

PAWNEE OIL CORPORATION INC.

A Geological and Geochemical Report on the Lynn Claim

Lillooet M.D., B.C.

by

T. L. Sadlier-Brown

Property Name: Lynn Claim (No. 1194)

NTS Map: 92J-15W

Coordinates: 50° 55' N. Latitude
122° 49' W. Longitude

Work Done: October 31st - November 3rd 1980

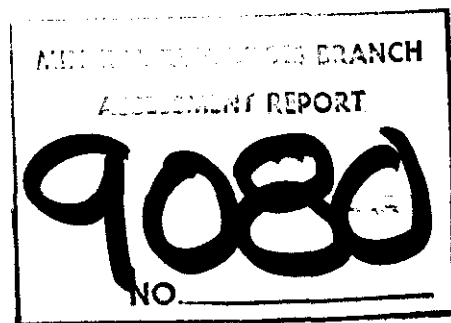


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SUMMARY

Nevin Sadlier-Brown Goodbrand Ltd. was retained by Pawnee Oil Corporation as its technical consultant on the Lynn Claim.

J.P. Elwell, P.Eng.; the Pawnee Oil Corporation engineer recommended an exploration program on the property that included a soil geochemical survey.

In November 1980 soils were sampled on a reconnaissance grid across the northern part of the claim. The grid was tied onto a grid on the adjoining Jean Claim on the west Lynn Claim line 4 units north of the legal corner post. Concurrently the geology of the property was mapped.

Soils were tested for zinc, lead, arsenic and gold. Zinc and lead distributions seem to reflect underlying folded stratigraphy. Sample spacing is too sparse for the significance of the gold and arsenic values to be known.

Mapping and soil geochemistry reveal that most of the Lynn Claim is underlain by volcanics and sediments of the Bridge River (Fergusson) Group; the host rocks of vein-gold mineralization elsewhere in the Gold Bridge-Bralorne camp.

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We recommend that the claim be explored further by additional soil sampling, electromagnetic surveys, and conventional prospecting.

1.0 INTRODUCTION

1.1 Terms of Reference

Nevin Sadlier-Brown Goodbrand Ltd. was retained by Pawnee Oil Corporation to carry out exploration work recommended by J.P. Elwell, P.Eng.; on the Lynn Claim. In October 1980 a preliminary soil survey was conducted on the claim in partial fulfillment of Elwell's recommendations. The results of this survey are discussed herein.

1.2 Location and Access

The Lynn Claim is located at 50° 55' north latitude and 122° 49' west longitude. The property is depicted on NTS Claim sheet 92J-15W at the confluence of Gun and Pearson Creeks, about 7 kilometers north-northwest of the town of Goldbridge (Drawings 1,2).

Access to the Gold Bridge-Bralorne area is by good gravel road from Lillooet to the east. In summer, access is also possible via the Hurley River road from Pemberton to the south. The Gun Creek road crosses the property, providing good access to its central part. The northern part of the claim is easily reached by logging roads that join the Gun Creek road at Lick Creek 0.5 kilometers west of the Lynn Claim (Drawing 3).

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1.3 Terrain and Vegetation

The property is situated in the Coast Mountains of southern British Columbia. It lies on the south slope of a ridge at elevations of between 800 meters and 1300 meters.

The upper slopes of the ridge on the northern part of the claim supports dense but partly logged pine forest. Lower slopes of the ridge are covered with open pine and deciduous forest.

1.4 Property

The Lynn Claim (Record No. 1194(1)) comprises 15 units (Drawing 2). It was staked by Greg A. Shore on January 20-21, 1980 and recorded at Lillooet on January 24, 1980. On February 22, 1980; 100% interest in the claim was transferred to Pawnee Oil Corporation.

1.5 Previous Work

There is no evidence or record of previous work on the Lynn Claim. It is, however, located in the Gold Bridge mining camp, an area that has been actively explored since the 19th century.

The following is J.P. Elwell's (1980) summary of work conducted in the area around the Lynn Claim in a parallel stratigraphic interval to that underlying the claim.

"Among the mineral occurrences in the Bridge River (Fergusson) Group which have been subjected to exploration in the past are the Minto Mine, about 5 kilometers southeast of the Lynn Claim, which was a prominent producer of gold, with silver and base metal values; the Dauntless, near Mowson Pond, consisting of a quartz vein 6 to 9 feet wide carrying gold values in the 0.2 oz/ton range; the Peerless, on the Golden Sidewalk Claim, which is a narrow vein with lead-zinc mineralization, with gold values indicated from assays of mineralized material from the adit dump running over one oz/ton. The Cu claim, adjoining the Lynn Claim to the east is reported to have a copper showing, and the Bunting, 1.5 kilometers to the west, covers a wide silicified zone mentioned in the B.C. Minister of Mines Report for 1933."

2.0 GEOLOGY

2.1 Regional Geology

The Gold Bridge-Bralorne area is underlain by a northwest trending belt of Triassic-age andesites and sediments of the Bridge River Group (Drawing 4). This group formerly known as the Fergusson Series is overlain by a succession of volcanics and sedimentary rocks which comprise of the Noel, Pioneer and Hurley Formations. The volcanics and sediments have been intruded and metamorphosed by the Bralorne intrusives (granite to diorite) and some ultramafics.

The geology of the Gold Bridge area has been studied by Cairnes (1934) and Woodsworth (1977).

2.2 Property Geology

The Lynn Claim is underlain by andesites and siltstones of the Triassic-age Bridge River Group. Outcrops are common only on the northern part of the claim. There, the rocks are metamorphosed to the upper greenschist and lower amphibolite facies and are highly foliated.

Scanty structural information indicates that these rocks are in a northeast striking, southeast dipping sequence that has been refolded and sheared along north-northwesterly axes.

A Pleistocene-age outwash covers the south end of the property. It extends from Gun Lake to Carpenter Lake. It may record the filling of an interglacial valley that drained the Downtown Lake region before the Bridge River gained prominence. Geological mapping was done by John Ostler, M.Sc. (pers. comm.) as part of regional survey in the Gun Creek area.

3.0 SOIL GEOCHEMISTRY

3.1 Soil Grid, November, 1980

A soil grid was laid out and sampled by Alex Black on November 2, 1980. The grid was tied onto a grid on the adjoining Jean Claim at 4 units north of the Lynn legal corner post (Drawing 5). Three lines were sampled. Two east-west lines spaced 500 meters apart and one north-south line were

sampled at 100 meter intervals. Lines were laid out by Brunton compass and hip chain.

Soils were sampled from the alluviated "B" soil horizon that is commonly 34cm below surface in the claim area. Samples were dried in kraft paper envelopes and shipped to Chemex Labs Ltd. in North Vancouver. Procedure at the lab is recounted in Appendix A.

3.2 Metal Distributions in Soils

Soils were tested for four metals: zinc, lead, arsenic, and gold. Zinc and lead distributions (Appendix B,C) seem to reflect stratigraphic trends in the underlying Bridge River Group andesites and siltstones (Drawings 6, 7). Base metal values are moderate and are similar to those found elsewhere in the Gold Bridge area.

Arsenic and gold values do not appear to be significant. This may be attributed to the absence of these elements on the property or the possibility that the 100 meter sample interval is too large to detect narrow linear features such as auriferous quartz veins.

4.0 CONCLUSIONS AND RECOMMENDATIONS


4.1 Conclusions

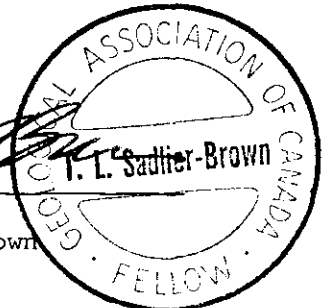
Mapping and soil geochemistry reveal that most of the Lynn Claim is underlain by volcanics and sediments of the Bridge River Group; the host rocks of vein-gold mineralization elsewhere in the Gold Bridge camp. Discoveries of vein mineralization on claims near the Lynn Claim indicate that vein mineralization may be present on the property.

4.2 Recommendations

Now that suitable control lines are laid out, geochemical exploration for vein gold mineralization should be expanded on tightly spaced east-west grid lines. Line spacing should be 100 meters and soils should be sampled at 20 meter intervals on each line. The writer agrees with J.P. Elwell, P.Eng. (1980) that a VLF electromagnetic survey may be useful to isolate exact sources of soil anomalies.

Respectfully submitted,


T. L. Sadlier-Brown

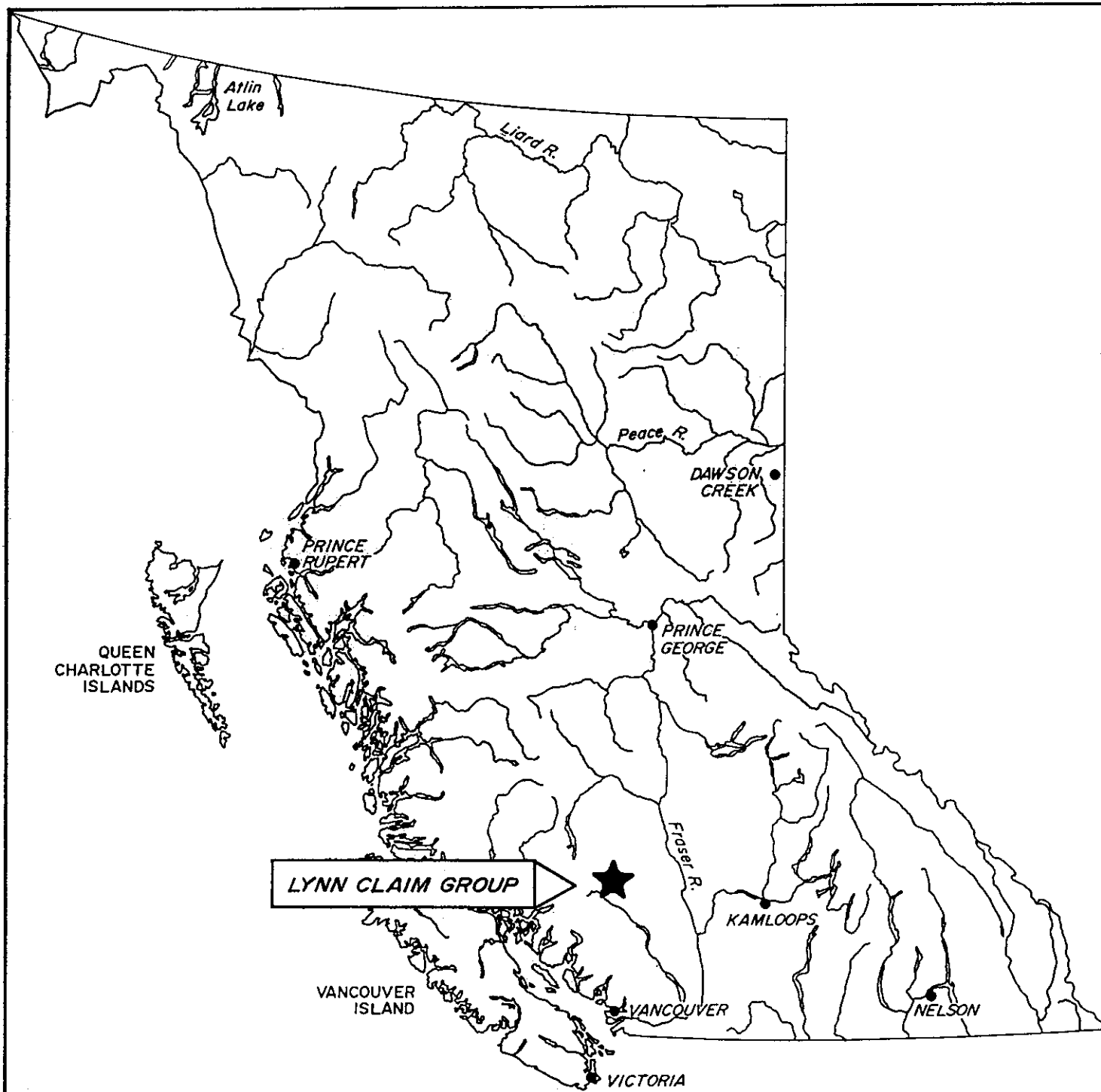


5.0 REFERENCES

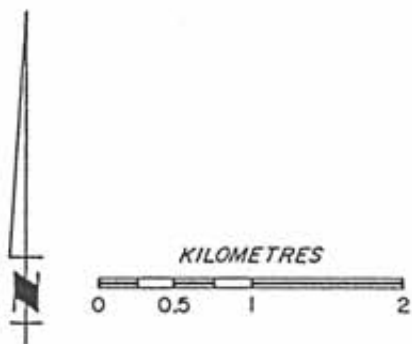
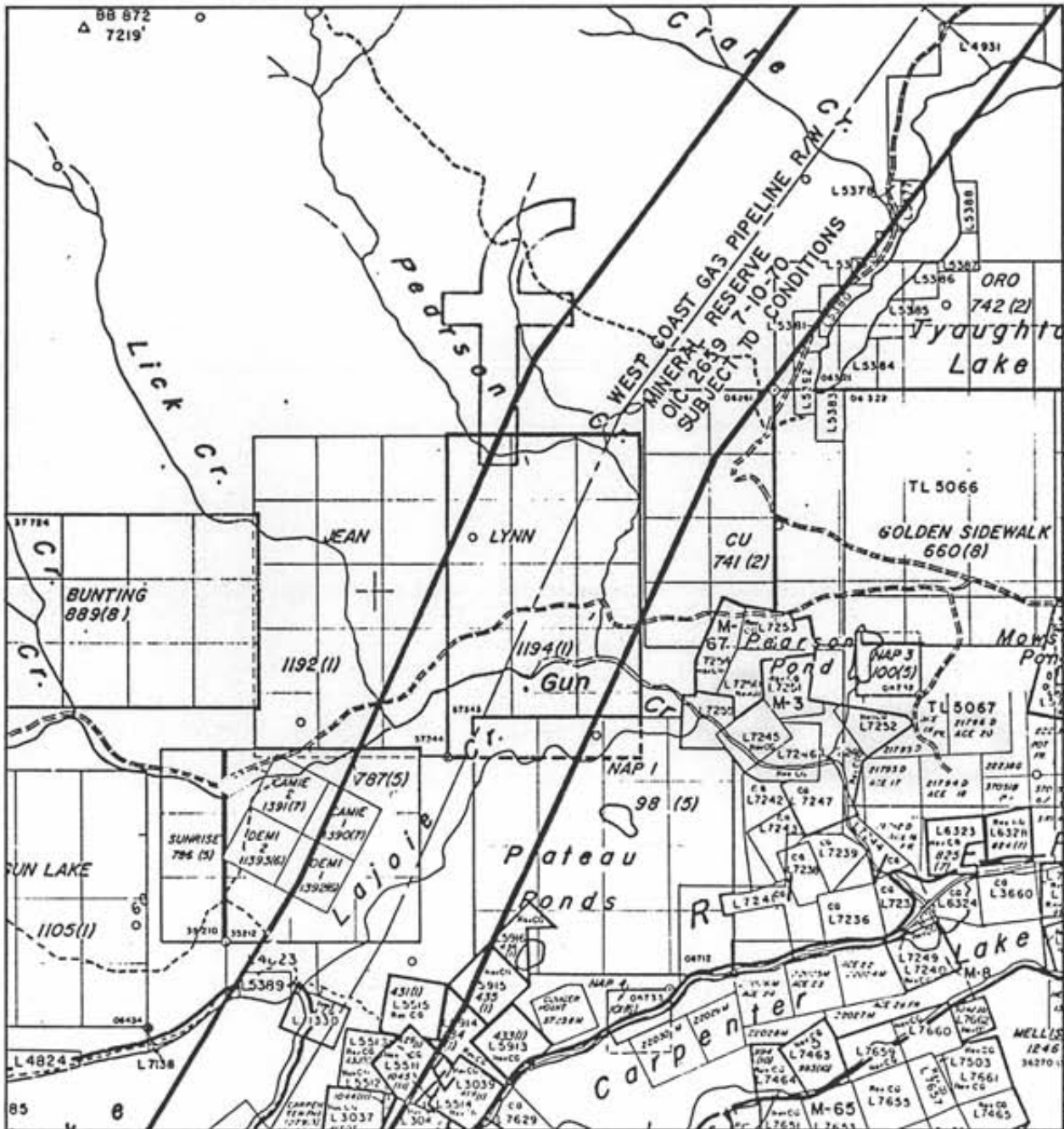
Cairnes, C.E., 1934: Cadwallader Creek Area, Lillooet District, British Columbia; Geological Survey of Canada Map 431A.

Elwell, J.P., 1980: Preliminary Report on the Lynn Claim Bridge River Area, Lillooet Mining District, B.C.; in Pawnee Oil Corporation, Statement of Material Facts, accepted October 30, 1980.

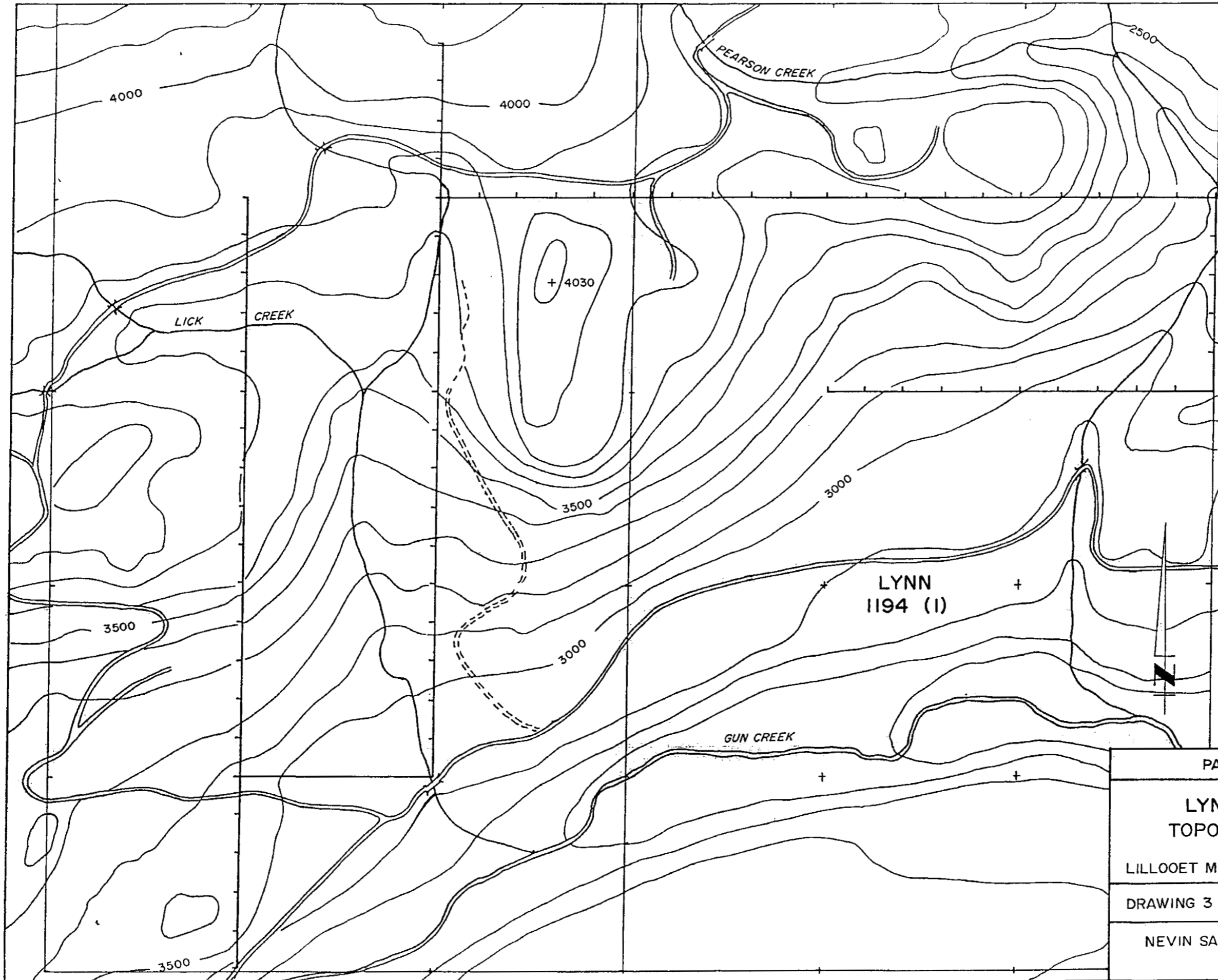
Woodsworth, G.J., 1977: Geology of the Pemberton Map Area (92J); Geological Survey of Canada Open File 482.



PAWNEE OIL CORPORATION
LYNN CLAIM GROUP GENERAL LOCATION
LILLOOET M.D.
DRAWING N° 1
NEVIN SADLER-BROWN GOODBRAND LTD. DECEMBER 1980



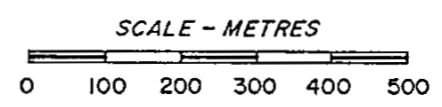
PAWNEE OIL CORPORATION	
LYNN CLAIM GROUP LOCATION: CLAIM MAP	
LILLOOET M.D	NTS MAP 92J/15W
DRAWING N° 2	SCALE 1:50 000
NEVIN SADLIER-BROWN GOODBRAND LTD. DECEMBER 1980	



LEGEND

- + CLAIM BOUNDARIES
- +— GEOCHEM. GRID LINES
- ==== ROAD
- == == TRAIL
- 4000 - 100' CONTOUR INTERVALS

MINERAL RESOURCES BRANCH
 ACCESSORY REPORT
9080
 NO. _____



PAWNEE OIL CORPORATION	
LYNN CLAIM GROUP TOPOGRAPHY & ACCESS	
LILLOOET M.D.	NTS MAP 92J/15W
DRAWING 3	SCALE 1:10 000
NEVIN SADLIER - BROWN GOODBRAND LTD. JANUARY 1981	

LEGEND

MID TO UPPER CRETACEOUS

- 14 **KINGSVALE GROUP:** 14a, arkose, greywacke, shale, minor conglomerate; 14b, andesitic flows and pyroclastics

LOWER CRETACEOUS

- 13 **TAYLOR CREEK GROUP:** Chert-pebble conglomerate, black limy shale, green tuff, volcanic breccia, andesite and basalt

UPPER TRIASSIC TO MIDDLE JURASSIC

- 8 **TYAUGHTON GROUP:** Shale, siltstone, greywacke

UPPER TRIASSIC

- 7 **CADWALLADER GROUP** (undivided; includes Hurley, Pioneer and Noel strata, may include older and younger rocks): andesitic breccia, tuff, and flows, greenstone; lesser slate, argillite, phyllite, conglomerate, limestone, rhyolitic breccia & flows
- 6 **HURLEY FORMATION:** Thin-bedded argillite, phyllite, limestone, tuff, conglomerate, andesite, minor chert
- 5 **PIONEER FORMATION:** Greenstone, andesitic to basaltic flows and pyroclastics; 5a, BRALORNE INTRUSIONS (in part): augite diorite, gabbro, greenstone (intrusive and dioritized equivalents of 5)
- 4 **NOEL FORMATION:** Thin-bedded argillite, chert, conglomerate and greenstone

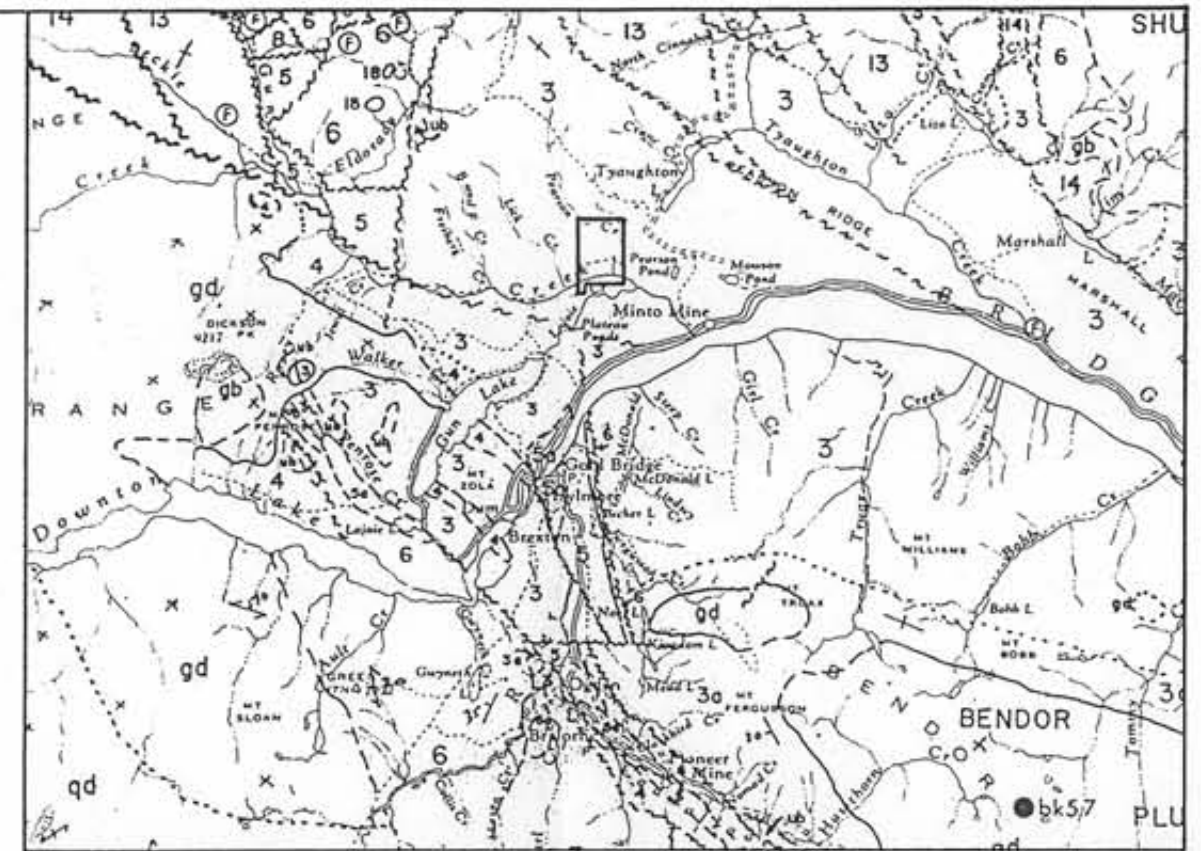
TRIASSIC AND JURASSIC AND OLDER(?)

- ub **Ultramafic rocks:** Serpentine, harzburgite, periodite, diorite
- 3 **BRIDGE RIVER (FERGUSON) GROUP:** Greenstone, basalt, chert, argillite, phyllite; minor limestone, serpentine, and serpentinized peridotite; 3a, more metamorphosed equivalents of 3, mainly biotite schist.

PLUTONIC ROCKS (mostly of unknown age)

- gd Granodiorite
qd Quartz diorite
gb Gabbro

- ⓕ Fossil locality
----- Geological boundary
~~~~~ Fault

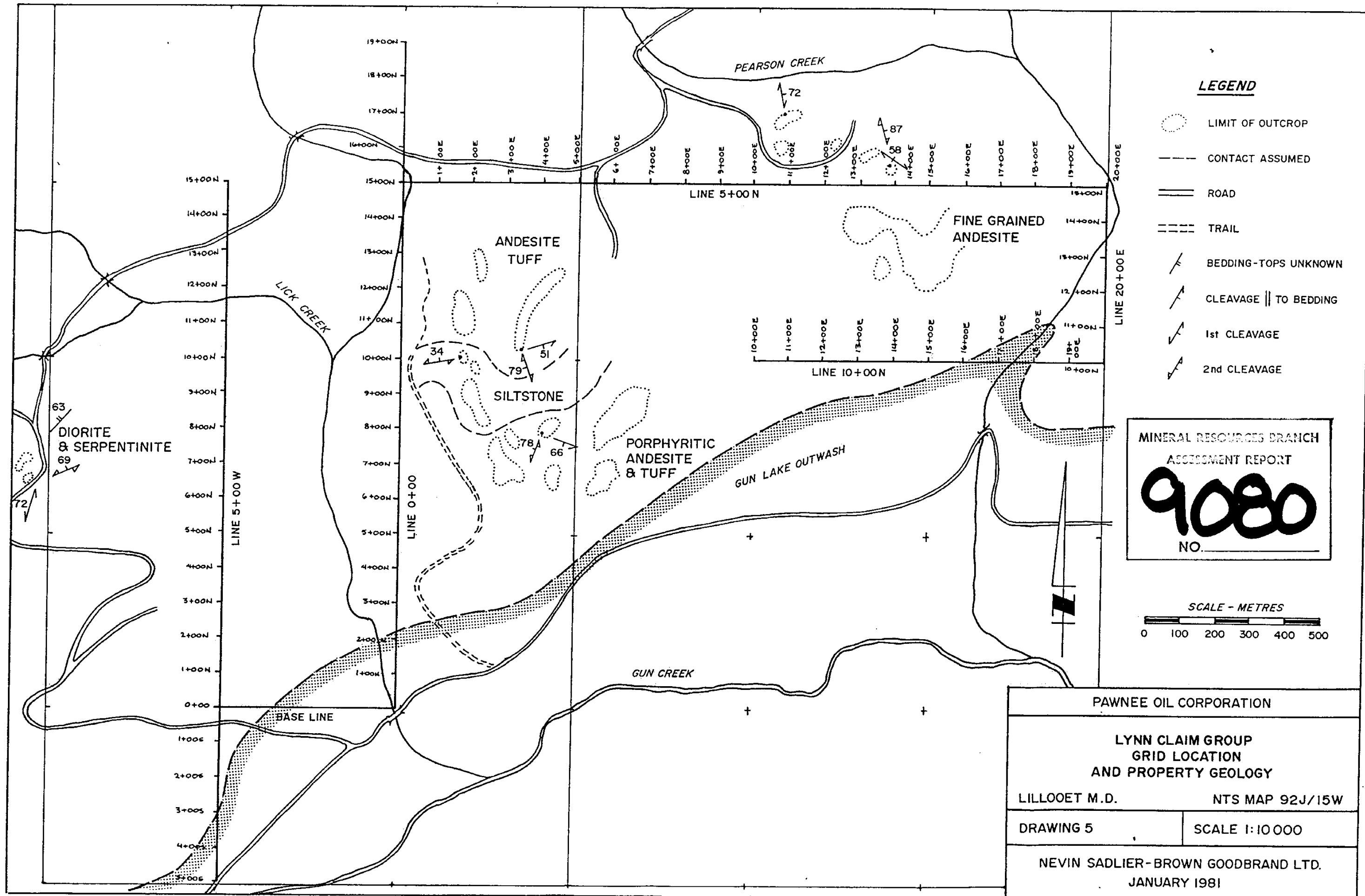


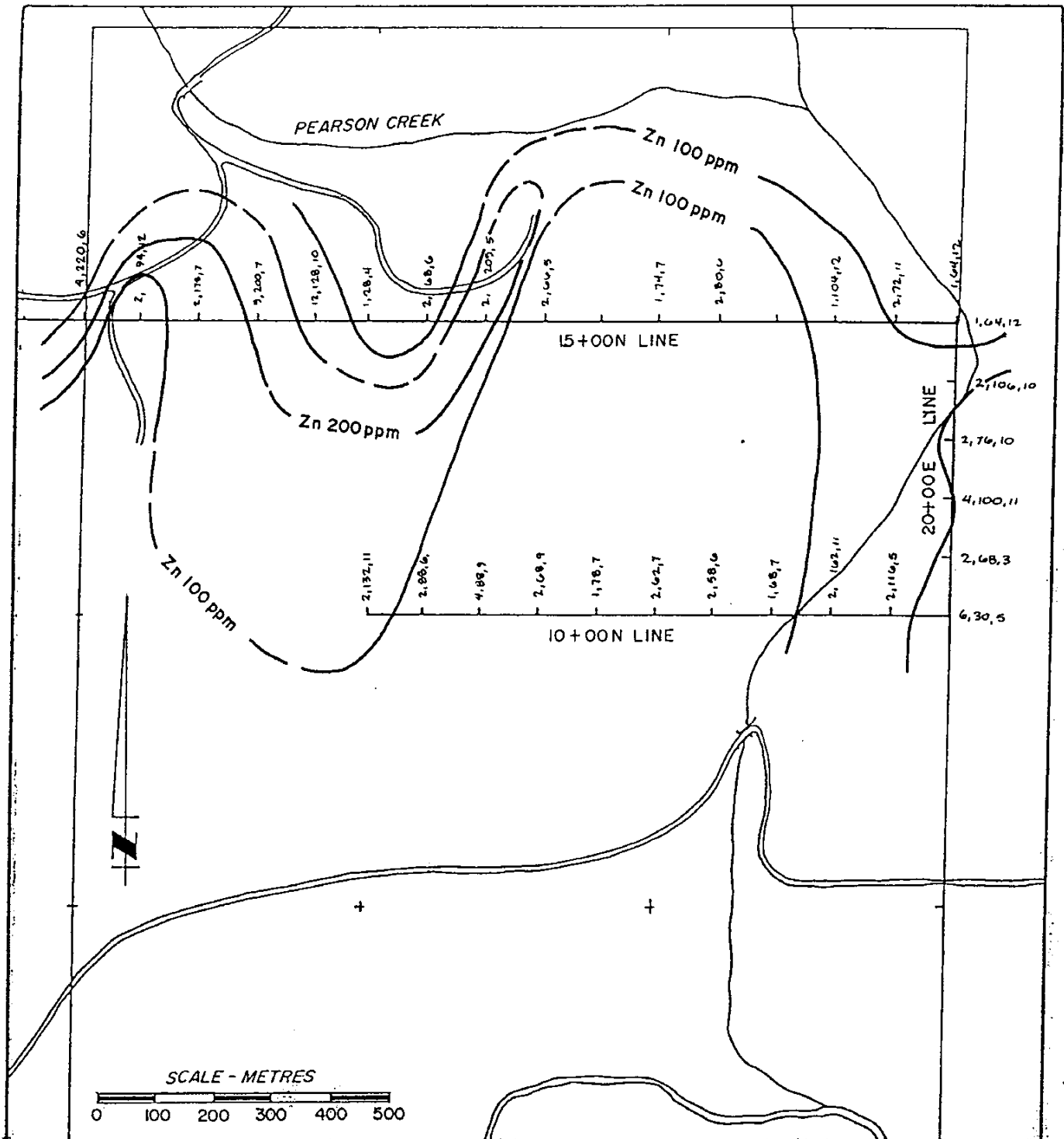
Taken from *GEOLOGY - PEMBERTON (92J) MAP AREA*  
Compiled by G.J. Woodsworth (1977)



|                                                    |                 |
|----------------------------------------------------|-----------------|
| PAWNEE OIL CORPORATION                             |                 |
| LYNN CLAIM GROUP<br>REGIONAL GEOLOGY (Woodsworth)  |                 |
| LILLOOET M.D.                                      | NTS MAP 92J/15W |
| DRAWING N° 4                                       | SCALE 1:250,000 |
| NEVIN SADLIER-BROWN GOODBRAND LTD.<br>JANUARY 1981 |                 |



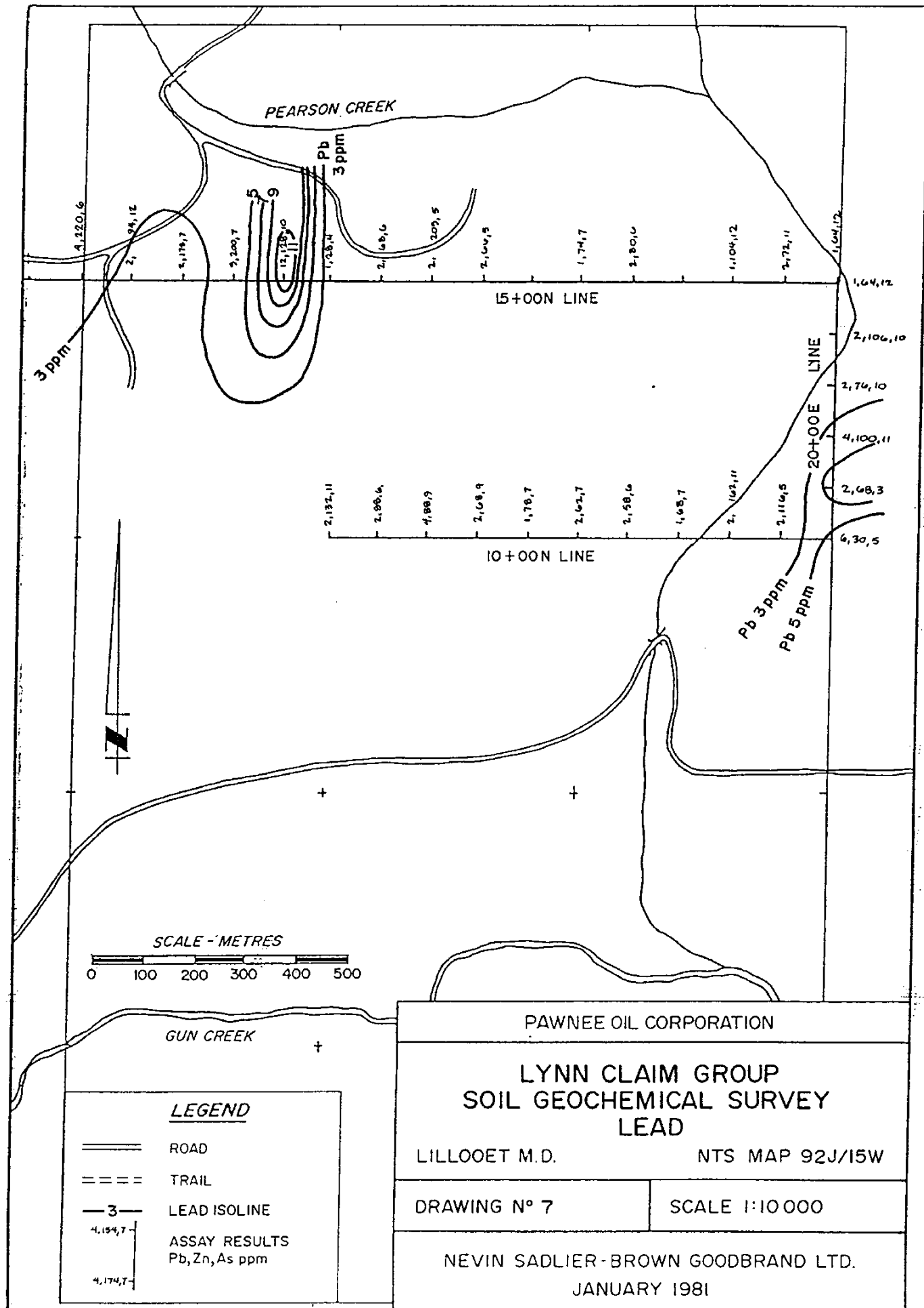




**LEGEND**

|         |                               |
|---------|-------------------------------|
| ==      | ROAD                          |
| ===     | TRAIL                         |
| -200-   | ZINC ISOLINE                  |
| 4,154,7 | ASSAY RESULTS<br>Pb,Zn,As ppm |
| 4,174,7 |                               |

|                                                     |                 |
|-----------------------------------------------------|-----------------|
| PAWNEE OIL CORPORATION                              |                 |
| LYNN CLAIM GROUP<br>SOIL GEOCHEMICAL SURVEY<br>ZINC |                 |
| LILLOOET M.D.                                       | NTS MAP 92J/15W |
| DRAWING N° 6                                        | SCALE 1:10 000  |
| NEVIN SADLIER-BROWN GOODBRAND LTD.<br>JANUARY 1981  |                 |



## APPENDIX A

PPM Arsenic: A 1.0 gram sample is digested with a mixture of perchloric acid and nitric acid to strong fumes of perchloric acid. The digested solution is diluted to volume and mixed. An aliquot of the digested is acidified, reduced with KI and mixed. A portion of the reduced solution is converted to arsine with  $\text{NaBH}_4$  and the arsenic content determined using flameless atomic absorption.

Detection limit - 1 PPM

PPM Lead

PPM Zinc: A 1.0 gram sample portion of sample is digested in conc. perchloric-nitric acid ( $\text{HClO}_4$ - $\text{HNO}_3$ ) for approx. 2 hrs. The digested sample is cooled and made up to 25 mls with distilled water. The solution is mixed and solids are allowed to settle. Zinc is determined by atomic absorption techniques.

PPB Gold: 5 gram samples ashed @  $800^\circ\text{C}$  for one hour, digested with aqua regia - twice to dryness - taken up in 25% HCL-, the gold then extracted as the bromide complex into MIBK and analyzed via A.A.

Detection limit - 10 PPB

NOTE: Samples are dried and run through 80 mesh prior to above.



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CANADA V7J 2C1  
TELEPHONE (604) 984-0221  
TELEX: 043-52597

• ANALYTICAL CHEMISTS

• GEOCHEMISTS

• REGISTERED ASSAYERS

## CERTIFICATE OF ANALYSIS

TO : Nevin Sadlier-Brown Goodbrand Ltd.,  
401 - 134 Abbott St.,  
Vancouver, B.C.  
V6B 2K4

APPENDIX B

CERT. # : A8C11171-001-  
INVOICE # : 40768  
DATE : 26-NOV-80  
P.C. # : NONE  
LYNN CLAIMS

ATTN. MR. T. SADLIER-BROWN

| Sample description | Prep code | Pb ppm | Zn ppm | As ppm | Au - (AA) ppb |    |    |
|--------------------|-----------|--------|--------|--------|---------------|----|----|
| 10+00N 10+00E      | 202       | 2      | 132    | 11     | <10           | -- | -- |
| 10+00N 11+00E      | 202       | 2      | 88     | 6      | <10           | -- | -- |
| 10+00N 13+00E      | 202       | 2      | 58     | 9      | <10           | -- | -- |
| 10+00N 14+00E      | 202       | 1      | 78     | 7      | <10           | -- | -- |
| 10+00N 15+00E      | 202       | 2      | 62     | 7      | <10           | -- | -- |
| 10+00N 16+00E      | 202       | 2      | 58     | 6      | <10           | -- | -- |
| 10+00N 17+00E      | 202       | 1      | 68     | 7      | <10           | -- | -- |
| 10+00N 18+00E      | 202       | 1      | 162    | 11     | <10           | -- | -- |
| 10+00N 19+00E      | 202       | 2      | 116    | 6      | <10           | -- | -- |
| 10+00N 20+00E      | 202       | 6      | 30     | 5      | <10           | -- | -- |
| 15+00N 6+00E       | 202       | 2      | 94     | 12     | <10           | -- | -- |
| 15+00N 7+00E       | 202       | 2      | 178    | 7      | <10           | -- | -- |
| 15+00N 8+00E       | 202       | 2      | 98     | 7      | <10           | -- | -- |
| 15+00N 9+00E       | 202       | 4      | 200    | 7      | <10           | -- | -- |
| 15+00N 10+00E      | 202       | 12     | 128    | 10     | <10           | -- | -- |
| 15+00N 11+00E      | 202       | 1      | 88     | 4      | <10           | -- | -- |
| 15+00N 12+00E      | 202       | 2      | 68     | 6      | <10           | -- | -- |
| 15+00N 13+00E      | 202       | 2      | 205    | 5      | <10           | -- | -- |
| 15+00N 14+00E      | 202       | 2      | 66     | 5      | <10           | -- | -- |
| 15+00N 15+00E      | 202       | 1      | 74     | 7      | <10           | -- | -- |
| 15+00N 16+00E      | 202       | 2      | 80     | 6      | <10           | -- | -- |
| 15+00N 18+00E      | 202       | 2      | 104    | 12     | <10           | -- | -- |
| 15+00N 19+00E      | 202       | 1      | 72     | 11     | <10           | -- | -- |
| 15+00N 20+00E      | 202       | 1      | 64     | 12     | <10           | -- | -- |
| 11+00N 20+00E      | 202       | 2      | 106    | 10     | <10           | -- | -- |
| 12+00N 20+00E      | 202       | 2      | 76     | 10     | <10           | -- | -- |
| 13+00N 20+00E      | 202       | 4      | 100    | 11     | <10           | -- | -- |
| 14+00N 20+00E      | 202       | 2      | 68     | 3      | <10           | -- | -- |

Certified by .....

*Hart Bichler*



MEMBER  
CANADIAN TESTING  
ASSOCIATION

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NORTH VANCOUVER B.C.  
CANADA V7J 2C1  
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TELEX: 043-52597

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## CERTIFICATE OF ANALYSIS

TO : Nevin Sadlier-Brown Goodbrand Ltd.,  
401 - 134 Abbott St.,  
Vancouver, B.C.  
V6B 2K4

APPENDIX B cont'd

CERT. # : A8011172-C02-A  
INVOICE # : 40793  
DATE : 27-NOV-80  
P.O. # : NONE  
LYNN CLAIMS

ATTN. MR. T. SADLIER-BROWN

| Sample description | Prep code | Pb ppm | Zn ppm | As ppm | Au -(AA) ppb |    |    |
|--------------------|-----------|--------|--------|--------|--------------|----|----|
| 10+00N 12+00E      | 202       | 4      | 88     | 9      | <10          | -- | -- |

Certified by .....

APPENDIX C

Metals in Soils

|       |         |                      |                              |                       |
|-------|---------|----------------------|------------------------------|-----------------------|
| (i)   | Zinc    | <u>Concentration</u> | <u>No. of Determinations</u> | <u>% Distribution</u> |
|       |         | 0 - 49 ppm           | 1                            | 3.45                  |
|       |         | 50 - 99              | 18                           | 62.06                 |
|       |         | 100 - 149            | 6                            | 20.69                 |
|       |         | 150 - 199            | 2                            | 6.90                  |
|       |         | 200 - 249            | 2                            | 6.90                  |
|       |         |                      | <u>29</u>                    | <u>100.00</u>         |
| (ii)  | Lead    | <u>Concentration</u> | <u>No. of Determinations</u> | <u>% Distribution</u> |
|       |         | 1 ppm                | 7                            | 24.14                 |
|       |         | 2                    | 17                           | 58.62                 |
|       |         | 3                    | 0                            | 0.00                  |
|       |         | 4                    | 3                            | 10.34                 |
|       |         | 5                    | 0                            | 0.00                  |
|       |         | 6                    | 1                            | 3.45                  |
|       |         | +6                   | 1                            | 3.45                  |
|       |         |                      | <u>29</u>                    | <u>100.00</u>         |
| (iii) | Arsenic | <u>Concentration</u> | <u>No. of Determinations</u> | <u>% Distribution</u> |
|       |         | 0 - 4 ppm            | 2                            | 6.90                  |
|       |         | 5 - 9                | 17                           | 58.62                 |
|       |         | 10 - 14              | 10                           | 34.48                 |
|       |         | 15 - 19              | 0                            | 0.00                  |
|       |         |                      | <u>29</u>                    | <u>100.00</u>         |

APPENDIX D

Itemized Cost Statement

|                                              |                        |
|----------------------------------------------|------------------------|
| Consulting Fees                              | \$ 880.00              |
| Geological, geochemical, geophysical surveys | 640.00                 |
| Travel, meals and accommodation              | 260.94                 |
| Assays                                       | 266.11                 |
| Reproduction and drafting                    | <u>15.00</u>           |
| <br>TOTAL COSTS TO DATE                      | <br><u>\$ 2,062.05</u> |



APPENDIX E

Certificate and Statement of Qualifications

I, Timothy L. Sadlier-Brown hereby certify that:

1. I am a consulting geologist and partner in the firm of Nevin Sadlier-Brown Goodbrand Ltd. with offices at 401 - 134 Abbott Street, Vancouver, B.C. V6B 2K4
2. I was educated at Carleton University in Ottawa, Ontario and am a Fellow of the Geological Association of Canada.
3. Since 1965 I have acted in the field of exploration geology in positions of responsibility and have been a principal in the firm of Nevin Sadlier-Brown Goodbrand Ltd. since 1972.
4. I personally supervised the geological work and geochemical sampling on the Lynn Claim as described in this report.
5. I hold no interest, direct or indirect, in the property described herein nor in the securities of Pawnee Oil Corporation nor do I expect to receive such interest.

