



photocopy of an original watercolour of tiger lily, *Lilium sp.* by Peggy Reimchen, November, 1981.



**PEGASUS**

earth sensing  
corporation

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May 12, 1982  
File 86-01

Energy Mines & Petroleum Resources  
411 Douglas Building,  
Victoria, B.C.  
V8V 1X4

Attention: Chief Gold Commissioner

Re: Assessment Report on  
Siwash Creek Claims,  
Tulameen District, B.C.

Dear Sir:

Please find enclosed the above mentioned report which summarizes a geological aerial photographic interpretation performed on the Siwash Creek property by ourselves.

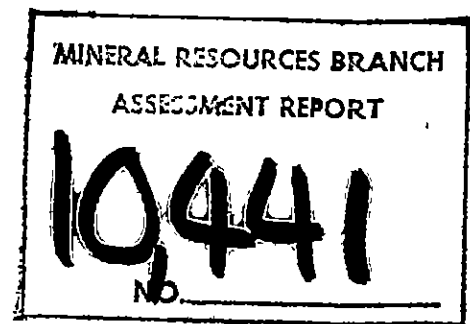
If you have any questions concerning this report, or if additional information is required, please contact us.

Respectfully submitted,  
PEGASUS EARTH SENSING CORPORATION

Ted H.F. Reimchen, P.Geol.  
President

Malcolm R. Gent  
Senior Geologist

THFR,MRG/sdvg  
Encl.



## Introduction

On the basis of old mining records, it appears that mining may be economically feasible in the Siwash Creek area of the Tulameen District of British Columbia. Mr. Wayne Nelsen, agent for owners of Leases 5868, 5870, 5864, 5865, 5866, 5867, 5873, and 5874, retained Pegasus Earth Sensing Corporation to review the available information and perform a geological evaluation and investigation by use of standard aerial photograph interpretation of his claims in the area shown on the location map.

The study area occupies 4 square kilometres. It is located to the east and southeast of Bankeir. It is accessible by all weather loose surface roads and by abandoned logging roads. At the time of evaluation and investigation of the leases, aerial photographic interpretation to detect undiscovered, potential placer gold bearing sedimentary units was considered an ideal method of evaluation since the area was snow bound. Detailed geologic maps of the area do not exist. Therefore, a sound geologic comprehension of the local surficial and bedrock geology had to be derived from interpretation of the aerial photos. In April, 1982, an aerial photographic, aerial magnetic interpretation and literature review of the area was completed.

## Mining History of the Siwash Creek Area

Siwash Creek Mines Ltd. (1912-1916) mined placer gold and gold-platinum black sands from the gravels in much of what is now the three most southerly leases managed by Mr. Nelsen. Siwash Creek Mines Ltd. installed a 450' open rock cut and tunnel into bedrock at a depth of 35' below the channels base. During 1913, 1915, and 1916 the sluice way was extended upstream.

Other mining properties in this area are located to the north of the leases evaluated. These properties include: El Paso Group, Blue Stone Claim, Renfrew Group, Claremont Group (possibly Argentite), Iron Duke and Fisher Maiden Claims and Mabel Claim. All of these are in proximity to the Nicola Group - Pennask Batholith contact.



7

30° 8'

9

15'

0

710'00m E

120°00'

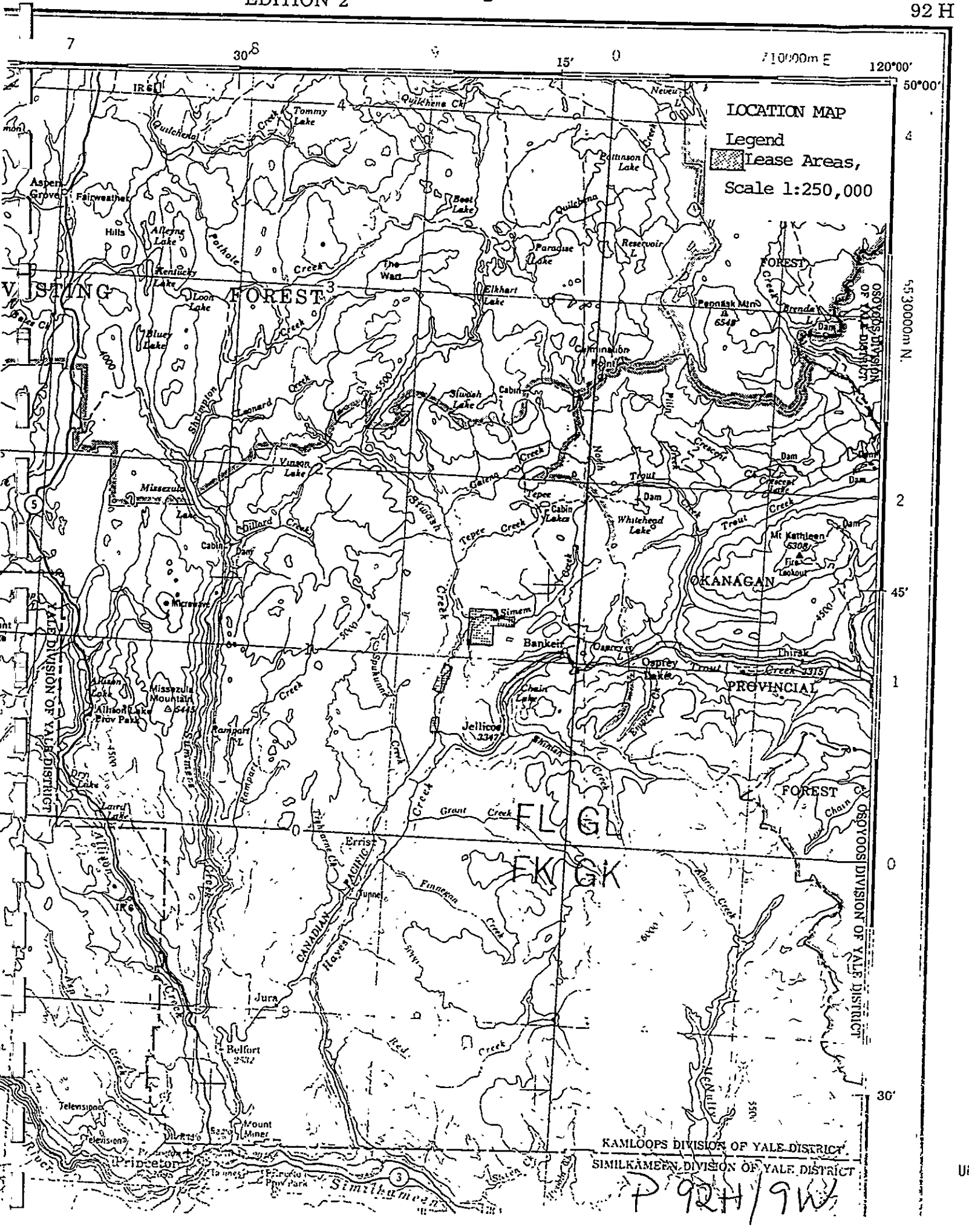
50°00'

LOCATION MAP

Legend

Lease Areas,

Scale 1:250,000



55°30000m N.

2

45°

1

0

30°

KAMLOOPS DIVISION OF YALE DISTRICT  
SIMILKAMEEN DIVISION OF YALE DISTRICT

P 92H/9W

Evaluation and Investigation of Leases by Aerial Photograph Interpretation

Placer Leases 5868, 5870, 5864, 5865, 5866, 5867, 5873, and 5874 are located in the Tulameen District of British Columbia. The first three leases are located on Siwash Creek which drains into Hayes Creek (a tributary of the Similkameen River) while the last five leases are located on or near Simen Creek, an eastern tributary of Siwash Creek (See Map in back pocket).

The leases are well located, being underlain by the porphyritic granitic Pennask Batholith margin. The Nicola Group-Pennask Batholith contact is located approximately 12 kms to the northwest and crosses the Siwash Creek 20 kms above the northern leases.

The black shales of the Nicola Group and some phases of the Pennask Batholith granite (particularly its margin) are auriferous. These units are drained by the Siwash Creek upon which the leases are located. Their location is quite favourable for possible economic gold mineralization. The river beds in the area of interest are oblique to the local glacial trend. Glacial action has probably not scoured out any placer gold that may have been concentrated there during the intense Tertiary weathering of the country rocks that produced most of B.C.'s major placer gold deposits.

Of major consequence to economic interests is the degree to which previous mining activities have exploited the ore reserves of these leases. By the careful interpretation of airphotos of the terrain on and in the vicinity of the leases, we were able to identify several areas of potential placer mineralization. As early prospectors did not have access to such methods for selecting primary exploration targets, many sites were missed, especially if they were not directly on the river courses. Thus, there is a reasonable chance that one or more of the leases will have mineable placer gold concentrations.

The Siwash Creek is almost certainly a paleo-valley of Tertiary age. Paleo-highs of outcrops and sub-outcrops of granite occur on the western edge and at the southern end of the eastern side of the valley with a thin veneer of glacial till. Pleistocene to recently exposed outcrops and sub-outcrops of granite are also exposed at the southeastern end of the valley. The exposure of bedrock to the valley floor on the southeastern side, suggests that in that area, the Early Pleistocene tertiary valley was further to the west (see Figure 1). Thus, the Siwash Creek Mines mining activities probably



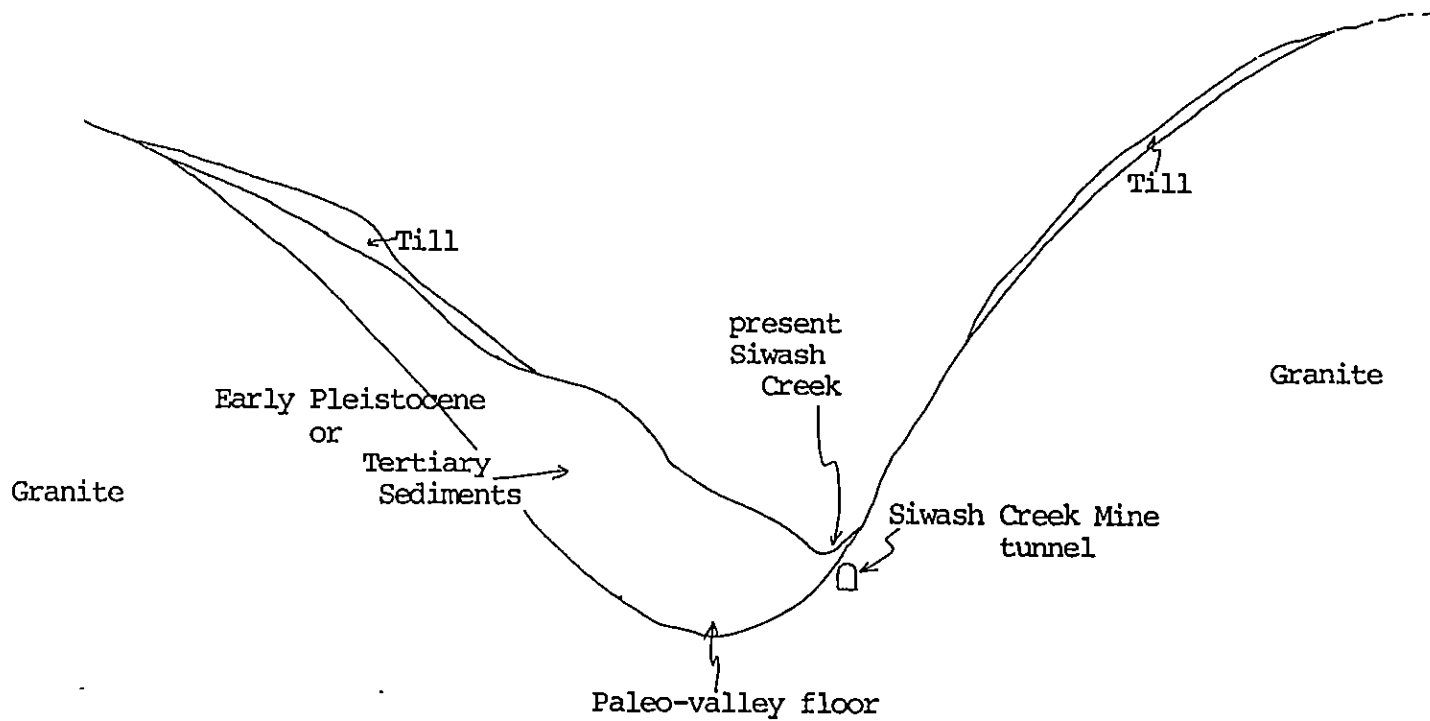


Figure 1. Schematic Cross-section of lower end of Siwash Creek (vertical scale strongly exaggerated).



missed the area of greatest ore reserves in the area.

A series of terraces or unconsolidated stratum were identified in the airphoto interpretation. The upper most is probably glacially derived material, being thickest on the southeast facing slope and thinnest on the opposite slope. Below it are a series of terraces and ridges that do not appear to be formed by glacial action or of material derived from glacial moraine, but this must be verified by field checking. The second level of terraces might possibly be related to an earlier period of glaciation - those with false stream bottoms (Leases 5870 and 5864). If these terraces and ridges are of older Pleistocene or Tertiary age, they should be considered as good sites for placer gold mineralization as are those with false stream bottoms and buried stream bottoms. Only lease 5874 does not have any sedimentary structures of interest but as Simens Creek drains a klipper of the Nicola Group, even this claim cannot be discounted, especially as outcrops in this area are sparse. Therefore, the extent of the Nicola Group rocks and roof pendants (ideal host for primary gold mineralization) may be much more extensive than is mapped. The drainage from this area into the far northern leases is a very favourable feature to be evaluated.

Also of interest is the Pleistocene longitudinal point bar accretion ridges located between and on Leases 5868 and 5870. Such ridges acquire sediments very slowly except under saturated suspension load conditions which may have occurred during earlier mining activities of the Siwash Creek. In any case, the reworking of these in such extreme sedimentary conditions could result in reconcentration of heavy minerals, including gold. Generally, Pleistocene placer mineralization tends to be of lower grade and tonnage than Tertiary mineralization, although such mineralization has been mined profitably in B.C.

In conclusion, the placer leases located on Siwash and Simen Creeks, B.C. have definite potential for mineralization at the sites indicated on the map. To verify the validity of the airphoto interpretation and to better evaluate the potential of the leases, especially the false and bedrock bottoms, point bar accretation ridges, channels and bars, field checking and mapping are necessary.



Itemized Expenses

Airphotos	\$ 22.73
Travel Expenses	26.82
Maps	4.24
Communications	15.72
Professional time at 49 Hrs. @ \$50/hr.	2,450.00
Report Preparation	<u>100.00</u>
TOTAL	<u><u>\$2,619.51</u></u>







**C. DRILLING**

(Details in report submitted as per section 8 of regulations.)  
(The itemized cost statement must be part of the report.)

COST

**D. GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL**

(Details in report submitted as per section 5, 6, or 7 of regulations.)  
(The itemized cost statement must be part of the report.)  
(State type of work in space below.)

..... Photogeological Interpretation, drafting of and preparation of report.....

..... \$ 2,000

TOTAL OF C AND D

..... \$ 2,000

Who was the operator (provided the financing)?

Name Mr. Wayne Nelsen

Address 554 East 15th Avenue

Vancouver, B.C. V5T 2R5

**Portable Assessment Credits (PAC) Withdrawal Request**

Amount to be withdrawn from owner(s) account(s):

AMOUNT

Name of Owner

(May be no more than 30 per cent of value of the approved work submitted as assessment work in C and (or) D.)

1. ....

2. ....

3. ....

4. ....

TOTAL WITHDRAWAL

TOTAL OF C AND (OR) D PLUS PAC WITHDRAWAL

I wish to apply \$ ..... of this work to the claims listed below.

(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)

.. 5864 - 1 year - \$250 ..... 5873 - 1 year - \$250

.. 5865 - 1 year - \$250 ..... 5874 - 1 year - \$250

.. 5866 - 1 year - \$250

.. 5867 - 1 year - \$250

.. 5868 - 1 year - \$255

.. 5870 - 1 year - \$250

Value of work to be credited to portable assessment credit (PAC) account(s).

(May only be credited from the approved value of C and (or) D not applied to claims.)

Name

AMOUNT

In owner(s) name.

1. ....

2. ....

3. ....

In operator(s) name (party providing the financing).

1. ....

2. ....

3. ....

*Wayne Nelsen*  
(Signature of Applicant)