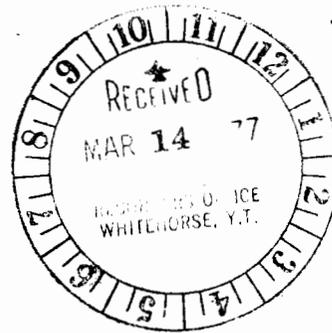




Swamp Creek. View upstream from Post 2 of the
Deer #1 discovery claim. This is just below the
junction with Soya Creek.
March 26, 1976

120041



ASSESSMENT AND EVALUATION REPORT ON
 Red, Deer and Soya PLACER CLAIMS
 AND Beef PLACER LEASES
 SWAMP CREEK
 WHITEHORSE MINING DISTRICT
 LADUE RIVER AREA, YUKON TERRITORY

Red 1 - 12	P3130, P3154-3164
Deer 1 - 9	P3129, P3135-3142
Soya 1 - 7	P3132, P3170-3175
Beef 1	PL3715
Beef 2	PL3716

Latitude 63°02'N, Longitude 140°57'W
 Claim Sheet 115N/2

J. Michael Kenyon September 17th, 1976





This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work in the amount of \$ _____

Resident Geologist or
Resident Mining Engineer

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

Commissioner of Yukon Territory

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	1
PHYSIOGRAPHY AND ACCESS	1
GEOLOGY	1
SAMPLING	5
CONCLUSION	8
REFERENCES	10
CERTIFICATES	11 & 12
SCHEDULE OF EMPLOYEES	13

Maps

LOCATION - MAP 1	2
CLAIM LOCATION - MAP 2	3
TRENCH LOCATIONS - MAP 3	7

Tables

TRENCH DIMENSIONS - TABLE 1	9
SAMPLE RESULTS - TABLE 2	9

INTRODUCTION

Swamp Creek lies within the Ladue River area of the Yukon Territories (Map 1). During the periods of August 6 to August 11 and August 18 to August 25, 1976, the Red, Deer and Soya placer claim groups and the Beef placer leases were investigated. A sketch of the claim locations is presented on Map 2.

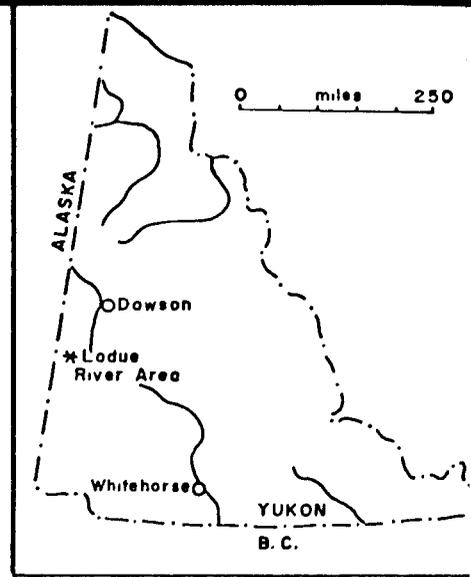
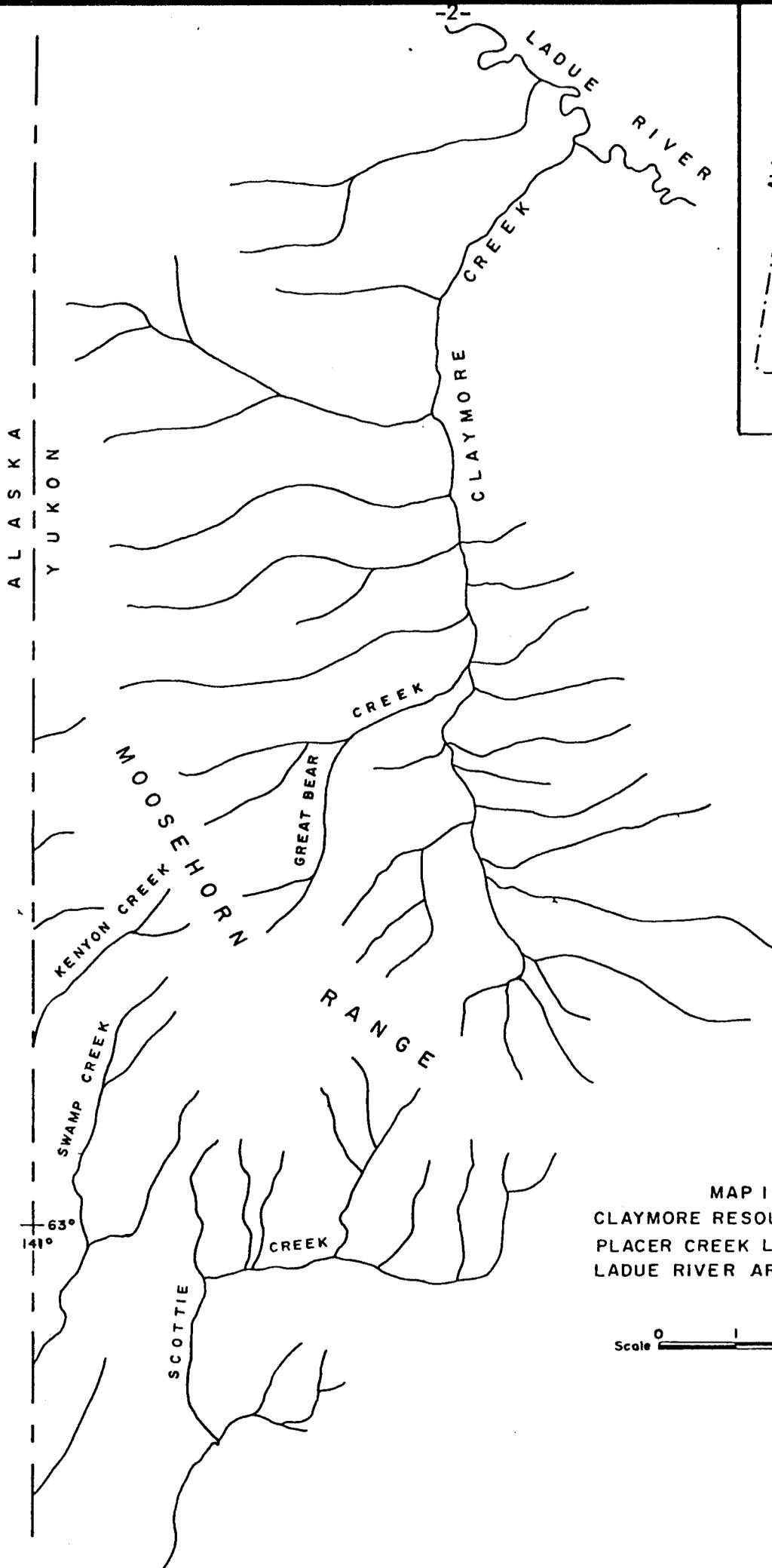
PHYSIOGRAPHY AND ACCESS

Swamp Creek drains a portion of the western slope of the Moosehorn Range and flows southwesterly a distance of 6 miles where it crosses the Yukon-Alaska border. The headwaters begin at an elevation of 3500 feet and the creek has a gradient of about 700 feet per mile for the first mile for both the north and south forks. Below this distance, inflection or knick points occur and the gradient changes abruptly to 150 feet per mile. The valley floor widens appreciably at this point from an approximate 150 foot width to over 1000 feet.

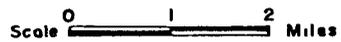
During the early part of the initial work period, access roads were constructed from the base camp down the north fork of Swamp Creek, a distance of 4 miles and up the south fork from the junction for a distance of 1 mile. The roads provide a more than adequate route for tracked vehicles and equipment and in addition the roads above the fork junction could be used by 4-wheel drive vehicles. Several helicopter landing sites were cleared along the creek.

GEOLOGY

The Ladue River area is within a large unglaciated sector of the Yukon, known as the Klondike Plateau. The topography is a maze of deep, broad valleys separated by long smooth-topped ridges, the result of over 30 million years of uninterrupted weathering. The area is greater than 90% overburden with rock

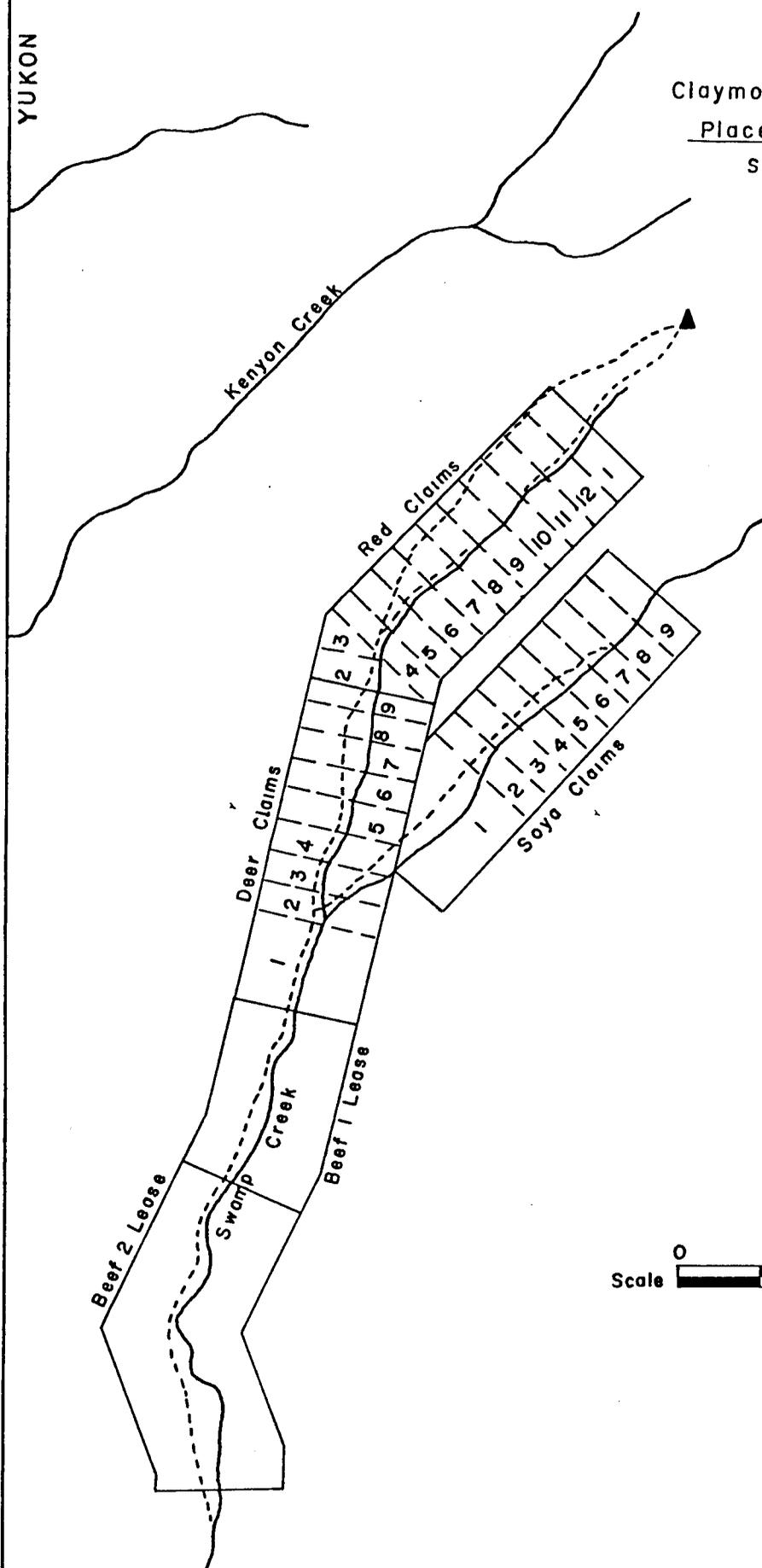


MAP I
 CLAYMORE RESOURCES LTD.
 PLACER CREEK LOCATIONS
 LADUE RIVER AREA, YUKON



ALASKA
YUKON

MAP 2
Claymore Resources Ltd.
Placer Claim Locations
Swamp Creek, Yukon



- ▲ camp
- road

GEOLOGY Continued

exposures generally limited to ridge tops. Available exposures are not solid outcrop but rather they consist of felsenmeer rubble and frost-shattered blocks.

Part of the extensive Klotassin batholith, an equigranular biotite hornblende granodiorite of probable Triassic age, underlies the area (Tempelman-Kluit, 1974). A fine-grained felsic aplite and a feldspar porphyry are also apparent, but due to the nature of the outcrop, their relationship to the granodiorite is not known. Gold-bearing quartz veins are exposed on the summit of the Moosehorn Range but the frequency and overall extent of the veins is not known. An additional quartz vein was exposed during road building along the north fork of Swamp Creek, a distance of 2 miles from the Moosehorn summit. All vein mineralogy consists of arsenopyrite, galena, sphalerite, sulphosalts (possibly boulangerite) and coarse native gold in a milky quartz gangue. The veins strike NNW and dip gently to the east, coincident with the major joint pattern of the intrusive.

The gravels of the upper mile of Swamp Creek are poorly sorted and poorly rounded. Downstream from this point, the gravels display a more mature sorted nature. The material encountered consists almost entirely of the above noted rock types including quartz material ranging from pebbles to boulders. Most of the quartz is mineralized with arsenopyrite, galena and sulphosalts and much of the quartz material contains free gold.

Gravel is exposed only in the stream channel. Elsewhere trenching has shown that the gravel is overlain by 2 to 4 feet of black organic muck and clay, which in turn is overlain by 1 to 2 feet of vegetation. All material is frozen beneath the vegetation cover, presumably to bedrock. The gravels are 30% cobble size, 30% sand and gravel and 20% boulders up to several feet across. The boulders are generally within the top 5 feet of material. The high boulder content of Swamp Creek is a reflection of the steepness of the valley walls. The boulders

GEOLOGY Continued

were probably rafted downslope at an angle to the stream channel rather than water transported. The clay content of the gravels is approximately 20%, but clay lenses and discontinuous seams are exposed in trenches for the first 3/4 of a mile of the stream length. Further downstream the sorting action of the creek appears to have dispersed clay accumulations to a uniform content throughout the gravel.

Swamp Creek contains both coarse and fine gold within the gravels exposed by trenching. The south fork of the creek shows coarse and fine gold within the active gravels of the upper 2 claims. The gold is not sorted and little settling has taken place; a reflection of the eluvial nature of the creek material. Alluvial modification of the gravels occurs downstream from trench Red 5, and at Trench Red 2, the gravel appears much more rounded and sorted. At this point, boulders constitute 5% of the volume, cobbles 35%, sand and gravel 40% and clay 20%.

SAMPLING

Five trenches were excavated along the first mile of Swamp Creek, all on the north fork as shown on Map 3. The work was accomplished with a Terex 82-40 bulldozer equipped with a heavy duty ripper. This machine is equivalent to a D-8 Caterpillar. Due to permafrost conditions trenching was extremely difficult and laborious, and resulted in equipment breakage. Flooding of the trenches from near-surface runoff was also a problem. Problems encountered in trenching prevented any trench from reaching bedrock.

The sampling procedure used consisted of sampling the gravels in 3 foot vertical sections, along the horizontal length of the trench wall. According to Wells (1973), the minimum number of level full, standard pans to a cubic yard of gravel is 150.

SAMPLING Continued

The standard gold pan measures 16 inches top diameter, 10 inches bottom diameter and has a depth of $2\frac{1}{2}$ inches. Ordinary gravel swell when removed from place by 25%, while clay and gravel swells 35%, (Wells 1973, p.191). A conservative gravel swell of 20% was used and added to the minimum number of standard pans to give an approximate figure of 180 pans per cubic yard of gravel.

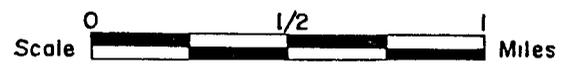
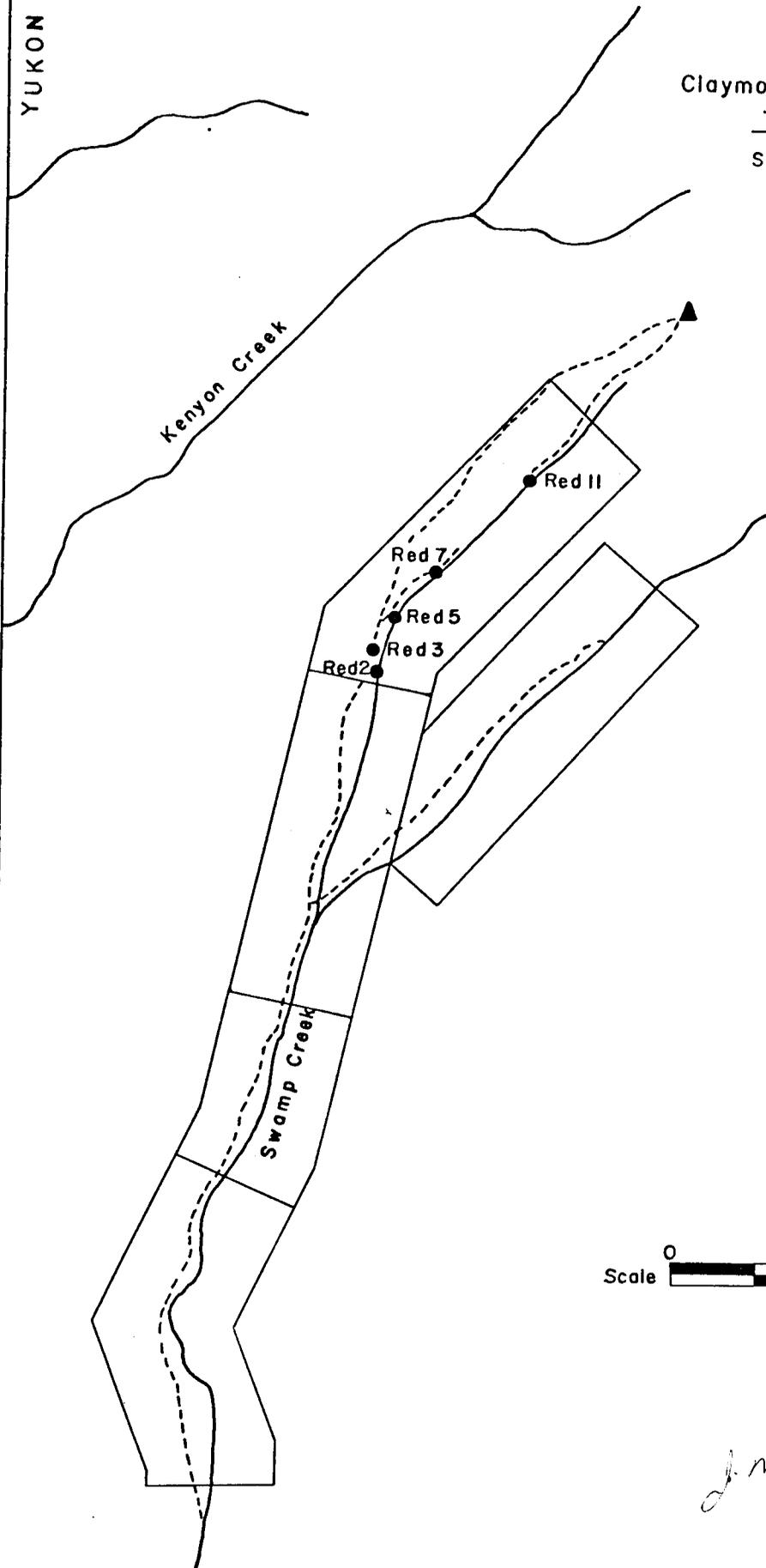
Shovel loads of gravel were taken at random vertically within the 3 foot section to be sampled and horizontally across the length of the trench, for an aggregate of 6 standard pans. A small shovel was used and approximately 5 shovel loads filled one standard pan. The material was washed down to a black sand concentrate in each pan, which was then further reduced by panning the aggregate concentrate. At this point, the magnetic fraction was removed and the non-magnetic material blown off. The gold was weighed and converted to ounces per cubic yard for each vertical one yard section. It is possible that gold loss occurred both in the panning process and in the final separation stage, indicating that values obtained are minimum grades. Table 1 shows the dimensions of the trenches and Table 2, the values obtained from sampling.

Although an access road was constructed the full length of the ground held on the south fork of Swamp Creek, trenching conditions and time did not permit quantitative samples for this area. Panning of the active gravels however, showed the existence of both coarse and fine gold. The nature and quantity of the gold is similar to that on the north sampled fork of the creek.

It is apparent that the bulk of the gold in alluvial placer deposits settles with time, to lower depths. It is estimated that the gravel in the lower section of Swamp Creek is in excess of 20 feet. Bulldozer trenching is not capable of depths greater than 10 or 12 feet in permafrost conditions. Two trenches were attempted downstream of trench Red 2 but were abandoned in black muck and permafrost at 6 foot depths.

ALASKA
YUKON

MAP 3
Claymore Resources Ltd.
Trench Locations
Swamp Creek, Yukon



- trench
- ▲ camp
- road

J. Michael Kenyon

CONCLUSION

Sampling to date has shown the existence of economic placer gold values on the north fork of Swamp Creek and indications are that the south fork will be equally as promising .

The steepness of the gradient on the upper section of the creek suggests that the gravels are not excessively thick, and should therefore be within the reach of bulldozer trenching . All trenches on the north fork should be deepened and a similar program begun on the south fork of the creek .

The shallower gradient sections of the creek are geologically more suitable environments for placer gold accumulation but are outside the capabilities of a bulldozer and will require testing with conventional placer drilling equipment .

Table 1

TRENCH DIMENSIONS

<u>Trench No.</u>	<u>Length (ft)</u>	<u>Width (ft)</u>	<u>Depth (ft)</u>
Red 2	80	24	6
Red 3	53	26	8
Red 5	68	29	5
Red 7	70	31	9
Red 11	64	24	5

Table 2

SAMPLE RESULTS

<u>Trench No.</u>	<u>Interval (ft)</u>	<u>Grade (oz/yd³)</u>
Red 2	0 - 3	0.10
	3 - 6	0.06*
Red 3		trace
Red 5	0 - 3	0.015
Red 7	0 - 3	trace
	3 - 6	0.075
	6 - 9	0.17
Red 11	0 - 3	0.015

* unreliable due to flooding and sloughing

REFERENCES

Tempelman - Kluit, D. J., 1974. Reconnaissance Geology of Aishihik Lake, Snag and Part of Stewart River Map - Areas, West - Central Yukon; Geol. Surv. Can., Paper 73 - 41.

Wells, J.H., 1973. Placer Examination, Principles and Practice; U.S. Dept. Int. Bureau of Land Management, Tech. Bull. 4.

STATEMENT OF QUALIFICATIONS

I, J. Michael Kenyon of the City of Edmonton, in the Province of Alberta, hereby declare:

- 1) That I am a graduate of the Northern Alberta Institute of Technology, Edmonton, Alberta with a diploma in Geology (1970), and that I am a graduate of the University of Alberta, Edmonton, with a B.Sc. (Spec.) in Geology (1974). At present I am enrolled in a Masters program in Geology at the University of Alberta.
- 2) That I have worked in mineral exploration since 1969, mainly in a temporary capacity. In latter years my position has been that of Party Chief.
- 3) This report is based on personal knowledge of the Claymore property. I was Party Chief, largely responsible for the field operations of the 1976 sampling program.

Dated at Edmonton, in the Province
of Alberta, this 27 day of September,
1976.



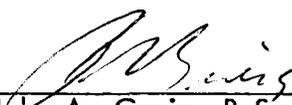
J. Michael Kenyon, B.Sc.

STATEMENT OF QUALIFICATIONS OF SUPERVISING GEOLOGIST

I, John A. Greig of the City of Edmonton, in the Province of Alberta, hereby declare:

- 1) That I am a Director and President of Claymore Resources Ltd.
- 2) That I am a Professional Geologist, registered in the Province of Alberta.
- 3) That the work described in this report by J. Michael Kenyon was carried out under my supervision.

Dated at the City of Edmonton, in
the Province of Alberta, this 27
day of September, 1976



John A. Greig, B.Sc., M.Sc., P. Geol.

Schedule of Employees

<u>Name & Address</u>	<u>Period of Employment & Position</u>	<u>Salary</u>
Hartley, Glenn S. #2, 10710 - 127th Street Edmonton, Alberta	May 13 - August 20, 1976 (Geologist)	\$1200/mo
Kenyon, J. Michael, B.Sc. 13906 - 101A Avenue Edmonton, Alberta	May 26 - September 17, 1976 (Party Chief)	\$1250/mo
Kenyon, Neil F. 5603 Buckboard Road Calgary, Alberta	May 13 - June 6, 1976 (Assistant Geologist)	\$ 475/mo
Rich, Anthony, B.Sc., P. Geol. 10947 - 86th Avenue Edmonton, Alberta	June 16 - June 23, 1976 (Geologist & Consultant)	\$ 70/day
Greig, John A., B.Sc., M. Sc. #202, 11111 - 87th Avenue Edmonton, Alberta	May 28 - June 5, 1976 August 18 - August 20, 1976 (Supervising Geologist and Consultant)	\$ 70/day

