

STATE OF ALASKA  
Application for Permits to Mine in Alaska (APMA)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Single Year     Multi-year - Start: 2019    Finish: 2023    APMA (District/Year/Number): F/2019/9381

What type activity are you planning to perform? (1) <input type="checkbox"/> Exploration/Reclamation <input type="checkbox"/> Access Equipment <input type="checkbox"/> Mining/Reclamation <input type="checkbox"/> Suction Dredge <input checked="" type="checkbox"/> Hardrock Exploration/Reclamat <input type="checkbox"/> Reclamation		Surface estate of mineral properties: (2) <input checked="" type="checkbox"/> State (General) <input type="checkbox"/> State (Mental Health) <input type="checkbox"/> Private (Patented) <input type="checkbox"/> Federal <input type="checkbox"/> Private (Native Corp.) <input type="checkbox"/> City or Borough	
Mineral Property Owners: (3) Company name and contact name if applicable Piek Incorporated Joe Piekenbrock	Lessee: (4) Company name and contact name if applicable	Operator: (5) Company name and contact name if applicable Western Alaska Copper & Gold Kit Marrs	
Mailing Address for official correspondence: 7853 Red Fox Drive Evergreen, CO 80439	Mailing Address for official correspondence:	Mailing Address for official correspondence: Western Alaska Copper & Gold 3573 E Sunrise Dr., Suite 233 Tucson, AZ 85718	
Home phone# (winter): (303) 886-0696	Home phone# (winter):	Home phone# (winter): 520-237-1475	
Work phone# (winter): (303) 886-0696	Work phone# (winter):	Work phone# (winter): 520-237-1475	
Home phone# (summer): (303) 886-0696	Home phone# (summer):	Home phone# (summer): 520-237-1475	
Work phone# (summer): (303) 886-0696	Work phone# (summer):	Work phone# (summer): 520-299-9101	
Cell/Satellite: (303) 886-0696	Cell/Satellite:	Cell/Satellite: 520-237-1475	
FAX: N/A	FAX:	FAX:	
E-mail: joepiekenbrock@gmail.com	E-mail:	E-mail: kitmarrs@mac.com	
Winter contact effective dates 10-1 to 4-30 Summer contact effective dates 4-30 to 10-1	Winter contact effective dates _____ to _____ Summer contact effective dates _____ to _____	Winter contact effective dates 11-1 to 4-30 Summer contact effective dates 4-30 to 11-1	
Project Name If Applicable: (6) Illinois Creek	# of Workers: (7) 12-15	Start-Up/Shut Down: (Month/Day) (8) 5-1 to 10-1	
Mining District: (9) Kaiyuh	Applicable USGS Map: (10) Nulato A-4	On What Stream Is This Activity? (11) N/A	
Legal Description of mineral properties to be worked and other projected related activities (MTRS): (12) Kateel River Meridian, T17S, R4E, Sections 11, 12, 13, 14; T17S R5E Sections 2, 3, 4, 5, 7-11, 15-16; T16S R5E Sections 25, 26, 34, 35, 36			
Internal Use Only: Date Application Received Complete: _____ Adjudicator: _____ LAS Entry: _____			

Page 1 Form 102-4071 Revised 11/2018

CID: \_\_\_\_\_

CID: \_\_\_\_\_

CID: \_\_\_\_\_

**MINERAL PROPERTIES LIST**

Attach additional sheets as necessary.

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 attached claims		7.		
2.			8.		
3.			9.		
4.			10.		
5.			11.		
6.			12.		

**INVENTORY OF EQUIPMENT**

List all mechanized equipment to be used (make, model, type, size, weight, 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, weight and loaded total weight.

Check One:

	Make, Model and Type of Equipment or Pump	Weight of Equipment and Any Trailers, including Loaded Weight	Quantity of this type	Located on the claim block?	Transporting to claim block?
1.	Multi-Power JKS 300 Drill rig	12,200	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.	Tracks and frame	4490	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.	Bean 450 Water pump	1460	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.	Bean 420 Water pump	820		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5.	Diesel generator (on drill rig)	N/A	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6.				<input type="checkbox"/>	<input type="checkbox"/>
7.				<input type="checkbox"/>	<input type="checkbox"/>
8.				<input type="checkbox"/>	<input type="checkbox"/>

**ACCESS OUTSIDE OF CLAIM BLOCK**

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.

All season roads may be an improved dirt road intended to be used during all seasons of the year without causing long term damage to the road. NOTE: It is strongly recommended that you contact the appropriate Regional Land Office as certain roads are subject to Generally Allowed Uses, and authorization (permit or easement) may be required for use of the route with off-road vehicles greater than 1500 lbs curb weight (like mining equipment).

A completed access map must be submitted with your application. Copies of USGS topographic maps at a scale of 1"=1 mile must clearly indicate the proposed access route from start to finish and include appropriate legal descriptions (township and range) on each map sheet. The quadrangle map name should also be indicated (Healy A-3, etc.). Paper size should be limited to 8 1/2" x 11". Do not tape maps together.

Access is:  Existing  To be constructed off claim block  Both, or  Helicopter Supported

Access outside the claim block crosses what type of land(s)?  State (General)  State (Mental Health)  City/Borough  Federal  Private  Private (Patented)  Private (Native Corp. Land)

Does the proposed route of travel include use of RS 2477 access?  Yes  No.

If the RS 2477 ROW has a State of Alaska RST number, please list: \_\_\_\_\_

**ACCESS OUTSIDE OF CLAIM BLOCK, CONTINUED**

Indicate type(s) of existing access:

- All Season Road: Existing Illinois Creek Mine roads.
- Summer Cross Country Travel off of claim block that is not considered Generally Allowed Uses (Complete Box 16)
- Airstrip
- River
- Winter Cross Country Travel that is not generally allowed use (Complete Box 16)

Indicate type(s) of access to be constructed:

- Access Road
- Airstrip

Please describe your construction activities and include mitigation measures to protect water, fish and game resources. (A map outlining the route of construction activities is required). Attach additional pages if necessary:

NONE

---

---

---

---

---

---

**CROSS COUNTRY TRAVEL**

(16)

**Summer Cross Country Travel:** Approvals for summer travel are issued from the DNR/DMLW Land section. Applications for LUPs may require sixty to ninety days to process and applications for easements may require six months to one year to process. A performance guarantee, insurance and fees are required before a permit will be issued and will only be released after travel is completed and no negative trail impacts have occurred.

**Winter Cross Country Travel:** May be approved when ground conditions will support the movement of heavy equipment. Existing roads and trails should be used whenever possible. The winter operation of ground contact vehicles for off-road travel must be limited to areas where ground frost and snow cover are adequate to prevent damage to the vegetation mat and underlying substrate. A completion report is required within 30 days of travel completion. Travel is generally not authorized after April 15<sup>th</sup> of each year (extensions may be granted as conditions allow).

A Cross Country Travel Route Map is required to obtain authorization. Is the map attached?

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

N/A

List all equipment and vehicles being transported from box 14:

N/A

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 cross country 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 WaterSource: \_\_\_\_\_

**CROSS COUNTRY TRAVEL, CONTINUED**

Are you transporting fuel?  Yes  No

The volume of fuel and hazardous substances to be used is the total volume (in gallons) to be carried on one vehicle and any trailers or sleds that vehicle is towing.

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

By helicopter 100 gal per load

Are you transporting other hazardous substances? Yes No If "yes", indicate type and amount:

NO

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

55 gal barrels and smaller drill mounted tanks

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

By helicopter

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:

Absorbent pads and containment material on site. Vehicles and equipment are maintained on regular schedule to eliminate leaks. Personnel are trained to inspect for any vehicle or equipment fuel leaks.

Does your cross country 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.

**FUEL AT MINE SITE**

(17)

Describe the total volume of fuel stored on site: [BLM Operators Only - Spill Worksheet is Required]

0-1,320 gallons (secondary containment recommended, but not required)

1,321-10,000 gallons (Self Certified Spill Prevention, Control and Countermeasure Plan (SPCC) required)

10,000+ gallons (Certified Engineered Plans required)

Indicate Distance Stored From Flowing Waters: +1,000 Feet (Minimum distance from naturally occurring water bodies required by DNR is 100 feet).

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

**ABOVEGROUND STORAGE TANK REGISTRATION**

(18)

If your operation will employ the use of at least one 1,000-gallon aboveground storage tank of noncrude oil (e.g. diesel), it must now be listed on a Class 2 Facility Registration and Notification Form. For additional information, including the registration form, visit <http://dec.alaska.gov/spar/ppr/prevention-preparedness/class-2-facilities/> or contact Class 2 facility staff at (907)465-5237 or [dec.spar.class2@alaska.gov](mailto:dec.spar.class2@alaska.gov). Understood:  Yes  No

TEMPORARY STRUCTURES/FACILITIES

(19)

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

Will/are any structures stored on general State lands (NOT within the permitted claim block)?  Yes  No

Will the structures be temporary or maintained year round?  Temporary (From \_\_\_\_\_ to \_\_\_\_\_)  Year Round

Request use of existing facilities (Indicate number and dimensions of each) on ADL(s): 728197 \_\_\_\_\_

Area of Camp: Length \_\_\_\_\_ Feet Width \_\_\_\_\_ Feet

Frame \_\_\_\_\_  Trailer ATCO \_\_\_\_\_  Tent/Tent Frame Weatherport \_\_\_\_\_

Request to place temporary structures (Indicate number and dimensions of each) on ADL(s): \_\_\_\_\_

Area of Camp: Length \_\_\_\_\_ Feet Width \_\_\_\_\_ Feet

Frame \_\_\_\_\_  Trailer \_\_\_\_\_  Tent/Tent Frame \_\_\_\_\_

Camp authorization is not requested because: Camp facilities pre-existing and permitted by APMA #2444 and APMA #2274

If camp is on private land, provide location: \_\_\_\_\_

Wastewater - Describe the wastewater type and quantity and proposed method of wastewater disposal:

Dish water and shower water disposed in dry well \_\_\_\_\_

Waste- Describe the types of waste that will be generated on-site, including solid waste, the source of the waste, and the method of waste disposal, i.e. pit privy, or self-contained system, or outfall line; indicate distance from the nearest water body: Pit privy in camp. Camp is +2,000 ft from nearest water source, an un-named tributary of Illinois Creek

What is the distance structures, including pit privies 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: +6,000 Ft

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

Dismantle, Removal, and Restoration Plan: Provide a plan for dismantling and removing temporary structures. Include the method and timeline for restoration of all stucture location areas.

Existing Illinois Creek Camp is permitted under APMA #2444 \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**EXPLOSIVES**

(22)

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.

**DAMS**

(23)

No dam required  Existing  To be constructed

Proposed Structure:  Temporary  Permanent

Purpose:  Makeup water pond  Settling/recycle pond  Stream diversion Other: \_\_\_\_\_

Length: \_\_\_\_\_ ft Height: \_\_\_\_\_ ft Width At Crest: \_\_\_\_\_ ft Width At Base: \_\_\_\_\_ ft

Note: Height should be measured from the lowest point at either the upstream or downstream toe of the dam to the crest of the dam.

Water impoundment capacity (if known): \_\_\_\_\_ acre-feet

**IN-STREAM ACTIVITIES and STREAM CROSSINGS**

(24)

List any equipment that will be crossing streams or used in-stream (refer to Box 14 if necessary):

NONE

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 <a href="http://dnr.alaska.gov/mapper/controller">http://dnr.alaska.gov/mapper/controller</a>		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.					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If in-stream activities and/or stream crossings are requested at more than 5 locations, please provide tabular data format (DNR template available at <http://dnr.alaska.gov/mlw/forms/?tab= mining>).

**WATER USE AUTHORIZATIONS**

Water usage (including from 100% recycle systems) may require approval by either Temporary Water Use Authorization 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 Temporary Water Use Authorization application may be initiated from this APMA application unless a Water Right is requested. Please contact the ADNR, Water Resources Section at telephone number (907) 451-2790 if interested in a Water Right or for more information.

**A. START-UP WATER AND MAKE-UP WATER:**

Is water withdrawn from any lake, stream, creek, river, etc. (does not include recycling/settling ponds)?  Yes  No

What is the name(s) of the lake, stream, creek, river, etc.? \_\_\_\_\_

What are the months of water use needed (for example May 1<sup>st</sup> through October 31<sup>st</sup>)? \_\_\_\_\_

**Start-up water:** Is water required at the start of the season to fill your recycle/settling pond system?

Yes (if **YES**, complete information below).  No If yes, what is the source name? \_\_\_\_\_

- Source:  Seepage infiltration from groundwater gained from cut and/or stream
- Diversion ditch from stream. Number of days diverting from stream for start-up water: \_\_\_\_\_
- Water intake rate: \_\_\_\_\_ gpm \_\_\_\_\_ hrs/day
- Pump from stream. Number of days pumping from stream for start-up water: \_\_\_\_\_
- Number of water pumps for start-up water: \_\_\_\_ Water intake rate (list for each pump): \_\_\_\_\_ gpm \_\_\_\_\_ hrs/day

**Make-up water:** Is water required to maintain water level in your recycle/settling pond system?

Yes (if **YES**, complete information below).  No If yes, what is the source name? \_\_\_\_\_

- Source:  Seepage infiltration from groundwater gained from cut and/or stream
- Ditch from stream. Number of days diverting from stream for make-up water: \_\_\_\_\_
- Water intake rate: \_\_\_\_\_ gpm \_\_\_\_\_ hrs/day
- Pump from stream. Number of days pumping from stream for make-up water: \_\_\_\_\_
- Number of water pumps for make-up: \_\_\_\_ Water intake rate (list for each pump): \_\_\_\_\_ gpm \_\_\_\_\_ hrs/day Pump intake size: \_\_\_\_\_ inches

**B. RECYCLE/SETTLING POND SYSTEM.**

Beaver ponds or other natural water features will not be permitted for use as settling ponds.

Is a pre-settling pond used?:  Yes  No Is recycle used?:  Yes  No

How many ponds are used in the recycle system? \_\_\_\_\_

Recycle pond is pond # \_\_\_\_\_ Settling pond is pond # \_\_\_\_\_

**C. RECYCLE/SETTLING POND SYSTEM (continued).**

Indicate Length (L), Width (W), and Depth (D) of each pond:

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

Pond # 5: L: \_\_\_\_\_ ft W: \_\_\_\_\_ ft D: \_\_\_\_\_ ft Pond # 6: L: \_\_\_\_\_ ft W: \_\_\_\_\_ ft D: \_\_\_\_\_ ft



Estimated hours per day that pump(s) will be used, return line size (in inches), operating pump rate (in gallons per minute), and water usage days per month:

Pump #1: \_\_\_\_\_ hrs/day \_\_\_\_\_ inches \_\_\_\_\_ gpm \_\_\_\_\_ days/month  
Pump #2: \_\_\_\_\_ hrs/day \_\_\_\_\_ inches \_\_\_\_\_ gpm \_\_\_\_\_ days/month  
Pump #3: \_\_\_\_\_ hrs/day \_\_\_\_\_ inches \_\_\_\_\_ gpm \_\_\_\_\_ days/month

**D. CAMP WATER USE.**

Is camp water used?  Yes  No

Maximum number of persons present in camp at a time 16

Camp water source:  Well  Haul  Stream  Spring  Lake

Name of water source (if any): Illinois Creek

Camp pump intake diameter: 1.5" Camp pump rate: 25 gpm 2-4 hrs/day

**E. EXPLORATION ACTIVITIES.**

Is water required for exploration activities?  Yes  No

If **YES**, What types of exploration activities are being performed?  Trenching  Drilling

If **YES**, How many pumps are used in the exploration activities? 1

Estimated hours per day that pump(s) will be used, return line size (in inches), operating pump rate (in gallons per minute), and water usage days per month: Pump #1: 20 hrs/day 1.5 inches 30 gpm 30 days/month

**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

**F. SUCTION DREDGING.**

If suction dredging activity is occurring please ensure that you have completed the dredge table in Section **(20) MINING METHOD.**

**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 Page Two 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 <http://alaska.gov/go/2MPF>.

Previously issued DEC-APDES Wastewater discharge permit #: N/A

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.

**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.

**Note:**

- If your APMA requires, but does not include a JD or Mitigation Statement, your application will be considered incomplete. The Corps may also contact you for additional information. Please ensure your contact information on the front page is current.
- For BLM Operators: A complete 404 Wetland Permit Package with additional photos of the upland areas to be mined will be sufficient to meet the requirement for the uplands reclamation baseline data and riparian mitigation measures as required by § 43 CFR 3809.

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

Latitude: N/A Longitude: - N/A

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**

**(28)**

**A MAP OF COMPLETE STREAM DIVERSION IS REQUIRED:** Plan Map of Operation included in the APMA should 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.

**Please note:** If you have a stream diversion structure; this 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). Complete Section 24 (regarding a Dam) of this APMA. If you require further regulatory guidance regarding dams, please contact our Dam Safety and Construction Unit, Dam Safety Engineer at telephone number 907-269-8636 or for more information go to the Alaska Dam Safety Program website at: <http://dnr.alaska.gov/mlw/water/dams/index.cfm>

**Is stream diversion required?**  Yes (if **YES**, complete information below).  No

Existing (Date Constructed \_\_\_\_\_) To Be Constructed (Date \_\_\_\_\_)

**If a diversion is required or pre-existing, please contact your local ADF&G, Division of Habitat for Fish Habitat Permitting information. To facilitate permit issuance, please provide the following information:**

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)

Dimensions of proposed diversion:

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

Note: Diversion should approximate the existing stream in terms of meander bends, length, depth, stream width, and floodplain width.

**(Please provide plan and profile diagrams of diversion in Section 29, PLAN MAP OF OPERATION) or attach additional sheets as necessary**

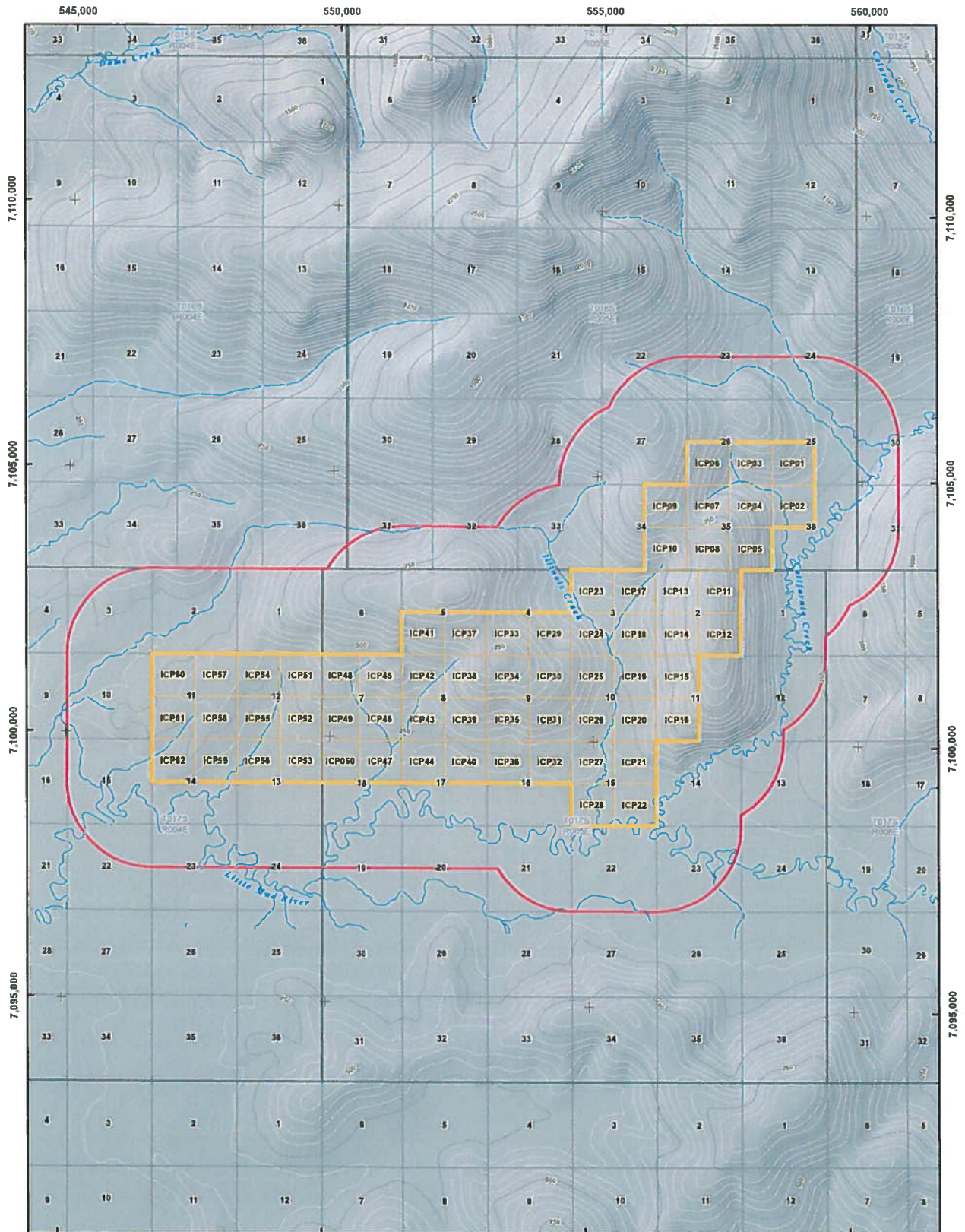
PLAN MAP OF OPERATION

(29)

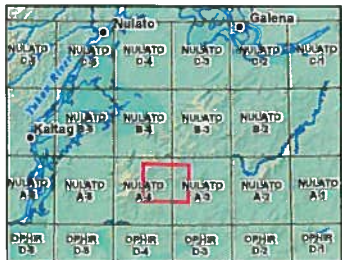
VICINITY MAP

Date Prepared:	Applicant Name:
<b>STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES DIVISION OF MINING, LAND AND WATER</b>	
<b>MAP:</b>	
Sec.(s) _____ Township _____, Range _____, Meridian _____	
Scale: 1" = _____	ADLs:
SHEET OF _____	APMA # _____

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

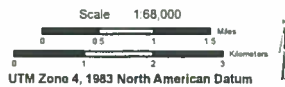


DRAFT WORK PRODUCT, NOT FOR DISTRIBUTION  
WITHOUT PERMISSION OF WAACG



**Legend**

- Illinois Creek Claim Block
- One Mile Area of Interest Boundary
- BLM Township/Section Grid
- ~ USGS NHD Streams



**Western Alaska Copper & Gold  
Illinois Creek Mining District**

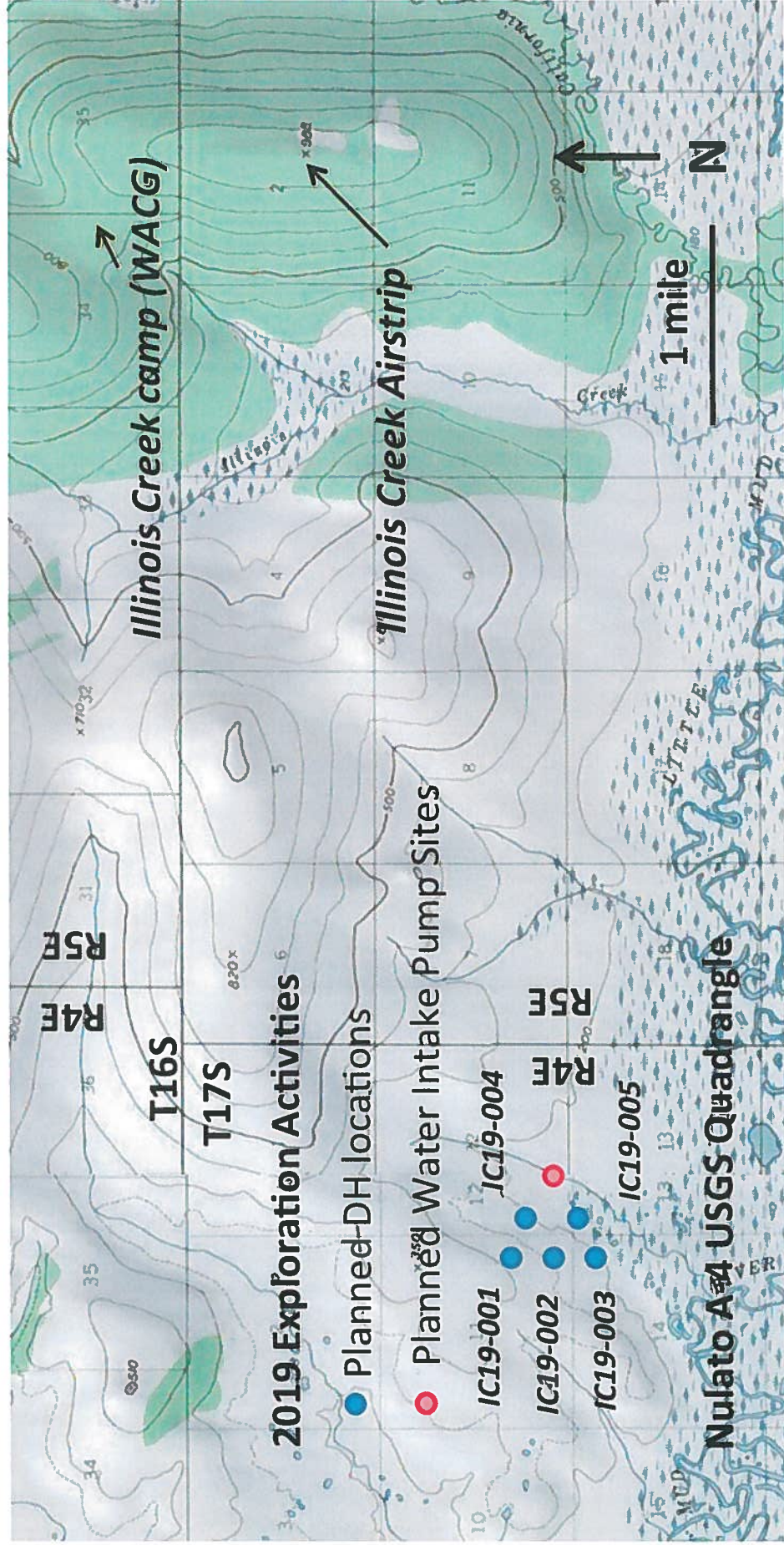
**Illinois Creek Claims**

File: RDI\_Illinois\_Creek\_Claims\_11x17\_181017

Date: October 18, 2018

Author: RDI-LS

**Illinois Creek Plan of Operations  
Planned Drill Hole Locations  
2019 Illinois Creek Program**







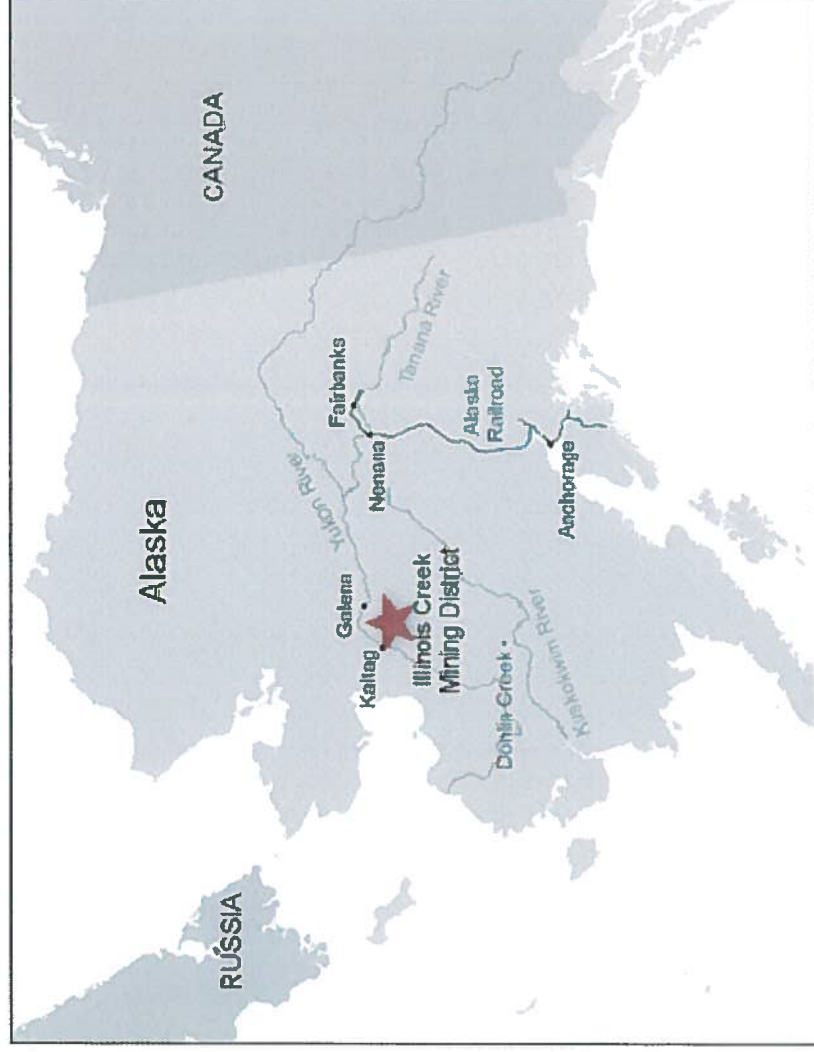
# **AA** WESTERN ALASKA **COPPER & GOLD**

## **ILLINOIS CREEK APMA APPLICATION**

**May 2019**

**Contacts: Kit Marrs at +1 520 237-1475 or  
Joe Piekenbrock at +1 303 886-0696**

# Location



WACG owns the Round Top and Honker properties consisting of 104 state of Alaska mining claims and has the right to acquire a 100% interest in the adjacent Illinois Creek property comprised of 62 state of Alaska claims. (26,560 acres or >41 sq mi)

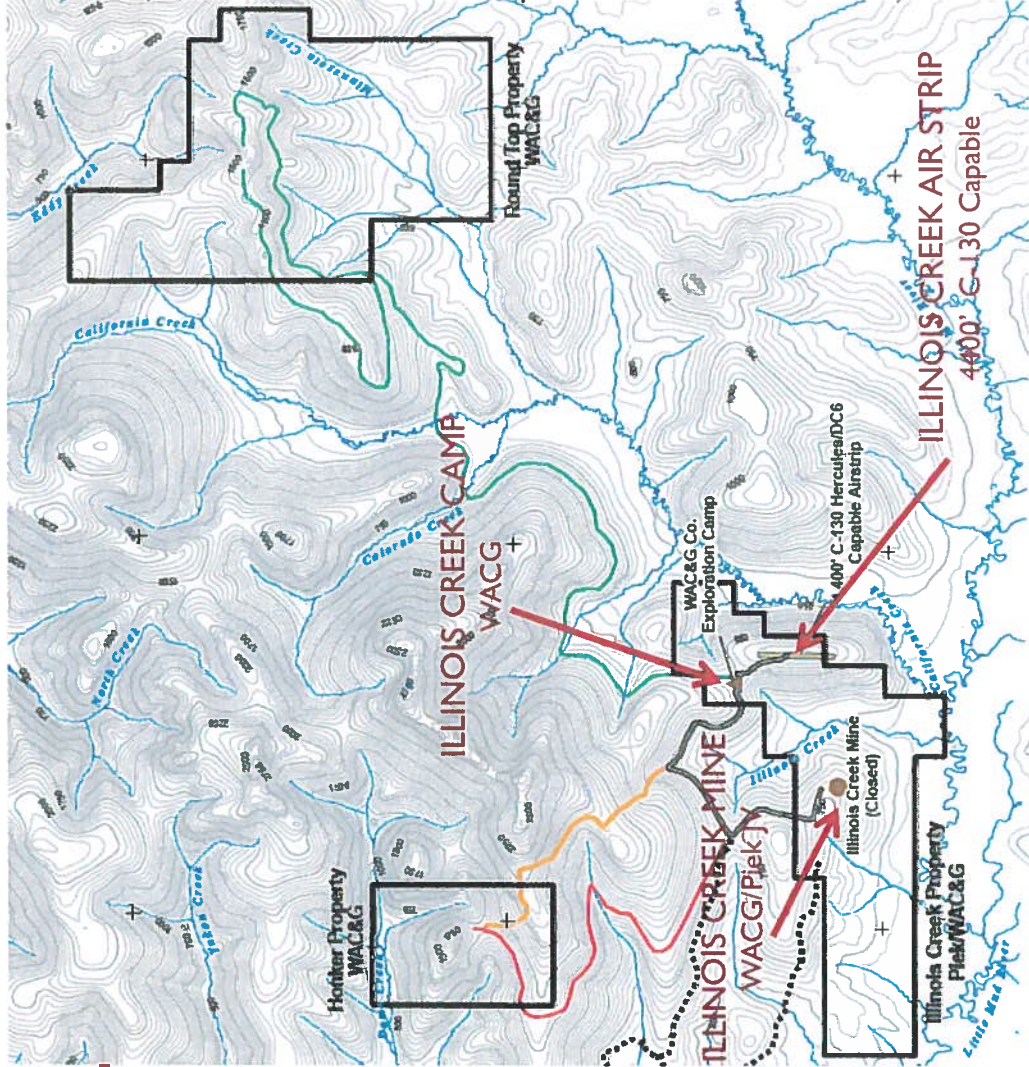
The properties are on State of Alaska land and lie within the Doyon Native Corporation region. The closest community is the village of Kaitag, 35 miles to the NW.

Galena, 65 miles to the NE, is a major regional hub with daily air service from Fairbanks and river barge service from Nenana, which is located on the AK Railroad and AK Highway.

Illinois Creek District is located 120 miles north of the Donlin Creek Gold deposit.



# Illinois Creek District Map



The Round Top Cu/Mo/Ag porphyry and the Honker low-sulfidation Au prospects of WACG are located 12 miles northeast and 6 miles northwest, respectively, of the Illinois Creek Camp (WACG) and airstrip (public).

Proposed road connections to the Illinois Creek Road System (shown in black) will allow for low cost exploration and development access to both the Round Top and Honker properties.

The past-producing Illinois Creek heap leach oxide Au-Ag mine and porphyry Cu/Au target are owned by Piek Inc. WACG has recently completed an agreement to jointly explore with an option to acquire 100% interest in the claims.

# Existing Infrastructure

---



**4,400 Foot Airstrip with fuel storage  
Heavy equipment on site for loading  
DC-6/C-130 Capable**



**WACG Camp & Core Facility**



# Existing Illinois Creek Mine Infrastructure





# Development Infrastructure

RUBY MARINE

WELCOME SERVICES EQUIPMENT GALLERY CONTACT

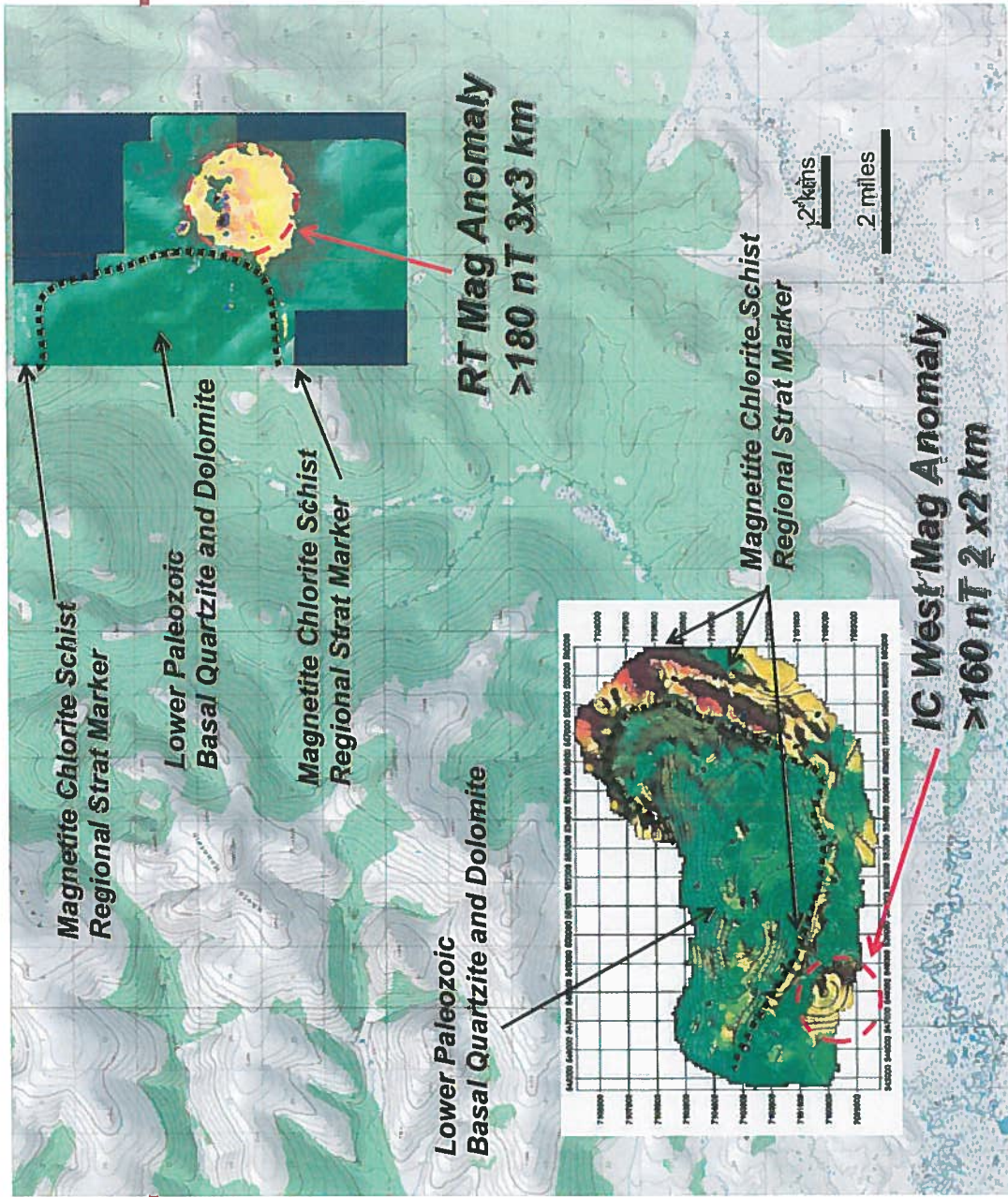


Existing River Barge service between Nenana (Alaska Railroad and Alaska Highway) and Lower Yukon ports at Galena, Kaltag and coastal ports of St. Mary's/Emmonak provides connections to Seattle via Lynden Alaska Marine as well as to Asia. River draft at IC barge site >40' depth.

**A** WESTERN ALASKA  
COPPER AND GOLD

# 2019 Targeting District Porphyry Targets

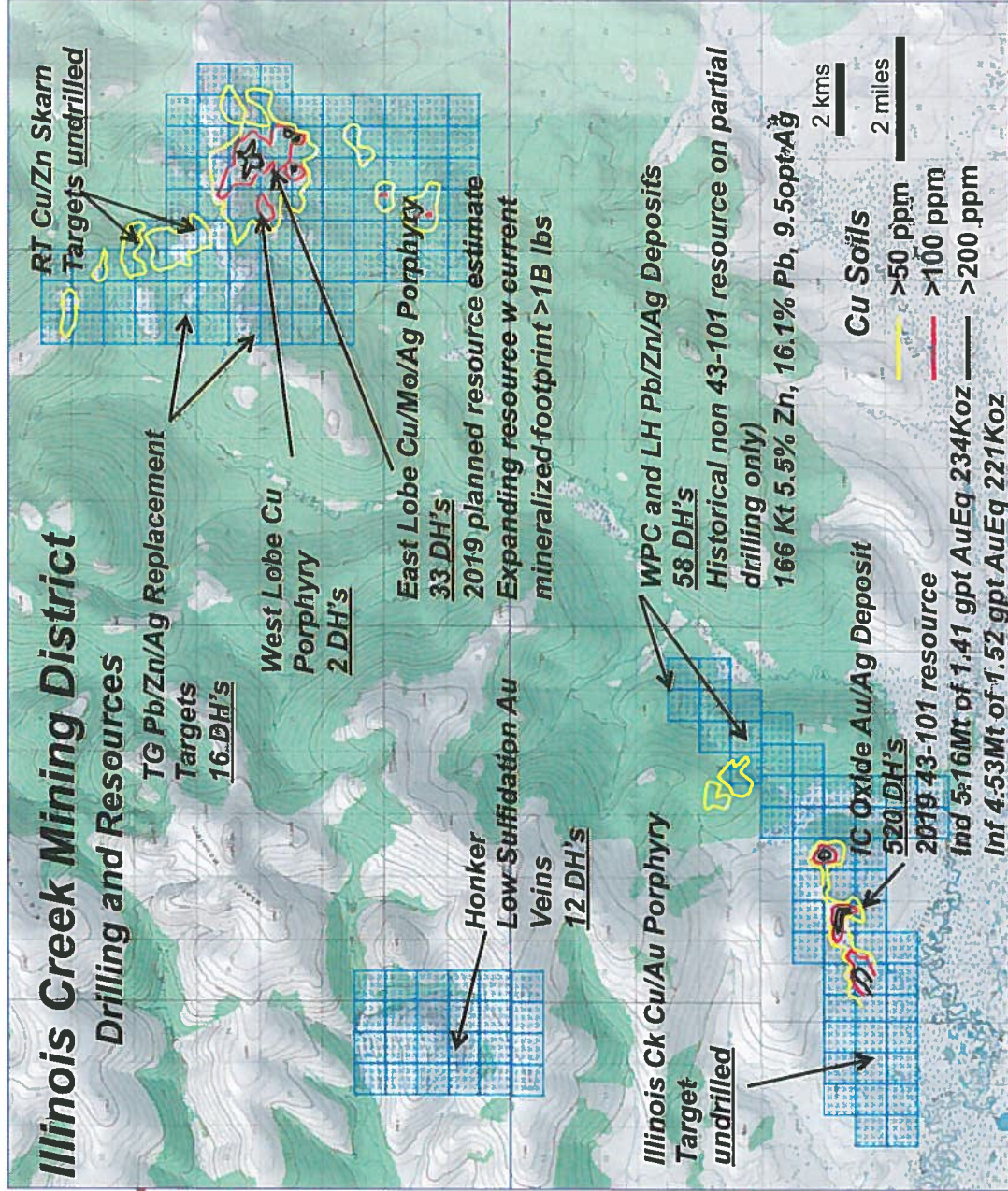
Round Top and Illinois Creek  
both exhibit strong  
aeromagnetic signatures





# Illinois Creek Mining District

## Drilling and Resources



# Drilling/Resources

## Current 43-101 Resources:

**Illinois Creek Au/Ag Oxide Deposit**  
Indicated 5.16Mt of 1.41 gpt AuEq  
234Koz AuEq

Inferred 4.53Mt of 1.52 gpt AuEq  
221Koz AuEq

## Round Top Cu Deposit

2019 Q3/Q4 Planned Resource Estimation  
Post 2019 Drill Program

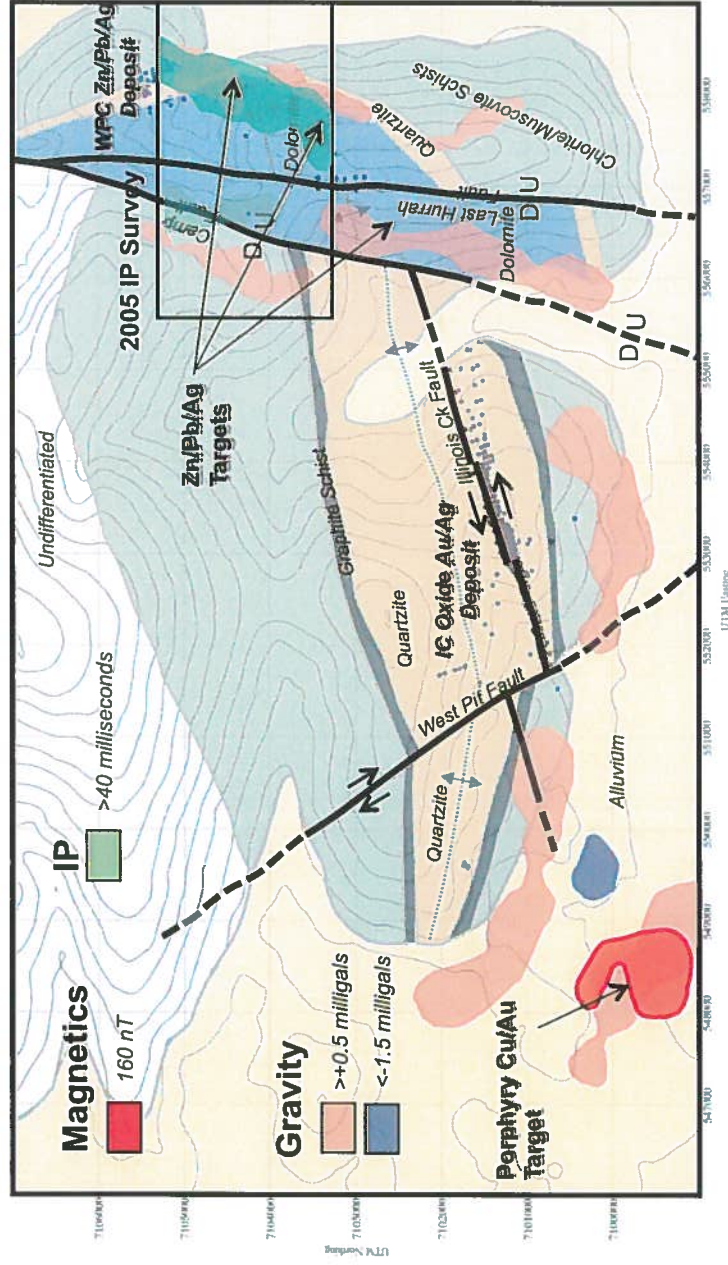
## Historical non 43-101 Resources:

### Waterpump Creek

Historical 166,000 tons @ 16.1% Zn,  
5.5% Pb, 9.5 opt Ag



# Illinois Creek – Porphyry and Replacement Targets



\*Interpretive Geologic Map based on limited surface outcrops (<1%), drill based stratigraphy, airborne magnetics and EM conductivity, reconnaissance gravity surveys and limited IP

**CROSS SECTION SKETCH**

**BEFORE MINING**

**(30)**

**DURING MINING**

**AFTER MINING**

Date Prepared:

Applicant Name:

**STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND AND WATER**

**MAP:**

Sec.(s) \_\_\_\_\_ Township \_\_\_\_\_, Range \_\_\_\_\_, Meridian \_\_\_\_\_

Scale: 1" = \_\_\_\_\_

ADLs:

SHEET OF

APMA #

**NARRATIVE**

**(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.

See attached narative

**Narrative - Hard Rock Exploration Plan**

**APMA F/2019/9831 (2019-2023)**

**Submitted with 2019 APMA Application**

**1. Introduction**

Piek Incorporated and Western Alaska Copper & Gold plan to continue to explore and develop the hard rock potential of the Illinois Creek mining claim block in 2019-2023. The 2019 program plans to drill a series of diamond core test holes on the western side of the property to test a coincident soil geochemical and geophysical anomaly. In 2020-2023 we will drill exploration and metallurgical test holes in the vicinity of the existing Illinois Creek Mine and conduct ground geophysical surveys across the entire Illinois Creek claim block. Also in 2020-2023 we will drill exploration diamond holes to define and expand the Waterpump Creek and associated lead-zinc-silver deposits in the northeast portion of the claim block. This area was extensively explored in the 1980's by Anaconda Minerals Co. and in 2004-06 by Nova Gold Resources and contains a defined mineral resource.

See attached map of geologic targets on the Illinois Creek claim block.

**2. General**

***2.1 Access to the claim block***

- Access to the claim block will be via aircraft to the State of Alaska owned Illinois Creek Airstrip.
- Access on the claim block is by pre-existing roads related to the historical Illinois Creek mine
- Access to the work area on the western side of the claim block will be by helicopter and existing mine roads

***2.2 Camp***

- The existing camp is owned by Western Alaska Copper and Gold (WACG) who will provide support to the Illinois Creek hard rock exploration program of Piek Incorporated. WACG is currently conducting exploration on their adjacent Round Top and Honker claim blocks that is based out of the existing Illinois Creek camp. These activities have been continuous since 2009.
- Potable water for the camp is pumped from Illinois Creek at the road crossing on the access road to the historic Illinois Creek mine, and then hauled to camp by truck.
- The WACG camp is permitted for use under APMA 2444 which is the permit to explore the Round Top copper deposit.

***2.3 Fuel Storage***

- Fuel is stored at the Illinois Creek Airstrip which is greater than 500 ft from any water source.
- Fuel is stored in 55 gallon drums.
- Less than 1320 gallons of fuel storage at any given time is planned for the Illinois Creek project.
- Spill containment kits included sorbent pads will be available for use if needed. SOP's were developed for the Illinois Creek camp, airstrip and drill sites for fuel handling and spill response

in 2017. Those SOP's will be reviewed and updated if needed and then instituted in both the Illinois Creek (Piek Incorporated) and Round Top/Honker (WACG) programs.

### **3. 2019-2023 Work Plan**

#### **3.1 Drilling**

- A total of up to 5 diamond drill holes are planned over a 2-3 week program scheduled for July 2019 using a Multi-Power JKS-300 track mounted drill rig or placed on wood beam crib supports. The weight is approximately 10,000. The drill core will be NQ and BTW size and range from 2.4" to 2.75" diameter. Drill rods, equipment boxes, pumps and water hose will be helicopter transported.
- Locations of drills holes, water intake points and impacted claims are shown on the attached Plan of Operations map.
- No DH's are anticipated within 250 feet on any running water source though ground-truthing will confirm this before drilling. Slight adjustments to DH locations can be anticipated to maintain adequate buffers.
- Drill holes are anticipated to average about 500 feet though provisionally could attain a maximum of 1000 feet.
- Use of the tracked rig currently owned by WACG is planned though that is subject to change.
- The rig as such does not need pad preparation though minor hand preparation and leveling of drill sites may be required. Minor clearing of vegetation is anticipated. Where applicable any soil or vegetative material will be stockpiled.
- Drill fluid additives will be review for applicability with state standards and regulations.
- A combination of hand dug sumps and overflow into the vegetative mat are planned for the drill cuttings where applicable.

#### **3.2 Transport and Movement of the Drill rig**

- The drill rig will be mobilized to the first drill site utilizing a helicopter based at the Illinois Creek camp.
- Movement between sites will utilize a tracked rig configuration to minimize impact on the vegetative mat. No new trails/tracks are anticipated.
- Manpower and supplies including fuel for the drill rig will be by helicopter transport from the Illinois Creek camp.
- The drill rig will be demobilized by helicopter to the Illinois Creek camp at the end of drilling program and all supplies, materials, and trash removed from site.

#### **3.3 Water Usage**

- One water withdrawal point is anticipated and will utilize a small unnamed seasonal (?) creek T17S R4E section 12 which drains into the marshes along the north side of the Little Mud River. Screened intakes will be employed though due to the size and seasonality of the flow – no fish entrapment is expected. Water intake points are shown in the attached Plan of Operations maps
- Drill usage is estimated at 5 gpm x 24hrs/day or 7200 gpd. A 2-3 week program is planned.

### **3.4 Reclamation**

- All supplies, materials, and trash will be removed from site.
- All drill holes will be reclaimed and plugged with a bentonite clay hole plug to DNR specifications during the program – backfilled with bentonite slurry, the drill site monumented, then covered with available brush, reseeded and photographed.
- If the vegetative mat is compromised during drill rig movement between drill sites, additional reclamation procedures will be employed including drainage control and water bars if needed, replacing of organics and cover as practicable, and reseeding as needed.
- Reclamation is planned concurrently with exploration.

**NOTICE OF OPERATOR AUTHORIZATION -- STATE MINERAL LOCATIONS**

All operators or lease holders submitting APMA's for operations on State mineral locations must submit a "Notice of Authorization" from the owner of record. This notice of authorization must name the operator and leaseholder (if different), the claims(s) by Name and ADL number(s), and the time frame (beginning and ending dates) for which the authorization remains in force. The Division of Mining, Land & Water will not issue any mining permits until we receive this Notice of Authorization. **Please include it with your APMA.**

**OPERATOR AUTHORIZATION**

I, Joe Piekenbrock, President; Piek Incorporated, OWNER of state claim(s) :


<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>
Attached					

(Attach additional sheet if necessary)

Have authorized Western Alaska Copper & Gold

Address of Operator 3573 E Sunrise Dr, Suite 233, Tucson, AZ 85718


to operate on these claims from 1/1/19 to 12/31/22

Owner's Signature  Date 5/28/2019

**NOTARY**

Subscribed and sworn to before me this 28 day of May, 2019.

For (owner)

(Signature of Notary) 

My commission expires: 03-01-2021

**DONNA ANDERSON**  
**NOTARY PUBLIC**  
**STATE OF COLORADO**  
**NOTARY ID 20174009227**  
**MY COMMISSION EXPIRES 03/01/2021**

OR (If the LESSEE and OPERATOR are not the same, both sections must be completed)

I, \_\_\_\_\_, LESSEE of state claim(s) :

<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>	<u>Claim Name</u>	<u>ADL Number</u>

(Attach additional sheet if necessary)

have authorized Western Alaska Copper & Gold to operate on these claims from  / /  to  / / .

Lessee's Signature \_\_\_\_\_ Date 5/28/2019

Lessee's Address \_\_\_\_\_

**NOTARY:**

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

For (Lessee)

(Signature of Notary) \_\_\_\_\_

My commission expires:



**EXHIBIT "B" ILLINOIS CREEK (ICP) CLAIM LIST**

10/1/2018

Claim #	ADL#	Recording Dist	Posting Date	Recording Date	Meridian	Township	Range	Sect	1/4 Sect
ICP01	728188	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	25	SW
ICP02	728189	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	36	NW
ICP03	728190	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	26	SE
ICP04	728191	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	35	NE
ICP05	728192	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	35	SE
ICP06	728193	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	26	SW
ICP07	728194	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	35	NW
ICP08	728195	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	35	SW
ICP09	728196	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	34	NE
ICP10	728197	Mt McKinley	6/29/2018	7/30/2018	Kateel River	16S	5E	34	SE
ICP11	728198	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	2	NE
ICP12	728199	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	2	SE
ICP13	728200	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	2	NW
ICP14	728201	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	2	SW
ICP15	728202	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	11	NW
ICP16	728203	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	11	SW
ICP17	728204	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	3	NE
ICP18	728205	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	3	SE
ICP19	728206	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	10	NE
ICP20	728207	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	10	SE
ICP21	728208	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	15	NE
ICP22	728209	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	15	SE
ICP23	728210	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	3	NW
ICP24	728211	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	3	SW
ICP25	728212	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	10	NW
ICP26	728213	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	10	SW
ICP27	728214	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	15	NW
ICP28	728215	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	15	SW
ICP29	728216	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	4	SE
ICP30	728217	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	9	NE
ICP31	728218	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	9	SE
ICP32	728219	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	16	NE
ICP33	728220	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	4	SW
ICP34	728221	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	9	NW
ICP35	728222	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	9	SW
ICP36	728223	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	16	NW
ICP37	728224	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	5	SE
ICP38	728225	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	8	NE
ICP39	728226	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	8	SE
ICP40	728227	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	17	NE
ICP41	728228	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	5	SW
ICP42	728229	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	8	NW
ICP43	728230	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	8	SW
ICP44	728231	Mt McKinley	6/29/2018	7/30/2018	Kateel River	17S	5E	17	NW
ICP45	728232	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	5E	7	NE
ICP46	728233	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	5E	7	SE

ICP47	728234	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	5E	18	NE
ICP48	728235	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	5E	7	NW
ICP49	728236	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	5E	7	SW
ICP50	728237	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	5E	18	NW
ICP51	728238	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	12	NE
ICP52	728239	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	12	SE
ICP53	728240	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	13	NE
ICP54	728241	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	12	NW
ICP55	728242	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	12	SW
ICP56	728243	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	13	NW
ICP57	728244	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	11	NE
ICP58	728245	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	11	SE
ICP59	728246	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	14	NE
ICP60	728247	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	11	NW
ICP61	728248	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	11	SW
ICP62	728249	Mt McKinley	6/30/2018	7/30/2018	Kateel River	17S	4E	14	NW

2018 ANNUAL RECLAMATION STATEMENT

(32)

- Placer Mining
- Suction Dredging
- Hardrock Exploration

APMA # : \_\_\_\_\_

Complete and return this statement by December 31, 2018. If you did not operate, fill in name, check bottom box, sign and return form.

In accordance with AS 27.19 (Reclamation Act):

I, Joe Piekenbrock hereby file an annual reclamation statement for the 2017 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 2018: None cubic yards (includes strippings and processed material).

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

Total acreage disturbed in 2018: \_\_\_\_\_ acres. (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.  No Diversion

Stream diversion:  Temporary  Permanent (check one).

Total area reclaimed in 2018: \_\_\_\_\_ acres.

Total un-reclaimed acres: \_\_\_\_\_ (This should match "total acreage currently disturbed" on the 2019 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:

Empty rectangular box for other reclamation measures.

did not operate in 2018 and therefore did not conduct reclamation.

[Signature]  
Signed

5/24/2018  
Date

Relationship to Claim(s)

- Owner  Lessee  Operator
- Agent For: \_\_\_\_\_

**RECLAMATION PLAN**

(33)

**RECLAMATION PLAN**  
(Disturbance Area 5 Acres Or Greater Or Greater In Size Than 5 Acres)

**LETTER OF INTENT TO DO RECLAMATION**  
(Disturbed Area Less Than 5 Acres)

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.

BLM requires that the 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 <http://www.blm.gov/ak/st/en/prog/minerals.html> for more information on what is needed for a reclamation plan on Federal lands.

Total acreage currently disturbed: 0.0 acres. This should match: "Total Unreclaimed Acres" on your 2018 Annual Reclamation Statement for Small Mines, or line #7 on your 2019 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 2019 0.03 acres. Total acreage (currently disturbed plus new acres): 0.03 acres.

Acreage disturbed by land status: 0.03 State (general) 0 State (Mental Health) 0 Private 0 Federal

Total acreage to be reclaimed in 2019: 0.03 acres; Total volume of material to be disturbed in 2019: N/A 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.
- 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. Exploration trenches shall be flagged and signs posted to notify the public of the existence of the open trenches. All exploration trenches shall be reclaimed by the end of the exploration season in which they are constructed, unless specifically approved by the DMLW.
- Shallow auger holes (limited to depth of overburden) shall 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 shall be removed or cut off at, or below, ground level. All drill holes shall 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 shall be placed immediately above the static water level in the drill hole. 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 during which they are drilled, unless otherwise specifically approved by the DMLW.
- If artesian conditions are encountered, the operator shall contact the DMLW (Kindra Geis (907) 451-2790) and the DEC (Tim Pilon at (907) 451-2136) for hole plugging requirements.
- All buildings and structures constructed, used or improved, on State land, will be removed, dismantled, or otherwise properly disposed of at the completion of the activity. The campsite will be cleaned up and left free of debris. In consideration of potentially significant historic properties/cultural resources, do not remove or disturb any buildings, structures, objects, or artifacts that were located on the site prior to the current operation without preauthorization from SHPO (Contact Mckenzie Johnson of SHPO at (907) 269-8726 or [mckenzie.johnson@alaska.gov](mailto:mckenzie.johnson@alaska.gov) ).

**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.

2. Federal land managers may require reclamation measures different to those identified above.

**BONDING:** In accordance with AS 27.19, bonding is required for all operations having a mined area of ≥ 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 than that amount. A Statewide bonding pool has been established and may be joined by completing the bond pool application form. No reclamation plan approval goes into effect until the bonding pool deposit and annual nonrefundable fee are paid. Federal land managers may have additional bonding requirements. Use bond form to calculate area of disturbance for bonding.

Kit Marrs  
Printed name (Applicant)  
*Western Alaska Copper & Gold*  
*Kit Marrs*  
Signature (Applicant)

Relationship to Mineral Property:

Owner  Lessee  Operator  
 Agent For: \_\_\_\_\_

Date: 5-24-19

APMA #: F/2019/9831