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REPORT  
ON THE  
SILVER POND GROUP  
OMINECA MINING DIVISION  
B.C.

BY  
W.R. BACON, Ph.D., P.Eng.

GANGES, B.C.

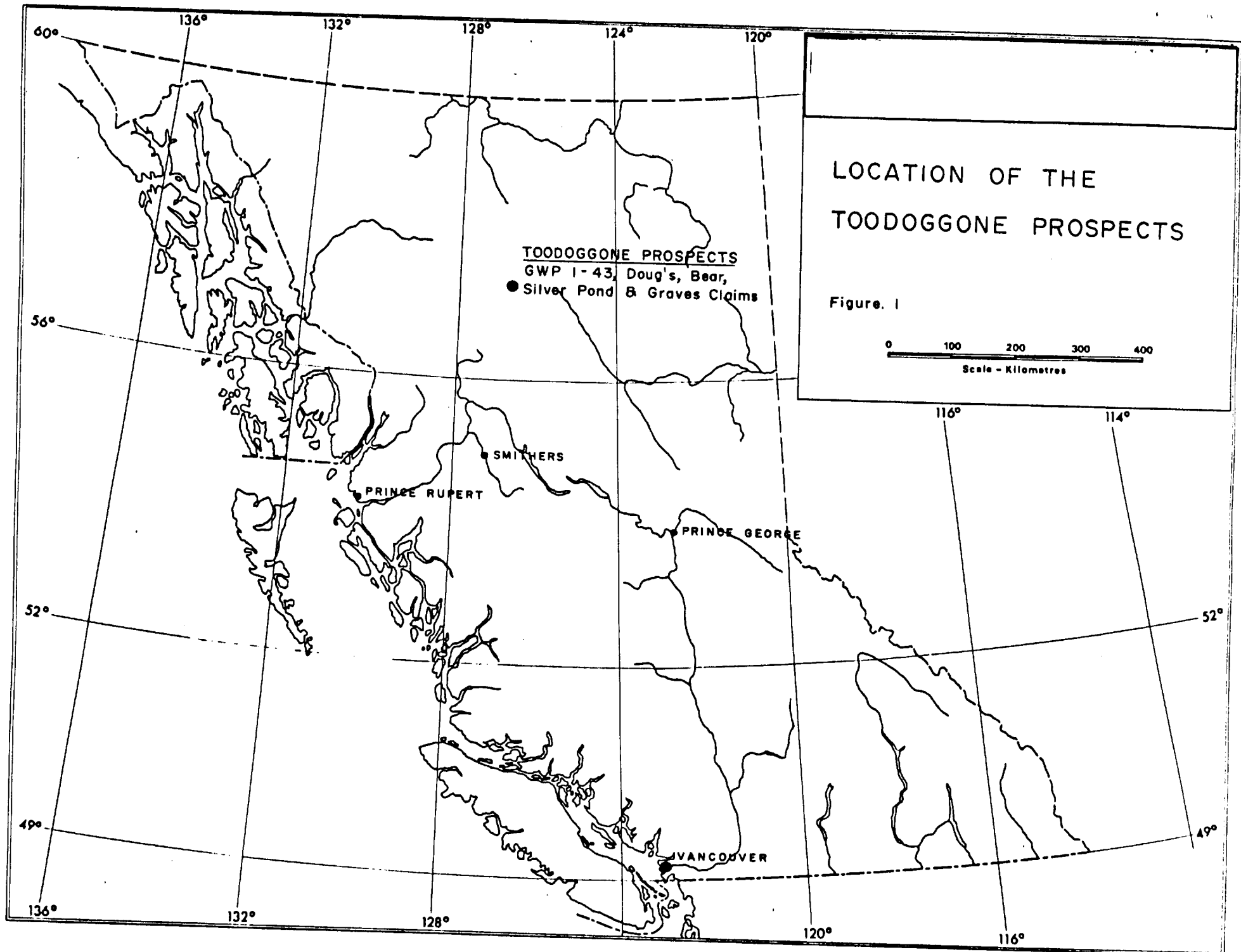
MARCH 15, 1982

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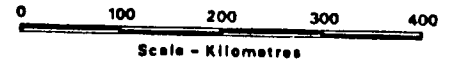
ILLUSTRATIONS

FIGURE 1 .....	FRONTSPIECE
FIGURE 2 .....	FOLLOWING PAGE 1
FIGURE 3 .....	FOLLOWING PAGE 2



LOCATION OF THE  
TOODOGGONE PROSPECTS

Figure. 1



## INTRODUCTION

(see Figures 1 and 2)

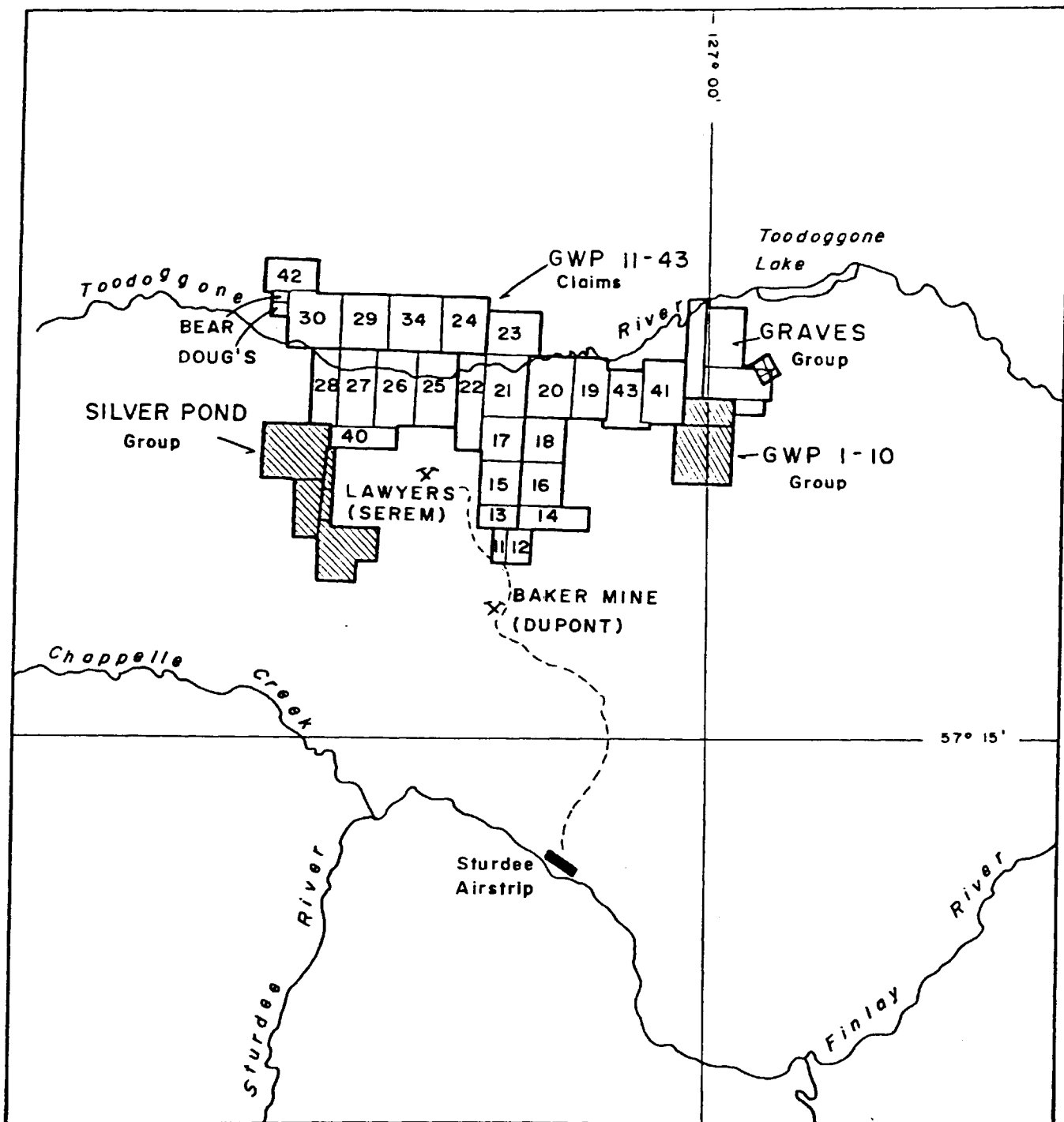
The Toodoggone River area is a new gold area in north central British Columbia. It is located 300 km. north of Smithers, at the headwaters of the Finlay River.

Access is by air. The Sturdee airstrip is on the north side of the Sturdee River and on the south side of the camp. The strip was built mainly to assist DuPont of Canada Exploration Limited in its effort to initiate an underground gold-silver operation (BAKER MINE) on known gold-silver-quartz veins.

Thus far, the Baker is the only operating mine in the Toodoggone. It was started up toward the end of 1980. Published reserves were 100,000 short tons averaging 0.92 oz. gold/ton and 18.7 oz. silver/ton.

The Lawyers gold-silver deposit, approximately 15 km. north of the Baker mine, holds out considerable hope of being larger than Baker. At Lawyers the gold occurs in the "AMETHYST GOLD BRECCIA", a zone that has been traced for a length of 610 metres, a width 60-75 metres, and a vertical depth of 75 metres. This exotic host rock and its exotic mineralization - acanthite, electrum, native silver - definitely suggest an epithermal deposit, as do the vein textures that feature open spaces.

During 1979-80, approximately 2000 mineral claim units were staked in the area and, in 1981, a further 1,300 units were staked .



**LEGEND**

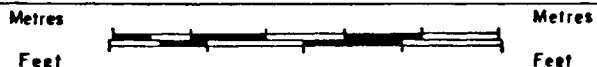


100% Great Western Petroleum



Toadoggone Joint Venture

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



MAPPED BY:	SCALE: 1: 250,000	DRAWING NUMBER
DRAWN BY: D.L.Y	DATE: JAN. 1982	FIGURE 2
REVISED:	N.T.S.	

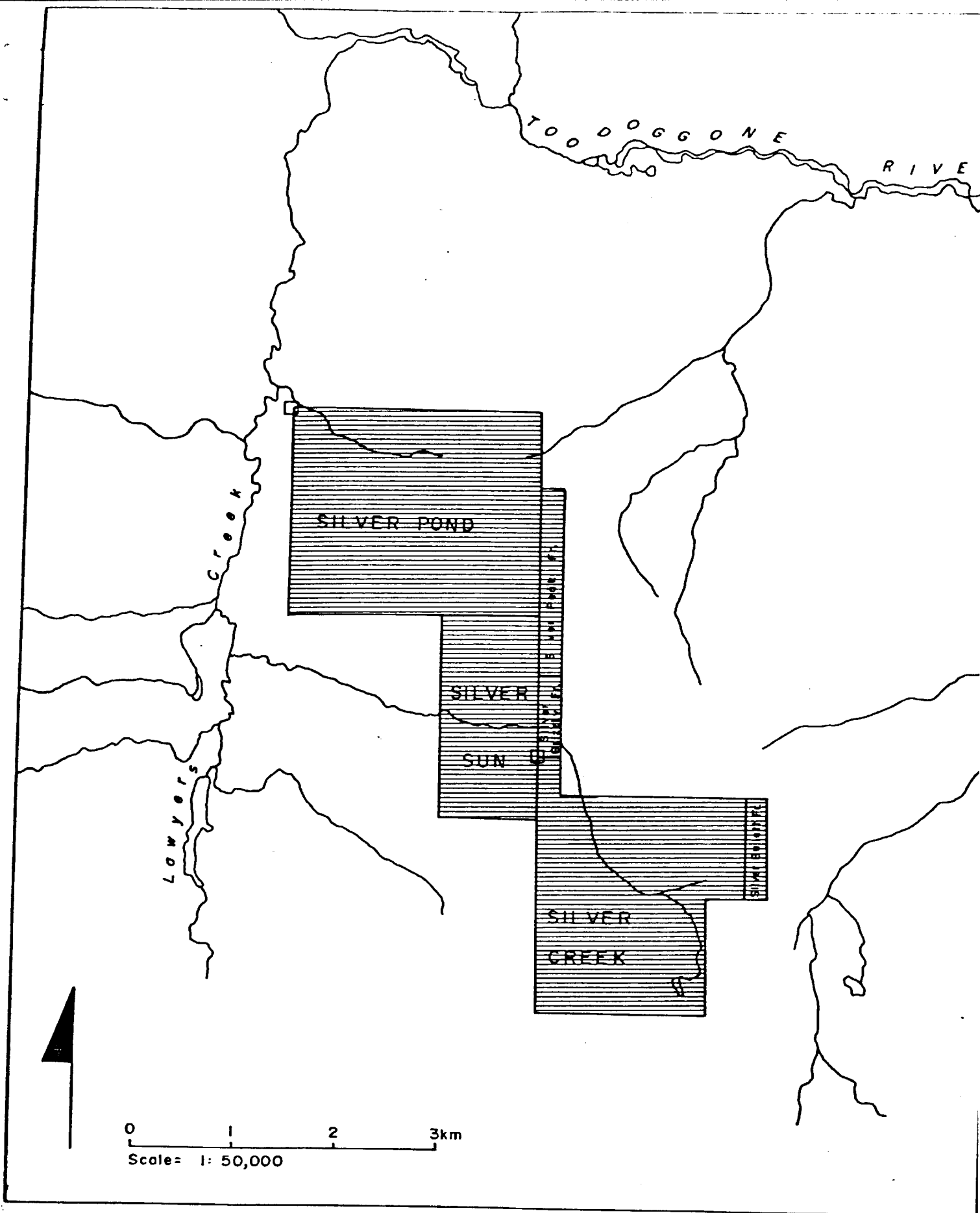
SILVER POND GROUP

The Silver Pond group consists of the following claims:

<u>NAME</u>	<u>UNITS</u>
Silver Pond	20
Silver Creek	20
Silver Sun	8
Silver Grizzly Fr.	-
Silver Bullett Fr.	-
Silver Peak Fr.	-

The Silver Pond group is immediately west of the Lawyers property owned by S.E.R.E.M. Ltd. In prospecting parlance, the Silver Pond is "tied on" to what may become a very important gold mine.

Great Western Petroleum Corporation holds the Silver Pond group under option from C.F. (Chuck) Kowall, a well known prospector. The option was obtained in February, 1981 and the Corporation initiated the standard program of prospecting, mapping and geochemical surveys.



NTS 94E / 6W

Figure. 3 LOCATION OF SILVER POND GROUP CLAIMS

REGIONAL GEOLOGY

According to T.G. SCHROETER,\* the Toodoggone area is underlain by the Toodoggone volcanic sequence which consists of a pile of complexly intercalated and varicoloured, subaerial andesitic, dacitic and trachytic tuffs, ash flow sheets, and minor epiclastic rocks that is at least 1000 metres thick. These rocks are tentatively correlated with Early Jurassic rocks of the Hazelton Group and, according to K-AR and Sb-Sr dates obtained from whole rock and mineral samples, range between 179 and 190±7 Ma.

Schroeter considers that the Toodoggone volcanic rocks and intrusions are probably COEVAL with the Omineca Intrusions.

The Toodoggone volcanic rocks are subdivided as follows:

- UPPER Volcanic - sedimentary assemblage.  
(locally present)
- MIDDLE Rhyolites, dacites; intermediate to acidic, orange crystal to lithic tuffs, minor welded tuffs, and quartz feldspar porphyries.
- LOWER Pyroclastic maroon agglomerate and grey to green to maroon andesitic and dacitic tuffs.

Schroeter considers that major structural breaks and mineralizing events (e.g. LAWYERS) coincide with the contact between lower and middle volcanic divisions.

The dominant structures of the area are persistent northwest striking faults similar possibly to the Pinchi fault. Some of these faults may have served as channelways for the sulphur-poor, hydrothermal solutions that transported the precious metals to their places of deposition at Baker, Lawyers, etc.

\*SCHROETER, T.G.: PAPER 1981-1, GEOLOGICAL FIELDWORK,  
B.C. MINISTRY OF ENERGY, MINES AND  
PETROLEUM RESOURCES



CLAIM GEOLOGY

Extensive multicoloured (yellow, orange, brown) gossans west of the Silver Peak Fraction (SE section of Silver Pond claim and NW section of Silver Sun) undoubtedly had much to do with attracting early attention to the Silver Pond property. Work by Schroeter and others here indicates that this zone is characterized by such clay minerals as alunite, dickite, illite, etc. and that breccia occurs on the Peak, all of which constitutes a highly intriguing geological situation. Not only do the outcrops present a "leached" appearance but the occurrence of alunite would tend to support the idea that, in fact, leaching has occurred.

PREVIOUS WORK

A silicified zone exposed on the Silver Creek claim was explored in 1972, by two drill holes put down by Kennco Explorations (Western) Limited. The longer (94 feet) of the two holes was drilled S.65° W. with a -70° dip, i.e. down the creek bank and apparently sub-parallel to potential mineralized fault structures. The second hole, more sensibly it would seem, was collared in the creek bottom on a bearing of N 30°E with a dip of -60°. Because of caving, this hole was terminated at a depth of 38 feet. Low silver (0.10) values were obtained.

INITIAL (1981) PROGRAM

In spite of the brevity of the program, about eight square kilometres were covered on the Silver Pond and Silver Creek claims in this initial program. Moreover, the showing on the Silver Creek claim is considered to merit further attention.

The silicified zone noted under Previous Work is exposed intermittently for about 40 metres along Silver Creek. Abnormally high values (up to 880 ppb gold and 24.5 ppm silver respectively) were obtained in chip sampling this showing. Extensions to the zone, which appears to strike northerly, are obscured by overburden. In this vicinity numerous rhyolite dykes and/or sills occur. Pyrite occurs sporadically and, to a lesser extent, arsenopyrite.

RECOMMENDATIONS

The 1981 results necessitate a follow-up program in 1982. There should be two objectives for 1982:

- (1) Continue with the 1981 field program, doing detail work wherever the reconnaissance geochemistry warrants it. To date, it has only been possible to do detail on the Silver Pond claim, for lack of time.
- (2) Diamond drill the Silver Creek showing sufficiently to determine its potential. Drill two, 100m. holes, below which drill four 200m. holes; NQ-BQ drilling, 1000m. total.

COST ESTIMATE

(Proposed 1982 Program)

DIAMOND DRILLING, 1000M. OF NQ-BQ @ \$100/M. ....	\$100,000
MOBILIZATION, DEMOBILIZATION FROM SMITHERS .....	48,000
HELICOPTER, 80 HRS. @ \$550/HR. ....	44,000
SUPERVISOR - CORE LOGGER - SURVEYOR - (1 MAN) .....	5,000
SUPERVISOR'S ASST., CORE GRABBER - (1 MAN) .....	3,000
	<hr/>
	\$200,000
CONTINGENCIES 15%	30,000
	<hr/>
SUB - TOTAL	\$230,000

FIELD PROGRAM (CONTINUED)

SIX PERSONS x 2.5 MOS. \$1,500 AVGE. ....	\$ 22,500
HELICOPTER, 80 HRS. @ \$550/HR. ....	44,000
	<hr/>
SUB - TOTAL	\$ 66,500
ASSAYING, ANALYSIS .....	3,000
	<hr/>
TOTAL	<u><u>\$299,500</u></u>

*Or Deen, P. Eng.*

CERTIFICATE

I, WILLIAM R. BACON, of Ganges, B.C., DO HEREBY

CERTIFY THAT:

1. I am a consulting geological engineer registered with the Association of Professional Engineers of British Columbia since 1950;
2. I am a graduate of the University of British Columbia with B.A. Sc., (1939) and M.A. Sc., (1942) degrees in Geological Engineering;
3. I am a graduate of the University of Toronto with a Ph.D. degree (1952) in Economic Geology;
4. During the past 40 years I have been engaged in economic geology and the search for mineral deposits in North America, South America, Australia, Asia and Europe;
5. I personally examined the Toodoggone area by foot and by helicopter on August 26, 1980;
6. I have no interest in the Silver Pond property, or the GWP claims or in Great Western Petroleum Corporation, or in E & B Explorations Ltd. of Calgary, Alberta nor do I intend to acquire any.

*William R. Bacon, P.Eng.*

William R. Bacon  
Professional Engineer

Great Western Petroleum Corporation,  
3rd Floor,  
744 West Hastings Street,  
VANCOUVER, B.C.,  
V6C 1A5

Dear Sirs:

I, William R. Bacon, Ph.D., P.Eng., hereby consent to the use of my reports dated March 15, 1982 on the Toodoggone Joint Venture and the Silver Pond Group, Omineca Mining Division, British Columbia, in any Filing Statment, Statement of Material Facts, or Prospectus to be issued by Great Western Petroleum Corporation.

DATED at Vancouver, British Columbia, this 6th day of April, 1982.



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William R. Bacon, Ph.D., P.Eng.