



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

February 12, 2009

Leon Eddins
2443 Bruins Cir
Boise, Idaho 83704

RE: Site Visit to McMahon Patented Mining Claims

Dear Mr. Eddins:

The Idaho Department of Environmental Quality (IDEQ) has completed a review of historical mining data and geological information, and completed a site visit to the McMahon patented mining claims. During the site visit on July 17, 2007, former mining sites were evaluated and photographs were collected for documentation in a Preliminary Assessment (PA). However, because active mining operations appear to be taking place on and adjacent to the patented lands, IDEQ will not be completing a comprehensive PA at this time.

PAs are conducted according to the federal Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA). The reasons to complete a PA include:

- 1) To identify those sites which are not eligible for CERCLIS because they do not pose a threat to public health or the environment (No Remedial Action Planned (NRAP));
- 2) To determine if there is a need for removal actions or other programmatic management of sites;
- 3) To determine if a Site Investigation, which is a more detailed site characterization, is needed; and/or
- 4) To gather data to facilitate later evaluation of the release through the Hazard Ranking System (HRS)

IDEQ has completed PAs under contract with the U.S. Environmental Protection Agency in order to identify risks to human health and the environment, and make recommendations to land owners regarding how risks might be managed, if necessary.

No samples were collected during the site visit because no significant mine waste dumps or effluent discharges were observed. There was no evidence of acid mine drainage or impacted surface waters. Subsequent to our analysis IDEQ has determined that No Remedial Action is Planned (NRAP) for this property at this time.

Abbreviated PA Letter

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However, based on the historical information regarding mine development and production, IDEQ recommends that your future development plans incorporate risk management provisions for any residential home sites, and to protect worker health and safety from potential risks associated with heavy metals which may be present. IDEQ recommends that you incorporate Best Management Practices (BMPs) in your present mining operations. In particular, the open adit near Ader Gulch should be managed to prevent people from entering and being exposed to unsafe conditions. Other areas to focus your attention during mining activities include fuel and oil storage, management of waste materials, and avoiding discharges to waters of the U.S.

Photos of the subject area and a map are attached. Several gold prospects existed in this area, however, limited historical information on the former mine sites was found. The nearby Ader Group (aka Adair or St. Clair Group) claim appears to be on U.S. Forest Service lands. Excerpts from A. Anderson's "Geology and Ore Deposits of Boise Basin, Idaho," 1947 USGS report are included.

IDEQ very much appreciates your cooperation and approval for our access, and looks forward to addressing any questions you may have regarding our findings. Please call me if you have any comments, questions, or if I may be of any other assistance. We very much appreciate any feedback you can give us relative to our services.

Sincerely,



Bruce A. Schuld
Mine Waste Projects Coordinator

BS:PJ:te G:\Waste & Remediation\Bruce Schuld\McMahon Adar

attachments

cc: Ken Marcie, Environmental Protection Agency
Jim Curtis, USDA Forest Service, Boise National Forest
Maggie Manderbach, USDA Forest Service, Region IV
Gordon Ravenscroft, Emergency/Dispatch Manager, Boise County
Don Eddins
Richard Eddins
file

ABBREVIATED PRELIMINARY ASSESSMENT CHECKLIST

This checklist can be used to help the site investigator determine if an Abbreviated Preliminary Assessment (APA) is warranted. This checklist should document the rationale for the decision on whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer: Pete Johansen Idaho DEQ 1/15/09
(Name/Title) (Date)
1410 N. Hilton, Boise, ID 83706 (208)373-0230
(Address) (Phone)
www.deq.idaho.gov
(E-Mail Address)

Site Name: McMahon Lode/Ader Gulch

Previous Names (if any): _____

Site Location: 4 miles NE of Pioneerville, ID (Grimes Pass Mining District)
(Street)
T 5, R 5E, Sec 24 , _____ - _____
(City) (ST) (Zip)

Latitude: N 44° 00' 52" **Longitude:** W 115° 48' 41"

Describe the release (or potential release) and its probable nature: This site was investigated for potential releases of heavy metals and sediment from mine waste dumps, and potential discharges of other deleterious materials associated with abandoned mines.

Part 1 - Superfund Eligibility Evaluation

If all answers are "no" go on to Part 2, otherwise proceed to Part 3.

	YES	NO
1. Is the site currently in CERCLIS or an "alias" of another site?		x
2. Is the site being addressed by some other remedial program (Federal, State, or Tribal)?		x
3. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (e.g., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?		x
4. Are the hazardous substances potentially released at the site excluded by policy considerations (i.e., deferred to RCRA corrective action)?		x
5. Is there sufficient documentation to demonstrate that no potential for a release that could cause adverse environmental or human health impacts exists (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance releases have occurred, or an EPA approved risk assessment completed)?		x

Please explain all "yes" answer(s). _____
Historical records research and site visit did not reveal any potential contaminants of concern.

EXHIBIT 1 SITE ASSESSMENT DECISION GUIDELINES FOR A SITE

Exhibit 1 identifies different types of site information and provides some possible recommendations for further site assessment activities based on that information. You will use Exhibit 1 in determining the need for further action at the site, based on the answers to the questions in Part 2. Please use your professional judgement when evaluating a site. Your judgement may be different from the general recommendations for a site given below.

Suspected/Documented Site Conditions		APA	Full PA	PA/SI	SI
1. There are no releases or potential to release.		<u>Yes</u>	No	No	No
2. No uncontained sources with CERCLA-eligible substances are present on site.		<u>Yes</u>	No	No	No
3. There are no on-site, adjacent, or nearby targets.		Yes	<u>No</u>	No	No
4. There is documentation indicating that a target (e.g., drinking water wells, drinking surface water intakes, etc.) has been exposed to a hazardous substance released from the site.	Option 1: APA SI	<u>Yes</u>	No	No	Yes
	Option 2: PA/SI	No	No	Yes	NA
5. There is an apparent release at the site with no documentation of targets, but there are targets on site or immediately adjacent to the site.	Option 1: APA SI	Yes	No	No	Yes
	Option 2: PA/SI	<u>No</u>	No	Yes	NA
6. There is an apparent release and no documented on-site targets and no documented targets immediately adjacent to the site, but there are nearby targets. Nearby targets are those targets that are located within 1 mile of the site and have a relatively high likelihood of exposure to a hazardous substance migration from the site.		<u>No</u>	Yes	No	No
7. There is no indication of a hazardous substance release, and there are uncontained sources containing CERCLA hazardous substances, but there is a potential to release with targets present on site or in proximity to the site.		<u>No</u>	Yes	No	No

Part 3 - EPA Site Assessment Decision

When completing Part 3, use Part 2 and Exhibit 1 to select the appropriate decision. For example, if the answer to question 1 in Part 2 was "no," then an APA may be performed and the "NFRAP" box below should be checked. Additionally, if the answer to question 4 in Part 2 is "yes," then you have two options (as indicated in Exhibit 1): Option 1 --conduct an APA and check the "Lower Priority SI" or "Higher Priority SI" box below; or Option 2 -- proceed with a combined PA/SI assessment.

Check the box that applies based on the conclusions of the APA:

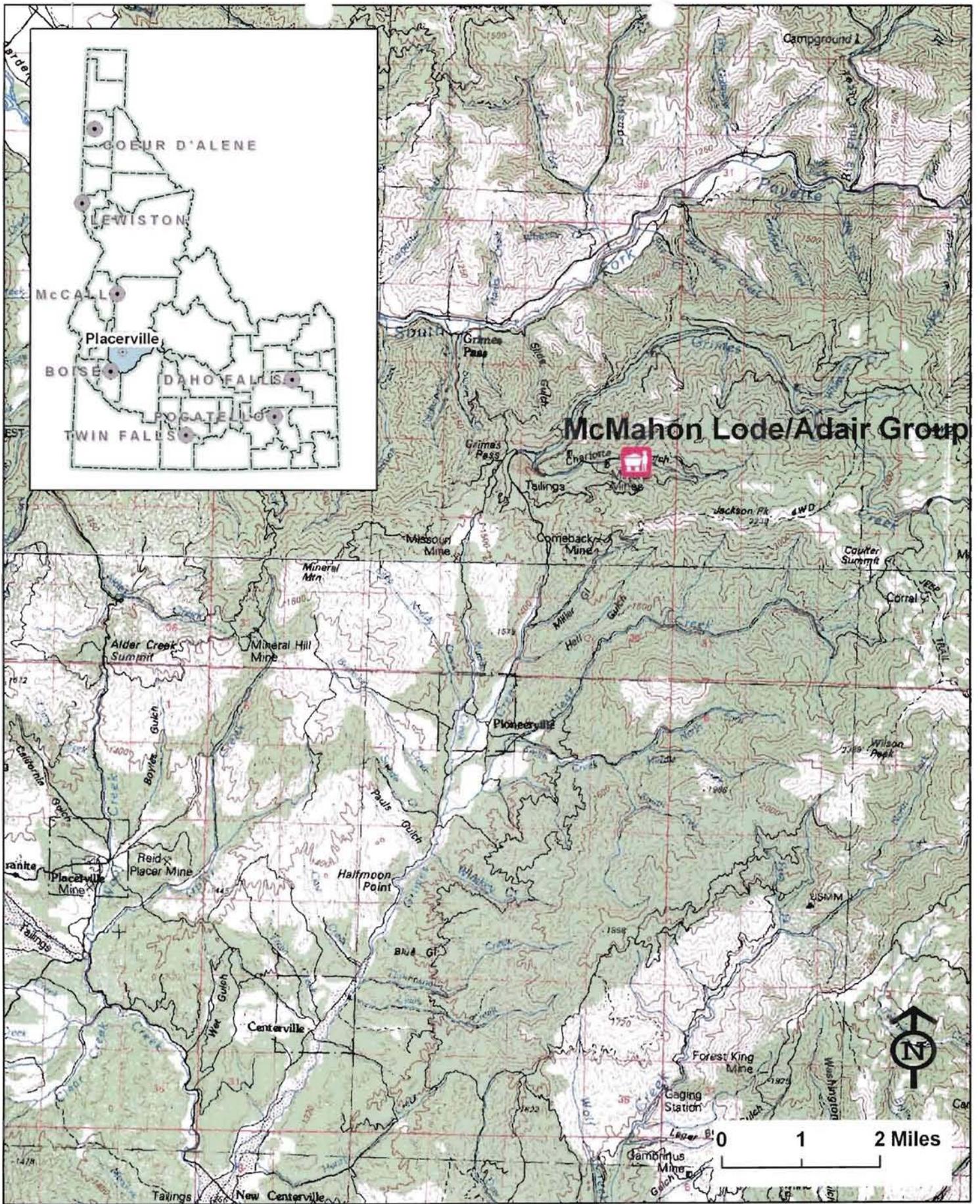
x	NFRAP	Refer to Removal Program - further site assessment needed
	Higher Priority SI	Refer to Removal Program - NFRAP
	Lower Priority SI	Site is being addressed as part of another CERCLIS site
	Defer to RCRA Subtitle C	Other: _____
	Defer to NRC	

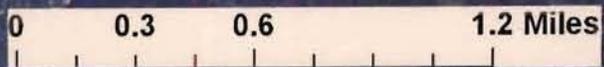
Regional EPA Reviewer: _____
Print Name/Signature
Date

PLEASE EXPLAIN THE RATIONALE FOR YOUR DECISION: _____

Subject area consists of forested hillside with a small stream present in Ader Gulch. One open adit was observed. No waste dumps were observed. No potential releases or threats to human health and the environment were observed. Because of current mining activities, the site does not fall under CERCLA. Best Practice Management (BMP) procedures should be implemented during mining operations.

NOTES:





Legend

-  Prospect
-  Streams

Charlotte Gulch



Independence Lode

RP08N05E248300A

Saturn Lode

Ader Gulch

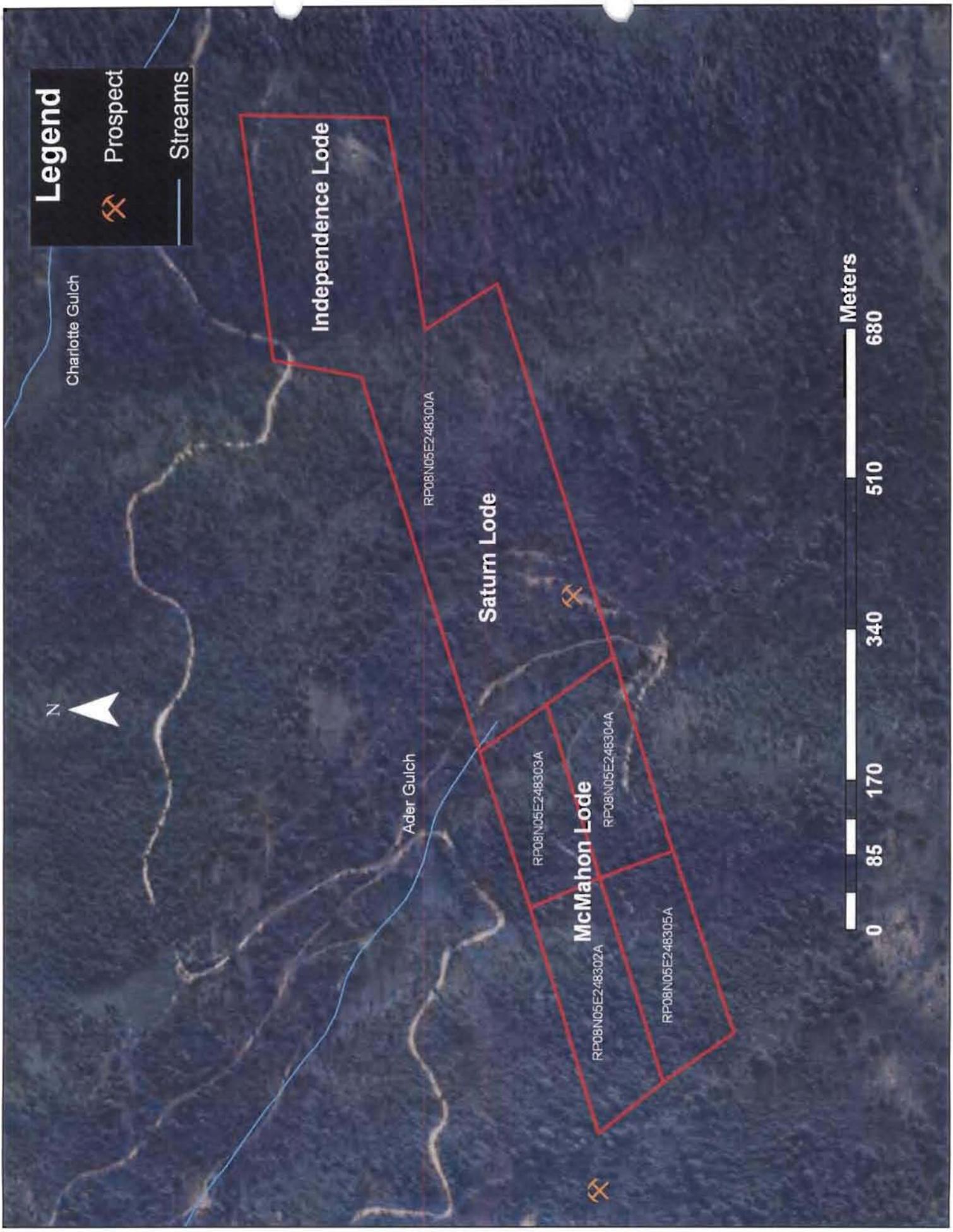
RP08N05E248303A

McMahon Lode

RP08N05E248304A

RP08N05E248302A

RP08N05E248305A





Legend



Field Site

Major Faults

Major Lithology

alluvium

calc-alkaline intrusive

felsic pyroclastic

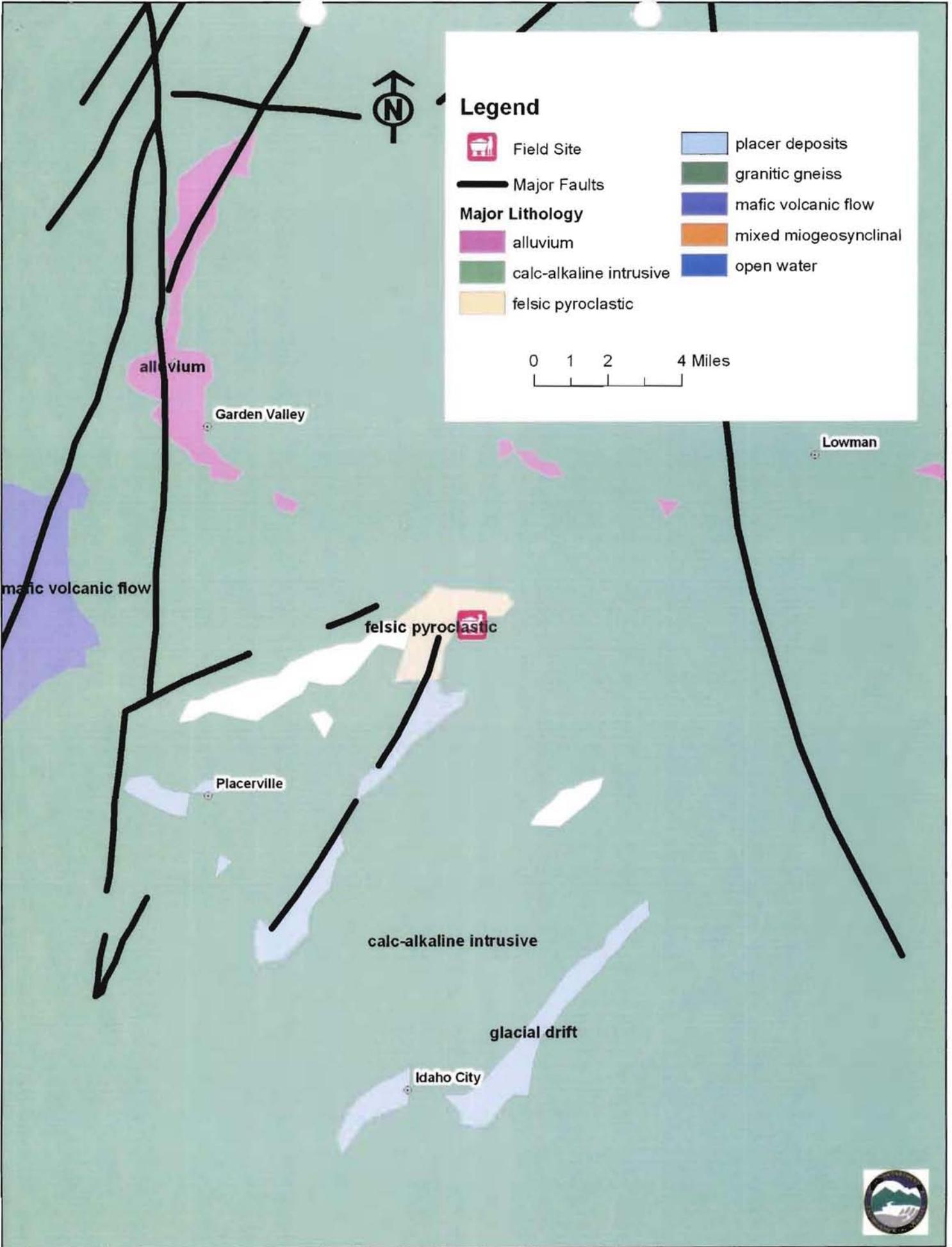
placer deposits

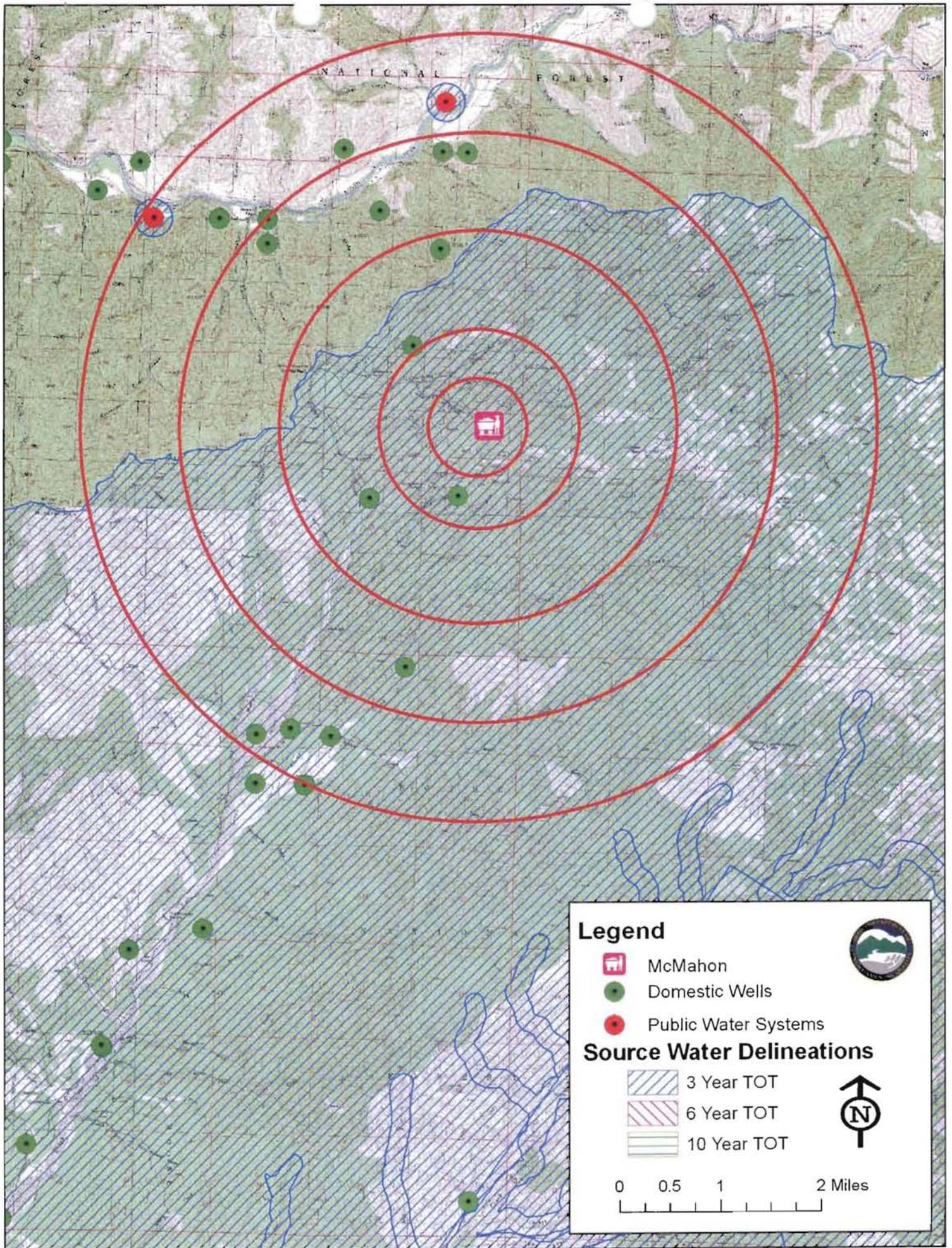
granitic gneiss

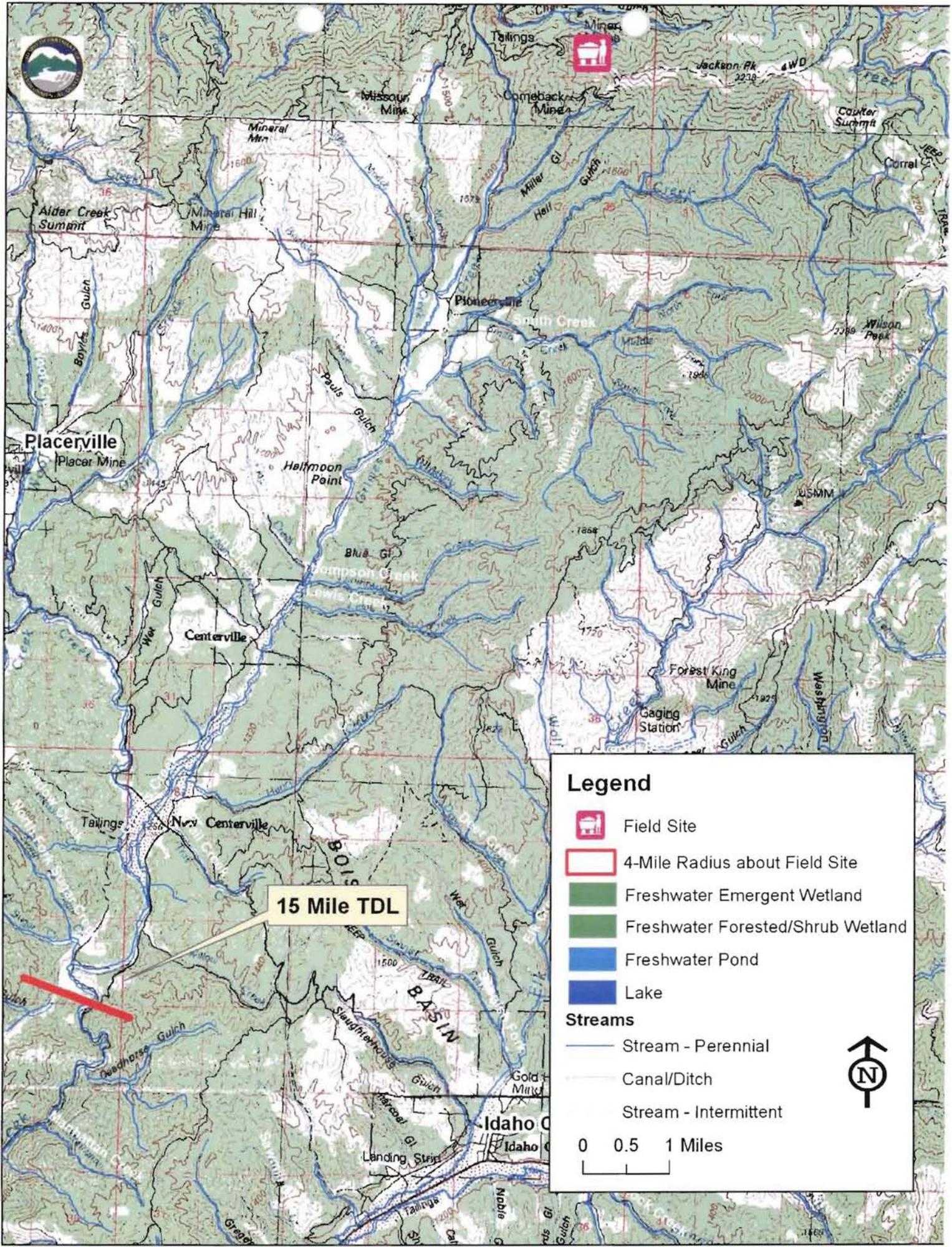
mafic volcanic flow

mixed miogeosynclinal

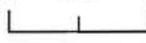
open water







Legend

-  Field Site
-  4-Mile Radius about Field Site
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Freshwater Pond
-  Lake
- Streams**
-  Stream - Perennial
-  Canal/Ditch
-  Stream - Intermittent
- 
- 0 0.5 1 Miles
- 

15 Mile TDL

Idaho C
Idaho C

McMahon Adar properties photos













19, 21
44 C

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UNITED STATES DEPARTMENT OF THE INTERIOR

**GEOLOGY AND ORE DEPOSITS
OF
BOISE BASIN, IDAHO**

Prepared in cooperation with the
IDAHO BUREAU OF MINES AND GEOLOGY

GEOLOGICAL SURVEY BULLETIN 944-C

Anderson, Alfred L. (1947)

wide at the crosscut and contains small pockets and shoots of ore 2 to 10 inches thick. Away from the crosscut the ore disappears, and marks of hydrothermal alteration gradually fade away. The lamprophyric dike has been somewhat bleached and in places contains fragments of ore. Near the crosscut the dike is about 12 feet wide, but along the drift it becomes larger and fills the entire fracture zone.

The ore in the lenses and pockets has about as much quartz as sulfides. The latter consist of nearly equal amounts of pyrite, sphalerite, chalcopyrite, tetrahedrite, and galena. The sulfides are coarse-grained and are in part a replacement of a somewhat earlier coarse-grained quartz and in part a replacement of the altered granitic rock. In most of the ore the sulfides have been more or less thoroughly brecciated and then cemented by moderately coarse-grained to coarse-grained white quartz, which has a notable gold content. In places the quartz-sulfide ore is cut by thin seams of calcite.

SMUGGLER GROUP

The Smuggler group is in Charlot Gulch below the Enterprise, about $1\frac{1}{4}$ miles east of Grimes Pass. No work had been done on the property for a number of years, and none of the workings, which include a tunnel and shaft with 1,400 feet of crosscuts, drifts, and raises, were accessible. Considerable ore has been mined, and some sacked ore still remains on the dump. Records of production were not obtained.

The fissure zone occupied by the Smuggler lode is said to parallel the Enterprise and Mohawk. Two ore shoots are reported, one, encountered at a depth of 65 feet, is 120 feet long and as much as 3 feet wide and the other at a depth of 100 feet is 70 feet long and as much as 2 feet wide.⁴¹ The shoots are apparently composed of massive sulfides, as ore on the dump consists largely of galena, pyrite, and chalcopyrite and lesser amounts of sphalerite and tetrahedrite. The sulfide masses are compact and are enclosed in intensively sericitized granitic rock. Neither early nor late quartz appeared in the ore examined.

ADER PROPERTY

The Ader property, comprising the St. Clair group of claims, is in sec. 25, T. 8 N., R. 5 E., in Ader Gulch, a tributary of Charlot Gulch, about $1\frac{1}{4}$ miles east of Grimes Pass. The group has been prospected for a long time, and a number of mineralized fissures and fracture zones have been exposed in short tunnels directed into the slopes on each side of the gulch. Three very crooked tunnels penetrate the slope on the northeast side of the gulch at points 60 to 80 feet apart, spaced vertically at levels of 10 to 20 feet, and four others are driven into the base of the slope across the creek. These workings total in the aggregate about 1,000 feet of crosscuts and drifts.

⁴¹ Ballard, S. M., op. cit., p. 86.

The property lies near the center of the large quartz monzonite porphyry stock and along the course of a swarm of rhyolite porphyry dikes, most of which trend about N. 10° E. but a few N. 70° E. The property is in a part of the "porphyry belt" where the post-dike fracturing and fissuring has been particularly intense. The porphyries have been complexly sheared over a broad zone of undetermined size and trend, and the fractures and fissures are comparatively closely spaced. The most prominent ones strike about N. 10°-20° E., and N. 70° E. and the more subordinate ones N. 30°-40° E. and N. 10°-20° W. All fractures dip westward, the prominent ones at angles as low as 10° and the subordinate ones at angles between 35° and 60°. The individual fracture and fissure zones range from a few inches to 4 feet in width. Those striking N. 10° E. are the widest, contain the most ore, and have the thickest bands of gouge. The set trending N. 10° E. about parallels the rhyolite porphyry contacts and crosses the set trending N. 70° E., which also contains appreciable amounts of ore. Along the more prominent fissure zones the ore tends to occur as scattered sulfide seams and stringers, locally as lenses from a few inches to as much as 18 inches thick and 20 to 30 feet long. In some places the ore is also disseminated for short distances in the wall. The wall rock is everywhere altered. In places it is intensively sericitized and locally more or less thoroughly silicified and impregnated with pyrite.

Most of the ore is the base-metal kind, but it also has appreciable, and in places, apparently considerable amounts of gold. The base-metal minerals include galena, sphalerite, pyrite, tetrahedrite, and chalcopyrite. The galena is everywhere most abundant, but locally the tetrahedrite is also notably conspicuous. In places the sulfides have been brecciated and cemented by late-stage quartz and by pinkish carbonate. In some of the fissures the young quartz is the most abundant mineral, and the gold content is relatively high. In places the younger quartz occurs in separate seams and stringers, in part accompanied by small cubes of pyrite. Some random samples of galena and other sulfides were assayed to determine associated gold content and showed 0.92 ounce in gold per ton and 17.8 ounces in silver. Free gold has been observed with the young quartz, and also on fracture surfaces of the jointed country rock.

The abundance of the fissure zones and the complexity of the fracturing and fissuring are difficult to describe without detailed structural maps of the underground workings. The tunnel farthest up the gulch on the northeast side of the creek is driven along a conspicuous fissure zone about 2 feet wide, striking N. 20° E., which contains bands and stringers of sulfides, mainly galena, the individual bands being as much as 6 inches thick. The tunnel passes diagonally across the fracture zone and in the next 140 feet crosses three minor fissure

zones, one striking N. 35° E. and the other two striking N. 10° E. The first contains little ore; the second has 12 inches of crushed rock and gouge fringed by sulfide stringers for several feet on each side, and the third has sulfides scattered through a zone 6 to 12 inches wide. One hundred and forty feet from the portal the tunnel crosses another prominent lode striking N. 10° E., which lies in the footwall of a rhyolite porphyry dike. This lode is exposed by drifts on both sides of the crosscut, and locally as much as 18 inches of sulfides, mainly galena, is exposed. Elsewhere the lode is but 8 to 12 inches wide, and the ore is in smaller seams and stringers. The south drift passes into the footwall of the lode and exposes other fractures and fissures, some of which strike N. 10° E. Each of the fissures shows variation in dip, and some of them are notably flat.

The second tunnel lies about 80 feet from the first and about 20 feet lower. It explores the lode on which the first tunnel was started and is driven along the lode for 90 feet. For most of the distance the lode is 3 to 4 feet wide and contains sporadically scattered ore seams. The lode lies along the contact of a rhyolite porphyry dike of the same trend, but most of the fracturing has occurred in the bordering quartz monzonite porphyry. The third adit is about 60 feet from and 10 feet below the second. It curves and passes a few feet under the other workings and, therefore, prospects the same ground. It, however, reveals some additional mineralized fractures, most of which strike N. 70° E. In all, 10 prominent lodes are exposed on this 340-foot tunnel. Most of the lodes are 2 to 3 feet wide and contain thin sulfide seams and stringers.

Of the four tunnels across the creek, only one was open when the property was visited. It extended into the slope for 100 feet. A quartz-sulfide vein about 6 inches thick, contained in a much broader fracture zone, was exposed in the face. This fracture zone belonged to the set trending N. 10° E. In one of the other tunnels on the same side of the creek Ballard¹² reports a fractured zone about 45 feet wide, which had 12 parallel quartz veins 4 to 25 inches thick spaced 3 to 5 feet apart. He states that free gold was visible in fractures in the quartz.

J. S. MINE

The J. S. mine is in sec. 22, T. 18 N., R. 5 E., at the head of Muddy Creek, about half a mile southwest of Grimes Pass. The workings are shallow and comprise several short tunnels, shafts, and open cuts. In 1934 the work was confined to an 85-foot shaft from the bottom of which short crosscuts and drifts had been driven. Mining has been confined largely to the oxidized ore, which has been treated by stamp amalgamation.

¹² Ballard, S. M., *op. cit.*, pp. 87-88.