

MAP NO.: 105 D 6
ASSESSMENT REPORT X
PROSPECTUS
CONFIDENTIAL X
OPEN FILE

DOCUMENT NO: 092769
MINING DISTRICT: Whitehorse
TYPE OF WORK: Geochemical

REPORT FILED UNDER: G.S. Davidson

DATE PERFORMED: June, July, August 1989 DATE FILED: 8 November, 1989

LOCATION: LAT.: 60°17'N AREA: Pugh Peak
 LONG.: 135°06'W VALUE \$: 2000.00

CLAIM NAME & NO.: PUGH 1-20 (YB12803-22)

WORK DONE BY: G.S. Davidson

WORK DONE FOR: G.S. Davidson

DATE TO GOOD STANDING:	

REMARKS: #278 PUGH
Gold and silver occur in northeast-striking epithermal stockwork quartz veins which cut granodiorite and a rhyolite porphyry plug at the head of Schnabel Creek. Veins in the granodiorite contain arsenopyrite, pyrite, galena and sphlerite and are associated with sericite, kaolinite and potassium feldspar alteration. The veins contain up to 443 ppb Au and 5.1 ppm Ag. Metamorphosed xenoliths in the granodiorite contain up to 3.4 g/t Au and 523.6 g/t Ag.



ASSESSMENT REPORT

on the

FUGH 1-20 CLAIMS
(YB12803-YB12822)

NTS 105 D-6

Lat. 60 17' N, Long. 135 06' W
Whitehorse Mining District

092769

G.F.
Oct/89

This report has been examined by
the Geological Evaluation Unit
under Section 53 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of \$ 2000.00.



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

SUMMARY

The PUGH 1-20 mineral claims are held by the writer in the Wheaton River district of the southwestern Yukon Territory. The property covers part of the Folle' plug, an outlying body of rhyolite porphyry of the Eocene Mount Skukum Volcanic Complex. A strong system of quartz-chalcedony veining has been located within the rhyolites and the surrounding granodiotite. The vein mineralogy indicates that an epithermal system exists on the PUGH claims.

The Wheaton River district has a history of precious metal exploration and production dating back to the early 1900's. Presently the district is covered by more than 2000 mineral claims. Recent mining has taken place at the Mount Skukum Gold Mine and advanced exploration programs are underway on the Omni Resources-Skukum Creek and Mt. Skukum properties.

The quartz-chalcedony vein system on the PUGH claims warrants detailed surface evaluation. A program of prospecting, geological mapping, geochemistry and trenching at a proposed budget of \$50,000 is recommended.

TABLE OF CONTENTS

	page
SUMMARY	
TABLE OF CONTENTS	
INTRODUCTION	1
LOCATION AND ACCESS	1
PHYSIOGRAPHY, VEGETATION AND CLIMATE	1
PROPERTY	4
HISTORY	4
REGIONAL GEOLOGY	6
MINERALIZATION	6
PROPERTY GEOLOGY	9
RECENT EXPLORATION	9
1989 EXPLORATION	12
RECOMMENDATIONS	21
STATEMENT OF COSTS	22
CERTIFICATE	23
REFERENCES	24

LIST OF FIGURES

Figure 1	Location Map	2
Figure 2	Regional Map	3
Figure 3	Claim Plan	5
Figure 4	Location of major Eocene rhyolite intrusions	7
Figure 5	Geology	10
Figure 6	Sample locations and values	13

LIST OF TABLES

Table 1	Table of Formations	8
Table 2	Characteristics of Vein Deposits	11
Table 3	Sample Descriptions and Values	14-20

APPENDIX 1-Certificates of analysis

INTRODUCTION

This report describes prospecting traverses undertaken on the PUGH claims by the writer and geologists from Total Energold in June, July and August 1989.

LOCATION AND ACCESS

The PUGH claims cover a broad ridge south of Pugh Peak and north of the Wheaton River on NTS Map Sheet 105 D-6. The property lies 40 km south of Whitehorse at geographical coordinates 60 17'N latitude, 135 06'W longitude (see Figures 1 & 2).

The Alaska and Klondike Highways, and the Wheaton River-Mount Skukum all-season gravel road provide access to the area. A four wheel drive road follows Schnabel Creek from the Wheaton road to within 1 km of the property. Presently access to the claims is on foot or by helicopter.

PHYSIOGRAPHY, CLIMATE, VEGETATION

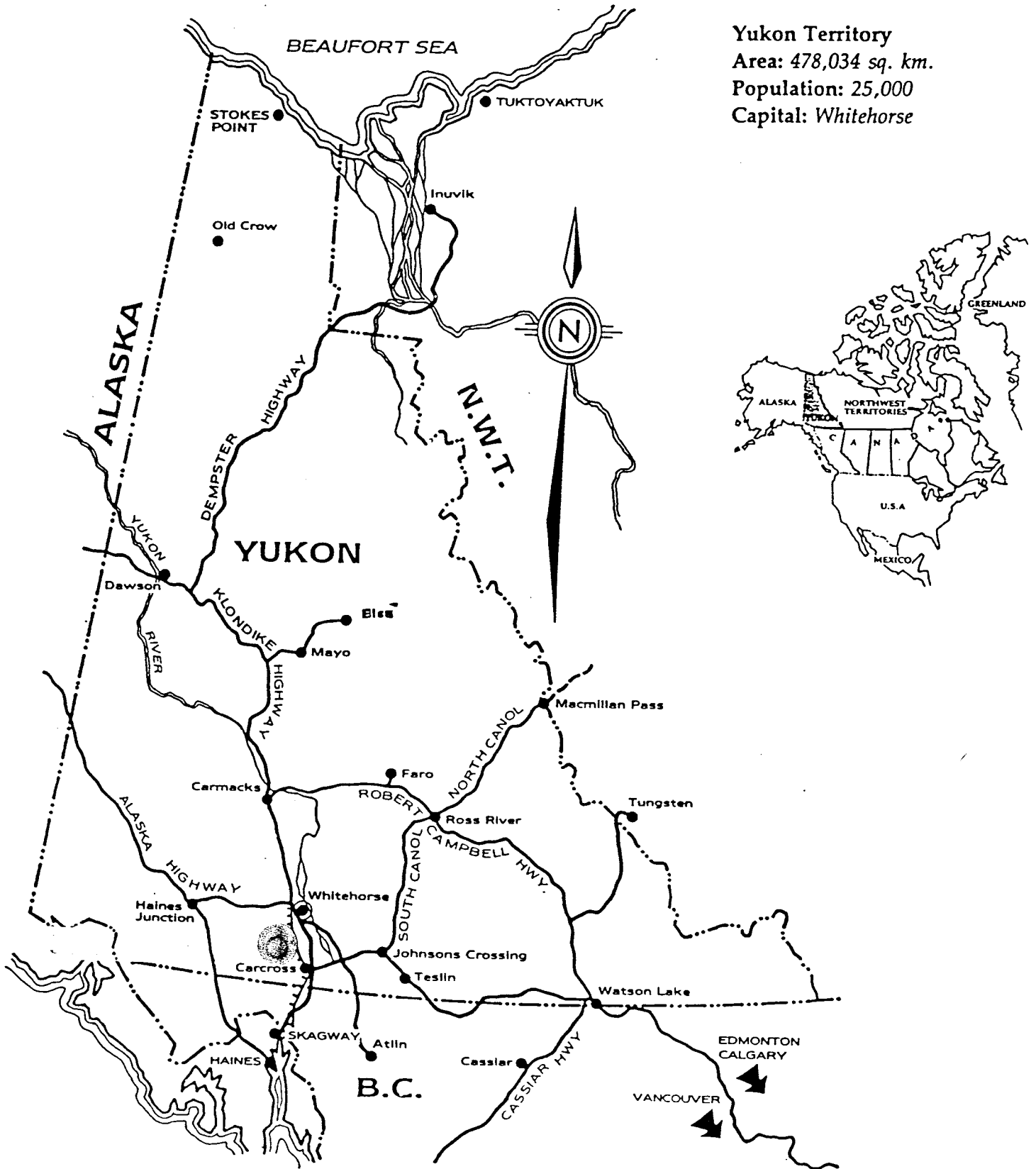
The Wheaton River district lies in the Boundary Ranges of the Coast Mountains, a rolling uplands area featuring several prominent peaks and steep-walled stream and river valleys. Glacial action has modified major river valleys to deep U-shaped drainages with terrace and outwash deposits. Topographically the area becomes progressively more severe to the southwest, culminating in 2,500 m mountains and icefields at the headwaters of the Wheaton and Watson Rivers.

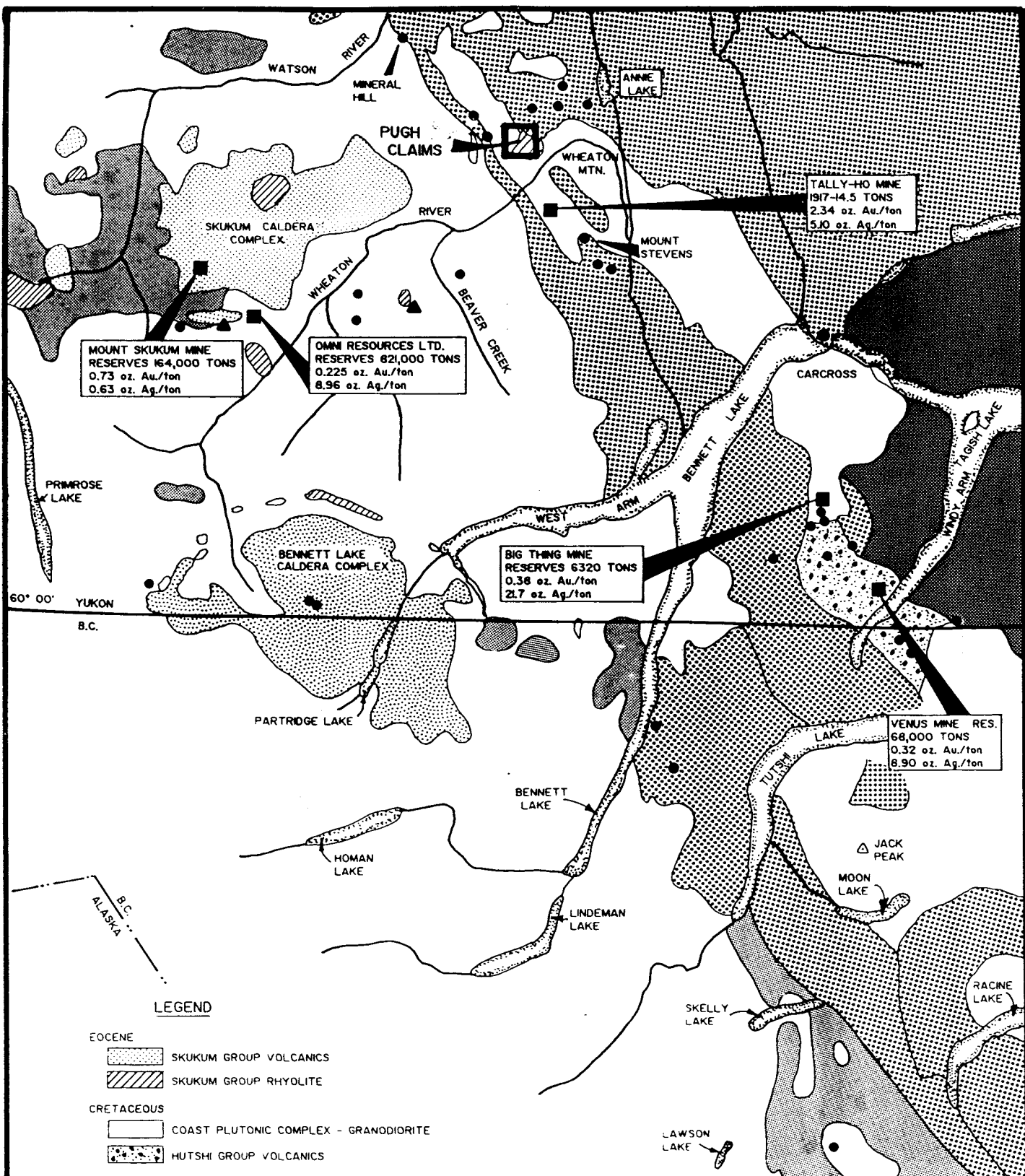
On the PUGH claims, Pugh Peak reaches a maximum elevation of 2075 m while the lowest-lying feature is Schnabel Creek at 1400 m. The claims cover a barren southerly trending ridge extending from the southwestern flank of Pugh Peak. Outcrop is common on steep slopes descending from the rounded ridge top. The effects of local alpine glaciation are evident on the northern side of Pugh Peak, where cirques and tarns are present.

The southwestern Yukon has a dry sub-arctic climate, modified by the Pacific Ocean. Summer temperatures average 12 C and annual precipitation totals 40 cm. The exploration season lasts from May until October.

Figure 1

Yukon Territory
Area: 478,034 sq. km.
Population: 25,000
Capital: Whitehorse





MOUNT SKUKUM MINE
RESERVES 164,000 TONS
0.73 oz. Au./ton
0.63 oz. Ag./ton

OMNI RESOURCES LTD.
RESERVES 821,000 TONS
0.225 oz. Au./ton
8.96 oz. Ag./ton

BIG THING MINE
RESERVES 6320 TONS
0.36 oz. Au./ton
21.7 oz. Ag./ton

TALLY-HO MINE
1917-14.5 TONS
2.34 oz. Au./ton
5.10 oz. Ag./ton

VENUS MINE RES.
68,000 TONS
0.32 oz. Au./ton
8.90 oz. Ag./ton

LEGEND

EOCENE

- SKUKUM GROUP VOLCANICS
- SKUKUM GROUP RHYOLITE

CRETACEOUS

- COAST PLUTONIC COMPLEX - GRANODIORITE
- HUTSHI GROUP VOLCANICS

TRIASSIC TO JURASSIC

- WHITEHORSE TROUGH LEWIS RIVER GROUP AND LABERGE GROUP

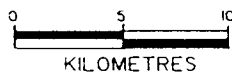
PERMIAN

- TAKU GROUP

PALEOZOIC OR OLDER (?)

- YUKON METAMORPHIC COMPLEX

- ANTIMONY PROSPECT
- PRECIOUS METALS PROSPECT
- PRECIOUS METALS DEPOSIT



PUGH CLAIMS REGIONAL MAP		
BENNETT LAKE DISTRICT		
N.T.S. 104M, 105D	TECH.: G.D.	DATE: April, 1988
SCALE:	DRAFTING: <i>[Signature]</i>	FIGURE: 2

Vegetation in the uplands consists of dwarf grasses, moss and lichen. Timber is restricted to the main valleys at elevations below 1200 m.

PROPERTY

The PUGH 1-20 claims (YB12803-YB12822) are registered with the district mining recorder in Whitehorse. An anniversary date of 26 October, 1990 has been applied for. The contiguous claims were staked by the writer in accordance with the Yukon Quartz Mining Act. Figure 3 shows the claim plan.

HISTORY

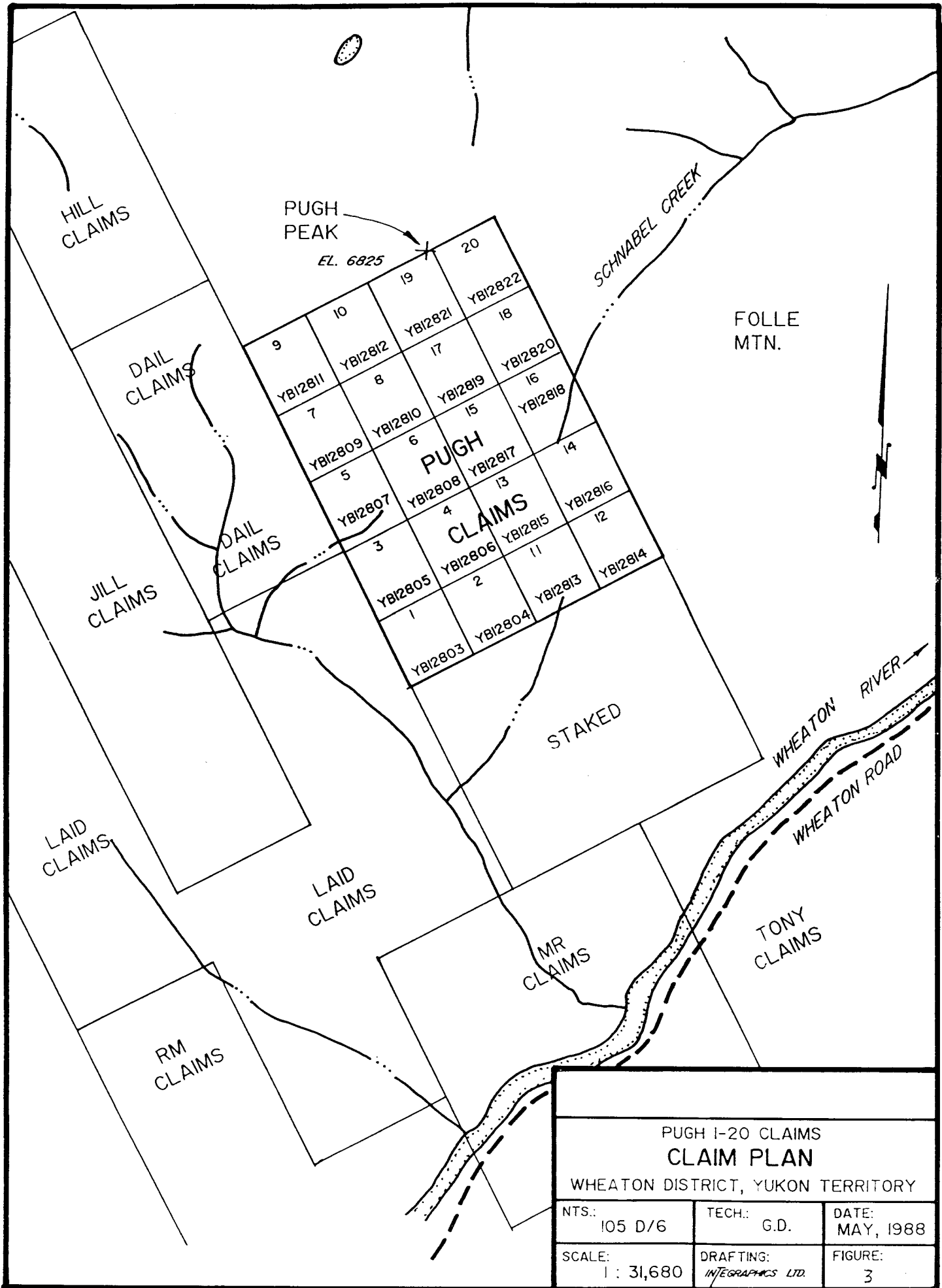
The Wheaton River and Bennett Lake districts were first explored by prospectors travelling along the major lakes and rivers of the southwestern Yukon in the early 1890's. The original claims in the district were those of Corwin & Rickman who, in 1893, located stibnite showings on Carbon Hill.

More intensive exploration began in 1906 after the discovery of gold bearing quartz veins on Gold Hill and the discovery of antimony-silver veins on Carbon and Chiefton Hills. A minor staking rush saw claims staked on most of the hills in the Wheaton Valley. Claims were also staked on Montana Mountain and west of Millhaven Bay.

From 1906 to the mid-1920's prospectors were active throughout the area. Wagon roads were built beside the Wheaton River, Thompson Creek, Stevens Creek, and the Watson River to access numerous adits and pits on the surrounding mountains. Limited development and mining was undertaken on Tally-Ho Mountain, Carbon Hill and Montana Mountain.

From the mid-1920's to the 1970's, the district experienced little exploration of record. The Venus and Arctic Mines, on Montana Mountain, operated periodically during the 1970's.

In the 1980's, the discovery and development of the Mount Skukum mine coupled with a dramatic increase in the values of gold and silver caused a methodical staking rush of the Wheaton Valley-Bennett Lake district. Presently there are over 3,000 mineral claims in the region.



<p align="center">PUGH 1-20 CLAIMS CLAIM PLAN</p> <p align="center">WHEATON DISTRICT, YUKON TERRITORY</p>		
<p>NTS.: 105 D/6</p>	<p>TECH.: G.D.</p>	<p>DATE: MAY, 1988</p>
<p>SCALE: 1 : 31,680</p>	<p>DRAFTING: INTEGRAPHS LTD.</p>	<p>FIGURE: 3</p>

The area covered by the Pugh claims was initially staked by Tally-Ho Exploration Co. Ltd. in 1984. Tally-Ho personnel prospected the area and located quartz-chalcedony veining in rhyolite porphyry of the Folle'plug. Vein samples returned low gold and silver values. Tally-Ho allowed the claims to lapse in 1987.

REGIONAL GEOLOGY

The geology of the district was initially mapped by D.D. Cairnes of the GSC, published in Memoir 31 (1912) and later by J. Wheeler, published in Memoir 312 (1961). Recently the region has been remapped by R.A. Doherty & C.J.R. Hart and released as Open File 1988-2.

The district features two terranes: 1) the Whitehorse Trough consisting of Mesozoic and Paleozoic folded meta-volcanic and meta-sedimentary rocks to the east, and 2) crystalline rocks of the Coast Plutonic Complex and Yukon Crystalline Terrane, consisting of meta-sedimentary rocks of the Late Precambrian and /or Paleozoic Yukon Group intruded by Triassic to Tertiary bodies of granitic rock to the west.

The terranes are divided by the Tally-Ho Shear Zone, a complex assemblage of volcanic and metamorphic rocks.

Both terranes are intruded and overlain by Eocene volcanics. The Folle' plug shown in Figure 4 is of Eocene age.

MINERALIZATION

Three types of mineralized veins are recognized in the Wheaton area (Doherty & Hart, 1988). The following descriptions are from Open File 1988-2, pg 54.

- 1 Epithermal gold-silver veins associated with northeast trending normal faults hosted within bi-modal calc-alkaline andesitic volcanics of the Skukum Group and associated with Eocene rhyolite porphyry dykes outside the volcanic complex.
- 2 Antimony-silver veins with silver in argentiferous galena and with or without sphalerite, jamesonite, gold, arsenopyrite and pyrite. The veins are in important east-west trending normal faults cutting Late Triassic and younger granitic rocks.

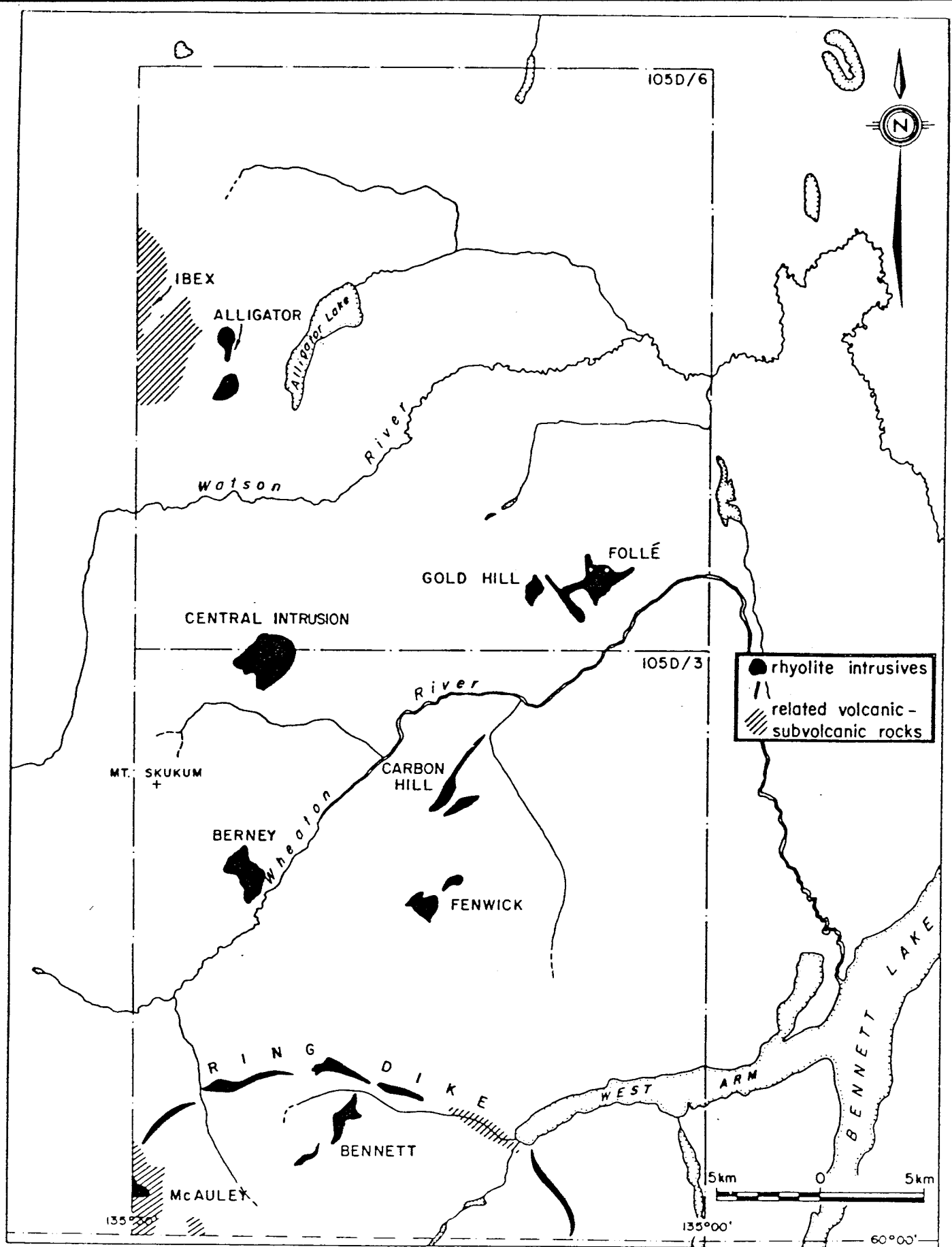


Figure 4. Location of major Eocene rhyolite intrusions and associated sub-volcanic rocks.

Table of Formations

ERA	PERIOD or EPOCH	FORMATION	LITHOLOGY		
CENOZOIC	Pleistocene and Recent		Glacial drift, alluvium, volcanic ash		
		Miles Canyon	Basalt, minor sediments and pyroclastics		
	U n c o n f o r m i t y				
	Eocene	Skukum and Bennett Lake Intrusives		Quartz feldspar granite porphyry	
				Smokey quartz eye granite	
				Rhyolite feldspar porphyry	
				Ryolite dykes	
	I n t r u s i v e C o n t a c t				
	Tertiary			Felsic pyroclastics, tuff, lithic tuff, welded tuff, flow banded rhyolite, epiclastic sediments, andesite flows and breccias, dacite flows, conglomerate and basalt	
			U n c o n f o r m i t y		
				Ibex alaskite	
			Pink quartz monzonite		
		Alaskite granite with mafic border phase			
		Leucogranite			
I n t r u s i v e C o n t a c t					
MESOZOIC	Cretaceous	Mt. Nansen Gp.	Rhyolite to andesite flows and lithic tuff		
		U n c o n f o r m i t y			
		Coast Plutonic Complex		Folle Mountain biotite granite	
				Hornblende granodiorite	
				Mt. Anderson granite-granodiorite	
				Boudette Creek quartz monzonite	
				Wheaton Valley hornblende granodiorite	
		Fenwick Creek diorite			
	I n t r u s i v e C o n t a c t				
	Uppermost Jurassic/Lower Cretaceous	Tantalus Formation	Chert pebble conglomerate, grit, sandstone, shale and coal		
	Lower and Middle Jurassic	Laberge Group	Granite cobble conglomerate, greywacke, arkose, siltstone and andesite		
	D i s c o n f o r m i t y				
	Late Triassic			Friday Creek diorite	
				Pyroxenite, leucogabbro	
			Megacrystic granite-granodiorite		
			Intrusion breccia		
I n t r u s i v e C o n t a c t					
	Lewes River Group	Andesite flows, breccias, tuff, augite and feldspar porphyry, chlorite schist, agglomerate, arkose, conglomerate, marble, limestone, greywacke and argillite			
R e l a t i o n s U n c e r t a i n					
		Andesite flows, breccia and tuff			
U n c o n f o r m i t y					
PALEOZOIC -?,-?,-? Precambrian			Hornblende granodiorite gneiss		
	I n t r u s i v e C o n t a c t				
	Paleozoic and Older	Yukon Crystalline Terrane	Biotite muscovite quartz feldspar gneiss, chlorite biotite feldspar gneiss, muscovite quartz schist, marble, quartzite, amphibolite		

- 3 Gold-silver and telluride bearing quartz veins spatially related to the "Tally-Ho Shear Zone", sheared and chloritized mafic volcanic rocks and nearby sheared or unsheared granitic rocks and Jurassic Laberge Group arkosic sedimentary rocks.

The characteristics of the three types of vein systems are summarized in Table 2.

PROPERTY GEOLOGY

The property is primarily underlain by a plug of Eocene rhyolite porphyry (Folle' plug) and by the Jurassic-Cretaceous Wheaton Valley Granodiorite. On the western margin of the claims Mesozoic volcanic rocks outcrop alongside the Tally Ho Shear Zone. Figure 5 shows the property geology.

The rhyolite porphyry plug weathers a tan to buff colour and is aphanitic to fine grained. Phenocrysts consist of feldspar and quartz. Locally, highly silicified dacite dykes intrude the rhyolite plug.

Within the plug and in surrounding granodiorite chalcedony rich dykes and quartz-chalcedony-calcite-fluorite stockworks strike northeasterly.

RECENT EXPLORATION

In 1985, the writer performed several traverses through the claim area on behalf of Tally Ho Exploration Ltd. Eleven rock samples were collected from a quartz vein system situated at the head of Schnabel Creek. Eight samples recorded anomalous gold values between 30-500ppb. Further work was recommended, however the claims were allowed to lapse in 1987.

In 1988, the writer staked the area and resampled the extensive quartz stockwork system. The stockwork veins consist of "Type 1" quartz veins containing variable amounts of fluorite, calcite and chalcedony. There is a general lack of sulphides in the veining within the rhyolite plug, however veins hosted by granodiorite contain variable amounts of arsenopyrite, pyrite, galena and sphalerite. Sericite, kaolinite and K-feldspar alteration are associated with the veining.

LEGEND

TERTIARY

EOCENE

SKUKUM GROUP

MOUNT SKUKUM VOLCANIC COMPLEX

Er_{fp} Rhyolite Feldspar Porphyry
High level, buff weathering, felsic domes, plugs and laccoliths.

Er Rhyolite Dykes

LATE CRETACEOUS and TERTIARY

KT_{al} Perkins Peak Plug
Alaskite-granite

K_v Felsic to Intermediate Volcanics

CRETACEOUS

K_{gr} Fols Mountain Granite

JURASSIC and CRETACEOUS

UPPER JURASSIC

JK_{gd} Wheaton Valley Hornblende Granodiorite

**UPPER JURASSIC AND CRETACEOUS
TANTALUS FORMATION**

JK_{Tcg} Conglomerate

LOWER AND MIDDLE JURASSIC

LABERGE GROUP

J_{ls} Sedimentary Rocks
Greywacke, arkose, siliceous siltstone and argillite, immature sandstone and grit.

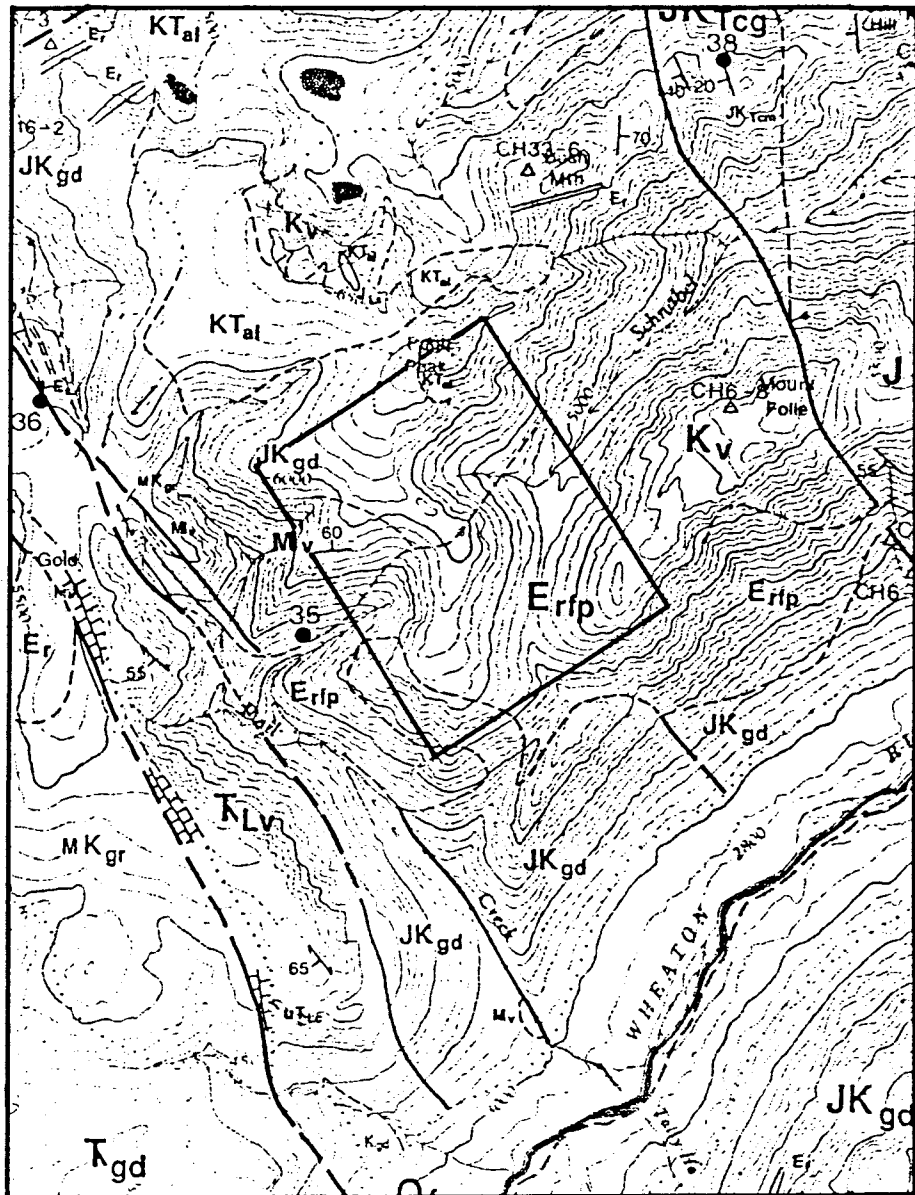
UPPER TRIASSIC TO JURASSIC

LEWES RIVER GROUP

T_{lv} Volcanic Rocks
Andesitic flow, breccia, tuff, feldspar porphyry and augite porphyry.

TRIASSIC and OLDER ?

M_v Mesozoic Volcanics ?
Andesite flow, breccia and tuff.



SYMBOLS

- Geological Boundary (defined, approximate, assumed.....)
- Bedding (inclined, vertical, dip unknown)
- Schistosity (inclined, vertical, unknown)
- Fault (defined approximate)
- Fault (solid circles on downthrown side)
- Adit or Tunnel (caved)
- Mine or Mineral Prospect

• FROM DIAND OPEN FILE REPORT 1988-2.

PUGH I-20 CLAIMS GEOLOGY WHEATON DISTRICT, YUKON TERRITORY		
NTS: 105 D/6	TECH: G.D.	DATE: MAY, 1988
SCALE: 1 : 50,000	DRAFTING: INTEGRATIONS LTD.	FIGURE: 5

	AGE EXAMPLE	HOST ROCK	ORE MINERALOGY	GANGUE MINERALOGY	ALTERATION ASSEMBLAGE	GEO-CHEMISTRY	VEIN TEXTURES	STRUCTURE	FLUID INCLUSION
TYPE I	EOCENE Gold-Silver Epithermal Veins Mt. Skukum	Esk; Skukum Gp Andesite flows & tuff; Rhy dykes & dyke bx; pebble dykes; overlying HCsn, Kgd	native gold electrum minor proustite Py, Sph, Gn at depth; low sulphide	Qtz + Cal lamellar & bladed texture; fluorite rhodochrosite adularia	Silicification Propylitic Phyllic Argillic	Au, Ag (+/-)As, Mn Distal Hg, Ba	lamellar cockade comb breccia stockwork ft wall & hg wall gouge	Steep normal faults ft. wall & hg. wall gouge 035 trending	T 190-313°C 0.7 wt% NaCl $\delta^{18}O_{\text{‰}}$ CO ₂ [1]
TYPE II	K - T CRETACEOUS to TERTIARY Antimony - Silver Veins Morning Goddell Porter Becker- Cochran	Trgd, Kgd Localized near downfaulted blocks of Kv, JKTcg HCsn; some post mineralization Eocene dykes	Stibnite, galena, sphalerite, jamesonite arsenopyrite; jarosite & realgar at surface	Quartz, bladed barite, calcite fluorite	Strong phyllic, Fe-Carbonate	Sb, Ag, Pb, Zn, Cu, Ba, Hg, (+/-) Au Au increases at depth?	Massive qtz & stibnite, bladed barite. Some crustiform textures, fluorite casts	Steep normal faults 115°/85S	T 213 °C 4.9 wt% NaCl $\delta^{18}O_{\text{‰}}$ +5.8 CO ₂ [2]
TYPE III	Tr - K Gold-Silver Tellurides Dail Gold Reef Tally-Ho	WTL, augite porp. sheared mafic volcanics; sheared gndr	native gold tellurides galena pyrite; minor Cu as malachite	Quartz, ribboned qtz, massive finely crystalline quartz	weak phyllic Fe-carbonate	Au-Ag-Te As, Bi, Pb, Zn, Cu	massive ribboned saccharoidal	Regionally extensive shear zone	T 298 °C 4.7 wt% NaCl $\delta^{18}O_{\text{‰}}$ [2]

TABLE 2: Characteristics of Vein Deposits; ([1] McDonald, 1986; [2] Rucker, 1987).

1989 EXPLORATION

Prospecting traverses north of the Folle' plug located several new quartz-chalcedony-fluorite veins in the granodiorite. Generally, the veins outcrop in steep narrow gullies or box canyons that incise the granodiorite. Rhyolite porphyry dykes intrude the granodiorite and generally form the footwall or hangingwall of the quartz-chalcedony veining. Dykes are kaolinized and the surrounding granodiorite features weak propylitic alteration. Veins have a strike of 25 deg. and dip 70 deg. west.

A 1.5m wide quartz vein (No. 2 Vein) outcrops just below the ridge crest and approximately 125m downslope on the Pugh #17 claim. This vein exhibits typical "Type 1" vein characteristics including cockade textured quartz with fluorite cores, brecciated rhyolite fragments, kaolinization and chalcedony breccia. Minor arsenopyrite and pyrite are common. Samples collected from the No. 2 Vein by B. Macdonald of Total Energold returned gold and silver values up to 443ppb and 5.1ppm respectively.

A second type of mineral occurrence was found in a gully 150m northwest of the No. 2 Vein. Sulphide rich quartz boulders were traced to lenses of metasediment in the granodiorite. The largest lens measured approx. 2m by 5m and consisted of banded black gneiss containing limonite stained coarse grained granular quartz with disseminated pyrite, galena and sphalerite. Rock samples produced gold and silver values up to 3,433ppb and 523.6ppm respectively.

Rock sample descriptions and values are summarized in Table 2, and sample locations are shown in Figure 6. Assay certificates are presented in Appendix 1.

A remote sensing image prepared for the area, suggests that north and northeasterly trending linears traverse the property. Several of these linears lie normal to one of the main structural features in the district, the Tally Ho Shear Zone.

FIGURE 6 - SAMPLE LOCATIONS AND VALUES

LEGEND

EOCENE


Skukum Group

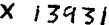
Erp Rhyolite porphyry plugs and dykes


JURASSIC & CRETACEOUS

JKgd Wheaton Valley hornblende granodiorite

SYMBOLS

Geological boundary, defined, assumed 

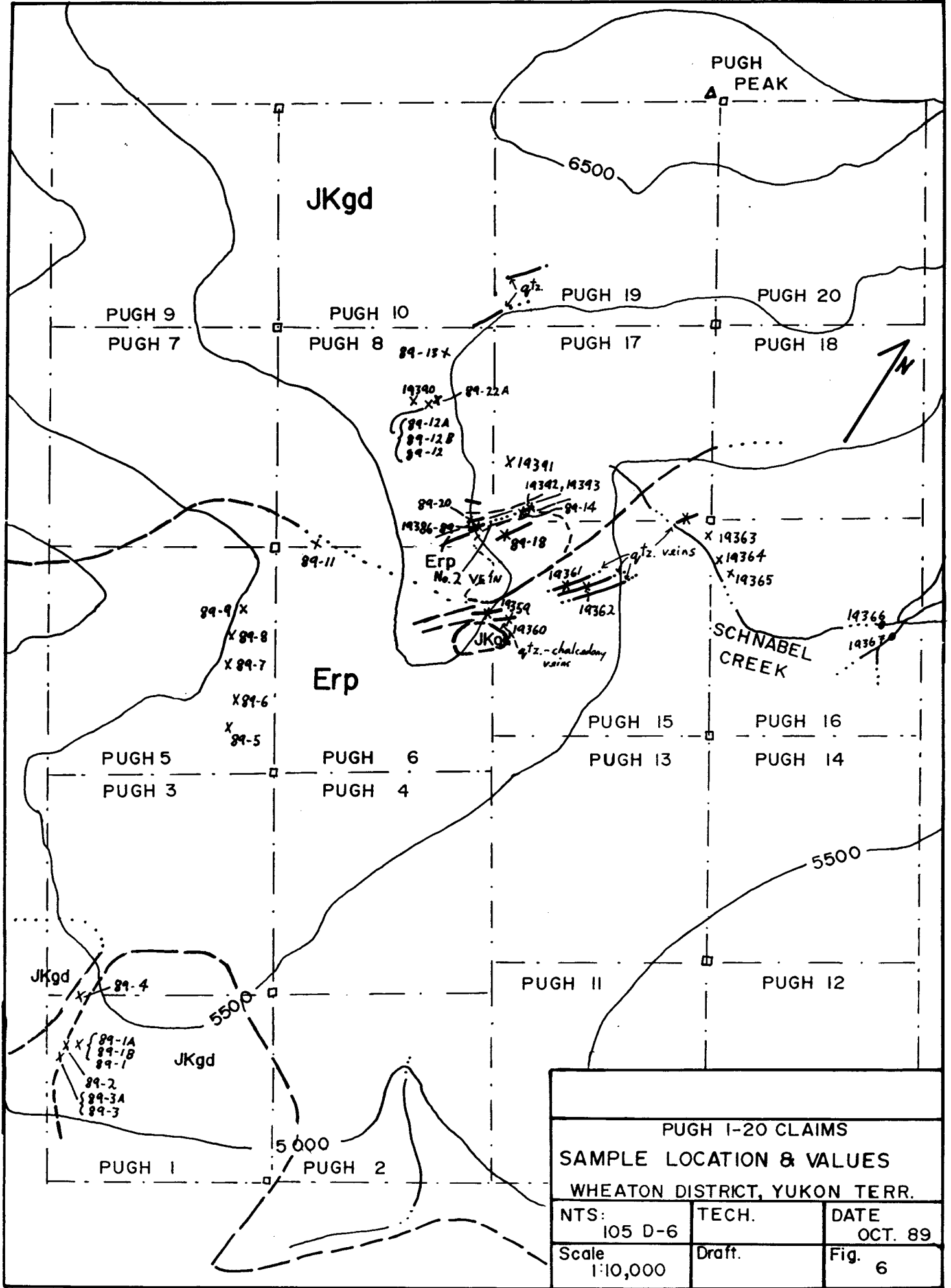
Rock sample location & number  13931

Silt sample location & number  19366

SAMPLE VALUES

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	Sample	oz/t Au	oz/t Ag
89-1A	19	3.1	22	286	444	89-14	0.005	<0.1
89-1B	18	2.1	7	435	462	89-18	0.003	<0.1
89-1	22	5.5	255	287	281	89-20	0.006	<0.1
89-2	21	0.8	6	45	100	89-22A	0.054	7.80
89-3A	16	1.3	12	19	60	89-22B	0.086	11.03
89-3	16	1.5	18	40	84			
89-4	24	0.8	5	2	131			
89-5	23	1.1	2	4	393			
89-7	20	1.2	8	153	152			
89-8	20	4.7	7	59	131			
89-9	17	204.5	23	9780	10			
89-11	38	188.8	18	3994	18			
89-12A	960	154.2	88	3724	16			
89-12B	789	106.5	650	2200	10760			
89-12	960	156.3	14	4006	17			
89-13	103	148.2	86	3813	16			

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	Sample	ppb Au	ppm Ag
19386	161	5.1	80	154	49	19359	25	4.6
19387	159	2.8	8	3	22	19360	32	0.3
19388	299	1.8	5	19	21	19361	24	<0.1
19389	82	3.4	48	203	99	19362	36	<0.1
19390	3433	523.6	149	67540	11	19363	52	<0.1
19391	85	4.6	4	39	27	19364	347	<0.1
19392	68	4.5	15	137	202	19365	88	2.9
19393	443	2.1	21	35	76	19366	29	0.3
X	175	2.9	27	87	148	19367	30	<0.1



PUGH 1-20 CLAIMS		
SAMPLE LOCATION & VALUES		
WHEATON DISTRICT, YUKON TERR.		
NTS:	TECH.	DATE
105 D-6		OCT. 89
Scale	Draft.	Fig.
1:10,000		6

TABLE 3
SAMPLE DESCRIPTIONS AND VALUES

* Descriptions and assays provided by B. Macdonald (Total Energold)

Sample Number	Sample Type	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
19359	float		Translucent chalcedony in rhyolite dyke	25	4.6			
19360	0.25m grab		Re-brecciated chalcedony in rhyolite dyke	32	0.3			
19361	grab		Altered rhyolite dyke with sheeted quartz-siderite-fluorite veins	24	<0.1			
19362	float		Vein chalcedony 0.25m across with disseminated pyrite (approx. 1%)	36	<0.1			
19363	0.2m	top of Schnabel Cr.	Chalcedony vein in rhyolite dyke	52	<0.1			
19364	0.15m	" " "	Limonitic quartz vein with open space and coarse calcite grains, also some limonitic boxwork and prismatic sulphides	347	<0.1			
19365	0.4m	Schnabel Cr.	veinlets in sheeted structure cutting rhyolite outcrop	88	2.9			
19366	silt	Schnabel Cr.		29	0.3			
19367	silt	Schnabel Cr. tributary		30	<0.1			

Sample Number	Sample Type	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
89-1A	grab		Fractured, limonite stained rhyolite dyke (Skukum Group)	19	3.1	22	286	444
89-1B	grab		Medium-grained, greyish white quartz vein with angular fragments of granodiorite approximately 4cm across. No sulphides apparent.	18	2.1	7	435	462
89-1	grab		Coarse-grained limonite stained quartz vein with jarosite boxwork on fracture surfaces, very heavy. One band approximately 2cm wide of massive magnetite crosscuts quartz.	22	5.5	256	287	281
89-2	grab		Fine grained, light-grey massive quartz sample from quartz sweat with minor limonite staining.	21	0.8	6	45	100
89-3A	grab		Fine-grained, highly-silicified rhyolite with limonitic-hematitic fracture surfaces and minor boxwork textures.	16	1.3	12	19	60
89-3	grab		Fine-grained, highly-silicified brecciated rhyolite cross-cut by open space quartz veinlet 0.5 - 1.0cm wide. Cockade quartz and limonite staining in vein open spaces.	16	1.5	18	40	84

Sample Number	Sample Type	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
89-4	grab		Fine-grained, light grey quartz vein or aplite phase of granodiorite. No sulphides, no limonite.	24	0.8	5	2	131
89-5	grab		Brecciated, silicified, bleached rhyolite with rotated fragments re-cemented by fine chalcedonic quartz. Inter-fragmental spaces containing 1-2mm sized clots of limonite. Abundant fractures are limonite and pyrolusite stained.	23	1.1	2	4	396
89-7	grab		Aphanitic rhyodacite dyke with moderate silicification and minor limonitic boxwork textures present.	20	1.2	8	153	152
89-8	grab		Extremely altered, brecciated rock silicified and cemented by quartz. Large clots 2-3cm across of jarositic boxwork. Pyrolusite stained fractures.	20	4.7	7	59	131
89-9	grab		Quartz vein and quartz-breccia sample with abundant bleached/silicified fragments (unidentifiable) 1-10mm across. Quartz is coarse grained to chalcedonic and fractured. Limonite coats fractures.	17	204.5	23	9780	10

Sample Number	Sample Type	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
89-11	grab		Very fine-grained massive quartz vein with minor jarosite/pyrolusite staining on fractures.	38	188.8	18	3994	18
89-12A	grab		Very coarse-grained quartz vein with heavy limonite staining and 1 - 1.5cm clots of boxwork texture. Approximately 2% medium-grained galena present as 3mm - 1cm sized clots of crystals.	960	154.2	88	3724	16
89-12B	grab		Very coarse-grained (1-3 mm) quartz vein, light coloured with minor limonite staining and 2mm to 1cm sized clots of medium-grained galena scattered throughout (galena - approximately 1%).	789	106.5	650	2200	10760
89-12	grab		Medium-grained, coarse-grained (1-3mm) quartz vein, light-coloured with minor limonite staining and 2mm to 1cm sized clots of medium-grained galena scattered throughout (approximately 1% galena total).	960	156.3	14	4006	17

Sample Number	Sample Type	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
89-13	grab		Banded gneiss or metasediment with quartz-rich sweats parallel to banding containing fine disseminations of sphalerite, galena and pyrite with some boxwork texture also present. <1% sulphides.	103	148.2	86	3813	16
19386	1.0m chip	No.2 Vein near ridge crest	Disseminated sulphides in rhyolite breccia.	161	5.1	80	154	49
19387	0.6m chip	No.2 Vein	Vein breccia in rhyolite.	159	2.8	8	3	22
19388	0.5m chip	No.2 Vein	Epithermal quartz vein.	299	1.8	5	19	21
19389	1.0m chip	No.2 Vein	Sulphide-rich, limonitic, brecciated rhyolite.	82	3.4	48	203	99
19390	Float		High grade picked sample of selected well mineralized float	3433	523.6	149	67540	11
19391	grab		Vuggy quartz wallrock breccia with angular open spaces filled with boxwork limonite. Minor fluorite, pyrite, sphalerite and galena.	85	4.6	4	39	27
19392	1.0m chip	No.2 Vein Bottom exposure	Solid epithermal quartz vein, no breccia textures, many open spaces with boxwork. Trace arsenopyrite in band.	68	4.5	15	137	202

Sample Number	Sample Type	Location	Description	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm
19393	1.0m chip	No.2 Vein Bottom Exposure	Cockade textured quartz breccia vein with minor pyrite. Altered fragments approximately 3-15cm across have cockade over growths.	443	2.1	21	35	76

* Descriptions and assays provided by G. Davidson

Sample Number	Sample Type	Location	Description	Au oz/t	Ag oz/t
89-14	grab	No.2 Vein Bottom exposure.	Coarse-grained, brecciated, quartz fluorite vein 1.5m wide. Rhyolite fragments, minor arsenopyrite.	0.005	<0.1
89-18	grab	Small vein 50m east of No.2 Vein.	Coarse-grained quartz vein, open coxcomb textures, minor sphalerite and pyrite. Some chalcedony.	0.003	<0.1
89-20	grab	No.2 Vein Bellow ridge crest.	Rhyolite dyke, narrow cross-cutting quartz veins, open vugs, minor arsenopyrite.	0.006	<0.1
89-22A	grab		Coarse-grained sugary quartz lens limonite staining, disseminated pyrite 1%.	.0 54	7.80
89-22A	grab		Coarse-grained sugary quartz lens, limonite staining, disseminated pyrite and galena 2%.	0.086	11.03

RECOMMENDATIONS

The claims warrant a detailed surface exploration program to evaluate the strong quartz-chalcedony vein system occurring at the head of Schnabel Creek. This program should include geological mapping, geochemistry and trenching. The following program is proposed:

Geological mapping and supervision	\$	6000
Assistant		4000
Grid development 25 km		5500
Geochemistry 250 samples (Au+8)		7000
Road building and upgrading, trenching		12500
Camp and supplies		4500
Transportation		2500
Report and assessment		3000
Contingency		5000
	TOTAL	\$ 50000

STATEMENT OF COSTS

Period: June 1 - Sept. 30, 1989

Personnel:	G. Davidson, 4 days	\$ 1,200
	B. Macdonald, 1.5 days	
Sample Assay:	Northern Analytical	
	37 rock samples	691
Helicopter:	Frontier Helicopters,	
	Trans North Air	650
	Total Costs	\$ 2,541

CERTIFICATE

I, GRAHAM DAVIDSON, of the City of Whitehorse, in the Yukon Territory, HEREBY CERTIFY:

1. That I am a consulting geologist and that I performed the work program described in this report.
2. That I am a graduate of the University of Western Ontario (H. BSc., Geology, 1981).
3. That I am registered as a Professional Geologist by the Association of Professional Engineers, Geologists & Geophysicists of Alberta (No. 42038).
4. That I have been engaged in mineral exploration on a full time basis for nine years in the Yukon and Northwest Territories, and British Columbia.

SIGNED at Whitehorse, Yukon this 30th day of October, 1989.

G.S. DAVIDSON, P.Geol.



REFERENCES

- Cairnes, D.D. 1916: Wheaton District, Southern Yukon. GSC. Memoir 31.
- Davidson, G. & Robertson R. 1986: Report on 1985 Exploration Activities - Wheaton River Joint Venture.
- Doherty, R.A. & Hart, C. 1988: Preliminary Geology of Map Sheets 105 D-3 and 105 D-6. Open File 1988-2
- Lambert, M.B. 1974: The Bennett Lake Cauldron Subsidence Complex, British Columbia and Yukon Territory. GSC. Bulletin 227.

APPENDIX - CERTIFICATE OF ANALYSIS

July 8, 1989

Total Energold Corp
 21 - 1114 - 1st Ave
 Whitehorse, Yukon
 Y1A 1A3

Work order # 29005

Purchase order # 6542 MN

ASSAY CERTIFICATE

Sample	ppb Au	ppm Ag	ppm Pb	ppm Cu	ppm Zn
19353					
19354					
19355					
19356					
19357					
19358					
19359	25	4.6			
19360	32	0.3			
19361	24	<0.1			
19362	36	<0.1			
19363	52	<0.1			
19364	347	<0.1			
19365	88	2.9			
19366	29	0.3			
19367	30	<0.1			

} Eview

} Pugh Peak

Au by 30g fire assay / AAS finish
 metals by AAS / aqua regia digestion



August 1, 1989

Mount Skukum Gold Mining Corp.
 Bag 2775
 Whitehorse, Yukon
 Y1A 3V5

ASSAY CERTIFICATE

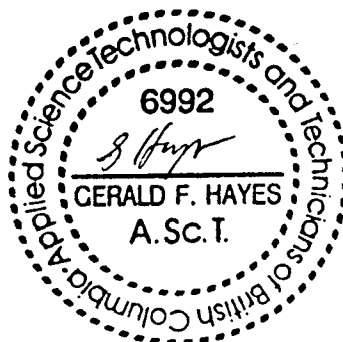
Work Order # 29059

PO # 6587MN

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn
19386	161	5.1	80	154	49
19387	159	2.8	8	3	22
19388	299	1.8	5	19	21
19389	82	3.4	48	203	99
19390	3433	523.6	149	67540	11
19391	85	4.6	4	39	27
19392	68	4.5	15	137	202
19393	443	2.1	21	35	76
X	175	2.9	27	87	148

Pugh Peak

Au -- 15g fire assay/AAS finish
 Metals -- Aqua-regia digestion/AAS



August 1, 1989

Total Energold Corp
 21 - 1114 - 1st Ave
 Whitehorse, Yukon
 Y1A 1A3

ASSAY CERTIFICATE

Work Order # 29040

File # 29040

PC# 3032

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn
89-1A	19	3.1	22	285	444
89-1B	18	2.1	7	435	462
89-1	22	5.5	255	287	281
89-2	21	0.8	6	45	100
89-3A	16	1.3	12	19	60
89-3	16	1.5	18	40	84
89-4	24	0.8	5	2	131
89-5	23	1.1	2	4	393
89-7	20	1.2	8	153	152
89-8	20	4.7	7	59	131
89-9	17	204.5	23	9780	10
89-11	38	188.8	18	3994	18
89-12A	960	154.2	88	3724	16
89-12B	789	106.5	650	2200	10760
89-12	960	156.3	14	4006	17
89-13	103	148.2	86	3813	16

Au -- 15g fire assay/AAS finish
 Metals -- Aqua-regia digestion/AAS



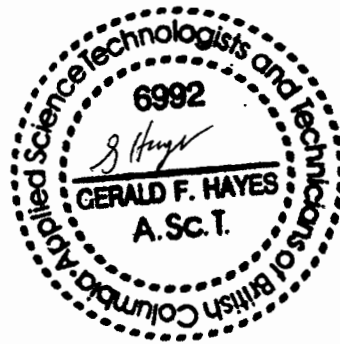
July 29, 1989

Graham Davidson
17 - 4078 - 4th Ave.
Whitehorse, Yukon

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29045

Sample	oz/t Au	oz/t Ag
89-14	0.005	<0.1
89-18	0.003	<0.1
89-20	0.006	<0.1
89-22A	0.054	7.80
89-22B	0.086	11.03



INVOICE FOR ANALYTICAL SERVICES

Sample Preparation	5 x \$ 3.75	=	\$ 18.75
Au & Ag Fire Assay	5 x \$ 12.75	=	\$ 63.75
Total due on receipt of invoice			\$ 82.50

Thank you for using Northern Analytical Laboratories Ltd.

Paid