4813

93L/6E

Dominion Property
South Showing - North Slope of Denys Valley
Maharaja Minerals Ltd.

93L/6E
Dominion, Dome ?

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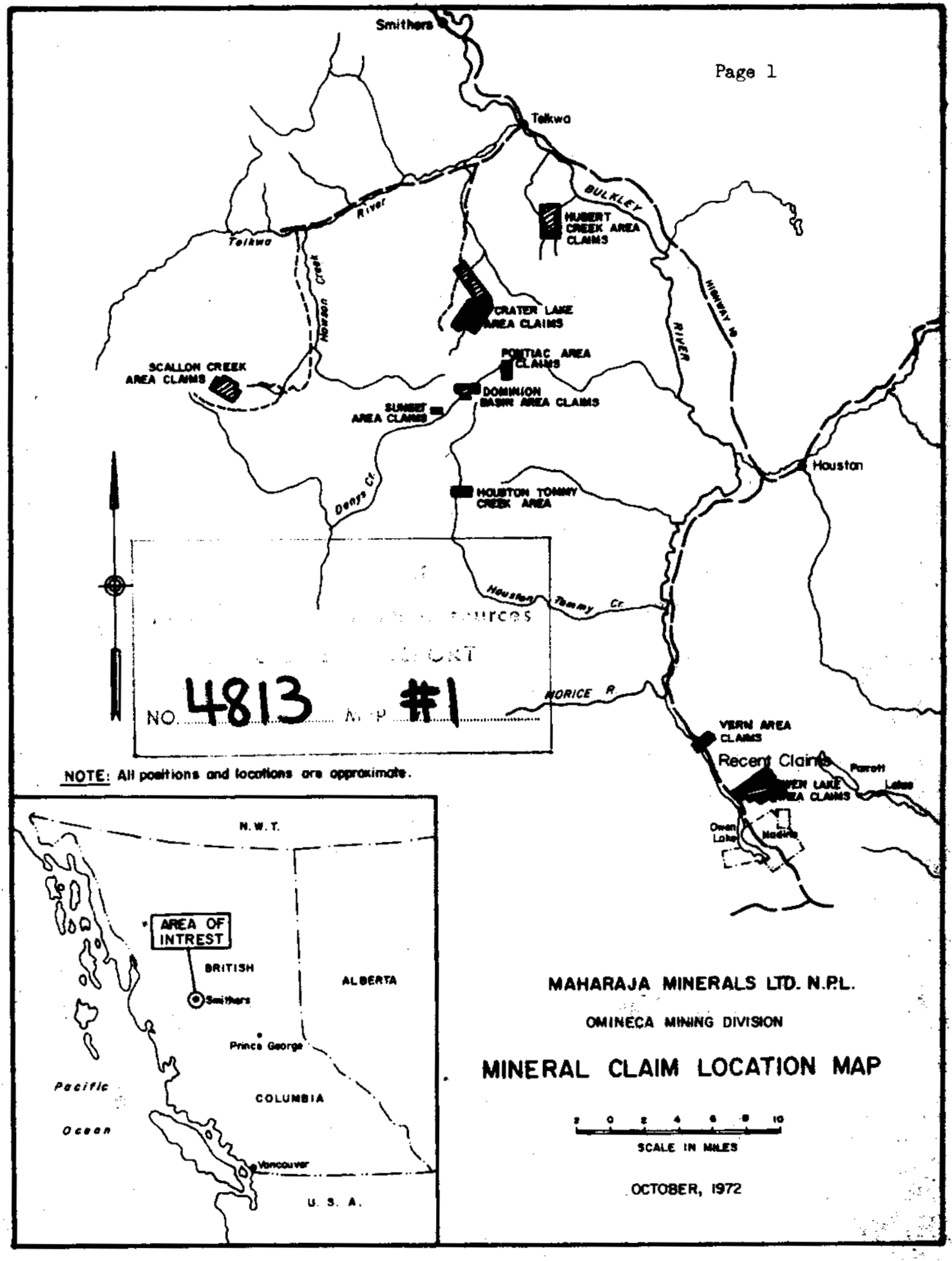


NOTE: All positions and locations are approximate.

MAHARAJA MINERALS LTD. N.P.L.

OMINECA MINING DIVISION

MINERAL CLAIM LOCATION MAP

2 0 2 4 6 8 10

SCALE IN MILES

OCTOBER, 1972

OUR FILE _____

YOUR FILE _____

P.O. BOX 986
POSTAL STATION A
VANCOUVER 1, B.C.

CUSTOMER MINING SERVICES LIMITED

1102 - 207 W. HASTINGS STREET, VANCOUVER 3, B.C.

TELEPHONE (604) 684-0611

September 25th, 1973.

Mr. James A. Rutherford,
President,
Custom Mining Services Ltd.,
1102 -207 Hastings Street,
Vancouver 3,
B.C.

Re: Dominion Property
South Showing - North Slope of Denys Valley
Maharaja Minerals Ltd.

Dear Mr. Rutherford,

As instructed I have now completed locational survey work by plane table and stadia in order to outline and locate the above mineralized outcrop.

Drawings No. 1 and No. 2 have been made showing the outcrop and details of dips and strikes.

In order to afford opportunity for structural control of the showing I have superimposed the surrounding geological rock types. This geological structure is taken from the 1969 Department of Mines and Technical Surveys report Fig.14.

i. Minerals seen in mineralized outcrop

(a) Malachite. There is much surface staining and appears in the rock when broken with hammer.

(b) Bornite.

(c) Chalcopyrite

(d) Azurite

(e) Some specularite

(f) Calcite

...Contd.

(g) Some galena.

2. Country rock is andesite, with alteration in the ore zone.

3. The dips are shown on Dwg.No.1. They are irregular, but show that in general, the ore system dips to the North East at an average dip of 70.

4. Mineralized Outcrop - Structure

The outcrop surveyed occurs over a width of 180 ft. The strike length exposed is 50 feet. The structure is composed of many veins and lenses, and together appear to form a multiple lens system. The visible ore cut off at the lenses is not clearly cut as in a vein, but is rather homogeneous with or disseminated into the andesite. Samples were taken and numbered in relation to survey points on Dwg.No.1. Doubtless these will run high in copper. In order to get an overall grade width it will be necessary to do one or both of the following.

(a) Chip sample across the full 180 ft.width.

(b) Blast out a complete lift and ship out for bulk sampling.

5. Further Exploration.

(a) Diamond drill from a position in the hanging wall to prove continuity and grade.

(b) Diamond drill North and South of the showing along the projected hanging wall in order to determine continuity of strike.

6. Potential

The dimensions of the outcrop indicates a tonnage of 850 tons per vertical foot. It is important to determine continuity as outlined in note No.5.

Respectfully Submitted,

R. Cullen
Coordination Engineering Geologist
Custom Mining Services Ltd.

MIN-EN LABORATORIES LTD.
705 WEST 15TH STREET
NORTH VANCOUVER, B.C.
Phone 980 5814

Certificate of Assay

TO: Maharaja Minerals Ltd. PROJECT No.

Box 533, Postal Station A DATE Oct 5/73

Vancouver, B.C. File No. 543

SAMPLE No.	Cu %	Ag oz/ton	Au oz/ton	
S1	.061	.14	.002	
S2	5.300	5.86	.006	
S3	6.350	.89	.002	
S4	9.450	13.12	.006	
S7	23.700	43.15	.013	
S11	17.100	24.20	.006	
Scallon Group				
CC	7.500	4.35	.002	
C	10.400	6.58	.004	
DD	10.500	4.97	.002	
D	7.200	3.14	.003	
G	16.900	2.44	.003	

MIN-EN Laboratories Ltd.

CERTIFIED BY Gilbert L Hemonville

APPENDIX "A"

EVIDENCE OF EXPENDITURE INCURRED

NAME:	CATEGORY:	RATE:	DAYS PERIOD:	WAGE
R. Cullen	Engineer	$1,300/mo	10	$435.
R. Biss	Geologist	$ 800/mo	10	$267.
Okanagan Helicopters	Mobilization		4 hrs.	$1048.
J. McAndrew	Consulting	$150/day	2 days	$ 300.
Man Maintenance		$25/day/man	20 man days	$ 500.
Overhead(Assays vehicles, office etc.)		50% of labor and maintenance		$ 750.
			TOTAL	$ 3,300.

I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the City of Vancouver, in the Province of British Columbia, this 28th day of December, 1973, A. D.

James L. Cullen

Jean Paul Sub-mining Recorder

Dec 28 1973

CERTIFICATION OF RUDOLF BISS

#207 - 1120 Denman Street, Vancouver, B. C. Phone: 683-0664

1) I am a graduate of Technical University, Department of Mines of Kosice - Czechoslovakea

2) I am a graduate of Ecole Nationale Superieure de Geologie et de Prospection Miniere - Nancy (France)

3) I am not a registered Engineer in the Province of British Columbia or of any province.

4) I have been engaged in mining for two years in Czechoslovakia and for three years in France.

5) I have no direct, or indirect interest in the properties of Maharaja Minerals Ltd.

Dated at Vancouver, British Columbia, this 25th day of December, 1973.

SIGNED: Rudolf Biss

Rudolf Biss

CERTIFICATION OF JOHN M. McANDREW

#212, 14840 - 105 Avenue, Surrey, B. C. Phone: 588-8072

1 - Registered as a Professional Engineer by the Association of Professional Engineers of B. C.

2 - A fellow of the Geological Association of Canada.

3 - B. Sc. in Geology from the University of Alberta, Edmonton, Alberta: post graduate courses in surveying, McGill University, Montreal, Quebec.

4 - Prior to consulting the author spent seventeen years in exploration, property evaluation, mine geology, and production with the following companies.

Anaconda American Brass Limited - Copper, Molybdenum
Silver Titan Mines - Silver, Lead, Zinc.
Columbia Iron Mining Co. - Coal
Newmont Exploration Ltd. - Nickel, Copper
Iron Ore Company of Canada Ltd. - Direct Shipping Iron Ore.
N. W. Byrne Company - Gold
Quebec Cartier Mining Comp. Ltd. - Concentrating Iron Ore.
Eldorado Mining and Refining Co. - Uranium
International Nickel Co. - Nickel, Copper

5 - I have no direct or indirect interest in the properties covered by this report.

6 - I inspected a portion of the work while the program was being carried out. I have read this report and personally endorse the facts and concepts contained in the text.

Dated this 28 day of December, 1973, in Vancouver, B. C.

SIGNED: John M. McAndrew

John McAndrew. P. Eng.

Telephones:
Bus: 576-8148
Res: 576-8170

D.L. COOKE AND ASSOCIATES LTD.
MINERAL EXPLORATION CONSULTANTS

16331 Bell Road,
Surrey, B.C.
Canada

PETROGRAPHIC REPORT

NUMBER: D LOCALITY: DOMINION BASIN DATE: February 21, 1974

NAME AND CLASSIFICATION: SKARN

MEGASCOPIC DESCRIPTION: Coarse blebs of chalcopyrite and minor specular hematite are scattered in this greenish rock.

MICROSCOPIC DESCRIPTION:

Minerals	%	Remarks
1. Carbonate	30	Carbonate occurs as large ragged grains that in part enclose other minerals.
2. Chlorite	20	Subradial patches of green chlorite occur within coarse carbonate and as mixtures together with epidote and amphibole.
3. Amphibole	15	Needles and "shredded" blades of tremolite exhibit a fibrous texture. These are randomly distributed.
4. Quartz	10	Clear, equigranular quartz occurs with the sulphides and as patches within the carbonate.
5. Epidote	10	Small epidote grains are optically continuous within some areas.
6. Leucoxene/Sphene	5	Strings of leucoxene and recrystallized sphene are common.
7. Chalcopyrite	4-7	Anhedral grains are characteristic.
8. Specularite	2	Clusters of spherulitic specular hematite are associated with the sulphides.
9. Bornite	1	Anhedral grains are moderately common.

TEXTURE: A coarse equigranular to poikilitic texture is apparent in thin section. Carbonate forms large plates which enclose irregular grains and patches of chlorite, tremolite, quartz and epidote. The sulphides seem to be closely associated with quartz and hematite.

CONCLUSION:

The rock is a copper-bearing skarn. It is probably derived from limey sedimentary or volcanic rocks, where intruded by an igneous body. The primary texture was obliterated and recrystallization accounts for the present texture and mineralogy.

R. CULLEN - MINING ENGINEERING EXPERIENCE

MAY 1972 RC

July 1971 to present

Senior Mining Engineer - Granduc Operating Co. Ltd.,
Tide Lake, B.C.

Report to Superintendent of Planning and Engineering

Major Duties

1. Research and study the feasibility and economics of alternate methods of mining. Make recommendations for change or innovation to present methods to the Superintendent of Planning and Engineering.

2. Supervise, direct and guide the department in planning and scheduling the methods and location of mining for the five year period from one to six years ahead of present mining.

3. Supervise, direct and guide the department in the preparation of detailed layouts, schedules and recommendations for the blocks of the mine to be mined, broken into six months periods, covering mining methods access, ventilation, drainage, pumping, haulage, location of facilities, such as underground crusher stations, sumps, and pumping stations. These to include costs.

4. Liase constantly and closely with senior mine supervision and management, geology department, and short range planning department.

5. Attend long range mine planning meetings.

6. Make semi-monthly reports on achievement of the department to Superintendent of Planning and Engineering.

PROJECTS PERSONALLY COMPLETED INCLUDE THE FOLLOWING:

1. Designed a conveyor decline and ramp service system, including all facilities, such as pump station, crusher station, ore and waste pass system. This system is located below present mining levels and will be the main services required for hoisting ore from the lower levels.

2. Designed a mechanized cut and fill stoping system in order to mine approximately 5,000,000 tons of ore in three ore bodies below present mining block.

   Submitted a fully comprehensive feasibility report, including the amount of preproduction development required, ventilation arrangements, capital and operating costs, productivity expected, equipment requirements, manpower requirements, backfill requirements are also included.

3. Designed an underground classified tailings repulping facility to supply back fill in slurry form, hydraulically to the cut and fill stoping system referred to in (2). A full cost report was submitted.

4. Studied the feasibility of a block cave method of mining two separate ore lenses in a suitable location of the mine.

   Detailed layouts and costs were submitted.

5. Set out an eight year period of stoping and illustrated by quarter years on a longitudinal section through the mine.

   This involved calculation of stope tonnages, productivity, and compiling the necessary statistics such as ore tonnages per strike foot over certain vertical intervals.

October 1969 to June 1971

Senior Mine Engineer - Western Mines Ltd.,
Campbell River, B.C.

RC

Reported to Assistant Manager and General Manager

RC

Major Duties included:-

1. Supervised an Engineering Department of six, who were engaged on the following:-

   1. Mine Surveying - Underground and open pit.

   2. Incentive bonus calculations and rate setting.

   3. Performance statistics

   4. Mine Planning - production schedules

   5. Ventilation control and quarterly ventilation surveys

2. Studied and approved all mine planning for future mining.

3. Carried out feasibility exercises on the open pit limits to maximum allowable waste to ore ratios.

4. Approved incentive bonus calculations for bi monthly payments.

5. Approved all quantity payments on a monthly basis to the company's open pit contractor.

6. Recommended any mining method change or innovation to management.

7. Attended weekly meetings with management.

8. Submitted a monthly engineering report to management.

PROJECTS PERSONALLY COMPLETED INCLUDE THE FOLLOWING

1. A feasibility study to determine the ultimate depth of the open pit in order to mine additional ore.

   A report was submitted to management.

2. The planning of a -15% decline from surface at the company's Myra Falls Mine, in order to provide lower levels below the existing levels.

   This involved geological interpretation and projection of ore zone material in order to have the heading in the footwall waste.

3. Designed and laid out a sub level cave system of mining for an upper ore zone at the Myra Falls Mine.

4. Various cut and fill mining layouts were planned and laid out for the Lynx Mine.

5. Calculated the mine ventilation characteristic curve for the Myra Falls mine in order to determine the permanent ventilation fan requirements.

6. Closely supervised and organised two major surface/underground correlation surveys of large extent, in order to set out two important bore hole raises.

   One correlation survey was at the Lynx Mine, and the other at Myra Falls Mine. Underground traversing and surface triangulation were involved.

   Both raises when bored broke through well within allowable limits of their target locations.

7. Closely supervised and organised the preparation of ventilation plans and sections, upon which to record periodic ventilation surveys.

8. Closely supervised the survey section and instituted new techniques for the cut and fill stoping tonnage surveys.

con't

August 1968 to September 1969

Senior Mine Planning Engineer - Granduc Operating Co.
Tide Lake, B.C.

Reported to Chief Engineer

Major Duties

1. Provided mine development layouts and mine planning in order to bring the mine into production, on a sub level cave mining method.

2. Scheduled the development and major facilities on a critical path method of scheduling, followed up by bar charts, with due regard to resources available.

3. Provided future mine development costs on a quarterly basis.

4. Attended meetings with mine operating supervision and management.

5. Provided feasibility studies on alternate methods.

September 1966 to July 1968

Chief Engineer - Campbell Red Lake Mines Ltd., Balmertown, Ontario.

Reported to General Manager

Major Duties

1. In charge of an engineering staff of twelve.

2. Responsible for all current and long range mining layouts, surveying, sampling, bonus calculations, and the usual mine engineering office functions.

3. I was responsible for the ore reserve calculations, calculated on a quarterly basis.

The mining methods were 80% shrinkage and 20% cut and fill.

August 1965 to August 1966

Chief Engineer - Anglo Rouyn Mines Ltd.,
La Ronge, Saskatchewan.

Reported to Assistant Manager

Major Duties

I was responsible for all mining engineering. An engineering staff of six reported to me.

1. I did considerable mine planning for the preproduction phase. The mine was brought into production using the longhole open stope and shrinkage methods of stoping.

2. I was also involved in the planning and setting out of a small two lift open pit.

3. Mining cost estimates yearly, quarterly, and monthly on a budget control basis were prepared by me.

June 1964 to July 1965

Chief Engineer - Wasamac Mines Ltd.,
Arntfield, P. Q.

Reported to - Mine Manager

This mine was being prepared for production during my period with the company.

Major Duties

1. I was reponsible for mining engineering underground and surface. An engineering staff of six reported to me.

2. I was responsible for all surface construction engineering control, mine plant layouts and design work other than those designs prepared by the company consultant.

3. Material requirements, construction schedules were prepared by my department.

4. Underground development programs and planning were prepared by me.

   I carried out very detailed development and stoping schedules, total cost estimates work and profitability estimates.

   The work was done very accurately as the profitability margin was small, the grade of ore being only 0.14 oz. au. per ton.

5. I was the company's representative in all matters dealing with the company's surface engineering consultants and construction contractors.

6. I did all the necessary liason work with the various goverment departments for approvals such as tailings impoundment dams etc.

1960 - 1964

Planning Engineer - Mattagami Lake Mines Ltd.
Matagami, P.Q.

I reported to the Chief Engineer

In this capacity I was also the assistant chief engineer.

I came here in the shaft sinking stage and was responsible for all underground current layouts, mine planning, mining methods study, cost analysis of methods, and long range production schedules.

The mining method was longhole open stoping with delayed fill.

Playing an important part in helping to bring the mine into production, called for very detailed and thorough mine planning.

1956 - 1960

Planning Engineer - Rio Algom Mines Ltd.,
Nordic Mine,
Elliot Lake, Ontario

I reported to the Chief Engineer

In this capacity I was also Assistant Chief Engineer.

Two layout engineers reported to me, and in my capacity of Assistant Chief Engineer, I was in charge of the engineering department during the Chief Engineer's absence from the property.

DUTIES

1. I was responsible for all layouts and mine planning for the underground operation.

2. Monthly, quarterly and yearly production schedules were prepared by me.

3. An excellent system of budget control was in force and I prepared the underground operations monthly cost budget in conjunction with development and production.

4. Miscellaneous underground structural drawings, were prepared by me.

5. Special projects such as shaft plumbing for correlation surveys surface to mine levels, were organised and directed by me.

1952-1956

Layout Engineer - Falconbridge Nickel Mines Ltd.,
Falconbridge, Ontario

I reported to the Chief Engineer of Mines.

1. I was engaged with a group of planning engineers on all design layout work re: shaft sinking, loading pockets, crusher station etc., sufficient to bring the company's Fecunis Lake Mine and Longvack Mine into production.

2. After completion of the preproduction mine planning, I was transferred to the company's Longvack Mine in charge of Mine Engineering. I continued to report to the Chief Engineer of Mines.

1946-1952 - Northern Rhodesian Copper Belt

Roan Antelope Copper Mines Ltd.,
Luanshya, Zambia

Rhokana Corporation Ltd.,
Kitwe, Zambia

Experience included mine surveying, blasting layouts for long hole stoping, shaft plumbing.

1939-1946 - South and West Yeekshire Coal Field, England

I was employed here during my student days, and my experience included mine ventilation, mine surveying and general mine experience.

R. A. Mullen.

R. A. Mullen.

surface expression of a major structure carrying copper and other minerals. The mineralized showing has been traced on either side of the "chimney" chip sample section for approximately 1,000 feet to the south. It has not been found to the north because of overburden but does extend westwards towards Webster Creek for a distance of about 200 feet at an angle from the "chimney" proper which suggests northerly extension. Copper showings have been located further south (see map attached). We do not know at this time whether the "horizons" are interconnected. It is the writers opinion that these other showings are separate structures but will likely show a configuration not unlike that of the "slump block." Mr. R. Allan Rutherford, the writer's brother, who originally discovered the Crater Lake chalcocite showings inside the Crater Lake cirque and at the "chimney" has found similar mineralization at separate points to the south of Crater Lake along the vertical walls separating the Crater Lake "plateau area" from Loring and Webster Creek. The structure of an anticline can be seen inside the Crater Lake cirque and the "chimney" could be the westerly limb of that anticline.

4) Two geological maps and Dr. Cooke's report are attached hereto in compliance with your requests. They are in duplicate.

Geological Report #4813

2) The strikes and dips were taken on fractures which just happen to parallel a N.E. trending dyke suggesting time event parallels.

3) See maps attached (Dominion Basin Gelogical Map & S. Showing Map)

4) " " "

5) " " "

1) Please refer to Dr. D. L. Cooke's sample D rock description. He calls it a copper-bearing skarn. We accept his observation that contrary to all other published data on this area the showing is definitely not little blebs, veinlets nor as is suggested in the 1969 Minister of Mines report "fissure veining and cavity filling."

Unfortunately Mr. Ralph Cullen, currently the Chief Engineer for Jordan River Mines (see recent letter to be attached to his Scallon certification data appended hereto on the Scallon revised report) seems to have used a bedding symbol on his original map to designate fractures. Our new map enclosed has been "corrected."

Geological Report #4831

1) We have enclosed four maps of the "slump block" area among which

...../4

is the geological map that you requested.

2) It is this writers opinion that the "slump block" is the surface expression of a "friendly horizon" fault block. According to Dr. Tipper of the G.S.C. minor and major fault blocks are common in the regional map area, especially in the Loring Creek area which is apparently the shoreline of a cretaceous lake. Falconbridge found another mineralized horizon below the ones exposed on the surface. It is highly probable that more will be found in typical saddle reef-like section all relative to a major structural control which could be a fault plane parallel to the "block" or some other control. It is probably the latter and likely an intrusive related to an additional structural contol extant in pre-mineralization times. When the writer first visited the area and knew little of the regional picture it did appear that a piece of "crater-like" rock came down from the Crater Lake area. We had found similar rocks with copper mineralization high up several hundred feet above the area.

Geological Report #4812

We have tried to comply with your directives as set out. Our revised report has been placed "up front" of Mr. Cullen's original submission. Mr. Cullen's certification or extensive and quite impressive work resumé should have his recent letter of February 18, 1974 attached to it for a complete record to date. Mr. Cullen's employment with us terminated almost to the day (September 25, 1973) he submitted his reports (letters et al) to our office.

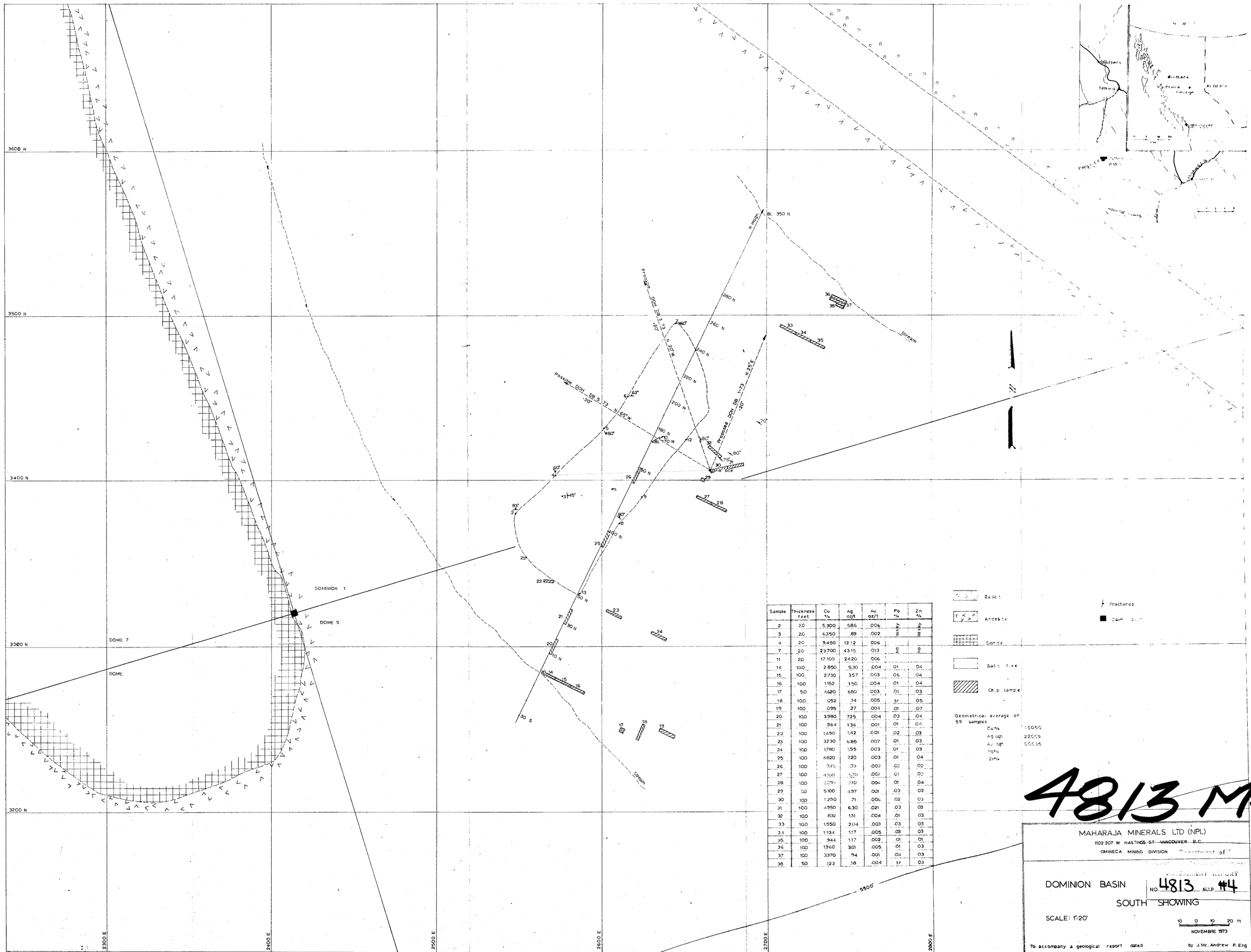
We trust that our revised effort is satisfactory.

As at date Mr. J. McAndrew is on vacation in Hawaii. As our consultant and pursuant to your departments edicts he normally places his P. Eng. seal on our reports. In his absense Mr. James A. Rutherford has placed his G.A.C. seal on the maps where needed. If it is necessary to have Mr. McAndrew's P. Eng. seal on the maps please send them back and we will have him stamp them on his return. Mr. McAndrew will likely be back in Vancouver on or about March 30, 1974.

We trust that once Dr. Seregaroli's results are mailed to you our assessment file may be closed. We have done our best to comply under the circumstances. The circumstances which have involved field personnel have not been too happy as we are sure you are aware.

Yours very truly,

James A. Rutherford
President,
Maharaja Minerals Ltd., (N.P.L.)



Sample	Thickness feet	Cu %	Ag oz/t	Au oz/t	Pb %	Zn %
2	20	5.300	.586	.006	tr	tr
3	20	6.350	.89	.002	tr	tr
4	20	9.450	13.12	.006		
7	20	23.700	43.15	.013	0	0
11	20	17.100	24.20	.006		
14	100	2.850	5.30	.004	.01	.04
15	100	2.730	3.57	.003	.06	.04
16	100	1.152	1.50	.004	.01	.04
17	50	4.620	6.80	.003	.01	.03
18	100	.052	.14	.005	tr	.05
19	100	.095	.27	.004	.01	.07
20	100	3.980	7.25	.004	.03	.04
21	100	.964	1.36	.001	.01	.04
22	100	1.490	1.42	.001	.02	.03
23	100	3.230	6.85	.007	.01	.03
24	100	1.780	1.55	.003	.01	.03
25	100	4.820	7.20	.003	.01	.04
26	100	.015	.03	.002	.02	.02
27	100	.100	.270	.002	.01	.02
28	100	.226	.310	.004	.01	.04
29	50	5.100	4.97	.001	.03	.02
30	100	1.290	.71	.006	.02	.03
31	100	4.950	6.30	.021	.03	.03
32	100	.832	1.31	.004	.01	.03
33	100	1.550	2.04	.003	.03	.03
34	100	1.134	1.17	.005	.03	.03
35	100	.944	1.17	.002	.01	.01
36	100	1.960	3.01	.005	.01	.03
37	100	3.370	.94	.001	.04	.03
38	50	.123	.18	.004	tr	.03

4813 MA

MAHARAJA MINERALS LTD (NPL)
1102 207 W HASTINGS ST VANCOUVER B.C.
OMINECA MINING DIVISION

DOMINION BASIN
SOUTH SHOWING
NO. 4813 MAP #4

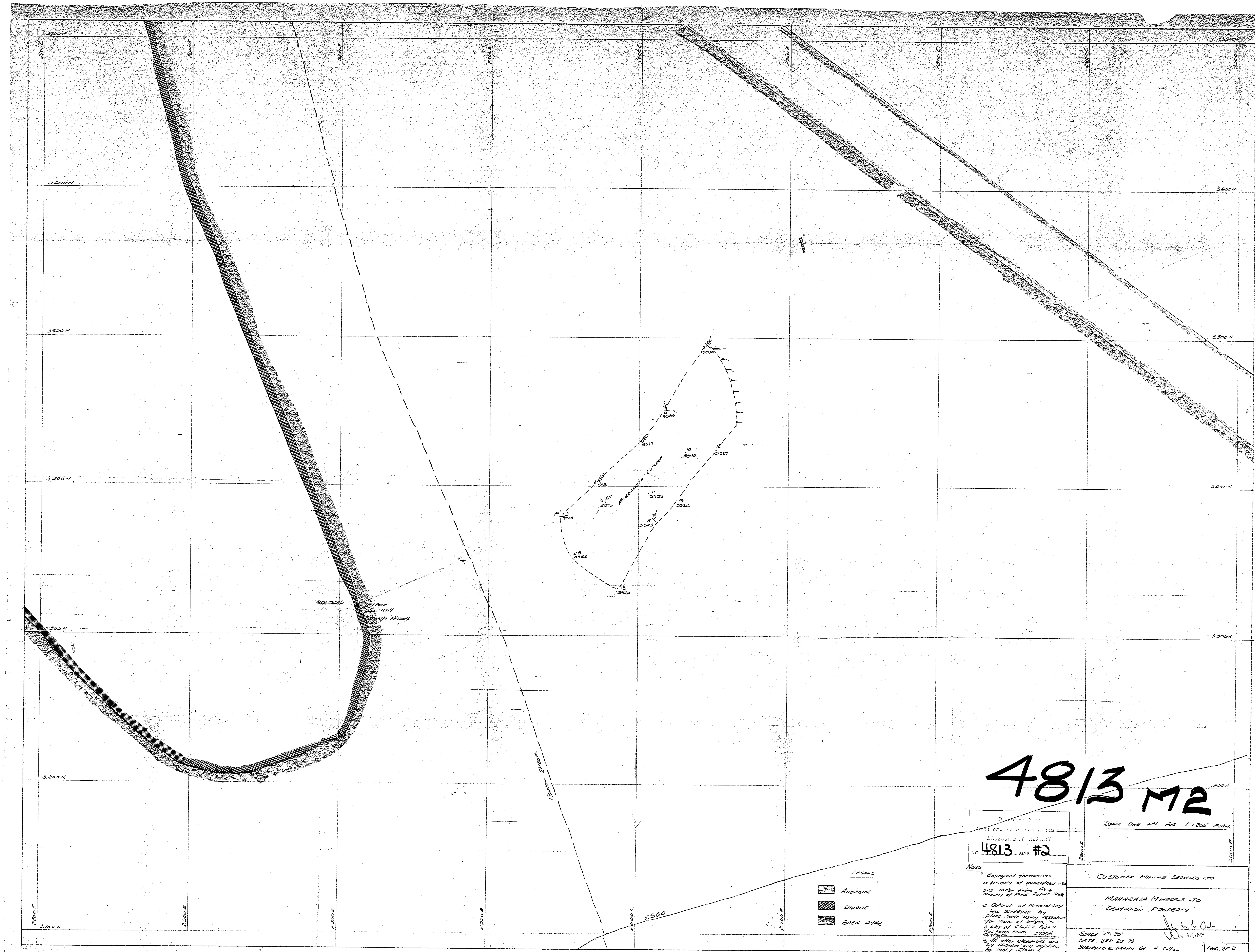
SCALE: 1:20'

10 0 10 20 ft

NOVEMBRE 1973

To accompany a geological report dated

by J.Mc. Andrew P. Eng


4813 M2
3600N
3500N
3400N
3300N
3200N
3100N
2200E
2300E
2400E
2500E
2600E
2700E
2800E
2900E
3000E
5500
Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4813 MAP #2
REFER DWG Nº1 FOR 1"=200' PLAN
LEGEND
ANDESITE
DIORITE
BASIC DYKE
NOTES
1 Geological formations in vicinity of mineralised area are taken from Fig 14 Ministry of Mines Report 1962
2. Outcrop of mineralised was surveyed by plane table using resection for point of origin.
3 Elev. of Claim 7 Post 1 was taken from 2700N contours
4. All other elevations are by Stadia and relative to Post 1 - Claim 7.
CUSTOMER MINING SERVICES LTD.
MAHARAJA MINERALS LTD.
DOMINION PROPERTY
Dec 28, 1973
SCALE 1": 20'
DATE: SEP 24 73
SURVEYED & DRAWN BY R. Culler
DWG. Nº 2

For details of south showing refer to map number

4813 M3

MAHARAJA MINERALS LTD (NPL)
1102-207 W. HASTINGS ST. VANCOUVER B.C.
OMINECA MINING DIVISION

DOMINION BASIN
GEOLOGICAL MAP

Scale: 1:200'

100 0 100 200 ft

DECEMBER 1973

To accompany a geological report dated by J.Mc Andrew P. Eng.

Minister of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4813 MAP #3