115-J-3

Area Exploration Company
Mount Nansen Project
Whitehorse Mining District, Yukon

Rusk Creek Zone and
Ancillary Projects, 1972

Oct. 1972 R.A. Dickinson

FILE COPY

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AREA EXPLORATION COMPANY

MOUNT NANSEN PROJECT

WHITEHORSE MINING DISTRICT, YUKON TERRITORY

RUSK CREEK ZONE AND ANCILLARY PROJECTS, 1972

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OCTOBER 1972

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GENERAL INTRODUCTION

This report describes several small work programs carried out by Area Exploration Company employees, in the Mount Nansen area, during the summer months of 1972.

The programs included:-

1) Exploration of the Rusk Creek molybdenite-copper zone.

2) Silt sampling near Tertiary intrusives east of the Mount Nansen Property.

3) Soil sampling at south end of Mount Nansen Mines Ltd. Property, near Webber Creek.

4) Claim staking to fill fractions within Mount Nansen Mines Ltd. claim block and to extend coverage over the Rusk Creek zone.

A major diamond drilling program undertaken by Area Exploration Company, on Mount Nansen Mines Ltd. Property, is the subject of a separate report.

The Mount Nansen area lies in the Carmacks district, Yukon Territory, some 115 miles northwest of Whitehorse and 30 miles west of Carmacks.

1. RUSK CREEK ZONE

SUMMARY

A geochemical silt sampling program carried out by Area Exploration Company in 1971 indicated a broad area of anomalous values in molybdenum, copper, lead, zinc and silver at the western boundary of the Mount Nansen Mines claim block. Follow-up prospecting in 1972 located an extensive zone of disseminated molybdenite mineralization near Rusk Creek.

Thirty-nine full size mineral claims, Rusk 1-39, were staked, extending Mount Nansen Mines Ltd. claim block to the west to cover the area of interest. Thirty line-miles of grid were picketed over the area and 599 soil samples collected.

The soil survey outlined three anomalous zones. Anomaly 1, which lies north of base line 288N, is a linear Pb-Zn-Ag high and probably produced by a zoned Pb-Zn-Ag vein system. Rock type in this area is dacite. Anomaly 2 is a lengthy but irregular Cu-Mo anomaly broadly rimmed by Pb-Zn-Ag highs. This anomaly lies between two northeasterly-trending faults and is roughly coincident with an area characterized by finely disseminated molybdenite in biotite-quartz altered dacite over a length of 3,500 feet along an east-facing talus slope. Mineralization crops out near a quartz-feldspar porphyry contact and is presumably related to the intrusive porphyry body. Anomaly 3 lies south of base line 248N and like Anomaly 2 is a narrow but lengthy copper-molybdenum anomaly rimmed on the west by Pb-Zn-Ag highs. Geochemical anomalies 2 and 3 probably result from a single block faulted and uplifted mineralized zone.

Future work should include an I.P. survey over the grid and dependent on the results, diamond drilling.

INTRODUCTION

A silt survey conducted by personnel of Area Exploration Company during the summer months of 1971, located a zoned geochemical anomaly at the headwaters of Rusk Creek.

In August 1972, follow-up exploration work, the subject of this report, was undertaken and included the following:-

1) Minor silt sampling.
2) Extending 1971 grid.
3) Grid soil sampling.
4) Geological mapping.
5) Staking 39 claims.

LOCATION AND TOPOGRAPHY

The Rusk Creek area is located on the western border of the large Mount Nansen Mines Ltd. claim block. Most of the anomalous area lies within Bit 5 and 6 mineral claims. Rusk Creek is a tributary of Nansen Creek and is opposite Discovery Creek. A road leading to percussion drill holes CP-6 and CP-7, two miles northeast of Rusk Creek, provides the closest road access. Future road building or drill moving to the Rusk zone will be hampered by a Nansen Creek crossing.

The area of interest is topographically high, lying on the east-facing slope of a narrow mountainous belt of weathering resistant andesitic and dacitic volcanic flows. The belt, in the Nansen region, culminates 3 miles to the north with Mount Nansen peak which reaches 5,593 feet above sea level. The Rusk grid lies at elevations between 3,700 and 5,100 feet. Steep talus slopes of 20°-40° are common. The area is completely above timber line, covered at lower altitudes by buck brush and sparsely covered by moss at higher altitudes.

CLAIMS

Thirty-nine full-sized claims, Rusk 1-39, were staked on August 5, 1972 to provide complete coverage of the Rusk Creek geochemical anomaly (see Figure 1). The new claims extend Mount Nansen Mines Ltd. claim block to the west. The Rusk claims were recorded in Whitehorse on August 16, 1972, and are located in the Whitehorse Mining District on Sheet 115-I-3.

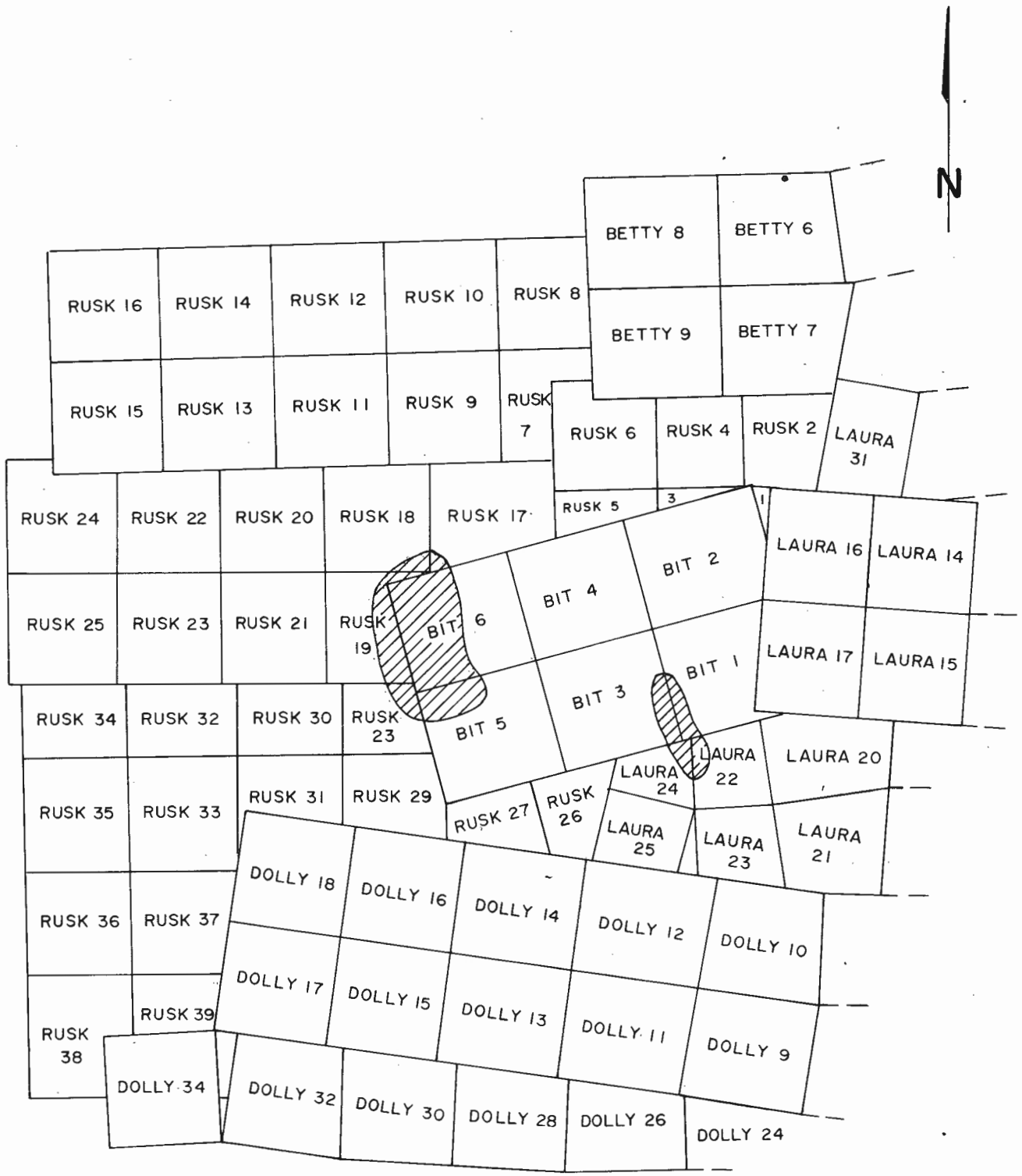
GRID EXTENSION

A total of 154,200 feet or approximately 30 line miles of grid were chained and picketed over the anomalous zone by outside contractors. Lines 288N and 248N of the 1971 Mount Nansen grid were extended southwest to 396W, and used as base lines. Cross-lines were run NW-SE at 400 foot intervals across the base lines. Stations were marked at 200 foot spacings with laths. As with the 1971 grid, only north and west coordinates were used.

GEOCHEMISTRY

Silt Survey

Eight silt samples were collected from streams on the western flank of the mountainous belt. Silt samples collected in 1971, which led to the discovery of the Rusk Creek zone, were taken from streams along the eastern flank of the ridge. The samples collected this year were not anomalous (see Map 2). It is unlikely that the mineralized zone found on the eastern slope near Rusk Creek continues through the ridge to crop out on the western flank.



AREA EXPLORATION COMPANY

LOCATION MAP
RUSK Mo - Cu ZONE

Scale: 1000 0 1000 2000 3000 FEET

Drawn by: C. L. C.

Fig. 1

Soil Survey

Five hundred and ninety-nine soil samples were collected, using mattocks, along the grid lines at 200 foot intervals. Where possible the "B" horizon was sampled. Several sample stations were missed due to lack of soil and the presence of boulder talus. At higher altitudes a mixture of volcanic ash and soil often had to be sampled. All samples were analysed for copper, molybdenum, lead, zinc and silver by the Barringer Research Ltd. laboratory in Whitehorse.

Maps 3, 4, 5, 6 and 7 show contoured results of the analysis. Map 8 is a composite of the anomalous areas for each metal except silver. Threshold values for copper, molybdenum, lead, zinc and silver have been determined from earlier surveys in the Mount Nansen area. Threshold values are as follows:

Cu	70 p.p.m.
Mo	7 p.p.m.
Pb	50 p.p.m.
Zn	164 p.p.m.
Ag	0.5 p.p.m.

The contoured results and composite outline three anomalous zones. Anomaly 1 (see Map 8) is located slightly north of base line 288N and stretches from 320W to 352W. It is a two-part, linear, northeasterly-striking Pb-Zn-Ag anomaly. High values for Pb, Zn and Ag are 185, 680 and 1.4 p.p.m. respectively. The configuration of this anomaly indicates it is caused by a significant Pb-Zn-Ag vein or vein system. The vein or system may be zoned with high silver values bordered on each side by Pb and Zn. Other Pb-Zn veins in the Nansen area carry Au values.

Anomaly 2 (see Map 8) is a large, irregular Cu, Mo, Pb, Zn and Ag zone. It lies between the two base lines and stretches from 332W to 360W. Copper values are spotty but the Mo anomaly, although relatively narrow, is continuous over some 3,500 feet. Cu and Mo anomalies are rimmed by a semi-circle of high Pb, Zn and Ag values. At least three Pb-Ag veins are indicated by continuous linear highs at the border of Anomaly 2.

Anomaly 3 is located south of base line 248N. It is a narrow Cu, Mo, Pb, Zn, Ag anomaly that stretches for 2,000 feet along lines 328W and 324W. Again, this anomaly is zoned. High Cu, Mo, Pb, Zn and Ag values are rimmed on the east by anomalous Pb, Zn and Ag soils.

Anomalies 2 and 3 may be caused by one uplifted and offset mineralized zone. This postulation fits with the geology. The area of Anomaly 3 is covered by overburden, however, float rock type corresponds with the rock type found near Anomaly 2. A mild left lateral offset along the Rusk Creek fault and block uplift of Anomaly 2 is one possible mechanism for producing the juxtaposed anomalous zones and rock types. Contoured values for copper and molybdenum strongly suggest a fault displacement. Pb-Zn-Ag veining

appears to be synchronous with or post faulting. Many of the postulated vein zones trend NE-SW parallelling lineaments.

GEOLOGY

For a complete description of the regional geology of the Mount Nansen district, the reader is referred to a report compiled by R.A. Dickinson and P.F. Lewis for the 1971 Mount Nansen project. The report is titled "Geology, Geochemistry and Drilling, 1971."

True outcrop in the Rusk Creek area is scarce. All slopes are covered by boulder talus while low-lying areas are moss and buck brush-covered. A 1" = 400' geologic map has been prepared from float and talus mapping, and included in this report.

Rock Types

The predominant rock type of the Rusk Creek area is an aphanitic, medium-grey, well-jointed dacite. This rock type occurs between two major northeast-trending faults. The southernmost fault parallels Rusk Creek while the northern fault roughly parallels Line 288N. Most of the mineralization that is described in a later section is found in dacite between these two major lineaments.

South of the Rusk Creek fault, volcanic rock of dacitic composition is overlain by an approximately 400-700 foot thick pile of cream-coloured, tuffaceous rhyolite. The rhyolite is often banded, locally porphyritic and hematite stained.

The rhyolite in turn is overlain by porphyritic andesite. North of the fault that parallels Line 288N, rock type is also porphyritic andesite. The andesite is made up of subhedral plagioclase phenocrysts set in a greenish-grey microcrystalline matrix.

The volcanics are intruded by three main rock types. A large body of medium-grained, grey-green quartz diorite is located east of the Rusk zone. The quartz diorite is possibly an early phase of a northwest-trending granodioritic batholith found east of the map sheet.

Intrusive into the dacite is a small hypabyssal sill or plug-like body of silicified quartz-feldspar porphyry. Its surface extent is not determinable because of overlying dacite talus. The porphyry body is most likely represented by the topographic dome centred at 268N, 332W. The dome plunges into the ridge of dacite.

Biotite-feldspar porphyry float was located locally across the east-facing dacite talus slope. This rock type is of rhyodacitic composition and is distinguished by euhedral phenocrysts of biotite and feldspar set in a grey microcrystalline matrix. The biotite-feldspar porphyry float may represent narrow dykes cutting the dacite. This rock type is found only in the mineralized zone.

Mineralization

Mineralization consisting of molybdenite with minor amounts of chalcopyrite, hematite and pyrrhotite occurs in the dacite over a 3,500 foot zone near the contact with the silicified quartz-feldspar porphyry body. This mineralized zone coincides with geochemical Anomaly 2 and is located on the east-facing slope between the Rusk Creek and 288N faults. Mineralization is first found 400 feet below the crest of the ridge and occurs in boulder talus to the base of the slope.

Molybdenite, occurring as extremely fine disseminations and along fracture planes in biotite altered dacite, is the predominant mineralization. Traces of disseminated chalcopyrite are associated with the molybdenite. Concentrations of molybdenite accompany sugary quartz as joint and fracture fillings. Molybdenite also commonly occurs within the biotite-feldspar porphyry rock unit.

Minor chalcopyrite and pyrite were found in the quartz-feldspar porphyry.

The spatial relationship of this mineralization to the quartz-feldspar porphyry exposure suggests a hydrothermal-contact genesis, the mineralizing fluids coming from the final volatile stages of the porphyry intrusive. Grade of mineralization often increases towards the contact in other deposits of this nature.

Alteration

Euhedral biotite phenocrysts occur in dacite throughout the mineralized zone. Biotite to a lesser extent accompanies quartz-molybdenite fracture and joint fillings. Biotite is likely secondary. Potassium feldspar is often associated with biotite rock alteration in many other deposits. However, potassium feldspar was not recognized in the Rusk Creek area.

Unlike other parts of the Mount Nansen property, sulphides have not been leached due to the resistant nature of the volcanic flows.

Structure

Two prominent lineament directions are common in the Rusk Creek area. These directions are NE and NNW. Two strong parallel northeast lineaments cut the Rusk Creek grid. One parallels base line 288N while the other coincides with Rusk Creek. The lineaments are probably normal near vertical faults responsible for the uplift of a central dacite block and mineralized zone. This central block may have been offset some 1,500 feet to the west and uplifted 500-700 feet.

A NNW-trending lineament appears to have faulted off a thick pile of rhyolitic tuff outcropping south of base line 248N.

The Mount Nansen volcanics are well jointed, especially in the molybdenite mineralized area. Joint planes commonly trend NNW and NE with variable dips.

These two lineament directions are important for the localization of dykes and veins throughout the Mount Nansen area and are probably synchronous with or post main stage porphyry intrusion. In the Rusk Creek area linear Pb-Ag soil anomalies probably resulting from vein systems trend NE.

Geological Synthesis

Dacite is probably the oldest rock type that crops out in the Rusk Creek area. Dacite is overlain by tuffaceous rhyolite which in turn is capped by porphyritic andesite. The basic volcanic rocks have been called the Mount Nansen Group and restricted to Upper Triassic-Lower Cretaceous by Bostock (1936). Rhyolite has been placed in the Tertiary by Bostock (1936) and Cairnes (1915). The interbedding of these rock types in the Rusk Creek area indicates Mount Nansen volcanism may have extended into Tertiary time.

The Mount Nansen Group is intruded by quartz diorite. The quartz diorite is spatially related to a granodiorite batholith that crops out east of Rusk Creek and is probably an early phase of this batholithic intrusion.

Quartz-feldspar porphyry intrudes all other rock types in the Mount Nansen region. Feldspar porphyry is dated as Tertiary by both Cairnes (1915) and Bostock (1936). A small siliceous porphyry body intrudes the dacite rock type in the Rusk Creek area. Biotite-feldspar porphyry float found across the mineralized zone at Rusk Creek may be from narrow dykes cutting the volcanics and related to the quartz-feldspar porphyry period of intrusion.

Chalcopyrite and molybdenite mineralization occurs in dacite near the small exposure of quartz-feldspar porphyry. Molybdenite was also found within float samples of biotite-feldspar porphyry. Pyrite and minor chalcopyrite occur within the quartz-feldspar porphyry rock type. The copper-molybdenum mineralization's spatial relationship with the porphyry body suggests the mineralization is genetically related to it and is of the contact type. Pb-Ag mineralization indicated by geochemical data is possibly later than chalcopyrite-molybdenite deposition and zoned around a Cu-Mo core. Mineralizing fluids also contained silica, potassium and probably magnesium producing the biotite-quartz rock alteration in the molybdenite zone.

Geological and geochemical data suggest the mineralized zone is offset and uplifted by NE-trending block faults. Lead-silver-zinc mineral deposition may have been synchronous with the early stages of faulting. Several linear Pb-Ag geochemical anomalies follow NE trends.

CONCLUSION AND RECOMMENDATIONS

The molybdenite mineralized zone, located between base line 288N and the Rusk Creek fault is worthy of further exploration. Although representative, mineralized rock samples assayed only 0.007, 0.006 and 0.003% Mo across this zone, mineralizing fluids circulating in the Rusk Creek area must have been extensive to produce such a broad and zonally mineralized region.

Finely disseminated molybdenite in dacite, quartz molybdenite fracture fillings, biotite rock alteration and Pb-Ag veining all indicate a hydrothermal origin for the porphyry-type disseminated mineralization. An underlying Tertiary intrusive body contacting with the dacitic pile in this anomalous area is indicated. Molybdenite bearing, biotite-feldspar porphyry float found only in the mineralized zone probably represents dykes cutting the volcanics as apophysis for an underlying porphyry body. In addition, a small exposure of pyrite-mineralized quartz-feldspar porphyry crops out at the northeastern edge of the zone.

Grade of mineralization often increases towards the contact in this type of deposit and mineralization could be expected to extend into a porphyry body itself. Mineral zoning, with molybdenite rimming a central chalcopyrite zone is a common feature of many porphyry orebodies. Perhaps copper grades would increase significantly towards the porphyry contact. These suppositions are schematically depicted in Figure 2.

A frequency-domain Induced Polarization survey is recommended for the Rusk area as the next step of exploration. The Rusk Creek grid is tied into the Mount Nansen grid to the east. An I.P. survey in the Rusk Creek area would also cover a large gap left in the 1971 I.P. survey. Problems may arise in getting good contacts on many of the boulder talus slopes near Rusk Creek. Should the survey indicate increasing mineralization with depth, diamond drilling should be undertaken.

In the event that poor contacts completely nullify the I.P. survey, a diamond drill hole should be drilled in the Rusk Creek area in conjunction with further drilling at the north end of the Mount Nansen property. A suggested collar for a diamond drill hole is at 260N, 342W. It should be a long inclined hole drilling into the ridge, thereby testing the geological section and the possible improvement of copper-molybdenum grades. Ideally, the drill should be moved in the early part of the summer while the ground is still frozen and drilling should be undertaken in August when water is abundant at higher altitudes.

A tent camp is required for any further work programs in the Rusk Creek area.

South

North

X

Y

RUSK CREEK FAULT

PORPHYRITIC ANDESITE

D

RHYOLITE, TUFF

H

LEAD - ZINC SULPHIDES

MOLYBDENITE

BIOTITE ALTERED DACITE

MOLYBDENITE

SULPHIDES ?

COPPER

LEAD - ZINC SULPHIDES

MOLYBDENITE

D

D

QUARTZ - FELDSPAR PORPHYRY

L

QUARTZ - DIORITE

G'

DACITE

4500

4100

3700

Pb - Ag Vein

Pb - Ag Vein

PORPHYRITIC ANDESITE

D

QUARTZ DIORITE

G'

G'

AREA EXPLORATION COMPANY

SCHEMATIC X - SECTION

Rusk Creek Zone

HORIZONTAL SCALE = VERTICAL SCALE: 1" = 400'

October, 1972 R. Dickinson

Fig. 2

2. SILT SAMPLING, EAST OF MOUNT NANSEN PROPERTY

Seven silt samples, D101-D - D107-D, were collected from a tributary of Victoria Creek, approximately 3 miles east of the Mount Nansen claim block and opposite to Back Creek.

The samples were analysed by Barringer Research for copper, molybdenum, lead and silver. Results are listed below:-

Sample	Cu	Mo	Pb	Ag
D101-D	3 p.p.m.	2 p.p.m.	4 p.p.m.	.1 p.p.m.
D102-D	8	2	10	.1
D103-D	12	2	7	.1
D104-D	9	2	5	.1
D105-D	6	2	6	.1
D106-D	2	2	3	.1
D107-D	5	2	4	.1

In the Mount Nansen area, threshold values for copper, molybdenum, lead and silver in silts are in the order of 30 p.p.m., 7.5 p.p.m., 25 p.p.m., and 0.5 p.p.m. respectively. The sampled area is not anomalous and further interest does not appear warranted.

Geologically, the area consists of dykes and small sills of Tertiary quartz-feldspar porphyry which have intruded granodiorite, and Yukon Group metamorphics. Only rock float was examined, as outcrop in this area is nil.

3. SOIL SAMPLING, WEBBER CREEK AREA

Forty-five soil samples were collected during the 1972 field season over a grid located 3,000 feet NNE of Mount Nansen Mines Ltd. mill and camp complex. The flagged grid lies over a silicified quartz-feldspar porphyry dome, intrusive into Yukon Group metamorphics. Similar geological structures are associated with disseminated copper-molybdenum mineralization at the north end of the Mount Nansen property. The Webber, Huestis and Brown McDade Pb-Ag vein systems zonally surround this southern dome. Although claims covering the Webber grid are not included within the original Mount Nansen Mines Ltd. option agreement, this area was tested in an effort to locate worthy targets for assessment diamond drilling.

The location of the Webber grid is shown in the diagram overleaf. Samples were collected at 400 foot intervals. All samples were run for total copper and molybdenum by the Barringer Research Ltd. laboratory in Whitehorse. Threshold values for copper and molybdenum in the Mount Nansen area are 70 and 7 p.p.m. respectively.

The soils collected were not anomalous in either copper or molybdenum. Further exploration over the Webber grid is not warranted.

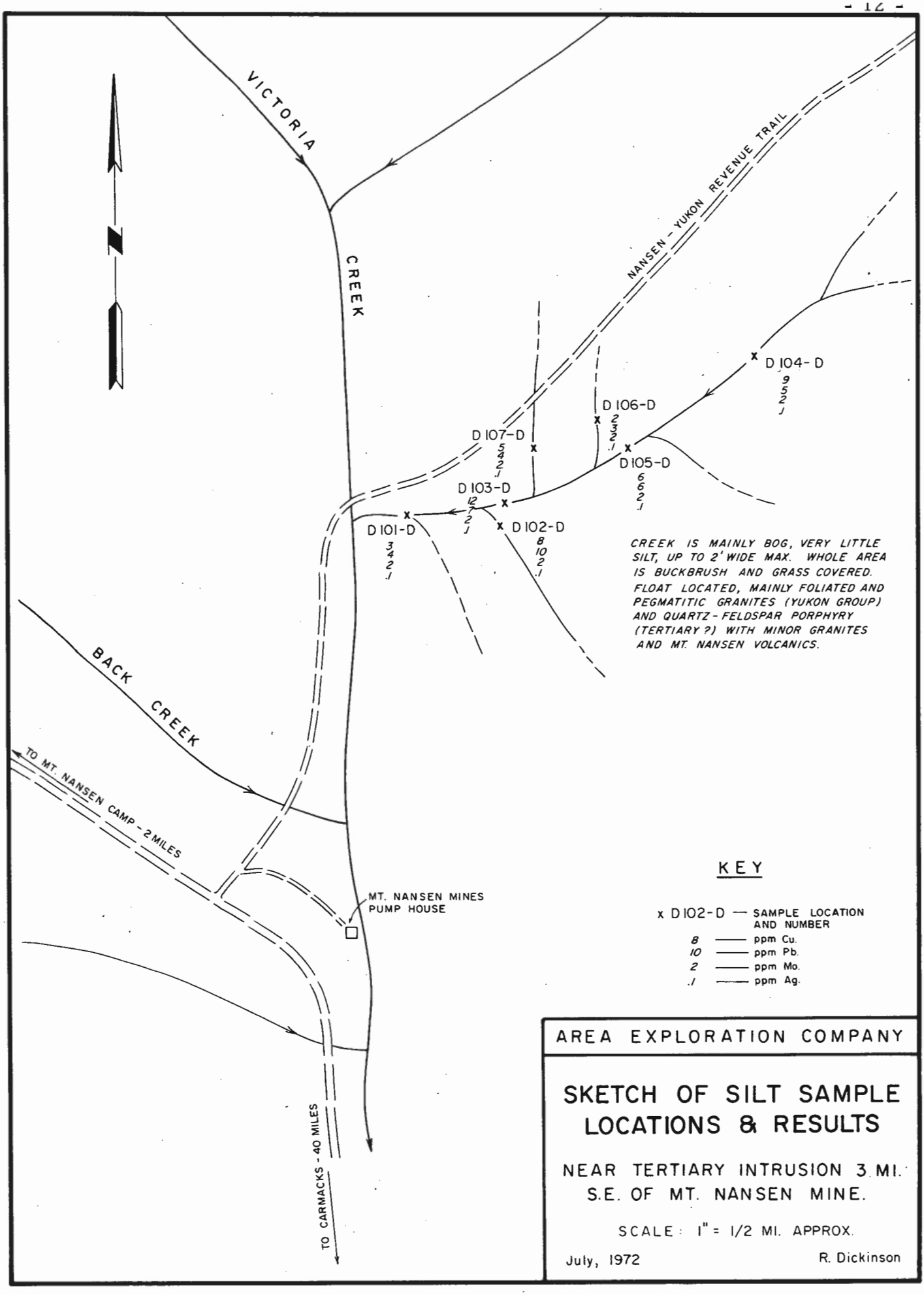

VICTORIA
CREEK
NANSEN - YUKON REVENUE TRAIL
D 104- D
9
5
2
1
D 106-D
2
3
2
1
D 107-D
5
4
2
1
D 105-D
6
6
2
1
D 103-D
12
2
2
1
D 101-D
3
4
2
1
D 102-D
8
10
2
1
CREEK IS MAINLY BOG, VERY LITTLE SILT, UP TO 2' WIDE MAX. WHOLE AREA IS BUCKBRUSH AND GRASS COVERED.
FLOAT LOCATED, MAINLY FOLIATED AND PEGMATITIC GRANITES (YUKON GROUP) AND QUARTZ - FELDSPAR PORPHYRY (TERTIARY ?) WITH MINOR GRANITES AND MT. NANSEN VOLCANICS.
BACK CREEK
TO MT. NANSEN CAMP - 2 MILES
MT. NANSEN MINES PUMP HOUSE
TO CARMACKS - 40 MILES
KEY
x D102-D — SAMPLE LOCATION AND NUMBER
8 — ppm Cu.
10 — ppm Pb.
2 — ppm Mo.
.1 — ppm Ag.
AREA EXPLORATION COMPANY
SKETCH OF SILT SAMPLE LOCATIONS & RESULTS
NEAR TERTIARY INTRUSION 3 MI. S.E. OF MT. NANSEN MINE.
SCALE: 1" = 1/2 MI. APPROX.
July, 1972
R. Dickinson

Fig. 3

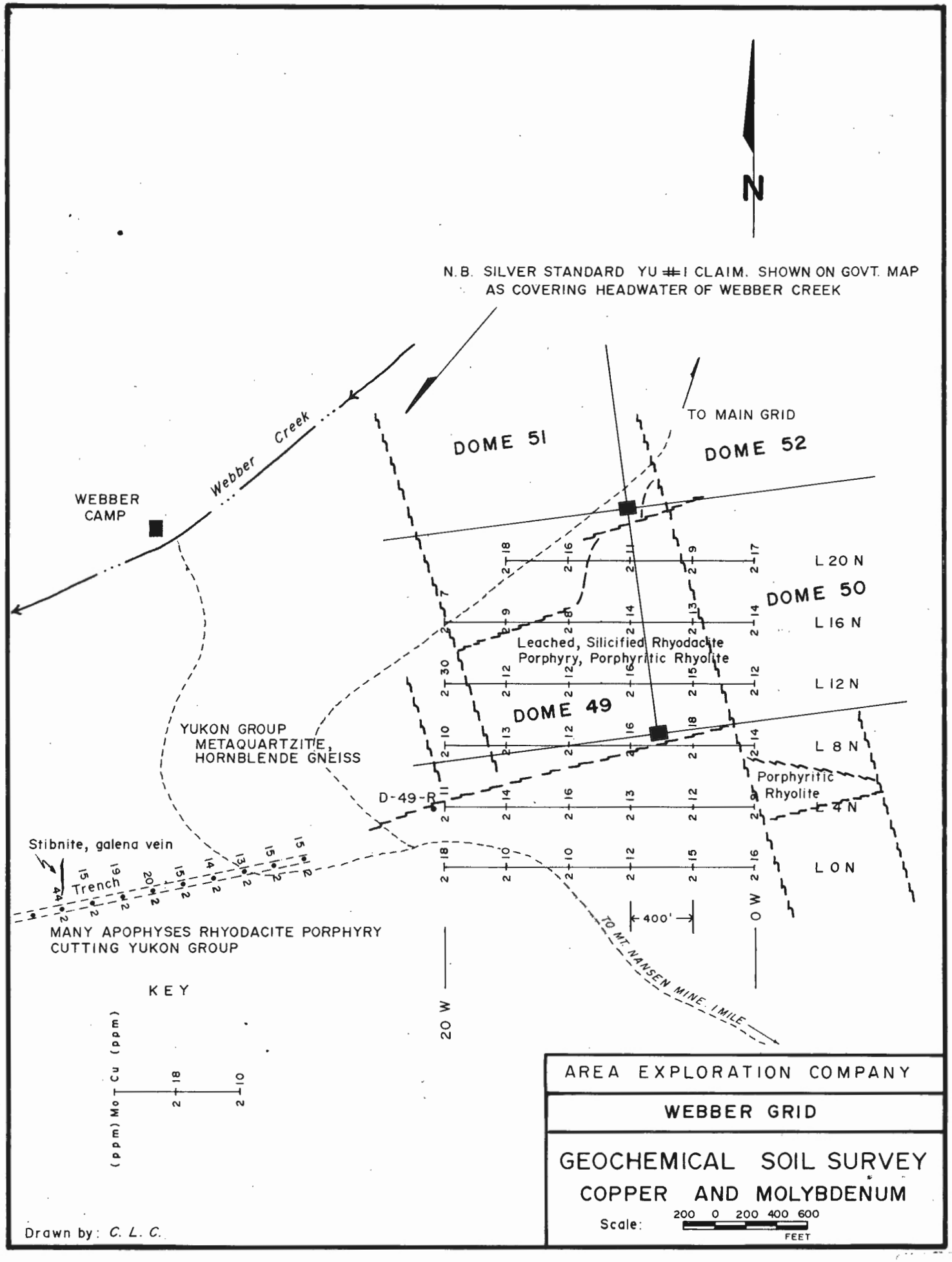

N
N.B. SILVER STANDARD YU #1 CLAIM. SHOWN ON GOVT. MAP AS COVERING HEADWATER OF WEBBER CREEK
TO MAIN GRID
DOME 51
DOME 52
DOME 50
DOME 49
Webber Creek
WEBBER CAMP
L 20 N
L 16 N
L 12 N
L 8 N
L 4 N
L 0 N
Leached, Silicified Rhyodacite Porphyry, Porphyritic Rhyolite
YUKON GROUP METAQUARTZITE, HORNBLENDE GNEISS
Porphyritic Rhyolite
D-49-R
Stibnite, galena vein
Trench
MANY APOPHYSES RHYODACITE PORPHYRY CUTTING YUKON GROUP
400'
TO MT. NANSEN MINE, 1 MILE
20 W
0 W
KEY
(ppm) Mo
Cu (ppm)
AREA EXPLORATION COMPANY
WEBBER GRID
GEOCHEMICAL SOIL SURVEY
COPPER AND MOLYBDENUM
Scale: 200 0 200 400 600 FEET
Drawn by: C. L. C.

Fig. 4

4. CLAIM STAKING, 1972

The following is a list of claims staked by Area Exploration Company during the 1972 field season:-

1) Claims staked within the original Mount Nansen Mines claim block.

Claim	Grant #	Sheet	Staker	Date Staked	Expiry Date
GS 1 FR	Y 66675	115-I-3	J. G. Simpson	June 11, 1972	June 19, 1973
2 FR	Y 66676	"	"	"	"
3	Y 66677	"	"	"	"
4	Y 66678	"	"	"	"
5 FR	Y 66679	"	"	"	"
6 FR	Y 66680	"	"	"	"
7 FR	Y 66681	"	"	"	"
8 FR	Y 66682	"	"	"	"
9 FR	Y 66771	"	J.B.P. Sawyer	June 22, 1972	July 10, 1973
10 FR	Y 66772	"	"	"	"
11 FR	Y 66773	"	"	"	"
12 FR	Y 66774	"	"	"	"
13 FR	Y 66775	"	"	"	"
14 FR	Y 66776	"	"	"	"
15 FR	Y 66777	"	"	"	"
16 FR	Y 66778	"	"	"	"

2) Claims staked to extend the Mount Nansen claim block to the west.

Claim	Grant No.	Sheet	Staker	Date Staked	Expiry Date
Rusk 1	Y 66939	115-I-3	G. Asma	Aug. 5, 1972	Aug. 16, 1973
2	Y 66947	"	K. Burvill	"	"
3	Y 66948	"	"	"	"
4	Y 66949	"	"	"	"
5	Y 66950	"	"	"	"
6	Y 66951	"	"	"	"
7	Y 66952	"	"	"	"
8	Y 66953	"	"	"	"
9	Y 66955	"	A. Skookum	"	"
10	Y 66956	"	"	"	"

Claim	Grant No.	Sheet	Staker	Date Staked	Expiry Date
Rusk 11	Y 66957	115-I-3	A. Skookum	Aug. 5, 1972	Aug, 16, 1973
12	Y 66958	"	"	"	"
13	Y 66959	"	"	"	"
14	Y 66960	"	"	"	"
15	Y 66961	"	"	"	"
16	Y 66962	"	"	"	"
17	Y 66954	"	K. Burvill	"	"
18	Y 66963	"	R. Dickinson	"	"
19	Y 66964	"	"	"	"
20	Y 66965	"	"	"	"
21	Y 66966	"	"	"	"
22	Y 66967	"	"	"	"
23	Y 66968	"	"	"	"
24	Y 66969	"	"	"	"
25	Y 66970	"	"	"	"
26	Y 66940	"	G. Asma	"	"
27	Y 66941	"	"	"	"
28	Y 66942	"	"	"	"
29	Y 66943	"	"	"	"
30	Y 66944	"	"	"	"
31	Y 66945	"	"	"	"
32	Y 66946	"	"	"	"
33	Y 66971	"	E. Caron	"	"
34	Y 66972	"	"	"	"
35	Y 66973	"	"	"	"
36	Y 66974	"	"	"	"
37	Y 66975	"	"	"	"
38	Y 66976	"	"	"	"
39	Y 66977	"	"	"	"

A revised plot of all claims in the Nansen Creek area at present held by Area Exploration Company is shown on Map 9 at the rear of this report.

KEY

TERTIARY	M	BRECCIA OF UNIT 'L' WITH HIGHLY SILICIC MATRIX, STRONGLY SILICIFIED UNIT 'L'
	L	RHYODACITIC SUBVOLCANIC - VOLCANIC PORPHYRY WITH QTZ, 2 FELDSPAR, HORNBLENDE AND BIOTITE PHENOCRYSTS WHEN FRESH - ALSO ALTERED VARIETIES OF SAME AND OF UNIT 'G' (PHYLLIC AND ARGILLIC ALTERATION)
	K	HORNBLENDE PORPHYRY, POSSIBLY ALKALINE ?
	J	PORPHYRITIC ADAMELLITE, PHENOCRYSTS OF ORTHOCLASE UP TO 2 INCHES
	H	RHYOLITE
MESOZOIC	G	GRANODIORITE TO ADAMELLITE, EQUIGRANULAR, OFTEN GRADATIONAL INTO UNIT 'L'
	G'	QTZ MICRODIORITE, PROABLY A MARGINAL FACIES OF UNIT 'G'
	F	DIORITE, EQUIGRANULAR, PROBABLY A SILL
	E	ANDESITIC SUBVOLCANIC PORPHYRY, PHENOCRYSTS OF HORNBLENDE AND ANDESINE
	D	PORPHYRITIC VOLCANICS, DACITIC TO BASALTIC, DOMINANTLY ANDESITIC
	C	AGGLOMERATES, AND CONGLOMERATES OF UNIT 'D' AND MINOR UNIT 'A' WITH ANDESITIC MATRIX
PALAEOZOIC AND/OR PRECAMBRIAN	B	DIORITE, LINEATED OR OCCASIONALLY FOLIATED IN AMPHIBOLE
	A	METAMORPHIC AND MIGMATITIC ROCKS —— YUKON GROUP

MOUNT NANSEN GROUP

- OUTCROP
- FELSENMEER
- FLOAT ROCK TYPE
- TRENCH ROCK TYPE
- LITHOLOGIC BOUNDARY
- AIR PHOTO LINEAMENT
- Pb – Zn – Ag VEIN
- SPECIMEN LOCALITY (D-66)
- X–Y — LINE OF SECTION
- JOINTING
- SCHISTOSITY, GNEISSIC BANDING
- BEDDING, IGNEOUS CONTACT
- FISSILITY DUE TO SHEARING
- DRILL HOLE LOCATION (CP-1)
- DIRT ROAD
- FAULT, INTERPRETED FROM AIR PHOTOS

SLATE CREEK

DISCOVERY CREEK

RUSK CREEK

NANSEN CREEK

Claim Boundary

BASELINE 308 N

BASELINE 288 N

BASELINE 248 N

BASELINE 228 N

LIMONITE ENCRUSTED QUARTZ VEIN FLOAT

CHALCOPYRITE

CAMP

Highly Silicified, Locally Porphyritic, Quartz Latite – Rhyodacite

Biotite-Plag. Rhyodacite Porphyry Float along Slope Probably a Series of Dykes Cutting Volcs

Bedded Tuffaceous, Cream Rhyolite

Agglomerate

fissile porphyritic andesite

QUARTZ - ALTERED GRANITE

MOLYBDENITE

D-116-R Wo₃ - 01% Mo - 003%

D-117-R Wo₃ - 04% Mo - 005%

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT
RUSK CREEK
GEOLOGY

Scale: 1" = 400'

Compiled: R A Dickinson

Date: September 1972

Map 1

inches
0 1 2
0 1 2 3 4 5
centimetres

YUKON GEOLOGICAL SURVEY

This reference scale bar has been added to the original image. It will therefore reflect any ratio as the image, therefore, it can be used as a reference for the original size.

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT

GEOCHEMICAL SILT SURVEY

COPPER, MOLYBDENUM, LEAD, SILVER

1 in = 1000 ft

JANUARY, 1972

Map 2

KEY:

BOUNDARY OF ANOMALOUS CATCHMENT AREAS

STREAM WITH SAMPLE LOCATION, NUMBER OF SAMPLE, AND METAL VALUES, IN P.P.M., IN THE ORDER:

104
11
10
3
0.2

Cu
Pb
Mo
Ag

SLATE CREEK

RUSK CREEK

DISCOVERY CREEK

NANSEN CREEK

KEY

>400	
200 - 400	
100 - 200	

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT

RUSK CREEK

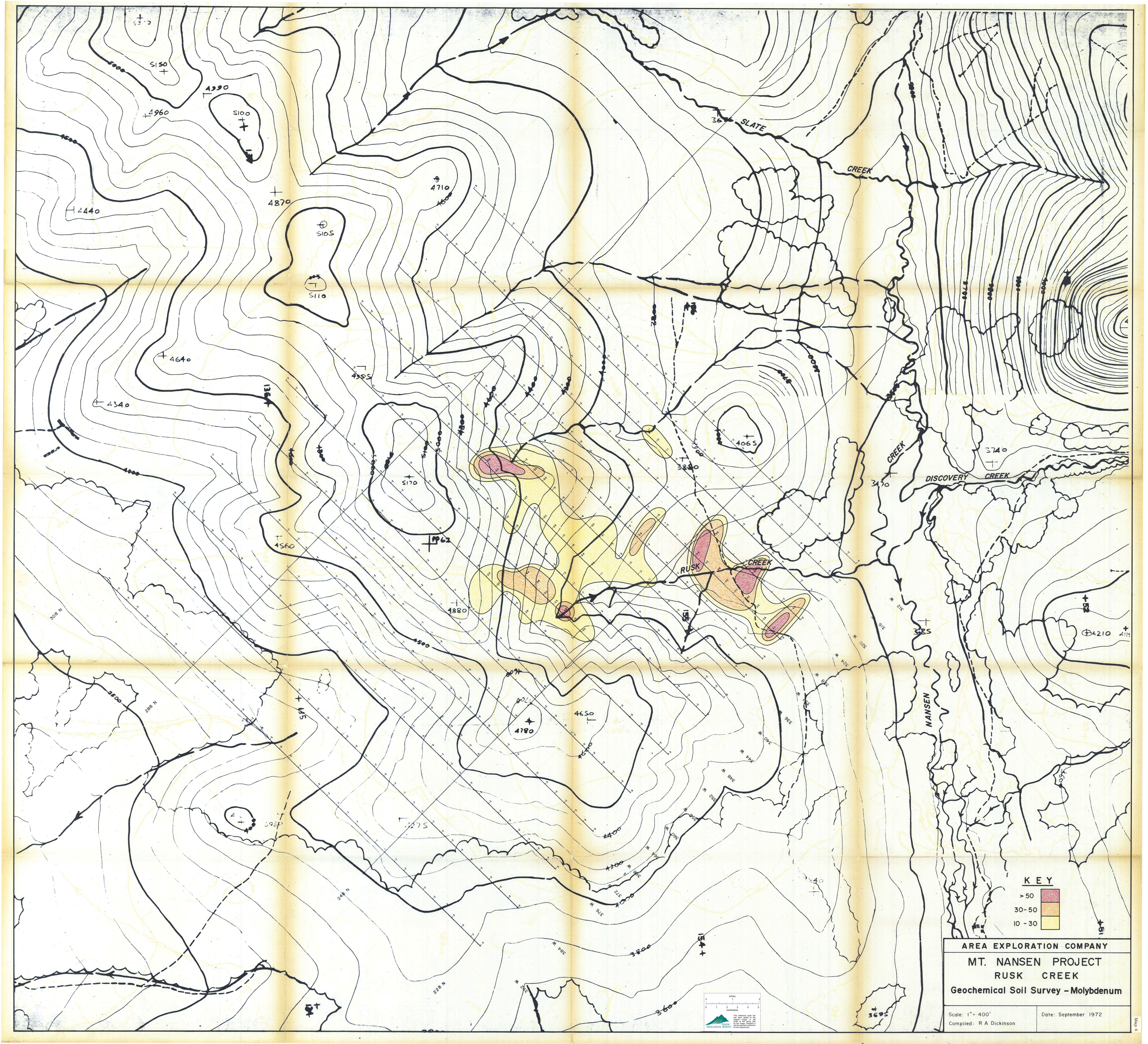
Geochemical Soil Survey – Copper

Scale: 1"= 400'

Compiled: R. A. Dickinson

Date: September 1972

Map 3


SLATE
CREEK
DISCOVERY
CREEK
RUSK
CREEK
NANSEN
CREEK
5150
4990
4960
5100
4710
4870
4440
5105
5110
4640
4555
4340
5170
4560
4880
4065
3890
3740
3470
4210
4650
4780
KEY
>50
30-50
10 - 30
AREA EXPLORATION COMPANY
MT. NANSEN PROJECT
RUSK CREEK
Geochemical Soil Survey - Molybdenum
Scale: 1" = 400'
Compiled: R. A. Dickinson
Date: September 1972
Map 4

SLATE CREEK

DISCOVERY CREEK

CREEK

RUSK CREEK

NANSEN

KEY

> 300	
250 - 300	
200 - 251	
150 - 200	
100 - 150	
50 - 100	

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT

RUSK CREEK

Geochemical Soil Survey – Lead

Scale: 1" = 400'

Compiled: R.A. Dickinson

Date: September 1972

Map 5

SLATE CREEK

RUSK CREEK

NANSEN CREEK

DISCOVERY CREEK

KEY

> 400	
301 - 400	
201 - 300	
100 - 200	

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT

RUSK CREEK

Geochemical Soil Survey - Zinc

Scale: 1" = 400'

Compiled: R. A. Dickinson

Date: September 1972

Map 6

SLATE CREEK

RUSK CREEK

DISCOVERY CREEK

NANSEN CREEK

5150 4990 4960 5100 4710 4870 4440 5105 5110 4640 4555 4340 5170 4062 4560 4880 4590 4650 4180 4275 4065 3840 3740 3470 3585 4210 4115 3695 3980

KEY

> 3·0	
1·0 - 3·0	
0·5 - 0·9	

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT

RUSK CREEK

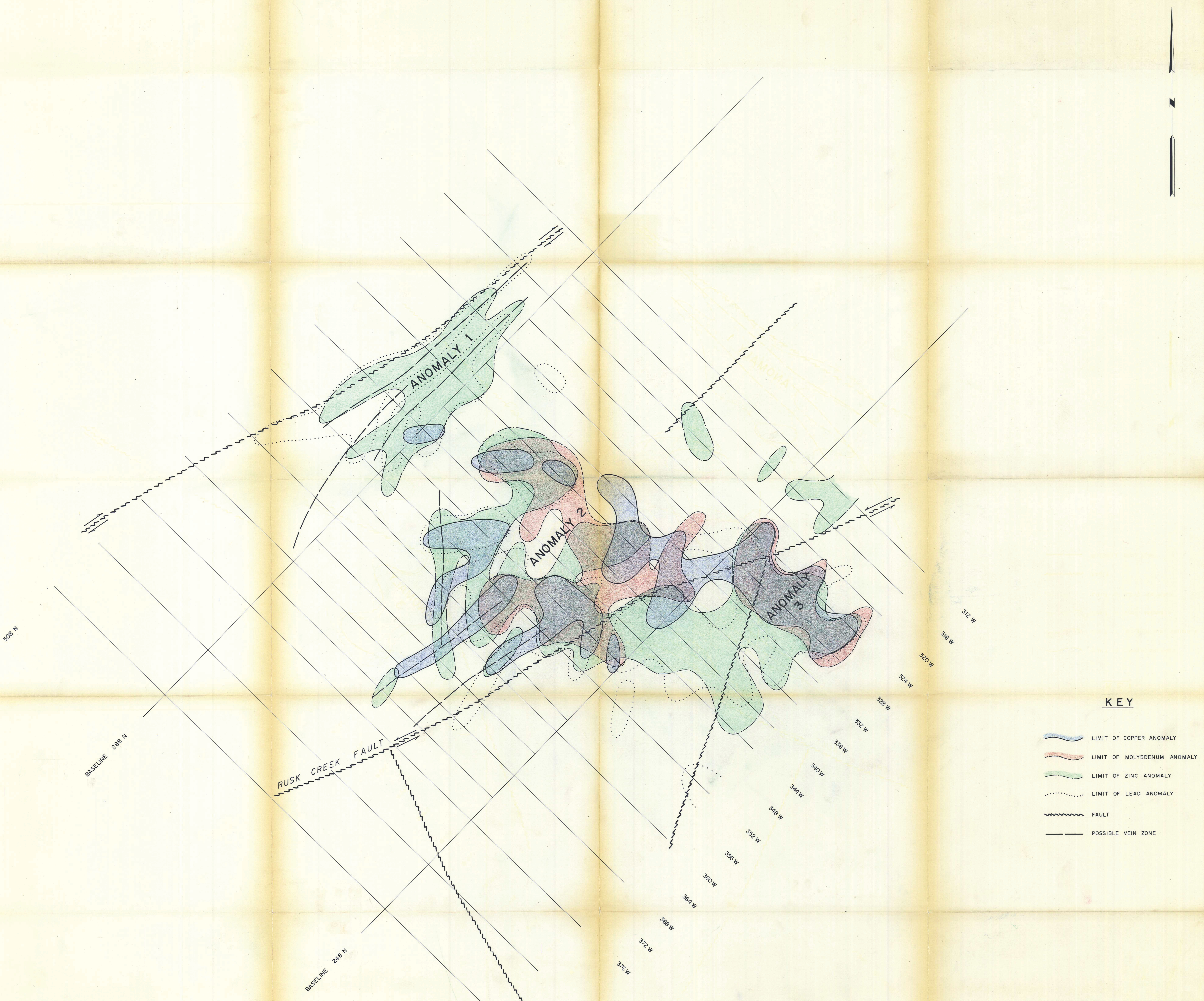
Geochemical Soil Survey – Silver

Scale: 1" = 400'

Compiled: R A. Dickinson

Date: September 1972

Map 7



AREA EXPLORATION COMPANY

MT. NANSEN PROJECT
RUSK CREEK
Geochemical Soil Survey – Composite

Scale: 1" = 400'
Compiled: R. A. Dickinson
Date: September 1972

inches 0 1 2
0 1 2 3 4 5 centimetres
YUKON GEOLOGICAL SURVEY
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Map 8

KEY

OUTLINE OF CLAIMS STAKED BY AREA AND OPTIONED BY AREA FROM MT. NANSEN MINES LTD.

----- SILVER STANDARD CLAIM AND OTHERS

TONI WHEELER'S CLAIMS (OPTIONED)

MOUNT NANSEN CLAIMS NOT UNDER OPTION BY AREA

■ CLAIM POST LOCATED

● CP 1-9 PERCUSSION HOLES 1971
● CD 1-2 DIAMOND DRILL HOLES 1971
● CD 3-14 DIAMOND DRILL HOLES 1972

inches
0 1 2
0 1 2 3 4 5
centimetres

This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

YUKON GEOLOGICAL SURVEY

AREA EXPLORATION COMPANY

MT. NANSEN PROJECT

CLAIM LOCATION PLAN

1000 0 1000 2000 3000 FEET
SCALE 1" = 1000 FEET

COMPILED BY: R. A. DICKINSON

DATE: JULY 30, 1971

Map 9