	217	105.6
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	5/1/1991	6/11/2019	83	9.1	6	60	2	8.9

Period of Record Monitoring Summary

YSSF3

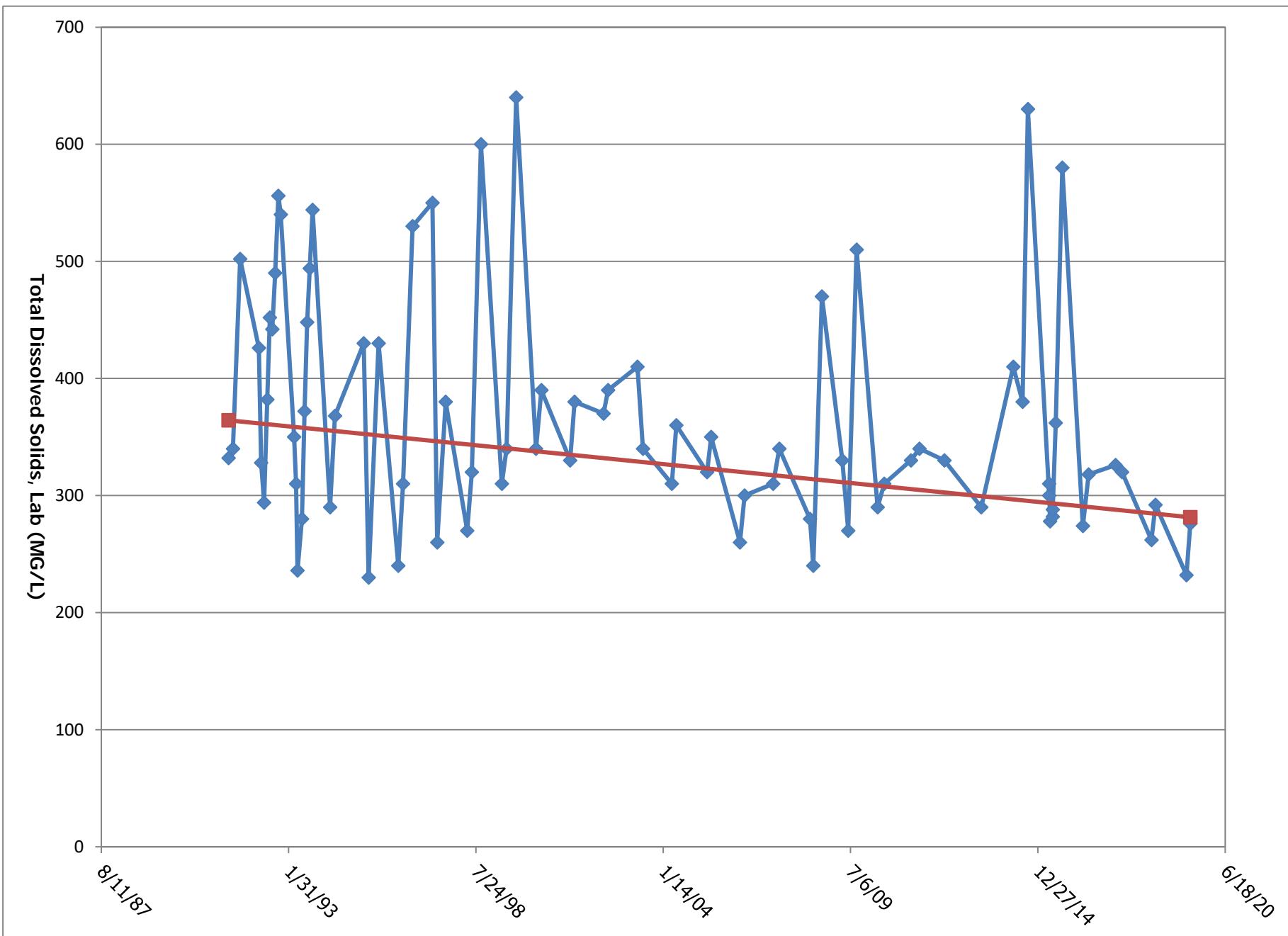
Report 10: Page 2 of 5

loc_report_order	1	1					
Location Code	YSSF3	YSSF3					
sys_sample_code	3002_YSSF3_05012019	3002_YSSF3_06112019					
Site ID							
Date	5/1/2019	6/11/2019					
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result
	Flow	N	GPM	Y	1830	Y	1172
1	Specific Conductivity, Field	N	UMHOS/CM	Y	465.3	Y	494
2	pH, Field	N	S.U.	Y	8.61	Y	8.38
3	Temperature, Field	N	DEG-C	Y	5.4	Y	9.8
18	Iron	TR	MG/L	Y	0.26	Y	0.13
21	Manganese	D	MG/L	Y	0.0024	Y	0.0121
30	Selenium	D	UG/L	Y	0.5	Y	0.1
30	Selenium	PD	UG/L	Y	0.4	Y	0.2
30	Selenium	TR	UG/L	Y	0.5	Y	0.1
39	Total Dissolved Solids, Lab	N	MG/L	Y	232	Y	276
41	Solids, Total Suspended	N	MG/L	Y	5	N	20



Period of Record Water Discharge Hydrograph

YSSF3



Period of Record TDS Trend Plot

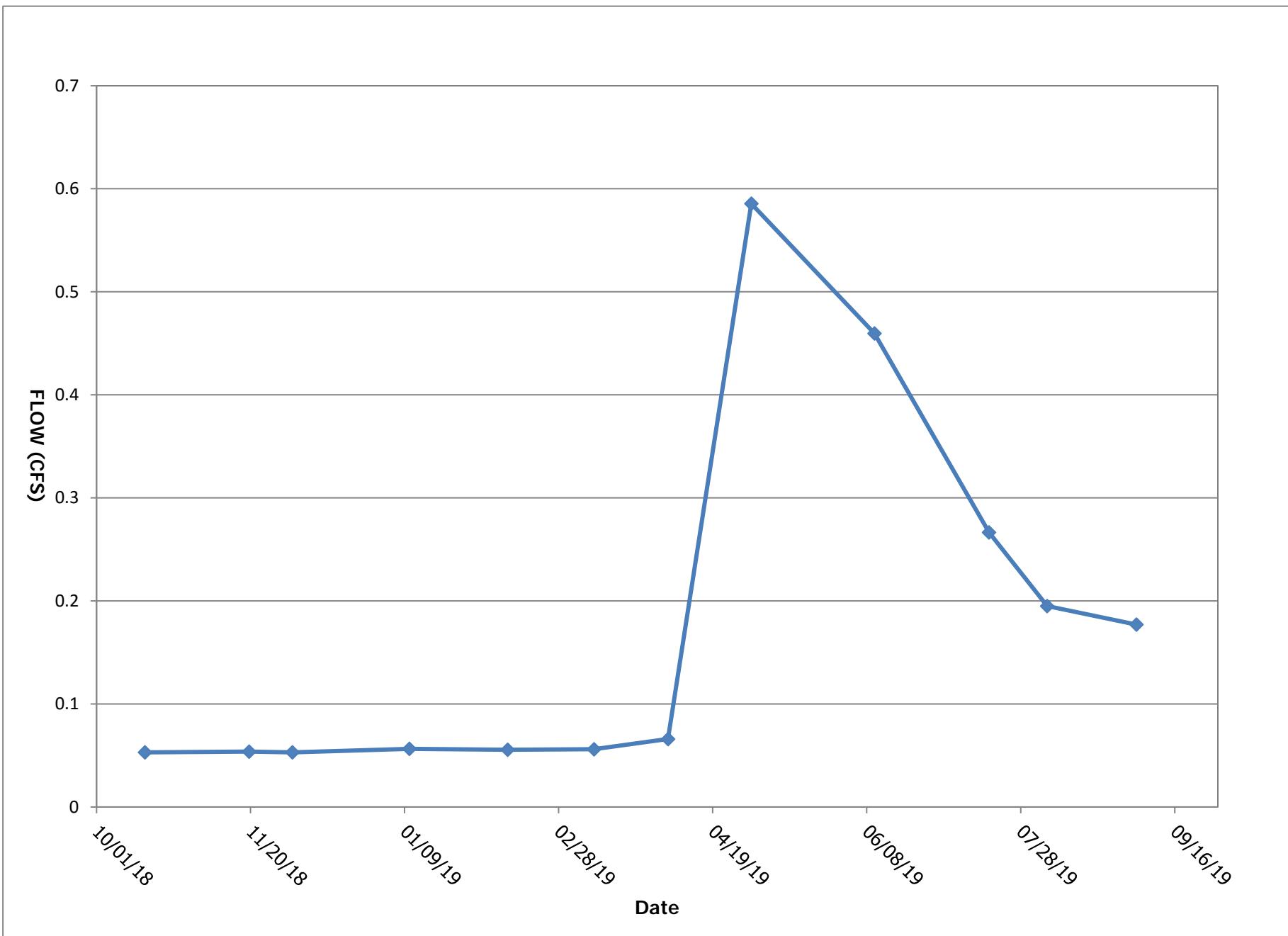
YSSF3

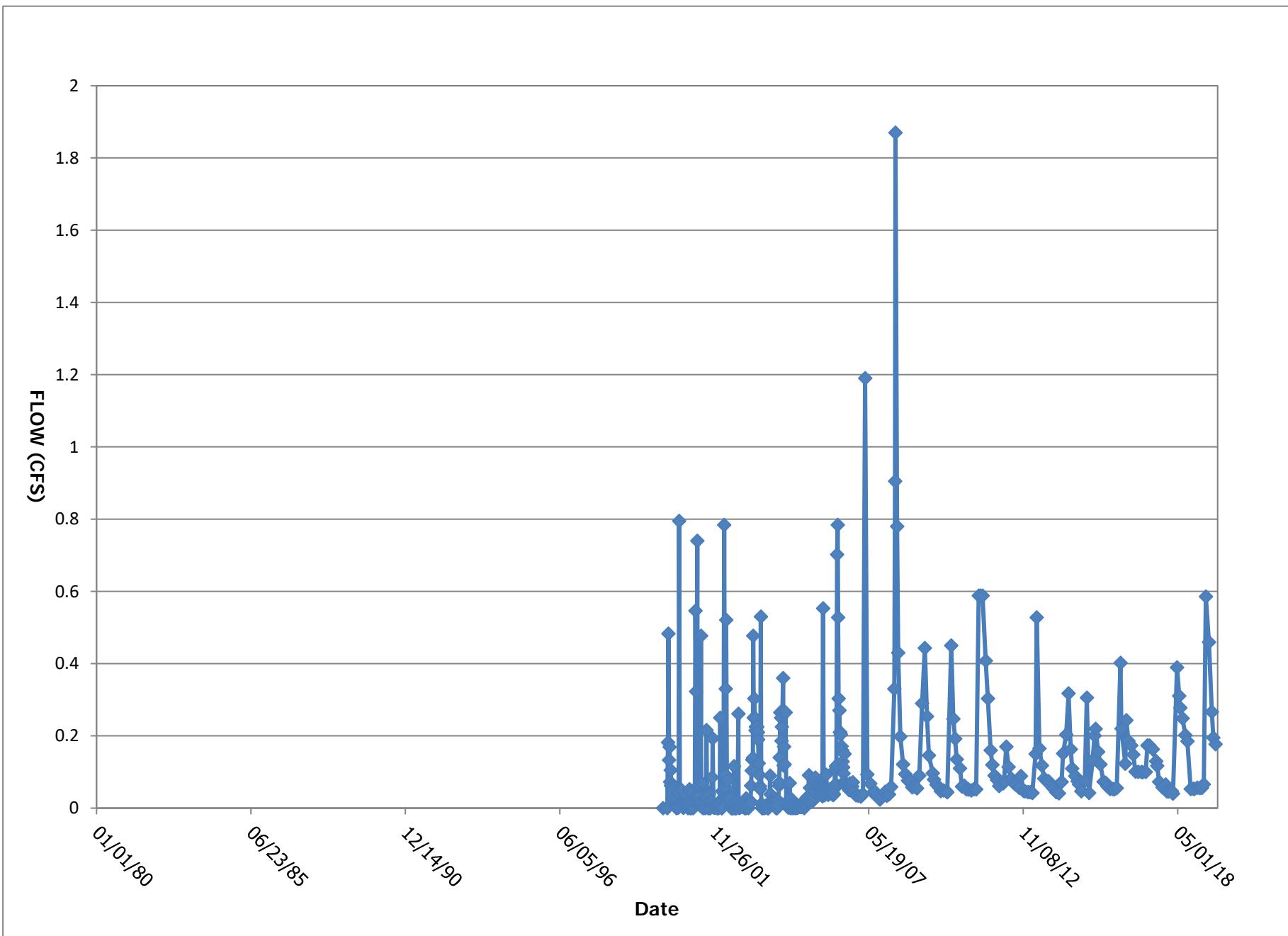
		loc_report_order	1	1	1	1					
		Location Code	NPDES12	NPDES12	NPDES12	NPDES12					
		sys_sample_code	3002_NPDES12_01102019	3002_NPDES12_02112019	3002_NPDES12_03112019	3002_NPDES12_04042019					
		Site ID	1/10/2019		2/11/2019						
		Date	1/10/2019		2/11/2019						
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result
1	Flow	N	GPM	Y	25.3	Y	24.9	Y	25	Y	29.6
2	pH, Field	N	S.U.	Y	7.63	Y	7.66	Y	7.69	Y	7.67
3	Temperature, Field	N	C	Y	2.7	Y	2.5	Y	2.6	Y	3.4
4	Specific Conductivity, Field	N	UMHOS/CM	Y	1952	Y	1954	Y	1947	Y	1963
5	Iron	TR	MG/L	Y	0.11	Y	0.08	Y	0.06	Y	0.18
6	Manganese	PD	MG/L	Y	0.343					Y	0.079
7	Selenium	D	UG/L								
7	Selenium	PD	UG/L	N	0.5	Y	1.8	Y	0.7	Y	3.2
7	Selenium	TR	UG/L	Y	0.3	Y	0.6	N	0.5	Y	3.5
9	Total Dissolved Solids, Lab	N	MG/L	Y	3200	Y	3300	Y	3090	Y	2090
19	Solids, Settleable	N	ML/L	N	0.5	N	0.5	N	0.5	N	0.5

loc_report_order	1	1	1	1							
Location Code	NPDES12	NPDES12	NPDES12	NPDES12							
sys_sample_code	3002_NPDES12_05012019	3002_NPDES12_06102019	3002_NPDES12_07172019	3002_NPDES12_07172019A							
Site ID											
Date	5/1/2019	6/10/2019	7/17/2019	7/17/2019							
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result
1	Flow	N	GPM	Y	262.8	Y	206.3	Y	119.6	Y	119.6
2	pH, Field	N	S.U.	Y	8.09	Y	7.94	Y	8.2	Y	8.2
3	Temperature, Field	N	C	Y	7.6	Y	15.2	Y	26.6	Y	26.6
4	Specific Conductivity, Field	N	UMHOS/CM	Y	1974	Y	3270	Y	3307	Y	3307
5	Iron	TR	MG/L	Y	0.06	N	0.2	Y	0.1		
6	Manganese	PD	MG/L					Y	0.08		
7	Selenium	D	UG/L	Y	1.9					Y	0.9
7	Selenium	PD	UG/L	Y	1.8	Y	1.6	Y	0.9		
7	Selenium	TR	UG/L	Y	1.9	Y	1.1	Y	0.5	Y	0.6
9	Total Dissolved Solids, Lab	N	MG/L	Y	1660	Y	2990	Y	3070	Y	3110
19	Solids, Settleable	N	ML/L	N	0.5	N	0.5	N	0.5		

		loc_report_order	1	1	1	1			
		Location Code	NPDES12	NPDES12	NPDES12	NPDES12			
		sys_sample_code	3002_NPDES12_08052019	3002_NPDES12_09032019	3002_NPDES12_10162018	3002_NPDES12_11192018			
		Site ID	8/5/2019		9/3/2019				
		Date			10/16/2018				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result
1	Flow	N	GPM	Y	87.6	Y	79.6	Y	23.8
2	pH, Field	N	S.U.	Y	8.14	Y	8.3	Y	8.15
3	Temperature, Field	N	C	Y	24.7	Y	21.4	Y	11
4	Specific Conductivity, Field	N	UMHOS/CM	Y	3322	Y	3369	Y	3531
5	Iron	TR	MG/L	Y	0.16	Y	0.1	Y	0.14
6	Manganese	PD	MG/L				Y	0.2	
7	Selenium	D	UG/L						
7	Selenium	PD	UG/L	Y	0.7	Y	0.5	Y	6.1
7	Selenium	TR	UG/L	Y	0.7	Y	0.4	Y	0.3
9	Total Dissolved Solids, Lab	N	MG/L	Y	3110	Y	3160	Y	3230
19	Solids, Settleable	N	ML/L	N	0.5	N	0.5		

loc_report_order	1				
Location Code	NPDES12				
sys_sample_code	3002_NPDES12_12032018				
Site ID					
Date	12/3/2018				
report_order	Parameter	Fraction	Units	Detection	Result
1	Flow	N	GPM	Y	24
2	pH, Field	N	S.U.	Y	7.76
3	Temperature, Field	N	C	Y	2.7
4	Specific Conductivity, Field	N	UMHOS/CM	Y	3409
5	Iron	TR	MG/L	Y	0.09
6	Manganese	PD	MG/L		
7	Selenium	D	UG/L		
7	Selenium	PD	UG/L	Y	35.2
7	Selenium	TR	UG/L	N	0.2
9	Total Dissolved Solids, Lab	N	MG/L	Y	3290
19	Solids, Settleable	N	ML/L		

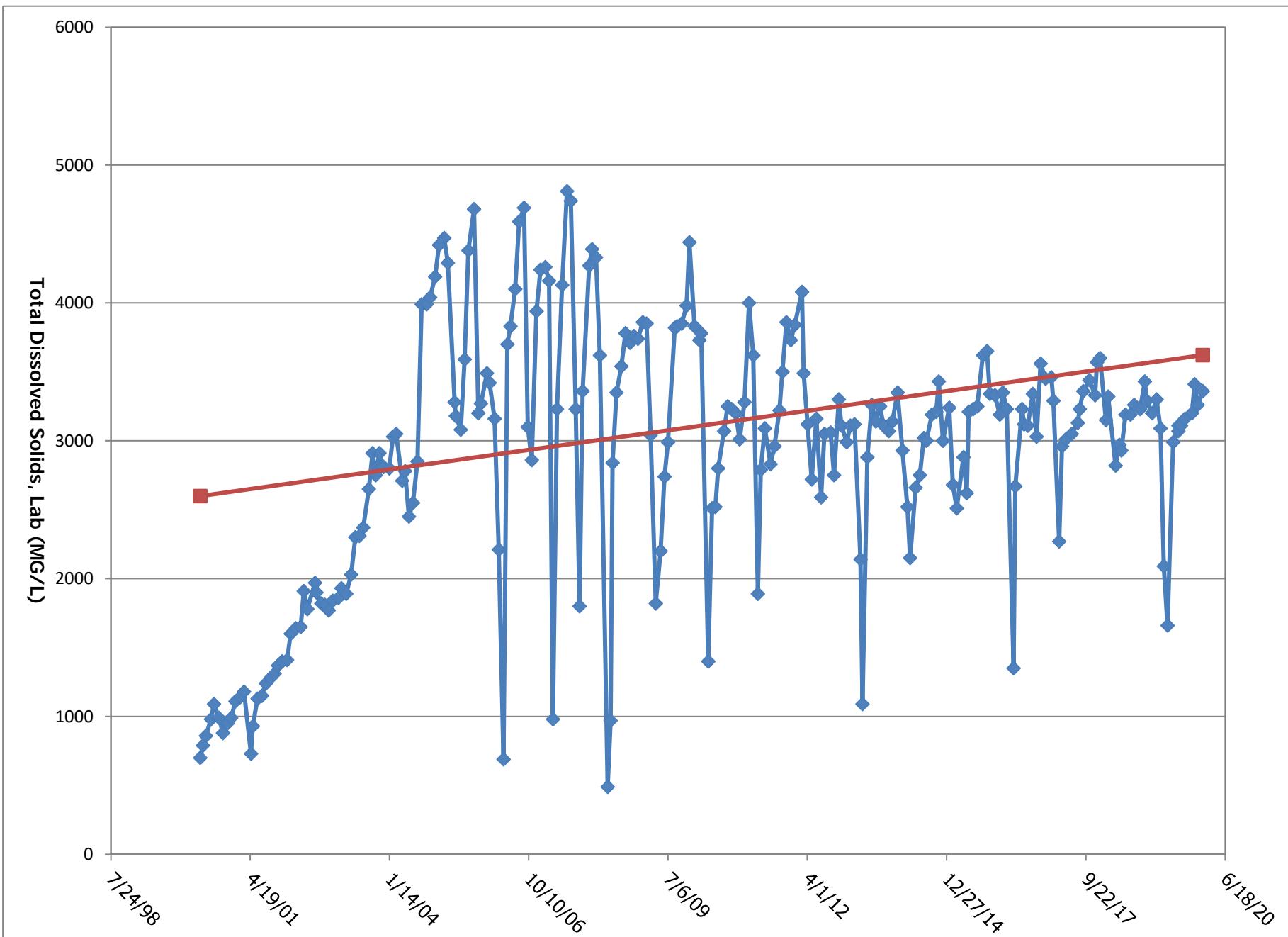




Period of Record Water Discharge Hydrograph

NPDES12

Report 11: Page 6 of 7



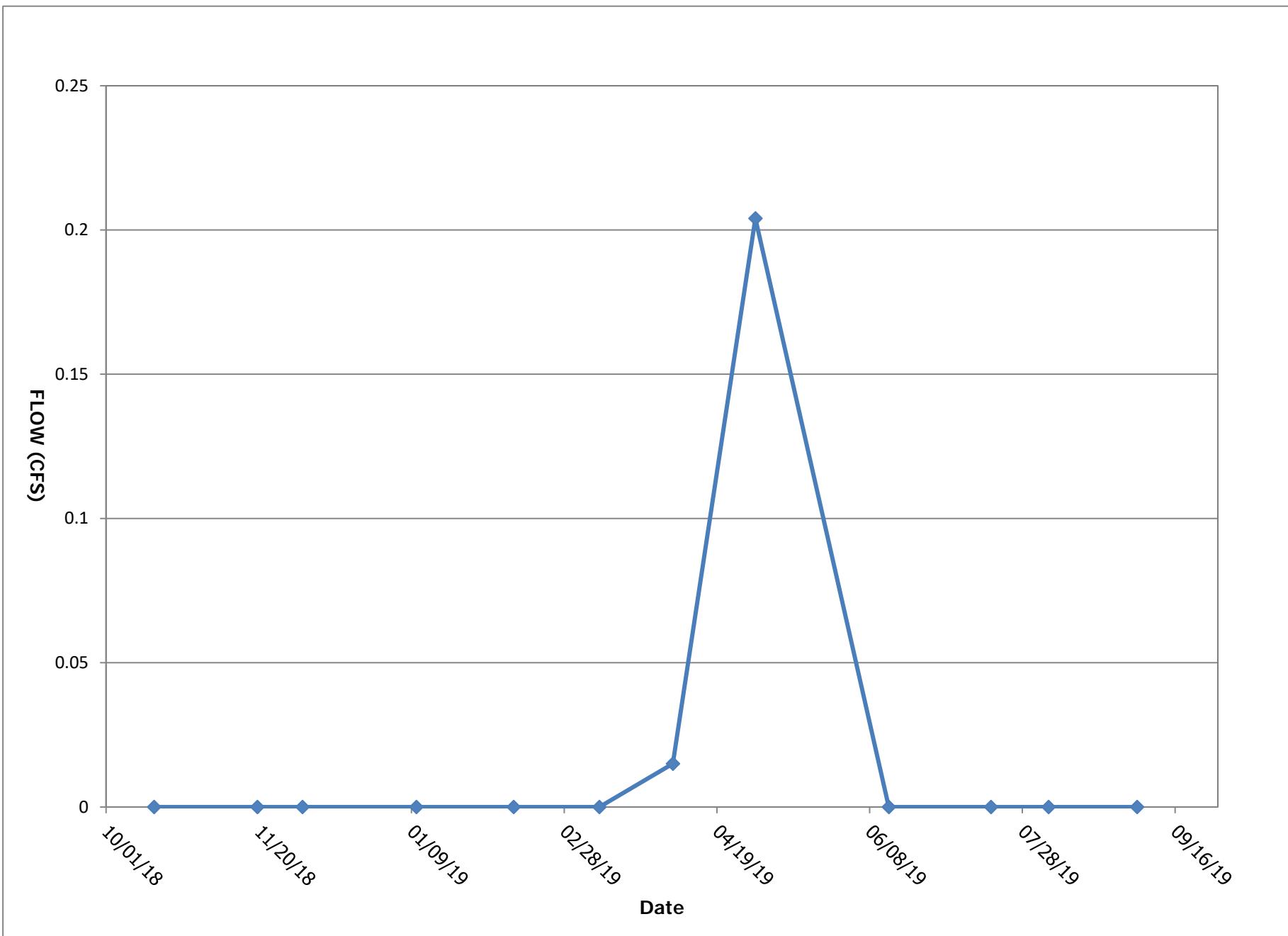
Period of Record TDS Trend Plot

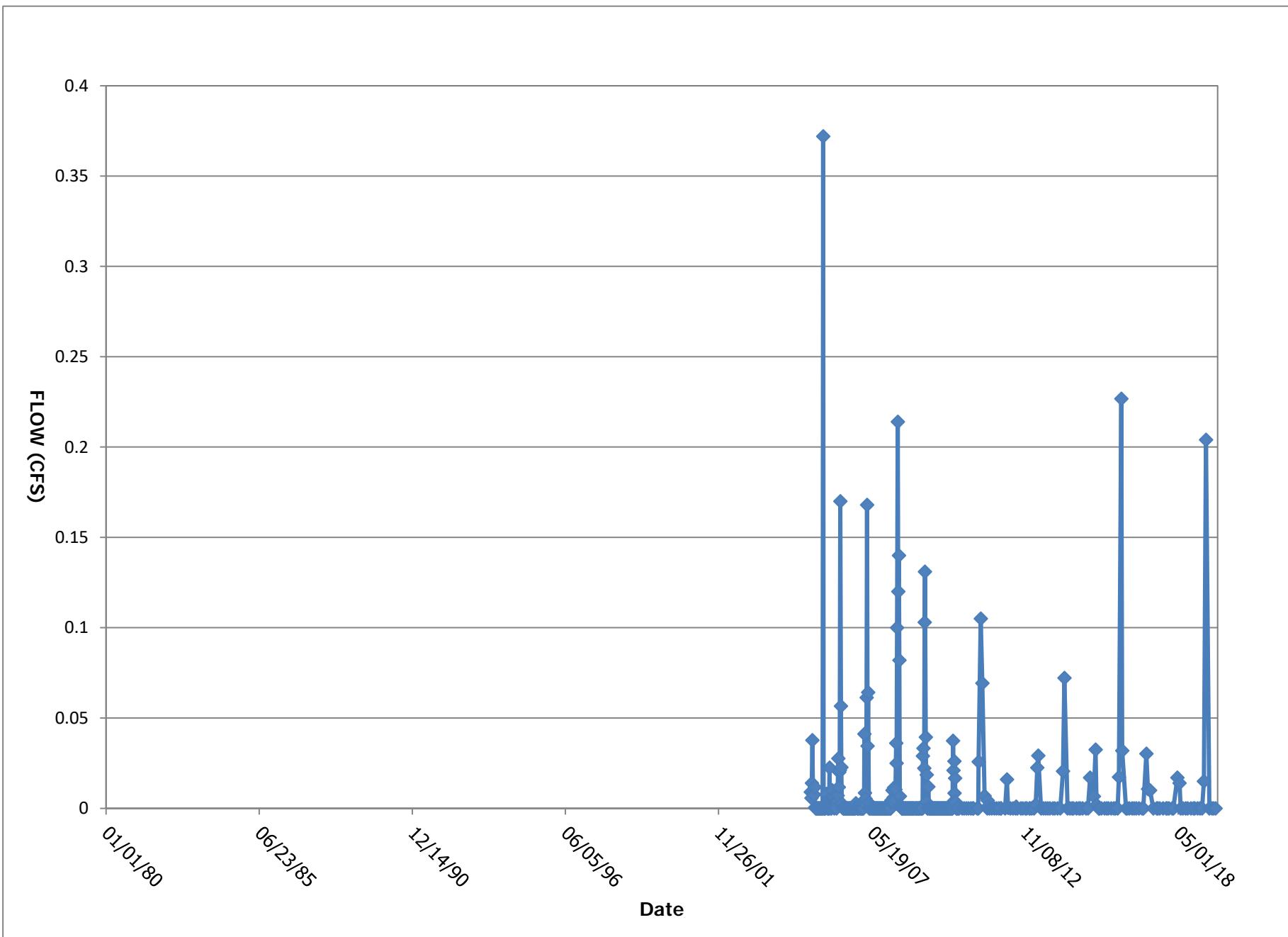
NPDES12

				loc_report_order	2	2	2	2
				Location Code	NPDES13	NPDES13	NPDES13	NPDES13
				sys_sample_code	3002_NPDES13_01102019	3002_NPDES13_02112019	3002_NPDES13_03112019	3002_NPDES13_04042019
				Site ID	1/10/2019	2/11/2019	3/11/2019	4/4/2019
				Date				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	0	Y	0	Y
2	pH, Field	N	S.U.					Y
3	Temperature, Field	N	C					Y
4	Specific Conductivity, Field	N	UMHOS/CM					Y
5	Iron	T	MG/L					Y
5	Iron	TR	MG/L					Y
6	Manganese	PD	MG/L					Y
7	Selenium	D	UG/L					
7	Selenium	PD	UG/L					Y
7	Selenium	TR	UG/L					Y
8	Solids, Total Suspended	N	MG/L					Y
9	Total Dissolved Solids, Lab	N	MG/L					Y
10	Arsenic	TR	UG/L					Y
11	Cadmium	PD	UG/L					N
12	Chromium	PD	UG/L					N
13	Copper	PD	UG/L					Y
14	Lead	PD	UG/L					Y
15	Mercury	T	UG/L					Y
16	Nickel	PD	UG/L					N
17	Silver	PD	UG/L					N
18	Zinc	PD	MG/L					Y
19	Solids, Settleable	N	ML/L					N

				loc_report_order	2	2	2	2
				Location Code	NPDES13	NPDES13	NPDES13	NPDES13
				sys_sample_code	3002_NPDES13_05012019	3002_NPDES13_06142019	3002_NPDES13_07172019	3002_NPDES13_08052019
				Site ID	5/1/2019	6/14/2019	7/17/2019	8/5/2019
				Date				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	91.5	Y	0	Y
2	pH, Field	N	S.U.	Y	9.07			
3	Temperature, Field	N	C	Y	7.2			
4	Specific Conductivity, Field	N	UMHOS/CM	Y	2173			
5	Iron	T	MG/L					
5	Iron	TR	MG/L	Y	0.38			
6	Manganese	PD	MG/L					
7	Selenium	D	UG/L	Y	13			
7	Selenium	PD	UG/L					
7	Selenium	TR	UG/L	Y	12.5			
8	Solids, Total Suspended	N	MG/L					
9	Total Dissolved Solids, Lab	N	MG/L	Y	1880			
10	Arsenic	TR	UG/L					
11	Cadmium	PD	UG/L					
12	Chromium	PD	UG/L					
13	Copper	PD	UG/L					
14	Lead	PD	UG/L					
15	Mercury	T	UG/L					
16	Nickel	PD	UG/L					
17	Silver	PD	UG/L					
18	Zinc	PD	MG/L					
19	Solids, Settleable	N	ML/L	N	0.5			

				loc_report_order	2	2	2	2
				Location Code	NPDES13	NPDES13	NPDES13	NPDES13
				sys_sample_code	3002_NPDES13_09032019	3002_NPDES13_10162018	3002_NPDES13_11192018	3002_NPDES13_12042018
				Site ID	9/3/2019	10/16/2018	11/19/2018	12/4/2018
				Date				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	0	Y	0	Y
2	pH, Field	N	S.U.					
3	Temperature, Field	N	C					
4	Specific Conductivity, Field	N	UMHOS/CM					
5	Iron	T	MG/L					
5	Iron	TR	MG/L					
6	Manganese	PD	MG/L					
7	Selenium	D	UG/L					
7	Selenium	PD	UG/L					
7	Selenium	TR	UG/L					
8	Solids, Total Suspended	N	MG/L					
9	Total Dissolved Solids, Lab	N	MG/L					
10	Arsenic	TR	UG/L					
11	Cadmium	PD	UG/L					
12	Chromium	PD	UG/L					
13	Copper	PD	UG/L					
14	Lead	PD	UG/L					
15	Mercury	T	UG/L					
16	Nickel	PD	UG/L					
17	Silver	PD	UG/L					
18	Zinc	PD	MG/L					
19	Solids, Settleable	N	ML/L					

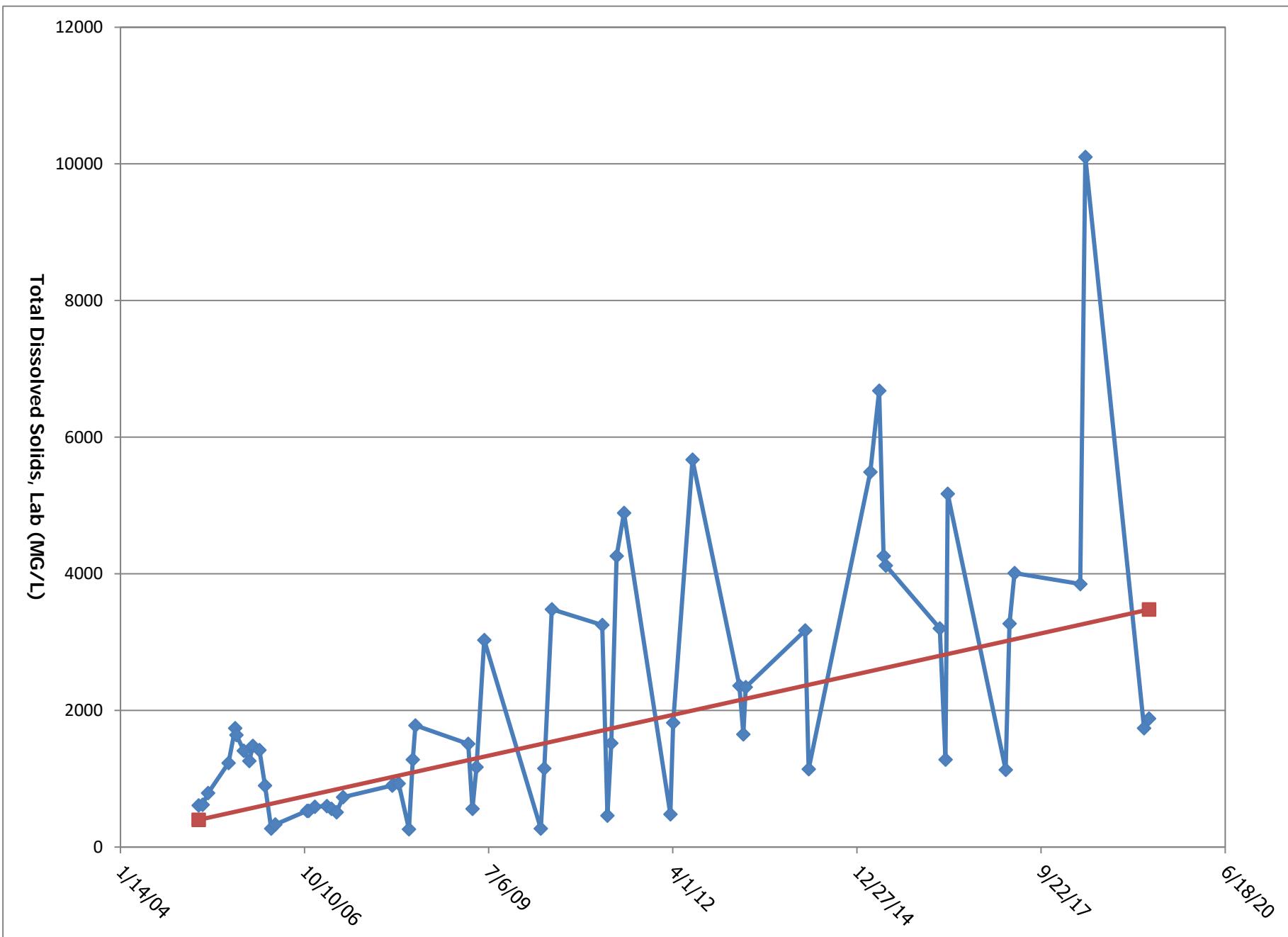




Period of Record Water Discharge Hydrograph

NPDES13

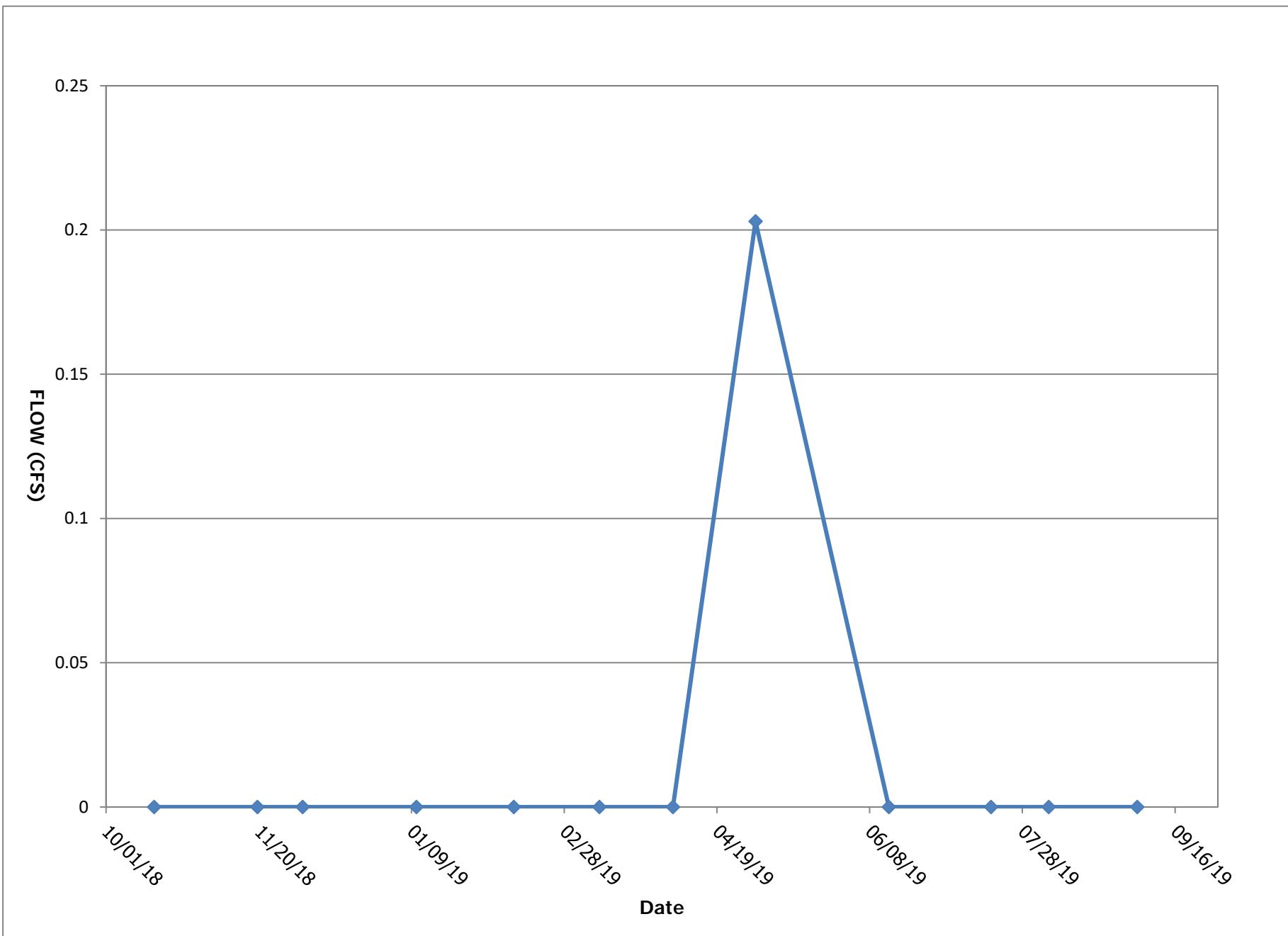
Report 12: Page 5 of 6



				loc_report_order	3	3	3	3
				Location Code	NPDES14	NPDES14	NPDES14	NPDES14
				sys_sample_code	3002_NPDES14_01102019	3002_NPDES14_02112019	3002_NPDES14_03112019	3002_NPDES14_04042019
				Site ID	1/10/2019	2/11/2019	3/11/2019	4/4/2019
				Date				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	0	Y	0	Y
2	pH, Field	N	S.U.					
3	Temperature, Field	N	C					
4	Specific Conductivity, Field	N	UMHOS/CM					
7	Selenium	D	UG/L					
7	Selenium	TR	UG/L					
9	Total Dissolved Solids, Lab	N	MG/L					
19	Solids, Settleable	N	ML/L					

				loc_report_order	3	3	3	3
				Location Code	NPDES14	NPDES14	NPDES14	NPDES14
				sys_sample_code	3002_NPDES14_05012019	3002_NPDES14_06142019	3002_NPDES14_07172019	3002_NPDES14_08052019
				Site ID	5/1/2019		6/14/2019	
				Date	5/1/2019		6/14/2019	
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	90.9	Y	0	Y
2	pH, Field	N	S.U.	Y	8.29			
3	Temperature, Field	N	C	Y	6.6			
4	Specific Conductivity, Field	N	UMHOS/CM	Y	1756			
7	Selenium	D	UG/L	Y	0.7			
7	Selenium	TR	UG/L	Y	0.6			
9	Total Dissolved Solids, Lab	N	MG/L	Y	1440			
19	Solids, Settleable	N	ML/L	N	0.5			

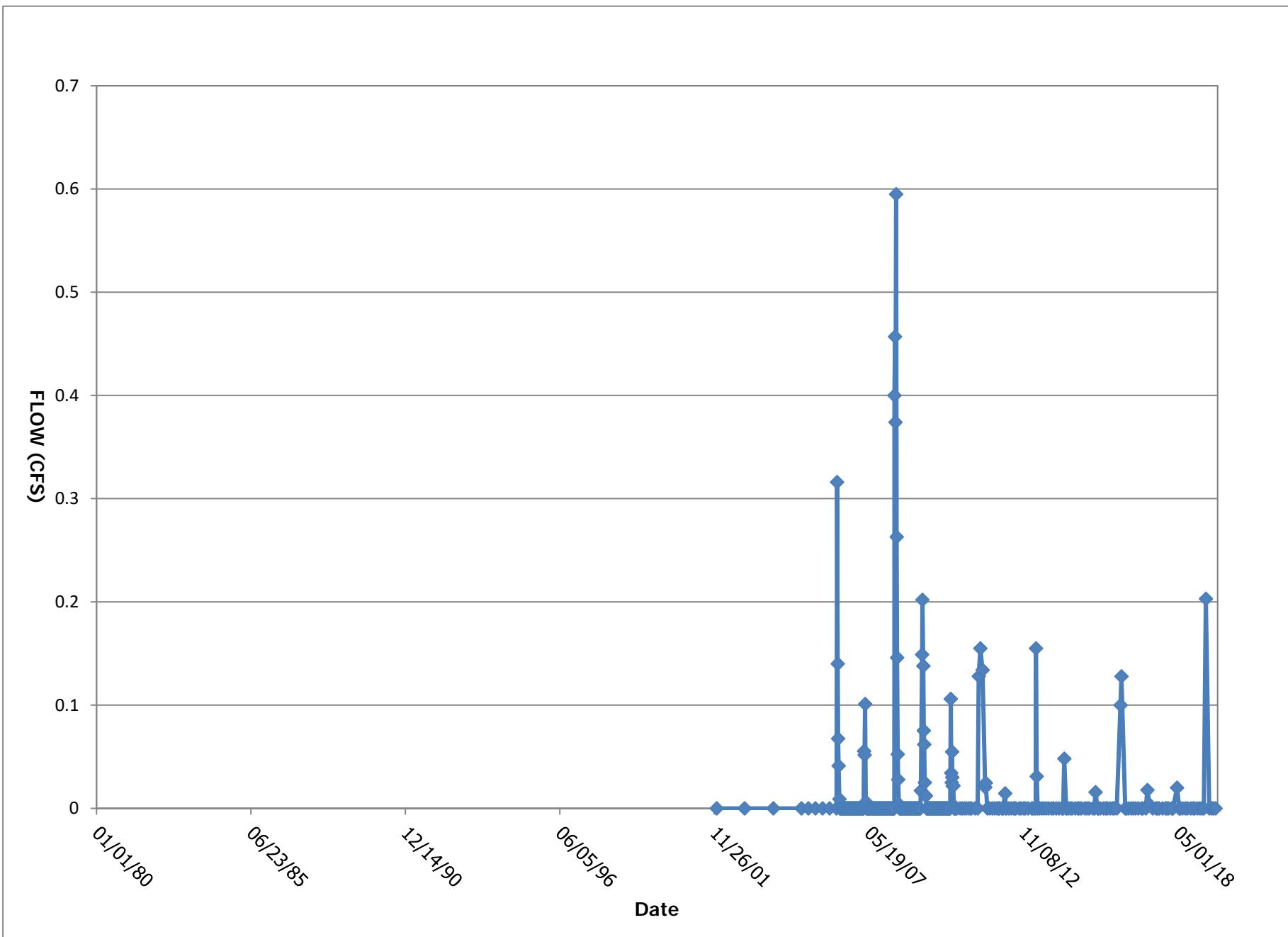
				loc_report_order	3 NPDES14 3002_NPDES14_09032019		3 NPDES14 3002_NPDES14_10162018		3 NPDES14 3002_NPDES14_11192018		3 NPDES14 3002_NPDES14_12042018	
report_order	Parameter	Fraction	Units	Date	9/3/2019		10/16/2018		11/19/2018		12/4/2018	
1	Flow	N	GPM		Y	0	Y	0	Y	0	Y	0
2	pH, Field	N	S.U.									
3	Temperature, Field	N	C									
4	Specific Conductivity, Field	N	UMHOS/CM									
7	Selenium	D	UG/L									
7	Selenium	TR	UG/L									
9	Total Dissolved Solids, Lab	N	MG/L									
19	Solids, Settleable	N	ML/L									



Water Year Water Discharge Hydrograph

NPDES 14

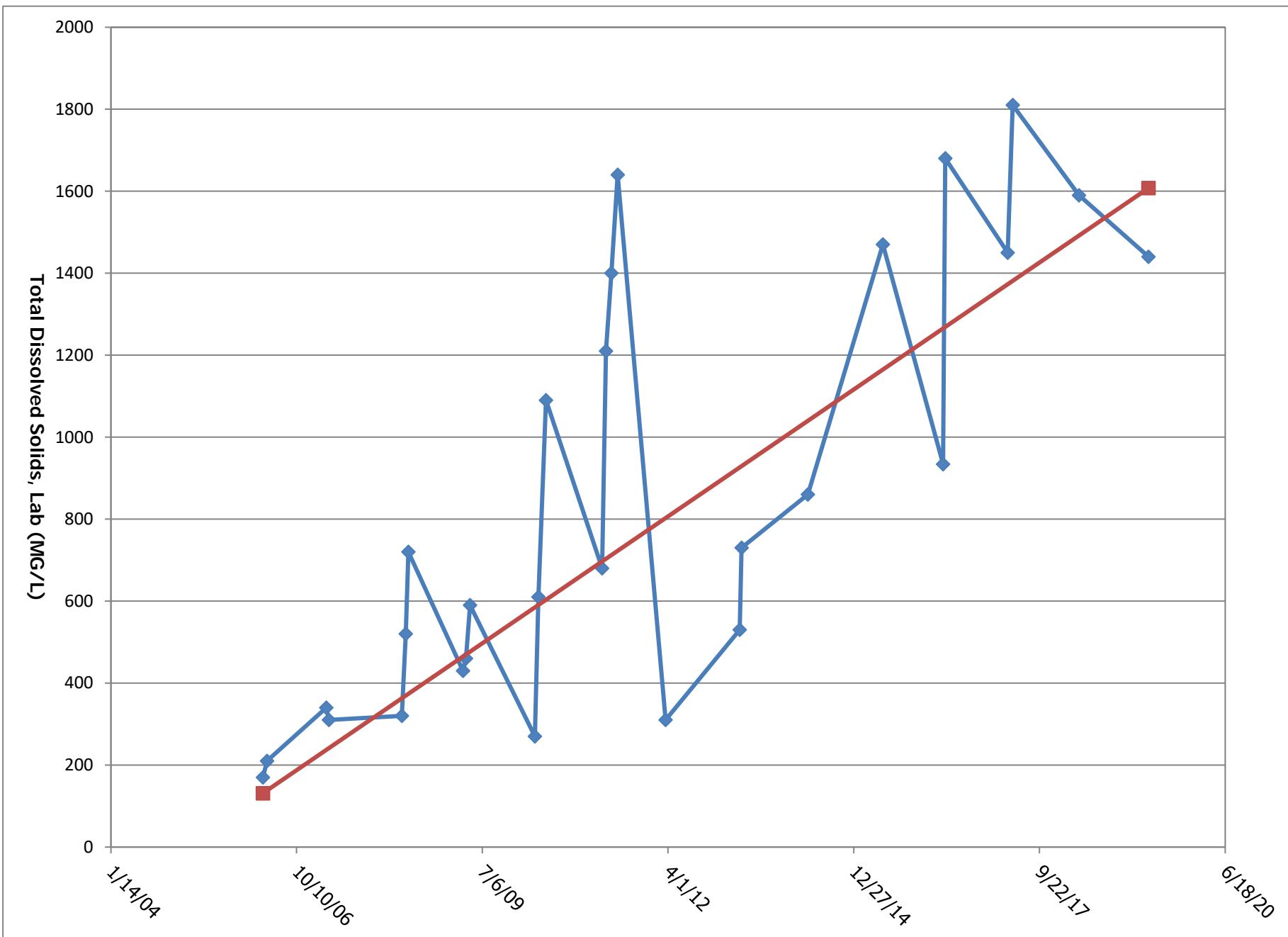
Report 13: Page 4 of 6



Period of Record Water Discharge Hydrograph

NPDES 14

Report 13: Page 5 of 6



Period of Record TDS Trend Plot

NPDES 14

loc_report_order Location Code Location Name					2 YSS2							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	5/1/1991	9/3/2019	133	591.183	128	6650	0	1097.86
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	1/28/1981	9/3/2019	188	1135	945	4430	0.92	750.1
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	1/28/1981	9/3/2019	185	8.18	8.22	8.58	7.3	0.233
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	1/28/1981	9/11/2018	187	10.6	11.4	21.4	0	5.34
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	5/1/2019	9/3/2019	3	11.2	9.6	17.8	6.1	6.01
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	1/28/1981	9/14/2015	87	275	264	475	97	89.4
6	3002 - AHR SW & SPR Long	Arsenic	D	UG/L	4/15/1981	5/2/1983	5	1	1	1	1	0
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	5/1/1991	9/14/2015	61	1	1	3	0.4	0.45
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	1/28/1981	9/14/2015	87	327.7	317.2	558	118.34	103.88
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	1/28/1981	9/14/2015	84	87	60	400	20	75
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	4/15/1981	9/14/2015	13	0.8	0.2	3	0.1	1
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	4/26/2005	4/21/2010	16	0.1	0.1	0.2	0.1	0.03
9	3002 - AHR SW & SPR Long	Cadmium	TR	UG/L	5/1/1991	6/9/2005	41	0.2	0.1	0.6	0.1	0.2
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	1/28/1981	9/14/2015	87	113	92	364	31	62.08
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	1/28/1981	9/14/2015	87	4.59	2	41	0	7.05
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	1/28/1981	9/14/2015	87	7.23	6.2	21	2	3.96
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	4/26/2005	9/14/2015	8	0.5	0.5	1	0.1	0.3
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	4/26/2005	4/21/2010	16	0.3	0.2	1	0.1	0.3
13	3002 - AHR SW & SPR Long	Chromium	TR	UG/L	5/1/1991	6/9/2005	41	10	10	20	0.4	3
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	1/28/1981	9/14/2015	83	1090	881	4140	290	715.2
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	4/15/1981	9/14/2015	13	2	1	6	0.5	2
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	4/26/2005	4/21/2010	16	1.9	1.7	5	0.5	1.3
15	3002 - AHR SW & SPR Long	Copper	TR	UG/L	5/1/1991	6/9/2005	41	82.5	10	2970	0.9	462
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	1/28/1981	9/14/2015	84	613	450	3100	140	491
18	3002 - AHR SW & SPR Long	Iron	D	MG/L	1/28/1981	4/9/2014	66	0.045	0.02	0.29	0.01	0.053
18	3002 - AHR SW & SPR Long	Iron	PD	MG/L	5/2/2013	4/27/2015	3	0.17	0.2	0.21	0.09	0.067
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	5/1/1991	4/21/2010	58	0.966	0.795	3.21	0.09	0.594
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	1/28/1981	9/3/2019	75	4.65	0.85	190	0.26	22.2
18	3002 - AHR SW & SPR Long	Iron	TR10UM	MG/L	5/2/2013	5/2/2013	1	0.21	0.21	0.21	0.21	0
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	4/15/1981	9/14/2015	17	1	1	4	0.1	1
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	4/26/2005	4/21/2010	16	0.4	0.4	0.9	0.1	0.2
19	3002 - AHR SW & SPR Long	Lead	TR	UG/L	5/1/1991	6/9/2005	41	0.95	1	5	0.1	0.74

Period of Record Monitoring Summary

YSS2

Report 14: Page 1 of 6

loc_report_order Location Code Location Name					2 YSS2							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	1/28/1981	9/14/2015	87	86.8	54.4	534	16	88.8
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	1/28/1981	9/3/2019	80	0.18	0.08	1.67	0.01	0.275
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	4/26/2005	6/5/2018	27	0.13	0.13	0.37	0.01	0.09
21	3002 - AHR SW & SPR Long	Manganese	T	MG/L	5/1/1991	6/9/2005	41	0.25	0.14	1.04	0.01	0.263
21	3002 - AHR SW & SPR Long	Manganese	TR	MG/L	1/28/1981	10/4/1983	28	0.31	0.11	4.1	0.03	0.76
22	3002 - AHR SW & SPR Long	Mercury	D	UG/L	4/15/1981	5/2/1983	5	0.08	0.1	0.1	0	0.04
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	6/2/2004	6/11/2019	39	0.2	0.2	1	0.2	0.2
22	3002 - AHR SW & SPR Long	Mercury	TR	UG/L	5/1/1991	4/15/2004	38	0.2	0.2	0.2	0.1	0.05
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	4/15/1981	9/14/2015	13	8	8	20	0	5
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	4/26/2005	4/21/2010	16	10	10	50	10	10
23	3002 - AHR SW & SPR Long	Nickel	TR	UG/L	5/1/1991	6/9/2005	41	20	10	100	10	10
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	5/1/1991	6/11/2019	77	0.0996	0.05	1.12	0.04	0.147
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	5/1/1991	6/11/2019	75	0.826	0.12	18.5	0.02	2.27
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	5/1/1991	6/11/2019	77	0.0345	0.01	1.14	0.01	0.131
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	1/28/1981	9/14/2015	89	8.21	8.2	8.7	7.3	0.242
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	1/28/1981	9/14/2015	87	4.48	3.9	15.5	1.8	2.52
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	4/15/1981	9/3/2019	35	0.94	0.8	5	0	0.8
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	4/26/2005	9/3/2019	30	1.85	1	10.8	0.2	2.43
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	5/1/1991	9/3/2019	61	1.1	1	5	0.4	0.68
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	4/26/2005	9/14/2015	8	0.09	0.05	0.3	0.05	0.09
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	4/26/2005	4/21/2010	16	0.06	0.05	0.1	0.05	0.02
31	3002 - AHR SW & SPR Long	Silver	TR	UG/L	5/1/1991	6/9/2005	41	0.53	0.5	5	0.05	0.77
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	1/28/1981	9/14/2015	87	37.3	22	230	5.2	38.8
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	1/28/1981	9/14/2015	84	0.571	0.48	1.82	0.2	0.321
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	1/28/1981	6/11/2019	101	433	261	2800	42	479
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	5/1/1991	6/11/2019	76	0.036	0.02	0.38	0.01	0.046
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	4/15/1981	9/14/2015	17	0.01	0.01	0.05	0.003	0.01
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	4/26/2005	4/21/2010	16	0.01	0.01	0.05	0.01	0.01
37	3002 - AHR SW & SPR Long	Zinc	TR	MG/L	5/1/1991	6/9/2005	41	0.0639	0.01	1.81	0.01	0.28
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	5/1/1991	9/14/2015	63	-0.178	-0.12	7.4	-6.7	2.41
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	1/28/1981	9/3/2019	106	985.8	675.5	4590	190	833.3
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	1/28/1981	9/14/2015	86	846.4	583	4270	190	745.69

Period of Record Monitoring Summary

YSS2

Report 14: Page 2 of 6

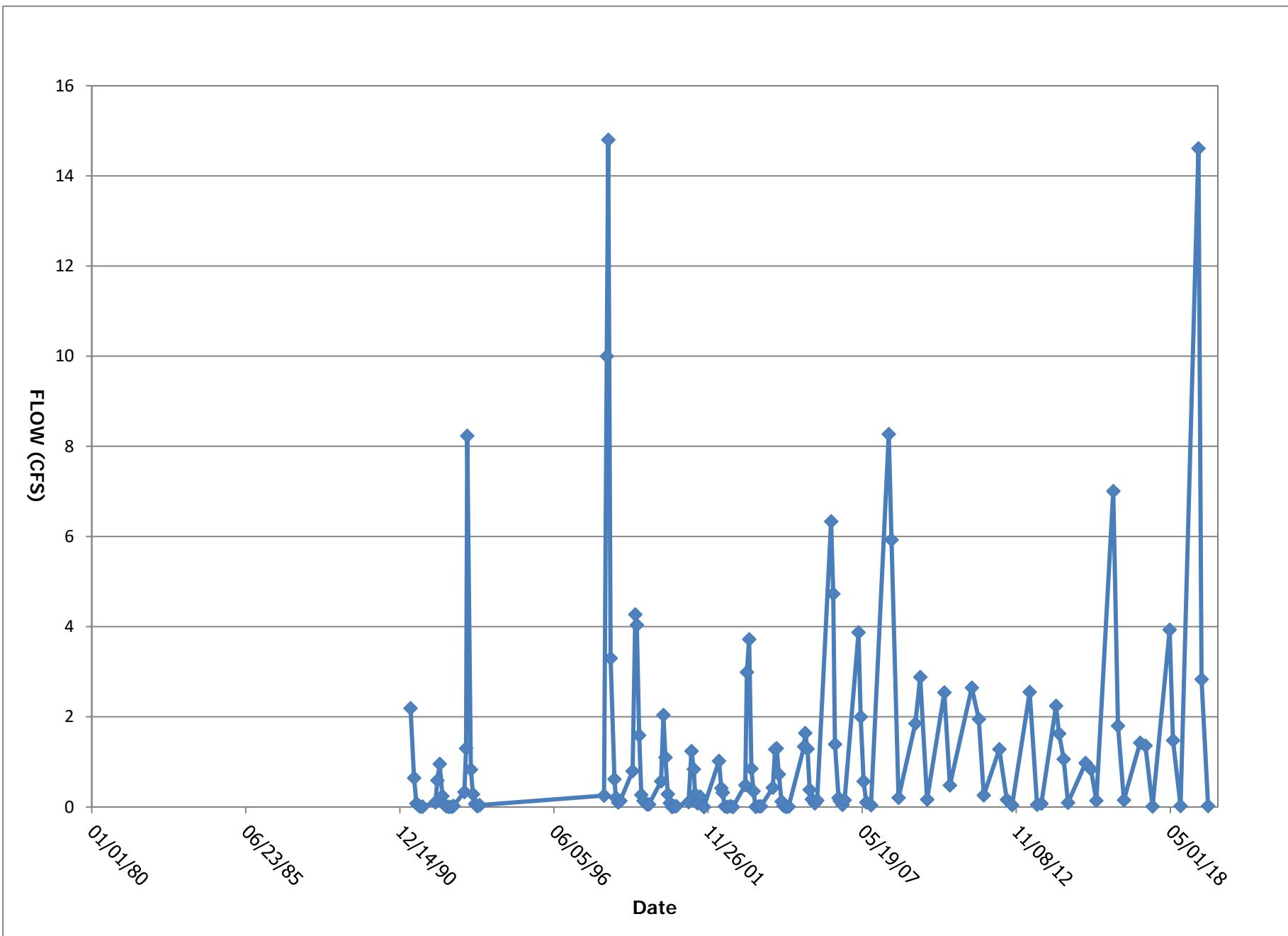
					loc_report_order	2 YSS2						
					Location Code							
					Location Name							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Deviation
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	5/1/1991	9/3/2019	83	18.7	14	118	2	17.7

Period of Record Monitoring Summary

YSS2

Report 14: Page 3 of 6

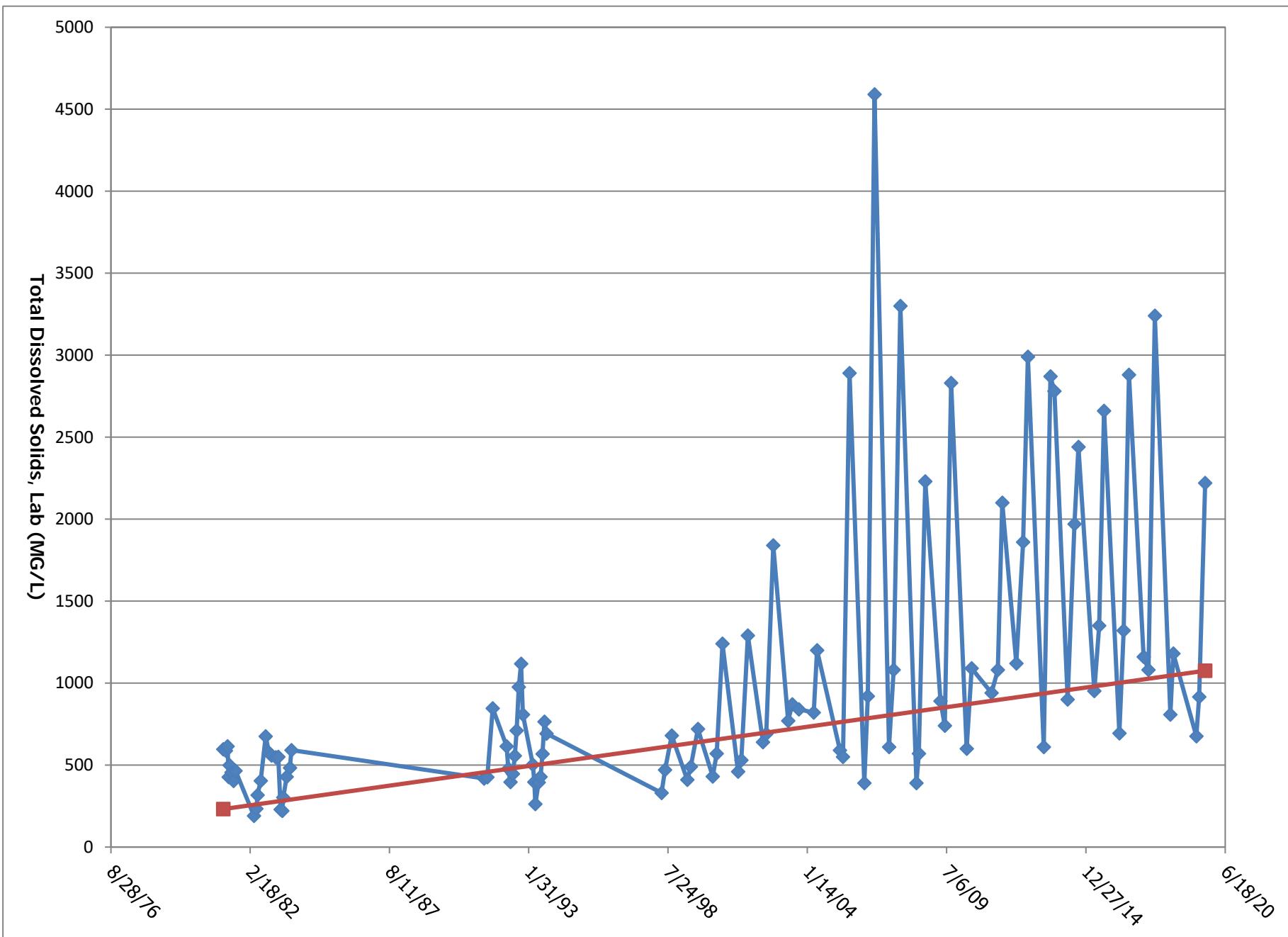
loc_report_order Location Code sys_sample_code Site ID Date				2 YSS2 3002_YSS2_05012019		2 YSS2 3002_YSS2_06112019		2 YSS2 3002_YSS2_09032019	
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result
	Flow	N	GPM	Y	6559	Y	1270.8	Y	10.3
1	Specific Conductivity, Field	N	UMHOS/CM	Y	971	Y	1237	Y	2608
2	pH, Field	N	S.U.	Y	8.29	Y	8.4	Y	8.53
3	Temperature, Field	N	DEG-C	Y	6.1	Y	9.6	Y	17.8
18	Iron	TR	MG/L	Y	0.78	Y	0.43	Y	0.42
21	Manganese	D	MG/L	Y	0.0106	Y	0.0243	Y	0.112
22	Mercury	T	UG/L	N	1	N	1		
24	Ammonia Nitrogen	N	MG/L	N	0.2	N	0.2		
26	Nitrate Nitrogen	N	MG/L	Y	0.31	Y	0.08		
27	Nitrite Nitrogen	N	MG/L	Y	0.02	N	0.05		
30	Selenium	D	UG/L	Y	1.1	Y	0.4	Y	0.4
30	Selenium	PD	UG/L	Y	1	Y	0.6	Y	0.3
30	Selenium	TR	UG/L	Y	1	Y	0.4	Y	0.5
34	Sulfates	N	MG/L	Y	309	Y	410		
35	Sulfide	N	MG/L	N	0.1	N	0.1		
39	Total Dissolved Solids, Lab	N	MG/L	Y	676	Y	916	Y	2220
41	Solids, Total Suspended	N	MG/L	Y	13	Y	10	Y	18



Period of Record Water Discharge Hydrograph

YSS2

Report 14: Page 5 of 6



Period of Record TDS Trend Plot

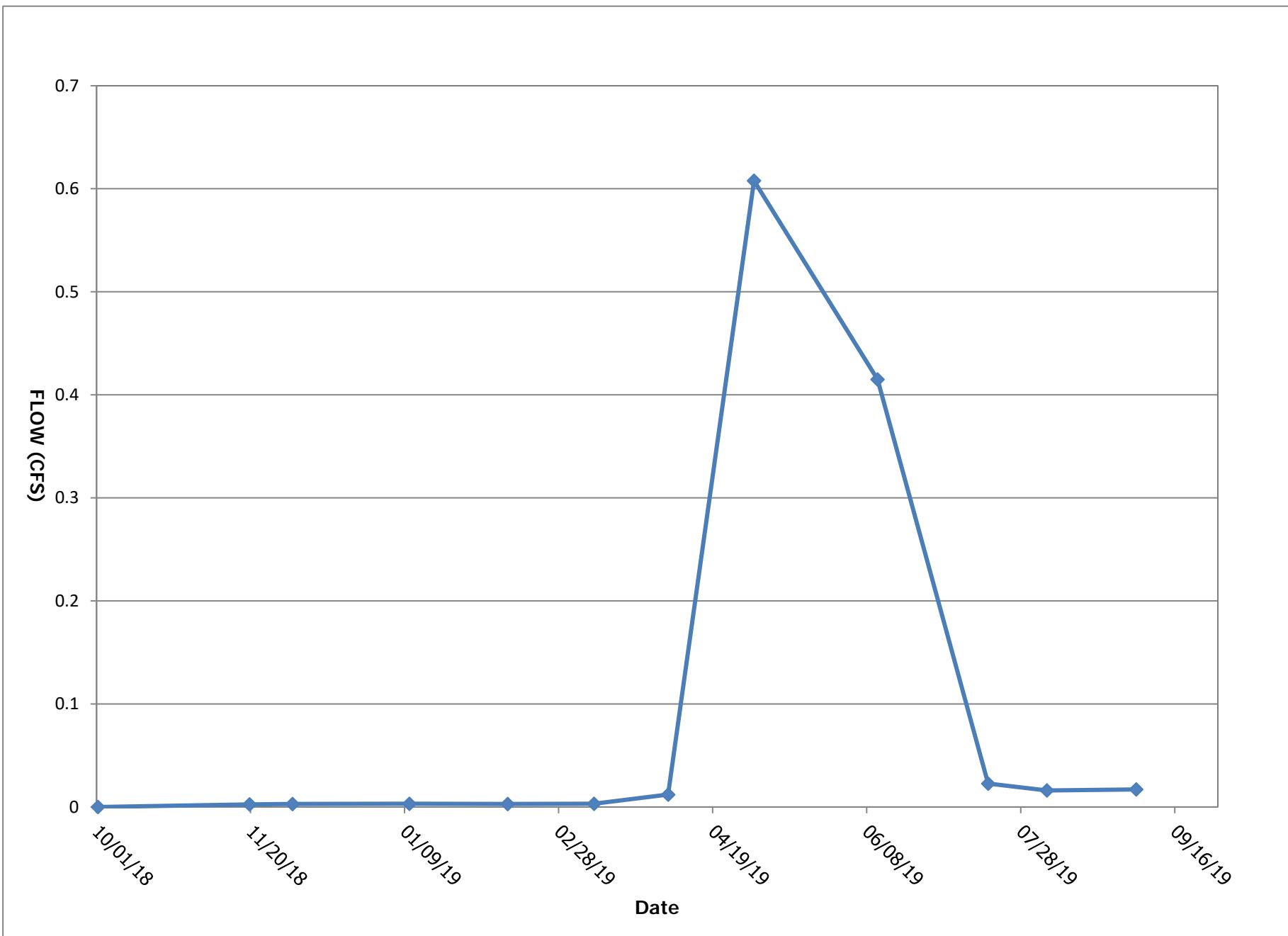
YSS2

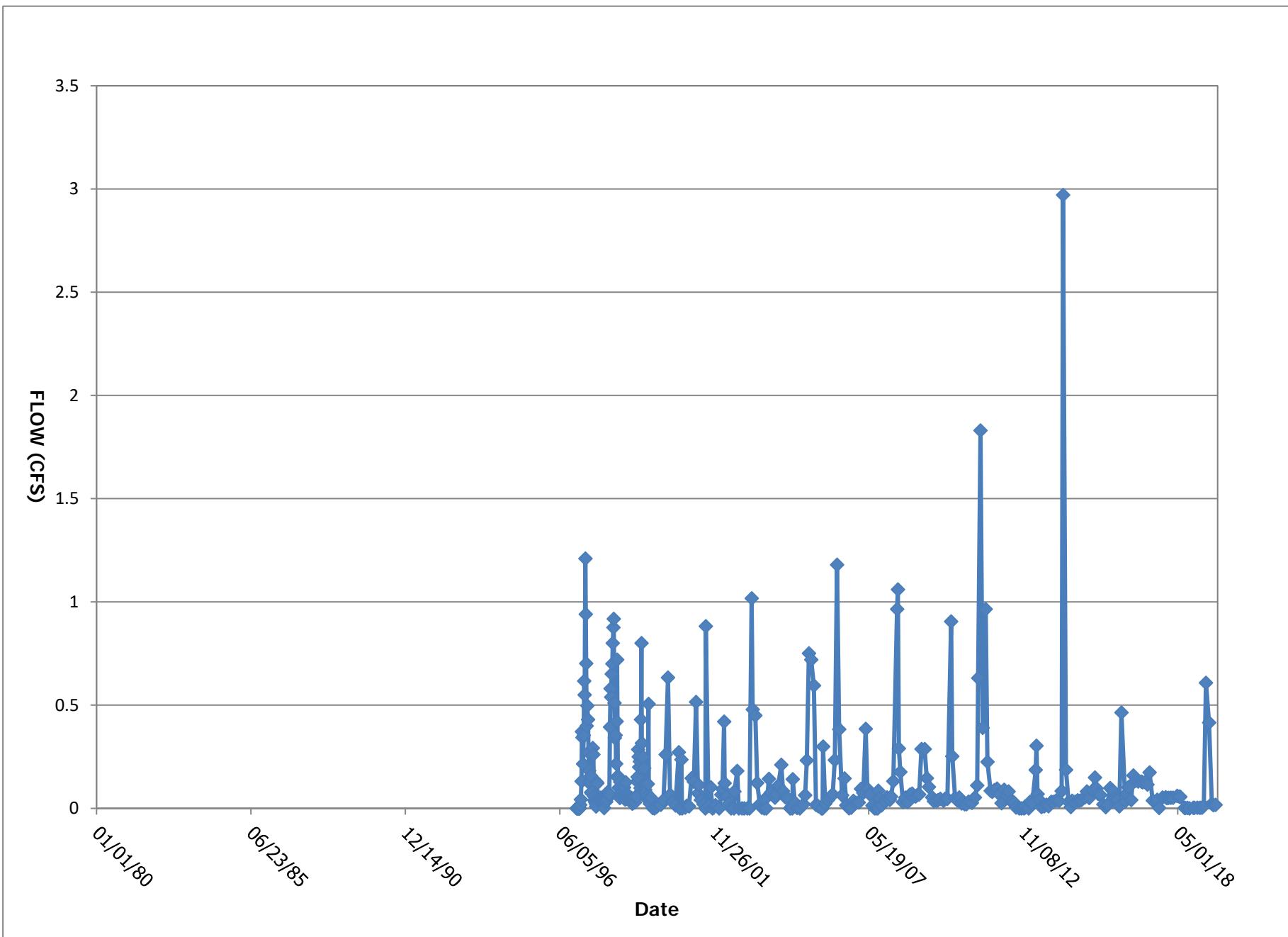
				4 NPDES10 3002_NPDES10_01102019		4 NPDES10 3002_NPDES10_02112019		4 NPDES10 3002_NPDES10_03112019		4 NPDES10 3002_NPDES10_04042019	
				1/10/2019		2/11/2019		3/11/2019		4/4/2019	
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result
1	Flow	N	GPM	Y	1.4	Y	1.3	Y	1.4	Y	5.2
2	pH, Field	N	S.U.	Y	7.95	Y	7.91	Y	7.87	Y	7.85
3	Temperature, Field	N	C	Y	2	Y	1.7	Y	2.1	Y	3.7
4	Specific Conductivity, Field	N	UMHOS/CM	Y	1915	Y	1907	Y	1894	Y	1927
5	Iron	TR	MG/L	Y	0.05	Y	0.07	Y	0.07	Y	0.09
7	Selenium	D	UG/L								
7	Selenium	PD	UG/L	Y	0.7	Y	0.7	Y	20.3	Y	0.7
7	Selenium	TR	UG/L	Y	0.3	Y	0.7	Y	0.9	Y	0.7
9	Total Dissolved Solids, Lab	N	MG/L	Y	3280	Y	3220	Y	3030	Y	1420
13	Copper	PD	UG/L	N	2	N	2	N	2	N	2
19	Solids, Settleable	N	ML/L	N	0.5	N	0.5	N	0.5	N	0.5

		loc_report_order	4		4		4		4		
		Location Code	NPDES10		NPDES10		NPDES10		NPDES10		
		sys_sample_code	3002_NPDES10_05022019		3002_NPDES10_06112019		3002_NPDES10_07172019		3002_NPDES10_07172019A		
		Site ID	5/2/2019		6/11/2019		7/17/2019		7/17/2019		
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result
1	Flow	N	GPM	Y	272.8	Y	186.2	Y	10.2	Y	10.2
2	pH, Field	N	S.U.	Y	8.13	Y	8.15	Y	8.24	Y	8.24
3	Temperature, Field	N	C	Y	8.1	Y	19.1	Y	21.8	Y	21.8
4	Specific Conductivity, Field	N	UMHOS/CM	Y	2214	Y	2576	Y	2437	Y	2437
5	Iron	TR	MG/L	Y	0.13	N	0.2	Y	0.38		
7	Selenium	D	UG/L	Y	0.4				Y		0.3
7	Selenium	PD	UG/L	Y	0.4	N	0.5	Y	0.3		
7	Selenium	TR	UG/L	Y	0.4	Y	0.3	N	0.5	N	0.5
9	Total Dissolved Solids, Lab	N	MG/L	Y	1880	Y	2290	Y	2150	Y	2160
13	Copper	PD	UG/L	N	2	Y	8	N	2		
19	Solids, Settleable	N	ML/L	N	0.5	N	0.5	N	0.5		

				4 NPDES10 3002_NPDES10_08052019		4 NPDES10 3002_NPDES10_09032019		4 NPDES10 3002_NPDES10_10012018		4 NPDES10 3002_NPDES10_11192018	
				8/5/2019		9/3/2019		10/1/2018		11/19/2018	
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result
1	Flow	N	GPM	Y	7.3	Y	7.6	Y	0	Y	1.1
2	pH, Field	N	S.U.	Y	8.07	Y	8.21			Y	8.47
3	Temperature, Field	N	C	Y	23.2	Y	19.3			Y	1.1
4	Specific Conductivity, Field	N	UMHOS/CM	Y	2737	Y	3009			Y	3677
5	Iron	TR	MG/L	N	0.2	N	0.2			Y	0.07
7	Selenium	D	UG/L								
7	Selenium	PD	UG/L	Y	0.3	N	0.5			N	0.2
7	Selenium	TR	UG/L	N	0.5	Y	0.2			N	0.2
9	Total Dissolved Solids, Lab	N	MG/L	Y	2420	Y	2760			Y	3300
13	Copper	PD	UG/L	N	4	N	4			N	2
19	Solids, Settleable	N	ML/L	N	0.5	N	0.5				

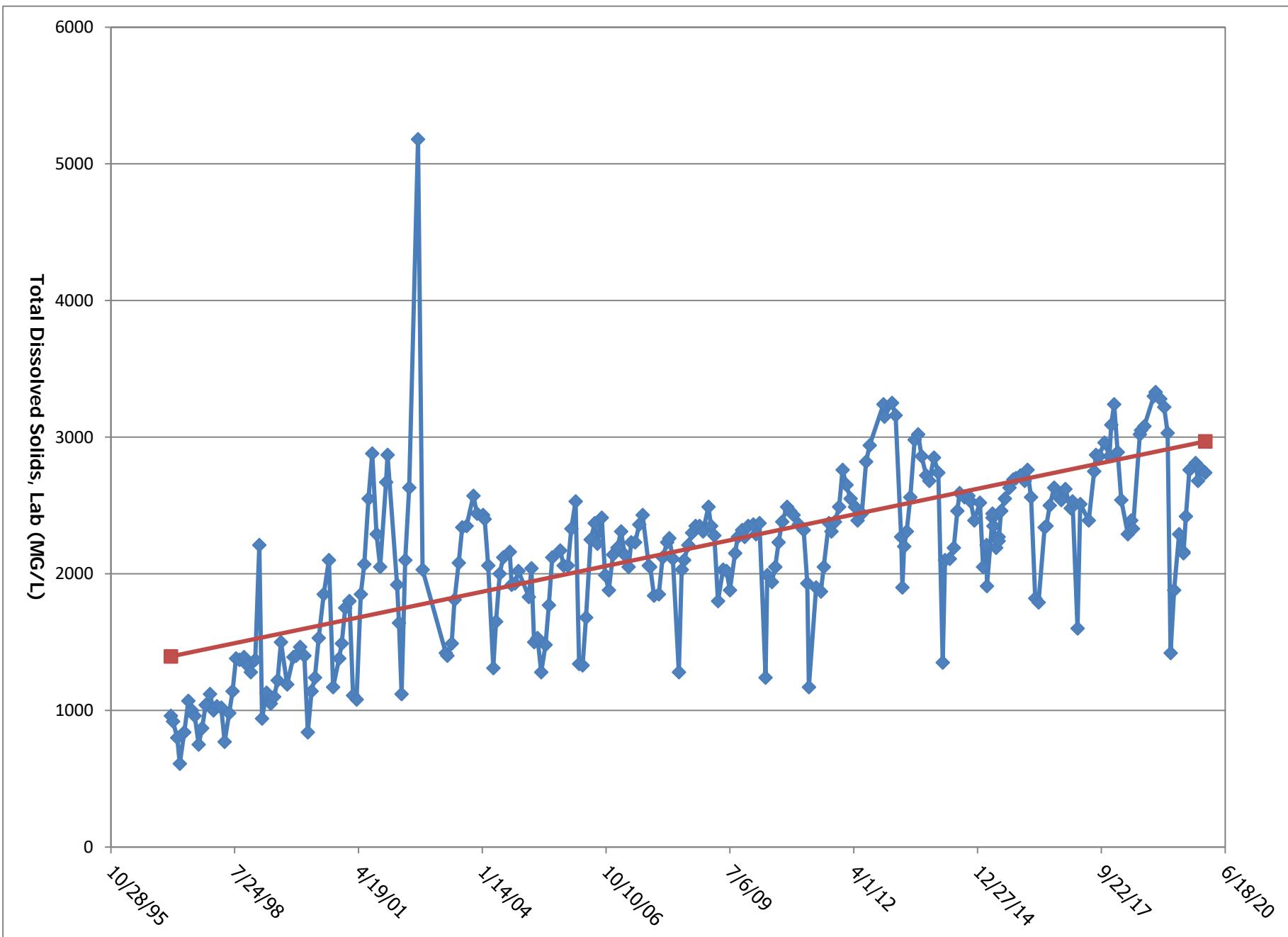
loc_report_order	4				
Location Code	NPDES10				
sys_sample_code	3002_NPDES10_12032018				
Site ID					
Date	12/3/2018				
report_order	Parameter	Fraction	Units	Detection	Result
1	Flow	N	GPM	Y	1.3
2	pH, Field	N	S.U.	Y	8.02
3	Temperature, Field	N	C	Y	1.3
4	Specific Conductivity, Field	N	UMHOS/CM	Y	3773
5	Iron	TR	MG/L	Y	0.07
7	Selenium	D	UG/L		
7	Selenium	PD	UG/L	Y	1.8
7	Selenium	TR	UG/L	Y	0.4
9	Total Dissolved Solids, Lab	N	MG/L	Y	3330
13	Copper	PD	UG/L	N	2
19	Solids, Settleable	N	ML/L		





Period of Record Water Discharge Hydrograph

NPDES10



Period of Record TDS Trend Plot

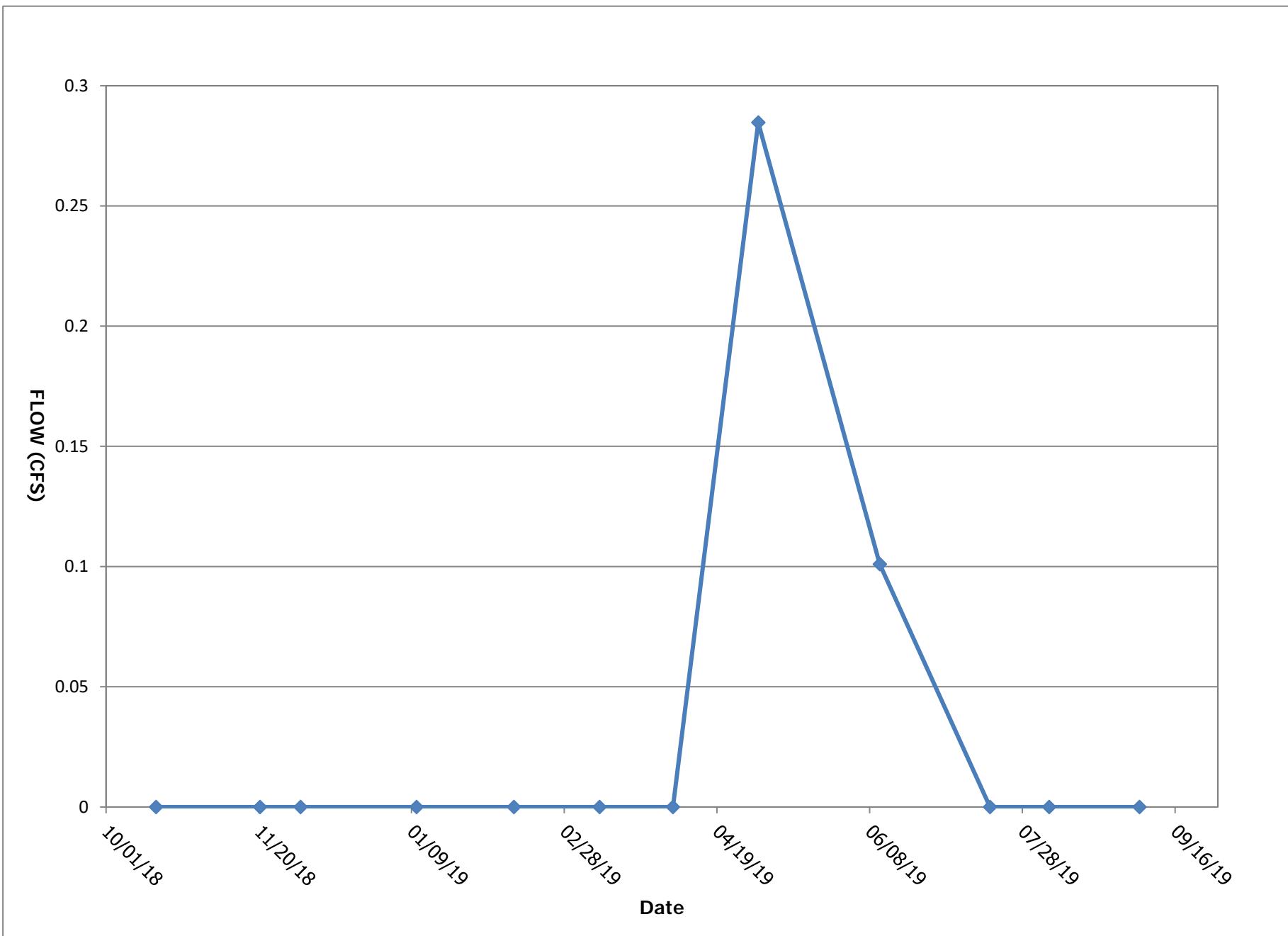
NPDES10

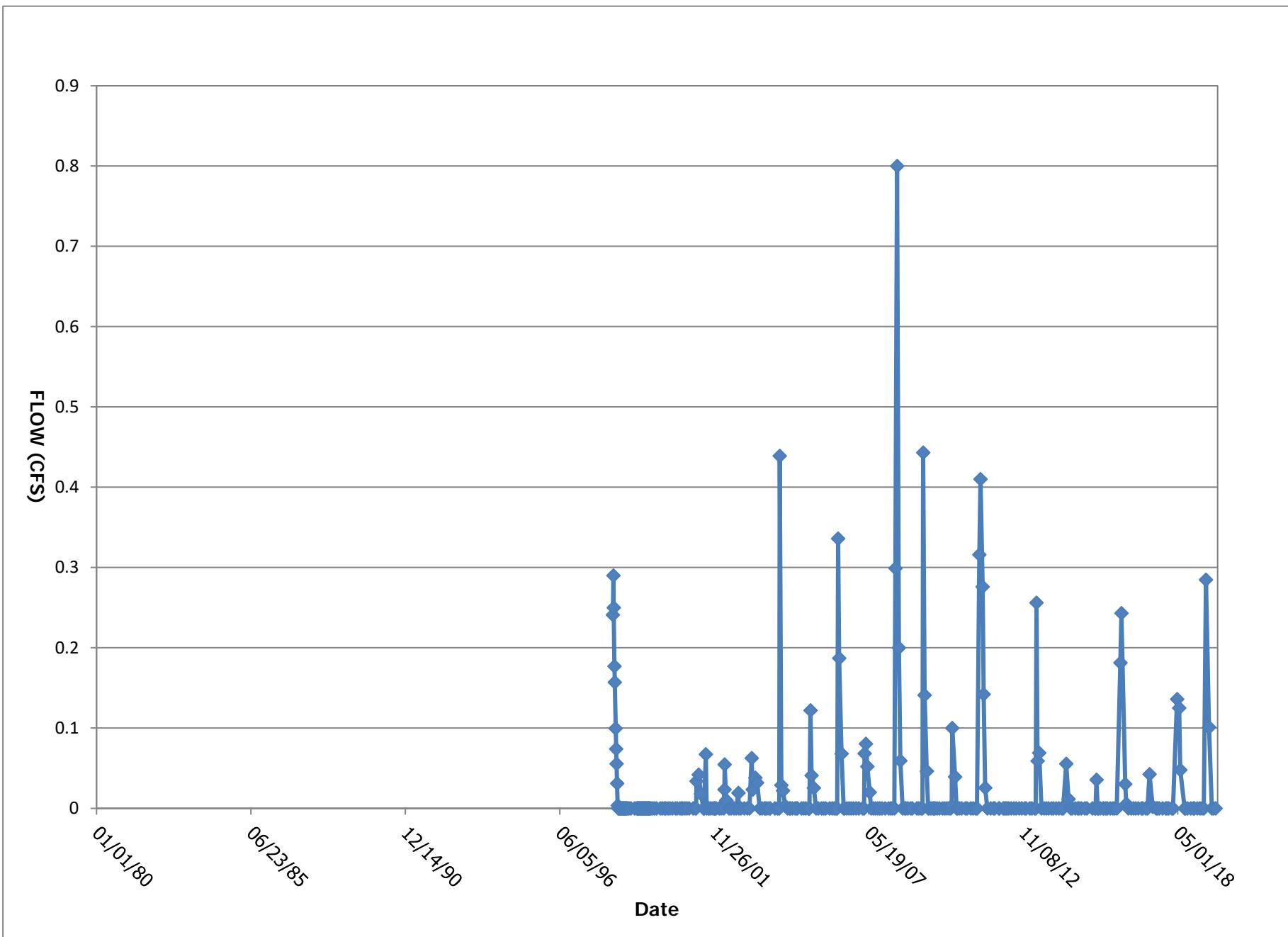
				loc_report_order	5	5	5	5
				Location Code	NPDES11	NPDES11	NPDES11	NPDES11
				sys_sample_code	3002_NPDES11_01102019	3002_NPDES11_02112019	3002_NPDES11_03112019	3002_NPDES11_04042019
				Site ID	1/10/2019	2/11/2019	3/11/2019	4/4/2019
				Date				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	0	Y	0	Y
2	pH, Field	N	S.U.					
3	Temperature, Field	N	C					
4	Specific Conductivity, Field	N	UMHOS/CM					
5	Iron	D	MG/L					
5	Iron	PD	MG/L					
5	Iron	TR	MG/L					
7	Selenium	D	UG/L					
7	Selenium	PD	UG/L					
7	Selenium	TR	UG/L					
8	Solids, Total Suspended	N	MG/L					
9	Total Dissolved Solids, Lab	N	MG/L					
11	Cadmium	PD	UG/L					
12	Chromium	PD	UG/L					
13	Copper	PD	UG/L					
14	Lead	PD	UG/L					
15	Mercury	T	UG/L					
16	Nickel	PD	UG/L					
17	Silver	PD	UG/L					
18	Zinc	PD	MG/L					
19	Solids, Settleable	N	ML/L					

				loc_report_order	5	5	5	5
				Location Code	NPDES11	NPDES11	NPDES11	NPDES11
				sys_sample_code	3002_NPDES11_05022019	3002_NPDES11_05022019A	3002_NPDES11_06112019	3002_NPDES11_07172019
				Site ID	5/2/2019		5/2/2019	
				Date	5/2/2019		6/11/2019	
report_order	Parameter	Fraction	Units		Detection	Result	Detection	Result
1	Flow	N	GPM		Y	127.8	Y	45.4
2	pH, Field	N	S.U.		Y	8.36	Y	8.19
3	Temperature, Field	N	C		Y	11.3	Y	14
4	Specific Conductivity, Field	N	UMHOS/CM		Y	1398	Y	1802
5	Iron	D	MG/L			N	0.08	
5	Iron	PD	MG/L			Y	0.1	
5	Iron	TR	MG/L	Y	0.83	Y	0.72	N
7	Selenium	D	UG/L			Y	0.4	
7	Selenium	PD	UG/L	Y	0.4			
7	Selenium	TR	UG/L	Y	0.4	Y	0.4	
8	Solids, Total Suspended	N	MG/L			Y	31	
9	Total Dissolved Solids, Lab	N	MG/L	Y	1100	Y	1100	Y
11	Cadmium	PD	UG/L	N	0.3			
12	Chromium	PD	UG/L	N	2			
13	Copper	PD	UG/L	N	2			
14	Lead	PD	UG/L	Y	0.3			
15	Mercury	T	UG/L	Y	0.0024			
16	Nickel	PD	UG/L	N	40			
17	Silver	PD	UG/L	N	0.5			
18	Zinc	PD	MG/L	N	0.05			
19	Solids, Settleable	N	ML/L	N	0.5		N	0.5

				loc_report_order	5	5	5	5
				Location Code	NPDES11	NPDES11	NPDES11	NPDES11
				sys_sample_code	3002_NPDES11_08052019	3002_NPDES11_09042019	3002_NPDES11_10172018	3002_NPDES11_11202018
				Site ID	8/5/2019	9/4/2019	10/17/2018	11/20/2018
				Date				
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection
1	Flow	N	GPM	Y	0	Y	0	Y
2	pH, Field	N	S.U.					
3	Temperature, Field	N	C					
4	Specific Conductivity, Field	N	UMHOS/CM					
5	Iron	D	MG/L					
5	Iron	PD	MG/L					
5	Iron	TR	MG/L					
7	Selenium	D	UG/L					
7	Selenium	PD	UG/L					
7	Selenium	TR	UG/L					
8	Solids, Total Suspended	N	MG/L					
9	Total Dissolved Solids, Lab	N	MG/L					
11	Cadmium	PD	UG/L					
12	Chromium	PD	UG/L					
13	Copper	PD	UG/L					
14	Lead	PD	UG/L					
15	Mercury	T	UG/L					
16	Nickel	PD	UG/L					
17	Silver	PD	UG/L					
18	Zinc	PD	MG/L					
19	Solids, Settleable	N	ML/L					

		loc_report_order	5		
		Location Code	NPDES11		
		sys_sample_code	3002_NPDES11_12032018		
		Site ID			
		Date	12/3/2018		
report_order	Parameter	Fraction	Units	Detection	Result
1	Flow	N	GPM	Y	0
2	pH, Field	N	S.U.		
3	Temperature, Field	N	C		
4	Specific Conductivity, Field	N	UMHOS/CM		
5	Iron	D	MG/L		
5	Iron	PD	MG/L		
5	Iron	TR	MG/L		
7	Selenium	D	UG/L		
7	Selenium	PD	UG/L		
7	Selenium	TR	UG/L		
8	Solids, Total Suspended	N	MG/L		
9	Total Dissolved Solids, Lab	N	MG/L		
11	Cadmium	PD	UG/L		
12	Chromium	PD	UG/L		
13	Copper	PD	UG/L		
14	Lead	PD	UG/L		
15	Mercury	T	UG/L		
16	Nickel	PD	UG/L		
17	Silver	PD	UG/L		
18	Zinc	PD	MG/L		
19	Solids, Settleable	N	ML/L		

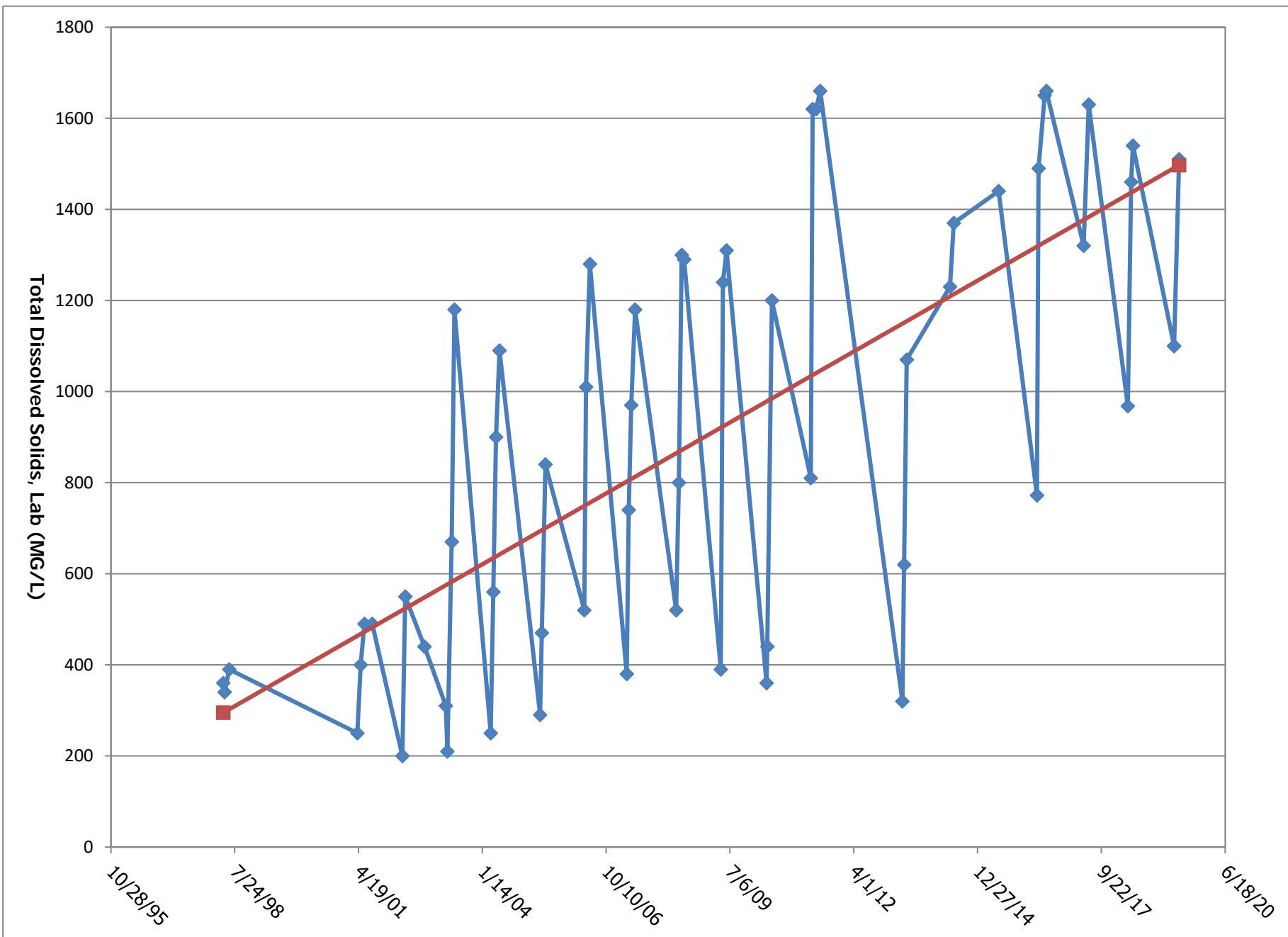




Period of Record Water Discharge Hydrograph

NPDES11

Report 16: Page 6 of 7



Period of Record TDS Trend Plot

NPDES11

loc_report_order Location Code Location Name					3 YSGF5							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	4/9/1991	9/4/2019	157	397.24	124	4762	0	717.36
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	4/9/1991	7/17/2019	157	1149	1170	3360	1.17	277.4
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	4/9/1991	7/17/2019	158	8.3	8.33	8.74	7.61	0.177
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	4/9/1991	9/11/2018	155	11.5	11.6	24.5	1	5.6
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	5/2/2019	7/17/2019	3	12.8	11.3	17.9	9.1	4.58
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	5/2/1991	9/14/2015	75	269	272	362	164	53.9
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	5/2/1991	9/14/2015	72	1.1	1	3	0.5	0.44
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	5/2/1991	9/14/2015	75	315	320	426	195	62.6
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	5/2/1991	9/14/2015	72	94	80	1000	20	110
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	4/25/2005	9/14/2015	8	0.1	0.1	0.1	0.1	1E-17
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	4/25/2005	5/5/2011	19	0.1	0.1	0.1	0.1	3E-17
9	3002 - AHR SW & SPR Long	Cadmium	TR	UG/L	5/2/1991	6/7/2005	49	0.31	0.1	1.4	0.1	0.29
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	5/2/1991	4/5/2017	76	136	139	176	95	17.8
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	5/2/1991	9/14/2015	75	7.08	5	35	0	6.93
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	5/2/1991	9/14/2015	75	7.4	7	10	4	1.3
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	4/25/2005	9/14/2015	8	0.4	0.5	0.5	0.1	0.2
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	4/25/2005	5/5/2011	19	0.3	0.3	0.7	0.1	0.2
13	3002 - AHR SW & SPR Long	Chromium	TR	UG/L	5/2/1991	6/7/2005	49	9.8	10	20	0.4	2.3
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	5/2/1991	9/14/2015	72	1119	1135	1370	672	136.4
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	4/25/2005	9/14/2015	8	1.3	0.5	4	0.5	1.4
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	4/25/2005	5/5/2011	19	1.7	1.8	3.3	0.5	0.8
15	3002 - AHR SW & SPR Long	Copper	TR	UG/L	5/2/1991	6/7/2005	49	31.9	10	1040	0.7	147
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	5/2/1991	4/5/2017	73	627.71	635	822	434	83.039
18	3002 - AHR SW & SPR Long	Iron	D	MG/L	5/2/1991	7/17/2019	60	0.064	0.02	0.55	0.01	0.12
18	3002 - AHR SW & SPR Long	Iron	PD	MG/L	4/29/2013	7/17/2019	12	0.463	0.415	1.13	0.11	0.33
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	5/2/1991	5/5/2011	69	1.5	1.34	9.9	0.15	1.39
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	9/14/2005	7/17/2019	53	1.65	1.46	5.77	0.44	1.1
18	3002 - AHR SW & SPR Long	Iron	TR10UM	MG/L	4/29/2013	4/29/2013	1	0.25	0.25	0.25	0.25	0
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	4/25/2005	9/14/2015	8	0.1	0.1	0.1	0.1	1E-17
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	4/25/2005	5/5/2011	19	1.1	0.8	3.1	0.1	0.78
19	3002 - AHR SW & SPR Long	Lead	TR	UG/L	5/2/1991	6/7/2005	49	1.4	1	5	0.2	1.2
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	5/2/1991	4/5/2017	76	70.7	70.9	92.8	48	9.91

Period of Record Monitoring Summary

YSGF5

Report 17: Page 1 of 5

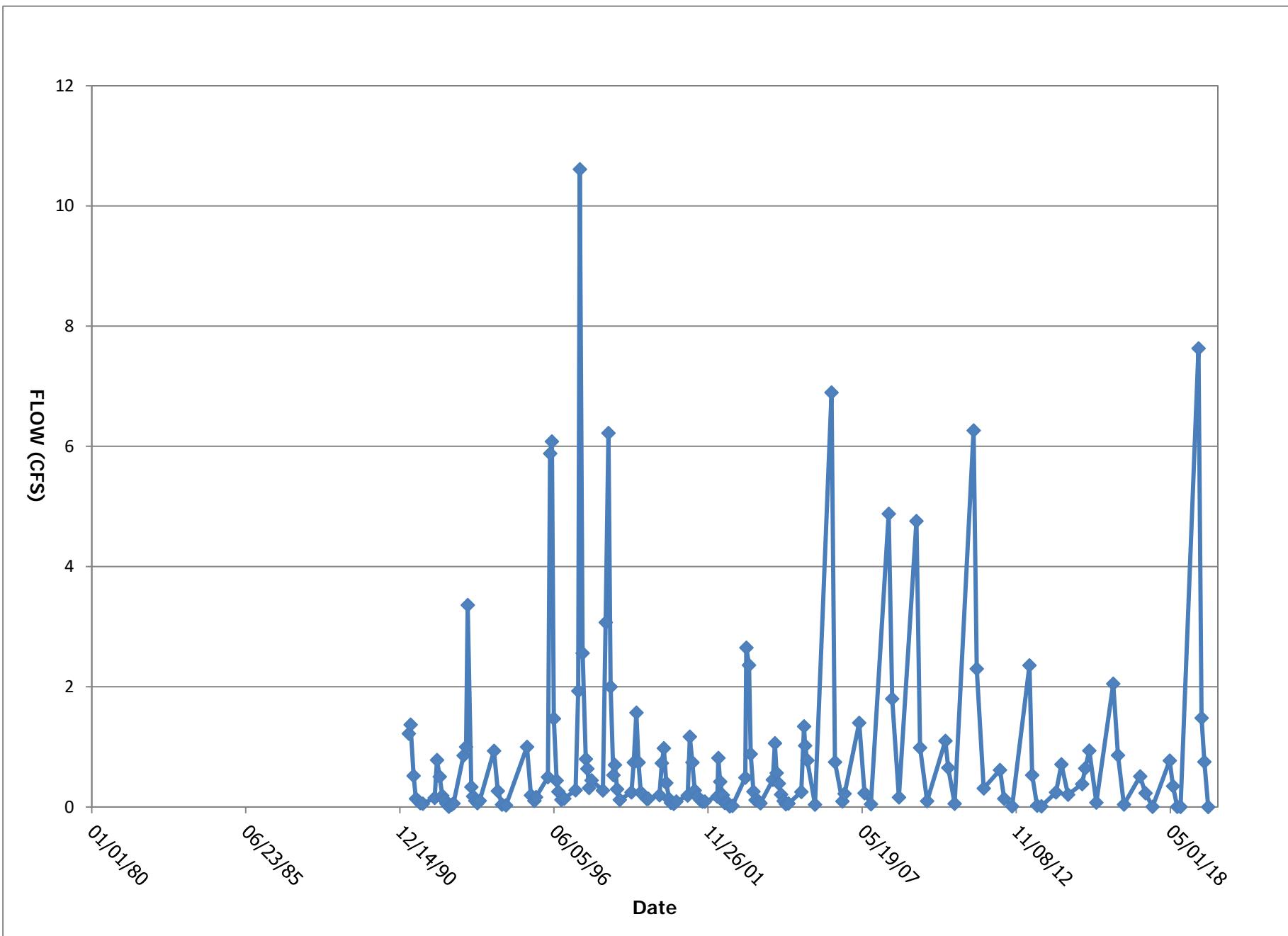
loc_report_order Location Code Location Name					3 YSGF5							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	5/2/1991	6/11/2019	62	0.134	0.13	0.39	0.01	0.0924
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	4/25/2005	6/5/2018	28	0.18	0.12	0.46	0.04	0.13
21	3002 - AHR SW & SPR Long	Manganese	T	MG/L	5/2/1991	6/7/2005	49	0.21	0.19	0.67	0.04	0.13
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	6/1/2004	6/11/2019	43	0.2	0.2	1	0.2	0.2
22	3002 - AHR SW & SPR Long	Mercury	TR	UG/L	5/2/1991	4/12/2004	45	0.2	0.2	0.5	0.1	0.07
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	4/25/2005	9/14/2015	8	9	8	10	8	0.9
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	4/25/2005	5/5/2011	19	10	10	20	10	2
23	3002 - AHR SW & SPR Long	Nickel	TR	UG/L	5/2/1991	6/7/2005	49	10	10	40	10	6
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	5/2/1991	6/11/2019	88	0.08	0.05	0.7	0.04	0.088
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	5/2/1991	6/11/2019	88	0.12	0.07	0.93	0.02	0.15
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	5/2/1991	6/11/2019	88	0.01	0.01	0.1	0.01	0.01
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	5/2/1991	9/14/2015	72	8.3	8.3	8.8	7.7	0.2
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	5/2/1991	9/14/2015	75	5.4	5.1	8.1	3.6	0.95
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	4/25/2005	6/11/2019	28	0.67	0.6	2	0.1	0.43
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	4/25/2005	6/11/2019	33	0.61	0.6	1.7	0.1	0.42
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	5/2/1991	6/11/2019	69	1	1	10	0.2	1
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	4/25/2005	9/14/2015	8	0.06	0.05	0.1	0.05	0.02
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	4/25/2005	5/5/2011	19	0.05	0.05	0.05	0.05	1E-17
31	3002 - AHR SW & SPR Long	Silver	TR	UG/L	5/2/1991	6/7/2005	49	0.5	0.5	5	0.05	0.7
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	5/2/1991	9/14/2015	75	31.4	31.3	46	18.9	5.62
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	5/2/1991	9/14/2015	72	0.55	0.53	0.77	0.38	0.076
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	5/2/1991	6/11/2019	91	413	421	567	270	62.7
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	5/2/1991	6/11/2019	87	0.04	0.02	0.2	0.01	0.039
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	4/25/2005	9/14/2015	8	0.01	0.01	0.01	0.01	0
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	4/25/2005	5/5/2011	19	0.01	0.01	0.01	0.01	2E-18
37	3002 - AHR SW & SPR Long	Zinc	TR	MG/L	5/2/1991	6/7/2005	49	0.041	0.01	0.63	0.01	0.11
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	5/2/1991	9/14/2015	75	-0.46	-0.83	5.7	-5.6	2.27
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	5/2/1991	7/17/2019	97	879	890	1170	556	123
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	5/2/1991	9/14/2015	72	821.68	842	1100	580	106.89
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	5/2/1991	7/17/2019	97	45.8	33	296	2	42.4

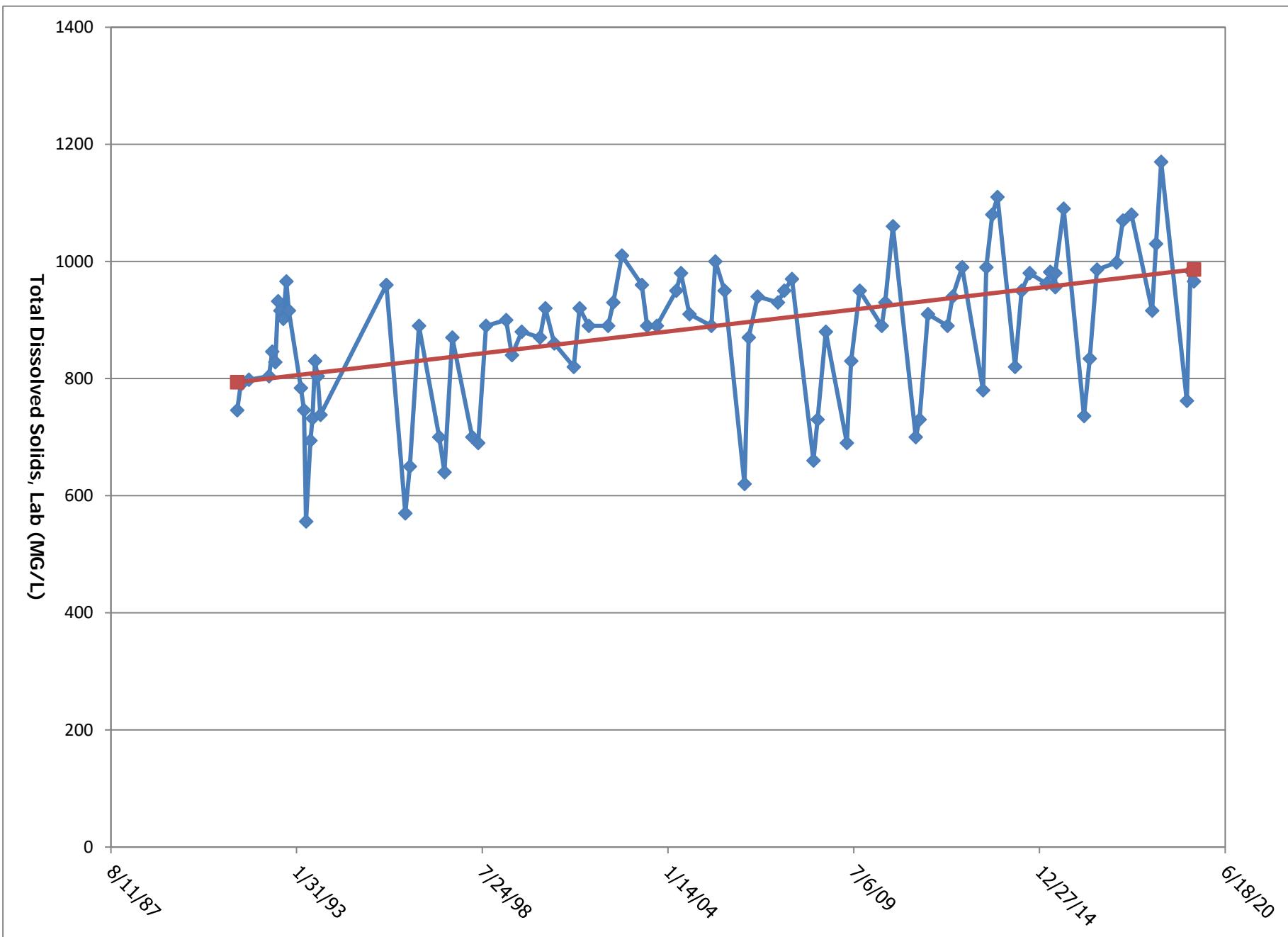
Period of Record Monitoring Summary

YSGF5

Report 17: Page 2 of 5

		loc_report_order	3	3	3	3					
		Location Code	YSGF5	YSGF5	YSGF5	YSGF5					
		sys_sample_code	3002_YSGF5_05022019	3002_YSGF5_06112019	3002_YSGF5_07172019	3002_YSGF5_09042019					
		Site ID									
		Date	5/2/2019	6/11/2019	7/17/2019	9/4/2019					
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result
	Flow	N	GPM	Y	3424	Y	664.8	Y	337	Y	0
1	Specific Conductivity, Field	N	UMHOS/CM	Y	1075	Y	1337	Y	1347		
2	pH, Field	N	S.U.	Y	8.28	Y	8.31	Y	8.21		
3	Temperature, Field	N	DEG-C	Y	9.1	Y	11.3	Y	17.9		
18	Iron	D	MG/L	N	0.08			Y	0.08		
18	Iron	PD	MG/L	Y	0.17			Y	0.24		
18	Iron	TR	MG/L	Y	0.77	Y	0.57	Y	0.44		
21	Manganese	D	MG/L	Y	0.041	Y	0.0538				
22	Mercury	T	UG/L	N	1	N	1				
24	Ammonia Nitrogen	N	MG/L	N	0.2	N	0.2				
26	Nitrate Nitrogen	N	MG/L	Y	0.07	N	0.05				
27	Nitrite Nitrogen	N	MG/L	N	0.05	N	0.1				
30	Selenium	D	UG/L	Y	0.7	Y	0.5				
30	Selenium	PD	UG/L	Y	0.8	Y	0.4				
30	Selenium	TR	UG/L	Y	0.9	Y	0.4				
34	Sulfates	N	MG/L	Y	337	Y	467				
35	Sulfide	N	MG/L	N	0.1	N	0.1				
39	Total Dissolved Solids, Lab	N	MG/L	Y	762	Y	984	Y	966		
41	Solids, Total Suspended	N	MG/L	Y	15	Y	20	Y	14		





Period of Record TDS Trend Plot

YSGF5

Report 17: Page 5 of 5

loc_report_order Location Code Location Name					4 YSG5							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	5/9/1996	9/3/2019	78	1916.73	549.5	20691	5.19	3506.72
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	7/12/1995	9/3/2019	83	2569	2580	4760	2.32	864.9
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	7/12/1995	9/3/2019	84	8.19	8.19	8.88	7.64	0.221
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	7/12/1995	9/11/2018	79	14	14.6	26.1	3.7	4.481
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	5/2/2019	9/3/2019	5	15	17.2	19.9	7.5	5.24
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	6/15/2009	9/3/2019	33	287	300	379	172	48.3
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	6/15/2009	9/3/2019	33	1.1	1	2	0.5	0.32
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	6/15/2009	9/3/2019	23	332	348	440	199	58.2
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	6/15/2009	9/3/2019	33	190	180	280	110	48
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	4/8/2014	9/3/2019	17	0.2	0.2	0.5	0.1	0.1
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	6/15/2009	10/1/2013	16	0.2	0.2	0.5	0.1	0.1
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	6/15/2009	9/3/2019	33	275	283	394	120	74.2
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	6/15/2009	9/3/2019	23	9.63	10.7	21	2	6.19
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	6/15/2009	9/3/2019	33	23.5	23.3	35	12	6.49
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	4/8/2014	9/3/2019	17	1	1	4	0.5	1
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	6/15/2009	10/1/2013	16	0.9	0.8	3	0.5	0.6
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	6/15/2009	6/5/2018	30	2890	3030	4040	1550	644
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMS/CM	5/2/2019	9/3/2019	3	2640	2740	3560	1610	979
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	4/8/2014	9/3/2019	17	1.8	1	4.2	0.5	1.4
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	6/15/2009	10/1/2013	16	2.2	2	6	0.5	1.4
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	6/15/2009	9/3/2019	33	1770	1810	2730	753	531
18	3002 - AHR SW & SPR Long	Iron	D	MG/L	4/29/2013	4/8/2014	2	0.16	0.16	0.29	0.02	0.19
18	3002 - AHR SW & SPR Long	Iron	PD	MG/L	4/29/2013	4/23/2015	3	0.2	0.16	0.32	0.11	0.11
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	5/3/2007	10/1/2013	18	0.799	0.745	1.6	0.15	0.466
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	5/3/2007	9/3/2019	37	0.901	0.8	2.53	0.16	0.581
18	3002 - AHR SW & SPR Long	Iron	TR10UM	MG/L	4/29/2013	4/29/2013	1	0.16	0.16	0.16	0.16	0
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	4/8/2014	9/3/2019	17	0.3	0.2	1	0.1	0.2
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	6/15/2009	10/1/2013	16	0.5	0.5	1	0.1	0.3
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	6/15/2009	9/3/2019	33	264	265	425	110	85.4
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	4/8/2014	9/3/2019	18	0.198	0.11	0.72	0.01	0.201
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	6/15/2009	10/1/2013	16	0.29	0.27	0.67	0.06	0.16
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	6/15/2009	9/3/2019	34	0.3	0.2	1	0.2	0.3

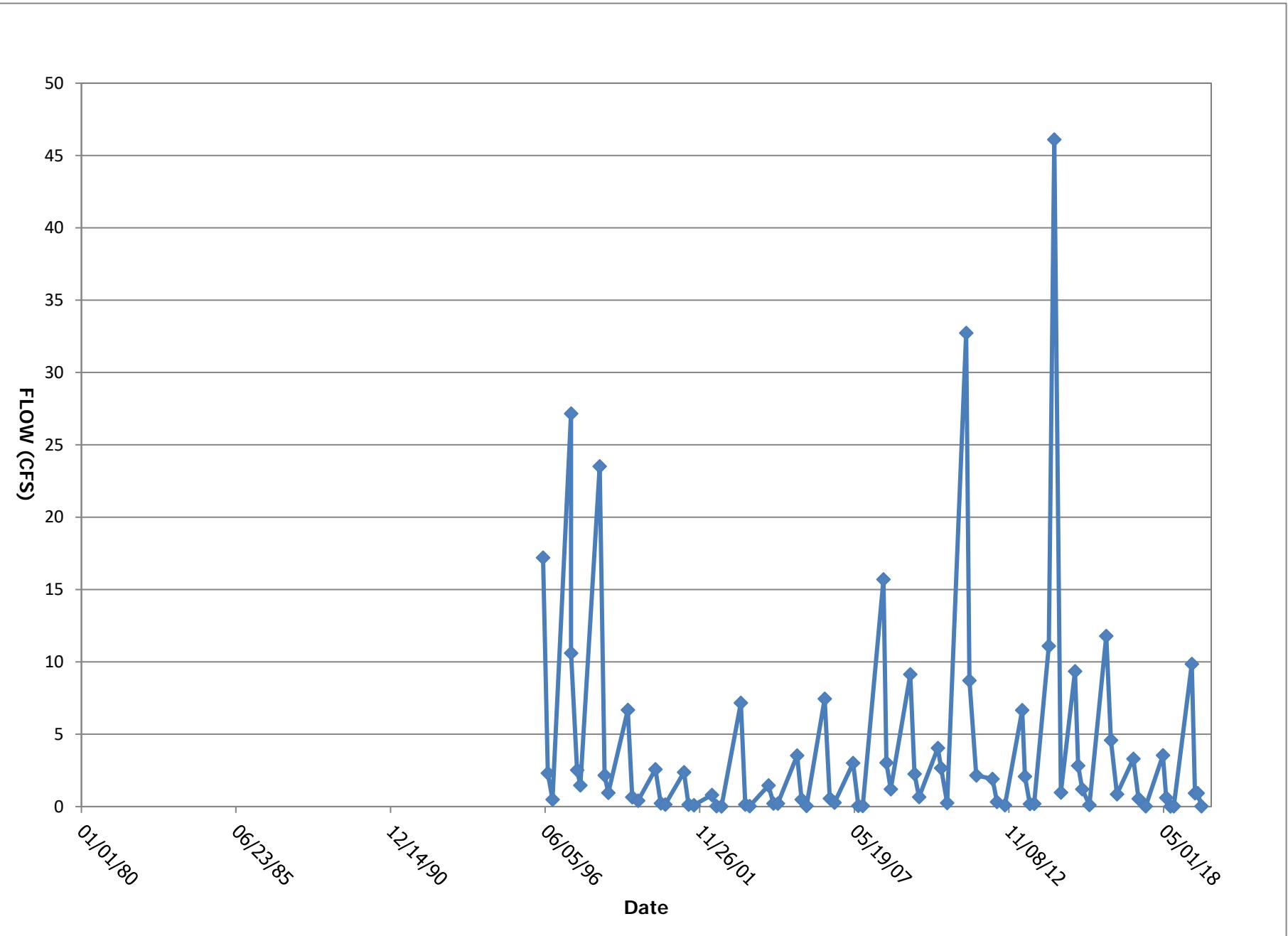
loc_report_order Location Code Location Name					4 YSG5							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Maximum	Minimum	Standard Deviation
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	4/8/2014	9/3/2019	17	20	20	80	8	20
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	6/15/2009	10/1/2013	16	20	20	30	10	6
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	6/15/2009	9/3/2019	34	0.071	0.05	0.2	0.05	0.049
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	6/15/2009	9/3/2019	33	0.613	0.49	2.6	0.02	0.646
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	6/15/2009	9/3/2019	33	0.02	0.01	0.1	0.01	0.02
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	6/15/2009	9/3/2019	33	8.4	8.4	8.6	8.2	0.09
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	6/15/2009	9/3/2019	33	7.71	7.2	11	5	1.79
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	7/6/2009	9/3/2019	30	2.58	1.65	15.7	0.5	2.97
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	6/15/2009	6/12/2019	17	3.2	2.3	7.8	0.1	2.5
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	7/6/2009	9/3/2019	30	2.62	1.6	17.2	0.5	3.17
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	4/8/2014	9/3/2019	17	0.2	0.1	1	0.05	0.3
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	6/15/2009	10/1/2013	16	0.09	0.08	0.3	0.05	0.06
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	6/15/2009	9/3/2019	33	123	125	208	61.8	34.5
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	6/15/2009	9/3/2019	33	1.3	1.3	2.08	0.72	0.321
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	6/15/2009	9/3/2019	41	1660	1610	2790	716	521
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	6/15/2009	9/3/2019	34	0.03	0.02	0.1	0.02	0.03
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	4/8/2014	9/3/2019	17	0.03	0.02	0.1	0.01	0.03
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	6/15/2009	10/1/2013	16	0.02	0.02	0.02	0.01	0.005
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	6/15/2009	9/3/2019	33	-0.22	0	7.2	-5.6	2.9
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	5/9/1996	9/3/2019	81	2600	2540	4210	1130	740
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	6/15/2009	9/3/2019	32	2540	2610	3870	1160	724
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	6/15/2009	9/3/2019	38	24	22	59	7	14

		loc_report_order	4	4	4
		Location Code	YSG5	YSG5	YSG5
		sys_sample_code	3002_YSG5_05022019	3002_YSG5_06112019	3002_YSG5_06122019A
		Site ID			
		Date	5/2/2019	6/11/2019	6/12/2019
report_order	Parameter	Fraction	Units	Detection	Result
	Flow	N	GPM	Y	4423
1	Specific Conductivity, Field	N	UMHOS/CM	Y	1696
2	pH, Field	N	S.U.	Y	8.31
3	Temperature, Field	N	DEG-C	Y	7.5
4	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	Y	175
6	Arsenic	TR	UG/L	Y	1.5
7	Bicarbonate as HCO ₃	N	MG/L	Y	213
8	Boron	D	UG/L	Y	110
9	Cadmium	D	UG/L	N	0.3
10	Calcium	D	MG/L	Y	120
11	Carbonate as CO ₃	N	MG/L	N	20
12	Chloride	N	MG/L	Y	12
13	Chromium	D	UG/L	N	2
14	Specific Conductivity, Lab	N	UMS/CM	Y	1610
15	Copper	D	UG/L	Y	4.1
17	Hardness	N	MG/L	Y	753
18	Iron	TR	MG/L	Y	2.38
19	Lead	D	UG/L	N	0.5
20	Magnesium	D	MG/L	Y	110
21	Manganese	D	MG/L	N	0.05
22	Mercury	T	UG/L	N	1
23	Nickel	D	UG/L	N	40
24	Ammonia Nitrogen	N	MG/L	N	0.2
26	Nitrate Nitrogen	N	MG/L	Y	0.76
27	Nitrite Nitrogen	N	MG/L	Y	0.02
28	pH, Lab	N	S.U.	Y	8.3
29	Potassium	D	MG/L	Y	5.1
30	Selenium	D	UG/L	Y	4
30	Selenium	PD	UG/L		
30	Selenium	TR	UG/L	Y	3.6
31	Silver	D	UG/L	N	0.5

	loc_report_order	4	4	4		
	Location Code	YSG5	YSG5	YSG5		
	sys_sample_code	3002_YSG5_05022019	3002_YSG5_06112019	3002_YSG5_06122019A		
	Site ID					
	Date	5/2/2019	6/11/2019	6/12/2019		
report_order	Parameter	Fraction	Units	Detection Result	Detection Result	Detection Result
32	Sodium	D	MG/L	Y 91.5	Y 97.5	
33	Sodium Adsorption Ratio	N	RATIO	Y 1.5	Y 1	
34	Sulfates	N	MG/L	Y 716	Y 1450	Y 1470
35	Sulfide	N	MG/L	N 0.1	N 0.1	N 0.1
37	Zinc	D	MG/L	N 0.05	N 0.1	
38	Cation / Anion Balance	N	%	Y 0	Y 1.3	
39	Total Dissolved Solids, Lab	N	MG/L	Y 1300	Y 2540	Y 2520
40	Total Dissolved Solids (Calculated)	N	MG/L	Y 1160	Y 2280	
41	Solids, Total Suspended	N	MG/L	Y 32	Y 10	Y 13

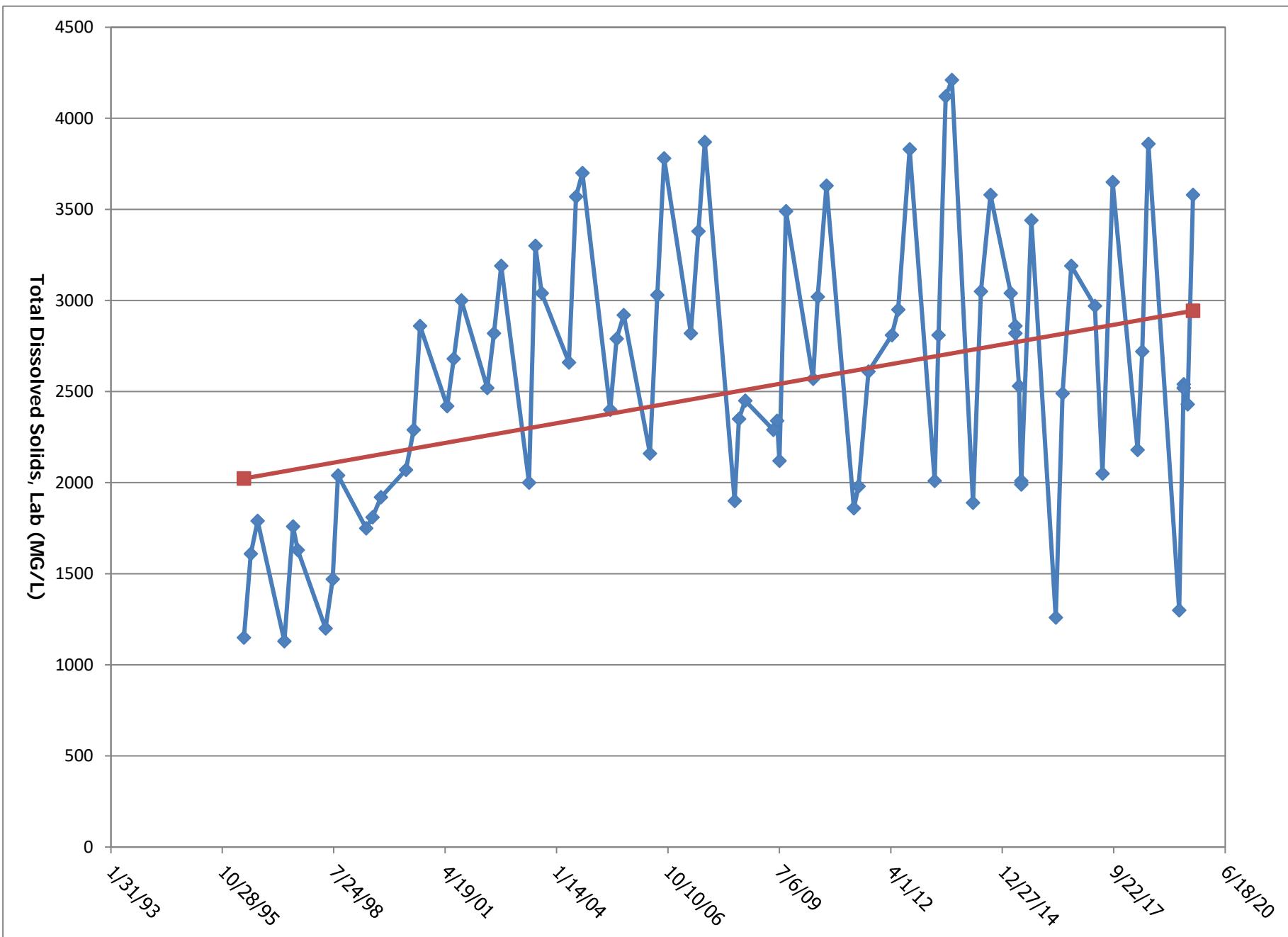
		loc_report_order	4		4		4
		Location Code	YSG5		YSG5		YSG5
		sys_sample_code	3002_YSG5_06122019B		3002_YSG5_07172019		3002_YSG5_09032019
		Site ID		6/12/2019		7/17/2019	
		Date					9/3/2019
report_order	Parameter	Fraction	Units	Detection	Result	Detection	Result
	Flow	N	GPM	Y	1410.7	Y	416
1	Specific Conductivity, Field	N	UMHOS/CM			Y	2784
2	pH, Field	N	S.U.	Y	8.5	Y	8.23
3	Temperature, Field	N	DEG-C	Y	11.7	Y	19.9
4	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L				Y
6	Arsenic	TR	UG/L				Y
7	Bicarbonate as HCO ₃	N	MG/L				Y
8	Boron	D	UG/L				Y
9	Cadmium	D	UG/L				N
10	Calcium	D	MG/L				Y
11	Carbonate as CO ₃	N	MG/L				Y
12	Chloride	N	MG/L				Y
13	Chromium	D	UG/L				N
14	Specific Conductivity, Lab	N	UMS/CM				Y
15	Copper	D	UG/L				N
17	Hardness	N	MG/L				Y
18	Iron	TR	MG/L				Y
19	Lead	D	UG/L				Y
20	Magnesium	D	MG/L				Y
21	Manganese	D	MG/L				Y
22	Mercury	T	UG/L				N
23	Nickel	D	UG/L				N
24	Ammonia Nitrogen	N	MG/L				N
26	Nitrate Nitrogen	N	MG/L				N
27	Nitrite Nitrogen	N	MG/L				N
28	pH, Lab	N	S.U.				Y
29	Potassium	D	MG/L				Y
30	Selenium	D	UG/L	Y	1.6	Y	1.2
30	Selenium	PD	UG/L				
30	Selenium	TR	UG/L	Y	1.8	Y	1.1
31	Silver	D	UG/L				N

	loc_report_order	4	4	4			
	Location Code	YSG5	YSG5	YSG5			
	sys_sample_code	3002_YSG5_06122019B	3002_YSG5_07172019	3002_YSG5_09032019			
	Site ID						
	Date	6/12/2019	7/17/2019	9/3/2019			
report_order	Parameter	Fraction	Units	Detection Result	Detection Result	Detection Result	
32	Sodium	D	MG/L			Y	129
33	Sodium Adsorption Ratio	N	RATIO			Y	1.2
34	Sulfates	N	MG/L	Y 1460	Y 1390	Y	2080
35	Sulfide	N	MG/L			N	0.1
37	Zinc	D	MG/L			N	0.1
38	Cation / Anion Balance	N	%			Y	0
39	Total Dissolved Solids, Lab	N	MG/L	Y 2520	Y 2430	Y	3580
40	Total Dissolved Solids (Calculated)	N	MG/L			Y	3180
41	Solids, Total Suspended	N	MG/L			Y	17



Period of Record Water Discharge Hydrograph

YSG5



Period of Record TDS Trend Plot

YSG5

Report 18: Page 8 of 8

loc_report_order Location Code Location Name					1 YSSPG1							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	9/24/2002	6/11/2019	23	59.05	33.3	213	0	61.12
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	9/24/2002	6/11/2019	22	2345	2390	2970	2.3	610.8
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	9/24/2002	6/11/2019	22	8.12	8.17	8.32	7.53	0.197
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	9/24/2002	6/6/2018	21	13	12.6	21.9	5.2	3.58
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	6/11/2019	6/11/2019	1	17.8	17.8	17.8	17.8	0
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	9/24/2002	6/24/2015	14	441	436	534	334	47.6
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	9/24/2002	6/24/2015	14	0.99	0.9	3	0.5	0.64
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	9/24/2002	6/24/2015	13	545	539	651	475	48.4
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	9/24/2002	6/24/2015	14	210	210	270	160	30
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	5/14/2014	6/24/2015	2	0.2	0.2	0.2	0.1	0.07
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	9/14/2005	6/9/2009	6	0.2	0.2	0.2	0.1	0.05
9	3002 - AHR SW & SPR Long	Cadmium	TR	UG/L	9/24/2002	5/23/2005	6	0.2	0.2	0.5	0.1	0.1
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	9/24/2002	6/24/2015	14	278	279	333	225	27.6
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	9/24/2002	6/24/2015	13	2.9	2	12	2	2.8
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	9/24/2002	6/24/2015	14	20.3	19.5	27	14.4	3.55
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	5/14/2014	6/24/2015	2	0.8	0.8	1	0.5	0.4
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	9/14/2005	6/9/2009	6	0.3	0.2	0.6	0.1	0.2
13	3002 - AHR SW & SPR Long	Chromium	TR	UG/L	9/24/2002	5/23/2005	6	10	20	20	1	8
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	9/24/2002	6/24/2015	14	2350	2370	2670	1900	224
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	5/14/2014	6/24/2015	2	0.8	0.8	1	0.5	0.4
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	9/14/2005	6/9/2009	6	1.6	1.5	2.8	1	0.69
15	3002 - AHR SW & SPR Long	Copper	TR	UG/L	9/24/2002	5/23/2005	6	10	10	20	10	5
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	9/24/2002	6/24/2015	14	1540	1560	1890	1230	177
18	3002 - AHR SW & SPR Long	Iron	D	MG/L	9/24/2002	5/23/2005	6	0.04	0.02	0.1	0.02	0.03
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	9/24/2002	6/9/2009	11	0.412	0.17	1.8	0.04	0.553
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	6/26/2003	6/11/2019	17	0.349	0.15	1.76	0.01	0.482
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	5/14/2014	6/24/2015	2	0.2	0.2	0.2	0.1	0.07
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	9/14/2005	6/9/2009	6	0.3	0.2	0.8	0.1	0.3
19	3002 - AHR SW & SPR Long	Lead	TR	UG/L	9/24/2002	5/23/2005	6	0.5	0.5	0.8	0.1	0.3
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	9/24/2002	6/24/2015	14	206	211	264	163	27.9
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	9/24/2002	6/11/2019	12	0.36	0.29	0.88	0.1	0.217
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	9/14/2005	6/6/2018	10	0.435	0.37	1.03	0.13	0.241

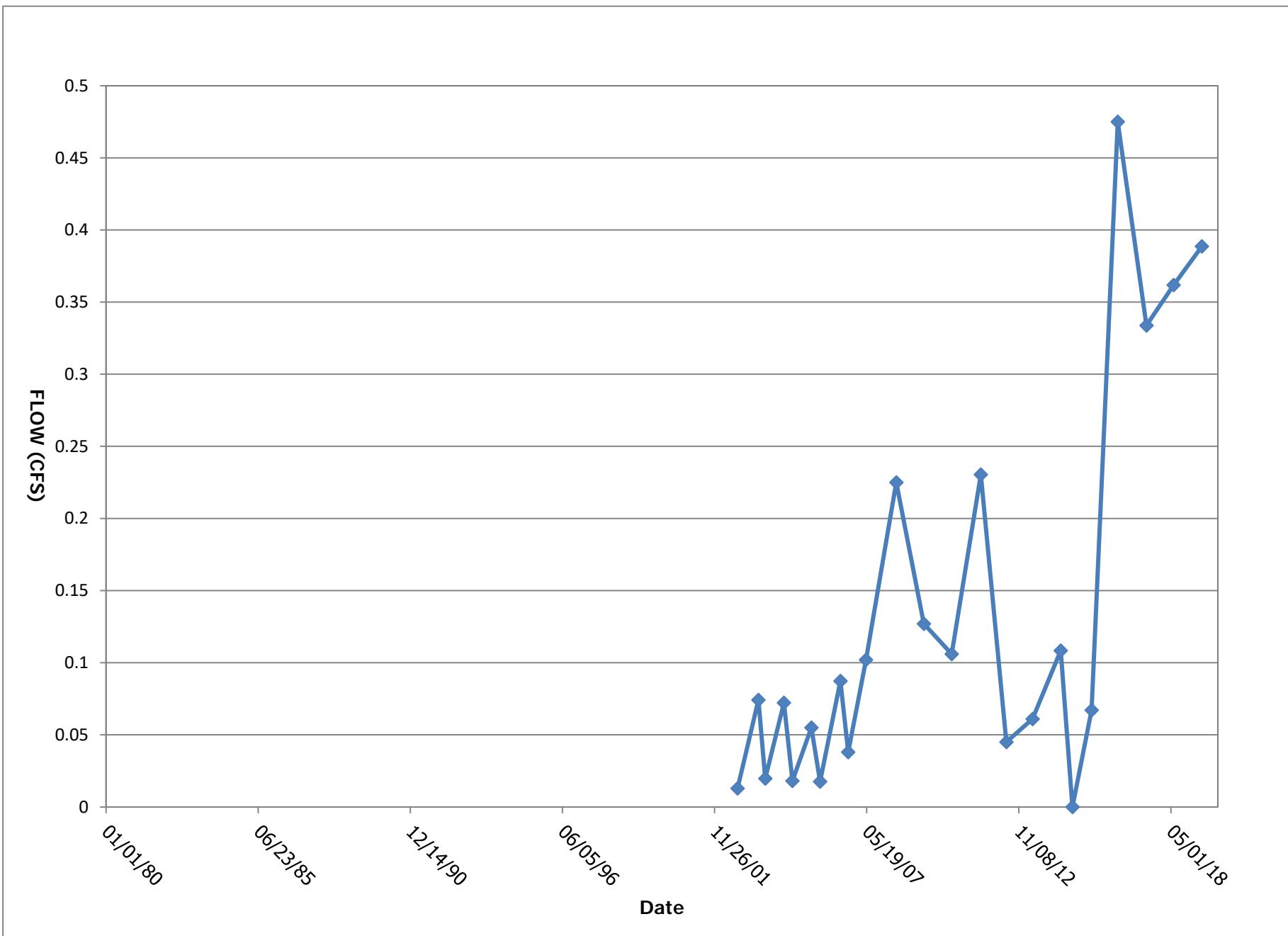
Period of Record Monitoring Summary

YSSPG1

Report 19: Page 1 of 5

loc_report_order Location Code Location Name					1 YSSPG1							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
21	3002 - AHR SW & SPR Long	Manganese	T	MG/L	9/24/2002	5/23/2005	6	0.447	0.35	1.06	0.1	0.351
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	5/26/2004	6/11/2019	19	0.2	0.2	1	0.2	0.2
22	3002 - AHR SW & SPR Long	Mercury	TR	UG/L	9/24/2002	9/24/2003	3	0.2	0.2	0.2	0.2	3E-17
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	5/14/2014	6/24/2015	2	10	10	20	8	8
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	9/14/2005	6/9/2009	6	20	20	20	10	4
23	3002 - AHR SW & SPR Long	Nickel	TR	UG/L	9/24/2002	5/23/2005	6	20	20	20	10	5
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	9/24/2002	6/11/2019	22	0.066	0.05	0.2	0.05	0.039
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	9/24/2002	6/11/2019	22	0.358	0.225	1.26	0.02	0.364
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	9/24/2002	6/11/2019	22	0.01	0.01	0.05	0.01	0.01
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	9/24/2002	6/24/2015	14	8.1	8.2	8.4	7.5	0.24
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	9/24/2002	6/24/2015	14	5.9	5.6	8.1	4.4	1
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	6/10/2010	6/11/2019	10	0.65	0.25	3.2	0.2	0.93
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	9/14/2005	6/11/2019	11	0.5	0.3	2	0.2	0.5
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	9/24/2002	6/11/2019	13	0.6	0.5	1	0.1	0.4
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	5/14/2014	6/24/2015	2	0.08	0.08	0.1	0.05	0.04
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	9/14/2005	6/9/2009	6	0.08	0.08	0.1	0.05	0.03
31	3002 - AHR SW & SPR Long	Silver	TR	UG/L	9/24/2002	5/23/2005	6	0.1	0.1	0.3	0.05	0.09
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	9/24/2002	6/24/2015	14	60.1	58.3	123	38.6	20.7
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	9/24/2002	6/24/2015	14	0.676	0.625	1.54	0.47	0.263
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	9/24/2002	6/11/2019	22	1180	1210	1570	850	182
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	9/24/2002	6/11/2019	22	0.03	0.02	0.1	0.02	0.02
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	6/26/2003	6/24/2015	3	0.053	0.02	0.13	0.01	0.067
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	9/14/2005	6/9/2009	6	0.03	0.02	0.08	0.01	0.03
37	3002 - AHR SW & SPR Long	Zinc	TR	MG/L	9/24/2002	5/23/2005	6	0.03	0.02	0.07	0.01	0.02
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	9/24/2002	6/24/2015	14	-0.17	-0.2	6.3	-5.3	3.7
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	9/24/2002	6/11/2019	22	2210	2220	2850	1670	281
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	9/24/2002	6/24/2015	14	1990	2050	2320	1630	210
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	9/24/2002	6/11/2019	22	19	8.5	92	5	24

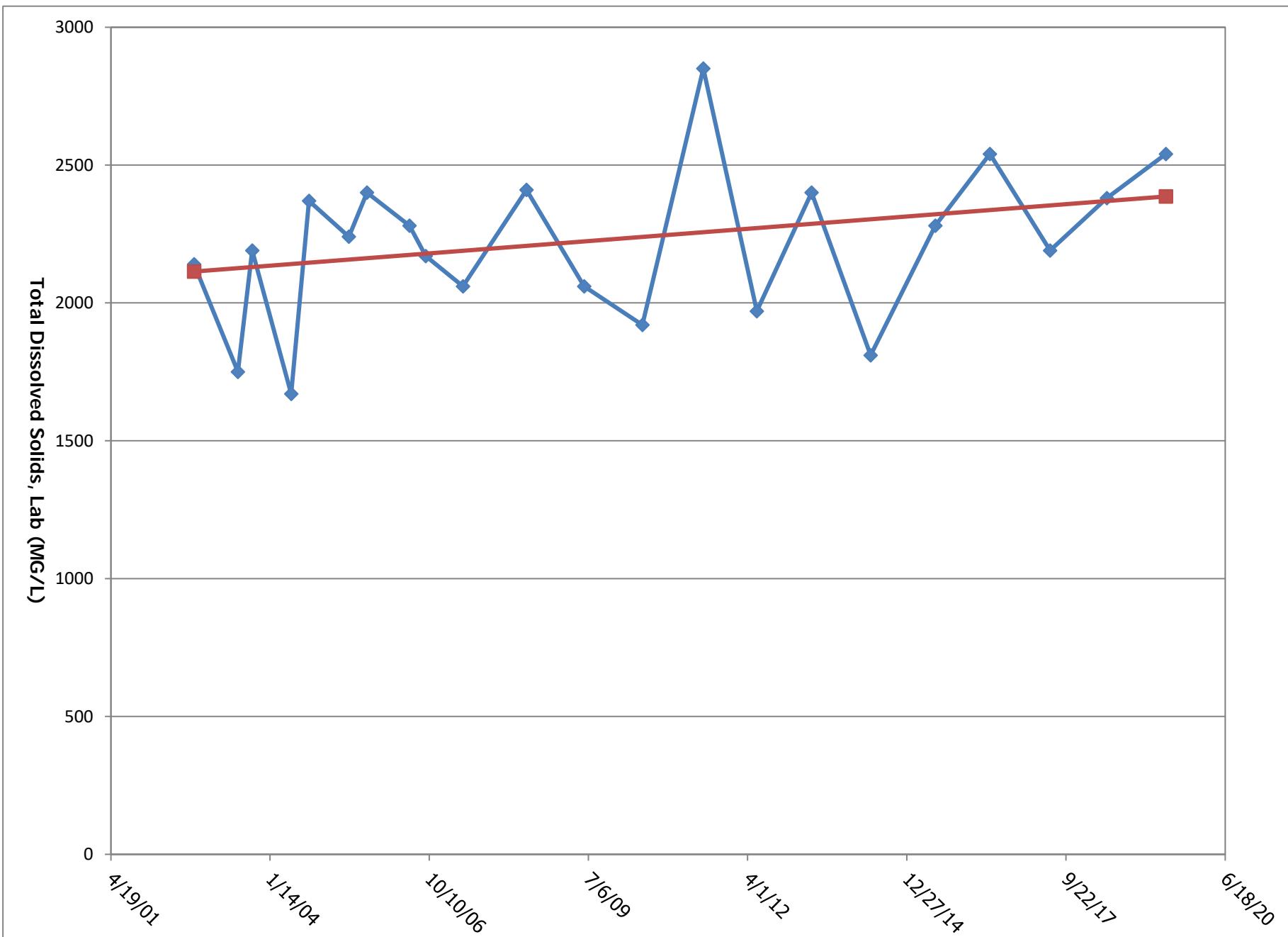
loc_report_order	1				
Location Code	YSSPG1				
sys_sample_code	3002_YSSPG1_06112019				
Site ID					
Date	6/11/2019				
report_order	Parameter	Fraction	Units	Detection	Result
42	Flow	N	GPM	Y	174.4
1	Specific Conductivity	N	UMHOS/CM	Y	2849
2	pH, Field	N	S.U.	Y	8.07
3	Temperature, Field	N	DEG-C	Y	17.8
18	Iron	TR	MG/L	Y	0.68
21	Manganese	D	MG/L	Y	0.248
22	Mercury	T	UG/L	N	1
24	Ammonia Nitrogen	N	MG/L	N	0.2
26	Nitrate Nitrogen	N	MG/L	Y	0.08
27	Nitrite Nitrogen	N	MG/L	N	0.05
30	Selenium	D	UG/L	N	0.5
30	Selenium	PD	UG/L	N	0.5
30	Selenium	TR	UG/L	N	0.5
34	Sulfates	N	MG/L	Y	1420
35	Sulfide	N	MG/L	N	0.1
39	Total Dissolved Solid	N	MG/L	Y	2540
41	Solids, Total Suspended	N	MG/L	Y	25



Period of Record Water Discharge Hydrograph

YSSPG1

Report 19: Page 4 of 5



Period of Record TDS Trend Plot

YSSPG1

Report 19: Page 5 of 5

loc_report_order Location Code Location Name					2 YSSPG2							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	5/23/2005	6/11/2019	18	5.08	5.69	14.2	0	4.3
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	5/23/2005	6/11/2019	14	2458	2625	3123	2.3	750.5
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	5/23/2005	6/11/2019	14	7.59	7.76	8.19	6.86	0.5
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	5/23/2005	6/6/2018	13	13.7	13.5	20.5	10	2.83
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	6/11/2019	6/11/2019	1	11.3	11.3	11.3	11.3	0
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	5/23/2005	6/24/2015	7	463	452	510	435	26.9
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	5/23/2005	6/24/2015	7	1	1	3	0.2	0.9
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	5/23/2005	6/24/2015	7	554	545	623	474	48.2
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	5/23/2005	6/24/2015	7	380	380	490	250	78
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	5/16/2014	6/24/2015	2	0.3	0.3	0.4	0.2	0.1
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	6/8/2006	6/29/2009	4	0.2	0.2	0.2	0.1	0.06
9	3002 - AHR SW & SPR Long	Cadmium	TR	UG/L	5/23/2005	5/23/2005	1	0.6	0.6	0.6	0.6	0
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	5/23/2005	6/24/2015	7	353	352	378	306	23.9
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	5/23/2005	6/24/2015	7	6.9	2	28	2	9.8
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	5/23/2005	6/24/2015	7	15	15	20	8.8	4.4
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	5/16/2014	6/24/2015	2	1	1	1	1	0
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	6/8/2006	6/29/2009	4	0.4	0.2	1	0.1	0.4
13	3002 - AHR SW & SPR Long	Chromium	TR	UG/L	5/23/2005	5/23/2005	1	0.5	0.5	0.5	0.5	0
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	5/23/2005	6/24/2015	7	2600	2630	2790	2360	164
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	5/16/2014	6/24/2015	2	1	1	1	1	0
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	6/8/2006	6/29/2009	4	2.4	2.2	4	1	1.2
15	3002 - AHR SW & SPR Long	Copper	TR	UG/L	5/23/2005	5/23/2005	1	20	20	20	20	0
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	5/23/2005	6/24/2015	7	1670	1700	1850	1460	122
18	3002 - AHR SW & SPR Long	Iron	D	MG/L	5/23/2005	5/23/2005	1	0.01	0.01	0.01	0.01	0
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	5/23/2005	6/29/2009	5	0.064	0.04	0.19	0.02	0.072
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	6/8/2006	6/11/2019	13	0.15	0.06	0.48	0.03	0.15
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	5/16/2014	6/24/2015	2	0.2	0.2	0.2	0.2	0
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	6/8/2006	6/29/2009	4	0.2	0.2	0.2	0.1	0.06
19	3002 - AHR SW & SPR Long	Lead	TR	UG/L	5/23/2005	5/23/2005	1	0.1	0.1	0.1	0.1	0
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	5/23/2005	6/24/2015	7	193	189	226	168	21.6
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	5/23/2005	6/11/2019	6	0.52	0.274	1.57	0.02	0.619
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	6/8/2006	6/6/2018	8	0.459	0.305	1.32	0.08	0.432

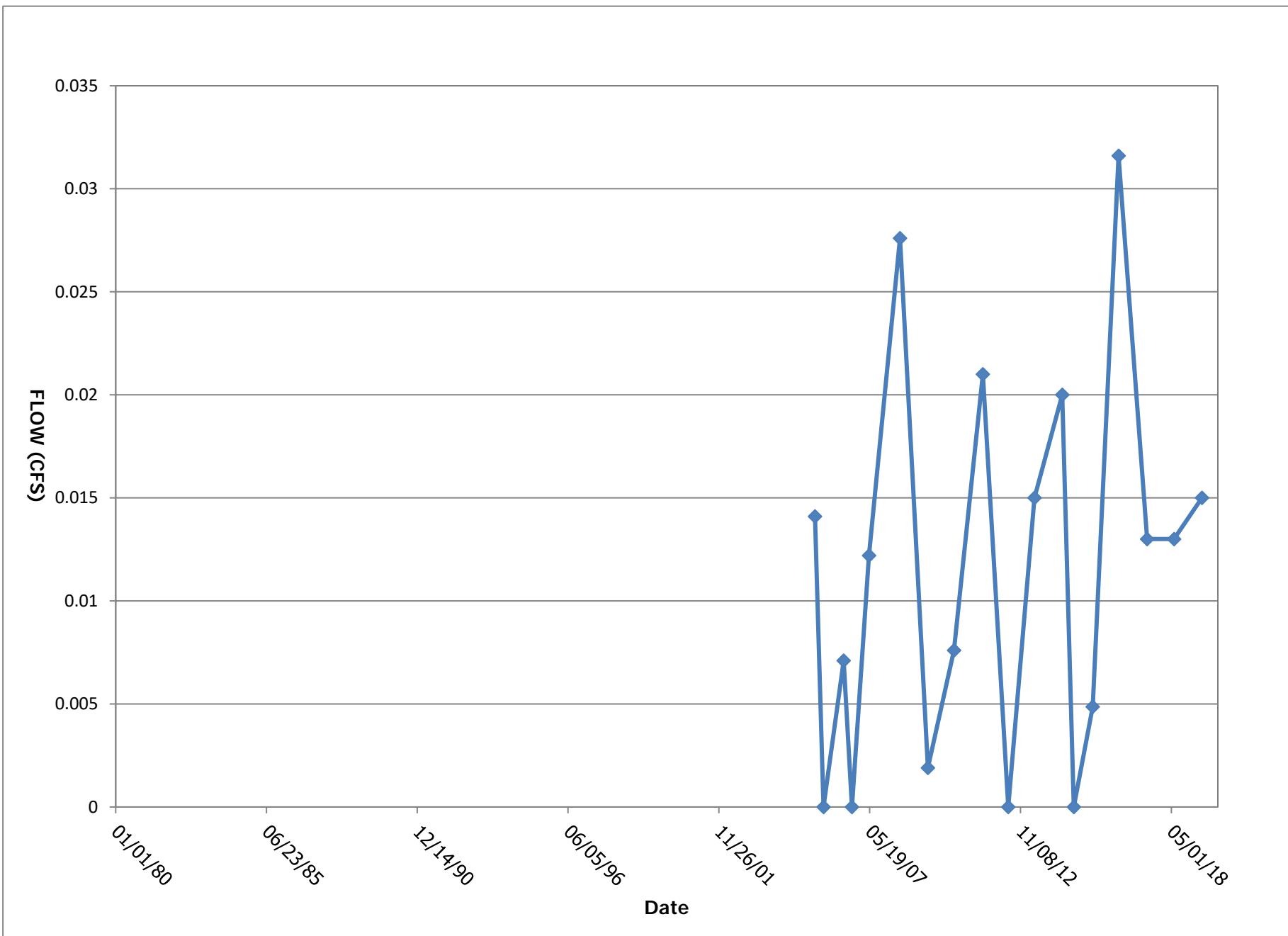
Period of Record Monitoring Summary

YSSPG2

Report 20: Page 1 of 5

loc_report_order Location Code Location Name					2 YSSPG2							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
21	3002 - AHR SW & SPR Long	Manganese	T	MG/L	5/23/2005	5/23/2005	1	1.02	1.02	1.02	1.02	0
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	5/23/2005	6/24/2015	7	0.2	0.2	0.2	0.2	3E-17
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	5/16/2014	6/24/2015	2	24	24	28	20	5.7
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	6/8/2006	6/29/2009	4	20	20	20	20	0
23	3002 - AHR SW & SPR Long	Nickel	TR	UG/L	5/23/2005	5/23/2005	1	40	40	40	40	0
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	5/23/2005	6/24/2015	7	0.077	0.05	0.24	0.05	0.072
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	5/23/2005	6/24/2015	7	0.1	0.03	0.6	0.02	0.2
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	5/23/2005	6/24/2015	7	0.01	0.01	0.01	0.01	0
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	5/23/2005	6/24/2015	7	8.1	8.2	8.5	7.8	0.26
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	5/23/2005	6/24/2015	7	5.5	5.4	6.5	4.6	0.66
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	5/13/2013	6/11/2019	7	0.3	0.2	0.5	0.2	0.1
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	6/8/2006	6/11/2019	9	0.2	0.2	0.5	0.2	0.1
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	5/23/2005	6/11/2019	8	0.3	0.2	1	0.1	0.3
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	5/16/2014	6/24/2015	2	0.1	0.1	0.1	0.1	0
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	6/8/2006	6/29/2009	4	0.08	0.08	0.1	0.05	0.03
31	3002 - AHR SW & SPR Long	Silver	TR	UG/L	5/23/2005	5/23/2005	1	0.3	0.3	0.3	0.3	0
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	5/23/2005	6/24/2015	7	41.4	37	60.6	31.1	10.7
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	5/23/2005	6/24/2015	7	0.44	0.42	0.62	0.33	0.1
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	5/23/2005	6/24/2015	7	1270	1250	1470	1130	119
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	5/23/2005	6/24/2015	7	0.02	0.02	0.04	0.02	0.008
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	5/16/2014	6/24/2015	2	0.03	0.03	0.04	0.02	0.01
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	6/8/2006	6/29/2009	4	0.02	0.02	0.02	0.02	0
37	3002 - AHR SW & SPR Long	Zinc	TR	MG/L	5/23/2005	5/23/2005	1	0.05	0.05	0.05	0.05	0
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	5/23/2005	6/24/2015	7	-1.2	-0.9	1.4	-5.5	2.1
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	5/23/2005	6/11/2019	14	2460	2400	2900	2140	236
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	5/23/2005	6/24/2015	7	2160	2130	2430	1990	156
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	5/23/2005	6/11/2019	14	9.1	5.5	24	5	6.4

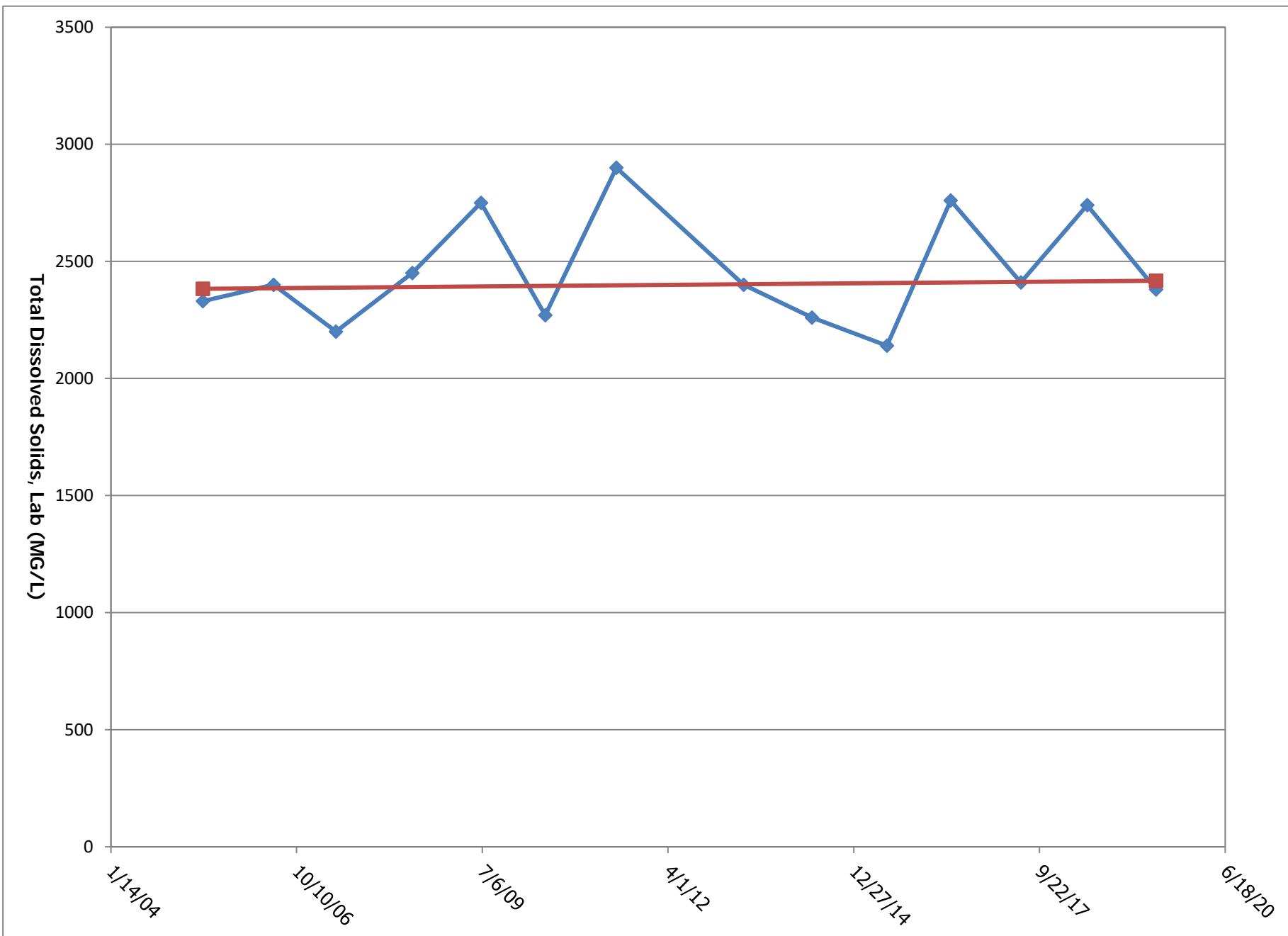
loc_report_order	2				
Location Code	YSSPG2				
sys_sample_code	3002_YSSPG2_06112019				
Site ID					
Date	6/11/2019				
report_order	Parameter	Fraction	Units	Detection	Result
42	Flow	N	GPM	Y	6.6
1	Specific Conductivity	N	UMHOS/CM	Y	2774
2	pH, Field	N	S.U.	Y	7.06
3	Temperature, Field	N	DEG-C	Y	11.3
18	Iron	TR	MG/L	N	0.2
21	Manganese	D	MG/L	Y	0.188
30	Selenium	D	UG/L	N	0.5
30	Selenium	PD	UG/L	N	0.5
30	Selenium	TR	UG/L	N	0.5
39	Total Dissolved Solid	N	MG/L	Y	2380
41	Solids, Total Suspended	N	MG/L	N	20



Period of Record Water Discharge Hydrograph

YSSPG2

Report 20: Page 4 of 5



Period of Record TDS Trend Plot

YSSPG2

Report 20: Page 5 of 5

		loc_report_order				3 YSSPG3						
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	9/21/2005	6/12/2019	20	10.32	1.95	86.85	0	19.52
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	9/21/2005	6/12/2019	16	3670	3665	6250	1767	1231
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	9/21/2005	6/12/2019	16	7.38	7.32	8.01	6.97	0.307
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	9/21/2005	6/6/2018	15	11.8	12	17.9	3.1	3.34
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	6/12/2019	6/12/2019	1	12.1	12.1	12.1	12.1	0
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	9/21/2005	6/2/2015	8	579	593	612	471	45.5
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	9/21/2005	6/2/2015	7	1	0.9	3	0.3	1
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	9/21/2005	6/2/2015	8	702	714	740	574	53.4
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	9/21/2005	6/2/2015	7	350	360	400	310	35
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	6/2/2015	6/2/2015	1	0.2	0.2	0.2	0.2	0
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	9/21/2005	6/30/2009	6	0.3	0.2	0.5	0.1	0.2
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	9/21/2005	6/2/2015	8	355	343	483	290	59.7
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	9/21/2005	6/2/2015	8	4	2	18	2	5.7
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	9/21/2005	6/2/2015	8	14.8	16.1	22	1	6.98
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	6/2/2015	6/2/2015	1	0.5	0.5	0.5	0.5	0
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	9/21/2005	6/30/2009	6	0.92	0.35	3	0.1	1.1
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	9/21/2005	6/2/2015	7	4240	3970	6120	2870	1090
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	6/2/2015	6/2/2015	1	17.7	17.7	17.7	17.7	0
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	9/21/2005	6/30/2009	6	3.6	3.4	6	1	1.7
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	9/21/2005	6/2/2015	7	2850	2470	4670	2130	871
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	9/21/2005	6/30/2009	6	0.587	0.235	1.69	0.1	0.674
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	9/21/2005	6/12/2019	15	0.363	0.11	1.64	0.02	0.456
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	6/2/2015	6/2/2015	1	0.1	0.1	0.1	0.1	0
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	9/21/2005	6/30/2009	6	0.68	0.4	1.9	0.1	0.72
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	9/21/2005	6/2/2015	8	498	435	842	310	173
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	6/25/2010	6/12/2019	5	0.21	0.201	0.41	0.03	0.161
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	9/21/2005	6/6/2018	10	0.5	0.58	0.89	0.01	0.29
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	9/21/2005	6/2/2015	10	0.2	0.2	0.2	0.2	3E-17
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	6/2/2015	6/2/2015	1	8	8	8	8	0
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	9/21/2005	6/30/2009	6	40	40	60	10	20
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	9/21/2005	6/2/2015	10	0.789	0.81	2.36	0.05	0.791
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	9/21/2005	6/2/2015	10	4.59	4.62	11	0.42	2.84

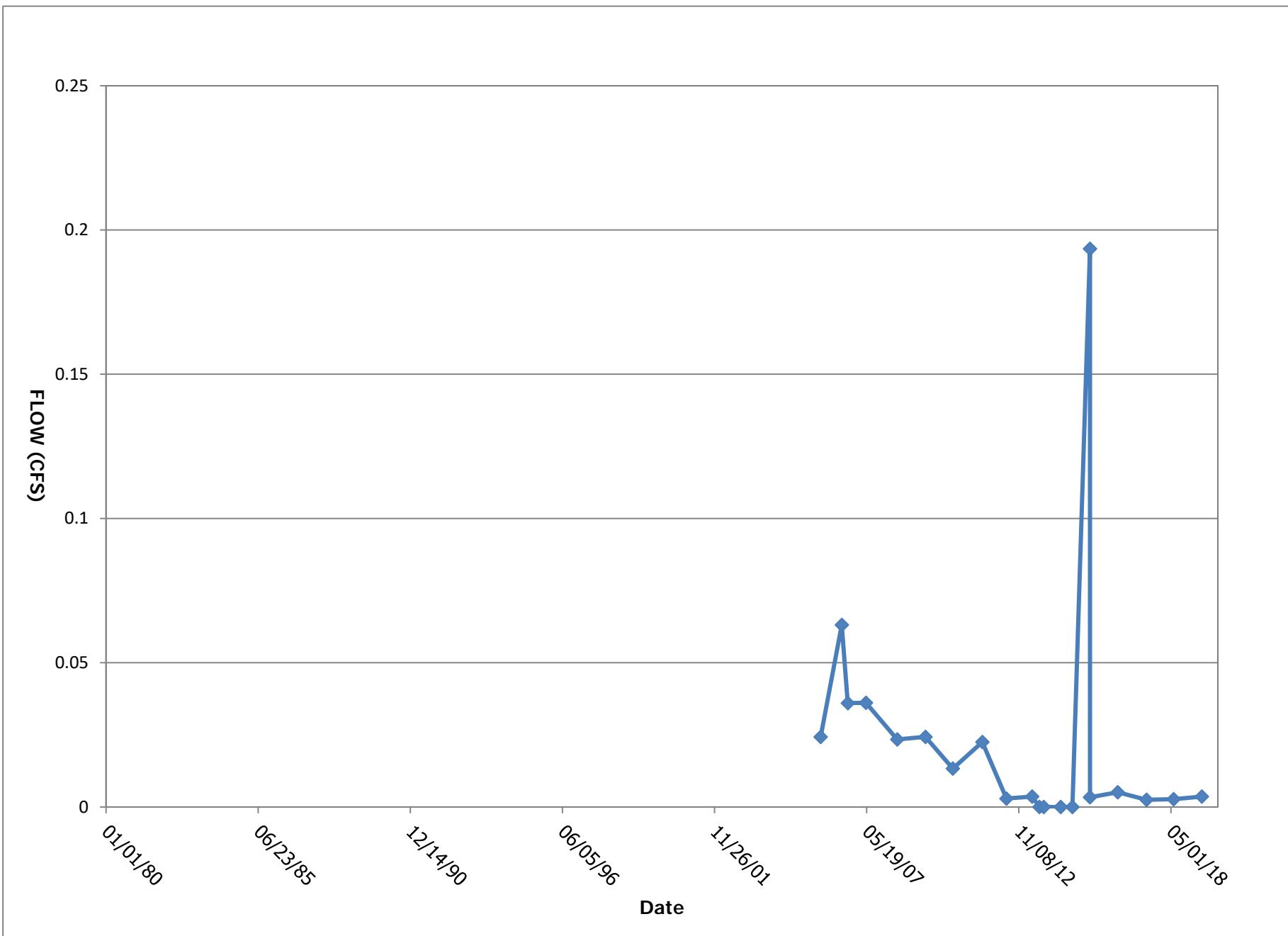
Period of Record Monitoring Summary

YSSPG3

Report 21: Page 1 of 5

loc_report_order Location Code Location Name					3 YSSPG3							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	9/21/2005	6/2/2015	10	0.03	0.02	0.08	0.01	0.02
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	9/21/2005	6/2/2015	7	8	8	8.3	7.8	0.18
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	9/21/2005	6/2/2015	8	12.7	12	19.6	9.3	3.32
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	7/18/2011	6/12/2019	8	11.8	4.5	57.7	0.3	19.4
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	9/21/2005	6/12/2019	11	6.85	7.5	15.6	0.1	6.23
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	5/2/2013	6/12/2019	6	11.1	1.05	51.8	0.3	20.5
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	6/2/2015	6/2/2015	1	0.05	0.05	0.05	0.05	0
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	9/21/2005	6/30/2009	6	0.2	0.1	0.3	0.05	0.1
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	9/21/2005	6/2/2015	8	189	176	297	120	56.1
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	9/21/2005	6/2/2015	7	1.51	1.44	1.9	1.14	0.263
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	9/21/2005	6/2/2015	10	2910	2330	5310	1890	1100
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	9/21/2005	6/2/2015	10	0.041	0.02	0.19	0.02	0.053
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	6/2/2015	6/2/2015	1	0.01	0.01	0.01	0.01	0
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	9/21/2005	6/30/2009	6	0.08	0.04	0.3	0.01	0.1
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	9/21/2005	6/2/2015	8	-3	-3.3	1.3	-7.8	2.9
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	9/21/2005	6/12/2019	15	3860	3760	6820	1460	1710
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	9/21/2005	6/2/2015	7	4200	3490	7380	3040	1500
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	9/21/2005	6/12/2019	15	15	8	50	5	15

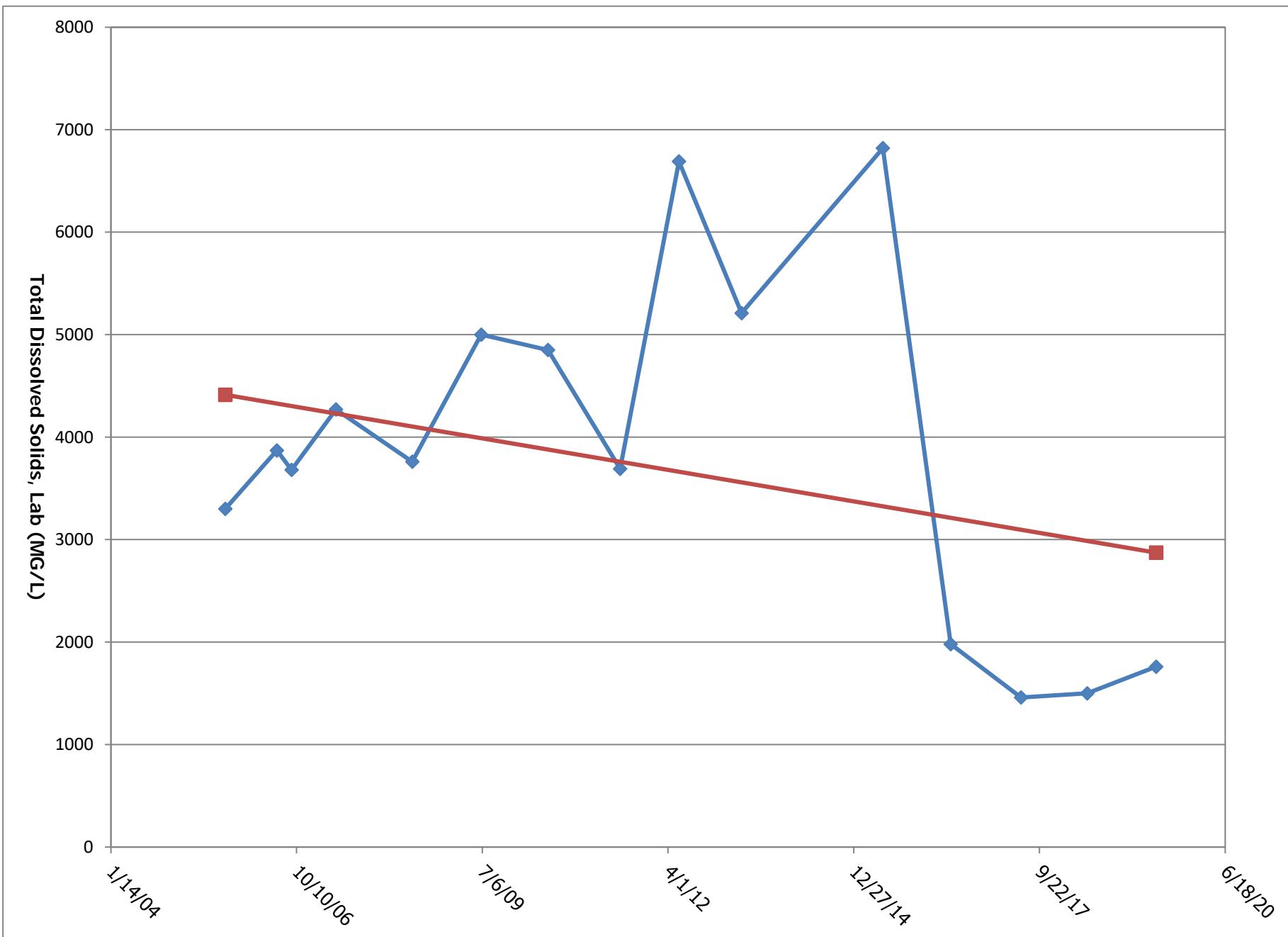
loc_report_order	3				
Location Code	YSSPG3				
sys_sample_code	3002_YSSPG3_06122019				
Site ID					
Date	6/12/2019				
report_order	Parameter	Fraction	Units	Detection	Result
42	Flow	N	GPM	Y	1.6
1	Specific Conductivity	N	UMHOS/CM	Y	2142
2	pH, Field	N	S.U.	Y	8.01
3	Temperature, Field	N	DEG-C	Y	12.1
18	Iron	TR	MG/L	Y	0.11
21	Manganese	D	MG/L	Y	0.201
30	Selenium	D	UG/L	Y	0.6
30	Selenium	PD	UG/L	Y	0.5
30	Selenium	TR	UG/L	Y	0.5
39	Total Dissolved Solid	N	MG/L	Y	1760
41	Solids, Total Suspended	N	MG/L	N	20



Period of Record Water Discharge Hydrograph

YSSPG3

Report 21: Page 4 of 5



Period of Record TDS Trend Plot

YSSPG3

Report 21: Page 5 of 5

		loc_report_order				4 YSSPG4						
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
42	3002 - AHR SW & SPR Long	Flow	N	GPM	6/26/2006	6/12/2019	17	69.664	86.9	187.5	1.71	55.617
1	3002 - AHR SW & SPR Long	Specific Conductivity, Field	N	UMHOS/CM	6/26/2006	6/12/2019	17	2543	2830	4060	2.7	1029
2	3002 - AHR SW & SPR Long	pH, Field	N	S.U.	6/26/2006	6/12/2019	17	7.68	7.71	8.28	6.71	0.516
3	3002 - AHR SW & SPR Long	Temperature, Field	N	C	6/26/2006	6/6/2018	16	13.7	14	21	5.9	3.92
3	3002 - AHR SW & SPR Long	Temperature, Field	N	DEG-C	6/12/2019	6/12/2019	1	9.1	9.1	9.1	9.1	0
4	3002 - AHR SW & SPR Long	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	6/26/2006	6/2/2015	11	469	456	547	404	45
6	3002 - AHR SW & SPR Long	Arsenic	TR	UG/L	6/26/2006	6/2/2015	8	0.7	0.5	2	0.4	0.6
7	3002 - AHR SW & SPR Long	Bicarbonate as HCO ₃	N	MG/L	6/26/2006	6/2/2015	11	569	556	668	493	54
8	3002 - AHR SW & SPR Long	Boron	D	UG/L	6/26/2006	6/2/2015	8	380	390	460	280	70
9	3002 - AHR SW & SPR Long	Cadmium	D	UG/L	5/13/2014	6/2/2015	3	0.2	0.2	0.2	0.2	3E-17
9	3002 - AHR SW & SPR Long	Cadmium	PD	UG/L	6/26/2006	6/30/2009	5	0.2	0.2	0.5	0.1	0.2
10	3002 - AHR SW & SPR Long	Calcium	D	MG/L	6/26/2006	6/2/2015	11	301	293	380	242	38
11	3002 - AHR SW & SPR Long	Carbonate as CO ₃	N	MG/L	6/26/2006	6/2/2015	11	3.1	2	14	2	3.6
12	3002 - AHR SW & SPR Long	Chloride	N	MG/L	6/26/2006	6/2/2015	11	13.3	12	19	8	3.53
13	3002 - AHR SW & SPR Long	Chromium	D	UG/L	5/13/2014	6/2/2015	3	0.8	1	1	0.5	0.3
13	3002 - AHR SW & SPR Long	Chromium	PD	UG/L	6/26/2006	6/30/2009	5	0.5	0.5	1	0.1	0.4
14	3002 - AHR SW & SPR Long	Specific Conductivity, Lab	N	UMHOS/CM	6/26/2006	6/2/2015	8	3020	3110	3470	2410	341
15	3002 - AHR SW & SPR Long	Copper	D	UG/L	5/13/2014	6/2/2015	3	3	4	4	1	2
15	3002 - AHR SW & SPR Long	Copper	PD	UG/L	6/26/2006	6/30/2009	5	4	3.5	6.3	3	1.4
17	3002 - AHR SW & SPR Long	Hardness	N	MG/L	6/26/2006	6/2/2015	8	1930	1820	2840	1550	404
18	3002 - AHR SW & SPR Long	Iron	T	MG/L	6/26/2006	6/30/2009	5	0.13	0.12	0.28	0.04	0.099
18	3002 - AHR SW & SPR Long	Iron	TR	MG/L	6/26/2006	6/12/2019	18	0.12	0.095	0.34	0.04	0.095
19	3002 - AHR SW & SPR Long	Lead	D	UG/L	5/13/2014	6/2/2015	3	0.2	0.2	0.2	0.1	0.06
19	3002 - AHR SW & SPR Long	Lead	PD	UG/L	6/26/2006	6/30/2009	5	0.46	0.2	1.4	0.2	0.53
20	3002 - AHR SW & SPR Long	Magnesium	D	MG/L	6/26/2006	6/2/2015	11	272	251	459	212	67.7
21	3002 - AHR SW & SPR Long	Manganese	D	MG/L	6/25/2010	6/12/2019	7	0.674	0.46	1.46	0.24	0.444
21	3002 - AHR SW & SPR Long	Manganese	PD	MG/L	6/26/2006	6/6/2018	11	0.809	0.63	1.58	0.22	0.478
22	3002 - AHR SW & SPR Long	Mercury	T	UG/L	6/26/2006	6/2/2015	13	0.3	0.2	2	0.2	0.5
23	3002 - AHR SW & SPR Long	Nickel	D	UG/L	5/13/2014	6/2/2015	3	19	20	20	16	2.3
23	3002 - AHR SW & SPR Long	Nickel	PD	UG/L	6/26/2006	6/30/2009	5	30	30	60	20	20
24	3002 - AHR SW & SPR Long	Ammonia Nitrogen	N	MG/L	6/26/2006	6/2/2015	13	0.306	0.19	1.05	0.05	0.304
26	3002 - AHR SW & SPR Long	Nitrate Nitrogen	N	MG/L	6/26/2006	6/2/2015	13	0.891	0.63	3.57	0.22	0.909

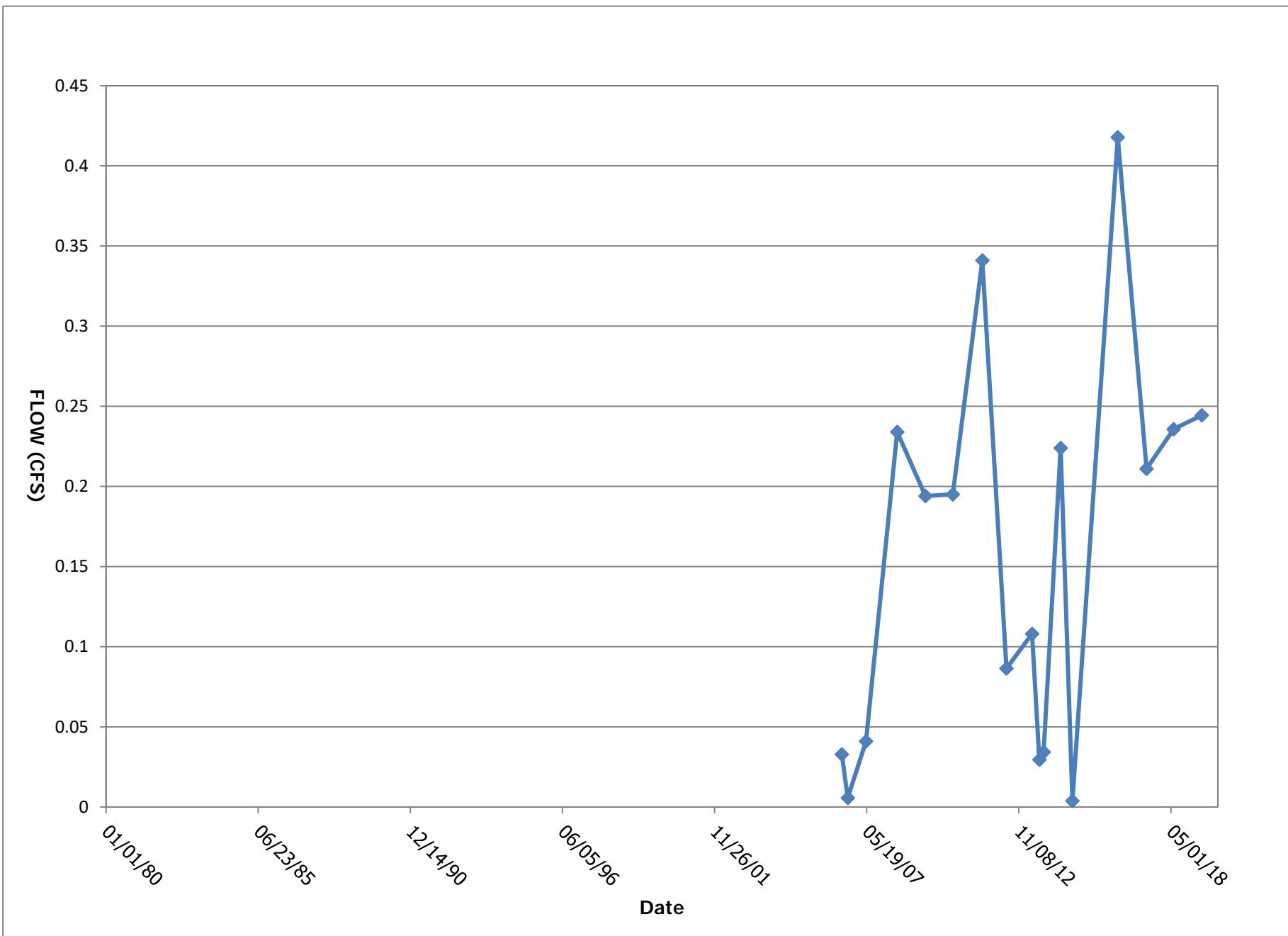
Period of Record Monitoring Summary

YSSPG4

Report 22: Page 1 of 5

loc_report_order Location Code Location Name					4 YSSPG4							
report_order	Type	Parameter	Fraction	Units	Start Date	End Date	Sample Count	Average	Median	Maximum	Minimum	Standard Deviation
27	3002 - AHR SW & SPR Long	Nitrite Nitrogen	N	MG/L	6/26/2006	6/2/2015	13	0.02	0.01	0.06	0.01	0.02
28	3002 - AHR SW & SPR Long	pH, Lab	N	S.U.	6/26/2006	6/2/2015	8	8.1	8.2	8.3	7.9	0.13
29	3002 - AHR SW & SPR Long	Potassium	D	MG/L	6/26/2006	6/2/2015	11	10.6	9.7	14	8.5	1.81
30	3002 - AHR SW & SPR Long	Selenium	D	UG/L	7/18/2011	6/12/2019	12	1.1	0.8	5.6	0.2	1.5
30	3002 - AHR SW & SPR Long	Selenium	PD	UG/L	6/26/2006	6/12/2019	12	1.82	0.5	11.1	0.2	3.27
30	3002 - AHR SW & SPR Long	Selenium	TR	UG/L	5/2/2013	6/12/2019	10	1.1	0.65	5.1	0.1	1.5
31	3002 - AHR SW & SPR Long	Silver	D	UG/L	5/13/2014	6/2/2015	3	0.08	0.1	0.1	0.05	0.03
31	3002 - AHR SW & SPR Long	Silver	PD	UG/L	6/26/2006	6/30/2009	5	0.1	0.1	0.3	0.05	0.1
32	3002 - AHR SW & SPR Long	Sodium	D	MG/L	6/26/2006	6/2/2015	11	97	93.8	167	72	25.3
33	3002 - AHR SW & SPR Long	Sodium Adsorption Ratio	N	RATIO	6/26/2006	6/2/2015	8	0.994	0.965	1.38	0.8	0.17
34	3002 - AHR SW & SPR Long	Sulfates	N	MG/L	6/26/2006	6/2/2015	13	1610	1520	2670	1200	376
35	3002 - AHR SW & SPR Long	Sulfide	N	MG/L	6/26/2006	6/2/2015	13	0.03	0.02	0.08	0.02	0.02
37	3002 - AHR SW & SPR Long	Zinc	D	MG/L	5/13/2014	6/2/2015	3	0.02	0.02	0.02	0.01	0.006
37	3002 - AHR SW & SPR Long	Zinc	PD	MG/L	6/26/2006	6/30/2009	5	0.02	0.02	0.02	0.02	0
38	3002 - AHR SW & SPR Long	Cation / Anion Balance	N	%	6/26/2006	6/2/2015	11	-2.3	-2.2	1.1	-8.3	3.1
39	3002 - AHR SW & SPR Long	Total Dissolved Solids, Lab	N	MG/L	6/26/2006	6/12/2019	18	2740	2670	4280	2190	479
40	3002 - AHR SW & SPR Long	Total Dissolved Solids (Calculated)	N	MG/L	6/26/2006	6/2/2015	10	2660	2560	3980	2210	523
41	3002 - AHR SW & SPR Long	Solids, Total Suspended	N	MG/L	6/26/2006	6/12/2019	18	10	5	44	5	11

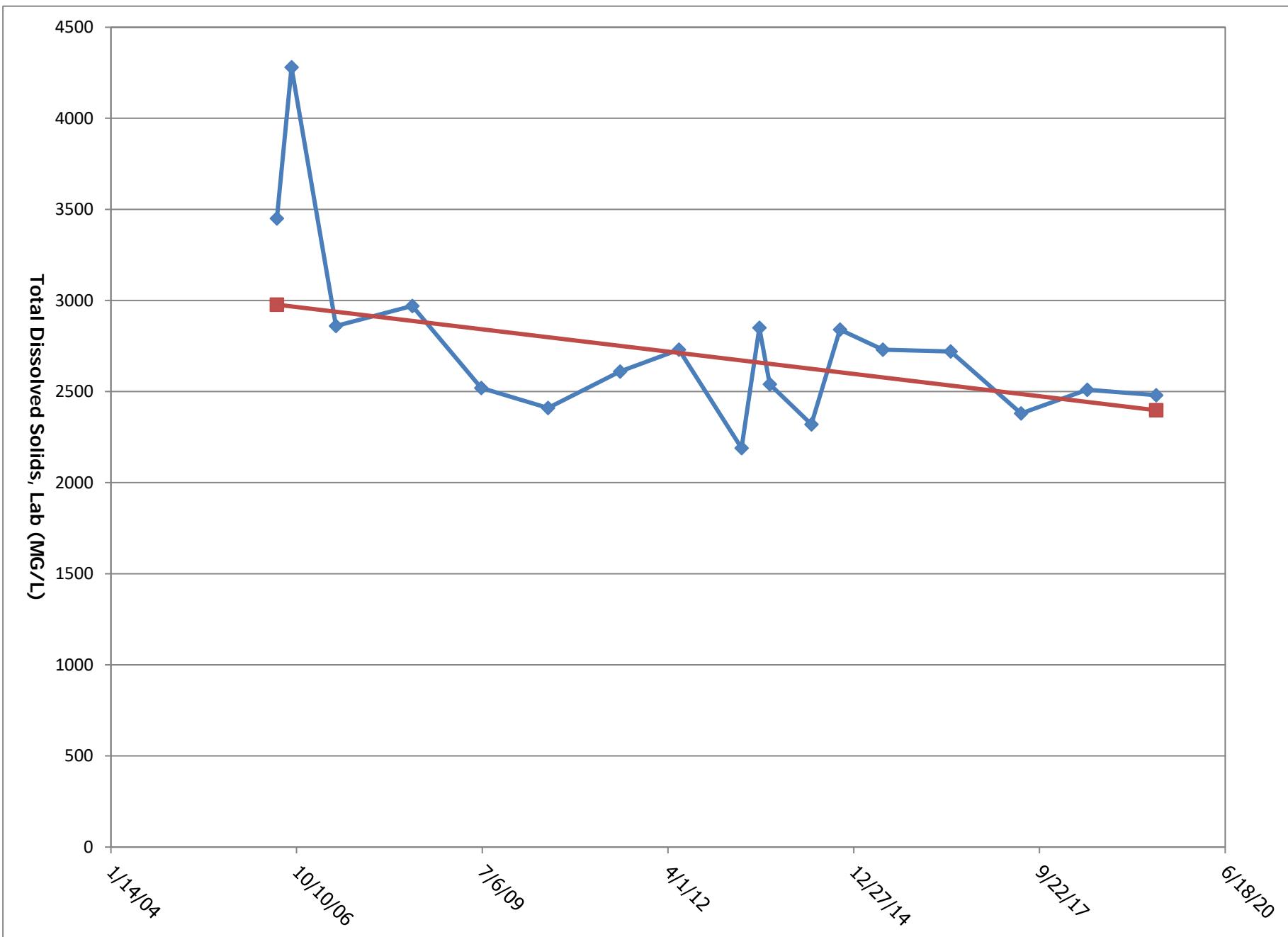
loc_report_order	4				
Location Code	YSSPG4				
sys_sample_code	3002_YSSPG4_06122019				
Site ID					
Date	6/12/2019				
report_order	Parameter	Fraction	Units	Detection	Result
42	Flow	N	GPM	Y	109.7
1	Specific Conductivity	N	UMHOS/CM	Y	2894
2	pH, Field	N	S.U.	Y	6.81
3	Temperature, Field	N	DEG-C	Y	9.1
18	Iron	TR	MG/L	N	0.2
21	Manganese	D	MG/L	Y	1.46
30	Selenium	D	UG/L	Y	0.5
30	Selenium	PD	UG/L	Y	0.5
30	Selenium	TR	UG/L	Y	0.5
39	Total Dissolved Solid	N	MG/L	Y	2480
41	Solids, Total Suspended	N	MG/L	N	20



Period of Record Water Discharge Hydrograph

YSSPG4

Report 22: Page 4 of 5



Period of Record TDS Trend Plot

YSSPG4