

Williams Fork Mine



2024 Annual Hydrology Report

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To: Colorado Division of Reclamation, Mining, and Safety

BY: Moffat County Mining, LLC

2024 ANNUAL HYDROLOGY REPORT
Permit No. C-81-044

Submitted to:

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Submitted by:

Moffat County Mining
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2024 ANNUAL HYDROLOGY REPORT

1.0 INTRODUCTION

The following Annual Hydrology Report (AHR) presents hydrologic monitoring data from the Williams Fork underground mine sites near Craig, Colorado for the 2024 calendar year. Site locations are described below. This AHR is provided in fulfillment of reporting requirements under the Colorado State Division of Reclamation, Mining and Safety (DRMS), Permit No. C-81-044. All references to "2024" in this report refer to the 2024 calendar year (January 1, 2024 through December 31, 2024). Monitoring results for prior calendar years (1983 through 2023) are presented in previous AHRs, although selected historical data (period of record – POR) are summarized in some of the tables and figures within this AHR.

Following a discussion of Site Location and Background, this AHR provides a section on the 2024 Hydrologic Monitoring Program, which is further divided into the following subsections:

- 1) Groundwater Monitoring
- 2) Surface Water Monitoring

This is followed by the Summary and Conclusions Section. Tables, Figures, and back-up documentation are located in the tabbed sections at the back of this AHR.

2.0 SITE LOCATION AND BACKGROUND

Williams Fork No. 5 and Eagle No. 6 Mines are underground coal mines located approximately seven miles south of Craig, Colorado, on State Highway 13. The mine sites, and adjacent area lie along the northern foot of the Williams Fork Mountains, which trend east to west. The elevation of the permit area ranges from a low of approximately 6,130 feet in the Big Bottom area, to a high of about 7,400 feet in the Williams Fork Mountains. The entire operation is located in Moffat County, Colorado. The general location of the site is shown on Figure 1.

There are two (2) major northwestern Colorado Rivers, which intersect the permit area. These are: 1) the Yampa River and 2) the Williams Fork River. The Yampa River runs from north to south through the permit area, while the Williams Fork River runs from south to north and intersects the Yampa River just north of the mine facilities area. The northern portion of the permit area is dominated by the Big Bottom alluvium, while the southern and eastern portions of the permit area are dominated by the Williams Fork Mountains and the riverbeds of the Yampa and Williams Fork Rivers.

The Eagle Mine sites are located in an area, which has been historically mined by surface and underground mining. The earliest records of mining indicate that underground mining began in this area in the late 1920's

and early 1930's, while surface strip mining began around 1975. The major mines which have operated in the past are: 1) Wise Hill (1,2,3,4), Williams Fork Strip (1,2,3), and Trapper Strip. The Trapper Strip Mine began operations in 1976 and has continued to date.

Underground mining began at the Eagle No. 5 Mine in 1972, under a subsidiary of the Zigler Coal Co. The Cyprus Empire Corporation (CEC), a subsidiary of the Cyprus Coal Company, subsequently acquired the mines from Zigler in 1982, and began operating under an approved Colorado Mine Land Reclamation Board permit in August, 1983. In 1999, CEC was acquired by RAG EC. In April 2004, RAG EC was acquired by Peabody Energy, with the mine owned by Peabody's subsidiary, BTU, and the mine name changing to BTU Empire Corporation (BTU EC). In December 2009, the mine name was changed to William's Fork Mine (WFM)

Hydrologic monitoring has been conducted at the mine site since 1980, primarily by CEC/RAG EC/BTU EC/WFM personnel. A private company (Two Pines Inc.) has also been contracted to assist with some of the hydrologic monitoring over the years. Water quality samples are currently analyzed by ACZ Laboratories, Inc., of Steamboat Springs, Colorado, an USEPA certified laboratory.

The Eagle No. 5 Mine, mining the "F" Coal Seam of the Cretaceous Age Williams Fork Formation, originally utilized room-and-pillar mining methods until 1985, when economics dictated a change to the longwall mining method. The aerial extent of the underground workings in the Eagle No. 5 Mine was approximately 2,040 acres in early 1990, when the No. 5 mine was sealed and mining moved to the Eagle No. 6 Mine. Full production in the Eagle No. 6 Mine began in late 1990, with coal extraction from the underlying "E" Coal Seam of the Williams Fork Formation. Coal mined at the No. 5 and No. 6 Mines was loaded on unit trains at the mine facility area and hauled by rail to market. The 5A portals and a short section of the No. 5 Mine mains were used for access to the Eagle No. 6 Mine. The aerial extent of the underground workings in the Eagle No. 6 Mine (underlying portions of the No. 5 Mine) was approximately 640 acres at in late 1995, when mining ceased. The mines were subsequently in temporary cessation (TC), until Williams Fork re-activated water monitoring during the second quarter of 2006, in anticipation of WFM considering options for future re-activation of the mine site, and because a bond release application was also being contemplated for the Utah Tract and Williams Fork Strip Pit portions of the mine property.

During the third quarter of 2013, the mine reverted back to TC monitoring (discussed further below). In July 2013 all power was shut down on the mine property. Within a month or so of the shut-down, the site substation was partially dismantled.

In May 2014, copper thieves were discovered on site and apprehended by the Moffat County Sheriff's department. The thieves' activities had resulted in \$500,000 to one million dollars-worth of damage between the main warehouse and the multi-services building on site. Security cameras were subsequently installed on site, and a security company was hired to inspect the site daily.

In November 2016, WFM requested deactivation of TC status, in anticipation of upcoming reclamation of

the site. Reclamation continued through 2023, the final seeding to take place in the fall of 2023.

3.0 2024 HYDROLOGIC MONITORING PROGRAM

The WFM hydrologic monitoring program includes data collected specifically to meet requirements of the CDRMS, as well as data collected to meet the requirements of the Colorado Wastewater Discharge Permit System (CDPS). Note that “CDPS” parameters were formerly referred to as National Pollutant Discharge Elimination System (NPDES) parameters in prior AHRs. Specific monitoring locations are illustrated on Figure 2.

In June 2001, Technical Revision TR01-32 was approved, allowing suspension of many DRMS hydrologic monitoring requirements while the mine was in temporary cessation (TC). In 2005 BTU EC began to examine options for future re-activation of the mine site. In view of these considerations, BTU EC reverted back to the active monitoring plan (pages 1 – 14 of Exhibit 29), during the second quarter of 2006. In the third quarter of 2013 the mine reverted back to temporary cessation monitoring, as it was decided that there were no short term plans to reactivate mining.

WFM personnel is responsible for adhering to the monitoring requirements of its CDPS permit. Note that data acquisition required under the TC monitoring plan, only include sites:

- Bedrock well TR-7A,
- Alluvial well AVF-5,
- Surface water sites (Williams Fork) WF-1, WF-2,
- CDPS (Permit CO-0034142) sites:
 - 1) Mine discharge No. 5 Mine sump [CDPS Outfall 003, a.k.a. site 5D];
 - 2) Mine discharge 7 North Angle Well Bore [CDPS Outfall 024, a.k.a. site 9P3], and
 - 3) Spring - No. 1 Strip Pit [CDPS Outfall 022, a.k.a. site 1SP].

In 2016 TC was lifted and reclamation of the mine site began.

Table 1A presents a summary of hydrologic monitoring requirements for these sites under TC (modified from TR01-32, Appendix D of the TC monitoring plan). Table 1B outlines monitoring and sites required when off TC. Water quality monitoring includes field parameters (Table 2), surface water quality parameters under TC (Table 3A), and off TC (Table 3B). CDPS parameters (Table 4) are the monitoring requirements page from CDPHE CDPS permit CO-0042142.

3.1 GROUNDWATER MONITORING

3.1.1 BEDROCK WELLS

Three sandstone aquifers are found beneath the subject site. In ascending order, they are: Trout Creek

Sandstone, Middle Sandstone, and Twentymile Sandstone. The Eagle No. 5 and Eagle No. 6 Mines are located between the Trout Creek Sandstone and the Middle Sandstone.

Water Levels

Trout Creek Sandstone: Water level measurements in the Trout Creek Sandstone No. 5 Mine well are shown on Figure 3. Historical annual water level fluctuations of 20 to 200 feet have been observed at this well but no seasonal pattern is evident. Note that recent water levels (2006 to date) were lower than levels measured prior to TC. This drop is apparently from consistent subsurface dewatering with the No. 5 mine pump. Levels remained relatively consistent from 2006 through 2013 with some variation due to periodic down time from malfunctions of the No. 5 mine pump. During the last quarter of 2012, the pump failed, resulting in no discharge. The pump was replaced in the spring of 2012, but stopped operating in July 2013 when power was removed from the site. The higher water level for No 5 starting in 2016 indicates how the water level had risen without pump dewatering over the years. In September of 2020 reclamation efforts made it impossible to get a reading during the 4th quarter due to well obstruction. Water level readings resumed in 2021. The 5 Mine Well water level continues to slowly rise as the mine fills with water. The former Okie Plaza Trout Creek well was abandoned in June 1994 as mining advanced through its location.

Middle Sandstone: The water levels in the Middle Sandstone formation as measured in wells TR-4, TR-7a, 81-01, 83-01, 83-02, and 83-03. Historically these show fluctuations which are apparently related to dewatering and past subsidence associated with Mines 5 and 6. Wells TR-4 water levels appear to be slightly rising since 2008 (Fig. 4). Levels in TR-7A (Fig. 5) have risen about 50 feet since 2013. There was one outlier in the spring of 2020 that dropped the well level by 40 feet but the well has since returned to the prior level. It is unclear if there was a reading error or what caused the drop. The water level has remained steady through 2024. 81-01 is relatively consistent with that seen prior to TC (Fig. 6). The water levels in 83-01 (Fig. 7) have been on the rise since monitoring was reactivated in 2006, with consistent seasonal fluctuations. The water levels in well 83-02 (Fig. 8) are consistent with those found since monitoring was reactivated in 2006. The water level decline of about 150 feet from 1987 to mid 1990 in well 83-02 was determined to be related to mine dewatering as Mine 5 workings approached the location of the well. The more abrupt 200 foot decline in water levels observed in 1990 is thought to be a drawdown response due to subsidence as it is located only a few hundred feet horizontally from an F seam longwall panel which was mined in a similar time frame. The water level stabilized until 1994 when it recovered to the 1983 levels. Water levels in 83-02 have been stable since 2006.

Wells TR-4 and 83-03 are located at greater distance horizontally from the active operations for mines 5 and 6. Water levels in Well TR-4 (Fig. 4) historically appear to be related to the fluctuations observed on all three of the down gradient Middle Sandstone Wells: 81-01, 83-01 and 83-02. The water level decline in TR-4 prior to 1984 and the subsequent recovery up to 1988 closely parallels the trends observed in Wells 81-01 and 83-01. The decline during the first part of 1991 also parallels the trend in these two wells. However, the

rapid decline during the last part of 1989 and the first part of 1990 appears to follow the trend observed in Well 83-02 although the magnitude of decline is considerably less. In 2024, Well 83-02, was unable to be sampled due to obstruction in the pipe. Unusually large fluctuations for TR-4 for 1999 through 2000 have been attributed to a faulty pressurized line system.

Well 83-03 (Fig.9) is the Middle Sandstone monitoring well located furthest (more than 1.5 miles) from active underground operations for Mines 5 and 6. The overall trend from 1984 through 2000 and again in 2006 to date suggests a similar trend to the other Middle Sandstone wells. Well 83-03 has remained steady throughout the history of the well. It is located along the Yampa River and is artesian. The pressure at the well has consistently measured between 32 PSI and 36 PSI, until last year, 2023. The hydrant is leaking and a pressure reading is not stable. The water levels in the Middle Sandstone wells had either recovered or stabilized in 1995. Note that in early 2008 and 2009 there were drops in the water level, after which water levels stabilized and started to rise again in 2012. The reason for the drops is unclear. A larger drop of over 125 feet occurred after the TC ended in 2017 and monitoring resumed, the water has since stabilized and is on a steady mild incline.

Historically, the groundwater gradient in the Middle Sandstone in the vicinity of the mining operation generally decreases from the southeast to the northwest.

Twentymile Sandstone: Monitoring results to date (Fig. 10) showed no apparent change in the water levels in the Twentymile Sandstone that could be attributable to mining activities. Wells 259 and 84-01 remained relatively stable. 9 Mine well has exhibited a stable level since the beginning of monitoring. In 2024, 9 Mine Well was unable to be sampled due to obstruction in casing.

Historically, the groundwater gradient in the Middle Sandstone in the vicinity of the mining operation generally decreases from the southeast to the northwest.

Water Quality

Trout Creek Sandstone: The field parameter data for No. 5 Mine well does not suggest any significant mining related water quality impacts to the Trout Creek Sandstone. The water quality data for this Trout Creek Sandstone well is summarized on Table 5. A plot of field conductivity measurements is presented in Figure 11. Note that conductivity values for the No. 5 Mine well following the 2006 removal from TC appear elevated compared to earlier historical values. This may be related to consistent pumping at this site.

Note that the No. 5 dewatering pump was damaged during the fourth quarter of 2010 and was removed and replaced with another pump in June 2012 when the area was dry enough to bring in a crane. In July 2013 all power was removed from the facility, and pumping ceased.

Middle Sandstone: The field parameter data for the three Middle Sandstone wells (TR-4, TR-7A, 81-01) was reviewed. Water quality data are summarized in Tables 6 through 11. Plots of field conductivity for these Middle Sandstone Wells are presented in Figure 12. The conductivity measurements recorded in wells TR-7A , TR-4, and 81-01 remain stable as compared to recent historic values. Note that wells TR-4 and 81-01 exhibited elevated conductivity values after monitoring was re-initiated in 2006 when removed from TC. The reason for that effect is unknown. Since 2022 TR-4 has shown inconsistent conductivity and water level. The well is damaged from freeze/thaw cycles, making sampling consistency difficult.

In 2024 the wells TR-7A and TR-4 are consistent with each other at around the historical average. Historically, all three wells have shown a reduction in concentrations of iron.

Twentymile Sandstone: The recent field parameter data for the Twentymile Sandstone well 259, does not suggest a significant impact or trend. Figure 13 shows historical conductivity data. The 9 Mine well exhibited a rise in conductivity in 2010, appeared to stabilize in mid-2011 and went up again in 2016 after TC but has since stabilized and is on a mild downward trend. Water quality data for these Twentymile Sandstone wells are summarized in Tables 12 through 14. Conductivity values have stabilized at 259, since 2020. Since 2022, no data was collected at 9 Mine Well due to obstruction in well.

In summary, conductivity values stabilized or dropped since mining and pumping have ceased in the Trout Creek and Middle Sandstones. Typical seasonal fluctuations in conductivity exist, but are consistent. The overall water quality of all three aquifers indicate no obvious adverse impacts related to Mines 5 and 6.

3.1.2 MINE WATER DISCHARGE

The 7 North Angle (7NA) well site (associated with CDPS Outfall 024, a.k.a. site 9P3 by DRMS) was a mine dewatering well site that would eventually discharge into the Williams Fork River. The Eagle No. 5 Mine sump discharge is CDPS Outfall 003, a.k.a. site 5D. It is also a mine dewatering pump. Under TC, monitoring of these sites remains the same as in the active mining monitoring plan, however 9P3 has not discharged since 2001, and no near future discharge is anticipated.

Site 5D has not discharged since about July 2013, when power was removed from the site. No near future

discharge is anticipated from this site either. Please consult prior AHRs for historical data.

There was no active pumping performed at the mine since July 2013. A plot of the measured discharge for this point is presented in Figure 14. Figure 15 is a historical monthly tabulation of flow measurements.

3.1.3 ALLUVIAL WELLS

Under TC, water data in the Williams Fork River Alluvium is monitored via alluvial well AVF-5, which is located adjacent to the underground discharge sediment ponds area (See Figure 2). Under TC, AVF-5 is measured for water level and field parameters on an annual basis (between July 20th and August 30th) concurrent with the Williams Fork surface water sampling (site WF-1). No water quality analyses were required for AVF-5 under TC.

Out of TC, alluvial wells AVF-3, AVF-5, and AVF-6 require quarterly water quality monitoring (See Table 1B). These wells are located in the general area of the loadout facilities and underground discharge sediment ponds. Historically, groundwater levels in the alluvium have remained fairly regular, with normal seasonal fluctuations, apparently related to changes in river levels. POR groundwater levels are plotted in Figure 16. The data indicates no impact on alluvial water levels related to mining.

Field parameter data for these alluvial wells are presented in Tables 15 through 17. POR water quality data is provided in Tables 15A through 17A. A plot of field electric conductivity versus time is presented in Figure 17. There has been no conclusive evidence of seasonal variation of water quality in the alluvium. Overall, over the past 5 years, the wells show conductivity levels within the historic readings or a slightly downward trend.

3.2 SURFACE WATER MONITORING

3.2.1 Rivers

There are two rivers in the vicinity of the mine site. The Yampa River flows in a southeasterly direction across the mine site. The Yampa River drains most of the northwest corner of Colorado and part of south-central Wyoming. The second river is the Williams Fork, which is a major tributary of the Yampa River. The Williams Fork River joins the Yampa River on the mine property. Monitoring data is collected for the Williams Fork River. The Williams Fork River gaging station (WF-2) is near the confluence with the Yampa River, downstream of the Eagle No. 5 Mine discharge. The staff gage (WF-1) is located upstream of the mine discharge points. WF-2 is also monitored concurrent with WF-1.

The flow data for WF-2 was historically provided by the United States Geologic Survey (USGS) via one gaging station and one staff gage for collection of Williams Fork River flow data (former site 09249750). however, their monitoring of the Williams Fork stations was discontinued in 2001. In 2010 the State Division of Water Resources (Office of State Engineer) reactivated the site. Data for the former USGS site can be found on the State Water Resources website under station No. WMFKMHCO. A copy of their 2024 daily

average flow data is provided at the back of this AHR under Support Data.

Historically, comparisons between up gradient site WF-1, and down gradient site WF-2, have not show any stream depletion impacts from mine dewatering. Summaries of WF-1 and WF-2 water quality data are presented in Tables 18 through 19. POR data is provided in Tables 18A and 19A, respectively. A plot of upstream and downstream dissolved solids measurements for the river is presented in Figure 18. Water quality data does not show any significant variation from expected values. The comparisons of data from the upstream and downstream station on the Williams Fork River indicate that there is no detectable effect of mining on river water quality. As expected, dissolved solids decrease with increasing flow rate in the rivers, due to dilution from runoff.

3.2.2 Springs

There is one active spring on the mine site area, known as the No. 1 Strip Pit Discharge, or 1SP. There are a few other ephemeral springs and local permanent "damp spots" in the area; however, their combined flow is normally less than 5-10 gpm, and therefore are not significant. The 1SP Discharge is a CDPS monitoring point (Outfall 022). There is no sediment pond associated with this spring. Spring water runs down a narrow path through a vegetative filter, drops down onto an isolated sand bar, and during the spring discharges directly to the Williams Fork River. The POR discharges for the 1SP are presented in Figure 19. 2024 discharge data is presented in Figure 20. The site flows sporadically during the spring. The discharge typically begins in March during the spring melt and is generally dry by the end of June. 1SP does not typically discharge from July through March.

Table 20 provides 2024 data for this site, while Table 20A provides POR data. A plot of POR total dissolved solids for 1SP is presented in Figure 21, and POR iron concentrations are presented on Figure 22. Figure 21 indicates TDS concentrations spiked in 2023 and have trended down in to the historical range this year. Figure 22 illustrates the variable nature of total recoverable iron concentrations in 1SP discharge. Since 2002 there has been slight general upward trend in iron concentrations, however these levels are still within historic ranges seen for this site. The iron trends seasonally from lower concentrations to higher concentrations We will continue to monitor this trend.

3.2.3 Ponds

There was no recorded discharge from any on-site sediment ponds in 2024.

4.0 SUMMARY AND CONCLUSIONS

The subject mine site ceased active mining operations in 1995, thus total mined acreage has not changed since then. The site went in and out of Temporary Cessation (TC) until 2016 when it was removed from TC to commence final reclamation. The site was taken off TC in November 2016 for reclamation and will continue until further notice. DRMS will be notified of our intentions well in advance.

No significant, unpredicted, or adverse environmental impacts were noted during hydrologic monitoring for 2024. All environmental precautions have been taken to a max extent during the reclamation process. BMP are being followed. During 2018 most of the major structures were demolished and removed from site. Final grading started in 2019 and reclamation grading was finalized in 2022 and the final seeding took place in the fall of 2023.

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TABLE 1A
SUMMARY OF HYDROLOGIC MONITORING STATIONS UNDER TEMPORARY CESSATION

BEDROCK WELLS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	DEPTH (ft)	SCREEN INTERVAL (ft)	FREQUENCY OF MEASUREMENT*			COMMENTS
					WATER LEVEL	FIELD PARAMETER**	FULL QUALITY**	
TR-7A	Middle SS	6,244.30	740	624-725	A	A	NA	

ALLUVIAL WELLS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	DEPTH (ft)	FREQUENCY OF MEASUREMENT*			COMMENTS
				WATER LEVEL	FIELD PARAMETER**	FULL QUALITY**	
AVF-5	Wms. Fk. Alluvial	6,132.59	16	A	A	NA	

MINE DISCHARGES

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	FREQUENCY OF MEASUREMENT*				COMMENTS
			WATER LEVEL	FIELD PARAMETER**	CDPS	FULL QUALITY**	
No. 5 Mine Sump	F Seam	6,300-5,600	W	W	Outfall 003 (5D)	S/Q	No Discharge in 2014
7 N. Angle Sump	F Seam		W	W	Outfall 024 (9P3)	S/Q	No Discharge in 2014

SURFACE WATERS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	FREQUENCY OF MEASUREMENT*				COMMENTS
			WATER LEVEL	FIELD PARAMETER**	CDPS	FULL QUALITY**	
WF-1	Wms. Fk. Upstrm	6,142.39	A	A	NA	A	
WF-2	Wms. Fk. Dwnstrm	6,119.87	A	A	NA	A	

SPRINGS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	FREQUENCY OF MEASUREMENT*				COMMENTS
			WATER LEVEL	FIELD PARAMETER**	CDPS	FULL QUALITY**	
No. 1 Strip Pit	Spoils	6,120.00	W	W	Outfall 022 (1SP)	S/Q	Limited discharge in 2014

* W=Weekly, S=Semi-Monthly, M=Monthly, Q=Quarterly, A=Annually
** Surface water parameters for surface water stations, and CDPS parameters for mine discharges and No. 1 Strip Pit

TABLE 1B
SUMMARY OF HYDROLOGIC MONITORING STATIONS
BEDROCK WELLS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	DEPTH (ft)	SCREEN INTERVAL (ft)	FREQUENCY OF MEASUREMENT*			COMMENTS
					FLOW LEVEL	FIELD PARAMETER**	FULL QUALITY**	
No. 5 Mine Well	Trout Creek SS	6,143.62	437	400-437	Q	Q	A	Water Supply No Power
Okie Plaza Well	Trout Creek SS	6,551.68	800					Abandoned 6/94
TR-4	Middle SS	6,308.30	1,335	1,230-1,330	Q	Q	A	
TR-7A	Middle SS	6,244.30	740	624-725	Q	Q	A	
81-01	Middle SS	6,413.00	533	384-533	Q	Q	A	
83-01	Middle SS	6,172.13	509	405-509	Q			
83-02	Middle SS	6,678.50	708	620-708	Q			
83-03	Middle SS	6,131.22	1,640	1,520-1,640	Q			
259	Twentymile SS	6,128.00	104	18-104	Q	Q	A	
84-01	Twentymile SS	6,307.47	962	585-959	Q			
No. 9 Mine Well	Twentymile SS	6,383.29	600		Q	Q	A	Water Supply

* C=Continuous, D=Daily, W=Weekly, S=Semi-Monthly, M=Montly, Q=Quarterly, A=Annually

** Groundwater Parameters

TABLE 1B - CONTINUED
SUMMARY OF HYDROLOGIC MONITORING STATIONS

ALLUVIAL WELLS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)	DEPTH (ft)	FREQUENCY OF MEASUREMENT*			COMMENTS
				FLOW LEVEL	FIELD PARAMETER**	FULL QUALITY**	
AVF-3	Wms. Fk. Alluvial	6,137.95	17	Q	Q	Q	
AVF-5	Wms. Fk. Alluvial	6,132.59	16	Q	Q	Q	Replaced AVF-5 9/82
AVF-6	Wms. Fk. Alluvial	6,146.23	16	Q	Q	Q	
9BF	9MN Waste Pile	-	-	Q	Q	Q	

MINE DISCHARGES

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)		FREQUENCY OF MEASUREMENT*			COMMENTS
				FLOW LEVEL	FIELD PARAMETER**	NPDES	
No. 5 Mine Sump	F Seam	6,300-5,600	W	W		S/Q	NPDES # 003
7 N. Angle Sump	F Seam		W	W		S/Q	NPDES #024 (9P3)

SURFACE WATERS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)		FREQUENCY OF MEASUREMENT*			COMMENTS
				FLOW LEVEL	FIELD PARAMETER**	NPDES	
WF-1	Wms. Fk. Upstrm	6,142.39	M	M		--	Q
WF-2	Wms. Fk. Dwnstrm	6,119.87	C	M		--	Q

SPRINGS

STATION NAME	WATER SOURCE	DATUM ELEVATION (ft)		FREQUENCY OF MEASUREMENT*			COMMENTS
				FLOW LEVEL	FIELD PARAMETER**	NPDES	
No. 1 Strip Pit	Spoils	6,120.00	W	W		S/Q	NPDES #022

* C=Continuous, D=Daily, W=Weekly, S=Semi-Monthly, M=Monthly, Q=Quarterly, A=Annually

** Surface water parameters for surface water stations, ground water parameters for spring stations, and NPDES parameters for mine discharges and No. 1 Strip Pit

TABLE 2
FIELD PARAMETERS

PARAMETER	SAMPLE SOURCE		
	Ground Water	Surface Water	NPDES
Temperature	X	X	X
Conductivity	X	X	X
pH	X	X	X
Suspended Solids		X	
Flow		X	X
Depth	X		

TABLE 3A
FULL SUITE OF WATER QUALITY ANALYSES
UNDER TEMPORARY CESSATION

PARAMETER	SURFACE WATER
Conductivity	X
pH	X
Acidity (as CaCO ₃)	X
Solids, Total Dissolved	X
Solids, Total Suspended	X
Chloride	X
Iron, Total Recoverable	X
Manganese, Total Recoverable	X

TABLE 3B
FULL SUITE OF WATER QUALITY ANALYSES

PARAMETER	GROUND WATER	SURFACE WATER
Conductivity*	X	X
pH	X	X
Alkalinity (CaCO ₃)	X	
Acidity (as CaCO ₃)		X
Solids, Dissolved		X
Suspended		X
Hardness	X	
Calcium	X	
Magnesium	X	
Sodium	X	
Bicarbonate (as HCO ₃)	X	
Carbonate (as CO ₃)	X	
Chloride	X	X
Sulfate	X	
Arsenic	X	
Cadmium	X	
Lead	X	
Mercury	X	
Selenium	X	
Iron	X	X
Manganese	X	X
Zinc	X	
Boron	X	
Molybdenum	X	
Nitrate (as N)	X	

* umhos/cm³ @ 25 C

TABLE 4
NPDES PARAMETERS

PARAMETER	WEEKLY	BI-MONTHLY	MONTHLY	QUARTERLY	ANNUAL
<u>Discharge Points 003, 022, and 024</u>					
Flow	X				
pH	X				
Solids, Total Suspended		X			
Oil and Grease		X			
Solids, Total Dissolved				X	
Arsenic, Total			X		
Arsenic, PD			X		
Cadmium, PD			X		
Chromium, PD			X		
Chromium- Tri, TR			X		
Copper, PD			X		
Iron, TR		X			
Lead, PD			X		
Manganese, PD			X		
Mercury, Total			X		
Nickel, PD			X		
Selenium, PD			X		
Silver, PD			X		
Zinc, Total Recoverable		X	X		
Sulfide			X		
<u>WET, Chronic</u>					<u>X</u>

Table: 5
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 5MN, NO. 5 Mine Well, Trout Creek Sandstone Datum: 6143.62

Date	3/28/2024	6/25/2024	9/26/2024	11/13/2024
Depth to Water (FT)	5.5	5.1	5.2	6

POWER HAS BEEN DISCONNECTED AND
WATER LEVEL IS TOO LOW TO OBTAIN
SAMPLE SINCE 2013

Table: 6
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: T4, Well TR-4, Middle Sandstone

Datum: 6308.3

				Date		3/28/2024		6/25/2024		9/26/2024		11/13/2024	
Depth to Water (FT)				4.65		3.9		6.7		5.1			
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L			333	Y						
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L			20	N						
ANION	Chloride	N	MG/L			9.27	Y						
ANION	Sulfates	N	MG/L			154	Y						
CATION	Calcium	D	MG/L			18.6	Y						
CATION	Magnesium	D	MG/L			32.6	Y						
CATION	Sodium	D	MG/L			134	Y						
FIELD	pH, Field	N	S.U.	7.8	Y	7.4	Y	7.7	Y	8.2	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1370	Y	810	Y	1030	Y	1580	Y		
FIELD	Temperature, Field	N	DEG-C	8.7	Y	16.1	Y	12.1	Y	8.4	Y		
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L			0.1	N						
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L			333	Y						
PHYSICAL	Hardness	N	MG/L			181	Y						
PHYSICAL	Hydroxide as OH	N	MG/L			20	N						
PHYSICAL	pH, Lab	N	S.U.			6.9	Y						
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM			752	Y						
PRIMARY	Arsenic	D	UG/L			1	N						
PRIMARY	Cadmium	D	UG/L			0.25	N						
PRIMARY	Lead	D	UG/L			0.23	Y						
PRIMARY	Mercury	D	UG/L			1	N						
PRIMARY	Selenium	D	UG/L			0.25	N						
SECONDARY	Iron	D	UG/L			447	Y						
SECONDARY	Manganese	D	UG/L			107	Y						
SECONDARY	Zinc	D	UG/L			20	Y						
TRACE	Boron	D	UG/L			78	Y						
TRACE	Molybdenum	D	UG/L			100	N						

Table: 6A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: T4, Well TR-4, Middle Sandstone

Datum: 6308.3

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO ₃	N	MG/L	5/20/2009	6/25/2024	11	523	541	690	333	116
ANION	Alkalinity, Carbonate as CaCO ₃	N	MG/L	6/27/1996	6/25/2024	10	41.4	37.5	112	2	29.4
ANION	Chloride	N	MG/L	3/30/1981	6/25/2024	40	12	3	41	1	15
ANION	Sulfates	N	MG/L	3/30/1981	6/25/2024	40	177	53.5	620	2	234
CATION	Calcium	D	MG/L	7/8/1983	6/25/2024	32	10.9	4.8	100	2	19.4
CATION	Magnesium	D	MG/L	7/8/1983	6/25/2024	32	15	10.4	51.3	1	12
CATION	Sodium	D	MG/L	7/8/1983	6/25/2024	32	197	42	553	16.3	214
FIELD	pH, Field	N	S.U.	1/26/1982	11/13/2024	117	8.47	8.57	9.5	6.7	0.535
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	11/13/2024	117	858.04	367	2410	180	772.41
FIELD	Temperature, Field	N	DEG-C	5/27/1982	11/13/2024	113	11.5	11	26.5	4.5	2.8
NUTRIENT	NO ₃ -NO ₂ Nitrogen	N	MG/L	3/30/1981	6/25/2024	42	0.06	0.06	0.1	0.02	0.04
PHYSICAL	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	3/30/1981	6/25/2024	36	339	262	630	117	178
PHYSICAL	Hardness	N	MG/L	5/5/2011	6/25/2024	11	76.6	35	222	18	78.6
PHYSICAL	Hydroxide as OH	N	MG/L	6/11/1992	6/25/2024	16	20	20	20	0	9
PHYSICAL	pH, Lab	N	S.U.	3/30/1981	6/25/2024	40	8.51	8.6	10.3	6.9	0.653
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	3/30/1981	6/25/2024	40	917	525	2340	180	812
PRIMARY	Arsenic	D	UG/L	7/8/1983	6/25/2024	32	3	1	40	1	7
PRIMARY	Cadmium	D	UG/L	7/8/1983	6/25/2024	32	4.4	3	50	0.25	8.7
PRIMARY	Lead	D	UG/L	7/8/1983	6/25/2024	32	15.4	20	50	0.1	14.2
PRIMARY	Mercury	D	UG/L	7/8/1983	6/25/2024	32	0.5	0.2	1	0.1	0.4
PRIMARY	Selenium	D	UG/L	7/8/1983	6/25/2024	32	0.85	1	2	0.2	0.56
SECONDARY	Iron	D	UG/L	3/5/1985	6/25/2024	31	319	122	1510	10	432
SECONDARY	Manganese	D	UG/L	7/8/1983	6/25/2024	32	23.9	12.5	107	5	22.3
SECONDARY	Zinc	D	UG/L	7/8/1983	6/25/2024	32	55	15	990	5	170
TRACE	Boron	D	UG/L	7/8/1983	6/25/2024	32	92.3	60	220	10	77.2
TRACE	Molybdenum	D	UG/L	7/8/1983	6/25/2024	32	70	50	200	5	50

Table: 7
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: T7A, Well TR-7A, Middle Sandstone

Datum: 6244.3

				Date		3/28/2024		6/25/2024		9/26/2024		11/13/2024	
Depth to Water (FT)				88.5		87.9		87.7		88.3			
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L			254	Y						
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L			20	N						
ANION	Chloride	N	MG/L			1.73	Y						
ANION	Sulfates	N	MG/L			31.4	Y						
CATION	Calcium	D	MG/L			20.1	Y						
CATION	Magnesium	D	MG/L			35.9	Y						
CATION	Sodium	D	MG/L			35	Y						
FIELD	pH, Field	N	S.U.	8.3	Y	7.5	Y	8.1	Y	7.3	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	530	Y	490	Y	430	Y	460	Y		
FIELD	Temperature, Field	N	DEG-C	7.9	Y	15.2	Y	14.4	Y	9.3	Y		
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L			0.1	N						
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L			254	Y						
PHYSICAL	Hardness	N	MG/L			198	Y						
PHYSICAL	Hydroxide as OH	N	MG/L			20	N						
PHYSICAL	pH, Lab	N	S.U.			8.2	Y						
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM			389	Y						
PRIMARY	Arsenic	D	UG/L			0.3	Y						
PRIMARY	Cadmium	D	UG/L			0.25	N						
PRIMARY	Lead	D	UG/L			3.08	Y						
PRIMARY	Mercury	D	UG/L			1	N						
PRIMARY	Selenium	D	UG/L			0.25	N						
SECONDARY	Iron	D	UG/L			455	Y						
SECONDARY	Manganese	D	UG/L			69	Y						
SECONDARY	Zinc	D	UG/L			289	Y						
TRACE	Boron	D	UG/L			100	N						
TRACE	Molybdenum	D	UG/L			100	N						

Table: 7A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: T7A, Well TR-7A, Middle Sandstone

Datum: 6244.3

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	5/20/2009	6/25/2024	11	210	204	254	183	23.8
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	6/25/1996	6/25/2024	10	22.3	19.6	34.8	12	7.05
ANION	Chloride	N	MG/L	3/30/1981	6/25/2024	40	3.2	2	8	1	1.96
ANION	Sulfates	N	MG/L	3/30/1981	6/25/2024	40	21.2	10	85	1	21.4
CATION	Calcium	D	MG/L	6/29/1983	6/25/2024	32	7.68	6	28	2	5.88
CATION	Magnesium	D	MG/L	6/29/1983	6/25/2024	32	26.5	27.4	35.9	14	5.45
CATION	Sodium	D	MG/L	6/29/1983	6/25/2024	32	36.2	33	63	19.6	9.81
FIELD	pH, Field	N	S.U.	1/26/1982	11/13/2024	120	8.59	8.6	10.1	7.1	0.508
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	11/13/2024	120	409	400	1320	122	114
FIELD	Temperature, Field	N	DEG-C	5/27/1982	11/13/2024	115	11.7	11.4	21	5.4	2.41
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	3/30/1981	6/25/2024	43	0.074	0.1	0.35	0.02	0.061
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	3/30/1981	6/25/2024	37	189	198	254	127	31.8
PHYSICAL	Hardness	N	MG/L	5/5/2011	6/25/2024	11	137	133	198	120	21.6
PHYSICAL	Hydroxide as OH	N	MG/L	6/11/1992	6/25/2024	16	20	20	20	0	9
PHYSICAL	pH, Lab	N	S.U.	3/30/1981	6/25/2024	40	8.706	8.735	10.14	6.5	0.545
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	3/30/1981	6/25/2024	40	378	370	600	265	57.2
PRIMARY	Arsenic	D	UG/L	6/29/1983	6/25/2024	32	3	1	40	0.3	7
PRIMARY	Cadmium	D	UG/L	6/29/1983	6/25/2024	32	3	3	10	0.06	2.5
PRIMARY	Lead	D	UG/L	6/29/1983	6/25/2024	32	24	20	290	0.7	50
PRIMARY	Mercury	D	UG/L	6/29/1983	6/25/2024	32	0.5	0.3	1	0.1	0.4
PRIMARY	Selenium	D	UG/L	6/29/1983	6/25/2024	32	0.86	1	2	0.25	0.55
SECONDARY	Iron	D	UG/L	3/5/1985	6/25/2024	31	317	80	3780	10	673
SECONDARY	Manganese	D	UG/L	6/29/1983	6/25/2024	32	26	25	69	10	13
SECONDARY	Zinc	D	UG/L	6/29/1983	6/25/2024	32	31.4	10	289	5	51.6
TRACE	Boron	D	UG/L	6/29/1983	6/25/2024	32	42	40	100	10	23
TRACE	Molybdenum	D	UG/L	6/29/1983	6/25/2024	32	70	50	200	10	50

Table: 8
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 01, Well 81-01, Middle Sandstone

Datum: 6413.0

Water 017 Well 01 017 Middle Sandstone

Date: 6/1/2016

Date				3/28/2024		6/25/2024		9/26/2024		11/13/2024	
Depth to Water (FT)				252.1		250.2		250.9		252.3	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L			274	Y				
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L			20	N				
ANION	Chloride	N	MG/L			37.4	Y				
ANION	Sulfates	N	MG/L			472	Y				
CATION	Calcium	D	MG/L			86.7	Y				
CATION	Magnesium	D	MG/L			121	Y				
CATION	Sodium	D	MG/L			38.2	Y				
FIELD	pH, Field	N	S.U.	7.5	Y	7.1	Y	7.5	Y	7.2	Y
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1530	Y	1140	Y	1370	Y	1220	Y
FIELD	Temperature, Field	N	DEG-C	4.4	Y	18.1	Y	7.8	Y	5.9	Y
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L			0.06	Y				
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L			274	Y				
PHYSICAL	Hardness	N	MG/L			715	Y				
PHYSICAL	Hydroxide as OH	N	MG/L			20	N				
PHYSICAL	pH, Lab	N	S.U.			7.5	Y				
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM			1160	Y				
PRIMARY	Arsenic	D	UG/L			1	N				
PRIMARY	Cadmium	D	UG/L			0.25	N				
PRIMARY	Lead	D	UG/L			0.5	N				
PRIMARY	Mercury	D	UG/L			1	N				
PRIMARY	Selenium	D	UG/L			0.25	N				
SECONDARY	Iron	D	UG/L			1710	Y				
SECONDARY	Manganese	D	UG/L			325	Y				
SECONDARY	Zinc	D	UG/L			50	N				
TRACE	Boron	D	UG/L			100	N				
TRACE	Molybdenum	D	UG/L			100	N				

Table: 8A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: 01, Well 81-01, Middle Sandstone

Datum: 6413.0

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	5/20/2009	6/25/2024	11	356	337	480	274	69.9
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	5/20/2009	6/25/2024	8	20	20	20	1	7
ANION	Chloride	N	MG/L	5/20/2009	6/25/2024	13	36.6	40	44.3	7	10.4
ANION	Sulfates	N	MG/L	5/20/2009	6/25/2024	13	370	370	490	170	89.3
CATION	Calcium	D	MG/L	5/20/2009	6/25/2024	13	97.2	99.9	120	69	15
CATION	Magnesium	D	MG/L	5/20/2009	6/25/2024	13	102	106	121	54	17.1
CATION	Sodium	D	MG/L	5/20/2009	6/25/2024	13	34.9	34.9	48.7	22	5.8
FIELD	pH, Field	N	S.U.	2/13/2019	11/13/2024	25	7.35	7.26	7.81	6.9	0.238
FIELD	Specific Conductivity, Field	N	UMHOS/CM	2/13/2019	11/13/2024	24	1380	1360	1780	1140	143
FIELD	Temperature, Field	N	DEG-C	2/13/2019	11/13/2024	25	10.1	10.8	18.1	4.4	2.84
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	5/5/2011	6/25/2024	21	0.09	0.1	0.1	0.03	0.02
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	5/20/2009	6/25/2024	13	329	330	390	274	38
PHYSICAL	Hardness	N	MG/L	5/5/2011	6/25/2024	11	673	669	736	588	49
PHYSICAL	Hydroxide as OH	N	MG/L	5/5/2011	6/25/2024	12	20	20	20	20	0
PHYSICAL	pH, Lab	N	S.U.	5/20/2009	6/25/2024	13	8.06	8.1	8.32	7.5	0.229
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	5/20/2009	6/25/2024	13	1240	1240	1380	880	143
PRIMARY	Arsenic	D	UG/L	5/20/2009	6/25/2024	13	1	1	2	1	0.4
PRIMARY	Cadmium	D	UG/L	5/20/2009	6/25/2024	13	0.39	0.5	0.5	0.25	0.12
PRIMARY	Lead	D	UG/L	5/20/2009	6/25/2024	13	0.69	0.35	5	0.1	1.3
PRIMARY	Mercury	D	UG/L	5/20/2009	6/25/2024	13	0.9	1	1	0.2	0.2
PRIMARY	Selenium	D	UG/L	5/20/2009	6/25/2024	13	0.55	0.3	2	0.25	0.6
SECONDARY	Iron	D	UG/L	5/20/2009	6/25/2024	13	4610	4500	12800	30	3240
SECONDARY	Manganese	D	UG/L	5/20/2009	6/25/2024	13	248	230	372	98	86.1
SECONDARY	Zinc	D	UG/L	5/20/2009	6/25/2024	13	50	50	50	5	10
TRACE	Boron	D	UG/L	5/20/2009	6/25/2024	13	44	40	100	20	23
TRACE	Molybdenum	D	UG/L	5/20/2009	6/25/2024	13	90	100	100	50	20

Table: 9 **2024 Annual Hydrology Report**
Williams Fork Mine **Water Year Monitoring Data**

Site: 301, Well 83-01, Middle Sandstone

Datum: 6172.13

Date	3/28/2024	6/25/2024	9/26/2024	11/13/2024
Depth to Water (FT)	20.8	19.75	20.3	20.4

Table: 10
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 302, Well 83-02, Middle Sandstone

Datum: 6678.50

Date	3/28/2024	6/25/2024	9/26/2024	11/13/2024
Depth to Water (FT)				

Unable to obtain water level in 2024

Table: 11
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 303, Well 83-03, Middle Sandstone

Datum: 6131.22

Date	3/28/2024	6/25/2024	9/26/2024	11/13/2024
Depth to Water (FT)	0	0	0	0
PSI	*	*	*	*

Artesian Well

*Hydrant broken - unable to obtain accurate pressure reading

Table: 12
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 259, Well 259, Twentymile Sandstone

Datum: 6128.0

				Date		3/28/2024		6/25/2024		9/26/2024		11/13/2024	
Depth to Water (FT)				0		0		0		0		0	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L			255	Y						
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L			20	N						
ANION	Chloride	N	MG/L			2.63	Y						
ANION	Sulfates	N	MG/L			77.3	Y						
CATION	Calcium	D	MG/L			56.7	Y						
CATION	Magnesium	D	MG/L			23.6	Y						
CATION	Sodium	D	MG/L			35.2	Y						
FIELD	pH, Field	N	S.U.	7.8	Y	7.3	Y	7.2	Y	7.6	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	640	Y	570	Y	540	Y	590	Y		
FIELD	Temperature, Field	N	DEG-C	7.5	Y	17.9	Y	11	Y	7.9	Y		
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L			0.1	N						
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L			255	Y						
PHYSICAL	Hardness	N	MG/L			239	Y						
PHYSICAL	Hydroxide as OH	N	MG/L			20	N						
PHYSICAL	pH, Lab	N	S.U.			6.9	Y						
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM			567	Y						
PRIMARY	Arsenic	D	UG/L			1	N						
PRIMARY	Cadmium	D	UG/L			0.25	N						
PRIMARY	Lead	D	UG/L			0.5	N						
PRIMARY	Mercury	D	UG/L			1	N						
PRIMARY	Selenium	D	UG/L			0.25	N						
SECONDARY	Iron	D	UG/L			2390	Y						
SECONDARY	Manganese	D	UG/L			17	Y						
SECONDARY	Zinc	D	UG/L			71	Y						
TRACE	Boron	D	UG/L			46	Y						
TRACE	Molybdenum	D	UG/L			100	N						

Table: 12A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: 259, Well 259, Twentymile Sandstone

Datum: 6128.0

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	5/20/2009	6/25/2024	12	136	139	265	8.2	114
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	11/25/1996	6/25/2024	10	8.9	6.7	20	1	8
ANION	Chloride	N	MG/L	3/30/1981	6/25/2024	38	6.73	3.36	30.6	1	7.12
ANION	Sulfates	N	MG/L	3/30/1981	6/25/2024	38	39.6	50	95	1	29.7
CATION	Calcium	D	MG/L	6/29/1983	6/25/2024	30	28.9	26.5	76	2.4	23.2
CATION	Magnesium	D	MG/L	6/29/1983	6/25/2024	30	13.4	15.5	24.2	1.1	9.21
CATION	Sodium	D	MG/L	6/29/1983	6/25/2024	30	24.1	24.7	39.3	4.7	11
FIELD	pH, Field	N	S.U.	1/26/1982	11/13/2024	114	7.58	7.62	9.21	6	0.628
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	11/13/2024	114	433.5	481.5	1440	109.2	244.3
FIELD	Temperature, Field	N	DEG-C	5/27/1982	11/13/2024	110	10.9	11	18.9	4	2.83
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	3/30/1981	6/25/2024	42	0.067	0.09	0.26	0.02	0.049
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	3/30/1981	6/25/2024	37	153	205	271	6.8	94.3
PHYSICAL	Hardness	N	MG/L	5/5/2011	6/25/2024	11	119	38	239	25	101
PHYSICAL	Hydroxide as OH	N	MG/L	6/11/1992	6/25/2024	16	20	20	20	0	8
PHYSICAL	pH, Lab	N	S.U.	6/29/1981	6/25/2024	37	7.78	7.92	9.2	5.9	0.752
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	3/30/1981	6/25/2024	38	373	485	575	67	192
PRIMARY	Arsenic	D	UG/L	6/29/1983	6/25/2024	30	3	1	40	1	7
PRIMARY	Cadmium	D	UG/L	6/29/1983	6/25/2024	30	2.9	3	10	0.06	2.5
PRIMARY	Lead	D	UG/L	6/29/1983	6/25/2024	30	27	20	380	0.1	68
PRIMARY	Mercury	D	UG/L	6/29/1983	6/25/2024	30	0.5	0.2	1	0.1	0.4
PRIMARY	Selenium	D	UG/L	6/29/1983	6/25/2024	30	1	1	6	0.25	1.1
SECONDARY	Iron	D	UG/L	3/5/1985	6/25/2024	29	1010	80	7400	10	1940
SECONDARY	Manganese	D	UG/L	6/29/1983	6/25/2024	30	94.6	50	330	7	93.7
SECONDARY	Zinc	D	UG/L	6/29/1983	6/25/2024	30	73.7	50	540	5	120
TRACE	Boron	D	UG/L	6/29/1983	6/25/2024	30	63	56	240	10	43
TRACE	Molybdenum	D	UG/L	6/29/1983	6/25/2024	30	70	50	200	10	50

Table: 13
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 401, Well 84-01, Twentymile Sandstone

Datum: 6307.47

Date	3/28/2024	6/25/2024	9/26/2024	11/13/2024
Depth to Water (FT)	46.0	46.9	47.4	47.8

Table: 14
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: 9MN, #9 Mine Well, Twentymile Sandstone

Datum: 6383.29

Date											
Depth to Water (FT)											
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L								
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L								
ANION	Chloride	N	MG/L								
ANION	Sulfates	N	MG/L								
CATION	Calcium	D	MG/L								
CATION	Magnesium	D	MG/L								
CATION	Sodium	D	MG/L								
FIELD	pH, Field	N	S.U.								
FIELD	Specific Conductivity, Field	N	UMHOS/CM								
FIELD	Temperature, Field	N	DEG-C								
NUTRIENT	Nitrate as NO3	N	MG/L								
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L								
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L								
PHYSICAL	Hardness as CaCO3	N	MG/L								
PHYSICAL	Hydroxide as OH	N	MG/L								
PHYSICAL	pH, Lab	N	S.U.								
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM								
PRIMARY	Arsenic	D	UG/L								
PRIMARY	Cadmium	D	UG/L								
PRIMARY	Lead	D	UG/L								
PRIMARY	Mercury	D	UG/L								
PRIMARY	Selenium	D	UG/L								
SECONDARY	Iron	D	UG/L								
SECONDARY	Manganese	D	UG/L								
SECONDARY	Zinc	D	UG/L								
TRACE	Boron	D	UG/L								
TRACE	Molybdenum	D	UG/L								

2022/2023/2024: Obstruction in well.
Unable to obtain water level or sample.

Table: 14A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: 9MN, #9 Mine Well, Twentymile Sandstone

Datum: 6383.29

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO ₃	N	MG/L	5/20/2009	4/14/2021	8	370	392	480	259	90
ANION	Alkalinity, Carbonate as CaCO ₃	N	MG/L	6/13/1996	4/14/2021	6	10	20	20	1	10
ANION	Chloride	N	MG/L	3/30/1981	4/14/2021	31	14.6	4	54.7	2	18.2
ANION	Sulfates	N	MG/L	3/30/1981	4/14/2021	31	90.8	50	365	4	91
CATION	Calcium	D	MG/L	6/29/1983	4/14/2021	24	81.6	79.7	163	35.1	29.4
CATION	Magnesium	D	MG/L	6/29/1983	4/14/2021	24	41.1	33	87.3	22	16.7
CATION	Sodium	D	MG/L	6/29/1983	4/14/2021	24	21.042	16.95	43.5	9.9	9.4706
FIELD	pH, Field	N	S.U.	1/26/1982	12/12/2021	103	7.36	7.3	8.7	6.6	0.425
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	12/12/2021	103	785	640	3500	428	376
FIELD	Temperature, Field	N	DEG-C	5/27/1982	12/12/2021	99	13.1	12.2	23.1	9.7	2.81
NUTRIENT	NO ₃ -NO ₂ Nitrogen	N	MG/L	3/30/1981	4/14/2021	37	0.055	0.04	0.12	0.02	0.036
PHYSICAL	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	3/30/1981	4/14/2021	31	301	296	441	193	46.1
PHYSICAL	Hardness	N	MG/L	5/5/2011	5/18/2020	8	513	481	767	358	121
PHYSICAL	Hydroxide as OH	N	MG/L	6/4/1992	4/14/2021	13	10	20	20	0	9
PHYSICAL	pH, Lab	N	S.U.	3/30/1981	4/14/2021	32	7.89	7.88	9.1	7	0.403
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	3/30/1981	4/14/2021	32	728	620	1470	380	266
PRIMARY	Arsenic	D	UG/L	6/29/1983	4/14/2021	24	3.7	1.2	40	0.5	8
PRIMARY	Cadmium	D	UG/L	6/29/1983	4/14/2021	24	3	3	10	0.07	2.5
PRIMARY	Lead	D	UG/L	6/29/1983	4/14/2021	24	10	20	50	0.1	10
PRIMARY	Mercury	D	UG/L	6/29/1983	4/14/2021	24	0.5	0.2	1	0.1	0.4
PRIMARY	Selenium	D	UG/L	6/29/1983	4/14/2021	24	1	1	4	0.2	0.88
SECONDARY	Iron	D	UG/L	3/5/1985	4/14/2021	23	613	140	3760	10	986
SECONDARY	Manganese	D	UG/L	6/29/1983	4/14/2021	24	242	61.5	1150	40	329
SECONDARY	Zinc	D	UG/L	6/29/1983	4/14/2021	24	259	124	1200	10	296
TRACE	Boron	D	UG/L	6/29/1983	4/14/2021	24	41	30	90	20	21
TRACE	Molybdenum	D	UG/L	6/29/1983	4/14/2021	24	70	50	200	10	50

Table: 15
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: AV3, Well AVF-3, Williams Fork Alluvium

Datum: 6137.95

				Date		3/21/2024		6/19/2024		9/19/2024		11/15/2024	
				Depth to Water (FT)		Dry		Dry		Dry		Dry	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L										
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L										
ANION	Chloride	N	MG/L										
ANION	Sulfates	N	MG/L										
CATION	Calcium	D	MG/L										
CATION	Magnesium	D	MG/L										
CATION	Sodium	D	MG/L										
FIELD	pH, Field	N	S.U.										
FIELD	Specific Conductivity, Field	N	UMHOS/CM										
FIELD	Temperature, Field	N	DEG-C										
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L										
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L										
PHYSICAL	Hardness	N	MG/L										
PHYSICAL	Hydroxide as OH	N	MG/L										
PHYSICAL	pH, Lab	N	S.U.										
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM										
PRIMARY	Arsenic	D	UG/L										
PRIMARY	Cadmium	D	UG/L										
PRIMARY	Lead	D	UG/L										
PRIMARY	Mercury	D	UG/L										
PRIMARY	Selenium	D	UG/L										
SECONDARY	Iron	D	UG/L										
SECONDARY	Manganese	D	UG/L										
SECONDARY	Zinc	D	UG/L										
TRACE	Boron	D	UG/L										
TRACE	Molybdenum	D	UG/L										

Table: 15A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: AV3, Well AVF-3, Williams Fork Alluvium

Datum: 6137.95

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	3/16/2009	6/19/2023	28	410	500	601	97	162
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	3/16/1996	6/19/2023	28	10.1	2.55	20	1	9.31
ANION	Chloride	N	MG/L	6/29/1981	6/19/2023	114	196	180	2300	1.54	228
ANION	Sulfates	N	MG/L	6/29/1981	6/19/2023	114	281	277	531	4.4	119
CATION	Calcium	D	MG/L	3/30/1983	6/19/2023	107	110	112	167	27.1	27
CATION	Magnesium	D	MG/L	3/30/1983	6/19/2023	107	68.8	73	104	6.99	21.9
CATION	Sodium	D	MG/L	3/30/1983	6/19/2023	107	175	180	288	2.58	62.9
FIELD	pH, Field	N	S.U.	1/26/1982	6/19/2023	154	7.42	7.4	8.7	6.8	0.276
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	6/19/2023	154	1622.004	1650	2750	280	397.1241
FIELD	Temperature, Field	N	DEG-C	5/27/1982	6/19/2023	150	9.45	9	18.5	3.7	2.97
NUTRIENT	Nitrate Nitrogen	N	MG/L	3/26/1984	6/19/2023	103	0.141	0.06	1.68	0.01	0.211
NUTRIENT	Nitrite Nitrogen	N	MG/L	12/4/1986	6/19/2023	30	0.015	0.01	0.05	0.01	0.011
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	6/29/1981	6/19/2023	114	0.258	0.1	1.99	0.01	0.333
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	6/29/1981	6/19/2023	107	408	408	980	97	109
PHYSICAL	Hardness	N	MG/L	3/16/1992	6/19/2023	28	438	525	661	111	178
PHYSICAL	Hydroxide as OH	N	MG/L	8/14/1991	6/19/2023	52	10	20	20	0	9
PHYSICAL	pH, Lab	N	S.U.	6/29/1981	6/19/2023	114	7.78	7.8	8.4	6.7	0.348
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	6/29/1981	6/19/2023	114	1668	1720	2700	196	497.3
PRIMARY	Arsenic	D	UG/L	3/30/1983	6/19/2023	107	2.31	1	40	0.2	5.47
PRIMARY	Cadmium	D	UG/L	3/30/1983	6/19/2023	107	3.51	5	10	0.05	2.22
PRIMARY	Lead	D	UG/L	3/30/1983	6/19/2023	107	22	20	100	0.1	20
PRIMARY	Mercury	D	UG/L	3/30/1983	6/19/2023	107	0.5	0.2	10	0.1	1
PRIMARY	Selenium	D	UG/L	3/30/1983	6/19/2023	107	1.54	1	25.6	0.1	2.63
SECONDARY	Iron	D	UG/L	3/26/1984	6/19/2023	103	289	60	3460	5	587
SECONDARY	Manganese	D	UG/L	3/30/1983	6/19/2023	107	153	128	934	5	151
SECONDARY	Zinc	D	UG/L	3/30/1983	6/19/2023	107	35.7	10	1180	5	115
TRACE	Boron	D	UG/L	3/30/1983	6/19/2023	106	112	100	280	10	46.8
TRACE	Molybdenum	D	UG/L	3/30/1983	6/19/2023	107	60	50	200	10	50

Table: 16
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: AV5, Well AVF-5, Williams Fork Alluvium

Datum: 6132.59

				Date		3/19/2024		6/25/2024		9/26/2024		11/13/2024	
				Depth to Water (FT)		7.5		5.8		10.1		10.3	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection		
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	645	Y			677	Y	595	Y		
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	20	N			20	N	20	N		
ANION	Chloride	N	MG/L	40.4	Y	16	Y	36.1	Y	38.6	Y		
ANION	Sulfates	N	MG/L	420	Y			408	Y	480	Y		
CATION	Calcium	D	MG/L	54.6	Y			50.4	Y	59.4	Y		
CATION	Magnesium	D	MG/L	26.3	Y			22.5	Y	28	Y		
CATION	Sodium	D	MG/L	400	Y			392	Y	433	Y		
FIELD	pH, Field	N	S.U.	7.4	Y	7.5	Y	7.4	Y	7.1	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1920	Y	1460	Y	1850	Y	2040	Y		
FIELD	Temperature, Field	N	DEG-C	8.2	Y	23.4	Y	15.3	Y	10.9	Y		
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	7.34	Y			1.08	Y	0.627	Y		
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	645	Y			677	Y	595	Y		
PHYSICAL	Hardness	N	MG/L	245	Y			219	Y	264	Y		
PHYSICAL	Hydroxide as OH	N	MG/L	20	N			20	N	20	N		
PHYSICAL	pH, Lab	N	S.U.	7.7	Y	8.1	Y	7.2	Y	7	Y		
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	1970	Y	1480	Y	2070	Y	1630	Y		
PRIMARY	Arsenic	D	UG/L	0.47	Y			0.64	Y	0.74	Y		
PRIMARY	Cadmium	D	UG/L	0.25	N			0.093	Y	0.077	Y		
PRIMARY	Lead	D	UG/L	0.5	N			0.5	N	0.5	N		
PRIMARY	Mercury	D	UG/L	1	N			1	N	1	N		
PRIMARY	Selenium	D	UG/L	18.1	Y			2.41	Y	4.77	Y		
SECONDARY	Iron	D	UG/L	150	N			150	N	150	N		
SECONDARY	Manganese	D	UG/L	290	Y			31	Y	58	Y		
SECONDARY	Zinc	D	UG/L	63	Y			50	N	50	N		
TRACE	Boron	D	UG/L	259	Y			353	Y	380	Y		
TRACE	Molybdenum	D	UG/L	100	N			100	N	100	N		

Table: 16A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: AVF, Well AVF-5, Williams Fork Alluvium

Datum: 6132.59

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	3/16/2009	11/13/2024	36	809	740	1200	594	176
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	3/16/1996	11/13/2024	36	16.5	20	59.6	1	15.1
ANION	Chloride	N	MG/L	6/29/1981	11/13/2024	123	28.3	27	47.9	7	8.4
ANION	Sulfates	N	MG/L	6/29/1981	11/13/2024	122	215	198	733	4	175
CATION	Calcium	D	MG/L	3/30/1983	11/13/2024	115	68.9	51.6	225	28.3	41.6
CATION	Magnesium	D	MG/L	3/30/1983	11/13/2024	115	42.7	28.3	149	12.2	29.7
CATION	Sodium	D	MG/L	3/30/1983	11/13/2024	115	312	340	967	6.09	118
FIELD	pH, Field	N	S.U.	1/26/1982	11/13/2024	162	7.43	7.4	9.7	6.3	0.338
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	11/13/2024	162	1748.85	1702.5	3700	220	451.46
FIELD	Temperature, Field	N	DEG-C	5/27/1982	11/13/2024	158	10.4	10.2	23.4	2	3.88
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	6/29/1981	11/13/2024	123	1.41	0.1	74	0.02	7.06
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	6/29/1981	11/13/2024	116	779.2	802.5	1215	243	173.2
PHYSICAL	Hardness	N	MG/L	3/16/1992	11/13/2024	36	203	203	272	121	41.6
PHYSICAL	Hydroxide as OH	N	MG/L	8/14/1991	11/13/2024	59	10	20	20	0	9
PHYSICAL	pH, Lab	N	S.U.	6/29/1981	11/13/2024	123	7.86	7.8	9.72	6.9	0.431
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	6/29/1981	11/13/2024	123	1727	1730	2580	860	286.1
PRIMARY	Arsenic	D	UG/L	3/30/1983	11/13/2024	115	2.08	1	40	0.3	5.27
PRIMARY	Cadmium	D	UG/L	3/30/1983	11/13/2024	115	3.17	3	10	0.07	2.31
PRIMARY	Lead	D	UG/L	3/30/1983	11/13/2024	115	21.7	20	310	0.1	32.2
PRIMARY	Mercury	D	UG/L	3/30/1983	11/13/2024	115	0.5	0.2	1	0.1	0.4
PRIMARY	Selenium	D	UG/L	3/30/1983	11/13/2024	115	2.96	2	41.7	0.1	5.16
SECONDARY	Iron	D	UG/L	3/26/1984	11/13/2024	110	117	45	2100	10	255
SECONDARY	Manganese	D	UG/L	3/30/1983	11/13/2024	115	319	169	2000	5	383
SECONDARY	Zinc	D	UG/L	3/30/1983	11/13/2024	115	28.8	10	477	5	48
TRACE	Boron	D	UG/L	3/30/1983	11/13/2024	115	254	270	440	30	106
TRACE	Molybdenum	D	UG/L	3/30/1983	11/13/2024	115	60	50	200	10	50

Table: 17
Williams Fork Mine

2024 Annual Hydrology Report
Water Year Monitoring Data

Site: AV6, Well AVF-6, Williams Fork Alluvium

Datum: 6146.23

				Date		3/20/2024		6/25/2024		9/26/2024		11/13/2024	
				Depth to Water (FT)		6.7		6.7		8.5		8.7	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO3	N	MG/L	545	Y			655	Y	749	Y		
ANION	Alkalinity, Carbonate as CaCO3	N	MG/L	20	N			20	N	20	N		
ANION	Chloride	N	MG/L	15.1	Y	10.8	Y	19.4	Y	16.9	Y		
ANION	Sulfates	N	MG/L	367	Y			458	Y	498	Y		
CATION	Calcium	D	MG/L	149	Y			173	Y	160	Y		
CATION	Magnesium	D	MG/L	95.8	Y			111	Y	100	Y		
CATION	Sodium	D	MG/L	70.2	Y			116	Y	104	Y		
FIELD	pH, Field	N	S.U.	6.9	Y	7.3	Y	7	Y	5.6	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1550	Y	1220	Y	1620	Y	1650	Y		
FIELD	Temperature, Field	N	DEG-C	7.8	Y	18	Y	16.7	Y	11.8	Y		
NUTRIENT	NO3-NO2 Nitrogen	N	MG/L	0.1	N			0.1	N	0.1	N		
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	545	Y			655	Y	749	Y		
PHYSICAL	Hardness	N	MG/L	767	Y			889	Y	811	Y		
PHYSICAL	Hydroxide as OH	N	MG/L	20	N			20	N	20	N		
PHYSICAL	pH, Lab	N	S.U.	7.7	Y	7.9	Y	6.9	Y	7.6	Y		
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	1420	Y	1270	Y	1890	Y	2130	Y		
PRIMARY	Arsenic	D	UG/L	0.39	Y			0.26	Y	0.49	Y		
PRIMARY	Cadmium	D	UG/L	0.25	N			0.25	N	0.25	N		
PRIMARY	Lead	D	UG/L	0.5	N			0.5	N	0.5	N		
PRIMARY	Mercury	D	UG/L	1	N			1	N	1	N		
PRIMARY	Selenium	D	UG/L	0.51	Y			0.25	N	0.19	Y		
SECONDARY	Iron	D	UG/L	492	Y			210	Y	672	Y		
SECONDARY	Manganese	D	UG/L	151	Y			204	Y	210	Y		
SECONDARY	Zinc	D	UG/L	86	Y			50	N	674	Y		
TRACE	Boron	D	UG/L	81	Y			89	Y	115	Y		
TRACE	Molybdenum	D	UG/L	100	N			100	N	100	N		

Table: 17A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: AV6, Well AVF-6, Williams Fork Alluvium

Datum: 6146.23

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO ₃	N	MG/L	3/16/2009	11/13/2024	36	472	490	749	284	110
ANION	Alkalinity, Carbonate as CaCO ₃	N	MG/L	3/16/1996	11/13/2024	36	12	20	20	1	8.9
ANION	Chloride	N	MG/L	6/29/1981	11/13/2024	123	23.5	20	92	3.2	18.7
ANION	Sulfates	N	MG/L	6/29/1981	11/13/2024	122	325	315	827	10	185
CATION	Calcium	D	MG/L	3/30/1983	11/13/2024	115	126	129	234	30.3	47
CATION	Magnesium	D	MG/L	3/30/1983	11/13/2024	115	70.9	72	139	19.5	24.1
CATION	Sodium	D	MG/L	3/30/1983	11/13/2024	115	131	115	451	30	82.1
FIELD	pH, Field	N	S.U.	1/26/1982	11/13/2024	161	7.35	7.38	8.22	5.6	0.288
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	11/13/2024	161	1506.5	1590	3000	630	338.448
FIELD	Temperature, Field	N	DEG-C	5/27/1982	11/13/2024	157	10.5	10.5	23.1	3.9	3.7
NUTRIENT	NO ₃ -NO ₂ Nitrogen	N	MG/L	6/29/1981	11/13/2024	123	0.0766	0.05	0.47	0.02	0.0841
PHYSICAL	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	6/29/1981	11/13/2024	116	527	532	917	263	127
PHYSICAL	Hardness	N	MG/L	3/16/1992	11/13/2024	36	532	499	1140	258	214
PHYSICAL	Hydroxide as OH	N	MG/L	8/14/1991	11/13/2024	60	10	20	20	0	9
PHYSICAL	pH, Lab	N	S.U.	6/29/1981	11/13/2024	122	7.75	7.7	8.6	6.6	0.376
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	6/29/1981	11/13/2024	123	1436	1430	2260	556	400
PRIMARY	Arsenic	D	UG/L	3/30/1983	11/13/2024	115	2	1	40	0.2	5.2
PRIMARY	Cadmium	D	UG/L	3/30/1983	11/13/2024	115	3.26	4	11	0.06	2.44
PRIMARY	Lead	D	UG/L	3/30/1983	11/13/2024	115	20	20	130	0.1	21
PRIMARY	Mercury	D	UG/L	3/30/1983	11/13/2024	115	0.5	0.2	1	0.1	0.4
PRIMARY	Selenium	D	UG/L	3/30/1983	11/13/2024	115	2	1	32	0.1	4.78
SECONDARY	Iron	D	UG/L	3/26/1984	11/13/2024	111	172	92	1600	5	236
SECONDARY	Manganese	D	UG/L	3/30/1983	11/13/2024	115	147	123	769	8	120
SECONDARY	Zinc	D	UG/L	3/30/1983	11/13/2024	115	29.7	10	674	5	64.2
TRACE	Boron	D	UG/L	3/30/1983	11/13/2024	115	108	90	390	20	69.8
TRACE	Molybdenum	D	UG/L	3/30/1983	11/13/2024	115	70	50	200	10	50

Table: 18 2024 Annual Hydrology Report
Williams Fork Mine Water Year Monitoring Data

Site:WF1, Williams Fork River, Upstream

Datum: 6142.39

				Date		1/9/2024		2/25/2024		3/20/2024		4/17/2024		5/1/2024
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result
FIELD	pH, Field	N	S.U.	7.7	Y	7.9	Y	6.9	Y	8	Y	7.8		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	610	Y	550	Y	580	Y	500	Y	340		
FIELD	Temperature, Field	N	DEG-C	3.8	Y	2.1	Y	2.3	Y	11.3	Y	14.1		
PHYSICAL	Acidity	N	MG/L					20	N					
PHYSICAL	pH, Lab	N	S.U.					7.7	Y					
PHYSICAL	Solids, Total Suspended	N	MG/L	20	N	20	N	9	Y	106	Y	344		
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L					354	Y					
SECONDARY	Iron	TR	UG/L					381	Y					
SECONDARY	Manganese	TR	UG/L					41	Y					

Table: 18 2024 Annual Hydrology Report
Williams Fork Mine Water Year Monitoring Data

Site:WF1, Williams Fork River, Upstream

Datum: 6142.39

				Date 4/2024	6/25/2024		7/30/2024		8/28/2024		9/26/2024	
Type	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
FIELD	pH, Field	N	S.U.	Y	7.9	Y	7.1	Y	8	Y	8.2	Y
FIELD	Specific Conductivity, Field	N	UMHOS/CM	Y	330	Y	590	Y	450	Y	450	Y
FIELD	Temperature, Field	N	DEG-C	Y	21.2	Y	24.8	Y	19.3	Y	16	Y
PHYSICAL	Acidity	N	MG/L		20	N					20	N
PHYSICAL	pH, Lab	N	S.U.		6.7	Y					6.8	Y
PHYSICAL	Solids, Total Suspended	N	MG/L	Y	15	Y	20	N	5	Y	20	N
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L		194	Y					266	Y
SECONDARY	Iron	TR	UG/L		510	Y					126	Y
SECONDARY	Manganese	TR	UG/L		23	Y					50	N

Table: 18 2024 Annual Hydrology Report
Williams Fork Mine Water Year Monitoring Data

Site:WF1, Williams Fork River, Upstream

Datum: 6142.39

				Date		10/30/2024		11/13/2024		12/17/2024	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection
FIELD	pH, Field	N	S.U.	8.4	Y	6.9	Y	7.9	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	520	Y	830	Y	800	Y		
FIELD	Temperature, Field	N	DEG-C	6.3	Y	0.7	Y	2.3	Y		
PHYSICAL	Acidity	N	MG/L			20	N				
PHYSICAL	pH, Lab	N	S.U.			7.6	Y				
PHYSICAL	Solids, Total Suspended	N	MG/L	20	N	6	Y	20	N		
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L			288	Y				
SECONDARY	Iron	TR	UG/L			203	Y				
SECONDARY	Manganese	TR	UG/L			50	N				

Table: 18A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site:WF1, Williams Fork River, Upstream

Datum: 6142.39

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
2003 - SW PARAMS ANION	Sulfates	N	MG/L	6/19/1981	5/31/1990	13	76	66	138	21	40.4
FIELD	pH, Field	N	S.U.	1/26/1982	12/17/2024	347	9.53	8.08	524	6.9	27.7
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	12/17/2024	346	539.01	554	1125	8.77	161.12
FIELD	Temperature, Field	N	DEG-C	5/27/1982	12/17/2024	342	8.99	7.95	27.8	0	7.28
PHYSICAL	Acidity	N	MG/L	3/23/1984	11/13/2024	114	5.34	2	20	-241	25.1
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	6/19/1981	2/12/1997	14	163	180	225	69	52.1
PHYSICAL	pH, Lab	N	S.U.	6/19/1981	11/13/2024	125	8.18	8.3	8.79	6.7	0.368
PHYSICAL	Solids, Total Suspended	N	MG/L	6/19/1981	12/17/2024	339	81.52	17	2810	2	247.4
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L	6/19/1981	11/13/2024	129	319	320	588	94	110
SECONDARY	Iron	TR	UG/L	3/23/1984	11/13/2024	95	1730	360	29700	60	4220
SECONDARY	Manganese	TR	UG/L	6/19/1981	11/13/2024	107	59	35	582	5	78.2

Table: 19**Williams Fork Mine****2024 Annual Hydrology Report****Water Year Monitoring Data**

Site:WF2, Williams Fork River, Upstream

Datum: 6119.87

Date				1/9/2024		2/25/2024		3/19/2024		4/17/2024		5/14/2024		6/2/2024
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result
FIELD	pH, Field	N	S.U.	8.1	Y	7.9	Y	8.2	Y	8.1	Y	7.6	Y	7.8
FIELD	Specific Conductivity, Field	N	UMHOS/CM	440	Y	530	Y	590	Y	490	Y	360	Y	300
FIELD	Temperature, Field	N	DEG-C	4.7	Y	1.8	Y	8.7	Y	10.7	Y	15	Y	23.1
PHYSICAL	Acidity	N	MG/L					20	N					20
PHYSICAL	pH, Lab	N	S.U.					7.8	Y					7.1
PHYSICAL	Solids, Total Suspended	N	MG/L	20	N	20	N	14	Y	147	Y	395	Y	20
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L					348	Y					194
SECONDARY	Iron	TR	UG/L					529	Y					506
SECONDARY	Manganese	TR	UG/L					49	Y					23

Table: 19**Williams Fork Mine****2024 Annual Hydrology Report****Water Year Monitoring Data**

Site:WF2, Williams Fork River, Upstream

Datum: 6119.8

				Date	6/2024	7/30/2024	8/28/2024	9/26/2024	10/30/2024	11/13/2024
Type	Parameter	Fraction	Units	Detection	Result	Detection	Result	Detection	Result	Detection
FIELD	pH, Field	N	S.U.	Y	7.5	Y	8.1	Y	8	Y
FIELD	Specific Conductivity, Field	N	UMHOS/CM	Y	430	Y	440	Y	450	Y
FIELD	Temperature, Field	N	DEG-C	Y	24.9	Y	18.9	Y	13.5	Y
PHYSICAL	Acidity	N	MG/L	N					20	N
PHYSICAL	pH, Lab	N	S.U.	Y					6.6	Y
PHYSICAL	Solids, Total Suspended	N	MG/L	Y	20	N	13	Y	7	Y
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L	Y					280	Y
SECONDARY	Iron	TR	UG/L	Y					145	Y
SECONDARY	Manganese	TR	UG/L	Y					50	N

Table: 19
Williams Fork Mine
2024 Annual Hydrology Report
Water Year Monitoring Data

Site:WF2, Williams Fork River, Upstream

Datum: 6119.8

				Date	12/17/2024
Type	Parameter	Fraction	Units	Result	Detection
FIELD	pH, Field	N	S.U.	6.8	Y
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1020	Y
FIELD	Temperature, Field	N	DEG-C	3.2	Y
PHYSICAL	Acidity	N	MG/L		
PHYSICAL	pH, Lab	N	S.U.		
PHYSICAL	Solids, Total Suspended	N	MG/L	20	N
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L		
SECONDARY	Iron	TR	UG/L		
SECONDARY	Manganese	TR	UG/L		

Table: 19A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site:WF2, Williams Fork River, Upstream

Datum: 6119.87

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
2003 - SW PA	Sulfates	N	MG/L	6/19/1981	12/7/1983	12	80.9	85	144	21	39
FIELD	pH, Field	N	S.U.	1/26/1982	12/17/2024	353	8.03	8.06	8.83	6.77	0.397
FIELD	Specific Conductivity, Field	N	UMHOS/CM	1/26/1982	12/17/2024	352	542.1	558	1200	174.9	167.37
FIELD	Temperature, Field	N	DEG-C	5/27/1982	12/17/2024	348	8.93	8	27.8	0	7.14
PHYSICAL	Acidity	N	MG/L	3/23/1984	11/13/2024	116	5.26	2	20	-245	25.2
PHYSICAL	Alkalinity as CaCO3, @ pH 4.5	N	MG/L	6/19/1981	2/12/1997	13	179	203	223	71	51.7
PHYSICAL	pH, Lab	N	S.U.	6/19/1981	11/13/2024	127	8.19	8.3	8.7	6.6	0.334
PHYSICAL	Solids, Total Suspended	N	MG/L	6/19/1981	12/17/2024	342	81.4	14	2800	2	240
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L	6/19/1981	11/13/2024	131	327	332	602	85	111
SECONDARY	Iron	TR	UG/L	3/23/1984	11/13/2024	97	1840	330	36300	100	4960
SECONDARY	Manganese	TR	UG/L	6/19/1981	11/13/2024	108	60.5	31.5	693	5	90.2

Table: 20**Williams Fork Mine****2024 Annual Hydrology Report****Water Year Monitoring Data**

Site: 1SP, Spoil Spring

Datum: 6120.0

Date				3/19/2024		3/28/2024		4/10/2024		4/17/2024		4/29/2024	
FIELD	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
FIELD	Flow	N	CFS	0.022	Y	0.019	Y	0.02	Y	0.022	Y	0.008	Y
FIELD	pH, Field	N	S.U.	7.3	Y	7.5	Y	7.3	Y	7.3	Y	6.9	Y
FIELD	Specific Conductivity, Field	N	UMHOS/CM	2510	Y	2510	Y	2230	Y	2260	Y	2330	Y
FIELD	Temperature, Field	N	DEG-C	10.1	Y	4.5	Y	10.1	Y	10.8	Y	15	Y
PRIMARY	Arsenic	PD	UG/L	0.49	Y			0.37	Y				
PRIMARY	Arsenic	T	UG/L	0.49	Y			0.37	Y				
PRIMARY	Cadmium	PD	UG/L	0.25	N			0.25	N				
PRIMARY	Chromium	TR	UG/L	50	N			50	N				
PRIMARY	Copper	PD	UG/L	50	N			50	N				
PRIMARY	Lead	PD	UG/L	0.5	N			0.5	N				
PRIMARY	Mercury	T	UG/L	1	N			1	N				
PRIMARY	Selenium	PD	UG/L	0.61	Y			0.39	Y				
TRACE	Nickel	PD	UG/L	40	N			40	N				
TRACE	Sulfide	N	UG/L	100	N			100	N				
SECONDARY	Iron	TR	UG/L	225	Y	214	Y	123	Y	131	Y		
SECONDARY	Manganese	PD	UG/L	211	Y			144	Y				
SECONDARY	Silver	PD	UG/L	25	N			25	N				
SECONDARY	Zinc	PD	UG/L	50	N			74	Y				
PHYSICAL	pH, Lab	N	S.U.	7.7	Y			8.2	Y				
PHYSICAL	Solids, Total Suspended	N	MG/L	20	N	20	N	20	N	20	N		
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	2520	Y			2300	Y				
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L	1980	Y	2030	Y	1780	Y	1770	Y		

Table: 20**Williams Fork Mine****2024 Annual Hydrology Report****Water Year Monitoring Data**

Site: 1SP, Spoil Spring

Datum: 6120.0

Date				5/3/2024		5/14/2024		6/13/2024		6/25/2024	
FIELD	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection
FIELD	Flow	N	CFS	0.008	Y	0.008	Y	0.008	Y	0.002	Y
FIELD	pH, Field	N	S.U.	7.4	Y	7.3	Y	7.2	Y	6.8	Y
FIELD	Specific Conductivity, Field	N	UMHOS/CM	2280	Y	2110	Y	2180	Y	2170	Y
FIELD	Temperature, Field	N	DEG-C	4.6	Y	15.3	Y	20.8	Y	18	Y
PRIMARY	Arsenic	PD	UG/L	0.49	Y			0.46	Y		
PRIMARY	Arsenic	T	UG/L	0.39	Y			0.58	Y		
PRIMARY	Cadmium	PD	UG/L	0.25	N			0.25	N		
PRIMARY	Chromium	TR	UG/L	50	N			50	N		
PRIMARY	Copper	PD	UG/L	50	N			50	N		
PRIMARY	Lead	PD	UG/L	0.5	N			0.5	N		
PRIMARY	Mercury	T	UG/L	1	N			1	N		
PRIMARY	Selenium	PD	UG/L	0.25	N			0.12	Y		
TRACE	Nickel	PD	UG/L	40	N			40	N		
TRACE	Sulfide	N	UG/L	100	N			100	N		
SECONDARY	Iron	TR	UG/L	342	Y	377	Y	416	Y	731	Y
SECONDARY	Manganese	PD	UG/L	491	Y			700	Y		
SECONDARY	Silver	PD	UG/L	25	N			25	N		
SECONDARY	Zinc	PD	UG/L	50	N			50	N		
PHYSICAL	pH, Lab	N	S.U.	8.1	Y			7.8	Y		
PHYSICAL	Solids, Total Suspended	N	MG/L	20	N	31	Y	20	N	20	N
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	2310	Y			2160	Y		
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L	1710	Y	1710	Y	1700	Y	1750	Y

Table: 20A
Williams Fork Mine

2024 Annual Hydrology Report
Period of Record

Site: 1SP, Spoil Spring

Datum: 6120.0

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
FIELD	Flow	N	CFS	1/3/1984	9/6/2024	551	0.0597	0.04	0.67	0	0.0728
FIELD	pH, Field	N	S.U.	5/28/1982	8/8/2024	1264	8.01	8	9.06	6.6	0.34
FIELD	Specific Conductivity, Field	N	UMHOS/CM	5/28/1982	8/8/2024	1263	1638.88	1630	3080	585	260.479
FIELD	Temperature, Field	N	DEG-C	5/28/1982	8/8/2024	1260	9.44	9.6	30	0	5.7
FIELD	Arsenic	PD	UG/L	11/20/2012	8/2/2024	51	0.71	0.6	5	0.3	0.67
FIELD	Arsenic	T	UG/L	9/22/1983	8/2/2024	53	0.809	0.77	2	0.4	0.33
PRIMARY	Cadmium	PD	UG/L	11/20/2012	8/2/2024	51	0.43	0.5	3	0.1	0.39
PRIMARY	Chromium	TR	UG/L	11/20/2012	8/2/2024	51	50	50	50	50	0
PRIMARY	Copper	PD	UG/L	11/20/2012	8/2/2024	51	50	50	100	50	10
PRIMARY	Lead	PD	UG/L	11/20/2012	8/2/2024	51	0.5	0.5	3	0.1	0.4
PRIMARY	Mercury	T	UG/L	1/17/1983	8/2/2024	57	0.8	1	1	0.1	0.3
PRIMARY	Selenium	PD	UG/L	11/20/2012	8/2/2024	51	1.24	0.3	17.9	0.1	3.15
TRACE	Nickel	PD	UG/L	11/20/2012	8/2/2024	51	41	40	80	10	13
TRACE	Sulfide	N	UG/L	5/31/1990	8/2/2024	51	96	100	210	10	28
SECONDARY	Iron	TR	UG/L	3/23/1984	8/8/2024	345	413	250	2350	0.16	435
SECONDARY	Manganese	PD	UG/L	11/20/2012	8/2/2024	51	481	471	1450	14	350
SECONDARY	Silver	PD	UG/L	11/20/2012	8/2/2024	51	30	30	50	25	5.4
SECONDARY	Zinc	PD	UG/L	11/20/2012	8/2/2024	51	57	50	330	10	42
PHYSICAL	pH, Lab	N	S.U.	9/28/1981	8/2/2024	186	8.11	8.1	8.5	7.08	0.228
PHYSICAL	Solids, Total Suspended	N	MG/L	9/28/1981	8/8/2024	663	11	6	76	1	9.2
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	9/28/1981	8/2/2024	186	2046	2090	2950	7.8	368.6
PHYSICAL	Total Dissolved Solids, Lab	N	MG/L	9/28/1981	8/8/2024	214	1351	1226	5160	820	459.4

Table: 21**Williams Fork Mine**

Site: 9BF

Datum: 6308.3

2024 Annual Hydrology Report**Water Year Monitoring Data**

				Date		3/28/2024		6/25/2024		9/26/2024		11/13/2024	
				Depth to Water (FT)		40.3		40.6		17.7		18.1	
Type	Parameter	Fraction	Units	Result	Detection	Result	Detection	Result	Detection	Result	Detection	Result	Detection
ANION	Alkalinity, Bicarbonate as CaCO ₃	N	MG/L	235	Y			328	Y	375	Y		
ANION	Alkalinity, Carbonate as CaCO ₃	N	MG/L	20	N			20	N	20	N		
ANION	Chloride	N	MG/L	10	Y	6.38	Y	8	Y	7.77	Y		
ANION	Sulfates	N	MG/L	196	Y			191	Y	166	Y		
CATION	Calcium	D	MG/L	44.8	Y			43.3	Y	47.5	Y		
CATION	Magnesium	D	MG/L	30.2	Y			27	Y	29	Y		
CATION	Sodium	D	MG/L	99.6	Y			105	Y	112	Y		
FIELD	pH, Field	N	S.U.	7.3	Y	7	Y	7.1	Y	6.7	Y		
FIELD	Specific Conductivity, Field	N	UMHOS/CM	900	Y	830	Y	910	Y	920	Y		
FIELD	Temperature, Field	N	DEG-C	7.2	Y	20.1	Y	12.1	Y	10.4	Y		
NUTRIENT	NO ₃ -NO ₂ Nitrogen	N	MG/L	1.05	Y			0.027	Y	0.102	Y		
PHYSICAL	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	235	Y			328	Y	375	Y		
PHYSICAL	Hardness	N	MG/L	236	Y			219	Y	238	Y		
PHYSICAL	Hydroxide as OH	N	MG/L	20	N			20	N	20	N		
PHYSICAL	pH, Lab	N	S.U.	7.4	Y	7	Y	6.5	Y	6.9	Y		
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	778	Y	774	Y	950	Y	1000	Y		
PRIMARY	Arsenic	D	UG/L	0.62	Y			0.22	Y	0.75	Y		
PRIMARY	Cadmium	D	UG/L	0.25	N			0.25	N	0.25	N		
PRIMARY	Lead	D	UG/L	0.48	Y			0.32	Y	0.52	Y		
PRIMARY	Mercury	D	UG/L	1	N			1	N	1	N		
PRIMARY	Selenium	D	UG/L	2.45	Y			0.25	N	0.1	Y		
SECONDARY	Iron	D	UG/L	142	Y			84	Y	445	Y		
SECONDARY	Manganese	D	UG/L	54	Y			106	Y	128	Y		
SECONDARY	Zinc	D	UG/L	361	Y			49	Y	112	Y		
TRACE	Boron	D	UG/L	624	Y			570	Y	639	Y		
TRACE	Molybdenum	D	UG/L	100	N			100	N	100	N		

Table: 21A**Williams Fork Mine**

Site: 9BF

Datum: 6308.3

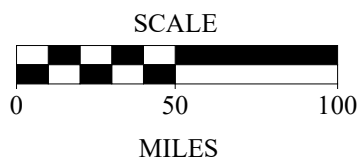
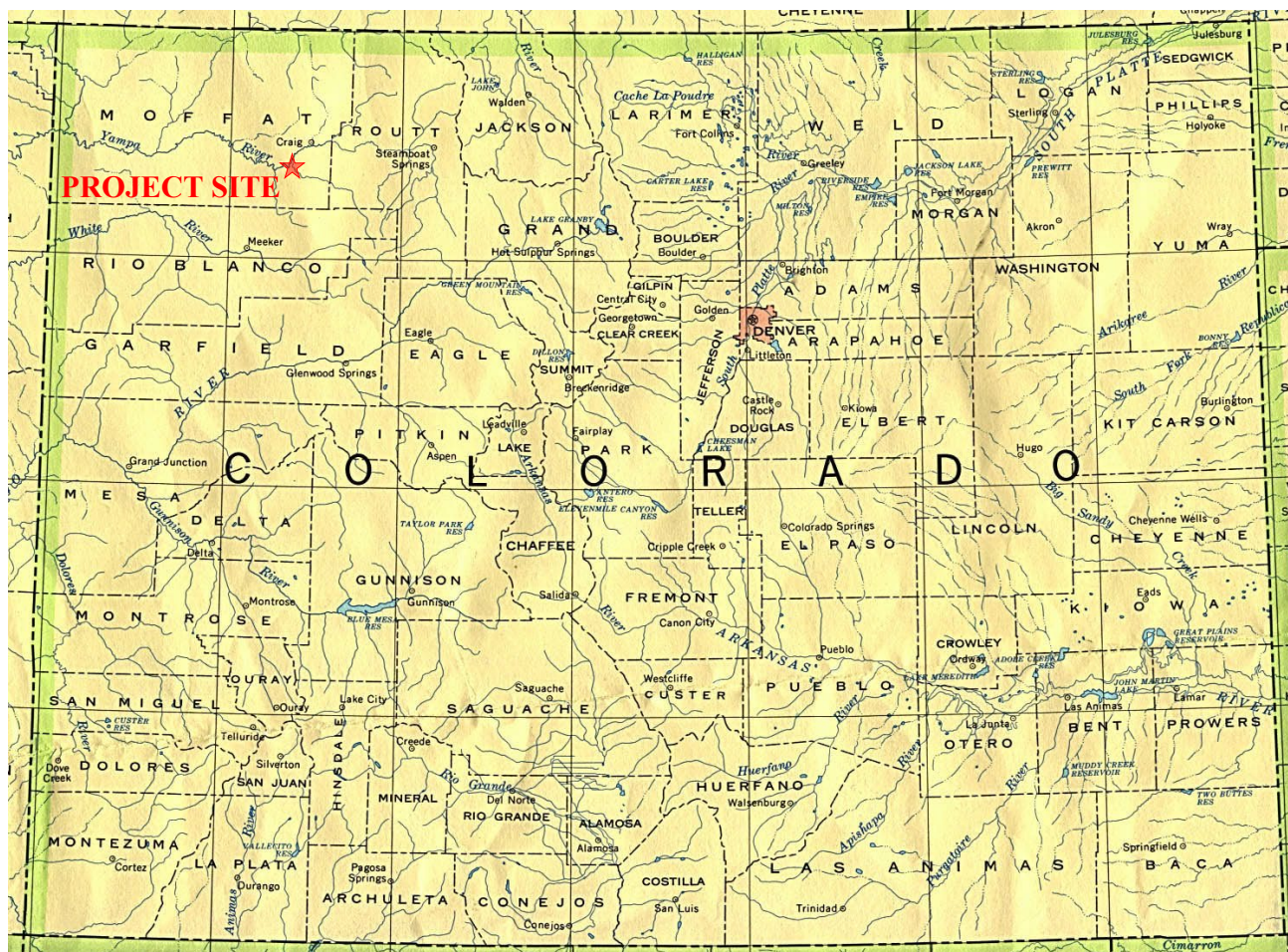
2024 Annual Hydrology Report**Period of Record**

Type	Parameter	Fraction	Units	Start Date	End Date	Count	Average	Median	Max	Min	STD
ANION	Alkalinity, Bicarbonate as CaCO ₃	N	MG/L	6/10/2010	11/13/2024	32	412	358	1100	102	214
ANION	Alkalinity, Carbonate as CaCO ₃	N	MG/L	6/10/2010	11/13/2024	25	20	20	20	1	6
ANION	Chloride	N	MG/L	6/10/2010	11/13/2024	39	19.9	18.2	57	3.52	12.3
ANION	Sulfates	N	MG/L	6/10/2010	11/13/2024	38	238	218	520	18	130
CATION	Calcium	D	MG/L	6/10/2010	11/13/2024	38	49.8	46.6	87.3	24.8	16.2
CATION	Magnesium	D	MG/L	6/10/2010	11/13/2024	38	33.2	31.5	57.6	15.8	11.5
CATION	Sodium	D	MG/L	6/10/2010	11/13/2024	38	177	131	493	63.9	107
FIELD	pH, Field	N	S.U.	11/29/2016	11/13/2024	33	7.13	7.14	7.67	6.7	0.209
FIELD	Specific Conductivity, Field	N	UMHOS/CM	11/29/2016	11/13/2024	32	1100	1060	1850	570	285
FIELD	Temperature, Field	N	DEG-C	11/29/2016	11/13/2024	32	12.8	12.7	20.1	7.2	2.48
NUTRIENT	NO ₃ -NO ₂ Nitrogen	N	MG/L	2/15/2011	11/13/2024	59	0.81	0.55	3.27	0.02	0.934
PHYSICAL	Alkalinity as CaCO ₃ , @ pH 4.5	N	MG/L	6/10/2010	11/13/2024	38	423	364	957	102	209
PHYSICAL	Hardness	N	MG/L	2/15/2011	11/13/2024	33	271	277	455	127	90
PHYSICAL	Hydroxide as OH	N	MG/L	2/15/2011	11/13/2024	35	20	20	20	20	0
PHYSICAL	pH, Lab	N	S.U.	6/10/2010	11/13/2024	39	7.73	8	8.5	6.5	0.522
PHYSICAL	Specific Conductivity, Lab	N	UMHOS/CM	6/10/2010	11/13/2024	39	1250	1200	2320	521	433
PRIMARY	Arsenic	D	UG/L	6/10/2010	11/13/2024	38	1.9	0.72	30	0.22	4.95
PRIMARY	Cadmium	D	UG/L	6/10/2010	11/13/2024	38	0.93	0.3	10	0.05	2
PRIMARY	Lead	D	UG/L	6/10/2010	11/13/2024	38	3.43	0.455	50	0.1	11.3
PRIMARY	Mercury	D	UG/L	6/10/2010	11/13/2024	38	0.9	1	1	0.2	0.2
PRIMARY	Selenium	D	UG/L	6/10/2010	11/13/2024	38	2.53	0.5	20.5	0.1	4.54
SECONDARY	Iron	D	UG/L	6/10/2010	11/13/2024	38	183	140	1210	20	209
SECONDARY	Manganese	D	UG/L	6/10/2010	11/13/2024	38	62.8	52	129	10	38.5
SECONDARY	Zinc	D	UG/L	6/10/2010	11/13/2024	38	141	50	830	5	198
TRACE	Boron	D	UG/L	6/10/2010	11/13/2024	38	596	610	690	440	69
TRACE	Molybdenum	D	UG/L	6/10/2010	11/13/2024	38	90	100	100	50	20

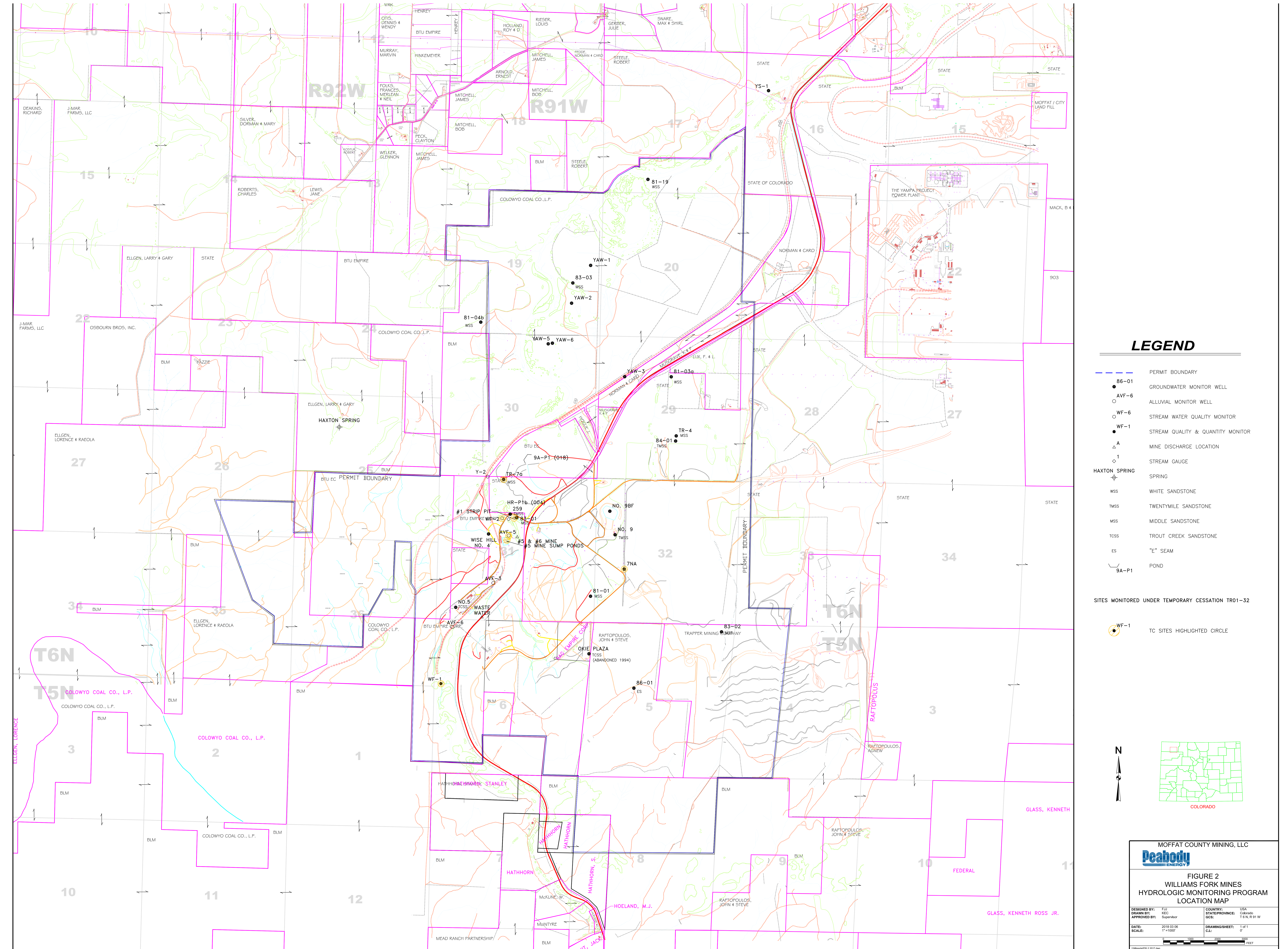
FIGURES

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- 23.) Williams Fork River, Water Year Flow

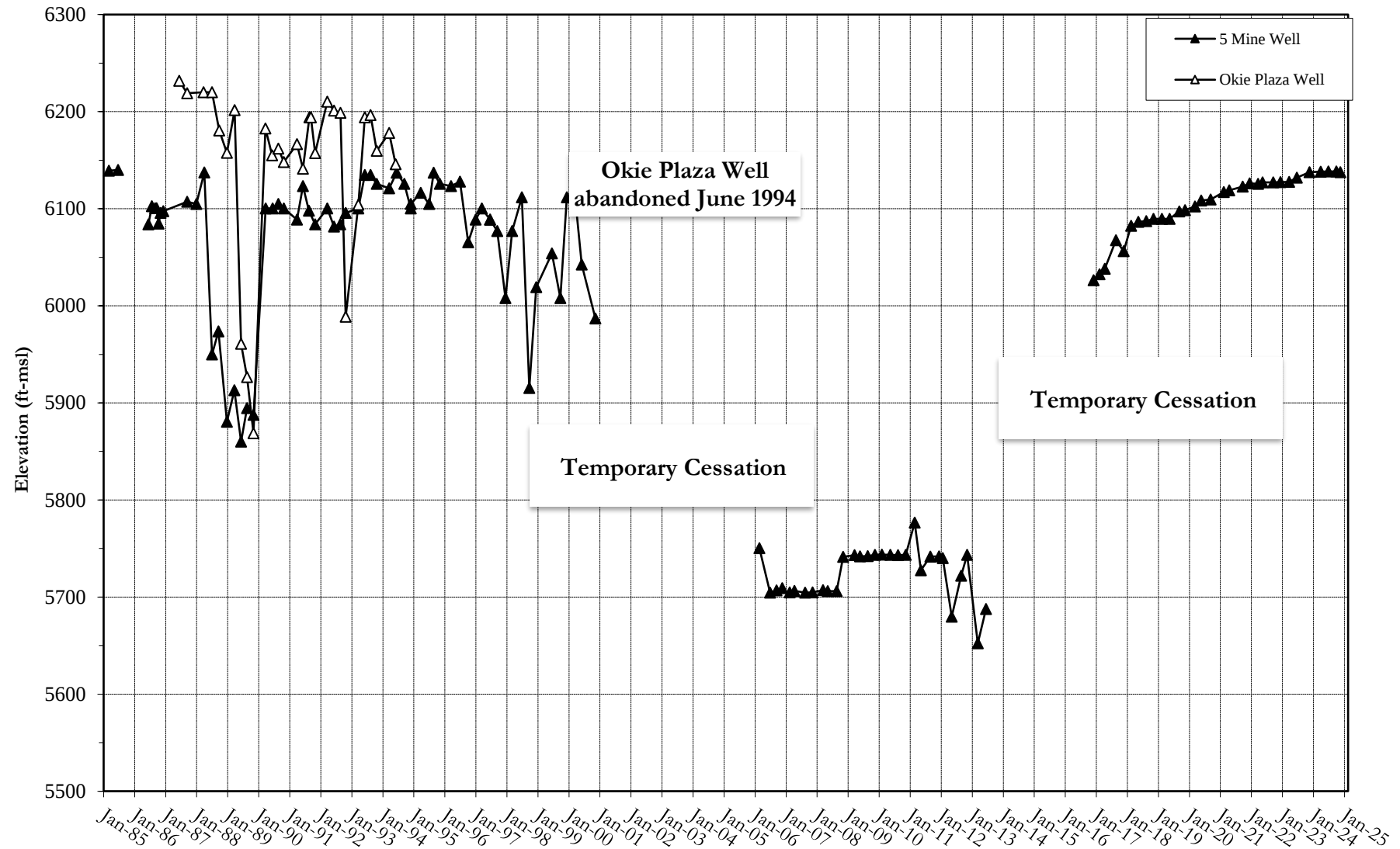


GENERAL LOCATION MAP



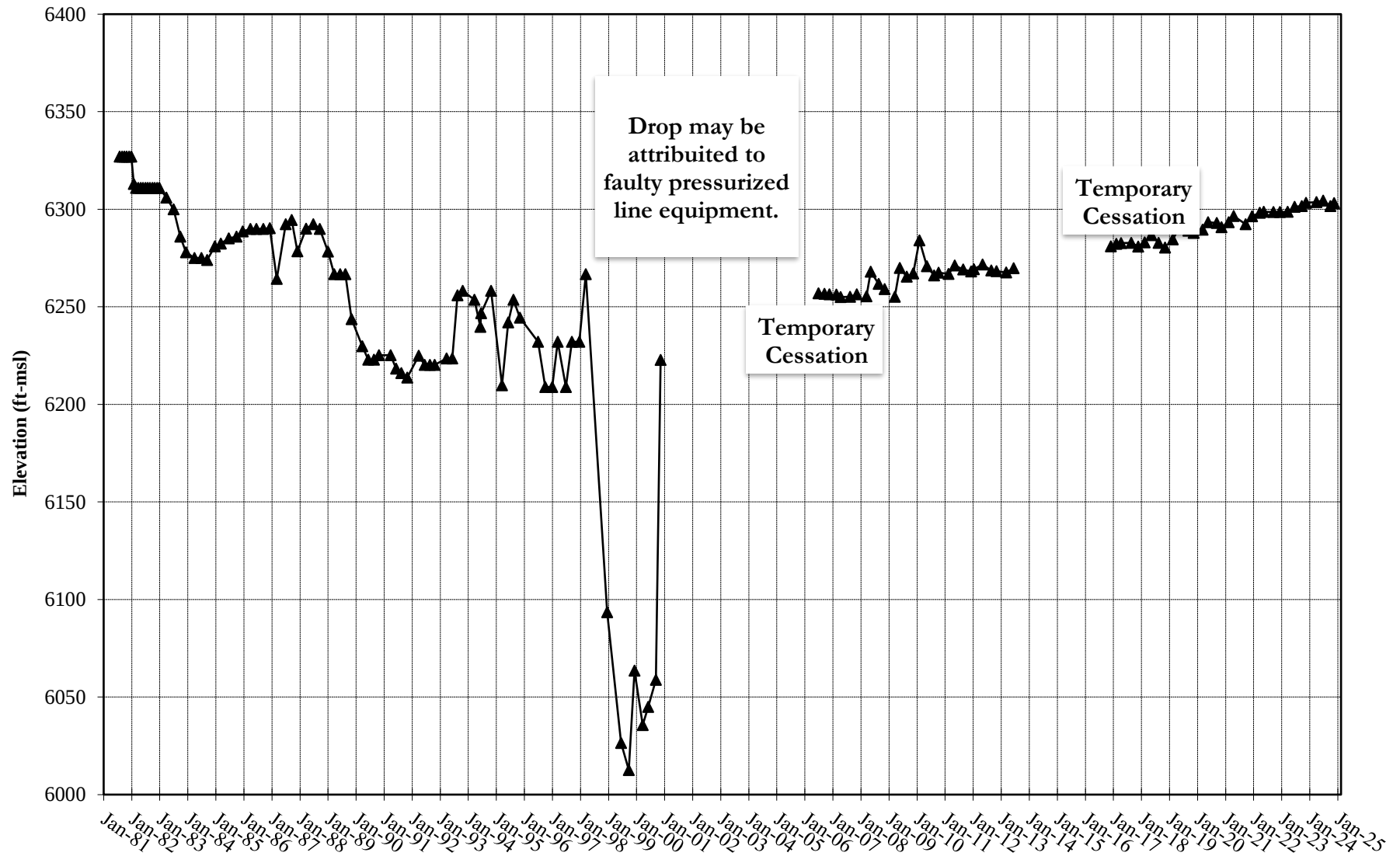
PLOT OF WATER LEVELS

Trout Creek Sandstone Wells



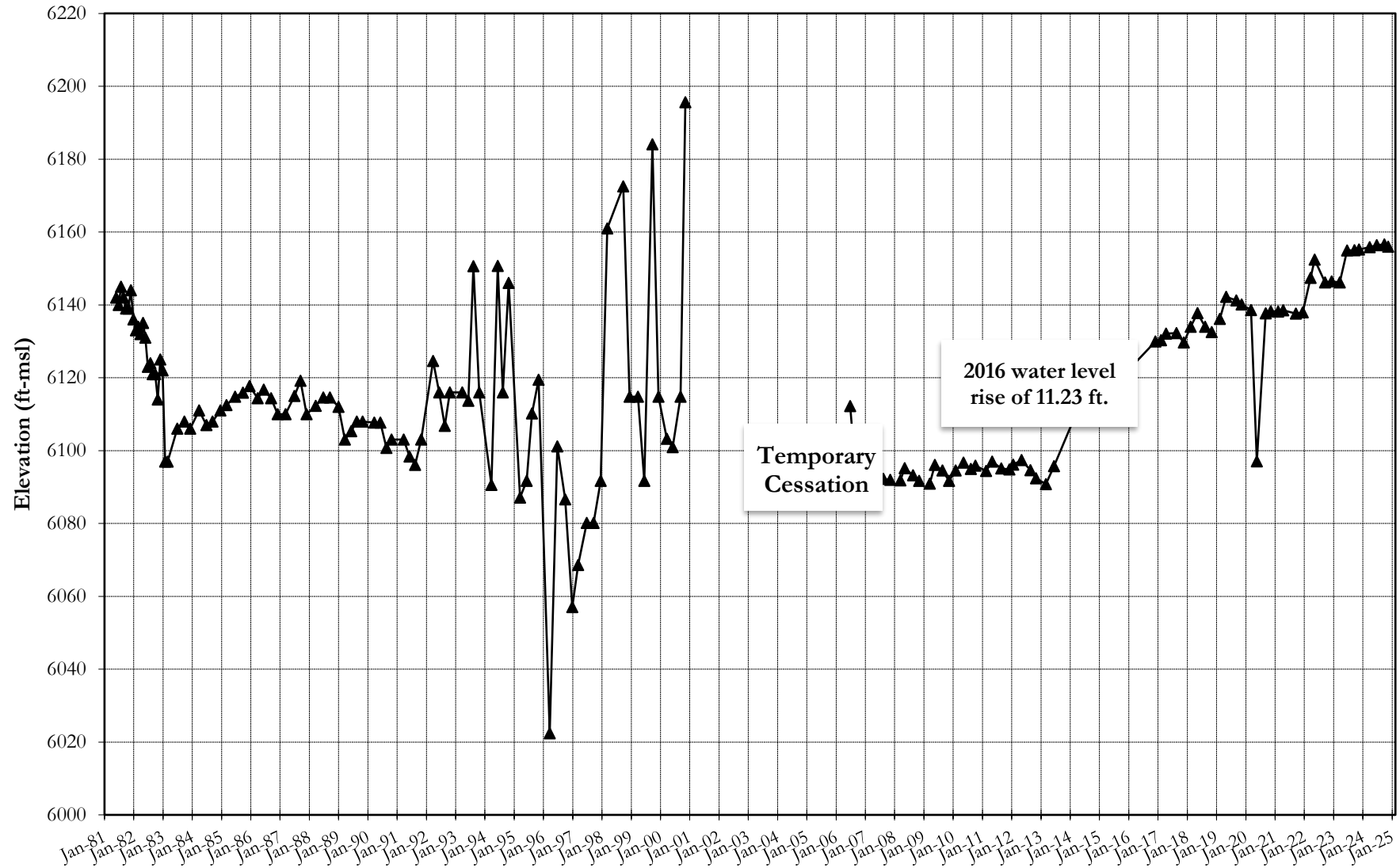
PLOT OF WATER LEVELS

Well TR-4, Middle Sandstone



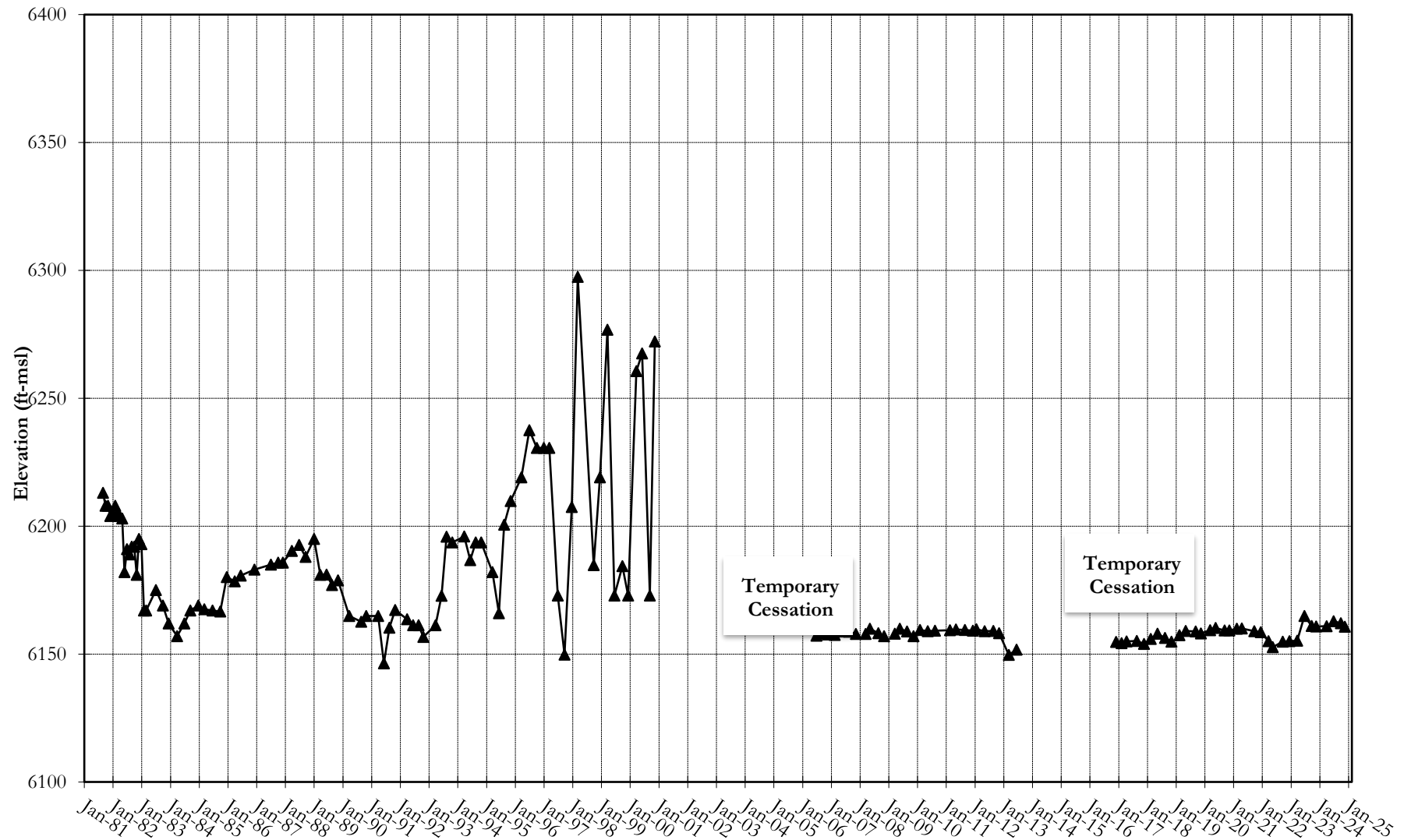
PLOT OF WATER LEVELS

Well TR-7a, Middle Sandstone



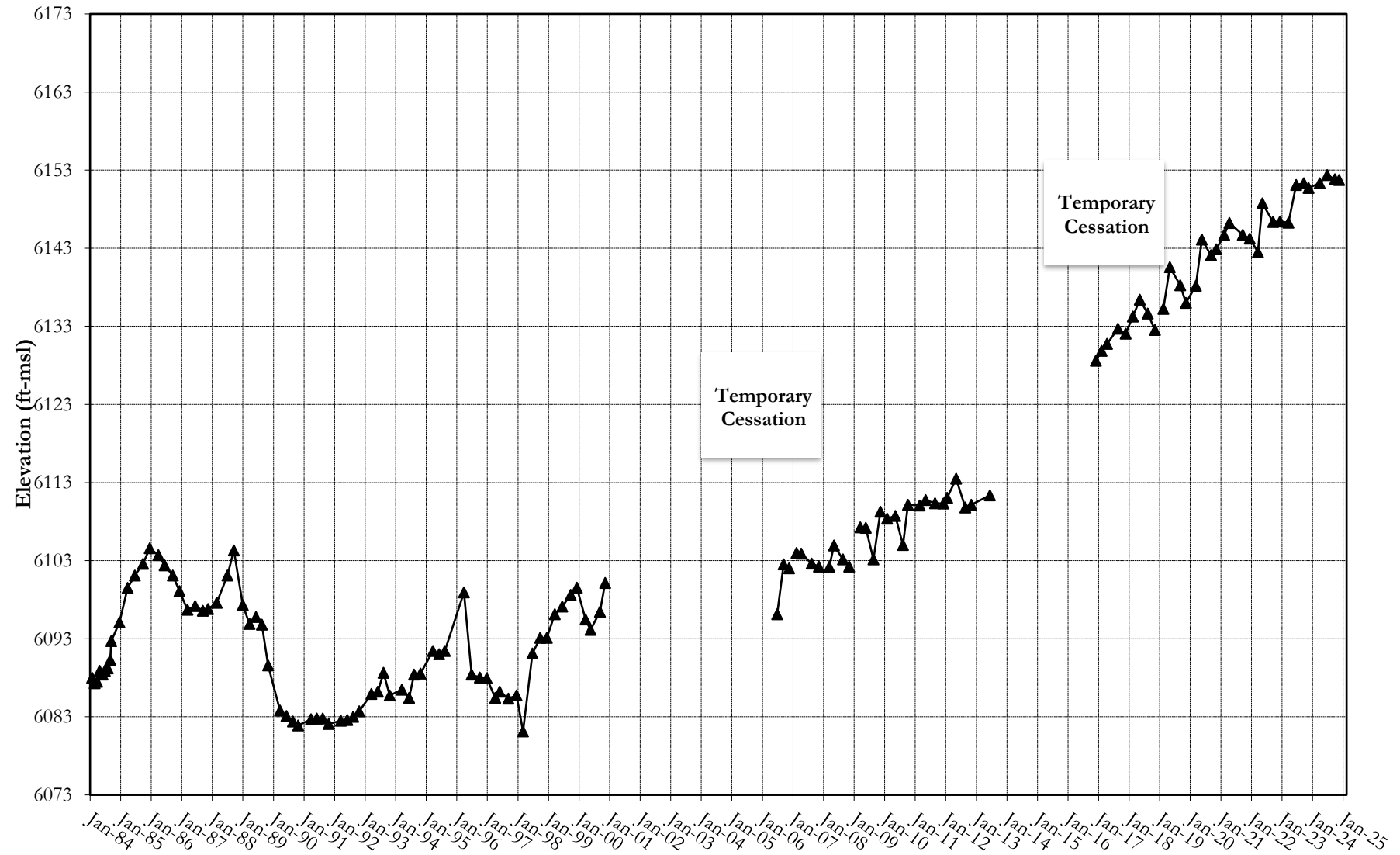
PLOT OF WATER LEVELS

Well 81-01, Middle Sandstone



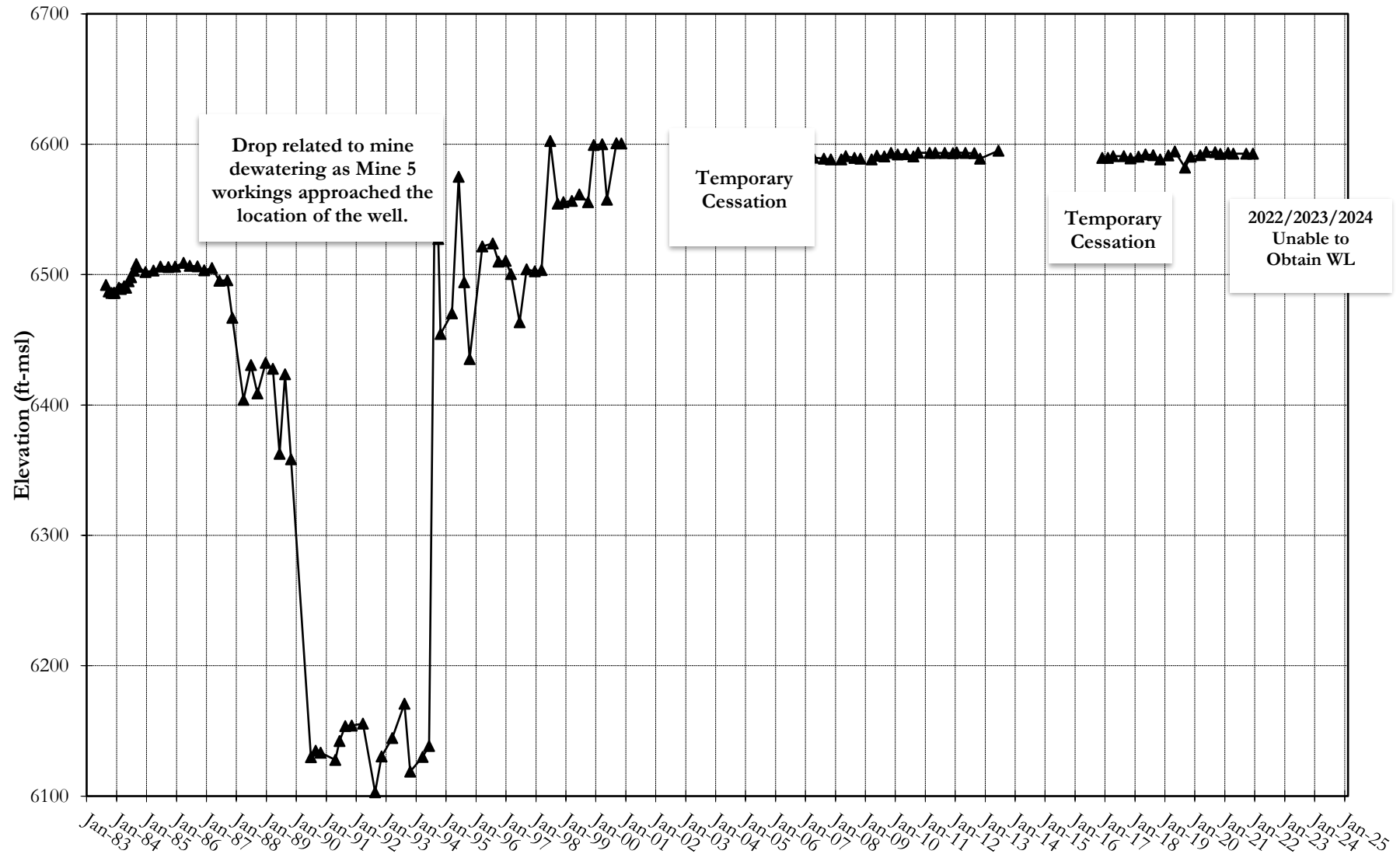
PLOT OF WATER LEVELS

Well 83-01, Middle Sandstone



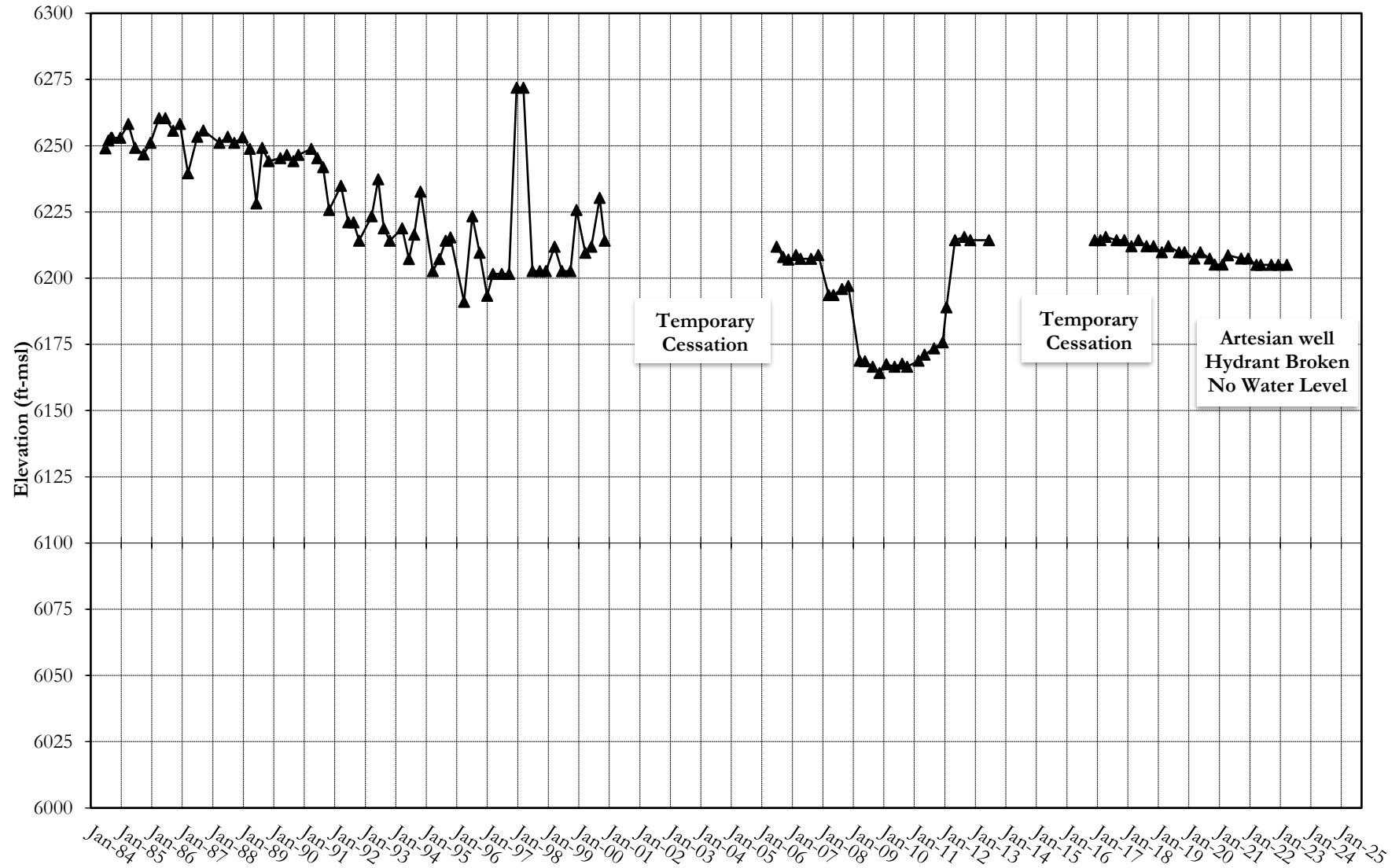
PLOT OF WATER LEVELS

Well 83-02, Middle Sandstone



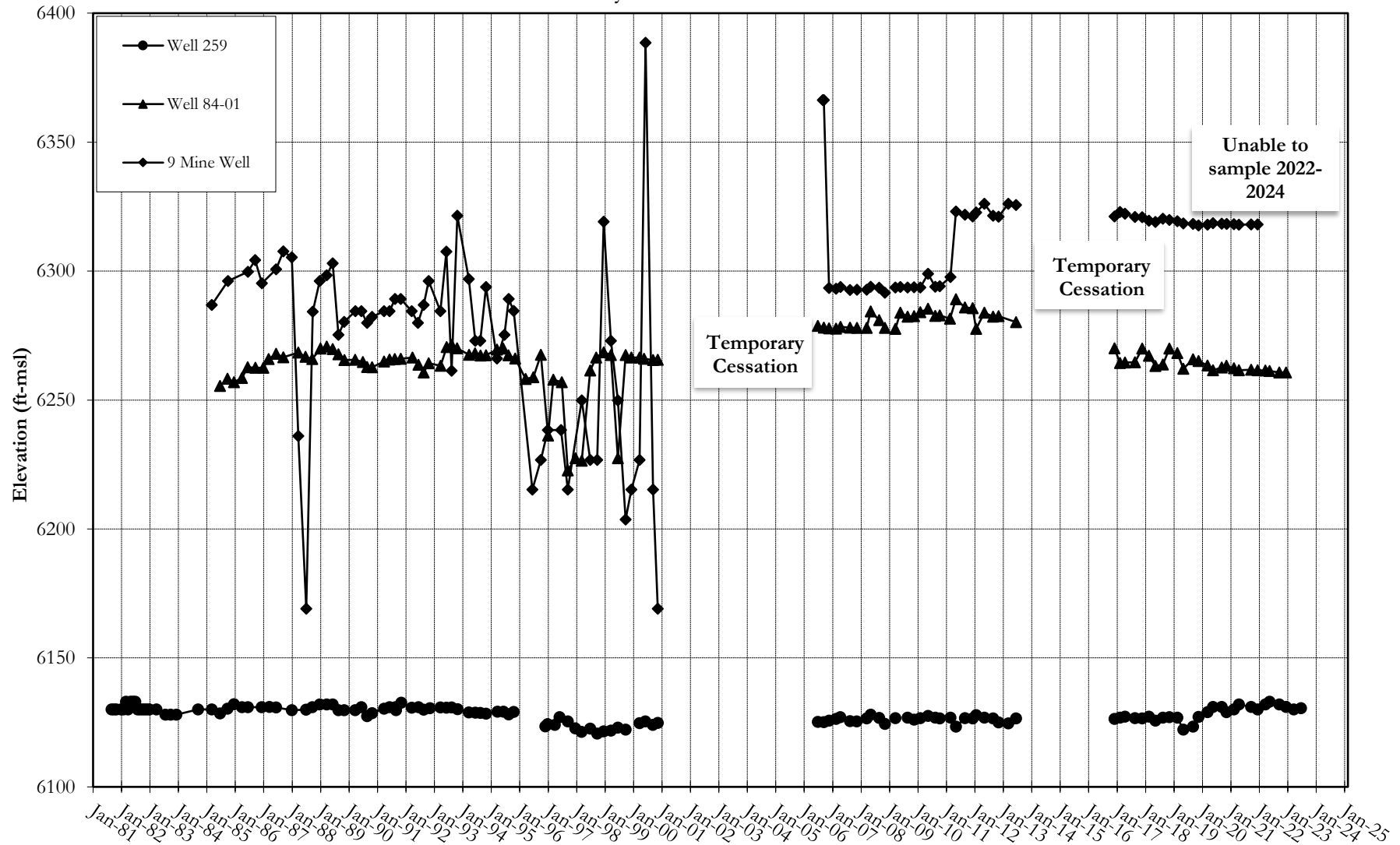
PLOT OF WATER LEVELS

Well 83-03, Middle Sandstone



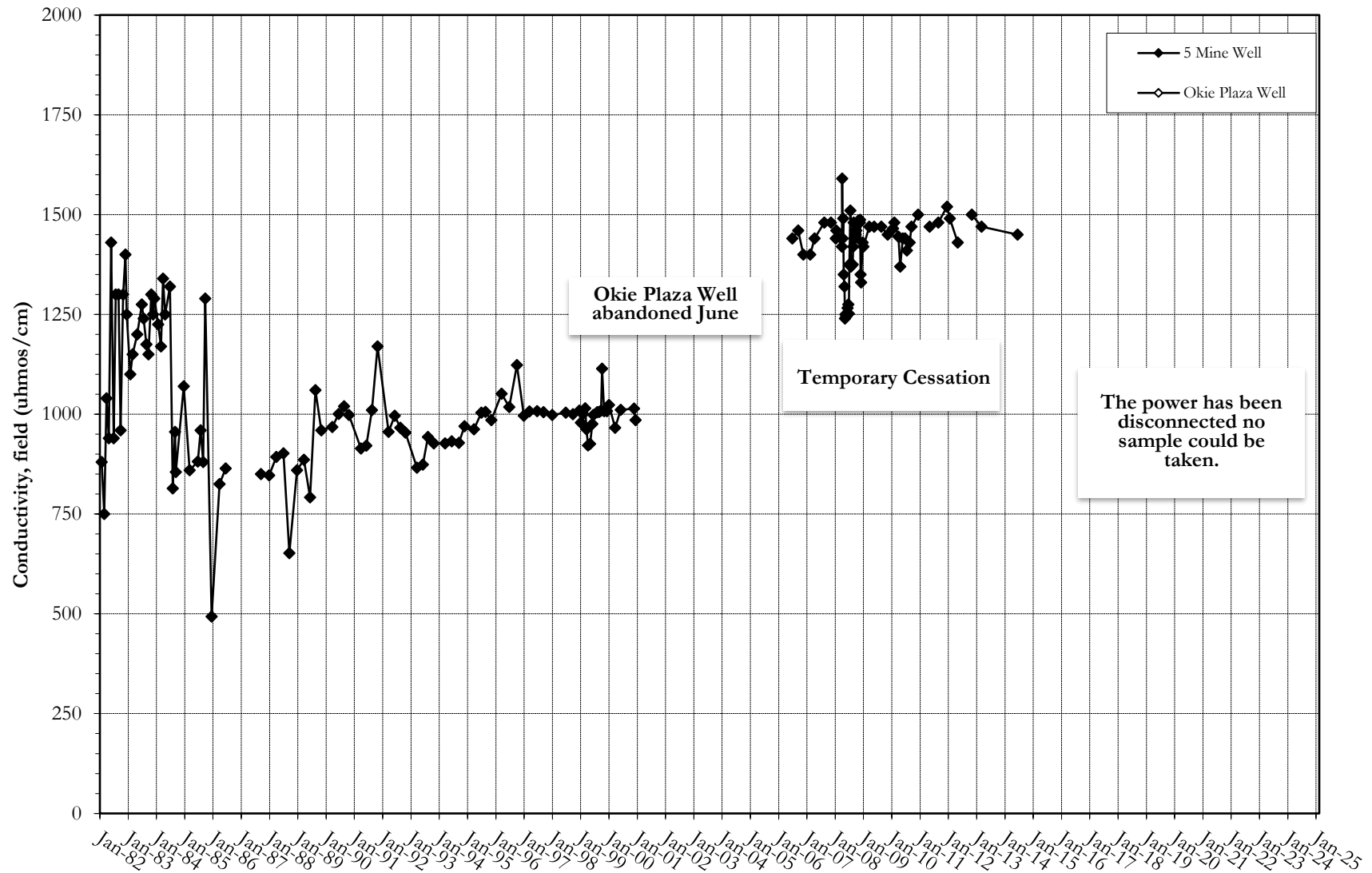
PLOT OF WATER LEVELS

Twentymile Sandstone Wells

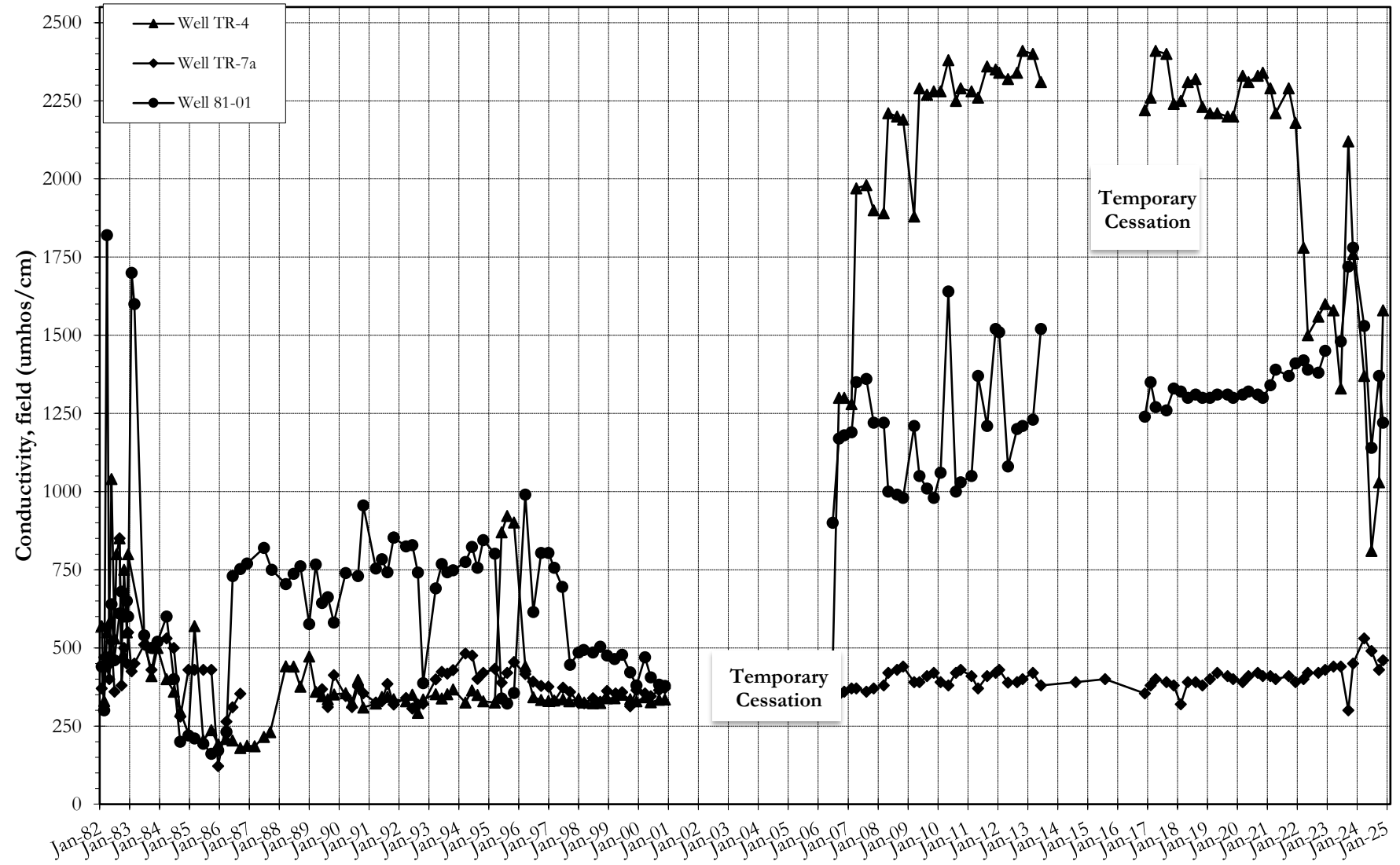


Trout Creek Sandstone

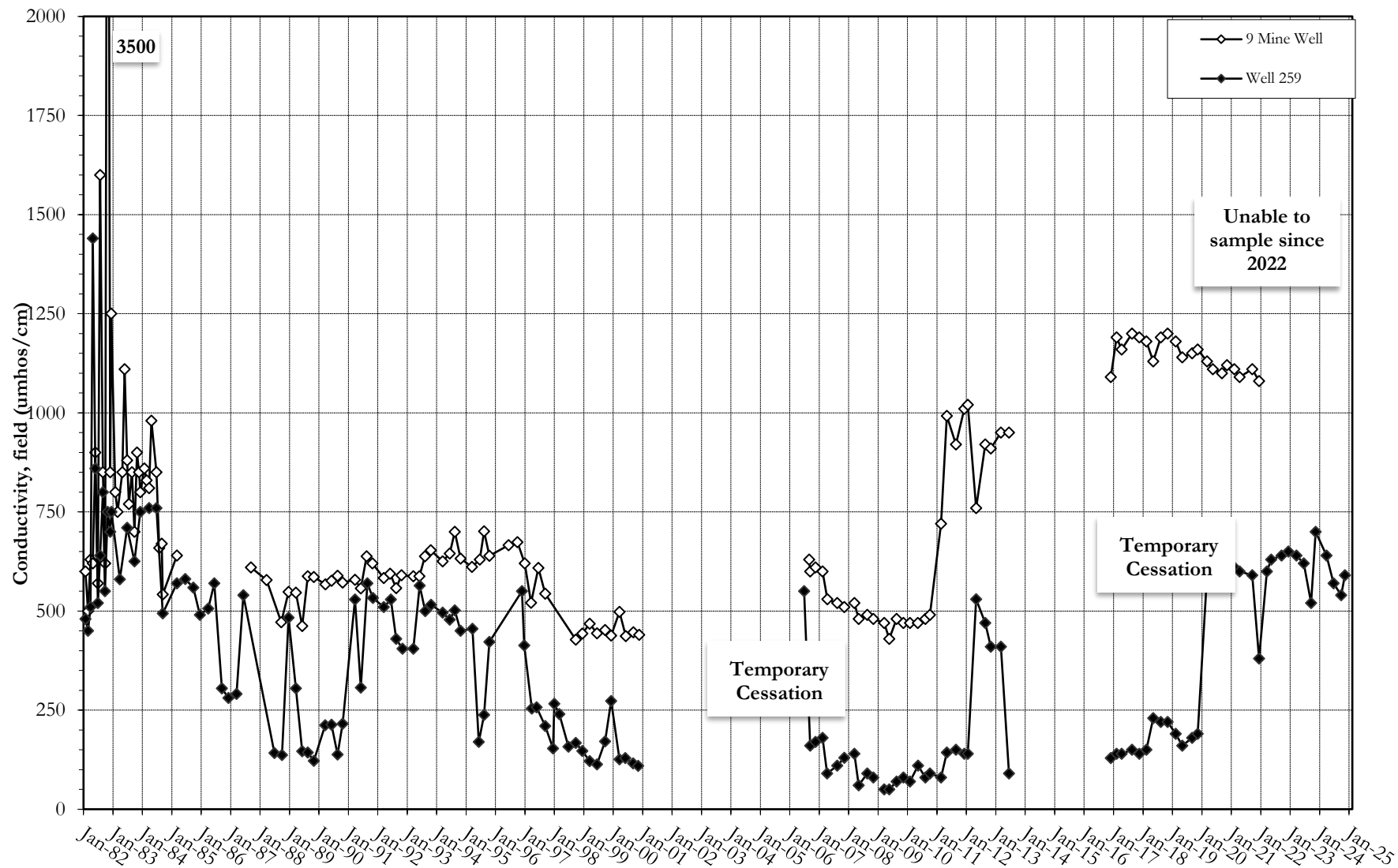
Conductivity, Field



Middle Sandstone Conductivity, Field

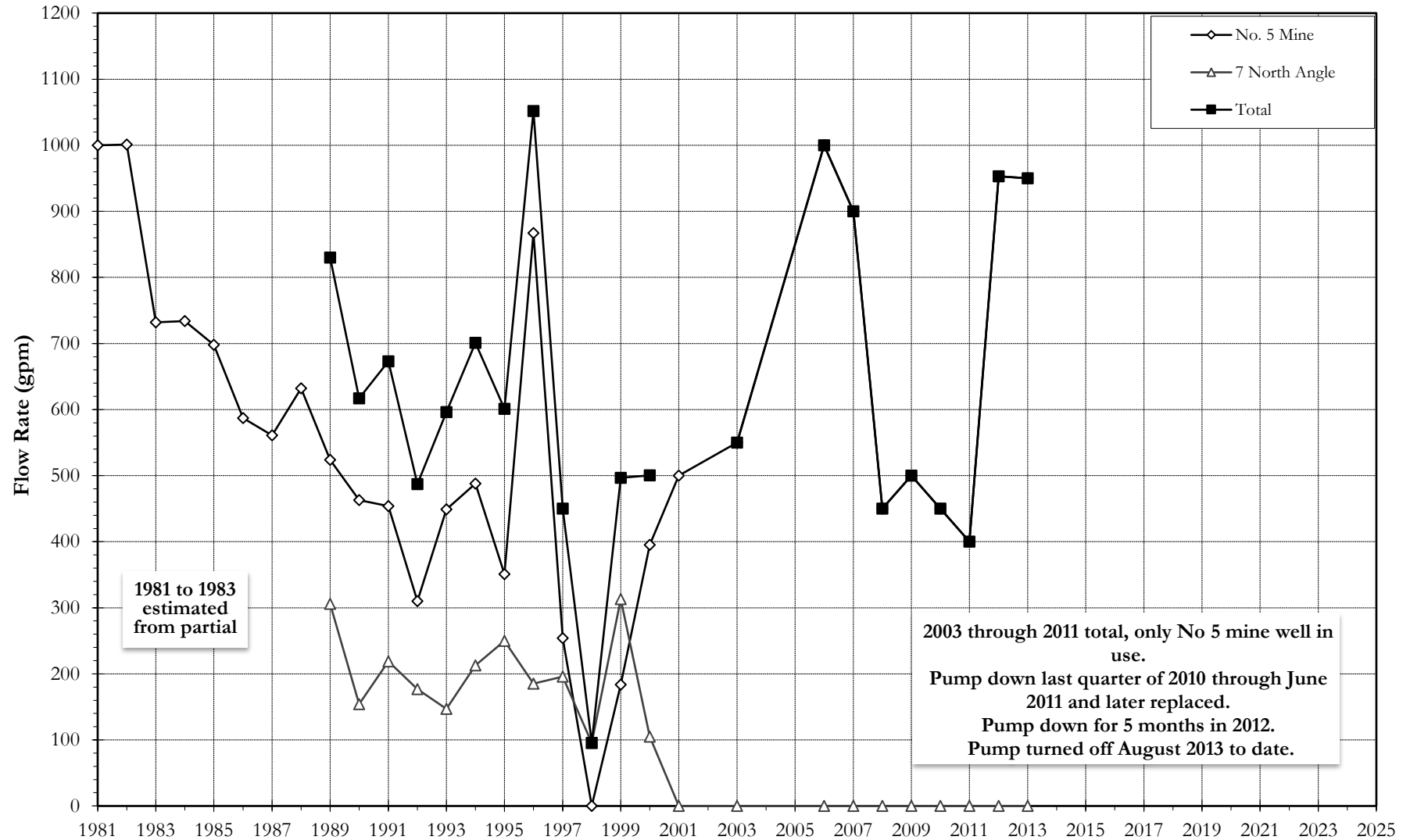


Twentymile Sandstone Conductivity, Field

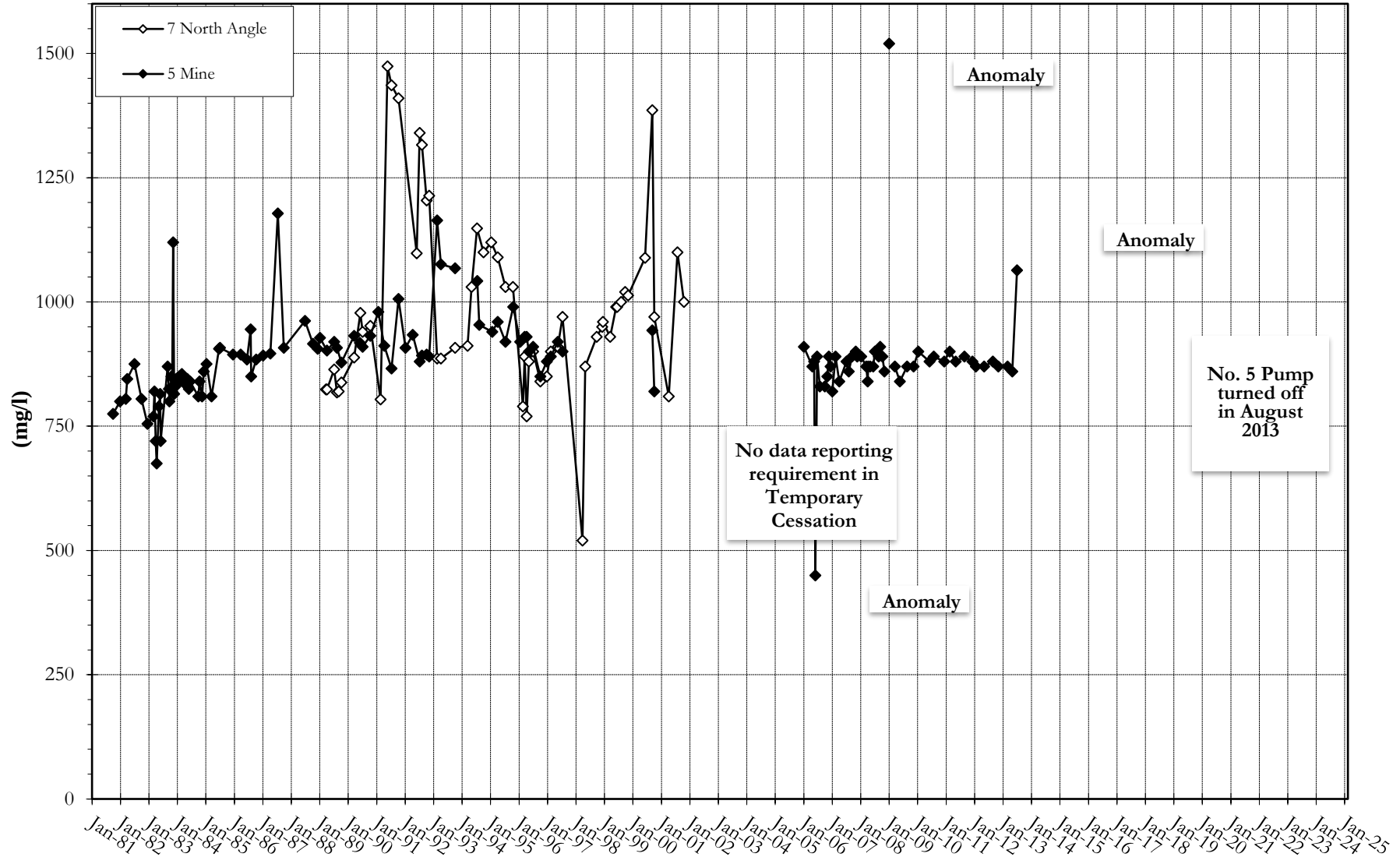


Mean Annual Discharge Rate

No. 5 & 6 Mines

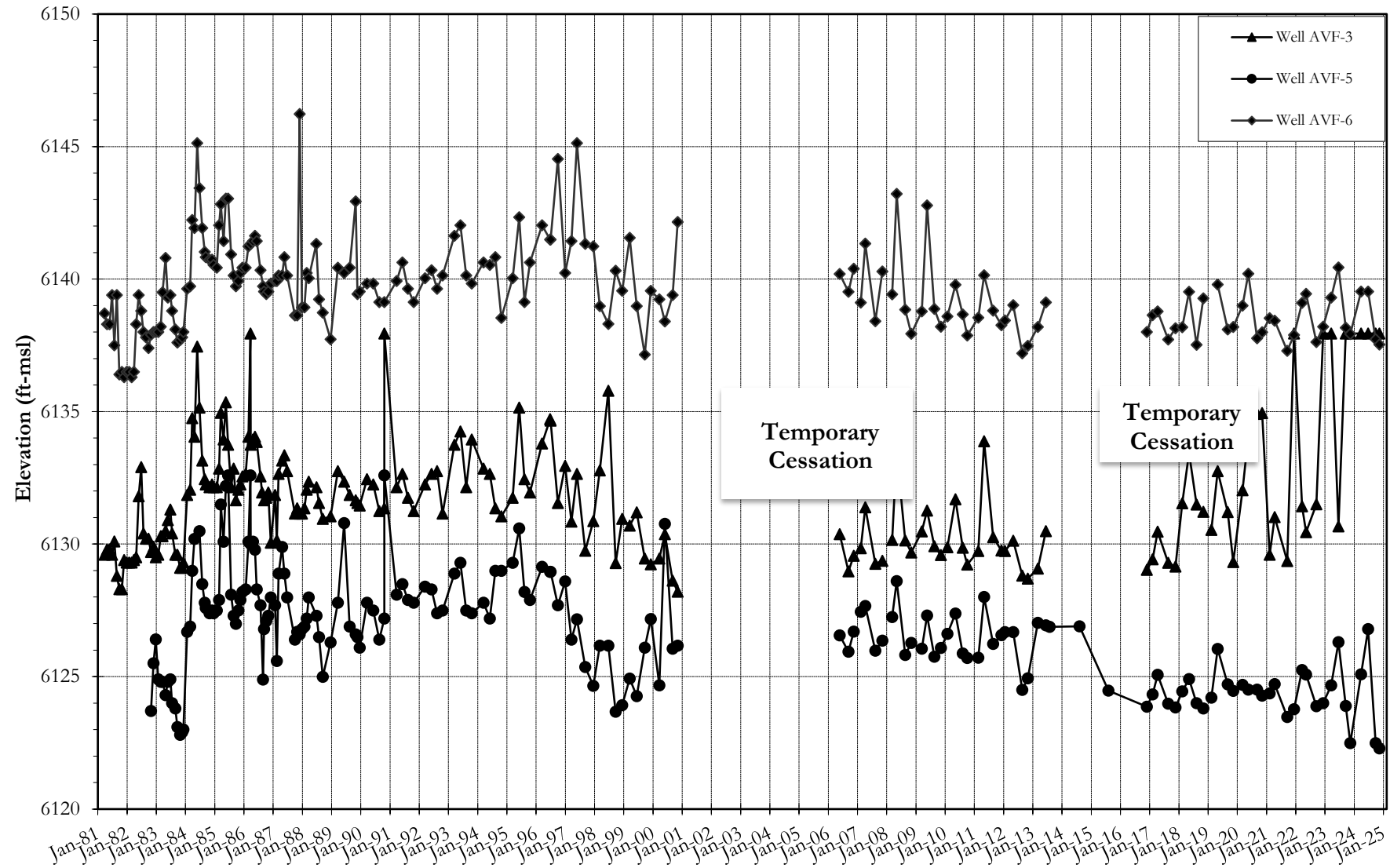


No. 5 Mine & 7 North Angle Discharges Solids, Dissolved

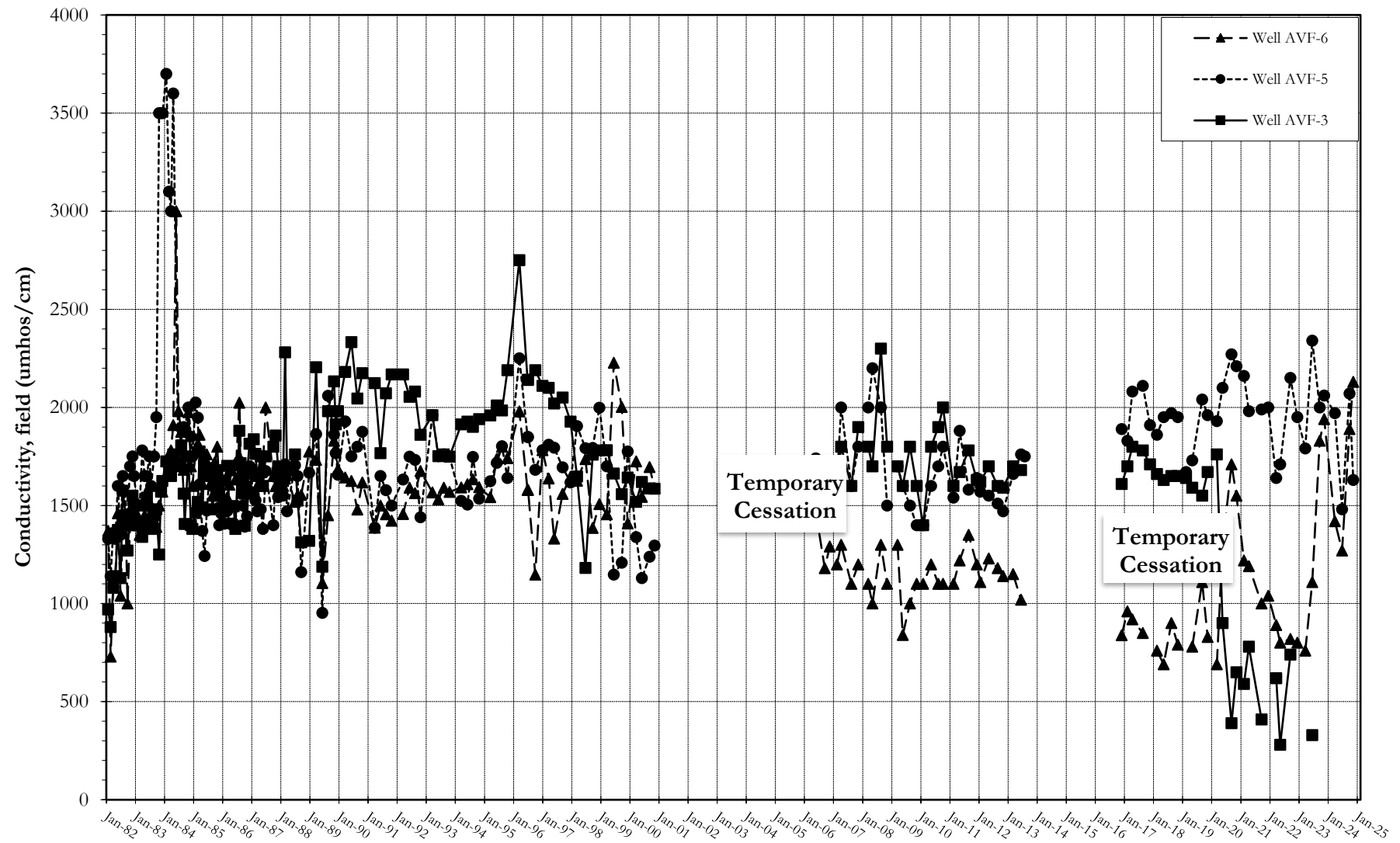


PLOT OF WATER LEVELS

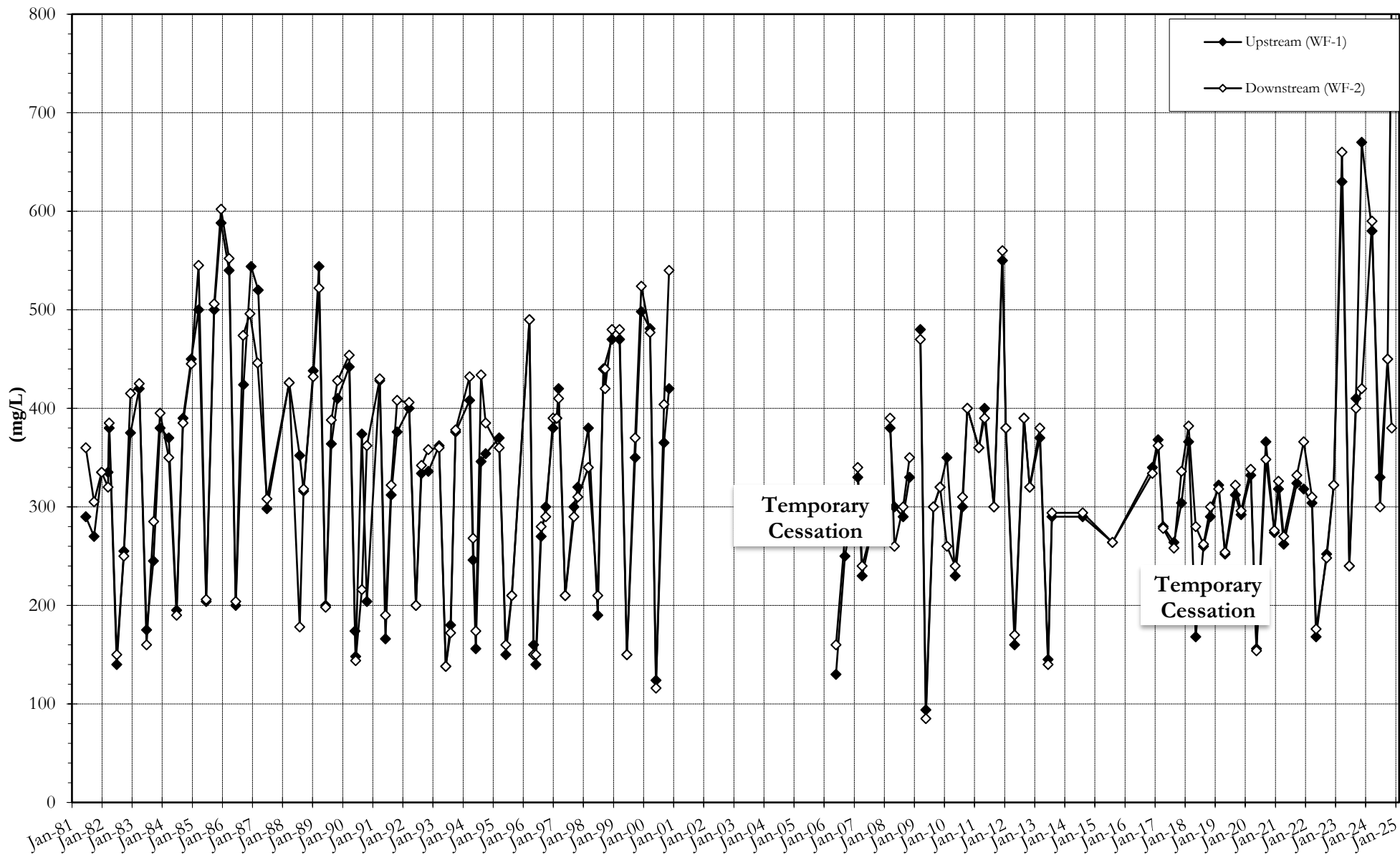
Williams Fork Alluvium



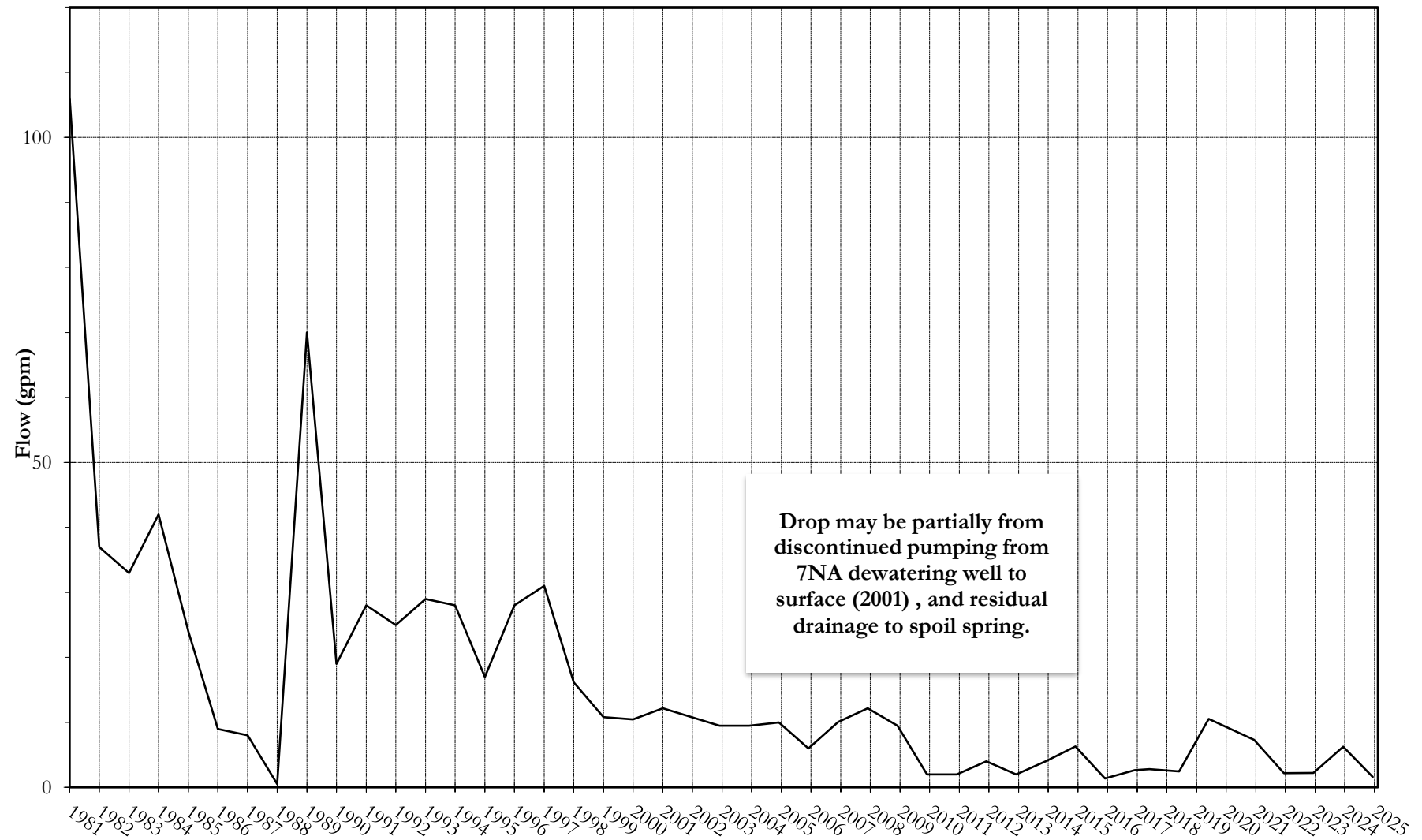
Williams Fork Alluvium Conductivity, Field



Williams Fork River Solids, Total Dissolved

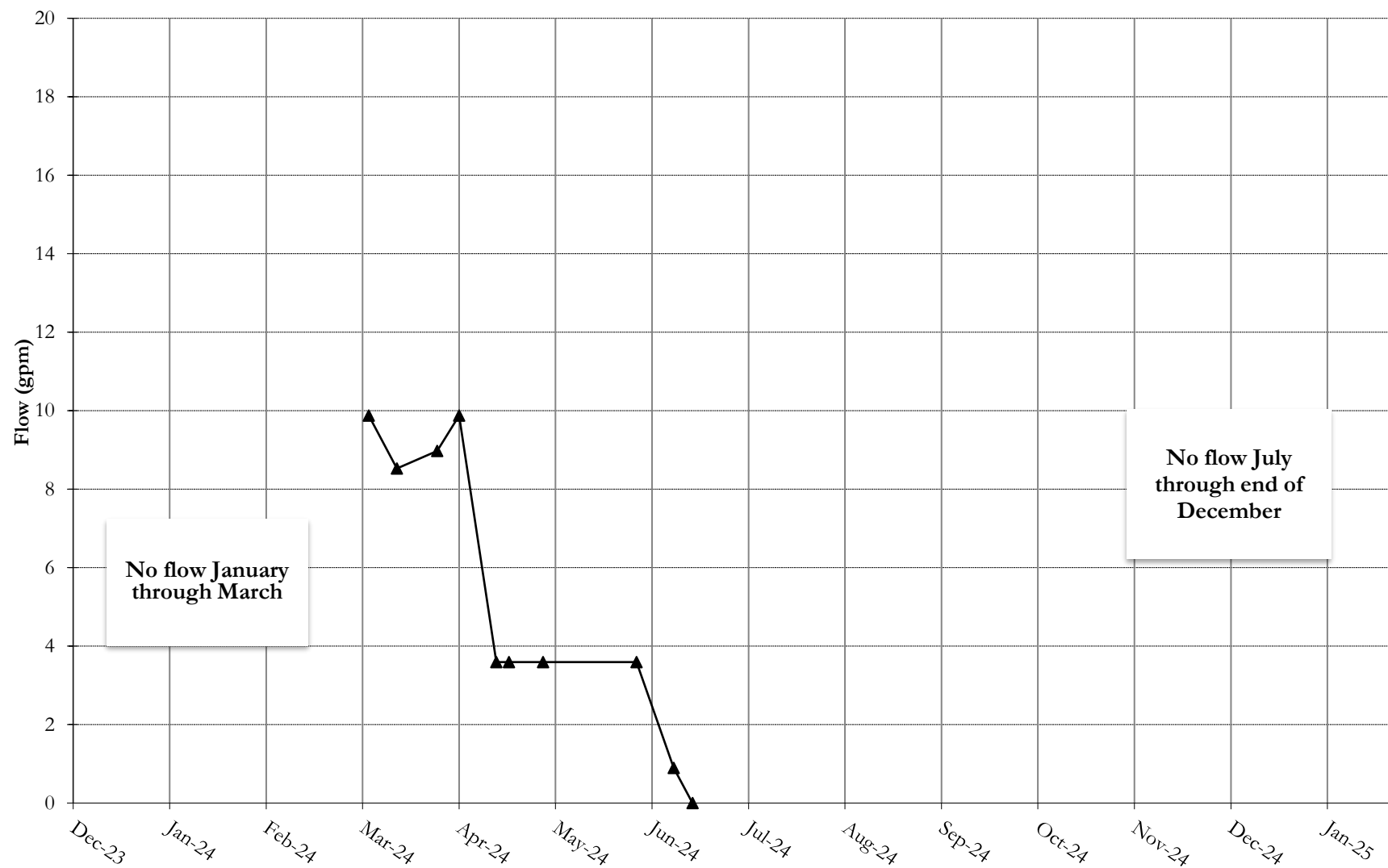


Average Discharge From No. 1 Strip Pit Period of Record



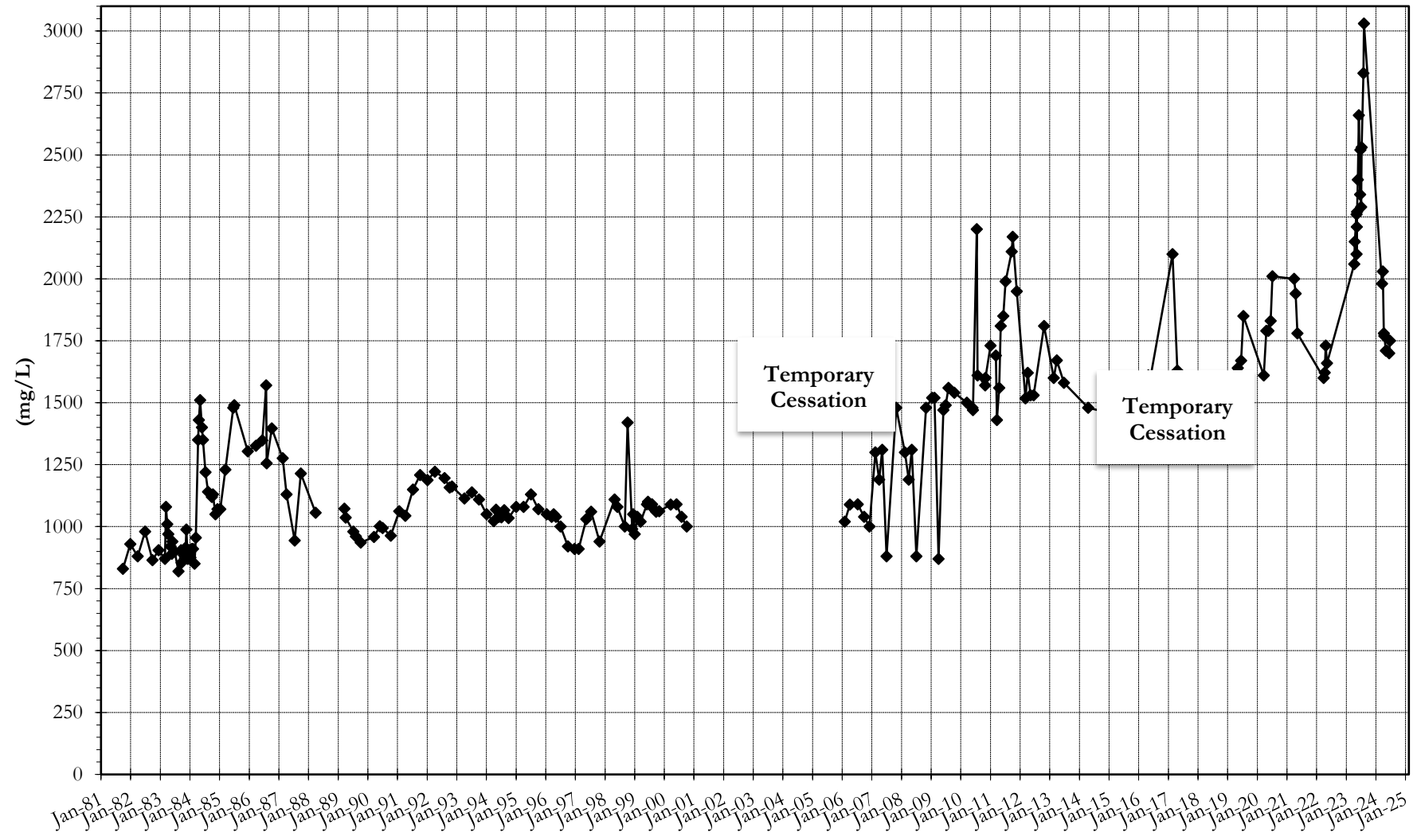
Plot of Flow Rates

No. 1 Strip Pit Discharge, 2024 Water Year

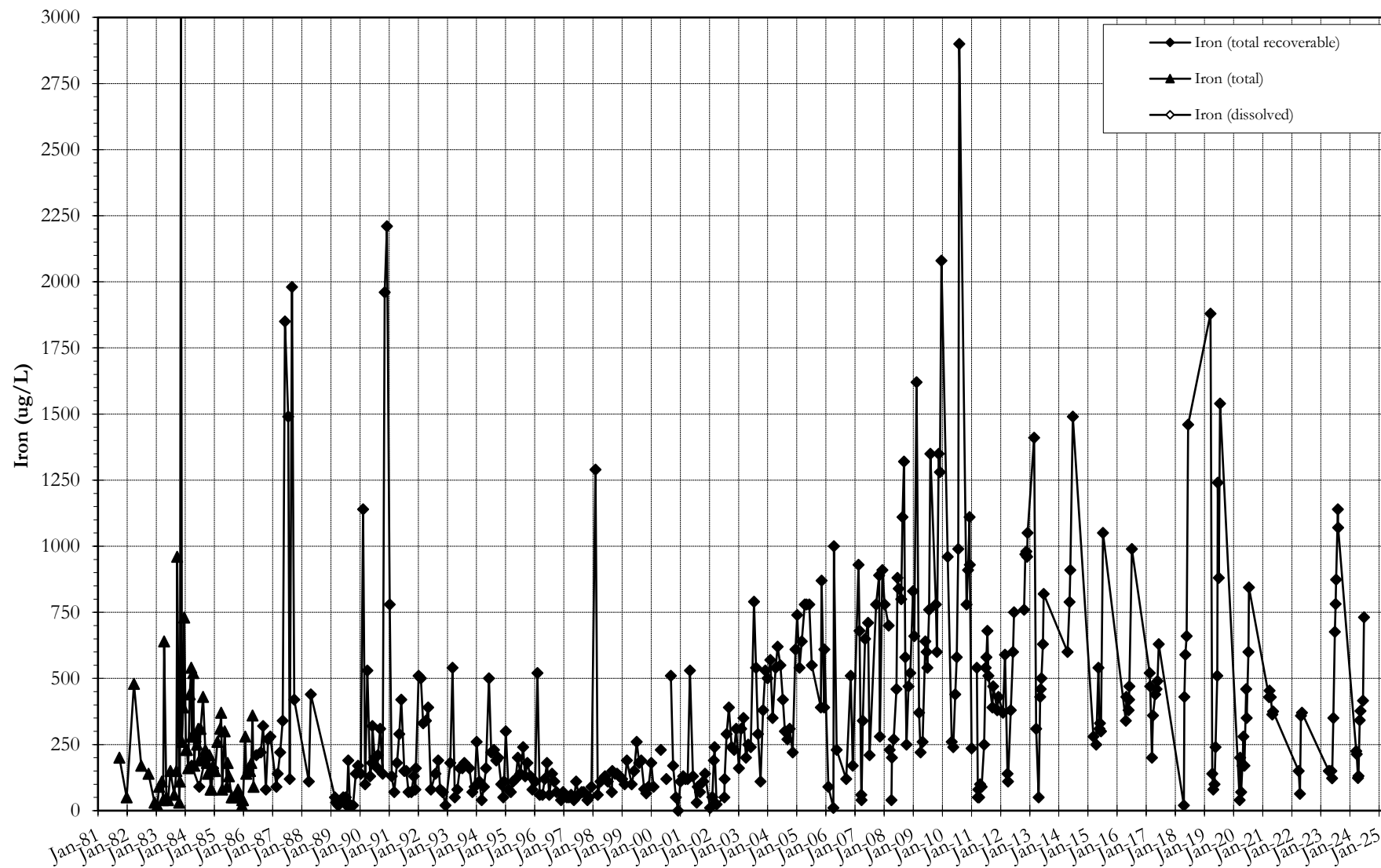


No. 1 Strip Pit Discharge

Solids, Dissolved



No. 1 Strip Pit Discharge Iron - Period of Record



SUPPORTING DATA

2024Williams Fork River Flow Record

Colorado DWR Site WMFKMHCO

Site	Date Time	DISCHRG Value	DISCHRG Units	DISCHRG Observation Flag
WMFKMHCO	01/01/2024 00:00	12.7	cfs	Ice
WMFKMHCO	01/02/2024 00:00	0	cfs	Ice
WMFKMHCO	01/03/2024 00:00	44.3	cfs	Ice
WMFKMHCO	01/04/2024 00:00	101	cfs	Ice
WMFKMHCO	01/05/2024 00:00	97.8	cfs	Ice
WMFKMHCO	01/06/2024 00:00	100	cfs	Ice
WMFKMHCO	01/07/2024 00:00	99.5	cfs	Ice
WMFKMHCO	01/08/2024 00:00	103	cfs	Ice
WMFKMHCO	01/09/2024 00:00	66.1	cfs	Ice
WMFKMHCO	01/10/2024 00:00	103	cfs	Ice
WMFKMHCO	01/11/2024 00:00	121	cfs	Ice
WMFKMHCO	01/12/2024 00:00	191	cfs	Ice
WMFKMHCO	01/13/2024 00:00	222	cfs	Ice
WMFKMHCO	01/14/2024 00:00	206	cfs	Ice
WMFKMHCO	01/15/2024 00:00	196	cfs	Ice
WMFKMHCO	01/16/2024 00:00	187	cfs	Ice
WMFKMHCO	01/17/2024 00:00	178	cfs	Ice
WMFKMHCO	01/18/2024 00:00	161	cfs	Ice
WMFKMHCO	01/19/2024 00:00	153	cfs	Ice
WMFKMHCO	01/20/2024 00:00	207	cfs	Ice
WMFKMHCO	01/21/2024 00:00	189	cfs	Ice
WMFKMHCO	01/22/2024 00:00	229	cfs	Ice
WMFKMHCO	01/23/2024 00:00	230	cfs	Ice
WMFKMHCO	01/24/2024 00:00	222	cfs	Ice
WMFKMHCO	01/25/2024 00:00	207	cfs	Ice
WMFKMHCO	01/26/2024 00:00	192	cfs	Ice
WMFKMHCO	01/27/2024 00:00	145	cfs	Ice
WMFKMHCO	01/28/2024 00:00	92.1	cfs	Ice
WMFKMHCO	01/29/2024 00:00	94.3	cfs	Ice
WMFKMHCO	01/30/2024 00:00	88.4	cfs	Ice
WMFKMHCO	01/31/2024 00:00	84.7	cfs	Ice
WMFKMHCO	02/01/2024 00:00	128	cfs	Ice
WMFKMHCO	02/02/2024 00:00	154	cfs	Ice
WMFKMHCO	02/03/2024 00:00	201	cfs	Ice
WMFKMHCO	02/04/2024 00:00	193	cfs	Ice
WMFKMHCO	02/05/2024 00:00	185	cfs	Ice
WMFKMHCO	02/06/2024 00:00	170	cfs	Ice
WMFKMHCO	02/07/2024 00:00	176	cfs	Ice
WMFKMHCO	02/08/2024 00:00	178	cfs	Ice
WMFKMHCO	02/09/2024 00:00	173	cfs	Ice

WMFKMHCO	02/10/2024 00:00	130	cfs	lce
WMFKMHCO	02/11/2024 00:00	120	cfs	lce
WMFKMHCO	02/12/2024 00:00	113	cfs	lce
WMFKMHCO	02/13/2024 00:00	106	cfs	lce
WMFKMHCO	02/14/2024 00:00	149	cfs	lce
WMFKMHCO	02/15/2024 00:00	203	cfs	lce
WMFKMHCO	02/16/2024 00:00	193	cfs	lce
WMFKMHCO	02/17/2024 00:00	186	cfs	lce
WMFKMHCO	02/18/2024 00:00	180	cfs	lce
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WMFKMHCO	03/07/2024 00:00	144	cfs	lce
WMFKMHCO	03/08/2024 00:00	159	cfs	lce
WMFKMHCO	03/09/2024 00:00	125	cfs	lce
WMFKMHCO	03/10/2024 00:00	138	cfs	lce
WMFKMHCO	03/11/2024 00:00	126	cfs	lce
WMFKMHCO	03/12/2024 00:00	159	cfs	lce
WMFKMHCO	03/13/2024 00:00	157	cfs	lce
WMFKMHCO	03/14/2024 00:00	166	cfs	lce
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WMFKMHCO	03/16/2024 00:00	99.5	cfs	lce
WMFKMHCO	03/17/2024 00:00	76.8	cfs	lce
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WMFKMHCO	03/19/2024 00:00	82	cfs	lce
WMFKMHCO	03/20/2024 00:00	91.2	cfs	lce
WMFKMHCO	03/21/2024 00:00	102	cfs	lce
WMFKMHCO	03/22/2024 00:00	116	cfs	lce
WMFKMHCO	03/23/2024 00:00	124	cfs	lce
WMFKMHCO	03/24/2024 00:00	135	cfs	lce

WMFKMHCO	03/25/2024 00:00	110	cfs	Ice
WMFKMHCO	03/26/2024 00:00	91.2	cfs	
WMFKMHCO	03/27/2024 00:00	87.3	cfs	
WMFKMHCO	03/28/2024 00:00	77.9	cfs	
WMFKMHCO	03/29/2024 00:00	87	cfs	
WMFKMHCO	03/30/2024 00:00	83.7	cfs	
WMFKMHCO	03/31/2024 00:00	83.6	cfs	
WMFKMHCO	04/01/2024 00:00	92.7	cfs	
WMFKMHCO	04/02/2024 00:00	91.3	cfs	
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WMFKMHCO	04/16/2024 00:00	352	cfs	
WMFKMHCO	04/17/2024 00:00	324	cfs	
WMFKMHCO	04/18/2024 00:00	369	cfs	
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WMFKMHCO	04/26/2024 00:00	825	cfs	
WMFKMHCO	04/27/2024 00:00	732	cfs	
WMFKMHCO	04/28/2024 00:00	596	cfs	
WMFKMHCO	04/29/2024 00:00	544	cfs	
WMFKMHCO	04/30/2024 00:00	633	cfs	
WMFKMHCO	05/01/2024 00:00	694	cfs	
WMFKMHCO	05/02/2024 00:00	553	cfs	
WMFKMHCO	05/03/2024 00:00	524	cfs	
WMFKMHCO	05/04/2024 00:00	469	cfs	
WMFKMHCO	05/05/2024 00:00	608	cfs	
WMFKMHCO	05/06/2024 00:00	901	cfs	
WMFKMHCO	05/07/2024 00:00	658	cfs	

WMFKMHCO	05/08/2024 00:00	530	cfs
WMFKMHCO	05/09/2024 00:00	445	cfs
WMFKMHCO	05/10/2024 00:00	421	cfs
WMFKMHCO	05/11/2024 00:00	417	cfs
WMFKMHCO	05/12/2024 00:00	432	cfs
WMFKMHCO	05/13/2024 00:00	552	cfs
WMFKMHCO	05/14/2024 00:00	857	cfs
WMFKMHCO	05/15/2024 00:00	1070	cfs
WMFKMHCO	05/16/2024 00:00	1010	cfs
WMFKMHCO	05/17/2024 00:00	1170	cfs
WMFKMHCO	05/18/2024 00:00	1270	cfs
WMFKMHCO	05/19/2024 00:00	1330	cfs
WMFKMHCO	05/20/2024 00:00	1310	cfs
WMFKMHCO	05/21/2024 00:00	1220	cfs
WMFKMHCO	05/22/2024 00:00	842	cfs
WMFKMHCO	05/23/2024 00:00	667	cfs
WMFKMHCO	05/24/2024 00:00	603	cfs
WMFKMHCO	05/25/2024 00:00	652	cfs
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WMFKMHCO	06/08/2024 00:00	1010	cfs
WMFKMHCO	06/09/2024 00:00	981	cfs
WMFKMHCO	06/10/2024 00:00	930	cfs
WMFKMHCO	06/11/2024 00:00	877	cfs
WMFKMHCO	06/12/2024 00:00	814	cfs
WMFKMHCO	06/13/2024 00:00	759	cfs
WMFKMHCO	06/14/2024 00:00	731	cfs
WMFKMHCO	06/15/2024 00:00	634	cfs
WMFKMHCO	06/16/2024 00:00	576	cfs
WMFKMHCO	06/17/2024 00:00	523	cfs
WMFKMHCO	06/18/2024 00:00	469	cfs
WMFKMHCO	06/19/2024 00:00	392	cfs
WMFKMHCO	06/20/2024 00:00	349	cfs

WMFKMHCO	06/21/2024 00:00	391	cfs
WMFKMHCO	06/22/2024 00:00	407	cfs
WMFKMHCO	06/23/2024 00:00	352	cfs
WMFKMHCO	06/24/2024 00:00	301	cfs
WMFKMHCO	06/25/2024 00:00	276	cfs
WMFKMHCO	06/26/2024 00:00	254	cfs
WMFKMHCO	06/27/2024 00:00	269	cfs
WMFKMHCO	06/28/2024 00:00	281	cfs
WMFKMHCO	06/29/2024 00:00	252	cfs
WMFKMHCO	06/30/2024 00:00	215	cfs
WMFKMHCO	07/01/2024 00:00	192	cfs
WMFKMHCO	07/02/2024 00:00	217	cfs
WMFKMHCO	07/03/2024 00:00	182	cfs
WMFKMHCO	07/04/2024 00:00	154	cfs
WMFKMHCO	07/05/2024 00:00	138	cfs
WMFKMHCO	07/06/2024 00:00	127	cfs
WMFKMHCO	07/07/2024 00:00	116	cfs
WMFKMHCO	07/08/2024 00:00	109	cfs
WMFKMHCO	07/09/2024 00:00	104	cfs
WMFKMHCO	07/10/2024 00:00	94.9	cfs
WMFKMHCO	07/11/2024 00:00	84.2	cfs
WMFKMHCO	07/12/2024 00:00	80.3	cfs
WMFKMHCO	07/13/2024 00:00	75.7	cfs
WMFKMHCO	07/14/2024 00:00	74.3	cfs
WMFKMHCO	07/15/2024 00:00	74.9	cfs
WMFKMHCO	07/16/2024 00:00	71.2	cfs
WMFKMHCO	07/17/2024 00:00	66.7	cfs
WMFKMHCO	07/18/2024 00:00	64	cfs
WMFKMHCO	07/19/2024 00:00	65.2	cfs
WMFKMHCO	07/20/2024 00:00	64.7	cfs
WMFKMHCO	07/21/2024 00:00	63.5	cfs
WMFKMHCO	07/22/2024 00:00	62.9	cfs
WMFKMHCO	07/23/2024 00:00	61.5	cfs
WMFKMHCO	07/24/2024 00:00	60.2	cfs
WMFKMHCO	07/25/2024 00:00	58.5	cfs
WMFKMHCO	07/26/2024 00:00	55.5	cfs
WMFKMHCO	07/27/2024 00:00	53.9	cfs
WMFKMHCO	07/28/2024 00:00	60.3	cfs
WMFKMHCO	07/29/2024 00:00	58.7	cfs
WMFKMHCO	07/30/2024 00:00	51.3	cfs
WMFKMHCO	07/31/2024 00:00	46.3	cfs
WMFKMHCO	08/01/2024 00:00	42.5	cfs
WMFKMHCO	08/02/2024 00:00	41.8	cfs
WMFKMHCO	08/03/2024 00:00	38.4	cfs

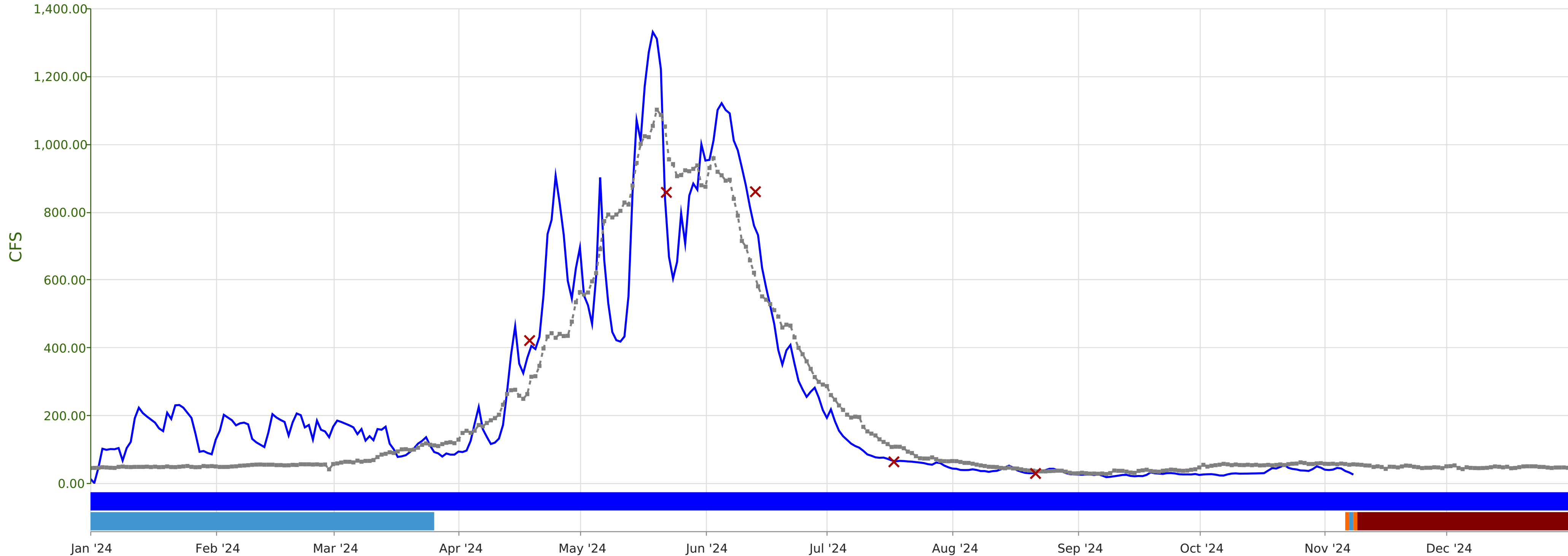
WMFKMHCO	08/04/2024 00:00	38.1	cfs
WMFKMHCO	08/05/2024 00:00	38.3	cfs
WMFKMHCO	08/06/2024 00:00	40.3	cfs
WMFKMHCO	08/07/2024 00:00	38.3	cfs
WMFKMHCO	08/08/2024 00:00	35.2	cfs
WMFKMHCO	08/09/2024 00:00	35.1	cfs
WMFKMHCO	08/10/2024 00:00	32.8	cfs
WMFKMHCO	08/11/2024 00:00	35	cfs
WMFKMHCO	08/12/2024 00:00	35.9	cfs
WMFKMHCO	08/13/2024 00:00	40.3	cfs
WMFKMHCO	08/14/2024 00:00	45.9	cfs
WMFKMHCO	08/15/2024 00:00	51.1	cfs
WMFKMHCO	08/16/2024 00:00	45.4	cfs
WMFKMHCO	08/17/2024 00:00	37.3	cfs
WMFKMHCO	08/18/2024 00:00	33.2	cfs
WMFKMHCO	08/19/2024 00:00	29.8	cfs
WMFKMHCO	08/20/2024 00:00	28.8	cfs
WMFKMHCO	08/21/2024 00:00	29.4	cfs
WMFKMHCO	08/22/2024 00:00	31.3	cfs
WMFKMHCO	08/23/2024 00:00	34.6	cfs
WMFKMHCO	08/24/2024 00:00	37.9	cfs
WMFKMHCO	08/25/2024 00:00	41.9	cfs
WMFKMHCO	08/26/2024 00:00	41.8	cfs
WMFKMHCO	08/27/2024 00:00	38	cfs
WMFKMHCO	08/28/2024 00:00	34.7	cfs
WMFKMHCO	08/29/2024 00:00	29.4	cfs
WMFKMHCO	08/30/2024 00:00	26.1	cfs
WMFKMHCO	08/31/2024 00:00	25.1	cfs
WMFKMHCO	09/01/2024 00:00	24.8	cfs
WMFKMHCO	09/02/2024 00:00	24.4	cfs
WMFKMHCO	09/03/2024 00:00	24.9	cfs
WMFKMHCO	09/04/2024 00:00	25.3	cfs
WMFKMHCO	09/05/2024 00:00	23.4	cfs
WMFKMHCO	09/06/2024 00:00	25.4	cfs
WMFKMHCO	09/07/2024 00:00	21.9	cfs
WMFKMHCO	09/08/2024 00:00	17.3	cfs
WMFKMHCO	09/09/2024 00:00	18.2	cfs
WMFKMHCO	09/10/2024 00:00	19.9	cfs
WMFKMHCO	09/11/2024 00:00	21.6	cfs
WMFKMHCO	09/12/2024 00:00	23.6	cfs
WMFKMHCO	09/13/2024 00:00	24	cfs
WMFKMHCO	09/14/2024 00:00	20.8	cfs
WMFKMHCO	09/15/2024 00:00	19.9	cfs
WMFKMHCO	09/16/2024 00:00	20.6	cfs

WMFKMHCO	09/17/2024 00:00	20.3	cfs
WMFKMHCO	09/18/2024 00:00	23.9	cfs
WMFKMHCO	09/19/2024 00:00	31.5	cfs
WMFKMHCO	09/20/2024 00:00	28.5	cfs
WMFKMHCO	09/21/2024 00:00	27.8	cfs
WMFKMHCO	09/22/2024 00:00	26.8	cfs
WMFKMHCO	09/23/2024 00:00	29	cfs
WMFKMHCO	09/24/2024 00:00	29.3	cfs
WMFKMHCO	09/25/2024 00:00	28.1	cfs
WMFKMHCO	09/26/2024 00:00	25.8	cfs
WMFKMHCO	09/27/2024 00:00	25.2	cfs
WMFKMHCO	09/28/2024 00:00	25.3	cfs
WMFKMHCO	09/29/2024 00:00	25.1	cfs
WMFKMHCO	09/30/2024 00:00	26.5	cfs
WMFKMHCO	10/01/2024 00:00	23.8	cfs
WMFKMHCO	10/02/2024 00:00	25.1	cfs
WMFKMHCO	10/03/2024 00:00	25.7	cfs
WMFKMHCO	10/04/2024 00:00	26	cfs
WMFKMHCO	10/05/2024 00:00	24.6	cfs
WMFKMHCO	10/06/2024 00:00	22.2	cfs
WMFKMHCO	10/07/2024 00:00	22	cfs
WMFKMHCO	10/08/2024 00:00	25.4	cfs
WMFKMHCO	10/09/2024 00:00	27.7	cfs
WMFKMHCO	10/10/2024 00:00	28.3	cfs
WMFKMHCO	10/11/2024 00:00	27.4	cfs
WMFKMHCO	10/12/2024 00:00	27.6	cfs
WMFKMHCO	10/13/2024 00:00	27.7	cfs
WMFKMHCO	10/14/2024 00:00	28	cfs
WMFKMHCO	10/15/2024 00:00	28.2	cfs
WMFKMHCO	10/16/2024 00:00	28.6	cfs
WMFKMHCO	10/17/2024 00:00	29	cfs
WMFKMHCO	10/18/2024 00:00	36.5	cfs
WMFKMHCO	10/19/2024 00:00	43.8	cfs
WMFKMHCO	10/20/2024 00:00	42.6	cfs
WMFKMHCO	10/21/2024 00:00	47.4	cfs
WMFKMHCO	10/22/2024 00:00	52.9	cfs
WMFKMHCO	10/23/2024 00:00	44.7	cfs
WMFKMHCO	10/24/2024 00:00	41.4	cfs
WMFKMHCO	10/25/2024 00:00	40	cfs
WMFKMHCO	10/26/2024 00:00	37	cfs
WMFKMHCO	10/27/2024 00:00	36.6	cfs
WMFKMHCO	10/28/2024 00:00	35.5	cfs
WMFKMHCO	10/29/2024 00:00	40.9	cfs
WMFKMHCO	10/30/2024 00:00	48.9	cfs

WMFKMHCO	10/31/2024 00:00	45.4	cfs	
WMFKMHCO	11/01/2024 00:00	39.2	cfs	
WMFKMHCO	11/02/2024 00:00	38.2	cfs	
WMFKMHCO	11/03/2024 00:00	39.4	cfs	
WMFKMHCO	11/04/2024 00:00	44.4	cfs	
WMFKMHCO	11/05/2024 00:00	42.8	cfs	
WMFKMHCO	11/06/2024 00:00	35.4	cfs	*
WMFKMHCO	11/07/2024 00:00	31	cfs	Ice
WMFKMHCO	11/08/2024 00:00	24.7	cfs	*
WMFKMHCO	11/09/2024 00:00		cfs	Ssn
WMFKMHCO	11/10/2024 00:00		cfs	Ssn
WMFKMHCO	11/11/2024 00:00		cfs	Ssn
WMFKMHCO	11/12/2024 00:00		cfs	Ssn
WMFKMHCO	11/13/2024 00:00		cfs	Ssn
WMFKMHCO	11/14/2024 00:00		cfs	Ssn
WMFKMHCO	11/15/2024 00:00		cfs	Ssn
WMFKMHCO	11/16/2024 00:00		cfs	Ssn
WMFKMHCO	11/17/2024 00:00		cfs	Ssn
WMFKMHCO	11/18/2024 00:00		cfs	Ssn
WMFKMHCO	11/19/2024 00:00		cfs	Ssn
WMFKMHCO	11/20/2024 00:00		cfs	Ssn
WMFKMHCO	11/21/2024 00:00		cfs	Ssn
WMFKMHCO	11/22/2024 00:00		cfs	Ssn
WMFKMHCO	11/23/2024 00:00		cfs	Ssn
WMFKMHCO	11/24/2024 00:00		cfs	Ssn
WMFKMHCO	11/25/2024 00:00		cfs	Ssn
WMFKMHCO	11/26/2024 00:00		cfs	Ssn
WMFKMHCO	11/27/2024 00:00		cfs	Ssn
WMFKMHCO	11/28/2024 00:00		cfs	Ssn
WMFKMHCO	11/29/2024 00:00		cfs	Ssn
WMFKMHCO	11/30/2024 00:00		cfs	Ssn
WMFKMHCO	12/01/2024 00:00		cfs	Ssn
WMFKMHCO	12/02/2024 00:00		cfs	Ssn
WMFKMHCO	12/03/2024 00:00		cfs	Ssn
WMFKMHCO	12/04/2024 00:00		cfs	Ssn
WMFKMHCO	12/05/2024 00:00		cfs	Ssn
WMFKMHCO	12/06/2024 00:00		cfs	Ssn
WMFKMHCO	12/07/2024 00:00		cfs	Ssn
WMFKMHCO	12/08/2024 00:00		cfs	Ssn
WMFKMHCO	12/09/2024 00:00		cfs	Ssn
WMFKMHCO	12/10/2024 00:00		cfs	Ssn
WMFKMHCO	12/11/2024 00:00		cfs	Ssn
WMFKMHCO	12/12/2024 00:00		cfs	Ssn
WMFKMHCO	12/13/2024 00:00		cfs	Ssn

WMFKMHCO	12/14/2024 00:00	cfs	Ssn
WMFKMHCO	12/15/2024 00:00	cfs	Ssn
WMFKMHCO	12/16/2024 00:00	cfs	Ssn
WMFKMHCO	12/17/2024 00:00	cfs	Ssn
WMFKMHCO	12/18/2024 00:00	cfs	Ssn
WMFKMHCO	12/19/2024 00:00	cfs	Ssn
WMFKMHCO	12/20/2024 00:00	cfs	Ssn
WMFKMHCO	12/21/2024 00:00	cfs	Ssn
WMFKMHCO	12/22/2024 00:00	cfs	Ssn
WMFKMHCO	12/23/2024 00:00	cfs	Ssn
WMFKMHCO	12/24/2024 00:00	cfs	Ssn
WMFKMHCO	12/25/2024 00:00	cfs	Ssn
WMFKMHCO	12/26/2024 00:00	cfs	Ssn
WMFKMHCO	12/27/2024 00:00	cfs	Ssn
WMFKMHCO	12/28/2024 00:00	cfs	Ssn
WMFKMHCO	12/29/2024 00:00	cfs	Ssn
WMFKMHCO	12/30/2024 00:00	cfs	Ssn
WMFKMHCO	12/31/2024 00:00	cfs	Ssn

WMFKMHCO - WILLIAMS FORK AT MOUTH NEAR HAMILTON



Legend

Flags

■ O - Original data as collected by the data collection platform ■ Ice - Ice affected * ■ Ssn - Parameter monitored seasonally