




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: Henderson Mine	MINE/PROSPECTING ID#: M-1977-342	MINERAL: Molybdenum	COUNTY: Clear Creek, Grand
INSPECTION TYPE: Aerial Inspection	WEATHER: Clear	INSP. DATE: September 11, 2024	INSP. TIME: 09:00
OPERATOR: Climax Molybdenum Company	OPERATOR REPRESENTATIVE: N/A	TYPE OF OPERATION: 112d-3 - Designated Mining Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: None	BOND AMOUNT: \$143,264,468.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Amber M. Gibson Brock Bowles	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: October 4, 2024	

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>N</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>Y</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>N</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 an aerial photograph inspection of the Henderson Mine by Amber Gibson with the Colorado Division of Reclamation, Mining and Safety (Division/DRMS) based on aerial photographs taken by Brock Bowles (also with DRMS) on September 11, 2024. The Operator did not accompany the Division on this aerial inspection. The site is a 112d-3 molybdenum mine with a mine site located approximately 9 miles west-northwest of Empire, CO and a mill site located approximately 7.2 miles northwest of Colorado State Highway 9, along Ute Pass Road. The purpose of the aerial inspection program is to provide the Division a broad perspective that cannot be obtained from the ground, to document changes in areas of the mine over time, and to identify areas of focus for future on-the-ground monitoring inspections.

This inspection included the following facilities and areas:

- Henderson Mine
- URAD Water Treatment Plant
- Henderson Mill

Both the mine and the mill appear to be in compliance with the approved mining plans. No unidentified disturbance areas, or offsite disturbance was observed. Some deep erosion gullies can be seen on the northern toe of the slope at 3-Dam. The Operator is aware of this erosion and has plans to repair it. No other cause for concern was identified from the aerial photographs.

A few aerial pictures are described and included within this report. Also, enclosed for reference, are mining plan maps from Amendment no. 8 (AM8) and a map from Technical Revision no. 36 (TR36).

This concludes the Division's Inspection Report. If you need additional information or have any questions, please email me at amber.gibson@state.co.us or call at **720-836-0967**.

Inspection Contact Address

Miguel Hamarat
Climax Molybdenum Company
P.O. Box 68
Empire, CO 80438

Enclosures: Mining Plan Map for the Mine/Mine Surface Facilities and URAD treatment area - *Exhibit C*
Mining Plan Map for the Tailings Impoundment at the mill *Exhibit C.A to AM-08*
Mining Plan Map of the Tailings Impoundment and the Mill facilities - *Exhibit C.B to AM-08*
Mining Plan Map of the portal and transfer station area - *Exhibit C.C to AM-08*
Well location map submitted with TR36 for the tailings facility at the Mill – *Figure 1*

EC: Jared Ebert, DRMS
Nikie Gagnon, DRMS
Joel Renfro, DRMS

PHOTOGRAPHS



Photo 1: Looking southwest at the surface facilities at the mine.



Photo 2: Looking at the eastern side of the surface facilities at the mine.



Photo 3: Looking south at the URAD water treatment facility ponds.



Photo 4: Looking northeast at the Lower URAD reservoir at the base of the URAD water treatment area.



Photo 5: Looking northwest at the Tailings Impoundment at the Mill. The red arrow points to 3-Dam and the yellow arrow points to 1-Dam.



Photo 6: Looking west across the northern border of the deposition cells in the Tailings Impoundment. Circled are test plot areas where the Operator is testing revegetation methods for future use in reclamation efforts on the Tailings Impoundment.



Photo 7: Looking west at the northern portion of the Tailings Pond.



Photo 8: Looking west across the Tailings Impoundment. The area circled in red shows some recent tailings deposition on the Tailings Impoundment.



Photo 9: Looking southwest at the seepage collection trenches along the toe of the slope behind 1-Dam.



Photo 10: Looking northwest at the southern portion of the seepage collection canals on 1-Dam and the 1-Dam abutment area.



Photo 11: Looking west at the north side of 3-Dam. The arrows indicate the seepage collection trenches. Some erosion gullies are present along the north toe of the slope on the backside of 3-Dam.



Photo 12: Looking west at an overview of 3-Dam and the start of the east branch of Ute Creek leading from 3-Dam (red arrow).



Photo 13: Looking northwest at the East Branch of Ute Creek and the Mill facilities.



Photo 14: Looking at the tailings deposition within the East Branch of Ute Creek and the northwest side of the Mill facilities.



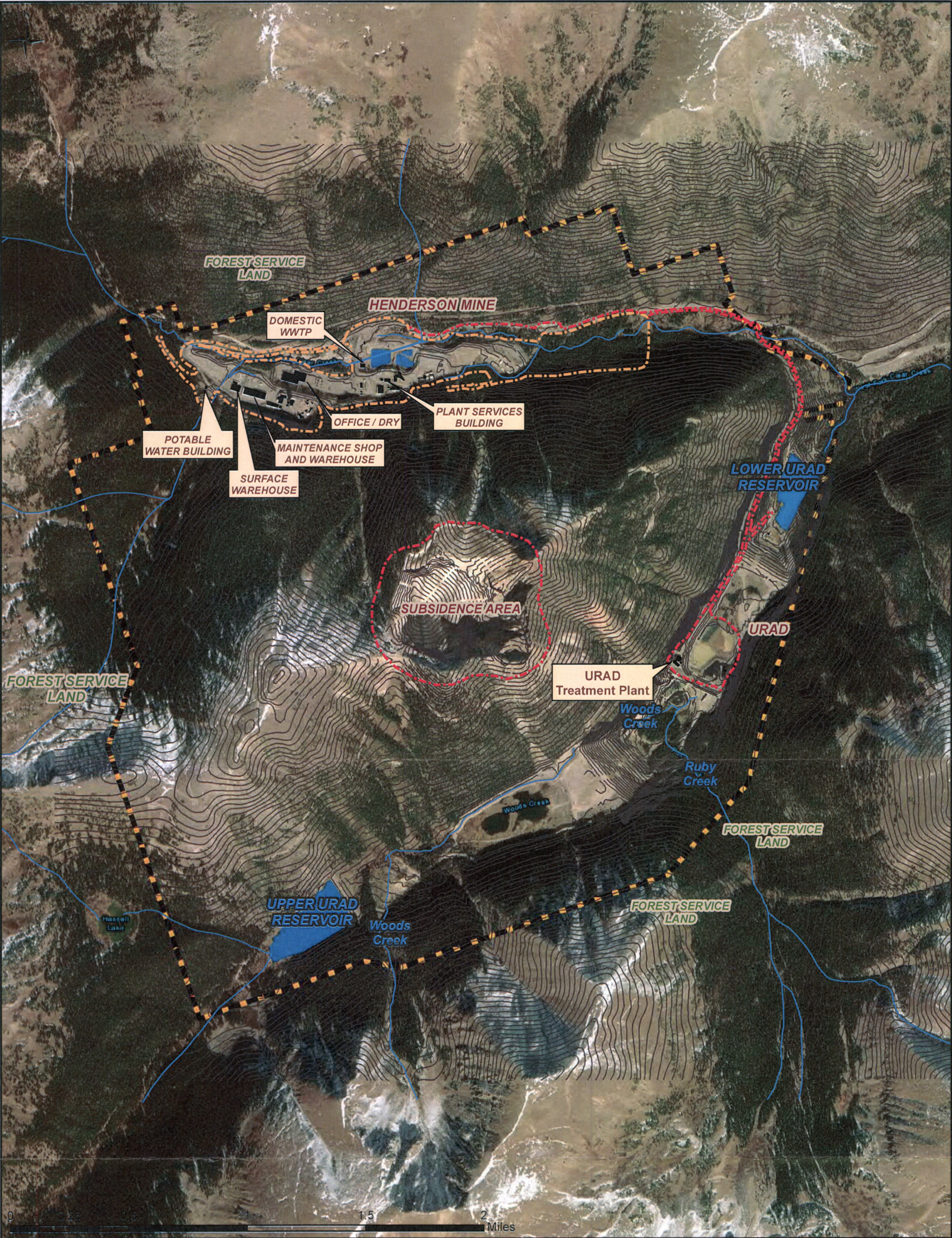
Photo 15: Looking at the north side of the East Branch Reservoir.



Photo 16: Looking at the south side of the East Branch Reservoir.



Photo 17: Looking southwest at the transfer station for the conveyor system (red circle). Looking southeast at the portal (yellow circle).



MAP FEATURES

- PROPOSED ADDITIONAL AFFECTED LAND BOUNDARY
- AFFECTED LAND BOUNDARY
- STREAM / DITCH
- PROPERTY BOUNDARY
- LAKE / POND
- BUILDING

REVISION	DATE
Updated Affected Land Boundary	12/10/2015
Updated Affected Land Boundary	08/07/2017
Updated Affected Land Boundary characteristics	01/15/2019
Updated 'Map Features' and feature characteristics	03/19/2019

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HENDERSON OPERATIONS
1746 County Road
Empire, Colorado 80438

Exhibit C
Pre-Mining and Mining Plan
Map of Affected Lands

DESIGNED BY:

DRAWN BY: MT/KV (Aquionix)

DATE DRAWN: 8/7/17

SCALE: 1:24,000

COORD. SYSTEM: WGS_1984_Web_Mercator_Auxiliary_Sphere



LOCATION MAP

MAP FEATURES

PROPERTY BOUNDARY	BUILDING	ULTIMATE CANAL
AFFECTED LAND BOUNDARY	SUB-MAP REFERENCE OUTLINE	
PROPOSED ADDITIONAL AFFECTED LAND BOUNDARY	AM-08 ACREAGE	
PERENNIAL STREAM	OVERHEAD POWERLINE	
INTERMITTENT STREAM	POTENTIAL AND APPROXIMATE DRILL PAD AND ACCESS ROAD	
LAKE / POND	POTENTIAL AND APPROXIMATE MONITORING WELL LOCATION	

SIGNATORY INFORMATION

SIGNATURE

Miguel Hamarat
NAME

Environmental Manager
TITLE

Pursuant to Rule 6.2.1(2)(b), this map has been prepared under my direction as a registered land surveyor, professional engineer, or other qualified person.

REVISION	DATE	AUTHOR
Added potential Monitoring Well locations, drill pads and access roads.	9/18/2023	MT

Aquionix
EHS Services

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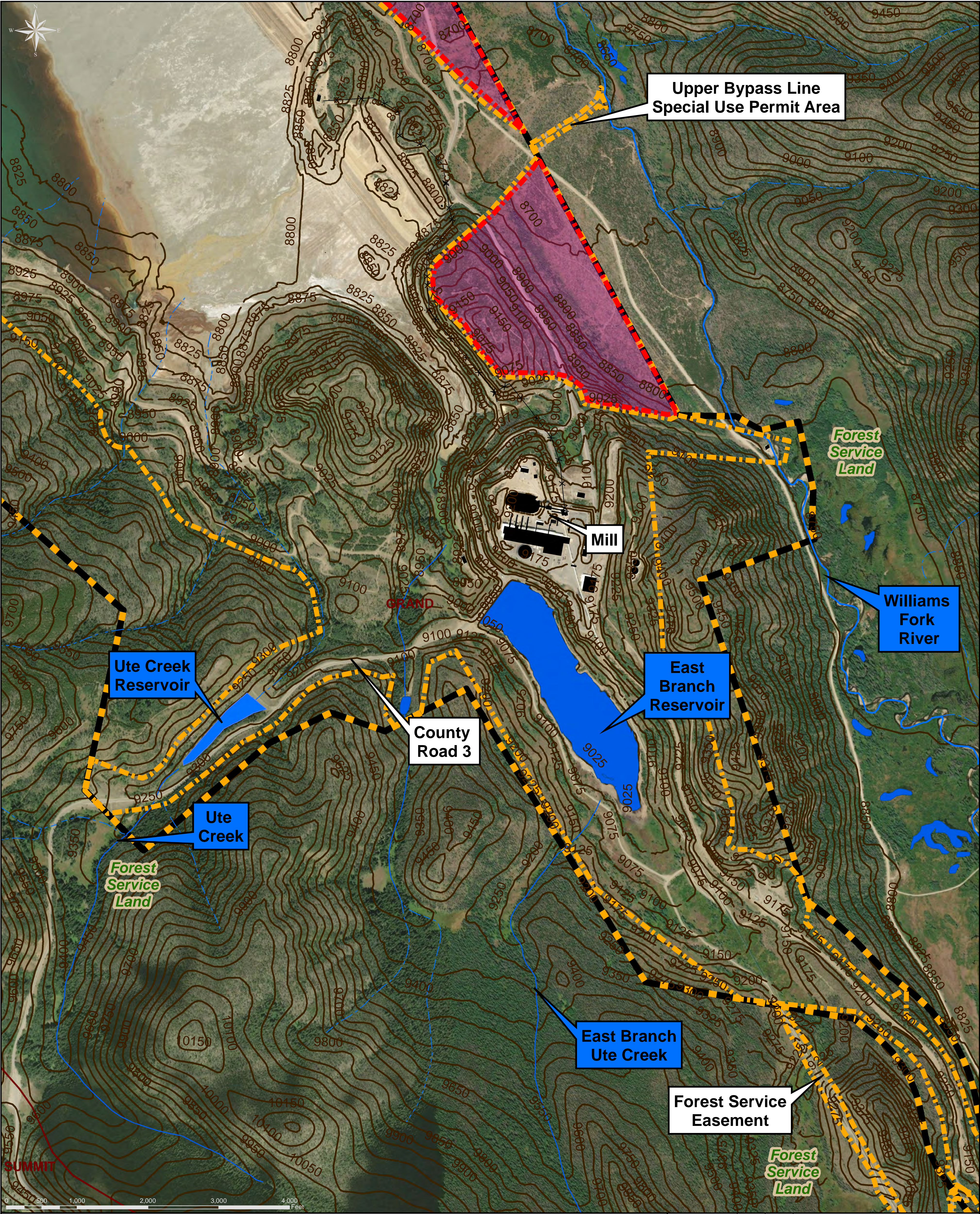
DESIGNED BY: MT(Aquionix)
DRAWN BY: MT(Aquionix)
DATE DRAWN: 2/27/2023

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HENDERSON OPERATIONS
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Empire, Colorado 80438

HENDERSON MILL
Exhibit C.A to AM-08
Pre-Mining and Mining Plan
Map of Affected Lands

SCALE: 1 inch = 658 feet
COORDINATE SYSTEM: NAD_1983
_UTM_Zone_13N

Y:\CMC - Henderson - 3770\Henderson GIS\moda\mill\Reclamation\AM-08



LOCATION MAP

MAP FEATURES

PROPERTY BOUNDARY	BUILDING
AFFECTED LAND BOUNDARY	SUB-MAP REFERENCE OUTLINE
PROPOSED ADDITIONAL AFFECTED LAND BOUNDARY	AM-08 ACREAGE
PERENNIAL STREAM	OVERHEAD POWERLINE
INTERMITTENT STREAM	
LAKE / POND	

SIGNATORY INFORMATION

Miguel Hamarat

SIGNATURE

Miguel Hamarat

NAME

Environmental Manager

TITLE

REVISION	DATE	AUTHOR

Aquionix
EHS Services

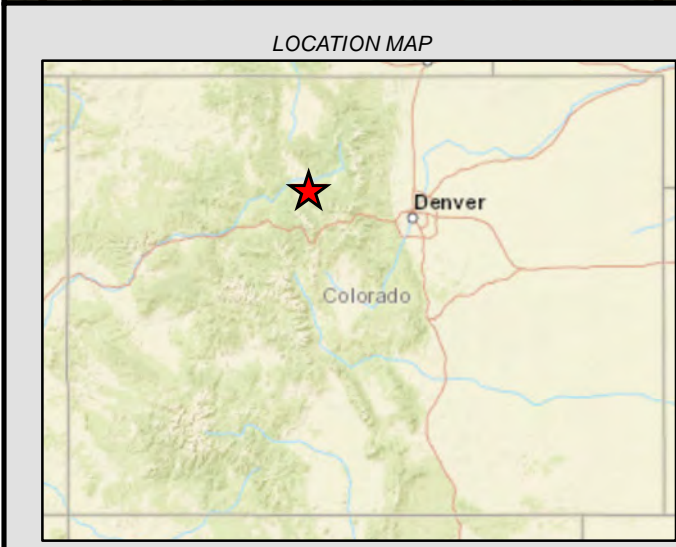
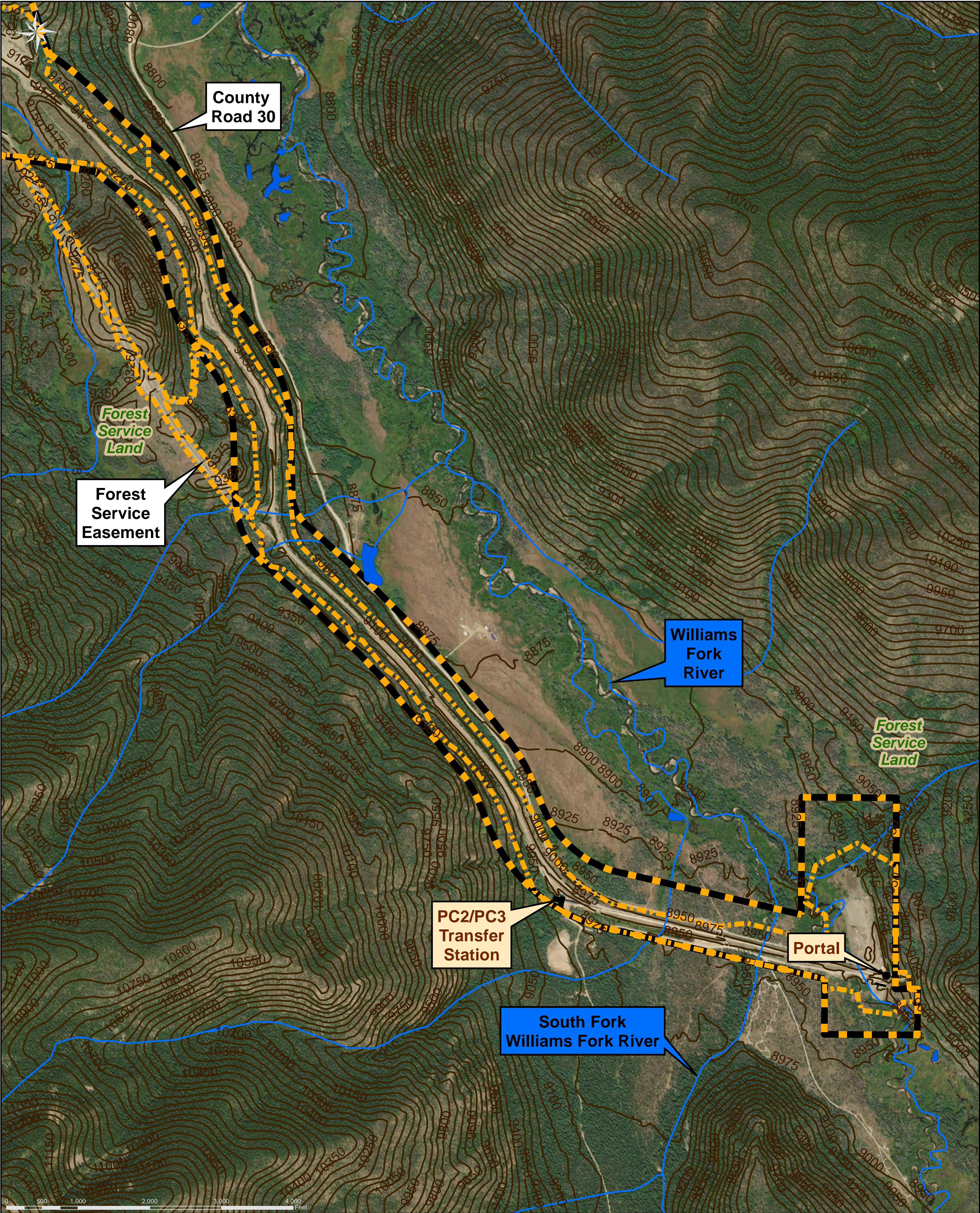
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HENDERSON MILL
Exhibit C.B to AM-08
Pre-Mining and Mining Plan
Map of Affected Lands

DESIGNED BY:
DRAWN BY: MT(Aquionix)
DATE DRAWN: 2/27/2023

SCALE: 1 inch = 658 feet
COORDINATE SYSTEM: NAD_1983
UTM_Zone_13N



MAP FEATURES

	PROPERTY BOUNDARY		BUILDING
	AFFECTED LAND BOUNDARY		SUB-MAP REFERENCE OUTLINE
	PROPOSED ADDITIONAL AFFECTED LAND BOUNDARY		AM-08 ACREAGE
	PERENNIAL STREAM		
	INTERMITTENT STREAM		
	LAKE / POND		

SIGNATORY INFORMATION

Miguel Hamarat

SIGNATURE

Miguel Hamarat

NAME

Environmental Manager

TITLE

Pursuant to Rule 6.2.1(2)(b), this map has been prepared under my direction as a registered land surveyor, professional engineer, or other qualified person.

REVISION	DATE	AUTHOR

Aquionix
EHS Services

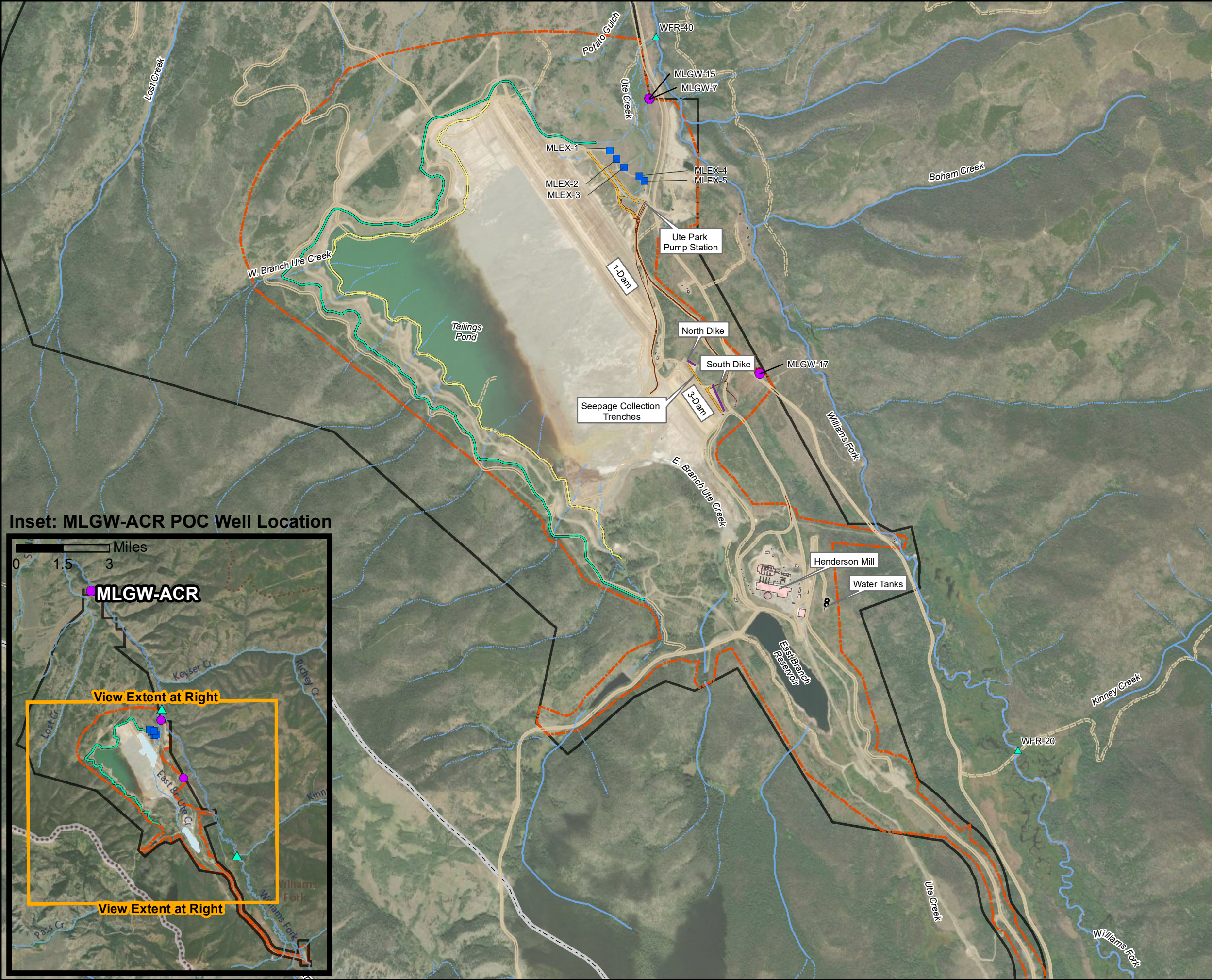
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HENDERSON MILL
Exhibit C.C
Pre-Mining and Mining Plan
Map of Affected Lands

DESIGNED BY:
DRAWN BY: MT(Aquionix)
DATE DRAWN: 3/6/2023

SCALE: 1 inch = 650 feet
COORDINATE SYSTEM: NAD_1983
UTM_Zone_13N

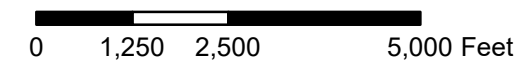


- Legend**
- POC Monitor Well
 - Extraction Well
 - Surface Water Monitoring Loc.
 - Ultimate Canal
 - Canal
 - Dike
 - Ditch
 - Intermittent Surface Water
 - Perennial Surface Water
 - Pipeline
 - Road
dashed where unimproved
 - Property Boundary
 - Affected Lands (2010)
 - County Line

Henderson Mill, Grand County, CO



SCALE: 1 inch = 2,500 feet



**Figure 1
Regional Map
Henderson Mill, CO**