

# 5152

## 921/8W

GEOLOGICAL REPORT  
ON THE  
STUMP LAKE PROPERTY  
KAMLOOPS MINING DISTRICT, B.C.  
FOR  
JUNIPER MINES LTD. (NPL)

|                               |          |
|-------------------------------|----------|
| Department of                 |          |
| Mines and Petroleum Resources |          |
| ASSESSMENT REPORT             |          |
| NO. 5152                      | MAP..... |

Vancouver, B.C.  
August 25, 1974.

F. Holcapek, P. Eng.

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GEOLOGICAL REPORT  
ON THE  
STUMP LAKE PROPERTY,  
KAMLOOPS MINING DISTRICT, B.C.,  
FOR  
JUNIPER MINES LTD. (NPL).

I-00 SUMMARY

The Stump Lake property of Juniper Mines Ltd. lies 24 miles northeast of Merritt.

The property was acquired by Juniper Mines Ltd. in April, 1974.

Past work was concentrated on the Enterprise, Joshua, No Surrender, King William, Jenny Long and Azlea.

Most of the production was derived from the Enterprise - King William vein systems.

Present mapping on the property was conducted by Mr. R.H. Philp, P. Eng., and the writer. A 200 x100 foot picket grid was established in the northern and southern sections of the property for ground control.

The object of the mapping program was to relocate the old workings, to sample vein exposures and to clarify the geological setting of the area.

The property is underlain by greenstone, a member of the Nicola volcanics of Upper Triassic Age.

The vein systems mapped are normally associated with shear zones and alteration zone cutting the greenstone.

Veins vary from a few inches to several feet. Sampling conducted shows that the grade varies from tr. to 1.10 oz in gold, .16 oz to 56.5 oz silver and minor base metal values.

The attitude and trend of the veins suggest that all showings found on the property belong to the same fracture system.

Branching and variation of strike within individual veins is common.

#### 2-00 CONSLUSIONS

1. Veins mapped and sampled in the northern portions are usually exposed in trenches. All of the veins cut greenstone and are associated with shearing and alterations.
2. The No Surrender, King William and Ruby veins appear to be branches and/or the southern extension of the Enterprise vein system.
3. The veins pinch and swell, have an attitude varying from N20W to N30E, 60° to 75° E.
4. The grade is variable but when visible sulfides occur within the vein material, gold and silver values are usually high.
5. This area is the most promising section to find ore-shoots similar to the Enterprise system.
6. Veins exposed in the central part are too few to allow any conclusions. Further work is warranted on this section.
7. In the southern area, the Jenny Long vein system will need more work before any definite conclusions can be drawn.

8. The Azlea and Brian working should be examined and sampled.
9. A literature research and compilation of old data should be completed.

Respectfully submitted,

F. Holcapek, P. Eng.

Vancouver, B.C.  
August 24, 1974.

### 3-00 INTRODUCTION

The Stump Lake gold property of Juniper Mines Ltd. consists of 38 reverted Crown Granted Mineral Claims and 60 additional claims by location.

The property is located south of Stump Lake, 24 miles northeast of Merritt, B.C.

The report is based on geological mapping and sampling, by Mr. R.H.D. Philp, P. Eng. of the Enterprise group, and by the writer of the Jenny Long group.

A total of 36.55 line miles of grid lines, 200 ft. x 100 ft. were established.

### 4-00 GEOGRAPHY

#### 4-10 Location and Access

The property referred to in this report is located just south of Stump Lake, 24 miles northeast of Merritt, B.C.

Co-ordinates of the property are 50° 18' N. Lat;  
120° 22' E. Long.

Access is by highway No. 5 from Merritt, then by various secondary roads which traverse the property. Merritt, one of the larger interior villages lies 240 miles from Vancouver, B.C.

#### 4-20 Physiography

Relief throughout the claims is gentle and moderate with elevation averaging approximately 3,500 feet above sea level. The high elevation area within the property limits are sparsely treed, mainly with Jack Pine and lesser fir while the lower portions consists of open grazing land. Summers are hot and

dry, while winters are generally cold. Precipitation is light although minor snow may be present during the winter months.

Water should be available from various creeks, especially in the northern part of the property during the spring and early summer.

#### 5-00 PROPERTY

The Stump Lake property consists of the following 48 reverted Crown Granted mineral claims and fractions now held by mineral leases and 59 staked mineral claims:

| <u>Group</u>    | <u>Lot #</u> | <u># of Acres</u> | <u>Record #</u> |
|-----------------|--------------|-------------------|-----------------|
| Gentle Annie    | 589          | 20.66             | 59396           |
| Sheelah         | 5129         | 46.18             | 59429           |
| M. Fraction     | 5124         | 34.44             | 59428           |
| L. Fraction     | 5123         | 40.80             | 59427           |
| Lee No. 8       | 5122         | 51.65             | 59426           |
| Nels Fr.        | 5115         | 23.84             | 59425           |
| Maybelle Fr.    | 5114         | 21.11             | 59424           |
| IXL No. 6       | 5111         | 41.57             | 59423           |
| Eileen O. Fr.   | 5105         | 47.81             | 59422           |
| E. Fraction     | 5098         | 32.17             | 59421           |
| Raven           | 5097         | 51.31             | 59420           |
| Early Bird      | 5086         | 51.10             | 59419           |
| Thistle Fr.     | 5085         | 42.09             | 59418           |
| Moon            | 5084         | 51.65             | 59417           |
| Sun             | 5083         | 51.65             | 59416           |
| Ruby M. Fr.     | 5080         | 27.51)            | 59425           |
| Star Fr. N. 1   | 5081         | 10.66)            |                 |
| Raven No. 2     | 5079         | 51.69             | 59414           |
| Jessie B        | 5078         | 51.65             | 59413           |
| Marion C. Fr.   | 5077         | 39.29             | 59412           |
| Georgina M. Fr. | 5076         | 9.64              | 59411           |

| <u>Group</u>     | <u>Lot #</u> | <u># of Acres</u> | <u>Record #</u> |
|------------------|--------------|-------------------|-----------------|
| Ester M. Fr.     | 5075         | 44.50             | 59410           |
| C. Fr.           | 5059         | 16.18             | 59409           |
| Day Star         | 4111         | 51.64             | 59408           |
| Entente Cordial  | 4110         | 51.65             | 59407           |
| New Emblem       | 4109         | 51.65             | 59406           |
| Planet Ext.      | 4108         | 50.73             | 59405           |
| New Star #2 Fr.  | 4106         | 26.95             | 59403           |
| Silver King Ext. | 4107         | 51.64             | 59404           |
| Silver Star      | 4104         | 44.91             | 59402           |
| Silver King #2   | 4013         | 51.28             | 59401           |
| Planet #1        | 4102         | 51.65             | 59400           |
| Big Sandy        | 637          | 20.66             | 59399           |
| No Surrender     | 591          | 19.50)            | 59398           |
| King William     | 592          | 20.50)            |                 |
| Belle Scott      | 590          | 20.40             | 59397           |
| Jenny Long       | 718          | 20.66             |                 |
| Garden 1         | 5046         | 34.79             |                 |
| Garden 2         | 5093         | 49.83             |                 |
| Garden 3         | 5094         | 42.80             |                 |
| Garden 4         | 5095         | 50.95             |                 |
| Garden 5         | 5096         | 51.65             |                 |
| Scotia           | 5092         | 49.83             |                 |
| Wren             | 5043         | 51.57             |                 |
| Brian            | 5091         | 49.81             |                 |
| Dorothy          | 5047         | 31.15             |                 |
| Bluebird         | 5042         | 44.30             |                 |
| Clara B          | 5045         | 24.81             |                 |
| Parkview 3       | 5041         | 32.39             |                 |
| Azela            | 692          | 20.66             |                 |

| <u>Claims</u>   | <u>Record #</u> | <u>Record Date</u> |
|-----------------|-----------------|--------------------|
| TC #2 - 10      | 59806-69814     | March 6, 1974.     |
| Bee 2 Fr - 8 Fr | 59814-59821     | March 6, 1974.     |



| <u>Group</u> | <u>Record No.</u> | <u>Record Date</u> |
|--------------|-------------------|--------------------|
| Bee 15-19    |                   |                    |
| Bee 21-32    | 59822-59842       | March 6, 1974.     |
| Bee 34-37    |                   |                    |
| WB 1-28      | 59842-59870       | March 6, 1974.     |

#### 6-00 HISTORY

During the early 1900's gold-silver quartz veins carrying considerable values in gold-silver-lead-zinc and copper as well as scheelite were explored in the Stump Lake area. The main company operating in the area was the Consolidated Nichola Goldfield Ltd. or Stump Lake Gold Mines. Most of the work was concentrated on the Enterprise, King William, Tubal Cain, Joshua, Jenny Long and Johannesburg. The Jenny Long was separated from the main block of claims and was operated under the name of Jenny Long or Kootenay Nevada Mines Ltd.

Production figures for the mining camp, as reported by the Department of Mines of British Columbia, are a total of 77,605 tons of ore mines, yielding 8,494 ounces of gold, 252,939 ounces of Silver, 40,822 pounds of copper, 2,206,555 pounds of lead and 367,869 pounds of zinc. This production was in the period from 1916 to 1944.

From 1939-1944 minor tonnage of scheelite was recovered from the tailings. Nearly all this reported production is considered to have come from the Enterprise and King William claims. On the Jenny Long property, Consolidated Nichola Goldfields Ltd., established a 35 ton mill in the mid 1930's, but no production records are available. The minerals recovered were gold and silver. In numerous reports reference is made to the presence of lead, zinc, copper and tungsten.

Juniper Mines Ltd., acquired the property during April 1974 and completed Geological mapping, re - location of old surveyed claim post and sampling of showings and trenches.

## 7-00 GEOLOGY

### 7-10 Regional Geology

Regional geological mapping has been carried out by the Geological Survey of Canada and published on a scale of 1"=4 miles as Map 886A Nicola Map Sheet. This indicates that the claim area is underlain by Nicola Group volcanics and sediments of Upper Triassic age. Predominant rock types within this group in the general area is greenstone. Map 886A classifies the Nicola Group as follows:

Greenstone, andesite, basalt, agglomerate, breccia, tuff minor argillite, limestone and conglomerate.

### 7-20 Local Geology

Geological mapping at a scale of 1" - 200 ft. showed that the Stump Lake area is underlain by greenstones belonging to the Nicola Group of Upper Triassic Age.

Several small area of rhyolites, tuff and possibly agglomerate outcrops occur but the exposures are isolated and too far apart to allow interpretation.

Quartz veins, shear zones and alteration zones containing variable amounts of sulfides have been mapped and sampled. The main difficulties encountered during mapping was poor rock exposures and sloughed trenches.

### 7-30 Discussion of Showings

#### 7-31 Northern Mapped Section

##### New Star Vein

A caved shaft or pit, in greenstone, has been located. Quartz material containing galena, pyrite derived from a zone of strong alteration has been sampled.

| <u>Sample</u> | <u>Width</u> | <u>Au oz</u><br><u>Ton</u> | <u>Ag oz</u><br><u>Ton</u> | <u>Pb%</u> | <u>Zn%</u> | <u>Cu%</u> |
|---------------|--------------|----------------------------|----------------------------|------------|------------|------------|
| 756           | grab         | .09                        | 4.55                       |            |            |            |
| 757           | grab         | .02                        | 1.02                       |            |            |            |

Bulk samples taken from the dump of the Enterprise underground workings:

|     |      |      |      |     |     |     |
|-----|------|------|------|-----|-----|-----|
| 791 | Bulk | .005 | .36  | .09 | .22 | .02 |
| 792 | bulk | .01  | 1.11 | .20 | .12 | .04 |
| 793 | bulk | .005 | .44  | .10 | .07 | .01 |
| 794 | bulk | .005 | .92  | .07 | .06 | .02 |

ENTERPRISE - (not part of claim group)

Several selected high grade samples were taken to establish the trend of the best mineralized material.

|     |      |      |      |      |      |      |
|-----|------|------|------|------|------|------|
| 754 | grab | 1.10 | 73.4 | 8.20 | 4.78 | 1.48 |
| 755 | grab | .136 | 49.1 | 2.28 | 1.83 | 1.07 |

Joshua Vein - (not part of the claim group)

The Joshua shaft is one of the main workings in the area, although no large production was derived from this vein system, it is connected by a crosscut to the Enterprise workings.

The shaft was sunk in greenstone on a strong alteration zone containing variable amount of quartz vein material and sulfides.

|     |                   |     |      |  |  |  |
|-----|-------------------|-----|------|--|--|--|
| 751 | grab from<br>dump | .63 | 56.5 |  |  |  |
|-----|-------------------|-----|------|--|--|--|

No Surrender Vein

On the No Surrender claim extensive cat trenching and pitting has been found. Most of the pits and trenches are along strike of the veins and are in part, sloughed.

Two sets of veins are partially exposed. The first trending N20 to N30°E dipping 75° east.

The zone is essentially a 10 foot wide shear with strong alteration, carbonitization of the greenstone, containing a quartz vein of variable width traced for a length of 800 ft.

Samples taken are chip or grab samples depending on the quality of the exposure.

| <u>Sample</u> | <u>Au oz</u><br><u>ton</u> | <u>Ag oz</u><br><u>ton</u> | <u>Pb%</u> | <u>Zn%</u> | <u>Cu%</u> |
|---------------|----------------------------|----------------------------|------------|------------|------------|
| 59            | tr                         | 0.24                       |            |            |            |
| 60            | .07                        | 2.23                       | 2.14       | .04        | .01        |
| 61            | .05                        | 7.49                       |            |            |            |
| 62            | .32                        | 26.10                      |            |            |            |
| 63            | .01                        | .55                        |            |            |            |
| 64            | .005                       | .48                        |            |            |            |

The second vein trends northwesterly and is exposed in one trench. The vein is essentially a 6 foot wide alteration zone containing quartz stringers. The main trench is water filled.

|    |                |     |      |      |      |     |
|----|----------------|-----|------|------|------|-----|
| 65 | grab<br>(dump) | .04 | .01  |      |      |     |
| 66 | "              | .44 | 36.7 | 38.0 | 2.88 | .16 |

#### King William Vein

The King William Vein appears to be an extension of the northwesterly striking vein on the No Surrender claims. From the mapping of the old trenches it becomes apparent that this vein branches off with a northwesterly strike changing to north.

Several shafts have been sunk on this vein but are not accessible. The vein dips 65° E and consists of an alteration zone approximately 4 feet wide containing up to 4 inches of quartz vein material.

A second vein trending approximately N45W, 65°E appears to connect the No Surrender south extension and the King William.

| <u>Sample</u> |                           | <u>Au oz</u><br><u>ton</u> | <u>Ag oz</u><br><u>ton</u> | <u>Pb%</u> | <u>Zn%</u> | <u>Cu%</u> |
|---------------|---------------------------|----------------------------|----------------------------|------------|------------|------------|
| 787           | King William              | .01                        | .63                        | .49        | .76        | .04        |
| 788           | " "                       | .003                       | .22                        |            |            |            |
| 789           | " "                       | .003                       | .20                        |            |            |            |
| 767           | Branch to<br>No Surrender | .02                        | .58                        |            |            |            |
| 768           | "                         | .05                        | .047                       |            |            |            |
| 769           | "                         | .32                        | 14.68                      | 3.30       | 1.82       | .12        |
| 770           | "                         | .25                        | 16.50                      | 16.00      | 13.4       | .70        |
| 771           | "                         | .003                       | .30                        | .18        | .14        | .01        |
| 772           | "                         | .11                        | 1.15                       | 1.08       | .54        | .08        |
| 773           | "                         | .01                        | .19                        |            |            |            |
| 774           | "                         | tr.                        | .18                        |            |            |            |
| 782           | S.E. area                 | tr.                        | .81                        |            |            |            |

Sample 782 originated southeast from the main vein in the area of sheared greenstone and altered rubble. The sample contained pyrite and malachite.

#### Emulator Vein - Sheelah Mineral Claims

The old workings on this vein system consists of an adit and numerous pits and trenches. All of the workings are sloughed except the adit which is open but has not been mapped.

The vein is possibly the extension of the Joshua Vein system but no outcrop of the vein has been found between the two areas.

The vein consists of an alteration zone within greenstone followed by quartz filling.

Samples taken are grab samples from the sloughed trenches and pits or dump samples from the adit.

| <u>Sample</u> |      | <u>Au oz</u><br><u>ton</u> | <u>Ag oz</u><br><u>ton</u> | <u>Pb%</u> | <u>Zn%</u> | <u>Cu%</u> |
|---------------|------|----------------------------|----------------------------|------------|------------|------------|
| 775           | pit  | .03                        | .27                        |            |            |            |
| 776           | dump | .39                        | 1.12                       |            |            |            |
| 777           | dump | .005                       | .50                        |            |            |            |

#### Silver King Vein

The Silver King shaft located in the western central part of the claim is garbage filled. The vein where visible consists of a 2 foot 2 inch alteration zone with quartz.

Several pits have been excavated, now sloughed, on the vein. The vein strikes northerly and dips 70° E.

|     |      |     |      |      |      |      |
|-----|------|-----|------|------|------|------|
| 778 | grab | .01 | .43  |      |      |      |
| 779 |      | .06 | 8.26 |      |      |      |
| 780 |      | .13 | 7.26 | 14.0 | .23  | .01  |
| 781 |      | .03 | 1.19 | .13  | 0.01 | <.01 |

#### Ruby M Vein system

Three areas of trenching have been found, believed to be the old Ruby M workings.

The main pit is on a northeasterly trending vein, dipping at 50° east. Here 18" of quartz vein material is exposed with traces of pyrite. Relationship of this vein to the other zones is not known. This could be the southern extension of one of the No Surrender Veins.

|     |                          |      |     |  |  |  |
|-----|--------------------------|------|-----|--|--|--|
| 796 | 18" qtz.<br>minor pyrite | .003 | .20 |  |  |  |
|-----|--------------------------|------|-----|--|--|--|

West of the pit a stripped area with quartz boulders containing bornite and minor pyrite has been located.

|     |      |     |      |  |  |  |
|-----|------|-----|------|--|--|--|
| 795 | grab | .01 | 1.03 |  |  |  |
|-----|------|-----|------|--|--|--|



South east of the latter an old cut with no outcrops is located. Minor quartz boulders with minor sulfides have been collected for sampling.

| <u>Sample</u> |      | <u>Au oz</u><br><u>ton</u> | <u>Ag oz</u><br><u>ton</u> | <u>Pb%</u> | <u>Zn%</u> | <u>Cu%</u> |
|---------------|------|----------------------------|----------------------------|------------|------------|------------|
| 790           | grab | .39                        | 3.97                       |            |            |            |

#### Marion C Vein System

This vein system appears to be the southern most exposed section of the Enterprise - No Surrender - King William vein system.

Two outcrops of the vein system have been found. The first consists of a 4 inch quartz vein striking N20-30E dipping 55° E. Minor pyrite occurs associated with the quartz. This outcrop was not sampled.

The second outcrop lies due south of the King William Main workings. Here an incline at 75° E was sunk on the vein for 50 feet. The vein has an indicated northerly strike and dip at 75° E.

The vein appears to be a shear filling with associated alteration.

|     |      |     |     |     |      |
|-----|------|-----|-----|-----|------|
| 784 | .003 | .52 | .09 | .03 | <.01 |
| 785 | .005 | .54 |     |     | <.01 |
| 786 | .005 | .41 |     |     | <.01 |

#### Ester M Vein

Four old cuts were located in the area of the Ester M. vein. Three of the cuts do not show bedrock. Quartz boulders in the vicinity of the cuts indicate that the vein has been reached. The fourth shows quartz stringers in brown shales with traces of pyrite.

|     |     |     |  |  |  |
|-----|-----|-----|--|--|--|
| 783 | .01 | .81 |  |  |  |
|-----|-----|-----|--|--|--|

Big Sandy

Along the northern boundary of the claim, beside the NW corner post an old hand trench completely caved was found. Erratics in the trench consists of greenstone boulders. No quartz material was found in this trench.

7-32 Middle Mapped Section

Mapping in this part was based on compass and chain traverses for ground control. Vein systems mapped in the middle section of the property appears to lie along the extension of the Ester vein system, the relationship to other veins is not known. The general trend of this vein indicates that they are definitely not part of the Enterprise, No Surrender-King William vein system.

M Fraction

On this claim along the eastern margin, three cuts were mapped. The northern most, a trench 4' x 5' shows strongly sheared greenstone with minor alteration - carbonatization. A quartz vein 9" wide folbws the shear. No sulfides have been found associated with the vein material. Minor pyrite occurs as dissemination within the greenstone. The vein trends N10-20° E, 65° E.

Two other trenches are completely filled, but altered greenstone-carbonate rock and quartz boulders have been found showing traces of galena and pyrite.

| <u>Sample</u> |             | <u>Au oz</u> | <u>Ag oz</u> | <u>Pb</u> | <u>Zn</u> | <u>Cu</u> |
|---------------|-------------|--------------|--------------|-----------|-----------|-----------|
| 16908         | Grade float | .02          | 1.28         | 1.21      | .01       | .02       |
| 16909         | 9"          | tr.          | .16          | .01       | .41       | .01       |

Raven II

The main workings are located along the southeastern limits of a large greenstone outcrop. Two trenches 4 x 6 x 6 ft and 4 x 5 x 4 ft. expose the vein. The vein strikes N20W, 65° E.,



on surface. At the bottom of the first trench the dip of the vein flattens to a 40-45° dip.

The vein has a width of 1.5 feet and is surrounded by a 4 foot wide alteration zone.

The other trenches are completely sloughed, but in vicinity of the trenches, the greenstone outcropping is strongly fractured and shows disseminated pyrite.

| <u>Sample</u> | <u>Width</u> | <u>Au oz</u> | <u>Ag oz</u> | <u>Pb</u> | <u>Zn</u> | <u>Cu</u> |
|---------------|--------------|--------------|--------------|-----------|-----------|-----------|
| 16910         | 1.5' vein    | .02          | 2.04         | .09       | .31       | .04       |

#### IXL-Fr.

The vein was found outcropping along a steep west slope. The first outcrops consists of a poorly exposed quartz vein cutting greenstone. The vein trends N10W and dips approximately 60° E, into the mountain. Strong shearing is indicated parallel to the vein.

Approximately 400 feet south a shaft has been sunk on the vein. The shaft is water filled and of unknown depth. Strong east-west shearing occurs north of the shaft. Numerous quartz stringers follow the shear direction.

The vein material consists of quartz with galena, sphalerite and pyrite. Minor malachite and azurite occurs as staining. The vein strikes northerly and dips at 60°E.

|       |      |     |      |     |     |     |
|-------|------|-----|------|-----|-----|-----|
| 16907 | dump | .02 | 3.68 | .84 | .03 | .01 |
|-------|------|-----|------|-----|-----|-----|

#### 7-33 South Section

Mapping in this part was completed using a 200 x 100 foot picketed grid for ground control.

In general it was found that outcrops are very sparse west of the baseline and the eastern portion is covered by heavy

glacial till in the topographically higher part of the grid.

#### Moon

A completely sloughed and filled old hand trench was located on this claim. Outcrops in the immediate area are greenstones, strongly fractured. No good exposures have been found in this area.

#### Parkview 3

Along the northern boundary of the Parkview claim, on line 6N 1W, a sloughed trench is located. No vein material was found. The trench appears to lie along the strike of the Jenny Long vein.

#### Jenny Long

The Jenny Long veins system has been developed by an inclined shaft now water filled, 3 bulldozer trenches and several small cuts.

The main vein exposure occurs in vicinity of the shaft, the vein strikes N10W, 60°E. The vein appears to follow a shear zone with associated alteration. The vein consists of quartz with variable amounts of galena, sphalerite, pyrite and chalcopyrite. It pinches and swells and is normally less than 1 ft. wide.

North of the shaft in two bulldozer trenches two veins are intermittently exposed. The vein material is similar to the above.

Southeast from the shaft, minor quartz float and altered greenstone has been found in a sloughed cat trench.

.17

| <u>Sample</u> |                               | <u>Au oz</u> | <u>Ag oz</u> | <u>Pb%</u> | <u>Zn%</u> | <u>Cu%</u> |
|---------------|-------------------------------|--------------|--------------|------------|------------|------------|
| 16912         | Float bull<br>dozer trench    | .28          | 6.12         | .84        | .37        | .49        |
| 16913         | Eastern vein<br>dozer trench  | .01          | .79          | .07        | .05        | .04        |
| 16915         | Western vein<br>Dozer trench  | .30          | 5.48         | 1.21       | .16        | .08        |
| 16916         | Vein in cut<br>south of shaft | <.003        | .05          |            |            |            |
| 16917         | Dump material                 | .13          | 4.37         | 1.14       | .92        | .38        |

### Wren

No vein outcrops or old workings have been found on this claim. A quartz dump has been found in the central part of the claims beside the road. This dump has been transported to its present location.

|       |      |      |     |     |     |      |
|-------|------|------|-----|-----|-----|------|
| 16911 | Grab | .003 | .59 | .05 | .02 | <.01 |
|-------|------|------|-----|-----|-----|------|

### Brian

The Brian shaft has not been located by the writer. Prospecting of the area south of the grid located the shaft approximately 300 ft. south and 100 ft. west of station 30S, 0+00W.

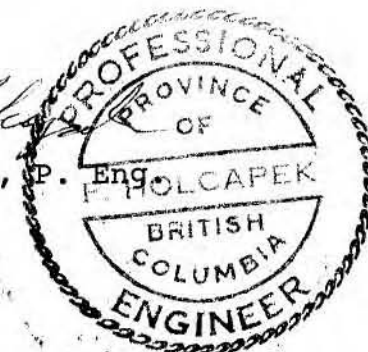
Samples shown to the writer were quartz fragments containing galena, chalcopyrite and sphalerite. No assays were obtained.

### Azela

The Azela lies approximately 700 ft. east of the mapped area and has not been investigated by the writer.

Vancouver, B.C.  
August 25, 1974.

*F. Holcapek*  
F. Holcapek, P. Eng



CERTIFICATION

I, Ferdinand Holcapek of 92-10842 152nd Street, Surrey, British Columbia, do hereby certify that:

1. I am a graduate of the University of British Columbia, with a Bachelor of Science Degree in Geology, 1969.
2. Since graduation I have been engaged in mining exploration in British Columbia, Yukon Territory, Northwest Territories, Quebec, Nevada, Arizona, Mexico and Australia.
3. I am a registered member, in good standing, of the Association of Professional Engineers of British Columbia, the Geological Association of Canada and the Society of Exploration Geophysists.
4. I am a Consulting Geologist.
5. This report is based on field work conducted under my supervision, during the period of July 12 to July 31, 1974.
6. That the cost statement attached outlines expenditures incurred to complete the work program.



F. Holcapek, P. Eng.

Vancouver, B.C.  
August 25, 1974.



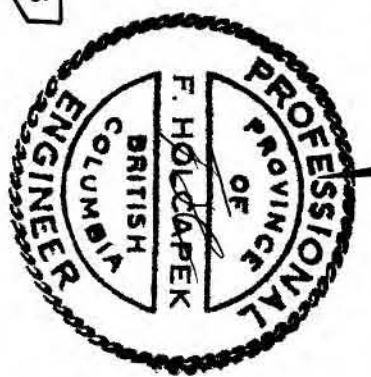
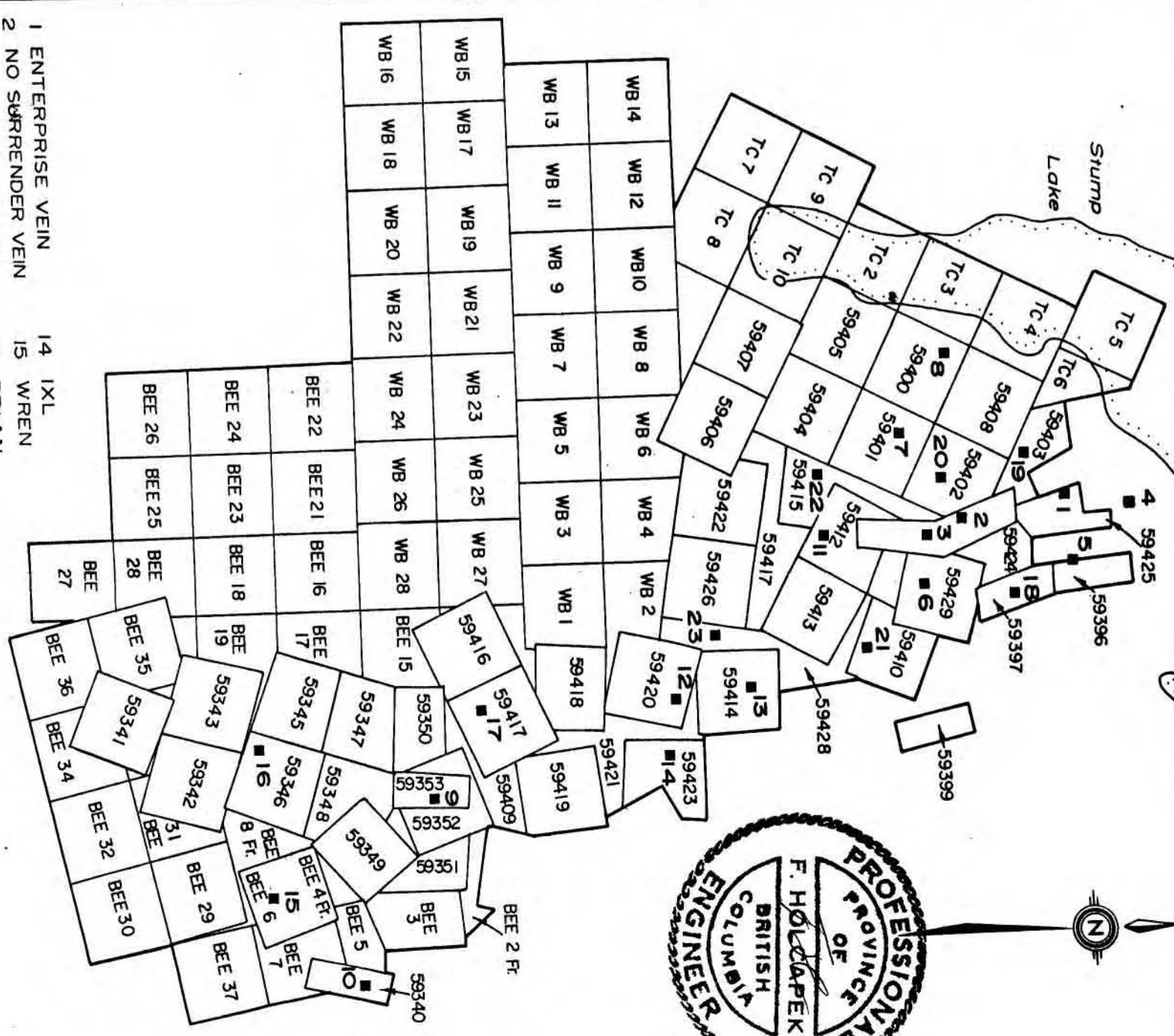
| Loc. | No. | Au(oz/t) | Ag(oz/t) | Cu(%) | Pb(%) | Zn(%) |
|------|-----|----------|----------|-------|-------|-------|
| 5    | 751 | 0.62     | 56.5     |       |       |       |
| 18   | 752 | tr       | 1.04     |       |       |       |
| 18   | 753 | tr       | 0.56     |       |       |       |
| 1    | 754 | 1.10     | 73.4     | 1.48  | 8.20  | 4.78  |
| 1    | 755 | 0.36     | 49.1     | 1.07  | 2.28  | 1.83  |
| 19   | 756 | 0.09     | 4.55     |       |       |       |
| 19   | 757 | 0.02     | 1.02     |       |       |       |
| 20   | 758 | 0.04     | 2.02     |       |       |       |
| 2    | 759 | tr       | 0.24     |       |       |       |
| 2    | 760 | 0.07     | 2.23     | 0.01  | 2.14  | 0.04  |
| 2    | 761 | 0.05     | 1.49     |       |       |       |
| 2    | 762 | 0.32     | 26.1     |       |       |       |
| 2    | 763 | 0.01     | 0.55     |       |       |       |
| 2    | 764 | 0.005    | 0.48     |       |       |       |
| 2    | 765 | 0.04     | 0.01     | 0.16  | 28.0  | 2.88  |
| 2    | 766 | 0.44     | 36.7     | 0.11  | 13.3  | 0.05  |
| 3    | 767 | 0.02     | 0.58     |       |       |       |
| 3    | 768 | 0.05     | 0.47     |       |       |       |
| 3    | 769 | 0.32     | 4.68     | 0.12  | 3.30  | 1.82  |
| 3    | 770 | 0.25     | 16.5     | 0.70  | 16.0  | 13.4  |
| 3    | 771 | 0.003    | 0.30     | 0.01  | 0.18  | 0.14  |
| 3    | 772 | 0.11     | 1.15     | 0.08  | 1.08  | 0.54  |
| 3    | 773 | 0.01     | 0.19     |       |       |       |
| 3    | 774 | tr       | 0.18     |       |       |       |
| 6    | 775 | 0.03     | 0.27     |       |       |       |
| 6    | 776 | 0.39     | 1.13     |       |       |       |
| 6    | 777 | 0.005    | 0.50     |       |       |       |
| 7    | 778 | 0.01     | 0.43     |       |       |       |
| 7    | 779 | 0.06     | 8.26     |       |       |       |
| 7    | 780 | 0.13     | 7.27     | 0.01  | 14.0  | 0.23  |
| 7    | 781 | 0.03     | 1.19     | <0.01 | 0.13  | 0.01  |
| 3    | 782 | tr       | 0.48     | 0.02  |       |       |
| 21   | 783 | 0.01     | 0.81     |       |       |       |
| 11   | 784 | 0.003    | 0.52     | <0.01 | 0.09  | 0.03  |
| 11   | 785 | 0.005    | 0.54     | <0.01 |       |       |
| 11   | 786 | 0.005    | 0.41     | <0.01 |       |       |

| Loc. | No. | Au(oz/t) | Ag(oz/t) | Cu(%) | Pb(%) | Zn(%) |
|------|-----|----------|----------|-------|-------|-------|
| 3    | 787 | 0.01     | 0.63     | 0.04  | 0.49  | 0.76  |
| 3    | 788 | 0.003    | 0.22     |       |       |       |
| 3    | 789 | 0.003    | 0.20     |       |       |       |
| 22   | 790 | 0.39     | 3.97     |       |       |       |
| 19   | 791 | 0.005    | 0.36     | .02   | .09   | .22   |
| 19   | 792 | 0.01     | 1.11     | .04   | .20   | .12   |
| 19   | 793 | 0.005    | 0.44     | .01   | .10   | .07   |
| 19   | 794 | 0.005    | 0.92     | .02   | .07   | .06   |
| 22   | 795 | 0.01     | 1.03     |       |       |       |
| 22   | 796 | 0.003    | 0.20     |       |       |       |
| 23   | 908 | 0.02     | 1.28     | 0.02  | 1.21  | 0.01  |
| 23   | 909 | tr       | .16      | 0.01  | 0.01  | 0.41  |
| 13   | 910 | 0.02     | 2.04     | .04   | 0.09  | 0.31  |
| 14   | 907 | 0.02     | 3.58     | .01   | .84   | .03   |
| 15   | 911 | .003     | .59      | <.01  | 0.05  | 0.02  |
| 9    | 912 | .28      | 6.12     | .46   | .84   | .37   |
| 9    | 913 | 0.01     | 0.79     | 0.04  | 0.07  | 0.05  |
| 9    | 915 | 0.30     | 5.48     | 0.08  | 1.21  | 0.16  |
| 9    | 916 | 0.38     | 4.68     | .18   | 0.80  | .10   |
| 9    | 917 | .13      | 4.39     | .38   | 1.14  | .92   |

Loc.-refers to location number on accompanying map.

- 1 ENTERPRISE VEIN
- 2 NO SURRENDER VEIN
- 3 KING WILLIAM VEIN
- 4 TUBAL CAIN VEIN
- 5 JOSHUA VEIN
- 6 EMULATOR VEIN
- 7 SILVER KING VEIN
- 8 PLANET VEIN
- 9 JENNY LONG VEIN
- 10 AZELA
- 11 MARIAN C.
- 12 RAVIN
- 13 RAVIN NO. 2

- 14 IXL
- 15 WREN
- 16 BRIAN
- 17 MOON
- 18 BELLE SCOTT
- 19 NEW STAR
- 20 SILVER STAR
- 21 ESTHAR M.
- 22 RUBY M.
- 23 M. FRACTION



JUNIPER MINES LTD. (NPL)  
 STUMP LAKE PROPERTY  
 SHOWING VEIN SYSTEMS  
 & INITIAL SAMPLE RESULTS





ASSAY TABLE

| SAMPLE NO. | GOLD(G/T) | SILVER(G/T) | COPPER % | LEAD % | ZINC % |
|------------|-----------|-------------|----------|--------|--------|
| 18751      | 0.82      | 58.5        |          |        |        |
| 52         | TR        | 1.04        |          |        |        |
| 53         | TR        | 0.54        |          |        |        |
| 54         | 1.10      | 73.4        | 1.48     | 8.20   | 4.78   |
| 55         | 0.38      | 48.1        | 1.07     | 2.28   | 1.83   |
| 56         | 0.09      | 4.85        |          |        |        |
| 57         | 0.02      | 1.02        |          |        |        |
| 58         | 0.04      | 2.02        |          |        |        |
| 59         | TR        | 0.24        |          |        |        |
| 60         | 0.07      | 2.23        | 0.01     | 2.14   | 0.04   |
| 61         | 0.05      | 1.49        |          |        |        |
| 62         | 0.22      | 28.1        |          |        |        |
| 63         | 0.01      | 0.55        |          |        |        |
| 64         | 0.009     | 0.48        |          |        |        |
| 65         | 0.04      | 0.91        | 0.16     | 28.6   | 2.88   |
| 66         | 0.14      | 28.7        | 0.11     | 12.3   | 0.98   |
| 67         | 0.02      | 0.58        |          |        |        |
| 68         | 0.08      | 0.47        |          |        |        |
| 69         | 0.32      | 4.88        | 0.12     | 3.20   | 1.82   |
| 70         | 0.25      | 18.3        | 0.70     | 18.0   | 12.4   |
| 71         | 0.003     | 0.30        | 0.01     | 0.18   | 0.14   |
| 72         | 0.11      | 1.15        | 0.08     | 1.08   | 0.54   |
| 73         | 0.01      | 0.19        |          |        |        |
| 74         | TR        | 0.18        |          |        |        |
| 75         | 0.03      | 0.27        |          |        |        |
| 76         | 0.39      | 1.13        |          |        |        |
| 77         | 0.008     | 0.80        |          |        |        |
| 78         | 0.01      | 0.43        |          |        |        |
| 79         | 0.08      | 8.28        |          |        |        |
| 80         | 0.12      | 7.27        | 0.01     | 14.0   | 0.23   |
| 81         | 0.03      | 1.19        | 0.01     | 0.12   | 0.01   |
| 82         | TR        | 0.44        | 0.02     |        |        |
| 83         | 0.01      | 0.81        |          |        |        |
| 84         | 0.003     | 0.52        | 0.01     | 0.09   | 0.03   |
| 85         | 0.008     | 0.84        | 0.01     |        |        |
| 86         | 0.008     | 0.41        | 0.01     |        |        |
| 87         | 0.01      | 0.82        | 0.04     | 0.48   | 0.78   |
| 88         | 0.003     | 0.22        |          |        |        |
| 89         | 0.003     | 0.20        |          |        |        |
| 90         | 0.39      | 3.97        |          |        |        |
| 91         | 0.008     | 0.38        | 0.02     | 0.09   | 0.22   |
| 92         | 0.01      | 1.11        | 0.04     | 0.20   | 0.12   |
| 93         | 0.008     | 0.44        | 0.01     | 0.10   | 0.07   |
| 94         | 0.008     | 0.92        | 0.02     | 0.07   | 0.08   |
| 95         | 0.01      | 1.03        |          |        |        |
| 96         | 0.003     | 0.20        |          |        |        |



**LEGEND**

- GREENSTONE
- TRENCHES
- CLAIM POST
- VEIN
- FAULT
- CREEKS
- ROAD
- SHARP
- OUTCROP
- SHAFT
- STRIKE AND DIP
- SAMPLE LOCATION

SAMPLES # 65, 64

5152  
m1

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 5152 MAP #1

**PROFESSIONAL ENGINEER**  
F. MOCAPEK  
BRITISH ENGINEERS

JUNIPER MINES LTD.(NPL)  
JENNY LONG GROUP STUMP LAKE AREA  
NICOLA MINING DIVISION, B.C.

STUMP LAKE GOLD PROPERTY  
**GEOLOGY FOR**  
NORTHERN SECTION

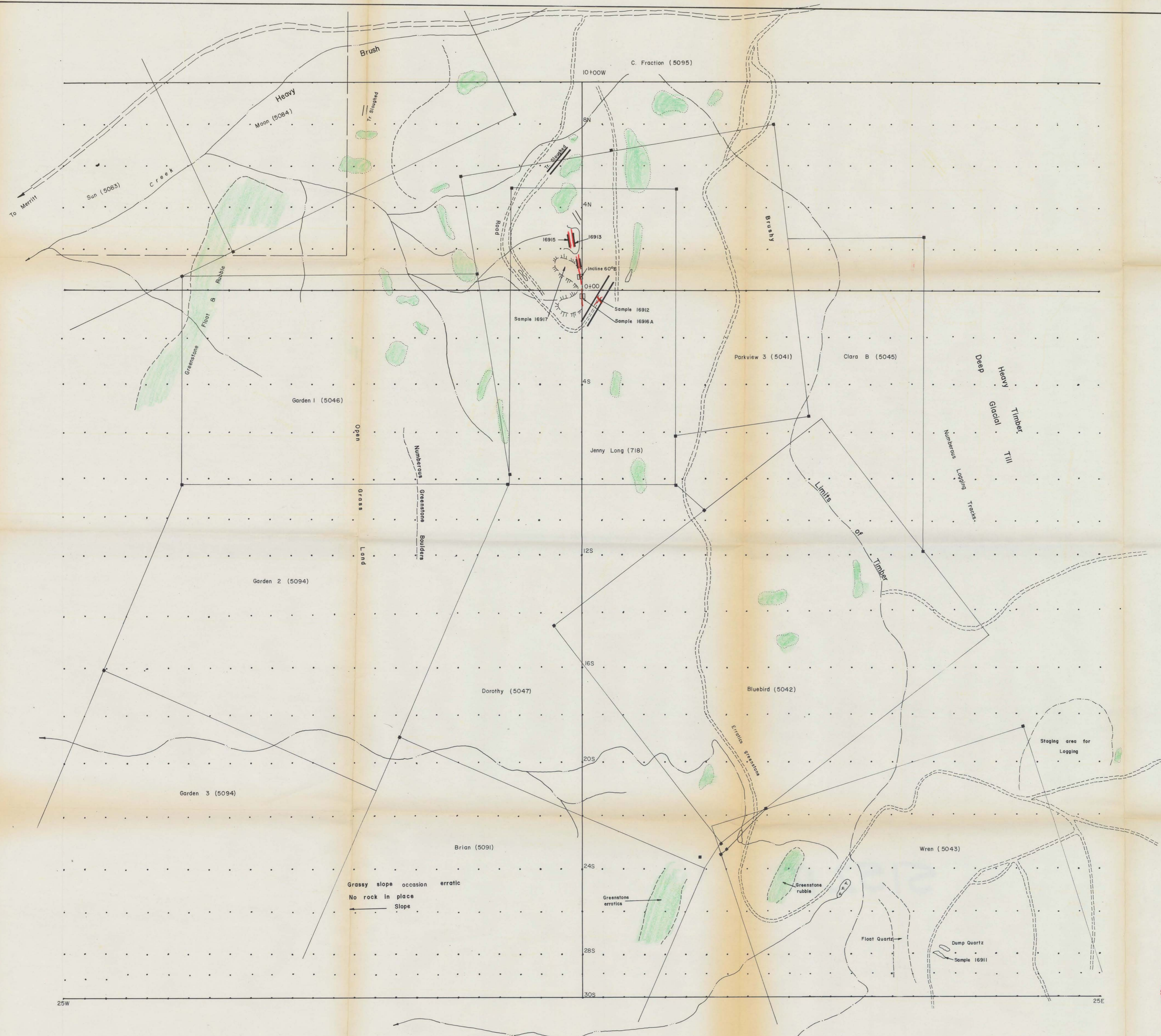
SCALE IN FEET  
0 200 400 600

AGILIS ENGINEERING LTD. AUGUST, 1974.





| Sample N <sup>o</sup> | Cu %   | Pb % | Zn % | Ag<br>oz/ton | Au<br>oz/ton |
|-----------------------|--------|------|------|--------------|--------------|
| 16911                 | < 0.01 | 0.05 | 0.02 | 0.59         | 0.003        |
| 16912                 | 0.49   | 0.84 | 0.37 | 6.12         | 0.28         |
| 16913                 | 0.04   | 0.07 | 0.05 | 0.79         | 0.01         |
| 16915                 | 0.08   | 1.21 | 0.16 | 5.48         | 0.30         |
| 16916A                | 0.18   | 0.80 | 0.10 | 4.68         | 0.38         |
| 16917                 | 0.38   | 1.14 | 0.92 | 4.37         | 0.13         |



Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 5152 MAP #2 **5152 M2**



JUNIPER MINES LTD. (NPL)  
JENNY LONG GROUP STUMP LAKE AREA  
NICOLA MINING DIVISION, B.C.

STUMP LAKE GOLD PROPERTY  
**GEOLOGY MAP**  
CENTRAL SECTION

SCALE IN FEET  
200 0 200 400 600

AGLIS ENGINEERING LTD. AUGUST 1974





W3  
2129

5152  
M3

**LEGEND**

|  |             |  |                |
|--|-------------|--|----------------|
|  | Green stone |  | Swamp          |
|  | Claim post  |  | Creek          |
|  | Vein        |  | Strike and dip |
|  | Fault       |  |                |
|  | Road        |  |                |
|  | Outcrop     |  |                |
|  | Shaft       |  |                |

| Sample N <sup>o</sup> | Copper % | Lead % | Zinc % | Silver oz/ton | Gold oz/ton |
|-----------------------|----------|--------|--------|---------------|-------------|
| 16907                 | 0.01     | 0.84   | 0.03   | 3.58          | 0.02        |
| 16908                 | 0.02     | 1.21   | 0.01   | 1.28          | 0.02        |
| 16909                 | 0.01     | 0.01   | 0.41   | 0.16          | Trace       |
| 16910                 | 0.04     | 0.09   | 0.31   | 2.04          | 0.02        |

Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 5152 MAP #3



JUNIPER MINES LTD. (NPL)  
JENNY LONG GROUP STUMP LAKE AREA  
NICOLA MINING DIVISION, B. C.

STUMP LAKE GOLD PROPERTY

**GEOLOGY MAP**  
SOUTHERN SECTION

SCALE IN FEET  
200 0 200 400 600

AGILIS ENGINEERING LTD. AUGUST 1974