



MINERALS PROGRAM INSPECTION REPORT

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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: Cross Gold Mine	MINE/PROSPECTING ID#: M-1977-410	MINERAL: Gold, copper, silver, zinc and lead	COUNTY: Boulder
INSPECTION TYPE: Preoperation Inspection	INSPECTOR(S): Amy Eschberger, Peter Hays	INSP. DATE: June 24, 2021	INSP. TIME: 10:00
OPERATOR: Grand Island Resources LLC	OPERATOR REPRESENTATIVE(S): Richard Mittasch, Daniel Pollock	TYPE OF OPERATION: 110(2) - Hard Rock Limited Impact	

REASON FOR INSPECTION: Preoperation Inspection	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$39,811.00
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None
WEATHER: Cloudy	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: September 14, 2021

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

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

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

OBSERVATIONS

This was a pre-operation inspection of the Cross Gold Mine (Permit No. M-1977-410) conducted by Amy Eschberger and Peter Hays of the Division of Reclamation, Mining and Safety (Division) in response to an Amendment application (AM-2) filed with our office on February 8, 2021. The inspection was also partly conducted to observe the stabilization work completed on the slope above the Idaho Tunnel portal in relation to the Division's review of Technical Revision No. 9 (TR-9). The operator was represented during the inspection by Richard Mittasch and Daniel Pollock. The site is located approximately 4 miles northwest of Nederland, CO in Boulder County, at an elevation of approximately 9,760 feet. Access to the site is off of Caribou Road. A separate entrance exists for each of the two mines at the site, the Cross Mine (to the south) and the Caribou Mine (to the north). **Photos 1-54** taken during the inspection are included with this report.

This is a 110(2) underground mining operation permitted for 8.95 acres to mine for gold, silver, copper, zinc, and lead. The current permit area includes two historic mine disturbance areas, the Cross Mine (at the southern edge of the valley) and the Caribou Mine (at the northern edge of the valley). Historic waste rock piles were left in both mine areas. However, much of the historic waste rock material at the Cross Mine was removed from the site in the 1970's to create a more level surface for parking and equipment storage. The two mines are separated by Coon Track Creek, a perennial stream that is tributary to North Beaver Creek, which flows into Middle Boulder Creek before entering the Barker Meadow Reservoir (in Nederland). This creek exhibits steady low flows year-round below the mine site due to discharges from the Cross and Caribou mines, with high flows during snowmelt runoff. Wetland areas associated with the creek were surveyed within the permit area, for which a Jurisdictional Determination has been obtained from the U.S. Army Corps of Engineers.

Discharge from the Cross Mine and Caribou Mine (Idaho Tunnel) portals is directed to a series of plastic-lined ponds. Discharge from the Cross Mine reports directly to Pond 1 via pipeline. This water requires the daily addition of lime to meet discharge standards for the NPDES permit the operator maintains with the CDPHE. The treated water is then directed via pipeline to the larger Pond 2 (located in the middle of the valley, between the two mine areas). Discharge from the Caribou Mine expresses from the Idaho Tunnel and is directed through settling Ponds 3A, 3B, and 3C, then to Pond 2 via pipeline. According to the approved permit, discharge from the Caribou Mine does not require lime treatment to meet standards for the NPDES permit. The combined mine water in Pond 2 is then discharged via pipeline to the approved outfall at Coon Track Creek. The operator conducts bi-monthly water sampling from the discharge point and regularly reports the data to CDPHE in accordance with the NPDES permit. The operator records daily temperature, pH, and flow readings for the discharges, and also records daily creek flow measurements at an installed weir located upgradient of the mine disturbance. These logs are maintained in the Cross Mine office building.

The approved mining plan for the site is centered on mining, waste rock storage, and ore storage activities in the Cross Mine area, and only waste rock storage activities in the Caribou Mine area. The operation is not currently authorized to mine the Caribou Mine, only to rehabilitate the tunnel and portal. No on-site processing is to occur under the approved permit, besides basic screening/sizing of waste rock for aggregate use. Run of mine ore is temporarily stored in the large warehouse building in the Cross Mine area to be shipped off-site for processing. No designated chemicals are to be used or stored on site. According to the approved permit, waste rock at the site consists primarily of quartz monzonite and gneiss, and is not considered to be acid-producing or metals-leaching material. The approved post-mining land use for the site is forestry with limited residential use associated with the historic cabin present on site.

The Division has approved multiple revisions for this permit since its last inspection on September 15, 2020, including: a permit transfer (SO-2) from Calais Resources Colorado, Inc. to Grand Island Resources, LLC (approved on October 16, 2020), a Technical Revision (TR-8) to provide a detailed plan for the rehabilitation

and replacement of the liners on Ponds 3A-3C at the Caribou Mine as well as additional improvements to the water treatment system (which included a surety increase of \$8,311.00 to the current bond amount of \$39,811.00; approved on November 10, 2020), an Acreage Reduction (AR-1) to release 0.4 acre of undisturbed lands from the southern portion of the permit area (giving the current 8.95 acre permit area; approved on November 12, 2020), a Technical Revision (TR-7) to present geotechnical stability analyses for the slopes adjacent to the Idaho Tunnel portal (which included a stipulation to present additional stability information in a subsequent revision; approved on December 3, 2020), and a Technical Revision (TR-9) to provide the additional stability analysis information for the slopes adjacent to the Idaho Tunnel portal, as required by the TR-7 stipulation (approved after this inspection, on August 23, 2021). The Division also approved a Notice of Intent to Conduct Prospecting Operations (NOI; File No. P-2021-013) for a drilling program to occur in support of the mine operation (approved on July 13, 2021), and is currently reviewing two other NOIs (Files No. P-2021-015 and P-2021-016) for additional drilling programs in support of the mine operation.

In its last inspection report, dated October 9, 2020, the Division cited a problem for areas affected outside of the approved permit boundary, including the Idaho Tunnel portal area, the area west of and including a portion of settling Ponds 3A-3C, the oil shed and disturbed area adjacent to this shed, and the northern edge of Pond 2. Some of these off-site disturbed areas have existed for many years, but were recently observed to be “off-site” after the operator conducted a new survey and re-staked the permit boundary. The off-site disturbance at the Idaho Tunnel portal area recently occurred during the operator’s rehabilitation of the tunnel and excavation and stabilization of the slope surrounding the portal. The off-site disturbance adjacent to Ponds 3A-3C may have occurred during the recent rehabilitation of these ponds, in which the ponds were re-excavated and their liners replaced. The corrective action for this problem required the operator to submit an Amendment application by January 7, 2021, to include, at a minimum, all areas currently affected outside the approved permit boundary, with updated mining and reclamation plans and maps to address the utilization of these areas by the operation and their reclamation.

The operator submitted the required Amendment application (AM-2) on January 8, 2021. AM-2 was called complete (filed) for review purposes on February 8, 2021. The operator published the newspaper notice required by Rule 1.6.2(1)(d) on February 25, 2021 in The Mountain-Ear. Per Rule 1.7.1(2)(b), the public comment period closed ten (10) days after the newspaper publication date, on March 7, 2021. During this period, the Division received comments on the application from the Division of Water Resources (DWR), History Colorado, and Boulder County Community Planning and Permitting (BCCPP). No objections were received on the application. However, the agency comment letters identify a number of issues that need to be addressed by the operator in order to obtain full compliance at the site. For example, DWR requires the operator to obtain a substitute water supply plan (SWSP) or a court-decreed plan for augmentation to replace evaporative depletions from the exposed surface area of the settling ponds. Additionally, BCCPP requires the operator to modify their Special Use Permit to address particular structures and activities not covered under the existing Development Agreement. The operator must inform the Division through the adequacy review process of how it intends to address any compliance issues raised by commenting agencies.

The Division has issued two adequacy letters on AM-2 thus far, on February 23, 2021 and on July 22, 2021. The operator responded to the Division’s first adequacy review letter on May 25, 2021. The Division is currently waiting for the operator’s response to the adequacy items identified in its second adequacy review letter. The decision date for AM-2 was initially set for March 10, 2021 (30 days from filing). This date has been extended three times at the operator’s request, and is currently set for October 8, 2021.

AM-2 proposes a 1.04 acre increase in the permit area (see enclosed Exhibit E – Map 2), for a new permit area of 9.99 acres (the maximum permit area allowed under a 110 permit; an expansion to 10 acres or more would require a permit Conversion to a 112 permit). The proposed increase includes four small expansion areas at the

Cross-Caribou site, totaling 0.65 acres (see enclosed Exhibit E – Map 3), and two new mine openings located above the site, totaling 0.39 acre (see enclosed Exhibit E – Map 4). The proposed expansion areas at the Cross-Caribou site cover the off-site affected lands at the Idaho Tunnel portal area, the oil shed and equipment storage area adjacent to the shed, the area west of Ponds 3A-3C, and the area north of Pond 2 (including a portion of the water pipelines). AM-2 also proposes constructing a new internal road (approximately 30 feet wide x 885 feet in length) at the Cross-Caribou site to connect the two mines, which would provide safer access from one mine to the other than the publicly-used Caribou Road which is currently used. The proposed expansion area west of Ponds 3A-3C will allow additional space to construct the new road. The two new mine openings proposed in the application include the existing Potosi Shaft, located approximately 0.35 mile northwest from the Cross-Caribou site, off of Caribou Road, and the existing Caribou Level 300 Portal, located approximately 0.9 mile northwest of the Cross-Caribou site, off of a U.S. Forest Service (USFS) Road.

The Division first inspected the Cross-Caribou site. The operator has delineated the four proposed expansion areas with white PVC pipes and t-posts. The proposed expansion area near Pond 2 consists mostly of undisturbed forestland and the northernmost corner of this pond (including a portion of the above-ground pipelines which discharge mine water into the pond). This area will only be used by the operation for running water pipelines to Pond 2. The proposed expansion area near Ponds 3A-3C includes a portion of Coon Track Creek and its associated wetlands, undisturbed forested areas, and the western edge of Pond 3A. Some disturbance in this area may occur in the construction of the new road between the Cross and Caribou Mines. An existing footpath exists between Pond 1 (at the Cross Mine) and Ponds 3A-3C (at the Caribou Mine). It appears the northern portion of the existing footpath may align with the location of the new road. However, the southern portion of the new road would bend to the east around the eastern edge of Pond 1 to connect to the Cross Mine area near the Cross office building.

The proposed expansion area at the Idaho Tunnel includes the new portal location (after excavation of the hillside) and the disturbed slope above the portal. The slope face surrounding the portal has been stabilized with shotcrete. The glory hole which had opened up in the hillside above the portal due to collapses that occurred inside the tunnel have been stabilized with pervious cellular concrete, as approved in TR-5. After the cellular concrete placed in the subsidence area cured for several weeks, the operator placed an additional 3 or 4 staggered layers of this material to partially fill in the saddle over the tunnel for long-term stability. Each lift was approximately 4-5 feet thick placed in a stair-step fashion. Individual lifts were secured to the preceding lift with grouted threadbar anchors. Douglas fir lagging (8 inch x 3 inch x 8 foot long) was used as formwork and left in place as facing. This entire mass was anchored into the slope using grouted threadbar to serve as a slope-retaining structure.

In TR-9, the operator provided stability analyses that demonstrates the slope above the Idaho Tunnel portal meets the stability requirements of the Mined Land Reclamation Board's policy. During the inspection, the Division observed existing conditions in this area to be consistent with the information provided in both TR-9 and AM-2. The slope above the portal and Caribou Road (located above the tunnel) appeared to be stable at the time of the inspection. The operator inspects the slope and Caribou Road daily for any changes or signs of distress. As an additional safety measure, the operator has placed concrete jersey barriers along the edge of the road above the portal. The operator has plans to backfill the entire slope above the portal to match the surrounding contours, and to revegetate this area with grasses, shrubs, and pine trees. The details of this proposed reclamation plan will be reviewed through AM-2. It should be noted, the operator has a structure agreement in place with the owner of the road, Boulder County.

The proposed expansion area near the existing oil shed at the Caribou Mine includes a portion of the oil shed and a cleared off area just west/northwest of the oil shed primarily used for equipment storage. AM-2 proposes the continued use of this area for equipment storage. However, one of the Exhibit E figures (Map 7) shows this

area to be used for additional waste rock storage. The Division has requested clarification on the planned use of this area by the operation. For reclamation, this area will be ripped, retopsoiled, and revegetated.

The Division observed no permanent, man-made structures (not owned by the operator) located on or within 200 feet of the proposed affected lands at the Cross-Caribou site which are not already accounted for in AM-2. The Division has asked that all such structures owned by the operator be included in the structure list provided in the application. Existing conditions at the four proposed expansion areas at the Cross-Caribou site appear to be as described in AM-2.

While on site, the Division inspected current permitted features in both the Cross Mine and Caribou Mine areas. There are two existing waste rock stockpiles at the Cross Mine, including one just southeast of the New Cross Mine Decline Portal area and one just southeast of the Cross warehouse/ore storage building. In AM-2, the operator is proposing to use the waste rock stored at the Cross Mine to construct the new road between the two mine areas. Only the Caribou Mine waste rock storage area will continue to be used for future storage. The reclamation of all waste rock storage areas must be addressed in AM-2. Additionally, the operator will need to address reclamation of the New Cross Mine Decline Portal area, the development of which was discontinued, leaving an excavated area in the hillside with steep slopes. The crest of this slope appears to be located approximately 30 feet from the western permit boundary. Therefore, any additional sloughing of this excavated area could potentially cause off-site disturbance. The operator must describe in AM-2 how this area will be stabilized and reclaimed.

The Division inspected the proposed new permit area for the Potosi Shaft, located approximately 0.35 mile northwest of the Cross-Caribou site. AM-2 indicates this shaft will be used as an airway or secondary escape route. The shaft is located approximately 100 feet north of Caribou Road, on top of what appears to be an historic waste rock dump. The shaft is immediately enclosed by barbed wire, with chain-link fencing surrounding the entire shaft area. "Keep out" signs are posted on the shaft. AM-2 proposes a rectangular-shaped permit area of 0.06 acre for the Potosi Shaft area. The Division estimates the chain-link fencing surrounding the shaft to cover an area approximately 15 feet x 10 feet in size, which corresponds to 0.003 acre. Therefore, it appears the chain-link fencing does not delineate the proposed permit area. The operator will need to mark the permit boundary in this area with monuments or other markers that are clearly visible and adequate to delineate such boundaries in accordance with Rule 3.1.12(2). The Division observed some historical structures located in the Potosi Shaft area, including old concrete foundations and the remnants of two stone buildings. These structures were associated with the old mining town called Caribou that existed in the area in the late 1800's and early 1900's. All of these structures appeared to be located within 200 feet of the proposed Potosi Shaft permit area, except for the remnants of the larger stone building (to the west), which may be located just outside of the 200 foot radius. The operator will need to address these structures in AM-2, and provide a structure agreement for any structures not owned by the operator.

AM-2 states the Potosi Shaft will be accessed on foot (off of Caribou Road), and that no new road will be constructed in this area. During the inspection, the Division was unable to locate any existing roads in this area. However, in viewing aerial imagery of the site available in Google Earth, it appears there is a single-track trail off Caribou Road which runs east/northeast directly south of the stone building located closest to the Potosi Shaft and continues east/northeast to the shaft area. Apparently, this trail was mostly grown over by vegetation, making it difficult to locate during the inspection. The operator should be reminded that any existing roads requiring upgrading in support of the proposed operation would be considered affected lands pursuant to Rule 1.1(4).

The Division inspected the proposed new permit area for the Caribou Level 300 Portal, located approximately 0.9 mile northwest of the Cross-Caribou site. AM-2 does not clearly describe the intended use of this portal by the operation. The Division has requested additional information on the proposed use of this portal, as well as

any rehabilitation efforts that will be required for its use. The portal is located on the northeastern slope of Caribou Hill, just south of a USFS road. An historic waste rock dump is located across from the portal, on the north side of the USFS road. AM-2 proposes a long rectangular-shaped permit area of 0.33 acre for the Caribou Level 300 Portal area. During the inspection, the Division was unable to locate any markers delineating this proposed permit boundary. The operator will need to mark the permit boundary in this area with monuments or other markers that are clearly visible and adequate to delineate such boundaries in accordance with Rule 3.1.12(2).

An old snow shed extends approximately 80 feet from the portal to the USFS road. The entrance to the snow shed is located approximately 10-15 feet off of the USFS road. The entrance was boarded up; however, a large hole exists in the western side of the shed (close to the entrance), from which, the Division was able to look inside. Some trash was present on the floor of the shed (primarily beer cans), indicating public use of the area and potential trespass into the shed. Given the distance of this portal from the main mine site and the public use of the area, the Division has asked the operator to provide additional information on how the mine opening will be stabilized and secured during operations. The snow shed and USFS road were the only existing structures observed near the proposed Caribou Level 300 Portal permit area. The operator will need to address these structures in AM-2, and provide a structure agreement for the USFS road.

AM-2 states a new road approximately 30 square feet in area will be constructed off the existing (USFS) road for access to the proposed Caribou Level 300 Portal permit area. This road will be regraded, tilled, and revegetated for final reclamation. It is not clear in the application where exactly this road would be constructed. It would seem the road would be constructed from the entrance of the snow shed to the adjacent USFS road; however, the proposed square footage does not seem to correlate with the road dimensions that would be required based on the distance between the snow shed and road observed during the inspection. The Division has requested additional information on this road, including its estimated dimensions and location. According to the Exhibit E maps provided in AM-2, the northern edge of the proposed Caribou Level 300 Portal permit area slightly overlaps the USFS road. If this is accurate, the operator will need to provide documentation of its legal right to enter any proposed affected lands owned by the USFS.

The Division's second adequacy letter identifies several items in the application requiring clarification or additional information. One such item involves the proposed post-mining land use for the site. As mentioned above, the current approved post-mining land use is forestry with limited residential use. While the application form submitted with AM-2 selected forestry as the primary post-mining land use, throughout the rest of the application, the operator refers to an industrial post-mining land use for the site. The Division has requested clarification on this matter. If the operator is proposing a change in post-mining land use to industrial, this must be clearly stated in the application. Additionally, as discussed with the operator in its September 1, 2021 meeting, a new newspaper publication will be required to include the proposed industrial post-mining land use for the site. This would open up a new 10-day public comment period for the application. Alternatively, the operator may choose to not change the post-mining land use in AM-2, in which case, the current newspaper publication is adequate. However, some portions of the application (e.g., reclamation plan, bond estimate) may require revision in order to maintain consistency with the currently approved post-mining land use.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS



Photo 1. View of permit sign posted at Cross Mine entrance. This sign includes the site name and permit number as required by Rule 3.1.12(1), but should also include the operator name and a statement that a reclamation permit for the operation has been issued by the CO Mined Land Reclamation Board.



Photo 2. View looking northwest at Cross Shop located in Cross Mine area.



Photo 3. View looking south at Cross Warehouse/Ore Storage Building located in Cross Mine area.



Photo 4. View looking inside entrance to Cross Mine snow shed (adjacent to Cross Shop).



Photo 5. View looking south at waste rock stockpile stored just southeast of New Cross Mine Decline Portal in Cross Mine area.



Photo 6. View looking west at New Cross Mine Decline Portal in Cross Mine area. Development of this portal was discontinued, leaving a partially excavated hillside with steep slopes.



Photo 7. View looking northwest at waste rock stockpile stored just southeast of Cross Warehouse/Ore Storage Building in Cross Mine area.



Photo 8. View looking northwest at explosives storage area located southeast of Cross Warehouse/Ore Storage Building in Cross Mine area, where two magazines are secured with padlocks and lock boxes.



Photo 9. View looking northwest across access road to Cross Mine area. Note Cross Warehouse/Ore Storage Building (at left) and Cross Shop (at center).



Photo 10. View looking north across valley between Cross and Caribou Mines, showing Pond 2 in which water from each mine is combined prior to being discharged to Coon Track Creek under NPDES permit.



Photo 11. View looking east across valley between Cross and Caribou Mines, showing approximate location (circled) of discharge point from Pond 2 to Coon Track Creek under NPDES permit.



Photo 12. View looking northeast at expansion area proposed in AM-2 for pond water pipelines, located directly north of Pond 2. Note white pipeline which conveys water from Pond 1 (at Cross Mine) and black pipeline which conveys water from Ponds 3A-3C (at Caribou Mine).



Photo 13. View looking east across northern corner of Pond 2, showing discharge into pond from Pond 1 (Cross Mine; white pipeline) and Ponds 3A-3C (Caribou Mine; black pipeline). The proposed expansion area in AM-2 would include the northern edge of this pond with the discharge pipelines.



Photo 14. View looking southeast across Pond 2 in which water from each mine is combined prior to being discharged to Coon Track Creek under NPDES permit. Operator should remove any sediment or vegetation from pond liner to maintain adequate freeboard and protect liner integrity.



Photo 15. View looking southeast across Pond 1, in which Cross Mine water is discharged and treated with lime daily. Water from this pond gravity drains to Pond 2. Operator should remove any sediment or vegetation from pond liner to maintain adequate freeboard and protect liner integrity.



Photo 16. View looking east at drainage pipeline which conveys treated Cross Mine water from Pond 1 to Pond 2.



Photo 17. View looking north at existing footpath which allows access from Pond 1 at Cross Mine to Ponds 3A-3C at Caribou Mine.



Photo 18. View looking southeast at existing footpath which allows access from Pond 1 at Cross Mine to Ponds 3A-3C at Caribou Mine.



Photo 19. View looking west at expansion area proposed in AM-2 along western edge of current permit area, for Ponds 3A-3C and new road construction. Note Coon Track Creek (at center) which will be routed beneath the new road via a culvert.



Photo 20. View looking north at existing footpath which allows access from Pond 1 at Cross Mine to Ponds 3A-3C at Caribou Mine. The new road proposed in AM-2 may align at least partially with this portion of the existing footpath.



Photo 21. View looking northwest at expansion area proposed in AM-2 along western edge of current permit area, for Ponds 3A-3C and new road construction.



Photo 22. View looking south/southwest (from southern edge of Pond 3C) at expansion area proposed in AM-2 along western edge of current permit area, for Ponds 3A-3C and new road construction.



Photo 23. View looking east/northeast at existing footpath below Ponds 3A-3C. The new road proposed in AM-2 appears to align with this portion of the existing footpath.



Photo 24. View looking southwest across Pond 3C (in Caribou Mine area) which was rehabilitated per TR-8. This is the largest and most downgradient of the three settling ponds.



Photo 25. View looking west across northern edge of Pond 3C (in Caribou Mine area) which was rehabilitated per TR-8, showing inlet pipe from Pond 3B (circled) discharging into pond.



Photo 26. View looking southwest across Pond 3B (in Caribou Mine area) which was rehabilitated per TR-8. This is the middle of the three settling ponds. Note inlet pipe from Pond 3A (circled) discharging into pond.



Photo 27. View looking southwest across Pond 3A (in Caribou Mine area) which was rehabilitated per TR-8. This is the most upgradient of the three settling ponds.



Photo 28. View looking northwest at expansion area proposed in AM-2 with Idaho Tunnel portal (in Caribou Mine area). Note surrounding slope face stabilized with shotcrete and small “glory hole” created by tunnel collapse (location indicated) stabilized with pervious cellular concrete per TR-5.



Photo 29. View looking northwest at excavated hillside just west/southwest of Idaho Tunnel Portal (in Caribou Mine area) which is part of expansion area proposed in AM-2. This slope face is stabilized partially with shotcrete and partially with wire mesh anchored into the slope.

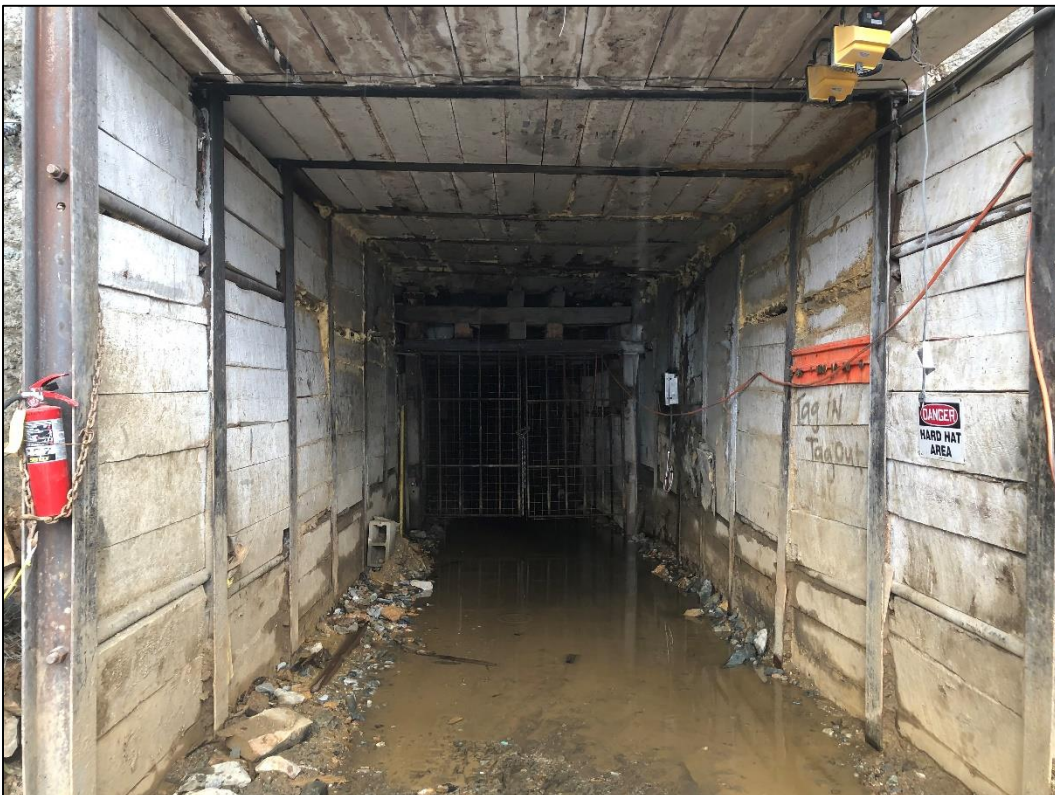


Photo 30. View looking inside Idaho Tunnel portal (in Caribou Mine area) which is secured by a locked gate. Note water draining from mine opening. This portal has been rehabilitated for safe entry per TR-5.



Photo 31. View looking southeast from Caribou Road across slope above Idaho Tunnel Portal where small “glory hole” created by tunnel collapse (location indicated) was stabilized with pervious cellular concrete per TR-5. This disturbed slope is part of the expansion area proposed in AM-2.



Photo 32. View looking northeast across slope between Caribou Road (at left) and area above Idaho Tunnel Portal (at right) where small “glory hole” was stabilized with pervious cellular concrete per TR-5. This disturbed slope is part of the expansion area proposed in AM-2. The new northern permit boundary in this area would align with the edge of Caribou Road.



Photo 33. View looking east at expansion area proposed in AM-2 for oil shed and equipment storage (in Caribou mine area).



Photo 34. View looking northeast at expansion area proposed in AM-2 for oil shed (visible at right) and equipment storage (in Caribou Mine area).



Photo 35. View looking northwest at Caribou Office and Dryroom Building located in Caribou Mine area.



Photo 36. View looking southeast at new work area constructed with conex boxes in Caribou Mine area.



Photo 37. View looking northeast across top of historic waste rock pile located in Caribou Mine area. Rock screens were present in this area during inspection. Operator is not authorized to conduct any processing activities on site beyond screening/sizing waste rock for aggregate use.



Photo 38. View looking west across southern slope of historic waste rock pile located in Caribou Mine area, with slope gradients of approximately 1H:1V.



Photo 39. View looking west across existing road from Caribou Mine access road to Ponds 3A-3C (partially visible in background). The new road proposed in AM-2 may align at least partially with this existing road.



Photo 40. View of locked gate at entrance to Forest Service Road used to access Caribou Level 300 Portal permit area proposed in AM-2. The proposed site is located approximately 1,900 feet down the road from the entrance gate.



Photo 41. View looking northwest at Forest Service Road used to access Caribou Level 300 Portal permit area proposed in AM-2. Note sign at right indicating road is FS 505.



Photo 42. View looking west/northwest at Forest Service Road used to access Caribou Level 300 Portal permit area proposed in AM-2.



Photo 43. View looking south (across Forest Service Road) at Caribou Level 300 Portal permit area proposed in AM-2. Note entrance to snow shed (in background) located approximately 10-15 feet off road. The proposed permit area will need to be delineated with markers.



Photo 44. Closer view of entrance to snow shed for Caribou Level 300 Portal proposed in AM-2. The proposed permit area will need to be delineated with markers.



Photo 45. View inside snow shed for Caribou Level 300 Portal proposed in AM-2 (from hole in west side of shed). Some trash was present inside, indicating this shed is accessible by the public (at least to some extent).



Photo 46. View looking south across snow shed for Caribou Level 300 Portal proposed in AM-2. The permit area will need to be delineated with markers.



Photo 47. View looking northwest across edge of historic waste rock pile located north of proposed Caribou Level 300 Portal permit area, on north side of Forest Service Road. This pile is not included in the proposed permit area.



Photo 48. View looking east/northeast at Potosi Shaft permit area proposed in AM-2, located approximately 100 feet north of Caribou Road. The proposed permit area will need to be delineated with markers.



Photo 49. View looking north at Potosi Shaft permit area proposed in AM-2, located approximately 100 feet north of Caribou Road. The shaft is currently enclosed by chainlink fencing. The proposed permit area will need to be delineated with markers.



Photo 50. Closer view of Potosi Shaft proposed in AM-2, showing "Keep Out" signs posted and barbed wire fencing immediately surrounding shaft (within chainlink fence enclosure).



Photo 51. View looking west at historic structures located directly behind Potosi Shaft. These structures need to be addressed in AM-2. Since the proposed permit area was not delineated, the Division is uncertain whether these structures are included in the proposed permit area.



Photo 52. View looking north at historic structures located approximately 40-50 feet northeast of Potosi Shaft. These structures need to be addressed in AM-2.



Photo 53. View looking west at historic structure (remnants of stone building) located approximately 130 feet west of Potosi Shaft. This structure needs to be addressed in AM-2.



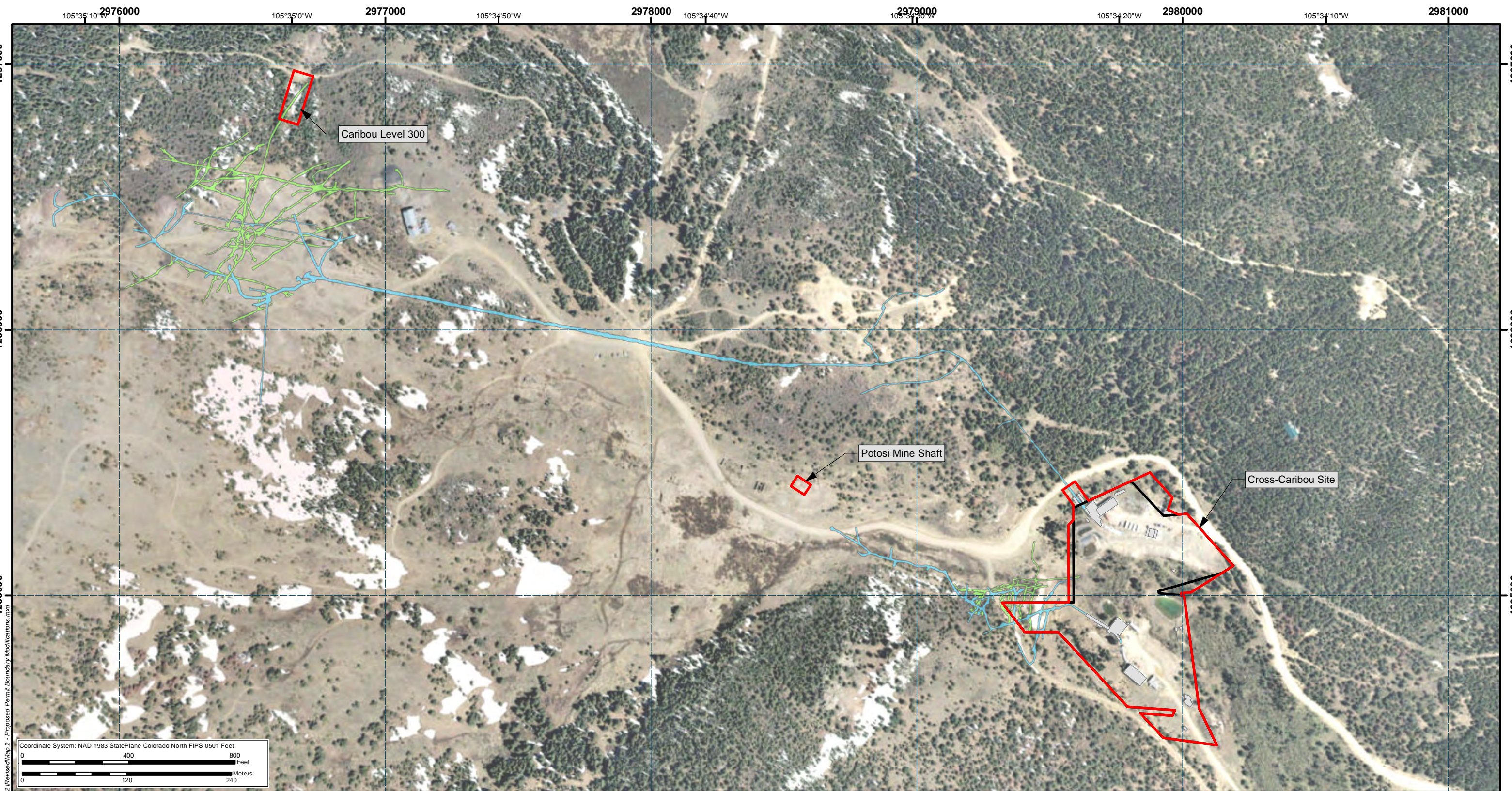
Photo 54. View looking northwest at historic structure (remnants of stone building; indicated) located approximately 230 feet west of Potosi Shaft. Since the proposed permit area was not delineated, the Division is uncertain whether this structure is located within 200 feet. If so, it must be addressed in AM-2. Caribou Road is visible in the foreground.

Inspection Contact Address

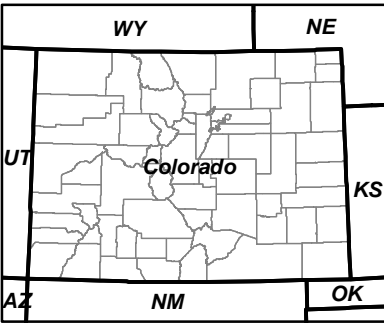
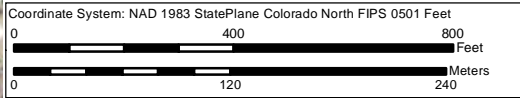
Richard Mittasch
Grand Island Resources LLC
4415 Caribou Rd
P.O. Box 3395
Nederland, CO 80466

Encls: Exhibit E - Map 2 - Proposed Permit Boundary Modifications
Exhibit E – Map 3 - Proposed Permit Boundary Modifications, Cross-Caribou Site
Exhibit E – Map 4 - Proposed Permit Boundary Modifications, Potosi Mine Shaft and Caribou 300 Level

CC: Daniel Pollock, Grand Island Resources LLC
Peter Hays, DRMS
Michael Cunningham, DRMS




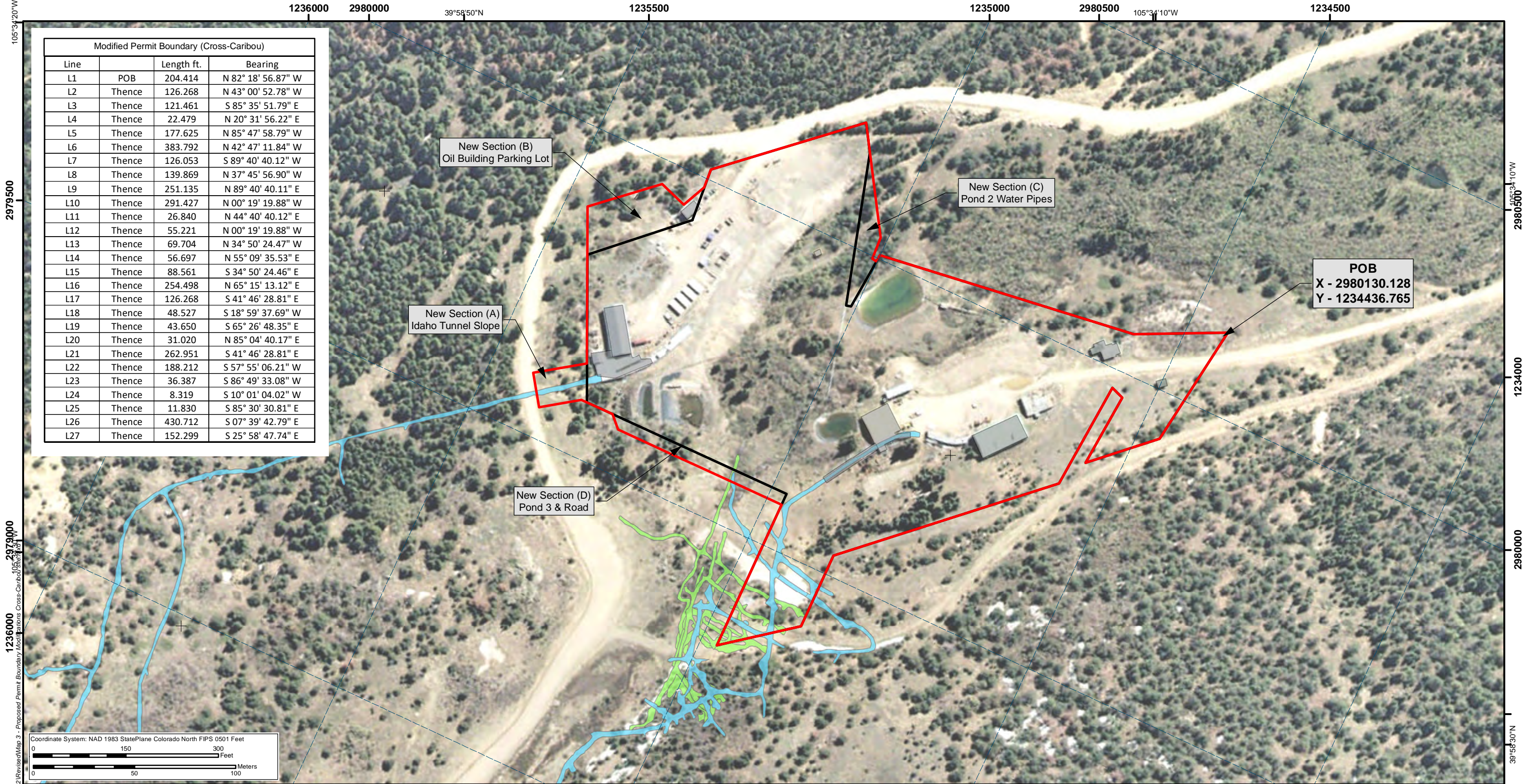
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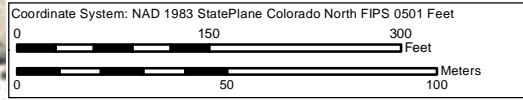
- Legend**
- Permit Boundary - Modified (9.99 ac)
 - Permit Boundary - Current (8.95 ac)
 - Underground Workings
 - Level 1
 - Sub Levels



Project		DRMS Amendment 2	
Title		EXHIBIT E	
		Proposed Permit Boundary Modifications	
	Project No. CO-0801		File No.
	GIS:	JST 05/17/21	Scale As Shown
	Check:	JST 05/17/21	Rev 0
	Review:	DP 05/17/21	Map 2

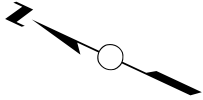



Modified Permit Boundary (Cross-Caribou)			
Line		Length ft.	Bearing
L1	POB	204.414	N 82° 18' 56.87" W
L2	Thence	126.268	N 43° 00' 52.78" W
L3	Thence	121.461	S 85° 35' 51.79" E
L4	Thence	22.479	N 20° 31' 56.22" E
L5	Thence	177.625	N 85° 47' 58.79" W
L6	Thence	383.792	N 42° 47' 11.84" W
L7	Thence	126.053	S 89° 40' 40.12" W
L8	Thence	139.869	N 37° 45' 56.90" W
L9	Thence	251.135	N 89° 40' 40.11" E
L10	Thence	291.427	N 00° 19' 19.88" W
L11	Thence	26.840	N 44° 40' 40.12" E
L12	Thence	55.221	N 00° 19' 19.88" W
L13	Thence	69.704	N 34° 50' 24.47" W
L14	Thence	56.697	N 55° 09' 35.53" E
L15	Thence	88.561	S 34° 50' 24.46" E
L16	Thence	254.498	N 65° 15' 13.12" E
L17	Thence	126.268	S 41° 46' 28.81" E
L18	Thence	48.527	S 18° 59' 37.69" W
L19	Thence	43.650	S 65° 26' 48.35" E
L20	Thence	31.020	N 85° 04' 40.17" E
L21	Thence	262.951	S 41° 46' 28.81" E
L22	Thence	188.212	S 57° 55' 06.21" W
L23	Thence	36.387	S 86° 49' 33.08" W
L24	Thence	8.319	S 10° 01' 04.02" W
L25	Thence	11.830	S 85° 30' 30.81" E
L26	Thence	430.712	S 07° 39' 42.79" E
L27	Thence	152.299	S 25° 58' 47.74" E

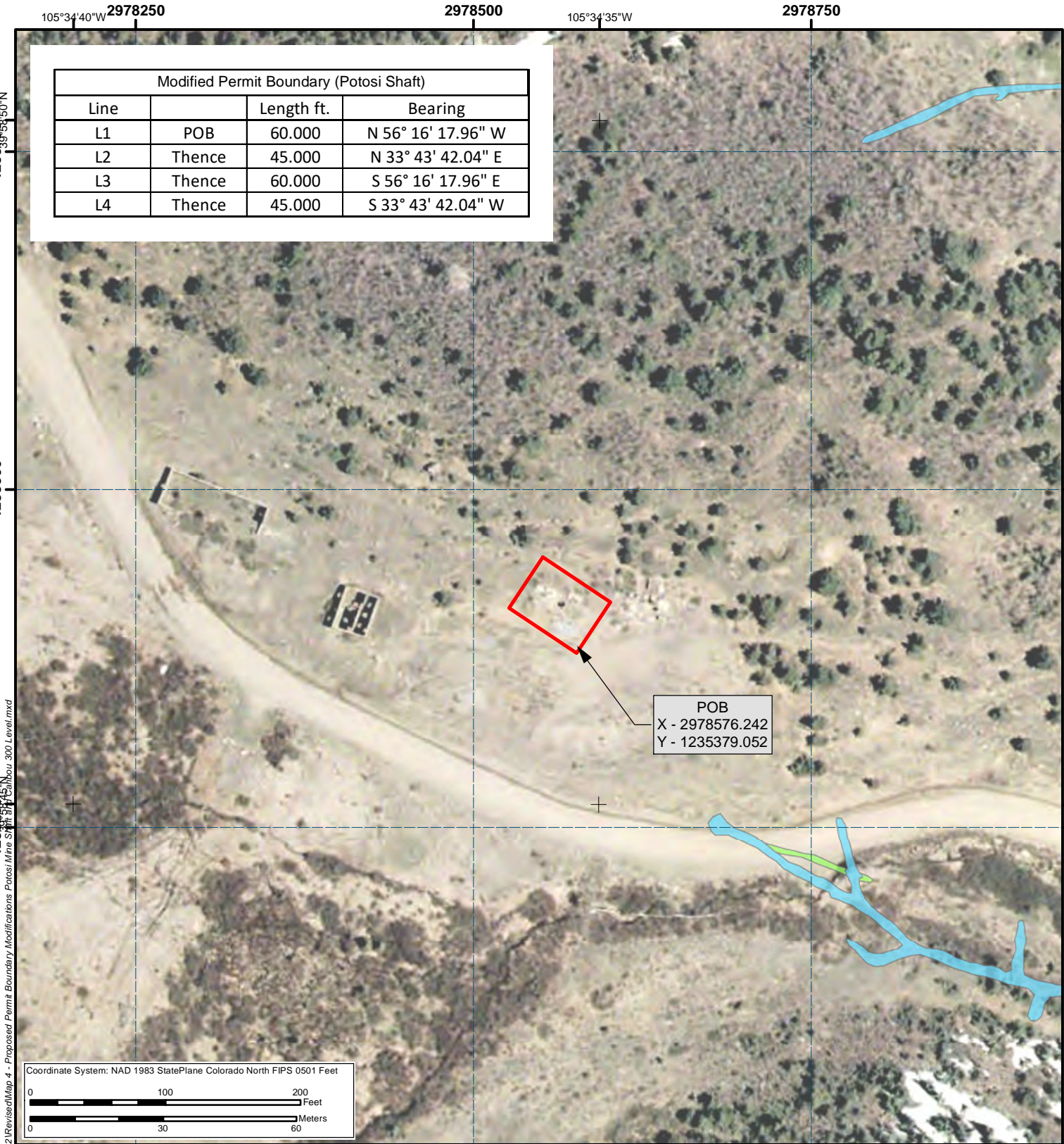


- Legend**
- Permit Boundary - Modified (9.60 ac)
 - Permit Boundary - Current (8.95 ac)
 - Underground Workings
 - Level 1
 - Sub Levels

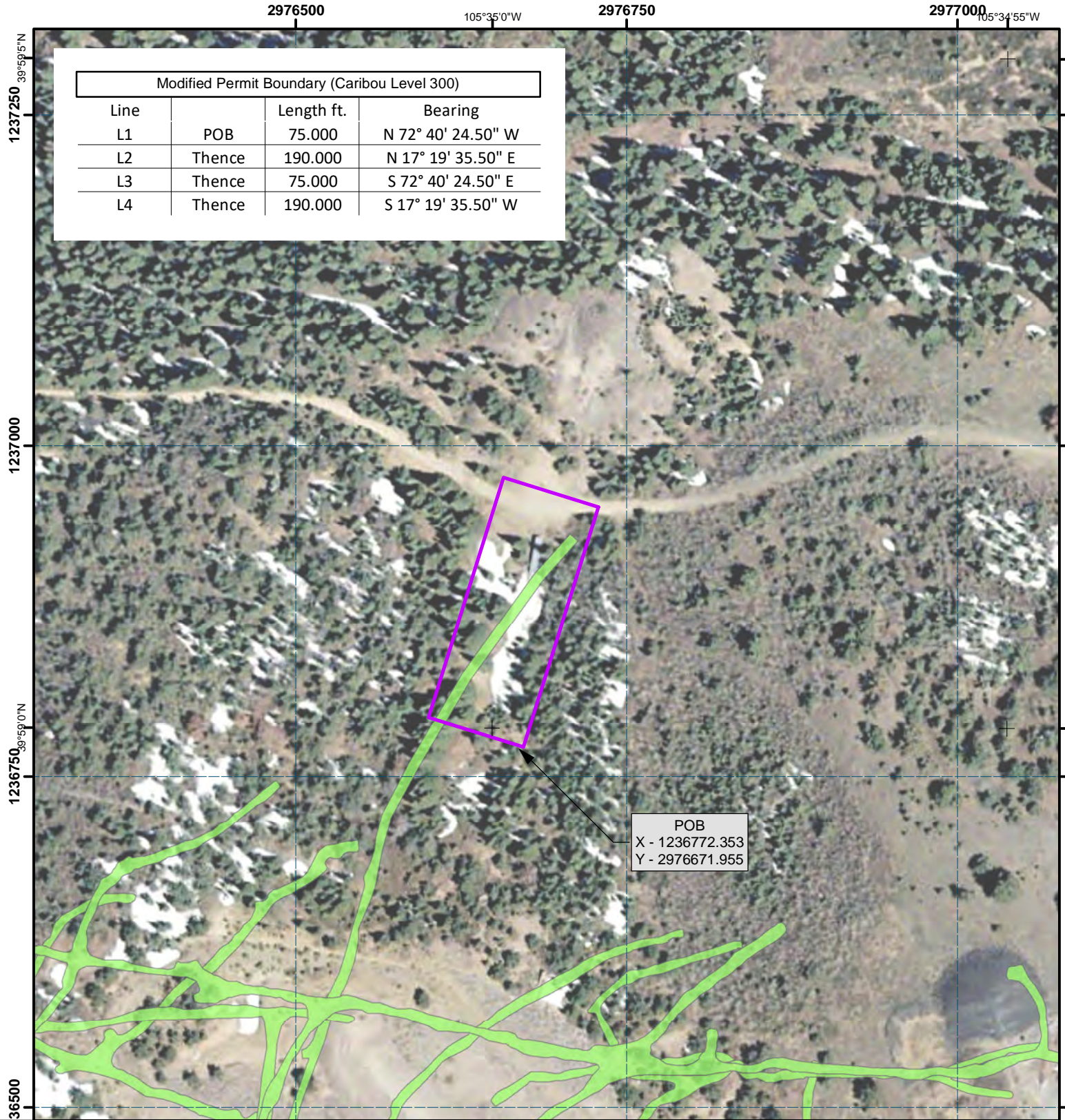
Permit Modifications		
New Section	Name	Area (ac)
A	Idaho Tunnel & Slope	0.11 ac
B	Oil Building Parking Lot	0.27 ac
C	Pond 2 Water Pipes	0.13 ac
D	Pond 3 & Road	0.13 ac



Project	DRMS Amendment 2			
Title	EXHIBIT E Proposed Permit Boundary Modifications Cross-Caribou Site			
	Project No. CO-0801		File No.	
	GIS:	JST	05/17/21	Scale As Shown
	Check:	JST	05/17/21	Rev 0
	Review:	DP	05/17/21	Map 3




Modified Permit Boundary (Potosi Shaft)			
Line		Length ft.	Bearing
L1	POB	60.000	N 56° 16' 17.96" W
L2	Thence	45.000	N 33° 43' 42.04" E
L3	Thence	60.000	S 56° 16' 17.96" E
L4	Thence	45.000	S 33° 43' 42.04" W



Modified Permit Boundary (Caribou Level 300)			
Line		Length ft.	Bearing
L1	POB	75.000	N 72° 40' 24.50" W
L2	Thence	190.000	N 17° 19' 35.50" E
L3	Thence	75.000	S 72° 40' 24.50" E
L4	Thence	190.000	S 17° 19' 35.50" W

- Legend**
- Potosi Permit Boundary - Modified (0.06 ac)
 - Caribou 300 Level Permit Boundary - Modified (0.33 ac)
 - Underground Workings
 - Level 1
 - Sub Levels

Project				DRMS Amendment 2			
Title				EXHIBIT E			
				Proposed Permit Boundary Modifications Potosi Mine Shaft and Caribou 300 Level			
		Project No. CO-0801		File No.			
		GIS:	JST	05/17/21	Scale As Shown	Rev 0	
		Check:	JST	05/17/21	Map 4		
		Review:	DP	05/17/21			