

MAP NO.: ASSESSMENT REPORT X  
105 D 3 PROSPECTUS  
CONFIDENTIAL X  
OPEN FILE

DOCUMENT NO: 092779  
MINING DISTRICT: Whitehorse  
TYPE OF WORK: Geochemical

REPORT FILED UNDER: Skukum Gold Incorporated

DATE PERFORMED: 18-25 July, 1989

DATE FILED: 15 December, 1989

LOCATION: LAT.: 60°13'N

AREA: Tally Ho Mountain

LONG.: 135°06'W

VALUE \$: 6 550.00

CLAIM NAME & NO.: BARR 1-16,39-60,117-138(YA96945-60,YA94930-51,YA97688-709)

WORK DONE BY: H.F. MacKinnon

WORK DONE FOR: Skukum Gold Inc. and Berglynn Resources Inc.

DATE TO GOOD STANDING:

REMARKS: ADJOINS #29 TALLY-HO

Sphalerite, molybdenite, chalcopryrite and pyrrhotite are occur in and around quartz veins up to 8 m long and 20 cm wide within a 0.76 sq km anomalous zone which is believed to be the surface expression of a zoned porphyry system. Gold values up to 2.8 g/t were obtained from chalcopryrite and galena-bearing quartz float.

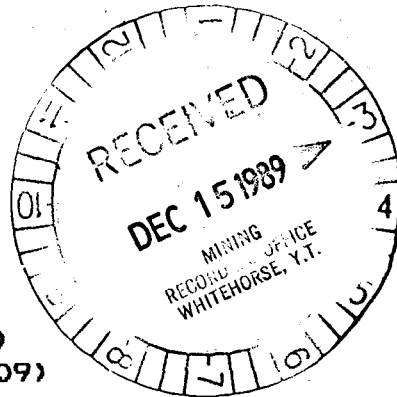


# SKUKUM GOLD INC.

GEOLOGICAL AND GEOCHEMICAL  
REPORT

ON THE

BARR 1-16 (YA96945-YA96960)  
BARR 39-60 (YA94930-YA94951)  
BARR 117-138 (YA97688-YA97709)  
Mineral Claims



Mt. Tally Ho and Partridge Creek Area

WHITEHORSE MINING DISTRICT  
YUKON TERRITORY

N.T.S. : 105D/3

LATITUDE: 60 Degrees 13 Minutes North  
LONGITUDE: 135 Degrees 06 Minutes West

JUNE 18 to JULY 25, 1989

By

HUGH F. MacKINNON B.Sc.

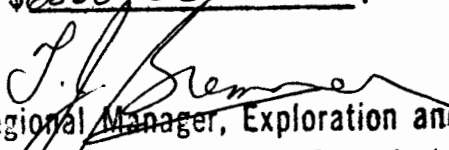
OCTOBER 20, 1989

For

Skukum Gold Inc. and Berglynn Resources Inc.  
990 - 840 Howe St.  
Vancouver, B.C.  
V6Z 2L2

052.79

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 \$6550.00.

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

## SUMMARY

This report describes the exploration work conducted on Skukum Gold and Berglynn Resources BARR claims in 1989. The property consists of 60 contiguous mineral claims located at Mt. Tally Ho and Partridge Creek in the Wheaton River area. Access is provided by a pair of 4W roads off of the all weather Annie Lake Road.

The property is underlain by roof pendants of Paleozoic or older Yukon Group metasedimentary and gneissic rocks. These rocks are intruded by several northwest trending Coast Plutonic Complex plutons of Paleozoic to Upper Jurassic age. To the east the claims are underlain by Lewes River Group metavolcanic and metasedimentary rocks of the Upper Triassic to Jurassic Tally Ho Shear Zone. The Tally Ho Shear Zone trends northwest and is believed to be the northern extension of the Llewellynn fault. The former producing Tally Ho high grade gold -silver - lead mine/prospect is located adjacent to the northeastern claims. Additional epithermal to mesothermal mineralized veins and faults occur throughout the Wheaton River area.

Prospecting, geological mapping and geochemical sampling of anomalous areas outlined in previous surveys was the focus of much of the 1989 exploration program. Molybdenite and base metal mineralization, in place and in float, was found over much of the property. One showing, the MOLY zone, consists of an 8 meters wide exposure of quartz veins up to 20 centimeters with up to 6% molybdenite. Sphalerite, chalcopyrite and pyrrhotite are associated with a moderate propylitic alteration halo around the veins. The MOLY zone occurs within a 0.76 square kilometer area which is anomalous in molybdenum  $\pm$  copper  $\pm$  silver  $\pm$  zinc  $\pm$  arsenic  $\pm$  gold. Soil and stream sediment sample anomalies are particularly concentrated in the MOOSE zone, 150 meters south of the MOLY zone. Elemental distribution and mineralization suggest the area is a zoned porphyry (?) deposit with a molybdenum rich core and copper, zinc, arsenic and precious metal enriched outer shell. Preliminary examination suggests that the deposit (?) is uneconomic.

The best gold values ( $\leq$  0.083 oz/ton) occur in float samples above the carbonate altered granitic rocks of the ASE zone. Chalcopyrite and galena are associated with the auriferous quartz float. Additional weak precious metal and base metal anomalies exist throughout the property but because of the extensive overburden cover are believed, for the most part, to represent glacial dispersal patterns rather than bedrock geochemistry.

A low priority program consisting of an airborne geophysical survey, followed by ground geophysical survey(s), prospecting, soil sampling and trenching is proposed for 1990.

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APPENDIX - 1 : Sample descriptions

APPENDIX - 2 : Analytical results

# 1. INTRODUCTION

## 1.1 LOCATION & ACCESS

The BARR claims cover the Partridge Creek valley and the north slope of Mt. Tally Ho in the southern Yukon at 60 degrees 13 minutes north latitude and 135 degrees 06 minutes west longitude ( NTS:105D/3) (Figure 1). The property is accessible by 2 wheel or 4 by 4 roads (depending on the time of year) off the all weather Annie Lake road. Total distance by road to the claim groups from Whitehorse is approximately 85 kilometers. Alternate access, to the more remote sections of the property, is provided by helicopter, with the nearest permanent base being Whitehorse, Yukon Territory.

## 1.2 CLIMATE, TOPOGRAPHY AND VEGETATION

The climate in the Wheaton River area is variable with hot summers, enhanced by 18-20 hours of daylight, and long cold winters. Precipitation is moderate (60 centimeters annually) with about half falling as rain. The northern slopes and many of the gullies are snow covered till the end of June. Creeks and lakes are open from early May to mid October.

The western half of the property covers the broad U shaped Partridge Creek valley and the eastern half the moderate north facing slope of Mt. Tally Ho. Maximum relief in the area is approximately 625 meters (2050 feet) with valley floors of 900 meters (2950 feet) and the higher slopes at 1525 meters (5000 feet).

Roughly eighty five percent of the property is below tree line. Higher elevations are cover by stunted spruce and shrubs, the intermediate slopes mixed spruce, poplar, alder and 'buckbrush' and the valley floors spruce and alder.

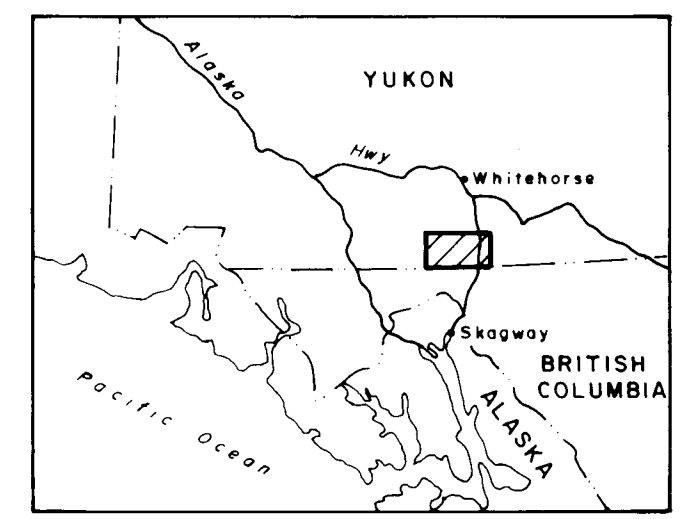
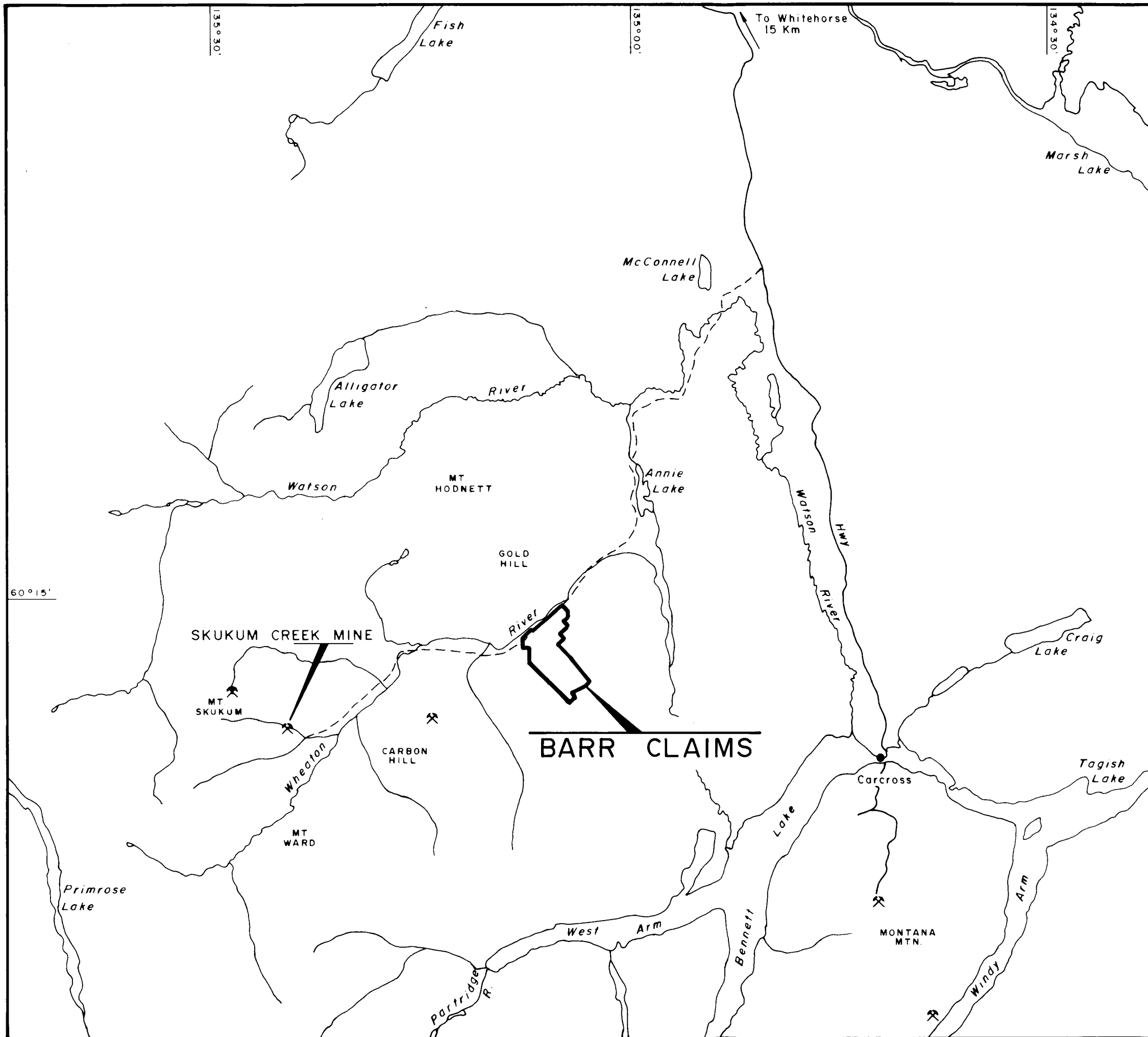
## 1.3 PROPERTY & CLAIM STATUS

The BARR property consists of 60 contiguous 2 post claims located within the Whitehorse Mining District and staked under the provisions of the Yukon Quartz Mining Act (Figure 2). The claim status is listed in table 1 below.

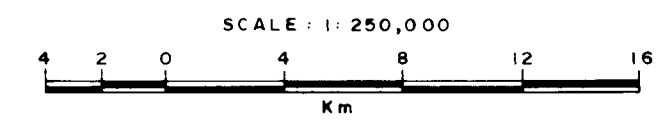
Claim Name	Grant Numbers	Recording Date	Renewal Period*	Total Claims
BARR 1-16	YA96945-960	Feb. 20,1987	Aug. 20,1990	16
BARR 39-60	YA94930-951	June 12,1986	Sept. 12,1990	22
BARR 117-138	YA97688-709	June 19,1987	Sept. 12,1990	22

\* Pending acceptance of assessment report.

All the claims are jointly owned by Berglynn Resources Inc. and Skukum Gold Inc. of 990-840 Howe St., Vancouver, B.C..



LOCATION MAP

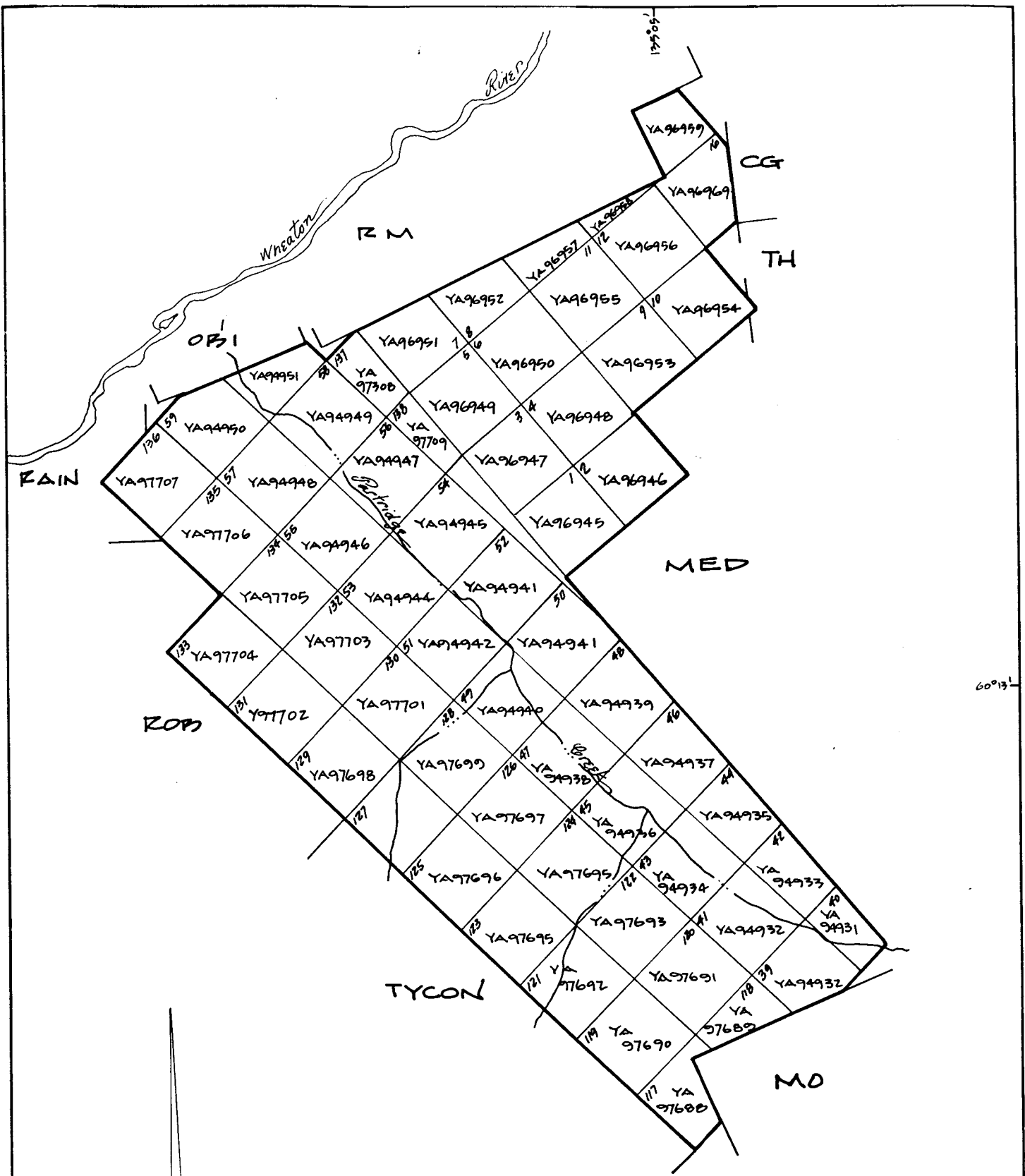


**SKUKUM GOLD INC.**  
**BARR CLAIMS**  
 WHITEHORSE MINING DIVISION - YUKON TERRITORY

**LOCATION MAP**

N.T.S. 105D3, 4, 5, 6  
 DRAWN BY: A.L.W., H.F.M., T.M.

FIGURE No. 1  
 DATE: DEC 1989



60°13'

SKUKUM GOLD INC.  
 BERGLYNN RESOURCES INC. - J.V.  
 BARE CLAIMS  
 WHITEHORSE MINING DISTRICT  
**CLAIM MAP**

Drawn by: HM/vh Date: Oct 1989 FIGURE No. 2  
 NTS: 105 D3 Scale: 1:30,000

#### 1.4 PREVIOUS WORK HISTORY

The Geological Survey of Canada conducted a regional geochemical stream sediment survey in the area in 1985 (G.S.C., 1985) however they only sampled three of the creeks draining the BARR claims and none of these creeks were anomalous.

In 1986 an initial program of prospecting and mapping was conducted by Aurum Geological Consultants, of Vancouver, B.C., on the BARR 39-60 claims. No anomalous samples or zones of interest were located.

During the summer of 1987 a program of stream sediment and contour and pace-compass line soil/talus fines geochemical sampling was conducted by Skukum Ventures Inc. (now Skukum Gold Inc.) on the BARR 1-16 and 39-60 claims. This program delineated several weak precious and base metal anomalies (Coster, 1987, 1988).

In the spring of 1988 Skukum Gold conducted reconnaissance prospecting, mapping and sampling on the BARR 117-138 claims. Molybdenite mineralization was discovered but had no associated precious metal values and was therefore deemed uneconomic. Additional weak scattered base metal, molybdenum, and gold anomalies were found but again regarded as not worthy of follow up (Coster and Strain, 1988).

One kilometer to the east of the property small high grade gold-silver-lead quartz veins occur in rocks of the Tally Ho Shear Zone. This showing occurs in an up to 4 meter thick brecciated fault splay off of Tally Ho gulch and was originally staked in 1907. In the winter of 1917-18 a hand sorted ore shipment of 14,628 tons assaying 2.34 oz/ton gold, 5.1 oz/ton silver and 6.85 oz/ton lead was made from this showing. Additional precious metal and base metal veins occur throughout the Tally Ho Shear zone and have been the subject of exploration and limited mining activity since the late 1800's.

Two kilometers to the west of the property, on Mt. Anderson, gold-silver-lead quartz veins up to 2 meters thick occur in granitic rocks. These veins have been sporadically worked since the 1890's.

Since the early 1980's there has been exploration conducted on numerous properties located in the area since the discovery and development of TOTAL ERICKSON's MT.SKUKUM gold-silver mine and OMNI RESOURCES-SKUKUM GOLD's SKUKUM CREEK gold-silver-base metal deposit. Skukum Gold and other companies are conducting exploration work throughout the Wheaton River area.

### 1.5 1989 EXPLORATION PROGRAM

The 1989 work program was carried out by a one to two person crew intermittently between June 18 and July 25, 1989 and consisted of follow up geological mapping and geochemical sampling and further reconnaissance prospecting and sampling. Work was conducted out of the Skukum Gold - Omni Resources base camp at Skukum Creek, approximately 14 kilometers by road from the Partridge Creek road.

The exploration was conducted by the following Skukum Gold Inc. personnel:

Hugh MacKinnon B.Sc. ....	Project Geologist
Erik Bergvinson .....	Prospector
Terence Elliott M.Sc. ....	Senior Company Geologist

## 2. GEOLOGY

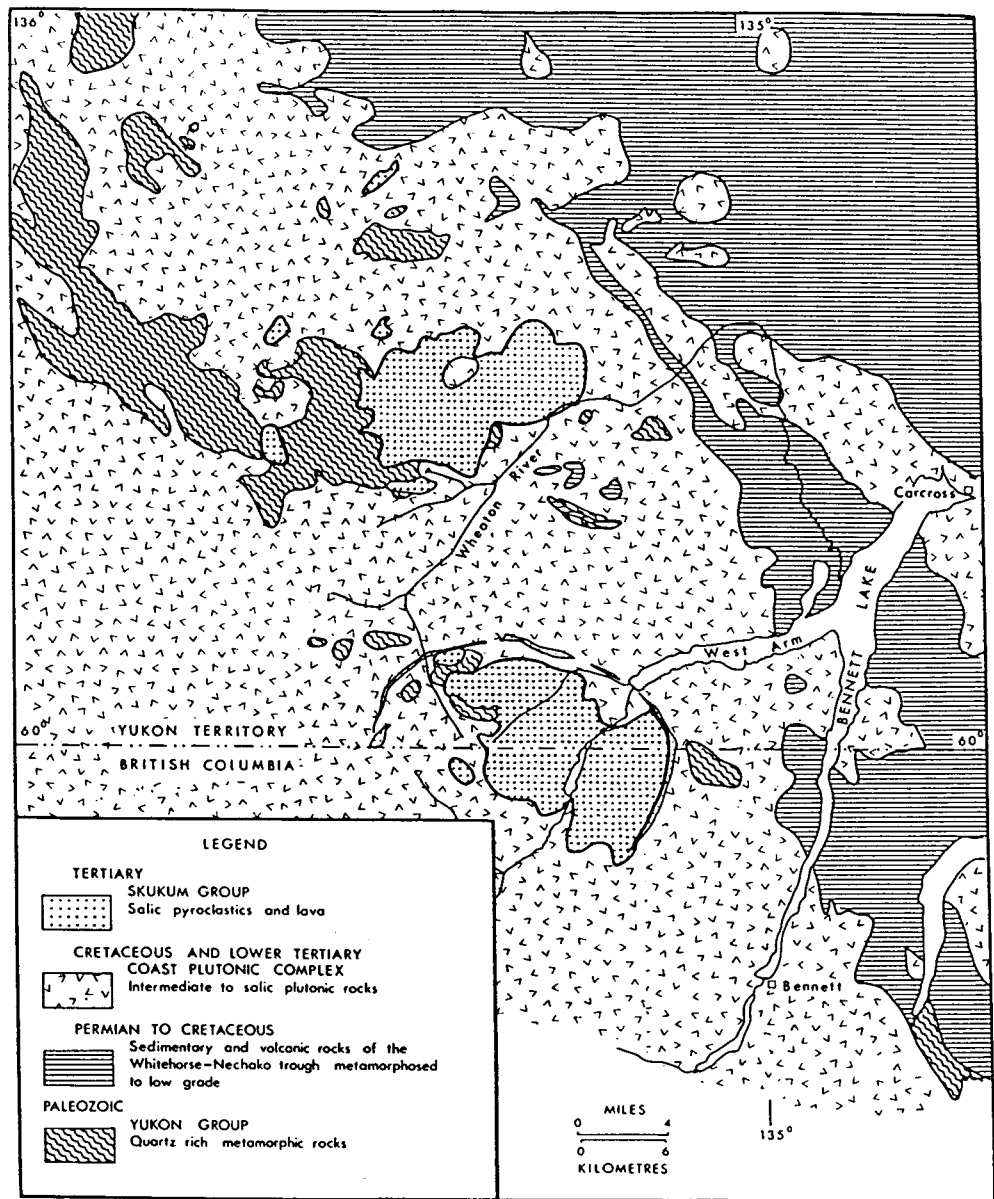
### 2.1 REGIONAL GEOLOGY

The regional geology is presented in figure 3.

The BARR claims lie on the border between the Nisling Terrane to the west and the Whitehorse Trough to the east. The Nisling Terrane is composed of rocks of the Proterozoic to Permian Yukon Crystalline Terrane and the Triassic to Tertiary Coast Plutonic Complex. The Whitehorse Trough consists of folded Mesozoic volcanic and sedimentary rocks. The Tally Ho Shear Zone separates the two terranes and consists of mafic volcanic and volcanoclastic rocks, augite porphyry, marble, and ultramafic intrusions variably metamorphosed to upper greenschist facies with a penetrative fabric indicative of semi-ductile to brittle deformation. Hart and Pelletier (1989) report that the Tally Ho Shear Zone represents the northern extension of the Llewellynn fault; a major fault undergoing extensive exploration to the south in British Columbia.

Lower Tertiary volcanics of the Skukum Group unconformably overlie and intrude the rocks of the Nisling Terrane. The Skukum Group, of Eocene age, is the northernmost part of the Sloko volcanic province and outcrops in two distinct areas. The Mount Skukum Complex is the more northerly of the two complexes and consists of predominantly felsic to andesitic tuffs and flows and related epiclastics.

Rhyolite dykes and stocks cross cut all the above units and are believed to be the last phase of Eocene volcanism.



SKUKUM GOLD INC.  
 REGIONAL GEOLOGY  
 After Lambert (1974)  
 Figure 3

Precious metal and base metal mineralized epithermal to mesothermal veins and faults occur throughout the Wheaton District. Mineralization is predominantly related to the Eocene vulcanism.

## 2.2 PROPERTY GEOLOGY

Outcrop comprises less than five percent of the property and is concentrate mainly in gullies. The remainder of the property is overlain by a sequence of glacial till, glaciofluvial and lacustrine sediments. Raised beaches, strand lines and till ridges cover the flanks of the Partridge Creek and Wheaton valleys. Sediment thickness is highly variably with the greatest apparent thickness being in the Partridge Creek valley where sand and gravel bluffs are up to 40 meters high.

Mapping and prospecting was conducted at a scale of 1:5,000 (Maps 1&2) in 1989. Additional geological information was obtained from Doherty and Hart's 1988 report.

### 2.2.1 LITHOLOGIES & STRUCTURES

The oldest units on the property belong to the Paleozoic or older Yukon Group (HEsn) and are exposed as roof pendants underlying the western portion of the property ( Table 2). These rocks are rusty and fairly resistant weathering and consist of biotite-quartz gneiss, which locally are almost schistose, granitic or ortho gneiss and sugary to massive impure quartzite and aplite. Adjacent to the western boundary of the claims a small 3-4 meter band of light grey marble (HEm) outcrops. The marble is skarnified adjacent to its contacts.

Two groups of weakly to well foliated granitic rocks outcrop adjacent to and within the Yukon Group rocks. They range from medium grained hornblende-biotite granodiorite to hornblende granodiorite (Pgd), which in places is so well foliated as to resemble a gneiss, and equigranular hornblende-biotite quartz diorite (Pgd). The latter rock unit is the least foliated of the two and is thus believed to be a younger plutonic phase. It should be noted that distinguishing between the orthogneiss and well foliated granitic rocks is rather difficult so mapped contacts are subject to verification. Future mapping should work toward a definitive definition of the above units.

These older rocks are intruded by a northwest trending belt of very distinctive pink potassic feldspar megacrystic granodiorite (Tkgd). The granodiorite is coarse grained with approximately 25% light grey to clear quartz, 10 to 15% hornblende and biotite and 30% 1-3cm pink potassic feldspars. Occassionally the mafic minerals display a preferred

orientation.

**Table 2: Table of Formations**

QUATERNARY

PLEISTOCENE AND RECENT

Q.....Glacial drift, glacialfluvial deposits,  
lacustrine deposits, alluvium.

**Unconformity**

TERTIARY

EOCENE (?)

SKUKUM GROUP

Trd, Tad.....Rhyolite dyke, andesite dyke.

T(?)dd.....Diorite dyke.

UPPER JURASSIC

COAST PLUTONIC COMPLEX

JKgd.....Wheaton Valley hornblende granodiorite.

**Disconformity**

UPPER TRIASSIC TO JURASSIC

COAST PLUTONIC COMPLEX

Tkgd.....Megacrystic granodiorite.

**Intrusive contact**

LEWES RIVER GROUP

uTk1c.....Marble and limestone.

Tk1v.....Metamorphosed intermediate to basic  
volcanics and sediments.

**Unconformity**

PALEOZOIC (?)

Pqd.....Hornblende-biotite-quartz diorite.

PALEOZOIC and OLDER

Pgd.....Hornblende and hornblende-biotite  
granodiorite/gneiss.

### Intrusive contact

#### YUKON GROUP

HEsn.....Biotite-quartz gneiss, orthogneiss,  
quartzite and/or aplite.

HEm.....Marble.

The northeastern corner of the property is underlain by Lewes River volcanic and sedimentary rocks ( Tklv) belonging to the Tally Ho Shear Zone (Llwellyn fault). Dark green, green to grey andesites, porphyritic andesite, weakly magnetic basalt flows and tuffs, minor dacite porphyry and related epiclastic rocks were the principal volcanic rocks observed. Finely banded argillite and siltstone occur as thin (?) units within the volcanic package. All the rocks are metamorphosed to upper greenschist facies and display a pervasive chloritic and epidote alteration. In addition they are locally sheared-mylonitized, fractured and or brecciated. Massive white to grey banded and contorted marble/limestone (uTklc) occur as cliffs at higher elevations or as pods within the other rocks. Locally the marbles are skarnified and/or contain pyritic, rusty weathered amphibolitic bands.

In contrast to Doherty and Hart's mapping the Tally Ho Shear Zone rocks were observed to be in contact to the west with hornblende granodiorite and medium grained hornblende biotite granodiorite (JKgd) instead of the megacrystic granodiorite.

The above units are intruded by several Tertiary dykes including; rusty yellow weathered rhyolite (Trd), grey green andesite (Tad), and a light grey green rusty weathered diorite (T(?)dd) of uncertain age.

In addition to the northwest trending Tally Ho Shear Zone, and related structures, a pair of roughly east-west trending normal faults occur at the western property boundary. The extension of these faults was not located on the BARR claims.

#### 2.2.2 MINERALIZATION & ALTERATION

Molybdenite and base metal mineralization either in place or as float samples was found scattered throughout the areas prospected in 1989. Rock sample descriptions are contained in appendix 1.

The most significant showing is the MOLY ZONE, in the southwestern claims, and consists of an 8 meter wide zone (exposed in a creek bed) of up to 20 centimeter quartz veins spaced at

roughly one meter intervals. Within the white massive quartz veins are coarse (up to 5cm) clusters of up to 6% molybdenite rosettes and trace amounts of finely disseminated chalcopyrite. Weak to moderately foliated quartz diorite host the veins and is essentially unaltered except within approximately 40 centimeters of the veins, whereupon it is chloritized and weakly carbonatized. Within the altered rock fine disseminated blebs or fracture fillings of sphalerite (0.2%), chalcopyrite (0.4%), and pyrrhotite were observed. Veins trends roughly northeast-southwest, are of variable orientation and thickness and form a weak stockwork.

Additional molybdenite and chalcopyrite mineralization was found in small quartz veins and stringers within the Yukon group rocks and as float over much of the other lithologies.

The largest alteration zone found to date is a zone of iron carbonate altered granodiorite with numerous quartz-carbonate stringer veins occurring near the contact with Tally Ho Shear Zone rocks in the northeastern corner of the property. The zone is 150 meters long and roughly 15 (?) meters wide and has areas of local chloritization, hematization and shearing. No mineralization of any significance was found in the zone but chalcopyrite, malachite and galena bearing quartz vein float was encountered immediately above the alteration zone.

Small zones of malachite staining with trace amounts of chalcopyrite and pyrite were found in sheared and quartz veined (pods) Lewes River Group rocks. Although there is a multitude of small pods of bull quartz none were found to be mineralized. Local areas of strong propylitic alteration are present in Lewes River Group rocks.

Small areas of skarnification in the marbles with accompanying pyrite, and occasionally malachite and galena were found adjacent to the property.

### 3. GEOCHEMISTRY

#### 3.1 INTRODUCTION

Soil, stream sediment and talus fine samples were collected for geochemical analyses from selected portions of the property during the 1989 exploration program. Rock samples were collected from interesting lithologies, float, alteration and mineralization. A total of 167 ungridded and 94 gridded soil samples, 6 stream sediment samples and 31 rock samples were collected.

All sample locations are shown on Maps 1 and 2 and anomalous samples on Maps 3 and 4. Gridded sample results are presented in figures 4 to 6. Analytical results for all samples are included in appendix 2.

### 3.2 SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Soil, talus fines and stream sediment/silt samples were collected in KRAFT gusseted paper bags and sent to ACME ANALYTICAL LABS of Vancouver, B.C.. At ACME, samples were oven dried at approximately 60 degrees Celsius and sieved to minus 80 mesh. Rock samples were collected in plastic bags and also sent to ACME. Samples were then crushed down to minus 3/16 of an inch, and then a 1/2 pound is pulverized to minus 100 mesh. A 0.5 gram sample of the minus 80 fraction of all samples was digested in hot, dilute aqua regia in a boiling water bath and then diluted to 10 ml. with distilled water. Soil, silt and talus fines samples were analyzed for silver, copper, lead, zinc, arsenic, and molybdenum using the Induced Coupled Plasma (ICP) technique. In addition gold was analyzed from a 10 gm. fraction by the conventional Atomic Absorption (AA) technique. Most rock samples were analyzed for the same suite of elements but gold and silver were assayed using conventional assay techniques.

### 3.3 LITHOGEOCHEMISTRY

Of the 31 rocks sampled 5 are considered anomalous ( $\geq .005$  oz/ton) and an additional 5 are considered possibly anomalous (.004-.002 oz/ton) in gold (Table 3). The highest gold value, within the property area, is 0.083 oz/ton from a float sample in the ASE zone. One additional sample from this area returned 0.028 oz/ton. Sample 10R1 from a galena bearing skarn adjacent to the western edge of BARR 129 returned 0.203

Table 3: Anomalous Rock Samples

Sample #	Location	Cu ppm	Pb ppm	Zn ppm	Ag OPT	As ppm	Mo ppm	Au OPT
5R2	NW claims	107					13	
5R4	"						423	
5R5	"	634						
5F4	"					21	1057	
5FB	BARR 130	1843			.34	21		
5F9	"	153						
5R8	MDLY Zone	High		High	?	?	High	
5R9	"	High		High	?	?	High	
10R2	"	High		?	?	?	26%	
10R3	"	High		?	?	?	23%	
5F3	MOOSE Zone					69	18	
5F17	BARR 49						401	
5F18	"	145		929				
5F1	BARR 54						30	.040
5F2	BARR 42	96					278	
5F11	"	1081	151		.30		10	
5R6	MSE Zone	98			.16	48	74	.012

Table 3: cont'd

Sample #	Location	Cu ppm	Pb ppm	Zn ppm	Ag OPT	As ppm	Mo ppm	Au DPT
5R7	"	766						
5F12	"	1520			.10		23	
5F13	"	104						.005
5F14	ASE Zone	2066			1.15			.028
5F15	"		9440		.35			.083
5F16	"	94	939					

oz/ton gold. Similar skarn type mineralization was not located on the adjacent BARR claims.

Six samples are anomalous in silver with the highest value, 1.15 oz/ton, coming from the ASE zone. Lead and zinc are anomalous in only three samples. Copper anomalies occur throughout the property area with 17 of 31 samples being anomalous. The best copper value were returned from the MOLY zone where up to 0.4% chalcopyrite was observed. A sample from the ASE zone returned 2066 ppm copper. Molybdenum is anomalous in 14 samples with the highest values coming from the MOLY zone where up to 6% molybdenite was obtained in grab samples. At least four samples are anomalous in arsenic but the highest value is only 69 ppm.

### 3.4 SOIL AND STREAM SEDIMENT GEOCHEMISTRY

Soil and talus fines samples were collected over interesting areas, and along hip chained, compass or contour traverses. A 500 meter x 375 meter flagged grid was also established and sampled. The majority of the soils are from a poor to weakly developed B -C horizon. This horizon varied greatly in thickness and colour but on average occurred at 3 to 40 centimeters below the surface and was a light brown colour. As much of the terrain was fairly swampy A horizon black organic 'muck' was sampled occasionally.

Stream sediment samples were taken in the active portions of selected creeks. The finest (silty) sediments were recovered where possible.

#### 3.4.1 TREATMENT AND PRESENTATION OF RESULTS

Anomalous values are based on the statistical interpretation of samples from Skukum Gold's NET-VIN-HOD properties to the north (MacKinnon and Wilkins, 1988). This claims package has fairly similar geology to that of the BARR claims and represents a much bigger (n=1046), more representative (?), sample population. Readers can refer to MacKinnon and Wilkins (1988) for a review of the statistical methodology. Molybdenite anomalies were interpreted based on a visual

inspection of data. The threshold value for zinc has been lowered to compensate for a possible elevated threshold value caused by mineralization in the TK zone on the HOD claims. Anomalous sample divisions are presented in table 4.

Table 4: Statistical summary of anomalies.

Mean (x)	Threshold		Strongly Anomalous x+4s
	x+2s	x+3s	
Cu 15 ppm	71-98	99-129	+130
Pb 18 ppm	90-126	127-162	+163
Zn 78 ppm	200-469	470-600	+600
As 3 ppm	13-17	18-22	+23
Mo ppm	10-19	20-30	+31
Ag 0.2 ppm	1.1-1.5	1.6-2.0	+2.1
Au 2 ppb	16-21	22-28	+29

#### 3.4.2 UNGRIDDED SOIL AND TALUS FINES RESULTS

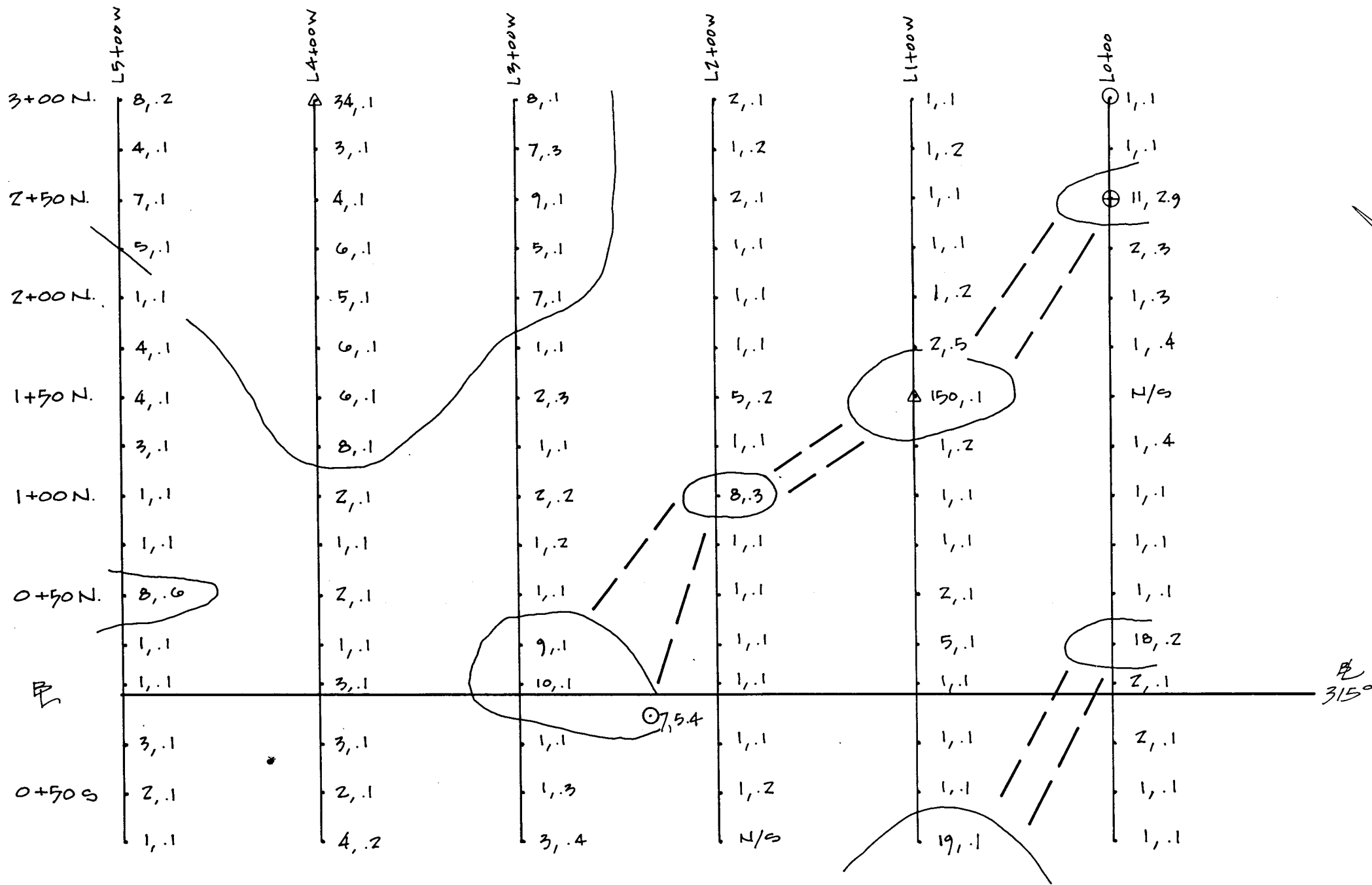
Twenty samples are anomalous or possibly anomalous in gold. The highest value 730 ppb occurs by itself in the northwest claim and confirms the presence of gold in an area with a 1988 109 ppb gold anomaly. The greatest concentration of anomalous gold values occurs in the MSE, ASE and MOOSE Zones. Silver is generally not very anomalous in the property, with the highest value (5.4 ppm) occurring in the southeastern claims. Copper, arsenic and silver anomalies are principally clustered in the MOOSE and MSE Zones. A large area of molybdenum anomalies occurs northwest of the MOOSE Zone. The highest value within this zone is 63 ppm.

#### 3.4.3 GRID 89-B1 RESULTS

Of the 94 samples taken only 2 are anomalous in gold. An additional 2 are anomalous in silver. Five samples are strongly anomalous in copper and one in zinc. A spot high of 990 ppm copper occurs at L0/2+50N. Seven samples are strongly anomalous in arsenic and one sample strongly anomalous in lead. A general northwest trending pattern to the anomalies is evident, however the different elemental anomalies are not in general coincident.

#### 3.4.4 STREAM SEDIMENT RESULTS

Two stream sediment samples are anomalous in copper, zinc, silver and arsenic. These come from the MOOSE zone. An additional sample from the same area is anomalous in copper, silver and molybdenum. Gold was not anomalous in any of these samples.



**LEGEND**

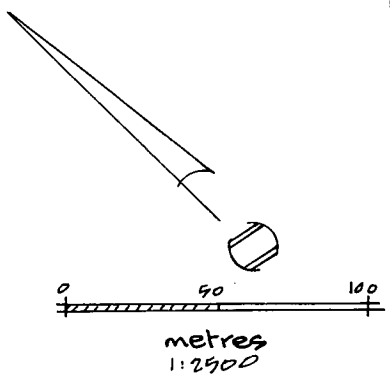
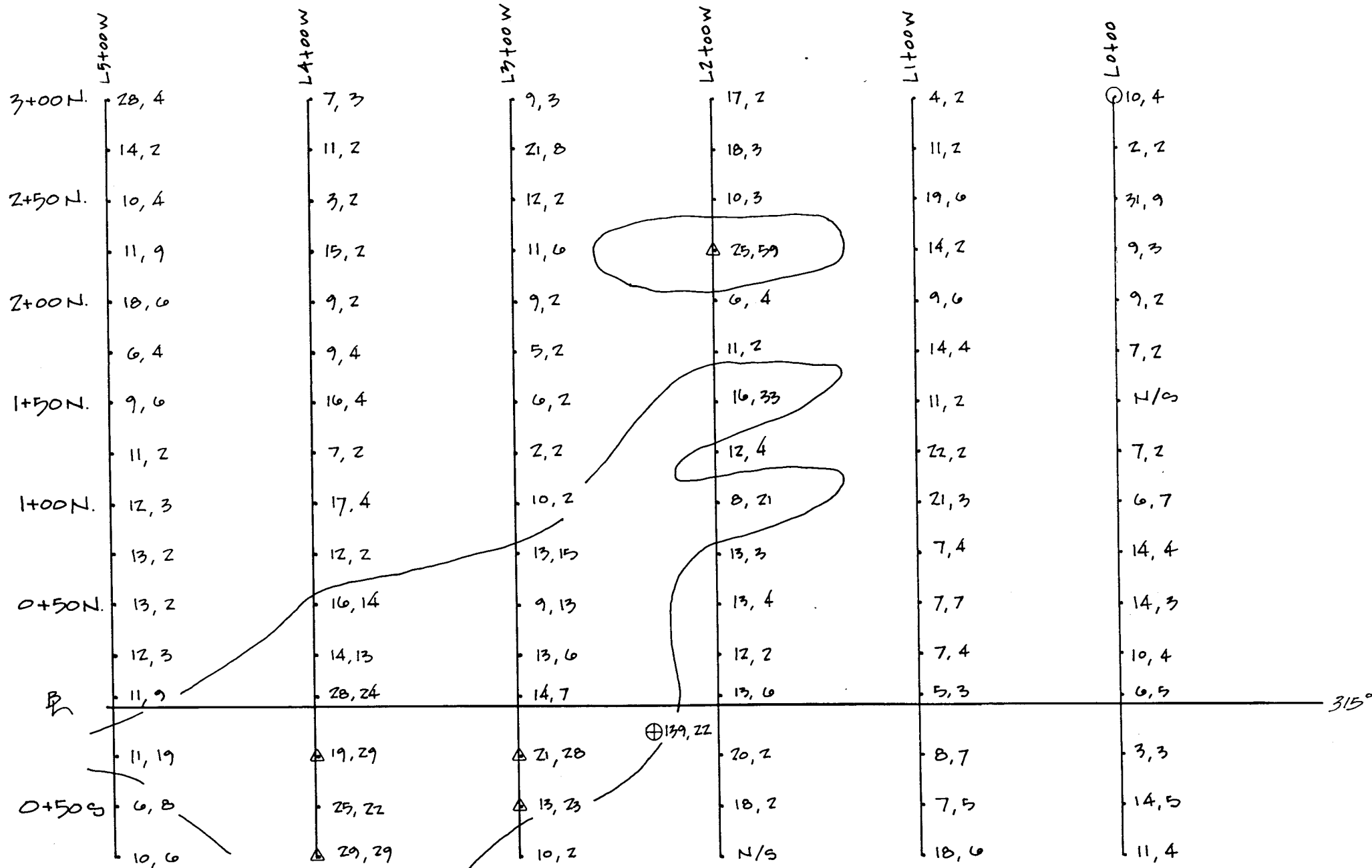
- | · Soil Sample Location : Au (ppb) Ag (ppm)
- Δ · Sample strongly anomalous in Au
- · Sample strongly anomalous in Ag
- · 25 ppb Au contour line
- - - · Potential trend

SKOKUM GOLD INC  
 BERGLYNN RESOURCES JOINT VENTURE  
 BARR 79-60 CLAIMS  
 WHITEHORSE MINING DISTRICT  
 GRID 89 B-1  
 Au, Ag  
 SOIL GEOCHEMISTRY

Drawn by: HM/Vn Date: Oct. 1989 Figure No.

NTS: 105/D3 Scale: 1:2500





**LEGEND**

- t . Soil Sample Location: Pb(ppm) As(ppm)
- Δ . Sample strongly anomalous in As
- . Sample strongly anomalous in Pb
- ∩ . >10 ppm As Contour line

SKUKUM GOLD INC  
 BERGLYNN RESOURCES JOINT VENTURE  
 BARR 39-60 CLAIMS  
 WHITEHORSE MINING DISTRICT

**GRID 89 B-1  
 Pb, As  
 SOIL GEOCHEMISTRY**

Drawn by: HM/vh Date: Oct. 1989 Figure

NTS: 105/D3 Scale: 1:2500

#### 4. DISCUSSION

##### 4.1 MOLY and MOOSE ZONES

The most interesting area discovered to date is a 1.9 kilometer by 0.4 kilometer (0.76 sq. km) area with 67 (including 1988 samples) samples that are anomalous in molybdenum ± copper ± zinc ± arsenic ± silver ± gold. The best mineralized showing in the area is the MOLY zone. The mineralogy of this zone - molybdenite, sphalerite and chalcopyrite - suggests that similar veins may underlie the area to the north where base metal and molybdenum anomalies are present. The highest concentration of anomalous samples is in the MOOSE zone. No mineralization has been found in this area as it is for the most part covered by a thin veneer of glacial deposits.

Mineralization throughout this section of the property is generally associated with or within small quartz veins which both parallel and crosscut the foliation of the older rocks. Quartz veins, with molybdenite and or chalcopyrite, have been found elsewhere on the property within the megacrystic granodiorite which suggests that the mineralization is post Jurassic. Whether the mineralization is related to the Eocene volcanism, as is the case in other showing in the Wheaton District, is uncertain.

The distribution of anomalous elements suggests that there is a zoned 'deposit' with a molybdenum ± copper ± silver ± zinc central shell or core and an arsenic ± silver ± copper ± gold outer shell. Similar zoned deposits are located adjacent to the Llwelllyn Fault (Tally Ho Shear Zone) to the south in B.C.. This apparent distribution may just be an artifact of glacial drift but observed mineralization closely matches the soil and stream sediment geochemistry.

Terence Elliott (pers. comm., 1989) suggests that although the MOLY Zone has pockets of high grade mineralization it is likely uneconomic for the following reasons:

- 1) The vein spacing is likely too large relative to the vein widths and thus would result in an ore that is too diluted.

- 2) Alteration intensity is generally too low and too restricted, suggesting spotty rather than continuous mineralization.

- 3) The zone may be too small for a high tonnage low grade open pit mining operation.

- 4) There are no significant precious metal values associated with the mineralization.

- 5) Although the areal extent of the molybdenum anomaly is fairly large, individual values are quite small (highest value 73 ppm) and do not come close to the +100 ppm threshold value usually deemed as the indicator for economic deposits.

However since the area is covered in overburden it is quite possible that the best mineralization has as yet not been discovered and an ore deposit may be present.

#### 4.2 MSE and ASE ZONES

The MSE zone occurs in rocks of the Tally Ho Shear zone. It is for the most part a copper showing with accessory gold, arsenic and molybdenum values. Mineralization, alteration and veining is scattered and discontinuous suggesting the zone, although interesting, is uneconomic. Since molybdenum is anomalous in the area, mineralization here may be related to that to the west, in the MOLY zone.

Subeconomic gold values of up to 0.083 oz/ton have been returned from float samples in the ASE zone. Alteration intensity is strong over part of the zone and this, principally carbonate, alteration is anomalous gold (up to 112 ppb). Gold is the principal element that is anomalous. In contrast to the other showings lead is anomalous in several samples, including one which returned 9440 ppm (0.9%). In the old Tally Ho mine, less than one kilometer to the east, gold is associated with galena in quartz veins, so there is the possibility that similar as yet undiscovered veining is present in the ASE zone. Silver values do not correlate well with those of lead so the galena is likely not argentiferous and silver may occur as native silver or silver rich sulphosalts.

Skarn mineralization was observed in the cliffs above the zone and since the best mineralization was found in float samples it is possible that the mineralization is related to the skarns not the altered granitic rocks.

#### 4.3 GRID 89-B1

Grid 89-B1 was established to determine the extent of the moderate (up to 205 ppb) gold anomaly outlined in the 1987 sampling. Only two samples (150 ppb and 34 ppb) were found to be strongly anomalous in gold. Three clusters of elevated gold values are present (figure 4):

- 1) A weak anomaly centered at L4W/2+25N.
- 2) A moderate possibly east-west trending anomaly stretching from L3W/B.L. to L0+00/2+50N.
- 3) A weak anomaly stretching from L1W/0+75S to L0+00/0+25N.

Anomaly 1 may represent down slope dispersion from a weak source. Anomalies 2 and 3 roughly correspond to the trend of glacial movement in the valley and thus may also represent dispersion from a source, off the property, to the east. Alternately, weak alteration accompanied by minor quartz

veining as seen at 2+35W/0+10S and in float at 0+75W/3+25N may be responsible for the anomaly.

As noted before the base metal, arsenic and precious metal anomalies are only weakly coincident. This suggests that there is a hydromorphic as well as a glacial component to the dispersion of the elements from the source(s).

#### 4.4 OTHER ANOMALIES

There is a string of copper  $\pm$  gold  $\pm$  silver  $\pm$  zinc anomalies along the northeastern boundary of the BARR 39-60 claims. The anomalous values are low and likely reflect downslope dispersion from anomalous zones to the northeast at the contact of granitic and Lewes River group rocks.

No anomalous gold values were returned from the rocks in the area of the 730 ppb anomaly. Rocks in the area are rusty weathered impure quartzite and biotite-quartz gneiss with minor aplite. The cause of the anomaly has not been determined but may represent residual weathering of a weakly auriferous band.

A float sample of cryptocrystalline quartz found on BARR 54 returned 0.040 oz/ton gold. As this sample was found in a large terrace of glacialfluvial debris it is unlikely a source for this float can be located. Spot anomalies occur in other areas of the property and are not deemed very significant.

#### 5. CONCLUSIONS

Several zones of anomalous samples and mineralization have been discovered during the course of the 1989 exploration program. A molybdenum  $\pm$  copper  $\pm$  zinc  $\pm$  silver  $\pm$  gold  $\pm$  arsenic anomaly covering an area of roughly 0.76 square kilometers is the most interesting. Molybdenite rosettes in quartz veins and stringers occur in the MOLY zone and as float or in outcrop within the anomalous area. Chalcopyrite, sphalerite and pyrrhotite also occur in the area. The greatest concentration of anomalies is in the MOOSE zone. Elemental distribution and mineralization suggests the anomaly is caused by a zoned porphyry (?) deposit with a molybdenum  $\pm$  copper core and precious metal, arsenic, copper and zinc enriched outer shell. Mineralization is believed to be post Jurassic but the source of the mineralizing fluids is unknown. Preliminary evaluation of the area indicates it does not host an economic deposit.

The best gold value, 0.203 oz/ton, obtained in 1989 came from a skarn on the ROB property. Similar mineralization was not found on the adjacent BARR claims.

Two float samples in the ASE zone returned high (up to 0.083 oz/ton) gold. Galena or chalcopryrite was found in the samples and suggests a genetic affinity to precious metal mineralization hosted in quartz veins in the Tally Ho Shear Zone to the east. No source for the float was located, but they were found associated with altered granitic rocks and thus may be insitu.

Gridded soil surveying outlined several non coincident weak copper, zinc, arsenic and gold anomalies. The roughly northwest trend of the anomalies likely reflects glacial dispersion from a source off of the property.

The property is overlain by a cover of glacial and lacustrine deposits. This makes it difficult to evaluate the numerous other anomalies found on the property.

## 6. RECOMMENDATIONS

The soil survey was taken over mostly glaciofluvial sediments and although has outlined many anomalies likely does not closely reflect the bedrock geochemistry. And, since no areas of strong precious metal anomalies have been found to date any work done on the property in 1990 can be considered as low priority, relative to other properties.

The following program should complete the preliminary evaluations of the property and provide us with enough data with which a decision in regard to keeping the claims can be made.

- 1) Airborne geophysical survey with a low frequency EM transmitter allowing for good depth penetration through the overburden.

- 2) Ground EM geophysical survey follow up of the airborne survey, particularly in the areas of the MOOSE, MOLY and ASE zones.

- 3) Gridded soil sampling of the best geophysical anomalies utilizing the same grid as the geophysical ground survey.

- 4) CAT trenching contingent on the above results. Trenching and the access road construction will fulfill the physical requirements for the BARR 39-60 claims.

- 5) Additional prospecting and mapping, particularly in the areas near the TALLY HO SHEAR ZONE.

## 7. REFERENCES

- Coster, I.P.D.A., 1987** Geochemical Report on the BARR 39-60 Mineral Claims; Skukum Ventures Inc. unpublished assessment report.
- Coster, I.P.D.A., 1988** Geochemical Report on the BARR 1-16 Mineral Claims; Skukum Ventures Inc. unpublished assessment report.
- Coster, I.P.D.A., and Strain, D.M., 1988** Geochemical and Geological Report on the BARR 117-138 Mineral Claims; Skukum Gold Inc. and Berglynn Resources Inc. unpublished assessment report.
- Doherty, R.A., & Hart, C.J.R., 1988** Preliminary Geology of Fenwick Creek (105D/3) and Alligator Lake (105D/6) Map Areas; Department of Indian and Northern Affairs Canada; Open File 1988-2, 80pp. With 1:50,000 scale maps.
- G.S.C., 1985** Stream Sediment and Water Geochemical Survey Southern Yukon Territory. G.S.C. Open File 1218.
- Hart, C.J.R., & Pelletier, K.S., 1989** Geology of Carcross (105D/2) and part of Robinson (105D/7) Map Areas; Department of Indian and Northern Affairs Canada; Open File 1989-1, 84pp. With 1:50,000 scale maps.
- MacKinnon, H.F., & Wilkins, A.L., 1988** Preliminary Geological and Geochemical Report on the NET and VIN Mineral Claims; Skukum Gold Inc. unpublished assessment report.



9. STATEMENT OF QUALIFICATIONS

I, Hugh Francis MacKinnon of P.O. Box 1785, Rossland, B.C., hereby certify that:

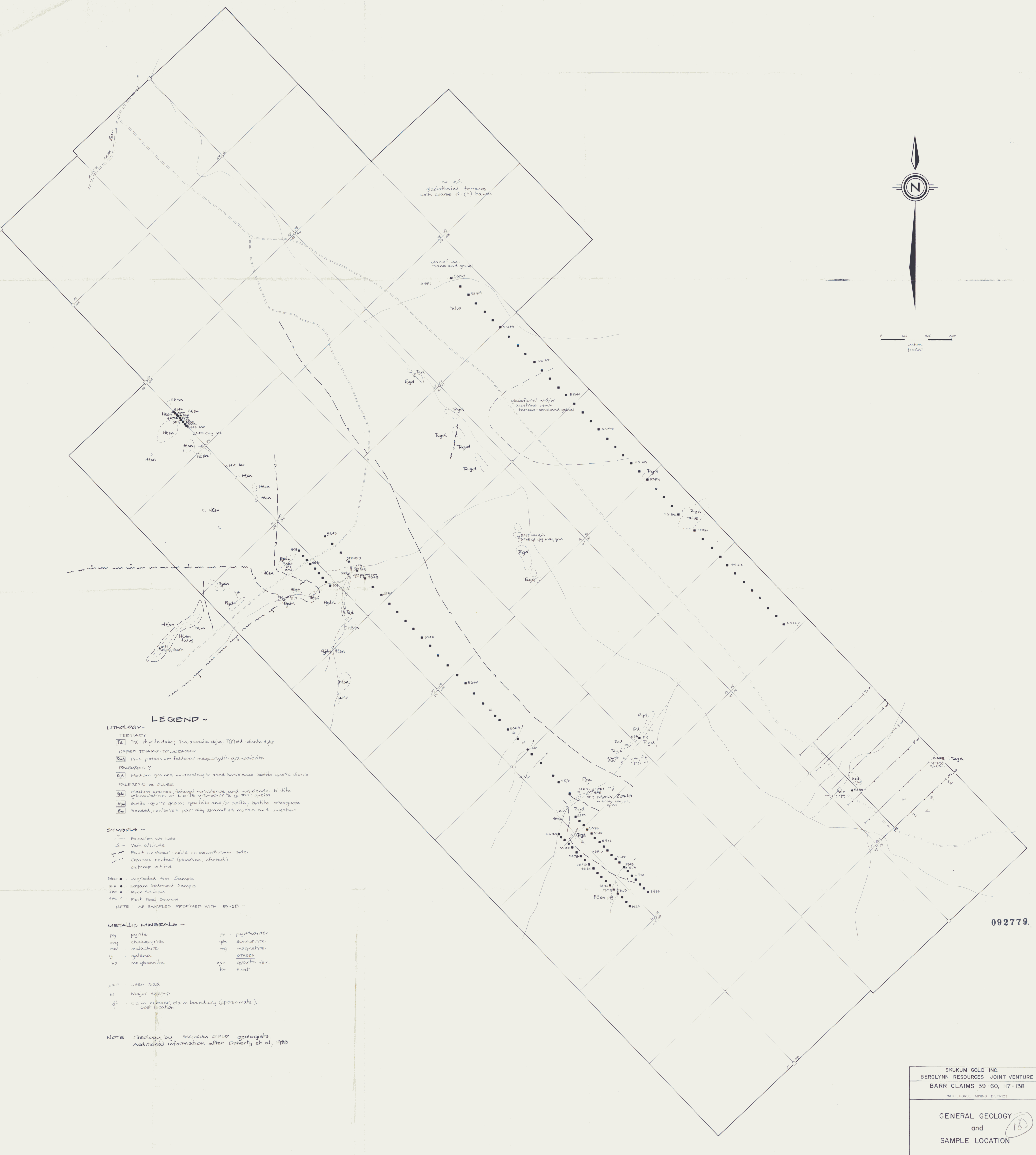
- 1) I graduated with a Bachelor of Science Degree with Honours in Geology from Carleton University, Ottawa, Ontario, in 1986.
- 2) I have been engaged in mineral exploration since 1980 in Ontario, Saskatchewan, The Northwest Territories, British Columbia, Nova Scotia and The Yukon Territory.
- 3) I was the project geologist for Skukum Gold's regional claims program.
- 4) I was involved in the work performed on the BARR claims in the summer of 1989 and am the author of this report.

Dated this twentieth day of October, 1989

  
-----  
Hugh F. MacKinnon, B.Sc.



metres  
1:5000



**LEGEND ~**

**LITHOLOGY ~**

- TERTIARY**
- Tad - andesite dyke; T(?) - diorite dyke
- UPPER TRIASSIC TO JURASSIC**
- Rgd - pink potassium feldspar megacrystic granodiorite
- PALEOZOIC ?**
- Rgd - medium grained moderately foliated hornblende biotite quartz diorite
- PALEOZOIC OR OLDER**
- Rgd - medium grained, foliated hornblende and hornblende - biotite granodiorite or biotite granodiorite (ortho) gneiss
- HESn - biotite - quartz gneiss, quartzite and/or aplite, biotite orthogneiss
- HEM - banded, contorted partially skarnified marble and limestone

**SYMBOLS ~**

- Elevation altitude
- - - Vein altitude
- - - Fault or shear - circle on downthrown side
- - - Geologic contact (observed, inferred)
- - - Outcrop outline
- 5500 ■ Ungraded Soil Sample
- 5500 ● Stream Sediment Sample
- 5500 ▲ Rock Sample
- 5500 △ Rock float sample
- NOTE: All samples prefixed with 09-2E -

**METALLIC MINERALS ~**

- py - pyrite
- cpy - chalcopyrite
- mal - malachite
- gf - galena
- mo - molybdenite
- sp - sphalerite
- sn - stannite
- mg - magnetite
- OTHErs - other
- qm - quartz vein
- fit - float

- Jeep road
- sw Major swamp
- Claim number, claim boundary (approximate), post location

NOTE: Geology by SKUKUM GOLD geologists.  
Additional information after Doherty et al, 1980

092779.

SKUKUM GOLD INC. BERGLYNN RESOURCES - JOINT VENTURE BARR CLAIMS 39-60, 117-138 WHITEHORSE MINING DISTRICT		
GENERAL GEOLOGY and SAMPLE LOCATION		
Drawn by: H.M./v.h.	Date: Oct 1989	KJAF/MLP
NTS: 1:5000	Scale: 1:5000	1



092779

**LEGEND ~**

**LITHOLOGY:**

- UPPER JURASSIC**
- JKgd Medium to coarse grained biotite diorite and hornblende granodiorite
- UPPER TRIASSIC TO JURASSIC**
- Lewes River Volcanics (Tally to Shear Zone)
- UKLC Light grey to white marble and limestone; contorted bedding with minor amphibolitic bands and contact skarns
  - RLV Metamorphosed volcanic rocks and sediments including; augite andesite, andesite porphyry, porphyritic dacite, dacite; basalt (?), argillite and siltstone

**SYMBOLS:**

- Outcrop
- ~ Fault or shear attitude
- /// Moderate to strong alteration zone
- - - Geologic contact observed, inferred
- sp Foliation attitude
- Claim number with approximate location of posts and boundary

**METALLIC MINERALS**

- py pyrite
- cpy chalcopyrite
- gl galena
- mal malachite
- po pyrrhotite

**ALTERATION ASSEMBLAGES**

- cl chloritization
- ep epidotization
- fe-carb. iron carbonate and/or iron carbonate veins
- cc carbonatization and/or calcite veins
- hm hematization
- qv quartz veins or pods
- bx brecciation

- SS126 ■ Soil Sample
- SS96 ▲ Rock Sample
- SS115 △ Float Sample

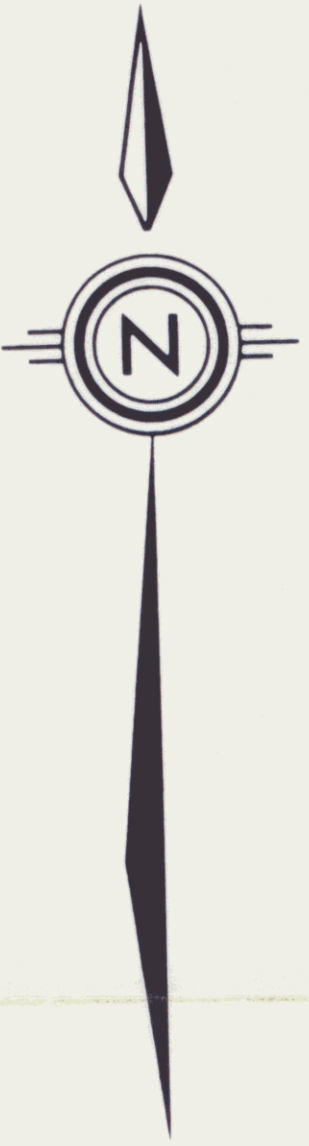


SKUKUM GOLD INC  
BERGLYNN RESOURCES INC. Joint Venture  
BARRE 1-16 CLAIMS  
WHITEHORSE MINING DISTRICT

**GEOLOGY and SAMPLE LOCATIONS**

Drawn by: HM/vh Date: Oct 1989 MAP No. 2  
NTS: 105/D3 Scale: 1:5000

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**SAMPLE GEOCHEMISTRY**

ELEMENT	POSSIBLY ANOMALOUS	ANOMALOUS	STRONGLY ANOMALOUS
Cu ppm	21 - 70	75 - 120	+150
Pb ppm	50 - 126	127 - 162	+163
Zn ppm	200 - 460	470 - 600	+601
As ppm	15 - 17	18 - 22	+23
Mo ppm	10 - 19	20 - 30	+30
Ag ppm	1.1 - 1.5	1.6 - 2.0	+2.1
Au ppb	16 - 21	22 - 28	+29

**LEGEND ~**

- **552** Anomalous soil sample and anomalous element(s)
- **516** Anomalous silt sample and anomalous element(s)
- ▲ **502** Anomalous rock sample and anomalous element(s) value
- △ **5F2** Anomalous rock float sample and anomalous element(s) value
- × **Mo** Anomalous geochemistry sample and anomalous element(s)
- Post position (approximate)
- Property boundary (approximate)

092779

SKUKUM GOLD INC.  
 BERGLYNN RESOURCES - JOINT VENTURE  
 BARR CLAIMS 39-60, 117-138  
 WHITEHORSE MINING DISTRICT

ANOMALOUS SAMPLE  
 GEOCHEMISTRY

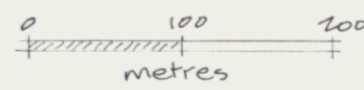
Drawn by: HM / wh    Date: Oct. 1989    MAP No. 3  
 NTS - 105 / 03    Scale: 1 : 5000



**SAMPLE GEOCHEMISTRY**

ELEMENT	POSSIBLY ANOMALOUS	ANOMALOUS	STRONGLY ANOMALOUS
Cu (ppm)	71-98	99-129	+130
Pb (ppm)	90-126	127-162	+163
Zn (ppm)	200-469	470-600	+601
As (ppm)	13-17	18-22	+23
Ag (ppm)	1.1-1.5	1.6-2.0	+2.1
Au (ppb)	16-21	22-23	+29

- Soil Sample
  - ▲ Rock Sample
  - △ Rock Float Sample
  - △ Anomalous sample and anomalous element(s)
- NOTE ~ All samples prefixed with 85-2E



SKUKUM GOLD INC.  
 BERGLYNN RESOURCES INC. JOINT VENTURE  
 BARR 1-16 CLAIMS  
 WHITEHORSE MINING DISTRICT

**ANOMALOUS SAMPLE  
 GEOCHEMISTRY**

Drawn by: HM/vh Date: Oct 1989 MAP No. 4  
 NTS: 105/D3 Scale: 1:5000

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APPENDIX 1

SAMPLE DESCRIPTIONS

BERGLYNN RESOURCES &  
SAMPLE DESCRIPTIONS - SKUKUM GOLD INC.

PROJECT: BARR - 2E

SAMPLER: HUGH MACKINNON

SAMPLE #	DATE	LOCATION	SAMPLE DESCRIPTIONS
89-2E-SF1	June 18	BARR 54	Weakly vuggy, light brown qb vein float; Almost chalcedonic.
89-2E-10R1	18	BARR - <del>124</del> ROB BORDOR	Pyritic very vuggy stann band w ( $\leq 0.5\%$ ) fr. galena; at contact w aplitic gd(?)
-2E-10R2	18	BARR 124 Creek bed	qb veins up to 20cm thick hosting up to 10% coarse molybdenite.
-10R3		moly zone	
-10R4		moly zone	
-2E-10SL12	18	BARR 117-138	Silt samples.
SS1-8	18	BARR	Soil samples in area of weak gold & strong Ba anomaly
-SF2	July 1	BARR 3A-60	Small 1cm qb vein & limonitic float w tr py, py, mal, Mal <sub>2</sub> , argl.
-559-3A	July 3	BARR 117-138	Soils in area 310ppb Au anomaly.
-SR1			Aplite dyke or quartzite band w fr. gr. py ( $\leq 5\%$ ), tr Mal <sub>2</sub> ?; tr cpy?
-SF3			Chalcedonic qb and carbonate breccia 20cm float tr py; at 310ppb sample spot.
-SL3,4			Silts
-SF4	July 9	BARR 117-138	Bull qb-gneiss float 6cm w 1% moly residue.
-SF5		"	Sugary quartzite-gneiss w tr cpy?, tr py, & moly?
-SR2		"	Pyritic cherty zone w possible sphalerite(?) in rusty biotite-quartz gneiss
-SR3		"	cherty dark grey bands rusty weathered w black stringer bands tr py.
-SF6		"	Tr moly fr. gr. in vugiferous gneiss.
-SF7		"	Float (subcrop) at 10ppb Au soil anomaly. Marble? white/black spots w tr sulphide?
-SR4		"	Collection of small qb veinlets w tr - 2% moly.
SS35-42		"	Soils
-SF8	July 11	"	Small 5cm pebble w band of malachite & chalcopryrite (2%)
-SR5		"	magnetite, pyrrhotite, cpy pod in white weathered megacrystic augen gneiss.
-SF9		"	25cm float at creek, banded qb vein in gneiss. strong pyritic band.
-SF10		"	Drusy qb cemented breccia.
SS43-84		"	Soil traverse.
SS85	July 12	BARR 3A-60	Soil over rusty gd w small vuggy qb veins & veinlets.
-SF11	July 13	"	$\leq 6\%$ py, tr cpy, tr mal, tr galena in vuggy qb veinlets in gd.
-SR6	July 15	BARR 1-16	Gossanous qb vein breccia pod tr py. Vuggy drusy qb breccia. Weathered boxworks.



APPENDIX 2  
ANALYTICAL RESULTS

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: AUG 4 1989

DATE REPORT MAILED: *Aug. 9/89.*

### ASSAY CERTIFICATE

AU\*\* BY FIRE ASSAY FROM 1/2 A.T.  
SAMPLE TYPE: ROCK

SIGNED BY *C. Long* D. TOYE, C. LEONG, J. WANG: CERTIFIED B.C. ASSAYERS

SKUKUM GOLD INC. PROJECT 2E-BARR FILE # 89-2694

SAMPLE#	Au** OZ/T
89-2E-5R-8	.001
89-2E-5R-9	.001
89-2E-10R-1	.203
89-2E-10R-2	.001
89-2E-10R-3	.001

ACME ANALYTICAL LABORATORIES LTD.

DATE RECEIVED: SEP 12 1989

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE(604)253-3158 FAX(604)253-1716 DATE REPORT MAILED:

*Sept. 19/89.***GEOCHEMICAL/ASSAY CERTIFICATE**

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: ROCK AG\*\* + AU\*\* BY FIRE ASSAY FROM 1/2 A.T.

SIGNED BY *C. Long* D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

Skukum Gold PROJECT 2E-BARR FILE # 89-3607 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	As PPM	Ag** OZ/T	Au** OZ/T
89-2E-5R1	3	46	21	58	6	.01	.001
89-2E-5R2	13	107	11	89	6	.02	.001
89-2E-5R3	6	23	28	171	6	.01	.001
89-2E-5R4	423	31	2	32	2	.01	.001
89-2E-5R5	9	634	2	117	2	.04	.001
89-2E-5R6	74	98	7	34	48	.16	.012
89-2E-5R7	1	766	17	83	5	.08	.001
89-2E-5F1	30	12	5	4	16	.09	.040
89-2E-5F2	278	96	4	61	2	.01	.002
89-2E-5F3	18	23	18	15	69	.01	.001
89-2E-5F4	1077	30	3	27	21	.01	.001
89-2E-5F5	7	29	8	23	9	.01	.001
89-2E-5F6	8	29	7	44	2	.01	.002
89-2E-5F7	2	13	11	38	5	.01	.003
89-2E-5F8	12	1843	30	107	21	.34	.001
89-2E-5F9	5	153	40	51	2	.01	.003
89-2E-5F10	3	3	6	6	2	.01	.001
89-2E-5F11	10	1081	151	138	2	.30	.002
89-2E-5F12	23	1520	14	89	2	.10	.001
89-2E-5F13	2	104	3	47	2	.01	.005
89-2E-5F14	2	2066	86	29	2	1.15	.028
89-2E-5F15	2	14	9440	12	2	.35	.083
89-2E-5F16	3	94	939	53	2	.06	.001
89-2E-5F17	401	9	49	3	6	.04	.001
89-2E-5F18	3	145	78	929	2	.01	.001
STD C	19	63	37	134	40	-	-

ACME ANALYTICAL LABORATORIES LTD.  
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
 PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: SEP 12 1989

DATE REPORT MAILED: *Sept. 18/89*

### GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: P1-P8 SOIL P9 SILT AU\* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY *C. Henry* D.TOYB, C.LRONG, J.WANG; CERTIFIED B.C. ASSAYERS

Skukum Gold PROJECT 2E-BARR FILE # 89-3613 Page 1

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
2E-B1-L5W 3+00N	1	33	28	151	.2	4	8
2E-B1-L5W 2+75N	1	25	14	166	.1	2	4
2E-B1-L5W 2+50N	1	34	10	59	.1	4	7
2E-B1-L5W 2+25N	1	23	11	46	.1	9	5
2E-B1-L5W 2+00N	1	27	18	51	.1	6	1
2E-B1-L5W 1+75N	1	18	6	55	.1	4	4
2E-B1-L5W 1+50N	1	16	9	55	.1	6	4
2E-B1-L5W 1+25N	1	9	11	69	.1	2	3
2E-B1-L5W 1+00N	1	19	12	45	.1	3	1
2E-B1-L5W 0+75N	1	48	13	69	.1	2	1
2E-B1-L5W 0+50N	1	115	13	175	.6	2	8
2E-B1-L5W 0+25N	1	55	12	114	.1	3	1
2E-B1-L5W 0+00	1	45	11	84	.1	9	1
2E-B1-L5W 0+25S	1	41	11	109	.1	19	3
2E-B1-L5W 0+50S	1	19	6	57	.1	8	2
2E-B1-L5W 0+75S	1	31	10	48	.1	6	1
2E-B1-L4W 3+00N	1	47	7	83	.1	3	34
2E-B1-L4W 2+75N	1	48	11	54	.1	2	3
2E-B1-L4W 2+50N	1	55	3	55	.1	2	4
2E-B1-L4W 2+25N	1	74	15	63	.1	2	6
2E-B1-L4W 2+00N	1	69	9	63	.1	2	5
2E-B1-L4W 1+75N	1	79	9	63	.1	4	6
2E-B1-L4W 1+50N	1	55	16	58	.1	4	6
2E-B1-L4W 1+25N	1	73	7	63	.1	2	8
2E-B1-L4W 1+00N	1	14	17	94	.1	4	2
2E-B1-L4W 0+75N	1	20	12	47	.1	2	1
2E-B1-L4W 0+50N	1	14	16	71	.1	14	2
2E-B1-L4W 0+25N	1	21	14	100	.1	13	1
2E-B1-L4W 0+00	1	31	28	198	.1	24	3
2E-B1-L4W 0+25S	1	22	19	107	.1	29	3
2E-B1-L4W 0+50S	1	23	25	182	.1	22	2
2E-B1-L4W 0+75S	1	49	29	221	.2	29	4
2E-B1-L3W 3+00N	1	85	9	61	.1	3	8
2E-B1-L3W 2+75N	1	102	21	95	.3	8	7
2E-B1-L3W 2+50N	1	64	12	62	.1	2	9
2E-B1-L3W 2+25N	1	88	11	77	.1	6	5
STD C/AU-S	17	59	43	132	6.7	42	51

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
2E-B1-L3W 2+00N	1	32	9	64	.1	2	7
2E-B1-L3W 1+75N	1	11	5	92	.1	2	1
2E-B1-L3W 1+50N	1	80	6	70	.3	2	2
2E-B1-L3W 1+25N	1	13	2	29	.1	2	1
2E-B1-L3W 1+00N	1	19	10	47	.2	2	2
2E-B1-L3W 0+75N	2	17	13	77	.2	15	1
2E-B1-L3W 0+50N	1	20	9	65	.1	13	1
2E-B1-L3W 0+25N	1	21	13	77	.1	6	9
2E-B1-L3W 0+00	1	31	14	57	.1	7	10
2E-B1-L3W 0+25S	2	42	21	155	.1	28	1
2E-B1-L3W 0+50S	1	43	13	66	.3	23	1
2E-B1-L3W 0+75S	1	70	10	68	.4	2	3
2E-B1-L2W 3+00N	1	19	17	67	.1	2	2
2E-B1-L2W 2+75N	1	21	18	181	.2	3	1
2E-B1-L2W 2+50N	1	12	10	104	.1	3	2
2E-B1-L2W 2+25N	1	97	25	180	.1	59	1
2E-B1-L2W 2+00N	1	18	6	86	.1	4	1
2E-B1-L2W 1+75N	1	8	11	36	.1	2	1
2E-B1-L2W 1+50N	1	124	16	98	.2	33	5
2E-B1-L2W 1+25N	1	20	12	31	.1	4	1
2E-B1-L2W 1+00N	1	85	8	68	.3	21	8
2E-B1-L2W 0+75N	1	19	13	81	.1	3	1
2E-B1-L2W 0+50N	3	40	13	91	.1	4	1
2E-B1-L2W 0+25N	1	16	12	42	.1	2	1
2E-B1-L2W 0+00	1	10	13	77	.1	6	1
2E-B1-L2W 0+25S	1	23	20	91	.1	2	1
2E-B1-L2W 0+50S	1	28	18	56	.2	2	1
2E-B1-L1W 3+00N	1	8	4	20	.1	2	1
2E-B1-L1W 2+75N	1	135	11	42	.2	2	1
2E-B1-L1W 2+50N	1	103	19	317	.1	6	1
2E-B1-L1W 2+25N	1	86	14	205	.1	2	1
2E-B1-L1W 2+00N	1	28	9	70	.2	6	1
2E-B1-L1W 1+75N	1	388	14	114	.5	4	2
2E-B1-L1W 1+50N	1	25	11	34	.1	2	150
2E-B1-L1W 1+25N	1	10	22	88	.2	2	1
2E-B1-L1W 1+00N	2	31	21	144	.1	3	1
STD C/AU-S	17	60	43	132	6.6	39	51

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
2E-B1-L1W 0+75N	1	20	7	31	.1	4	1
2E-B1-L1W 0+50N	1	26	7	41	.1	7	2
2E-B1-L1W 0+25N	1	10	7	64	.1	4	5
2E-B1-L1W 0+00	1	12	5	99	.1	3	1
2E-B1-L1W 0+25S	1	15	8	109	.1	7	1
2E-B1-L1W 0+50S	1	18	7	112	.1	5	1
2E-B1-L1W 0+75S	23	24	18	95	.1	6	19
2E-B1-LOW 3+00N	2	102	10	714	.5	4	1
2E-B1-LOW 2+75N	1	38	2	76	.2	2	1
2E-B1-LOW 2+50N	2	999	31	492	2.9	9	11
2E-B1-LOW 2+25N	1	38	9	140	.3	3	2
2E-B1-LOW 2+00N	2	52	9	157	.3	2	1
2E-B1-LOW 1+75N	1	61	7	55	.4	2	1
2E-B1-LOW 1+25N	3	220	7	72	.4	2	1
2E-B1-LOW 1+00N	1	27	6	45	.1	7	1
2E-B1-LOW 0+75N	1	13	14	72	.1	4	1
2E-B1-LOW 0+50N	1	12	14	85	.1	3	1
2E-B1-LOW 0+25N	1	15	10	81	.2	4	18
2E-B1-LOW 0+00	2	43	6	44	.1	5	2
2E-B1-LOW 0+25S	1	16	3	131	.1	3	2
2E-B1-LOW 0+50S	3	25	14	49	.1	5	1
2E-B1-LOW 0+75S	1	21	11	112	.1	4	1
STD C/AU-S	18	60	36	133	6.9	41	47

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
89-2E-5S1	2	29	15	68	.1	7	3
89-2E-5S2	1	20	13	36	.1	8	36
89-2E-5S3	1	14	8	33	.3	9	5
89-2E-5S4	2	11	13	73	.2	6	2
89-2E-5S5	2	11	13	84	.2	9	3
89-2E-5S6	2	10	13	95	.1	3	2
89-2E-5S7	2	24	12	87	.2	6	1
89-2E-5S8	2	7	6	27	.2	6	1
89-2E-5S9	16	198	19	99	.4	21	2
89-2E-5S10	3	27	13	52	.1	4	2
89-2E-5S11	2	14	12	35	.3	4	2
89-2E-5S12	3	146	16	160	.5	12	4
89-2E-5S13	1	10	12	38	.1	7	2
89-2E-5S14	1	9	11	36	.2	6	1
89-2E-5S15	2	31	12	53	.1	13	1
89-2E-5S16	2	52	9	88	.5	16	3
89-2E-5S17	2	18	16	85	.2	2	1
89-2E-5S18	2	62	20	158	.6	25	5
89-2E-5S19	1	19	17	83	.2	7	2
89-2E-5S20	2	19	17	163	.2	9	2
89-2E-5S21	2	27	19	140	.2	3	1
89-2E-5S22	1	11	9	57	.1	9	1
89-2E-5S23	5	50	20	66	.2	28	3
89-2E-5S24	1	15	10	40	.2	8	1
89-2E-5S25	1	16	10	54	.2	8	1
89-2E-5S26	1	10	9	69	.1	2	3
89-2E-5S27	1	16	11	79	.2	6	1
89-2E-5S28	2	19	10	74	.2	9	1
89-2E-5S29	8	123	49	193	1.6	81	4
89-2E-5S30	4	141	44	145	1.6	38	3
89-2E-5S31	5	103	41	105	.8	44	3
89-2E-5S32	5	256	54	143	1.1	37	4
89-2E-5S33	2	56	27	64	.9	6	1
89-2E-5S34	2	52	24	82	1.0	6	4
89-2E-5S35	1	21	10	29	.2	4	1
89-2E-5S36	1	12	9	33	.2	5	1
STD C/AU-S	18	63	39	132	6.7	37	52

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
89-2E-5S37	1	15	14	67	.1	5	6
89-2E-5S38	1	10	8	30	.1	4	9
89-2E-5S39	4	30	36	188	.4	27	8
89-2E-5S40	3	38	54	263	.6	22	730
89-2E-5S41	1	12	11	43	.1	2	5
89-2E-5S42	1	35	88	233	.5	9	5
89-2E-5S43	1	11	11	64	.1	2	3
89-2E-5S44	2	16	10	64	.1	6	2
89-2E-5S45	1	6	13	52	.1	3	2
89-2E-5S46	1	16	9	31	.1	7	3
89-2E-5S47	4	66	25	121	.1	7	7
89-2E-5S48	5	15	13	73	.1	8	3
89-2E-5S49	7	8	11	60	.4	4	3
89-2E-5S50	63	14	16	130	.1	5	4
89-2E-5S51	15	5	10	45	.1	2	2
89-2E-5S52	52	82	19	210	.1	15	2
89-2E-5S53	18	29	32	194	.3	15	7
89-2E-5S54	18	11	20	125	.1	4	11
89-2E-5S55	3	8	11	37	.1	4	3
89-2E-5S56	5	7	11	40	.1	4	4
89-2E-5S57	9	10	11	42	.1	3	3
89-2E-5S58	10	8	11	36	.1	4	2
89-2E-5S59	22	35	16	77	.3	6	5
89-2E-5S60	6	12	10	29	.1	3	3
89-2E-5S61	7	30	6	60	.1	5	3
89-2E-5S62	9	13	3	30	.1	2	3
89-2E-5S63	48	127	14	51	.4	11	14
89-2E-5S64	10	10	8	42	.1	5	4
89-2E-5S65	12	34	6	37	.1	5	1
89-2E-5S66	24	258	23	134	1.1	32	11
89-2E-5S67	1	16	14	37	.1	4	8
89-2E-5S68	8	108	16	296	.2	18	7
89-2E-5S69	3	28	18	78	.1	13	3
89-2E-5S70	2	36	18	75	.1	16	1
89-2E-5S71	1	32	31	219	.4	18	4
89-2E-5S72	1	27	14	77	.1	10	3
STD C/AU-S	17	59	41	132	6.7	42	47

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
89-2E-5S73	2	16	19	57	.2	17	4
89-2E-5S74	6	199	23	189	2.4	27	6
89-2E-5S75	2	29	19	64	.2	13	2
89-2E-5S76	4	204	147	185	2.4	28	5
89-2E-5S77	2	17	12	73	.1	4	1
89-2E-5S78	2	227	44	105	.7	56	4
89-2E-5S79	2	106	89	116	1.4	31	3
89-2E-5S80	5	78	37	88	1.1	20	4
89-2E-5S81	2	15	24	92	.1	10	18
89-2E-5S82	1	15	17	51	.1	7	73
89-2E-5S83	2	20	32	89	.1	16	4
89-2E-5S84	1	16	19	64	.1	24	30
89-2E-5S85	31	274	139	276	5.4	22	7
89-2E-5S86	8	72	16	92	.7	11	21
89-2E-5S87	2	194	9	103	.8	16	7
89-2E-5S88	10	110	21	87	.7	6	51
89-2E-5S89	2	117	26	91	.4	3	25
89-2E-5S90	2	91	24	94	.3	4	9
89-2E-5S91	3	52	21	79	.2	5	11
89-2E-5S92	1	21	10	58	.1	3	2
89-2E-5S93	1	20	12	64	.3	4	5
89-2E-5S94	1	20	15	58	.2	7	14
89-2E-5S95	1	27	10	75	.2	3	9
89-2E-5S96	1	25	12	73	.3	4	2
89-2E-5S97	1	29	19	66	.2	4	13
89-2E-5S98	1	49	16	66	.3	10	9
89-2E-5S99	1	50	6	102	.2	2	8
89-2E-5S100	3	67	95	133	.4	5	13
89-2E-5S101	2	29	24	62	.1	8	14
89-2E-5S102	4	24	23	56	.3	8	16
89-2E-5S103	4	39	45	76	.1	11	5
89-2E-5S104	3	33	27	69	.2	11	5
89-2E-5S105	3	25	23	96	.1	4	3
89-2E-5S106	3	39	31	105	.2	10	4
89-2E-5S107	2	18	42	102	.1	5	1
89-2E-5S108	1	23	69	108	.1	5	4
STD C/AU-S	18	59	43	132	6.7	42	52

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
89-2E-5S109	3	14	36	75	.1	6	6
89-2E-5S110	2	24	31	81	.1	13	9
89-2E-5S111	2	20	37	75	.1	7	11
89-2E-5S112	2	17	38	91	.1	6	7
89-2E-5S113	2	17	21	59	.1	3	5
89-2E-5S114	2	15	27	64	.1	3	45
89-2E-5S115	1	22	36	55	.1	5	18
89-2E-5S116	2	38	113	72	.3	3	37
89-2E-5S117	1	27	30	67	.1	2	40
89-2E-5S118	6	14	29	50	.4	4	112
89-2E-5S119	3	26	47	83	.1	2	16
89-2E-5S120	1	12	4	46	.1	2	1
89-2E-5S121	2	11	24	44	.1	4	10
89-2E-5S122	2	13	20	53	.1	3	1
89-2E-5S123	1	30	27	60	.1	4	5
89-2E-5S124	1	15	12	30	.1	3	3
89-2E-5S125	3	17	11	37	.1	3	13
89-2E-5S126	2	15	14	32	.1	4	2
89-2E-5S127	1	54	12	51	.2	6	2
89-2E-5S128	1	94	21	68	.1	5	8
89-2E-5S129	1	93	14	66	.1	4	72
89-2E-5S130	1	109	14	75	.1	2	12
89-2E-5S131	1	102	22	110	.2	5	11
89-2E-5S132	1	50	10	106	.1	2	8
89-2E-5S133	1	90	14	67	.1	5	4
89-2E-5S134	1	55	19	63	.1	6	7
89-2E-5S135	1	51	20	82	.1	4	1
89-2E-5S136	1	41	15	115	.1	2	7
89-2E-5S137	1	38	16	103	.1	4	3
89-2E-5S138	1	65	18	87	.1	3	25
89-2E-5S139	1	20	9	74	.1	9	5
89-2E-5S140	1	19	11	73	.1	13	33
89-2E-5S141	1	13	14	55	.1	9	4
89-2E-5S142	1	26	13	104	.1	9	4
89-2E-5S143	1	17	18	116	.1	7	5
89-2E-5S144	1	21	18	143	.1	9	5
STD C/AU-S	18	60	38	132	6.7	42	53

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
89-2E-5S145	1	14	12	41	.1	4	1
89-2E-5S146	1	14	6	89	.1	2	39
89-2E-5S147	1	22	5	97	.1	3	6
89-2E-5S148	1	26	10	123	.2	2	1
89-2E-5S149	1	30	11	112	.1	2	1
89-2E-5S150	1	12	5	56	.1	2	3
89-2E-5S151	1	34	19	51	.2	2	3
89-2E-5S152	1	36	16	47	.3	2	4
89-2E-5S153	4	75	19	102	.2	2	1
89-2E-5S154	1	36	6	36	.1	2	41
89-2E-5S155	1	81	15	82	.5	2	2
89-2E-5S156	1	137	13	141	.6	5	1
89-2E-5S157	1	178	27	142	.6	2	1
89-2E-5S158	1	170	27	208	.9	2	1
89-2E-5S159	1	49	21	178	.4	2	3
89-2E-5S160	1	27	13	139	.2	3	2
89-2E-5S161	1	49	14	180	.3	2	1
89-2E-5S162	1	82	17	104	.4	2	1
89-2E-5S163	1	202	26	128	2.2	2	1
89-2E-5S164	1	63	8	65	.4	4	1
89-2E-5S165	1	477	20	108	2.6	2	1
89-2E-5S166	1	39	13	315	.3	2	1
89-2E-5S167	1	67	12	134	.1	2	3
STD C/AU-S	18	61	42	132	6.9	41	51

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	As PPM	Au* PPB
89-2E-5L1	1	26	18	82	.1	12	11
89-2E-5L2	1	23	18	70	.2	10	8
89-2E-5L3	3	109	31	375	3.1	79	1
89-2E-5L4	2	107	41	377	2.9	74	7
89-2E-5L5	2	33	15	76	.3	11	2
89-2E-5L6	13	227	20	181	1.1	20	1
STD C/AU-S	18	61	42	132	6.9	41	51