

'81- # 282-# 9110

ROAD BUILDING, TRENCHING,
AND GEOCHEMICAL REPORT
ON THE
NITHI MOUNTAIN MOLYBDENUM PROPERTY
FRASER LAKE, BRITISH COLUMBIA

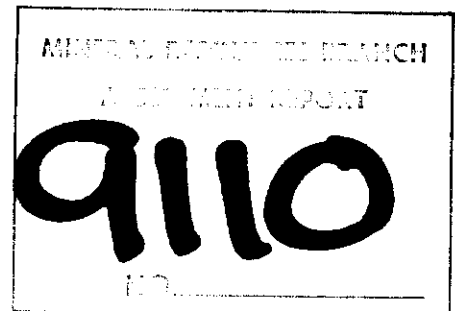
MOM GROUP (MOLLY 1-14, 17, 18; MJM 3-5)
SMID GROUP (DB 1-4, MJM 1-2, STREP and STREP 79)
Mineral Claim Groups
OMINECA MINING DIVISION

N.T.S. MAP SHEETS 93 F/15, 93 K/2
LATITUDE $53^{\circ}57'24''$ to $54^{\circ}00'07''$
LONGITUDE $124^{\circ}47'48''$ to $124^{\circ}53'07''$

prepared for
ROCKWELL MINING CORPORATION
Vancouver, British Columbia

by
James W. Davis, B.Sc., M.Sc., P.Geol.
TAIGA CONSULTANTS LTD.
Calgary, Alberta

March 1981



S U M M A R Y

1. The property under consideration consists of 141 claim units or two-post claims which have been grouped for purposes of assessment into two claim groups. The SMID Group consists of claims DB 1-4, MJM 1 and 2, STREP, and STREP 79; and the MOM Group consists of claims MOLLY 1-14, 17, 18 and MJM 3-5; all of which cover and surround Nithi Mountain and its flanks.
2. The total area under mineral disposition is approximately 2,850 hectares (7,042 acres).
3. The two claim groups are situated about 8 km (5 mi.) south of the village of Fraser Lake, British Columbia, and are accessible via the Chowsunkit logging road and a network of old logging roads which crisscross the property.
4. The claim groups are located within an area underlain by the various phases of the Topley intrusives.
5. Work carried out on the claims included road building, trenching, and geochemical sampling of these trenches and old diamond drill core stored on Nithi Mountain along with comprehensive geochemical analysis of rock samples previously collected in the July 1980 field program.
6. The geochemical results have been plotted on a 1:1,000 scale map of the trenches.
7. All samples collected were bedrock, and these samples defined several molybdenite showings on the property.

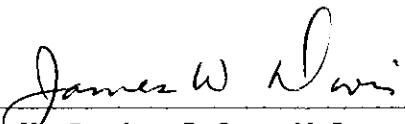
STATEMENT OF QUALIFICATIONS

I, the undersigned, of the City of Calgary in the Province of Alberta,
do hereby certify:

1. that I am a consulting geologist residing at 3220 Oakwood Drive S.W.,
Calgary, Alberta;
2. that I graduated from St. Louis University with a B.Sc. in Geology
in 1967, and with an M.Sc., in Geology in 1969, and that I have been
practising my profession continuously since graduation;
3. that I am registered as a Professional Geologist with the Association
of Professional Engineers, Geologists and Geophysicists of Alberta
since 1971;
4. that I have personally supervised and participated in the exploration
of the Nithi Mountain property during the period from October 14, 1980
to March 2, 1981.

Respectfully submitted,

Calgary, Alberta
March 1981



James W. Davis, B.Sc., M.Sc., P.Geol.

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INTRODUCTION (Location, Property Description)

The Nithi Mountain molybdenum property is located about 8 km (5 mi.) south of the village of Fraser Lake, which is 158 km (98 mi.) west of the city of Prince George in central British Columbia (Figure 1). The property lies almost entirely within N.T.S. 93 F/15 with the northern margin extending into the southern part of N.T.S. 93 K/2. The top of Nithi Mountain is located at approximately 124°50' West longitude and 53°58' North latitude, near the central part of the property, at an elevation of 1,352 metres (4,435 feet) ASL.

The Nithi Mountain property consists of 17 old-style two-post claims and about 110 claim units staked under the modified grid system, within the Omineca Mining Division. As is shown in Figure 2, these claims cover and surround Nithi Mountain and its flanks. This contiguous block of claims is held under option by Rockwell Mining Corporation from three different owners. The Molly 1-14, 17 and 18 are optioned from Andrew Robertson (Fraser Lake Mines); the MJM 1-5 claims from Nithex Explorations Ltd.; and the Strep and Strep 79 claims from P. Ogryzlo and Don Young. In addition, the DB 1-4 claims were staked in the summer of 1980 for Rockwell Mining Corporation. The total area under option is 2,850 hectares (7,042 acres). These claims have been grouped for purposes of assessment into the MOM group (consisting of the MOLLY 1-14, 17, 18, MJM 3-5 claims), and the SMID group (consisting of the DB 1-4, MJM 1-2, STREP, STREP 79 claims). A summary of relevant claim data is presented in Table 1.

Assessability

The Nithi Mountain property is accessible from Fraser Lake by four-wheel-drive vehicles via the Chowsunkit logging road and secondary roads. The main electrical power line for the Endako Mine is only four miles north of the property. The village of Fraser Lake is located along the Yellowhead Highway (B.C. Highway 16) and the main Canadian National rail line through central British Columbia to Prince Rupert. A small airfield is located about 1 km south of Fraser Lake, which is capable of accommodating light aircraft. Thus, there exists an excellent transportation and mining infrastructure within a relatively short distance from the property which would allow rapid development of any mineral deposits found in the vicinity.

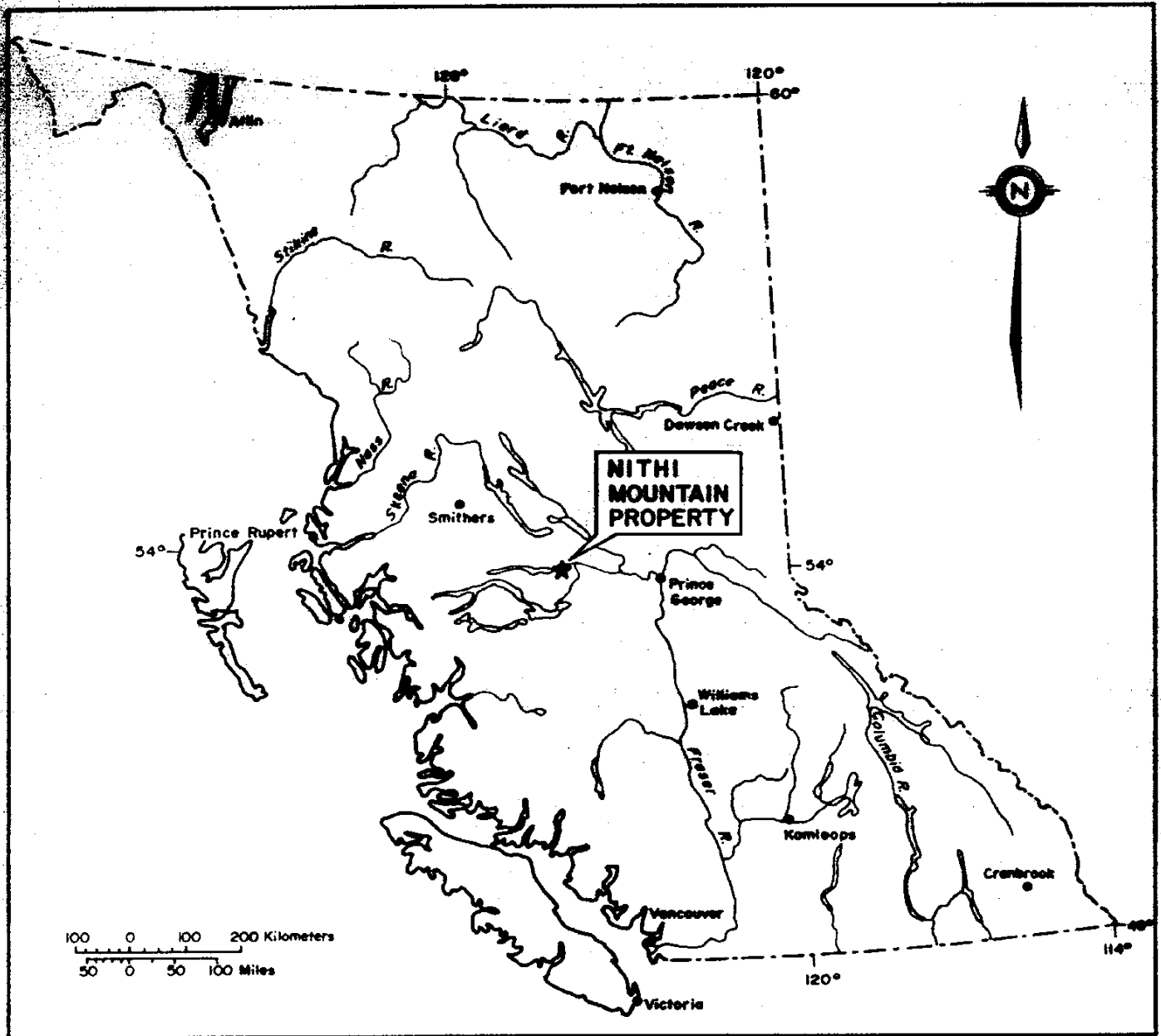


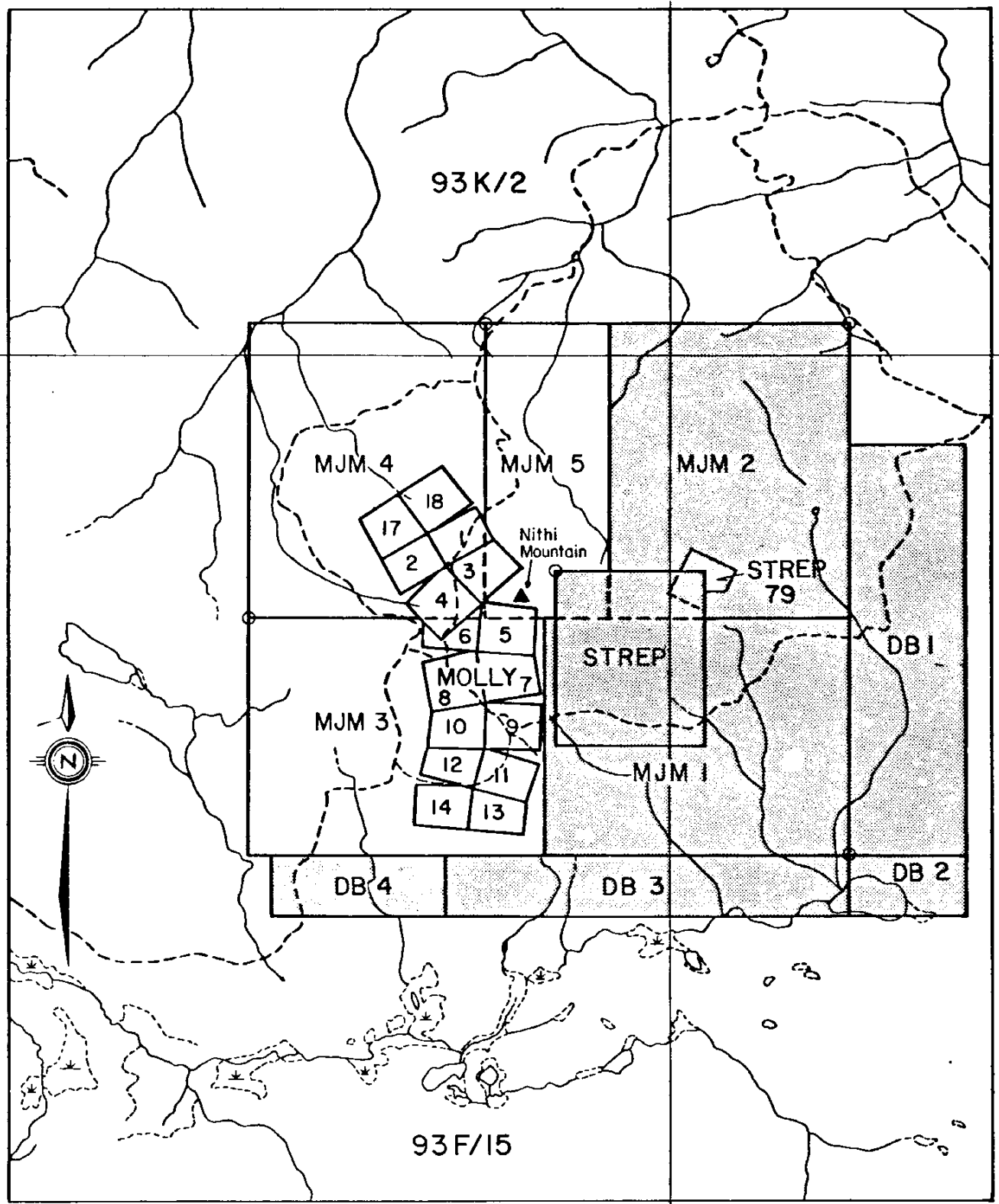
FIGURE 1

REGIONAL LOCATION MAP
NITHI MOUNTAIN MOLYBDENUM PROPERTY

124°50'

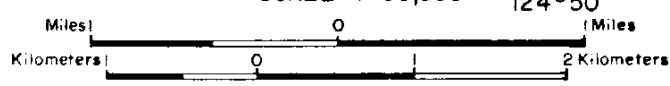
54°00'

54°00'



SCALE 1:50,000

124°50'



- MOM GROUP (Mollys; MJM 3,4,5)
- SMID GROUP (DB 1,2,3,4; MJM 1,2; Streps)

FIGURE 2

PROPERTY LOCATION MAP

TABLE 1
SUMMARY OF CLAIM DATA

	<u>Claim Name</u>	<u>Claim Units</u>	<u>Record Number</u>	<u>Record Date</u>	<u>Expiry Date</u>	
MOM Group	MOLLY 1		15166	June 27/62	June 27/81	
	MOLLY 2		15167	"	"	
	MOLLY 3		15168	"	"	
	MOLLY 4		15169	"	"	
	MOLLY 5		15170	"	"	
	MOLLY 6		15171	"	"	
	MOLLY 7		15172	"	"	
	MOLLY 8	2-post claims	15173	"	"	
	MOLLY 9		15174	"	"	
	MOLLY 10		15175	"	"	
	MOLLY 11		15176	"	"	
	MOLLY 12		15177	"	"	
	MOLLY 13		15178	"	"	
	MOLLY 14		15179	"	"	
	MOLLY 17		15182	June 29/62	"	
	MOLLY 18		15183	"	"	
		MJM 3	20	837	Oct. 17/77	Oct. 17/83
		MJM 4	20	838	"	Oct. 17/82
	MJM 5	10	839	"	"	
SMID Group	DB 1	14	3132	Aug. 27/80	Aug. 27/81	
	DB 2	2	3133	"	"	
	DB 3	7	3134	"	"	
	DB 4	3	3556	Feb. 4/81	Feb. 4/82	
	MJM 1	20	835	Oct. 17/77	Oct. 17/83	
	MJM 2	20	836	"	Oct. 17/82	
	STREP	9	801	Sep. 26/77	Sep. 27/84	
	STREP 79	2-post claim	2394	Dec. 14/77	Dec. 14/83	

PHYSIOGRAPHY

The Nithi Mountain area is within the Interior System of the Canadian Cordillera and more specifically within the physiographic subdivision referred to as the Nechako Plateau. Local terrain consists of gently rolling hills and low mountains with flat-bottomed valleys. Upland surfaces are generally well-drained with few lakes or marshes, while the valleys are the loci of a number of large, long, narrow lakes such as Fraser Lake or Francois Lake. These east-west trending lakes are the remnants of Pleistocene meltwater channels which followed pre-Pleistocene stream valleys. The east-west orientation of these valleys probably reflects fundamental structural control of pre-Pleistocene topography.

Local relief in the Fraser Lake area is approximately 680 m (2,240 ft.) ASL as measured from Fraser Lake's 670 m (2,197 ft.) to the top of Nithi Mountain's 1,350 m (4,435 ft.) ASL. This order of relief is slightly greater than elsewhere on the Nechako Plateau indicating that Nithi Mountain may have been a topographic high even prior to the late Tertiary uplift and stream dissection of the area. Elevations on the Nithi Mountain moly property itself vary from 823 m (2,700 ft.) ASL in the southeastern part of the area to 1,352 m (4,435 ft.) ASL at the top of Nithi Mountain.

Nithi Mountain has a pronounced asymmetry with a steep south flank and a more gentle north flank. This asymmetry is due to the presence of a deeply incised and underfit, east-west trending stream valley south of the mountain. This flat-bottomed stream valley is filled with thick glacio-fluvial and glacio-lacustral deposits.

Bedrock exposures are more abundant on the south slope of Nithi Mountain due to the steeper topography and drier soil conditions which allow more rapid erosion.

The climate of the region is a continental type of warm summers and long cold winters. Temperatures range from a summer mean of 14°C to 16°C (57°F to 61°F) with highs to 18°C (90°F), to a winter average of -10°C to -15°C (14°F to 5°F) with lows of -40°C (-40°F). The area receives from 40 cm to 50 cm (16" to 20") of annual precipitation. There are only from 60 to 100 frost-free days yearly, which limits the agricultural potential of the region.

REGIONAL GEOLOGICAL SETTING

Relevant Published Geological Mapping

Regional mapping by the Geological Survey of Canada was carried out in the Fraser Lake area by J. G. Grey and J. E. Armstrong in 1936-1937. The geological map (630A) for the Fraser Lake map-area was published in 1941 at a scale of 1:253,440. A geological compilation map (971A) of the region was completed at a scale of 1:506,880 by H. M. R. Rice in 1948. Geological mapping of the Nechako River map-area, which includes the Nithi Mountain area, was completed by H. W. Tipper in 1949-1953. The results of this mapping were published in G.S.C. Memoir 324 in 1968. A geological map (1131A) accompanying this report was printed at a scale of 1:253,440. The most detailed geological map of the Nithi Mountain area was completed by J. M. Carr in 1966 at a scale of 1:63,360 as part of "Geology of the Endako Area" in a publication produced by the B.C. Department of Mines and Petroleum Resources on "Lode Metal in British Columbia". More recently, a regional geological atlas (G.S.C. Map 1424A) was compiled by R. J. W. Douglas for all of N.T.S. 93, at a scale of 1:1,000,000.

The Earth Physics Branch of the Geological Survey of Canada completed an aeromagnetic survey of Nithi Mountain in 1961. The Fraser Lake area (93 K/2) is covered by aeromagnetic map 1590G, while the Hallett Lake map-sheet (93 F/15), which includes most of Nithi Mountain, is covered by aeromagnetic map 1589G. Both of these maps are produced at a scale of 1:63,360.

There exists in the geological literature a great number of reports dealing with the Endako Molybdenum Mine. However, most of the reports do not deal specifically with the geology and mineral occurrences of the Nithi Mountain area. Since these reports contribute to a better understanding of the style of mineralization sought in the Nithi Mountain area, a partial list of these reports is included in the Bibliography.

Regional Geology (Table 2)

The Topley batholith, which is of Middle Jurassic to Lower Cretaceous age, extends northwest from Tatuk Lake to Babine Lake for a distance of

TABLE 2
REGIONAL STRATIGRAPHIC SUCCESSION

Era	Period or Epoch	Formation	Lithology	
Cenozoic	Recent		Stream and lake deposits, talus, soil	
	Pleistocene		Glacial and glacio-fluvial deposits	
	Erosion interval			
	Oligocene and Miocene	Endako Group	Basalt, andesite; related tuff and breccia; minor shale and greywacke	
Angular unconformity				
Mesozoic and Cenozoic	Upper Cretaceous and Paleocene	Dotsa Lake Group	Rhyolitic and dacitic tuff and breccia; shale, sandstone, conglomerate	
			Rhyolite, dacite, trachyte, andesite; minor basalt; related tuff and breccia	
			Basalt, andesite; minor rhyolite, sandstone, and conglomerate	
Erosion interval				
Mesozoic	Lower and Middle Jurassic	Hazelton Group	Greywacke, argillite, conglomerate tuff, breccia, andesite, and arkose; minor rhyolite	
			Andesite, related tuffs and breccias, chert-pebble conglomerate, shale, and sandstone	
	Unconformity; erosional interval			
	Middle Jurassic to Lower Cretaceous	Topley intrusions:		Granite, granodiorite, diorite, and quartz diorite
		Fraser quartz monzonite		Pink biotite-hornblende quartz monzonite. Small circular stock.
		Stellako intrusions		Pink biotite quartz monzonite, pink-grey hornblende-biotite granodiorite. Discordant, north-northeast trend
		Francois granite		Red porphyritic biotite granite. Miagolytic, chilled margins. No molybdenum deposits.
		Casey alaskite		Leucogranite and quartz monzonite. Discordant stocks and satellitic dykes. Molybdenum deposits at Owl Lake, Tatin Lake, Nithi Mountain, and Endako.
		Glenannan complex		Zoned pluton north of Endako. Pink porphyritic granite, quartz monzonite, granodiorite. No molybdenum deposits.
		Nithi quartz monzonite		Pink-grey subporphyritic biotite-hornblende quartz monzonite. Resembles Endako quartz monzonite and may be equivalent. Molybdenum deposit at Nithi Mountain
Quartz feldspar porphyry, porphyritic granite, aplite			Brown-pink porphyry dykes up to 45 metres wide, abundant at mine. Porphyritic pink potash feldspar granite dykes up to 15 metres wide. Pink sugary aplite up to 1.2 metres wide	
Endako quartz monzonite		Pink subporphyritic biotite-hornblende quartz monzonite. Host rock at Endako mine		
Simon Bay diorite complex		Coarse-grained, foliated hornblende diorite, quartz diorite, granodiorite, gabbro. Mesozonal, concordant pluton. Oldest Topley unit. No molybdenum deposits		
Intrusive contact with lower part of Takla Group				
Upper Triassic and Lower Jurassic	Takla Group		Red and brown shale, conglomerate, and greywacke	
			Andesitic and basaltic flows, tuffs, and breccias; interbedded argillite and minor limestone	
Intrusive contact between Topley Intrusions and Cache Creek Group				
Paleozoic	Pennsylvanian and Permian	Cache Creek Group	Limestone, chert, argillite	

modified after Tipper (1963)

155 km (96 mi.). This intrusive was emplaced into country rock consisting of the Pennsylvanian and Permian Cache Creek Group, the Upper Triassic and Lower Jurassic Takla Group, and the Lower to Middle Jurassic Hazelton Group. The Cache Creek Group consists of limestone, chert, argillite, basic volcanics, and greenstones. The Takla Group consists of basalt and andesite along with minor interflow sedimentary rock units. The Hazelton Group consists of andesite, rhyolite, and sedimentary rocks.

The Topley intrusives intrude the southwestern flank of the Pinchi geanticline, which is an elongate, northwest trending, fault-bounded belt of Cache Creek rocks. This geanticline was uplifted and broadly folded and faulted in late Triassic time. Peripheral faults along the flanks of the Pinchi geanticline are thought to have controlled the emplacement of the Topley. Towards the southwest of Nithi Mountain, the Topley is intrusive into both the Takla Group and the Hazelton Group.

Carr (1966) has recognized nine phases of the Topley Intrusions. The oldest and most extensive Topley is the Simon Bay diorite complex. This Middle Jurassic complex consists of coarsely crystalline, foliated hornblende diorite, quartz diorite, granodiorite, and gabbro. This mesozonal concordant pluton exhibits a pronounced northwest foliation which is thought to reflect pre-existing structural control for its emplacement.

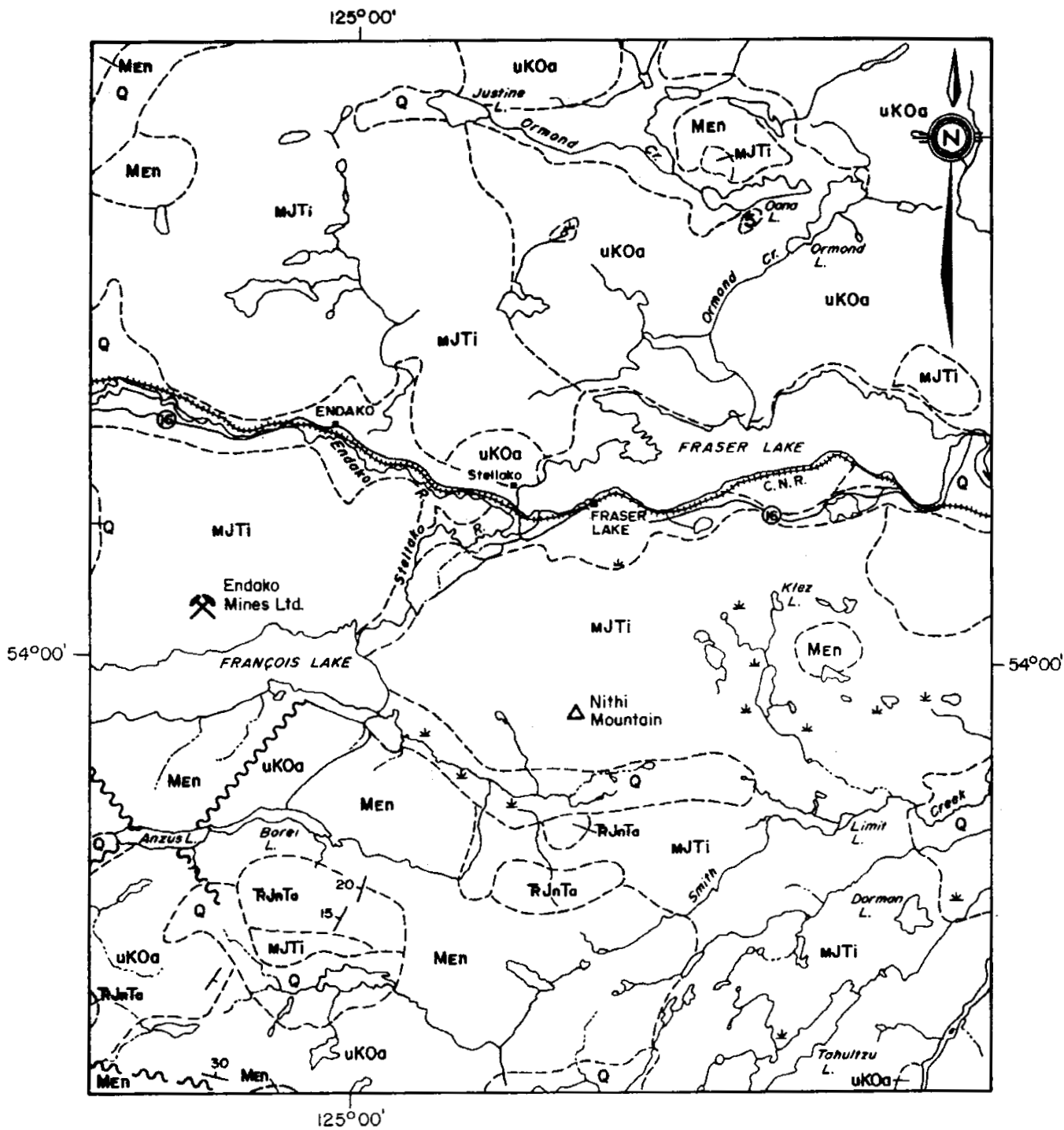
Simon Bay rocks are intruded by the Late Jurassic Topley phases consisting of the Endako, Nithi, Glenannan, Casey, and Francois plutons. The Endako intrusive is Upper Jurassic in age and is a subporphyritic biotite hornblende quartz monzonite, which is the host rock for the Endako Mine. The Nithi stock is a pink-grey subporphyritic biotite hornblende quartz monzonite. The Nithi quartz monzonite is the same age as the Endako pluton and is lithologically similar and for these reasons is considered equivalent. The Glenannan is a zoned pluton composed of pink porphyritic granite located north of Endako. The Casey alaskite occurs as discordant stocks which vary from granite to monzonite in composition. The Stellako intrusives are pink biotite quartz monzonite and pink-grey hornblende biotite granodiorite. The final unit identified as part of the Topley is the Fraser quartz monzonite which is Lower Cretaceous in age and is exposed in one

small circular stock of pink biotite hornblende quartz monzonite. Of these various phases of the Topley, only the Endako, Nithi, and Casey are known to host significant molybdenum mineralization.

Following an extended period of erosion, which unroofed the older Topley intrusions, the Lower to Middle Jurassic Hazelton Group was laid down in a northwest trending basin through the area. The Hazelton Group can be subdivided into two units, the chert-pebble conglomerate unit and the Middle Jurassic volcanic unit. The chert-pebble conglomerate unit consists of conglomerate, shale, and greywacke, along with volcanics including both flows and pyroclastics which vary from andesitic to basaltic in composition. The Middle Jurassic unit is mainly sedimentary with some interlayered flow breccias and tuffs. Rock types include andesite, rhyolite, greywacke, conglomerate, shale, argillite, and arkose. Both of these Hazelton units received debris from the erosion of the Topley intrusions.

Resting with angular unconformity on all older formations is the Upper Cretaceous to Paleocene Ootsa Lake Group. The Ootsa Lake Group is predominantly acid volcanics although some andesite and basalt flows do occur near the base of the group. Also included within this group are minor interflow sedimentary rocks.

Unconformably overlying the Ootsa Lake Group are the Oligocene and Miocene Endako Group sedimentary and volcanic rocks. The lower Endako Group units consist of conglomerate, sandstone, mudstone, and minor lignite which represent stream and lacustral deposition under continental weathering conditions. The upper units of the Endako Group are predominantly basaltic flows with minor andesite and interflow sediments. Following the deposition of these flood basalts, the Nechako Plateau was faulted and uplifted. In late Cenozoic time, erosion dissected this plateau, producing a mature topography only slightly modified by Pleistocene glaciation. Table 2 summarizes the regional stratigraphic succession and Figure 3 illustrates the geologic setting of the Nithi Mountain area.



SCALE: 1:250,000 or 1cm = 1km

FIGURE 3
REGIONAL GEOLOGY, NITHI MOUNTAIN

Q	Quaternary	MJTi	Topley Intrusions
MEN	Endako Group	RjJnTa	Takla Group
uKOa	Ootsa Lake Group		Fault
			Bedding (inclined, vertical)

LOCAL GEOLOGY

The Nithi Mountain property is completely underlain by the various phases of the Topley intrusives. A detailed description of the rock units exposed on Nithi Mountain as defined by Carr (1966) is as follows:

Simon Bay Complex

The complex consists largely of foliated, rather dark rocks having a mixed or hybrid appearance and composed partly of alternating bands, or lenses, which range in width from inches to hundreds of feet and differ either in composition, in grain size, or both. The rocks are mostly greenish, fine- or medium-grained, equigranular quartz diorites consisting of moderate amounts of quartz and orthoclase, or microcline, and abundant plagioclase, biotite, and hornblende. Quartz is interstitial and wedge shaped; orthoclase is in small discrete crystals; plagioclase is andesine and lacks oscillatory zoning; hornblende partly forms anhedral crystals of above average size; and biotite is commonly poikilitic or, in the mafic bands, in laminated masses which contribute strongly to the foliation of the rock. Accessories include magnetite, sphene, and pyrite. Locally there are gabbros, which are quartz-free and contain labradorite plagioclase, diopside, and hornblende. In places the rocks enclose coarse-grained lenses of quartz diorite composition. Inclusions are common and are mainly angular, although in the well-foliated rocks some are lenticular. The inclusions are of dark fine-grained rock which is probably hornfels. In places, notably near Simon Bay, the complex is traversed in several directions by fine-grained light-coloured quartz monzonite dykes at whose margins the host rocks are feldspathized. Aplite dykes were also noted. Although generally fresh, the rocks of the complex are in places strongly sheared and altered, with production of actinolite, chlorite, epidote, pyrite, magnetite, and locally scapolite. This hydrothermal alteration also affects certain sheared greenstone dykes in the rocks but is less apparent in other, later, dykes, which include both acid porphyries and diabase dykes. Shearing in the complex is in various directions, some of which are transverse to the foliation of the rocks.

Caledonia Quartz Monzonite

Caledonia Quartz Monzonite occurs on the southwestern flank of Nithi Mountain and as irregular patches in Endako quartz monzonite. At two locations it is close to felsic dykes but contacts between Caledonia quartz monzonite and other rock types were not seen.

Caledonia quartz monzonite is a grey to pink, medium-grained porphyritic rock which contains approximately equal amounts of quartz, plagioclase, and potassium feldspar and 5-10% biotite. Pink subhedral potassium feldspar phenocrysts from 5-16 mm long

which make up approximately 10% of the rock are characteristic of Caledonia quartz monzonite. No molybdenite was found in Caledonia quartz monzonite on Nithi Mountain.

Nithi Quartz Monzonite

This unit occupies the summit and parts of the northern and eastern slopes of Nithi Mountain and is divided into several outcrop areas by a large later intrusion of the Casey quartz monzonite. West of the summit the unit is in exposed sheared contact with the quartz diorite complex, which it probably intrudes and against which it appears somewhat chilled. Contacts with quartz monzonites assumed to be younger are entirely hidden. The unit consists of quartz monzonites which, although differing in appearance, are probably intergradational and which occur alternately without a definable pattern. The difference in these rocks results from a variation in the content of light-coloured phenocrysts and medium-sized crystals, which are mostly of orthoclase but also of plagioclase and quartz. The rocks contain occasional small dark inclusions like those in previously described units, some of the inclusions being angular and little resorbed. On the Molly road a weak foliation due to feldspar alignment is steep and strikes variously northeast and northwest.

The least porphyritic variety of the Nithi quartz monzonite is a uniform medium-grained pinkish-grey rock with abundant biotite and a granular texture. Crystals as much as one-half centimetre in size are rare, and the majority are between one-half millimetre and 2 millimetres. The estimated modal composition of the rock is: Quartz, 35%; orthoclase, 21%; plagioclase, 35%; biotite, 7%; hornblende, 1%; other minerals, including magnetite, sphene, and apatite, 1%. Although quartz, orthoclase, and biotite may be locally interstitial, the over-all texture is controlled by closely packed subhedral crystals. Orthoclase is perthitic and locally has microcline twinning. Plagioclase shows strongly developed oscillatory zoning and wide rims of more albitic composition. Quartz grains are aggregates of closely packed individuals, formed perhaps by recrystallization during cooling and inversion. Biotite mainly forms small thick plates.

The strongly porphyritic variety is a lighter-coloured, generally pink rock of somewhat coarser grain size and with phenocrysts mainly of perthitic orthoclase and aggregated quartz but also of plagioclase that together amount to nearly one-third of the rock. The estimated modal composition of a specimen is: Quartz, 40%; orthoclase, 30%; plagioclase, 23%; biotite, minor hornblende, and accessory minerals, 7%. The rock, which looks not unlike the Glenannan quartz monzonite, differs from the preceding variety only in the presence of phenocrysts and medium-sized crystals, of which those of orthoclase and plagioclase reach lengths of 2 centimetres and one-half centimetre respectively, and those of quartz a diameter of three-quarters of a centimetre. The orthoclase phenocrysts deeply enclose small crystals of other minerals and are intergrown at their margins with

neighbouring crystals. The quartz phenocrysts contain inclusions mainly of feldspar and are ovoid to irregular in shape, with well-defined partly rounded margins.

Rocks occur which are intermediate in character between these two described varieties and which superficially resemble the Endako quartz monzonite and have abundant phenocrysts of sizes generally not exceeding one-half centimetre.

Casey Granite

The unit comprises light-coloured rocks, many of which locally have been called alaskite. They are mostly quartz monzonites, although some fine-grained varieties are granites. Although varying in appearance due to their differing grain size and porphyritic development, all are characterized by an absence of hornblende, a low biotite content, and an inequigranular texture.

Fine-grained rocks occupy parts of the margins of the main bodies and also form dykes and offshoots of the latter. They are pink, more or less porphyritic rocks which resemble aplites and have an average grain size of about one-half millimetre. Orthoclase and quartz phenocrysts are 3 millimetres in size in some rocks and are as large as one-half centimetre in others. Under the microscope the quartz phenocrysts appear as aggregated grains, and the rocks are found to contain micropegmatite. The estimated mode of a specimen of these rocks is: Quartz, 33%; orthoclase, 40%; plagioclase, 25%; biotite, 2%.

The remaining rocks are somewhat coarser grained, with average grain sizes ranging up to 2 millimetres; they are pink or white quartz monzonites that weather either white or brownish. The coarser of these rocks are found mainly in the stock and its northernmost arm, and in the northern part of the Nithi Mountain body. The absence of fine-grained rocks along parts of the contacts with the older units, and in some dykes which cut these units, shows that the degree of chilling of the intrusions was slight. In some places the adjoining older rocks were apparently sheared prior to emplacement of the Casey intrusion; for example, the Tatin quartz monzonite at a contact north of Tatin Lake. In the stock, rapid fluctuations of grain size occur and locally there are lenses of granite pegmatite and separate pod-like concentrations of biotite. In many places the rocks contain small irregular cavities partly filled with well-crystallized quartz, orthoclase and biotite, and chlorite. A foliation is recorded only in rocks north and south of the east end of Tatin Lake, where it is directed northward across the assumed strike of both bodies. Inclusions of foreign rocks are virtually absent in the unit.

The coarser-grained rocks contain phenocrysts of orthoclase and quartz which increase in size and number roughly with increasing grain size of the rock. They may be as large as 1 centimetre and constitute as much as 30% of the rock. The phenocrysts are relatively inconspicuous because of the irregularity of their margins, which are poikilitic to smaller crystals. With increasing

coarseness the rocks adopt a less granular, more interstitial texture, in which both quartz and orthoclase partly surround other crystals and form interstitial wedges. Plagioclase is generally in small crystals, and in some of the rocks it exceeds orthoclase in amount. Biotite forms small scarce books and plates and is slightly more plentiful than in the fine-grained rocks. Under the microscope some interstitial orthoclase is seen to possess microcline twinning, and plagioclase crystals show wide marginal zones and only the faintest indication of oscillatory zoning. Local graphic intergrowths of quartz and orthoclase occur but not in the coarsest-grained rocks. The estimated mode of a typical coarser-grained rock is: Quartz, 36%; orthoclase, 30%; plagioclase, 30%; biotite, 3%; accessories, 1%.

Stellako Quartz Monzonite

The Stellako quartz monzonite occurs in the northwestern corner of the Nithi Mountain property. This intrusive phase is one of the youngest phases of the Topley, according to Carr (1964). No molybdenite mineralization has been found associated with this intrusive phase. The Stellako consists of a finely crystalline grey, massive quartz monzonite, which contains approximately 5% biotite and 2% hornblende.

Aplite dykes occur on Nithi Mountain along with associated pegmatite of granitic composition at a number of locations. The aplites are most abundant in the Casey granite. The aplite is generally light pink in colour with a relatively uniform, finely crystalline texture composed of quartz, orthoclase, and rarely, plagioclase and biotite. Pegmatite with crystals up to several centimetres in size are compositionally the same as the aplite and are often in gradational contact with aplite.

The porphyry dykes are mapped into several groups depending on the composition of the light-coloured phenocrysts. The majority of these dykes are rhyolite, quartz latite, and dacite, but some dykes of latite to andesite composition have been recognized. Generally, the dyke rocks are pre-mineral in age.

Dykes with quartz, orthoclase, and plagioclase phenocrysts are common and have been noted on the west side of Nithi Mountain within the Nithi quartz monzonite. These dykes contain phenocrysts ranging from 5 mm to 2 cm in size, imbedded in a ground mass which is generally rhyolitic in

composition. According to Carr (1966), these dykes are mineralized only at the Endako Mine and at the showings on Nithi Mountain, and he states:

The dykes at the mine are numerous, mineralized, and as much as 40 feet wide, with strikes that range from northeast to northwest. Several narrow darker-coloured dykes which strike northeastward in the Endako quartz monzonite north of the tailings dam may be related to them. The dykes on Nithi Mountain curve northward to the Molly showing and are partly strongly sheared and altered. Near the showing a large dyke is locally 100 feet wide and contains secondary uranium minerals in fractures.

Quartz porphyry dykes were mapped at several locations in the northeastern part of the Nithi Mountain property near the Tan showing. These dykes, which have quartz and plagioclase phenocrysts, strike toward the northwest and are dacitic in composition and vary from grey to pink in colour.

Several small lamprophire dykes have been mapped in the property with most located on the west side of the Nithi Mountain summit. These dykes are finely crystalline and dark-green to black in colour, and tend to occur mainly in shear zones and joints, and are often sheared themselves by subsequent reactivation of these faults. While these dykes are post-ore, their structural association probably accounts for their abundance at the Endako Mine.

Structural geology plays a key role in localizing both the emplacement of the various Topley intrusions and in the ground preparation for the formation of ore deposits. Kimura and Drummond (1969) and Dawson and Kimura (1972) have discussed the structural control for the formation of the Endako ore body. Essentially, the Endako ore body is a mineralized elongate stockwork. Dawson and Kimura (1972) state:

The development of the Endako orebody was influenced by three related igneous events: emplacement and crystallization of Endako quartz monzonite; intrusion of residual granitic magma as pre-ore dykes; and ascent of hydrothermal fluids through the localized zone of intense fracturing related to wrench faulting and doming (see Figure 4). Early compressional stress, active during emplacement and cooling of Endako pluton, apparently generated localized doming and fracturing in the vicinity of the mine, an area occupying the intersection of regional east-west, northwest, and northeast fracture systems. Intrusion of

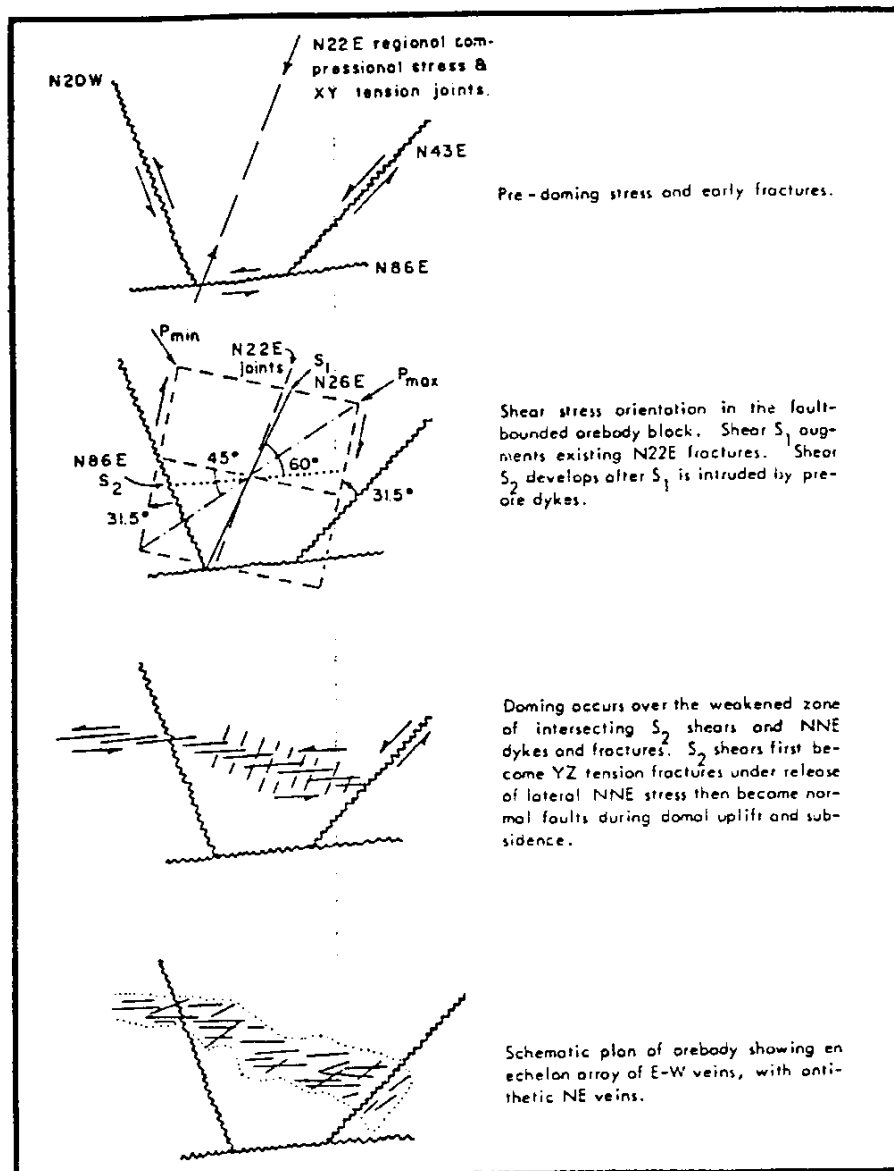


FIGURE 4

Localization and Development of the Endako Stockwork
(after Dawson and Kimura, 1972)

pre-ore dykes accompanied the principal structural adjustment of the pluton: wrench faulting along principal orebody faults and secondary shears; doming of the orebody area; and antithetic faulting along conjugate southward and northwestward dipping fractures. Many large veins and smaller stockwork veinlets follow the predominant east-west and northeast fracture directions.

The structure of Nithi Mountain is broadly similar to the Endako Mine. Although the number of faults mappable on the basis of outcrops and trenches is extremely limited, inspection of available aerial photographs and topographic maps allows the delineation of possible fault trends. Figure 5 is a sketch map illustrating both known and inferred faults in the vicinity of Nithi Mountain. The major fault zones south and southwest of Nithi Mountain are similar to the regional fault set which controlled the initial development of the Endako stockwork. The most predominant quartz vein orientation on Nithi Mountain is 60° to 75° with steep dips toward the south. The fracture pattern observable on air photos of the area, as illustrated in Figure 5, consists of a dominant northwest set oriented 325° to 365° and a secondary pattern oriented northeast at 40° to 60° azimuth.

The general east-west orientation of quartz molybdenite veins on Nithi Mountain is essentially the same as that found in the Endako ore body. The prominent northwest fracture pattern appears to be a first-order shear direction related to a left-lateral movement along the major east-west trending fault zone located south of Nithi Mountain. The northeast trending set of fractures would then represent a conjugate shear direction of the northwest set.

While the existence of an Endako type stockwork cannot be demonstrated, due mainly to the lack of outcrop, certainly the conditions necessary to develop such a stockwork appear to be present. The existence of the Endako stockwork itself was not recognized until after mining began on the ore body.

Rock Alteration and Mineralization

Three types of alteration have been recognized in the Nithi quartz monzonite and the Casey granite, which are argillic, phyllic, and potassic.

The relationship of these three types of alteration to the classical molybdenum porphyry is illustrated in Figure 6.

Pervasive argillic alteration varies in intensity from a slight development of kaolinite in plagioclase feldspar to complete alteration of both plagioclase and potassium feldspar to a soft creamy-white to green clay. Intensely argillic alteration has been recognized in the Nithi (Endako) quartz monzonite in a north trending zone 760 m (2,500 ft.) wide and 2,400 m (8,000 ft.) long which is centered 600 m (2,000 ft.) southwest of the summit of Nithi Mountain. Argillic alteration of the Casey granite occurs marginally to veins, fractures, and faults.

Phyllic alteration occurs on the property in the form of pyrite-sericite quartz veins in both the Nithi quartz monzonite and the Casey granite. Sericite has been noted within the Casey granite in outcrop on the east side of Nithi Mountain and sericite is pervasive for short widths near some veins in the Nithi quartz monzonite.

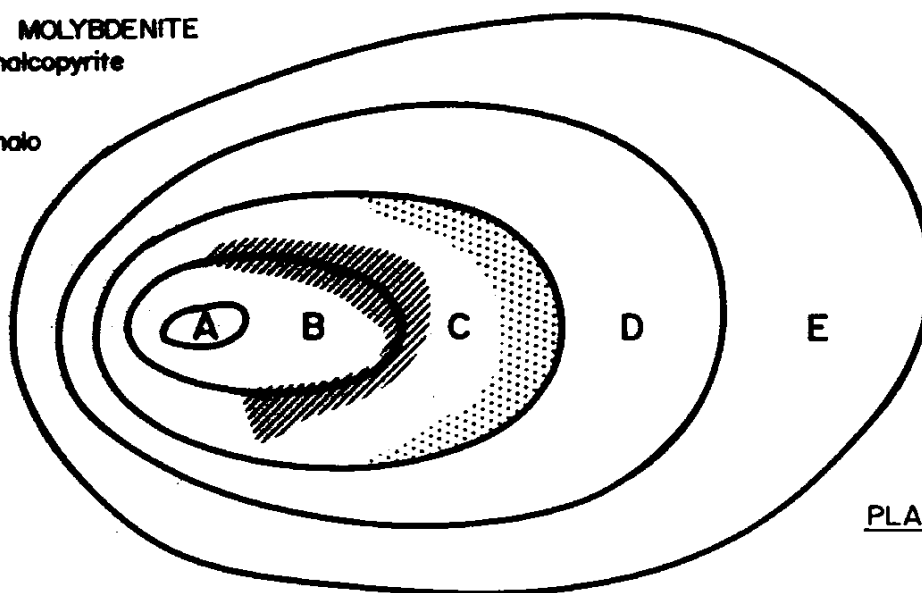
Potassic alteration has also been noted within both the Casey granite and the Nithi quartz monzonite. In these rocks, this alteration is characterized by orange-pink to salmon-pink envelopes around veins, which may or may not contain quartz. Fairly intense potassic alteration has been noted associated with disseminated molybdenite in several occurrences on the east side of the Nithi Mountain property.

At the Endako Mine, all three types of alteration have been described by Drummond and Kimura (1969). They note that K-feldspar alteration is "more common within the orebody than quartz-magnetite-molybdenite veins with quartz-sericite-pyrite envelopes". The pervasive breakdown of feldspars to kaolinite and some sericite occurs on the fringes of the alteration zone and adjacent to quartz molybdenite veins without an alteration envelope.

Molybdenite mineralization is widely distributed on the Nithi Mountain property. This mineralization is most commonly associated with quartz veins, but also occurs as fracture fillings, disseminations, or scattered tiny rosettes. Gangue minerals in the quartz veins often include pyrite

minor MOLYBDENITE
and chalcopyrite

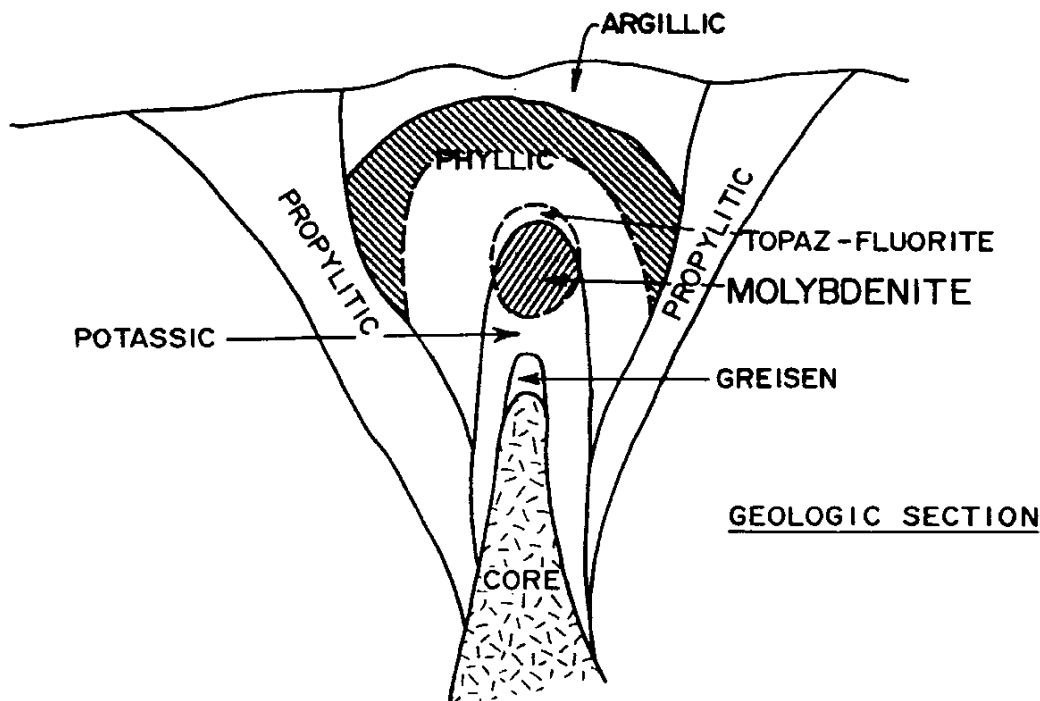
pyrite halo



PLAN VIEW

POTASSIC (A-chlorite, B-biotite), PHYLIC (C-sericite-quartz)
ARGILLIC (D-kaolin-illite), PROPYLITIC (E-chlorite-epidote)

ZONAL ALTERATION, COPPER PORPHYRY (HYPOGENE)



GEOLOGIC SECTION

FIGURE 6
ZONAL ALTERATION, MOLYBDENUM PORPHYRY

along with minor amounts of magnetite and specular hematite. Molybdenite typically occurs as finely divided grains within the quartz veins imparting a characteristic bluish-grey colouration. In other cases, small quartz veins alternate from pure quartz to quartz and molybdenite to pure molybdenite along the strike of the vein. Fracture fillings of molybdenite are common with some disseminated molybdenite in the adjacent host rock. Ferromolybdenite, which is a secondary mineral formed from weathering of molybdenite, is locally found associated with quartz molybdenite veins. Small scattered rosettes of molybdenite were noted both in the Nithi quartz monzonite and in the Casey granite. Most quartz molybdenite veins strike from 60° to 70° with steep dips of from 65° to 90° . Veins are generally inclined towards the southeast.

MINERAL OCCURRENCES

'Terri' Showing

The 'Terri' Showing is located in the east-central part of the Strep claim in the central part of the property. The showing was discovered in 1980 by Taiga Consultants Ltd., while completing a soil sampling survey on behalf of Rockwell Mining Corporation. The showing occurs within outcrop and felsenmeer of Casey granite near the contact with the Nithi quartz monzonite. Molybdenite occurs in quartz molybdenite veins trending N65°E, as fracture fillings, and as disseminations within the granite itself. The granite has been subjected to mild argillic alteration and bleaching. Assay results range up to 0.714% MoS₂. An average of three samples taken across the showing was 0.257% MoS₂.

Work on this showing to date is confined to soil and rock geochemical sampling. Molybdenum-in-soil geochemical anomalies are present in the vicinity of the anomaly; however, there is not a direct correspondence. This may be due to the downslope geochemical dispersion pattern developed in this type of terrain. Neither trenching nor drilling have been completed on this showing. The nearest drill hole on the property is N-13 which is located 225 m (730 ft.) towards the southeast. In this hole, numerous closely-spaced quartz veins along with specks and hairline fracture fillings of molybdenite were reported throughout the core, but only two 3-m (10-ft.) intervals were sampled and returned assays of 0.039% and 0.026% MoS₂. The 'Terri' Showing, because of the continuity of the molybdenite mineralization and the nature of that mineralization, is considered second only to the 'Chris' Showing in significance.

'Chris' Showing

The 'Chris' Showing is located in the south-central part of the property on the MJM 3 claim. The original quartz molybdenite vein was found and trenched by Amax when they controlled the property in 1975-1976; however, the showing was never described in assessment reports. The showing was relocated by Taiga in 1980 and an extension towards the east-northeast

vein system was delineated. Further towards the northeast is the 1000 ppm molybdenum-in-soil geochemical anomaly detected by Amax. Prospecting in the vicinity of the anomaly by Taiga resulted in the detection of four molybdenite areas.

The 'Chris' Showing is underlain by Nithi quartz monzonite. Mineralization consists of quartz molybdenite veins and fracture fillings with a predominant 60° - 70° strike. One quartz molybdenite vein exposed in a bull-dozed trench was 20 cm (8") wide and assayed 0.413% MoS_2 . Argillic alteration varies from moderate to intense with minor phyllic and potassic alteration adjacent to fracture planes noted.

Exploration work carried out to date includes geologic mapping, geochemical sampling, limited trenching, and drilling. Geological mapping was completed by Amax in 1975 and updated by Taiga in 1980. Soil and rock geochemical sampling of the showing was completed by Amax and Taiga, in 1975 and 1980 respectively. A number of molybdenum anomalies were detected within the area of the showing as illustrated on Maps 1 and 2. Bulldozer trenching was carried out along the "C" line and at the main Chris Showing. Two drill holes (N-11, N-14) have been completed near the showing, located 1,184 m (3,885 ft.) toward the south. The N-14 drill hole was the best hole completed on the property to date. The hole was inclined 60° to a depth of 302 m (991 ft.) and intersected a combined thickness of 170 m (558 ft.) of molybdenite mineralization assaying an average of 0.10% MoS_2 . The best assay result from the hole was 3 m (10 ft.) averaging 0.205% MoS_2 . Hole N-11 encountered only low-grade molybdenite mineralization. The 'Chris' Showing is considered to be the highest priority area for further exploration work. This conclusion is based on the observed mineralization, the positive geochemical response, and the previous drilling results.

EXPLORATION HISTORY

The original claims staked on Nithi Mountain were staked during the period 1952-1955 for uranium. Mineralization in the form of the secondary uranium minerals was found in a fractured rhyolite porphyry dyke within Topley granite. The showing was located at an elevation of 1,070 m (3,500 ft.) on the northwest slope of Nithi Mountain. The dyke had a length of 185 m (600 ft.) and a width of about 30 m (100 ft.), and trended north-south.

Work on these original claims included trenching and drilling. Four drill holes were completed in 1956 by American Standard Mines who optioned the original claims. In all, a total of 100 m (333 ft.) of drilling was completed. This uranium mineralization was found to have no depth extension and the claims were subsequently dropped.

With the discovery of the Endako Mine in 1962, there was renewed exploration in the area for molybdenite. This exploration resulted in the staking of Nithi Mountain by various junior mining companies including R & P Metals Ltd. (Fraser Lake Mines), Fort Reliance Minerals, Dundee Mines, Jodee Explorations, and New Indian Mines. Trenching, soil sampling, and diamond drilling were completed during this period. Although molybdenum mineralization was discovered, both in surface workings and in subsequent diamond drilling, little effort was directed towards a systematic evaluation of these properties. Interest gradually declined in the late 1960's and most claims were allowed to lapse.

In 1970, Nithex Exploration restaked the area and carried out an exploration program of trenching and diamond drilling. Nithex drilled a total of four diamond drill holes, one of which encountered significant molybdenite mineralization.

In 1975, Amex Potash Limited optioned the claims held by Nithex and Fraser Lake Mines on Nithi Mountain and subsequently acquired additional claims in the same area in order to complement their land position. Exploration carried out in 1975 by Amex included geologic mapping, soil sampling, magnetic surveying, and induced polarization surveying. In the summer of 1976, a percussion drilling program was completed by Amex

on their Nithi properties. Twelve holes totalling 975 m (3,200 ft.) were drilled on the property. Subsequently, Amex dropped their option on the property.

In 1980, Rockwell Mining Corporation optioned the various mineral properties on Nithi Mountain and contracted Taiga Consultants Ltd. to carry out an exploration program on these properties. This exploration program consisted of soil and rock geochemical sampling, geological mapping, and prospecting, carried out during the summer of 1980. Based on the encouraging results obtained from this program, a further program was initiated in the fall of 1980 consisting of road building, drill site preparation, trenching, and rock geochemical sampling. This fall program is the subject of this report.

EXPLORATION PROGRAM

Based on the favorable results encountered during the geochemical survey conducted during the summer of 1980, further exploration work was authorized by Rockwell Mining Corporation on the Nithi Mountain property. This exploration program, which was carried out during the period October 15 to November 4, consisted of road building, drill site preparation, trenching, geochemical sampling, and prospecting.

Road building was carried out in two phases. The first phase was directed towards clearing and upgrading existing access, and the second phase involved the actual construction of new roads. The upgrading of existing access involved clearing deadfall, rock debris, and installing culverts where flowing streams cut the existing roads of access to Nithi Mountain. The main access road cleared extends from the Chowsunkit Road southward along the east side of the property to the "B" line, connecting to the "Terri" Showing and then towards the southwest to the "Chris" Showing. The locations of these roads and the two showings in question are illustrated on Map 1 which accompanies this report.

The second phase in the road building program consisted of the construction of trenches, roads, and drill sites on the "Terri" and "Chris" Showings. The sequence which was followed was to first dig a shallow trench with a D-6 bulldozer about a metre deep. This trench, where it cut bedrock, was then systematically sampled. The trench was then back-filled and smoothed into a road bed. Spaced at intervals along the road grid, drill sites were prepared. Maps 2 and 3 illustrate the new road constructed in the area along with the assay results from rock samples gathered from the two showings.

In addition to the rock samples gathered in the trenches/roads on the "Terri" and "Chris" Showings, soil geochemical anomalies generated during the survey previously completed were followed up. Emphasis was placed on the examination of anomalies in the vicinity of the two showings and along a northeast trending series of geochemical anomalies extending from the south flank of Nithi Mountain (Map 1). The assay results from rock samples gathered during this follow-up work are shown in Appendix I.

In addition to rock samples gathered from trenches and during prospecting of various soil geochemical anomalies, core from several old diamond drill holes was sampled. Core from a drill program carried out in the mid-1960's by Fraser Lake Mines was stored on Nithi Mountain. When this core was found to be undisturbed and where these previous drill holes were drilled near the "Terri" or "Chris" Showings, mineralized core intervals were sampled. Surprisingly, much of this core had not previously been split and sampled even when there were seams of molybdenite visible. Samples were taken from holes N-11, N-13, and N-14, because these samples could yield relevant data concerning the molybdenite mineralization on the "Terri" and "Chris" Showings. The results of this sampling are presented in Appendix I.

All rock samples were analyzed both for MoS_2 and Total Mo reported as MoS_2 . These analyses were completed by Rossbacher Labs in Burnaby, B.C., and the analytical procedures are described in Appendix II of this report. In addition, a number of rock samples gathered during the previous geochemical survey were analyzed for a broad suite of elements by Geo Analytical Services (Western) Ltd. in Calgary. The analytical procedures employed during this analysis are also included in Appendix II of this report.

The purpose of this additional geochemical work was twofold. Firstly, it evaluated whether economically significant concentrations of other elements existed on the property, and secondly it established what geochemical associations may exist between molybdenum and other elements.

INTERPRETATION OF EXPLORATION RESULTS

The trenching and sampling on the "Terri" and "Chris" Showings have established bedrock continuity of molybdenite mineralization. On the "Terri" Showing nearly everywhere bedrock was exposed by the shallow bulldozer trenching, new molybdenite occurrences were discovered. Similarly on the "Chris" Showing, more mineralization was encountered especially along the trail leading to the proposed drill sites R-81-1 and R-81-2 at the south end of the showing.

Geochemical results from these showings are reported both as MoS_2 and as Total Mo reported as MoS_2 . Since there are no concentrations of molybdenum by supergene processes, the Total Mo reported as MoS_2 is considered the more reliable assay result to indicate true bedrock molybdenum concentration. What appears to happen is that some of the molybdenite (MoS_2) is oxidized along with pyrite to form either ferromolybdenite $\text{Fe}_2(\text{MoO}_4)_3 \cdot 8\text{H}_2\text{O}$ or molybdenite (MoO_3). Since both of these mineral species are derived from molybdenite, they are treated as reflecting the original concentration of molybdenite in the bedrock. In an attempt to acquire representative samples, relatively large samples weighing from one to two kilograms were taken.

On this basis, the various trenches of the "Terri" Showing run as follows:

- Trench B-1, 18 samples, range 0.014% to 0.106%, avg 0.060% MoS_2
- Trench B-2, 43 samples, range 0.020% to 0.510%, avg 0.093% MoS_2
- *Trench B-3, 4 samples, range 0.024% to 0.130%, avg 0.064% MoS_2
- Trench B-4, 16 samples, range 0.062% to 0.410%, avg 0.124% MoS_2

*along trench B-3, bedrock was poorly exposed, resulting in the limited number of samples taken.

Along the two short trenches/roads completed on the "Chris" Showing, only a few mineralized rock samples were found. This is due to the lack of bedrock exposures produced by the shallow trenching completed on this showing. However, during the process of upgrading the trail at the south end of the showing, numerous mineralized boulders and bedrock exposures were encountered. A total of 12 samples were taken which averaged 0.320% MoS_2 .

Assay values ranged from 1.340% MoS₂ to 0.022% MoS₂ in this area. While the majority of these samples were boulders, the angular nature of these boulders strongly suggests that they were derived from a local source. Further support for this interpretation is gained from the fact that molybdenite mineralization in bedrock was found at several locations along the road.

Prospecting of geochemical anomalies in the vicinity of Nithi Mountain resulted in the discovery of several mineralized occurrences in the area. In general, exposures are extremely poor along the trend of geochemical anomalies which extend northeast from the south flank of Nithi Mountain. While the initial reconnaissance prospecting yielded only three mineralized specimens, further detailed prospecting is required to fully evaluate this trend. Assay values from grab samples gathered along this trend ranged from 0.134% to 0.360% MoS₂ suggesting further exploration is required.

Further geochemical data was obtained by testing selected rock samples by whole-rock analysis. The locations of these rock samples are illustrated on Map 1 of this report, and the actual analytical results are presented in Appendix I. No economic element values other than molybdenum were delineated by this analysis.

Assay results for molybdenum from the drill core sampled on the property are also tabulated in Appendix I. The previously unsampled core came from holes N-11, N-13, and N-14 which were drilled on or adjacent to the "Terri" or "Chris" Showings. All observable molybdenite mineralization in this diamond drill core was sampled except that previously sampled or those core boxes which had been tampered with by vandals. These results indicate that, in a number of instances, core intervals containing 0.10% MoS₂ or better had not been sampled in the original drill program carried out in the mid-1960's.

RECOMMENDATIONS

Based on the geology, geochemistry, and mineralization delineated on the "Terri" and "Chris" Showings to date, it is proposed that a diamond drilling program be initiated to further evaluate the possible economic significance of these showings. It is recommended that a diamond drill program be carried out in the spring of 1981 to consist of approximately 1,820 m (6,000 ft.) of drilling to determine if economic molybdenite mineralization exists on the Nithi Mountain property.

If sufficient encouragement is received during the initial drilling stage, a second phase of drilling could follow immediately. This second phase would consist of an additional 1,820 m (6,000 ft.) of diamond drilling and 3,660 m (12,000 ft.) of percussion drilling. The percussion drilling would be contingent on the depth at which mineralization is encountered since this technique is limited to relatively shallow depths in the order of about 180 m (600 ft.). Diamond drilling has the advantage of yielding better geological information and allowing deeper penetration. However, due to the higher cost of diamond drilling, percussion drilling should be used between the diamond drill holes and to test the lower priority targets. Thus, a ratio of about 2 to 1 percussion versus diamond drill holes is recommended.

PERSONNEL

<u>Name, Position, Address</u>	<u>Dates</u>
AUSSANT, Claude (Project Geologist) 31 Templebow Way N.E. Calgary, Alberta T1Y 5B5	Oct. 20-27, 1980
DAVIS, James W. (Project Supervisor) 3220 Oakwood Drive S.W. Calgary, Alberta T2V 0J9	Oct. 15-31, 1980
NELSON, Thomas (Prospector) #2, 519 - 64th Ave. N.E. Calgary, Alberta T2K 5M7	Oct. 30-Nov. 4, 1980
NICHOLSON, Alberta A. (Cat Operator) P. O. Box 514 Vanderhoof, B.C.	Oct. 24-27, 1980 Feb. 26-Mar. 2, 1981
RAY, Robert (Prospector) P. O. Box 32 Fort Fraser, B.C. VOJ 1N0	Oct. 16-Nov. 2, 1980 Feb. 26-Mar. 2, 1981
WEAVER, Daryl (Skidder Operator) P. O. Box 21 Vanderhoof, B.C.	Oct. 28-31, 1980

BIBLIOGRAPHYB.C. DEPARTMENT OF MINESAssessment Reports

- Harris, F.R., and Lebel, J.L. (1975): Geological, Geophysical, Geochemical Report on the Nithi Mountain Property; for Amex Potash Limited (Asses. File 5714).
- Harris, F.R. (1976): Assessment Report on Percussion Drilling on Nithi Mountain Property; for Amex Potash Limited (Assess. File 5915).
- R & P Metals (1964): drill logs
- Roberts, A.F. (1970): Report on the Nithi Mountain Property; for Nithex Exploration & Development Ltd. (Assess. File 2841).
- (1970): Geochemical Survey Report on Nithi Mountain; for Nithex Exploration & Development Ltd. (Assess. File 2842).
- (1970): Supplementary Report on Nithi Mountain Group and Adjoining Claim Groups; for Nithex Exploration & Development Ltd. (Assess. File 2843).

Summaries of Exploration Work

- 1955: Fraser Lake; in Lode Metals in British Columbia, p.28
- 1963: Lode Metals, Nithi Mountain; in 1963 Annual Report, pp.36-38
- 1964: Endako; in 1964 Annual Report, pp.58-64
- 1965: Endako, Lode Metals; in 1965 Annual Report, pp.136-138
- 1966: Enco, Molly, etc.; in 1966 Annual Report, p.118
- 1970: Lode, Mint, Pen; in Geology, Exploration and Mining in British Columbia, p.112
- 1972: Nithi, MJM, Mint, Lode; in Geology, Exploration and Mining in British Columbia, pp.348-349
- 1973: MJM, Mint, Lode; in Geology, Exploration and Mining in British Columbia, p.327
- 1975: Nithi, Jen; in Exploration in British Columbia, pp.132-133
- 1976: Nithi, Jen; in Exploration in British Columbia, pp.142-143
- 1978: Nithi, Jen; in Exploration in British Columbia, p.202

Bibliography continuedPRIVATE COMPANY REPORTS

Davis, J.W., and Aussant, C.H. (1980): Geochemical Report on the Nithi Mountain Moly Project; for Rockwell Mining Corporation.

Harris, F.R. (1975): Assessment Report, Nithi Mountain topographic map; for Amax Potash Limited

Roberts, A.F. (1971): Report on Nithi Mountain Property and Drill Logs for Holes No. 1 and 2; for Nithex Exploration & Development Ltd.

— (1972): Report on Nithi Mountain Property; for Nithex Exploration & Development Ltd.

— (1973): Geochemical Report on the AXE and MO Claims; for Nithex Exploration & Development Ltd.

— (1973): Drilling Report on Holes N1-73 and H4-73; for Nithex Exploration & Development Ltd.

Tully, D.W. (1978): Nithi Mountain Claims (93-F-15W); for Nithex Exploration & Development Ltd.

OTHER REFERENCES

Burnham, C.W. (1962): Facies and Types of Hydrothermal Alteration; in Economic Geology, Vol.57, pp.768-784.

Carr, J.M. (1965): The Geology of the Endako Area; in B.C. Minister of Mines 1965 Annual Report, pp.114-135.

Dawson, K.M. (1964): Geology of Endako Mine, British Columbia; unpublished thesis

Dawson, K.M., and Kimura, E.T. (1972): Endako Report; in XXIV International Geological Congress, "Copper and Molybdenum Deposits of the Western Cordillera", pp.36-37, 40-45.

Drummond, A.D., and Kimura, E.T. (1969): Geology of the Endako Molybdenum Deposit; in C.I.M. Transactions, Vol.72, pp.183-192.

— (1969): Hydrothermal Alteration at Endako — A Comparison to Experimental Studies; in C.I.M. Transactions, Vol.72, pp.193-198.

Elevatorski, E.A., ed. (1980): Molybdenum Resources Guidebook, MINOBRAS, LCC 79-90717.

Bibliography, continued

- Gray, J.G., and Armstrong, J.E. (1936-37): Geology, Map 630A, Fort Fraser (East Half), British Columbia; Dept. of Mines & Resources.
- Kimura, E.T., Drummond, A.D., and Bysouth, G.D. (1976): The Endako Molybdenum Deposit; in C.I.M. Special Vol.15, Porphyry Deposits of the Canadian Cordillera.
- Rice, H.M.A. (1948): Geological Information, Placer Deposits, Map 971A, Smithers and Fort St. James, British Columbia; Dept. of Mines & Resources.
- Tipper, H.W. (1968): Nechako River Map Area, British Columbia; G.S.C. Memoir 324.
- Tipper, H.W., Campbell, R.B., Taylor, G.C., Stott, D.F. (1974): Geological Compilation, Parsnip River, British Columbia; G.S.C. Map 1424A

SUMMARY OF EXPENDITURES
Fraser Lake, British Columbia
Omineca Mining Division

Claim Group: MOM Group (MOLLY 1-14, 17, 18; MJM 3-5)

Time Period: October 14, 1980 to March 2, 1981

<u>PRE-FIELD PREPARATION</u>		\$ 650.00
<u>PERSONNEL</u>		
Project Supervisor	6 man days @ \$275/day	1,650.00
Geologist	3 man days @ \$240/day	720.00
Prospectors	14 man days @ \$140/day	<u>1,960.00</u>
		4,330.00
<u>TRANSPORTATION & TRAVEL</u>		
Travel expenses		210.00
4x4 truck	9 days @ \$35/day	<u>315.00</u>
		525.00
<u>CAMP & ACCOMMODATION</u>		
Lodging	18 man days @ \$10/day	180.00
Food	18 man days @ \$17/day	306.00
Fuel		87.00
Field equipment rental and misc. supplies	18 man days @ \$15/day	<u>270.00</u>
		843.00
<u>CONTRACT SERVICES</u>		
Multi-element geochemical analyses		
22 rock samples @ \$28/sample		616.00
Mo assays, incl. sample preparation		
87 rock & core samples @ \$8.20/sample		713.40
Bulldozer (D-6) — trenching & road building		
6 days rental @ \$412.75		<u>2,476.50</u>
		3,805.90
<u>MISCELLANEOUS</u>		
Maps, publications, reproductions		55.00
Long-distance telephone		65.00
Freight charges		<u>45.00</u>
		165.00
<u>POST-FIELD COMPILATION</u>		
Report writing		825.00
Drafting and secretarial		<u>265.00</u>
		1,090.00
	SUB-TOTAL	\$11,408.90
<u>ADMINISTRATION @ 10%</u>		<u>1,140.89</u>
	TOTAL	<u>\$12,549.79</u>

SUMMARY OF EXPENDITURES
Fraser Lake, British Columbia
Omineca Mining Division

Claim Group: SMID Group (MJM 1-2, DB 1-4, STREP, STREP 79)

Time Period: October 14, 1980 to March 2, 1981

<u>PRE-FIELD PREPARATION</u>		\$ 650.00
<u>PERSONNEL</u>		
Project Supervisor	11 man days @ \$275/day	3,025.00
Geologist	5 man days @ \$240/day	1,200.00
Prospectors	15 man days @ \$140/day	<u>2,100.00</u>
		6,325.00
<u>TRANSPORTATION & TRAVEL</u>		
Travel expenses		210.00
4x4 truck	12 days @ \$35/day	<u>420.00</u>
		630.00
<u>CAMP & ACCOMMODATION</u>		
Lodging	31 man days @ \$10/day	310.00
Food	31 man days @ \$17/day	527.00
Fuel		134.40
Field equipment rental and misc. supplies	31 man days @ \$15/day	<u>465.00</u>
		1,436.40
<u>CONTRACT SERVICES</u>		
Multi-element geochemical analyses		
24 rock samples @ \$28/sample		672.00
Mo assays, incl. sample preparation		
101 rock & core samples @ \$8.20/sample		828.20
Bulldozer (D-6) — trenching & road building		
3 days rental @ \$412.75		1,238.25
Skidder and operator, 4 days		<u>1,677.38</u>
		4,415.83
<u>MISCELLANEOUS</u>		
Maps, publications, reproductions		65.00
Long-distance telephone		65.00
Freight charges		<u>45.00</u>
		175.00
<u>POST-FIELD COMPILATION</u>		
Report writing		1,175.00
Drafting and secretarial		<u>435.00</u>
		1,610.00
		SUB-TOTAL \$ 15,242.23
<u>ADMINISTRATION</u> @ 10%		<u>1,524.22</u>
		TOTAL \$ <u>16,766.45</u>

A P P E N D I X I

Rock Descriptions
Geochemical and Assay Results

JD-100 o/c	TERRI showing 25m east LN 1990+100N	Medium crystalline Casey granite with several quartz molybdenite veins 2mm-6mm wide. Minor limonite staining, pervasive argillic alteration
JD-101 o/c	TERRI showing 15m east LN 1990+100N	Finely crystalline Casey granite with one quartz molybdenite vein 1cm wide, coarse moly, pyrite crystal 8mm square, limonite staining, pervasive argillic alteration, phyllic alteration adjacent to vein
JD-102 o/c	TERRI showing 20m east LN 1915+300N	Coarsely crystalline Casey granite, rosettes of molybdenite, vugs, pervasive argillic alteration
JD-103 fels	TERRI showing LN 19+15E 3+00N	Medium crystalline Casey granite with disseminated molybdenite along fracture surface, argillic alteration, pervasive coarse molybdenite on fracture face
JD-104 o/c	TERRI showing 30m west LN 22+15 2+50N	Coarsely crystalline Casey granite with one 5mm quartz molybdenite vein, limonite stained throughout, weak argillic alteration, finely disseminated molybdenite throughout
JD-105 o/c	TERRI showing 25m east LN 22+15 1+75N	Coarsely crystalline Casey granite with finely disseminated molybdenite along fracture face, pervasive argillic alteration
JD-106 o/c	TERRI showing 15m SSE drill- site R81-9	Finely crystalline Casey granite with several hairline fractures with molybdenite, argillic alteration, weak K-spar alteration
JD-107	35m WSW of line LN 19+90E 1+00N	Very finely crystalline Casey granite quartz eye porphyry with well developed quartz molybdenite stockwork, potassic alteration, weak argillic alteration, minor limonite staining
JD-108	25m east LN 6+25E 11+00S	Very coarsely crystalline Nithi quartz monzonite with 1.5cm wide quartz molybdenite vein, potassic alteration, weak limonite staining
RR-100 fels	TERRI showing 25m W, 75m N on line 20+65E	Finely crystalline Casey granite, with one hairline quartz molybdenite vein, minor limonite, argillic alteration

RR-101 fels	50m W, 75m N on line 20+65E	Finely crystalline Casey granite with several hairline quartz molybdenite veins and finely disseminated molybdenite, limonite staining along numerous hairline fractures, argillic alteration
RR-102 fels	25m E, 100m N on line 19+90E	Finely crystalline Casey granite with finely disseminated molybdenite grains, argillic alteration is pervasive with minor salmon-pink K-feldspar alteration
RR-103 o/c	TERRI showing 2+50N on line 23+65E	Medium crystalline Casey granite with several 3mm-5mm quartz molybdenite veins, moly is fine- to medium-grained, limonite staining along fine fractures, argillic alteration
RR-104 boulder	TERRI showing 105m E of middle crossline	Glacially transported boulder. Coarsely crystalline Nithi quartz monzonite, with coarse 4mm quartz molybdenite vein, manganese staining, phyllic alteration, minor limonite
RR-105 o/c	CHRIS showing 15m SE of S end of Z-line trench E of LN 7+70E	Coarsely crystalline Nithi quartz monzonite with 3mm quartz molybdenite vein and minor disseminated molybdenite, minor pyrite and limonite, weak argillic alteration
RR-106 o/c	CHRIS showing 75m W of LN 7+70E 7+70S	Sheared quartz molybdenite vein in Nithi quartz monzonite, limonite staining, moderate argillic alteration
RR-107 o/c	CHRIS showing 45m N of LN 7 +70 7+70S	Quartz molybdenite vein 10cm wide in Nithi quartz monzonite, limonite staining, moderate argillic alteration
RR-108 o/c	Nithi Mtn 5m W LN 6+25E 5+75N	Coarsely crystalline Nithi quartz monzonite with 3mm-5mm quartz molybdenite veins, moderate argillic alteration, limonite staining
RR-109 o/c	Nithi Mtn LN 21+00W 5m E 2+00W //	Coarsely crystalline Nithi quartz monzonite with 5mm quartz molybdenite vein, pervasive argillic alteration, abundant limonite staining
RR-110	LN 21+40E 2+25N	Coarse-grained Casey granite with one quartz molybdenite vein, pervasive argillic alteration, considerable limonite staining
RR-111	40m E LN 6+25E 11+00S	2cm quartz molybdenite vein along contact between finely crystalline Casey granite and coarsely crystalline Nithi quartz monzonite, potassic alteration in Casey and pervasive argillic alteration in Nithi

RR-112	20m W LN 7+70E 11+50S	Very coarsely crystalline Nithi quartz monzonite with 1cm thick quartz molybdenite vein, argillic alteration and pervasive limonite staining
RR-113	30m E LN 7+70E 11+50S	Pegmatitic Nithi quartz monzonite with 1.5cm quartz molybdenite vein, extensive potassic alteration
RR-114 boulder	40m E LN 7+70E 11+75S	Pegmatitic Nithi quartz monzonite with 5mm quartz molybdenite vein, potassic and argillic alteration, minor limonite staining
RR-115	25m E LN 6+25E 11+15S	Very coarsely crystalline Nithi quartz monzonite with disseminated molybdenite along fracture surface, mild potassic and argillic alteration, minor limonite staining along joint surfaces
RR-116	30m E LN 9+40E 2+25N	Coarsely crystalline Nithi quartz monzonite with 3mm wide quartz molybdenite vein, pervasive argillic alteration, limonite stained
RR-117	40m W LN 10+90E 4+00N	Coarsely crystalline Nithi quartz monzonite with 5mm quartz molybdenite vein, pervasive argillic alteration, limonite stained
RR-118 boulder	75m NE of Drill Hole N-14	Porphyritic coarsely crystalline Nithi quartz monzonite with fracture filling of finely crystalline molybdenite; moderate argillic alteration and limonite staining
RR-119 boulder	30m W LN 9+40E 10+25S	Coarsely crystalline Nithi quartz monzonite with 2cm-3cm ribbon quartz molybdenite vein; intense argillic alteration, minor limonite staining
RR-120 boulder	250m E on drill road to R 81-1	Coarsely crystalline Nithi quartz molybdenite with stockwork of 1mm-3mm veinlets along with finely disseminated molybdenite; moderate argillic and potassic alteration, minor limonite staining
RR-121 outcrop	50m W LN 9+40E 10+00S	Finely crystalline Casey granite with a 1mm-2mm molybdenite veinlet; weak argillic alteration with minor limonite staining on fracture surface

TN-100 boulder	637m E on drill road to R81-1	Coarsely crystalline quartz monzonite with disseminated molybdenite and minor pyrite; weathered with no apparent alteration
TN-101 boulder	523m E on drill road to R81-1	Porphyritic coarsely crystalline Nithi quartz monzonite with several thin, 1mm-2mm fracture fillings of molybdenite and disseminations of molybdenite; minor argillic alteration; limonite and ferromolybdenite staining
TN-102 boulder	466m E on drill road to R81-1	Coarsely crystalline Nithi quartz monzonite with several 3mm-5mm quartz molybdenite veins; no apparent alteration
TN-103 boulder	188m E on drill road to R81-1	Coarsely crystalline Nithi quartz molybdenite with numerous rosettes of molybdenite up to 5mm in diameter adjacent to 3cm quartz vein
CA-100 outcrop	TERRI showing 3m N Drillsite R81-5	Finely crystalline Casey granite, porphyritic with quartz phenocrysts, hairline finely crystalline quartz-filled fracture, scattered disseminated molybdenite; argillic alteration
CA-101	C-line 20m W JD-18	Very coarsely crystalline Nithi quartz monzonite with disseminated molybdenite; potassic alteration; minor limonite staining

LN B-1

- 69m Very finely crystalline Casey granite with 1cm wide quartz vein with specular hematite and possibly molybdenite, weak potassic alteration
- 112m Finely crystalline Casey granite quartz eye porphyry, with hairline molybdenite and disseminated molybdenite, potassic alteration, weak limonite staining
- 118m Medium crystalline Casey granite with 2mm quartz molybdenite vein and disseminated molybdenite, moderate argillic alteration, minor limonite staining
- 126m Very finely crystalline Casey granite with trace of disseminated molybdenite, pervasive argillic alteration, limonite staining on joint surfaces
- 128m Finely crystalline Casey granite with hairline quartz molybdenite vein, bleached with moderate argillic alteration, minor limonite stain
- 133m Medium crystalline Casey granite with 3mm wide quartz molybdenite vein, moderate argillic alteration, minor limonite and hematite stain
- 149m Finely crystalline Casey granite with disseminated molybdenite rosettes up to 3mm in diameter distributed along poorly defined fracture surface, potassic alteration
- 166m Very finely crystalline Casey granite with hairline fracture fillings of molybdenite and some disseminated molybdenite grains, intense bleaching with moderate argillic alteration, hematite and limonite staining
- 166.5m Very finely crystalline Casey granite, porphyritic with large quartz eyes, with molybdenite in hairline fractures, weak argillic and potassic alteration, minor limonite staining
- 167.5m Very finely crystalline Casey granite with clots of finely crystalline molybdenite, bleached with moderate argillic alteration, weak limonite staining
- 225m Very finely crystalline Casey granite with molybdenite disseminated along one fracture surface, bleached, moderate argillic alteration, minor limonite staining along fractures
- 293m Very finely crystalline Casey granite with hairline quartz molybdenite veinlet, moderate argillic alteration, minor limonite staining
- 313m Finely crystalline Casey granite with several small rosettes of molybdenite up to 3mm in diameter, bleaching and weak argillic alteration noted, minor iron staining

(LN B-1 continued)

- 317m Finely crystalline Casey granite with several hairline quartz molybdenite veins, moderate argillic alteration and limonite staining along fracture surfaces
- 337m Medium crystalline Casey granite with 2mm-6mm quartz molybdenite veins, weak argillic alteration and minor limonite staining on fracture surfaces
- 349m Medium crystalline Casey granite with disseminated molybdenite and hairline quartz molybdenite veins, salmon-pink potassic alteration, limonite staining
- 427m Finely crystalline Casey granite with 4mm quartz molybdenite vein, weak argillic and potassic alteration, minor limonite staining

LN B-2

- 43m W Finely crystalline Casey granite with 2 molybdenite fracture fillings, weak potassic alteration, minor limonite and hematite staining
- 40m W Finely crystalline Casey granite with quartz molybdenite and molybdenite in coarse stockwork, potassic alteration noted, minor limonite staining
- 39m W Very finely crystalline Casey granite, slightly porphyritic with large quartz eyes, several 2mm wide quartz molybdenite veins, very weak argillic and potassic alteration, minor limonite staining
- 36m W Finely crystalline Casey granite with well developed stockwork of hairline molybdenite fractures, potassic alteration along with weak argillic and sericitic alteration, minor limonite staining
- 34m W Finely crystalline Casey granite with several quartz molybdenite veins, bleached argillic alteration, weak potassic alteration, minor limonite staining along fractures, very weak phyllic alteration
- 31m W Finely crystalline Casey granite with abundant molybdenite rosettes along fracture surfaces, argillic alteration with weak potassic alteration noted, limonite staining along fracture surfaces
- 30m W Very finely crystalline Casey granite, quartz eye porphyry with quartz molybdenite veins and fracture fillings of molybdenite in stockwork, potassic alteration, limonite stained on weathered surface
- 28m W Finely crystalline Casey biotite granite, with stockwork of hairline molybdenite veins spaced 4cm to 10cm apart producing a diamond pattern, potassic and argillic alteration noted, minor limonite stain
- 21.5m Very finely crystalline Casey granite with several parallel thin quartz molybdenite veins, weak argillic and potassic alteration noted, limonite noted along fractures
- 21m W Very finely crystalline Casey granite, quartz eye porphyry with fracture filling of finely crystalline molybdenite, bleached argillic alteration, minor limonite
- 13m W Finely crystalline Casey granite with 3mm in diameter rosettes of molybdenite disseminated along irregular fracture surface, bleached, intense argillic alteration, minor limonite staining
- 6m Medium crystalline Casey granite with small rosettes of molybdenite up to 4mm in diameter, moderate argillic alteration, minor limonite staining
- 6.5m Finely crystalline Casey granite with numerous rosettes of molybdenite up to 4mm in diameter, weak potassic alteration, moderate argillic alteration, limonite stained along fracture surfaces

(LN B-2 continued)

- 6.9m Finely crystalline Casey granite with small rosettes of molybdenite up to 3mm in diameter, weak argillic alteration, pervasive limonite staining
- 7m Finely crystalline Casey granite with hairline quartz molybdenite veinlets and some finely disseminated molybdenite, pervasive argillic alteration, limonite staining along fracture surfaces
- 7.6m Medium crystalline Casey granite with one small quartz molybdenite veinlet, weak argillic alteration and limonite staining
- 12.5m Very finely crystalline Casey granite with both hairline fracture fillings and minute disseminations of molybdenite, bleached with moderate argillic alteration
- 13.1m Finely crystalline Casey granite with several quartz molybdenite veins up to 6mm, bleached with moderate argillic alteration, limonite stained along fractures
- 19m Finely crystalline Casey granite with finely disseminated molybdenite, bleached with minor argillic alteration, limonite along fracture planes
- 30m Very coarsely crystalline Nithi quartz monzonite with both disseminated and thin veinlets of quartz molybdenite, abundant pyrite and limonite staining
- 35m Very finely crystalline Casey granite, quartz eye porphyry with minor disseminated molybdenite, potassic and argillic alteration, limonite staining along joints
- 42m Medium crystalline Casey granite with disseminated molybdenite along fracture planes, bleached with moderate argillic alteration, minor limonite staining
- 131m Coarsely crystalline Nithi quartz monzonite with a single 3mm quartz molybdenite vein, intense argillic alteration, weak potassic alteration along vein, limonite staining along fractures and weathered surfaces
- 133m Coarsely crystalline Nithi quartz monzonite with 6mm wide quartz molybdenite vein, argillic and potassic alteration, minor limonite staining
- 137m Medium crystalline Casey granite with minor disseminated molybdenite, weak argillic alteration, pervasive limonite staining
- 204m Coarsely crystalline Casey granite with several quartz molybdenite veins up to 8mm wide, pervasive argillic alteration, minor limonite staining

(LN B-2 continued)

- 208m Medium crystalline Casey granite with 1cm wide quartz molybdenite vein, weak argillic alteration, minor iron staining
- 212m Coarsely crystalline Casey granite with a few scattered flakes of molybdenite, intense argillic alteration, limonite staining on weathered surfaces
- 220.5m Coarsely crystalline Casey granite with finely disseminated molybdenite, moderate argillic alteration, limonite staining along joints
- 243m Coarsely crystalline Nithi quartz monzonite with minor disseminated molybdenite, intense argillic alteration, minor limonite staining on weathered surfaces
- 365m Coarsely crystalline Nithi quartz monzonite with disseminated molybdenite, pervasive argillic alteration with minor pyrite and iron staining
- 376m Coarsely crystalline Casey granite with disseminated molybdenite, pervasive argillic alteration, minor hematite and limonite staining
- 382m Coarsely crystalline Casey granite with disseminated molybdenite and a hairline quartz molybdenite vein, pervasive argillic alteration, minor limonite staining
- 388m Coarsely crystalline Casey granite with 3mm wide quartz molybdenite vein and minor disseminated molybdenite, pervasive argillic alteration, limonite staining
- 400m Medium crystalline Casey granite with several 1mm-2mm quartz molybdenite veins, weak argillic and potassic alteration and minor limonite staining of weathered surfaces
- 411m Medium crystalline Casey granite with 3mm quartz molybdenite vein, weak potassic and argillic alteration, minor limonite staining
- 414m Medium crystalline Casey granite with fine-grained molybdenite along fracture surface, weak potassic and argillic alteration, minor limonite staining along fracture
- 431m Coarsely crystalline Casey granite with several intersecting quartz molybdenite veins, bleached, moderate argillic alteration, weak potassic alteration, minor limonite
- 435m Medium crystalline Casey granite with quartz molybdenite and disseminated molybdenite, intense argillic alteration and minor limonite staining
- 436m Medium crystalline Casey granite with disseminated molybdenite along a 2mm wide fracture, intense argillic alteration, minor limonite staining

(LN B-2 continued)

- 446m Medium crystalline Casey granite with several 1mm-2mm molybdenite veinlets, weak argillic alteration, minor limonite staining on weathered surfaces.
- 455m Finely crystalline Casey granite with quartz molybdenite vein, bleached, pervasive argillic alteration, limonite staining along fracture surfaces
- 457m Finely crystalline Casey biotite granite with 3mm wide quartz molybdenite vein, weak potassic alteration, minor limonite staining
- 460m Finely crystalline Casey granite with hairline fracture fillings of molybdenite, weak potassic alteration, minor limonite staining
- 465m Medium crystalline Casey granite with several thin quartz molybdenite veins, moderate argillic alteration, minor limonite staining adjacent to fracture

LN B-3

- 00m Medium crystalline Casey granite with disseminated molybdenite developed along poorly defined fracture surface, hematite blebs noted along with minor limonite staining, weak argillic alteration
- 4m Coarsely crystalline Casey granite with 2mm wide quartz molybdenite vein, moderate argillic alteration, minor limonite staining
- 10m Coarsely crystalline Casey granite with trace of molybdenite disseminated along 1cm wide chalcedony vein, trace pyrite, limonite stained, intense argillic alteration
- 69m Medium crystalline Casey granite with 3mm wide quartz molybdenite vein, weak argillic alteration, limonite stained on weathered surface

LN B-4

- 24m Medium crystalline Casey granite with finely disseminated molybdenite along poorly developed fracture plane, moderate argillic alteration, minor limonite staining
- 32m Finely crystalline Casey granite with several 2mm wide quartz molybdenite veins, strong argillic alteration, weak limonite staining on weathered surface
- 33m Finely crystalline Casey granite with quartz molybdenite stockwork, up to 3mm wide veins, moderate argillic alteration, limonite stain
- 43m Finely crystalline Casey granite with a hairline quartz molybdenite veinlet and considerable disseminated molybdenite, intense argillic alteration, minor limonite staining, minor slickensided joint surface
- 45m Finely crystalline Casey granite with hairline quartz molybdenite veinlet, pervasive argillic alteration, minor limonite staining
- 53m Finely crystalline Casey granite with some finely disseminated molybdenite, weak argillic and potassic alteration, weak limonite staining
- 57m Finely crystalline Casey granite with 2mm quartz molybdenite vein, weak argillic alteration, minor limonite staining

<u>ASSAY NUMBER</u>	<u>DRILL HOLE</u>	<u>FOOTAGE INTERVAL</u>	<u>% MoS₂</u>	<u>% TOTAL Mo as MoS₂</u>
2489	N-11	347-348	0.058	0.060
2490	"	367-368	0.011	0.012
2491	"	373-374	0.149	0.152
2492	"	378-379	0.321	0.324
2493	"	387-388	0.015	0.016
2494	"	396-397	0.145	0.148
2497	"	398-399	0.041	0.043
2496	"	405-407	0.026	0.028
2498	"	409-410	0.028	0.030
2499	"	414-415	0.031	0.032
2500	"	416-417	0.201	0.204
2487	"	417-422	0.037	0.040
2488	"	432-434	0.150	0.154
2484	"	443-445	0.140	0.142
2486	"	449-450	0.024	0.026
2480	"	457-458	0.176	0.180
2481	"	461-462	0.060	0.062
2482	"	463-464	0.089	0.092
2483	"	473-474	0.058	0.060
2460	"	483-485	0.013	0.018
2461	"	490-491	0.002	0.007
2462	"	493-494	0.077	0.084
2478	"	520-521	0.065	0.068
2479	"	525-527	0.214	0.217
2474	"	533-535	0.319	0.324
2475	"	538-539	0.095	0.098
2476	"	540-541	0.140	0.144
2477	"	547-550	0.023	0.025
2473	"	568-569	0.176	0.180
2471	"	576-577	0.021	0.022
2472	"	583-584	0.097	0.100
2496	"	600-601	0.034	0.036
2470	"	607-608	0.002	0.004

<u>ASSAY NUMBER</u>	<u>DRILL HOLE</u>	<u>FOOTAGE INTERVAL</u>	<u>% MoS₂</u>	<u>% TOTAL Mo as MoS₂</u>
2466	N-11	615-616	0.279	0.284
2467	"	623-627	0.047	0.049
2468	"	630-632	0.005	0.006
2458	N-13	11-12	0.009	0.012
2459	"	23½-24½	0.948	0.960
2455	"	30½-31½	0.053	0.054
2456	"	34-36	0.191	0.197
2457	"	40-43	0.033	0.036
2451	"	45-46	0.004	0.007
2452	"	50-51	0.060	0.061
2453	"	55-56	0.025	0.026
2454	"	64-65	0.018	0.020
2649	"	65-70	0.029	0.032
2650	"	80-84	0.023	0.025
2647	"	86-90	0.027	0.028
2648	"	100-103	0.061	0.062
2644	"	103-106	0.037	0.038
2645	"	114-116	0.012	0.013
2646	"	116-121	0.019	0.020
2640	"	121-126	0.084	0.085
2641	"	126-131	0.050	0.051
2642	"	131-136	0.047	0.048
2643	"	136-137	0.105	0.106
2636	"	144-145	0.004	0.005
2637	"	149-150	0.037	0.038
2638	"	154-156	0.223	0.224
2639	"	157-158	0.021	0.022
2634	"	162-170	0.012	0.013
2635	"	168-169	0.041	0.042
2630	"	178½-179½	0.114	0.116
2631	"	181-182	0.020	0.021
2632	"	186-189	0.045	0.047

ASSAY NUMBER	DRILL HOLE	FOOTAGE INTERVAL	% MoS ₂	% TOTAL Mo AS MoS ₂
2633	"	191-192	0.053	0.054
2626	"	195-196	0.039	0.040
2627	"	203-204	0.069	0.070
2628	"	207-208	0.013	0.014
2629	"	209-210	0.067	0.068
2621	"	218-219	0.006	0.007
2622	"	221-222	0.042	0.044
2623	"	233½-234½	0.051	0.052
2624	"	236-(6")	0.050	0.051
2626	"	243-244	0.027	0.028
2603	"	~ 269-270	0.062	0.064
2604	"	284-285	0.020	0.021
2605	"	289-293	0.040	0.041
2606	"	292-297	0.022	0.023
2607	"	297-302	0.015	0.016
2608	"	302-307	0.037	0.038
2609	"	307-312	0.013	0.014
2610	"	318-319	0.096	0.098
2611	"	321-(4")	0.015	0.016
2612	"	327-(3")	0.140	0.142
2613	"	333-(6")	0.003	0.004
2614	"	343-(4")	0.125	0.126
2615	"	346-347	0.031	0.032
2616	"	348-(6")	0.057	0.058
2617	"	347-352	0.047	0.048
2618	"	352-357	0.041	0.042
2619	"	357-362	0.002	0.005
2620	"	362-367	0.044	0.045
2601	"	412-413	0.051	0.052
2602	"	403-405	0.049	0.051
2301	"	839-840 ft.	0.055	0.060
2302	"	844-846	0.029	0.034
2303	"	827-828	0.042	0.048
2304	"	830-831	0.009	0.014

<u>ASSAY NUMBER</u>	<u>DRILL HOLE</u>	<u>FOOTAGE INTERVAL</u>	<u>% MoS₂</u>	<u>% TOTAL Mo AS MoS₂</u>
2463	N-14	889-890	0.006	0.010
2464	"	908-909	0.019	0.024
2465	"	918-919	0.215	0.220

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO. 80312

TO: TAIGA CONSULTANTS LTD.
1300 E. 8th St. S.W.
Calgary, Alta

INVOICE NO. 8068

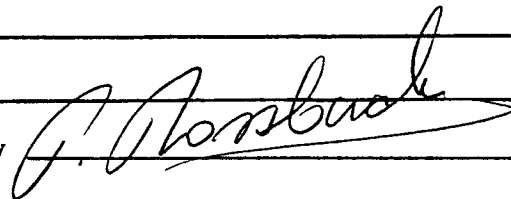
DATE RECEIVED

DATE ANALYSED Nov 12, 1980

ATTN: B.C. 80-7

SAMPLE NO.:	% MoS ₂	% T.Mo as MoS ₂
CA101	0.039	0.052
2301	0.055	0.060
2302	0.029	0.034
2303	0.042	0.048
2304	0.009	0.014
2460	0.013	0.018
2461	0.002	0.007
2462	0.077	0.084
2463	0.006	0.010
2464	0.019	0.024
2465	0.215	0.220
2466	0.279	0.284
2467	0.047	0.049
2468	0.005	0.006
2469	0.034	0.036
2470	0.002	0.004
2471	0.021	0.022
2472	0.097	0.100
2473	0.176	0.180
2474	0.319	0.324
2475	0.095	0.098
2476	0.140	0.144
2477	0.023	0.025
2478	0.065	0.068
2479	0.214	0.217
2480	0.176	0.180
2481	0.060	0.062
2482	0.089	0.092
2483	0.058	0.060
2484	0.140	0.142
2485	missing	--
2486	0.024	0.026
2487	0.037	0.040
2488	0.150	0.154
2489	0.058	0.060
2490	0.011	0.012
2491	0.149	0.152
2492	0.321	0.324
2493	0.015	0.016
2494	0.145	0.148

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Calgary, Alta

CERTIFICATE NO. 80312

INVOICE NO. 1068

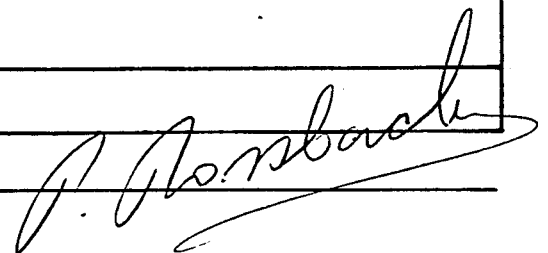
DATE RECEIVED

DATE ANALYSED Nov, 1980

ATTN: B.C. 80-7

SAMPLE NO.:	% MoS ₂	% T.Mo as MoS ₂
2496	0.026	0.028
2497	0.041	0.043
2498	0.028	0.030
2499	0.031	0.032
2500	0.201	0.204
2622	0.042	0.044
2624	0.050	0.051
2630	0.114	0.116
2632	0.045	0.047
2601	0.051	0.052
2602	0.049	0.051
2603	0.062	0.064
2604	0.020	0.021
2605	0.040	0.041
2606	0.022	0.023
2607	0.015	0.016
2608	0.037	0.038
2609	0.013	0.014
2610	0.096	0.098
2611	0.015	0.016
2612	0.140	0.142
2613	0.003	0.004
2614	0.125	0.126
2615	0.031	0.032
2616	0.057	0.058
2617	0.047	0.048
2618	0.041	0.042
2619	0.002	0.005
2620	0.044	0.045
2621	0.006	0.007
2623	0.051	0.052
2625	0.027	0.028
2626	0.039	0.040
2627	0.069	0.070
2628	0.013	0.014
2629	0.067	0.068
2631	0.020	0.021
2633	0.053	0.054
2634	0.012	0.013
2635	0.041	0.042

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AREA CODE: 604

CERTIFICATE OF ANALYSIS

TO: TAIGA CONSULTANTS LTD.
1300 8th St. S.W.
Calgary, Alta

CERTIFICATE NO. 80812

INVOICE NO. 1068

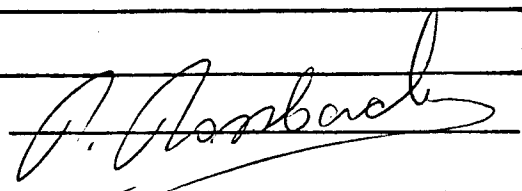
DATE RECEIVED

DATE ANALYSED Nov, 1980

ATTN: B.C. 80-7

SAMPLE NO.:	% MoS ₂	% T.Mo as MoS ₂
2636	0.004	0.005
2637	0.037	0.038
2638	0.223	0.224
2639	0.021	0.022
2640	0.084	0.085
2641	0.050	0.051
2642	0.047	0.048
2643	0.105	0.106
2644	0.037	0.038
2645	0.012	0.013
2646	0.019	0.020
2647	0.027	0.028
2648	0.061	0.062
2649	0.029	0.032
2650	0.023	0.025
2451	0.004	0.007
2452	0.060	0.061
2453	0.025	0.026
2454	0.018	0.020
2455	0.053	0.054
2456	0.191	0.197
2457	0.033	0.036
2458	0.009	0.012
2459	0.948	0.960
TN100	0.016	0.022
101	0.144	0.364
102	0.094	0.102
103	1.25	1.34
RR118	0.118	0.152
119	0.178	0.200
120	0.130	0.152
121	0.038	0.048

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2225 S. SPRINGER AVE.,
 BURNABY, B. C.
 CANADA
 TELEPHONE: 299-6910
 AREA CODE: 604

CERTIFICATE OF ANALYSIS

CERTIFICATE NO.80812

TO: TAIGA CONSULTANTS LTD.
 1300 8th St. S.W.
 Calgary, Alberta

INVOICE NO.1068

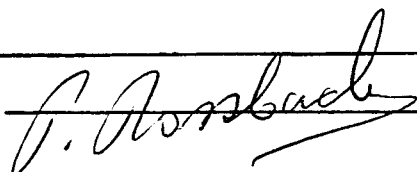
DATE RECEIVED

DATE ANALYSED Nov. 1980

ATTN: B.C. 80-7

SAMPLE NO.:	% MoS ₂	% T.Mo as MoS ₂
RR 100	0.013	0.033
101	0.014	0.038
102	0.064	0.092
103	0.105	0.140
104	0.212	0.240
105	0.072	0.112
106	0.136	0.176
107	0.112	0.153
108	0.166	0.360
109	0.162	0.220
JD100	0.107	0.124
101	0.341	0.362
102	0.124	0.144
103	0.110	0.220
104	0.105	0.143
105	0.021	0.031
106	0.047	0.080
CA100	0.011	0.035
B-1 69	0.002	0.024
118	0.024	0.044
126	0.016	0.040
128	0.032	0.064
133	0.018	0.050
149	0.022	0.070
166	< 0.001	0.030
166.5	0.012	0.044
167.5	< 0.001	0.016
225	0.044	0.066
293	0.010	0.028
313	0.012	0.040
B-2 317	0.026	0.096
337	0.076	0.106
349	0.036	0.050

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GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.,
BURNABY, B. C.
CANADA
TELEPHONE: 299-6910
AREA CODE: 604

CERTIFICATE OF ANALYSIS

TO: TAIGA CONSULTANTS LTD.
1300 8th St. S.W.
Calgary, Alberta

CERTIFICATE NO. 80812

INVOICE NO. 1068

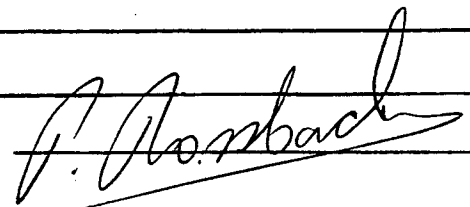
DATE RECEIVED

DATE ANALYSED Nov 12, 1980

ATTN: B.C. 80-7

SAMPLE NO.:	% MoS ₂	% T.Mo as MoS ₂
427	0.004	0.054
6.5	0.090	0.162
6.9	0.060	0.150
7	0.014	0.032
7.6	0.038	0.076
12.5	0.008	0.026
13.1	0.260	0.400
19	0.006	0.042
LIME 30	0.074	0.100
B-2 39W	0.010	0.024
43W	0.012	0.034
365	0.004	0.022
400	0.018	0.056
411	0.021	0.040
421	0.011	0.034
435	0.001	0.014
436	0.019	0.042
446	0.024	0.050
457	0.095	0.116
460	0.040	0.054
465	0.024	0.050
B-3 00	0.011	0.032
4	0.009	0.038
B-2 6	0.364	0.510
10	0.008	0.024
B-3 69	0.078	0.130
B-4 24	0.030	0.062
32	0.064	0.136
33	0.070	0.154
43	0.042	0.130
45	0.008	0.066
51	0.008	0.064
53	0.006	0.050
B-4 61	0.094	0.174
84	0.026	0.068
90	0.066	0.096
110	0.030	0.060
112	0.180	0.280
122	0.196	0.410
128	0.026	0.056

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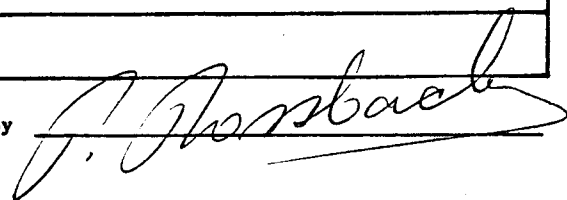
DATE RECEIVED

DATE ANALYSED Nov 1980

ATTN: B.C. 80-7

SAMPLE NO.:	% MoS ₂	% T.Mo as MoS ₂
132	0.030	0.068
B-4 183	0.024	0.108
RR 110	0.012	0.047
111	0.408	0.430
112	0.126	0.188
113	0.061	0.114
114	0.038	0.078
115	0.396	0.440
116	0.056	0.108
117	0.075	0.134
E-1 112	0.039	0.076
E-2 13W	0.028	0.084
21W	0.011	0.020
21.5W	0.021	0.040
22W	0.022	0.052
30	0.005	0.036
30W	0.008	0.013
31W	0.054	0.078
34W	0.179	0.224
35	0.021	0.038
36W	0.101	0.126
B-2 40W	0.067	0.096
131	0.008	0.036
133	0.054	0.072
137	0.025	0.044
204	0.024	0.064
208	0.078	0.164
212	0.049	0.080
220.5	0.075	0.126
243	0.090	0.108
376	0.043	0.050
382	0.014	0.046
388	0.038	0.068
414	0.062	0.090
431	0.068	0.094
455	0.043	0.072
B-2 460	0.023	0.032
JD 107	0.105	0.142
108	0.267	0.290

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SAMPLE TYPE:

LAB No.	CLIENT No.	SiO ₂ %	Al ₂ O ₃ %	CaO %	MgO %	K ₂ O %	Na ₂ O %	Fe ₂ O ₃ %	TiO ₂ %	P ₂ O ₅ %	MnO %	Ba ppm	Cr ppm	L.O.I. %	TOTAL OX'S %
1	CA- 2	83.7	8.59	0.146	0.196	4.555	0.536	0.969	0.133	0.019	0.011	703	208	0.43	99.25
2	CA- 3	77.7	10.90	0.209	0.248	4.988	1.073	0.820	0.163	0.038	0.010	1160	177	0.73	96.87
3	CA- 4	99.0	0.41	0.042	0.022	0.096	0.027	0.261	0.018	0.050	0.004	38	220	0.38	100.31
4	CA- 5	62.5	16.90	3.220	3.380	2.892	3.137	0.915	0.824	0.211	0.126	930	99	3.40	97.50
5	CA- 6	78.7	13.10	0.063	0.098	5.374	0.134	1.120	0.113	<0.001	0.031	160	162	1.55	100.28
6	CA- 7	80.9	12.20	0.084	0.081	4.651	0.214	0.801	0.081	0.010	0.030	107	283	1.53	100.58
7	CA- 8	80.7	12.40	0.084	0.070	4.651	0.201	0.801	0.074	0.006	0.022	62	171	1.58	100.58
8	JD- 1	82.1	12.60	0.230	0.087	4.651	2.413	0.746	0.100	0.024	0.018	124	195	0.93	103.89
9	JD- 3	99.2	0.48	0.084	0.031	0.072	0.027	0.410	0.014	0.006	0.011	34	229	0.08	100.41
0	JD- 4	95.6	2.44	0.063	0.113	0.795	0.027	1.040	0.030	0.022	0.011	79	375	0.25	100.39
1	JD- 5	64.0	13.60	2.860	2.430	2.289	2.816	11.400	0.600	0.158	0.087	898	161	3.75	103.98
2	JD- 6	72.7	16.00	1.320	0.549	4.338	4.290	2.050	0.280	0.053	0.040	1100	156	0.73	101.16
3	JD- 7	81.0	9.80	0.084	0.301	4.555	0.536	2.460	0.152	0.024	0.011	662	206	1.68	100.60
4	JD- 8	95.6	3.11	0.021	0.057	1.085	0.027	0.522	0.054	0.032	0.008	99	276	0.60	101.11
5	JD- 9	79.3	15.80	0.042	0.070	4.555	0.067	1.010	0.116	<0.001	0.031	75	171	1.65	102.64
6	JD-10	63.5	19.80	1.710	1.520	7.230	4.559	2.830	0.317	0.117	0.166	678	69	1.23	102.97
7	JD-11	76.9	15.00	0.188	0.211	5.374	3.593	1.040	0.157	0.041	0.011	230	139	1.03	103.54
8	JD-12	79.8	13.30	0.188	0.176	4.892	2.413	1.530	0.161	0.020	0.026	262	360	1.05	103.55
9	JD-13	79.3	12.40	0.382	0.134	4.555	2.949	1.510	0.129	0.016	0.020	188	240	0.50	101.89
0	JD-14	77.4	14.40	0.055	0.117	6.121	0.134	1.180	0.079	0.032	0.033	82	177	1.68	101.23



SAMPLE TYPE:

LAB No.	CLIENT No.	SiO ₂ %	Al ₂ O ₃ %	CaO %	MgO %	K ₂ O %	Na ₂ O %	Fe ₂ O ₃ %	TiO ₂ %	P ₂ O ₅ %	MnO %	Ba ppm	Cr ppm	L.O.I %	TOTAL OX. %
1	JD - 15	77.4	13.70	1.100	0.536	3.446	3.888	1.650	0.228	0.050	0.047	835	113	0.43	102.47
2	JD - 16	75.4	13.60	0.567	0.449	3.952	2.816	2.790	0.213	0.049	0.098	938	126	1.28	101.21
3	JD - 17	88.4	6.75	0.157	0.282	2.000	0.161	0.919	0.135	0.034	0.019	197	216	1.00	99.85
4	JD - 18	74.6	13.50	1.020	0.512	3.832	3.593	1.510	0.208	0.055	0.049	901	92	0.65	98.92
5	JD - 19	90.9	5.91	0.034	0.278	2.217	0.080	1.290	0.083	0.020	0.013	229	201	0.80	101.62
6	JD - 20	81.4	12.70	0.075	0.111	3.302	0.080	1.070	0.137	0.020	0.039	115	159	1.90	100.83
7	JD - 21	80.0	13.20	0.075	0.152	5.374	0.134	1.270	0.149	0.017	0.036	303	120	1.60	102.00
8	RR #1	90.6	2.48	0.546	0.121	1.301	0.161	6.010	0.056	0.048	0.009	147	264	2.18	103.51
9	76 N 11	73.9	14.90	1.020	0.594	3.253	4.103	2.650	0.326	0.066	0.057	802	19	2.35	102.56
0	76 N 11A	72.2	15.00	0.864	0.525	3.639	3.888	3.130	0.349	0.085	0.049	868	19	1.90	101.62
1	L1+52E-13	78.4	13.10	0.751	0.395	4.338	3.218	1.360	0.203	0.046	0.037	884	148	0.58	102.42
2	L7+70E-11	88.5	6.37	0.300	0.176	2.048	1.823	0.956	0.115	0.042	0.017	508	249	0.28	100.62
3	L19+90E-1	80.3	13.10	0.096	0.078	4.025	0.054	0.625	0.083	0.008	0.060	61	91	2.35	100.77
4	L19+90E-13	81.4	10.30	0.034	0.208	4.434	0.107	1.180	0.085	0.023	0.019	180	175	1.48	98.91
5	L20+65E-50	85.2	14.10	0.218	0.043	4.651	3.137	0.919	0.081	0.018	0.377	37	96	0.38	109.10
6	L20+65E-70	78.0	12.20	0.270	0.039	4.555	3.888	0.772	0.075	0.009	0.015	24	150	0.33	100.15
7	L21+40E-7	81.5	11.90	0.253	0.069	4.989	2.279	0.911	0.125	0.050	0.020	190	137	0.93	103.02
8	L22+90E-2	65.6	12.20	0.180	0.107	4.651	2.279	1.000	0.133	0.022	0.025	251	187	1.03	99.60
9	L23+65E-3	81.1	12.40	0.024	0.098	4.651	0.107	0.818	0.127	0.008	0.029	173	189	1.43	100.79
0	L24+40E-0	65.9	15.20	1.910	1.040	2.410	3.218	5.240	0.778	0.167	0.065	950	33	6.98	101.97



SAMPLE TYPE: _____

LAB No.	CLIENT No.	SiO ₂ %	Al ₂ O ₃ %	CaO %	MgO %	K ₂ O %	Na ₂ O %	Fe ₂ O ₃ %	TiO ₂ %	P ₂ O ₅ %	MnO %	Ba ppm	Cr ppm	L.O.I. %	TOTAL OX. %
1	L25+90E-5	80.4	13.10	0.543	0.216	4.651	3.486	1.190	0.151	0.009	0.035	242	149	0.60	104.34
2															
3															
4															
5															
6															
7															
8															
9															
0															
1															
2															
3															
4															
5															
6															
7															
8															
9															
0															



SAMPLE TYPE:

LAB No.	CLIENT No.	Ag ppm	Be ppm	Cd ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Sr ppm	V ppm	Zn ppm	Zr ppm	Bi ppm
1	CA - 2	<0.01	1.20	<0.01	4.6	25.9	1416	0.97	38	85.2	10.6	28.3	12.5	10
2	CA - 3	<0.01	1.94	1.08	34.5	22.4	2340	1.51	12	91.4	28.3	9.3	14.6	< 1
3	CA - 4	2.26	0.59	1.34	19.1	17.9	13200	2.06	12	15.7	1.7	11.2	5.8	< 1
4	CA - 5	<0.01	2.88	<0.01	25.0	32.2	156	< 0.01	< 1	396.0	164.0	47.7	12.3	29
5	CA - 6	<0.01	2.51	2.19	< 0.1	21.3	48	< 0.01	10	34.7	5.2	20.2	38.7	11
6	CA - 7	<0.01	2.33	0.46	< 0.1	16.8	162	0.33	9	28.3	3.2	23.8	33.6	9
7	CA - 8	<0.01	2.64	<0.01	12.9	22.1	216	0.31	8	18.8	4.0	21.6	32.4	10
8	JD - 1	<0.01	2.74	2.60	< 0.1	21.0	3740	< 0.01	32	37.5	6.7	21.3	49.0	10
9	JD - 3	1.38	0.70	1.35	18.8	18.6	240	2.39	5	15.7	4.0	11.5	2.9	< 1
0	JD - 4	0.80	2.05	1.18	25.5	97.9	28	1.73	13	18.9	6.2	51.8	5.4	9
1	JD - 5	<0.01	2.21	0.86	45.1	39.3	498	3.76	< 1	415.0	127.0	31.5	11.0	31
2	JD - 6	<0.01	2.96	<0.01	27.2	34.3	1684	1.27	9	206.0	27.5	25.0	22.6	8
3	JD - 7	1.25	2.90	0.67	19.3	39.9	1302	< 0.01	13	69.5	39.8	18.3	27.4	8
4	JD - 8	6.56	1.19	1.36	< 0.1	52.2	10560	1.04	74	22.1	6.7	10.0	12.4	20
5	JD - 9	<0.01	2.40	2.26	29.1	22.6	156	0.23	7	22.1	6.9	33.9	36.2	9
6	JD - 10	<0.01	8.24	<0.01	25.5	19.4	1508	1.68	7	224.0	37.2	41.9	27.5	11
7	JD - 11	<0.01	3.13	1.70	< 0.1	21.4	9000	< 0.01	10	47.1	5.4	8.8	54.6	10
8	JD - 12	<0.01	3.41	<0.01	18.6	28.8	108	< 0.01	20	40.8	12.6	16.7	49.8	28
9	JD - 13	<0.01	3.96	1.37	7.8	37.1	724	< 0.01	13	37.7	7.7	13.5	53.3	10
0	JD - 14	<0.01	2.74	1.80	9.9	20.3	660	< 0.01	26	22.3	8.8	18.5	32.1	18



SAMPLE TYPE:

LAB No.	CLIENT No.	Ag ppm	Be ppm	Cd ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Sr ppm	V ppm	Zn ppm	Zr ppm	Bi ppm
1	JD - 15	<0.01	3.84	<0.01	44.1	37.0	462	<0.01	8	158.0	25.7	16.4	18.5	9
2	JD - 16	<0.01	3.08	<0.01	44.2	46.2	162	<0.01	8	150.0	39.9	16.1	16.7	10
3	JD - 17	<0.01	4.82	<0.01	<0.1	24.3	612	<0.01	9	41.4	24.7	28.3	15.5	10
4	JD - 18	<0.01	2.79	0.19	31.6	37.3	242	<0.01	11	142.0	28.1	20.0	20.6	10
5	JD - 19	19.80	3.39	0.16	12.4	24.8	24	<0.01	27	28.8	19.7	18.6	14.9	12
6	JD - 20	<0.01	3.77	<0.01	<0.1	28.5	32	<0.01	9	28.7	10.0	20.4	43.6	9
7	JD - 21	<0.01	2.74	1.78	11.4	28.9	774	<0.01	15	31.9	12.7	19.6	43.6	11
8	RR # 1	2.56	0.87	<0.01	<0.1	71.5	920	<0.01	20	32.0	20.8	28.5	9.8	20
9	76 N 11	<0.01	3.06	0.51	41.5	41.0	30	0.40	37	200.0	42.2	38.6	29.1	10
0	76 N 11A	<0.01	3.00	1.08	49.6	45.7	62	1.04	50	181.0	37.6	57.4	40.3	8
1	L1+52E-13	<0.01	3.08	<0.01	35.0	29.2	556	<0.01	13	143.0	22.3	27.2	13.5	9
2	L7+70E-11	<0.01	1.31	<0.01	<0.1	28.3	3140	<0.01	7	73.1	13.4	24.0	8.8	10
3	L19+90E-1	<0.01	1.72	1.96	23.9	20.0	314	6.25	15	19.0	1.4	18.6	20.7	9
4	L19+90E-13	0.19	2.14	1.85	25.7	20.2	3700	6.42	19	35.2	5.6	17.7	28.0	10
5	L20+65E-50	<0.01	3.02	1.92	<0.1	19.8	4260	6.16	17	18.8	<0.1	10.0	16.8	8
6	L20+65E-70	0.15	3.38	1.64	16.6	12.1	296	6.21	15	15.5	2.8	8.2	27.9	<1
7	L21+40E- 7	<0.01	2.48	1.56	6.1	20.0	3100	6.17	12	51.9	5.6	12.7	25.2	10
8	L22+90E- 2	<0.01	3.07	1.13	5.3	19.0	220	5.90	12	34.2	6.7	10.3	38.4	10
9	L23+65E- 3	<0.01	2.56	1.92	24.4	<0.1	126	6.54	11	30.9	8.7	12.9	39.9	8
0	L24+40E- 0	<0.01	2.37	0.64	63.9	26.0	<1	6.85	14	409.0	92.7	58.2	50.5	8



SAMPLE TYPE: _____

LAB No.	CLIENT No.	Ag ppm	Be ppm	Cd ppm	Co ppm	Cu ppm	Mo ppm	Ni ppm	Pb ppm	Sr ppm	V ppm	Zn ppm	Zr ppm	Bi ppm	
1	L25+90E- 5	<0.01	3.43	1.51	27.3	19.9	300	6.19	14	54.8	7.5	21.2	32.5	9	
2															
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7															
8															
9															
0															

A P P E N D I X I I

Analytical Procedures

Rossbacher Laboratory Ltd.

GEOCHEMICAL ANALYSTS & ASSAYERS

2225 S. SPRINGER AVE.
BURNABY, B.C.
CANADA
TELEPHONE 299-6910
AREA CODE 604

Jan. 1980.

ANALYTICAL METHODS CURRENTLY IN USE AT ROSSBACHER LABORATORY LTD.

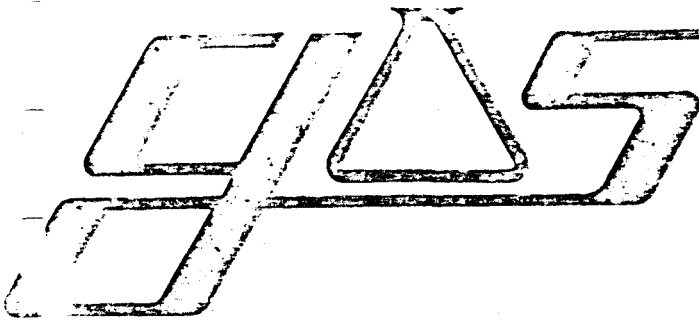
(1)

A. SAMPLE PREPARATION.

1. Geochem. Soil and Silt: Samples are dried, and sifted to minus 100 Mesh, through stainless steel, or nylon screens.
2. Geochem. Rock : Samples are dried, crushed to minus $\frac{1}{4}$ inch, split, and pulverized to minus 100 mesh.

B. METHOD OF ANALYSIS.

1. Multi element. (Mo, Cu, Ni, Co, Mn, Fe, Ag, Zn, Pb.): 0.5 Gram sample is digested for four hours with a 15:85 mixture of Nitric-Perchloric acid.
The resulting extract is analyzed by Atomic Absorption spectroscopy, using Background Correction where appropriate.
2. Tungsten: 1.0 Gram sample is sintered with a carbonate flux, and dissolved.
The resulting extract is analyzed colorimetrically, after reduction with Stannous Chloride, by use of Potassium Thiocyanate.
3. Tin: 0.5 Gram sample is sublimated by fusion with Ammonium Iodide, and dissolved.
The resulting solution is analyzed colorimetrically by use of Gallein.
4. Fluorine: 0.5 Gram sample is fused with a Carbonate Flux, and dissolved.
The resulting solution is analyzed for Fluorine by use of an Ion Selective Electrode.
5. Gold: 10.0 Gram sample is dissolved in Aqua Regia.
The resulting solution is subjected to a Methylisobutyl Ketone extraction, which extract is analyzed for Gold using Atomic Absorption Spectroscopy.
6. pH: An aqueous suspension of soil, or silt is prepared, and its pH is measured by use of a pH meter.



GEO ANALYTICAL SERVICES (WESTERN) LTD.
1935 30th AVENUE N.E., SUITE 10, CALGARY ALBERTA

(403) 230-1229 • TELEX 03-827 829

December 23, 1980

Taiga Consultants
301-1300 8th Street S.W.
Calgary, Alberta
T2R 1B2

ATTENTION: Mr. Jim Davis

Dear Mr. Davis

Following our recent telephone conversation, I am submitting to you the procedures used in the analyses of your samples:

LiBO₂ fusion: 0.250g of sample was mixed with approx. 800g of LiBO₂ flux, fused at 900°C for 10 minutes, dumped in 10% HNO₃, stirred into solution, diluted to 500 ml and analysed. For Major and Minor elements.

4 Acids digestion: 0.250g of sample was weighed into a teflon crucible; 0.5 ml of HCl, 1 ml of HNO₃, 2 ml of HClO₄ and 7 ml of HF were added, digested to near dryness, brought into solution with 0.5 N HNO₃ and diluted to 25 ml. For trace elements.

L.) .I.: a predetermined amount of sample was weighed into a crucible, heated in a furnace to 800°C for 4 hours, cooled and weighed again. Whatever loss was then calculated into percentage.

Bismuth analyses: 0.500g was weighed into a crucible, then heated at 600°C, transferred to a test tube. 1 part of H₂O, 1 part of HNO₃ and 3 parts of HCl were added. Digested for 3 hours in a water bath. Diluted to 10 ml in H₂O. Analysed by A.A.

Taiga Consultants

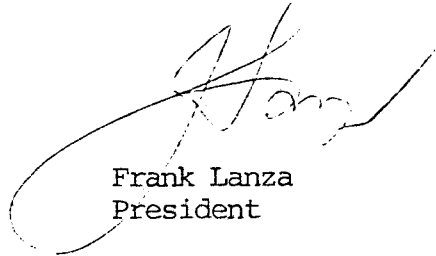
2

December 23, 1980

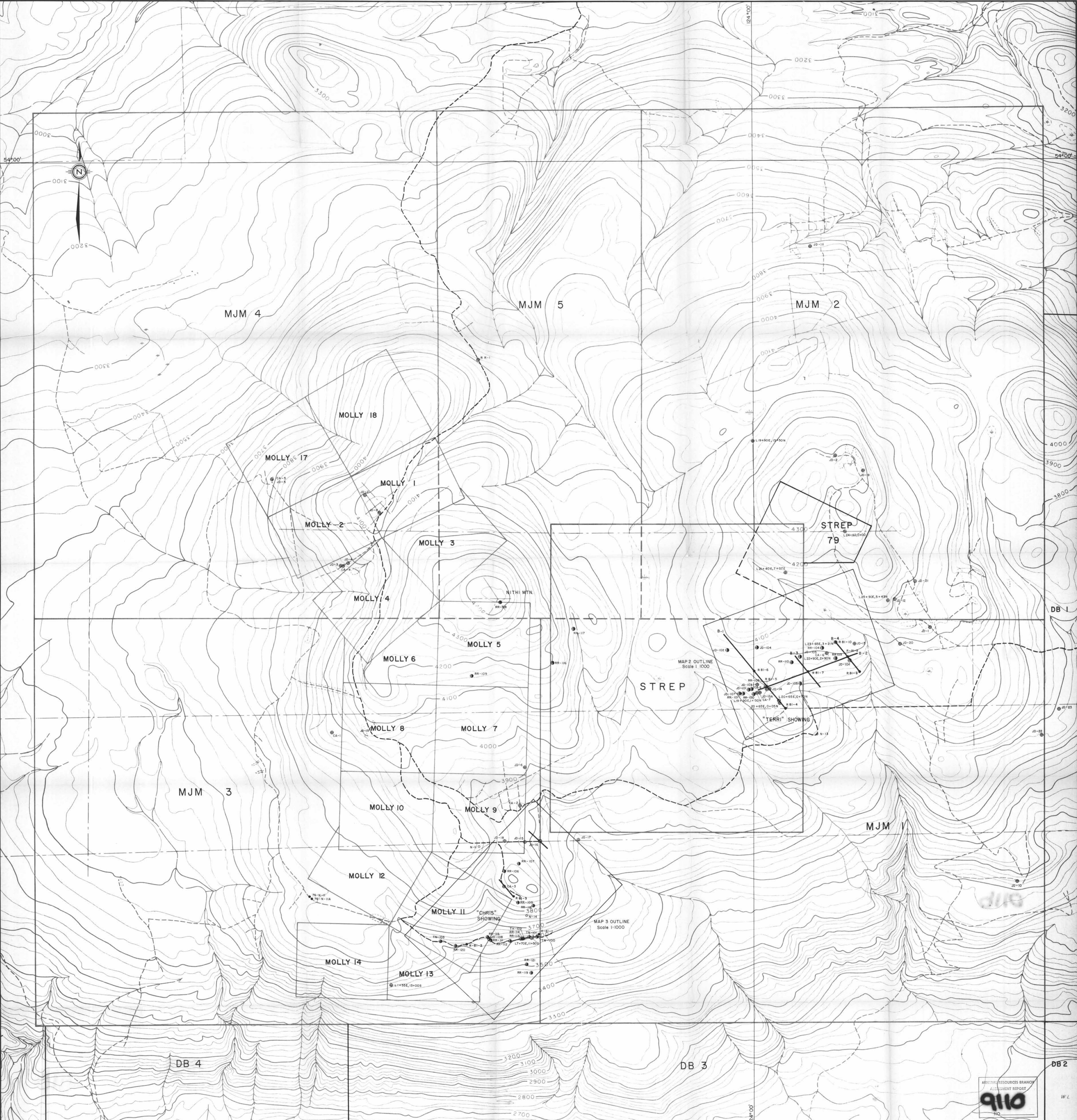
Sample preparation: Soils were sifted through an 80 mesh screen. The -80 mesh portion was used. Rock were crushed, pulverized and sifted through a 200 mesh screen. The -200 mesh portion was used.

I hope this will fill your requirements, should you have any questions, do not hesitate to call.

Sincerely yours,
Geo Analytical Services (Western) Ltd.

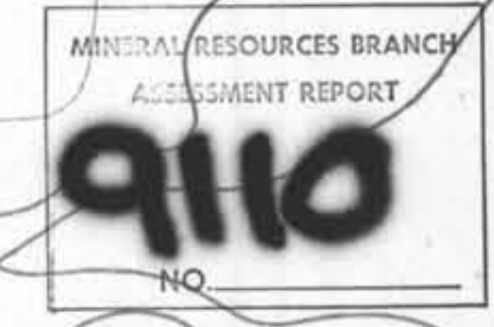


Frank Lanza
President

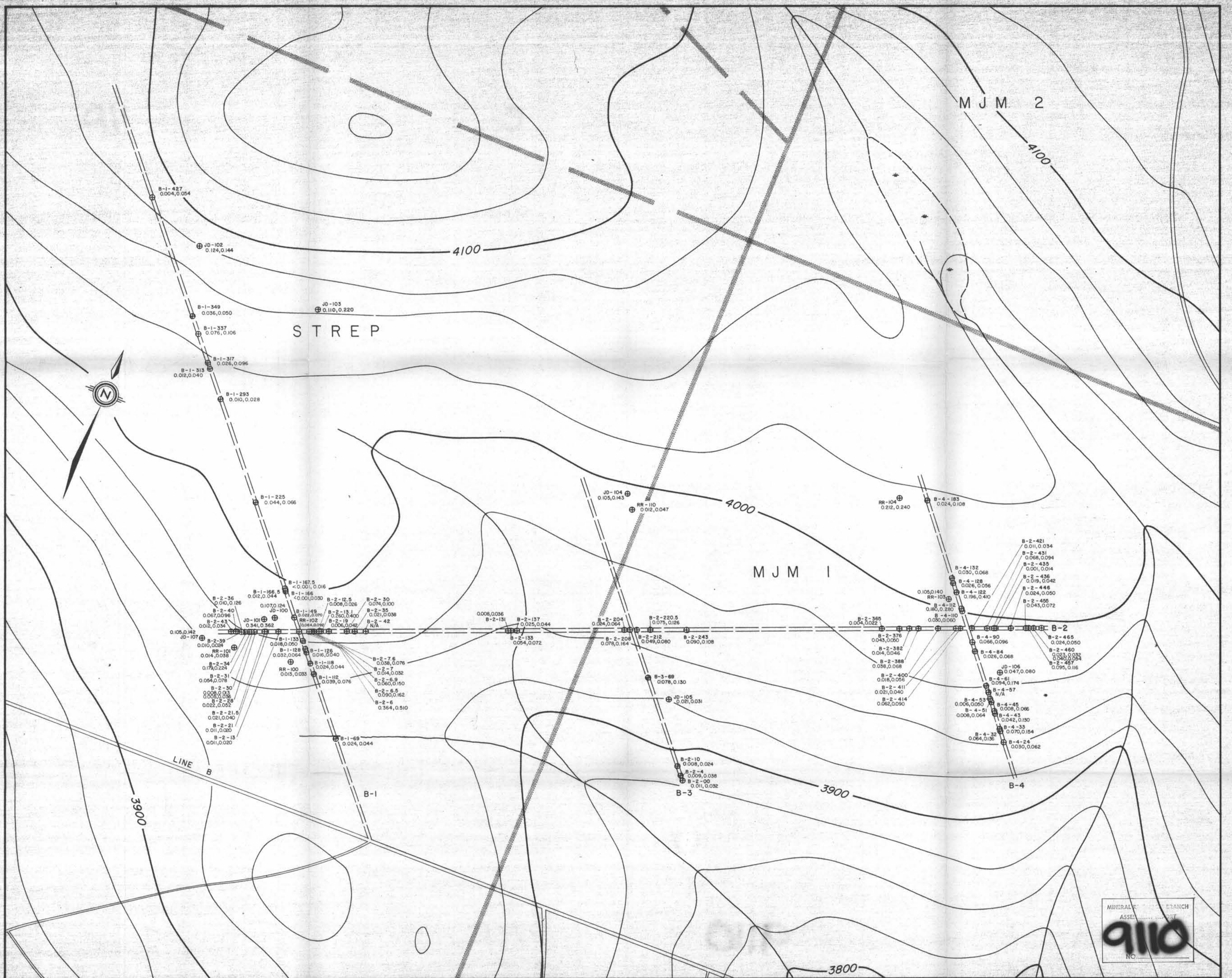


- Road/Trench
- - - Existing access
- Proposed drill sites ○ Existing drill sites
- Rock sample sites
- Summer program 1980
- Rock sample sites
- Winter program 1980

ROCKWELL MINING CORPORATION		
NITHI MOUNTAIN PROPERTY		
NTS 93F/15, 93 K/2	MAP 1	
PROJECT BC-80-7	ROCK SAMPLE LOCATION MAP	
SCALE 1:5,000	90 0 100 200 Meters	
TAIGA CONSULTANTS LTD.		



DECEMBER 1980

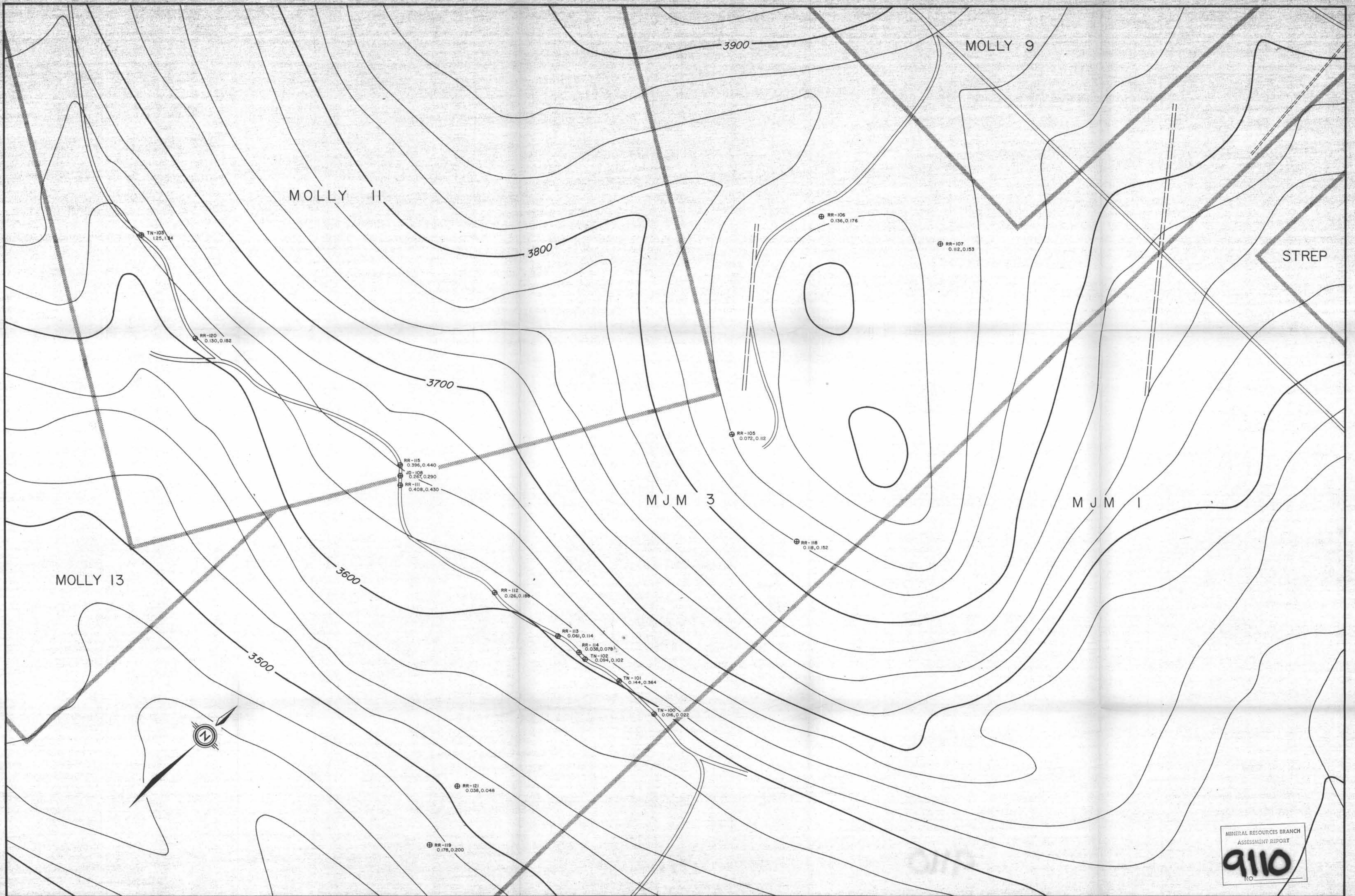


MINERAL ASSESSMENT PLAN
 910
 NO.

- Existing roads
- Existing trails
- New roads/trails
- ⊕ B-2-6
0.364, 0.510
N/A
Rock sample location and sample number
Assay results - % MoS₂, % T. Mo as MoS₂
Rock sample not analyzed
- Claim boundary
- 3900- Contour interval 25'

ROCKWELL MINING CORPORATION	
NITHI MOUNTAIN PROPERTY	
ROCK GEOCHEMICAL SAMPLES "TERRI" SHOWING	MAP 2
PROJECT BC-80-7	NTS 93F/15, 93K/2
SCALE 1:1,000	0 10 20 30 40 50 Meters
TAIGA CONSULTANTS LTD.	

DECEMBER, 1980



STREP

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9110
No.

- Existing roads
- Existing trails
- Old trenches
- New roads/trails
- ⊕ TN-101 Rock sample location and sample number
- 0144, 0.364 Assay results - % MoS₂, % T. Mo as MoS₂
- N/A Rock sample not analyzed
- Claim boundary
- 3900— Contour interval 25'

ROCKWELL MINING CORPORATION	
NITHI MOUNTAIN PROPERTY	
ROCK GEOCHEMICAL SAMPLES "CHRIS" SHOWING	MAP 3
PROJECT BC-80-7	NTS 93F/15,93K/2
SCALE 1"=1,000	0 10 20 30 40 50 Meters
TAIGA CONSULTANTS LTD.	
DECEMBER, 1980	

dw