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PERSONNEL EMPLOYED

Office Of The Supervising Mining Recorder
JAN - 6 1976
Yukon Territory

Line Cutting Performed by:

Mr. Allen Carlos,
13 Asp Street,
Whitehorse, Y.T.

RECEIVED
JAN 14 1976
MINING
INSPECTORS OFFICE
WHITEHORSE, Y.T.

Geophysics by:

Mr. Allen Carlos

This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of $275.00
for prospecting
Recorder or Assistant Mining Engineer
Considered as representation work under Section 55 (4) Yukon Quartz Mining Act
W.R. BAXTER
Supervising Mining Recorder
Commissioner of Yukon Territory

Geo-Chem Sampling by:

Mr. Allen Carlos

Diamond Drilling by:

Mr. Terry McCrory,
Whitehorse,Y.T.

Geo-Chem Analyses by:

Acme Analytical Laboratories Ltd.,
6455 Laurel Street,
Burnaby 2, B.C.

RECEIVED
JAN 09 1976
MINING
INSPECTORS OFFICE
WHITEHORSE, Y.T.

INTRODUCTION

The Horn Group of 24 mineral claims were staked for myself between February 28, 1975 and March 29, 1975.

Between March 2 and June 20, 1975, Line-Cutting, E.M. and Mag Surveys, limited soil geo-chem and diamond drilling were conducted over this property.

A baseline was established over a length of 5,000 feet, with crosslines at 400 foot intervals.

Geophysical readings were taken at 100 foot stations closed to 50 foot and 20 foot spacings over the area of interest.

The claim lines were accurately chained during staking. The claim tags have all been attached to their respective claim posts.

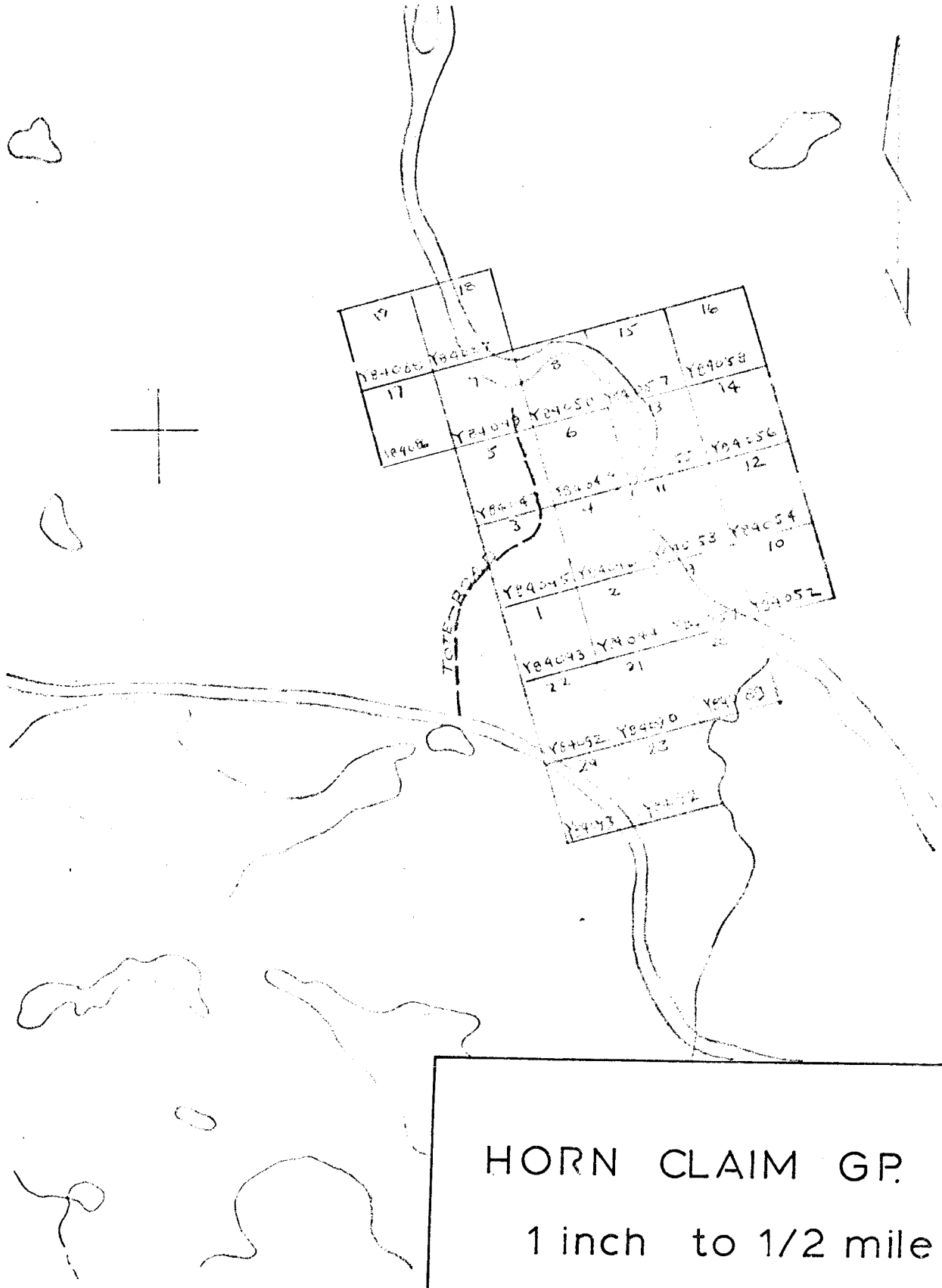
PROPERTY

The Horn Group consists of 24 contiguous mineral claims as follows:

Claim Name	Record No.	Location Date
Horn 1-8	Y84043-Y8050	February 28, 1975
Horn 9-16	Y84051-Y84058	March 1, 1975
Horn 17-24	Y84086-Y84093	March 29, 1975

The holder of the above claims is Allen Carlos of 13 Asp Street, Whitehorse, Y.T.

All work on the claims was done for A. Carlos.



HORN CLAIM GP.

1 inch to 1/2 mile

LOCATION AND ACCESS

The property is located some 16 miles along the Pelly River, South East of Ross River. The claims cover Hoole Canyon.

The Campbell Highway cuts through the Southern portion of the claim group.

Access to the property was by four wheel drive vehicle on a road slashed out by chain saw.

PHYSIOGRAPHY

The property is situated to the north of the Tintina Trench within the Yukon Plateau Province. It consists of relatively low relief with hills not exceeding 3000 feet. Outcrop is very limited, occurs mostly along the river and is estimated at about one percent.

REGIONAL GEOLOGY

The Horn claim group lies within a northwesterly trending metamorphic unit consisting of crystalline limestones, cherty quartzites and argillites.

Intrusive into the above unit is peridotite, porphyritic hornblende diorite and altered quartz diorite.

GEOCHEMICAL SURVEY

(a) General

In 1972, approximately 20 soil samples were taken in the vicinity of the present Diamond Drill hole. Three erratic highs approximately three times background in lead, zinc and copper were observed.

Limited soil sampling over areas of geophysical interest were performed in the present program.

48 samples were taken and analyzed for lead, zinc and copper.

Sample locations are as marked on map in pocket.

(b) General Geology

Claim group consists of Northwesterly trending metamorphosed carbonates, interbedded with thin bedded grey and black cherty quartzites.

Intrusives in this unit, as noted in Hoole Canyon, consist of peridotite and porphyritic hornblende diorite.

Altered quartz diorite occurs on line 40S; 900 feet to 1000 feet west.

(c) Pedology

Upon removal of the surface vegetation, a sandy gravel is exposed. Samples taken in this environment are usually dry to slightly moist.

(d) Laboratory Procedures

Readings were obtained in parts per million by use of an atomic absorption unit.

(e) Conclusions and Recommendations

48 soil samples were taken over zones of geophysical interest.

The results are very low with only several readings falling into the weakly anomalous range.

Diamond drilling has determined a great depth of overburden in the general area - masking any possible metal ion migration from bedrock.

No further soil geo-chem work is recommended due to the heavy overburden.

ANALYSES CERTIFICATE

File No. R-5092

"HORN GRID"

No.	Sample Station	Cu	Pb	ZN
1	20S B.L.....	28	30	110
2	1 W	18	24	200
3	2	16	38	154
4	4	30	42	130
5	6	32	38	126
6	8	24	48	150
7	12	16	24	68
8	14	16	20	70
9	16	26	30	92
10	18	16	28	118
11	20S 20W.....	12	26	104
12	24S 2W	20	40	132
13	4	24	42	152
14	6	22	30	94
15	8	24	30	74
16	10	28	28	90
17	12	22	32	130
18	14	16	26	200
19	16	20	28	110
20	18	110	40	230
21	24S 20W.....	20	28	74
22	28S B.L.....	12	22	160
23	2 W	30	42	114
24	4 W	14	32	136
25	6	16	20	84
26	10	20	20	80
27	12	82	22	78
28	14	38	20	70
29	16	28	24	70
30	28S 18W.....	44	20	62
31	40S 1E	74	28	70

ANALYSES CERTIFICATE (cont.)

No.	Sample Station	Cu	Pb	ZN
32	2E	28	34	120
33	3E	24	40	160
34	BL	24	38	82
35	40S 1W	22	28	48
36	44S BL	22	26	110
37	1W	42	38	114
38	2W	36	50	122
39	44S 3W	36	30	100
40	48S B.L.....	30	34	120
41	1W	26	40	146
42	2W	72	30	98
43	48S 3W	18	24	120
44	20S 10W.....	20	22	88
45	20W 28S.....	28	20	64
46	24W 28S.....	22	26	136
47	28W B.L.....	32	28	72
48	50W B.L.....	32	30	160

Rock Geo-Chem

Altered quartz diorite, outcropping on line 40S - 900 ft. to 1000 ft. west, was sent to the Whitehorse Assay Office for determination of lead, zinc and copper content in parts per million.

The following results were obtained:

Sample No.	Gold Oz. per ton	Copper P.P.M.	Lead P.P.M.	Zinc P.P.M.
1	.005	560	368	228

Geophysical Survey

(a) General

A baseline was established over a length of 5000 feet. Cross-lines were established 400 feet apart, except over area of interest, where the separation was only 100 feet.

Readings were taken at 100 foot intervals and closed to 50 feet over one anomalous zone.

(b) General Geology

The claim group consists of Northwesterly trending metamorphosed carbonates interbedded with thin-bedded grey and black cherty quartzites.

Intrusives consist of peridotite-altered quartz diorite and porphyritic hornblende diorite.

(c) Method & Equipment

Magnetometer survey was conducted by using a geotronics model G-110.

Operating principle is that of a neutralized fluxgate. Readout consists of a meter null plus precision dial to absolute value of vertical field. The unit has a sensitivity of 20 gammas per dial division.

Diurnal corrections were applied by checking in at a base station at a maximum of 1/2 hour duration.

Electromagnetic survey was conducted using a Geonics E.M. - 16 instrument.

Cross lines run normal to transmitter location station NPG, Washington, U.S.A., operating at a frequency of 18.6 KH_z.

(d) Interpretation

Intense magnetic anomalies in the range of 3000 to 4000 gammas are very likely due to basic rock types, as peridotite exposed in Hoole Canyon is quite magnetic. An exception may occur on line 40S - 1000W where strong magnetic readings flank an outcropping of altered quartz diorite, perhaps reflecting a contact metamorphic zone.

Mr. Steve Presunka, a well regarded geophysical contractor, has kindly offered his aid in the interpretation of the results. Following are his comments as presented to me. Mr. Presunka had observed the core prior to the interpretation.

Horn Claims

(1) L-200S cross-over at 760 feet west of the B.L. Depth to conductive zone = 230 ft.

Quadrature high - (a) graphitic zone (b) disseminated sulphides (c) or both combined as seen in the core. At 230 ft. the core should indicate better conductive material. Weak magnetic support along strike of conductor suggests presence of sulphide.

(2) L-200S - cross-over (secondary type) = L-285 ft. west of the B.L. Depth to conductive zone = 200 ft. Likely conductor parallels tilt direction of N.P.G. V.L.F. ST.

(3) L-3200S - cross-over 420 feet east of the B.L. Depth to conductive zone = 175 ft. Small quadrature suggests sulphide present. Strong magnetic correlation (should be detailed) V.L.F. S.T. 17.8 (Maine) should be run.

(4) Two lines - 4400S and 4800S

L-4400S cross-over 900 feet east of the B.L. Depth to conductive zone = 265 ft. Small quadrature and flanking magnetic correlation. Conductor likely due to sulphide along contact with basic rock type. Similar condition on L-4800S at cross-over 1020 ft.east of the B.L. Depth to this conductor zone is much greater, some 360 ft.

(5) Lines 4000S and 4400S west of the B.L.
Medium magnetic support.
Depth to conductor on L-4000S = 180 ft. (Interesting anomaly and should be detailed)

Mr. Steve Presunka (Report cont.)

There could be an interesting conductive zone west of the B.L. on L-2000, 2400 and 2800 S. The wide separation of inphase to quadrature in opposite polarity suggest an E.W. trend, same as indicated by the magnetic contours. V.L.F. ST. 17.8 would pick it up.

The core is conductive, not entirely due to graphite. The presence of sulphide in the core adds to the conductivity of the core. The conductors which have magnetic correlation likely due to sulphides.....

(e) Conclusions and Recommendations

The magnetometer alone may not produce definite anomalies signifying underlying sulphide mineralization. Several of the more intense readings are most certainly due to basic rock type.

Only diamond drilling will definitely determine what conditions are responsible for the more interesting E.M. anomalies.

Mr. Steve Presunka, in his interpretation of the results, has made a number of recommendations in regard to further E.M. work. He has also expressed verbally that a horizontal loop E.M. survey should be conducted.

Diamond Drilling

(a) General

The Diamond drill used on this project is owned by myself, A. Carlos. It is a B.B.S. No. 1 with a hydraulic head equipped to handle B.Q. wireline. Terry McCrory of Whitehorse, Yukon did the drilling.

A great problem was encountered in attempting to drive the casing to Bedrock through the over burden. Casing was halted at the 138 ft. mark - after which drilling commenced through the remaining overburden, into bedrock at 152 ft. and on to a depth of 200.5 ft. At this point the bit was worn and the hole abandoned.

(b) General Drill Hole Log

Diamond drill core consists basically of a carbonate rock, varying to a degree throughout its length despite having been recovered from a hole drilled essentially down dip of the formation.

General Drill Hole Log (cont.)

152 ft. - 169 ft. - badly broken ground - poor recovery.

169 ft. - 172 ft. - characterized by development of vugs with calcite fillings. Minor disseminated graphite.

172 ft. - 200.6 ft.- Ziosite visible throughout this length, alternate lengths of up to 3 ft. of a cemented breccia - consisting of locally derived material.

Graphite most noticeable from 172 ft. - 194 ft. visible primarily as thin layers along the supposed bedding planes.

Pyrite erratic, varying from 2% - 5%

Small scale tight folding with crest axis in line with apparent bedding very evident along this length.

The core was assayed for zinc in parts per million.

Sample No.	ZN PPM	Interval	Feet
B 27505	40	169-181	12
27506	104	181-186	5
27507	104	186-191	5
27508	112	191-196	5
27509	64	152-162	10
27510	60	196-200.6	4.6

(c) Core Storage

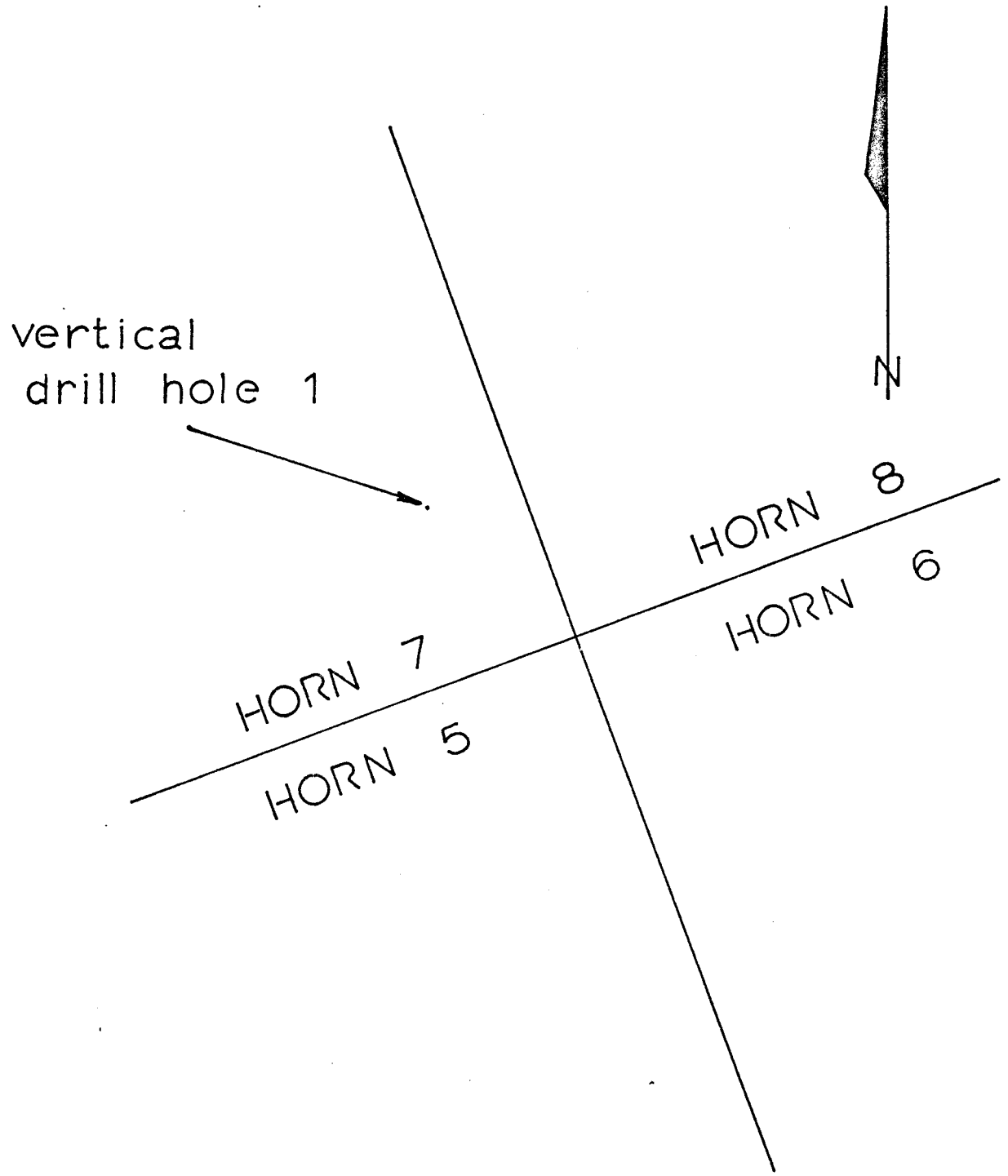
Core is stored at the residence of Mr. A. Carlos, 13 Asp Street, Whitehorse, Yukon Territory.

(d) Conclusions & Recommendations

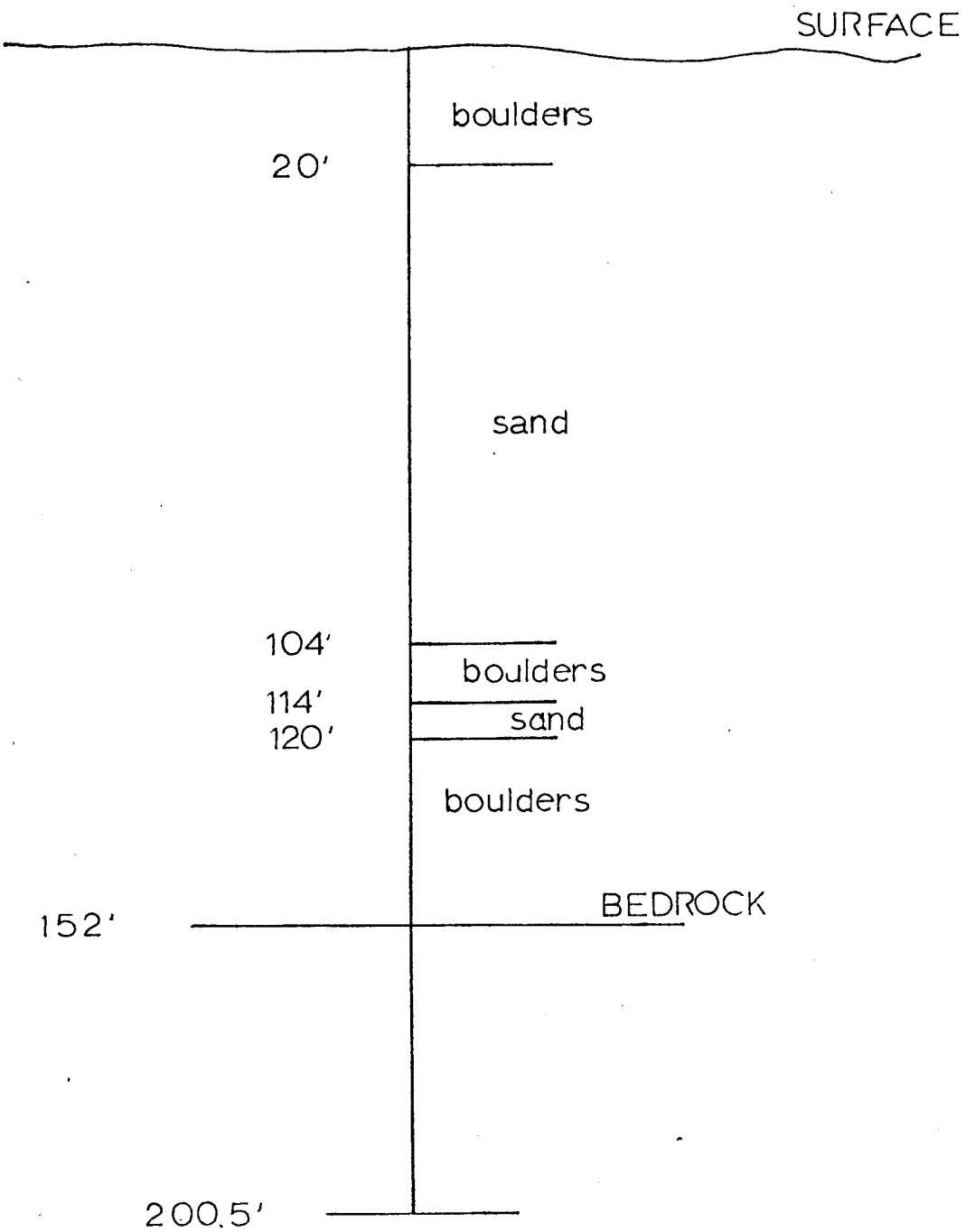
Diamond drilling was inconclusive as the desired depth was not reached.

The recovered core is encouraging due to the presence of pyrite and the degree of alteration.

Further Diamond drilling should be preceded by more detailed geophysical work.



DRILL HOLE LOC.
scale 1" to 500'



DRILL HOLE PROFILE

SCALE 1" TO 30'

Telephones:
Bus: 576-8168
Res: 576-8170

D.L. COOKE AND ASSOCIATES LTD.
MINERAL EXPLORATION CONSULTANTS

16331 Bell Road,
Surrey, B.C.
Canada, V3S 1J9

PETROGRAPHIC REPORT

NUMBER: AC-1 LOCALITY: Yukon Territory DATE: August 27, 1975

NAME AND CLASSIFICATION: GNEISS

MEGASCOPIC DESCRIPTION: Moderately banded structure is evident in the presence of white and dark green layers.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Carbonate	20	Calcite occurs as both fine and coarse grained equigranular grains, in both dark and light coloured layers.
2. Quartz	20	Quartz is similar to calcite in habit, and both are closely associated. Large grains contain abundant calcite inclusions.
3. Garnet	20	Narrow bands consist of abundant isotropic garnet, and lesser biotite, quartz and alkali feldspar.
4. Zoisite	15	The garnetiferous layers contain abundant zoisite.
5. Biotite	10	Biotite appears as a possible secondary mineral after hornblende, with which it is associated.
6. Alkali Feldspar	5	Fine grained feldspar occurs with fine quartz in narrow bands.
7. Chlorite/Sericite	3	Tiny grains are scattered throughout garnet-rich layers.
8. Apatite	3	Numerous isolated grains are present.
9. Hornblende	2	Irregular grains of hornblende are rimmed by fine grained biotite.
10. Pyrite	2	Irregular grains and seams are common.
11. Sphene	Tr.	This occurs as resinous brown grains. It is evident in the hand specimen.

TEXTURE: The specimen has a banded texture which results from the presence of layers rich in quartz, or biotite and garnet. Grain size varies from one layer to the next. It is coarse to medium grained.

CONCLUSION:

The sample is derived from metamorphism of a limey argillaceous parent rock. The brown resinous mineral marked for identification is sphene. It occurs in amounts of less than 1% by volume.

19 18

diamond drill hole

17 7 8 15 16

5 6 13 14

20S

24S

28S

3 4 11 12

40S

44S 1 2 9 10

48S

22 21 20

pelly river

24 23

CLAIM MAP + SURFACE PLAN

SOIL GEO-CHEMS

scale: 1 inch to 800 feet

BASELINE

4800S 4400S 4000S 3600S 3200S 2800S 2400S 2000S 1600S 1200S 800S 400S 0+00

NPG — WASH.

"HORN" CLAIMS

EM 16 PROFILE
in phase ——
quadrature - - - - -
SCALE : vert: 1"=16"
hor: 1"=200'
APRIL 19 , 1975

BASELINE

"HORN" GROUP
MAG: SURVEY
scale: 1" 200'