

J. B. P. Sawyer, P. Eng.

CONSULTING GEOLOGIST

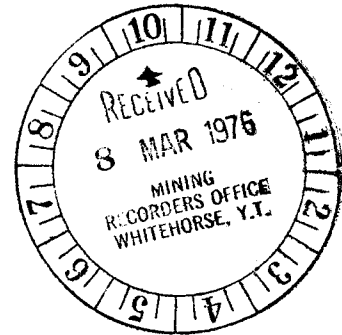
(604) 684-5433

REPORT ON
GEOLOGICAL and GEOCHEMICAL WORK
on the CLAYMORE RESOURCES LTD.

SOK 1 to 29 CLAIM GROUP

133°39'15"W, 62°23'N

July 10th to July 17th, 1975



ANVIL RANGE LEAD/ZINC DISTRICT
WHITEHORSE MINING DISTRICT, YUKON

WHITEHORSE MINING DISTRICT, YUKON

by

J. B. PAUL SAWYER, P. Eng.

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 \$3,750.00

J. B. Sawyer
Resident Geologist or
~~Resident Mining Engineer~~

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

[Signature]
Supervising Mining Recorder
Commissioner of Yukon Territory



VANCOUVER, B.C.

NOVEMBER 5th, 1975

070086

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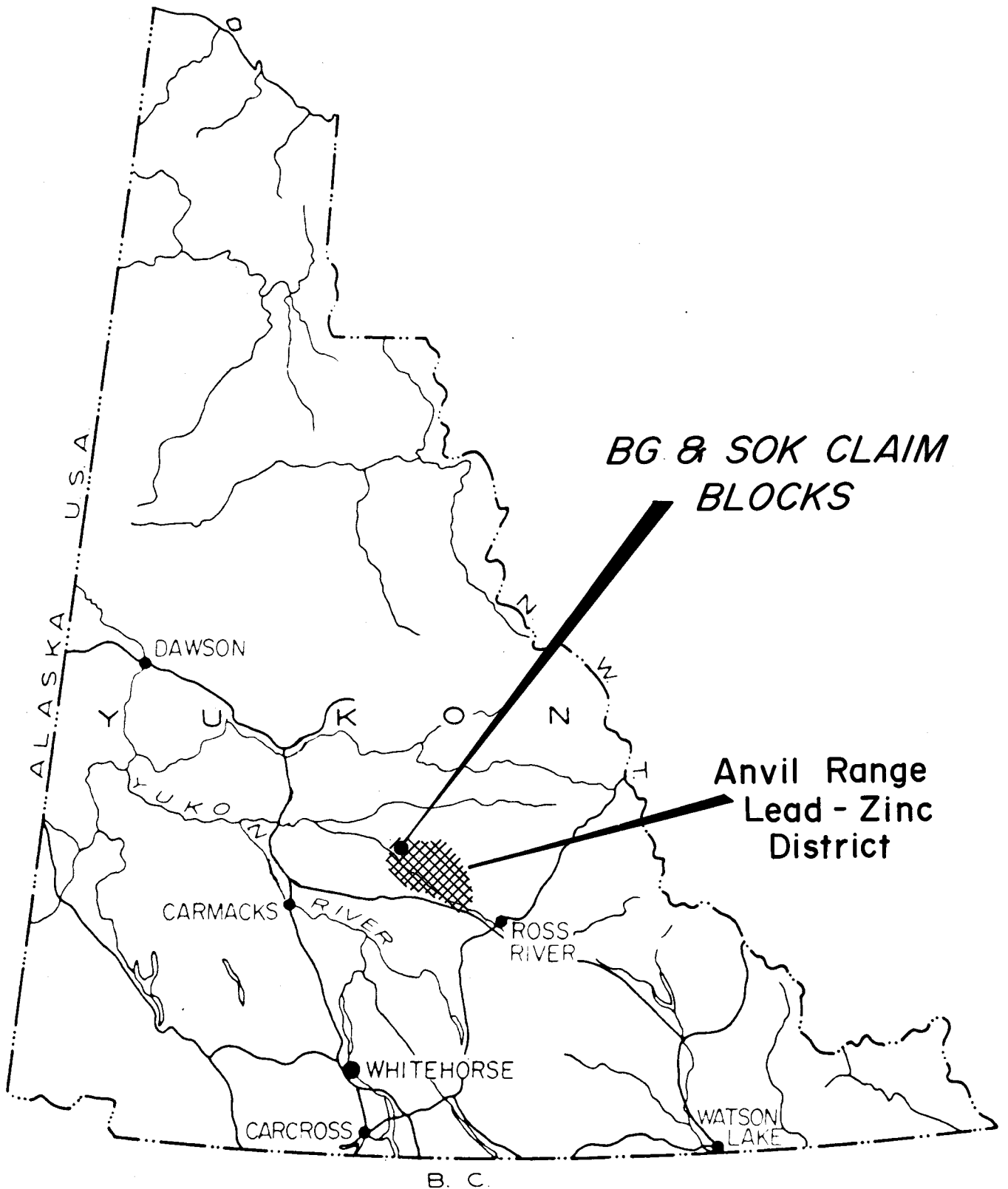
INTRODUCTION

The SOK Claim Group, which was staked for Claymore Resources Ltd. in July 1974 represents a partial restaking of the former Multi Claim Group of Anvil Mining Corporation. At the request of Mr. John Greig, President of Claymore Resources Ltd., the writer undertook to carry out a work program on the claims in July 1975 which consisted of geological mapping, and soil sampling over a part of the property. Line-cutting was carried out to facilitate this work over part of the claim group and in addition most of the streams draining the property were also silt sampled. This work is described in the following report which is to be submitted in support of applications for certificates of work which were filed in Whitehorse on July 23rd, 1975.

Geologically, most of the property is underlain by volcanic rocks of intermediate composition most of which carry sulphides in the form of pyrite, pyrrhotite and minor chalcopyrite. Schists and phyllites which could be stratigraphic equivalents of similar rocks which host the Anvil lead/zinc deposits further east along the Anvil Range are of only very minor extent. No important geological features, nor any significant geochemical anomalies were defined as a result of this work program and probably some of the more southerly claims could be eliminated from consideration for any further work.

Total expenditures on this work program by Claymore Resources Ltd. is sufficient to provide assessment credit for at least two years on each of the claims constituting the group.

CLAYMORE RESOURCES LTD. (N.P.L.)



***BG & SOK CLAIM
BLOCKS***

**Anvil Range
Lead - Zinc
District**

B. C.

Scale: 1 Inch = Approx. 80 Miles

PROPERTY

The SOK Claim Group consists of a total of 29 claims, SOK 1-29 inclusive, described as follows:

Claims	Grant Nos.	Recording Date	Expiry Date
SOK 1-29 inc.	Y79869-Y79897 inc.	July 23rd, 1974	July 23rd, 1975

These claims have been grouped into two groups on Forms E which were filed with the Mining Recorder, Whitehorse Mining District, on July 23rd, 1975. They lie in the Whitehorse Mining District and are shown on Yukon Claim Map 105 K/5.

LOCATION AND ACCESS

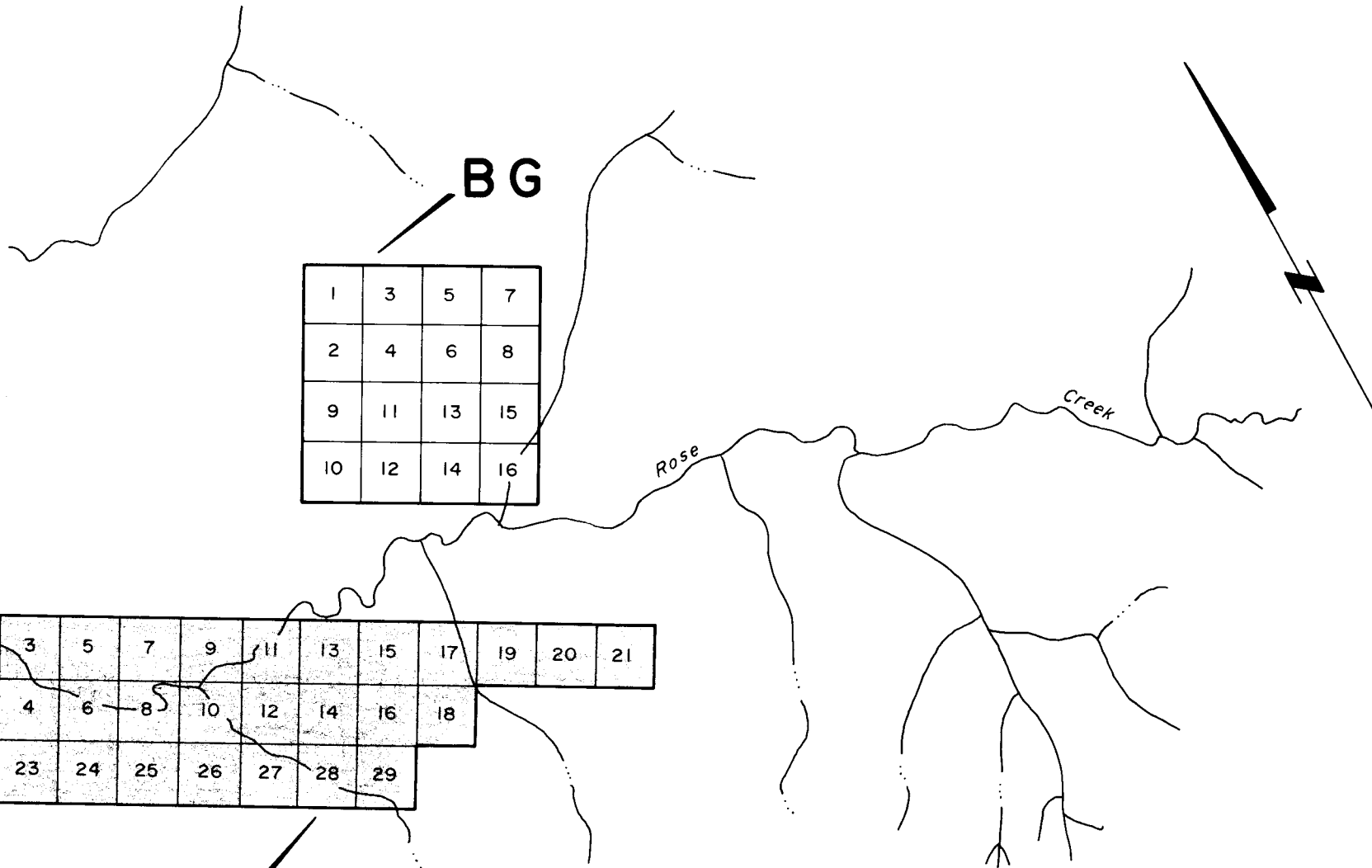
The SOK Claim Group straddles Rose Creek at the northwestern end of the Anvil Range lead/zinc district approximately 6 1/2 miles northwest of the Anvil open pit mine of Cyprus Anvil Mining Corporation. Coordinates of a point approximately at the centre of the group are 133° 39' 15" W, 62° 23' N. The claims are not directly accessible by road. A bulldozer trail suitable for tracked vehicles extends from the old Anvil air strip to the Hill Rust Claim Groups, a distance of approximately 3 1/2 miles but beyond this point there are only bush trails and an old drill road to the area of the SOK Claims. The most efficient access to the property is by helicopter from Faro and this means of transportation was used in the course of the work program completed in July 1975.

TOPOGRAPHY

The SOK Claim Group lies along and flanking the valley of Rose Creek which is on average perhaps of the order of 25-30 feet wide and 4-6 feet deep. Part of the low-lying land along Rose Creek is wet and swampy but the valley sides rise moderately steeply to the north and south, and the southern part of the property is well drained by numerous tributaries of Rose Creek. There is moderate outcrop on the higher levels of the valley sides. Vegetation consists of fairly sparse mixed spruce, fir and birch with heavy growth of buckbrush and arctic birch, particularly on the more open parts of the slopes. Maximum relief within the boundaries of the property is of the order of 700 to 800 feet.

HISTORY

The SOK Claim Group represents a restaking of the old Multi Claim Group formerly held by Anvil Mining Corporation. Some of the old claim posts for this former group were found during the course of the field



1	3	5	7
2	4	6	8
9	11	13	15
10	12	14	16

1	3	5	7	9	11	13	15	17	19	20	21
2	4	6	8	10	12	14	16	18			
22	23	24	25	26	27	28	29				

SOK

BG

CLAYMORE RESOURCES LTD. (N.P.L.)

BG, SOK CLAIM MAP

ANVIL RANGE LEAD-ZINC DISTRICT, YUKON

Scale 1:50,000

Drawn by: C. L. C.

work however the present SOK Claims do not coincide with the old Multi Claims and in fact lie to the north of where they are plotted on the Claim Sheet (105 K/5). Work by Anvil Mining Corporation on the Multi Claims included a geochemical survey in 1966 which outlined a copper anomaly but with no corresponding lead or zinc anomalies. In the same year magnetometer and J.E.M. surveys were also completed. Three magnetic features and a number of J.E.M. conductors were delineated the former being interpreted as being caused by volcanic rocks. The E.M. conductors were described as being probably due to graphitic schists interbedded with volcanics. In 1967 a geochemical survey over coincident magnetic and airborne E.M. anomalies failed to reveal any geochemical features of significance. Also in 1967 3.6 line miles of I.P. survey in the same area outlined four zones of interest. This was followed in 1968 by 502 feet of diamond drilling in one hole which was designed to test an airborne magnetic anomaly and ground I.P. anomaly. This drilling apparently failed to intersect any mineralization and the log describes intersections of interbedded volcanics and graphitic schists.

The ground adjoining the former Multi Claims immediately to the east was also formerly held by Anvil Mining Corporation as the Hog Claims. Two geochemical anomalies, described as being possibly transported, three magnetic anomalies, and several E.M. conductors were outlined in 1966 work programs but appear to have been dismissed as probably due to volcanic rocks and graphitic schists.

REGIONAL GEOLOGY

The Anvil Range at the northwestern extremity of which the SOK Claim Group is situated, lies in the Selwyn Basin Tectonic Province immediately north of the Tintina Trench.

The gross structure of Anvil Range is anticlinal and it is referred to as the Anvil Arch, which is some forty miles long, fifteen miles wide, with an amplitude of about two miles. Its trend is northwesterly, roughly parallel to the Tintina Trench and its core is occupied by granitic rocks of the Anvil Batholith which were intruded in Mesozoic time. Flanking the granitic core of the Range is a sequence of Proterozoic and Palaeozoic strata which dip away from the core. The old Palaeozoic rocks, probably Cambrian to Devonian-Mississippian in age are predominantly volcanic. From an economic point of view the most important rocks in the Anvil Range are those which comprise the metamorphic belt. A very simplified stratigraphic section of this belt would show a lower biotite-muscovite schist unit overlain by a calc-silicate gneiss unit which is in turn overlain by a biotite-muscovite phyllite unit. Contacts between all three units are gradational. Stratabound lead/zinc deposits in the Anvil district occur in graphitic, quartz-rich horizons in both the schist and phyllite units. The Faro orebodies, those closest to the SOK Claim Group, are in the schist unit.

1975 WORK PROGRAM

The 1975 work program on behalf of Claymore Resources Ltd. was carried out in the period July 10th to July 17th and consisted of line-cutting over part of the claim group, geological mapping over that part of the property lying south of Rose Creek, geochemical silt sampling of all of the streams and several of the minor drainages and seepages on the property, and a limited amount of soil sampling on part of the claim group. The line-cutting and soil sampling were carried out under contract by personnel of Donegal Developments Ltd. of Vancouver. Geological mapping and stream sediment sampling were carried out by the writer and by Mr. G. Boggaram, geologist. Access to the property for this work was by means of a Bell 206 helicopter chartered from Terr-Air Ltd. of Ross River. Details of the work performed are given below.

Line Cutting

A minimum amount of line cutting was carried out to provide some control for the geological and geochemical sampling and consisted of a base line and several short cross lines. The base line was started at a point approximately 800 feet south of claim post #1 for claims SOK 15 and 16 and was turned off on a bearing of 300° true. This point was designated arbitrarily as at 110E, 30N. The line was cut westwards for approximately 7000 feet however due to inaccuracy in the plotting of the claims on Claim Sheet 105 K/5 the base line met Rose Creek approximately 5000 feet east of the starting point and had to be offset 600 feet to the south in order to remain on the south side of Rose Creek which was too deep to be crossed on foot. The offset northwestern end of the base line extended from 59E to 37E, a distance of 2200 feet. The base line was also extended eastwards from the starting point a further 1500 feet, i. e. to 125E. Cross lines were established at 800 foot intervals using a Topofil machine starting at 118E, and were marked by flagging. These cross lines were extended only to Rose Creek or to the beginning of the swampy areas where soil samples were no longer available and to the south were only extended a maximum of 1200 feet. The base lines and cross lines are shown on the accompanying plans. A total of 1.78 miles of base line and 2.8 miles of cross line were established.

Soil Sampling

Soil samples were collected using mattocks at 200 foot intervals along the cross lines and were intended essentially only to cover the areas which, from the earlier work on the Multi claims, had returned some values of interest. The samples were collected in wet strength Kraft bags and shipped to the Whitehorse Laboratories of Barringer Research Ltd. where they were analysed for total copper, lead and zinc content with corrected values being determined for lead to eliminate any possible interference effects inherent in the atomic absorption determination technique for this metal. A total of 94 soil samples were collected.

The results of this work are plotted on three separate plans on a scale of 1" = 500', one plan each for lead, zinc, and copper. Standard statistical techniques were used to determine threshold values for each of these three metals as follows.

Copper Threshold = 90 ppm

Lead Threshold = 20 ppm

Zinc Threshold = 161 ppm

Considering these plots, it is apparent that only 5 samples showed copper values at or above threshold and these are randomly scattered throughout the grid. One sample which is highly anomalous (280 ppm copper) occurs at the northern end of line 62E at Rose Creek and is almost certainly due to contamination from tailings from the Anvil Mine.

Considering the zinc plot we see that the sample at the end of line 62E, Stn 30N on Rose Creek, is similarly highly anomalous returning a value of 2050 ppm zinc. Other than this only 5 samples are above threshold and while they do not show any strong pattern they do form a linear zone at the southeastern end of the grid extending from line 102E to 118E, approximately 1000 feet south of the base line. This zone is represented by a single sample, which is however the last sample on the line, on line 102E, and similarly a single sample on line 110E, and by two consecutive samples on line 118E. On line 110E a second anomalous sample occurs some 600 feet to the north of the other anomalous value. Some better definition of this zone could be obtained by fill-in sampling at closer intervals. Geologically this area is underlain by volcanic rocks.

Considering the lead plot there are only 5 samples above threshold including that at the base line 30N on line 62E, which also showed highly anomalous values in copper and zinc and is undoubtedly due to contamination. This sample returned a value of 745 ppm lead. The remaining 4 samples are widely scattered, and show no correlation with the scattered anomalous copper and zinc values.

Silt Sampling

During the course of the geological field work a total of 35 silt samples were collected from several of the creeks draining into Rose Creek from the south through the SOK Claim Group and from a number of spring seepages in the same area. The samples consisted of active sediment collected by hand into wet strength Kraft envelopes which were then dried in the sun and shipped to the Whitehorse geochemical laboratory of Barringer Research Ltd. where they were analysed for copper, lead and zinc using a partial extraction technique which employed 0.5N hydrochloric acid on a 250 milligram sample. As before, standard statistical techniques were used to determine background and threshold values as follows.

Silts - Copper Threshold = 53 ppm
 Lead Threshold = 38 ppm
 Zinc Threshold = 231 ppm

Considering the copper results - no samples exceeded the threshold value however several were in the 44-49 ppm range and one sample, Sok 33(d) returned a value of 52 ppm copper. Five samples returned values in lead above the threshold. Two of these, Sok 1(d) (175 ppm) and Sok 30(d) (800 ppm) are very highly anomalous, however both of these samples, as well as samples Sok 26(d) and Sok 27(d) were all taken near the mouths of the various tributaries, close to Rose Creek, and in the writer's opinion are undoubtedly due to contamination from tailings material. Considering now the zinc results we see that 3 samples are anomalous. Two of these, Sok 1(d) and Sok 30(d), have been described above and the high values they returned, 2700 ppm for Sok 1(d) and 315 ppm for Sok 30(d), are undoubtedly due to contamination. The third anomalous sample, Sok 4(d), is not quite so close to Rose Creek as the others but is the closest sample to Rose Creek, i. e. the furthest downstream, of the 8 samples in that particular sequence.

In general the silt sample results appear to be reflecting anomalous concentrations of base metals only at locations very close to Rose Creek where there has been contamination from tailings material and they do not indicate any other anomalous concentrations of base metal elsewhere on that part of the claim group sampled.

By way of explanation it should be pointed out that in spite of normal precautions taken at the Cyprus Anvil Mining Corporation there is undoubtedly some downstream dispersion of base metals from the tailings pond which results in a higher than average concentration in the waters and sediments of Rose Creek. In addition, an accident during the winter of 1974/75 caused a breach of the tailings dam wall with the results that considerable volumes of tailings slimes were washed down Rose Creek, on top of the ice, and were deposited along the banks of the creek, sometimes to surprisingly high elevations along the creek banks. The very highly anomalous values in lead and zinc detected both by soils and silt samples taken near Rose Creek during this program are undoubtedly due to contamination effects resulting from this accident.

Geology of the Sok Claim Group

Outcrop over considerable parts of the Sok Claim Group is relatively sparse. The areas along the south bank of Rose Creek are devoid of outcrop so that the southwesterly corner of the property, particularly along the southern claim line for claims Sok 22, 23, and 24 have no outcrop

at all. Due to the short period of time available for completing the field work it was not possible to carry out detailed mapping of the Sok Claim Group north of Rose Creek. Had it been possible to cross the creek on foot this could have been effected but at the time the work was in progress the water level in Rose Creek was too high to permit this, and time did not permit establishment of a second camp site.

The relative scarcity of outcrop makes it difficult to produce an accurate geological map of the claims, however there is sufficient outcrop to confirm that the property is almost entirely underlain by volcanic rocks with minor bands of phyllite, quartzite, and limestone. In general the property lies within the area shown by Roddick & Green (Map 13-1961) to be underlain by their Unit 7 with rocks of their Unit 8 commonly present also.

As shown on the accompanying map the rocks mapped on the Sok Claim Group have been divided into three main units as follows.

Map Unit 1 is commonly a dark coloured, medium to fine-grained basic volcanic rock which usually exhibits some degree of schistosity. Outcrops of this unit frequently are spatially related to outcrops of very fine-grained dark coloured hornfels. In many instances without the aid of thin sections it is difficult to distinguish between the hornfels and the very fine-grained volcanics. Also included in this unit are minor bands of phyllite and quartz sericite schist. Unit 1c comprises much lighter coloured more siliceous rocks, possibly corresponding to the granulite of Roddick & Green, with minor siliceous limestone members. The siliceous quartzite (or granulite) is commonly finely banded and in places appears to have a fine-grained volcanic texture. Rocks of this sub-division appear to occur most commonly in the extreme eastern end of the property and also in one band near the south central part of the property.

Unit 2 - the distinction between rocks of Unit 1 and Unit 2 has been made mainly on the basis of grain size and texture, those of Unit 2 being generally much coarser grained with obvious volcanic textures, in places tuffaceous, and sometimes vesicular. Rocks assigned to this unit may in fact be the upper parts of flows of Unit 1.

Unit 3 - is a medium to coarse-grained intrusive rock of granodioritic or monzonitic composition. The only outcrops mapped occur immediately southwest of the southwest corner of the property.

One of the interesting features of the geology of this claim group is the relative abundance of sulphide mineralization within the volcanic rocks. Sulphides present include pyrite, pyrrhotite and some chalcopyrite with, in places, minor arsenopyrite. Nowhere does the tenor of the mineralization

even approach ore grade but interesting though minor amounts of pyrite, pyrrhotite, and chalcopyrite are associated with the lighter coloured volcanics of Unit 1c at sample sites 18, and 19. Minor amounts of chalcopyrite were also observed in dark fine-grained volcanic rocks of Unit 1 at sample sites 16, 25, and 28. In general most of the volcanic rocks carry some sulphide mineralization and this undoubtedly explains the I.P. anomaly, and possibly some of the E.M. conductors detected by Anvil Mining Corporation on the former Multi Claims.

The Sok Claim Group would appear to lie too far to the south to be underlain by the same stratigraphic horizons which host the Faro orebody and which possibly extend westwards through the general area of the Heck, Fubar, and former Crown - now Claymore's B.G. Group - claims.

To the south of the Sok Claim Group, on the northern flanks of Rose Mountain the rocks are predominantly dark coloured, massive volcanic flows and tuffs.

CONCLUSIONS

1. The SOK Claim Group as shown on the Yukon Claim Sheet 105 K/5 does not correspond with the actual location of these claims on the ground. The correct locations and size of the claims on the ground is as shown on the maps accompanying this report.

2. The SOK Claim Group is underlain predominantly by volcanic rocks which carry subeconomic sulphide mineralization. The schist and phyllite metamorphic units which are associated with the lead/zinc orebodies in the Faro area probably lie to the north of the SOK Claim Group.

3. Geochemical sampling, both of soils and stream sediments, carried out on the SOK Claim Group do not reveal any anomalous concentrations of metals with the exception of some very high values along Rose Creek which are due to contamination from the Anvil Mine tailings.

4. On the basis of the results of the limited 1975 work program the SOK Claim Group appears unlikely to be the locus of any major economic mineralization.

RECOMMENDATIONS

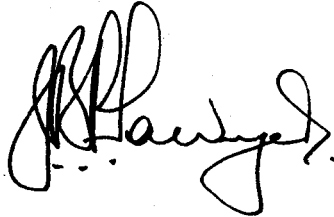
1. Geological mapping of that part of the claim group lying north of Rose Creek should be completed to determine if this most northerly

part of the claim group is underlain by, or is close to the favourable stratigraphic interval for Anvil type mineralization.


2. No further work is recommended on that part of the claim group lying south of Rose Creek.

3. The most northerly parts of the claim group would be the most favourable for retention and the assessment credits due should be applied to this part of the property.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "J. B. P. Sawyer". The signature is written in a cursive, flowing style with some loops and flourishes.

J. B. P. Sawyer, P. Eng.



BARRINGER RESEARCH Limited

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Biochemical
Laboratory
Report

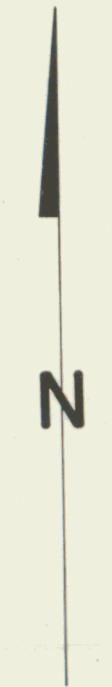
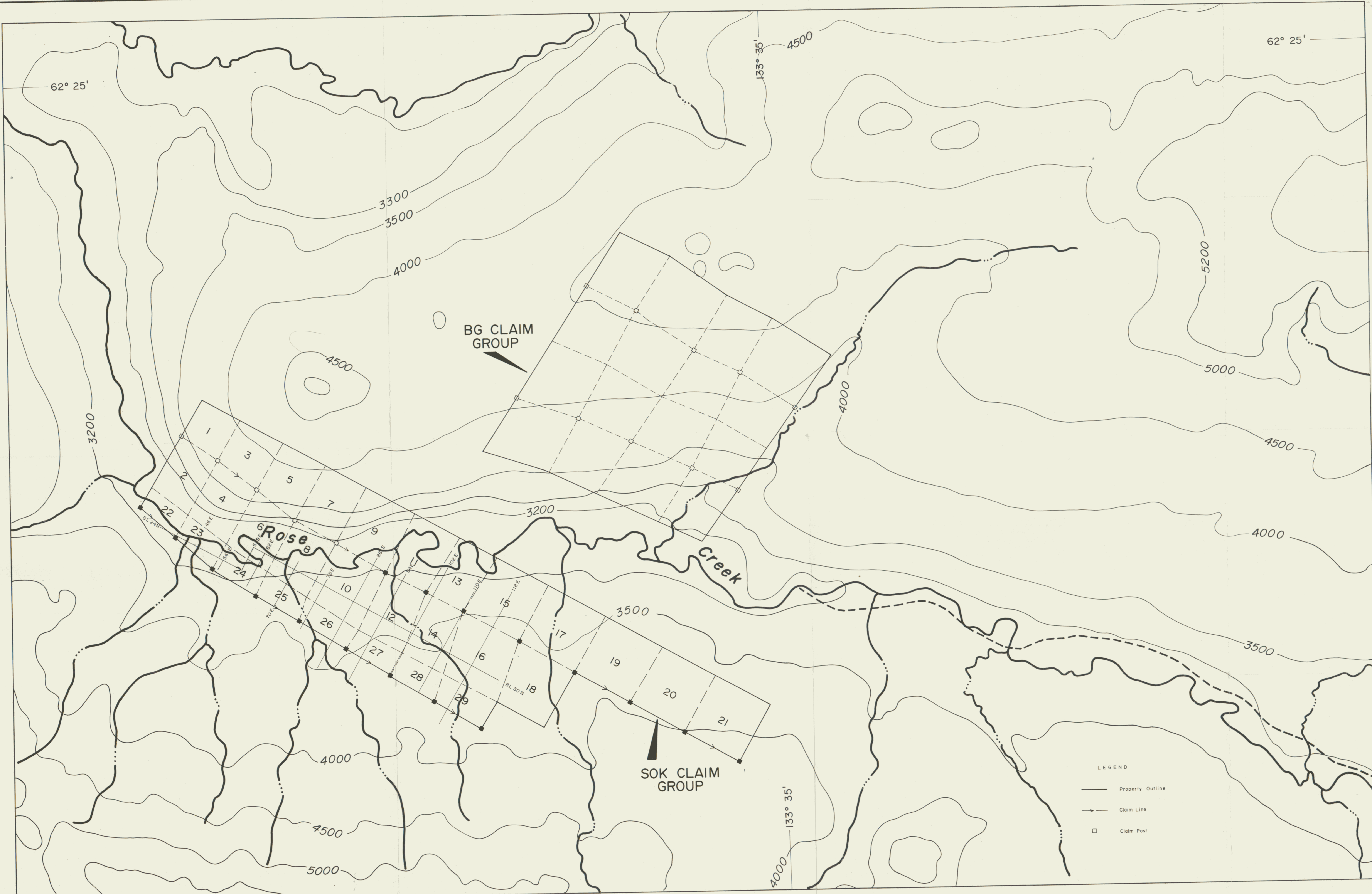
DATE
July 29th, 1975

REPORT NUMBER 45-A

CORR.

R.F.

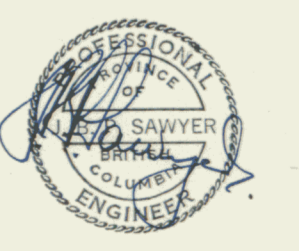
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SOK - 1	29		175		2700					
2	22		22		160					
3	33		41		225					
4	47		37		270					
5	41		19		200					
6	44		20		195					
7	33		16		170					
8	30		12		140					
9	22		8		89					
10	22		7		90					
11	36		11		125					
12	33		9		115					
13	49		15		205					
14	36		16		185					
15	37		14		170					
16	34		16		120					
17	27		12		86					
18	36		20		110					
19	27		19		75					
20	39		19		110					



LEGEND

- Property Outline
- - - Claim Line
- Claim Post

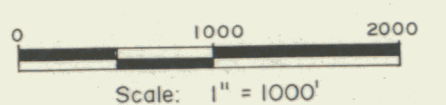
TO ACCOMPANY REPORT
 BY J.B.P. SAWYER, P. ENG.,
 DATED Nov 5th, 1975

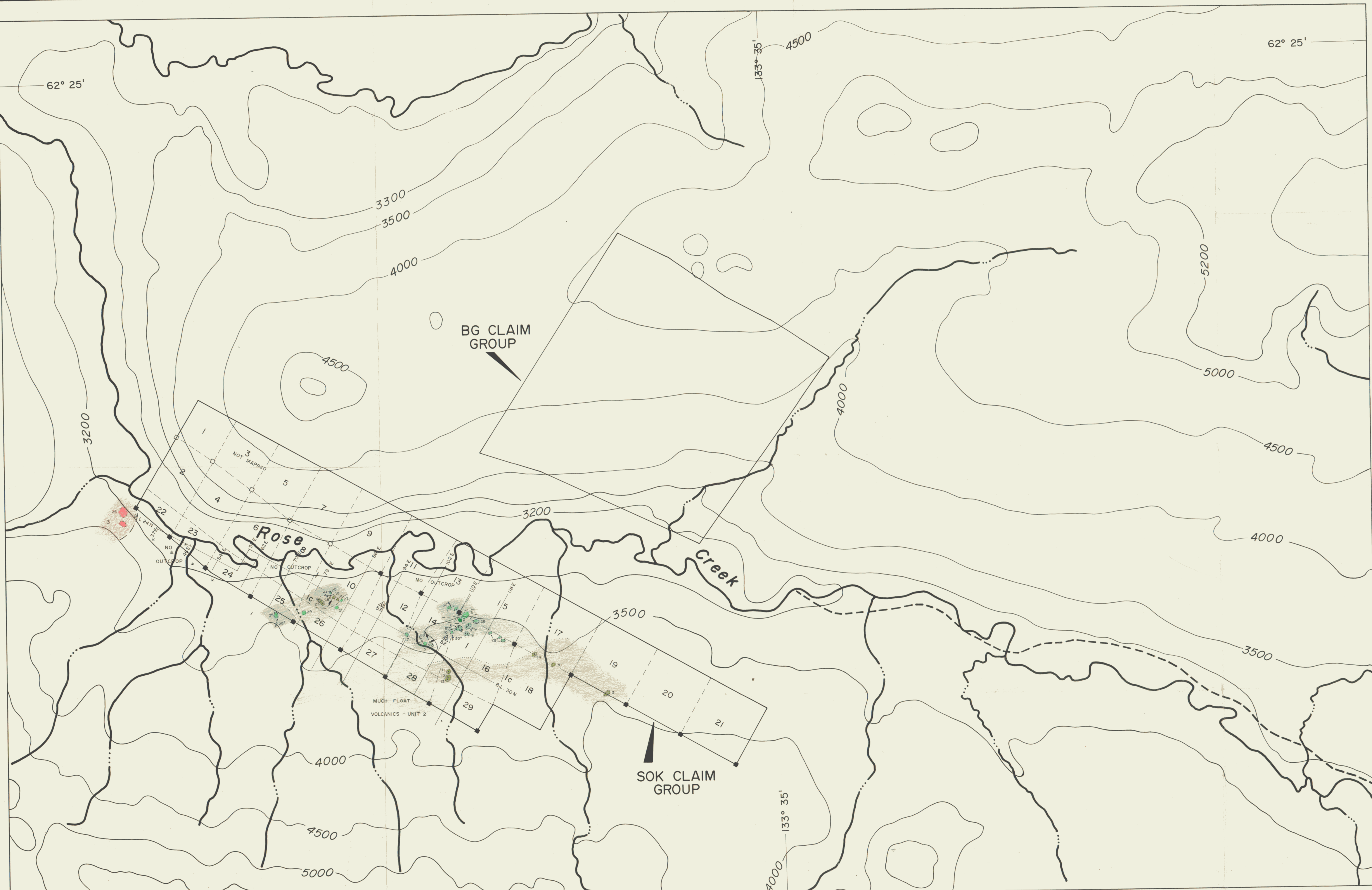


CLAYMORE RESOURCES LTD.
 ROSE CREEK AREA, YUKON

SOK GROUP
 CLAIMS and GRID

DRAWN BY: C. L. C.
 DATE: AUGUST 1975





LEGEND

CRETACEOUS

1 Medium to coarse grained quartz - monzonite, granodiorite

MISSISSIPPIAN or LATER

2 Medium to coarse grained volcanic - andesite B / or basalt - tuffaceous in part, sometimes vesicular - 2b, includes some hornfels.

3 Medium to fine grained, basic volcanic, commonly schistose; includes some hornfels (1a), and phyllite (1b); and light grey quartzite B / or siliceous limestone (1c).

X Outcrop

X-X Area of discontinuous outcrop

~ Foliation, strike and dip

~ Jointing, strike and dip

- - - Geological contact, assumed, possible

▲ 53 Cyprus Anvil air survey marker No 53

(X) 21 Sample site number

Note: Cyprus - Anvil Target No 52 = Multi Base Line, Stn. 68 + 00W
 No 53 = Multi Claim Post 11, 12, 13, 14

TO ACCOMPANY REPORT
 BY J.B.P. SAWYER, P. ENG.,
 DATED *Per: 5/8, 1975*

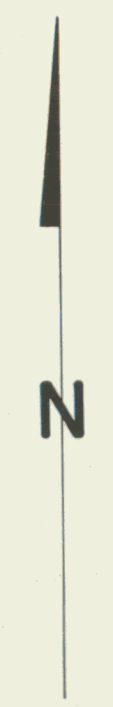
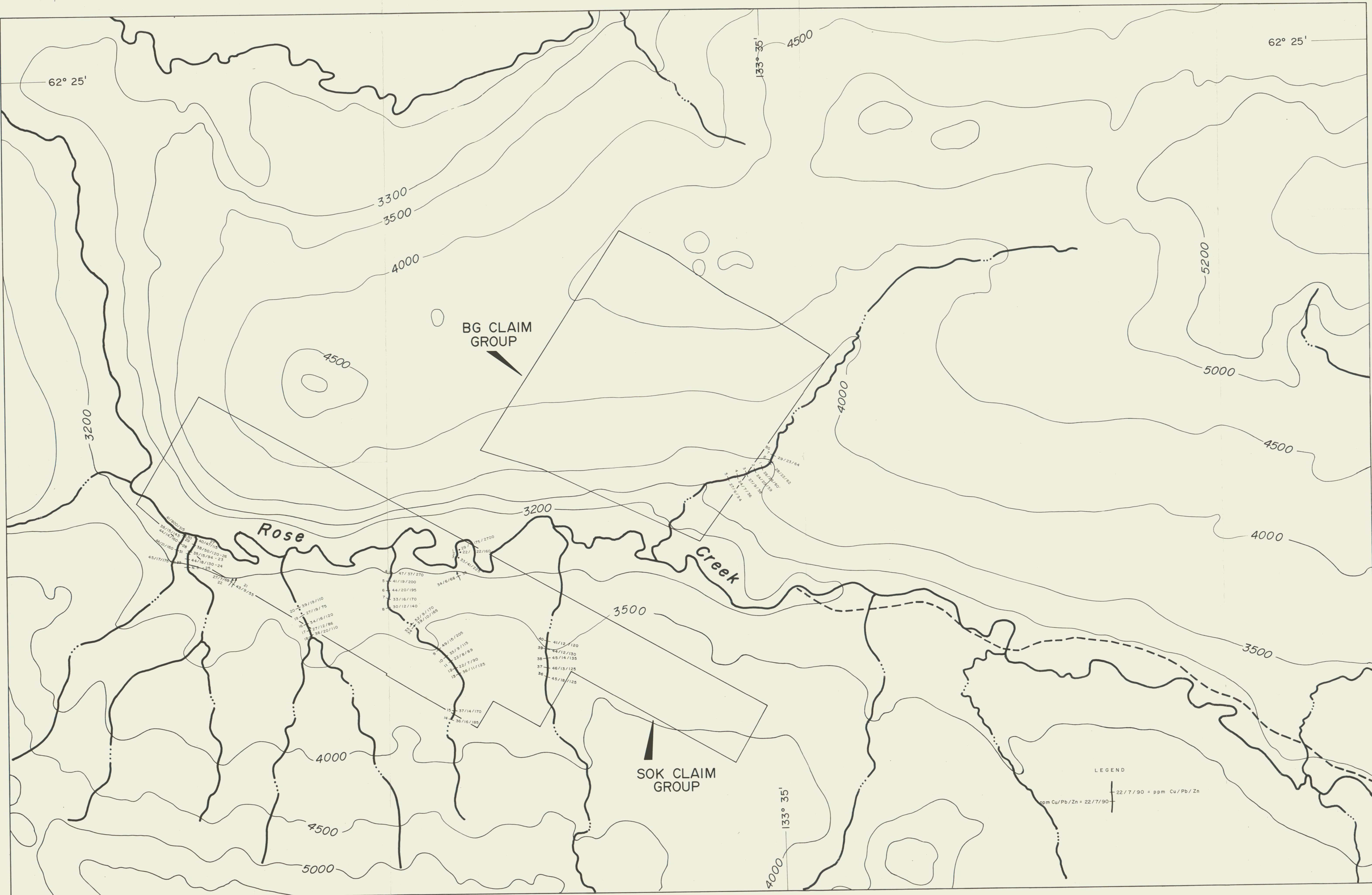
CLAYMORE RESOURCES LTD.
ROSE CREEK AREA, YUKON

**SOK GROUP
 GEOLOGY**

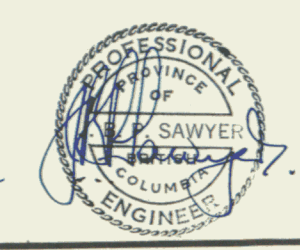
PROFESSIONAL ENGINEER
 J.B.P. SAWYER
 YUKON TERRITORY

DRAWN BY: C. L. C.
 DATE: AUGUST 1975

0 1000 2000
 Scale: 1" = 1000'



TO ACCOMPANY REPORT
 BY J.B.P. SAWYER, P. ENG.,
 DATED *From 5/26, 1975*

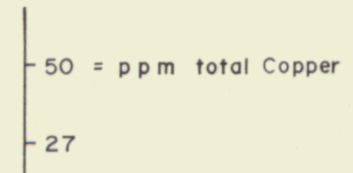
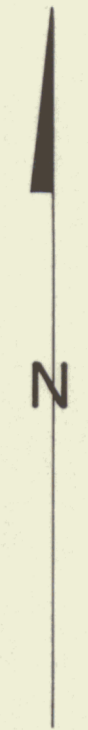


CLAYMORE RESOURCES LTD.
 ROSE CREEK AREA, YUKON

SOK and BG CLAIMS SILT SAMPLING RESULTS

LEGEND
 22/7/90 = ppm Cu/Pb/Zn

DRAWN BY: C. L. C.
 DATE: AUGUST 1975
 Scale: 1" = 1000'



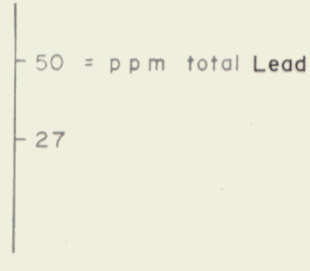
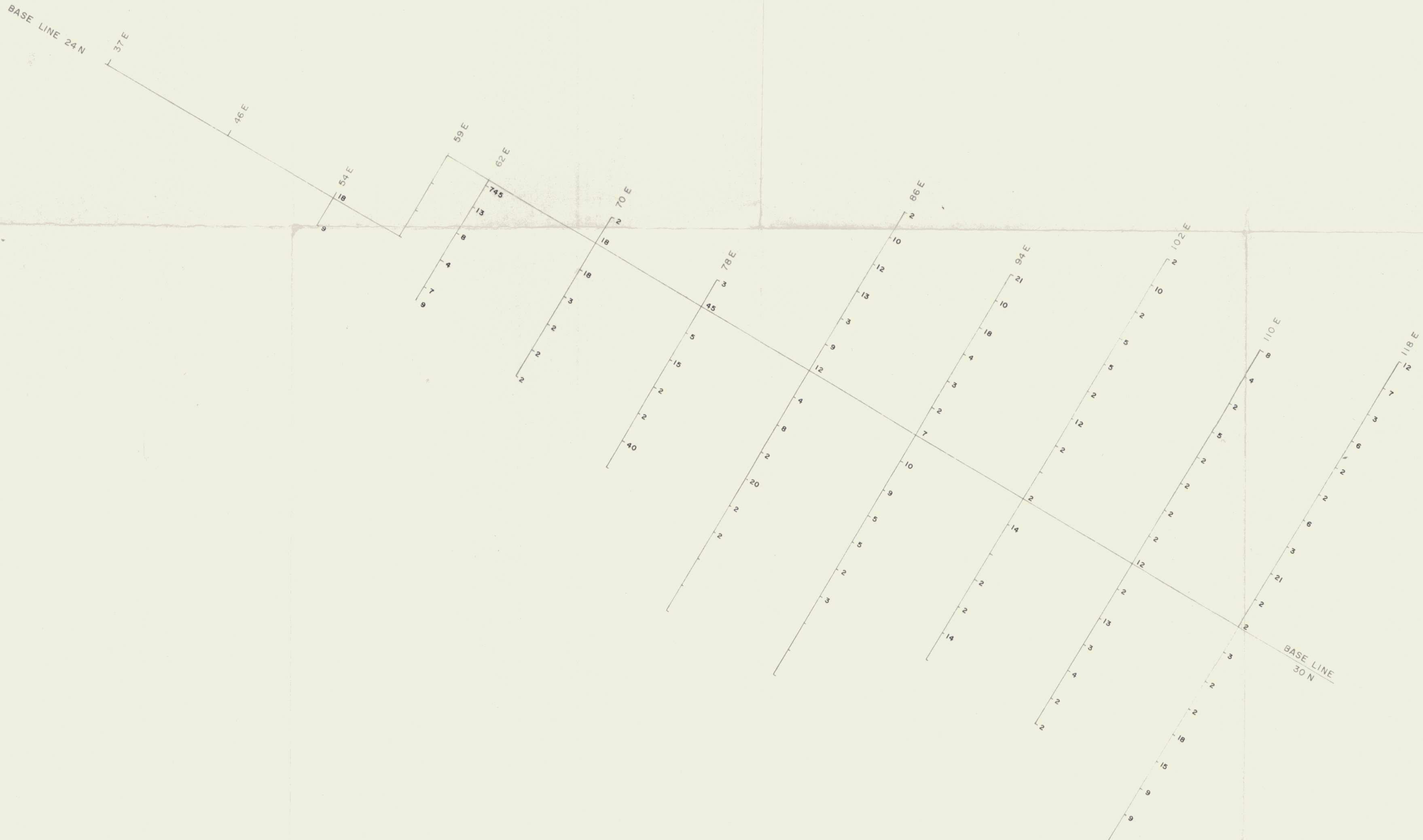
Calculated threshold = 90

CLAYMORE RESOURCES LTD.
SOK GROUP
ROSE CREEK AREA, YUKON
SOIL SAMPLING PLAN COPPER

Date: January 1976 Scale: 1" = 500' Drawn by: C. L. C.

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED Nov. 5th, 1975



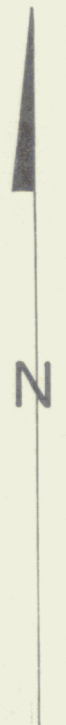


CLAYMORE RESOURCES LTD.
SOK GROUP
ROSE CREEK AREA, YUKON
SOIL SAMPLING PLAN LEAD

Date: January 1976
Scale: 1" = 500'
Drawn by: C. L. C.

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED Nov 5th, 1975





50 = ppm total Zinc
27
Calculated threshold = 161

CLAYMORE RESOURCES LTD.
SOK GROUP
ROSE CREEK AREA, YUKON
SOIL SAMPLING PLAN ZINC

Date: January 1976
Scale: 1" = 500'
Drawn by: C. L. C.

TO ACCOMPANY REPORT
BY J.B.P. SAWYER, P. ENG.,
DATED *Nov 5th, 1975*