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January 25, 1973

827194

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I	Diamond Drill Logs for S-72-1 to S-72-5 incl.
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REPORT ON GEOLOGY AND DRILLING

AT THE

MOUNT SICKER PROPEPTY, 1972

N.T.S. 92 B/13

BY

J. W. SIMPSON

I) SUMMARY

Ducanex optioned the Mount Sicker property in the spring of 1972 for the purpose of testing the possible extension of known, but now mined out, mineralization at the old mine site and exploring for zones of similar volcanogenic Cu-Zn mineralization on other parts of the property. The theory that other zones existed at depth or along strike was based on analogy to Western Mines property at Buttle Lake where several discontinuous but related pods of massive sulphide are being mined. Other evidence to support this theory was found in reports of exploration in the early 1900's when zones of 2% Cu were considered non-economic. It was hoped that large zones of relatively low grade material, similar to the New Brunswick deposits, or smaller higher grade massive sulphides similar to Western could be located.

Other than V.L.F. and magnetometer surveys, neither of which is sufficiently discriminatory in this rugged area to be useful, no geophysics had been done. If massive sulphides with an appreciable strike length existed within two hundred feet of the surface a C.E.M. survey would locate them. Other systems of EM and gravity surveys have too many topographical problems to be useful and were thus rejected. It is considered

I) SUMMARY (cont'd)

that IP would not be sufficiently discriminatory, in view of the abundance of pyritic schists and graphitic sediments, to be of use. It was thus decided to geologically map the property in reasonable detail, paying particular attention to ore controls. With this information it would be possible to locate areas similar to the ore bearing zone. These "geologically favourable" environments could then be run with CEM to locate drill targets.

I. M. Watson, P.Eng., was retained to map an expanded grid on the scale 1" = 200'. The CEM survey was done by Peter Walcott Associates. Based on results of this preliminary work three areas were selected and drilled in the fall.

II) CONCLUSIONS

Results of the drilling indicate that the sequence of schists North of the main E-W body of diorite contains disseminated, syngenetic copper. Low values were obtained from quartz-sericite schists (lightly sheared acid tuffs?), chlorite schists (sheared flows or pyroclastics of andesitic composition?) and from beds of pyritic, massive chert. Existence of the mineralized schist beds has never been reported but one suspects many of the old workings in the area started on outcrops of this material. It is interesting to note in passing that careful geological interpretation was solely responsible for prediction and discovery of this mineralized environment. The "NE copper zone" has been extended 1500' from the original area worked on by Mount Sicker Mines. Unfortunately neither grade nor width improved along strike.

Drilling under the Tyee workings was negative in the sense that no mineralization of note was intersected although the main fault structure and lithologies controlling the old ore zones were cut and identified.

III) RECOMMENDATIONS

Potential for improvement in thickness and grade of the mineralized schist "beds" exists between the two areas drilled north of the 26N tie line. Geological mapping is not complete in the area due to overburden cover and steep topography. Geochemistry has been shown to be a useful guide to mineralization but it probably would not define higher grade areas within the favourable horizon, (i.e. drill targets). However, a geochem survey might help to find the hanging wall of the mineralized schist horizon. Grid diamond drilling is the only reliable method of testing the remaining areas between Fortuna and Bluebell and the on strike extension from these workings.

Potential of the dip and strike extension of the old workings has not been completely tested. To do this would involve a very expensive program and this cannot be recommended at the present time in view of discouraging results from S-72-5. However, the strike extensions, particularly the possible fault displaced west end of the zone, deserve consideration as a drill target.

From a purely geological point of view, economic sulfides might still exist on the Mount Sicker property. A small geochem survey on the grid north of 26N and approximately 5000' of diamond drilling would be needed to completely test this possibility. It should be considered that drill road building in this part of the property will be expensive and thus an overall budget of the order of \$85,000 would be required for the program I have outlined.

4.(a)

If sufficient funds are available for work of this type in 1973 I recommend proceeding with this program.

IV) INTRODUCTION

A) Location & Access

The property is situated on the north and west flanks of Big Sicker Mountain, 35 air miles NW of Victoria, B.C. Access is by 8 miles of secondary road, called the Mount Sicker road, from its junction with Highway 1 (Victoria-Nanaimo).

Major power lines and a railway roughly parallel Highway 1. A deep-sea port is located at Crofton only 10 miles from the property.

Figure S-1 shows the general location.

B) Claims

Title to the property is complicated by the overlap of Crown Grants, E & N Railway (now C.P. rail) land grant and normal mineral claims. There are 5 separate ways mineral rights are held by Mount Sicker Mines Limited and because of this complex situation, it was decided to leave the property in Mount Sicker's name. Our rights to the property are secured by agreement only at the present time.

Table 1 lists the main features of title to the Mount Sicker property.

(1) Crown Granted Mineral Claims (total 26)

<u>Lot No.</u>	<u>Name of Claim</u>	<u>Lot No.</u>	<u>Name of Claim</u>
✓ 53-G	Estelle	108-G	Muriel Fraction
✓ 54-G	Westholme	✓ 87-G	Doubtful Fraction
✓ 51-G	Blue Bell	✓ 85-G	Thelma Fraction
✓ 50-G	Moline Fraction	✓ 86-G	Imperial Fraction
✓ 4-G	Acme	✓ 20-G	Herbert Fraction
✓ 18-G	Tony	✓ 110-G	Phil Fraction
✓ 47-G	Nellena	✓ 43-G	NT Fraction
✓ 59-G	Westholme Fraction	✓ 41-G	Magic Fraction
✓ 21-G	Dixie Fraction	✓ 39-G	Richard III
✓ 44-G	Golden Rod	✓ 37-G	Key City
✓ 18-G	Donagan	✓ 35-G	Lenora
✓ 19-G	XL	✓ 36-G	Tyee
✓ 63-G	Donald	✓ 60-G	Internation Fraction

All of the above are known to be in good standing and free of liabilities and charges.

(2) Located Mineral Claims (total 47)

These claims cover land with alienated base metal rights and thus the value of the claims is to hold precious metal rights only.

<u>Claim Name</u>	<u>Record Number</u>	<u>Present Expiry Date</u>
C.F. Group 1-8	14150-14157 (N)	October 25, 1973
C.F. Group 13-18	14162-14167 (N)	October 25, 1973
C.F. Group 25-28	14185-14188 (R)	December 8, 1973
C.F. Group 29-31	14197-14199 (R)	December 20, 1973
C.F. Group #33	14201 (R)	December 20, 1973
C.F. Group Fraction	14174 (N)	October 25, 1973
B 1-4	16372-16375 (D)	April 13, 1973
B 5	16446 (D)	April 21, 1973
B 6-22	16376-16392 (D)	April 13, 1973
Dawn 1 & 2	16448-9	April 30, 1974

(3) Mineral Leases (B.C.) (total 12 claims)

<u>Lease</u>	<u>Crown Grants</u>	<u>Present Expiry Date</u>
M-13	✓ 33G, 34G, 55G, 56G, 64G, 65G, 100G	December 9, 1973
M-17	5G, 6G, 7G & 89G	August 3, 1973
M-18	59G	August 3, 1973

(4) Mining Agreement

Mining Agreement #73 dated May 1, 1971 between Canadian Pacific Oil & Gas Limited and Mount Sicker gives Mount Sicker the right to explore a 1010 acre parcel of land and the option to lease said lands. The option has a term of two years expiring on May 1, 1973.

(5) Mining Lease

Mining Agreement #8 comprising 1800 acres (largely overlying crown granted claims) has been taken to lease. A new agreement between Mount Sicker and Canadian Pacific Oil & Gas has been drafted and the parcel of land is now referred to as Mining Lease #17. The date of this agreement is September 17, 1972.

A claim map showing all of the above groups is included with this report as Fig. S-2.

(C) History of Property

(1) General

The following is a summary of the detailed account provided by Sheppard, 1968⁽¹⁾.

Oxidized outcrops of the south orebody were discovered by prospectors in 1897. Development of the then independant Tyee and Lenora claims began almost immediately and in 1900 the

(1) General (cont'd)

two were amalgamated. Production ensued until 1907 and most of the south ore zone was removed at this time.

Ladysmith - Tidewater Smelters Limited carried out development on the Lenora-Tyee section of the ore zone between 1926 and 1929. No ore was mined.

Some of the best exploration was done during 1939 and 1940 by Sheep Creek Mines Limited. Their work included considerable diamond drilling from surface and underground. I understand the North ore zone was outlined at this time but it was not mined. Unfortunately none of the Sheep Creek drilling results are available.

Between 1943 and 1947 Twin J Mines operated the mine, first for Wartime Metals Corp. and later for the open market.

The most recent mining was done by Vancouver Island Base Metals Limited between 1949 and 1952. This was apparently a none too successful salvage job where many of the old pillars were removed. A fatal accident in 1952 was a major cause of the shut down.

Mount Sicker Mines Limited began work on the property in 1967 and they have spent approximately \$200,000 on exploration work. The major thrust of their work was to investigate the feasibility of heap leaching the low grade copper found in dumps and wall rocks of the old mine. This method of extraction was found to be not feasible.

(2) Ducanex Involvement

In December 1971 I wrote a report on the property after having received a letter from Mr. Field, president of Mount Sicker, inviting investigation of his property. It was agreed that an option should be entered into and a work program undertaken. On June 27, 1972 the option agreement was executed and work at the property began shortly thereafter.

The old grid was cleaned out and expanded to the North. Ivor Watson mapped the grid on a scale 1" = 200' in July 1972. During the latter part of that month a CEM Survey was run over the entire grid with a coil spacing of 200'. The horizontal shoot-back method was employed to eliminate topographic effects.

No EM conductors were located with the CEM unit, but based on encouraging conclusions of the Watson report a drilling program was mounted. Due to shortage in staff this drilling was postponed until the fall. In late October, November and early December five drill holes totalling about 3000' were completed. Mineralization was intersected in every hole but no single intersection was sufficiently interesting to justify "step-out" drilling.

V) GEOLOGYA) Regional

The Sicker Group rocks (Fyles, 1955)⁽⁶⁾ underlying Mount Sicker, Western Mines property at Buttle Lake and elsewhere are Permian or earlier (the oldest rocks known on Vancouver Island). The belt, hosting the Mount Sicker mineralization, extends from Saltspring Island to just west of the Chemainus River or a distance of 12 miles. The belt is approximately 2 miles wide, trends WNW, and dips steeply.

Rocks in the Group are intermediate to acid volcanic flows and tuffs with minor sediments and chert. Most of these are regionally metamorphosed and can best be described now as quartz-sericite, quartz-chlorite and chlorite schists. Series of quartz-feldspar porphyries referred to by early workers as Tyee porphyries are thought to be hypabyssal, crystallizing at about the time of the major deformation. Intrusive into this sequence are large concordant bodies of gabbro or diorite. These are also referred to as Tyee Porphyries but they are more obviously intrusive than quartz-feldspar rocks and are presumed to be somewhat younger (because they are relatively undeformed and unaltered).

Mineralization, in the form of pyrite, is abundant in the more acid schists but is sparse in other members of the Sicker Group.

B) Detailed

The reader is referred to the Watson report and map (August, 1972). In addition, refer to maps contained herein. Included is an overlay (Fig. S-3) which matches the Watson map and shows mineralization examined in outcrop plus areas where diamond drilling was carried out. Also included are a cross section through the Tyee zone with drill hole S-72-5 (Fig. S-4) and a geology map on the scale 1" = 100' (Fig. S-5) in the area surrounding drill holes S-72-1 and S-72-2.

Road building to drill sites for the first two holes uncovered a fair amount of bedrock which was mapped and helped simplify the geological picture obtained by Watson with far less exposure.

Diamond drill logs are included with this report and should be referred to for a detailed description of the drill hole geology. Three main areas were tested by drilling and a short summary of the geology of each of these areas follows:

(i) Bluebell Workings (Area "B" - Watson, 1972)

Old shafts, adits and small pits are found in virtually every part of the property. In the 1000' x 1000' area centered at 4W - 29+50N several old workings have been located, the most impressive of which was apparently called the Bluebell. It involved a shaft of unknown depth and tunnel of over 100' both of which followed a stronger pyritic shear in "quartz-eye" sericite schist.

The workings are in an area of structural complexity near the favourable diorite-acid schist contact. These features combined with the near certainty that the old workings followed some kind of mineralization led to diamond drill testing of the structure. Hole S-72-1 cut the schistosity (and primary bedding in this case) at a good angle (average $70-80^{\circ}$ to axis of core). The sequence of rock is possibly overturned but at present varies from andesite at the top of the hole, to "quartz-eye" sericite schist to graphitic sericite schist and finally acid tuffs.

These schists, underlying the Bluebell, are lightly sheared rhyolite porphyries or rhyolite crystal tuffs. The "quartz-eyes" are rounded and fairly abundant and could be either metacrysts, formed around a crystal fragment nucleus or quartz phenocrysts from an original porphyry. Feldspars and mafics which might have aided in solution of this question are now completely altered to sericite and talc.

The second drill hole was just north of the first but an interpreted fault cut between them. The existence of this fault was confirmed by intersections in the second hole and also by a completely different lithological sequence in what would otherwise have been the same horizon. No "quartz-eye" schist was found but a little quartz-sericite schist was cut. The sequence was predominantly made up of chlorite schist, quartz-chlorite schist and mudstone.

The schist-diorite contact was not penetrated by either drill hole but the main fault zones, which are associated with ore in the old mine, were tested.

(ii) Fortuna Adit (Area "A" - Watson, 1972)

At 61E-30N an area of extreme deformation and pyritization was tunnelled by "old timers". The exact date of development of the Fortuna Adit is unknown but it is presumed to be near the turn of the century. Mount Sicker Mines Limited did some bulldozer work in the area in 1968 but steep topography limited effectiveness of this program. Soil sampling of the area adjacent to a creek which drains the adit (i.e. on lines 60E & 68E) gave several values over 1000 ppm. Cu and low zinc values.

Geochemical response, proximity to a schist-diorite contact, heavy pyritization, known mineralization along strike (NE Cu Zone) and belief that the old timers followed mineralization with their adit led to diamond drill testing.

Quartz sericite schist, chlorite schist, minor andesite and interformation cherts were cut in holes S-72-3 and S-72-4. The sequence is basically similar to that encountered near Bluebell with exception of the presence of chert and absence of quartz-eye schists at Fortuna. Bedding and schistosity could not be differentiated with certainty in this area but it was assumed that bedding closely followed schistosity which dipped fairly steeply to the south.

(iii) Tyee Shaft Area

Development of the main ore zones at Mount Sicker stopped at the 400' level with only one exception, namely the Tyee shaft. In the B.C. Minister of Mines report, 1902⁽³⁾ a report on the Tyee states that closely below the 400' level of the shaft, green schists carrying about 2% Cu were encountered. This was apparently similar to material flanking the massive sulphide ore zones being mined at that time on higher levels. At the 1000' level (see B.C.M.M. 1905⁽⁴⁾) 3' of "barite-ore" was discovered. This zone was also cut on the 1150' and 1250' levels (B.C.M.M. 1906⁽⁵⁾). Grade of this deep material is unknown but at least some basis for the theory that ore exists beneath the old workings was given.

A deep drill hole, S-72-5, was put down under the old Tyee workings 400' east of the shaft to test for the possibility of a thick sequence of disseminated mineralization in chlorite schists and/or a zone of massive sulphides within the main fault, as suggested by the work referred to above. The hole was started at -60° but flattened considerably and ended up cross cutting the structure at a favourable angle (see Figure S-4). Rocks encountered were not unexpected. Thick sections of schists (quartz-sericite, chlorite) were separated by diorite. The contacts between the diorite and schists were examined carefully and found to be intrusive, i.e. top and bottom with definite hornfels development. In general the contacts were concordant and the intrusive bodies are definitely sill-like. The main fault, where intersected, is a zone of many faults with signs of substantial movement.

VI) MINERALIZATIONA) Old Mine

Published production statistics show that 305,787 tons grading 0.13 oz./ton Au, 2.75 oz./ton Ag, 3.3% Cu and 7.5% Zn were milled in the seven stages of mining. The mining history, previously outlined, indicates that hope for finding reserves within the area of old workings is not realistic. Samples of the ore can be found in hand sized specimens scattered around the Lenora workings and, in place, about 75' from the portal of the Lenora #2 adit. Entry into the old workings is not advisable due to their very poor conditions.

Other mineral showings were examined as shown on Figure S-3 .

B) 1972 Drilling Results

Table 1 summarizes the interesting intersections.

TABLE 1

<u>Drill Hole</u>	<u>Depth</u>		<u>%Cu</u>	<u>Assay</u>		
	<u>From</u>	<u>To</u>		<u>%Zn</u>	<u>Au</u> oz./ton	<u>Ag</u> oz./ton
S-72-1	312	322 (10')	.11	.02	.005	.02
	322	333 (11')	.41	.02	tr	.03
	333	343 (10')	.17	.02	tr	tr
	(31' - 0.18% Cu)					
S-72-3	22	32 (10')	.58	.02	.005	.03
	32	42 (10')	.36	.03	.005	.04
	(20' - 0.47% Cu)					
	87	89 (2')	1.64	.04	.005	.12
	249	256 (7')	.75	.02	.005	.06

TABLE 1 (cont'd)

<u>Drill Hole</u>	<u>Depth</u>		%Cu	%Zn	<u>Assay</u>	
	<u>From</u>	<u>To</u>			Au oz./ton	Ag oz./ton
S-72-4	50	60 (10')	.27	.03	.005	.04
	307	308 (1')	3.52	.05	.005	.26
	459	460 (1')	.87	-	-	-
	470	475 (5')	.22	-	tr	.02
	496	501 (5')	.41	.02	tr	tr
S-72-5	452	462 (10')	.05	.46	-	-

As can be seen from this table none of these sections are of economic importance either for low grade or insufficient thickness.

VII) REFERENCES

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- (6) Fyles, J. T., Geology of the Cowichan Lake Area, B.C. Dept. of Mines, Bull.37, 1955, page 11-19.

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Western Miner, pp. 38-44, March 1945.

DUCANEX RESOURCES LTD.



MOUNT SICKER PROPERTY
BRITISH COLUMBIA

100 0 100 200
MILES

DIAMOND DRILL RECORD

PROPERTY_____MOUNT SICKER

HOLE NO. S-72-1

DIP -45°

LOCATION 33 + 24 N. / 1 + 75 W.

SHEET NO. 1

LOG

LOG		
FROM	TO	DESCRIPTION
0	10	Overburden.
10	52 $\frac{1}{2}$	10-14' broken rock probably due to surface frost action. Rock is medium green-grey, medium grained andesite; some minor zones with epidote amygdules $\rightarrow 1/8"$; mafics too small to recognize; Tr. sulphide and 1 grain of chalcopyrite at 34'.
52 $\frac{1}{2}$	114	Quartz-Sericite schist, pyritic, heavily oxidized to 57'. Core angle 45° (to axis of hole) but flattens after the first 10' to about 70°. Throughout, the core angle varies from 45° to 90° with the average being about 70°-80°. The rock is probably a rhyolite porphyry or crystal tuff (many "quartz eyes" of 2-4mm. are apparent). Feldspars are now altered to sericite and talc. Pyrite content varies from $\frac{1}{2}\%$ to over 20% (in some 6" sections). Moderate oxidation to about 100' then rock becomes fairly fresh.
		<u>Fault Zones:</u> 65 - 66 $\frac{1}{2}$
		92 - 93
114	119	Light green rhyolite amygdaloidal flow. 10% banded, fine grained pyrite. 6" conformable hornfelsed zone at upper contact (possibly a chilled margin effect from a sill?): lower contact is gradational

ASSAYS

[illegible]

LEGEND

- | | |
|---|---------------------------------|
| 1 | Andesite |
| 2 | "Quartz eye"
sericite schist |
| 3 | Acid tuffs |
| 4 | Graphitic
sericite schist |
| 5 | Mudstone |
| 6 | Quartz chlorite
schist |
| 7 | Chlorite schist |
| 8 | Quartz sericite
schist |

SCALE 1 inch = 60'

Collar Lat. _____ Dep. _____

Collar Elevation 1540'Azimuth at Start S 40° W

Azimuth at End

DIPS:

F. _____ Ft. _____

Ft. _____ Ft. _____

Ft.

<p> F_t </p>	<p> F_t </p>
---------------------------	---------------------------

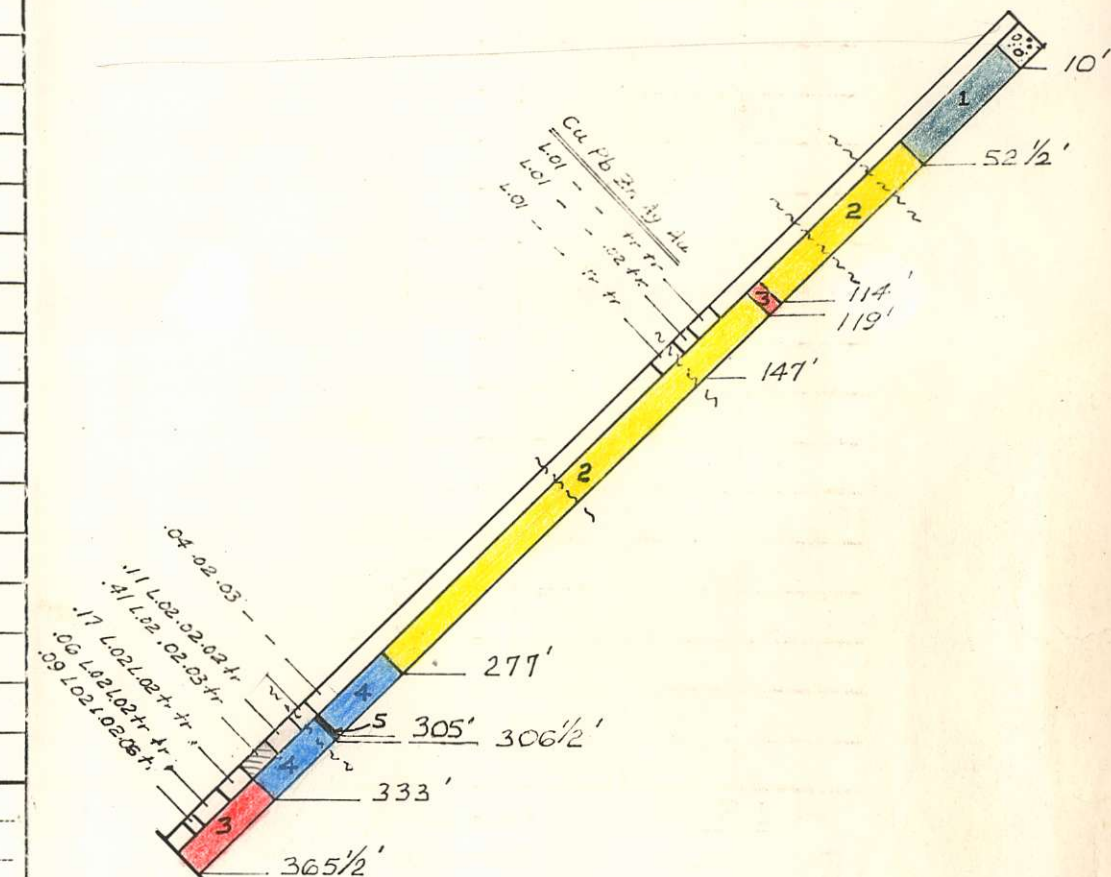
Logged By J.W. Simpson

Sampling By D. Compton

Assaying By Bondar Clegg

SECTIONS

Started Oct. 27/72 Completed Oct. 30/72 Depth of Hole 365½' Proposed Depth --



DIAMOND DRILL RECORD

PROPERTY.....

HOLE NO. S-72-1

DIP -45°

LOCATION _____

SHEET NO. 2

LOG

LOG		
FROM	TO	DESCRIPTION
		over about 1'.
		SECTION QUITE POSSIBLY OVERTURNED and hornfels is chilled margin at base of flow.
119	277	Quartz-sericite schist as before. Core angle now 70-80°, quartz eyes (both rounded and angular) form up to 20% of the rock locally.
		139-140½ about 30% pyrite in irregular bands up to ½" *probably old-timers lead*
		147-149 - probable fault zone - some oxidation and weak silicification.
		157½-159 - about 10% pyrite - fine bands
		175-177 - possible minor fault.
		205-209' - possible minor fault with some oxidation and minor fracturing.
		219-222' fracturing and possible fault.
		- about 2' lost core.
		256½-277' - intense sericitization and minor silicification (some quartz veins to 2").
		Some lost core.
277	305	Medium grey graphite-sericite schist. More intensely pyritic probably derived from argillaceous tuff - very finely laminated.
		Pyrite probably averages 10% now with some zones as high as 50% sulphide; minor quartz veining with irregular veins → 1" wide.
		*Many sedimentary features such as cross bedding and graded bedding.

ASSAYS

A S S A Y S							
SAMPLE No.	FROM	TO	WIDTH	V A L U E S			
				Cu	Pb	Zn	Ag/Au
228N	129	139	10'	L.01			tr/tr
227N	139	144	5'	L.01			0.02/ tr
229N	144	154	10'	L.01			tr/tr
226N	295	305	10'	.04	L.02	.03	

LEGEND

<div style="border-bottom: 2px solid black; display: inline-block; padding-bottom: 2px;">LEGEND</div>		<div style="border-bottom: 2px solid black; display: inline-block; padding-bottom: 2px;">FIELD DATA</div>	
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px; margin-bottom: 2px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px; margin: 2px;"></div>	SCALE inch	Collar Lat. Dep. Collar Elevation Azimuth at Start S. 40° W. Azimuth at End DIPS: Ft. Ft. Ft. Ft. Ft. Ft. Ft. Ft.	Logged By <u>J. W. Simpson</u> Sampling By Assaying By

SECTIONS

Started.....Completed.....Depth of Hole.....Proposed Depth

DIAMOND DRILL RECORD

PROPERTY _____ HOLE NO. S-72-1 DIP -45° LOCATION _____ SHEET NO. 3

LOG		
FROM	TO	DESCRIPTION
		Core angle 70-90°.
305	306½	Light green slightly sheared mudstone - some quartz veining and epidotization - could be an extremely fine pyroclastic - waterlain.
		Rare pyrite. <i>chlorite</i>
306	333	Graphitic sericite schist: as before - possible fault 311'. Traces of chalcopyrite. 318-358 - minor chalcopyrite in disseminated fairly coarse grains.
		323-325½'-some very coarse chalcopyrite - often crosses bedding ~1% Cu (for this 2½')
		After 325 rock becomes slightly coarser grained (but it still is a fine-medium grained tuff).
		330-331'-some good, coarse, chalcopyrite in part associated with a quartz veinlet.
333	365½	Quartz-sericite schist as before except with fewer quartz eyes. Slightly less sulphide than preceeding unit but more than other sericite schists; traces of chalcopyrite to 358' then sulphide content drops off quickly.
	END	

ASSAYS							
SAMPLE No.	FROM	TO	WIDTH	V A L U E S			
				Cu	Pb	Zn	Ag/Au
230 N	312 ^{95.1}	322	10'	.11	L.02	.02	.02/.005
231 N	322 ^{98.2}	333 ^{100.6}	11'	.41	L.02	.02	.03/tr
232 N	333 ^{106.6}	343 ^{104.6}	10'	.17	L.02	L.02	tr/tr
233 N	343	353 ^{107.6}	10'	.06	L.02	L.02	tr/tr
234 N	353	358 ^{109.1}	5'	.09	L.02	L.02	.05/tr

SECTIONS			
Started _____	Completed Oct. 30/72	Depth of Hole _____	Proposed Depth _____

SUMMARY

In S-72-1 a 42½' capping of intermediate volcanics overlies a sequence of acid tuffs with only one interflow of light green volcanics.

There are many sedimentary features indicating that the tuffs were water lain. Weak evidence suggests that the entire section may be overturned.

The main mass of rock (52-114' and 119-277') is a lightly sheared rhyolite porphyry or rhyolite crystal tuff. Quartz eyes are generally rounded and fairly abundant. Feldspars and mafics (if there were any) are altered to sericite and talc.

Pyrite is abundant throughout the schists and varies from ½% to over 30%. Average pyrite content of the sericite schist would be about 4%. Argillic tuffs from 277-305' and 306½-333' are higher in pyrite (say 10-15%) and chalcopyrite is present as fairly coarse blebs and disseminations.

Economic potential in this sedimentary sequence is confined to the lower (in the hole) band of graphitic schists from 306½-333'. Oxidation and leaching would limit the effectiveness of surface exploration.

November 1, 1972 J.W. Simpson

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-2

DIP -45°

LOCATION 36 + 34 N. - 2 + 20 W.
(180' E. of 4 W.)

SHEET NO. 1

LOG

LOG		
FROM	TO	DESCRIPTION
0	19	Overburden.
19	27½	Finely banded quartz-chlorite schist; some carbonate bands, some quartz-graphite bands. In general these bands vary from 1/16-½" and are irregular. Core angle varies considerably. No sulphides.
27½	55	Patchy & irregularly banded quartz chlorite schist. Differs from bed, above, in high degree of epidotization. Rock now about 30% epidote (after feldspar?). Minor fine-grained pyrite. No chalcopyrite noted. Some hematite (after pyrite?).
55	60	Fine-grained epidote-chlorite-quartz tuff. Massive except for minor carbonate filled fracture.
60	99	Variously altered siliceous pyroclastics. Alteration is mainly epidotization and carbonatization. 73-83' more chloritic section fine-grained and less altered. Minor pyrite disseminated in some sections. 73' - 2" band with about 15% pyrite.
99	150	Fine-grained, light grey, lightly sheared quartz-sericite schist, possibly a limy mudstone modified by shearing. Core angle fairly uniform and almost at right angles to core axis.

ASSAYS

[illegible]

LEGEND

As on log
S-72-1

SCALE 1 inch = 60'

Collar Lat. _____ Dep. _____
Collar Elevation 1450'
Azimuth at Start 210°
Azimuth at End _____

DIPS:

Ft. _____ Ft. _____

Ft. _____ Ft. _____

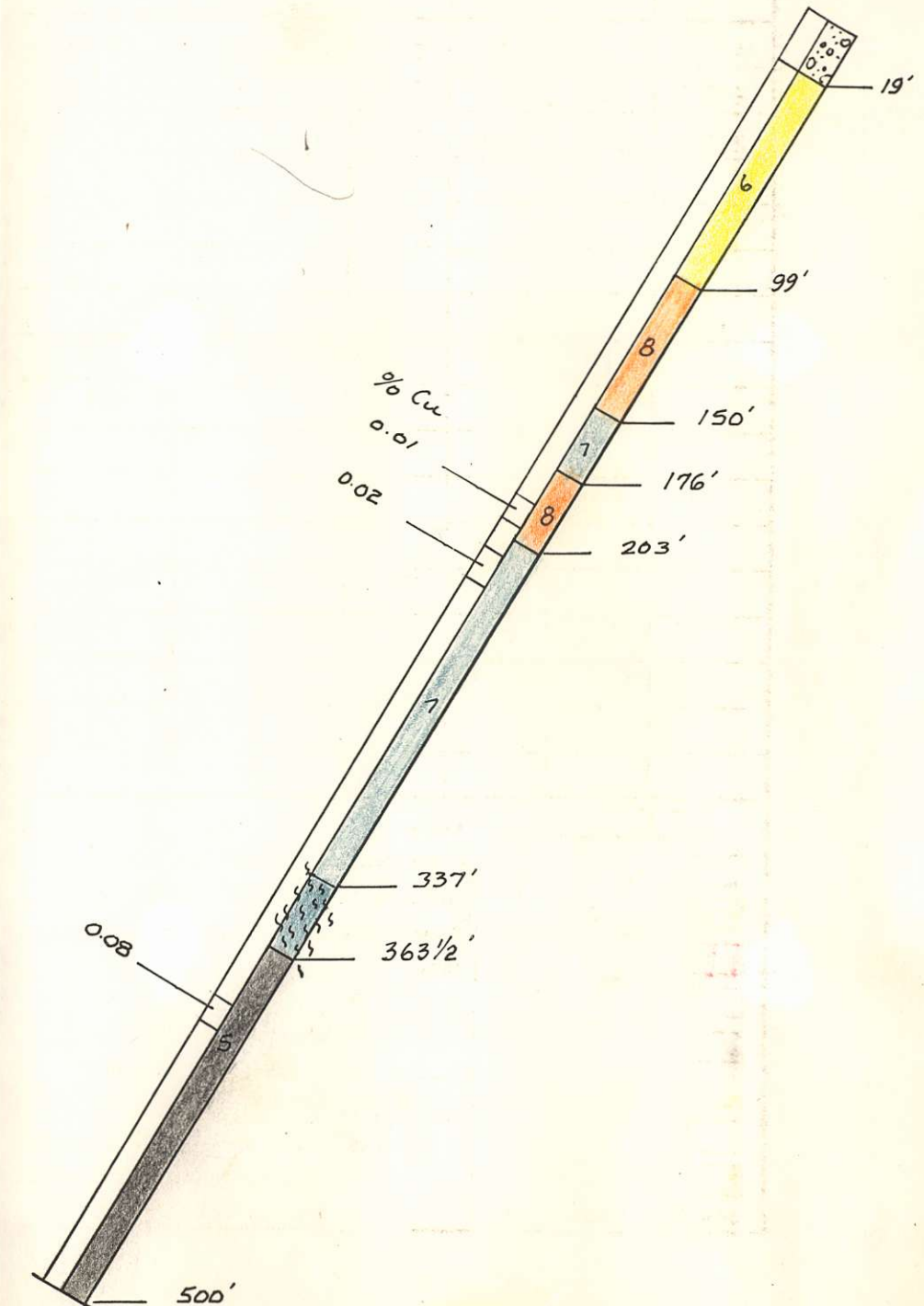
Ft. _____ Ft. _____

Ft. _____ Ft. _____

Logged By J.W.Simpson
Sampling By D. Compton
Assaying By Bondar Clegg

SECTIONS

Started Oct. 31/72 Completed Nov. 3/72 Depth of Hole 500' Proposed Depth 500'



DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-2

DIP -45°

LOCATION _____

SHEET NO. 2

LOG

LOG		
FROM	TO	DESCRIPTION
99	150	111-116' - somewhat darker colour and minor disseminated pyrite.
(continued)		116-118' Some irregular quartz patches.
		Other evidence of silicification at about 125
		138-150'. Gradually changes over a few feet
		to more chloritic & more silicified material.
150	176	Silicified andesite. (S) 153'. Rock is
		fine-grained with trace of epidotized feld-
		spar phenocrysts. Pervasive silicification
		is accompanied by limonite stained, quartz
		filled fractures. Intensity of silicification
		increases down hole.
		161-176'. Very intense silicification.
		165.5-176'. Brecciation - increasing in
		intensity with depth. Very low sulphide
		content. (S) 175'.
176	203	Fault contact (less competent rock below
		fault lost), e.g. 1' between 176-178', 1½'
		between 180.5-184. Rock is light grey quartz
		sericite schist similar to 99-150' intersec-
		tion. (S) 191'. Pyrite content about 5%
		between 190-200' in bands or disseminated.
203	247.5	Mottled grey & white argillaceous tuff; some
		fairly sandy in irregular bands, distinct
		from preceding intersection in colour(whiter)
		and coarse mottled texture. No sulphides
		for 5' then irregularly banded pyrite becomes

ASSAYS

[illegible]

LEGEND

[illegible]

SCALE inch

Collar Lat. _____ Dep. _____

Collar Elevation _____

Azimuth at Start

Azimuth at End -----

DIPS:

_____ Ft. _____ Ft.

..... Ft. Ft.

Ft. _____ Ft. _____

_____ Ft. _____ Ft.

Logged By

Sampling By _____

Assaying By _____

SECTIONS

Started.....Completed.....Depth of Hole.....Proposed Depth.....

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-2

DIP _____

LOCATION.....

SHEET NO. 3

LOG

LOG		
FROM	TO	DESCRIPTION
203 (continued)	247.5	fairly abundant. Silicification is moderate & irregular. Many fine calcite stringers. Metamorphism has caused irregular aggregates of felsic minerals to form giving mottled appearance.
247.5	255	Light green fine-grained andesite probably tuffaceous. Feldspar altered to epidote, many quartz & calcite filled fractures. Sulphides rare.
255	268	Mottled grey & white argillaceous tuff as 203-247'. Progressive increase in silicification to 268'. 262-268' - almost pure quartz.
268	363.5	Gradation to more basic volcanics over 2' into andesitic, silicified tuffs, further gradation from 278-285 into even more basic volcanics (now probably basaltic composition). Sulphides virtually absent except for narrow bands $\rightarrow \frac{1}{2}$ ". Some coarse fragments in this section. Minor hematite in fine stringers. 298' on - bulk composition probably closer to andesite again. (S) 301'. Many fine irregular quartz & carbonate filled fractures. 337-370' Major fault zone about 15' of core lost over this 33' interval.
363.5	500	In fault zone - change to pyritic quartz-chlorite schist. Probably a pyritic dacite

ASSAYS

[illegible]

SECTIONS

Started	Completed	Depth of Hole	Proposed Depth
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DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-2

DIP _____

LOCATION.....

SHEET NO. 4

LOG

LOG		
FROM	TO	DESCRIPTION
363.5	500	tuff or mudstone (similar to mudstone sections in S-72-1).
(continued)		
		367'. Some heavily pyritized material but lost core.
		375'. Some fairly coarse grains of chalcopyrite (over $\frac{1}{2}$ "). Average pyrite content varies between 2 and 10% for 5' sections. (S) 388'.
		404-406' - Fault zone, 1' core lost, chlorite content varies giving darker colour where it is more abundant e.g. 389-390'. After 411' chlorite generally more abundant. Some small gashes filled with epidote-quartz.
		420.5' - 2" with fairly coarse chalcopyrite(S). Pyrite content decreases to about 1-2% for 5' sections after 404(fault).
		442-444' - shcerty ("silicification?).
		437 & 445.5 - some coarse chalcopyrite over 1" & $\frac{1}{2}$ " respectively.
		447' - possible fault.
		452'-453' - cherty zone ~1% Cu over 1"
		487' - minor fault zone.
		489-490' - chertz zone-traces of chalcopyrite.
		492, 497-498' - minor faults.
		500' - END OF HOLE.

ASSAYS

<h1>ASSAYS</h1>				
SAMPLE No.	FROM	TO	WIDTH	V A L U E S

LEGEND

Collar Lat. Dep.

Collar Elevation

Azimuth at Start

Azimuth at End

DIPS:

..... Ft.
Ft.

..... Ft.
Ft.

..... Ft.
Ft.

..... Ft.
Ft.

..... Ft.
Ft.

Logged By

Sampling By

Assaying By

SCALE inch

SECTIONS

Started	Completed	Depth of Hole	Proposed Depth
----------------	------------------	----------------------	-----------------------

SUMMARY

0 - 19' Overburden.

19 - 99' Various silicified and epidotized. Chloritic pyroclastics. Usually very fine grained (i.e. tuffaceous).

99 - 150' Quartz sericite schist - probably a sheared mudstone - not pyritic.

150 - 176' Silicified, light green andesite.

176' Fault.

176 - 203' Quartz sericite schist similar to 99-150 intersection but now well pyritized (indigenous sulphides form bulk of this pyrite).

203 - 363.5 Variesly altered pyroclastics and andesitic flows(?)
often give mottled appearance.

337 - 370' Major fault.

363.5 - 500' Light grey quartz-chlorite-sericite schist (similar to 176-203 section but more chlorite and highly variable pyrite). Some silicified sections with minor chalcopyrite as coarse grains and irregular blebs.

Note: Rhyolite sequence of S-72-1 was not intersected. Mudstones have no substantial chalcopyrite bearing zones as in S-72-1.

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-3

DIP -90°

LOCATION 60 E - 29 N

SHEET NO. 1

LOG











FROM	TO	DESCRIPTION
0	6.71 22'	Overburden.
22	75½	Quartz sericite schist, variable amounts of
	23.0	chlorite & pyrite (some zones are almost
		chlorite schist). Colour is medium grey.
		Pyrite content varies (in 5' sections) from
		5 - 7%. Chalcopryite in stringers up to 3mm.
		wide, scattered (e.g.) 23', 26', 37', 40'.
		30-36': 2½' core lost.
		Between 38 & 42: 1' of core lost. Probably a
		quartz stringer with chalcopryite.
		42-46': 2' core lost - possible fault.
		54-61': 2' core lost.
		54-57: ½' core lost.
75½	189	Chlorite schist. Heavily pyritic. 7-15% for
	57.61	5' sections - colour almost black (looks a
		little like graphite in places but turns
		pale green when scratched).
		87-89' - ~1% Cu as chalcopryite irregularly
		disseminated & banded.
		→ 131-141' - 8' core lost in fault. Some
		pebbles from recovered material indicates
		some almost massive sulphide (90% pyrite)
		some pebbles with good chalcopryite.
		141-144' - 2½' lost core, angle about 45°.
189	193	Fault contacts with light green rock no chalco-
	58.8	pyrite - minor extremely fine pyrite.
193	200	Chlorite schist as before.

ASSAYS

SAMPLE No.	FROM	TO	WIDTH	VALUES			
				Cu	Pb	Zn	Ag/Au
242 N	6.7 22	9.8 32	* 10'	0.58	-	.02	.03/ .005
243 N	32	12.8 42	* 10'	0.36	-	.03	.04/ .005
244 N	26.5 87	27.1 89	2'	1.64	-	.04	.12/ .005
236 N	64.8 229	72.8 239	10'	.02	-	L.02	tr/ tr/
237 N	75.9 239	78.0 249	10'	L.01	L.02	L.02	-
235 N	78.0 249	81.7 256	7'	0.75	.02	.02	.06/ .005
238 N	81.7 256	87.7 268	12'	0.04	-	L.02	tr/ tr

* lost some core

LEGEND

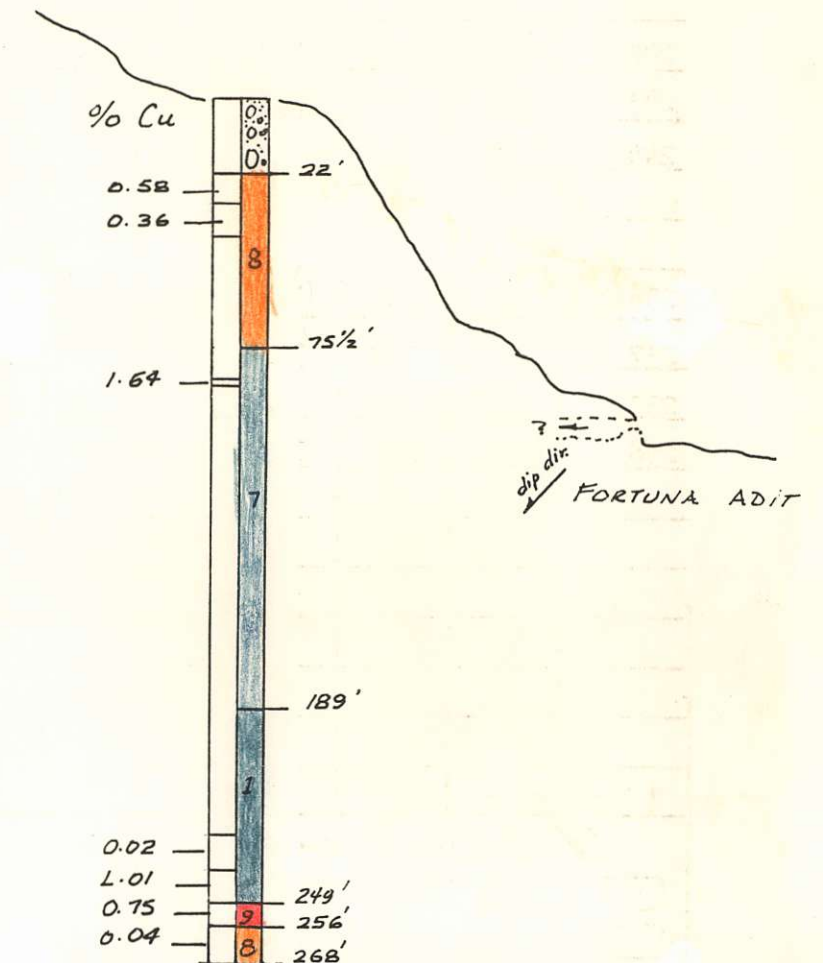
	As on log
	S-72-1
	Chert & heavy sulphides
	
	
	
	
	
	
	

SCALE 1 inch = 60'

Collar Lat. _____ Dep. _____
 Collar Elevation 1840'
 Azimuth at Start _____
 Azimuth at End _____
 DIPS:
 _____ Ft. _____ Ft.
 _____ Ft. _____ Ft.
 _____ Ft. _____ Ft.
 _____ Ft. _____ Ft.
 Logged By J.W. Simpson
 Sampling By D. Compton
 Assaying By Bondar Clegg

SECTIONS

Started Nov. 6/72 Completed Nov. 10/72 Depth of Hole 296' Proposed Depth 500'



DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-3

DIP _____

LOCATION _____

SHEET NO.....2

LOG

[illegible]

ASSAYS

[illegible]

LEGEND

SCALE inch

Collar Lat. _____ Dep. _____

Collar Elevation _____

Azimuth at Start _____

Azimuth at End _____

DIPS:

Ft. _____ Ft. _____

_____ Ft. _____ Ft.

Ft. _____ Ft. _____

Ft. _____ Ft. _____

Logged By _____

Sampling By _____

Assaying By _____

SECTIONS

Started.....Completed.....Depth of Hole.....Proposed Depth.....

SUMMARY

The rocks encountered in S-72-3 are predominantly chlorite schists with considerable pyrite and rarely chalcopyrite.

From 22-75½' the rock is chloritic sericite schist. From 75½' to 189' chlorite schist dominates. Between 189' and 249' the schists are faulted against andesite flows and tuffs. A massive pyrite-chert zone was intersected from 249-256', and this is assumed to be the stratigraphic equivalent of cherts in the northeast Cu zone. Copper, in the form of chalcopyrite is disseminated and forms about 1% of the zone. The hole ends in quartz-sericite schist with minor disseminated chalcopyrite and about 10% pyrite.

Much core was lost in the upper chlorite schist and some of these lost sections contained copper. It is not known if these zones are of economic interest or not.

The hole was abandoned at 268' when the rod string became stuck.

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-4

DIP -60°

LOCATION 26 N - 65 + 15 E

SHEET NO. 1









LOG

FROM	TO	DESCRIPTION
0	50	Overburden.
50	141	Sericitic, quartz-chlorite schist very similar to upper section in S-72-3. 5-15% pyrite (over 5' sections). Minor chalcopyrite. e.g. $\frac{1}{2}$ " stringer at 46 $\frac{1}{2}$ ' with some coarse blebs of chalcopyrite, 69 $\frac{1}{2}$ ' fine-medium grained chalcopyrite in quartz segregation, 96' a few grains of chalcopyrite. Core angle about 45°.
		86-108' very steep fault - almost parallel to core axis, limonite abundant.
		87-95' - 1' core lost.
		* 95 - 108' - 10' core lost.
		Chlorite content varies, some of rock could be called chlorite schist.
		113' About 1" of pyrite mud, probably ground core.
		128-131'. Fault zone. 1' core lost.
		Much pyrite.
141	154 $\frac{1}{2}$	Pyritic chert, some quartz veining, minor chalcopyrite - usually in fairly splashy blebs (~0.2% Cu for 13 $\frac{1}{2}$ ').
154 $\frac{1}{2}$	231	Muddy chlorite schist. Presumably similar to material above chert but more altered. Pyrite content fairly uniform at about 6-8% for 5' sections.
		About 176' Kaolin alteration (muddy

ASSAYS

SAMPLE No.	FROM	TO	WIDTH	VALUES			
				Cu	Pb	Zn	Ag/Au
245 N	50	60	10'	.27	-	.03	.04/.005
246 N	141	154 $\frac{1}{2}$	13 $\frac{1}{2}$ '	.08	-	L.02	.02/.005
247 N	176	186	10'	.01	L.02	.03	tr/tr
248 N	307	308	1'	3.52	L.02	.05	.26/.005
249 N	350	360	10'	0.07	L.02	.02	.04/tr
250 N	360	370	10'	0.14	-	.02	-/-
251 N	370	380	10'	0.10	L.02	.02	tr/tr
252 N	380	390	10'	0.06	-	-	-/-
253 N	390	400	10'	0.04	-	-	-/-
254 N	400	410	10'	0.08	L.02	L.02	tr/tr
255 N	432	448	16'	0.10	-	-	.04/.005
256 N	459	460	1'	0.87	-	-	-/-
257 N	470	475	5'	0.22	-	-	.02/tr
258 N	496	501	5'	0.41	L.02	L.02	tr/tr

LEGEND

	As on Log
	R-72-1
	
	
	
	
	
	

SCALE 1 inch = 60'

Collar Lat. _____ Dep. _____

Collar Elevation 1905'

Azimuth at Start _____

Azimuth at End _____

DIPS:

_____ Ft. _____ Ft.

_____ Ft. _____ Ft.

_____ Ft. _____ Ft.

_____ Ft. _____ Ft.

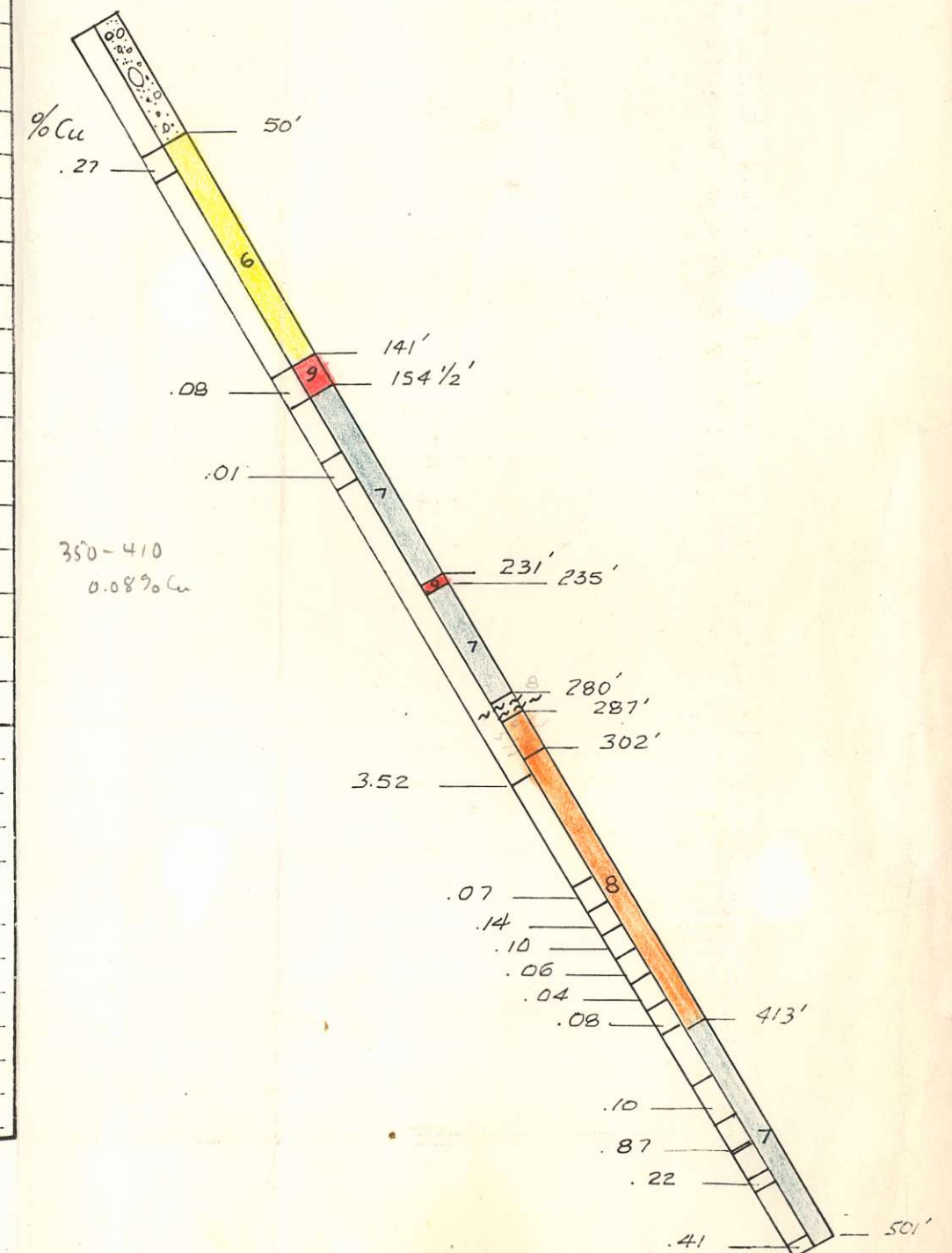
Logged By J.W. Simpson

Sampling By D. Compton

Assaying By Bondar Clegg

SECTIONS

Started _____ Completed _____ Depth of Hole _____ Proposed Depth _____



DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-4

DIP

LOCATION _____

SHEET NO. 2

LOG

LOG		
FROM	TO	DESCRIPTION
154½	231	appearance) grades into dark chlorite schist.
(continued)		Pyrite increases to 15% in some 5' sections.
		(S) 206'.
231	235	Pyrite bearing chert - no chalcopyrite. Some
		fine fracturing. Pyrite is mostly dissemin-
		ated & in irregular aggregated bands.
235	280	Sericitic-chlorite schist - heavily pyritized.
		Varying degree of chlorite (e.g. 248½-259 is
		chloritic, quartz sericite schist). Sulphides
		in bands, some ½" wide.
280	287	Quartz sericite schist - about 20% fine dis-
		seminated pyrite. (S) 281'. Fault 285-287'.
287	302	Major fault zone. Only fragments of core
		recovered. Rock types include chert, quartz
		sericite schist & quartz veins. All contain
		considerable pyrite. Some pieces have coarse
		blebs of chalcopyrite - sample of sludge comes
		from 292-298 zone.
302	413	Quartz sericite schist - about 10% chlorite
		giving a light grey green colour. Pyrite
		content about 4-5% for 10' sections.
		307-308' - some very coarse blebs of chalco-
		pyrite controlled by fracturing & contortions
		in schist. (S)-307½'. Average 3% Cu over 1'
		Traces of chalcopyrite 350-360 (section may
		average 0.1% Cu). Best material in this
		section is at 354-355' which runs about .3%.

ASSAYS

[illegible]

LEGEND

[illegible]

SCALE inch

Collar Lat. Dep.

Collar Elevation

Azimuth at Start _____

Azimuth at End

DIPS:

_____ Ft. _____ Ft.

..... Ft. Ft.

_____ Ft. _____ Ft. _____

_____ Ft. _____ Ft.

Logged By _____

Sampling By

Assaying By

SECTIONS

Started	Completed	Depth of Hole	Proposed Depth
---------------	-----------------	---------------------	----------------------

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-4

DIP _____

LOCATION _____

SHEET NO. 3

LOG

[illegible]

ASSAYS

[illegible]

SECTIONS

Started.....Completed.....Depth of Hole.....Proposed Depth.....

LEGEND

SCALE inch

Collar Lat. _____ Dep. _____

Collar Elevation _____

Azimuth at Start _____

Azimuth at End _____

DIPS:

_____ Ft. _____ Ft.

Ft. _____ Ft. _____

_____ Ft. _____ Ft.

Ft. _____ Ft. _____

Logged By _____

Sampling By

Assaying By

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER HOLE NO S-72-5 DIP -61° (start) LOCATION 4 E. - 6 N. SHEET NO. 1

LOG		
FROM	TO	DESCRIPTION
0	7	Overburden.
7	12	Diorite - dark green medium-grained irregular patches of epidote after feldspar.
		No sulphide.
12	15½	Surface - leached & oxidized quartz sericite schist - badly broken up.
15½	151	Diorite - sheared, some patches with recognizable mafics, others gone to epidote. Some sections highly silicified e.g. 20-20½' (also some brecciation here) 24-25' & 28-32'.
		Note 33-36' - fractures filled with fine-grained copper coloured material; very soft but metallic sheen like native copper.
		Mostly in fractures, but some disseminated.
		More silicified sections - average composition of rock probably closer to dacite - many irregular gashes filled with calcite.
		More Cu coloured material & Fe oxide (red).
		69-70' and then scattered rarely beyond there.
		83-84' - minor shearing, more Cu? mostly in fractures, also 89', 92', 93'.
		125-126' - minor shearing to give quartz chlorite schist.
		131½-134' - quartz sericite schist.
		135-136' - quartz sericite schist & minor very fine pyrite in these more acid sections.
		(S) 134½ - "diorite".

ASSAYS							
SAMPLE No.	FROM	TO	WDTH	V A L U E S			
				Cu	Zn	Au	Ag
						oz/T	oz/T
259	24	34	10'	L.01	-	-	-
260	34	36	2'	L.01	-	-	-
261	36	46	10'	.01	-	-	-
262	81	91	10'	L.01	-	-	-
263	91	101	10'	L.01	-	-	-
264	266	276	10'	.04	-	-	-
265	452	462	10'	.05	.46	-	-
266	462	472	10'	.01	.14	-	-
267	472	482	10'	L.01	.02	-	-
268	482	495	13'	.02	.09	-	-
269	642.5	647.5	5'	.01	-	.005	.02
270	830	840	10'	L.01	L.02	-	-
271	850	860	10'	L.01	L.02	-	-
272	870	880	10'	L.01	.02	-	-
273	890	900	10'	.02	L.02	-	-
274	1157	1167	10'	.03	L.02	.01	.05

<u>LEGEND</u>		Collar Lat. Dep.	
<input type="checkbox"/>	As on Log	Collar Elevation	
<input type="checkbox"/>	R-72-1	Azimuth at Start 180°	
<input type="checkbox"/>		Azimuth at End 172°	
<input type="checkbox"/>		DIPS:	
<input type="checkbox"/>		collar Ft. -61°	754 Ft. -43°
<input type="checkbox"/>		200 Ft. -64°	1151 Ft. -26°
<input type="checkbox"/>		400 Ft. -57°	1300 Ft. -31°
<input type="checkbox"/>		600 Ft. -51°	Ft.
<input type="checkbox"/>		Logged By J.W. Simpson	
<input type="checkbox"/>		Sampling By D. Compton	
<input type="checkbox"/>		Assaying By Bondar Clegg	
SCALE 1 inch = 60'			

SECTIONS	
Started <u>Nov. 19/72</u> Completed <u>Nov. 27/72</u> Depth of Hole <u>1342'</u> Proposed Depth <u>1500'</u>	
SECTION PLOTTED ON SEPARATE SHEET	

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-5

DIP _____

LOCATION _____

SHEET NO. 2

LOG

LOG		
FR	TO	DESCRIPTION
151	166	RHYOLITE CRYSTAL TUFF - sheared to give whitish quartz-sericite schist. Traces of fine disseminated pyrite. Angular quartz & feldspar fragment to 2mm. Core angle -45° .
166	168 $\frac{1}{2}$	Andesitic flow - irregular fractures filled with calcite - minor disseminated pyrite.
168 $\frac{1}{2}$	190	QUARTZ SERICITE SCHIST as 151-166. (S) 173'. From 174' on rock becomes coarser grained & more basic, gradation into chloritic tuff 188-190' & then fairly sharp contact.
190	196 $\frac{1}{2}$	Fairly coarse diorite. Mafics & feldspar altered \rightarrow epidote & chlorite.
196 $\frac{1}{2}$	201	Quartz sericite schist.
201	452	Hornfels 201-202' some chalcopryite & about 15% pyrite then coarse diorite \sim 20% feldspar in laths & irregular masses. Irregular veinlets filled with epidote, some wide (3") quartz-carbonate-epidote veins; fracturing weak - very few sulphides. (3)-230'. 268-269' - some quartz veining in area of more intense fracturing than before - traces of chalcopryite & minor pyrite in fractures associated with quartz. Graphite develops on some minor slips. 305' - another zone of fracturing quartz-epidote veining & carbonate fracture filling. 1 large (3mm.) grain of chalcopryite.

A S S A Y S

[illegible]

LEGEND

[illegible]

SCALE inch

Collar Lat. _____ Dep. _____

Collar Elevation _____

Azimuth at Start

Azimuth at End

DIPS:

_____ Ft. _____ Ft. _____

_____ Ft. _____ Ft. _____

_____ Ft. _____ Ft. _____

_____ Ft. _____ Ft. _____

Logged By _____

Sampling By

Assaying By _____

SECTIONS

Started	Completed	Depth of Hole	Proposed Depth
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DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-5

DIP _____

LOCATION.....

SHEET NO. 3

LOG

LOG		
FROM	TO	DESCRIPTION
201	452	316-318, 326-327 - fine-grained grey dykes.
(continued)		385-390 - some wide carbonate veinlets (fracture fillings).
		392-393 - much quartz veining.
		399' - minor fault.
		441-452' - progressive silicification, minor pyrite.
452	495 $\frac{1}{2}$	Quartz-sericite schist, minor amounts of pyrite in bands. Core angle 70-80° to axis of hole. Traces of chalcopyrite & sphalerite associated with quartz rich sections.
		478-484' - abundant quartz veining but very little sulphide. Traces of chalcopyrite in with fine pyritic bands.
495 $\frac{1}{2}$	506	Medium-grained diorite - as 201-452'. Traces of pyrite.
506	611	Fine dark green sheared calcareous andesite tuffs. Now chlorite schist in part. Some coarse sections like the diorite. Calcite may be part indigenous, certainly most of it has been introduced along fractures, rock has little or no pyrite. (S) 554'. More very fine red metallics (like red specularite), scattered 538-565.
		565-567' - medium grained diorite again.
		554' - minor chalcopyrite in fracture.
		575-611' - considerable calcite in gashes

ASSAYS

[illegible]

SECTIONS

Started	Completed	Depth of Hole	Proposed Depth
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LEGEND

SCALE inch

Collar Lot. _____ Dep. _____

Collar Elevation _____

Azimuth at Start _____

Azimuth at End _____

DIPS:

_____ Ft. _____ Ft. _____

_____ Ft. _____ Ft. _____

_____ Ft. _____ Ft. _____

Ft. _____ Ft. _____

Logged By

Sampling By

Assaying By

DIAMOND DRILL RECORD

PROPERTY.....MOUNT SICK.....

HOLE NO. S-72-5

DIP _____

LOCATION _____

SHEET NO. 4

LOG

LOG		
FROM	TO	DESCRIPTION
506	611	and fractures.
(Continued)		
611	673	Quartz sericite schist - as before, light grey, minor disseminated pyrite.
		643-648' - ~10% fine banded pyrite.
		652-654' - andesitic tuff - dark green.
		656-660' - very siliceous.
673	807	Acid crystal tuff. No sulphides. Crystals average about 2-3mm. sometimes rounded. Rock is comprised of about 60-70% crystal fragments & 30-40% clay-sericite-chlorite matrix. (S)-713'.
		Minor faults 745', 746 $\frac{1}{2}$,
		757-764 - chloritic zone. Rock is progressively silicified towards bottom of inter-section.
807	914	Quartz-sericite schist - pyritic sulphides in irregular bands & patches - always fine-grained. Average pyrite content ~7-8% for 5' sections.
		898-899' - graphitic zone.
914	980	Sheared andesite tuff. Sometimes a chlorite schist. Sometimes fairly coarse-grained (almost diorite). Occasional fractures & gashes filled with calcite.
		947-948' - FAULT GOUGE. Minor amounts of fine disseminated pyrite.

ASSAYS

[illegible]

SECTIONS

Started.....Completed.....Depth of Hole.....Proposed Depth

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-5

DIP _____

LOCATION _____

SHEET NO. 5

LOG

LOG		
FROM	TO	DESCRIPTION
		Last 15' grade into more acidic rock.
980	1044	Quartz-chlorite-sericite schist, medium grey colour. Minor disseminated pyrite.
		997-1007' - Fault gouge. Much shearing beyond 1007' indicating major Fault Zone.
		Only 2-3' of core lost. After 1007' - pyrite content increases slightly in more silicified rock - sulphide now averages 304%.
1044	1076	Complex section of andesite tuffs, diorites & chlorite schists, low sulphide.
		1045-1046½' - Fault gouge. Much quartz veining & calcite fracture filling. 1063-1065' - Fault gouge.
		1066-1072' - Quartz sericite schist interbed.
1076	1153	Quartz-chlorite-sericite schist.
		1080-1081½' - fault gouge. Core angle 70° - 80° to axis of hole except for minor contortions.
		1092-1093 & 1103' - minor faults. Pyrite content of schists only 1% or so. Very fine disseminated crystals. (S)-1105' - Quartz chlorite-sericite schist.
		1121-1125 - major fault. Filled with gouge, no sulphides, probably fairly steep.
		1½' core lost.
1153	1169	Mottled grey green sheared coarse tuff or pyroclastic, minor fine pyrite.

ASSAYS

[illegible]

SECTIONS

Started.....Completed.....Depth of Hole.....Proposed Dpeth.....

DIAMOND DRILL RECORD

PROPERTY MOUNT SICKER

HOLE NO. S-72-5

DIP _____

LOCATION _____

SHEET NO. 6

LOG

LOG		
FROM	TO	DESCRIPTION
1169	1188	Quartz-chlorite schist, medium grey fracture fillings of calcite & quartz. Minor fine-grained disseminated pyrite. 1178-1188' - major fault zone, much gouge, about 2' core lost. Chlorite content very high before fault & then drops off afterwards.
1188	1277	Quartz-chlorite-sericite schist as before - considerable tectonic activity but good core recovery. 1213-1214' - fault, also 1221-1222'. After 1222' grades in quartz-sericite schist with minor chlorite. Fractured silicified sections after 1230' have minor sulphides (mostly pyrite on fractures).
1277	1315	Gradual increase in chlorite from 1277' on. Could be called quartz chlorite schist, minor disseminated pyrite, core angle about 45°. Some coarse sections (on a scale of a few inches) indicating waterlain environment. Gradation into more basic material 1307-1315'.
1315	1343	Amygdaloidal andesite - like "diorite" before but "feldspar" grains (now epidote) look more like amygdules. Very light shearing has produced matrix of chlorite. Very rare pyrite.
		END OF HOLE.

ASSAYS

[illegible]

SECTIONS

Started	Completed	Depth of Hole	Proposed Depth
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