YMIP 95-061 GRASSROOTS PROSPECTING

SUMMARY REPORT

HOOLE RIVER AREA 105 G/12

WATSON LAKE MINING DISTRICT

Prepared by:

James S. Dodge, P.Eng.

June-December, 1995

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Hoole River Bridge/Fly	Camp I	In Pocket
Reel Creek Camp II		in pocket
MAX Claim Camp III		in pocket

<u>Assays</u>

NAL	WO#15263	04/08/95 +	ICP		6
NAL	WO#15138	28/08/95 +	ICP		6
NAL	WO#15409	12/10/95 +	ICP		6
NAL	WO#15456	24/10/95 +	ICP		6
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SUMMARY

The 1994 YMIP discovery of a glacially derived boulder on the MIDAS #1 claim (105G-12) Hoole River area carrying 14%-16% zinc - was the centerpiece for prospecting under the 1995 YMIP program.

Significantly, a petrographic description indicated that the sphalerite, calcite, and meta-quartzite were cogenetic. Moreover, the stratiform fabric of the mineralization posed the possibility of a bedrock source with substantial lateral continuity.

Prospecting was conducted up-ice from the site of the high-zinc boulder; in the glaciofluvial and morainal terrane of the Hoole River valley. Attention was directed to careful and detailed inspection of riverside cobbles and boulders, and occassional bedrock exposures, along both the left and right banks of the river. Secondarily, several traverses, up to 2 km long, investigated sparse outcrops in the higher moraine-covered areas away from the Hoole River. A total of 50 rock samples were analyzed for gold and 30element ICP during the course of the 1995 season.

An 8 km-long fault zone paralleling the right bank of the Hoole River was investigated as a possible locus of up-welling late hydrothermal mineralizing solutions genetically related to a (KTfqp) feldspar quartz porphyry plug on the projection of the fault zone near its junction with the Tintina fault. Several, not-travelled-far, small boulders of jasperoid, chalcedony breccia, and open space filled with quartz druse, carried anomalously high gold (~40 ppb) and arsenic (~50 ppm) values in the upper ranges of 103-1966 ppb and 1324-3289 ppm, respectively.

A block of ten MAX quartz claims were staked astride the northern end of the fault zone where cold springs discharge impressively large volumes of heavily limonite laden water, and near which auriferous pyrite epithermal float was found.

Although a number of calcareous meta-quartzite boulders were found along the right bank of the Hoole River up-ice from the MIDAS #1 sphalerite boulder, no additional zinc-bearing float was seen. Nonetheless, further prospecting in the area is justified on the basis of results from this 1995 YMIP; particularly the SEDEX boulder of Ag+ base metals ICP assays reported out only in December.

James S. Dodge 05/12/95

1.0 Introduction

1.1 Location and Access

Prospecting was conducted during June-October, 1995 in the Hoole River valley of southcentral Yukon, Watson Lake Mining District on claim sheet 105 G/12.

Continuous prospecting of glaciofluvial till and bedrock sites along and near the Hoole River commenced at NTS 558440 and continued up-stream to NTS 559344, a river distance of roughly 20 kilometers.

Access to the northern half of the area was by increasingly longer daily foot treks from a base camp at the Hoole River bridge on the Campbell Highway at NTS 569490 on to NTS 570429 along the east side of the MIDAS claims on the left bank of the river. Afterwards, a 5-day fly camp was established at 574424 by backpacking in from the Campbell Highway. In addition, two base camps set in by Trans North Helicopter were located up-stream on the right bank of the Hoole River at NTS 576356 and 595390 successively during the latter half of the prospecting program.

1.2 Terrain

The prospecting area comprised glaciofluvially derived flights of terraces bordering the Hoole River, and increasingly steeper moraine till-covered slopes above the terraces. Except for bouldery banks of the Hoole River, the area is covered by mature stands of mixed black spruce and aspen.

1.3 Claim Holdings

Prospecting was carried out over 'open' ground between and/or near several blocks of 1994 claims (REEL, RAN, BOD) staked by COMINCO, and the MIDAS claims of Dodgex Ltd.

1.4 Personnel

Prospecting was carried out solo by James S. Dodge intermittently during June-October, 1995. Slow return of assay results compelled several 2-week interuptions of field work.

1.5 Prospecting Targets

1.5-01 Stratiform Zinc

Follow-up prospecting in the search for the bedrock source of the high grade (14%-16% Zn) sphalerite-bearing boulder found in the 1994 YMIP season along the left bank of the Hoole River on MIDAS #1 claim at NTS 559439.

1.5-02 Mesothermal Au-Cu

Prospecting the southwesterly continuation of the quartzchlorite schist exposed on the MIDAS claims where river boulders of mesothermal pyrite-milky quartz carries snomalously high gold (1378 ppb) and copper (1.68%) values in a sheeted fabric of quartz-chlorite schist.

1.5-03 Epithermal Au

Prospecting for source of cobbles and small boulders of chalcedony, open space quartz druse, and jasperoid commonly found along the left bank of Hoole River near the MIDAS claims. These float represent typical epithermal mineralization; several samples had assayed >100 ppb gold and >100 ppm arsenic.

1.5-04 SEDEX Ag+Base Metals

Prospecting for Paleozoic sedimentary exhalative base metal sulfides not unlike reportedly on the ARGUS claims up-stream.

2.0 Prospecting Areas

2.1 Hoole Bridge/Fly Camp I

Fly Camp I at NTS 573423 was established by backpacking in from the Hoole River bridge on Campbell Highway (MAP I). Traverses in blue are from the Fly Camp. Brown line traverses were made from the Hoole Bridge base camp.

2.2 Reel Creek, Camp II

Camp II was set in by Trans North Helicopter based in Ross River. Blue lines indicate areas prospected from this camp.

2.3 MAX Claims, Camp III

Camp III was set in by Trans North Helicopters based at Ross River. Blue lines indicate areas prospected in detail from this camp. Prospecting toward the south along the right bank of the Hoole River overlapped the river boulder train previously less-intensively prospected section from Camp II.

3.0 Areal Geology

Paucity of outcrops lessens the accuracy of geologic mapping in the prospecting area. Nevertheless, several broad geologic features are evident.

(1) A well-defined north-northeast trending fault zone divides the prospecting area into two distinct geologic terranes. A host of limonite laden springs, land slides, epithermal chalcedony breccia float, and a quartz feldspar porphyry plug define the trend and extent of this fault zone.

(2) East of the fault zone, north dipping (15°-20°) amphibolites are well exposed along Reel Creek. The presence of garnet amphibolites, as well as nephritic and listwaenite carbonate boulders along the Hoole River, point to the probability of an ophiolitic package. In fact, as at Canol Cree (P.Erdmer and J.Dodge), the progenitor could be an eclogite regressed to garnet amphibolite.

(3) West of the fault zone, a triad of basal chlorite schist, middle limestone, and upper quartz chlorite schist dominate, and as a unit dip gently 15°-20° west.

(4) One interpretation of the geologic interrelationships is that the fault zone has had normal movement with the west side Cambrian (?) schists down with respect to the Carboniferous (?) ophiolite to the east.

(5) The discovery of a SEDEX-type boulder of anomalously high Ag+Cu+Pb+Zn+As+Mo+Bi suggest presence of acidic horizons in a volcanic sequence up-ice on or east of the MAX claims.

4.0 Conclusions

4.1 Stratiform Zn

A sample of the YMIP 1994 sphalerite-rich boulder was submitted to Vancouver Petrographics for a petrographic description. Significantly, their Job 950445 (enclosed) of 18 August revealed that sphalerite, calcite, and quartzite were cogenetic and defined a weak foliation. Thus, it was concluded that the metaquartzite bedrock source may be of potentially large extent - a worthy target for prospecting.

No similarly mineralized quartzite was found up-ice along the Hoole River in the 1995 prospecting area. However, over a score of small unmineralized banded quartzite boulders were found.

4.2 Mesothermal Au-Cu

No quartz-pyrite-chalcopyrite (with gold) float was found off the MIDAS claims.

4.3 Epithermal Au

Many cobbles and small boulders of orange-brown jasper, chalcedony, and vuggy quartz breccia druse were found among right-bank boulders of the Hoole River in prospecting areas from Camp II and III. NAL assays on WO#15456 of 24/10/95 illustrate anomalous gold values of 103, 211, and 1966 ppb and high arsenic from float samples on MAX claims 8 and 10.

4.4 SEDEX Ag+Base Metals

Discovery was made at NTS 586384 of a large (1 m) nottravelled-far boulder with silver and base metal values hosted by stratiform quartz-pyite matrix (PHOTO 3). Three samples (#2654, 2655, 2656) from the boulder yielded similar results the average of which was: 30.5 ppm Au, 505 ppm Cu, 2171 ppm Pb, 1385 ppm Zn, 843 ppm As, 116 ppm Mo, 65 ppm Bi. This suite of elements, in these ratios, point confidently to a SEDEX type source rock.

5.0 Recommendations

Recommendations are made for follow-up prospecting up-ice, and up-stream, on the Hoole River area toward the ARGUS claims for stratiform zinc in metaquartzite; (2) for SEDEX deposit carrying argentiferous base metal values; (3) for auriferous epithermal vein-type deposit in the main "Hoole" fault zone.

Geochemical soil sampling on the MAX claims is recommended.

Al. James S. Dodge 07 December, 1995

STATEMENT OF QUALIFICATIONS

I, James S. Dodge, of 14 MacDonald Road, Whitehorse, Yukon submit the following information which establishes some of the qualifications bearing on the necessary level of competence required to carry out the field work and preparation of this summary report on the YMIP 95-061 project.

Education

Missouri School of Mines, BS Mining Engineering, 1941 Princeton University, Field Geology, 1940 Stanford University, MS Economic Geology, 1951 Albert Ludwigs Universitaet(Germany), Economic Geology, 1952

Experience

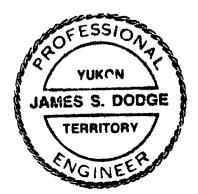
Active in mineral industry since 1941 (including U.S. Army Engineers) in North and South America, Asia and Africa as prospector, company geologist, mining engineer, mine operator, and consultant in ferrous, non-ferrous, and industrial minerals. Among the many organizations that I have been associated as an employee and consultant:

Anaconda, ESSO, Mitsui, USAEC, Ventures, DIAND, SCAP-Japan, Atlas, Glidden, Spartan/Nuspar, Hirst-chicagof, Floyd Odlum, Yukon Barite and numerous small mining ventures.

Experience in vein gold mines in Colorado and Alaska, in SEDEX/VMS deposits in Yukon and British Columbia and Japan, and in nephrite and chromite deposits in ophiolite terrane are specifically applicable to evaluation of grassroots prospecting under YMIP 95-061.

Professional Affiliations

Registered Professional Engineer (No. 311) by Association of Professional Engineers of the Yukon Territory Senior Fellow of the Society of Economic Geologists Senior Member of Society of Mining, Metallurgy and Exploration



ANNIN X LIC James S. Dodge, .Eng.



PHOTO 1 Looking north from left bank of Hoole River near NTS coordinates 576417 where chlorite schists are inclined 15°-25° west in cliffs both sides of short canyon.

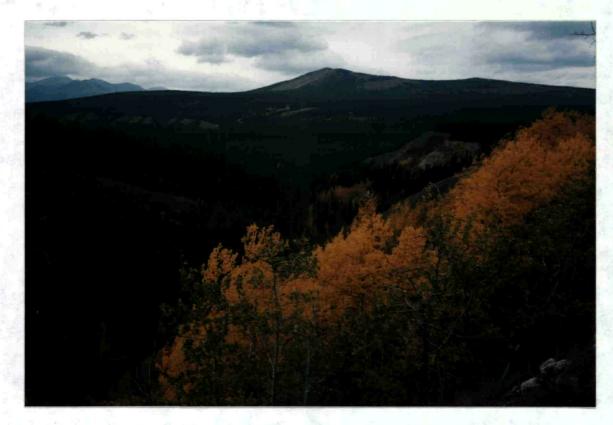


PHOTO 2 View northwest from north side of Reel Creek toward peak near COMINCO's BOD claims. Garnet amphibolite 010° 15°-20° west outcrops in bed of Peel Creek.

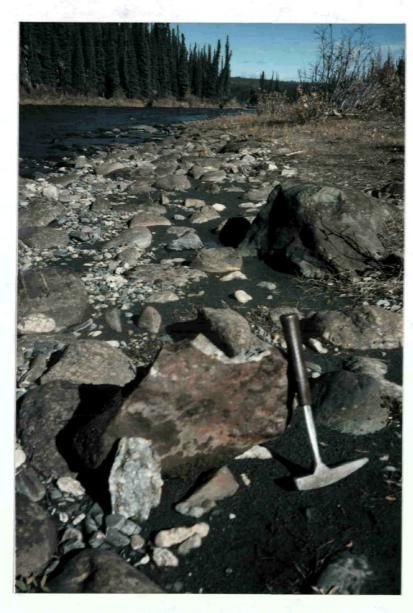
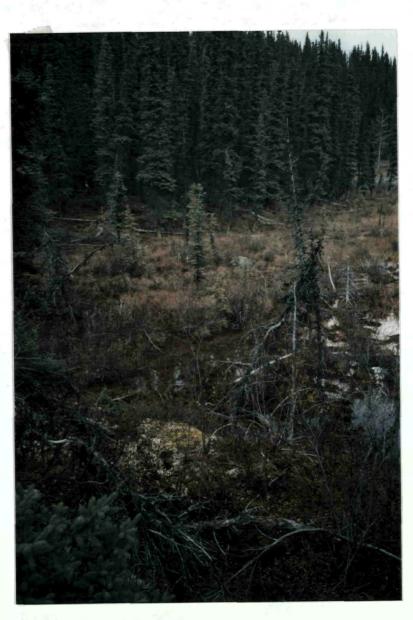


PHOTO 3 SEDEX boulder @ 587384 12/09. Samples #2654, 2655, 2655 yielded anomalously high Ag, Cu, Pb, Zn, Bi, Mo and As. MAX #4 claim



¹PHOTO 4 Hoole River with pyritic jasperoid boulder among boulders of amphibolite quartzite, and serpentinite.



'PHOTO 5 Limonite swamp covers over 2 hectares approximately 1 km south of Base Camp #3 along Hoole River @591388.



PHOTO 6 Limonite-laden active springs issuing at ca. 500 gallons per minute from a 200-meter interval of Hoole River fault zone.

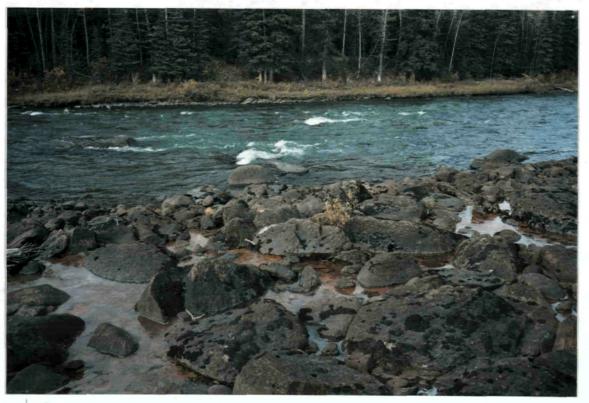


PHOTO 7 Limonite-loaded spring water draining among boulders along right bank of Hoole River at mouth of Wolf Creek- 584370.

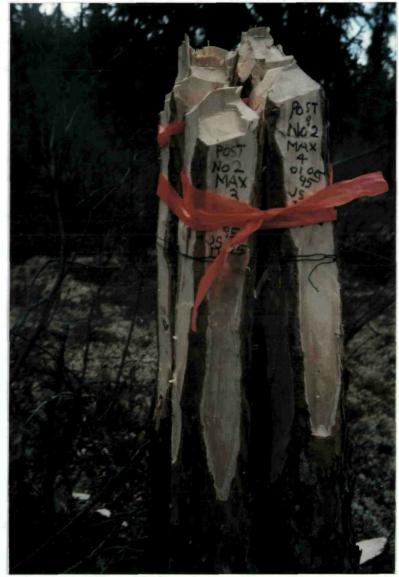


PHOTO 8 Claim Posts MAX Claims right bank of Hoole River.



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Assay Certificate

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James Dodge

WO#15263

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Assay Certificate

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James Dodge

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24/10/95

Assay Certificate

James Dodge

WO#15456

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2679	<5	•
2680	103	
2681	<5	
2682	211	
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8080 GLOVER ROAD, LANGLEY, B.C V3A 4P9 PHONE (604) 888-1323 • FAX (604) 888-3642

Report for: James S. Dodge, 14 MacDonald Rd., WHITEHORSE, Yukon Y1A 4L2

Job 950445

August 18th, 1995

SAMPLE:

A rock specimen (un-numbered) from the Hoole River area was submitted for polished thin sectioning and petrographic examination.

DESCRIPTION:

Estimated mode

Quartz	64
Sericite	1
Carbonate	7
Sphalerite	28
Pyrite	0.2
Chalcopyrite	trace
Galena	trace

This rock consists essentially of an equigranular mosaic of quartz, of grain size 0.1 - 0.5 mm. Honey-coloured sphalerite is the principal accessory, together with lesser proportions of carbonate.

The sphalerite occurs throughout as semi-continuous strings and networks of grains, 0.05 - 0.5 mm, locally aggregating as clumps to 1 or 2 mm in size. It is of similar grain size to the hosting quartz, and the textural relationship of the two minerals appears to be one of co-genetic recrystallization.

The host rock has the aspect of a metasediment - best characterized as a somewhat calcareous quartzite. The accessory carbonate (moderately reactive to dilute acid, and probably mainly calcite) occurs as sporadic individual grains and local coalescent pockets. It is of similar grain size to the quartz and sphalerite, and appears to be in textural equilibrium (co-recrystallized) with them. Its distribution is independent of that of the sphalerite.

Sericite is an evenly dispersed minor accessory, as sparse, slender, individual, weakly oriented flakes, intergranular to the polygonal quartz grains.

The distribution of the sphalerite and of local concentrations of carbonate define a weak foliation.

Traces of pyrite occur as a few clusters of grains 0.02 - 0.3 mm in size, associated with the sphalerite at one end of the sectioned portion.

The sphalerite is an unzoned, honey-coloured variety of remarkable homogeneity. The virtual absence of associated galena or chalcopyrite (except for one or two extremely rare specks) is a remarkable feature, which, together with its relatively coarse particle size and the simple host-rock mineralogy, should make material of this kind extremely amenable to concentration.

The assemblage represented in the sectioned portion corresponds most closely with that designated #8678 in the enclosed assay reports - rather than #8671, which apparently contained significant galena, and in which the the high Fe content was, presumably, contributed by major pyrite.

This specimen contains no garnet, and does not have obvious skarnic affinities. It appears to be a granulitic metamorphic rock (calcareous quartzite) in which the sphalerite may represent an original syngenetic constituent. The elevated Mn probably occurs as a molecular substitution in the sphalerite. The geochemically anomelous W could be indicative of the presence of minor associated syngenetic scheelite - though no W minerals were seen in this thin section.

These findings offer the possibility that the bedrock source of this material may be of potentially large extent. Continued prospecting would appear well justified.

J.F. Harris Ph.D.

929-5867

