COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: Cresson Project	**MINE/PROSPECTING ID#:** M-1980-244	**MINERAL:** Gold	**COUNTY:** Teller
INSPECTION TYPE: Monitoring	**INSPECTOR(S):** Elliott R. Russell	**INSP. DATE:** February 27, 2018	**INSP. TIME:** 10:30
OPERATOR: Cripple Creek & Victor Gold Mining Company	**OPERATOR REPRESENTATIVE:** Justin Bills & Clara Steward	**TYPE OF OPERATION:** 112d-3 - Designated Mining Operation	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** None	**BOND AMOUNT:** $207,991,188.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:**	**SIGNATURE DATE:** March 15, 2018

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected

(AR) RECORDS---------- PV	(FN) FINANCIAL WARRANTY-------- NA	(RD) ROADS---------- NA
(HB) HYDROLOGIC BALANCE---------- NA	(BG) BACKFILL & GRADING---------- NA	(EX) EXPLOSIVES--------- NA
(PW) PROCESSING WASTE/TAILING---- NA	(SF) PROCESSING FACILITIES------- PV	(TS) TOPSOIL---------- NA
(MP) GENL MINE PLAN COMPLIANCE- PV	(FW) FISH & WILDLIFE---------- NA	(RV) REVEGETATION---- NA
(SM) SIGNS AND MARKERS---------- NA	(SW) STORM WATER MGT PLAN---- NA	(CI) COMPLETE INSP---- N
(ES) OVERBURDEN/DEV. WASTE--------- NA	(SC) SEDIMENT CONTROL---------- NA	(RS) RECL PLAN/COMP-- NA
(AT) ACID OR TOXIC MATERIALS------- NA	(OD) OFF-SITE DAMAGE---------- NA	(ST) STIPULATIONS------- NA

Y = Inspected / N = Not inspected / NA = Not applicable to this report / PB = Problem cited / PV = Possible violation cited

PROBLEMS/POSSIBLE VIOLATIONS

INSPECTION TOPICS: General Mine Plan Compliance, Support Facilities On-site
POSSIBLE VIOLATION 1: Non-crushed ore (run-of-mine) was dumped in 200-foot lifts from the 9,850 lift, with steep side slopes onto down-sloping ground, and contacting the Drain Cover Fill for the geomembrane liner within the Squaw Gulch Valley Leach Facility. Additionally, crushed ore was dumped onto the Drain Cover Fill from the approximate 10,050 lift, approximately 200 feet above the active lift and out of sequence with the construction schedule of the permit for the Squaw Gulch Valley Leach Facility. The above mentioned activities are not authorized by the permit. The Operator has failed to follow the approved plan to stack ore in the Squaw Gulch Valley Leach Facility. Pursuant to C.R.S. 34-32-124(1), this is a possible violation for failure to comply with conditions of an order, permit, or regulation.
CORRECTIVE ACTIONS 1.1: This possible violation has been scheduled to be considered by the Mined Land Reclamation Board during the April 25-26, 2018 Board meeting. Official notice of the schedule and other details for the MLRB hearing will be provided under a separate document to be sent via certified mail to the Operator.
CORRECTIVE ACTION 1.1 DUE DATE: April 25-26, 2018
CORRECTIVE ACTIONS 1.2: Within 14 days of the signature date of this report, due March 29, 2018, the Operator shall file a Technical Revision (TR) with the Office addressing the process whereby the liner for the Squaw Gulch Valley Leach Facility is recertified as an Environmental Protection Facility. The TR shall address the applicable requirements of the Act and Rules for such facilities, including the applicable requirements of Rules 7.3 and 7.4.
CORRECTIVE ACTION 1.2 DUE DATE: March 29, 2018

INSPECTION TOPIC: Records
POSSIBLE VIOLATION 2: A slope failure has occurred in the Squaw Gulch Valley Leach Facility which may have damaged the geomembrane liner. The Operator failed to notify the Division of the slope failure, a possible violation of C.R.S. 34-32-121.5, Rule 8.1(a), and Rule 8.1(b). Pursuant to C.R.S. 34-32-124(1), this is a possible violation for failure to comply with conditions of an order, permit, or regulation.
CORRECTIVE ACTIONS: This possible violation has been scheduled to be considered by the Mined Land Reclamation Board during the April 25-26, 2018 Board meeting. Official notice of the schedule and other details for the MLRB hearing will be provided under a separate document to be sent via certified mail to the Operator.
CORRECTIVE ACTION DUE DATE: April 25-26, 2018

OBSERVATIONS

The Division of Reclamation, Mining and Safety (Division) conducted an inspection of the Cresson Project, Permit No. M-1980-244 (Permit), a Regular 112d(3) Designated Mining Operation Reclamation Permit with 6,007 permitted acres and an approved post-mining land use of Rangeland and Wildlife Habitat. The mine, operated by the Cripple Creek & Victor Golding Mining Company (CC&V or Operator), is located southeast of Cripple Creek, Colorado and north of Victor, Colorado. Elliott Russell, with the Division, inspected the site. Justin Bills and Clara Steward, representing the Operator, accompanied the inspection. This inspection was carried out as a part of the Division's routine inspection program. During the inspection the Division discovered and investigated a slope failure in the Environmental Protection Facility known as the Squaw Gulch Valley Leach Facility (SGVLF). The slope failure may have damaged the SGVLF's geomembrane liner. This report is specific to the SQVLF observations and subsequent investigation. Other observations will be documented in a separate report which will be sent at a later time.

Squaw Gulch Valley Leach Facility Inspection:
The Division observed the Squaw Gulch Valley Leach Facility (SGVLF) from a lookout point at approximately 10,100 feet, which is located between the Squaw Gulch and the Arequa Gulch Valley Leach Facilities (**Photos 1 and 2**). The Division observed a front-end loader loading haul trucks with stacked ore from an area within the SGVLF near the High Grade Mill (HGM) platform. The front-end loader was located on the 9,750 lift of the heap leach pad. The stacked ore was being removed and hauled approximately 2,000 feet northwest and up to the 9,850 lift of the SGVLF. Crushed ore is hauled and placed in the SGVLF; so, the observed front-end loader removing already placed ore in the SGVLF is not a typical activity observed at the facility. The Division inquired about the observed activities with Mr. Bills and Ms. Steward, however they were unfamiliar with the situation involving the front-end loader. The Division requested that Mr. Bills and Ms. Steward locate CC&V personnel who could explain the unusual activity occurring in the SGVLF and also to get closer to the front-end loader activity for further observations.

The Division met with Will Adams who stated a slope failure occurred while dumping the 9,850 lift across the side of the SGVLF. Mr. Adams stated that he believed the slope failure occurred sometime around the beginning of the year. Mr. Adams explained to the Division that CC&V wasn't sure if the slope failure had occurred in only the dumped ore material, the contact between the ore and the Drain Cover Fill (DCF), or between the DCF and the geomembrane liner. Mr. Adams further explained to the Division that to understand the extent of the possible damage caused by the slope failure, CC&V conducted conductivity tests using probes in the ore. According to Mr. Adams, the conductivity tests conducted by CC&V came back inconclusive. The Division was informed by Mr. Adams that CC&V was now removing the ore associated with the slope failure with the front-end loader in order to expose and remove the DCF to uncover and inspect the geomembrane liner for possible damage.

The Division was accompanied by Dylan Roberts into the SGVLF to inspect the area of the slope failure. Mr. Roberts stated to the Division that the slope failure had occurred sometime before the beginning of the year. The Division was informed the slope failure occurred when CC&V dumped ore from the 9,850 lift down to the 9,650 lift (**Photo 3**). Lifts in the SGVLF are permitted to be 100 feet high. In the area of the slope failure, the dump was approximately 200 feet high as a portion of the 9,750 lift was not completed before starting the 9,850 lift. While inspecting the area of the slope failure, the Division observed materials within the placed ore much larger than the normal crushed ore (**Photo 4**). The normal crushed ore is sized to a nominal 3/4 – 7/8 inch. After the inspection, on March 1, 2018, Mr. Bills informed the Division that CC&V is approved to use run-of-mine material in SGVLF. However, the Permit states that ore loading in the SGVLF is approved for crushed ore and agglomerated HGM tailings. The Permit does not authorize ore loading with run-of-mine material at the SGVLF. The Division also observed the slopes of the 9,850 lift in the area of the slope failure to be near the angle of repose, approximately 1.4H:1V. The Permit requires 2.5H:1V operational ore side slopes against down-sloping ground. The Division observed material dumped away from the side of the SGVLF and onto a downhill grade of DCF built at 2H:1V. The Permit requires the Operator to dump this ore in the SGVLF at a gentler slope (2.5H:1V, *not* 1.4H:1V). The Division believes the height of the ore lift, the inconsistent and variable size of the material being dumped, and the steep operational side slope of the dump being placed on a down slope, were all factors which led to the slope failure. Observations made during the inspection and recorded in this report indicate the Operator has failed to follow the approved plan for SGVLF required by the Permit. The above-mentioned issues are cited as Possible Violation 1, additional details are provided on page two of this report.

A photograph taken during the Division's January 16, 2018 aerial inspection shows the SGVLF slope failure prior to the observations made during the February 27, 2018 inspection (**Photo 5 and 6**). Additionally, as shown in Photos 5 and 6, crushed ore has also been end dumped onto the DCF from the approximate 10,050 lift. This new approximate 10,050 lift is in conflict with the standard ore loading sequence and operational ore side slopes against down-sloping ground as authorized by the permit. These issues are also cited as Possible Violation 1,

additional details are provided on page two of this report.

After the inspection, on March 13, 2018, Ms. Steward informed the Division the slope failure occurred on December 16, 2017. Operators are required to notify the Office, as soon as reasonably practicable, but no later than twenty-four hours, after the Operator has knowledge of a failure or imminent failure of any impoundment, embankment, stockpile or slope which poses a reasonable potential for danger to human health, property or the environment per the requirements of C.R.S. 34-32-121.5 and Rule 8.1(a). Operators are also required to notify the Office, as soon as reasonably practicable, but no later than twenty-four hours, after the Operator has knowledge of a failure or imminent failure of any Environmental Protection Facility designed to contain or control designated chemicals or process solutions as identified in the permit per the requirements of C.R.S. 34-32-121.5 and Rule 8.1(b). The Operator failed to notify the Division of the slope failure which occurred in close proximity to the geomembrane liner. Following the slope failure, the Operator conducted conductivity probe tests and began removal of material to determine if the geomembrane liner was compromised. These issues are cited as Possible Violation 2, additional details are provided on page two of this report.

Although active leaching was not proximal to the slope failure area during the inspection, the Operator should formally commit to cease all leaching activities on the 9,850 lift within 500 feet of the slope failure and possible damaged liner area. Authorization by the Division to resume these leaching activities may include the review and approval of a recertification of the EPF. During the inspection, the Division examined the SGVLF Leak Detection System and recorded all sumps as dry. The Operator should also formally commit to increasing the SGVLF Leak Detection System inspections from a weekly basis to daily. **To prevent further enforcement action by the Division, the Operator is strongly encouraged to submit written confirmation of voluntary and limited cessation of the leaching activities and commencement of daily leak detection system inspections, as described above, within 24 hours of receipt of this inspection report.**

This concludes the Division's Inspection Report; a subset of photographs taken during the inspection, and the January 16, 2018 aerial photograph are included below. For any additional information or questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at **303-866-3567 x8132**, or by email at elliott.russell@state.co.us.

Inspection Contact Address
Mike Schaffner
Cripple Creek & Victor Gold Mining Company
100 North Third Street
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EC: Meg Burt, Justin Bills, and Clara Steward with CC&V
Tony Waldron, Wally Erickson, Tim Cazier, and Amy Eschberger with DRMS
Jeff Fugate and Scott Schultz, AGO for DRMS

PHOTOGRAPHS

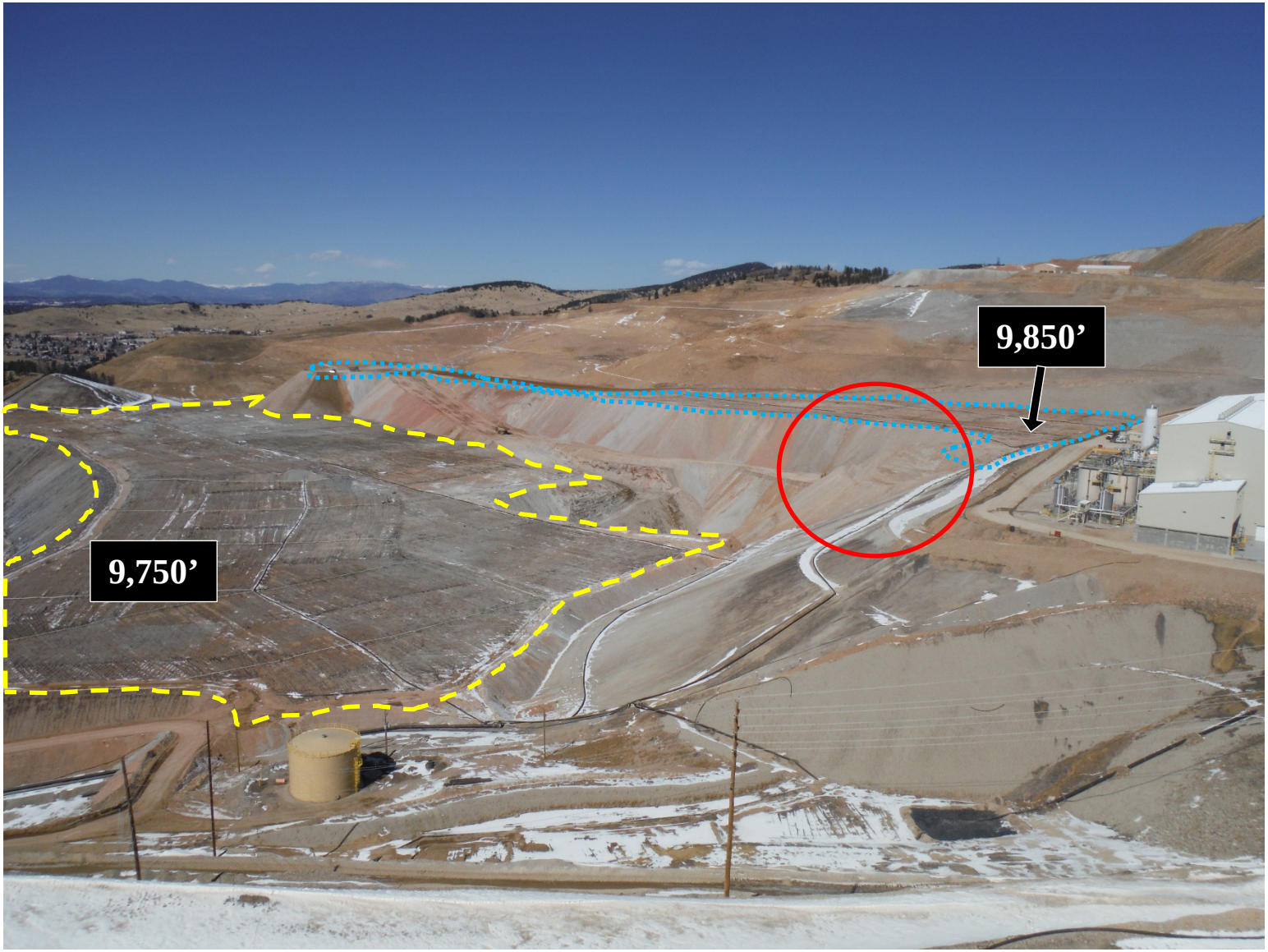

Photo 1. Overview of the SGVLF, top of 9,750 lift outlined in dashed yellow, top of 9,850 lift outlined in dotted blue, area of front-end loader activity circled in red; looking northwest.

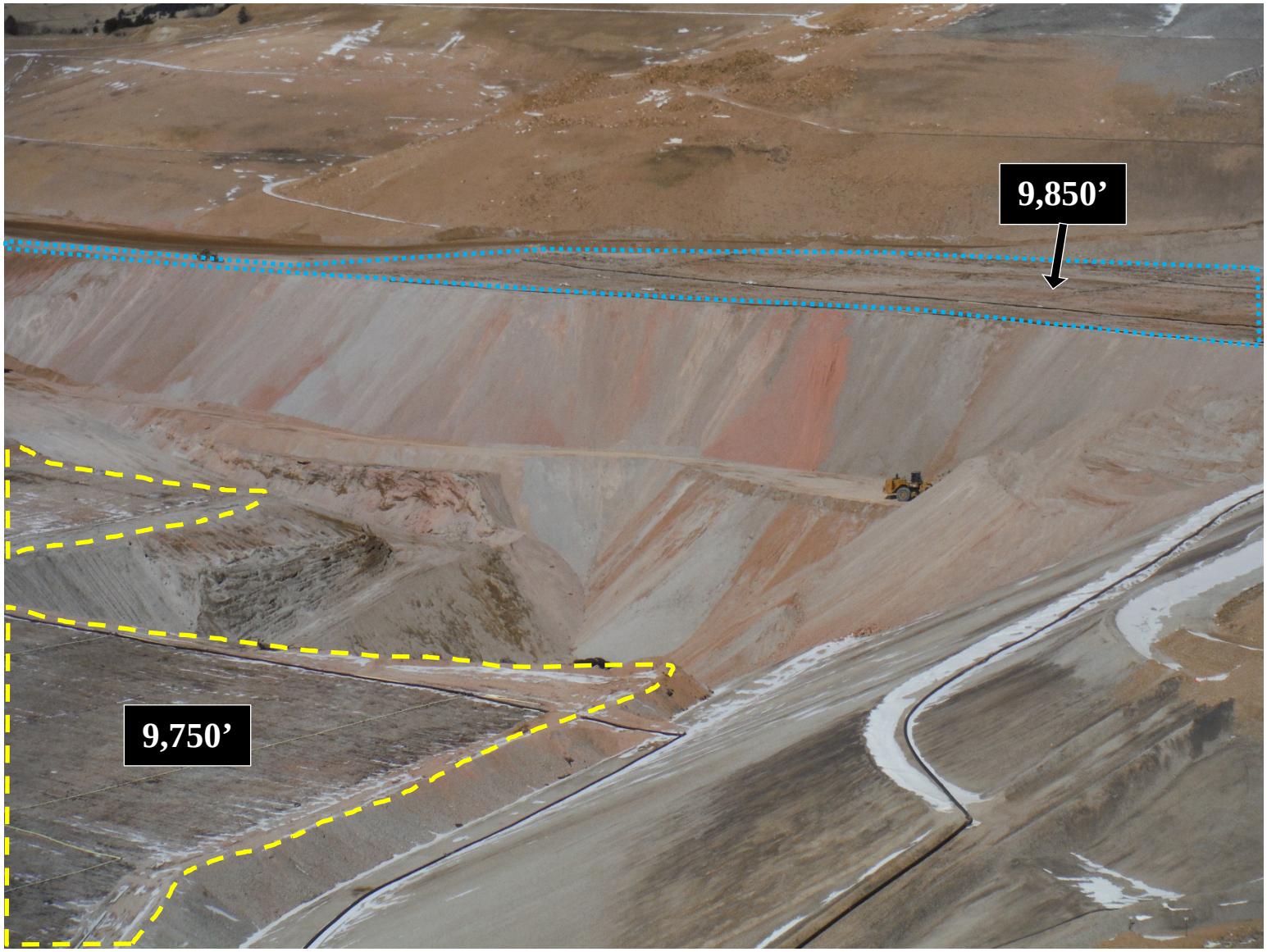

Photo 2. Close up of front-end loader activity in the SGVLF, top of 9,750 lift outlined in dashed yellow, top of 9,850 lift outlined in dotted blue; looking north.

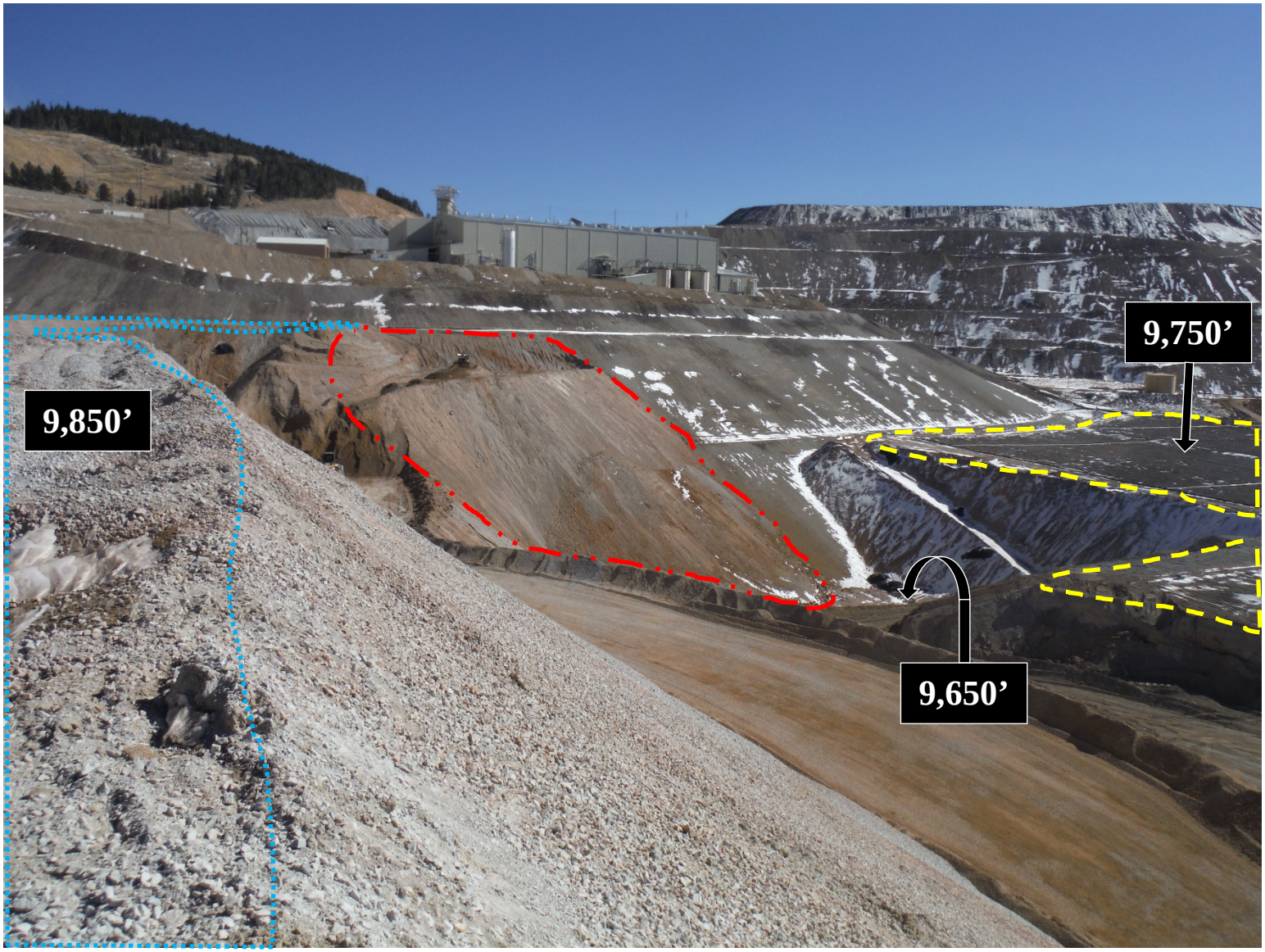

Photo 3. Area of slope failure outlined in dash-dot-dot red, top of 9,850 lift outlined in dotted blue, top of 9,750 lift outlined in dashed yellow; looking southeast.

Photos 4. Area of slope failure, non-crushed ore (run-of-mine material) circled in red; looking south.

Photo 5. Aerial photo taken January 16, 2018; looking southeast.

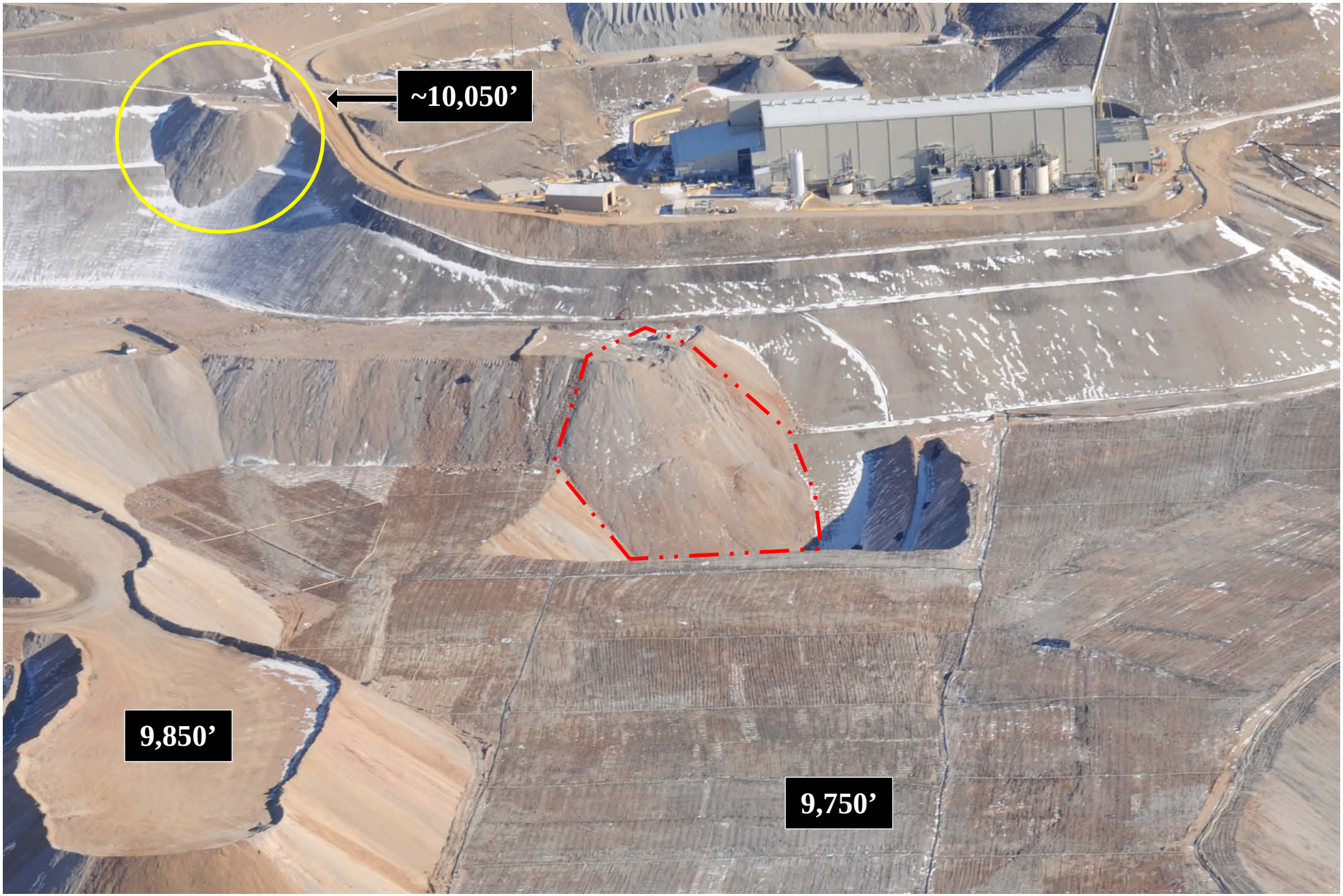

Photo 6. Zoomed in portion of Photo 5, area of slope failure outlined in dash-dot-dot red, approximate 10,050 lift circled in yellow; looking southeast.