

83-#317^B#11217

GREAT WESTERN PETROLEUM CORPORATION

GEOLOGICAL REPORT

on the

SNAFU CLAIM

OMINECA MINING DIVISION

BRITISH COLUMBIA

NTS: 94E/7W

LOCATION: $57^{\circ} 23' N$; $126^{\circ} 58' W$

OWNER/OPERATOR: Great western Petroleum Corporation

AUTHOR: Louise Eccles

DATE: December, 1982

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,217

TABLE OF CONTENTS

	<u>PAGE</u>
INTRODUCTION	1
PROPERTY DEFINITION	
History	1
List of Claims	2
Owner and Operator	2
Economic Assessment of the Property	2
GEOLOGICAL FIELDWORK	3
GENERAL GEOLOGY	3
PROPERTY GEOLOGY	3
CONCLUSIONS AND RECOMMENDATIONS	5
APPENDIX A -Analytical Procedures	6
COST STATEMENT	9
QUALIFICATIONS	10
ATTESTATION	11

LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
SN-82-1	Location of the SNAFU Claims	Foll. P.2
SN-82-2	Sample Locations and Gold and Silver Results	Foll. p.3
SN-82-3	Geology	Foll. P.4

INTRODUCTION

The SNAFU claim, consisting of 8 contiguous units is located in the Toodoggone area, 20 kilometres northeast of Sturdee Valley airstrip and approximately 300 kilometres due north of Smithers, B.C.. (Figure SN - 82-1).

Access to the property is usually by fixed wing aircraft from Smithers or Terrace to Sturdee Valley airstrip and by helicopter from there.

The claim is situated on the northeastern flank of Mt. Graves and foot travel in the area is impeded by precipitous terrain. The claim area is almost entirely above tree line except for the extreme northeast and southwest corners. Elevation difference between the highest and lowest points on the claim is about 550 metres.

Work done on the claim in August consisted of geological mapping and some rock sampling.

PROPERTY DEFINITION

History

Mineral exploration history in the Toodoggone district dates back to the 1930's when placer gold operations were active in the area. Widespread gossans in the region created interest in the 1960's when companies were actively pursuing porphyry copper and molybdenum deposits. Partially as a result of the porphyry exploration programs, anomalous gold and silver mineralization was discovered in several locations, one being the Baker Mine, which has been in production since early 1981. Significant gold discoveries have been made in recent years with the ongoing development of the Lawyers and Cliff Creek prospects by S.E.R.E.M.

and several other companies which had major exploration programs taking place in 1981 and 1982.

Some old prospecting records report the presence of anomalous silver and gold showings on Mount Graves. After researching the old reports, Charles Kowall staked the Graves claims which were then optioned to Great Western Petroleum Corporation. The Graves claims adjoined the T0 2 claim, owned by DuPont of Canada Exploration Ltdl and which were staked because of a geochemical anomalie from a creek draining the area. DuPont dropped the T0 2 claim in 1982 and the west half of the area was restaked by Great Western Petroleum Corp. in August after prospecting on their Graves claims proved there to be significant gold and silver values in rock geochemistry samples. See 1981 Assessment Report - Geology and Geochemistry of the Graves Claims by N. Cairn. DuPont filed an assessment report for the T0 2 claim in 1981 as well.

List Of Claims

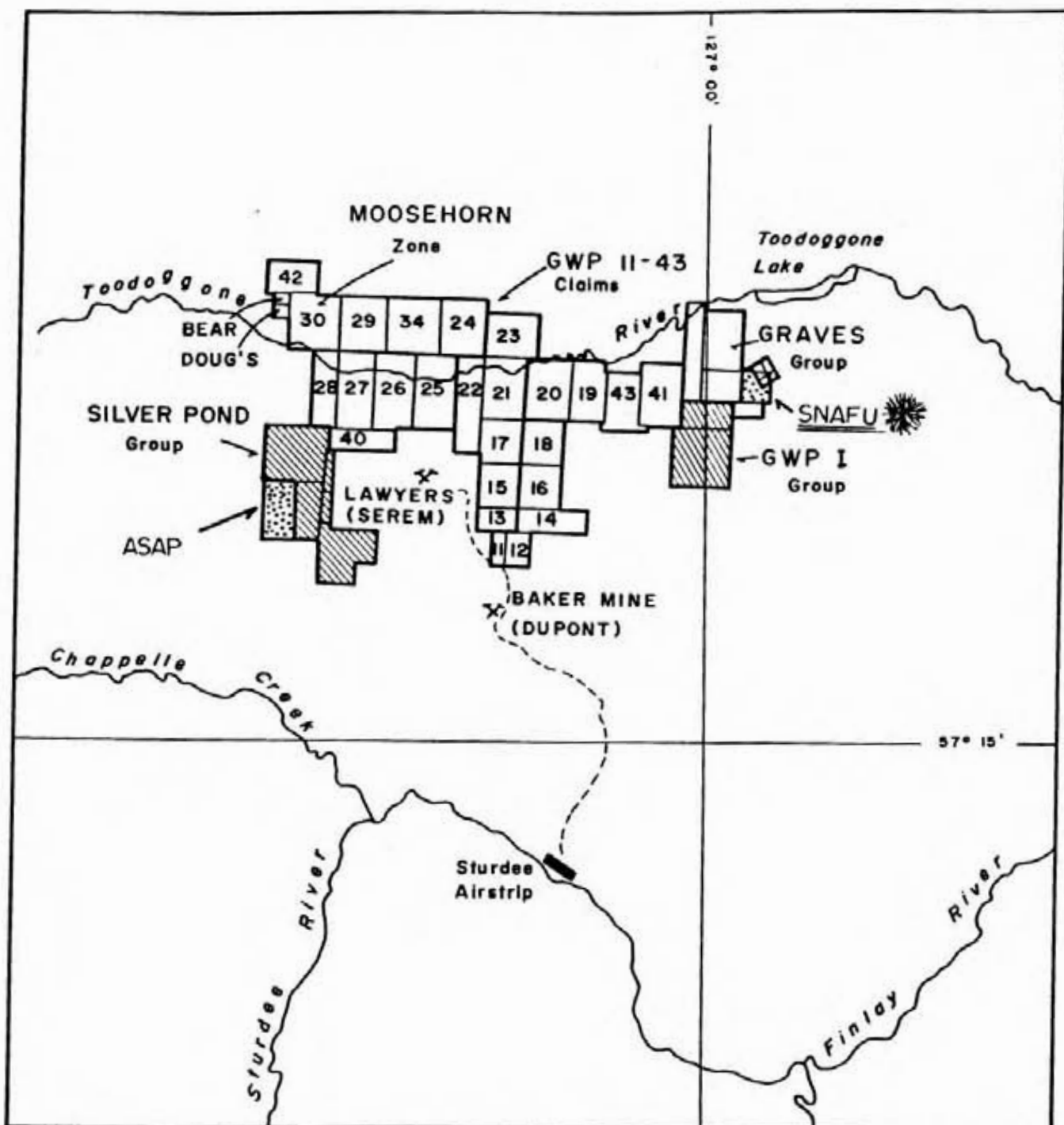
<u>Claim Name</u>	<u>Record No.</u>	<u>Units</u>	<u>Due Date</u>
SNAFU	4733	8	Aug. 23, 1983

Owner and Operator

The claim is owned outright by Great Western Petroleum Corporation and is operated by that company.

Economic Assessment of the Property

Geology on the SNAFU claim is similar to that on the Graves Claims which adjoin the property to the west. Close to the boundary between the two properties, on the Graves 1 claim, several high grade



LEGEND



100% Great Western Petroleum



Toodoggone Joint Venture



GREAT WESTERN PETROLEUM CORPORATION

**LOCATION OF GWP 1-43, DOUG'S,
BEAR, SILVER POND & GRAVES.
ASAP, SNAFU & GWP 200 CLAIMS**

Metres Metres
Feet Feet

MAPPED BY: <i>DLV</i>	SCALE: 1: 250,000	DRAWING NUMBER
DRAWN BY: D.L.V	DATE: JAN. 1982	
REVISED: OCT. 82	N.T.S. 94 E	

82-1

gold and silver showings occur within a silicified andesite ash flow unit. There exists a potential for the SNAFU claim to carry comparable deposits.

GEOLOGICAL FIELDWORK

Geology of the SNAFU claim was mapped on a scale of 1:10,000 in conjunction with geological mapping which took place on the Graves claims. Outcrop covers approximately 60% of the area, being most common along ridges which are lined by cliffs. About 200 hectares were covered by the mapping.

A total of 7 rock samples were collected from gossanned or silicified areas and sent to Min-En Laboratories in North Vancouver for geochemical analysis. Refer to Appendix A for analytical procedures.

For control a 1:10,000 scale topographic map was used as a base. Geology and geochemical results are plotted on Figures SN-82-2 and 3.

GENERAL GEOLOGY

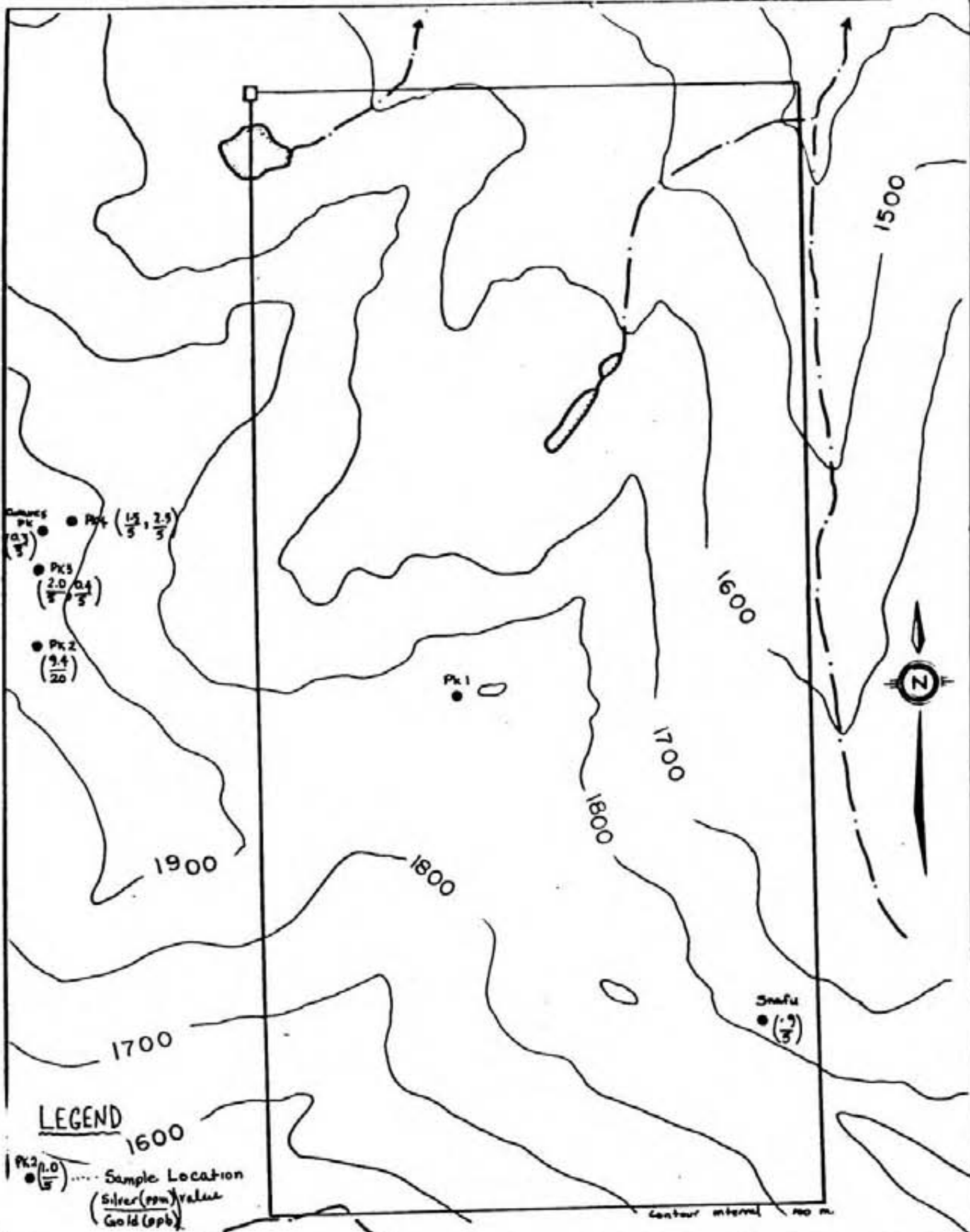
The SNAFU claim lies within the eastern margin of the Intermountain Belt and is believed to be mostly underlain by volcanic rocks of the Hazelton Assemblage of Early Jurassic Age.

A total of four distinct rock types have been mapped on the claims. Refer to Figure SN-82-3.

PROPERTY GEOLOGY

Unit 5 - Andesite Dykes

The youngest rocks in the area are dark green, fine grained



LEGEND

● (1.0 / 5) Sample Location
 (Silver (ppm) value / Gold (ppb))

DATE OCT. 82

NTS. 94E / 7W



GREAT WESTERN
PETROLEUM CORPORATION

SNAFU CLAIM

SAMPLE LOCATION

SILVER + GOLD GEOCHEM.

DRAWING NUMBER

SN-82-2

andesite dykes that range in width from 0.5 metres to 10 metres, and strike either northwesterly or northeasterly with very steep dips - mostly towards the north. Calcite veining is common within these dykes and occasionally minor malachite staining can be seen to be associated with them.

Unit 4 - Quartz Feldspar Porphyry Dyke

A quartz feldspar porphyry dyke with widths up to 25 metres cuts the Hazelton volcanic assemblage in the central area of the claim. Refer to Figure SN-82-3.

Attitude of the dyke varies from outcrop to outcrop but generally it has a northwesterly trending strike and dips steeply to the northeast.

This rock has a distinctive 'flesh' colour on both fresh and weathered surfaces. Being more resistant than the Hazelton rocks this dyke can be seen weathering in relief against the volcanics and can be easily spotted from a distance on cliffs in the area.

The rock is mainly composed of quartz eyes, one to four millimetres across surrounded by a matrix of unaltered potassium feldspar and quartz.

This dyke acts as a footwall to the lower gold/silver zone in the cirque of the Graves 1 claim. Refer to Figure SN-82-3.

Unit 3 - Basalt Flow

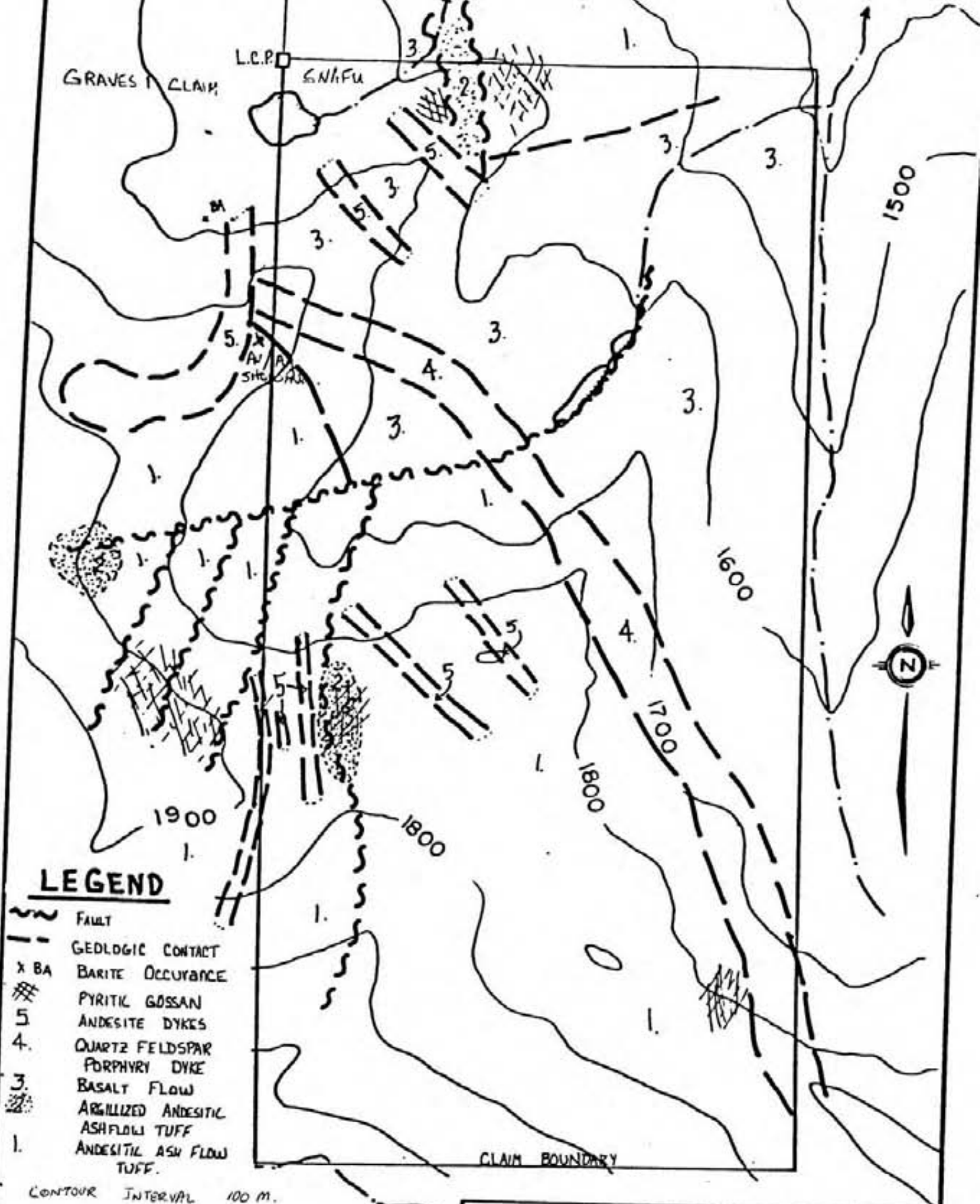
Massive maroon basalt flows outcrop extensively in the vicinity of Mt. Graves and can be seen in the northeast half of the SNAFU claim.

The matrix is very fine grained and clouded with abundant hematite. White phenocrysts of plagioclase up to 2 mm. across and randomly oriented characterize the rock. Magnetite is abundant in this

GRAVES CLAIM

L.C.P.

SNAFU



LEGEND

- ~ FAULT
- - - GEOLOGIC CONTACT
- x BA BARITE OCCURRENCE
- ▨ PYRITIC GOSSAN
- 5 ANDESITE DYKES
- 4. QUARTZ FELDSPAR PORPHYRY DYKE
- 3. BASALT FLOW
- ▨ ARGILLIZED ANDESITIC ASHFLOW TUFF
- 1. ANDESITIC ASH FLOW TUFF

CONTOUR INTERVAL 100 M.

DATE OCT. 82

N.T.S. 94E/17W

Metres 0 100 300 500 Metres
Feet 0 300 900 1500 Feet

SCALE 1:10,000



GREAT WESTERN
PETROLEUM CORPORATION

SNAFU CLAIM

GEOLOGY

DRAWING NUMBER

SN-82-3

MAPPED BY D. FORSTER

rock.

This rock shows poor resistance to weathering and is often crumbly and highly fractured.

Well developed flow banding is visible in some outcrops with attitudes averaging about 145° / 70 NE.

Unit 2 - Argillized Andesitic Ash Flow Tuff

Mapped as a separate unit on map SN-82-3, this rock is really just an altered phase of Unit 1 - Andesitic Ash Flow Tuff. Argillically altered zones typically occur adjacent to pervasively silicified areas and are recognized by abundant jarosite, goethite and limonite. These zones are highly weathered and crumble to touch. Commonly, the argillized areas are seen along faults.

Unit 1 - Andesitic Ash Flow Tuff

These rocks are generally dark green to grey green to orange with phenocrysts of plagioclase clouded with hematite. Hornblende and biotite can often be seen to be altering to chlorite. Magnetite makes up about 2 % of the rock where it is not oxidized to hematite.

Flow banding is usually visible in this rock and generally strikes northwesterly and dips steeply to the northeast.

CONCLUSIONS AND RECOMMENDATIONS

Favourable geology, comparable to that found on the Graves 1 claim, near the boundary with the SNAFU claim, makes the SNAFU claim an interesting exploration target in searching for gold/silver deposits.

Detailed prospecting and mapping is warranted over the entire claim and selected areas should be soil and rock sampled.

APPENDIX A

Analytical Procedures

APPENDIX 'A'

ANALYTICAL PROCEDURES

Samples are processed by Min-En Laboratories Ltd. in North Vancouver employing the following procedures:

After drying the samples at 95°C soil and stream sediment samples are screened by 80 mesh sieve to obtain the minus 80 mesh fraction for analysis. The rock samples are crushed by a jaw crusher and pulverized by ceramic plated pulverizer.

1.0 gram of the samples are digested for six hours with HNO_3 and HClO_4 mixture.

After cooling samples are diluted to standard volume. The solutions are analyzed by Atomic Absorption Spectrophotometers.

Copper, Lead, Zinc and Silver are analyzed using the CH_2H_2 - Air flame combination on these sample solutions.

For gold geochemical samples, a suitable weight 5.0 or 10.0 grams are pretreated with HNO_3 and HClO_4 mixture.

After pretreatments the samples are digested with Aqua Regia solution, and after digestion the samples are taken up with 25% HCl to suitable volume.

At this stage of the procedure copper, silver and zinc can be analyzed from suitable aliquot, by Atomic Absorption Spectrophotometric procedure.

Further oxidation and treatment of a least 75% of the original sample solutions are made suitable for extraction of gold with Methyl Iso-Butyl Ketone.

With a set of suitable standard solutions, gold is analyzed by Atomic Absorption instruments. The obtained detection limit is 5 ppb.

COST STATEMENT

1). Wages

<u>Name</u>	<u>Per Diem Rate</u>	<u>Dates Worked</u>	<u>No. Days</u>	<u>Total</u>
N. Caira geologist	\$105.00	Aug. 12, 1982	0.5	\$52.52
L. Eccles geologist	130.00	Aug. 12, 1982	0.5	65.00
D. Forster geologist	116.00	Aug. 12, 1982	1	116.00

2). Transportation

A. Helicopter - Airlift Corporation
August 12, 1982
0.7 hrs. x \$525/hr. x $\frac{1}{2}$ (split charter) = \$183.75

3). Camp Costs

\$50 per man per day	2 days	\$100.00
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4). Laboratory Costs

7 rock samples @ 9.50 analyzed for silver and gold at Min-En Laboratories	\$66.50
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5). Report and Drafting

\$450.00

TOTAL

\$933.75

QUALIFICATIONS

I, LOUISE K. ECCLES, do hereby certify that:

1. I am a geologist residing in Vancouver, British Columbia and am employed by Great Western Petroleum Corporation.
2. I am a graduate of the University of British Columbia with a B.Sc. (honors), degree in geology.
3. I have practised my profession in geology continuously for the past six years in British Columbia, Ontario, Yukon and Northwest Territories.
- 4). On Aug.12, 1982 a field program of rock sampling, prospecting, and geological mapping was carried out on the SNAFU claim, on behalf of Great Western Petroleum Corporation.



Louise K. Eccles
Geologist

ATTESTATION

I, NICHOLAS C. CARTER, of Victoria, British Columbia, do hereby certify that:

1. I am a practising geologist, registered with the Association of Professional Engineers of British Columbia since 1966.
2. I am a graduate of the University of New Brunswick with a B.Sc. degree, (1960); Michigan Technological University with a M.Sc. degree, (1962); and the University of British Columbia with a Ph.D. degree, (1974).
3. I have practised my profession in British Columbia and Eastern Canada and the Western United States for the past 22 years.
4. I personally oversaw the geological program carried out on the SNAFU claim and will attest to the authenticity of the data contained in this report.



N.C. Carter Ph.D., P.Eng.

N.C. Carter
PH.D., P.Eng.