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BRIEF REPORT ON

STREAM SEDIMENT GOLD CONTENT

ALONG UPPER FARLEIGH CREEK

IN NORTHERN HAGGARD GROUP OF CLAIMS AREA

OSOYOOS MINING DIVISION

Lat. 49° 28' 30" N Long. 119° 45' .5 Approx.

N.T.S. Map Sheet 82E/5W

by M. M. Suska, P. Geol.

for PETRO-CANADA RESOURCES and For LOSSAN EXPLORATION LTD.

Victoria, B.C., 1 September, 1991

GEOLOGICAL BRANCH ASSESSMENT REPORT

21,764

## TABLE OF CONTENTS

	Page No.
Certification	1
Technical Personnel-Breakdown of Costs	2
Reference Map	3
Introduction	4
Location and Accessibility	4
Physiography	4
History	5
Haggard Group of Claims	6
Stream Sediment Sampling (present survey)	7
General Geology	8
Recent Work	8
Brief Geology	8
Tentative List of Formations Present in Brent-Farleigh Lakes Area	9
Purpose	10
Method	10
Results and Comments	11
Appendix	12
Map I: Index Map	12
Map II: Sample Locations and Gold Content	13
Certificate for Assays by Loring Laboratories Ltd	14

## CERTIFICATION

- I, M. M. Suska, do hereby certify that:
  - 1. I am a practising Professional Geologist of Alberta with offices at 4009 Elbow Dr. S.W., Calgary, Alberta.
  - 2. I am a graduate of the University of London, U.K., B.Sc., and of the University of Alberta, Edmonton, M.Sc. (Geology).
  - 3. I have practiced geological field mapping since 1953 in more or less equal proportions in British Columbia and Alberta.
  - 4. I am a member in good standing of the Association of Professional Engineers, Geologists & Geophysicists of the Province of Alberta.
  - 5. I have personally visited the Haggard property and supervised exploration work carried out there.

Respectfully submitted

M. Suka

M. M. Suska, B.Sc., M.Sc., P. Geol.

Sept 1, 1991.

## TECHNICAL PERSONNEL

## Field and Office:

- M. M. Suska, B.Sc. (London, U.K.), M.Sc. (Alta.), P. Geol. (Alta).
- B. J. Krusche, P. Eng. (Alta.), B.A. Eng. Sc. (Dartmouth College, NH, U.S.A.)

## BREAKDOWN OF COSTS

## HAGGARD GROUP OF CLAIMS

Field Work:	Fees:	
Early summer, 1991	1 long day - B. J. Krusche ( of trave)	\$ 400.00
	(M. M. Suska in the camp, no charge) Accommodation & Food	80.00
	Truck access to Brent Lake & travel	
	in B.C SHARE	70.00
	Parcel express and telephone - SHARE	30.00
	Use of equipment	30.00
Assays:	Loring Laboratories Ltd.	90.00
Report & Office Share:		200.00
		\$ 900.00
		=======

## INTRODUCTION

#### LOCATION AND ACCESSIBILITY

The Haggard property is located in the Farleigh Lake - Brent Lake region of South Central British Columbia, about 11 kilometers west of Penticton. The claims area is accessible by a paved road to Farleigh Lake, and to Shingle Creek. Logging roads in the north and south of the area can be travelled by four-wheel drive vehicle and partially on foot. The central portion is quite rugged and at present exploration can be conducted on foot or on horseback only.

#### PHYSIOGRAPHY

The Farleigh Lake - Brent Lake area is characterized by low, mountainous terrain with topography ranging from 700 m to 1050 m above sea level.

Some south-facing slopes are open ranchlands covered by bunch-grass, sage brush, cactus and sparsely scattered pine trees. The summits and north-facing slopes and the Farleigh Creek valley are thickly wooded with pine and spruce trees, many of which are of loggable quality.

Climatic conditions are arid. The annual precipitation is about 28 cm, most of which occurs as snow in the winter months. Temperatures rise to  $38^{\circ}\text{C}$  for short periods in the summers.

Farleigh Creek flows all summer and there are large ponds along the valley caused by beaver dams. Wildlife includes bear, deer and grouse, which share the range with cattle and horses.

The Upper Farleigh Creek flows along a narrow rocky gully which is locally covered with large boulders and thick vegetation.

#### HISTORY

A portion of the Haggard Claims area consists of the area of old Clark No. 1, 2 and 3 claims.

British Newfoundland Exploration Ltd. staked these claims between February and April 1977. Geological mapping in that portion of the Haggard Claims Area was done by R. R. Culbert of D. G. Leighton & Associates in 1977, 1978 and 1980. The prospecting targets were Uranium and Thorium exclusively.

Subsequent to the 1979 field season, Clark Claims fell under the Uranium Moratorium imposed by the Government of British Columbia. Subsequently the Clark No. 1, 2 and 3 claims expired and the area was staked by Lossan Exploration Ltd.

Another portion of the Haggard group - Astro 45 Claim, is held by Lossan under option from PetroCanada of Calgary. Lossan Exploration Ltd. from Victoria, B.C. considers the Haggard Claims area and its vicinity to be the most prospective in the Okanagan volcanic region west of Penticton. Lossan is represented by Whiterabbit Resources of Calgary (4009 Elbow Drive S.W., Calgary, T2S 2K2, telephone 243-6816).

## HAGGARD GROUP OF CLAIMS

The Haggard Group of Claims includes the following Claims in the Farleigh Lake - Brent Lake Area of British Columbia, Osoyoos Mining Division:

	Record Date	Record No.
Gagoola	21 June, 1988	2916
Unslopogaas	21 June, 1988	2917
Umbopa	21 June, 1988	2919
Sukasu	21 June, 1988	2918
Impi	6 July, 1988	2924
Zloto	6 July, 1988	2922
Tatry	6 July, 1988	2923
Ayesha*	21 July, 1989	3190
Astro 45*	9 March, 1977	257

<sup>\*</sup>The Ayesha Claim was removed from the Group prior June 1990 and Astro 45 Claim was included into the Group at that time.

The Ayesha Claim is on its own now.

## STREAM SEDIMENT SAMPLING (present survey)

In total ten stream sediment samples were collected along Upper Farleigh Creek and small tributaries. Samples were coded: 91-17s to 91-26s. Sample locations are shown on Map II; (the figure 91 was omitted on Map II).

## GENERAL GEOLOGY

#### RECENT WORK

A large part of the Haggard Claims area was not mapped. A portion of Haggard Claims area, covered by the old Clark Claims, was partially mapped by R. R. Culbert of D. G. Leighton & Associates (1977-79).

A comprehensive regional geological description of the area was given by B. N. Church (1973 & 1982). The last--1990 and 1991--Assessment Reports on Haggard and Ayesha Claims area were reconnaissance, geological and geochemical surveys by M. M. Suska and B. J. Krusche.

#### BRIEF GEOLOGY

The Farleigh Lake - Brent Lake Property lies in the northwest of the White Lake Basin of the Okanagan area of British Columbia. Regionally, the White Lake Basin contains a thickness of up to 12,000 feet of Eocene volcanics and sediments which overlie a Mesozoic basement with an unconformity.

In the Farleigh Lake - Brent Lake area the Eocene volcanics and clastics overlie unconformably the Mesozoic intrusive complex. The complex outcrops mainly in the northwestern corner of the Claims area. The remainder of the area consists of Eocene bedrock. Outcrops are generally abundant. Glacial till is rare in the area of the survey. The soil cover is usually thin.

The Upper Farleigh Creek appears to follow a major fault separating the pre-Tertiary basement rocks in the north from basement and volcanic rocks in the south. Dacite dykes traverse the area of this report, but the area has not yet been mapped in detail.

## TENTATIVE LIST OF FORMATIONS PRESENT IN BRENT-FARLEIGH LAKES AREA (modified after Nordin, 1978 and Suska and Krusche, 1991)

### TERTIARY

**EOCENE** 

Marama Formation

Rhyolite & Rhyodacite, and Andesite Dykes

MIDDLE EOCENE

Marron Formation

Park Rill member

Non-vesicular Andesite

Nimpit Lake member

Trachyte, trachyandesite

Kearns Creek member

Basaltic Andesite

Kitley Lake member

Trachyte, Trachyandesite

Yellow Lake member

Phonolite Porphyry and minor

Tuffaceous and arcosic Sandstone Grit

NephelinerBasaltrgradingetosTephrite

Granodiorite

MIDDLE EOCENE TO Springbrook and/or Kettle River Formation

PALEOCENE Rhyolite Complex White Rhyolitic Tuff Conglomerate Rhyolitic Lava Breccia

------Unconformity Quartzite (?) Breccia

PRE-TERTIARY

Igneous Basement Granite

#### PURPOSE

The purpose of the 1990/91 field survey was to systematically sample stream sediments of a portion of Upper Farleigh Creek streambed, and to test these for gold content at trace levels.

#### METHOD

Fine stream sediments along Upper Farleigh Creek bed at locations shown on Map II were collected by B. Krusche, P. Eng. Distances between locations were 150 m on average. The sediments consisted of moist, fine silt, grading to sand.

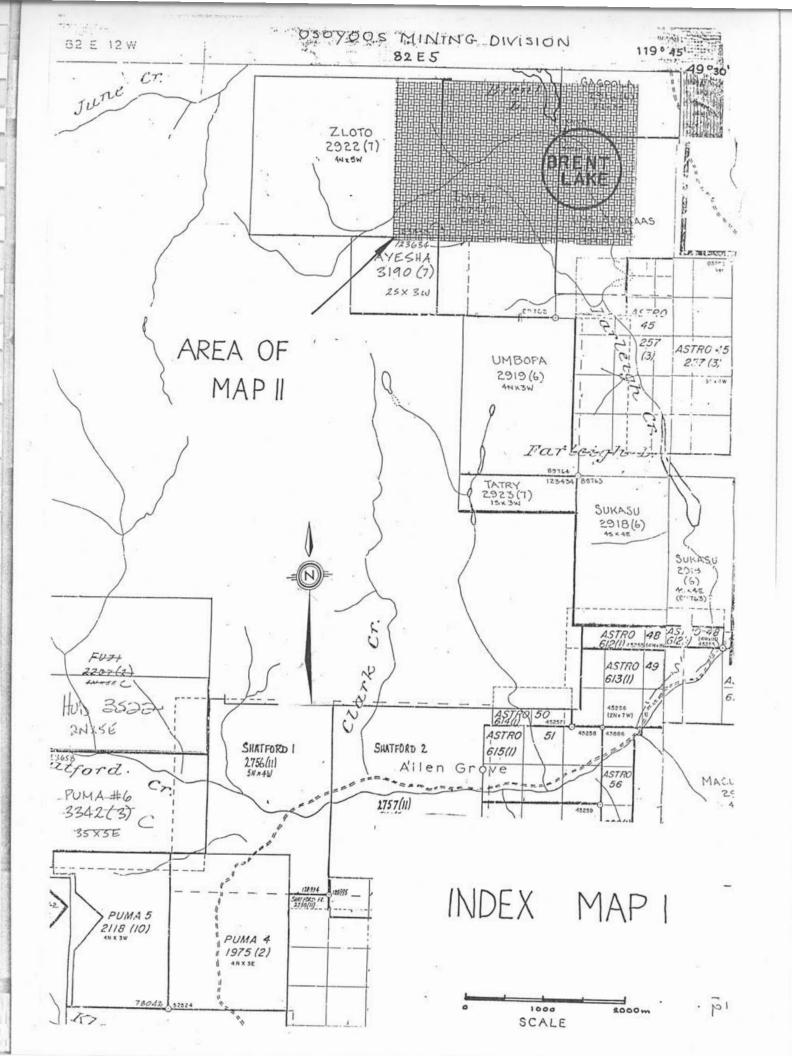
The samples were prepared by Loring Laboratories Ltd.: The sediments were dried and sieved through an 80-mesh screen. The fines were assayed for gold by Loring Laboratories Ltd. of Calgary: Total gold in 30 g samples was estimated by the fire assay method.

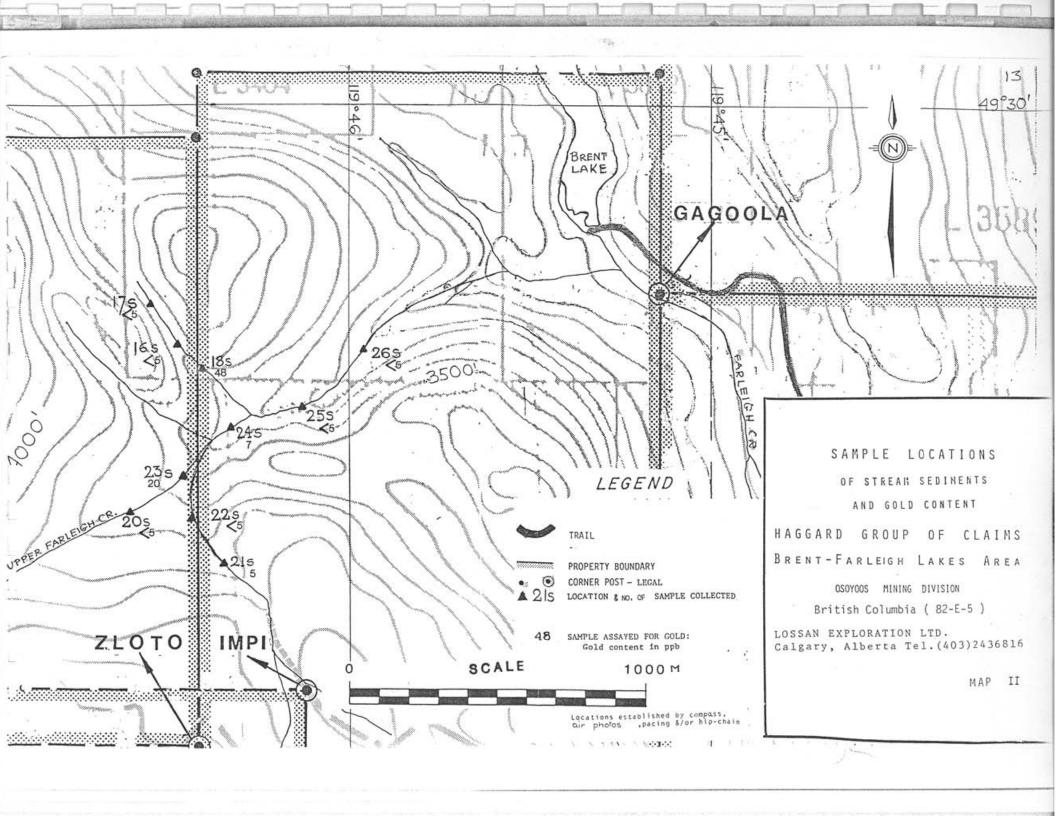
Ten samples in total (Nos. 17s - 26s) were collected and assayed: Five samples from the Zloto Claim; five samples from the Impi Claim. Both claims are in the Haggard group.

## RESULTS AND COMMENTS

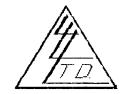
The locations of sediment samples and the results of gold assays were plotted on Map II. Samples 18s and 23s showed anomalous results: 48 ppb and 20 ppb of gold. The remainder exhibited a background of <5 ppb to 7 ppb of gold.

The creek bed along which the samples were collected appears to follow a major fault. Andesite and/or dacite dykes were observed in the region of Map II, the vicinity of the current sampling survey. However, the area immediate to the survey was not mapped. Future mapping and sampling should follow the anomalous indications.





To: MS. MADELINE	SUSKA
4009"ELBOW DRIVE	S.W.,
CALGARY, ALBERTA	T2S 2K2



File No. <u>34573</u>

Date <u>AUGUST 21, 1991</u>

Samples <u>19</u>

# Certificate of Assay LORING LABORATORIES LTD.

SAMPLE NO.

PPB Au

I91-16S		
I91-17S		
I91-18S		
I91-20S		
I91-21S		
I91-22S		
I91-23S		
I91-24S		
I91-25S		
I91-26S		
I91-27S		

I Hereby Certify that the above results are those assays made by me upon the herein described samples....

Rejects retained one month.
Pulps retained one month
unless specific arrangements
are made in advance.

Hary Judey,