GEOLOGY

of

NANSEN CREEK AREA CLAIMS

SILVER STANDARD MINES LTD.

CARMACKS, YUKON

by

Douglas D. Campbell

September 1958.

INDEX

LIST OF ILLUSTRATIONS

FRONTISPIECE

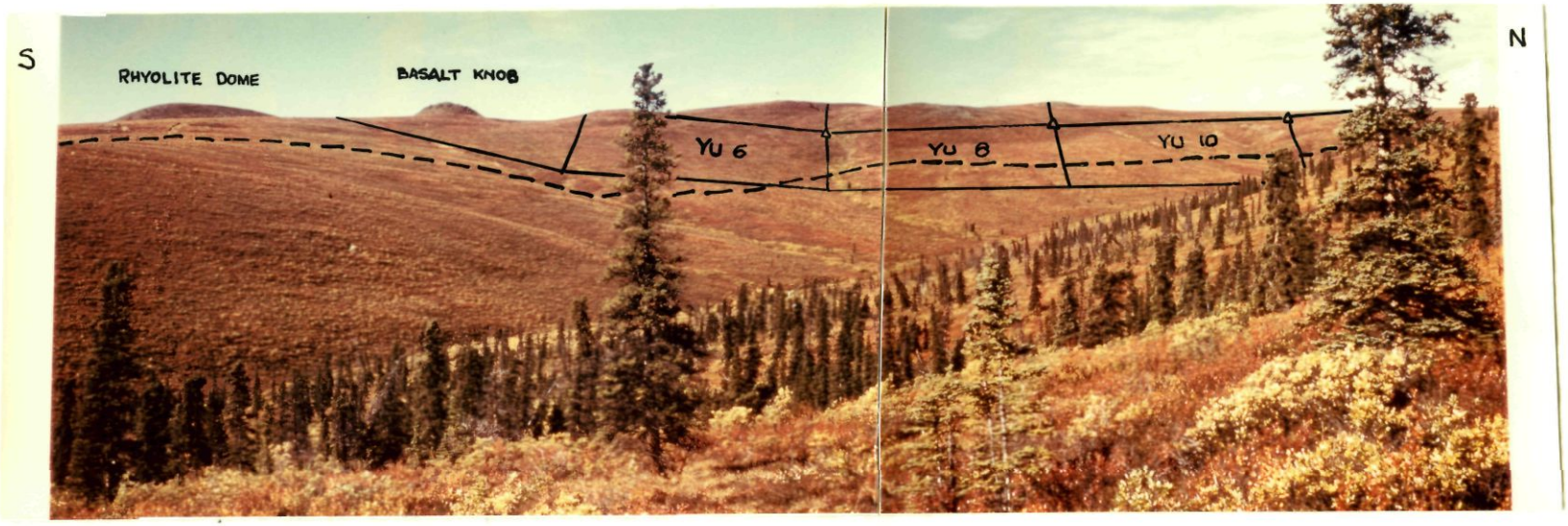

Photo - D. D. Campbell

VIEW FROM EAST OF SILVER STANDARD RIDGE

Probable position of Brown-McDade vein zone extension is shown as dashed line. Bulldozer cut in zone is visible in upper left-hand corner of photo. Approximate location of Silver Standard claims is shown in full lines.

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INTRODUCTION

Thirty-two mineral claims were staked in the Yukon in the spring of this year by officers of Silver Standard Mines Ltd. Many of the claims are undersize so that the total area covered is about the size of twenty regulation-size claims. The claims are located along the crest of the south spur of Victoria Mountain at elevations ranging from 4000 to 5000 feet. The spur is flanked on the west by Nansen Creek and on the east by Victoria Creek and lies 28 miles due west of the village of Carmacks.

With one assistant geologist, Mr. D. C. Miller, the writer mapped the topography and geology of the claims during the first ten days of September, and in addition mapped in reconnaissance a few of the adjoining crown grant claims of Brown-McDade Mines Ltd., as well as the underground workings of the Brown-McDade mine. The purposes of the mapping program were to provide credit for assessment and to evaluate the holdings.

The Silver Standard group of claims join the Brown-McDade property to the south and southeast and are flanked on the east and west by claims presently optioned to Asbestos Corporation Ltd. The north boundary is open. In mid-September an Asbestos Corporation party was putting in bulldozer cuts on their claims immediately northeast of the Brown-McDade Mine.

SUMMARY

The regional geology of the Nansen Creek area, west of Carmacks, Y.T., is briefly outlined in this report. The general geology of the 32 claims owned by Silver Standard mines is then described in some detail. In brief, the elongate strip of claims is underlain at the south end by granite and rhyolite, at the north end by granitic rocks and in the centre by a band of basalts and diorite.

Surface indications, in cuts and float, strongly suggest that the Brown-McDade vein zone extends across the length of the Silver Standard group of claims and is gold-bearing wherever it transects granitic rocks (ie) at the south and the north ends of the group of claims. A general description of the Brown-McDade mine geology is given in this report to facilitate correlation with indications obtained on Silver Standard ground.

It is recommended that further work be done on the Silver Standard claims and this should be bulldozer cuts, preferably preceded by an E-M survey, followed up by drilling if results are encouraging. If possible, access to Brown-McDade records and cooperation with that company in a joint effort would be advantageous in the coordinated development of the area.

TOPOGRAPHY

The Frontispiece is a photograph of the ridge covered by the Silver Standard claims and it clearly depicts the character of the terrain. The slopes of the hills are generally covered by grass and buck-brush and tend to be soggy underfoot except in the driest of seasons. The crests and some south slopes are generally rocky and open and have firm, dry surfaces. Creeks are abundant and during September of this year all had near-capacity flows.

None of the area has been glaciated and firm bedrock lies beneath a cover of soil, rock-soil and broken rock that generally ranges in thickness from five feet, on the ridges, to thirty feet, near the valley bottoms. Outcrops are common as erosional relict protuberances only on peaks and along ridge crests and tend to have outlines distinctive of the particular underlying rock-types. (See Frontispiece).

The bottoms of some valleys are covered by soil to depths of several feet, and no rock float is available; however, the remainder of the area is covered by rocky soil possessing abundant fragments of rock derived from the underlying formation and general geologic mapping by examination of rock fragments is very dependable. Formational contacts can be located within a few feet in many places and in two places contacts traced by float were confirmed by bulldozer cuts. Veins and other relatively narrow bodies contribute float only in amounts proportionate to their widths and where the mantle is thick the vein float is generally only a few pieces of vein material that may be easily overlooked. Where the mantle of decomposition is thin the amounts of surviving vein material are relatively greater and more easily found.

GENERAL GEOLOGY

In general, the Mt. Nansen and Victoria Mountain area is underlain by bodies of volcanic, dioritic, granitic and rhyolitic rocks in a complex pattern which indicates an intricate structural history. To the south, the east and the west of this area the terrain is underlain by Precambrian-Cambrian

GENERAL GEOLOGY (cont'd):

metamorphic rocks. To the north it is underlain by granitic intrusives locally capped by Tertiary basic volcanics.

The geology of the Carmacks District was mapped on a scale of 1 inch = 4 miles by H. S. Bostock in 1932-34 (G.S.C. Memoir 189). According to Bostock's designations the area immediately south of the Silver Standard claims is underlain by Precambrian-Cambrian schists and gneisses of the Yukon Group. The present mapping of the claims did not reach the area underlain by these rocks. A reconnaissance was made to find the contact of these rocks south of the Brown-McDade mine, where it is shown on Bostock's map, but the contact could not be found - presumably it lies somewhat further south. North of these metamorphic rocks the ridge between Nansen Creek and Victoria Creek is shown by Bostock to be underlain by three principal rock types, these are:

Mount Nansen Group: (Jurassic). Basalt and andesite volcanics and breccias.

Granitic Intrusives of Jurassic or post-Jurassic age.

Intruded by:

Rhyolitic Intrusives of Tertiary age.

These rock types do represent the formations underlying the ridge between Nansen and Victoria creeks but the outlines of the formations as shown on Bostock's map are only vaguely correct. Also, a large part of the ridge is underlain by diorite but is not shown as such on Bostock's map. The diorite is intrusive into or contemporaneous with the basalt and in turn is intruded by the granites.

Because of the lack of extensive bedrock exposures in the area the detailed structural features of the formations cannot be observed. For this reason the attitudes of flows, the nature of contacts and the existence of faults are largely undeterminable except where surface or underground workings reveal them.

Good exposures were found of contacts showing the following features:

(1) Granite intrusive into diorite.

GENERAL GEOLOGY (cont'd):

(2) Granite intrusive into basalt.

(3) Diorite gradational into basalt.

Inconclusive evidence was found indicating that the granitic intrusives are later than the rhyolite and that the rhyolite may be contemporaneous with the basalt-diorite sequence. These features are contrary to the sequence suggested by Bostock and require better exposures to be accepted as valid.

CLAIM GEOLOGY

Figure 1, accompanying this report, is a geological plan of the Silver Standard claims and part of the adjoining Brown-McDade property.

In this limited area it would appear that the sequence of formations is as follows:

OLD FORMATIONS:

(1) Rhyolite porphyry.

(2) Basalt - locally andesitic and dioritic - relation to rhyolite uncertain.

(3) Basalt breccia - intrusive plug in basalt.

(4) Diorite - intrusive and locally gradational into basalt. Locally becomes hornblende porphyry.

YOUNGER FORMATIONS:

(5) Granodiorite and porphyritic granite - intrusive into all the above rocks.

FAULTS:

(6) Major faults or shear zones, with extensive associated alteration zones; cut all the above-listed formations.

As explained earlier, contacts were established in most places by examining the rock fragments in the rock soil and in general are dependably located. The interrelations of the rock types is mostly from inference of the

CLAIM GEOLOGY (cont'd):

available geology. All rock-types are easily identified as distinct types. Brief descriptions of each type follow:

RHYOLITE: Generally white to creamy-gray in colour, weathers to a yellowish hue. Very hard and cherty in texture and invariably contains quartz phenocrysts, and less commonly feldspar phenocrysts, up to 1/4 inch in size. Rock exposures weather to evenly rounded domes and humps and fragments are usually shard-shaped with sharp edges.

BASALT: Dark green to medium gray-green, aphanitic to fine crystalline rock. Locally it is medium crystalline and quite dioritic. Also occurs in sharp contact with coarse crystalline diorite. Andesitic phases are common.

BASALT BRECCIA: The craggy peak on the ridge on claim YU 4 is comprised of a basalt-andesite breccia that appears to be in the form of a plug that has intruded the surrounding basalt. The fragments are sub-angular to well-rounded, generally a few inches in largest dimension, and are densely packed in an aphanitic green-gray matrix.

DIORITE: Medium to fine crystalline, dark green to greenish pale gray in colour, generally "peppered" by dark hornblende crystals. The rock is massive and locally coarse crystalline with hornblende phenocrysts an inch or so in length. The principal components are: hornblende, pyroxene, plagioclase, biotite and minor quartz. Outcrops are generally distinguished by slab-shaped rubble fragments.

GRANITIC ROCKS: Several phases of granitic rocks occur on the property and from all available evidence they appear to be gradational into one another. The principal types exposed are: granite (porphyritic and nonporphyritic), granodiorite, pegmatite and aplite.

CLAIM GEOLOGY (cont'd):

The pegmatitic and aplitic phases occur commonly along borders of granitic bodies intrusive into the country rocks and also as scattered lenses or patches within the granites.

Most of the ME claims and the YU 13-16 claims are underlain by porphyritic granite which is a very coarse to medium crystalline, pale cream to white-gray rock composed principally of orthoclase, quartz and biotite-muscovite. The phenocrysts are orthoclase and range up to two inches in length. The rock is commonly non-porphyritic and gradations from one texture to another can be seen in many places. In the Brown-McDade mine porphyritic granite grades into granodiorite.

The granodiorite is a dappled black and white rock of medium to coarse granitoid texture and is comprised principally of quartz, plagioclase, orthoclase and abundant hornblende.

The border phases of the granitic rocks are distinctive in both composition and fabric. Across widths of several to tens of feet the rock is commonly gneissic, pegmatitic and/or aplitic with considerable evidence of contamination by inclusion of the adjacent rock. On claims YU 2 and YU 4 such a contact can be followed through basalt to and across rhyolite. This contact, though not well exposed, strongly suggests that the rhyolite is pre and not post granite.

STRUCTURE:

Details of the structures of the formations were not determined but the general distribution of the different formations was ascertained to a fair degree of accuracy.

Referring to the geological map (Fig. 1), the geology of the Silver Standard claims is as follows:

North: All the claims north and east of YU 11 and YU 12 are underlain by granitic rocks, principally porphyritic granite. The extreme north and west fringes of the ME 10-16 block of claims are under-

CLAIM GEOLOGY (cont'd):

lain by rhyolite porphyry whose contact with the granite is ill-defined and not firmly determined.

Central: On the claims YU 11 and YU 12 the north granite is in sharp contact with diorite to the south. Two bands of diorite lie across the ridge and underlie most of the claims YU 8 to 12 and are apparently intrusive into and locally gradational into the basalts that lie to the south of and between the two diorite bands. In addition, the side of the nose that lies east of the southernmost Silver Standard claims, between Pony Creek and Back Creek, is underlain entirely by diorite. (Fig. 1).

Claims YU 3 to 7, lying south of the diorite bands, are underlain by basalt. On YU 4 the basalt is intruded by a body of basalt-andesite breccia that is probably a volcanic neck. It forms one of the dominant peaks on the ridge. (See Frontispiece). The contact of the basalt with the rhyolite to the south trends east-west across the ridge on claims YU 3 and 4. The basalt is intruded on claim YU 4 by a granodiorite apophyse that widens to the south and east, off the claim.

South: The two southernmost claims, YU 1 and 2, and most of YU 4, are underlain by rhyolite and granodiorite. The rhyolite underlies all of YU 1 and about a third of YU 2 and 3. The extension of the granodiorite apophyse that begins on YU 4 underlies the remainder of YU 2 and is apparently intrusive into the basalt and the rhyolite.

SUMMARY:

The central claims (about 8 claims) of the elongate block of claims owned by Silver Standard are underlain by a band of basic rocks comprised of basalt, diorite and some basalt breccia. The southern-most claims (about 3) are underlain by rhyolite and granodiorite. The northern claims are underlain by porphyritic granite and some rhyolite.

ECONOMIC GEOLOGY

BROWN-McDADE MINE

The economic geology of the Silver Standard claims is closely related to that of the Brown-McDade mine to the south. The workings of the mine were examined and the salient features were mapped in order to facilitate projection and recognition of any such features that might occur on the Silver Standard claims. It is important to have some knowledge of the detailed geology of the Brown-McDade ore zone to appreciate the significance of similar occurrences on the Silver Standard claims; therefore, a brief summary of the mine geology is included in this report.

The sketch plan in this report of the Brown-McDade workings (Fig. 2) was compiled by a chain and compass survey and only encompasses the main crosscut. The distances to the drift faces north and south of the crosscut were measured but, because of lack of time and abundance of dirt, the drifts were not mapped. The numbers shown on the plan and designated as specimen locations are for the benefit of Mr. D. Miller who collected a suite of alteration material for a thesis study.

Geologic Setting:

The entire Brown-McDade workings lie within granitic rocks, the most predominant of which is granodiorite. Porphyritic granite occurs near the portal. The granitic rocks are cut by at least two major faults or shear zones which trend about NNW and dip 60°-70° to the southwest. The rocks adjacent to these zones have been fractured, sheared, altered and mineralized to varying degrees.

The east fault in the mine, 150 feet from the portal (Fig. 2), is a zone about three feet in width comprised predominantly of gray-green fine grained gouge. The fault is flanked by subsidiary fractures for about ten feet on the hanging wall. Visible vein material on this fault, where it is exposed in the adit, consists only of narrow quartz and carbonate veinlets. Between this fault and the west fault, a distance of 500 feet, the country

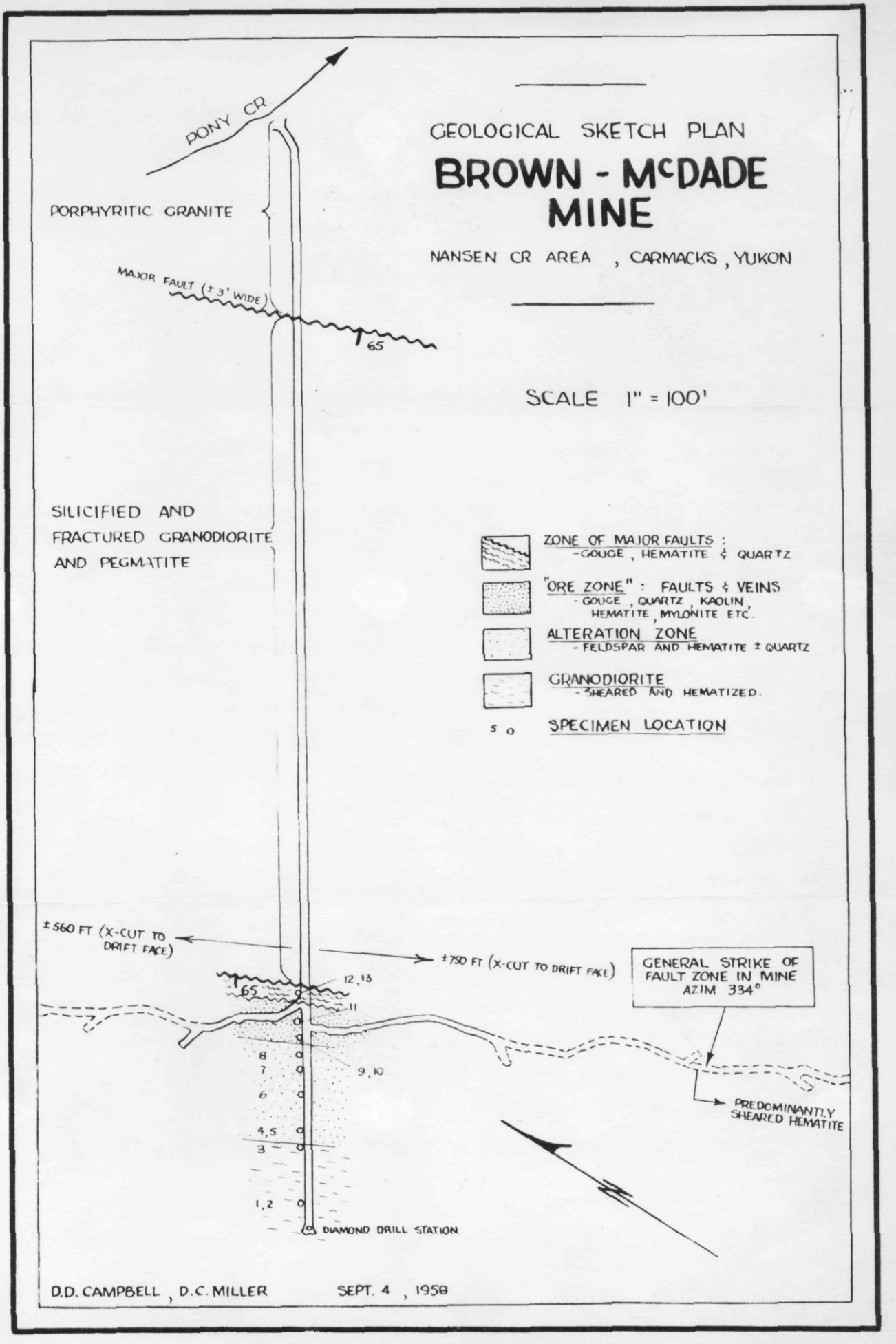

PONY CR.
PORPHYRITIC GRANITE
MAJOR FAULT (± 3' WIDE)
65
SILICIFIED AND
FRACTURED GRANODIORITE
AND PEGMATITE
GEOLOGICAL SKETCH PLAN
BROWN - McDADE
MINE
NANSEN CR AREA , CARMACKS , YUKON
SCALE 1" = 100'
ZONE OF MAJOR FAULTS :
- GOUGE , HEMATITE & QUARTZ
"ORE ZONE" : FAULTS & VEINS
- GOUGE , QUARTZ , KAOLIN ,
HEMATITE , MYLONITE ETC.
ALTERATION ZONE
- FELDSPAR AND HEMATITE ± QUARTZ
GRANODIORITE
- SHEARED AND HEMATIZED.
S 0 SPECIMEN LOCATION
± 560 FT (X-CUT TO
DRIFT FACE)
± 750 FT (X-CUT TO DRIFT FACE)
GENERAL STRIKE OF
FAULT ZONE IN MINE
AZIM 334°
65
12,13
11
8
7
6
4,5
3
1,2
9,10
PREDOMINANTLY
SHEARED HEMATITE
DIAMOND DRILL STATION
D.D. CAMPBELL , D.C. MILLER SEPT. 4 , 1958

FIG. 2

BROWN-McDADE MINE (cont'd):

rock is granodiorite that has been fractured and silicified to a degree appreciably more than normal for the area.

Ore Zone:

The west fault in the mine is the ore-bearing structure and has been exposed by drifting for a distance of about 1300 feet, 560 feet north of the crosscut and 750 feet south. The drift backs are clean near the crosscut but generally dust-covered along most of their lengths; however, enough clean exposures are available to provide a dependable representation of the general features of the ore zone.

The most dominant structure of the Brown-McDade zone is the fault plane that forms the footwall of the zone. The footwall plane is straight and smooth and is plastered on its hanging wall side with several inches of gouge. Adjacent to the footwall fault, on the hanging wall side, is a zone, about fifteen feet in width, of shears and fault planes which cut a soft mass of fault gouge and mylonite (pulverized rock). This zone has been locally mineralized by hematite and quartz. From observation it appears that this footwall fault zone is barren of ore.

Adjacent to the hanging wall of the fault zone is a zone about 30 feet in horizontal width which is termed here the "Ore Zone" (Fig. 2). This zone is comprised of harder material than the fault zone and is cut by considerably fewer faults. The principal components of this zone are: quartz, kaolin, gouge, hematite, mylonite and superimposed vein and ore minerals. In quartz lenses throughout this zone the minerals pyrite, chalcopyrite, galena and arsenopyrite were recognized. Grab samples of this metalliferous vein material generally carry gold. A more detailed account of the mineralogy of the Brown-McDade ore will be forthcoming from Mr. Miller's thesis studies.

In the hanging wall of the Ore Zone is an alteration zone which is about 75 feet in horizontal width (Fig. 2). It is a replacement zone of fractured, maroon-tinged rock comprised principally of feldspar, hematite and quartz. Remnants of granodiorite are generally common. This zone is presumably

BROWN-McDADE MINE (cont'd):

barren but it does supply very easily recognized rocks to surface float.

For a distance of at least 70 feet from the hanging wall of the alteration zone the granodiorite country rock is sheared and hematized.

Significant Features:

Several features about the Brown-McDade geology and development are of significant importance to the owners of the Silver Standard claims. These are listed below:

Geology: (1) The Brown-McDade ore zone is part of an extremely strong fault structure that in all probability extends for many thousands of feet and that could extend for miles. The Silver Standard claims are exactly on the strike of the Brown-McDade zone.

(2) The rocks in the hanging wall of the zone are extensively altered to maroon-red hematite, feldspar and quartz. These alteration products are distinctive of the ore zone and are easily recognized in the surface float that forms the covering mantle of the area. Where such material is found in reasonable quantity it is a safe assumption that the Brown-McDade zone, or one like it, underlies the mantle.

(3) The gold appears to be associated with the arsenopyrite.

Development: (1) The wanderings of the drifts in the mine, plus the haphazard location and distribution of stub crosscuts, suggest that the operators were not clear about what constituted the ore zone. Much drifting and sampling was done in both the fault zone and the alteration zone, neither of which are ore bearing. A proper evaluation of the Brown-McDade ore zone would involve remapping and study of test and drill hole results if available.

BROWN-McDADE MINE (cont'd):

(2) It has been reported that the three holes drilled through the zone from the end of the main crosscut intersected the zone about 100 feet below the drift and all returned ore intersections. If this information could be verified it would be important to the mine evaluation.

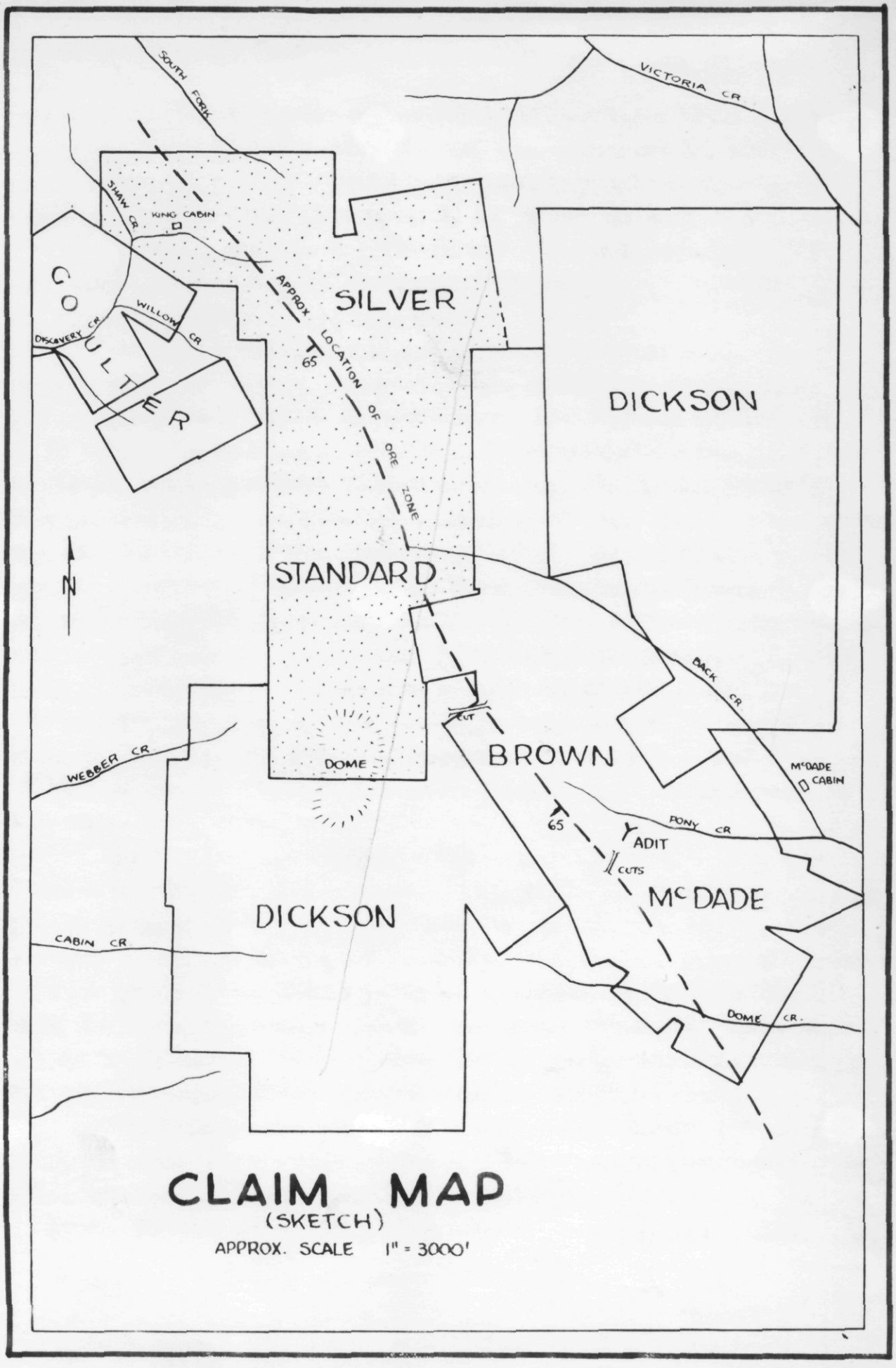
SILVER STANDARD CLAIMS

A projection of the Brown-McDade zone along strike to the northwest indicates that the zone passes onto Silver Standard claims near the headwaters of Back Creek (Fig. 3) and should continue across them to the vicinity of King's cabin south of South Fork Creek. The indications suggesting that this is the case are described below.

Bulldozer cuts on the surface directly above the mine expose the Brown-McDade zone extensively and well, although the rock is fractured to rubble. The predominant rock types are: rusty and silicified granodiorite, rusty quartz, maroon hematite and feldspar, pieces of clay (gouge), limonite and/or black sulphides in rusty quartz generally with rather ubiquitous green and yellow secondary minerals. Southeastward from these cuts the zone disappears under the alluvium covering the slopes of Dome Creek and eventually passes into Precambrian terrane.

Northwestward from the mine the zone disappears under the alluvial mantle of the Pony Creek valley and for a distance of about 4500 feet is evidenced only as scattered float. The numerous cuts along the flanks of the "Dome" are off the zone, but one cut, located 600 feet east of YU 4 M.C., has exposed identical vein material as did those above the mine. The zone in this trench is 150 feet in width with the east side open. Gold can be panned from most of the vein-zone material in the trench. This exposure is only slightly west of where a straight line projection of the zone from the mine would pass.

Northwestward from the above cut the hillside is covered by a mantle of basalt-diorite soil and float and no vein material was found; however, immediately north of the band of basic rocks, on the crest of the ridge near the pass, there is a large amount of float of vein zone material. This partial



CLAIM MAP

(SKETCH)

APPROX. SCALE 1" = 3000'

FIG. 3

SILVER STANDARD CLAIMS (cont'd):

exposure is roughly on the line projected from the mine to the bulldozer cut and northwestward and gold can be panned from it. (Fig. 1 and 3). From this point, northwestward to the creek at King's cabin, float of vein material is fairly common on the hillside.

In the creek at King's cabin and in the many cuts northwest of the cabin auriferous vein-zone material is one of the dominant rock types comprising the float-rock. Gold can be panned anywhere in the area.

No further tracing of the zone was done northwest of the Silver Standard claims but since it is obviously strong at the claim boundary it is entirely likely to continue to the northwest for a considerable distance.

From the above-described indications it seems probable that the Brown-McDade zone extends across the Silver Standard claims from southeast to northwest in a curving line for a distance of about 12,000 feet. It is also suggested that the interval of 5000 feet where the zone crosses the band of basalt-diorite rocks is probably an environment wherein the zone is narrower, less mineralized and accompanied by less wall-rock alteration than where it crosses granitic rocks. Where the zone occurs in granitic rocks on Silver Standard claims it appears to be of the same character and size as it is in the Brown-McDade mine.

All indications are that the zone on the northern Silver Standard claims is as good as that exposed in the mine.

RECOMMENDATIONS

CLAIMS: (Fig. 3)

If economy in holdings is desired some claims of the Silver Standard block can be dropped without losing valuable or potential ground. These are all the ME claims from 1 to 7 inclusive. Nothing of interest was found on them nor does the known geology indicate that they may have potential value.

The YU claims from 1 to 5 do not cover the Brown-McDade zone but they would pick it up down dip. Also, scattered float of vein material on these claims suggests the presence of possible economic structures.

SILVER STANDARD CLAIMS (cont'd):

If it is decided to explore and develop the ore zone on the Silver Standard claims it would be advisable to stake the open ground northeast of ME 14 and 16 claims and continue to prospect along the projection of the zone in that direction.

Some Silver Standard claims partially overlie crown grant claims (see inset Fig. 2). The claim ME 15 is practically all on the Goulter claims and could be dropped if absolute economy is desired.

Yukon Territory mineral acts allow sixteen claims per group. Geological and/or geophysical surveys of claims may be used in lieu of assessment work for one year only and must be done within the first three years after staking.

DEVELOPMENT:

The existence of the Brown-McDade ore zone on the Silver Standard claims is suggested by the various exposures and indications described above but its exact location is not known. Exploration should now be conducted to confirm the existence of the zone and determine its location. Several methods of investigation are applicable to this property but one that would give an indication of the nature of the zone as well as its location would be desirable Some possibilities are:

(1) Geochemical Survey: A soil survey would probably return results of interest but in view of the fact that we are dealing with a relatively narrow structure with a very minor base metal content a close spacing of a large number of samples will be necessary. This will be costly and the results will probably be of a very general nature.

It is suggested that this method of investigation be postponed until a later stage when the location of the structure is known but details are desired.

SILVER STANDARD CLAIMS (cont'd):

(2) E-M Survey: Of all the geophysical methods applicable to this property this one is believed to be the best. The metal content of the zone is not high but the structure (as seen in the mine) is strong and wide and should register sharp cross-overs. Traverse lines could be started at the opencut near YU 4 and continued along the structure without necessarily covering all the claims. The permafrost may hinder this method somewhat but some usable results should be obtained.

(3) Bulldozer Cuts: Bulldozer cuts intersecting the zone on Brown-McDade claims indicate that, if properly done, this method of exploration is the best available. On the sloping hill it is possible to put in long cuts and have room to dump. A long cut will ensure complete exposure of the width of the zone. The exposed material can be examined and sampled without difficulty. Any number of cuts could be started along the Silver Standard property and could be excavated in rotation, allowing thawing-time where necessary.

(4) Diamond Drilling: Drill cores, of course, would provide material for examination and sampling but the coring characteristics and recovery of the Brown-McDade zone should be determined, if possible, from the results obtained in the drilling at the mine. The zone has a high content of gouge and soft broken rock which may not return good core.

It is suggested that drilling be used as an adjunct to any one of the above listed methods.

It appears then that of the possible methods of exploration that may be used to advantage on this property, bulldozer cuts and, later, diamond drilling will provide the best and most information. In addition, both can be used as cumulative assessment work whereas surveys of any nature cannot be used after one survey has been so used, in this case geological mapping is now being applied for one year. An E-M survey does have the advantage of providing a guide for

SILVER STANDARD CLAIMS (cont'd):

bulldozer cuts or drilling and in that role may well be worth considering. This decision would resolve itself in comparative costs, if the E-M survey would be low cost, relative to the bulldozer cuts, then inclusion of it in the program would be of definite advantage and possibly result in saving money by ensuring proper location of the cuts.

From the information now available and the observations made on the property it certainly appears that more work is justified on exploration of the Brown-McDade zone on the Silver Standard claims. In conjunction with any such program it would be of very definite advantage to have access to the Brown-McDade Mine data and if possible to include Brown-McDade Ltd. in development of the entire area.

Respectfully submitted,

Douglas D. Campbell

NANSEN CREEK AREA, YUKON

GEOLOGY PLAN

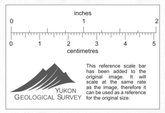
SILVER STANDARD MINES LTD.

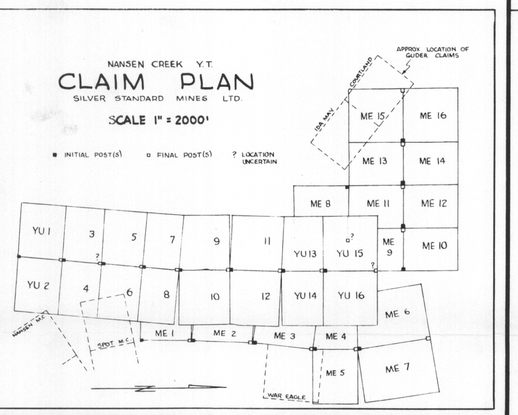
SCALE 1" = 500'

CONTOUR INTERVAL - 50'

DOUGLAS D. CAMPBELL SEPT. 1958 VANCOUVER, B.C.

CHAIN AND COMPASS





LEGEND

- GRANITIC INTRUSIVES - INCL. PORPHYRITIC PHASES
  - MIGMATITIC AND APLITIC
- DIORITE - INCL. ANDESITIC AND BASALTIC PHASES POSSIBLY GRADATIONAL WITH BASALT.
- BASALT
- BASALT BRECCIA — PROBABLY VOLCANIC NECK
- RHYOLITE

} MT. NANSEN GROUP (JURA-CRET.)

- ALTERATION AND MINERALIZATION - AS IN BROWN-McDADE VEIN ZONE
- OVERBURDEN — REST OF AREA IS ROCK, SOIL WITH ABUNDANT ROCK FLOAT
- ROCK CRAGS
- BULLDOZER CUT
- PRESUMED CONTACT
- ● AU - (PANNED)
- ○ NO AU "
- SUGGESTED TRACE OF BROWN-McDADE VEIN ZONE.

FIG. 1

SMALL SHAFT, NOW CAVED, SUNK MANY YEARS AGO. PROBABLY 6' TO 10' DEEP. DUMP SHOWS ABOUT 50% LEACHED QUARTZ ALL IN SMALL PIECES. SAMPLES OF QUARTZ ASSAY AS FOLLOWS

GOLD	SILVER
0·66 oz.	TRACE
3·52	5·0
0·20	0·6
0·76	2·0
0·36	1·5
0·50	0·7
0·20	TRACE

QUARTZ FLOAT 0·65 OZ GOLD

YAL 15
YAL 16
YAL 13
YAL 12
YAL 11
YAL 10
YAL 9
YAL 14
YAL 3
YAL 5
YAL 7
YAL 8
YAL 1
YAL 2
YAL 4
YAL 6
ME 16
ME 14
ME 12

SLOPE
RIDGE
GRANITE
SMALL SHAFT
SLOPE
PLACER WORKINGS
CABIN
NANSEN CREEK (SOUTH FORK)

PLAN
YAL GROUP OF MINERAL CLAIMS

NANSEN CREEK AREA, Y.T.

SCALE 1" = 500 FT. NOV. 4, 1958

R. E. LEGG.