

ASSESSMENT REPORTS

Whitehorse M.D.

MAP No. 115 H 10

TYPE OF WORK: Geological

REPORT FILED UNDER

J.S. Dodge

DATE PERFORMED

29 June - 15 July 1984

DATE FILED: 14 May 1985

LOCATION - LAT.

61°33'N

LONG.

136°34'W

CLAIM Nos.

SNAP 39-48; YA81726- YA81735

WORK DONE BY

J.S. Dodge

WORK DONE FOR

J.S. Dodge

REMARKS

091635

40885 p. 212

The claims are underlain by a Tertiary volcanic sequence which contains both felsic and mafic volcanics. It has been interpreted by Dodge to represent a collapsed caldera complex.

Hydrothermal alteration around siliceous veins is argillic. Vein materials are chalcedony and quartz, which often surround silicified breccia fragments with a drusy or crustiform habit.

No significant mineralization has been discovered following chip sampling of vein material in 1984. Mercury anomalies up to 400 ppb are reported from these samples.



200100

This report has been examined by
the Geological Evaluation Unit
under Section 32 (4) Yukon Quartz
Mineral Act and is allowed as
representative work in the amount
of \$ 2,932.70

Regional Manager, Exploration and
Geology for Commissioner
of Yukon Territory

200100

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GEOLOGICAL REPORT

SNAP QUARTZ CLAIMS 39-48

INTRODUCTION

During the period 29 June through 5 July, 1984 Messrs. James S. Dodge, Professional Engineer Yukon Territory #311 and Robert Coyne, 22 Beech Street, Whitehorse, field assistant, carried out a reconnaissance of the Claims area mapping the geology and collecting chip samples from various outcrops of bedrock.

The following claims in the southeastern corner of Claim Sheet 115-H-10 were included in this work for the respective owners as follows (Appendix "A"):

<u>CLAIM NAME</u>	<u>TAG NUMBER</u>	<u>LOCATION</u>	<u>OWNER</u>
SNAP 39	YA 81726	61°32'N-136°34'W	James Dodge
SNAP 40	YA 81727	61°32'N-136°34'W	James Dodge
SNAP 41	YA 81728	61°32'N-136°34'W	Dan Coyne
SNAP 42	YA 81729	61°32'N-136°34'W	Dan Coyne
SNAP 43	YA 81730	61°33'N-136°35'W	Dan Coyne
SNAP 44	YA 81731	61°33'N-136°35'W	Dan Coyne
SNAP 45	YA 81732	61°34'N-136°34'W	Dan Coyne
SNAP 46	YA 81733	61°34'N-136°34'W	Dan Coyne
SNAP 47	YA 81734	61°35'N-136°34'W	Dan Coyne
SNAP 48	YA 81735	61°35'N-136°34'W	Dan Coyne

Geology was observed particularly well from outcrops on the higher slopes of the northwesterly trending ridge along which the claim line SNAP 39-44 extends. However, scattered outcrops and sub-crop scree throughout the claim area, with the exception of the glaciated valley floor in SNAP 45 and 47, permit a reasonably reliable geologic interpretation of the structural setting related to the sequence of volcanic flows, intrusives, and hydrothermal mineralization.

Previously published work in the general area was carried out by Mr. Templeman-Kluit and published in 1974 as the Geological Survey of Canada, Paper 73-41, "Reconnaissance Geology of Aishihik Lake, Snag and Part of Stewart River Map-Areas, West-Central Yukon." Subsequently, in 1978, Messrs. Templeman-Kluit and Currie conducted a regional reconnaissance geochemical survey in the district.

GEOLOGY

Three formations of Tertiary age were mapped in the Claim area. The formations are assigned the names used by Mr. Templeman-Kluit in the GSC Paper 73-41 as follows:

Tvr Varicoloured Acid Tuff

A swarm of parallel, northeasterly trending, vertical feldspar porphyry dykes has been mapped from good exposures in the eastern half of SNAP #41 claim and along the western boundary of SNAP #42 claim along the high ridge traversed by the claim staking line. The dykes range in width from 3 to 20 metres.

The phenocrysts are a yellowish plagioclas (andesine ?) comprising upwards to 20 per cent of the rock. Groundmass is fine grained to aphanitic comprising megascopically indistinct minerals with a gray-green colour.

The dykes intrude dense, green propylitized volcanics of presumed Mount Nansen age. Contacts of the subvolcanic dykes are sharp in places and gradational in others.

Tmn Mount Nansen Group

The Mount Nansen Group of volcanic rocks crops out in SNAP #39-44 claims at altitudes ranging from 3900' to 4900'. The rocks comprise dark greenish flow, tuff and prominent tuff-breccias in which fragments and matrix are of apparently similar composition. Although layering or flow structures are indistinct, the formation presents the field impression that the units are flat-lying to gently dipping to the southwest.

Tvr Varicoloured Acid Tuff

Varicoloured tuff underlies the eastern half of SNAP #42 and 44 claims and all of SNAP #45-48 claims. The flat-lying beds comprise light coloured vitric, quartz-crystal, and welded tuffs of apparently rhyolitic

composition. The unit characteristically displays closely spaced partings along laminations parallel to flow banding in welded tuffs.

Colours of the unit in the claim area vary generally from cream to pink. Mauve coloured rocks are exposed on SNAP #42.

STRUCTURE

The dominant structural setting of the SNAP property is an arcuate segment of a cauldron boundary between Mount Nansen volcanics comprising the topographically high perimeter and varicoloured acid volcanics occupying the interior collapsed floor. The moat area is the locus for breccia veins and pipes, while the rim is transected by a system of fissure-filling veins parallel to the porphyry dykes.

MINERALIZATION

Hydrothermal mineralization with very low sulfur fugacity is represented in three distinct modes on the SNAP claims; namely, argillic alteration of breccia pipe fragments followed by one and possibly two stages of chalcedonic healing, argillic alteration along open fissures subsequently filled with drusy and crustiform quartz with accompanying fluor spar, and a jasperoidized breccia pipe. All this mineralization is evidence of near-surface, low temperature hydrothermal systems in proximity to the structurally prepared sites. A plutonic heat source, sufficient to drive the circulation of these mineralizing solutions, is reflected in the early Tertiary age of the varicoloured rhyolite flows and the porphyry dykes. Vein- and pipe-breccias appear to be localized in the vicinity of the intersection of the northeast trending open fissures and an arcuate or ring dyke fault system. No sulfide minerals were evident in any of the breccia zones.

SAMPLE RESULTS

During 29 June through 5 July, 1984 six 3-pound rock chip samples were taken from healed breccia material in pipes and fissures. Geochemical determinations were conducted by Bondar-Cleff Ltd. of North Vancouver, B.C. for copper, lead, zinc, arsenic, antimony, mercury, barium, gold and silver. Gold values did not exceed 10 parts per billion. Mercury values up to 400 parts per billion and antimony values to 30 parts per billion

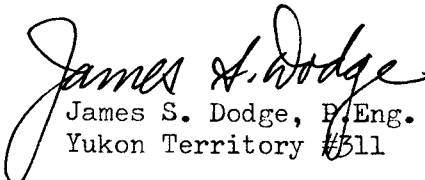
were the most significant assays, since these elements are commonly considered to be pathfinder elements in geochemical halos of hydrothermal deposits containing precious metals.

CONCLUSIONS

A detailed geological reconnaissance of the SNAP claim group #39-#48 indicates that a favourable geological setting exists for the emplacement of hydrothermal deposits of precious metals. The occurrence of jasperoid and chalcedonic healed breccia pipes and veins together with fluorspar and anomalously high concentrations of mercury and antimony reveal that a typical mineralizing environment existed for the transport and deposition of precious metals.

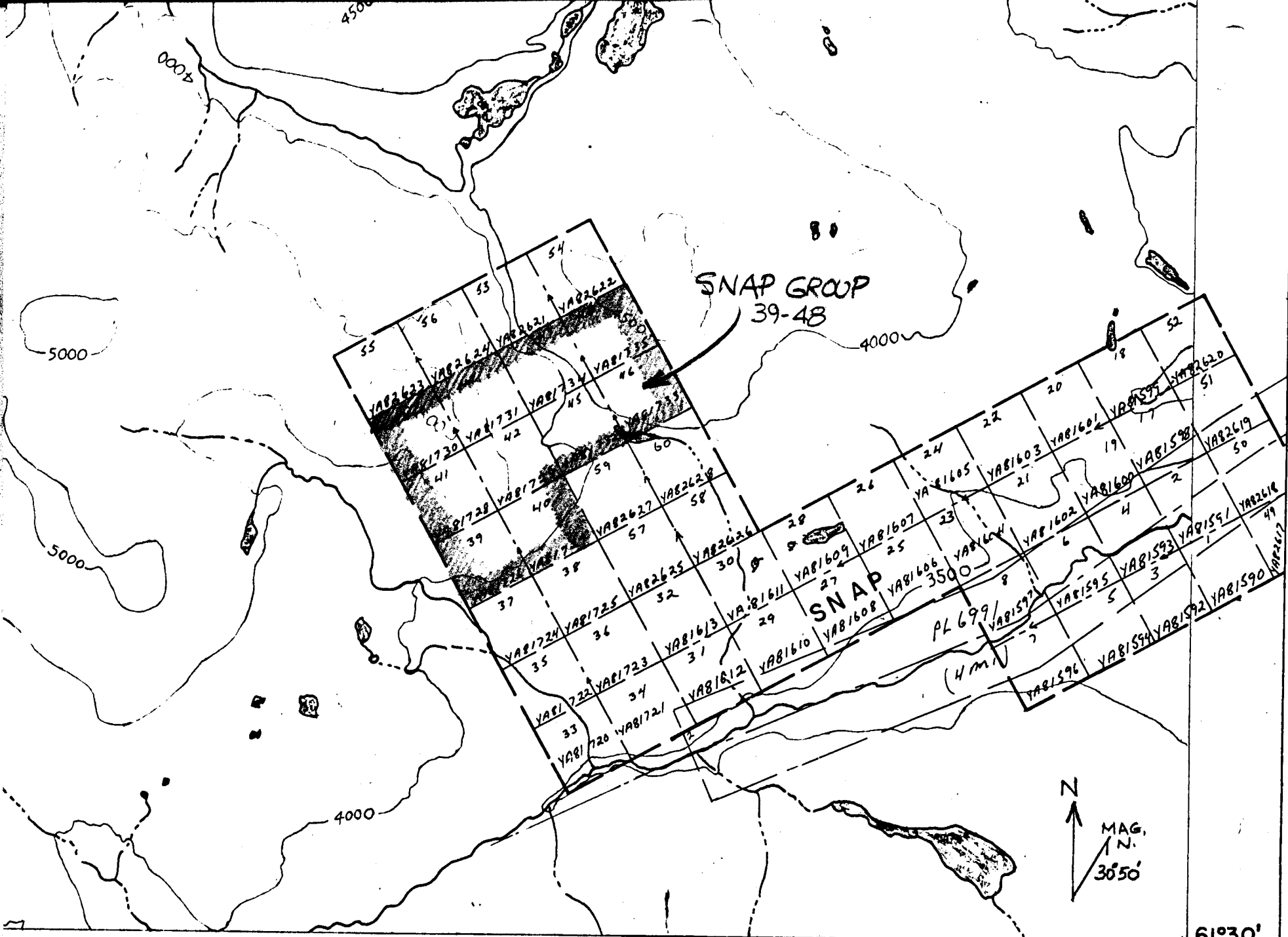
RECOMMENDATIONS

Only six rock samples were assayed and no important values in gold or silver were indicated. Nevertheless, the mode of mineralization and the uniquely favourable structural setting is interpreted to represent a high-level precious metal vein system. Detailed rock chip sampling is warranted.


James S. Dodge, P.Eng.
Yukon Territory #311

22 Beech Street,
Whitehorse, Yukon
Y1A 4A6

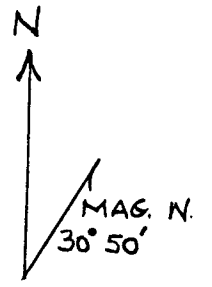
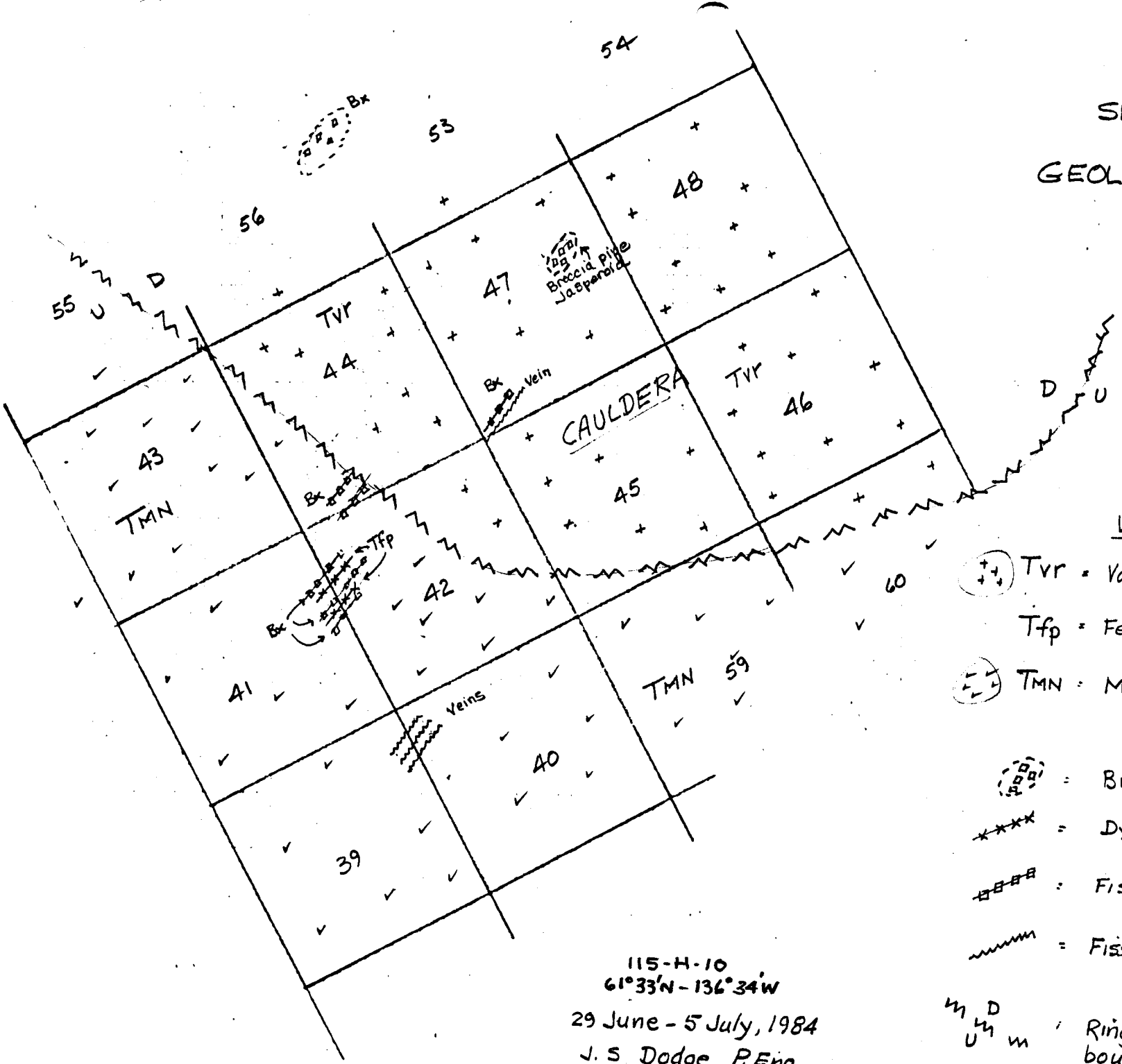
13 May, 1985



1" = 1/2 MILE
 MACINTOSH LAKE MAP IIS-H-10

136°30' 61°30'

SNAP GROUP
39-48
GEOLOGIC SKETCH
1" = 1000'



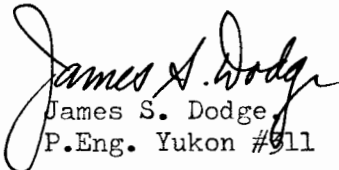
LEGEND

- TVR = Varicoloured rhyolite tuff
- Tfp = Feldspar porphyry dykes
- TMN = Mount Nansen Group
- = Breccia pipe
- = Dyke
- = Fissure breccia Bx
- = Fissure filling veins
- = Ring fault system bounding cauldrea
D = downside
U = upside

115-H-10
61°33'N - 136°34'W
29 June - 5 July, 1984
J. S. Dodge, P.Eng
Whitehorse, Yukon

VALUE OF 1984 GEOLOGICAL SURVEY

Sample Bags/Tags	\$ 10.50
Assays	178.20
Groceries (2 men)	150.00
Aircraft Charter (Alkan Air)	<u>554.00</u>
	892.70
Labour Robert Coyne, Field Assistant \$90/day x 6 days	540.00
Professional Engineer James Dodge \$250/day x 6 days	<u>1,500.00</u>
TOTAL EXPENDITURES (27/06-14/07 1984)	\$2,932.70


James S. Dodge
P.Eng. Yukon #911

SNAP CLAIM POSTS

39/41
40/42

Fissure filling
Qtz, Fluorspar, Calcite

TMN
Mount Nansem
volcanics

Tfp
Feldspar porphyry
dykes

SNAP GROUP
39-48
(Looking NW)
MAY 1984

Breccia
Pipe

Tvr
Varicoloured
acid volcanics
(rhyolite tuffs)

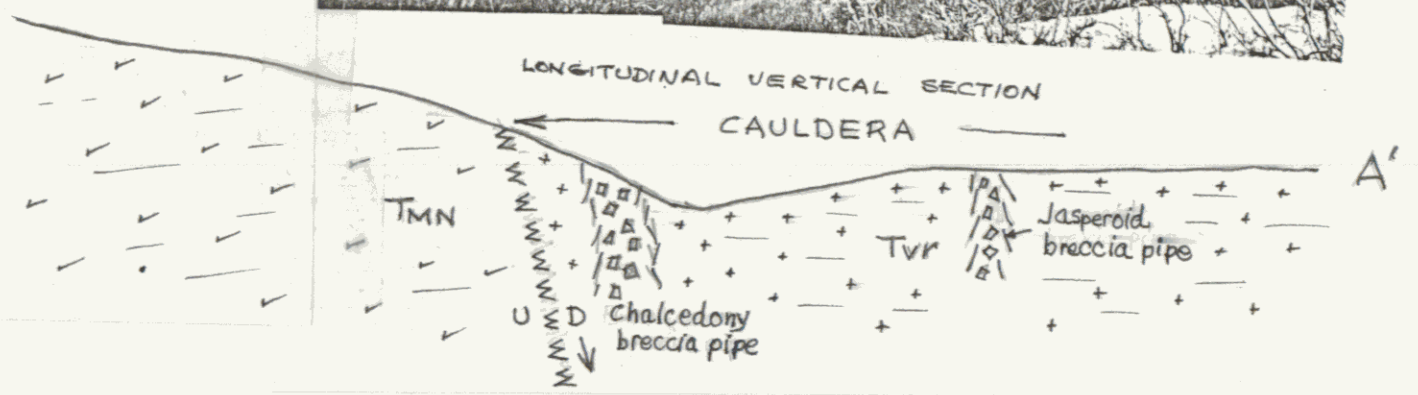
53/54
47/48

A'
25 ppm Silver
(+fluorspar)

48/46
47/45

Fissure filling
qtz, calcite, fluorite
TMN

James S. Dodge
P. Eng., Yukon. #311





MR. JAMES S. DODGE
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22 BEECH STREET
WHITEHORSE, YUKON
Y1A 4A6

Invoice: 11534

Date: July 26, 1984

Report No: 124-1784

Project: NONE GIVEN SNAP CLAIMS

BCC WHSE RPT 44-114

6 Analyses of Silver	at	1.95	11.70	
6 Analyses of Copper	at	1.00	6.00	
6 Analyses of Lead	at	1.00	6.00	
6 Analyses of Zinc	at	1.00	6.00	
Subtotal			29.70	29.70
6 Analyses of Gold - Fire Assay	at	6.50	39.00	
Subtotal			39.00	39.00
6 Analyses of Arsenic	at	3.50	21.00	
6 Analyses of Mercury	at	4.25	25.50	
Subtotal			46.50	46.50
6 Analyses of Barium	at	4.25	25.50	
6 Analyses of Antimony	at	3.25	19.50	
Subtotal			45.00	45.00
Sample Preparation				
6 Samples of CRUSH, PULVERIZE -100	at	3.00	18.00	
Subtotal			18.00	18.00
Invoice Total				\$178.20