

ASSESSMENT REPORT
on the
HOBO 1-52 MINERAL CLAIMS
RED MOUNTAIN
MAYO AND DAWSON MINING DISTRICTS
FIP88-051

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ASSESSMENT REPORT

on the

HOBO 1-52 Mineral Claims
YA89922 - YA89936, YA83709 - YA83744
NTS 115 P-15
Mayo and Dawson Mining Districts
Latitude 63° 57' N, Longitude 136° 45' W

For:

WALHALLA EXPLORATIONS CO. LTD.
5 TEAK CRESCENT
WHITEHORSE, YUKON

BY:

G.S. DAVIDSON, P. GEOL.
SEPTEMBER, 1988

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INTRODUCTION

This report describes prospecting and sampling work performed on the HOB0 1-52 claims from June 17 - 30, 1988. The claims cover gold bearing arsenopyrite-quartz veins occurring in gossanous Ordovician quartzite on the steep south facing side of Red Mountain. The writer spent three days on the property and reviewed rock and soil sampling surveys conducted by a three-man crew from Walhalla Explorations Co. Ltd.

LOCATION AND ACCESS

The property is located 65 km northwest of Mayo, Yukon on the west side of Red Mountain on NTS Map Sheet 115 P-15. Figure 1 shows the property location.

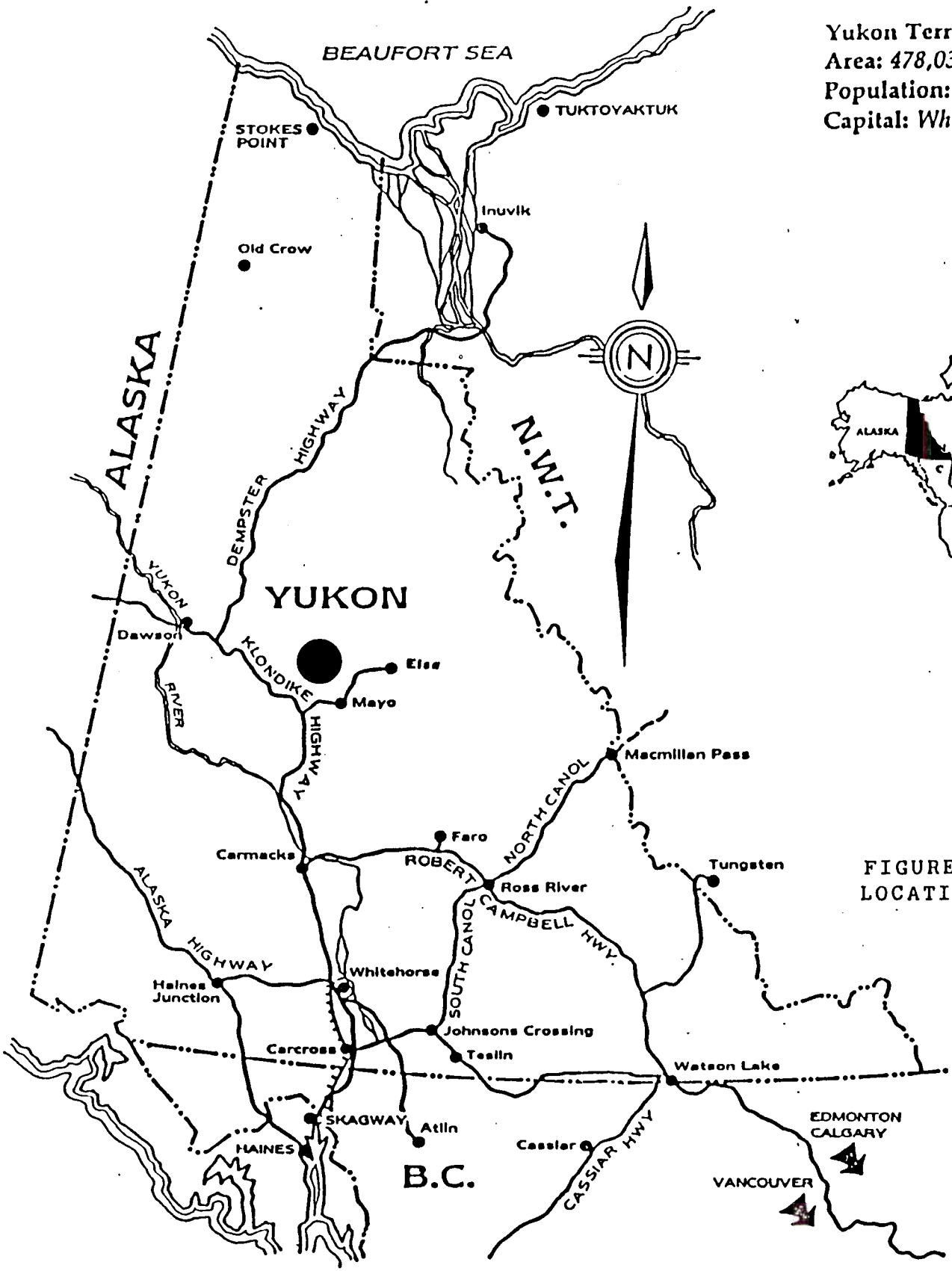
The claims are accessible by helicopter from Mayo. Road access is possible on a rough four wheel drive road that links a placer operation on Gem Creek to the Clear Creek road, which branches off the Klondike Highway. The 80 km trip from the highway to Gem Creek is reported to take up to 12 hours however upgrading of the latter part of this road would substantially reduce the travel time.

PHYSIOGRAPHY, VEGETATION, CLIMATE

Red Mountain at 1800 m is a prominent peak at the south end of the Ogilvie Mountains. The claims cover west and northwesterly trending ridges extending from the summit of Red Mountain. Ridge crests are rounded with limited outcrop at higher elevations. Moderate to steep slopes descend from the ridge crests at the headwaters of Gem, Sprague and HOB0 Creeks. Precipitous slopes with abundant outcrop are limited to the south face of Red Mountain. Felsenmeer is common along ridge crests.

Alpine areas feature moss and grass coverage, while vegetation at lower elevations consists of spruce forest and buck brush.

The exploration season lasts from June to late September. Winters are long and cold while summer temperatures average 12° C.



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



FIGURE 1
 LOCATION MAP

PROPERTY

The HOBO 1-52 claims are held by Walhalla Explorations Co. Ltd. in the Mayo and Dawson mining districts. They were staked on August 18, 1987 and recorded on August 26, 1987. The claim plan is shown in Figure 2 and Table 1 lists the property data.

TABLE 1
CLAIM DATA

CLAIM NAME	RECORD NUMBER	REGISTERED OWNER	MINING DISTRICT	EXPIRY DATE
HOBO 1-12	YA89921-YA89932	WALHALLA EXPL. CO. LTD.	DAWSON	26 AUG. 1992
HOBO 13-28	YA83709-YA83724	"	MAYO	26 AUG. 1991
HOBO 29-32	YA89933-YA89936	"	DAWSON	26 AUG. 1992
HOBO 33-52	YA83725-YA83744	"	MAYO	26 AUG. 1991

HISTORY

Red Mountain was originally staked as the Hobnail claims in 1923. Treadwell Yukon Consolidated trenched arsenopyrite-quartz veins in the late 1920's. The property was restaked by A. Abverson and J. Drapeau in 1933, and again by C. Poli in July, 1947. Asarco and Amax of Canada staked Red Mountain in 1977 and 1979 respectively. The recent workers performed geochemical and geological mapping surveys.

Placer gold bearing gravels have been mined on Gem Creek, Hobo and Sprague Creeks.

REGIONAL GEOLOGY

The Red Mountain area is underlain by sedimentary and metasedimentary rocks of Proterozoic and Paleozoic age intruded by bodies of granite, syenite, diorite and gabbro of Jurassic and/or Cretaceous age. The geology of the district was published as Map 1143 A by the G.S.C. Figure 3 shows the regional geology.

Yukon Group schist, phyllite, quartzite and limestone covers much of the area south of the property. Yukon Group rocks are unconformably overlain by Ordovician or younger interbedded cherty quartzites, black slate, pebble conglomerate and limestone. Cretaceous and Jurassic intrusive bodies have fractured and silicified the surrounding sediments. Quartz veins occur in the metasediments close to granite contacts. Some of the veins contain gold bearing arsenopyrite.

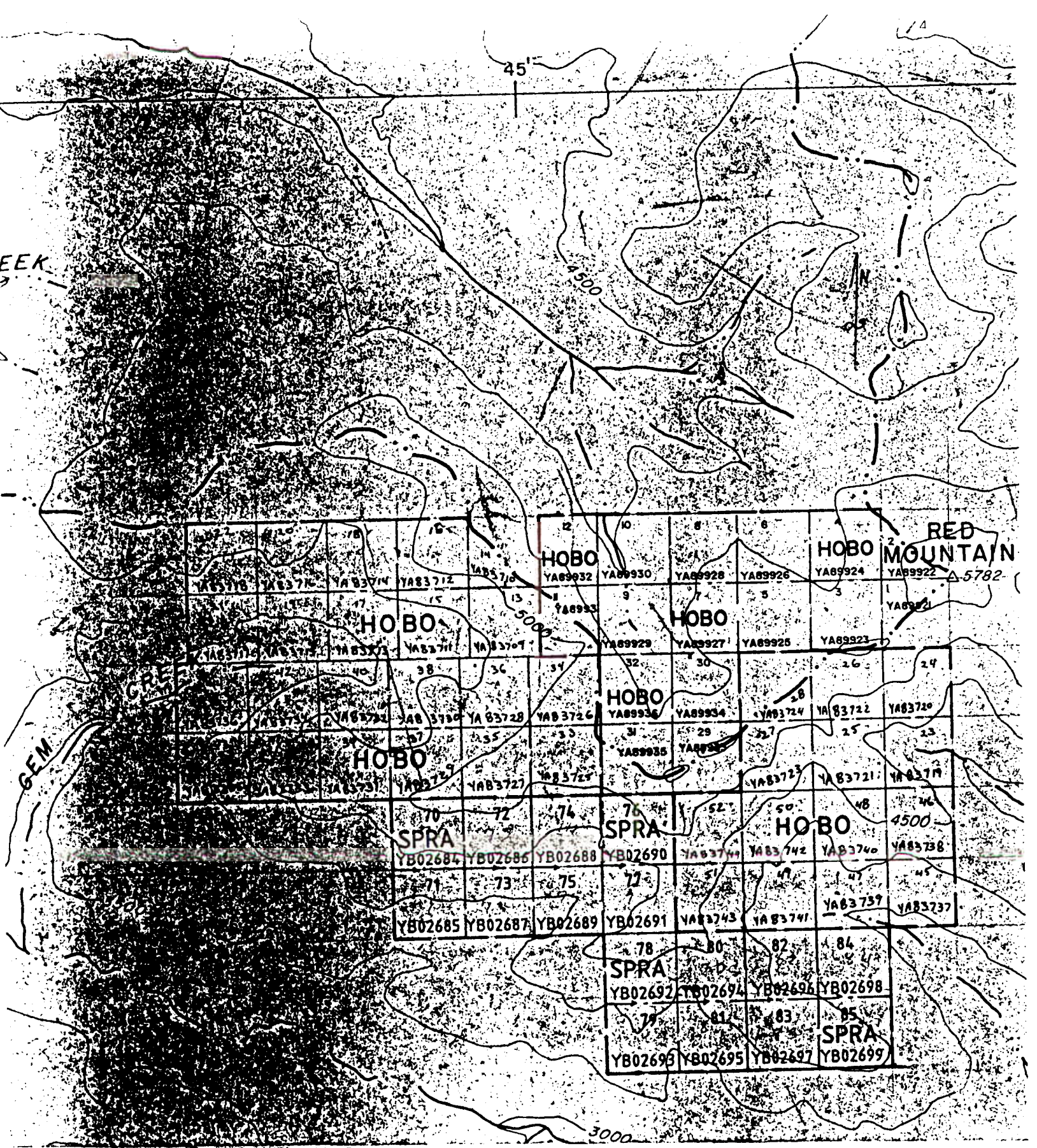
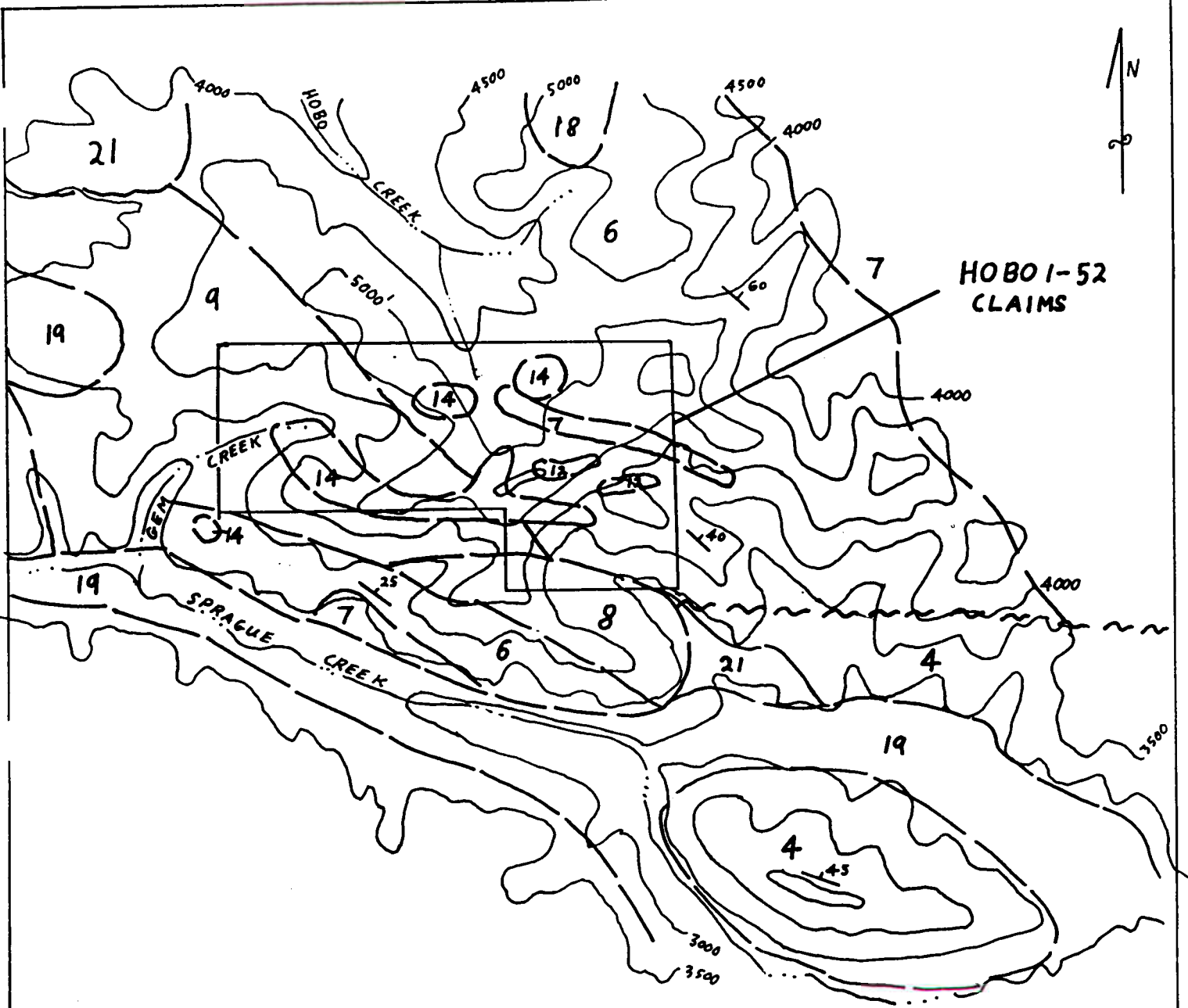


FIGURE 2 CLAIM PLAN
 NTS: 115 P-15
 Scale ~ 1:30,000



LEGEND

QUATERNARY

- 21 Surficial deposits, undivided
- 19 Stream deposits, alluvium

JURASSIC AND/OR CRETACEOUS

- 14 COAST INTRUSIONS, granite, granodiorite, quartz monzonite
- 12 Gabbro, peridotite, serpentinite, diorite

ORDOVICIAN OR LATER

- 9 Quartzite, slate, sandstone, conglomerate
- 8 Limestone, slate, phyllite, quartzite

ORDOVICIAN OR EARLIER

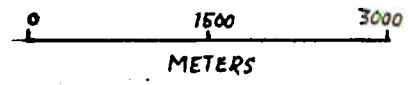
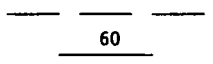
- 7 Variacoloured slate
- 6 Quartzite, slate, phyllite, limestone
- 4 YUKON GROUP, schist, quartzite, phyllite, limestone

FIGURE 3

REGIONAL GEOLOGY
MTS 115 P-15

SYMBOLS
Geological Contact

Bedding, strike and dip



EXPLORATION PROGRAM

INTRODUCTION

On June 17, 1988 a three-man field crew mobilized onto the HOBO claims, locating camp at 4300' elevation beside Gem Creek. Trans North Air, based in Mayo provided air support.

The crew performed contour soil sampling, stream sediment sampling and prospecting. Figure 4 shows sample locations and values. Also, four blast trenches were excavated on quartz veins.

One hundred and twenty soil samples were collected and a selective twenty six samples were analyzed for Au-Ag by Bondar-Clegg laboratories. Figure 5 shows the contour soil results. Eleven sediment samples were collected from HOBO and Gem Creeks. Sampling involved washing two full pans of silt and gravel down to a concentrate, which was then bagged for analysis.

Thirty eight rock samples were collected on prospecting traverses. Sixteen selective samples were submitted for analysis for Au-Ag.

The writer collected a further nine rock samples from the blast trenches. Figures 6 and 7 show the trench plans.

PROPERTY GEOLOGY

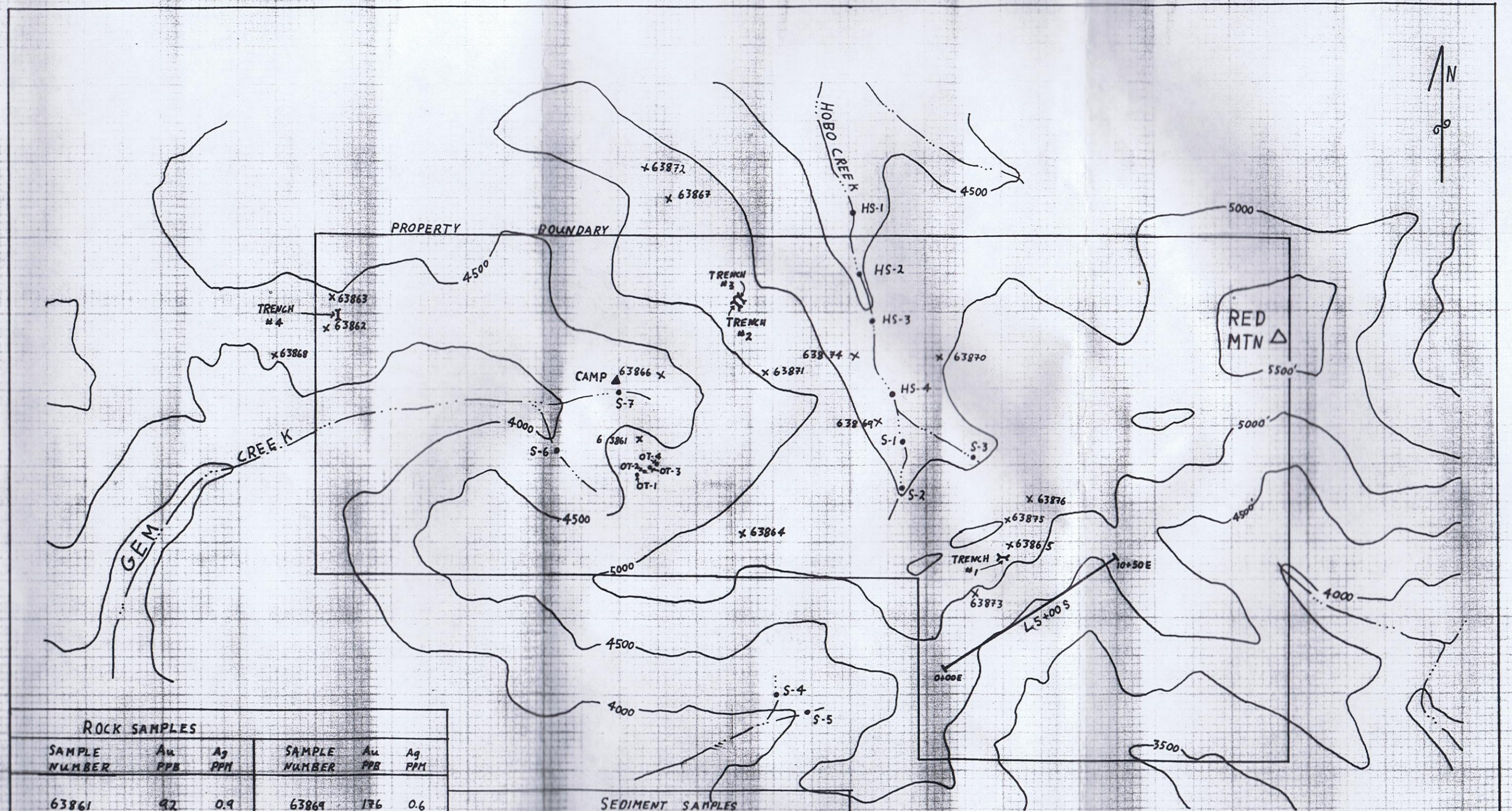
The property is underlain by Ordavician quartzite and slate which is locally silified and pyritic. Gossanous quartzite and interbedded slate outcrop across the south side of Red Mountain and along ridge crests. The metasediments are intruded by a lense of biotite granite on the northwestern flank of Red Mountain.

Previous workers located four diorite dykes on the southern and northwestern end of the property (Kidlark, R.G.). They also mapped basic volcanic breccia and flows on the eastern margin of the claim block.

GEOCHEMISTRY

SOIL

- Contour soil lines were run across a prominent gossan on the south face of Red Mountain. Moderate to strongly anomalous gold values (up to 351 ppb) were obtained from 2+50E - 7+00E and at 9+50E.
- Samples OT 1-4 were collected from an old trench south of camp. The trench was excavated using a ground sluice and dimensions are 50 m long, 1 m wide and .75 m deep. Gold values (see Figure 4) are strongly anomalous. The trench cuts orange weathering quartzite and slate containing minor pyrite.



ROCK SAMPLES					
SAMPLE NUMBER	Au PPB	Ag PPM	SAMPLE NUMBER	Au PPB	Ag PPM
63861	92	0.9	63869	176	0.6
63862	168	2.3	63870	12	0.5
63863	433	0.2	63871	2820	1.0
63864	1304	1.0	63872	37	0.1
63865	65	2.1	63873	278	1.0
63866	26	14.1	63874	161	0.3
63867	31	12.9	63875	31	0.1
63868	21	0.2	63876	806	1.3

SEDIMENT SAMPLES					
SAMPLE NUMBER	Au PPB	Ag PPM	SAMPLE NUMBER	Au PPB	Ag PPM
HS-1	158	0.3	S-2	1020	0.7
HS-2	274	0.3	S-3	1220	0.2
HS-3	1148	0.5	S-4	506	0.4
HS-4	5000	0.8	S-5	294	0.1
S-1	646	0.3	S-6	1285	0.4
			S-7	691	0.1

SOIL SAMPLES		
SAMPLE NUMBER	Au PPB	Ag PPM
OT-1	358	0.4
OT-2	594	0.5
OT-3	314	0.4
OT-4	319	0.3

Figure 4 : SAMPLE LOCATIONS AND VALUES

Scale 1:20,000

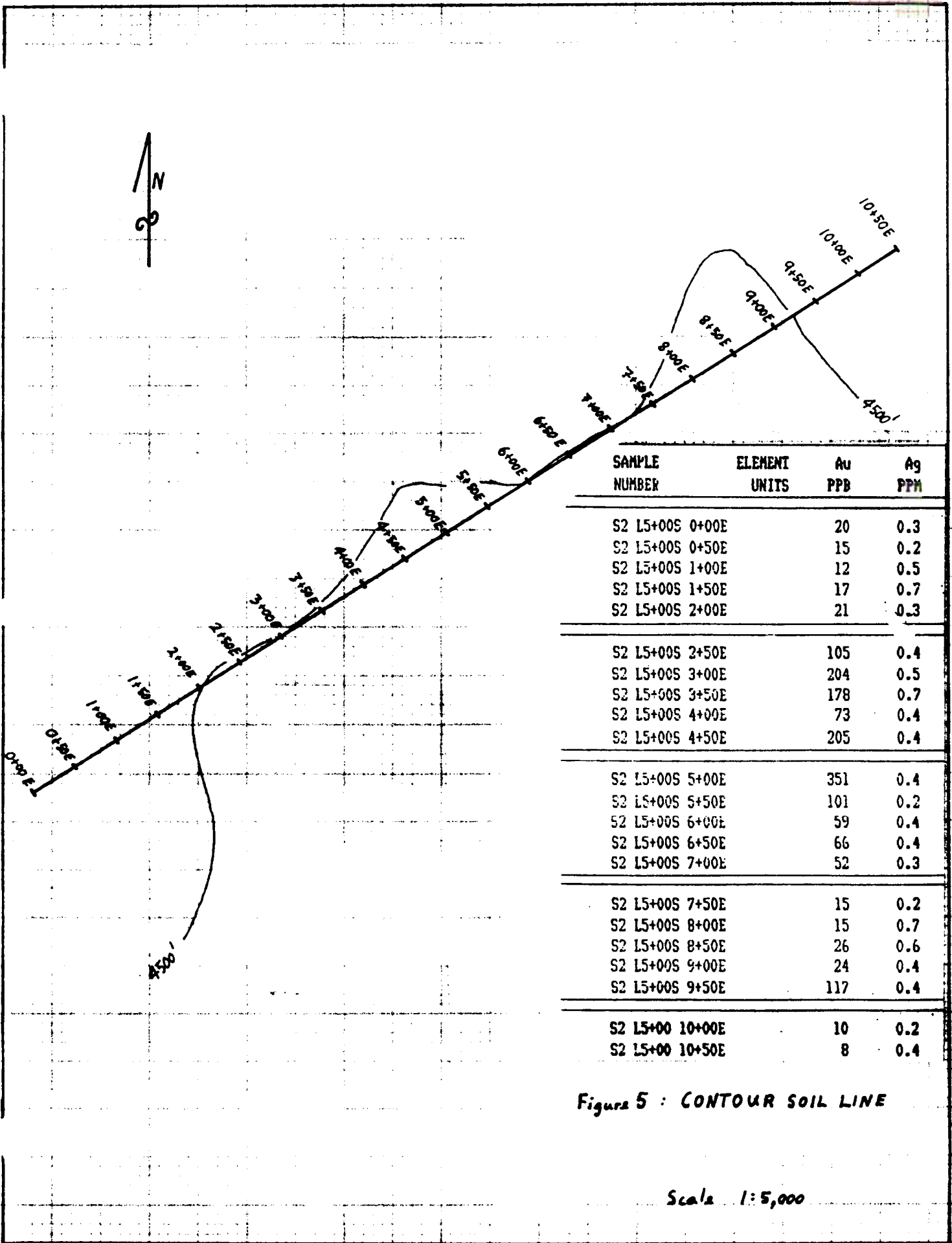


Figure 5 : CONTOUR SOIL LINE

Scale 1:5,000

SEDIMENT - Pan concentrate samples recorded high gold values on all creeks tested. A peak gold value of 5000 ppb was obtained on HOB0 Creek.

ROCK - Rock sample values and descriptions are listed in Table 2. Many of the samples returned anomalous gold values. The strength of the gold value depends directly on the amount of arsenopyrite in the sample. The highest gold values (>10,000 ppb) were from an arsenopyrite-stibnite-quartz vein which was exposed in and below Trench #1. The showing consists of a 2-5 cm wide band of massive arsenopyrite and stibnite in quartz gangue. This is the original mineral occurrence investigated by Treadwell Yukon Consolidated in the late 1920's. The sulphide bands were traced downslope for 30 m however the mineralization is very narrow.

Other quartz samples recorded gold values of less than 1000 ppb. The vein widths vary from 5-25 cm and generally contain minor pyrite, sericite and arsenopyrite. Several quartz veins containing quartzite fragments and manganese staining recorded silver values up to 12.9 ppm.

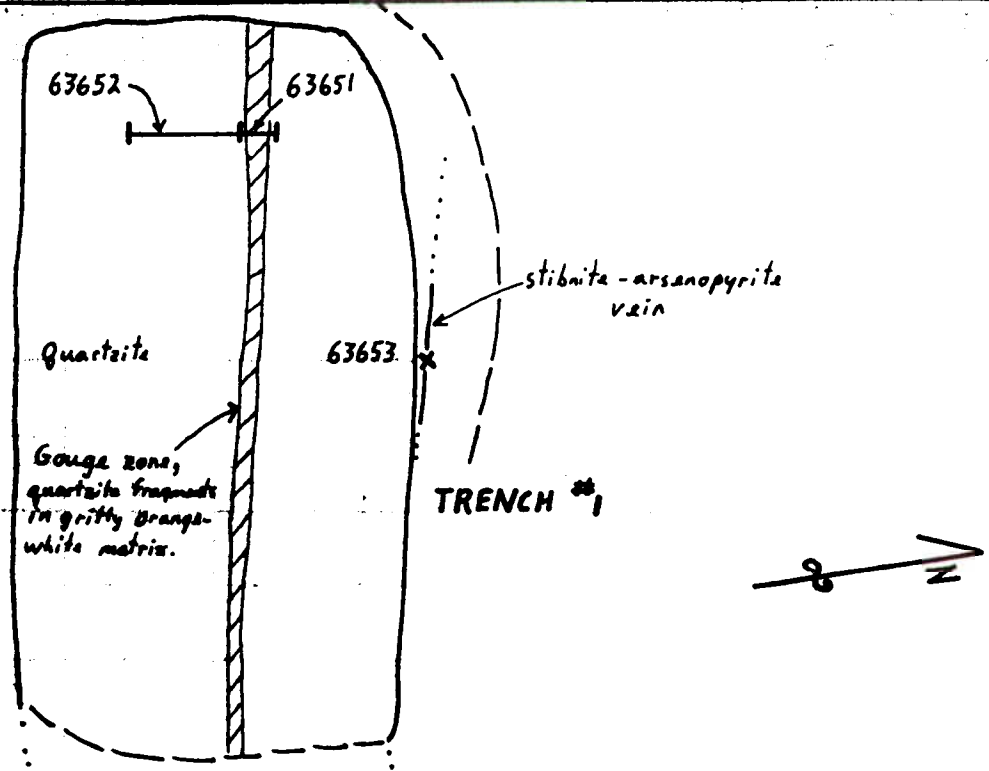
TRENCHING - Four quartz veins were blast-trenched on the property. Trench #1 exposes a narrow arsenopyrite-stibnite-quartz vein. Figure 6 shows the trench plan.

Trenches 2 and 3, shown in Figure 7, expose a quartz-breccia zone. The vein contains fragments of quartzite in a manganese stained, pyrite quartz matrix.

DISCUSSION AND RECOMMENDATIONS

The sampling program has outlined consistently anomalous gold values on the HOB0 claims. Two types of mineralization are present:

- 1) gossanous quartzite containing minor pyrite and arsenopyrite assays 200 - 500 ppb Au;
- 2) narrow arsenopyrite-stibnite bearing quartz veins assay greater than 10,000 ppb Au.

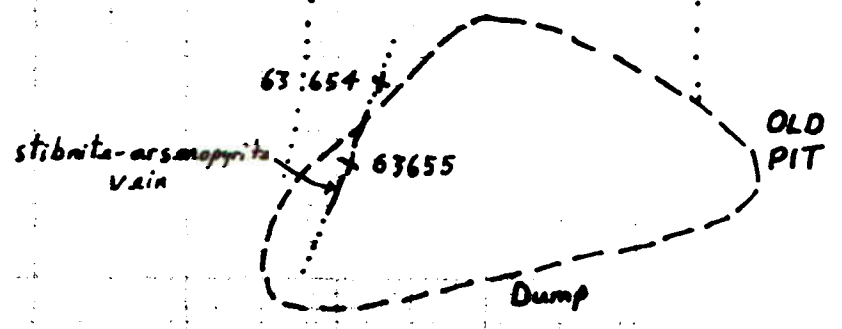


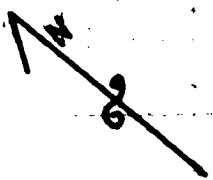
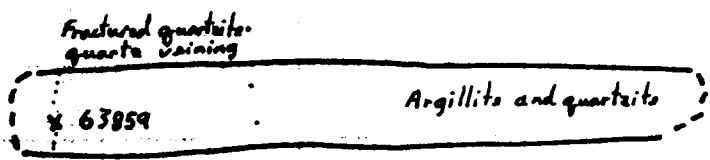
SAMPLE NUMBER	Au PPM	Ag PPM
63651	569	1.3
63652	212	0.8
63653	>10,000	23.7
63654	711	0.6
63656	>10,000	>50.0

rubble

Figure 6: TRENCH PLAN

Scale 1:100





SAMPLE NUMBER	Au PPB	Ag PPM
63857	512	1.4
63858	635	11.3
63859	168	2.1

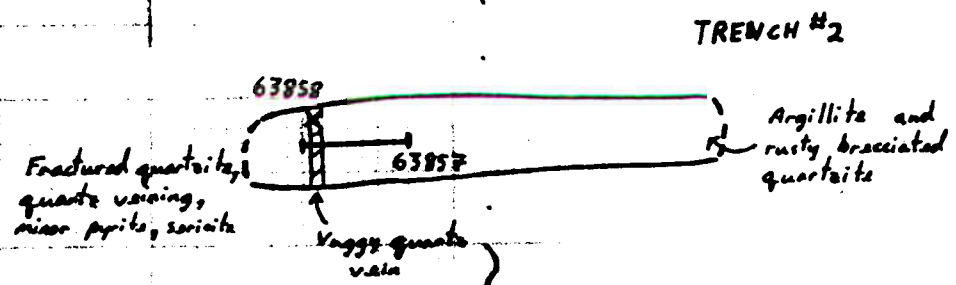


Figure 7: TRENCH PLAN

Scale 1:100

The low and higher grade mineralization occurs near granite contacts. Detailed sampling, VLF-EM and magnetometer surveys should be undertaken to try and define gold bearing areas. Once identified these targets should be cat trenched. The following program is proposed:

Grid development (picket grid)	\$ 5,000
Geochemistry 750 samples	11,500
Geology and supervision	3,500
VLF-EM and magnetometer surveys	5,500
Camp and supplies	3,500
Transportation	7,500
Report and assessment	<u>3,500</u>
Total Costs	\$ 40,000

TABLE 2 ROCK SAMPLE VALUES AND DESCRIPTIONS

Sample No.	Sample Type	Location	Description	Au ppb	Ag ppm
63851	40 cm. chip	Trench #1	Fractured quartzite and orange-white clay gouge zone	569	1.3
63852	125 cm. chip	Trench #1	Fractured quartzite, some breccia, no visible sulphides	212	0.8
63853	grab	Trench #1	Massive arsenopyrite vein, 2 cm wide	>10,000	23.7
63954	grab	Old pit bellow Trench #1	Quartz vein, vuggy, fine grained, sericite, no visible sulphides	711	0.6
63855	grab	Same as above	Massive arsenopyrite-stibnite and quartz vein, 4 cm wide	>10,000	>50.0
63856	grab	30 m bellow Trench #1	Massive arsenopyrite-stibnite in quartz vein, 20 cm wide	9,880	23.7
63857	150 cm. grab	Trench #2	Brecciated quartzite, quartz veins, minor arsenopyrite	512	1.4
63858	grab	Trench #2	Vuggy quartz vein, 10 cm wide, minor arsenopyrite and stibnite	635	11.3
63859	grab	Trench #3	Fractured quartzite, narrow quartz veins	168	2.1
63860	grab	Trench #4	Fractured quartzite, limonite in fractures	75	1.3
63861	float		Quartzite, arsenopyrite coating in fractures	92	0.9

TABLE 2 ROCK SAMPLE VALUES AND DESCRIPTIONS

TABLE 2 (CONTINUED)

Sample No.	Sample Type	Location	Description	Au ppb	Ag ppm
63862	grab		Quartz vein, vuggy, no visible sulphides	168	2.3
63863	grab		Quartz breccia vein containing quartzite fragments, vuggy, limonite, Mn staining	433	0.2
63864	grab		Quartz-feldspar-biotite granite, up to 2% disseminated pyrite and arsenopyrite	1304	1.0
63865	grab		Quartz vein, sericite, no visible sulphides	65	2.1
63866	grab		Actinolite skarn, vuggy, Mn staining	26	14.1
63867	grab		Quartzite, highly oxidized and fractured, Mn and limonite staining	31	12.9
63868	grab		Quartz vein, no visible sulphides	21	0.2
63869	grab		Quartz vein, minor pyrite and sericite	176	0.6

TABLE 2 ROCK SAMPLE VALUES AND DESCRIPTIONS

TABLE 2 (CONTINUED)

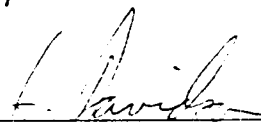
Sample No.	Sample Type	Location	Description	Au ppb	Ag ppm
63870	grab		Diorite, disseminated pyrite	12	0.5
63871	grab		Quartz vein, stibnite-arsenopyrite lenses	2820	1.0
63872	grab		Quartz vein, limonite and sericite, minor pyrite	37	0.1
63873	grab		Quartz vein, minor arsenopyrite and pyrite	278	1.0
63874	float		Quartzite, yellow weathering, oxidized, cinibar	161	0.3
63875	grab		Quartzite, brecciated, narrow quartz veins	31	0.1
63876	grab		Quartz vein, vuggy, minor arsenopyrite	806	1.3

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 supervised and participated in the work program described in this report.
2. That I am a graduate of the University of Western Ontario (H.B.Sc., Geology, 1981).
3. That I am registered as a Professional Geologist by the Association of Professional Engineers, Geologists and Geophysicists of Alberta (#42308).
4. That I have been engaged in mineral exploration on a full and part time basis for seven years, of which five have been spent in the Yukon, Northwest Territories and British Columbia.

SIGNED at Whitehorse, Yukon this *17* day of *January*, 1989.



G. S. Davidson, P. Geol.

G.S.

COSTS

RED MOUNTAIN

Mapping - Blow-ups		67.20	
Explosives		573.00	
Groceries		544.65	
Hotel		65.00	
Travel Expenses, camp rentals, tools		500.00	
Remote Sensing		225.00	
Truck Rental		<u>200.00</u>	
			2,174.85
 <u>Helicopter</u>			
June 17th - Move in and prepare exploration			
	4.9 hrs.	3,003.70	
June 27th Return from Mayo	0.9 hrs.	551.70	
June 30th Move Out	2.0 hrs.	<u>1,226.00</u>	
			4,781.40
 <u>Assays</u>			
		1,466.25	
		<u>22.50</u>	
			1,488.75
 <u>Wages</u>			
Camp preparation and travel			
3 man days @ \$250.00/day		750.00	
Personnel			
Mike Glynn	12 days at \$250.00/day	3,000.00	
Dave Sufady	14 days at \$250.00/day	3,500.00	
Simon Ridgway	14 days at \$250.00/day	3,500.00	
Office	2 days at \$200.00/day	<u>400.00</u>	
			11,850.00
Geologist	4 days at \$250.00/day	1,000.00	
Expenses - Truck, Gasoline		<u>275.00</u>	
			1,275.00
 <u>Report</u>			
Preparation, Printing, Typing		<u>1,100.00</u>	
			<u>1,100.00</u>
Total Costs:			\$22,670.00

REFERENCES

- Kidlark, R.G. 1980, 1979 Geological and Geochemical Assessment Report on the Red Mountain Property for Amax of Canada Ltd.
- Map 1143 A, 1964, Geological Survey of Canada.

APPENDIX I - CERTIFICATE OF ANALYSIS



REPORT: V88-04676.0

PROJECT: RED MOUNTAIN

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM
S2 L5+00S 0+00E		20	0.3	R2 M-3		21	0.2
S2 L5+00S 0+50E		15	0.2	R2 S-27		29	0.1
S2 L5+00S 1+00E		12	0.5	R2 S-28		970	4.7
S2 L5+00S 1+50E		17	0.7	R2 63851		569	1.3
S2 L5+00S 2+00E		21	0.3	R2 63852		212	0.8
S2 L5+00S 2+50E		105	0.4	R2 63853		>10000	23.7
S2 L5+00S 3+00E		204	0.5	R2 63854		711	0.6
S2 L5+00S 3+50E		178	0.7	R2 63855		>10000	>50.0
S2 L5+00S 4+00E		73	0.4	R2 63856		9880	23.7
S2 L5+00S 4+50E		205	0.4	R2 63857		512	1.4
S2 L5+00S 5+00E		351	0.4	R2 63858		635	11.3
S2 L5+00S 5+50E		101	0.2	R2 63859		168	2.1
S2 L5+00S 6+00E		59	0.4	R2 63860		75	1.3
S2 L5+00S 6+50E		66	0.4	R2 63861		92	0.9
S2 L5+00S 7+00E		52	0.3	R2 63862		168	2.3
S2 L5+00S 7+50E		15	0.2	R2 63863		433	0.2
S2 L5+00S 8+00E		15	0.7	R2 63864		1304	1.0
S2 L5+00S 8+50E		26	0.6	R2 63865		65	2.1
S2 L5+00S 9+00E		24	0.4	R2 63866		26	14.1
S2 L5+00S 9+50E		117	0.4	R2 63867		31	12.9
S2 L5+00 10+00E		10	0.2	R2 63868		21	0.2
S2 L5+00 10+50E		8	0.4	R2 63869		176	0.6
S2 OT-1		358	0.4	R2 63870		12	0.5
S2 OT-2		594	0.5	R2 63871		2820	1.0
S2 OT-3		314	0.4	R2 63872		37	0.1
S2 OT-4		319	0.3	R2 63873		278	1.0
T2 HS-1		158	0.3	R2 63874		161	0.3
T2 HS-2		274	0.3	R2 63875		31	0.1
T2 HS-3		1148	0.5	R2 63876		806	1.3
T2 HS-4		5000	0.8				
T2 S-1		646	0.3				
T2 S-2		1020	0.7				
T2 S-3		1220	0.2				
T2 S-4		506	0.4				
T2 S-5		294	0.1				
T2 S-6		1285	0.4				
T2 S-7		691	0.1				
T2 S-8		1053	0.3				
R2 M-1		144	1.0				
R2 M-2		47	0.7				