

STATE OF ALASKA
2025

Application for Permits to Mine in Alaska (APMA)

☒ Single Year ☒ Multi-year Start: 2026 Finish: 2027 APMA Number (A/F/J, Year, ****) _____

What type activity are you planning to perform? *REQUIRED (1) ☐ Suction Dredging/Reclamation ☐ Placer Mining/ Reclamation ☒ Hardrock Exploration/ Reclamation ☐ Reclamation Only ☐ Access	Surface estate of mineral properties: *REQUIRED (2) ☒ State (General) ☐ Federal ☐ State (Mental Health) ☐ Private ☐ City or Borough	
Check All That Apply: ☒ Mineral Property Owner ☐ Lessee ☐ Operator *Required (3) Name: <u>William DE Murray and Keith R Warren</u> Primary Phone Number: <u>+1 250 517 7473</u> Address: <u>P.O. Box 80156, Fairbanks, AK 99708</u> Secondary Phone Number: _____ Email: <u>yamatomurray@gmail.com</u> Click here for the Department of Commerce Link Alaska Business/Corporation Entity# _____ Registered Agent (Corp./LLC/LP) _____		
Check All That Apply: ☐ Mineral Property Owner ☒ Lessee ☐ Operator *Required (4) Name: <u>CMA AU LLC</u> Primary Phone Number: <u>(907) 971-0085</u> Address: <u>3133 Davis Road, office suite B</u> Secondary Phone Number: _____ <u>Fairbanks, AK 99709</u> Email: <u>ckim@mdf-global.com</u> Alaska Business/Corporation Entity# <u>10328069</u> Registered Agent (Corp./LLC/LP) <u>Cogency Global Inc.</u>		
Check All That Apply: ☐ Mineral Property Owner ☐ Lessee ☒ Operator *Required (5) Name: <u>CMA AU LLC</u> Primary Phone Number: <u>(907) 971-0085</u> Address: <u>3133 Davis Road, Office Suite B</u> Secondary Phone Number: _____ <u>Fairbanks, AK 99709</u> Email: <u>ckim@mdf-global.com</u> Alaska Business/Corporation Entity# <u>10328069</u> Registered Agent (Corp./LLC/LP) <u>Cogency Global Inc.</u>		
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) <u>Lichen</u>	Average Number of Workers: *REQUIRED (8) <u>12</u>	Start-Up/Shut Down: (Month/Day) (9) <u>06/01</u> to <u>08/31</u>
Mining District: *REQUIRED (10) <u>Matanuska-Susitna Borough</u>	Applicable USGS Map(s): *REQUIRED (11) <u>Talkeetna Mts Quadrangle</u>	On What Stream Is This Activity? (12) <u>Coal Creek</u>
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 <u>Township/Sections: S033N011E Section 34, S032N011E Section 2</u>		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: _____		

APMA 3035 Active Area



This map was created on 5/22/2026 by the Alaska Department of Natural Resources as a courtesy to supplement the application received. This map displays a graphical illustration only. Source documents remain the official record.

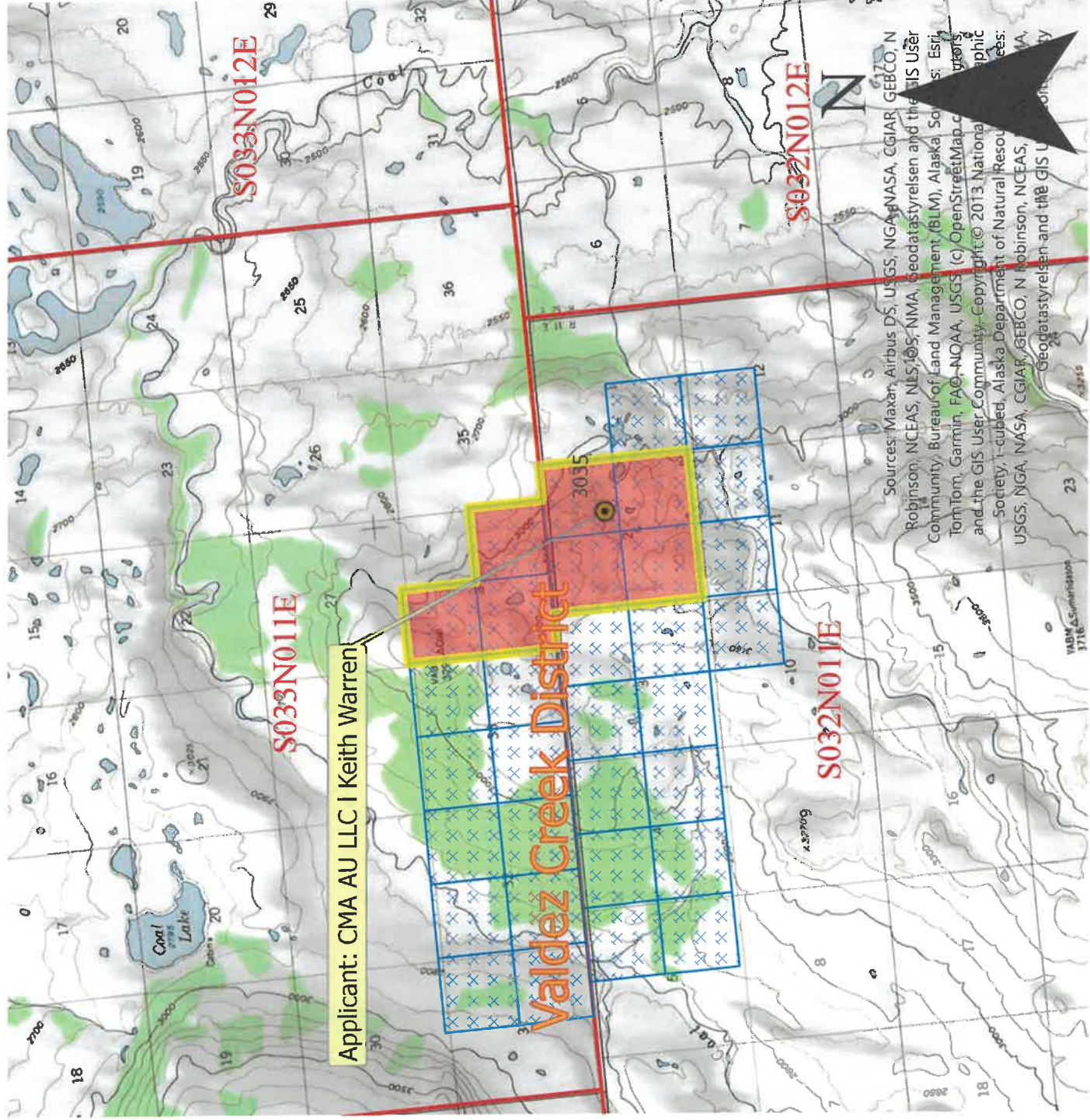
The State of Alaska makes no express or implied warranties (including warranties of merchantability and fitness) with respect to the character, function, or capabilities of electronic services or products or their appropriateness for any user's purposes. In no event will the State of Alaska be liable for any incidental, indirect, special, consequential or other damages suffered by the user or any other person or entity whether from the use of the electronic services or products, any failure thereof or otherwise, and in no event will the State of Alaska's liability to the requestor or anyone else exceed the fee paid for the electronic service or product.

Scale: 1:63,360

-  Hardrock Exploration
-  State Mining Claim Active

0 0.75 1.5 Miles

Center: 147°20'46"W 62°53'57"N



CASE_ID	CSTMNRNM	SPCLCDDSCR	CSSTTSDSCR	CLAIM_NAME	NTPSTDT	RFRSHDT
ADL 739182	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 1	3/4/2023 14:57	5/22/2026 4:01
ADL 739183	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 2	3/4/2023 14:57	5/22/2026 4:01
ADL 739184	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 3	3/4/2023 14:57	5/22/2026 4:01
ADL 739185	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 4	3/4/2023 14:57	5/22/2026 4:01
ADL 739186	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 5	3/4/2023 14:57	5/22/2026 4:01
ADL 739187	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 6	3/4/2023 14:57	5/22/2026 4:01
ADL 739188	WARREN, KEITH	MINING CLAIM (MC)	ACTIVE (35)	LICHEN RIDGE 7	3/4/2023 14:57	5/22/2026 4:01

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.	739182	Lichen Ridge 1	7.	739188	Lichen Ridge 7
2.	739183	Lichen Ridge 2	8.		
3.	739184	Lichen Ridge 3	9.		
4.	739185	Lichen Ridge 4	10.		
5.	738186	Lichen Ridge 5	11.		
6.	739187	Lichen Ridge 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.	B2 A-Star Helicopter or similar	1		☒
2.	CanDig CD21M or similar	1	☒	
3.				
4.				
5.				
6.				
7.				
8.				

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: _____

☐ 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:

We will be using approximately 20 ft x 20ft laydown area at the Alpine Lodge airport. for staging/storing 1- candig excavator unit 5-gallon gasoline cans and personnel being transported to and from the exploration area via Helicopter. Secondary containments and spill response kits will be onsite with equipment and fuel.

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:

Helicopter contractor and MDF-Alaska CMA personnel and contractors

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

CanDig excavator and personnel will be flown to project locations via Helicopter from Alpine Lodge. Travel to and from the Lichen project sites will be done during portions of the summer months.

State the average total miles traveled in one round trip: 30. State the number of trips proposed: 25.

State the start and end date(s) or period(s) of proposed travel: 06/01 to 08/31.

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:

5-gallons of gasoline

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:

5-gallon safety cans. will be accompanied with a 2'x2'x6" secondary containment and small spill response kit

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

Helicopter Cargo Basket

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.

a 20ft x 20ft area will be used for staging/short term storage of the candig excavator and support supplies at Alpine Creek Lodge airport

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:

All employees and contractors will complete annual fuel handling and spill response training prior to field activities

We will be using portable secondary containments for equipment, fuel tanks and fuel transfers. We will also have small spill response kits that travel with equipment and fuel.

Quantitiy 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: 150 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: _____

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: We will be using Alpine Lodge Airport and will not be adding or making any changes to structures

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: _____ Length (feet) _____ Width (feet).

☐ Request use of **existing** facilities, list ADL(s): _____
☐ 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						
Tent						
Trailer						
Platforms						
Out-Buildings						
Other:						

* 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):

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.**

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: _____

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.

MINING METHOD

(19)

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

Estimated cubic yards processed annually: _____

☐ 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

☐ Stream

☐ Mine cut isolated from stream

☐ Pond connected to stream

☐ Pond 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

Estimated number of pits to be excavated: _____ How long will the test pit be open if not converted into an active mine cut? _____

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

Placer Drilling: ☐ Yes ☐ No

Total number of holes to be drilled: _____ Type of drill(s) used: _____

Drilling and Test Pit Identification and Mineral Property Information

Trench/Hole ID on Map	ADL/BLM/USMS NUMBER

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:

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.							
2.							
3.							
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

(24)

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: _____
- What are the months of water use needed (for example May 1st through October 31st)? _____

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: F3N3W 20
Lat/Long: 65° 4' 15" N; 148° 12' 45" 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.			
Example: Unnamed Creek	F	3N	3W	20	Start-Up	X	Make-Up	X
1.					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 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.	Withdrawal Rate (gpm/pump)	Number of Pumps	Hours per Day	Days per Month	Additional Notes:
Pond # 1: L: ___ ft W: ___ ft D: ___ ft					Pond # 2: L: ___ ft W: ___ ft D: ___ ft
Pond # 3: L: ___ ft W: ___ ft D: ___ ft					Pond # 4: L: ___ ft W: ___ ft D: ___ ft

D. Camp Water Uses Provide information on camp water uses. If an ADEC public drinking water system is used, please attach certificate to operate and/or associated documents.	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.
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.

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 26.145. "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 #: _____

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: _____

Approximate coordinates of mine site:

Latitude: _____ Longitude: _____

Source (e.g., DNR - 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: _____

Responsible Party Name (First Last, Position) - Printed: _____

Business Name (if applicable) - Printed: _____

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: _____ Longitude: - _____

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

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

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 _____
If yes include culvert locations, sizes and length on a map or table.

PLAN MAP OF OPERATION *REQUIRED

(29)

VICINITY MAP

APMA #

ADLs:

(Attach additional sheets, along with detailed explanations as necessary)

CROSS SECTION SKETCH *REQUIRED

BEFORE ACTIVITY

(30)

DURING ACTIVITY

AFTER ACTIVITY

PLACER/SUCTION DREDGE NARRATIVE *REQUIRED

(31)

A narrative of the operation is required. Please use this space to describe the access, mining process, environmental protection measures and reclamation measures to be used for the duration of this permit. Use multiple sheets if necessary.

DESCRIBE ACCESS, PERSONNEL HOUSING AND CAMP LAYOUT:

DESCRIBE PROGRESSIVE STEPS OF MINING METHOD:

DESCRIBE PLANNED RECLAMATION MEASURES INCLUDING TIMELINE FOR RECLAMATION TO TAKE PLACE:

DISCUSS WATER MANAGEMENT PLANS, INCLUDING USE, SOURCE, QUANTITY AND SURFACE WATER/ EROSION MANAGMENT PLAN:

DISCUSS FUEL STORAGE, HANDLING, AND SPILL PREVENTION AND RESPONSE PLANS:

DISCUSS HOW THE OPERATION WILL AVOID/MITIGATE POTENTIAL IMPACTS TO FISH, WILDLIFE AND CULTURAL RESOURCES:

HARDROCK EXPLORATION TRENCHING and DRILLING

(32)

(Indicate target and trenching locations on sketch sheet and/or topographic map)

Trenching: ☒ Yes ☐ No

Estimated number of trenches to be excavated: 4 How long will trenches be open? 7-days

Average Size: Length: 100 Ft. Width: 5 Ft. Depth: 4 to 6 Ft.

Drilling: ☐ Yes ☒ No

Type of Drill(s) Used: _____

Total Number of Holes _____

Diameter of Drill Rod/Casing Rod _____ (NQ/HQ/H,Etc.)

Drilled: Estimated Maximum Depth: _____ Indicate how many pumps per water source: _____

Will water be used? ☐ Yes ☒ No

Water source name(s): _____

Describe detailed drill plan, closure, plugging methodology, reclamation and abandonment in project narrative.

Trench/Drilling Location and Mining Claim Information			
Trench/Drill ID on Map	ADL/BLM/USMS NUMBER	Decimal Degrees, NAD 83 Datum	
		Latitude	Longitude (approximate)
Lichen T01		see project narrative and map	
Lichen T02		see project narrative and map	
Lichen T03		see project narrative and map	
Lichen T04		see project narrative and map	

If more than 8 trenches/drill sites, please provide data in tabular format ([APMA tabular data template for reporting proposed activities and reclamation](#))

A narrative of the operation is required. Please attach a written narrative to this application. The narrative should include the information to answer the prompts provided below and include any additional information relevant to the proposed activities.

- 1.) Describe access to property, drill/trench sites, including length and type of access routes. Describe access reclamation measures to be conducted and timeline.
- 2.) Describe exploration method, scope of work proposed, equipment, when and where activities will occur, personnel housing location and camp description.
- 3.) Describe site preparation activities and pre-reclamation measures.
- 4.) Describe pad construction and dimensions.
- 5.) Describe drill core management, to include transportation of core, storage, and removal or disposal from the exploration project.
- 6.) Describe drill waste and drill water management, drill fluids and disposal methods. Attach msds/sds for all substances.
- 7.) Describe fuel handling at exploration drill sites (pads and trenches) and off site (camp or base operations).
- 8.) Discuss spill prevention and response plan.
- 9.) Describe water use including estimate of daily water use.
- 10.) Describe how the operation will avoid and/or mitigate potential impacts to fish, wildlife and cultural resources: describe closure, plugging methodology, surface reclamation and abandonment.

2024 ANNUAL RECLAMATION STATEMENT

(33)

- ☐ Placer Mining
☐ Suction Dredging
☒ Hardrock Exploration

APMA # _____

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, Dan Twitchell 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: 0 cubic yards (Includes stripping and processed material.)

Sluice days last season: 0 Cubic yards of material processed daily: 0 Annually: 0

Total acreage disturbed in 2024: State 0, 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 _____ 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: 0 (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:

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

Relationship to Claim(s)

☐ Owner ☒ Lessee ☐ Operator
☐ Agent For: _____

Signed Dan Twitchell Date 3/30/26

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: _____ 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: _____ acres. Total acreage (currently disturbed plus new acres): _____ acres.

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

Total acreage to be reclaimed in 2025: _____ acres; Total volume of material to be disturbed in 2025: _____ 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.

Printed name (Applicant) _____ Signature (Applicant) _____	Relationship to Mineral Property: ☐ Owner ☐ Lessee ☐ Operator ☐ Agent For: _____	Date: _____ APMA #: _____
---	--	----------------------------------

2025 RECLAMATION PLAN FORM (SUCTION DREDGE EXPLORATION)

☐ 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: _____ 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 _____ acres. Total acreage (currently disturbed plus new acres): _____ acres.

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

Total acreage to be reclaimed in 2025 _____ acres; Total volume of material to be disturbed in 2025: _____ 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.)

Stream Suction Dredge Operations:

- Reclamation will be completed prior to the end of the mining season. Reclamation will consist of leveling or contouring all gravel bar and stream bed tailings. Tailings will be left in such a manner that spring run-off will level the tailings without causing undue erosion.
- In no case will tailing piles extend more than 18 inches above the water surface at the end of the mining season.
- Prior to the end of the mining season, tailing piles, berms, or wing dams will be removed or left in such a manner to allow unrestricted passage of fish and flood waters.
- Other: _____

Offshore Suction Dredge Operations:

- Tailings discharged from the dredge to the lake, channel, sound, bay or sea floor will be placed in a manner that will approximate the adjacent floor surface. The dredge shall be moved as necessary to allow for the proper low-profile distribution of tailings.
- Tailings will be placed in a manner that will maintain a water depth suitable for safe passage of traffic.
- Other: _____

Generally:

- On all 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 $\geq$ 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.

Printed name (Applicant) _____ Signature (Applicant) _____	Relationship to Mineral Property: ☐ Owner ☐ Lessee ☐ Operator ☐ Agent For: _____	Date: _____ APMA #: _____
---	--	----------------------------------

2025 RECLAMATION PLAN FORM (HARDROCK EXPLORATION)

☐ 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: 0 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 2 acres. Total acreage (currently disturbed plus new acres): 2 acres.

Acreage disturbed by land status: 2 State (general) _____ State (Mental Health) _____ Private _____ Federal _____

Total acreage to be reclaimed in 2025 2 acres; Total volume of material to be disturbed in 2025: 370.37 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.)

- 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.
- 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. All exploration trenches will be reclaimed by the end of the exploration season in which they are constructed, unless specifically approved by the DMLW (Mining operations are required by law to be reclaimed as contemporaneously as practicable with the mining operation to leave the site in stable condition).
- 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.
- All drill hole casings will be removed or cut off at, or below, ground level. All drill holes will be plugged by the end of the exploration season with bentonite holeplug or equivalent slurry, for a minimum of 10 feet within the top 20 feet of the drill hole. The remainder of the hole will be backfilled to the surface with drill cuttings. If water is encountered in any drill hole, a minimum of 7 feet of bentonite holeplug or equivalent slurry will be placed immediately above the static water level in the drill hole. (NOTE: The operator understands that complete filling of the drill holes, from bottom to top, with bentonite holeplug or equivalent slurry is also permitted and is considered to be the preferred method of hole closure, unless communicated otherwise by DMLW.)
- If artesian conditions are encountered, the operator will take all measures practicable to prevent the offsite discharge of those waters subject to 11 AAC 97.240 and will contact the DMLW for approval of hole plugging measures.
- At closure, all 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 alternative 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 $\geq$ 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.

Dan Twitchell Printed name (Applicant)	Relationship to Mineral Property: ☐ Owner ☒ Lessee ☐ Operator ☐ Agent For: _____	Date: <u>3/30/26</u> APMA #: _____
 Signature (Applicant)		

**STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL FORM**

APMA # _____

Name

Mailing Address

City

State

Zip Code

Submits unto the State of Alaska, Department of Natural Resources, the sum of

\$ _____ DOLLARS

for payment into the State Wide Bonding Pool to meet the bonding requirements of Alaska Statute 27.19 for mining activity located on claim numbers _____

These claims are located within legal description (Township, Range, Section, Meridian)

This bond amount was calculated as follows:

For **Federal Claims**: The total area of the mining operation, including camp site, access roads, unreclaimed areas, and areas to be stripped for mining next season is _____ acres. Acreage should be rounded to the next whole acre. This acreage must include all areas disturbed by mining operations after January 1, 1981, that have not been approved as reclaimed by BLM. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

For **State and Patented Claims**: The active mining disturbance, not including camp and access roads is _____ acres (acreage should be rounded to the next whole acre). This includes all areas that are part of the mining operation; including stripped areas, mining cuts, overburden and tailing stockpiles and disposal areas, temporary or permanent stream diversions, and settling ponds. This acreage must include all areas disturbed by a mining operation after October 15, 1991 that have not been approved as reclaimed by ADNR. If a mining operation disturbs a previously mined area, that area must also be included in the acreage to be bonded.

Refundable bond deposit (new): _____ acres X \$112.50 = \$ _____

Nonrefundable bond pool annual fee (new): _____ acres X \$ 37.50 = \$ _____

Total \$ _____

Make check payable to 'Department of Natural Resources'. Sign and return form with applicable fees to: DNR - Mining: 550 W. 7th Ave. Suite 900B, Anchorage, AK 99501-3577 or 3700 Airport Way, Fairbanks, AK 99709-4699.

Signed - Miner

Date

ADNR - Division of Mining, Land & Water

Date

BLM - Bureau of Land Management

Date

STATE OF ALASKA, DEPARTMENT OF NATURAL RESOURCES
STATE WIDE BOND POOL RENEWAL FORM
FOR 2025 OPERATIONS

APMA # _____

Name _____

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: _____

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: _____ acres rounded up to next integer: _____ acres
2. Total whole number of acres disturbed in 2024? _____ acres rounded up to next integer: _____ 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.

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.

_____ acres x \$ 112.50 = \$ _____

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): _____ acres x \$ 37.50 = \$ _____

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

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

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

10. Total acreage bonded in 2025 (7 + 8): _____ 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 \$ _____. Make check payable to: DEPARTMENT OF NATURAL RESOURCES.

Signed – Miner _____

Date _____

ADNR - Division of Mining, Land & Water _____

Date _____

BLM - Bureau of Land Management _____

Date _____

Submit to DNR

Clear Form

**APPLICATION FOR RELEASE OF RECLAMATION BOND
OR
REFUND OF BOND POOL DEPOSIT**

APMA NUMBER: _____

Name of Applicant: _____

This form may be used to request release of a reclamation bond or a refund of the refundable portion of the bond pool deposit. **If the bond is for operations on federal claims, reclamation approval is required by the federal land manager before DNR will make the bond deposit refund.** If DNR has not inspected reclamation on the mineral property(s), photographs of the completed reclamation work may be required before the bond is released.

List the mineral property(s) that are subject to a release of a reclamation bond reduction, or refund of the refundable portion of the bond pool deposit. Please provide the casefile type (e.g.; ADL/AKFF/USMS) and number, or if Native Land, provide the legal description (MTRS). _____

Check all that apply: ☐ Reclamation Completed ☐ No Acreage Disturbance ☐ Successor of Interest
Note: _____

In accordance with the above referenced Annual Placer Mining Application (APMA) and approved reclamation plan, the number of acres bonded was _____. I request a release of the bonding obligation and a refund of the refundable bond pool deposit for _____ acres that have been reclaimed, were never disturbed, or a successor of interest has assumed all liability. I understand bond monies are refundable only to those individuals or businesses originally submitting such, unless proper documentation is enclosed indicating refunds should be issued otherwise.

I hereby swear or affirm, under oath, that I have examined Alaska Statute 27.19 (Reclamation Act), 11 AAC 97 (Reclamation Regulations) and my approved reclamation plan and believe myself to have completed the reclamation to the required standards and in accordance with my approved reclamation plan. Photographs of the completed reclamation work are attached: ☐ Yes ☐ No

I understand if the commissioner determines reclamation was not done in accordance with the approved plan of operations and this sworn statement, I remain liable under AS 27.19 to complete the reclamation.

I certify under penalty of perjury the foregoing is true and accurate.

(Signature of Applicant) _____

(Date) _____

NOTARY:

Subscribed and sworn before me this

This _____ day of _____, 20 _____

Signature of Notary: _____

My Commission Expires: _____

2026 Lichen (APMA#3035) Exploration Project Narrative

This 2026 field season MDF-Alaska is planning to conduct a field exploration program in the Matanuska-Susitna Borough on actively held claims on the Lichen project. The portion of the program concerning this agreement consists of the planned construction of up to 4-trenches approximately 100 feet long, 5 feet wide, by 4 to 6 feet in depth using small CanDig DC21M flyable excavation units or similar as well as relevant hand tools.

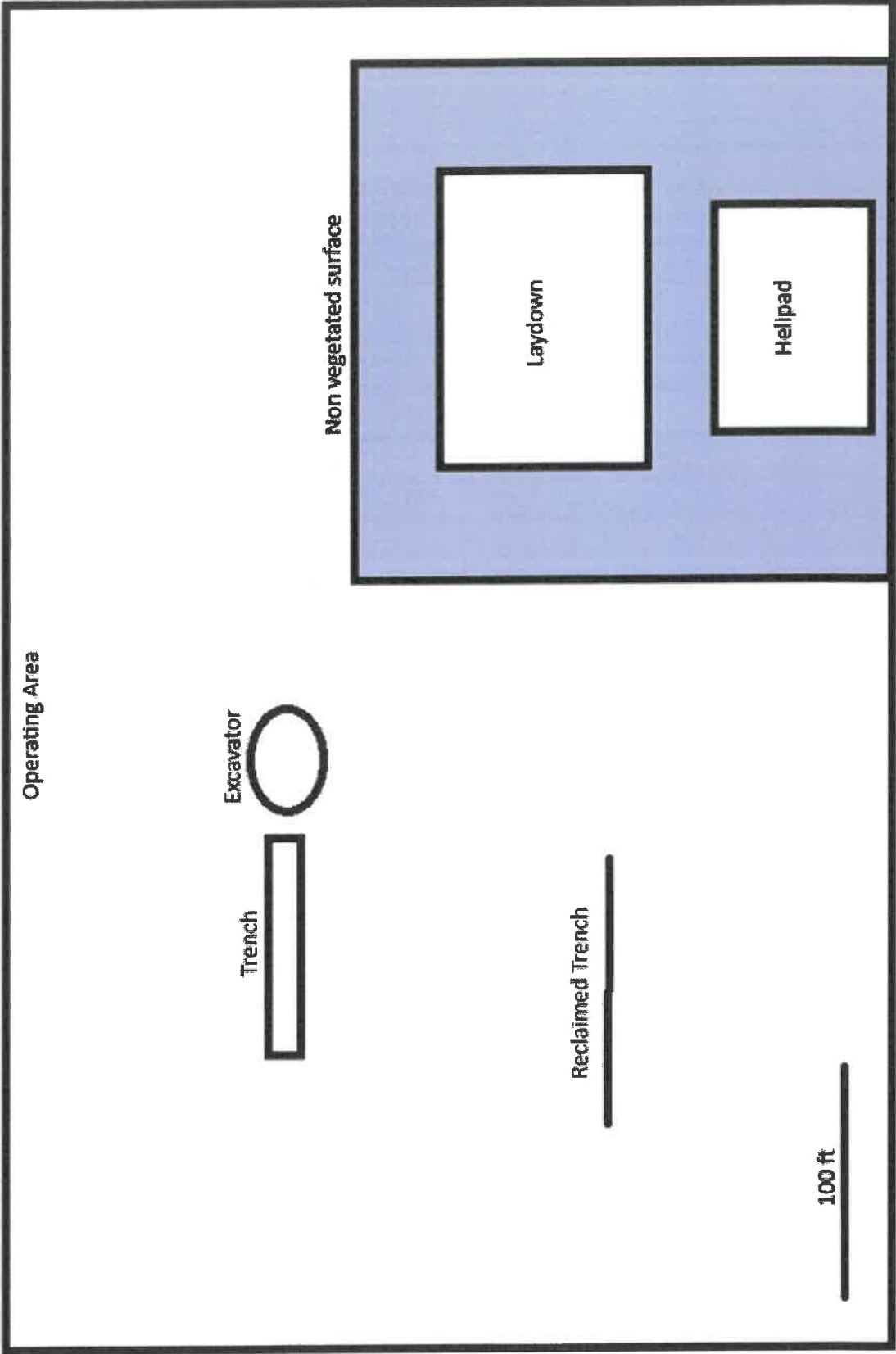
Each trench will be reclaimed within 7 days of creation, general procedure in trench construction is as follows. Careful removal of top organic layer along the length of the proposed trench line, keeping vegetation as intact as possible for replanting. Excavation of the remaining layers of unconsolidated sediment to as close to bedrock as feasible. Stockpiling dug sediments in a manner that prevents sloughing, runoff into waterways or any other unplanned transport of sediment. Reclamation will be the reverse of construction returning trench area to same contour and surface of the original area after necessary rock chip samples and geological measurements are collected. Photographs documenting the location of each trench along with coordinates of each end of all trenches dug. Should an area of interest be found within the project claim boundary we may add additional trenches within the requested disturbance limits reflected in the APMA application. If the condition arises the additional disturbance will be captured and reported with the end of year APMA report.

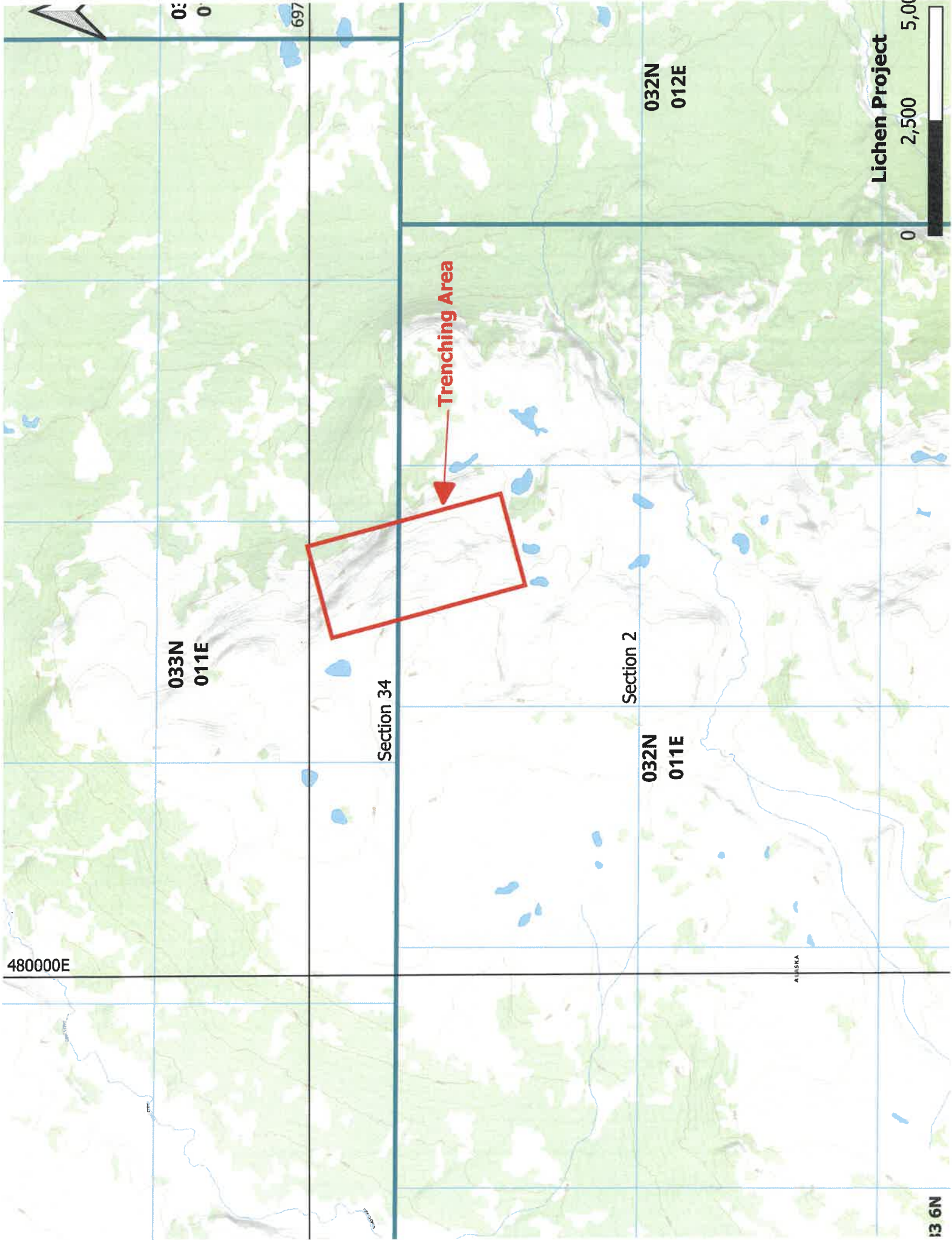
This is a helicopter supported exploration program where all equipment and personnel will be transported to and from the exploration area via the air. Field crews working on the Lichen project will operate out of Alpine Creek Lodge where personnel, equipment and supplies will be based and stored when not in use. We are not anticipating the need to clear/disturb ground for Landing zones. If this changes during the field season we will identify those areas, collect GPS coordinates, photos and include them in the reclamation field report to DNR at the end of the season.

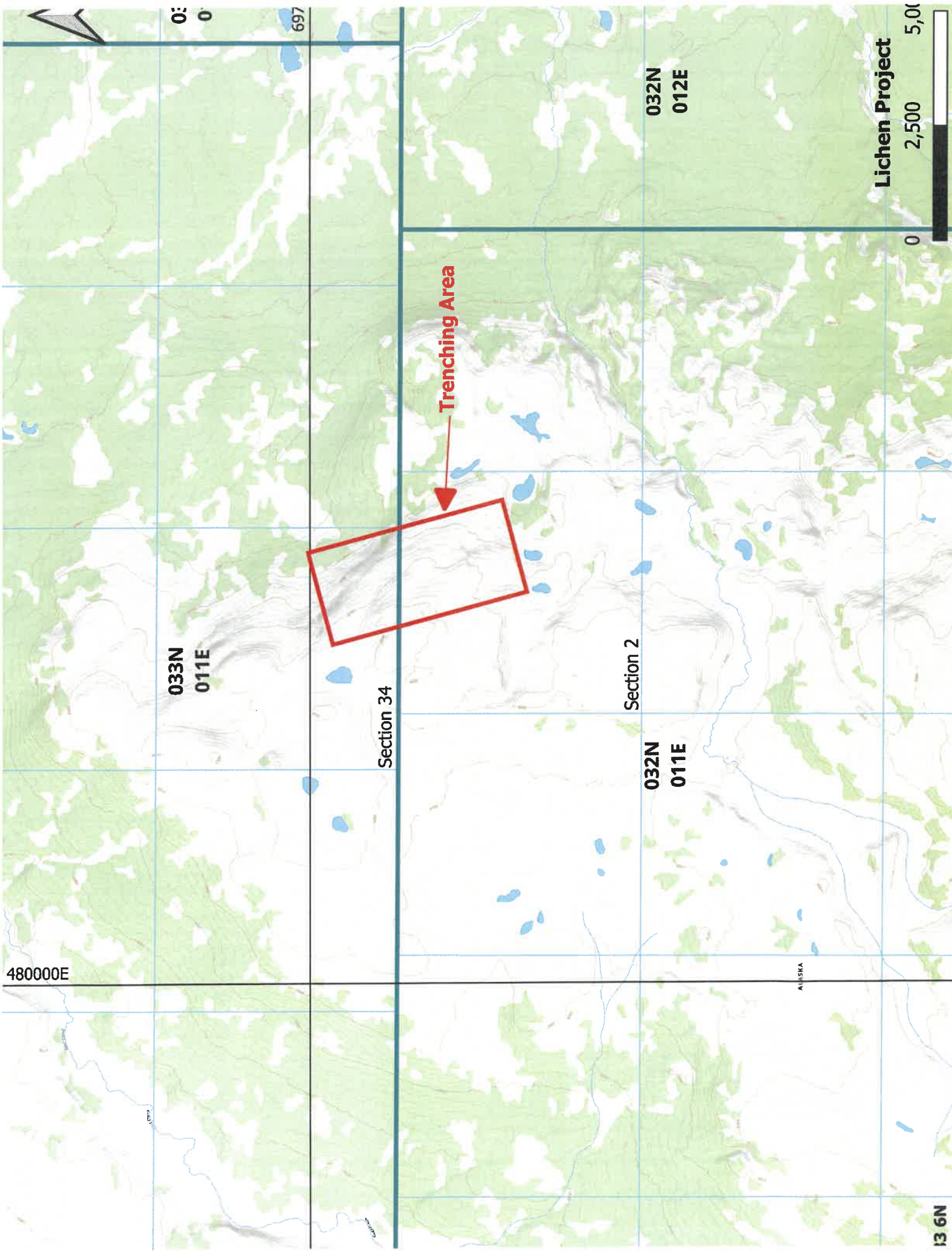
Fuel handling and spill response. We will be transporting fuel for the CanDig excavator to the field using 5-gallon safety cans. The fuel cans will be accompanied by a 2'x2'x6" secondary containment and spill response kit. All employees and contractors onsite are required to attend our annual fuel handling and spill response and cultural sensitivity training prior to the start of the field season.

Lichen Relevant Claims:

Name	ADL
Lichen Ridge 1	739182
Lichen Ridge 2	739183
Lichen Ridge 3	739184
Lichen Ridge 4	739185
Lichen Ridge 5	739186
Lichen Ridge 6	739187
Lichen Ridge 7	739188
Lichen Ridge 8	739189
Lichen Ridge 9	739190
Lichen Ridge 10	739191
Lichen Ridge 11	739192
Lichen Ridge 12	742223
Lichen Ridge 13	742224
Lichen Ridge 14	742225
Lichen Ridge 15	742226
Lichen Ridge 16	742227







480000E

033N
011E

Section 34

Section 2

032N
011E

032N
012E

Trenching Area

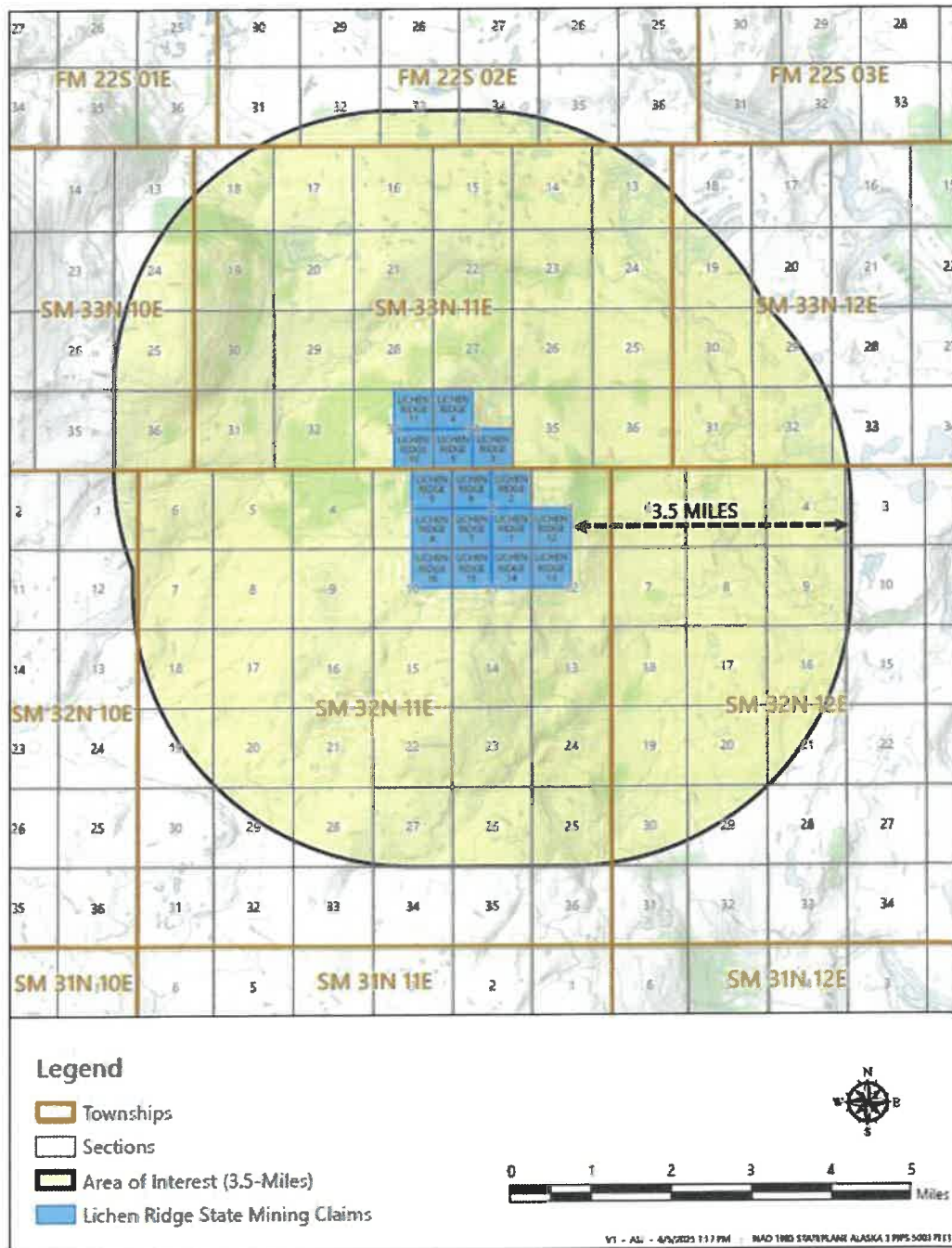
Lichen Project

0 2,500 5,000

13 6N

Area of Interest

The area 3½ miles from the boundary of the Claims as described in the figure below, containing 43,895 acres, more or less. Total area including Claims contains 46,455 acres, more or less.



Trench Diagram

Mockup of standard proposed trench,

All lengths subject to change due to natural conditions and scope of sampling. Measurements shown represent maximum expected extents of trenches dug. Red line below represents channel sample line along which in place rock chip samples will be recovered for analysis. Plastic liner will be used to protect vegetation from excavated unconsolidated sediments and removed from the field after reclamation is completed.

