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REPORT ON THE EXPLORATION PROGRAM

ON THE

D O N A GROUP OF CLAIMS

KEEFER LAKE AREA, B.C.

LOCATION: 3 MILES WEST-NORTHWEST OF KEEFER LAKE

(50° 08' N, 118° 24' W)

VERNON, M. D.,

BY

H. M. JONES, P. ENG.

EL PASO MINING AND MILLING COMPANY

DECEMBER 4, 1974

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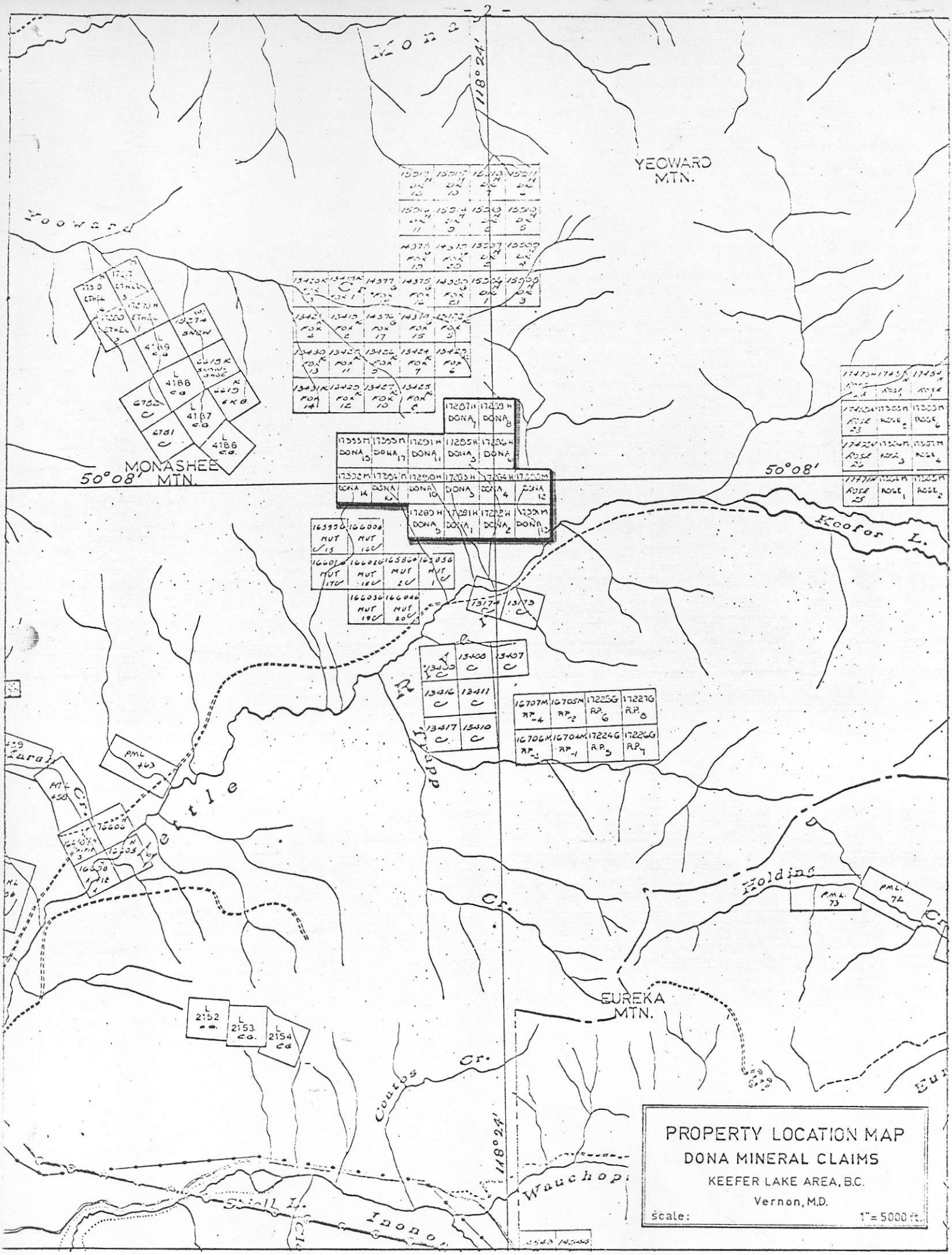
SUMMARY

From June 11th to September 27th, 1974 a program of geological mapping, bulldozer trenching, self potential surveying, detailed sampling, percussion drilling and placer testing was carried out on the Dona Claims, located near Keefer Lake in south central British Columbia. All work was concentrated on an area which from last seasons work was found to be geochemically anomalous in gold, arsenic and silver.

Trenching exposed numerous very narrow quartz veins weakly mineralized in gold and silver. Average grade of these veins is approximately 0.02 oz/ton gold and 0.04 oz/ton silver. An occassional small pod of massive arsenopyrite-stibnite was uncovered which assayed high in gold and silver. These were too few and too small to be of interest.

Placer testing failed to locate any concentrations of precious metals. Exploration on the Dona Claim failed to locate any economic mineral deposits. For this reason no further work is recommended at the present time.



PROPERTY LOCATION MAP

DONA MINERAL CLAIMS

KEEFER LAKE AREA, B.C.

Vernon, M.D.

Scale: 1" = 5000 ft.

INTRODUCTION

During the spring of 1973 a library research program was carried out on gold districts and properties in southern British Columbia. Utilizing this information and previous knowledge of the area, a gold district within the Monashee Mountains of south central British Columbia was selected for detailed prospecting. The area of interest was approximately delineated by Monashee Creek to the north, highway No. 6 to the south and west, and the headwaters of Monashee Creek and the Kettle River to the east. All streams and tributaries within this 200 square mile area were prospected and silt sampled.

Gold in the Monashee area is commonly associated with arsenopyrite, and for this reason arsenic was used as a trace element. All samples were assayed for gold, silver and arsenic.

The results of this field program showed only two streams as strongly anomalous in arsenic. One drains off the north slope of Yeoward Mountain in the vicinity of the DK Group of claims; the second off the southeast end of Monashee Mountain in the vicinity of the abandoned Mut claims. In this latter area, detailed silt and reconnaissance soil samples were taken which showed the ground to be strongly anomalous in arsenic and mildly interesting in gold. Prospecting here also located a scattering of coarse chunks of quartz float well mineralized with massive arsenopyrite, stibnite and pyrite. The Dona claims were therefore staked to cover this interesting area.

In the late fall of 1973, a detailed soil survey was run over an area 5400 feet long by 3000 feet wide to more than cover the area of interest found from prospecting. The results of this survey showed an arsenic anomaly trending northwesterly

for 2500 feet with coincident gold and silver anomalies over approximately 2000 feet.

From mid June to the end of September 1974, a program consisting of geological mapping, bulldozer trenching, detailed rock sampling and percussion drilling was carried out to assess the anomalies resulting from the geochemical survey. The crew consisted of three El Paso employees - a geologist, a mining engineer and a student assistant. The bulldozing was done by a contractor as was the percussion drilling.

This report is a discussion of the results of this program.

LOCATION AND ACCESS

The Dona property is situated in south central British Columbia, approximately 41 miles east of Vernon and 2 miles west of Keefer Lake, which is at the headwaters of the Kettle River. The geographic co-ordinates of the property are: 50^{o} 08' north latitude; 118^{o} 24' west longitude.

Access to the property is gained from Highway No. 6, approximately 30 miles southeast of Lumby. At this point a good logging road originates which follows the Kettle River northeasterly to its headwaters at Keefer Lake. This road is followed for 6.5 miles, then left to follow a jeep road 1 mile to the center of the property.

TOPOGRAPHY AND VEGETATION

The Dona Property is at the east end of Monashee Mountain which in this area forms an easterly trending ridge sloping gently to the east. The claims partly cover the east end of this ridge, so that slopes very from gentle on the ridge top to

steep on the side slopes. The main area of interest is on the south slopes which vary from 10^{o} to 30^{o} near the top of the ridge to gentle in the main Kettle River Valley to the south. Elevations range from 4500 feet in the river valley to 5500 feet on the ridge top.

Most of the claims are located within an old forest fire burn, estimated to have occurred at least 40 years ago. Present vegetation consists of sparse small second growth pine, fire and spruce, with abundant huckleberry bushes as ground cover. Thick alder is common in damp, shaded areas.

Only at the north end of the claim block, on the northern slopes are there stands of commercial timber. Here, spruce and hemlock are dominant.

CAMP FACILITIES

The property is located approximately 4 road miles from Keefer Lake where primative cabins are available from Keefer Lake Resorts Ltd. While this camp offers nothing but a bed and a roof, it can be made quite comfortable for summer use and is far more economical than setting up one's own camp.

CLAIMS AND TITLE

The property consists of seventeen claims owned by El Paso Mining and Milling Company. They are as follows:

CLAIM NAME	EXPIRY DATE
DONA 1 - 11	JULY 27, 1984
DONA 12 - 17	SEPT.28, 1984

FIELD PROGRAM

The field program was carried out from June 11th to September 27, 1974. It consisted of geological mapping of the 1973 gridded area, bulldozer trenching, detailed geological mapping and sampling of the trenches, placer prospecting and percussion drilling.

The technical work and supervision were done by a three man crew employed by El Paso Mining and Milling Company and consisted of one geologist, one mining engineer and one student assistant. Bulldozing and drilling were done by independant contractors.

TRENCHING

In the vicinity of the geochemical anomalies, outcrop is very sparse. Trenching was required to assess the bedrock geology. A total of 6285 feet of excavating was done in 12 trenches.

A small Case 450 crawler-type front end loader with easily detachable backhoe was contracted for this work. Most trenches were nearly level and were constructed as side hill cuts contouring along the steep southern slope. These were dug using the front end loader bucket. After completion, several trenches required deepening which was easily done using the backhoe. A total of five trenches were dug entirely with the backhoe, including one on a 30^{o} downhill slope on which a conventional bulldozer would have had extreme difficulty in operating.

In addition to the above trenches, four placer prospecting trenches were dug. They are discussed in the attached report by W. J. MacKenzie.

A summary of all trenching is shown in "Table of Trenching" on page

TABLE OF TRENCHES

Trench No.	LOCATION: Bearing and Distance from I.P. Dona 5 & 6 to Eastern End of Trench (Feet)	Bearing from Eastern End.	Length (Feet)	Average Depth (Feet)	Average Width (Feet)	Claim on which Located	Remarks
1	N34E for 512 Ft.	S42W	540 Ft.	5 Ft.	10 Ft.	30% Dona 5 70% Dona 6	Level side hill cut entire 250 Ft. length from N.E. end deepened 8 Ft. by backhoe.
1A	N41E for 460 '	S48W	435 '	4 '	10 '	Dona 6	Level sidehill cut; entire 120 Ft. length from SW end deepened 4-8 Ft. by backhoe.
2	N 4E for 600 '	S35W	865 '	5 '	10 '	10% Dona 3 10% Dona 6 80% Dona 5	Mostly level side hill cut
3	N22W for 792 '	Due So.to S47W	570 "	4 "	10 "	Dona 5	Mostly level side hill cut.
4	N27W for 952 '	S45W	550 '	4 '	10 '	Dona 5	Sidehill cut; slope 10° to NE, from 280' - 365' from NE end deepened 10' by backhoe.
5	N29W for 652 '	S80W	200 '	5 '	4 '	Dona 5	Level backhoe trench.
6	N30W for 1370 '	S85W	640 '	2-8 '	3-10'	Dona 5	Sidehill cut; gentle slope to NE. From NE end for 420' dug by front end loader to depth of 2'-4' and 10' wide, remaining220' by backhoe averaged 8' deep & 3' wide.
7	N32W for 928 '	N85W	230 '	6 '	4 '	Dona 5	Backhoe trench, slopes-10° to East.
8	N 6W for 668 '	S40W	360 '	5 '	10 '	Dona 5	Level sidehill cut.
9	N17W for 460 '	N60W	180 '	7 '	4 '	Dona 5	Backhoe cut; slopes 30° to SE.
10	N45W for 820 '	S51W	85 '	9 '	5 '	Dona 5	Level backhoe cut.
11	N65E for 420 '	N85W	510 '	5 '	4 '	10% Dona 5 90% Dona 6	Backhoe cut; slopes gently to east.
12	N87E for 300 '	S60W	320 '	4 '	10 '	Dona 4	Level sidehill cut.

GEOLOGY

- General Geology

The geology, as summarized on G.S.C. Map No. 1059A, shows that the Keefer Lake area is underlain by rocks of the Cache Creek Group of Carboniferous and Permian age. These form an irregular block approximately 17 miles long by 5 to 10 miles wide which is in fault contact to the north, east and west with Archaean or later metamorphic rocks of the Monashee Group. To the south they are in contact with Jurassic and/or Cretaceous granitic rocks of the Coast Intrusives.

The Cache Creek rocks are divided into three groups: Division A - mostly argillite; Division B - mainly andesite lava and tuff, with minor argillite, quartzite and limestone; Division C - mainly limestone, with minor argillite, quartzite and andesite lava, breccia and tuff. With reference to the above map, the Dona claims are located in Division B.

One small intrusive plug is noted on the map and is located approximately 1.5 miles northwest of the Dona property.

- Claim Geology

In preparation for trenching of the geochemical anomalies, a 200 scale geological map was prepared covering the entire 1973 grid. It was soon found that outcrop was very sparse, so for this reason much of the geological information came from "rubbly outcrop", which was rock debris thought to be in situ. The results

of this mapping are shown on map No. 82-L-1-A10. Trench geology was added to this map to help clarify the general geology of the claims.

This map illustrates that the geochemically anomalous zone, which also includes the mineralized float found in prospecting, is underlain by a northwesterly trending diorite "plug". From mapping this plug was inferred to be approximately 1000 feet long by 500 feet wide but trenching has shown it to be at least 2000 feet long and probably narrowing at either end.

The diorite intrudes tuffaceous rocks which are overlain and underlain by argillite. This volcanic-sedimentary sequence strikes N45^{o}W and dips about 30^{o} to the southwest. Since the diorite "plug" appears to have the same general strike as the surrounding rocks, it could be either sill-like or dyke-like in structure.

Sulfides are abundant within the mapped area. Pyrite and pyrrhotite are disseminated in the diorite in amounts up to 3%, while pyrite is common on bedding planes and fractures in argillite. Pyrite is weakly disseminated throughout the tuffaceous rocks.

Quartz float, mineralized with massive stibnite and arsenopyrite, was found in three locations. In each case the float consisted of several angular pieces 6 to 12 inches square containing massive sulfides as veins up to 3 inches wide. None of this material was found in place.

- Detailed Trench Geology

All trenches were mapped in detail on a scale of one inch equals 40 feet. The results of this mapping are shown on map No. 82-L-1-A8.

The main rock types seen in the trenches were the same as those observed in the 200 scale mapping, namely argillite, tuff and diorite. Exposures were much

better in the trenches where bedrock was exposed for almost the entire length in this case. These rock types may be described as follows:

ARGILLITES: They are very dark gray to black, fine grained, well bedded with abundant pyrite and pyrrhotite as disseminations and coatings on bedding planes and fractures. Included within the argillites are minor quartzite and cherty beds. These rocks are best exposed at the east and west ends of trenches 1, 2 and 4, and at the east end of trench 6.

TUFFS: They are light gray to light gray-green, fine to medium grained, and usually well bedded. The fine grained varieties are the lightest in colour and are usually silicified while the medium grained tuffs commonly are darker due to the presence of fine chloritized mafics.

The medium grained variety has an abundance of anhedral feldspar grains which when weathered and altered is difficult to distinguish from intrusive rock.

Minor fine pyrite is disseminated throughout the tuffs. The better exposures of tuffs are toward the eastern end of trenches 1 and 2 where they overly the argillite; to the west of the intrusive in trench 2 where they are "dioritic" textured and at the intersection of trench 3 and 5 where they are fine grained and very siliceous.

DIORITE: It is medium to coarse grained, dark grey to green, equigranular, devoid of quartz and with approximately 30% mafics - mostly hornblende in various stages of alteration to chlorite. Some of the coarser grained sections have appreciable biotite. The diorite is well mineralized with pyrite and pyrrhotite with amounts up to 3% common.

Some sections within the diorite have undergone extensive weathering. The coarser grained, biotite-rich zones are completely decomposed to depths of at least 10 feet while other sections with little or no biotite are relatively fresh.

A finer grained variety of diorite is exposed in some areas, especially trench No. 11, as very hard ribs. In all cases these contain an abundance of fine sulfides.

Chloritization, silicification, pyritization and shearing, compounded by weathering, make it very difficult to accurately locate diorite-tuff contacts. It appears that the diorite forms a large central core with "fingers" intruding the tuffaceous rocks. The clearest contacts are exposed in trench 6 near the west end. Here the diorite partly follows the bedding and partly cross-cuts it. On the basis of this contact and its general strike being the same as that of the bedding, it is assumed that it is best described as a sill with dyke-like off shoots.

BASIC DYKES: Very few were observed. They are completely chloritized and decomposed ultra mafic rocks characterized by spherical weathering. No fresh exposures were seen.

LEUCOCRATIC GRANITE: One exposure of this was seen in the access road toward the western end of trench 2. It is medium to coarse grained, equigranular and composed of approximately 20% quartz and 80% feldspar. It is devoid of mafics and sulfides.

This rock occurs on the western contact of the diorite intrusion and is considered to be a late phase of it.

QUARTZ VEINS: All trenches expose numerous quartz veins. These are commonly 1/16" to 3" wide with several 6" to 12" wide and one in trench 1A, up to 36" wide.

All veins are composed of massive white quartz, completely shattered and bordered by hematite margins. In the case of narrow veins, there is often more hematite than quartz. It should be noted that the quartz veins are restrited to the diorite.

The veins are randomly oriented but the majority strike between N20°E and N45°W and dip from 20° to 45° to the west or southwest. A smaller number of veins have very low dip angles. Two examples of these are veins in trench 5 where a gently dipping vein is exposed for 100 feet along the wall and in trench 1A where a large vein is exposed for 80 feet.

The flatter dipping veins show gentle undulations making it difficult to determine the true strike. Some of these show a gentle easterly dip.

The veins are very irregular and vary along strike from hairline fractures to several inches wide, then horsetailing out into hairline fractures again. They follow fractures and faults, often showing off-sets of several inches to two feet at vein intersections.

STRUCTURE

Bedding is the most obvious structual feature. Tuffs and argillites have an average attitude of N45°W / 20° - 45° SW. There are many variations in this indicating local warping of the beds.

Diorite, as mentioned aarlier, appears to follow the bedding and is either sill-like or dyke-like in structure. Many diorite contacts seen in the trenches have an attitude different than the bedding but these are invariably fault contacts.

Cuttings from the percussion drill were very fine and too difficult to log geologically without the use of a microscope. Based on colour of cuttings only, it would

appear that the diorite may be a steeply dipping structure and locally replaces along bedding. Until some microscopic work is done, the intrusive is better inferred as a dyke-like plug.

Faulting is widespread. Regionally, a prominent northwesterly striking lineament (fault?) crosses the west edge of the working area. It was crosscut in trench No. 2 which poorly exposed fractured argillite in its vicinity.

Locally, faulting is widespread. The great number of narrow veins and hematite fractures are thought to be following faults. These strike from northeasterly to northwesterly and have variable dips. Displacements of veins is from several inches to two feet but larger displacements are suspected.

Fracturing is also intense. Except within small sections of fresh, massive diorite all rock is strongly broken. The quartz veins, which are thought to be very late in the geologic sequence, are completely shattered, indicating very late faulting and fracturing.

Very strong limonitic shear zones were seen in trenches 4, 6 and 10. The first two have pods of massive sulfides associated with them.

MINERALIZATION

Pyrite and pyrrhotite are common throughout the working area as disseminations and fracture coatings in argillite, tuffs and diorite. No precious metals appear to be associated with these sulfides.

Massive lenses of arsenopyrite, stibnite and pyrite with or without jamesonite, galena and sphalerite occur sporadically throughout some of the quartz veins. The best exposure of this mineralization is in trench 1A. Here, pods up to 4 inches

PHOTOGRAPHS

DONA PROPERTY

1974

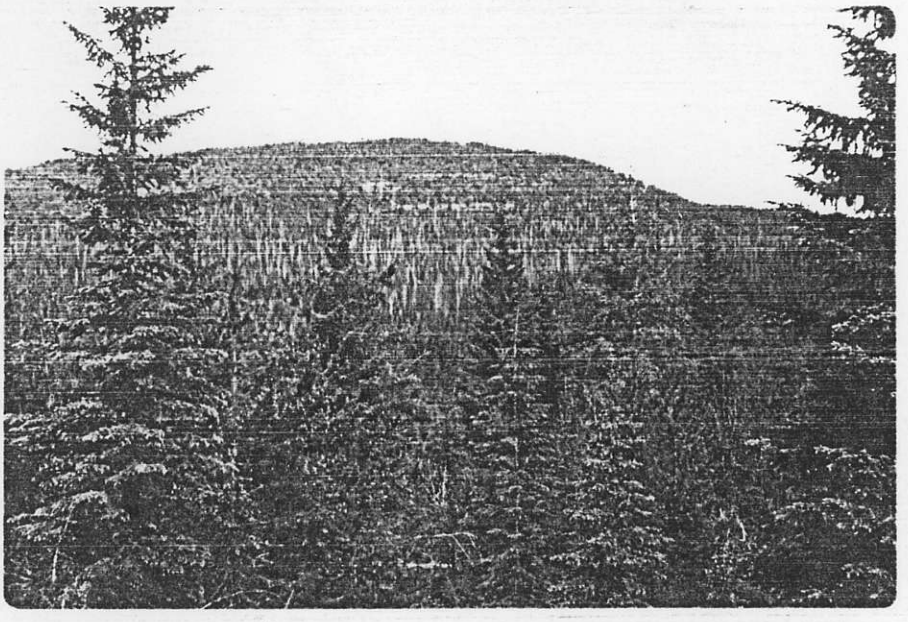


Plate No. 1A. Looking northwesterly toward trenches on Dona Claims.

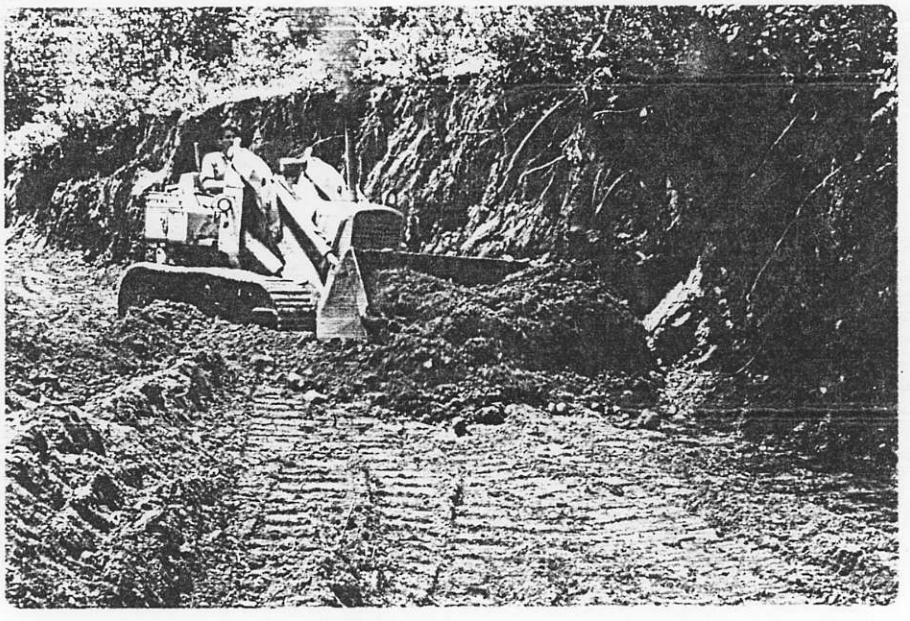


Plate No. 1B. Case 450 crawler bucket loader working on Trench #1.

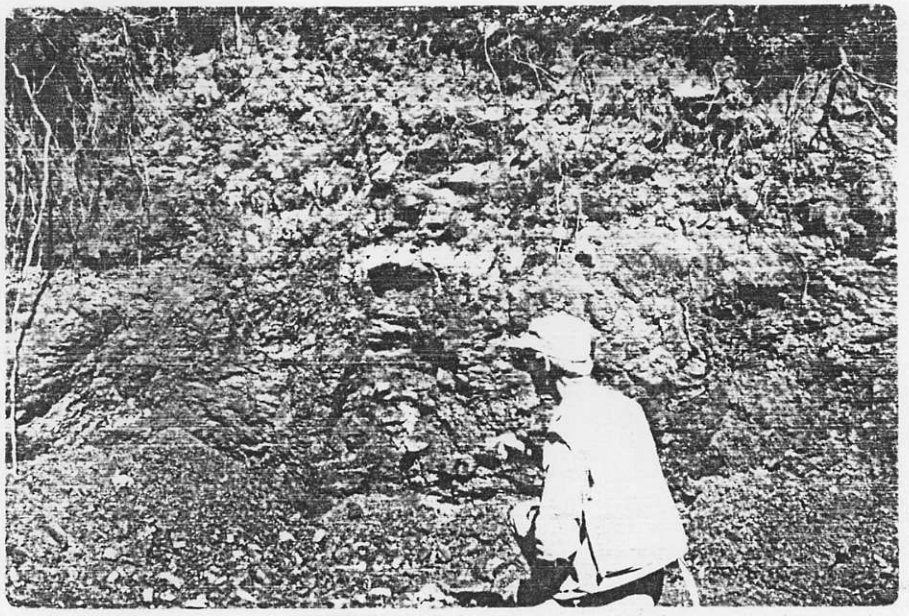


Plate No. 2A. Faulted segments of veins in Trench #3 near 134N, 97E.

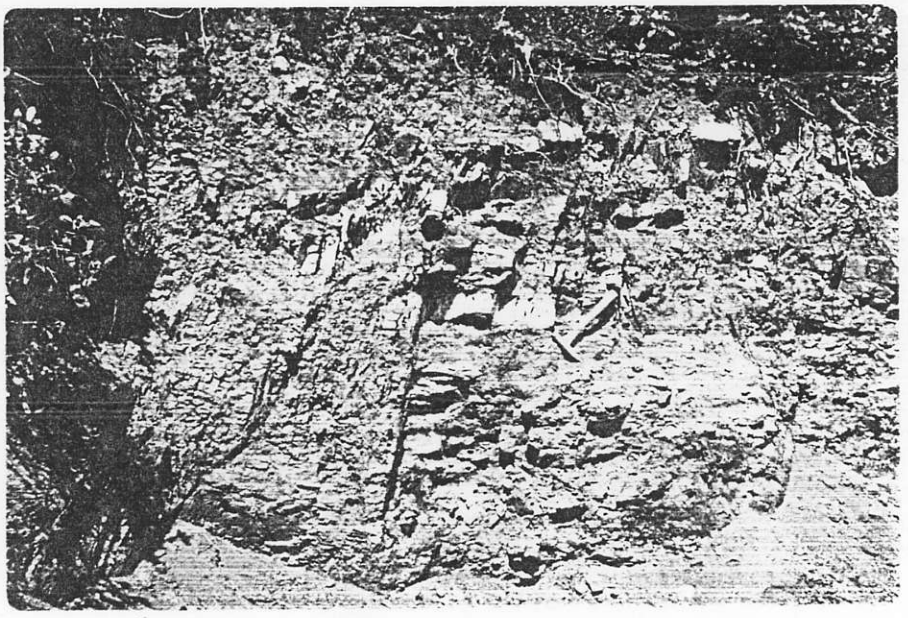


Plate No. 2B. Same veins after further excavation.

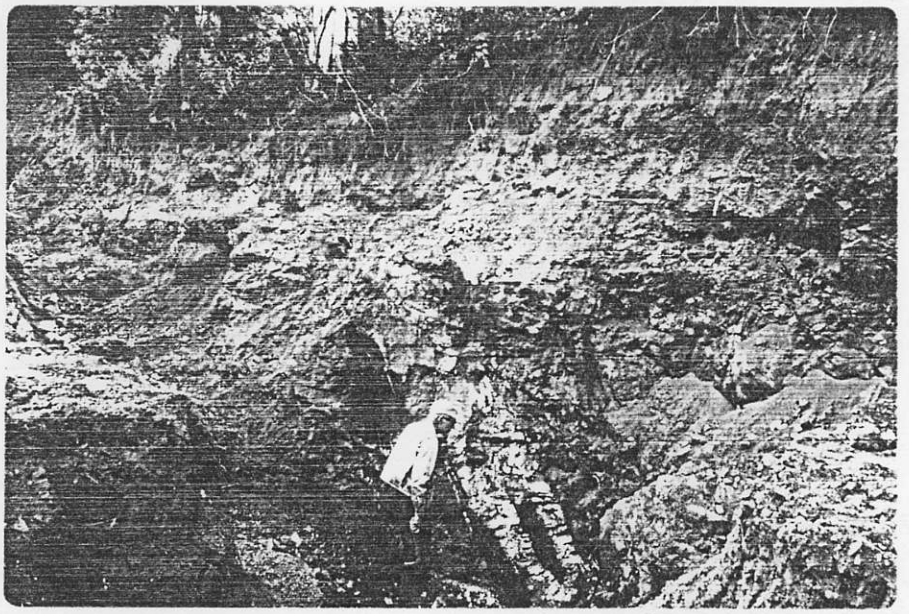


Plate No. 3A. Flat lying vein up to 36" wide intersected by steeply dipping vein in Trench # 1A. Small pods of massive sulfides near intersection of veins and along footwall of inclined vein.

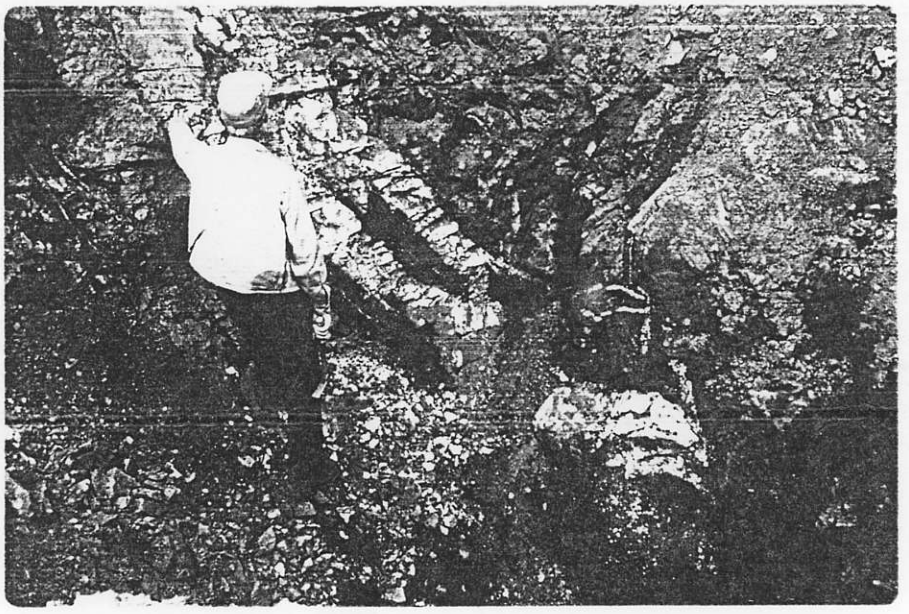


Plate No. 3B. Same veins as above. Note termination of inclined vein against 2" vein.

Plate No. 4A. Flat lying vein in trench #11 near intersection with trench # 1A. Note irregular nature of quartz and abundant hematite.

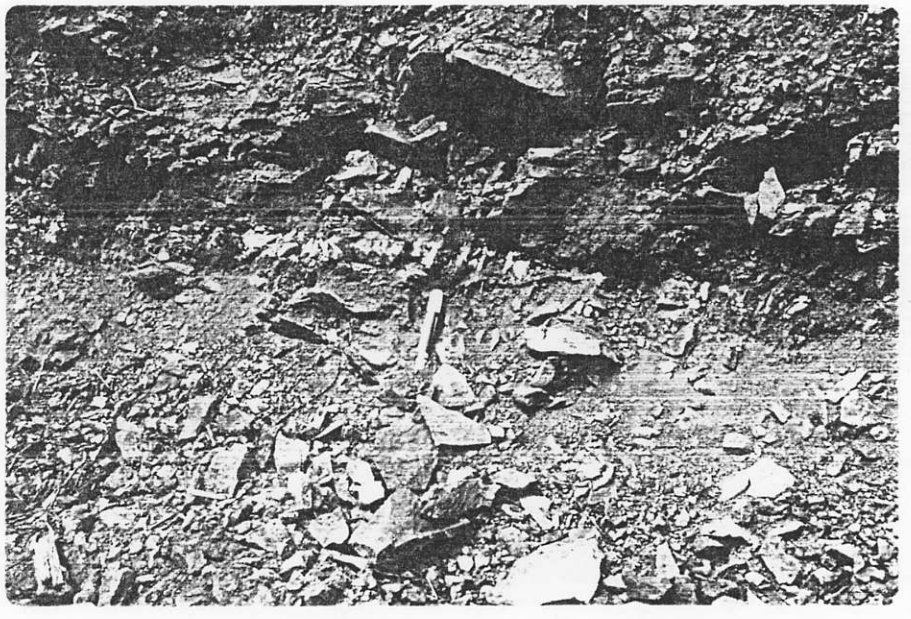


Plate No. 4B. Typical narrow vein in trench #2.

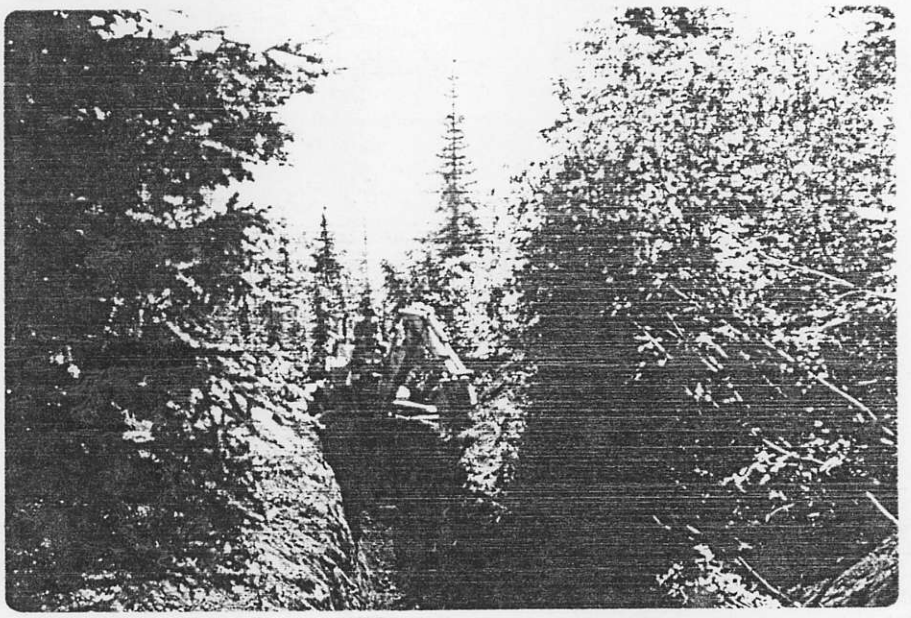


Plate No. 5A. Backhoe excavating upper end of trench #9.

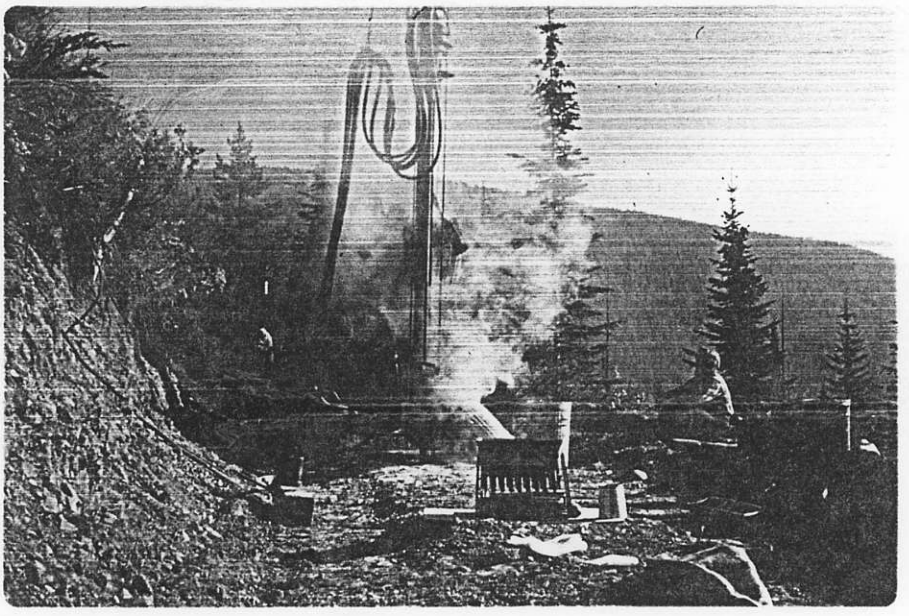


Plate No. 5B. Rotary percussion drilling Hole P-16, trench #4.

wide were found over about a 5 foot length of the large flat vein and for several feet beneath this one in a steeply dipping connecting vein. In all cases, the mineralization was very local,occurring as massive pods in otherwise barren bull quartz veins.

GEOPHYSICAL SURVEY-SELF POTENTIAL

A self-potential survey was run by an independent contractor over the geochemical anomalous area. All grid lines, at 200 foot separations were run from 122N to 148N, excluding lines 138N and 146W. Line length varied somewhat according to the width of the anomalies. Readings were taken at 50 foot intervals along each line. Approximately 3.8 line miles of survey were run.

ROTARY PERCUSSION DRILLING

Upon completion of all trenching, a limited program of rotary percussion drilling was carried out. A total of 3216 feet were drilled in 19 holes. This work was done by a contractor using an Atlas Copco rotary percussion drill and a Joy 600 c.f.m. compressor both mounted on a 4-wheel drive Dodge 5 ton truck chassis.

It was planned to drill two fences of holes across the anomalous zone approximately 500 feet apart. Due to the steep terrain, trenches 1 and 4 were selected as "road beds" from which to drill. It was also planned to drill each hole dry to 200 feet, but this had to be modified in some cases due to moisture causing the cuttings to stick in the hole. Holes were placed at 50 foot centers.

The first 12 holes were drilled using a 2 inch bit but this was changed to a one and seven-eighths inch one for the remaining holes. The smaller size bit gave better performance.

All holes had to be cased due to the soft and weathered nature of the bedrock. Depth of casing varied from 8 feet to 16 feet. After casing was set and drilling commenced, all cuttings were collected in 2-foot intervals in steel garbage cans. Each sample was then passed through a Jones riffle one or more times until it was reduced to approximately two pounds. The remainder of the cuttings was not saved.

A summary of all holes is shown in the following table.

THE FOLLOWING TABLE SUMMARIZES ALL DRILL HOLES:

HOLE NO.	LOCATION				DIP	LENGTH	CASING	REMARKS
	CLAIM	TRENCH	CO-ORDINATES					
P - 1	DONA 5	NO 1	129+06N	99+02E	-90	126	0-12	Rods broke off at 126'
P - 2	DONA 5	NO 1	129+43N	99+36E	-90	200	0-10	
P - 3	DONA 5	NO 1	129+78N	99+70E	-90	182	0-14	Stopped due to water
P - 4	DONA 6	NO 1	130+13N	100+04E	-90	200	0-14	
P - 5	DONA 6	NO 1	130+50N	100+38E	-90	140	0-14	Stopped due to water
P - 6	DONA 6	NO 1	130+83N	100+73E	-90	200	0-16	
P - 7	DONA 6	NO 1	131+21N	101+05E	-90	118	0-14	Stopped due to water
P - 8	DONA 6	NO 1	131+57N	101+43E	-90	200	0-10	
P - 9	DONA 6	NO 1	131+96N	101+73E	-90	200	0-10	
P - 10	DONA 6	NO 1	132+36N	102+03E	-90	200	0-12	
P - 11	DONA 5	NO 4	133+45N	92+42E	-90	150	0- 8	Stopped due to water
P - 12	DONA 5	NO 4	133+82N	92+81E	-90	150	0- 6	Stopped due to water
P - 13	DONA 5	NO 4	134+15N	93+19E	-90	190	0- 6	
P - 14	DONA 5	NO 4	134+45N	93+54E	-90	200	0-12	
P - 15	DONA 5	NO 4	135+82N	93+97E	-90	190	0-10	Stopped due to water
P - 16	DONA 5	NO 4	135+12N	94+35E	-90	200	0-10	
P - 17	DONA 5	NO 4	135+47N	94+65E	-90	160	0-12	Stopped due to compressor problem.
P - 18	DONA 5	NO 4	135+94N	94+89E	-90	162	0-10	Stopped due to water
P - 19	DONA 5	NO 4	136+30N	95+17E	-90	48	0-16	Stopped due to water
TOTAL FOOTAGE						3216 FEET		

SAMPLING AND ASSAYING

A great number of samples was taken, including 882 chip and channel samples from the trenches, 1475 percussion drill cutting samples and 211 soil samples. All were assayed for gold and silver, with a lesser number assayed for arsenic and antimony.

1. Trench Sampling - Numerous samples were taken from the trenches to see if there was a possibility of a large area of low grade gold mineralization. Since many of the veins exposed in the trench walls had a low dip angle, it was decided that vertical sampling would give the best results. Most trenches were sampled over their entire length with vertical sections at 5 foot and sometimes 10 foot centers. In most cases, if a quartz vein was included in the sample, a separate sample was also taken of only the vein material. Because of the large number of samples involved, only those with values of 0.02 oz/ton gold or better or with interesting silver values were plotted on the accompanying Map No. 82-L-1-A9.

2. Drill hole samples - All drill hole samples were taken and assayed in 2-foot intervals in an attempt to isolate any mineralized veins. As with the trench assays, only those above 0.02 oz/ton gold were considered of interest and were plotted on the accompanying sections. See Figure 1 and Figure 2.

DISCUSSION OF RESULTS

Geology and Mineralization - The geology may be summarized as consisting of a strongly faulted and fractured diorite dyke enclosed within shattered tuffs and argillite. Quartz veining is pervasive throughout the diorite but not the tuffs and argillite. Massive small pods of sulfides occur sporadically in some of the quartz veins.

Self-Potential Survey - The Self-Potential survey data was reviewed by Glen E. White, Geophysicist, who's firm conducted the survey on the property. The following excerpt is from his memo:

"The self-potential data is illustrated on plan form Fig. 82-L-1-A12 and profile form 82-L-1-A11. An interpretation of the results is shown on Fig. A12. The most noticable feature on the map is the voltage difference trending NW-SE across the northern part of the survey area. This survey was completed by the continuous profiling method, therefore, each point is directly related to each other with respect to an initial base station.

The maximum negative voltage was 912 millivolts and the maximum positive 55 millivolts; for a total difference of 967 millivolts, or almost 1 volt. Thus the large zone of negative numbers, which appears to relate to a shale horizon, must contain a number of heavily pyritized zones. A number of self-potential conductors are also depicted on Fig. A12 and have been referred to as self-potential linears. These are likely caused by possibly mineralized tectonic zones and/or steep topographic differentials."

In comparing the geological and geophysical data, it is readily apparent that the large negative voltages coincide with the pyritized black argillites to the northeast and that the inferred intrusive contact is fairly close to its mapped location. The geophysical survey did not locate a drilling target.

Assay Results

1. Trench Samples - Samples taken from the walls of the trenches show that almost all significant gold values (0.02 oz/ton or better) occur within narrow quartz veins. The fewer samples which show gold values over wider widths contain

mineralized vein material which "sweetens" the assay.

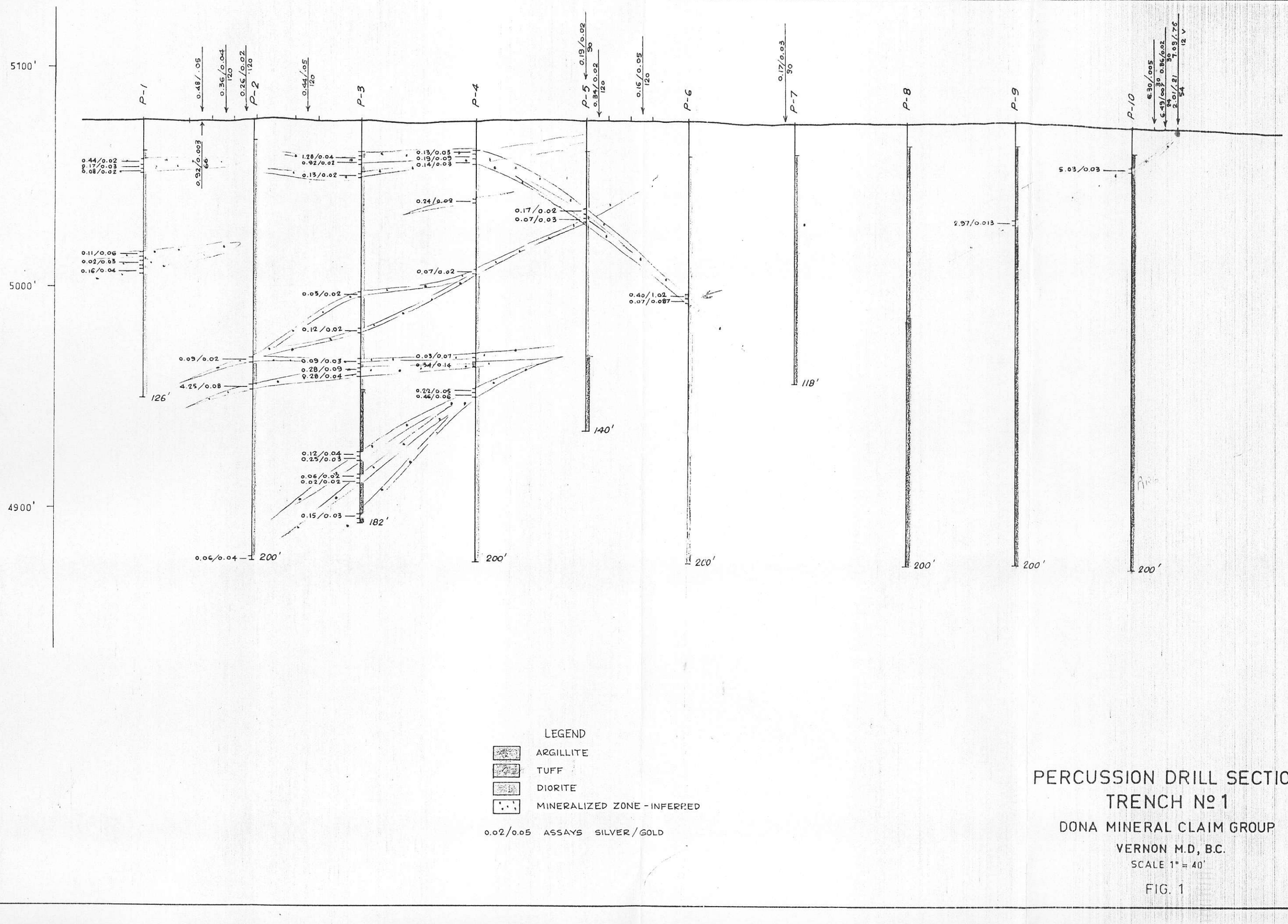
Assays shown on Map No. 82-L-1-A9 indicate gold values over lengths from 40 feet to 100 feet in trenches 1, 4, 5, 8, 10 and 11. These higher assays are due to one or occasionally two narrow mineralized veins which, being flat lying, follow the trench for a considerable distance and consequently are crosscut in numerous successive sample sections. It does not mean that there are many mineralized veins.

The following is a list of the better mineralized sections. All assays are the weighted average of the vertical samples. Also shown is the horizontal length over which these sections were taken.

TRENCH NO.	A S S A Y S		AVERAGE VERTICAL LENGTH	HORIZONTAL LENGTH
	GOLD	SILVER		
1A	0.085 oz/t	1.144 oz/t	2 Ft.6 In.	115 Feet
4 (a)*	0.205	1.000	6 Ft.5 In.	60 Feet
4 (b)*	0.030	0.063		40 Feet
10	0.035	0.118	5 Ft.9 In.	45 Feet
11	0.047	0.255	4 Ft.	100 Feet

* 4 (b) This sample composite of two horizontal samples taken over same shear zone as sampled in 4 (a).

2. Drill Hole Samples - All assays of 0.02 oz/ton or better gold are plotted on the enclosed drill sections (Fig. 1 and 2). These sections show a random scattering of clusters of very low assays. It is assumed that these reflect weakly mineralized veins similar to those seen in the trenches.



LEGEND

- ARGILLITE
- TUFF
- DIORITE
- MINERALIZED ZONE - INFERRED

0.02/0.05 ASSAYS SILVER/GOLD

PERCUSSION DRILL SECTION
TRENCH Nº 1

DONA MINERAL CLAIM GROUP

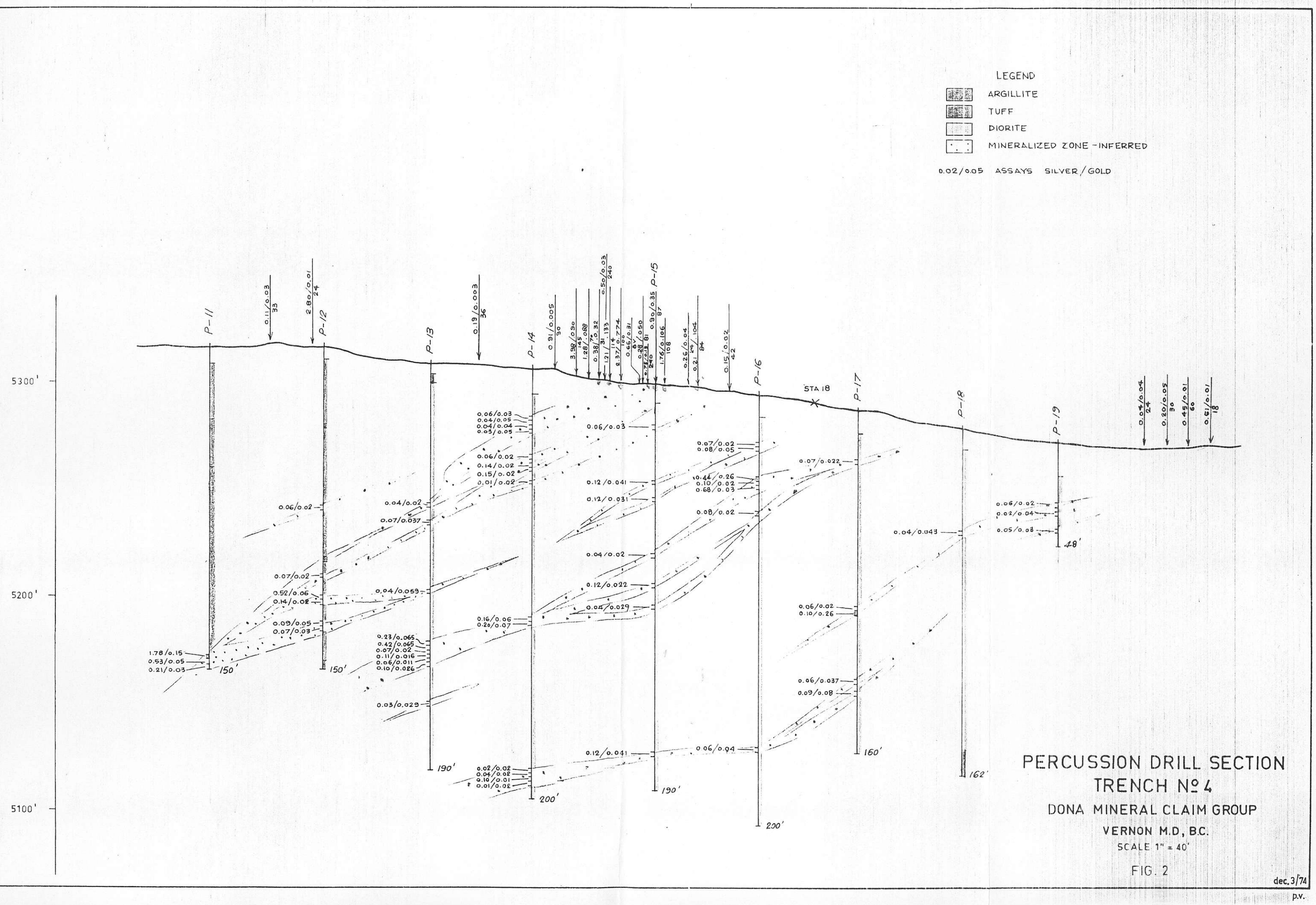
VERNON M.D, B.C.

SCALE 1" = 40'

FIG. 1

dec. 3 - 1974

p.v.


LEGEND
ARGILLITE
TUFF
DIORITE
MINERALIZED ZONE - INFERRED
0.02/0.005 ASSAYS SILVER/GOLD
5300'
5200'
5100'
P-11
P-12
P-13
P-14
P-15
P-16
P-17
P-18
P-19
STA 18
0.11/0.03 33
2.80/0.01 24
0.19/0.003 36
0.91/0.005 90
3.38/0.90 145
1.28/.088
0.38/.70 32
1.21/.31 133
2.37/.0.724 114
0.50/0.03 240
0.66/0.31 85
0.28/.050
2.24/3.13 81
2.40
0.30/0.35 87
1.76/0.106 108
0.26/0.04 24/104 84
0.21
0.15/0.02 42
0.04/0.04 24
0.20/0.05 30
0.45/0.01 60
0.61/0.01 18
1.78/0.15
0.53/0.05
0.21/0.03
150'
150'
190'
200'
190'
200'
160'
162'
48'
PERCUSSION DRILL SECTION
TRENCH Nº 4
DONA MINERAL CLAIM GROUP
VERNON M.D., B.C.
SCALE 1" = 40'
FIG. 2
dec. 3/74
p.v.

The mineralized zones are sketched in diagrammatically on the sections to infer their braided nature. It must be remembered that where a zone is indicated to be as much as 12 feet wide, it does not mean that there is a vein of this width. It should be interpreted that each 2 foot sample either contains a narrow mineralized vein or is contaminated by caving from an intersected vein higher in the hole.

It is readily apparent from the drilling that no widespread low grade mineralization is present or any sizeable higher grade vein or veins.

CONCLUSION

The object of the exploration program was to determine if either a vein deposit or a low grade disseminated deposit of economic grade was the cause of the geochemical anomalies. The results of the program indicate that neither are present.

Numerous small quartz veins were encountered, many of which carry very low values in gold and silver, say 0.02 oz/ton gold and 0.040 oz/ton silver. These could account for the geochemical anomalies.

In addition to the above weak mineralization, occasional pods of massive arsenopyrite - stibnite occur in a few veins. These occurrences would help intensify the geochemical anomalies.

It is concluded that no economic mineral deposit is present on the Dona property.

RECOMMENDATION

No further work is recommended on the Dona Claims at the present time.

REFERENCES

1. Ryback-Hardy, V. - Geochemical and Geophysical Report on the Dona Group of claims, November 21, 1973.

2. MacKenzie, W. J. - Summary Report, 1973 Fieldwork, Gold District Study, December 6, 1973.

3. Jones, A. G. - Vernon map area, British Columbia, G. S. C. Memoir 296, 1959.

Respectfully submitted,

Harold M Jones

H. M. Jones, P. Eng.
December 16, 1974

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A P P E N D I X I

REPORT ON FIELDWORK PROGRAM

DONA CLAIM GROUP - 1974

BY

W. J. MACKENZIE, P. ENG.

REPORT ON FIELDWORK PROGRAM

DONA CLAIM GROUP - 1974

BY

W. J. MACKENZIE, P. ENG.

INTRODUCTION:

During the period June 15th to September 30th, the following program of work was carried out on the Dona mineral claims to test the economic possibilities of the large significant geochemical soil anomaly and the discovery of substantial massive sulfide metal float resulting from the 1973 exploration.

Road Work:	4700' of vehicle access roads.
	1680' of tractor access roads.
Excavating:	5535' of trenching including 1540' of backhoe deepening.
Sampling:	211 soil samples.
	882 chip and channel samples.
	1475 percussion drill samples.
Drilling:	3216' were drilled in 19 holes by percussion drill.
Geophysical Surveying:	A S.P. Survey was done over the geochemical anomaly.
Geological Mapping:	The entire claim group was systematically mapped.

SUMMARY OF RESULTS:

Mineralization

Each of the 12 trenches excavated in the anomalous area exposed varying low degree silver and gold mineralization, none of which is of economic merit. The mineralization is invariably associated with quartz veining which ranges in thickness from

small fractions of an inch to two feet. The veins range in length from several feet to around one hundred feet; tend to pinch and swell; feather into a number of narrow stringers or tail off into a single stringer for some tens of feet before finally pinching out. Mineralization within the quartz is extremely erratic. Visible disseminated mineralization is not common whereas small lenses and nodules in the veins and pods along the foot-wall contact are. Silver and gold values in the nodules and pods seem to vary according to the proportion of arsenic and antimony sulfides and also to fineness of texture of the sulfides - the finer texture, the higher the gold values and in most cases,the silver values. All interesting mineralization observed to-date has been in quartz veins in or very close to diorite. Another factor that may control mineralization is the presence of hematite along the walls of the veins. The more interesting mineral exposures to-date are:

(a) No. 4 Trench - Shear zone in weathered diorite, including narrow quartz veins and accompanying bands of hematized wall rock with erratically scattered nodules and pods of Ag - Sb sulfides. Shear dips 20^{o} - 40^{o} southwest and measures 40 feet horizontal. 40' horizontal sample assays: 0.625 oz Ag and 0.08 oz Au. (approximately 20' true thickness) of which 20' horizontal sample assays: 0.75 oz Ag and 0.13 oz Au. (approximately 10' true thickness). A three inch massive sulfide pod in southwest end of trench assayed 150.8 oz Ag + 0.28 oz ~~Ag~~ Au (not included in any sample). A grab sample of siliceous, chloritized diorite from floor of trench, assayed 1.29 oz Ag + 0.01 oz Au.

(b) No. 6 Trench - Two interesting mineralized shear zones in diorite are exposed in this trench which is on grid line 140N.

The first one is located between 15 feet and 25 feet east of station 88E. There a schisted and hematized shear zone in diorite, containing a short lens of massive

sulfide 14 inches thick assays 5.42 oz Ag and 0.38 oz Au over 24". A vertical 84 inch sample, including the 24 inch sample, assays 2.05 oz Ag and 0.01 oz Au. Five feet to the east, a 132 inch vertical sample assays 4.93 oz Ag and 0.08 oz Au. The second shear zone is located 105' east of the first one and has similar dip and strike viz 40^{o} - 45^{o} west dip and N-S strike. At 105 feet, a vertical sample of 21 inches assayed 18.92 oz Ag and 0.05 oz Au. At 110 feet, a vertical sample of 140 inches assayed 2.51 oz Ag and 0.02 oz Au, including 18 inches of 17.2 oz Ag plus .04 oz Au. A grab massive sulfide pod not included in sample assayed, 198.3 oz Ag and 0.41 oz Au. At 115 feet, a vertical sample of 54 inches assayed 36.3 oz Ag plus 0.06 Au.

(c) No's 1A and 11 Trenches - See Sketch 5-2 - Sections of these trenches exposed a flat attitude quartz vein or combination of quartz stringers generally two to three feet below the surface, averaging 32 inches thick and assaying 0.75 oz Ag plus 0.09 oz Au over 180 feet of trench length. The assay values do not include any contribution from massive sulfide material removed from the trenches. The vein narrows to about 6 inches thickness to the southwest and outcrops into surface rubble.To the northeast, it is displaced down at least 20 feet by a fault striking northwest and dipping 42^{o} northeast. To the northwest, it apparently weakens in values as Percussion Drill Hole #3 shows an intersection of 48 inches, assaying 1.1 oz Ag and 0.03 Au; Holes No. 2 and 4 show very low values and Hole No. 1 could have missed the vein though the low values intersected from 16' - 20' might well be it. To the southeast the vein probably outcrops under surface rubble. A liberal estimate of mineable tonnage in the vein is 2000 tons which is not of economic significance.

PLACER GOLD TESTING:

Because of: (1) All quartz veins occurring in diorite and outcropping to surface, leave a leached residue of very fine free gold and hematite in the soil; and

(2) The drainage slope of the area of the property known to contain quartz veins leads to No. 3 Creek (excepting No. 6 Trench area), five trenches were excavated to determine the placer potential of No. 3 Creek. Four trenches were located in the vicinity grid station, Line 124N - 108E and one near grid station 127N - 50E. Of the southerly four trenches No's 1 and 2 were hand dug and failed to reach bedrock. Trenches No's 3 and 4 are of depths varying from 7 feet to 12 feet. Panning of many samples showed no gold content. Assaying of profile samples gave trace gold results in all but two samples i.e. the top 3 feet of Trench #4 which gave 0.003 oz/ton and the bottom sample, 8 feet - 9 feet, above bedrock of Trench #5 which also gave 0.003 oz/ton.

Two placer leases were staked over the whole length of No. 3 Creek but were not recorded. Placer possibility written off.

INVESTIGATION OF HIGH GOLD ANOMALIES IN SOILS:

Numerous soil samples from the geochemical grid stations and trench profile locations which gave ppm assays ranging from a low of 0.50 ppm to a high of 102.0 ppm were panned to obtain a quick check on the reliability of the laboratory analyses. In all instances, the gold showing in the pan was in reasonable proportion to that

recorded on assay returns. Panning of a number of soil samples, about 10' down slope from locations giving the higher gold assays, showed little or no gold which suggests no appreciable transporation of the gold from its source. In each instance, the source was no doubt arsenopyrite in or bordering quartz veins. Some veins in fractures in the diorite are so small that the narrow hematized bands of material containing them have to be crushed to make the quartz visible. Unfortunately, the quartz veins of all sizes are too widely spaced to provide economic distribution of gold in the soil.

PERCUSSION DRILLING RESULTS:

At time of writing all percussion drill-hole assays for Trench No. 1 section were to hand and those of any significance plotted on long section (See Sketch S-3). The assays pretty well prove the following:

1. No commercial ore zones are indicated.
2. The diorite occurs as a sill, not a stock or plug.
3. The tuffs and argillite contain no promising gold or silver values other than the small isolated lense of the northeast end at the section.
4. Any potentially economic mineral concentration will be in diorite and will probably be confined to zones of pronounced shearing and silicification.

RECOMMENDATIONS:

(1) If the percussion drilling results under No. 4 Trench are encouraging, a program of diamond drilling should be planned to explore the downward extension of the diorite to the west and northwest of the trench.

(2) If no encouragement results from the No. 4 Trench, percussion drilling, a "last straw" effort to prove or disprove a economic orebody on the Dona Property would be to explore the hangingwall section of the diorite sill from points of easy road access to determine if any concentration of mineralization occurs along the contact of the diorite and the impervious overlying tuffs and argillite.

The many instances of gold and silver association with quartz veins and hematized wall rock may be the result of the siliceous solutions remobilizing Fe, Ag, Sb, Ag and Au from the type of diorite seen in outcrops and the trenching. However, another possibility is that the original diorite sill was introduced, sheared and fractured by a later mineral rich quartz-diorite which provided the mineralization observed to-date.

GENERAL:

The amount of efficient work accomplished by a 450 D John Deere, tracked, front end loader with backhoe attachment in the road building and trenching on the property was surprising and satisfying. The operator and owner, Stan Brewer, is a fourth generation bush-man and prospector who worked energetically and intelligently at all times.

It is regretted that the past season's program on the Dona did not turn up an orebody.

W. J. MacKenzie