

Application for Permits to Mine in Alaska (APMA)

QUARTZ CREEK

☐ Single Year ☒ Multi-year Start: 2026 Finish: 2035 APMA Number (A/F/J, Year, ****) F-9398

What type activity are you planning to perform? *REQUIRED (1) ☐ Suction Dredging/Reclamation ☐ Reclamation Only ☒ Placer Mining/ Reclamation ☐ Access ☐ Hardrock Exploration/ Reclamation		Surface estate of mineral properties: *REQUIRED (2) ☒ State (General) ☐ State (Mental Health) ☐ Federal ☐ Private ☐ City or Borough	
Check All That Apply: ☒ Mineral Property Owner ☐ Lessee ☒ Operator *Required (3) Name: Mammoth Valley Mining LLC Primary Phone Number: -512-983-5570 Address: 11701 FM 2244 Suite 185 Secondary Phone Number: Austin TX 78738 Email: jotteson@noblemining.com Click here for the Department of Commerce Link Alaska Business/Corporation Entity# 10107289 Registered Agent (Corp./LLC/LP) Jeff Keener dba Metallogeny Inc.			
Check All That Apply: ☐ Mineral Property Owner ☐ Lessee ☐ Operator *Required (4) Name: Primary Phone Number: Address: Secondary Phone Number: Email:			
Alaska Business/Corporation Entity# Registered Agent (Corp./LLC/LP)			
Check All That Apply: ☐ Mineral Property Owner ☐ Lessee ☐ Operator *Required (5) Name: Primary Phone Number: Address: Secondary Phone Number: Email:			
Alaska Business/Corporation Entity# Registered Agent (Corp./LLC/LP)			
Check All That Apply: ☐ Mineral Property Owner ☐ Lessee ☐ Operator *Required (6) Name: Primary Phone Number: Address: Secondary Phone Number: Email:			
Attach a separate sheet for additional contacts Alaska Business/Corporation Entity# Registered Agent (Corp./LLC/LP)			
Project Name If Applicable: (7) Mammoth Valley (MVM)		Average Number of Workers: *REQUIRED (8) 6 to 8	
Mining District: *REQUIRED (10) Kougarak		Start-Up/Shut Down: (Month/Day) (9) May 15 to October 15	
Applicable USGS Map(s): *REQUIRED (11) Bendleben B-6		On What Stream Is This Activity? (12) Quartz Creek	
Legal Description of mineral properties to be worked (MTRS) *REQUIRED (13) Example: Fairbanks Meridian Township 001N Range 003E Sections 15, 16, and 21 or F 001N 003E Sec. 15, 16, and 21 KRM T001S, R029W Sections 30, 31 & 32 KRM T001S, R030W Section 25		Internal Use Only:	
Internal Use Only: Date Application Received Complete: Adjudicator: LAS Entry: Sec 3 CID: Sec 4 CID: Sec 5 CID: Sec 6 CID:			

MINERAL PROPERTIES LIST**(14)**

Properties that have previous mining disturbance requiring reclamation, active mining/exploration activities, surface improvements, location of a camp, or provides access through the claim block for mining activities. **DO NOT LIST CLAIMS UNLESS LISTED ACTIVITIES ARE ASSOCIATED WITH THEM.**

If requesting more than 12 claims, are additional sheets with ADL/BLM/USMS and legal descriptions attached? ☐ Yes ☐ No

Are any of these mineral properties an Upland or Offshore Mining Lease? Yes ☐ No ☒

	ADL/BLM/USMS #	PROPERTY NAME		ADL/BLM/USMS #	PROPERTY NAME
1.		See list on Figure 1	7.		
2.			8.		
3.			9.		
4.			10.		
5.			11.		
6.			12.		

INVENTORY OF EQUIPMENT**(15)**

List all mechanized equipment to be used (make, model, type, size, purpose, and number of each, including pumps). Attach additional sheets as necessary. If you are transporting on a trailer to the claim block, include the trailer size.

Check One:

	Make, Model, Type, Size, Purpose of Equipment or Pump	Quantity of this type	Located on the claim block?	Transporting to claim block?
1.	CAT D10N dozer - remove overburden, reclamation	1	☒	☐
2.	CAT D8R dozer - remove overburden, reclamation, construction	1	☒	☐
3.	Excavators, 20 & 30 ton class - load trucks, feed plants, gen'l utility	3	☒	☐
4.	CAT 950 loader - gen'l utility	1	☒	☐
5.	Articulated trucks, 30 & 40-ton class - haul overburden, pay gravel, and tails	2	☒	☐
6.	Washplants, 100 & 200 cyh class - process pay gravel	2	☒	☐
7.	Pumps, 8" x 10" - recycle process water	2	☒	☐
8.	Assorted trucks and ATVs for transport of fuel, supply, equipment, & crew	6	☒	☐

ACCESS TO THE CLAIM BLOCK**(16)**

Access across surface estates not owned by the State requires approval of the managing agency. It is the responsibility of the applicant to contact the owners of private property to obtain authorization for access.

When are you going to be transporting equipment and/or traveling to and from the claim block? ☐ Winter ☒ Summer

Access to the claim block crosses what type of land(s)?

State ☒ City/Borough ☐ Federal ☐ Private ☐

Indicate type(s) Existing Access to the claim block:

☒ All season Road (These are public easements maintained by municipal, borough, private, or state funds for year round use). List road(s) to claim block: Kougark Road/Nome-Taylor Highway

☐ Existing Route or a RST/ RS 2477 Easement with a mineral base surface.
If the RST/ RS 2477 Easement(s) has a State of Alaska number, please list: _____

☐ Navigable Waterway

☐ Aircraft Supported

Indicate type(s) of access to be constructed within the claim block for development of the mineral resource:

Road(s) ☒ Helicopter Pad ☐ Airstrip ☐ No Improvements or Construction Proposed ☐

ACCESS TO THE CLAIM BLOCK, CONTINUED

(16)

Please describe your construction activities and include mitigation measures to protect water, fish and game resources. Include a time frame for final closure and a reclamation plan for access within the claim block. Attach additional pages if necessary:

Access is existing since 1950s.

A access map **MUST** be submitted with your application. Topographic maps at a scale of 1"=1 mile must clearly indicate the proposed access route from start to finish, location of proposed construction activities, and appropriate legal descriptions (township and range) on each map sheet. Paper size should be limited to 8 ½" x 11". Do not tape maps together.

Name the individual(s) or business(es) who will be conducting the travel:

List all equipment and vehicles conducting travel to/from the claim block, including vehicle weights and season of travel:

N/A... no off-road travel

State the average total miles traveled in one round trip: _____. State the number of trips proposed: _____.

State the start and end date(s) or period(s) of proposed travel: _____.

Select the following terrain type(s) that best describes your route of travel: ☐ Wetlands ☐ Tundra

☐ Uplands ☐ Rivers or Other Water Bodies ☐ Wooded Areas (6" Trees or larger at breast height)

Will water be needed to construct ramps/ ice bridges? ☐ Yes ☐ No

If Yes, estimated quantity of water will be used: _____ gallons/day Water Source: _____

Are you transporting fuel? ☐ Yes ☐ No

Maximum volume of fuel (in gallons) that is being transported by one vehicle and any trailers or sleds it is towing:

Are you transporting other hazardous substances? ☐ Yes ☐ No If "Yes" indicate type and amount (e.g. gallons, lbs, psi):

How are petroleum products contained? (i.e., drums, bladders, steel tanks, etc.) Indicate size of containers:

How are petroleum products being transported? (i.e., skid-mounted tank, trailer, 55 gallon drums on skid, etc.)

ACCESS TO CLAIM BLOCK CONTINUED

(16)

Does your travel include the staging or storage of equipment or structures off the claim block? ☐ Yes ☒ No

If Yes, describe the location and dimensions of the long term or short term parking and/or storage areas.

PETROLEUM PRODUCT STORAGE

(17)

Do you have an Oil Discharge Prevention and Contingency Plan approved by the Alaska Department of Environmental Conservation? ☐ Yes ☒ No

Do you have either a trained spill response team or a contract with a spill response company? ☐ Yes ☒ No

Describe any measures you plan to take to minimize drips or spills from leaking equipment or vehicles:

Conventional spill and drip prevention equipment is stored in waterproof tubs with each of the fuel trucks

Quantity Petroleum Products to be Stored on the Project Site?

- ☐ 0-1,320 gallons of total storage (Secondary Containment recommended, but not required)
- ☒ 1,321-10,000 gallons of total storage (count only containers with a capacity of 55 gallons or greater). A self-certified Spill Prevention, Control, and Countermeasure (SPCC) plan is required and applies to all products, such as diesel fuel, gasoline, lube oil, hydraulic oil and waste oil. The self certified SPCC form can be downloaded at: <https://www.epa.gov/oil-spills-prevention-and-preparedness-regulations/tier-i-qualified-facility-spcc-plan-template>.
- ☐ 10,000+ gallons of total storage (count only containers with 55 gallons or greater storage capacity). An SPCC certified by a professional engineer is required and applies to all oil products, such as diesel fuel, gasoline, lube oil, hydraulic oil and waste oil.

Indicate Distance Stored From Flowing Waters: >100ft Feet. (Minimum distance from naturally occurring water bodies required by DNR is 100 feet).

Is waste oil stored on the project site? ☒ Yes ☐ No If Yes, describe quantity and storage modality: _____

Drums are located in metal Conex until it can be properly disposed at the nearest facility _____.

Are fuel containment berms around storage containers? ☒ Yes ☐ No Is berm area lined? ☒ Yes ☐ No

BLM operators submitting a plan of operation must submit a spill contingency plan. Notice level operations are encouraged to submit a spill contingency plan. The optional BLM Spill Contingency Plan can downloaded from: https://www.blm.gov/sites/blm.gov/files/BLM-AK_spill-contingency-plan_APMA_worksheetSup.pdf

TEMPORARY STRUCTURES/FACILITIES

(18)

Is a camp or placement of any temporary structure requested? ☒ Yes ☐ No

If "No", Please explain:

Describe all temporary improvements (including buildings, tent platforms, out-buildings, etc., including their quantity, dimensions and building type.

What type of property is the camp located on? ☒ State ☐ Federal ☐ Private (Patented) ☐ City or Borough ☐ MHTL

If camp is on private land, provide location:

Proposed perimeter dimensions of camp: 1000 Length (feet) 500 Width (feet).

☒ Request use of **existing** facilities, list ADL(s): ADL 571745, 571754, & 571755

☒ Year-Round ☐ Seasonal, from Approx. to , annually.

☐ Request to place **new** temporary structures, list ADL(s):

☐ Year-Round ☐ Seasonal, from Approx. to , annually.

	Temporary New Structures Quantity	Existing Structure Quantity	Use (Shop, office, etc.)	Dimensions (ft x ft)	Dimensions (ft x ft)	Dimensions (ft x ft)
Framed		4	lodging & storage			
Tent	2		shop and clean up area	60	30	30
Trailer						
Platforms	1		Yurt on site/tent for dining	30 ft diam		
Out-Buildings						
Other:	5		Containers for lodging & storage	20	8	8

* If Required, list any other structures on a separate sheet, include dimensions, use, and type.

Grey Water and Biological Waste - Describe storage and proposed method of disposal (e.g., leach line, septic, holding tank, or pit privy):

Outhouse, pit privy and leach line for grey water

Solid Waste - Describe the types of waste that will be generated on-site including garbage, scrap metal, industrial; and describe its disposal method. **Note: For on-site disposal on state land, additional authorization is required by DEC and DNR outside of the APMA.**
Solid waste: appropriate to burn will be burned in incinerator pit

What is the distance grey water, biological, and solid waste will be located from the ordinary high water mark of the nearest freshwater body (lake, stream, river, rivulet, etc.), or the mean high water mark of a saltwater body: >500ft

Will there be any use of animals (horses, dogs, goats/sheep, etc)? ☐ Yes ☒ No

Required: Dismantle and Removal for Structures: Provide a plan for dismantling and removing structures, equipment, and storage tanks. Include the method and timeline for restoration of all location areas.

All buildings are on skids and will be removed as part of mine closure. The camp area will be graded over with available organic material and allowed to revegetate naturally.

MINING METHOD

(19)

☒ Mechanical Placer Mining (e.g., terrestrial open-cut operations with dozer or excavator, etc.)

Estimated cubic yards processed annually: ~50,000

☐ Suction Dredge

☐ Mechanical Dredge (e.g., excavator or clam-shell)

List all suction and mechanical dredges. If information is not applicable, write "N/A." Attach extra sheet if necessary.

	Dredge 1		Dredge 2		Dredge 3	
Vessel ID (Name or Number)						
Vessel Dimensions						
Suction Dredge Intake Nozzle Diameter / Pump Size	Inches:	HP:	Inches:	HP:	Inches:	HP:
Mechanical Dredge Bucket Volume	Cubic Yards:		Cubic Yards:		Cubic Yards:	
Processing Rate	Yds. ³ /Hr.:		Yds. ³ /Hr.:		Yds. ³ /Hr.:	
Wastewater Discharge Rate	GPM:		GPM:		GPM:	
Maximum Water Depth	Feet:		Feet:		Feet:	
Average Daily Operating Hours						
Operation on Sea Ice (Yes/No)	Yes ☐ / No ☐		Yes ☐ No ☐		Yes ☐ / No ☐	
Vessel Registration # / State	#:	State:	#:	State:	#:	State:

Location: ☐ Offshore / Salt Water

☐ Pond connected to stream

☐ Stream

☐ Pond isolated from stream

☐ Mine cut isolated from stream

PLACER EXPLORATION DRILLING AND TEST PITS

(20)

Please provide topographic maps showing drilling and/or test pit locations that corresponds with the table below. Maps should (at minimum) have labeled Mineral Properties and labeled locations of proposed activities.

Methodology and reclamation of exploration activities must be described in the placer narrative.

Test Pits: ☐ Yes ☒ No

How long will the test pit be open if not converted into an active mine cut? _____

Estimated number of pits to be excavated: _____

Average Size: Length: _____ Ft. Width: _____ Ft. Depth: _____ Ft.

Placer Drilling: ☒ Yes ☐ No

Total number of holes to be drilled: ~35

Type of drill(s) used: Auger

Drilling and Test Pit Identification and Mineral Property Information

Trench/Hole ID on Map	ADL/BLM/USMS NUMBER
See Figure 13	

If more than 8 Pits/drill sites, please provide data in tabular format

EXPLOSIVES**(21)**

Will explosives be used? ☐ Yes ☒ No If "Yes", Indicate: Type: _____ Amount: _____

Explosive Handler's Certification/ATF Permit Numbers: _____

Describe your blast design, blast schedule, and explosives handling plan in the project narrative.

WATER ENTRAPMENT**(22)**

Will you be capturing water for use in mining operations? ☒ Yes ☐ No The entrapment is: ☒ Existing ☐ To be constructed

Where does the water have a potential to being stored? ☐ Above ground ☒ Below ground level ☐ Both

If above ground, what is the Length _____ ft Height _____ ft Width at crest _____ ft Width at base _____ ft of the berm(s)

What is the purpose of the water use? ☐ Makeup water pond ☒ Settling/recycle pond ☐ Stream diversion Other _____

How long do you expect for the entrapment to be in place ☐ Permanent ☐ 1-3 years ☐ 3-5 years ☒ 5 or more

If above ground, how many acre-feet is the maximum capacity of water stored from ground level to crest of the berm? _____

Total volume in acre-feet = surface area (acres) x average depth (feet) (1 acre = 43,560 square feet)

Where is the topographic location of the water storage area? ☒ Valley bottom ☐ Hillside

If on a hillside, Approximately how many feet is the water storage above the valley floor _____ ft

IN-STREAM ACTIVITIES and STREAM CROSSINGS**(23)**

List any equipment (refer to Box 15 if necessary) that will be crossing streams (including low-water crossings along established trails/roads) or used in any natural waterbody or used in-stream:

Open water crossing at North Fork by dozers, excavators, and haul trucks

List all stream crossings, suction dredge or pump locations, including unnamed streams.

	Stream Name/ Water Source	NAD 83 Datum (approximate) Coordinates can be obtained using Alaska Mapper http://dnr.alaska.gov/mapper/controller		MTRSC ¼ ¼ Ex: F001S001N01 SWSW	Check boxes to indicate type(s) of activity		
		Latitude ddd.mmmm	Longitude -ddd.mmmm		Crossing	Dredging	Water Intake
1.	Settling Pond	65.36434	-164.71534	K001S029W30 SW/SW	☐	☐	☒
2.					☐	☐	☐
3.	North Fork	65.3677	164.7197	K001S030W25 SE/SE	☒	☐	☐
4.					☐	☐	☐
5.					☐	☐	☐

If in-stream activities and/or stream crossings are requested at more than 5 locations, please provide tabular data format.

WATER USE AUTHORIZATIONS

If water is impounded, withdrawn, or diverted, the ADNR Water Resources Section needs to review the water sources and water uses to determine if a water use authorization is needed. Water usage (including from 100% recycle pond systems) may require approval by issuing a Temporary Water Use Authorization (TWUA) or a Water Right. Information provided below will be used to determine the quantity of water that you may be authorized to use for your mining operation. When estimating water quantities, please estimate withdrawal amounts typical of a dry summer and provide the maximum quantity that you may withdraw from a particular source (e.g., stream, pond, groundwater, etc.) in a season. A TWUA application may be initiated from this APMA, unless a Water Right is requested. Please contact the ADNR, Water Resources Section at telephone number (907) 451-2790 for more information.

- Is there a current Water Right within the proposed mineral property boundary? Yes ☒ No ☐
- If yes, provide the LAS or ADL Water Right Case File number: Quartz Creek, Dahl Creek
- What are the months of water use needed (for example May 1st through October 31st)? May 1st to October 15

Name & Location of Water Source(s):

- If water is required **to fill** or **to maintain** water in the recycle/settling pond system check the applicable box (table below in part A) for each water source used. Please note that a recycle/settling pond system is a water source (5 sources per TWUA). Stormwater from rainfall or snowmelt do not require water use authorizations.
- Identify each water source and its geographic location using MTRS. Include Lat/Long coordinates if available.

Example: Finger Lake: Fairbanks Meridian, Township 3 North, Range 3 West, Section 20.

MTRS: F3N3W20

Lat/Long: 65° 4' 15" N; 148° 12' 43" W

A. Name & Location of Water Source(s). No more than 5 water sources per TWUA. Attach list of additional sources if needed. A \$450 fee is associated with each TWUA. The APMA paperwork is all that is needed to apply for TWUAs. For example, if there are 20 sources listed in the APMA, 4 TWUA case files will be generated.

When submitting an APMA, a separate Application for Temporary use of Water form is not needed.

Provide the geographic name or locally know name of water Source. (Recycle/settling ponds, creek, stream, well, etc.) If requesting a stream reach, clearly identify the entire stream reach on a legible map.	Meridian	Township	Range	Section(s)	Start-Up Water and/or Make-Up Water? Check each applicable box.			
<u>Example:</u> Unnamed Creek	F	3N	3W	20	Start-Up	X	Make-Up	X
1. Settling/Recycle Pond	K	1s	29w	30	Start-Up	☒	Make-Up	☒
Latitude:					Longitude:			
2.					Start-Up	☐	Make-Up	☐
Latitude:					Longitude:			
3.					Start-Up	☐	Make-Up	☐
Latitude:					Longitude:			
4.					Start-Up	☐	Make-Up	☐
Latitude:					Longitude:			
5.					Start-Up	☐	Make-Up	☐
Latitude:					Longitude:			

WATER USE AUTHORIZATIONS CONT.

(24)

B. Water Use Activities. Complete applicable information for each source. For recycle/settling pond system complete part C. **Recycle/Settling Pond System.** For stream diversions also complete Section 29.

Geographic Name of Water Source (Same as sources Above). Describe the water use information for each source. For recycle/settling pond system complete Section C.	Diversion (gpm/cfs)	Withdrawal Rate (gpm/pump)	Number of Pumps	Hours per Day	Days per Month
1.					
2.					
3.					
4.					
5.					

C. Recycle/Settling Pond System	Withdrawal Rate (gpm/pump)	Number of Pumps	Hours per Day	Days per Month	Additional Notes:
This system will also need to be listed as a water source in Section A. This entire pond system counts towards the 5 sources allowed per TWUA. Provide Length (L), Width (W), and Depth (D), of each pond. Beaver ponds or similar nature made impoundments will not be permitted for use as settling ponds.	1500	1	12	25	See Figure 8
	Pond # 1: L: 50 ft W: 15 ft D: 10 ft			Pond # 2: L: 50 ft W: 15 ft D: 10 ft	
	Pond # 3: L: ft W: ft D: ft			Pond # 4: L: ft W: ft D: ft	

D. Camp Water Uses	Maximum # of People in Camp	Withdrawal Rate (gpm/pump)	Number of Pumps	Hours per Day	Days per Month	Source(s) of Water Well, Haul, Stream, Spring, Lake Source(s) will count towards the 5 sources identified in Section A.
Provide information on camp water uses. If an ADEC public drinking water system is used, please attach certificate to operate and/or associated documents.	5-8					Camp water will be hauled
	Additional Notes:					

WATER USE AUTHORIZATIONS CONTINUED

(24)

E. Exploration Activities A map of your requested drilling water sources is required with the following information: -MTRS sections, -stream reaches or other water sources (please label, including take points if known) -and drill hole locations.	Is Water Needed for Exploration Trenching or Drilling?	Withdrawal Rate (gpm/pump)	Number of Pumps	Hours per Day	Days per Month	Source(s) of Water Well, Haul, Stream, Spring Lake, etc. Source(s) will count towards the 5 sources identified in Section A.
	Yes	<100 gpm	1	10	7	Settling/Recycle Pond

D. SUCTION DREDGING.

If suction dredging activity is occurring, please ensure that you have completed the dredge table in Section (19) MINING METHOD.

TIMBER CLEARING AND USE
(Operations on State Lands Only)

(25)

Pursuant to AS 38.05.255, timber from land open to mining without lease, except "timberland", may be used by a mining claimant or prospecting site locator for the mining or development of the location or adjacent claims under common ownership. Timber not used for the mining or development of the location or adjacent locations, that is removed from the operation must be acquired via timber sale or written letter of non-objection from the Alaska Division of Forestry.

For questions on the appropriate use of timber on federal mining claims, contact your local BLM field office.

On other lands ("timberlands" and in areas that are closed to mining without lease), timber cleared, used and/or removed must be acquired via a timber sale or a written letter of non-objection from the Alaska Division of Forestry.

Will timber be used for the mining or development of the location or lease? ☐ Yes ☒ No

Describe the timbered area or areas to be cleared; include a map or drawing of the areas of timber to be cleared.

Describe the amount of timber to be used for the mining or development of the location or lease and the clearing methods you will use.

Are more than 40 acres of timbered area(s) to be cleared? ☐ Yes ☒ No

11 AAC 86.145. "A classification or designation indicating that timber and other forest products of significant value are included within a mining property is prima facie evidence that the land on which the property is located is considered to be "timberlands" for purposes of AS 38.05.255"

WASTEWATER DISCHARGE PERMIT APPLICATION**(26)**

All mechanical placer mine, suction dredge, and mechanical dredge operations that discharge to a water of the U.S. require an Alaska Pollutant Discharge Elimination System (APDES) permit from DEC. See Cover Pages for a list of APDES permit fees.

Operations wishing to discharge under the APDES Small Suction Dredge General Permit (dredges with intake diameters of 6" or less, or highbankers) may skip this section but must complete annual online registrations, including \$25 fee payments, at <https://dec.alaska.gov/water/edms>.

Previously issued DEC-APDES Wastewater discharge permit #: AKG370D9M

Do you want this APMA to act as an application or renewal for any of the following APDES general permits (GPs)*:

Mechanical Placer Miners GP (open-cut terrestrial operations):	☒ Yes	☐ No
Medium-Size Suction Dredge GP (nozzle diameter greater than 6" to 10"):	☐ Yes	☒ No
Norton Sound Large Dredge GP (nozzle diameter greater than 10" or mechanical dredge):	☐ Yes	☒ No

Waterbody the discharge flows directly into, or would potentially flow: Quartz Creek

Approximate coordinates of mine site:

Latitude: 65.3646 Longitude: 164.7102W

Source (e.g., DNR - Alaska Mapper): Alaska Mapper

*Mechanical placer operations that do not elect coverage under the Mechanical Placer Miners GP may be required to obtain coverage under the Multi-Sector General Permit for Storm Water. Contact DEC to terminate a permit.

Optional* - Mixing Zone Request or Termination for Mechanical Placer Mine Operations

Do you wish to apply for a mixing zone and modified turbidity limit from DEC? ☐ Yes ☒ No

If a mixing zone is requested, provide the following:

Coordinates of discharge location: Latitude: _____ Longitude: _____

Maximum Effluent Flow anticipated from your operation _____ (GPM) [must be greater than zero (0)].

Distance to nearest downstream drinking water source _____ and downstream placer mine _____.

Do you wish to terminate an active authorized mixing zone? ☐ Yes (APDES# _____) ☐ No

*A mixing zone authorizes an increase in the permit's turbidity limit based on available dilution from the surface water. Permittees without mixing zones must meet the water quality standard for turbidity at the point of discharge into the surface water.

**Certification Statement – applicable only to information required for DEC authorizations
(required for all DEC permit or mixing zone applicants)**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Party: Jeffrey O Keener

Responsible Party Name (First Last, Position) - Printed: Jeff Keener, Agent

Business Name (if applicable) - Printed: Metallogeny Inc.

SECTION 404 WETLANDS PERMIT

JURISDICTIONAL DETERMINATION (CORPS JD) and MITIGATION STATEMENT

All Placer Mining applicants are required to contact the Corps of Engineers for submittal requirements.

A complete application for a Department of the Army (DA), U.S. Army Corps of Engineers (Corps) Section 404 permit includes a description of project impacts (contained in the APMA), a Jurisdictional Determination (JD) and a Mitigation Statement. The applications for the JD and the Mitigation Statement are contained in two Corps Supplements, which may be attached to this APMA. The Supplements may be downloaded from the Corps and DNR websites, or obtained directly from a Corps office in paper copy, by email, or mail. Please contact the Corps to determine what supplements are required.

The Supplements are available at: <https://www.poa.usace.army.mil/Missions/Regulatory/Placer-Mining/>

Corps Supplement, Attachment 1, Jurisdictional Determination: Attachment 1 must be filled in and submitted to the Corps for **all new placer applications (New and Existing Operations)**. Photos of your mine site are required. Your JD will be valid for five years. Your photos will be used only for the purpose of conducting an offsite JD.

Corps Supplement, Attachment 2, Mitigation Statement: Alaska District regional mitigation policy for placer mining operations under this General Permit (GP) emphasizes avoidance and minimization of impacts; **compensatory mitigation is not required**. However, by regulation, a Mitigation Statement covering measures for avoidance, minimization, and compensatory mitigation, or, a reason why compensatory mitigation is not proposed, must be submitted to the Corps with each new APMA for projects that impact waters of the U.S.

Provide the Latitude and Longitude of the operation location (DD, NAD83):

Latitude: 65.36434 N Longitude: - 164.71534 W

Source (e.g., DNR - Alaska Mapper): Alaska Mapper

Please list Corps permits previously issued for this site: POA- 1996 - 00352 , POA- -

Certification Statement

The Alaska District will accept the APMA as a pre-construction notification, pursuant to 33 CFR 320.1 (c). Application is hereby made for a permit to authorize the work described in this APMA. I certify the information in the APMA, and any required Supplements, is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the operator/ applicant.

Operator or Agent:

J.O. Keener

4/14/2026

Print Name

Signature

Date

STREAM DIVERSION AND CULVERTS

(28)

A MAP OF COMPLETE STREAM DIVERSION IS REQUIRED: The map **MUST** show the entire length of the diversion (i.e., where the water is diverted from the natural stream channel to where it returns to the natural stream channel) with start and end locations clearly marked. Pending on the scale of the proposed diversion, additional maps, construction details, and a stream reclamation plan may be requested in addition to this section after initial review. Operations on BLM lands that are proposing a stream diversion are encouraged to contact their local field office as early as possible in the permitting process due to additional requirements. **Contact ADF&G, Habitat Section for Fish Habitat Permitting information regarding diversion requirements.**

Please note: A stream diversion structure may also qualify as a dam and be subject to the Alaska Department of Natural Resources Dam Safety Program per definitions provided in AS 46.17.900(3). If you require further regulatory guidance regarding dams, please contact our Dam Safety and Construction Unit, Dam Safety Engineer at (907) 269-8636, or for more information go to the Alaska Dam Safety Program website at: <http://dnr.alaska.gov/mlw/water/dams/>

Is Stream Diversion Required? ☐ Yes (if Yes, complete information below). ☒ No

Stream Name: _____

☐ Existing (Date Constructed _____) ☐ To Be Constructed (Date _____)

Diversion Start/upstream Location (Lat/Long) _____

Diversion End/Downstream Location (Lat/Long) _____

Is Stream Diversion? ☐ Permanent ☐ Temporary _____ year(s) _____ months

Will diversion be reclaimed annually prior to freeze-up or be retained throughout the mine life?

☐ Annually reclaimed/returned to natural stream ☐ Maintained throughout mine life

Dimensions of existing stream in diversion area:

Length _____ (ft) Top Width _____ (ft) Bottom Width _____ (ft) Depth _____ (ft) Floodplain Width _____ (ft)

Dominant substrate type (Choose Two): ☐ Bedrock ☐ Boulder ☐ Cobble ☐ Gravel ☐ Sand ☐ Silt/Clay

Dimensions of proposed diversion:

Length _____ (ft) Top Width _____ (ft) Bottom Width _____ (ft) Depth _____ (ft) Floodplain Width _____ (ft)

Note: The general geomorphology (e.g., meander, width/depth, pools/runs, etc.) and instream components (e.g., large woody debris, boulder/cobble, etc.) of the natural stream should be mimicked to the extent practicable.

***Required:** A written stream diversion narrative in addition to this form. The narrative should describe the following:

- 1.) Step by Step Procedures
- 2.) Construction Techniques
- 3.) Reclamation Techniques
- 4.) Timelines

Are culverts being installed in any natural water-body or diversion structures? Yes/No No
If yes include culvert locations, sizes and length on a map or table.

2024 ANNUAL RECLAMATION STATEMENT

(33)

- ☒ Placer Mining
☐ Suction Dredging
☐ Hardrock Exploration

APMA # F-9398

Complete and return this statement by December 31, 2024. If you did not operate, fill in your name, check bottom box, sign, and return form.

In accordance with AS 27.19 (Reclamation Act):

I, J.O. Keener, Agent hereby file an annual reclamation statement for the 2024 mining operation described in subject Application for Permits to Mine in Alaska. (Submission of this statement does not constitute reclamation approval.)

Volume of material disturbed in 2024: ~70,000 cubic yards (Includes stripping and processed material.)

Sluice days last season: 50 Cubic yards of material processed daily: 1,000 Annually: ~50,000

Total acreage disturbed in 2024: State 38, Federal 0, Private 0. (Includes stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary stream diversions, stream bypasses, and settling ponds.) Federal operators should include area of camp and access roads.

Length N/A feet and Width _____ feet of stream diversion.

Stream diversion: ☐ Temporary ☐ Permanent ☒ No Diversion (check one).

Total Area reclaimed in 2024: 0 acres.

Total un-reclaimed acres: 38 (This should match "total acreage currently disturbed" on the 2025 Reclamation Plan Form.)

For areas reclaimed, the following reclamation measures were used (check only measures that were used).

You must include photographs or videotapes of the completed reclamation work:

- ☐ Spread and contoured tailings
☐ Spread topsoil, vegetation, overburden muck or fines on the surface of contoured tailings
☐ Reestablished flood plain with stream channel in stable position
☐ Ponds are reclaimed
☐ Backfilled and reclaimed temporary stream diversions
☐ Camp removed, cleaned up and left free of debris
☐ Hardrock Exploration: Complete and submit an electronic Annual Reclamation Report

Other Reclamation Measures Taken:

~20 acres on Dahl Creek was reclaimed in 2024, but has not been approved by DNR, thus the bond will be renewed for the total 38 acres

☐ Did not operate in 2024 and therefore did not conduct reclamation.

Relationship to Claim(s)

☐ Owner ☐ Lessee ☐ Operator

☒ Agent For: Mammoth Valley

Signed J.O. Keener Date 4/14/2026

2025 RECLAMATION PLAN FORM (PLACER EXPLORATION OR MINING)

☒ A. RECLAMATION PLAN (REQUIRED if the operation will disturb five or more acres this year, OR 50,000 cubic yards, OR if the operation has a cumulative disturbed area of five or more acres).	☐ B. RECLAMATION PLAN VOLUNTARY (for an operation below limits shown in Box A but wanting to qualify for the statewide bonding pool. (Operations on BLM Lands and others not filing Letter of Intent).	☐ C. LETTER OF INTENT (34) (less than five acres to be disturbed AND less than 50,000 cubic yards AND less than five acres unreclaimed area).
--	---	---

In accordance with Alaska Statute 27.19, reclamation is required of all mining operations. Reclamation bonding is required of operations with disturbance of 5 acres or greater. Completion of this application will meet the requirements for a "Reclamation Plan" for operations 5 acres and larger in size and for a "Letter of Intent To Do Reclamation" for operations under 5 acres. If you do not intend to use the reclamation methods presented below, you must provide additional information concerning your plans for reclamation under separate attachments.

Total acreage currently disturbed: 38 acres. This should match: "Total Unreclaimed Acres" on your 2024 Annual Reclamation Statement for Small Mines, or line #7 on your 2025 Bond Pool Renewal Form. Disturbed ground includes all unreclaimed mining and exploration activity (excluding camps and roads) since October 1991. Federal operators must include areas of camps and roads.

New acres to be disturbed in 2025 7 acres. Total acreage (currently disturbed plus new acres): 45 acres.

Acreage disturbed by land status: 45 State (general) 0 State (Mental Health) 0 Private 0 Federal

Total acreage to be reclaimed in 2025: 20 acres; Total volume of material to be disturbed in 2025: 170,000 cubic yards.

Include strippings and overburden to be removed. Cubic yards = Length (yards) x Width (yards) x Depth (yards).

☐ Reclamation will be conducted concurrently with activity. ☒ Reclamation will be conducted at the end of the season.

THE FOLLOWING RECLAMATION MEASURES SHALL BE USED:

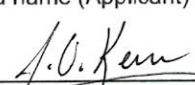
(These measures are required by law. Those that do not apply may be crossed out; but, an explanation must be given as to why these measures are not necessary at your site.)

- Topsoil, vegetation, and overburden muck, not promptly redistributed to an area being reclaimed, will be individually separated and stockpiled for future use. This material will be protected from erosion and from contamination by acidic or toxic materials and will not be buried by tailings.
- The area reclaimed will be reshaped to blend with the surrounding area using tailings, strippings, and overburden and be stabilized.
- Stockpiled topsoil, overburden muck, will be spread over the contoured exploration sites to promote natural plant growth such that the area can reasonably be expected to revegetate within five years. Stockpiled vegetation will be spread over topsoils.
- Settling ponds located within the active flood plain and necessary for continued use during the next mining season will be protected from erosion or the fines removed.
- If the mining operation diverts a stream channel or modifies a flood plain to the extent that the stream channel is no longer stable, the stream channel will be reestablished in a stable location in the valley flood plain.
- The flood plain will be established as appropriate to accommodate seasonal high-water flood events and prevent undue erosional degradation.
- Exploration trenches will be backfilled. Brush piles, stumps, topsoil, and other organics will be spread on the backfilled surface to inhibit erosion and promote natural revegetation.
- Shallow auger holes (limited to depth of overburden) will be backfilled with drill cuttings or other locally available material in such a manner that closes the hole to minimize the risk to humans, livestock and wildlife.
- At placer drift mine closure, all mine shafts, adits, tunnels, and air vents to underground workings will be stabilized and properly sealed to ensure protection of the public, wildlife, and the environment.
- On state lands; all buildings and structures constructed, used or improved will be removed, dismantled, or otherwise properly disposed of unless the surface owner or manager authorizes that the buildings and structures may stay.
- On state lands; all scrap iron, equipment, tools, piping, hardware, chemicals, fuels, waste, and general construction debris will be removed or properly disposed of.
- Reclamation measures taken will be consistent with any alternate post mining land use approved by the Commissioner, subject to the provisions of 11 AAC 97.300(h) and the conditions (if any) of an approved reclamation plan.

IMPORTANT: 1. Alternative reclamation measures may be approved if the reclamation measures presented above are not applicable to your site. Please explain in separate correspondence. Submit a sketch and describe additional reclamation measures you propose to conduct at your operation. Reclamation measures must comply with AS 27.19.

BONDING: In accordance with AS 27.19, bonding is required for all operations having a mined area of greater than or equal to five acres on State Land. This area must be bonded for \$750.00 per acre, unless the miner can demonstrate that a third party contractor can do the needed reclamation for less. The Statewide Bonding Pool may be joined by completing a bond pool application form and meeting certain requirements. No reclamation plan approval goes into effect until the bonding pool deposit and annual nonrefundable fees are paid. Use bond form to calculate area of disturbance for bonding.

BLM requires that a reclamation plan be consistent with §43 CFR 3809.420, Performance Standards for the Surface Management regulations for Federal Operations. Refer to 43 CFR 3809 or the BLM minerals website available at <https://www.blm.gov/programs/energy-and-minerals/mining-and-minerals> for more information on what is needed for a reclamation plan on Federal lands, as they may be different than those identified above.

J.O. Keener Printed name (Applicant)  Signature (Applicant)	Relationship to Mineral Property: ☐ Owner ☐ Lessee ☐ Operator ☒ Agent For: <u>Mammoth Valley</u>	Date: <u>4/14/2026</u> APMA #: <u>F-9398</u>
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**STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL RENEWAL FORM
FOR 2025 OPERATIONS**

APMA # F-9398

Mammoth Valley Mining LLC

Name

11701 FM 2244 Suite 185

Austin

TX

78738

Mailing Address

City

State

Zip

Submits to the State of Alaska, Department of Natural Resources, a renewal of reclamation bonding in accordance with AS 27.19 for mining activity on claim's: See Figure 1 of the attached Mine Plan

located in T. _____, R. _____, Sections _____, _____ M.

The amount of the refund or amount owed is calculated as follows:

1. Only whole number of acres bonded in 2024: 38.0 acres rounded up to next integer: 38 acres
2. Total whole number of acres disturbed in 2024? 38.0 acres rounded up to next integer: 38 acres

This includes unreclaimed acreage from previous years, October 1991 to present, for state or private lands, and 1981 to present for federal claims. On federal claims include area of camp and access roads.

Bonding credits carried forward from 2024 to 2025:

If you claim any acres in 3 or 4 complete the Bond Pool release form.

3. Number of acres bonded in 2024 but not disturbed: _____ acres x \$ 112.50 = \$ _____.
(1 minus 2 above)

4. Number of acres reclaimed in 2024 and approved by BLM/ DNR. _____ 0 _____ acres x \$ 112.50 = \$ _____.
Federal miners must submit a **Financial Guarantee Amount Reduction Letter** from BLM. All miners requesting a reduction of acreage must fill out the application for **Bond Release Form**, and include evidence of their reclamation with Photo/Video documentation unless otherwise specified by DNR.

5. Dollar total of lines 3 + 4: \$ _____

Bonding obligations for 2025:

6. Acreage disturbed but not bonded in 2024 (2 minus 1 above): _____ acres x \$ 150.00 = \$ _____

7. Number of all 2024 unreclaimed acres (2 minus 4 above): 38 acres x \$ 37.50 = \$ 1425.00

(line 7 should match "total acreage currently disturbed" on your 2024 Reclamation Plan.

8. New acres to be disturbed in 2025: 7 acres x \$ 150.00 = \$ 1050.00

9. Dollar total of lines 6 + 7 + 8: \$ 2475.00

10. Total acreage bonded in 2025 (7 + 8): 45 acres

If line 5 is larger than line 9 enter the difference here \$ _____. This amount will be refunded.

If line 9 is larger than line 5, the difference is due DNR \$ 2475.00. Make check payable to: DEPARTMENT OF NATURAL RESOURCES.

Signed - Miner

A. O. Kuen, AGENT FOR MVM

Date

4/14/2026

ADNR - Division of Mining, Land & Water

Date

BLM - Bureau of Land Management

Date

Submit to DNR

Clear Form

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Introduction...

Mammoth Valley Mining LLC ("MVM") has been mining on Quartz Creek since 2014 and proposes to continue its placer exploration and placer mining activities over the next ten years according to the following mine plan.

Mammoth Valley Camp...

The MVM camp is located on a bench of Dahl Creek and is accessed via 1.25 mile access road from 80 Mile Kougarak Road at the Brakes Bottom gravel pit. This camp site and road has been in existence since at least the early 1950s when Patrick Bliss and Heusten Alexander were mining on Quartz Creek and on Dahl Creek. The MVM crew is composed of 5 to 8 miners who are housed in small bunkhouses erected on skids. A large yurt serves as a cookshack and meeting place. Outhouse privies are used and a leach line is installed for gray water from the kitchen and shower house. Water is hauled to the camp from the Salmon Lake spring.

Fuel & Oil Storage...

Diesel fuel is delivered to the mine via commercial fuel carrier (Bonanza Fuel or Crowley) and pumped off into one fuel trailer holding up to 6,000 gallons and a fuel truck holding 3,000 gallons of diesel fuel. The fuel trailer is parked in a lined, bermed containment facility near the washplants and >100 ft from flowing water. The fuel truck travels to wherever a piece of equipment needs fuel. Fuel spill and drips kits are kept at the fuel trailer and in the fuel truck. A self-certified SPCC plan is kept in the Mine Office.

Motor oil and hydraulic oil are purchased in 5-gallon buckets and stored in a steel container near a shop tent at the Camp site. Waste oil is put back in the empty 5-gallon buckets or in a 55-gallon drum and hauled to Nome to be used in the waste-oil burner at the Nome City landfill.

Exploration Plan 2026...

MVM proposes to drill ~35 holes with a Nodwell mounted auger drill on North Fork Bench to explore for concentrations of placer gold. It is desired to do this as early as possible in 2026 while the ground is still hard. ***It is requested of USACE to review the plan shown on Figure 5 to assess the activity for permitting under a separate NWP-6 for temporary surface disturbance of wetlands.*** This would allow MVM to proceed with the drilling while the Individual Permit for the mine plan is being processed. The drilling and reclamation methods are described in detail on Figure 5.

Mine Plan 2026 to 2030, No. 1 Below Quarz Left-Limit Bench...

MVM proposes to mine at two locations during 2026 to 2030 as shown on Figure 4. These sites were surveyed and cleared for mining in fall of 2025 (**see Mammoth Valley Site Condition Assessment and Survey, Northern Land Use Research Alaska LLC, Jan 2026**) *Work would begin on No. 1 Below Quartz L-L Bench by conducting more reclamation along the right limit of the 2023 Hoffman Pit. It would be best if this work could be performed as early as possible while the ground is still frozen.* The Pilot Pit Cut #1 at this location will be prepared by dozing organic overburden into a stockpile along the northern margin of the cut and near the road. Silt overburden is then used to backfill the Hoffman Pit. Pay gravel is hauled to the plant for processing. If this cut is successful, a second cut (Cut #2) will be mined in 2027-2028 in the same fashion. A detailed description of the process, area, and volumes are given on Figures 6 through 12.

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine Plan 2026 to 2030, North Fork Bench...

If the drilling program proves that North Fork Bench has commercial quantities of placer gold, MVM proposes to construct a perimeter road around the mine area and plan mining by dividing the area into 4 annual pits as shown on Figures 14 & 15. The annual pits are further divided into 4 mine cuts. To initiate the 2027 pit, the surface is prepared by dozing organic overburden to the west into a stockpile about 100 ft wide and up to 15 ft tall. Pilot Cut #1 is then prepared by removing ~16 ft of frozen silt overburden by loading into trucks and backfilling an un-reclaimed mine cut from 2025 within a short haul distance. Up to 6 ft of pay gravel is hauled to the Process Site for processing. After completion of Cut #1, overburden from Cut #2 is dozed into and backfills Cut #1 and the pay is hauled to the Process Site. This procedure is followed to complete the annual pit. If the pilot pit is successful, the rest of the North Fork Bench 2028 through 2030 pits are prepared and mined in the same fashion as for the commissioning pit. Details of this are shown on Figures 16 to 21.

Mine Plan 2026 to 2035, Brakes Bottom Gravel Pit...

During this period, it is proposed to borrow ~10,000 cy of gravel from the Brakes Bottom gravel pit to use to maintain the access road going into the MVM mine and camp. This gravel pit has been in use by AK-DOT for maintaining the Kougark Road since the early 1970s. The MVM borrow cut will be up to 200 ft long by 100 ft wide and up to 15 feet deep (~0.5 ac & ~10,000 cy) and will be dug into the bank from the AK-DOT pit floor. At the end of this period, a determination will be made to continue to borrow from the MVM cut and to leave it open for AK-DOT to also borrow from or to conduct final closure on it. A modification to this plan will be submitted in 2035 to show this determination.

Reclamation Plan 2029 & 2031...

Reclamation at both sites will occur after mining is complete. Measures include backfilling excavations with overburden and grading reserved organic overburden over the contoured surface. Wherever possible, small shallow ponds will be created to give a functional lift to the local habitat. It is anticipated that natural revegetation at these sites will be rapid. See details given on Figures 8, 9, 19, 20, & 21.

In both cases, if more mining is contemplated going downstream on the Quartz Left-Limit Bench and/or upstream onto Joe Bench, it may be desirable to construct new settling ponds in the 2026 to 2030 mine pits at both locations (see Figure 11). A plan modification showing these details will be submitted for review in winter of 2027 – 2028.

Mine Plan 2031 to 2035 & Cultural Resources...

Figure 4 shows other locations in white dashed boundaries where previous exploration has shown valuable concentrations of gold occur. MVM wishes to conduct mining at the sites in the future, but they have not been surveyed for cultural artifacts. MVM will work with its consultants at Northern Land Use Research Alaska to develop a notification and mitigation plan for un-surveyed locations. After the mitigation plan is organized, a modification to the mine plan will be prepared and submitted to show how MVM proposes to mitigate impact to identifiable cultural resources, as well as to water resources and habitat.

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Tentative Reclamation Schedule...

Currently, MVM is bonded for 38 acres and 20 acres were reclaimed in 2025 (but have not been approved by DNR), thus there are ~18 un-reclaimed acres at this mine site. This includes the Process Site, the large Settling/Recycle Pond, part of the Hoffman Pit, and a small pit near the mouth of North Fork.

New Disturbance in 2026....

North Fork placer drilling = ~0.02 ac & 14 cy → reclaimed immediately after completing each hole
North Fork perimeter road = ~1.5 ac & ~10,000 cy → reserved to access claims on upper Quarz Creek
No. 1 Below Quartz Left-Limit Bench, Cut #1 = ~5 ac & ~169,000 cy → reclaimed in 2028, unless more mining takes place downstream on the left-limit bench.

Therefore, the total new disturbance proposed in 2026 to 2027, including the Brakes Bottom borrow pit is ~26 acres and ~825,000 cubic yards of overburden and pay gravel.

New Disturbance in 2027...

North Fork Mine Pit #1 = ~12.5 ac & ~428,000 cy → reclaimed in 2028, unless more mining takes place on North Fork Bench.
No. 1 Below Quartz Left-Limit Bench, Cut #2 = ~6.5 ac & ~208,000 cy → reclaimed in 2028, unless more mining takes place downstream on the left-limit bench.

After 2027, if no further mining is contemplated, the previously un-reclaimed acreage and the newly disturbed acreage will undergo final reclamation in 2028. A total of ~64 acres and >825,000 cy will be reclaimed. In this case, the MVM camp would be reclaimed by removing all buildings and equipment in 2029 and the camp site will be graded over with any available organic material. Although NLUR determined that the older Alexander buildings owned & occupied by MVM are not eligible for registration as historically significant buildings, they could be left on site as historical artifacts. AK-DMLW & SHPO will be consulted on this issue.

If mining continues through 2030 the total new disturbance at the two sites is estimated to be:

No. 1 Below Quartz Left Limit Bench = 11.5 acres & 377,000 cy

North Fork Bench = 50 acres & 1,732,000 cy

Therefore, a total of 61.5 acres & 2,109,000 cy

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Project Location...

For the period 2026 to 2030, mechanized placer mining activity is proposed on the state claims within the dark boundary below. This includes the following claims:

ADL 571745
ADL 571746
ADL 571747
ADL 571748
ADL 571751
ADL 571753
ADL 571754
ADL 571757
ADL 612219
ADL 802205

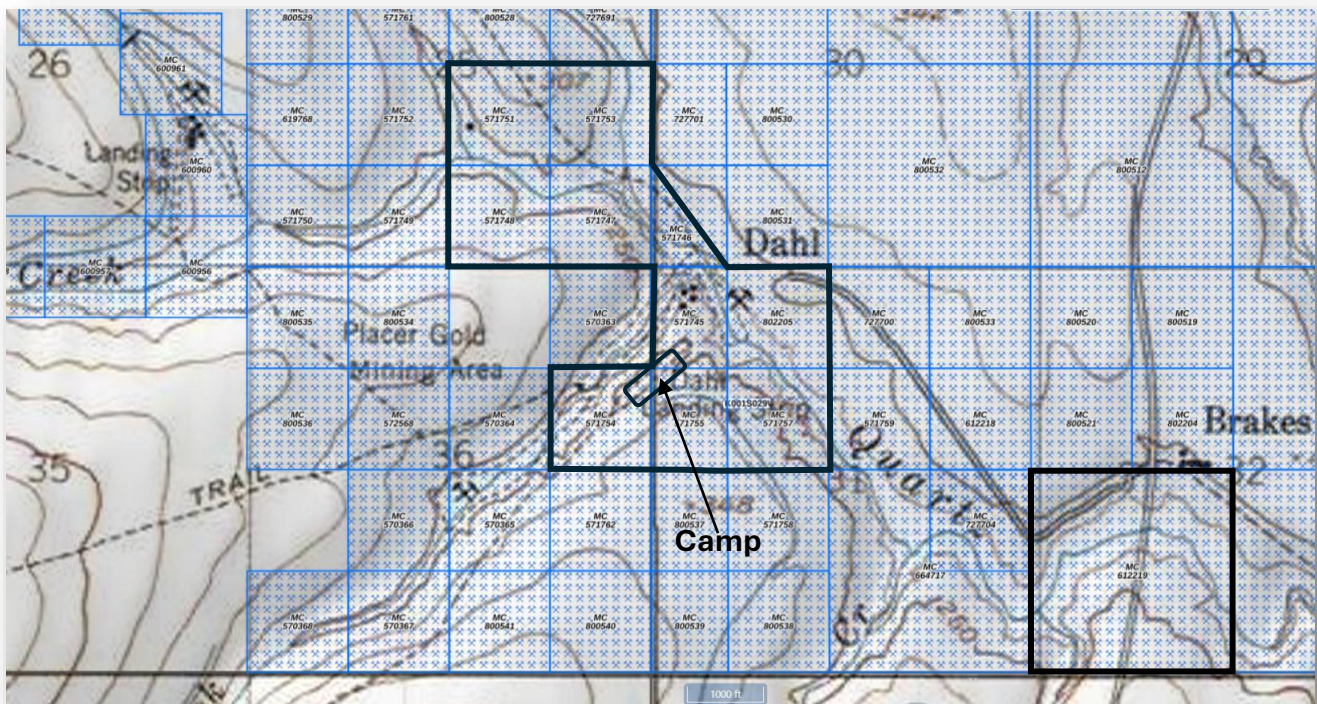


Figure 1

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

**Previously permitted mine sites, POA-1996-00352, on Middle Dahl Creek and
Lower Quartz Creek**

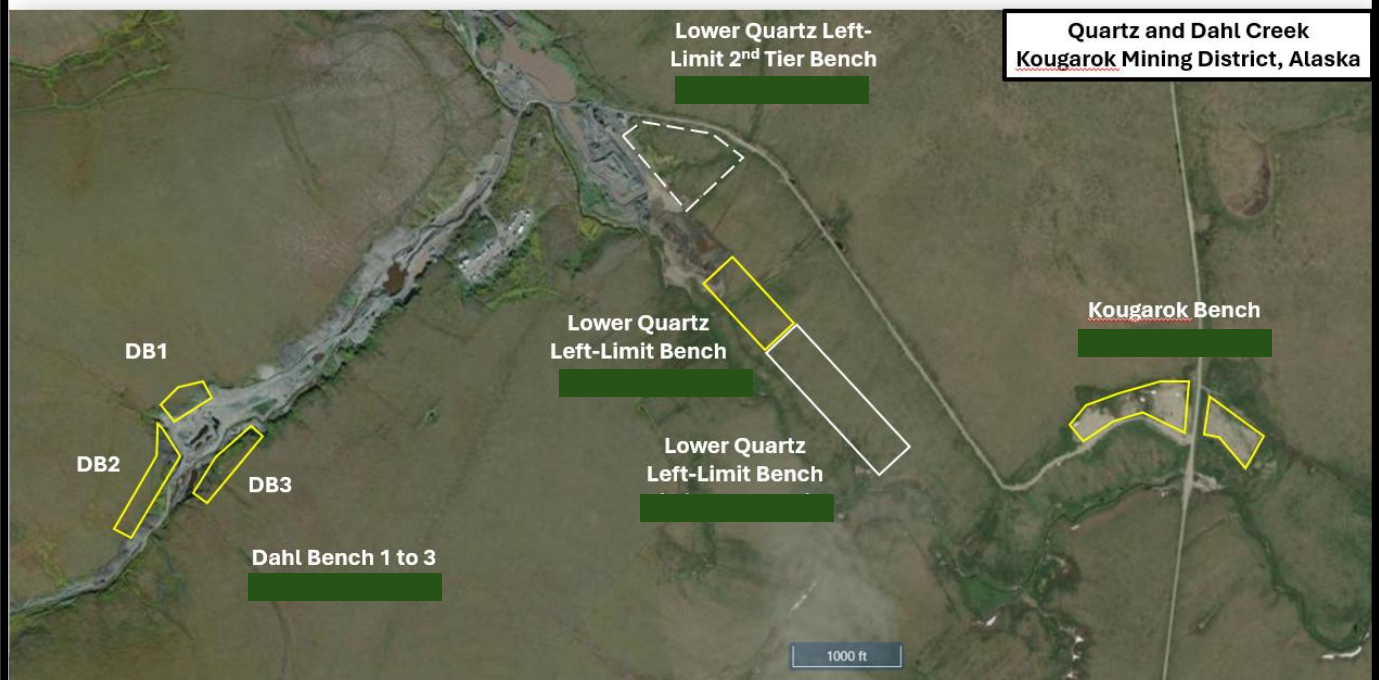


Figure 2

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

**Previously permitted mine sites, POA-1996-00352, on upper Quartz Creek
(Note that the Joe Creek and Atlas Creek sites were previously mined, <1959)**

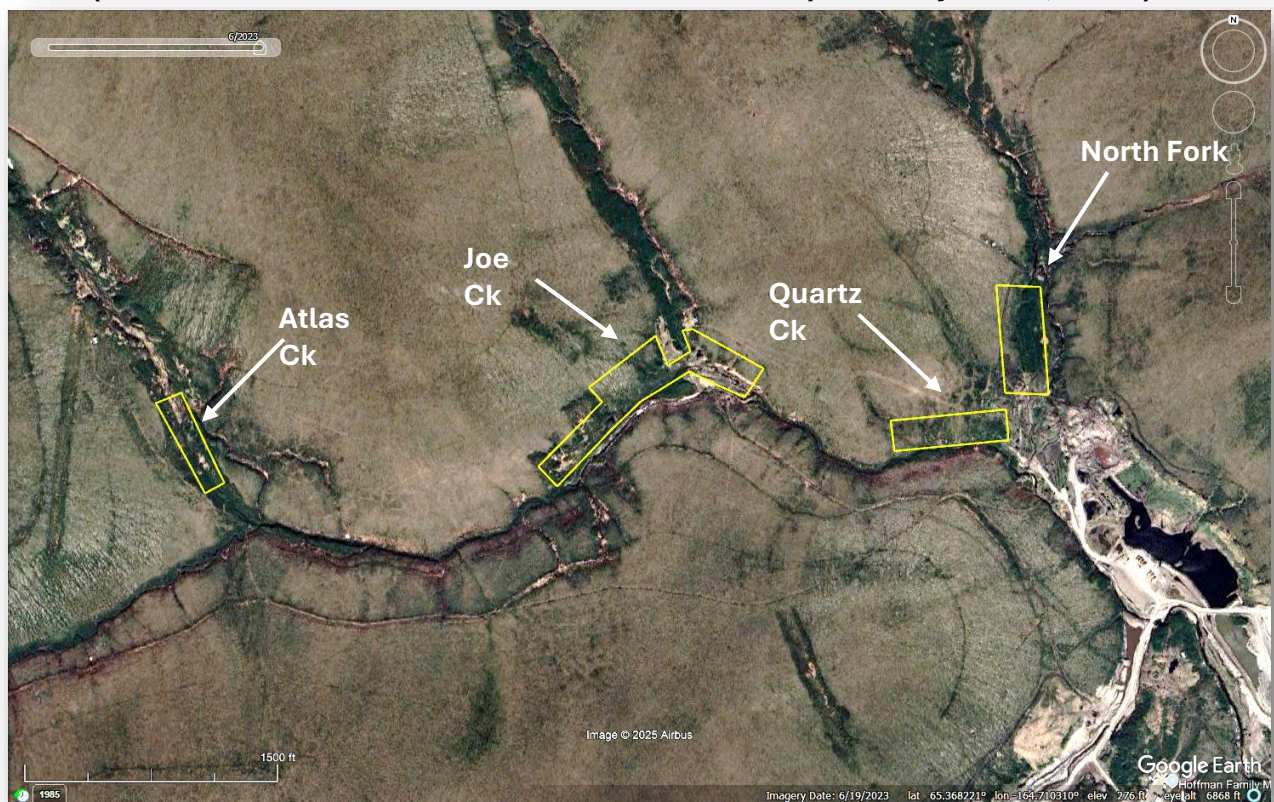


Figure 3

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine Plan 2026 to 2035...

During the period from 2026 to 2030, MVM proposes to conduct placer mining activity at the sites shown below in dark outline. These sites were surveyed in September of 2025 and assessed for cultural artifacts and have been cleared for surface disturbance. As part of the cultural resource inventory conducted by Norther Land Use Research LLC, **MAMMOTH VALLEY MINE CONDITION ASSESSMENT AND SURVEY, SEWARD PENINSULA, ALASKA, January 2026**, MVM will adopt the recommendations made to maintain a 500 ft buffer around those sites identified as potentially important for preservation. The mitigation plan for new, un-discovered cultural and historical relicts presented by NLUR will be adopted.

Future areas being considered for mining during the period from 2030 to 2035 are shown in white dashed boundaries. These sites have not been surveyed. Before mechanized disturbance takes place in these sites, a plan modification will be submitted and NLUR will be consulted for the best path forward.

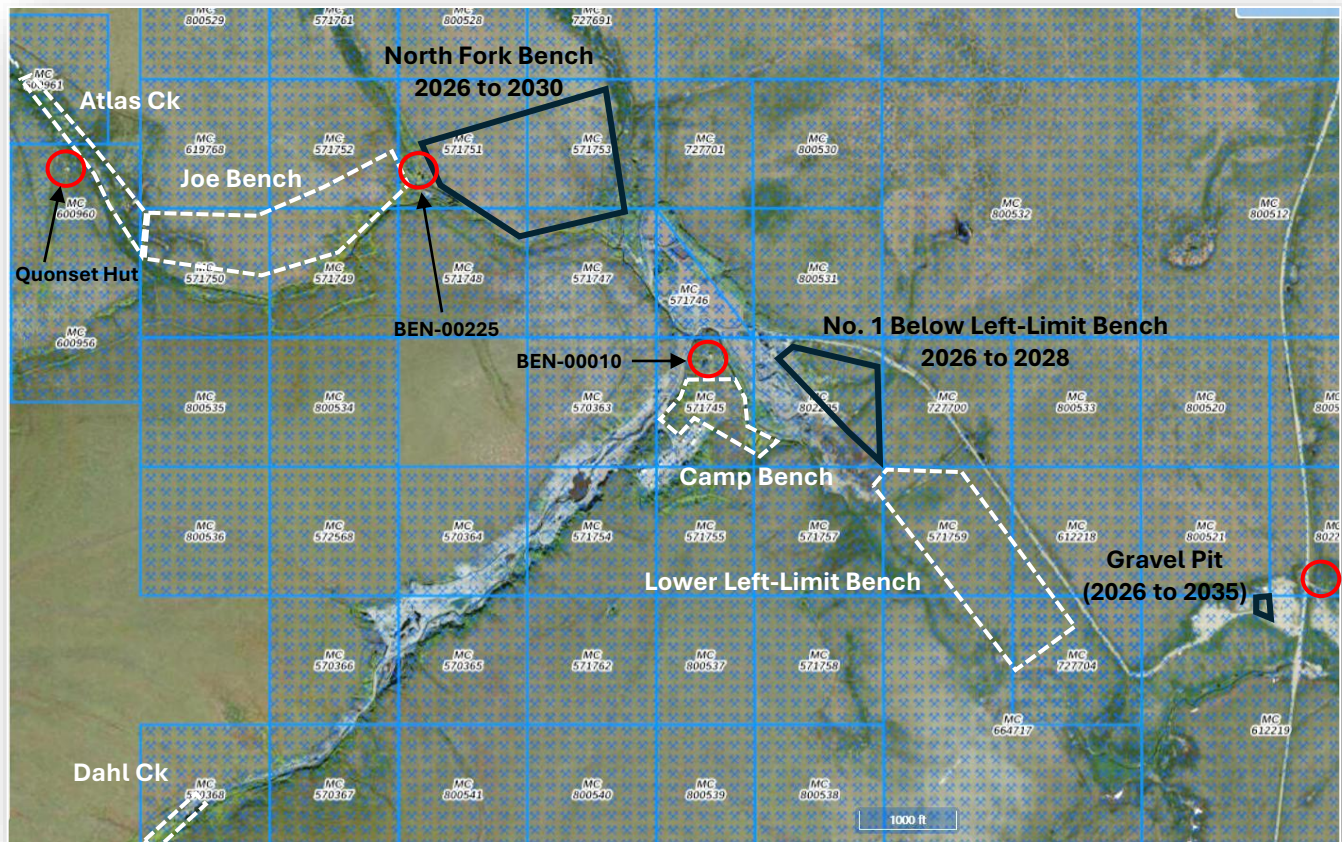


Figure 4

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

Placer Drilling Proposal on North Fork Bench...2026

It is proposed to drill up to 35 holes on the North Fork Bench on the left-limit of Quartz Creek to explore for placer gold concentrations using an auger drill mounted on a rubber-tracked Nodwell ATV. The holes will be 8-inches in diameter and up to 30 feet deep. Drill lines are spaced ~500 ft apart and holes are spaced ~100 ft apart on the drill lines. Samples of placer gravel will be collected and transported to the MVM gold room located near the Process Site for processing and panning.

The North Fork Bench is a typical tundra moss covered rise forming a low ridge between two tributaries, North Fork and Joe Creek, of Quartz Creek. Previous drilling in the vicinity indicates the ground may be permanently frozen. In the area of proposed drilling, excepting the cabin at Joe Creek, there is scant evidence of previous mining activity other than faint trails in the moss from modern tracked equipment. A 500 ft protective buffer around the cabin will be established.

Each drill hole will disturb <25 sq-ft and <0.4 cubic yards of cuttings. The total disturbance by drilling at this site is ~0.02 acres and ~14 cubic yards of cuttings. Holes will be backfilled with cuttings immediately after logging and sampling is completed. The top of the hole will be plugged with a wad of tundra organics. All drill holes will be reclaimed for ~0.02 acres of surface disturbance and ~14 cubic yards of organic silt and placer gravel. Note that MVM will maintain a 500 ft buffer around the un-surveyed cabin on Joe Creek. **It is requested to USACE that the placer drill exploration plan be evaluated and permitted under NWP-6 criteria.**

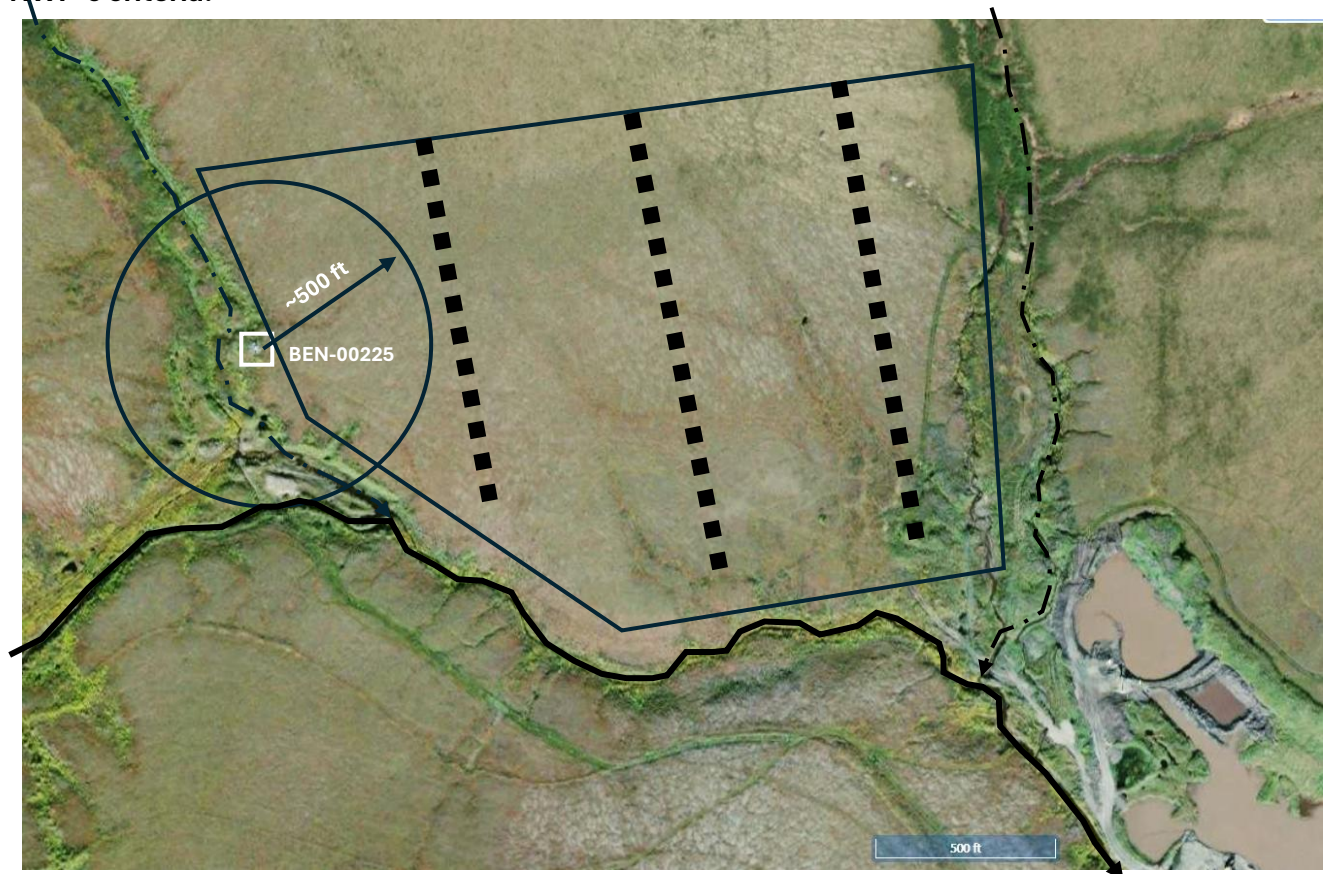


Figure 5

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine Plan for #1 Below Left-Limit Bench, 2026 to 2028....

MVM proposes to mine two cuts at this site during the period from 2026 to 2028. This part of the bench was previously drilled and shown to contain valuable concentrations of placer gold. The map below shows the total mine area footprint, the un-reclaimed portion of the Hoffman cut (2023), the process site, and an area along the right-limit of the Hoffman cut that needs more reclamation. MVM proposes to conduct mechanized reclamation of the right-limit of the Hoffman cut as early in 2026 as possible, while the ground is still frozen. The Hoffman cut will be backfilled with overburden from the Cut #1 of the 1 Below L-L Bench pit area, as shown in the following plan diagrams.

Total un-reclaimed area at this site is ~8.5 acres.

Total proposed new disturbance at this site is ~11.5 acres & ~377,000 cy of overburden & pay gravel.

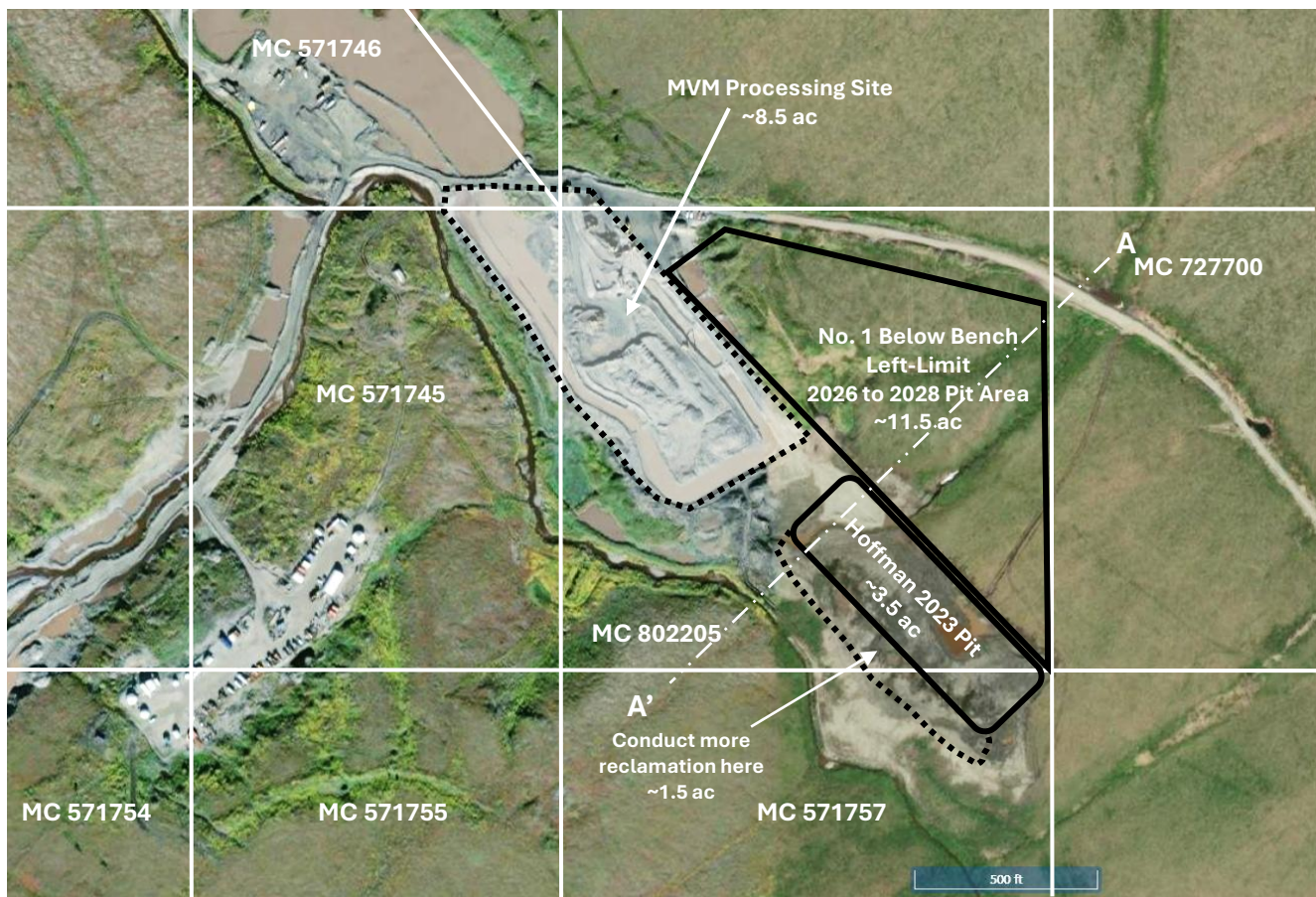


Figure 6

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

2026 to 2028 Mine Plan, No. 1 Below L-L Bench...Pilot Mine Cut #1

About 2 ft of moss and organic overburden on Cut #1 will be dozed towards the road into a stockpile, ~10 ft thick, to be reserved for future reclamation. Approximately 20 ft of ice-rich silt overburden will be used to backfill the Hoffman cut. Ice that thaws from the overburden will be drained into Process Site settling channel. Pay gravel averages about 4 ft thick and will be hauled with trucks via the existing haul road to the Pay Stockpile near the washplant for processing.



Figure 7

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

2026 to 2028 Mine Plan, Cut #1, No. 1 Below L-L Bench...

Pay Gravel from Cut #1, #1 Below L-L Bench will be processed with Plant #1 composed of a vibrating screen deck and sluice at a rate of ~100 cy/hr. Coarse tailings are used to improve the haul the road. Sluice effluent is discharged into a Settling Channel, which is mucked out periodically with an excavator. This silt is stockpiled and allowed to drain in the central part of the Process Site. Drainage water is collected into the Settling Channel. Process water flows through the Settling Channel to a large Recycle Pond on the north side of the Mine Access Road through a culvert. Recycle pump then return the process water to the plants. Recycled water is pumped to Plant #1 at a rate of ~1,500 gpm via 8' x 6" pump and 8-inch HDPE pipeline.

Areas and Volumes of Stockpiles:

Cut #1 = ~4.0 ac

ORG = ~1.0 ac & ~13,000 cy, up to 10 ft thick

OBN = ~3.5 ac & ~130,000cy, up to 23 ft thick

PAY = ~26,000 cy

Total new disturbance in 2026 = 5 acres & ~169,000 cy

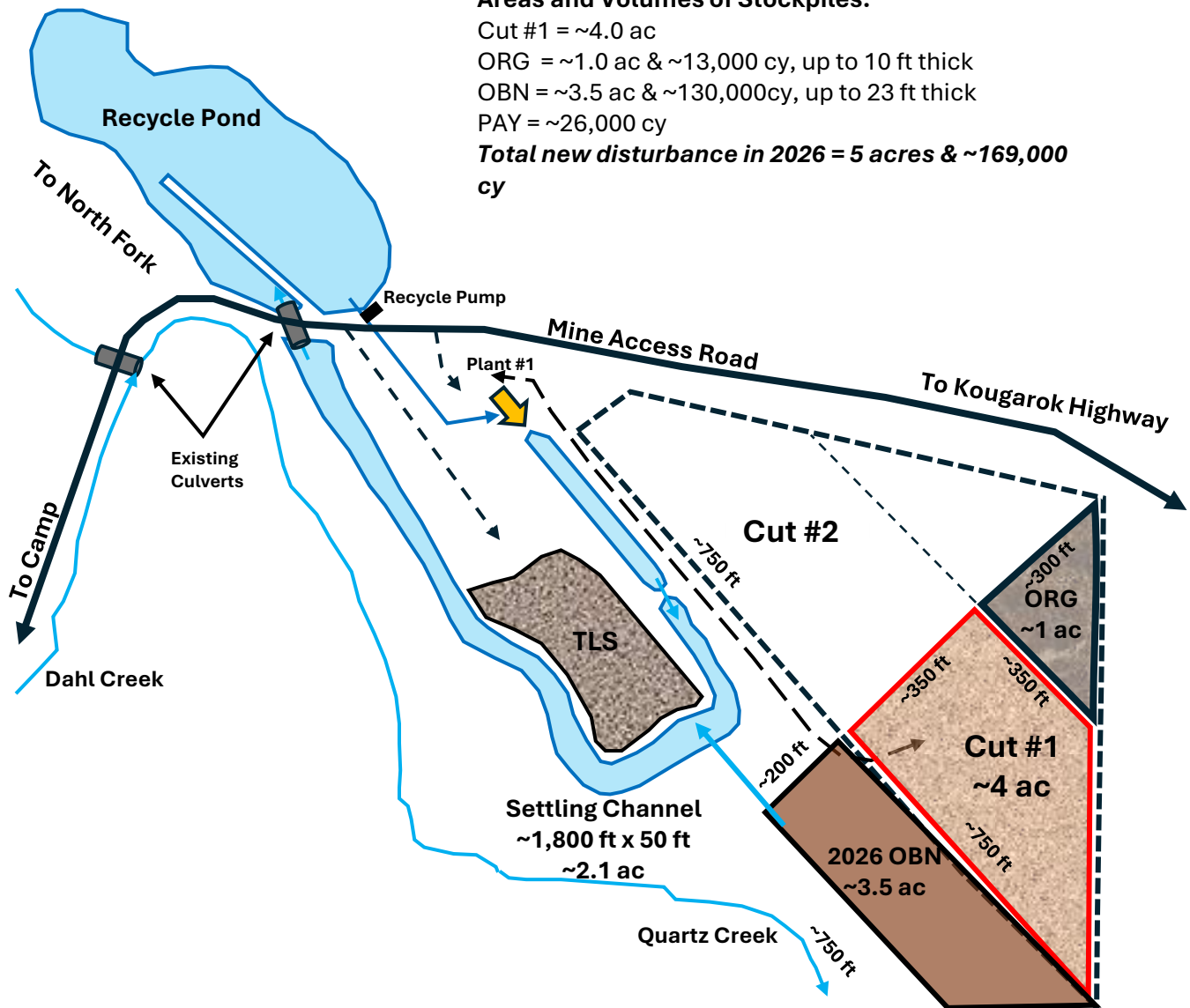


Figure 8

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

Reclamation Plan for #1 Below Left-Limit Bench, 2026 to 2028....

In the event that the results of the pilot Mine Cut #1 are unsatisfactory, the cut and the Hoffman pit will be reclaimed by backfilling the cut with overburden stockpiled in the Hoffman pit. The reserved organic overburden will be graded over the contoured surface. Where possible, small ponds will be created to promote a functional lift to the local habitat. Natural revegetation is expected to be rapid.

In this case, about 10 acres and ~169,000 cy will be reclaimed in 2027. The Process Site is reserved for use to process pay gravel from other locations including North Fork Bench.



Figure 9

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

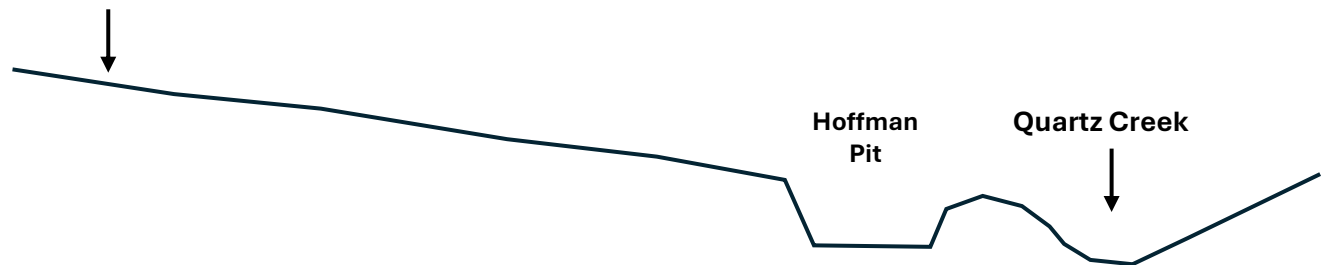
Bendeleben (B-6)

3 March 2026

A **Cross-Sections through 1Below L-L Bench Pilot Cut, A to A'.... (not to scale)** **A'**

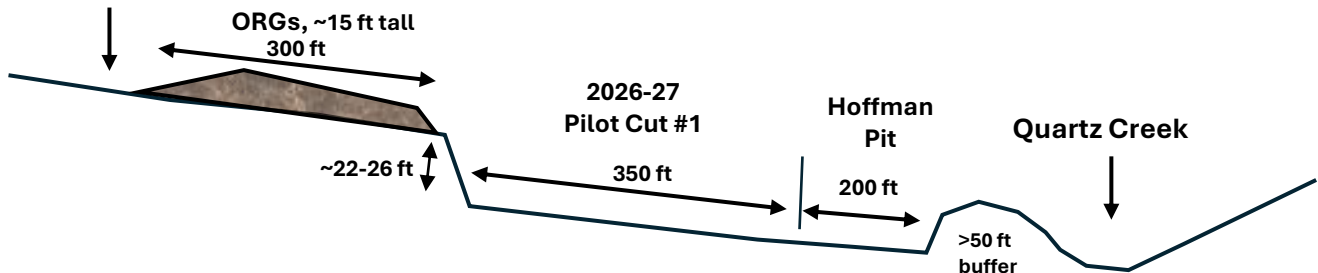
Current Conditions...

Mine Access Road



During Mining...

Mine Access Road



After Reclamation...

Mine Access Road

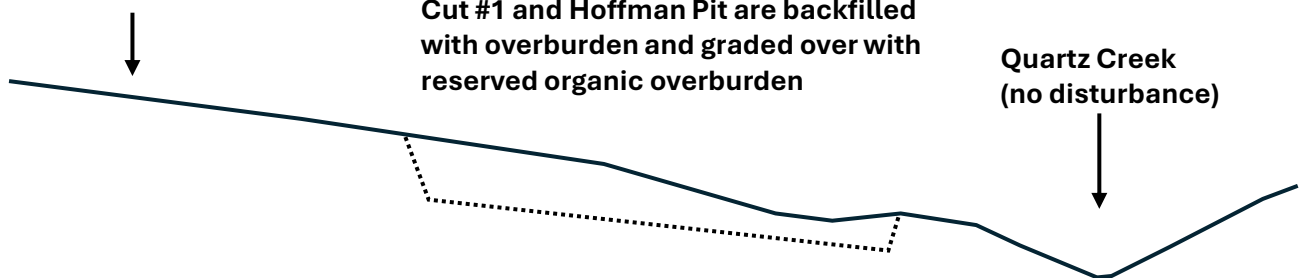


Figure 10

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

2026 to 2028 Mine Plan, Cut #2, No. 1 Below L-L Bench...

If the results from Mine Cut #1 are satisfactory, in 2027 about 2 ft of moss and organic overburden on Cut #2 will be dozed towards the road into a stockpile to be reserved for future reclamation. Approximately 20 ft of ice-rich silt overburden will be used to backfill Cut #1. Ice that thaws from the overburden will be drained into Process Site settling channel. Pay gravel averages about 4 ft thick and will be hauled with trucks via the existing haul road to the Pay Stockpile near Plant #1 for processing, as described for Cut #1.

Areas and Volumes of Stockpiles:

Cut #1 = ~5.0 ac

ORG = ~1.5 ac & ~16,000 cy, up to 10 ft thick

OBN = ~4.0 ac & ~160,000cy, up to 25 ft thick

PAY = ~32,000 cy

Total new disturbance in 2027 associated w/Cut #2 is ~6.5 acres & ~208,000 cy

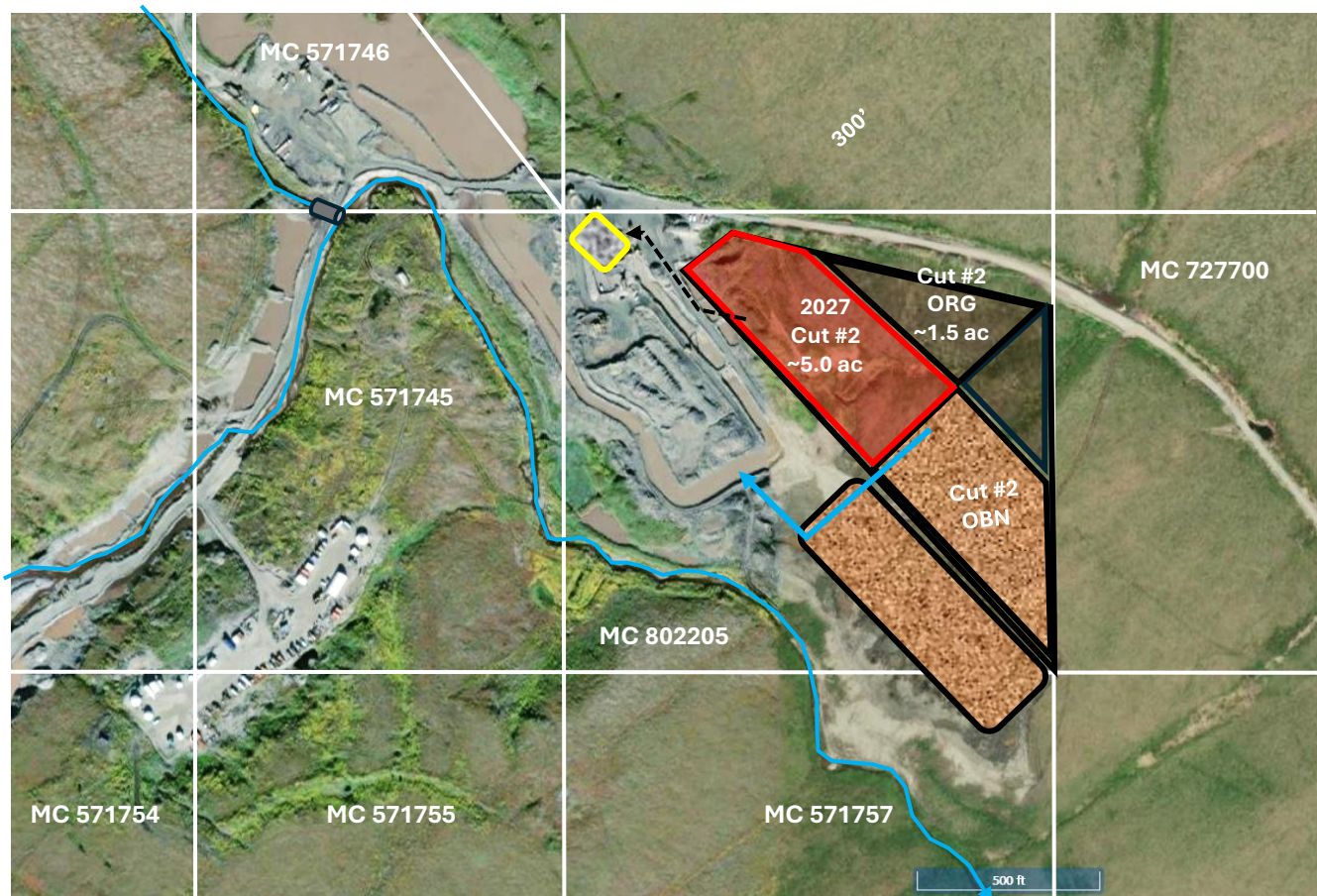


Figure 11

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

2028 to 2035 Mine Plan, No. 1 Below L-L Bench...

In 2028, if mining continues on this part of the left-limit bench of Quartz Creek, Plant #1 will be moved to a new location to discharge into Cut #2 on No. 1 Below L-L Bench to process pay gravel from future mine pits downstream of the Hoffman cut and Cut #1. These future mine cuts on the left-limit bench were previously permitted under the expired APMA and USACE POA-1996-00352. A plan modification showing the proposed new mine cuts will be submitted in winter of 2027-2028.

If mining on the lower left-limit bench is discontinued, Cut#2 will be reclaimed in 2028 using the same methods as for Cut #1. **In total, ~6.5 acres and ~208,000 cy will be reclaimed in 2028.**

The Process Site will continue to be used to process pay gravel from North Fork Bench and other locations.

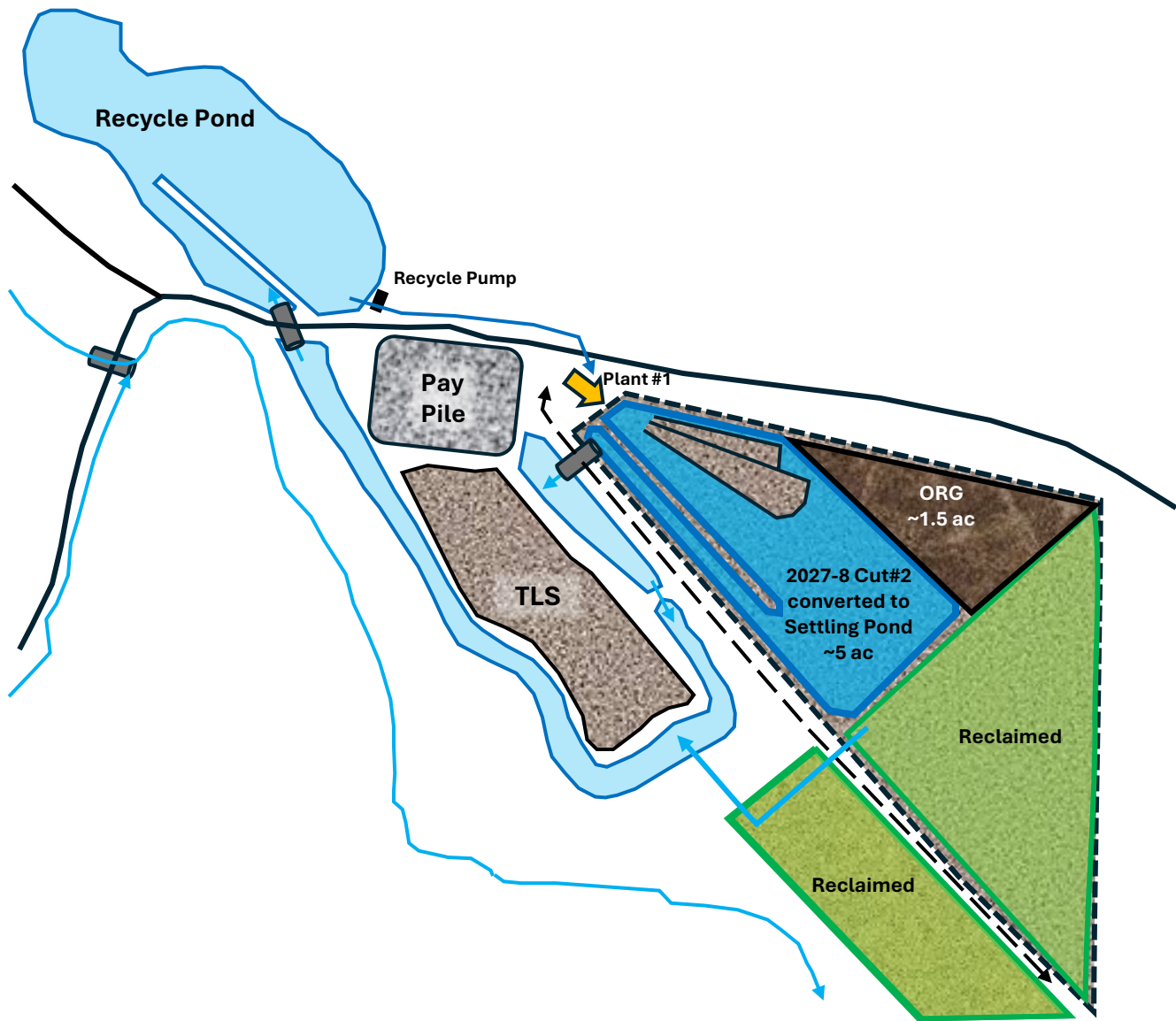


Figure 12

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

Mine Plan 2027 to 2030, North Fork Bench...

This figure shows the two areas of proposed disturbance at the North Fork Bench site.

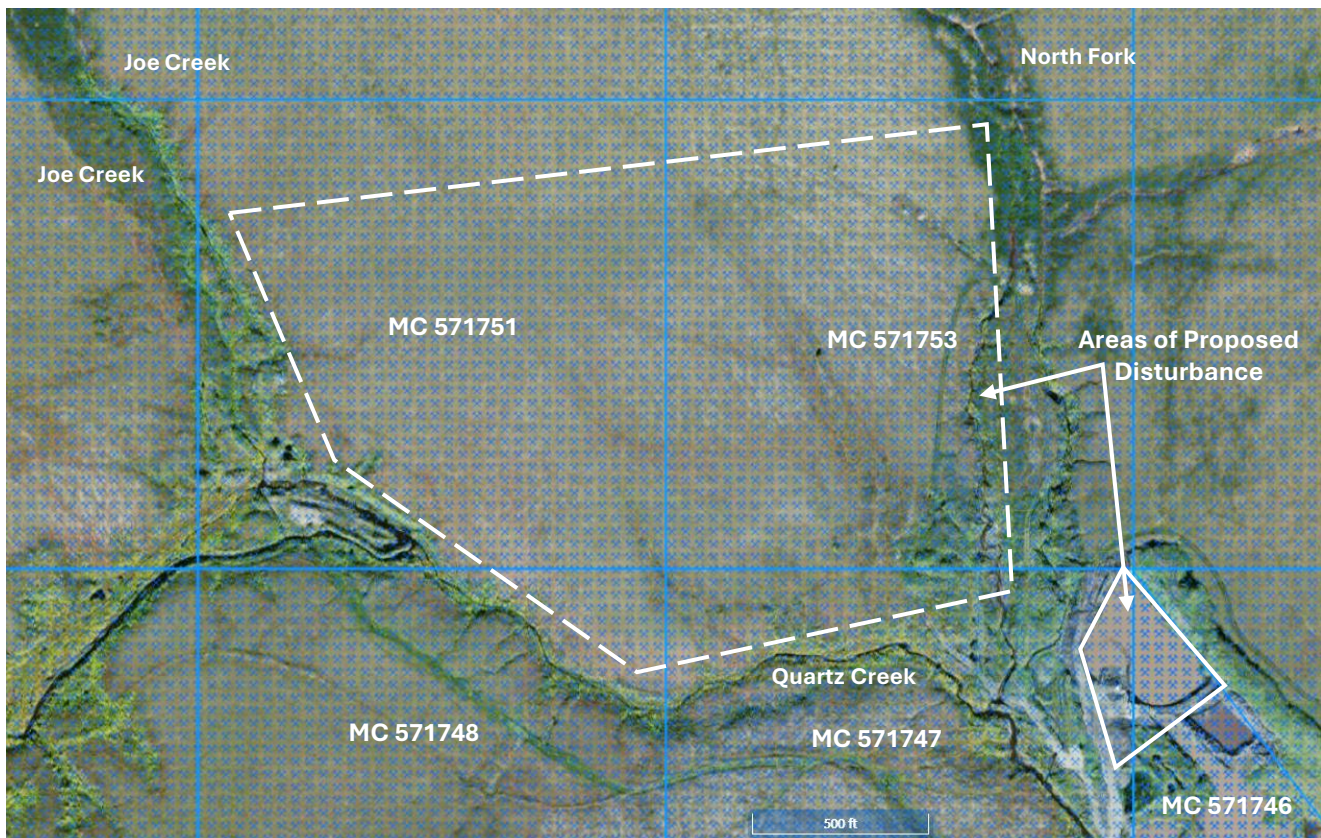


Figure 13

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine Plan 2026 to 2030, North Fork Bench...

If drilling results warrant mining the North Fork Bench, an area of ~40 acres within the red outline below will be assessed for mining in four annual mine pits. In preparation of mining, a perimeter access road will be constructed in 2026 using washed tailings generated at the Process Site. The road will be ~15 ft wide by 4 ft thick over a total length of ~3,500 ft (~1.5 acres & ~10,000 cy) shown below as the white dashed line. The road will use an open water crossing for North Fork. North Fork is about 2 ft wide and less than 6 inches deep during a typical summer.

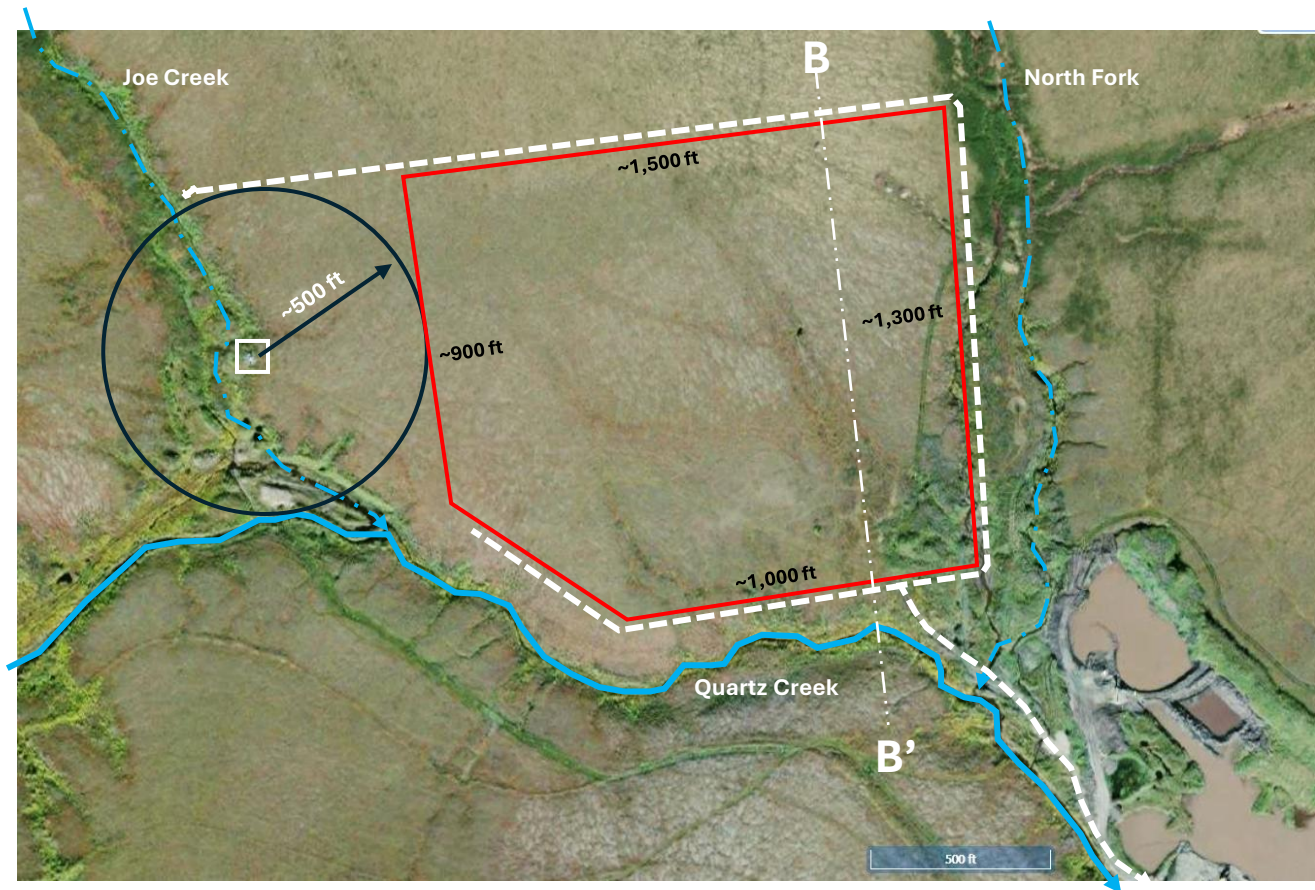


Figure 14

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine Plan 2026 to 2030, North Fork Bench...

North Fork Bench will be mined in four annual pits, measuring ~750 ft by 650 ft or ~11 acres each.

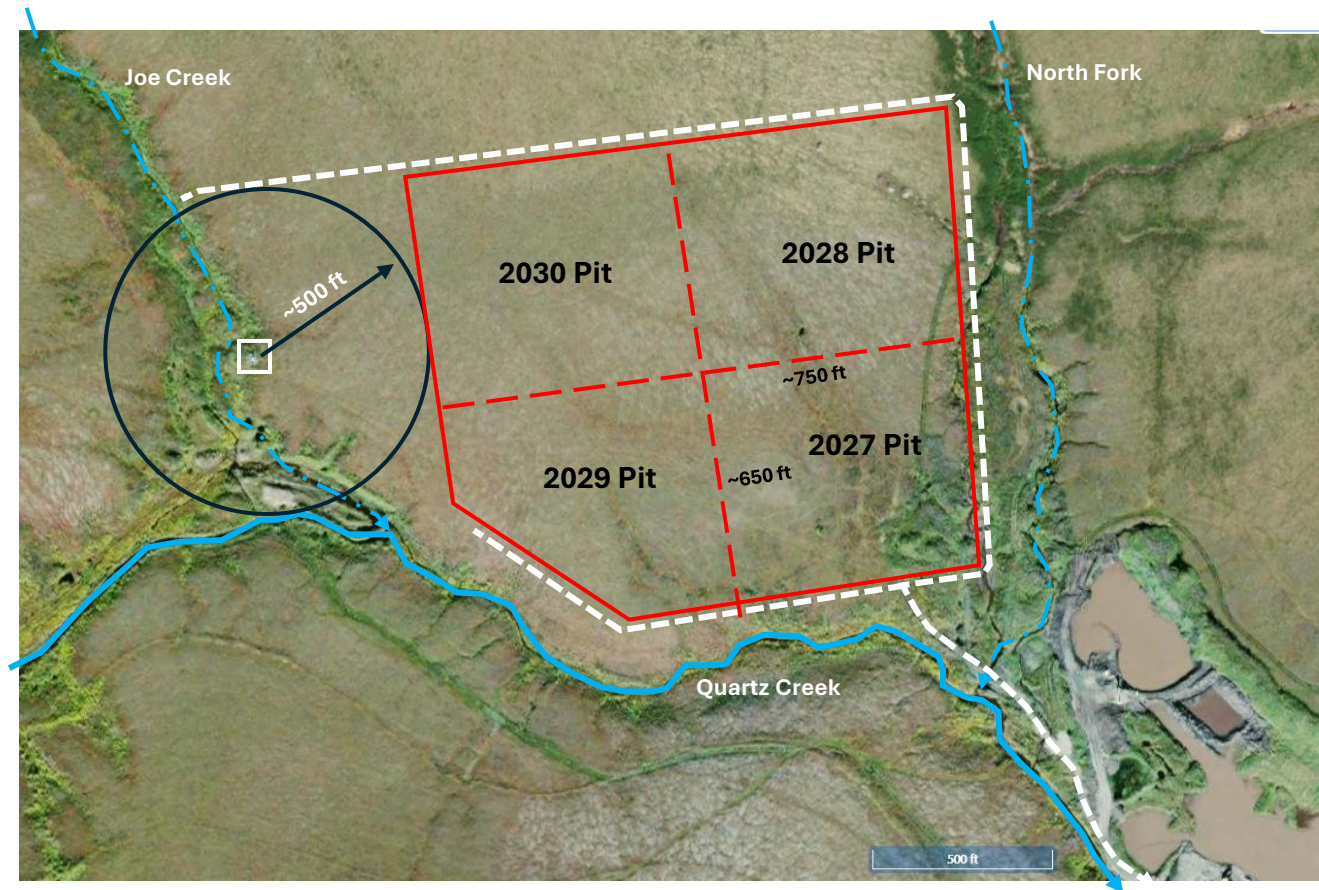


Figure 15

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

Mine Plan 2026 to 2030, North Fork Bench...

The 2027 Mine Pit will be mined in a series of four cuts as shown below.

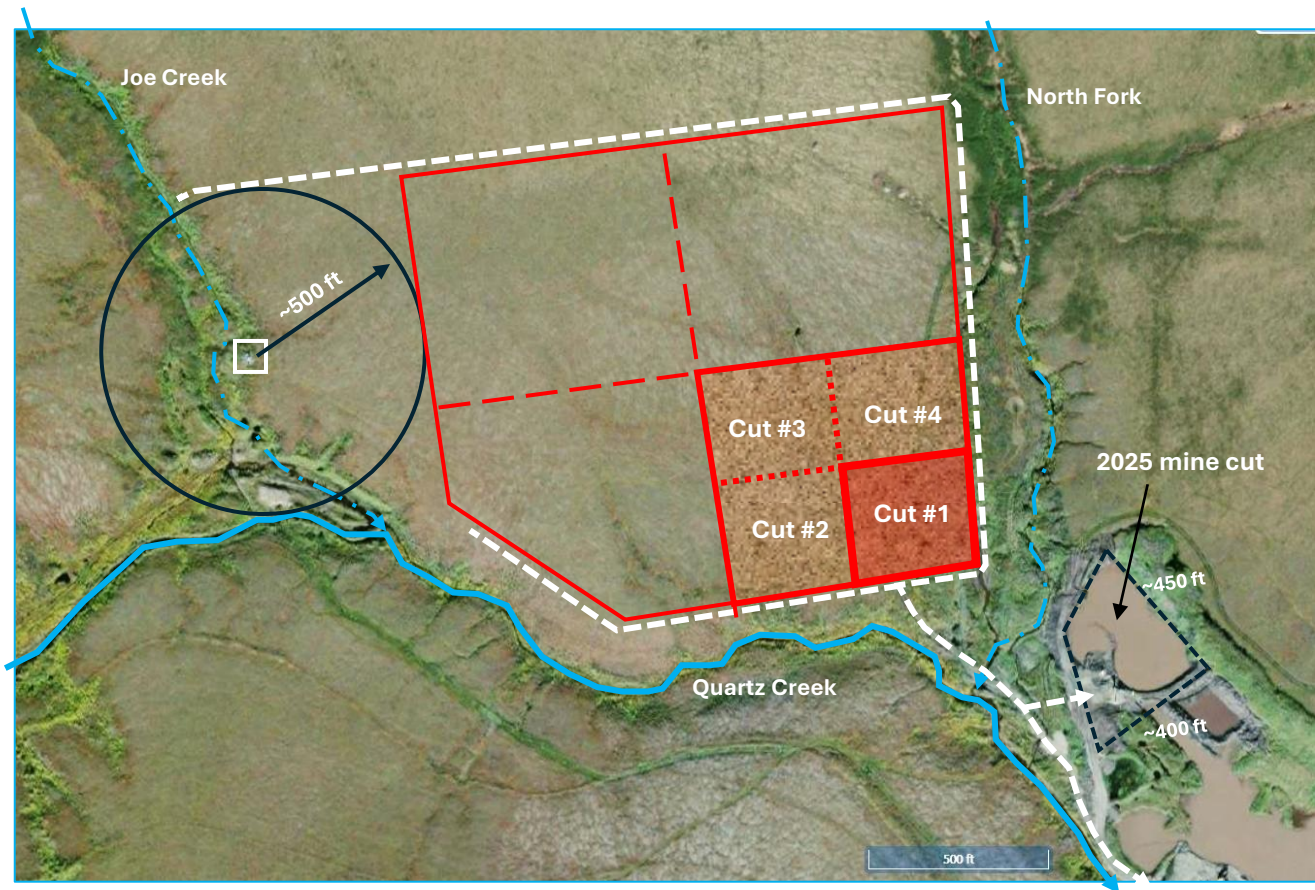


Figure 16

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

Mine Plan 2026 to 2030, North Fork Bench...Pilot Mine Cut #1

The Mine Pit will be prepared by dozing about 2 ft of moss and organics to the west limit of the pit into a stockpile 650 ft long by ~100 ft wide and ~15 ft tall (~36,000 cy) and reserved for future reclamation. About 16 ft of frozen silt overburden (~61,000 cy) from Cut #1 is loaded into trucks and used to backfill an un-reclaimed cut from 2025. Approximately 6 ft of pay gravel (~27,000 cy) is then hauled with trucks to Plant #1 at the Process Site for processing.

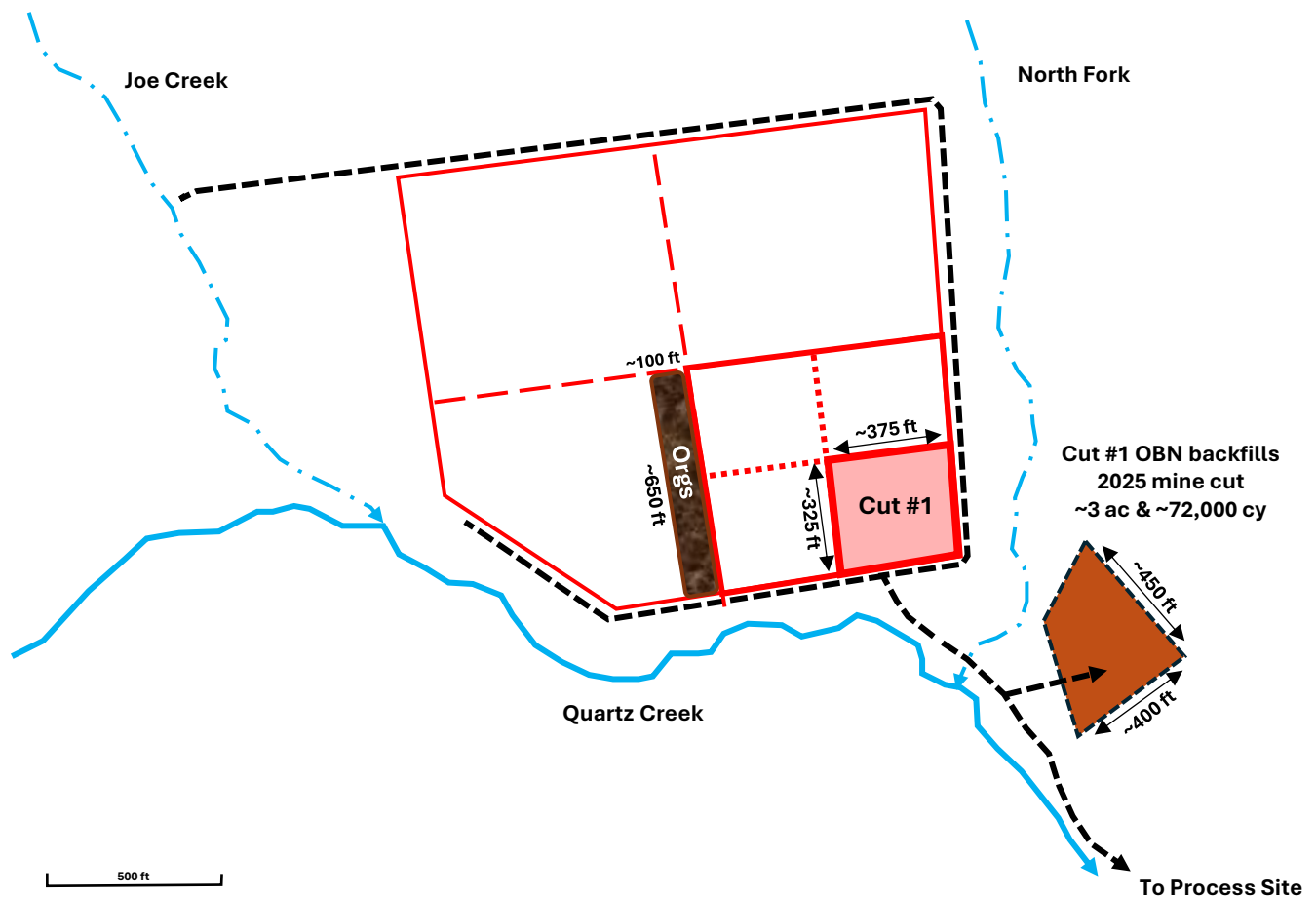


Figure 17

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine Plan 2026 to 2030, North Fork Bench...

The next three cuts within 2026-7 Mine Pit will be mined by dozing overburden from the new cut into the completed cut. Pay gravel is hauled with trucks to the Process Site for processing with Plant #1. Washed tailings are hauled back and used to extend and improve the haul road and the perimeter road.

Total Area and Volume:

Area Cut #1 = ~11 acres

ORG stockpile = ~1.5 ac & ~36,000 cy

OBN stockpile = ~3 ac & ~71,000 cy (un-reclaimed and w/in previously bonded acreage)

Remaining OBN backfilled w/in Cut #1 = ~213,000 cy

PAY = ~108,000 cy

Total new disturbance at this site in 2026-2027 is ~12.5 ac & ~428,000 cy of overburden and pay gravel.

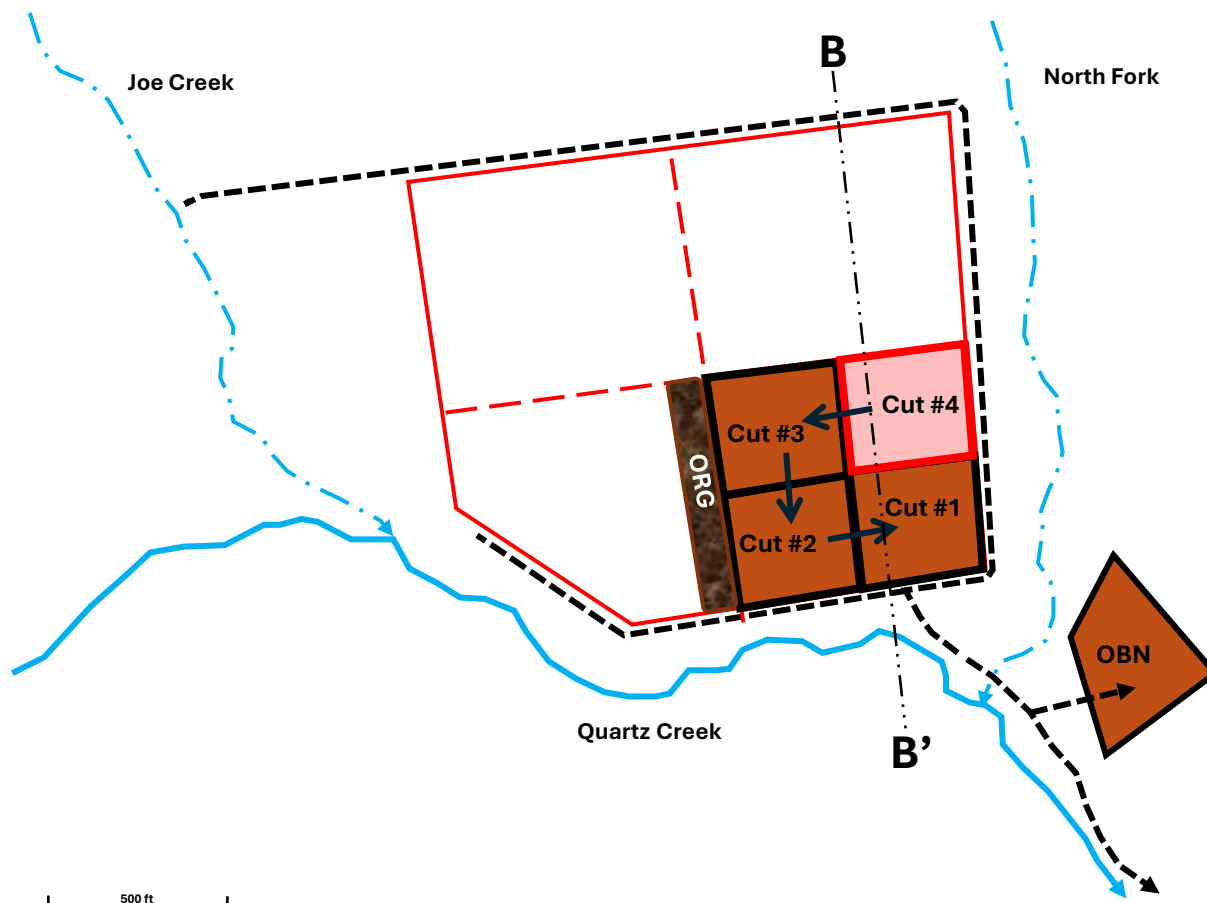


Figure 18

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Reclamation Plan 2028, North Fork Bench...

If results of mining the 2027 Mine Pit are poor and no further mining is planned here, the pit will be reclaimed in 2028 by contouring the backfilled overburden and grading the reserved organic material over the surface. A small pond will be created in the last cut mined with gently sloping banks. It is anticipated that natural revegetation will occur rapidly.

If no further mining is planned, the total area reclaimed is ~15.5 acres and ~428,000 cy.

The perimeter road will be left in place to provide for access to future mine sites on Joe and Atlas Creeks.

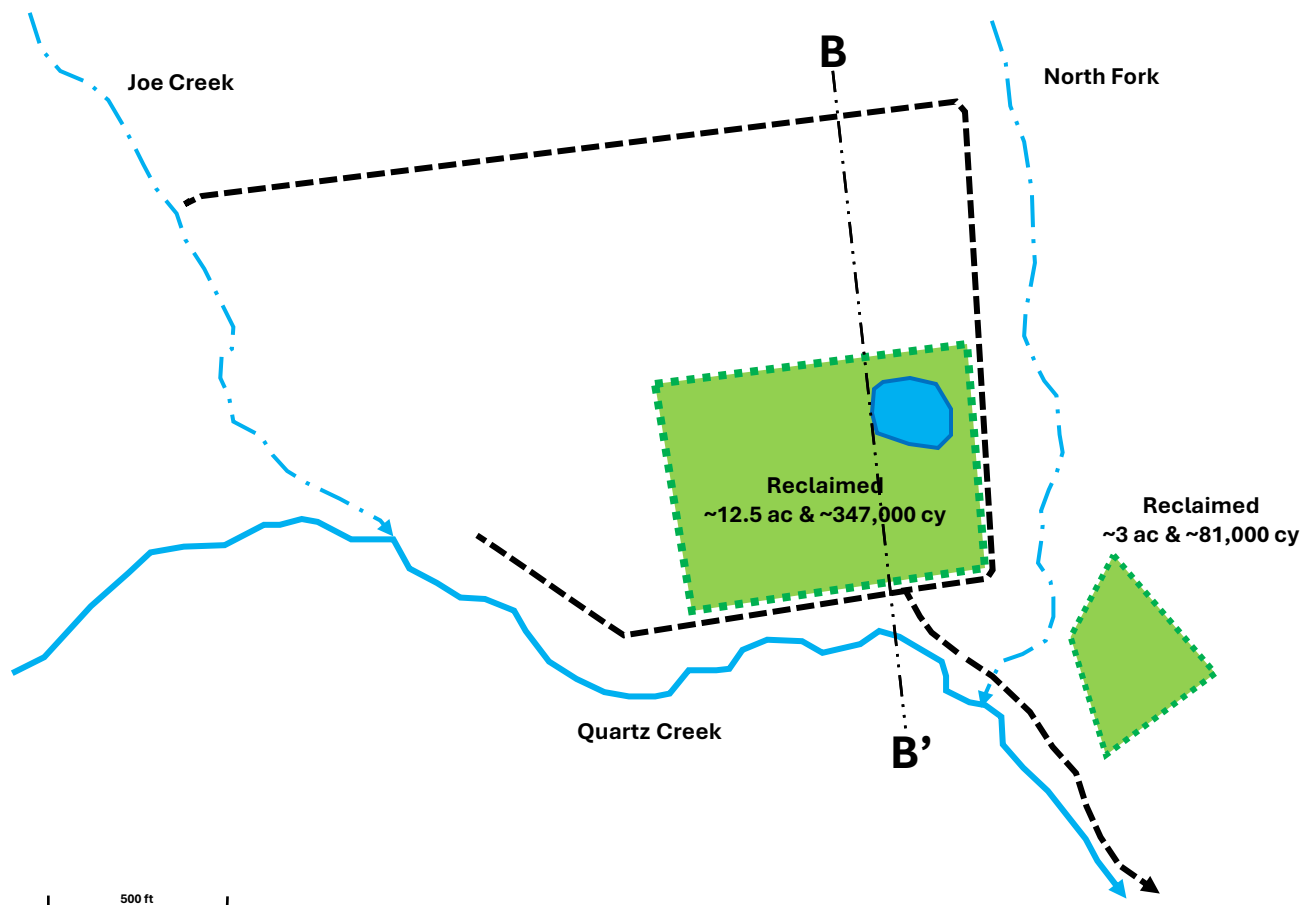


Figure 19

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

Mine & Reclamation Plan 2028-2031, North Fork Bench...

If results of mining the 2027 Mine Pit are positive and further mining on North Fork Bench is warranted, the subsequent annual Mine Pits will be mined in a similar fashion as the 2027 Mine Pit. Organic overburden is stockpiled along the margin of the annual pit and the pit is mined in a series of four mine cuts. Silt overburden is used to backfill the previously completed mine cut and pay gravel is hauled to the Process Site for processing. Upon completion of the North Fork multi-year pit area in 2030, if mining continues upstream on Joe Bench, a plan modification will be submitted to show the new proposed pit on Joe Bench and how North Fork Bench will be converted to a new process site.

If no further mining is planned here, the pit will be reclaimed in 2031 by contouring the backfilled overburden and grading the reserved organic material over the surface. Small ponds will be created wherever possible. It is anticipated that natural revegetation will occur rapidly.

If no further mining is planned, the total area reclaimed is ~43 acres and ~1,700,000 cy. The perimeter road will be left in place to provide for access to Joe and Atlas Creeks. ~1.5 ac carried.

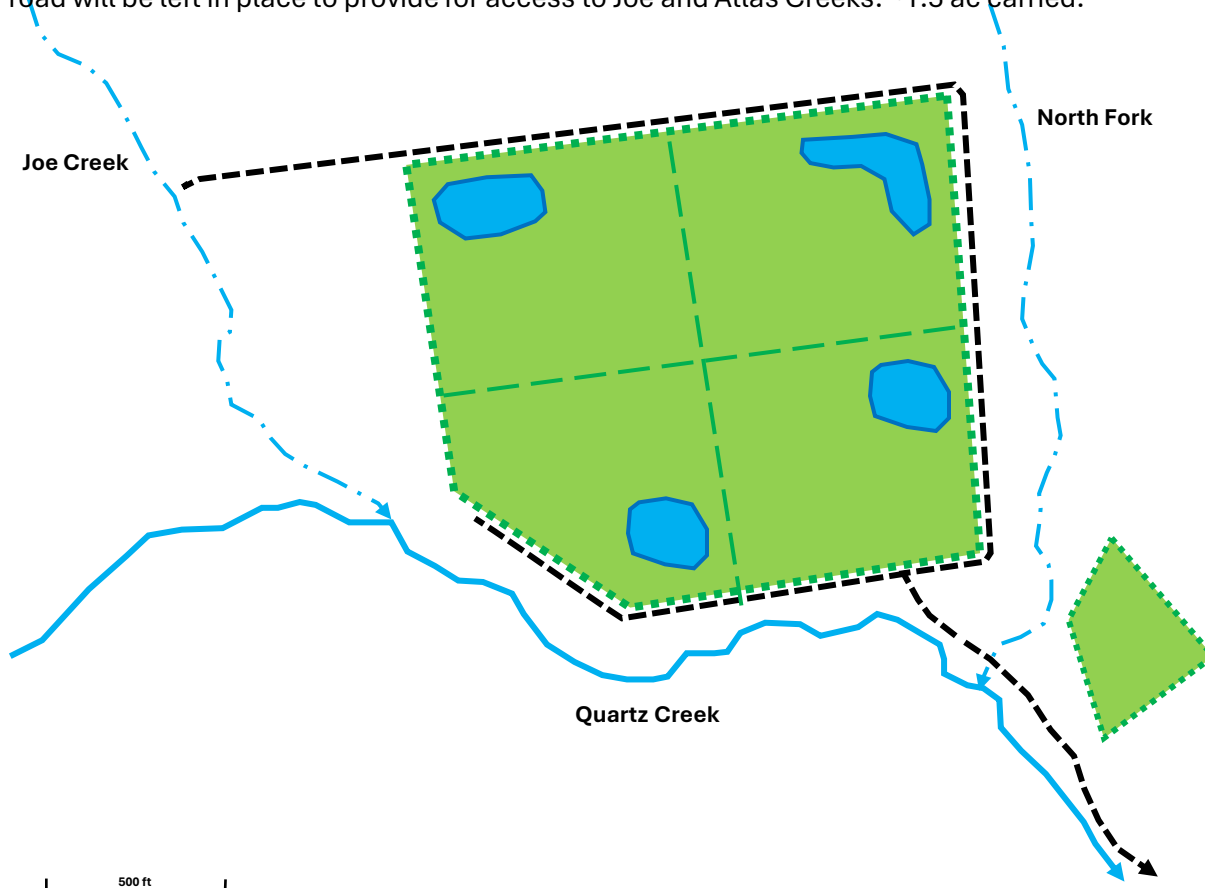


Figure 20

Mammoth Valley Mining LLC

APMA F-269398

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

3 March 2026

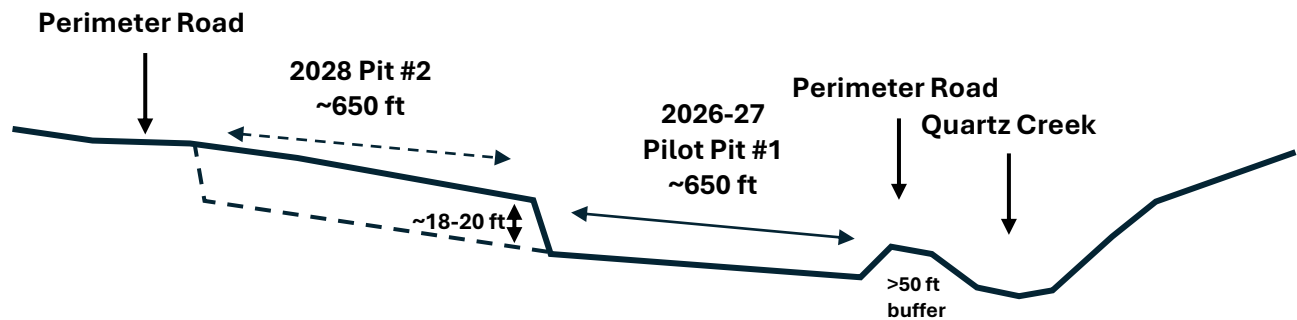
B Cross-Sections through North Fork Bench Pilot Cut, B to B'.... (not to scale)

B'

Current Conditions...



During Mining...



After Reclamation...

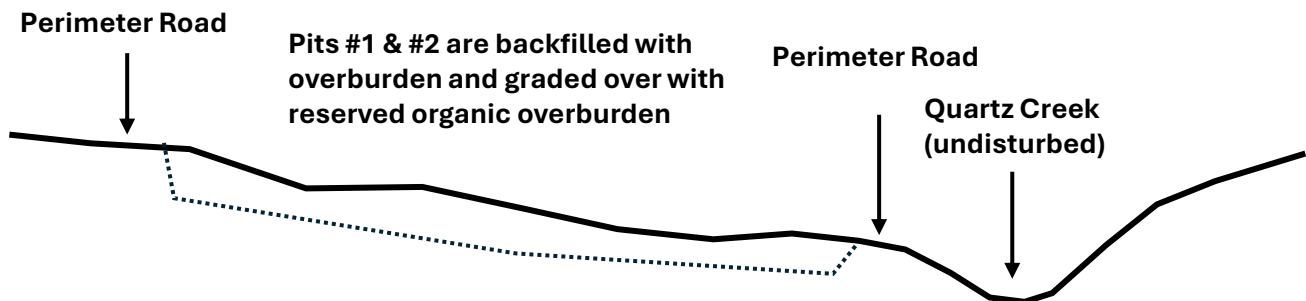


Figure 21

Mammoth Valley Mining LLC

Multi-Year Mine Plan, 2026 to 2035

Bendeleben (B-6)

APMA F-269398

3 March 2026

2026 to 2035, Brakes Bottom Gravel Pit...

Over the term of this mine plan, about 10,000 cy of gravel will be borrowed from an extension of the existing gravel pit measuring ~200 ft by ~100 ft (~0.5 ac) by up to ~15 ft thick to use to maintain the Mine Access Road into the MVM mine site. It is anticipated that this borrow pit will remain for some time, since it is also used by AK-DOT for surfacing the Kougarok Road. In 2035, a determination will be made as to whether to close the borrow pit or to keep it open for use by the mine and by the State of Alaska.

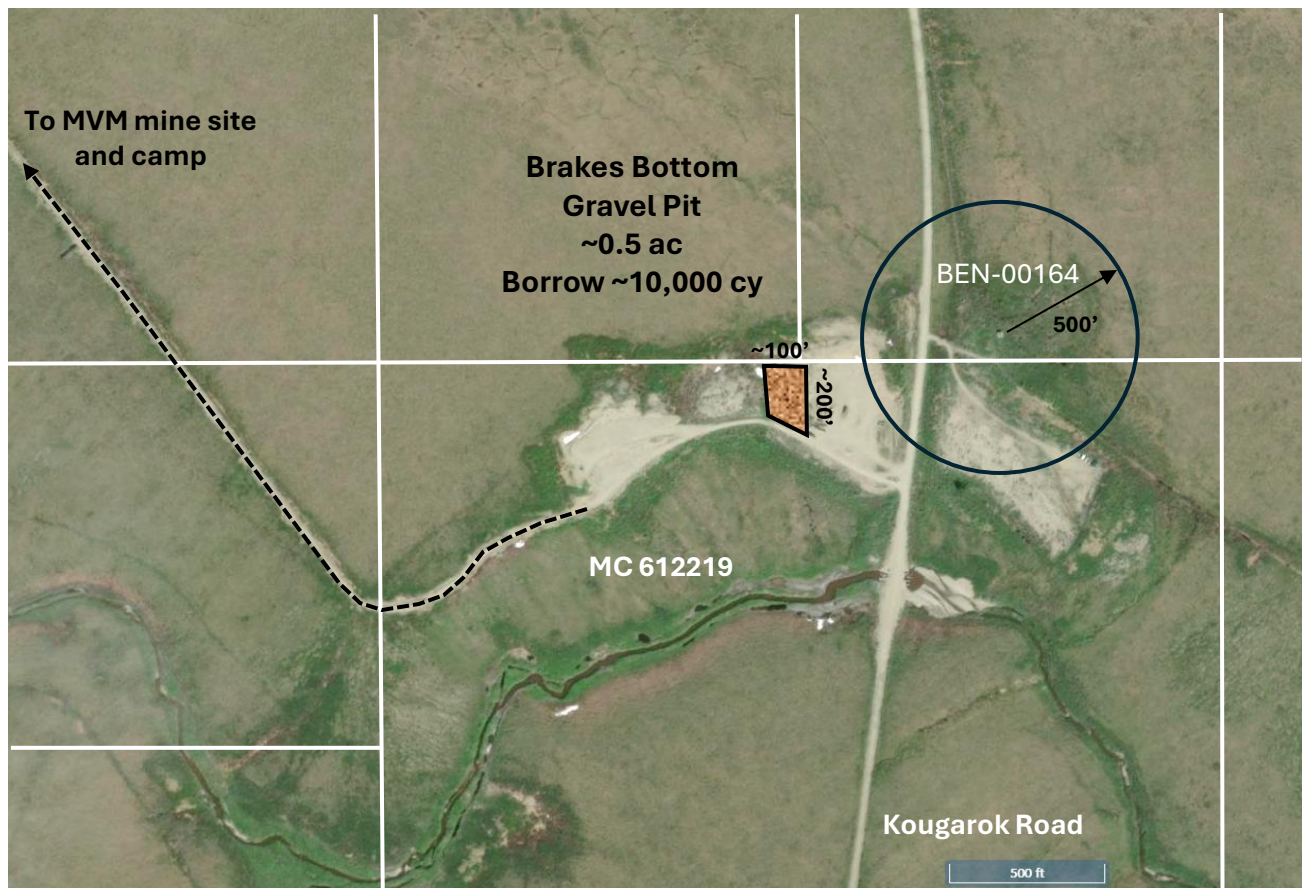


Figure 22