

875
PART 2
OF 3

REPORT ON
GEOLOGICAL WORK DONE
ON THE
92 CLAIM PROPERTY OF
KEL-GLEN MINES LTD. (N.P.L.)
BRENDA LAKE AREA, PEACHLAND, B.C.
BY
EVERETT J. LEES, PH.D.

Vancouver, B.C.,
November 7, 1966.

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

Table of Contents

	<u>Page</u>
Summary and Conclusions	(1)
Introduction	(2)
Property	(2)
Access (Roads)	(3)
History	(3)
Physiography	(4)
Base Lines and Lateral Lines	(4)
Geological Mapping	(5)
Geophysical and Geochemical Surveys	(5)
Geology	(6)
Mineralization	(8)
Bulk sampling	(9)
Diamond drilling and Percussion drilling	(9)

APPENDIX I

Personnel and Time
Distribution

APPENDIX II
(IN POCKET)

Geological Maps
Scale 1" - 400' #1
North - - - - -
South # 2
Scale 1" - 100'
Detail No. 1 Anomaly # 3
NEW ROADS # 4

APPENDIX III

Diamond drill Logs
K.G. 1
K.G. 2
K.G. 3
K.G. 4

Summary and Conclusions


Kel-Glen Mines Ltd. (M.P.L.) holdings consist of 92 claims in two groups of 80 and 12 contiguous claims respectively, lying close together in the active Brenda Lake area, of Peachland district, B.C. The holdings adjoin the property of Brenda Mines Limited, on which a low grade molybdenite-copper ore body is being readied for production, on a scale that promises to be the largest in the Province. Kel-Glen's property also adjoins that of Noranda Mines Limited on which recent mineral finds, some of which are near Kel-Glen's border, have been found and are presently being worked on.

The claims comprising the holdings of Kel-Glen Mines Ltd. (M.P.L.) are newly staked by the company and 75% of them embrace the favourable granodiorite of the batholith in which Brenda's ore has been found. The other 25% are underlain by sedimentary rocks of the Nicola series.

Geophysical and geochemical surveys have indicated anomalies, some of which have been tested by diamond drilling, percussion drilling and bulk sampling. Significant values of molybdenum and copper were obtained in the bulk sample but drilling to date has not encountered ore in commercial quantity.

Details of the geology, diamond drilling and percussion drilling follow.

Respectfully submitted,


Everest C. Lees, Ph.D.
Geologist

Introduction

A programme of exploration and acquisition of claims has actively been carried out on Kel-Glen's property in the Brenda Lake area, B.C. during the past year under the able supervision of Mr. Carson Murray, who has been connected with the exploration of the principal properties of the district over the past several years.

Property

92 mineral claims comprise the holdings of Kel-Glen Mines Ltd. (N.P.L.) in the Nicola Mining Division. These claims are :

Rob 1 to 8, 11 and 12 and 15 to 30	26 claims	
Bob 1 and 2	2 claims	
Visc 1 to 6	6 claims	
Cam 1 to 8, 11 to 14, 16, 18, and 20 to 26	21 claims	
Marn 10 to 29 and 31, 33, 35 and 37	24 claims	
Kel Fraction 1	<u>1 claim</u>	
	Sub-total	80 claims
Marn 1 to 9	9 claims	
Glen Fraction 1	1 claim	
Tom 1 and 2	<u>2 claims</u>	
	Sub-total	12 claims
	Total	<u>92 claims</u>

In addition to the above enumerated claims, Cam 15, 17 and 19 were staked but it is not known how much if any or all of these three claims are oversteaking of adjoining property.

Access (Roads)

Access to Kel-Glen property is by an all-weather gravel road 31 miles in length to the northwest from the village of Peachland on the paved highway and on the Canadian Pacific Railroad, between the towns of Penticton and Kelowna. The gravel road crosses the western part of Kel-Glen property to the camp located off the property on a favourable camp site, consisting temporarily of five trailers, three tents, a motor generator and shack, and a pump for water supply.

New roads bulldozed on the property to give access for work consist of -

(1) Cut-off road from Peachland road to Hathaume Lake road. (This cuts off up to 4 miles of travel between parts of the property)	0.2 miles
(2) Peachland Road to I.P. Anomaly I	1.9 miles
(3) Peachland Road to Anomalous geochemical area	1.6 miles
(4) Peachland Road to I.P. Anomaly IV	2.0 miles
	<hr/>
Total new road constructed	5.7 miles

For the most part these can be travelled by four wheel drive vehicles and under favourable weather conditions by two wheel drive trucks.

History

The 92 claims held by Kel-Glen Mines Ltd. (N.P.L.) were acquired by staking in 1965 and 1966. No previous work is known to have been done on these claims. Early work done in the district consists of a prospect shaft and adit on a copper showing on property now held by Brenda Mines Limited and a few old adits towards Peachland, from which copper and silver are reported. No major development of minerals in the district took place until Brenda started developing their larger molybdenum-copper ore body in 1964. This sparked the present intensive exploration of the district.

Physiography

Rounded topography with a local relief of 1500 feet, at elevations of 4500 to 6000 feet, above sea-level, mountain streams, beaver meadows and a forest of jack pine up to 12 inches in diameter afford conditions for mining, tailings disposal water and timber supply on the property. Should mining development take place on a major scale, the Hatbourne Lake basin promises to afford a major, possibly artesian, source of water supply. Electric power is not at present available, but it's near proximity at Brenda Mines Limited may be expected upon the development of that property as a major producer.

Base lines and Lateral lines

54 miles of base lines and lateral lines were cut, chained and picketed at 100 foot intervals. The lateral lines cover the 92 claims of the property for the most part, at 800 foot spacing with detail lines at right angles to the lateral lines spaced at 200 feet on Marn claims 13, 14, 15, and 16 to cover and facilitate work on a geological contact where molybdenum and copper have been discovered. The purpose of these lines was to form a base for geological, geophysical and geochemical surveying of the property.

Geological Mapping

52 miles of the 54 miles of picket lines and two miles of roads were geologically mapped. The two miles of lines omitted were on Bob 1, Rob 11, 29 and 30 claims upon which no outcrops were reported by the line cutters. Outcrops visible from the lines (50 to 200 feet) were tied in variously by pace, compass and visual estimation. Since the picket lines were chained without allowance for slope the accuracy of the location of the outcrops are well within the accuracy of the pickets and the scale of the maps, namely 100 feet to the inch for detail areas and 400 feet to 1 inch for general mapping. The accuracy of the picket lines, because of the surrounding nature of the topography and skill of the experienced line cutters probably shows few discrepancies over 300 feet, in lines some of which are close to four miles in length. All geological mapping was personally done by Everett J. Lees, Ph.D., geological engineer.

Geophysical and Geochemical Surveys

A geophysical survey of 37 miles of lines by the Induced Potential Pulse Transient three electrode array method was done by Canadian Aero Surveys Limited.

A geochemical survey of 7.5 miles of lines embracing 404 samples sent out for commercial assay has also been carried out. Both these surveys have been separately reported on - it is sufficient to say here that five I.P. anomalies and 1 general anomalous geochemical area were determined.

Geology

The Kel-Glen property lies in the Nicola Water Shed, adjacent to the divide between the Nicola and Okanagan drainage systems. There are several mountain streams on the property. These streams flow north and northwest.

Pleistocene deposits are widespread. Glacial erratics are at all elevations on the property. Sand and gravel deposits form terraces up to 100 feet in height in the branch of the Nicola valley followed by the Peachland road. Pitted ice contact slopes of lateral moraines, - and terraces probably glaciolacustrine, at all elevations around higher hills attest to stagnation of the ice at closing stages of glaciation. Some small but persistent gravel ridges may be eskers. A few small hills have the appearance of drumlins. Ground and lateral moraine was noted from Marn 17 northward through to Rob 20 claims. Clay till forms the terrain around Kel-Glen camp. No outcrops are present in the ground moraine area except on Marn 25 claim where the Nicola river (creek) has cut through the moraine into bedrock.

Rock outcrops are abundant on the higher central portion or about 25% of the property. Glacial deposits are thin in these sections.

The extreme west portion of the property slopes down to a large creek and is devoid of rock outcrops.

Table of Formations

<u>Pleistocene</u>	Glacial sand, gravel, and till.
<u>Jurassic or Later</u>	Granodiorite and related leucogranodiorite Diorite Porphyry (Age ?)
<u>Triassic (Nicola Series)</u>	Greywacke and interbedded quartzite and argillite.

Greys medium grained, relatively unmetamorphosed biotite hornblende granodiorite of the Jurassic or later batholith

which contains the Brenda ore, forms the terrain under 75% of the property. Greywacke and interbedded quartzite and argillite of the Triassic Nicola series underlies the southwesterly 25% of it as judged from the few outcrops, there, and from geophysical surveys. The contact between the intrusive rocks and the sedimentary rocks trends 130° across Marn claims 13, 15 and 16 and maintains this direction for at least $\frac{1}{2}$ mile to the northwest and 1 mile to the southeast. Locally at the site where detailed work was done on Marn 16 claim, the sedimentary rocks strike 128° and dip 50° southwest. The granodiorite contact strikes 80° dip 45° south.

The granodiorite is coarse grained right up to the contact with locally 1 or 2 feet showing some chilling.

Leucogranodiorite dykes cut the sedimentary rocks south of the contact on Marn 16 claim and road to the west. These dykes are of variable composition in any one dyke varying from irregularly crystallized granodiorite to aplite and pegmatite with barren quartz lenses up to two feet wide. No mineralization other than pyrite was seen in these dykes.

One other fresh looking grey green coloured dyke tentatively considered a diorite porphyry has phenocrysts of hornblende and feldspar. It cuts sediments in a road cut west of Marn 16 claim.

Canadian Aero Surveys Limited induced potential, pulse transient survey shows an anomaly half a mile wide along the contact of granodiorite and greywacke across claims Marn 13, 15 and 16. For the most part it covers the sedimentary rocks but laps over into the granodiorite. The anomaly is of an intensity of 20 to 40 milliseconds which the geophysicists report represents from 2% to 10% average by volume of polarizable material. The source of this anomalous response is probably pyrite and graphite. Pyrite is conspicuous on fracture planes in greywacke and along with secondary biotite also in small lenses. There is less of it in the quartzite beds. Pyrite generally conspicuous by its absence in granodiorite is present in that intrusive for some tens of feet from the contact on Marn 16.

The geophysical (I.P.) survey of the southwestern part of Kel-Glen property where there are but few outcrops, and these of greywacke, argillaceous greywacke and quartzite exposed along a logging road-cut on Marn 8 claim was done later than most of the other work. A report by Canadian Aero Mineral Surveys Limited dated October 14, 1966 summarizes results of this survey as follows:

"A marked increase in the apparent resistivity values noted in the south area of Marn claims 1 and 3 and a distinct decrease in polarization response in the north area on Marn claim 12 might indicate changes in rock type. A detailed investigation of these two areas is recommended."

Mineralization

Molybdenite and chalcopyrite are in quartz and feldspar stringers up to one inch wide and in fractures in the granodiorite within a few tens of feet of the contact on Marn 16 claim. The molybdenite forms bright silvery grey fresh looking foliated crystals or blocks of considerable thickness and of thumbnail size. Chalcopyrite is present in this vicinity and also was seen in a few places elsewhere on the property.

Bulk sampling

A bulk sample was taken from granodiorite on No. 1 geophysical I.P. anomaly on Marn 16 claim. It assayed 0.088% molybdenum and 0.045% copper. These values are in the significant range where major tonnages of low grade ore are sought.

Diamond Drilling and Percussion Drilling

Four diamond drill holes totalling 1461 feet of 'A' core were drilled. Three of these were on the No. 1 I.P. anomaly and cut across the greywacke - granodiorite contact on Marn 16 claim from greywacke on the south to granodiorite to the north. The drilling on No. 1 anomaly intersected molybdenite and/or chalcopyrite in each of the holes. The fourth hole was on the extensive No. IV I.P. anomaly all in granodiorite and failed to get significant sulphide mineralization. Logs of the diamond drill holes accompany this report.

Percussion drilling totalling 2201 feet was carried out partly for blasting purposes on I.P. Anomaly I but largely as 4 holes on Anomaly I and II holes on anomaly IV and 8 holes on the geochemical anomaly. Low values in molybdenum and copper were obtained in assays of the cuttings.

The drilling to date, however, has not indicated ore in commercial quantity. Other anomalies and favourable area near to mineral finds on adjacent property remain to be tested. The property owes its potential to ore and mineral finds on its power/adjoining neighbours, Brenda Mines Limited and property of Noranda Mines Limited.

Respectfully submitted,


Everett J. Lees, Ph.D.,
Geologist


Vancouver, B.C.
November 7, 1966.

APPENDIX 1.

The following is a list of the personnel and time spent in the carrying out of geological mapping, logging of diamond drill core and time devoted to percussion drill work, carried out from May 15, 1966 to November 14, 1966.

Everett J. Lees, B.A.Sc., Ph.D. Geologist (only) Man days

Geological mapping days of 10 hour duration translated to 8 hour days May 16 to August 31 = $108 \times \frac{10}{8}$	135
Diamond drill logging and percussion drill records days of 8 hours September 1 to October 29 = $61 \times \frac{8}{8}$	61
Preparation of maps and reports October 30 to November 7 = $5 \times \frac{8}{8}$	5
<u>Total</u>	<u>201</u>


Everett J. Lees, Ph.D.
Geologist

Vancouver, B.C.
November 7, 1966.

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

Diamond Drill Holes

A.G. 1.

LOCATION - No. 1 Anomaly 95 & 65 W; 25 & 35 S

DIRECTION - N. 38° E

DIP - 45°

LENGTH - 490'

COMMENCED - September 22, 1966 FINISHED - October 1, 1966

CORE RECOVERY - 90%

FROM TO DESCRIPTION

0 7 Casing

7 137 Graywacke

7 - 68 greenish gray fine grained granular with some minute hornblende crystal and some streaks or beds with very fine brotite. Extremely fine grained pyrite and gray iron mineral is disseminated through the core. There is fine pyrite on fractures.

7 - 8½' surface alteration

16' foliation 70° C/A

17' ¼" lens of quartz with pyrite

21' ¾" epidotized, ¼" lens pyrite

68 - 83 Black argillaceous graywacke a few quartzite beds some pyrite on fractures.

73' Minor chalcopyrite is a 3" more quartzitic bed.

75 - 80 broken by fractures into small pieces, 50% core recovery for 5'. This is a more siliceous bed with more, and coarser pyrite.

83 - 137 Fine grained greenish grey graywacke, few biotitic bands, fair amount of fine pyrite in rock and in fissures.

- 94 Little epidote
- 106 Foliation 70° C/A (Core Axis)
- 110 3/4" 50% pyrite
- 114 and 115 Two inches each backed, epidote
- 137 - 139½ Granodiorite - grey medium grained with brotite
- 137 Free contact
- 139½ Frozen contact
- 139½ - 144½ Greywacke - fair amount of biotite in streaks,
fair amount of pyrite on fractures - minor chalcopyrite
- 144½ - 146 Leucogranodiorite, dense, unfractured, little
pyrite. Both contacts frozen
- 144½ contact at 50° C/A
- 146 contact at 20° C/A
- 146 - 148 Granodiorite, grey, medium grained biotite. 148'
contact open, minor pyrite
- 148 - 158½ Greywacke
- 148 - 150 Some small tongues of brotite granodiorite
in greywacke
- 148 - 155 Greenish silicified, some pyrite
- 153½ Little chalcopyrite
- 155 - 158½ Briotite in greywacke, some pyrite
- 158½ - 490' Granodiorite - biotite - hornblende granodiorite;
coarse grained, grey hypidiomorphic granular,
biotite becomes less abundant after first 25 feet
and most of the dark mineral is hornblende,
quartz is not abundant. The rock approaches
diorite in composition
- 169½ - ½ inch leucocratic granodiorite

- 172½ - 173½ 50% vein quartz with epidote, a little pyrite and salmon coloured feldspar on contact, some pyrite, minor chalcopyrite on tight contacts
- 178 Some pyrite on fractures
- 178 - 184 fair amount of pyrite on fractures
- 188 Chloritic fracture with pyrite 30° C/A
- 189 Chloritic fractures with pyrite 25° and 45° C/A
- 192 Chloritic fracture with pyrite minor chalcopyrite 40° C/A
- 197 Chloritic fracture with pyrite 40° C/A
- 204½ Chloritic fracture parallel C/A
- 206½ Chloritic fracture 40° C/A
- 208½ - 209½ ½" peach coloured feldspathic stringer parallel C/A for 9" Molybdenite in blebs along stringer, fair pyrite.
- 209½ - 230 Fair pyrite
- 224½ 1" leucogranodiorite, fair pyrite
- 230 Pyrite decreasing
- 240 - 258 Little pyrite, letter biotite
- 255 Little peach coloured feldspar, minor epidote
- 257° Slip 50° C/A, minor pyrite
- 258° Slip 45° C/A
- 303' Slip 70° C/A little leaching and pyrite
- 303½ Slip 50° C/A
- 307 Abhoritic slip 0° C/A
- 319 Pyrite abundant for 1 m/h

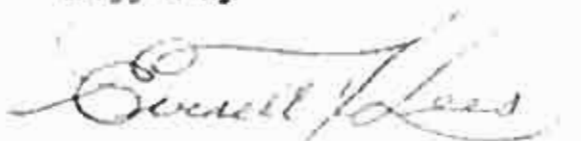
- 320 Slip 40° C/A little calcite
- 309½ - 330½ Broken core, some pyrite
- 337 Slip 45° C/A
- 343½ - 344 Slip 5° C/A
- 355 Slip 20° C/A
- 359 Slip 40° C/A
- 364½ Small irregular fracture with epidote and pyrite
- 372½ Chlorite slip 60° C/A
- 376 Chlorite slip 40° C/A
- 380 Chlorite slip 35° C/A
- 385 Chlorite slip 35° C/A
- 387 Chlorite slip 40° C/A some pyrite
- 397½ Tight fracture with pyrite 45° C/A
- 399½ Fracture with epidote 20° C/A
- 401 Fracture with chlorite and pyrite 50° C/A
- 410 Slip with pyrite, 40° C/A
- 411 Slip with 10° C/A
- 418 Slip 30° C/A some pyrite
- 421 Slip 45° C/A
- 432 Slip with pyrite
- 453½ 1" quartz with 30% pyrite, core broken
- 458 Core broken, fair pyrite
- 459 Core broken, little pyrite

473 - 473½ Leached a little

485 Broken and leached a little for 4"

490 and

Logged by



Everett J. Leas, Ph.D.
Geologist

Lost water 60'

Lost water 132 - 180'

Cemented at 60' and again at 180'

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

Diamond Drill Holes

K.G. 2.

LOCATION - No. 1 Anomaly 94 & 50 S. 26 & 95 W

DIRECTION - No. 38° E

DIP - 45°

LENGTH - 345'

COMMENCED - October 4, 1966. Finished October 13, 1966

CORE RECOVERY - 96%

FROM	TO	DESCRIPTION
0	9	<u>Casing</u>
9	59	<u>Greywacke</u> 0 - 37 Grey quartzitic, foliation probably bedding 60° to C/A (Core axis). Bands varying from brown with brotite to green with chlorite and grey with sericite. Pyrite on fractures. 40 - 59 Broken, cemented several times. 41 Two pieces about 1 cubic inch silicified and with pyrite. 51 Much biotite and 1 fragment ½ inch. long with pyrite. 52 Foliation 70° C/A. 56 Looks like rusty piece of steel Moly? Broken core to 59'. 59 73 <u>Granodiorite</u> - biotite. Light greenish grey. Fair amount of pyrite. 59 - 67 Broken.
73	85	<u>Greywacke</u> - Grey hornblended, some biotite and

- some pyrite. Foliation, (bedding) 70° C/A.
- 84 - 85 Small, pale pink garnets.
- 85 Contact open.
- 85 345 Granodiorite, Grey medium grained, hornblende,
some biotite.
- 85 - 86 1 - 2% pyrite.
- 109 Slip plane at 25° C/A, and 85° C/A
- 101 1" Hornblendic inclusion altered with 5% pyrite.
- 141 6" broken with pyrite.
- 143 Slip with 1/8" calcite 30° C/A.
- 143 Slip with 1/8" calcite 40° C/A.
- 143 - 144 Feldspars take on a salmon pink colour,
little pyrite.
- 150 Chloritic slip 30° C/A.
- 152 Molybdenite ? loose on core.
- 154 slip 25° C/A pyrite.
- 157 - 159 Leached some salmon pink feldspars,
some epidote and pyrite.
- 159½ Calcite fracture 70° C/A.
- 160 Chloritic fracture 20° C/A pyrite.
- 162 Calcite fracture, epidote? 25° C/A.
- 173 1/8" calcite slip with pyrite 60° C/A.
- 173½ 1/8" calcite slip with pyrite 20° C/A.
- 175 Chloritic slip 20° C/A.
- 176 1/8" calcite slip 60° C/A.
- 184 - 195 Broken core, 3/4 of it is gone. A
couple of pieces show leaching.

- 202½ Broken core, chloritic slips 60° C/A pyrite.
- 204 Smearred metallic mineral pyrite ? or Moly ?
- 205 - 211 Broken, 3 ft. missing.
- 210 Pyrite.
- 211 Calcite verg.
- 212 Calcite slip 70° C/A pyrite.
- 222 slip 50° C/A pyrite.
- 226 - 227 Broken core.
- 234½ - 240½ About 6" fragments some with pyrite
and a little chalcopyrite is all that was recovered.
- 241 ¼" quartz stringer 5% chalcopyrite.
- 244 - 244½ Broken with fairly heavy pyrite
on slips.
- 252 Chloritic slip 70° C/A pyrite.
- 258 ¼" calcite slip parallel to C/A.
- 265 Slip 70° C/A pyrite.
- 267 slip 40° C/A pyrite.
- 267½ Slip 30° C/A pyrite.
- 275 slip 80° C/A pyrite.
- 281½ Pyrite.
- 289 slip 70° C/A pyrite.
- 299 slip 60° C/A pyrite.
- 306 slip 60° C/A pyrite.
- 307 slip 60° C/A pyrite.
- 316 slip 45° C/A pyrite.

321 Chlorite slips and broken core 3 ft. lost

326 Mud.

329 - 3314 Broken core, epidote some pyrite.

332 Calcite slips 45° C/A.

345 MD

240' Cemented

Logged by

Everett J. Lees

Everett J. Lees, Ph.D.
Geologist

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

Diamond Drill Holes

K.G. 3.

LOCATION - No. 1 Anomaly 98 & 30 S. - 24 & 00 W

DIRECTION - No. 38° E.

DIP - 45°

LENGTH - 400'

COMMENCED - October 14, 1966 Finished October 20, 1966

CORE RECOVERY - 90%

FROM	TO	DESCRIPTION
0	11	Casing.
11	72	Greywacke, quartzite, with biotite bands and pyrite on fractures. 20' foliation 65° C/A. 41' pyrite and chlorite. 52' foliation 70° C/A - All somewhat broken to 52' 69' Silvery grey mineral on joint (unidentified).
72	90	Leucogranodiorite, varying to granodiorite, some pyrite.
90	106	Granodiorite - hornblende 94 Slip with pyrite 30° C/A.
106	118	Greywacke - leached for 6 inches at contact. Metamorphosed to hornblende hornfels. 109 Pyrite on slip 5° C/A.

- 106 - 114 Pyrite abundant on fractures.
- 118 173 Granodiorite - hornblende, biotite, medium grained.
- 137 - 139 Fracture parallel to core axis, some pyrite, rusty.
- 162 Slip 45° C/A. Pyrite foliation 65° C/A.
- 170 - 173 Tendency to leucocratic.
- 173 177 Greywacke - greenish quartzitic, some brown biotitic threads.
- 177 182 Granodiorite tending to leucocratic.
- 181 $\frac{3}{4}$ Small fissure with pyrite and chalcopyrite.
- 182 196 Greywacke
- 187 Fuggy with considerable pyrite.
- 192 " " " " .
- 193 Brown biotite foliation 70° C/A.
- 196 400 Granodiorite.
- 198 Pyrite on slip planes.
- 208 Slip 60° C/A pyrite.
- 221 " 50° C/A " .
- 232 - 233, Broken core, 5 feet missing, leucocratic spots pyrite and a little chalcopyrite.
- 233 Slip, pyrite.
- 245 Slip 70° C/A pyrite.
- 253 " 60° C/A " .
- 256 " " " .
- 277 $\frac{1}{2}$ " 40° C/A " .
- " 70° C/A " .

279 slip 70° C/A pyrite.

285 " 70° C/A " .

291 Chlorite slip 45° C/A.

291½" quartz and feldspar stringer ¼" molybdenite

298 Broken and leached.

310 2" mylonized, leached, garnets, pyrite.

314½ slip 70° C/A pyrite.

323-324 Several slips 25° to 45° for C/A.

325 slip 70° C/A pyrite.

326 ¼" quartz stringer 20° C/A.

334 ½" quartz feldspar band little pyrite 70° C/A

339 Pyrite.

340 Chlorite slip 60° C/A pyrite.

340½ Chlorite slip 60° C/A pyrite.

343 Seam pyrite 30° C/A.

346 Broken core, pyrite.

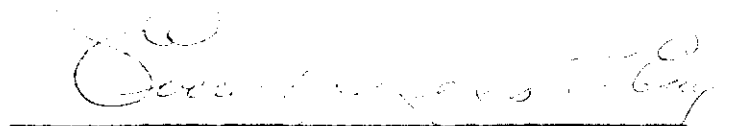
354 Pyrite.

369 " .

374 Broken core, pyrite.

400 End.

Logged by



Everett J. Lees, Ph.D.
Geologist

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

Diamond Drill Holes

K.G. 4.

LOCATION - Anomaly IV 32 N - 136 E

DIRECTION - 270° (due West)

DIP - -45°

LENGTH - 226½'

COMMENCED OCTOBER 25, 1966 FINISHED OCT. 28, 1966

CORE RECOVERY - 98%.

FROM	TO	DESCRIPTION
0	9	Casing.
9	226.5	Granodiorite (Hornblende - biotite, grey)
		26 Rusty fracture.
		29 - 30 Seam parallel C/A pyrite.
		42 Mud and weathered fracture 40° C/A
		46 Weathered fracture 30° C/A
		47 " " 30° C/A
		71 " "
		75 " " 25° C/A.
		79 " "
		82 " " little quartz 40° C/A.
		102 - 105 Weathered fracture 20° C/A.
		142 Weathered fracture 45° C/A.

147.5 - 151 Bleached weathered fracture 40° C/A.

151 - 179 Several joints with calcite.

184 Feldspar taks in salmon pink colour

185 6" Mud and broken rock.

226.5 End. No mineralization in this hole.

*Stopped 39 feet short of contract because of lack of water and freezing of line.

Logged by



Everett J. Lees, Ph.D.,
Geologist

The following is a list of the names of the persons who have been
 named in the above report, together with the date of their
 death, and the cause of death, as far as known.

Name	Date of Death	Cause of Death
John A. Smith	1880	Smallpox
James B. Jones	1881	Smallpox
William C. Brown	1882	Smallpox
Thomas D. White	1883	Smallpox
Robert E. Black	1884	Smallpox
Henry F. Green	1885	Smallpox
Charles G. Hall	1886	Smallpox
Edward H. King	1887	Smallpox
George I. Lee	1888	Smallpox
Frank J. Miller	1889	Smallpox
Samuel K. Davis	1890	Smallpox
John L. Wilson	1891	Smallpox
Richard M. Moore	1892	Smallpox
Joseph N. Taylor	1893	Smallpox
Benjamin O. Anderson	1894	Smallpox
Samuel P. Jackson	1895	Smallpox
John Q. Adams	1896	Smallpox
William R. Nelson	1897	Smallpox
Thomas S. Phillips	1898	Smallpox
Robert T. Turner	1899	Smallpox
George U. Young	1900	Smallpox
Charles V. King	1901	Smallpox
Edward W. Wright	1902	Smallpox
Frank X. Green	1903	Smallpox
Samuel Y. Hall	1904	Smallpox
John Z. King	1905	Smallpox
Richard A. Lee	1906	Smallpox
Joseph B. Miller	1907	Smallpox
Benjamin C. Davis	1908	Smallpox
Samuel D. Wilson	1909	Smallpox
John E. Moore	1910	Smallpox
William F. Taylor	1911	Smallpox
Thomas G. Anderson	1912	Smallpox
Robert H. Jackson	1913	Smallpox
George I. Adams	1914	Smallpox
Charles J. Nelson	1915	Smallpox
Edward K. Phillips	1916	Smallpox
Frank L. Turner	1917	Smallpox
Samuel M. Young	1918	Smallpox
John N. King	1919	Smallpox
Richard O. Wright	1920	Smallpox
Joseph P. Green	1921	Smallpox
Benjamin Q. Hall	1922	Smallpox
Samuel R. King	1923	Smallpox
John S. Lee	1924	Smallpox
William T. Miller	1925	Smallpox
Thomas U. Davis	1926	Smallpox
Robert V. Wilson	1927	Smallpox
George W. Moore	1928	Smallpox
Charles X. Taylor	1929	Smallpox
Edward Y. Anderson	1930	Smallpox
Frank Z. Jackson	1931	Smallpox
Samuel A. Adams	1932	Smallpox
John B. Nelson	1933	Smallpox
Richard C. Phillips	1934	Smallpox
Joseph D. Turner	1935	Smallpox
Benjamin E. Young	1936	Smallpox
Samuel F. King	1937	Smallpox
John G. Lee	1938	Smallpox
William H. Miller	1939	Smallpox
Thomas I. Davis	1940	Smallpox
Robert J. Wilson	1941	Smallpox
George K. Moore	1942	Smallpox
Charles L. Taylor	1943	Smallpox
Edward M. Anderson	1944	Smallpox
Frank N. Jackson	1945	Smallpox
Samuel O. Adams	1946	Smallpox
John P. Nelson	1947	Smallpox
Richard Q. Phillips	1948	Smallpox
Joseph R. Turner	1949	Smallpox
Benjamin S. Young	1950	Smallpox
Samuel T. King	1951	Smallpox
John U. Lee	1952	Smallpox
William V. Miller	1953	Smallpox
Thomas W. Davis	1954	Smallpox
Robert X. Wilson	1955	Smallpox
George Y. Moore	1956	Smallpox
Charles Z. Taylor	1957	Smallpox
Edward A. Anderson	1958	Smallpox
Frank B. Jackson	1959	Smallpox
Samuel C. Adams	1960	Smallpox
John D. Nelson	1961	Smallpox
Richard E. Phillips	1962	Smallpox
Joseph F. Turner	1963	Smallpox
Benjamin G. Young	1964	Smallpox
Samuel H. King	1965	Smallpox
John I. Lee	1966	Smallpox
William J. Miller	1967	Smallpox
Thomas K. Davis	1968	Smallpox
Robert L. Wilson	1969	Smallpox
George M. Moore	1970	Smallpox
Charles N. Taylor	1971	Smallpox
Edward O. Anderson	1972	Smallpox
Frank P. Jackson	1973	Smallpox
Samuel Q. Adams	1974	Smallpox
John R. Nelson	1975	Smallpox
Richard S. Phillips	1976	Smallpox
Joseph T. Turner	1977	Smallpox
Benjamin U. Young	1978	Smallpox
Samuel V. King	1979	Smallpox
John W. Lee	1980	Smallpox
William X. Miller	1981	Smallpox
Thomas Y. Davis	1982	Smallpox
Robert Z. Wilson	1983	Smallpox
George A. Moore	1984	Smallpox
Charles B. Taylor	1985	Smallpox
Edward C. Anderson	1986	Smallpox
Frank D. Jackson	1987	Smallpox
Samuel E. Adams	1988	Smallpox
John F. Nelson	1989	Smallpox
Richard G. Phillips	1990	Smallpox
Joseph H. Turner	1991	Smallpox
Benjamin I. Young	1992	Smallpox
Samuel J. King	1993	Smallpox
John K. Lee	1994	Smallpox
William L. Miller	1995	Smallpox
Thomas M. Davis	1996	Smallpox
Robert N. Wilson	1997	Smallpox
George O. Moore	1998	Smallpox
Charles P. Taylor	1999	Smallpox
Edward Q. Anderson	2000	Smallpox
Frank R. Jackson	2001	Smallpox
Samuel S. Adams	2002	Smallpox
John T. Nelson	2003	Smallpox
Richard U. Phillips	2004	Smallpox
Joseph V. Turner	2005	Smallpox
Benjamin W. Young	2006	Smallpox
Samuel X. King	2007	Smallpox
John Y. Lee	2008	Smallpox
William Z. Miller	2009	Smallpox
Thomas A. Davis	2010	Smallpox
Robert B. Wilson	2011	Smallpox
George C. Moore	2012	Smallpox
Charles D. Taylor	2013	Smallpox
Edward E. Anderson	2014	Smallpox
Frank F. Jackson	2015	Smallpox
Samuel G. Adams	2016	Smallpox
John H. Nelson	2017	Smallpox
Richard I. Phillips	2018	Smallpox
Joseph J. Turner	2019	Smallpox
Benjamin K. Young	2020	Smallpox
Samuel L. King	2021	Smallpox
John M. Lee	2022	Smallpox
William N. Miller	2023	Smallpox
Thomas O. Davis	2024	Smallpox
Robert P. Wilson	2025	Smallpox
George Q. Moore	2026	Smallpox
Charles R. Taylor	2027	Smallpox
Edward S. Anderson	2028	Smallpox
Frank T. Jackson	2029	Smallpox
Samuel U. Adams	2030	Smallpox
John V. Nelson	2031	Smallpox
Richard W. Phillips	2032	Smallpox
Joseph X. Turner	2033	Smallpox
Benjamin Y. Young	2034	Smallpox
Samuel Z. King	2035	Smallpox
John A. Lee	2036	Smallpox
William B. Miller	2037	Smallpox
Thomas C. Davis	2038	Smallpox
Robert D. Wilson	2039	Smallpox
George E. Moore	2040	Smallpox
Charles F. Taylor	2041	Smallpox
Edward G. Anderson	2042	Smallpox
Frank H. Jackson	2043	Smallpox
Samuel I. Adams	2044	Smallpox
John J. Nelson	2045	Smallpox
Richard K. Phillips	2046	Smallpox
Joseph L. Turner	2047	Smallpox
Benjamin M. Young	2048	Smallpox
Samuel N. King	2049	Smallpox
John O. Lee	2050	Smallpox
William P. Miller	2051	Smallpox
Thomas Q. Davis	2052	Smallpox
Robert R. Wilson	2053	Smallpox
George S. Moore	2054	Smallpox
Charles T. Taylor	2055	Smallpox
Edward U. Anderson	2056	Smallpox
Frank V. Jackson	2057	Smallpox
Samuel W. Adams	2058	Smallpox
John X. Nelson	2059	Smallpox
Richard Y. Phillips	2060	Smallpox
Joseph Z. Turner	2061	Smallpox
Benjamin A. Young	2062	Smallpox
Samuel B. King	2063	Smallpox
John C. Lee	2064	Smallpox
William D. Miller	2065	Smallpox
Thomas E. Davis	2066	Smallpox
Robert F. Wilson	2067	Smallpox
George G. Moore	2068	Smallpox
Charles H. Taylor	2069	Smallpox
Edward I. Anderson	2070	Smallpox
Frank J. Jackson	2071	Smallpox
Samuel K. Adams	2072	Smallpox
John L. Nelson	2073	Smallpox
Richard M. Phillips	2074	Smallpox
Joseph N. Turner	2075	Smallpox
Benjamin O. Young	2076	Smallpox
Samuel P. King	2077	Smallpox
John Q. Lee	2078	Smallpox
William R. Miller	2079	Smallpox
Thomas S. Davis	2080	Smallpox
Robert T. Wilson	2081	Smallpox
George U. Moore	2082	Smallpox
Charles V. Taylor	2083	Smallpox
Edward W. Anderson	2084	Smallpox
Frank X. Jackson	2085	Smallpox
Samuel Y. Adams	2086	Smallpox
John Z. Nelson	2087	Smallpox
Richard A. Phillips	2088	Smallpox
Joseph B. Turner	2089	Smallpox
Benjamin C. Young	2090	Smallpox
Samuel D. King	2091	Smallpox
John E. Lee	2092	Smallpox
William F. Miller	2093	Smallpox
Thomas G. Davis	2094	Smallpox
Robert H. Wilson	2095	Smallpox
George I. Moore	2096	Smallpox
Charles J. Taylor	2097	Smallpox
Edward K. Anderson	2098	Smallpox
Frank L. Jackson	2099	Smallpox
Samuel M. Adams	2100	Smallpox

The above list is based on the records of the
 County of [Name] and is subject to
 correction.

Date:

Date:

Date:

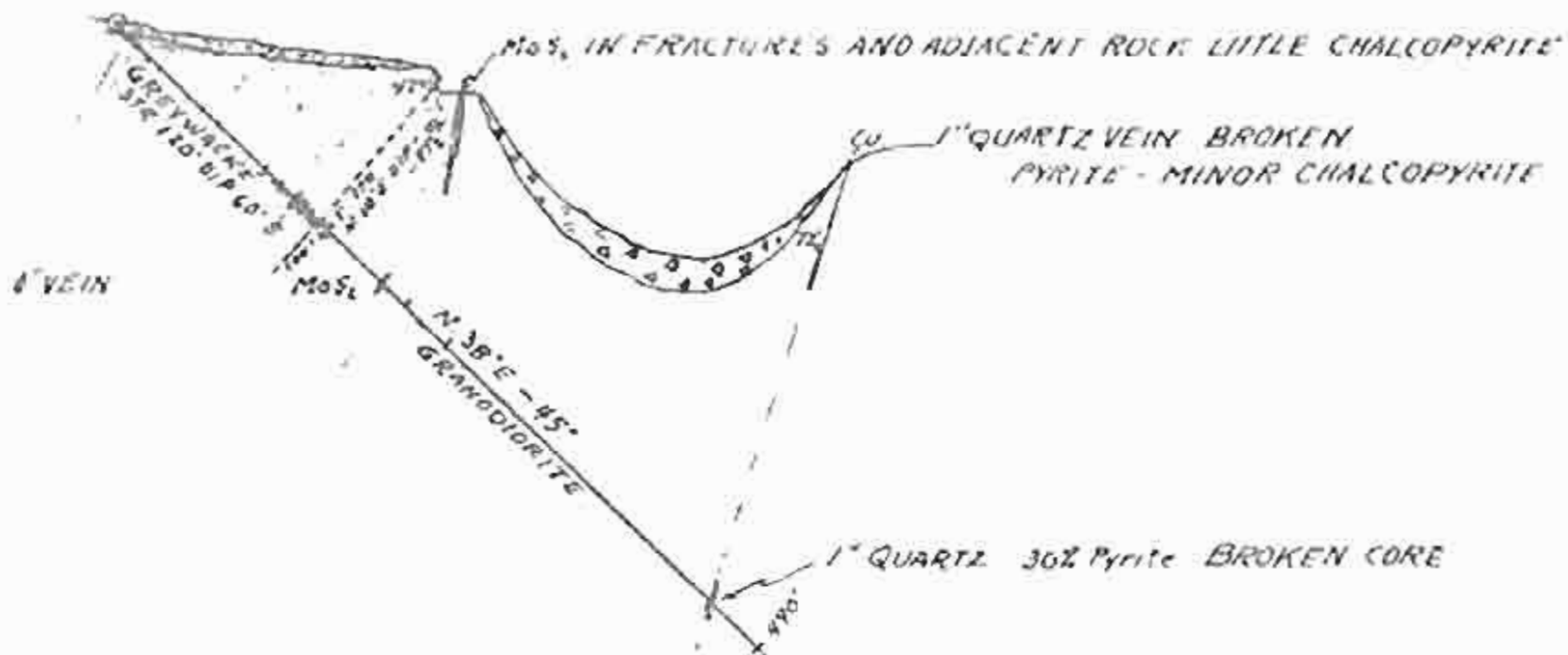
Date:

Date:

Date:

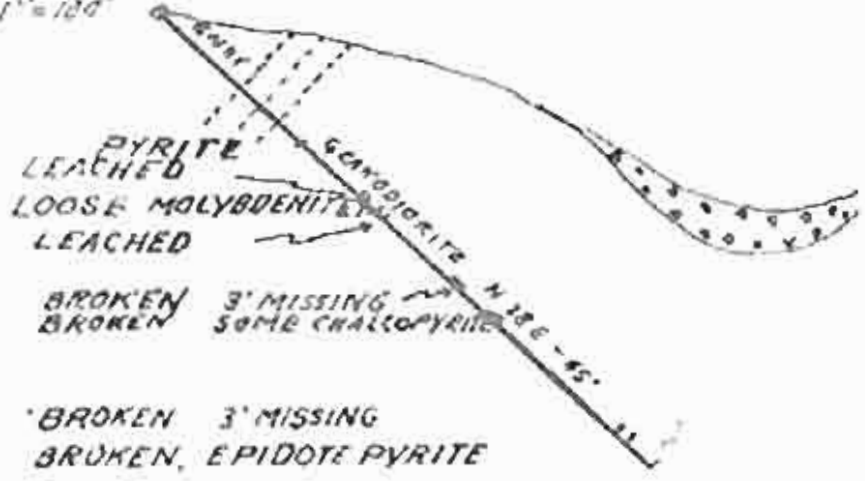
D.D.H. K.G.I

SCALE 1" = 100'



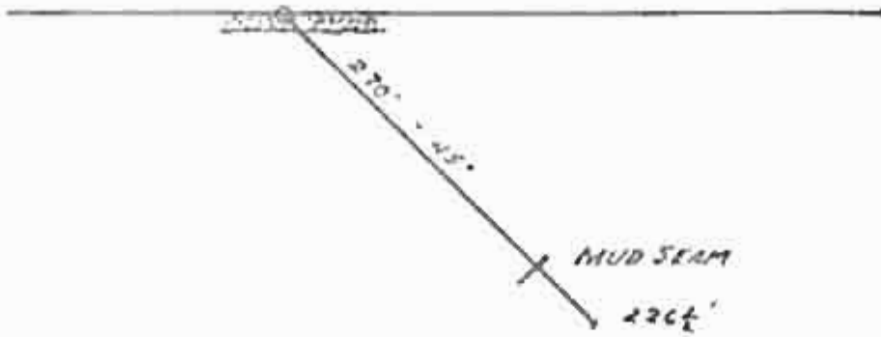
Small, thin, in vein
E.C.
Sept. 30/66

DDH K.G.L. 2
SCALE 1"=100'



[Handwritten signature]
K.G.L.
Dec 12/66

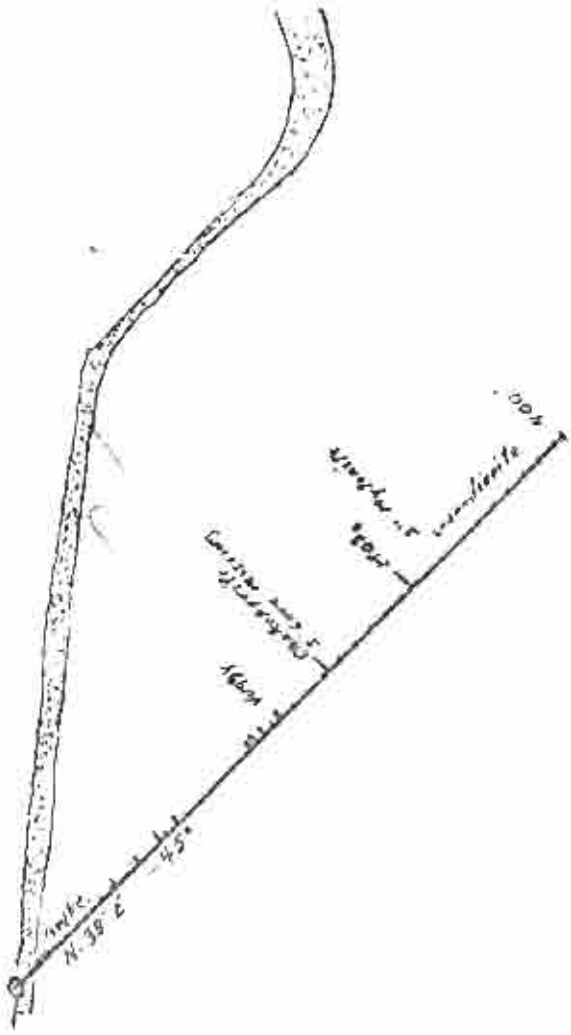
K.G. 4



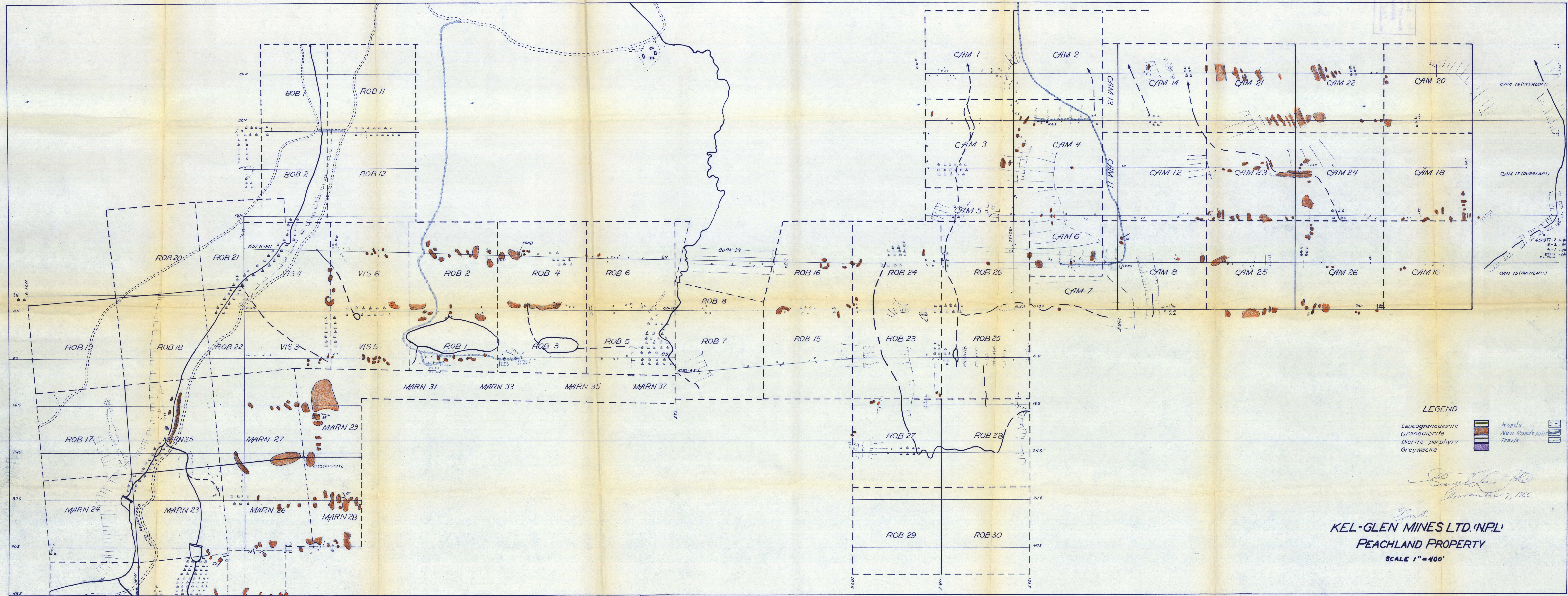
NO. IV ANOMALY

[Faint handwritten notes at the bottom of the page]

D.D.H. K.G. 3
SCALE 1" = 100'



Handwritten signature or note, possibly "D.D.H. K.G. 3"



Approved for Release by the
 National Security Council
 on 08-28-2014 pursuant to
 Executive Order 13526

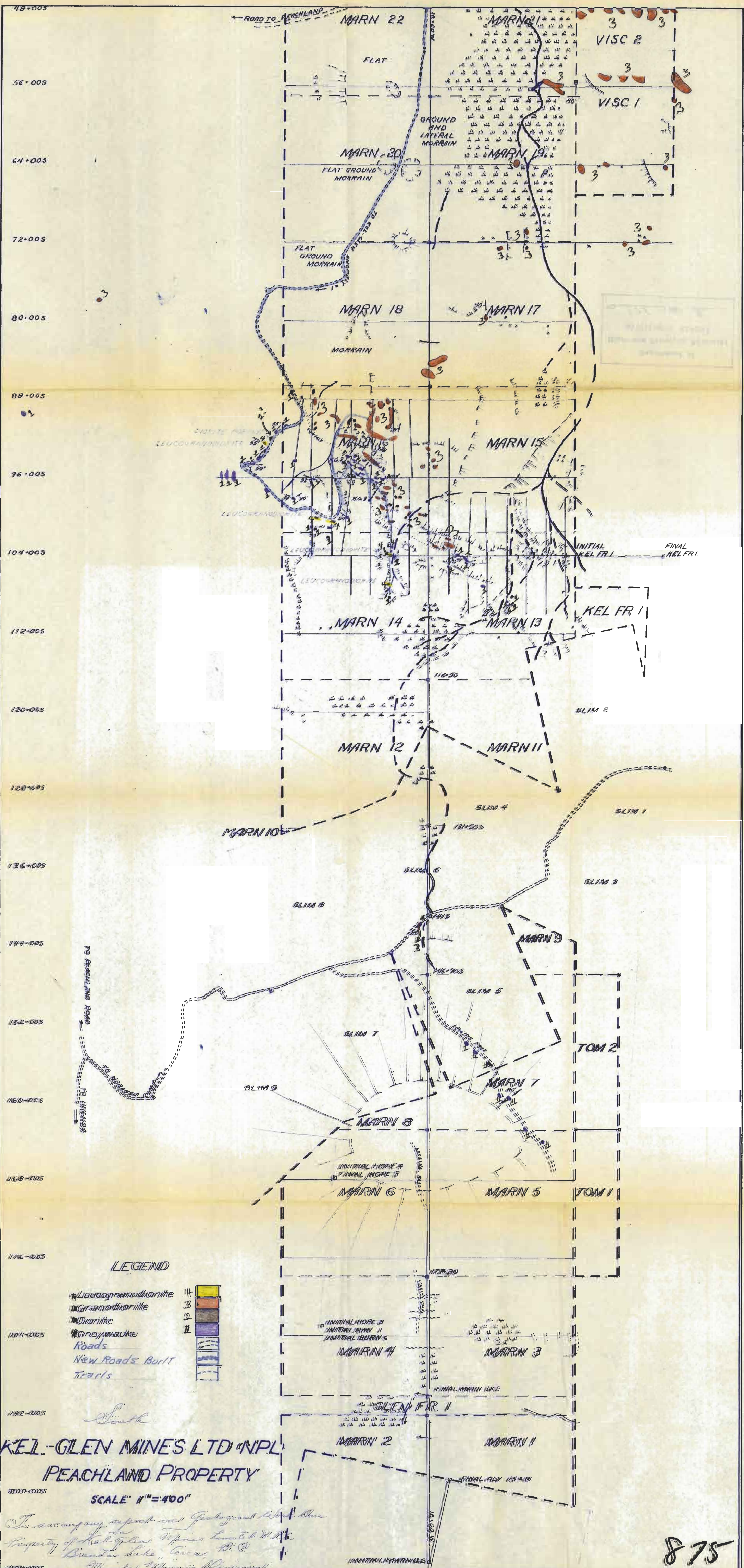
LEGEND

Leucogranodiorite		Roads	
Granodiorite		New Roads built	
Diorite porphyry		Trails	
Greywacke			

Ernest J. Lewis
 Geologist
 September 7, 1966

North
KEL-GLEN MINES LTD. (NPL)
PEACHLAND PROPERTY
 SCALE 1" = 400'

In accompanying report on Geological Work Done
 Property of Kel-Glen Mines Limited (NPL)
 Nevada Lakes Area, N.C.
 Nevada Mining Division
 by
Ernest J. Lewis Geologist
 September 7, 1966



48+005
56+005
64+005
72+005
80+005
88+005
96+005
104+005
112+005
120+005
128+005
136+005
144+005
152+005
160+005
168+005
176+005
180+005

LEGEND

Leucogranodiorite	4	
Gramodiorite	3	
Diorite	2	
Greywacke	1	
Roads		
New Roads Built		
Trails		

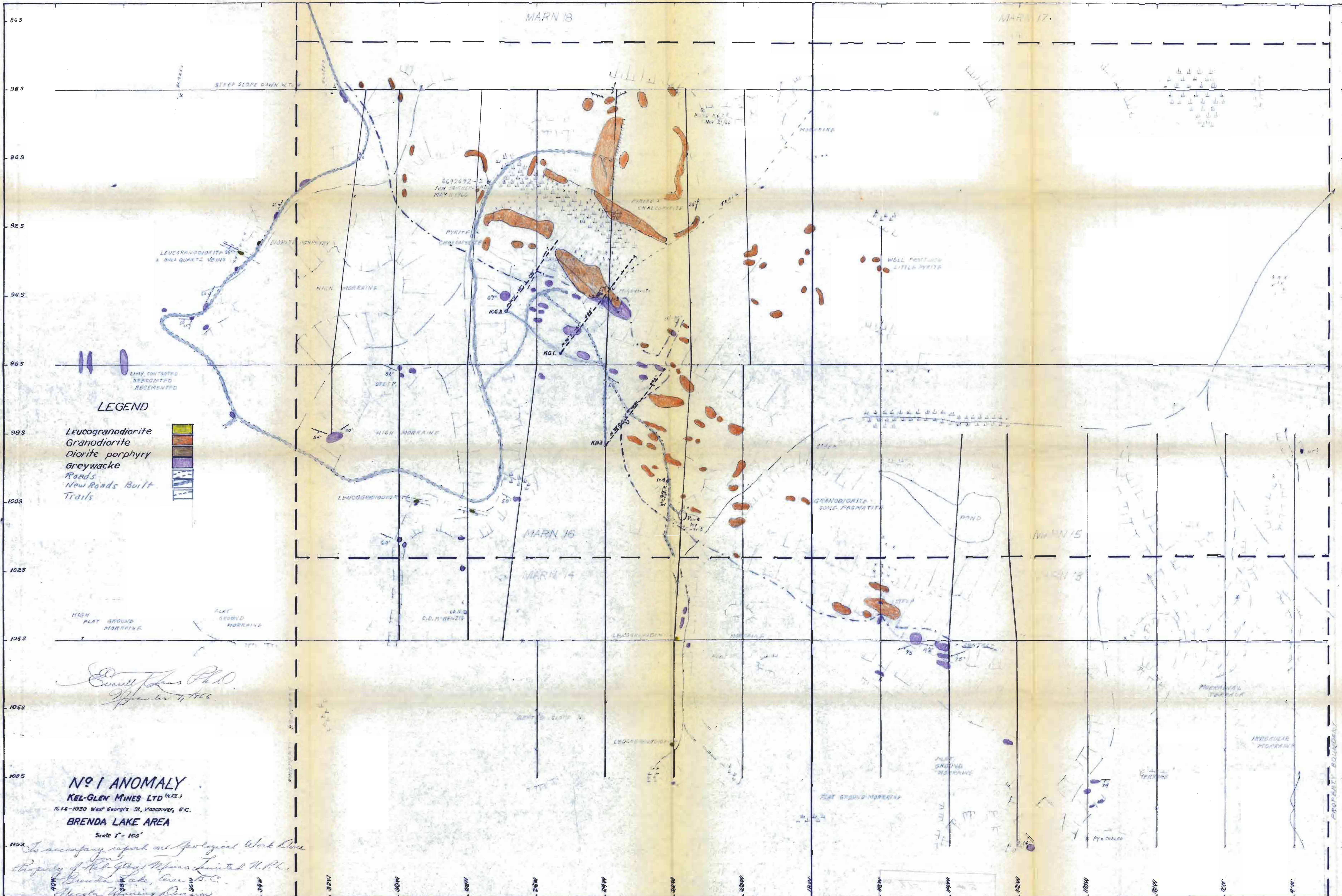
KEL-GLEN MINES LTD (NPL)
PEACHLAND PROPERTY
 SCALE 1" = 400'

This map was prepared by the Geological Department of Kel-Glen Mines Ltd. in connection with the development of the Peachland Property. It is based on the geological map of the Peachland area, prepared by the Geological Department of Kel-Glen Mines Ltd. in 1964. The map is a revision of the map of the Peachland area, prepared by the Geological Department of Kel-Glen Mines Ltd. in 1964. The map is a revision of the map of the Peachland area, prepared by the Geological Department of Kel-Glen Mines Ltd. in 1964.

Ernest J. Lees, P. O. Box 100, Vancouver, B.C.
 December 7, 1964.

875

Ernest J. Lees, P. O. Box 100, Vancouver, B.C.
 December 7, 1964



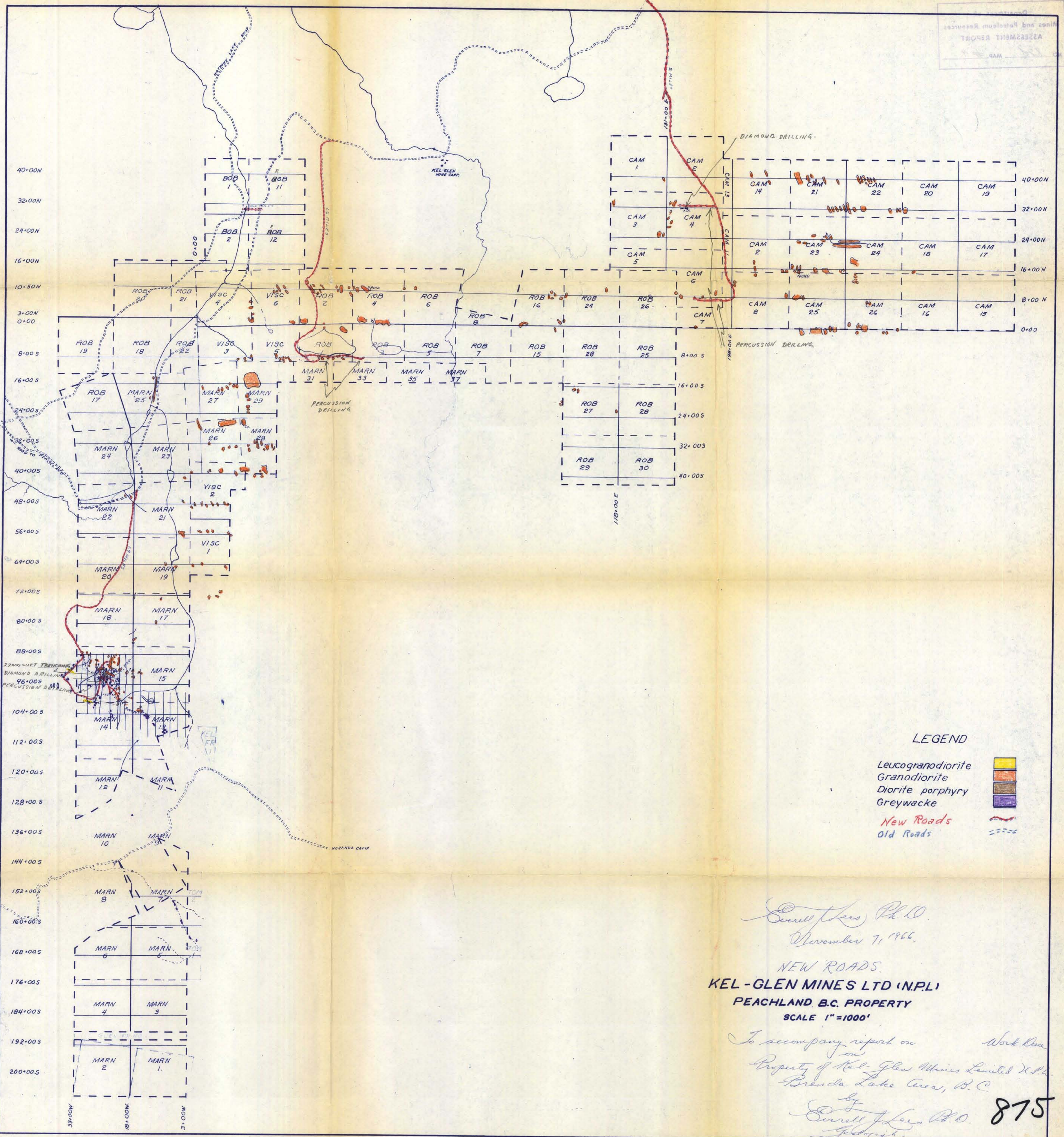
*Swerett Jones Ph.D.
November 7, 1966*

No. 1 ANOMALY
KEL-GLEN MINES LTD. (N.S.W.)
 1514-1030 West Georgia St., Vancouver, B.C.
BRENDA LAKE AREA
 Scale 1" = 100'

To accompany report on Geological Work Done
 Property of Kel-Glen Mines Limited N.P.L.
 Brenda Lake, near B.C.
 Nicola Mining Division

*Swerett Jones Ph.D.
November 7, 1966*

875 *Exp. 14, 1966*



LEGEND

- Leucogranodiorite
- Granodiorite
- Diorite porphyry
- Greywacke
- New Roads
- Old Roads

Everett Lees P. O.
 November 7, 1966.
 NEW ROADS.
KEL-GLEN MINES LTD (N.P.L.)
PEACHLAND B.C. PROPERTY
 SCALE 1"=1000'

To accompany report on *Work done*
 on
 Property of Kel-Glen Mines Limited (N.P.L.)
 Brenda Lake Area, B.C.
 by
Everett Lees P. O.
 Geologist.
 November 7, 1966 *E. L. Lees 1966*

875