

May 23, 2024

Mr. Mark Thompson Vice President - Environmental Affairs Montana Resources, LLC 600 Shields Avenue Butte, Montana 59701 USA Hanagement System Certified By: EO 9001 Colling Systems CERTIFIED 15 04021 Colling Systems CERTIFIED 15 04021

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Dear Mark,

RE: Q1 2024 – YDTI Quarterly Tailings and Water Management Summary

1.0 INTRODUCTION

This letter presents a summary of select water management data related to the Montana Resources, LLC (MR) Yankee Doodle Tailings Impoundment (YDTI) from the first quarter (Q1) of 2024, including January 1 to March 31, 2024. The purpose of this letter is to review the monitoring records associated with the YDTI water management systems and identify if any operational changes are recommended. The Q1 letter includes a summary of data related to the following:

- YDTI supernatant pond elevation
- Tailings beach elevations at the discharge points
- Silver Lake Water System (SLWS) flowrates
- Horseshoe Bend (HsB) Weir flowrates
- Seep 10 flowrates
- West Embankment Drain (WED) Extraction Pond flowrates

A photo log showing the current condition of the various water management systems is attached to this quarterly report. The photos were collected as part of the construction field review conducted by Knight Piésold Ltd. (KP) and MR on March 13, 2024.

2.0 YDTI SUPERNATANT POND

2.1 POND WATER ELEVATION

MR manually measures the YDTI supernatant pond elevation on a weekly basis. The final pond water elevation recorded during the Q1 monitoring period was 6362.6 ft on March 25, 2024. This measurement equates to a pond elevation increase of approximately 3.8 ft during Q1 2024. Monthly pond water elevations from 2019 through Q1 2024 are presented on Figure 2.1.

The water levels measured during Q1 increased each month, which is consistent with previous Q1 seasonal trends as the winter ice cap over the beach and pond melts. The water level increase recorded in Q1 was slightly larger than the water level increases measured during the same period in recent years. The larger increase in the water level rate of rise is attributed to changes in the operational philosophy of the Polishing Plant operations, which are described in more detail in the following section.





Figure 2.1 Monthly YDTI Pond Water Elevation

2.2 POLISHING PLANT DISCHARGE

The quarterly flow records for the Berkeley Pit Pumping System, Polishing Plant discharge, and associated YDTI deficit since off-site discharge via the Polishing Plant began in 2019 are shown on Figure 2.2. The YDTI supernatant pond had a net gain of approximately 83 million gallons (255 acre-ft) of water in Q1 2024. Approximately 343 million gallons (1,054 acre-ft) of treated Berkeley Pit water was discharged into the YDTI and 260 million gallons (800 acre-ft) of YDTI water was discharged off-site during Q1. The net YDTI water deficit between Berkeley Pit inflows and Polishing Plant off-site discharge since 2019 is approximately 2,880 million gallons (8,850 acre-ft).

MR have been discharging YDTI water off-site via the Polishing Plant since September 2019 in effort to draw the stored volume of the YDTI down to a recommended target of approximately 15,000 ac-ft. An estimated supernatant pond volume of approximately 17,100 acre-ft was achieved as of mid-July 2023, which is within the estimated normal seasonal fluctuations of the recommended target of approximately 15,000 acre-ft. The YDTI Engineer of Record identified in the 2023 Annual Inspection Report (KP, 2024) that the active drawdown of the pond inventory was therefore completed in 2023. A revised operating philosophy for the Polishing Plant discharge to actively maintain the pond water inventory within seasonal fluctuations is now being applied as recommended in the 2023 Annual Inspection Report. The net balance of 'Water from the Berkeley Pit to the YDTI' and 'Water discharged from the YDTI' will be adjusted as required to maintain the pond water inventory within a target normal operating range of 12,000 to 18,000 acre-ft.

A more detailed description of the Polishing Plant is presented in the TOMS Manual (MR/KP, 2023).







3.0 YDTI TAILINGS BEACH

3.1 TAILINGS DISCHARGE LOCATIONS AND BEACH ELEVATIONS

Tailings discharge records indicate that tailings were distributed from the West Embankment 12-inch discharge line and from five (of ten) 26-inch discharge locations during Q1 2024. The tailings discharge locations are shown on Figure 3.1, and the tailings beach elevations at each discharge location are shown on Figure 3.2.

The discharge location with the lowest beach elevation was 3-5 throughout Q1 2024. The elevation difference between the tailings beach at 3-5 and the supernatant pond surface was approximately 9.0 ft at the end of Q1 2024. The location of the lowest discharge point identifies the general area of the facility where the pond may initially contact the embankment in the event the pond elevation rises due to an increase in pond volume (e.g. flooding). The next lowest discharge point was 1-4, which was approximately 22.4 ft higher than the supernatant pond surface at the end of Q1 2024.





Note(s):

1. Tailings Line 3 along the North-South Embankment (dashed), was disconnected during Q1 2024 to facilitate regrading of the embankment crest. They will progressively reconnect the line during Q2.







Figure 3.2 Tailings Discharge Elevations

3.2 TAILINGS BEACH LENGTH

Images captured by the Sentinel-2 satellite are reviewed twice per month to remotely observe the shape of the tailings beach and position of the supernatant pond relative to the embankments. The shortest beach length was observed at the northern end of the North-South Embankment and estimated to be approximately 1,450 ft at the end of Q1. The beach length during Q1 was obscured by the snow and ice cap on top of the YDTI beach and supernatant pond. An overview of the facility observed from the Sentinel-2 satellite images at the end of January, early March, and beginning of April are presented in the attached Figures A.1 to A.3.

4.0 SILVER LAKE WATER SUPPLY SYSTEM FLOWRATE

Water from the Silver Lake Water System (SLWS) is used to meet the operational freshwater and make-up water requirements. The average SLWS flow in Q1 2024 was approximately 680 gpm (1.0 Mgpd), which is the target SLWS flowrate. Average monthly SLWS flowrates from 2019 through Q1 2024 are shown on Figure 4.1.







5.0 HSB WEIR FLOWRATE

The HsB Weir records the flow of surface water discharging from the HsB area via the HsB Pond. The flows include YDTI seepage and meteoric inputs from the contributing catchment areas. Seepage from the YDTI flows south through the HsB area and joins with localized surface runoff in the HsB Pond before passing over the HsB Weir. The flow depth over the weir is measured continuously using two independent ultrasonic lookdown sensors located upstream of the weir. One sensor is maintained by the Montana Bureau of Mines and Geology (MBMG) and the second sensor is maintained by MR. MR installed their sensor to enable remote continuous monitoring of the HsB flow data. A photo of the flow conditions observed at the HsB Weir on March 13, 2024 is presented in Appendix A in Photo 1.

The MR sensor was problematic in Q3 and Q4 2023. MR replaced their sensor in mid-Q1 2024; however, when comparison was performed against the MBMG sensor data and manual measurements, the analysis showed that the MBMG sensor data corresponded with the manual readings, and there was no correlation between the MR sensor and the manual readings. The Q1 HsB Weir flowrate analysis therefore continues to evaluate data solely from the MBMG sensor.

The average monthly HsB Weir flowrates measured by the MBMG sensor are presented on Figure 5.1. The average flowrate from the MBMG data throughout Q1 2024 was approximately 2,640 gpm. The average monthly flowrates observed during Q1 were generally stable and slightly lower than the previous four years.





Figure 5.1 Average Monthly HsB Weir Flowrate

6.0 SEEP 10 FLOWRATE

The Number 10 Seeps (Seep 10) daylight on the EL. 5,900 ft bench above the HsB seepage collection area. Historically the seeps were collected in a small unlined pond on top of the EL. 5,900 ft bench and routed to the upper HsB seepage collection area via a pipe. A new Seep 10 collection and conveyance system were constructed as part of the Stage 1 HsB Drainage System works, which are currently in progress. The new Seep 10 system includes a lined collection ditch, a lined pond with discharge weir and a conveyance pipeline that discharges directly into HsB Pond. The new Seep 10 system was commissioned in September 2023.

The Seep 10 flows are measured using an ultrasonic lookdown level sensor (the previous sensor was relocated to the new pond). The sensor automatically measures the stilling pond level immediately upstream of the weir. Images of the new Seep 10 pond on March 13, 2024 are presented in Appendix A in Photos 2 and 3.

The average monthly Seep 10 flowrates from 2020 through Q1 2024 are presented on Figure 6.1. The flowrates during the monitored period in Q1 2024 were on average approximately 55 gpm. Flowrate trends throughout Q1 2024 were consistent with seasonal trends observed in previous years.





Figure 6.1 Average Monthly Seep 10 Weir Flowrate

Note(s):

2. Data collection was suspended from September 8, 2023 to October 31, 2023 for the construction and commissioning of the new Seep 10 system.

7.0 WED EXTRACTION POND DEWATERING SYSTEM

Water collected in the WED flows by gravity into the Extraction Pond and is pumped to the YDTI via the Extraction Pond Dewatering System. The flows are measured using an inline totalizing flowmeter. An image of the WED Extraction Pond and Dewatering System taken on March 13, 2024 is presented in Appendix A – Photo 4. The average weekly flowrates for the Extraction Pond Dewatering System, since it began operating in November 2019, are presented on Figure 7.1. The average daily flowrate during Q1 2024 was 642 gpm, which is comparable to the flowrates recorded since mid-2022.





Note(s):

- 1. Erroneous data caused by pump cycling from March to April 2020 were removed.
- The average weekly Extraction Pond Dewatering System flowrate peaked between July 9 to 15, 2022. This high flowrate is attributed to a single event on July 9 associated with power outages and subsequent increase in pumping rate to reduce the WED pond elevation.
- 3. Erroneous data suspected to be due to a flowmeter error from March 4 to 18, 2023 were removed.
- 4. Erroneous data suspected to be due to maintenance downtime from July 28 to 30, 2023 were removed.

Figure 7.1 Average Weekly Extraction Pond Dewatering System Flowrate

8.0 CONCLUSIONS

The following observations were derived from the analysis of the Q1 2024 YDTI water data records:

- The YDTI supernatant pond elevation increased by approximately 3.7 ft in Q1 2024.
- Operation of the Berkeley Pit Pumping System and Polishing Plant resulted in a net gain of approximately 83 million gallons (255 acre-ft) of YDTI supernatant pond water during Q1.
- The active drawdown of the pond inventory to a recommended target of approximately 15,000 ac-ft (with consideration of the estimated normal seasonal fluctuations) was considered completed in 2023. A revised operating philosophy for the Polishing Plant discharge to actively maintain rather than drawdown the pond water inventory is now being applied.
- SLWS flows averaged approximately 676 gpm (1.0 Mgpd) during Q1.
- HsB Weir flowrates averaged approximately 2,640 gpm, which is comparable to the average flowrate since recirculation to the RDSs ceased in Q3 2021.
- Seep 10 flowrates averaged approximately 55 gpm in Q1, and flowrates throughout the quarter were consistent with the seasonal trends observed over the past three years.
- WED Extraction Pond Dewatering System flowrates averaged 642 gpm and are comparable with historical average daily pump rates.



We trust that this letter meets your needs at this time. Please do not hesitate to contact the undersigned with any questions.

Yours truly, Knight Piésold Ltd.

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KNIGHT PIÉSOLD LTD. PERMIT NUMBER — 1001011 — EGBC PERMIT TO PRACTICE

Approval that this document adheres to the Knight Piésold Quality System:

Attachments:

Figure A.1 Rev 0Tailings Beach Assessment – January 30, 2024Figure A.2 Rev 0Tailings Beach Assessment – March 8, 2024Figure A.3 Rev 0Tailings Beach Assessment – April 2, 2024Photo LogFigure A.3 Rev 0

References:

Montana Resources and Knight Piésold Ltd. (MR/KP, 2023). Yankee Doodle Tailings Impoundment – Tailings Operations, Maintenance and Surveillance (TOMS) Manual, Rev 6, dated December 2023.

Knight Piésold Ltd. (KP, 2024). Yankee Doodle Tailings Impoundment 2023 Annual Inspection Report, Rev 0, dated January 2024.







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Q1 2024 – YDTI QUARTERLY WATER DATA SUMMARY PHOTO LOG



PHOTO 1 - March 13, 2024 - HsB Weir



PHOTO 2 - March 13, 2024 - Seep 10 Stilling Pond



Q1 2024 – YDTI QUARTERLY WATER DATA SUMMARY PHOTO LOG



PHOTO 3 - March 13, 2024 - Seep 10 Weir.



PHOTO 4 – March 13, 2024 – Discharge from West Embankment (looking south)