



2020 ANNUAL
HYDROLOGY REPORT

OXBOW MINING, LLC

ELK CREEK MINE

CDRMS PERMIT C-1981-022

OXBOW MINING, LLC

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March 3, 2020

Mr. Leigh Simmons
Environmental Protection Specialist
Colorado Division of Reclamation, Mining and Safety
1313 Sherman Street, Room 215
Denver, CO, 80203

Re: 2020 Annual Hydrology Report
CDRMS Permit C-1981-022, Oxbow Mining, LLC

Dear Mr. Simmons:

Please find enclosed one copy of the Annual Hydrology Report for the year 2020.

The report and site descriptions follow the format of the revised hydrologic monitoring program approved as a result of the PR-04 Permit Revision and TR-47.

Please contact me if you have any questions concerning the contents of the report.

Sincerely,

Doug A. Smith
Chief Engineer

Enclosures

Xc: Mike Ludlow (OMLLC)
files

OXBOW MINING, LLC



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Via email

March 3, 2020

Mr. Greg Larson
Field Office Manager
BLM Uncompahgre Field Office
2465 S. Townsend Avenue
Montrose Colorado 81401

Mr. Levi Broyles
District Ranger
Paonia Ranger District
PO Box 1030
Paonia, Colorado 81428

Re: 2020 Annual Hydrology Report
CDRMS Permit C-1981-022, Oxbow Mining, LLC

To Whom It May Concern:

In accordance with the requirements of Federal Coal Lease COC- 61357, *Special Stipulation Section 15(d)(1) Water Replacement Plan*, please find attached one copy of the Oxbow Mining, LLC., CDRMS Annual Hydrology Report for the year 2020.

Please contact me at 970-929-6034 if you have any questions concerning the contents of the report.

Sincerely,

Doug A. Smith
Chief Engineer

Enclosures

Xc: Mike Ludlow (OMLLC)
Leigh Simmons (CDRMS)
Desty Dyer (BLM)
Dan Gray (USFS)

Files

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1.1 Introduction

Oxbow Mining, LLC owns the now closed and reclaimed Elk Creek and Sanborn Creek Mines. The surface facilities for the mines are located immediately north of the town of Somerset, Colorado in Gunnison County. The Sanborn Creek Mine portals were located about one mile east and the Elk Creek Mine portal is located about a half mile north of the office facilities, the town of Somerset and State Highway 133. Coal from both mines had been conveyed to surface facilities where storage, processing (screening and crushing) was conducted. The coal was then loaded onto unit train rail cars for shipment to customers. A limited amount of coal had historically been transported by highway truck from the facilities to a nearby loading and crushing facility (Terror Creek Loadout) where sized coal products were provided to customers. In early 2003 the Sanborn Creek mine completed mining of the last longwall panel, the mining equipment was removed and the mine was sealed and the portals reclaimed. In 2015 the Elk Creek Mine portals were sealed and demolition, backfill and grading was completed in 2018.

The Sanborn Creek and Elk Creek Mines' surface facilities are located within the North Fork of the Gunnison River drainage, which is a tributary to the Colorado River. The North Fork drainage ranges in elevation from 5,550 feet to 12,000 feet and drains 1,253 square miles. The average annual discharge of the North Fork of the Gunnison River at the U.S. Geological Survey gauging station 2.3 miles east of Somerset is 313,300 acre feet of water, or an average discharge of 457 cubic feet per second. Peak flows generally occur in May as a result of snowmelt with minimum flows occurring during the winter months.

Surface drainage from the CDRMS permit area runs directly to the North Fork of the Gunnison River. One perennial, one intermittent, and eleven ephemeral creeks and gulches drain the permit area. From west to east, the creeks shown on CDRMS permit drawing 2.04-M6 are known as:

Hubbard Creek	Perennial
Bear Creek	Ephemeral
Elk Creek	Ephemeral
Sanborn Creek	Ephemeral
Unnamed Drainage	Ephemeral
Coal Gulch	Ephemeral
A-Gulch	Ephemeral
B-Gulch	Ephemeral
C-Gulch	Ephemeral
Hawksnest Creek	Ephemeral
Hoopla Gulch	Ephemeral
Bardine Canyon	Ephemeral
Thompson Creek	Intermittent

1.2 Monitoring Information

The hydrologic monitoring parameters and the schedules for the hydrologic monitoring programs are presented in Section 2. The monitoring sites, parameters and schedules have evolved over time as the facility has evolved and changed. The current monitoring program was substantially modified in 2001 per Permit Revision PR-04 and further modified in TR-47 in 2004. The current monitoring program can be found in Exhibit 2.05-E7 – Hydrologic Monitoring Plan of the CDRMS permit.

Field parameters for groundwater are depth to water level, pH, conductivity, and temperature. Field parameters for surface water are flow, pH, conductivity, dissolved oxygen and temperature. Equipment and methods used to measure the field parameters include:

- Depth to water level - A cable marked in increments is lowered into the groundwater monitoring well until electrical continuity is reached at the water surface.
- pH – An Oakton Instruments pH Testr basic pocket-size tester is used to measure the pH of a water sample. Published specifications for the pH Testr are range: pH - 0.0 to 14.0, resolution: 0.1 pH, accuracy: ± 0.1 pH, automatic temperature compensation, up to 3 point calibration. The pH tester is calibrated prior to sampling events using the 2 point method. The expected pH is bracketed by the pH of the calibration solutions. In most cases the pH tester is calibrated to 7 and 10 which brackets all of the current monitoring results. If an expected pH is less than 7, the pH tester can be calibrated at 4 and 7.
- Conductivity - A Cole Parmer pocket-size TDS Testr 3 or TDS Testr 4 is used to measure the conductivity of a water sample. Published specifications for the TDS Testr 3 are range: 0 to 1990 μ S, resolution 10 μ S, accuracy: $\pm 2\%$ full scale, automatic temperature compensation: 0 to 50 degrees C, calibration with standard solution. Published specifications for the TDS Testr 4 are range: 0 to 19.90 mS, resolution: 0.1 mS, accuracy: $\pm 2\%$ full scale, automatic temperature compensation: 0 to 50 degrees C, calibration with standard solution.
- Temperature - A standard mercury thermometer that measures temperature in degrees Celsius is used.
- Flow - The flow is measured in one of four different ways. The first method is to utilize a known culvert size combined with the depth of flow and the velocity determined by measuring the time it takes a floating object to travel a known distance or using a flow meter. The second method is to time flow into a bucket of known size. The third is to measure the length, width, depth, and the velocity of a stream of water or sum the flows measured in segments of a larger stream of water. The fourth way, used to find the flow of the North Fork of the Gunnison and Hubbard Creek, is obtained from the nearby USGS gauging station or alternative if the station is not available.
- Dissolved Oxygen – An EXTECH Model 407510 Dissolved Oxygen Meter is used to measure dissolved oxygen with a remote sensor also containing a thermister for measuring temperature. The DO range is 0.0 – 19.9 mg/l ± 0.4 mg/l with 0.1 mg/l resolution. Before use, the meter is calibrated according to the meter calibration procedure. This meter also provides temperature readings in F or C degrees.

Historically, water samples from groundwater wells H-10 and B-6 had been taken with a bailer that had a restricted inlet. The bailer is weighted so it sinks to the bottom of the well when it is empty. The water flowed into the bailer slowly so a sample of the water from the bottom of the well was obtained. It was not possible to purge wells H-10 and B-6 because they were connected to the flooded mine workings. With the exception of 2009, recently H-10 well has been dry resulting in no samples being obtained. Because of mine development activities in the Bear Creek drainage during 2004, B-6 was sealed.

Typically, water samples from groundwater wells are obtained with a bailer after the wells have been bailed to remove the equivalent of at least one volume of water from the wells. Because of regional drought conditions a number of wells often experience lowered water levels and reduced inflows. Some wells simply continue to monitor limited water containing zones. In such cases, water levels may often be obtained but water samples are not available. Often, limited volumes of water are obtained with the bailer and some samples may contain sediment moved from the "disturbed" bottom of the well.

Pre 2010, SGS (formerly Commercial Testing & Engineering Co.) of Denver, Colorado, completed the laboratory analyses of the water samples. Post 2010, Enviro Chem Analytical, Inc. of Grand Junction, Colorado completed the laboratory analysis.

These analyses are summarized on the tables and graphs found in this report. The original copies of the laboratory analytical results are stored in the OMLLC offices and available for inspection by CDRMS during complete quarterly inspections. Copies of the specific laboratory reports are also available upon request.

2013 was the year where the mine was sealed in January because of a spontaneous combustion event in the longwall gob. Attempts to recover the mining equipment were thwarted in September 2013 when the mine was reopened and the spontaneous combustion later re-ignited. The portion of the mine containing the longwall was resealed and mine was temporarily idled on December 5, 2013. In December of 2015, the portals to the Elk Creek Mine were sealed and backfilled. The shafts were backfilled and capped. From November 2017 to March of 2018, the middle pad of the Elk Creek Mine property was reclaimed and the creek bed was restored in this area. During May 2018 to September 2018, the lower pad, which was used for coal storage and handling, was reclaimed and the creek bed was restored in this area as well.

2.0 Monitoring Requirements

2.1 Hydrologic Monitoring Parameters

The ongoing water quality monitoring parameters list is presented in Table 2.04.7-T1 (page 2.04-41) and Exhibit 2.05-E7 of the OMLLC permit and presented again as follows.

Ground Water

Surface Water

<u>Parameter</u>	<u>Units</u>	<u>Parameter</u>	<u>Units</u>
Water Level (Field)	feet	Flow	gpm/cfs
pH (field & lab)	standard	pH (field & lab)	standard units
Conductivity(field and lab)	uS/cm	Conductivity(field and lab)	uS/cm
Temperature	celsius	Temperature	celsius
		*Dissolved Oxygen	mg/l
Total Dissolved Solids(TDS)	mg/l	Total Dissolved Solids(TDS)	mg/l
		Total Suspended Solids(TSS)	mg/l
Alkalinity	mg/l	Alkalinity	mg/l
Ammonia	mg/l		
Bicarbonate	mg/l	Bicarbonate	mg/l
Calcium	mg/l	Calcium (Tot)	mg/l
Carbonate	mg/l	Magnesium(Tot)	mg/l
Chloride	mg/l	Chloride	mg/l
Nitrate/Nitrite	mg/l	Nitrate/Nitrite	mg/l
Phosphate	mg/l	Phosphate	mg/l
Sodium (Dis)	mg/l	Sodium (Dis)	mg/l
Sulfate	mg/l	Sulfate	mg/l
Arsenic (Dis)	mg/l		
Cadmium (Dis)	mg/l		
Iron (Dis)	mg/l	Iron (Dis)	mg/l
Iron (Tot)	mg/l	Iron (Tot)	mg/l
Manganese (Dis)	mg/l		
Manganese (Tot)	mg/l	Oil and Grease	visual
Zinc (Dis)	mg/l		

Note: The August water sample for the two North Fork of the Gunnison River sites will also be analyzed for the parameters of hardness, ammonia, cyanide, arsenic, silver, boron, cadmium, chromium III and IV, chlorine, mercury, manganese (dis), nickel, lead, selenium and zinc.

Tot = Total Recoverable

Dis = Dissolved

* Dissolved Oxygen – Dissolved oxygen will be monitored only for streams.

2.2 Hydrologic Monitoring Schedule

CDRMS Permit Revision PR-04 and TR-47 provide the most recent modification and definition to the ongoing hydrologic monitoring program. The following list describes the present monitoring sites.

<u>Station</u>	<u>Frequency</u>	<u>Elevation</u>	<u>Location</u>	<u>Water Type</u>
<u>Wells</u>				
BC-1	Note 3	6000	Lower Bear Creek	Colluvial Well – Down Gradient
EC-14	Note 3	6400	Upper Elk Creek	Colluvial Well – Up Gradient
EC-15	Note 3	6300	Mid Elk Creek	Colluvial Well – Mid Gradient
H-10	Note 3	6376	Hubbard Creek	Ground Water – Down Gradient Somerset Mine B seam workings
SC-1	Note 3	6106.1	Drill hole	Ground Water – Rollins SS
SC-3	Note 3	6227.8	Drill hole	Ground Water – D Seam
D2B	Note 7	6415	Upper Elk Creek	D to B Seam Water Transfer Well
D2B2	Note 7	6385	Hubbard creek	D to B Seam Water Transfer Well
<u>Streams</u>				
B-1	Note 1	6000	Lower Bear Creek	Surface Water – Down Gradient
B-2	Note 8	6800	Mid Bear Creek	Surface Water – Down Gradient
B-3	Note 8	7400	Upper Bear Creek	Surface Water – Up Gradient
C-1	Note 1	6070	Lower Coal Gulch	Surface Water – Down Gradient
E-1	Note 1	6000	Lower Elk Creek	Surface Water – Down Gradient
E-2	Note 1	6400	Upper Elk Creek	Surface Water – Up Gradient
H-1	Note 1	6100	Lower Hubbard Creek	Surface Water – Down Gradient
HN-1	Note 1	6200	Hawksnest Creek	Surface Water – Down Gradient
NF-1	Note 2	6080	N. Fk. Gunnison River	Surface Water – Up Gradient
NF-3	Note 2	5910	N. Fk. Gunnison River	Surface Water – Down-gradient
S-1	Note 1	6080	Upper Sanborn Creek	Surface Water – Up Gradient
USGS Gage	Note 6	6080	N. Fk Gunnison River	Surface Water
<u>Springs and Seeps</u>				
SP-8	Note 4	6200	Spring	Ground Water – slump feature
SP-9	Note 4	6200	Spring	Ground Water – slump feature
<u>Mine Water Discharge</u>				
Outfall 015	Note 5	6400	Elk Creek Mine	Mine Water

NOTES:

1. Monthly flow and field parameters - April through October. One full suite analysis during 2nd and 3rd quarters if available.
2. Same as Note 1 plus monthly field parameters and 4th quarter full suite analysis.
3. Field parameters twice, June through October. Full suite 3rd quarter if sample is available.
4. Discharge and field parameters twice during June through October.
5. CDPS requirements including quarterly WET testing.
6. USGS Gage used for stream flow purposes only.
7. D to B Seam water transfer well D2B is monitored for annual flow, TSS, pH and water level twice/year. D2B2 well is sealed
8. B-2 and B-3 are surface flow and field parameters only.

3.0 Surface Water Information

The data collected from Oxbow Mining, LLC (OMLLC) surface water monitoring sites along with the results of laboratory analyses are presented in Exhibit 1- Surface Water Information.

The following site discussions are presented from west to east through the OMLLC property.

H-1 – Lower Hubbard Creek

Surface water monitoring point H-1 is located on Hubbard Creek, where this perennial stream flows through the western edge of the OMLLC permit area associated with the abandoned but reclaimed Somerset Mine facility area and Blue Ribbon Mine Facility. Until 1996, the most recent surface activity in the area was the reclamation of the lower Hubbard Creek site. Mining activities also included the upper Hubbard Creek facilities area and the reclaimed Blue Ribbon Mine facility. In 2005 the Hubbard Bleeder Fan site, associated with the Elk Creek Mine, was permitted and constructed. During 2007, Bowie Resources, Ltd started construction of a ventilation shaft facility on lands managed by the USFS. The Bowie site is located adjacent to Hubbard Creek and up gradient of the Hubbard Creek facilities. The Bowie shaft construction continued into 2008 as did use of the upper Hubbard Creek facilities as a project staging area. Hubbard Creek is a stream that also serves as a trans-basin diversion from the Terror Creek reservoir during the summer irrigation season. The Hubbard Creek drainage and the Delta County two track road is also used extensively by USFS and BLM recreationists and other Bowie Resources mining related activities.

During 2009, the Blue Ribbon Mine received final Phase III bond release from CDRMS. Oxbow initiated reclamation rough grading of the Hubbard Fansite in 2010 and completed reclamation and seeding in 2011. The Bowie Hubbard Fansite was reclaimed and seeded in 2011.

The H-1 site is, in theory, utilized as a down gradient site to detect potential changes in stream quality or quantity as a result of mining activities. Hubbard Creek point H-1 was monitored in accordance with the permit requirements. Hubbard Creek continues to exhibit summer flow volumes in response to the management of upstream diversions and regional snow conditions. Hubbard Creek flows returned to normal flows during 2020. Nitrate/nitrite, total iron, chloride and sulfate appeared to fluctuate in 2011 and/or 2012 but otherwise, no significant difference in the 2020 monitoring results from baseline or historical measurements were noted. There appears to be no mining related impacts.

B-1, B-2 and B-3 – Bear Creek

The Bear Creek canyon light use road is used extensively to access the upper reaches of Bear Creek for cattle and sheep grazing, logging, hunting, mine exploration and borehole reclamation activities, natural gas operation and support companies, etc.

B-1 -- Surface water monitoring point B-1 - Lower Bear Creek, an ephemeral drainage, is monitored as a down gradient site to “verify” that the Elk Creek mine does not have an adverse

affect on the quality of runoff in the drainage. During 2020 there was, typical flow to no flow at B-1 after the conclusion of spring snowmelt.

Retreat mining of D seam ended under the Bear Creek drainage during 2008. The status of the Bear Creek road is assessed as part of ongoing subsidence monitoring. No adverse effects as a result of mining activities (or the multitude of other uses) were observed to have occurred to the Bear Creek road or Bear Creek water quality in 2020. From a historical perspective it is important to remember that, in addition to all of the surface uses of the Bear Creek drainage, the Bear Creek drainage was also undermined by extensive historic mine workings in the B and C seam of the Somerset Mine.

B-2 and B-3 -- In accordance with the Elk Creek Federal Coal Lease COC-61357 "Water Replacement Plan" stipulation, surface water monitoring points B-2 and B-3 are monitored for flow twice annually after tributary flow from side channels between the two points has ceased. B-2 corresponds to a mid-Bear creek location roughly corresponding to the south limit of the Elk Creek Federal Coal Lease. B-3 corresponds to an upper Bear Creek location roughly corresponding to the north limit of the Elk Creek Federal Coal Lease. Generally, due to the ephemeral nature of Bear Creek and the propensity for flows to quickly cease by late June, flow measurements are most often obtained in mid-June.

BEAR CREEK FLOW INFORMATION

Date	Site B-2	Site B-3
June 10, 2003	0.25 cfs	0.21 cfs
June 16, 2003	0.097 cfs	0.088 cfs
June 15, 2004	0.02 cfs	0.041 cfs
June 22, 2004	0.0 cfs	0.0174 cfs
June 15, 2005	1.036 cfs	1.085 cfs
June 30, 2005	0.39 cfs	0.13 cfs
June 7, 2006	0.047 cfs	0.033 cfs
June 13, 2006	Trace flow	Trace flow
June 15, 2007	0.21 cfs	0.34 cfs
June 28, 2007	Trace flow	Trace flow
June 18, 2008	1.29.cfs	0.72 cfs
June 25, 2008	0.49 cfs	0.67 cfs
June 17, 2009	0.55 cfs	0.46 cfs
June 25, 2009	0.65 cfs	0.63 cfs
June 4, 2010	3.3 cfs	1.5 cfs
June 11, 2010	0.67 cfs	0.67 cfs
June 14, 2011	2.3 cfs	1.85 cfs
June 28, 2011	1.35 cfs	1.92 cfs
June 8, 2012	0.0 cfs	0.0 cfs
June 13, 2012	0.0 cfs	0.0 cfs
June 3, 2013	0.257 cfs	0.22 cfs
June 24, 2013	0.0 cfs	0.0 cfs
June 12, 2014	0.5 cfs	0.63 cfs
June 17, 2014	0.42 cfs	0.12 cfs
June 16, 2015	0.3 cfs	0.62 cfs
June 24, 2015	0.13 cfs	0.13 cfs
June 10,2016	0.23 cfs	0.18 cfs
June 23, 2016	0.0 cfs	0.0 cfs
June 6, 2017	1.2 cfs	1.4 cfs
June 13, 2017	0.65 cfs	0.74 cfs
May 14, 2018	.05 cfs	.05 cfs
June 23, 2018	0.0 cfs	0.0 cfs
June 7, 2019	4.7 cfs	4.7 cfs
June 20, 2019	2.4 cfs	2.4 cfs
June 2, 2020	.07 cfs	.09 cfs
June 12, 2020	.02 cfs	.02 cfs

The information is collected in order to aid in analyzing 1) potential water depletions and 2) potential for injury to any Bear Creek water rights. Bear Creek stream flows ceased during the usual mid to late June timeframe. A spike in 2011 total iron levels appeared tied to TSS and seemed “normal” in 2014. A spike in 2012 chloride level occurred for no apparent reason and again in 2017 and 2018. No mine activity was performed within the Bear Creek drainage during 2018. Some 2009, 2010 and 2011 reduced levels of sodium, calcium, conductivity, TDS, and bicarbonate alkalinity appeared to remain at historic levels. The orthophosphate spike remains under the minimal 0.09 mg/l level. Here the importance in the role of the scale of the Y axis seems to predominate. Analysis of the 2020 data, as well as subsidence monitoring and observations in the field, suggests no significant anomalies or any indication of adverse effects attributable to mining activities.

E-1- Lower Elk Creek

Surface water monitoring point E-1 - Lower Elk Creek, an ephemeral drainage, is monitored as a down gradient site to verify that the Elk Creek Mine and the surface facility located at Somerset does not have an adverse effect on the quality of runoff in the drainage. During spring snowmelt, elevated levels of TSS and Total Recovered Iron are routinely encountered, presumably from natural upstream erosion in the unstable Elk Creek drainage, until stream flows subside. Naturally occurring slide blocks exist in the Elk Creek headwaters and no doubt contribute additional sediment loading.

Of particular note are the possible lingering effects of pumping the two mine recovery boreholes #1 and #2 during 3 months in 2013. Elevated levels of TDS from naturally occurring alkalinity were noted in the E-1 sampling during 2013. The additional pumping flows extended the 2013 runoff period in Elk Creek. Elevated dissolved solids raised conductivity measurement during pumping, but quickly returned to “normal” after pumping was terminated on September 9, 2013. Data beyond 2014 indicate no lingering effects from the pumping. The boreholes were sealed in 2015. The road and pad for these holes were reclaimed and seeded in 2016.

Mine activities in 2017 included reclamation of drill hole pads and roads above the Elk Creek drainage. This minimal activity should not have impacted the creek, but chloride levels appear to be elevated for both E-1 Lower Elk Creek and for E-2 Upper Elk Creek in 2017, 2018, 2019 and into 2020. The levels seen in 2019 corresponds with very high flows due to high snow pack levels. E-2 chloride levels, which is upstream of actual mine facilities, typically are higher or match the E-1 levels downstream of the mine facilities. This would indicate that restoration of portions of the Elk Creek stream channel during 2017 and 2018 had no effect on sample results.

An analysis of the data suggests there is no adverse impact of the Elk Creek Mine to Lower Elk Creek.

E-2- Upper Elk Creek

Surface water monitoring point E-2 - Upper Elk Creek, an ephemeral drainage, is monitored to verify that the Elk Creek mine does not have an adverse effect on the quality of runoff in the drainage. In addition, the site will serve as an up-gradient site to monitor Elk Creek prior to entering the OMLLC surface facility. See the above comments for site E-1 for the discussion on the dewater recovery boreholes.

An elevated September 2014 and July 2015 chloride levels appear to be anomalies, as the down dip site does not show a similar chloride level. An analysis of the data suggests there is no adverse impact of the Elk Creek Mine to the upper Elk Creek site or the segment of Lower Elk Creek in particular. See above in E-1 for discussion on 2020 chloride levels.

S-1 – Upper Sanborn Creek and S-2 – Lower Sanborn Creek

Surface water monitoring points S-1 - Upper Sanborn Creek and S-2 – Lower Sanborn Creek were established to monitor the flow in ephemeral Sanborn Creek above and below the disturbed area of the Sanborn Creek Mine site. Historically, Sanborn Creek also received mine water discharge from the Sanborn Creek Mine, consisting primarily of natural mine water inflows and some runoff of imported (from the North Fork intake) water from the mining sections. The mine water discharge (CDPS discharge point 011) commingled with upper Sanborn Creek flow for a distance of approximately 300 feet through culverts under the railroad and highway prior to discharging into the North Fork of the Gunnison River. The S-2 sample site is located at the outlet of the culvert, prior to the confluence with the river. Because of the 2003 closure of the Sanborn Creek mine, and the termination of discharge Outfall point 011, the S-2 sample site was no longer needed and, thus, eliminated from the OMLLC hydrologic monitoring program in 2004. (see TR-45).

Sanborn Creek, an ephemeral stream, flows at monitoring point S-1 during spring runoff and significant precipitation events. During 2019, S-1 had slightly higher than normal flows and ran through June. In 2020, flow stopped in April, so no lab analysis is available. An analysis of the limited data shows somewhat elevated magnesium in 2014. The data is variable but suggests there is no adverse impact of the Sanborn Creek Mine to Sanborn Creek.

C-1 – Lower Coal Gulch

Surface water monitoring point C-1 - Lower Coal Gulch, an ephemeral drainage, is monitored to verify that the Sanborn Creek mine does not have an adverse effect on the quality of runoff in this drainage. During 2020 there was, again, minimal flow in Coal Gulch during spring snowmelt, and no flow after snowmelt was completed. No lab analysis was conducted. Elevated levels of chloride are noted in 2016 through 2019. An analysis of the all of the data suggests there is no adverse impact of the Sanborn Creek mine to Lower Coal Gulch.

NF-1 and NF-3 – North Fork of the Gunnison River

Surface water monitoring points NF-1 (North Fork upstream) and NF-3 (North Fork downstream) were selected to monitor the water quality in the North Fork of the Gunnison River above and below the disturbed surface mine site of the Sanborn Creek and Elk Creek Mines. Monitoring point NF-3 was established in September 1997 to monitor for any mining-related water quality impacts from the West Valley coal refuse pile. It should be noted that NF-3 is also downstream from the town of Somerset and monitoring results for this station most likely include impacts from domestic water use, possible leakage from sanitary sewers, the Bear Mine discharges, and other factors that are not related to the Sanborn Creek or Elk Creek Mines. Similarly, both sample locations are located downstream of the adjacent Mountain Coal Company, West Elk Mine discharge points and potentially other less distinct historic mine discharges scattered along the river.

Flow in the river reflects natural seasonal flows from upland drainages plus regulated flows from Paonia Reservoir and significant other upland irrigation water storage facility releases during the summer irrigation season. During 2019, flows appear to be consistent with flows measured in 2018. During September of 2017 river flows contained significant amounts of sediment from sediment scouring activities of the Paonia Reservoir. Summer and early fall flows reflect discharges from upland storage reservoirs used downstream by the water rights holders. Irrigation water return from upstream agriculture activities does also occur. Charted cyanide levels are related to the Lab MDL. No significant changes were noted, however, in the analytical data. There is nothing in the data to suggest adverse impact by the Elk Creek Mine or Sanborn Creek Mine to the River.

The water flows for the North Fork are obtained from the USGS Gauging station located on the river upstream of the mine. Discussion took place with USGS regarding the future of the station in light of funding challenges. If the data from the station becomes unavailable, some other mechanism may have to be employed for flow data.

HN-1 – Lower Hawk’s Nest Creek

Surface water monitoring site HN-1 Lower Hawk’s Nest Creek, is monitored to verify that the Sanborn Creek Mine does not have an adverse effect on the quality or quantity of runoff from this ephemeral drainage. During 2017 there was, again, minimal flow in Hawk’s Nest Creek during spring snowmelt, and no flow after snowmelt was completed. Higher sulfate levels seen in 2011 appeared to return to normal in 2013. In 2019, flows returned to normal. An analysis of the data suggests there is no adverse impact of the Sanborn Creek Mine to Lower Hawk’s Nest Creek.

4.0 SEEP AND SPRING INFORMATION

Two spring monitoring points, SP-8 and SP-9 are monitored and the results compared with baseline and historic monitoring data. A significant change in the quality or quantity of flow from these springs and seeps after retreat mining might indicate that the Sanborn Creek Mine might be impacting these water resources.

The data collected from Oxbow's groundwater monitoring stations, along with the results of laboratory analyses are presented in Exhibit 2 – Groundwater Information.

Spring SP-8

Based on the quality and location of spring SP-8, it was determined that the source of the spring was the abandoned Oliver Mine. Until 1999, flows from this spring were relatively consistent. No flows were recorded during any of the 2001 through 2014 monitoring events. Based solely upon coincidence, Oxbow believes that water from the Oliver Mine may have drained into the Sanborn Creek mine at the time of the 1999 mine fire event. Since this event occurred, no flow from spring SP-8 has been recorded.

Spring SP-9

Spring SP-9 is a seep located at the base of a landslide feature in the Unnamed Gulch. Historically, flow had been nearly continual, but at very low rates. The source of the spring appears to be a shallow perched water zone discharging from the toe of a surface slide feature. During 2020 the spring SP-9 did not flow.

5.0 Ground Water Information

The data collected from Oxbow's groundwater monitoring sites, along with the results of laboratory analyses are presented in Exhibit 2 – Groundwater Information.

The following site discussions are presented from west to east through the OMLLC property.

H-10 Well – B-Seam – Somerset Mine Workings – Hubbard Creek Drainage

The sealing of all of the abandoned, historic Somerset Mine portals has precluded access into the mine to obtain underground mine water samples from those abandoned workings. Instead, since the Somerset mine was closed in 1985, monitoring wells H-10 and B-6 had historically been utilized to monitor potential groundwater inflow and quality in order to predict the extent of flooding in the abandoned underground workings. Monitoring water levels in these two wells served as a valuable predictive tool as to whether water from flooded mine workings could impact the hydrologic balance.

The H-10 well is located in Hubbard canyon near the western limit of underground B seam mining of the Somerset mine and near the north or down-gradient limit of the old mine workings in that specific area. The elevation of the B seam in the well is ~ 6018 feet. From 1987 to 1989, the water level in H-10 held steady at about elevation 6028 feet, and then in 1992 rose to approximately 6068 feet in elevation. From 1989 until 1999, the water level ranged from 6067 feet to 6069 feet in elevation. In October 1999 and 2000 through 2008 no water could be measured in the well. In 2009 the water level elevation was found to have reestablished and ranged from 6088.7' to 6090'. In 2010 through 2020, no water has been measured in the well.

Starting in 2006, the H-10 well was to have been used to monitor any B seam water level resulting from the transfer of water from the D seam workings to the B seam workings through borehole D2B2 located in the vicinity of the Hubbard Fansite. As of the data year 2008, no water level had been encountered in H-10. With the sealing of the western mining district and sealing of the Hubbard shaft on October 12, 2008, the pumping of water to D2B2 was halted.

The reestablishment of a water level in the well in 2009 likely indicated inflow into the abandoned mine workings in this vicinity. A comparison of the 2009 water quality data versus the earlier pre-1997 data indicates little change with the exception of increased dissolved and total iron concentrations and increased dissolved solids concentration, primarily as calcium. A lack of a water level in 2010 through 2019 indicates the variable nature of the ground water in the vicinity.

B-6 Well – B Seam – Somerset Mine Workings – Bear Creek Drainage

The B-6 monitor well is no longer in service and the following discussion is presented for historical reference.

“The B-6 well is also located in a down-gradient location in the abandoned Somerset Mine workings in the vicinity of Bear Creek canyon. The elevation of B seam in this vicinity is ~5925

feet. In monitoring the B-6 well, the historical fluctuation of water levels has been different than experienced in well H-10. After initially rising to elevation 6035 feet, the water level fell to elevation 6014 feet in 1990. Water levels then recovered, with an increase to elevation 6033 feet in 1992, and rising to elevation 6051 feet in 1993. The water level ranged from 6038 feet to 6048 feet in 1994 and 1995, and then rose to elevation 6054 feet in 1997. In 1998 the water level ranged between 6052 and 6053 feet in elevation.

Similar to monitoring well H-10, since October 1999 and during 2000 through 2004 no water was measured in well B-6. The lack of water in the H-10 and B-6 wells may be due to a blockage or another problem in the wells. The scenario that both wells failed at the same time appears, however, unlikely. Performance and condition of the bailer when raised during sampling do not suggest the wells were blocked.

A more plausible explanation is that because these two wells are located in two different drainages and both are dry suggests that the water level, thus inflow, into the abandoned Somerset Mine has simply decreased for some unknown reason. Curiously, this decrease is coincident with the time of the mine fire event and pumping from the North Fork into the Sanborn Creek Mine. Flows also ceased just a few months earlier from Spring 8 (believed to have been from the old Oliver Mine D-seam workings).

However, unlike the Oliver Mine, there is no portion of the abandoned B- and C-seam workings of the Somerset Mine that overlie the Sanborn Creek Mine. Rather, there is more than 200 horizontal feet of unmined B-seam coal barrier pillar separating and isolating the Somerset Mine B workings from the Sanborn Creek mine B workings.

OMLLC has held the belief through the years that should wells H-10 and B-6 continue to remain dry, the data supports the conclusion that the Somerset mine will continue to have a negligible affect on the hydrologic balance of the region. (See the following discussion regarding the D2B water transfer well for additional ground water discussions.)

In the fall of 2004, the Elk Creek Mine D seam development was to have intercepted the vicinity of the B-6 well. Because of the MSHA requirement to seal interconnecting mine openings in order to isolate mine atmospheres, the B-6 well was plugged with concrete on October 19, 2004. Upon entering the vicinity of the well, the steel casing was never actually encountered by the D seam continuous miner section and the casing remains intact within a coal pillar.”

BC-1 Well – Lower Bear Creek Canyon – Alluvium/Colluvium

The Bear Creek canyon light use road is used extensively to access the upper reaches of Bear Creek for cattle and sheep grazing, logging, gas company access, mine exploration and methane ventilation activities, hunting, etc. The two track, ranch road crosses Oxbow, BLM, and other private lands.

The BC-1 Well is located in the shallow alluvium/colluvium located near the entrance to Bear Creek canyon in the vicinity of the railroad trestle. The purpose of the well is to monitor possible groundwater changes down gradient from the Elk Creek Mine D seam mining activities

in the Bear Creek drainage area. In addition, it is important to note that the BC-1 well is also located down-gradient from the old Somerset Mine workings as well.

Groundwater in this ephemeral drainage appears closely linked to the variable surface water flow found nearby in Bear Creek. Soon after Bear Creek goes dry, typically, so drops the water level in the BC-1 well. During late 2006 the monitor well was damaged by a hunter's vehicle. No water samples could be taken during 2007 because of the damage. MR-85 addressed the re-drill of the monitor well which was completed on November 9, 2007. On June 18, 2008 and during the sampling event of August 8, 2008 attempts were made for the routine sample of the "new" well. We found that the well was "pushed over" making it un-useable once again. Repairs were made to the well on August 25, 2008 and the well successfully sampled on August 26, 2008. A large concrete barrier has been placed in front of BC-1 to prevent additional damage.

During 2020, Bear Creek had routine normal spring snow melt flows followed by the usual complete absence of flow during the dry season.

During 2020, water samples were available in BC-1. Analysis of the BC-1 data suggests no recent anomalies or long term trends.

EC-14, EC-15 Wells - Elk Creek – Alluvium/Colluvium

The EC-14 well is located up gradient of the EC-15 well. The EC-14 well is located in undisturbed alluvium/colluvium up-gradient from the Elk Creek mine surface facility but down-gradient from the eventual D seam mining area located in the upper reaches of Elk Creek. The EC-15 well is located in alluvium/colluvium located south of the D seam portal area but north of the coal stockpile area. Changes in the hydrologic condition of shallow Elk Creek alluvial groundwater due to mining activities could potentially be monitored from these two wells.

The EC-14 monitor well was proposed to be moved upstream to accommodate the 2012 construction of a methane fueled, electricity generation facility. In 2012 the monitor well was redrilled so as to be located off of the methane facility. The old well was sealed and abandoned.

During 2020, water levels in the wells were seasonably variable.

Both wells showed elevated levels of chloride and zinc in 2012 for no apparent reason, but the 2013 levels appeared to return to "normal" During 2014, chloride was elevated in both, but zinc seemed elevated only in EC-15. There was an EC-14 chloride spike in June 2017, but levels returned to normal in September. EC-15 also had a spike in chloride in June 2017, but was dry in September. Elevated chloride and manganese levels continued in both wells during 2017 through 2020. Zinc in EC-14 and EC-15 has stabilized at slightly elevated levels. Overall, analysis of the data for these wells suggests no anomalies or effects attributed to mining.

D2B and D2B2 Mine Water Transfer Wells ("D seam to B seam")

The purpose of these two boreholes was to transfer mine water from the D seam Elk Creek mine workings to the underlying Somerset B/C seam workings. The depth to water is to be measured

at the same frequency as the overall OMLLC groundwater monitoring program. Data is also to be collected regarding 1) annual total volume of water transferred, 2) representative pH of transferred water and 3) representative TSS of transferred water.

D2B

The D2B mine water transfer well was drilled and completed in late December 2004 in the vicinity of the upper Elk Creek facilities area. When the drill penetrated the B Seam workings, it was apparent that this portion of the B seam mine was flooded with water. The B seam was encountered at the 5918' elevation and a static water level later appeared at the 6042' elevation. Water transfer operations first began in early 2005 for D2B. During late 2011, the D2B water meter failed and had to be replaced. During 2012, we estimate that 81 million gallons of water was transferred. During 2013, with the sealing and later idling of the Elk Creek mine due to the spontaneous combustion event behind the longwall no water was transferred during the year. In 2015, the Elk Creek Mine was sealed and no water pumped since that time. The water level returns to the 6051' elevation.

The floor of the historic Somerset B Seam Mine portal is at the approximate 6090' elevation, so there remains approximately 39' of elevation remaining before the water could exit the mine at that location.

D2B2

The D2B2 borehole was completed in December 2005 in the vicinity of the Hubbard Fan. Water transfer started during early 2006. The bottom 39' of the 338' borehole is uncased. The B seam coal roof was encountered at 6046' elevation. After initial water transfer, initial water level was encountered at 6053' elevation, or 7' above the coal. Subsequent measurements encountered an apparent dry borehole obstruction at the 6070.7' elevation or 24' above the coal. The obstruction has not precluded water transfer, but has limited the ability to lower the sounder past the obstruction. During 2008, the sounder encountered more favorable conditions and a water level appeared at the 6064' elevation. During 2008 the underground pumps ran very little. On October 12, 2008 the 13 West gate road was sealed, the Hubbard fan dismantled, the shaft sealed with earthen materials and the western mining district sealed off. Pumping of water to D2B2 was also concluded. The reclamation and seeding of the Hubbard fansite was completed in early 2012.

Water Level (Elevation Ft.)

Date	D2B	D2B2
January 14, 2005	6044.0	-
January 19, 2005	6044.0	-
February 22, 2005	6044.6	-
March 31, 2005	6043.6	-
May 3, 2005	6044.0	-
June 15, 2005	6044.5	-
July 11, 2005	6043.6	-
August 24, 2005	6044.6	-

October, 17, 2005	6045.0	-
April 19, 2006	-	6053
May 25, 2006	6047	-
June 7, 2006	-	6066.7
July 26, 2006	6047	6070.7
October 17, 2006	6045	-
December 27, 2006	6047	6070.7
May 23, 2007	6047	Indeterminate
June 19, 2007	6049	Indeterminate
August 16, 2007	6049	Indeterminate
June 18, 2008	6052.5	6063
September 11, 2008		6064
October 15, 2008	6051	
March 16, 2009	6047	Borehole is sealed.
June 16, 2009	6060	Borehole is sealed
August 4, 2009	6060	Borehole is sealed
October 26, 2009	6059	Borehole is sealed
June 15, 2010	6057.8	Borehole is sealed
August 6, 2010	6056.8	Borehole is sealed
June 30, 2011	6057	Borehole is sealed
October 7, 2011	6057	Borehole is sealed
June 19, 2012	6055	Borehole is sealed
November 21, 2012	6057	Borehole is sealed
May 10, 2013	6051.5	Borehole is sealed
October 16, 2013	6051	Borehole is sealed
May 27, 2014	6051	Borehole is sealed
September 8, 2014	6051	Borehole is sealed
June 30, 2015	6053	Borehole is sealed
Sept 16, 2015	6053	Borehole is sealed
July 13, 2016	6053	Borehole is sealed
October 11, 2016	6053	Borehole is sealed
June 30, 2017	6051	Borehole is sealed
October 20, 2017	6051	Borehole is sealed
June 20, 2018	6053	Borehole is sealed
September 14, 2018	6053	Borehole is sealed
June 20, 2019	6054	Borehole is sealed
September 20, 2019	6053	Borehole is sealed
June 19, 2020	6053.5	Borehole is sealed
September 14, 2020	6051	Borehole is sealed

The data suggests no unexpected anomalies to the B seam water level.

Initially, once a year, samples of water were taken of water transferred to D2B and D2B2 and summarized below. The access to the pumps leading to D2B2 is permanently sealed with the sealing of the West District. A representative D2B data from the 2013 dewater borehole is presented here. There is no more transfer as the Elk Creek mine is sealed. No issues were ever encountered with respect to the analytical results.

Date	D2B		D2B2	
	pH	TSS	pH	TSS
Year 2015	N/A	N/A	N/A	N/A
Year 2014	N/A	N/A	N/A	N/A
September 9, 2013	7.94	21 mg/l	N/A	N/A
December 27, 2012	9.19	85 mg/l	NA	NA
October 5, 2011	8.5	22 mg/l	N/A	N/A
November 18, 2010	9.11	23 mg/l	N/A	N/A
October 15, 2009	8.44	17 mg/l	Not available	Not available
December 31, 2008	8.69	38 mg/l	Not available	Not available
December 31, 2007	8.72	17 mg/l	8.49	14 mg/l
June 13, 2006	8.58	12 mg/l	8.15	39 mg/l
June 6, 2005	8.57	10 mg/l	NA	NA
December 28, 2004	8.53	6 mg/l	NA	NA

SC-1 Well – Rollins Sandstone

Monitor well SC-1 is located just east of the reclaimed Sanborn Creek mine portal area.

Well SC-1 was completed in the Rollins Sandstone, which is located 40 to 50 feet below the B-Seam. Monitoring data were historically collected from well SC-1 prior to any substantial mining in the B-Seam of the Sanborn Creek Mine. The SC-1 well is located up-gradient relative to the Rollins Sandstone unit which is located stratigraphically under the footprint of the mining activities.

Water in the Rollins Sandstone is confined to limited localized zones that are fractured and/or contained above the Rollins, as evidenced by past water level measurements that are well above the top of the sandstone member. Water quality is poor, with high total dissolved solids as sodium chloride. Inflow and recovery of the water level in the drill holes indicates very low permeability and porosity of the sandstone. The 2012 sampling indicated a substantial drop in dissolved solids, chlorides, etc. These parameters appeared to return to “normal” in 2013. A review of the long term water level appears to show a continuous drop in water level elevation, suggesting low transmissivity of water into the sandstone from the up gradient river. In 2014 the water level was so low there was barely enough to trip the sounder recording the water level. During 2016, there was insufficient water for bottled samples. Water levels returned in 2017, 2018 and in 2019, enough so that chemical analysis was barely possible. The waters return and low level may explain elevated manganese TR, Iron D and a calcium spike.

Generally, the limited water quantity and poor water quality suggests there is limited transmissivity between the North Fork of the Gunnison River alluvium through the Rollins sandstone down-gradient towards the area associated with the Sanborn Creek Mine.

SC-3 Well - B-Seam Coal – Sanborn Creek Mine

Monitor well SC-3 is located east of the Sanborn Creek reclaimed mine portal area along the entrance to the pre-existing ranch road to Coal Gulch.

Monitoring well SC-3 was completed into the B Seam coal. Monitoring data were collected from well SC-3 prior to any substantial mining in the B-Seam of the Sanborn Creek Mine. The SC-3 well is up-gradient relative to the B seam underground mining activities but down-gradient from the North Fork of the Gunnison River

The plastic pipe casing is squeezed at the 20 foot level making it difficult to lower a bailer. Using a smaller diameter bailer we have found very minimal water available in the well. In fact there are times when the initial bailing of the well to remove one volume effectively drains the available water. The lack of water in the well and the poor water quality suggests there is little transmissivity and connection between the North Fork of the Gunnison River and the B seam coal at this particular vicinity of the mine. The elevated 2012 levels of zinc and iron appeared to return to “normal” but sulfate seemed to remain elevated. Perhaps the lack of water in the well is skewing the results. Overall depth appears to be “normal”. The well was again dry in 2018, but returned in 2019. Sulfate returned to normal, but chloride remains elevated.

As the locations of SC-1 and SC-3 wells serve to monitor only the Rollins sandstone and B-seam coal respectively up-gradient of the Sanborn creek mining area, their utility towards the monitoring of the Sanborn Creek mine itself remains somewhat limited.

6.0 Mine Water Information

Elk Creek Mine Water

The water utilized at the mine property continues to be all imported from the alluvial water supply well located near the North Fork of the Gunnison River per the OMLLC water rights and Augmentation Plan.

During 2012, the 4 West and 5 West seals flowed at a combined rate of 12.3 gpm. The 13 west entry 1 seal flowed ~80 gpm. The 4B entry 10.5 crosscut flowed 2.69 gpm. The 4N entry, 3 E crosscut flowed 23.08 gpm.

During 2013, the mine was sealed or idled for most of the year. An assessment of mine inflows was not possible during 2013 but it is likely similar to 2012. During 2014 the mine remained idle and at the end of 2015 the mine was permanently sealed.

See the D2B and D2B2 well discussion above for information regarding the transfer of collected Elk Creek mine sump water to the abandoned Somerset B/C seam workings.

Water is no longer removed from the mine workings.

Outfall 011 – Sanborn Creek Mine Water Discharge

Outfall 011 was the OMLLC - CDPS mine water discharge point from Sanborn Creek Mine that discharged into Sanborn Creek

The Sanborn Creek Mine water drainage system was decommissioned on May 21, 2003. Since the mine completed the last panel, the underground hardware was removed and the entries were sealed in accordance with MSHA requirements.

During 2004, CDMG approved PAP TR-45 which removed Outfall 011 as a monitoring point.

Outfall 015 – Elk Creek Mine Water Discharge

Outfall 015 is a CDPS mine water discharge point for the Elk Creek Mine. The mine water discharge point provides for the discharge of mine water to Elk Creek. The Outfall 015 has never discharged. The mine is sealed and will not discharge again.

Outfall 015B – Elk Creek Mine Dewater Boreholes.

CDPS Permit No. CO-0000132 is the primary, current Permit for the Oxbow Mining, LLC., Elk Creek Mine. Outfall 015 is the primary dewater borehole for mine water. Due to unforeseen mine conditions and circumstances related to a spontaneous combustion event and temporary sealing of the mine by the Mine Safety and Health Administration (MSHA) Oxbow had proposed a temporary re-location for the mine water discharge Outfall 015 borehole to aid in mine recovery efforts. As Permit CO-0000132 was expired and operating under an Administrative Extension, CDPHE could not “modify” an expired Permit. Oxbow was instructed to submit an application for an alternative Outfall 015B. The alternative dewater borehole Permit application (March 26, 2013) resulted in the issuance (on April 16, 2013) of Permit COG-850064 for an alternative Outfall 015B. The resultant dewater borehole pump(s) operated from June 3, 2013 until September 9, 2013. Approximately 58,879,900 gallons (180.6 acre-feet) were subsequently pumped from the mine and discharged to upper Elk Creek. The pumps were later pulled and all hardware removed from the drill pads. On January 31, 2014 a request was submitted to CDPHE to terminate COG-850064. During the active pumping of the dewater boreholes, the water monitoring and reporting were conducted in accordance with the terms and conditions found in the COG-850064 Permit.

During 2015, both of the boreholes were sealed and will not discharge again.

EXHIBIT 1

H-1 HUBBARD CREEK

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: H-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/6/2020	13:30	0.5	7.8	280	10.8										11																	
9/15/2020	12:15	0.8	8.2	370	15										10.3																	
8/12/2020	14:15	0.3	8.7	470	22										8.1																	
7/13/2020	14:45	1.3	8.3	370	23	52.07	7.39	246	58.63	0.3	18.52	34	222	0.08	7.6				23.2			5.3					27.6			0.266	0.034	
6/2/2020	10:10	4.6	8.2	340	14.4										9.9																	
5/18/2020	14:00	30	8.3	190	13.2	31.76	7.63	137	23.04	0.3	43.81	30	116	0.08	7.1				18.8			4.8					21.4			0.195	0.028	
4/27/2020	12:30	44	8	160	6.2										12																	
10/17/2019	12:30	3.5	8.2	320	6.1										12.5																	
9/18/2019	14:15	2.9	8.5	300	15.6										10																	
8/20/2019	11:15	2.5	8.3	420	17.2										9.7																	
7/10/2019	13:30	13.3	8.1	290	15.2	55.86	8.33	194	31.8	0.3	31.52	32	242	0.08	8.4				26.1			5.6					22.3			0.109	0.024	
6/7/2019	12:50	160	8.2	120	10.9										10.9																	
5/13/2019	13:50	367	8	20	9.7	51.72	7.67	115	30.83	0.3	24.28	80	256	0.08	8.9				28.4			6.9					26.1			0.136	0.029	
4/12/2019	13:30	67	7.7	270	1.6										13.9																	
10/17/2018	12:15	2.7	8.2	360	6										12.5																	
9/14/2018	13:22	0.05	9.3	460	18										9.5																	
8/27/2018	9:15	0.45	7.6	470	12.2										10.7																	
7/11/2018	13:10	0.2	8.3	450	23.9	38.91	7.46	132	18.53	0.3	27.16	22	103	0.08	11.2				23.7			7.1					26.5			0.28	0.049	
6/22/2018	10:50	2.8	9	340	16.8										9.7				20.1			5.3					24.6			0.186	0.029	
5/14/2018	23:30	88	8.7	130	7.3	34.18	6.77	107	30.43	0.3	18.93	42	82	0.08	11.4																	
4/24/2018	14:10	68.8	8.6	240	8.4										11.7																	
10/19/2017	10:45	3	8.2	380	5.7										12.9																	
9/11/2017	12:15	1.6	8.4	450	18.4										9.2																	
8/6/2017	9:15	5.7	8.4	470	16										12.5																	
7/18/2017	12:45	2.8	9.2	430	21.4	25.81	7.61	130	39.76	0.3	32.76	16	132	0.08	14.3				20.1			5.4					25.1			0.024	0.022	
6/6/2017	10:45	175	8.7	120	7.4										12																	
5/17/2017	9:30	98	9.1	150	4.2	32	7.56	128	27.59	0.3	51.13	106	54	0.08	11.7				19.7			5.2					24.2			0.21	0.034	
4/28/2017	10:30	46.7	9.1	230	2.9										13.6																	
10/28/2016	11:00	3.34	8.6	410	8.5										11.8																	
9/22/2016	9:15	1.7	8.7	440	14										12.6																	
8/25/2016	11:50	1.7	9	110	15.5										10																	
7/25/2016	11:30	4.3	9	190	18.9	87.07	8.66	325	14.31	0.3	14.41	18	224	0.08	9.7				39.2			17.5					31.7			0.623	0.089	
6/9/2016	11:45	75	8.6	60	10.9										8.8																	
5/23/2016	12:45	60	7.9	140	7.5	91.5	7.75	161	2.03	0.3	9.41	60	146	0.08	10.1				15			5.6					20.8			0.67	0.29	
4/26/2016	12:45	60	7.9	140	7.5										15.9																	
10/21/2015	10:00		8.4	230	8.3										11.9																	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: H-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	DO	Al	As	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
9/18/2015	12:20		8.9	230	15.6								14.3																
8/4/2015	13:10		8.9	330	19.3								12.1																
7/21/2015	13:50		8.7	350	18.6	81.03	7.83	241	11.54	0.3	14.76	14	0.08	9.8		41.2			17.8					32.5				0.77	0.16
6/17/2015	13:00		8.4	130	14.7								8.9																
5/4/2015	14:15		9.3	170	11.8								12.7																
4/14/2015	10:45		8.5	150	9.5	78.3	6.93	147	2.03	0.3	7.41	19	102	0.08	9.6	15			5.6					20.8				0.67	0.29
10/31/2014	11:30		9.8	131	5.8								12.5																
9/10/2014	9:50		9.1	150	12	75.44	7.23	225	10.9	0.3	15.23	17	214	0.08	9.9	43.4			18.2					32.2				0.81	0.18
8/25/2014	14:15		8.9	150	17.3								13.8																
7/8/2014	10:20		9.6	190	17								13.5																
6/11/2014	14:00		8.8	140	12.5								16.1																
5/19/2014	14:00		8.9	70	11.9								14.8																
4/8/2014	11:20		8.8	120	5.1	86.9	6.78	184	2.55	0.3	9.09	39	104	0.08	9.7	31.4			22.6					16.61				1.08	0.06
10/18/2013	14:00		8.5	120	5.3								9.5																
9/6/2013	10:45		8.8	210	18								12																
8/16/2013	11:45		8.5	170	19.1								13																
7/18/2013	14:00		8.2	170	24.7								13.3																
6/5/2013	14:45		8.7	170	19.5								8.9																
5/6/2013	10:45		8.5	70	9.3	122.63	7.24	295	8.78	0.3	15.64	35	275	0.08	9.7	15			7.4					34				0.49	0.2
4/22/2013	14:00		8.6	120	10.3								10.1																
10/10/2012	13:00		8.1	200	13.5								12.3																
9/6/2012	13:00		8.5	210	16.5								11.6																
8/2/2012	11:45		9.4	260	23	118.2	8.47	215	128.52	0.3	11.42	38	165	0.038	9	38.8			11.0					50.8				1.53	0.05
7/30/2012	13:00		9.8	270	26.3								7.1																
6/13/2012	11:00		9	150	21								13																
6/8/2012	11:00		9.1	300	16.8								11.9																
5/9/2012	13:00		8.5	130	13.2	70.92	7.82	218	84.37	1.76	20.17	2	174	0.08	8.3	14.34			6.0					9.15				0.31	0.02
4/23/2012	14:00		8.3	70	11.1								15.1																
10/7/2011	13:30		8.3	150	10.1								13.1																
9/8/2011	13:00		8.8	200	18.7								10.8																
8/15/2011	12:35		8.6	250	22.5	17.41	8.18	253	4.96	0.3	17.28	45	243	0.08	9.6	36.8			6.9					32.8				0.73	0.17
7/26/2011	14:00		8.6	330	18.3								10.7																
6/14/2011	13:45		8.3	70	12.9								15																
5/23/2011	13:30		8.9	110	8								12.3																
4/19/2011	11:30		9.2	90	2.8	59.4	7.36	119	29.6	1.93	61.74	140	166	0.081	8.2	7.18			5.3					6.59				4.15	0.25
10/27/2010	2:30		8.9	140	3.7								14																

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: H-1

Date	Time	Flow	pH	Field	Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
9/27/2010	2:30		8.3		260	17.5										11.1																
8/5/2010	2:40		9.3		220	23										13.5																
7/15/2010	1:20		8.9		290	18										9.5																
6/4/2010	3:45		9.1		100	15.8										11.5																
5/18/2010	11:30		8.9		90	8.8										8.2																
4/22/2010	2:35		9		80	8.8										9.2																
10/12/2009	1:30		8.5		160	8.4										13.9																
9/25/2009	12:30		7.8		270	17.3										10.2																
8/5/2009	10:00		8.4		280	16										13.6																
7/17/2009	2:00		7.4		300	25										10.9																
6/22/2009	10:15		7.6		140	16										8.5																
5/6/2009	10:30		8		90	7.3										11.4																
4/29/2009	11:15		8.2		90	8.3										12.7																
10/15/2008	13:00		7.8		220	8										8.6																
9/11/2008	13:25		7.6		260	17.2										11.3																
8/5/2008	13:00		8.5		320	24.9										16																
7/29/2008	14:00		10.1		230	21										8.7																
6/18/2008	11:00		8.6		70	8										15																
5/23/2008	12:00		8.4		80	9										11.7																
4/18/2008	14:30		8.4		110	14										3.3																
10/24/2007	2:40		8.22		135	7.8										8.9																
9/11/2007	14:15		8.5		210	20.5										14.3																
8/7/2007	1:50		8.33		170	21.3										14.3																
7/17/2007	15:00		8.6		250	25.7										12.5																
6/15/2007	2:30		8.45		480	21.2										11.6																
5/23/2007	11:00		7.95		131	8.4										5.1																
4/26/2007	15:30		8.16		140	9.9										11.4																
10/27/2006	13:00		8.25		130	3										11.4																
9/27/2006	12:00		8.24		180	11.4										16.8																
8/10/2006	13:00		9.36		230	23										17.8																
7/21/2006	12:15		8.55		240	24.3										12.4																
6/13/2006	10:30	0			260	16										13.9																
5/26/2006	10:45		7.91		80	11.9										12.4																
4/17/2006	14:30		7.7		100	13.9										13.9																
10/17/2005	11:40		8.62		180	13.6										19.3																
9/22/2005	13:50		8.68		200	19.3										19.3																

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: H-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	IDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
8/30/2005	14:00		8.9	210	18	130	8.45	230	1	0.04	12	11	150	0.01					28				6.6				18		0	0	0.72	0.07
8/5/2005	11:30		8.86	290	20																								0	0		
7/25/2005	15:00		8.8	250	20																								0	0		
6/15/2005	13:00		8.4	80	14	59	7.87	100	1	0.02	5	15	84	0.01					15				3.4			4.6		0	0	0.89	0.07	
5/9/2005	14:30		8.11	120	11																							0	0			
4/19/2005	11:15		8.07	110	4																							0	0			
10/8/2004	15:30		8.36	130	10																							0	0			
9/27/2004	12:15		8.4	120	11																							0	0			
8/23/2004	11:40		8.45	180	15	120	8.14	190	1	0.02	5	11	130	0.01					24				5.9			11		0	0	1.3		
7/23/2004	10:30		8.39	200	19																							0	0			
6/22/2004	14:30		8.67	80	10	150	8.34	250	1	0.24	11	5	160	0.01					29				7.5			16		0	0	0.37		
5/20/2004	11:00		8.67	80	10																							0	0			
4/14/2004	15:00		8.52	120	12																							0	0			
10/13/2003	14:45		7.71	260	13																							0	0			
9/17/2003	13:15		9.19	210	15																							0	0			
8/26/2003	11:00		8.82	230	19	150	8.43	250	1	0.02	9	17	160	0.01					28				13.0			25		0	0	0.85	0.04	
7/29/2003	13:30		8.88	220	24																							0	0			
6/17/2003	11:45		8.87	200	17	130	8.47	220	1	0.07	11	5	150	0.01					24				6.3			12		0	0	0.28	0.06	
8/21/2002	2:45	0	9.3	600	23	250	8.35	590	11	0.05	82	13	330	0.01					36				22.0			33		0	0	0.25		
6/27/2002	11:30	1	8.4	300	18	270	8.15	610	7	0.02	90	5	390	0.01					50				33.0			39		0	0	0.03		
10/31/2001	12:30	1.1	7.6	300	10	300	8.23	770	18	0.02	110	5	510	0.01	10.2	0.38	0.002	0.005	47.2	0.01	0.05	20.6	0.024	0.0002	0.05	0.002	67.6	0.087	0	0	0.48	
8/20/2001	12:10	2.5	8.1	280	13																							0	0			
6/20/2001	13:15	4.3	8.1	300	12																							0	0			
4/24/2001	12:15	15.25	7.5	180	6	131	7.95	232	2	0.04	11	15	151	0.01	10.6	0.25	0.004	0.005	24	0.005	0.05	5.8	0.028	0.0002	0.05	0.004	13.7	0.028	0	0	0.53	
10/31/2000	13:40	3	7.8	350	10	180	7.90	369	5	0.02	35	5	230	0.01	10.3	0.15	0.006	0.005	32.7	0.005	0.05	10.9	0.012	0.0002	0.05	0.002	21.8	0.005	0	0	0.18	
8/24/2000	15:02	1.8	7.3	250	14																							0	0			
6/18/2000	14:15	42	7.5	100	12																							0	0			
4/28/2000	13:40	198	7	100	10	55	7.17	115	1	0.09	8	30	99	0.01	8.3	1.24	0.002	0.005	13.6	0.008	0.05	3.8	0.043	0.0002	0.05	0.002	6.6	0.007	0	0	1.46	
10/28/1999	12:01	2.5	8.5	200	6	146	8.06	251	1	0.02	9	5	155	0.02	10.8	0.65	0.009	0.005	29.6	0.005	0.05	7.3	0.046	0.0002	0.05	0.002	15.8	0.008	0	0	0.71	
8/17/1999	16:15	2.5	8.9	210	16																							0	0			
6/29/1999	15:51	152	8.5	210	12																							0	0			
4/21/1999	14:15	162	8.6	180	4	87	7.57	151	3	0.09	3	88	129	0.02	10.7	3.13	0.002	0.005	17.3	0.005	0.05	4.6	0.093	0.0002	0.05	0.002	5.3	0.005	0	0	0.92	
10/30/1998	8:35	22.4	8	210	14	131	7.95	232	2	0.04	11	15	151	0.01	10.6	0.25	0.004	0.005	24	0.005	0.05	5.8	0.028	0.0003	0.05	0.004	13.7	0.028	0	0	0.53	
8/19/1998		13.6	8	160	18																							0	0			
6/26/1998		15.7	8	200	16																							0	0			
4/30/1998		124.8	8.5	150	3	87	7.57	151	3	0.09	3	88	129	0.02	10.7	3.13	0.0002	0.005	17.8	0.005	0.05	4.5	0.093	0.0002	0.05	0.002	5.3	0.007	0	0	3.34	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: H-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dls
10/24/1997		15	7.8	220	7		7.74	235	3	-0.02	10	8	146	0.01	10	-0.002	-0.002	-0.005	29.1	-0.005	-0.05	6.3	0.005	-0.0002	0.004	14.6	0	0	0	0	0	0.02
8/19/1997		24.68	8.1	210	25																											
6/24/1997		16.26	8.5	380	14																											
4/15/1997		195	8.9	130	5		6.05	230	2	5.6	14	15	184	0.01	9.9	1.23	-0.002	-0.005	24.4	-0.005	-0.05	5.6	0.024	-0.0002	-0.002	8.9	0	0	0	0	0	0.95
10/22/1996		3.7	8.4	260	1		8.00	270	2	0.03	17	20	190	-0.01	11.9	0.54	-0.002	-0.005	27.7	-0.005	-0.05	7.2	0.023	-0.0002	-0.002	16.9	-0.005	0	0	0	0	0.66
8/6/1996		4.52	8.4	270	14																											
6/5/1996		20.3	8.4	160	16																											
4/25/1996		157	8.3	100	5		8.01	139	1	0.04	12	53	110	0.02	10.2	1.88	0.002	0.013	18.9	-0.005	-0.05	4.8	0.072	-0.0002	-0.002	5.4	0.009	0	0	0	2.27	
10/10/1995	8:02	1580	8.9	280	5	140	8.44	310	3	0.05		8	190	-0.01	9.2	0.17	-0.002	-0.005	30.7	-0.005	-0.05	8.0	0.028	-0.0002	-0.002	23.4	0	0	0	0	0	0.32
8/3/1995	11:36	1740	8.8	310	17																											
6/6/1995	8:46	128000	8.9	70	6																											
4/5/1995	8:30	69100	8.4	140	0		7.88	180	3	0.18		140	140	0.02	10.7	3	0.002	-0.005	24.6	0.005	-0.05	6.2	0.08	-0.0002	-0.002	9.2	0	0	0	0	3.67	
10/10/1994	10:23	2990	8.3	210	5		8.33	220	4	0.05		10	140	-0.01	10	0.2	-0.002	-0.002	25	0.029	-0.05	5.9	0.02	-0.0002	-0.002	14	0	0	0	0	0	0.49
8/10/1994	12:01	4710	8.4	220	18																											
6/9/1994	11:52	3400	8.4	220	15																											
4/30/1994	10:12		8.3	170	15	90	8.10	215				8	86							-0.01	-0.02		0.01				0	0	0	0	0.99	
11/10/1993	10:50	2	8.4	460	4		8.40					2	244														0	0	0	0	0	0.37
8/30/1993	8:40	3	8.7	330	13																						0	0	0	0		
6/30/1993	10:48	10	8.1	140	13																						0	0	0	0		
10/23/1992		0.5	8.6	240	14	160	8.60	252				8	160							-0.01	-0.02		0.03				0	0	0	0	0.34	
9/29/1992		2	8.5	270	20	148	8.70	248				6	126							0.01	-0.02		0.02				0	0	0	0	0.29	
6/16/1992		15	8	140	12	54	7.40	128				36	90							0.01	-0.02		0.02				0	0	0	0	1.51	
4/30/1992		72	8.2	92	16	52	7.60	107				50	100							-0.01	-0.02		0.05				0	0	0	0	1.9	
11/12/1991	10:10	1.1	8.2	130	8	102	8.10	273				6	134							-0.01	-0.02		0.03				0	0	0	0	0.39	
8/30/1991	10:20	2	8.4	210	20	124	8.10	260				32	168							-0.01	-0.02		0.07				0	0	0	0	1.8	
6/29/1991	11:05	35.5	8.6	260	21	132	8.20	258				38	178							-0.01	-0.02		0.04				0	0	0	0	0.96	
4/30/1991		77.4	8.2	91	9	76	7.80	171				2	98							-0.01	-0.02		0.01				0	0	0	0	0.4	
10/1/1990		0.7			21	117	8.45	260				14	162							-0.01	-0.02		0.07				0	0	0	0	1.02	
8/1/1990		0.3			21	140	8.45	260				6	158							0.03	-0.02		0.01				0	0	0	0	0.54	
7/1/1990		2			20	102	8.50	180				14	134							-0.01	-0.02		0.09				0	0	0	0	0.81	
4/1/1990		64.8			17.5	56	8.15	90				8	88							-0.01	-0.02		0.02				0	0	0	0	0.28	
10/1/1989		1.9			15																						0	0	0	0		
10/1/1989						330	8.15	195				22	156							-0.01	-0.02		-0.01				0	0	0	0	0.42	
8/1/1989						140	8.05	250				22	186							0.01	0.02		0.01				0	0	0	0	0.64	
8/1/1989		2			16																						0	0	0	0		
6/1/1989						162	8.10	321				6	201							0.01	0.01		0.01				0	0	0	0	0.32	

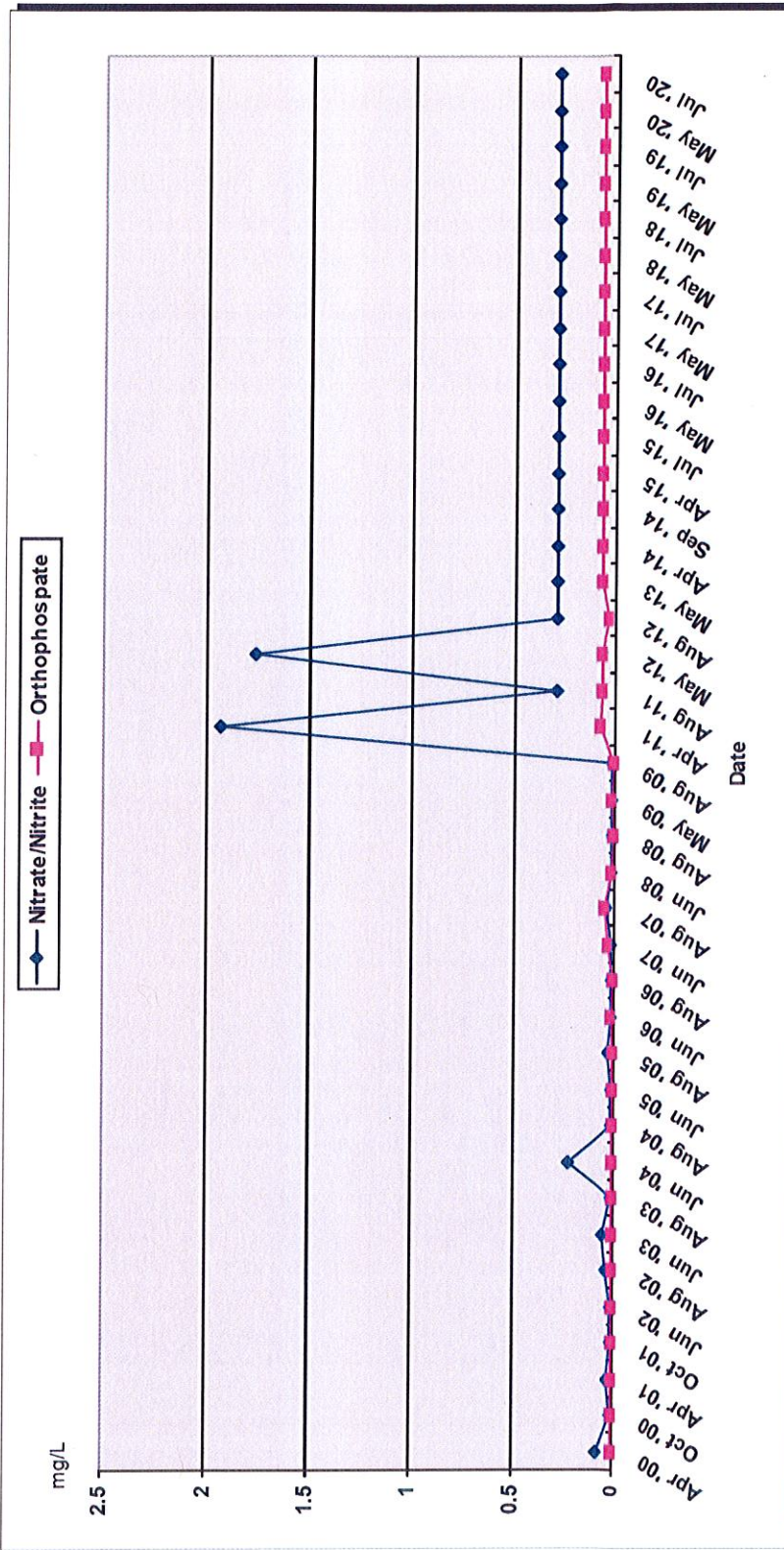
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: H-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
6/1/1989		3.2			10.5							14	114					0.01	0.01		0.04						0	0		1.91
4/1/1989						49	8.30	125				8	237					0.01	0.01		0.02						0	0		0.43
10/1/1988		121			7	124	8.00	280				10	262					0.06	0.3		0.02						0	0		0.27
10/1/1988		3			8.5	164	8.10	390				4	216					0.01	0.01		0.04						0	0		0.89
8/1/1988		1.5			17.5	137	8.30	310				23	162					0.01	0.01		0.03						0	0		0.79
6/1/1988					16	63	7.90	171				9	210					0.01	0.01		0.02						0	0		0.41
6/1/1988		4.8			4.5	142	8.00	319				166	228					0.03	0.01		0.14						0	0		7.8
4/1/1988		92.6																									0	0		
10/1/1987		2.7			9	151	8.70	348				342	263					0.01	0.01		0.34						0	0		9.2
10/1/1987						56	7.80	145				38	117					0.01	0.01		0.02						0	0		0.42
8/1/1987		6.7			11	129	8.10	290				40	193					0.01	0.01		0						0	0		0.91
6/1/1987		11.3			14	68	7.30	179				236	114					0.01	0.02		0.01						0	0		11
5/1/1987		192																									0	0		
12/1/1986		37.9																									0	0		
12/1/1986																											0	0		
9/1/1986		0																									0	0		
9/1/1986		37.7																									0	0		
6/1/1986						54	7.40	128				36	90					0.01	0.02		0.02						0	0		1.51
6/1/1986																											0	0		
3/1/1986		114				113	7.70	267				150	164					0.01	0.01		0.01						0	0		0.16
3/1/1986																											0	0		

MONITORING CHART FOR 2020 AHR

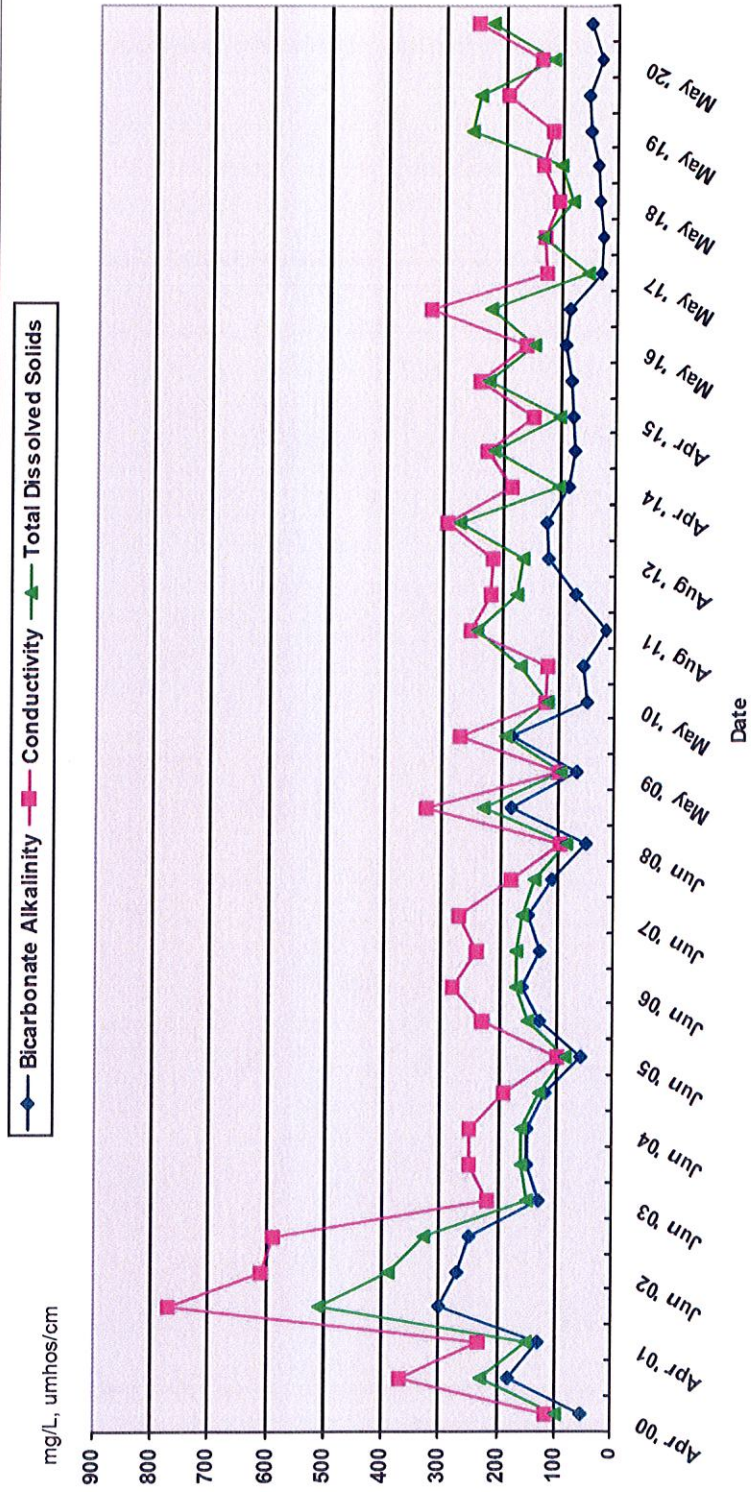
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

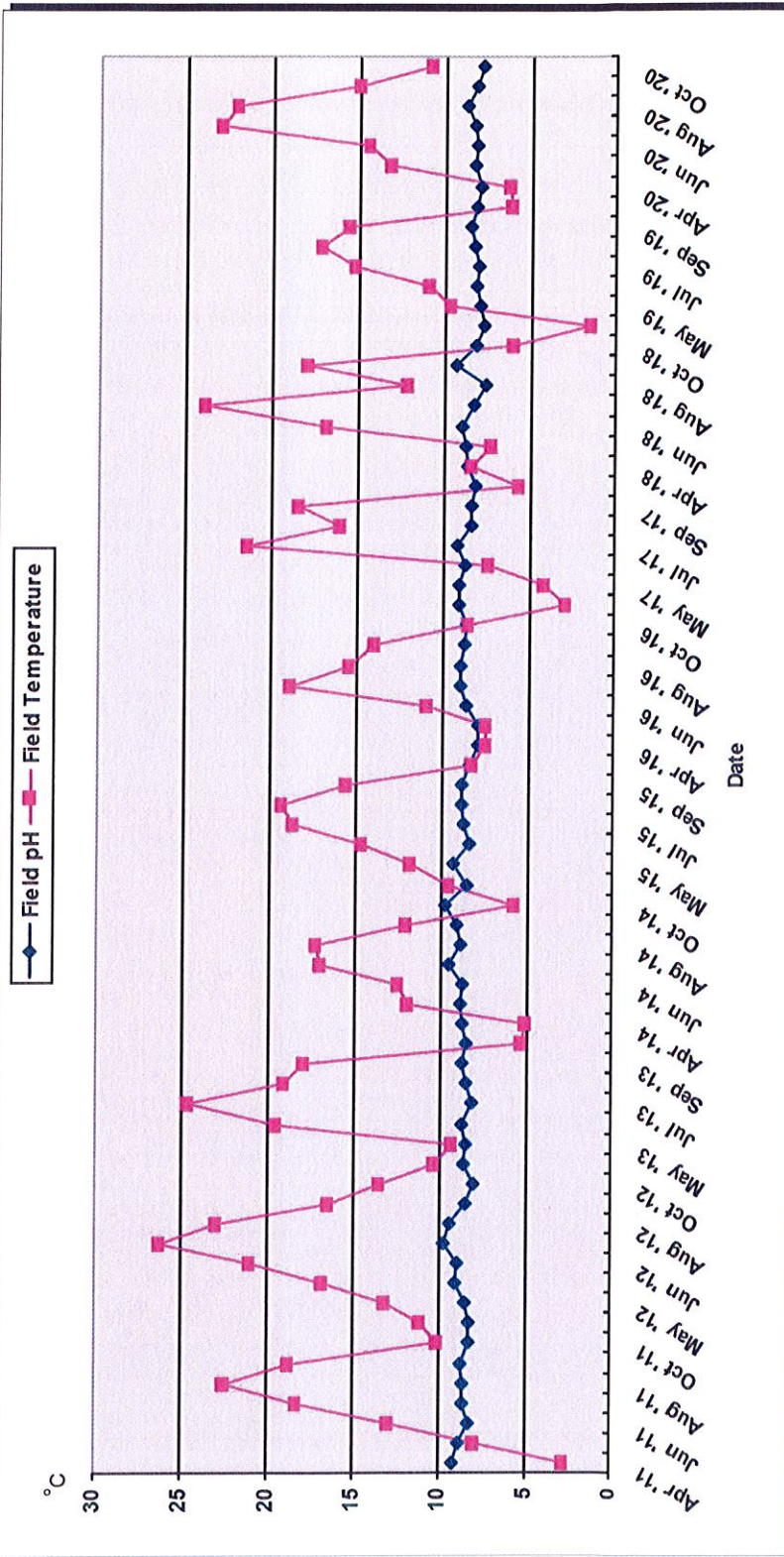
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: H-1



MONITORING CHART FOR 2020 AHR

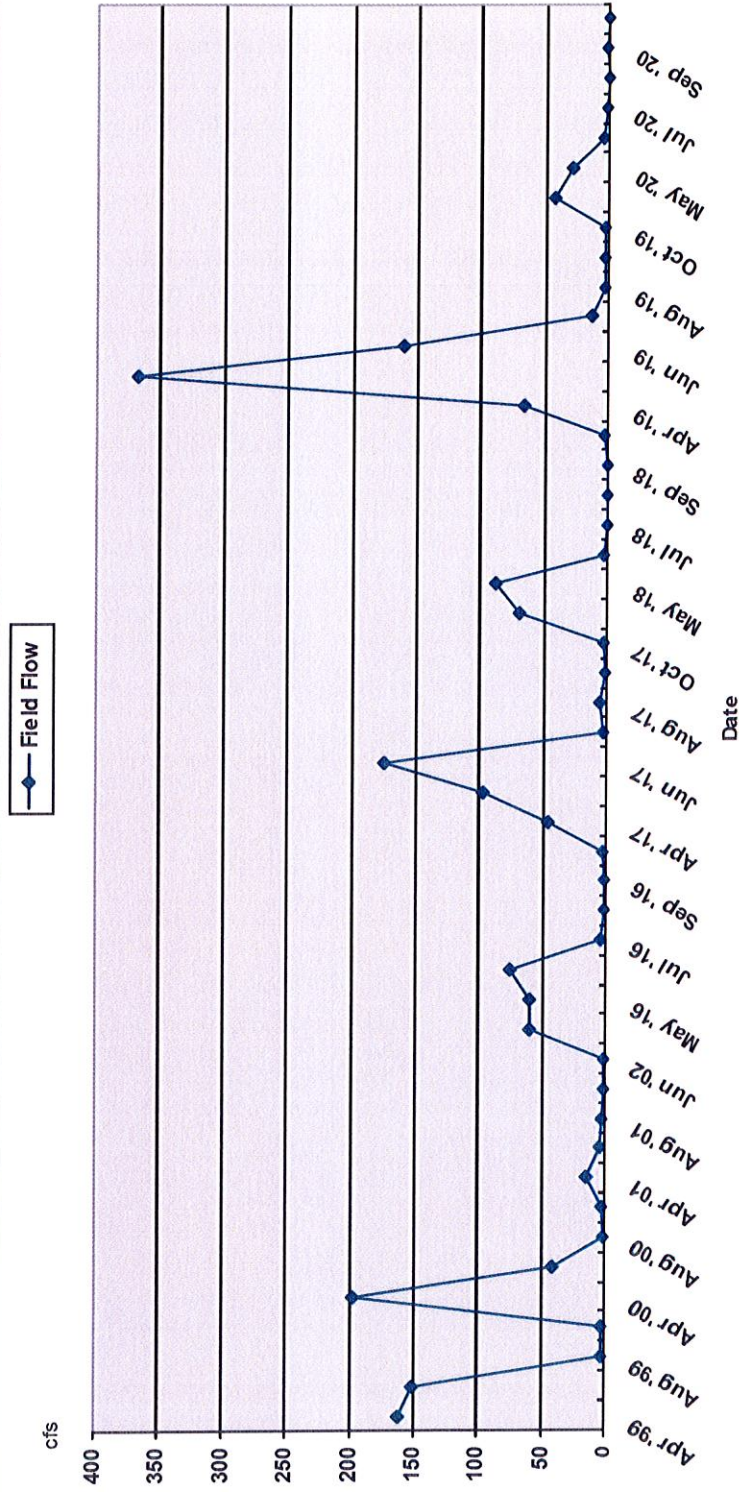
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

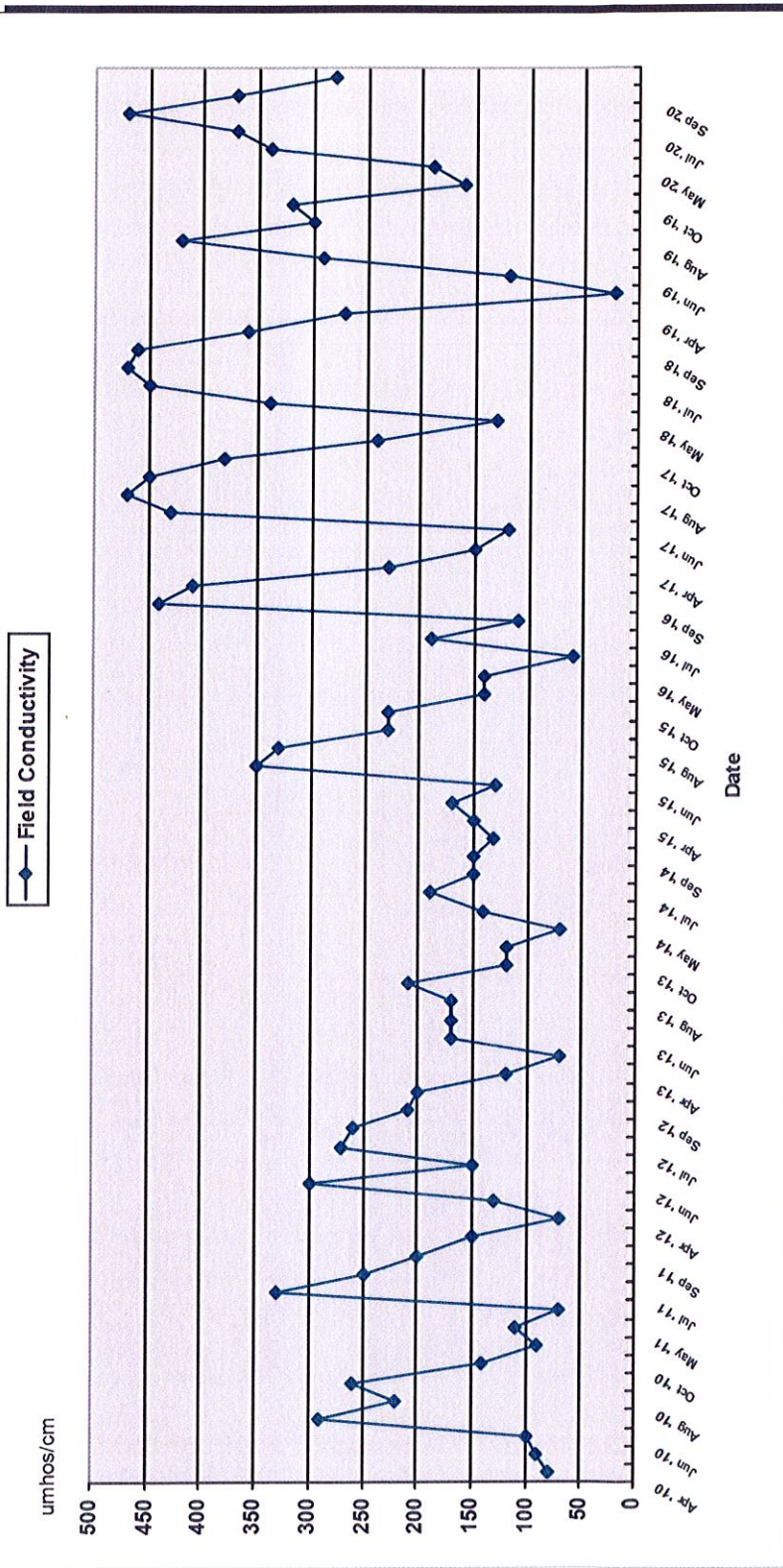
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: H-1



MONITORING CHART FOR 2020 AHR

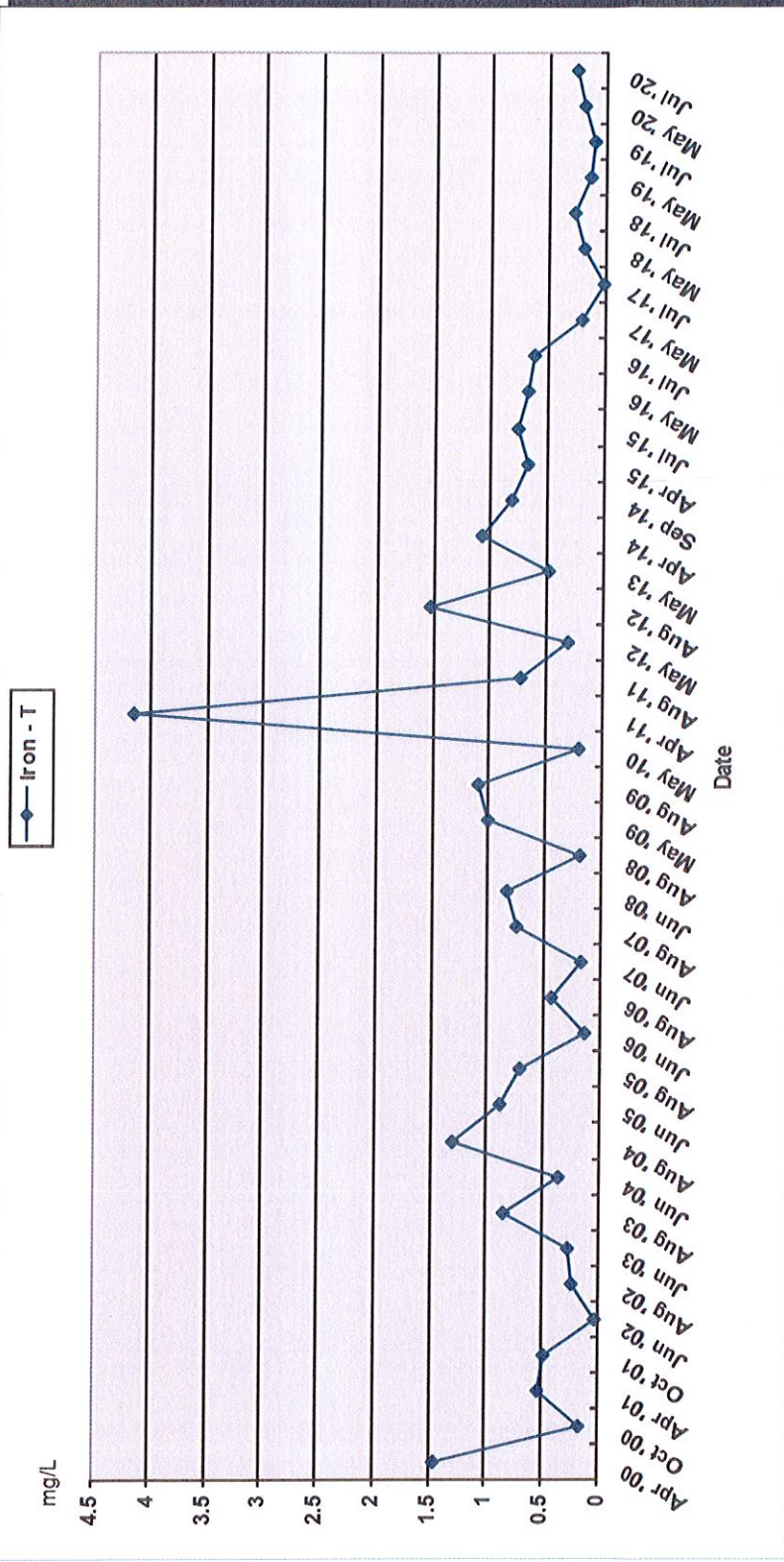
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

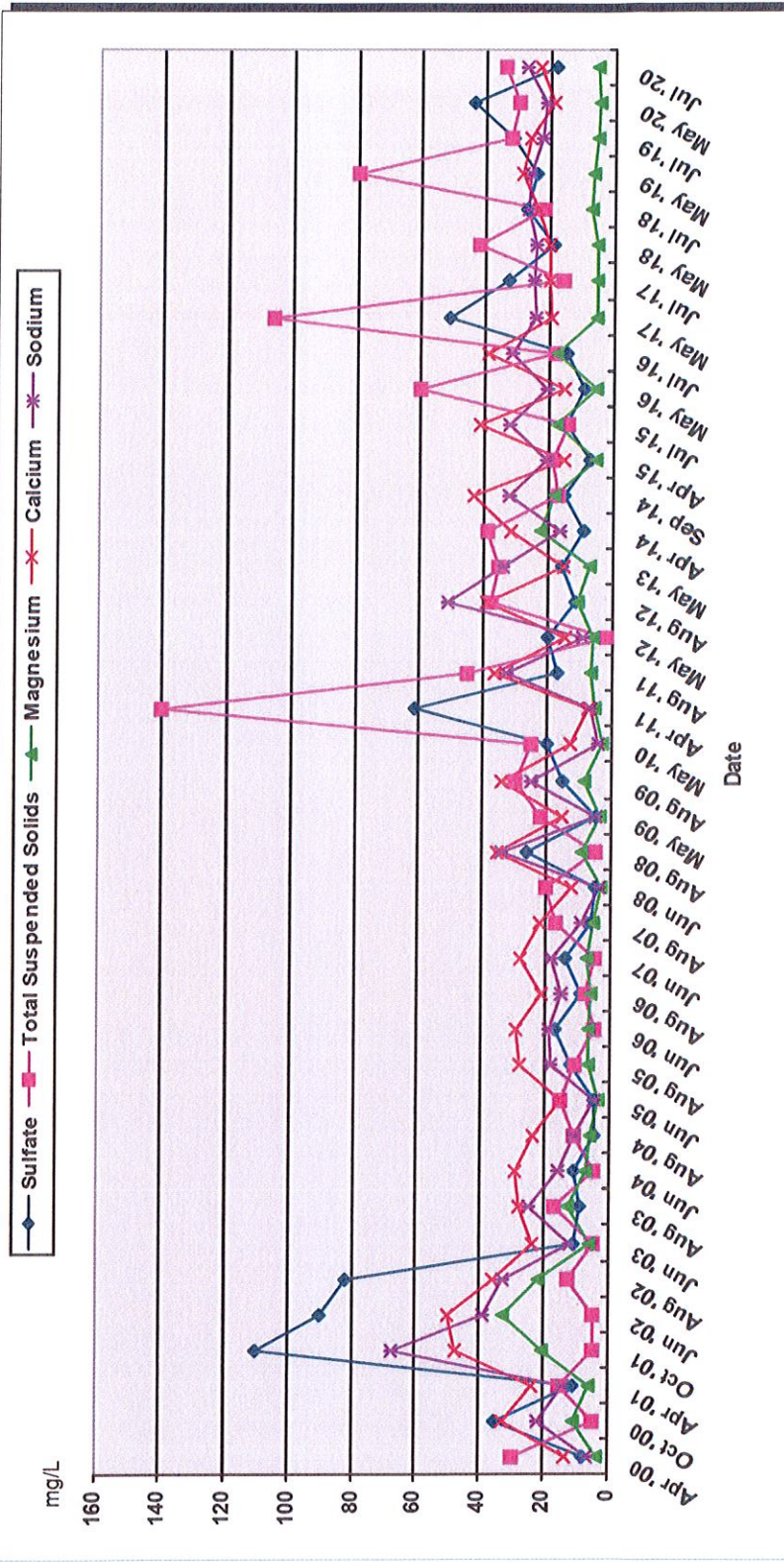
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

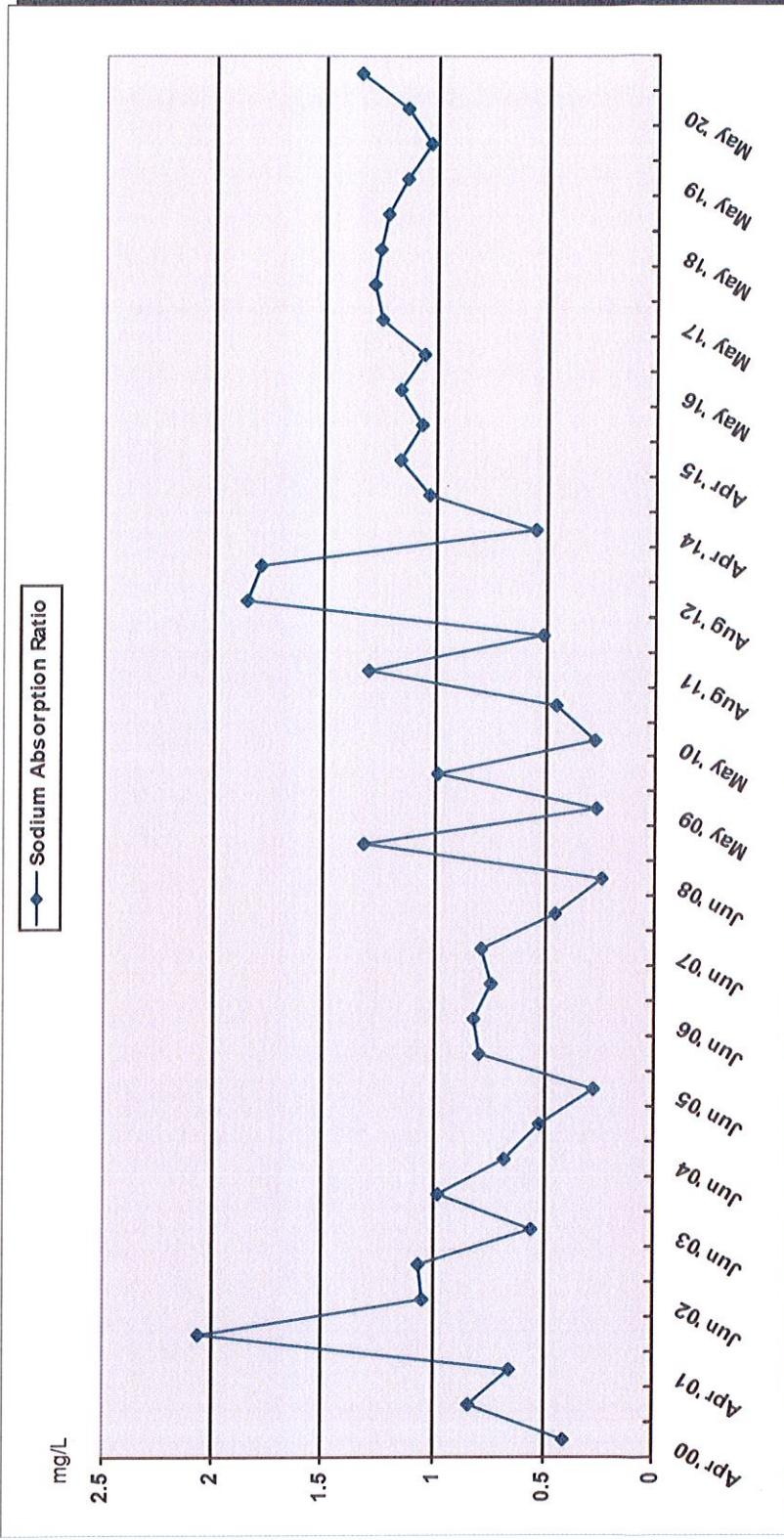
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

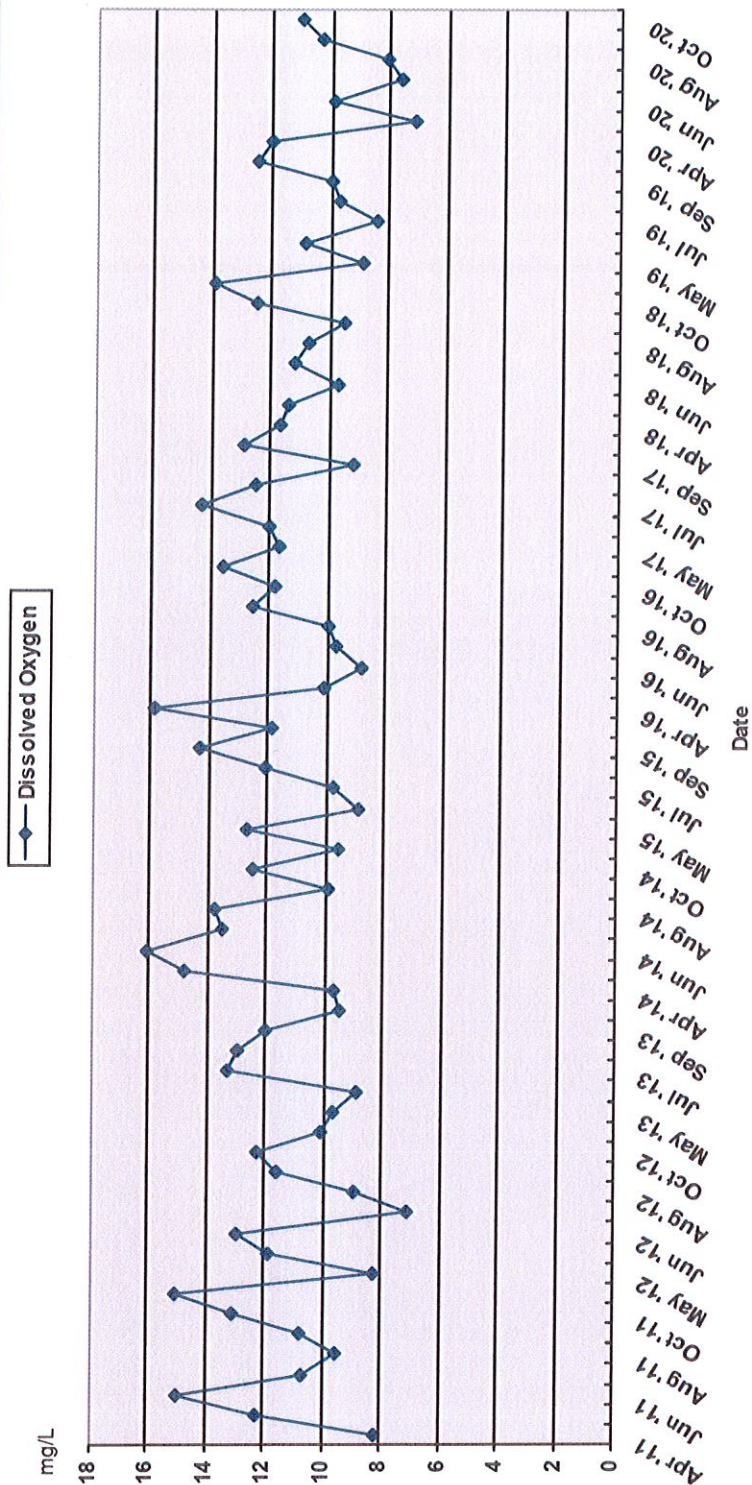
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

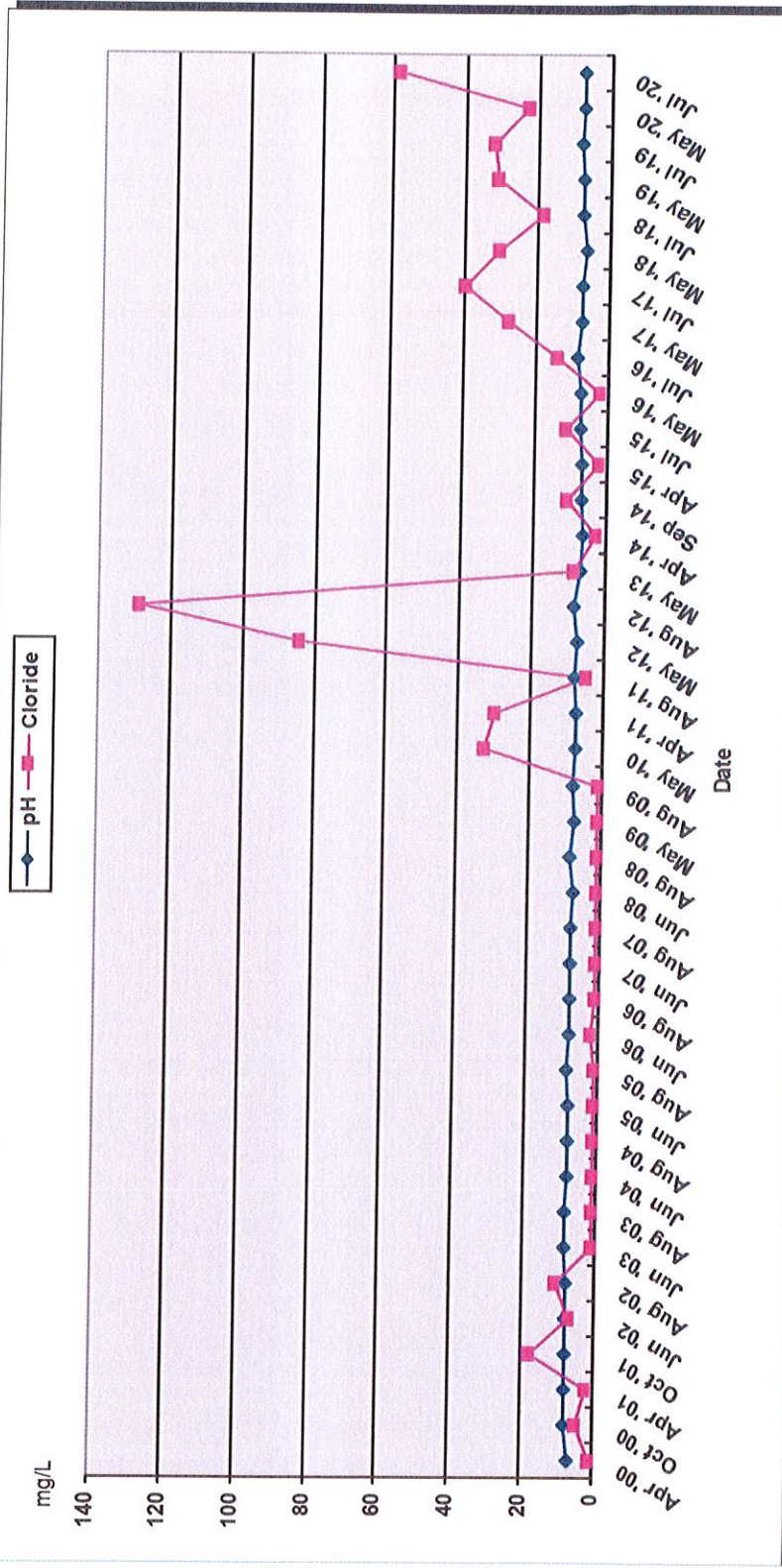
SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: H-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

B-1 BEAR CREEK

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: B-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/6/2020	13:20	0																													
9/15/2020	23:55	0																													
8/12/2020	13:50	0																													
7/13/2020	15:00	0																													
6/2/2020	10:30	0.05	7.9	1050	12.7									10.6																	
5/18/2020	13:20	0.49	8.5	710	13.1	89.23	7.59	280	51.9	0.3	46.74	22	263	0.08	7.9			37.5			11.3					39.2				0.059	0.014
4/27/2020	11:50	11	8.2	270	8.4									11.8																	
10/17/2019	9:30	0																													
9/18/2019	13:55	0																													
8/20/2019	10:20	0																													
7/10/2019	13:00	0.07	7.6	1150	14.8	126.9	8.03	590	40.06	0.3	90.55	14	496	0.08	8.2			48.7			12.8					45.6				0.048	0.011
6/7/2019	11:30	6.5	8.3	380	10.4									11.2																	
5/13/2019	13:29	17.2	8.1	20	9.3	87.04	7.35	146	60.85	0.3	24.7	60	352	0.08	9.4			46.2			12.2					43.8				0.055	0.012
4/12/2019	11:30	9.3	7.8	340	2.9									13.5																	
10/17/2018	11:00	0																													
9/14/2018	10:40	0																													
8/27/2018	10:15	0																													
7/11/2018	13:35	0																													
6/22/2018	9:40	0																													
5/14/2018	11:00	0.24	8.8	970	10.1	117.61	7.28	576	83.6	0.3	88.49	38	446	0.08	10.3			42.5			12.7					39.6				0.088	0.018
4/24/2018	13:50	3.3	8.8	560	11.1									11																	
10/19/2017	10:25	0																													
9/11/2017	11:00	0																													
8/8/2017	10:30	0																													
7/18/2017	13:10	0																													
6/6/2017	10:15	1.2	8.9	730	11.6									11.3																	
5/17/2017	10:00	5.2	8.8	440	6.4	105.34	7.47	339	61.5	0.3	43.17	30	266	0.08	12			43.3			12.4					41.6				0.076	0.016
4/28/2017	10:00	11.7	9	290	3.3									13.5																	
10/28/2016	10:45	0																													
9/22/2016	9:45	0																													
8/25/2016	10:55	0																													
7/25/2016	11:15	0																													
6/9/2016	11:15	1.2	8.5	240	11.3									11.3																	
5/23/2016	10:45	7.2	8.7	50	7.7	154.26	8.18	259	5.45	0.3	20.17	10	249	0.08	9.9			30.2			11.5					33.9				0.062	0.016
4/26/2016	13:15	12.5	7.9	150	6.6									13.1																	
10/21/2015	9:15	0																													

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: B-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	CI	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/13/2015	9:00	0																														
9/18/2015	14:00	0																														
8/4/2015	13:00	0																														
7/21/2015	12:00	0																														
6/17/2015	13:00	1.12	10.3	5.1	16										15																	
5/4/2015	2:30	1.37	9.4	380	12.5										14.5																	
4/14/2015	10:30	1.81	8.4	550	7.5	144.13	7.86	470	6.76	0.3	88.08	22	414	0.08	9.6				48.6			18.4					47.6				0.08	0.02
10/31/2014	11:00	0																														
9/10/2014	13:00	0																														
8/25/2014	14:00	0																														
7/8/2014	21:20	0																														
6/11/2014	15:00	0.69	9.1	430	13.5										10.4																	
5/19/2014	13:50	5.5	9.1	150	13.2										13																	
4/8/2014	11:00	13.7	8.7	140	5.2	138.57	6.84	220	2.76	0.3	20.08	112	187	0.08	9.7				25.4			20.6					19.82				2.91	0.07
10/18/2013	14:00	0																														
9/9/2013	10:00	0																														
8/16/2013	10:00	0																														
7/18/2013	13:00	0																														
6/4/2013	13:00	0.6	8.4	330	13										8																	
5/6/2013	11:00	5.5	8.4	140	11.9	146.44	7.43	444	4.54	0.3	19.76	134	333	0.08	9.6				21			9.4					24				1.75	0.15
4/22/2013	14:20	3.7	8.5	180	10										17.1																	
10/10/2012	13:00	0																														
9/16/2012	13:00	0																														
8/2/2012	12:00	0																														
7/30/2012	13:00	0																														
6/8/2012	12:00	0																														
5/9/2012	13:30	0.25	8.9	430	13	183.41	8.24	574	44.67	2.55	17.52	11	419	0.08	8.6				50.2			19.8					53.8				0.06	0.03
4/23/2012	14:45	1.8	9.5	270	14.9										12.1																	
10/18/2011	13:00	0																														
9/8/2011	12:00	0																														
8/15/2011	13:00	0																														
7/26/2011	14:00	0	8.2	690	16.9										10.1																	
6/14/2011	13:30	3.63	8.9	360	8.6										16.1																	
5/23/2011	13:30	11	8.8	130	10.8										14																	
4/19/2011	12:00	41.25	9	80	4.4	84.2	7.30	106	11.2	2.28	54.88	320	176	0.082	8.4				7.27			7.6					8.21				14.09	0.4
10/27/2010	2:15	0																														

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: B-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
9/27/2010	2:15	0																													
8/5/2010	2:00	0																													
7/15/2010	1:00	0																													
6/4/2010	12:00	1.37	9.2	370	22.3																										
5/18/2010	12:00	14.7	8.9	140	9.8	71.67	7.97	181.7	10.9	4.04	18.52	55	138	0	8.3			16.2			4.2					12.18				0.19	0.12
4/22/2010	2:00	33	8.8	80	6.3									15																	
10/12/2009	12:00	0																													
9/25/2009	12:00	0																													
8/5/2009	11:00	0	8.4	910	14									12.4																	
7/12/2009	11:00	0																													
6/22/2009	10:45	0.82	7.8	530	17.8									12.5																	
5/6/2009	10:50	8.25	7.9	110	8	87	7.85	140	1	0.08	9	95	130	0.02	13.2			16			4.5					12				1.2	0.04
4/29/2009	12:30	16.5	8.7	120	8.9									14.7																	
10/15/2008	14:00	0																													
9/11/2008	14:00	0																													
8/7/2008	13:35	0	7.9	510	18.6	350	8.02	620	3	0.04	74	5	410	0.02	16.7			61			15.0					61				0.12	0.03
7/29/2008	14:30	0	8.4	1040	20.1									16.7																	
6/18/2008	12:00	1.92	8.7	450	18.3	270	8.46	520	3	0.16	69	11	340	0.02	6.7			50			17.0					53				0.24	0.01
5/23/2008	11:10	12	8.5	180	8.4									5																	
4/18/2008	15:40	11.55	8.2	120	14.1									8.3																	
10/25/2007	2:30	0																													
9/11/2007	13:00	0																													
8/7/2007	13:00	0																													
7/17/2007	13:30	0																													
6/15/2007	12:00	0.03	8.33	560	14.9	300	8.28	600	3	0.14	70	9	370	0.02	4			51			21.0					49				1.5	0.01
5/15/2007	12:01	1.1	8.36	300	9.1									11.7																	
4/26/2007	15:15	5	8.4	190	11.8									5																	
10/17/2006	12:30	0																													
9/27/2006	12:30	0																													
8/10/2006	12:30	0																													
7/21/2006	12:30	0																													
6/13/2006	11:00	0	7.62	650	13.7	370	7.55	730	7	0.02	100	6	460	0.01	7.4			66			23.0					63				0.21	0.21
5/26/2006	10:30	1.8	8.54	420	10.2									10.4																	
4/17/2006	14:25	42.07	7.63	90	9.4									12.5																	
10/17/2005	11:30	0																													
9/22/2005	13:15	0																													

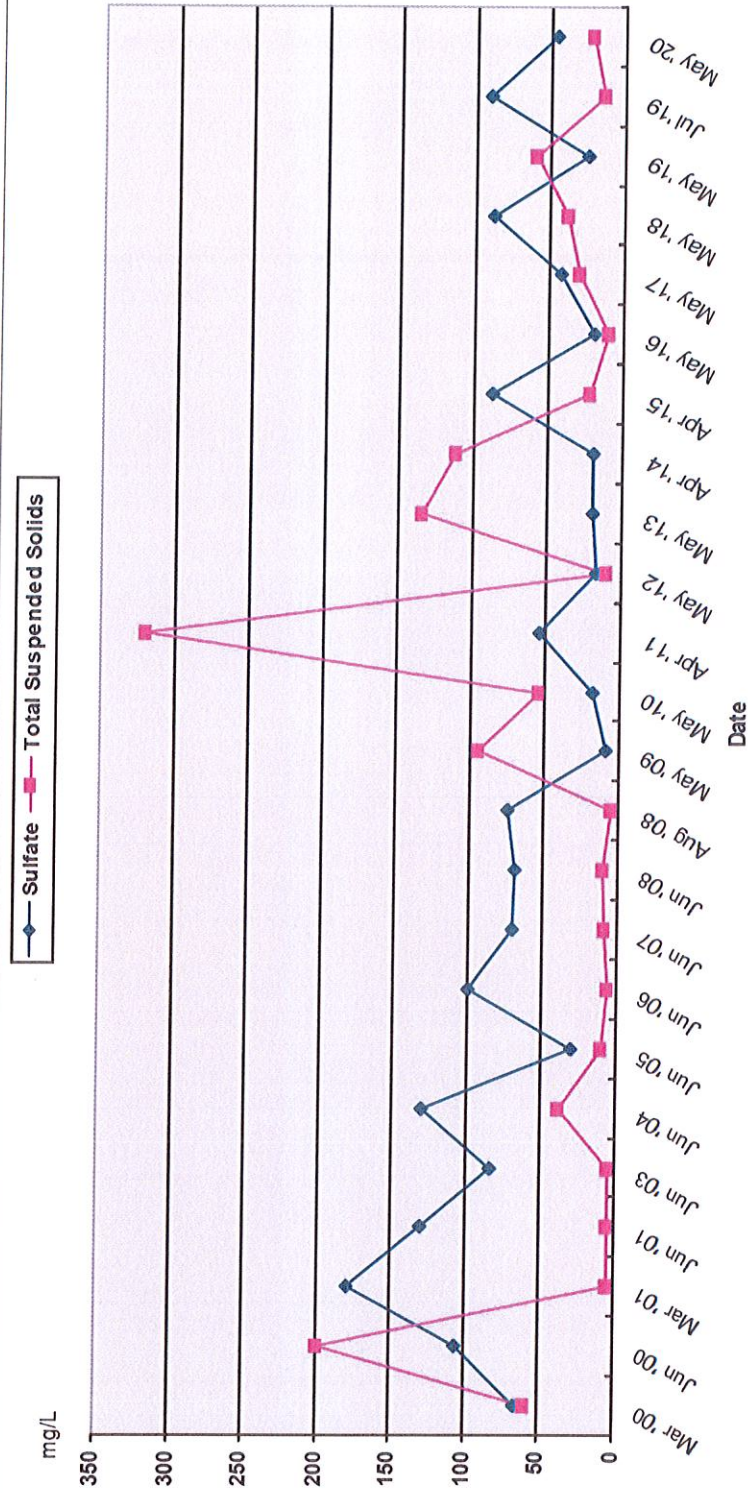
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: B-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
8/30/2005	13:40	0																														
8/5/2005	11:15	0																														
7/25/2005	14:00	0																														
6/17/2005	10:25	1.75	8.61	310	13	190	8.35	350	2	0.09	31	10	210	0.01					35			11.0					26				0.65	
5/9/2005	14:50	56.54	8.02	110	13																											
4/18/2005	10:50	57.75	8.03	80	5																											
10/8/2004	14:25	0																														
9/27/2004	11:45	0																														
8/23/2004	11:00	0																														
7/23/2004	10:00	0																														
6/22/2004	12:20	0	7.55	790	15	390	7.63	800	8	0.02	130	38	500	0.03					78			28.0					64				6.9	
5/20/2004	10:30	1.65	8.63	330	11																											
4/14/2004	14:45	14.4	8.54	140	11																											
10/13/2003	14:00	0																														
9/17/2003	13:00	0																														
8/26/2003	10:30	0																														
7/28/2003	13:00	0																														
6/17/2003	13:45	0.09	8.43	550	17	280	8.14	600	4	0.2	84	5	370	0.01					50			21.0					50				0.45	0.01
5/13/2003	11:20	21	9.03	140	8																											
4/10/2003	14:00	4	8.52	260	11																											
10/24/2002	0																															
7/20/2002	0																															
6/23/2002	0																															
6/29/2001	11:30		8.3	700		390	8.16	818	8	0.02	130	5	530	0.02	0.2	0.002	0.005	58.8	0.005	0.05	0.05	25.3	0.022	0.0002	0.05	0.002	68.7	0.006	0		0.06	
6/29/2001	11:30					390	8.16	818	8	0.02	130	5	530	0.02	0.2	0.002	0.005	58.8	0.005	0.05	0.05	25.3	0.022	0.0002	0.05	0.002	68.7	0.006	0		0.06	
3/30/2001	12:00					290	8.21	772	7	1.18	180	5	510	0.01	0.09	0.002	0.005	65.9	0.009	0.05	31.4	0.005	0.0002	0.05	0.002	65.4	0.011	0		0.05		
6/29/2000	14:00		8.13	600	18	357	8.13	755	8	0.26	107	200	520	0.05	0.18	0.002	0.005	47.8	0.005	0.05	0.05	22.8	0.012	0.0002	0.05	0.002	74.6	0.012	0		0.17	
3/28/2000	10:45		8	300	7	143	8.20	478	4	0.71	67	60	302	0.01	1.83	0.002	0.005	36.5	0.019	0.05	0.05	13.3	0.041	0.0002	0.05	0.002	40.7	0.025	0		2.07	
6/29/1999	14:10	4	8.3	500	18	262	8.50	688	6	0.64	160	7	415	0.02	0	0.18	0.009	0.005	22.8	0.005	0.05	9.5	0.006	0.0002	0.05	0.002	36.9	0.007	0		0.07	
3/30/1999	13:00	29.59	7.5	300	6	126	7.85	288	4	0.28	33	11	196	0.01	0	0.91	0.002	0.005	21.9	0.005	0.05	7.6	0.018	0.0002	0.05	0.002	22.7	0.006	0		0.93	

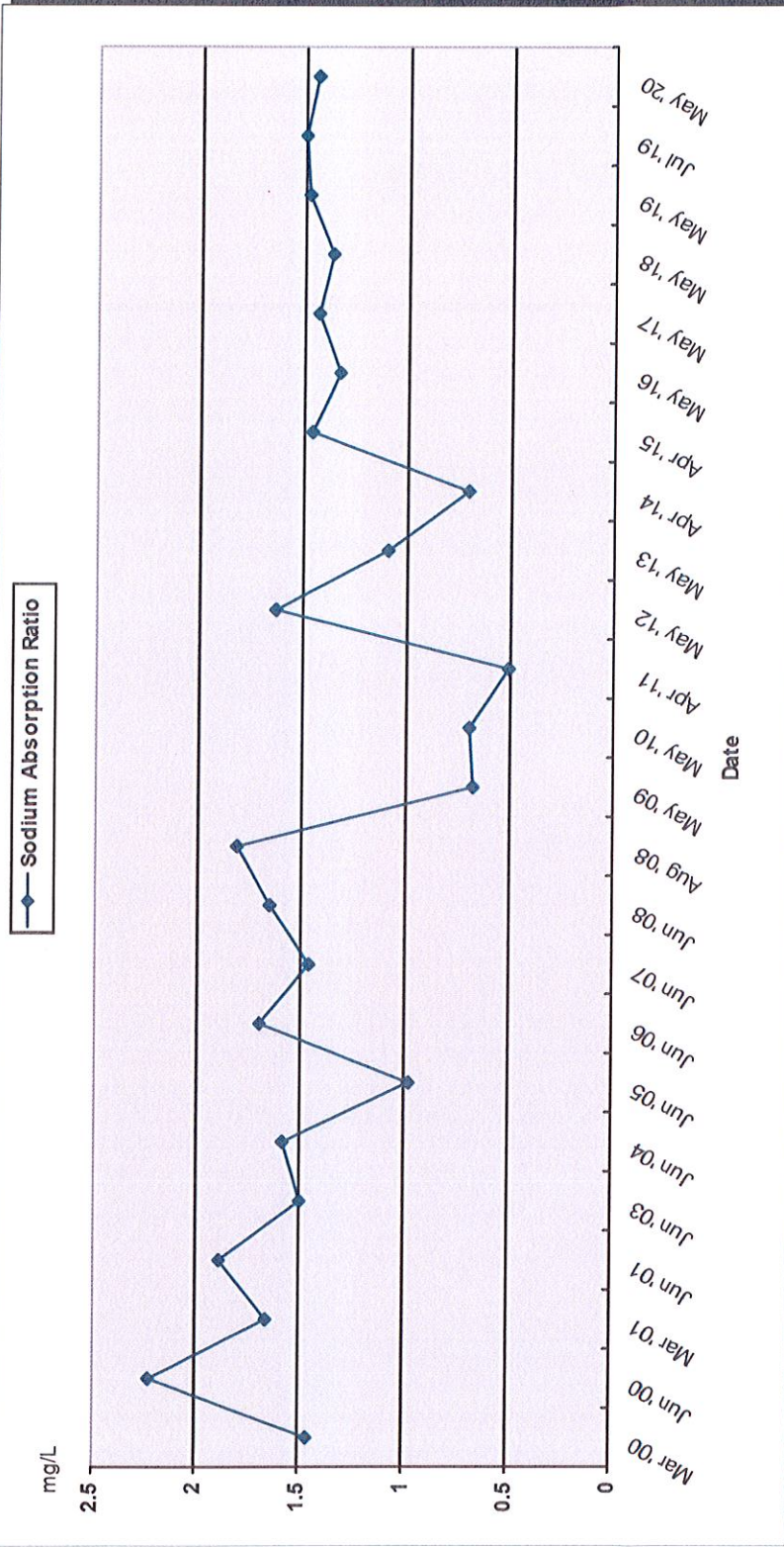
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: B-1



MONITORING CHART FOR 2020 AHR

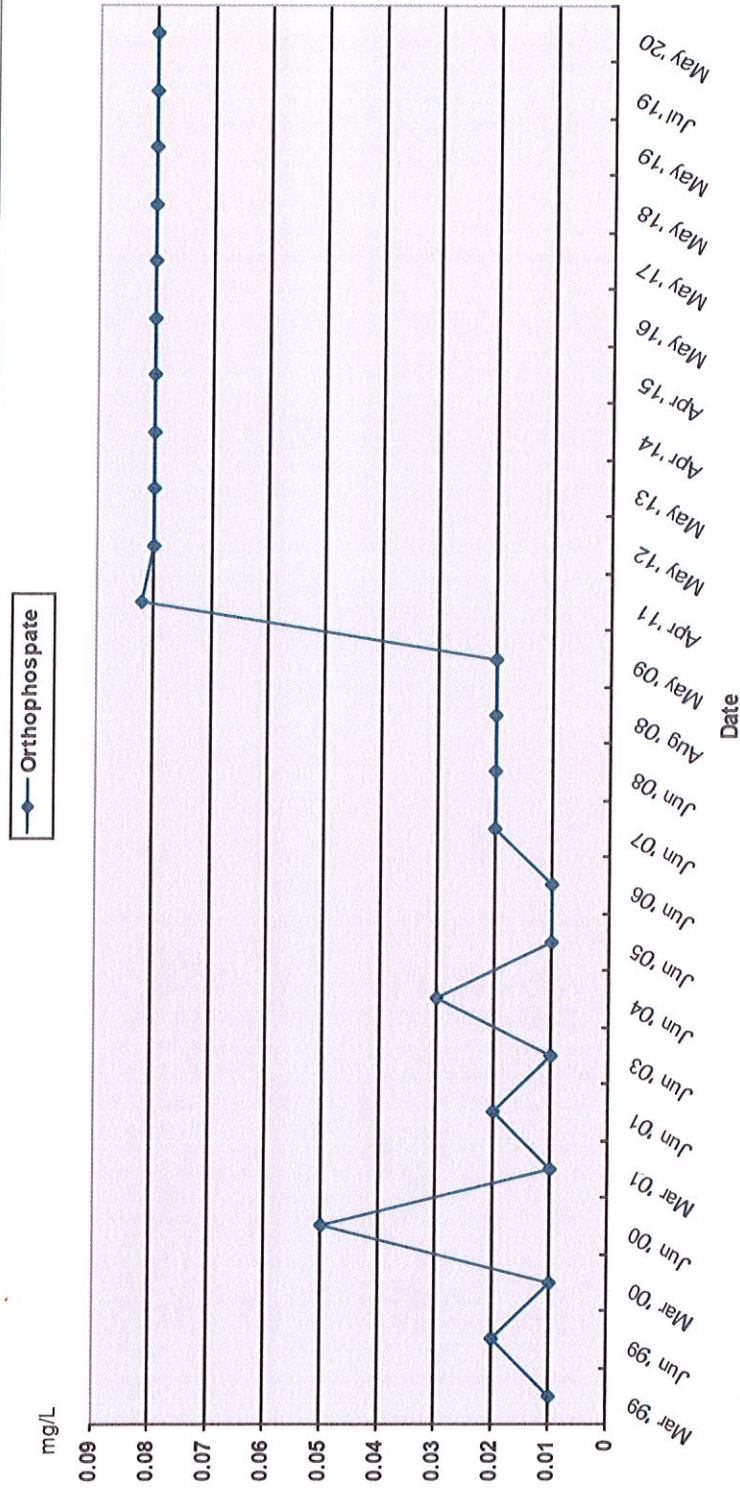
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

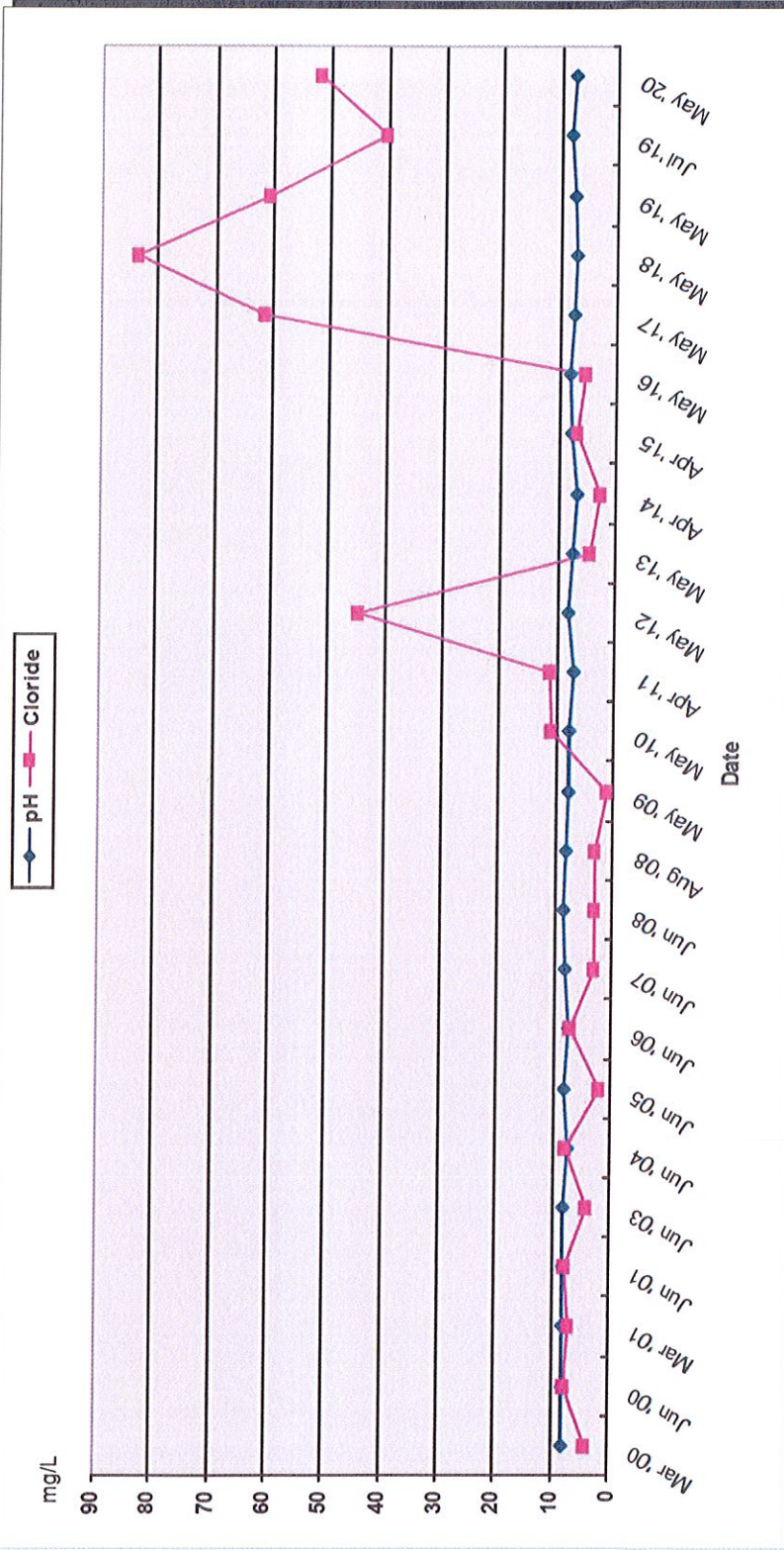
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

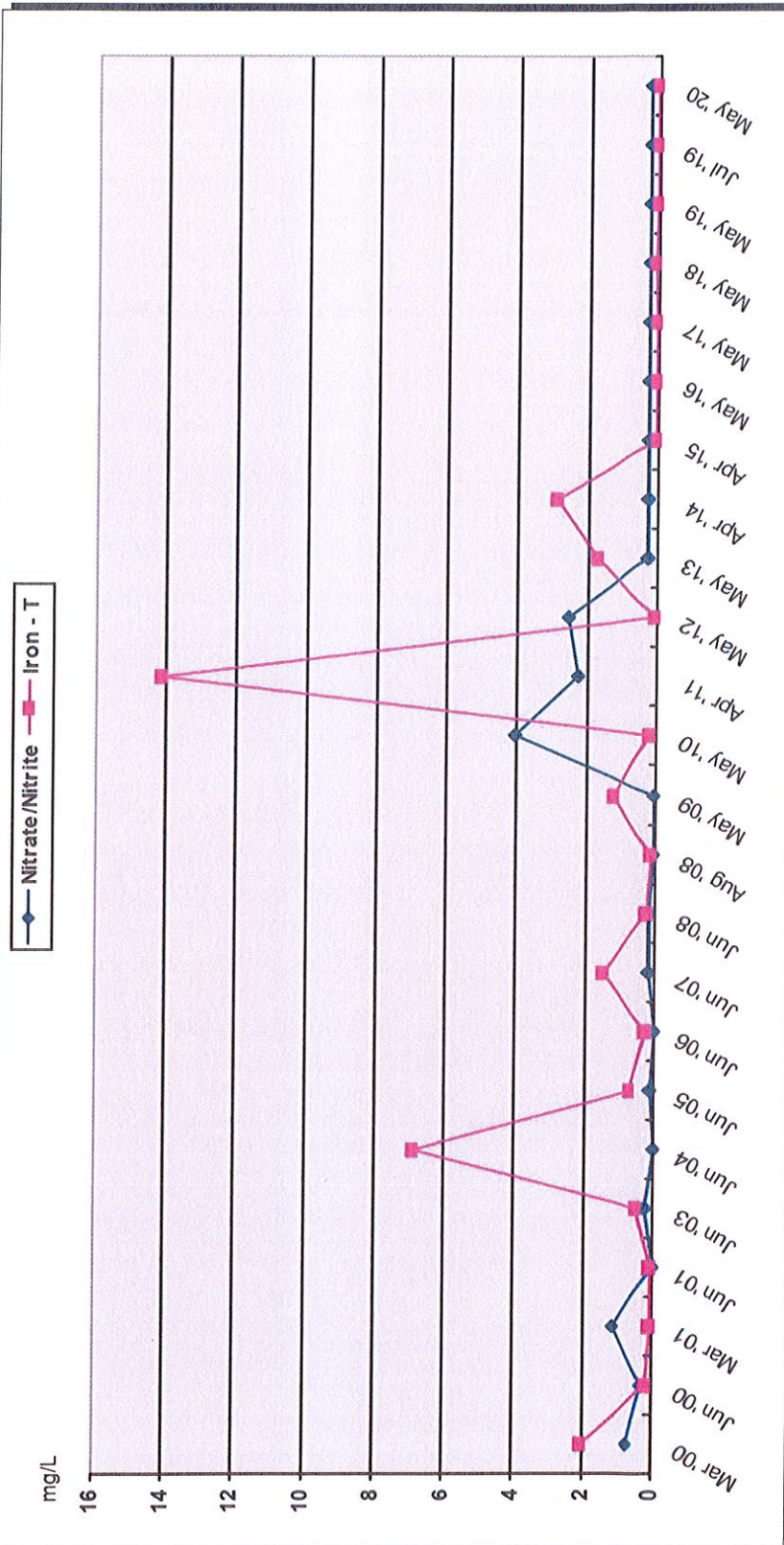
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

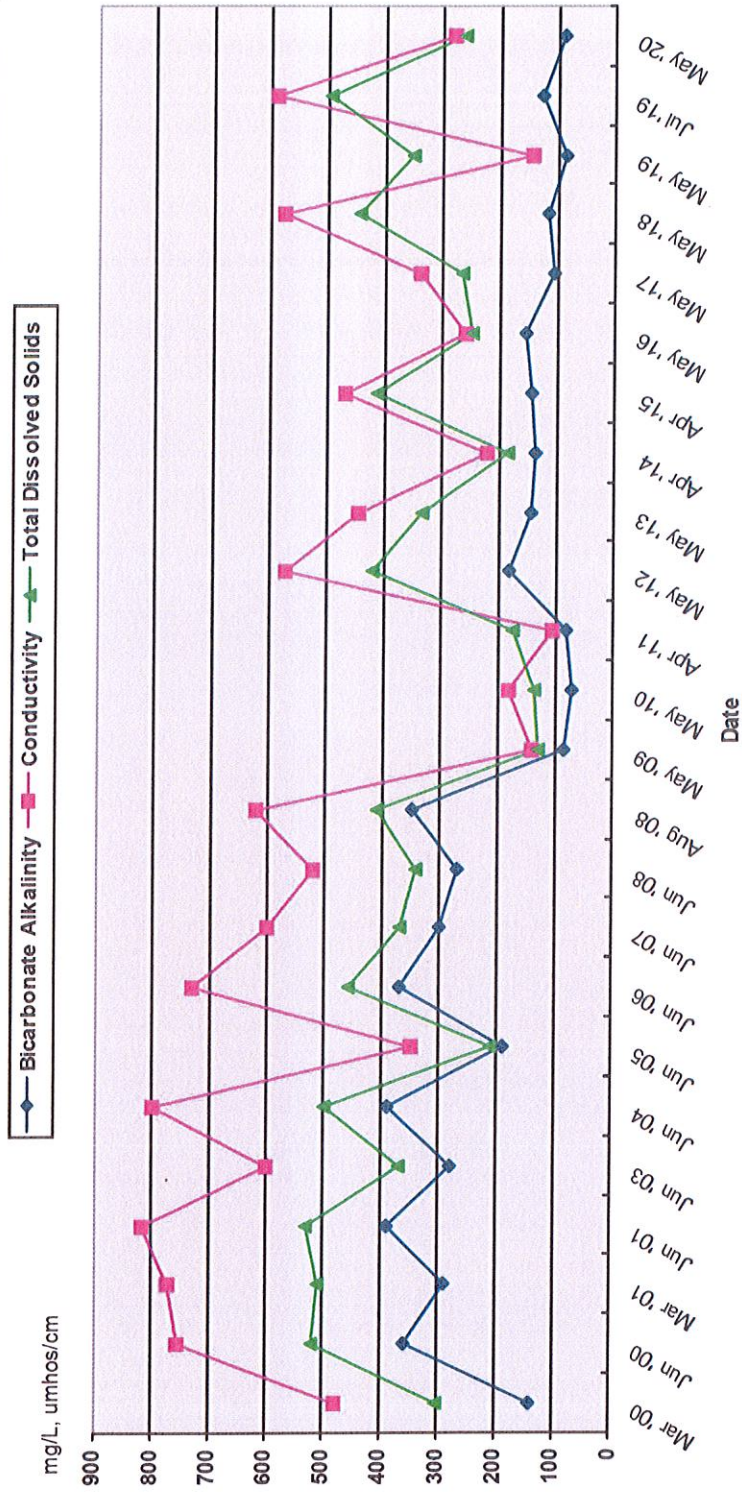
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

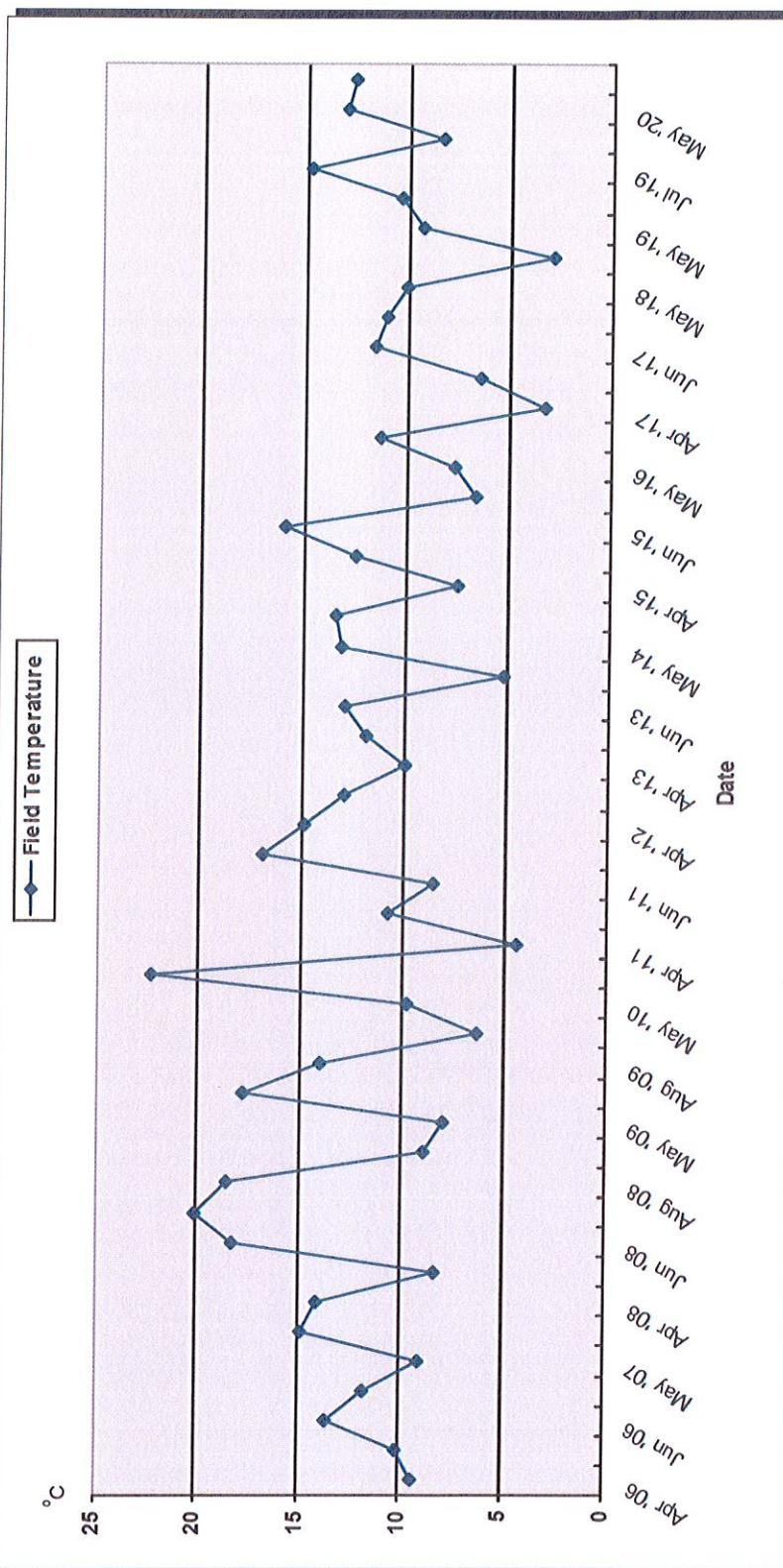
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: B-1



MONITORING CHART FOR 2020 AHR

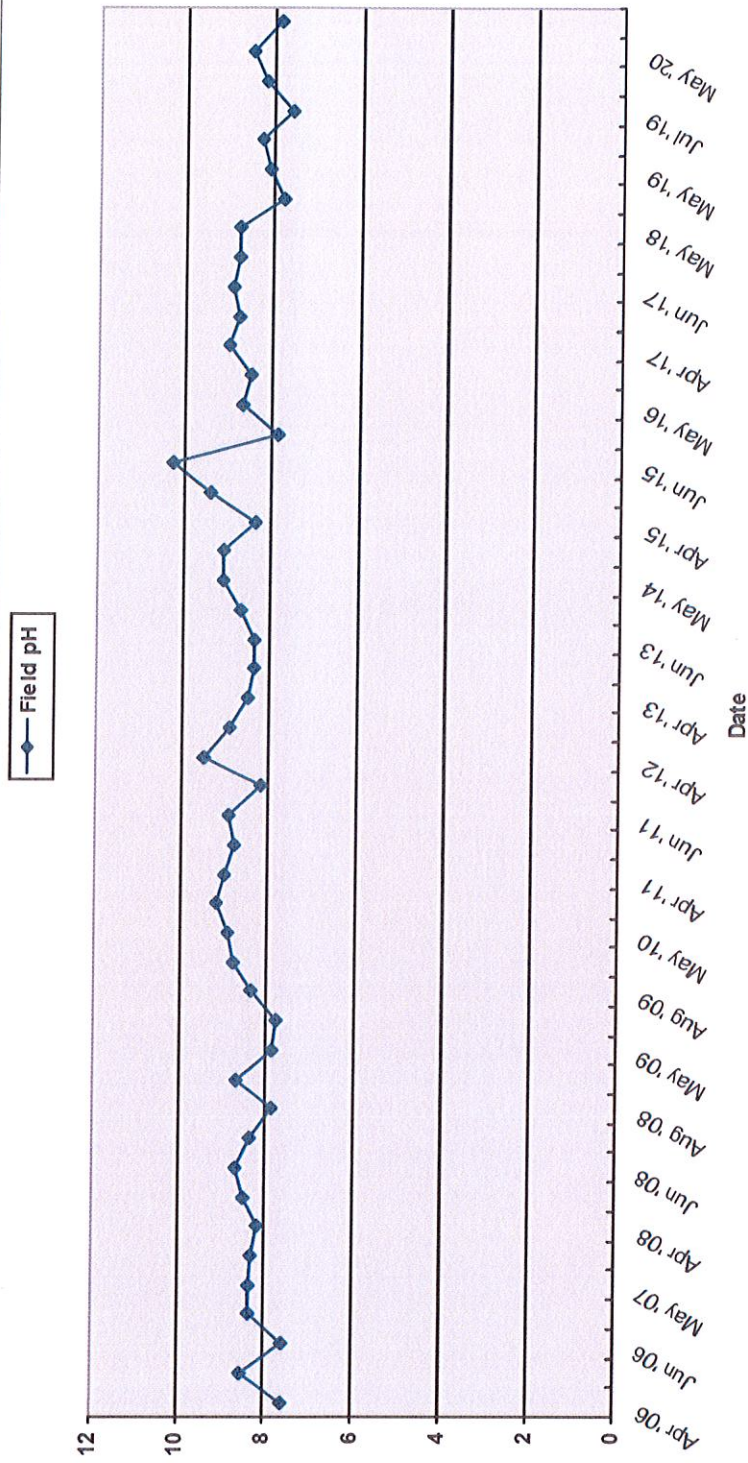
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

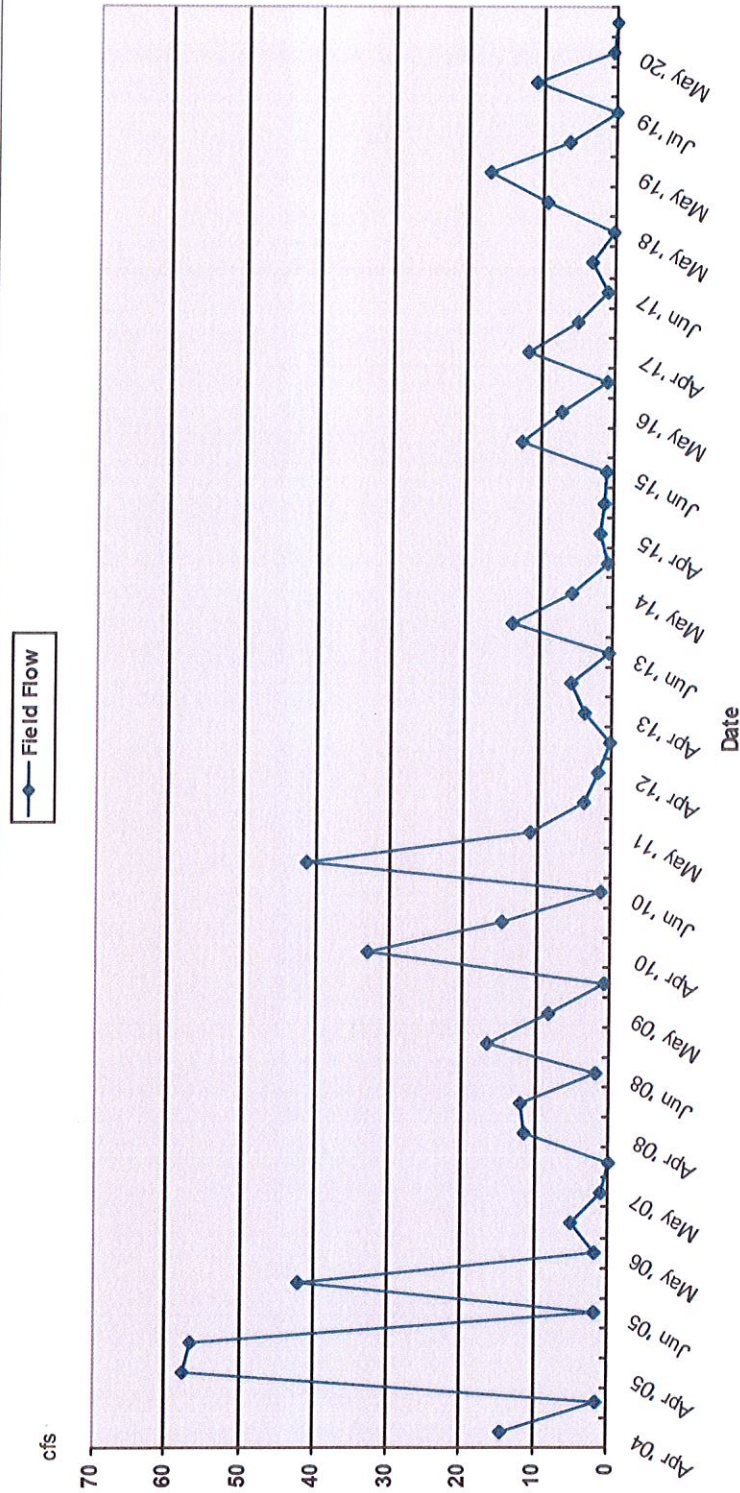
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

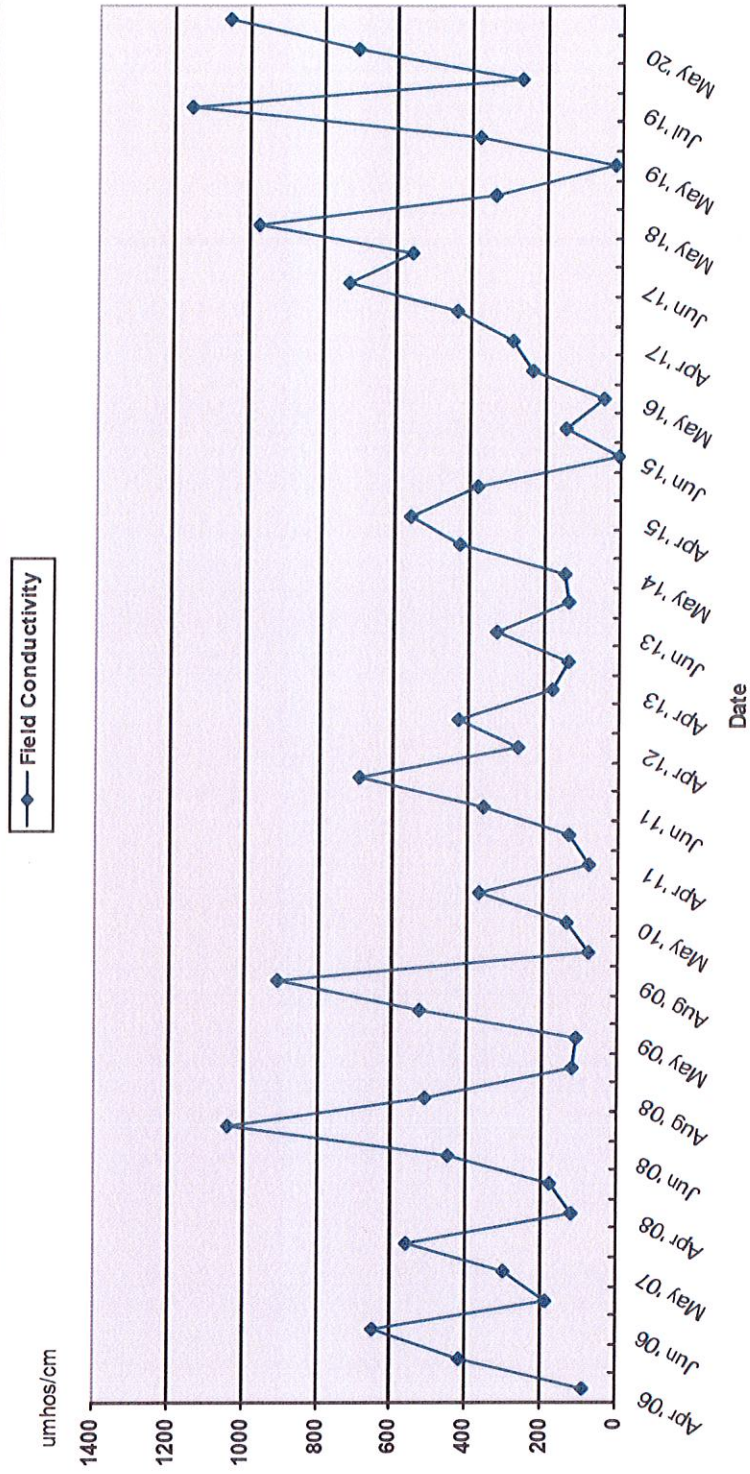
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: B-1



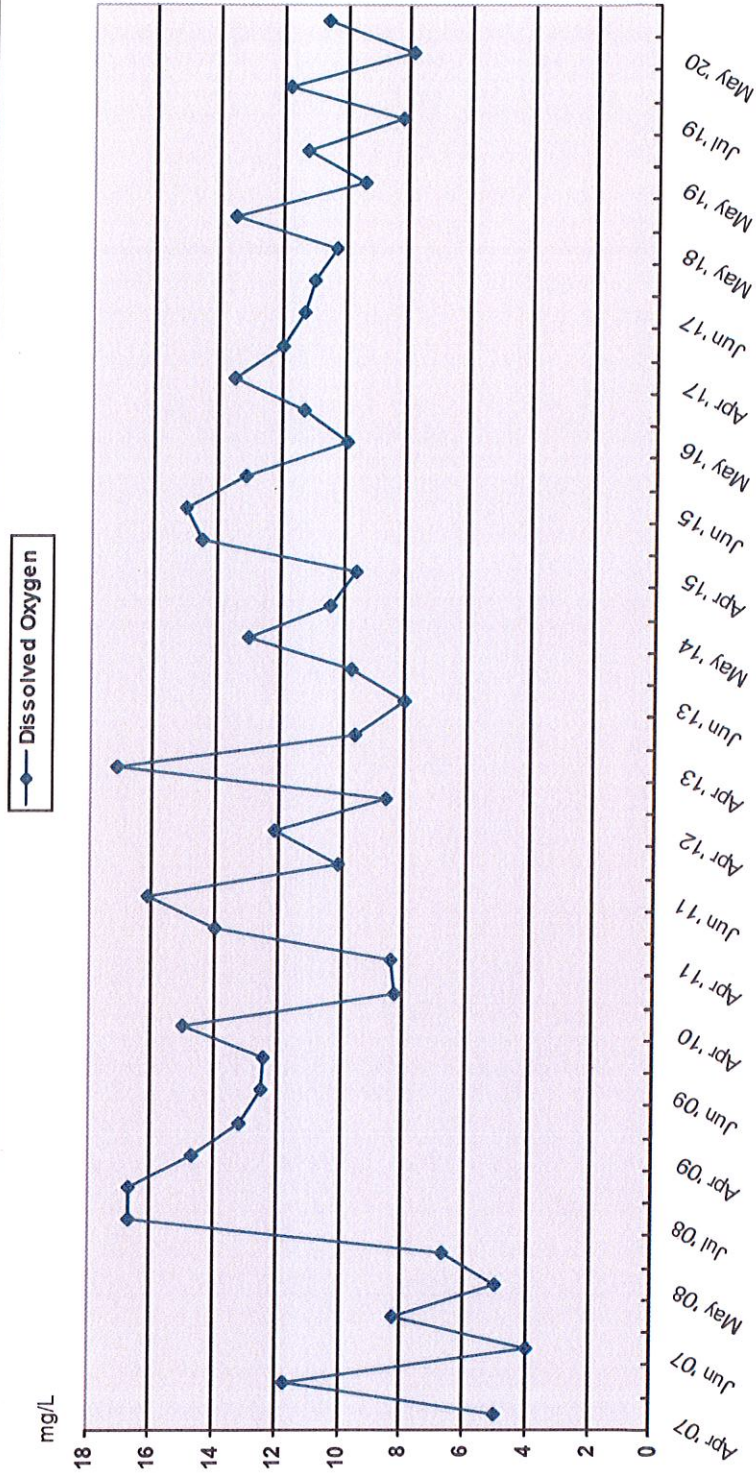
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: B-1



MONITORING CHART FOR 2020 AHR

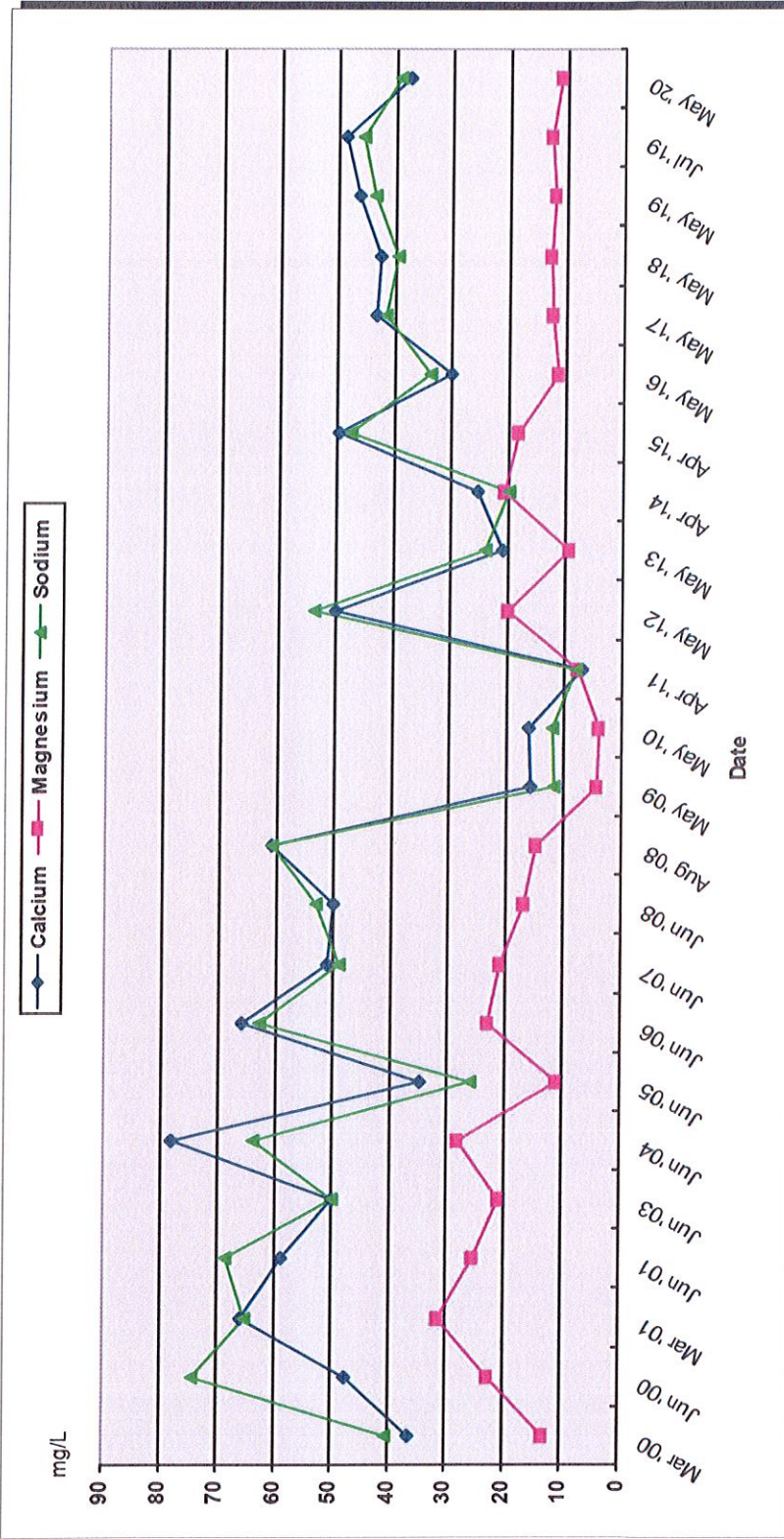
SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: B-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

C-1 LOWER COAL GULCH

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/6/2020	12:30	0																										0	0		
9/15/2020	11:15	0																										0	0		
8/12/2020	13:00	0																										0	0		
7/13/2020	14:15	0																										0	0		
6/2/2020	8:55	0																										0	0		
5/18/2020	12:07	0																										0	0		
4/27/2020	10:15	0.58	8.1	250	6.3										12.1													0	0		
10/17/2019	9:00	0																										0	0		
9/18/2019	13:10	0																										0	0		
8/20/2019	9:45	0																										0	0		
7/10/2019	12:00	0																										0	0		
6/7/2019	10:20	0.07	8.5	520	10.3										10.3													0	0		
5/13/2019	13:35	0.8	8.2	300	11.2	102	7.77	202	33.36	0.3	23.87	76	404	0.08	9.3			41.3		10.9					35.2		0	0	0.096	0.013	
4/12/2019	10:35	2.2	7.7	190	2.5										13.8													0	0		
10/17/2018		0																										0	0		
9/14/2018	10:40	0																										0	0		
8/27/2018	11:05	0																										0	0		
7/11/2018	14:30	0																										0	0		
6/22/2018	9:07	0																										0	0		
5/14/2018	10:10	0																										0	0		
4/24/2018	12:45	0.02	8.7	670	14.7										10.2													0	0		
10/19/2017	11:25	0																										0	0		
9/11/2017	10:30	0																										0	0		
8/8/2017	11:20	0																										0	0		
7/18/2017	11:50	0																										0	0		
6/6/2017	11:45	0																										0	0		
5/17/2017	11:00	0.04	8.7	600	7.3	116.25	7.17	119	24.7	0.3	27.52	14	120	0.08	11.4			36.9		9.2					30.4		0	0	0.101	0.019	
4/28/2017	9:00	0.8	9.3	370	3.7										13.3													0	0		
10/28/2016	10:10	0																										0	0		
9/22/2016	10:55	0																										0	0		
8/25/2016	10:45	0																										0	0		
7/25/2016	10:25	0																										0	0		
6/9/2016	9:45	0																										0	0		
5/23/2016	9:15	0.31	8.8	250	8.4	72.88	7.83	231	15.09	0.3	54.53	26	202	0.08	9.8			29.2		9.6					19.8		0	0	0.088	0.014	
4/26/2016	9:45	1.1	8.6	130	5.1										13.2													0	0		
10/21/2015	9:15	0																										0	0		

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
10/13/2015	12:00	0																														
9/18/2015	1:00	0																														
8/4/2015	1:00	0																														
7/17/2015	11:00	0																														
6/17/2015	11:00	0																														
5/4/2015	1:00	1	8.9	510	10	67.18	7.38	375	4.84	0.3	35.19	16	334	0.08	9.8				41.6		13.2					35.6				0	0.1	0.02
4/14/2015	9:40	0																														
10/31/2014	11:00	0																														
9/10/2014	8:30	0																														
8/25/2014	8:00	0																														
7/8/2014	8:30	0																														
6/11/2014	11:00	0																														
5/19/2014	13:00	0.44	9.2	220	12.3																											
4/8/2014	10:00	2	8.7	120	3.5	44.17	6.75	169	1.76	0.3	12.77	12	133	0.08	9.7			23.8		21.2						17.85				0	2.01	0.03
10/18/2013	10:00	0																														
9/9/2013	10:00	0																														
8/18/2013	10:00	0																														
7/18/2013	13:00	0																														
6/5/2013	13:00	0																														
5/6/2013	13:00	0.25	8.4	160	12.3	55.18	7.65	456	2.48	0.3	16.05	12	384	0.08	9.6			21.2		9.6						59				0	0.44	0.17
4/22/2013	12:25	0.75	8.5	140	7.7																											
10/10/2012	11:45	0																														
9/6/2012	12:00	0																														
8/2/2012	12:00	0																														
7/30/2012	12:00	0																														
6/13/2012	10:00	0																														
6/8/2012	11:45	0																														
5/9/2012	12:00	0																														
4/23/2012	13:15	0																														
10/18/2011	13:00	0																														
9/26/2011	13:30	0																														
8/15/2011	12:30	0																														
7/26/2011	13:00	0																														
6/14/2011	12:00	0																														
5/23/2011	14:45	1.65	8.5	130	8.8																											
4/19/2011	22:45	8	9.7	70	3.4	57.2	7.11	141	23.6	0.88	90.55	226	152	0.081	8.2			3.79		5.1						7.58				0	6.04	0.23

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/27/2010	12:45	0																												
9/9/2010	1:10	0																												
8/5/2010	12:00	0																												
7/15/2010	1:00	0																												
5/18/2010	10:30	0.55	9.7	210	9.4	133.31	8.16	294	21.8	1.07	25.93	20	236	0.08	8.1			31.3		10.2					19.41				0.15	0.09
4/22/2010	12:40	3.4	9.4	100	6									14.3																
10/12/2009	12:00	0																												
9/25/2009	12:00	0																												
8/5/2009	12:00	0																												
7/17/2009	12:45	0																												
6/22/2009	9:15	0																												
5/6/2009	9:00	0.99	7.6	170	5.4	120	8.08	180	1	0.02	9	6	130	0.03	17			20		6.9					13				0.5	0.01
4/29/2009	10:20	3.33	8.1	130	4.9									16.3																
10/7/2008	11:00	0																												
9/11/2008	12:30	0																												
8/5/2008	12:00	0																												
7/29/2008	12:00	0																												
6/18/2008	10:00	0																												
5/23/2008	10:30	0.67	8.5	230	6.5									4																
4/18/2008	14:15	4.2	8.2	100	6.4									13.1																
10/24/2007	13:30	0																												
9/11/2007	12:00	0																												
8/7/2007	12:30	0																												
7/17/2007	12:35	0																												
6/15/2007	12:30	0																												
5/15/2007	11:00	1	8.42	320	8.4									10.2																
4/26/2007	14:15	1.46	8.25	210	15.6									8																
10/17/2006	10:00	0																												
9/19/2006	10:00	0																												
8/10/2006	10:00	0																												
7/21/2006	10:00	0																												
6/13/2006	10:00	0																												
5/26/2006	9:45	0																												
4/17/2006	13:20	3	7.84	110	8.3									13.3																
10/17/2005	10:00	0																												
9/22/2005	14:00	0																												

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
8/5/2005	15:00	0																											0	0		
7/25/2005	14:00	0																											0	0		
6/15/2005	9:35	0.078	8.7	350	12																							0	0			
5/9/2005	12:55	2.62	8.3	120	12	230	8.37	420	2	0.08	32	35	260	0.01				51			15.0					30	0	0	0	5.8		
4/18/2005	10:00	5.52	7.9	100	6																						0	0	0	0		
10/8/2004	13:55	0																									0	0	0	0		
9/27/2004	9:30	0																									0	0	0	0		
8/23/2004	10:50	0																									0	0	0	0		
7/23/2004	11:20	0																									0	0	0	0		
6/22/2004	9:30	0	7.32	870	16																						0	0	0	0		
5/20/2004	9:55	0																									0	0	0	0		
4/14/2004	13:50	0.43	8.78	210	13																						0	0	0	0		
10/13/2003		0																									0	0	0	0		
9/17/2003		0																									0	0	0	0		
8/26/2003		0																									0	0	0	0		
7/28/2003	12:00	0																									0	0	0	0		
6/17/2003		0																									0	0	0	0		
5/30/2003	9:30	0.07	8.94	380	18																						0	0	0	0		
4/10/2003		0																									0	0	0	0		
9/6/2002		0																									0	0	0	0		
7/20/2002		0																									0	0	0	0		
6/25/2002		0																									0	0	0	0		
12/29/2001	9:30	0																									0	0	0	0		
11/27/2001	9:25	0																									0	0	0	0		
10/30/2001	10:55	0																									0	0	0	0		
9/28/2001	9:40	0																									0	0	0	0		
8/28/2001	10:25	0																									0	0	0	0		
7/23/2001	9:35	0																									0	0	0	0		
6/29/2001	10:50	0																									0	0	0	0		
5/30/2001	11:15	24	7.6	300	9																						0	0	0	0		
4/26/2001	9:40	12	7.5	250	7																						0	0	0	0		
3/30/2001	9:30	0																									0	0	0	0		
2/27/2001	10:10	0																									0	0	0	0		
1/25/2001	10:00	0																									0	0	0	0		
12/28/2000	14:12	0																									0	0	0	0		
11/22/2000	9:08	0																									0	0	0	0		

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/22/2000	12:30	0																													
9/28/2000	8:05	0																													
8/24/2000	7:05	0																													
7/25/2000	14:12	0																													
6/29/2000	10:01	0																													
5/17/2000	15:00	15	7.6	310	12																										
4/25/2000	8:02	24	7.5	250	9																										
3/28/2000	9:31	15	7.6	300	7	152	7.91	300	3	0.04	21	35	207	0.05	2.08	0.002	0.005	27.3	0.028	0.05	7.9	0.022	0.0002	0.05	0.002	20.5	0.031	0	0	2.03	
2/18/2000	7:31	0																													
1/25/2000	8:47	0																													
12/22/1999	7:30	0																													
11/24/1999	9:38	0																													
10/28/1999	8:59	0																													
9/23/1999	7:49	0																													
8/17/1999	8:59	0																													
7/26/1999	8:01	0																													
6/29/1999	7:46	0																													
5/25/1999	8:32	0																													
4/21/1999	11:23	24	8.5	110	9	139	7.55	262	2	0.02	20	5	152	0.03	0.7	0.002	0.005	21.6	0.005	0.05	7.1	0.007	0.0002	0.06	0.003	20.5	0.038	0	0	0.77	
3/30/1999	13:10	16	8.5	110	9																										
2/10/1999	9:25	0																													
1/29/1999	8:19	0																													
12/30/1998		0																													
11/30/1998		0																													
10/7/1998		0																													
9/30/1998		0																													
8/19/1998		0																													
7/27/1998		0																													
6/2/1998		11.7	7.1	80	12	224	7.97	466	4	1.5	51	6	310	0.02	0.02	0.009	0.005	11	0.011	0.05	0.0	3.6	0.0002	0.05	0.004	6.7	0.013	0	0	0.04	
5/28/1998		62	7	120	10																										
4/20/1998		19	7.1	150	7																										
3/23/1998	11:38	55	7.2	160	8	113	7.84	212	2	0.05	14	115	178	0.06	3.91	0.002	0.005	20.7	0.005	0.05	0.1	7.69	0.0002	0.05	0.002	14.5	0.011	0	0	4.24	
2/6/1998		0																													
1/20/1998		0																													
9/11/1997		0																													
8/21/1997		0																													

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
7/29/1997		0																														
6/23/1997		22	8.5	800	11		8.27	860	5	1.6	128	52	0.09	1.02	-0.002	-0.005	49	-0.005	0.09	33.2	0.024	-0.0002	-0.002	86.2	0	0	0	0	0	1.37		
5/22/1997		27	8.2	110	8																											
4/29/1997		10	8.3	120	7																											
3/11/1997							7.95	447	5	0.06	58	33	0.03	1.28	-0.002	-0.005	42.3	-0.005	-0.05	14.3	0.02	0.0003	-0.002	33.8	0	0	0	0	0	1.44		
3/11/1997		22	8.9	420	5																											
2/27/1997		0																														
1/10/1997		0																														
12/13/1996		0																														
11/19/1996		0																														
10/8/1996		0																														
9/5/1996		0																														
8/2/1996		0																														
7/16/1996		0																														
6/5/1996		0																														
5/9/1996		29.6	8.8	330	11																											
4/8/1996		15	8.8	110	9																											
3/4/1996		9.26	0																													
2/5/1996		11.06	0																													
1/4/1996		7.59	0																													
12/5/1995		9.02	0																													
11/2/1995		12.54	0																													
10/2/1995		13.23	0																													
9/6/1995		13.59	0																													
8/2/1995		12.55	0																													
7/10/1995		11.50	14.3	430	18																											
6/7/1995		11.05	8.6	170	10		7.97	220	1	0.04		6	0.04	0.17	-0.002	-0.005	22.4	-0.005	-0.05	8.2	0.006	-0.0002	0.018	19.5	0	0	0	0	0	0.47		
5/2/1995		9.34	20	110	5																											
4/3/1995		11.46	28	200	7																											
3/13/1995		7.37	34	200	4		8.20	240	2	-0.02		23	0.04	1.11	-0.001	-0.005	23.3	-0.005	-0.05	7.1	0.018	-0.0002	0.007	18.6	0	0	0	0	0	1.32		
2/6/1995		10.12	0																													
1/3/1995		10.20	0																													
12/5/1994		11.34	0																													
11/8/1994		13.45	0																													
10/4/1994		10.17	0																													
9/14/1994		10.05	0																													

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: C-1

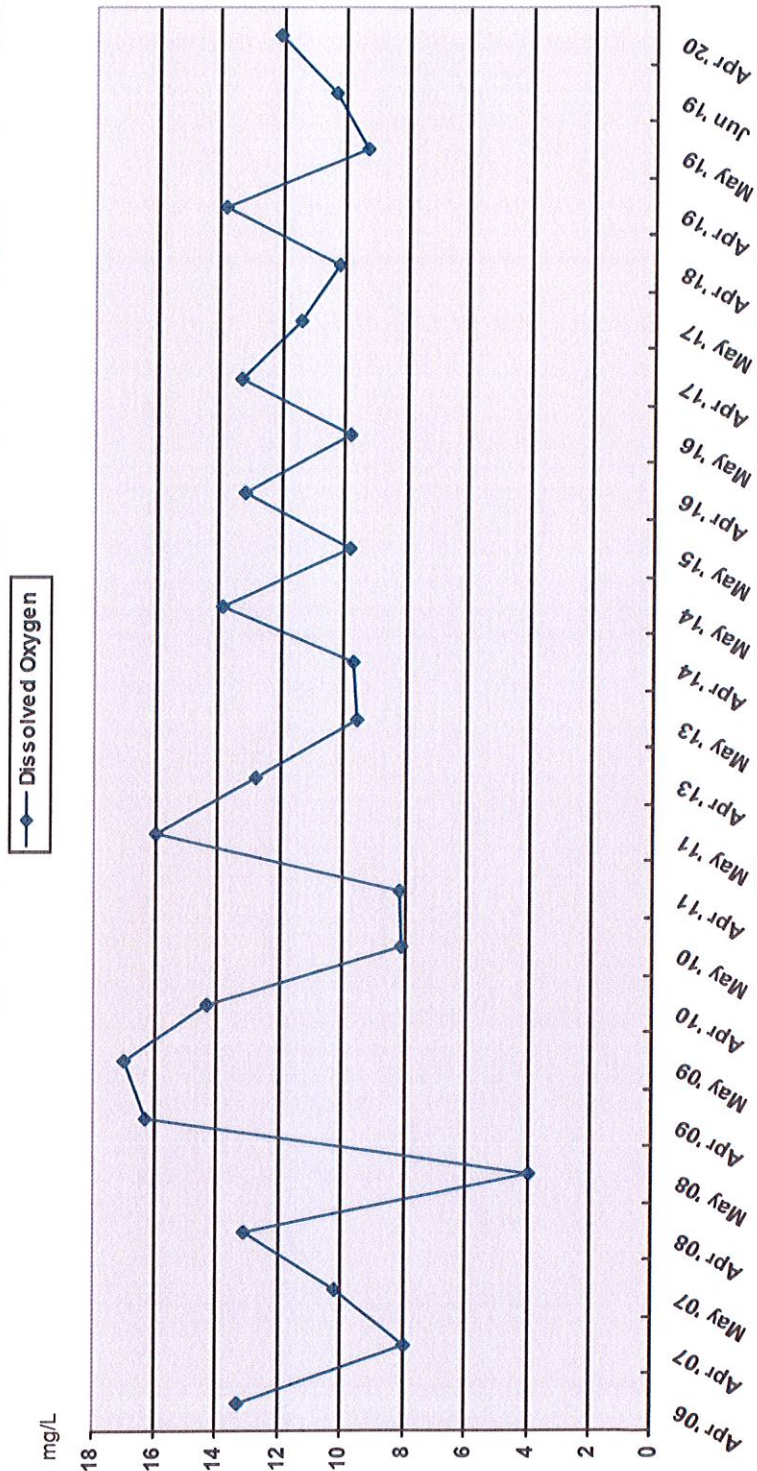
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8/9/1994	9:48	0																											0	0		
7/11/1994	14:22	0																											0	0		
6/9/1994	10:15	0																											0	0		
5/31/1994		0																											0	0		
4/30/1994	14:10		8.6	150	10																							0	0			
3/31/1994	10:58	12	9.2	310	17	110	7.90	316				10	186							-0.01	-0.02		0.01					0	0		0.87	
12/21/1993		0																											0	0		
11/10/1993		0																											0	0		
10/29/1993		0																											0	0		
9/8/1993		0																											0	0		
8/30/1993		0																											0	0		
7/28/1993	9:10	0																											0	0		
7/1/1993		0																											0	0		
4/29/1993	12:35	21	8.2	80	7	48	8.30	91				94	88							-0.01	-0.02		0.12					0	0		6.8	
3/19/1993	12:28	13	8.5	310	8	190	8.50	442				62	282							-0.01	-0.02		0.03					0	0		1.63	
2/26/1993		0																											0	0		
1/30/1993		0																											0	0		

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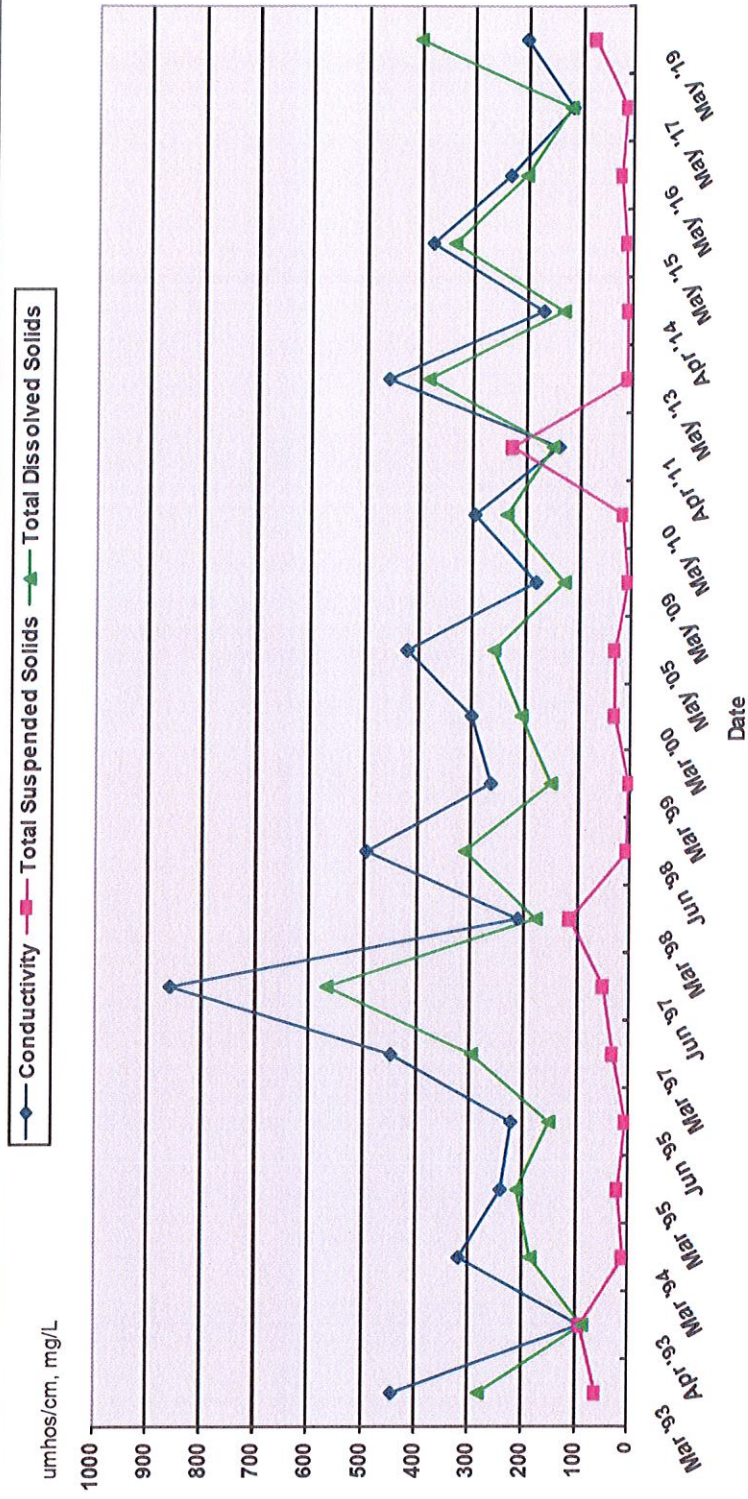
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

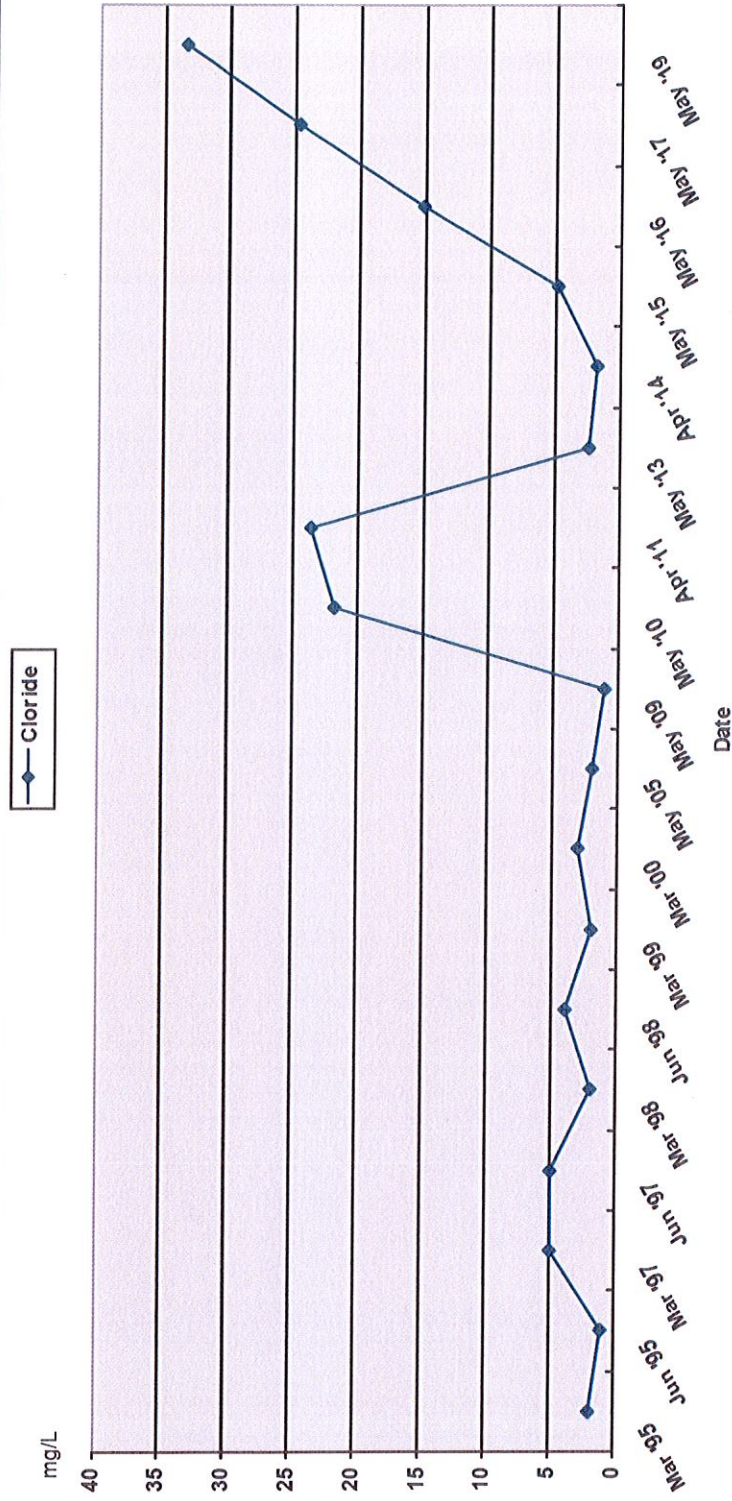
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

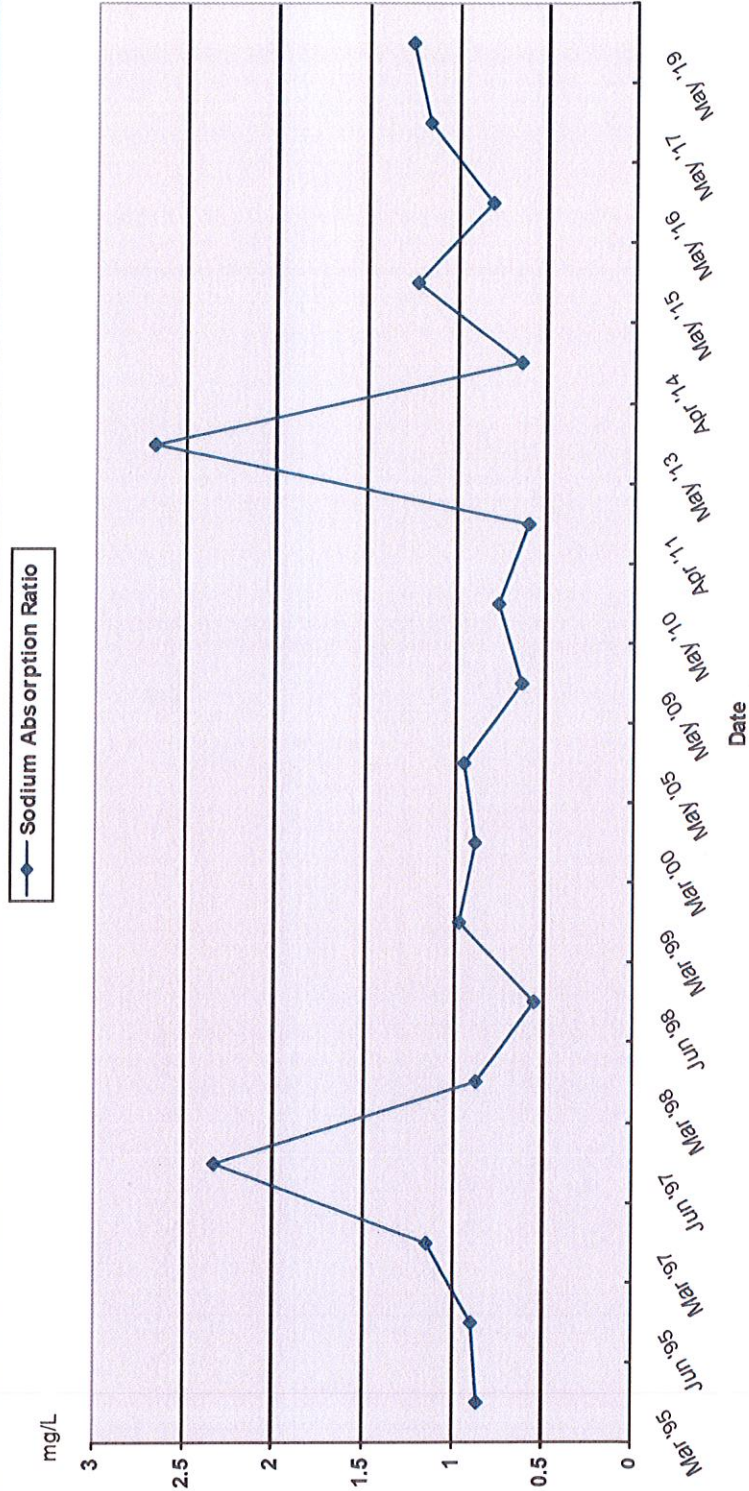
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

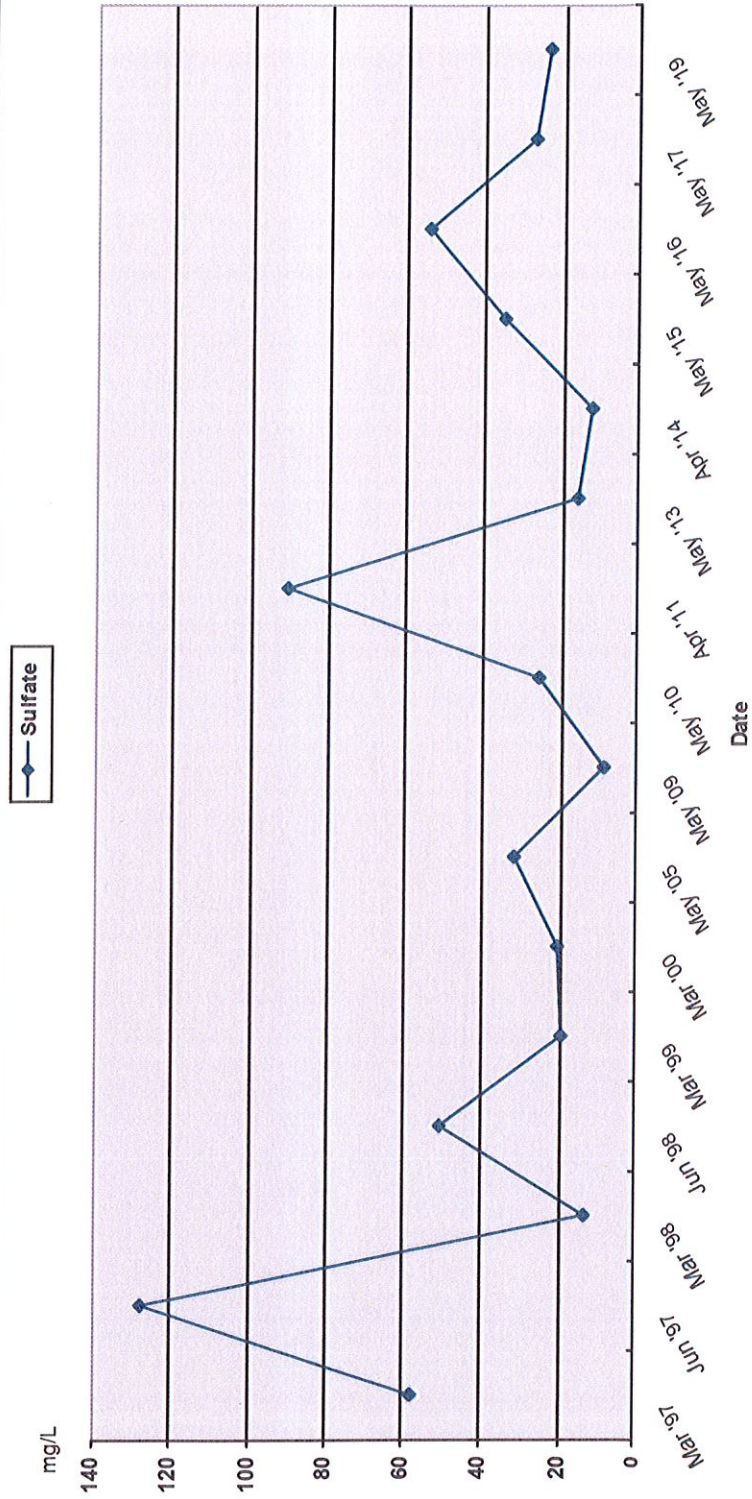
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

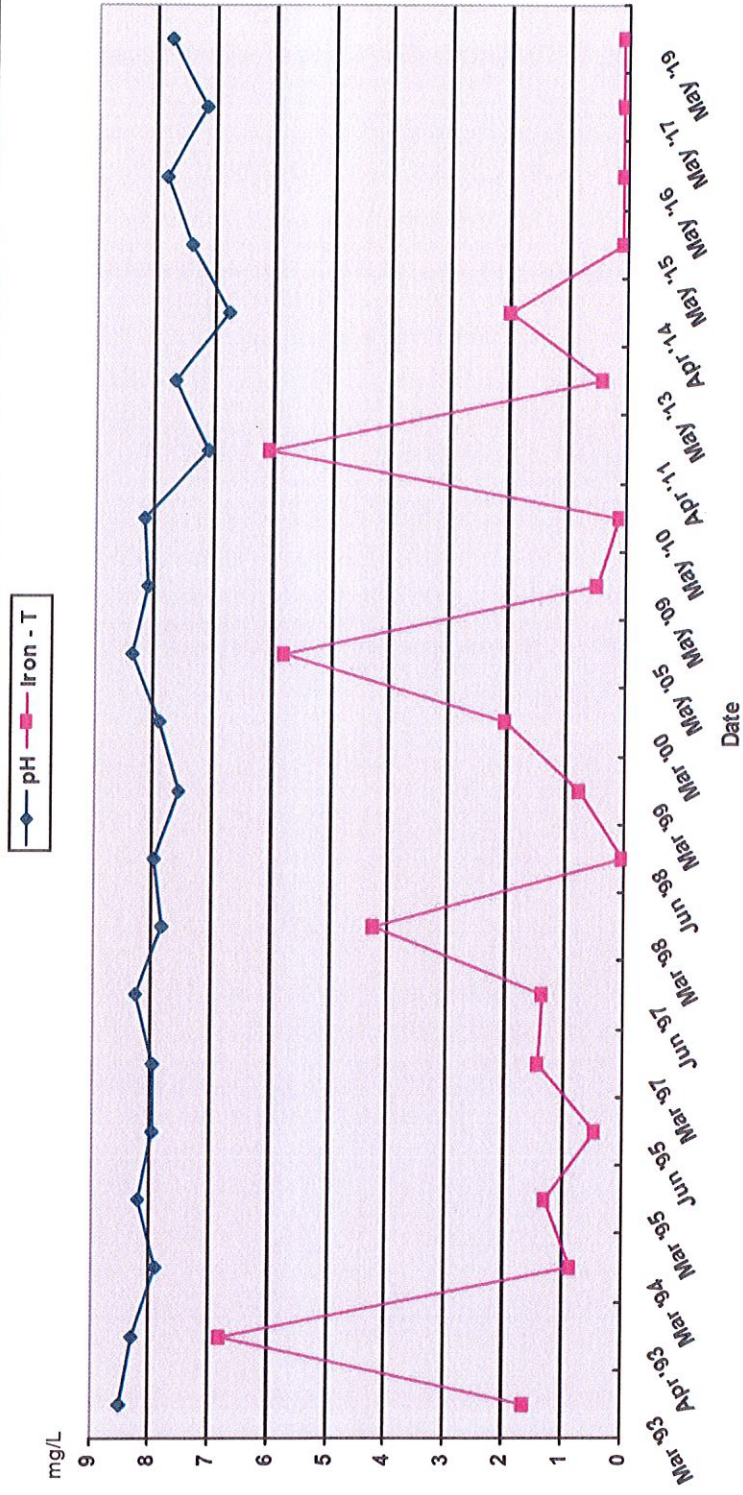
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

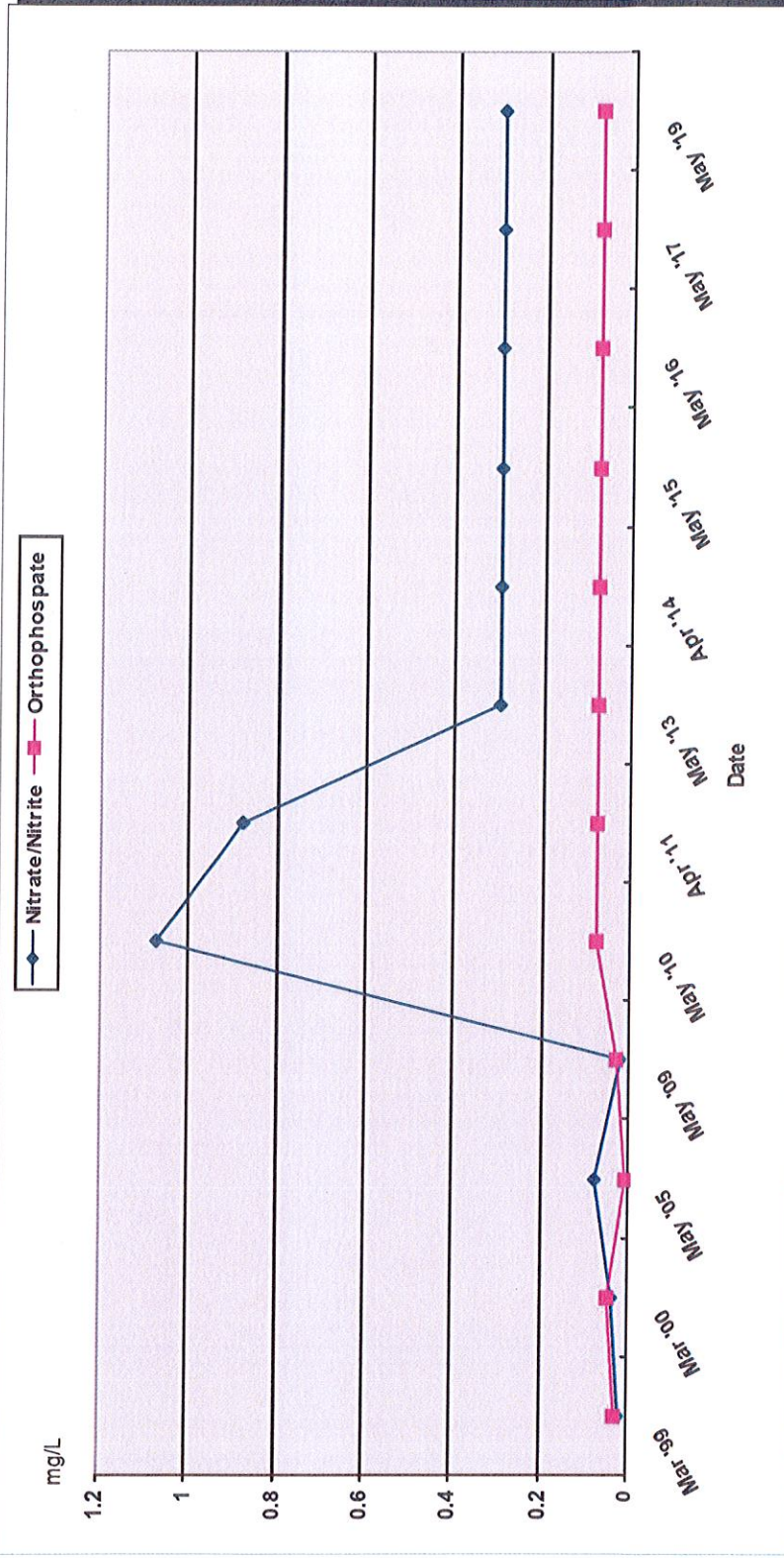
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: C-1



MONITORING CHART FOR 2020 AHR

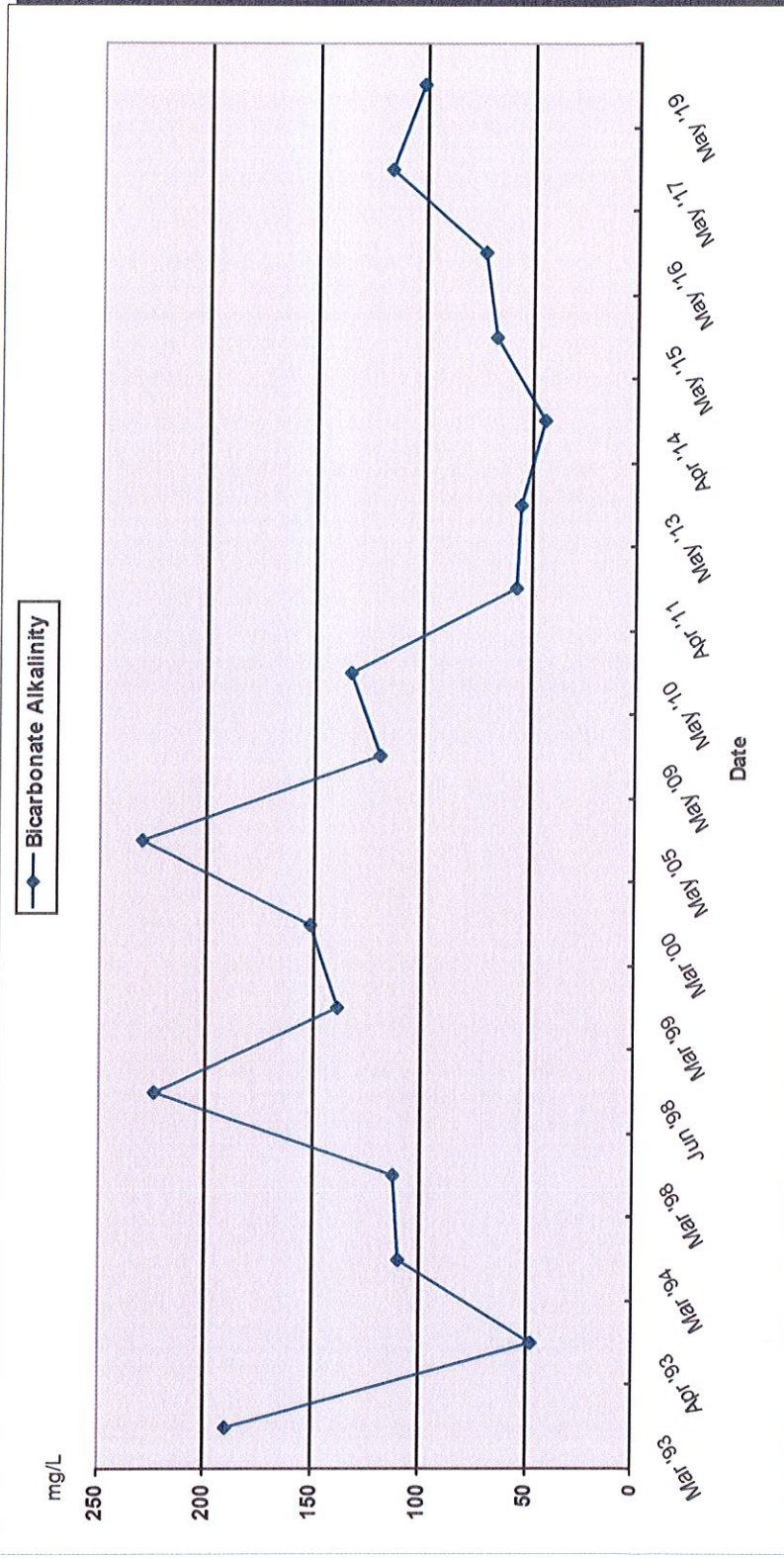
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

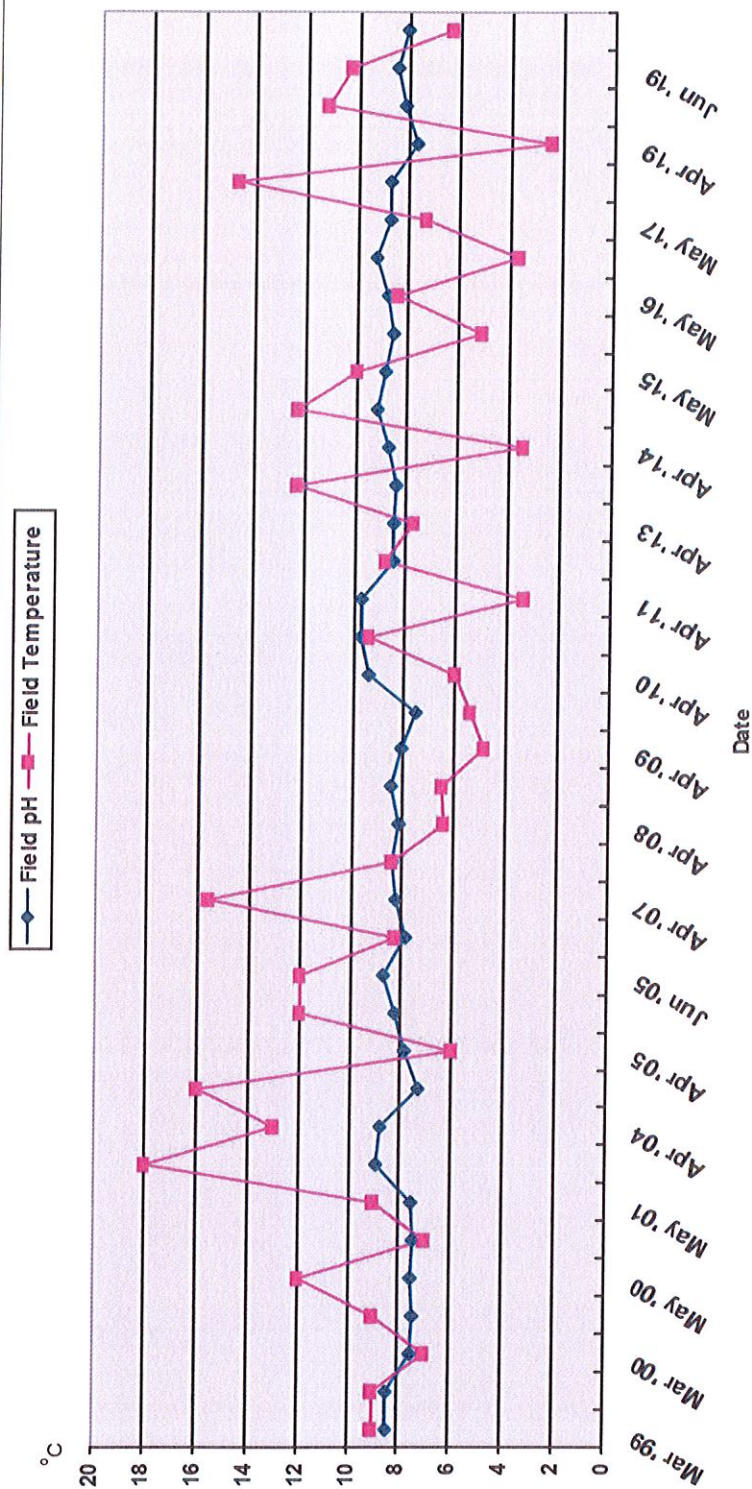
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

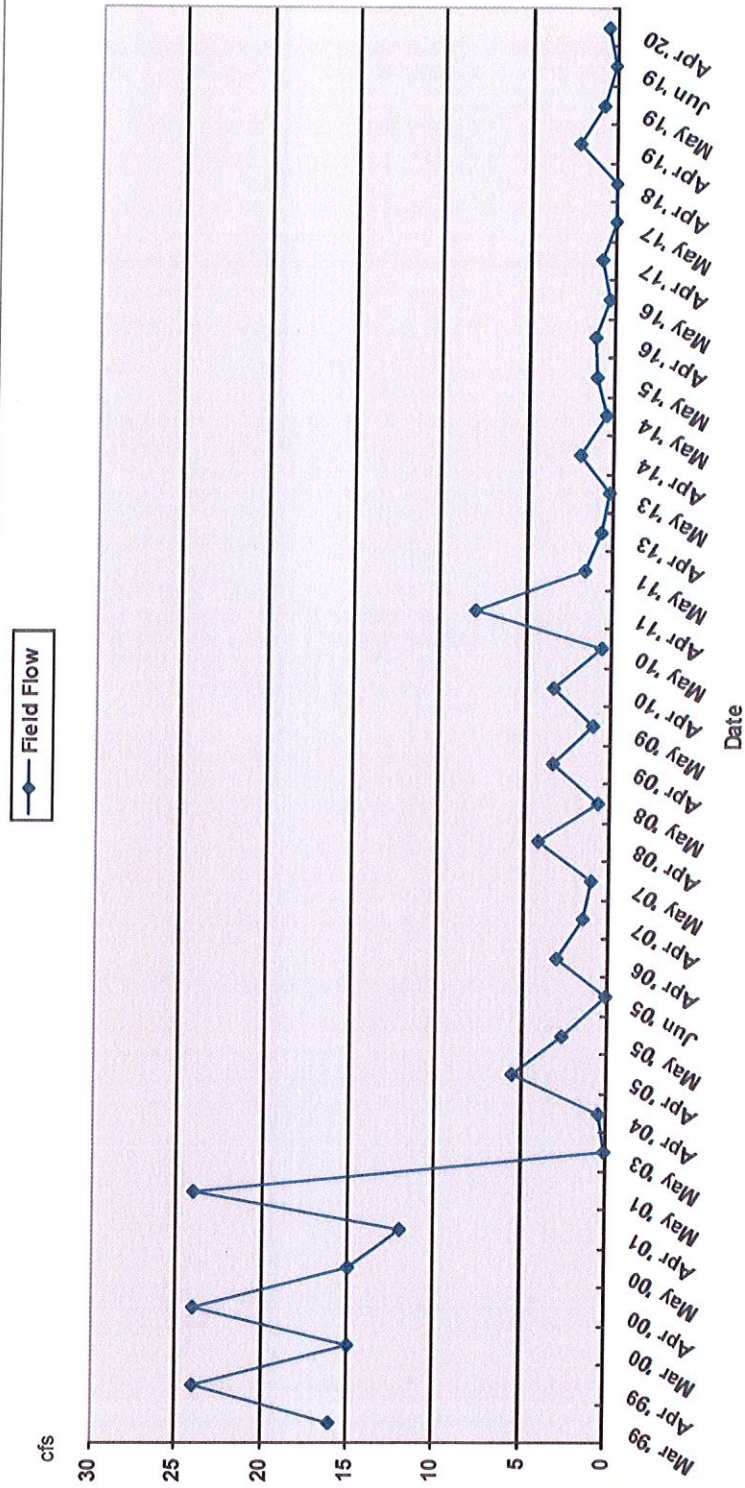
SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: C-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

S-1 SANBORN CREEK

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
10/6/2020	15:15	0																													
9/15/2020	11:00	0																													
8/12/2020	12:55	0																													
7/13/2020	14:00	0																													
6/2/2020	8:45	0																													
5/18/2020	12:00	0																													
4/27/2020	9:50	2.5	7.9	180	5.6								12.6																		
10/17/2019	9:15	0																													
9/18/2019	13:00	0																													
8/20/2019	9:30	0																													
7/10/2019	11:55	0																													
6/7/2019	10:00	0.3	8.5	280	9.5								11.5																		
5/13/2019	12:10	2.8	8.1	190	7.6	57.69	7.84	115	27.5	0.3	21.81	44	396	0.08	9.5		24.1			7.9					26.3					0.027	
4/12/2019	10:15	2.5	7.7	170	2.8																										
10/17/2018	12:00	0																													
9/14/2018	11:15	0																													
8/27/2018	11:15	0																													
7/11/2018	14:40	0																													
6/22/2018	9:00	0																													
5/14/2018	10:00	0																													
4/24/2018	12:25	0.2	8.6	360	9								11.6																		
10/19/2017	11:30	0																													
9/11/2017	10:00	0																													
8/8/2017	11:30	0																													
7/18/2017	11:30	0																													
6/6/2017	12:00	0																													
5/17/2017	11:30	0.05	8.7	340	7.4	71.55	8.05	158	15.3	0.3	19.88	2	148	0.08	11.9		24.3			4.7					21.3				0.098	0.014	
4/28/2017	8:40	2.2	9.4	230	6.4								12.9																		
10/28/2016	10:00	0																													
9/22/2016	11:05	0																													
8/25/2016	10:30	0																													
7/25/2016	10:15	0																													
6/9/2016	9:15	0																													
5/23/2016	8:30	0.83	9	200	7.1	87.74	7.65	174	5.76	0.3	34.82	10	170	0.08	9.9		25.9			7.5					22.5				0.13	0.02	
4/26/2016	9:25	2.9	8.7	100	4.7								13.9																		
11/21/2015	9:00	0																													

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
10/13/2015	12:00	0																														
9/18/2015	12:00	0																														
8/4/2015	1:00	0																														
7/21/2015	12:00	0																														
6/17/2015	9:00	0																														
5/4/2015	12:30	1	8.8	240	13.6	21.53	6.79	119	1.76	0.3	4.82	11	97	0.08	9.8			29			8.8					27.2					0.13	0.02
4/14/2015	9:20	0																														
10/31/2014	11:00	0																														
9/10/2014	8:00	0																														
8/25/2014	8:00	0																														
7/8/2014	8:30	0																														
6/11/2014	11:00	0																														
5/19/2014	13:25	0.33	8.6	110	12.1										13.4																	
4/8/2014	10:40	2.4	8.7	80	4	24.56	6.73	117	1.76	0.3	4.18	13	98	0.08	9.8			17.2			16.6					9.17					0.66	0.02
10/18/2013	10:00	0																														
9/9/2013	10:00	0																														
8/16/2013	10:00	0																														
7/18/2013	13:00	0																														
6/5/2013	13:00	0																														
5/6/2013	11:40	0.75	8.4	90	9.6										9.8																	
4/22/2013	12:20	1.6	8.4	100	6.8	38.22	6.99	322	2.48	0.3	4.43	11	250	0.08	13.3			27.8			8.4				59						1.14	0.12
10/10/2012	14:30	0																														
9/6/2012	13:00	0																														
8/2/2012	11:00	0																														
7/30/2012	11:15	0																														
6/13/2012	10:00	0																														
6/8/2012	13:00	0																														
5/9/2012	12:00	0																														
4/23/2012	13:10	0																														
10/7/2011	14:30	0																														
9/8/2011	15:00	0																														
8/15/2011	14:00	0																														
7/26/2011	13:00	0																														
6/14/2011	13:00	0																														
5/23/2011	14:00	2.82	8.7	100	10.5										13.1																	
4/19/2011	10:30	18.75	9.6	50	2.8	48.6	7.18	97	21.8	0.71	60.37	58	124	0.081	8.3			4.16			3.7				4.69						1.33	0.46

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/27/2010	12:45	0																														
9/27/2010	1:00	0																														
8/5/2010	12:00	0																														
7/15/2010	1:00	0																														
6/4/2010	12:00	0																														
5/18/2010	10:20	1.33	10.1	140	9.4	74.11	7.79	170.1	21.8	0.69	25.93	32	145	0.082	8.2				13.6			5.2					7.38	0	0	0	0.11	0.08
4/22/2010	12:30	4	9.6	80	5.1										14.4																	
10/12/2009	12:00	0																														
9/25/2009	12:10	0																														
8/5/2009	12:00	0																														
7/17/2009	12:45	0																														
6/22/2009	9:00	0																														
5/6/2009	8:40	4.5	7.8	90	4.7	75	7.85	110	1	0.03	5	5	96	0.01	14.3				14			4.9					5	0	0	0.66	0.04	
4/29/2009	10:10	4.5	8.5	90	3.9										13.6																	
10/15/2008	9:00	0																														
9/11/2008	11:00	0																														
8/5/2008	12:00	0																														
7/29/2008	9:00	0																														
6/18/2008	9:45	0																														
5/23/2008	10:20	1.66	8.3	140	6.4										6													0	0	0	0	0
4/18/2008	14:00	6.66	8.3	90	4.7										11.4													0	0	0	0	0
10/24/2007	13:30	0																														
9/11/2007	10:00																															
8/17/2007	10:00																															
7/17/2007	10:00																															
6/15/2007	10:00																															
5/15/2007	10:45	0.31	7.98	220	10.6										11													0	0	0	0	0
4/26/2007	14:30	2.5	8	150	8.6										12.1													0	0	0	0	0
9/27/2006	10:00	0																														
8/10/2006	10:00	0																														
7/21/2006	10:00	0																														
6/13/2006	10:00	0																														
5/26/2006	9:40	0																														
4/17/2006	13:00	8.16	8.16	80	6.9										14.1													0	0	0	0	0
10/17/2005	10:00	0																														
9/22/2005	1:00	0																														

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
8/30/2005	12:00	0																														
8/5/2005	8:15	0																														
7/25/2005	2:00	0																														
6/15/2005	8:15	0																														
5/9/2005	12:45	6.72	8.2	100	12																											
4/18/2005	9:45	2.37	8.24	80	4																											
10/8/2004	16:15	0																														
9/27/2004	9:20	0																														
8/23/2004	11:00	0																														
7/23/2004	11:50	0																														
6/22/2004	9:15	0																														
5/20/2004	9:50	0																														
4/14/2004	13:40	1.69	9.33	110	9																											
10/13/2003	12:00	0																														
9/17/2003	12:00	0																														
8/26/2003	12:00	0																														
7/28/2003	12:00	0																														
6/17/2003	12:00	0																														
5/13/2003	12:10	0.43	8.53	740	8																											
4/10/2003	13:00	1	8.68	140	8																											
10/24/2002		0																														
9/6/2002		0																														
8/14/2002		0																														
7/20/2002		0																														
6/23/2002		0																														
12/29/2001	8:30	0																														
12/29/2001	8:15	0																														
11/27/2001	8:10	0																														
10/30/2001	9:40	0																														
9/28/2001	8:25	0																														
8/28/2001	8:10	0																														
7/23/2001	8:20	0																														
6/29/2001	9:35	0																														
5/30/2001	10:00	120	7.4	220	9																											
4/26/2001	8:25	3562	7.5	210	7																											
3/30/2001	8:15	0																														

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
2/27/2001	8:55	0																														
1/25/2001	8:45	0																														
12/28/2000	11:14	0																														
11/23/2000	8:24	0																														
10/20/2000	12:02	0																														
9/28/2000	8:05	0																														
8/24/2000	10:24	0																														
7/24/2000	8:00	0																														
6/29/2000	12:16	0																														
5/17/2000	9:53	200	7.4	180	12																											
4/25/2000	10:24	7542	7.6	210	10																											
3/28/2000	9:04	5428	7.5	200	7	143	7.73	275	1	0.08	17	5	171	0.05	0.36	0.002	0.005	24.6	0.036	0.05	7.9	0.005	0.0002	0.05	0.002	17.7	0.03				0.28	
2/18/2000	13:14	0																														
1/25/2000	14:11	0																														
12/22/1999	7:10	0																														
11/24/1999	9:12	0																														
10/28/1999	8:22	0																														
9/23/1999	7:26	0																														
8/17/1999	8:15	0																														
7/26/1999	7:15	0																														
6/29/1999	7:29	0																														
5/25/1999	8:07	0																														
4/21/1999	10:47	4987	8	90	7																											
3/30/1999	12:00	7585	8.5	80	7	117	7.32	217	2	0.02	14	5	181	0.04	0	0.78	0.002	0.005	20.5	0.007	0.05	7.7	0.022	0.0002	0.05	0.002	15.3	0.034				0.91
2/10/1999	8:55	0																														
1/29/1999	7:59	0																														
12/30/1998		0																														
11/30/1998		0																														
10/7/1998		0																														
9/30/1998		0																														
8/19/1998		0																														
7/27/1998		0																														
6/2/1998	32.8		8.2	300	14	181	8.21	326	3	0.14	21	10	201	0.05	0.03	0.002	0.005	16.8	0.005	0.05	5.9	0.005	0.0002	0.05	0.002	8.8	0.005				0.07	
5/28/1998	69		8	90	11																											
4/20/1998	2019		8	100	10																											
3/23/1998	950.8		7.3	190	7	124	7.75	242	2	0.05	14	5	170	0.06	1.49	0.003	0.005	24	0.005	0.05	8.7	0.01	0.0002	0.05	0.002	15.3	0.005				0.88	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
2/6/1998		0																														
1/20/1998		0																														
9/11/1997		0																														
8/21/1997		0																														
7/29/1997		0																														
6/23/1997		0																														
5/23/1997		294	8	90	8																											
4/7/1997		2806	8.1	100	5																											
3/17/1997		11781	8.2	100	6		7.41	148	2	0.12	4	9	140	0.06		0.53	0.002	-0.005	14.6	0.024	-0.05	5.4	0.013	-0.0002		-0.002	7.1				0.5	
2/27/1997		0																														
1/10/1997		0																														
12/3/1996		0																														
11/14/1996		0																														
10/8/1996		0																														
9/5/1996		0																														
8/16/1996		0																														
7/3/1996		0																														
6/3/1996		0																														
5/6/1996		590	8.5	90	9																											
4/8/1996		6320	9.5	80	5																											
3/4/1996	8:56	0																														
2/5/1996	8:29	0																														
1/3/1996	12:23	0																														
12/4/1995	8:22	0																														
11/2/1995	12:29	0																														
10/2/1995	11:42	0																														
9/5/1995	12:47	0																														
8/2/1995	12:31	0																														
7/10/1995	10:24	0																														
6/7/1995	9:14																															
6/7/1995	9:14	2410	8.4	100	7		7.77	160	1	-0.02		9	120	0.03		0.33	-0.002	-0.005	18.1	-0.005	-0.05	6.2	0.009	-0.0002		0.019	9.5				0.7	
5/1/1995	10:07	5065	8.6	90	4																											
4/3/1995	10:26	180	8.4	150	4																											
3/13/1995	9:54	145	8.5	230	5																											
3/13/1995	9:54																															
3/7/1995	11:57	0					8.18	250	2	0.03		-5	190	0.04		-0.02	-0.001	-0.005	23.2	0.005	-0.05	7.3	0.005	-0.0002		0.003	14.4				0.19	

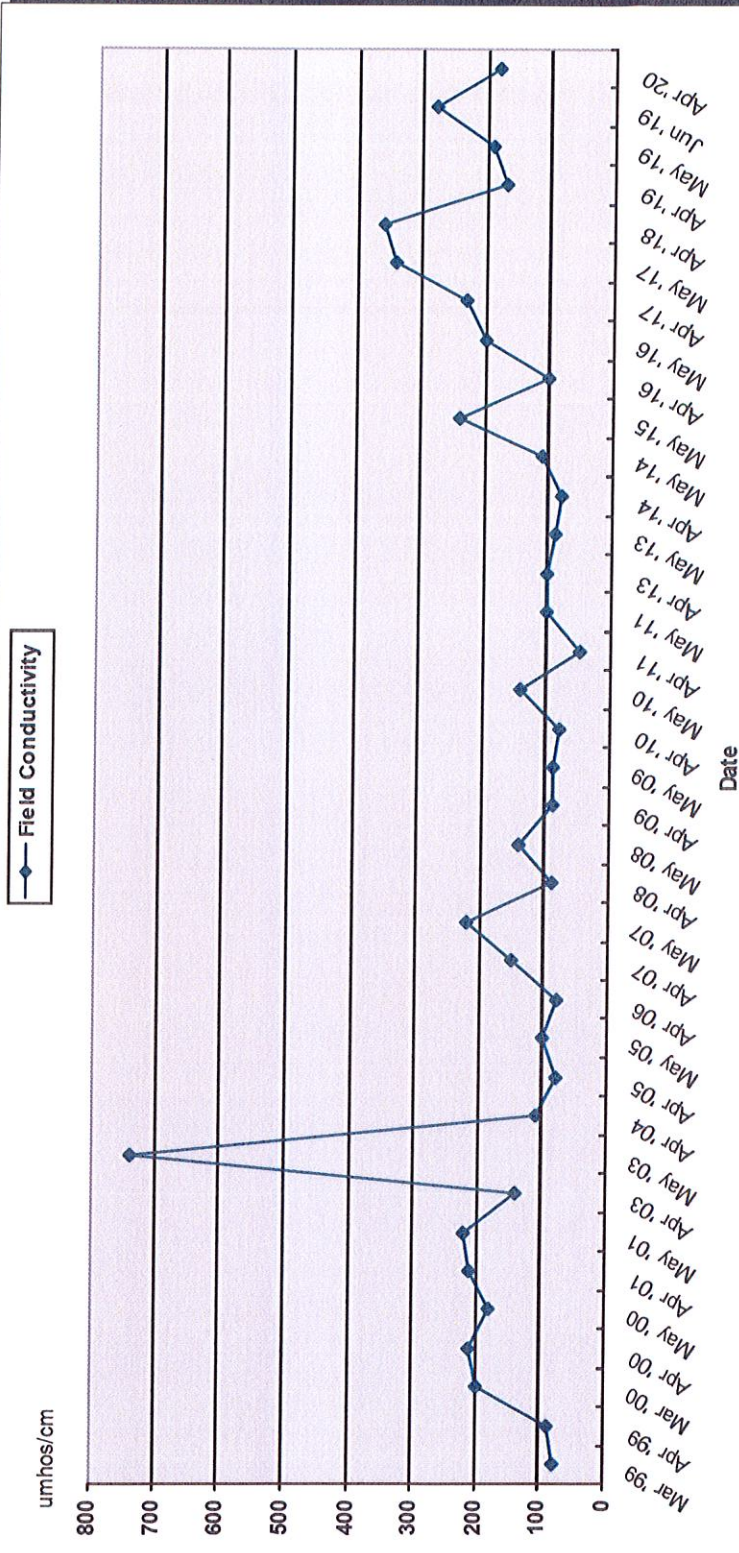
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: S-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
2/6/1995	9:29	0																															
1/3/1995	8:16	0																															
12/5/1994	10:56	0																															
11/8/1994	9:50	0																															
10/4/1994	9:02	0																															
9/14/1994	8:42	0																															
8/9/1994	12:13	0																															
7/11/1994	13:28	0																															
6/9/1994	9:24	0																															
5/31/1994		0																															
4/30/1994	14:15	1200	8.6	130	10	74	8.10	148				4	106						-0.01	-0.02		0.01	0.01								0.82		
3/31/1994	8:39	95	8.4	170	10	90	8.00	242				4	150						0.01	-0.02		0.01									0.28		
12/21/1993		0																															
11/10/1993		0																															
10/29/1993		0																															
9/8/1993		0																															
8/30/1993	13:45	0																															
7/28/1993	8:20	0																															
7/1/1993		0																															
4/29/1993	11:50	20882	8.3	70	6	48	8.10	95				66	92						-0.01	-0.02		0.06									1.97		
3/19/1993	12:15	1000	8.4	220	7	154	8.40	328				-2	210						-0.01	-0.02		0.01									0.02		
2/26/1993		0																															
1/30/1993		0																															

MONITORING CHART FOR 2020 AHR

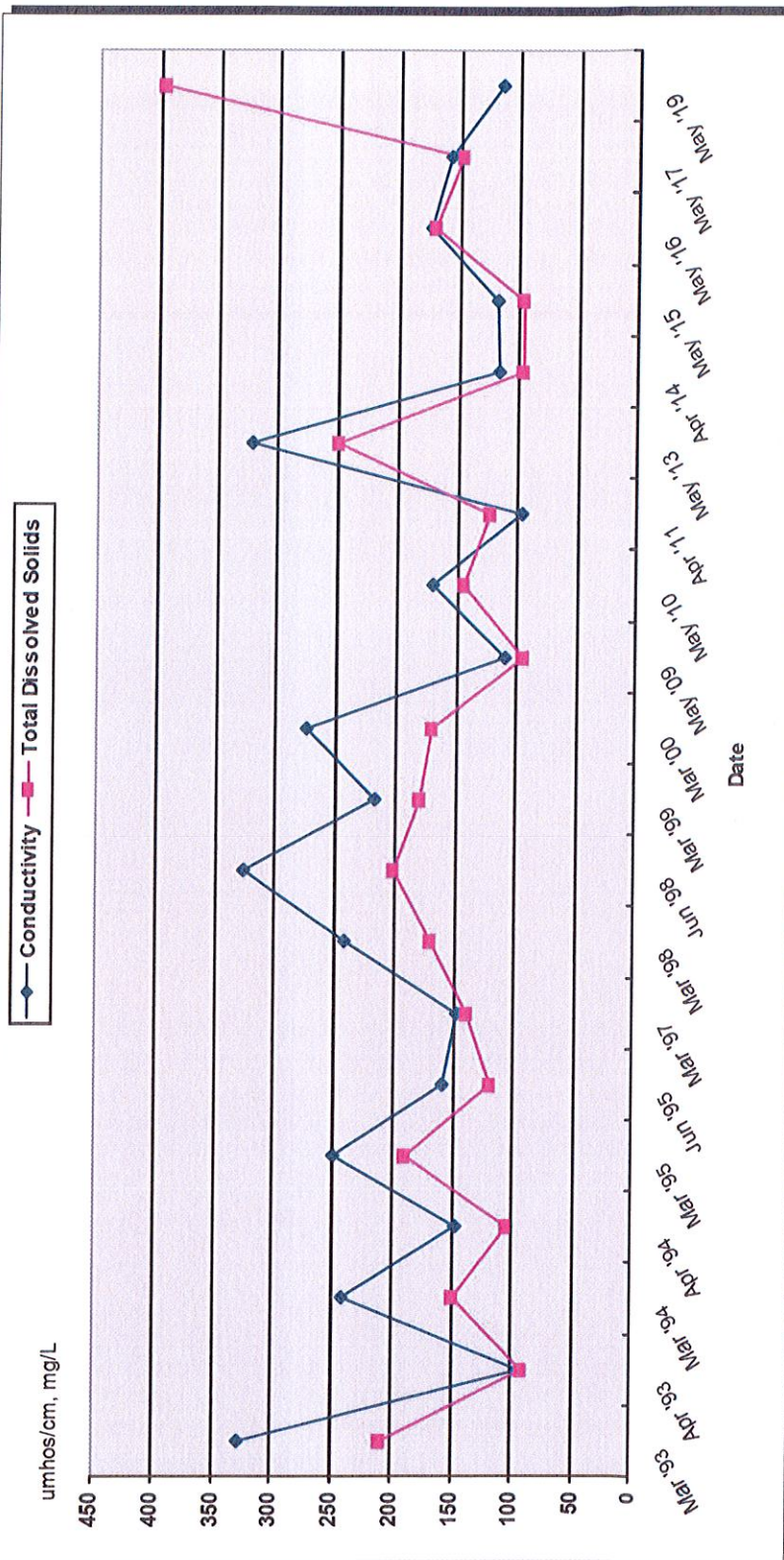
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

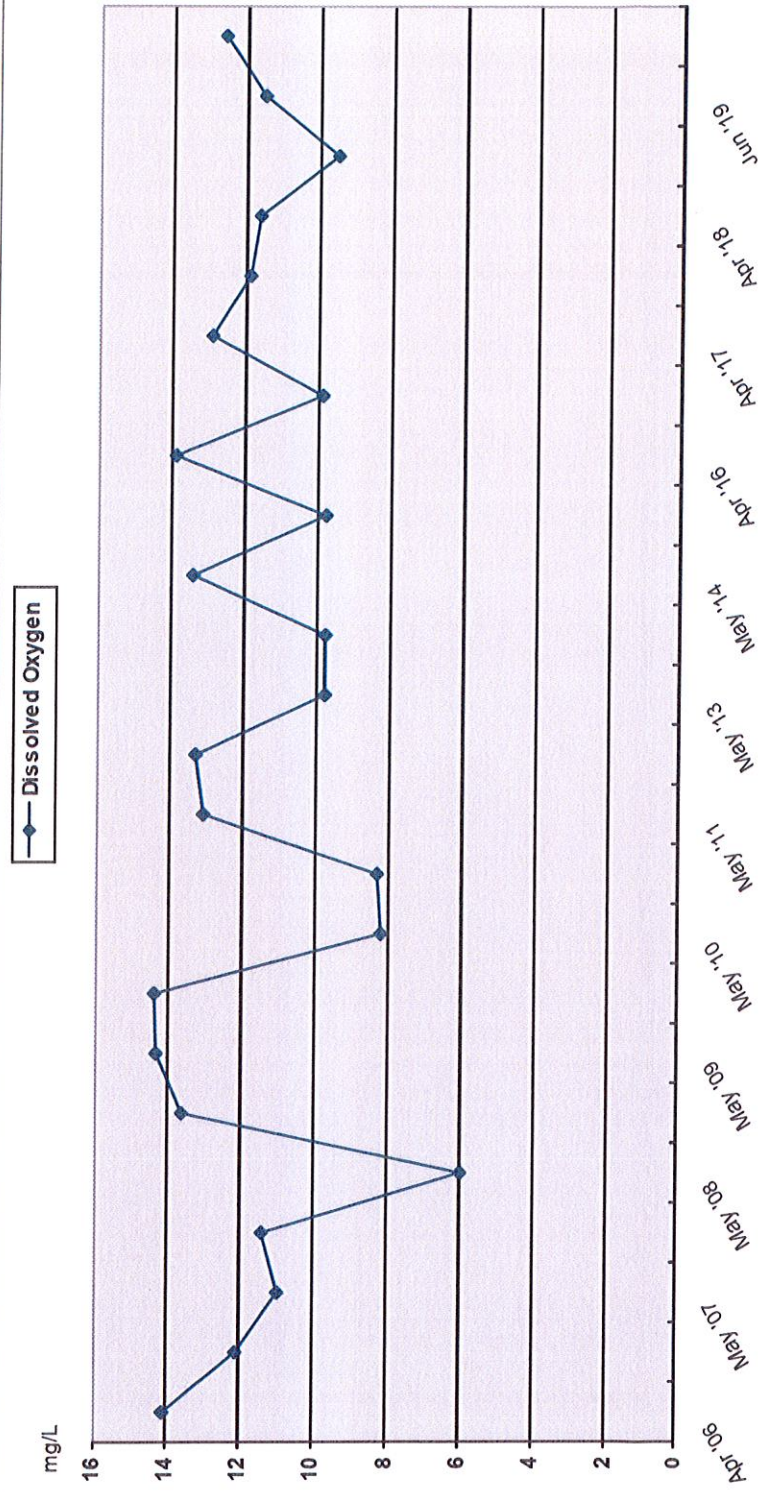
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

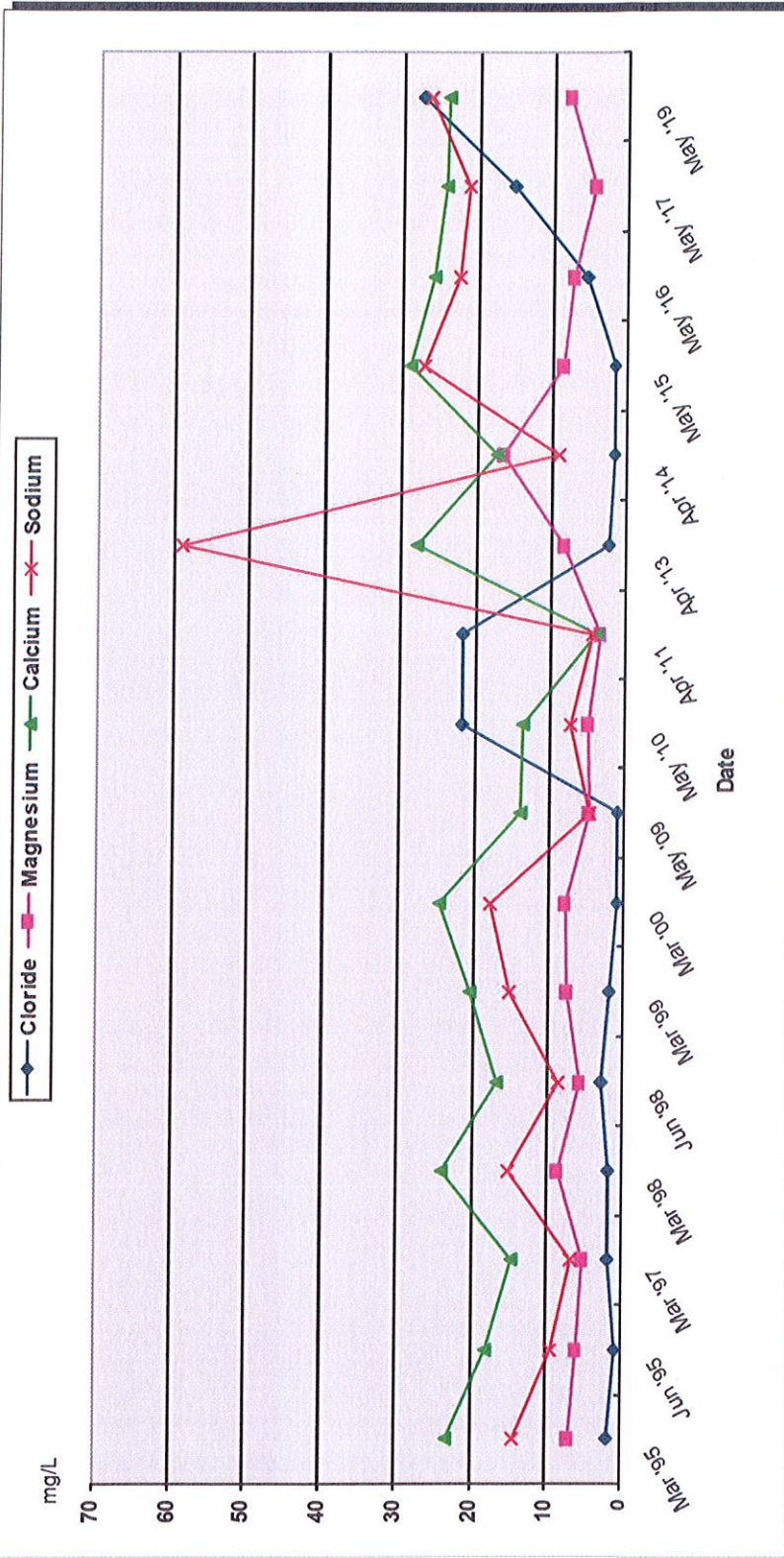
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

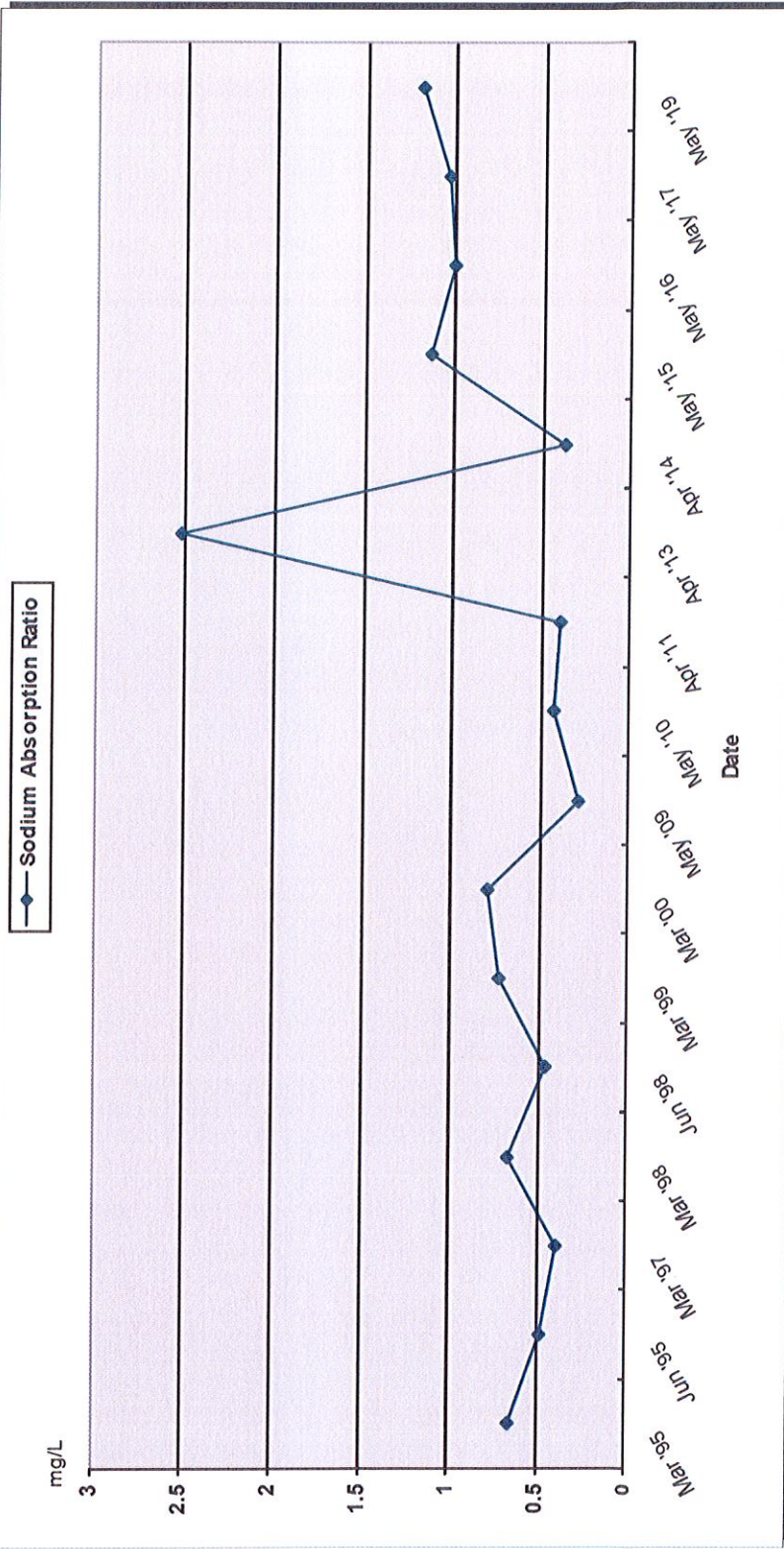
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: S-1



MONITORING CHART FOF 2020 AHR

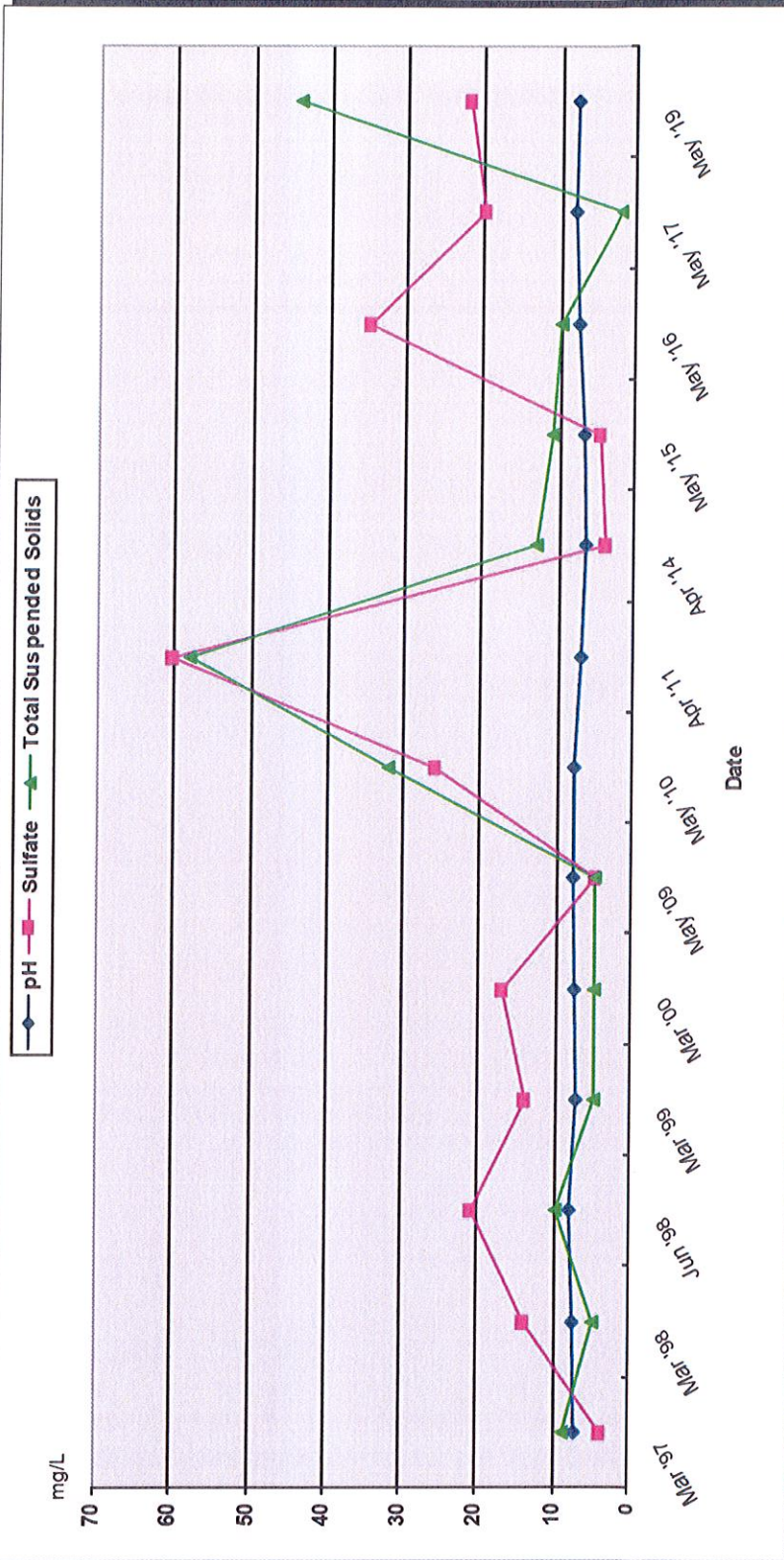
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

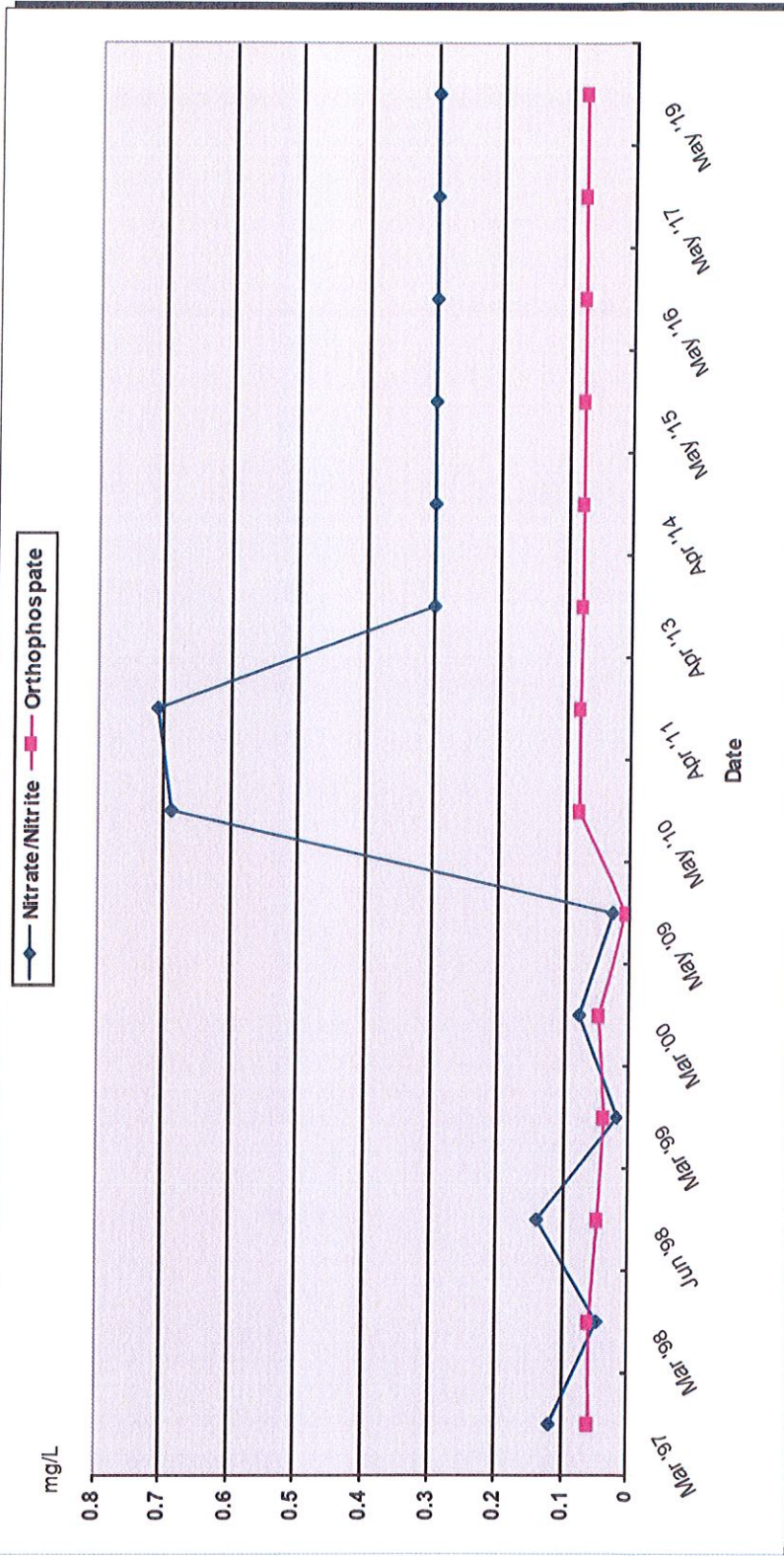
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

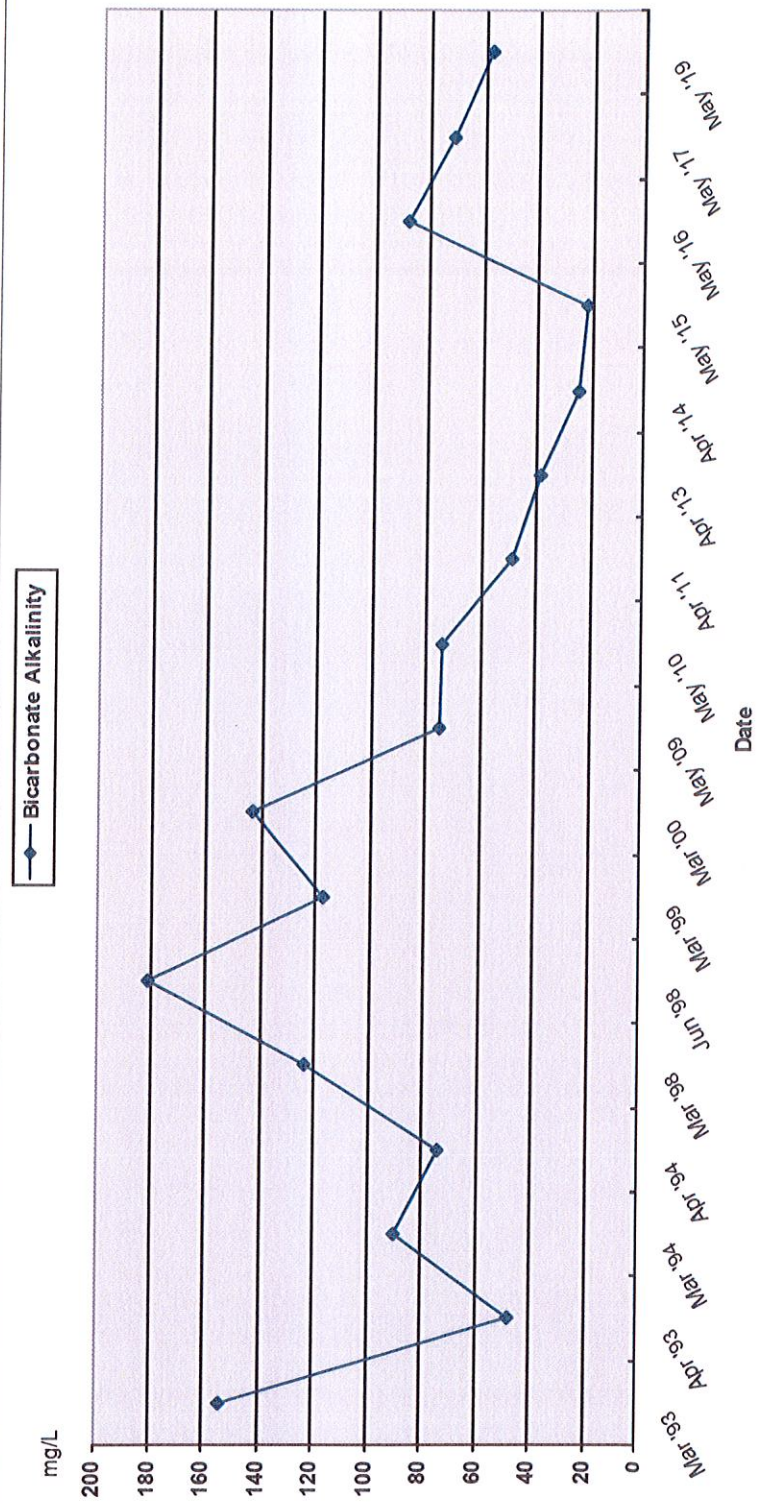
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

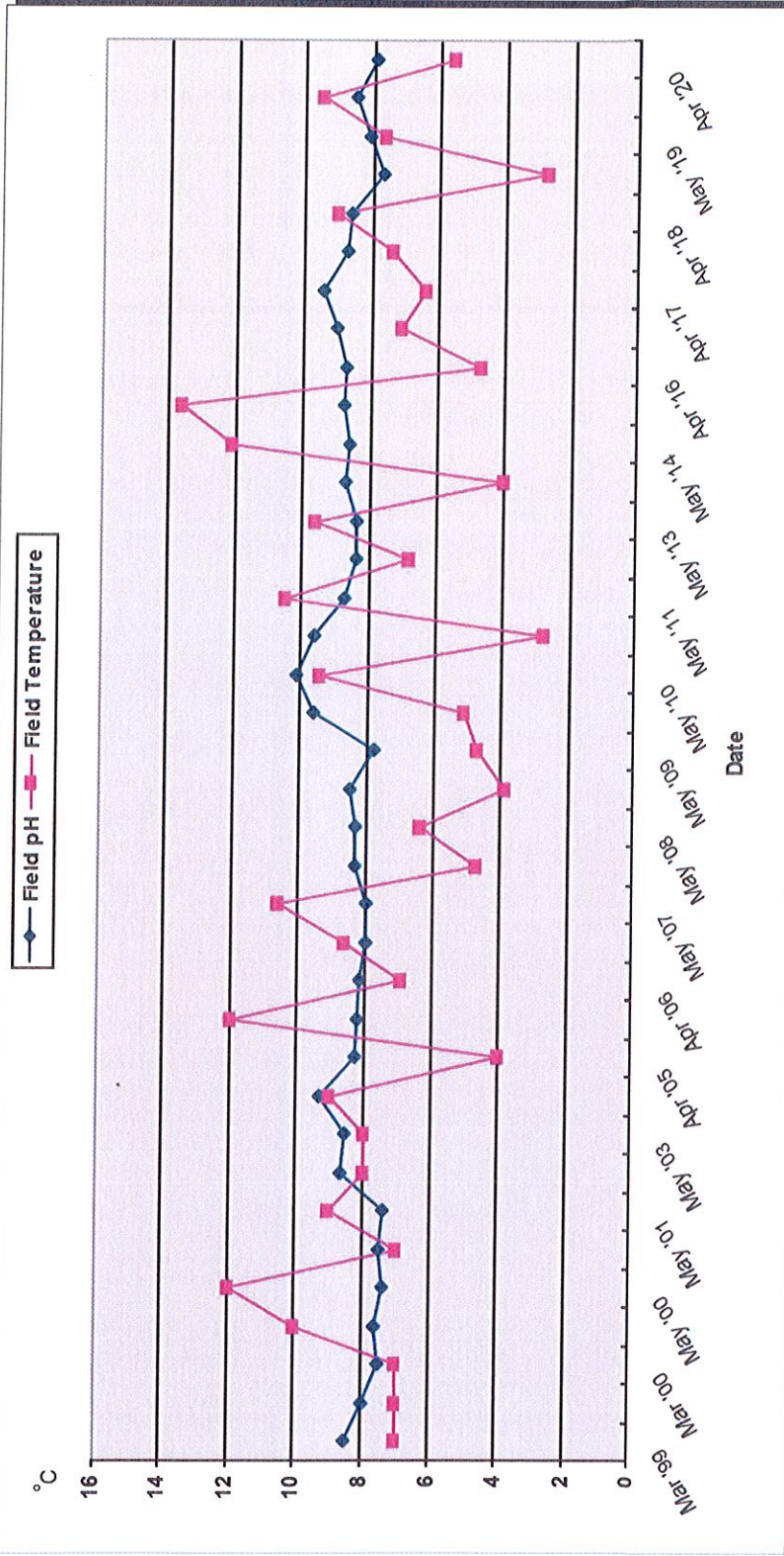
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

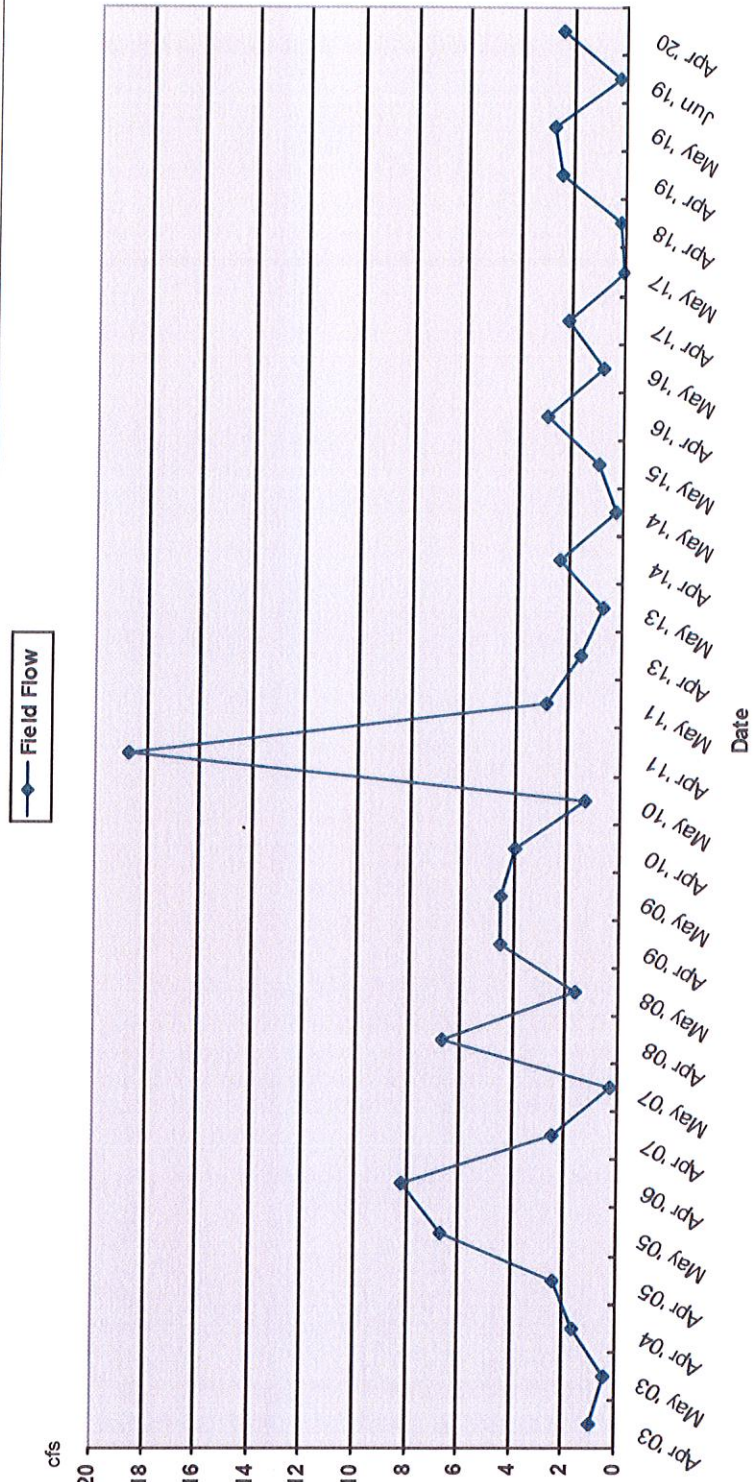
SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: S-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

E-1 LOWER ELK CREEK

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/6/2020	13:45	0																													
9/15/2020	13:00	0																													
8/12/2020	14:45	0																													
7/12/2020	15:45	0																													
6/20/2020	12:00	0.1	8.7	1030	15.9																										
5/19/2020	14:25	0.65	8.9	810	17.3	137	8.09	353	42.49	0.3	53.22	50	318	0.08	7.1			49.3			9.0					45.9				0.645	0.113
4/27/2020	13:35	3.4	8.5	520	12										10.8																
10/17/2019	9:45	0																													
9/18/2019	14:30	0																													
8/20/2019	14:00	0																													
7/10/2019	14:00	0.09	8.2	1200	17.9	126.3	8.50	586	37.72	0.3	76.7	12	504	0.08	8.2			48.5			11.5					46.3				0.725	0.131
6/7/2019	13:15	6.2	8.5	610	15.1										10																
5/13/2019	14:35	11.7	8.2	40	12.6	130	7.44	294	65.33	0.3	25.52	1990	550	0.08	9.4			71.8			11.9					53.5				0.841	0.167
4/12/2019	12:30	8.3	8.1	540	4										13.2																
10/17/2018	12:00	0																													
9/14/2018	11:45	0																													
8/27/2018	12:00	0																													
7/11/2018	14:40	0																													
6/22/2018	11:20	0																													
5/14/2018	12:45	0.22	9.1	1050	9.5	143.58	7.90	564	59.53	0.3	83.55	20	434	0.08	10.5			53.1			10.6					47.6				0.678	0.128
4/24/2018	12:05	2.1	9	770	10.1										11.4																
10/19/2017	11:40	0																													
9/11/2017	9:00	0																													
8/8/2017	13:10	0.03	8.6	1170	15.1																										
7/18/2017	13:15	0.04	9.4	1270	17.6	149.35	8.29	421	38.13	0.3	84.79	12	402	0.08	13.5			58.3			10.5					52.4				0.358	0.103
6/6/2017	12:30	1.5	9.4	870	12.1										12.1																
5/17/2017	11:45	2.5	9	650	6.4	129.93	7.96	339	42.4	0.3	80.67	510	320	0.08	12.7			57.1			10.2					50.3				0.987	0.155
4/28/2017	11:34	7	9	540	3.6										13.3																
10/28/2016	12:15	0.01	9	1450	10.4										11.2																
9/22/2016	12:30	0.02	8.9	1370	13.9										11																
8/25/2016	13:20	0.01	9.1	250	11.9										10.9																
7/25/2016	12:40	0.5	9.1	540	14.6	196.54	8.63	466	17.73	0.3	95.49	18	486	0.08	9.8			44.2			21.9					74.2				0.092	0.019
6/9/2016	13:15	1.4	8.9	600	16.1										10.6																
5/23/2016	12:45	9.6	8.8	260	11.4	165.18	7.91	324	9.45	0.3	50.17	423	305	0.08	10.1						10.3					44.9				0.847	0.164
4/26/2016	8:30	20	8.5	280	5.4										18																
10/21/2015	9:00	0.1	8.8	910	9.1										11.6																

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	CI	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
9/22/2015	11:00	0.1	9.5	730	11.6									12.3																	
8/4/2015	1:30	0.15	8.1	740	15.8									10.7																	
7/21/2015	14:20	0.15	8.9	790	16.1	183.14	8.02	404	12.76	0.3	65.43	22	388	0.08	9.9			43.6			22.3					76.9				0.103	0.035
6/17/2015	13:30	0.1	8.9	850	13.9									9.1																	
5/4/2015	14:15	1.1	9.2	540	12.7									13.1																	
4/14/2015	11:30	0.1	9.2	550	5	163.4	7.28	486	6.76	0.3	49.39	24	438	0.08	14.7			56.4			13.6					55.8				1.01	0.13
10/31/2014	11:45	0.1	10	660	9									8.3				43			21.8					74.8				0.11	0.04
9/10/2014	10:40	0.1	9.1	510	15.4	177.3	7.69	420	12.76	0.3	69.97	25	394	0.08	9.9																
8/25/2014	14:45	0.1	10.1	690	16.5									9.6																	
7/8/2014	11:00	0.3	8.9	260	12.3									12.9																	
6/11/2014	15:00	0.56	9.5	460	17.3									12.9																	
5/19/2014	14:45	4.65	9.3	290	15.8									14.8																	
4/8/2014	13:45	7.8	9.1	240	9									11.8																	
10/18/2013	14:40	0.045	9.4	820	7.8									12.7																	
9/9/2013	13:30	0.08	9.5	900	16									12																	
8/16/2013	12:50	0.5	9.8	3300	12.8									15.7																	
7/18/2013	14:30	0.5	9.7	4600	22.7									10.8																	
6/5/2013	2:30	0.37	8.9	2600	16.9									13.6																	
5/6/2013	13:45	7.8	8.3	240	9	166.19	7.57	371	4.84	0.3	8.43	340	320	0.08	9.6			21.2			21.6					29.62				4.25	0.06
4/22/2013	14:50	0.5	8.8	250	9.9									15.4																	
10/10/2012	13:00	0																													
9/6/2012	12:00	0																													
8/2/2012	12:00	0																													
7/30/2012	13:30	0																													
6/13/2012	12:00	0																													
5/9/2012	14:15	0.06	9.2	420	10.7	177.3	8.28	542	59.56	0.98	24.88	100	408	0.08	8.7			49.8			13.4					74.6				0.68	0.06
4/23/2012	15:00	0.73	9.1	340	13.5									13.2																	
10/18/2011	12:00	0																													
9/6/2011	12:00	0																													
8/15/2011	12:00	0.3	8.7	560	15.2									14.5																	
7/26/2011	12:00	0.3	8.9	680	15.2									11.9																	
6/14/2011	14:15	1.12	8.6	430	14.5									10.9																	
5/23/2011	15:00	11.9	8.5	250	9.7									13.6																	
4/29/2011	8:00	14.2	7.8	170	10.2	95.5	7.68	232	6.52	1.23	127.6	1766	370	0.084	8.3			46.2			32.2					23.21				74	0.08
10/27/2010	14:00	0.01	8.8	790	5.3									16.8																	
9/27/2010	15:00	0.01	8.7	840	14.6									10.2																	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	CI	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
8/5/2010	12:30	0.1	8.9	720	20	272.95	8.30	735	20.42	0.3	93.43	50	558	0.028	12.5			21.05		14.8					164	0	0	0	0.19	0.01
7/15/2010	13:30	0.1	8.3	550	14.8									13.6												0	0			
6/4/2010	14:30	0.6	8.8	500	12.5									11.3												0	0			
5/18/2010	13:50	7.14	8.9	260	11.5	158.31	8.19	327	4.36	1.47	25.11	1000	270	0.086	8.3			35.3		12.2					35.8	0	0	0	11.09	0.04
4/22/2010	13:45	5.9	8.8	230	7.2									14.3												0	0			
10/12/2009	1:00	0																								0	0			
9/25/2009	2:00	0.1	7.9	800	15.9									9												0	0			
8/5/2009	2:30	0.1	8.6	630	16	350	8.60	710	8	0.09	100	5	480	0.01	9					14.0					140	0	0	0	0.05	0.01
7/7/2009	3:20	0.1	7.8	690	21.4									13.8												0	0			
6/22/2009	11:15	4.05	8	510	13.8									13.3												0	0			
5/6/2009	11:30	11	7.9	210	7.4	170	8.18	250	1	0.08	10	1300	270	0.03	16.6			47		6.2					29	0	0	0	25	0.02
4/29/2009	9:15	11	8.8	220	3.2									14.7												0	0			
10/15/2008	15:30	0																								0	0			
9/11/2008	14:30	0.1	7.8	780	15.7									7.8												0	0			
8/5/2008	14:40	0.1	8.6	630	16.3	350	8.59	800	9	0.04	120	5	510	0.01	7.8			23		16.0					150	0	0	0	0.08	0.01
7/29/2008	15:30	0.1	9.7	750	22									9.4												0	0			
6/18/2008	14:20	1.84	8.9	460	15.7	320	8.37	550	4	0.02	53	85	370	0.02	11.8			52		13.0					70	0	0	0	1.9	0.01
5/23/2008	14:20	7.7	8.4	320	15									6.7												0	0			
4/21/2008	13:15	22.7	8.5	200	9									14.7												0	0			
10/24/2007	15:05	0.4	9.15	520	9									8.9												0	0			
9/11/2007	3:00	0	9.19	750	15.6									3												0	0			
8/7/2007	14:30	0.4	9.1	650	18.9	350	8.40	750	9	0.04	98	7	500	0.01	8.7			33		15.0					130	0	0	0	0.3	0.01
7/17/2007	3:45	0.04	8.7	720	23.8									6.3												0	0			
6/15/2007	15:10	0.4	8.86	480	18.6	320	8.39	580	4	0.02	58	27	360	0.02	7.9			36		13.0					83	0	0	0	0.89	0.01
5/15/2007	15:30	1.28	8.4	500	8.1									10.2												0	0			
4/30/2007	13:30	8.6	8.38	380	15.1									9.6												0	0			
10/17/2006	13:00	2.9	8.51	530	6.9									5.3												0	0			
9/27/2006	1:15	0	8.96	720	10									11.2												0	0			
8/10/2006	10:00	2.84	9.74	820	16	380	8.33	910	25	0.28	130	23	560	0.01	6.7			20		16.0					150	0	0	0	1.2	0.01
7/21/2006	15:00	0	9.43	710	16.6									6.6												0	0			
6/13/2006	12:30	2.84	8.6	260	16	360	8.20	740	7	0.05	96	5	460	0.01	8.2			40		15.0					120	0	0	0	0.15	0.01
5/26/2006	11:20	0.99	8.96	480	11.3									10.6												0	0			
4/17/2006	15:00	39.4	8.1	180	10.4									13												0	0			
10/17/2005	3:15	0.1	8.62	800	17																					0	0			
9/14/2005	14:30	0.1	8.75	670	19.4																					0	0			
8/30/2005	14:30	0	9.2	790	17	360	8.58	850	14	0.07	140	5	540	0.01						16.0					170	0	0	0	0.12	0.01

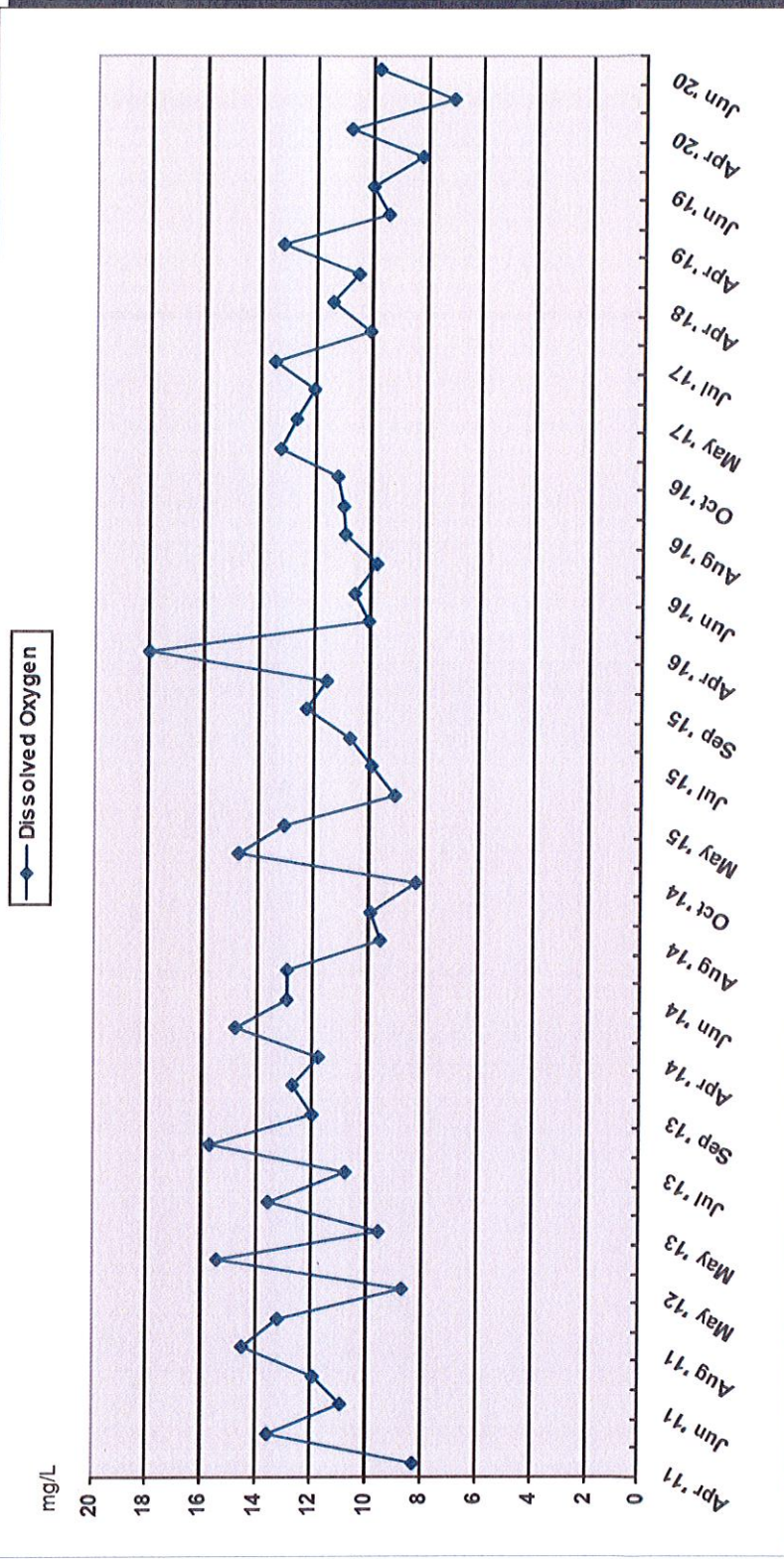
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
8/5/2005	15:25	0.1	8.8	740	18																												
7/26/2005	15:45	0.1	8.88	790	20																												
6/15/2005	15:00	1.63	9.24	440	15	290	8.54	480	2	0.02	25	380	330	0.02					58				12.0				32				13	0.01	
5/9/2005	15:15	38.76	8.58	200	14																												
4/18/2005	12:20	47.9	8.05	190	7																												
10/8/2004	16:00	0																															
9/27/2004	12:30	0																															
8/23/2004	11:00	0																															
7/23/2004	14:20	0																															
6/22/2004	11:00	0.2	8.7	800	13	410	8.32	890	12	0.09	140	5	560	0.02					39				15.0				170				0.21		
5/20/2004	11:40	0.6	8.85	460	13																												
4/14/2004	16:00	13.25	8.7	300	13																												
10/13/2003	13:30	0																															
9/17/2003	13:30	0																															
8/26/2003	13:30	0																															
7/28/2003	14:00	0																															
6/17/2003	15:30	0.09	9.29	660	15	380	8.48	710	6	0.09	81	30	450	0.01					48				15.0				98				0.83	0.02	
5/13/2003	13:50	0.11	8.5	250	10																												
4/29/2003	12:15	8.8	8.68	260	8																												
9/6/2002		0																															
6/25/2002		0																															
12/28/2001	10:25		7.7	900	7	510	7.89	1038	6	0.03	160	16	580	0.01					0.3	0.004	0.005	57.5	0.006	0.05	17.9	0.014	0.0002	0.05	0.002	120	0.008	0	0.22
6/29/2001	13:30		8.1	700		390	8.59	838	7	0.02	100	5	590	0.01					0.18	0.002	0.005	31.2	0.005	0.05	11.5	0.005	0.0002	0.05	0.002	125	0.005	0	0.05
3/30/2001	12:30		8.3	700		300	8.47	583	6	0.12	57	56	370	0.02					1.44	0.002	0.005	45.7	0.008	0.05	11.8	0.029	0.0002	0.05	0.002	73.5	0.316	0	1.5
6/29/2000	14:15		8.1	500	18	357	8.47	800	9	0.05	109	5	530	0.03					0.08	0.002	0.005	20.2	0.005	0.05	7.0	0.005	0.0002	0.05	0.002	91.5	0.046	0	0.05
3/28/2000	10:27		8	300	8	152	8.25	414	4	0.07	24	377	257	0.04					15.6	0.002	0.005	35.6	0.028	0.05	7.8	0.227	0.0002	0.05	0.002	48.8	0.054	0	13.3
9/24/1999	8:15	0																															
6/29/1999	1:30	10	8.3	700	18	362	8.36	786	8	0.14	115	7	447	0.01					0.15	0.003	0.005	17.6	0.005	0.05	6.3	0.005	0.0002	0.05	0.002	74.5	0.005	0	0.07
3/30/1999	12:30	10	8	300	7	238	8.07	409	3	0.14	25	1125	240	0.03	0				43.9	0.002	0.005	51.5	0.029	0.05	17.2	0.74	0.0002	0.05	0.002	45	0.144	0	43.3
3/6/1996	9:38	68	8.7	620	1																												
2/22/1996	10:45	32	8.7	270	2																												

MONITORING CHART FOR 2020 AHR

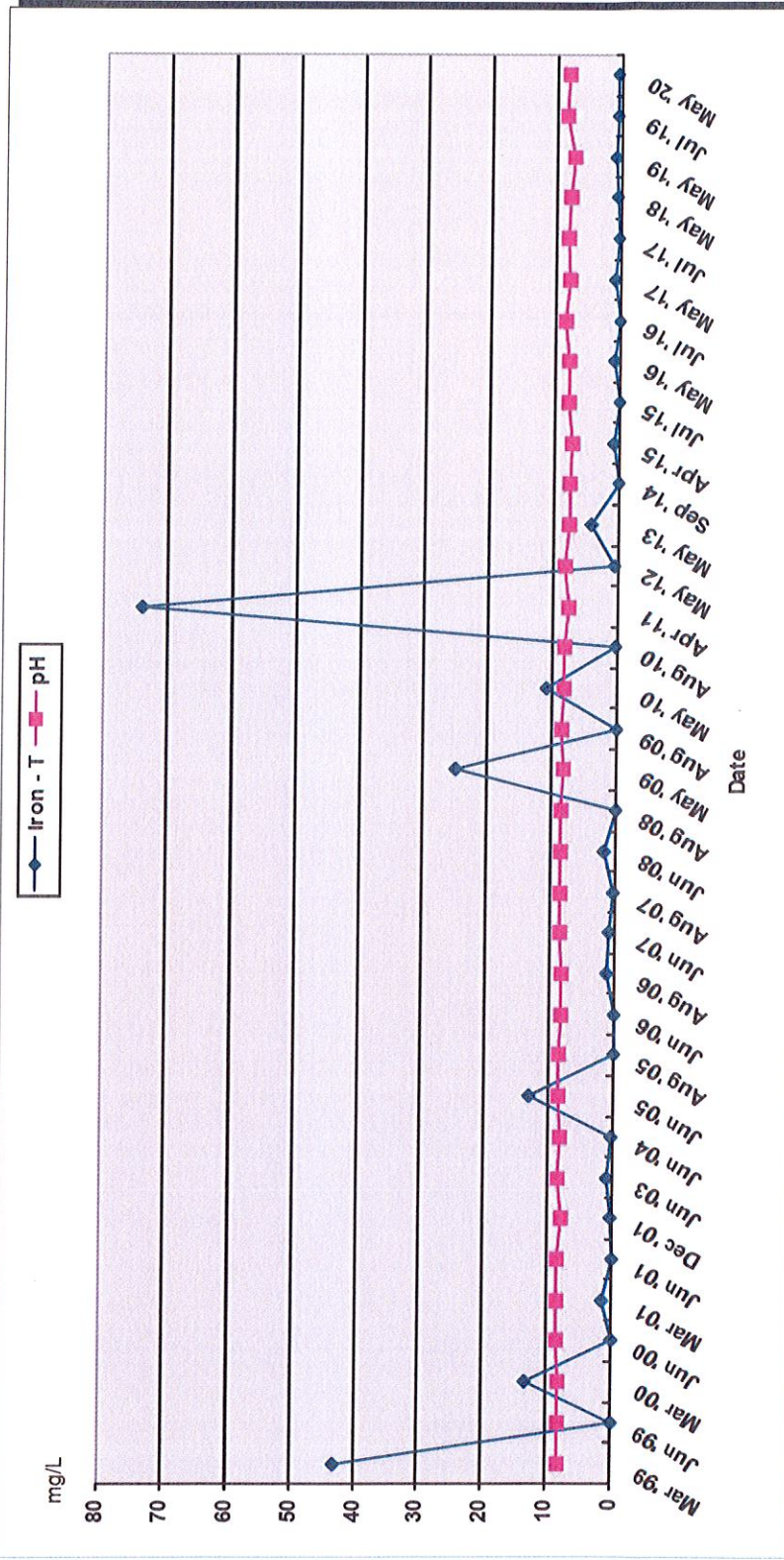
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-1

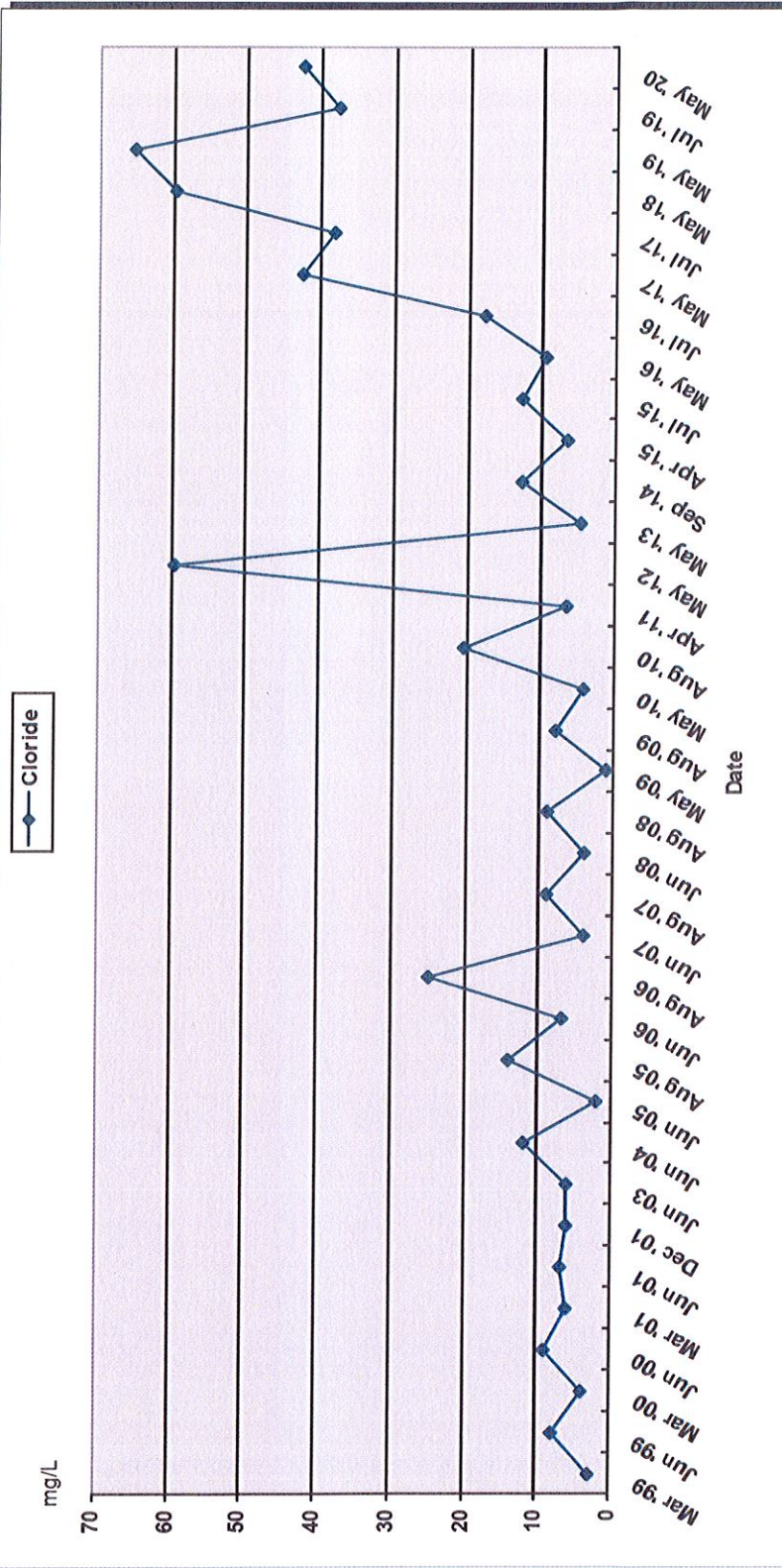


Oxbow Mining, LLC., Elk Creek Mine

Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

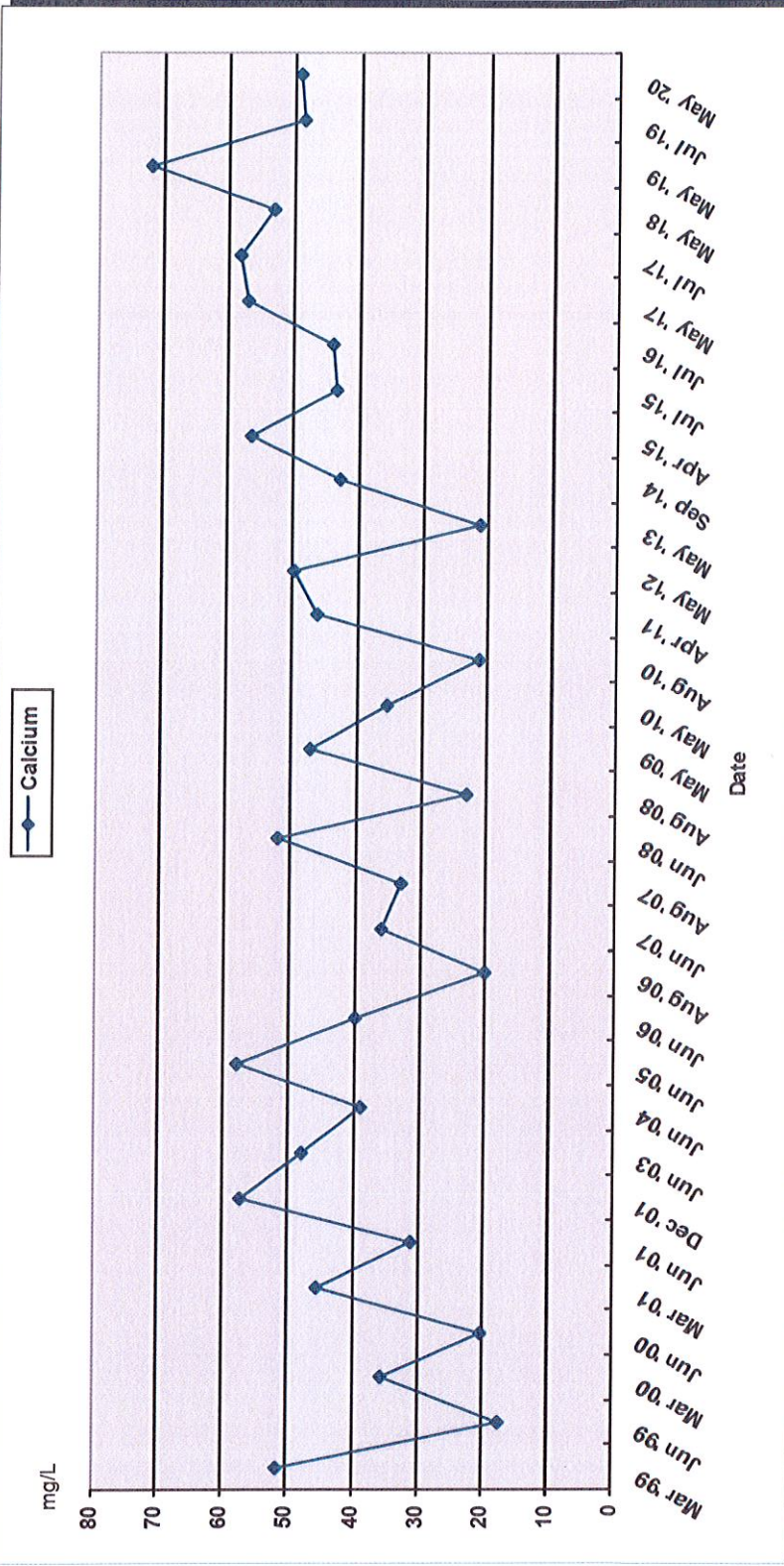
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

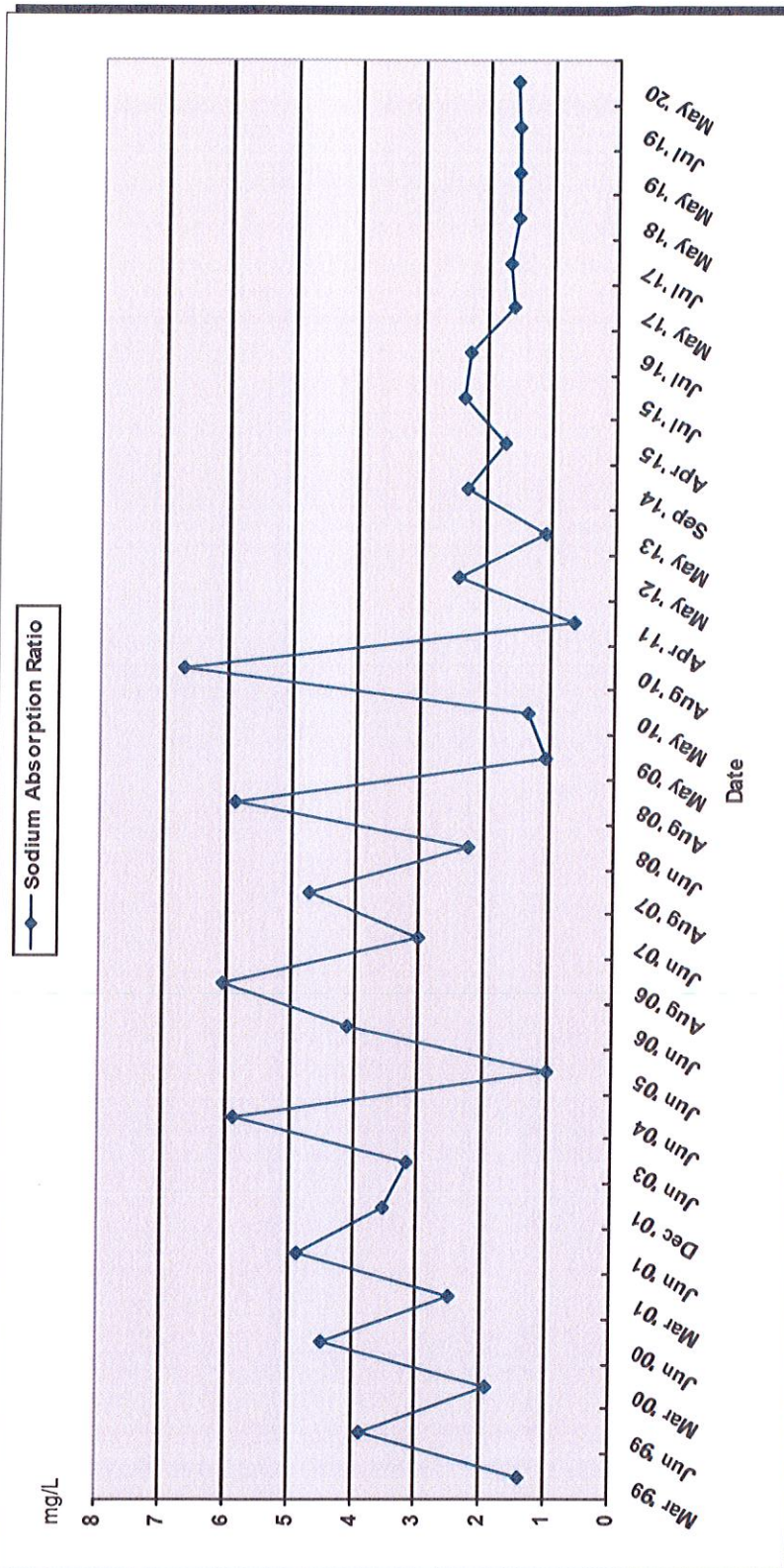
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

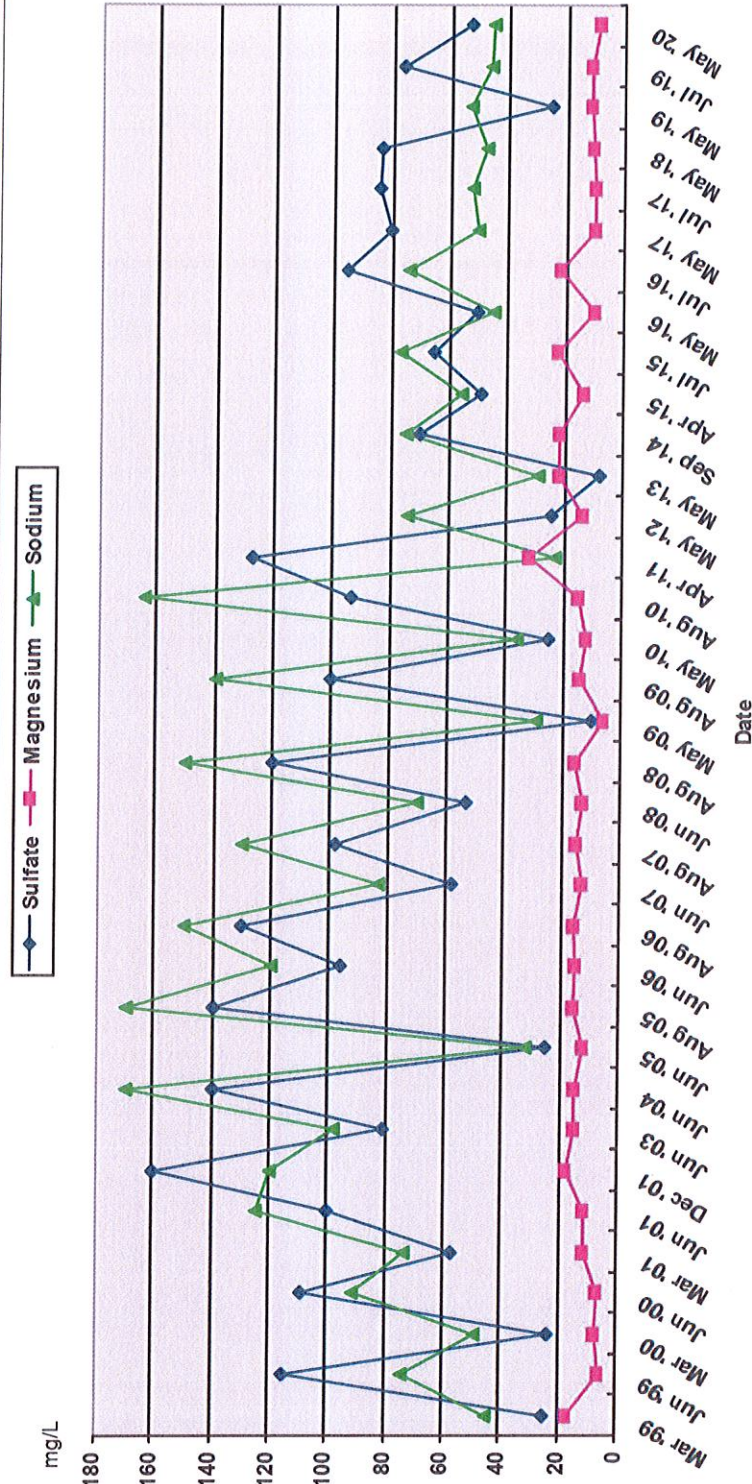
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

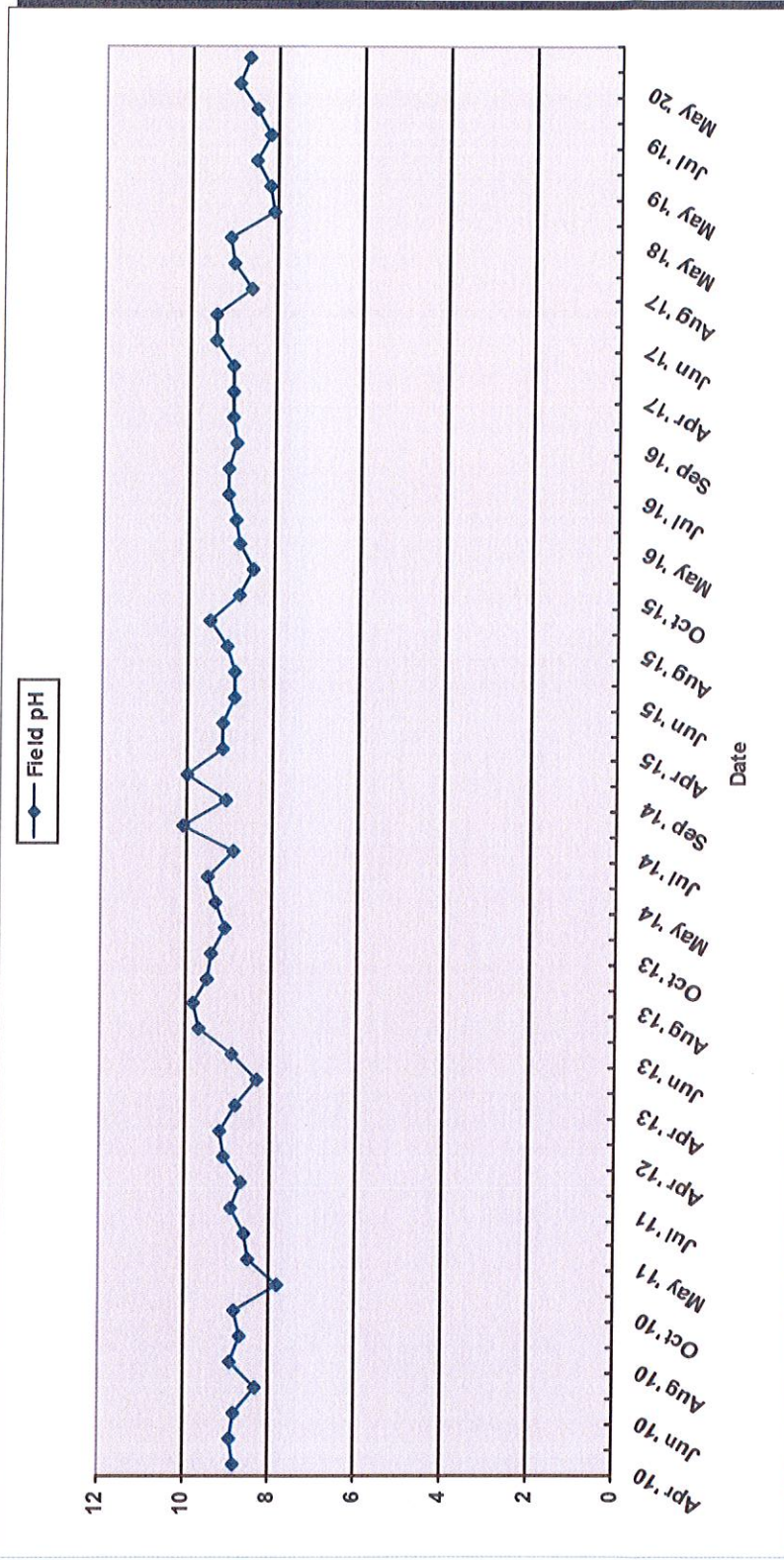
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-1



MONITORING CHART FOR 2020 AHR

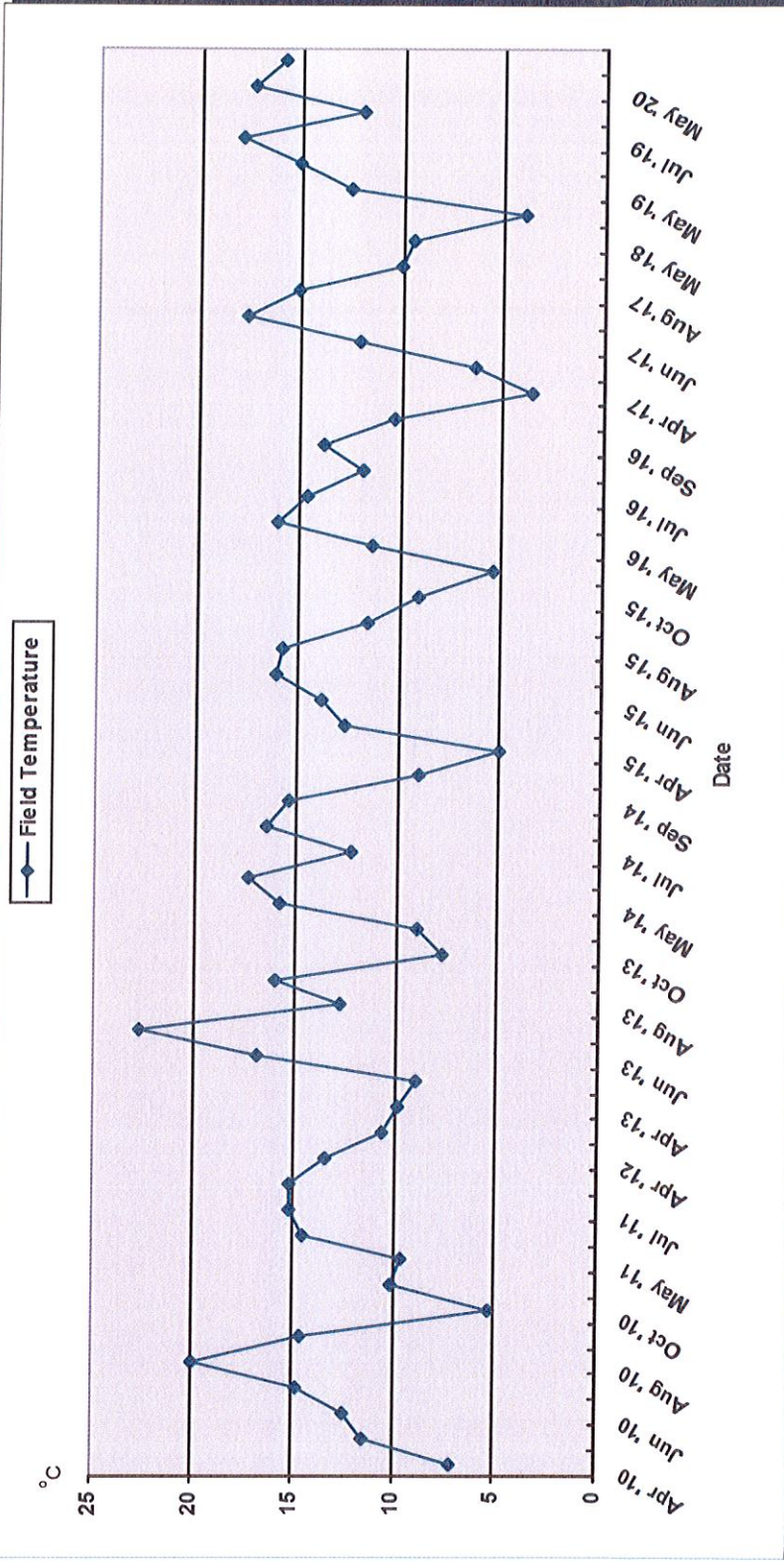
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

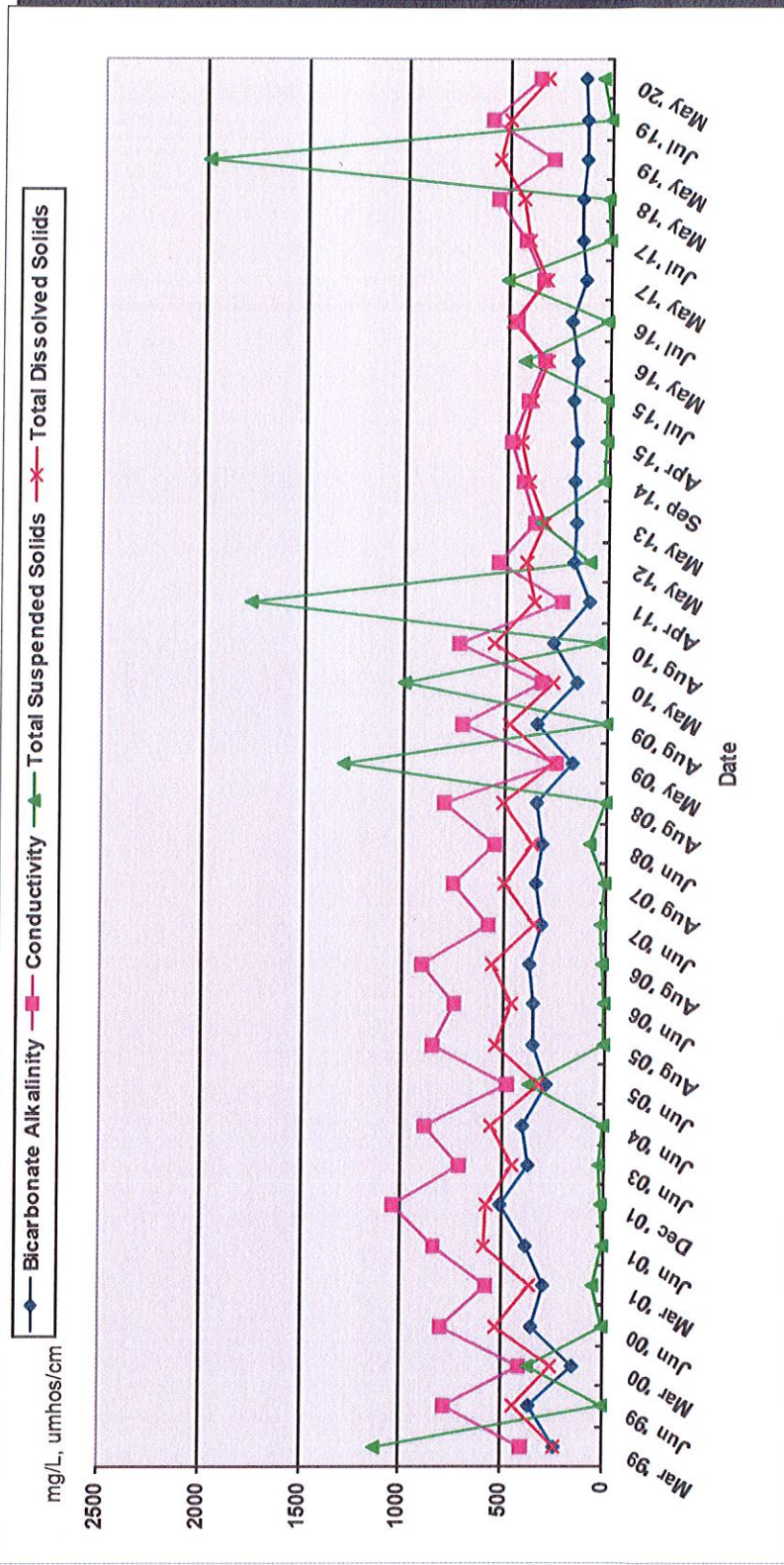
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

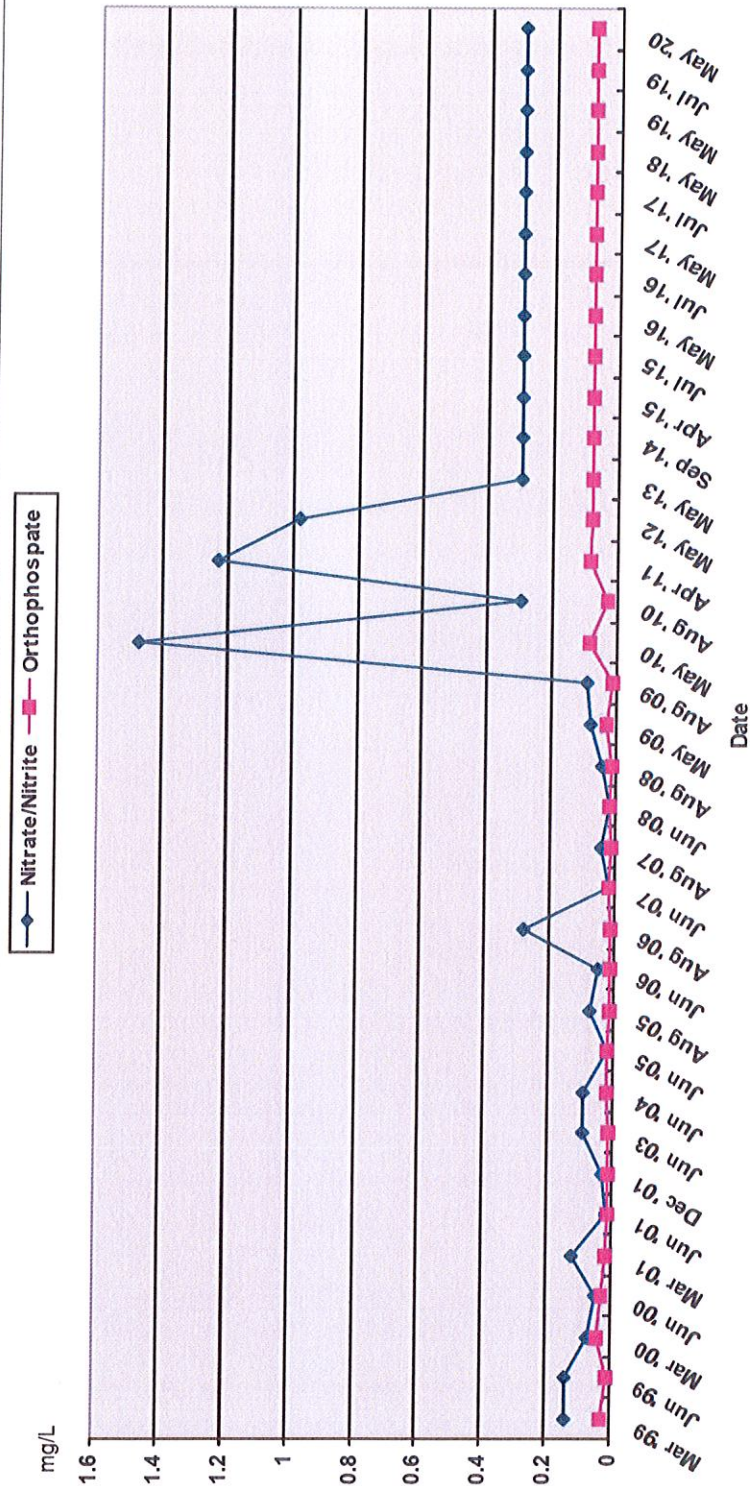
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

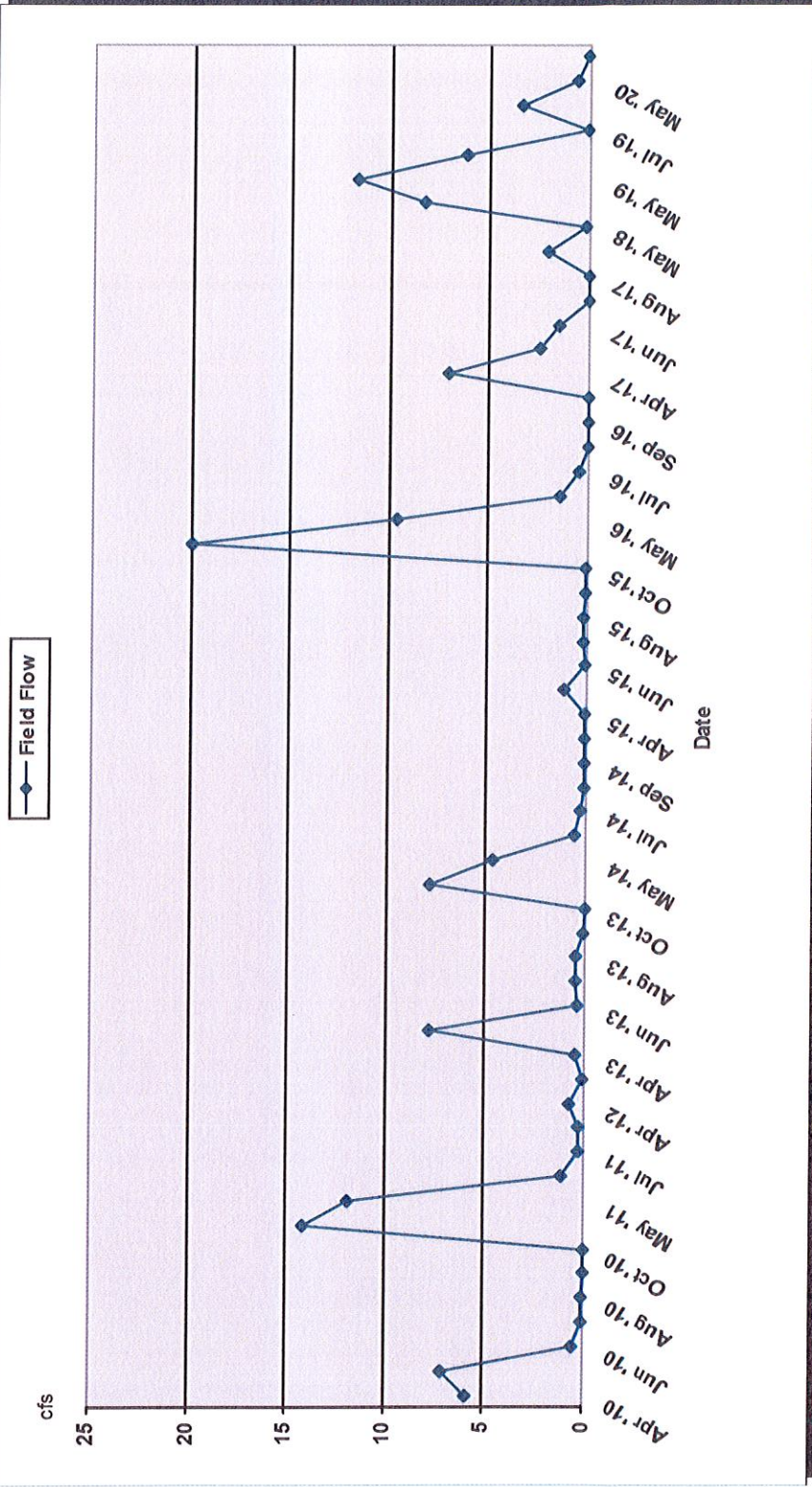
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

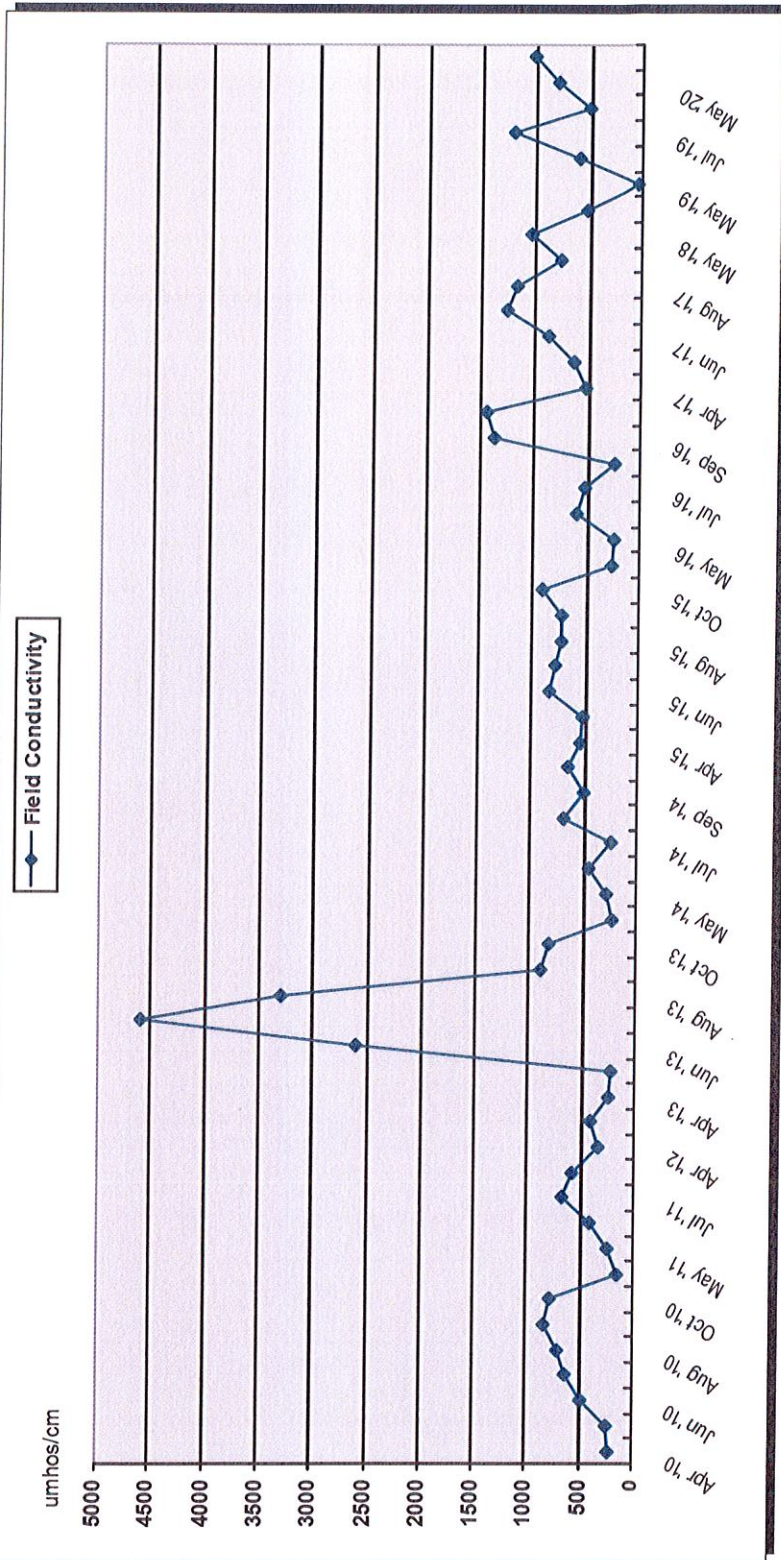
SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

E-2 UPPER ELK CREEK

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-2

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	CI	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
10/6/2020	13:55	0																													
9/15/2020	13:15	0																													
8/12/2020	14:55	0																													
7/13/2020	16:00	0																													
6/2/2020	12:15	0.14	8.5	1050	15.2										10.2																
5/18/2020	15:05	0.69	8.8	750	17.3	126	8.27	367	58.01	0.3	47.87	66	336	0.08	7.2				44.6			9.2				51.8				0.761	0.043
4/28/2020	14:37	3.1	8.5	520	12										10.8																
10/17/2019	10:00	0																													
9/18/2019	14:45	0																													
8/20/2019	2:15	0																													
7/10/2019	14:15	0.1	8.1	1220	17.7	138	8.58	563	39.98	0.3	92.44	14	438	0.08	8.2				52.8			11.8				50.7				0.812	0.179
6/7/2019	13:30	7.5	8.5	630	13.2										10.3																
5/13/2019	15:15	11.7	8.2	30	12.7	132	7.70	292	63.28	0.3	26.75	2370	710	0.08	9.4				69.8			11.7				56.2				0.977	0.231
4/12/2019	12:45	8	8.1	550	3.2										13.5																
10/17/2018	12:00	0																													
9/14/2018	11:45	0																													
8/27/2018	12:00	0																													
7/11/2018	14:45	0																													
6/22/2018	11:30	0																													
5/14/2018	0:15	0.22	9	1160	12.6	126.74	8.09	574	65.88	0.3	69.15	28	444	0.08	10.2				48.9			11.3				68.3				0.594	0.069
4/24/2018	11:45	2.1	9.1	810	10.1										10.9																
10/19/2017	12:20	0																													
9/11/2017	8:30	0																													
8/8/2017	13:35	0.04	8.3	1210	17.3										9.7																
7/18/2017	13:45	0.05	9.1	1280	20.8	147.03	8.30	431	67.09	0.3	72.15	28	468	0.08	13.5				48.7			11.3				77.2				0.564	0.043
6/6/2017	12:15	1.6	9.3	860	12.5										10.8																
5/17/2017	12:00	2.5	9	670	6.1	123.09	8.16	329	61.5	0.3	119.36	339	291	0.08	12.8				47.4			10.9				74.1				0.962	0.056
4/28/2017	12:00	7	9	550	4.1										13.3																
10/28/2016	12:00	0.02	8.7	1460	9.2										11.7																
9/22/2016	11:15	0.02	8.9	1360	12										11																
8/25/2016	12:32	0.05	9	80	12.3										10.7																
7/25/2016	12:20	0.7	8.9	560	18.9	234.7	8.38	477	17.73	0.3	79.03	12	0.018	0.08	9.9				51.3			22.4				116.9				0.034	0.018
6/9/2016	13:45	1.4	8.8	600	16.7										10.2																
5/23/2016	14:00	7.5	8.8	400	11.4	186.69	7.86	161	10.08	0.3	44.04	407	318	0.08	10				41			9.6				52.2				0.94	0.02
4/26/2016	9:00	18.7	8.8	310	3.9										12.8																
10/21/2015	9:20	0.1	8.7	890	9.2										11.7																

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-2

Date	Time	Flow	Field	pH	Field	Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
9/22/2015	23:15	0.1	9.4	740	11											12.4																	
8/4/2015	13:45	0.15	9.1	800	15.9											11																	
7/21/2015	14:00	0.15	8.7	830	17.6	165.74	8.12	429	48.83	0.3	82.08	16	403	0.08	10.1					49.7			22.4					122.8			0	0.032	0.019
6/17/2015	14:00	0.1	9	860	13.8											9.1																	
5/14/2015	15:00	1.1	9	550	12.5											12.5																	
4/14/2015	11:45	0.1	8.9	590	8.6	177.81	7.52	6.26	10.08	0.3	44.04	28	567	0.08	12.6					49			12.6					82.2			0	0.94	0.02
10/31/2014	11:55	0.1	9.8	650	8.1											9.8				51.4			23.0					125			0	0.04	0.02
9/10/2014	23:30	0.1	9	500	15.4	168.86	7.88	433	58.77	0.3	88.08	18	388	0.08	10																		
8/25/2014	14:45	0.1	9.9	600	16.7											9.6																	
7/8/2014	11:15	0.3	8.8	260	12.5											13.2																	
6/11/2014	3:20	0.56	9.6	470	17.4											13																	
5/19/2014	15:00	4.65	9.2	290	15.7											14.7																	
4/8/2014	13:00	7.8	9.1	250	8.9	168.36	7.07	381	4.84	0.3	6.46	230	329	0.08	9.7					48			22.8					27.49			0	4.27	0.04
10/18/2013	14:55	0.045	9.5	830	7.9											12.6																	
9/9/2013	14:00	0.08	9.4	900	17											14																	
8/16/2013	13:10	0.5	9.9	3200	12.7											15.5																	
7/18/2013	14:45	0.5	9.7	4500	21											11																	
6/5/2013	14:45	0.37	8.9	2500	17											14.1																	
5/6/2013	13:30	0.75	8.6	250	10.1	171.88	7.93	706	6.23	0.3	7.82	278	566	0.08	9.3					27.4			15.6					46			11	0.1	
4/22/2013	14:50	0.5	8.7	250	10.5											14.9																	
10/10/2012	12:00	0																															
9/6/2012	12:00	0																															
8/2/2012	12:00	0																															
7/30/2012	14:00	0																															
6/13/2012	12:00	0																															
5/9/2012	14:30	0.06	9.1	500	13.1	189.96	8.11	523	39.7	1.13	20.08	11	382	0.08	8.6					57			12.6					70.6			0	0.77	0.01
10/18/2011	12:00	2	8.6	680	8.5											12.4																	
9/8/2011	12:00	2	9	700	16.1											11.8																	
8/15/2011	13:30	0.3	8.7	610	17.5											15																	
7/26/2011	12:00	0.3	8.6	710	15.3											12.3																	
6/14/2011	14:30	1.12	8.5	420	14.3											11.3																	
5/28/2011	15:30	11.9	8.6	260	9.7											13.9																	
4/19/2011	13:20	14.2	8.6	160	7	123.6	7.73	235	11.2	1.44	117.99	1836	160	0.082	8.5					33.6			20.2					23.18			0	25.52	0.08
10/27/2010	14:20	0.01	8.8	780	5.1											16.9																	
9/27/2010	15:20	0.01	8.8	830	15.3											11.1																	
8/5/2010	12:40	0.1	8.9	740	20	288.6	8.13	749	37.44	0.3	85.2	58	618	0.02	11.5					26.52			14.2					155.6			0	0.06	0.03

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-2

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
7/15/2010	13:40	0.1	8.4	630	15										12.9																
6/4/2010	14:30	0.6	8.9	510	13.5										11.5																
5/19/2010	13:30	7.14	8.9	250	13.3	155.99	8.17	330	10.9	1.6	19.76	1120	276	0.084	8.4				37.1		14.6					33.1				15.39	0.06
4/22/2010	14:30	5.9	8.8	220	6.7										11.7																
10/12/2009	1:00	0																													
9/25/2009	2:30	0.1	8	800	15.8										10.1																
8/5/2009	2:00	0.1	8.4	650	15	420	8.30	740	5	0.02	98	5	510	0.01	16.7				44		15.0					130				0.04	0.04
7/17/2009	3:00	0.1	7.7	680	23.8										14.2																
6/22/2009	11:40	4.05	7.9	540	14										12.5																
5/6/2009	11:15	11	8	210	8.5	170	8.23	240	1	0.09	9	1300	170	0.02	12.2				49		12.0					29				27	0.02
4/29/2009	9:45	11	8.7	220	3.4										14.8																
10/15/2008	14:00	0																													
9/11/2008	14:45	0.1	8	770	14.9										8.3																
8/5/2008	14:20	0.1	8.4	710	23.8	400	8.40	830	6	0.02	110	5	540	0.01	8.5				38		14.0					140				0.02	0.01
7/29/2008	15:30	0.1	9.8	740	21										9																
6/19/2008	14:50	1.84	8.8	550	18	330	8.48	560	3	0.02	50	69	390	0.01	15.6				56		13.0					67				2.2	0.01
5/29/2008	14:00	7.7	8.5	310	14.3										5.8																
4/21/2008	13:45	22.7	8.6	200	8.9										13																
10/24/2007	15:20	0.4	9.2	500	9.2										8.9																
9/11/2007	15:20	0	9.21	730	16.7										3																
8/7/2007	14:30	0.4	8.97	700	20.1	370	8.31	770	5	0.02	97	5	510	0.03	9.6				38		13.0					130				0.01	0.01
7/17/2007	15:30	2	8.59	730	24.5										6																
6/15/2007	2:55	0.4	8.66	570	22.9	320	8.44	610	4	0.02	57	24	370	0.04	7				40		13.0					81				0.88	0.01
5/15/2007	15:00	1.28	8.6	500	7.9										9.1																
4/30/2007	15:00	8.6	8.32	360	14.5										9.8																
10/17/2006	13:30	2.9	8.6	540	7.4										5.2																
9/27/2006	13:45	0	9.04	710	11										11																
8/10/2006	10:30	2.84	9.02	760	15	410	8.14	880	7	0.02	110	14	550	0.01	7				27		14.0					140				0.3	0.01
7/21/2006	15:30	0	9.35	690	17.1										6.8																
6/13/2006	12:40	2.84	8.83	740	18.7	380	8.11	750	5	0.02	93	5	480	0.01	7.9				42		13.0					110				0.11	0.01
5/26/2006	23:40	0.99	8.92	470	11.3										11																
4/17/2006	15:30	39.4	8.17	180	10.4										13.1																
10/17/2005	2:50	0.1	8.61	810	16.7																										
9/22/2005	15:45	0.1	8.75	680	19.6																										
8/30/2005	2:30	0	9.02	790	17	400	8.36	840	7	0.02	130	5	530	0.01					37		14.0					170				0.15	0.01
8/5/2005	13:10	0	8.92	820	22																										

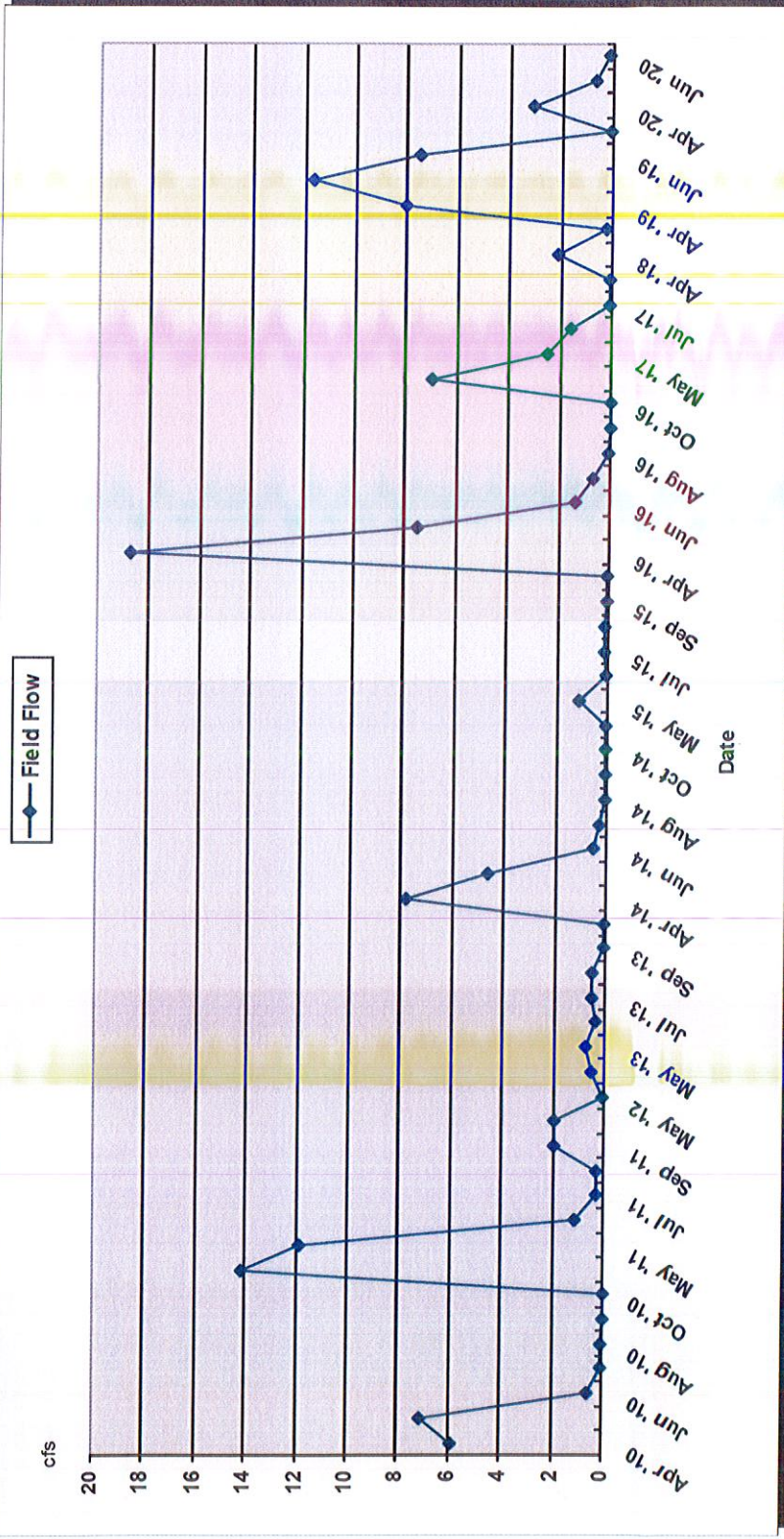
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: E-2

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
7/25/2005	15:50	0.1	8.85	780	21																											
6/15/2005	14:15	1.63	9.14	440	17	290	8.51	480	2	0.02	24	390	330	0.02								13.0					33	0	0	14	0.01	
5/9/2005	15:30	38.76	8.5	210	14																											
4/18/2005	12:40	47.9	8.05	190	7																											
10/8/2004	16:15	0																														
9/27/2004	12:45	0																														
8/23/2004	11:00	0																														
7/23/2004	14:00	0																														
6/22/2004	10:40	0.2	8.43	760	11	430	8.30	890	7	0.02	120	11	540	0.01					45			14.0					160	0	0	0.32		
5/20/2004	11:30	0.6	8.79	450	12																											
4/14/2004	15:45	13.25	8.66	300	13																											
10/13/2003	14:00	0																														
9/17/2003	14:00	0																														
8/26/2003	23:50	0.002	8.52	890	18																											
7/28/2003	14:00	0																														
6/17/2003	14:45	0.09	8.82	680	20	360	8.48	710	5	0.08	78	18	450	0.01					45			14.0					96	0	0	1.7	0.01	
5/13/2003	14:45	0.11	8.8	240	9																											
4/21/2003	11:30	8.8	8.91	260	7																											
9/6/2002		0																														
6/25/2002		0																														
6/29/2001	13:40	8.4		700		400	8.80	976	18	0.46	150	6	670	0.01		0.2	0.002	0.005	42.2	0.005	0.05	15.8	0.013	0.0002	0.05	0.002	142	0.122	0	0	0.54	
3/30/2001	13:00	8.5		600		300	8.48	581	7	0.12	58	57	370	0.01		1.07	0.002	0.005	45.4	0.012	0.05	11.7	0.028	0.0002	0.05	0.002	72.4	0.315	0	0	1.1	
3/28/2001	10:27	8		300	7	171	8.26	416	4	0.08	21	316	286	0.04		15.9	0.002	0.005	35.2	0.043	0.05	8.0	0.238	0.0002	0.05	0.002	49.6	0.06	0	0	14	
12/29/2000	9:48	7.8		200	5	120	7.93	228	9	0.14	18	140	150	0.01		0.52	0.004	0.005	23.3	0.005	0.05	4.6	0.016	0.0002	0.05	0.002	13.4	0.024	0	0	0.71	
6/29/2000		8.3		700	18	366	8.49	840	9	0.34	93	5	540	0.01		0.09	0.002	0.005	28.8	0.005	0.05	9.4	0.005	0.0002	0.05	0.002	123	0.026	0	0	0.09	
9/24/1999	8:16	0																														
6/29/1999	13:40	0	8	700	18	347	9.00	806	9	0.03	128	5	511	0.01		0.13	0.008	0.005	12.1	0.005	0.05	6.0	0.0002	0.05	0.0002	74.4	0.005	0	0	0.009		
3/30/1999	12:45	10	8	300	7	230	8.09	404	3	0.11	25	1128	227	0.03	0	39.7	0.002	0.005	49.4	0.028	0.05	15.7	0.678	0.002	0.05	0.002	45.9	0.153	0	0	39	
3/6/1996	10:13	75	8.6	600	1																											
2/22/1996	11:10	34	8.6	270	2																											

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-2

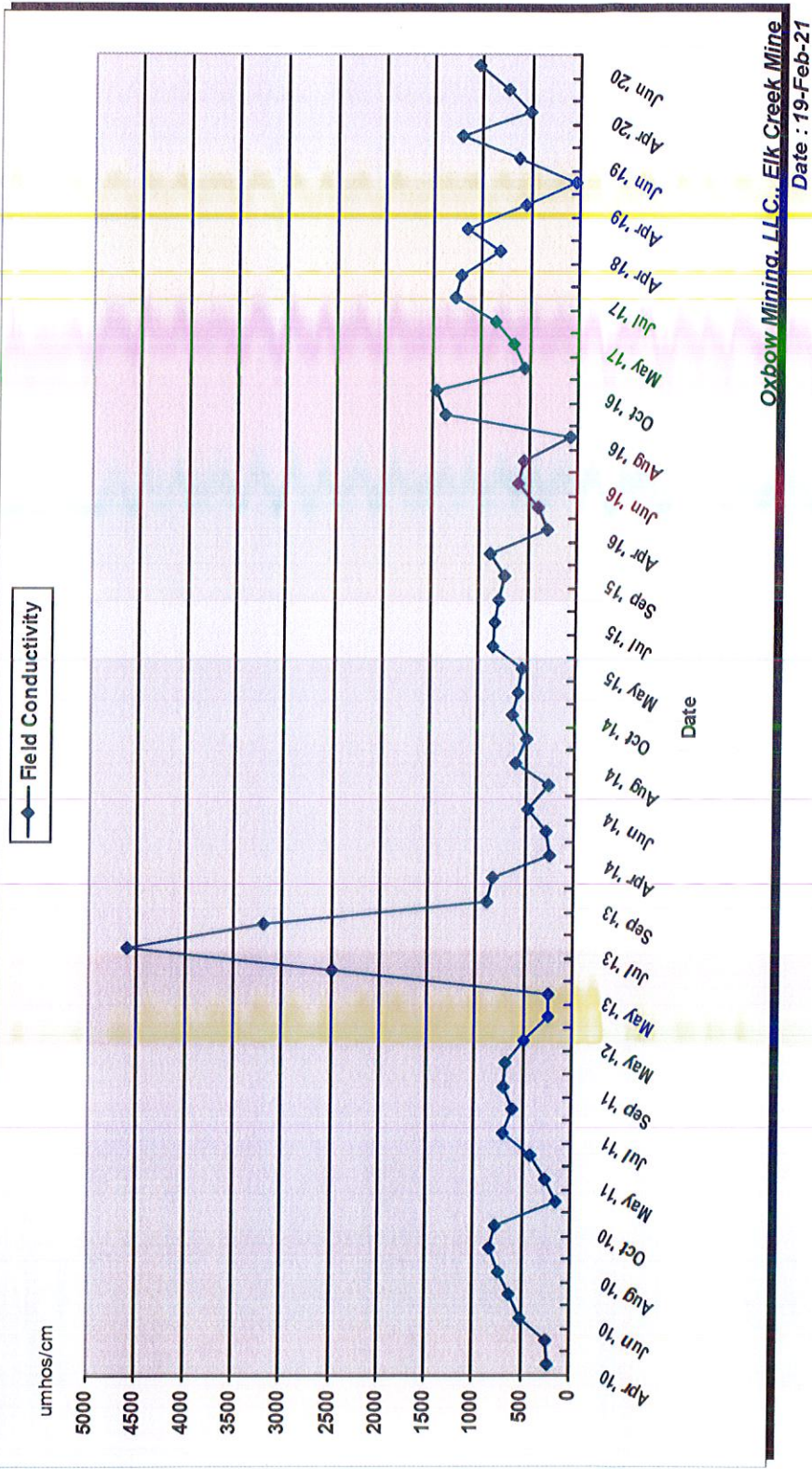


Oxbow Mining, LLC., Elk Creek Mine

Date : 19-Feb-21

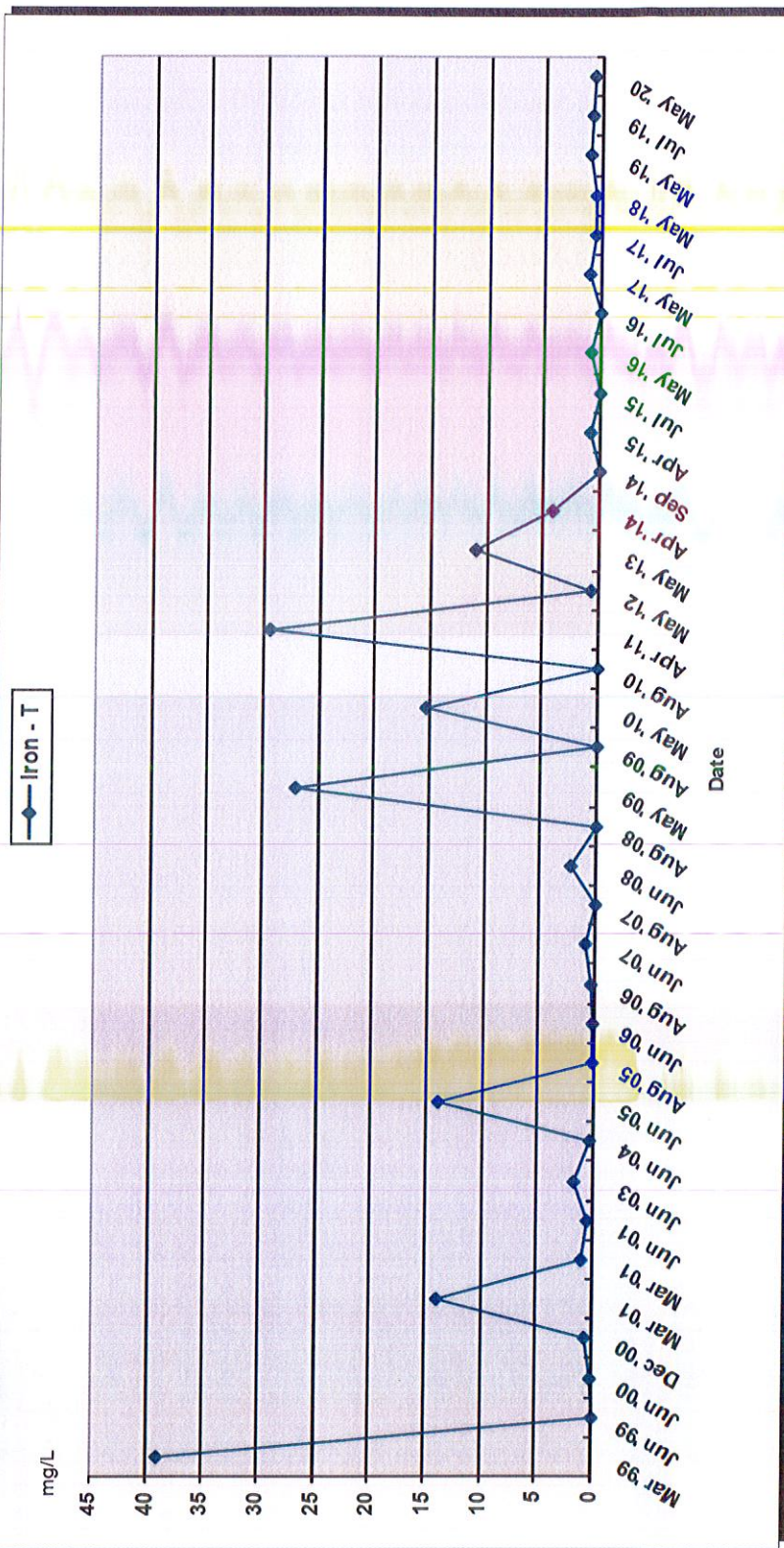
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-2



MONITORING CHART FOR 2020 AHR

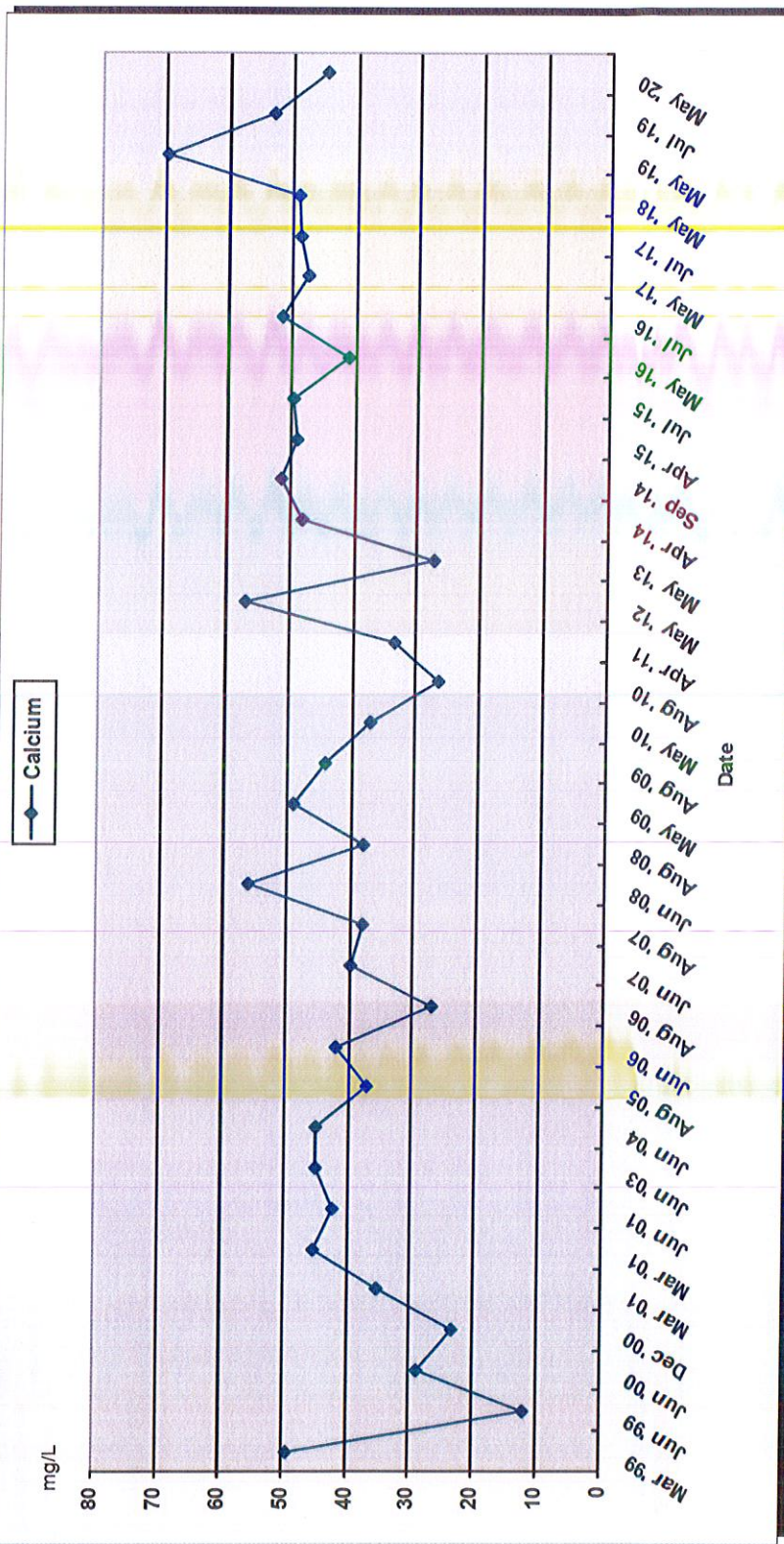
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

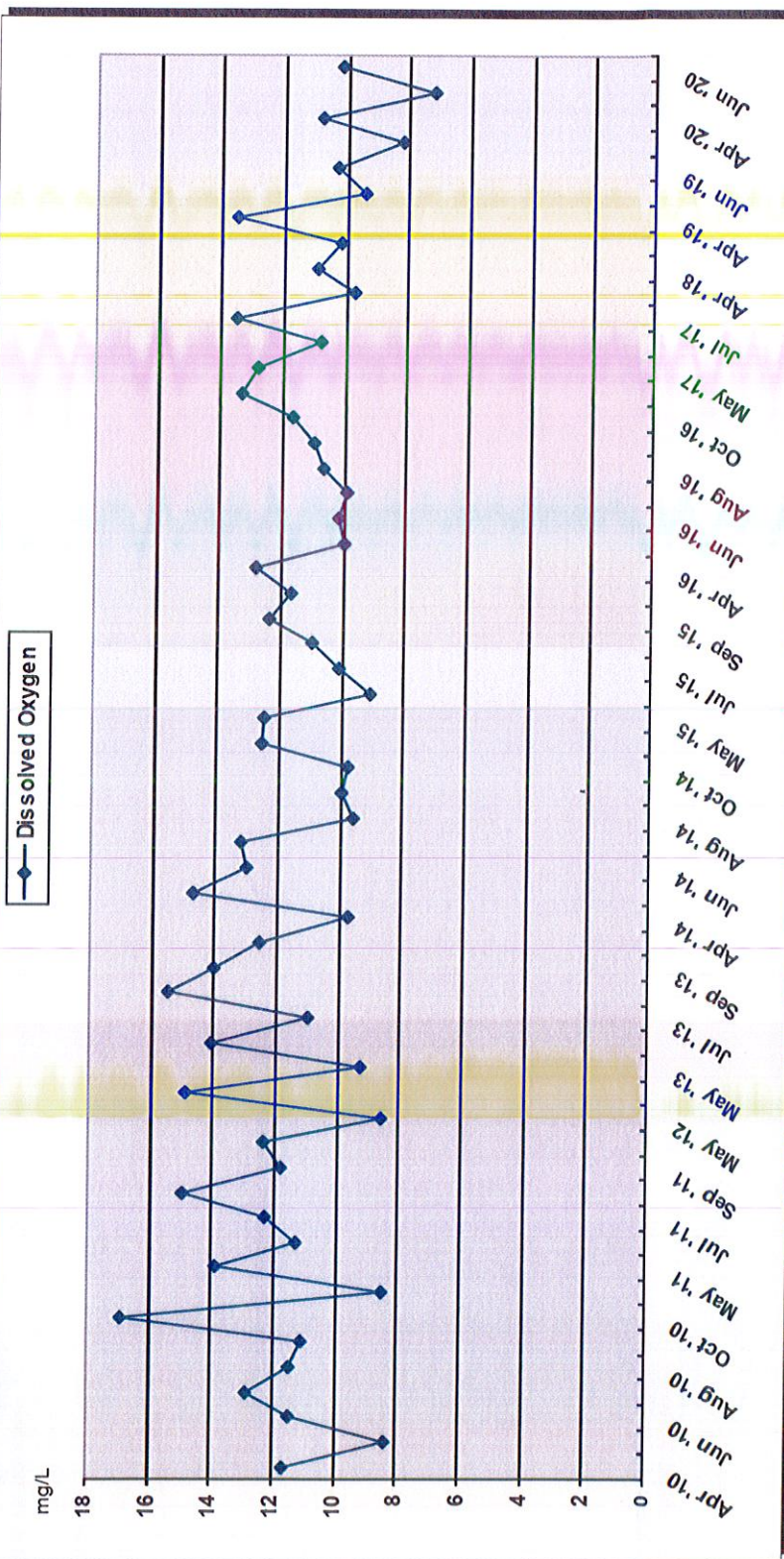
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

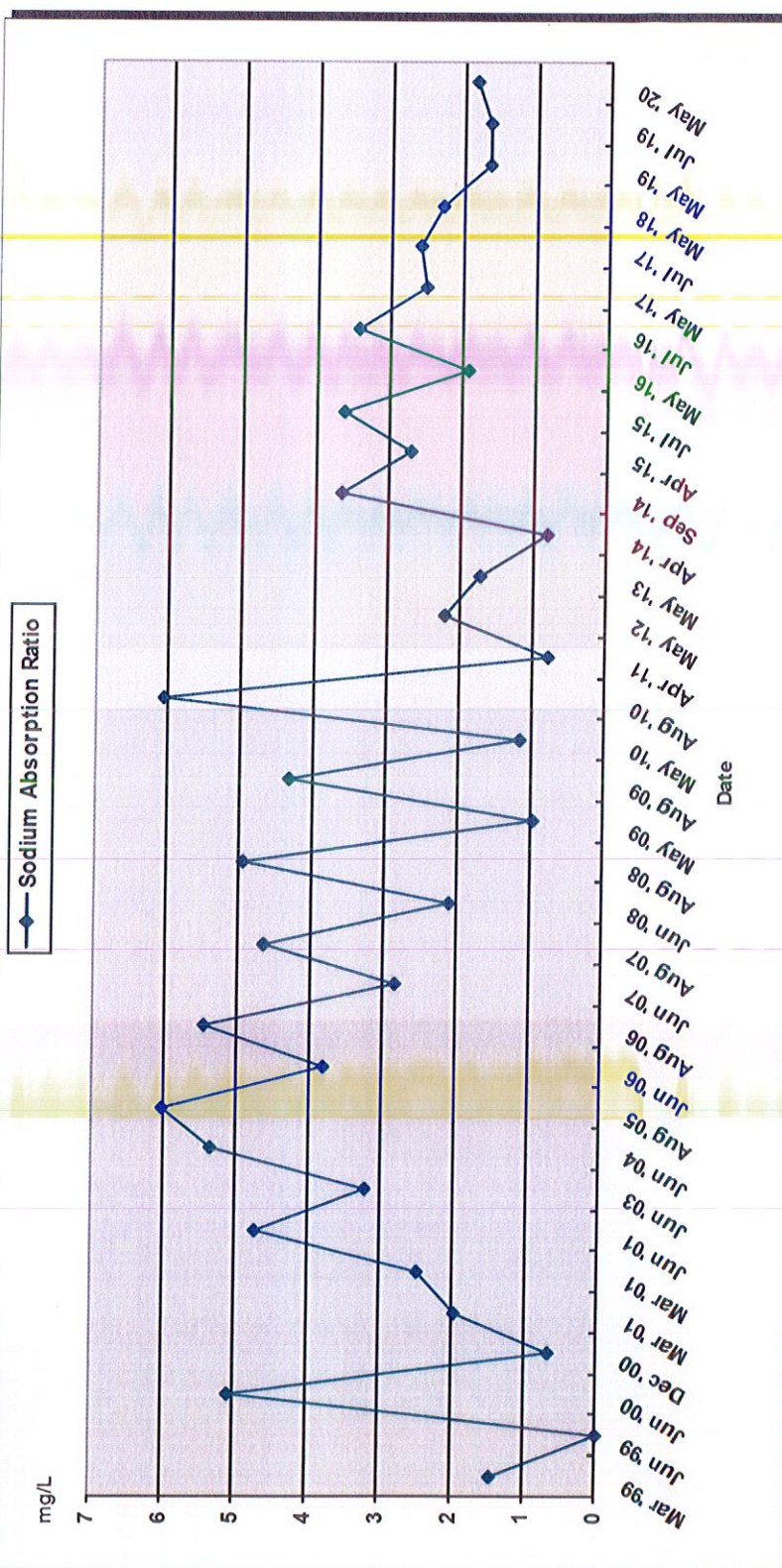
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

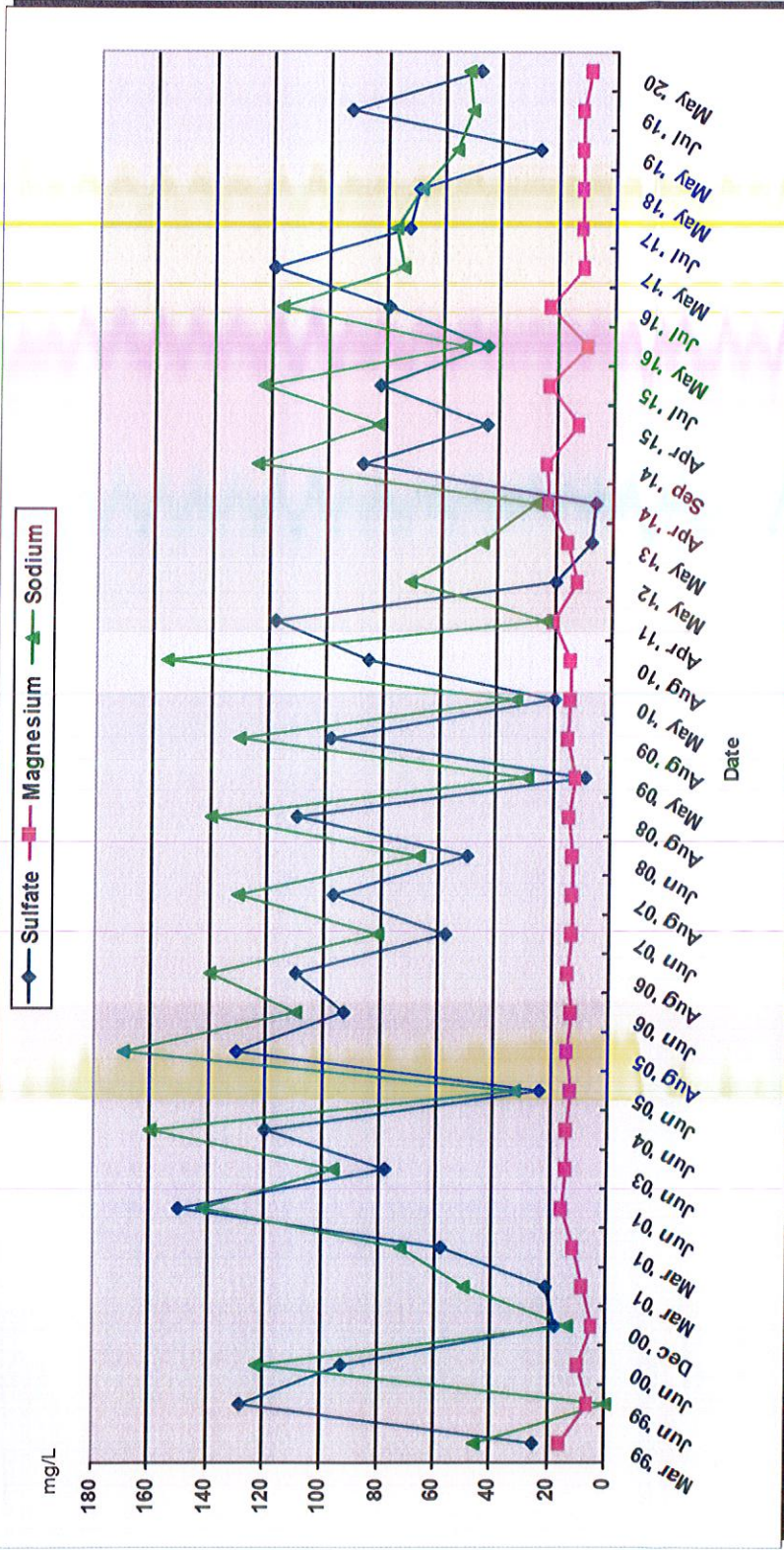
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

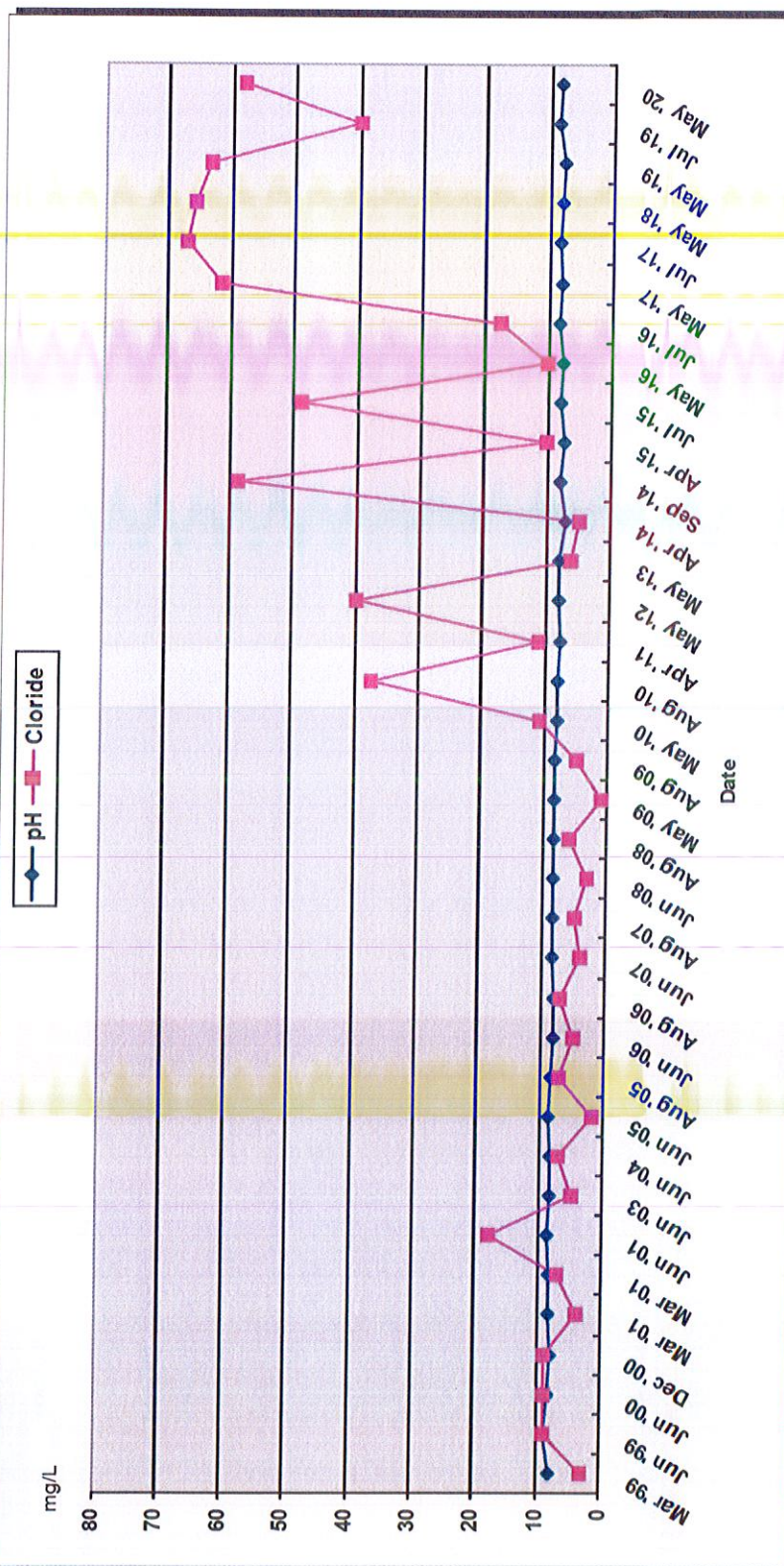
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-2

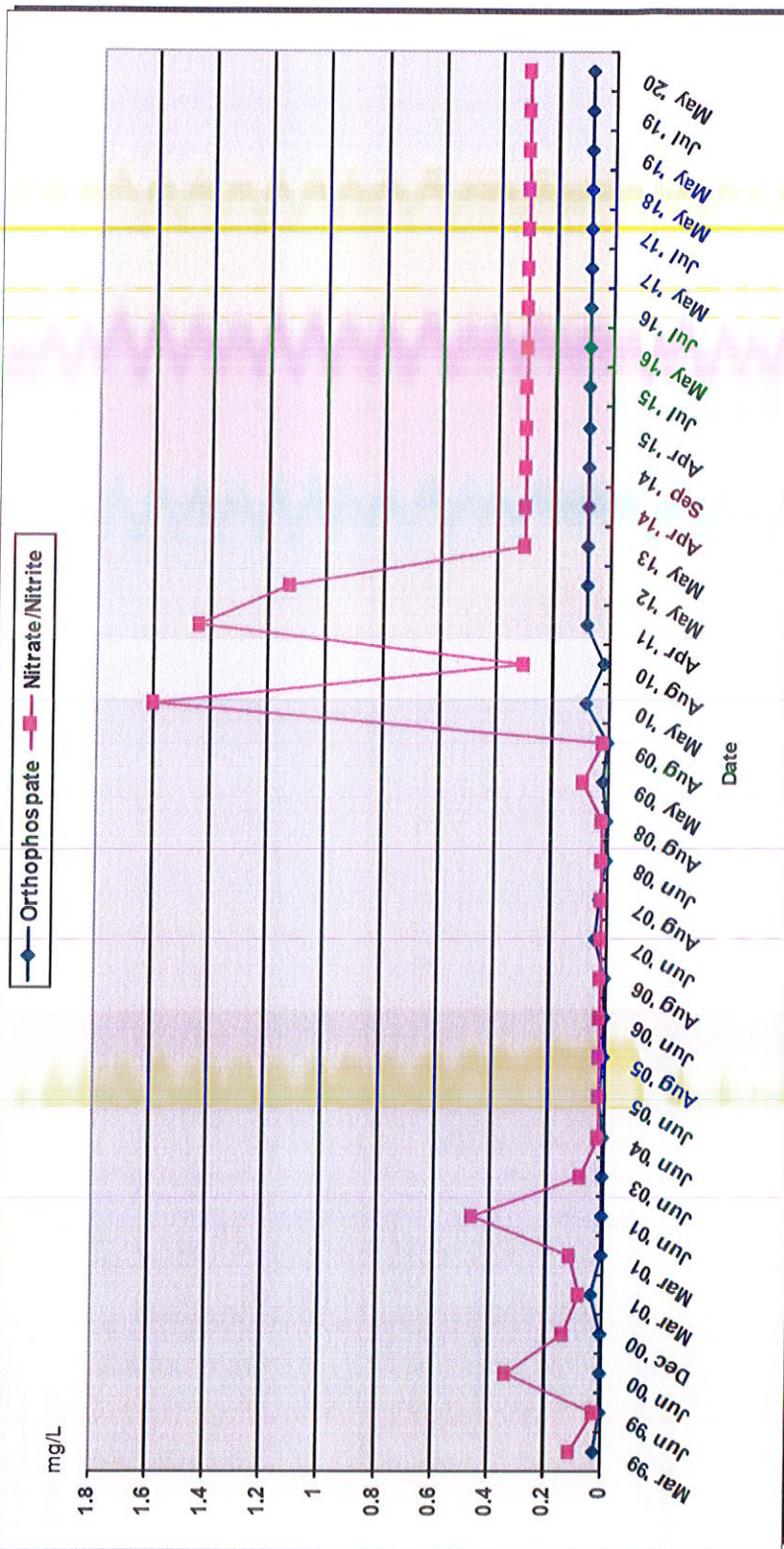


Oxbow Mining, LLC., Elk Creek Mine

Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

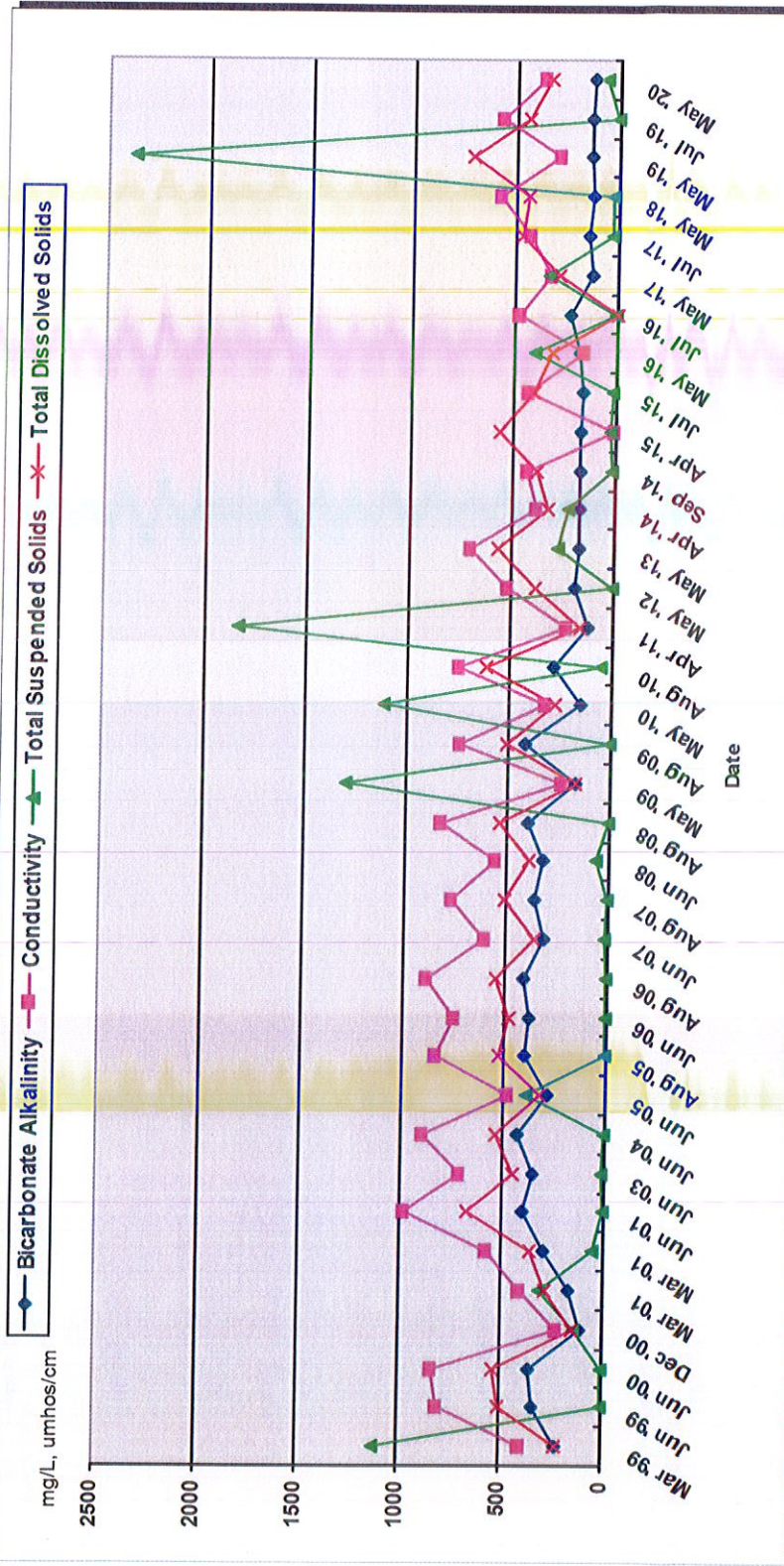
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

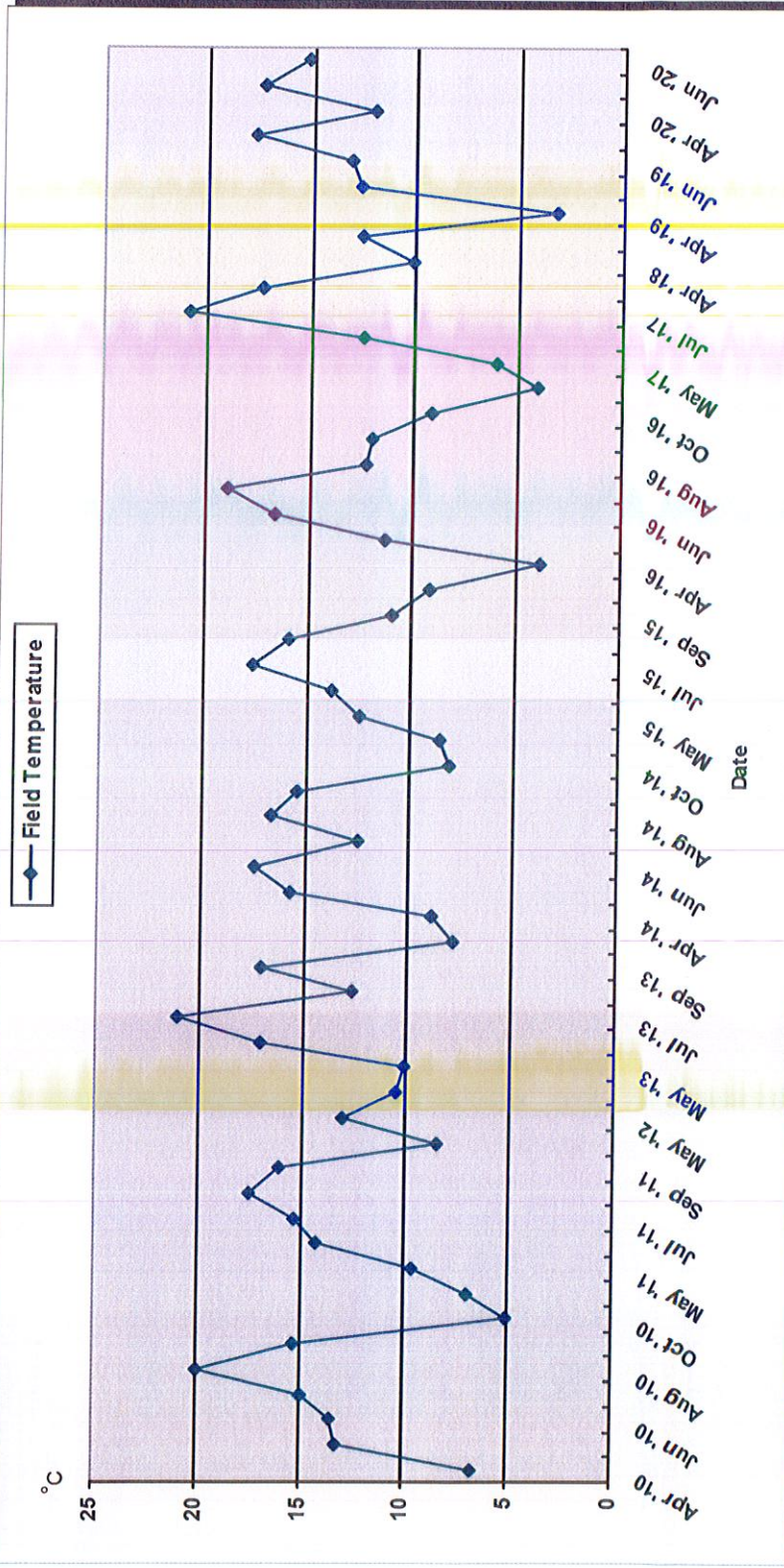
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

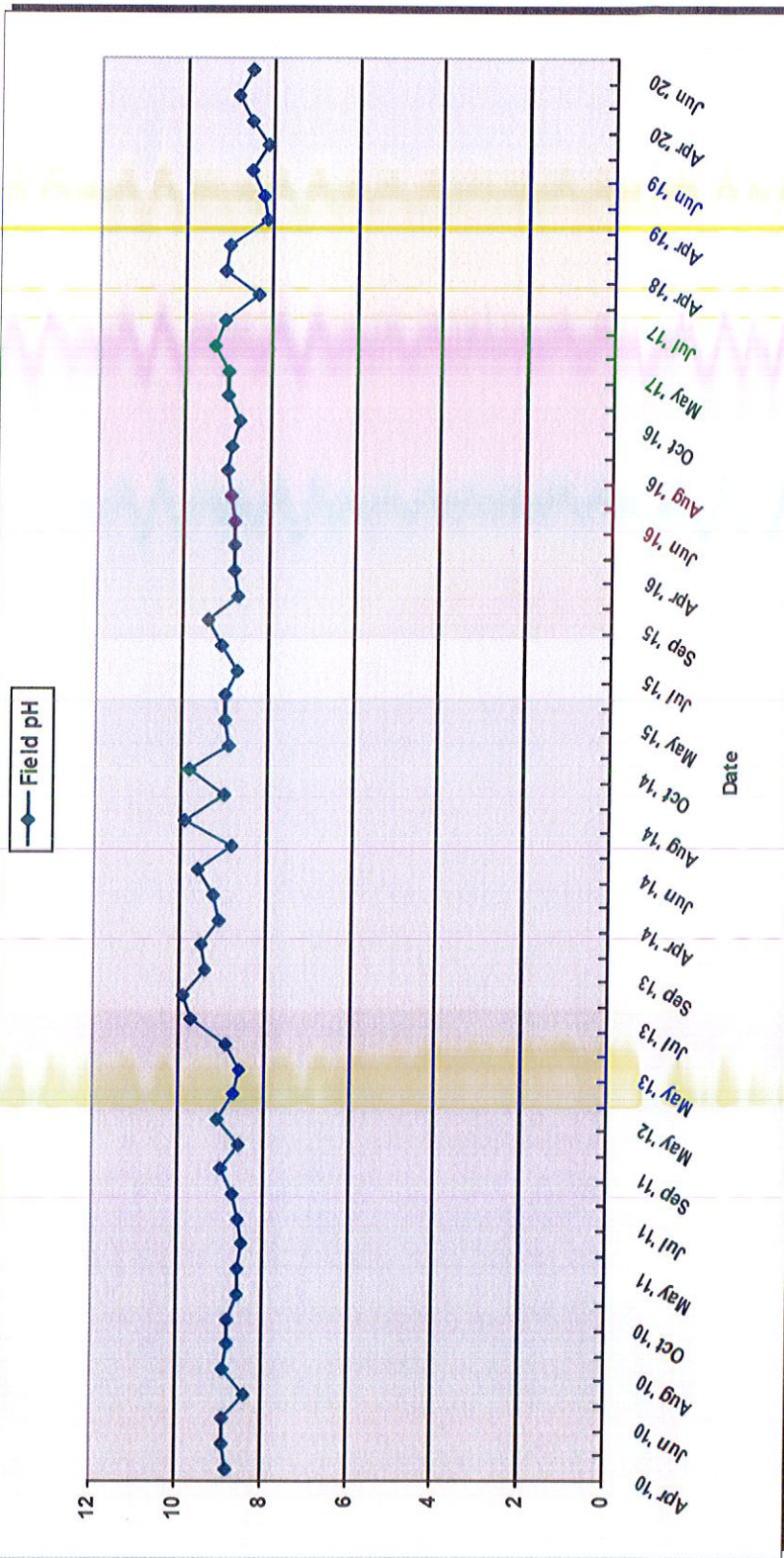
SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: E-2



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

NF-1 UPPER N.F. GUNNISON RIVER

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
12/8/2017	12:30	45	8.5	310	0.2									14.5																
11/13/2017	13:20	42.1	8.5	270	5.2	24.76	6.88	132	17.73	0.3	11.94	31	114	0.08	14.3		26.89			3.3					18.45	0	0	0	0.361	0.054
10/19/2017	10:15	56.2	8.3	240	3.2									13.2												0	0	0		
9/11/2017	11:30	237	8.6	360	19.1									9.2												0	0	0		
8/8/2017	11:05	289	8.1	230	14									12.6												0	0	0		
7/18/2017	12:05	289	9.3	190	19.4	25.81	7.51	130	41.83	0.3	28.15	16	132	0.08	14.3	0.004	0.002	27.43		0.005	3.8	0.014	0.00009		0.004	18.64	0.021	0	0.421	0.067
6/6/2017	11:30	2140	8.3	100	8.7									13.2						4.3					19.3	0	0	0	0.106	0.018
5/17/2017	10:30	1980	8.6	150	5.7	32.93	7.45	91	35.01	0.3	11.52	48	62	0.08	12.1		13.9									0	0	0		
4/28/2017	9:30	928	9.1	230	3.8									13.2												0	0	0		
3/8/2017	10:15	126	9.2	370	3									13.2												0	0	0		
2/3/2017	11:00	78	8.6	350	1.4									13.6												0	0	0		
1/18/2017	12:00	83	8.4	330	0.5									15												0	0	0		
12/12/2016	11:30	60	8.6	310	0.2									15.2												0	0	0		
11/29/2016	9:21	66	8.3	260	0.3	48.39	7.53	284	7.9	0.3	13.58	46	256	0.08	9.8		21.4			5.2					22.8	0	0	0	0.54	0.022
10/28/2016	10:20	87	8.9	320	7.5									12.6												0	0	0		
9/22/2016	10:30	92	8.5	300	13.9									12.7												0	0	0		
8/25/2016	11:00	245	9.2	170	15.8									9.9												0	0	0		
7/25/2016	10:45	245	9.8	100	16.4	58.13	8.56	192	11.76	0.3	6.83	170	16	0.08	9.8	0.004	0.002	14.8		0.005	4.2	0.013	0.0001		0.005	21.55	0.016	0	0.224	0.034
6/9/2016	10:30	1510	8.9	60	11.4									12.8												0	0	0		
5/23/2016	10:00	2110	8.9	80	8.8	78.56	7.81	149	4.84	0.3	5.76	68	128	0.08	9.9		12.2			4.0					20.6	0	0	0	0.58	0.02
4/26/2016	13:47	729	8.1	110	6.8									13												0	0	0		
3/10/2016	13:10	159	9.1	180	7.5									12.8												0	0	0		
2/11/2016	11:15	90	9.2	160	2									13.7												0	0	0		
12/10/2015	8:40		8.7	160	2									14.5												0	0	0		
11/9/2015	13:30		8.4	230	6.3									14.3												0	0	0		
10/21/2015	9:30		9.8	220	10.3	52.17	7.51	203	16.8	0.3	18.74	25	194	0.08	8.5		31.8			7.1					25	0	0	0	0.58	0.047
9/18/2015	13:30		8.9	240	18									9.2												0	0	0		
8/4/2015	12:40		9	200	17.6									13.8												0	0	0		
7/21/2015	13:00		8.7	180	17.1	52.17	8.12	157	11.76	0.3	13.53	34	148	0.08	9.8	0.004	0.002	29.61		0.005	4.1	0.012	0.00011		0.005	24.68	0.018	0	0.47	0.085
6/17/2015	13:00		8.7	110	14.5									14.3												0	0	0		
5/4/2015	14:20		9	110	11									15.7												0	0	0		
4/14/2015	10:00		8.8	120	3.8	81.14	7.11	142	4.84	0.3	5.76	9	128	0.08	10.6		12.2			4.0					20.8	0	0	0	0.58	0.02
3/3/2015	13:00		9	80	6.3									12.5												0	0	0		
2/3/2015	13:45		9.4	110	4.1									12.5												0	0	0		
1/9/2015	14:00		8.4	135	0.3									9.7												0	0	0		
12/18/2014	14:00		9.4	100	4.1									13.5												0	0	0		

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
11/11/2014	11:00		9.3	100	1	66.13	7.56	296	43.6	0.3	49.39	62	247	0.08	10.1				44.6			11.4				25.8	0	0	0	7.6	0.03	
10/31/2014	11:00		9.9	120	5.4									13.1													0	0	0	0	0	0
9/10/2014	9:30		8.9	100	15.2	36.94	6.58	142	12.76	0.3	16.05	24	102	0.08	9.6		0.003	0.003	33.4	0.005	13.0	0.011	0.000029	0.004	33.2	0.026	0	0	0	0.54	0.08	
8/25/2014	1:30		8.3	160	18.2									11.5													0	0	0	0	0	0
7/8/2014	9:00		8.8	70	13									14.1													0	0	0	0	0	0
6/11/2014	13:00		8.8	140	13.4									9.6													0	0	0	0	0	0
5/19/2014	13:15		9.2	60	11.3									10													0	0	0	0	0	0
4/14/2014	8:00		0.1	0	0	84.13	7.14	188	11.76	0.3	8.43	54	159	0.08	9.8				37.4			40.0				9.04	0	0	0	26.9	0.06	
4/8/2014	10:30		8.3	140	6.1	88.73	7.07	191	8.53	0.3	4.18	6.8	166	0.08	9.6				33.6			20.0				17.28	0	0	0	0.85	0.08	
3/8/2014	13:00		8.9	140	6.9									13.6													0	0	0	0	0	0
2/18/2014	14:00		8.9	130	2.6									8.9													0	0	0	0	0	0
1/15/2014	13:30		8.2	130	0.2									8.5													0	0	0	0	0	0
12/2/2013	12:30		8.8	140	1									13.8													0	0	0	0	0	0
11/13/2013	10:30		8.7	120	0.5									15.2													0	0	0	0	0	0
10/18/2013	13:00		8.4	100	7.4									12.9													0	0	0	0	0	0
9/9/2013	11:00		8	160	17									13.3													0	0	0	0	0	0
8/16/2013	10:30		8.2	150	16.6									8.2													0	0	0	0	0	0
7/18/2013	1:30		8.8	110	20.4	98.43	8.12	234	17.43	0.3	5.13	68	208	0.094	14.1		0.003	0.003	28.6	0.005	9.8	0.014	0.000033	0.006	46.6	0.022	0	0	1.38	0.26		
6/5/2013	13:15		8.7	50	14.1									6													0	0	0	0	0	0
5/6/2013	11:45		8.4	80	9	96.45	7.20	242	11.56	0.3	4.52	75	222	0.08	9.4				24.2			10.0				45	0	0	0	1.03	0.23	
4/22/2013	13:10		8.3	130	10.5									8.3													0	0	0	0	0	0
3/21/2013	0:00		8.5	170	11									10.6													0	0	0	0	0	0
2/21/2013	13:00		7.8	220	3.1									14.7													0	0	0	0	0	0
12/5/2012	12:45		8.9	150	3.1	98.79	8.21	204	78.43	0.3	7.04	178	4	0.048	8.6				33.5			17.0				55.56	0	0	0	0.16	0.07	
11/20/2012	13:00		7.6	160	5.3									11.3													0	0	0	0	0	0
10/10/2012	14:00		8.5	150	11.3									11.9													0	0	0	0	0	0
9/6/2012	13:00		8.4	200	15.5									10.8													0	0	0	0	0	0
8/2/2012	11:15		9.4	180	23	91.71	8.29	203	#####	0.3	6.56	39	117	0.051	11.1		0.003	0.002	67	0.005	11.2	0.01	0.00004	0.008	37.8	0.05	0	0	0.7	0.02		
7/30/2012	12:20		9.3	190	23									10.4													0	0	0	0	0	0
6/13/2012	10:20		8.6	180	16.6									9.8													0	0	0	0	0	0
6/8/2012	11:25		8.4	90	12.9									15.4													0	0	0	0	0	0
5/9/2012	12:15		7.4	70	9.1	54.76	7.12	167	4.36	1.06	21.42	125	55	0.17	12.1				9.5			2.5				4.45	0	0	0	0.2	0.01	
4/23/2012	13:35		8.1	70	15									14.5													0	0	0	0	0	0
3/26/2012	13:00		7.8	110	7.3									12.1													0	0	0	0	0	0
2/20/2012	15:00		7.7	230	2.9									14.3													0	0	0	0	0	0
1/10/2012	13:00		7.4	140	3.1									14.8													0	0	0	0	0	0

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
12/5/2011	13:00		8.2	170	1.2	18.53	7.88	266	2.46	0.3	6.99	129	3	0.17	7.5	0.003	0.005	23.4	0.005	3.0	0.06	0.000025	0.004	8.2	0.01	0	0	0	0	0.22	0.07
11/18/2011	12:00		8.6	150	2.3									14.1																	
10/7/2011	12:00		8.2	180	8.3									12.8																	
9/26/2011	12:00		9.3	170	17.8									12.3																	
7/26/2011	14:15		8.1	110	14									12.2																	
6/14/2011	14:15		8.3	80	11.5									13.8																	
5/23/2011	13:55		8.6	140	7.6									15.6																	
3/30/2011	1:00		8.3	200	6									12.7																	
2/5/2011	14:00		8.7	280	1.4									14.8																	
1/21/2011	14:00		8.5	230	2.1									14.8																	
12/21/2010	11:00		8.8	220	1									11.9																	
10/27/2010	1:00		8.9	160	4.7									14.3																	
9/27/2010	1:30		8.2	270	16									10.6																	
7/15/2010	2:00		9	150	18.8									13																	
6/4/2010	12:15		10	70	10.4									14.2																	
4/22/2010	1:10		9	100	5.8									13.1																	
3/3/2010	1:00		9.2	250	1.9									11.7																	
2/23/2010	1:00		9.3	450	2.2									14.7																	
1/28/2010	1:00		9.3	260	1.5									16.6																	
12/9/2009	10:15		8.9	210	1									12																	
11/16/2009	10:00		8.5	230	2.9									15.4																	
9/25/2009	9:00		7.2	150	14.9									11.7																	
7/17/2009	1:00		6.8	140	18.4									4.2																	
6/22/2009	9:35		7.7	90	12.9									16.1																	
4/29/2009	10:45		8.2	110	5.5									14.3																	
3/9/2009	10:00		8.1	200	5.3									13.9																	
2/5/2009	12:00		7.7	100	1									15.2																	
1/16/2009	11:30		7.6	270	0.6									12.5																	
12/2/2008	14:00		8	170	2.8									12.8																	
11/17/2008	13:00		8.1	160	3.7									14.2																	
10/15/2008	14:00		7.4	170	4.7									12.7																	
9/11/2008	12:45		7.1	160	15.8									10.7																	
7/29/2008	13:30		7.7	170	19									8.7																	
5/23/2008	11:00		8.5	90	6.2									10.5																	
4/18/2008	14:40		8.2	170	7.5									14.2																	
3/26/2008	14:30		8.8	190	7.5									7.9																	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
1/30/2008	13:00		8.1	180	1										9.3																	
12/18/2007	12:30		8.27	150	0.7										15																	
11/13/2007	13:15		7.45	180	1										9.9																	
10/24/2007	14:15		8.6	110	7.6										9.9																	
9/11/2007	13:45		8.35	180	17										9.8																	
7/17/2007	13:00		7.74	160	16.7										10.1																	
5/15/2007	11:25		7.54	80	9.8										10.3																	
4/26/2007	15:00		8.18	120	9.3										11.9																	
3/12/2007	11:00		8.04	100	4										12.6																	
2/21/2007	11:00		7.71	190	3										15.1																	
1/19/2007	12:01		8.16	200	1										8.7																	
12/18/2006	10:00		7.53	170	0.8										29																	
11/22/2006	10:00		7.6	120	1.8										4.3																	
9/27/2006	11:30		8.26	150	7										3.9																	
7/21/2006	11:30		7.46	140	18.5										21																	
5/26/2006	10:15		7.7	80	8.5										13.1																	
4/17/2006	13:55		7.93	120	6.9										14.1																	
3/27/2006	14:00		8.3	160	8										5.2																	
2/22/2006	14:15		7.62	190	1										12.7																	
1/27/2006	9:00		8.94	320	3																											
12/5/2005	1:00		8.24	210	10.2																											
11/7/2005	1:00		8.22	120	14.3																											
10/17/2005	11:40		8.69	160	15.2																											
9/22/2005	13:20		8.63	180	18.2																											
8/5/2005	15:00		9.21	140	21																											
7/25/2005	14:15		8.34	130	18																											
6/15/2005	9:55		8.48	90	10																											
5/9/2005	13:25		8.24	80	12																											
4/18/2005	10:30		7.99	120	5																											
3/29/2005	9:00		8.64	140	6																											
2/22/2005	10:50		8.22	180	5																											
1/19/2005	10:30		8.5	150	1																											
12/13/2004	11:00		8.27	160	3																											
11/15/2004	10:30		8.02	150	6																											
10/8/2004	14:05		8.61	170	13																											
9/27/2004	23:20		8.9	160	10																											

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
5/20/2004	10:10		8.81	90	8																											
4/14/2004	14:25		8.63	130	12																											
3/12/2004	13:30		9.06	170	8																											
2/26/2004	13:45		8.5	200	4																											
1/27/2004	11:00		8.5	280	1																											
12/5/2003	10:15		8	280	2																											
10/13/2003	14:00		7.9	150	11																											
9/17/2003	13:45		9.33	160	15																											
7/28/2003	12:15		9.7	150	17																											
5/13/2003	11:55		8.23	110	8																											
4/10/2003	13:00		9.07	150	10																											
3/27/2003	9:00		9.1	130	5																											
2/20/2003	15:20		9.01	280	3																											
1/15/2003	9:00		8.6	300	1																											
12/10/2002			9.16	300	2																											
11/11/2002			8.4	200	1																											
9/6/2002			9.1	200	16																											
7/20/2002			7.6	200	21																											

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

Date	Time	Hardness	Ammonia	Cyanide	Silver	Boron	Chromium(Trivalent)	Chromium(Hexavalent)	Chlorine	Nickel	Alkalinity(Carbonate)	Chromium(Total)	Antimony
7/13/2020	14:30	92.35804	0.043	0.02	0.05	0.4	0.01	0.05	0.05	0.02			
7/10/2019	12:15	83.97279	0.047	0.02	0.05	0.42	0.01	0.05	0.05	0.02			
7/11/2018	14:00	84.25	0.076	0.02	0.05	0.49	0.01	0.05	0.05	0.02			
7/18/2017	12:05	83.97639	0.086	0.02	0.05	0.53	0.01	0.05	0.05	0.02			
7/25/2016	10:45	54.33	0.022	0.02	0.05	0.61	0.01	0.05	0.05	0.02			
7/21/2015	13:00	90.73761	0.108	0.02	0.05	0.58	0.01	0.05	0.05	0.02			
9/10/2014	9:30	136.93	0.029	0.02	0.005	0.74	0.005	0.01	0.05	0.01			
7/18/2013	1:30	111.7706	0.033	0.02	0.005	0.72	0.005	0.01	0.008	0.01			
8/2/2012	11:15	213.42	0.023	0.02	0.05	0.56	0.01	0.05	0.05	0.02			
12/5/2011	13:00	70.66026	0.09	0.01	0.005	1.9	0.005	0.01	0.008	0.005			

MONITORING CHART FOR 2020 AHR

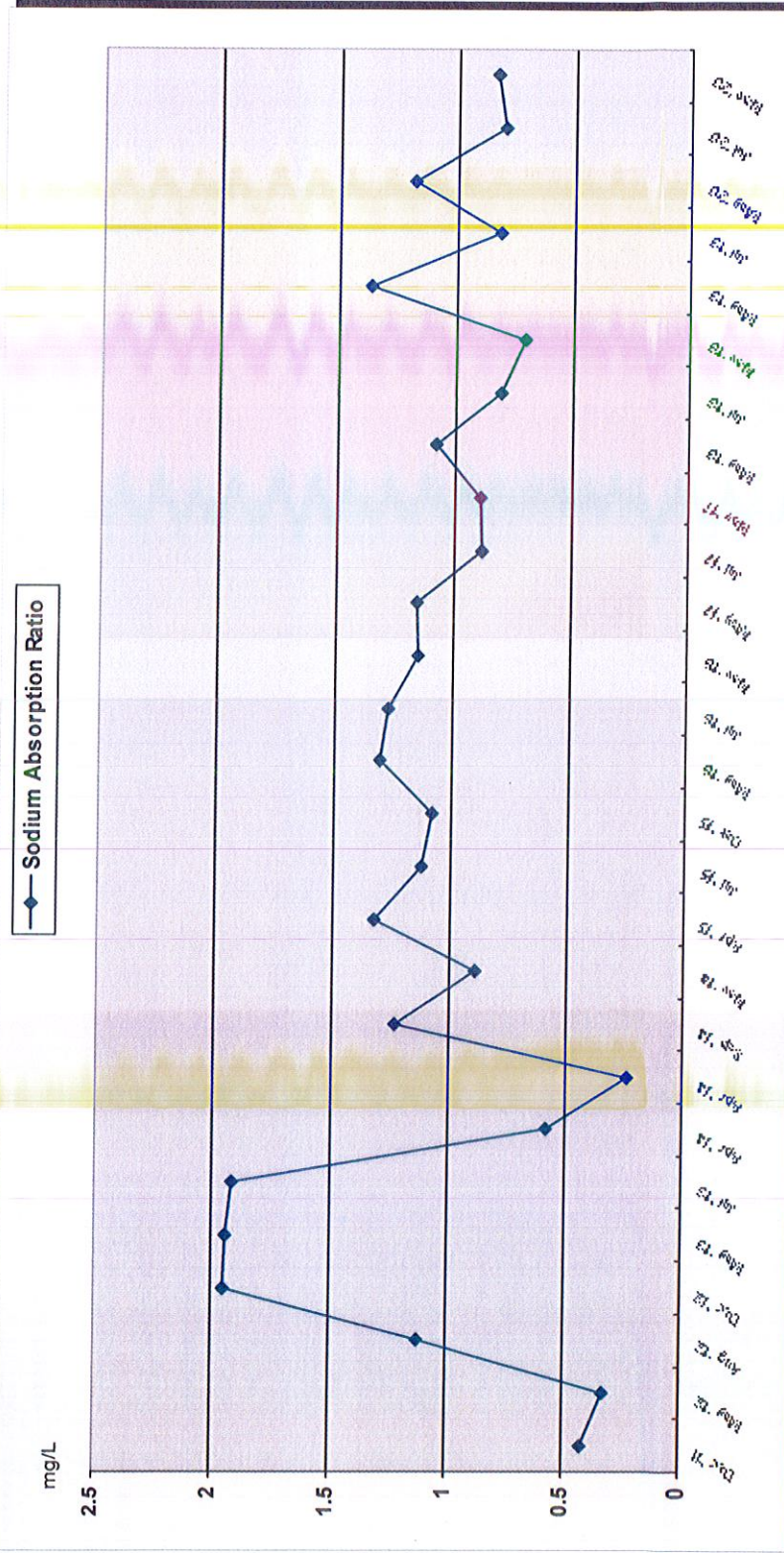
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

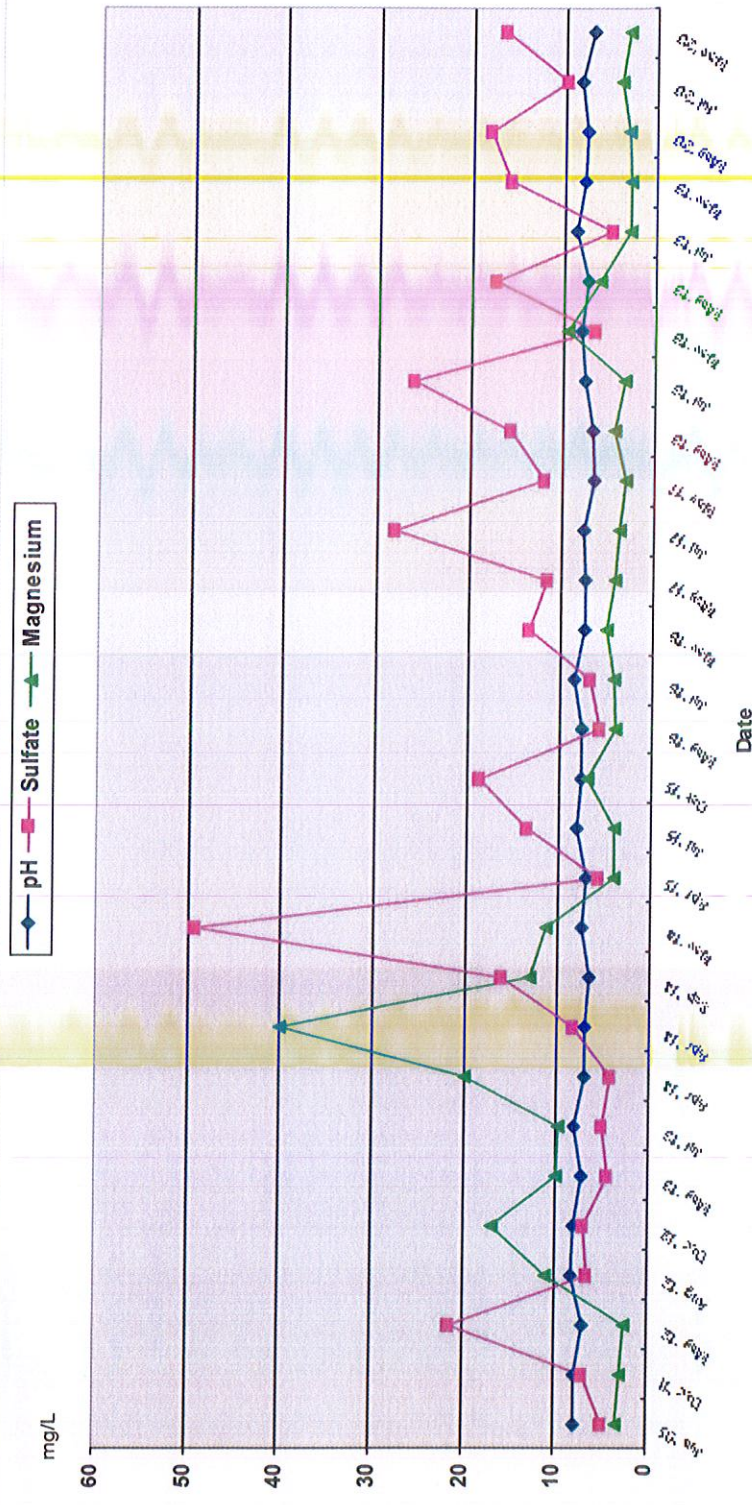
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

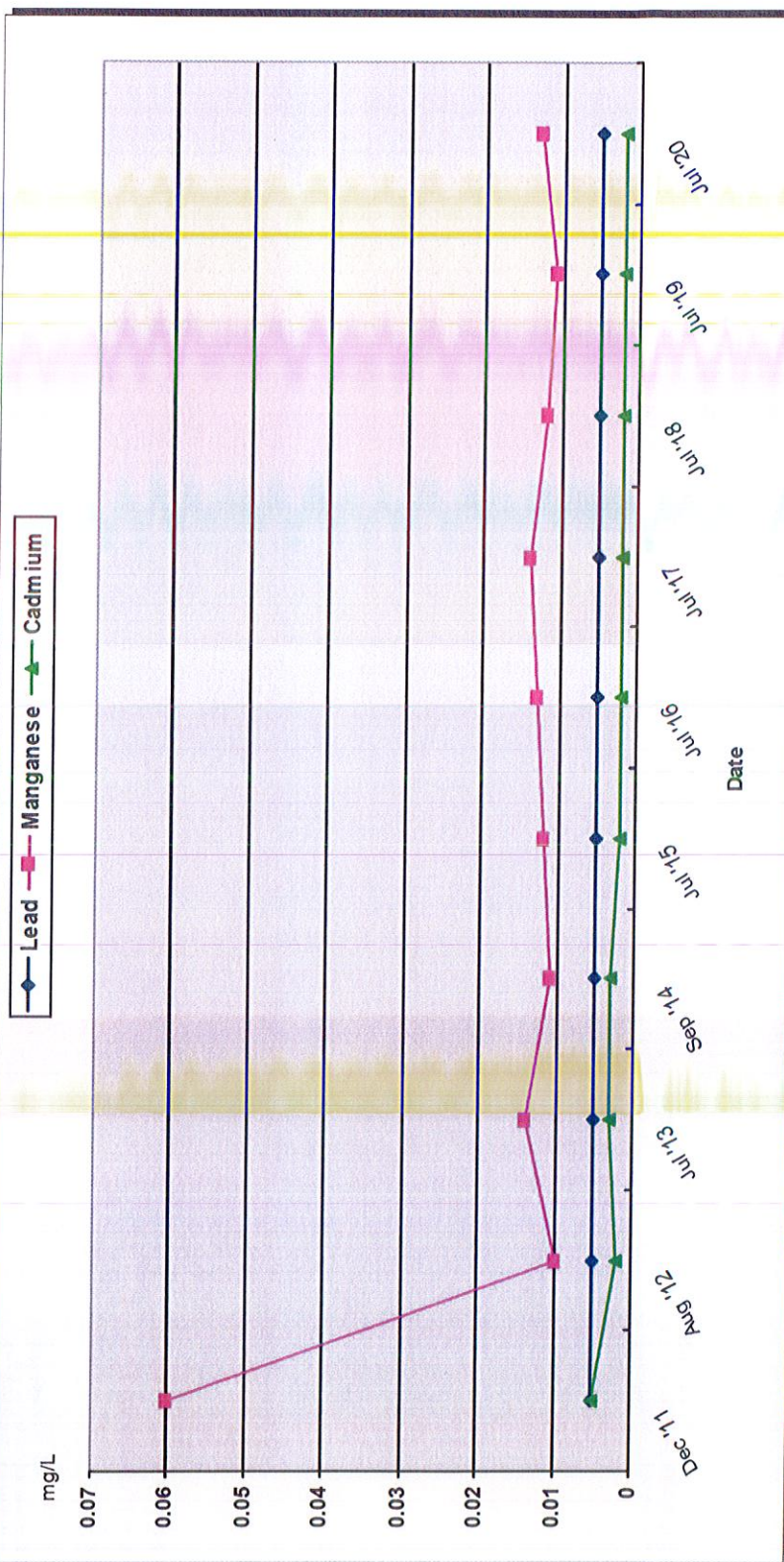
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-1



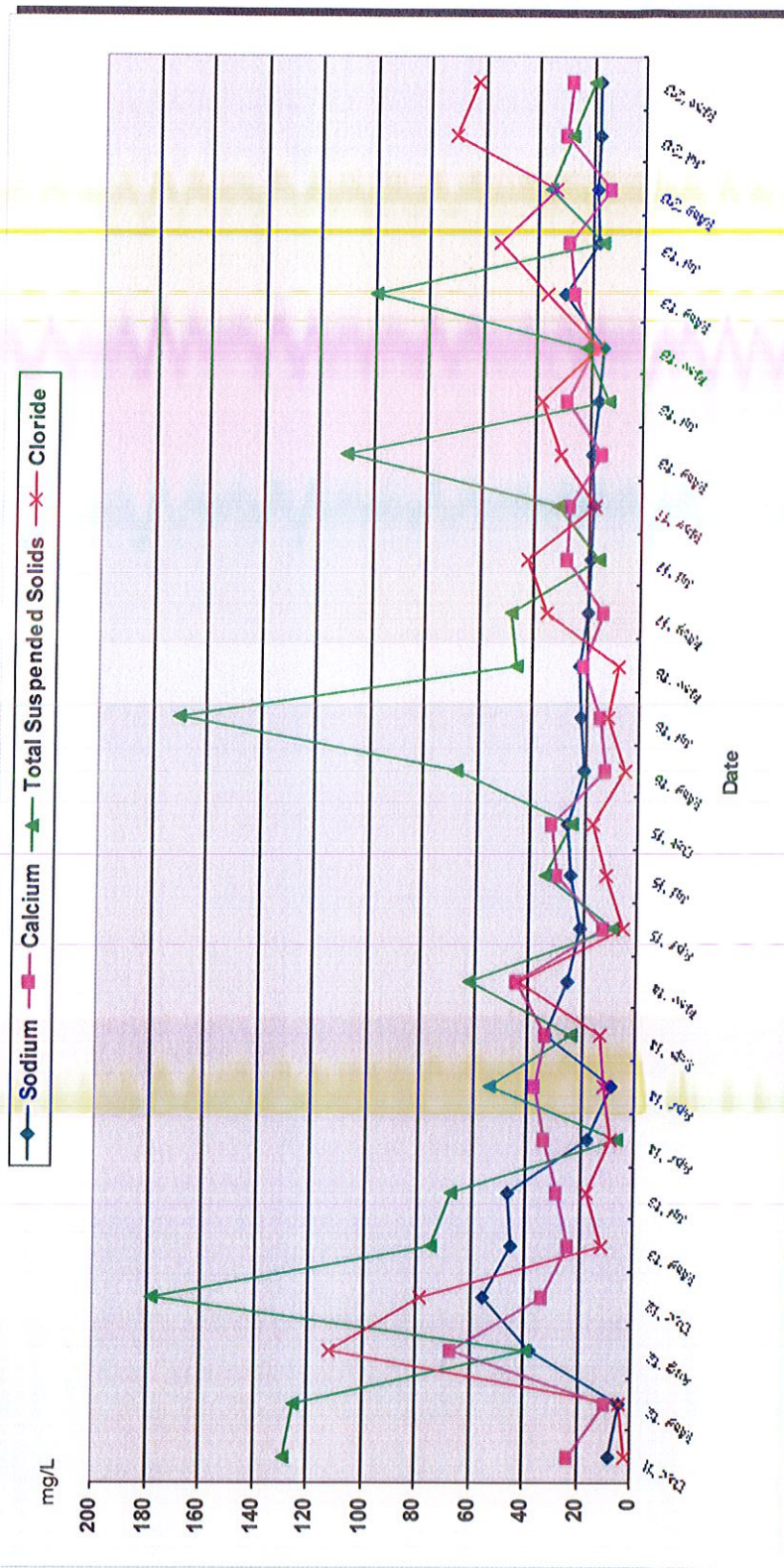
Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

SURFACE WATER LOCATION: NF-1



MONITORING CHART FOR 2020 AHR

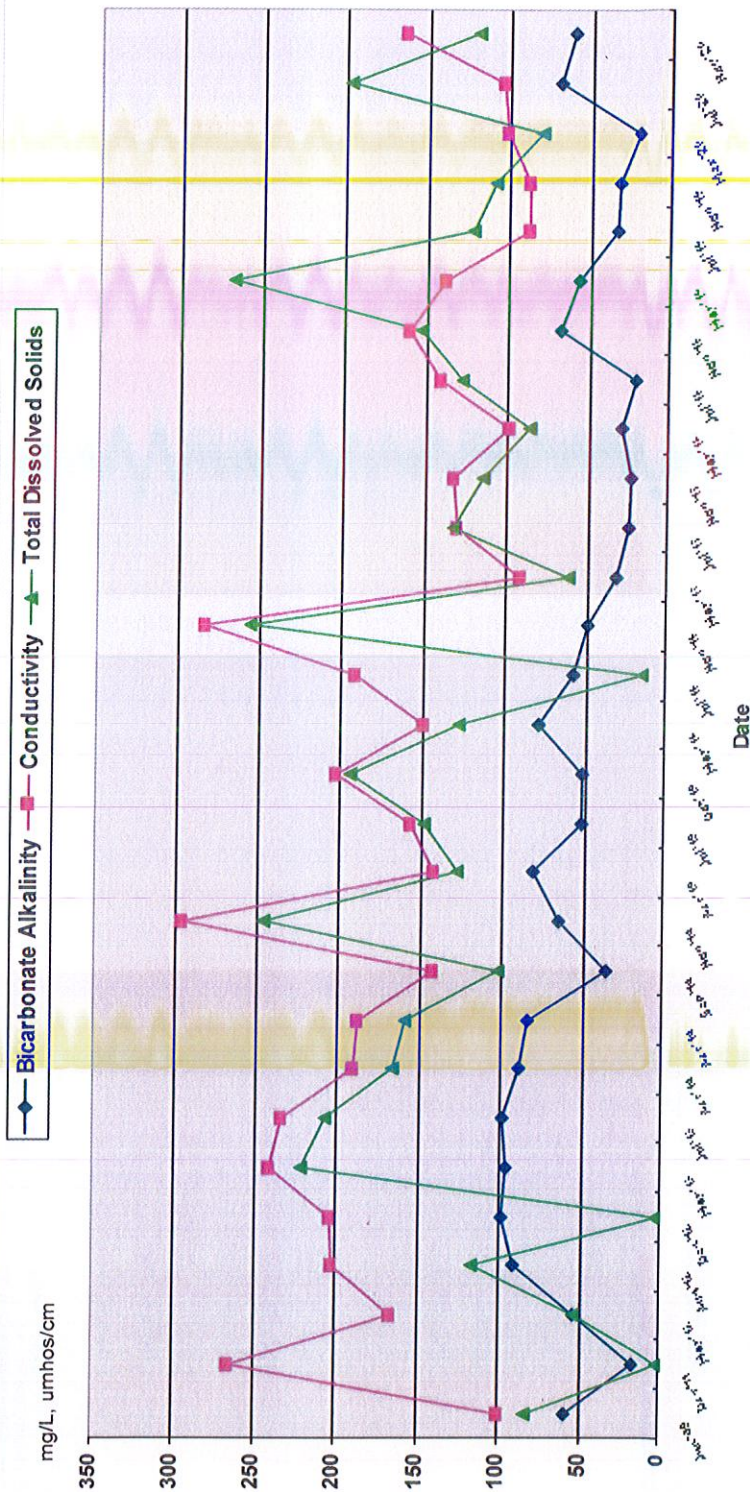
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

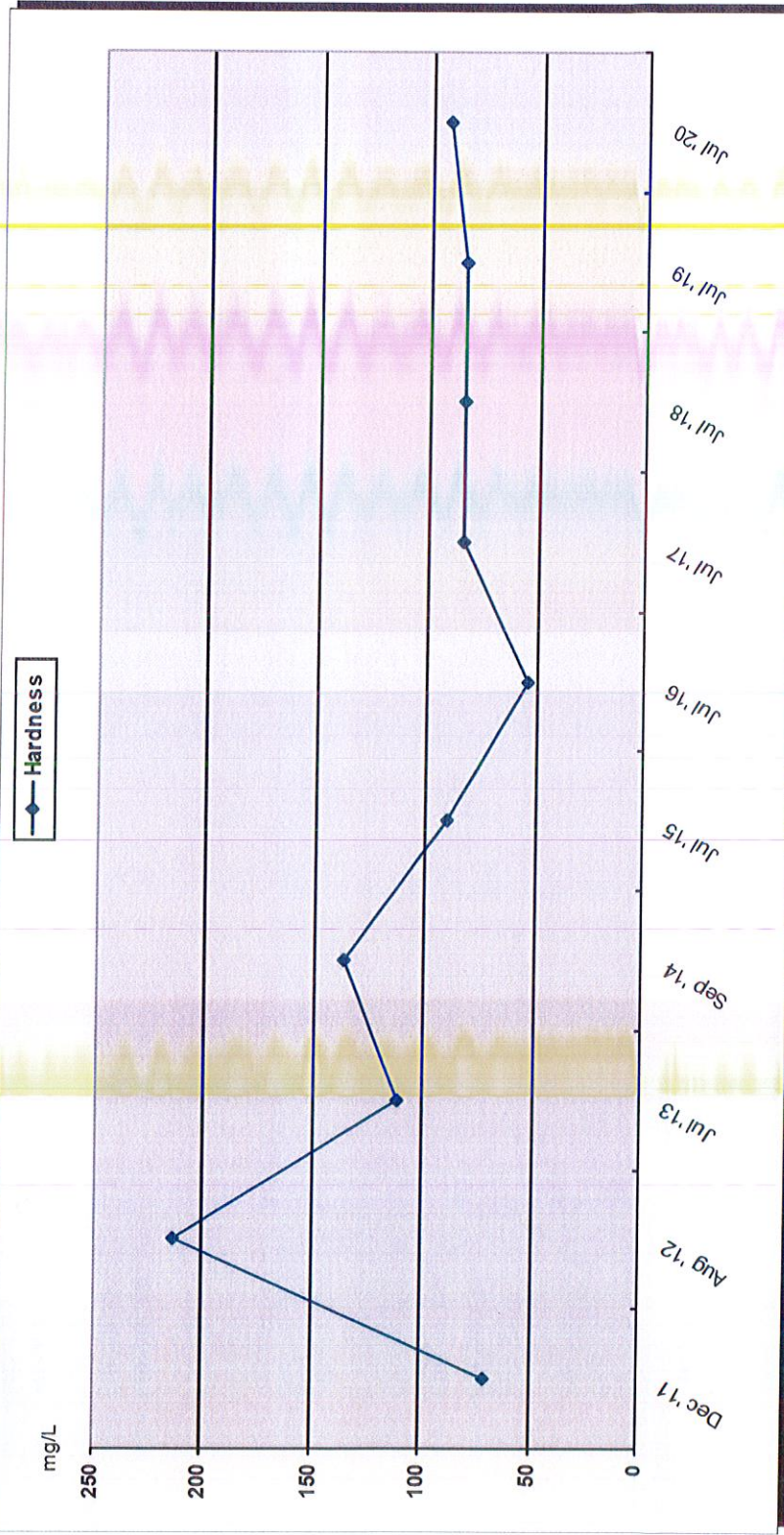
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

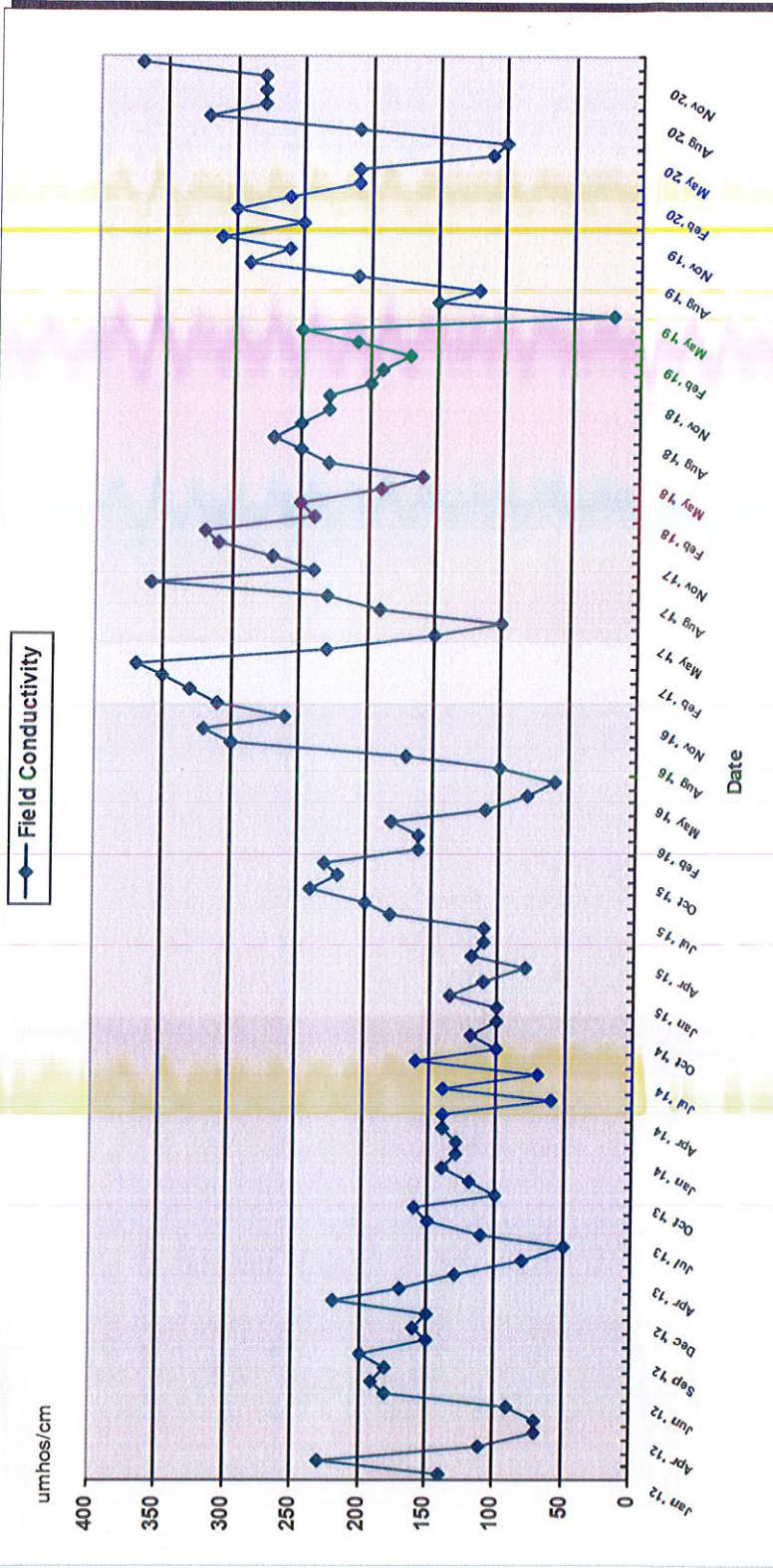


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

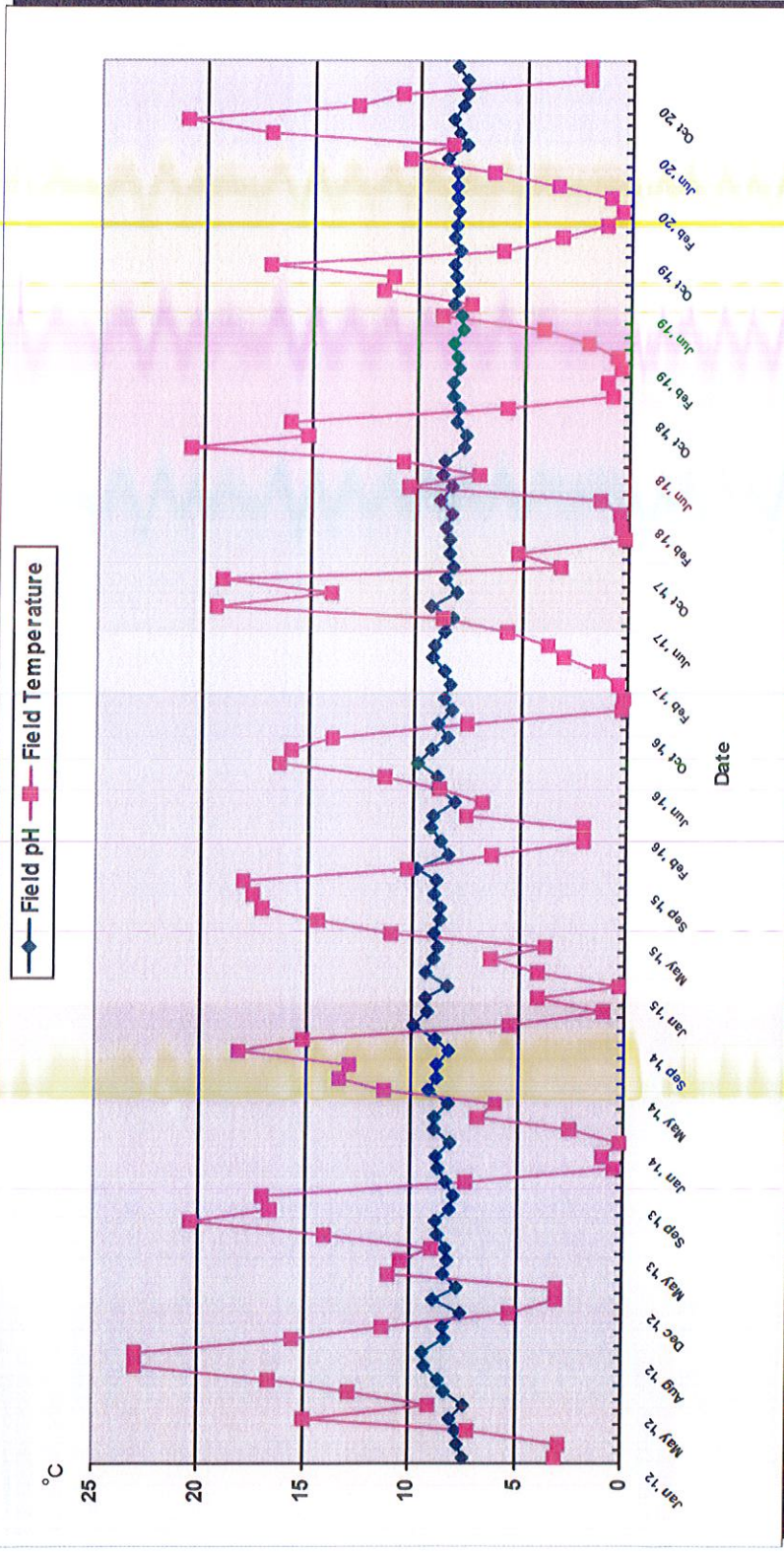
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

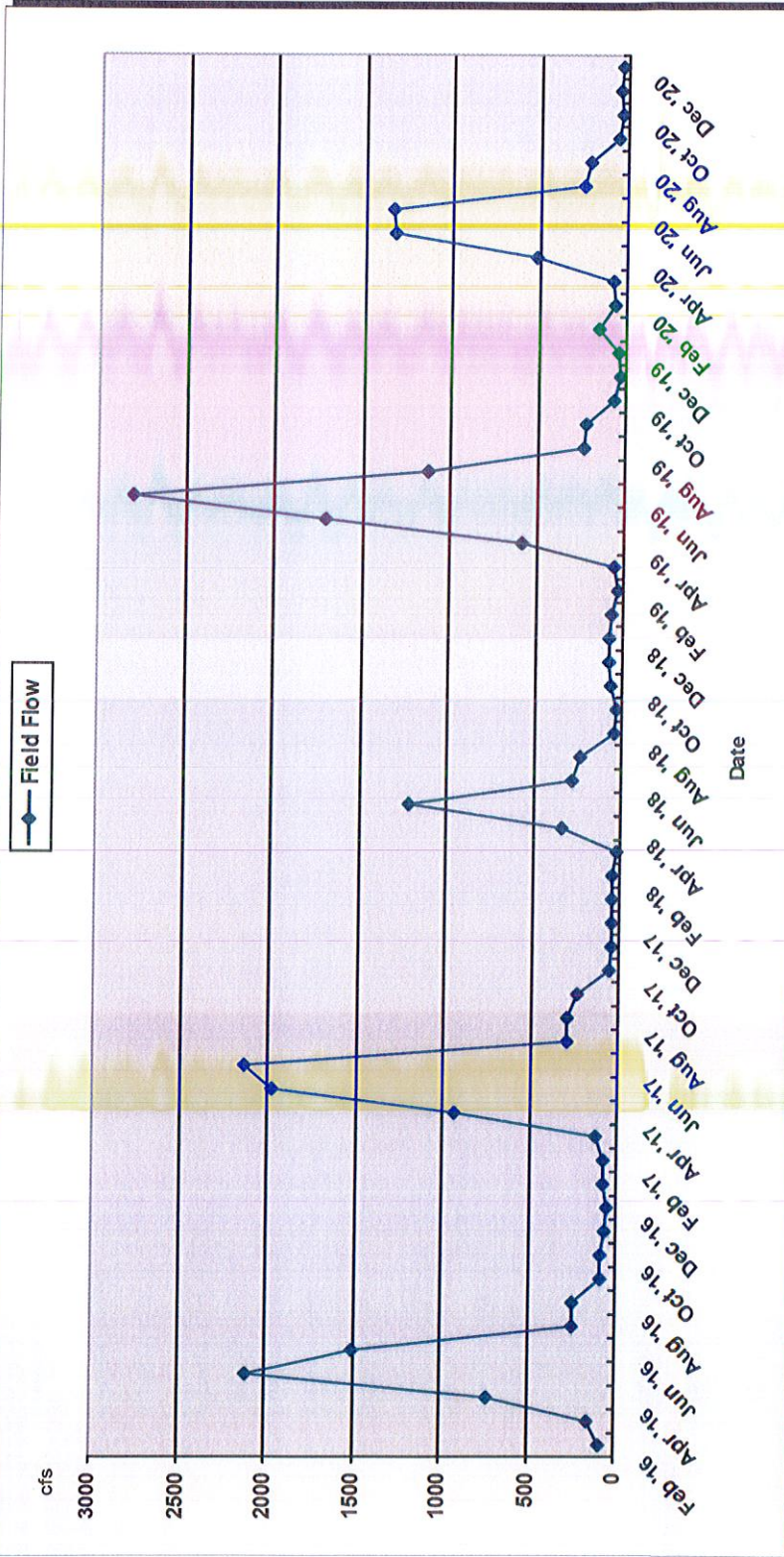
MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-1



MONITORING CHART FOR 2020 AHR

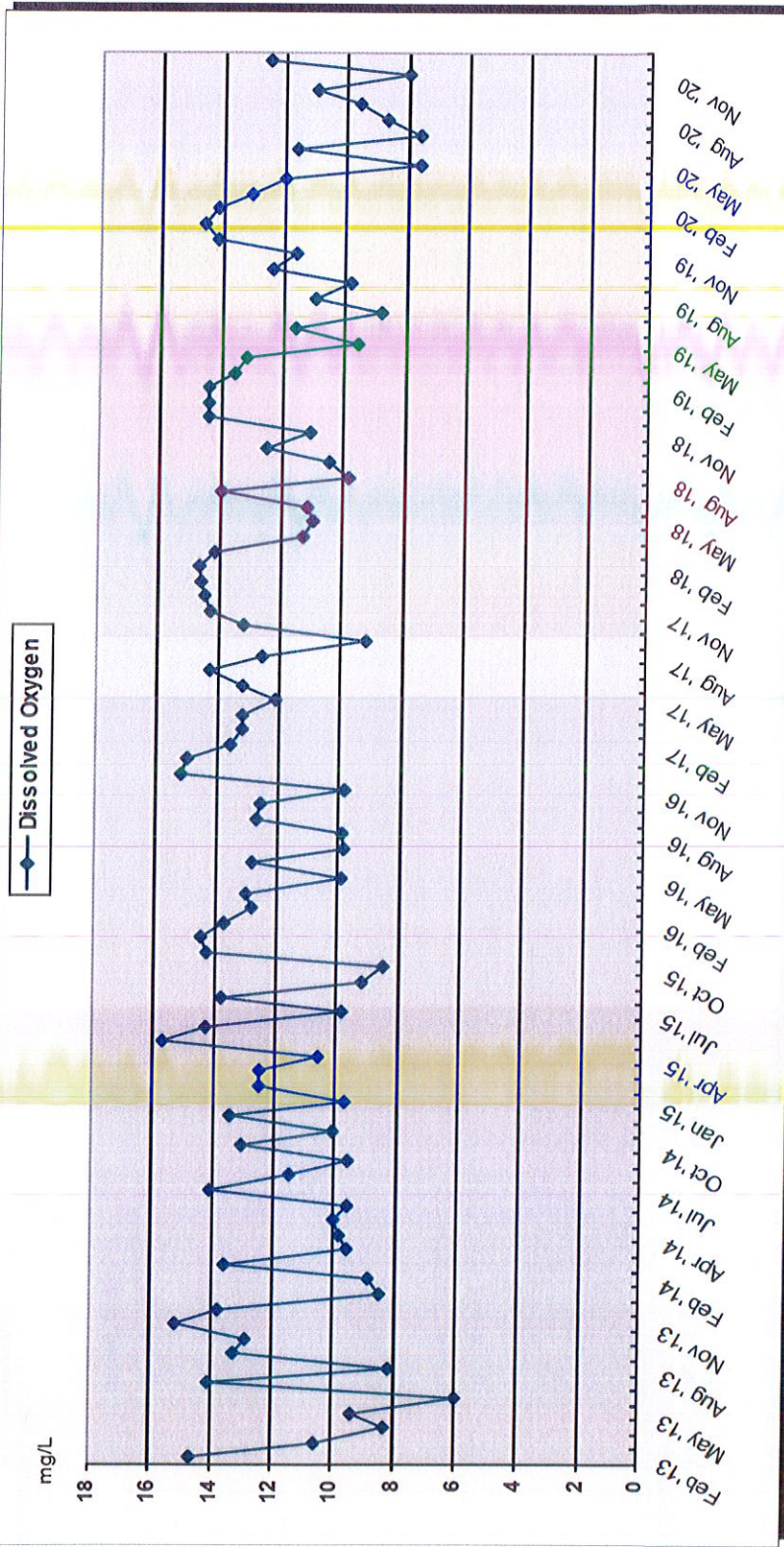
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

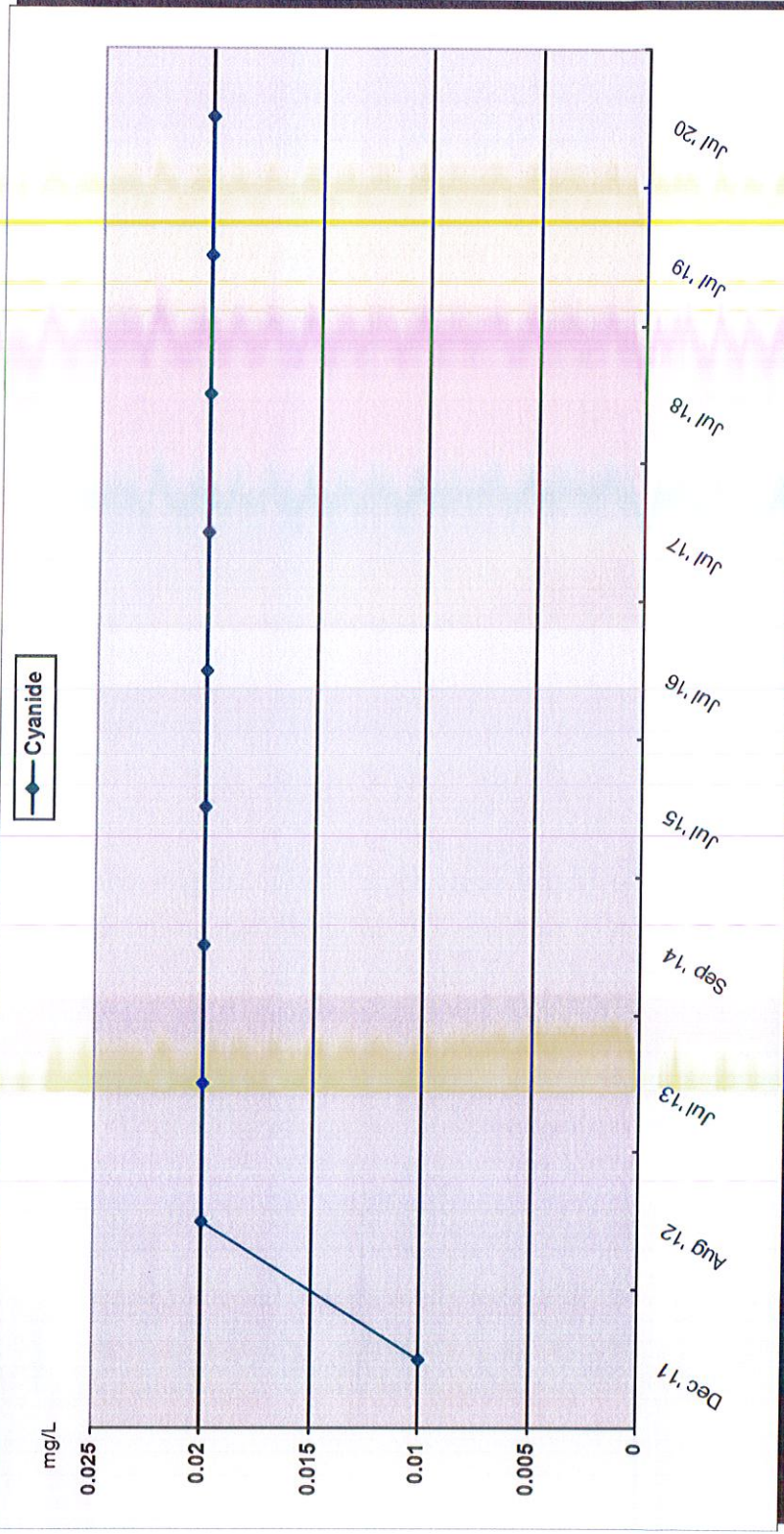
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC, Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

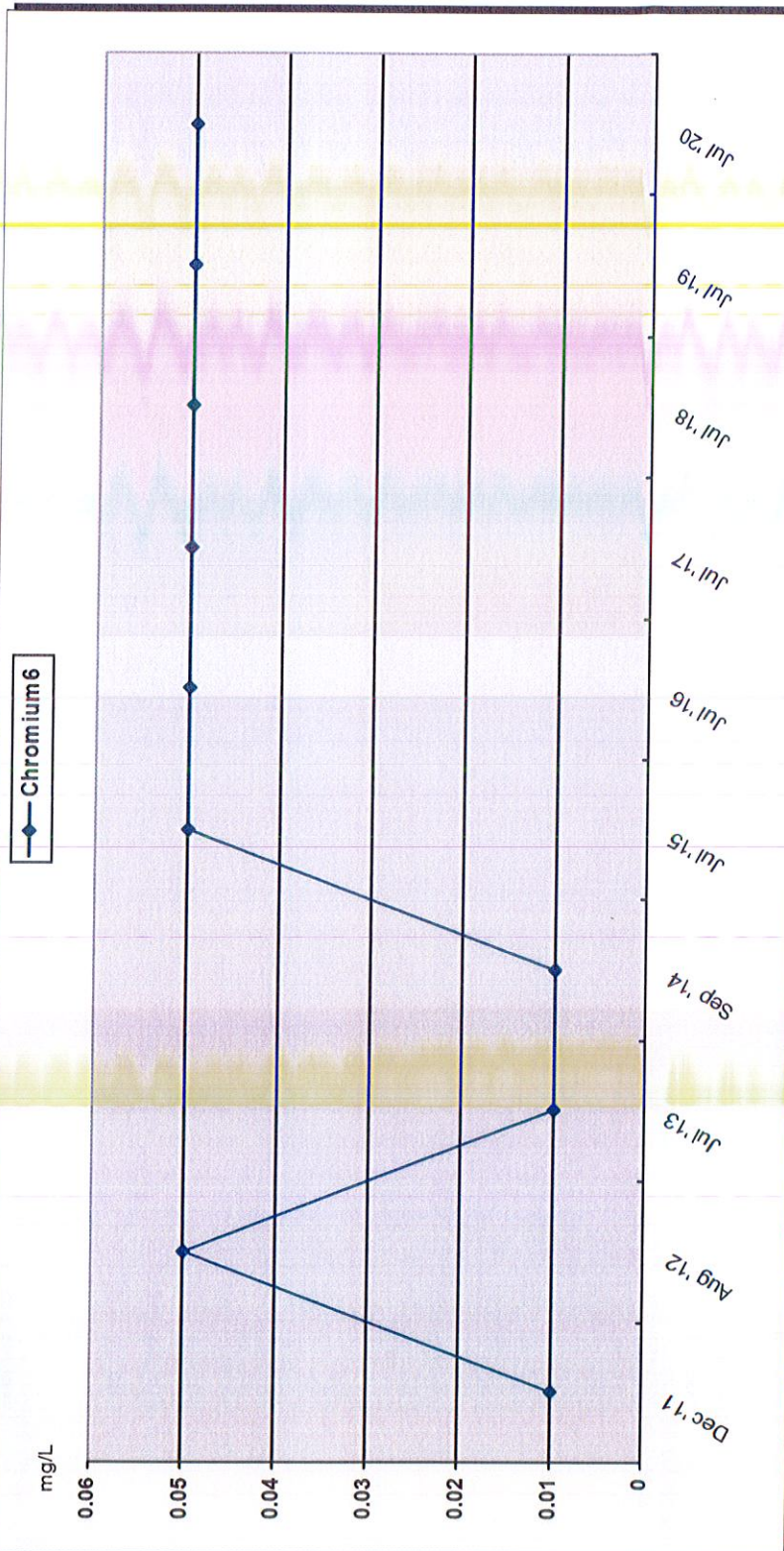


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-1

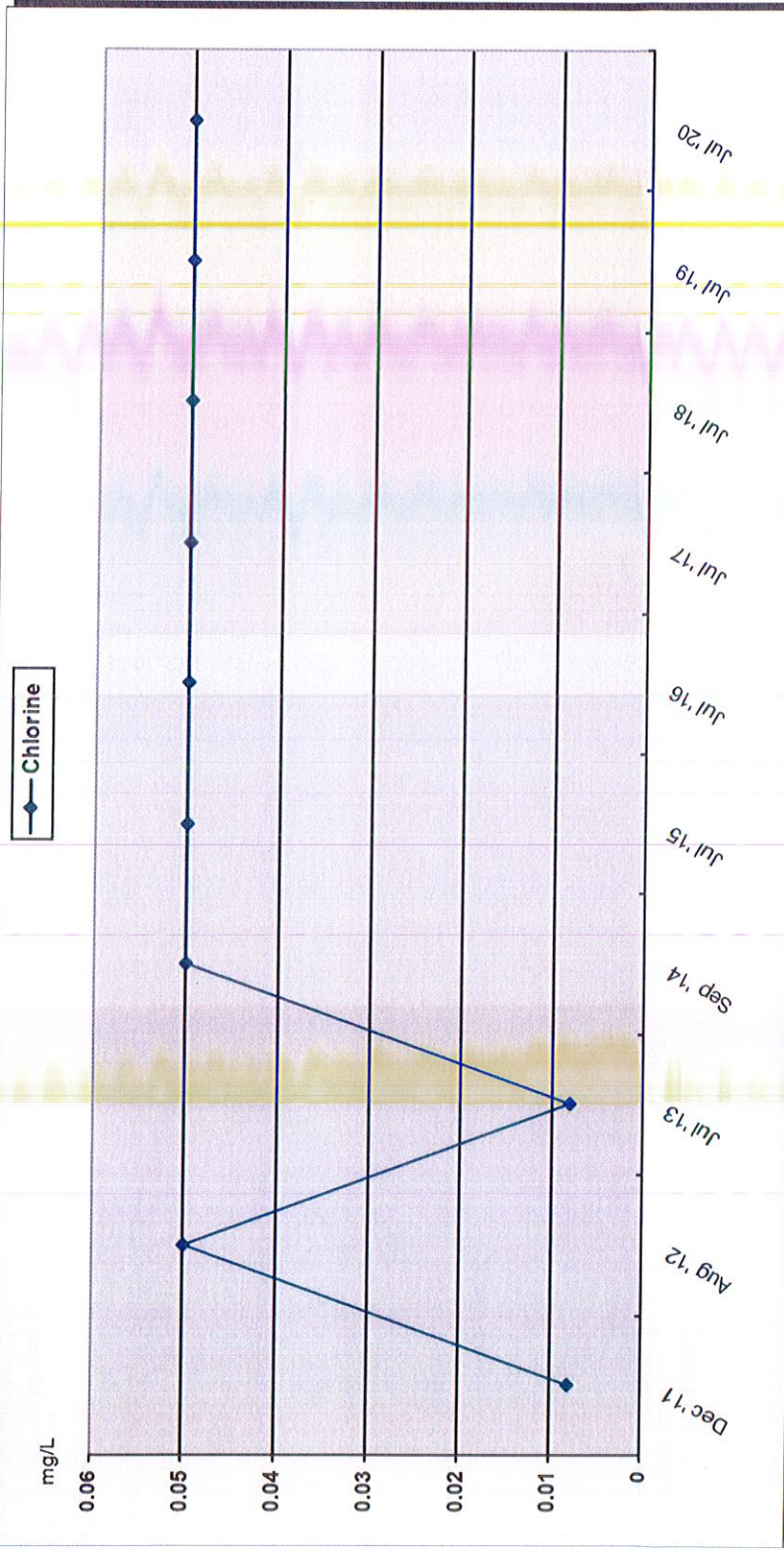


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

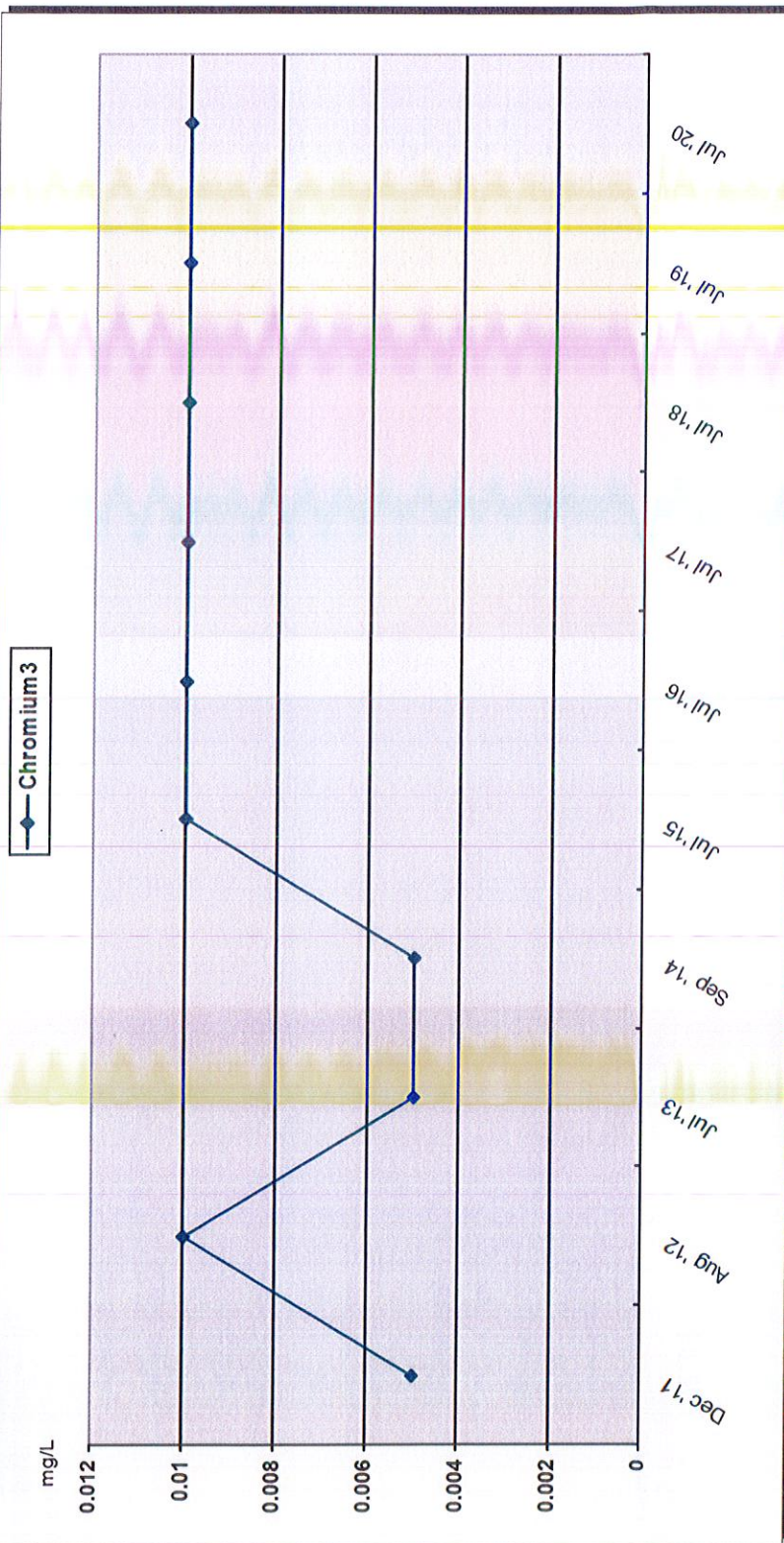
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

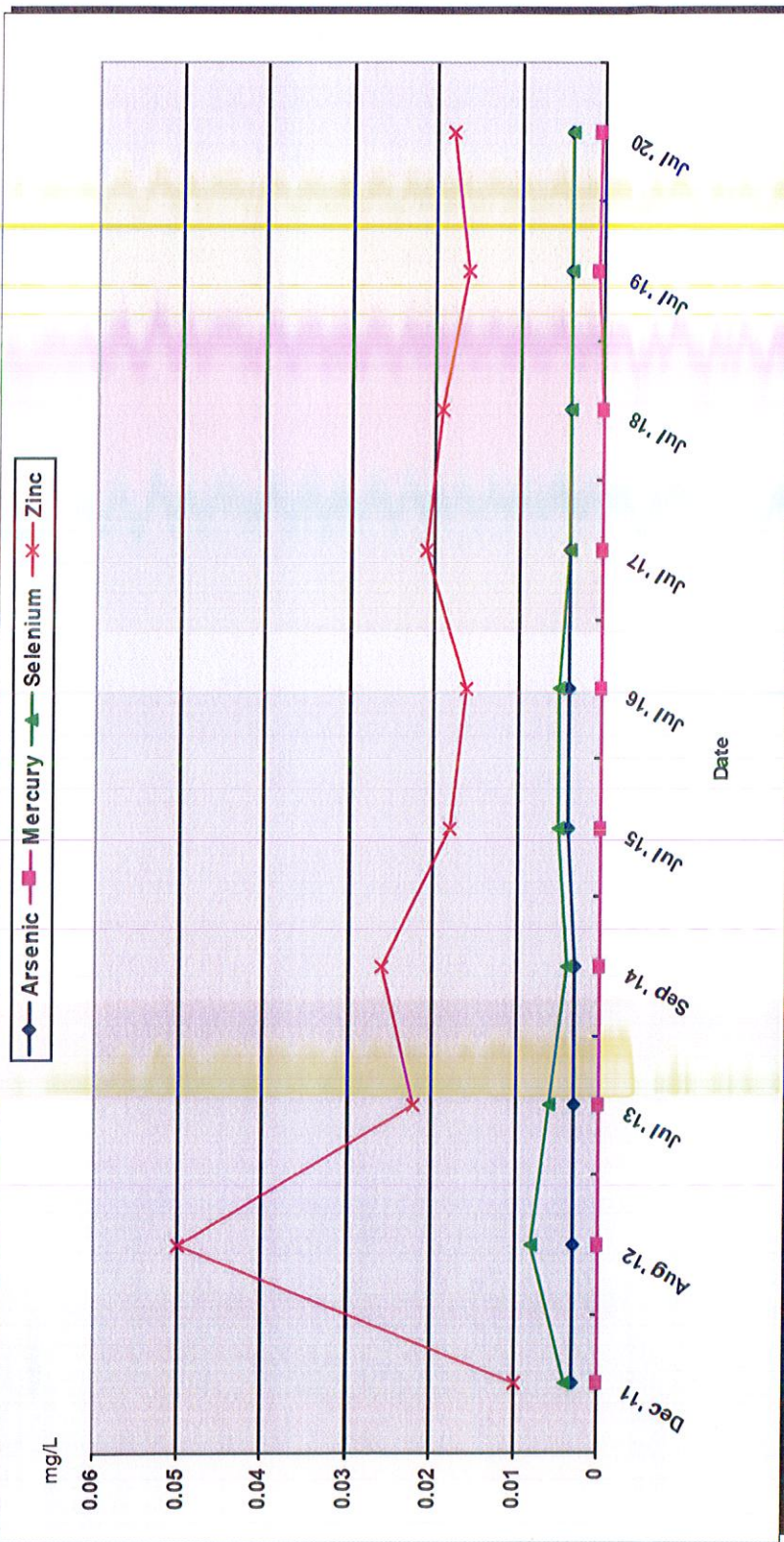
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

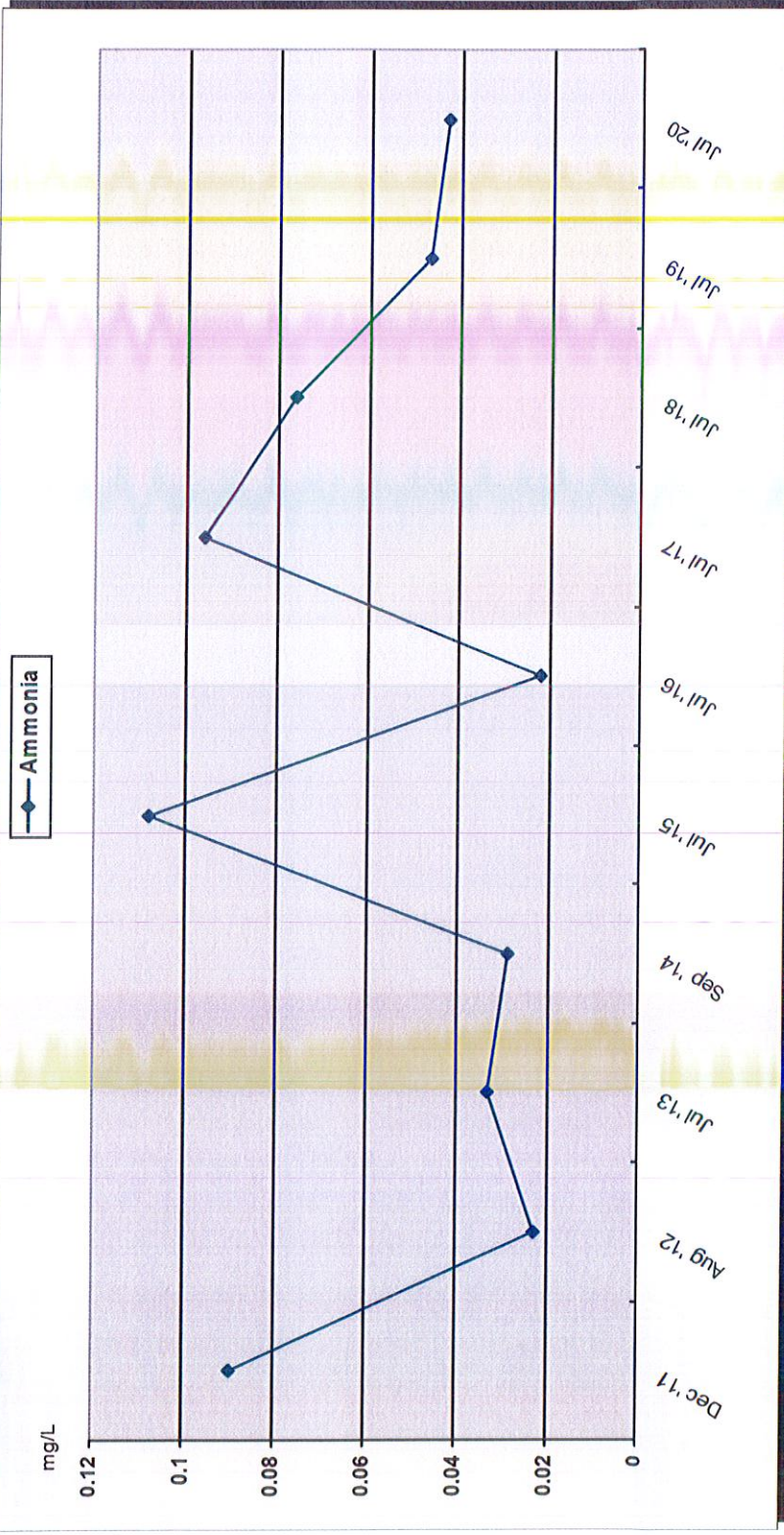
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

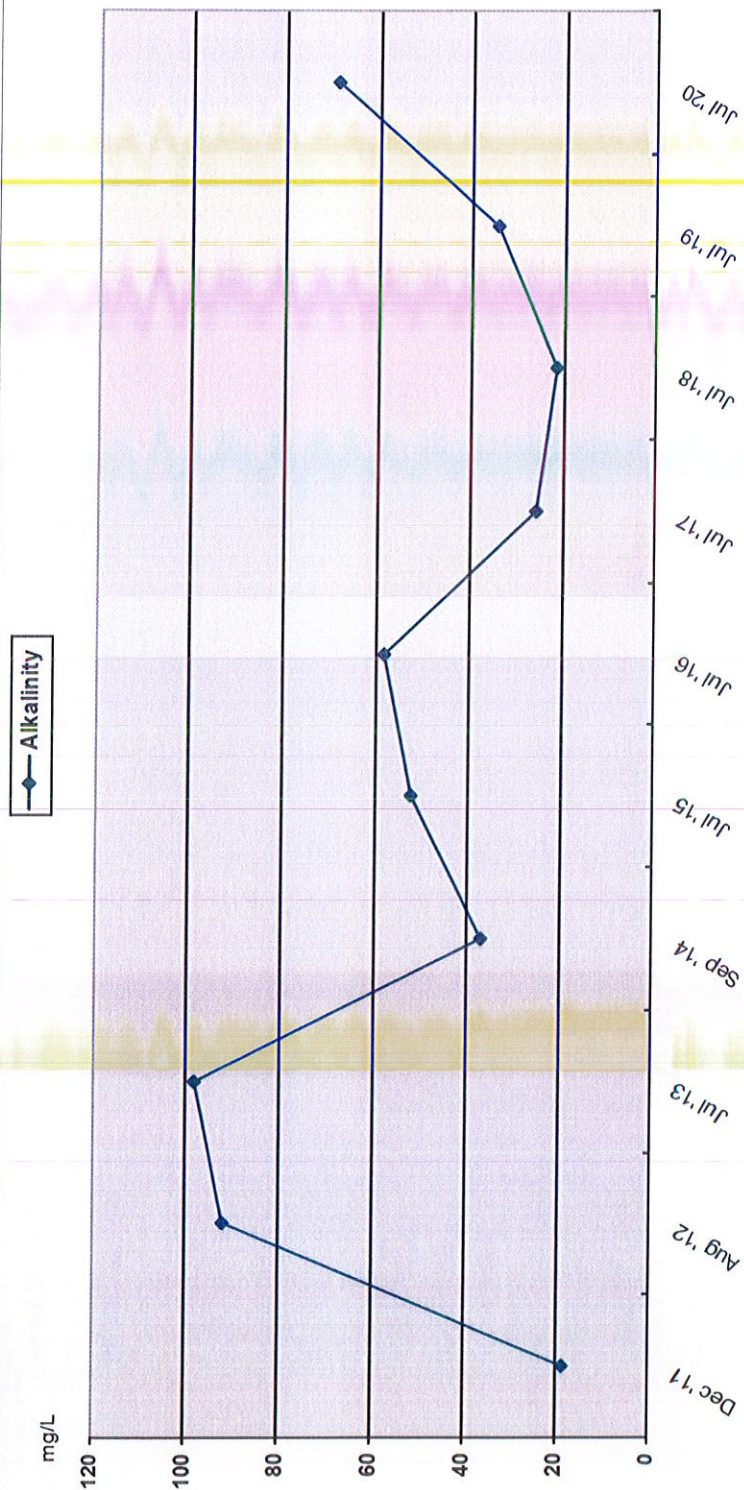
SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

NF-3 LOWER N.F. GUNNISON RIVER

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
12/3/2020	15:15	30.5	8.3	380	2									12.5																		
11/17/2020	13:00	45	7.8	310	2	79.63	7.05	211	65.8	0.3	22.18	12	174	0.08	8.1			29.3			3.4									0	0.527	0.074
10/6/2020	11:45	33.9	8	280	10.6										11.2															0	0	0
9/15/2020	11:45	60.9	8.1	280	13										10.4															0	0	0
8/12/2020	13:45	221	8.4	320	21										8.8															0	0	0
7/13/2020	15:15	250	8.3	210	17	74.07	8.39	112	#####	0.3	7	24	168	0.08	7		0.004	0.002	32.84	0.005	5.5	0.015	0.0006		0.004	19.37	0.051	0	0	0.498	0.064	
6/2/2020	9:30	1330	7.7	110	8.5										11.3															0	0	0
5/18/2020	12:55	1340	8.4	120	10	23.84	7.78	122	27.17	0.3	36.12	58	108	0.08	8.4			17.3			4.4								0	0.085	0.066	
4/27/2020	11:41	512	8.3	210	6.5										12															0	0	0
3/18/2020	11:45	80.5	8.2	210	3.5										13.1															0	0	0
2/21/2020	11:15	62	8.2	280	1										14.4															0	0	0
1/9/2020	12:00	155	8.2	290	0.5										14.6															0	0	0
12/9/2019	11:30	48.3	8.2	250	1.1										14.2															0	0	0
11/18/2019	14:15	35	8.3	310	3.3	36.54	7.94	77	48.63	0.3	19.76	10	94	0.08	10.5						3.2								0	0.466	0.067	
10/17/2019	13:30	72	8.2	290	6.1										12.4															0	0	0
8/20/2019	10:15	241	8.2	210	11.2										11.1															0	0	0
7/10/2019	12:45	1110	8.1	120	11.7	32.81	8.52	75	60.54	0.3	5.76	8	88	0.08	8.7		0.004	0.002	29.1	0.005	3.5	0.012	0.0006		0.004	18.9	0.06	0	0	0.401	0.056	
6/7/2019	11:15	2720	8.4	130	7.9										12.1															0	0.097	0.032
5/13/2019	14:15	1660	8	20	9.6	61.11	7.52	138	40.33	0.3	14.82	108	272	0.08	9.7			27.1			7.4								0	0	0	0
4/12/2019	11:20	586	7.8	250	4.1										13.4															0	0	0
3/15/2019	13:45	51	8.1	210	2										14.1															0	0	0
2/26/2019	9:00	30	8.1	140	0.6										14.7															0	0	0
1/29/2019	14:30	88	8.1	210	0.5										14.6															0	0	0
12/10/2018	13:30	83	8.2	220	0.4										14.5															0	0	0
11/14/2018	13:45	81	8.3	280	0.4	77.78	7.83	167	10.02	0.3	17.74	22	168	0.08	11.6			19.68			9.3								0	0.072	0.015	
10/17/2018	12:45	62.2	8.2	250	6										12.5															0	0	0
9/18/2018	13:50	224	8.4	290	17										9.7															0	0	0
9/14/2018	13:37	33.7	8.3	260	15.2										10.1															0	0	0
8/27/2018	10:35	46.7	7.7	280	13.7										10.7															0	0	0
7/11/2018	13:47	241	7.8	250	20.9	24.25	7.69	129	33.25	0.3	38.22	11	106	0.08	14		0.004	0.002	26.33	0.005	3.9	0.012	0.00008		0.004	18.55	0.019	0	0	0.502	0.076	
6/22/2018	9:36	280	8.7	230	10.7										11.2															0	0	0
5/14/2018	10:30	1210	8.7	160	7.1										12															0	0	0
4/24/2018	13:40	333	8.6	190	10.4										11.5															0	0	0
3/8/2018	10:30	25	8.9	320	1.7										15															0	0	0
2/5/2018	10:15	45	8.5	290	0.1										14.7															0	0	0
1/5/2018	9:30	40	8.3	350	0.3										14.7															0	0	0

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
12/8/2017	12:45	45	8.2	340	0.1										14.7																
11/13/2017	13:00	42.1	8.6	300	4.8	27.44	6.83	140	29.76	0.3	19.35	36	89	0.08	13.8			25.43		4.1						21.78		0	0	0.399	0.066
10/19/2017	12:05	56.2	8.1	250	4.4									12.9														0	0		
9/11/2017	11:45	233	8.4	340	18.1									9.8														0	0		
8/8/2017	10:40	289	8.1	230	13.7									12.8														0	0		
7/19/2017	12:15	289	9.1	190	19	29.63	7.58	120	28.76	0.3	45.86	10	96	0.08	13.8		0.004	0.002	25.69	0.005	4.4	0.015	0.00009	0.004	22.44	0.021	0	0	0.438	0.072	
6/6/2017	11:15	2170	8.4	100	8.9									13.4														0	0		
5/17/2017	10:15	1980	8.6	160	5.6	28.6	7.39	79	32.4	0.3	46.1	68	54	0.08	12.7			17.8		5.2					20.9		0	0	0.111	0.087	
4/28/2017	11:30	937	9.1	240	5.3									13														0	0		
3/8/2017	10:45	128	8.9	400	2.2									13.8														0	0		
2/3/2017	11:15	83	8.7	350	0.3									14.6														0	0		
1/18/2017	12:30	83	8.3	330	0.8									14.7														0	0		
12/12/2016	11:45	60	8.6	320	0.1									14.7														0	0		
11/29/2016	9:45	66	8.4	290	0.1	58.13	7.64	278	8.39	0.3	15.64	30	264	0.08	9.9			22.6		5.4					27.3		0	0	0.59	0.051	
10/28/2016	10:35	89	8.8	330	7.3									12.2														0	0		
9/22/2016	10:00	92	8.5	310	13.6									12.2														0	0		
8/25/2016	11:20	241	9	170	15.8									10.1														0	0		
7/25/2016	11:05	245	9.3	120	16.8	92.32	8.66	235	15.21	0.3	11.54	18	0.06	0.08	9.6		0.005	0.002	16.9	0.005	4.9	0.015	0.00011	0.005	0.08	0.023	0	0	0.576	0.06	
6/9/2016	22:45	1660	8.9	50	9.7									12														0	0		
5/23/2016	22:20	2100	8.8	70	9	85.41	7.79	169	8.53	0.3	16.88	96	154	0.08	10					4.4					25.6		0	0	0.64	0.09	
4/28/2016	13:30	746	7.9	120	7.4									13.6														0	0		
3/10/2016	13:25	156	8.8	170	7.5									12.5														0	0		
2/11/2016	11:30	90	8.8	160	2.5									15.2														0	0		
12/10/2015	9:00		8.8	170	2									14.7														0	0		
11/9/2015	13:25		8.4	220	6.3									12.6														0	0		
10/21/2015	9:15		8.6	220	9.5	50.28	7.79	191	22.53	0.3	15.44	2.3	178	0.08	11.7			27.6		7.3					28.1		0	0	0.6	0.058	
9/18/2015	14:00		9	230	18									10.1														0	0		
8/4/2015	12:50		9.1	210	17.5									13.4														0	0		
7/21/2015	14:20		8.6	170	17.3	51.05	7.92	148	24.18	0.3	11.54	22	133	0.08	9.4		0.004	0.002	27.64	0.005	5.1	0.013	0.0001	0.005	29.71	0.022	0	0	0.51	0.097	
6/17/2015	14:00		8.8	110	14.8									15														0	0		
5/4/2015	14:00		9.1	110	11									15.5														0	0		
4/14/2015	10:20		8.8	120	5	88.6	7.84	242	8.53	0.3	16.88	28	182	0.08	12.8			15		4.4					18.8		0	0	0.64	0.09	
3/3/2015	1:30		9.1	90	6.3									11.5														0	0		
2/3/2015	14:00		9.3	110	4.3									13														0	0		
1/9/2015	14:20		8.4	130	0.3									9.5														0	0		
12/18/2014	14:15		9.3	100	4									13.4														0	0		

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
11/11/2014	11:15		9.3	120	1.5	65.67	7.78	279	39.24	0.3	24.69	75	255	0.08	10.2				51.6		14.6					17.8	0	0	7.38	0.02	
10/31/2014	11:15		9.5	110	5.8									13.8													0	0			
9/10/2014	10:20		9	90	12	40.29	6.86	167	53.12	0.3	13.17	34	148	0.08	9.6		0.003	0.003	28.2	0.005	10.0	0.012	0.00003	0.005	32.6	0.023	0	0	0.61	0.14	
8/25/2014	13:45		8.4	170	18.4									12.1													0	0			
7/8/2014	9:15		8.7	70	13									13.8													0	0			
6/11/2014	1:20		8.9	140	12.9									8.1													0	0			
5/19/2014	13:40		9.1	70	10.9									10.2													0	0			
5/13/2014	14:15	1660	8	20	9.6									11.3													0	0			
4/8/2014	10:50		8.7	130	5.7	84.13	6.69	177	9.74	0.3	12.77	59	138	0.08	9.7				38.6		20.2					16.57	0	0	0.89	0.02	
3/8/2014	13:20		8.9	140	7									13.5													0	0			
2/24/2014	14:20		8.7	130	2.6									13													0	0			
1/15/2014	13:45		8.1	130	0.2									8.6													0	0			
1/31/2013	9:15																										0	0			
12/5/2012	12:30		9.4	200	2	93.44	8.35	199	76.22	0.3	4.38	172	5	0.046	8.5				48		17.4					64.8	0	0	0.1	0.06	
11/20/2012	13:00		7.7	160	5.3									11.8													0	0			
10/10/2012	13:30		8.5	160	11.4									12.2													0	0			
9/6/2012	13:00		8.3	200	15.5									11.2													0	0			
8/2/2012	11:25		9.3	180	23	85.79	8.48	155	#####	0.3	2.67	34	102	0.051	11.3		0.003	0.001	41.2	0.005	8.0	0.01	0.00004	0.007	33.2	0.04	0	0	0.53	0.07	
7/30/2012	12:40		9.2	200	24									11													0	0			
6/13/2012	10:40		8.4	100	17.2									10.3													0	0			
6/8/2012	11:15		8.3	100	13									14.8													0	0			
5/9/2012	12:03		8.1	80	7.8	41.11	7.54	132	54.59	1.13	36.55	12	104	0.08	8.4				9.58		2.6					5.15	0	0	0.19	0.02	
4/23/2012	13:45		8	70	15.1									14.2													0	0			
3/26/2012	13:00		7.7	115	7.4									12.9													0	0			
2/20/2012	15:00		7.8	230	3									14.7													0	0			
1/10/2012	13:00		7.5	140	3.2									14.6													0	0			
12/5/2011	15:00		8.1	190	1.1	18.53	8.03	272	2.97	0.3	6.17	150	2	0.14	7.4		0.002	0.005	25.2	0.005	3.0	0.09	0.000025	0.003	9	0.01	0	0	0.18	0.02	
11/18/2011	14:00		8.6	150	3									14.2													0	0			
10/7/2011	13:00		8.3	180	8.4									12.9													0	0			
9/8/2011	12:00		9.4	180	17.7									12.9													0	0			
8/15/2011	12:15		8.6	130	17.4	8.42	8.12	153	7.44	0.3	8.64	15	129	0.26	9.7		0.004	0.007	25.8	0.005	3.0	0.017	0.00025	0.005	10.49	0.022	0	0	0.27	0.13	
7/26/2011	15:00		8.5	110	14.4									12.5													0	0			
6/14/2011	14:00		8.3	70	11.6									14.2													0	0			
5/23/2011	13:55		8.8	140	7.6									15.8													0	0			
4/19/2011	14:00		8.5	130	12.9	84.24	7.63	159	21.8	0.36	75.46	546	200	0.08	8.3				19.9		12.4					9.92	0	0	13.91	0.08	
3/30/2011	14:15		8.4	210	6									13													0	0			

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
2/4/2011	14:30		8.9	270	1.5										13.9																	
1/21/2011	14:20		8.7	240	2										14.9																	
12/21/2010	11:15		8.7	210	1										12.3																	
11/2/2010	12:45		8.7	210	5.2	87.49	7.62	245	12.71	0.43	20.99	66	248	0.08	9.5				24.3		5.8					19.29					0.08	0.01
10/27/2010	1:15		9	160	4.6										14.1																	
9/27/2010	2:00		8.4	270	17										11.7																	
8/5/2010	12:50		9.2	130	20	52.7	7.59	142	20.42	0.3	8.64	76	168	0.023	12.6		0.005	0.002	13.36	0.005	2.6	0.012	0.00016		0.006	10.02	14			0	0.35	0.04
7/15/2010	2:20		8.9	150	19										13.5																	
6/4/2010	12:20		9.8	75	10.2										13.9																	
5/18/2010	11:10		9.1	90	8.5	45.65	7.51	145.2	21.3	1.93	34.99	108	141	0	8.2				16.5		4.9					4.91				11.07	0.08	
4/22/2010	1:30		9.1	100	5.9										12.9																	
3/3/2010	1:30		9.4	250	2										11.2																	
2/23/2010	1:30		9.4	450	2.1										13.9																	
1/28/2010	1:30		9.1	280	1.6										17.2																	
12/9/2009	10:30		8.7	210	1										14																	
11/16/2009	10:15		8.4	230	2.8										13.2																	
10/12/2009	11:30		8.5	220	6.9	150	8.01	290	8	0.02	16	5	170	0.3	13.8				27		5.8	0.023				33				0	0.19	0.01
9/25/2009	9:15		7.2	160	15.3										10.9																	
8/5/2009	10:45		8.2	140	19.6	110	8.19	150	2	0.02	7	12	120	0.11	9.4		0.01	0.005	22	0.01	4.3	0.005	0.0002		0.002	12	0.005			2.1	0.03	
7/17/2009	1:15		7	140	18.5										4																	
6/22/2009	9:45		7.8	90	12.9										15.8																	
5/6/2009	10:00		7.8	90	7.1	72	8.04	110	1	0.12	5	230	100	0.04	15.2				21		6.2					5.3				7.8	0.05	
4/29/2009	10:55		8.3	120	5.7										14.5																	
3/9/2009	10:25		8	200	4.4										13.8																	
2/5/2009	12:30		7.8	110	1										14.9																	
1/16/2009	11:45		7.7	290	0.6										13.8																	
12/2/2008	14:00		8.1	160	2.8										13																	
11/17/2008	14:00		8.2	170	6.3										12																	
10/15/2008	13:00		7.4	160	4.6										11.2																	
9/11/2008	13:00		7.2	170	16										11.3																	
8/5/2008	12:35		8.4	130	16	82	8.10	140	2	0.02	7	5	96	0.01	8.3		0.01	0.005	19	0.05	3.3	0.005	0.0002		0.002	7.5			0	0.18	0.02	
7/29/2008	13:45		7.8	180	19										12.1																	
6/18/2008	10:20		8.8	550	18	47	7.83	91	1		5	130	65	0.07	10.4				14		3.3					3				4.6	0.03	
6/18/2008	10:20		8.5	60	10.4	47	7.83	91	1	0.05	5	130	65	0.07	10.4				14		3.3					3				4.6	0.03	
5/29/2008	14:00		8.5	310	14.3										5.8																	
5/23/2008	11:10		8.5	100	6.3										11																	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
4/21/2008	13:45		8.6	200	8.9										13																	
4/18/2008	14:40		8.1	160	7.6										13.8																	
3/26/2008	14:40		8.7	180	7.8										8.3																	
3/26/2008	14:40		8.7	180	7.8										8.3																	
1/30/2008	12:00		8.3	200	1										9																	
1/30/2008	12:30		8.3	200	1										9																	
12/18/2007	12:45		8.31	150	0.8										17																	
11/13/2007	13:30		7.5	180	1										12.3																	
10/24/2007	14:00		8.58	120	7.8										12.3																	
9/11/2007	13:40		8.3	200	16.8										10																	
8/7/2007	13:10		7.98	140	14.5										10.3																	
7/17/2007	1:15		7.84	160	17.2										10.3																	
6/15/2007	13:00		8.05	80	13										10.2																	
5/15/2007	14:30		7.6	90	7.9										10.5																	
4/26/2007	14:30		8.2	110	9.3										11.7																	
3/12/2007	14:00		7.95	100	4																											
2/21/2007	13:00		7.74	190	3																											
1/19/2007	13:00		8	190	1										9.5																	
12/18/2006	10:00		7.48	170	0.8										8.7																	
11/22/2006	10:00		7.81	140	1.8										29.3																	
10/17/2006	10:00		8.49	112	8										12.2																	
9/19/2006	11:40		8.4	150	8										4.1																	
8/10/2006	10:00		8.95	160	18										19.8																	
7/21/2006	11:45		7.38	130	19.1										18																	
6/13/2006	10:20		8.2	80	9.5										11.7																	
5/26/2006	10:15		7.56	80	13.3										13.3																	
4/17/2006	14:10		7.85	130	6.9										13.9																	
3/27/2006	14:20		8.55	190	8										5.7																	
2/22/2006	14:30		8.39	200	1										11.5																	
1/27/2006	9:00		9.14	350	3.5																											
12/5/2005	1:15		8.43	220	10																											
11/7/2005	1:15		8.44	130	10.2																											
10/17/2005	11:45		8.59	160	15.4										26																	
9/22/2005	2:40		8.71	180	18.6																											
8/30/2005	14:20		8.72	150	16										0.01																	
8/5/2005	14:40		9.1	140	20										0.01																	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
7/25/2005	14:30		8.3	130	18																											
6/15/2005	13:00		8.42	90	10	57	7.75	100	1	0.04	5	13	88	0.01				16			2.6					5						
5/8/2005	14:40		8.27	130	10																											
4/18/2005	10:40		8.01	120	5																											
3/29/2005	9:15		8.7	140	6																											
2/22/2005	11:00		8.1	210	4																											
1/19/2005	10:40		8.57	150	1																											
12/13/2004	11:20		8.25	160	3																											
11/15/2004	10:45		8.1	180	5																											
10/8/2004	14:15		8.55	180	13																											
9/27/2004	11:30		8.8	150	10																											
8/23/2004	11:15		8.39	200	14	130	8.26	210	2	0.02	6	25	120	0.01		0.002	0.005	29		0.05	5.1	0.005	0.0002		0.002	10	0.005	0		0.48	0.04	
7/23/2004	11:00		8.6	160	15																											
6/22/2004	14:00		8.39	80	16	52	8.03	110	1	0.05	8	6	62	0.01				14			2.3					5.2				0	0.2	0.1
5/20/2004	10:20		8.76	80	10																											
4/14/2004	14:40		8.5	130	12																											
3/12/2004	13:50		8.96	160	8																											
2/26/2004	14:15		8.54	180	4																											
1/27/2004	23:30		8.5	320	1																											
12/5/2003	10:40		8	300	2																											
11/11/2003	9:15		5.6	130	5	95	7.94	180	3	0.02	12	5	120	0.01				23			5.3					16				0	0.28	0.02
10/13/2003	14:30		7.84	180	12																											
9/17/2003	13:30		9.43	170	15																											
8/26/2003	10:20		8.99	200	18	120	8.45	210	2	0.02	8	15	140	0.01		0.005	0.005	29		0.05	9.1	0.005	0.0002		0.002	19	0.005	0		0.77	0.03	
7/28/2003	12:40		9.5	150	18																											
6/17/2003	10:30		8.74	70	13	44	7.97	85	1	0.11	6	10	67	0.01				11			1.8					4.7				0	0.4	0.04
5/13/2003	12:00		8.56	100	9																											
4/10/2003	15:00		9.02	160	12																											
3/27/2003	9:00		9.03	150	5																											
2/20/2003	15:00		8.56	250	3																											
1/15/2003	9:00		8.6	300	1																											
12/10/2002			8.85	300	2																											
11/11/2002			8.01	200	1																											
10/24/2002			7.95	200	6	96	7.96	210	3	0.02	11	5	120	0.01				16			3.4					14				0	0.1	
9/6/2002			9.1	200	16																											
7/20/2002			8.1	200	22																											

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
6/27/2002			8.2	100	15	90	8.48	150	1	0.03	5	5	110	0.01	8.3	0.5	0.002	0.005	39	0.006	0.05	4.1	0.018	0.0002	0.05	0.006	11	0.007	0	0	0.35
3/27/2002						84	8.56	180	3	0.06	16	11	120	0.02	8.7	0.32	0.002	0.005	22	0.005	0.05	5.6	0.013	0.0002	0.05	0.002	13	0.005	0	0	0.16
12/19/2001	12:50		8.5	320	4	194	8.82	376	9	0.02	17	9	239	0.01	8.7	0.43	0.002	0.005	18.3	0.005	0.05	2.9	0.015	0.0002	0.05	0.002	52.8	0.015	0	0	0.44
9/28/2001	10:20		7.9	200	15	130	8.10	230	5	0.1	18	6	140	0.01	9.8	0.39	0.002	0.005	25.7	0.006	0.05	4.2	0.005	0.0002	0.05	0.002	15	0.005	0	0	0.12
6/29/2001	9:20		8.3	100	13	54	8.20	104	2	0.02	6	5	67	0.01	9.3	0.15	0.002	0.005	10.9	0.005	0.05	1.2	0.008	0.0002	0.05	0.002	10.4	0.007	0	0	0.13
3/30/2001	11:30		8.2	300	5	110	8.37	249	11	0.03	16	8	140	0.01	12.1	0.26	0.002	0.005	19.8	0.007	0.05	3.7	0.011	0.0002	0.05	0.002	25.2	0.01	0	0	0.27
12/28/2000	9:30	195	7.9	200	8	160	8.10	304	2	0.12	16	8	180	0.01	10	0.17	0.007	0.005	22.4	0.006	0.05	4.4	0.01	0.0002	0.05	0.002	26.9	0.008	0	0	0.15
9/28/2000	15:20	92	8	160	18	98	8.21	172	1	0.02	10	15	120	0.01	8.5	0.19	0.012	0.005	21.8	0.005	0.05	3.9	0.02	0.0002	0.05	0.002	12	0.012	0	0	0.22
6/29/2000	13:30	171	8	100	15	61	8.09	122	1	0.08	6	5	84	0.01	7.9	0.07	0.002	0.005	12.9	0.005	0.05	0.5	0.007	0.0002	0.05	0.002	8	0.021	0	0	0.09
3/28/2000	12:15	326	7.7	180	7	107	7.86	192	2	0.07	9	17	116	0.01	9.6	0.95	0.002	0.005	22.7	0.034	0.05	3.2	0.029	0.0002	0.05	0.002	10.9	0.026	0	0	0.86
12/15/1999	10:30	126	7.5	180	4	98	7.63	223	2	0.17	16	16	115	0.01	8.9	0.17	0.008	0.005	23.2	0.005	0.05	4.6	0.008	0.0004	0.05	0.002	15.6	0.005	0	0	0.1
9/23/1999	8:35	237	7.72	300	18	104	7.72	488	1	0.08	7	27	193	0.01	9	0.6	0.002	0.005	27.2	0.005	0.05	4.7	0.031	0.0002	0.05	0.002	8.5	0.011	0	0	0.53
8/30/1999	12:20	216	7.6	120	15	142	8.20	283	14	0.06	7	10	246	0.01	8.7	0.52	0.014	0.005	17.2	0.005	0.05	2.3	0.011	0.0002	0.05	0.017	70.1	0.005	0	0	0.31
7/27/1999	14:10	200	7.2	100	16	79	7.88	145	1	0.03	8	124	91	0.01	8.3	2.11	0.002	0.005	16.2	0.007	0.02	3.2	0.047	0.0002	0.05	0.002	7.1	0.093	0	0	2.56
6/29/1999	13:59	637	7.2	100	14	46	7.61	86	3	0.03	7	10	57	0.01	9.1	0.2	0.003	0.005	6	0.005	0.05	0.9	0.009	0.0002	0.05	0.002	5.4	0.009	0	0	0.33

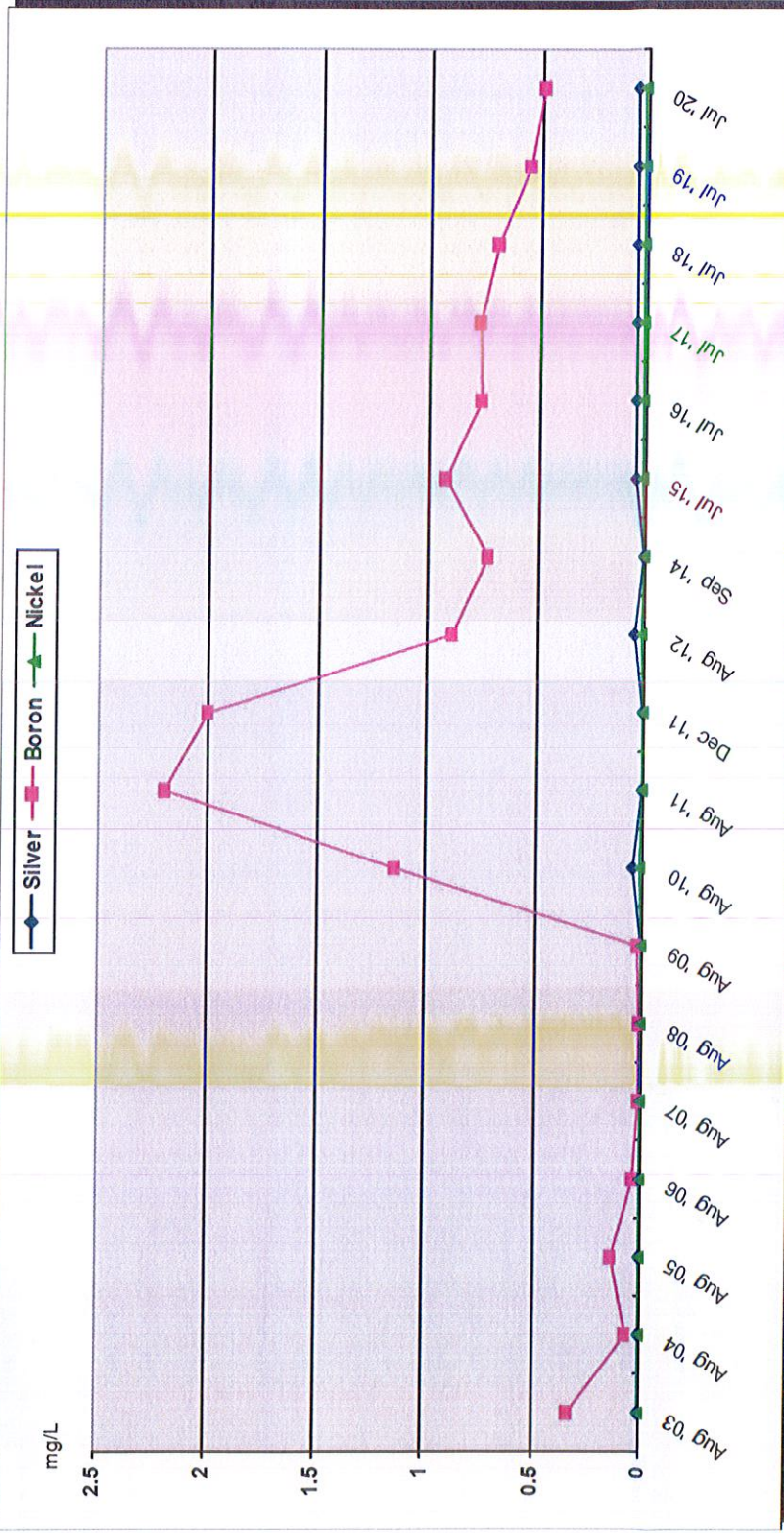
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

Date	Time	Hardness	Ammonia	Cyanide	Silver	Boron	Chromium(Trivalent)	Chromium(Hexavalent)	Chlorine	Nickel	Alkalinity(Carbonate)	Chromium(Total)	Antimony
7/13/2020	15:15	104.48576	0.049	0.02	0.05	0.49	0.01	0.05	0.05	0.02			
7/10/2019	12:45	87.11688	0.053	0.02	0.05	0.55	0.01	0.05	0.05	0.02			
7/11/2018	13:47	81.76503	0.009	0.02	0.05	0.69	0.01	0.05	0.05	0.02			
7/18/2017	12:15	82.06123	0.01	0.02	0.05	0.77	0.01	0.05	0.05	0.02			
7/25/2016	11:05	62.24	0.064	0.02	0.05	0.76	0.01	0.05	0.05	0.02			
7/21/2015	14:20	90.06	0.013	0.02	0.05	0.92	0.01	0.05	0.05	0.02	51.05		
9/10/2014	10:20	111.6	0.027	0.02	0.005	0.73	0.005	0.01	0.05	0.01			
8/2/2012	11:25	135.82	0.021	0.02	0.05	0.89	0.01	0.05	0.05	0.02			
12/5/2011	15:00	75.23722	0.11	0.01	0.005	2	0.005	0.01	0.008	0.005			
8/15/2011	12:15	76.85896	0.13	0.01	0.005	2.2	0.005	0.01	0.008	0.005			
8/5/2010	12:50	44.06672	0.025	0.02	0.05	1.14	0.01	0.05	0.05	0.02			52.7
10/12/2009	11:30	90											
8/5/2009	10:45	70	0.22	0.005	0.005	0.03	0.005	0.005		0.01		0.005	
8/5/2008	12:35	60		0.005	0.005	0.02	0.005	0.005	0.1	0.01			
8/7/2007	13:10	62	0.1	0.005	0.005	0.02	0.005	0.005	0.1	0.01			
8/10/2006	10:00	60		0.005	0.005	0.04	0.005	0.005		0.01		0.005	
8/30/2005	14:20	64	0.05	0.005	0.005	0.14	0.005	0.005		0.01			
8/23/2004	11:15	94	0.05	0.005	0.005	0.07	0.005	0.005	0.1	0.01			
8/26/2003	10:20	84	0.05		0.005	0.34	0.005	0.005		0.01		0.005	0.002

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

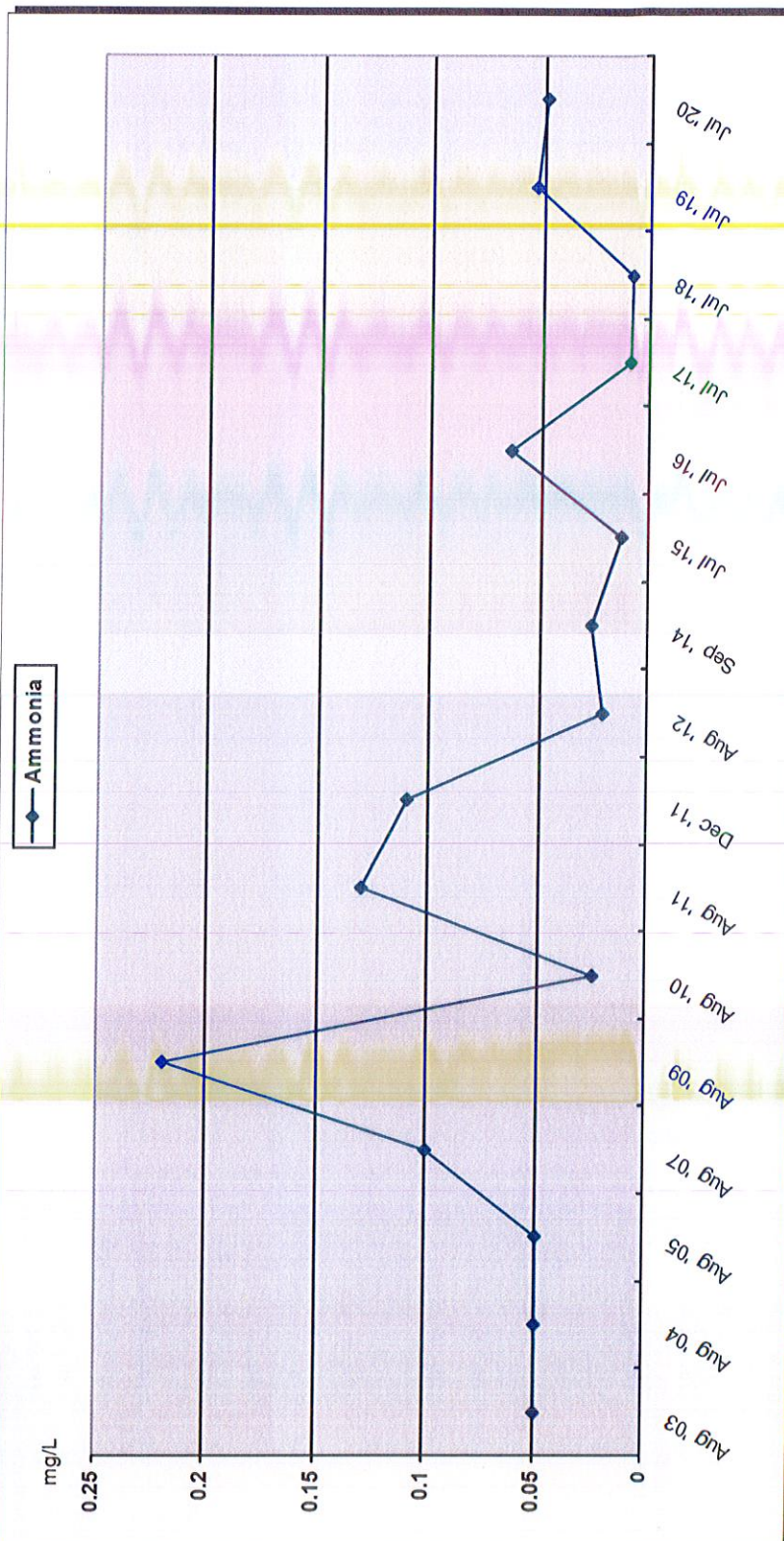


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

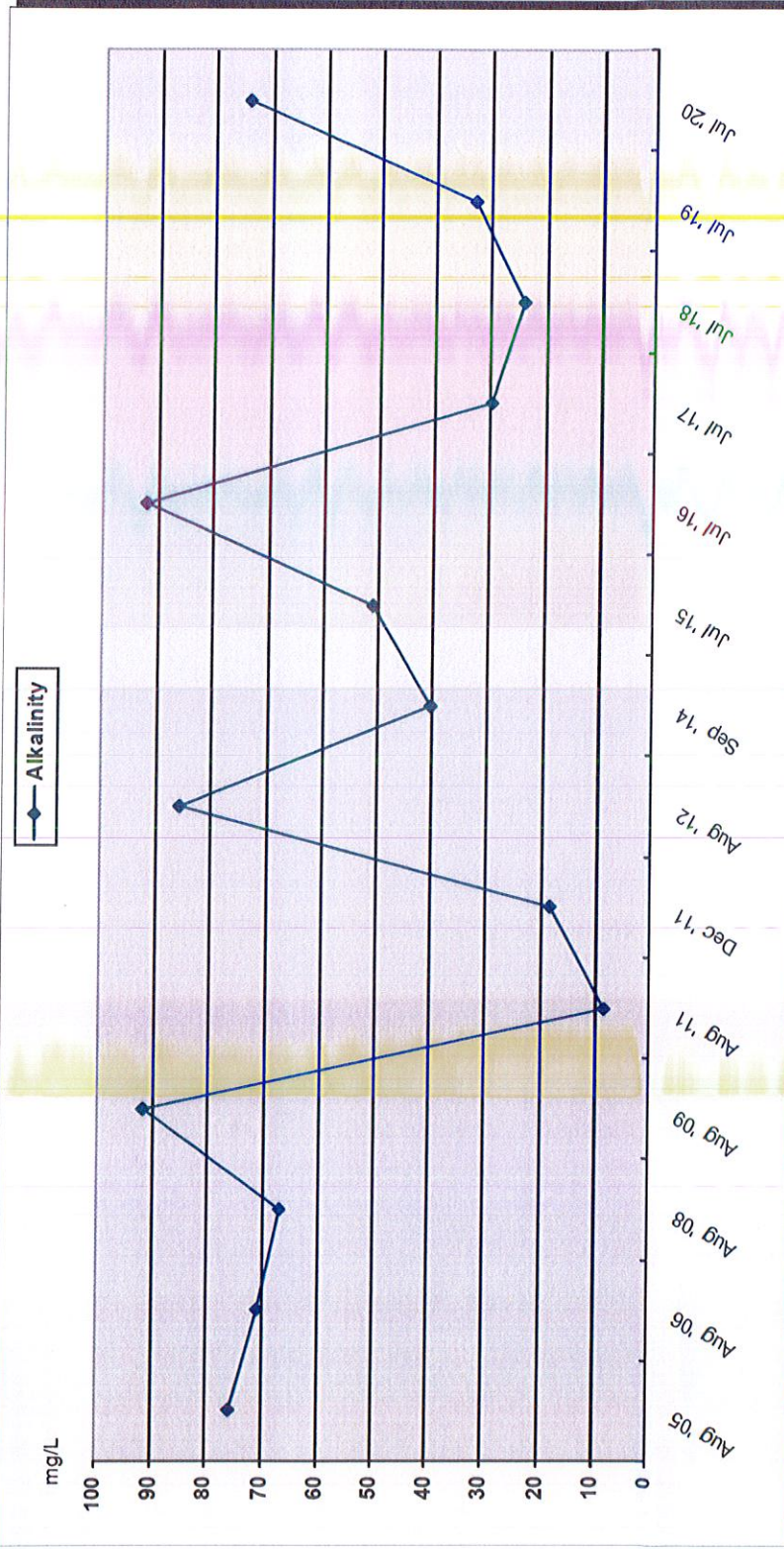
SURFACE WATER LOCATION: NF-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

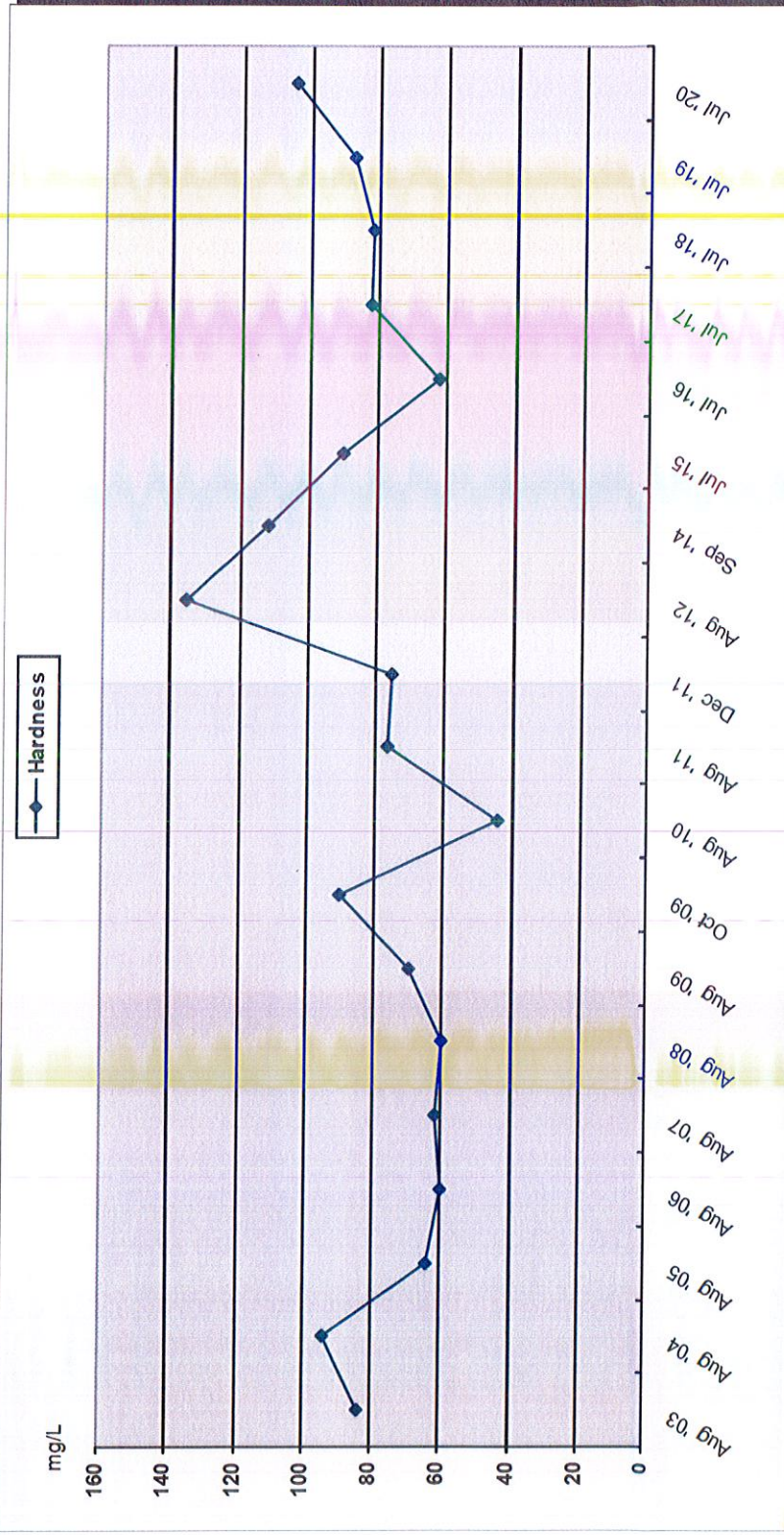
SURFACE WATER LOCATION: NF-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

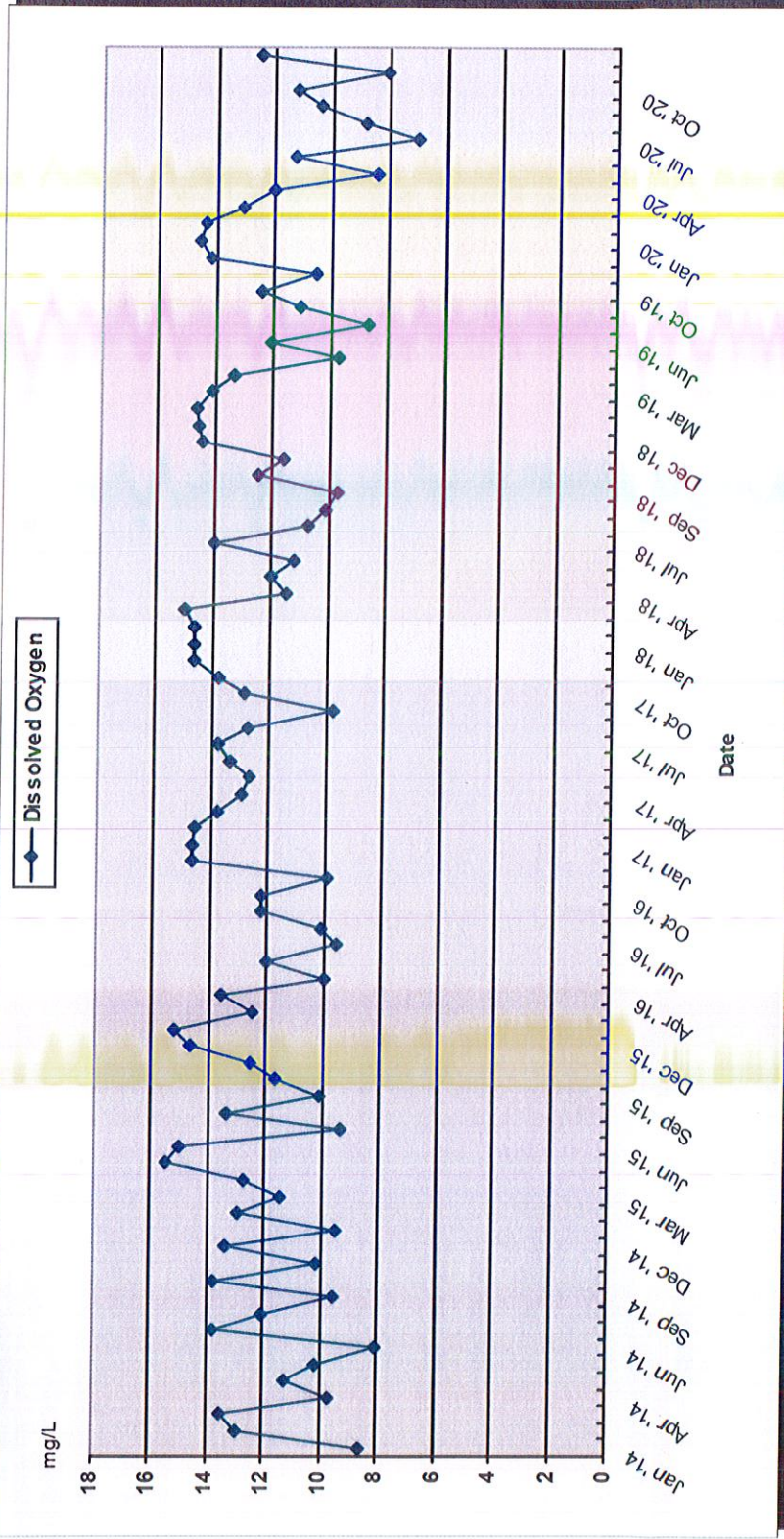


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

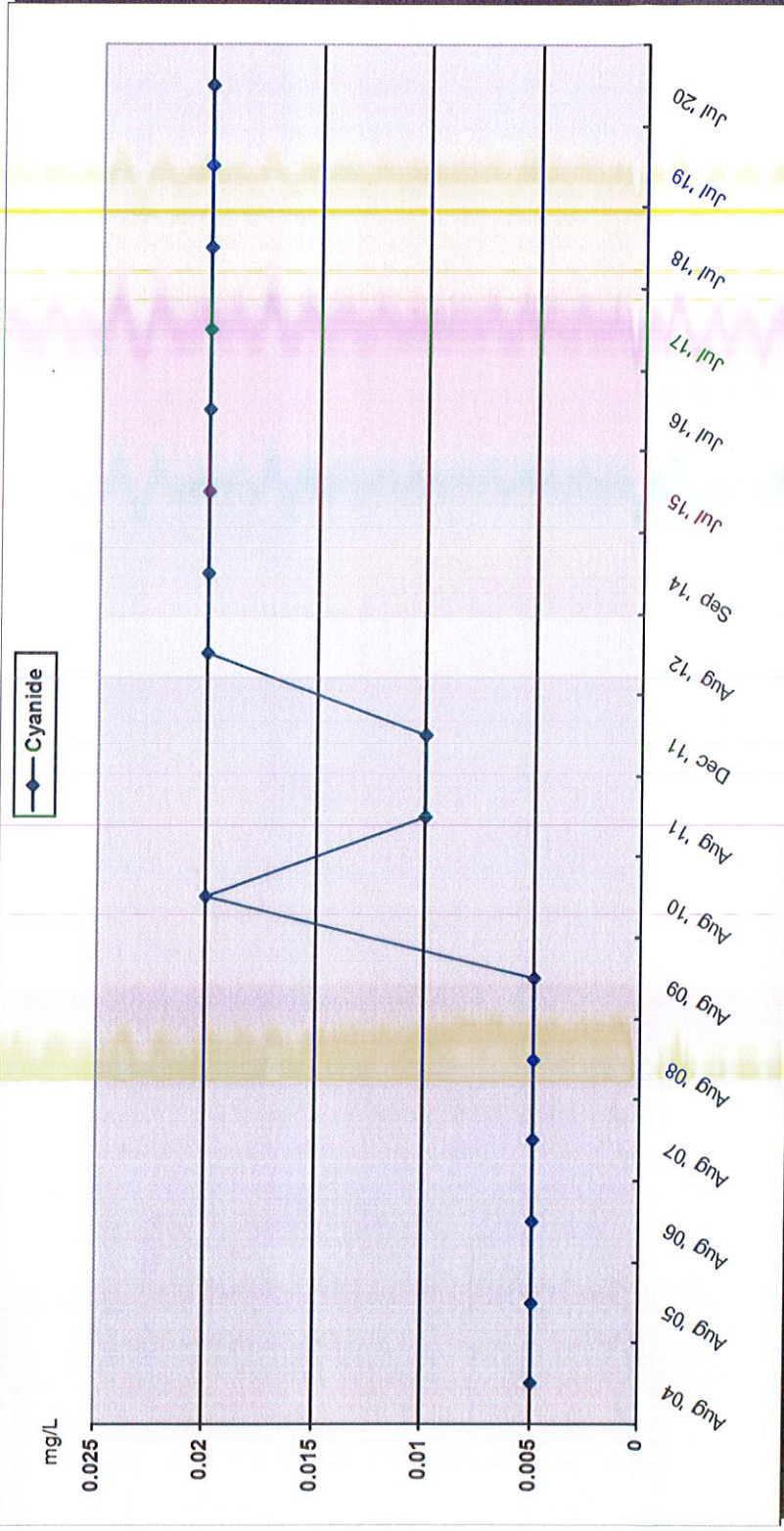


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

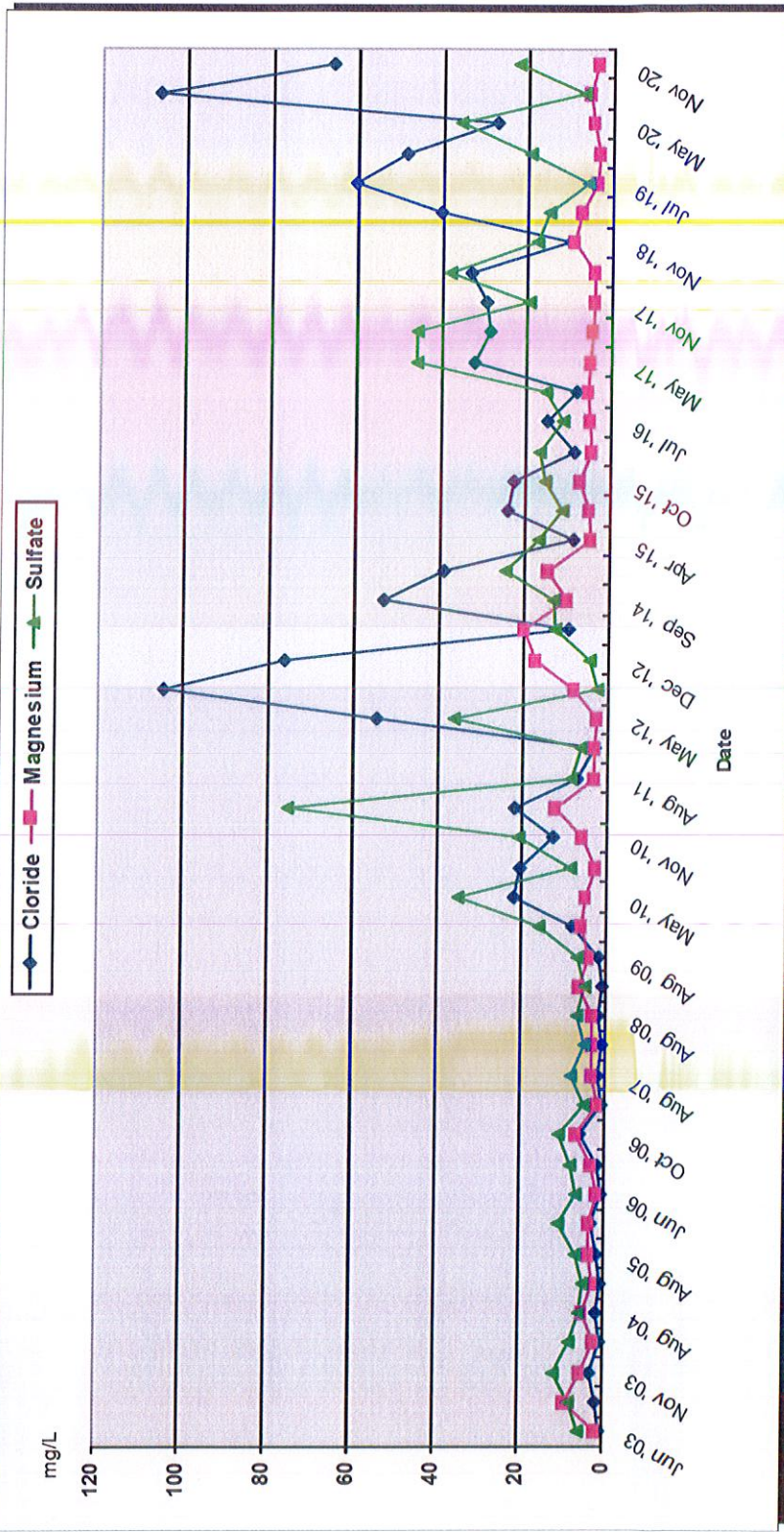


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

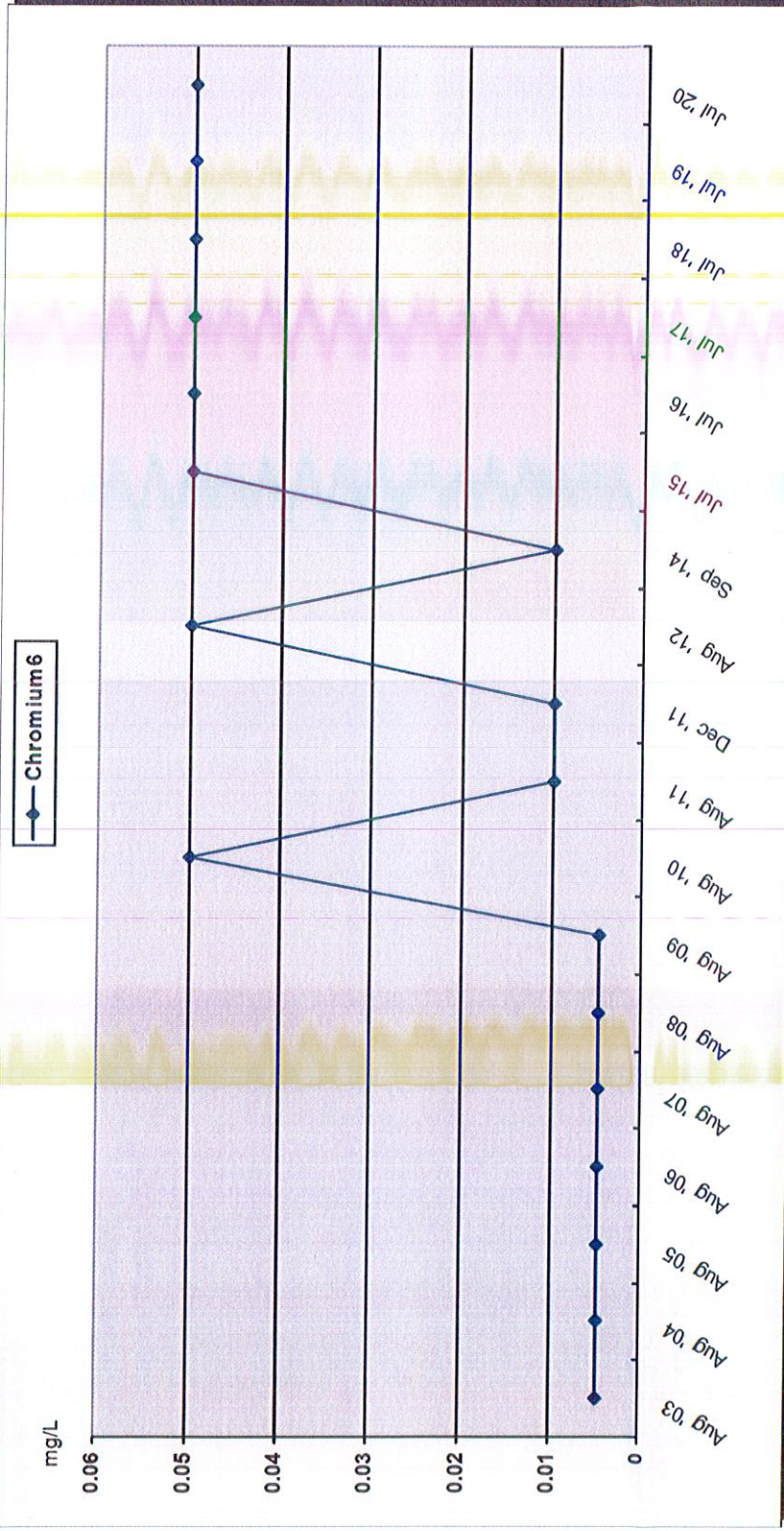
SURFACE WATER LOCATION: NF-3



Oxbow Mining, LLC., Elk Creek Mine
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MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

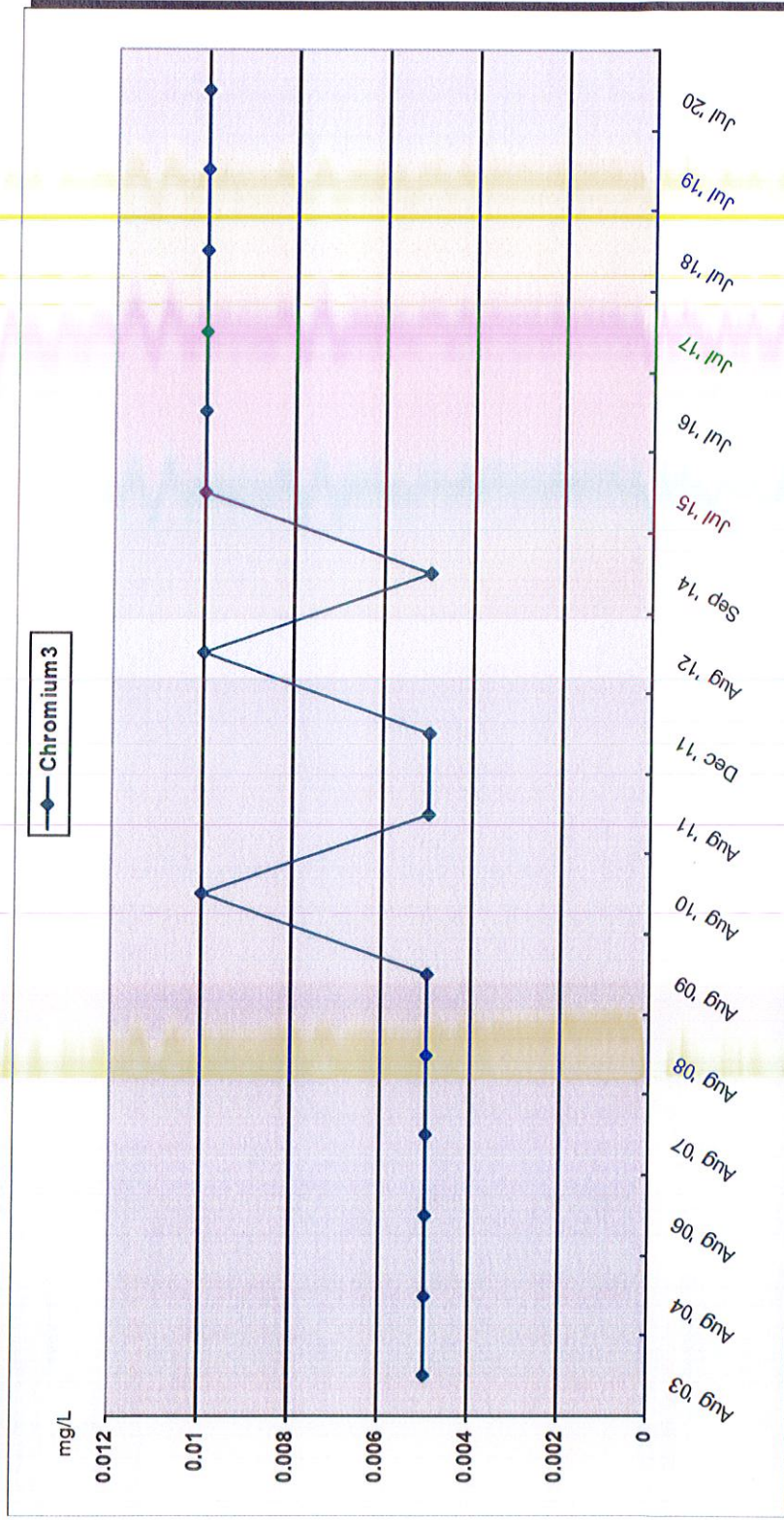


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

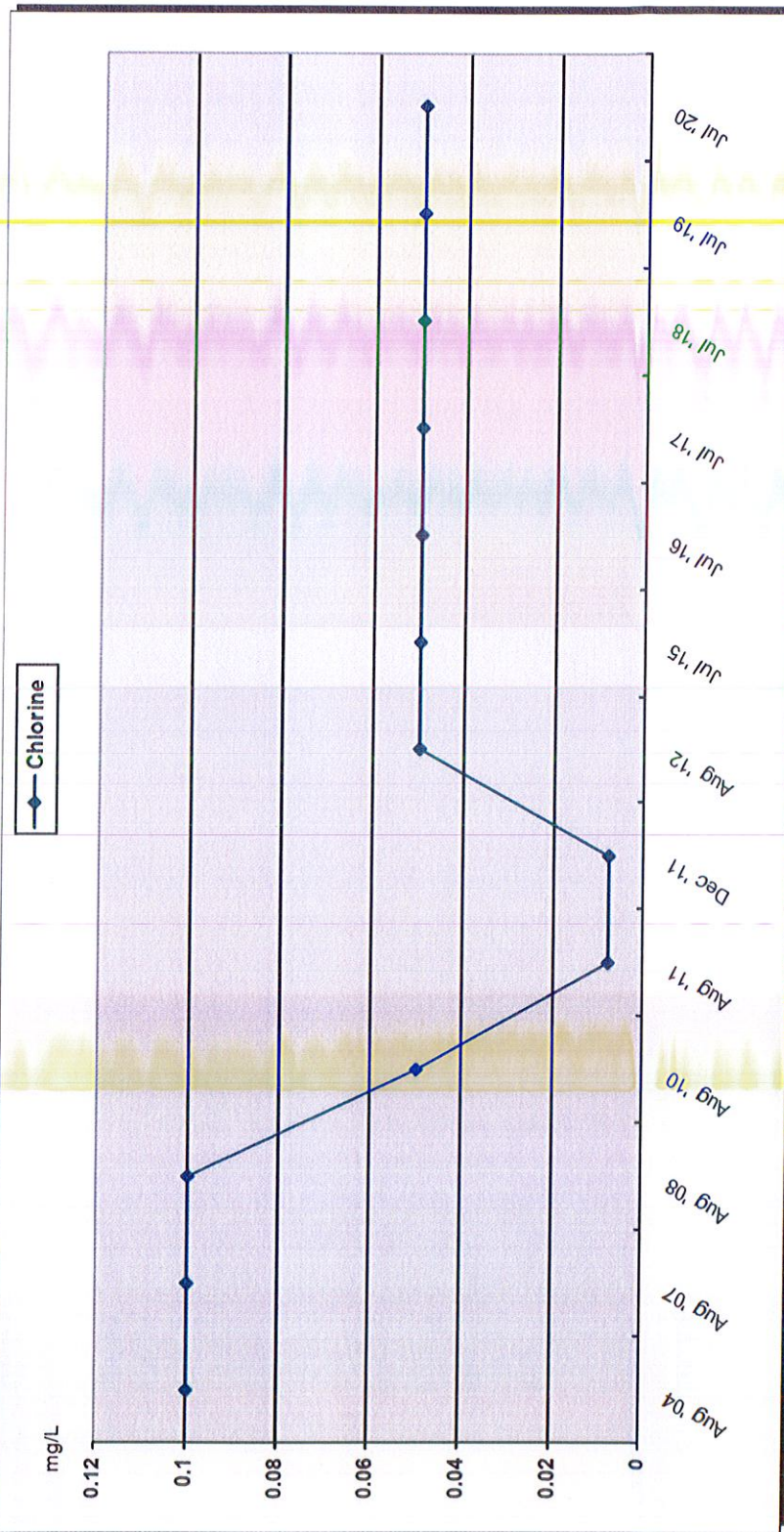


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3

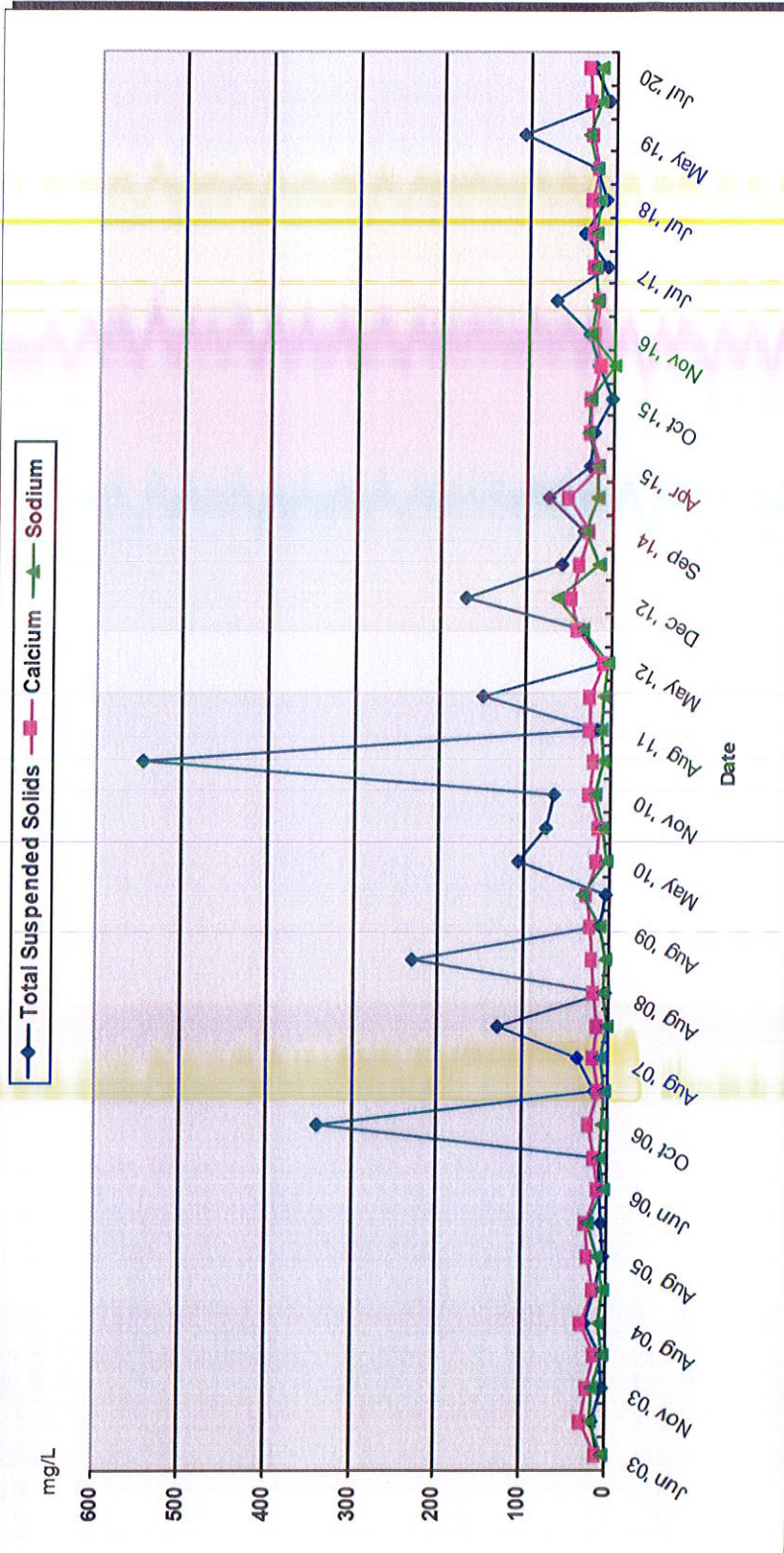


Oxbow Mining, LLC., Elk Creek Mine

Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

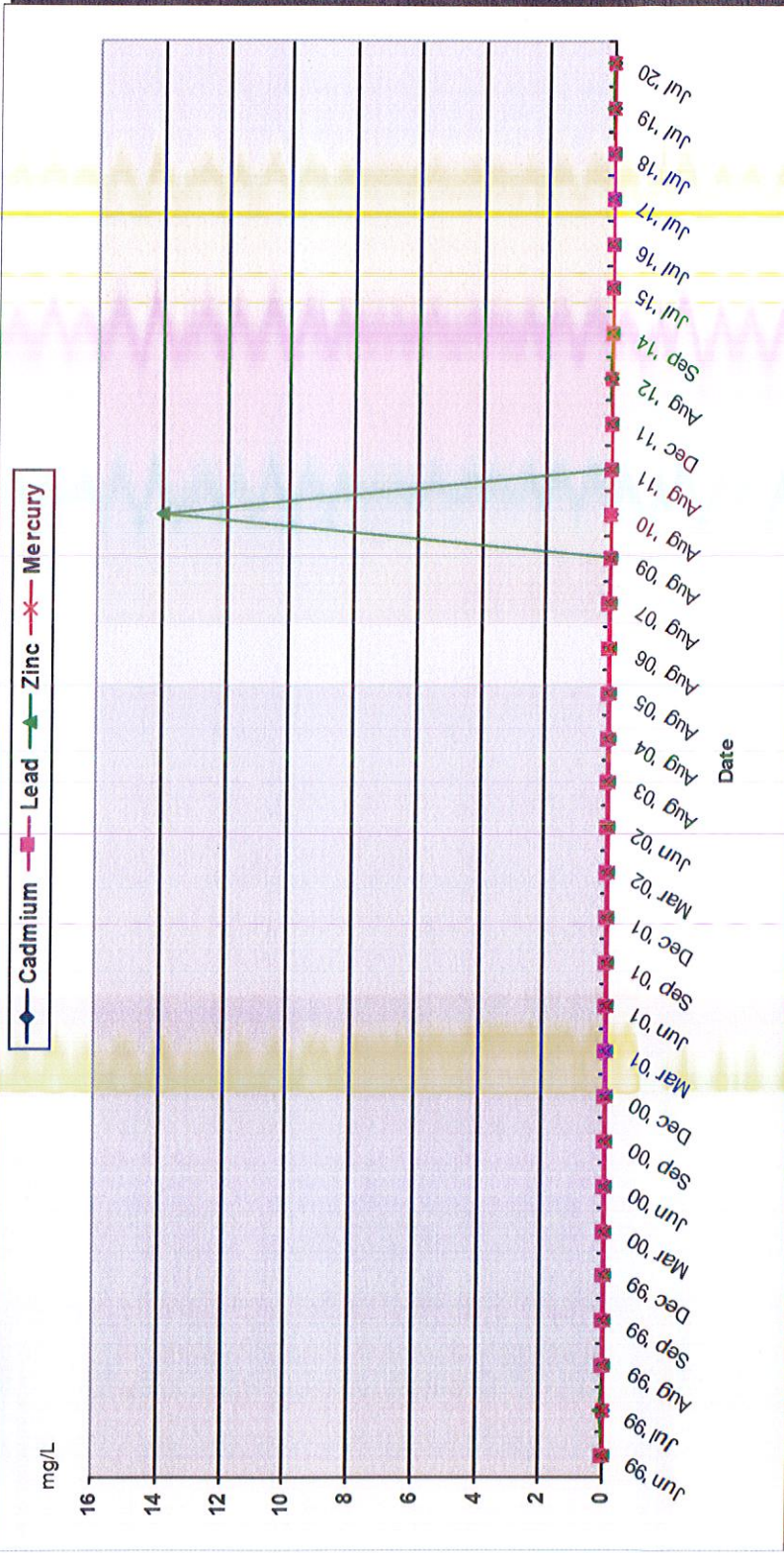
SURFACE WATER LOCATION: NF-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

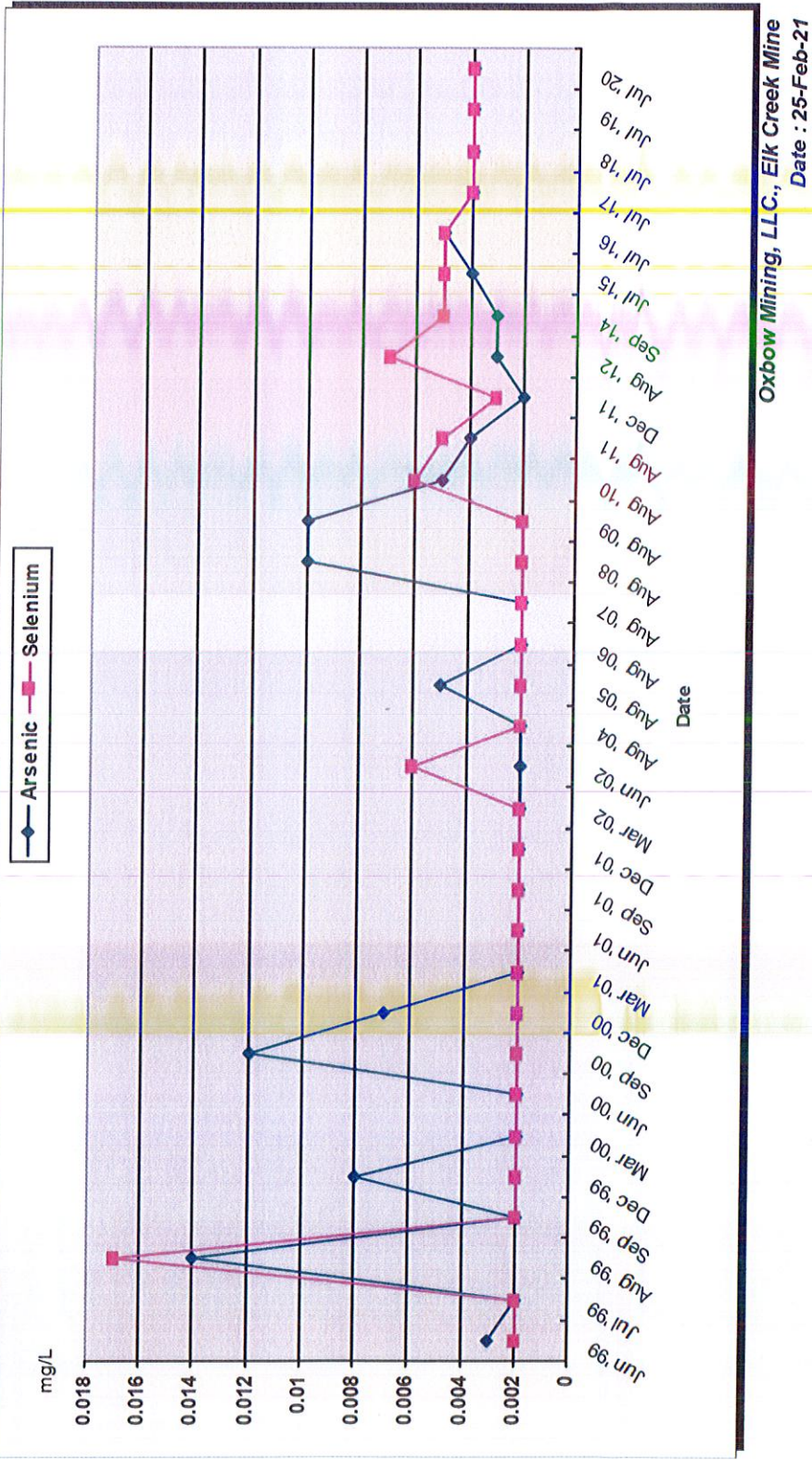
SURFACE WATER LOCATION: NF-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 25-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: NF-3



HN-1 LOWER HAWK'S NEST CREEK

SURFACE WATER LOCATION: HN-1

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MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: HN-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
10/13/2015	11:00	0																														
9/18/2015	12:00	0																														
8/4/2015	1:00	0																														
7/21/2015	12:00	0																														
6/17/2015	9:00	0																														
5/4/2015	1:30	0.75	9.3	170	12	60.19	6.81	122	4.84	0.3	5.19	16	103	0.08	9.7				14.4						29.2					0.12	0.02	
4/14/2015	9:30	0																														
10/31/2014		0																														
9/10/2014	10:00	0																														
8/25/2014	13:00	0																														
7/8/2014	8:45	0																														
6/11/2014	11:00	0																														
5/19/2014	13:00	0.75	9.1	100	1										9.1																	
4/8/2014	10:15	1	8.7	70	3.6	54.09	6.79	107	8.53	0.3	15.64	54	94	0.08	9.8				24		21.0			8.47						1.6	0.02	
10/18/2013	10:00	0																														
9/9/2013	10:00	0																														
8/16/2013	10:00	0																														
7/18/2013	13:00	0																														
6/5/2013	13:00	0																														
5/6/2013	12:00	0.75	8.4	50	8.7	49.62	7.51	190	4.56	0.3	8.23	68	102	0.08	9.7				12.4		6.4					29				1.28	0.44	
4/22/2013	12:50	1	8.2	60	7.5										16.2																	
10/10/2012	12:00	0																														
9/6/2012	13:30	0																														
8/2/2012	12:00	0																														
7/30/2012	12:00	0																														
6/13/2012	10:00	0																														
6/8/2012	11:00	0																														
5/9/2012	12:00	0																														
4/23/2012	13:20	0.73	7.8	130	15.2										16.6																	
10/7/2011	14:00	0																														
9/8/2011	13:30	0																														
8/15/2011	13:00	0																														
7/26/2011	13:30	0																														
6/14/2011	13:20	0																														
5/23/2011	2:45	2.04	8.6	140	7.6										15.6				2.82		2.6					13.3				2.01	1.04	
4/19/2011	11:00	22.4	9.1	40	2.8	43.2	7.01	70	22.4	1.03	45.28	60	120	0.08	8.2																	

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: HN-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
10/27/2010	12:45	0																														
9/9/2010	1:15	0																														
8/5/2010	12:00	0																														
7/15/2010	1:00	0																														
6/4/2010	12:00	0																														
5/18/2010	10:45	1.1	9.6	100	9.5	54.37	7.65	138.7	21.8	1.16	18.11	15	118	0	8.2				10.5		4.0					7.58					0.28	0.21
10/12/2009	2:00	0																														
9/25/2009	1:30	0																														
8/5/2009	12:30	0																														
7/17/2009	12:45	0																														
6/22/2009	9:30	0																														
5/6/2009	9:30	6.13	7.8	70	5.1	47	7.75	75	1	0.08	5	74	0.02	16					9.1		3.3					4.3				1.4	0.09	
4/29/2009	10:30	6.13	8.2	60	4.6										16.9																	
10/15/2008	12:00	0																														
9/11/2008	12:15	0																														
8/5/2008	12:00	0																														
7/29/2008	9:00	0																														
6/18/2008	10:00	0																														
5/23/2008	10:45	1.47	8.5	110	6.7										7.7																	
4/18/2008	13:30	6.23	8.1	60	6										12.8																	
10/24/2007	13:30	0																														
9/11/2007	12:00	0																														
8/7/2007	12:30	0																														
7/17/2007	12:45	0																														
6/15/2007	12:30	0																														
5/15/2007	11:10	3	7.88	180	8.2										10.5																	
4/26/2007	14:50	2.9	8.05	80	8.3										11.4																	
10/17/2006	10:00	0																														
9/27/2006	10:00	0																														
8/10/2006	10:00	0																														
7/21/2006	10:00	0																														
6/9/2006	10:00	0																														
5/26/2006	9:50	0																														
4/17/2006	14:40	14.42	7.5	60	11.6										13.8																	
10/17/2005	11:30	0																														
9/22/2005	1:00	0																														

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: HN-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
8/30/2005	12:00	0																													
8/5/2005	9:15	0																													
7/25/2005	2:00	0																													
6/15/2005	9:50	0																													
5/9/2005	1:10	5.7	8.28	80	12																										
4/18/2005	10:20	27.1	7.9	100	6																										
10/8/2004	14:00	0																													
9/27/2004	9:30	0																													
8/23/2004	11:00	0																													
7/23/2004	11:20	0																													
6/22/2004	10:00	0																													
5/20/2004	10:00	0																													
4/14/2004	14:10	2.1	9.03	70	9																										
10/13/2003	14:00	0																													
9/17/2003	14:00	0																													
8/26/2003	9:50	0																													
7/28/2003	12:05	0																													
6/17/2003	14:00	0																													
5/13/2003	12:30	3.6	8.6	70	8																										
4/10/2003	14:10	4	8.52	900	7																										
9/6/2002		0																													
7/20/2002		0																													
6/25/2002		0																													
12/29/2001	11:15	0																													
11/27/2001	11:10	0																													
10/30/2001	12:40	0																													
9/28/2001	11:25	0																													
8/28/2001	12:10	0																													
7/23/2001	11:20	0																													
6/29/2001	12:35	0																													
5/30/2001	13:00	0																													
4/26/2001	11:25	25.8	7.6	100	9																										
3/30/2001	9:30	64.2	7.5	200	6																										
2/27/2001	11:55	0																													
1/25/2001	11:45	0																													
12/28/2000	14:39	0																													

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: HN-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
11/22/2000	8:41	0																														
10/20/2000	9:10	0																														
9/28/2000	8:45	0																														
8/24/2000	7:37	0																														
7/25/2000	2:40	0																														
6/18/2000	9:36	0																														
5/17/2000	15:40	10	8.2	120	14																											
4/25/2000	8:40	5841	8.3	100	10																											
3/28/2000	11:15	78.25	7.4	100	7	43	7.55	109	1	0.03	10	5	101	0.04		2.17	0.002	0.005	10.6	0.046	0.05	3.0	0.015	0.0002	0.05	0.002	8.9	0.023			1.62	
2/28/2000	9:40	0																														
1/25/2000	9:20	0																														
12/22/1999	8:10	0																														
11/24/1999	10:19	0																														
10/28/1999	10:15	0																														
9/23/1999	8:41	0																														
8/17/1999	9:52	0																														
7/28/1999	9:21	0																														
6/29/1999	12:05	0																														
5/25/1999	9:10	0																														
4/21/1999	12:31	2959	8.2	80	7																											
3/30/1999	13:20	6321	8.5	70	5	40	6.86	67	1	0.05	10	5	89	0.03	0	2.74	0.002	0.005	7.51	0.01	0.1	2.7	0.021	0.0005	0.05	0.002	5.53	0.033			2.39	
2/10/1999	10:15	0																														
1/28/1999	9:19	0																														
9/11/1997		0																														
8/21/1997		0																														
7/29/1997		0																														
6/23/1997		0																														
5/22/1997		992	8.2	400	8																											
4/7/1997		1364	8.3	400	5																											
3/11/1997		877	8.7	520	6																											
3/11/1997		0																														
2/27/1997		0																														
1/10/1997		0																														
12/13/1996		0																														
11/26/1996		0																														
10/8/1996		0																														

MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: HN-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis	
9/5/1996		0																															
8/2/1996		0																															
7/16/1996		0																															
6/5/1996		0																															
5/9/1996		524	8.8	90	11																												
4/8/1996		5340	8.6	60	8																												
3/4/1996	10:27	0																															
2/5/1996	12:32	0																															
1/4/1996	9:38	0																															
12/5/1995	11:47	0																															
11/3/1995	9:17	0																															
10/2/1995	13:53	0																															
9/7/1995	8:01	0																															
8/2/1995	13:45	0																															
7/10/1995	12:38	5.1	8.5	240	16																												
6/7/1995	10:43																																
6/7/1995	10:43	3120	9.1	80	9																												
5/2/1995	10:44	5950	8.4	40	5																												
4/3/1995	12:33	620	8.3	70	5																												
3/13/1995	8:07																																
3/13/1995	8:07	975	8.4	100	3																												
2/6/1995	11:24	0																															
1/3/1995	11:24	0																															
12/5/1994	12:28	0																															
11/10/1994	9:52	0																															
10/4/1994	11:05	0																															
9/14/1994	10:56	0																															
8/8/1994	8:20	0																															
7/12/1994	11:28	0																															
6/9/1994		0																															
5/31/1994	12:09	8	8.2	210	12																												
4/30/1994	13:50																																
4/30/1994	13:50	1100	8.6	130	10	48	7.90	98				-2	84							-0.01	-0.02			-0.01							1.4		
3/31/1994	11:35																																
3/31/1994	11:35	350	7	210	13	50	7.80	126				4	90							-0.01	-0.02			-0.01								0.66	
12/21/1993		0																															

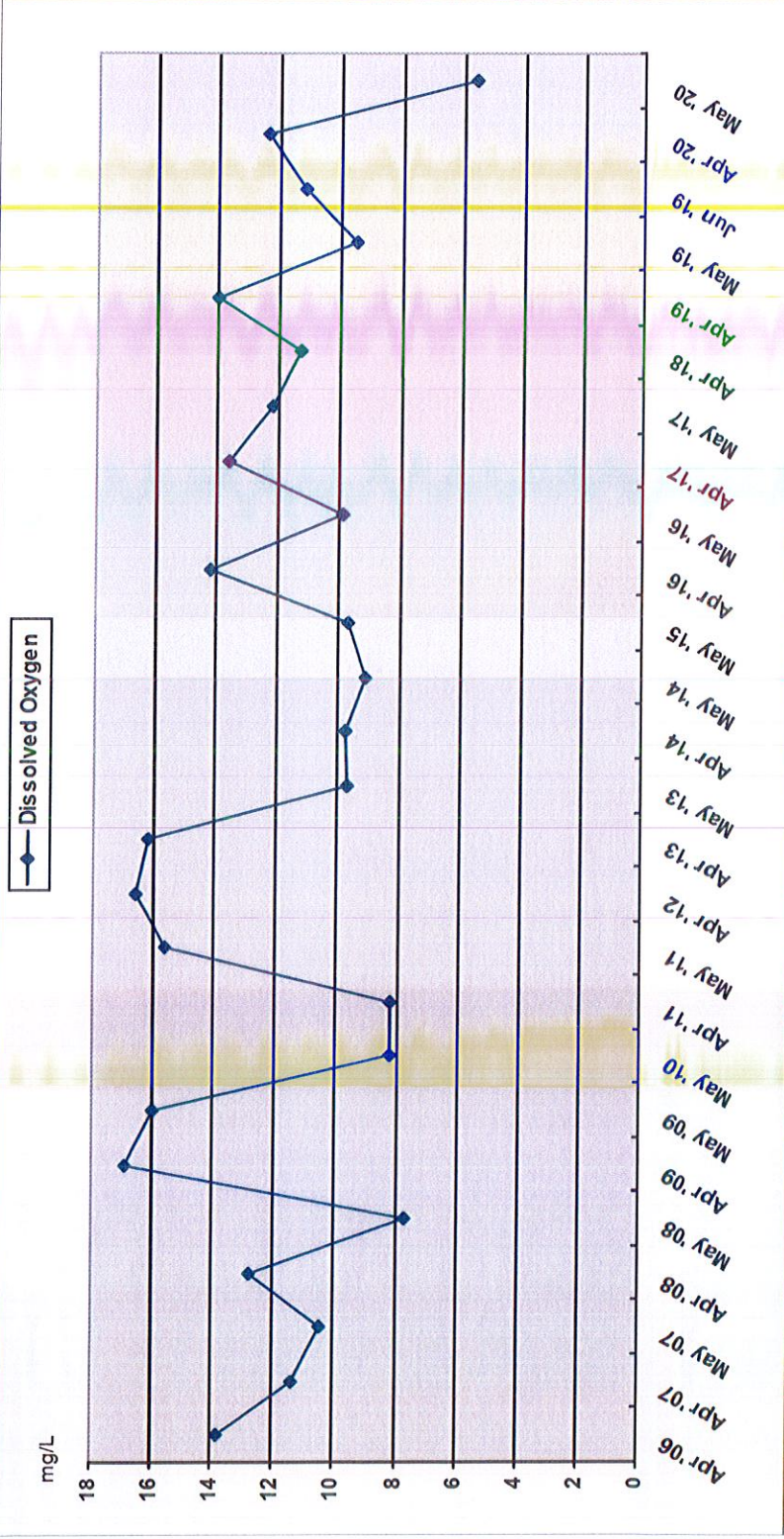
MONITORING DATA FOR 2020 AHR

SURFACE WATER LOCATION: HN-1

Date	Time	Flow	Field pH	Field Cond	Tem	HCO3	pH	Cond	Cl	NO3/NO2	SO4	TSS	TDS	PO4	DO	Al	As	Cd	Ca	Cu	Pb	Mg	Mn	Hg	Mo	Se	Na	Zn	Oil	Grease	Fe-Tr	Fe-Dis
11/10/1993		0																														
10/29/1993		0																														
9/8/1993		0																														
8/30/1993		0																														
7/28/1993		0																														
7/1/1993		0																														
4/30/1993	13:00					36	8.00	67				28	74							-0.01	-0.02		0.03								1.83	
4/30/1993	13:00	15720	8.4	1900	7																											
3/19/1993	13:00					72	8.00	152				-2	104							-0.01	-0.02		-0.01								0.23	
3/19/1993	13:00	1500	8.5	90	4																											
2/26/1993		0																														
1/30/1993		0																														

MONITORING CHART FOR 2020 AHR

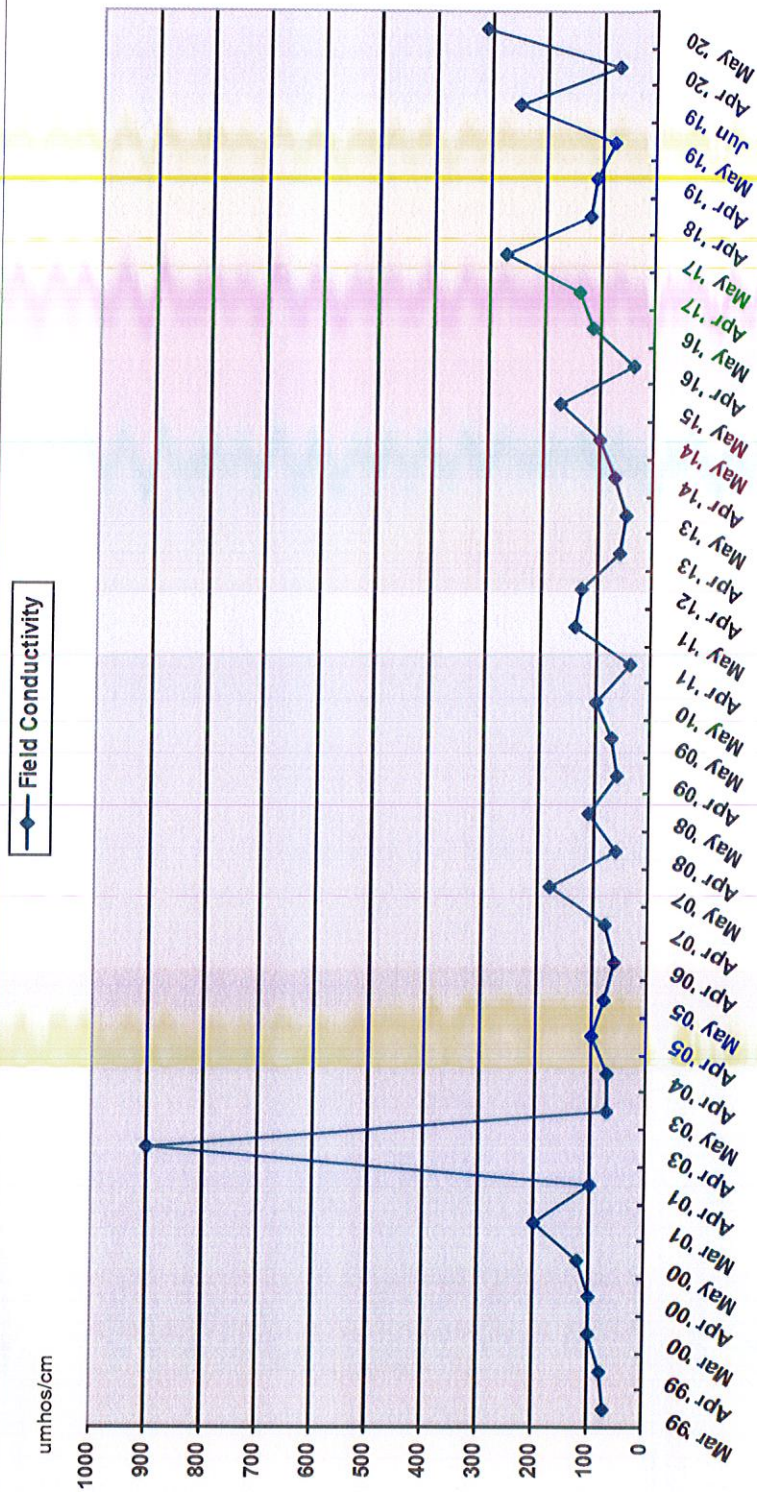
SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

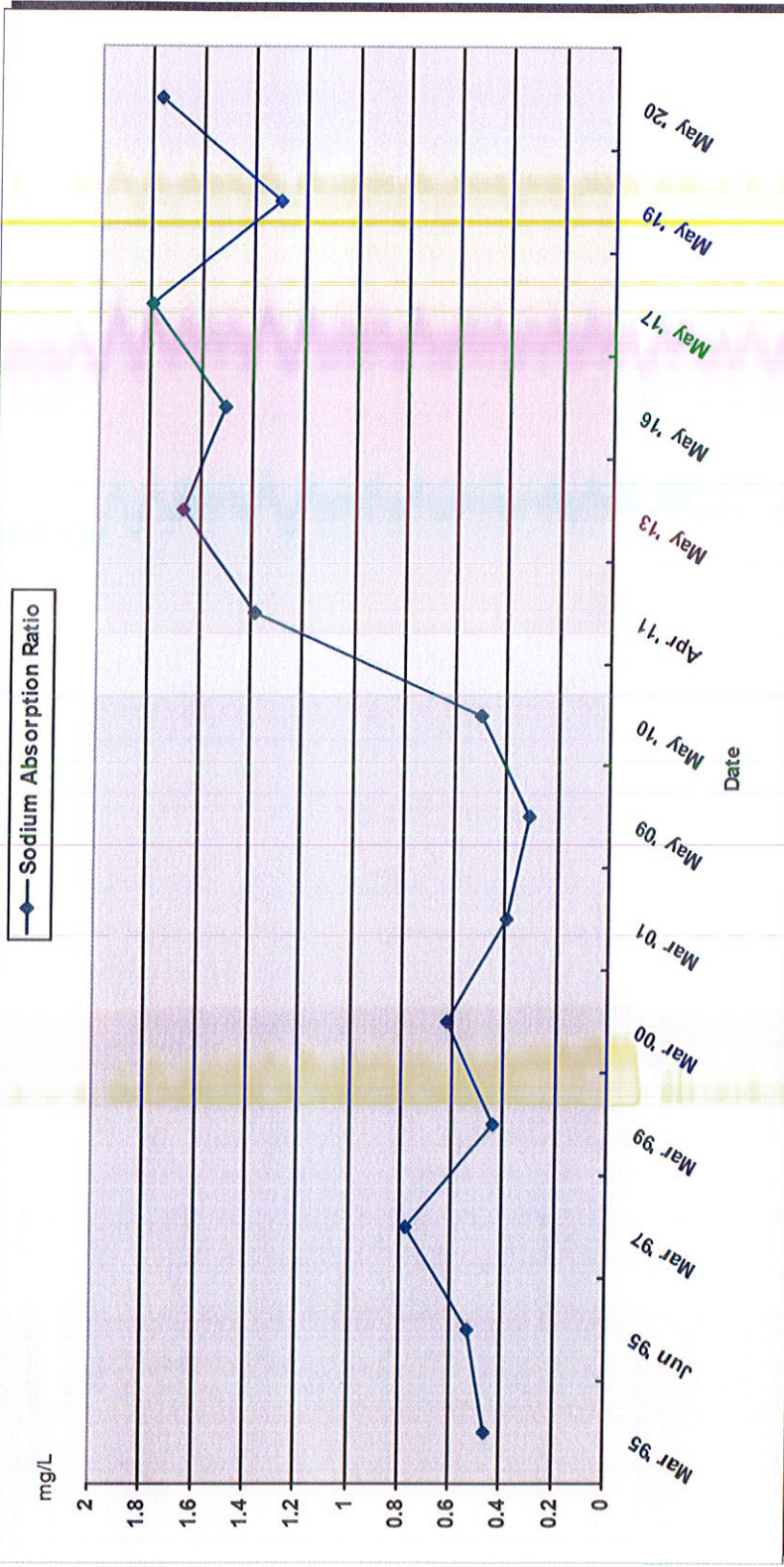
SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

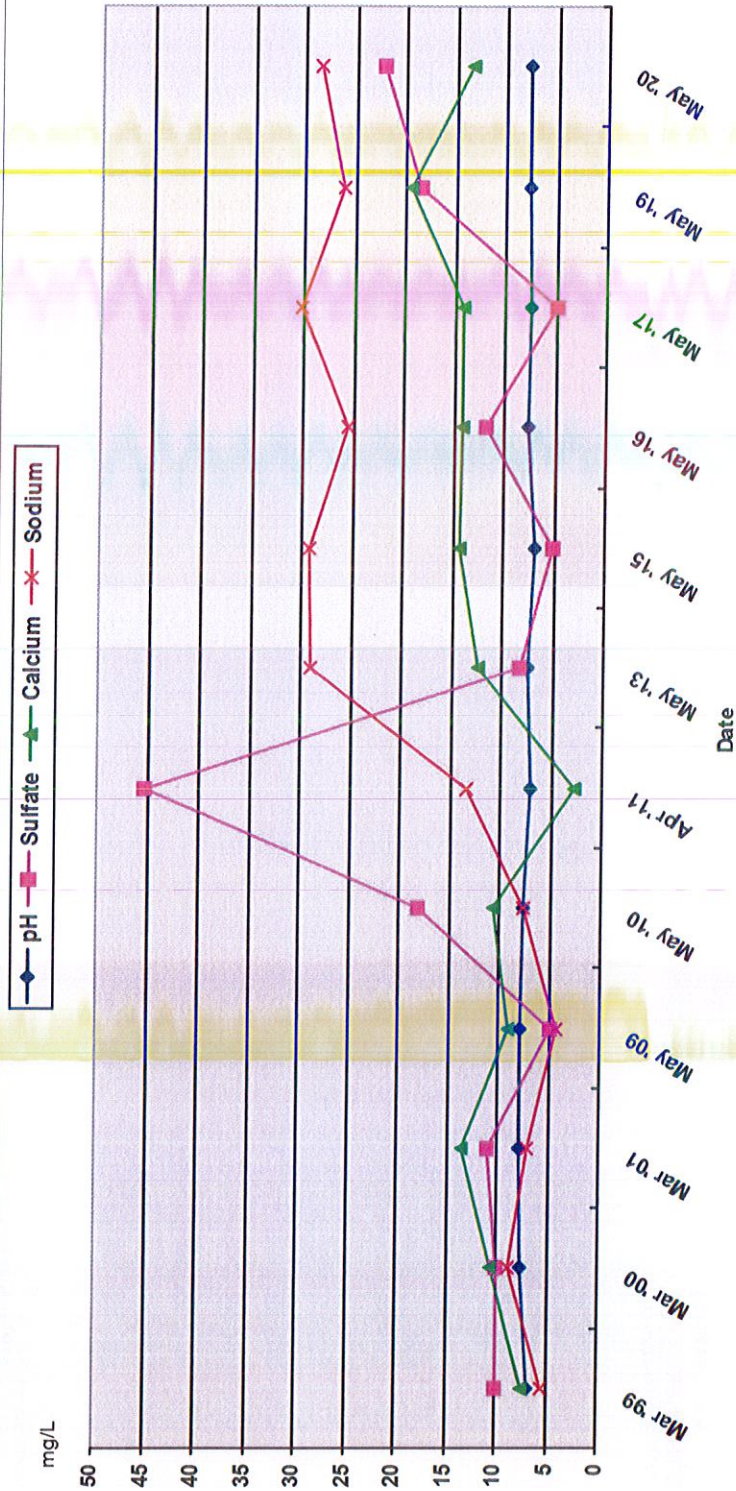
SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

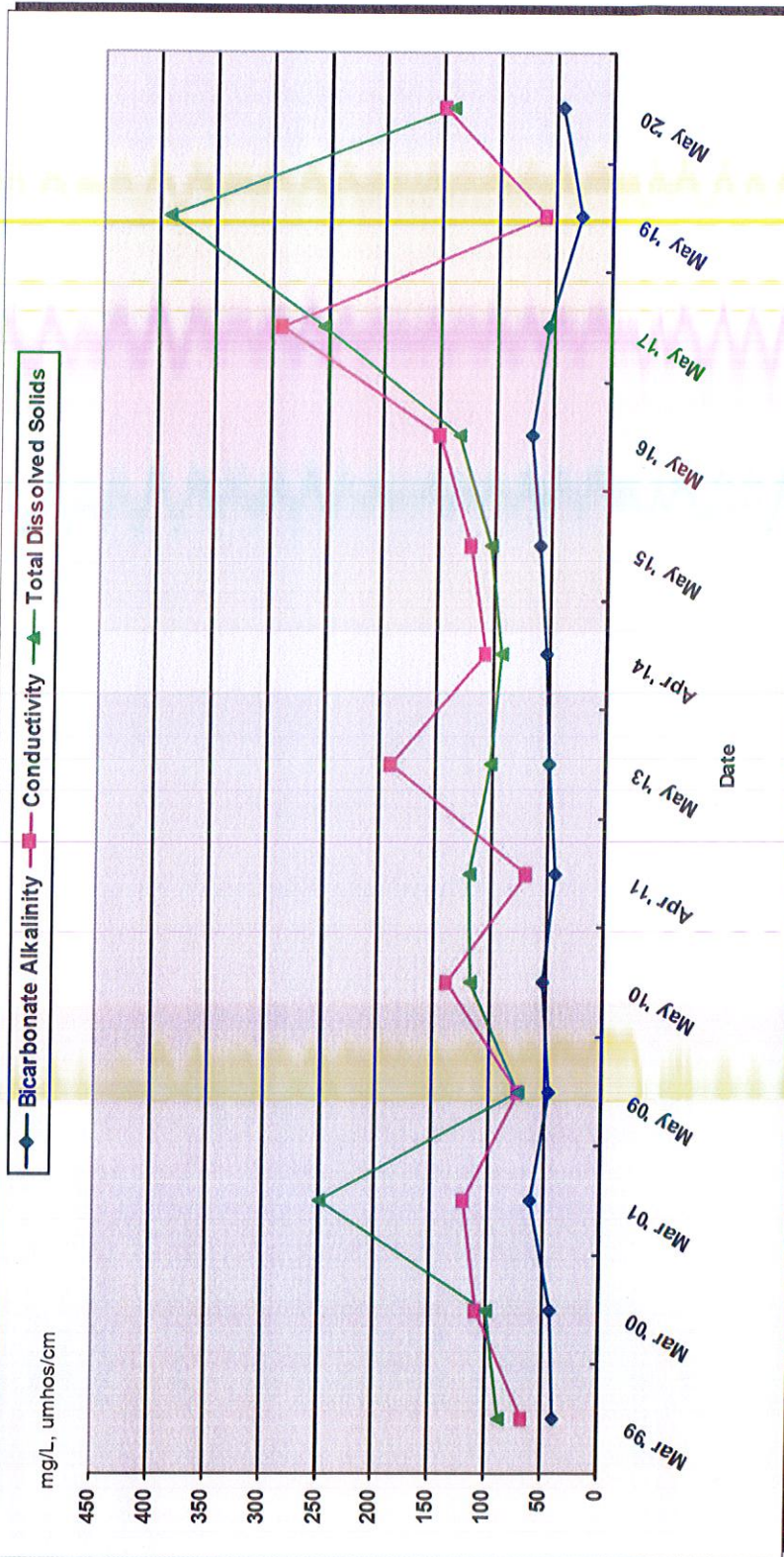
SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

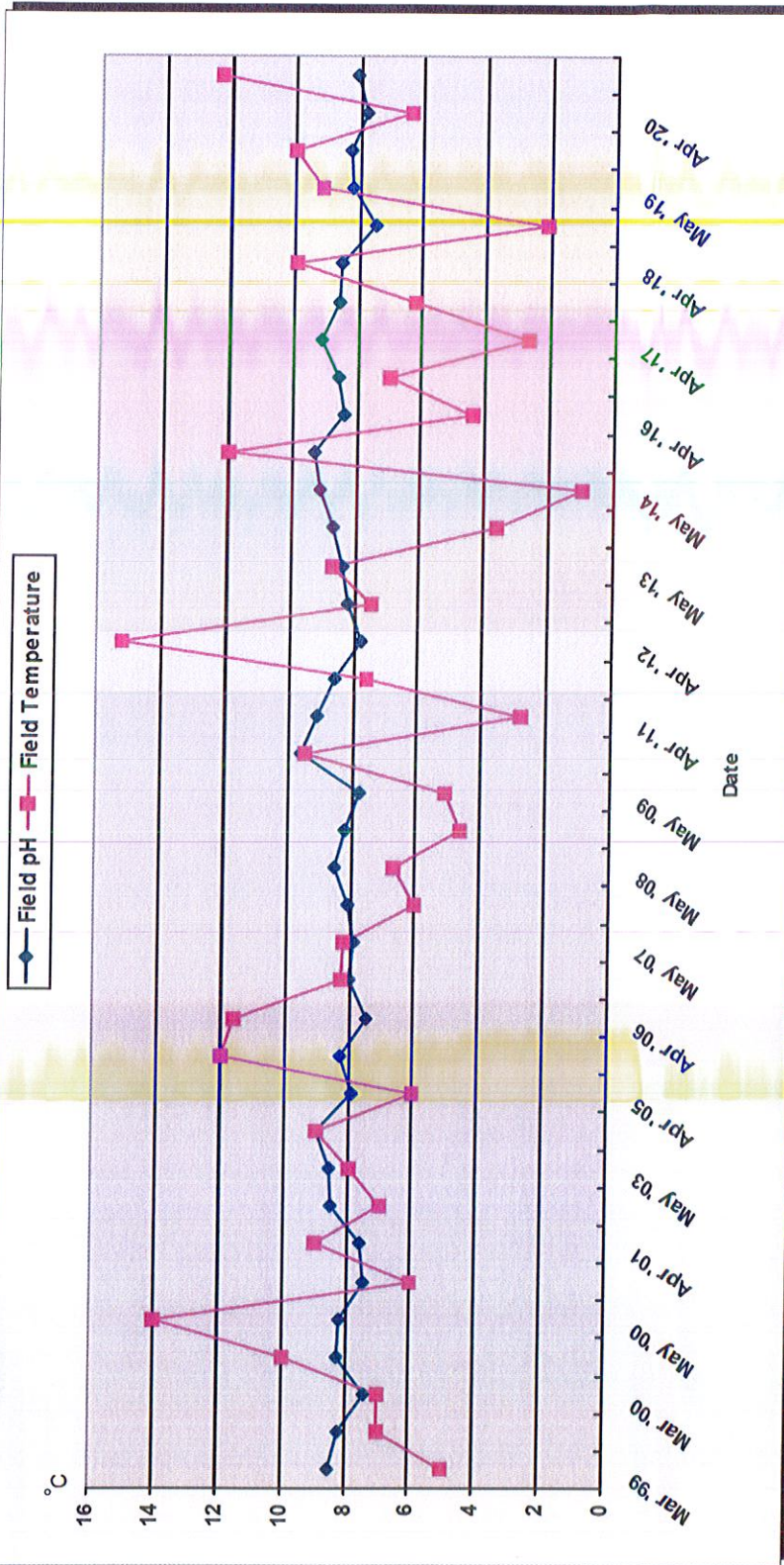
SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

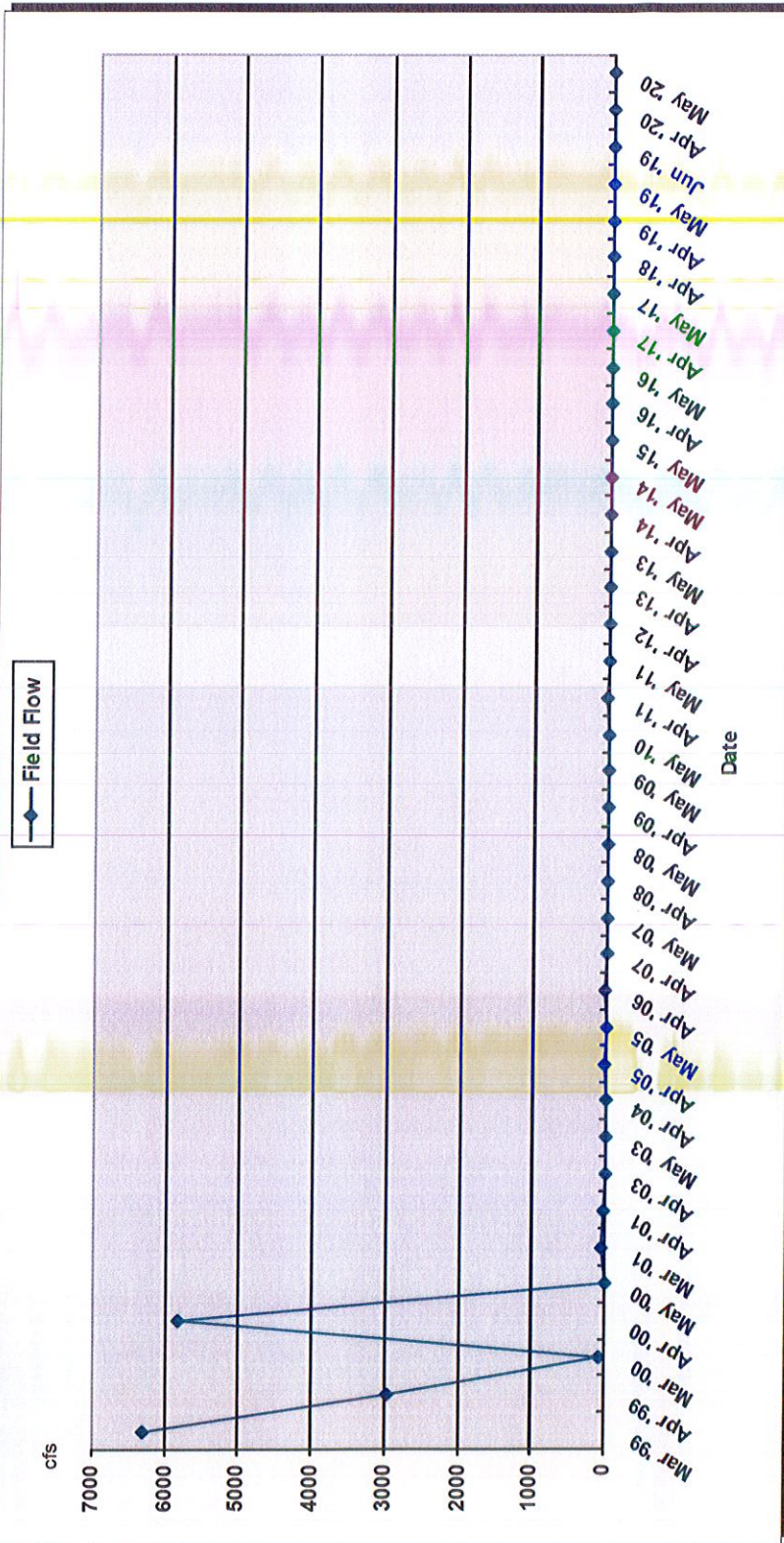
SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 22-Feb-21

MONITORING CHART FOR 2020 AHR

SURFACE WATER LOCATION: HN-1



Oxbow Mining, LLC., Elk Creek Mine

Date : 22-Feb-21

EXHIBIT 2



SP-8 DRY SINCE 1998

SP-9 DRY SINCE 2001





H-10 WELL

B SEAM – SOMERSET MINE WORKINGS
HUBBARD CREEK DRAINAGE



MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: H-10

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/14/2020	12:00	0																										
6/12/2020	11:45	0																										
6/20/2019	12:45	0																										
9/17/2018	12:00	0																										
6/15/2018	12:00	0																										
9/12/2017	13:00	0																										
6/22/2017	12:00	0																										
9/28/2016	12:00	0																										
6/20/2016	12:00	0																										
8/18/2015	13:00	0																										
8/18/2015	12:00	0																										
6/16/2015	12:00	0																										
6/10/2015	12:00	0																										
9/11/2014	12:00	0																										
6/24/2014	12:00	0																										
7/18/2013	12:00	0																										
6/18/2013	12:00	0																										
8/2/2012	12:00	0																										
6/19/2012	12:00	0																										
7/26/2011	9:00	0																										
6/23/2011	9:00	0																										
8/6/2010	13:30	0																										
6/15/2010	10:00	0																										
8/4/2009	10:00	279.25	7.7	3900	24	10	2300	1	7.27	4200	280	0.34	5	3200		0.23	0.006	0.005	49	66	8.5	0.430	1.1				950	0.047
6/16/2009	1:00	280.3	7.1	3900	20	10	2400	1	7.45	3900	270	0.02	5	3100		0.24	0.01	0.005	53	39	9.4	0.504	0.852				960	0.038
8/8/2008	10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/1/2008	10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/19/2008	11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/18/2008	10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8/10/2006	10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6/9/2006	12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/17/2005	11:45	0																										
8/5/2005	10:00	0																										

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: H-10

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
8/23/2004	12:00	0	0	0	0																							
6/22/2004	14:30	0	0	0	0																							
8/26/2003	11:15	0	0	0	0																							
6/17/2003	0	0	0	0	0																							
9/23/2002	0	0	0	0	0																							
10/30/2001	13:55	0	0	0	0																							
4/26/2001	14:15	0	0	0	0																							
10/2/2000	13:39	0	0	0	0																							
4/26/2000	14:34	0	0	0	0																							
10/22/1999	13:10	0	0	0	0																							
10/16/1999	15:10	0	0	0	0																							
10/12/1999	16:15	0	0	0	0																							
4/21/1999	20:15	307	7.8	4500	20																							
10/23/1997	307																											
10/23/1997						2.9	2503	37	8.46	4440	276	0.03	2.4	2753		0.04	-0.002	-0.005	6.53	3.59	0.44	0.018	0.033	3.15	-0.0002	-0.002	1190	
4/29/1997	307		7.7	4700		20																						
10/22/1996						3.2	2520	-1	7.66	4290	300	-0.02	5.8	2740		0.03	0.004	-0.005	-0.005	18.5	0.06	0.014	0.16	2.9	-0.0002	-0.002	1130	
10/22/1996	307.9		7.9	4600		13																						
4/25/1996	308.1		8	4200		20																						
10/10/1995	7:10					2.7	2380	120	8.77	4400	290	0.14		2800		0.04	-0.002	-0.005	6.2	3.11	0.02	0.017	0.03	2.6	-0.0002	-0.002	1100	
10/10/1995	7:10		7.8	4800		15																						
10/10/1995	7:10					20																						
4/6/1995	10:25	308.25	7.8	4500		20																						
10/11/1994	10:42					2.56	2660	-0.5	8.39	4690	300	0.26		2840		0.08	0.005	0.005	7.2	11.3	0.06	0.030	0.12	3.2	0.0003	0.026	1100	
10/11/1994	10:42	308.5	7.6	4800		19																						
4/30/1994	10:12					2.51	1922	0	7.80	4510	289			2816		0.017	0.005	-0.005	6	3.6	0.3	0.020		3	-0.0002	0.001	1010	
4/30/1994	10:12					19																						
11/10/1993	11:20	308.67	8.3	4800																								
11/10/1993	11:20																											
11/10/1993	11:20					19																						
8/30/1993	8:00					3.14	2080	0	8.20	4430	301	0.13		2818		0.009	-0.005	-0.005	7	13.4	0.79	0.030		3	-0.0002		1050	
8/30/1993	8:00	307	8.9	5000		18																						
6/30/1993	10:18					1.91	2250	0	7.80	4560	312	-0.02		2774		-0.005	0.001	-0.005	6	4.69	0.2	0.030		3	-0.0002	-0.001	1090	
6/30/1993	10:18	307	7.1																									

BC-1 WELL
LOWER BEAR CREEK CANYON
ALLUVIUM/COLLUVIUM

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: BC-1

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/16/2020	13:05	12	8.3	2500	16	0.234	828	0	7.74	1320	265.88	0.068	130	1152	0	0.002	0.01	56.5	0.068	0.011	0.052	0.088	0.088	0.088	0.088	0.088	226	0.042
6/16/2020	12:00	7.5	7.2	1090	16	0.29	314	0	7.46	830	105.35	0.036	176.99	788	0	0.002	0.01	53.1	0.088	0.01	0.059	0.082	0.082	0.082	0.082	211	0.04	
9/23/2019	14:30	11	8.1	2500	15	0.126	223.6	0	7.67	1295	141.8	0.04	135.83	1258	0	0.002	0.01	62.1	0.126	0.01	0.056	0.071	0.071	0.071	0.071	232	0.038	
6/24/2019	13:00	6.5	8	1210	13	0.102	288	0	7.32	868	85.33	0	188.3	814	0	0.002	0.01	56.9	0.133	0.009	0.064	0.087	0.087	0.087	0.087	247	0.041	
9/17/2018	12:25	12	8.8	2300	16	0.115	367.8	0	8.14	952	107.68	0.11	152.29	1342	0	0.002	0.01	55.6	1.06	0.061	0.046	0.164	0.164	0.164	0.164	289	0.037	
6/18/2018	12:50	9	8.2	1700	15	0.103	386.91	0	7.61	1019	107.68	0.14	207.14	1216	0	0.002	0.01	54.3	1.39	0.078	0.053	0.182	0.182	0.182	0.182	327	0.041	
9/13/2017	11:50	11	8.4	400	15	0.083	353.4	0	8.16	603	119.05	0.11	196.33	736	0	0.002	0.01	46.7	1.16	0.062	0.049	0.166	0.166	0.166	0.166	291	0.036	
6/27/2017	11:40	7	8.2	1280	15	0.096	206.25	0	7.32	786	85.36	0	211.56	742	0	0.002	0.01	36.7	0.674	0.176	0.077	0.098	0.098	0.098	0.098	219	0.038	
9/28/2016	10:20	10.5	8.6	2500	15	0.112	354.74	0	8.01	1370	80.19	0	201.68	1292	0	0.002	0.01	47.3	1.57	0.203	0.086	0.126	0.126	0.126	0.126	266	0.044	
6/20/2016	10:15	7.5	8	580	14	0.106	284.48	0	7.84	579	106.35	0	274.54	850	0	0.002	0.01	50.1	1.03	0.063	0.044	0.145	0.145	0.145	0.145	263	0.042	
8/18/2015	9:30	8.5	7.7	1250	15	0.145	355.48	0	7.73	1392	62.13	0	288.51	1137	0	0.002	0.01	48.4	2.63	0.058	0.039	0.126	0.126	0.126	0.126	274	0.038	
6/16/2015	14:00	6.5	8.4	1170	13																							
9/11/2014	8:30	11.25	8.4	750	14	0.148	591	0	7.82	2020	138.3	0.64	208.27	1885	0	0.003	0.01	24.6	0.87	0.13	0.030	0.04	0.04	0.04	0.04	187.2	0.01	
6/25/2014	10:00	6.75	8.3	1010	16	0.169	361	0	7.85	1308	58.71	0	226.07	1216	0	0.002	0.01	47.1	4.19	0.062	0.043	0.133	0.133	0.133	0.133	261	0.031	
7/18/2013	12:00	9.25	7	120	14	0.189	355.91	0	7.83	1278	56.44	0.3	238.14	1158	0.08	0.003	0.01	44.6	4.49	0.054	0.050	0.15	0.15	0.15	0.15	256.5	0.03	
6/18/2013	12:00	7	8.1	1450	11																							
8/2/2012	13:00		8.8	1950	13	0.35	244.29	0	7.90	1444	53.34	0.3	146.74	1391	0.08	0.006	0.01	21.4	53	0.08	0.010	0.61	0.61	0	0	196.6	0.22	
6/19/2012	13:00	9	7.6	1350	11																							
7/29/2011	9:00	7.5	7.9	1130	15	0.17	59.53	0	7.32	1048	4.96	0.22	256.43	833	0.08	0.006	0.01	54.4	2.92	0.02	0.080	0.15	0.15	0.15	0.15	248.8	0.05	
6/23/2011	9:00	7	7.9	1110	11																							
8/5/2010	13:00	9	8.8	1390	14	0.02	569.16	0	6.90	1504	37.44	0.49	241.61	1022	0.08	0.005	0.01	99.4	63.8	0.07	0.080	0.99	0.99	0.99	0.99	119	0.08	
6/16/2010	10:30	6	8.8	1370	15	0.456	382.13	0	7.25	1800	9.33	0	275.36	990	0	0.099	0.005	50.1	14.53	0.01	0.007	0.23	0.23	0.23	0.23	244	0.03	
8/4/2009	9:30	8.6	8.2	620	16	0.38	810	1	7.53	1900	85	0.02	250	1200	0.01	0.002	0.005	63	50	0.03	0.110	0.36	0.36	0.36	0.36	370	0.005	
6/16/2009	9:00	6.1	7.5	1230	14	0.27	520	1	7.62	1500	37	0.02	310	450	0.01	0.01	0.005	67	3.3	0.03	0.143	0.192	0.192	0.192	0.192	220	0.005	
8/26/2008	15:00	9.5	8.3	1880	17	0.79	1000	1	7.93	2300	130	0.19	210	1100	0.04	0.01	0.005	37	33	0.01	0.023	0.267	0.267	0.267	0.267	470	0.005	
8/10/2006	10:00	11.5	8.88	2100	15	0.89	930	1	8.11	2200	140	0.02	260	1700	0.01	0.002	0.005	42	92	0.06	0.053	0.568	0.568	0.568	0.568	490	0.005	
6/9/2006	12:00	8	7.21	690	15																							
10/17/2005	12:30	0																										
8/5/2005	9:20	9.5	6.8	1510	14																							
8/23/2004	11:50	11	0	0	0																							
6/16/2004	12:15	7.5	7.65	1010	16	0.34	480	1	7.54	1200	29	0.02	180	720	0.01	0.002	0.005	67	11	0.01	0.061	0.292	0.292	0.292	0.292	150	0.005	
8/26/2003	10:30	10.9	8.59	1000	16	0.49	1100	1	7.99	2300	170	0.02	160	1500	0.01	0.002	0.005	24	56	0.04	0.036	0.329	0.329	0.329	0.329	580	0.01	
6/19/2003	13:30	0	8.37	1600	17	0.17	540	1	7.66	1300	46	0.08	180	790	0.01	0.002	0.005	53	20	0.02	0.143	0.284	0.284	0.284	0.284	190	0.015	

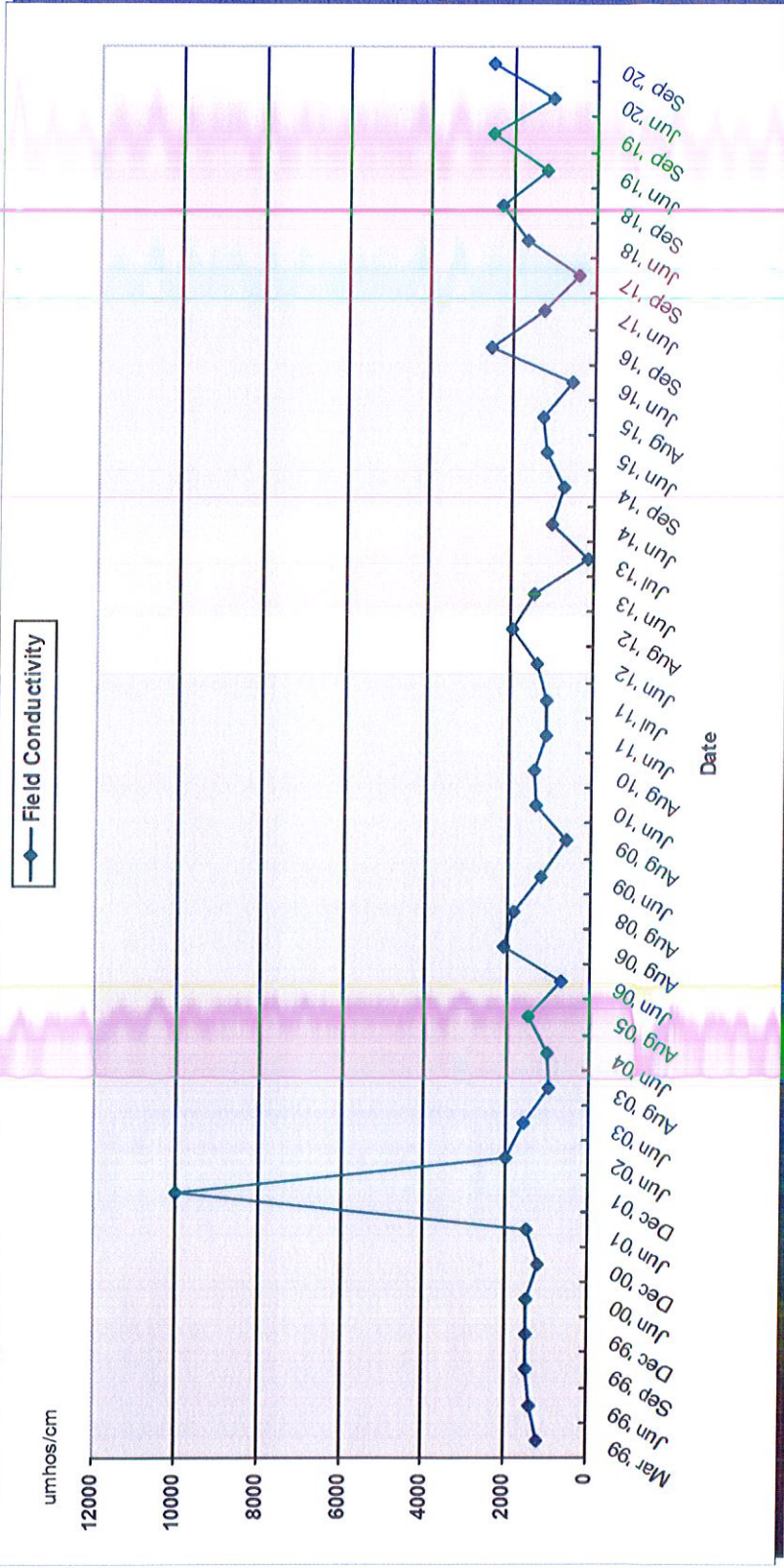
MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: BC-1

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/6/2002		10.75	0	0	0																							
6/25/2002		9.25	6.1	2000	15																							
12/19/2001	13:00	0	7.1	10000	8	1.77	2700	1	7.70	11800	1400	0.08	100	4800	15	0.01	0.002	0.005	34.2	0.28	0.02	0.005	0.006	8.7	0.0002	0.002	2320	0.005
6/29/2001	10:50	0	7.8	1500	0	0.39	760	1	8.00	1604	67	0.02	290	1100	2700	0.01	0.002	0.005	70.3	55.2	0.01	0.144	1.75	38.5	0.0002	0.002	255	0.008
12/28/2000	13:45	0	7.3	1200	12	1.14	616	1	7.60	1608	63	0.02	269	1036	594	0.01	0.002	0.005	60.2	61.4	0.01	0.240	0.71	33.7	0.0002	0.002	340	0.016
6/29/2000	13:51	0	8	1500	12	0.91	630	1	8.02	1650	77	0.03	300	1340	5990	0.02	0.002	0.005	34.6	100	0.01	1.450	0.073	19.8	0.0002	0.002	320	0.005
12/28/1999	13:45	6.6	7.6	1500	7	1.14	616	1																				
9/22/1999	3:14	6.3	7.6	1500	0																							
6/29/1999	8:15	6.6	7.7	1400	0	0.57	786	1	8.16	1970	163	0.03	263	1110	2675	0.02	0.005	0.005	15.8	41.8	0.01	0.086	0.706	9.9	0.0002	0.002	280	0.005
3/28/1999	7:26	6.5	7.8	1200	8																							

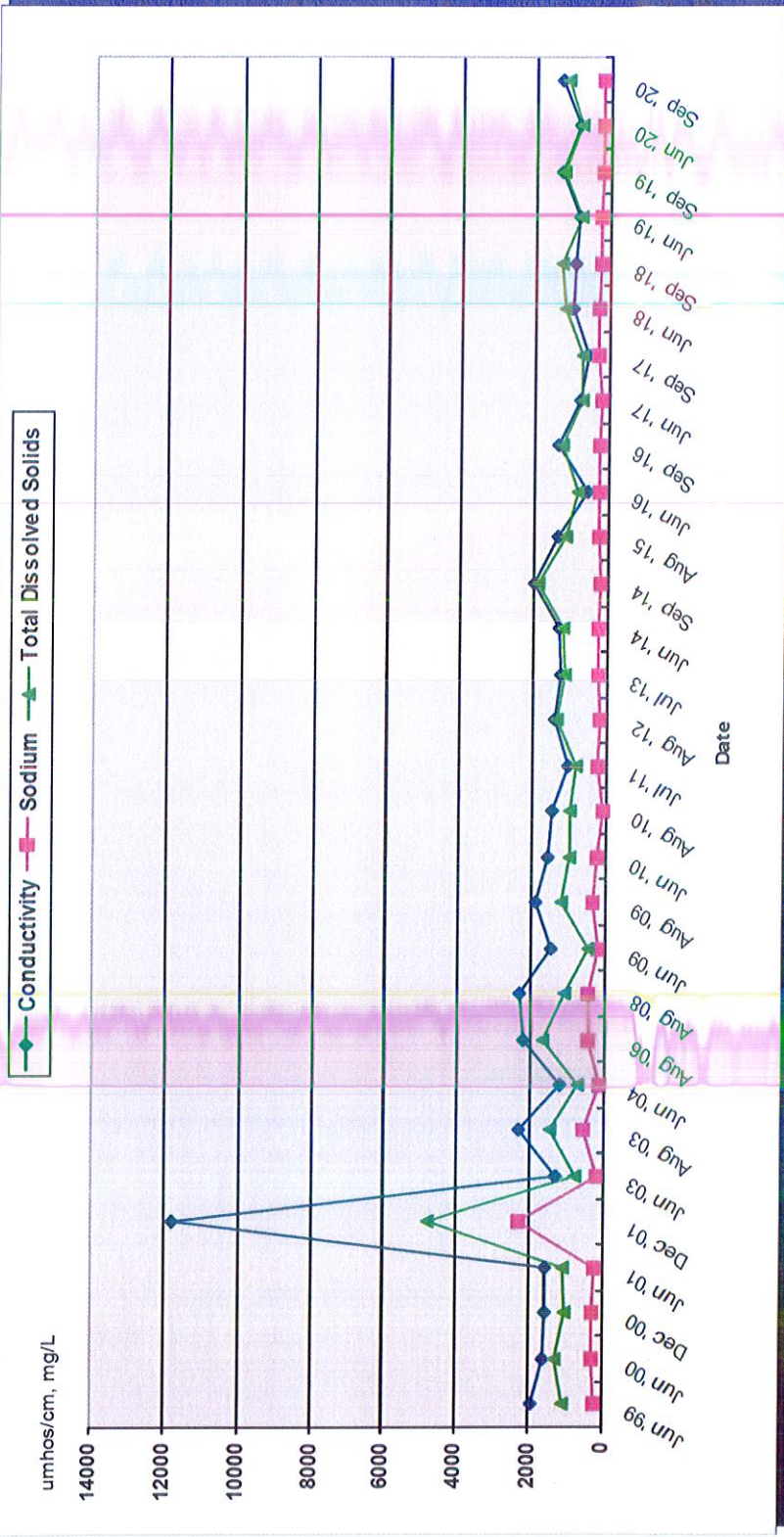
MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: BC-1



MONITORING CHART FOF2020 AHR

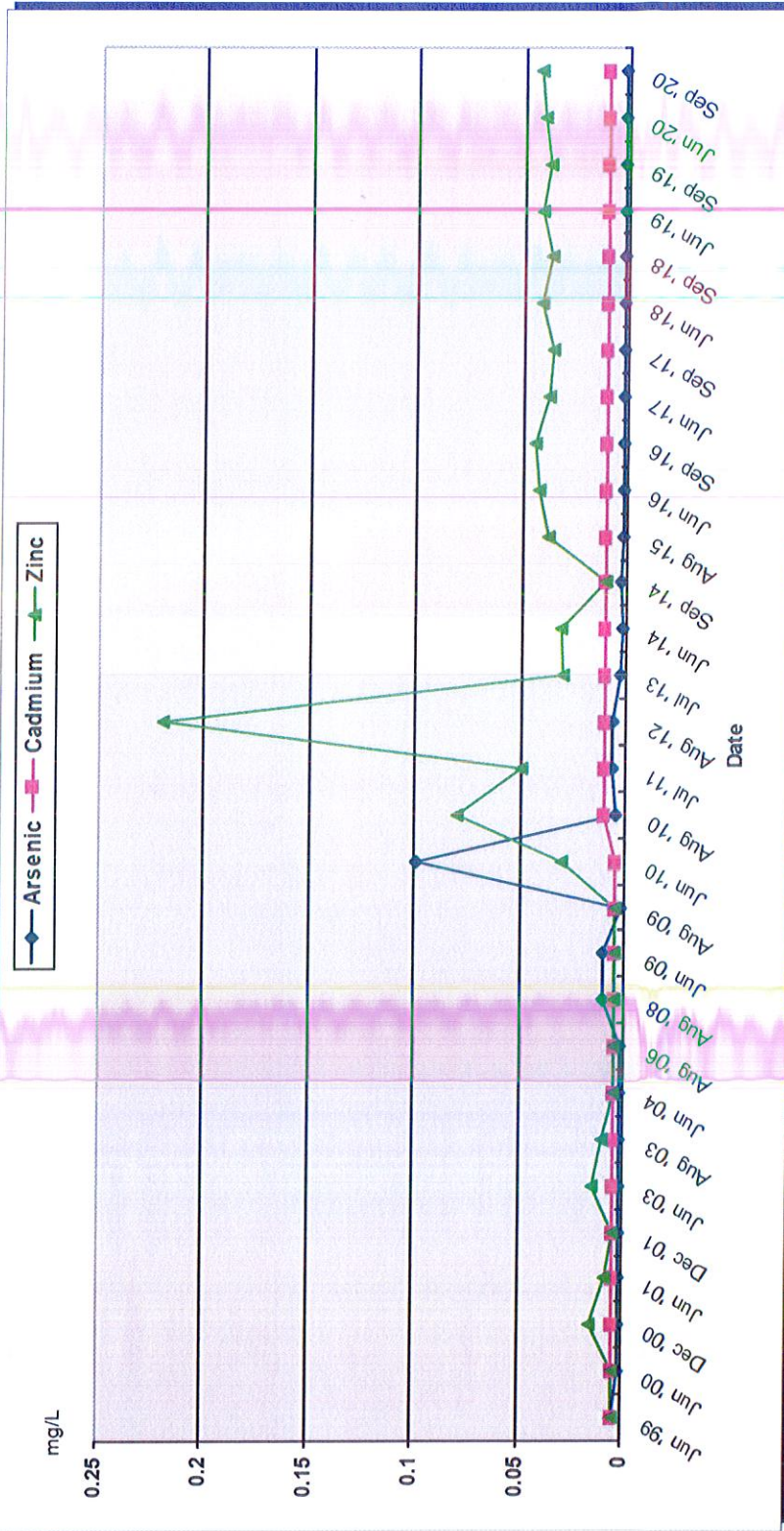
GROUND WATER LOCATION: BC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOF2020 AHR

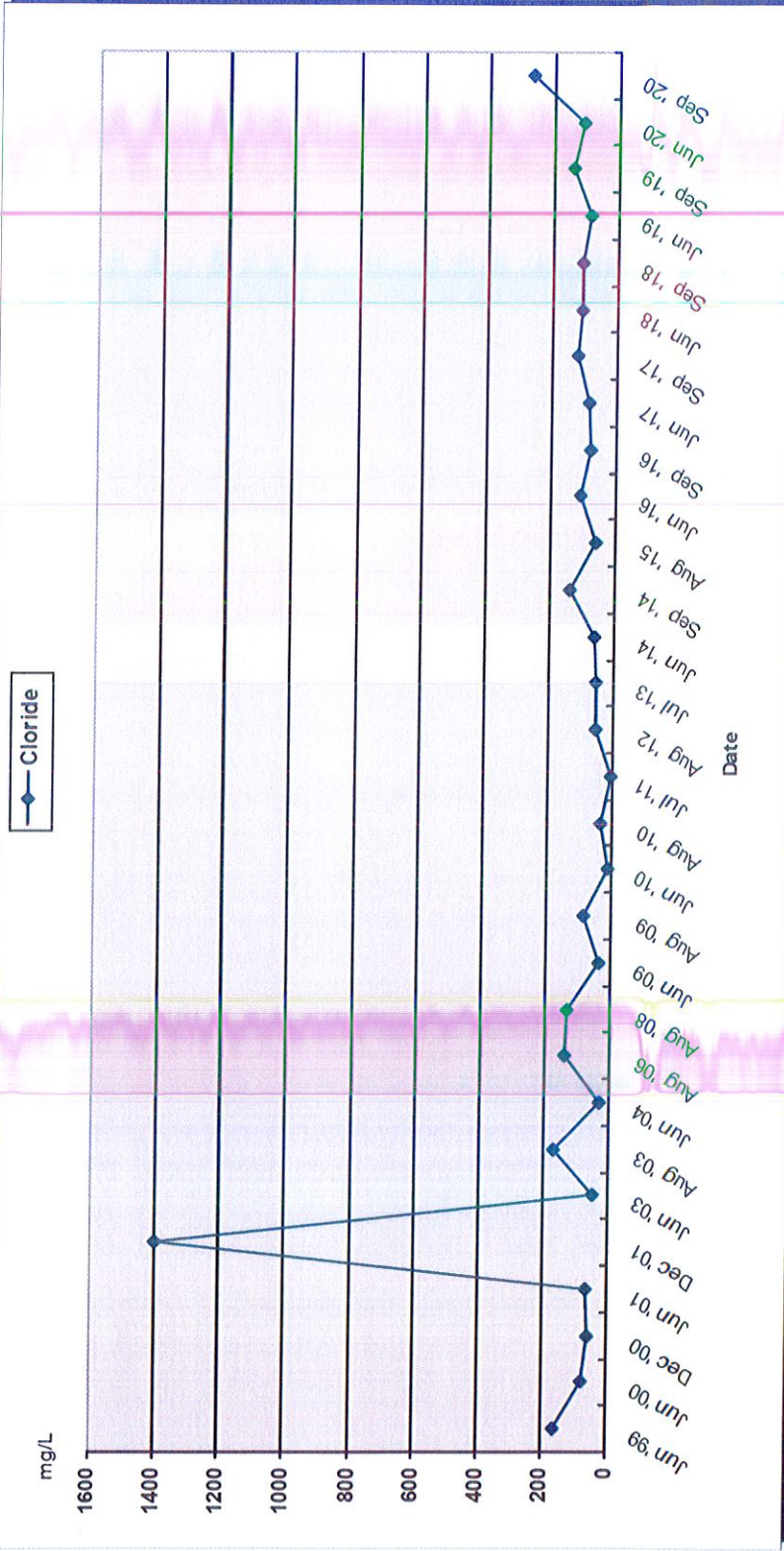
GROUND WATER LOCATION: BC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

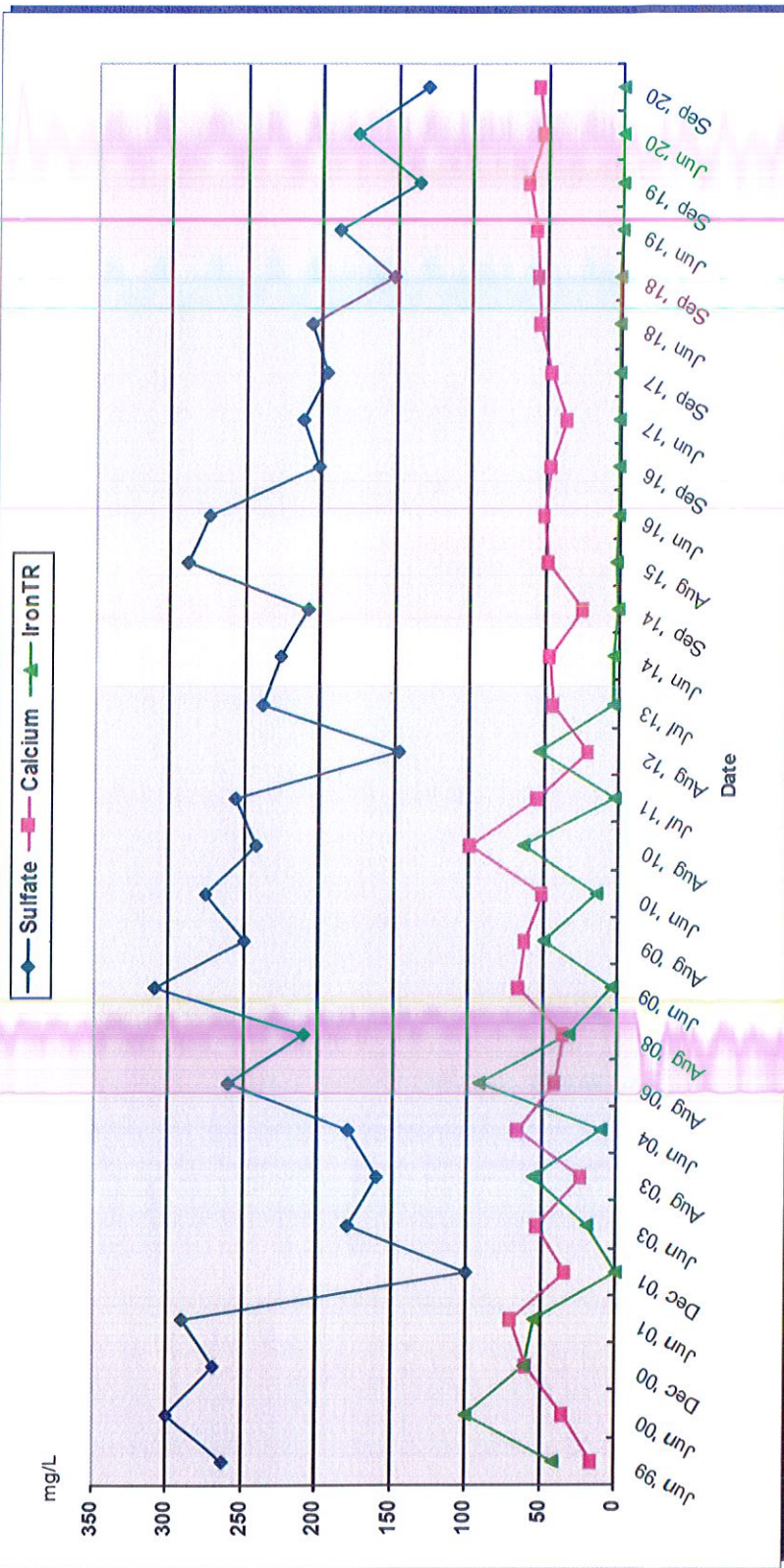
GROUND WATER LOCATION: BC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

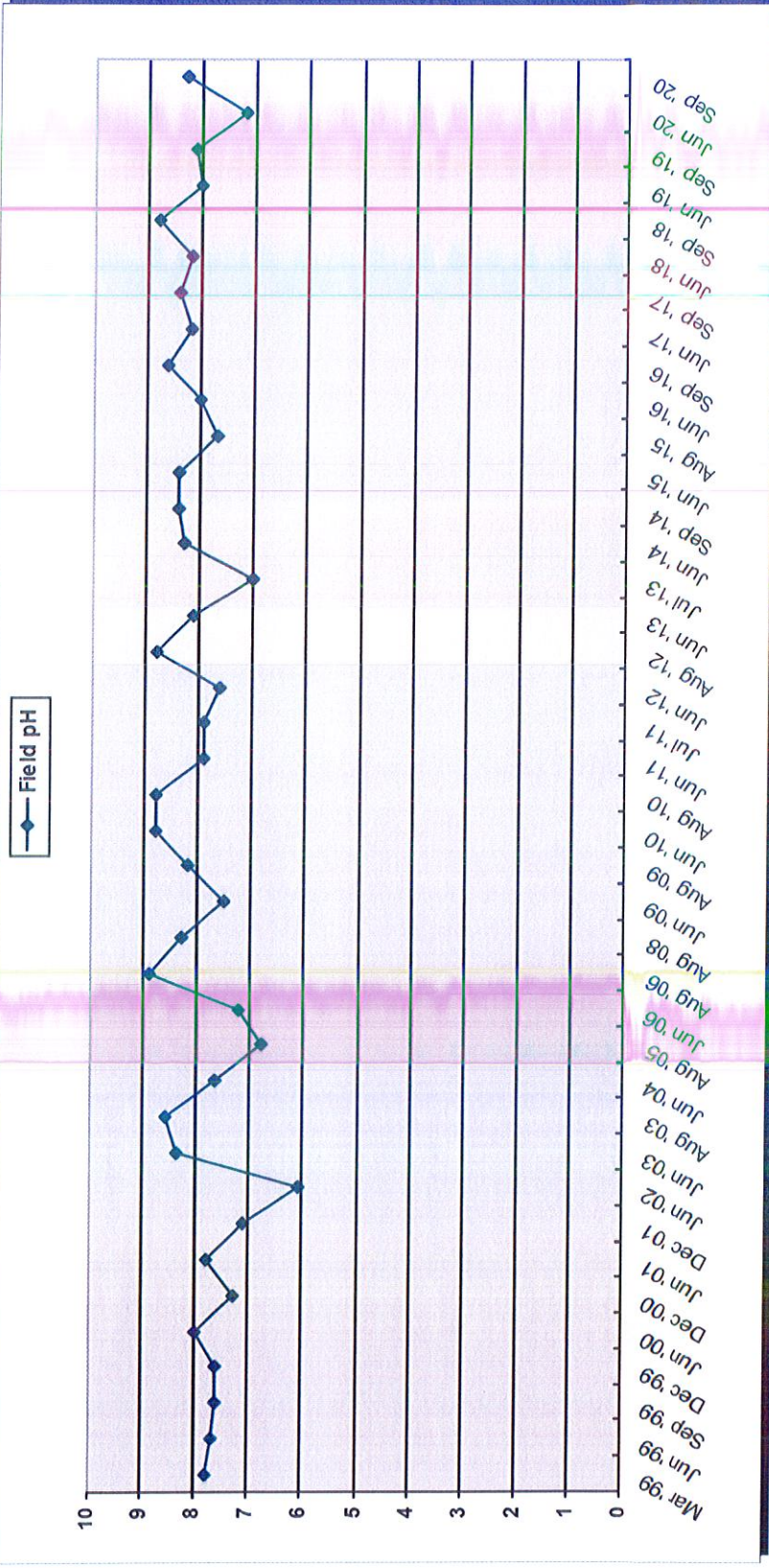
GROUND WATER LOCATION: BC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOF2020 AHR

GROUND WATER LOCATION: BC-1

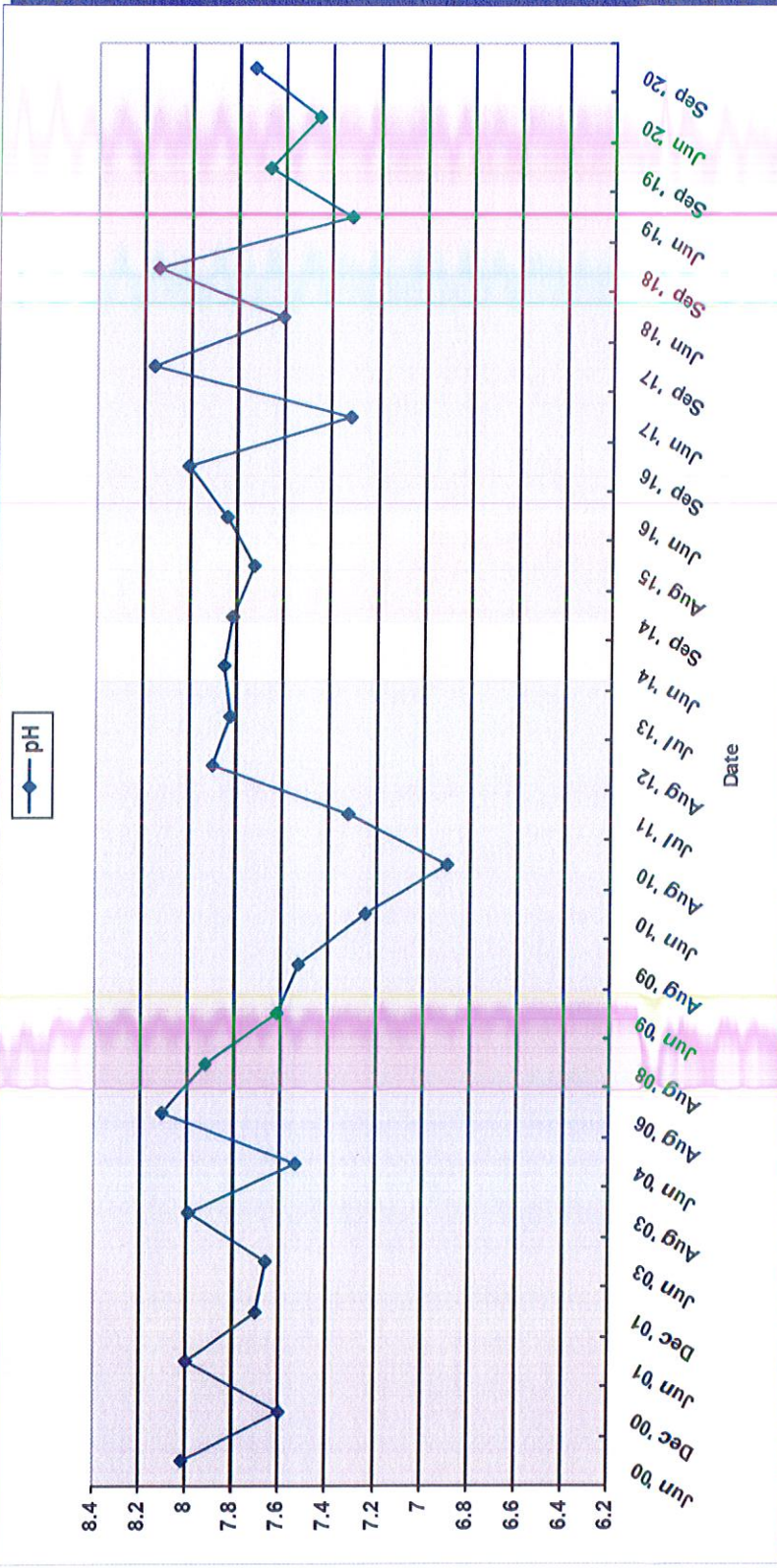


Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

MONITORING CHART FOR 2020AHR

GROUND WATER LOCATION: BC-1

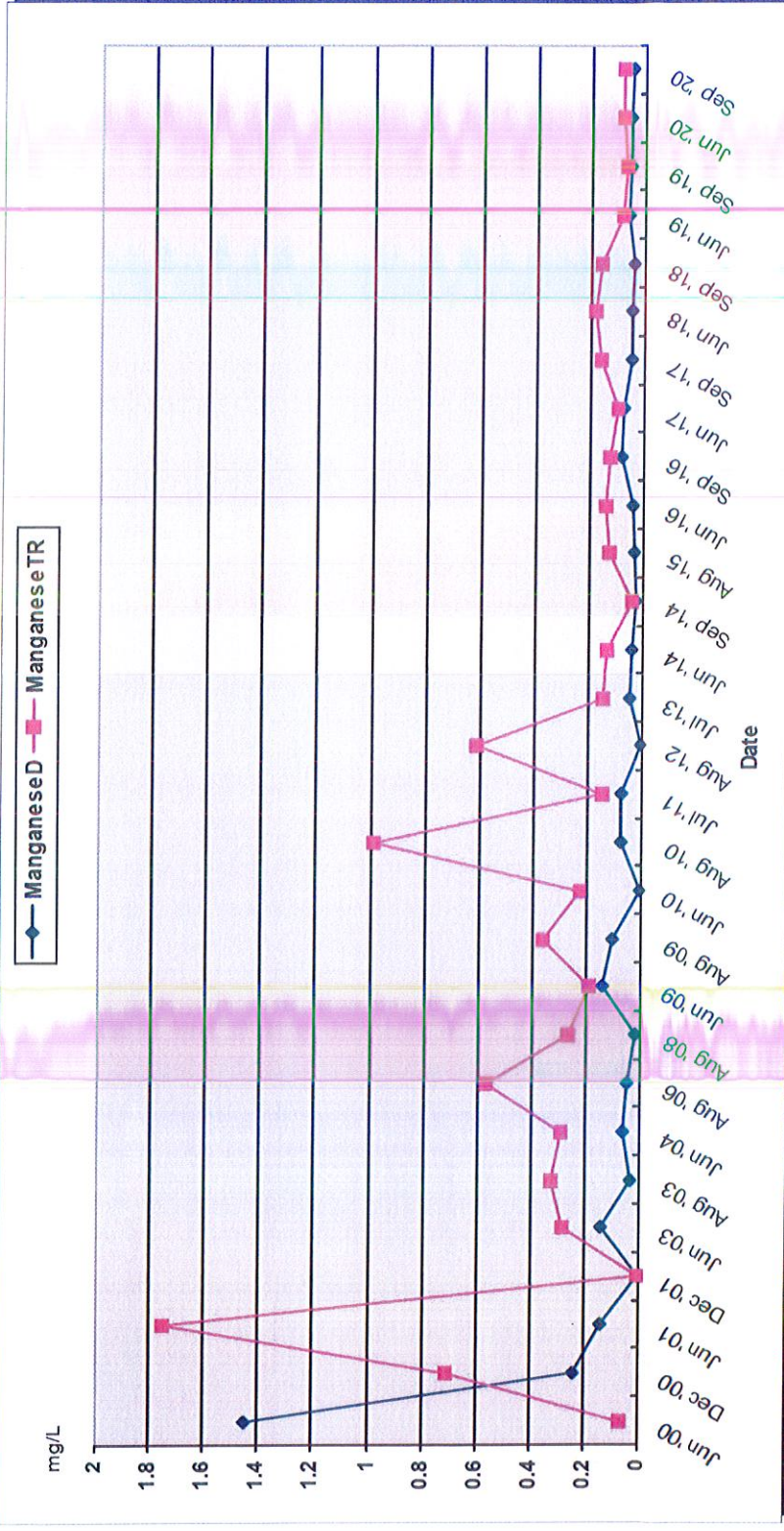


Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

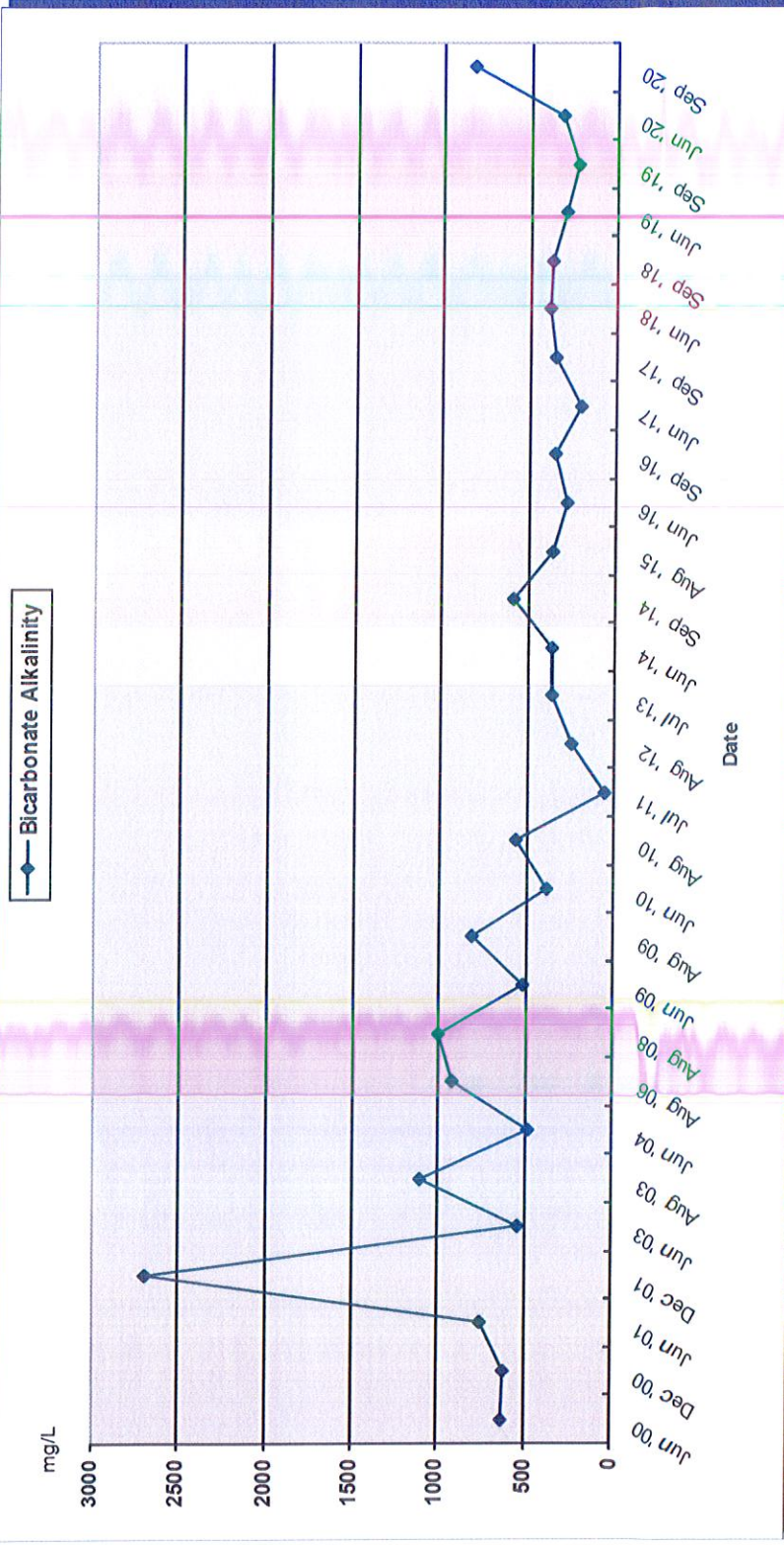
GROUND WATER LOCATION: BC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: BC-1

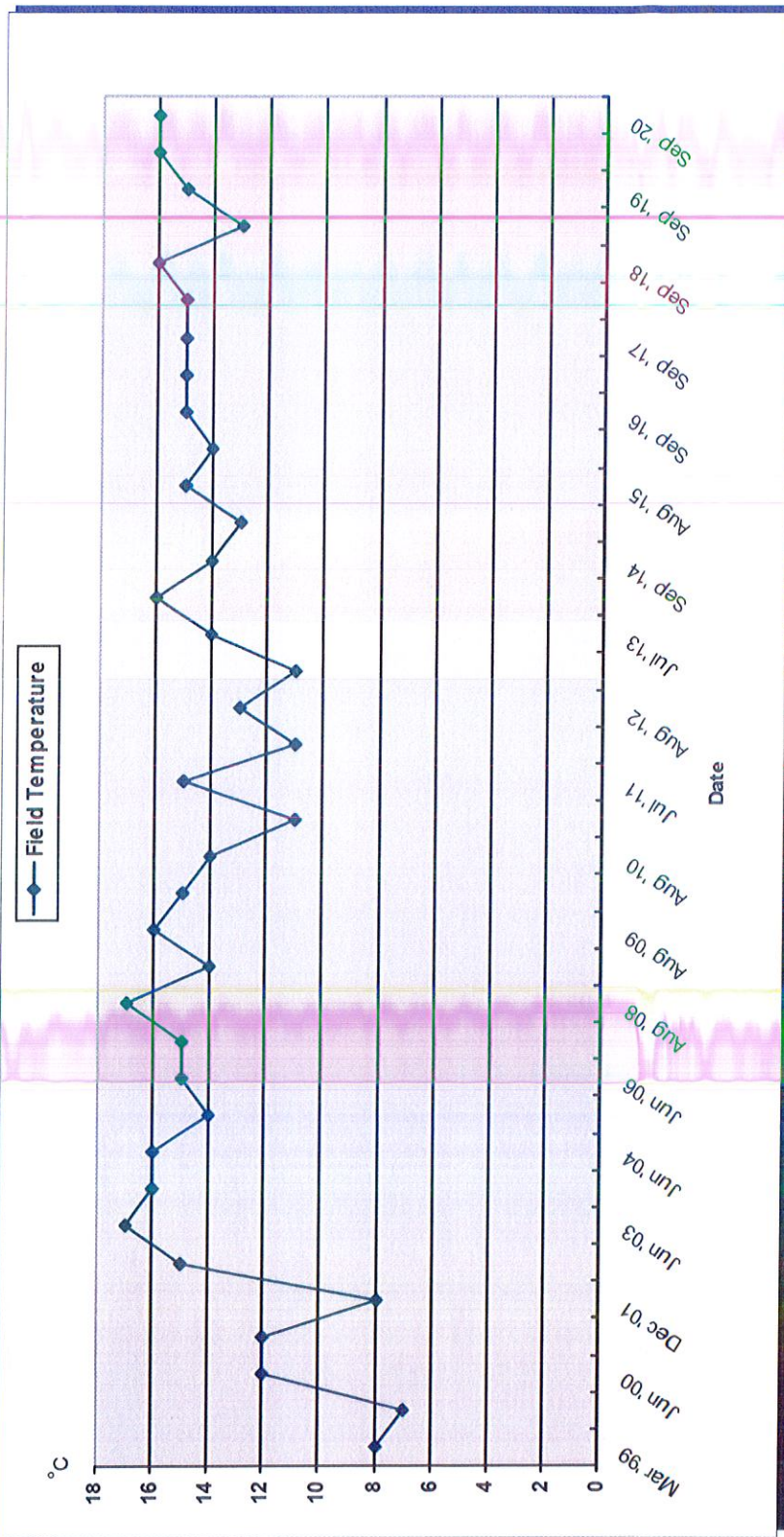


Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: BC-1

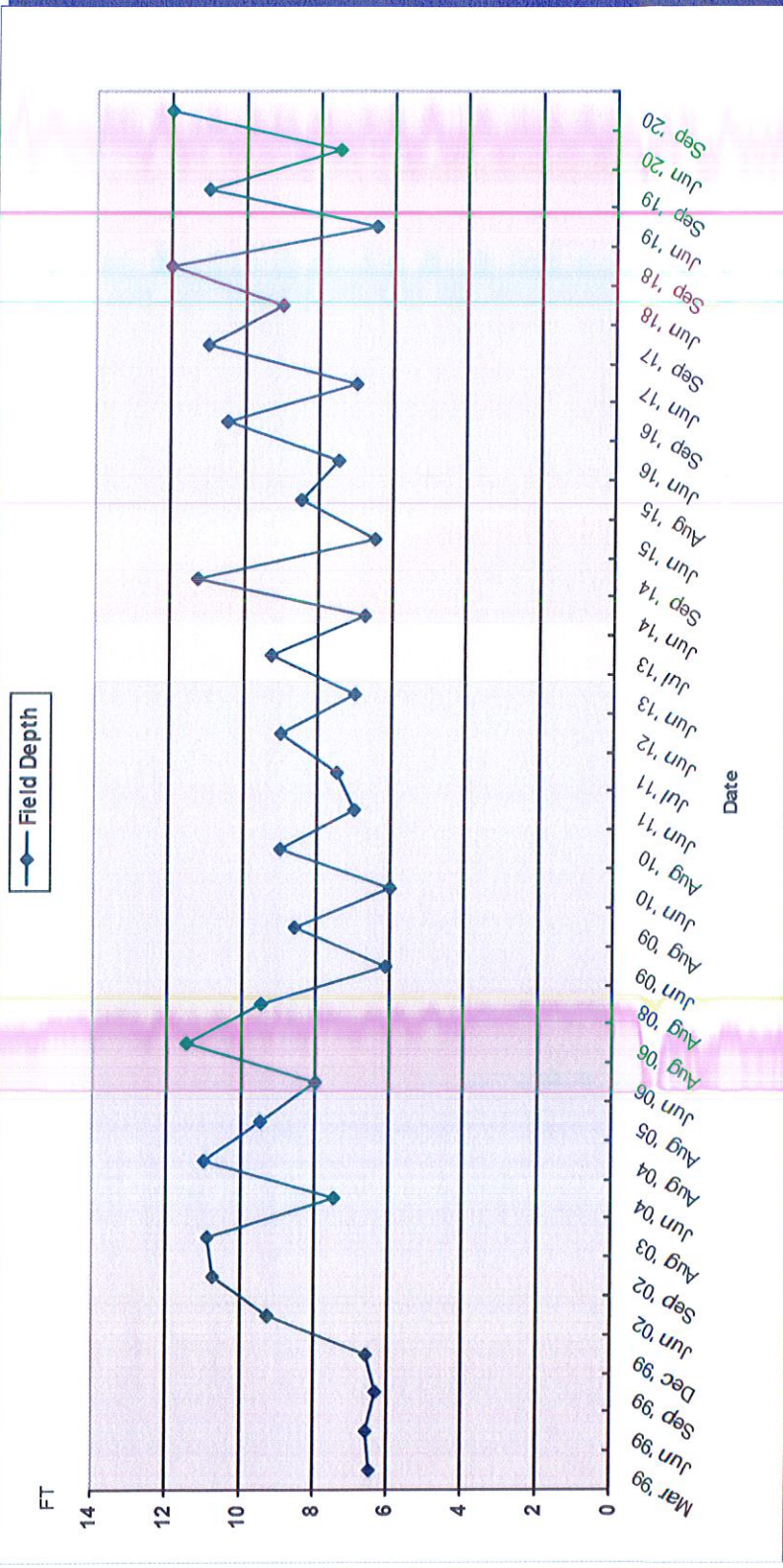


Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

MONITORING CHART FOF2020 AHR

GROUND WATER LOCATION: BC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

EC-14 WELL
UPPER ELK CREEK CANYON
ALLUVIUM / COLLUVIUM

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: EC-14

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/16/2020	13:30	12.5	7.2	1570	15	0.189	380	0	7.68	989	194.98	0.018	76.56	932		0	0.002	0.01	121.3	1.16	0.119	0.098	0.164				269	0.039
6/16/2020	12:30	12	7.1	1300	15	0.112	432	0	7.38	1196	265.88	0.026	87.67	1096		0	0.002	0.01	116.3	1.28	0.112	0.101	0.178				263	0.035
9/23/2019	13:15	12.5	7.5	1440	13	0.073	190	0	7.45	671	142.7	0.08	87.26	566		0	0.002	0.01	48.3	1.34	0.123	0.082	0.138				202	0.033
6/24/2019	12:30	11	7.8	1450	11	0.096	426	0	7.54	938	113.68	0.12	105.55	882		0	0.002	0.01	81.3	1.67	0.154	0.094	0.168				202	0.038
9/17/2018	11:45	13	7.1	1400	14	0.078	301.25	0	7.33	732	116.78	0.18	104.96	1222		0	0.002	0.01	79.2	3.03	0.038	0.038	0.751				164	0.033
6/18/2018	12:15	12	8.4	1380	13	0.082	303.24	0	7.64	812	116.78	0.29	83.55	861		0	0.002	0.01	77.5	3.97	0.049	0.042	1.005				187	0.031
9/13/2017	12:05	12.75	7.9	1530	12	0.077	283.33	0	7.44	370	32.94	0.21	88.91	460		0	0.002	0.01	67.3	3.18	0.39	0.038	0.98				117	0.027
6/27/2017	11:00	12	8.2	1440	13	0.064	245.36	0	7.41	748	170.43	0.19	87.43	686		0	0.002	0.01	51.8	2.23	0.203	0.089	0.129				149	0.033
9/28/2016	12:00	12	7.5	1630	13	0.076	309.37	0	8.05	817	48.39	0.29	193.45	706		0	0.002	0.01	72.3	18.5	0.247	0.092	0.354				155	0.033
6/20/2016	9:45	11.5	8	560	12	0.078	302.26	0	8.01	605	35.45	0.22	103.72	656		0	0.002	0.01	71.3	5.43	0.041	0.052	1.13				139	0.031
8/19/2015	10:45	12	7.9	1060	13	0.082	269.43	0	7.87	719	16.44	0.38	145.96	694		0	0.003	0.01	69.1	22.8	0.049	0.042	1.64				148	0.025
9/11/2014	9:00	12.6	8.2	670	12	0.104	379	0	7.55	854	46.12	0.4	111.9	763		0	0.003	0.01	77.6	6.42	0.09	0.010	0.17				145.2	0.03
6/25/2014	9:00	12	8.4	660	12	0.091	271	0	7.72	680	16.4	0.51	103.58	572		0	0.005	0.01	88.6	39.7	0.046	0.046	1.97				197	0.019
7/18/2013	12:00	13	7.7	680	10	0.088	267.18	0	7.69	694	22.13	0.48	108.36	527		0.08	0.006	0.01	81.3	44.8	0.038	0.050	2.62				188.3	0.02
6/18/2013	12:00	14	7.6	630	12																							
8/2/2012	13:30	14	7	760	9	0.22	333.4	0	7.21	650	98.51	0.41	38.87	556		0.08	0.003	0.01	75.2	180	0.04	0.010	8.98	0	0	0	76.2	0.51
6/19/2012	13:30	12	7.3	780	8																							
7/26/2011	9:00	14	7.9	1050	10	0.12	80.31	0	7.37	955	4.96	0.19	112.36	1086		0.08	0.01	68.1	17.66	0.14	0.010	0.46				212	0.03	
6/23/2011	9:00	14	8	920	10																							
8/5/2010	6:45	14	9.3	1090	8	0.02	484.84	0	7.41	1161	27.23	1.46	120.19	798		0.08	0.007	0.01	25.06	36.8	0.02	0.010	1.18				160	0.02
6/15/2010	8:30	12.9	9.2	1050	9	0.124	518.57	0	7.33	1277	9.43	9.97	109.07	980		0	0.072	0.006	70.6	56.5	0.42	0.003	1.16				258.8	0.03
8/4/2009	14:00	14	8.2	940	12	0.2	720	1	7.29	1100	8	0.05	110	820		0.01	0.002	0.005	130	72	0.01	0.008	1.5				180	0.007
6/17/2009	14:00	13.3	7.6	1080	9	0.05	530	1	7.40	1000	14	0.02	88	650		0.01	0.01	0.005	100	34	0.03	0.005	0.749				140	0.005
8/11/2008	9:00	14	7.4	1060	10	0.52	750	1	7.46	1300	14	0.02	100	970		0.02	0.01	0.005	160	82	0.01	0.031	2.3				190	0.005
6/18/2008	14:00	12.3	8	1040	7																							
8/2/2007	14:00	14	7.48	1100	6	0.33	660	1	7.61	1200	8	0.02	120	430		0.01	0.002	0.005	78	22	0.01	0.005	0.316				190	0.005
6/19/2007	14:00	14	7.32	1200	8.5	0.46	710	1	7.74	1300	22	0.02	120	910		0.11	0.002	0.005	77	48	0.01	0.005	0.571				200	0.005
8/10/2006	14:00	14	7.53	1190	10	0.2	740		7.61	1300	19	0.08	130	1100		0.01	0.002	0.005	94	85	0.01	0.005	0				200	0.005
6/9/2006	12:00	13.6	7.68	1090	7																							
10/17/2005	14:00	13.5	7.98	1070	11	0.37	710	1	7.57	1300	18	0.61	160	870		0.01	0.002	0.005	90	12	0.01	0.005	0.38				220	0.005
8/5/2005	10:00	14	7.4	1060	10		710		7.57	1300	18		160	870		0.01	0.002	0.005	90	12	0.01	0.005	0.38				220	0.006
6/22/2004	14:00	12.6	7.68	1120	12	0.55	1100	1	7.53	1100	14	0.02	170	880		0.01	0.002	0.005	410	460	0.01	0.005	8				220	0.005
8/26/2003	14:00	14.5	7.85	960	11	0.05	1500	1	7.57	1200	11	0.1	150	830		0.01	0.002	0.005	600	990	0.04	0.011	14				230	0.005

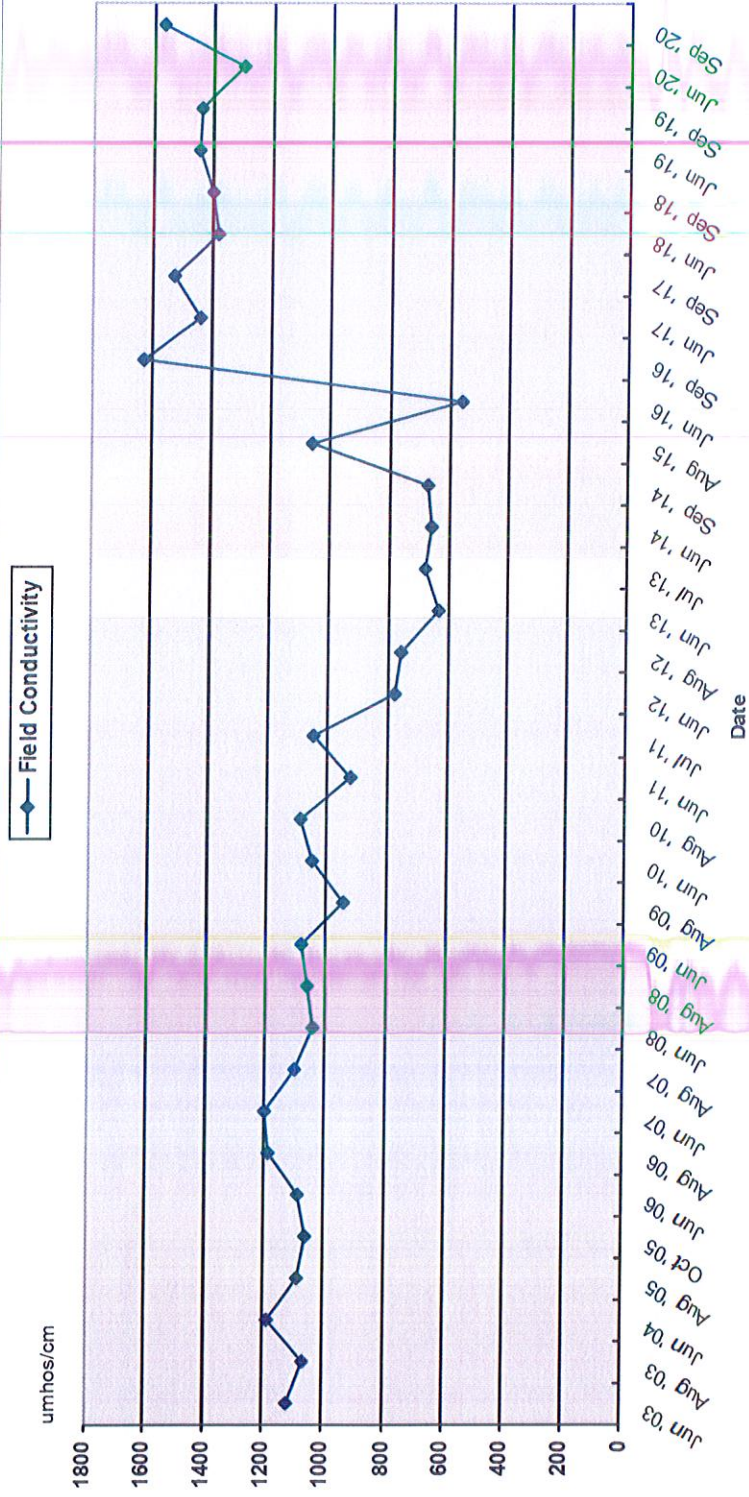
MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: EC-14

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
6/17/2003	14:00	13.75	7.02	990	13	0.05	800	1	7.62	1300	11	0.11	150	850		0.01	0.002	0.005	160	160	0.02	0.032	2.8				0.032	0.005

MONITORING CHART FOR 2020 AHR

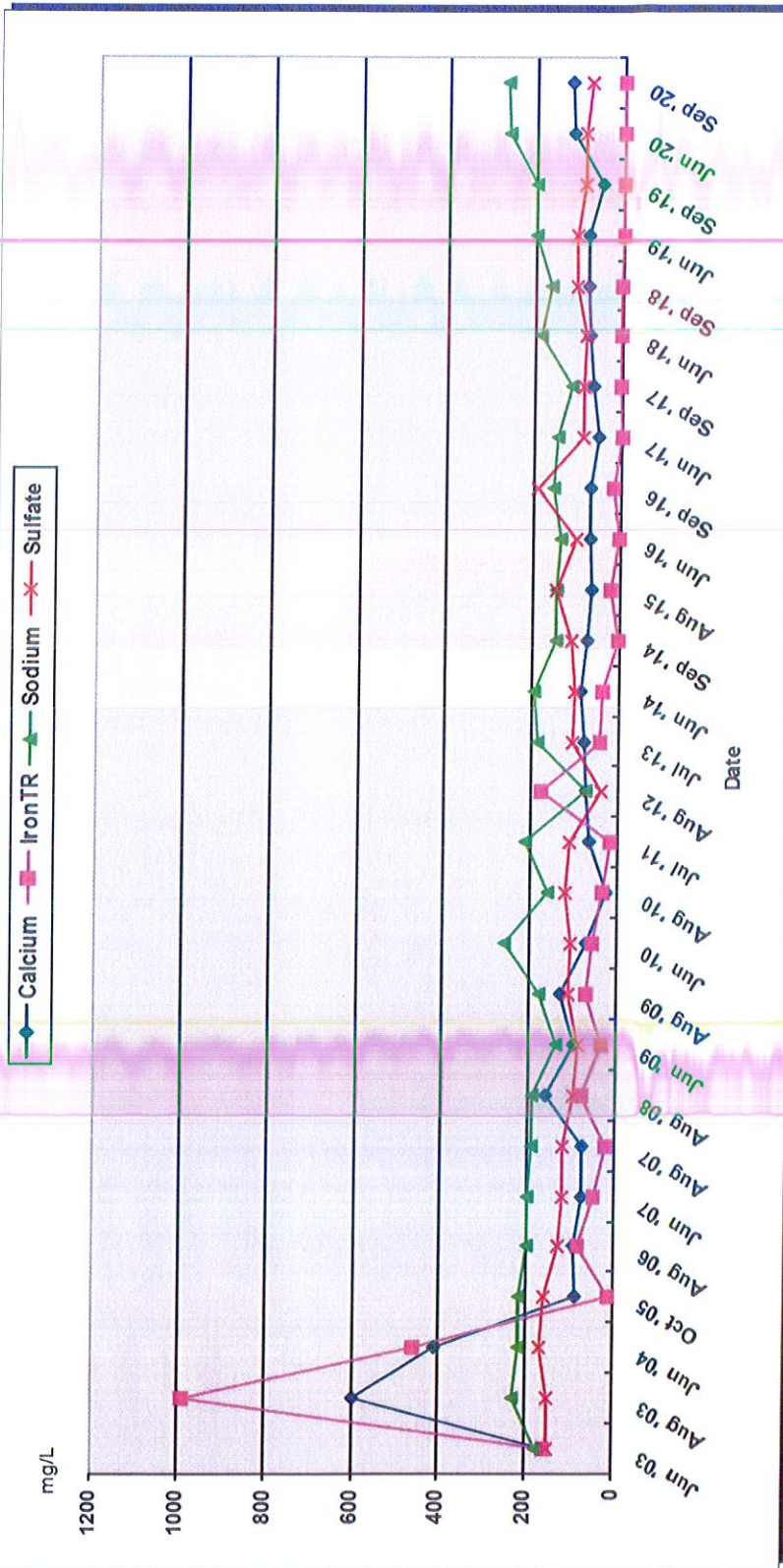
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOF2020 AHR

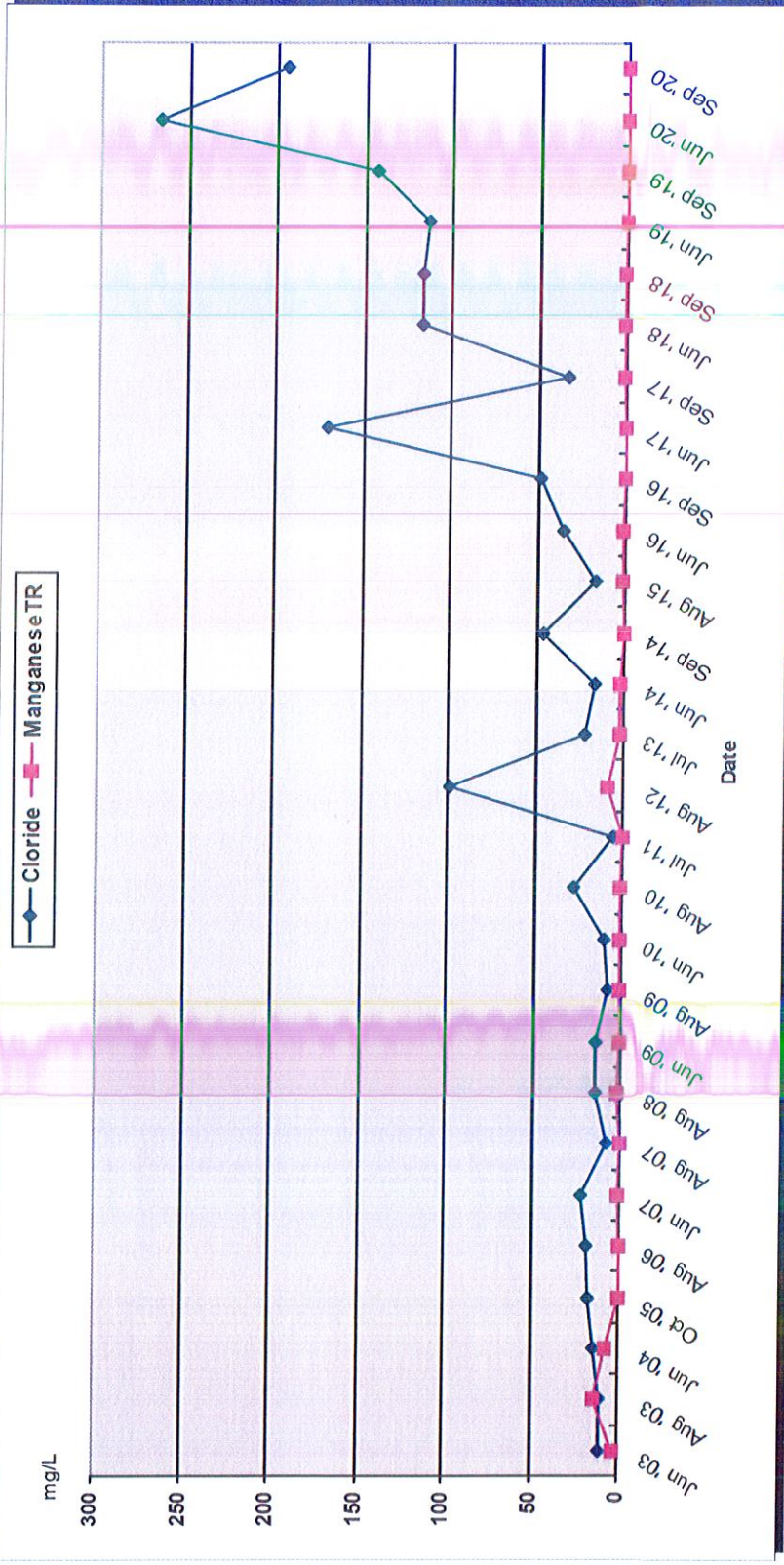
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC, Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOF2020 AHR

GROUND WATER LOCATION: EC-14

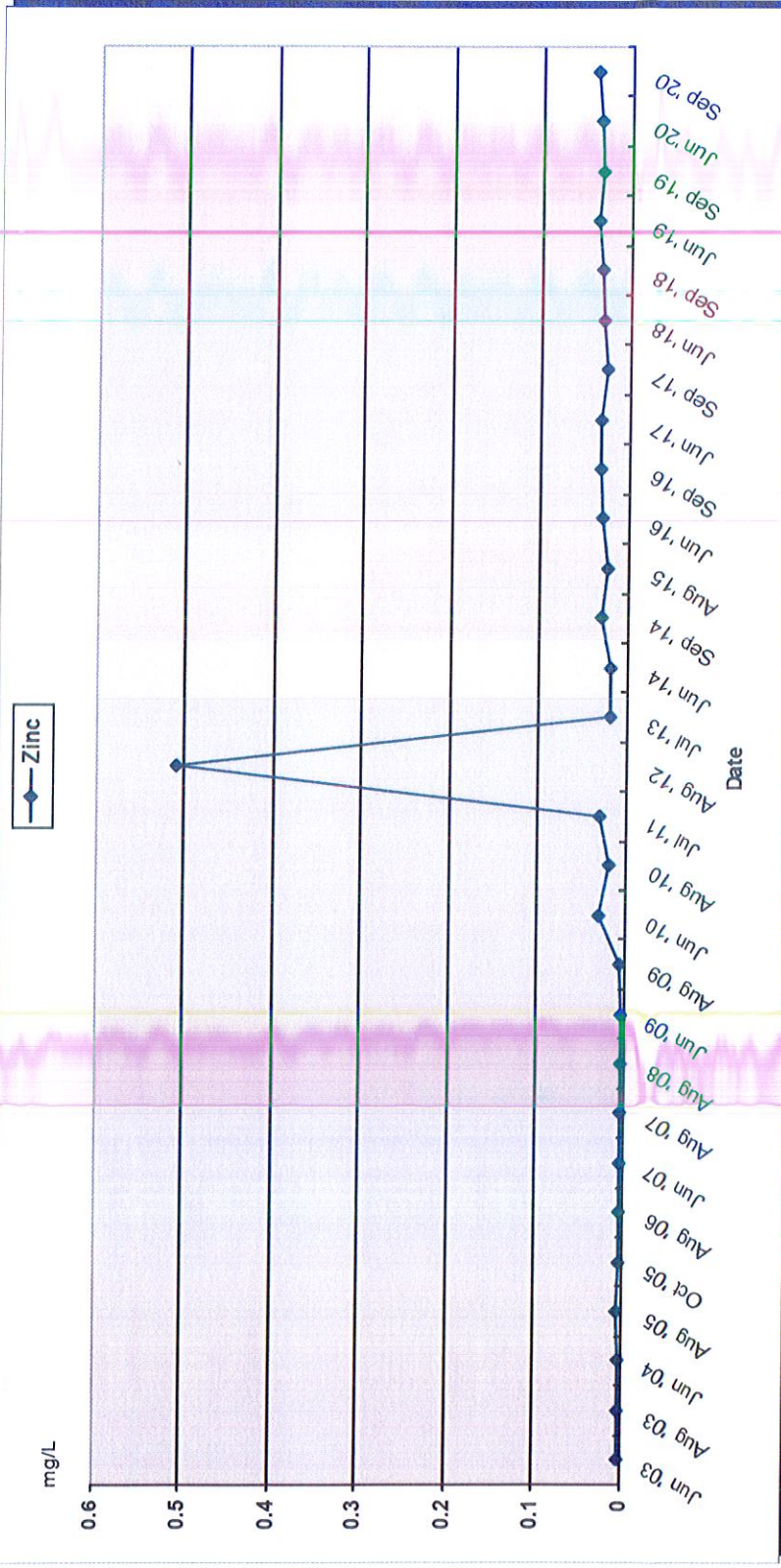


Oxbow Mining, LLC., Elk Creek Mine

Date : 17-Feb-21

MONITORING CHART FOF2020 AHR

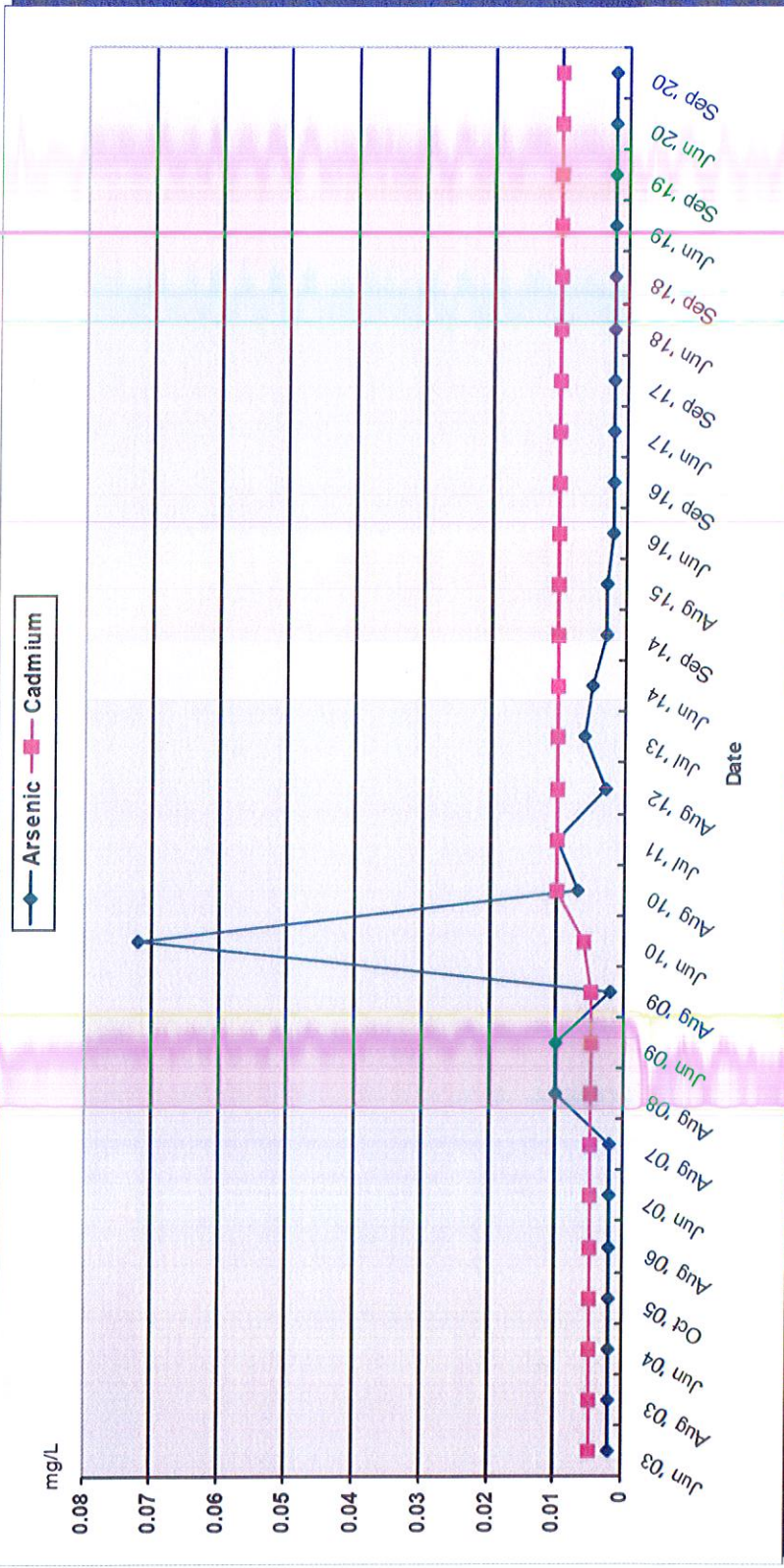
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOF2020 AHR

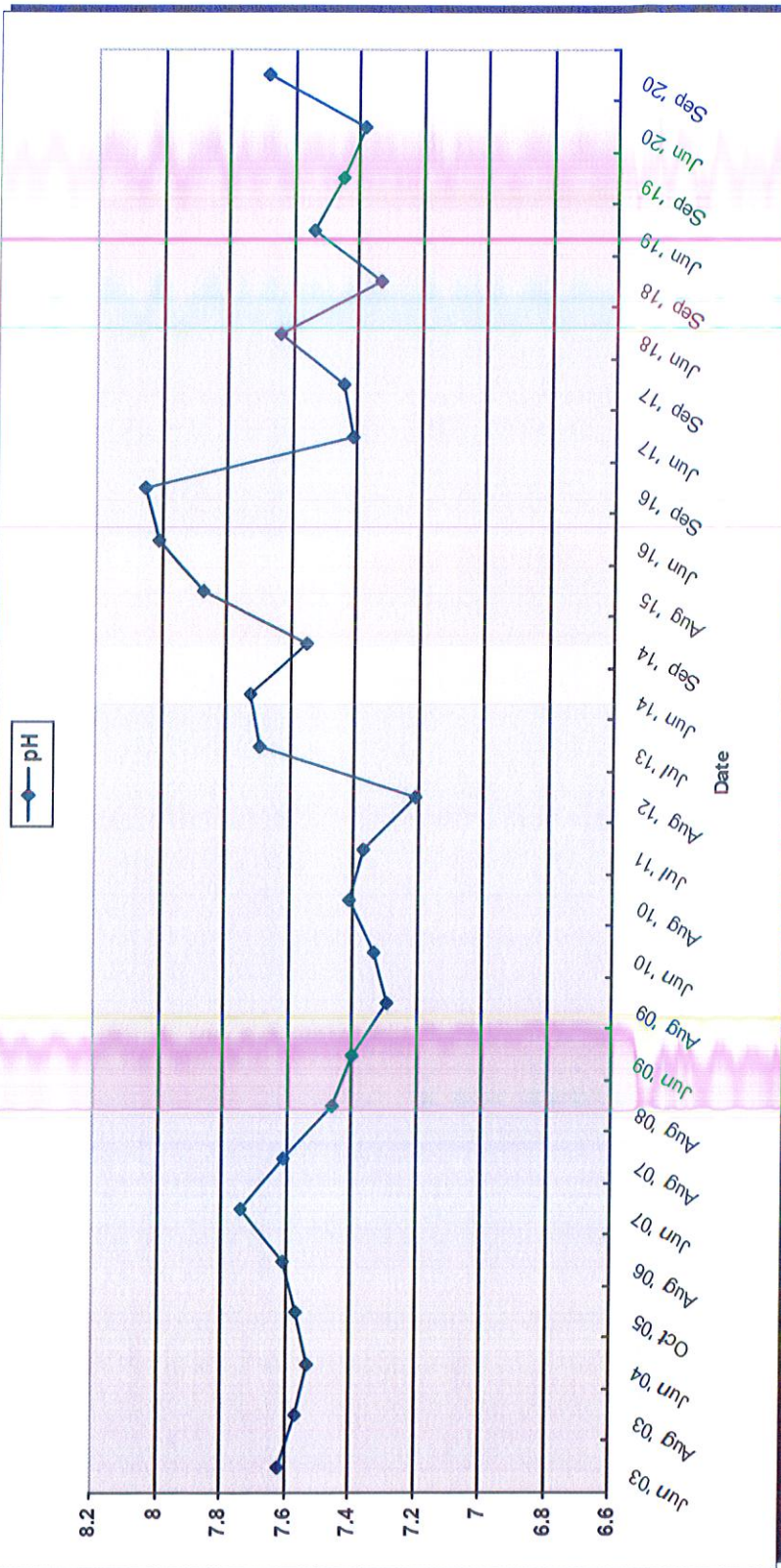
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOI2020 AHR

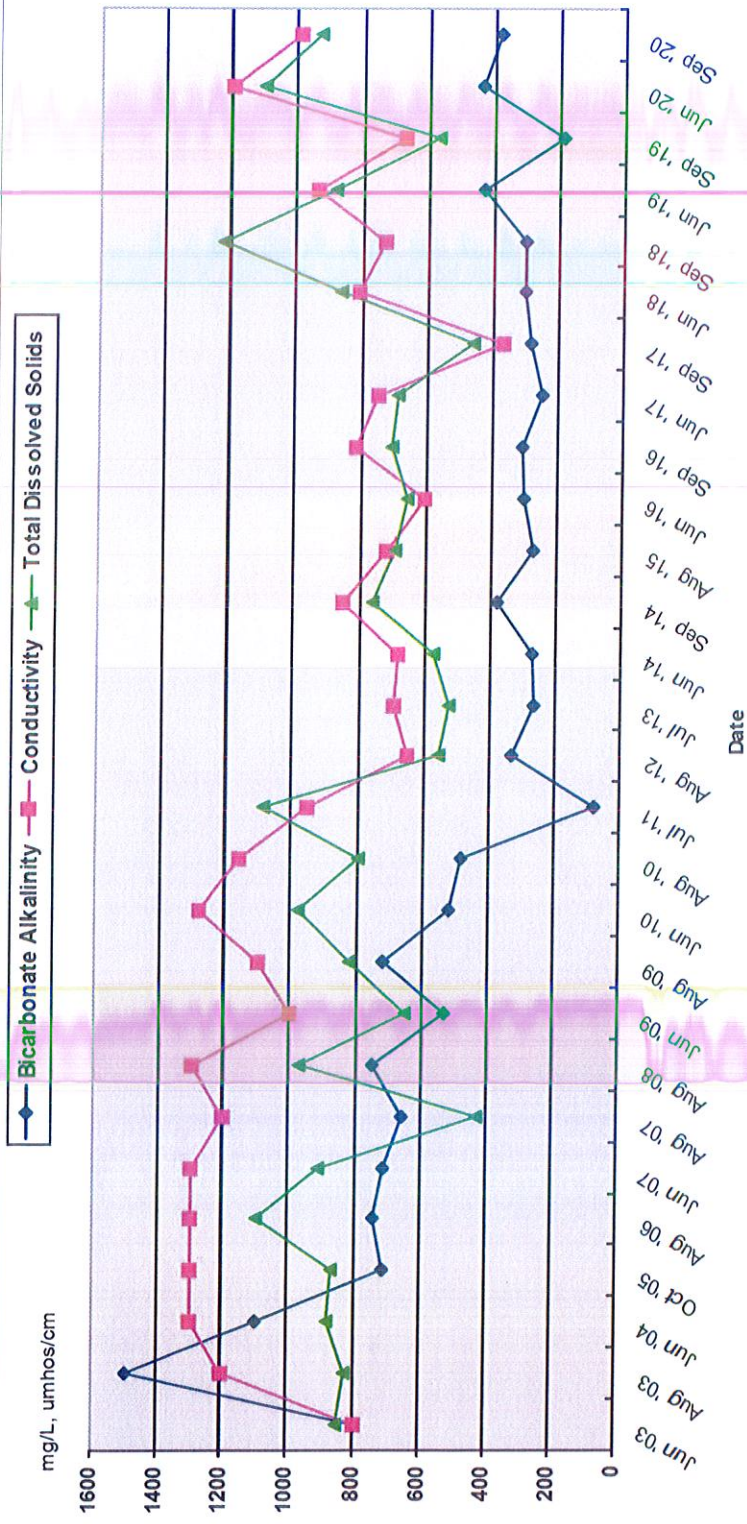
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOR 2020 AHR

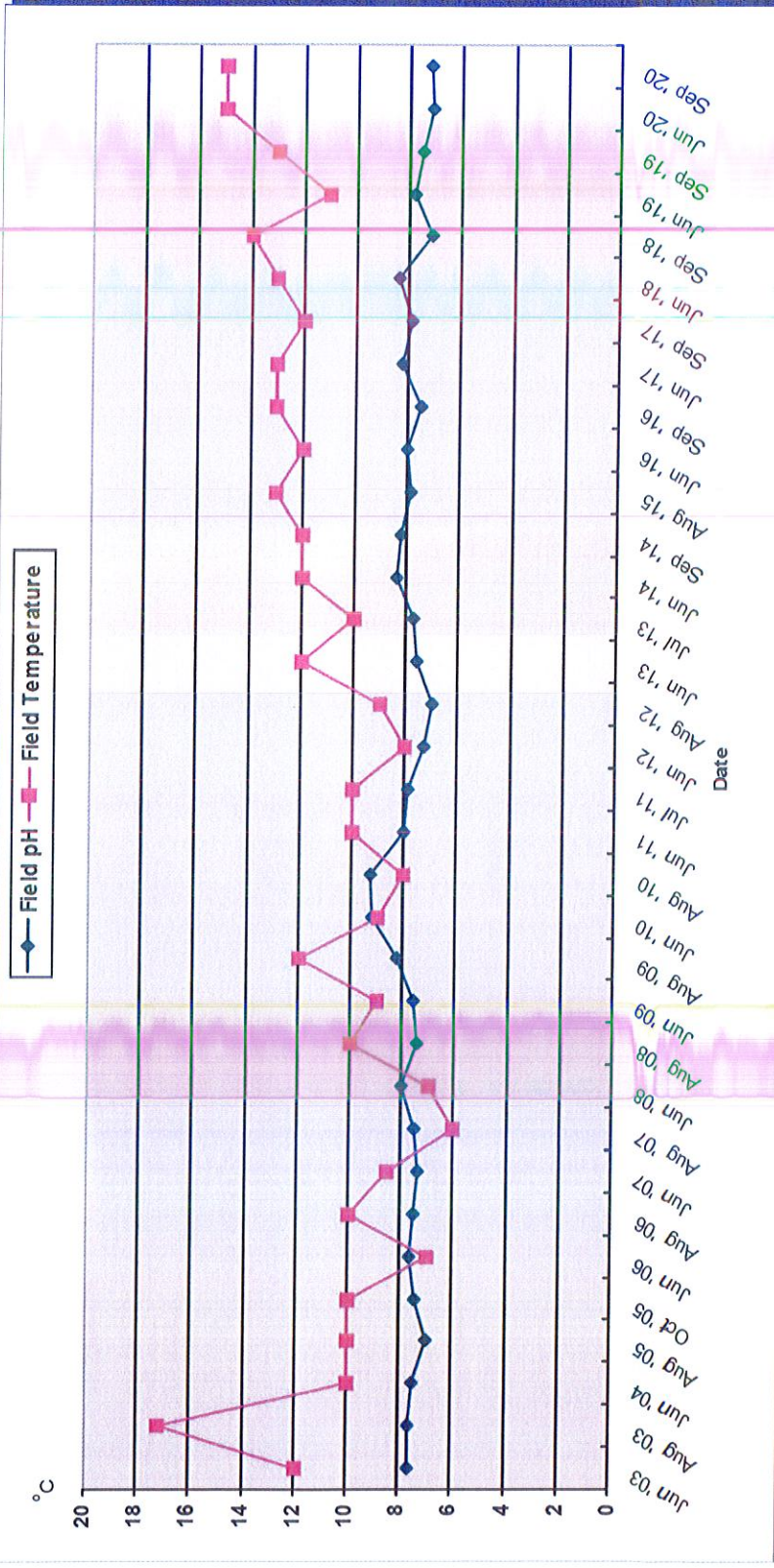
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOR 2020 AHR

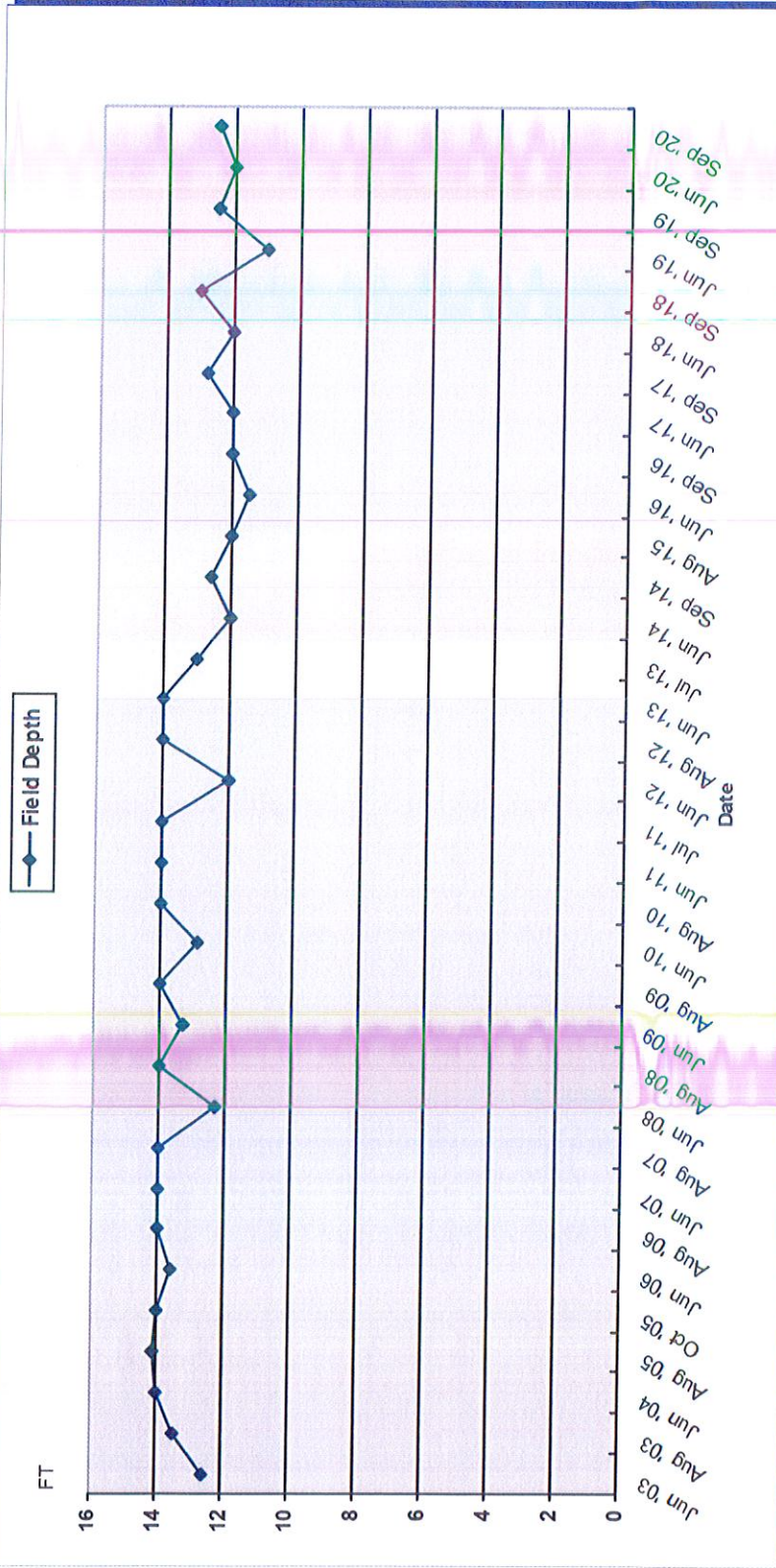
GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine
Date : 17-Feb-21

MONITORING CHART FOF2020 AHR

GROUND WATER LOCATION: EC-14



Oxbow Mining, LLC., Elk Creek Mine

Date : 17-Feb-21

EC-15 WELL
MID ELK CREEK CANYON
ALLUVIUM / COLLUVIUM

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: EC-15

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
6/16/2020	12:15	44	7.1	1140	16	0.129	410	0	7.37	1129	248.15	0.11	68.33	1012	0	0.003	0.01	98.9	2.67	0.344	0.116	0.38					254	0.056
9/23/2019	13:05	48	7.5	1420	15	0.072	139	0	7.27	628	121.6	0.05	62.97	564	0	0.002	0.01	50.2	2.97	0.354	0.089	0.313					141	0.048
6/24/2019	12:45	40.5	8.1	1040	13	0.149	294	0	7.67	634	125.18	0.09	58.57	596	0	0.002	0.01	67.8	3.28	0.381	0.101	0.36					193	0.049
6/18/2018	12:30	45.5	8.2	1580	15	0.126	296.55	0	7.30	790	103.43	0.26	105.73	848	0	0.002	0.01	76.6	5.37	0.055	0.055	0.457					183	0.036
6/27/2017	11:20	47	8.1	1020	14	0.083	216.92	0	7.29	627	107.93	0.16	64.62	572	0	0.002	0.01	55.1	3.67	0.351	0.093	0.312					141	0.042
9/28/2016	12:25	49	7.4	1360	16	0.088	291.59	0	7.90	646	37.49	0.22	48.98	578	0	0.002	0.01	65.7	25.33	0.636	0.089	0.614					171	0.039
6/20/2016	10:00	43.5	8.2	540	13	0.103	273.54	0	7.89	525	17.73	0.16	78.45	508	0	0.002	0.01	66.2	4.56	0.051	0.038	0.405					164	0.033
8/19/2015	10:00	48	7.8	910	13	0.097	233.51	233.51	7.88	708	18.53	0.29	112.5	651	0	0.002	0.01	64.3	7.46	0.048	0.026	0.303					158	0.026
6/16/2015	10:40	44.5	8	1060																								
9/11/2014	9:00	45	7.4	840	14	0.107	322	0	7.42	938	30.75	0.25	88.08	842	0	0.002	0.01	97.2	1.9	0.08	0.010	0.06					129.6	0.09
6/25/2014	9:00	45.5	7.8	780	17	0.111	228	0	7.69	694	20.03	0.36	94.11	631	0	0.003	0.01	85.2	10.08	0.051	0.029	0.279					185	0.021
7/18/2013	12:00	51	7.6	770	14	0.113	239.55	0	7.63	724	18.66	0.33	98.51	672	0	0.08	0.003	0.01	84.4	9.66	0.044	0.030	0.38				177.4	0.02
6/18/2013	12:00	46	7.3	1450	12																							
8/2/2012	12:00	51.25	0	0	0																							
6/19/2012	14:00	47	7	830	11																							
7/26/2011	9:00	49	7.8	880	12	0.13	56.72	0	7.26	782	2.48	0.22	75.73	2290	0.08	0.013	0.01	67.2	2.78	0.1	0.010	0.07					194	0.03
6/23/2011	9:00	46	7.8	1070	7																							
8/5/2010	7:00	46.5	9.1	880	7	0.02	371.01	0	7.07	895	40.84	1.37	74.5	534	0.08	0.004	0.01	80.3	24	0.08	0.010	0.81					96.5	0.04
6/15/2010	10:00	44.75	8.9	800	8	0.086	383.66	0	7.02	951	5.76	0	62.15	650	0	0.067	0.005	72.2	73	0.01	0.001	2.01					138	0.02
8/4/2009	12:40	49.3	7.8	690	19	0.6	550	1	7.04	810	6	0.04	62	660	0.01	0.002	0.005	460	260	0.01	0.021	10					110	0.005
6/16/2009	11:00	47	7.5	800	13	0.17	610	1	7.58	1100	11	0.02	98	910	0.02	0.01	0.005	84	10	0.03	0.005	0.17					150	0.005
8/8/2008	10:00	48.5	7.3	800	13	0.31	550	1	7.11	980	12	0.03	66	490	0.04	0.01	0.005	140	74	0.01	0.021	1.8					110	0.008
6/18/2008	10:00	46	7.6	800	10																							
8/2/2007	10:00	48	7.08	860	14	0.51	560	1	7.37	930	6	0.07	68	2800	0.01	0.002	0.005	120	69	0.03	0.005	1.2					110	0.005
6/19/2007	9:30	46.5	6.94	840	11	0.31	530	1	7.26	890	10	0.02	62	610	0.03	0.002	0.005	82	41	0.01	0.005	0.661					110	0.005
8/10/2006	22:00	49	6.97	890	14	0.16	660	1	7.66	1000	11	0.07	79	760	0.01	0.002	0.005	180	160	0.01	0.005			76			110	0.005
6/9/2006	12:00	46	7.23	860	0																							
10/17/2005	2:35	48.33	0	0	0																							
8/5/2005	9:20	48.2	6.73	880	12																							
8/23/2004	14:15	51.25	0	0	0																							
6/22/2004	12:45	46	7.1	929	15	0.25	770	1	7.29	1000	12	0.13	99	660	0.01	0.002	0.005	220	76	0.01	0.005	1.8					130	0.006
8/26/2003	13:00	51.25	0	0	0																							
6/19/2003	15:00	0	7.18	660	15	0.05	740	1	7.22	1100	11	0.29	120	700	0.01	0.002	0.005	240	110	0.04	0.005	2.7					110	0.005

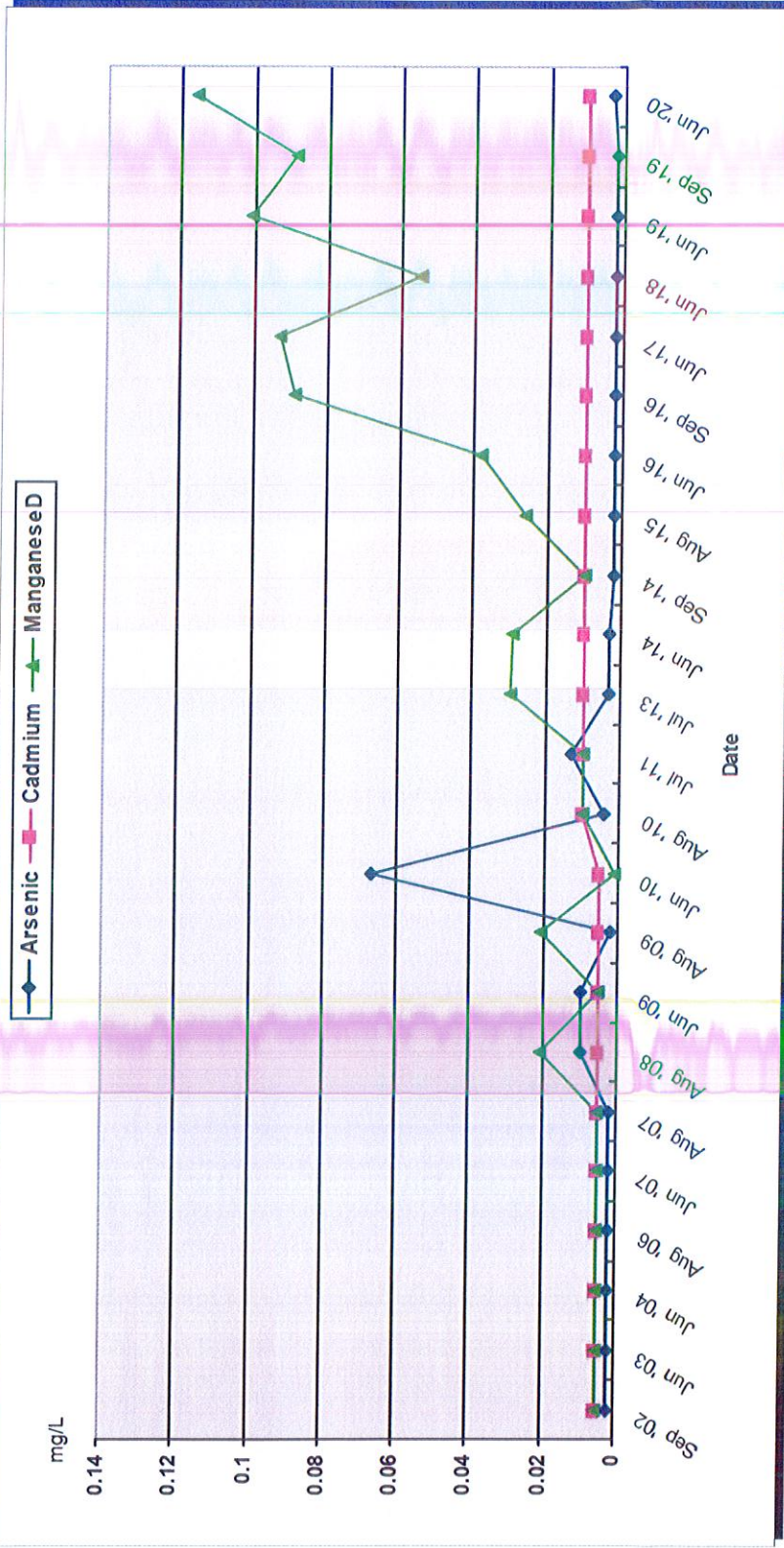
MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: EC-15

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn	
9/23/2002	7:00	46	7.2	900	15	0.6	1000	1200	7.56	1100	26	0.39	140	130		0.01	0.002	0.005	410	210	0.01	0.005	7.5					130	
6/25/2002	7:00	46	7.1	900	17																								

MONITORING CHART FOR 2020 AHR

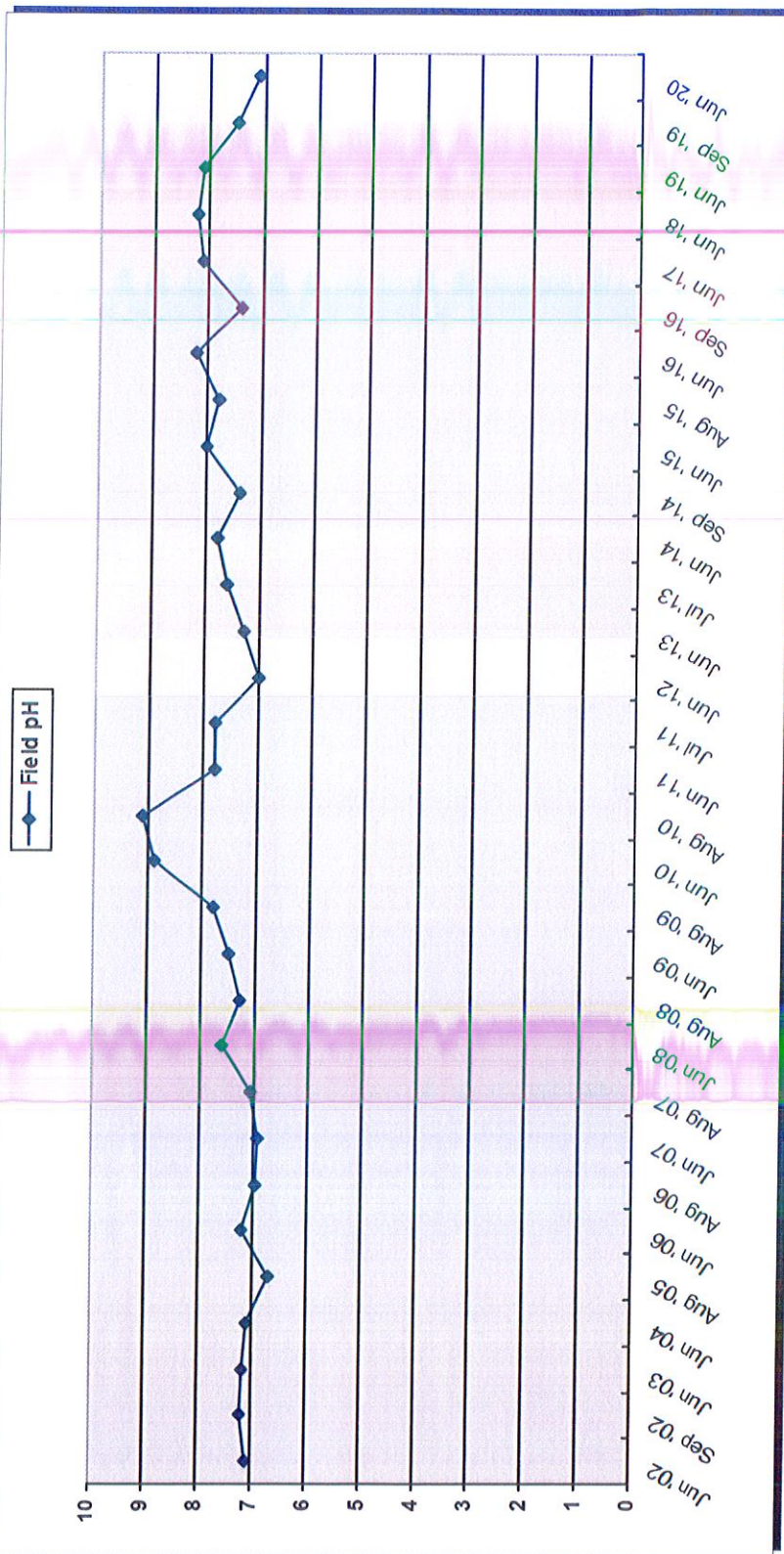
GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOI 2020 AHR

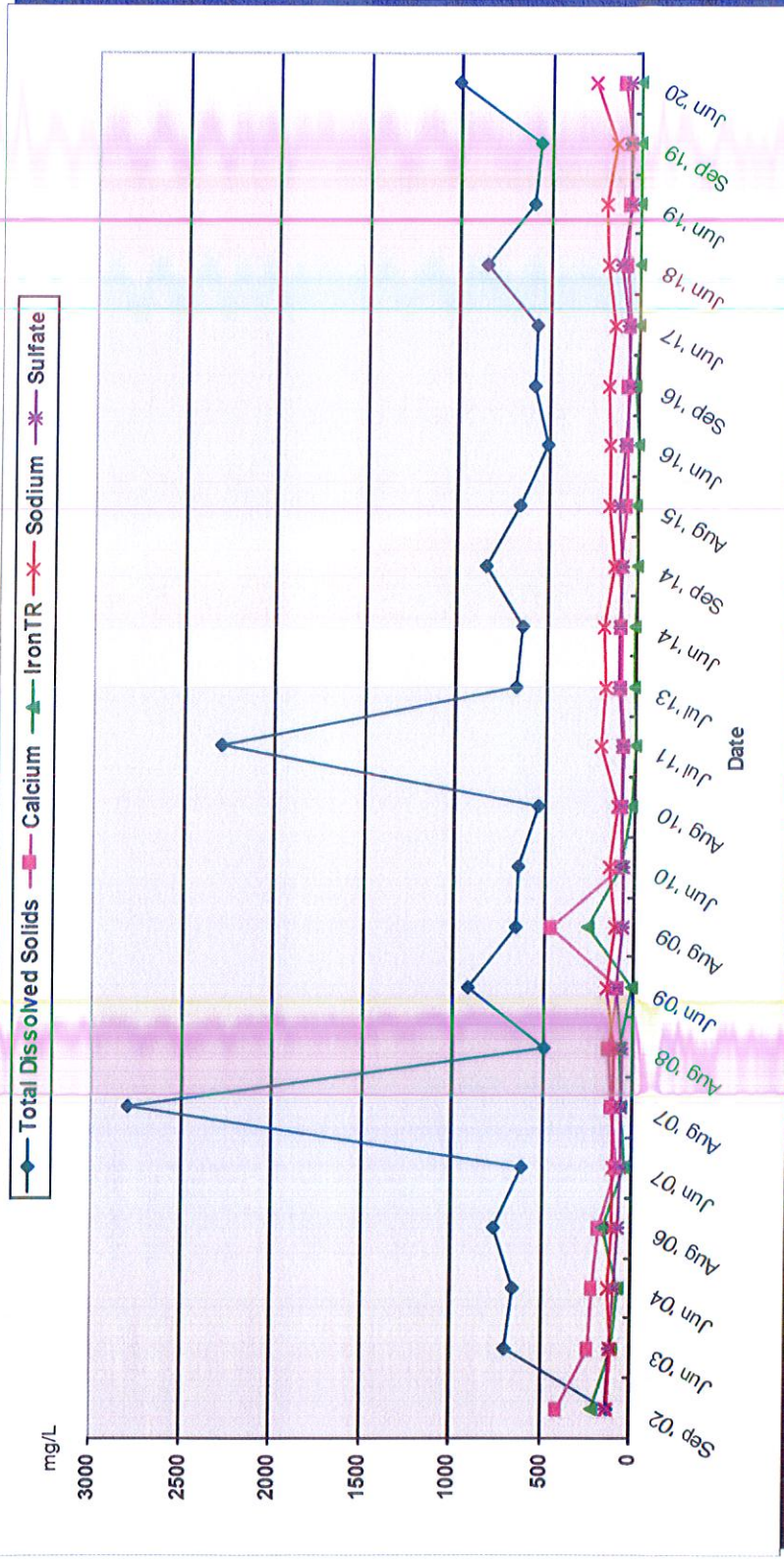
GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC., Elk Creek Mine
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MONITORING CHART FOR 2020 AHR

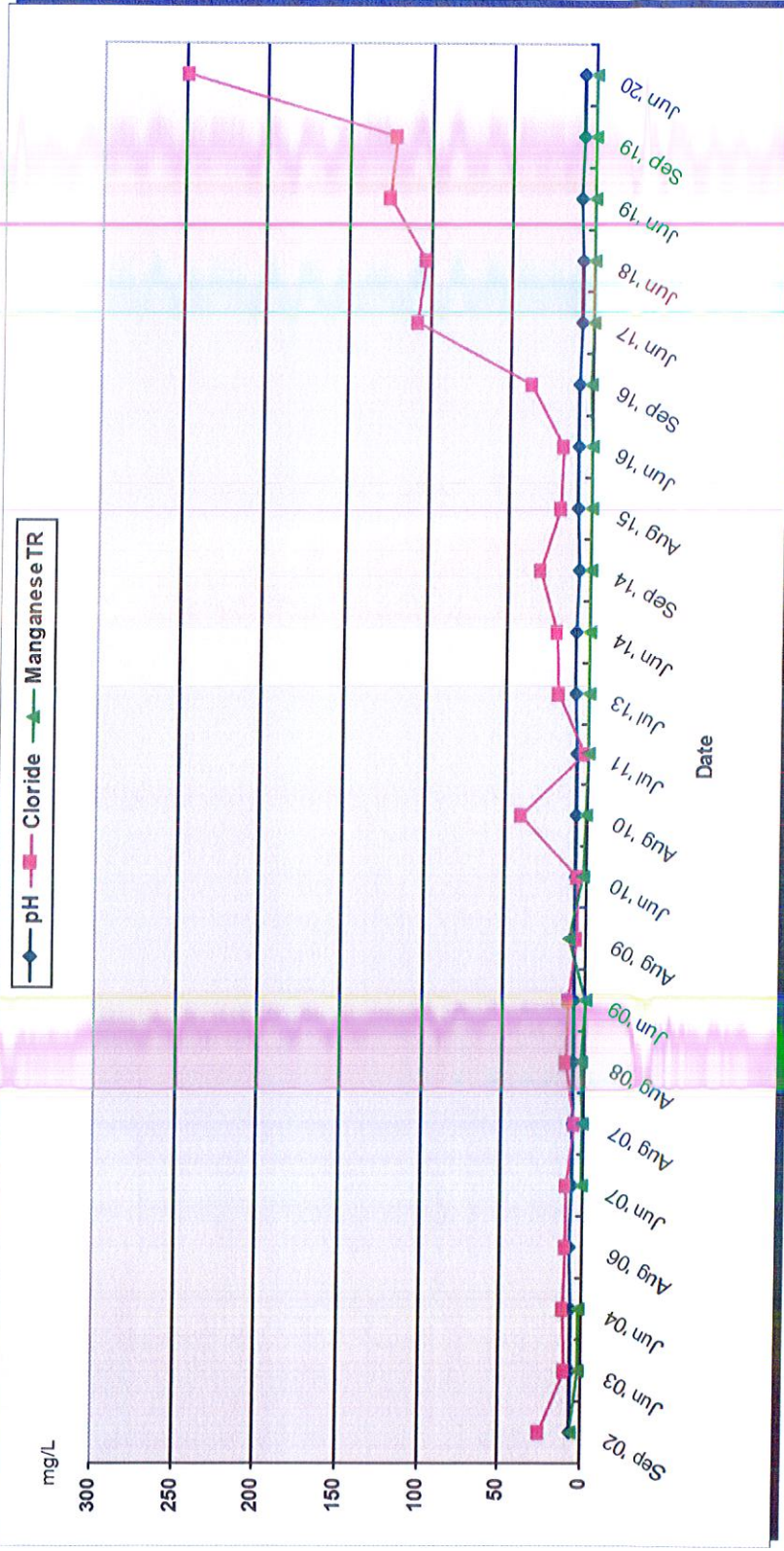
GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC, Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: EC-15

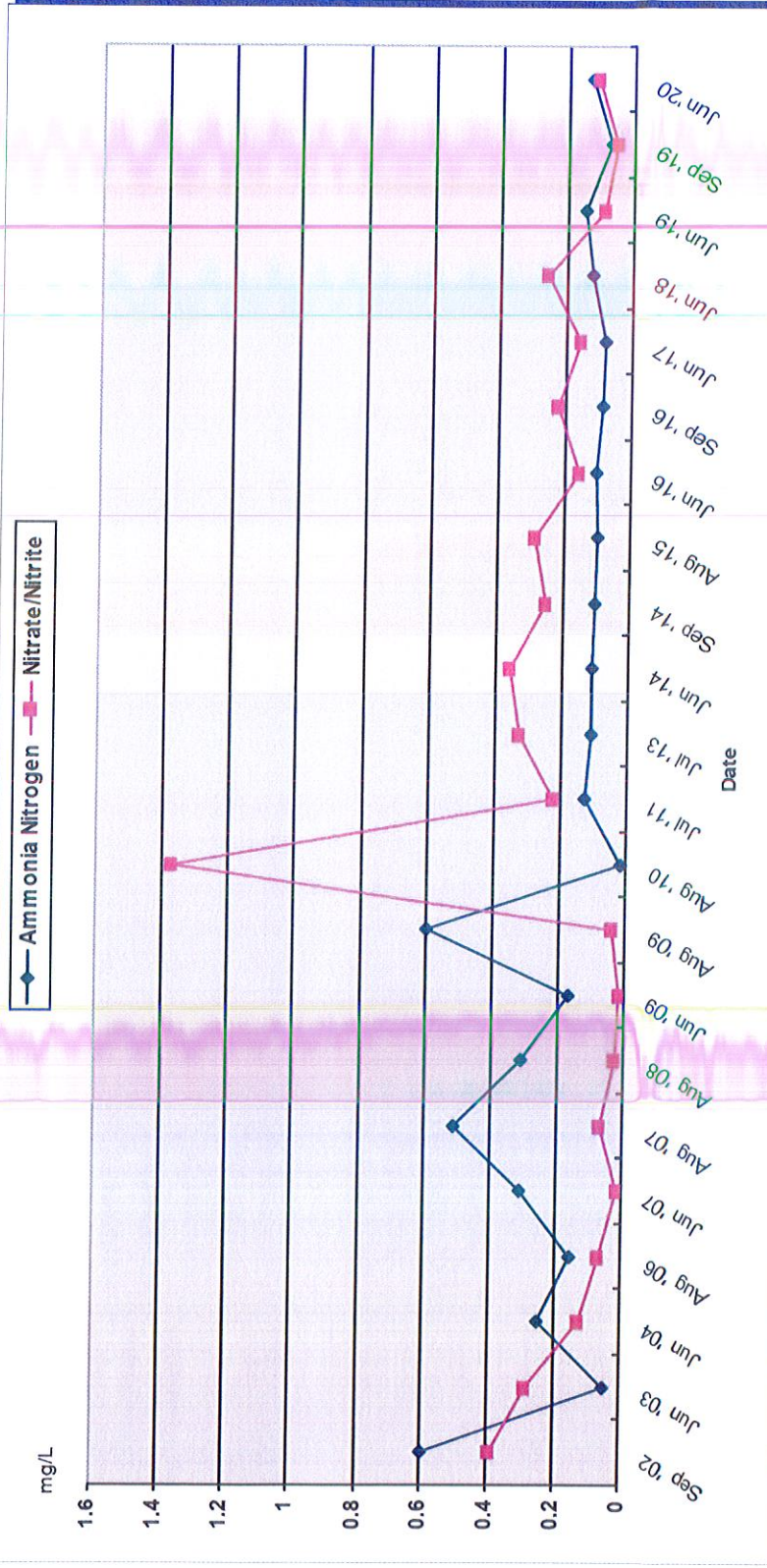


Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

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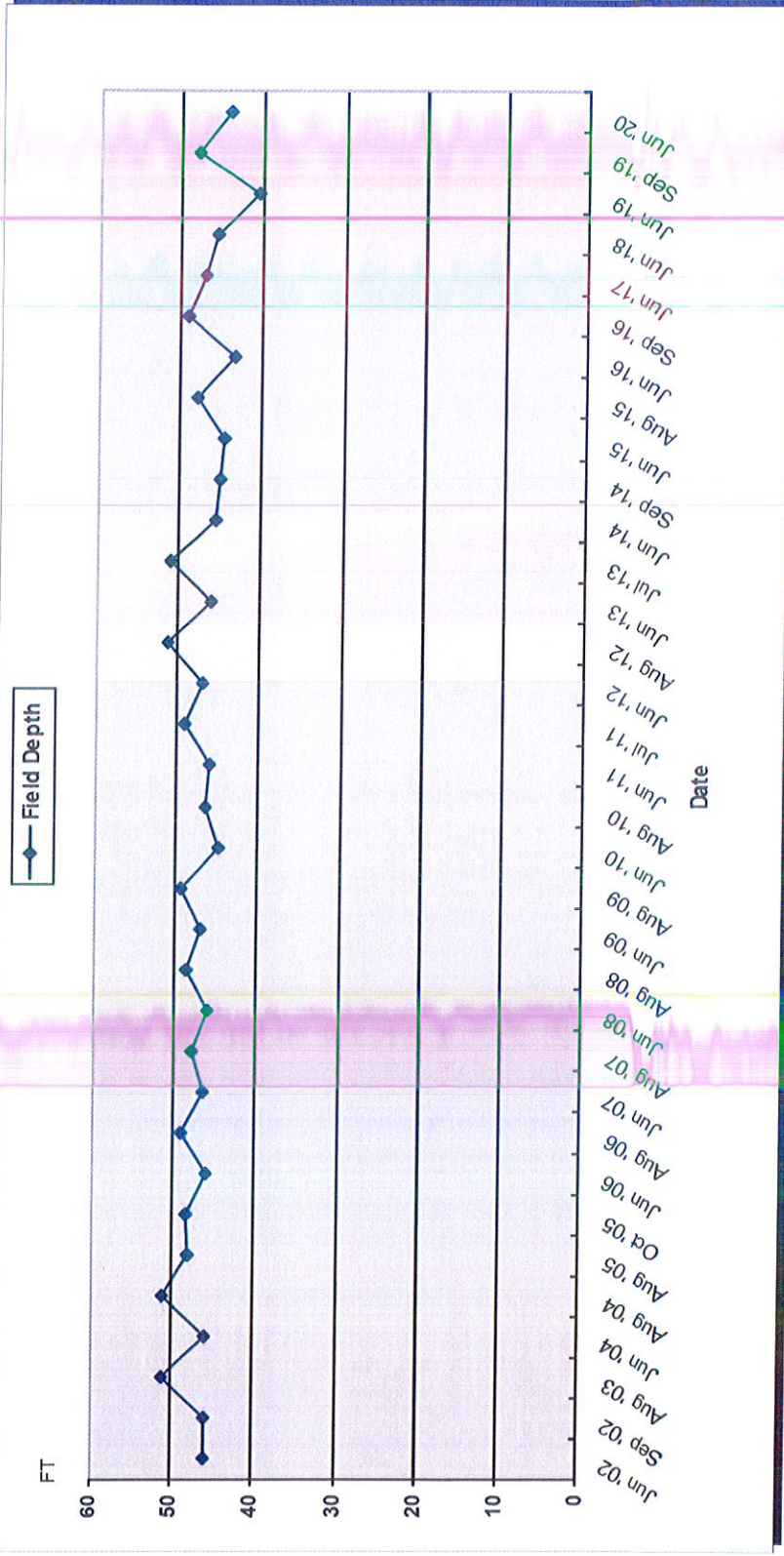
GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC, Elk Creek Mine
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MONITORING CHART FOR 2020 AHR

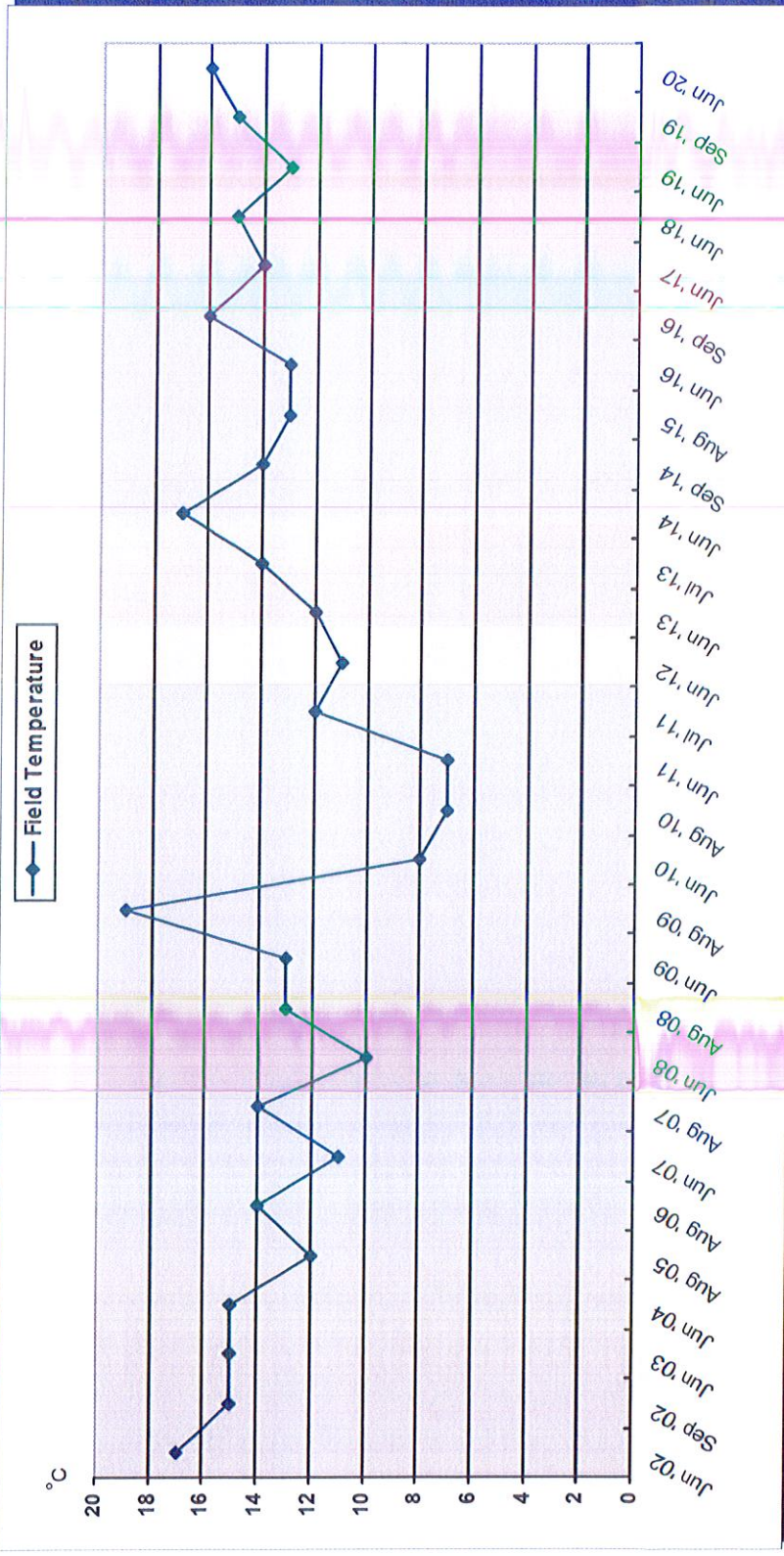
GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

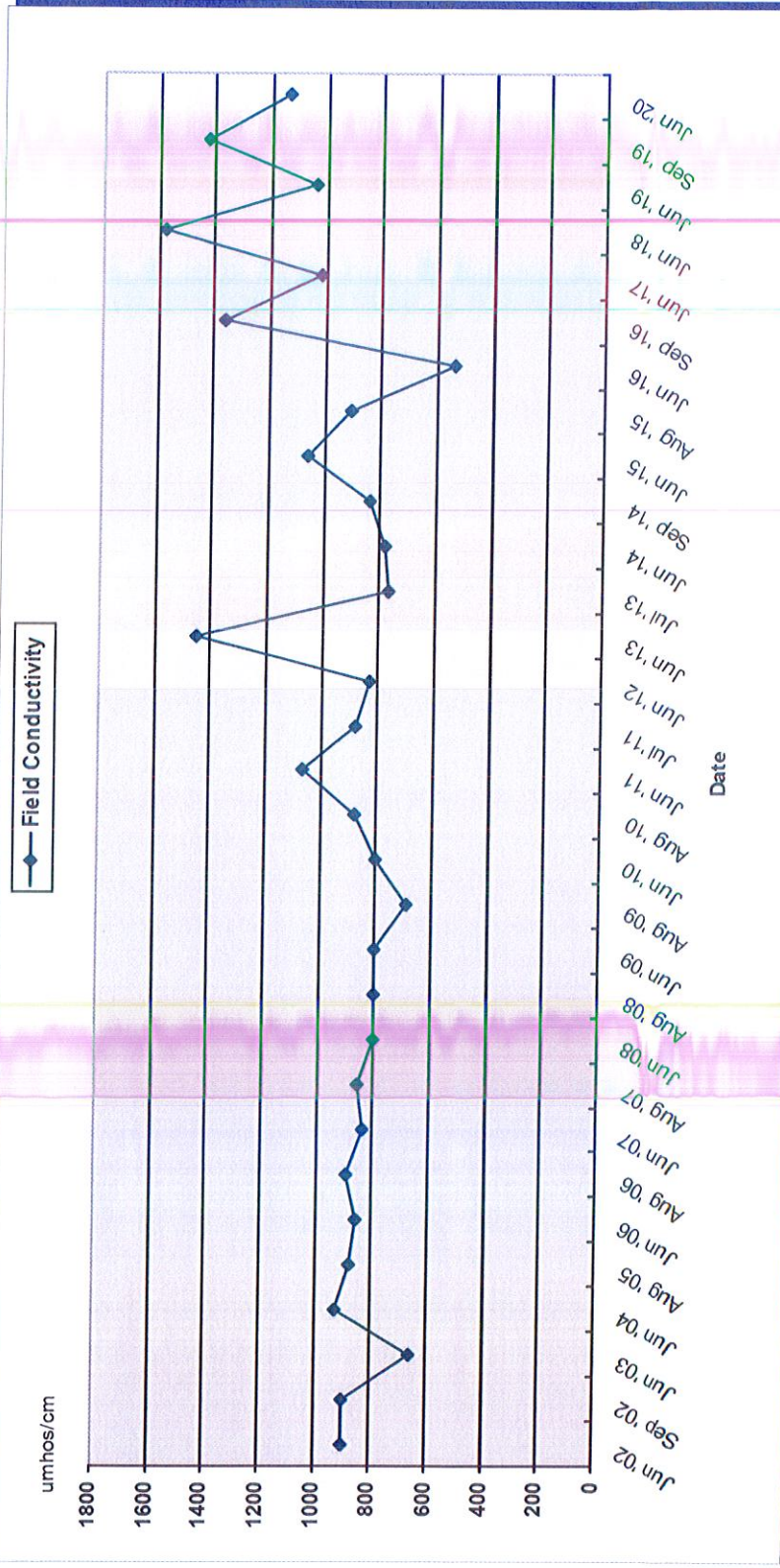
GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: EC-15



Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

SC-1 WELL
ROLLINS SANDSTONE
SANBORN CREEK MINE

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: SC-1

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dls	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/16/2020	12:50	130	8.4	9700	21	1.99	2868	72	8.41	12860	5760.63	0.061	9.47	10154	0.266	0.005	0.01	2670	12.9	1.023			0.308	0.591			2155	0.287
6/16/2020	11:15	128	8.3	16500	18	1.15	2800	112	8.32	13380	5707.45	0.62	11.11	12534	0.306	0.005	0.01	2620	15.3	1.006	0.308	0.591				2104	0.264	
9/23/2019	14:15	127	8.3	11100	18	0.834	2680	89	8.25	11860	3639	0.46	13.17	10694	0.176	0.004	0.01	2123	7.13	0.641	0.231	0.529				2360	0.194	
6/24/2019	12:15	124	8.5	10500	14	0.924	2760	0	8.39	7218	1032	0.54	18.66	7085	0.218	0.004	0.01	1780	12.4	0.982	0.257	0.547				1167	0.207	
9/17/2018	12:05	140	7.1	950	23	0.169	267.66	0	8.34	915	367	0.54	24.7	1204	0	0.002	0.01	174.1	1.85	0.058	0.094	0.276				233	0.066	
6/18/2018	11:55	144	9.5	1090	19	0.278	248.66	0	8.20	658	139.2	0.34	23.87	741	0	0.003	0.01	39.3	2.28	0.066	0.116	0.329				175	0.075	
9/13/2017	12:17	148	8.6	100	20	0.106	284.58	0	8.40	479	29.25	0.14	18.52	662	0	0.002	0.01	63.2	4.79	0.048	0.047	0.393				143	0.03	
6/27/2017	10:30	148	9.2	12300	18	0.524	1742.44		8.06	8230	3431	0.33	15.23	8188	0.096	0.004	0.01	1572.2	7.13	0.642	0.323	0.598				1360	0.106	
9/28/2016	11:00	158	8.7	1360	21																							
6/17/2016	9:30	154	8.7	1200	22																							
8/18/2015	9:00	157																										
6/16/2015	9:00	157																										
9/10/2014	12:00	157																										
9/10/2014	9:00	157																										
6/24/2014	9:00	153.5	7.8	780	17																							
7/18/2013	12:00	147	8.1	8000	16	0.712	455.71	0	8.13	11860	4217	0.3	33.82	11860		0.08	0.005	0.022	35.1	3.13	0.31	0.100	0.24				4035	0.08
6/18/2013	12:00	140	8.3	9600	11																							
8/2/2012	12:00	157	8.7	9800	16	0.56	280.05	0	8.11	896	68.02	0.36	17.01	817		0.08	0.005	0.05	34.2	1.88	0.26	0.140	0.42				382.5	0.61
6/19/2012	13:45	157																										
7/26/2011	12:00	130	8.1	16000	17	0.657	449.28	0	8.12	12290	4325.25	0.31	21.81	10657		0.08	0.005	0.03	15.39	2.78	0.2	0.110	0.17				4174	0.09
6/23/2011	9:00	125.5	7.9	10800	15																							
8/5/2010	6:10	123.5	8.5	12100	12	7.425	3275.83	0	7.93	14830	3059.69	35.8	12.35	9202		0.452	1.308	0.02	16.87	1.65	0.12	0.100	0.15				3720	0.17
6/16/2010	10:00	117	8.3	11800	18	6.075	3178.8	0	7.95	16980	23.88	14.95	5.76	8840		0.44	0.548	0.011	18.07	2.95	0.12	0.025	0.192				4830	0.11
8/4/2009	12:00	113.3	7.6	11300	18	8	4100	1	8.07	16000	4300	0.98	6	11000		0.22	0.002	0.005	24	6	0.1	0.120	0.2				4100	0.12
6/17/2009	12:00	102.7	7.6	26000	11	8.4	4100	1	8.12	20000	4500	0.74	5	11000		0.2	0.005	0.005	23	7.3	0.12	0.096	0.186				4100	0.032
8/11/2008	12:00	96	7.9	12500	15	8.3	3900	1	7.98	17000	3700	0.02	5	11000		0.25	0.01	0.005	19	2.6	0.09	0.075	0.103				4200	0.032
6/18/2008	9:30	90	8.3	13600	14																							
8/2/2007	12:00	90	8.3	7200	16	0.27	4000	1	8.05	18000	4400	6.2	5	11000		0.36	0.002	0.005	15	1.8	0.02	0.005	0.075				4100	0.015
6/19/2007	12:00	93	8.21	10500	16.3	8.6	3900	29	8.39	17000	4700	1	26	11000		0.5	0.002	0.005	13	1.7	0.05	0.050	0.071				4500	0.008
8/10/2006	12:00	95	8.47	13100	15	9.8	4000	1	7.96	18000	4500	0.03	5	11000		0.47	0.002	0.005	16	1.9	0.07	0.064	16				3800	0.038
6/9/2006	12:00	94	8.29	12700	16																							
10/17/2005	10:40	93	8.1	12600	15.9	10	3500	1	7.99	18000	6200	7.1	5	11000		0.56	0.002	0.005	17	1.1	0.05	0.028	0.069				4600	0.027
8/5/2005	9:00	87.5	7.52	15000	16																							

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: SC-1

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
8/23/2004	10:20	93	7.85	14500	14																							
6/22/2004	12:00	91.8	7.85	12000	15	3.2	3800	1	7.87	18000	6400	0.07	5	11000		0.01	0.002	0.005	16	4.6	0.04	0.047	0.086				5000	0.04
8/26/2003	8:50	98.4	7.94	20000	14	3.5	3900	5	7.84	23000	4300	6.2	5	11000		0.01	0.002	0.005	19	6.1	0.02	0.005	0.102				4300	0.02
6/17/2003	8:30	89.2	8.4	15000	15	3.3	3900	1	7.83	20000	4300	0.1	5	10000		0.01	0.002	0.005	22	5.5	0.05	0.041	0.081				4200	0.049
9/23/2002	12:00	90	7.7	15000	13	4.3	3900	1	7.94	16000	4300	0.21	5	11000		0.01	0.002	0.005	20	12	0.01	0.005	0.143				4300	0.005
9/28/2001	13:10	88.2	7.3	12900	11																							
3/30/2001	13:00	90	7.4	13000	10																							
9/28/2000	14:31	89.9	7.9	16000	0																							
3/25/2000	14:00	90.1	7.8	15500	0																							
9/22/1999	8:54	90.5	7.9	15500	12																							
3/29/1999	9:51	90.1	8.6	11500	10																							
12/30/1998		88.3	7.8	16000	15					16320				10170						9.37		0.005						
9/30/1998		89	7.1	16000	16																							
6/29/1998		89.2	7	15900	16																							
3/25/1998		90.1	8	15000	15					14420				11373						9.59		0.014						
9/9/1997		88.8	8	16100	17																							
6/24/1997						2.6	3850	1	7.93	16100	5400	1.9	7	10630		0.1	0.005	0.005	17.9	15.5	0.06	0.028	0.119	11.9	-0.0002	0.003	3900	
6/24/1997		88.4	7.9	16200	18																							
3/20/1997		89.1	8.2	15300	15																							
12/17/1996						2.9	3820	-1	7.44	16230	6680	0.03	14	10350		0.05	-0.002	-0.005	18.4	2.81		0.061	0.014	10.8	-0.0002	0.002	4040	
12/17/1996		89.9	7.9	15100	11																							
9/19/1996		90.5	7.8	16100	15																							
6/10/1996						3.7	3950	-1	7.85	15810	4050	0.04	1	10800		0.08	0.018	-0.005	17.9	1.59	0.03	0.048	0.059	12.5	0.0003	0.037	4200	
6/10/1996		90.2	8.1	15600	17																							
3/19/1996	7:32	90.1	8	14500	10																							
12/5/1995	7:44					3.1	3460	132	8.58	16000	4310	0.11		10300		-0.01	-0.005	-0.005	20.2	3.44	0.03	0.090	0.11	12.8	-0.0002	-0.005	4000	0.085
12/5/1995	7:44	90.3	7.6	13700	13																							
9/6/1995	11:27	90.5	7.8	16100	15																							
6/8/1995	8:56					2.8	3690	-1	7.95	15850	4290	0.07		10500		-0.01	-0.01	-0.005	20.7	1.61	0.04	0.080	0.09	14.6	-0.0002	-0.01	4950	-0.005
6/8/1995	8:56	92.8	7.8	14200	14																							
3/8/1995	12:44	89.5	7.6	14900	15																							
12/7/1994	9:33					2.3	3300	-0.5	7.86	13900	3350	0.06		8680		-0.01	0.091	0.005	23	10.2	0.05	0.150	0.15	11.4	-0.0002	0.143	3600	0.12
12/7/1994	9:33	94.67	7.6	12800	12																							

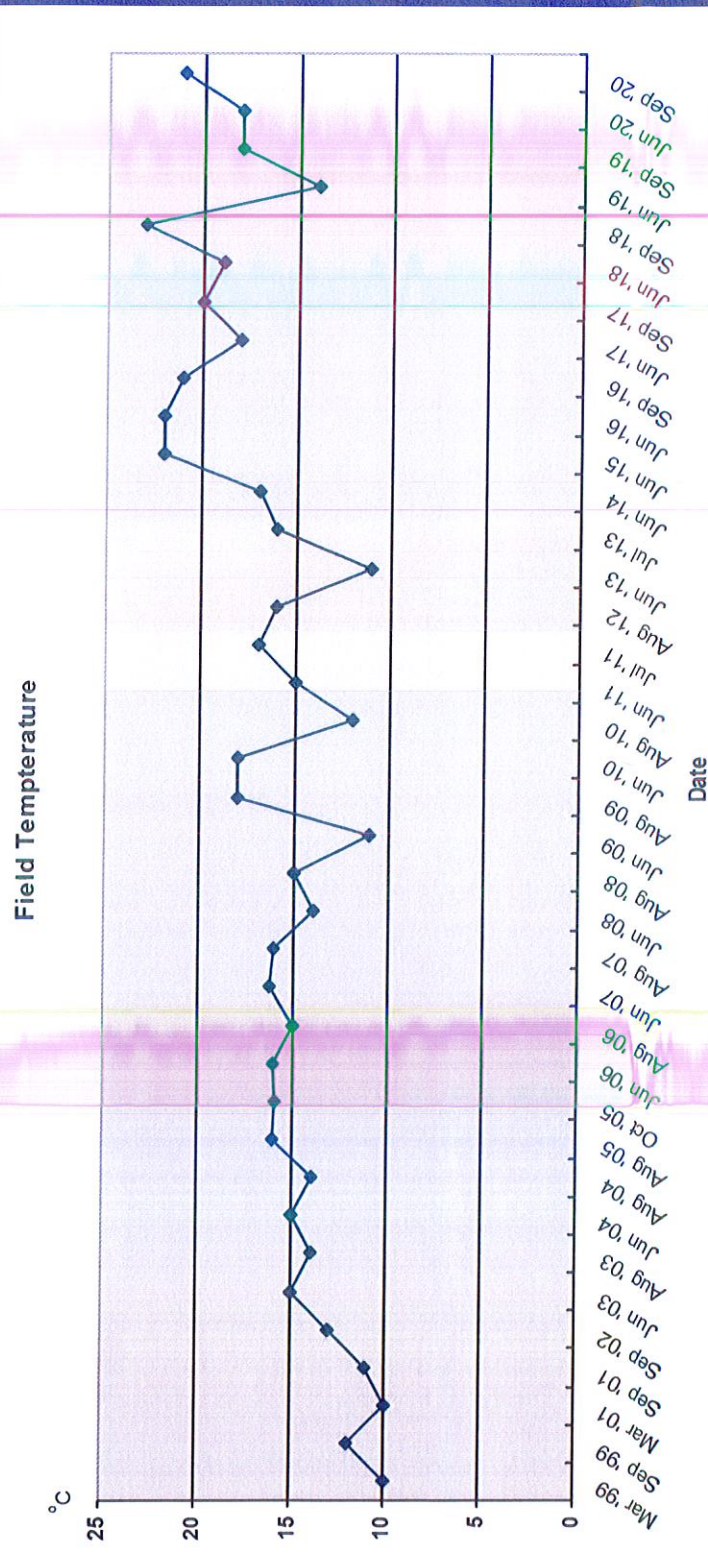
MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: SC-1

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/16/1994	10:37	90	8.1	12500	15																							
6/29/1994	10:03	89.5	8.2	12300	16																							
6/29/1994	10:03					2.7	3290	-1	8.00	12920	4300	-0.02		8060		0.04	-0.002	-0.005	29	5.8	-0.02	0.280	0.26	12	-0.0002	-0.002	3300	0.285
4/28/1994	13:15	78	8.3	11000	12																							
3/31/1994	8:50	78	8.2	12100	12																							
3/31/1994	8:50					2.15	2350	100	8.30	13430	3280			8136	34	0.019	0.002	-0.02	25	2	0.1	10.000	20	-0.0002	-0.001	3035	0.39	
12/22/1993	10:00		9.2	1300	13																							
11/10/1993	8:44		9.1	13300	13																							
11/10/1993	8:44								8.20					7980	16					0.88								
8/30/1993	13:15	90	8.6	10700	15																							
8/30/1993	13:15					3.18	2678	76	8.10	13400	3431	0.02		8060	16	0.007	-0.001	-0.01	26	0.65	0.04	0.220	12	-0.0002	-0.001	3080	0.55	
7/1/1993	13:55	90	8.4	8900	16																							
7/1/1993	13:55					2.26	1840	0	8.00	13300	3525	0.07		7800	116	-0.005	0.002	-0.01	25	3.83	-0.04	0.200	12	-0.0002	-0.001	2960	0.27	
4/30/1993	11:45	89.25	8	9000	17																							
3/30/1993	9:00					2.29	1452	88	8.60	11700	3520	-0.02		7714	40	0.013	0.002	-0.025	26	0.29	0.26	0.200	12	0.0001	-0.005	3180	-0.05	
3/30/1993	9:00	88.4	8.1	9000	13																							

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1

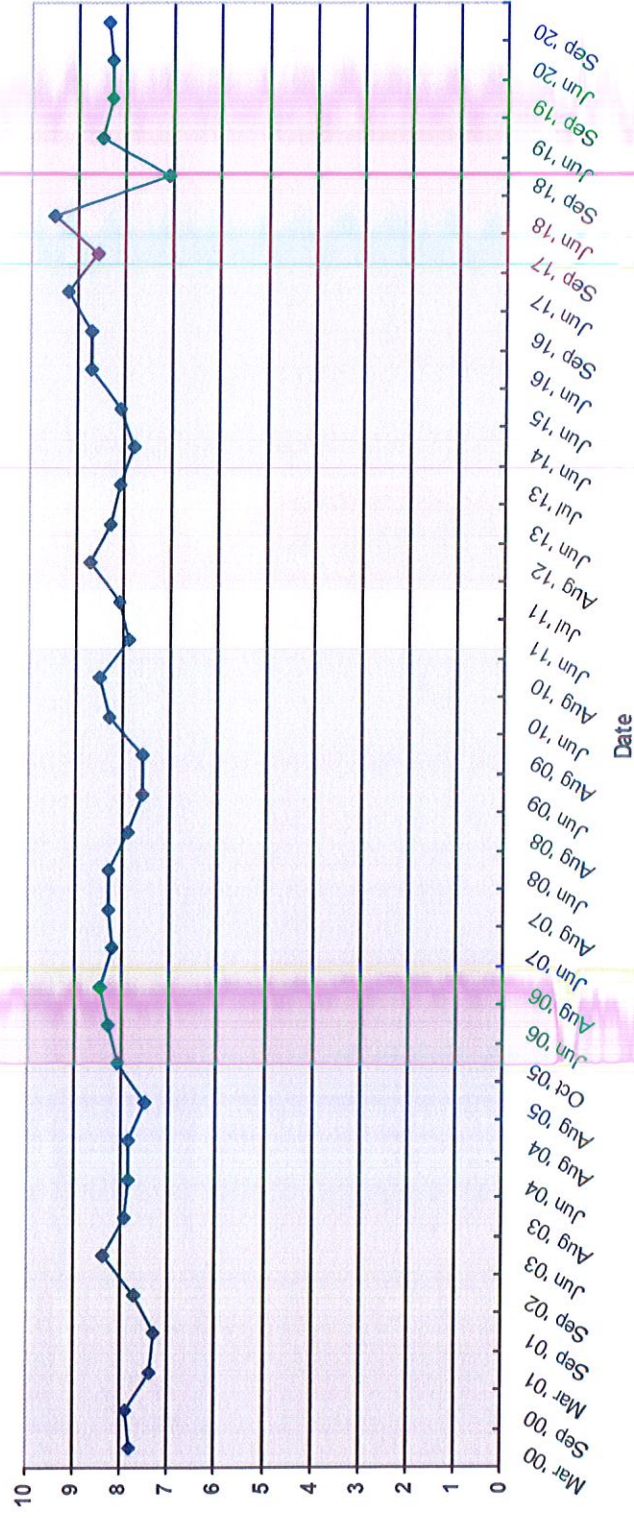


Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1

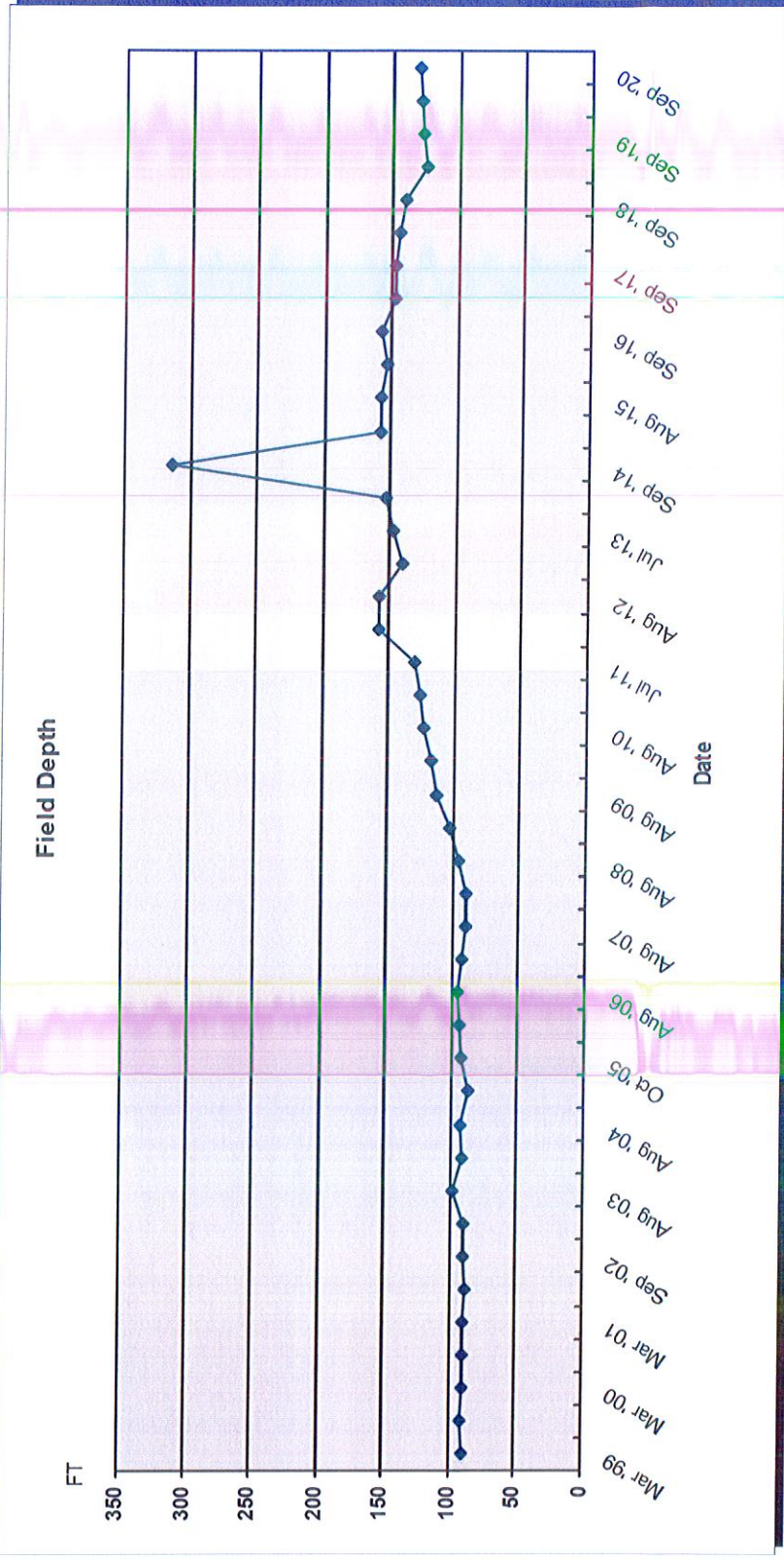
Field pH



Oxbow Mining, LLC., Elk Creek Mine
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MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1



Oxbow Mining, LLC., Elk Creek Mine

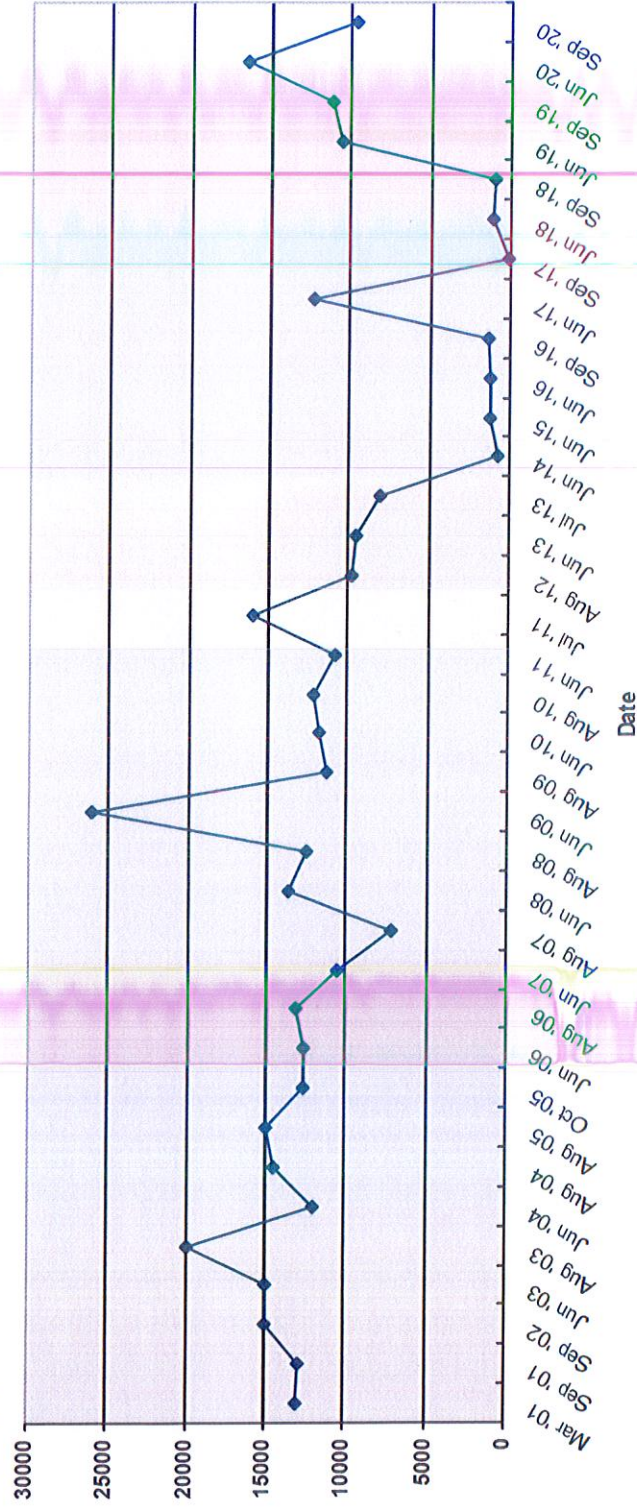
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1

Field Conductivity

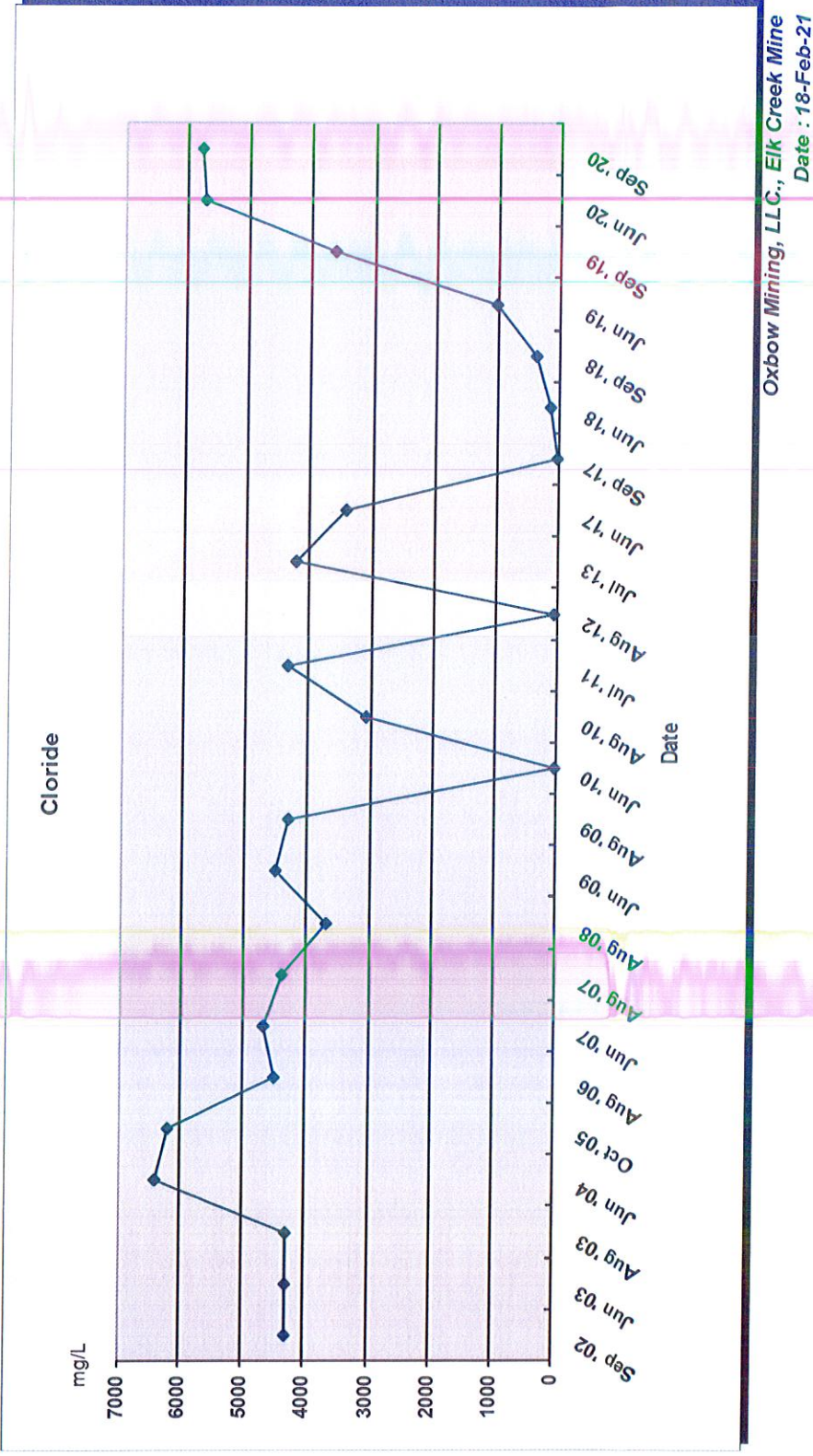
umhos/cm



Oxbow Mining, LLC., Elk Creek Mine
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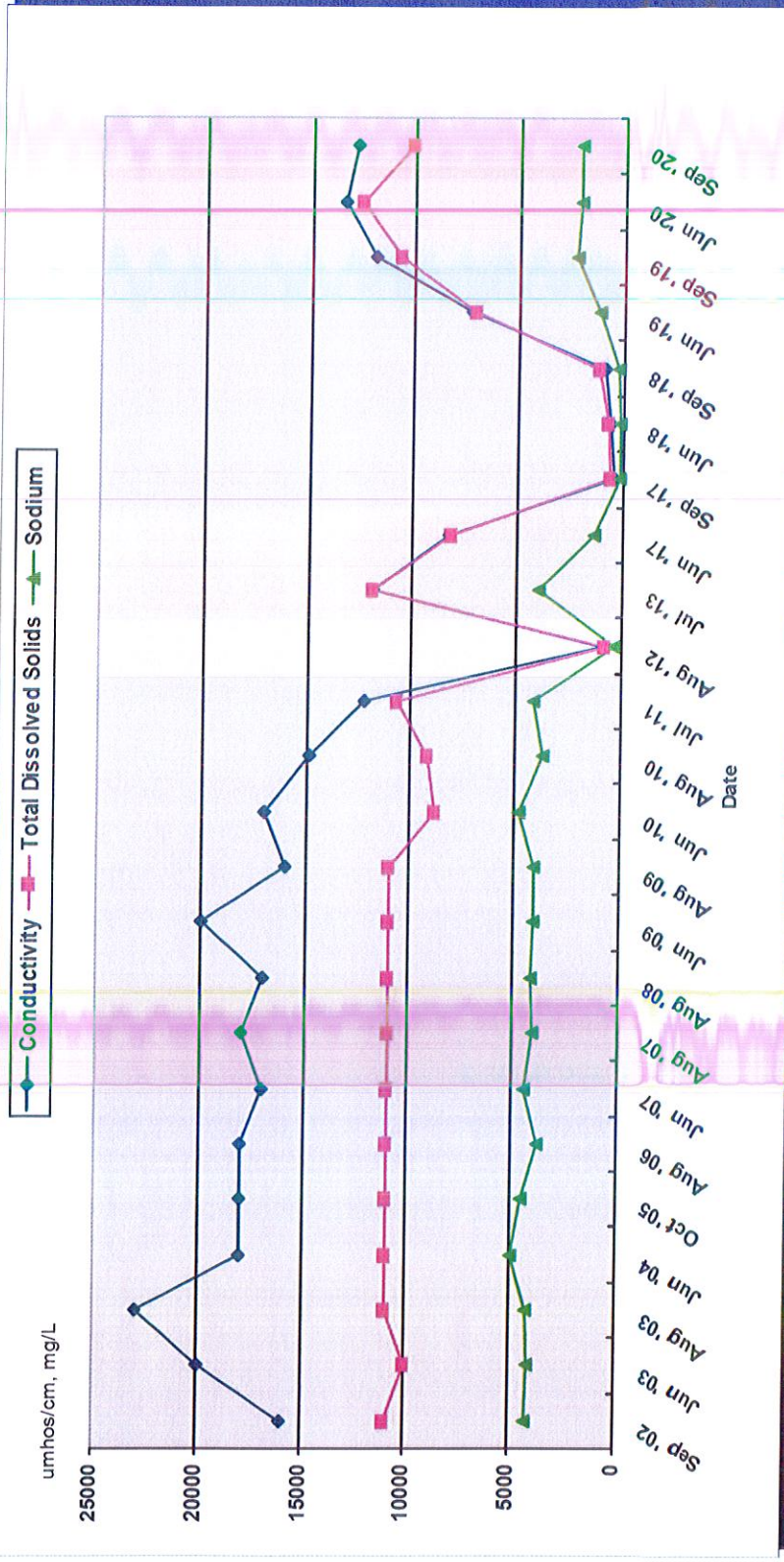
MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1



MONITORING CHART FOR 2020 AHR

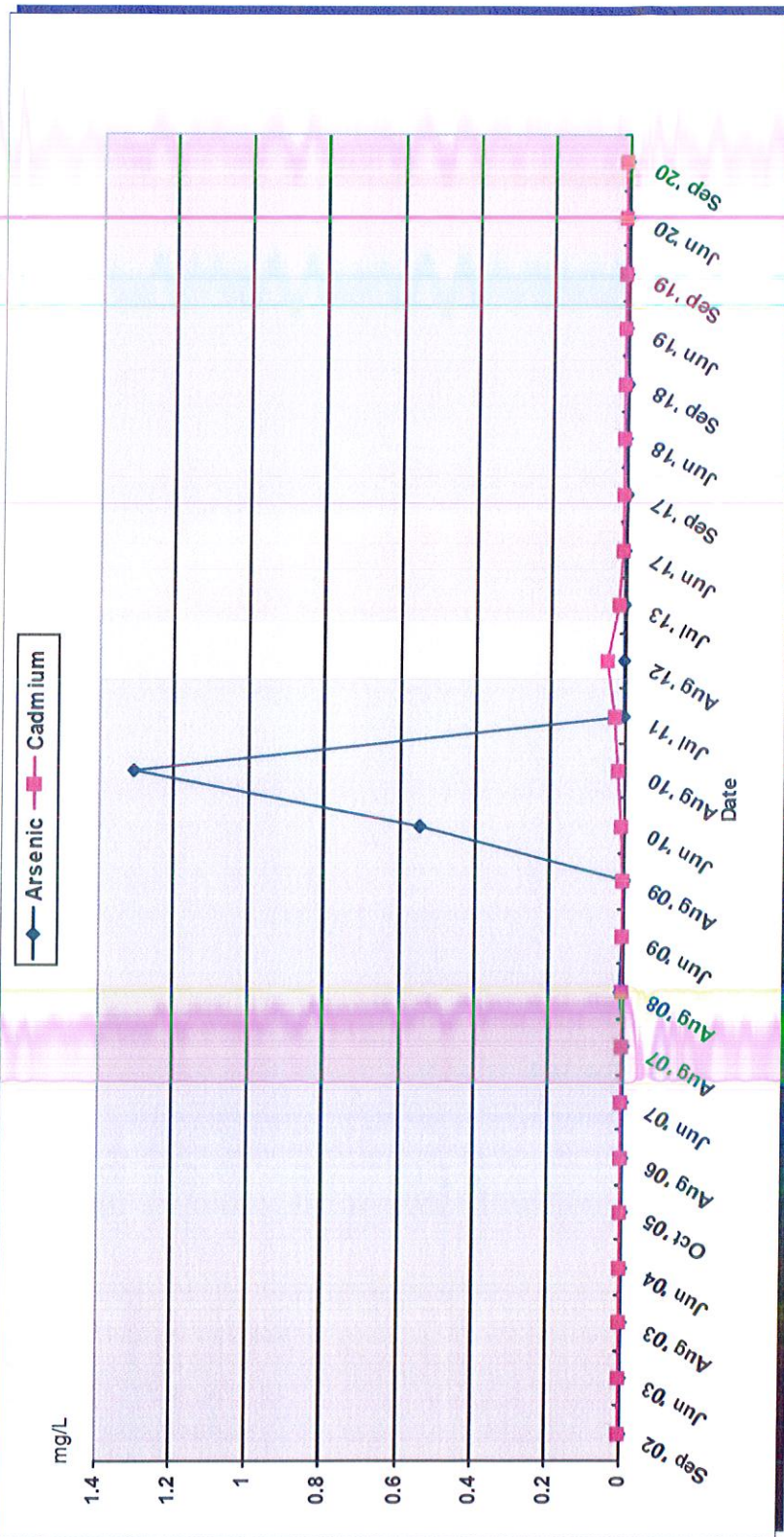
GROUND WATER LOCATION: SC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1

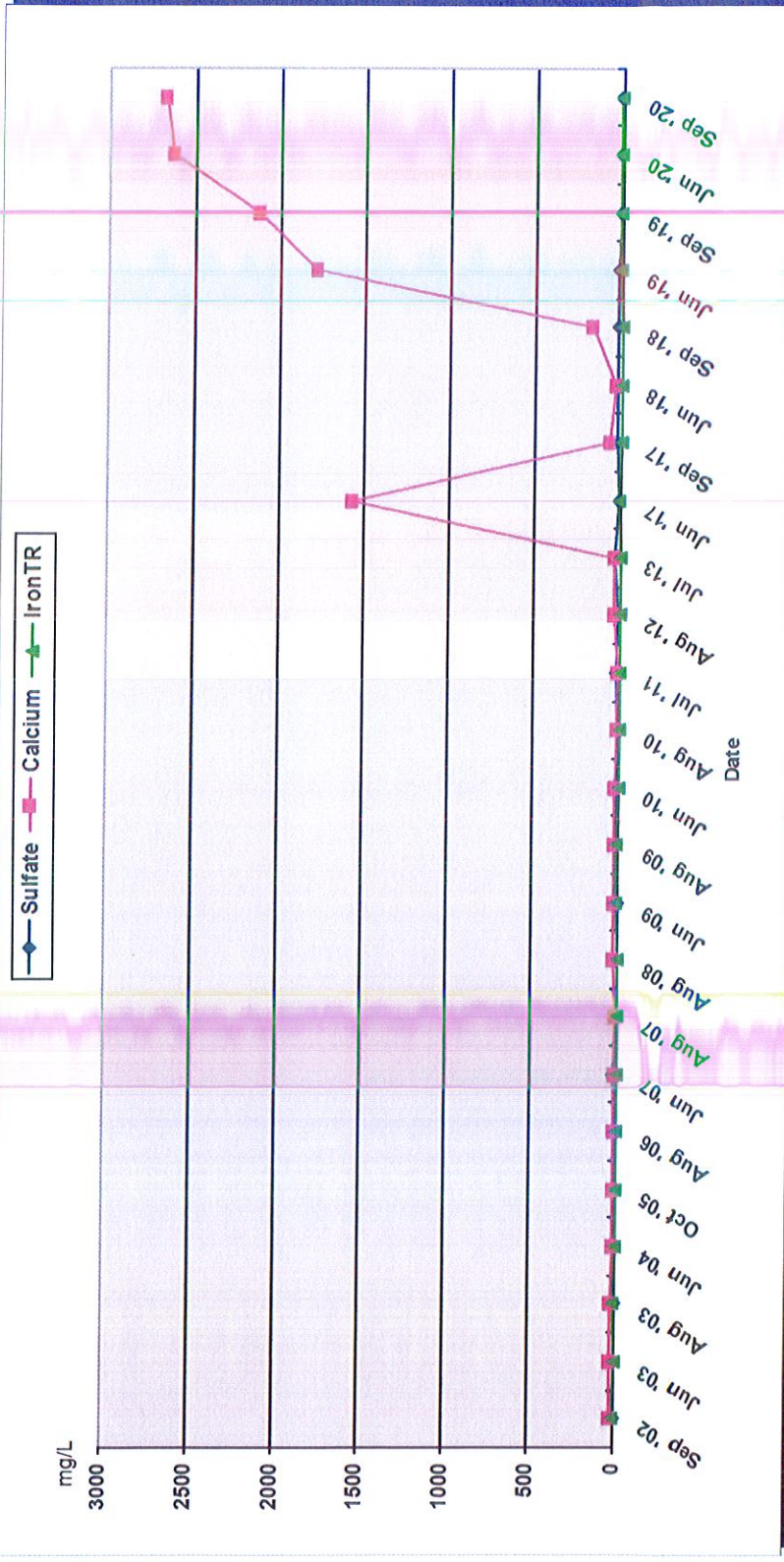


Oxbow Mining, LLC., Elk Creek Mine

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MONITORING CHART FOR 2020 AHR

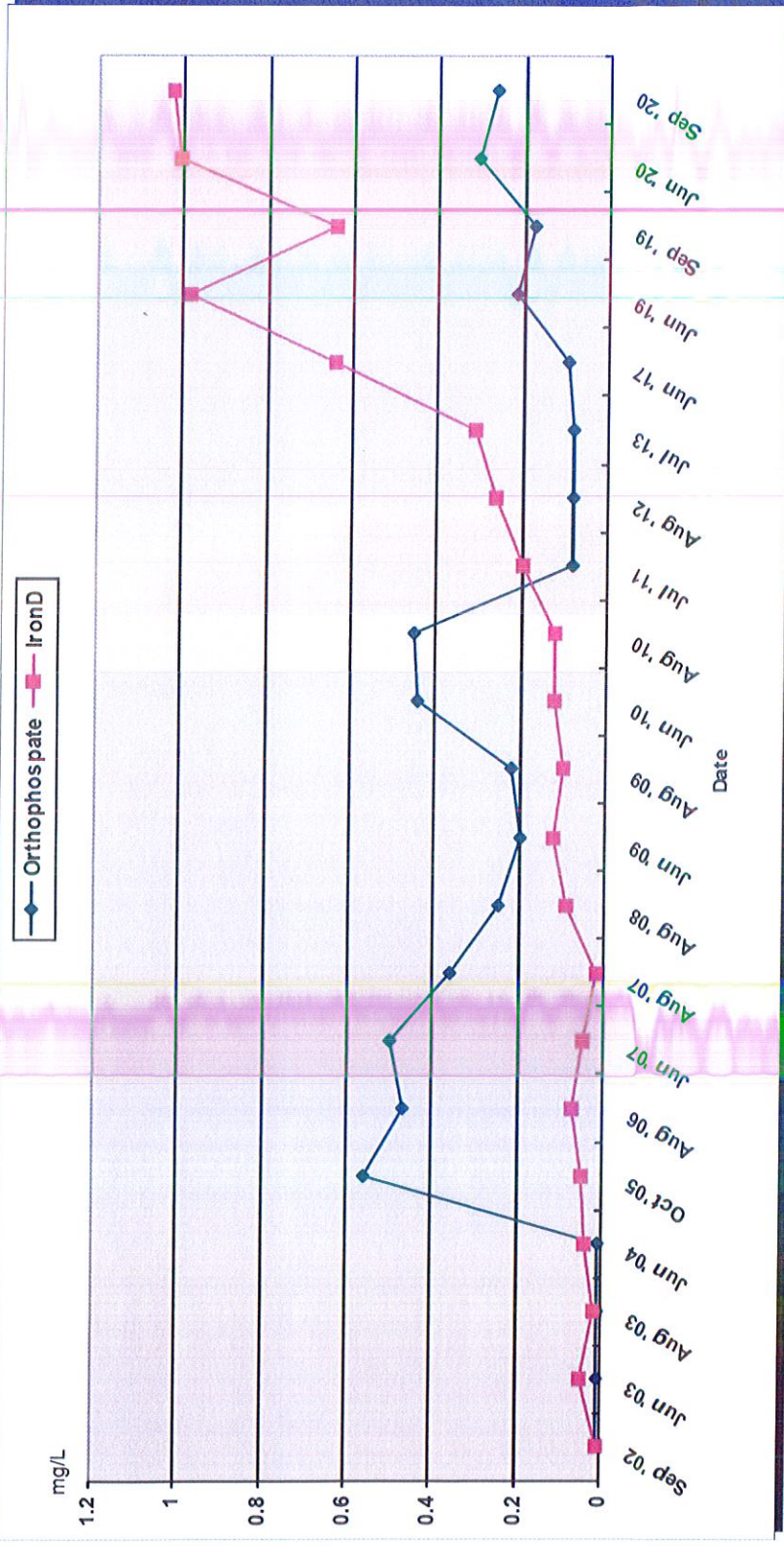
GROUND WATER LOCATION: SC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

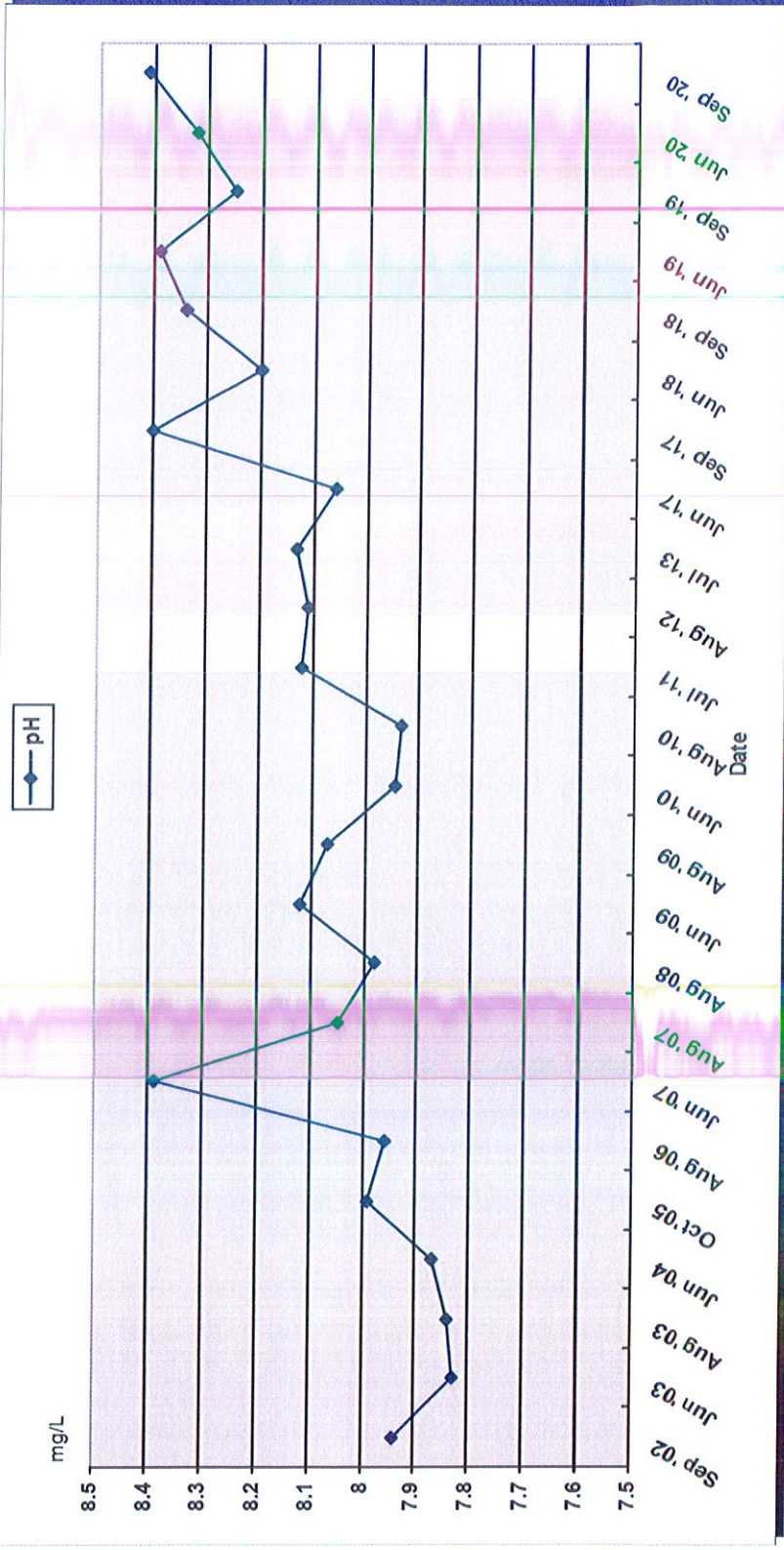
GROUND WATER LOCATION: SC-1



Oxbow Mining, LLC., Elk Creek Mine
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MONITORING CHART FOR 2020 AHR

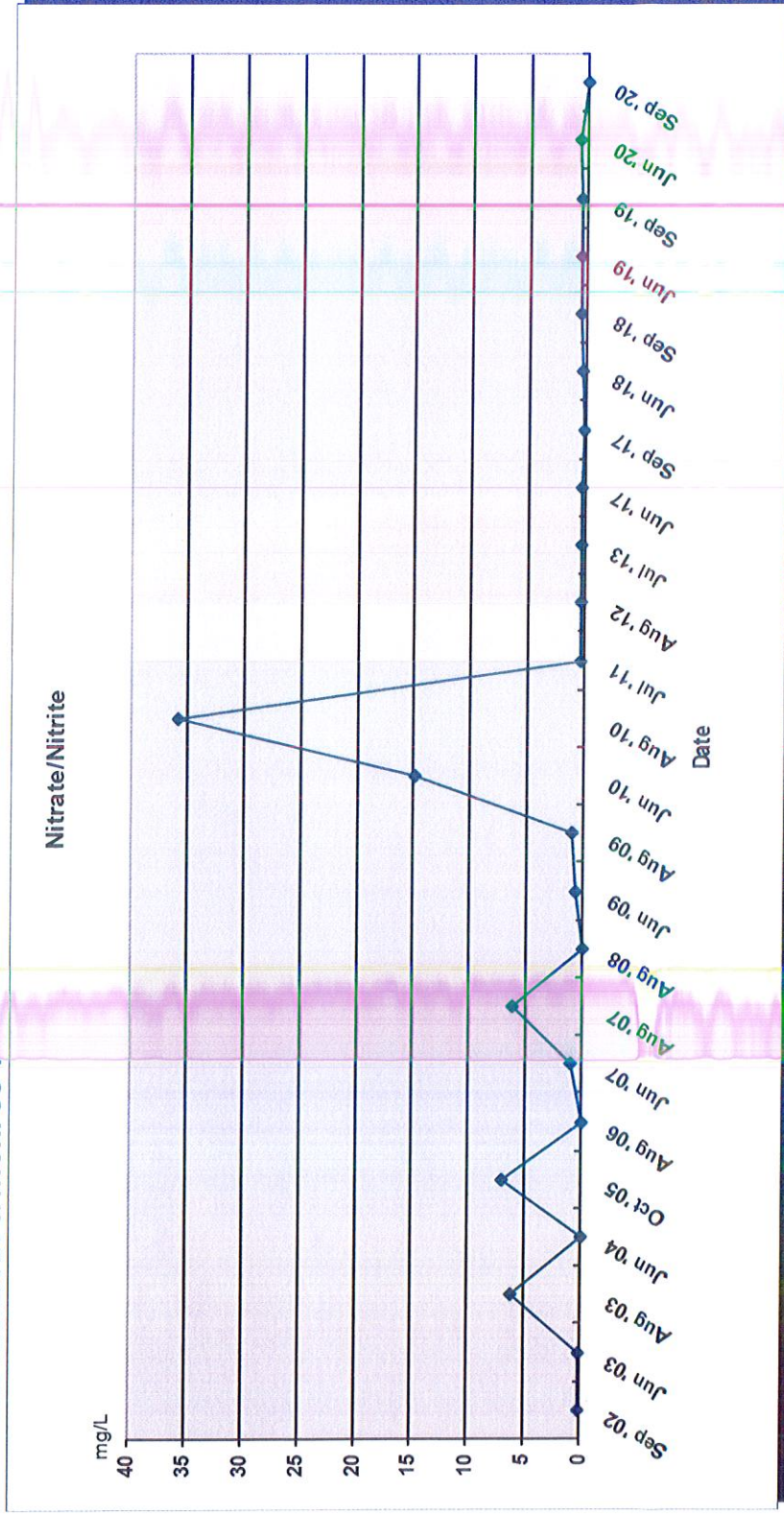
GROUND WATER LOCATION: SC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

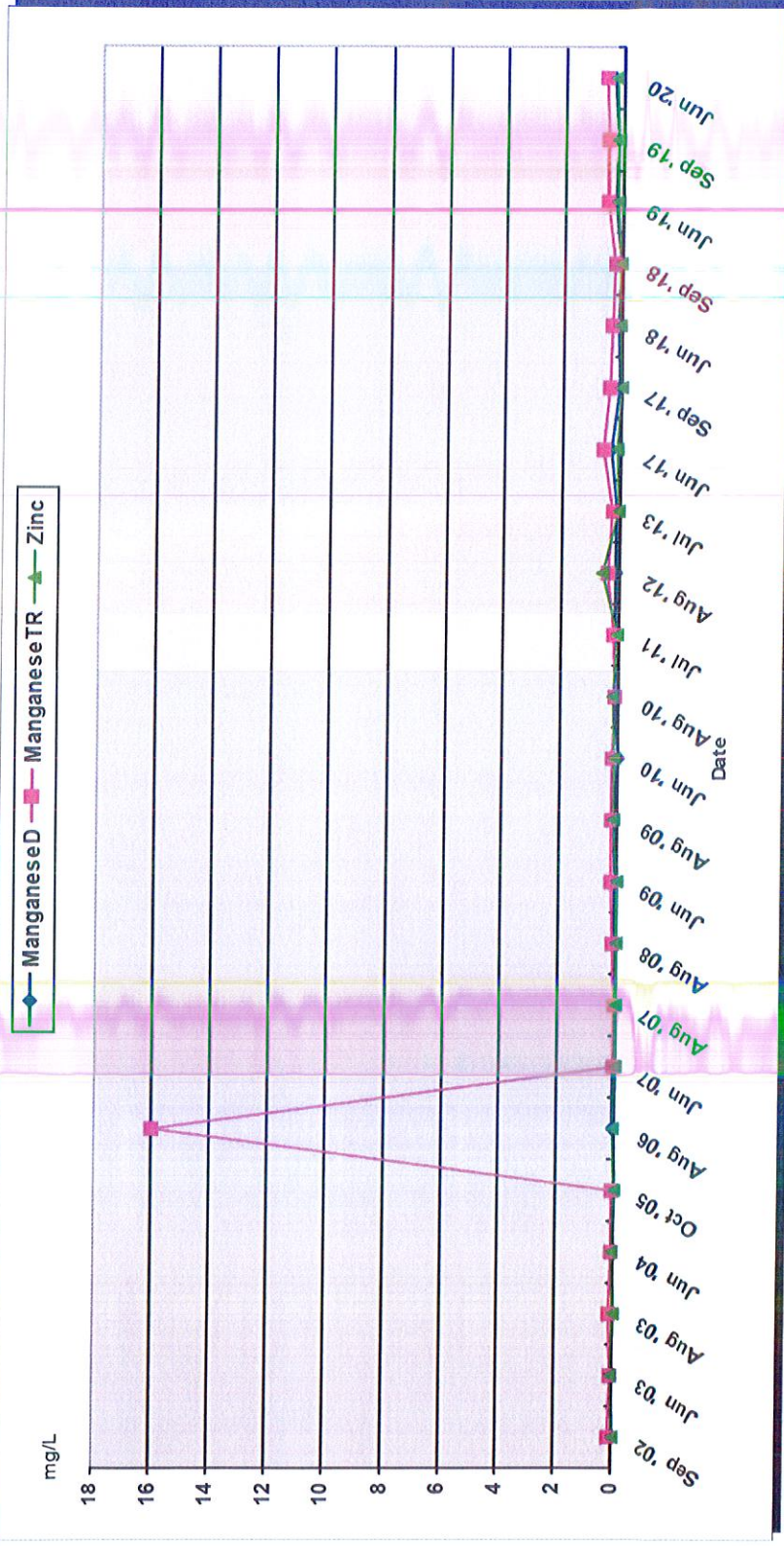
GROUND WATER LOCATION: SC-1



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1



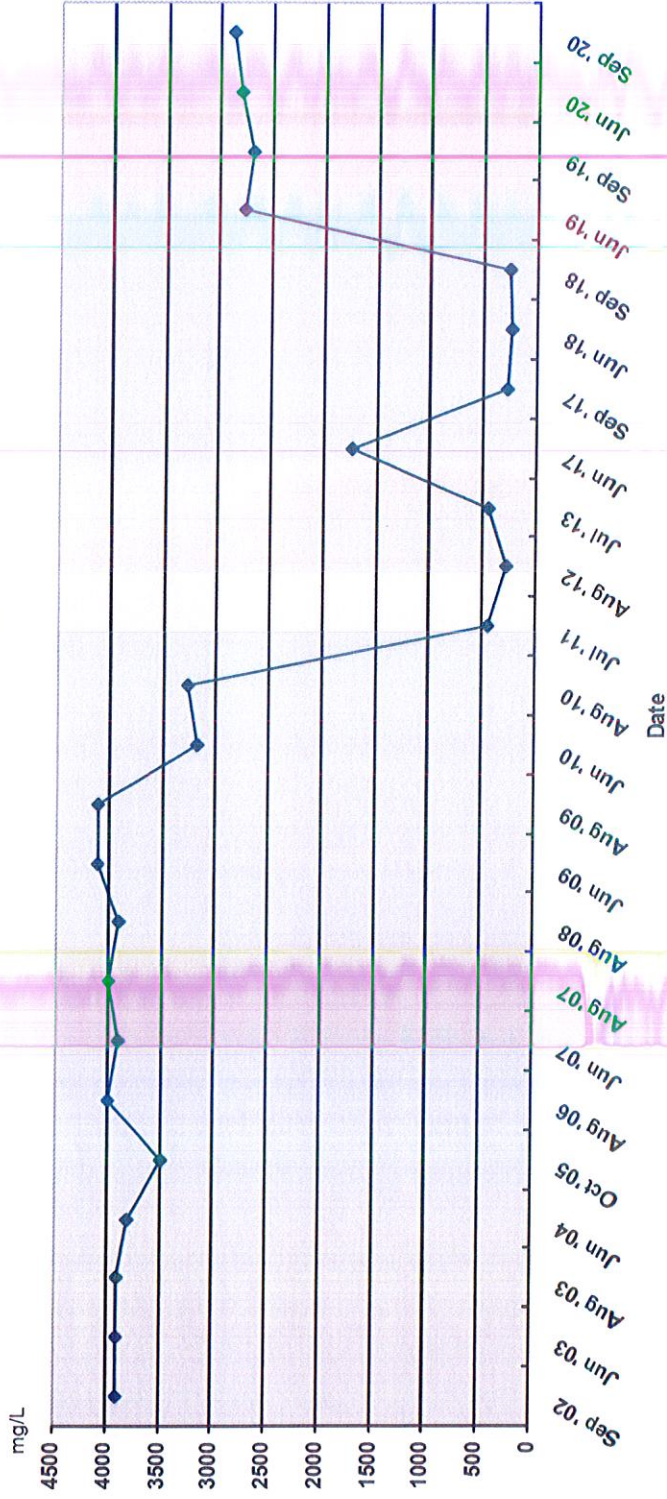
Oxbow Mining, LLC., Elk Creek Mine

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MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-1

Bicarbonate Alkalinity



Oxbow Mining, LLC., Elk Creek Mine
Date : 18-Feb-21

SC-3 WELL
B SEAM COAL
SANBORN CREEK MINE

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: SC-3

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
9/16/2020	12:30	144	7.2	1370	18	0.298	365	0	7.92	1789	212.7	0.051	13.17	1574	0.102	0.003	0.01	68.1	0.543	0.214	0.131	0.365					328	0.187
6/16/2020	11:45	144	7.2	1290	17	0.33	448	0	7.81	1139	283.6	0.54	4.94	1077	0.11	0.003	0.01	64.9	0.607	0.256	0.137	0.204					311	0.108
9/23/2019	13:45	144	7.5	1350	16	0.293	384	0	7.87	980	124.08	0.09	5.35	912	0	0.002	0.01	40.9	0.474	0.199	0.102	0.167					229	0.082
6/24/2019	11:50	143.5	7.9	1360	15	0.405	375	0	7.97	810	188.54	0	5.83	764	0	0.002	0.01	52.8	0.566	0.218	0.119	0.184					264	0.094
9/17/2018	13:00	146																										
6/18/2018	13:40	146																										
9/13/2017	12:30	144	7.8	1600	19	0.223	206.45	0	7.84	351	11.83	0	27.99	400	0	0.003	0.01	34.6	1.99	0.058	0.098	0.289					148	0.068
6/27/2017	10:00	143.5	8.4	1420	16	0.316	320.04	0	7.72	821	210.19	0	4.12	790	0	0.003	0.01	44.3	0.803	0.194	0.147	0.206					229	0.088
9/28/2016	8:46	143.5	7.6	1100	17	0.401	305.82	0	8.27	713	30.9	0	123.48	666	0	0.003	0.01	37.2	2.11	0.061	0.161	0.398					219	0.092
6/20/2016	8:46	143.35	8.5	560	15	0.381	359.16	0	8.05	513	8.86	0	53.75	536	0	0.003	0.01	35.8	2.26	0.067	0.129	0.316					197	0.074
8/19/2015	10:00	143.5	7.7	1090	16	0.364	341.61	0	8.04	696	11.83	0	94.33	647	0	0.004	0.01	34.1	3.25	0.084	0.104	0.255					202	0.077
6/16/2015	10:00	143.5	7.5	1030	17																							
9/10/2014	9:00	144	7.8	710	14	0.612	329	0	7.47	913	10.9	0	26.75	902	0	0.002	0.01	47	0.99	0.04	0.100	0.12					139.2	0.07
6/25/2014	9:00	143.5	8	800	18	0.583	344	0	7.58	7800	11.76	0	99.71	744	0	0.005	0.01	32.8	3.88	0.106	0.110	0.234					247	0.068
7/19/2013	12:00	144	7.6	740	14	0.544	336	0	7.54	755	17.43	0.3	104.16	630	0.08	0.005	0.01	31.2	4.09	0.12	0.120	0.26					225	0.07
6/18/2013	12:00	143	7.2	720	11																							
8/2/2012	13:30	144	7.9	1100	16	0.71	311.44	0	7.70	1102	24.81	0.3	153.55	1085	0	0.08	0.007	0.01	46.2	166.5	46.8	0.860	2.19	0	0	0	111.4	1.65
6/19/2012	13:00	144	7.5	1000	13																							
7/28/2011	9:00	144	7.8	1000	15	0.18	78.62	0	7.49	790	4.96	0.29	90.14	1347	0.08	0.005	0.01	34	3.47	0.05	0.130	0.15					229	0.02
6/23/2011	12:00	144	7.6	10000	13																							
8/5/2010	6:30	144.5	8.8	1000	12	0.625	455.33	0	7.34	974	136.13	0.3	33.75	782	0.08	0.08	0.01	47.5	5.5	0.06	0.120	0.17					162.5	0.03
6/15/2010	9:30	143.6	8.7	1000	16	0.594	462.93	0	7.44	1040	4.56		23.05	790	0	0.078	0.006	34.6	56.2	0.04	0.026	0.89					192	0.006
8/4/2009	8:00	144.5	8.4	1000	14	0.84	560	1	7.34	1200	78	0.02	14	880	0.06	0.002	0.005	53	52	0.01	0.097	0.83					200	0.005
6/16/2009	10:00	143.8	7.1	1000	13	0.91	600	1	7.42	960	10	0.02	23	740	0.16	0.01	0.005	53	33	0.03	0.122	0.546					170	0.005
8/8/2008	10:30	145	7.4	1200	10	0.95	610	1	7.49	1300	64	0.02	57	800	0.02	0.01	0.005	46	0.93	0.01	0.134	0.134					210	0.04
6/18/2008	9:30	144	7.7	1000	13																							
8/2/2007	8:00	145	7.49	700	17	0.19	570	1	7.52	1100	50	0.02	64	2600	0.01	0.002	0.005	46	26	0.01	0.005	0.43					200	0.1
6/19/2007	8:00	144	7.17	900	16.5	0.95	590	1	7.51	980	16	0.02	9	580	0.01	0.002	0.005	41	16	0.01	0.130	0.316					150	0.005
8/10/2006	12:00	145	7.16	900	17	1	560	1	7.74	1100	17	0.04	63	590	0.01	0.002	0.005	35	26	0.01	0.103						150	0.111
6/9/2006	12:00	145.2	7.45	9000	14																							
10/17/2005	11:00	145	7.68	930	17.1	1.4	510	1	7.60	1100	52	0.72	100	710	0.01	0.002	0.005	46	18	0.01	0.177	0.333					200	0.03
8/5/2005	9:45	144	6.6	1100	15																							
8/23/2004	10:43	146	7.3	930	14																							

MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: SC-3

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
6/22/2004	9:40	144.5	7.4	940	14	0.71	510	1	7.40	990	27	0.02	70	620	0.01	0.002	0.005	60	20	0.03	0.173	0.385					180	0.02
8/26/2003	9:15	145	7.69	1100	15	0.6	530	1	7.45	1000	29	0.11	48	660	0.01	0.002	0.005	64	46	0.01	0.129	0.646					210	0.005
6/17/2003	9:00	144.7	7.69	900	16	0.66	550	1	7.53	1100	58	0.08	79	680	0.01	0.002	0.005	62	36	0.21	0.181	0.585					150	0.005
11/6/2002		148.5	0	0	0																							
6/25/2002		146	0	0	0																							
12/29/2001	13:30	0	0	0	0																							
9/28/2001	13:40	0	0	0	0																							
6/29/2001	14:50	0	0	0	0																							
3/30/2001	13:30	0	0	0	0																							
12/29/2000	11:30	141.5	7.7	900	12	0.78	580	1	7.87	1063	51	0.09	64	640	750	0.01	0.002	0.005	49.9	24.7	0.01	0.362	0.125	20.6	0.0002	0.002	170	0.015
9/28/2000	15:00	141.7	7.4	1000	14																							
6/29/2000	13:09	142	7	900	15	1.2	450	1	7.03	910	14	0.02	78	600	920	0.03	0.002	0.005	47.8	7.53	0.01	0.183	0.14	15.1	0.0002	0.007	140	0.016
3/25/2000	14:30	142	7.5	1100	16																							
12/14/1999	13:00	141	7.4	1000	16	1.21	530	1	7.31	965	47	0.14	35	690	675	0.01	0.002	0.005	45.3	18.7	0.01	0.293	0.279	16.2	0.0002	0.019	141	1.16
9/22/1999	9:45	142.5	7.5	900	16																							
6/30/1999	13:10	141.25	7.6	1100	17	1.54	442	1	7.27	972	34	0.15	84	555	865	0.01	0.002	0.005	38	17.2	0.01	0.293	0.147	13.2	0.0002	0.002	102	0.045
3/29/1999	10:37	142	7.9	1200	15																							
12/30/1998		142	7.4	1000	19					916				527						10.8		0.121						
9/30/1998		142	7.5	1010	19																							
6/29/1998		143	7.6	1190	19					956				600						2.36		0.125						
3/25/1998		142.6	8.3	1100	12																							
9/9/1997		142.3	7.6	1200	15																							
6/24/1997						0.5	470	-1	7.47	990	25	1.6	107	630		0.36	0.006	-0.005	51.9	11.2	0.03	0.096	0.236	19.2	-0.0002	0.005	160	
6/24/1997		141.8	7.8	920	17																							
3/20/1997		143	7.4	1000	15																							
12/17/1996									7.48																			
12/17/1996						0.62	560	-1	7.48	1140	75	0.02	70	710		-0.01	-0.002	-0.005	47.8	11.1	-0.005	0.022	0.267	17.9	0.0002	-0.002	167	
12/17/1996		143.8	7.9	1170	10																							
9/19/1996		142.2	7.5	1000	15																							
6/10/1996		141	7.5	880	16																							
6/10/1996						0.96	470	-1	7.45	979	6	0.05	94	710		0.02	-0.002	-0.005	55.1	4.46	-0.01	0.140	0.173	22.5	-0.0002	0.002	180	
3/19/1996	8:13	143.12	7.7	1010	12																							
12/5/1995	10:18					1.5	481	-1	7.52	910	12	0.04		560		-0.01	-0.005	-0.005	46.5	3.75	0.02	0.120	0.18	17	-0.0002	-0.005	150	0.067

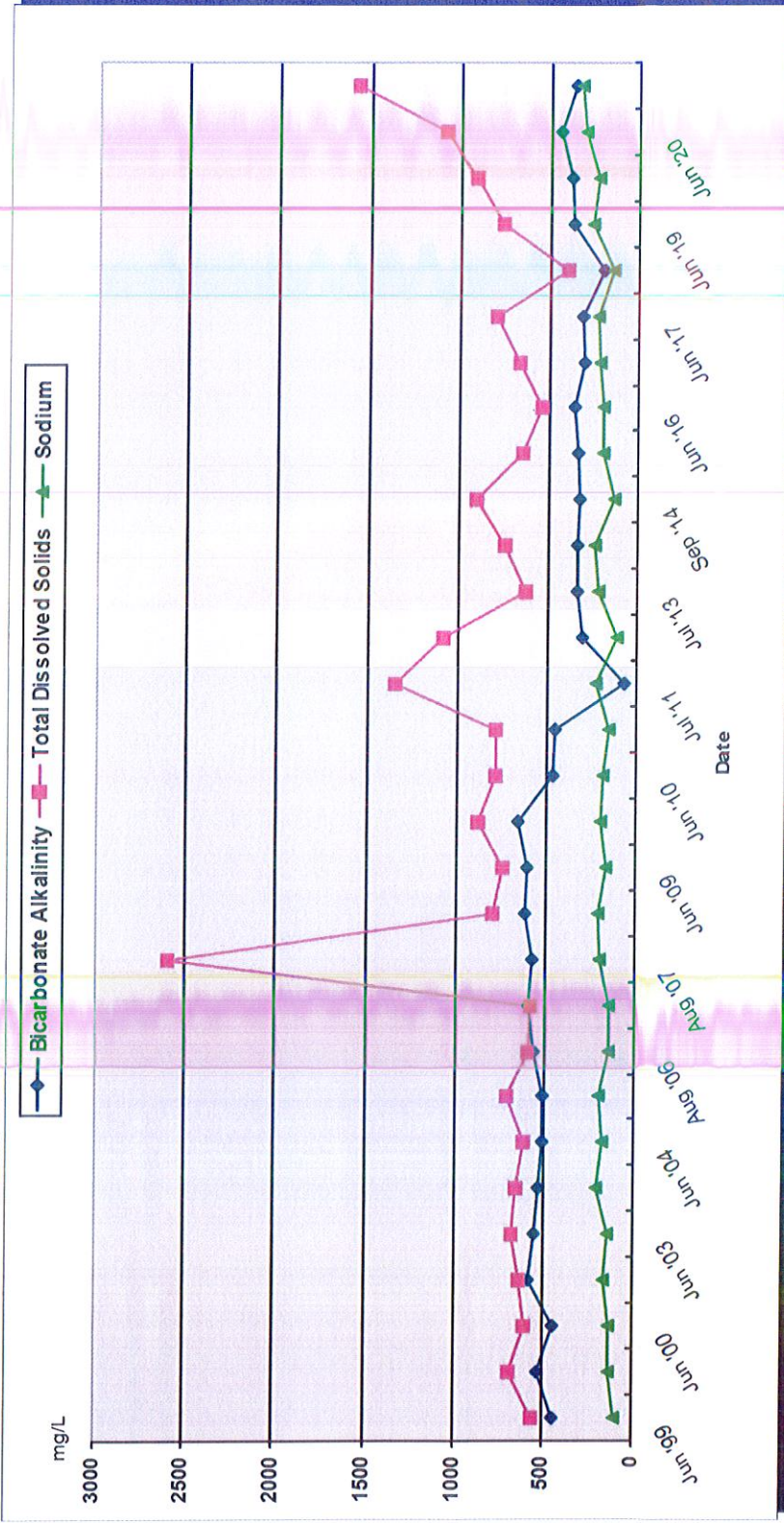
MONITORING DATA FOR 2020 AHR

GROUNDWATER LOCATION: SC-3

Date	Time	DEPTH	Field pH	Field Cond	Tem	NH3	HCO3	CO3	pH	Cond	Cl	NO3/NO2	SO4	TDS	TSS	PO4	As	Cd	Ca	Fe-Tr	Fe-Dis	Mnd	Mntr	Mg	Hg	Se	Na	Zn
12/5/1995	10:18	142.9	7.7	930	13																							
9/6/1995	13:27	142.2	7.5	1000	15	0.45	412	-1	7.47	950	16	0.06		590		-0.01	-0.002	-0.005	52.4	5.04	-0.005	0.124	0.18	21.3	-0.0002	0.006	193	-0.005
6/8/1995	10:57																											
6/8/1995	10:57	#####	7.4	880	13																							
3/15/1995	12:33	142.75	7.3	1020	15																							
12/7/1994	10:57	148.5	8.6	1000	12																							
12/7/1994	10:57					1.2	530	-0.5	7.57	1000	16	0.1		660		0.02	0.035	-0.005	49	21.2	0.02	0.100	0.1	19.4	-0.0002	0.007	160	0.008
9/16/1994	11:39	143	7.7	950	16																							
6/29/1994	11:00	158	8	1200	16																							
6/29/1994	11:00					0.8	510	-1	7.55	1130	51	0.04		720		-0.01	-0.002	-0.005	56	19	-0.02	0.150	0.35	20	-0.0002	-0.002	160	-0.005
4/28/1994	14:10	142	8.2	1200	17																							
3/31/1994	10:04					0.61	380	0	7.70	1197	14			746	688	-0.005	-0.001	-0.005	70	11	0.11	0.170		28	-0.0002	-0.001	149	0.02
11/10/1993	9:15																											
8/30/1993	11:45					0.7	456	0	7.90	1020	10	0.05		566	570	-0.005	-0.001	-0.005	48	13	0.58	0.130		19	-0.0002	-0.001	145	0.1
8/30/1993	11:45	142	8.4	930	15																							
7/1/1993	12:00	141	8	920	17																							
7/1/1993	12:00					0.6	386	0	7.50	906	8	-0.02		568	364	-0.005	-0.001	-0.005	54	11.6	0.38	0.170		21	-0.0002	0.001	132	0.12
4/30/1993	12:20	140.75	7.6	850	15																							
3/30/1993	9:50					0.71	416	28	8.80	866	17	-0.02		566	1840	-0.005	-0.001	-0.005	49	42	0.02	0.130		19	0.0008	-0.001	143	-0.01
3/30/1993	9:50	142.75	7.8	900	13																							

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-3

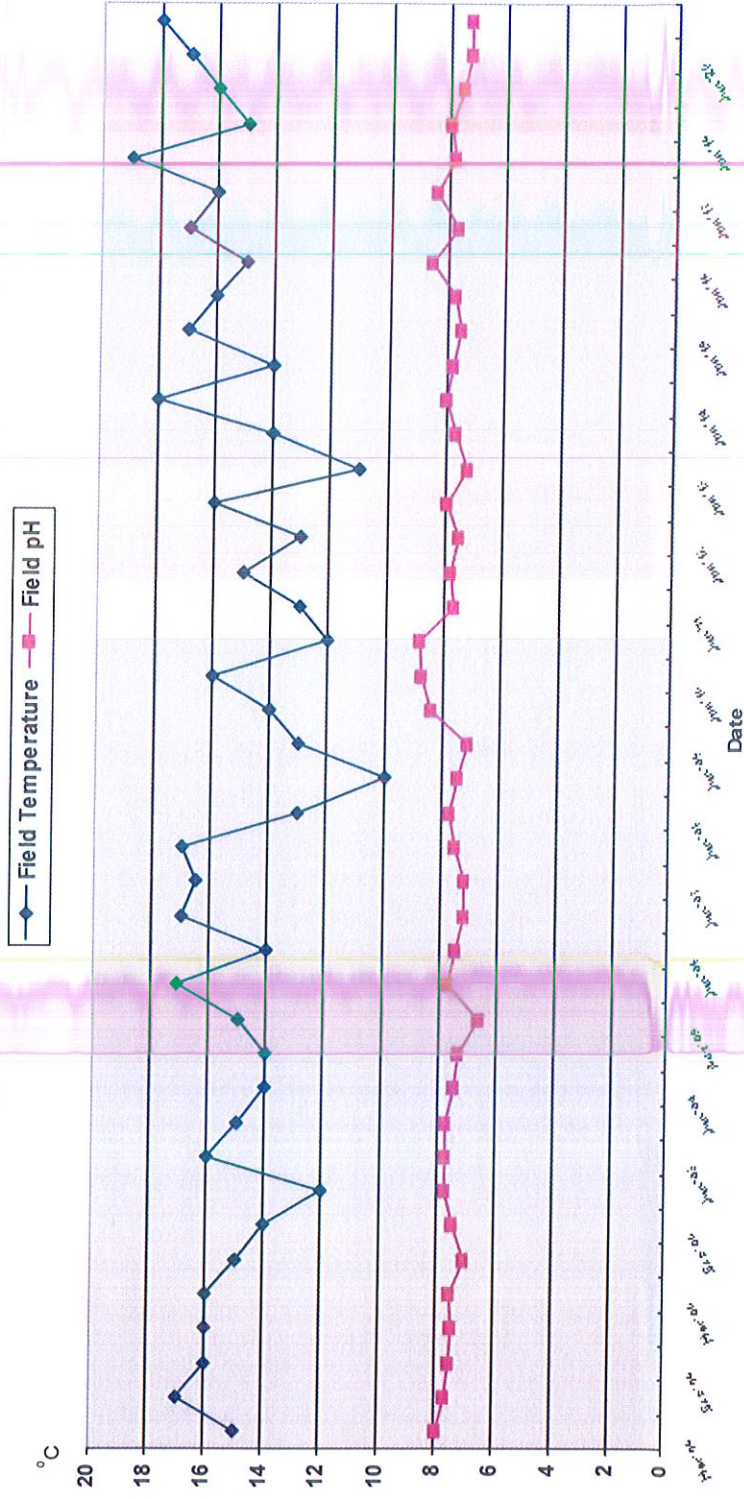


Oxbow Mining, LLC., Elk Creek Mine

Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

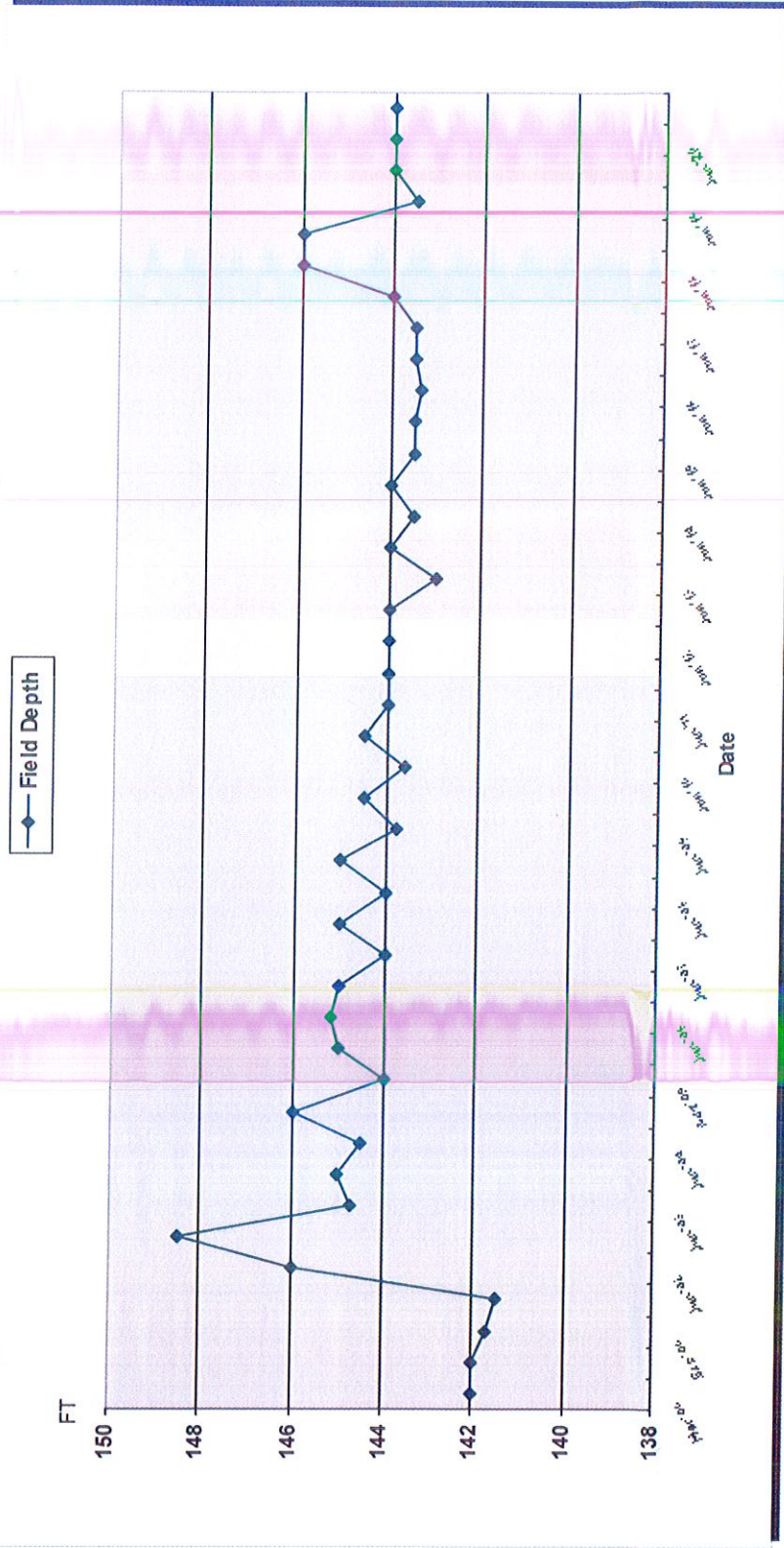
GROUND WATER LOCATION: SC-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

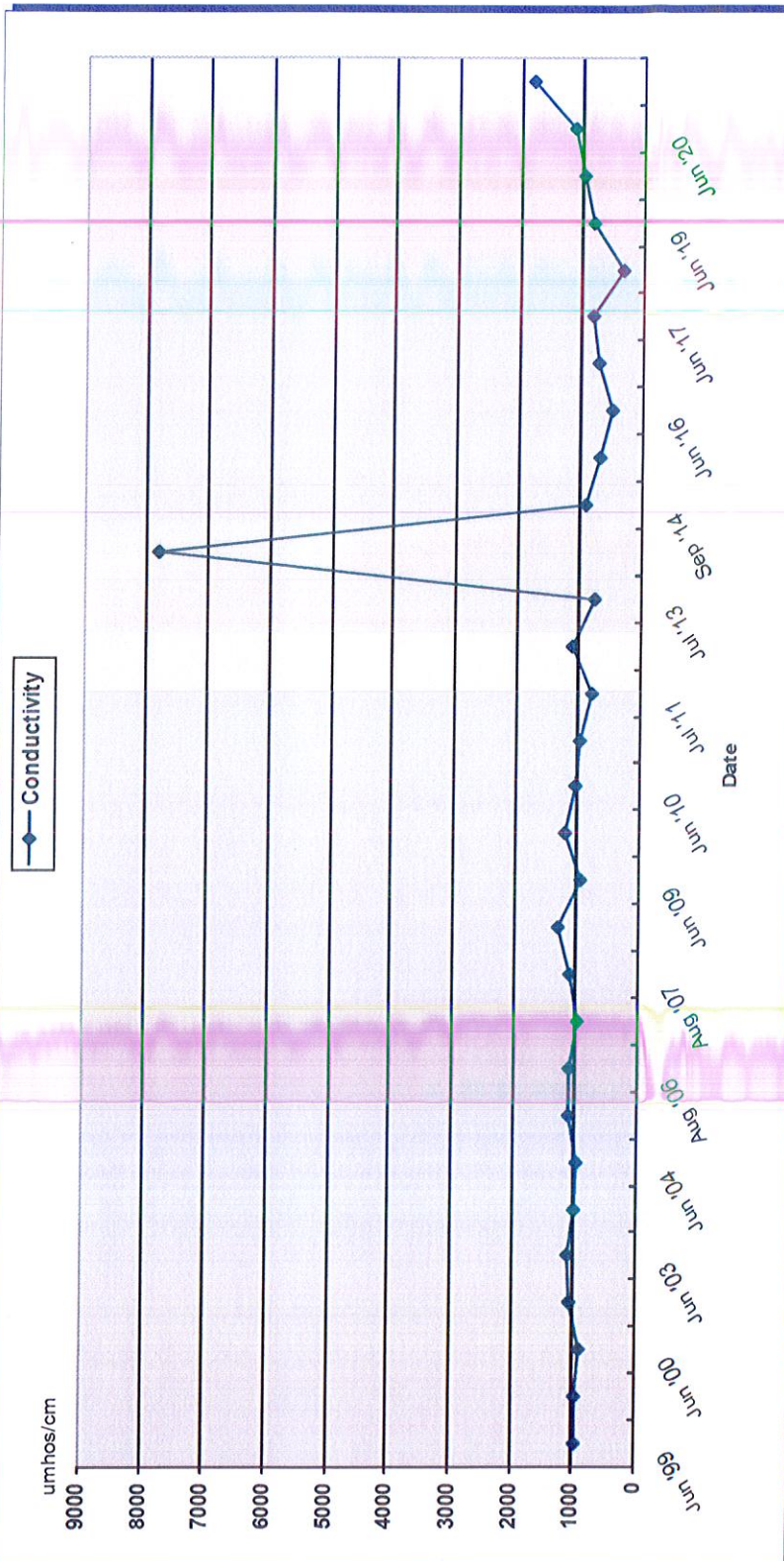
GROUND WATER LOCATION: SC-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-3

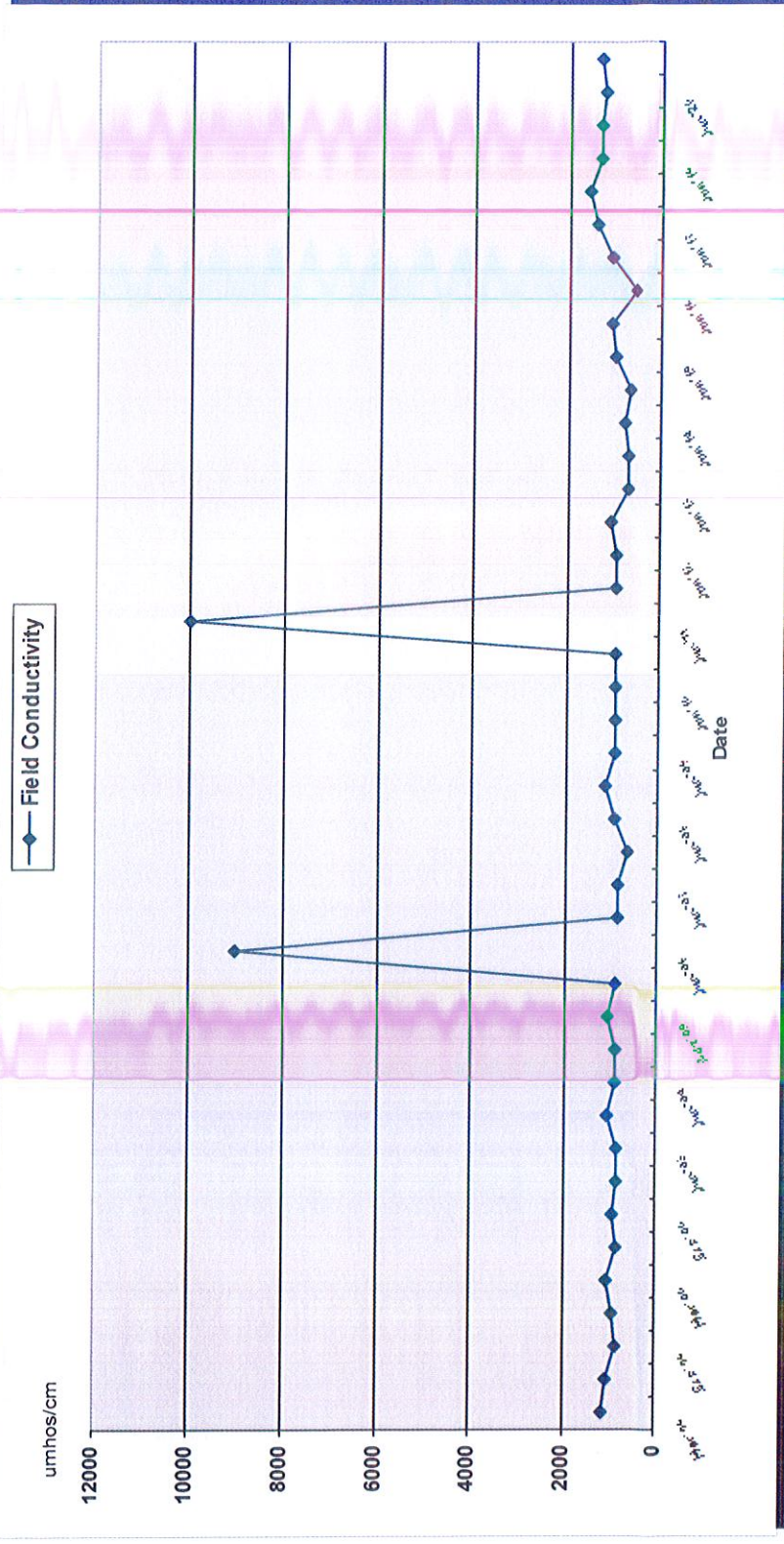


Oxbow Mining, LLC., Elk Creek Mine

Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-3

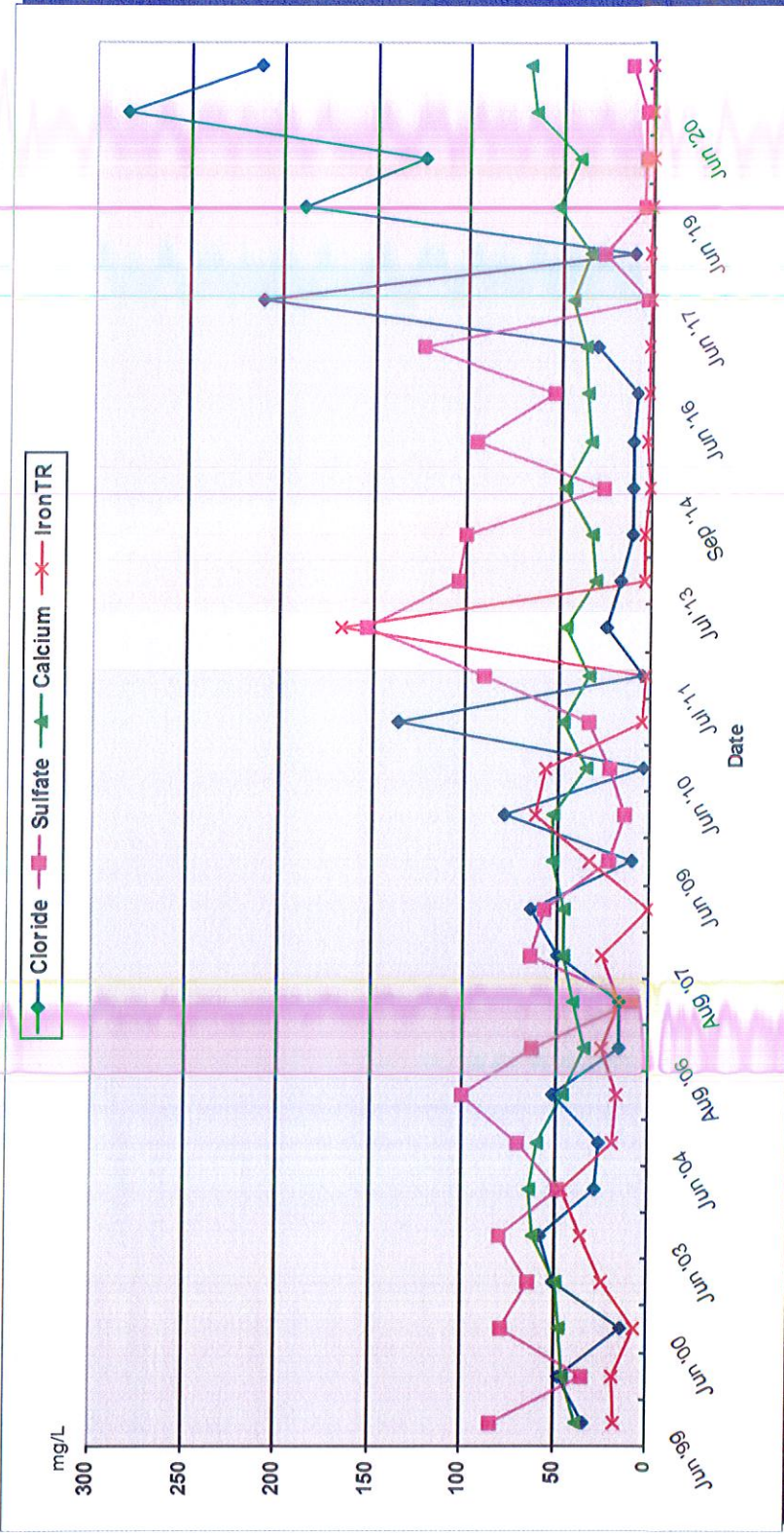


Oxbow Mining, LLC., Elk Creek Mine

Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

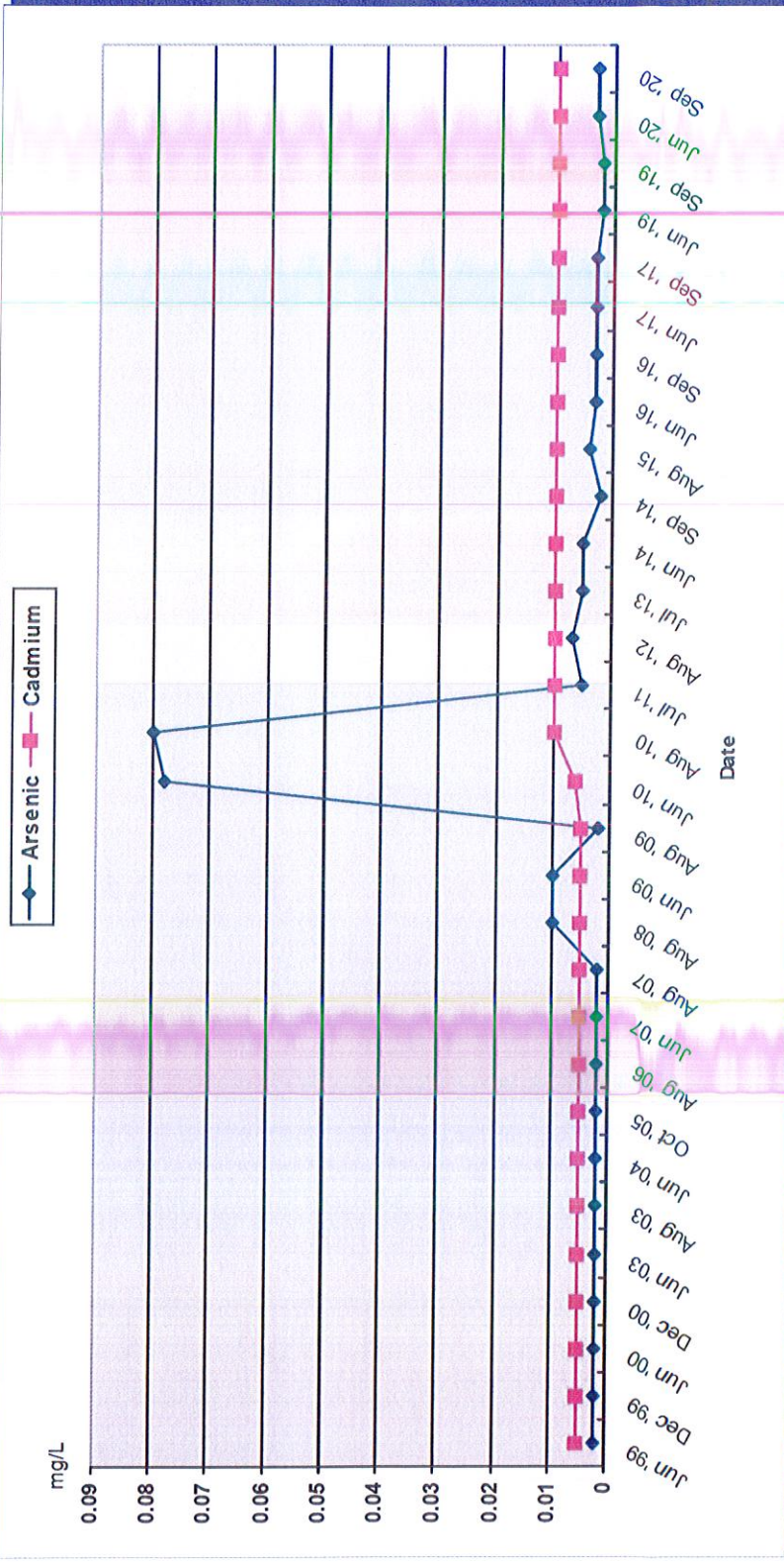
GROUND WATER LOCATION: SC-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

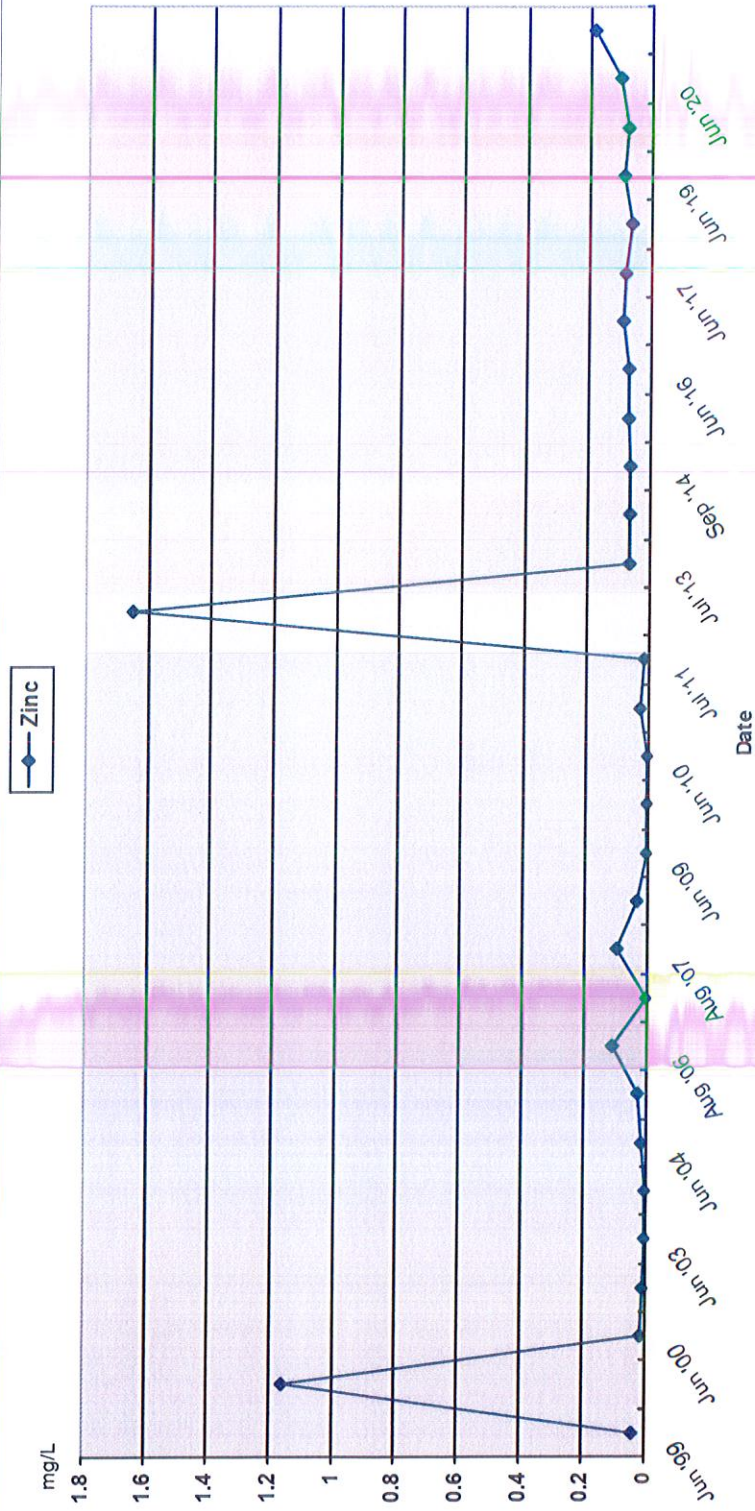
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MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-3



MONITORING CHART FOR 2020 AHR

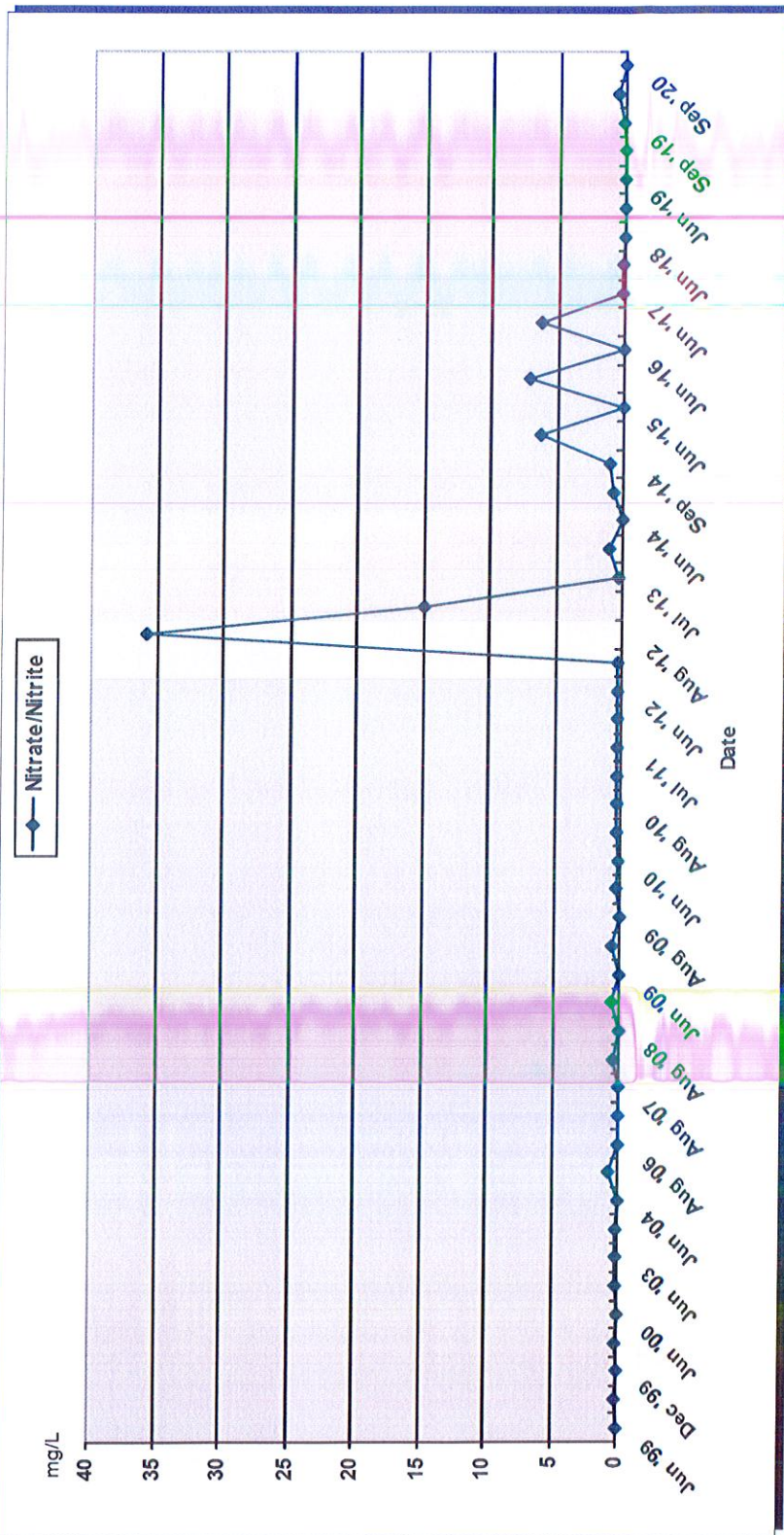
GROUND WATER LOCATION: SC-3



Oxbow Mining, LLC., Elk Creek Mine
Date : 19-Feb-21

MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: SC-3

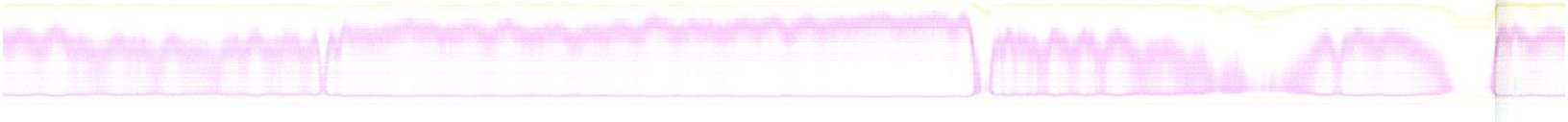


Oxbow Mining, LLC., Elk Creek Mine

Date : 18-Feb-21

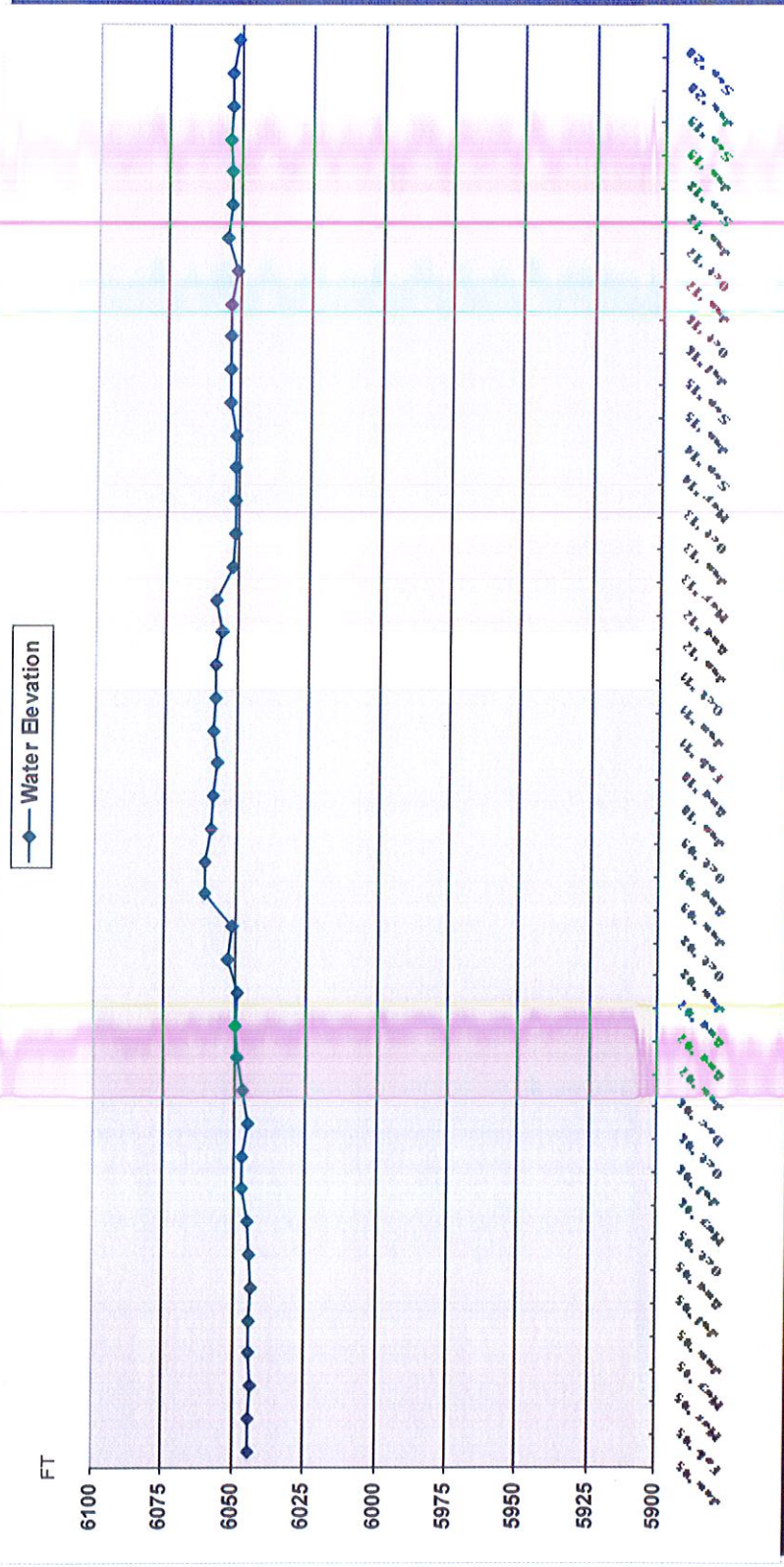


D2B
D2B2



MONITORING CHART FOR 2020 AHR

GROUND WATER LOCATION: D2B



Oxbow Mining, LLC., Elk Creek Mine

Date : 03-Mar-21