

812663

REPORT ON THE  
1974 DIAMOND DRILL PROJECT  
ON THE OK PROPERTY  
OF GRANITE MOUNTAIN MINES LTD.

BY

*92-K-2*

A.W. RANDALL, P.ENG.

For

WESTERN MINES LIMITED

DECEMBER 1974

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	126N                     128N                     132N
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	170N

MAPS

SUMMARY

In November 1973 Western Mines Ltd. optioned the OK property from Granite Mountain Mines. The claims, which are located near Powell River, B.C., cover an area of copper-molybdenum mineralization of the "porphyry-copper" type.

During the period 1965 to 1973 several major companies have conducted numerous geological, geochemical and geophysical surveys as well as approximately 30,000 feet of diamond drilling and 2,400 feet of percussion drilling. Western Mines drilled another 12,700 feet during 1974. This work has located a considerable amount of low grade copper-molybdenum mineralization. However, only one area, the North Lake zone, which was drilled during the 1972 season has been defined sufficiently to estimate ore reserves. Estimated reserves in this area are 100,000,000 tons grading 0.32% Cu and 0.02% MoS<sub>2</sub> (Meyer, Boyle; February 1973). A calculation of "drill indicated" ore reserves has been made by the writer, totalling approximately 54,000,000 tons grading 0.30% Cu and 0.016% MoS<sub>2</sub>. In order to make this deposit an economic operation, 50 - 100,000,000 tons of ore grading 0.4% to 0.5% Cu will have to be found.

More work is recommended for a number of areas in order to better outline and possibly expand known mineralized zones, and to test as yet unexplored areas. The work planned includes geological mapping, an induced polarization survey and further drilling.

PROPERTY AND OWNERSHIP

Granite Mountain Mines optioned the OK property from M.V. Boylan and R. Mickle in 1972. The property consists of 325 full-sized claims and 18 fractions. A list of these claims is included in the appendix, part C1.

Western Mines optioned the OK Property from Granite Mountain Mines in November 1973. By making a cash payment of \$10,000 and agreeing to pay the original optioners \$6,000 per year, plus agreeing to an escalating work commitment over the next several years, Western can earn a 65% interest in the property. Since \$257,000 has already been expended during the 1974 drill programme, Western has gained a 50% interest. Details of the option agreement are included in Appendix A.

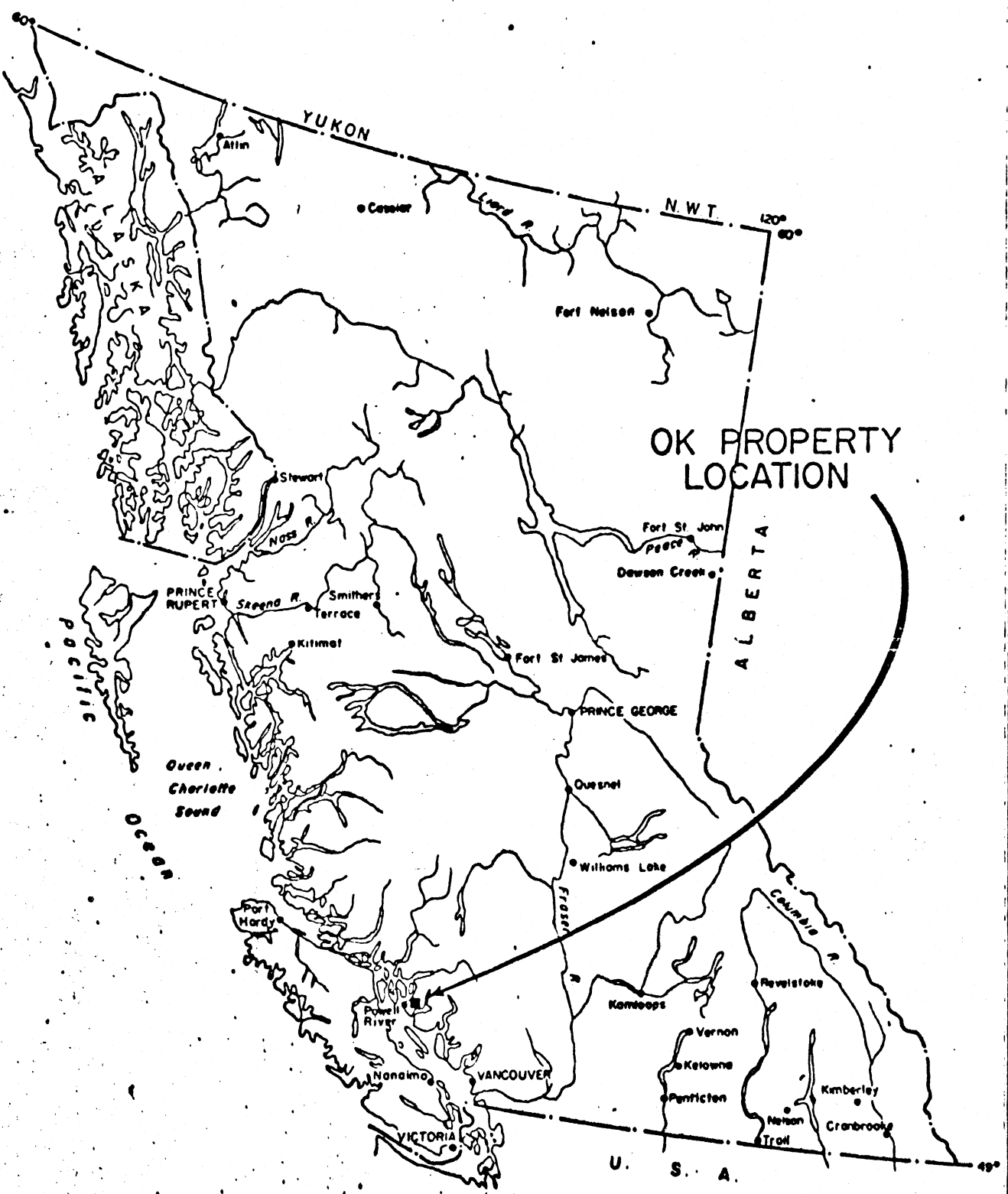
A question has arisen in the agreement about the \$6,000 per year option payments. Since Western now has a 50% interest, it must be resolved as to, by whom or how option payments will be made to Boylan and Mickle in the event that Western does no further work on the property.

LOCATION

LAT: 50° 03' N                      LONG: 124° 40' W

ELEVATION: 2800 - 3200 ASL

The claim block is located approximately 12 miles NNW of Powell River. Access is via approximately 15 miles of logging roads from Powell River; -Lund Highway.

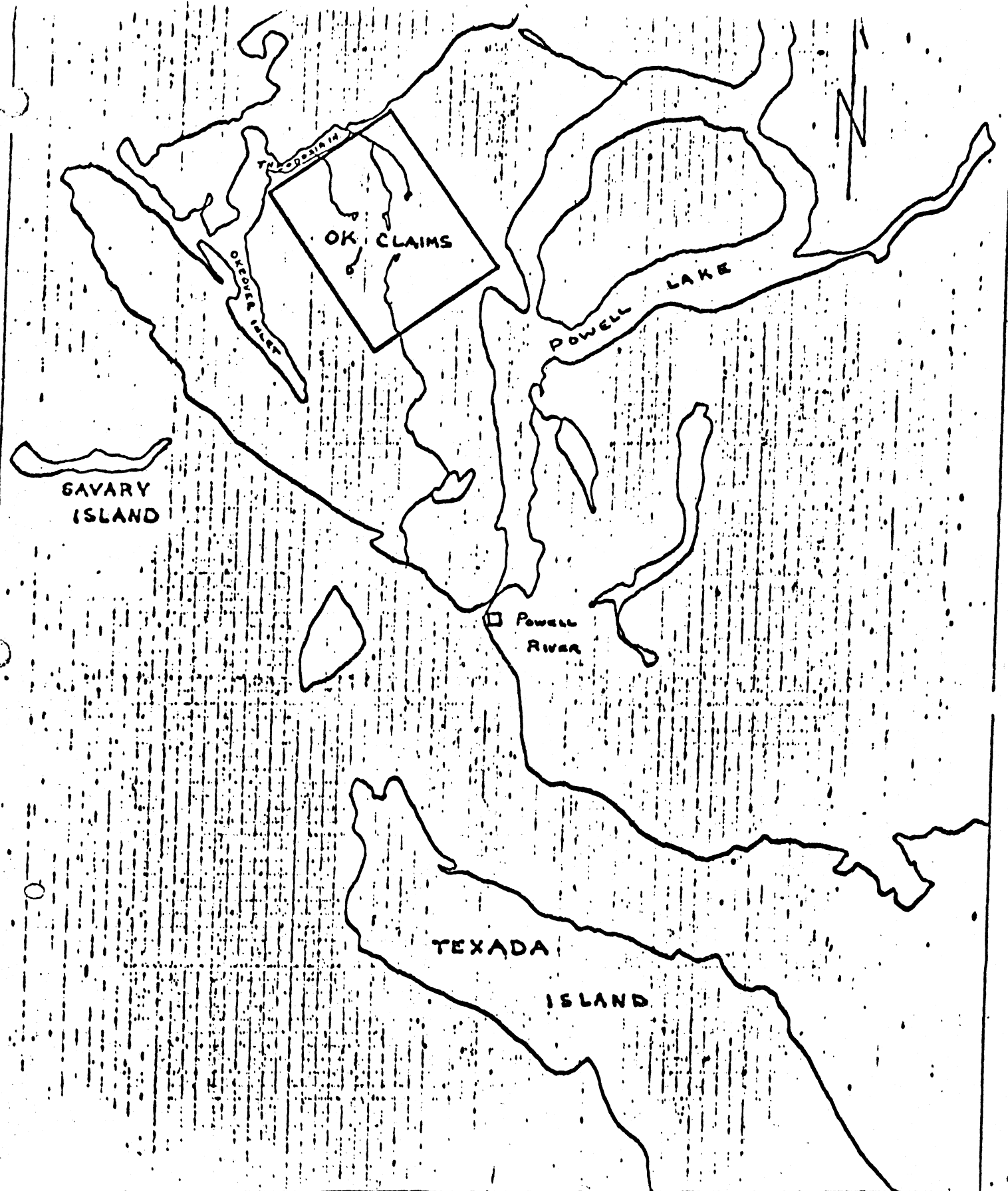


**WESTERN MINES LIMITED  
LOCATION MAP**

SCALE: 1" = 136 Miles

MAP No. 6M-21

JULY 1, 1974



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

**WESTERN MINES LIMITED**  
**OK CLAIMS LOCATION**

Scale: 1" = 4mi      Date: JULY 1 1974      Plate: GM-2

The claims are situated on a rolling, swampy, plateau known as the Bunster Hills. A number of small lakes and sloughs are scattered about the area. Local relief is 300 to 400 feet.

The climate is typical "west-coast" with 50 to 60 inches of rain per year. Snow falls anytime from November to April. A particularly heavy snow fall occurred during the 1974 season, more than 10 feet fell during the months of February, March and April.

The vegetation is typically "west-coast" rain forest, with heavy timber and moderate undergrowth. Rock outcroppings are few, limited to road cuts, creek beds and some of the steeper ridges.

#### HISTORY

The property was located in 1965 by R. Mickle using geochemical stream sediment sampling methods.

During the past 8 years several major companies have optioned the property and have conducted geochemical, geological and geophysical investigations. By the end of 1973, 29,838 feet of diamond drilling and 2,380 feet of percussion drilling were completed. In November 1973 Western Mines optioned the property from Granite Mountain Mines. The following table lists the work done on the OK property

<u>COMPANY</u>	<u>YEAR</u>	<u>WORK</u>
Mickle, Boylan (private individuals)	1965	Discovery
Noranda	1966-67	Diamond Drilling - 15 holes, 8,429 feet; geological and geochemical surveys.
Asarco	1968	Diamond Drilling - 8 holes, 3,290 ft; geological and geophysical surveys.
Falconbridge	1967-70	Diamond Drilling - 6 holes, 1,996 ft.; geological, geochemical, geophysical surveys.
Granite Mountain	1972	Diamond Drilling - 22 holes 14,031 feet; geological geochemical, geophysical surveys.
Sierra Empire	1973	Diamond Drilling - 4 holes, 2,092 ft.
Western Mines Ltd.	1974	Diamond Drilling - 22 holes 12,695 feet.

GEOLOGY

Regional:- The OK property lies along the Western flank of the Coast Crystalline Complex. The complex is composed mainly of granitic rocks including diorite-gabbro, quartz-diorite, granodiorite and granite. Numerous small intrusions have been injected into the complex during the various stages of orogeny.



Local: The claim area is underlain by diorite-gabbro of the Coast Crystalline Complex which has been intruded by two phases of plutonic activity; a granodiorite phase surrounding a core of quartz-monzonite. The intrusion has an elongated, elliptical shape and strikes roughly northward. The granodiorite phase has dimensions of about 5 miles by 2 miles, the quartz monzonite core is about 2 miles long and averages less than 2,000 feet wide. The suggested age for this intrusion is Cretaceous or Tertiary. A swarm of dacite, andesite and diorite dykes have invaded the entire area. These dykes trend roughly parallel (northward) to the main structures however their vertical attitude appears to be very irregular. A number of major faults have offset and distorted the structure of the intrusions and dykes.

#### MINERALIZATION

Mineralization on the Granite Mountain property consists mainly of primary sulphides, including chalcopyrite, pyrite, molybdenite, plus minor bornite and sphalerite. A thin veneer of oxide minerals, mainly malachite and limonite plus a little azurite are also present. These oxides generally occur within 20 feet of the surface, or occasionally some may be found in fault zones at depth. Sporadic occurrences of magnetite have also been noted.

Chalcopyrite is found most commonly in a zone of altered granodiorite peripheral to the quartz monzonite core. It occurs both disseminated and on fractures. Grain size ranges from very fine to fine in the disseminated form and as blebs or coatings in and along the borders of quartz veinlets.

A few grains of chalcopyrite were found disseminated in the quartz monzonite, near the contact with the granodiorite. The strongest chalcopyrite mineralization has been found in altered granodiorite where silification, sericitization and chloritization are most extensive.

Pyrite - is found throughout the granodiorite, in some sections of the dykes, and sparsely disseminated in the quartz monzonite. In the granodiorite it is associated with the less altered sections and decreases with increasing alteration and increasing chalcopyrite content. Consequently a pyrite halo can be observed.

Molybdenite is sparsely and erratically distributed through the granodiorite. Occasionally it occurs as disseminated grains but it is most commonly observed on fracture surfaces. Some has also been noted in quartz veinlets. There is no apparent direct relation between the distribution of molybdenite and chalcopyrite mineralization. Good grade molybdenite mineralization has been noted with some of the better grade chalcopyrite sections, however, moderate quantities of molybdenite have also been found in several locations of the less altered rocks of the pyrite halo.

Magnetite has been observed in several places however no distinctive distribution was observed. The most well developed occurrence noted was magnetite rosettes in the quartz monzonite. Elsewhere it is generally sparse, mainly occurring as clusters of grains in the granodiorite, near the contact with the quartz monzonite.

Sphalerite has been noted in a few widely spaced localities. The sphalerite generally occurs as fairly massive lumps or blebs in quartz veinlets.

The most significant mineral zonation pattern observed is a chalcopyrite zone surrounded by a pyrite halo. This chalcopyrite zone forms a discontinuous, irregular, band peripheral to the quartz-monzonite intrusion, corresponding roughly with a K-spar, sericite, chlorite, quartz alteration halo which also surrounds the quartz-monzonite. The chalcopyrite zone is also associated with an area of more intensive fracturing which surrounds the quartz-monzonite. (This fracture zone was probably formed during emplacement of the monzonite body.) Pyrite is present in the chalcopyrite zone but tends to decrease as chalcopyrite increases toward the quartz-monzonite core. From observation of many outcrops in the area, it is apparent that the pyrite halo extends outward several thousand feet. This zonation pattern is best observed in the North Lake area. A similar pattern has been noted south of the Lizard Lake, on Section 84N where<sup>a</sup> a distinct copper grade boundary occurs. The average copper grade drops from the 0.25% range to less than 0.05%, corresponding with a sharp increase in pyrite content in the low grade copper zone.

#### DRILLING

During the past 8 years a number of areas on the claims have been tested by drilling with generally inconclusive results. The area best defined so far is the North Lake Zone, however even this area requires further drilling to effectively define the ore zone and to be able to accurately calculate ore reserves.

In 1974 Western drilled 22 holes totalling 12,695 feet of core. (See table I and Map GM-3). All holes were drilled at -45°, toward either "grid-east" or "grid-west". Most of the holes were drilled in four selected areas, in an attempt to better outline known areas of mineralization and to test some new areas, as well as to try to correlate some of the dykes in order to determine their attitudes. The main areas drilled include (1) South Zone (2) Central Zone (3) Lizard Lake (4) White Rectangle Lake Zone.

Inspiration Drilling of Vancouver was contracted to do the work. They supplied a Boyles Model 17A drill equipped to drill BQ size core, as well as a complete camp for ten men.

Drilling commenced on February 3rd and was completed on June 16th. During the period February to April, excessive amounts of snow made the maintenance of roads and opening of new drill sites a very time consuming and costly process. Extremely muddy conditions during the spring thaw in May and June made it virtually impossible to work in some areas. It has been concluded that the best time for working in this area is on snow with equipment suitable for working under these conditions or during late August when ground conditions are at their driest.

Copper and/or molybdenum mineralization was noted in most of the holes but the average grade of any mineralized interval was rarely above 0.25% copper. Results of the drilling are as follows:

1. South Zone

Holes 74-20 and 21, located on the 36N section were planned to try to better outline the mineralized zone located there, to attempt to determine an attitude on the mineralized zone and to try to correlate some of the dykes. The top 480 feet of hole 20 averaged better than 0.2% Cu. The top 508 feet of 74-21 averaged 0.23% Cu with one section of 76.5 feet grading 0.4% Cu.

Hole 74-22 was drilled in an attempt to intersect the possible northerly extension of the mineralized zone occurring on the 36N section. The average copper grade of this hole was low and further reduced by the amount of dyke material present, approximately one third of the total length. The casing was left in this hole in the event that a re-evaluation of the results indicates than an extension of the hole may intersect the mineralized zone sought.

2. Central Zone

This hole runs from the vicinity of the camp, north to the White Rectangle - OK fault zone. Holes 74-1 to 7 were drilled in this zone.

The bottom 223 feet of 74-1 and the top 200 feet of 2 encountered mineralization grading up to 0.27% Cu but averaged about 0.15% Cu. This seems to indicate a narrow zone of 0.15 to 0.2% Copper mineralization roughly between 49E and 51E on the 64N line. Both these holes were within the granodiorite. Holes 74-3 to 5 are on the 76N line. Hole 3 encountered copper mineralization grading as high as 0.4%, however the average grade throughout the hole was highly variable and the average was low. Hole 3 and the bottom of hole 4 were in quartz-monzonite. Copper grade in both holes 4 and 5 was generally below 0.1%.

Holes 74-6 and 7 located on the 84N line are both situated in granodiorite. Copper content in hole 6 averaged 0.16%. A very sharp grade boundary may be seen in hole 7 where the copper grade drops from greater than 0.2% to less than 0.05%. This sharp cutoff was also noted in hole 71-9.

### 3. Lizard Lake Zone

Holes 74-8 to 14 and 18 are generally within the granodiorite although some quartz-monzonitic rock was encountered. Holes 74-8 and 11 appear to be in the "pyrite halo", as pyrite was the main mineral present and copper grade was generally less than 0.05% Cu. Copper grade within the short granodiorite sections of hole 12 was usually better than 0.2%, however, more than 50% of the hole cut dyke material and consequently the average grade is low. Hole 13 intersected some mineralization, however, the grade rarely ran above 0.2%. The results of hole 74-14 were more encouraging. The top 214 feet of the hole averaged 0.25% Cu with some sections running 0.4%. Hole 18 was drilled in an attempt to intersect the possible northerly extension of the Lizard Lake Zone. The top 217 feet of this hole averaged 0.15% Cu, which may indicate the hole just touches the western fringe of the mineralized zone.

### 4. White Rectangle Lake Zone

Hole 15 and 16 were generally low grade, less than 0.08% Cu. Hole 15 intersected quartz-monzonite porphyry at 306 feet. Copper grade in hole 17 was generally less than 0.15%. This area requires further drilling, however, ground conditions during the spring breakup made it impossible to continue at that time.

## ORE RESERVES

In 1973, using a 0.2% Cu cut-off grade, ore reserves for the North Lake Zone were estimated to be 97,000,000 tons grading 0.32% Cu and 0.02% MoS<sub>2</sub> with 15,000,000 tons below cut-off and 28,000,000 tons barren dyke.

A new estimate of ore reserves for the North Lake Zone has been made by the writer. The following assumptions were made:

1. All dykes greater than 10 feet wide are separable, i.e. minable as waste.
2. The ratio of ore to waste determined for each section, is representative of that ratio for the whole block of ore represented by the section.

On each section the mineralized zone was broken into the following areas:

1. Greater than 0.2% Cu and
2. 0.1 to 0.2% Cu.

The lower limit of the mineralized zone was taken roughly 100 feet below the deepest drilling, resulting in an average thickness of 700 feet for the ore zone. An average grade, for both copper and molybdenite, for each area was determined using all drill-core assays. In computing the averages, dykes less than 10 feet wide were included.

Using the 0.2% Cu cut-off, "drill-indicated" ore reserves of approximately 54,000,000 tons grading 0.3% Cu and 0.016% MoS<sub>2</sub> were determined. "Geologically Inferred" reserves in the greater than 0.2% Cu range added an additional 21,000,000 tons grading 0.26% Cu and 0.012% MoS<sub>2</sub>. "Drill-Indicated" reserves in the 0.1% to 0.2% Cu zones were 13,500,000 tons grading 0.15% Cu and 0.02% MoS<sub>2</sub>. Details of these calculations are tabulated on Table III.

The amount of ore present (expressed as %) in relation to barren dyke material varied from 69% to 100%, but averaged 80% for reserves above the 0.2% Cu cut-off.



CONCLUSIONS

Copper-molybdenum mineralization is distributed over a wide area on the OK claims, however significant zones of ore grade material are small, sporadic and as yet ill-defined. Only the North Lake Zone has had sufficient drilling to attempt to calculate ore reserves. The average grade of copper mineralization located in the 1974 drilling rarely ran above 0.2%. The best grade of copper mineralization occurred almost invariably in zones of altered granodiorite.

One of the main problems associated with development of ore reserves on this property is the abundance of dykes, and whether sorting of these dykes from ore material can be effected. From the drilling to date, it has been generally impossible to correlate dykes between drill holes on the same section, leading to the conclusion that these dykes have very irregular vertical attitudes.

Further drilling as well as geological and geophysical work is necessary to explore the property thoroughly and effectively.

RECOMMENDATIONS

Work is recommended for the following areas:

1. North Lake Zone (includes White Rectangle Lake Zone)

Further drilling is necessary to better define the boundaries and close off the southern extension of this zone. Holes should be located as follows:

124N - 72E  
120N - 69E; 120N - 74E; 120 - 79E  
116N - 72E  
112N - 76E  
108N - 76E

All these holes should be at least 600 feet long and drilled at -45° toward "grid-west". If good grade ore is encountered on all these sections then the 200 ft. interval between each section could be drilled off with holes located at similar spacings.

2. South Zone

Drilling is recommended on sections 32N and 40 N to attempt to extend the mineralized zone outlined on the 36N section.

32N - 63E; 32N - 68E  
40N - 62E

These holes should be drilled at least 600 feet deep, at - 45° toward "grid-west".

3. Central Zone

In the area immediately to the south of the camp several good surface exposures have been located. Several short winkle drill holes have apparently cut good copper-molybdenum mineralization. The extension of the south zone copper geochem anomaly also crosses this area. Thus the following holes are recommended:

52N - 54E  
56N - 55 + 50E

These should be drilled at -45° toward "grid-east".

#### 4. Theodosia Inlet Zone

This area is located on the northern end of the property, extending part way from the slope to Theodosia Inlet. Geological work should be done first to outline the boundary of the diorite-gabbro complex. At the same time the geochemical grid could be extended and possibly widened to facilitate mapping and to be used for a following geophysical programme. An induced polarization survey may help to outline mineralized zones and define drill targets.

It is suggested that drilling on the North Lake Zone and the indicated surveys on the Theodosia Inlet be started in late summer, when ground conditions should be driest. As the season becomes wetter work could be moved to the south and Central zones. Estimated costs for the recommended programme are shown in Table IV.

APPENDIX A

- REFERENCES

- STATEMENT OF EXPENDITURES

- ARTICLE II OF LEGAL AGREEMENT

- TABLE I - DDH LOCATIONS

- TABLE II - AVERAGE COPPER GRADES

- TABLE III - ORE RESERVES

- TABLE IV - ESTIMATED COSTS

REFERENCES

Hallof P.G., and Goudie M.A.:

- Report on the Induced Polarization and Resistivity Survey on the "OK" Property, Powell River area, Vancouver Mining Division, B.C. for Granite Mountain Sierra Empire, June, 1973.

Meyer W. and Boyle P.:

- Summary Report 1972 OK Property Powell River, B.C., February, 1973

Allen A.R.

- Report on the OK Property Powell River, B.C. August, 1972

Wares R.:

- OK Property for Falconbridge, April, 1971

**STATEMENT OF EXPENDITURES ON GRANITE MOUNTAIN  
PROPERTY, POWELL RIVER, B.C. TO  
JULY 31st, 1974**

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<b>OPERATING</b>	20,625.00
Labour	
Supplies	2,657.00
<b>DIAMOND DRILLING</b>	149,917.00
Contractor	
Labour	575.00
Supplies	7.00
<b>GEOCHEMISTRY</b>	7,288.00
Contractor	
<b>LINE CUTTING</b>	6,295.00
Contractor	
<b>DRILL SITE PREPARATION</b>	16,759.00
Contractor	
Assessment & Recording Fees	1,332.00
Option Payments (Includes registration fee for Option Agreement)	17,695.00
Office Rental & Expenses	249.00
Transportation	281.00
Board & Lodging	3,030.00
Sampling & Assaying	663.00
Miscellaneous Charges	<u>15,500.00</u>
	242,873.00
Administration & Overhead @ 6%	<u>14,572.00</u>
<b>TOTAL</b>	<u>\$257,445.00</u>

Certified Correct

*Norman T. McGeach*  
Norman T. McGeach  
Chief Accountant

ARTICLE II - EXPLORATION EXPENDITURES  
AND ASSIGNMENT OF INTEREST

2.1 In consideration of the sum of \$10.00 now paid by Western to Granite (the receipt whereof by Granite is hereby acknowledged) and the firm commitment of Western hereby given to make the payments and incur the Exploration Expenses pursuant to Section 3.1(b) hereof, Granite hereby gives and grants to Western the sole and exclusive right to acquire an assignment of the interests of Granite in the Option Agreement referred to in Section 2.2 to Section 2.6 inclusive.

2.2 Western shall earn and be entitled to assignment from Granite of an undivided 30% interest in and to the Option and in and to the Option Agreement and in and to Granite's interest in the Property subject to the Option and to the Option Agreement by Western:

✓ (a) paying to Granite the sum of \$10,000 on the Effective Date;

✓ (b) expending \$59,000 on Exploration Expenses on the Property within nine months after the Effective Date;

✓ (c) giving a written commitment to Granite within nine months after the Effective Date to expend a further \$25,000 on Exploration Expenses on the Property within twelve months after the Effective Date, and incurring said Exploration Expenses within said twelve months;

✓ (d) giving a written commitment to Granite within twelve months after the Effective Date to expend a further \$50,000 on Explorations Expenses on the Property within eighteen months after the Effective Date, and incurring said Exploration Expenses within said eighteen

69  
25  
50  
3

2.3 Western shall earn and be entitled to an assignment from Granite of an additional undivided 10% interest, to a total of a 40% interest, in and to the Option and in and to the Option Agreement, and in and to Granite's interest in the Property, subject to the Option and to the Option Agreement, by Western giving a written commitment to Granite within eighteen months after the Effective Date to expend a further \$50,000 on Exploration Expenses on the Property within twenty-four months after the Effective Date, and incurring said Exploration Expenses within said twenty-four months.

2.4 Western shall earn and be entitled to an assignment from Granite of an additional undivided 10% interest, to a total of a 50% interest, in and to the Option and in and to the Option Agreement, and in and to Granite's interest in the Property, subject to the Option and to the Option Agreement, by Western giving a written commitment to Granite within twenty-four months to expend a further \$50,000 on Exploration Expenses on the Property within thirty months after the Effective Date, and incurring said Exploration Expenses within said thirty months.

2.5 Western shall be entitled to increase its interest in the Option, the Option Agreement and Granite's interest in the Property by a further 6%, to a total of 56%, by causing the preparation of, and delivery to Granite of a copy of, a Feasibility Report on or before January 1, 1983.

2.6 Western shall be entitled to increase its interest in the Option, the Option Agreement and Granite's interest in the Property by a further 9%, to a total of 65%, by arranging financing required to Place the Property into Production.

2.7 At any time that Western has become entitled to an assignment of an interest in the Option, the Option Agreement and the Property from Granite, Granite will from time to time on receiving a written request from Western execute an assignment of the interest in form satisfactory to Western and give



TABLE I  
DDH LOCATIONS - 1974

<u>DDH NO.</u>	<u>LOCATION</u>		<u>EL. AT COLLAR</u>	<u>BEARING</u>	<u>TOTAL LENGTH</u>
	<u>N</u>	<u>E</u>			
74-1	63+30	53	2885	245	524'
2	68	50	2855	"	546'
3	76	51+45	2890	"	567'
4	76	54	2900	"	509'
5	76	56	2940	"	577'
6	84	54+50	2960	"	537'
7	84	50	2903	"	667'
8	95+64	55	2954	"	617'
9	95+64	55	2954	"	547'
10	96	58+80	2960	65°	547'
11	92	50+10	2951	245°	507'
12	99+90	56+20	3013	65	496'
13	99+60	59	3032	65	547'
14	104	55+75	3050	65	527'
15	102+60	69+40	3100	245	427'
16	104+70	72+75	3100	"	577'
17	108	72+70		"	557'
18	115+60	57		"	504'
19	164	69+20		"	697'
20	35+90	61+64	3051	"	767'
21	35+18N	65+20	3092	"	986'
22	39+90	65+33	3065	"	447'

TOTAL FOOTAGE - 1974 - 12,695'

TABLE II

AVERAGE COPPER GRADES FOR MINERALIZED  
INTERVALS IN THE 1974 DIAMOND DRILL HOLES

(Dykes less than 20' in width were included  
in the calculation of averages)

<u>HOLE NO.</u>	<u>INTERVAL FT.</u>	<u>LENGTH FT.</u>	<u>AV. CU GRADE (%)</u>
74-1	14' - 125'	111	.09
	176' - 256'	80	.10
	319' - 542'	223	.15
2	12 - 546	534	.15
3	6.5 - 567	560.5	.10
4	4 - 444.5	440.5	.02
5	19 - 577	558	.02
6	46 - 537	491	.16
7	5 - 105	100	.15
	141 - 203	62	.20
	228.5 - 310	81.5	.12
	310 - 497	87.0	.22
	(397.5 - 446)	(66.5)	(.34)
	497 - 667	170	.01
8	13 - 617	604	.01
9	7 - 547	540	.13
10	41 - 59.5	18.5	.33
	84 - 161	77	.17
	220 - 298	78	.03
	322 - 547	225	.01

TABLE II CON'T.

<u>HOLE NO.</u>	<u>INTERVAL FT.</u>	<u>LENGTH FT.</u>	<u>AV. CU GRADE (%)</u>
74 - 11	7 - 507	500	.01
12	5 - 111.5 362.5 - 495	106.5 131.5	.25 .10
13	98 - 129 174 - 409.5 451.5 - 508	31 235.5 146.5	.13 .14 .05
14	6 - 503 6 - 220	407 214	.20 .25
15	7 - 427	420	.05
16	22 - 577	555	.08
17	115.5 - 129.4 231 - 381.5 398.5 - 439	15.0 150.5 40.5	.08 .15 .15
18	0 - 32 157 - 217 376 - 462.5 438 - 470	32 60 26.5 32	.17 .19 .01 .01
19	8 - 697	689	.02
20	6 - 176 243 - 264.5 300.5 - 561 579 - 623 653 - 743	170 21.5 44.5 44 90	.22 .32 .13 .08 .08

TABLE II CON'T.

<u>HOLE NO.</u>	<u>INTERVAL FT.</u>	<u>LENGTH FT.</u>	<u>AV. CU. GRADE (%)</u>
74-21	15 - 508	493	.23
	(255.5 - 332)	(76.5)	(.40)
	591.5 - 664.5	74	.12
	684 - 844	160	.15
	858 - 889.5	31.5	.08
22	6 - 207.5	201.5	.11
	304.5 - 447	142.5	.11

ORE RESERVES - TABLE III

<u>SECTION</u>	<u>AREA</u>	<u>HORIZ. DIST.</u>	<u>TONS</u>	<u>% ORE</u>	<u>TONS ORE</u>	<u>TONS WASTE</u>	<u>CU GRADE % * *</u>
<u>A. DRILL INDICATED, USING 0.2% Cu CUT-OFF</u>							
136 N	69,375	280	1,554,000	100%	1,554,000	-	.31
132 N	588,720	400	18,839,040	79%	14,882,841	3,956,199	.29
128 N.	771,950	300	18,526,800	69%	12,783,442	5,743,380	.32
126 N	602,125	200	9,634,000	76%	7,321,840	2,312,160	.36
124 N	594,350	150	7,132,200	73%	5,206,506	1,925,624	.26
122+50N	695,000	250	13,900,000	88%	12,232,000	1,668,000	.29
<b>TOTALS</b>		<b>1580</b>	<b>69,586,040</b>	<b>80% Av.</b>	<b>53,980,629</b>	<b>15,605,411</b>	<b>.30 Av.</b>
<u>B. DRILL INDICATED, 0.10 - 0.20 Cu</u>							
136 N	144,690	280	3,241,056	95%	3,079,003	162,053	.14
136 N E.	324,194	400	10,950,208	70%	7,665,145	3,285,063	.15
132 N W.	238,733	400	7,639,456	36%	2,750,204	4,889,252	.16
<b>TOTALS</b>		<b>1080</b>	<b>21,830,720</b>	<b>67% Av.</b>	<b>13,494,352</b>	<b>8,336,368</b>	<b>.15</b>
<u>C. GEOLOGICALLY INFERRED, USING 0.2% Cu CUT-OFF</u>							
122+50N	695,000	600	33,360,000	88%	29,356,800	4,003,200	.29
112N	340,650	600	17,713,800	78%	13,816,764	3,879,036	.19
<b>AVERAGE OF ABOVE</b>			<b>25,936,900</b>	<b>82%</b>	<b>20,940,258</b>	<b>4,596,642</b>	<b>0.26</b>

TABLE IV

ESTIMATED COSTS FOR MINIMUM PROPOSED WORK

OK PROPERTY

Diamond Drilling - approx. 10,000 ft. @ \$20.00/ft. -	200,000
Supervision of Diamond Drilling - 3 mo. @ \$2,000/mo. (includes assistant)	6,000
Geophysical Survey - approx. 10 line miles - @ \$700/line mile -	7,000
Geological Mapping - 2 mo. @ \$2,000/mo. (includes assistant)	4,000
	<hr/>
	\$217,000
	<hr/>



W. MEYER & ASSOCIATES LTD.

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Vancouver 2, B.C.  
Canada (604) 688-4638

August 28, 1973.

Mr. T. P. Bowes  
Granite Mountain Mines Ltd.  
#330-470 Granville St.  
Vancouver 2, B. C.

RE: O.K. PROPERTY, PROGRESS REPORT

INTRODUCTION:

The following is a brief summary of the first stage programme on the O.K. Property carried out under the Granite Mountain -- Sierra Empire agreement.

I.P.

Approximately 6 line miles of I.P. were completed in three parts of the property. The survey was carried out by McPhar Geophysics Ltd. using frequency domain method. The lines completed were checks on and extensions of previous data.

A report from McPhar is not yet available, but generally the survey method and field procedure provide much

better resolution of anomalous areas. In the north end of the grid where the survey was restricted by topography, two anomalous zones were partially outlined. One is a 3,000 feet extension of the anomaly associated with the North Lake Zone. The second, lying to the west, is an extension of a previously known anomaly but one untested by drilling.

DRILLING:

2,108 feet of drilling has been completed in 4 holes. 3 were drilled south of North Lake and one in the "North End".

Drill holes 73 - 1 ( 126 + 00N - 74 + 50E ), 73 - 3 ( 126 + 00N - 72 + 50E ), 73 - 4 ( 126 + 00N - 74 + 50E ) were all drilled at - 45° to the grid west (245°). All encountered mineralization typical of the North Lake Zone.

The weighted average for the block tested by this fence of holes is 0.37% copper, slightly higher than the average grades encountered within the North Lake Zone in the 1972 programme. Post mineral dykes of less than 20 feet were included in the averages and given a value of zero.

Molybdenite values vary from less than 0.01 to 0.036.

The best intersection occurred in hole 73 - 3 where 105 feet returning an average of 0.51 Cu and 0.036 MoS<sub>2</sub>.





Drill hole 73 - 2 is located at LI74 + 00N - 80 + 00E to drill at - 45° to the grid East (65°). The object of the hole was test an I.P. anomaly outlined in the present survey. The hole was drilled to 207 feet in well altered quartz monzonite and dyke material. No significant mineralization was encountered but it is most significant that the quartz monzonite, to which the mineralization is peripheral, extends into this area. Further drilling will be required in this zone.

#### CONCLUSIONS AND RECOMMENDATIONS:

The current programme added 2 new drill targets and completed a "fence" of holes across the North Lake Zone. The holes drilled on the North Lake Zone returned slightly higher grades and larger dyke-free sections than those encountered in the 1972 programme.

A continuing programme is warranted as outlined in the 1972 Summary Report. Ideally, 2 drills should be use, one drilling-off the North Lake Zone and the second to test the "outside" targets.

The outside targets include the 2 zones outlined by the recent I.P. survey in the north, the Claim Lake area, Lizard Lake area, and the I.P. anomaly at the south end of the property near LI2 + 00N.

Respectfully submitted,

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W. Meyer, P. Eng.

