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NO SECURITIES COMMISSION OR SIMILAR AUTHORITY IN CANADA HAS IN ANY WAY PASSED UPON THE MERITS OF THE SECURITIES OFFERED BY THIS PROSPECTUS AND ANY REPRESENTATION TO THE CONTRARY IS AN OFFENCE.

New Issue

August 29, 1969.

Mt. Ogden Mines Ltd.

(Non-Personal Liability)

Incorporated in the Province of British Columbia

The Company offers 250,000 shares of its capital stock at a price of 75¢ per share, out of which may be paid a commission not exceeding 15¢ per share, subject to prior sale and the approval of all legal matters by the Company's solicitors.

A PURCHASE OF THE SECURITIES OFFERED BY THIS PROSPECTUS MUST BE CONSIDERED A SPECULATION. The Company's mining property, as described in this Prospectus under the heading "Business and Property", is without a known body of commercial ore and the proposed program of work thereon must therefore be considered as exploratory and strictly speculative. Reference should also be made to the parts of this Prospectus headed "Principal Holders of Securities" and "Interest of Management and Others in Material Transactions" for a comparison of the number of shares offered by this Prospectus with the number of shares issued by the Company to promoters, directors, officers and controlling persons.

NO SURVEY OF ANY PROPERTY OR PROPERTY INTEREST HELD BY THE COMPANY HAS BEEN MADE AND THEREFORE IN ACCORDANCE WITH THE MINING LAWS OF THE APPROPRIATE JURISDICTIONS IN WHICH SUCH PROPERTY IS SITUATED THE EXISTENCE OF AND THE AREAS OF SUCH PROPERTIES COULD BE IN DOUBT.

DISTRIBUTION SPREAD

	<u>Price to Public</u>	<u>Commissions</u>	<u>Proceeds to Company</u>
Per Share	75¢	15¢	60¢
Total	\$187,500.00	\$37,500.00	\$150,000.00

PLAN OF DISTRIBUTION

The shares are to be sold either directly to the public by the Company or through the facilities of persons or companies registered for trading in securities within the Province of British Columbia.

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USE OF PROCEEDS

Of the net proceeds from this offering, the Company intends to allocate \$75,000.00 to proceed with the recommendations of Christopher Riley, P. Eng., in his annexed report dated October 24, 1968. These recommendations consist of continued drilling on the present drill location and attempting to establish other drill sites. The Company intends initially to drill only about 1,000 to 1,500 ft. The estimates contained in the said report are based on drilling at a monthly rate of 1,000 ft. per month as follows:

Drilling at overall costs of \$20.00 per foot	\$ 20,000.00
Helicopter rent - 5 hours per day at \$80.00 per hour	12,000.00
Commissary, 7 men at \$12.00 per day	2,500.00
Engineering, consulting and general help	2,000.00
Air service to Atlin, 8 trips per month	<u>1,600.00</u>
	\$ 38,100.00
Contingencies at 15%	<u>5,800.00</u>
Total Costs for one month	<u>\$ 43,900.00</u>

The Company intends to allocate \$44,585.20 of the net proceeds from this offering to discharge the current liabilities shown on the Company's balance sheet as at April 30th, 1969, a copy of which is annexed hereto.

The Company intends to allocate the balance of the net proceeds, namely \$30,414.80 to defray subsequent business, administrative, legal and audit expenses.

No part of the proceeds will be used to invest, underwrite, or trade in securities other than those that qualify as investments in which trust funds may be invested under the laws of the jurisdictions in which the securities offered by this Prospectus may lawfully be sold.

Should the Company propose to use the proceeds to acquire non-trustee type securities after the initial distribution of the securities offered by this Prospectus, approval by the shareholders will be obtained and disclosures made to the regulatory securities bodies having jurisdiction over the sale of the securities offered by this Prospectus.

If the actual proceeds from the offering should prove insufficient to accomplish all the purposes set out above, priority will be given firstly to the discharge of existing liabilities, and thereafter the Company will proceed with the drilling program on a monthly basis.

CAPITAL STRUCTURE

<u>Designation of Security</u>	<u>Amount Authorized</u>	<u>Amount Out- standing as at April 30, 1969 (Date of Balance Sheet Contained herein)</u>	<u>Amount Out- standing as at August 29, 1969 (Date of this Pros- pectus)</u>	<u>Amount Outstand- ing if all Sec- urities being Offered are Sold</u>
Shares	3,000,000	1,233,072	1,233,072	1,483,072

There have been 483,072 shares sold for cash to date as follows:

<u>No. of Shares</u>	<u>Price</u>	<u>Total Cash Received</u>	<u>Commissions Paid</u>
200,000	10¢	\$20,000.00	Nil
110,000	25¢	\$27,500.00	Nil
140,005	50¢	\$70,002.50	Nil
7,267	75¢	\$ 5,450.00	Nil
<u>25,800</u>	<u>\$1.00</u>	<u>\$25,800.00</u>	<u>Nil</u>
<u>483,072</u>		<u>\$223,752.50</u>	

NAME, INCORPORATION, ETC.

Full Corporate Name: Mt. Ogden Mines Ltd. (N.P.L.)
Head Office: 27th Floor, 1177 West Hastings Street, Vancouver, B.C.
Registered Office: #1614 - 1030 West Georgia Street, Vancouver, B.C.
Incorporated: February 7th, 1967 by Memorandum of Association under
the Companies Act of the Province of British Columbia.
Converted to a Public Company: August 21, 1967.

BUSINESS AND PROPERTY

The Company was formed to engage in the acquisition, exploration, development and operation of mines, mineral lands and deposits and in particular to acquire properties in northwestern British Columbia.

The Company is the recorded and beneficial holder of 29 mineral claims situated in the Atlin Mining Division about 12 miles south and 6 miles east of Tulsequah, and more particularly described as follows:

Pat #12 to 26 incl.	Record No. 7956 to 7970
Pat #41 to 52 incl.	Record No. 7985 to 7996
Pat #68	Record No. 8012
Pat #70	Record No. 8014

Access at present is by air to Boundary Lake and then on foot to the property. This lake is 40 miles from Juneau and 80 miles from Atlin. For the exploration period, the property can be serviced by helicopter based at Tulsequah where there are good facilities due to past mining activities. If an ore body were developed, study would have to be given to production routes. The most feasible appears to be up the Sittakanay River and thence up the valley of a small tributary, to the property.

The said mineral claims are held by the Company pursuant to the Mineral Act of the Province of British Columbia which provides, inter alia, that they shall be forfeited unless work is performed on them to the value of at least \$100.00 a year per claim (or unless cash is paid to the Mining Recorder in lieu of such work). The present expiry date for all of the said claims is February 8, 1970.

The claims now held by the Company are a portion of the property acquired by an Agreement of the 26th of February, 1967 between the Company and Charles E. Craig, Harry O. Fowler (formerly directors of the Company) and Harold Jones, for a full price or consideration of 750,000 shares of the capital of the Company together with the sum of \$3,000.00. The original claim block consisted of 156 claims of which certain claims

have been abandoned as a result of work done upon the property. The 750,000 shares are referred to in this Prospectus under the caption "Escrowed Shares".

None of the claims have been surveyed and accordingly the size of or the existence of any of the said claims may be in doubt. The claims are staked as full size claims.

For full particulars of the work done upon the property, reference is made to the annexed report of Christopher Riley, P. Eng., dated the 24th of October, 1968.

To the knowledge of the Company's Engineer, the ground was first staked in 1960 and optioned to the Wenner Gren company who later abandoned its option. The claims were re-staked in 1967 and were acquired by the Company. A camp for eight men was established on Border Lake. Attempts to drill from the glacier ice were found too difficult and a drill was placed by helicopter on a rock outcrop. Some 50 feet was drilled. A 400 foot to the inch topographic map was compiled from topographic maps and aerial photographs were prepared by the Wenner Gren company.

Mt. Ogden Mines Ltd. (N.P.L.) in May, 1967, made an aerial geophysical survey using both magnetometer and electromagnetic instruments. There is no surface plant or equipment and there is no underground exploration or plant or equipment.

The Company now proposes to proceed with the program of further exploration recommended in the said report of Christopher Riley, P. Eng. As the property is without a known body of commercial ore, the proposed program must be considered as an exploratory search for ore.

PROMOTERS

The promoter of the Company can be considered to be Mr. Harold Jones, Suite 114, 845 Hornby Street, Vancouver, B.C. by reason of his substantial holding of shares of the capital of the Company and by reason of being one of the original vendors of the property now held by the Company.

SHARES BEING OFFERED

The Company is offering by this Prospectus 250,000 common shares of its capital stock as fully paid and non-assessable at a price of 75¢ per share, subject to a selling commission not to exceed 15¢ per share. When issued, the said shares will rank equally with all other issued shares of the Company for the purposes of dividends, voting, liquidation or distribution and for all other purposes. The rights of holders of the shares can be modified only by a special resolution of the Company's shareholders.

DIRECTORS AND OFFICERS

<u>Name and Address</u>	<u>Principal Occupation for past five years</u>	<u>Position Held with Company</u>
James Aubrey Simmons, 101 - 110 19th Street, West Vancouver, B.C.	Mining Executive - Associated with New Imperial Mines Ltd., Arctic Gold & Silver Mines Ltd. and now associated with Canol Mines Limited, Boswell River Mines Limited, Interprovincial Silver Mines Limited, Silver Christal Mines Limited.	President and Director.
Mario Luiz da Roza, 4586 Capilano Road, North Vancouver, B.C.	Business Executive - Formerly associated with Everett Steamship Corporation, Hong Kong and Far East. Member of Tenancy Tribunal Hong Kong Government and authorized and licensed auditor, Hong Kong Government.	Vice-President and Director.
Bernard Ouellette	Mining Executive - Associated with Silver Christal Mines & Boswell River Mines since 1968. Prior thereto, Accountant with Cloutier, Ouellette & Co., Vancouver, B. C.	Secretary and Director

REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

No director or officer has received any remuneration from the Company in such capacity. Directors are entitled to receive reimbursement for out-of-pocket expenses incurred in the conduct of the Company's business. It is not anticipated that any remuneration will be payable to any Director or Officer in such capacity.

ESCROWED SHARES

<u>Designation of Class</u>	<u>Number of Shares held in Escrow as at the Date hereof</u>	<u>Percentage of Class</u>
Common	750,000	60.82%

Certificates representing the said 750,000 shares are held by The Guaranty Trust Company of Canada, 580 Hornby Street, Vancouver, B.C., upon terms whereby they cannot be sold or dealt with in any manner without the written consent of the Superintendent of Brokers for the Province of British Columbia, and whereby, if the Company loses or does not obtain a good marketable title to, or abandons or discontinues

development on any of the properties which were, or formed part of, the consideration for any of the said shares held in escrow, or in the event of the property not being as represented, there shall be surrendered to the Company by way of gift for cancellation such number of escrow shares as the Superintendent in his sole discretion deems fair and equitable.

PRINCIPAL HOLDERS OF SHARES

On the records of the Company, the following persons hold more than 10% of its common shares as at the date of this Prospectus:

<u>Name and Address</u>	<u>Type of Ownership</u>	<u>Number of Shares Owned</u>	<u>% of Issued Common Shares</u>
Charles E. Craig, #505 - 730 Humboldt St., Victoria, B. C.	Of Record	300,000	24.32%
Harold O. Fowler, 3817 Duke Rd., R.R. #1, Victoria, B. C.	Of Record	300,000	24.32%

However, the above persons have agreed to transfer their shares (within escrow) to Harold Jones, who in turn has agreed to transfer certain shares to others. All these agreed transfers are subject to the consent of the Superintendent of Brokers who has called for the approval of the shareholders of the Company, with the escrowed shareholders refraining from voting. It is intended that such a resolution will be put before the next annual general meeting of the Company.

Treating these agreements as transfers of beneficial ownership, the only person holding more than 10% of the common shares of the Company is as follows:

<u>Name and Address</u>	<u>Type of Ownership</u>	<u>Number of Shares Owned</u>	<u>% of Issued Common Shares</u>
Harold Jones, #114, Mayfair Towers, 845 Hornby Street, Vancouver, B. C.	Beneficial	535,000	43.39%

The directors and senior officers of the Company, as a group, beneficially own 15.89% of the issued common shares of the Company as at the date of this Prospectus.

PRIOR SALES

Within the past twelve months the Company has sold 3,100 shares at a price of 75¢ each.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Reference is made to the caption "Business and Property" wherein it was noted that 750,000 shares of the capital of the Company were issued in consideration of property acquired by the Company. Two of the persons receiving certain of those shares were, at that time, Directors of the Company. No present Director or Officer of the Company has any interest in any material transaction of the Company.

AUDITORS, TRANSFER AGENT AND REGISTRAR

The Auditors for the Company are Messrs. Gunderson, Stokes, Walton and Company, Chartered Accountants, 475 Howe Street, Vancouver, B.C.

The Transfer Agent and Registrar for the Company is The Guaranty Trust Company of Canada and the register of transfers is located at the Vancouver office of said Trust Company, 580 Hornby Street, Vancouver, B.C.

MATERIAL CONTRACTS

All material contracts entered into by the Company outside the normal course of business, are disclosed elsewhere in this Prospectus and copies of such contracts may be inspected during regular business hours at the head office of the Company, 27th Floor, 1177 West Hastings Street, Vancouver, B.C., while the shares hereby offered are in the course of primary distribution.

OTHER MATERIAL FACTS

As shown in the financial statements which accompany this Prospectus, the Company owns shares in other mining companies acquired at a cost of \$27,750.00. These shares were purchased for investment purposes while the Company was still in the private stage. At present, there is no quoted market value for any of the shares and the Company's intention is to continue to hold them.

CERTIFICATE OF DIRECTORS AND PROMOTER

The foregoing constitutes full, true and plain disclosure of all material facts relating to the securities offered by this Prospectus as required by Part VII of the Securities Act, 1967, and the regulations thereunder.

" J.A. SIMMONS "

James Aubrey Simmons, Director

" BERNARD OUELLETTE "

Bernard Ouellette, Director

" M. L. DA ROZA "

Mario Luiz Da Roza, Director

" HAROLD JONES "

Harold Jones, Promoter

STATUTORY RIGHTS OF WITHDRAWAL AND RECISSION

Section 61 and 62 of the Securities Act, 1967 (British Columbia) provides in effect, that where a security is offered to the public in the course of primary distribution:

- (1) A purchaser has a right to rescind a contract for the purchase of a security, while still the owner thereof, if a copy of the last prospectus, together with financial statements and reports and summaries of reports relating to the securities as filed with the British Columbia Securities Commission, was not delivered to him or his agent prior to delivery to either of them of the written confirmation of the sale of the securities. Written notice of intention to commence an action for rescission must be served on the person who contracted to sell within 60 days of the date of delivery of the written confirmation, but no action shall be commenced after the expiration of three months from the date of service of such notice.
- (2) A purchaser has the right to rescind a contract for the purchase of such security, while still the owner thereof, if the prospectus or any amended prospectus offering such security contains an untrue statement of a material fact or omits to state a material fact necessary in order to make any statement therein not misleading in the light of the circumstances in which it was made, but no action to enforce this right can be commenced by a purchaser after expiration of 90 days from the later of the date of such contract or the date on which such prospectus or amended prospectus is received or is deemed to be received by him or his agent.

Reference is made to the said Act for the complete text of the provisions under which the foregoing rights are conferred.

CHARTERED ACCOUNTANTS

VANCOUVER - VICTORIA - PENTICTON

BRITISH COLUMBIA

AUDITORS' REPORT

To the Directors of
Mt. Ogden Mines Ltd. (N.P.L.)

We have examined the balance sheet of Mt. Ogden Mines Ltd. (N.P.L.) as at April 30, 1969 and the statements of surplus, and exploration, development and administrative expenses and source and application of working capital for the period June 1, 1967 to April 30, 1969. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances except that we were unable to confirm the investment in Rogue Point Mines Ltd. (N.P.L.) and Gold Eagle Mines Ltd. (N.P.L.).

We did not investigate the title to the mineral claims but relied upon the search made and opinion given by the solicitor for the company.

Subject to the limited scope of our examination with respect to the aforementioned investments, in our opinion, these financial statements present fairly the financial position of the company as at April 30, 1969 and the results of its operations and the source and application of its working capital for the period June 1, 1967 to April 30, 1969 in accordance with generally accepted accounting principles applied on a consistent basis.



Vancouver, B. C.
August 4, 1969

Chartered Accountants

Balance Sheet as at April 30, 1969ASSETSCurrent Assets

Accounts receivable		\$	357.89
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Investments, at cost (no quoted market value)

Rogue Point Mines Ltd. (N.P.L.), 11,750 shares	\$	11,750.00	
Gold Eagle Mines Ltd. (N.P.L.), 100,000 shares		10,000.00	
Bering Holdings Ltd., 1,200 shares		<u>6,000.00</u>	27,750.00

Mineral Claims (Note 1)

78,300.00

Fixed Assets, at cost

Office equipment	\$	3,482.46	
General equipment		<u>2,510.33</u>	5,992.79

Deferred Exploration, Development and Administrative Expenses168,250.77\$280,651.45LIABILITIES AND SHAREHOLDERS' EQUITYCurrent Liabilities

Accounts payable and accrued liabilities	\$	31,753.89	
Advances from shareholders		<u>12,831.31</u>	\$ 44,585.20

Shareholders' Equity

Share capital:

Authorized

3,000,000 shares with a nominal or par value of 50¢ each		<u>\$1,500,000.00</u>	
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Issued and fully paid

1,233,072 shares (Note 2)	\$	223,752.50	
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Surplus

12,313.75 236,066.25\$280,651.45Approved on Behalf of the Board


Director



Director

The accompanying notes to the financial statements are an integral part thereof

This is the balance sheet referred to in the accompanying report of
Gunderson Stokes Walton & Co., Chartered Accountants,
dated August 4, 1969

Statement of Surplus

For the Period June 1, 1967 to April 30, 1969

	<u>June 1/67</u> <u>to</u> <u>July 31/68</u>	<u>Aug. 1/68</u> <u>to</u> <u>April 30/69</u>
<u>Balance at Beginning of Period</u>	\$ -	\$ 13,250.00
Add gain on disposal of investments	13,250.00	-
	<hr/>	<hr/>
	\$ 13,250.00	\$ 13,250.00
Deduct loss on disposal of fixed assets	-	936.25
	<hr/>	<hr/>
<u>Balance at End of Period</u>	<u>\$ 13,250.00</u>	<u>\$ 12,313.75</u>

The accompanying notes to the financial statements are an integral part thereof

The is the statement of surplus referred to in the accompanying report of
 Gunderson Stokes Walton & Co., Chartered Accountants,
 dated August 4, 1969

Statement of Exploration, Development and Administrative Expenses

For the Period June 1, 1967 to April 30, 1969

	<u>June 1/67</u>	<u>Aug. 1/68</u>	
	<u>To</u>	<u>To</u>	
	<u>July 31/68</u>	<u>April 30/69</u>	<u>Total</u>
<u>Exploration and Development Expenses</u>			
Assays	\$ 263.69	\$ -	\$ 263.69
Drilling	542.41	-	542.41
Engineering and survey	46,297.23	(476.19)	45,821.04
Equipment rental	4,800.76	197.74	4,998.50
Equipment repairs and maintenance	2,393.97	1,276.91	3,670.88
Film costs	5,065.69	-	5,065.69
Freight	1,175.06	24.80	1,199.86
Gas and fuel	4,549.97	13.30	4,563.27
Licences and fees	1,655.00	52.50	1,707.50
Maps and blueprints	530.58	-	530.58
Staking	31,892.97	884.57	32,777.54
Supplies	7,099.68	-	7,099.68
Telephone	536.67	137.36	674.03
Travel	17,222.43	602.95	17,825.38
Workmen's compensation	997.52	-	997.52
	<u>\$125,023.63</u>	<u>\$ 2,713.94</u>	<u>\$127,737.57</u>
<u>Administrative Expenses</u>			
Car lease	\$ 5,995.68	\$ 3,079.47	\$ 9,075.15
Legal and audit	1,516.81	1,752.55	3,269.36
Office overhead	1,696.36	1,374.84	3,071.20
Office wages and expense	1,256.89	5,150.11	6,407.00
Promotion and advertising	8,511.01	1,859.57	10,370.58
Telephone and miscellaneous	3,342.88	1,342.68	4,685.56
Travel	2,354.44	1,279.91	3,634.35
	<u>\$ 24,674.07</u>	<u>\$ 15,839.13</u>	<u>\$ 40,513.20</u>
	<u>\$149,697.70</u>	<u>\$ 18,553.07</u>	<u>\$168,250.77</u>

The accompanying notes to the financial statements are an integral part thereof

This is the statement of exploration, development and administrative expenses referred to in the accompanying report of Gunderson Stokes Walton & Co., Chartered Accountants, dated August 4, 1969

Statement of Source and Application of Working Capital

For the Period June 1, 1967 to April 30, 1969

	<u>June 1/67</u> To July 31/68	<u>Aug. 1/68</u> To April 30/69
<u>Working Capital Deficiency at Beginning of Period</u>	\$ -	\$ 24,131.55
<u>Add Application of Working Capital</u>		
Exploration, development and administrative expenses	\$149,697.70	\$ 18,553.07
Purchase of investments	41,000.00	-
Purchase of mineral claims	3,300.00	-
Purchase of fixed assets	3,061.35	3,867.69
	<u>\$197,059.05</u>	<u>\$ 22,420.76</u>
	\$197,059.05	\$ 46,552.31
<u>Deduct Source of Working Capital</u>		
Shares issued for cash	\$146,427.50	\$ 2,325.00
Shares issued in settlement of liabilities	-	6,885.79
Sale of investments	26,500.00	-
	<u>\$172,927.50</u>	<u>\$ 9,210.79</u>
<u>Working Capital Deficiency at End of Period</u>	<u>\$ 24,131.55</u>	<u>\$ 37,341.52</u>

The accompanying notes to the financial statements are an integral part thereof

This is the statement of source and application of working capital referred to in the accompanying report of Gunderson Stokes Walton & Co., Chartered Accountants, dated August 4, 1969

Notes to the Financial Statements

April 30, 1969

1. Mineral Claims - \$78,300.00

The company is the recorded and beneficial owner of 40 mineral claims in the Atlin Mining Division of the Province of British Columbia which were acquired for the undernoted consideration:

(i) cash, including sundry costs	\$ 3,300.00
(ii) 750,000 shares in the capital stock of the company at an attributed value of 10¢ per share	<u>75,000.00</u>
	<u>\$ 78,300.00</u>

29 of these claims expire on February 8, 1970. The remaining 11 were abandoned subsequent to April 30, 1969.

2. Share Capital Issued and Fully Paid

	<u>Number of Shares</u>	<u>Par Value</u>	<u>Discount (Premium)</u>	<u>Net</u>
For mineral claims				
Balance July 31, 1968 and April 30, 1969	750,000	\$375,000.00	\$300,000.00	\$ 75,000.00
<hr/>				
For cash				
Balance July 31, 1968	479,972	\$239,986.00	\$ 93,558.50	\$146,427.50
Issued during the period	<u>3,100</u>	<u>1,550.00</u>	<u>(775.00)</u>	<u>2,325.00</u>
Balance April 30, 1969	483,072	\$241,536.00	\$ 92,783.50	\$148,752.50
<hr/>				
	<u>1,233,072</u>	<u>\$616,536.00</u>	<u>\$392,783.50</u>	<u>\$223,752.50</u>

REPORT ON
THE MINERAL DEPOSITS OF
MT. OGDEN MINES LIMITED

By

Christopher Riley, P.Eng.

October 24, 1968

SUMMARY:

This report deals with a potential molybdenite deposit plus one or more of base metals situated in the Tulsequah district in northwestern British Columbia. It is rugged and, like other parts of the area, pretty well ice covered, so is expensive to service and difficult to work. The nature of the prospects is described, means of exploration discussed and approximate costs of exploration estimated.

INTRODUCTION:

The Mt. Ogden molybdenite and base metal prospects are situated in a rugged area of the Coast Mountains of Northwestern B.C. Preliminary geological study and aerial magnetometer and electromagnetic surveys have been made. This report is based on visits by the writer to the district in 1964, a study of the above surveys and a personal examination in company with the prospector, Kol Lovang, on June 3, 1967.

There are no published reports on the property other than this and the only geological mapping of the region was done by Dr. F. A. Kerr of the Geological Survey of Canada in the years from 1929 to 1932. The results of his work are shown on Map No. 931A which, in the southern part, reaches within a mile of the showings. Interestingly enough, this old map shows the glacier in the valley of the Sittakanay River to extend four miles farther down the valley than now

and the glacier in a small valley tributary to the Sittakanay River and at the head of which are the Mt. Ogden deposits, to have melted back about two miles. It is thus obvious that Kerr could not have seen the molybdenite bearing moraine which led to the discovery of the prospect.

PROPERTY AND LOCATION:

The property consists of 67 recorded claims as follows:

Tap 1-14, 17, 18, 23 and 24

Pat 2, 4, 6, 8, 10, 12-26, 40-52, 67-78,
94 and 96, 98 and 100

The property is situated at 133° 20' west longitude and 58° 28' latitude in the Atlin Mining Division and about 12 miles south and 6 east of Tulsequah. This place is on the Taku River about 7 miles east of the Alaska boundary and was formerly the residential area for the Big Bull Mine.

The Mt. Ogden showings are at the head of a small valley glacier, here called the White Glacier, which drains into the Sittakanay River 12 miles about its confluence with the Taku River about 2 miles east of the boundary.

ACCESS:

The claims are in the Coast Mountains and the ground is rugged and largely ice covered. The rock exposures are therefore mostly on the side and tops of steep ridges rendering access difficult. The present means of access are best made by helicopter or by fixed wing to Boundary Lake and then on foot to the showings. This lake is 40 miles from Juneau and 80 from Atlin. For the exploration period, the property will need to be serviced by helicopter which can be based conveniently at Tulsequah where there are good facilities due to past mining activities. If an ore body were developed, study would have to be given to production routes. The most feasible appears to be up the Sittakanay River some 16 miles from the Taku and thence up the side valley and the White Glacier.

GENERAL CHARACTER:

In order to describe the property clearly, some details of the nature of the White and other valley glaciers should be given. These glaciers move down their valleys at a very slow rate and generally carry large amounts of rock debris, fallen from the mountain slopes on to the ice surface. This material is called moraine and as the glacier flows and the rock falls, a long trail of it forms on the surface. There are generally several ice feeders to the main flow from side valleys and so there are often several parallel moraines and where the feeders merge these moraines lie well out on the main glacier and are called medial moraines. All these eventually pile up at the end and become terminal moraines.

For the past 75 years most glaciers have been melting faster than they build up and, in the case of the White Glacier, its lower end has retreated up the valley for two miles and has melted down vertically about 300 feet. The glacier in the Sittakanay River Valley is at a lower elevation and has gone back four miles.

The Mt. Ogden deposit was discovered because molybdenite shows up in the terminal moraine up from the bottom and for over one mile. However, it is not now found in any moraine on the main body of the ice. The likely reason for this is that the mineral was fed to the ice when its level was two or three hundred feet higher than now and has not been feeding for some hundreds of years.

Glaciers also pluck rock from their floors, and, due to the absence of the mineral on the main body, it was at first thought that it might have come from below. Study of the place it occupies in the terminal moraine now indicates that its source was most likely the place where it is now known in the solid rock, and the amount of it suggests that this source is well worthy of detailed exploration. This place of origin is in or near a narrow and precipitous ridge of rock separating the White from the larger Wright Glacier and from which ridge flows one of the glaciers tributary to the White. It lies almost entirely on Pat 74 claim.

In addition to the molybdenite deposit and its float in the terminal moraine, there is a medial moraine with numerous rock pieces carrying lead and zinc minerals

with a small amount of magnetic iron. This may be followed upwards for about a mile to a place where it is covered by the neve or permanent snow. The actual source has not been found but is on the mountain slope on the western side of the valley and probably on the Pat 40 claim. A few pieces of mineral have been found on other moraines and may come from the areas of the other electromagnetic anomalies.

HISTORY:

Kol Lovang, a well known prospector, along with his partner George White, who was lost in the bush since, found the molybdenite float in 1960. Subsequently the ground was staked by White's brother and optioned to the Wenner Gren company whose geologists prospected the area and found the mineral in the ridge mentioned above. This company eventually abandoned the option and in 1965 a small prospecting company re-staked it but later allowed the claims to lapse without doing any work. Lovang staked it in 1967 and Mt. Ogden Mines was incorporated and has commenced work as soon as conditions permitted.

A camp for eight men was established on Border Lake and a helicopter chartered. Attempts were made to drill from the glacier ice but it was found too difficult to maintain foundations for the drill due to melting of the ice. Eventually the machine was placed by the helicopter on a safe rock outcrop on claim Pat 64 about 7,000 feet northerly from the main showings but near the favorable contact. Some 50 feet were drilled into the intrusive rock and of this, 40 feet carried values in molybdenum though sub ore. The contact with the older rocks was not reached. The drill broke down before the hole could be nearly completed and, as the season was well advanced, work was suspended and the drill left on the site ready for continued work in that location.

GENERAL GEOLOGY:

The only geological mapping of the Mt. Ogden locality was done in the years 1929-32 by F. A. Kerr of the Geological Survey of Canada. The results of this work are shown on the G.S.C. Taku River Sheet, Map No. 931A. Mapping reaches within 2 or 3 miles of the Pat claims and shows that the bedrock is volcanic and sedimentary rocks, mainly limestone and argillites of which the last have been closely folded and in-

jected by a whitish granitic rock here called alaskite. The molybdenite mineralization is closely associated with this rock and is probably not found apart from it.

DEVELOPMENT:

Work to date includes a 400' to the inch topographic map compiled from government topographic maps and aerial photos and made on a Kelsh plotter. This was prepared by the Wenner Gren company and will be most useful in further work. During early May, 1967, an aerial geophysical survey was carried out by C. B. Selmser of Geo Cal Ltd. using both magnetometer and electromagnetic instruments. The magnetic work did not find anomalies suggestive of mineral deposits but was successful in finding enough variation in magnetic intensity to permit making a geological map by interpolation from the known outcrops and covered a significant part of the claim area. Used in combination with the topographic map it will prove most useful in continued work as ice and snow cover a good part of the ground.

The electromagnetic survey found five anomalies, two of which probably represent molybdenite mineralization and three base metals deposits. These will prove useful targets in continued exploration.

MINERAL DEPOSITS:

The nature and structure of the molybdenite deposit, from which the float came, is partly shown in the mineralized rock in the terminal moraine. Observation here shows that about half of this is the dark sedimentary rock, very much altered, nearly half is alaskite and some contains both types of rock, showing a sharp contact. As noted before, these mineralized fragments occupy a quite restricted part of the moraine. The former indicates that the deposit occupies the contact area between the alaskite and sediments and the latter that the source is in one locality.

A contact structure is a characteristic feature of some molybdenite ore or sub-ore bodies. In these an acidic rock is intrusive in older ones and the contact area between the two types is mineralized for some distance into both in the form of a halo around the intrusive. Another feature may be the presence of iron sulphides beyond the halo.

The location in which molybdenite was found in bed

rock on Pat 45 is on a narrow ridge running between two higher peaks at about northeast and separating the White from the Wright Glacier. Here there are stringers of molybdenite one-quarter inch or less thick lying in joint planes in the alaskite and dipping east at about 20°. Examination was difficult due to the steep cliffs and to the snow which covered possible crevasses and the bergschrund - the space at the head of a glacier between ice and rock wall - also covered by snow. Two contacts between alaskite and sediments were seen but not closely enough to observe mineralization. Some distance into the sediments there are rusty areas indicating mineralization by iron sulphides. Alaskite runs to the top of the ridge so the depth within it here cannot be estimated. The contact between the two rocks continues northwesterly for about 5,000 feet as shown by a few rock exposures and the geological map.

The nature of the base metal deposit on Pat 40 may be judged by the minerals in the moraine which indicate that it is contact metamorphic and hence a body of irregular shape. To test it, the anomaly on Pat 40 should be drilled if a set-up can be found.

EXPLORATION METHODS:

Due to the precipitous character of the country and the presence of the glaciers, it would be advisable to employ one or more alpinists as advisors on drilling sites and on sampling. The present set-up of the drill will permit of drilling several holes from this location into the contact area. However, due to the distance from the best presently known showing, it is essential to get much closer. Sites are not obvious and alpinists could be of great assistance in the preparation of such and ordinary workmen could not be expected to work under the hazards of the steep cliffs and ice. They could also assist the geologist greatly in the requisite mapping and in more surface sampling.

RECOMMENDATIONS:

Continue the drilling on the present drill location as long as seems advisable to the geologist in charge. Sample the contacts in the area of Pat 45 and attempt to find a drill site there, so that as many holes may be drilled as possible in this location. If sites are available continue drilling the contact southward from present hole. Start ground geological mapping.

COSTS:

Operating costs in this quite remote location will be much higher than in areas closer to sources of supplies. Transport of equipment in and out, and freighting of current supplies from Atlin add greatly to the usual costs. The drill will need to be served daily by helicopter which will increase the drilling costs to a high figure. Besides, some drilling will be through unknown thicknesses of ice to reach rock. The following figures are based partly on experience in the Yukon as outlined in an article on costs there in the Canadian Mining Journal in April, 1967.

The estimates are based on a preliminary program of 7,000 feet of drilling at a monthly rate of 1,000 feet per month or 30 feet per day.

Drilling at overall costs of \$20.00 per foot	\$ 20,000.00
Helicopter rent - 5 hours per day @ \$80.00 per hour	12,000.00
Commissary, 7 men at \$12.00 per day	2,500.00
Engineering, consulting and general help	2,000.00
Air service to Atlin, 8 trips per month	<u>1,600.00</u>
	\$ 38,100.00
Contingencies at 15%	<u>5,800.00</u>
	<u>\$ 43,900.00</u>
Seven months @ \$43,900.00	<u>\$307,300.00</u>
Total costs	<u>\$307,300.00</u>

"CHRISTOPHER RILEY"

Christopher Riley, P. Eng.

C E R T I F I C A T E

I, CHRISTOPHER RILEY, of 4826 Puget Drive, in the City of Vancouver, in the Province of British Columbia, DO HEREBY CERTIFY:

1. THAT I am a consulting Geologist, with a business address at 102 - 402 West Pender Street, in the City of Vancouver, in the Province of British Columbia.
2. THAT I am a graduate of McMaster University, (B.A.), the University of British Columbia (M.A.), and the University of Chicago (Ph.D.), all in Economic Geology.
3. THAT I am a registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columbia, and a member of the Geological Association of Canada.
4. THAT I have practiced my profession as a geologist for the past 36 years.
5. THAT the information contained in my accompanying report is based on two examinations in 1964 and one examination on June 3, 1967.
6. THAT I have no direct or indirect interest in the Mineral Claims, the subject of my said report, or of any of the other properties of, or in any of the securities of Mt. Ogden Mines Ltd. (N.P.L.), nor do I expect to receive any.

DATED this twenty-fourth day of October, 1968.

"Christopher Riley"

CHRISTOPHER RILEY, P.ENG.
Consulting Geologist

