

1676

GEOPHYSICAL REPORT

Ronka E.M. 16 Survey

Dia, Vera and Pearl Groups
Highland Valley Property,
B.C.

of

KEL-GLEN MINES LTD. (N.P.L.)

Claim Sheet No.

Pukaist Creek, 4 miles N.W. of Quiltantan Lake,
22 miles by highway S.W. of Ashcroft

Lat. $50^{\circ}32'$ N., Long. $121^{\circ}07'$ W.

Work supervised by E.J. Lees, Ph.D., P.Eng.
Report written by E.J. Lees, Ph.D., P.Eng.

Work done May 6 - May 25, 1968
Report written June 2, 1968

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REPORT ON

Geophysical Ronka E.M. 16 Survey Kel-Glen Mines Ltd. (N.P.L.) Highland Valley Property Dia, Vera and Pearl Groups

INTRODUCTION

A geophysical survey was carried out with a Ronka E.M. 16 instrument over the Highland Valley property (Dia, Vera and Pearl groups), B.C. of Kel-Glen Mines Ltd. (N.P.L.)

CONCLUSIONS AND RECOMMENDATIONS

A number of conductors were indicated over the property. Any one, or several of these might indicate small high grade ore structures, or collectively a larger low grade mineralized body.

Because of a scarcity of outcrops and the widespread distribution of the conductors, a further narrowing of the more favorable areas is desirable.

It is recommended that the geochemical (soil sampling) survey commenced last fall be re-started. The more favorable sections delineated by the two preceding surveys could possibly be further delineated by a S.P. or Resistivity survey of selected areas.

An I.P. geophysical survey of the whole property would be more comprehensive in search for large copper-molybdenum bodies of the nature of those of Bethlehem Copper, Lornex and Highmont, neighbors of Kel-Glen.

When the results of the recommended surveys are assessed, this can be further considered. A concentrated search of the more favorable areas by bulldozer or drilling should await the results of geophysical and geochemical surveys.

PROPERTY

The property consists of two groups of contiguous claims separated by about $\frac{1}{4}$ mile as follows:

Vera 1-19, 21-23, 20 Fr., Te Fr.1, Te Fr.2	- 25 claims
Dia 1-5, 7-10	- <u>9 claims</u>
	34 claims
Pearl 1-10, Pearl Fr.1	<u>11 claims</u>
	TOTAL <u>45 claims</u>

ACCESS

The paved highway from Ashcroft to Bethlehem Copper Mine runs through the property, 22 miles south-east of Ashcroft.

GEOLOGY

The geology of the area is covered by Geological Survey of Canada, Memoir 262 Ashcroft Map-Area, B.C. by J. Duffell and K.C. McTaggart. The geological map 1010A - One inch to four miles accompanying this memoir shows the terrain on Kel-Glen's property to be entirely composed of the Guichon Creek batholith, the rock members of which are listed as granite, granodiorite, quartz diorite and diorite. Rock outcrops seen by Kel-Glen personnel on the property are sparse and are all medium grained granodiorite, or quartz diorite. Glacier-fluvial gravels form terraces and moraines on the mountain side. Gravels and probably other unconsolidated deposits fill the main valley of Pukaist Creek to depths of 200 feet.

LINE CUTTING AND E.M. 16 SURVEY

East-west lines were cut at 800 foot spacing and flagged at 100 foot intervals. Ronka E.M. 16 "in phase" and "quadrature" readings were taken at 100 foot intervals from a power broadcast originating near Seattle. All readings were taken with the instrument facing east.

Lines and E.M. readings are:

Dia	28,600 feet
Vera	48,900 feet
Pearl	<u>20,700 feet</u>
Total	98,200 feet or 18.6 miles.

The geophysical readings cover the property, except for the farm fields of 101 Ranch, which the Kel-Glen claims overlies in part.

RESULTS OF E.M. 16 SURVEY

A number of conductors were indicated by the geophysical survey and shown on the accompanying map upon which the profiles of readings are plotted. Three sets of these may be accounted for by surface structures. One set of anomalous results lies along a creek in the north-east corner of the Dia group, and may or may not be due to the creek. A second set of anomalous results follow a telephone or power line along the north side of the highway and may be ascribed to its influence. A third set is located at the east end of the property and may be accounted for by a wire fence and creek.

Other "cross-overs" representing conductors are widespread on the Dia, Vera and Pearl groups. Because the entire property is believed to be underlain by the favorable granodioritic intrusives, and rock-outcrops are few, further surveys will be required to ascertain the nature of the conductors.

PERSONNEL

The following personnel of Kel-Glen Mines Ltd. (N.P.L.) were employed on the line cutting and Ronka E.M. 16 survey of the Dia, Vera and Pearl groups, under the supervision of E.J. Lees.

Work in spring 1968 consists of:

E.J. Lees, Ph.D., P.Eng., 1614-1030 West Georgia St.,
Vancouver, B.C., Geologist

May 6	Travelling	8 hrs.	
7, 8	Supervision in field 2x10 =	20 hrs.	
9	Travelling	8 hrs.	
23-31	Plotting, interpretation, report 9x8 =	<u>72 hrs.</u>	108 hrs.

Tom Fenton, 1614-1030 West Georgia St.,
Vancouver, B.C., Foreman and Line Cutter

May 6	Travelling	8 hrs.	
8-22	Line cutting 15x10 =	150 hrs.	
23-24	Travelling and office 2x8 =	16 hrs.	
25	Breaking Camp, travelling	<u>8 hrs.</u>	182 hrs.

Erin Eagen, 3285 Virginia Park,
Windsor, Ont., Line Cutter

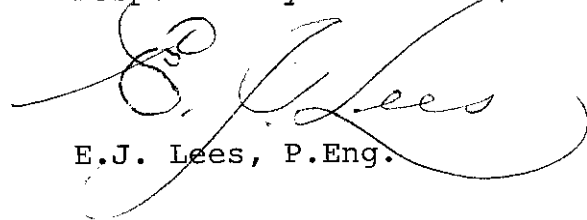
May 6	Travelling	8 hrs.	
7-24	Line cutting 18x10 =	180 hrs.	
25	Breaking Camp, travelling	<u>8 hrs.</u>	196 hrs.

Don Apps, Box 438, Cumberland, B.C.
Instrument Operator

May 6	Travelling	8 hrs.	
7-24	Operating Ronka E.M.16 18x10 =	180 hrs.	
25	Breaking Camp, travelling	<u>8 hrs.</u>	<u>196 hrs.</u>

Total Time 682 hrs.

Respectfully submitted,



E.J. Lees, P.Eng.

Vancouver, B.C.
June 2, 1968.



November 6th, 1968.

Mr. Frank J. Sell,
Mining Recorder,
Court House,
Kamloops, B.C.



Dear Sir,

Re: Dia, Vera, TE, Pearl Mineral Claims
Geophysical Report

I have your letter of October 28, 1968 regarding the qualifications of the instrument operator used on the above survey.

Mr. Don Apps of Comox, B.C. was the operator. He was trained by me this past spring in the use of the Ronka E.M. 16 instrument. I spent 2 days in constant attendance with him on the survey, supervising his every move. I also checked his work by having him cover several lines previously covered in similar fashion by another operator of similar training and found a reasonable agreement in results.

The interpretation of the survey was made by me.

My qualifications are:

B.A.Sc. U.B.C. 1927 Geological Engineering.
Ph.D. University of Toronto 1931 Geology.
P.Eng. B.C. 1939-1942, Ontario 1942-1965, B.C. 1967-1968.
Course Kirkland Lake Collegiate 1950 Electronics.
Course B.C. Institute of Technology 1967-1968 Geophysics.

Over 20 years as mine, field and exploration geologist with incident examining and laying out programs on basis of geophysical reports.

Yours truly,

KEL-GLEN MINES LTD. (N.P.L.)

Per:

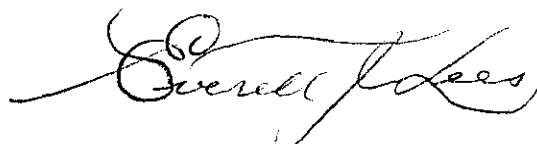
Everett J. Lees,
Geologist and Director.

C E R T I F I C A T E

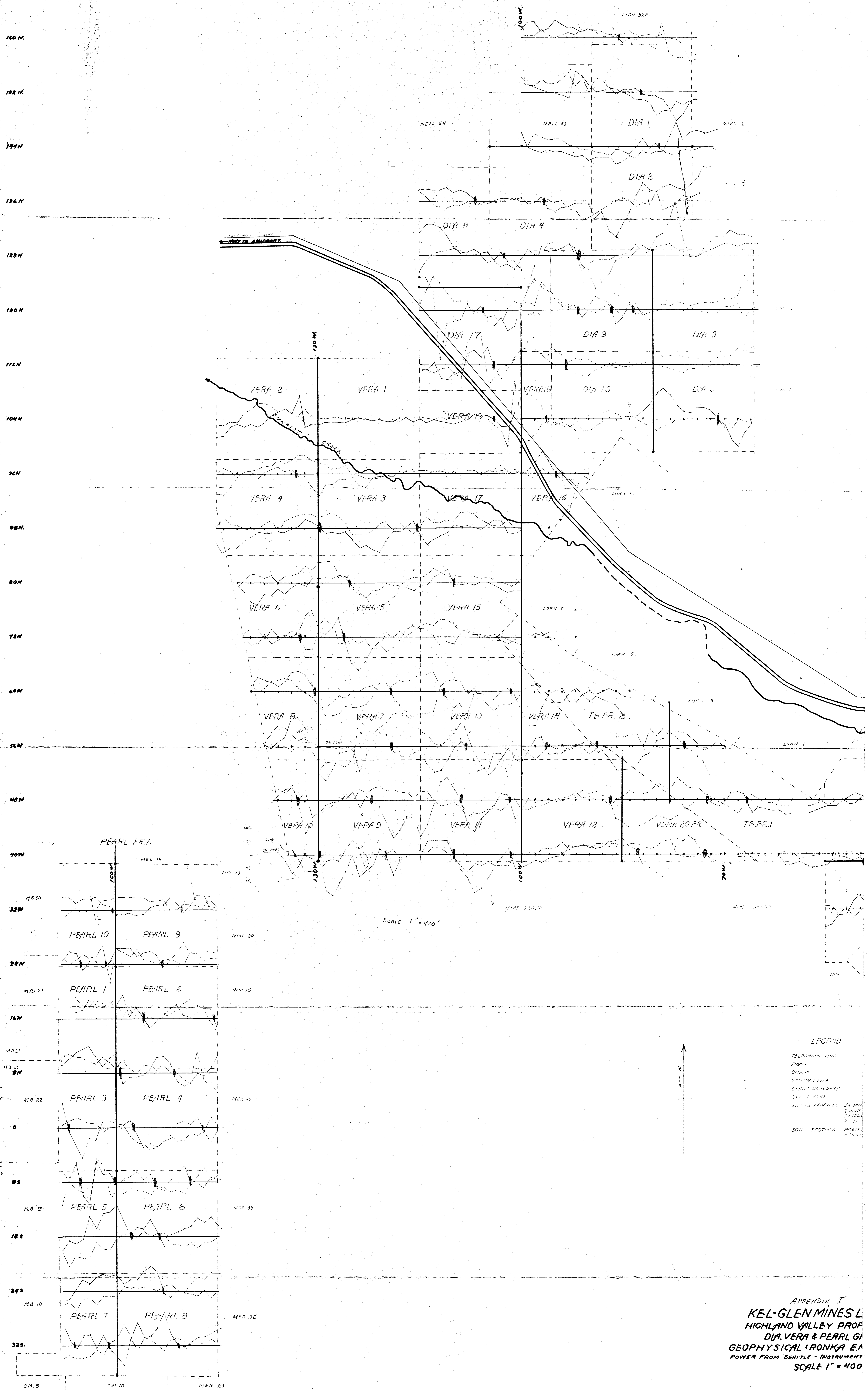
I, Everett John Lees, of the City of Vancouver,
in the Province of British Columbia, HEREBY CERTIFY:

- (1) That I am a Geological Engineer, and my address is
1614-1030 West Georgia Street, Vancouver 5, B.C.
- (2) That I am a graduate of the University of British
Columbia, with the degree of B.A. Sc. (1927) in Geological
Engineering and of the University of Toronto with the
degree of Ph.D. (1931) in geology.
- (3) That I am a registered Professional Engineer in the
Province of British Columbia.
- (4) That I have practised my profession as geologist for
more than twenty years.
- (5) That I am a director of Kel-Glen Mines Ltd. (N.P.L.)
and an employee of the company as geologist in charge
of technical programmes, and that I have a beneficial
share interest of less than 5% of the company's stock.
- (6) That I have no direct or indirect interest in any
Company acquiring control or intending to acquire
control of Kel-Glen Mines Ltd. (N.P.L.)
- (7) That I have exercised overall supervision and been
present on the property of the geophysical Ronka
E.M.16 survey of Kel-Glen's 42 claim group of claims
consisting of the Dia, Pearl, ^{TE} ~~Kel~~ Fr. 1, ^{TE} ~~Kel~~ Fr. 2
and Vera claims, Kamloops Mining District, B.C.

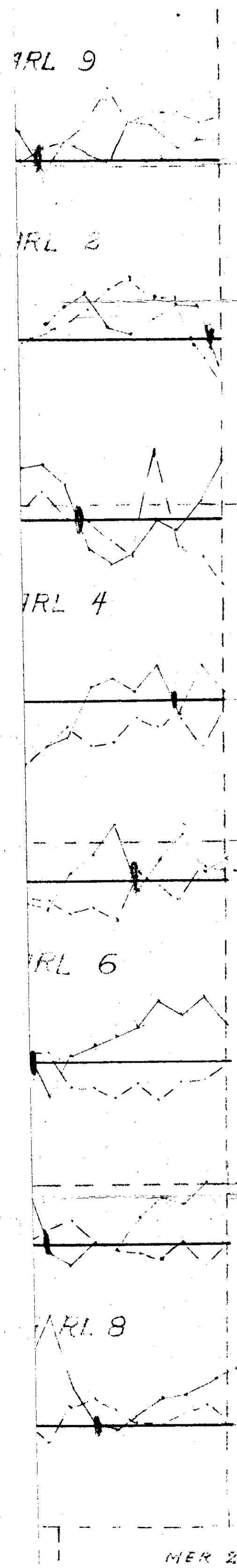
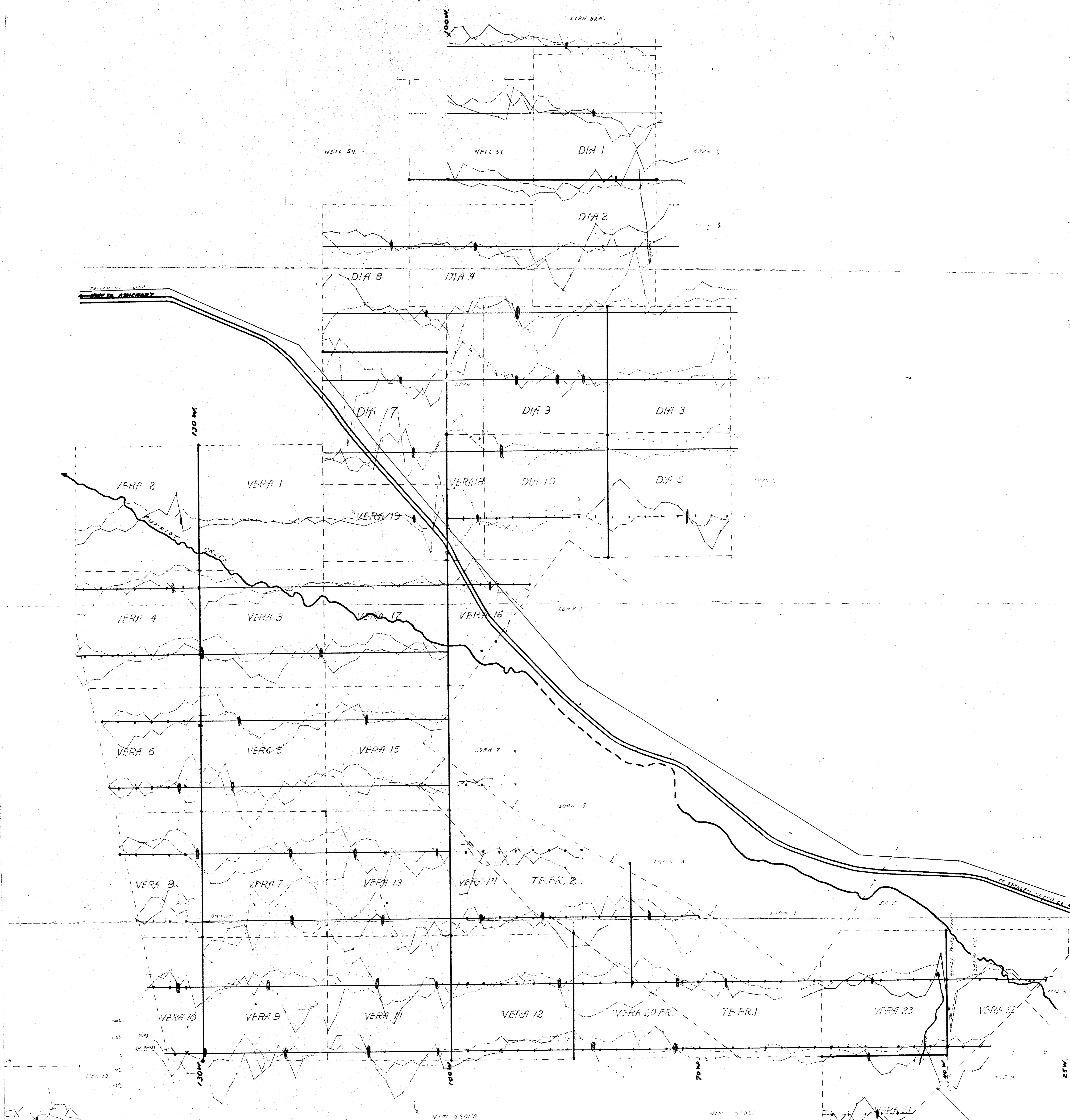
DATED this 10th day of September, 1968.



Everett J. Lees, Ph.D., P.Eng.
Geologist.



APPENDIX I
KEL-GLEN MINES L
HIGHLAND VALLEY PROP
DIJ, VERA & PEARL GR
GEOPHYSICAL (RONKA EA
POWER FROM SEATTLE - INSTRUMENT
SCALE 1" = 400'



SCALE 1" = 400'

LEGEND

- TELEPHONE LINE
- R.R.
- CHURN
- 3" DIA. PIPE
- CLAY BOUNDARY
- STEEL PIPE
- SOIL TESTING POSITIVE
- IN PLACE CONDUIT
- CONDUIT
- WIRE NUMBER 17-20%
- SOIL TESTING POSITIVE
- SOIL TESTING NEGATIVE

APPENDIX I
KEL-GLEN MINES LTD. (N.L.)
 HIGHLAND VALLEY PROPERTY B.C.
 DIAL, VERA & PEARL GROUPS
 GEOPHYSICAL (RONKA E.M. 16) SURVEY
 POWER FROM SEATTLE - INSTRUMENT ALWAYS FACING EAST.
 SCALE 1" = 400'

S. J. Lees, P. Eng.
 June 2, 1968.

Department of
 Mines and Petroleum Resources
 ASSESSMENT REPORT
 NO. 1676 MAP 1

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