

85-568-13906

GEOCHEMICAL, GEOLOGICAL AND GEOPHYSICAL REPORT

ON THE

PUMA GROUP

NTS 82E/5

OSOYDOS MINING DIVISION

LATITUDE 49 23'

LONGITUDE 119 49'

for

Grand National Resources Inc.

#905 - 626 West Pender Street

Vancouver, B.C.

V6B 1V9

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,906**

July 15, 1985

3501 - 16th Street

Vernon, B.C. V1T 3X7

Roy Kregosky

BSc. Geology

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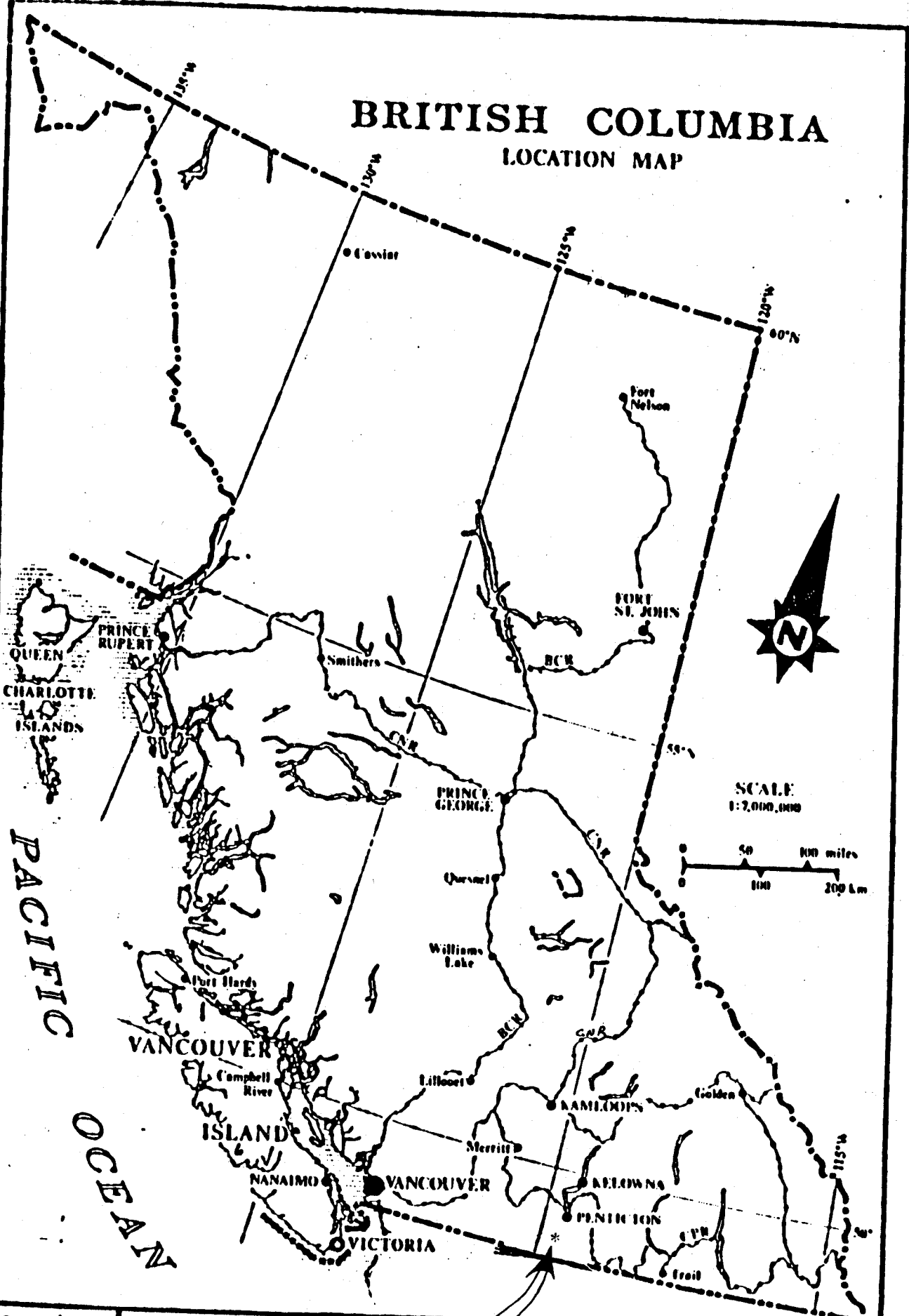
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# BRITISH COLUMBIA

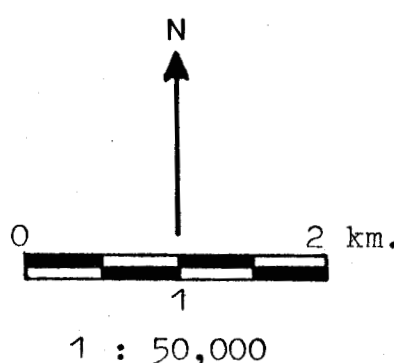
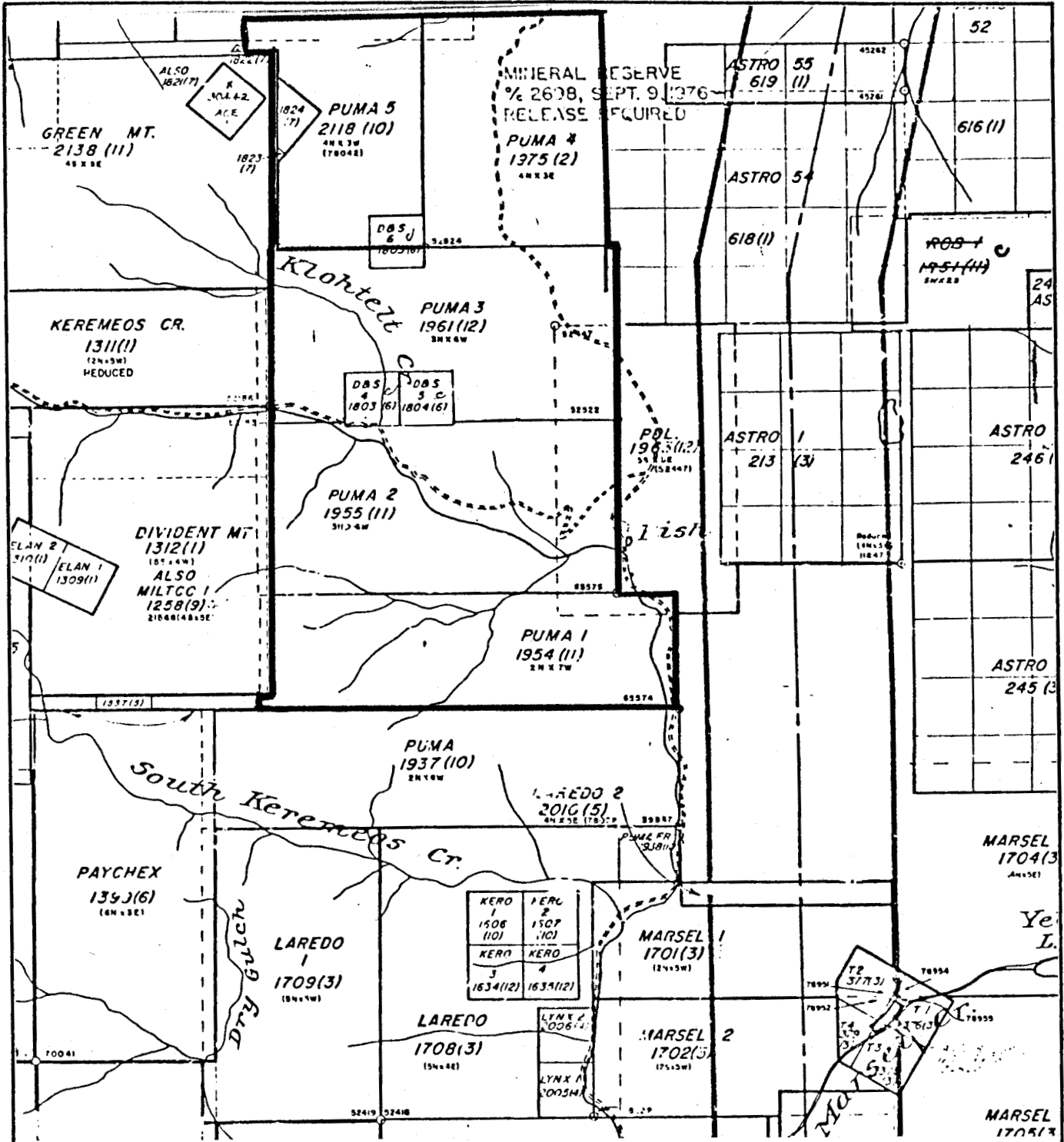
## LOCATION MAP



Monashee  
Geological  
Services

GRAND NATIONAL RESOURCES INC.  
Puma Group - Osoyoos Mining Division

DATE  
June 20/85  
FIG. No. 1

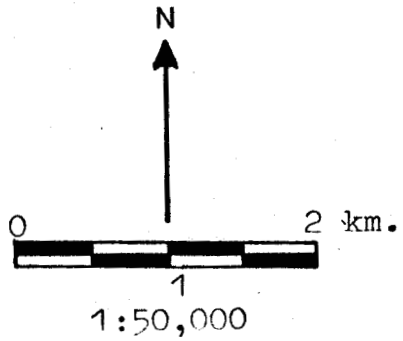
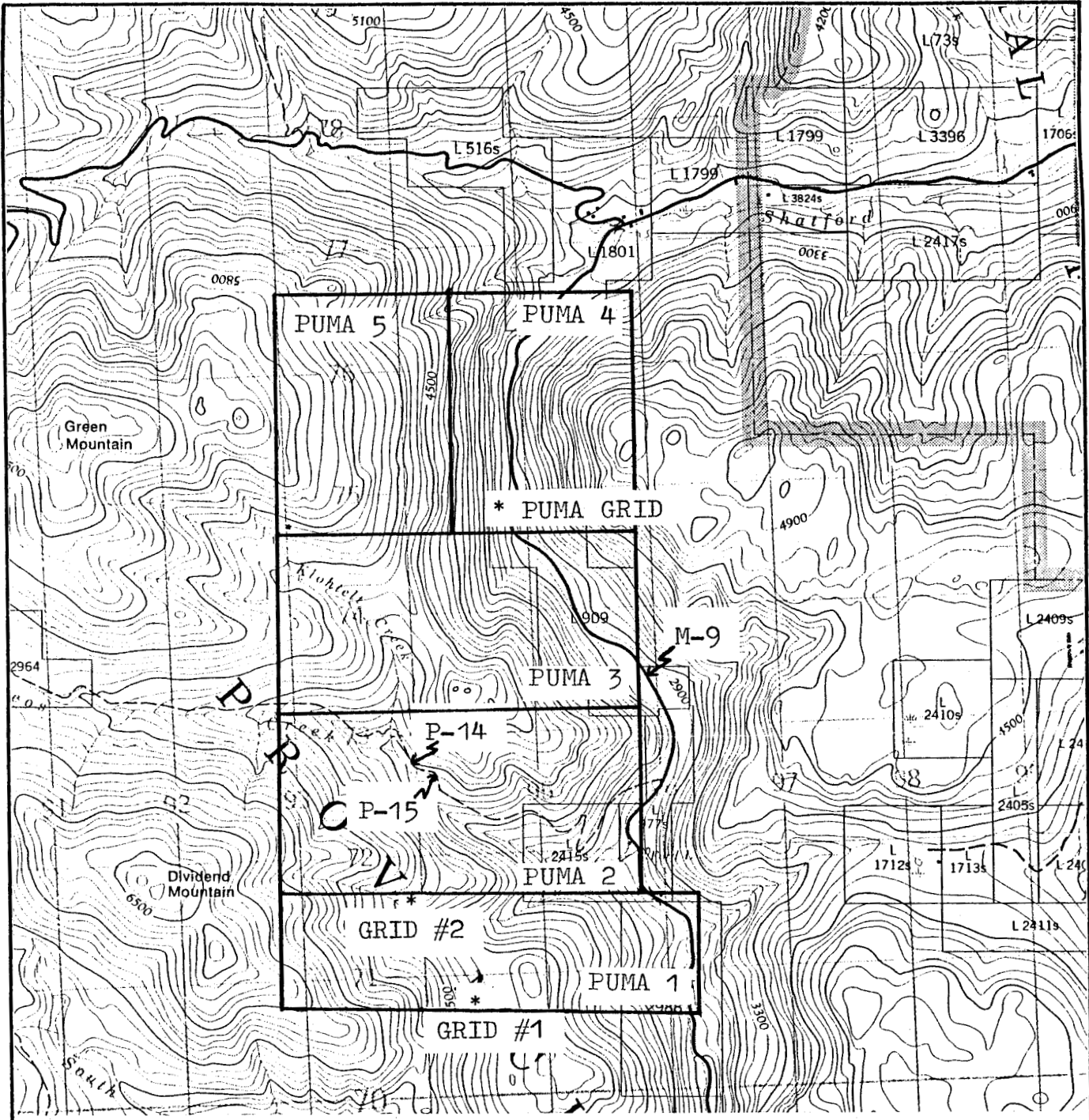


GRAND NATIONAL RESOURCES INC.

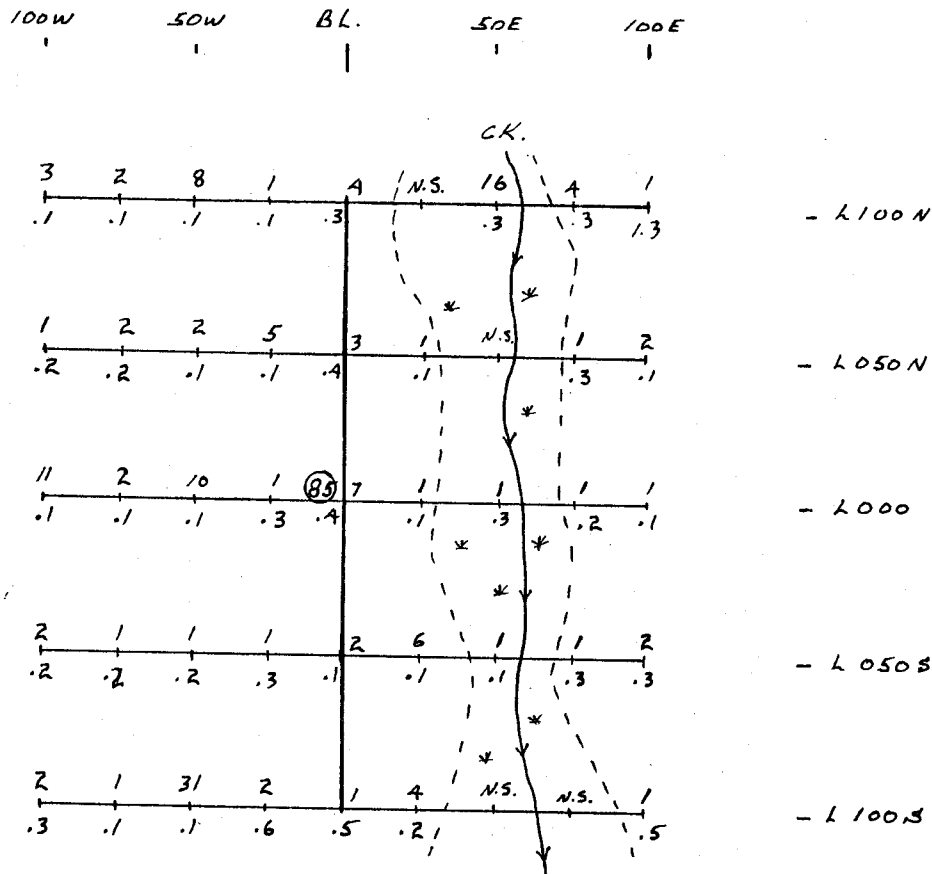
Puma Group - Osoyoos Mining Division

Claim Location Map

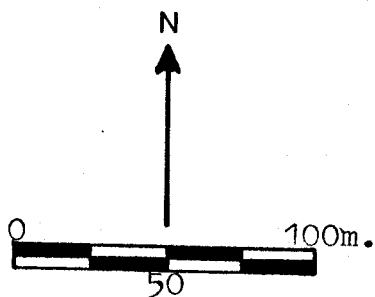
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| Monashee Geological Services | nts: 82E/5<br>June 20, 1985 | Fig. no. 2 |
|------------------------------|-----------------------------|------------|



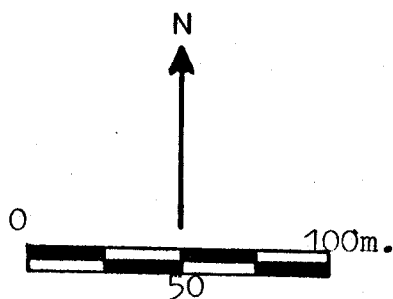
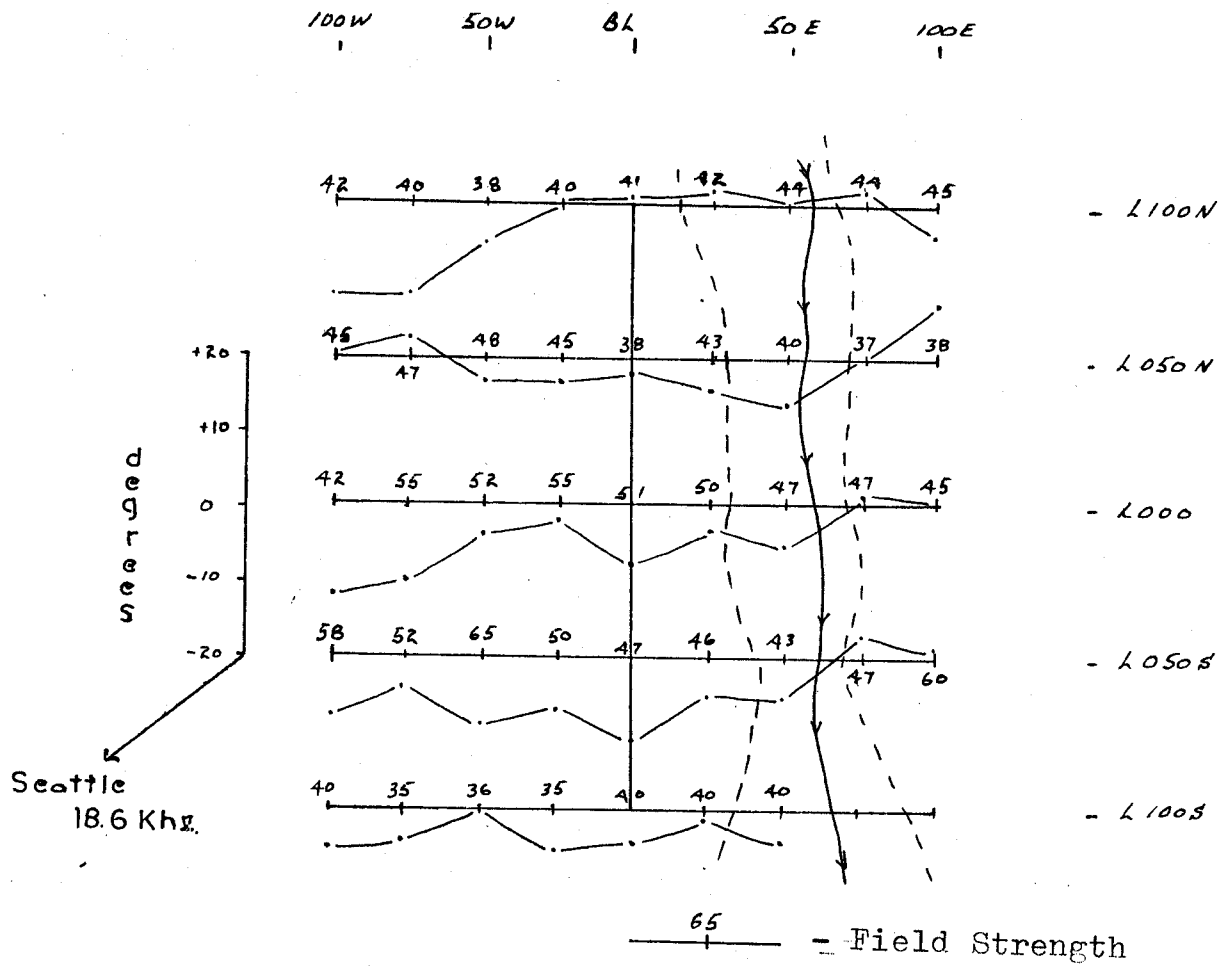
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| Survey Location Map                                                         |                             |            |
| Monashee<br>Geological<br>Services                                          | nts: 82E/5<br>June 20, 1985 | Fig. no. 3 |



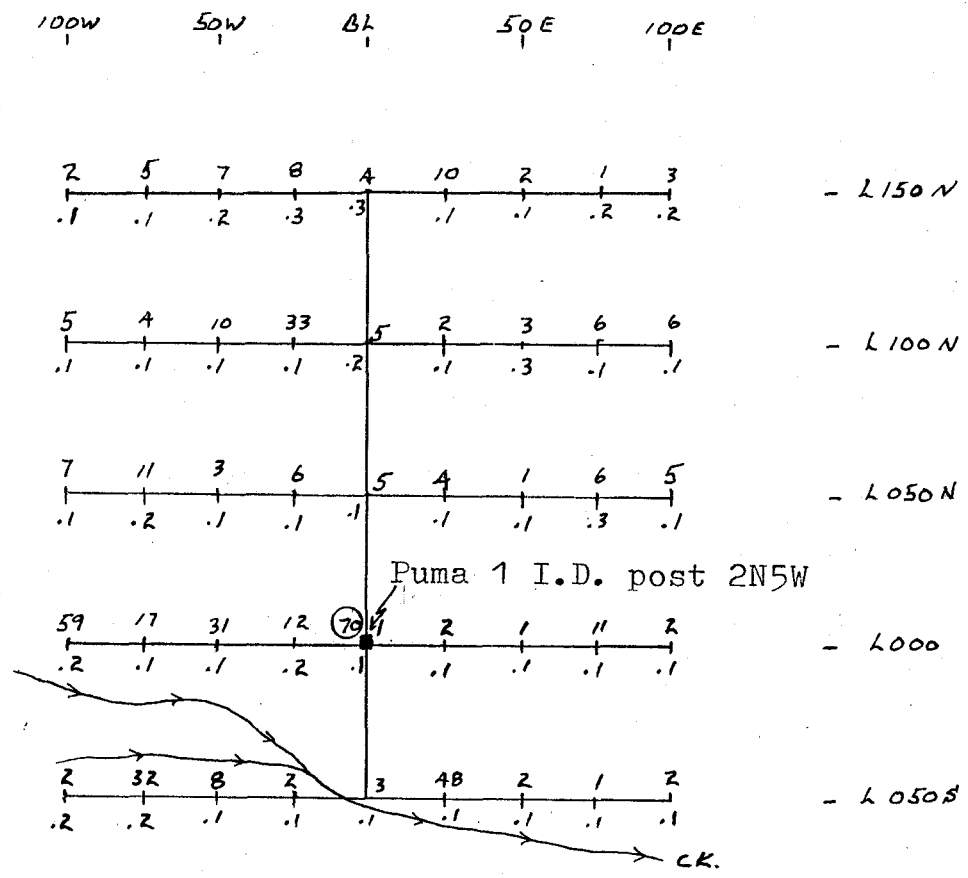
'83 sample 83 7 Au. ppb.  
4 Ag. ppm.



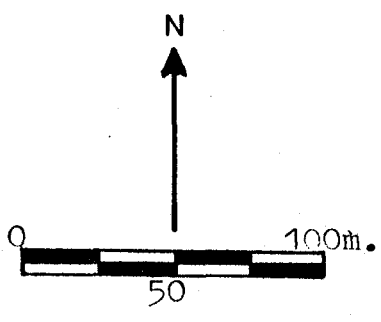
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| GRAND NATIONAL RESOURCES INC.        |                             |            |
| Puma Group - Osoyoos Mining Division |                             |            |
| Reconnaissance Geochemical Survey    |                             |            |
| Grid 1                               |                             |            |
| Monashee Geological Services         | nts: 82E/5<br>June 20, 1985 | Fig. no. 4 |



|                                      |                             |            |
|--------------------------------------|-----------------------------|------------|
| GRAND NATIONAL RESOURCES INC.        |                             |            |
| Puma Group - Osoyoos Mining Division |                             |            |
| Reconnaissance VLF-EM Survey         |                             |            |
| Grid 1                               |                             |            |
| Monashee<br>Geological<br>Services   | nts: 82E/5<br>June 20, 1985 | Fig. no. 5 |



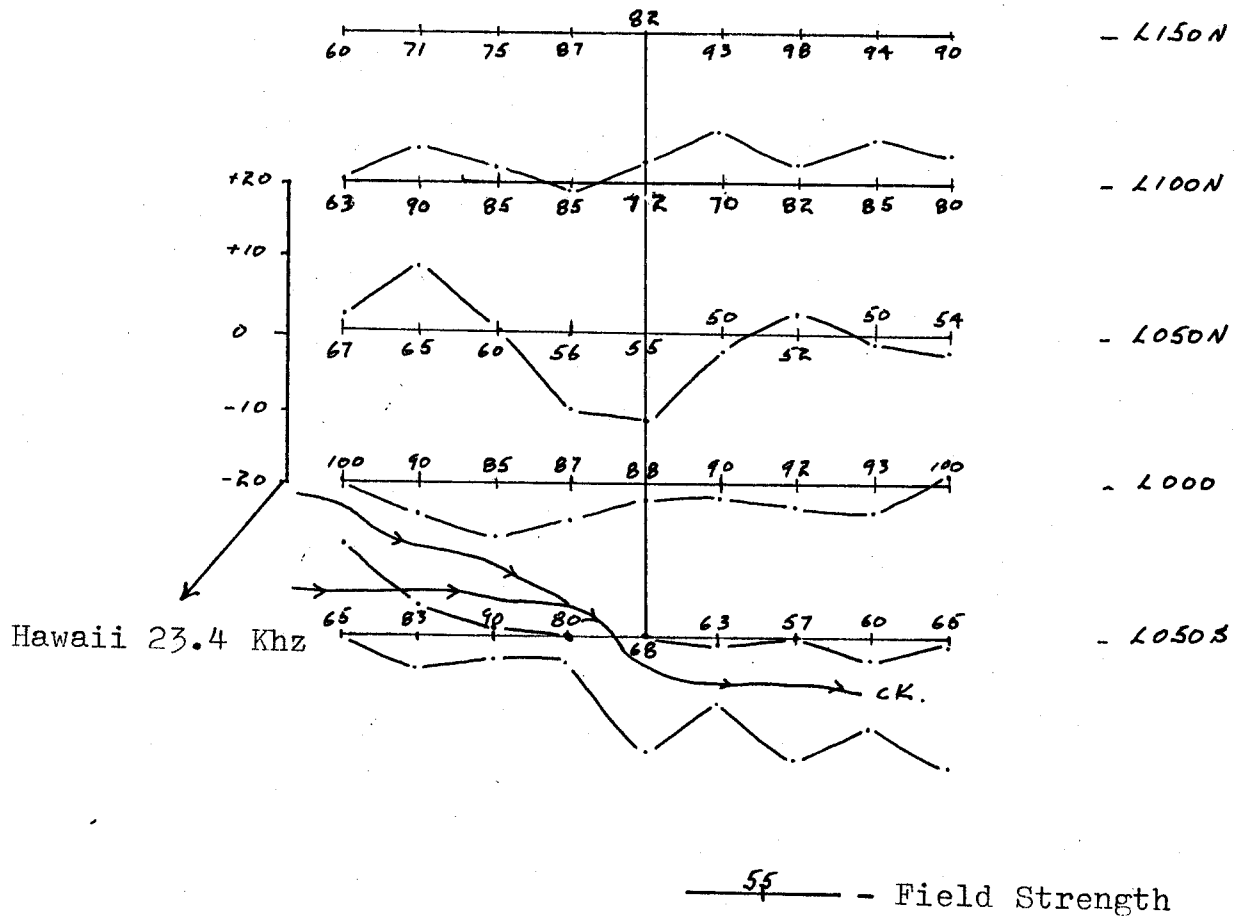
'83 sample 70, Au. ppb.  
 .1 Ag. ppm.



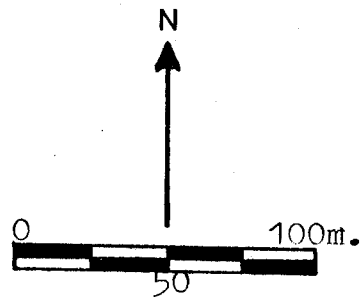
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| GRAND NATIONAL RESOURCES INC.        |                             |            |
| Puma Group - Osoyoos Mining Division |                             |            |
| Reconnaissance Geochemical Survey    |                             |            |
| Grid 2                               |                             |            |
| Monashee Geological Services         | nts: 82E/5<br>June 20, 1985 | Fig. no. 6 |



100W      50W      BL      50E      100E



Hawaii 23.4 KHz

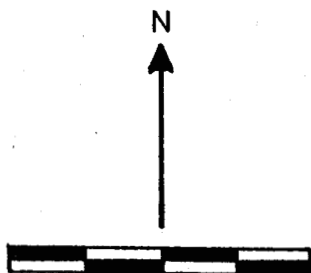


|                                        |                             |            |
|----------------------------------------|-----------------------------|------------|
| GRAND NATIONAL RESOURCES INC.          |                             |            |
| Puma Group - Osoyoos Mining Division   |                             |            |
| Reconnaissance VLF-EM Survey<br>Grid 2 |                             |            |
| Monashee<br>Geological<br>Services     | nts: 82E/5<br>June 20, 1985 | Fig. no. 7 |

GRAND NATIONAL

FILE # 85-0629

| SAMPLE# | LOCATION     | Ag<br>ppm | Au*<br>ppb | REMARKS        |
|---------|--------------|-----------|------------|----------------|
| P-1     | L2N 3100W    | .4        | 2          | BASALT         |
| P-2     | L4N 0112W    | .2        | 3          | ARG. QUARTZITE |
| P-3     | L4N 0118W    | .3        | 30         | C.g. DIORITE   |
| P-4     | L4N 0135W    | .4        | 5          | BASALT         |
| P-5     | L4N 1412W    | .2        | 110        | BASALT         |
| P-6     | L4N 1460W    | .1        | 5          | ARG. QUARTZITE |
| P-7     | L315N 1440W  | .1        | 35         | " "            |
| P-8     | L3N 0115E    | .3        | 4          | IN CONTACT     |
| P-9     | " "          | .1        | 1          | DIORITE C.g.   |
| P-10    | L3N 1400W    | .5        | 3          |                |
| P-11    | L3N 1480W    | .3        | 2          | QUARTZITE      |
| P-12    | L2+50N 1480W | .6        | 18         | "              |
| P-13    | L2+50N 0490W | .2        | 20         | F.g. DIORITE   |
| P-14    | SEE FIG. #3  | .2        | 8          | ARG. CHERT     |
| P-15    | "            | .1        | 7          | "              |
| P-16    | L3N 0150W    | .1        | 1          | C.g. DIORITE   |
| P-17    | L4N 0180W    | .1        | 2          | QUARTZITE      |
| P-18    | L2N 0120W    | .1        | 9          | "              |
| P-19    | L2N 0130W    | .1        | 12         | C.g. DIORITE   |
| P-20    | L1N 0125E    | .1        | 34         | C.g. "         |
| P-21    | B1 0100      | .1        | 19         | ARG. QUARTZITE |
| P-22    | "            | .1        | 80         | C.g. DIORITE   |
| P-23    | B115         | .2        | 145        | " "            |
| P-24    | L15 0175W    | .1        | 7          | QUARTZITE      |
| M-5     | L25 2100E    | .1        | 2          | GREENSTONE     |
| M-6     | L35 0190E    | .1        | 6          | QUARTZITE      |
| M-7     | L45 1460W    | .2        | 2          | GREENSTONE     |
| M-8     | L2305 0150W  | .1        | 13         | QUARTZITE      |
| M-9     | SEE FIG. #3  | .3        | 14         | CHERT          |
| STD C   |              | 7.1       | 500        |                |



GRAND NATIONAL RESOURCES INC.

Puma Group - Osoyoos Mining Division

Lithochemical Samples

Monashee  
Geological  
Services

nts: 82E/5  
June 20, 1985

Fig. no. 9

ANALYTICAL LABORATORIES LTD.  
 .HASTINGS ST. VANCOUVER B.C. V6A 1R6  
 253-3158 TELEX 04-53124

DATE RECEIVED: JUNE 12 1985

DATE REPORT MAILED: *June 24/85*

**ASSAY CERTIFICATE**

SAMPLE TYPE: ROCK CHIPS AU: 10 GRAM REGULAR ASSAY

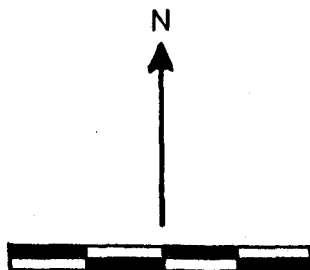
ASSAYER: *T. Saundry* DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

GRAND NATIONAL

FILE # 85-0906

PAGE

| SAMPLE# | LOCATION    | Cu % | Pb % | Zn % | Ag OZ/T | Au OZ/T | REMARKS           |
|---------|-------------|------|------|------|---------|---------|-------------------|
| 609     | L2N 100W    | .01  | .01  | .01  | .01     | .001    | Diorite - CONTACT |
| 610     | " "         | .01  | .01  | .01  | .01     | .001    | CHEST-H.W. - "    |
| 611     | L245N 1470W | .01  | .01  | .01  | .01     | .001    | Diorite           |
| 612     | L275N 1480W | .01  | .01  | .01  | .01     | .001    | Diorite           |
| 613     | L3N 0435W   | .01  | .01  | .01  | .03     | .001    | Diorite - CONTACT |
| 614     | L4N 0410W   | .01  | .01  | .01  | .01     | .001    | Diorite           |
| 615     | L4N 1410W   | .01  | .01  | .01  | .01     | .001    | BASALT            |
| 616     | L3N 0415E   | .01  | .01  | .01  | .01     | .001    | Diorite           |
| 617     | L1N 0425E   | .01  | .01  | .01  | .01     | .004    | "                 |
| 618     | L2N 0450E   | .01  | .01  | .01  | .01     | .001    | Diorite - CONTACT |
| 619     | L2N 0425W   | .01  | .01  | .03  | .01     | .001    | " "               |
| 620     | L1N 0475W   | .01  | .01  | .01  | .01     | .001    | Diorite           |
| 622     | L0 0410W    | .01  | .01  | .01  | .01     | .001    | Diorite           |
| 623     | B1 0400     | .01  | .01  | .01  | .01     | .001    | Diorite - CONTACT |
| 624     | L15 0400    | .01  | .01  | .01  | .01     | .015    | Diorite           |
| 625     | L15 0400    | .01  | .01  | .01  | .01     | .006    | "                 |
| 626     | L1450S 0400 | .01  | .01  | .01  | .01     | .014    | "                 |
| 627     | L0 1425E    | .01  | .01  | .01  | .01     | .003    | "                 |



|                                      |                             |             |
|--------------------------------------|-----------------------------|-------------|
| GRAND NATIONAL RESOURCES INC.        |                             |             |
| Puma Group - Osoyoos Mining Division |                             |             |
| Assay Samples                        |                             |             |
| Monashee Geological Services         | nts: 82E/5<br>July 15, 1985 | Fig. no. 11 |

SUMMARY

The Puma Group is located in the Osoyoos Mining Division near the community of Ollala, B.C. The claims are currently in good standing and registered to Grand National Resources Inc. of Vancouver, B.C.

The property is underlain by Triassic metasediments belonging to the Independence Formation. These rocks have been intruded by contemporaneous volcanic and plutonic rocks of the Old Tom Formation.

Previous development work consisting of geophysical and geochemical surveys has outlined coincident, sub-parallel VLF-EM (length-800 meters) and gold geochemical (up to 650 p.p.b. with a length of 700 meters) anomalies.

This years exploration programs have increased, both in length and width, these geophysical and geochemical anomalies. The VLF-EM anomaly though decreasing in magnitude, has been increased to a length of 1400 meters. A second conductor with a length of 350 meters has also been located in the northeastern portion of the Puma grid. The gold geochemical anomaly, though discontinuous, has been increased to a length of 1050 meters with a maximum width of 250 meters. Values of up to 400 p.p.b. in gold were obtained.

It is recommended that additional development work be conducted in order to determine the mode and nature of the anomalies as outlined by the geophysical and geochemical surveys.

## INTRODUCTION

The Puma Group of mineral claims is located in the Osoyoos Mining Division and is situated approximately 25 kilometers north of Keremeos or 25 kilometers west of Penticton, B.C. on the Green Mountain Road (fig.1). Good two-wheel drive access is provided via B.C. Highway 3A or B.C. Highway 97.

The property (fig.2) is located on the eastern flank of Apex and Green Mountains. The main topographical feature on the claims is Keremeos Creek which traverses the central and eastern portions of the Puma Group. The terrain is steep, with slopes frequently in excess of 45°, and having elevations ranging from 915 meters on Green Mountain Road to more than 1500 meters in the western portions. The exposure is generally easterly with low precipitation providing for moderately open forests of immature Douglas Fir. There is sufficient timber and water resources available for exploration and development purposes.

## PROPERTY HISTORY

The Puma Group consists of eight contiguous claims with a total of 71 units. The claims are currently in good standing and registered to Grand National Resources Inc. of Vancouver, B.C. The claims have a good mineral potential due to the close proximity to the Hedley, Ollala and Fairview Gold camps. A brief examination of Assessment reports failed to locate areas of previous exploration in the immediate claim group.

## PROPERTY GEOLOGY

According to H.W. Little's Geological Map 15-1961, the Puma Group is underlain by Triassic cherts, greenstones and diorites from three contemporaneous formations including the Independence, Shoemaker and Old Tom. These formations have been intruded by

Cretaceous dioritic plutons of the Nelson Batholith. Bedding in the area trends northeasterly with moderate to steep dips to the southeast. The main structural feature in the area is the fault zone as represented by Keremeos Creek.

RECONNAISSANCE SURVEYS - GRID 1

This years exploration program (fig. 3) was carried out in three different areas of the Puma Group. Grid 1 was established in the southern portion of the Puma 1 claim. Grid 2 was located on the common boundry line of the Puma 1 and Puma 2 claim. The majority of the work was conducted on the Puma Grid located in the south-western portion of the Puma 4 claim. In all, a total of 25 days were spent on the programs from May 1 to June 21, 1985. The surveys were carried out by the author and one field assistant, Mr. M. Schram of Ollala, B.C.

Reconnaissance grid 1 (fig.3) was located 250 meters east of I.D. post 3W of the Puma 1 claim. Location was prompted by a geochemical sample of 85 p.p.b. gold which was obtained during the original staking of the claim group. To test the validity and extent of the above gold value, a small reconnaissance grid totalling 1 line kilometer was established upon which 41 soil samples (fig.4) were collected and a VLF-EM (fig.5) survey conducted. As can be noted from fig.4, the geochemical samples failed to duplicate the original value as well as failing to indicate a continuation or other areas of interest. The VLF-EM (fig.5) was also unresponsive over the grid area with any points of interest being related to a main southward trending drainage feature. Due to the negative results of these two surveys, no further work is recommended for the immediate area.

RECONNAISSANCE SURVEYS - GRID 2

These surveys (fig.3) which consisted of geochemical (fig.6) and geophysical (fig.7) were located at I.D. Post 2N 5W of the Puma 1 claim. Here again, location was prompted by a geochemical sample of 70 p.p.b. gold obtained during staking. As a result, another small grid totalling 1 line-kilometer was established upon which 45 soil samples were collected and a VLF-EM survey conducted. The geochemical samples (fig.6) failed to duplicate the original value though a number of other interesting values were obtained. The values located at L0+00 1+00W, L0+50S 0+25E and 0+75E are considered to reflect the detrital nature of the soil which is associated with the branching drainage system situated at L0+50S. The only other sample of interest is located at L1+00N 0+25W.

The VLF-EM survey (fig.7) was more responsive with the strongest inflection being recorded at L1+00N 0+75W. This zone is traceable from L1+50N 0+50W to L0+00 1+00W.

Due to the somewhat positive results but the limited areal extent it is recommended that the area warrants additional work. Initially consisting of prospecting to aid in the interpretation of the data.

GEOCHEMICAL SURVEY - PUMA GRID

In 1984, a geochemical survey outlined a northwesterly trending gold anomaly with values up to 640 p.p.b. As a result, the Puma Grid (fig.8) was expanded in a north and eastward direction during the 1985 exploration program. In all, an additional 5 line-kilometers were ran. This included four detailed survey lines from which samples were collected from 10 meter

stations. A total of 72 samples were obtained on these four lines in an attempt to locate the westernmost, up slope limit to the gold anomaly. Soil samples (161) from the new lines yield a total of 233 samples.

The geochemical survey consisted of collecting soil samples from the 'B' soil horizon (5-10 cm. deep) from which rocks and organic material were removed by hand. The samples were placed in numbered kraft paper envelopes and sent to Acme Analytical Laboratories Ltd. of Vancouver, B.C. All the samples were analyzed for gold with the detailed line samples being analyzed for silver as well.

Laboratory analysis consisted of drying the samples at 60 C. and sieving to a -80 mesh. A 10 gram sample was ignited and then leached by hot Aqua Regia followed by Atomic absorption analysis to obtain gold values in parts per billion. The silver analysis in parts per million was obtained by I.C.P. after a .500 gram sample is digested by hot HCL - HNO<sub>3</sub>-H<sub>2</sub>O.

The above field and laboratory procedures were also followed in the case of the reconnaissance surveys at grid 1 and grid 2.

Office interpretation of the results consisted of visually manipulating the gold values to obtain a threshold value of 25 p.p.b. which is considered to be slightly anomalous. Once again, silver does not appear to be a good trace element indicator.

In addition to the 233 soil samples, a number (26) of lithochemical samples (fig. 8&9) were collected to try and isolate the mineralized host rock. Gold and silver analysis was obtained by atomic absorption after a 10 gram sample was ignited and digested by hot Aqua Regia.



GEOLOGICAL SURVEY - PUMA GRID

The geological survey (fig. 10) consisted of mapping the relationship between the rock types as exposed on the Puma Grid. Underlying the grid area are Triassic metasedimentary rocks of the Independence Formation. These consist mainly of grey to purple-black cherts which have a flat, sub-concoidal fracture and white to grey-brown quartzites depending upon the argillaceous content. Both varieties are locally haemato-limonitic stained with varying amounts of pyrite especially in contact zones. Bedding, in contrast to H.W. Little's map, trends northwesterly with moderate (45°) dips to the southwest. Bedding attitudes in the northern portion (L7+00N to L10+00N) of the grid trend northeasterly with moderate dips to the northwest. Locally, the metasedimentary rocks exhibit small isoclinal folds.

These metasedimentary rocks are intercalated and interbedded with amygdaloidal basalts. Greenstones is a more appropriate name for these rocks as they have undergone appreciable propylitization with the development of secondary epidote, chlorite and calcite. The fabric or flow structure which trends at 140° and plunges moderately to the southwest prompts the author to adopt the amygdaloidal basalts classification. These magnetic volcanic rocks possibly represent a sub-aqueous flow with included remnants of limestone beds.

The above two rock types have been intruded by a fine grain to coarse grained diorite which might be contemporaneous with the basalts or more likely related to the Cretaceous Nelson Batholith which outcrops immediately north of Shatford Creek. This diorite

appears porphyritic in outcrop due to differential weathering. It is normally pyritic especially along fracture surfaces with the occasional disseminations of chalcopyrite. The diorite occurs as irregular cupolas and thin sill-like intrusions which generally trend sub-parallel to the bedding of the metasedimentary formations. It also appears as a layered igneous intrusion with a more basic gabbroic rock type outcropping at lower elevations and especially at L7+00N 0+75E.

The contact between the diorites and the metasediments is sharp with a thin chilled border. Frequently the diorite contact is exhibited by large (up to 1.5 cm.) euhedral biotite crystals. In close proximity to the contact the diorite ferromagnesium minerals are green as opposed to being brown in fresher and more isolated areas. The metasediments are generally unreactive to the intrusions though occasionally secondary crystal growth from the argillaceous material can be noted. Locally, these rocks are vuggy, haemato-limonitic stained and pyritic. At the contacts the diorite has a tendency to be less 'competent' and more prone to fracturing and subsequent sloughing.

During the geological survey a number of chip samples (fig.11) were collected to help in the interpretation of the apparent mineralization as outlined by the geochemical survey.

#### GEOPHYSICAL SURVEY - FUMA GRID

This survey (fig.12) was conducted over the newly extended grid in an attempt to trace the strong VLF-EM anomaly located during the 1984 survey. In all, a total of 4 line-kilometers were surveyed using a Sabre VLF-EM (Model 27) receiver. It was tuned to

the Seattle, Washington transmitter which operates at a frequency of 24.8 Khz.

#### TECHNICAL DATA AND INTERPRETATION

The exploration surveys on the Puma Grid were conducted in an attempt to extend the existing geophysical and geochemical anomalies as outlined during the 1984 surveys as well as attempting to obtain more information to aid in the interpretation of those anomalies.

A comparison of the geochemical map (fig.8) and the geological map (fig. 10) indicates the close interrelationships between the diorite intrusion and gold trace elements in the soils. The gold geochemical values effectively trace out the observed outcroppings of the diorite. This is, in part, substantiated by the lithochemical samples (fig.9) which indicate anomalous values are usually associated with the diorite. One anomalous sample (P-7) was obtained from the quartzites which were in contact with the diorite. Another sample (P-5) was obtained from the amygdaloidal basalts. Due to the limited amount (29) of lithochemical samples, they are not considered to be as representative as the soil samples which better demonstrates the importance of the diorite-metasedimentary contact.

This better delineated bifurcating geochemical anomaly has an apparent, discontinuous length of 1050 meters with a maximum width of 250 meters.

In comparison to the above positive results, the assay samples (fig.11), the majority of which were obtained from the diorites, yielded low to negligible assay values. These low values

tend to suggest that it is not the diorites themselves that are the important factor but the diorite-metasediment contact; especially keeping in mind the fractured, sloughing nature of the diorites at the contact.

The VLF-EM survey (fig.12) has indicated a continuation to the anomaly outlined during the 1984 survey. This northerly trending westerly dipping anomaly has decreased considerably in magnitude except at L9+00N 1+25W which exhibits the strongest inflections. In this area, three residual quadrature readings were also obtained supporting the presence of this electromagnetic inhomogeneity. The presence of a structural off-set or fault located at L5+00N 1+75W is supported by the VLF-EM data as well as the geological data (fig. 10) which indicate a change in the bedding attitudes across this zone.

This extended VLF-EM anomaly has a length of 1400 meters. In addition, another secondary sub-parallel conductor has been located which extends from L7+00N 0+25E to L10+00N 1+25E for a length of 350 meters. These anomalies are open to the north with the main Puma anomaly also being open in a southerly direction.

Combining the results from the three surveys, an overall interpretation of the Puma Grid suggests a sources of mineralization located at depth as outlined by the VLF-EM data. The unreactive nature of the siliceous metasedimentary rocks and the nature of the diorite at the contact support the occurrence of numerous trace element seepage anomalies located along the contacts thereby yielding the gold geochemical anomalies over a considerable area.

CONCLUSION

The geophysical survey on the Fuma grid was successful in tracing the VLF-EM anomaly, though at a reduced magnitude, over a length of 1400 meters. This low to moderately conductive anomaly is trending in a northerly direction with moderate dips to the west. The geochemical survey with values up to 400 p.p.b. in gold has outlined a gold anomaly for a length of 1050 meters with a maximum width of 250 meters.

The geological survey has provided the necessary information to aid in the interpretation of the above two surveys and has indicated the significance of the metasedimentary-diorite contact.

Due to the favorable results obtained from the surveys it is recommended that the property undergo further development. This would consist of collecting additional chip samples for assay from the metasedimentary contact zones. In order to ascertain the presence of mineralization at depth an Induced Polarization survey should also be undertaken.


ITEMIZED COST STATEMENT

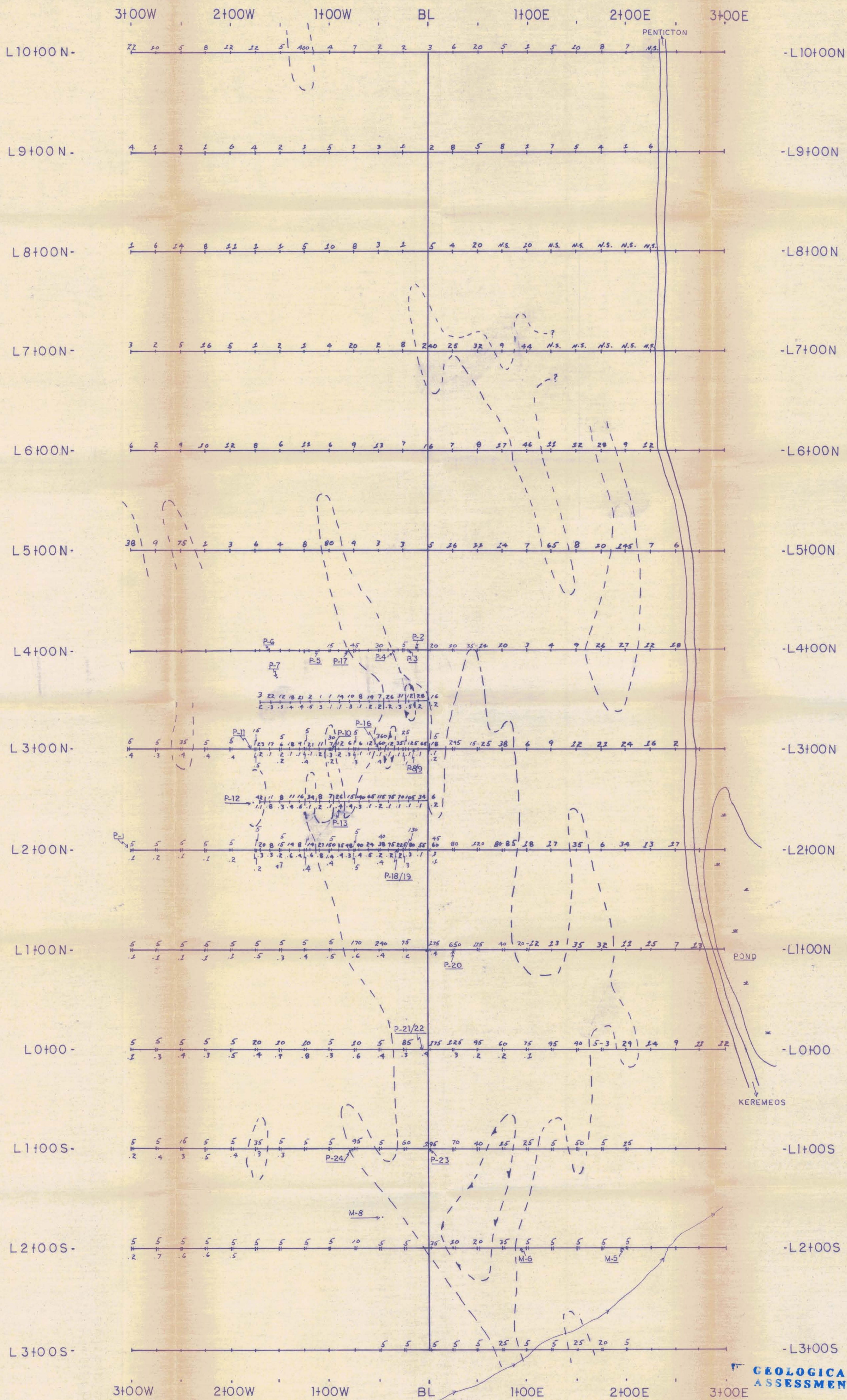
|    |                                                      |             |
|----|------------------------------------------------------|-------------|
| 1. | R. Kregosky, Geologist; 25 days @ \$200.00/day.....  | \$ 5,000.00 |
| 2. | M. Schram, field assist.; 25 days @ \$100.00/day.... | \$ 2,500.00 |
| 3. | VLF-EM rental; 15 days @ \$50.00/day.....            | \$ 750.00   |
| 4. | Food & Accommodation; 25 days.....                   | \$ 1,250.00 |
| 5. | Transportation; vehicle rental @ \$35.00/day.....    | \$ 875.00   |
|    | 3500 kilometers @ \$.25/km.....                      | \$ 875.00   |
| 6. | 319 soil samples; 187 Ag @ \$2.00 ea.....            | \$ 374.00   |
|    | 319 Au @ \$4.00 ea.....                              | \$ 1,276.00 |
|    | 319 soil sample preparation @.60 ea.....             | \$ 191.40   |
|    | 26 rock sample preparation @2.75 ea.....             | \$ 71.50    |

|                                           |       |             |
|-------------------------------------------|-------|-------------|
| 7. 18 Assay samples; Cu @ 6.75 .....      | \$    | 121.50      |
| Pb @ 3.75.....                            | \$    | 67.50       |
| Zn @ 3.75.....                            | \$    | 67.50       |
| Ag @ 3.75.....                            | \$    | 67.50       |
| Au @ 9.25.....                            | \$    | 166.50      |
| Prepaaration @ 2.75 ea.....               | \$    | 49.50       |
| 8. 4 days report and map preparation..... | \$    | 800.00      |
| 9. Blueprinting and photocopying.....     | \$    | 50.00       |
| 10. Secretarial fees.....                 | \$    | 50.00       |
|                                           |       | <hr/>       |
|                                           | TOTAL | \$14,602.90 |

AUTHOR'S QUALIFICATIONS

I declare that I, Roy D. Kregosky am a practicing Geologist having graduated from the University of Calgary in 1971 with a Bachelor of Science degree in Geology

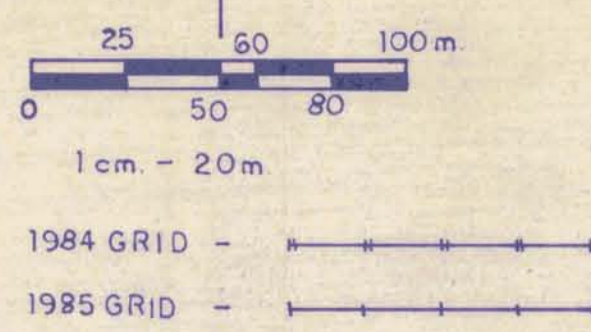
  
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BSc. Geology



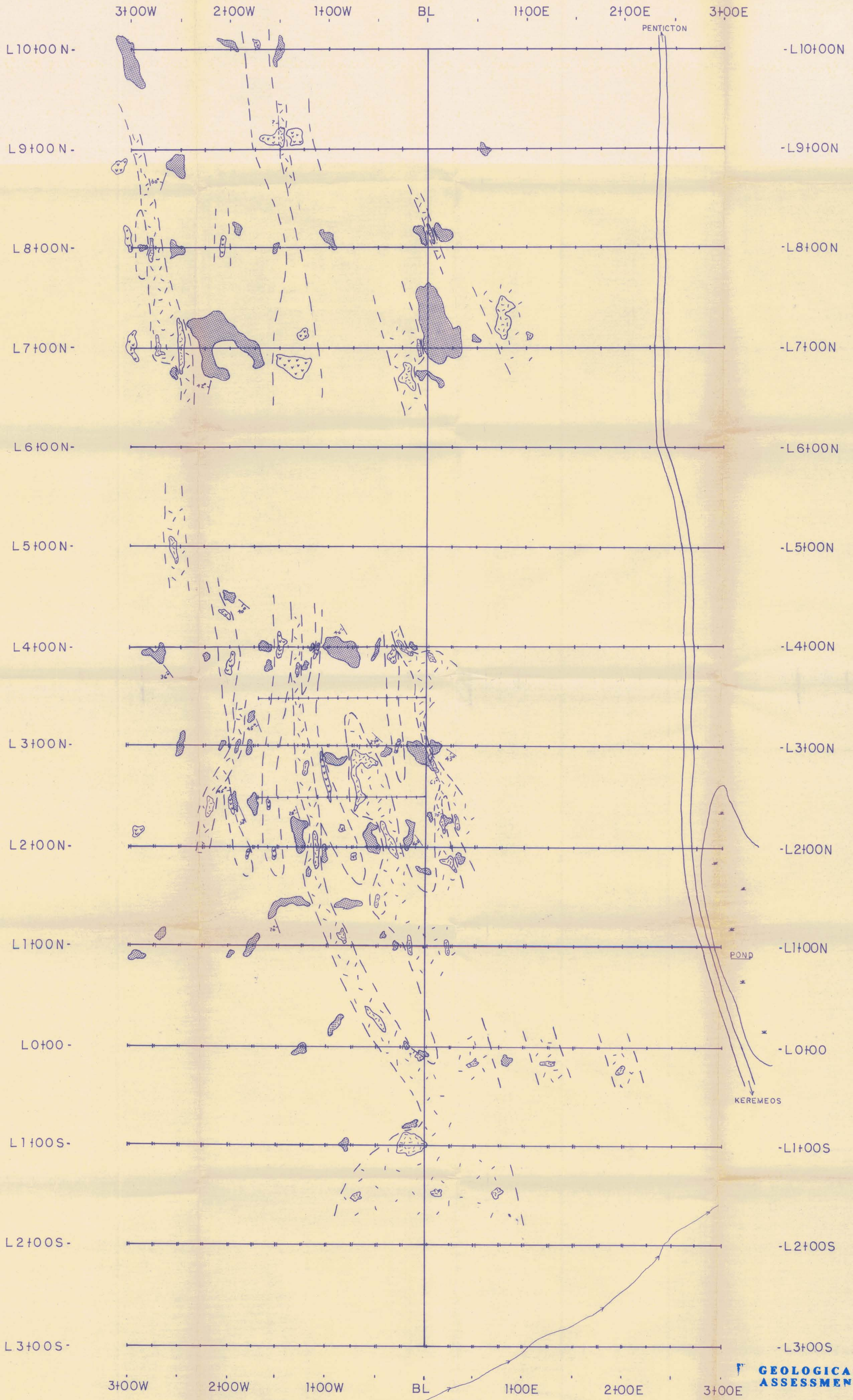
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,906**

GEOCHEMICAL ANOMALY - GOLD ZONES -   
 GEOCHEMICAL DEPRESSION -   
 LITHOGEOCHEMICAL SAMPLES - P/M   
 DRAINAGE -



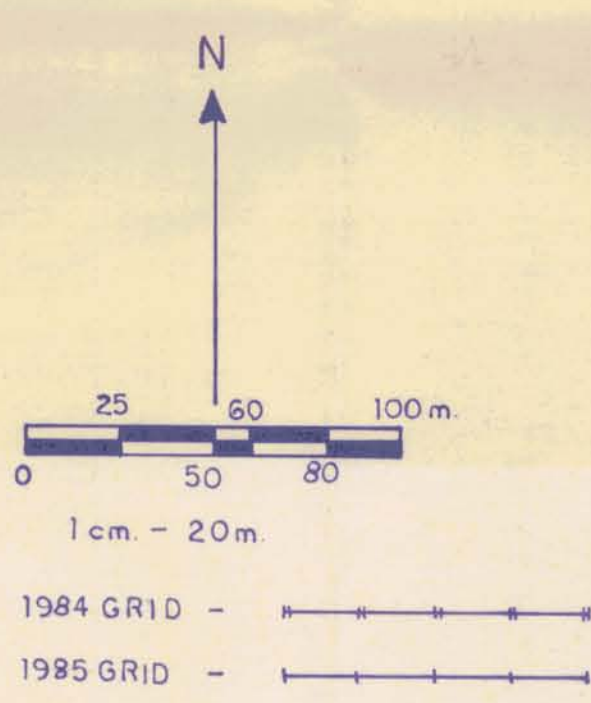
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| GRAND NATIONAL RESOURCES INC.      |                             |       |
| PUMA GROUP - OSOYOOS M.D.          |                             |       |
| GEOCHEMICAL SURVEY                 |                             |       |
| MONASHEE<br>GEOLOGICAL<br>SERVICES | NTS: 82E/5<br>JULY 15, 1985 | FIG.8 |



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

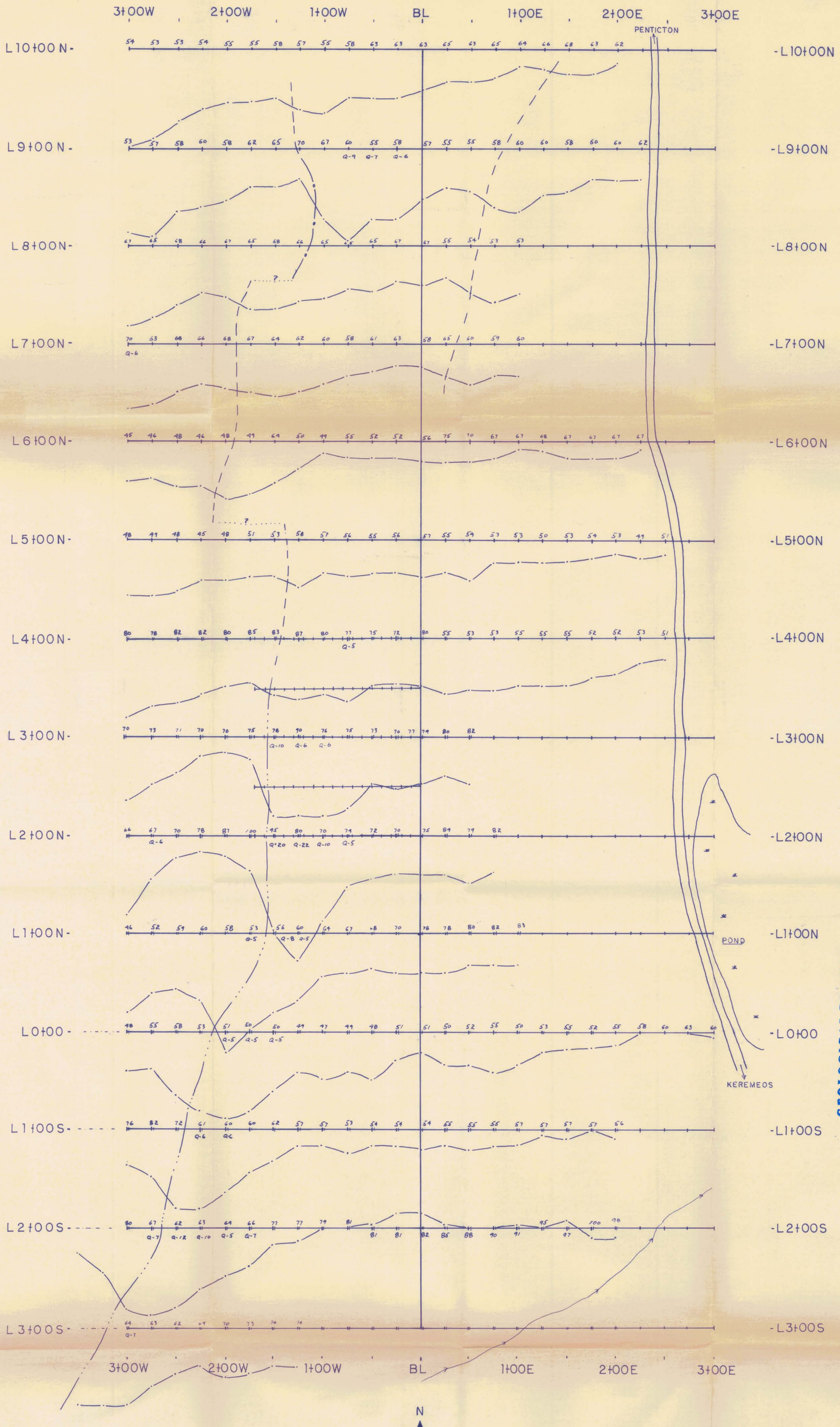
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- LEGEND**
- TRIASSIC**
- OLD TOM FORMATION:
- DIORITE
  - AMYGDALOIDAL BASALT (greenstone)
- INDEPENDENCE FORMATION:
- CHERT
  - QUARTZITE
  - ARGILLACEOUS MEMBERS
- BEDDING
- CONTACT: OBSERVED
- CONTACT: ASSUMED
- DRAINAGE



|                                    |                             |        |
|------------------------------------|-----------------------------|--------|
| GRAND NATIONAL RESOURCES INC.      |                             |        |
| PUMA GROUP - OSOYOOS M. D.         |                             |        |
| GEOLOGICAL SURVEY                  |                             |        |
| MONASHEE<br>GEOLOGICAL<br>SERVICES | NTS: 82E/5<br>JULY 15, 1985 | FIG.10 |





DEPTH IN METERS

PRIMARY CONDUCTORS - 1984   
 - 1985   
 SECONDARY CONDUCTORS - 1985   
 FIELD STRENGTH   
 QUADRATURE   
 DIP ANGLE

N  
 SEATTLE 100 Khz. 24.0  
 0 25 50 100 m.  
 1 cm. = 20 m.  
 1984 GRID   
 1985 GRID

|                                    |                             |         |
|------------------------------------|-----------------------------|---------|
| GRAND NATIONAL RESOURCES INC.      |                             |         |
| PUMA GROUP - OSOYOOS M. D.         |                             |         |
| VLF-EM SURVEY                      |                             |         |
| MONASHEE<br>GEOLOGICAL<br>SERVICES | NTS: 82E/5<br>JULY 15, 1985 | FIG. 12 |

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