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REPORT ON

1971 DIAMOND DRILL PROGRAM

CAB CLAIM GROUP

RISBY TUNGSTEN MINES LTD. (N.P.L.)

by

P. Marshall

and

T. Antoniuk

CALTOR SYNDICATE

November 1971.

Rayrock
CTGOL
ASHLAND.

REPORT OF P. MARSHALL

Location and Access

The CAB Claims (1 to 106) are located between Twin Peaks and Fox Mountain, about 18 miles northwest of the junction of Fox Creek with Canol Road, at a point 26 miles southeast of the settlement of Ross River.

The claims are outlined on Map Sheet 105-F-14, in the Whitehorse Mining District, Yukon Territory.

Access to the property is via helicopter from either Whitehorse or Ross River. Heavy equipment can be trucked to the before mentioned point on the Canol Road and flown in the last 18 miles.

Previous Work

The claims were originally staked and prospected by Peter Risby, a prospector working out of Ross River.

During the 1968 field season geochemical silt samples and rock samples from the showings were taken. Two zones of mineralization were outlined.

During the 1969 field season Atlas Explorations Ltd. carried out additional work. A base line and grid system were set out over showing number two, and a geological survey was undertaken, using a plane table for plotting outcrop.

Additional sampling and trenching were undertaken to check previous work, and to further delineate the mineralized zones.

In summary, Atlas stated - "..... a uniform sequence of sedimentary rocks at least 1,000' in thickness ..... of probable Lower Cambrian age ..... intruded and uplifted to the west by a Cretaceous quartz monzonite batholith ..... at or close to the intrusive contacts the sediments have been recrystallized to a pale brownish-green garnet-diopside skarn....." (Report by Atlas Exploration 1969)

As a result of this work Atlas recommended a 5,000' drill program be undertaken to ascertain the grade and extent of mineralization.

Topography and Climate

The area of interest straddles a steep, northerly trending ridge, between two fairly large north facing cirques. The elevation ranges from 5,160 feet to 6,090 feet, well above the 4,500 foot tree line.

The cirques themselves are relatively steep and covered with extensive talus deposits. Ice and snow persists throughout the summer and the constant melting supplies two main streams flowing off the mountain. There is no impounded water and hence in late August and early September the stream flow declines

at a rapid rate, limiting the drilling season to about mid-September.

Typical of mountainous areas the day to day weather is unpredictable, but about two thirds of the days in July and August witnessed low cloud cover, heavy rain and scattered snow showers. Windy periods limited the flying time around the actual ridge area.

Geology

The basis for the geomorphology here is a doming effect, caused by a granitic textured intrusive batholith raising up the pre-existing metasedimentary rocks.

Alpine glaciation has removed much of the material, and an arete ridge is the result of two large cirque glaciers that have eroded away much of the mountain.

Numerous faults appear across the top of this ridge, and fault zones were common in the drill core. This faulting would be directly related to the stresses caused by the doming of the metasediments.

Towards the north the dips tend to steepen from 45° to 66°, resulting in a greater required depth of drilling in this area.

Diopside skarns appear common along the intrusive contact; in many cases poorly formed grossularite garnets are present along with much carbonate and siliceous minerals.

The scheelite, as indicated by ultra-violet examination,

was almost always associated with massive pyrrhotite and pyrite veins; minor stringers of chalcopyrite were also present in these zones.

The scheelite was in the form of bands, generally parallel to the fabric of the metasediments, composed of small euhedral white crystals, quite noticeable to the naked eye after viewing them under ultra-violet light.

Summary

During the 1971 field season Caltor Syndicate initiated a drill program that resulted in 3,563 feet of BQ wire line drilling to test number two showing. The following is a list of the drill holes and their locations.

From a set up at 8+20S, 2+50E three holes were drilled.

R-1-71 a 601 foot vertical hole that intersected Skarns.

R-2-71 a 476 foot 49° angle hole bearing 180° that intersected skarns.

R-3-71 a 353 foot 66° angle hole bearing 218° that failed to intersect skarns.

From a set up at 14+50S, 1+50E two holes were drilled.

R-4-71 a 334 foot vertical hole, that intersected skarns.

R-5-71 A 247 foot 66° angle hole, bearing 175°, again intersecting skarns.

From a set up at 24+00S, 0+00, two holes were drilled

R-6-71 a 600 foot vertical hole intersecting barren skarns.

R-7-71 a 352 foot 45° angle hole bearing 322°, intersecting barren skarns.

From a set up at about 10+00S, 13+00E one hole was drilled.

R-8-71 a 600 foot vertical hole, that failed to intersect skarns, or large intrusives.

Method

The core was detail logged at the drill site, and ultra-violet examination of all the core was undertaken at night. All fluorescent scheelite was marked, and visual grade estimates were made. Later the best scheelite areas were sampled and assayed, then numerous fill in samples were taken, along with samples of the low grade skarn zones.

All core was flown down to the campsite and stored, except for hole number R-5-71 which was brought into Whitehorse and deposited with the Geological Survey of Canada at their storage facilities.

Results

Hole R-1-71 intersected a series of diopsidic skarns, and ultra violet examination showed a zone of interest from 538.8 to 557.0 feet.

Several massive pyrrhotite-pyrite-chalcopyrite veins contained scheelite, one short 0.7 foot zone assayed 5.21 % WO_3.

The overall results of this zone were 11.6 feet of 0.66 % WO_3, 5.8 feet of gneissic material containing only trace WO_3, and

finally 1.4 feet of 2.72 % WO_3.

Other zones assayed considerably below 0.5 % WO_3.

Hole R-2-71 had a 1.6 foot section assaying 0.92 % WO_3, but all other assays were considerably below 0.5 % and hence sub-exonomic.

Hole R-3-71 failed to intersect anything of economic interest.

Hole R-4-71 intersected numerous skanrs, containing only negligable amounts of scheelite, but from 232.1 feet, 4.3 feet of 2.42 % WO_3 were obtained, and for 12.9 feet, from 232.1 to 245.1 an average of 1.07 % WO_3 was obtained. This was the best section cut by the drill program.

Hole R-5-71 intersected several skarns, but all samples assayed were less than 0.5 % WO_3, and hence sub-economic.

Hole R-6-71 and R-7-71 both penetrated several skarn zones, but again all assays were below 0.5 % and therefore of little economic interest.

Hole R-8-71, set back to the east in an attempt to trace any width to the skarns, failed to reach the intrusive material, and no evidence of scheelite was obtained.

Conclusions

The 11.6 feet of 0.66 % WO_3 and the 12.9 feet of 1.07 % WO_3 in holes R-1-71 and R-4-71 were of possible economic interest, and if any continuity between the two holes could be obtained in future drilling, this area may be further developed.

The lack of significant assays in holes number R-2-71 and R-5-71 seem to indicate that the scheelite mineralization, associated with massive sulphides is sporadic through the skarn zones, and hence difficult to assess.

Because of the lateness of the season, no holes were attempted on showing number one.

Recommendations

A further series of holes would be needed to prove out possible economic mineralization. Holes about 100 feet north and south of Holes R-1-71 and R-4-71, and about 3 holes between R-1-71 and R-4-71 would give the needed information.

The two holes to the north would have to be 600 feet deep because of the steepening of the dip of the latholith, whereas the three holes to the south could be about 300 feet deep.

If these holes proved positive, another hole to the east and down slope would be needed to indicate if the scheelite zone had any width. Here a hole at least 600 feet would be needed, dipping in a westerly direction to penetrate the steeply dipping metasediments.

This program to test number two showing would require 2,700 feet of drilling. Actual locations are not given because the nature of the terrain dictates the actual drill location. There are only a few scattered sites that a helicopter can land the drill equipment.

As of yet mineralized zone number one has not been tested. Two holes drilled to a depth of 900 feet each for a total of 1,800 feet would be needed.

Thus an overall program of 4,500 feet of drilling is dictated; this is about 1,000 feet more than the 1971 program. The costs, because of more actual required drill sites and hence more flying time, would be about 10 % higher than the 1971 costs.

Respectfully submitted,

"Peter Marshall"

September, 1971

REPORT OF T. ANTONIUK

Introduction

The objective of the 1971 drill program was the exploration of the No. 2 Showing where surface exposures indicated a possible scheelite deposit within two parallel skarn bands, with good length and width potential, near an intrusive contact. Surface sample results were erratic. The nature of the terrain precluded the obtaining of good samples and diamond drilling was considered the most effective method of obtaining an accurate sample and information on structural continuity of the skarn zones. Mr. Peter Marshall, geologist, formerly employed by CIGOL, was engaged to provide on site supervision of the drilling.

Conclusions

The results of the diamond drill program were inconclusive. Numerous skarn zones were intersected. Most were barren or only weakly mineralized with scheelite. Holes 1 and 4 intersected interesting values of a true width of 13.9 feet assaying 0.63 % WO_3 and 9.9 feet assaying 1.07 % WO_3, roughly confirming surface indications. These holes were 600 feet apart on strike and 500 and 350 feet respectively down dip below surface. Abundant cross-faulting in the area and poor correlation of rock sequences between holes from the same setup make it uncertain whether this well mineralized zone is continuous between these holes.

Sufficient work was recorded as assessment work to keep all 106 claims in good standing until 1976.

A program of 4,900 feet of diamond drilling at an estimated cost of $100,000 is recommended. This drilling would test for continuity between holes 1 and 2, depth extension and extension of the structure to the north. It would also provide for an initial test of Showing No. 1.

Title

Title to the claims has been transferred and is now registered in the name of Risby Tungsten Mines Ltd. (N.P.L.).

The maximum assessment work allowable, 5 years per claim, was recorded and the following list shows present status.

Claim No.	Grant Number	Expiry Date
CAB 1 - 8	Y25386 - Y25393	Oct. 15, 1976
9 - 16	Y25394 - Y25401	Oct. 15, 1976
17 - 24	Y25506 - Y25513	July 29, 1976
25 - 32	Y25514 - Y25521	July 29, 1976
33 - 72	Y25822 - Y25861	Aug. 30, 1976
73 - 104	Y25923 - Y25954	Sep. 9, 1976
105 - 106	Y26151 - Y26152	Sep. 23, 1976

Sampling and Assaying

The sampling procedure is described by Mr. P. Marshall. Split core was sent to the Whitehorse Assay Office where the total sample was pulverized before taking a portion for assay. Many assays, but not all, were considerably lower than estimated by P. Marshall from UV Lamp examination. In some cases adjoining

sections were as estimated and considerably lower respectively. Rejects and pulps were recombined and portions taken and sent for check assay to Chemex Labs in Vancouver and Loring Labs in Calgary. Results from Chemex checked quite closely but about 5 % higher. Results from Loring were more erratic and were generally slightly higher again. Both confirmed the low assays from sections with high estimates. No reason for this discrepancy has been found. Some other white fluorescing mineral such as hydrozincite must be present. The following are some examples of assay variations:

Hole	Section	Width	UV Estimate Scheelite	Whitehorse % WO_3	Chemex %WO_3	Loring %WO_3
1	538.8 - 542.3	3.5	1 %	0.68	0.72	0.65
	544.6 - 546.3	1.7	5 %	2.15	2.40	2.42
	546.3 - 549.7	3.4	0.5	0.14	0.02	0.15
	555.6 - 556.3	0.7	3	5.21	5.25	5.45
2	435.3 - 438.2	2.9	1	0.12	0.16	0.13
	441.0 - 442.6	1.6	1	0.92	1.00	0.84
4	232.1 - 236.4	4.3	2	2.42	2.45	2.61
	236.4 - 238.0	1.6	0.5	0.62	0.67	0.89
	238.0 - 241.9	3.9	Tr.	0.24	0.31	0.43
	243.5 - 245.0	1.5	2	0.47	0.60	0.81

Hole	Section	Width	UV Estimate Scheelite	Whitehorse % WO_3	Chemex %WO_3	Loring %WO_3
5	124.8 - 125.3	0.5	2	0.02	0.08	0.04
	129.2 - 132.7	3.5	Tr.	0.18	0.28	0.38
	132.7 - 135.7	3.0	2	0.08	0.17	0.20
	136.7 - 139.5	2.8	2	0.23	0.36	0.26
Averages						
1	538.8 - 557.0	18.2		0.63	0.67	0.66
2	432.7 - 442.6	9.9		0.21	0.24	0.21
4	232.1 - 245.0	12.9		1.07	1.12	1.26
5	124.8 - 140.7	15.9		0.10	0.17	0.18

Observations

The drilling was wide spaced and difficult to correlate. Faulting appears much more prevalent than surface mapping indicated. Abundant barren skarn zones and intrusive sills (?) added to the difficulty. Holes drilled from the same setup intersected radically different rock sequences. The cross section drawn by P. Marshall gives one interpretation. Many others are possible. An an example it is quite probable that a fault exists and should have been drawn between holes 4 and 5. The rock sequences are too different to be a continuous structure as shown on the section. Skarn zones appear erratically distributed and discontinuous with location probably having a spatial relationship to intrusive bodies.

The report on surface mapping by Atlas Exploration stated that scheelite mineralization occurred both in skarn and in gossanized metasedimentary schists. Detailed examination of the core with a UV Lamp by P. Marshall found only rare occurrences of scheelite in metasediments and best scheelite mineralization associated with sulphide content in skarns.

Most skarn zones were barren or contained only weak scheelite mineralization. Two holes cut sections containing interesting values. It is significant that both these were in vertical holes and thus the deepest intersections, hole 1 500 feet down dip below surface and hole 4 350 feet down dip below surface. Hole 1 was drilled below a surface exposure of two parallel zones assaying 0.22 % WO_3 over 12 feet and 0.34 % WO_3 over 21 feet. The hole intersected 18.2 feet averaging 0.63 % WO_3 and 4.7 feet averaging 0.05 % WO_3.

Hole 4 was drilled about 600 feet south under the best surface trench where two bands assayed 0.67 % WO_3 over 9 feet and 0.63 % WO_3 over 15 feet. The hole intersected 12.9 feet averaging 1.07 % WO_3 and 7.1 feet averaging 0.04 % WO_3.

Holes 6 and 7 were drilled about 1,000 feet farther south in an area where surface assays were sparse and low.

Bad weather and icing conditions forced the cancellation of planned drilling on the No. 1 Showing which would have meant a long walk for the drillers along a treacherous, icy, knife edge ridge.

Instead hole 8 was drilled with the intention of obtaining an intersection 600 feet vertically below holes 1 and 4. In error this was drilled vertically instead of at 45° into the hillside at right angles to the structure. To reach the interesting horizon with a vertical hole would have required a greater depth of hole than possible with our equipment.

Showing No. 2 has not been fully explored. Holes 1 and 4, 600 feet apart, appear to have intersected the same horizon and returned values of 0.63 % WO_3 over 18.2 feet and 1.07 % WO_3 over 12.9 feet respectively. P. Marshall reports a change in dip of the structure between these two holes but a study of the drill logs and hole locations makes it quite obvious that he failed to take into account differences in elevation. Attitude of gneissosity recorded in the logs of the core and location of intersections are fully compatible with the surface indicated approximate 40° dip. Also there is little evidence to support the large displacement along the fault between the two holes as shown on his cross section. At a 40° dip true widths would be 13.9 feet in hole 1 and 9.9 feet in hole 4. Hole 2 was stopped after passing through some weakly mineralized skarn, 0.21 % WO_3 over 9.9 feet, and may not have reached the main horizon. Hole 3 encountered considerable faulting and this, coupled with the error in interpretation of the dip of the structure, caused its stoppage before intersecting the target horizon.

To the south holes 5, 6 and 7 all intersected abundant skarn with weak scheelite mineralization. This is also the area where UV Lamp examination gave misleading evidence, assays not corresponding to observed fluorescence. No work was conducted north of hole 1 where mapping and sampling by Atlas Explorations located sporadic skarn and scheelite for a distance of 3,200 feet.

Showing No. 1 still holds promise. Surface exposures are heavily gossaned, possibly indicating abundant sulphides. As drilling evidence indicated a direct relationship between sulphide content and better grade scheelite mineralization this showing deserves further examination. This could be a large tonnage area. It should be noted that holes 6 and 7 were drilled below areas of fairly heavy gossan with poor results.

Recommendations

A diamond drill program to further explore the No. 2 Showing between holes 1 and 4 and to the north is recommended. At least two holes should also be drilled on No. 1 Showing to obtain a good cross sectional sample and indication of grade.

Proposed Program: Exact locations are not given as topography and accessability by helicopter will to a large extent dictate drilling sites. It is probable that some blasting and cribbing will be required to provide drill sites.

No. 2 Showing:

To test continuity between holes 1 and 4

2 holes at 500 feet each	1,000 feet

To test down dip continuity below holes 1 and 4

2 holes at 600 feet each	1,200 feet

To test extensions to the north

4 holes - 2 at 350 feet 2 at 450 feet	1,500 feet

No. 1 Showing:

2 holes at 600 feet each	1,200 feet
Total	4,900 feet

Estimate of Cost - Based on actual cost of 1971 drill program.

Diamond Drilling: Direct cost including camp @ $12.00 per foot	$ 58,800.00
Travel and Transportation	30,000.00
Supervision and Administration	10,000.00
Assaying	1,200.00
Total	$100,000.00

Respectfully submitted,

T. Antoniuk, P.Eng.

November 1971

TELEPHONE 487-0334
AREA CODE 416

SUITE 1011
2200 YONGE STREET
TORONTO 12, ONTARIO

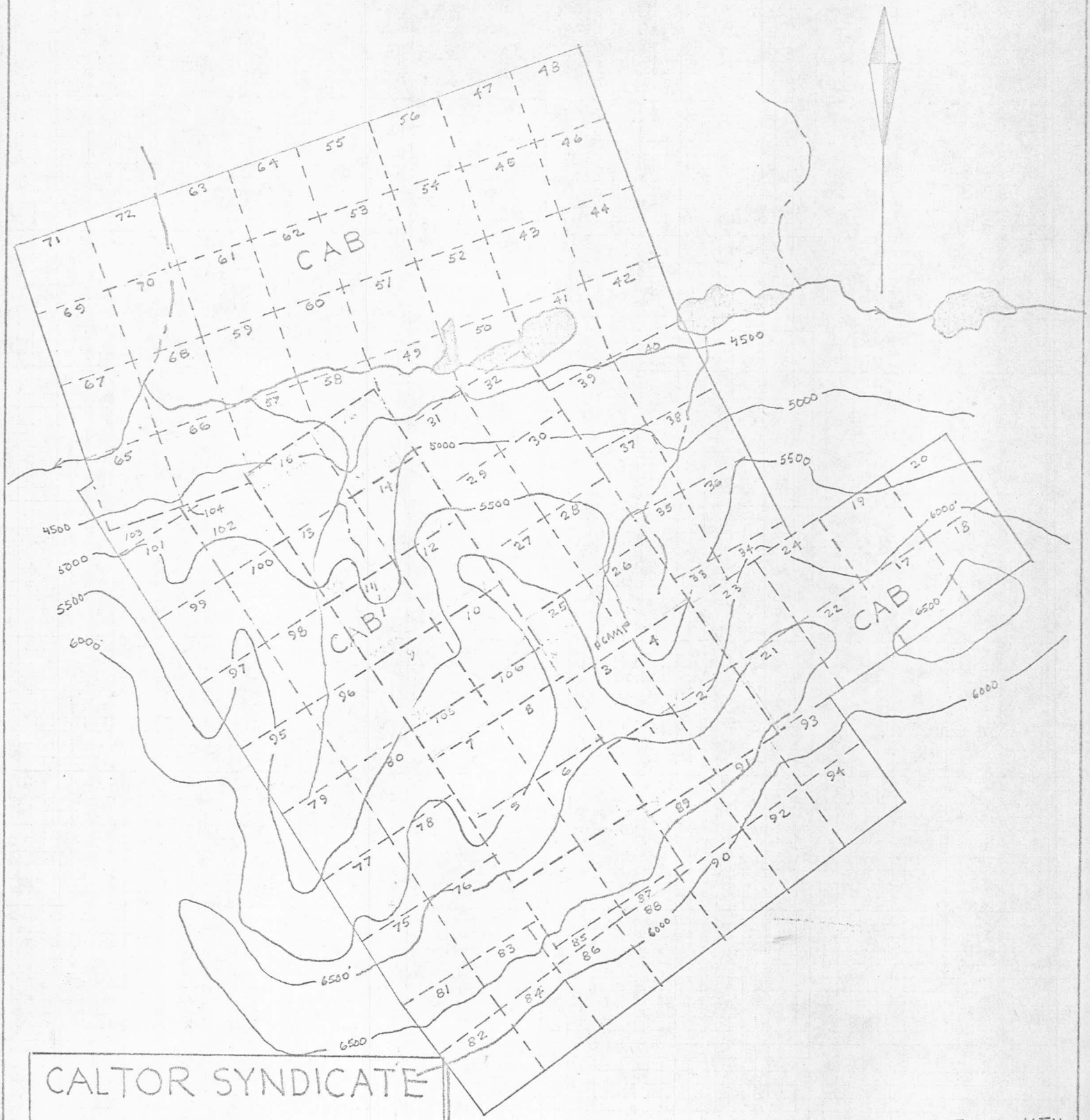
CALTOR SYNDICATE

RISBY TUNGSTEN PROJECT

EXPENDITURES 1971

Payment to Atsui	$ 5,000.00
Diamond Drilling	43,224.18
Travel and Transportation	19,629.73
Field Supplies	1,562.71
Assays	1,020.60
Assessment Work Fees	2,525.00
	$ 72,962.22
ADD: Administration Fee 10%	7,296.22
	$ 80,258.44
ADD: Option Payment - P. Risby	5,000.00
Portion of T. Antoniuk's Salary	1,004.29
	$ 86,262.73

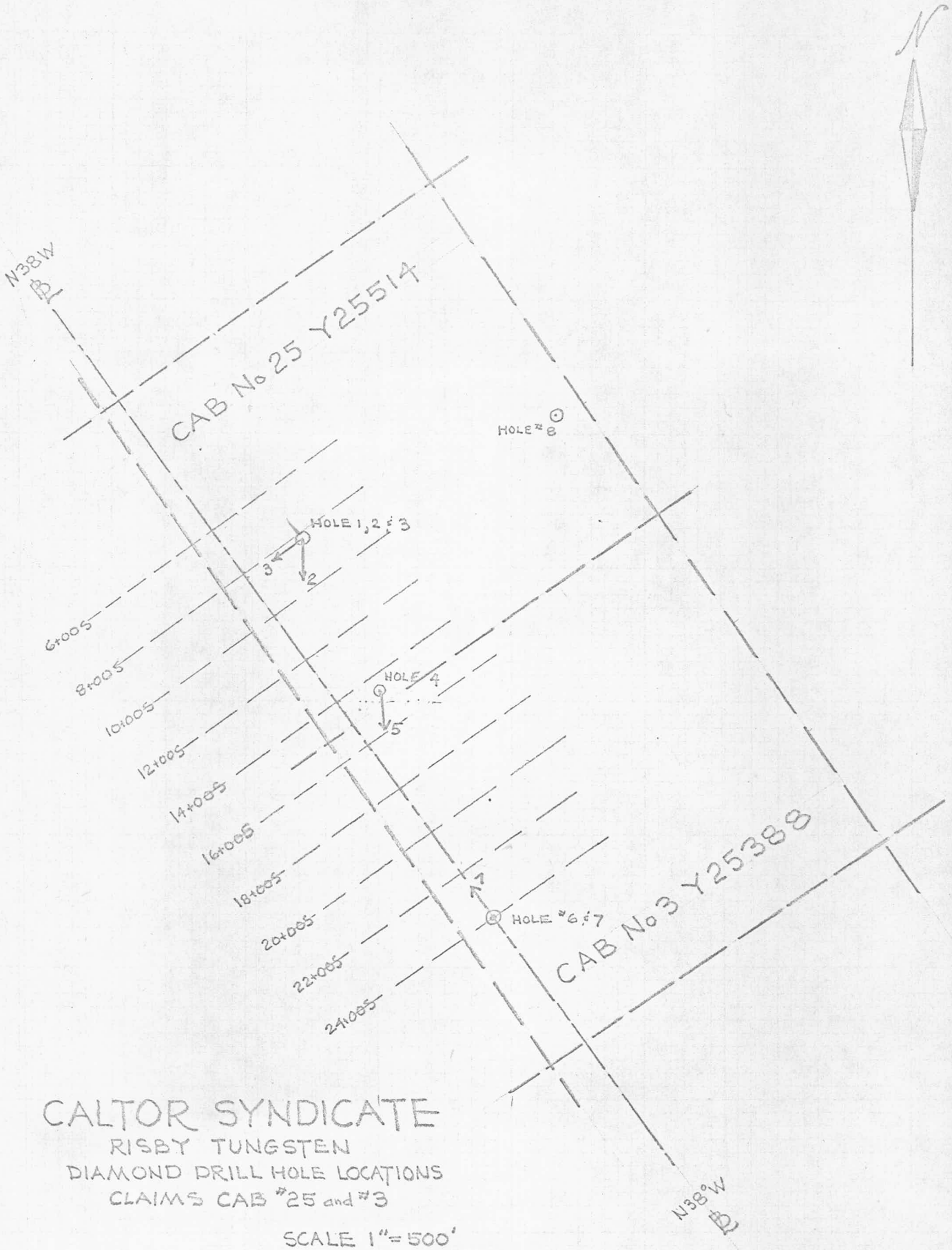
Toronto, Canada
November 17, 1971



CALTOR SYNDICATE

LOCATION OF
CLAIM GROUPS

ON CLAIM MAP 105F-14
WHITEHORSE M.D. YUKON -



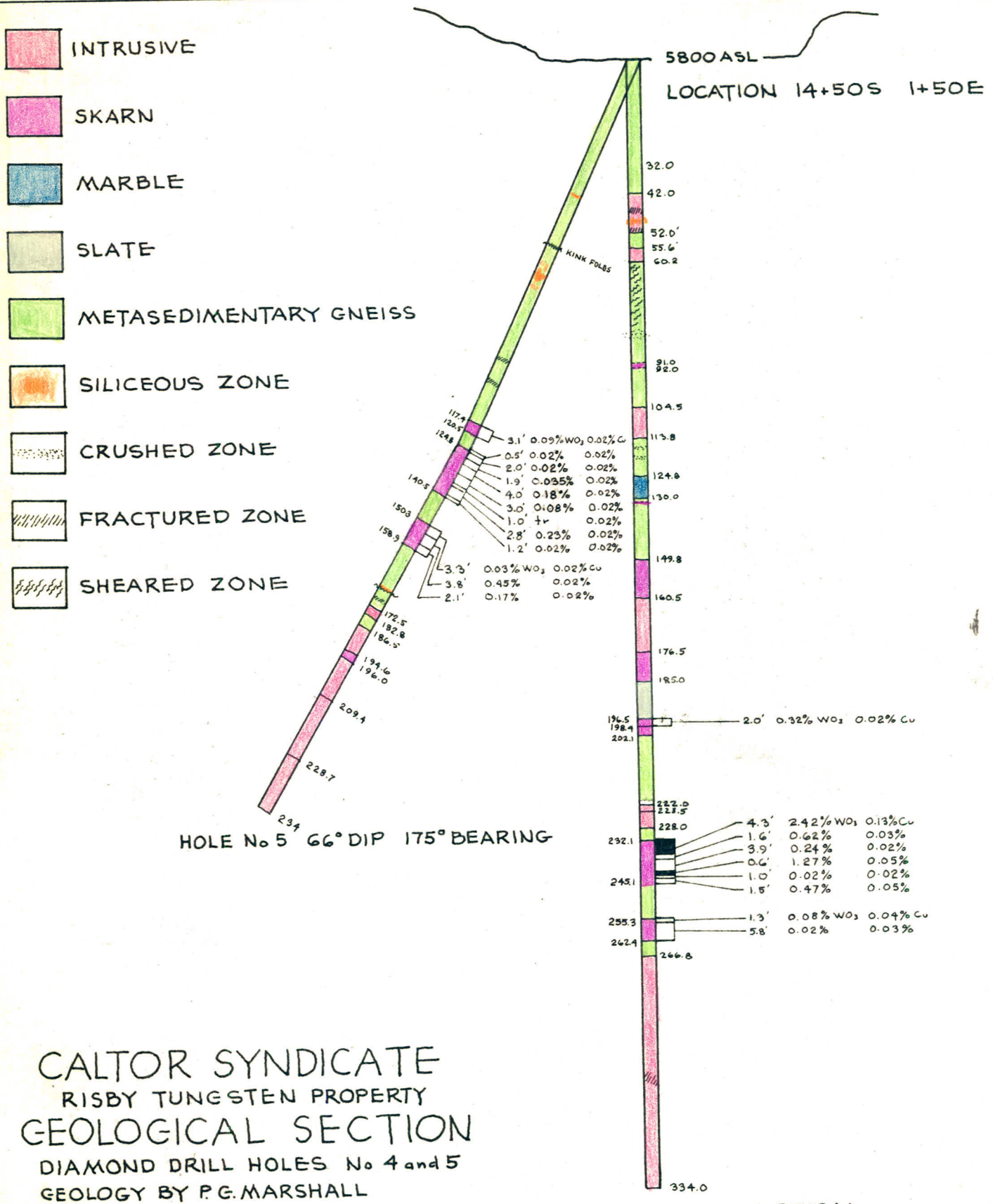
CALTOR SYNDICATE

RISBY TUNGSTEN

DIAMOND DRILL HOLE LOCATIONS

CLAIMS CAB #25 and #3

SCALE 1"=500'



CALTOR SYNDICATE

RISBY TUNGSTEN PROPERTY

GEOLOGICAL SECTION

DIAMOND DRILL HOLES No 4 and 5

GEOLOGY BY P.G. MARSHALL

SCALE 1" = 40'

16 SEPT. 1971

METASEDIMENTARY GNEISS

SKARN

MARBLE

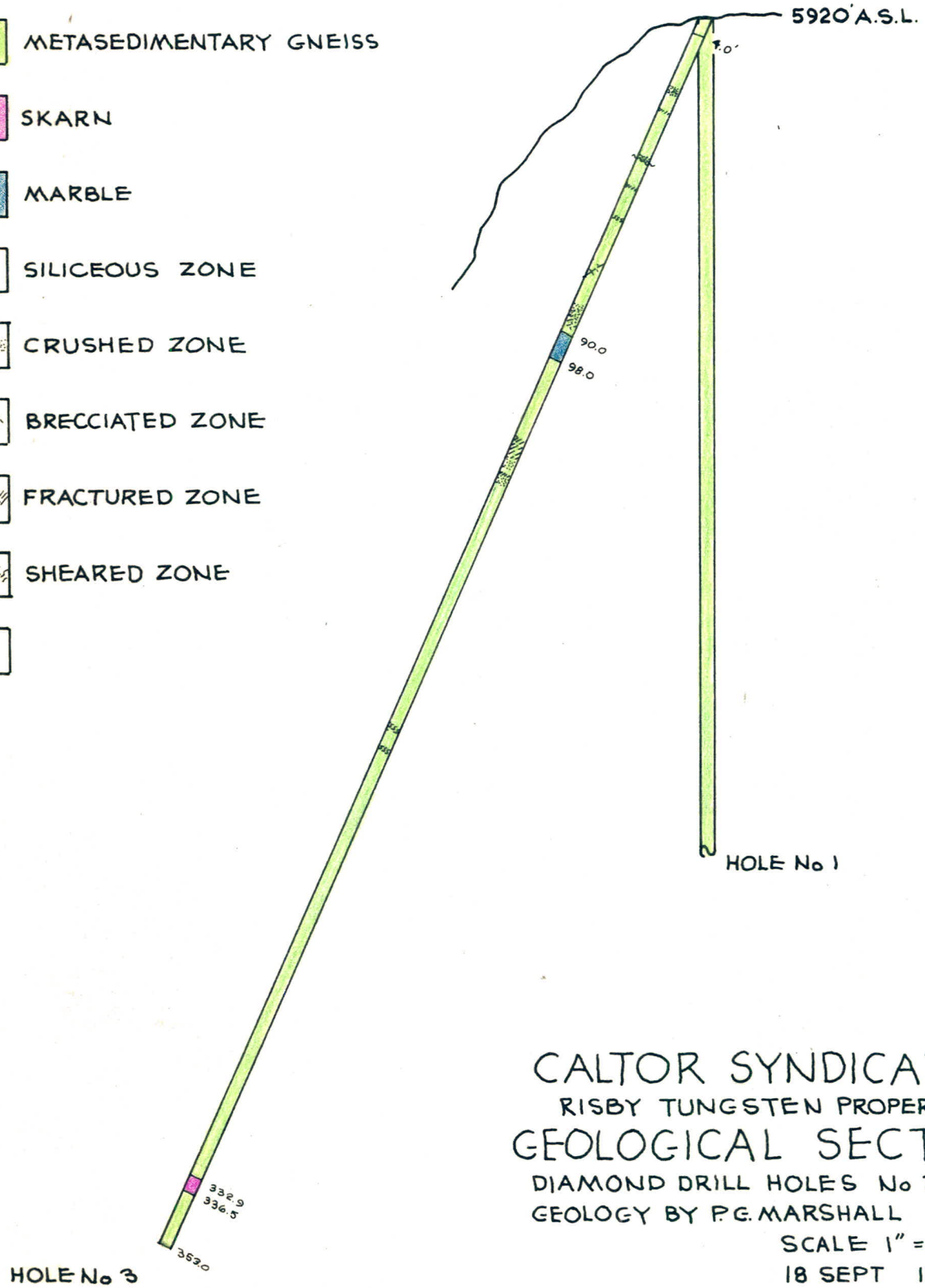
SILICEOUS ZONE

CRUSHED ZONE

BRECCIATED ZONE

FRACTURED ZONE

SHEARED ZONE



CALTOR SYNDICATE

RISBY TUNGSTEN PROPERTY

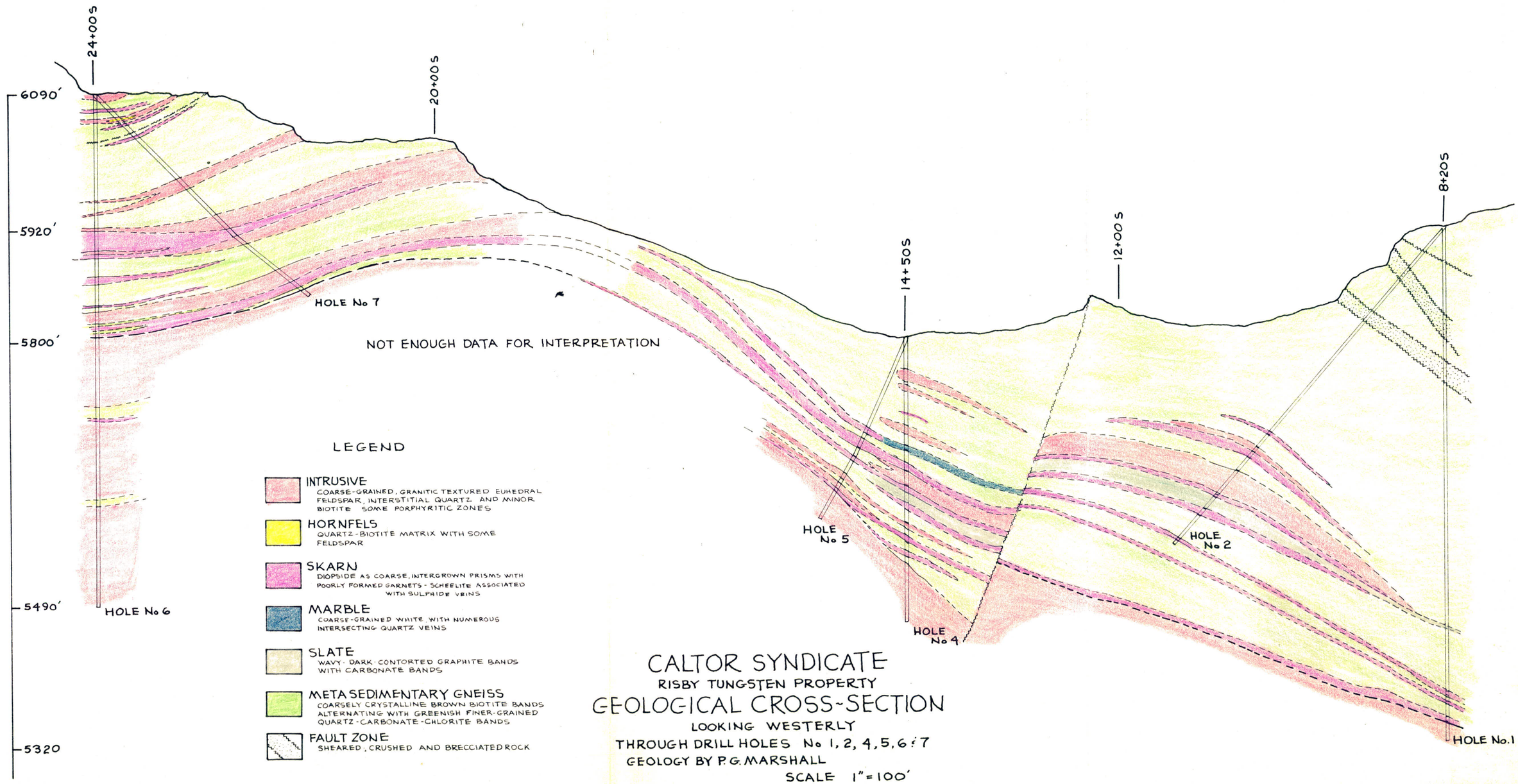
GEOLOGICAL SECTION

DIAMOND DRILL HOLES No 3 and 1

GEOLOGY BY P.G. MARSHALL

SCALE 1" = 40'

18 SEPT 1971



CALTOR SYNDICATE

RISBY TUNGSTEN PROPERTY

GEOLOGICAL CROSS-SECTION

LOOKING WESTERLY

THROUGH DRILL HOLES No 1, 2, 4, 5, 6 & 7

GEOLOGY BY P.G. MARSHALL

SCALE 1" = 100'

15 SEPTEMBER 1971

INTRUSIVE

SKARN

MARBLE

SLATE

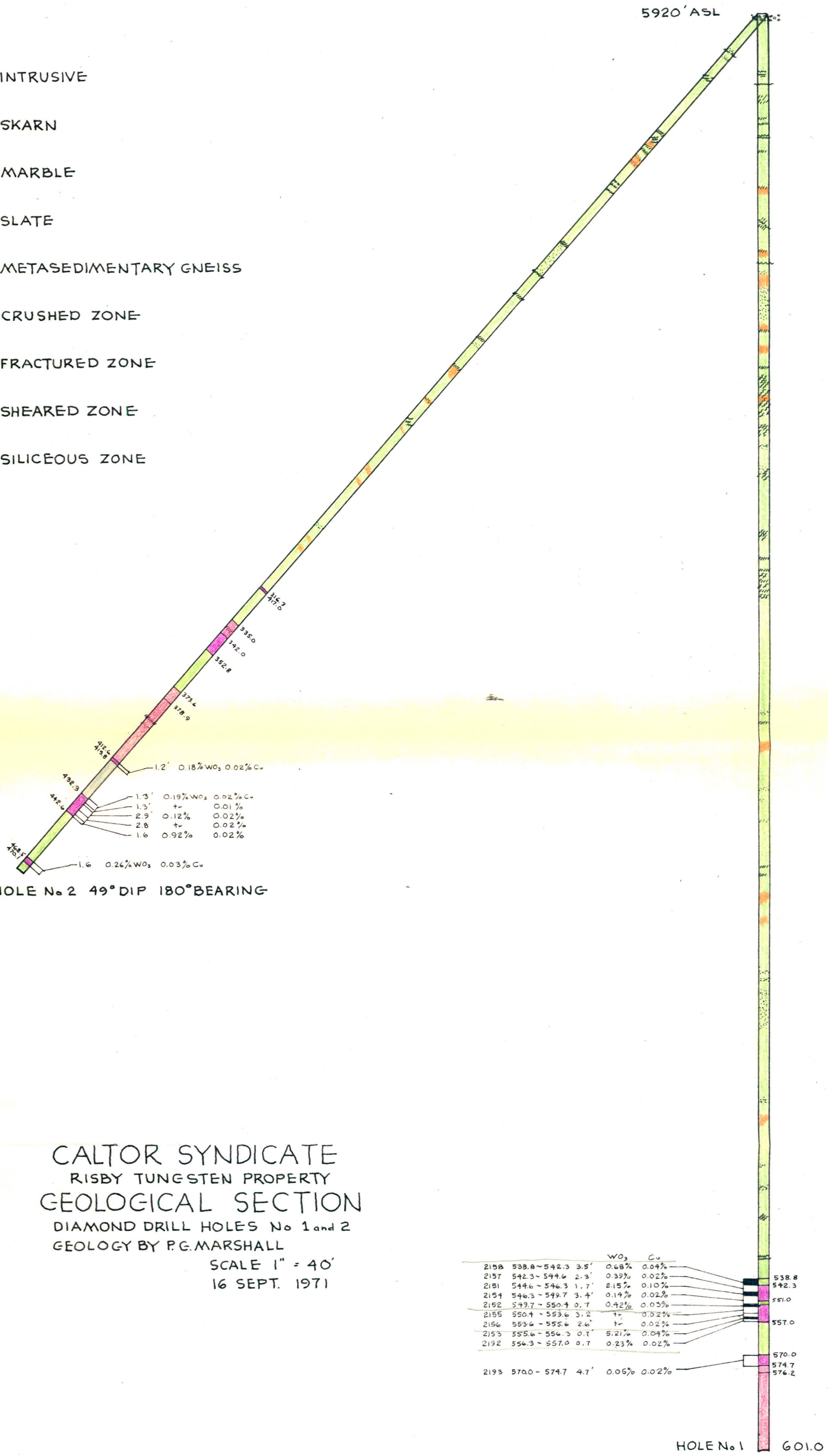
METASEDIMENTARY GNEISS

CRUSHED ZONE

FRACTURED ZONE

SHEARED ZONE

SILICEOUS ZONE



HOLE No 2 49° DIP 180° BEARING

CALTOR SYNDICATE

RISBY TUNGSTEN PROPERTY

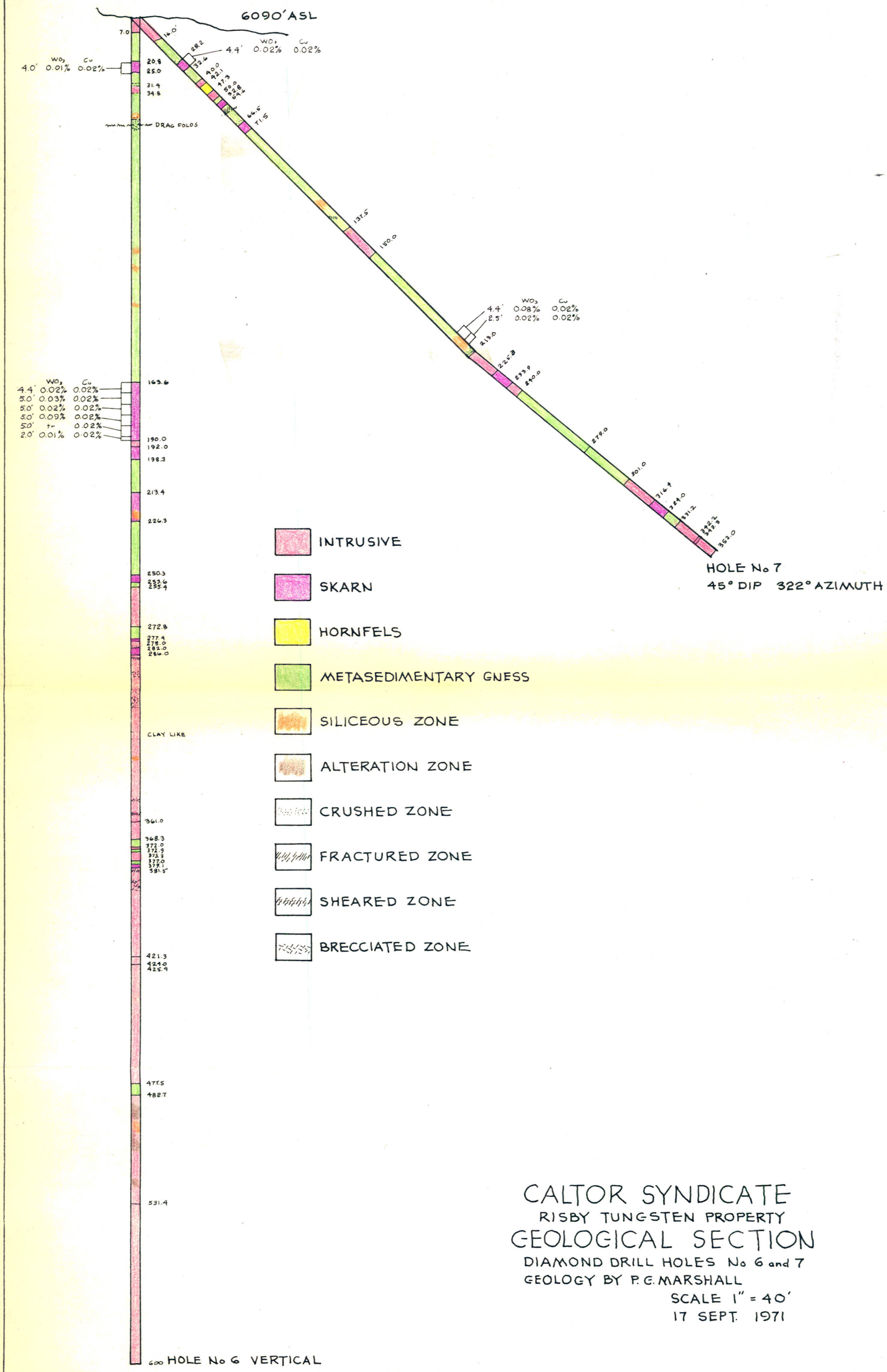
GEOLOGICAL SECTION

DIAMOND DRILL HOLES No 1 and 2

GEOLOGY BY P.G. MARSHALL

SCALE 1" = 40'

16 SEPT. 1971



CALTOR SYNDICATE

RISBY TUNGSTEN PROPERTY

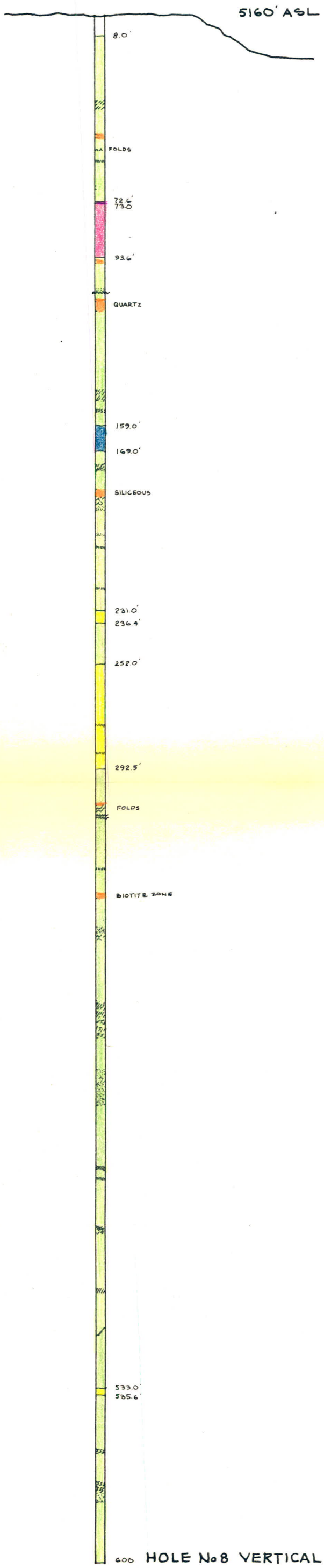
GEOLOGICAL SECTION

DIAMOND DRILL HOLES No 6 and 7

GEOLOGY BY P. G. MARSHALL

SCALE 1" = 40'

17 SEPT. 1971



INTRUSIVE

SKARN

MARBLE

FELDSPAR PORPHYRY

METASEDIMENTARY GNEISS

SILICEOUS ZONE

CRUSHED ZONE

FRACTURED ZONE

SHEARED ZONE

CALTOR SYNDICATE

RISBY TUNGSTEN PROPERTY

GEOLOGICAL SECTION

DIAMOND DRILL HOLE No 8

GEOLOGY BY P.G. MARSHALL

SCALE 1" = 40'

17 SEPT 1971