USDA, Forest Service

PLAN OF OPERATIONS FOR MINING ACTIVITIES ON NATIONAL FOREST SYSTEM LANDS

FS-2800-5 (Rev. 3/08) OMB 0596-0022

	<u>USE OF</u> REGULATI	<u>THIS FORM IS OPTIONAL!</u> 1* TIME USERS SHOULD DIRECT ONS (36 CFR 228A) TO THE FOREST SERVICE DISTRICT OF	QUESTIONS REGARDING T FICE NEAREST YOUR AREA	HIS FORM OR OF INTEREST.	
Suk	omitted by:				
Jul	milited by.	Signature	Title	Date (mm/dd/yy)	
		Signature	Title	Date (mm/dd/yy)	
Pla	n Received by:				
		Signature	Title	Date (mm/dd/yy)	
		I. GENERAL INFORMA	ATION	(IIIIII GW) J	
A.	Name of Mine/Proj	ect: Keystone			
В.	Type of Operation:	Exploration			
D.	If continuing a previous operation, this plan (preplaces/pmodifies/psupplements) a previous plan of operations. (check one) Proposed start-up date (mm/dd/yy) of operation: 5/1/2021				
Ε.	Expected total duration of this operation: 4 months				
F.	•	ed date <i>(mm/dd/yy)</i> of annual reclamation/st	abilization close out:	11/15/2021	
G	Expected date (mm/dd/yy) for completion of all required reclamation: 11/15/2021				
		II. PRINCIPALS			
A.		I Phone number of operator: lamera Resources, 1111 Melville Street, Suite	∍ 1100, Vancouver, B	C, Canada 604-307-6450	
B.		d phone number of authorized field represer n to act on behalf of operator.	ntative (if other than t	the operator).	
C.	•	d phone number of owners of the claims (if d 1) Adamera Minerals, 1111 Melville Street, Suit	•	.C. Canad <u>a (604-307-6450)</u>	

D. Name, address and phone number of any other lessees, assigns, agents, etc., and briefly describe their involvement with the operation, if applicable:

	III. PROP	ERTY OR AREA		
	(Name of claim, if applicable, and the legal la	and description where the op	eration will be located.)	
MC#	Name	Section	Township	Range
ORMC177907	BM261	25	40N	30E
ORMC177921	BM275	26	40N	30E
ORMC177930	BM284	26	40N	30E
ORMC177935	BM289	26	40N	30E
ORMC177939	BM293	35	40N	30E

IV. DESCRIPTION OF THE OPERATION

35

26

40N

40N

30E

30E

BM294

BMS2

ORMC177940

ORMC174737

A. Access. Show on a map (USGS quadrangle map or a National Forest map, for example) the claim boundaries, if applicable, and all access needs such as roads and trails, on and off the claim. Specify which Forest Service roads will be used, where maintenance or reconstruction is proposed, and where new construction is necessary. For new construction, include construction specifications such as widths, grades, etc., location and size of culverts, describe maintenance plans, and the type and size of vehicles and equipment that will use the access routes.

We intend to use only existing public Forest Service (FS) roads to access the work area. Equipment and supplies will be moved up the Pontiac Ridge road and FS Road 3575/140 and FS Road 3575/141. The junction of #141 and #140 will be used for offloading equipment and supplies. All roads to be used for drilling include FS 3575/140, FS 3575/141, and FS 3575/144. All road access proposed for this project uses only existing public roads. No new road construction will be necessary (Please see accompanying map). The ridgetop flat adjacent to FS road 3575/141 (at approximately NAD83 354050E/5421600N) will be used for a staging area to store drilling supplies. That staging area will be used for the seasonal duration of the drill project. All materials stored at the staging area will be removed at the end of the drill season. The staging area will be fenced to keep out livestock.

The offloading area mentioned above at the intersection of roads 3575/140 and 3575/141 will be necessary for removing the core drill and accessories from a transport truck. The reason for this is that the road truck may not be able to safely navigate the narrow forest service roads to get to the staging area and turn around successfully. Materials stored at the offloading area and staging area will include one core drill, 2 Bean 35 size pumps, one light plant, one generator maximum of 10kw, a maximum of 110 gallons of diesel and 110 gallons on gasoline, drillrods, casing, polydrill in 5 gallon buckets (maximum of 20), cement (20 sacks 90 pounds each), bentonite (20 sacks 50 pounds each), shredded paper for lost circulation material (10 sacks 50 pound each), 10 5-gallon buckets of rod grease, and accessory drill tools such 1-2 core barrels, overshot assembly for core retrieval, one welder, 3 water tanks (maximum 1000 gallons each), 2 ATV's, 2 mud mixers, and tools for general equipment repair. The offloading area will be used for a maximum of 5 days during mobilization and a maximum of 5 days during de-mobilization. Any gasoline or diesel stored at the offloading or staging area will be kept in impermeable containers within a second impermeable container capable of holding at least 1.5X the amount of gasoline and diesel present in the event of inadvertent leaks.

Several deadfall trees will be removed from the road corridor to permit safe access. This will be done with either a chain saw for the larger diameter deadfall or with a tow chain for the smaller deadfall. That deadfall will be pulled to the side of the road so that vehicular access can be safely accomplished. We do not need to drive off existing roads to go around fallen trees or washouts. Brush and trees less than 6 inches in diameter will be removed from the abandoned roads. All vehicles and the core drill will be washed prior to mobilization to preclude the spread of noxious weeds.

B.	Map, Sketch or I Show the size and waste dumps, drill involved, etc. See accompanyin	kind of all surface of pads, timber dispo	ocation and layout of listurbances such as sal or clearance, e	the area of operation s trenches, pits, settli tc. Include sizes, c	n. Identify any streams, on ng ponds, stream chann apacities, acreage, amo	creeks or springs if known. els and run-off diversions, punts, locations, materials
	occ docompanyin	g map.				

C. Project Description. Describe all aspects of the operation including mining, milling, and exploration methods, materials, equipment, workforce, construction and operation schedule, power requirements, how clearing will be accomplished, topsoil stockpile, waste rock placement, tailings disposal, proposed number of drillholes and depth, depth of proposed suction dredging, and how gravels will be replaced, etc. Calculate production rates of ore. Include justification and calculations for settling pond capacities, and the size of runoff diversion channels.

This is an exploratory drilling project. Drilling is necessary to test laterally extensive mineralization found in the area. We have selected a maximum of 7 drill sites for this proposed program (see accompanying map). This initial drilling will be done with a LF-70 or LF-90 size core drill. There will be only one drill at each site. That one drill will complete up to two holes at each site. The core drill will be no wider than 12 feet and no longer than 70 feet. The drill will be at each site for 1-4 weeks.

No site leveling will be necessary because all sites will be on the shoulder of existing roads that lie behind a locked gate. This will preclude any unnecessary disturbance. The roads will not be blocked by equipment, sumps, drills, or vehicles so that any authorized traffic can pass by the sites safely. Drill cuttings will be contained in sumps and will be buried at the end of the project within those sumps. The cuttings will remain in the sumps in perpetuity. No more than 14 drill holes will be completed at 7 sites. Each site will require a cuttings sump that will be no larger than 15 ft X 10 ft X 4 ft deep. That size of sump will be sufficient to accommodate cuttings from 2 drill holes. The sumps will be fenced with bright orange plastic fencing 4-5 feet in height supported by iron fence stakes. Silt fences will be installed on the downhill side of the sumps to preclude erosion or fugitive dust escape. The sumps will be completed using a backhoe or small excavator. Topsoil will be segregated from subsoil during sump excavation, and both of them will be returned to their respective original positions upon reclamation. Drill holes will average 700 feet in depth, with a maximum of 1200 feet in depth and 3.5 inches in diameter. At most, a maximum total footage of 8000 linear feet will be completed. Projected hole depth is determined by simple geologic cross-sections prior to drilling. Final hole depth is determined by rock type and mineralization seen in the continuous core samples. The type of geophysics we are using does not provide a reliable depth to target, and that is why some holes might be as much as 1200 feet in depth. All holes will be abandoned according to Washington state regulations (subsequent paragraph) as part of the reclamation. Each hole will be properly abandoned before the drill moves to the next site. Immediate drill hole abandonment should mitigate excessive reclamation bond costs. The drill hole abandonment procedure will be as follows:

The holes will be filled from total depth to within 20 feet of the surface with a fluid mixture of water and a cement-based or bentonite-based material OR a dry bentonite-based material texturally consisting of either chips or pellets specifically designed for sealing drill holes. A cement cap will then be installed from 20 feet to surface. No posts or rods will be permitted to protrude above ground level to provide safe passage of humans and animals.

D. Equipment and Vehicles. Describe that which is proposed for use in your operation (Examples: drill, dozer, wash plant, mill, etc.). Include: sizes, capacity, frequency of use, etc.

- (2) One ton pickup (Daily use)
- (2) 3/4 ton pickups (Daily use)
- (2) 1/2 ton pickup or SUV (Daily use)
- (2) 4-wheel ATV (Daily use)
- (3) Bean 35 or equivalent pump (Daily use)
- (1) Backhoe or small excavator. (Use as needed not daily))
- (1) Small dozer D-4 to D-6 size (Use as needed not daily)
- (1) LF-70 or LF-90 size drill and ancillary drill tools. The drill will be truck-mounted, tracked self-propelled, or skid-mounted (Daily Use). It will be no longer than 70 feet and no wider than 12 feet.
- (1) Skidder with forks or All-Terrain Forklift (Use as needed not daily))
- (1) Boom Truck (Use as needed not daily))
- (1) Mud mixer (Daily use)
- (1) 2000-5000 gallon water truck (Daily use)
- (1) Drill support truck for rod/casing and tools/welder transport (Use as needed not daily)
- (1) Chain saw (use as needed not daily))
- (1) Light Plant 5-10 KW (Daily use)
- (2) Generators, each 2-10KW (Use as needed not daily)
- (1) Welder (Use as needed not daily)
- (1) Cutting Torch (Use as neded not daily)
- (1) Grinder (Use as needed not daily)
- (3) 1000 gallon water tanks (Daily use)
- (2) Low Boy or flatbed transport trucks to deliver equipment (Mobe-demobe only not daily)
- (2) Propane Heaters for crew comfort (Use as needed not daily)
- E. Structures. Include information about fixed or portable structures or facilities planned for the operation. Show locations on the map. Include such things as living quarters, storage sheds, mill buildings, thickener tanks, fuel storage, powder magazines, pipelines, water diversions, trailers, sanitation facilities including sewage disposal, etc. Include engineering design and geotechnical information for project facilities, justification and calculations for sizing of tanks, pipelines and water diversions, etc.

 No structures will be necessary

V. ENVIRONMENTAL PROTECTION MEASURES (SEE 36 CFR 228.8)

A. Air Quality. Describe measures proposed to minimize impacts on air quality such as obtaining a burning permit for slash disposal or dust abatement on roads.

No dust abatement work is anticipated. Trips for drill access will be kept to a bare minimum. However, should dust abatement become necessary, a water truck will be used to water the road as needed.

- **B. Water Quality.** State how applicable state and federal water quality standards will be met. Describe measures or management practices to be used to minimize water quality impacts and meet applicable standards.
 - 1. State whether water is to be used in the operation, and describe the quantity, source, methods and design of diversions, storage, use, disposal, and treatment facilities. Include assumptions for sizing water conveyance or storage facilities.
 - 2. Describe methods to control erosion and surface water runoff from all disturbed areas, including waste and tailings dumps.
 - 3. Describe proposed surface water and groundwater quality monitoring, if required, to demonstrate compliance with federal or state water quality standards.
 - 4. Describe the measures to be used to minimize potential water quality impacts during seasonal closures, or for a temporary cessation of operations.
 - 5. If land application is proposed for waste water disposal, the location and operation of the land application system must be described. Also describe how vegetation, soil, and surface and groundwater quality will be protected if land application is used.
 - 1) A maximum of 5000 gallons of water per 12 hour shift will be necessary for drilling to lubricate the drill rods and bring cuttings to the surface. The water will be transported to the sites in a water truck.
 - 2) All drill return water and cuttings will be stored in a sump at each site. The sumps will be buried when reclamation is done. Water will not be allowed to flow away from the sites/sumps on the surface. Silt fences will be installed on the downhill side of the sumps. This will preclude any erosion or fugitive dust escape.
 - 3) There will be no surface or groundwater monitoring
 - 4) Water use will be discontinued when the drilling operation has been suspended or completed.
 - 5) N/A
- C. Solid Wastes. Describe the quantity and the physical and chemical characteristics of solid waste produced by the operation. Describe how the wastes will be disposed of including location and design of facilities, or treated so as to minimize adverse impacts. The only solid waste produced will be rock flour from the drilling process. We estimate no more than 1400 pounds of rock flour per 700 foot drill hole (2 pounds per foot is a rough estimate for all drill holes). The rock flour will be kept on-site in the cuttings pits.

Refuse from expendable supplies used at the drill site will be removed on a daily basis.

A portable toilet will be stationed at the drill sites to accommodate drill crews and geologists.

D. Scenic Values. Describe protection of scenic values such as screening, slash disposal, or timely reclamation.
Drill holes will be abandoned according to Washington state regulations (see Description of the Operation Part C) before the drill is moved off the site. Sumps for water and cuttings will be filled to original land surface as soon as enough water is gone from the pits to make that practical. All sumps will be reclaimed prior to the annual reclamation deadline. Sites will be re-seeded with a seed mixture approved by the USFS project supervisor. Equipment and vehicles will be washed prior to mobilization onto USFS land to preclude the spread of noxious weeds. Personnell will not be permitted to camp on Forest Service property.

E. Fish and Wildlife. Describe measures to maintain and protect fisheries and wildlife, and their habitat (includes threatened, endangered, and sensitive species) affected by the operations.

Cuttings and drill water will be kept on-site. Petroleum products necessary for work will be kept in impermeable containers that are marked appropriately. No hunting or harassment of wildlife will be allowed by any of the crew members.

F. Cultural Resources. Describe measures for protecting known historic and archeological values, or new sites in the project area. Should cultural resources be discovered, work will cease immediately and the Forest Servicer officer in charge of project supervision will be notified within 24 hours. Work will not be resumed until authorized by the Forest Service officer in charge of project supervision.

G. Hazardous Substances.

1. Identify the type and volume of all hazardous materials and toxic substances which will be used or generated in the operations including cyanide, solvents, petroleum products, mill, process and laboratory reagents.

Gasoline: No more than 250 gallons will be kept on-site Diesel: No more than 250 gallons will be kept on-site Polydrill: No more than 150 gallons will be kept on-site Bentonite: No more than 2,5000 pounds will be kept on-site Cement: No more than 2,500 pounds will be kept on-site

Lost Circulation Material (Shredded paper): No more than 1,500 pounds will be kept on-site

MSDS Sheets for all hazardous substances used and drill additives used will be available on-site.

2. For each material or substance, describe the methods, volume, and frequency of transport (include type of containers and vehicles), procedures for use of materials or substances, methods, volume, and containers for disposal of materials and substances, security (fencing), identification (signing/labeling), or other special operations requirements necessary to conduct the proposed operations.

Gasoline: Transported in approved cans, barrels, or saddle tanks, 50 gallons per day average, daily transport by pickup truck. Fuel transfer sites will be underlain by fuel absorbent diapers. Fuel stored on-site will be kept within a containment vessel.

Diesel: Transported in approved cans, barrels, or saddles tanks, 75 gallons per shift average, semi-daily transport by pickup truck. Fuel transfer sites will be underlain by absorbent diapers. Fuel stored on-site will be kept within a containment vessel.

Polydrill:Polydrill will be mixed with water. No more than 100 gallons will be used daily. The polydrill may be transported to the site as needed, probably about three times a week..

3. Describe the measures to be taken for release of a reportable quantity of a hazardous material or the release of a toxic substance. This includes plans for spill prevention, containment, notification, and cleanup.
Hazardous substances as defined by Forest Service personnel will be kept within impermeable containment vessels to preclude ground contamination. Should a reportable quantity (> 5 gallons) of hazardous material or toxic substance be spilled outside the containment vessels, all operations will cease while the spill is assessed. The Forest Service project supervisor will be notified of the spill within 24 hours of the spill. Containment procedures will be undertaken immediately. Any contaminated soil will be exhumed and segregated, to be removed from the site for disposal at an appropriate hazmat disposal facility identified by the Forest Service project supervisor.

H.	Reclamation. Describe the annual and final reclamation standards based on the anticipated schedule for construction,
	operations, and project closure. Include such items as the removal of structures and facilities including bridges and culverts, a
	revegetation plan, permanent containment of mine tailings, waste, or sludges which pose a threat of a release into the environment,
	closing ponds and eliminating standing water, a final surface shaping plan, and post operations monitoring and maintenance plans.
	Annual Reclamation: Drill holes will be reclaimed as required by state of Washington hole abandonment regulations (see
	Description of the Operation Part C, paragraph 3); Sites will be re-seeded, sumps reclaimed and covered, all waste
	materials removed. Any road berms existing prior to drilling will be replaced to preclude unauthorized access. Any topsoil
	disturbed or removed during site leveling and sump excavation will be segregated from subsoil and replaced in their
	respective original positions during reclamation. Each sump will be initially filled with subsoil, and finally covered with
	topsoil that was segregated during sump construction. Each sump, drill hole, or surface disturbance will be seeded with
	the approved seed mixture.

Final reclamation: One year anniversary: Inspect for noxious weeds, spray where appropriate and allowed as stipulated by the Forest Service representative.

VI. FOREST SERVICE EVALUATION OF PLAN OF OPERATIONS

A.	Required	changes/n	nodification	s/special	mitigation	tor plan	of operat	ions:

В.	Bond. Reclamation of all disturbances connected with this plan of operations is covered by Reclamation
	Performance Bond No, dated (mm/dd/yy), signed by (Principal) and (Surety), for the
	penal sum of This Reclamation Performance Bond is a guarantee of faithful performance with the terms and
	conditions listed below, and with the reclamation requirements agreed upon in the plan of operations. This
	Reclamation Performance Bond also extends to and includes any unauthorized activities conducted in connection with this operation.

The bond amount for this Reclamation Performance Bond was based on a bond calculation worksheet. The bond amount may be adjusted during the term of this proposed plan of operations in response to changes in the operations or to changes in the economy. Both the Reclamation Performance Bond and the bond calculation worksheet are attached to and made part of this plan of operations. Acceptable bond securities (subject to change) include:

- 1. Negotiable Treasury bills and notes which are unconditionally guaranteed as to both principle and interest in an amount equal at their par value to the penal sum of the bond; or
- 2. Certified or cashier's check, bank draft, Post Office money order, cash, assigned certificate of deposit, assigned savings account, blanket bond, or an irrevocable letter of credit equal to the penal sum of the bond.

VII. TERMS AND CONDITIONS

- A. If a bond is required, it must be furnished before approval of the plan of operations.
- B. Information provided with this plan marked confidential will be treated in accordance with the agency's laws, rules, and regulations.
- C. Approval of this plan does not constitute certification of ownership to any person named herein and/or recognition of the validity of any mining claim named herein.
- D. Approval of this plan does not relieve me of my responsibility to comply with other applicable state or federal laws, rules, or regulations.
- E. If previously undiscovered cultural resources (historic or prehistoric objects, artifacts, or sites) are exposed as a result of operations, those operations will not proceed until notification is received from the Authorized Officer that provisions for mitigating unforeseen impacts as required by 36 CFR 228.4(e) and 36 CFR 800 have been complied with.

Burden and Non-Discrimination Statement

(Date) (mm/dd/yy)

Signature of (Authorized Officer)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0022. The time required to complete this information collection is estimated to average 12 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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