July 30, 2024

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Dear Mike,

RE: Q1 2024 – YDTI Quarterly Piezometric and Deformation Monitoring Update

1.0 INTRODUCTION

1.1 GENERAL

Montana Resources, LLC. (MR) operates an open pit copper and molybdenum mine in Butte, Montana. Tailings produced from ore processing are stored within the Yankee Doodle Tailings Impoundment (YDTI), which is a valley-fill style impoundment contained within rockfill embankments. Knight Piésold Ltd. (KP) supports MR to routinely monitor hydrogeological and geotechnical conditions as part of their operational surveillance plan for the tailings facility, as described in the Tailings Operations, Maintenance and Surveillance (TOMS) Manual (MR/KP, 2023). Monitoring data are comprehensively reviewed on a quarterly basis to evaluate the performance of the YDTI in conjunction with observations made during periodic inspections.

Piezometric conditions within the YDTI embankments, tailings mass, and surrounding areas are an important indicator of facility performance. Near real-time piezometric data from instrumentation at select monitoring sites have designated Quantitative Performance Parameters (QPPs) within the TOMS Manual and are regularly evaluated relative to piezometric 'trigger elevations' to pre-emptively identify and respond to changing conditions.

Embankment deformation monitoring is active, with data collection beginning in 2020, to characterize and monitor surface and subsurface deformations using in-situ instrumentation and satellite-based remote sensing. Observed deformation rates, magnitudes, and the spatial distribution thereof are important indicators of embankment performance and are regularly reviewed by KP. The TOMS Manual does not yet include deformation based QPPs; however, these will be considered for future revisions. Available deformation data are evaluated and presented on a quarterly or more frequent basis to regularly monitor for changes in deformation behavior and evaluate incorporation of deformation instrumentation for QPP monitoring in the future.

This letter provides a quarterly summary of piezometric and deformation monitoring data collected during the first quarter (Q1) of 2024 for key monitoring sites.

1.2 SUMMARY OF YDTI OPERATIONS AND RELEVANT ACTIVITY

Tailings deposition, water reclaim, and performance evaluation (inspection and monitoring) remained active at the YDTI during Q1 2024, with only minimal construction activity during the quarter. The following is a summary of these activities, with potential to influence observed piezometric and/or displacement conditions:

- Tailings discharge during Q1 2024 was predominantly active along the West Embankment from spigots 1-1 and 2-3, and 1-4 (47% and 24% of total Q1 discharge hours, respectively), at the North-South Embankment from spigot 3-3 (13% of total Q1 discharge hours), and along the East-West Embankment from spigots 2-1 and 3-1 (8% of total Q1 discharge hours). The remainder of the total Q1 discharge was distributed through the #1 12-in line located along the West Embankment and spigot 3-2 at the North-South Embankment. The #3 12-in line located along the North-South Embankment was disconnected during Q1 to facilitate embankment crest regrading.
- The YDTI supernatant pond monitored an elevation increase of approximately 3.8 ft during Q1 2024. The monthly elevation increases were generally consistent with previously observed seasonal trends at the YDTI. 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.
- Only minor embankment construction activities occurred during Q1 2024, including placement of facing material (Zone F) along the upstream North-South and East-West Embankment slopes (intermittently between approximately Sections 23+00NW and 43+00N) and construction of the tailings pipeline bench along the North-South Embankments (between approximately Sections 28+00N and 43+00N).

2.0 PIEZOMETRIC MONITORING

2.1 GENERAL

Piezometric data are available to KP via a Remote Monitoring System (RMS) and data from QPP sites are reviewed weekly by KP and MR. This letter presents trends and conditions based on data collection from the QPP sites during Q1 2024, with select additional data from non-QPP monitoring sites when useful to support the key findings. Comprehensive analysis of data from the remaining non-QPP monitoring sites is completed annually and will next be presented in the 2024 Data Analysis Report. The active piezometric monitoring network and a summary of Q1 2024 piezometric conditions are presented in the following sections.

2.2 OVERVIEW OF PIEZOMETRIC MONITORING NETWORK

Pore pressures are monitored at 117 active instrumentation locations at the YDTI, the West Ridge, and Horseshoe Bend (HsB) areas. Locations of the piezometric monitoring sites are shown on Figure 1. These sites include 39 standpipe piezometers/monitoring wells, 76 drillholes with active vibrating wire piezometers (VWPs) and two active Elexon Geo4Sight (Geo4Sight) installations. Most existing standpipe piezometers and monitoring wells have been outfitted for continuous monitoring by suspending a VWP sensor within the PVC riser and connecting the sensor via radiotelemetry to the RMS.

Fifteen (15) standpipe piezometers and drillhole VWP sensors have designated QPPs within the TOMS Manual and are used to routinely assess the performance of the YDTI. The QPPs include a piezometric ‘trigger elevation’ at or above which the QPP is exceeded, and a Level 1 Unusual Occurrence would be triggered, as specified in Table 5.1 of the TOMS Manual (MR/KP, 2023). Trigger elevations assigned to

each QPP site are reviewed by KP on an annual basis. A summary of the piezometric QPPs that are currently in use at the YDTI is included in Table 1.

Piezometric data availability via the RMS has typically been highly reliable, except for minor outages including battery depletion, minor hardware problems, and temporary loss of communication with the local network. Minor outages have continued to be regularly identified during weekly monitoring reviews and corrective measures carried out to remedy minor issues typically within one week of identification. No QPP outages occurred during Q1 2024.

Three QPP monitoring sites have been abandoned and are no longer included in the quarterly piezometric monitoring review. These sites include:

- **DH15-S5 VW2 (East-West Embankment, Section 8+00W)** has recorded erroneous readings since April 15, 2023, due to suspected VWP cable damage and has been abandoned. Replacement QPPs have been adopted using sensors installed at drillhole DH23-S1.
- **DH18-S1 VW2, VW3, and VW4 (North-South Embankment, Section 28+00N)** were deactivated on March 8th, 2023 to facilitate North-South Embankment EL. 6,450 ft lift construction but were subsequently damaged and abandoned. KP plans to replace these sensors with installations completed during the 2024 Site Investigation Program.
- **MW12-05 (North-South Embankment, Section 53+00N)** was damaged on August 8, 2023 and has been abandoned. KP may consider replacement of instrumentation at this site as part of upcoming site investigation programs over the next several years.

2.3 SUMMARY OF Q1 2024 PIEOZOMETRIC CONDITIONS

2.3.1 OVERVIEW

Piezometric monitoring completed during Q1 2024 continues to indicate that the facility is performing as intended, and observed conditions are generally consistent with prior monitoring periods. The following is a high-level summary of monitored piezometric trends and conditions:

- No piezometric trigger elevation exceedances were observed at QPP monitoring sites during Q1 2024.
- Minor embankment pore water pressure increases were observed during Q1 2024 within the basal saturated zone of the Central Pedestal Area of the East-West and North-South Embankments, particularly along Section 8+00W. These increasing trends continue from Q4 2023 and are interpreted to result from usage of nearby discharge points (2-1, 3-1, 3-2, 3-3), which has resulted in increasing tailings pore water pressures upstream of the embankments in this area.
- Observed embankment pore water pressures within the East-West and North-South Embankments outside the Central Pedestal Area remained relatively stable throughout Q1 2024. It is noted that tailings pore water pressures upstream of the embankments in these areas also remained relatively constant.
- Relatively constant or slightly decreasing pore water pressures were observed within the West Embankment and West Embankment Drain (WED) during Q1 2024.

Monitoring findings supporting the above conclusions are provided by embankment area in the following subsections. A high-level summary of QPP piezometric data and instrumentation status is provided in Table 1. Piezometric data recorded at QPP sites within the East-West, North-South, and West Embankments are shown relative to QPP trigger elevations on Figures 2 through 6. Piezometric conditions and quarterly change in piezometric elevation for instruments installed along Section 8+00W of the East-West Embankment are presented graphically on Figure 7.

2.3.2 CENTRAL PEDESTAL AREA EMBANKMENTS (SECTION 12+00W TO 8+00N)

Piezometric monitoring within the Central Pedestal Area (East-West and North-South Embankments between Section 12+00NW and 8+00N) observed slightly increasing pore water pressures within the basal saturated zone along Sections 8+00W and 0+00 during Q1 2024. Pore water pressures monitored within the overlying embankment remained relatively constant. Notable piezometric trends observed are summarized below.

Piezometric QPP sensors installed within the East-West Embankment basal saturated zone along Section 8+00W generally monitored slightly increasing pore water pressures during Q1 2024. Supporting findings include:

- QPP monitoring sites installed in the embankment foundation (DH15-S4 VW1, DH15-S3 VW1, DH23-S1 VW2) monitored slightly increasing pore water pressures (approximately 0.3, 1.8 ft, and 1.3 ft respectively) during Q1 2024.
- QPP monitoring sites installed in the basal rockfill monitored slightly increasing piezometric conditions throughout Q1 2024. This includes DH15-S4 VW2 (3.8 ft increase), MW94-11 (1.4 ft increase), MW94-08 (1.9 ft increase). QPP monitoring site DH23-S1 VW3 monitored relatively stable pore water pressures (decrease of approximately 0.6 ft).
- Non-QPP sensor DH23-S3 VW3 (installed downstream of DH15-S4) continued to monitor gradually increasing pore water pressures during Q1 2024; a trend which was been observed at this sensor since it was installed in Q4 2023. The sensor observed a 9.2 ft piezometric increase during Q1 2024.
- Non-QPP sensor DH23-S1 VW1 monitored minor quarterly increase of 1.8 ft.

Pore pressures monitored by instruments installed within rockfill above the basal saturated zone on Section 8+00W remained relatively constant through Q1 2024. Supporting findings include:

- Non-QPP sensors within the downstream starter dam at DH21-S2 VW2, VW3, and VW4 remained unsaturated through Q1 2024.
- Non-QPP sensors DH23-S3 VW6 and VW7 monitored relatively stable pore water pressures (changes of less than +/- 1 ft) during the quarter.
- Non-QPP sensor DH23-S1 VW5 monitored a 1.5 ft pore water pressure decrease during Q1 2024, while the overlying VW6 and VW7 sensors observed relatively constant pressures (changes of less than +/- 1 ft).

Piezometric elevations monitored within the basal system by QPP and non-QPP sites on Section 0+00 remained relatively stable or increased slightly throughout the quarter. Key findings include:

- Non-QPP sensors DH23-S4 VW1 and VW2 monitored slightly increasing pore water pressures (0.5 and 4 ft, respectively) during Q1 2024. Non-QPP sensor DH23-S4 VW3 became saturated on January 6, 2024 and observed a quarterly increase of 4.9 ft.
- QPP sensor DH19-S7 VW1 continued to monitor a minor pore water pressure decrease (approximately 2.4 ft) within the embankment foundation. The overlying VW2 sensor remained unsaturated.
- Non-QPP sensor DH23-S2 VW1 monitored generally constant pore water pressure (change of less than +/- 1 ft) within the foundation during the quarter. The overlying VW2 and VW3 sensors remained unsaturated.
- QPP sensor DH17-S1 VW2 remained unsaturated and non-QPP sensor DH17-S1 VW1 monitored relatively stable pore water pressures (changes of less than +/- 1 ft) during Q1 2024.

Instrumentation installed within rockfill above the basal saturated zone on Section 0+00 observed relatively constant (mix of minor increasing and decreasing pressures) pore water pressure trends through Q1 2024, except for at DH21-S4 (VW6 and VW7) where larger increases were observed. Key findings include:

- Non-QPP sensors DH21-S4 VW6 and VW7 monitored increasing pore pressures during Q1 2024 (approximately 6.3 ft and 5 ft, respectively) within the embankment rockfill. These appear to be associated with the pore water pressure increases observed at CPT14-02 (see Section 2.3.6).
- Non-QPP sensors DH23-S4 VW6, VW7, and VW8 monitored slightly decreasing (1 to 2 ft decrease) pore pressures beneath the embankment crest during Q1 2024.
- Non-QPP sensor SCPT21-S9 VW6 monitored slightly decreasing conditions (approximately 1.7 ft) beneath the downstream slope during Q1 2024.
- Non-QPP sensors DH19-S7 VW3 through VW6 monitored relatively stable pore water pressures (changes less than +/- 1 ft) beneath the downstream slope during the quarter.

Non-QPP sensor DH19-S7 VW7 has continued to monitor substantial pore water pressure fluctuations within the historical 1982 lift top, following completion of EL. 6,450 ft embankment construction (beginning in approximately May 2023). Findings are summarized below and may indicate an instrumentation issue:

- DH19-S7 VW7 observed an overall quarterly pore water pressure decrease of approximately 12 ft during Q1 2024. Two fluctuations (increases followed by subsequent dissipation were observed between January 28th to February 2nd (approximately 5 ft increase) and March 16th to March 21st (approximately 16 ft increase). No corresponding pore pressure trends or fluctuations of similar magnitude are discernable at adjacent piezometric monitoring sites (i.e., DH21-S1, SCPT21-S9, DH23-S2, other DH19-S7 sensors).
- The cause of the fluctuating trend at DH19-S7 VW7 is uncertain and may indicate an instrumentation issue. Additional monitoring and assessment are recommended.

2.3.3 EAST-WEST EMBANKMENT (SECTION 12+00W+)

Observed embankment pore water pressures within the East-West Embankment outside the Central Pedestal Area remained relatively stable throughout Q1 2024. Supporting findings include:

- QPP and non-QPP instruments DH18-S3 VW3 and VW2 (Section 28+00NW) monitored stable piezometric conditions during Q1 2024 (changes of less than +/- 1 ft).
- Non-QPP instruments in drillhole DH18-S5 (Section 28+000NW; VW1, VW2, VW4, and VW5) monitored relatively constant pore water pressures during the quarter (changes of less than +/- 1 ft).
- Non-QPP sensors in drillhole DH18-S4 (Section 43+00NW; VW1 through VW4) monitored relatively stable pore water pressures during Q1 2024 (changes of less than +/- 1 ft).

The above trends are consistent with stable pore water pressure monitoring findings from the tailings upstream of the East-West Embankment, as described in Section 2.3.6.

2.3.4 NORTH-SOUTH EMBANKMENT (SECTION 8+00N+)

Limited piezometric data are available within the North-South Embankment due to damage resulting from EL. 6,450 ft embankment lift construction. Available piezometric instruments continue to indicate stable or slightly decreasing pore water pressures during Q1 2024. Key findings include:

- QPP sensor DH18-S2 VW2 monitored relatively stable pore water pressure (approximately 0.3 ft decrease) during Q1 2024.

- Monitoring well MW12-01 monitored relatively stable pore water pressures (approximately 1.0 ft decrease) during Q1 2024.
- Non-QPP site DH21-S3 monitored relatively stable piezometric conditions during Q1 2024 (changes of less than +/- 1 ft).

2.3.5 WEST EMBANKMENT AND DRAIN

Slightly decreasing pore water pressures were observed within the West Embankment and West Embankment Drain (WED) during Q1 2024. Key findings include:

- QPP sensors in drillhole DH15-12 (VW1, VW2, and VW3), installed within the West Embankment, observed slightly decreasing pore water pressures (approximately 0.7 ft). All three sensors remained approximately 20 ft below their QPP trigger thresholds.
- Pore water pressures monitored by QPP sensors installed in WED Drain Pods 1 and 2 (VWP-DP1 and VWP-DP2, respectively) observed slightly decreasing pore pressures (approximately 0.4 ft and 0.3 ft, respectively). The sensors remain approximately 33 ft and 28 ft below their respective QPP trigger thresholds.
- The piezometric elevation monitored by the non-QPP sensor in the WED Extraction Basin (VWP-EB1) monitored a minor pore water pressure decrease (approximately 0.6 ft) during Q1 2024.

2.3.6 TAILINGS MASS

Tailings mass pore water pressures upstream of the Central Pedestal Area of the embankment increased during Q1 2024. Key findings include:

- Pore pressures upstream of the rockfill surcharge at non-QPP sites SCPT15-04 VW2 and SCPT15-05 VW2 increased by approximately 5.5 ft and 5.8 ft, respectively during Q1 2024. The increasing trends started in May 2023 and correspond with nearby tailings discharge at locations 3-1 and 3-3. Sensors SCPT15-04 VW2 and SCPT15-05 VW2 both started collecting erroneous data starting March 30, 2024, due to a suspected data logger issue.
- Non-QPP sites DH17-S3 VW2 and SCPT15-03 VW1 monitored slightly increasing pore water pressures beneath the central rockfill surcharge (approximately 3.6 ft) during Q1 2024. SCPT15-03 VW1 started recording erroneous data on March 30, 2024, due to a suspected data logger issue.
- Sensor CPT14-02 VW1 (Section 13+00N) monitored an approximately 13 ft pore pressure increase within the tailings that is inferred to be associated with predominant usage of nearby tailings discharges (3-2 and 3-3) and recent inundation of a corner of the rockfill surcharge pad, which may be enhancing recharge into the embankment.

Piezometric elevations within the tailings beach adjacent to the East-West Embankment outside the Central Pedestal Area remained stable during Q1 2024. Key findings include:

- Sensors CPT13-06 VW1 and SCPT15-08 VW1 and VW2 (Section 43+00NW) monitored stable pore water pressures (changes of less than +/- 1 ft) during Q1 2024.
- Sensor CPT15-06 VW2 (Section 28+00NW) monitored generally stable pore water pressures (changes of less than +/- 1 ft) during Q1 2024.
- Non-QPP sensors SCPT21-S5 VW1, VW2, and VW3 monitored steady increases in piezometric elevation (approximately 1.8, 2.0, and 2.4 ft, respectively) during Q1 2024, while nearby tailings discharge locations 3-1, 3-2, and 3-3 were active.

Piezometric instruments within the tailings beach adjacent to the North-South Embankment outside the Central Pedestal Area monitored predominantly stable pore water pressure trends during Q1 2024. More significant pore pressure increases and decreases were observed at DH19-S6. Key findings include:

- Non-QPP sensor DH19-S6 VW6 (Section 53+00N) observed decreasing pore water pressures (approximately 6.5 ft) during Q1 2023, while VW5 monitored relatively stable conditions.
- Non-QPP sensors SCPT21-S1 VW1, VW2, and VW3 (Section 43+00N) monitored relatively stable pore water pressure (changes of less than approximately +/- 1 ft) during Q1 2024.
- Non-QPP sensors SCPT21-S4 VW1 and VW2 (Section 28+00N) observed relatively stable pore water pressures (increases of less than approximately +/- 1 ft); note that sensor SCPT21-S2 VW2 began collecting erroneous data starting March 30, 2024, due to a suspected data logger issue. Sensor SCPT21-S4 VW3 monitored decreasing conditions of approximately 1.6 ft during Q1 2024.

There are presently no QPPs designated for pore water pressures within the tailings mass.

3.0 DEFORMATION MONITORING

3.1 GENERAL

Surface and subsurface deformation data are regularly reviewed by KP as part of the routine YDTI monitoring programs. This letter summarizes displacement trends observed during Q1 2024, with select presentation of longer-term trends when useful to support the key findings. The active displacement monitoring network and a summary of Q1 2024 displacement trends are presented in the following sections.

3.2 OVERVIEW OF DEFORMATION MONITORING NETWORK

Surface and subsurface deformations of the YDTI embankments are actively monitored using in-situ instrumentation and remote sensing techniques. The instrumentation and remote sensing techniques incorporated into the monitoring program are summarized in the 2022 Data Analysis Report (KP, 2023), and within monthly construction monitoring and quarterly monitoring documents. A list of the available techniques is provided below:

- **Global Navigational Satellite System (GNSS) instrumented survey-monuments** at four locations (DH19-S3, DH19-S4, DH19-S5, and DH19-S7) within the Central Pedestal Area of the East-West Embankment.
- **Manual survey-monuments** at 15 locations along the East-West Embankment and six locations along the North-South Embankment. These monuments were previously surveyed using Differential Global Positioning System (DGPS) survey equipment; however, MR transitioned to prisms and total station surveying methods in September 2023.
- **Satellite-based interferometric Synthetic Aperture Radar** (inSAR) Bulletin and SqueeSAR analyses with comprehensive coverage of the YDTI embankments. Data collection is active from approximately April through October annually, while snow-free conditions persist. No short-term inSAR bulletins and SqueeSAR data are available for review in Q1 2024.
- **In-Place-Inclinometer** (IPI) instruments co-located with the GNSS instrumentation in drillholes DH19-S3, DH19-S4, DH19-S5, and DH19-S7 within the Central Pedestal Area of the East-West Embankment.
- **Manual Inclinometers** located in drillholes DH21-S2 and DH21-S3 within the East-West and North-South Embankment and surveyed with a traversing-probe. Minimal data were available from

these sites in Q1 2024 as the manual probe was damaged. The probe has been repaired and data collection will resume in Q2 2024.

- **Geo4Sight deformation instruments** within drillholes DH20-S2 (Section 8+00W) and DH21-S4 (Section 0+00), installed through the rockfill surcharge, tailings, and upstream slope of the East-West Embankment in the Central Pedestal Area.

Data from instrumentation sites were generally available via the RMS or manually downloaded, depending on the data transmission method. The trends and conditions observed in the monitoring data during Q1 2024 using available instrumentation and remote sensing data are summarized in the following sections. More comprehensive analysis of available deformation data will be presented in the annually issued Data Analysis Report. No deformation related QPPs are presently active; however, KP is evaluating the data and are considering incorporation of deformation related QPPs for future revisions of the TOMS Manual.

3.3 SUMMARY OF Q1 2024 DISPLACEMENT TRENDS

3.3.1 OVERVIEW

Deformation monitoring completed during Q1 2024 continues to indicate that the facility is performing as intended, and observed conditions are generally consistent with prior monitoring periods. Observed YDTI embankment trends from Q1 2024 are summarized below:

- Continued constant rate surface deformations within regions of historical rockfill outside of recent construction influence, with no observation of progressive (accelerating) deformation rates in these areas.
- Slightly elevated deformation rates continued to be observed within and localized around regions of recent construction (East-West and North-South Embankment EL. 6,450 ft lift construction), slowing with time following the substantial completion of rockfill placement in Q1 2023. Findings from Q1 2024 do not indicate development of unexpected deformations within the downstream embankment shell nor evidence of progressive (accelerating) deformation following substantial completion of construction.

Key findings are discussed by embankment in the following sections.

3.3.2 CENTRAL PEDESTAL AREA EMBANKMENTS (SECTION 12+00W TO 8+00N)

Construction of the EL. 6,450 ft lift of the East-West Embankment was substantially completed in August 2022 and monitoring since (including during Q1 2024) indicates slowing surface and subsurface deformation rates both within and downstream of areas of recent construction. A high-level summary of monitored Q1 2024 deformations is provided below:

- GNSS and total station survey-monuments indicate constant or slightly slowing surface deformation rates within the Central Pedestal Area since substantial completion of EL. 6,450 ft lift construction:
  - Survey-monuments installed along the central Tailings Pipeline Ramp (GNSS DH19-S7, DS-1, DS-2, DS-3, and DS-4) have monitored slowing vertical and lateral (predominantly southward) deformations.
  - Limited data are available from the survey-monuments installed along the EL. 6,150 ft bench (MS-1, MS-2, and MS-3) during Q1 2024; however, the monuments generally have continued to exhibit slowing displacement rates. Slowing vertical and lateral displacement rates were monitored at GNSS DH19-S5 (EL. 6,150 ft bench; Section 12+00W) during Q1 2024.

  - Limited data are available from the survey monuments installed along the Seep 10 Bench (SB-1, SB-2, and SB-3); however, these monuments and GNSS survey-monuments DH19-S3 and DH19-S4 indicate constant or slightly slowing deformation rates during Q1 2024.
- Seep 10 Bench inclinometers (DH19-S3, DH19-S4) indicate that deformation rates have generally remained constant during Q1 2024. A single inclinometer reading taken in January at DH21-S2 also indicates generally constant deformation rates in Q1.
- Geo4Sight instrumentation at DH20-S2 (Section 8+00W) and DH21-S4 (0+00) from beneath the surcharge and within the upstream Central Pedestal Embankment slope continued to monitor minimal displacements following completion of the rockfill surcharge and embankment lift construction.

3.3.3 EAST-WEST EMBANKMENT (SECTION 12+00W+)

No displacement data are presently available within the East-West Embankment outside of the Central Pedestal, while inSAR remains inactive during the snow season. An initial inclinometer (DH24-S1) is planned for installation within the East-West Embankment along Section 28+00NW as part of the 2024 Site Investigation Program, and installation of additional survey-monuments in this area is also planned for 2024. These instruments will provide in-situ subsurface and surface displacement monitoring, respectively. Data will be incorporated into the quarterly monitoring letters as they become available.

3.3.4 NORTH-SOUTH EMBANKMENT (SECTION 8+00N+)

North-South Embankment EL. 6,450 ft lift construction was substantially completed in March 2023 and observed surface and subsurface deformations since (including during Q1 2024) have slowed. A high-level summary of monitored Q1 2024 conditions is provided below:

- Survey-monuments installed along the North-South Embankment (NS-01, NS-02, NS-03, NS-04, NS-05, and NS-06) continue to indicate slightly elevated, generally slowing deformation rates following the substantial conclusion of EL. 6,450 ft lift construction. Monument NS-01 (near Section 0+00) continues to monitor slightly elevated deformation rates at the corner of the North-South Embankment, where the most recent lifts were placed and are continuing to settle. It is anticipated that rates will continue to slow in Q2 2024.
- A single inclinometer reading taken in January at DH21-S3 indicates generally constant deformation rates in Q1.

KP expects North-South Embankment deformation rates will continue to slow and stabilize with time given no further large-scale embankment construction activities are upcoming. This expectation continues to be regularly demonstrated by available deformation monitoring data from multiple monitoring methods.

4.0 CONCLUSIONS

KP supports MR with routine monitoring of YDTI hydrogeological and geotechnical conditions, as part of their operational surveillance plan for the tailings facility, as described in the TOMS Manual (MR/KP, 2023). Piezometric conditions, surface deformation, and subsurface deformation data are available in near real-time using the RMS. Formal analysis and reporting of monitoring data are completed on a quarterly basis to evaluate the performance of the YDTI.

Piezometric conditions are monitored within the YDTI embankments, tailings mass, and surrounding areas and are an important indicator of facility performance. A subset of piezometric monitoring sites have designated QPPs within the TOMS Manual and are regularly evaluated relative to piezometric ‘trigger

elevations' to pre-emptively identify and respond to changing conditions. There were no piezometric QPP exceedances during Q1 2024. Minor embankment pore water pressure increases were observed within the basal saturated zone of the Central Pedestal Area of the East-West and North-South Embankments, particularly along Section 8+00W. These increasing pressures in the embankment are interpreted to be associated with nearby tailings discharge and the related minor increases in tailings pore water pressures upstream of the embankment. Relatively stable piezometric conditions were monitored throughout the North-South, East-West Embankments (outside the Central Pedestal Area), and within the West-Embankment (including the WED) during Q1 2024.

Slightly elevated surface and subsurface deformations continue to be observed within and localized around areas of recent North-South and East-West Embankment construction. Monitored displacement rates (from the survey-monuments, inSAR, and inclinometers) throughout the North-South and East-West Embankments continued to slow following substantial completion of EL. 6,450 ft lift construction. Findings do not indicate development of progressive (accelerating) deformations following construction. KP anticipates that elevated deformation rates resulting from construction will continue to slow and stabilize with time.

Please do not hesitate to contact the undersigned should you have any questions or if you would like any additional information.

Yours truly,
Knight Piésold Ltd.

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EGBC PERMIT TO PRACTICE

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

Attachments:

Table 1 Rev 0	Summary of Piezometric Quantitative Performance Parameter (QPP) Monitoring
Figure 1 Rev 0	Active Piezometric Instrumentation and Monitoring Sites
Figure 2 Rev 0	Trigger Piezometric Elevations East-West Embankment
Figure 3 Rev 0	Trigger Piezometric Elevations East-West Embankment
Figure 4 Rev 0	Trigger Piezometric Elevations North-South Embankment
Figure 5 Rev 0	Trigger Piezometric Elevations West Embankment
Figure 6 Rev 0	Trigger Piezometric Elevations West Embankment
Figure 7 Rev 0	East-West Embankment Section 8+00W (Looking West)
Figure 8 Rev 0	Comparison of Cumulative Vertical GNSS Displacement Magnitudes (July 1, 2020 through March 31, 2023)
Appendix A	GNSS and Total Station Deformation Plots
Appendix B	Inclinometer Deformation Plots
Appendix C	Geo4Sight Deformation Plots

References:

Knight Piésold Ltd. (KP, 2023). 2022 Data Analysis Report (KP Reference No. VA101-126/27-4 Rev 0), dated June 8, 2023.

Montana Resources and Knight Piésold Ltd. (MR/KP, 2023). Yankee Doodle Tailings Impoundment – Tailings Operations, Maintenance and Surveillance (TOMS) Manual, Rev 6, December 4, 2023.

Copy To: Mark Thompson, Amanda Griffith (MR)

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Knight Piésold CONSULTING

TABLE 1

MONTANA RESOURCES, LLC
MONTANA RESOURCES

YDTI PIEZOMETRIC AND DEFORMATION MONITORING UPDATE (Q1 2024)
SUMMARY OF PIEZOMETRIC QUANTITATIVE PERFORMANCE PARAMETER (QPP) MONITORING

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Monitoring Region	Location	QPP Instrumentation Site	Monitoring Site Type [1]	Piezometric Trigger Elevation (ft)	Maximum Piezometric Elevation Recorded Q1 2024 (ft)	End of Q1 2024 Piezometric Elevation (ft)	Exceeded Trigger Elevation During Q1 2024 (Yes/No)	Pore Pressure Change Q1 2024 (ft)	Comments
East-West Embankment	Section 8+00W	DH23-S1 VW2 [3]	VWP Sensor	5,795	5,757	5,756	No	1.28	
	Section 8+00W	DH23-S1 VW3 [3]	VWP Sensor	5,808	5,768	5,767	No	-0.60	
	Section 8+00W	DH15-S4 VW1	VWP Sensor	5,740	5,712	5,712	No	0.34	
	Section 8+00W	DH15-S4 VW2	VWP Sensor	5,800	5,775	5,775	No	3.76	
	Section 8+00W	DH15-S3 VW1	VWP Sensor	5,690	5,666	5,666	No	1.78	
	Section 8+00W	MW94-11	VWP Sensor	5,693	5,674	5,674	No	1.43	
	Section 8+00W	MW94-08	VWP Sensor	5,680	5,671	5,671	No	1.85	
	Section 0+00	DH19-S7 VW1 [4]	VWP Sensor	5,770	5,725	5,723	No	-2.37	
	Section 0+00	DH17-S1 VW2	VWP Sensor	5,741	5,714	5,713	No	0.32	
	Section 28+00NW	DH18-S3 VW3	VWP Sensor	6,044	6,022	6,022	No	0.27	
North-South Embankment [5, 6]	Section 13+00N	MW12-01	VWP Sensor	5,940	5,930	5,929	No	-0.98	
	Section 43+00N	DH18-S2 VW2	VWP Sensor	6,029	6,011	6,011	No	-0.39	
West Embankment	Section 108+00N	VWP-DP1	VWP Sensor	6,374	6,342	6,341	No	-0.37	
	Section 83+00N	VWP-DP2	VWP Sensor	6,366	6,339	6,338	No	-0.25	
	Section 98+00N	DH15-12 VW1	VWP Sensor	6,372	6,353	6,350	No	-0.71	
	Section 98+00N	DH15-12 VW2	VWP Sensor	6,372	6,352	6,352	No	-0.66	
	Section 98+00N	DH15-12 VW3	VWP Sensor	6,372	5,666	6,352	No	-0.68	

\\KPL\VA-Prj$\1\01\00126\31\A\Correspondence\VA24-00764 - Q1 2024 Piezometric and Deformation Monitoring Summary\Tables\[QPP Compliance Figures and Table Q1.xlsm]Table 1 - QPP Evaluation

NOTES:
1. PIEZOMETRIC DATA FROM VWP SITES ARE COLLECTED HOURLY USING DATA LOGGERS AND A REMOTE MONITORING SYSTEM.
2. THE PIEZOMETRIC QPP NETWORK WAS EXPANDED TO INCLUDE ADDITIONAL SENSORS DURING THE 2020 TOMS UPDATE (MR/KP, 2020).
3. SENSORS INSTALLED AT DH15-S5 WERE DAMAGED BY CONSTRUCTION ON APRIL 15, 2023 AND ABANDONED. THIS SITE HAS BEEN RETIRED FROM THE QPPS AND REPLACED WITH NEARBY DH23-S1 SENSORS.
4. DH17-S2 VW2 WAS DAMAGED ON MARCH 19, 2021 AND DATA THEREAFTER ARE INTERPRETED TO BE ERRONEOUS. THIS SENSOR WAS RETIRED FROM THE QPPS AND REPLACED WITH THE NEARBY DH19-S7 VW1.
5. SENSOR MW12-05 WAS DAMAGED BY CONSTRUCTION ON AUGUST 8, 2023 AND ABANDONED.
6. SENSOR DH18-S1 VW2 WAS DAMAGED BY CONSTRUCTION ON MARCH 8, 2023 AND ABANDONED. REPLACEMENT QPP(S) WILL BE ADOPTED BASED ON SENSORS INSTALLED IN 2024.

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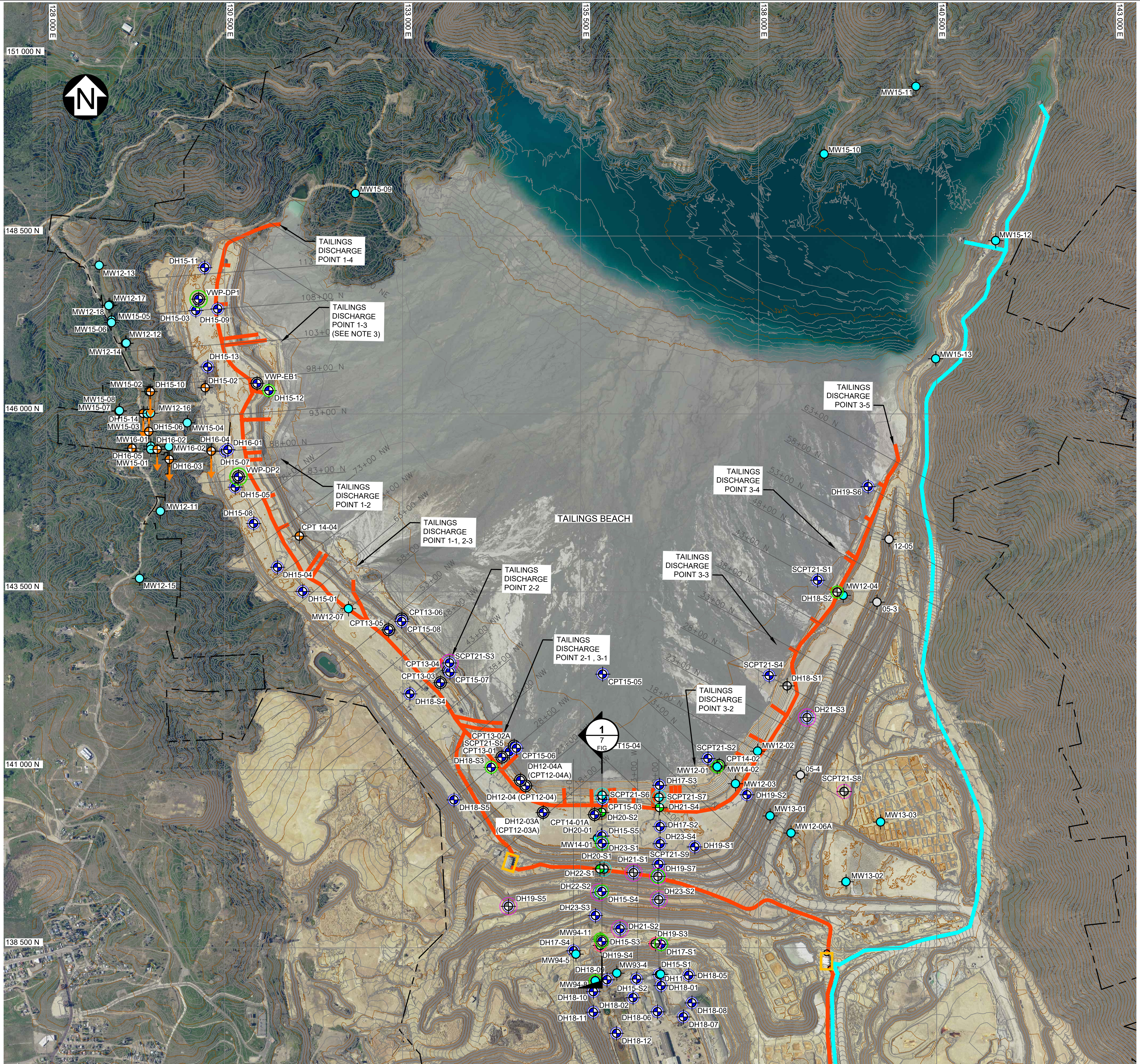

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. QPP MONITORING SITES = QUANTITATIVE PERFORMANCE PARAMETER.
3. 1-3 TAILINGS DISCHARGE POINT WAS RELOCATED NORTH IN OCTOBER 2017.
4. THE AERIAL PHOTO SHOWN IS FROM JULY, 2023.
5. SEPTEMBER 2023 TOPOGRAPHY PROVIDED BY MONTANA RESOURCES, LLC.
6. NO PORE WATER PRESSURE DATA ARE AVAILABLE FROM DH20-S1 AND DH22-S1 AS THE INSTRUMENTS ARE NOT FUNCTIONAL.
7. SENSOR DH17-S2 VW2 WAS DAMAGED ON MARCH 19, 2021 AND RETIRED FROM THE QPPS.
8. SENSOR MW12-05 WAS DAMAGED BY CONSTRUCTION ON AUGUST 8, 2023 AND RETIRED FROM THE QPPS.
9. SENSOR DH18-S1 VW2 WAS DAMAGED BY CONSTRUCTION ON MARCH 8, 2023 AND RETIRED FROM THE QPPS.

LEGEND:

- MONITORING WELL/ STANDPIPE - VIBRATING WIRE PIEZOMETER
- DRILLHOLE WITH NESTED VIBRATING WIRE PIEZOMETERS AND GEO4SIGHT INSTRUMENTATION
- GEOPHYSICAL CASING
- INCLINOMETER
- INCLINOMETER WITH NESTED VIBRATING WIRE PIEZOMETERS
- NESTED VIBRATING WIRE PIEZOMETERS
- SINGLE VIBRATING WIRE PIEZOMETER
- VERTICAL DRILLHOLE
- ANGLED DRILLHOLE
- DRY MONITORING WELL
- QPP MONITORING SITES[2]
- TAILINGS PIPELINE
- RECLAIM PIPELINE
- PROPERTY LINE

SCALE A 500 0 500 1000 1500 2000 2500 ft

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YANKEE DOODLE TAILINGS IMPOUNDMENT ACTIVE PIEZOMETRIC INSTRUMENTATION AND MONITORING SITES

Knight Piésold CONSULTING

P/A NO.	REF NO.
VA101-126/31	VA24-00764

FIGURE 1 REV 0

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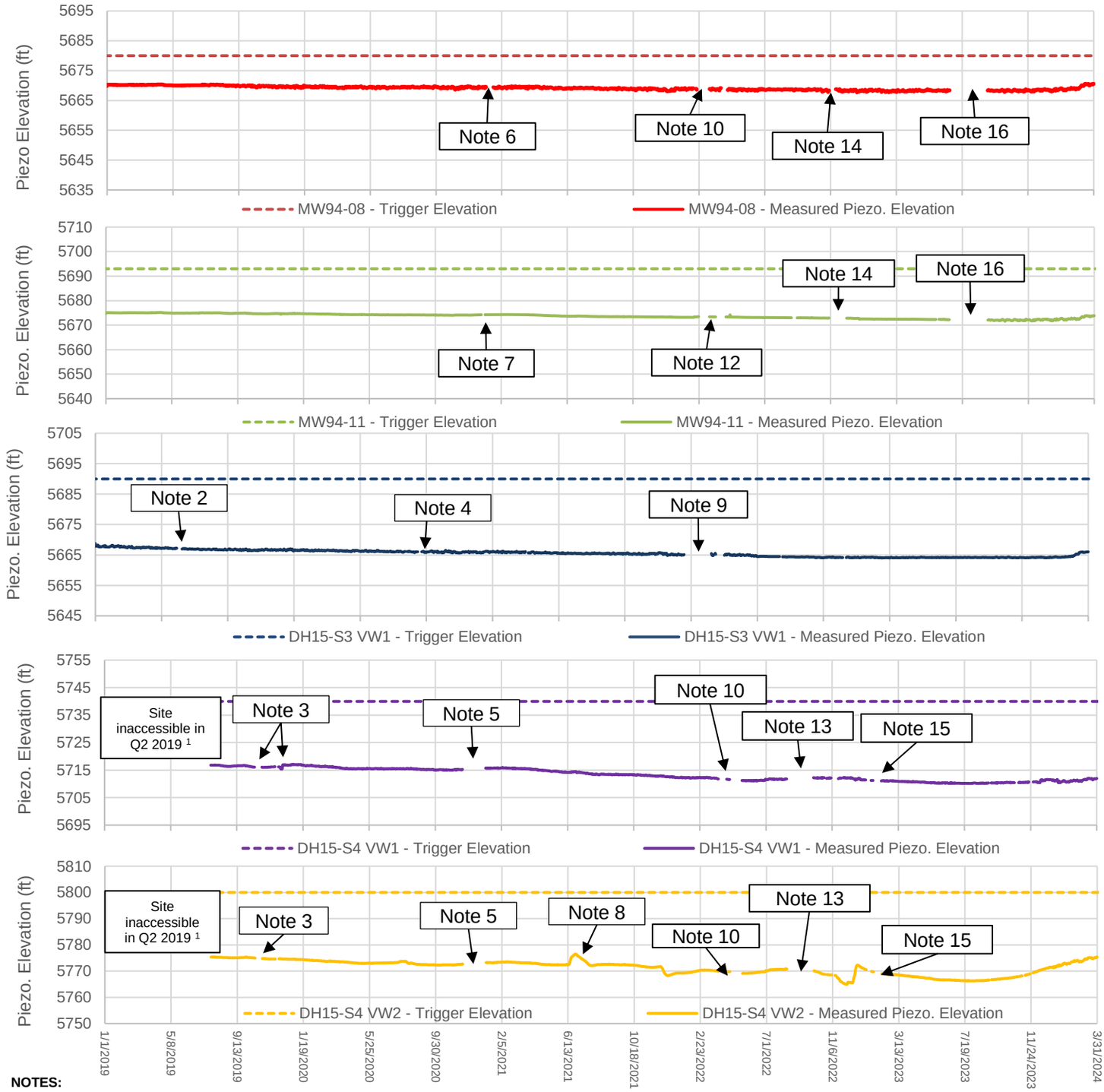
SAVED: M:\1\01\00126\31\A\Acad\FIGS\B03, 7/30/2024 9:00:23 AM , RMCLELLAN PRINTED: 7/30/2024 10:06:38 AM, FIG 1, RMCLELLAN
XREF FILE(S): Tailngs and Reclaim Pipelines; 5ft_01_2023-07-26; TOPO - 5' - August 2023; Tailngs Spigots and Reclaim Pipelines - September 2023 IMAGE FILE(S): 5ft_01 2023-07-26



NOTES:

1. NO DATA ARE SHOWN FROM DEC 20, 2017 TO JULY 25, 2019 FOR DH15-S4 VW1 AND VW2 AS MR STAFF WERE UNABLE TO CONNECT THE INSTRUMENTATION WITH THE REMOTE MONITORING SYSTEM DUE TO SITE INACCESSIBILITY.
2. NO DATA WERE COLLECTED BY DH15-S3 VW1 FROM JUNE 7, 2019 TO JUNE 16, 2019 DUE TO INSUFFICIENT BATTERY VOLTAGE
3. NO DATA WERE COLLECTED BY DH15-S4 VW1 AND VW2 DUE TO POWER SUPPLY ISSUES OCTOBER 19 TO 31 AND NOVEMBER 27, 2019 TO DECEMBER 3, 2019. SENSORS MOVED TO A NEW LOGGER.
4. NO DATA WERE COLLECTED BY DH15-S3 VW1 FROM SEPTEMBER 15 TO SEPTEMBER 21, 2020 DUE TO DEPLETED GEONET BATTERY WHICH WAS SUBSEQUENTLY REPLACED.
5. NO DATA WERE COLLECTED BY DH15-S4 VW1 AND VW2 DUE TO SUSPECTED LOGGER ISSUE FROM NOVEMBER 22, 2020. FUNCTIONALITY WAS RESTORED USING A REPLACEMENT LOGGER IN Q1 2021.
6. NO DATA WERE COLLECTED BY MW94-08 FROM JANUARY 7 TO 19, 2021 DUE TO A DEPLETED BATTERY WHICH WAS SUBSEQUENTLY REPLACED.
7. NO DATA WERE COLLECTED BY MW94-11 FROM DECEMBER 30, 2020 TO JANUARY 4, 2021 DUE TO A DEPLETED BATTERY WHICH WAS SUBSEQUENTLY REPLACED.
8. PIEZOMETRIC ELEVATION INCREASED IN RESPONSE TO OBSERVED INFILTRATION OF TAILINGS SLURRY WATER INTO THE CENTRAL ROCKFILL SURCHARGE FROM JUNE 14 TO JUNE 28, 2021 AS DESCRIBED IN VA21-01320.
9. SENSOR DH15-S3 VW1 WENT OFFLINE ON FEBRUARY 9, 2022 DUE TO A SUSPECTED RMS CONNECTIVITY ISSUE. CONNECTIVITY WAS RE-ESTABLISHED ON APRIL 20, 2022.
10. SENSORS DH15-S4 VW1 AND VW2 WERE TEMPORARILY DISCONNECTED BETWEEN APRIL 1 AND MAY 17, 2022 DUE TO A SUSPECTED RMS CONNECTIVITY ISSUE.
11. SENSOR MW94-8 WAS TEMPORARILY DISCONNECTED BETWEEN FEBRUARY 19 AND APRIL 21, 2022 DUE TO A SUSPECTED LOGGER VOLTAGE ISSUE.
12. SENSOR MW94-11 WAS TEMPORARILY DISCONNECTED BETWEEN MARCH 6 AND APRIL 18, 2022 DUE TO A SUSPECTED RMS CONNECTIVITY ISSUE.
13. SENSORS DH15-S4 VW1 AND VW2 COLLECTED ERRONEOUS READINGS BETWEEN AUGUST 9 AND OCTOBER 4, 2022, DUE TO SUSPECTED LOGGER ISSUE.
14. SENSORS 94-8 AND 94-11 WERE TEMPORARILY DISCONNECTED BETWEEN NOVEMBER 3 AND DECEMBER 9, 2022 DUE TO A SUSPECTED LOGGER VOLTAGE ISSUE.
15. SENSORS DH15-S4 VW1 AND VW2 COLLECTED MINIMAL DATA BETWEEN JANUARY 11 AND FEBRUARY 8, 2023 DUE TO A SUSPECTED DATA LOGGER ISSUE.
16. SENSORS 94-8 AND 94-11 STOPPED RECORDING BETWEEN JUNE 30 AND SEPTEMBER 7, 2023 DUE TO A DATALOGGER HARDWARE ISSUE.

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SUMMARY OF MEASURED VS. QPP TRIGGER PIEZOMETRIC ELEVATIONS EAST-WEST EMBANKMENT

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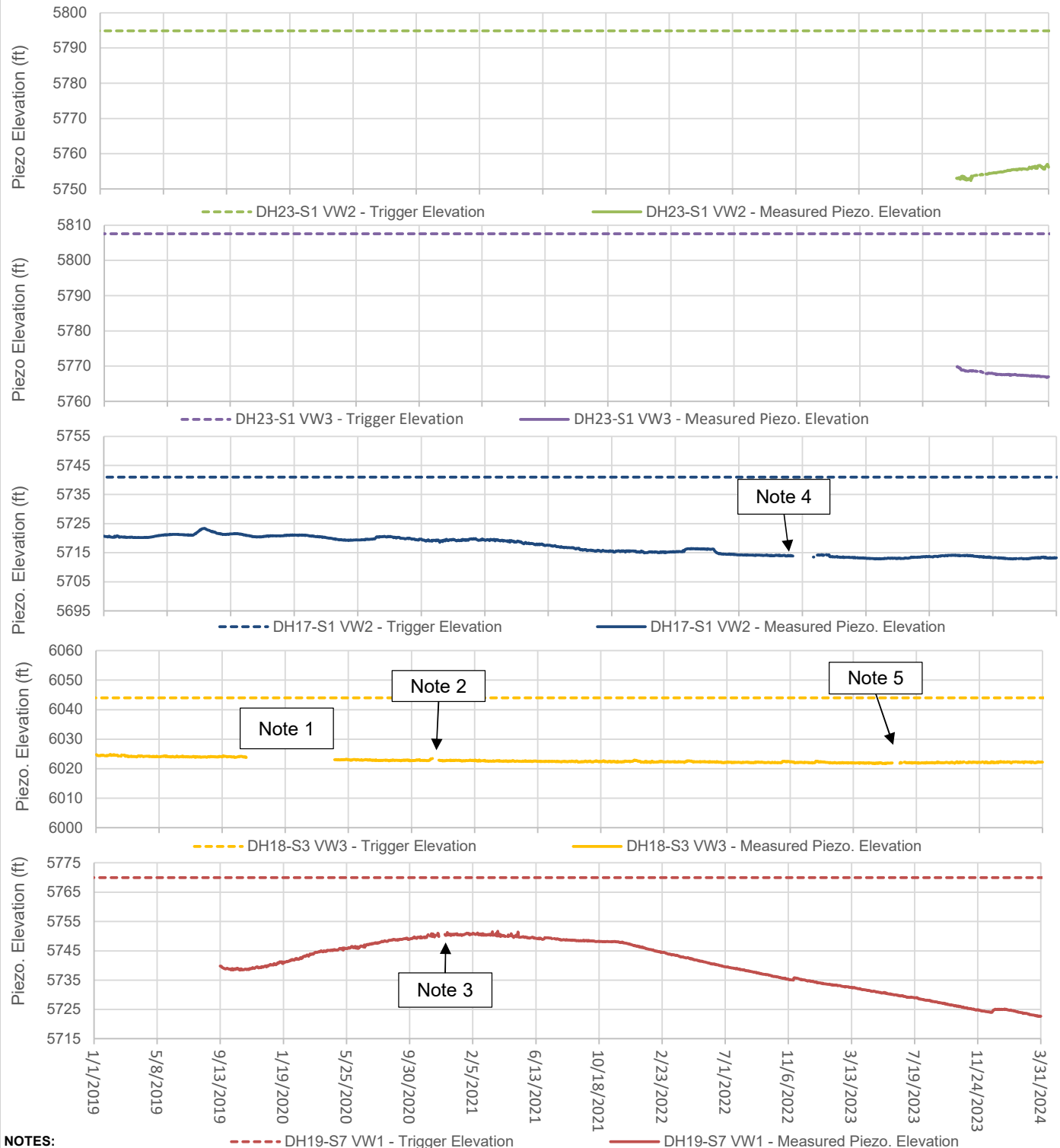
P/A NO.	REF. NO.
VA101-126/31	VA24-00764

FIGURE 2 REV 0



NOTES:

1. NO DATA WERE COLLECTED BY DH18-S3 VW1 FROM NOVEMBER 1, 2019 TO FEBRUARY 3, 2020 AND FEBRUARY 4 TO APRIL 30, 2020 DUE TO SUSPECTED HARDWARE DAMAGE.
2. NO DATA WERE COLLECTED BY DH18-S3 DUE TO A DEPLETED DATA LOGGER BATTERY FROM NOVEMBER 12 TO 25, 2020.
3. NO DATA WERE COLLECTED BY DH19-S7 VW1 FROM NOVEMBER 30 TO DECEMBER 10, 2020 DUE TO AN UNKNOWN HARDWARE ISSUE.
4. THE DATA LOGGER AT DH17-S1 WAS DAMAGED AND NO DATA WERE RECORDED BETWEEN OCTOBER 18, 2022 AND DECEMBER 9, 2022. FUNCTIONALITY HAS SUBSEQUENTLY BEEN RESTORED.
5. SENSOR DH18-S3 VW3 COLLECTED ERROENOUS DATA BETWEEN JUNE 21 AND 24, 2023. THESE VALUES HAVE BEEN OMITTED FOR CLARITY.

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SUMMARY OF MEASURED VS. QPP TRIGGER PIEZOMETRIC ELEVATIONS EAST-WEST EMBANKMENT

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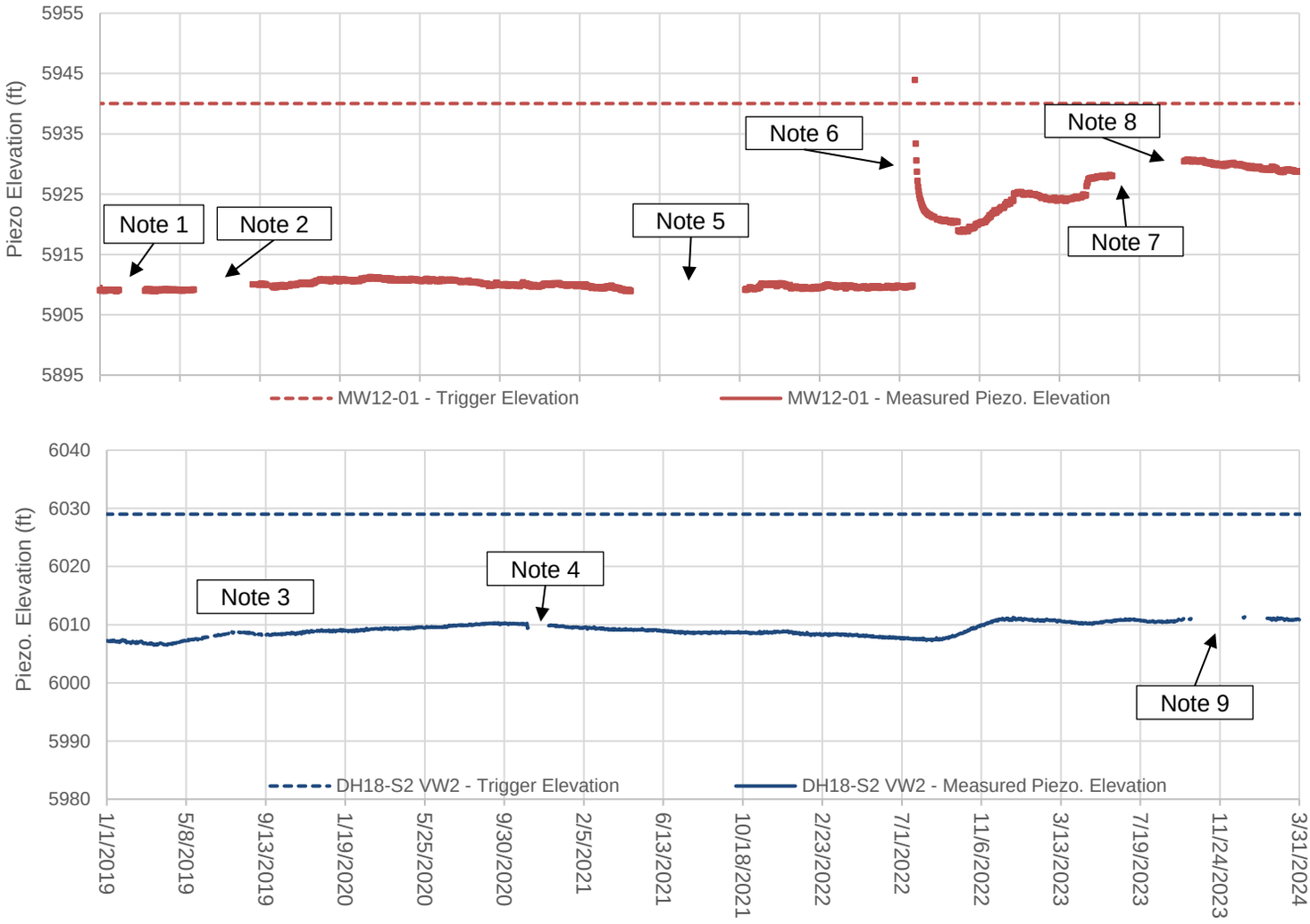
REF. NO. VA24-00764

FIGURE 3

REV 0



NOTES:

1. MW12-01 BECAME UNSATURATED FROM FEBRUARY 1 TO MARCH 13, 2019.
2. NO DATA WERE COLLECTED BY MW12-01 FROM MAY 31 TO SEPTEMBER 11, 2019 DUE TO DATA LOGGER FAILURE.
3. ERRONEOUS NOISE WAS RECORDED IN THE DATA BY DH18-S2 VW2. THESE DATA HAVE BEEN OMITTED FOR CLARITY.
4. NO DATA WERE COLLECTED BY DH18-S2 VW2 FROM NOVEMBER 8 TO DECEMBER 12, 2020 WHILE THE SENSORS WERE REROUTED TO A NEW MONITORING HUB LOCATION.
5. SENSOR MW12-01 VW1 WAS UNSATURATED BETWEEN APRIL 28 AND OCTOBER 28, 2021. DATA HAVE BEEN OMITTED FROM PLOT FOR CLARITY. THE SENSOR RESATURATED ON OCTOBER 18, 2021 AND REMAINED SATURATED THEREAFTER.
6. THE MW12-01 STANDPIPE WAS INUNDATED BY THE RISING TAILINGS BEACH ON JULY 22, 2022 AND HAS SUBSEQUENTLY RECORDED HIGHER PIEZOMETRIC ELEVATIONS. RECENT READINGS MAY BE INFLUENCED BY LOCAL TAILINGS DISCHARGE.
7. SENSOR MW12-01 MONITORED AN INCREASE IN PIEZOMETRIC ELEVATION THAT MAY HAVE RESULTED FROM RISING TAILINGS LEVEL OR ALLUVIAL FACING PLACEMENT.
8. SENSOR MW12-01 STOPPED COLLECTING DATA BETWEEN JUNE 6 AND SEPTEMBER 29, 2023 DUE TO HARDWARE CONNECTION ISSUE.
9. DH18-S2 VW2 STOPPED COLLECTING DATA BETWEEN OCTOBER 10, 2023 AND FEBRUARY 8, 2024.

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SUMMARY OF MEASURED VS. QPP TRIGGER PIEZOMETRIC ELEVATIONS NORTH-SOUTH EMBANKMENT

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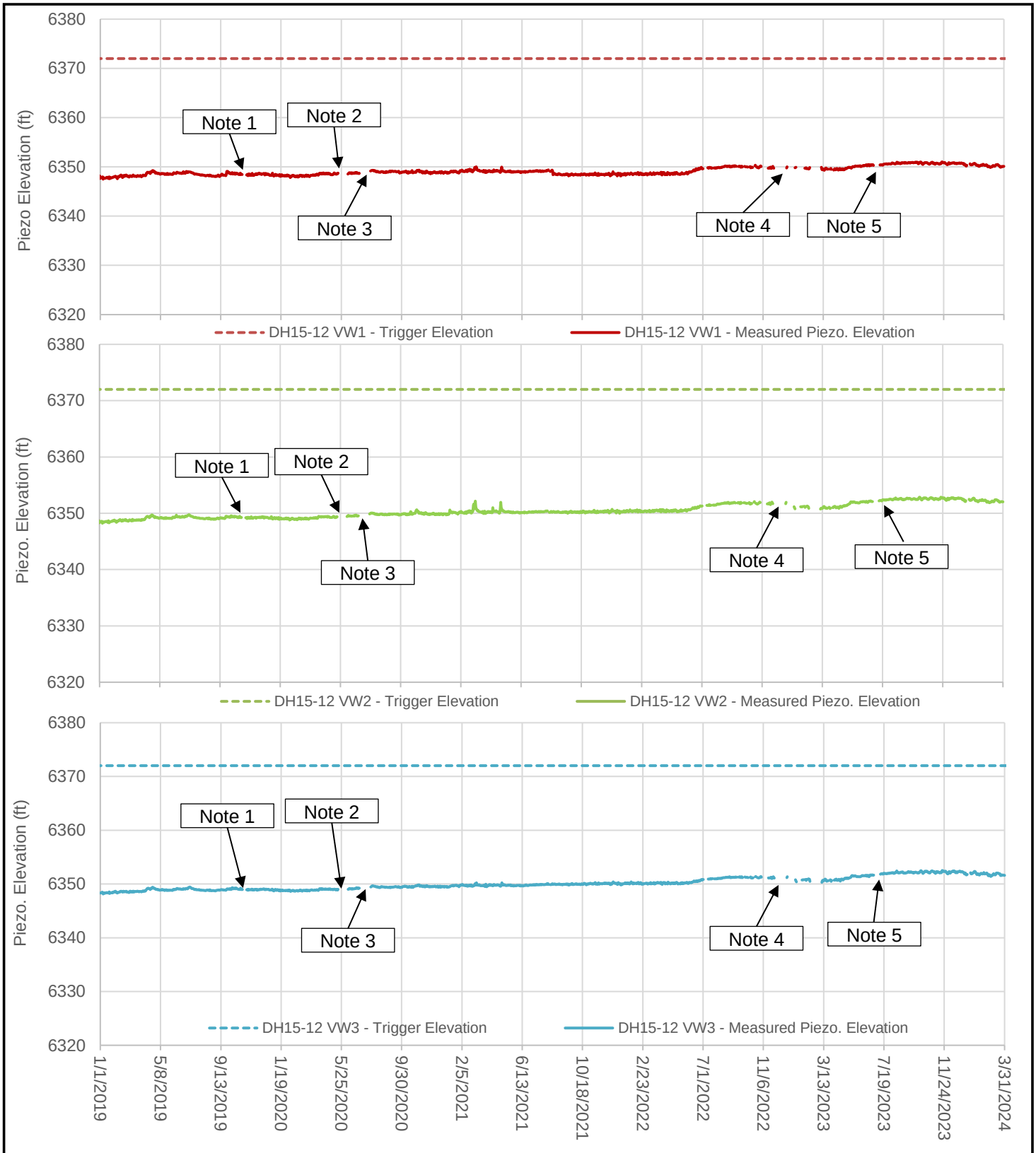
FIGURE 4 REV 0



NOTES:

1. NO DATA WERE COLLECTED BY DH15-12 VW1, VW2, AND VW3 FROM OCTOBER 30, 2019 TO NOVEMBER 6, 2019 DUE TO A CONNECTIVITY ISSUE.
2. NO DATA WERE COLLECTED BY DH15-12 VW1, VW2, AND VW3 FROM MAY 19 TO JUNE 9, 2020 DUE TO A SUSPECTED LOGGER CONNECTIVITY ISSUE.
3. NO DATA WERE COLLECTED BY DH15-12 VW1, VW2, AND VW3 FROM JULY 3 TO JULY 26, 2020 DUE TO A CONNECTIVITY ISSUE.
4. ALL SENSORS IN DRILLHOLE DH15-12 EXPERIENCED INTERMITTENT OUTAGES BETWEEN NOVEMBER 2, 2022 AND APRIL 15, 2023.
5. NO DATA WERE COLLECTED BY DH15-12 VW1, VW2 AND VW3 FROM JUNE 29 TO JULY 12, 2023 DUE TO A CONNECTIVITY ISSUE.

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SUMMARY OF MEASURED VS. QPP TRIGGER PIEZOMETRIC ELEVATIONS WEST EMBANKMENT

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FIGURE 5 REV 0

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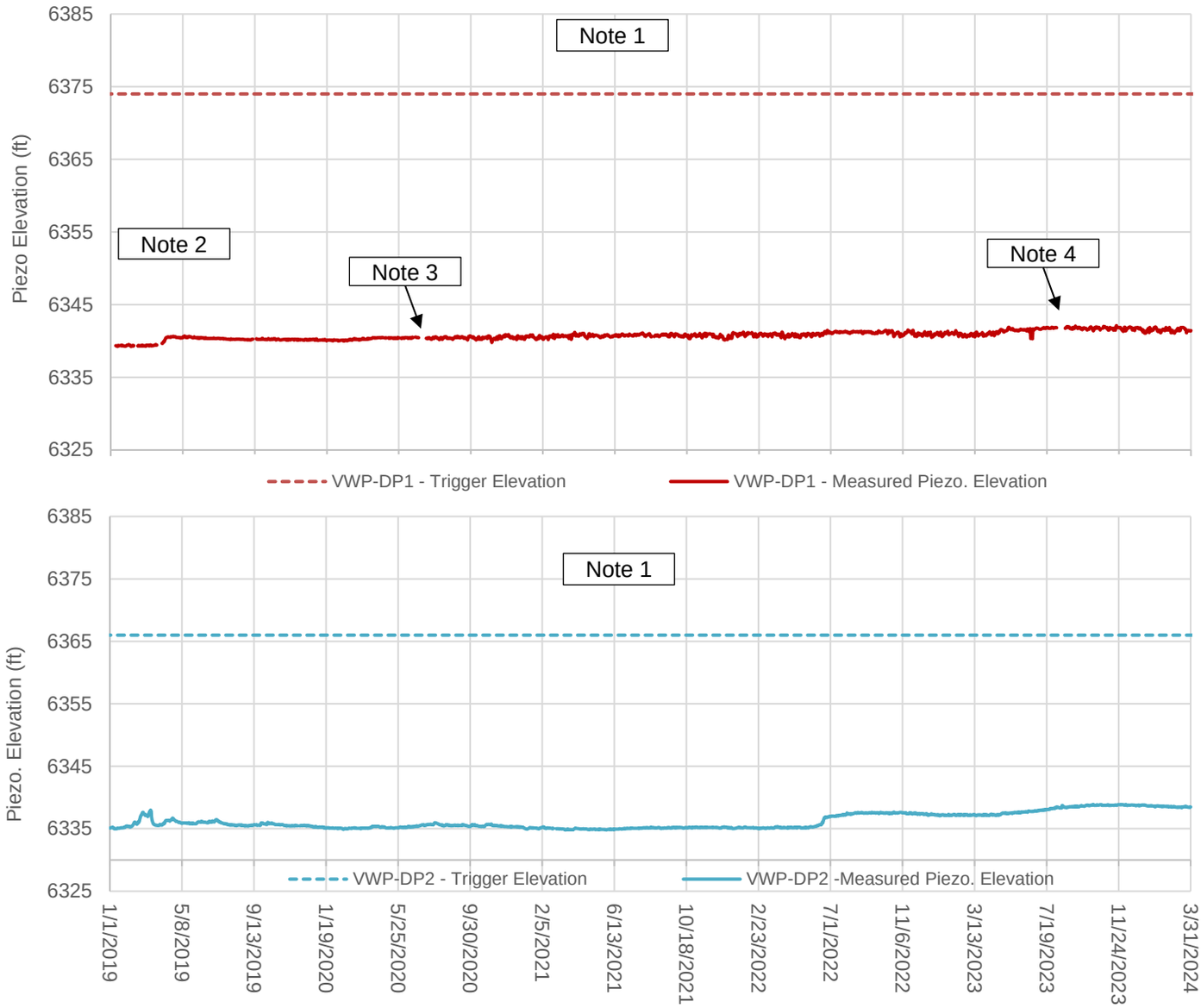

NOTES:

1. TRIGGER ELEVATIONS FOR SENSORS INSTALLED IN THE DRAIN PODS HAVE BEEN SPECIFIED AT THE ALLOWABLE HYDRAULIC GRADE LINE.
2. PERIODIC OUTAGES OCCURED AT VWP-DP1 DUE TO INTERMITTENT BATTERY VOLTAGE ISSUES.
3. NO DATA WERE RECORDED BY VWP-DP1 FROM JULY 1 TO 14, 2020 DUE TO A DATALOGGER ISSUE. A REPLACEMENT DATALOGGER WAS SUBSEQUENTLY INSTALLED TO RESOLVE THE ISSUE.
4. NO DATA WERE RECORDED BY VWP-DP1 FROM AUGUST 7 TO 20, 2023 DUE TO A CONNECTIVITY ISSUE.

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SUMMARY OF MEASURED VS. QPP TRIGGER PIEZOMETRIC ELEVATIONS WEST EMBANKMENT

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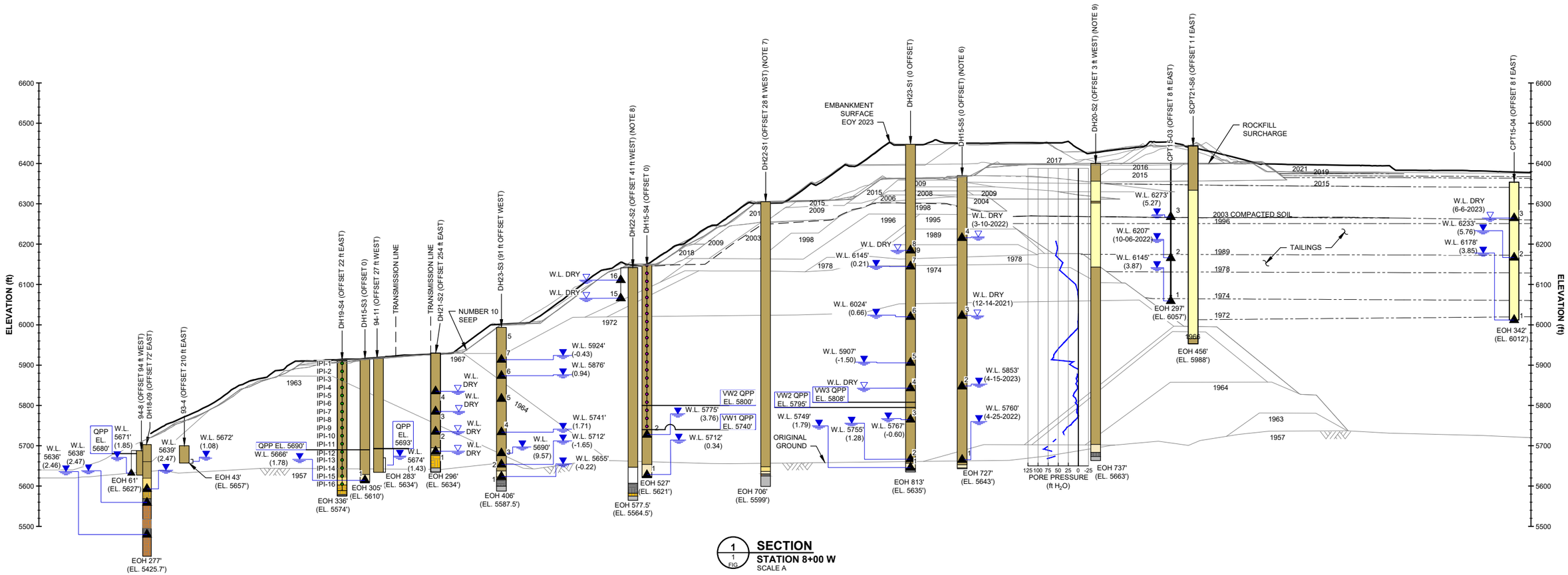
FIGURE 6 REV 0



1 / 1 FIG — SECTION
STATION 8+00 W
SCALE A

NOTES:

1. COORDINATE SYSTEM IS ANACONDA MINE GRID.
2. DIMENSIONS AND ELEVATIONS ARE IN FEET, UNLESS NOTED OTHERWISE.
3. PIEZOMETRIC LEVELS (W.L.) SHOWN USING END OF Q1 2024 READINGS (MARCH 31, 2024), UNLESS OTHERWISE INDICATED.
4. CHANGE IN WATER LEVEL FOR QPP SITES IS RELATIVE TO END OF Q4 2023.
5. QPP STANDS FOR QUANTITIVE PERFORMANCE PARAMETER.
6. SENSORS DH15-S5 VWP1, VWP2, VWP3, AND VWP4 WERE DAMAGED DURING COLLAR RAISE AND HAVE BEEN ABANDONED.
7. DRILLHOLE DH22-S1 CONTAINS 119 MARKERS, 59 OF WHICH INCLUDE PORE WATER PRESSURE INSTRUMENTATION. ELECTRICAL AND COMMUNICATIONS ISSUES WITH THE READER AND MARKERS HAVE PRECLUDED DATA COLLECTION SINCE INSTALLATION IN OCTOBER 2022.
8. FOURTEEN OF SIXTEEN VWPS INSTALLED AT DH22-S2 WERE DAMAGED DURING GROUTING AND ARE NOT FUNCTIONAL.
9. PORE PRESSURE MARKER 11 FROM DH20-S2 HAS RECORDED ERRONEOUS VALUES SINCE DECEMBER 2, 2022. DATA HAVE BEEN OMITTED FOR CLARITY.

LEGEND:

- TAILINGS
- EMBANKMENT FILL
- ALLUVIUM
- RECENT ALLUVIUM
- HIGHLY ALTERED BEDROCK
- HIGHLY WEATHERED BEDROCK
- MODERATELY WEATHERED BEDROCK
- COMPETENT BEDROCK
- NO RECOVERY

- W.L. XXX — QUARTERLY PIEZOMETRIC ELEVATION CHANGE (±X.X feet) SINCE LAST QUARTER
- VIBRATING WIRE PIEZOMETER
- THERMISTOR
- IN-PLACE INCLINOMETER SENSOR
- SOL — SETTING OUT LINE
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

SCALE A: 125 0 125 250 375 500 625 ft

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YDTI PIEZOMETRIC CONDITIONS EAST-WEST EMBANKMENT SECTION 8+00W (LOOKING WEST)

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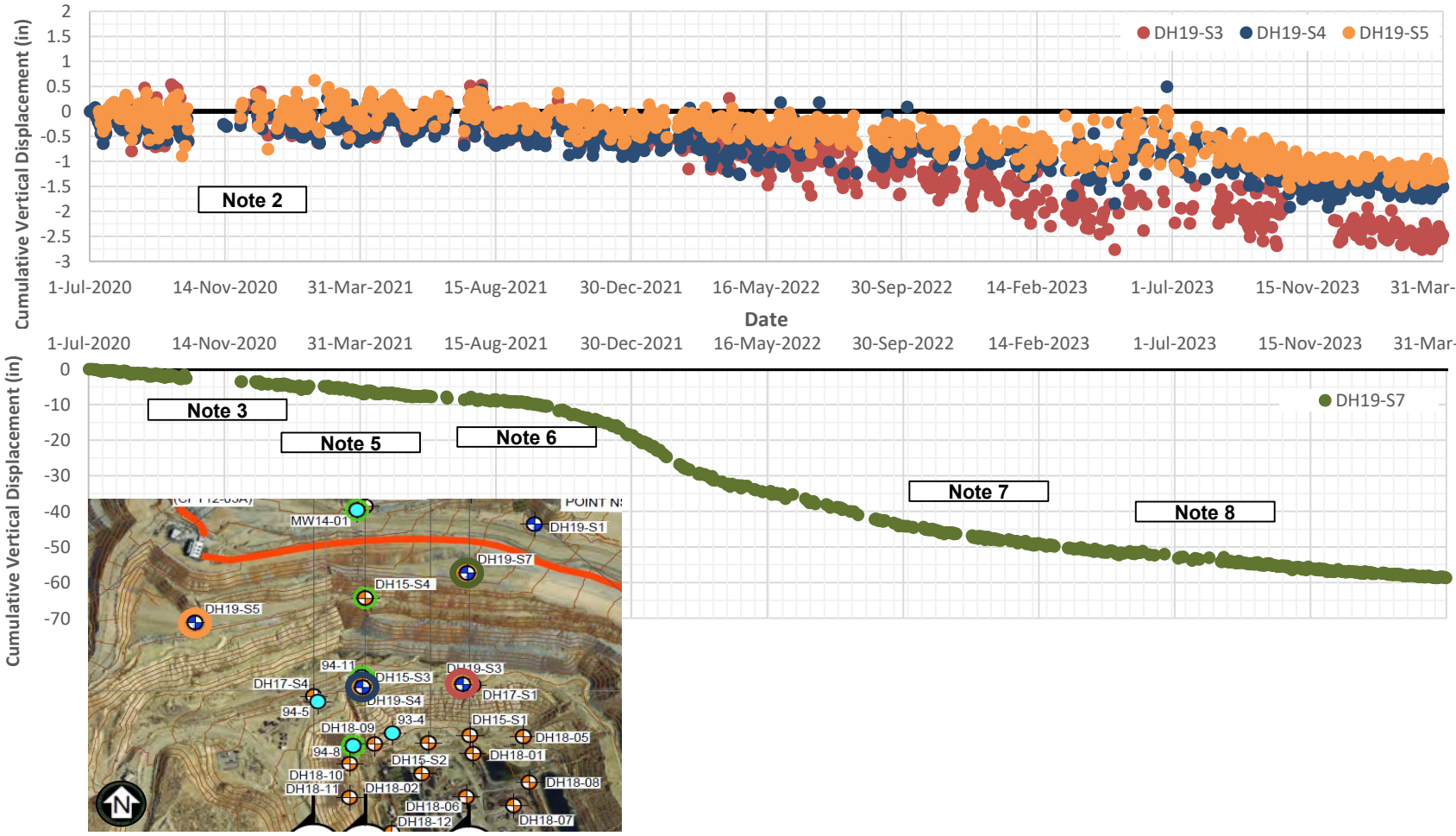
REF NO. VA24-00764

FIGURE 7

REV 0

SAVED: M:\11\01\00126\13\11A\cad\FIGS\B04, 7/30/2024 9:05:44 AM , RMCLELLAN PRINTED: 7/30/2024 10:11:55 AM, FIG 7, RMCLELLAN
XREFILES(Sections IMAGE FILES):



NOTES:

1. CUMULATIVE VERTICAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTEDFROM DH19-S2 AND DH19-S5 BETWEEN OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NO DATA WERE COLLECTED FROM DH19-S3 AND DH19-S7 BETWEEN OCTOBER 7 TO NOVEMBER 13, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
4. NEGATIVE VERTICAL DISPLAEMENTS INDICATE DOWNWARD DISPLACEMENT.
5. NO DATA WERE COLLECTED FROM FEBRUARY 9 TO 21, 2021 DUE TO A DEPLETED DATA LOGGER BATTERY.
6. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
7. NO DATA WERE COLLECTED FROM AUGUST 16 TO SEPTEMBER 2, 2022, NOVEMBER 23 TO DECEMBER 10, 2022, AND MARCH 2 TO 16, 2023 DUE TO A HARDWARE ISSUE.
8. LIMITED DATA WERE COLLECTED FROM MAY 31 TO AUGUST 17, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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COMPARISON OF CUMULATIVE VERTICAL GNSS DISPLACEMENT MAGNITUDES (JULY 1, 2020 THROUGH MARCH 31, 2023)

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REF. NO. VA24-00764

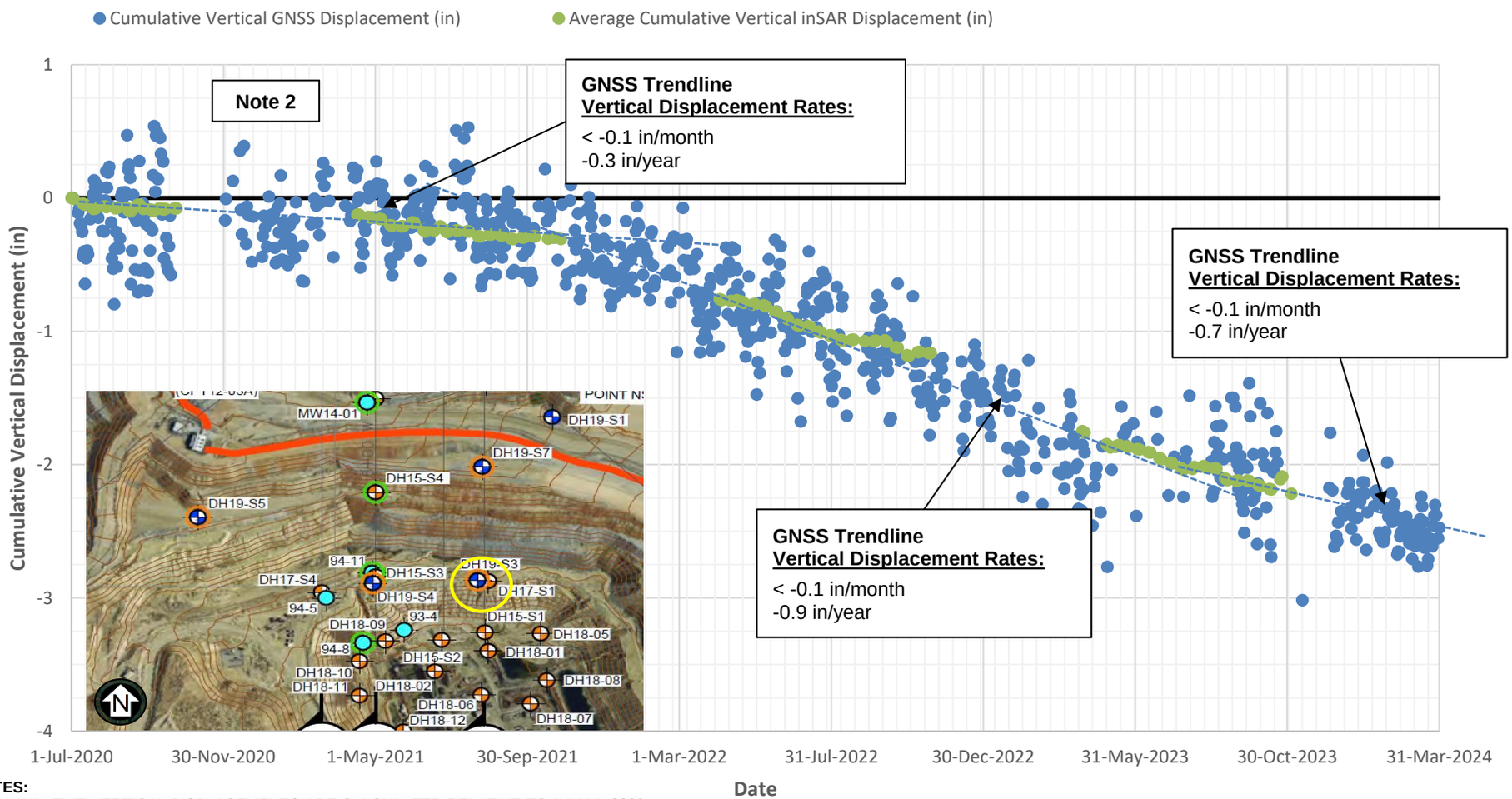
FIGURE 8

REV 0

APPENDIX A

GNSS and Total Station Deformation Plots

(Figures A.1 to A.23)



NOTES:

1. CUMULATIVE VERTICAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. THE AVERAGE CUMULATIVE VERTICAL INSAR DISPLACEMENT IS CALCULATED BY AVERAGING TIME-SERIES DISPLACEMENTS FROM NINE INSAR DATA POINTS LOCATED ADJACENT TO DH19-S3.
5. NO LONG-TERM (SQUEESAR) INSAR DATA ARE AVAILABLE FROM OCTOBER 2, 2020 TO APRIL 13, 2021, NOVEMBER 3, 2021 TO APRIL 13, 2022, AND NOVEMBER 6 TO MARCH 31, 2023 DUE TO THE ONSET OF WINTER CONDITIONS.
6. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
7. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
8. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE A PROCESSING SERVER ISSUE.
9. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
10. NO DATA WERE COLLECTED FROM JUNE 5 TO JUNE 23, 2023 DUE TO A HARDWARE ISSUE.
11. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.
12. LIMITED DATA WERE COLLECTED FROM OCTOBER 21 TO DECEMBER 12, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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CUMULATIVE VERTICAL DISPLACEMENTS MONITORED AT DH19-S3 (JULY 1, 2020 THROUGH JUNE 30, 2024)

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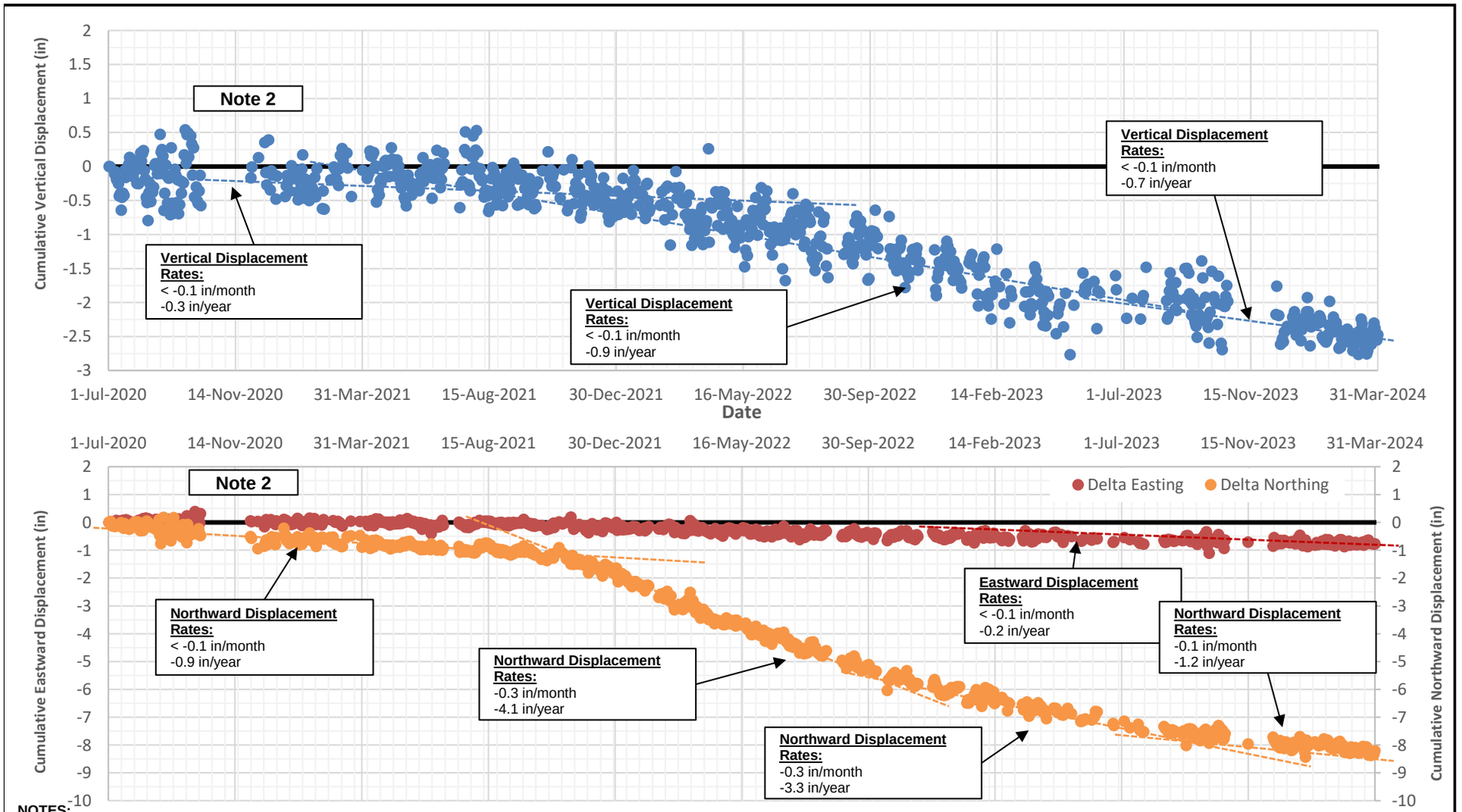
REF. NO. VA24-00764

FIGURE A.1

REV 0



NOTES:

1. CUMULATIVE VERTICAL AND LATERAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
5. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
6. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE A PROCESSING SERVER ISSUE.
7. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
8. NO DATA WERE COLLECTED FROM JUNE 5 TO JUNE 23, 2023 DUE TO A HARDWARE ISSUE.
9. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.
10. LIMITED DATA WERE COLLECTED FROM OCTOBER 21 TO DECEMBER 12, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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MONTANA RESOURCES

CUMULATIVE VERTICAL & LATERAL DISPLACEMENTS MONITORED AT DH19-S3 (JULY 1, 2020 THROUGH JUNE 30, 2024)

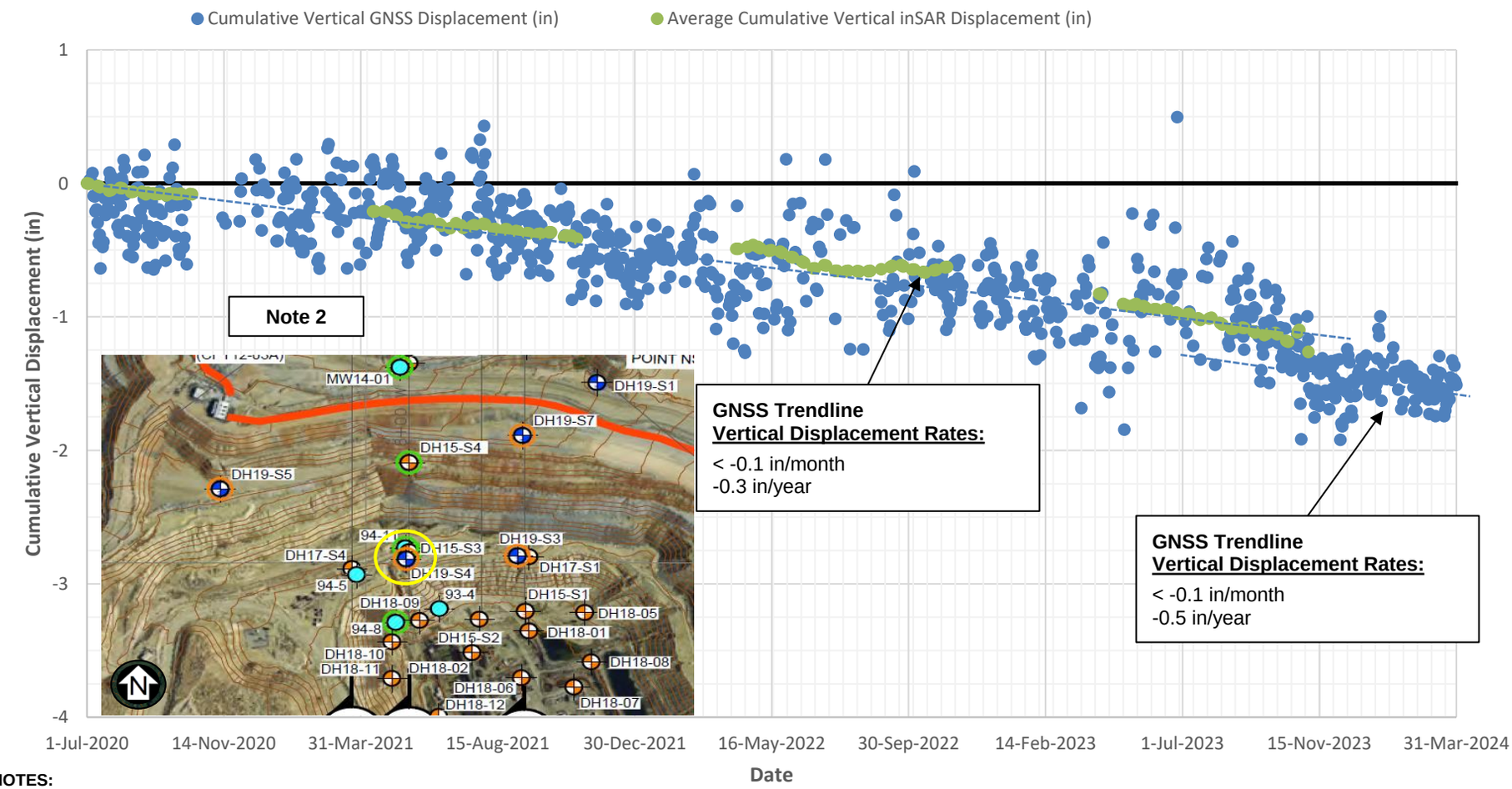
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.2

REV 0



NOTES:

1. CUMULATIVE VERTICAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. THE AVERAGE CUMULATIVE VERTICAL INSAR DISPLACEMENT IS CALCULATED BY AVERAGING TIME-SERIES DISPLACEMENTS FROM NINE INSAR DATA POINTS LOCATED ADJACENT TO DH19-S4.
5. NO LONG-TERM (SQUEESAR) INSAR DATA ARE AVAILABLE FROM OCTOBER 2, 2020 TO APRIL 13, 2021, NOVEMBER 3, 2021 TO APRIL 13, 2022, AND NOVEMBER 6 TO MARCH 31, 2023 DUE TO THE ONSET OF WINTER CONDITIONS.
6. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
7. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
8. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE TO A PROCESSING SERVER ISSUE.
9. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
10. NO DATA WERE COLLECTED FROM JUNE 7 TO JUNE 19, 2023 DUE TO A HARDWARE ISSUE.

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CUMULATIVE VERTICAL DISPLACEMENTS MONITORED AT DH19-S4 (JULY 1, 2020 THROUGH JUNE 30, 2024)

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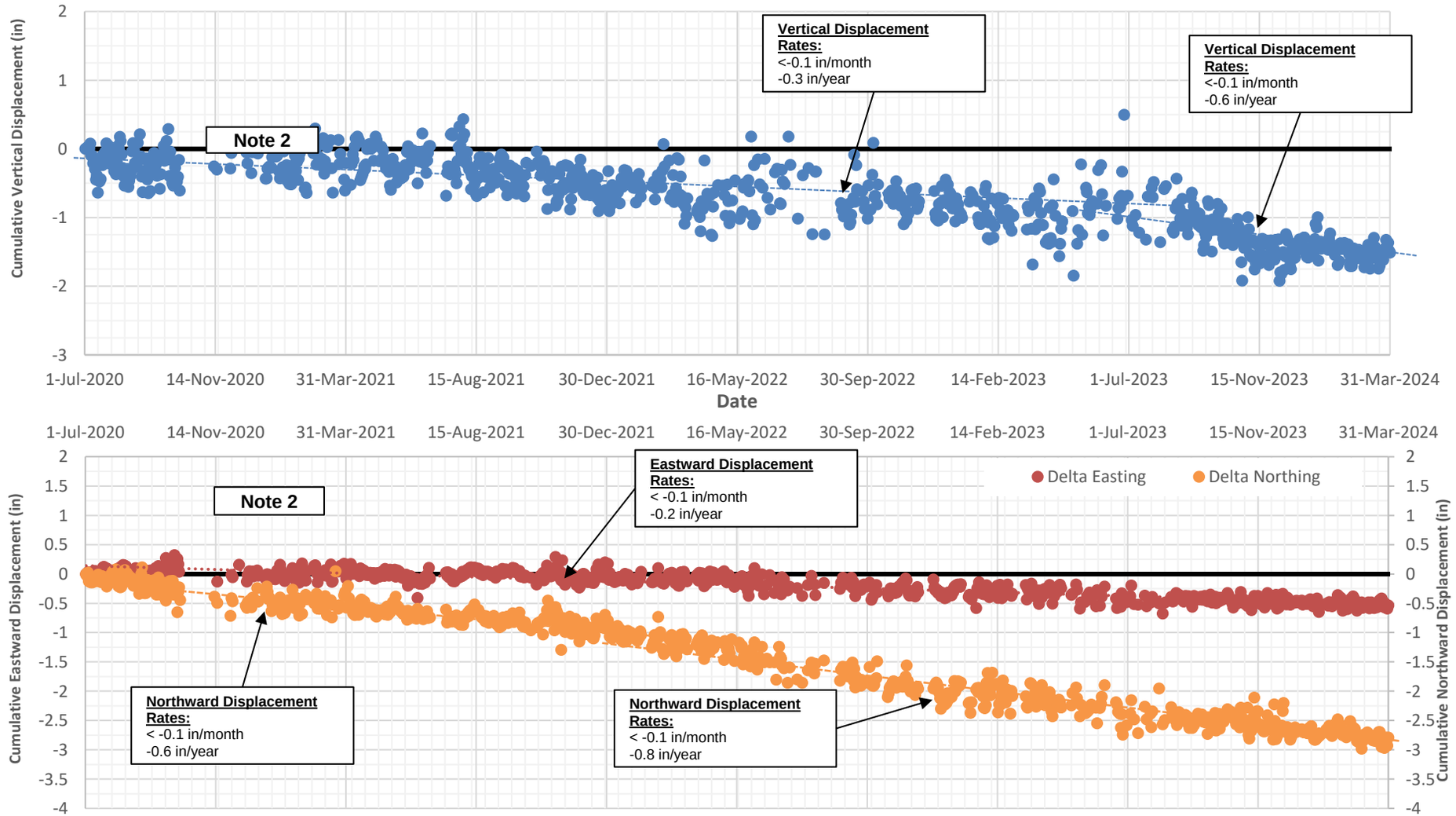
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.3

REV 0



NOTES:

1. CUMULATIVE VERTICAL AND LATERAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
5. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
6. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE TO A PROCESSING SERVER ISSUE.
7. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
8. NO DATA WERE COLLECTED FROM JUNE 7 TO JUNE 19, 2023 DUE TO A HARDWARE ISSUE.
9. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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CUMULATIVE VERTICAL & LATERAL DISPLACEMENTS MONITORED AT DH19-S4 (JULY 1, 2020 THROUGH JUNE 30, 2024)

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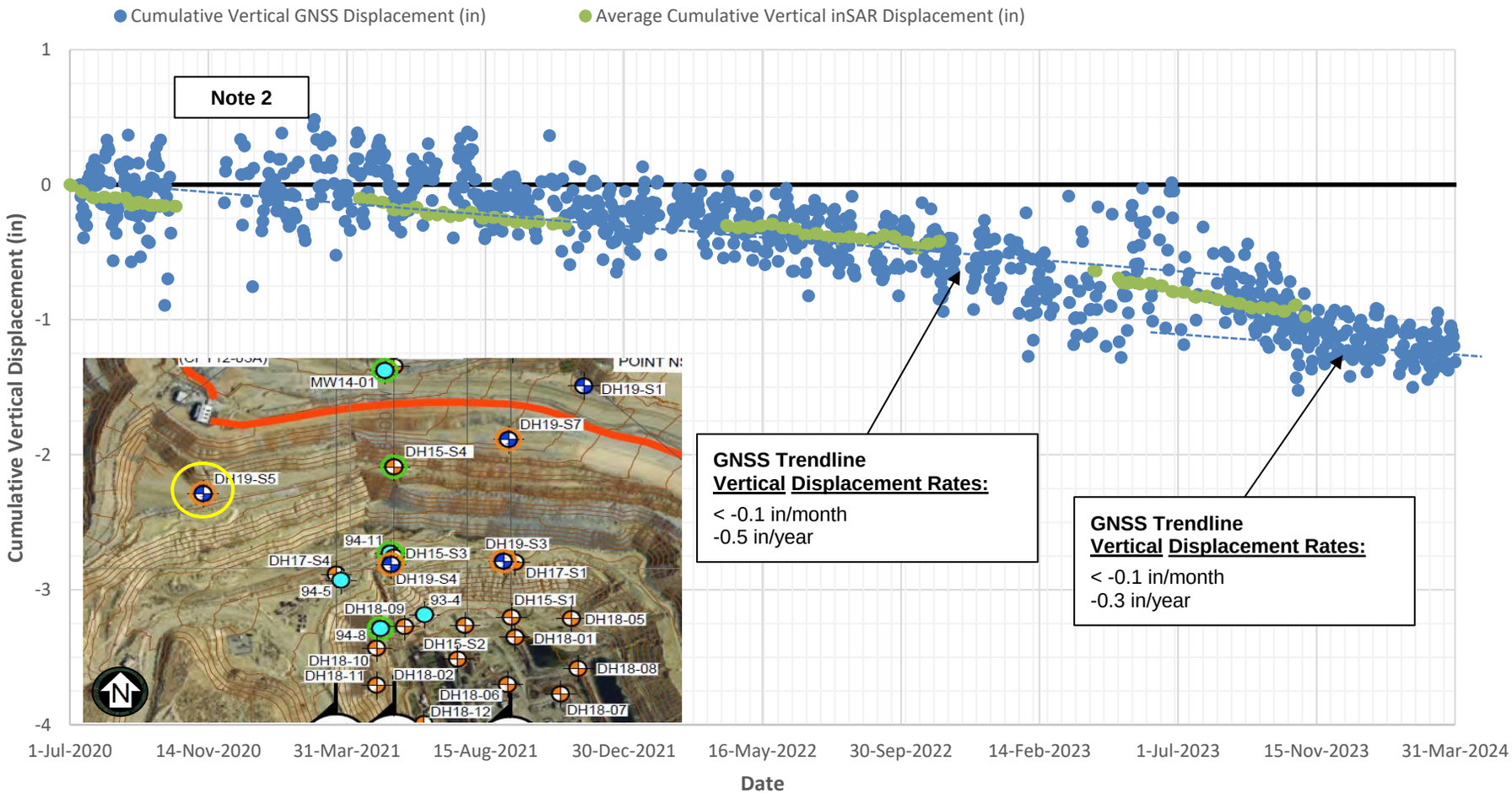
REF. NO. VA24-00764

FIGURE A.4

REV 0



NOTES:

1. CUMULATIVE VERTICAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. THE AVERAGE CUMULATIVE VERTICAL INSAR DISPLACEMENT IS CALCULATED BY AVERAGING TIME-SERIES DISPLACEMENTS FROM NINE INSAR DATA POINTS LOCATED ADJACENT TO DH19-S5.
5. NO LONG-TERM (SQUEESAR) INSAR DATA ARE AVAILABLE FROM OCTOBER 2, 2020 TO APRIL 13, 2021, NOVEMBER 3, 2021 TO APRIL 13, 2022, AND NOVEMBER 6 TO MARCH 31, 2023 DUE TO THE ONSET OF WINTER CONDITIONS.
6. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
7. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
8. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8 DUE A PROCESSING SERVER ISSUE.
9. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
10. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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CUMULATIVE VERTICAL DISPLACEMENTS MONITORED AT DH19-S5 (JULY 1, 2020 THROUGH JUNE 30, 2024)

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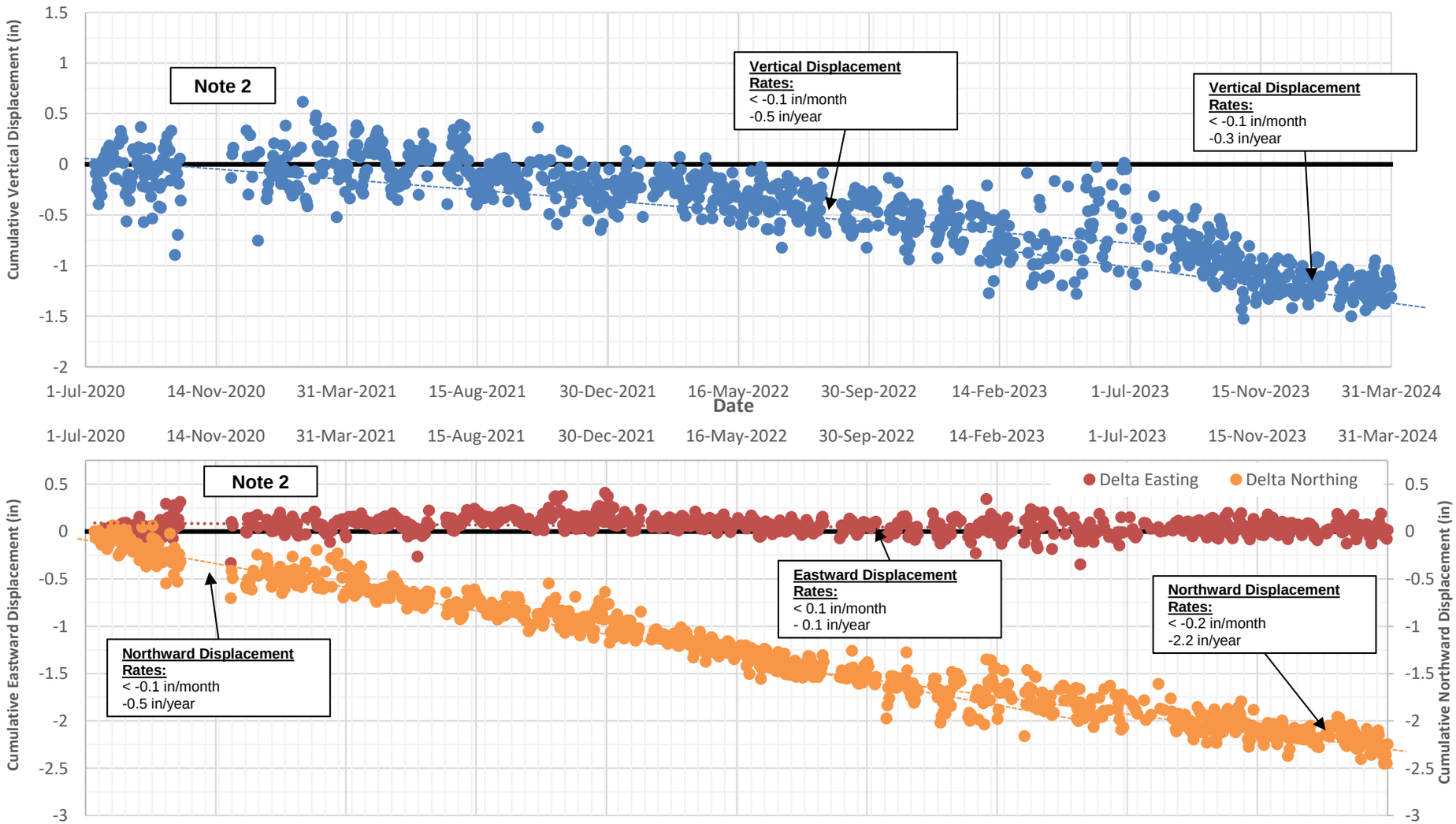
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.5

REV 0



NOTES:

1. CUMULATIVE VERTICAL AND LATERAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
5. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
6. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE TO A PROCESSING SERVER ISSUE.
7. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE
8. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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CUMULATIVE VERTICAL & LATERAL DISPLACEMENTS MONITORED AT DH19-S5 (JULY 1, 2020 THROUGH JUNE 30, 2024)

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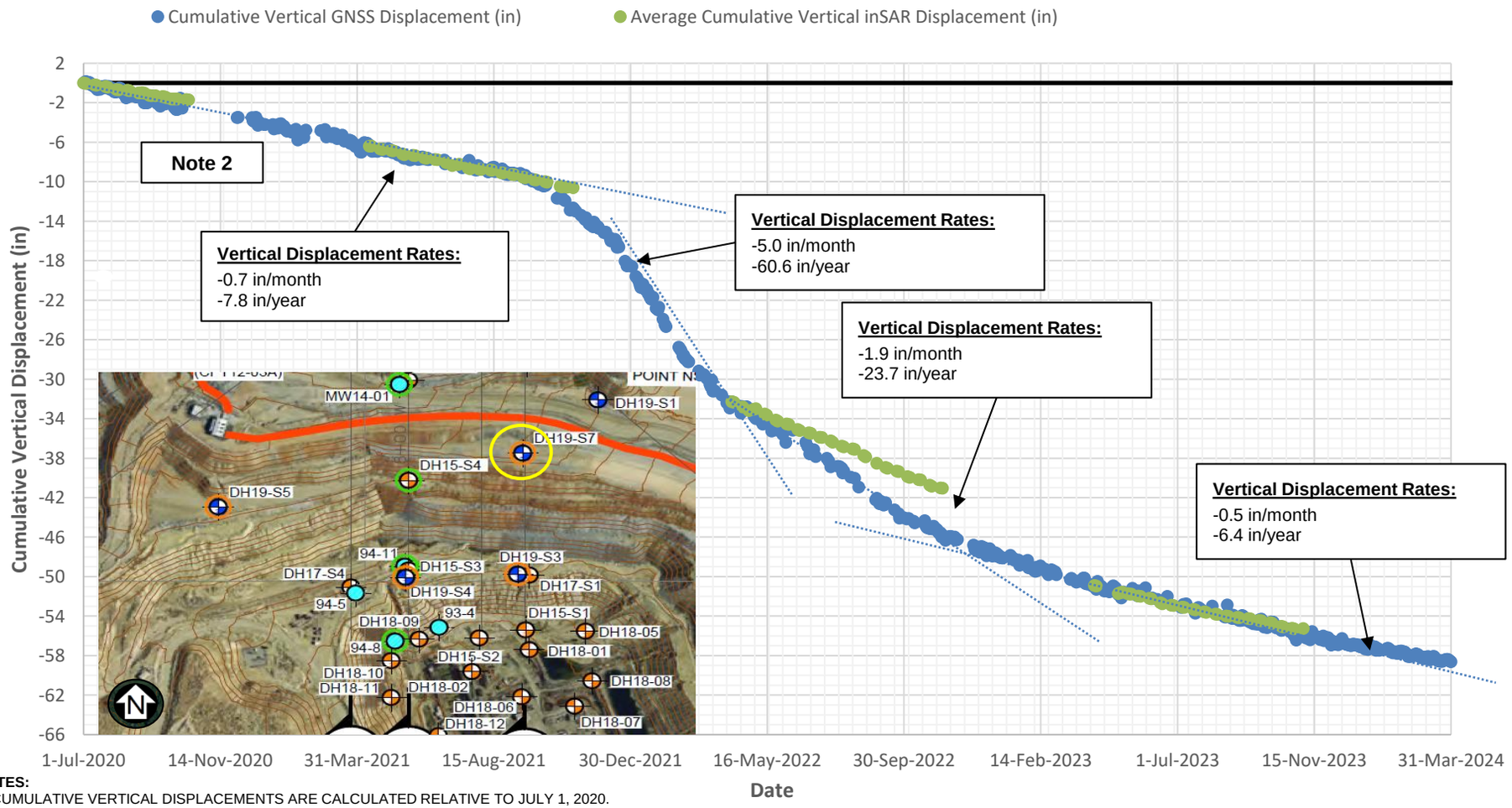
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.6

REV 0



NOTES:

1. CUMULATIVE VERTICAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. THE AVERAGE CUMULATIVE VERTICAL INSAR DISPLACEMENT IS CALCULATED BY AVERAGING TIME-SERIES DISPLACEMENTS FROM NINE INSAR DATA POINTS LOCATED ADJACENT TO DH19-S7.
5. NO LONG-TERM (SQUEESAR) INSAR DATA ARE AVAILABLE FROM OCTOBER 2, 2020 TO APRIL 13, 2021, NOVEMBER 3, 2021 TO APRIL 13, 2022, AND NOVEMBER 6 TO MARCH 31, 2023 DUE TO THE ONSET OF WINTER CONDITIONS.
6. NO DATA WERE COLLECTED FROM FEBRUARY 9 TO 21, 2021 DUE TO A DEPLETED DATA LOGGER BATTERY.
7. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
8. THE -1 STD. DEV. SERIES IS THE AVERAGE INSAR DEFORMATION RATE MINUS THE STANDARD DEVIATION OF DATA POINTS LOCAL TO THE INSTRUMENTATION SITE.
9. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
10. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE TO A PROCESSING SERVER ISSUE.
11. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
12. LIMITED DATA WERE COLLECTED FROM JUNE 6 TO JUNE 30, 2023 DUE TO A HARDWARE ISSUE.
13. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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CUMULATIVE VERTICAL DISPLACEMENTS MONITORED AT DH19-S7 (JULY 1, 2020 THROUGH JUNE 30, 2024)

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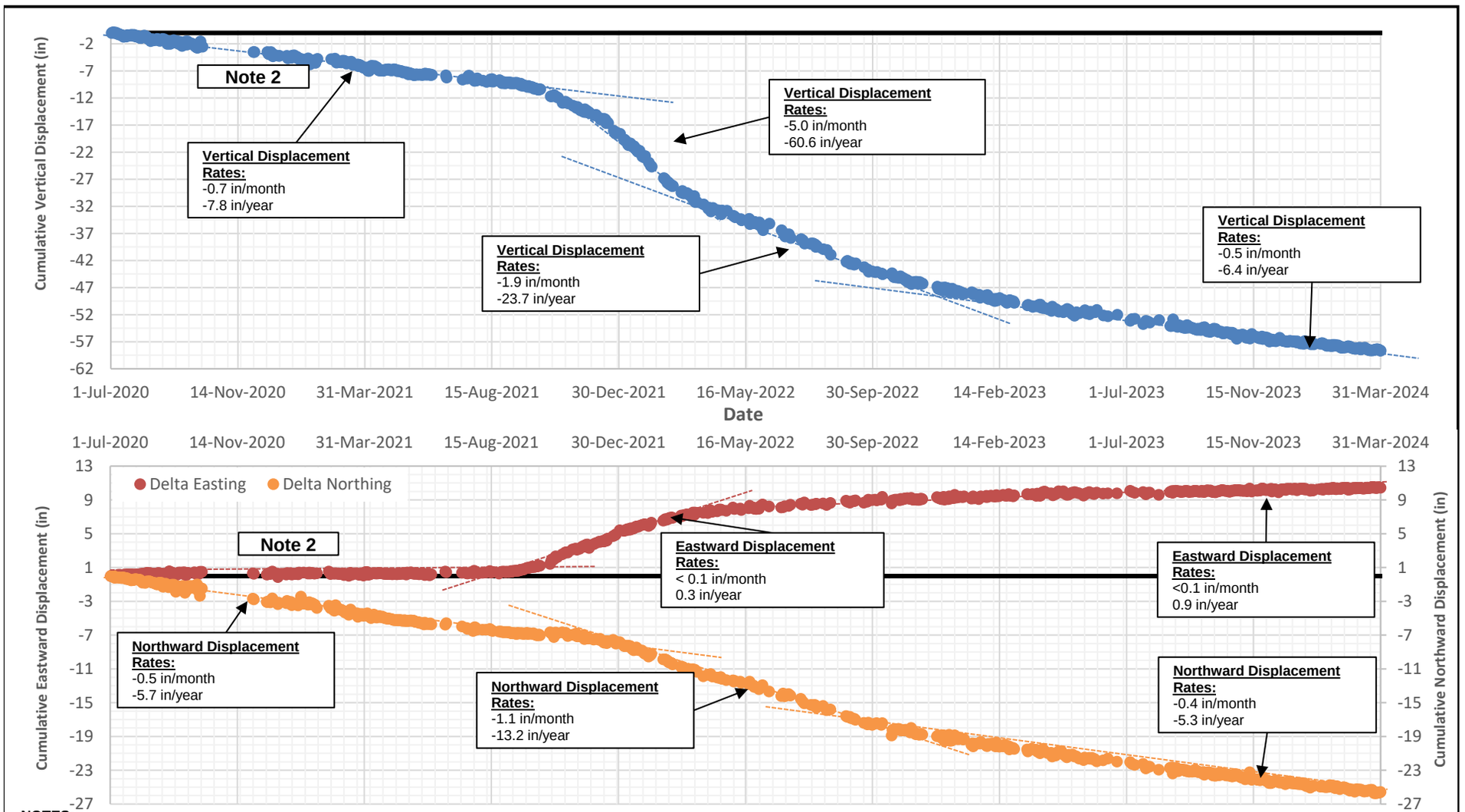
REF. NO. VA24-00764

FIGURE A.7

REV 0



NOTES:

1. CUMULATIVE VERTICAL AND LATERAL DISPLACEMENTS ARE CALCULATED RELATIVE TO JULY 1, 2020.
2. NO DATA WERE COLLECTED FROM OCTOBER 7 TO DECEMBER 2, 2020 DUE TO A POWER MANAGEMENT SCHEDULE ISSUE AT THE GNSS REFERENCE STATION (DH16-04).
3. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
4. NO DATA WERE COLLECTED FROM FEBRUARY 9 TO 21, 2021 DUE TO A DEPLETED DATA LOGGER BATTERY.
5. NO DATA WERE COLLECTED FROM JUNE 12 TO JULY 15, 2021 DUE TO A TELEMETRY HARDWARE OUTAGE.
6. NO DATA WERE COLLECTED FROM AUGUST 17 TO SEPTEMBER 2, 2022 DUE TO A SATELLITE UPDATE REQUIRING THE SENSORS TO HARD RESET.
7. NO DATA WERE COLLECTED FROM NOVEMBER 24 TO DECEMBER 8, 2022 DUE TO A PROCESSING SERVER ISSUE.
8. NO DATA WERE COLLECTED FROM MARCH 3 TO MARCH 15, 2023 DUE TO A HARDWARE ISSUE.
9. LIMITED DATA WERE COLLECTED FROM JUNE 6 TO JUNE 30, 2023 DUE TO A HARDWARE ISSUE.
10. LIMITED DATA WERE COLLECTED FROM JUNE 23 TO AUGUST 16, 2023 DUE TO A HARDWARE CONNECTION ISSUE.

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CUMULATIVE VERTICAL & LATERAL DISPLACEMENTS MONITORED AT DH19-S7 (JULY 1, 2020 JUNE 30, 2024)

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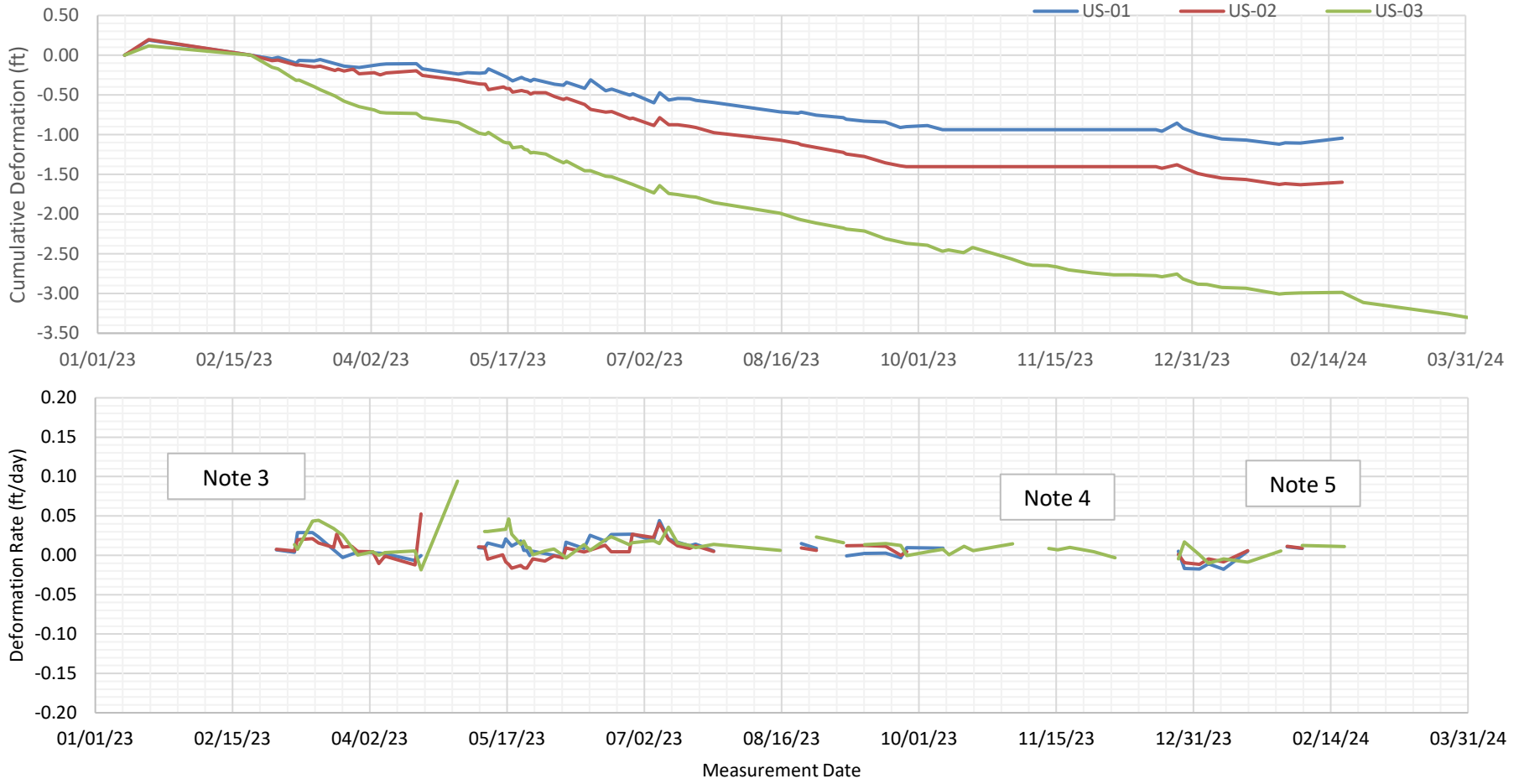
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.8

REV 0



NOTES:

1. UPSTREAM MONUMENTS WERE ACTIVATED ON FEBRUARY 21, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENTS US-01 AND US-02 WERE TEMPORARILY REMOVED BETWEEN SEPTEMBER 27 TO DECEMBER 19, 2023 DUE TO CONSTRUCTION.
5. NO DATA AVAILABLE FROM US-01 AND US-02 AFTER FEBRUARY 19, 2024 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
UPSTREAM TOTAL STATION MONUMENTS
VERTICAL DEFORMATION

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P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.9

REV 0

NOTES:

1. UPSTREAM MONUMENTS WERE ACTIVATED ON FEBRUARY 21, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENTS US-01 AND US-02 WERE TEMPORARILY REMOVED BETWEEN SEPTEMBER 27 TO DECEMBER 19, 2023 DUE TO CONSTRUCTION.
5. NO DATA AVAILABLE FROM US-01 AND US-02 AFTER FEBRUARY 19, 2024 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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UPSTREAM TOTAL STATION MONUMENTS
NORTH-SOUTH DEFORMATION

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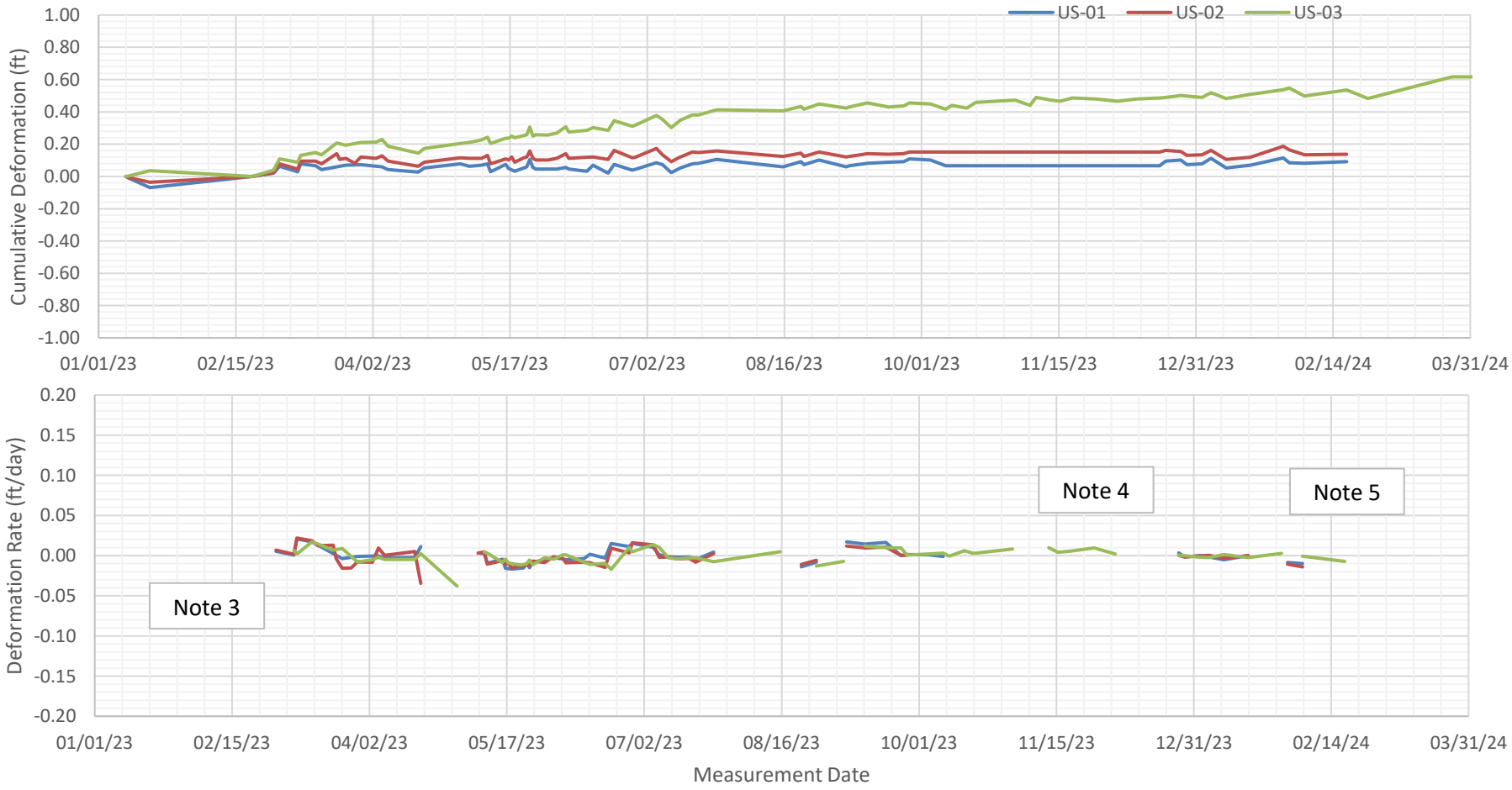
REF. NO. VA24-00764

FIGURE A.10

REV 0



NOTES:

1. UPSTREAM MONUMENTS WERE ACTIVATED ON FEBRUARY 21, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENTS US-01 AND US-02 WERE TEMPORARILY REMOVED BETWEEN SEPTEMBER 27 TO DECEMBER 19, 2023 DUE TO CONSTRUCTION.
5. NO DATA AVAILABLE FROM US-01 AND US-02 AFTER FEBRUARY 19, 2024 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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EAST-WEST DEFORMATION

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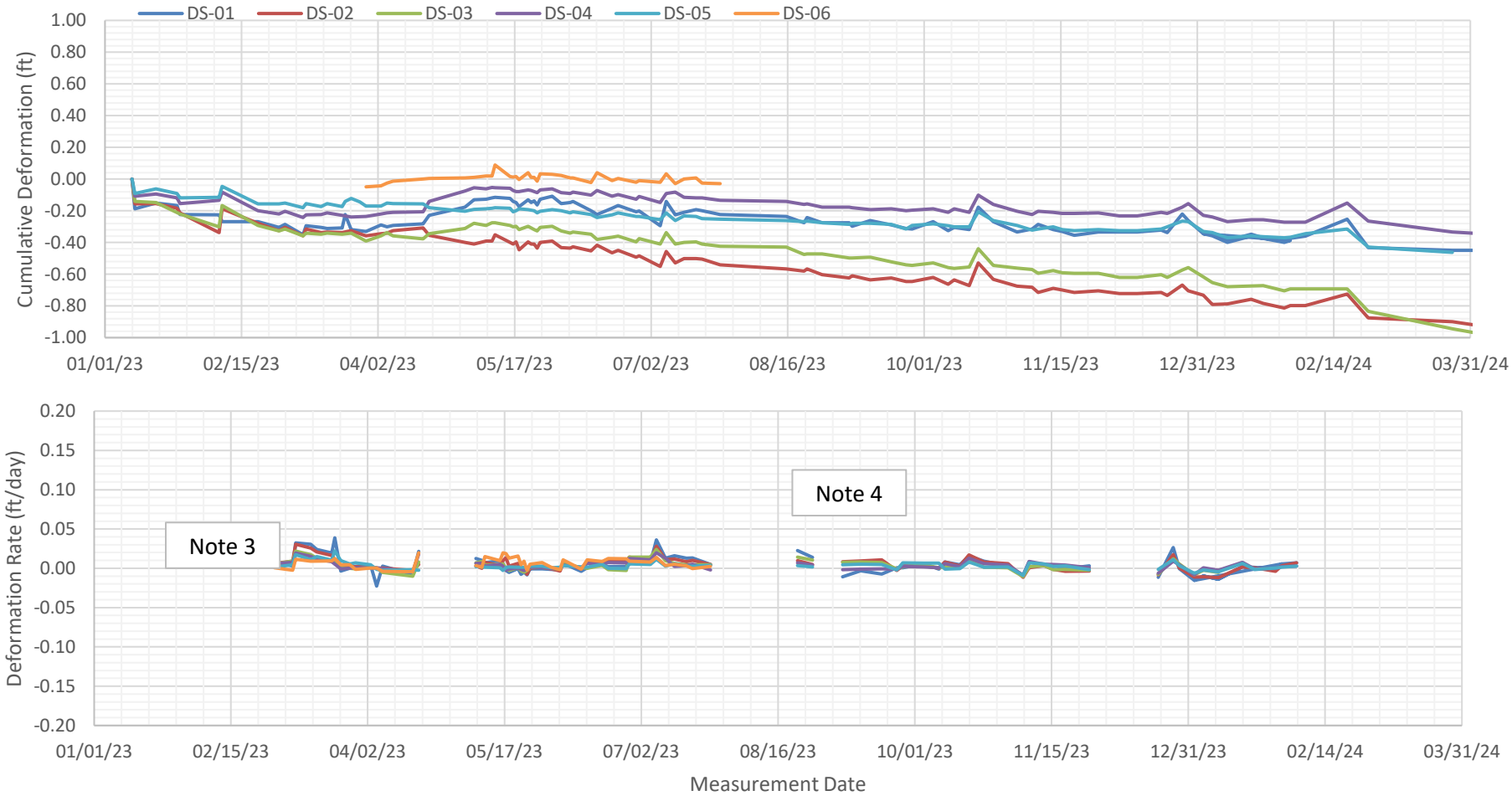
FIGURE A.11

REV 0



NOTES:

1. DOWNSTREAM MONUMENTS WERE ACTIVATED ON JANUARY 10, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENT DS-06 HAS BEEN TEMPORARILY REMOVED SINCE JULY 25, 2023 DUE TO CONSTRUCTION.

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DOWNSTREAM TOTAL STATION MONUMENTS
VERTICAL DEFORMATION**

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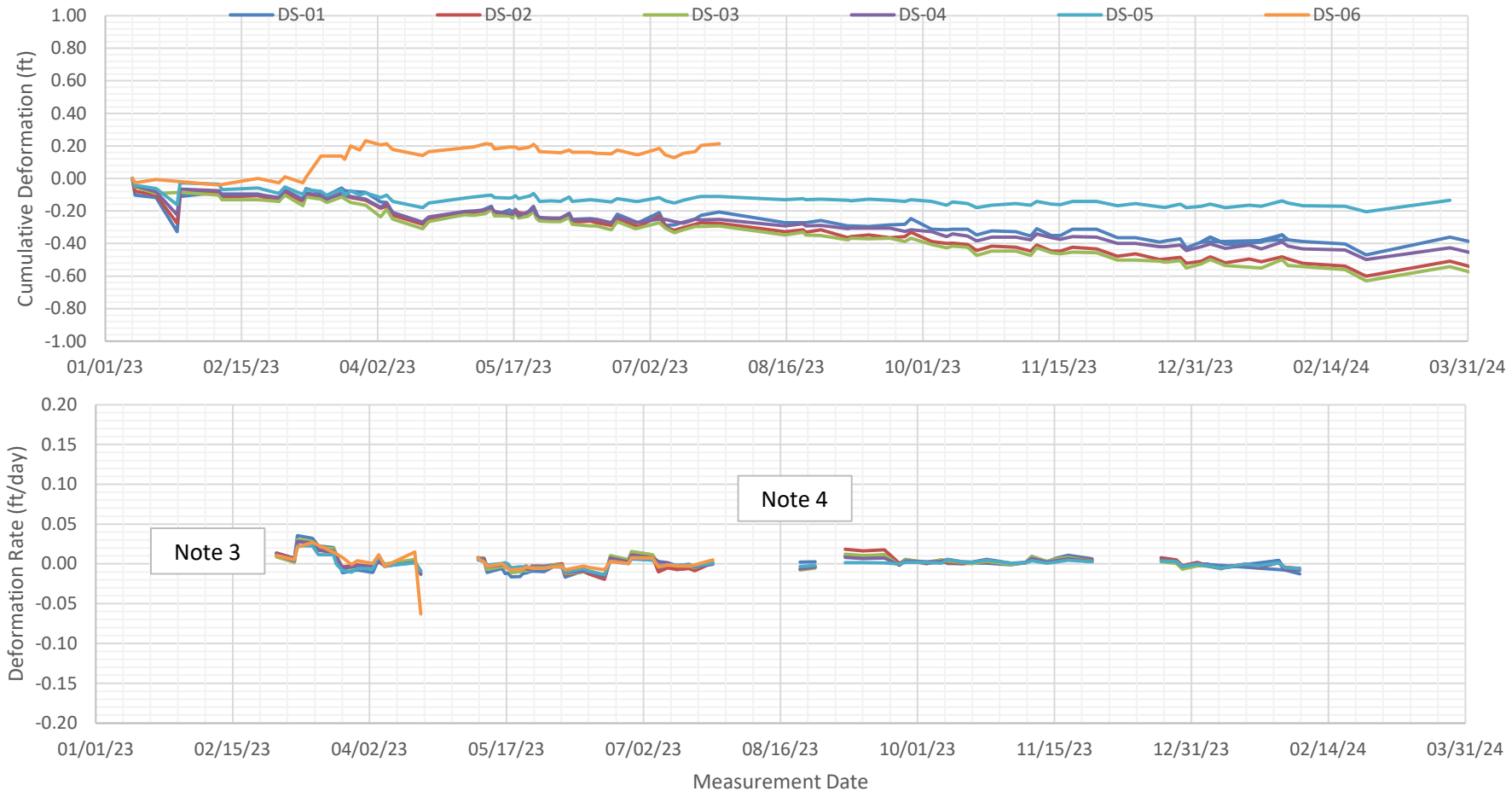
REF. NO. VA24-00764

FIGURE A.12

REV 0



NOTES:

1. DOWNSTREAM MONUMENTS WERE ACTIVATED ON JANUARY 10, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENT DS-06 HAS BEEN TEMPORARILY REMOVED SINCE JULY 25, 2023 DUE TO CONSTRUCTION.

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DOWNSTREAM TOTAL STATION MONUMENTS
NORTH-SOUTH DEFORMATION

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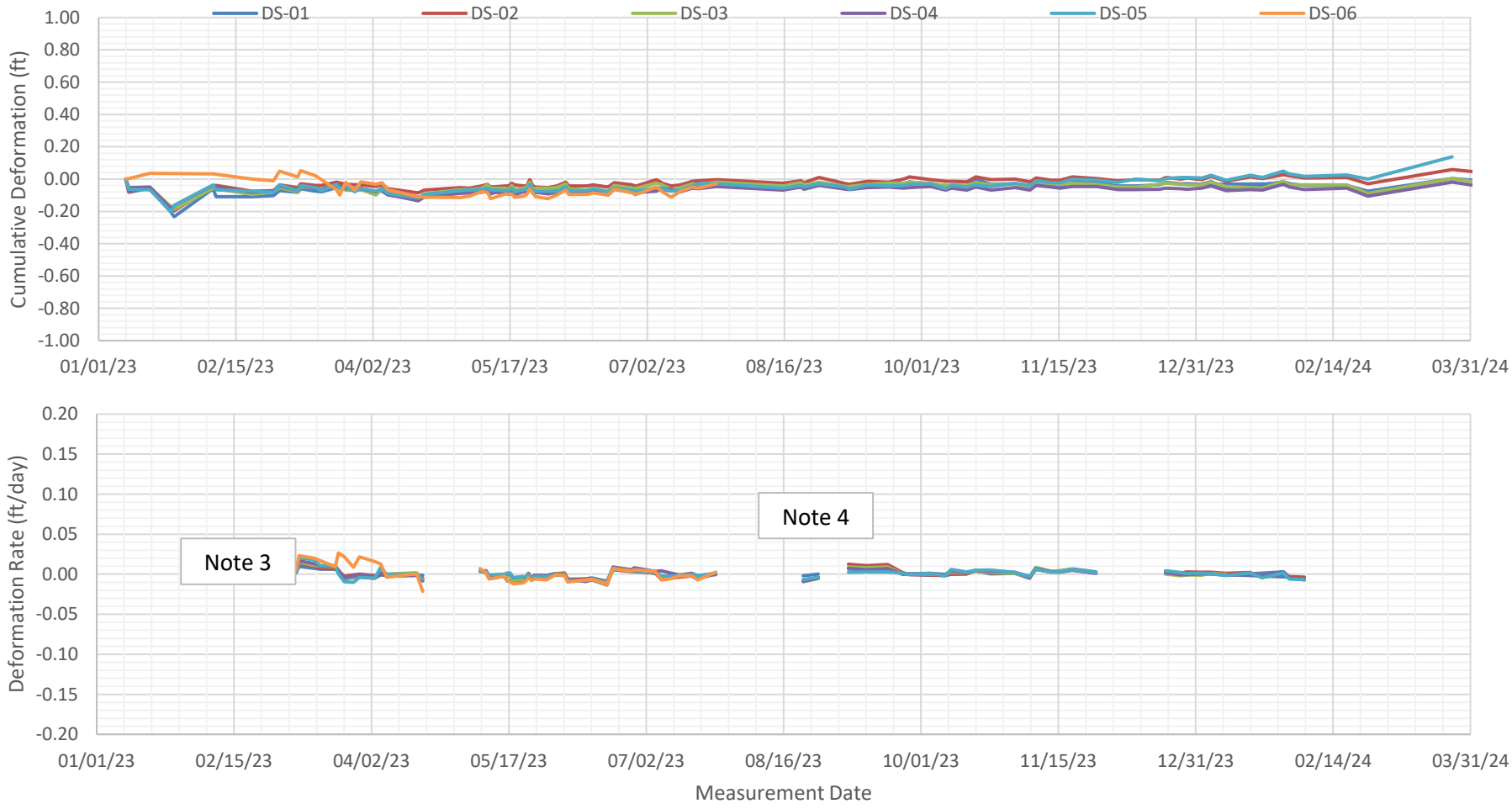
REF. NO. VA24-00764

FIGURE A.13

REV 0



NOTES:

1. DOWNSTREAM MONUMENTS WERE ACTIVATED ON JANUARY 10, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENT DS-06 HAS BEEN TEMPORARILY REMOVED SINCE JULY 25, 2023 DUE TO CONSTRUCTION.

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DOWNSTREAM TOTAL STATION MONUMENTS
EAST-WEST DEFORMATION

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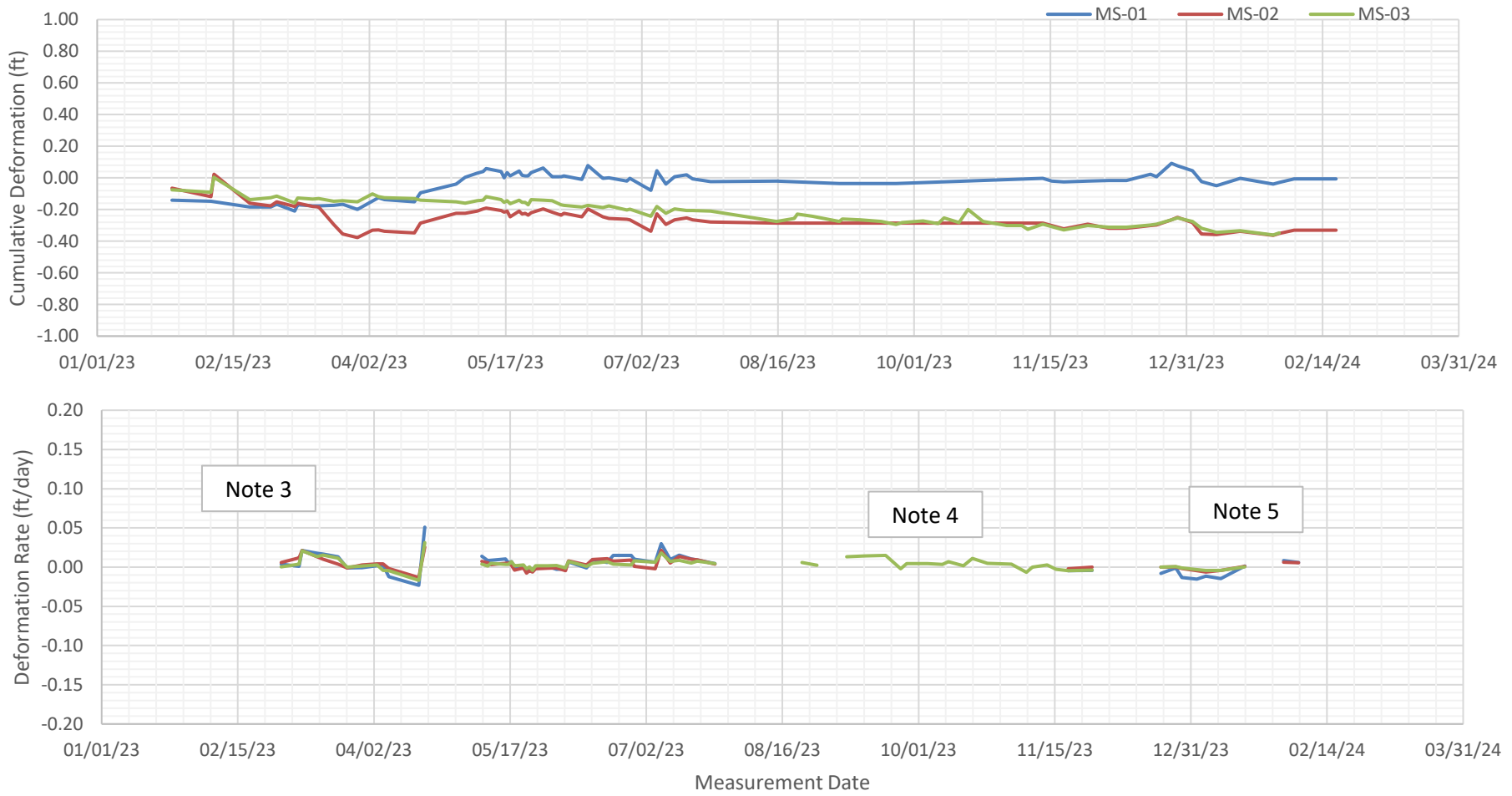
REF. NO. VA24-00764

FIGURE A.14

REV 0



NOTES:

1. MIDSLOPE MONUMENTS WERE ACTIVATED ON JANUARY 18, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENTS MS-01 AND MS-02 WERE TEMPORARILY REMOVED BETWEEN JULY 25 AND NOVEMBER 13, 2023 DUE TO CONSTRUCTION.
5. NO DATA ARE AVAILABLE AFTER JANUARY 31, 2024 FOR MS-03 AND AFTER FEBRUARY 19, 2024 AT MS-01 AND MS-02 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING MIDSLOPE TOTAL STATION MONUMENTS VERTICAL DEFORMATION

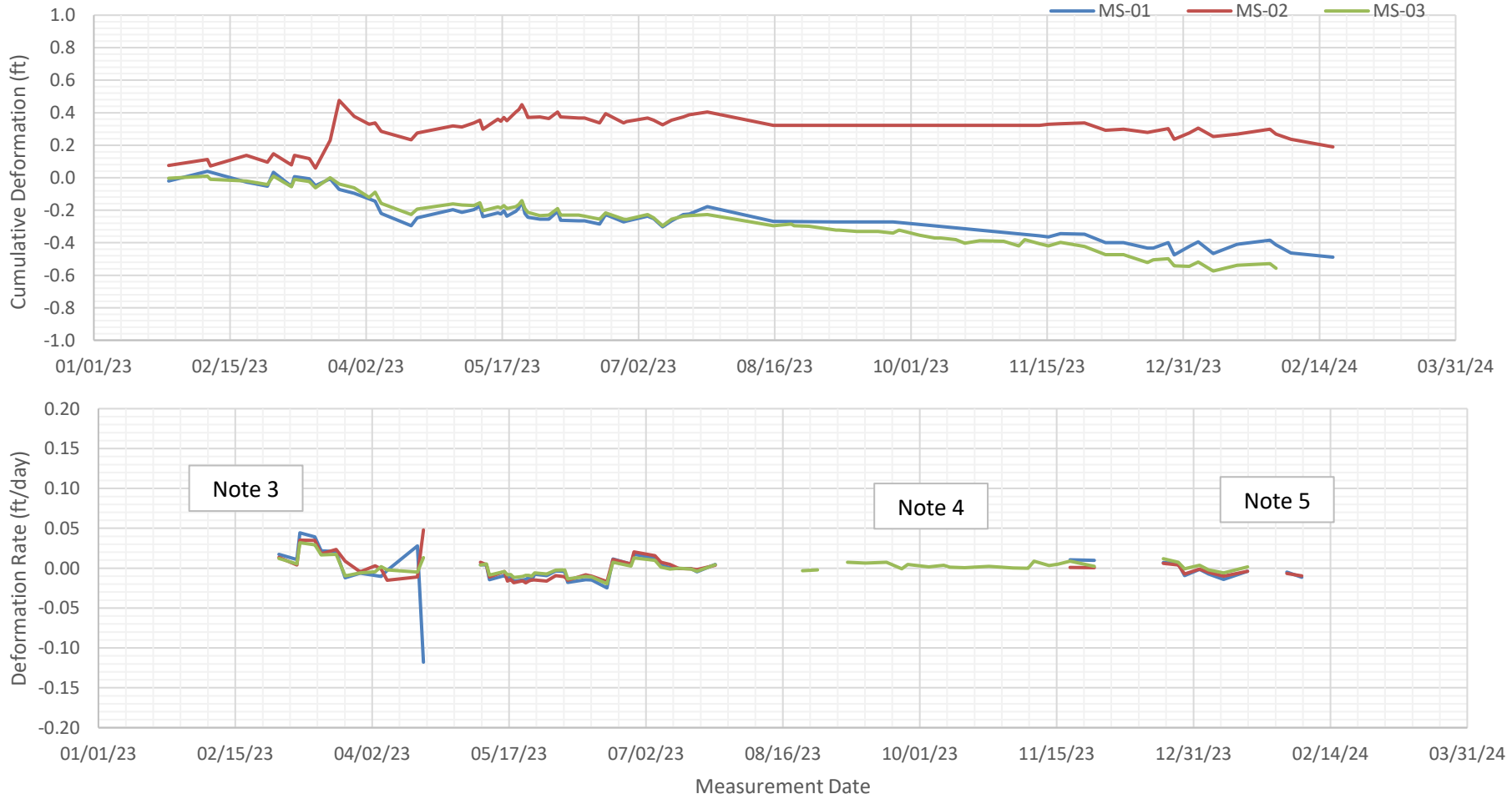
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.15

REV 0



NOTES:

1. MIDSLOPE MONUMENTS WERE ACTIVATED ON JANUARY 18, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENTS MS-01 AND MS-02 WERE TEMPORARILY REMOVED BETWEEN JULY 25 AND NOVEMBER 13, 2023 DUE TO CONSTRUCTION.
5. NO DATA ARE AVAILABLE AFTER JANUARY 31, 2024 FOR MS-03 AND AFTER FEBRUARY 19, 2024 AT MS-01 AND MS-02 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES LLC.

MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING MIDSLOPE TOTAL STATION MONUMENTS NORTH-SOUTH DEFORMATION

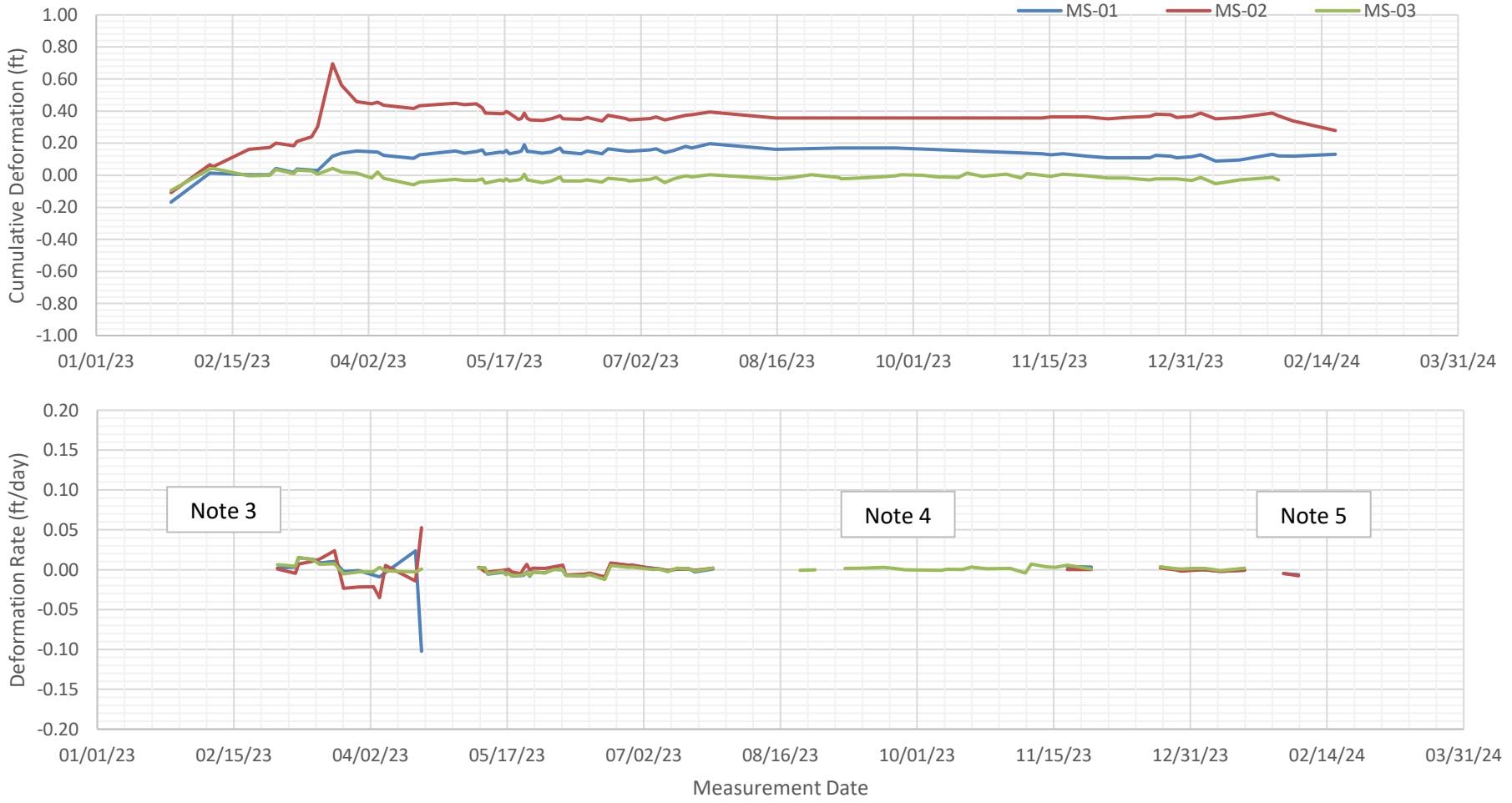
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.16

REV 0



NOTES:

1. MIDSLOPE MONUMENTS WERE ACTIVATED ON JANUARY 18, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. MONUMENTS MS-01 AND MS-02 WERE TEMPORARILY REMOVED BETWEEN JULY 25 AND NOVEMBER 13, 2023 DUE TO CONSTRUCTION.
5. NO DATA ARE AVAILABLE AFTER JANUARY 31, 2024 FOR MS-03 AND AFTER FEBRUARY 19, 2024 AT MS-01 AND MS-02 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES LLC.

MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
MIDSLOPE TOTAL STATION MONUMENTS
EAST-WEST DEFORMATION

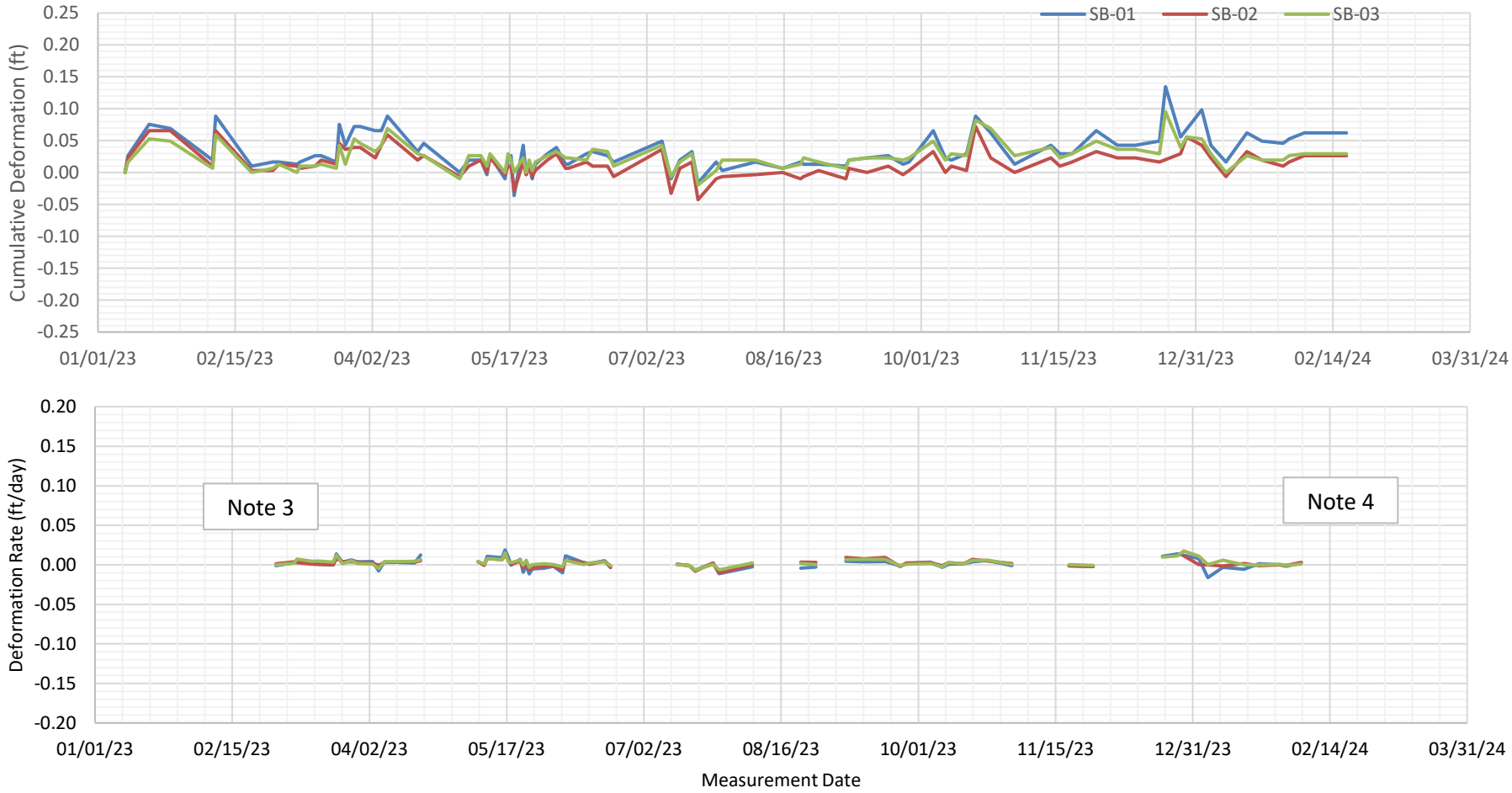
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.17

REV 0



NOTES:

1. SEEP 10 BENCH MONUMENTS WERE ACTIVATED ON JANUARY 10, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. NO DATA ARE AVAILABLE AFTER FEBRUARY 19, 2024 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES LLC.

MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
SEEP 10 BENCH TOTAL STATION MONUMENTS
VERTICAL DEFORMATION

Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.18

REV 0

NOTES:

1. SEEP 10 BENCH MONUMENTS WERE ACTIVATED ON JANUARY 10, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. NO DATA ARE AVAILABLE AFTER FEBRUARY 19, 2024 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	26APR'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES LLC.

MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
SEEP 10 BENCH TOTAL STATION MONUMENTS
NORTH-SOUTH DEFORMATION

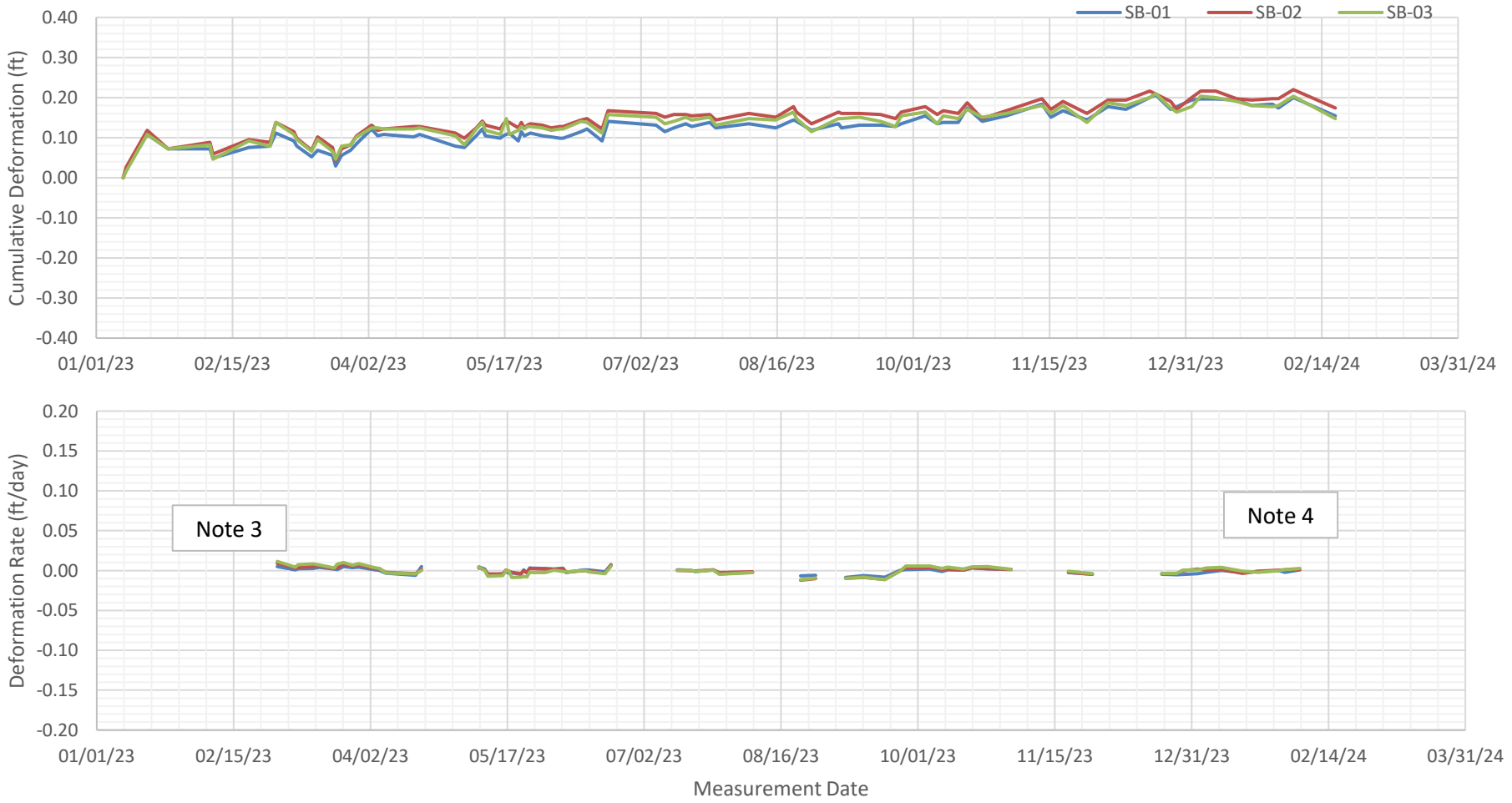
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.19

REV 0



NOTES:

1. SEEP 10 BENCH MONUMENTS WERE ACTIVATED ON JANUARY 10, 2023, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. NO DATA ARE AVAILABLE AFTER FEBRUARY 19, 2024 DUE TO LIMITED SURVEY STAFF AVAILABILITY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	26APR'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES LLC.

MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
SEEP 10 BENCH TOTAL STATION MONUMENTS
EAST-WEST DEFORMATION

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P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.20

REV 0

M:\1\01\00126\31\A\Data\Task 320 - YDTI Monitoring & Instrumentation\3. Deformation Monitoring\Surface Deformation\2 - Total Station\[YDTI 6,450 Total Station Survey-Deformation Monitoring - March 2024 (Q1)]NS - Vertical Def.

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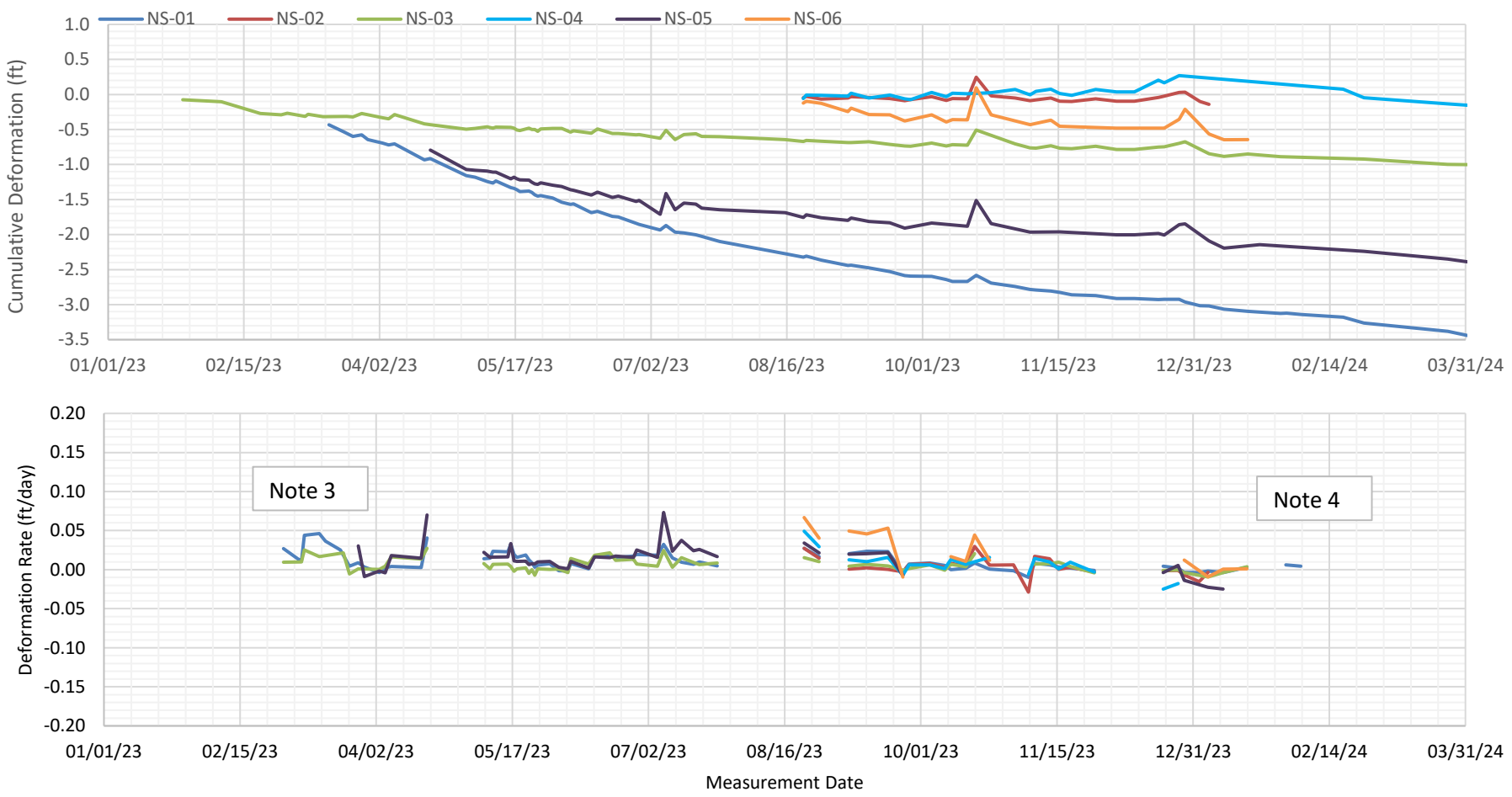

NOTES:

1. MONUMENTS NS-03, NS-01 AND NS-05 WERE ACTIVATED ON JANUARY 18, FEBRUARY 21 AND MARCH 2, 2023, RESPECTIVELY, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021. MONUMENTS NS-02, NS-04 AND NS-06 WERE LATER ACTIVATED ON AUGUST 16, 2023.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. NO DATA ARE AVAILABLE FROM NS-02 STARTING JANUARY 5, 2024, AND FROM NS-06 STARTING JANUARY 18, 2024, UNTIL MARCH 31, 2024, RESPECTIVELY, DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES LLC.

MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
NORTH-SOUTH EMBANKMENT TOTAL STATION
MONUMENTS VERTICAL DEFORMATION

Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.21

REV 0

M:\1\01\00126\31\A\Data\Task 320 - YDTI Monitoring & Instrumentation\3. Deformation Monitoring\Surface Deformation\2 - Total Station\[YDTI 6,450 Total Station Survey-Deformation Monitoring - March 2024 (Q1)]NS - N-S Def.

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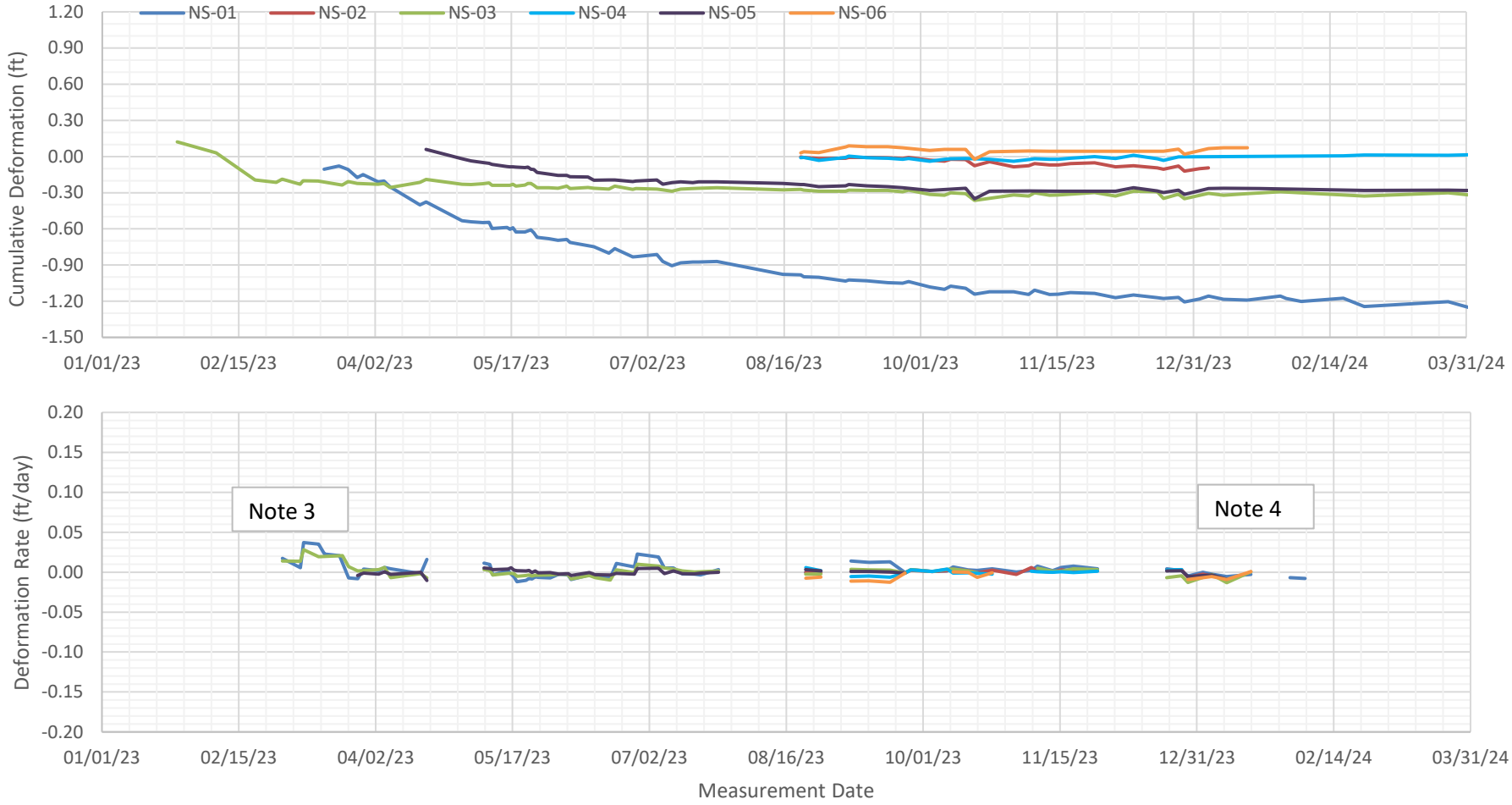

NOTES:

1. MONUMENTS NS-03, NS-01 AND NS-05 WERE ACTIVATED ON JANUARY 18, FEBRUARY 21 AND MARCH 2, 2023, RESPECTIVELY, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021. MONUMENTS NS-02, NS-04 AND NS-06 WERE LATER ACTIVATED ON AUGUST 16, 2023.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. NO DATA ARE AVAILABLE FROM NS-02 STARTING JANUARY 5, 2024, AND FROM NS-06 STARTING JANUARY 18, 2024, UNTIL MARCH 31, 2024, RESPECTIVELY, DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES

EL. 6,450 CONSTRUCTION MONITORING
NORTH-SOUTH EMBANKMENT TOTAL STATION
MONUMENTS NORTH-SOUTH DEFORMATION

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P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE A.22

REV 0

M:\1\01\00126\31\A\Data\Task 320 - YDTI Monitoring & Instrumentation\3. Deformation Monitoring\Surface Deformation\2 - Total Station\[YDTI 6,450 Total Station Survey-Deformation Monitoring - March 2024 (Q1)]NS - E-W Def.

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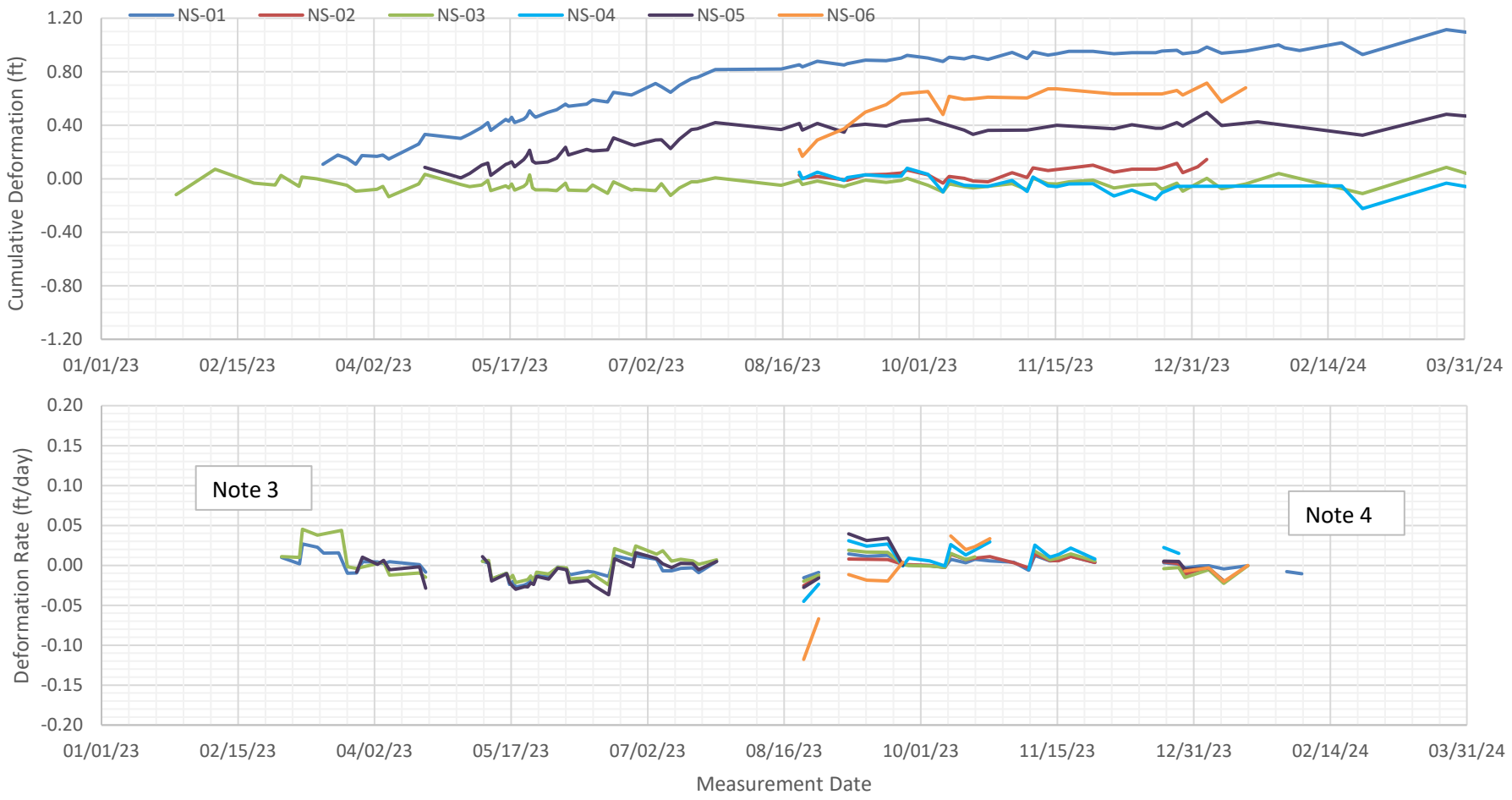

NOTES:

1. MONUMENTS NS-03, NS-01 AND NS-05 WERE ACTIVATED ON JANUARY 18, FEBRUARY 21 AND MARCH 2, 2023, RESPECTIVELY, FOLLOWING DGPS SURVEY COVERAGE SINCE MID-2021. MONUMENTS NS-02, NS-04 AND NS-06 WERE LATER ACTIVATED ON AUGUST 16, 2023.
2. NEGATIVE VERTICAL DISPLACEMENTS INDICATE DOWNWARD DISPLACEMENT.
3. DEFORMATION RATES ARE CALCULATED AS A 14-DAY AVERAGE USING A MINIMUM OF 3 DATA POINTS. DATA GAPS ARE PRESENT IN THE DEFORMATION RATE PLOT WHERE INSUFFICIENT DEFORMATION MEASUREMENTS ARE AVAILABLE FOR THE MOVING AVERAGE. DATA GAPS ARE PRESENT DUE TO LIMITED SURVEY STAFF AVAILABILITY.
4. NO DATA ARE AVAILABLE FROM NS-02 STARTING JANUARY 5, 2024, AND FROM NS-06 STARTING JANUARY 18, 2024, UNTIL MARCH 31, 2024, RESPECTIVELY, DUE TO LIMITED SURVEY STAFF AVAILABILITY.

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MONTANA RESOURCES LLC.

MONTANA RESOURCES

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NORTH-SOUTH EMBANKMENT TOTAL STATION
MONUMENTS EAST-WEST DEFORMATION

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P/A NO. VA101-126/31

REF. NO. VA24-00764

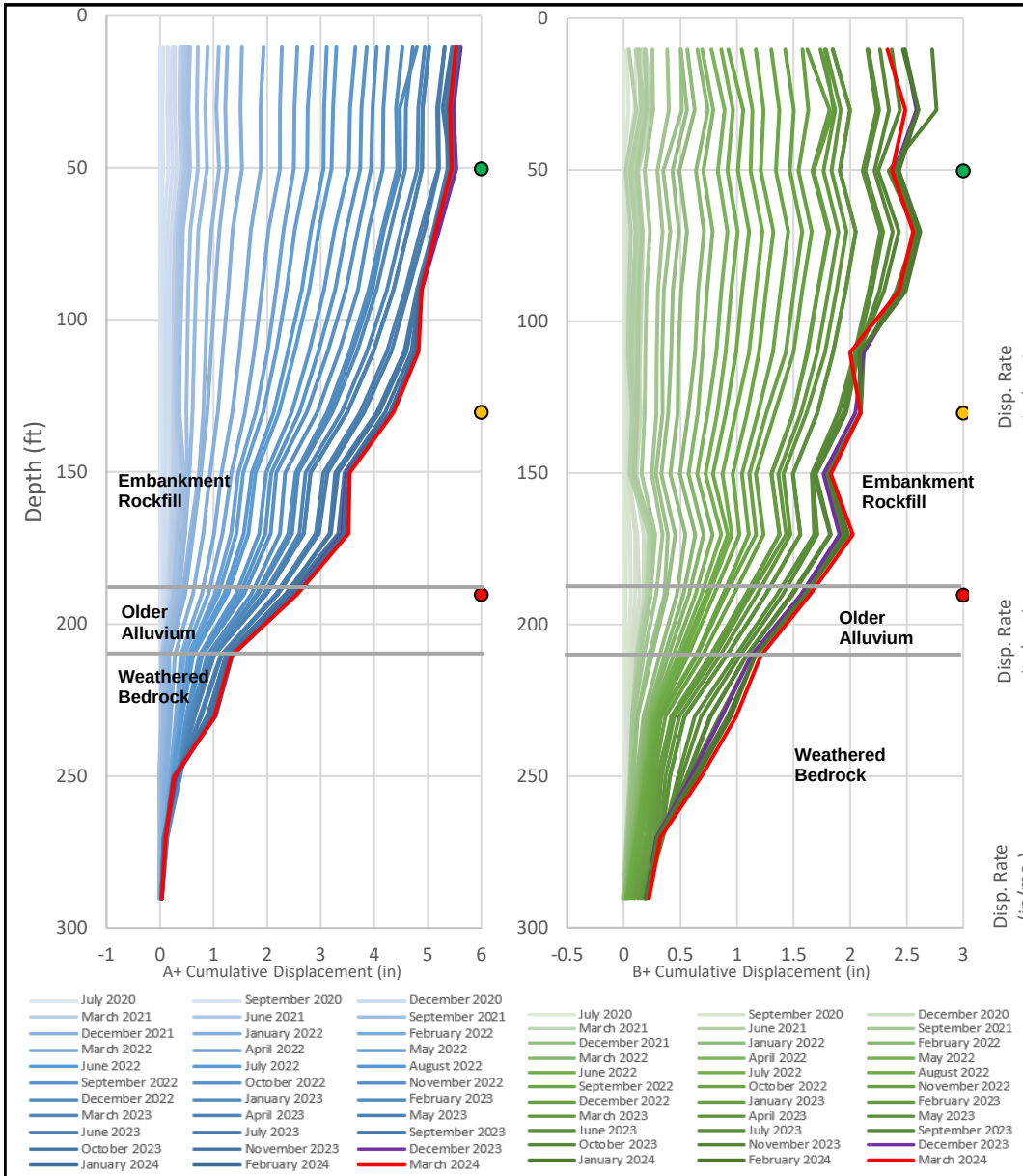
FIGURE A.23

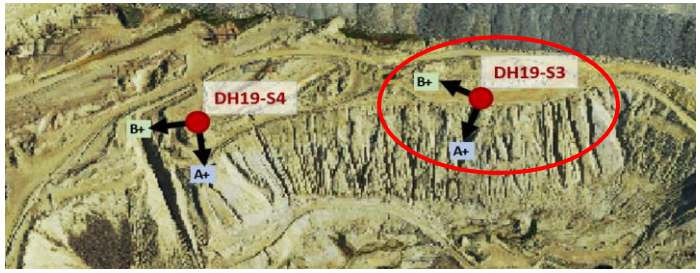
REV 0

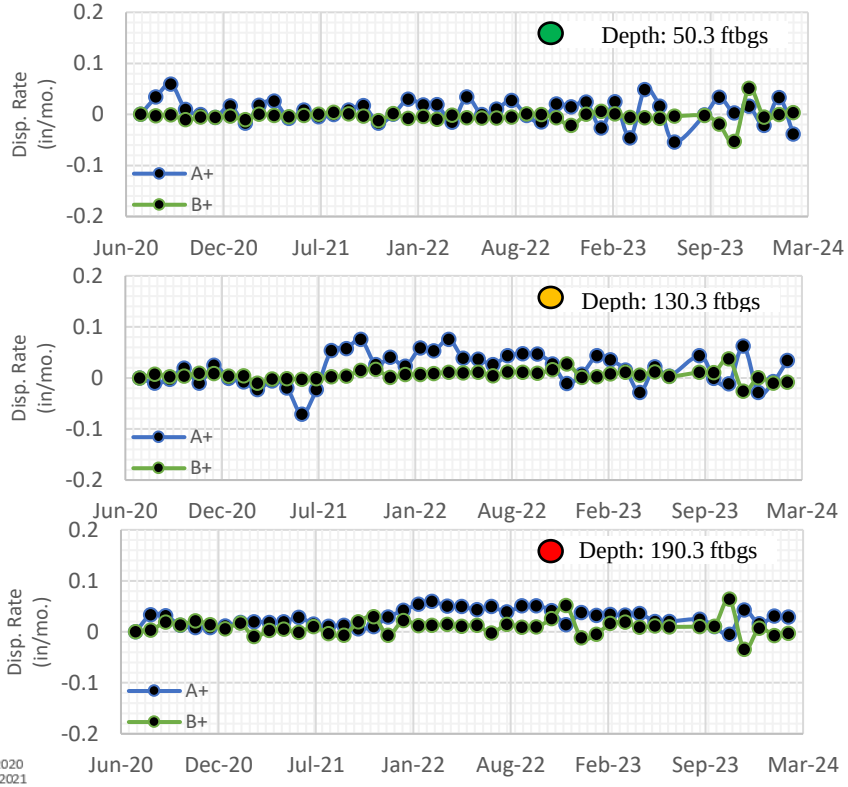
APPENDIX B

Inclinometer Deformation Plots

(Figures B.1 to B.14)







NOTES:
1. CUMULATIVE DEFORMATION MAGNITUDES AND RATES ARE PRESENTED AS MONTHLY AVERAGES.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.

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MONTANA RESOURCES

MONTHLY AVERAGE CUMULATIVE SUBSURFACE DEFORMATION DRILLHOLE DH19-S3 (JULY 2020 THROUGH MARCH 2024)

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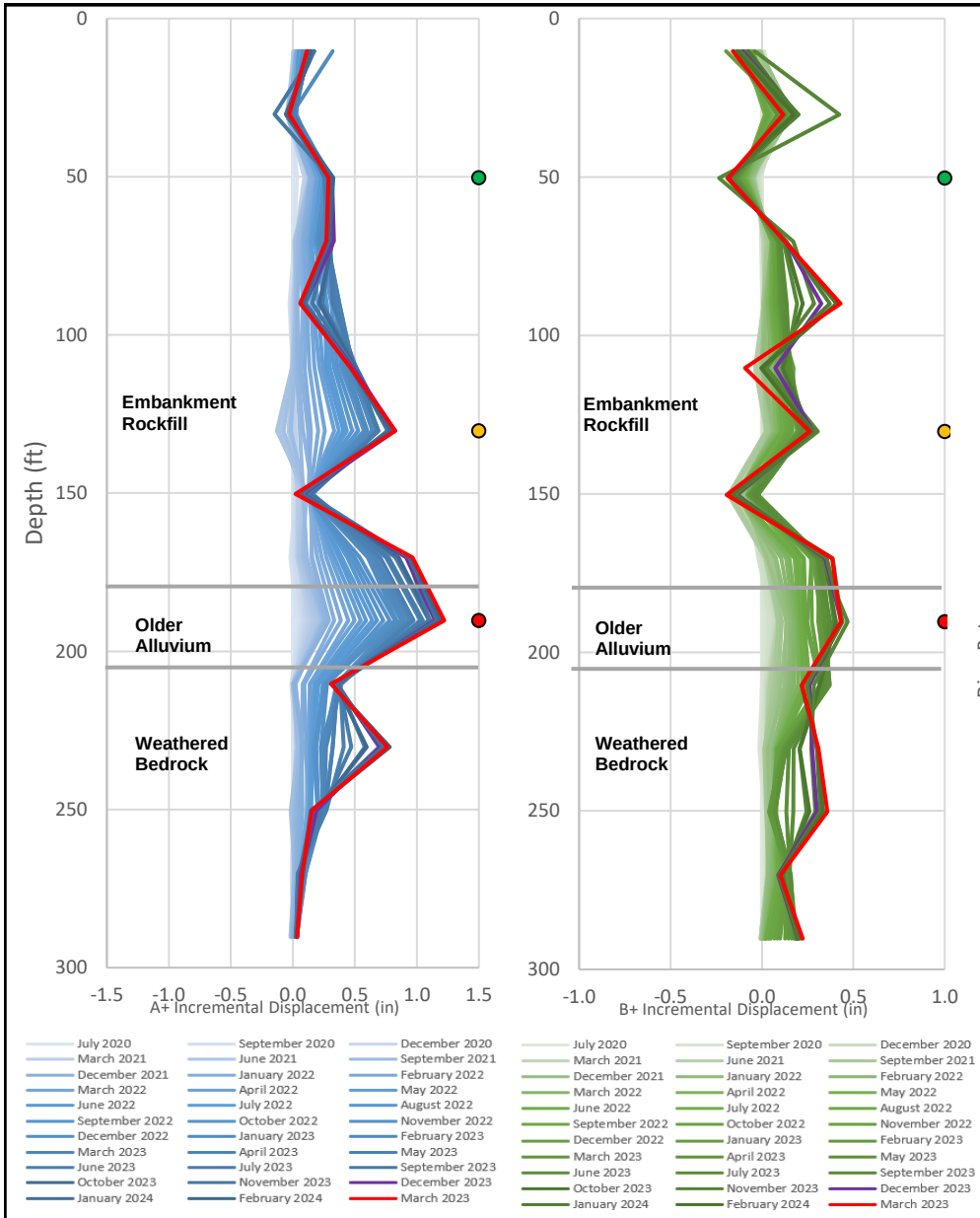
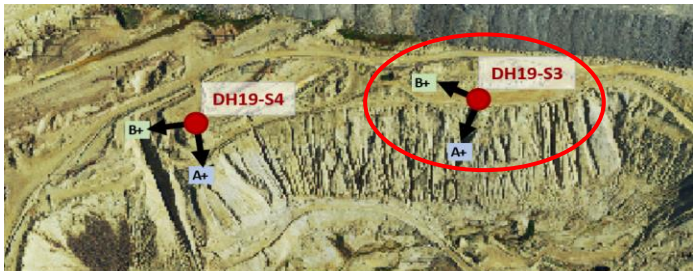
P/A NO. VA101-126/31

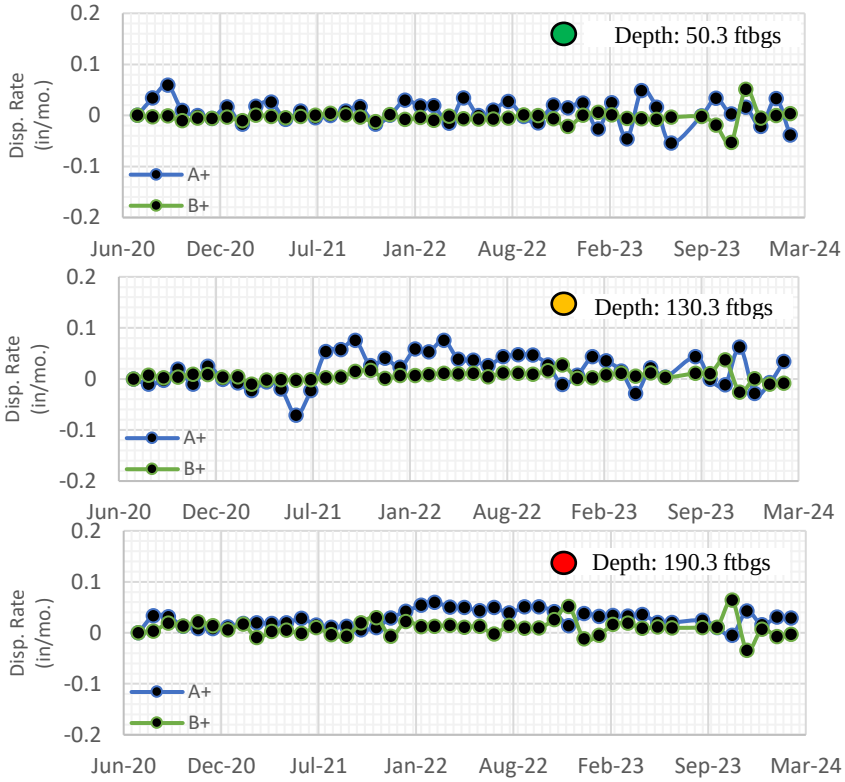
REF. NO. VA24-00764

FIGURE B.1

REV 0







NOTES:
1. INCREMENTAL DEFORMATION MAGNITUDES AND RATES ARE PRESENTED AS MONTHLY AVERAGES.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	23MAR'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

MONTHLY AVERAGE INCREMENTAL SUBSURFACE DEFORMATION DRILLHOLE DH19-S3 (JULY 2020 THROUGH MARCH 2024)

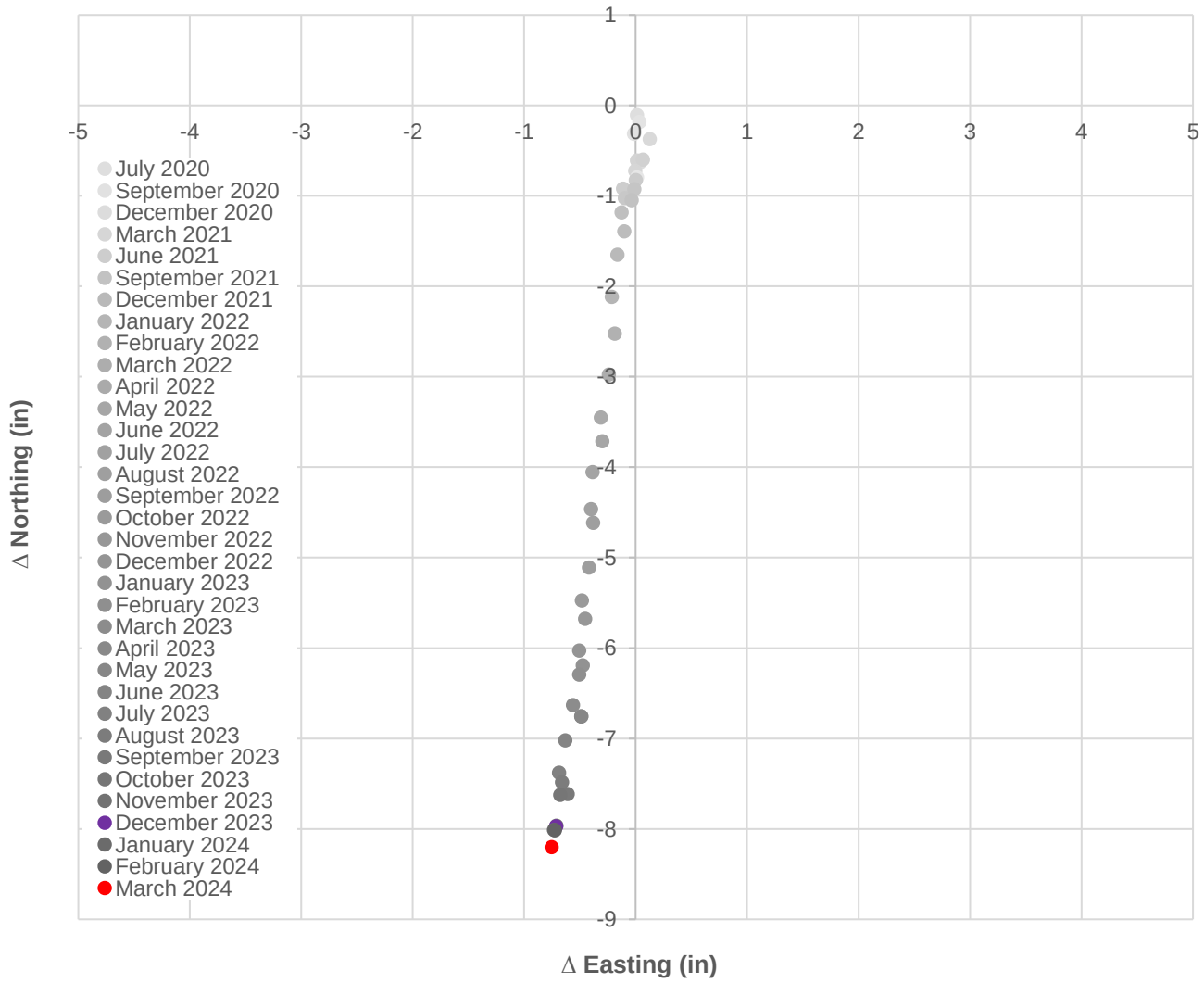
Knight Piésold CONSULTING

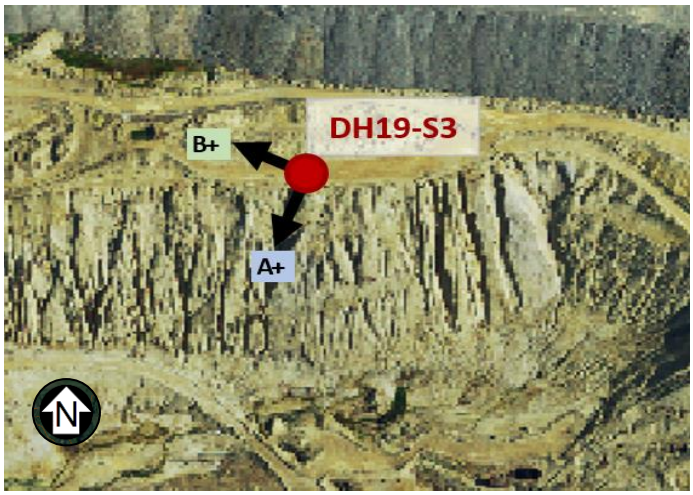
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE B.2

REV 0





NOTES:
1. COLLAR WANDER IS MONITORED USING GNSS INSTRUMENTATION INSTALLED AT THE INCLINOMETER COLLAR LOCATION.
2. THE PLOT ABOVE PRESENTS COLLAR POSITION BASED ON NORTH AND EAST CHANGE RELATIVE TO A JULY 1, 2020 BASELINE GNSS SURVEY.
3. NO DATA ARE AVAILABLE FOR NOVEMBER, 2020 WHILE THE INSTRUMENTATION WAS OFFLINE DUE TO A POWER MANAGEMENT ISSUE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
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MONTANA RESOURCES, LLC

MONTANA RESOURCES

DH19-S3 GNSS-BASED INCLINOMETER COLLAR WANDER (JULY 1, 2020 THROUGH MARCH 31, 2024)

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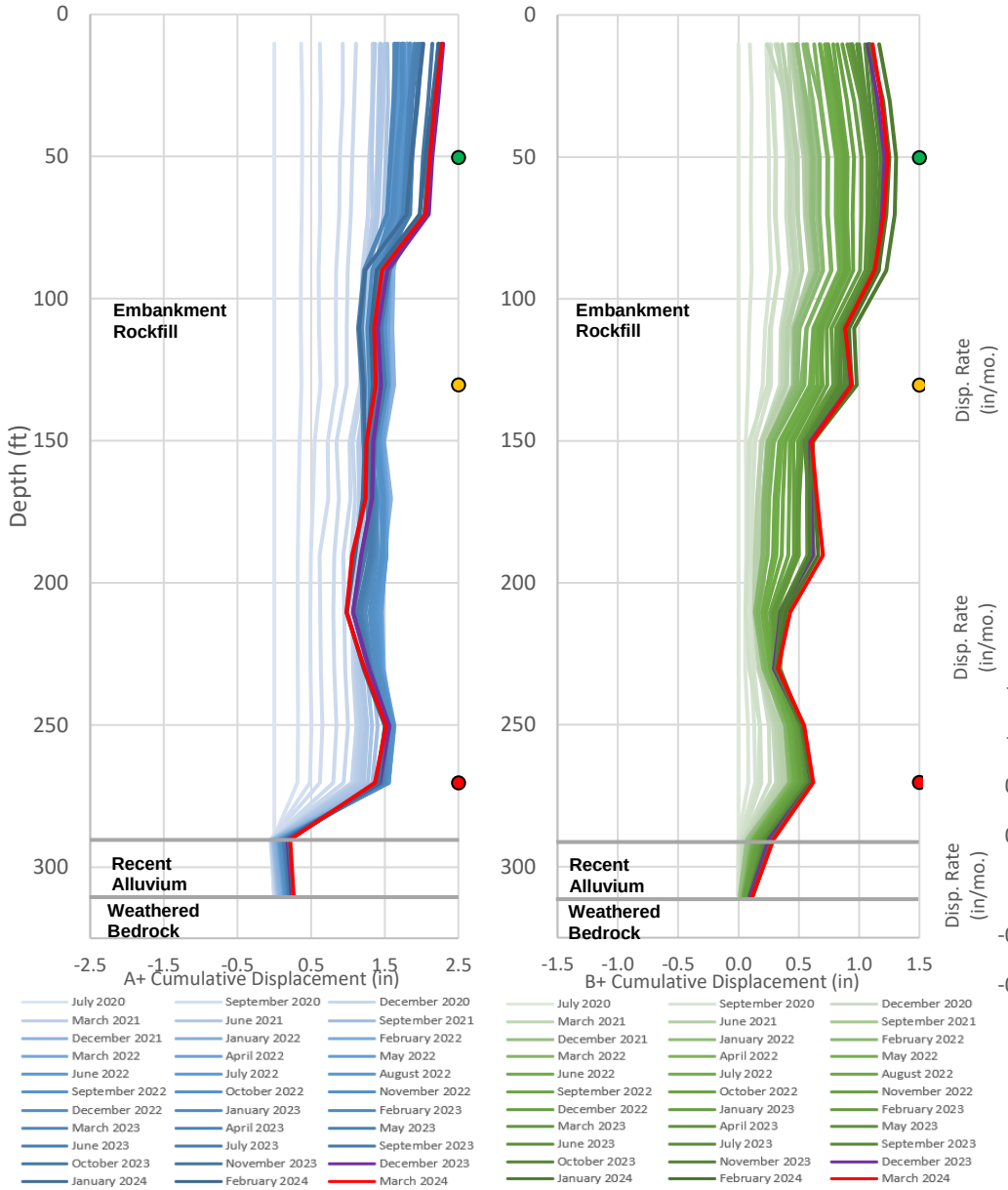
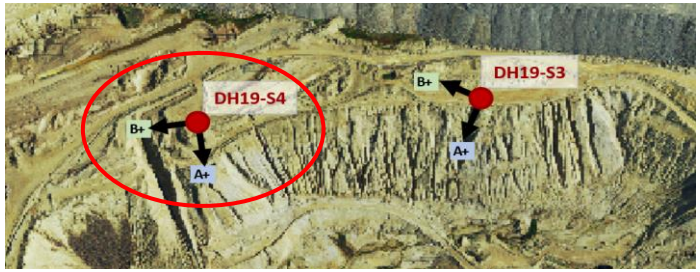
P/A NO. VA101-126/31

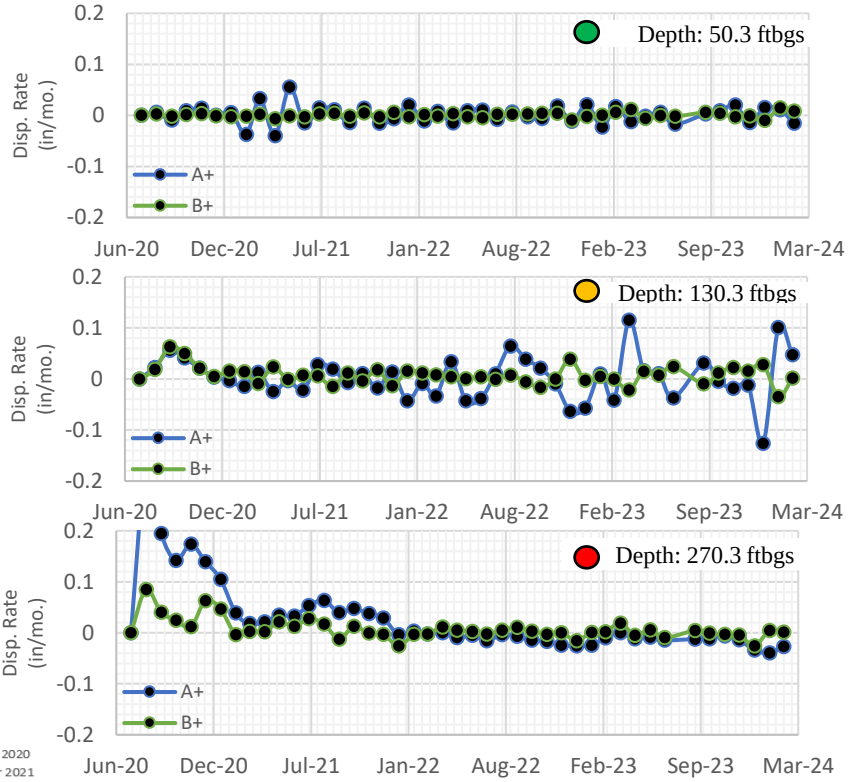
REF. NO. VA24-00764

FIGURE B.3

REV 0







NOTES:
1. CUMULATIVE DEFORMATION MAGNITUDES AND RATES ARE PRESENTED AS MONTHLY AVERAGES.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.
3. DEFORMATION MAGNITUDE BETWEEN 290 FTBG AND 310 FTBG IS INTEPRETED TO BE AN OVERESTIMATE DUE TO IPI CONNECTING ROD FLEXION.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
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MONTANA RESOURCES, LLC

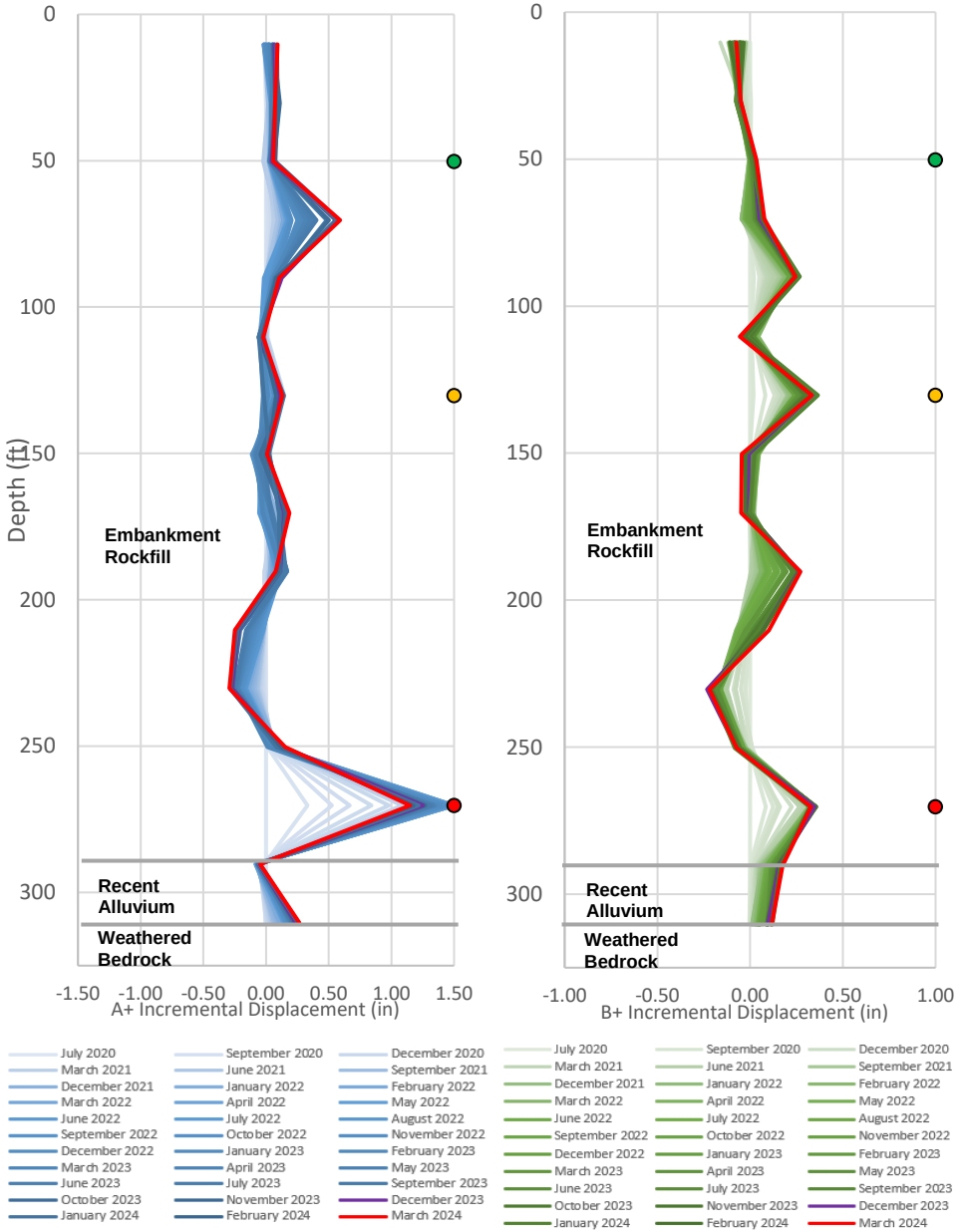
MONTANA RESOURCES

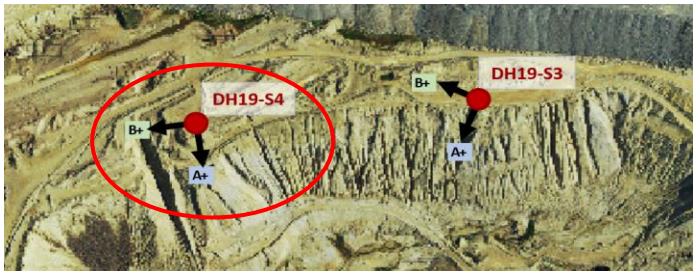
MONTHLY AVERAGE CUMULATIVE SUBSURFACE DEFORMATION DRILLHOLE DH19-S4 (JULY 2020 THROUGH MARCH 2024)

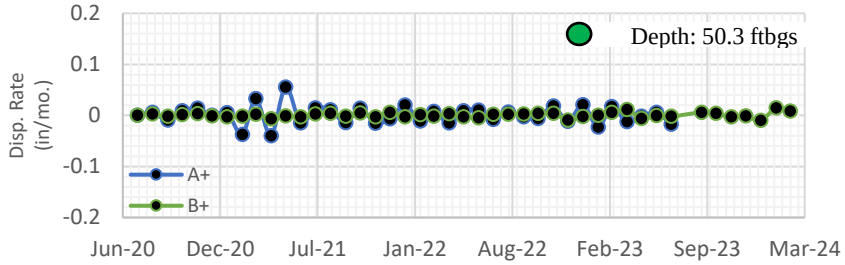
Knight Piésold CONSULTING

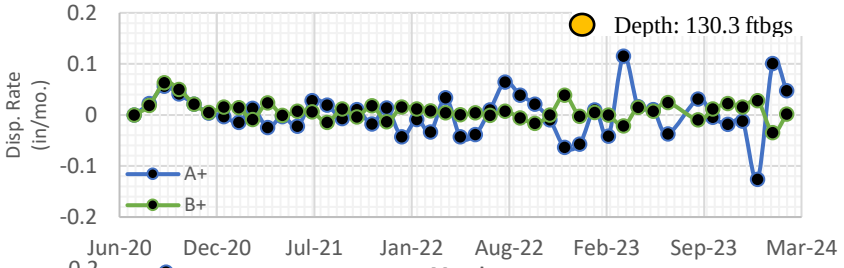
P/A NO.	REF. NO.
VA101-126/31	VA24-00764

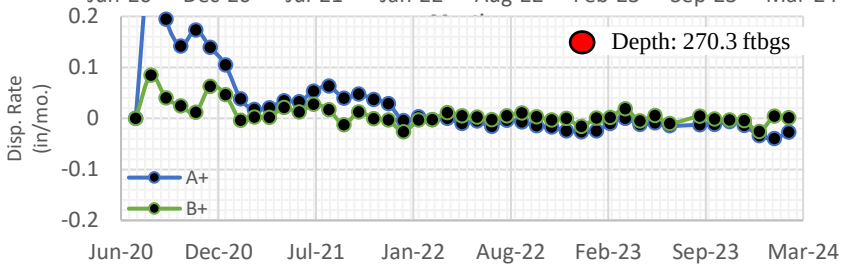
FIGURE B.4 REV 0











NOTES:
1. INCREMENTAL DEFORMATION MAGNITUDES AND RATES ARE PRESENTED AS MONTHLY AVERAGES.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.
3. DEFORMATION MAGNITUDE BETWEEN 250 FTBG TO 290 FTBG IS INTERPRETED TO BE AN OVERESTIMATE DUE TO IPI CONNECTING ROD FLEXION.

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MONTANA RESOURCES, LLC

MONTANA RESOURCES

MONTHLY AVERAGE INCREMENTAL SUBSURFACE DEFORMATION DRILLHOLE DH19-S4 (JULY 2020 THROUGH MARCH 2024)

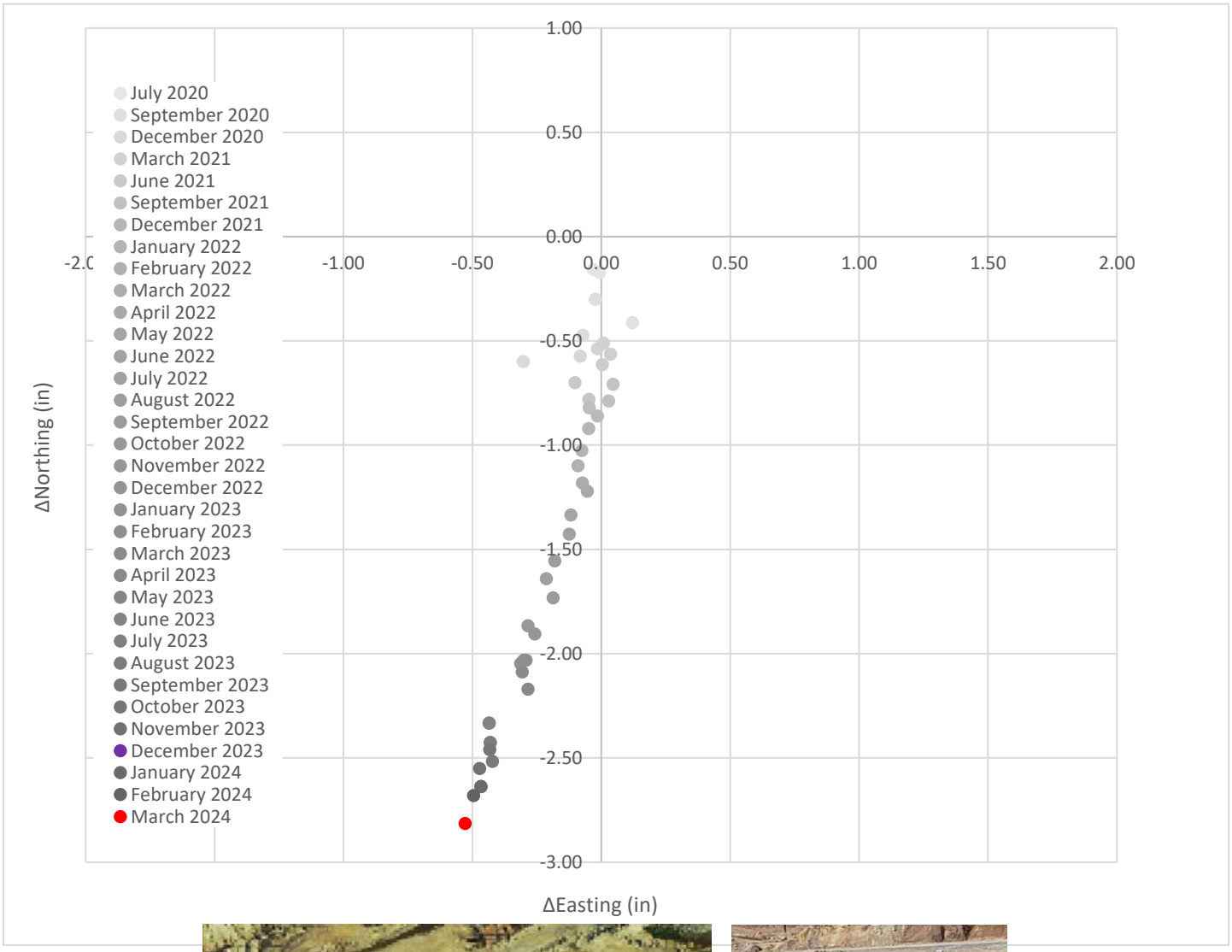
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE B.5

REV 0



NOTES:
1. COLLAR WANDER IS MONITORED USING GNSS INSTRUMENTATION INSTALLED AT THE INCLINOMETER COLLAR LOCATION.
2. THE PLOT ABOVE PRESENTS COLLAR POSITION BASED ON NORTH AND EAST CHANGE RELATIVE TO A JULY 1, 2020 BASELINE GNSS SURVEY.
3. NO DATA ARE AVAILABLE FOR NOVEMBER, 2020 WHILE THE INSTRUMENTATION WAS OFFLINE DUE TO A POWER MANAGEMENT ISSUE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	24APR'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

DH19-S4 GNSS-BASED INCLINOMETER COLLAR WANDER (JULY 1, 2020 THROUGH MARCH 31, 2024)

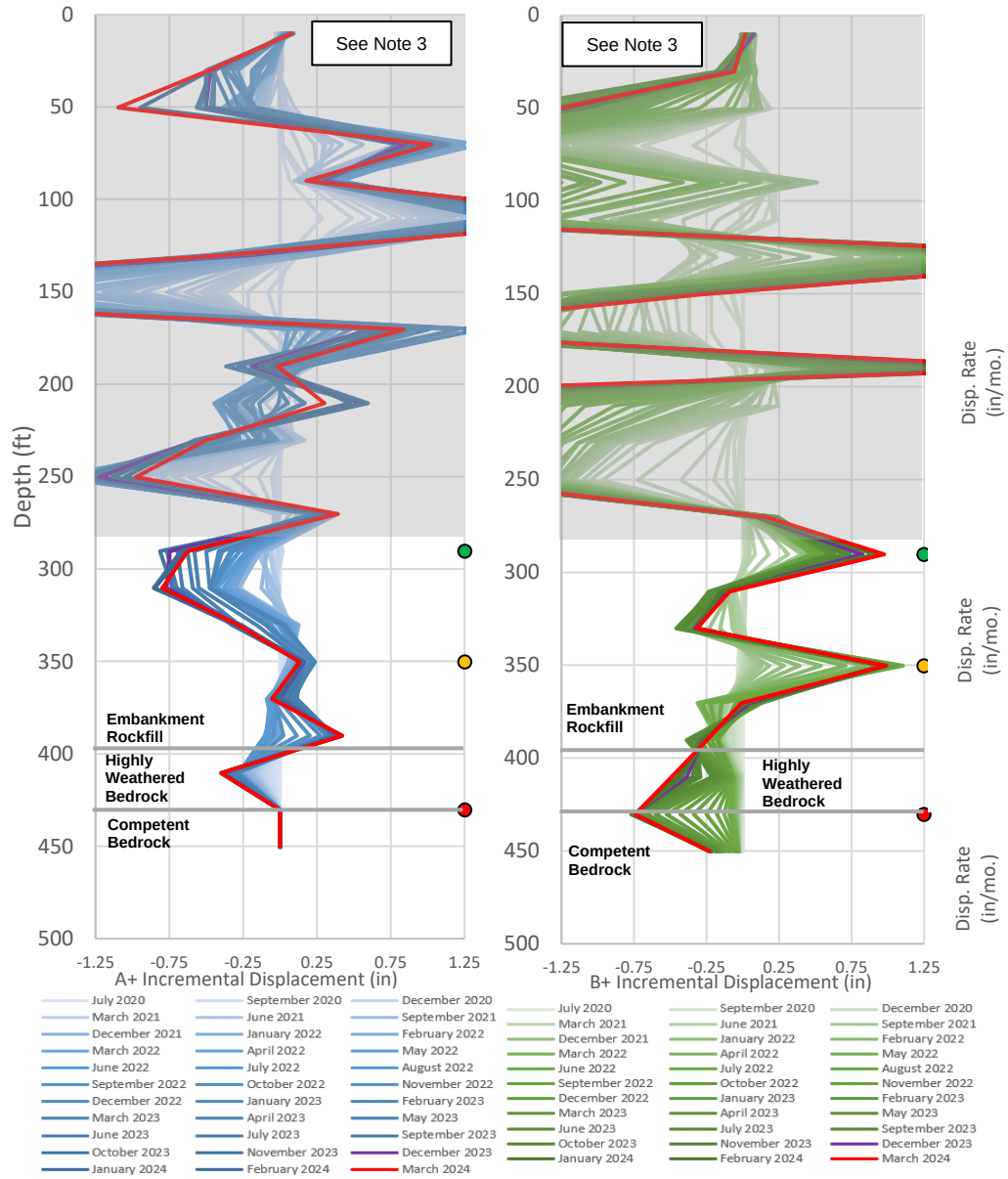
Knight Piésold CONSULTING

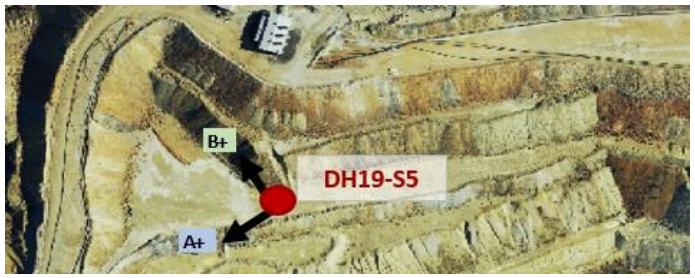
P/A NO. VA101-126/31

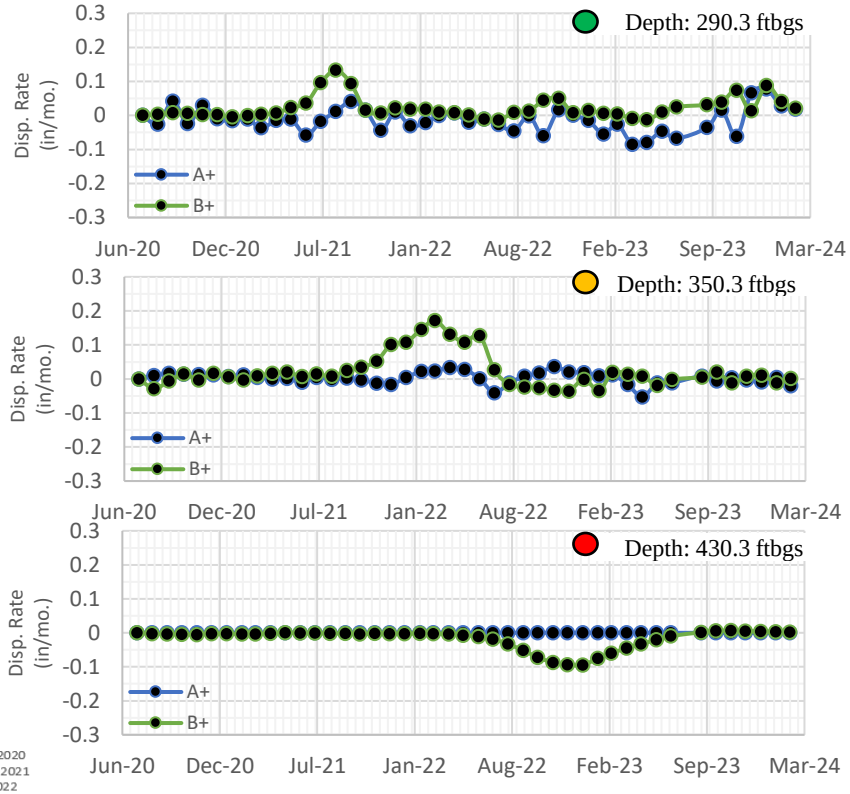
REF. NO. VA24-00764

FIGURE B.6

REV 0







NOTES:
1. INCREMENTAL DEFORMATION MAGNITUDES AND RATES ARE PRESENTED AS MONTHLY AVERAGES.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.
3. DEFORMATION DATA WITHIN THE UPPER 275 FTBG ARE INTERPRETED TO RESULT PREDOMINANTLY FROM SETTLEMENT-DERIVED CASING DISTORTION WITHIN HISTORICALLY LEACHED ROCKFILL.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	24APR'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES, LLC

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MONTHLY AVERAGE INCREMENTAL SUBSURFACE DEFORMATION DRILLHOLE DH19-S5 (JULY 2020 THROUGH MARCH 2024)

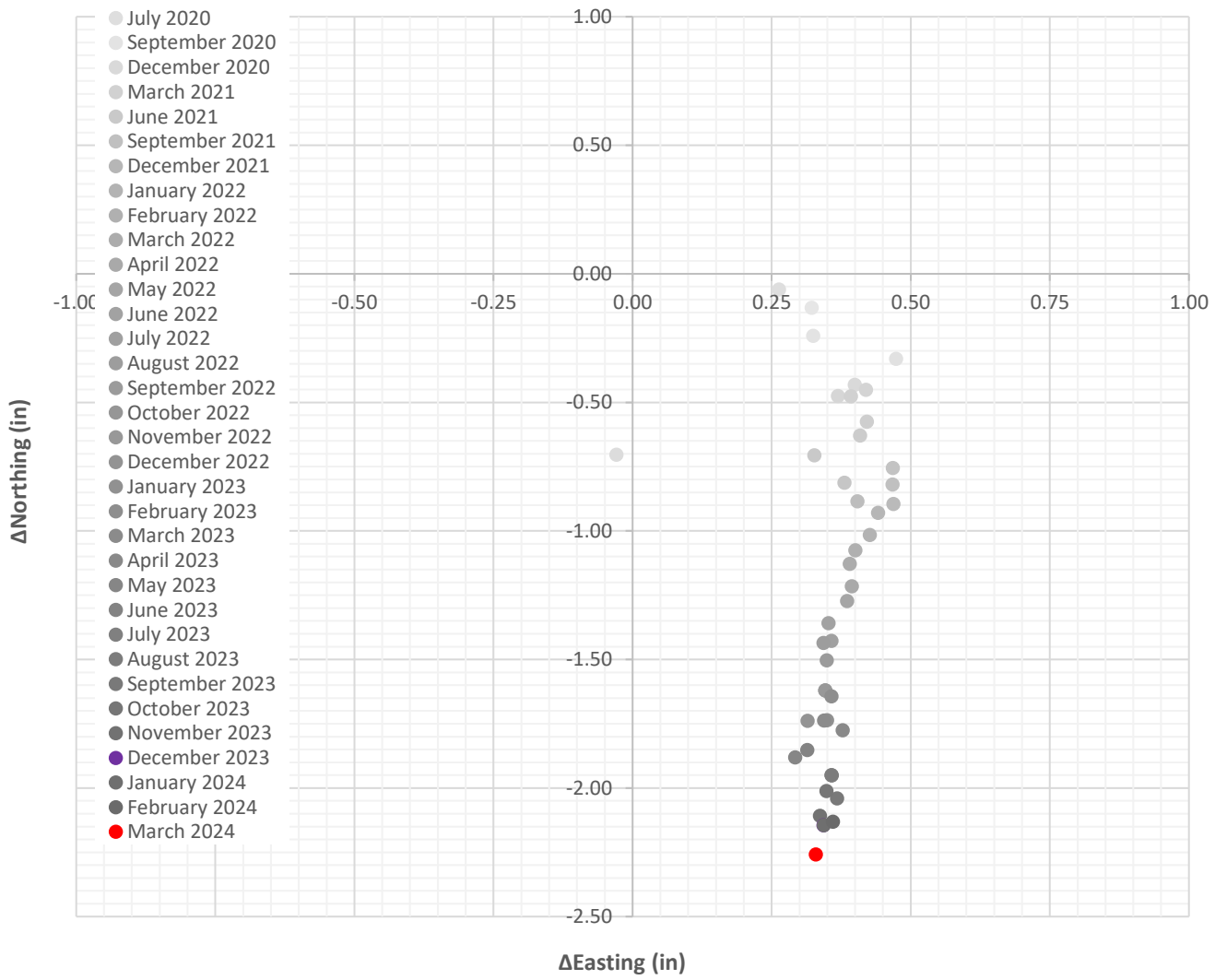
Knight Piésold CONSULTING

P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE B.7

REV 0



NOTES:
1. COLLAR WANDER IS MONITORED USING GNSS INSTRUMENTATION INSTALLED AT THE INCLINOMETER COLLAR LOCATION.
2. THE PLOT ABOVE PRESENTS COLLAR POSITION BASED ON NORTH AND EAST CHANGE RELATIVE TO A JULY 1, 2020 BASELINE GNSS SURVEY.
3. NO DATA ARE AVAILABLE FOR NOVEMBER, 2020 WHILE THE INSTRUMENTATION WAS OFFLINE DUE TO A POWER

MONTANA RESOURCES, LLC

MONTANA RESOURCES

DH19-S5 GNSS-BASED INCLINOMETER COLLAR WANDER (JULY 1, 2020 THROUGH MARCH 31, 2024)

Knight Piésold CONSULTING

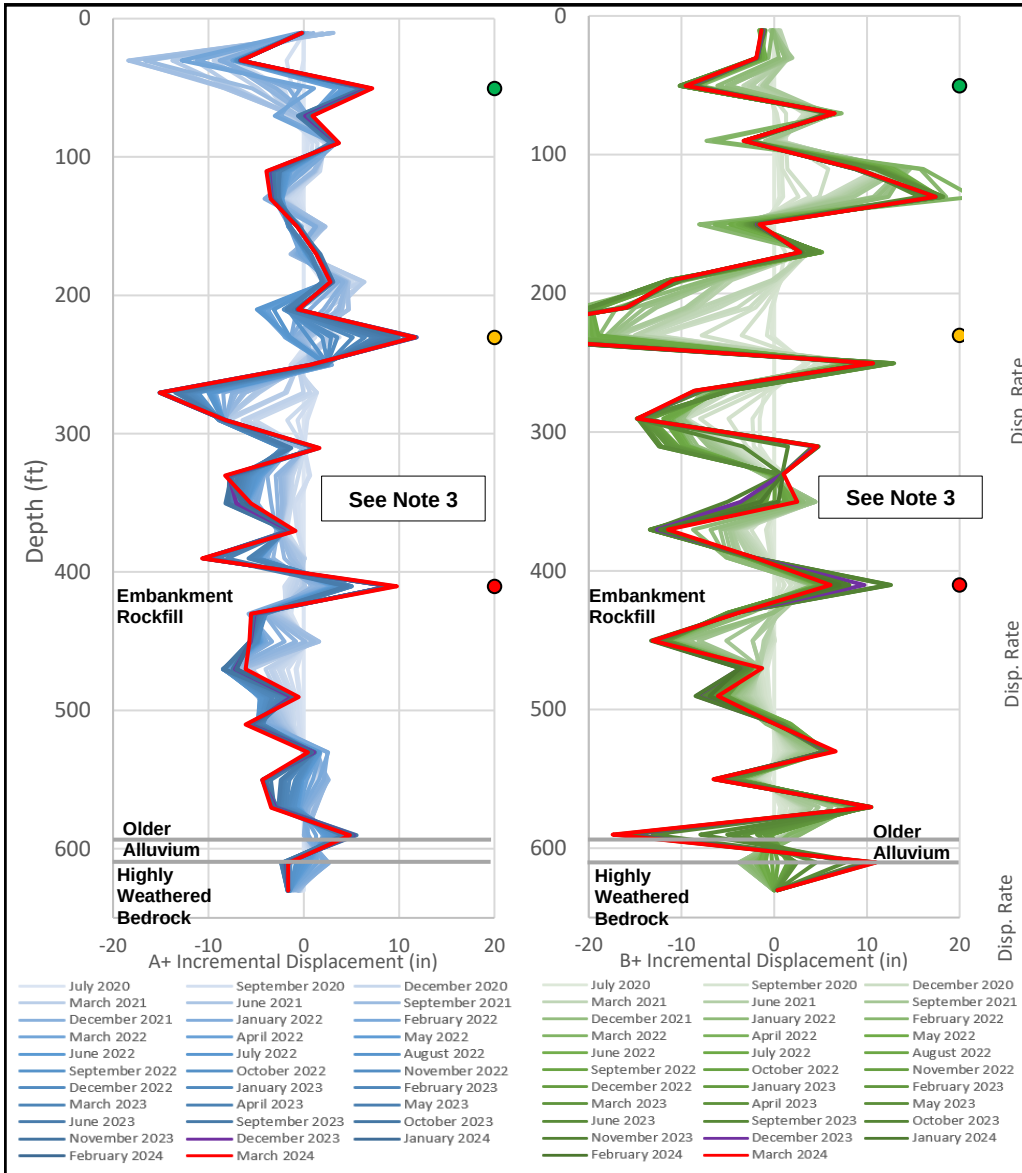
P/A NO. VA101-126/31

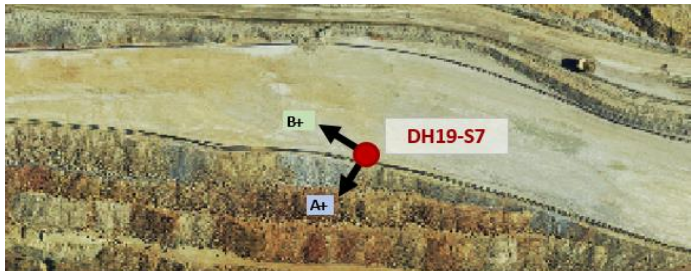
REF. NO. VA24-00764

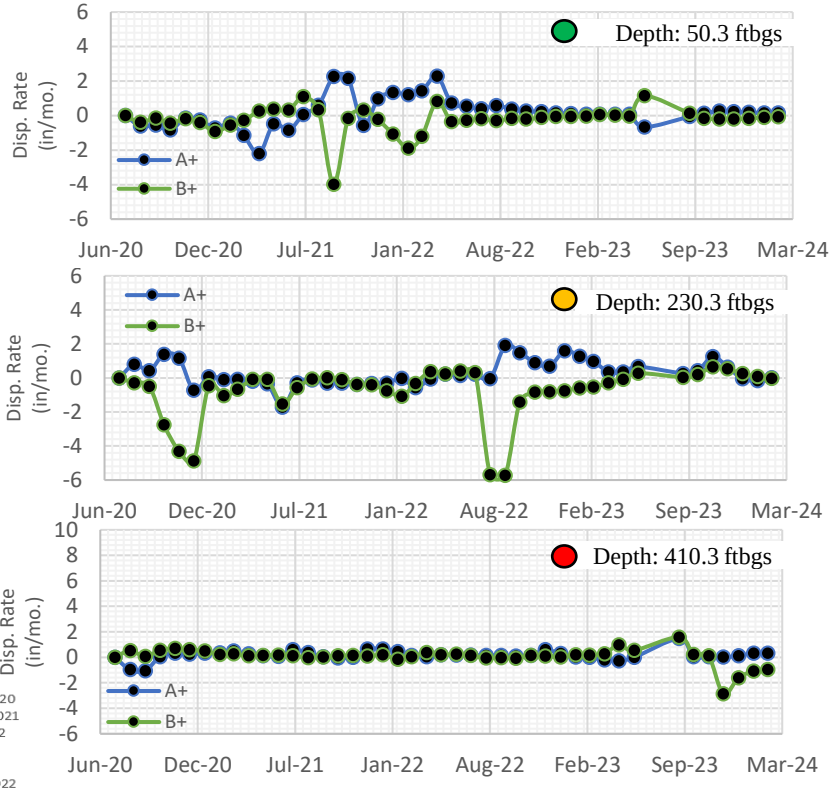
FIGURE B.8

REV 0

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	24APR'24	ISSUED WITH LETTER	CNN	KTD







NOTES:
1. INCREMENTAL DEFORMATION MAGNITUDES AND RATES ARE PRESENTED AS MONTHLY AVERAGES.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.
3. DEFORMATION DATA THROUGHOUT THE EMBANKMENT ROCKFILL ARE INTERPRETED TO RESULT PREDOMINANTLY FROM SETTLEMENT-DERIVED CASING DISTORTION WITHIN THE ROCKFILL AND ARE NOT REPRESENTATIVE OF IN-SITU LATERAL DISPLACEMENT.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	24APR'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

MONTHLY AVERAGE INCREMENTAL SUBSURFACE DEFORMATION DRILLHOLE DH19-S7 (JULY 2020 THROUGH MARCH 2024)

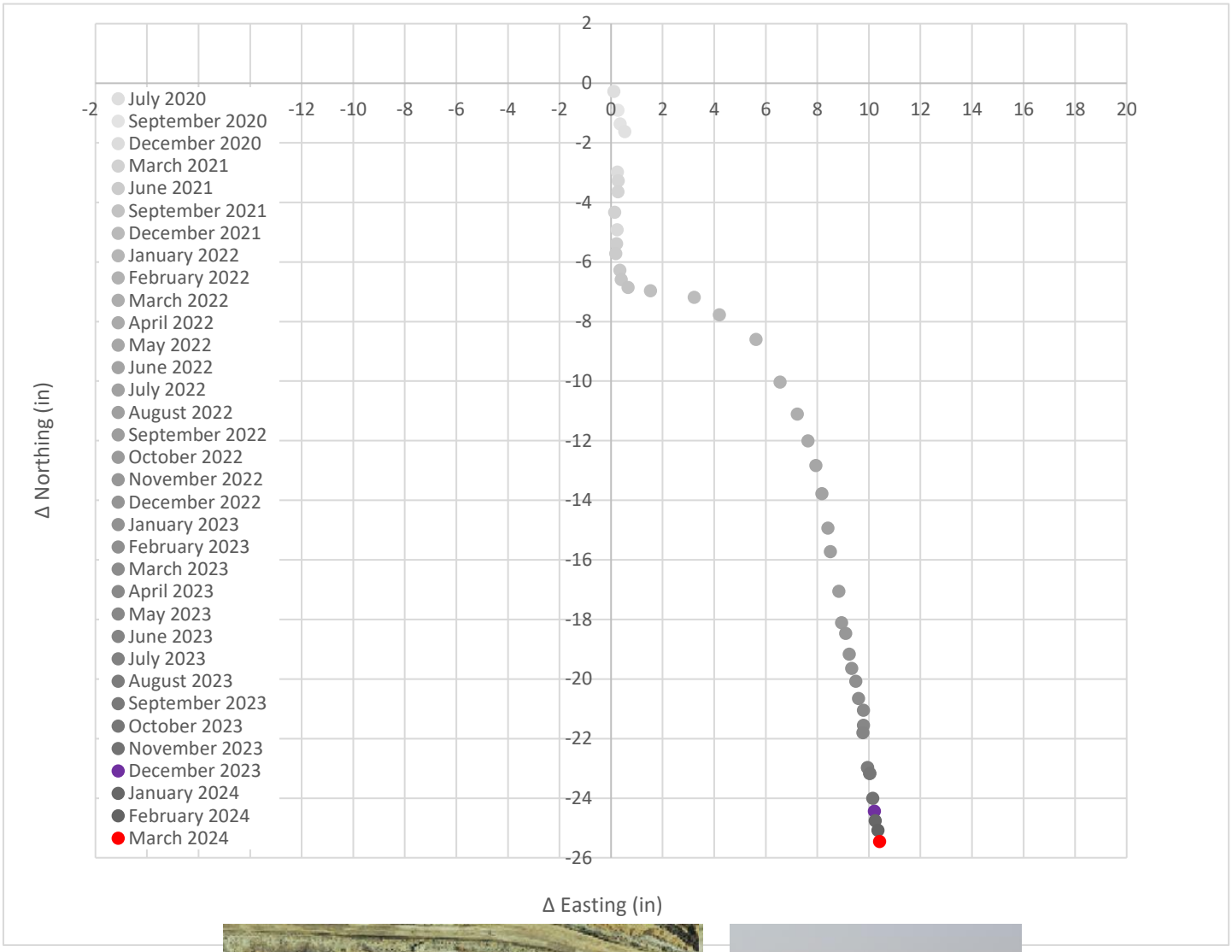
Knight Piésold CONSULTING

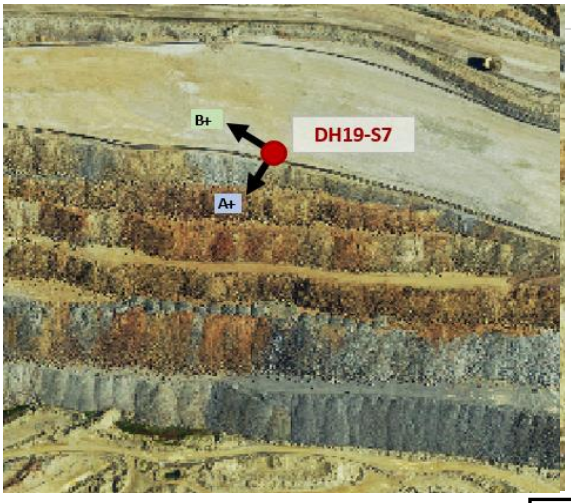
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE B.9

REV 0





NOTES:
1. COLLAR WANDER IS MONITORED USING GNSS INSTRUMENTATION INSTALLED AT THE INCLINOMETER COLLAR LOCATION.
2. THE PLOT ABOVE PRESENTS COLLAR POSITION BASED ON NORTH AND EAST CHANGE RELATIVE TO A JULY 1, 2020 BASELINE GNSS SURVEY.
3. NO DATA ARE AVAILABLE FOR NOVEMBER, 2020 WHILE THE INSTRUMENTATION WAS OFFLINE DUE TO A POWER MANAGEMENT ISSUE.

MONTANA RESOURCES, LLC

MONTANA RESOURCES

DH19-S7 GNSS-BASED INCLINOMETER COLLAR WANDER (JULY 1, 2020 THROUGH MARCH 31, 2024)

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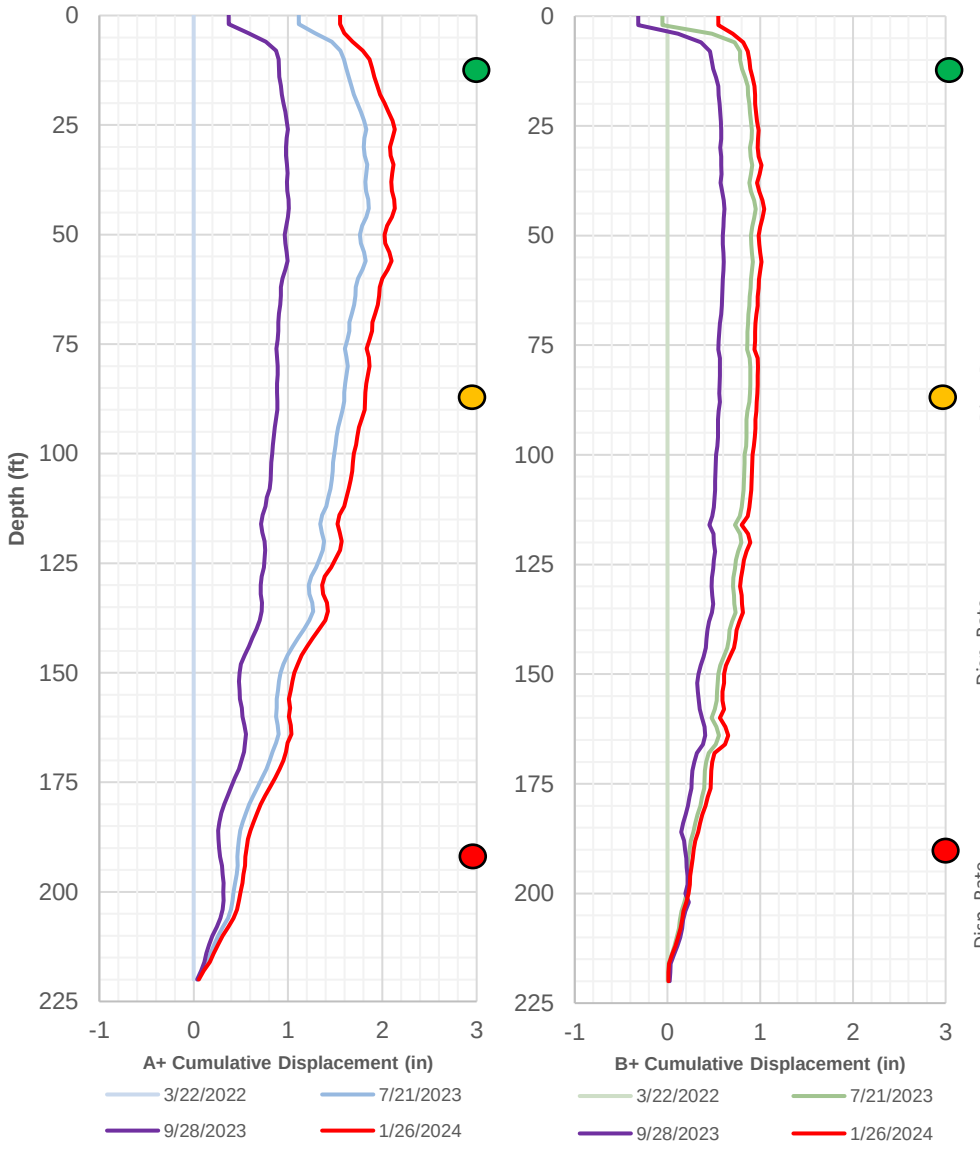
P/A NO. VA101-126/31

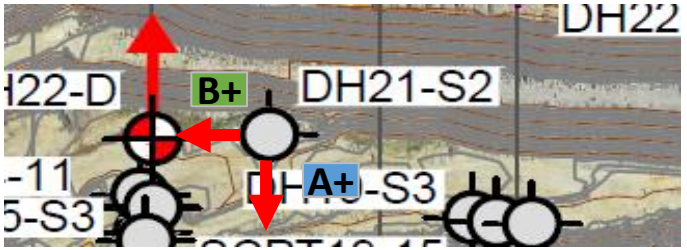
REF. NO. VA24-00764

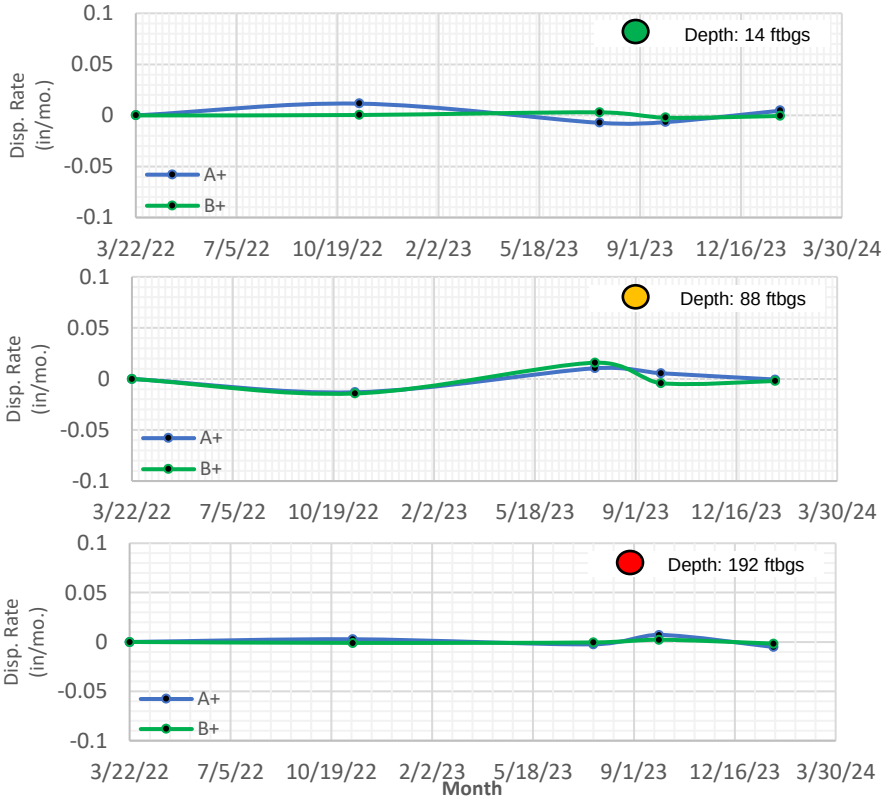
FIGURE B.10

REV 0

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	24APR'24	ISSUED WITH LETTER	CNN	KTD







NOTES:
1. CUMULATIVE DEFORMATION MAGNITUDES AND RATES ARE PRESENTED.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29JAN'24	ISSUED WITH LETTER	CNN	KTD

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CUMULATIVE SUBSURFACE DEFORMATION DRILLHOLE DH21-S2 (MARCH 2022 THROUGH MARCH 2024)

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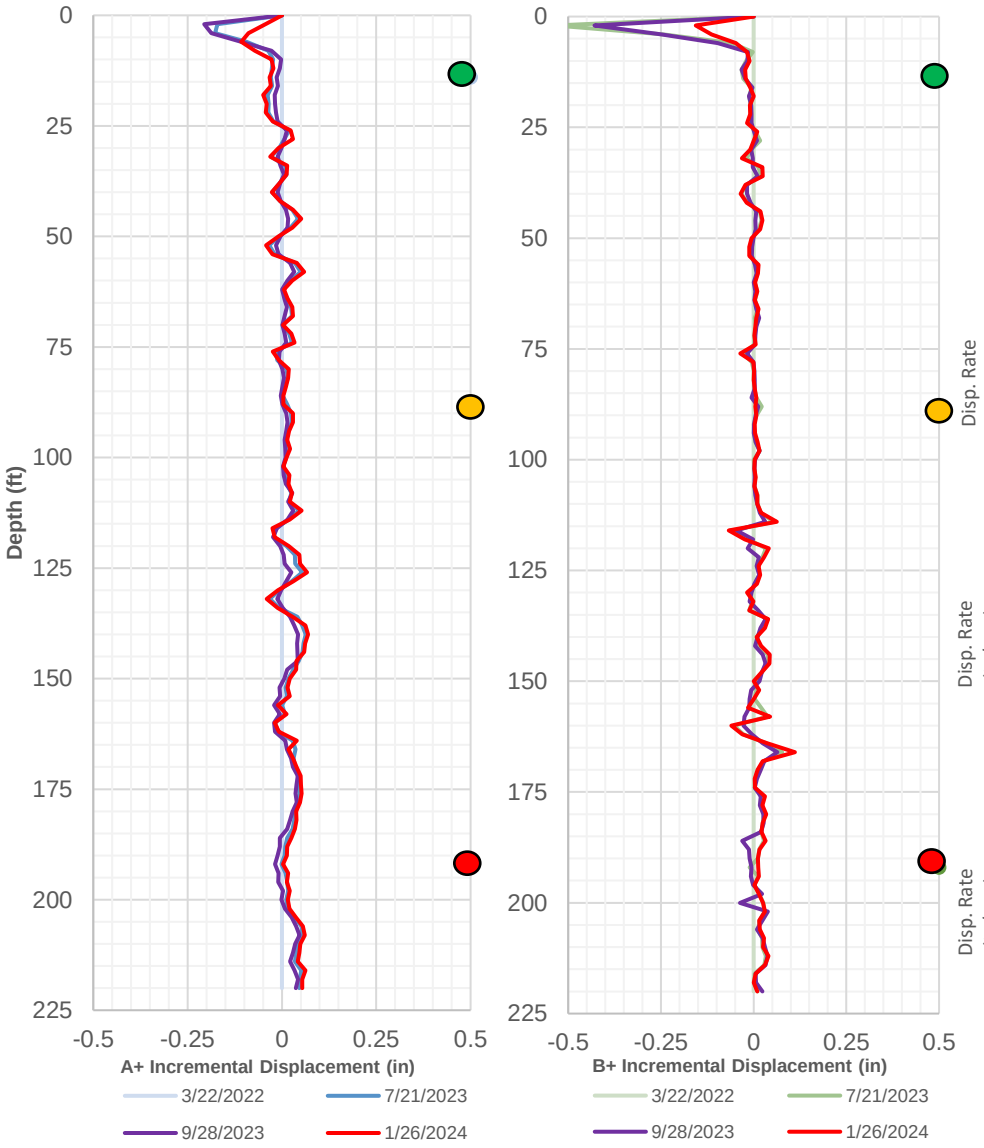
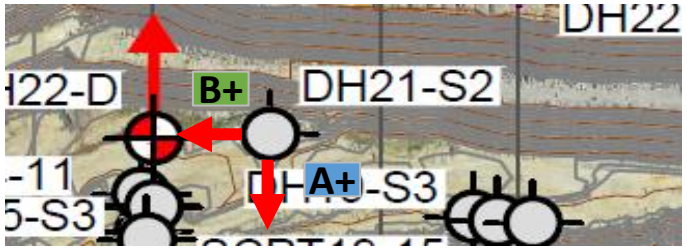
P/A NO. VA101-126/31

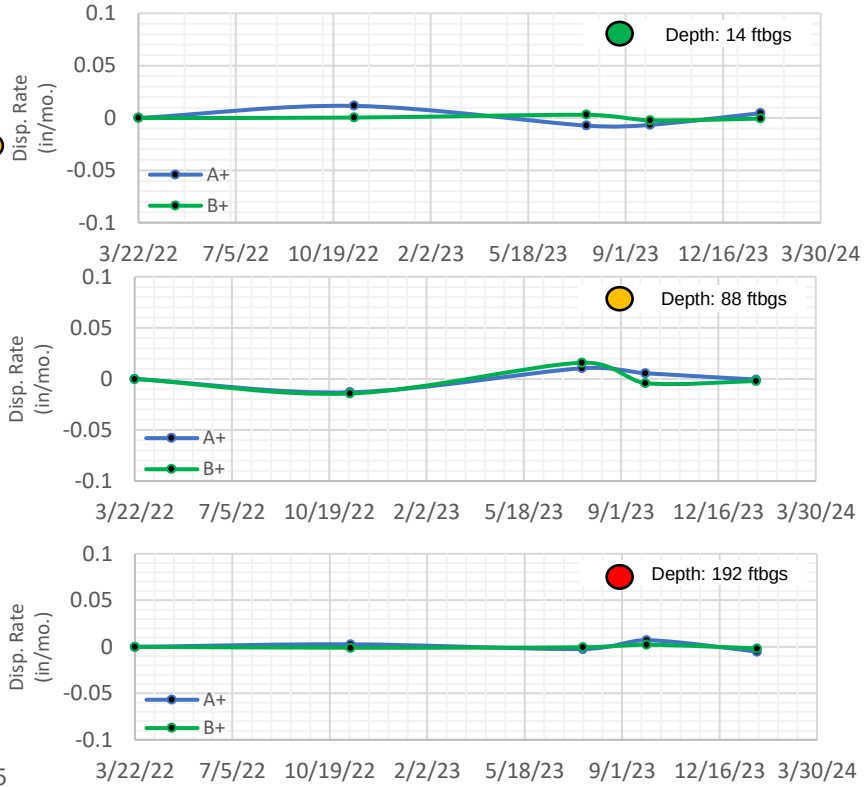
REF. NO. VA24-00764

FIGURE B.11

REV 0







NOTES:
1. INCREMENTAL DEFORMATION MAGNITUDES AND RATES ARE PRESENTED.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHWARD AND WESTWARD DISPLACEMENTS, RESPECTIVELY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29JAN'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

INCREMENTAL SUBSURFACE DEFORMATION DRILLHOLE DH21-S2 (MARCH 2022 THROUGH MARCH 2024)

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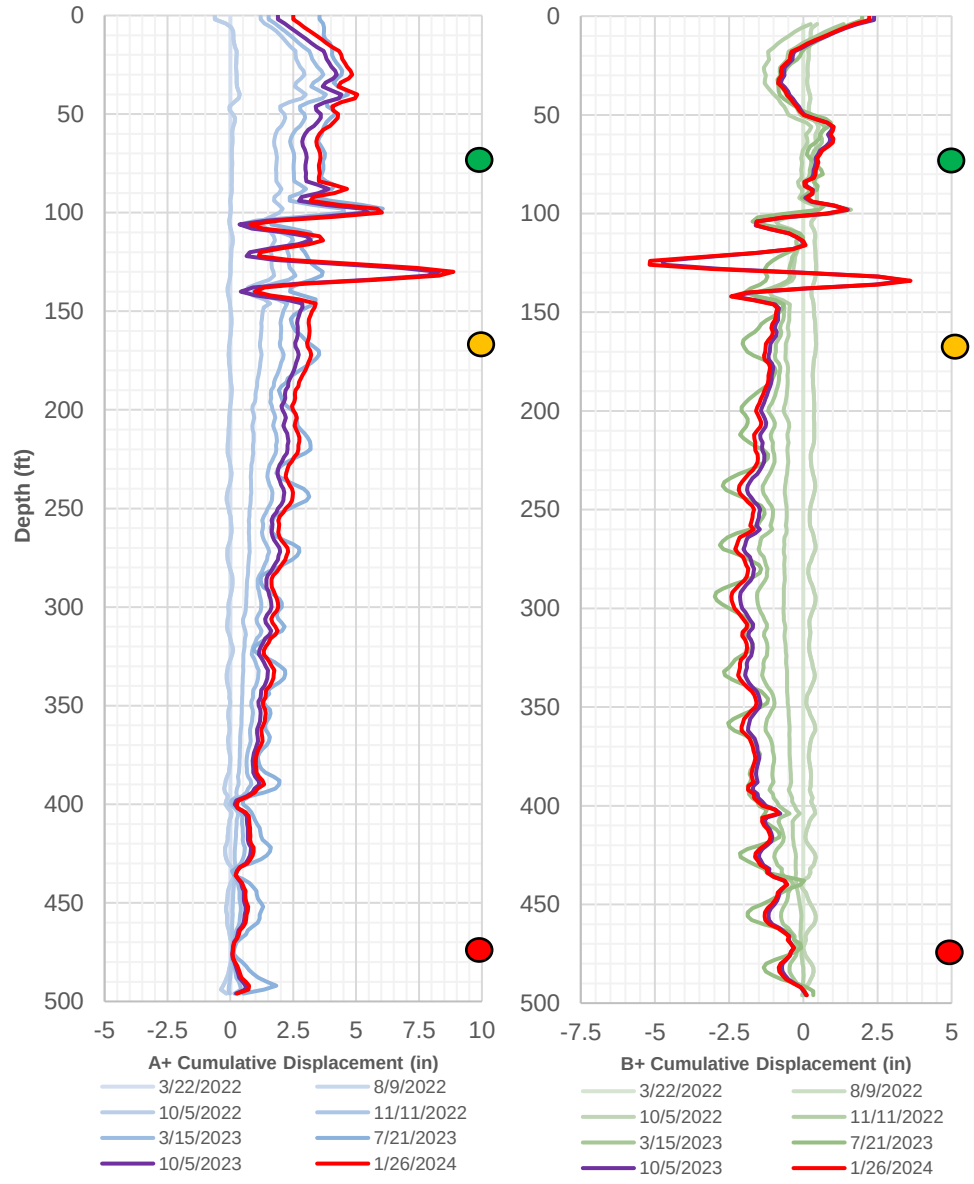
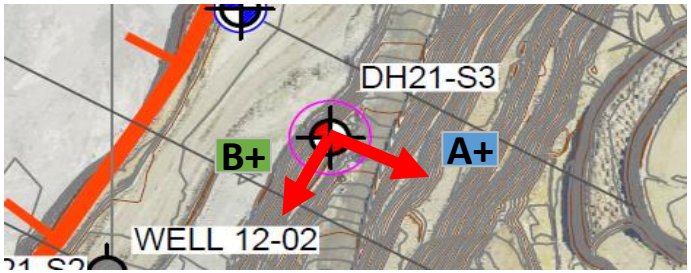
P/A NO. VA101-126/31

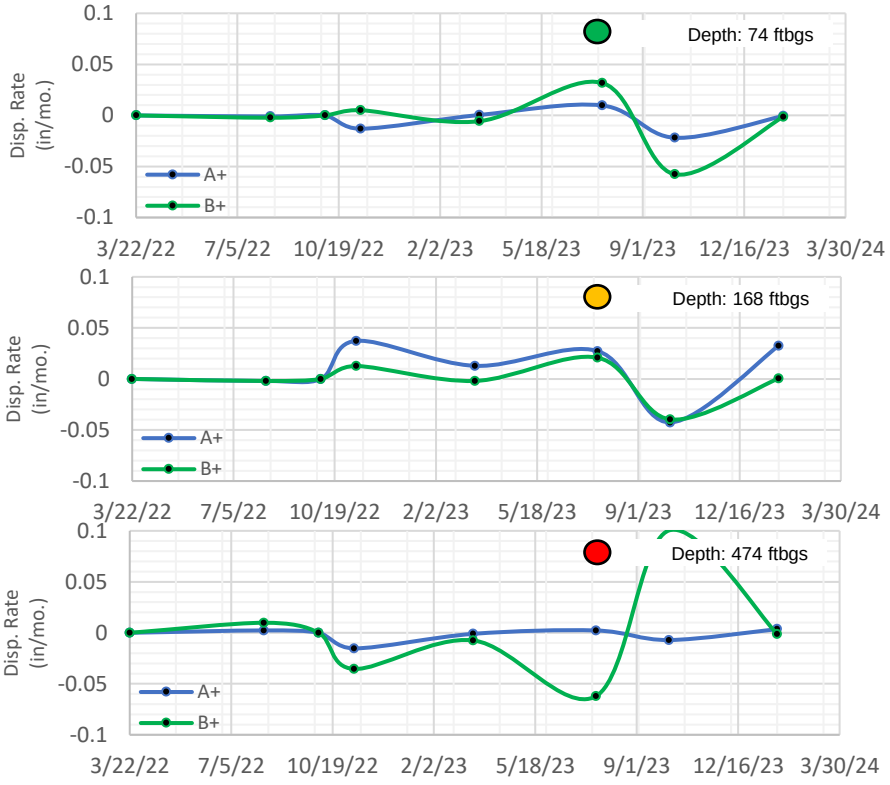
REF. NO. VA24-00764

FIGURE B.12

REV 0







NOTES:
1. CUMULATIVE DEFORMATION MAGNITUDES AND RATES ARE PRESENTED.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHEASTWARD AND SOUTHWESTWARD DISPLACEMENTS, RESPECTIVELY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29JAN'24	ISSUED WITH LETTER	CNN	KTD

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MONTANA RESOURCES

CUMULATIVE SUBSURFACE DEFORMATION DRILLHOLE DH21-S3 (MARCH 2022 THROUGH MARCH 2024)

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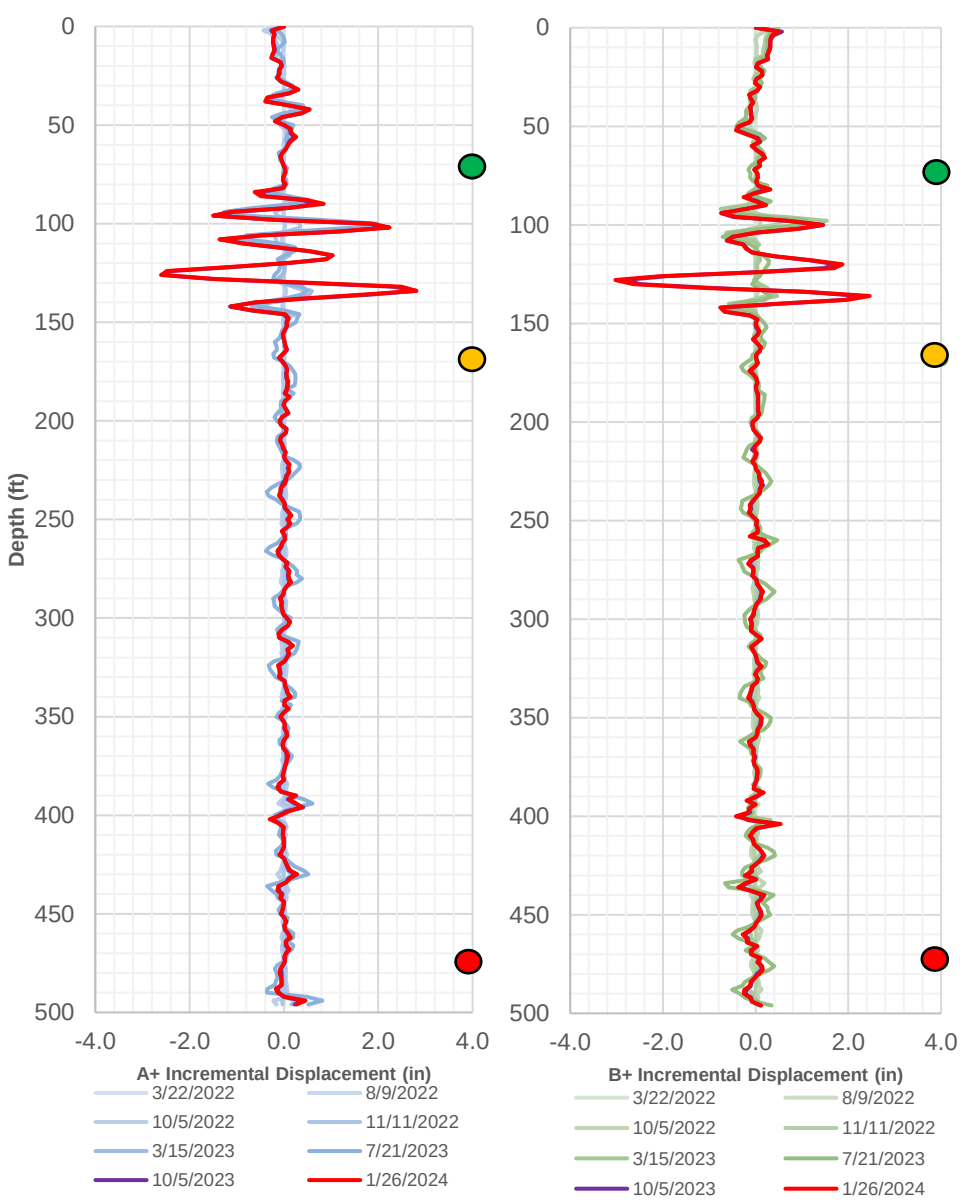
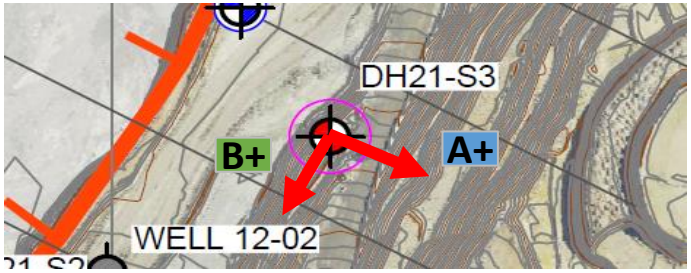
P/A NO. VA101-126/31

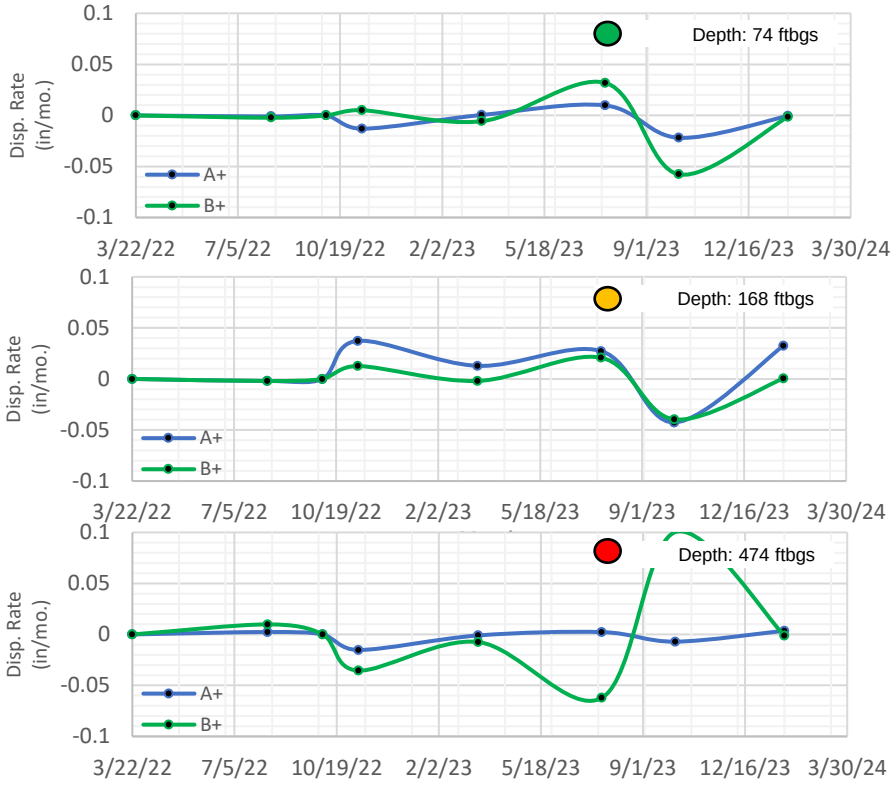
REF. NO. VA24-00764

FIGURE B.13

REV 0







NOTES:
1. INCREMENTAL DEFORMATION MAGNITUDES AND RATES ARE PRESENTED.
2. POSITIVE A+ AND B+ DEFORMATIONS INDICATE SOUTHEASTWARD AND SOUTHWESTWARD DISPLACEMENTS, RESPECTIVELY.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	29JAN'24	ISSUED WITH LETTER	CNN	KTD

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INCREMENTAL SUBSURFACE DEFORMATION DRILLHOLE DH21-S3 (MARCH 2022 THROUGH MARCH 2024)

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REF. NO. VA24-00764

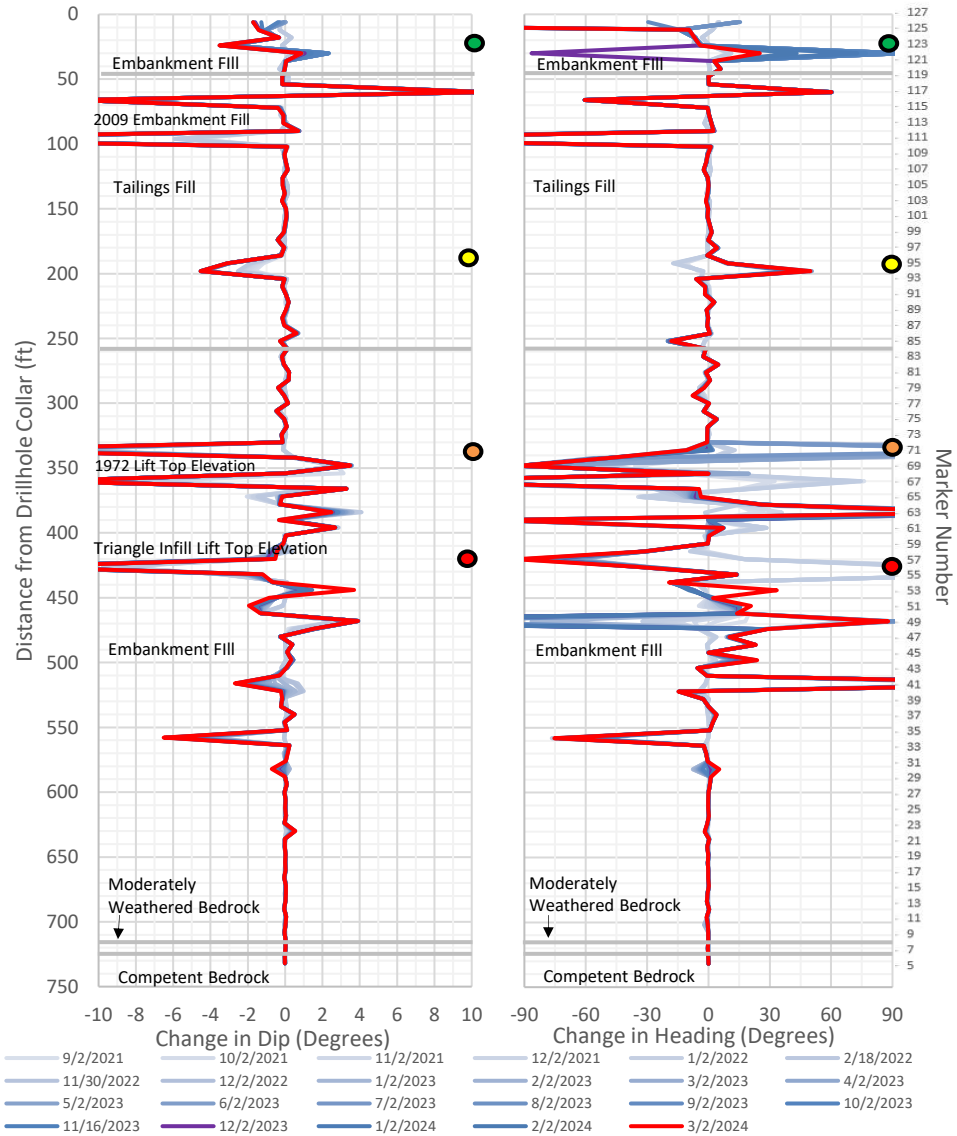
FIGURE B.14

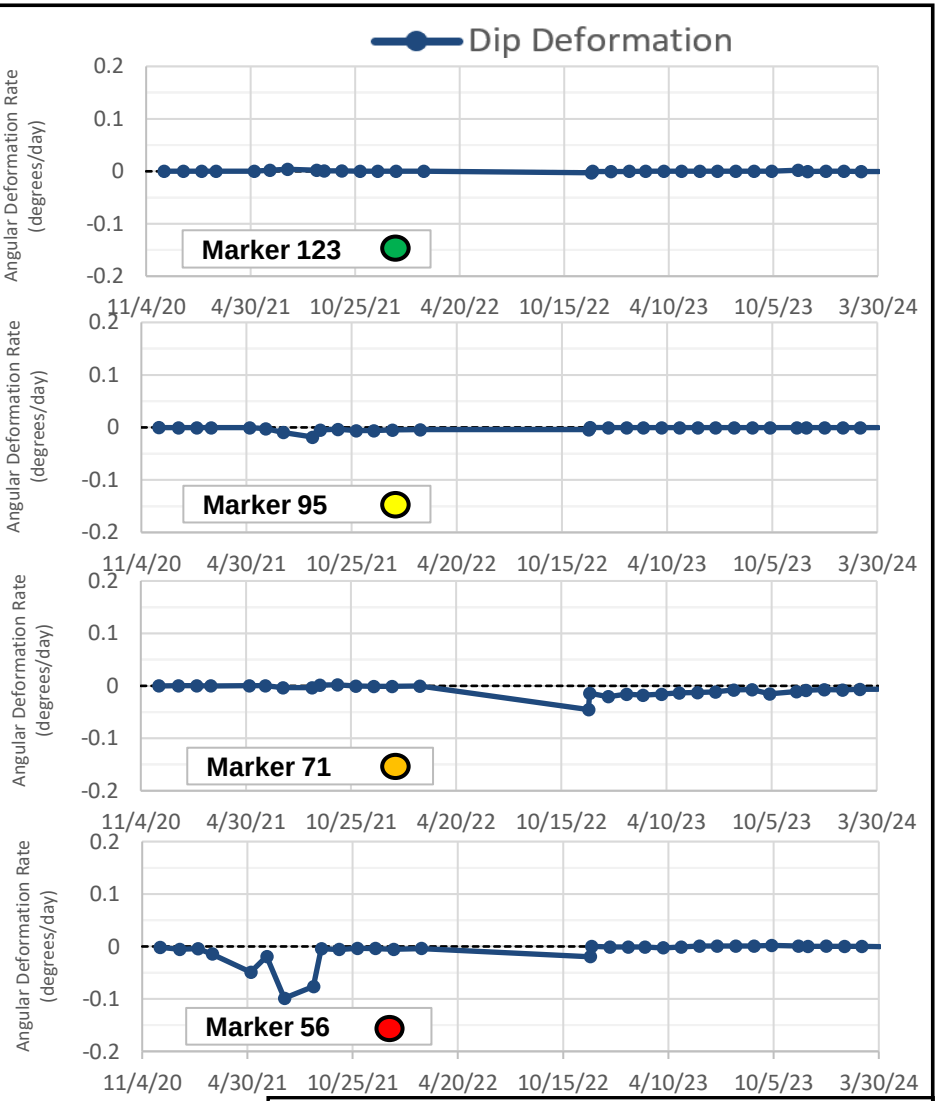
REV 0

APPENDIX C

Geo4Sight Deformation Plots

(Figures C.1 to C.2)





NOTES:

1. MONTHLY AVERAGE DEFORMATIONS ARE PRESENTED AND ARE RELATIVE TO A MONTHLY AVERAGE BASELINE FROM NOVEMBER 24, 2020 TO JANUARY 2, 2024.
2. DIP IS MEASURED FROM THE HORIZONTAL GROUND SURFACE TO THE SENSOR'S Y-AXIS. NEGATIVE CHANGE-IN-DIP INDICATES A STEEPENING SENSOR ORIENTATION.
3. HEADING IS MEASURED CLOCKWISE (CW) FROM THE MAGNETIC NORTHING. POSITIVE CHANGE-IN-HEADING INDICATES CW ANG. DEFORMATION.
4. GEO4SIGHT INSTRUMENTATION IN DH20-S2 WAS OFFLINE BETWEEN MARCH 3 AND NOVEMBER 30, 2022 DUE TO A WATER DAMAGED DATALOGGER.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	08FEB'24	ISSUED WITH LETTER	GOJ	KTD

MONTANA RESOURCES, LLC

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DH20-S2 GEO4SIGHT DIP AND HEADING ANGULAR DEFORMATION MAGNITUDES AND RATES (NOVEMBER 2020 TO MARCH 2024)

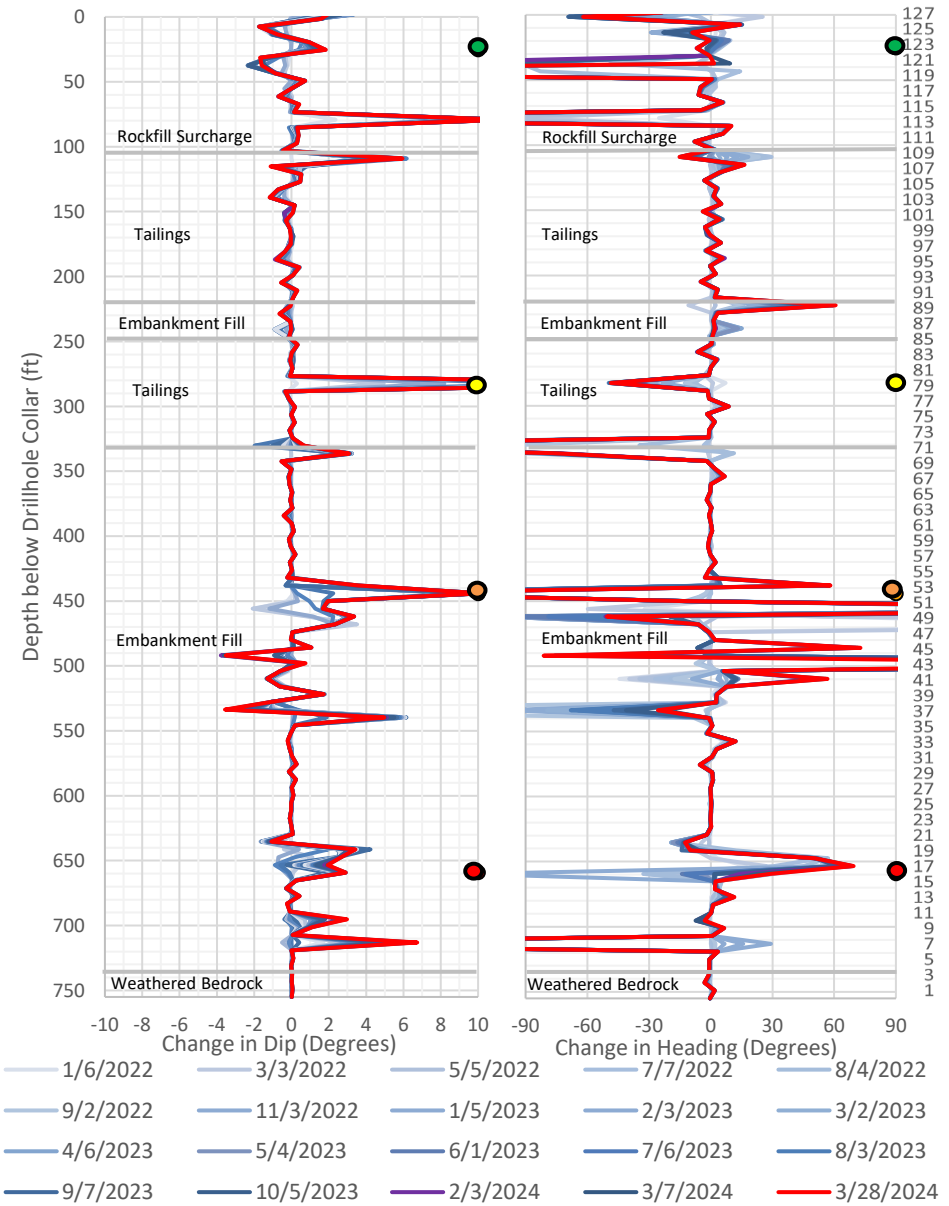
Knight Piésold CONSULTING

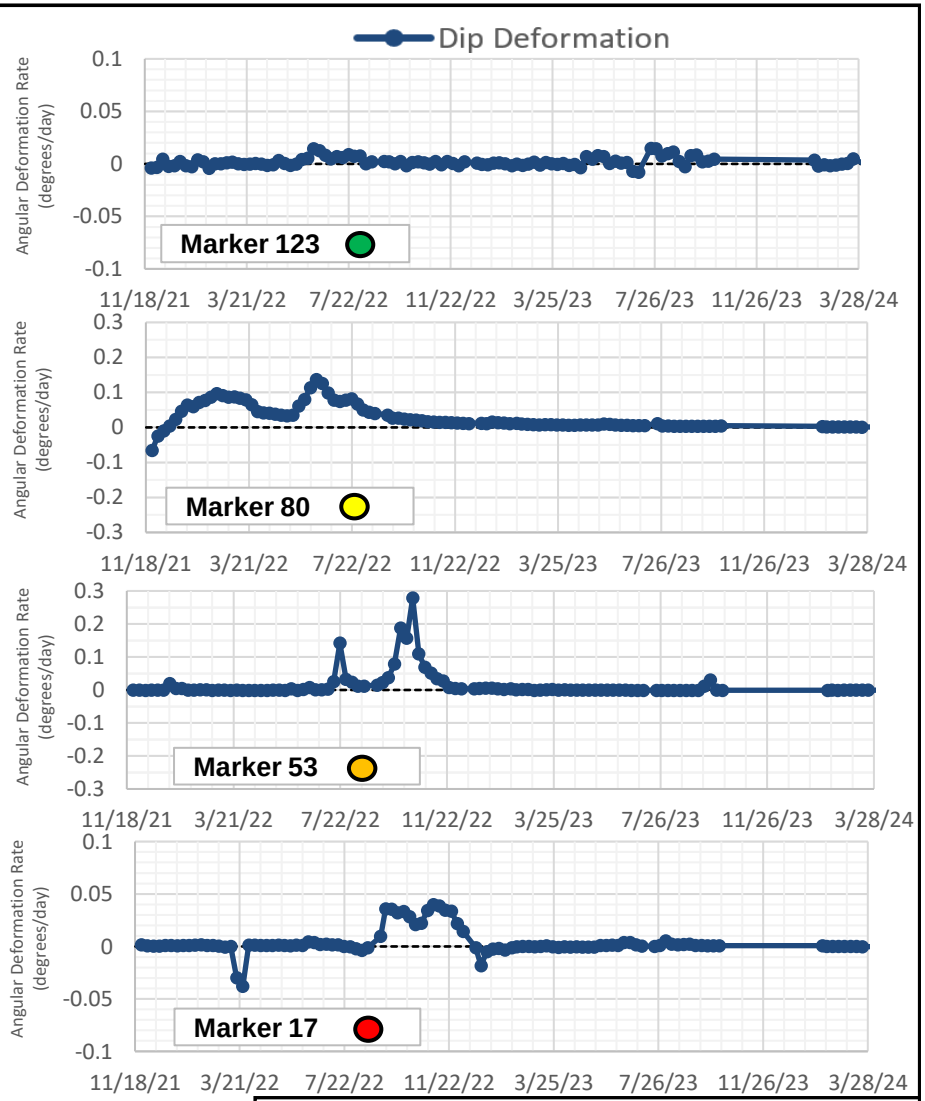
P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE C.1

REV 0





NOTES:

1. MONTHLY AVERAGE DEFORMATIONS ARE PRESENTED AND ARE RELATIVE TO A WEEKLY AVERAGE BASELINE FROM NOVEMBER 18, 2021 TO SEPTEMBER 28, 2023.
2. DIP IS MEASURED FROM THE HORIZONTAL GROUND SURFACE TO THE SENSOR'S X-AXIS. NEGATIVE CHANGE-IN-DIP INDICATES A STEEPENING SENSOR ORIENTATION.
3. HEADING IS MEASURED CLOCKWISE (CW) FROM THE MAGNETIC NORTHING. POSITIVE CHANGE-IN-HEADING INDICATES CW ANGULAR DEFORMATION.
4. GEO4SIGHT INSTRUMENTATION WAS OFFLINE BETWEEN OCTOBER 5, 2023, AND FEBRUARY 3, 2024 DUE TO CONSTRUCTION RELATED FILLING AND REGRADING ON EL. 6450 FT.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	08MAY'24	ISSUED WITH LETTER	CNN	KTD

MONTANA RESOURCES, LLC.

MONTANA RESOURCES

DH21-S4 GEO4SIGHT ANALYSIS
ANGULAR DEFORMATION PROFILES AND RATES
(NOVEMBER 2021 TO MARCH 2024)

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P/A NO. VA101-126/31

REF. NO. VA24-00764

FIGURE C.2

REV 0