

ASSESSMENT REPORTS

Whitehorse M.D.

MAP No. 105 D 3

TYPE OF WORK: Geological, Geochemical

REPORT FILED UNDER	Noranda Exploration Company LTD.
DATE PERFORMED	4 October - 7 October, DATE FILED: 14 June 1985.
LOCATION - LAT.	60°15'N 1984
LONG.	135°24'W
CLAIM Nos.	SCAR 1-16; YA81904 - YA81919
WORK DONE BY	M.P. Webster
WORK DONE FOR	Noranda Exploration Company LTD.
REMARKS	The property is underlain by Cretaceous granodiorite and quartz monzonite which are intruded by a Tertiary rhyolite plug. Quartz veins occur at or near the granodiorite-rhyolite contact. Local hematite, sphalerite and pyrite are present.
091640	40X p. 99-100

Geologic mapping; rock, talus fine and silt geochemistry; and 1:5000 scale mapping were done in 1985. Fifty five talus fine samples and 27 rock samples were collected in a reconnaissance manner and analyzed for Cu, Zn, Pb, Ag, As, Au and Sb. Several anomalies were discovered for all elements with a high of 1900 ppb for Au from a rock chip sample of quartz-carbonate vein material bearing bornite, chalcopyrite and pyrite.





SCAR 1-16 CLAIMS

GEOLOGY AND GEOCHEMISTRY

1984

Whitehorse Mining District

N.T.S. 105 D/3E

Latitude 60°15'N

Longitude 135°24'W

1640

Owner: Noranda Exploration Company, Limited
(No Personal Liability)

Author: M.P. Webster

Date: May, 1985

Regional Manager
Noranda Exploration
Whitehorse, Yukon Territory
10

This report has been prepared by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 4,800.00.

010.00



Regional Manager, Exploration and
Geological Services for Commissioner
of Yukon Territory.

TABLE OF CONTENTS

<u>TEXT</u>		<u>PAGE</u>
CHAPTER ONE:	INTRODUCTION	
1-1:	Introductory Statement	1
1-2:	Location and Access	2
1-3:	Physiography and Vegetation	2
1-4:	History of the Property	4
1-5:	Work Program	6
CHAPTER TWO:	GEOLOGY	
2-1:	Regional Geology	7
2-2:	Detailed Geology	11
CHAPTER THREE:	GEOCHEMISTRY	
3-1:	Talus Fines Sampling Program	14
3-2:	Rock Sampling Program	15
CHAPTER FOUR:	MINERALIZATION	
4-1:	Regional Summary	17
CHAPTER FIVE:	CONCLUSIONS AND RECOMMENDATIONS	25
References		
Statement of Qualifications		
Statement of Costs		

PAGE

LIST OF FIGURES

FIGURE 1:	Location Map	3
FIGURE 2:	Claim Map	5
FIGURE 3:	Regional Geology Map	10
FIGURE 4:	Detailed Geology Map	in pocket

LIST OF TABLES

TABLE 1:	Table of Formations	9
TABLE 2:	Statistical Summary - Talus Fines	15
TABLE 3:	Statistical Summary - Rock Samples	16
TABLE 4:	Summary Table of Wheaton River Deposits	19

LIST OF APPENDICES

APPENDIX 1:	Rock Sample Descriptions and Geochemical Results
-------------	--

CHAPTER ONE: INTRODUCTION

1-1: INTRODUCTORY STATEMENT

Noranda Exploration Company, Limited staked the SCAR 1-16 claims May 18, 1984 and conducted preliminary field work October 4-7, 1984. The SCAR 17-34 claims were staked and recorded December 7, 1984 in Whitehorse. No previous work has been done by the company in the immediate claim group vicinity. These claims were staked to cover geology favourable for Au-Ag-Sb vein deposits found in the Wheaton River area.

The Wheaton River area vein deposits are thought to be associated with remnant Skukum Group volcanic rocks and the high level Tertiary rhyolite plugs distributed along fracture systems generated by the doming and collapse of the Mt. Skukum caldera complex. Mineralized veins include gold-silver, silver-lead and antimony-silver minerals in quartz and calcite gangue materials.

Development of the Wheaton River area has been sporadic since the late 1800's, but peaked in the early 1900's, the late 1960's, and in the last decade. Recently, Agip-Erickson Gold Mines reported that the Mt. Skukum (Cirque zone) epithermal gold vein deposit contains 450,000 tons at an average grade of 0.7 opt Au. Shakwak Exploration Co. Ltd. reports a vein grading 0.34 opt Au and 8.5 opt Ag up to 0.76 metres wide over a potential length of 610 metres. There are more than twenty-five vein type mineral occurrences known in the Wheaton River area.

1-2: LOCATION and ACCESS

The SCAR 1-16 claim group is located 67 kilometres SW of Whitehorse at latitude 60°09'N and longitude 135°24'W on N.T.S. 1:50,000 map sheet 105 D/3E (Figure 1). The claims lie at the mouth of Berney Creek and the Wheaton River.

Access to the property is via the Annie Lake road which reaches the northeast tip of the claim block. The camp was situated on Berney Creek 4 kilometres from the southernmost traverse point on the claim group.

The dry, sparsely wooded flats just west of the Wheaton River provide excellent road building conditions for future access to the claims and southern cliff face. The stream valley draining north on the west side of the property offers an alternative access route to the central part of the property.

1-3: PHYSIOGRAPHY and VEGETATION

The Wheaton River area lies along the western flank of the Yukon plateau and immediately east of the Coast Ranges. The terrain varies from rolling hills to elevated plains incised by wide, deep u-shaped valleys with hanging valleys remaining from the Pleistocene glaciation.

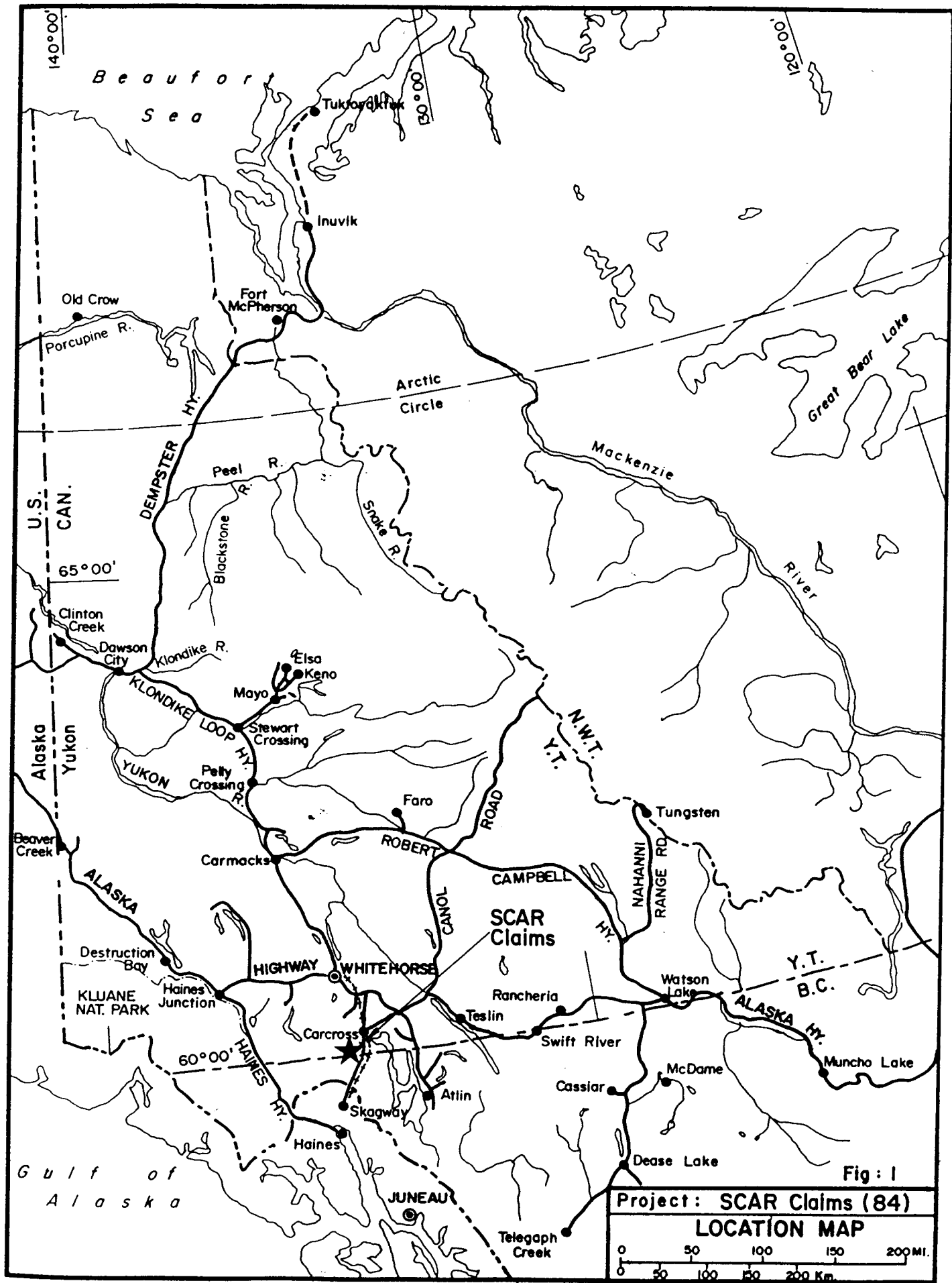


Fig: 1

Project: SCAR Claims (84)
LOCATION MAP
 0 50 100 150 200 MI.
 0 50 100 150 200 Km.

VANCAL 11926

The SCAR 1-16 group is bounded in the southeast by steep, rugged slopes up to 760 metres high. The northwest part of the property has steep but grass covered slopes.

Vegetation on the SCAR group is typical of the regional pattern. The property vegetation is sparse and grassy whereas the Wheaton River valley is densely wooded with conifer, birch and willow. The treeline is localized along stream river channels at an elevation of approximately 1,370 metres. The vegetation becomes sparsely wooded to grassy and marshy near the Wheaton River east of the SCAR claim block.

1-4: HISTORY of the PROPERTY

The SCAR 1-16 group was staked May 18, 1984 and recorded May 23, 1984 in Whitehorse (Figure 2). They were staked to cover one of the few remaining areas of favourable Tertiary Mt. Skukum rhyolite. Preliminary field work was conducted October 4-7, 1984. This included rock and stream geochemistry and geological mapping.

Claims and Ownership

<u>Claim Name</u>	<u>Grant (Tag) No.</u>	<u>Date Claim Recorded</u>
SCAR 1-16	YA81904-YA81919	May 23, 1984.

Noranda Exploration Company, Limited (No Personal Liability) has 100% interest in each mining claim named above. Upon acceptance of this assessment report, the claims will be in good standing until May 23, 1986.

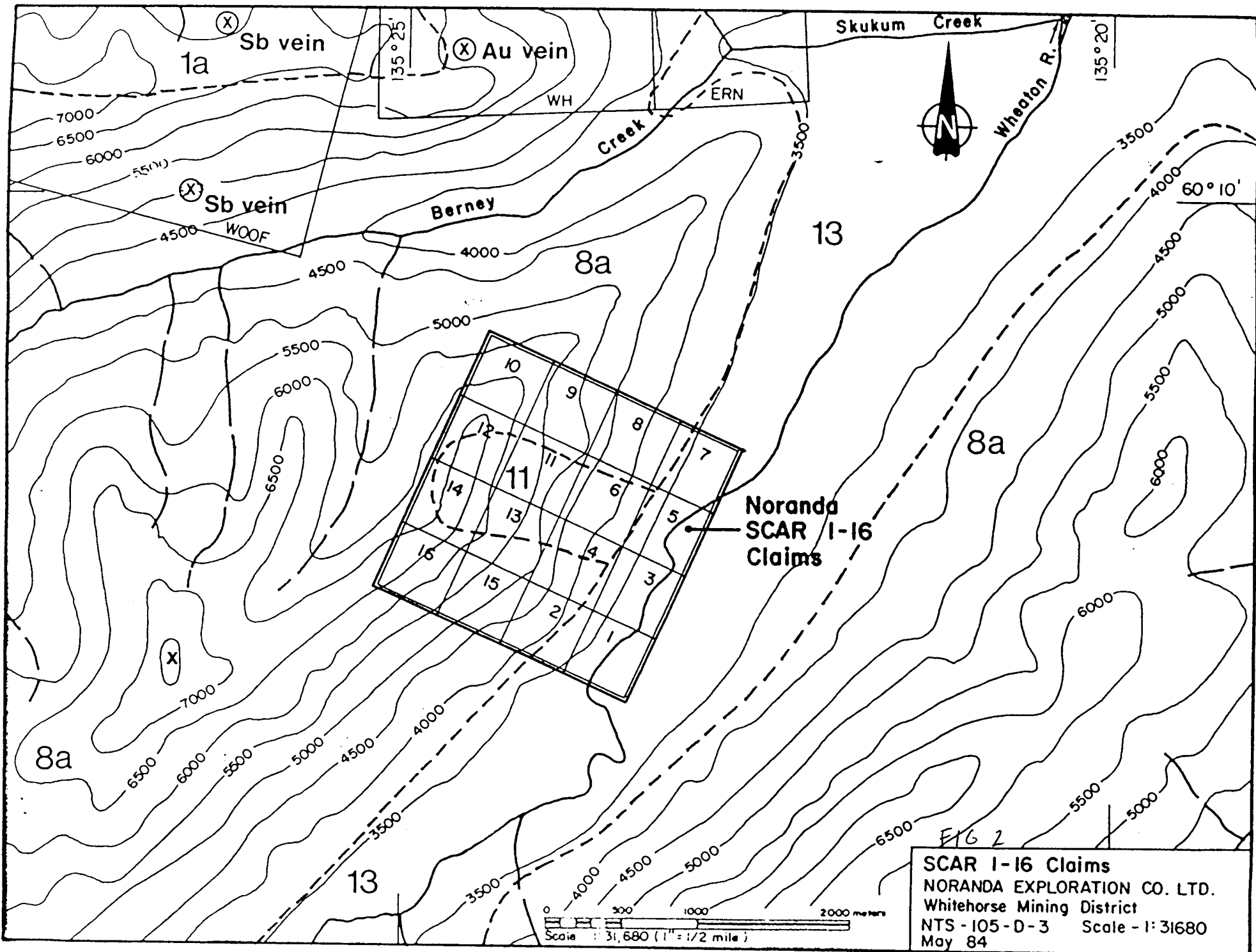


FIG 2
SCAR 1-16 Claims
 NORANDA EXPLORATION CO. LTD.
 Whitehorse Mining District
 NTS - 105-D-3 Scale - 1:31680
 May 84

1-5: Work Program

Preliminary field work was conducted on the SCAR 1-16 claims from October 4 to 7, 1984. The work program included geological mapping, detailed rock, talus fines and silt sample geochemistry. Geological mapping was done at 1:10,000 and 1:5,000 scales from airphoto and N.T.S. map 105 D/3E enlargements.

The exploration crew was camped on Berney Creek 4 kilometres west of the Wheaton River on a short trail leading from the Annie Lake road. This camp was approximately 2 kilometres north of the claim block and a one hour walk to the property was required. Trans Canada Helicopters Ltd., frequently in the area, provided helicopter support to work the southern part of the property and cliff face.

It is recommended in future exploration programs that camp be established on the property. The Wheaton River valley at the base of the cliff has many dry and flat potential camp sites and the north draining stream in the west part of the property may be selected as central camp location. Expert climbing assistance is recommended for complete prospecting of the steep cliff face.

The personnel involved in the 1984 field program are listed below:

Mary Webster	Party Chief
Kim Heberlein	Senior Assistant
Stuart MacKenzie	Senior Assistant
Steve Mackay	Junior Assistant

CHAPTER TWO: GEOLOGY

2-1: REGIONAL GEOLOGY

The geology and mineral potential of the area has been documented by D.D. Cairnes (1912, 1916), J.O. Wheeler (1961), and more recently by M.J. Smith (1979), M.B. Lambert (1974) and the Northern Cordillera Mineral Inventory (Archer, Cathro & Associates Ltd., 1981).

The oldest rocks in the region are the Precambrian metasediments of the Yukon Group (Table 1). The Yukon Group quartz-mica schists, feldspathic gneisses and crystalline limestone occur as a northwest trending belt intruded by granitic rocks of the Cretaceous Coast Intrusions. The Triassic Lewes River Group metavolcanic rocks and Jurassic Laberge Group metasediments unconformably overlie the Yukon Group and occupy the northeastern part of the Wheaton River area. The Lower Tertiary Skukum Group¹ is comprised of intermediate to felsic volcanic rocks which occur in the centre of the Wheaton River area and as part of the Bennett Lake complex 20 km to the south at the Yukon-B.C. border.

1. The Skukum Group volcanics have been described as the "Carmacks basalts" and "Wheaton River Volcanics" (Cairnes, 1912, p. 64 and 68), the "New Volcanics" and "Acid Volcanics" (Cockfield and Bell, 1926, p. 34), and recently as two groups subdivided into seven members of defined composition and texture (Pride, 1983, p. 94-104).

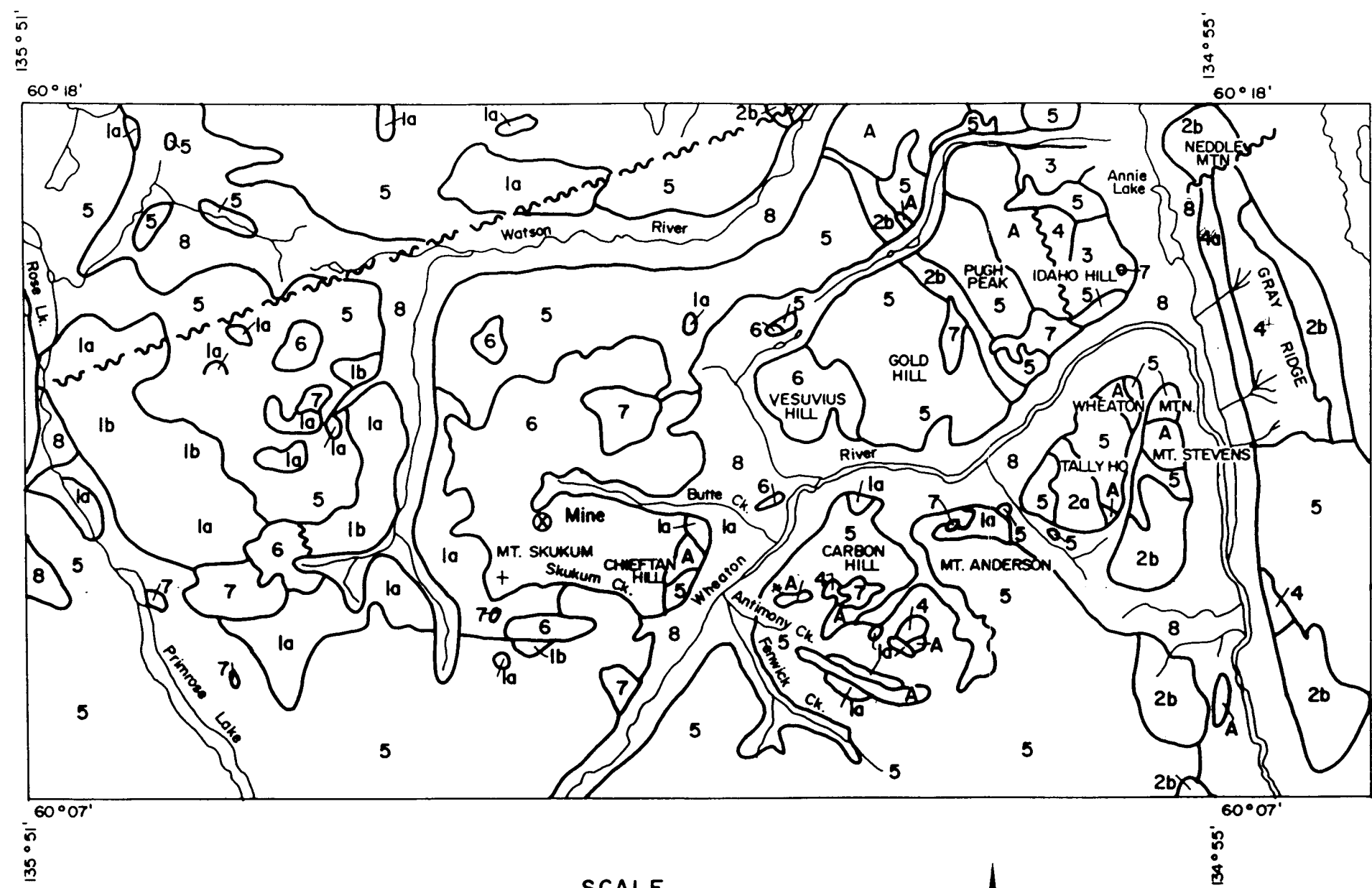
The Bennett Lake complex consists of a rhyolite to dacite ash flow, breccia and tuff volcanic package in part circumscribed by a high level rhyolite ring dyke with related intrusions. Lambert describes this complex as "two nested calderas, an eroded structural dome and a thick succession of pyroclastic and epiclastic rocks related to eruption, subsidence and filling of the cauldrons" (Lambert, 1974, p. 9).

Lambert suggested that the Skukum region may represent a second caldera complex with grossly similar geology and structural characteristics.

The Skukum complex occupies approximately 140 km² and is elliptical in plan. It is partially fault bounded and in places intruded by felsic dykes and stocks. A major north trending fault divides the Skukum ellipse into two parts which are made up of probably genetically related interlayered sedimentary-volcanic units. On the west side, andesitic flows, pyroclastic flows and sedimentary units up to 500 metres thick are found. The eastern block consists of altered pyroclastic, brecciated, flow banded and spherulitic felsic lava flows up to 800 metres thick. Cogenetic high level rhyolite to dacite intrusions punctuate the perimeter of the complex. These rhyolites are thought to represent late ring fracture intrusions associated with a caldera event (Pride, nee Smith, 1981).

TABLE 1: TABLE OF FORMATIONS

ERA	PERIOD or EPOCH	FORMATION	LITHOLOGY	
Cenozoic	Recent and Pleistocene		Glacial debris, loess, volcanic ash	
			Basalt; minor pyroclastic rocks	
			-----UNCONFORMITY-----	
	Tertiary			Granite Porphyry, Rhyolite
				-----INTRUSIVE INTO LOWER SKUKUM GP.-----
		Skukum Group	Andesite, basalt, rhyolite, trachyte breccia, tuffs, flows. Granitic breccia, minor greywacke, sandstone and siltstone.	
Mesozoic	Cretaceous	Coast Intrusions	Hbl'd-bio-oligoclase granodiorite diorite, granite, pegmatitic syenite	
			-----INTRUSIVE CONTACT-----	
		Hutshi Group	Basalt, andesite, porphyritic andesite, qtz latite & rhyolite flows, breccias and tuffs; minor greywacke, argillite; conglomerate locally at base	
	Upper Jurassic	Tantalus Fm	Arkose, siltstone, congl. argillite, coal	
	Lower Jurassic	Laberge Group	Conglomerate, greywacke, arkose quartzite, siltstone, argillite, hornfels	
			-----UNCONFORMITY-----	
	Upper Triassic	Lewes River Group	Volcanic greywacke, siltstone, argillite, limestone breccia conglomerate; volcanic breccia agglomerate tuff; andesite, porphyritic andesite & basalt	
Paleozoic	Pennsylvanian(?) & Permian	Taku Group	Limestone, breccia, chert; greenstone and (?) pyroclast rocks	
Precambrian		Yukon Group	Quartz-mica, qtz-chlorite and mica schists; quartzite, feldspathic hbl'd gneiss, amphibolite, epidote-amphibolite crystalline limestone; feldspathic gneiss, lit-par-lit gneiss; gneissic porphyritic granodiorite & quartz diorite	



Legend

- CENOZOIC**
- Quaternary
 - 8 Alluvium, glacial deposits, volcanic ash, loess.
- Tertiary or Earlier
 - 7 Rhyolite
 - 6 SKUKUM GROUP
Andesite, basalt, rhyolite and trachyte breccia tuffs & flows, granitic conglomerate, minor greywacke.
- MESOZOIC**
- Cretaceous
 - 5 COAST INTRUSIONS
Granodiorite, quartz diorite.
- Jurassic (?) and Cretaceous
 - 4 HUTSHI GROUP
Basalt, andesite, qtz. latite & rhyolite, minor sediments.
 - 4a TANTALUS FORMATION
Arkose, siltstone, conglomerate, argillite, coal.
- Jurassic
 - 3 LABERGE GROUP
Greywacke, arkose, quartzite, conglomerate, siltstone, argillite, hornfels.
- Triassic
 - 2 LEWES RIVER GROUP
A) Limestone, limestone breccia.
B) Metamorphosed rocks.
- PRECAMBRIAN and LATER**
- 1 YUKON GROUP
A) Quartz-mica, quartz chlorite and mica schists, micaceous quartzite, gneiss, amphibolite.
B) Crystalline limestone.
- A Volcanic rocks of uncertain age.



Fig. : 3

REVISED	WHEATON RIVER Property	
	REGIONAL GEOLOGY (Modified from SMITH, 1981)	
PROJ. No. _____	SURVEY BY: _____	DATE: MAY 85
N.T.S. 105 D	DRAWN BY: AI	SCALE: _____
DWG. No. _____	NORANDA EXPLORATION OFFICE: Whitehorse	

Vein occurrences are spatially related to the ring structure in both the Bennett Lake and Skukum volcanic complexes. This mineralization is thought to be linked to hydrothermal and structural events of late stage caldera development.

2-2: DETAILED GEOLOGY

Geological mapping at the 1:10,000 scale of the SCAR 1-16 group indicates that the oldest rocks in the area are granodiorite to quartz monzonites of the Coast Intrusions. A Tertiary rhyolite plug up to 1000 metres in width and over 650 metres in height intrudes the granitic Coast Intrusion and is well exposed on the southeast cliff face of the claim group. Contacts of the plug are sharp with little evidence of brecciation. Small zones of silicification, clay or slight chloritic alteration found within the rhyolite plug are localized at narrow shear or fault zones. At the rhyolite-granodiorite contact silicic alteration and mineralization is more pervasive. Quartz veins (a few millimetres to 0.5 metres in width) occur in close proximity to the rhyolite-granodiorite contact and are locally stained with manganese and limonite, and display carbonate and "clay-like" alteration.

Rock DescriptionsCoast Intrusions:

Medium to coarse grained, grey to pinkish, equigranular granodiorite. Biotite (up to 10%) generally dominates over hornblende. Euhedral to subhedral quartz grains; K-feldspar and mafic minerals are subhedral. Intense alteration of K-feldspar to grey clay masses and leaching of mafics near rhyolite-granodiorite contact. Disseminated, trace to 5%, pyrite blebs or euhedral grains <3 mm in diameter are common.

Rhyolite:

Aphanitic to saccharoidal pale brown, beige to white rhyolite porphyry. Up to 15% clear to grey subhedral phenocrysts, 2-3 mm diameter. There are less than 5% mafic minerals, chiefly biotite which is commonly chloritized near contacts. Minor clay alteration of anhedral feldspar grains. Local calcareous, manganese and/or limonite alteration. Magnetite (up to 25%), specular hematite (up to 10%) and pyrite are noted near rhyolite-granodiorite contact. Small rhyolite stocks and dykes occur locally.

Late IntrusionsAplite Dykes:

White to buff coloured dykes 0.15 to 25 metres wide of fine-grained to saccharoidal equigranular quartz and alkali feldspar. 1-5% pyrite (cubes up to 2 mm diameter). Contacts sharp, some muscovite along contacts.

Porphyritic Dykes:

Felsic: Rhyolitic and granitic textures. Very fine grained to saccharoidal, quartz and feldspar phenocrysts <0.5 cm diam., occasional pyrite, local calcareous and/or limonite alteration. Contacts sharp, minor muscovite along fractures and contacts.

Mafic: Dark green to black, very fine grained basalt. Siliceous and calcareous alteration, minor pyrite. 1-5 mm diam. subhedral quartz phenocrysts.

Quartz Veins:

Range in width from a few millimetres to 0.5 m in width. Occur near rhyolite-granodiorite contact. Clear grey to white, massive to vuggy texture. Hematite, chlorite, carbonate, sericite alteration intensity is variable. Local specular hematite, apatite, pyrite usually <10% and disseminated. Minor leaching at vein contacts.

Heavy snow conditions hampered climbing and severely limited outcrop exposure. Mapping of rhyolite-granodiorite contacts to the north and south of the rhyolite plug is incomplete due to these hazardous conditions.

CHAPTER THREE: GEOCHEMISTRY

A reconnaissance prospecting, geological mapping, talus fines and rock sampling program was carried out on the SCAR 1-16 claims. Sampling of the rhyolite plug, associated rhyolite and aplite dykes, quartz veins, shear zones and contacts was emphasized. The one stream draining north on the west part of the property has not yet been sampled due to freezing temperatures during the program. Summary statistical analysis of the geochemical results from the talus fines and rock samples have been summarized in Tables 2 and 3. All element values are in ppm except for gold which is in ppb. The anomalous threshold level is taken to be two arithmetic standard deviations above the arithmetic mean. The threshold values taken from the talus fines sampling program (Table 2) are considered more representative of the property than the selected, generally high grade rock sample values (Table 3).

3-1: TALUS FINES SAMPLING PROGRAM

A total of fifty-five talus fines and outcrop chip samples were taken at 25 metre intervals along lines 725 m and 650 m in length at the 1200 m and 1300 m elevation contours respectively.

The following samples were notably anomalous:

Sample No.	Cu	Zn	Pb	Ag	As	Au
35406	320	390	160	2.4	42	480
35407	310	350	180	1.8	140	140

These samples are located near the north rhyolite-granodiorite contact. Table 2 provides a statistical summary of this talus fines sampling program.

TABLE 2

STATISTICAL SUMMARY

Talus Fines

	Cu	Zn	Pb	Ag	As	Au
Number of Analyses	55	55	55	55	55	54
Lowest Value	16	26	4	.4	1	10
Highest Value	550	700	300	4.2	140	480
Mean (Log)	69.1	132.2	45.6	1.47	4.9	24.8
Stand. Dev. (Log)	.412	.395	.510	.273	.715	.358
Mean (Arith)	109.8	190.7	80.5	1.77	15.9	39.6
Stand. Dev. (Arith)	114.75	159.49	76.04	1.073	24.57	67.40
Anomalous Threshold	339.30	509.68	232.58	3.916	65.04	174.40

3-2: ROCK SAMPLING PROGRAM

A total of 27 rock samples were taken primarily along the southeast facing cliff. Emphasis was placed on sampling the rhyolite plug and associated dykes, aplite and mafic dykes, the contacts between lithologies and alteration zones. Sampling was done along the base of the cliff face and those gullies free from snow cover. Table 3 presents a statistical summary of this rock sampling program.

TABLE 3
STATISTICAL SUMMARY

Rock Samples

	<u>Cu</u>	<u>Zn</u>	<u>Pb</u>	<u>Ag</u>	<u>As</u>	<u>Au</u>	<u>Sb</u>
Number of Analyses	27	27	27	27	27	27	3
Lowest Value	8	16	2	.2	1	10	1
Highest Value	9600	76000	19000	530.0	32	1900	1
Mean (Log)	177.6	335.9	111.9	4.02	1.1	33.2	1.0
Stand. Dev. (Log)	.889	1.044	1.198	1.016	.290	.569	.000
Mean (Arith)	1138.4	5515.9	2435.4	48.01	2.1	121.5	1.0
Stand. Dev. (Arith)	2293.67	15421.52	5020.59	115.765	5.97	364.10	.00
Anomalous Threshold	5725.74	36358.94	12476.58	279.54	14.04	849.7	1.0

CHAPTER FOUR: MINERALIZATION

4-1: REGIONAL SUMMARY

Three mineralized vein types have been described in the Wheaton River area by Cairnes (1912), Cockfield and Bell (1944) and Wheeler (1961). These are gold-silver, antimony-silver and silver-lead deposits.

Gold-silver veins are found as fissure type veins in the Cretaceous granitic Coast Range intrusions on Wheaton Mountain and Mt. Anderson. Mt. Stevens and Gold Hill host gold-silver vein deposits in the greenschist facies rocks of the Lewes River Group associated with granitic intrusions. Both vein occurrences are compositionally uniform and structurally persistent. The dominant sulphides are pyrite and galena. Minor native gold and gold-silver tellurides may be present in the quartz or calcite gangue components.

Antimony-silver veins are typically hosted by Coast Range intrusions and old volcanic rocks of uncertain age cut by porphyritic granitic rhyolitic dykes. Quartz is the dominant gangue mineral with significant calcite and barite. Argentiferous stibnite is the chief metallic mineral yet galena, sphalerite, jamesonite, tetrahedrite, arsenopyrite and other Ag-Pb-Sb sulphides may be present.

The silver-lead veins parallel the bedding planes of the Laberge Group greywackes on Idaho Hill. These tabular or podlike replacement deposits host argentiferous arsenopyrite and galena with minor pyrite, sphalerite and chalcopyrite. Quartz and/or calcite are the dominant gangue minerals.

Mineralization is thought to be linked to the doming and subsidence of the Skukum caldera volcanic complex. Buchanan's (1981) model of epithermal precious metal vein deposits describes temporal and vertical zonation of vein fractures related to a caldera environment. The epithermal model outlines only a genetic classification of vein deposits where vertical zonation passes with depth from agate and clays at the paleosurface to calcite, zeolites, agate, stibnite, realgar and gold; then quartz, calcite, pyrite, barite, pyrite and gold (silver); then quartz, adularia, sericite, pyrite, calcite, chlorite, fluorite, gold, silver, (lead, zinc and copper); then quartz, fluorite, pyrite, chlorite, silver, lead, zinc and copper.

Should this theory be applicable to the Wheaton River area, the three types of veins previously described in this section may reflect only erosional levels of a "typical" epithermal deposit. Carbon Hill (POP claims group) exemplifies this idea in that lenses of barite and quartz pass into stibnite, then gold-stibnite assemblages at depth. The Mt. Skukum gold deposit is a carbonate-gold vein probably representing higher levels of the vertical zonation sequence. The

LOCATION	CLAIM GROUP	COMMODITIES	DESCRIPTION	PRODUCTION/ASSAYS
Mt. Stevens Area 135 deg 00', 60 deg 13' 105 D/3E	Hawkeye Group	Au, Pb, Cu	Two quartz vein 0.5 m and approx. 1.0 m wide within Lewes River Group green schists. The veins parallel schistosity of country rock and have a slight impregnation of galena and chalcopyrite.	1972 - Pyrite and galena samples of quartz assay 0.01 oz/t Ag, 0.002 oz/t Au; background base metal values recovered from soil sampling.
	Acme Claim	Au, Pb	Large lenticular quartz lens 9 m wide 30 m long parallel to foliation of chloritic, sericitic schists. Full strike length not determined due to burden cover. Minor galena and pyrite.	
	Midnight Group	Au, Ag, Pb	Lewes River Group green schists and greenstones are cut by granite porphyry dykes up to 10 m wide and by basalt dykes up to 2 m wide and/or a series of parallel crossfaults. The porphyry dykes are sericitized and host many qtz stringers locally containing native gold and gold bearing pyrite and galena. Cockfield regards the intersection of the granitic porphyry dykes and crossfaults as the most favourable ore shoot location.	
	Hidden Ore Group (adjoining the Midnight Group)	Au, Ag, Pb, Zn, Cu	Numerous qtz-porphyry and granite porphyry dykes intrude Lewes River Group green schists at the contact to a granodiorite body probably part of the Cretaceous Coastal intrusions. A high amount of fracturing of the dykes followed by quartz infilling up to 5 cm wide is accompanied by the occurrence of native gold, galena, pyrite with minor sphalerite and chalcopyrite. Gold occurs locally in cubical cavities with limonite.	Workings expose mineralized and fractured dykes at elevations 1675 m (5500') and 792 m (2600').
Buffalo Hump Group (Golden Slipper, Sunrise, Wheaton) 60 deg 14', 135 deg 00'	Au, Pb	Golden Slipper: Quartz float containing minor disseminated galena, free gold and sylvanite, hedylyrite, tellurbismuth and hessite. Sunrise: Most persistent vein of the group. Ave. 1 m wide exposed over 15 m, 315 deg/35 deg NE vein fissure in granodiorite sparsely mineralized with galena, pyrite and native gold.	Golden Slipper 1909 - 26 m drift with 6 m x-cut. 1923-27 - 15 m drifting. Now held by Tally-Ho Expl. Three grab samples ave. 1.61 oz/t Au, 131.1 oz/t Ag.	

LOCATION	CLAIM GROUP	COMMODITIES	DESCRIPTION	PRODUCTION/ASSAYS
Wheaton Mountain 135 deg 05' 60 deg 14' 105 D/3E	Wheaton Mt. Claims (McDonald Fraction, Gopher, Silver Queen)	Ag, Pb, Au	McDonald: Quartz vein in granodiorite fissure 313 deg/90, massive and comb. and banded character. Argentiferous galena. Gopher: Irregular 2 m wide quartz lens con- taining disseminated galena in greenstone and green schist of Lewes River Group. Silver Queen: 1 m wide quartz vein in grano- diorite hosting galena, pyrite	McDonald Fraction: pit - 0.05 oz/t Ag, 0.08x Pb 16 m shaft; 0.16 oz/t Au, 12.7 oz/t Ag Restaked 1983; Tally-Ho ECL Silver Queen: pit 0.84 oz/t Au, 0.50
Mt. Anderson Area 60 deg 12' 135 deg 09' 105 D/3	Mt. Anderson (Whirlwind, Becker-Cochran)	Au, Ag, Pb, Zn	Whirlwind (Lower vein): 0.1-1.8 m vuggy quartz vein cuts granodiorite and is locally cut by basalt dykes. Galena and pyrite are erratically distributed. 1947 test shipment: 1.0 oz/t Au, 12.6 oz/t Ag, 11.69x Pb, 5.2x Zn 1968 Adanac trenching: 1m wide, 15m long ore shoot ave. 2.0 oz/t Au, 5 oz/t Ag. Upper vein: 270/90, outcrops 60 m above lower vein 0.8 m of rusty quartz bounded on both sides by 0.5m of vuggy qtz and discontinuous galena lenses. Sheared granodiorite wall-rock. Basalt dykes occur locally. Intermittent exposure to the SE of continued vein material.	Staked 1906 & 1909 - two adits 12 m and 27 m drift on Whirlwind. 1912 - small mill built, no record of production. 1915: #1 adit - 98 m drifted; 45 m on lower vein #2 adit - 100 m drifted on upper vein #3 adit - 22 m and 10 m x-cut on a different vein #4 adit - failed to intersect a vein Restaked in 1926, 1934, 1944, 1947, 1951, 1957, 1960, 1962, 1964, 1968, 1974, 1977, and finally as Tam group in 1978. Work during this time tailed hand and bulldozer trenching, small sampling programs, one geophysical survey (1979) and one test shipment sent to the Trail Smelter after property examination by Keno Hill (1947).
	Becker-Cochran property (Yukon Antimony)	Ag, Pb, Zn, Ni, Ba	Shear zone 310/75 deg SW, 2m wide, 300m strike length hosts lenses of quartz, barite cut by a rhyolite dyke and old andesite (unit A). Poor surface ex- pression of grey, red, yellow gangue, some massive sulphide boulders. Mineralization: stibnite with minor pyrite, sphalerite, realgar, orpiment galena, tetrahedrite in quartz and minor barite gangue. Yukon Antimony: 1.5m width, 100m length shear zone in Adit #1, grades 4.8x Sb, 0.6x Pb, 0.9 oz/t Ag. 1964: 23,000 tons 3.6x Sb over 2 m width. Dept. of Mines: 331 kg selected bulk sample from surface pit: 11.21x Sb, 0.27x Zn, 0.024x Pb, 0.004x Cu, 0.12x Ni, 0.81x Fe, 5.64x S, 0.01 oz/t Au, 0.03 oz/t Ag, 73.7x insolubles.	Staked July 1907 no info avail. Restaked 1915: trenching, 30 m adit. Restaked 1940, by 1951 numerous bulldozer pits, 27 m adit. Restaked 1964 by Yukon Antimony: trenching, mapping and sampling, 3 adits (1415') and 567 m drilling (about half underground). Bulk sampling by Dept. of Mines & Technical Surveys. May 1973 restaked by E. Bergvinson - mapping, geochem, road building, underground rehabilitation, 550 m drilling (7 holes). 1980 stripping DB, EM survey, geol. mapping, sampling.
	Fleming	Cu, Zn, Pb, Au, Ag	Yukon Group roof pendent within granodiorite. Coast Intrusion hosts garnet-epidote-calcite-magnetite skarn. Discontinuous 7-25 cm wide lenses, minerali- zation includes cyp, bornite, specularite and pyrite.	Staked as Fleming claims July 1909 by H.E. Porter: hand pitting Restaked by Yukon Antimony 1965: bulldozer trenching Transferred to New Ridge M.L. 1978: trenching, mag & Em survey, 7 (530m) percussion holes; best assays from mag high drill holes 0.6x Zn, 0.05x Pb

LOCATION	CLAIM GROUP	COMMODITIES	DESCRIPTION	PRODUCTION/ASSAYS
Tally-Ho Gulch 105 D/3E	Tally-Ho Group 60 deg 15', 135 deg 03'	Au, Ag, Pb	A brecciated fault zone up to 4 m wide 315 deg/ 65 deg NE in Coastal intrusive granodiorite cut by Tertiary dykes. Disseminated argentiferous galena in 0.5-1 m wide footwall silicified fault zone. Fault gouge is clayey and alteration of galena to cerussite observed within 3 m of the surface.	Main Adit - 1280 m elevation, 213 m drift and short drifts (15 m and 22 m) 11912: 0.7 oz/t Au, 2.7 oz/t Ag 11917: handcobbed, 14,628 ton test shipment to Tacoma Smelter; 2.34 oz/t Au, 5.1 oz/t Ag, 6.85x 11966: 0.6 oz/t Au, 4.2 oz/t Ag, 6.8x Pb Adit - 1203 m elev., 137 m drift and 45 m x-cut. No ore intersected. 11966: drilling, adit rehabilitation, no mineral ization intersected. 11983: Tally-Ho ECL; mapping, geochem, mag, EM surveys, trenching, underground rehabilitation.
Carbon Hill Area 60 deg 12', 135 deg 15' 105 D/3	Porter Vein 60 deg 11', 135 deg 17'	Sb, Ag, Au, Zn, Pb, Cu, Ba	15-20 quartz-biotite veinlets in granitic rocks and occasionally cut andesitic (unit A) roof pendants. Sporadic pockets of argentiferous stibnite and sphal- erite with minor galena, tetrahedrite, zinkerite, chalcostibnite, plagioclase, covellite. Underground exploration reportedly recovered assays 20% Sb, less than 5 oz/t Ag, 5x Pb, 0.25 oz/t Au over 7-20 cm widths.	11898 - trenching as PORTEL, EMPIRE, EXCELSIOR claims 11906 - restaked, 355 m drifting 11941 - restaked, workings rehabilitation 11964 - Yukon Antimony Corp: sampling, bulldozer trenching 11976 - Con-Am Res. Ltd: EM survey, 10 drill hole (672 m) - best intersection 8.2x Sb, 2.0x Zn over 0.4 m. 11906 - staked by C. Goddell: trenches and a short adit 11958 - restaked by Prospectors Airways 11965 - restaked by Yukon Antimony Corp. Ltd.: trenching 11976 - Con Am Res. Ltd. restaked, mapped and sampled 11984 - restaked as POP claims; M. Barker
Mt. Skukum Area 60 deg 11', 135 deg 23' 105 D/3	Morning Vein 60 deg 12', 135 deg 21' (SE face of Chieftan Hill)	Sb, Zn	Strong fault 12 m wide strikes east, vertical dip hosts quartz veinlets within andesite (unit A). GSC reports max. vein width 1.2 m. Lumps of quartz in vein contain stibnite and locally some sphalerite. Hand picked sample, taken by Bostock, yielded 49.9x Sb.	11906 - staked as 14 Morning, etc. by Eisenhower: hand trenching 11951 - restaked as Chief by W. McAlister 11964 - restaked and optioned to Yukon Antimony Corp. L.: tote road 11965 - bulldozer trenching 11981 - restaked as Chief by M. Johnson.
	Skukum Porphyry 60 deg 11', 135 deg 23'	Cu, Ag	Granitic breccia hosts chalcopryrite and pyrite at the contact between granodiorite, Skukum group and a volcanic complex. The zone of weak to mod. silifi- cation, chloritization, biotization, kaolinization to the potassic facies is 365 m long, 15 to 120 m wide on the cliff face. Some native copper present.	11907 or earlier - staked as Skookum, no records 11966 - Yukon Antimony Corp. L: IP survey, 275 m drilling (2 holes). IP anomaly drilled (228m) intersected pyrite only. Second hole aban- doned at 48 m in talus. 11971 - Archer Cathro & Assoc: mapping & sampling 11975 - restaked Berglyn Res. Ltd. Grab samples from outcrop: 0.1-0.5x Cu, up to 0.20 oz/t Ag

LOCATION	CLAIM GROUP	COMMODITIES	DESCRIPTION	PRODUCTION/ASSAYS
	Mt. Reid Vein 60 deg 10', 135 deg 24'	Au, Ag Pb, Zn, Sb	Two quartz vein 30-100 m apart cut granodiorite and andesite roof pendant. North vein: 0.6 m wide, occasionally up to 7.6 m wide within a fracture zone South vein: 3-5 m wide, vertical dip, adit workings show 3 m vein widths. Mineralization consists of galena, sphalerite, pyrite, stibnite and arsenopyrite 1936 - 7 channel samples ave. Au(oz/t) 0.277 Ag(oz/t) 17.3 Sb(%) -- 1974 - best sample 1.5 m width Au(oz/t) 0.38 Ag(oz/t) 36.4 Sb(%) 1.02 Geochemical sampling outlined two areas anomalous in Au, Ag and Sb.	1922 - 12 m adit, trenching, shallow shafts 1930 - trenching, road building and restaked as Strenbraten by J. Strenbraten 1935. 1937 - 30 m adit North vein; 300 m of pits and cuts to South vein. Restaked 1953, 1962, 1963 1965 - Yukon Antimony Corp; tote road, bulldozer trenching 1973 - restaked as WH claims by El Pasa Mg and Milling; mapping, rock and soil sampling. 1975 - Con-Am Res. option; mapping, sampling, EM survey, road rebuilt; option drooped 1979. 1980 - transfer to E. Bergvinson
	Berney 60 deg 10', 135 deg 30'	Sb	Roof pendants of Yukon Group metasediments in Coast Range granodiorite cut by a small stock of Tertiary group volcanics.	No records of assessment work prior to 1923. GSC noted in 1915 antimony showing on both sides of Mt. Reid found by E. Johnson. 1975 - restaked by Can Superior EL; mapping, soil survey. 1980 - restaked by J. Millhouse; mapping, geochem 1982 - restaked by Agip Can.; mapping, geochem
	Charleston Vein (Mascot) 60 deg 10', 135 deg 30'	Au, Ag, Pb Cu	Quartz vein: ave. 45 cm wide. Pyrite, minor galena occasional malachite. Diorite host. Alteration envelope up to 1.5 m on either side of vein. 2m vein (grab) Au(oz/t) 0.11 Ag(oz/t) 1.5 Sample ave. from 13 trenches along 600m strike length Au(oz/t) 0.34 Ag(oz/t) 8.4 (across 0.64m) Grab samples up to 12.65 Ag(oz/t) 149.0	1907 - staked as Mascot and Charleston by C. Weik, up to 1954 rock trenches and adits (1922, one 60 m adit) 1980 - Armco MP Expl. and Chevron; geochemistry 1983 - restaked as Earl cl (YA77893) by Agip Can
West Wheaton River Area approx. 60 deg 15' 135 deg 45' 105 D/4	Bostock (Vein?) 60 deg 13', 135 deg 35' 105 D/4	Sb	Yukon Group metasediments occur as roof pendants in Coast Range granodiorite.	The GSC reports that prior to 1940 E. Johnson found stibnite "on the west side of the head of Watson River". Prior to 1907 the Porcupine and Dail claims were staked in this area. No records preserved.
	Rose Vein 60 deg 21', 135 deg 51' 105 D/5	Ag, Au Pb	Galena and pyrite occur in a slightly rusty quartz vein up to 9 m wide, 600 m strike length that cuts pyritic rhyolite and dacite porphyry of the Skukum Group. 3 selected specimens ave. Au(oz/t) 0.27 Ag(oz/t) 25.6 Pb(%) (Worbett) Mineralized qtz sample Au(oz/t) 0.25 Ag(oz/t) 15.4 Pb(%) 11.9 Assays over 10m up to 0.45 1982 work indicated very low average grades.	Discovered 1949 by T. Worbett Staked 1962 by W. Newmanishin Restaked 1967, 1973, 1979 1982 restaked as Primrose Cl. by Cominco; mapping, geochem and rock sampling

LOCATION	CLAIM GROUP	COMMODITIES	DESCRIPTION	PRODUCTION/ASSAYS
	Primrose Skarn 60 deg 16', 135 deg 57' 105 D/5	Zn	Weak skarn zone 15 m wide and 90 m long developed in a thin limestone horizon of the Yukon Group which has been intruded by Cretaceous granodiorite. Some sphalerite mineralization.	Staked in 1968, 1971, 1972 Restaked 1981 by Westfort Pet. L.; mapping, geochem and channel sampling.
Gold Hill District 105 D/6 135 deg 07', 60 deg 18'	Gold Reef Claim 60 deg 18', 135 deg, 08'	Au, Ag Pb, Cu	Quartz vein 305/55 deg SW parallels, occasionally crosscuts the foliation host Lewes River Group greenstones & schists. Traced over 300 m ave. 1.5 m wide, small lenses of aspy, galena, argentite, chalcopyrite, and pyrite. Native gold may occur disseminated or in pockets as small spongy masses including sylvanite (Au,Ag)Te hessite, petzite and telluric ochre.	1909: approx. 100 m of drifts, cross-cuts and shafts. One ton of ore shipped.
	Dail Ck 60 deg 17', 135 deg 07'	Au, Ag, Te	Quartz vein 278/80 deg SW, 20-50 cm wide occurs in a fissure in granitic rocks at an elevation of 1463m (4800'). Disseminated galena and minor sylvanite.	13 samples (oz/T) Au Ag 1QV 35 cm (14") 0.25 0.75 1QV 50 cm (20") 0.11 1.99 Ave. mineralized specimens 1.51 15.75 Now held by Tally Ho ECL
	Lucky Boy (SE of Legal Tender)	Cu	Quartz vein striking NW in green schists containing chalcopyrite, chalcocite and malachite.	1909, frozen felsenmeer caused difficulty in uncovering 2-3 sq. m.
	Legal Tender 60 deg 21', 135 deg 14'	Ag, Pb, Cu	Fine crystalline quartz vein locally exhibiting a coarse comb structure strikes NW and has a near vertical dip in granodiorite. Metallic minerals argentiferous galena & minor chalcopyrite.	1909 - one 30 m drift, trenching, bulldozer trail. Assays reported up to 100 oz/t Ag 1977: dump sample, 9.5 oz/t Au, 18.6 oz/t Ag and 25.3% Pb. Now held by Tally-Ho ECL.
Idaho Hill Area 60 deg 20', 135 deg 02' 105 D/6	Union Mines 60 deg 19', 135 deg 02' 105 D/6 (Export, Idaho Hill, Lost Mines, Nevada Mines)	Ag, Pb Zn, Au, Cu	Zone 1: at least a dozen 10-30 cm wide, traced up to 30 m length quartz-calcite veins cut Laberge Group greywackes and tuffs are found within an area 120 m x 365 m. Mineralization in the vein gangue and walls consists of galena, arsenopyrite, minor sphalerite, pyrite and chalcopyrite. Grades from early work: 50 oz/t Ag, 40% Pb, 0.1 oz/t Au. Zone 2 (uphill from Zone 1): 8 m wide vein contains 3 bands of sulphides approx. 0.5 m wide. Best assays (grab) (1964) 7.6 m chip sample from trench (1964) Selected sample from trench Zone 3: New (1978) showing consisting of narrow, NW/70 deg SW qtz-carbonate vein, weak galena, sphalerite, chalcopyrite and pyrrhotite mineralization.	Reportedly staked 1893 by Thomas Kerwin. Staked 1898 as Union Mines claims by W.P. Schnab 1906 - 10 tons of hand cobbled ore at \$20.00/ton x shipped. By 1909, 3 adits (longest adit 41 m). Restaked 1927, 1946, 1951 (mapping, trenching, rehabilitation) 1957 - hand, bulldozer trenching 1964 - Optioned to Cominco; bulldozer trenching, mapping, geochem, geophysics. 1971; soil sawol 1972; EM survey and in 1974 bulldozer trenching Restaked 1976 by Dumb Donkey ML; optioned to Whitehorse Copper ML 1978 - mag, EM, IP surveys trenching. Transferred to Annie Lake ML 1979 - mapping, geo physical surveys. Transferred in 1981 to Doug Baird, then in 1983 Avid Gold Res. Inc.; trenching.

general observation of quartz-calcite-barite gangue mineral assemblages in the Wheaton River area suggests an epithermal origin for these vein deposits and provides an exploration guide to buried precious metal deposits.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

The SCAR 1-16 claims are underlain by Cretaceous granitic Coast Intrusions. A high level Tertiary rhyolite porphyry plug intrudes the Coast Intrusions in the southeast part of the claim block. Associated rhyolite dykes may be accompanied by minor intrusive breccia. Later aplite and mafic dykes are seen to crosscut rhyolite and Coast Intrusion granites.

Detailed mapping, rock and reconnaissance talus fines sampling has shown that economic mineral potential may lie in the vicinity of the northern contact of the Tertiary rhyolite plug. Intense zones of silicification, shear zones and quartz or quartz-carbonate veins have proven slightly enriched in base and precious metals whereas numerous talus samples are moderately to highly enriched in Cu, Pb, Zn and Ag. Aplite dykes have not yet proven to be of economic interest.

Heavy snow cover severely hampered climbing conditions and outcrop visibility. Because the cliff face offers excellent exposure of the Tertiary rhyolite, it is strongly recommended that field work be conducted in July or early August in future exploration programs.

Geological mapping, sampling and prospecting should be completed in the northwest part of the claim group.

Detailed geological mapping, prospecting and talus sampling of the Tertiary rhyolite plug is recommended. Delineation of the previously cited silicified zones and accompanying precious metal

enrichment is imperative.

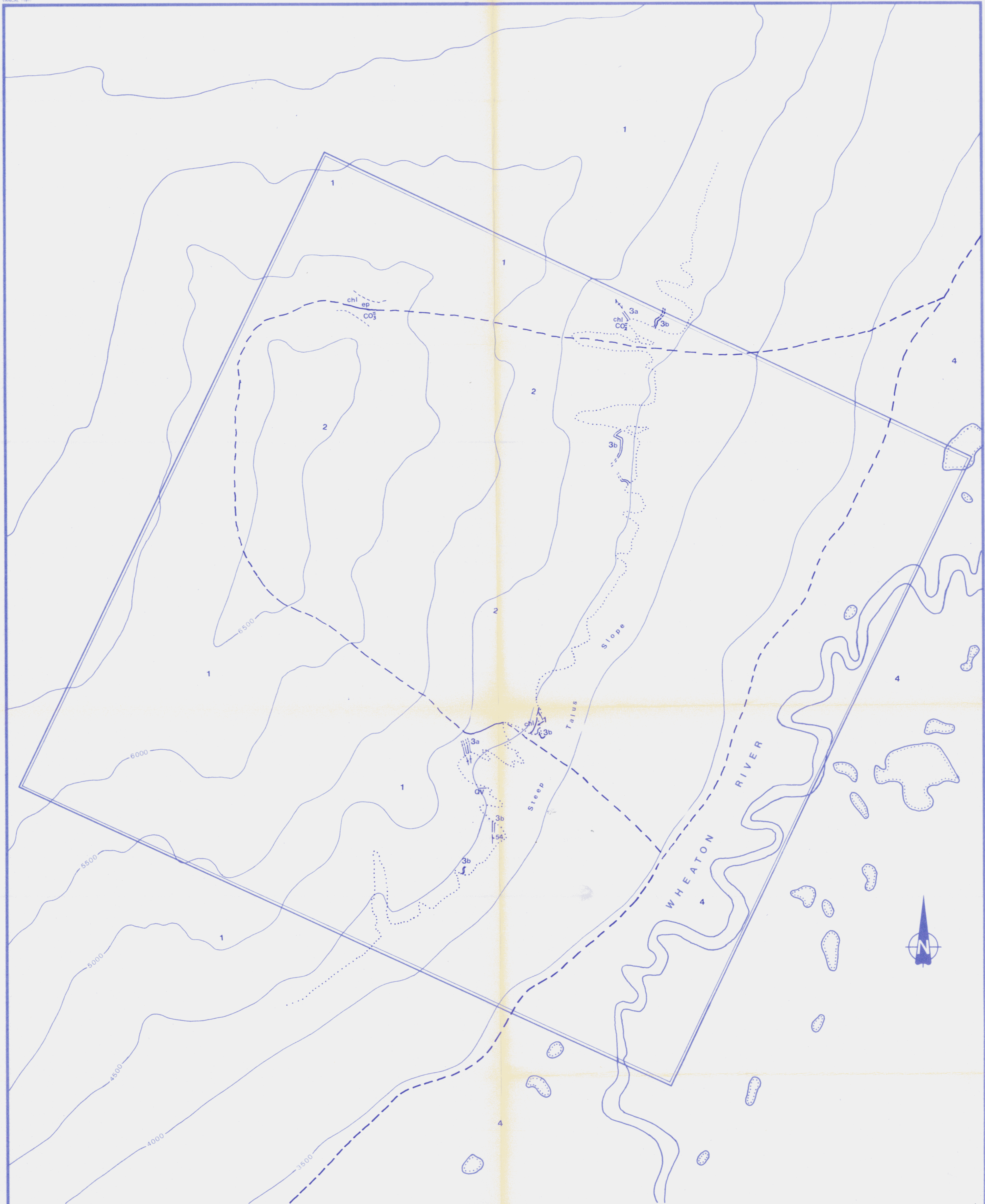
Follow-up prospecting and detailed stream sampling is recommended for the west part of the property.

A soil sampling program is recommended along the ridge top within close proximity to the rhyolite plug. The width of the plug is projected to be no more than 1000 metres and sampling of several lines at 25 metre spacings is suggested in order to detect precious metal deposits beneath this soil covered area.

Respectfully submitted,

A handwritten signature in cursive script that reads "Mary Webster". The signature is fluid and includes a long, sweeping underline that extends to the right.

Mary Webster
Field Geologist



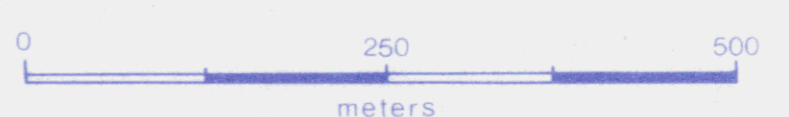
Legend

- QUATERNARY**
- 4 ALLUVIUM
- INTRUSIVES:**
- 3a Aplite Dyke
 - 3b Mafic Dyke
- TERTIARY**
- 2 RHYOLITE : massive to porphyritic; qtz - f-spar.
- CRETACEOUS**
- 1 COAST INTRUSIONS: hornblende-biotite granodiorite, diorite

Symbols

- Outcrop
- Bedding
- Schistosity
- Geological contact, real, assumed.
- QV Quartz vein

chl - chloritized
 CO₃[±] - carbonate
 musc - muscovite
 ep - epidote



091640

FIGURE 4

REVISED	SCAR PROJECT	
	Detailed Geology	
PROJ. No. 84	SURVEY BY: KH, SJM, SAM, MPW	DATE: May 85
N.T.S. 105D/3W	DRAWN BY: MPW	SCALE:
DWG. No.	NORANDA EXPLORATION	
	OFFICE: WH	

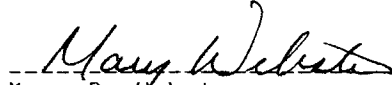
REFERENCES

- Buchanan, L.J., 1981. Precious metal deposits associated with volcanic environments in the southwest.
- Cairnes, D.D., 1912. Wheaton District, Yukon Territory. G.S.C., Mem. 31.
- Cockfield, W.E. and Bell, A.H., 1944. Whitehorse District, Yukon. G.S.C., Paper 44-14.
- Northern Cordillera Mineral Inventory, 1981. Archer, Cathro and Associates.
- Pride, M.J. (nee Smith), 1983. Interlayered sedimentary-volcanic sequence Mt. Skukum volcanic complex; Yukon Exploration and Geology 1983, pp. 94-104.
- Smith, M.J., 1981. The Skukum volcanic complex, 105DSW: Geology and comparison to the Bennett Lake Cauldron complex; Yukon Exploration and Geology 1982, pp. 68-72.
- Wheeler, J.O., 1961. Whitehorse map-area, Yukon Territory. G.S.C., Mem. 312.

STATEMENT OF QUALIFICATIONS

I, Mary P. Webster, of the City of Whitehorse, Yukon Territory do hereby certify that:

1. I have been employed as a Geologist by Noranda Exploration Company, Limited (No Personal Liability) since May 1984.
2. I am a graduate of McMaster University, Hamilton, Ontario with a B.Sc. in Geology.
3. I am a member of the Prospector's and Developers Association and the B.C. and Yukon Chamber of Mines.
4. I supervised and carried out part of the work described in this report.



Mary P. Webster
Field Geologist
Noranda Exploration Co. Ltd.
(No Personal Liability)

NORANDA EXPLORATION COMPANY, LIMITED

STATEMENT OF COSTS

MAY, 1985

PROJECT: SCAR 1-16

TYPE OF REPORT: Geochemical, Geological

Dates from October 4-7, 1984

a) Wages: including report preparation, drafting,
secretarial services and field crew

No. of Days	= 30	
Rate per Day	= \$94.40	
Total Cost	(30 x 94.40)	\$2832.00

b) Food and Accommodation:

No. of Days	= 16	
Rate per Day	= \$39.54	
Total Cost	(16 x 39.54)	632.64

c) Fuel and Transportation 2218.26

d) Sample Analysis 934.80

TOTAL COST \$6617.70

NORANDA EXPLORATION COMPANY, LIMITED

DETAILS OF ANALYSES COSTS

Project: Scar 1-16 Group

Element	No. of Determinations	Cost per Determination	Total
Cu	86	1.60	131.20
Zn	86	.60	49.20
Pb	86	.60	49.20
Ag	86	.60	49.20
Au	86	3.50	287.00
As	86	1.50	123.00
Sb	82	3.00	246.00
Total			\$934.80

NORANDA EXPLORATION COMPANY, LIMITED

APPENDIX 1: ROCK SAMPLE DESCRIPTIONS AND GEOCHEMICAL RESULTS

PROJECT: SCAR N.T.S. 105 D/3

SAMPLE NO.	LOCATION AND DESCRIPTION	TYPE/ WIDTH	ASSAYS					
			Cu	Zn	Pb	Ag	As	Au
R35401	(Magnetite 30%) massive to disseminated in fine grained crystalline siliceous matrix - limonite alteration as well as minor malachite stain	float 12x10x4	4400	7500	4800	82.0	<2	60
R35402	Gray altered(?) Rhyolite tuff, 20% disseminated subhedral to flake pyrrhotite, minor limonite stain and clay alteration, dark colour may be due to fine diss. sulphides.	float 20x10x8	220	220	34	1.8	<2	20
R35403	Quartz vein 7 cm wide, cutting buff limonite and hematite stained aphanitic rhyolite. Minor Po occurs as diss. flakes b.t. quartz crystals - some clay alt. occurring here.	float 16x4x3	160	94	42	2.6	<2	20
R35404	Highly altered granite (1m wide zone) from contact with rhyolite plug, heavy Mn and limonite staining with clay alteration, minor specular hematite.	grab 10/c 11 m	600	520	24	4.4	<2	20
R35405	Rhyolite at contact with granite, cut by many quartz veins up to km wide, strong bleaching in some areas as well as recrystallization of rhyolite - veins occur along fractures with some minor pyrite.	grab 10/c 12 m	160	240	18	2.4	<2	30
R35410	Quartz Vein: black with heavy Mn oxide stain and limonite stain, well crystallized to sugary texture containing 25% Py and 20% specular hem., sphalerite.	float 16x4x3	9600	18000	16000	530.0	<2	400
R35411	Quartz Vein: with bands of open space filling quartz, hematite with limonite stain, vuggy with 1% Py.	float 110x10x10	820	1700	560	56.0	<2	80
R35412	Quartz Vein: sugary textured, black, banded with heavy Mn oxide stain, specular hematite diss. with limonite stain, vuggy - minor pyrite.	float 110x5x7	740	76000	19000	250.0	<2	110
R35413	Quartz Vein: No visible sulphides or oxides. Some minor clay alteration.	float 110x8x2	12	250	72	1.8	<2	20
R68819	QMONZ-GDIO: med. - c. grained, equigranular, intensely clay altered to gray massive. All mafics leached out. Tr. to <1/2% dissem. blebby f. grained py. Extremely well fractured.	grab 10/c	22	80	16	0.6	<2	10
R68820	Rhyolite: at contact w/ QMONZ-GDIO. Lim. washed on all surfaces, fresh surface, difficult to get, pale bn-gy to beige f. grained w/ 15% clear-gray quartz crystals, 2 mm, avge 1 mm. <5% mafics = chloritized biotite. Tr py v.f. grained, disseminated to <1/2%. Non calc. Minor clay alt'n of fs? V. well fractured.	grab 10/c	18	120	24	0.4	<2	10

SAMPLE NO.	LOCATION AND DESCRIPTION	TYPE/ WIDTH	ASSAYS					
			Cu	Zn	Pb	Ag	As	Au
R68821	Rhyolite (as 68820): pyritic with minor qtz 7 mm vein, clear gy + barren looking. Py 2 mm blebs, 1% lo/c	grab	32	42	8	0.4	<2	10
R68822	Basalt Dyke: pyritic. Dark green-grey, f. grnd. massive, w/ avge 1/2 x 2 mm blebs of py + rare 1.5 cm blebs, all py? Parallels joint patterns in GDIO-QMONZ.	grab	20	68	2	0.2	<2	10
R68823	Granodiorite-qtz monzonite: med. grained, equigranular, clear gray qtz veinlets + stringers (10% of whole rock)	float	8	42	10	0.4	<2	10
R68824	Granodiorite: strongly altered and x-cut by silica filled fractures with 3-5% of silver gray mineral (v. shiny and scratches silver gray), f.g. galena disseminated along fractures, in vugs and along stringers, minor py, pervasive clay alt'n, minor potassic alteration qtz appears recrystallized, 4 mm diam. max., minor amythyst(?).	grab	270	9400	10000	22.0	<2	30
R68825	Granodiorite(?): medium grained - manganese along fracture surfaces, 10% magnetite in patches up to 1 cm across, 3-5% disseminated pyrite. Mafics have been replaced by Fe-oxides?	float	3200	2200	3800	37.0	<2	40
R68876	Qtz-Carb. Vein: 3 cm wide, many hairline qtz stringers, sericite, carbonate alteration, minor manganese staining on fracture surface and dendrites through rock emanating fr qtz vein, py 2%, Mn 5-6%, sericite up to 15%.	float	94	82	120	3.8	<2	50
R68877	Rhyolite fragments in siliceous pink white matrix, 20% magnetite, 3-5% f. grained disseminated blebby py. Rhyolite frags highly leached. All lim. stained. Heavy black coating on some fractures, manganese, goethite(?).	float	1000	4800	5200	48.0	<2	110
R68878	Rhyolite with laminated py. 5-7% med. grained blebby Py + tr. cpy in sugary silic. rock, probably Rhy. All limonite stained. Py forms bands up to 1 cm wide of disseminated grains alternating with bands of less Py. Py possibly parallels fractures.	float	130	120	22	0.8	<2	120
R68879	Qtz-Carbonate pod at (0.5 m x 0.2 m) Mafic Dyke/ Diorite Contact - brecciated mafic fragments (2cm diam) angular in carb-qtz matrix fine gr. and white, very minor py and limited extent of limonite occurrence <5 m py 1% sericite alt'n.	grab	110	96	34	1.4	<2	20

SAMPLE NO.	LOCATION AND DESCRIPTION	(TYPE/ WIDTH	ASSAYS					
			Cu	Zn	Pb	Ag	As	Au
R68880	Diorite: rich in biotite, hornblende, chlorite. Minor sericite alteration zone 4 m wide 8 m long, pod shaped, pronounced quartz phenocrysts 2 mm diam, potassic alteration, disseminated py (2-3%) and po (5%), discrete py blebs <2 mm diam.	lgrab lo/c	46	82	20	1.0	<2	30
R68885	Rhyolite/Diorite contact: sample taken 2 m either side of 54/90 deg Rhyolite/Diorite Contact. No pervasive alteration.	lchip lo/c	28	34	14	0.4	<2	10
R68886	Qtz-carbonate stringer: 2 cm wide, mineralized in core of stringer bornite 10%, cpy 2%, py 1%, malachite staining on surface. Sharp but irregular contact and strike length >10 m.	lchip lo/c	2500	170	80	17.0	<2	1900
R68887	Rhyolite Dyke: 10-12 cm wide, >10 m in length 18/50 deg W, host diorite, sharp unaltered contact very fine grained, light grey-blue-white colour, rusty oxidized surface, flat hard fr. surface.	lchip 4 m	38	18	16	0.6	<2	10
R68888	Rhyolite Dyke (as 68887): 6 m wide, >30 m long, host diorite contacts clean, no staining.	lgrab	64	16	8	0.4	32	10
R68889	Rhyolite (similar to 68880): po 1%, py 2% disseminated + fine grained, altered fine gr. diorite! Rusty oxidized weath. surface.	lfloat	44	36	32	0.8	<2	10