

GEOLOGICAL REPORT ON CLAIMS KAY 1-12

Location: the south side of the Nass
River, 14 miles southwest
of New Aiyansh, Skeena
Mining Division, B.C.
55°, 129° S.E.

Author: F. Charlton, Terrace, B.C.

Owner of Claims: P. Hughan, Aiyansh,
B.C.

Report Prepared for: Nass River Mines
103 P/3 W Limited

Work done between Apr. 25 - May 30, 1967

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ASSESSMENT WORK INFORMATION

Geological Mapping: April 25th to May 30th, 1967

F. Charlton, Terrace, B.C., geologist
31 days at \$23.00 per day

\$ 713.00

H. Wylie, Aiyansh, B.C. assistant,
175 hours at \$2.20 per hour

385.00

TOTAL COST

\$1,098.00

GEOLOGICAL REPORT ON CLAIMS KAY 1 TO 12

Location: Nass River Area, Skeena Mining Division, B.C.

Owner: P. Hughan, Aiyansh, B.C.
(held under option by Nass River Mines Ltd.)

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Summary and Recommendations

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2: Location of Chip Samples (10 ft. = 1 in.) # 3
3: Location of Chip Samples (10 ft. = 1 in.) # 4
#1 4: Geological Map (100 ft. = 1 in.)

rocks. Occurrences of this type are found scattered throughout an area approximately 500 ft. by 1,000 ft., east of the base-line between 4+00 south and 10+00 south. The chip samples of rock trenches are from this area and include this type of mineralization. A few occurrences of this type were found in the western half of the plug, particularly near hornfels.

Arsenopyrite occurs in the eastern end of the plug. Six grab samples were assayed for gold and contained 0.01 oz./ton or less.

A grab sample of fractured and altered rock from a warm sulphurous spring assayed only a trace of gold.

A 30 element spectrographic analysis of a grey sub-metallic powder found near the sulphurous springs and in quartz veins contained no concentration of metals other than iron.

FAVOURABLE AREAS:

No areas are recommended for further exploration.

FRED CHARLTON.

July 3, 1967.

slate or hornfels with few quartz veins and no molybdenite.

In the mapped area molybdenite occurs as:

- (1) coarse-grained disseminations (rosettes) in granite that is characterized by very small vugs (miarolitic granite).
- (2) in quartz veins, in the granite or, rarely, in the hornfels.
- (3) as fine-grained disseminations in aplite and alaskite dykes.
- (4) as sparse disseminations in granite.
- (5) on fractures in granite or hornfels, usually with quartz.

The molybdenite is rare on fractures or disseminated in granite.

The molybdenite disseminated in aplite and alaskite dykes is of low grade, limited width (less than five feet) and the dykes are usually spaced at least fifty feet apart.

Almost all of the occurrences of molybdenite in quartz veins consist of molybdenite sparsely disseminated in the quartz. Seams and pockets of molybdenite are rare.

The quartz veins are usually irregular, relatively short and widely spaced. Wide, regular quartz veins occur east of the base-line between 10+00 south and 15+00 south. These veins are not well mineralized and are widely spaced. A small quartz vein stockworks occurs in the brecciated and fractured granite near 14+00 south; 27+00 west. Molybdenite is disseminated erratically in the quartz veins.

The coarse-grained disseminations of molybdenite in vuggy granite are of higher grade (grab samples estimated as 1% to 2% MoS₂). No mineralization of this type has been found over a width of more than one foot. On clearly exposed outcrops the vuggy granite can be seen as narrow, poorly defined dykes cutting the other granitic

SUMMARY AND RECOMMENDATIONS:

No further work is recommended.

Chip samples from 77 feet of rock trenches were assayed for MoS_2 and MoO_3 . The best assay was 0.05% MoS_2 over 4 feet. The longest trench, 24 feet, assayed 0.02% MoS_2 (Total molybdenum content expressed as MoS_2 is 0.07% MoS_2 and 0.02% MoS_2 respectively).

Prospecting and geological mapping, on a scale of 100 feet to the inch, did not locate any molybdenite occurrences large enough to be of further interest. Molybdenite is common but most occurrences are of very low grade. Higher grade occurrences, such as those included in the chip samples, are confined to zones less than one foot wide and are widely separated.

The pattern of molybdenite mineralization in the granitic plug is very similar to the pattern of mineralization in the granitic plugs on Valley and Ridge Groups. On Valley and Ridge Groups the concentration of pyrite is related to the concentration of molybdenite and an Induced Polarization Survey was useful. The pyrite in the granitic rocks on Kay Group also appears to be concentrated near the molybdenite occurrences. However, because the molybdenite occurrences exposed in outcrops are erratic and apparently of lower grade than those on Valley and Ridge Groups an I.P. Survey is not recommended.

GEOLOGY: SULPHIDE MINERALIZATION:
OBSERVED MINERALIZATION:

The area of the granitic plug and its contact was prospected and most of this area was mapped on a scale of 100 feet to the inch. The portion of the claims not included on the map were prospected. There are relatively few outcrops. The outcrops are

INTRODUCTION:

Claims Kay 1 to 12 are on the south shore of the Nass River approximately 69 miles north-northwest of Terrace, B.C. These claims are west of and adjacent to the Valley Group claims.

Claims Kay 1 to 12 are held under an option agreement; the original option included claims Kay 1 to 17.

The option on claims Kay 13 to 17 was terminated in 1966. These claims were located on slate with few quartz veins, very little hydrothermal alteration and no sulphide mineralization other than pyrite.

Claims Kay 1 to 12 are located on slate and hornfels intruded by a granitic plug that is approximately 2,200 feet by 4,700 feet. Molybdenite occurrences are found throughout the plug and in the adjacent hornfels.

In 1966 Nass River Mines Ltd. filed assessment work for a period of one year on claims Kay 1 to 12, and recorded seven additional claims (L-1 to L-4, M fractional, N frac. and O frac.) to cover the northern portion of the granite-hornfels contacts and fractions between claims Kay 1 to 12.

In 1967, the following work has been completed:

(1) Cutting and Chaining Lines:

H. Wiley: 71 hrs. at \$2.20/hr.	\$156.20	
D. Ahlstrom 71 hrs. at \$2.20/hr.	<u>156.20</u>	\$312.40

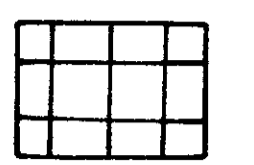
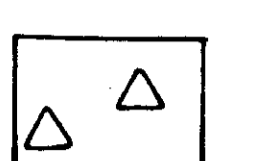
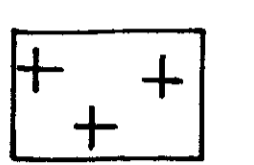
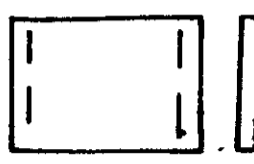
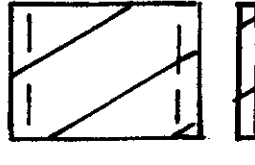
(2) Assays of chip and grab samples: (estimated) 71.00

(3) Geological Mapping:

F. Charlton, geologist		
31 days at \$23.00/day	\$713.00	
H. Wiley, assistant		
175 hrs. at \$2.20/hr.	<u>385.00</u>	<u>1,098.00</u>





Total		<u>\$1,481.20</u>
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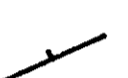
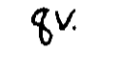
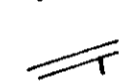
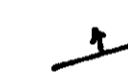





LEGEND

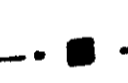






-  Feldspar porphyry and lamprophyre dykes
- Granitic Rocks**
-  Alaskite, usually as dykes
-  Aplite, usually as dykes
-  increasing content of pyrite → Porphyritic Granite
-  Non-porphyritic Granite

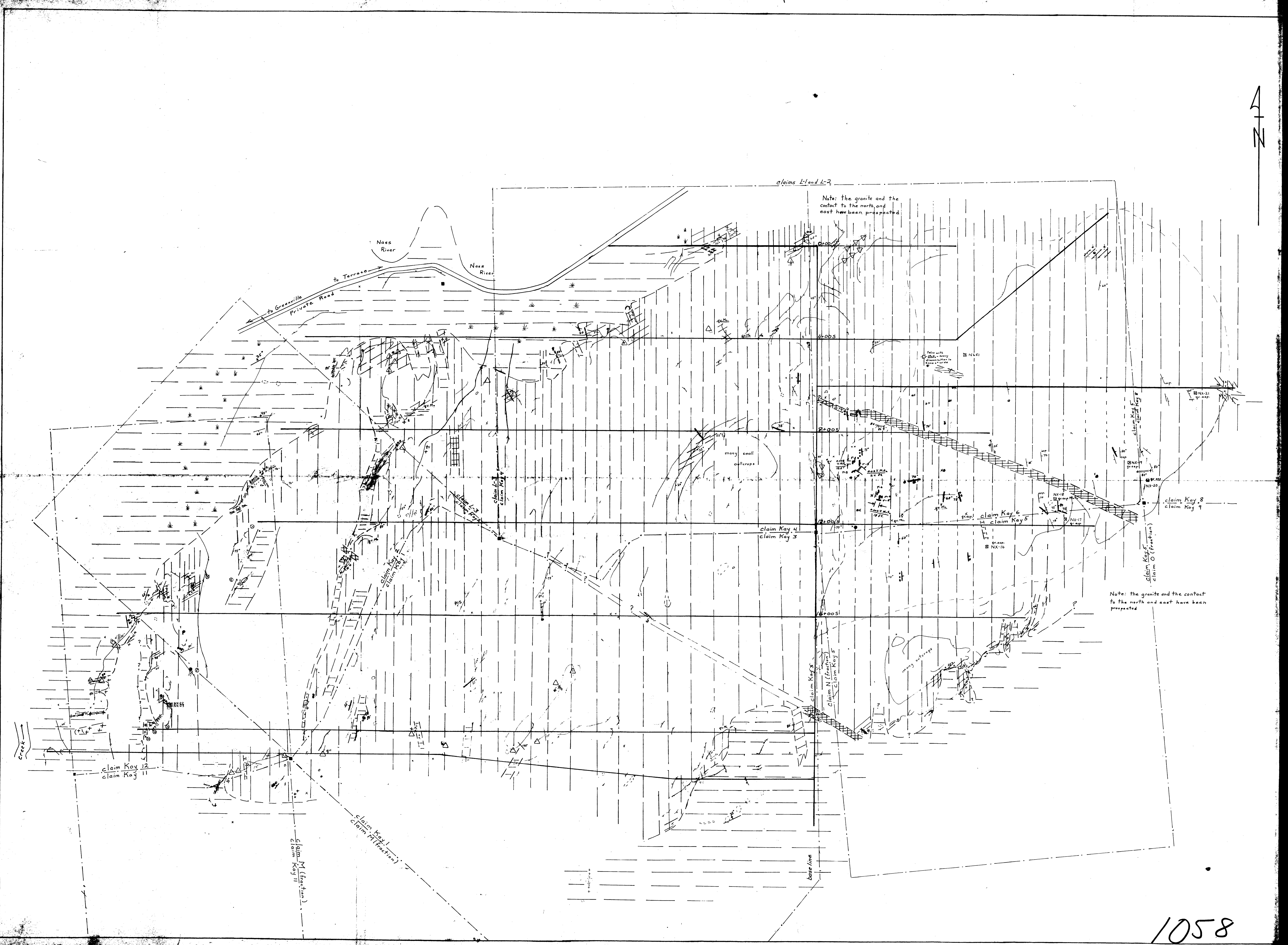
 Hornfels

Molybdenite Mineralization

-  quartz vein stockworks with molybdenite
 -  quartz vein with molybdenite
 -  small quartz veinlets with molybdenite
 -  disseminated molybdenite
- Note: most occurrences contain only traces of molybdenite

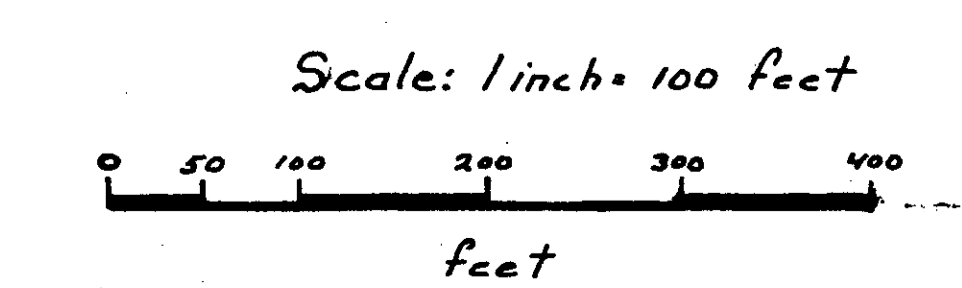
-  quartz vein
-  small quartz veinlets
-  small quartz veinlets with arsenopyrite
-  dyke
-  bedding in hornfels
-  geological contact
-  fracture zone
-  warm, sulphurous springs and seeps
-  bleached and altered granite near sulphurous springs

-  claim boundary, claim part cut and chained lines (not all lines are shown on the map)
-  rock trench
-  sample location
-  creek
-  swamp
-  rock outcrop, outcrop cliff
-  large hill east of the baseline (only the largest outcrops are mapped in this area)



Geological Map of part of
Claims Kay 1 to 12
Skeena Mining Division, B.C.
Nass River Mines Ltd.,

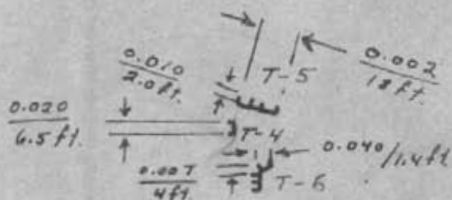
to accompany a geological report by F. Charlton on
claims Kay 1 to 12, located on the south shore of the
Nass River, 12 miles southwest of Hazelton, Skeena MD, B.C.



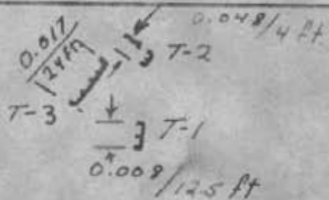
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line 8+005



line 10+005



line 12+005

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WAB

9. M.S.
sample width

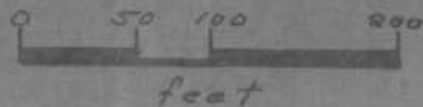
baseline

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Kay Group

location of trenches no.
1 to 6

Scale: 100 ft. = 1 in.



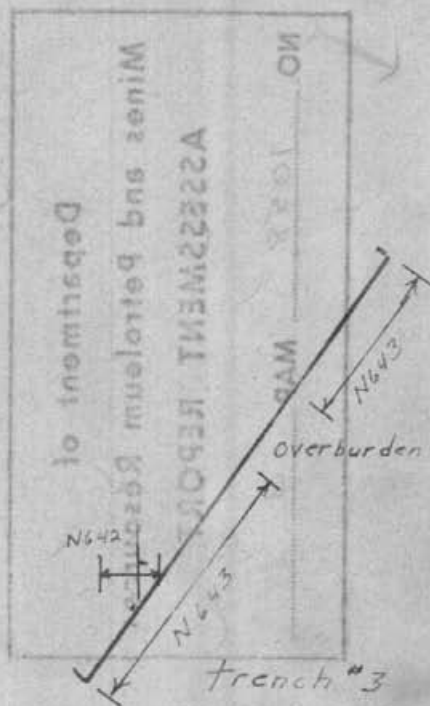
R. Charlton figure 1

May 23/67

line 10+00S

1+80E

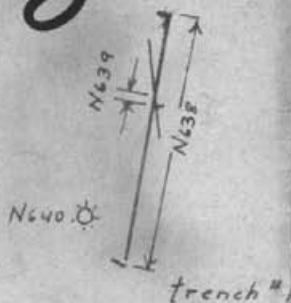
1+60E

N
1
Z

-] trench
 T quartz vein
 ☼ grab sample

Note: all chip samples contain weathered granite

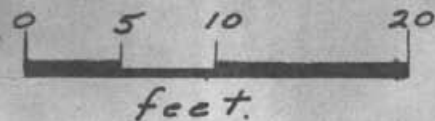
Note: all samples (except N640) are chip samples



Sample no.	Sample width	Description	% MoS ₂
N638	12.5 ft.	Porphyritic granite. no MoS ₂ observed	0.008
N639	0.5 ft.	as above: MoS ₂ on fracture	0.047
N640	grab sample	best selected grab sample from trench #1. MoS ₂ : coarse dissemination in porphyritic granite	0.14
N641	4.0 ft.	Porphyritic granite. qtz. vein 0.5 ft. wide with disseminated MoS ₂ at contact.	0.048
N642	3.0 ft.	Porphyritic granite. MoS ₂ dissem. in qtz. vein 0.3' wide and in granite 0.2' east of vein	0.047
N643	24.0 ft.	Porphyritic granite 1 flake MoS ₂ , also qtz. vein 0.3' wide (as above)	0.017

Kay Group

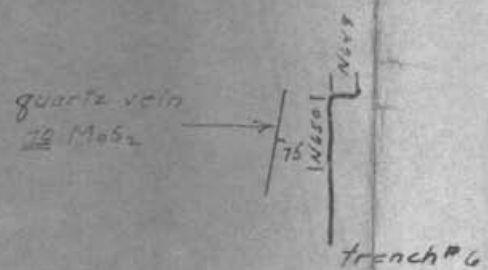
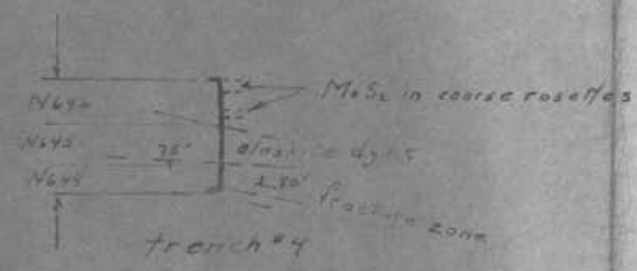
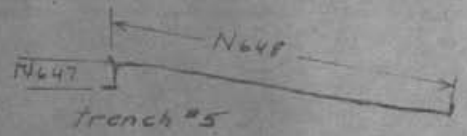
location of samples
N638 to N643: from
trenches 1 to 3.



W. Charlton figure 2 May 23/67

Sample no.	Sample width	description	% MoS ₂
N644	1.5 ft.	Porphyritic granite highly fractured. v. fine gr. dissem. MoS ₂	0.023
N645	2.4 ft.	alaskite dyke with disseminated MoS ₂	0.020
N646	2.6 ft.	Porphyritic granite coarse MoS ₂ in rosettes in microlitic granite (over 1.0' width)	0.020
N647	2.0 ft.	Por. granite 0.3' alaskite dyke with yellow stain	0.010
N648	18.0 ft.	Por. granite; trace MoS ₂ in 0.1' qtz. vein	0.002
N649	1.4 ft.	Por. granite; no observed MoS ₂ (mass of vfg. MoS ₂ 0.2' in diameter not included in sample)	0.040
N650	4.0'	Por. granite; 0.2' qtz. vein no MoS ₂	0.007

3+06 E
+ 9100 S



Kay Group

location of chip samples
N644 to N650 (trenches 4 to 6)

Scale: 10 feet = 1 inch



F. Charlton figure 3 May 23/67

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