

A REPORT ON THE
GEOLOGICAL SURVEY
OF THE
R.A.F. PROPERTY
Stewart Area, Skeena Mining Division,
British Columbia.

Name of claims - R.A.F. #1, 2, and 3

Location of Property - R.A.F., 5.9 miles Northeast of Stewart,
55°129' N.W.

Report prepared by - Robert A. Knutson, Geologist

Owner of claims - Angello Bugnello, Stewart, B.C.

Optioner of Claims - Newconex Limited
Room 914, 525 Seymour St.
Vancouver 2, B.C.

Period in which work was done - August 16 to September 7, 1960.

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INTRODUCTION:

During the period between August 16 to September 7, 1960 a geological survey was made of the R.A.F. Property, Glacier Creek, Skeena Mining Division, British Columbia. Detailed maps were prepared of two mineral showings in the area. Picket lines, cut in conjunction with a geophysical survey, provided control. However, owing to the steep nature of the topography in the northeast part of the property, compass and chain methods were used.

Location and Accessibility:

The R.A.F. Property ($55^{\circ}59'20''N$, $129^{\circ}52'30''W$) is located on a tributary of Glacier Creek, 5.9 miles northeast of Stewart, B.C.

The Dunwell road, joining the Stewart-Cassiar Highway at Glacier Creek, is passable by four wheel drive vehicles for a distance of two miles. From this point, a trail, in poor repair, leads to the property which is about 3,300 feet above sea level.

Reports and Map References:

Hanson, G., The Bear River, and Stewart Map Areas, Cassiar District, B.C., Memoir 159, Geological Survey of Canada, Ottawa 1929.
" "., Memoir 175 - G.S.C. - Ottawa 1935.

Mineral Reference Map No. 3T269M
Provisional Map 103 P/13 West Half.

DESCRIPTION:

Map No. 1, drawn to a scale of one inch equals one hundred feet, accompanies this report. This map includes two inset maps (scale 1 inch = 20 feet), showing the detail geology of the adits and a copper showing.

General Geology:

The country rock underlying the R.A.F. claims is argillite of the Bitter Creek formation, cut by innumerable small and moderate sized dykes and sills. Rock exposures are scarce in the southwest part of the claim group, but plentiful in the northeastern section at higher elevations. An excellent impression of the argillite-intrusive relationship may be gained northeast of the

claims on the cliff faces. The dykes appear to have engulfed large blocks of argillite without any distinct pattern or trend. Dykes merge with intrusive masses and sills, thicken and thin indiscriminately, and often terminate for no apparent reason. Thus when rock exposures are limited to the creek bed, as they are on Claim No. 1, it is virtually impossible to determine the nature of the intrusive mass, whether it is a dyke, sill or plug. There has been at least two ages of intrusion, an augite porphyrite of the erratic type, described above, and a series of felsite dykes, one to ten feet in width, which cut both the porphyrite and argillite.

The regional strike of the argillite in the vicinity of the claims is northward and the dip to the west. However, the strike has been altered locally by the action of intrusives and drag-folding. A strong fault zone striking N. 60°E. can be traced in the lower portions of the creek bed. The fault dips steeply to the west. The extent and direction of the fault movement is unknown, but distinct horizontal grooves are evident in the fault walls.

Rock Types:

The following is a brief description of the rock types encountered in the area:

Felsite dykes:- Light green colour, fine grained to glassy, in part porphyritic, the felsite occurs only as dykes and sills. Feldspar forms the phenocrysts in the porphyritic phases. The dykes vary in width from one to ten feet and are for the most part regular with clear cut contacts. The felsite is a fresh unaltered rock and carries no sulphide mineralization. The predominant strike of the dykes is to the northwest.

Augite Porphyrite:- The augite porphyrite is a dark greenish-grey, medium textured rock, usually distinctly porphyritic in hand specimen. The principal phenocrysts are crystals of dark augite. The porphyrite is traversed by various sulphide bearing quartz veins, but no mineralization was observed in the rock.

Argillite:- The argillite is a dark variety, cleaved into slate in places, coarsely bedded and generally exhibits rusty weathering on the exposed surface. The rock shows varying degrees of alteration, in the extreme cases grading into micaceous schist. Graphitic phases are visible in the argillite in the creek bed. Portions of the argillite are calcareous but no pure limestone was noted on the property.

Mineralization:

The mineralized vein on the R.A.F. group occupies a fault in the creek bed and consists of quartz, massive and disseminated sulphides. The vein has been exposed by two adits; the upper 58 feet long, at an elevation of 3,260 feet, the lower, (elevation 3,200 feet), 125 feet southwest, is 150 feet long. The vein averages 2 to 3 feet in width but widens to seven feet at a point 33 feet from the portal of the upper adit. The vein is present at the face of the upper adit, but in the lower tunnel it terminates against a pre-mineral felsite dyke. Minor quartz was observed beyond the dyke, but it contains no sulphides.

The sulphide minerals are jamesonite, sphalerite, pyrite, chalcopyrite, tetrahedrite, and galena; but the last three are rare. Massive sulphides up to 2 feet in width occur in the upper vein, but 6 inches is the greatest width observed in the lower adit.

A second sulphide occurrence is located in the north-eastern part of R.A.F. Claim No. 2, at an elevation of 4,000 ft. above sea level. Chalcopyrite, the chief sulphide mineral has two modes of occurrence; as disseminated masses in quartz-calcite veinlets, and as replacement pods in calcareous argillite. The veinlets occupy shear zones, strike northwestward and dip to the east. The replacement masses parallel the argillite bedding which is slightly folded in the face of the open cut. Abundant quartz is exposed in the creek bed north of the open-cut but contains only minor disseminated sulphides.

The strike of the mineralization is difficult to determine, as it does not continue on the north side of the creek. The area south of the open-cut is covered with over-burden and heavy alpine brush and was not thoroughly explored. It is possible that the zone continues in this direction.

The results of assays and sample locations for both mineralized zones are shown on the accompanying map.

CONCLUSIONS:

Geological mapping in the vicinity of the R.A.F. quartz vein failed to reveal additional veins or features which might warrant further work on the zone.

Although the geology of the copper zone is somewhat obscure, the relatively good copper content indicates that further work is warranted on that section of the claims.

Toronto,
February 9, 1961.

Respectfully submitted,
Newconex Limited,
Robert A. Knutson, B.A., M.Sc.,
Robert A. Knutson
Geologist

A. Statement of Expenditures:

Geologist (R.A. Knutson - 5 days @ \$20.00 per day)	-----	\$100.00
Assistant (D. Hawkins - 5 days @ \$12.00 per day)	-----	\$ 60.00
		<hr/>
	Total	\$160.00

Respectfully submitted,

Robert A. Knutson

Robert A. Knutson

B. Statement of Qualifications:

Robert A. Knutson - While employed by Lundberg Explorations Limited, the writer was required to file a statement of qualifications with the Department. Please refer to your File No. 166 for this statement.

Respectfully submitted,

Robert A. Knutson

Robert A. Knutson

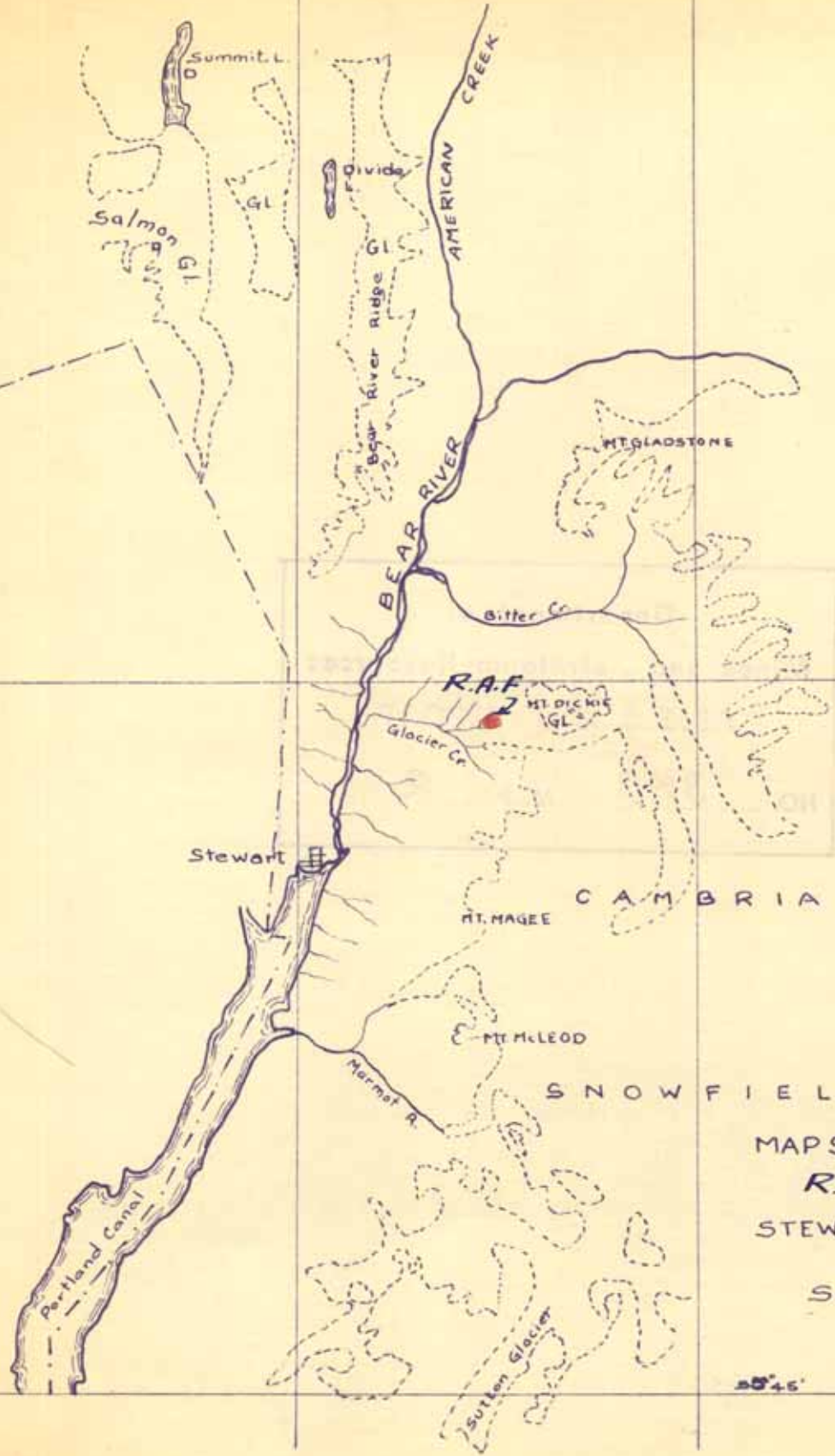
Toronto,
February 9, 1961.

130° 15'

130° 00'

129° 45'

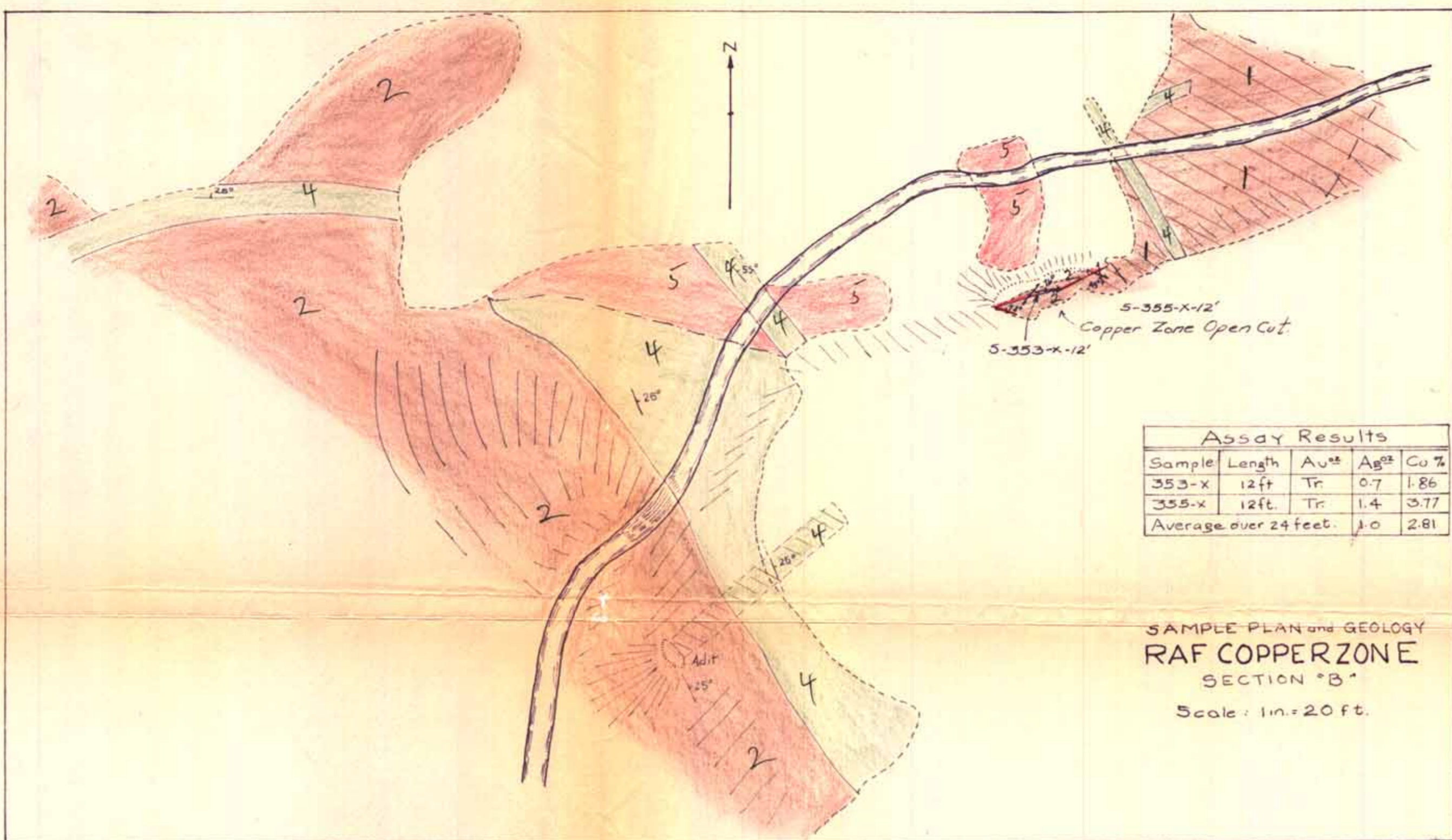
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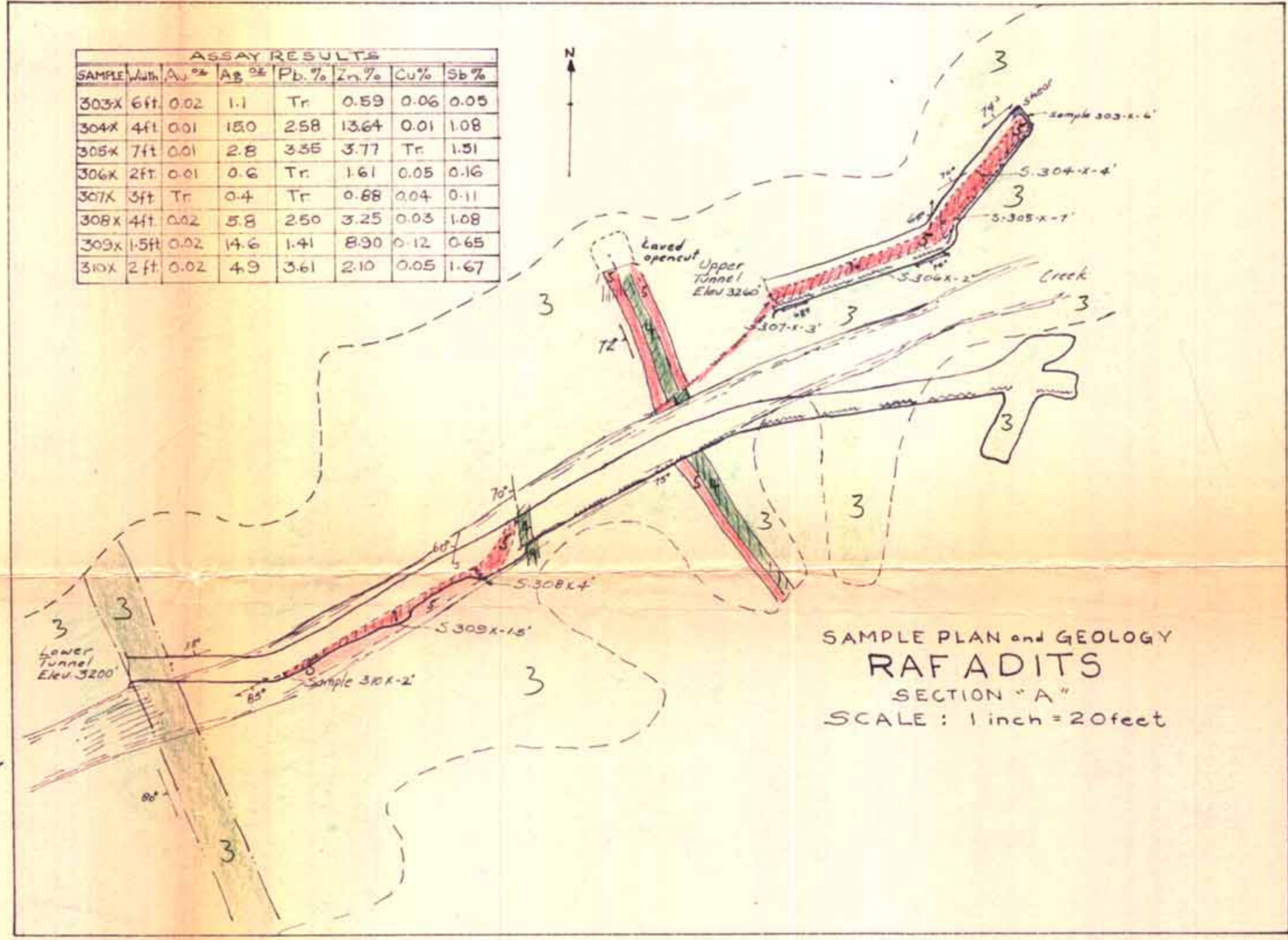
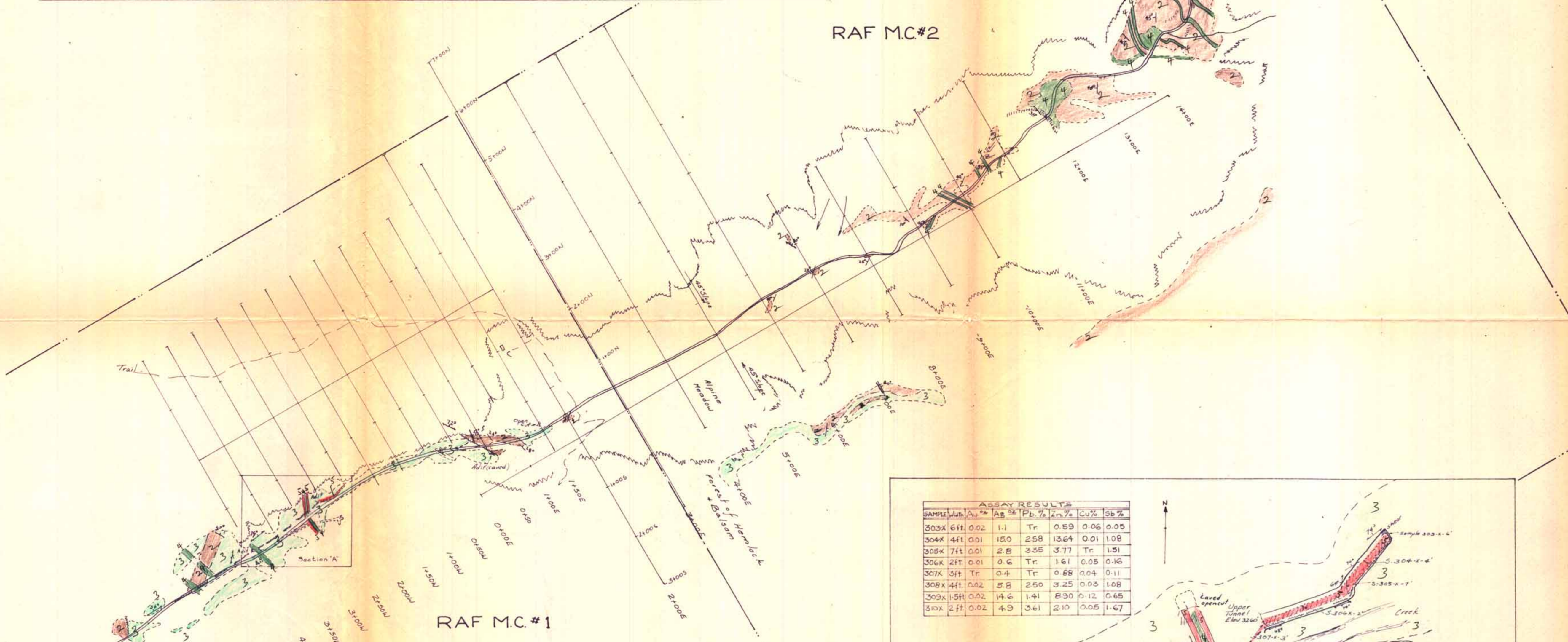
56° 00'

MAP SHOWING LOCATION OF
R.A.F. PROPERTY
 STEWART AREA, SKEENA M.D.
 B.C.
 Scale: 1 inch = 4 Miles.

56° 45'



TN
RAF M.C.#3



- LEGEND**
- JURASSIC**
- 5 - Quartz Vein
 - 4 - Felsite (dyke) in pure porphyritic
 - 3 - Augite Porphyrite
- BITTER Creek Formation**
- 2 - Argillite
 - 1 - Carbonaceous Arg.
- SYMBOLS**
- - - - - Outcrop boundary
 - - - - - Contact (defined)
 - - - - - Contact (Assumed)
 - ~~~~~ Fault
 - 25° Strike + Dip of bedding
 - 25° Strike + Dip of Shearing
 - ~~~~~ Tree line

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 343 MAP 1

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MAP SHOWING
THE GEOLOGY AND SAMPLE PLANS
on the
RAF PROPERTY
STEWART
MAUDE GULCH-GLACIER CK. AREA
SKEENA MINING DIVISION, B.C.
SCALE: 1 inch = 100 feet.
NEWCONEX LIMITED
R.A. Knudson
Sept 1960.

MAP No. 1