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THE MOSQUITO CREEK PROJECT
WELLS, B. C.
By: H. Brodie Hicks, P. Eng., M. Eng.
Vancouver, B. C. March 15, 1979

PROSPECTUS

of

THE MOSQUITO CREEK PROJECT

WELLS, B.C.

Prepared For:

THE DEPUTY MINISTER
DEPARTMENT OF MINES AND PETROLEUM RESOURCES
BRITISH COLUMBIA

By:

H. Brodie Hicks, P. Eng., M. Eng.

Vancouver, B.C.
March 15, 1979

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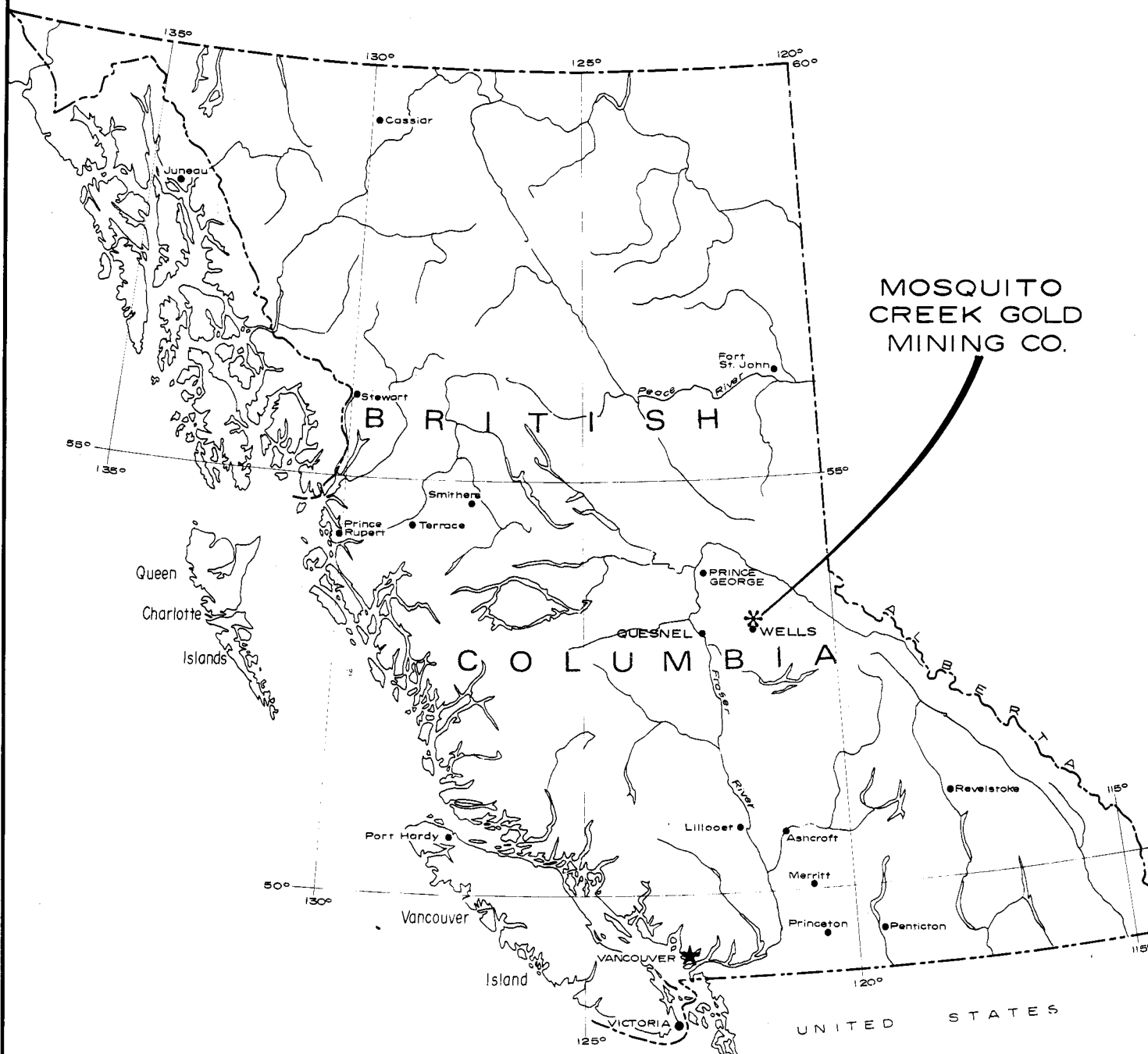
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MOSQUITO
CREEK GOLD
MINING CO.

M.G. ENGINEERING LTD.

VANCOUVER

B. C.

THE MOSQUITO CREEK GOLD MINING CO.

WELLS, B.C.

M. GUIGUET

Scale: 1" = 136 Miles Date: June/78 No: 1

TO ACCOMPANY REPORT BY H. BRODIE HICKS
REVISED MARCH 15, 1979.

To Accompany Report by M. Guiguet
June 30/78

ALTair drafting services Ltd.

INTRODUCTION

This prospectus has been commissioned by The Mosquito Creek Gold Mining Co. Ltd. (N.P.L.), with head office at Suite 586, Calgary Place Three, Calgary, Alberta, T2P 2E7, for submission to the Deputy Minister, Department of Mines and Petroleum Resources of British Columbia, in support of an application for permission to proceed with a planned production operation.

The prospectus describes the presently available reserves, proposed exploration and development programmes, mining and milling parameters, and anticipated environmental and socio-economic effects.

SUMMARY

Underground development work and diamond drilling has outlined a reserve of 21,400 tons of indicated ore grading 0.84 oz/ton gold and 0.26 oz/ton silver. The ore consists of sulphide replacements similar to those mined in the past on adjacent properties.

A programme of additional underground development designed to confirm and possibly increase these reserves is now under way and, as soon as weather permits, erection of a 100-ton per day cyanidation mill will be undertaken with the objective of achieving production toward the late summer of this year.

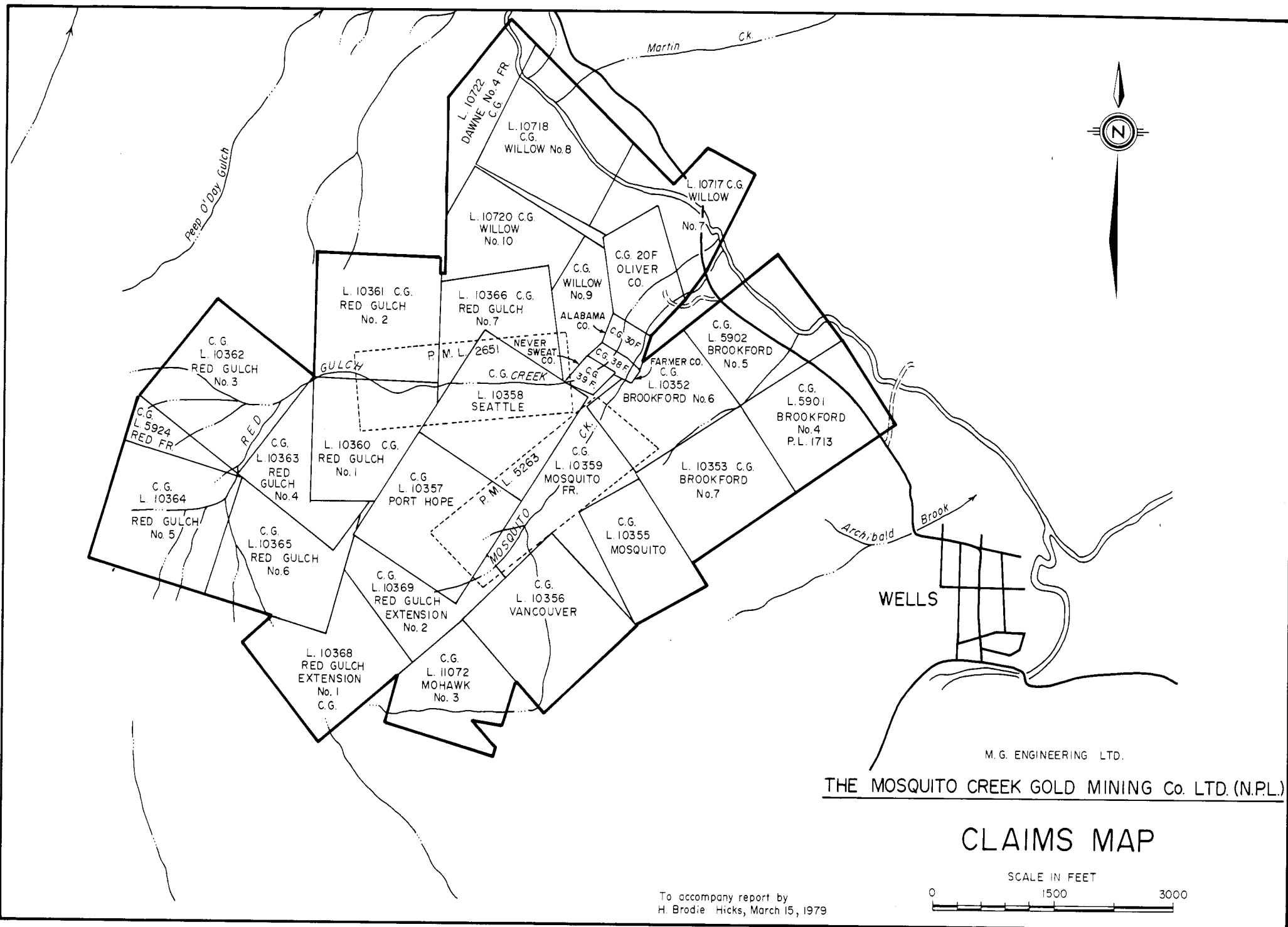
Negotiations for the necessary financing are well advanced but cannot be completed until all necessary Governmental approvals have been obtained.

PROPERTY

The Mosquito Creek Gold Mining Co. Ltd. (N.P.L.) holds 29 Crown-Granted mineral claims and two placer leases on Island Mountain, two miles west of the village of Wells, B.C., in the Cariboo Mining District at latitude 53° 07' North and 121° 36' West.

Titles were searched and claim posts examined in 1975 by an associate of the writer and found to be in good standing. Mr. A.H. Jukes, President of the Company, advises that the claims continue to be in good standing. A list follows:

Cont'd/2



PROPERTY Cont'd

<u>Crown Granted Mineral Lease</u>	<u>Lot. No.</u>	<u>No. of Acres</u>	<u>Date Crown Granted</u>
Brookford No. 4	5901	42.37	February 1, 1936
Brookford No. 5	5902	41.32	February 1, 1936
Brookford No. 6	10352	35.94	February 1, 1936
Brookford No. 7	10353	43.95	February 1, 1936
Mosquito	10355	31.67	February 1, 1936
Vancouver	10356	51.65	February 1, 1936
Port Hope	10357	51.65	February 1, 1936
Seattle	10358	51.36	February 1, 1936
Mosquito Fraction	10359	38.89	July 13, 1936
Mohawk No. 3	11072	35.14	April 30, 1935
Red Gulch No. 1	10360	40.89	October 30, 1939
Red Gulch No. 2	10361	51.65	October 30, 1939
Red Gulch No. 3	10362	51.65	October 30, 1939
Red Gulch No. 4	10363	26.04	November 11, 1939
Red Gulch No. 5	10364	51.64	October 30, 1939
Red Gulch No. 6	10365	42.15	October 30, 1939
Red Gulch No. 7	10366	31.99	October 27, 1939
Red Gulch Ext. No. 1	10368	43.41	October 27, 1939
Red Gulch Ext. No. 2	10369	25.33	October 27, 1939

Cont'd/3

PROPERTY Cont'd

<u>Crown Granted Mineral Lease</u>	<u>Lot. No.</u>	<u>No. of Acres</u>	<u>Date Crown Granted</u>
Red Fraction	5924	9.52	October 30, 1939
Willow No. 7	10717	38.07	February 19, 1951
Willow No. 8	10718	47.13	February 19, 1951
Willow No. 9	10719	19.38	February 19, 1951
Willow No. 10	10720	33.63	February 19, 1951
Dawne No. 4 Fraction	10722	27.08	February 19, 1951

The following also have placer rights:

Oliver	20F	23.52	September 2, 1875
Alabama Co.	30F	5.00	May 16, 1875
Farmer Co.	38F	3.00	May 17, 1876
Never Sweat Co.	39F	3.00	May 17, 1876
Total	29	998.29	
	<u>claims</u>		

<u>Placer Mineral Lease</u>	<u>Work Recorded To</u>	<u>Date Recorded</u>
P.M.L. 5263	February 10, 1980	February 10, 1951
P.M.L. 2651	June 27, 1980	June 27, 1933

ACCESS

The property is reached from Wells by a good gravel road for one mile downstream along the Willow River, thence 1.3 miles south to the shaft site.

Cont'd/3

HISTORY

The gold rush of the 1860's to Williams Creek precipitated the gold placer mining which continued sporadically until recently. It will be noted that some of the present Mosquito Creek claims were first staked in 1875. Mr. Jack Gunn, the last owner, ceased hydraulic mining in 1960.

Lode mining in the area was carried out by Cariboo Gold Quartz Mining Company, from 1933 to 1959, on the adjacent claims on Cow Mountain. The Island Mountain Mines Co. (owned by Newmont Mining Corp.) produced from their claims from 1934 to 1954 at which time they were acquired by the Cariboo Gold Quartz Mining Co. Production continued until 1967 when rising costs in the context of a fixed gold price forced closure. The Mosquito Creek claims overlap, in part, these former working, and at depths of from 800 to 1,350 feet below the present shaft bottom old records show ore reserves of 40,000 tons grading 0.70 oz/ton. These working are flooded and, for the present, are inaccessible.

Production from the former mines comprised 2,927,246 tons with an average grade of 0.428 oz/ton. Gold production totalled 1,196,283 oz and silver production 137,750 oz.

The present Company was incorporated in 1971 and, under a working agreement with Home Oil Co. of Calgary, a programme of surface and underground exploration was carried out through the Spring of 1975. This comprised road construction, geological, geochemical and geophysical surveys, bulldozer trenching, 16,180 feet of surface diamond drilling, 10,910 feet of percussion drilling, sinking of a 516-foot production shaft, 2,137 feet of drifting and crosscutting, 6,660 feet of underground diamond drilling, and environmental monitoring of the surrounding area.

Underground work was resumed in July, 1977, and comprised 1,859 feet of lateral development, 5,313 feet of underground diamond drilling and 1,150 feet of surface diamond drilling. A trial stope produced approximately 1,265 tons of ore which is stockpiled on surface.

GEOLOGY

The rocks of the area are comprised within the Snowshoe formation of the Cariboo Group and consist of meta sediments of early Cambrian age including phyllites, quartzites and limestones. There are no

Cont'd/4

GEOLOGY Cont'd

local intrusions. The formation has been intensely folded and the main mineralized areas occur within a fold, overturned to the southwest, on the northeast flank of an anticlinorium which strikes northwest and plunges 22° in the strike direction. The anticlinorium has been flexed normal to the plunge with resulting major faults developing at intervals of 700 to 1800 feet. These faults strike northerly and have varying dips to the east.

Gold production has been derived from two distinctive rock types. The Rainbow bed is composed of dark quartzites, argillites and some phyllites in which tension fractures have developed normal to the bedding. These fractures have in turn been filled with gold bearing quartz and pyrite.

The Baker member is composed of light fine grained calcareous quartzites, talcose rocks and interbedded limestones. The limestones have been replaced by gold bearing sulfides and this generally occurs in the bed nearest the Baker-Rainbow contact. This contact zone, which is the major exploration target of the Mosquito Creek project, has been traced over a distance of 9.6 km (6 miles) and was a main source of ore for the previous producers. The contact area has been complicated by overturned folding and has provided the environment for gold deposition.

In general, the average grade of the quartz veins in the Rainbow member has been in the order of 0.30 to 0.40 ounces of gold per ton with minor silver values. The Baker replacement ore has averaged 0.50 to several ounces of gold per ton with silver content generally 10% to 15% of the gold content. At the present time, attention is being confined to the replacement ore.

ORE RESERVES

Ore reserves in the new mine have been estimated by the Project Manager, Mr. M. Guiguet (a former Associate of the writer) as follows:

	<u>Tons</u>	<u>Gold oz/ton</u>	<u>Silver oz/ton</u>
Drift Indicated	4,800	1.00	0.45
Drill Indicated	16,600	0.80	0.21
	<u>21,400</u>	<u>0.84</u>	<u>0.26</u>

Cont'd/6

MINING

Mining methods will be based on experience of similar orebodies in the adjacent mines. In general, the replacement lenses plunge at an angle of 22°. Open stoping will be employed with the ore being scraped to boxholes. Trains will be loaded through chutes for transport to the shaft. Cars will be hoisted and the ore dumped on surface.

Preproduction development is planned as follows: The principal ore-shoot on which mining will commence has already been outlined on the 4th (4100) level and partially opened up by raising and box-holing. The 3rd (4200) level is now to be advanced easterly approximately 600 feet with a view to intersecting the upward extension of this shoot. From the end of this drift, a combined ventilation - escapeway raise will be driven to surface. Mining can then proceed on both levels. The present mine status and proposed development are shown on the accompanying plans and sections.

METALLURGY

The former producing mines attained an average recovery of 95% of the gold and silver content by a straight cyanidation process. The present reserves appear to be mineralogically identical and hence the same process will be used.

MILLING

Essentially the milling process will comprise two-stage crushing, followed by grinding in a ball-mill in closed circuit with a cyclone classifier to 65% -200 mesh. The classifier overflow will be thickened and pumped to pachuca tanks for cyanide leaching and two-stage filtration. The filtrate (pregnant solution) will be clarified and the gold precipitated in presses with zinc dust. The precipitate will either be shipped to a refinery or refined on site, depending on economics.

The mill will be situated on the Alabama claim at an elevation of 4,010 feet, approximately 4,900 feet from the shaft. Ore will be transported by truck. Site selection was based, in part, on shortening of tailings pipelines to reduce danger of spillage.

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MILLING Cont'd

Foundations will be largely on bedrock. The mill building is expected to be 50' by 105'. Capacity will be 100-150 tons per day. Flowsheet and equipment details are not yet finalized.

TAILINGS

The area selected for the tailings pond is on the Oliver claim, two hundred feet below the mill site. Most of the area is bedrock, denuded by placer mining. The retaining dike will be constructed of local rock and gravel with a clay lining to prevent seepage. Surface run-off water will be diverted by ditching. The initial pond will have a capacity of 1,300,000 cubic feet, sufficient to hold 72,000 tons of tailings and 760,000 cubic feet of effluent, sufficient for two years operation. The effluent will be recycled to the process. Tailings treatment will be applied to reduce the cyanide content to permissible standards.

From November 1963 to April 2, 1975, monitoring of the water quality in the local watershed was carried out by Willis, Cunliffe,, Tait and Co., consulting engineers. No pollution attributable to the mining operation was detected. Their reports are available for inspection.

POWER

Power for both mining and milling will be supplied by diesel generators. It is planned to use two Caterpillar D379 units with an existing D300 unit available as a standby.

WATER

Mining water will be obtained by recirculation of mine drainage. Process water will be derived from Mosquito and Red Gulch creeks. For camp use, water will be trucked from Mosquito Creek.

COMMUNICATIONS

The mine site is serviced by radio telephone through the B.C. Telephone System. It is proposed to have a land line between the mine and mill. The underground working levels have an inter-communication phone system to the hoistroom.

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ANCILLARY FACILITIES

Maintenance

A well equipped machine shop is now on the mine site, sufficient for all mining and surface plant needs.

A similar machine shop will be required at the mill to service that operation. It will be contained in the mill.

Office, Changehouse and Dry and Warehousing

These offices are already at the mine site and are sufficient for the projected crews. The explosives powder magazine is at the 4400 adit and sufficient storage is available.

Mill warehousing will be in the mill. A cold storage building will be on the flats below the mill for bulk storage not needed at mine or mill.

Present oil storage at the mine site (6000 gallon tank) is sufficient for the planned production rate and similar storage will be made available at the mill site near the road.

Fuel storage will adhere to the relevant codes.

Fire Protection, Safety and First Aid

A 6000 gallon water reservoir at the mine will be available for fire protection. A reservoir above the mill will also be available for that locality.

First aid equipment is now located at the mine office, as is the mine rescue apparatus.

Living Accomodations

All personnel will live off camp. There is accomodation in the village of Wells and its surrounding.

ENVIRONMENTAL CONSIDERATIONS

The property is in the Mosquito Creek Watershed which has been extensively placer mined and denuded of first growth vegetation. The area affected, mine-site, mill and tailings pond, are

Cont'd/9

ENVIRONMENTAL CONSIDERATIONS Cont'd

covered by sparse, non-commercial, second growth spruce and lodgepole pine, with alder and willow undergrowth.

The mill and tailings areas are basically barren bedrock and old gravel piles, left by the placer miners.

The water quality survey conducted has established that no harmful effects from the mining has occurred. It is planned to monitor the streams when production commences.

The tailings will be contained, and any contaminants controlled and monitored. Any discharge into the environment will adhere to government codes and regulations.

Reclamation both at the mine site and mill-tailings areas on termination of mining will adhere to the reclamation codes.

SOCIO-ECONOMIC CONSIDERATIONS

The community of Wells, a mining-oriented village, provides social and recreational amenities including community hall, churches, curling rink, ski hills and some of the best cross-country ski trails in the country. Snowmobiling is an added attraction. Fishing and canoeing in Bowron Park and the immediate lakes near Wells are excellent. Big game hunting is also a sport, in season. The first mining camp in British Columbia, Barkerville, is only four miles from Wells and provides museum, summer shows and many attractions for visitors and locals alike. The first class highway is only 50 miles away, at Quesnel, a large community with hospital, markets, and terminals for rail, truck and airline facilities.

Thus, the Mosquito Creek Gold Mining crews will have these alternatives not usually available to mining personnel in remote locations.

The Mosquito Creek Project will have an annual payroll of approximately \$900,000 and an expenditure of approximately \$800,000 on consumable supplies and services. It is expected that 85% of the payroll will be spent locally and in the Quesnel-Prince George area. Purchases of fuel, groceries, transportation and shop services will be largely made in Quesnel. These items will account for about 25% of the supply expenditures with the greater part of the balance in Prince George and Vancouver.

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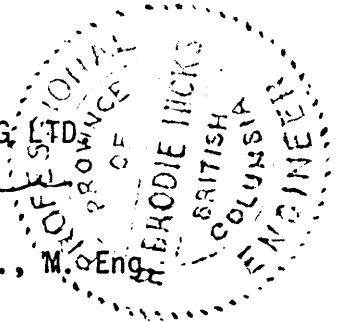
CONCLUSION

Planning of the Mosquito Creek Project has at all times included consideration of meeting Government regulations with respect to safety, environmental protection, and ultimate reclamation. It is believed that these objectives have been attained. Initiation of production at Mosquito Creek is expected to have a beneficial effect on the economy of the area and thus, indirectly, to the economy of the Province as a whole.

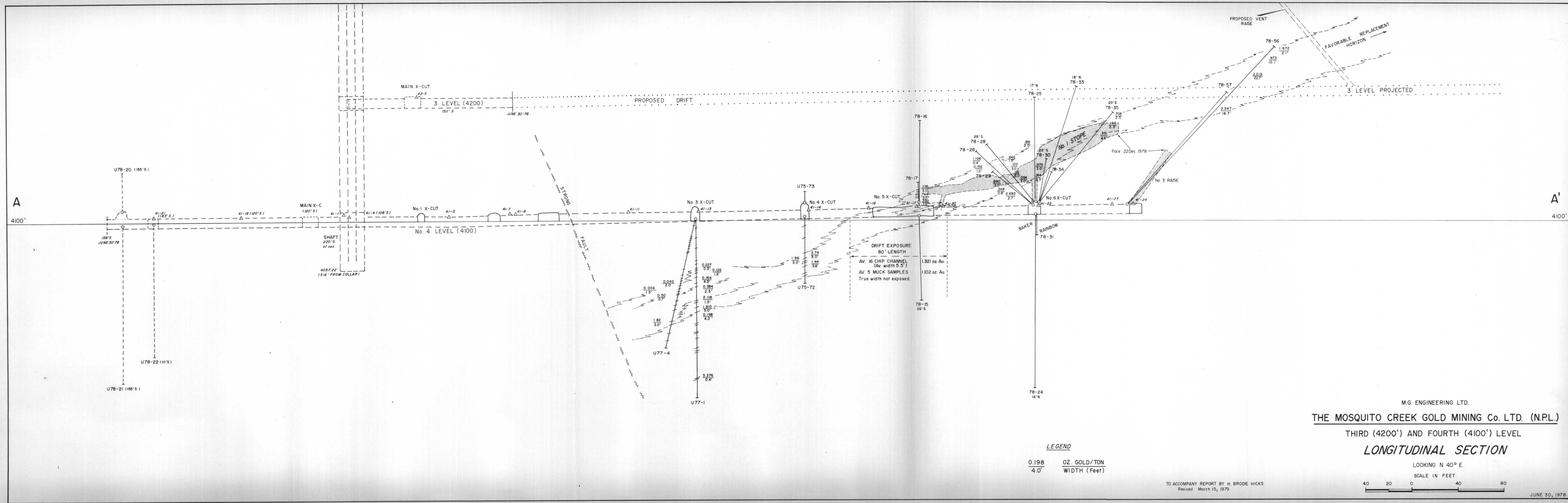
Respectfully submitted,

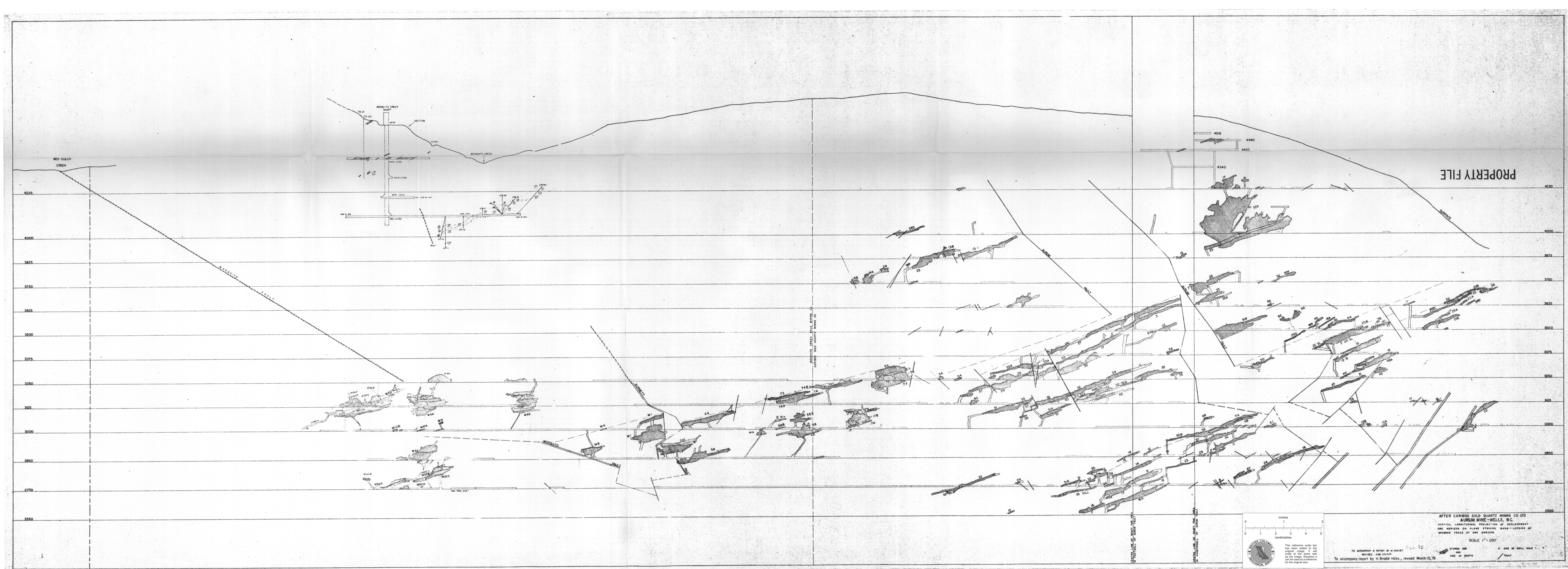
BRODIE HICKS ENGINEERING LTD.

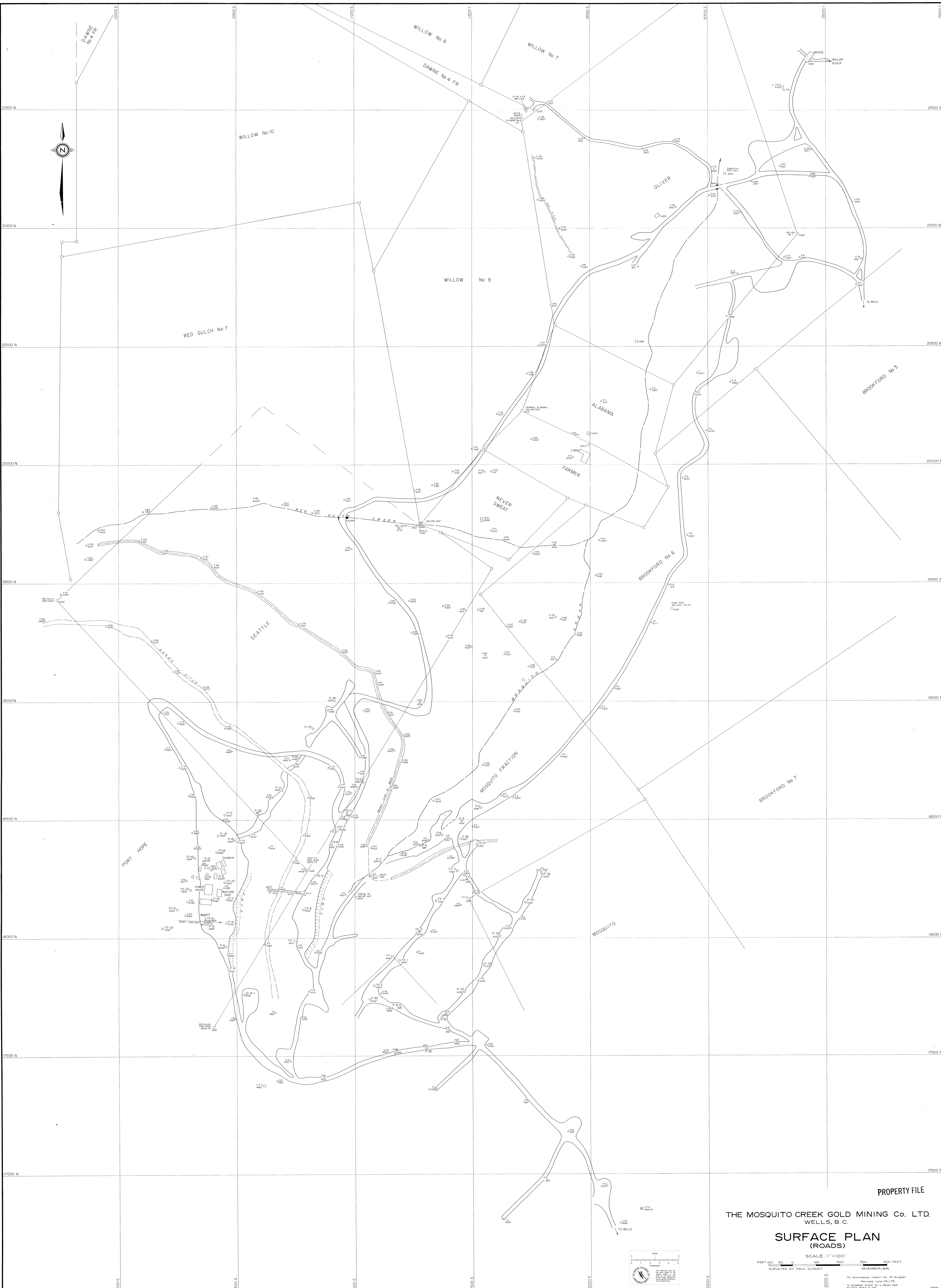
H. Brodie Hicks
H. Brodie Hicks, P. Eng., M. Eng.



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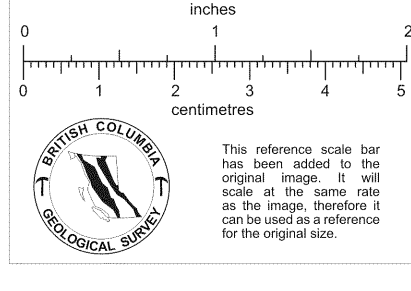
THE MOSQUITO CREEK GOLD MINING Co. LTD.
WELLS, B. C.

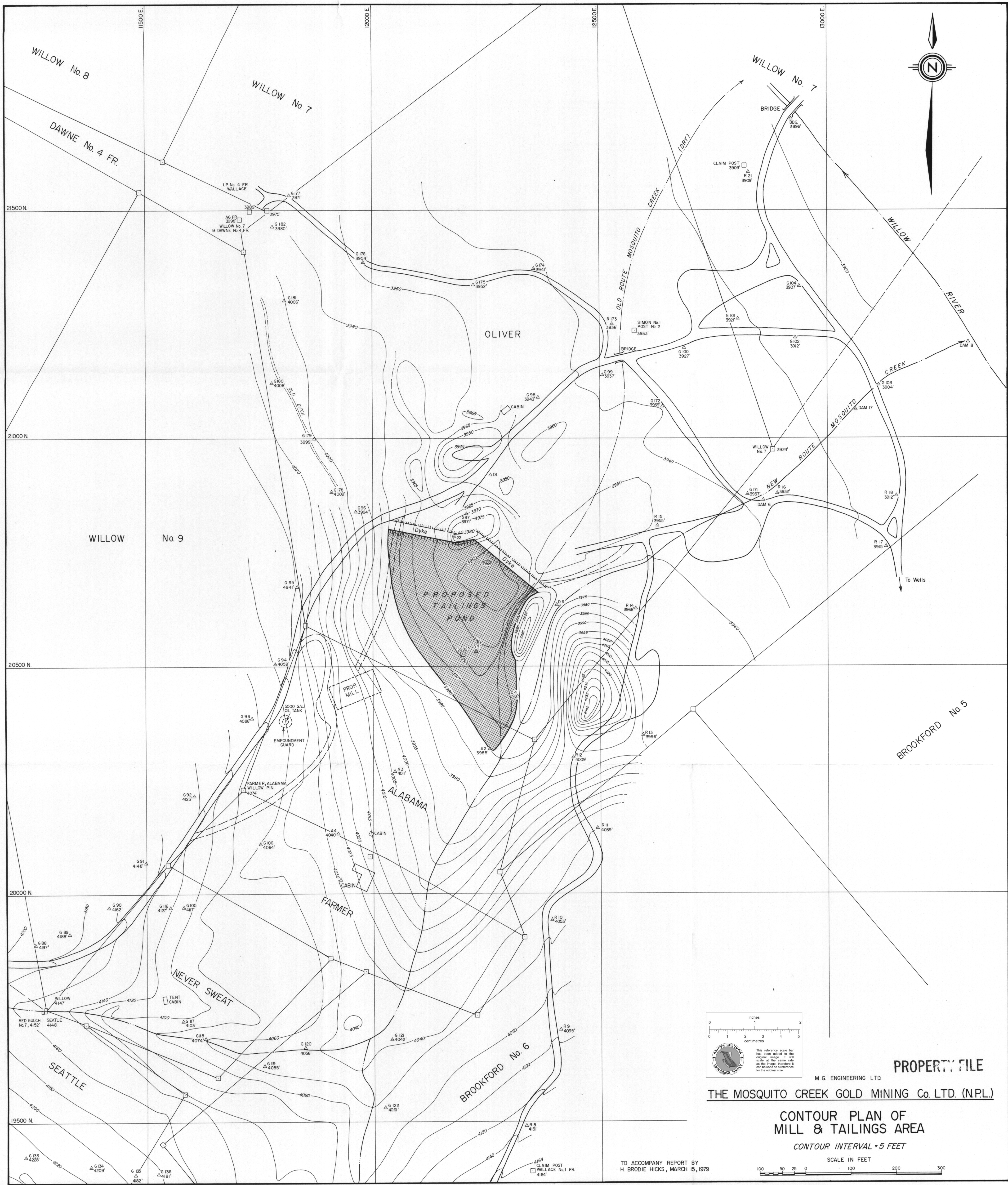
**SURFACE PLAN
(ROADS)**


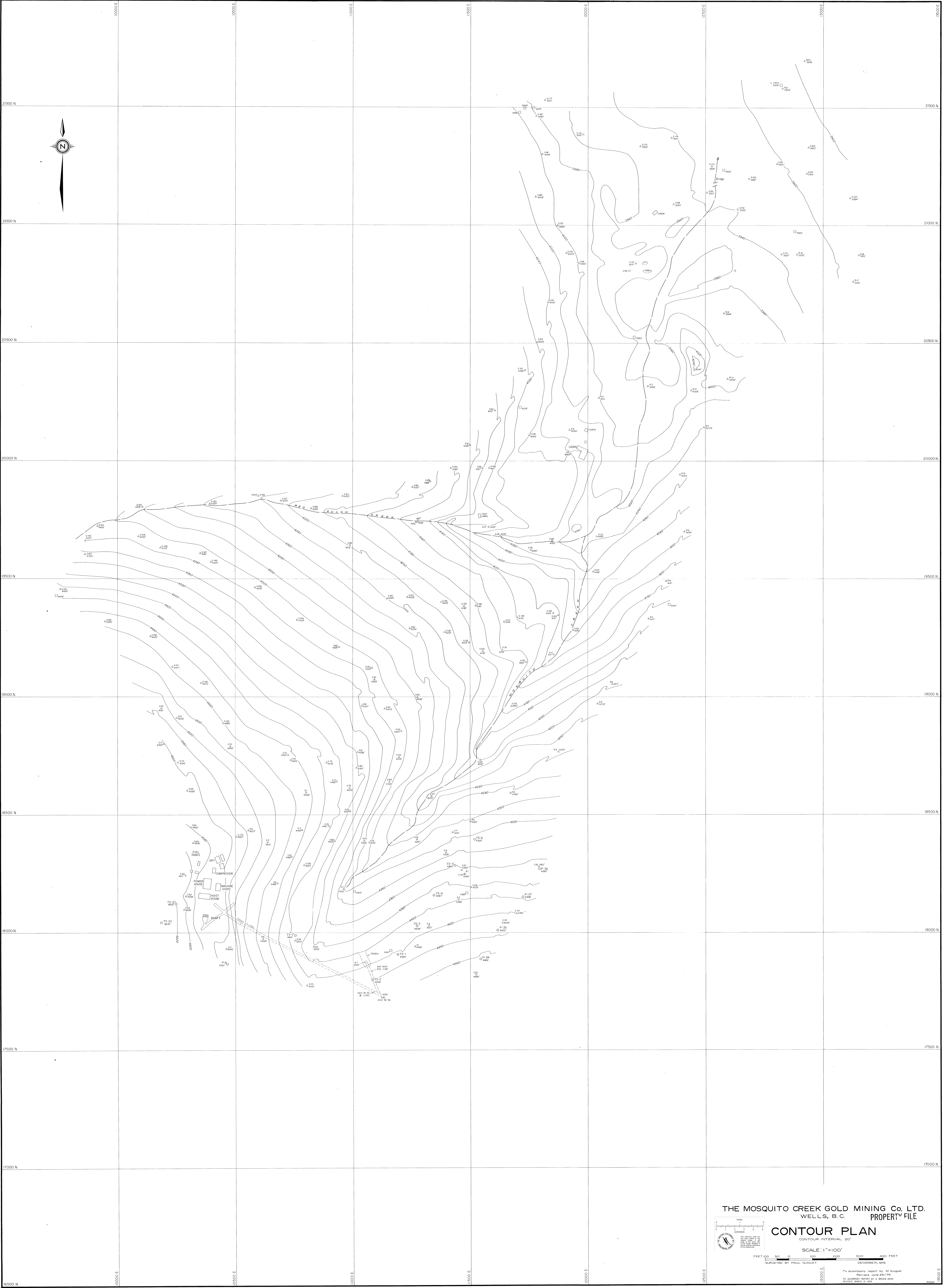
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SURVEYED BY PAUL GUGUET
DECEMBER, 1970

To accompany report by M. Guggen
Revised June 25/75
To accompany report by H. Bousquet
Revised March 5/76



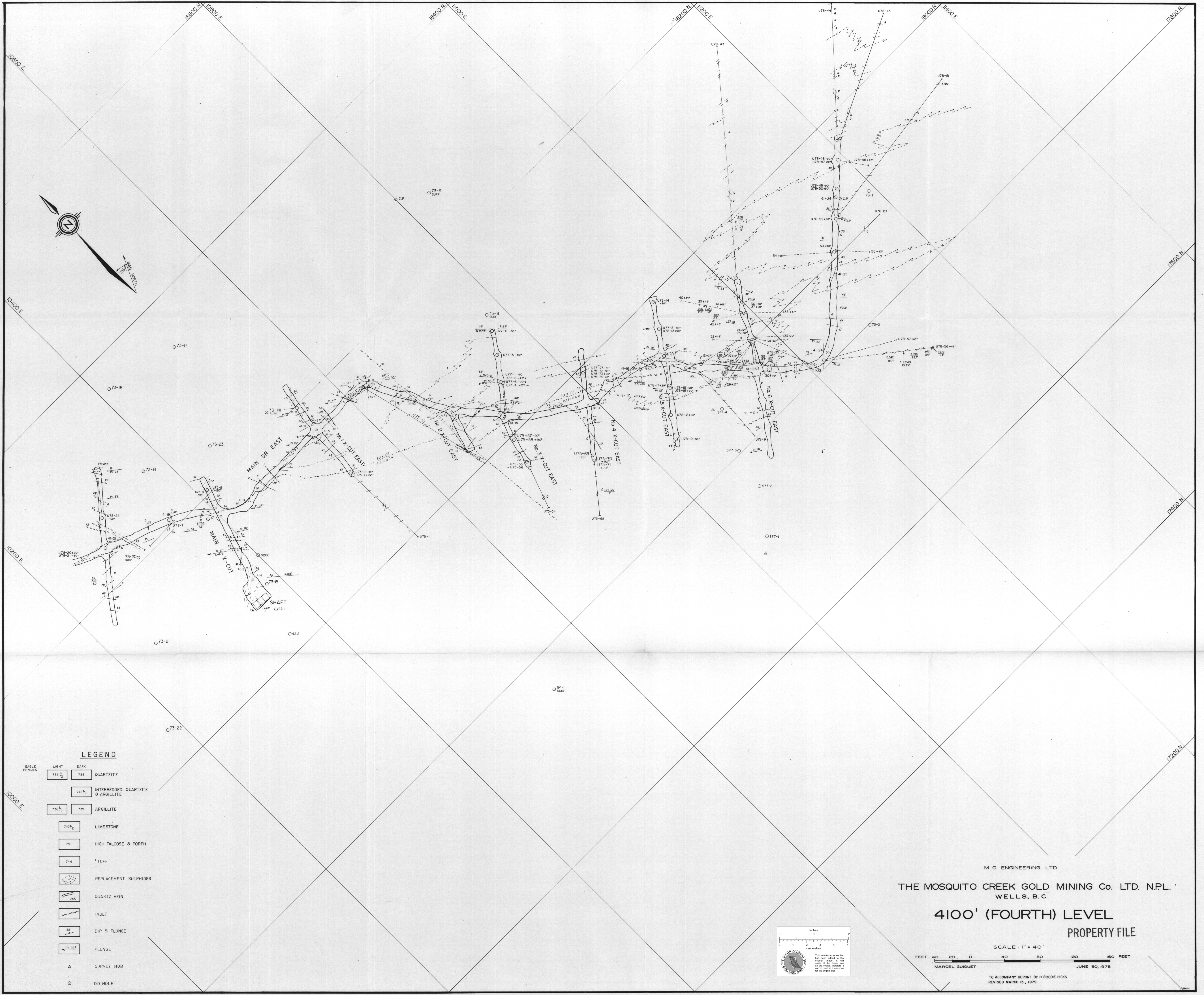




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To accompany report by M. Guigue
Revised June 25/75
TO ACCOMPANY REPORT BY H. BROOK HICKS



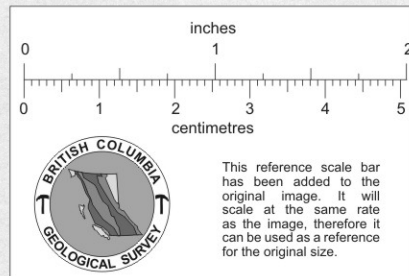
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M. G. ENGINEERING LTD.

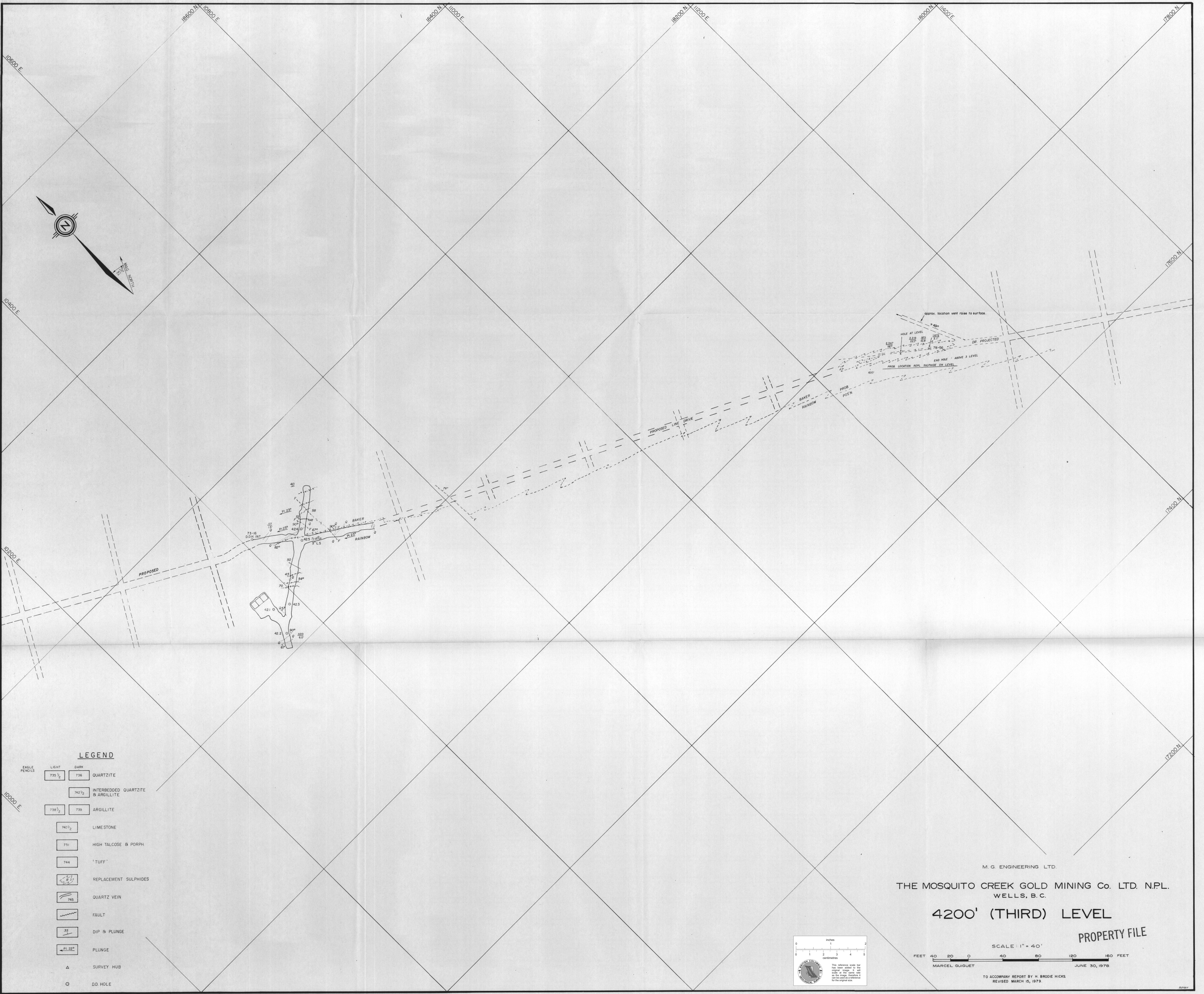
THE MOSQUITO CREEK GOLD MINING Co. LTD. N.P.L.
WELLS, B.C.

4100' (FOURTH) LEVEL
PROPERTY FILE



SCALE: 1" = 40'
MARCEL GUIGUET
JUNE 30, 1978

TO ACCOMPANY REPORT BY H. BRODIE HICKS
REVISED MARCH 15, 1979.



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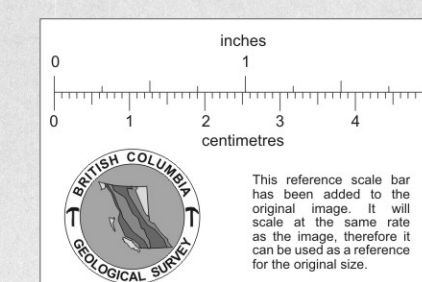
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M.G. ENGINEERING LTD.

THE MOSQUITO CREEK GOLD MINING Co. LTD. N.P.L.
WELLS, B.C.

4200' (THIRD) LEVEL

PROPERTY FILE



SCALE: 1" = 40'

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MARCEL GUGUET

JUNE 30, 1978

TO ACCOMPANY REPORT BY H. BRODIE HICKS
REVISED MARCH 15, 1979