

104M/08
Prop. Exam

820205

MINNOVA

MEMORANDUM

DATE: December 10, 1992
A TO: I. D. Pirie
COPIES A TO: G. S. Wells, NTS
DE FROM: J. D. Kapusta
SUBJECT: Property Submittal - Lumsden Claims - Atlin, B.C. - High Grade Bonanza Type Epithermal Veins.

The Lumsden claims are of limited size (less than 17 units) and lack well developed, immediate drill targets. There is no database of previous work compiled for the property and it appears that there has not been a comprehensive exploration program conducted on the claims to date. The only real merit of this property is its proximity to the old Engineer Mine, that produced 19,600 oz of gold. I would have to say the Lumsden claims have the potential to be just as good as the adjacent Engineer Mine. But this type of target does not meet Minnova's present acquisition criteria.

Vendor: Keith Lumsden
P.O. Box 5599, Whitehorse, Yukon, Y1A 5H4

Location:

The Lumsden property is located in the Atlin Mining Division of British Columbia on NTS sheet 104M/8E. The property is situated on the east shore of Taku Arm, on the southern part of Tagish Lake, approximately 30 km southwest of Atlin and 100 km south of Carcross (Yukon) or 145 km from Whitehorse (Yukon). Access is by float plane or helicopter based in Whitehorse or via a 10 ton barge (owned by Keith Lumsden, along Tagish Lake) from Carcross. In good weather the barge trip is estimated to take six hours.

Claim Status: 17 Reverted Crown Grants, all owned by Keith Lumsden

<u>Claim Name</u>	<u>Units</u>	<u>Lot#</u>	<u>Record#</u>	<u>Work Due</u>
Jersey Lily	1	21	19383	Feb 14, 1993
Nest Egg	1	3292	19386	Feb 14, 1993
Betsay	1	1262	19387	Feb 14, 1993
Bonanza	1	915	19388	Feb 14, 1993
Rubberneck	1	916	19389	Feb 14, 1993
Mickey	1	967	19397	Feb 14, 1993
Lakeview	1	241	19398	Feb 14, 1993
Taku Chief	1	240	19399	Feb 14, 1993
Myosotis	1	239	19400	Feb 14, 1993
Northern				
Partnership #5	1	972	19401	Feb 14, 1993
Hill Fraction	1	1264	298	Mar 29, 1993
Smith Fraction	1	4568	298?	Mar 29, 1993
Golden Hope	1	1263	299	Mar 29, 1993
Daisy	1	970	300	Mar 29, 1993
Speculation	1	969	301	Mar 29, 1993
Sweepstake #1	1	3283	302	Apr 4, 1993
Plato	1	968	2791	?

Geology:

The Tagish Lake area was mapped by the GSC in 1957 by R.L. Christie. Taku Arm is located along the eastern contact of the Coast Range Complex, that is made up of a series of large

intrusions of granodiorite and quartz-diorite ranging in age from Mid-Cretaceous to Tertiary. Within the intrusive complex, and flanking it to the east are metamorphosed rocks believed to be pre-Permian in age. These are quartzites, schists, gneisses and limestone. East of the pre-Permian metamorphic complex are found Early Jurassic sediments of the Laberge Group. These sediments include greywackes, siltstones, argillites, slate, conglomerate and minor limestones. Intruding these sediments are stocks and dykes of Cretaceous or Eocene age and areas of andesitic to rhyolitic volcanics of Tertiary age. Engineer Mountain, immediately east of the property is underlain by rhyolites and a stock of leucocratic granite. Late Cretaceous diorites outcrop to the southwest of the claims.

TARGET:

The immediate target on the Lumsden property would be high grade, Bonanza-type, Epithermal veins, as found on the adjoining Engineer Mine. The Engineer Mine has produced 19,600 oz Au and 8000 oz Ag from approximately 18,400 tons of ore, mined sporadically between 1890 and 1952.

ENGINEER MINE:

Approximately 20,000 feet of workings on four levels (level 5-8) are present on the Engineer property. Levels 6, 7 and 8 are presently flooded.

The Engineer Mine is underlain by fine grained greywacke, shale and slates of the Laberge Group that strike north 63° east and dip 35° to the northeast. The sediments are cut by a number of andesite porphyry and granite porphyry dykes.

Two pipe-like stockworks (A & B) (referred to as Hubs) of quartz that contain brecciated and altered sediments occur on the property. Quartz veining and shear zones appear to originate from these hubs. These hubs most likely represent the intersections of two or more veins or veins with shears that acted as channels for

silica introduction.

Two well defined shear zones occur on the property, these have been labelled A and B. Each of these shear zones appear to originate from a hub; shear zone A from Hub A and shear zone B from Hub B.

Shear zone A is approximately 4000 feet long and varies in width from 20 to 40 feet, and strikes 150° . Shear zone B is noted as being similar in appearance and origin to A.

Both shear zones have been explored by underground workings and appear as zones of crushed and brecciated slates with local intense silicification. Both are believed to be tectonic in origin and are conformable to bedding. Veinlets and fine disseminations of pyrite occur in the shears. The highest grade grab sample from one of the shears ran 0.035 oz Au. A series of samples over 25 feet averaged 0.014 oz Au.

The shears appears to be post mineralization.

A series of approximately 25 separate veins, from which the majority of production occurred are found on the property. Most work is reported to have been carried out on the Engineer, Double Decker, No. 2, Boulder, Andy and Blue veins. The ore is described as exceptionally rich shoots with free gold. The veins vary from narrow fracture fillings to compound veins up to 30 feet wide. The best mineralization is found in veins that are vuggy with banded drusy quartz that contains minor calcite and roscoelite (vanadium rich mica), sulphide content is low. Native gold may be accompanied by one or more of the following: telluride, pyrite, limonite, hematite and native antimony (Allemontite, an antimony arsenic mixture). The gold occurs as fine grains or leaves up to .5 inch thick and is erratically distributed.

The strike of the veins varies from 340° to 40° (at angles of 20 to 40 degrees to the shears) with dips ranging from steep to the northeast to steep to the southeast. Most veins dips to the southeast. From the plan maps provided it appears that the veins are cut off by the shear zones and do not extend onto the Lumsden claims. This however, does not rule out the discovery of new, mineralized veins.

LUMSDEN PROPERTY:

A system of five northerly striking (N20W) veins occur on the Myosotis, Taku Chief and Lakeview claims. These veins have been explored by a number of open cuts and the Gleaner Tunnel. The veins have been found to vary in thickness from 1 to 10 feet. The Gleaner tunnel has dimensions of 7 by 10 feet and is 750 feet long. The tunnel cuts through nine quartz veins ranging in thickness from 5 to 61 cm and two narrow shear zones 25 to 150 cm thick. There is no mention of any assay results; from any of these veins. Drill holes 80-2 and 80-3 were drilled to test these vein structures, results are not presently available but are reported as "not encouraging".

Another 18 metre long adit is located on the north bank of Butler Creek. This adit follows a 15 cm wide zone of stringers and veinlets. No assay data is available from this adit, but visible gold was reported in all ore removed from here.

An adit of unknown dimensions is known to exist near the south end of the Myosotis claim, this is pre-1935 in origin.

On the Mickey claim the Mickey vein is exposed for 400 meters to the northeast from the B Hub and varies in width from 7 to 14 meters. A 58 m deep shaft was sunk on the B Hub and 70 m of drifting was done on the Mickey vein. Three trenches across the vein in 1980 yielded values up to 0.166 oz/ton. Stripping of the vein in 1981 exposed sections containing mixed breccia and argillite, and an andesite feldspar porphyry dyke along the footwall contact. Forty-seven, two metre chip samples were collected, these returned values ranging from .001 to 1.35 oz/ton Au. Drill hole 80-1 was drilled into the Mickey Vein and returned 16 feet grading 0.042 oz/ton Au and 0.51 oz/ton Ag. The entire drilled width of the vein was 38 ft. that assayed 0.029 oz/ton Au.

The Jersey Lily vein is exposed on the Jersey Lily claim, south of the Engineer Mine. The vein itself is composed of multiple quartz veins and one breccia vein two to three metres thick. Trenching in 1981 exposed the vein over 61 cm. Here it is described as being a vuggy argillite breccia, striking 12° and

dipping 67° to 68° west. No assay information has been supplied.

Shear Zone A appears to continue off the Engineer property onto the Lumsden holdings on Lot 972, 262 and 3292. No work appears to have been done on this structure. Shear Zone B also appears to be unexplored on the Lumsden property.

The B Hub occurs on the boundary between the Mickey claim on the Lumsden holdings and the Northern Partnership No. 4 claim of the Engineer Mine holdings. It is described as a quartz stockwork measuring 120 by 80 feet in surface dimensions. Approximately 332 meters of underground workings have the Hub in various directions. No assays have been supplied for any work carried out on the Hub.

Exploration:

Windarra Minerals appear to have been the last (and only) company to have completed an exploration program on the property in 1980 and 1981. In 1980 a 2.70 km long base line was established on which 25 km of 100 meter spaced grid lines were established. A total of 801 soil samples were collected at 30 m intervals from the grid and analyzed for lead, zinc and silver. In 1981 the base line was extended 900 meters and cross lines were established every 40 meters. The new lines were soil sampled on 20 meter intervals, and samples analyzed for lead, zinc and silver. A total of 396 samples for gold and silver. Three diamond drill holes were also completed.

The Lumsden claims should be considered a raw, grassroots type prospect from Minnova's point of view.