

2506

RED ROCK MINES LTD.
Geophysical Report on the
ED 1-14; EHL 1-12 and Belle 1-42
mineral claims
Liard Mining Division, B. C.
57°29'N, 127°05'W
NTS 94-E-6

ALRAE ENGINEERING LTD.

April 20, 1970

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ALRAE ENGINEERING LTD.
VANCOUVER, B.C.
ENGINEERS & GEOLOGISTS

SUMMARY

1. Red Rock Mines Ltd. (N.P.L.) holds 68 claims in the Toodoggone River area of B. C.

2. A magnetometer survey was conducted during March, 1970, by Alrae Engineering Ltd., of Vancouver.

3. Other than broad magnetic features which likely outline lithological changes, no significant anomalies were encountered.

4. Much of the area of the claims was inaccessible because of snow conditions and the ruggedness of the terrain.

5. Areas not covered by the survey should be prospected in detail and the known showings trenched.

6. The cost of this preliminary work is estimated at \$6,400.00.

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MAPS (*Rev*)

#1 Magnetometer Survey - Instrument
Readings and Contours

Scale

1" = 400'

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. *2506* MAP

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INTRODUCTION

The following report covers the geophysical survey conducted between March 10 and March 23, 1970, by Alrae Engineering Ltd., of Vancouver, for Red Rock Mines Ltd. (N.P.L.).

The survey consisted of detailed magnetics using a Sharpe MF-1 fluxgate magnetometer. Before commencement of the survey, it was deemed necessary to stake the Belle 1-42 inclusive claims in order to adequately insure that the surveyed area was covered by the company's holdings, since heavy snow conditions prevented the actual location of many of the claim posts of the original ED and EHL claims.

Very little information is available on the area since the area has not been geologically mapped by government agencies and no detailed geological survey has been conducted by the present owners of the claims.

General geological information is extrapolated from Map 932A published by the Geological Survey of Canada.

LOCATION AND ACCESS

The claims are located approximately 165 miles southeast of Watson Lake in the Yukon Territory and 145 miles east of Telegraph Creek, B.C. The only reasonable access to the area is by aircraft. Float equipped aircraft can land on Lower Belle Lake at the northwest corner of the claims. The lake is located on Midas Creek, a tributary of the Toodoggone River, four miles to the south.

During the time of the survey, access to the claims from Lower Belle Lake was provided by bombardier-type snowmobile.

CLAIMS

The following is a list of the claim names which comprise the main claim group:

<u>Claim Name</u>	<u>Record Number</u>
ED 1-14, incl.	79411 - 79424
EHL 1-12, incl.	80595 - 80606
Belle 1-42, incl.	Not yet issued.

All claims are located within the Liard Mining Division.

GEOLOGY

Since no detailed geological information is available, only a very general picture of the geology can be given as extrapolated from G.S.C. Map 932A, Geological Map of British Columbia.

The area in which the claims are located lies between the Cassiar Mountains to the northwest and the Omineca Mountains to the southeast, and it would appear that the major portion of the area is underlain by sedimentary and volcanic rocks of the Cretaceous and/or Tertiary periods, probably the Ootsa Lake Group, Sloko Group or Sustut Group. Jurassic and/or Cretaceous acidic and intermediate intrusives make up the major portion of the Cassiar Mountains to the northwest and a good deal of the Omineca Mountains to the southeast. General trend of the mountains and formations in the area would be northwest-southeast and they form the west side of the Rocky Mountain trench.

Information obtained from prospectors who have been on the ground substantiates that the major portion of the rocks encountered are of volcanic or sedimentary origin.

ED and EHL claims were originally staked to cover several small sulphide showings which had been exposed in the bottoms of the

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creeks which drain the western cirques of Mount Gordonia. A one-half inch stringer of bornite was encountered on claim EHL 6 in a very small rock exposure. On claim EHL 8, pyrite, specular hematite and some copper stain was observed in the creek bottom. Also, on claim ED 12, a stringer of massive pyrite with some chalcopyrite occurs in a small shear within the volcanics.

MAGNETOMETER SURVEY

The accessible part of the claim group was surveyed using a Sharpe model MF-1 fluxgate magnetometer with a carefully laid out ground control grid. The grid consisted of a base line 12,500 feet in length running approximately east-west, cross lines were established from this base line at 400 foot intervals. In the south portion of the property it was necessary to establish two alternate base lines. Base line B being 4,000 feet in length and base line C, 1,800 feet in length. Because of the ruggedness of the terrain and possible snow avalanche conditions, only the valley floors were able to be surveyed but every attempt was made to survey as much as possible without risking the safety of the personnel involved.

All base lines and cross lines were picketed, blazed and flagged with each 100 foot station being clearly marked by a numbered flag.

Readings were taken at 100 foot intervals along the base lines and along the cross lines. During the completion of the survey it was not felt that any areas were significantly anomalous to warrant any detailed magnetic work.

Diurnal corrections and day-to-day instrument corrections were applied to all readings and the corrected readings have been plotted on the accompanying map. The map also shows the contoured readings, grid lines, claim lines and topographic features.

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INTERPRETATION OF MAGNETIC SURVEY

The only significant magnetic feature encountered during the survey is a broad magnetic anomaly located on claims Belle 3, 4, 5 and 6. The relative magnetic relief averages 800 gammas with singular highs going to +1,000 gammas. On the Belle 15 and 16 claims another broad anomaly, having a relative magnetic relief of about 1,000 gammas, occurs. A great variance of magnetic readings occurs throughout the rest of the survey area consisting of many isolated magnetic highs as well as magnetic lows but there appears to be no obvious correlation between them.

In specific areas where sulphides are known to occur, no anomalous conditions which could be definitely related to these occurrences can be depicted.

The broad anomalous area at the west edge of the claim group suggests a change in lithology in that area and the anomaly on the Belle 15 and 16 claims would also appear to be a lithological change.

CONCLUSIONS AND RECOMMENDATIONS

Based strictly on a magnetic interpretation of the conducted survey, there does not appear to be any justification for proceeding with other programs on the property. However, much of the staked area was not covered by the survey because of impossible conditions and they should at least be prospected during the coming season. Also, the limited amount of work which has been done on the known sulphide occurrences has not ruled out the possibility of an expansion or extension of the zones.

It is recommended that when conditions are suitable for surface exploration that a two man prospecting party spend some time on the ground covering the areas which have not yet been looked at

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and trenching by drilling and blasting those areas in which sulphide occurrences are known to exist. No work beyond this very preliminary stage can be recommended.

COST ESTIMATE

The estimated expenditures for a preliminary program of prospecting and trenching are listed below:

1 prospector and 1 assistant for 4 weeks	\$ 2,000.00
Camp and supplies	800.00
Transportation	1,500.00
Equipment rental	1,000.00
Engineering and supervision	400.00
Contingencies	<u>700.00</u>
	\$ <u>6,400.00</u>

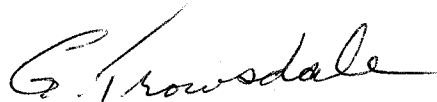
Any estimate of expenditure beyond this preliminary stage are unwarranted at this time.

Respectfully submitted:



D. L. McKelvie, P. Eng.

Declared before me at the
of **VANCOUVER, B.C.**, in the
Province of British Columbia
day of **AUG 10 1970**, A.D.
Sub-Mining Recorder



~~A Commission for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.~~

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APPENDIX A
Time and Cost Distribution
Magnetometer Survey
ED, EHL and Belle Claims

<u>PERSONNEL</u>	<u>OCCUPATION</u>	<u>DATES</u>	<u>WAGES</u>
D. Reinke	Field Supervisor	March 10-23/70	\$ 738.78
R. Smith	Inst. Operator	March 10-21/70	603.25
A. Wall	Line Cutter	March 10-21/70	543.25
C. Nelson	Line Cutter	March 10-21/70	543.25
R. Bailey	Line Cutter	March 10-21/70	543.25
R. Hatt	Cook	March 10-20/70	497.97
R. Jury	Geologist		50.00
D. McKelvie	Geologist		100.00
N. Grant Brown	Draftsman		310.00
			<u>\$ 3,929.75</u>
Equipment and supplies			1,143.23
Transportation			<u>1,853.60</u>
			<u>\$ 6,926.58</u>

651³⁰

And 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 28
day of April, A.D.

1970
Ed Brozin

A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.

CERTIFICATE

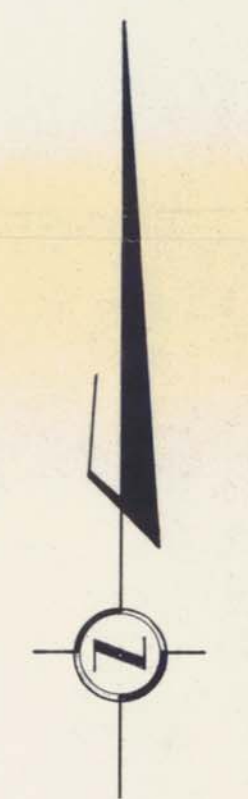
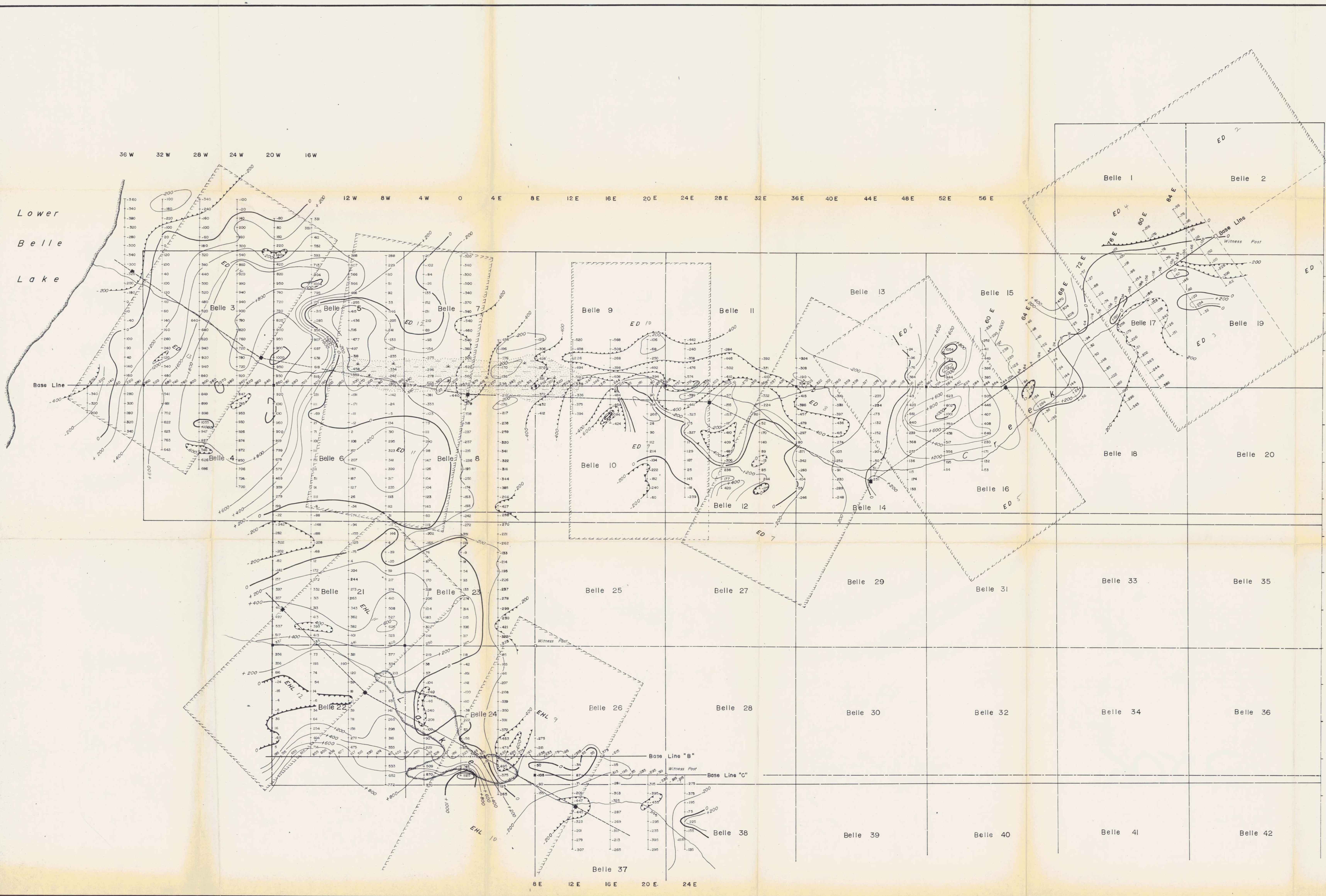
I, Dennis L. McKelvie, residing at 2589 Hoskins Road, North Vancouver, B.C., do hereby certify that:

1. I am a consulting geological engineer.
2. I graduated from the Provincial Institute of Mining, Haileybury, Ontario, in 1954.
3. I graduated from Queen's University, Kingston, Ontario, in 1958 with a B.Sc. degree in Geological Sciences (Engineering).
4. I am a registered Professional Engineer in the Provinces of British Columbia and Ontario and a fellow of the Geological Association of Canada.
5. I have practiced my profession since 1958 in the employ of McIntyre Porcupine Mines Limited, American Smelting and Refining Company, and Alrae Engineering Ltd.
6. I have not personally examined the property described in this report.
7. I have no interest, either directly or indirectly, in the securities or properties of Red Rock Mines Ltd. (N.P.L.).

DATED AT VANCOUVER, this 20th day of April, A.D. 1970.



D. L. McKelvie, P. Eng.



LEGEND

- Magnetic contour
- Magnetic low
- Contour interval 200 gammas
- Claim post - Belle, ED and EHL
- Claim line - Belle, ED and EHL
- Survey line - station and reading in gammas
- Location line - Belle
- Location line - ED and EHL
- Edge of lake
- Swamp
- Creek

INSTRUMENT USED Sharpe MFI

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2506 MAP #1

NOTE: To accompany Geophysical Survey Report by D.L. McKelvie P. Eng. on the Belle, ED and EHL Claims, Liard Mining Division dated April 20, 1970

2506

ALRAE ENGINEERING LTD. CONSULTING ENGINEERS & GEOLOGISTS - VANCOUVER, CANADA	
RED ROCK MINES LTD. LOWER BELLE LAKE	
MAGNETOMETER SURVEY INSTRUMENT READINGS AND CONTOURS	
SCALE: 1 inch = 400 Feet	DESIGNED: D.R.
DATE: April 9, 1970	DRAWN: N.G.B.
REVISED:	CHECKED: R.G.J.
	MAP NO: