Father John Sheffield, Salmon Arm

Clearwater Molybdenum

92-P-?

810333

92P

November 5, 1980

Father John Sheffield
St. Joseph's Church
P. O. Box 268
90 First Street S.E.
Salmon Arm, B.C.
VOE 2TO

Dear Father Sheffield:

With this letter I return your information and comments on the Clearwater Molybdenum) prospect. Some years ago, our Mr. Glenn Simpson visited the property with negative conclusions.

We certainly appreciate your well organized and convincingly appraised submittal and would welcome any further property referrals.

Yours truly,

CYPRUS ANVIL MINING CORPORATION

D. S. Jennings
Chief Geologist

Encl.
DSJ/rc

PHONE 604-832-3021

St. Joseph's Church

P.O. BOX 268, 90 FIRST STREET S.E.
SALMON ARM, B.C.
V0E 2T0

October 6, 1980

Cyprus Anvil Mining Corp.,
355 Burrard Street,
VANCOUVER, B. C.

Gentlemen:

Attached is a geologist's report given to me some years ago by AMAX. It describes a molybdenum property which may not have been properly understood at the time and certainly was not economic when molybdenum was $2.00 per lb.

Also enclosed are some comments, etc., which may lead to a re-examination of the prospect.

You may not be able to visit this property (which one geologist described as "the best exposed I have seen in my life") until next Spring, though an earlier date would be preferable. It can be seen until mid-November or after mid-April. Access is excellent, only six miles from pavement, on the side of a two-lane gravel road, at 1550 feet altitude.

If this material is not of interest to you, please return it at your early convenience.

Sincerely yours,

Father John Sheffield

Father John Sheffield

THE CLEARWATER MOLYBDENUM PROSPECT

In 1962, a logging company built a road along the west bank of the Clearwater River. Six miles north of the town of Clearwater, B.C. the road was cut through a "nose" of argillized and propylized granodiorite leading down to the river. (cf. GSC Memoir 363)

This road-cut, after the blasting, became covered with a fine, black dust - "black moly", i.e., "jordisite", an amorphous form of MoS_2 resulting from the weathering of molybdenite. The molybdenite (and jordisite) occurs in several types of veins: some have minimal quartz; some have predominant quartz; some are heavily bordered with K-feldspar; some occur in almost clayey argillization; some show rosette moly; others show molybdenite "paint", etc. But the whole assembly was judged to be sub-economic in grade, though no bulk-sampling was ever done. The deposit was drilled -- 1414 feet of AQ core -- but no sludge samples were kept and no core remains. The jordisite was logged as "graphite".

Possibly a score of geologists have examined the prospect and have reported negatively. All these efforts seem to have been directed to finding economic mineralization in the zones of argillic and propylitic alteration; whereas at Climax, Urad-Henderson, Questa, Endako and B.C. Moly, porphyry molybdenum stockworks have yielded economic mineralization only in the zones of abundant quartz, orthoclase, topaz and phyllic alteration. cf. diagrams on p. 163 and 190 of Hollister's "Geology of the Porphyry Copper Deposits of the Western Hemisphere"; also p. 739 of "Economic Geology", Vol. 67, 1972.

At Climax the uppermost zones were entirely eroded, including most of the Ceresco orebody, as projected. At Endako, Boss Mtn., and Questa, the same seems to be the case. At Clearwater, the molybdenite was exposed by a river which cut a canyon through hundreds of feet of the altered granodiorite porphyry -- the canyon wall rises

sharply some 2000 feet on the west -- thus leaving a large vertical cross-section of the argillic and propylitic zones. Nogal Peak seems also to have the upper zones preserved to some extent, though the quartz-sericite-pyrite zone is also exposed. At Clearwater, even the diamond drilling did not penetrate to an intensely silicified zone (it started hundreds of feet above the road), though it did find an iron-rich zone -- hematite -- from 400 feet below the road to the end of the hole. Mostly, it proved that the low-grade mineralization extended vertically for a thousand feet in the argillic and propylitic zones. Incidentally, there are surface signs of molybdenite over a length of two miles in a NW-SE direction. This area is covered by over forty claim units owned by partners Rabbitt & Sheffield.

AMAX REPORT SAY 2300 ft

In the cut and near the road, there is an exposure of granodiorite porphyry much less altered than most of the other granitic rocks in the immediate vicinity. In this exposure there is a veinlet of quartz-orthoclase-molybdenite, much different from the other molybdenite veins in the area and very like many veins in the main ore zone at Climax.(cf. Plate 29, Bulletin 846C, USGS)

If there is an orebody at Clearwater, it likely tops 500 feet or more below the level of the Clearwater River. Mining would, therefore, be entirely an underground, cut-and-fill, operation unless, of course, bulk sampling should prove that the large body of low-grade molybdenite mineralization in the zones of argillic and propylitic alteration can be mined economically. Underground mining was not practical when molybdenum was selling at $2 or $3 per lb. However, at today's prices, the whole picture deserves a careful review. Deep drilling might find an acceptable grade of ore.

Enclosed is a geologist's report prepared originally for Amax. It was given to me after Amax had omitted to pay the "rental" once imposed by the NDP government and my partner and I had staked the

ground. Amax, at our invitation, re-examined the property and decided it was not worthwhile, as was probably the case at the prices then prevailing. However, if the lower, more favorable zones, are proportionately comparable to the size of the exposed zones, some effort and expenditure would seem to be worthwhile, at $12 per lb.

In the early 1970's Mr. G.F.E. White, resident engineer at Kamloops made a trip up the east side of the Clearwater River and found traces of molybdenite -- presumably opposite the road-cut and in a line with the findings on the Mel group. Altogether the surface showings, understandably diffuse after consulting Hollister's diagram on page 190, seem to extend (or to have once extended) through an immense body of rock, two miles long, a thousand feet thick and of considerable, though undetermined, width. The road cut shows mineralization for 750 feet.

Detailed examination of this prospect indicates that it may be a porphyry molybdenum stockwork deposit, with all the potentiality thus involved.

John Sheffield

(Does this explain the fractured, altered, mineralized rock mass at Clearwater?)

An extract from "Multiple Intrusion and Mineralization at Climax, Col."

by Stewart R. Wallace & five other employees of Climax Molybdenum Co. as contained in the Graton-Sales Volume "Ore Deposits of the United States, 1933-1967" published by the American Institute of Mining, Metalurgical and Petroleum Engineers, Inc., New York, 1968 pp. 35-36

"The pattern at Climax of repeated igneous-hydrothermal events is far too well developed to dismiss as due simply to a normal circumstance in the process of ore formation; it requires a causative cyclic mechanism. One such mechanism is discussed below.

If the assumption is made that the parent magma of the Climax ore bodies contained 10 per cent water and that this water was all given off as a hydrothermal fluid containing 0.1 grams per litre of molybdenum, an estimated 25 to 30 cubic miles of magma would be needed to yield the amount of molybdenum present at Climax. If the three ore bodies are arbitrarily considered to be equal, about 10 cubic miles of magma would thus be required for each. This volume is far greater than that of any of the units of the Climax Stock to observable depth, and much of the source magma, therefore, must have existed at greater depths and supplied molybdenum during the course of mineralization to those parts of the igneous-hydrothermal systems where the ore solutions were being concentrated.

The horizontal dimensions of the various productive units of the Climax Stock give areas of between 1/5 and 1/15 square miles. These may well enlarge somewhat downward, but the authors envision them as cylindrical bodies, the vertical dimensions of which are much greater than their horizontal ones; the magma chamber during each igneous-hydrothermal stage is considered to have been a column thousands of feet in length, connecting at depth with a much larger reservoir.

Small,but repeated, vertical movements of magma in the column fracture the rocks at the top of the chamber and allowed the more easily driven fluids to escape. The concomitant drop in confining pressure reduced the solubility of the hyperfusibles, and the dense water-rich gas, streaming up within the column, dissolved metallic constituents from the magma and carried them to the top of the chamber and into the fractured country rock where they formed the ore.

The rate of extraction of volatile constituents from the magma by this process exceeded the rate of their generation by crystallization. Thus, there was a net loss of water in the residual magmatic fluid and a consequent increast in the freezing point. As the process of mineralization continued, the system lost energy, the temperature dropped, and finally, the magma congealed, presumably at some constriction well down in the column. The magmatic source was thus sealed off from the hydrothermal part of the system, and the process of ore formation gradually ceased.

AMAX MINERALS EXPLORATION

A DIVISION OF AMAX POTASH LIMITED

PHONE (AREA CODE 604) 683-0474

TELEX 04-54387

#601 - 535 THURLOW STREET
VANCOUVER, BRITISH COLUMBIA
V6E 3L6

May 18, 1977

Father John Sheffield,
St. Joseph's Church,
P.O. Box 268,
Salmon Arm, B.C.

Dear Father Sheffield:

Re: Clearwater Mo Property

Enclosed please find a copy of the report by D.L. Mathias, Jr. and the diamond drill logs on the above property which I promised to send you.

I can find no mention of sludge samples being taken - the drilling was done by a light model machine which may not have been particularly amenable to sludge collection.

There appear a number of disharmonious items in the logs and the report. The mention of graphite in some of the veins and shears; the apparent insensitivity of the assay values when compared with the number of MoS_2 bearing veinlets as observed in the core; and the possibility that values may have been washed from the core suggest that there may be room for improvement. Nonetheless, it is difficult to manufacture the required 10-fold increase out of these discrepancies.

It seems to me that what limited potential the property has must be searched for on the Nehaliston Plateau - above the cliffs, and it must show promise of something better than is presently observed.

I feel this is, at the moment, too long a shot for AMAX and that I must therefore inform you that we are unable to enter into an exploration agreement on the Clearwater Mo Property.

I would still appreciate receiving whatever information you may be able to give me on the Sands Creek Mo property and also on your property near Quesnel.

Thank-you for taking the time to show me the property. Hopefully things may turn to a more mutually satisfactory conclusion another time.

Sincerely,

H.W. Sellmer
Regional Manager Western Canada

HWS/eb

Encls(2)

AMAX MINERALS EXPLORATION

A DIVISION OF AMAX POTASH LIMITED

PHONE (AREA CODE 604) 683-0474
TELEX 04-54387

#601 - 535 THURLOW STREET
VANCOUVER, BRITISH COLUMBIA
V6E 3L6

April 15, 1977

Father John Sheffield,
St. Joseph's Church,
P.O. Box 268,
Salmon Arm, B.C.

Dear Father Sheffield:

Re: Mell, Jude and Anthony Claims

A mutual acquaintance, Mike Sanguinetti of Cordilleran Engineering, brought to my attention that you and your partner, Dan Rabbitt, now hold claims on the former Southwest Potash Clearwater Mo properties and that you were interested in finding someone who might be willing to further evaluate the property.

A review of the Southwest Potash data (for we are one and the same company) reveals that the geologists on the property did refer to "sooty moly" in their reports.

It is not entirely clear to me how much additional work has been performed since 1963-4 when we drilled two holes on the property, or whether there are new road cut exposures to look at. I would therefore like, with your permission, to have the opportunity to examine the property sometime in mid-May or so. Further, if you could perhaps supply me with a phone number at which you may be reached, I could call you to arrange a mutually opportune time to carry out an examination.

Sincerely,

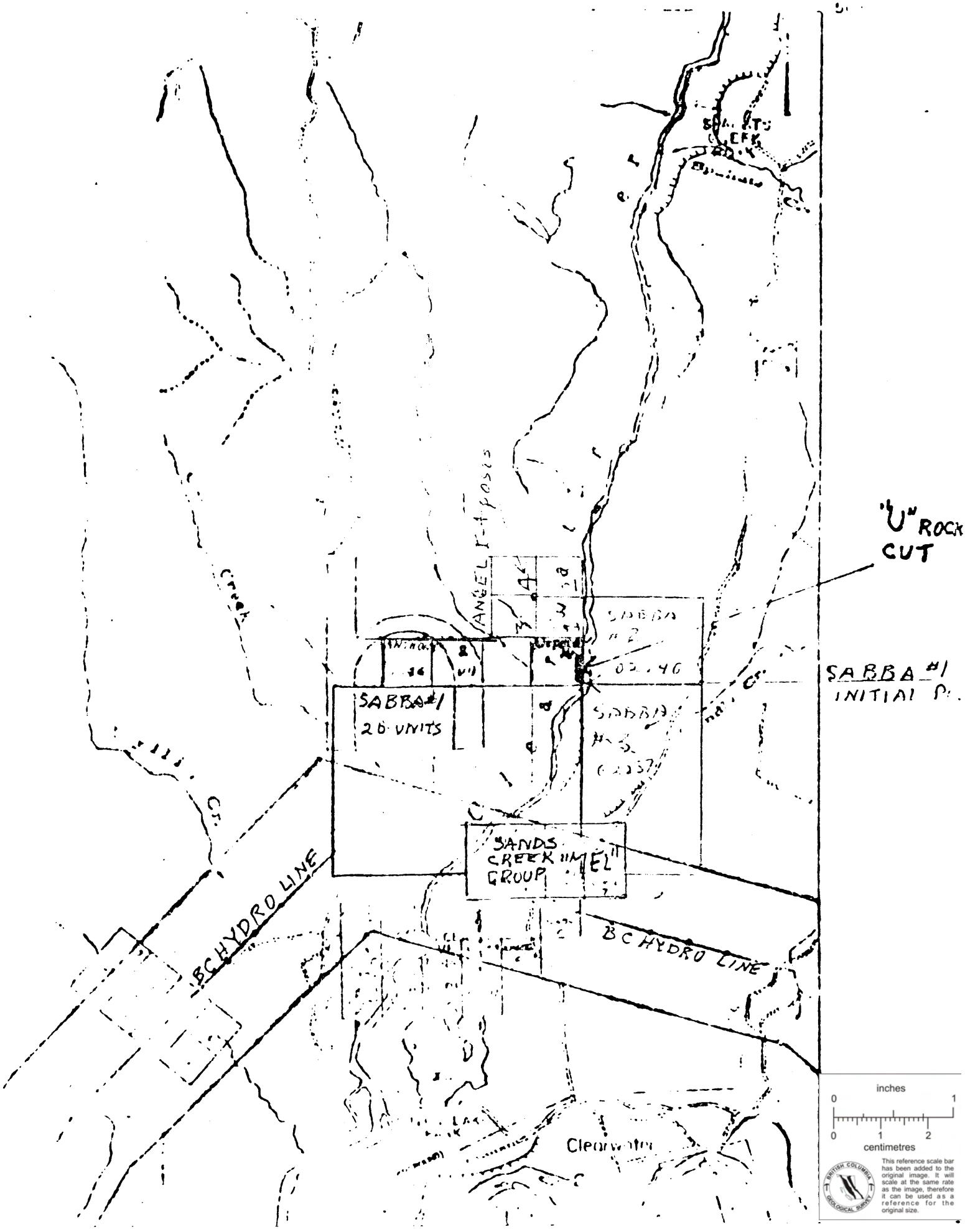
AMAX MINERALS EXPLORATION

H.W. Sellmer
Regional Manager Western Canada

HWS/eb

c.c. M. Sanguinetti,
Cordilleran Engineering

MAP. 92 P/9 E


"U" ROCK CUT
SABBA #1 INITIAL
SABBA #1 20 UNITS
SABBA #2
SABBA #3
SANDS CREEK "EL" GROUP
BC HYDRO LINE
BC HYDRO LINE
Creek
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inches
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.

92P/9E

Pouly Moly

Clearwater River

Report Company of Amax Potash

Recd 29/12/[illegible]

from Tim Godfrey

REGIONAL GEOLOGY

The Clearwater prospect lies near the eastern edge of a major granitic batholith (Takomkane batholith of Hutchinson and Hodder, 1960), which extends from Buster Lake east to Clearwater River and from Mahood Lake at least as far south as Bonaparte Lake (Plate II). The plutonic rocks are covered on the north by schists of the Shuswap Metamorphic Complex and on the south by Permian or earlier volcanics and argillites. Cenozoic lavas and fluvio-glacial sediments obscure large areas of the older rocks of the region.

The Boss Mountain, Anticlimax, and Sands Creek molybdenite properties are located within separate areas of this batholith.

Rock Types

Shuswap Metamorphic Complex. A miogeosynclinal assemblage of quartz-mica-schists underlies large areas north of the grani[illegible] Near the contacts, considerable migmatization has taken place resulting in hybrid gneisses bearing varying amounts of biotite

and quartz veining. Similar lithologies have been mapped in the Quesnel (Cariboo Group) and Blue River-Lempriere (Hobson Lake Series) areas.

Cache Creek (?) Group. Large areas south and southwest of the batholith are underlain by rocks of a widespread late Paleozoic eugeosynclinal assemblage: green andesitic tuff, agglomerate, breccia, and flows and slaty argillite, limy argillite, and limestone. The lithologies are similar to the Cache Creek rocks of the Fraser River region. Duffell and McTaggart (1952) place the Cache Creek Group in the Permian and (?) earlier; Campbell (1963) has classified rocks of similar lithology around Boss Mountain as Triassic and/or Jurassic. The exact age is still uncertain.

Mesozoic Plutonic Rocks. The Takomkane-Nehalliston batholithic assemblage includes rocks of quartz diorite, monzonite, granodiorite, granite, and alaskite composition, as well as lamprophyre and felsite dikes.

Quartz diorite, together with lamprophyre and felsite dikes, is the predominant rock type around Boss Mountain. Eastward, in the Clearwater region, K-feldspathized granodiorite with felsite dikes is dominant. Fine-grained, light-colored granitic phases occur in both areas. Alaskite is dominant at the Anticlimax property.

Rocks of the Takomkane-Nehalliston batholith have been classified as Jurassic and/or Cretaceous and (?) earlier by Campbell (1963).

Cenozoic Rocks. Flat-lying olivine-basalt flows (Miocene or Pliocene?) flooded many of the valleys of the region, including the Clearwater Valley. Four cinder cones and related flows near Clearwater Lake are post-glacial. Dutch Lake may occupy an old volcanic vent. Campbell (1964) mentions that these volcanics were accompanied by granitic and syenitic rocks, but little is known about these acidic phases.

Fluvio-glacial deposits are widespread.

Structure

Shuswap metamorphic rocks have been intensely deformed, but bedding and schistosity or foliation have relatively uniform attitudes over large areas. In the northeast part of the Quesnel Lake (East Half) sheet, overturned folds and reverse faults generally indicate tectonic transport toward the southwest. The predominant structural pattern on the Quesnel Lake sheet is one of northwest-trending faults and bedding.

PROPERTY GEOLOGY

Molybdenite mineralization has been observed over an easterly-trending area 2300 feet by 8000 feet, near the eastern border of the Takomkane-Nehalliston granodiorite. Metallization is present (1) in a set of thin, widely-spaced quartz veins, (2) as smears along fractures, (3) as flakes in aplite dikes, and (4) as occasional small rosettes in granodiorite. The quartz-vein association is the principal mode of occurrence, with molybdenite-bearing veins having been recorded over a vertical distance of 2300 feet. The veins occur in a regular set, average about 1/8" in thickness, and are widely spaced (average - 9.5 feet). Little or no molybden occurs in the granitic country rock, and broad areas barren of any veination were noted in the drill cores.

There is a notable similarity in host-rock petrology, alteration, and type of metallization between the Clearwater prospect and Endako.

Rock Types of the Property

All known molybdenite occurrences and all located claims under option lie within plutonic rocks. Within the property, the rocks show remarkably little variation. In this connection it should be emphasized that outcrops are very sparse on the Nehalliston Plateau; observations are based principally on the area east of the plateau rim and on drill core. The typical igneous material consists of medium-grained biotite granodiorit containing 25-30% salmon-pink feldspar, 35-40% white plagiocla feldspar, 5-10% biotite, and 15-25% quartz. Pink alkali feldspar locally forms as much as 55-65% of the rock.

Fine-grained, leucocratic (< 1% ferromagnesian minerals) pink granite phases, as much as 85 feet thick, were observed in the drill core, and as float on surface. Biotite-rich (> 20%) stringers (perhaps granitized inclusions) occur locally

The "d" Value of the Clearwater plutonic material is between 77 and 127 (2 samples); see Table 1. The low lime content suggests that the predominant rock type may be granite rather than granodiorite.

Pink to light gray aplite dikes, ranging from 0.2" to 2.4 feet in thickness, generally show sharply defined contacts. Density is on the order of one per 26 feet over the first 167 feet of DDH C-1. Below this depth only one dike occurs in the drill section.

Precipitous cliffs of Tertiary volcanics, displaying well-developed columnar jointing and scoriaceous tops, form the valley walls on the east side of the Clearwater River. Their composition reportedly ranges from andesite to basalt.

Alteration

Alteration at the Clearwater prospect is characterized by varying degrees of feldspathization, argillization, and propylitization.

Feldspathization is widespread in the discovery area and is marked by large (up to one-inch diameter) fresh K-feldspar metacrysts. In places, the feldspathization proceeded outward from thin, quartz-healed fractures. Elsewhere it is pervasive through the rock.

Argillization is extensive along several of the lower stream valleys and over considerable distances of the section cut in DDH C-2. The alteration generally has converted the feldspars to a white clayey material. There is some question whether the alteration along stream valleys is a cause or an effect; i.e., was the alteration caused by the stream, or is the stream location controlled by weaker hydrothermally (?) argillized zones.

Propylitization is widespread along and beneath the Clear water Valley, extending 3000 feet north of the discovery cut. Only an occasional boulder of epidotized granodiorite was found in the streams draining the Nehalliston Plateau.

Local red, iron-stained zones occur both at surface and in drill core.

Structure of the Deposit

The intrusive exhibits normal plutonic fracturing, but no crackled stockwork structures were observed. Minor shearing and narrow brecciated structures were recorded at surface and in drill core.

Quartz veining is confined to one set of fractures striking N40-50°W, dipping 30°-55°SW. Over 80 percent of the aplite dikes mapped occupy a closely related, but steeper, fracture set, striking N45-65°W, dipping 60-73°SW. It is noteworthy that the Boss Mountain breccia zones, 45 miles to the northwest, closely parallel these structures.

No exhaustive effort was expended on joint measurement, but the data recorded indicate that 33 percent of the joints strike N8°-25°W, dip 20°-45°W and 33 percent of the joints strike N15°-30°E, dip varied. The remainder show diverse patterns.

Stream patterns on top of the Nchalliston Plateau may be controlled by tectonic features in the underlying bedrock. The majority of the creeks trend N25-35°W, conforming with the regional structural pattern.

The Clearwater Valley is probably a fault line, but no conclusive evidence was found to support this postulation.

Mineralization

Molybdenite occurs (1) as sparse, fine-grained flakes in the felsite dikes, (2) as smears along fracture planes, (3) associated with the regular set of quartz veins, and (4) as occasional small rosettes in the granodiorite.

In the quartz veins the molybdenite occurs, in order of frequency, (1) marginally, both in the quartz and in the granitic host; (2) as stringers traversing the quartz; and (3) as disseminations through the vein material. Pyrite is a common associate; chalcopyrite is rare. No tungsten minerals were recognized. Average thickness of the quartz veins is 3/8". Density throughout the total depth of DDH C-1 is one per 9.5 feet; quartz veins are rare in C-2. The attitude of the veining is generally at right angles to the long axis of the core, indicating conformity with the surface exposures.

Fine molybdenite smears, without quartz and associated generally with sooty graphite, occur throughout DDH C-1, with a density pattern of one per 15.7 feet. Quartz veining and sooty molybdenite seams are rare in DDH C-2.

At the discovery road cut, molybdenite occurs with thin quartz veins striking N40W, dipping 32SW; but the most prominent form of metallization is in the form of molybdenite--graphite (smears along fracture planes. These fractures show the following attitudes, with the first two being the most common:

N23W, 38 SW
N68W, 55 SW
N30E, 70 NW

Elsewhere at surface molybdenite-quartz vein mineralizatio was noted only at 3940E - 0N and 2400E - 1200S, but stream

sediment anomalies suggest that veination of varying MoS_2 tenor may be present throughout the section to the top of the Nehalliston Plateau.

GRADE OF THE DEPOSIT

Molybdenite associated with quartz veining has been observed over a vertical distance of some 2300 feet, but the veins are widely spaced and the overall grade is low.

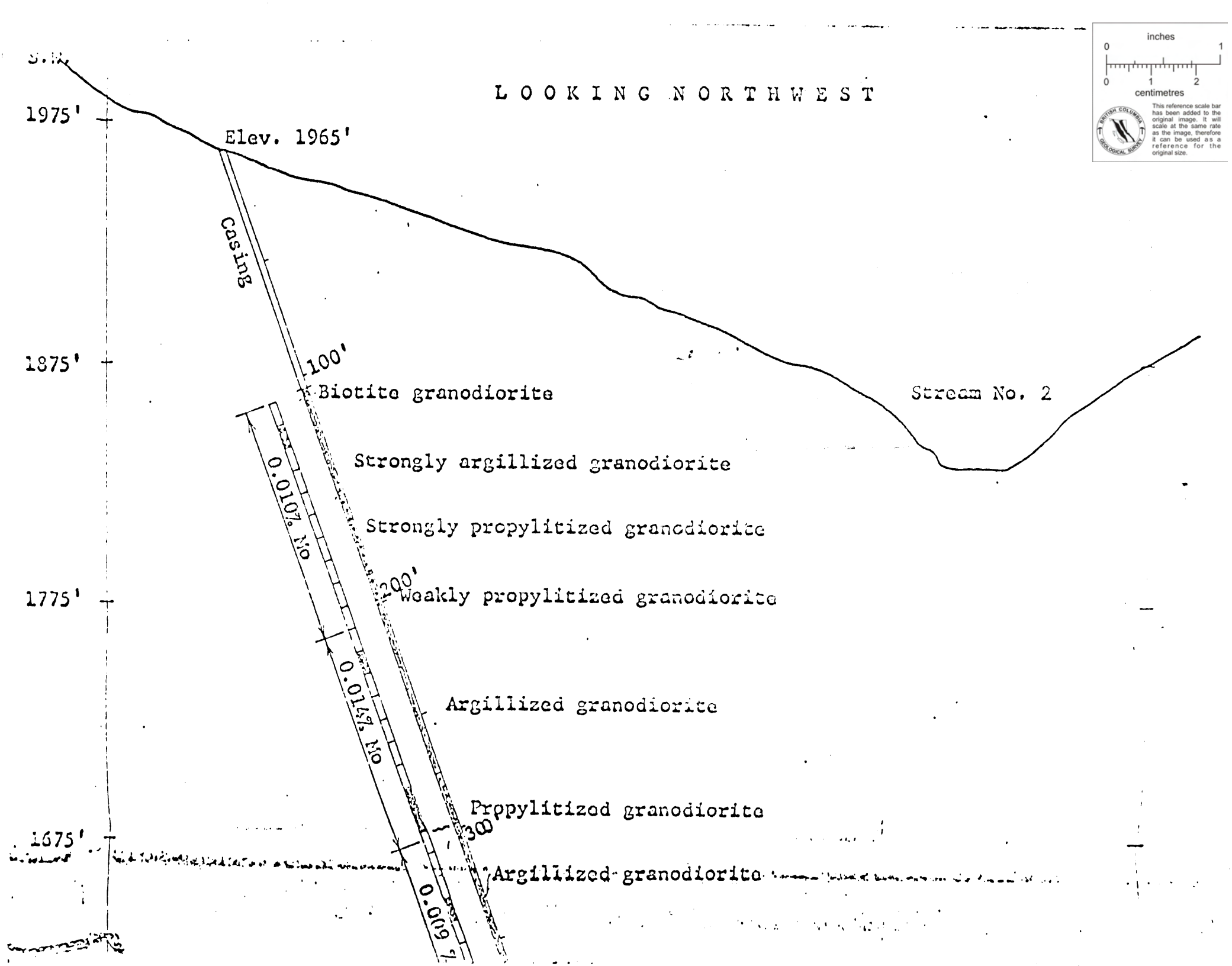
Assay data from diamond-drilling indicate that average grade to be on the order of 0.010% total Mo, equivalent to 0.017% MoS_2.

TABLE 1

CHEMICAL DATA - CLEARWATER PROSPECT

SAMPLE NO.	COLORIMETRIC - GOLDEN										FLAME PHOTOMETER			WET CHEMICAL	"d" Value
	Sn	Zn	Mn	Ni	Mo	Cu	Ba	Sr	Rb	Ti	K_2O	Na_2O	CaO	SiO_2	
1	8	41	490	nil to 10	nil	8	830	420	86	2400	3.85	3.73	0.875	65.96	77
2	nil to 24	24	520	4 to 20,000		120	900	380	170	800	4.43	3.50	0.650	64.84	127
3											3.20	3.98	1.10		
4											3.75	0.050	0.65		

#1 - Granodiorite from discovery roadcut.
#2 - Granodiorite adjacent to MoS_2 smear at discovery roadcut.
#3 - Granodiorite, fresh, from DDH C-1; depth - 92 feet.
#4 - Granodiorite, altered, from DDH C-2; depth - 115 feet.


LOOKING NORTHWEST
1975'
1875'
1775'
1675'
Elev. 1965'
Casing
100'
Biotite granodiorite
Stream No. 2
Strongly argillized granodiorite
Strongly propylitized granodiorite
200'
Weakly propylitized granodiorite
0.010% Mo
0.014% Mo
Argillized granodiorite
Prppylitized granodiorite
300'
Argillized granodiorite
0.009 %
inches
0
1
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2
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.

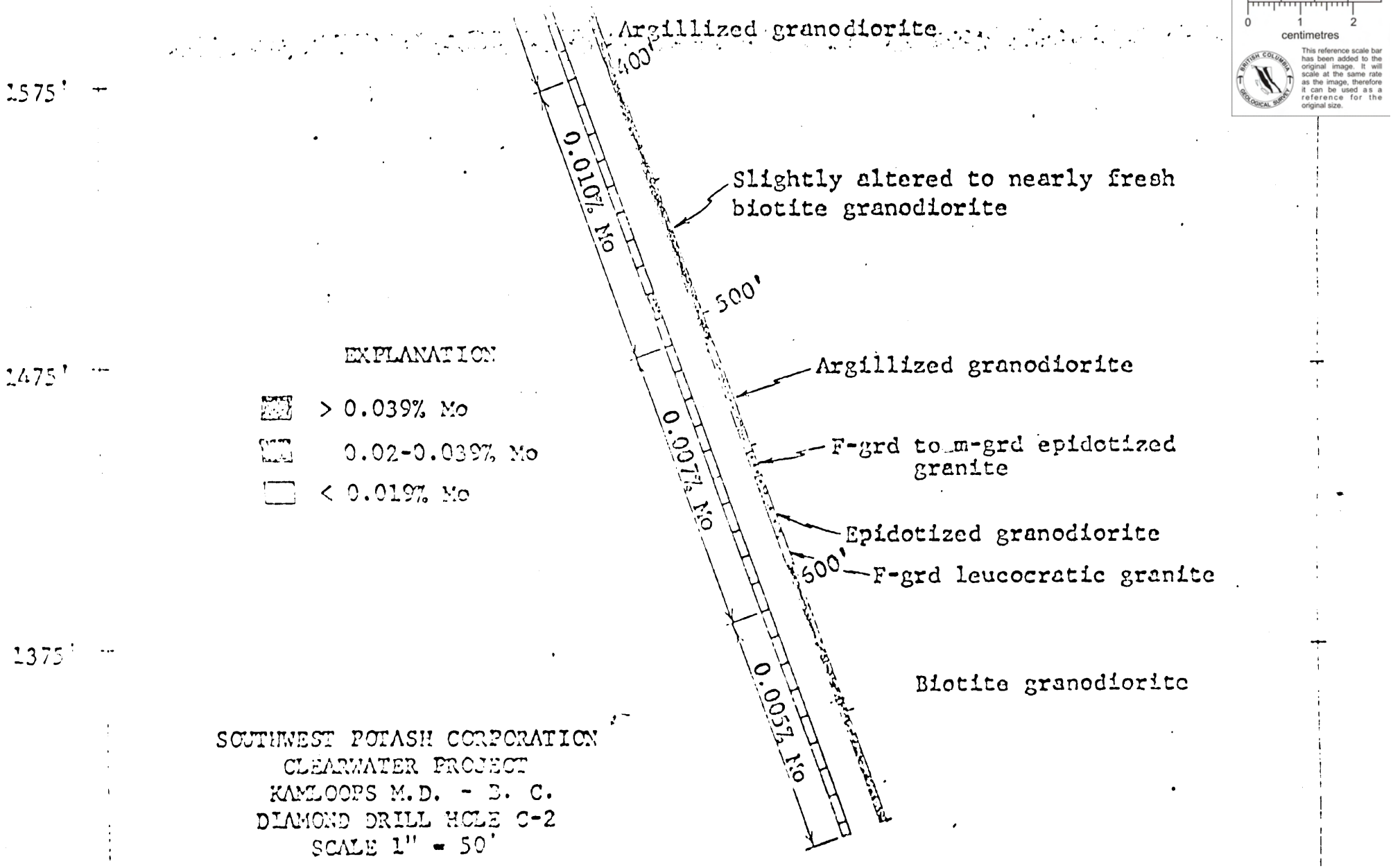

Argillized granodiorite
400'
0.010% Mo
Slightly altered to nearly fresh biotite granodiorite
300'
Argillized granodiorite
F-grd to m-grd epidotized granite
Epidotized granodiorite
500'
F-grd leucocratic granite
0.007% Mo
0.005% Mo
Biotite granodiorite
1575'
1475'
1375'
EXPLANATION
> 0.039% Mo
0.02-0.039% Mo
< 0.019% Mo
SOUTHWEST POTASH CORPORATION
CLEARWATER PROJECT
KAMLOOPS M.D. - B. C.
DIAMOND DRILL HOLE C-2
SCALE 1" = 50'

Figure 4

259/BC

Company SW POTASH
State BR. COLUMBIA
County
District KAMLOOPS

Project CLEARWATER
Property JACK FOOTE
Started 9.15.64
Completed 9.24.64
Logged by D.L. MATHIAS JR.

Bearing N50°E
Inclination -60°
Depth 723'

Sheet 1 of 10 Hole No. C-
Coordinates 4520 E
680 S
Altitude 1775'

Stage	Core Rec	% Rec	Assays Footage	Total Mo %	Remarks
0 35	—	—			Casing through blacky surface material.
					35.0 - 281.7 Biotite granodiorite, Porphyritic w/ K-fdsp meta crysts.
37	1.3	65	35-40	0.01	35.0 - 37.0 Rusty, weathered material
42	4.5	90			38.6 - 39.2 Considerable epidotization
					41.3 Qz veinlet w/ MoS_2 flakes and py
47	4.0	80			41.6 - 42.0 Rusty zone
			40-50	0.01	43.7 - 44.0 Aplite dikelet
52	5.0	100			52.0 Graphitic seam w/ MoS_2
57	5.0	100			58.8 MoS_2 w/ 1/4" qz vein
			50-60	0.01	61.9 Graphite w/ MoS_2 (?) along fracture plane
62	5.0	100			63.6 - 63.9 MoS_2 w/ qz veinlet
					64.6 Graphite seam w/ MoS_2
67	5.0	100	60-70	0.02	65.0 MoS_2 veinlets
72	5.0	100			Lt. greenish-yellow, granular mineral of epidote group along slip planes at number of places, most pronounced at 75.5 & 83.5
77	5.0	100			
			70-80	0.005	
82	5.0	100	80-90	0.005	78.4 - 78.9 Aplite dike; contact sharp
87	5.0	100			92.0 - 92.2 Aplite dike
92	5.0	100	90-100	0.01	93.5 Graphite seam w/ MoS_2

Sheet

Company SW POTASH Project CLEARWATER Sheet 2 of 10 Hole No. C

Footage	Core Rec.	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
97	102	5.0	100		
102	107	5.0	100	100-110 0.01	103.2 MoS_2 w/ qz veinlet
					107.5-107.6 Abndt MoS_2 w/ ½" vein of q and epidote
107	112	5.0	100		110.0 - 111.5 Strong propylitization
				110-120 0.01	110.0 Graphite - MoS_2 smear
					110.5 -do-
112	117	5.0	100		122.8 - 123.4 Epidotized shear zone
117	122	5.0	100	120-130 0.005	131.8 Abndt MoS_2 w/ qz veinlet
122	127	5.0	100		132.2 MoS_2 along fracture
127	132	5.0	100		134.9 MoS_2 flake w/ qz vein
				130-140 0.03	138.2 -do-
132	142	10.0	100		139.0-139.4 Scattered f-grd MoS_2 flak
					143.6 MoS_2 w/ thin qz vein
					143.9 -do-
				140-150 0.02	144.8-145.4 Dissem. MoS_2; 3/4" qz ve w/ MoS_2 at borders & py cin near center. MoS_2 seam
142	152	10.0	100		145.2
					153.2 - 155.6 Aplite dike
152	157	5.0	100	150-160 0.005	157.0 - 158.6 Qz veining w/ epidote & traces MoS_2
157	167	10.0	100		166.4 - 166.9 Aplite dike
				160-170 0.01	167.7 MoS_2 flakes
					168.2 MoS_2 rosette
167	177	10.0	100	170-180 0.01	168.9 - 169.1 Qz veinlet; MoS_2 at bor in host
					171.2 - 171.3 MoS_2 w/ 1" qz vein
					172.7 MoS_2 w/ 3/16" qz vein
177	187	10.0	100		178.3 MoS_2 seam
				180-190 0.005	190.1 MoS_2 at borders of

Company SW POTASH Project CLEARWATER Sheet 3 of 10 Hole No. C-

Footage	Core Rec.	% Rec.	ASSAYS Footage	Total Mo %	Remarks	
					190.8	MoS_2 at borders of 1/8" qz vein ⊥ long axis of core
			190-200	0.02		
197	10.0	100			197.0 - 206.0	limonite oxidation along occas' fractures
			200-210	0.01	200.5	MoS_2 seam
					209.9	Few MoS_2 flakes w/ qz
207	217	10.0	210-220	0.02	213.8-213.9	Abndt MoS_2 cutting 1" qz vein
217	227	9.1	220-230	0.01	230.5	Several MoS_2 flakes
227	237	9.2	230-240	0.01		
237	247	10.0	240-250	0.005	255.7 - 258.1	F-grd lt green phase. Fdsps altered to pale green "sausurite." Biotite unaffected
247	257.5	10.0	250-260	0.005		
257	267	10.0				
267	269	6.2	260-270	0.005	267.4	Thin py stringer ⊥ long axis of core.
269	279	10.0	270-280	0.005	278.3 - 279.6	60% ferromags
279	289	10.0				
					281.7 - 296.4	F-grd equigranular phase w/ up to 20% ferromags (principally biotite)
289	297	9.0				
297	304	7.0	280-290	0.005	289.9	Chlorite seams & stringers appear
					290.1	Thin py-cb vein w/ halo of pink K-fdsp
					296.9 - 380.0	F-grd pink facies w/ < 1% ferromags. A brecciated and re-healed fault zone or a younger

Sheet 3

Company SW POTASH Project CLEARWATER Sheet 4 of 10 Hole No. S-

Footage	Core Rec.	% Rec.	ASSAYS Footage	ASSAYS Total Mo %	Remarks
					Border shows successive alteration zones:
			290-300	0.01	289.9 Chlorite stringers appear
					292.0 Epidote appears
					297.2 Qz veins begin to appear
					297.0 - 305.0 MoS_2 dissem. at borders of qz veins and w/ epidotized zones
					Epidote quite abundant, 292.0 - 308.9, especially 303.8 - 304.6 (w/ cb)
304	3'	6.9	99		White to lt. gray qz veins
					297.2 3/16"
					298.2 3/16"
					298.9 - 299.1 2 3/4"
					299.3 - 299.5 2 1/2"
			300-310	0.01	300.6 1/16"
					301.4 1/8"
					302.0 - 302.1 1 1/8"
					302.5 - 302.6 1 1/4"
					304.5 1/8"
					304.7 1/16"
					305.0 1/4"
					305.1 1/4"
3'	321	10.0	100		
			310-320	0.01	314.5 MoS_2 flakes w/ epidote along fracture plane
					318.0 MoS_2 veinlet
					322.0 MoS_2 seam along fracture
					322.4 MoS_2 veinlet
321	327	96	96		323.4 - 328.5 MoS_2 flakes
			320-330	0.01	

Company SW POTASH Project CLEARWATER Sheet 5 of 10 Hole No. C-

Footage	Core Rec.	% Rec.	ASSAYS Footage	ASSAYS Total Mo %	Remarks
			330-340	0.01	333.3 MoS_2 w/ 1/16" qz vein ⊥ long axis of core
341	10.0	100			341.2 MoS_2 w/ 1/8" qz vein
			340-350	0.01	346.6 Barren 1/2" w'n qz vein; 65° ∠ w/ long axis
351	10.0	100			347.8 MoS_2 veinlet
			350-360	0.005	348.5 -do-
					360.2 MoS_2-py seam at 78° ∠ w/ long axis of core
361	10.0	100			
			360-370	0.005	
					Epidote fracture-seams common; somewhat more abndt after 351.0
371	10.0	100			
377	6.0	100	370-380	0.005	376.5-378.8 Strongly epidotized
387	10.0	100	380-390	0.005	380.0-387.6 Typical biotite granodiorite
397	10.0	100	390-400	0.005	387.6-402.8 F-grd, pink, low ferromag (±1%) aplitic phase; barren
407	10.0	100			402.8-467.0 Typical biotite granodiorite
			400-410	0.005	408.1 Thin py veinlet
417	10.0	100			410.2 MoS_2-graphite (?) seam; 22° ∠ w/ long axis of core
					410.7 1/8" seam of MoS_2; 26° ∠ w/ long axis of core
			410-420	0.04	419.0 Few blebs of cpy
427	3.0	100			421.3 MoS_2 seam; 35° ∠ w/ long axis of core; two thin seams take off

Company SW POTASH Project CLEARWATER Sheet 6 of 10 Hole No. C-

Footage		Core Rec.	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks	
						426.0-431.8	Fractured, incompetent fault(?) zone
430	10.0	100		420-430	0.01	426.0-428.3	Scattered, thin seams of graphite w/ MoS_2 (?). 0°-5° ∠ w/ long axis of core
						430.4-431.8	Propylitized zone
430	440	9.0	100	430-440	0.04	430.6	1/8" seam MoS_2
						431.2	-do-
440	444	4.0	100	440-450	0.005	443.4-444.0	Weak, propylitized zone; fault(?)
444	452.5	8.5	100			452.0	Epidote seam; 25° ∠ w/ long axis of core
				450-460	0.005	457.1	Epidote seam; 65° w/ long axis
452.5	463	9.5	100			462.6-463.5	Aplite dike; 52° ∠ w/ long axis of core
				460-470	0.005	467.5	Thin graphite-MoS_2 (?) seam; 47° ∠ w/ long axis
						469.8	1/2" qz vein w/ MoS_2 flakes 28° ∠ w/ long axis
463	473	10.0	100			470.0	Small MoS_2 clusters
				470-480	0.005	476.6	MoS_2-py seam; 53° ∠ w/ long axis of core
473	481	8.0	100				
						467.0 - 514.4	Variable am'ts of propylitic alteration in biotite granodiorite.
							Weak shear zones: 478.4-478.9
				480-490	0.005		486.1-487.5

Company SW POTASH Project CLEARWATER Sheet 7 of 10 Hole No. C-

Footage	Core Rec	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
[illegible] 499	6.6	94			508.0-510.0 Slightly finer-grd facies of granodiorite
[illegible] 509	10.0	100	500-510	0.005	510.0 Py-qz seam; 52° ∠ w/ long axis
					512.8 Graphite-MoS_2 seam; 28° ∠ w/ long axis of core
[illegible] 518	10.0	100			
					514.4-545.3 Biotite granodiorite; K-Faspathization abndt. Occas epidote-coated slip-plane. Barren.
[illegible] 528	10.0	100	510-520	0.005	
					517.4 Barren 3/4" wh qz vein
[illegible] 539	9.7	97	520-530	0.005	526.8 5/8" wh qz vein w/ MoS_2-flakes 40° ∠ w/ long axis of core
			530-540	0.005	
[illegible] 548	10.0	100			545.3-630.7 F-grd, low-color index facies. Epidetization common. Grain size shows gradational increase toward lower contact.
			540-550	0.005	
[illegible] 558	10.0	100			549.5 MoS_2-py seam; 57° ∠ w/ long axis
			550-560	0.01	555.7 MoS_2 seam. 60° ∠ w/ long axis
					560.2 1/4" seam of MoS_2; 80° ∠ w/ long axis of core
[illegible] 563	10.0	100	560-570	0.02	563.2 Py seam; 73° ∠ w/ long axis
					566.6 Py seam w/ minor MoS_2; 75° ∠ w/ long axis
[illegible] 579	9.7	97			570.8 Py grains w/ few MoS_2 flakes & wolframite (?)
[illegible] 588	[illegible]	88	570-580	0.005	577.4 Py grains
			580-590	0.005	594.9 MoS_2 rosettes w/ py
[illegible] 598	9.8	98	590-600	0.01	

Company SW POTASH Project CLEARWATER Sheet 8 of 10 Hole No. C-

Footage		Core Rec	% Rec	ASSAYS Footage	ASSAYS Mo_3 TOTAL %	Remarks
598	608	9.9	99	620-630	0.005	
608	618	10.0	100			630.7-723.0 Distinctive granular-textured rock type characterized by rose-colored hematitic coloration and light apple-green epidote alteration.
618	626	8.0	100	630-640	0.02	630.9 Barren 1/16" wh qz veinlet near ⊥ long axis of core
626	628	2.0	100			631.4 1/4" MoS_2-qz vein ⊥ long axis
628	630	2.0	100			631.4-631.6 Thin MoS_2 seams ⊥ long axis
						632.2 Py-MoS_2 rosettes w/ 1/4" veinlet
						632.6-632.8 Py-MoS_2 seams & scattered flakes.
						633.3-633.7 Fine, lacy MoS_2
630	640	10.0	100			633.7-634.0 Seams of sooty MoS_2; 68° ∠ w/ long axis of bx
						637.4 3/16" wh qz vein w/ py & MoS_2 42° ∠ w/ long axis
						638.4 -do-
						643.4 MoS_2-qz seam; 55° ∠ w/ long axis
640	650	10.0	100			
				640-650	0.02	643.8 -do- w/ py
						644.1 -do-
						649.8 Py-qz-musc seam; near ⊥ long axis
						652.5-652.7 Three seams of MoS_2-py w/ qz veining; 75° ∠ w/ long axis
650	660	8.3	83			659.5 3/8" vein of qz-MoS_2

Company SW POTASH Project CLEARWATER Sheet 2 of 10 Hole No. C

Footage		Core Rec	% Rec	ASSAYS Footage	Mo TOTAL %	Remarks	
660	664	4.0	100	650-660	0.02	660.0	MoS_2 seam ⊥ long axis of co
				660-670	0.01	666.0	-do-
	673	9.0	100			673.0	-do-
				670-680	0.005	678.6	Py w/ 1/16" qz vein ⊥ long axis
						680.4	Two thin (1/8" & 1/16") qz veinlets MoS_2, both x-cutting and at bord in granodiorite, ⊥ long axis
673	683	10.0	100			684.7	Thin py seam ⊥ long axis of
						685.5	1/8" qz-py-MoS_2 vein ⊥ long ax
				680-690	0.04	685.8	1/16" qz-MoS_2 veinlet
						685.9	1/2" qz-MoS_2 vein ⊥ long axis MoS_2 is at borders of vein
						686.3	MoS_2 flakes w/ 1/8" qz vein
						687.0	5/8" qz-MoS_2-musc vein ⊥ lon axis; MoS_2 dissem in qz & wall rock
						687.2	5/16" qz-MoS_2 vein
						687.5	1/16" qz vein w/ scattered MoS_2 f
693	693	9.9	99			688.3	3/16" qz-MoS_2-cpy vein
						688.5	MoS_2-qz seam
						688.7	1/8" qz-MoS_2-py vein
						690.0	Thin MoS_2 (?) seam along fra ⊥ long axis of core
						691.0	MoS_2 along fracture; 52° ∠ long axis
						691.1	-do-
						691.5	MoS_2 veinlets
				690-700	0.02	692.0	5/16" seam of MoS_2 & whqz
						692.2	MoS_2 flakes dissem in 1/16" qz veinlet
						693.5	Fine MoS_2 seam

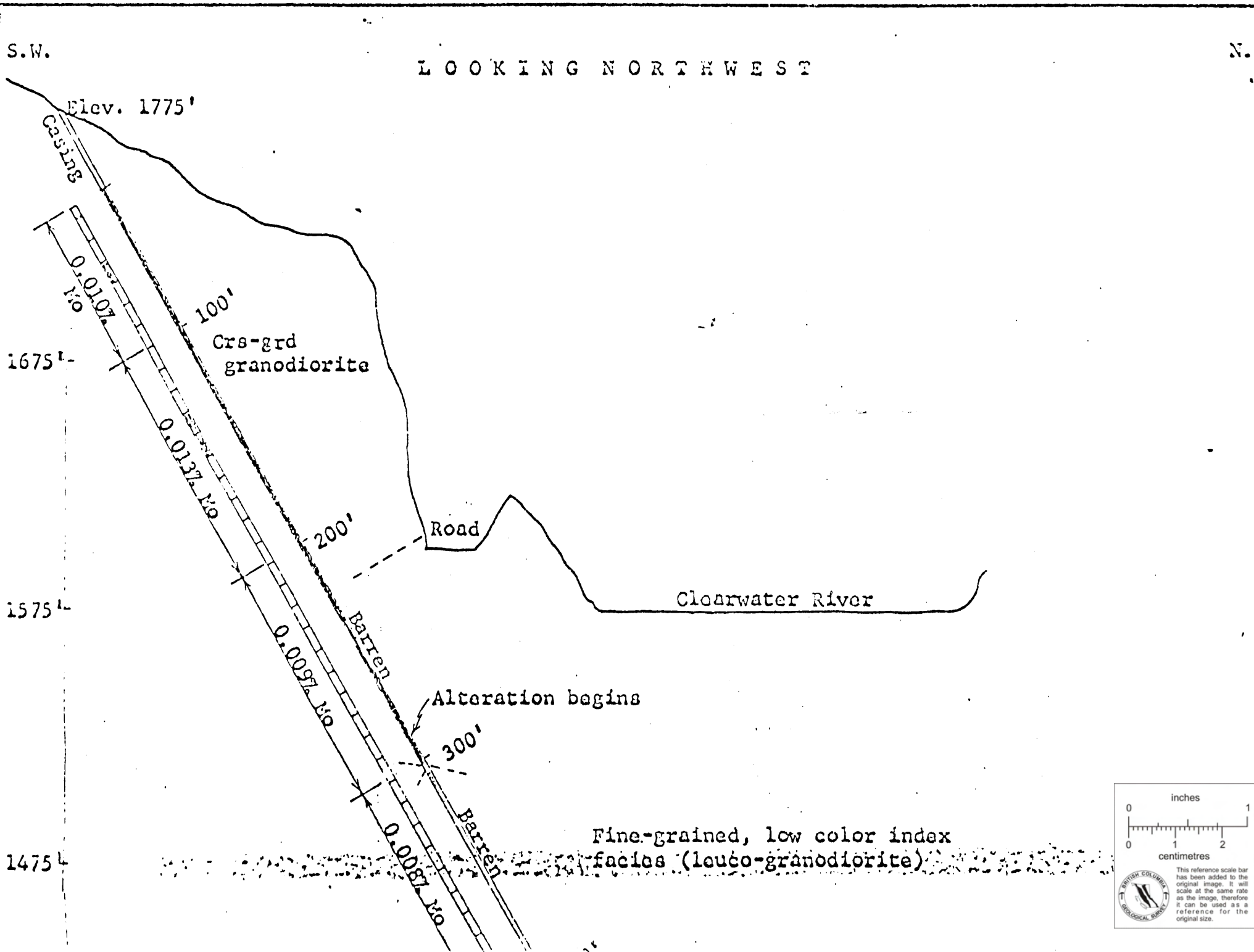
Company SW POTASH Project CLEARWATER Sheet 10 of 10 Hole No. C

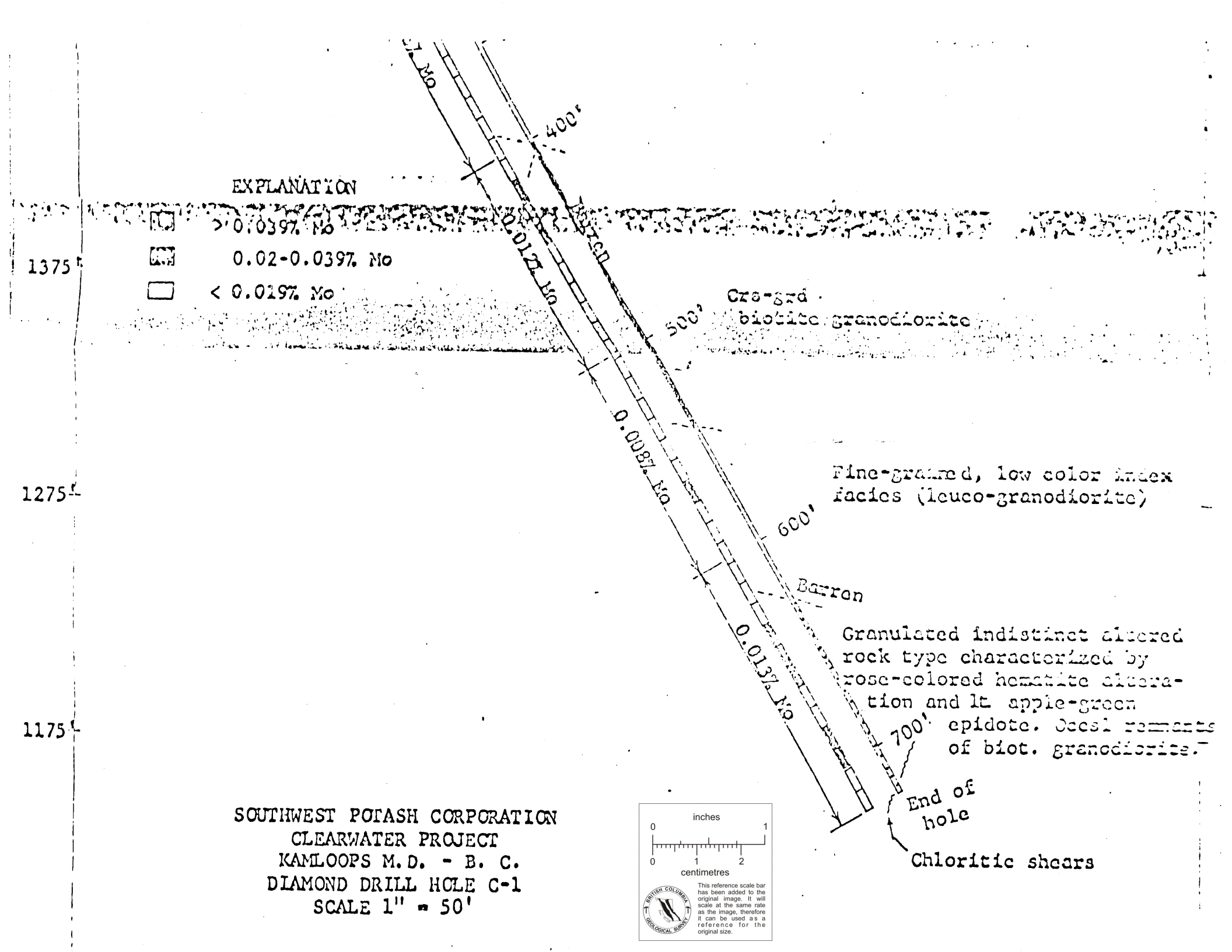
Footage	Core Rec	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
					694.0 Fine MoS_2 seam
693 703	10.0	100			696.1 3/8" MoS_2 - epidote - qz vein
					699.3 3/8" wh qz vein w/ disseminated py, MoS_2 . 40° ∠ w/ long axis
					699.9 Py cluster
			700-710	0.005	702.2 MoS_2 - graphite (?) seam
					702.5 - do -
703 713	9.9	99			703.2 - do -
					703.4 - do -
			712-720	0.005	712.8 MoS_2 threads along fracture ⊥ long axis of core
713 723	0.0	100			713.3-715.8 Serpentine - chlorite slic sides at 50° ∠ w/ long a
			720-723	0.005	
					723.0 END OF HOLE

CORE RECOVERY

0 - 35	casing	
35 - 47	10.2 / 12.0	85 %
47 - 217	170.0 / 170.0	100 %
217 - 268	49.7 / 51.0	98 %
268 - 568	298.8 / 300.0	99.6 %
568 - 608	38.2 / 40.0	95.5 %
608 - 723	113.0 / 115.0	98.0 %

No inclination tests. Tro-Pari damaged during first


S.W.
LOOKING NORTHWEST
N.E.
Elev. 1775'
Casing
0.010% Mo
100'
Crs-grd granodiorite
1675'
0.013% Mo
200'
Road
Clearwater River
1575'
0.009% Mo
Barren
Alteration begins
300'
Barren
Fine-grained, low color index facies (leuco-granodiorite)
1475'
0.008% Mo
inches
0
1
0
1
2
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.


EXPLANATION
> 0.039% Mo
0.02-0.039% Mo
< 0.019% Mo
1375'
1275'
1175'
0.1% Mo
0.012% Mo
0.008% Mo
0.013% Mo
400'
500'
600'
700'
Barren
Cre-grd biotite granodiorite
Fine-grained, low color index facies (leuco-granodiorite)
Granulated indistinct altered rock type characterized by rose-colored hematite alteration and lt apple-green epidote. Local remnants of biot. granodiorite.
End of hole
Chloritic shears
SOUTHWEST POTASH CORPORATION
CLEARWATER PROJECT
KAMLOOPS M.D. - B. C.
DIAMOND DRILL HOLE C-1
SCALE 1" = 50'
inches
0
1
0
1
2
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.
BRITISH COLUMBIA GEOLOGICAL SURVEY

259/BC

Company SOUTHWEST POTASH
State BRITISH COLUMBIA
County
District KAMLOOPS

Project CLEARWATER
Property JACK FOOTE
Started Oct. 1, 1964
Completed Oct. 9, 1964
Logged by D. L. MATHIAS JR.

Bearing N42E
Inclination -70°
Depth 691'

Sheet 1 of 7 Hole No. C-
Coordinates 160 S
3880 E
Altitude 1965'

Footage	Core Rec	% Rec	ASSAYS Footage	ASSAYS Total Mo	Remarks
	105				Casing through glacial drift and weathered bedrock.
105	112	2.6	37	105-115	0.01	105.0 – 108.4' Biotite granodiorite; limonite-stained along fractures.
2	117	4.2	84			
108.4	122	3.9	78	115-125	0.04	108.4 – 151.9' Strongly altered (argillization) granodiorite. All feldsps. and biotite converted to lt. gray, textureless material studded w/ relict qz. MoS_2 as dissem. flakes, vein seams, and as f-grd coloration (too fine to be distinguished under hand lens).
122	129	7.0	100			
129	135	4.8	80	125-135	0.005	
135	142	1.0	14			
				135-145	0.01	
142	150	0.6	7			151.9 – 187.5' Very weak, altered granodiorite. Core recovery over only 29%.
150	155	0.4	8	145-155	0.005	174.3 Epidote abndt.
155	170	1.6	11	155-165	0.005	181.8 MoS_2 clusters
170	177	3.4	49	165-175	0.005	Epidote, carbonate, apple-green sericite and maroon iron ox. coloration + clay minerals are most common alteration minerals.
177	182	3.1	62			
				175-185	0.005	

Sheet 1

Company SW POTASH Project CLEARWATER Sheet 2 of 7 Hole No. C

Footage		Core Rec.	% Rec.	ASSAYS Footage	Total Mo %
182	187	0.7	14		
187	189	1.7	85		
189	199	10.0	100	185-195	0.005
199	209	10.0	100	195-205	0.005
209	216	6.4	91	205-215	0.005
216	226	9.7	97	215-225	0.03
226	236	10.0	100	225-235	0.01
236	246	10.0	100	235-245	0.005
246	251	5.0	100	245-255	0.01
251	261	10.0	100		

Remarks

187.5 - 198.7 Altered but more competent, grano-diorite. Propylite (mainly epidote) and rose-colored dull fdsps are characteristic. Carbonate present but less abndt than in previous zone.
Calcite veining - 197.0 - 198.1

198.7 - 276.0 Strongly weathered (?), m-gr granodiorite. Fdsps converted to white clayey-calc aous masses, similar to alteration observed along str
209.9 MoS_2 seam - 1/16"; 20° ∠ w/ long axis core.

200.4 - 201.8 Pink, f-grd granulated (?) zon
No biotite.

217.5 7/16" gz-moly-cpy vein. MoS_2 a borders and in center of vein.

224.4 - 235.3 Strongly epidotized zone. Litt carbonate.
224.7 - 225.3 / 234.3 - 234.9 } Blk, nea-calc, mylonitized zones; 30° to 35° ∠ w/ axis of core
Zones within 198.7 - 276.0 are less kaolinized and pink fdsps are lustrous; biotite is unchanged. Esp 249.8 - 256.0 and 270.7 - 274.0.

Company SW POTASH Project CLEARWATER Sheet 3 of 7 Hole No. C-2

Footage	Core Rec.	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
			255-265	0.005	257.2 – 265.4 Epidote quite abndt.
[illegible]	271	10.0	100		
					264.9 – 265.2 F-grd, blk mylonite (?) zone
					275.4 MoS_2 dissem.
[illegible]	276	5.0	100	265-275	0.005 276.0 – 296.8 Strongly propylitized granodiorite; fdsps → epidote. Relict qz. Cb common.
[illegible]	293	7.0	100		280.5 – 282.8 Crushed, granulated mylonite zone; white to lt pink, f-grd qz + fdsps w/ quartzitic texture. Occsl py stringer. No [illegible]
[illegible]	296	2.9	97	275-285	0.04 282.2 – 282.6 Qz vein w/ py & MoS_2; qz milky & MoS_2 is scattered throughout.
296	299.5	3.5	70		296.8 – 299.2 Granular, white to rose-colored mylonitized (?) granodiorite or aplite (?). Occsl MoS_2 stringer w/ qz vein: 296.9 and 297.2. Lower contact makes 37° ∠ w/ long axis of core. Contact sharply defined, but there is an interlocking of grains, suggesting metasomatism.
299.5	296	5.2	95	285-295	0.02
296	306	10.0	100	295-305	0.005
					299.2 – 318.6 Altered or weathered granodiorite. Plag. fdsp → white, clayey material. K-fdsp + biotite relatively unchanged.
306	31[illegible]	5.0	100	305-315	0.01
					310.4 – 311.3 Red-brwn aplite dike
[illegible]	32[illegible]	10.0	100		315.8 – 316.7 Flesh-colored aplite or mylonite (?)
				315-325	0.01

Company SW POTASH Project CLEARWATER Sheet 4 of 7 Hole No.

Footage		Core Rec	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
321	331	10.0	100			318.6 - 360.9 Slightly less altered biotite granodiorite.
				325-335	0.03	Plag. fdsp. sausseritized, but much less clayey.
331	341	10.0	100			335.0 - 335.2 Pink aplite dike
				335-345	0.005	337.3 - 338.2 Flesh-colored aplite dike.
						Contact makes ∠ of 42° w/ long axis of co
341	351	10.0	100			
						360.9 - 369.3 Flesh-colored aplitic rock passing int
				345-355	0.005	less porphyritic, lower color index granite roc
351	361	10.0	100			
						369.3 - 403.4 Strongly altered granodiorite w/ plag.
				355-365	0.005	converted to soft white and greenish-white clay;
361	369	8.0	100			biotite somewhat altered to chlorite.
369	372	3.0	100	365-375	0.005	
372	381	7.3	81	375-385	0.005	403.4 - 510.9 Less altered to nearly fresh biotite
381	391	10.0	100			granodiorite
391	392	1.0	100	385-395	0.005	424.1 - 424.4 Very crs-grd K-fdsp - qz.
392	397	5.0	100			pegmatite stein
397	401	3.2	80	395-405	0.005	434.4 - 434.7 Flesh-colored aplite dike.
401	411	10.0	100			
				405-415	0.01	
411	421	10.0	100			
				415-425	0.005	
421	431	10.0	100			
				425-435	0.005	
431	440	9.0	100			
				435-445	0.01	
440	450	10.0	100			

(continuation sheet)

Company SW POTASH Project CLEARWATER Sheet 5 of 7 Hole No. C-2

...ntage	Core Rec	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
...0 470	10.0	100	455-465	0.01	
			465-475	0.005	
...0 480	10.0	100			
...0 483	3.0	100	475-485	0.01	Occsl very large (>1" diameter) pink K-fdsp xtal
...0 490	7.0	100			
...4 494	9.3	93	485-495	0.02	491.7 - 492.2 Pink aplite dike. Contact makes ∠ of 55° w/ long axis of core
...4 504	9.9	99	495-505	0.01	
...5 514	9.3	98	505-515	0.01	510.9 - 551.5 Altered biotite granodiorite. Plag. fdsp converted to earthy material
...4 524	9.7	97	515-525	0.01	
					514.4 - 514.6 Qz - K-fdsp vein
...4 527	3.0	100			
			525-535	0.01	542.6 - 543.0 Gray & maroon, f-grd rock w/ qz phenaxts or relicts (?) May be qz porphyry dike (?)
...7 537	10.0	100			
...7 546	9.7	97	535-545	0.005	
					546.4 - 547.7 Dark-colored phase w/ abndt fresh greenish-blk, m-grd fdsp laths envelop ping saussuritized plag.
...6 556	9.9	99	545-555	0.005	
					551.5 - 560.3 Distinctive pink rock w/ epidote alteration. F-grd to m-grd. Corresponds w/ simliar horizon at 630.7 - 723.0' in DDH C-1. Contains considerable cb.

HOLE C-1

Company SW POTASH Project CLEARWATER Sheet 6 of 7 Hole No. C-

Footage		Core Rec.	% Rec	ASSAYS Footage	ASSAYS Total Mo %	Remarks
556	566	10.0	100	555-565	0.005	560.3 - 584.4 Epidotized granodiorite. Original texture & mineralogy (except plag. fdsp.) preserved.
	576	10.0	100	565-575	0.005	558.0 - 559.3 Propylite; complete alteration.
576	586	9.7	97	575-585	0.005	584.4 - 593.0 F-grd, low-color index pink granite.
586	596	10.0	100	585-595	0.005	593.0 - 644.1 Normal biotite granodiorite.
596	606	9.7	97	595-605	0.005	593.0 - 599.1 K-fdsp oxidized to salmon-color & plag. fdsp. epidotized.
						604.6 - 604.8 Biotite-rich inclusion (?) w/ py stringers
						605.7 Py-qz seam (1/16")
606	616	10.0	100	605-615	0.005	619.1 Py seams ⊥ long axis of core
						626.2 Sooty pyritic seam making 35° ∠ w/ long axis of core
616	626	9.5	95	615-625	0.005	629.1 - 629.3 Reddish-brwn aplite dike
						644.1 - 646.0 Oxidized & epidotized zone
626	636	9.6	96	625-635	0.005	
636	646	9.7	97	635-645	0.005	646.0 - 691.0 Typical biotite granodiorite. Occsl epidote seams.
646	656	10.0	100	645-655	0.005	678.3 Py seam nearly ⊥ long axis of

Company SW POTASH Project CLEARWATER Sheet 7 of 7 Hole No. C-

Footage		Core Rec.	% Rec	ASSAYS Footage	ASSAYS Total Mo %
656	662	5.6	93	655-665	0.005
662	672	10.0	100	665-675	0.005
672	681	9.0	100	675-685	0.005
681	691	10.0	100	685-691	0.005

Remarks

673.0 MoS_2 flake

680.3 - 681.5 Rose-colored aplite dike

END OF HOLE

CORE RECOVERY

0 - 105	Casing	
105-135	22.5 / 30.0	75 %
135-170	3.6 / 35.0	10 %
170-189	8.9 / 19.0	47 %
189-209	20.0 / 20.0	100 %
209-226	16.1 / 17.0	95 %
226-283	57.0 / 57.0	100 %
283-296	11.6 / 13.0	89 %
296-691	389.1 / 395.0	98.5 %

No inclination tests. Hole was caving below casing.

Sheet

NORTH THOMPSON

North Barriere Lake (51° 119° S.W.)

Molybdenum

BAR* The Consolidated Mining and Smelting Company of Canada, Limited, holds the BAR 1–19 and the Barriere No. 6 recorded claims on the east side of Harper Creek, approximately 4 miles north of North Barriere Lake. Access is by a 5-mile logging-road up Harper Creek from the North Barriere Lake road. The mineralization consists of disseminated pyrite, with minor molybdenite and chalcopyrite in medium-grained granite. Work was carried out by a crew of three men under the direction of G. M. Gibson. The work included geological mapping and 302 feet of diamond drilling from one drill site. The property was not visited.

Clearwater River (51° 120° N.E.)

Molybdenum

Polly Ann, etc.* Southwest Potash Corporation; company office, 718 Granville Street, Vancouver 2. This company holds 55 recorded claims on the west side of the Clearwater River, including the Polly Ann 1–13, Betsy 1–17, Lizard 1–19, and Sock 7–12. The property is 6 miles north of Clearwater and access is by logging-road up Clearwater River. The showings are near the eastern edge of a major granitic batholith. Molybdenite mineralization is present mainly in a set of narrow, widely spaced quartz veinlets. Work, under the direction of D. L. Mathias, commenced in July and was completed by October. Two holes, totalling 1,414 feet, were diamond drilled. Other work included geological mapping and geochemical sampling.

ADAMS LAKE

Silver

Homestake* (51° 119° S.W.) Homestake Silver Ltd.; company office, 536 Howe Street, Vancouver 1. Coley Hall, president. This company holds 5 Crown-granted claims by option agreement and 15 claims by record. The property is on the Louis Creek-Skwaam Bay road, approximately 3 miles northwestward from the head of Skwaam (Agate) Bay on Adams Lake. Work in 1964 commenced on November 15th and was suspended on December 20th. About 2 miles of tractor-road was constructed. An average crew of five men was employed under the supervision of John Scott (*see* Annual Report, 1936, pp. D 32–D 36).

SHUSWAP LAKE

Zinc

Bet, Saul† (51° 119° S.E.) Edoran Oil Corporation Ltd., of Calgary, holds the Bet group of 43 claims and the adjoining Saul group of 4 claims. The property is on a ridge joining Crowfoot Mountain and Mobley Mountain at an elevation of approximately 6,200 feet. Access is by logging-road up Ross Creek from the north shore road of Shuswap Lake. Work included geological mapping, magnetometer surveying, and diamond drilling three holes, totalling 800 feet. An average crew of three men was employed under the direction of H. C. B. Leitch.

* By W. C. Robinson.
† By W. C. Robinson and G. E. P. Eastwood.

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
RESOURCE DATA SECTION

92P 021

NAME(S)= POLLY ANN

N.T.S. = 092P009E

MI= 092P 021

LAT= 5144.0 (DEG.MIN)
LONG= 2001.9
ELEVATION 0666 M.
MINING DIVISION= KAML
LOCATION ACCURACY= 1

UTMZ= 20U
UTMN= GN573500
UTME= GN070520

CAPSULE GEOLOGICAL COMMENT=
MOLYBDENITE OCCURS AS SPARSE FLAKES IN FELSITE DYKES, SHEARS ALONG FRACTURE PLANES, AND ASSOCIATED WITH A SET OF QUARTZ VEINS WHICH STRIKE N 40 TO 50 DEGREES W, DIP 30 TO 55 DEGREES SW AND AS SMALL ROSETTES IN GRANODIORITE. MINERALIZED ZONE IS AT E EDGE OF 40 BY 9 KM GRANODIORITE PLUTON.

COMMODITIES PRESENT= MO

MINERALS PRESENT=
MLBD

BIBLIOGRAPHY
C001A BCDM MAR 1964-99
C002A GSC MAP 1966-5

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92P-9 MO 2/-