

83-#884 - 11798 - 7

GEOCHEMICAL

ASSESSMENT REPORT

on the

GOLD PROPERTY

(GOLD, GOLDEN 1 and GOLDEN 2 CLAIMS)

VENNER MEADOWS

OSOYOOS MINING DIVISION, B.C.

NTS: 82E/6W
Latitude: 49°16.7' - 49°17.5' North
Longitude: 119°18.4' - 119°20.0' West
Owner: E & D Joint Venture
Consultant: K. L. Daughtry & Associates Ltd.
Author: K. L. Daughtry, P.Eng.
Date: January, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,798

TABLE OF CONTENTS

SUMMARY . . . . .	.Page 1
LOCATION, ACCESS, TOPOGRAPHY . . . . .	.Page 2
PROPERTY . . . . .	.Page 3
HISTORY . . . . .	.Page 4
GEOLOGY . . . . .	.Page 6
GEOCHEMICAL SURVEY . . . . .	.Page 7
DISCUSSION AND CONCLUSIONS . . . . .	.Page 9
REFERENCES . . . . .	.Page 10
STATEMENT OF COSTS . . . . .	.Page 11
STATEMENT OF QUALIFICATIONS . . . . .	.Page 12

LIST OF ILLUSTRATIONS

Figure 1	Location Map		Following Page 2
Figure 2	Index Map	1:50,000	Following Page 3
Figure 3	Gold in Soils	1:5,000	In pocket
Figure 4	Silver in Soils	1:5,000	In pocket
Figure 5	Arsenic in Soils	1:5,000	In pocket

SUMMARY

The GOLD property, 20 km southeast of Okanagan Falls in the Osoyoos Mining Division, B.C., is currently held by the E & D Joint Venture. This report describes the results of the geochemical soil survey conducted on the property in the summer of 1983.

In February of 1983, 5 km of grid were established and a ground magnetometer survey was carried out. The geochemical survey was subsequently conducted over the same grid.

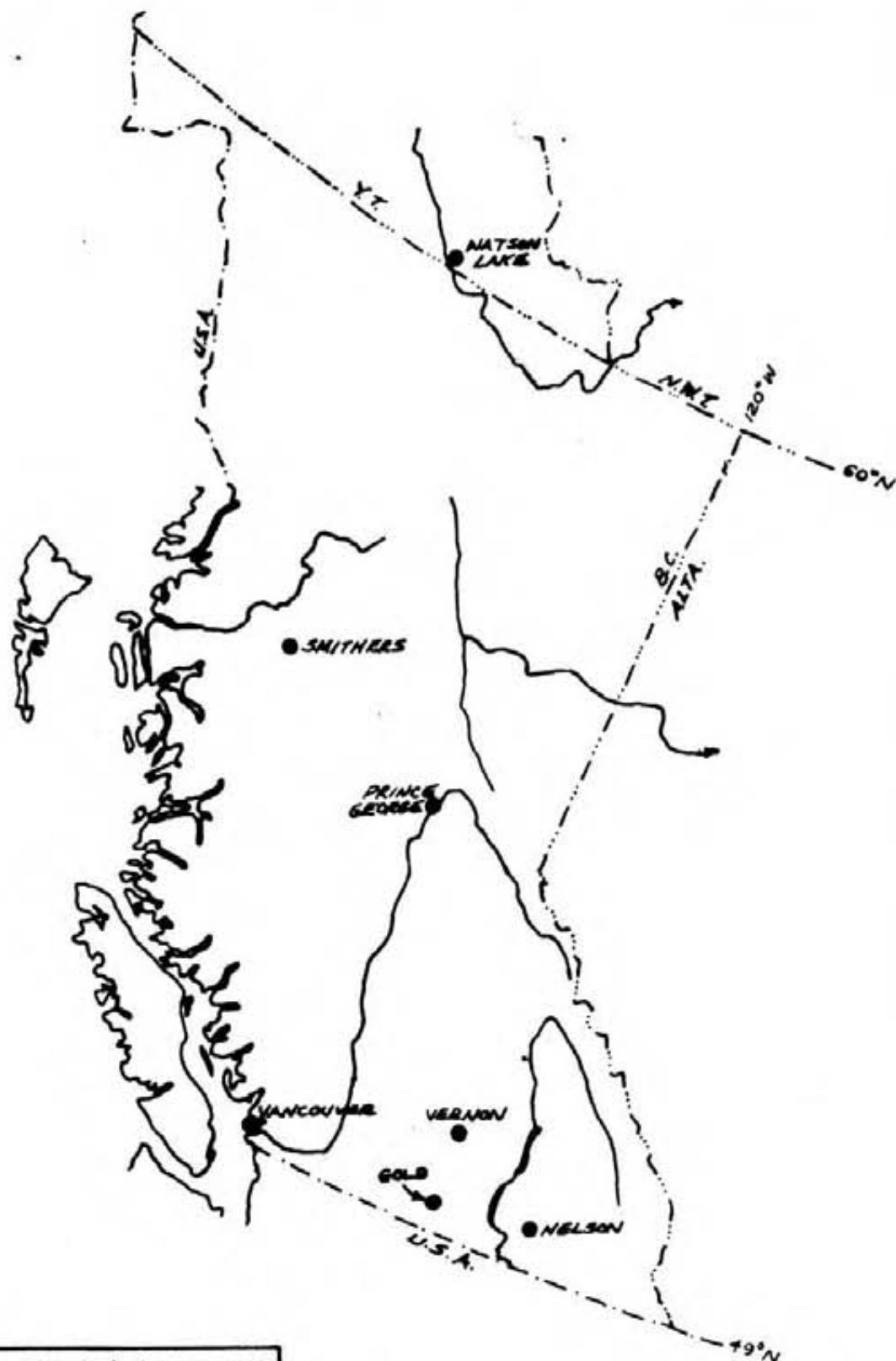
A total of 171 soil samples was collected and analysed for gold, silver and arsenic. Anomalous values occur in areas of hydrothermal alteration and, in some cases, with magnetic low anomalies.

LOCATION, ACCESS, TOPOGRAPHY

The GOLD property is located astride Solco (Fish) Creek, a southerly-flowing tributary of Vaseux Cr  ek, 20 km southeast of Okanagan Falls, B.C. (Figures 1 & 2). Venner Meadows is on the central part of the west boundary, and Solco (Fish) Lake is 8.5 km north-northeast of the centre of the GOLD claim. Elevations on the property vary from 1370m to 1600m a.s.l. The National Topographic System reference is 82E/6W and the co-ordinates of the area of the showings are 49  16.9' north and 119  08.4' west.

Good access is provided to the property by driving up the Shuttleworth Creek logging road from Okanagan Falls for 27 km. Much of the claim is covered by second growth with abundant windfalls and peckerpole pine.

Topography is rolling and typical of the Okanagan Plateau. The central part of the property is a bowl-like depression between low hills. The upper part of the Solco Creek canyon extends to the southern part of the GOLDEN 1 claim.



K.L. DAUGHTRY & ASSOC. LTD

E & D JOINT VENTURE

LOCATION MAP
GOLD PROPERTY
Osoyoos M.D.

Project No 098

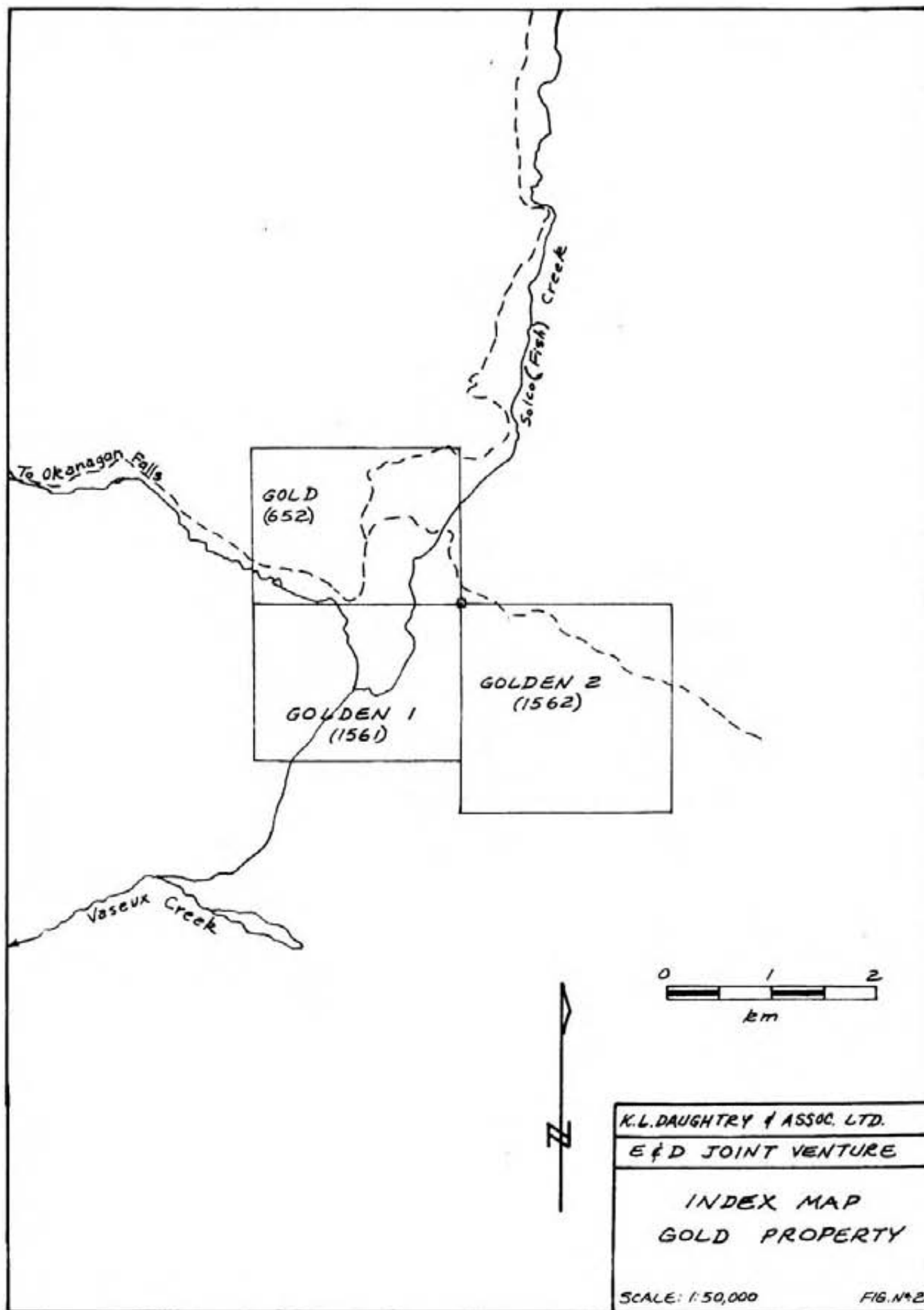
FIG. NO. 1

PROPERTY

The property consists of the following located mineral claims:

<u>Name</u>	<u>Record No.</u>	<u>No. units</u>	<u>Registered Owner</u>	<u>Expiry Date</u>
GOLD	652	12	P.P. Nielsen	March 1, 1985
GOLDEN 1	1561	12	K.L. Daughtry	July 15, 1984
GOLDEN 2	1562	20	K.L. Daughtry	July 15, 1984

The ownership of all claims is subject to an agreement between Energex Minerals Ltd. and K.L. Daughtry and Associates Ltd., acting for K.L. Daughtry, P.P. Nielsen, W.R. Gilmour and V.F. Erickson, dated August 11, 1978.



HISTORY

K.G. Ewers and partners of Okanagan Falls, B.C. staked the AU-RAIN group of 8 claims in June 1973. This was the first recorded activity in the area of the GOLD claim. The AU-RAIN property was staked to cover an occurrence of gold-silver mineralization exposed in a road cut on a recently upgraded logging road.

The prospectors dug two trenches, one on either side of the road. The western trench encountered bedrock but the eastern one was entirely in overburden.

In November 1973, Teck Corporation Limited conducted limited soil and rock geochemical surveys and magnetometer and VLF-EM surveys over the immediate area of the showing. Soil sampling indicated the presence of above-background gold, silver and mercury values near the showing. The geophysical surveys did not appear to indicate significant magnetic or VLF-EM response. However, magnetic readings were recorded only to the nearest 100 gammas.

In June 1974, Teck enlarged the grid and carried out further soil sampling. This work delineated an area, anomalous in gold and silver values, which extended about 1100 x 800 feet (330 x 240 m). Teck concluded that the anomalies were "related to nearby gold and silver mineralization of very limited areal extent", and dropped their option. The total value of Teck's work filed for assessment was about \$3500.00.

In 1975, Ewers and partners dug 4 trenches and cut over 800 metres of trail. Twenty-one rock samples were submitted for gold and silver assays.

Granby Mining Corporation carried out a channel sampling programme of

outcrops, road cuts and trenches in November 1975. Granby's report concludes "... appreciable gold and silver mineralization occurs erratically in limited areal extent.... It might merit additional detailed sampling and some exploration, but its potential is considered not enough for Granby at this time".

From November 1975 to May 1976, Ewers and partners conducted biogeochemical surveys, trenching, and assaying. Some of this work was financed by Canex Placer Limited.

Apparently no further work was performed, and the AU-RAIN claims were allowed to lapse in 1978. The area of the showings were re-staked as the GOLD claim by the current owners in February 1979.

In 1980 a 1:5,000 base map was prepared by Pacific Survey Corporation and filed for assessment work. In addition the current owners conducted a geochemical orientation survey over part of the claim. Soil samples were collected and analyzed for gold, silver, arsenic, antimony and mercury. High values in gold, silver, arsenic and mercury occurred near the known showings, and two new areas of anomalous arsenic and mercury values were discovered. Antimony values were negative.

In 1982 an orientation ground magnetometer survey was conducted over portions of the property. This survey indicated that a direct correlation existed between magnetic lows and both the geochemical anomalies and hydrothermally altered and mineralized rock.

In 1983, 5 kilometres of grid were installed and a ground magnetometer survey was conducted. This survey confirmed the correspondence of magnetic lows with geochemical anomalies and altered rock.

GEOLOGY

The GOLD property is in an outlier of early Tertiary volcanic and sedimentary rocks which are correlative with rocks of the White Lake Basin 11 km to the west and northwest.

Early Tertiary rocks were probably once co-extensive between the White Lake Basin and the area of the GOLD property. Tertiary faults have tilted and uplifted intervening blocks resulting in erosion of the Tertiary units between the Okanagan Valley and the subject area. The distribution of Tertiary rocks in the outlier itself may be controlled by unmapped Tertiary block faults.

The pre-Tertiary basement rocks in the area of the property are shown on GSC Map 15-1961 as Mesozoic Valhalla granitic rocks and metamorphic rocks of the older Monashee Group.

The GOLD claim is underlain by andesitic flows and tuffs which overlie sedimentary rocks south of the area of the showings. The andesitic rocks are described by Verzosa (1974) as dark-coloured fine-grained feldspar porphyry and tuff. Verzosa also mentions areas of rusty, highly altered and silicified rock associated with a northeasterly-trending zone of shearing and fracturing. Alteration is accompanied by pyritization in places, is patchy, and is spatially related to bands, veins and veinlets of calcite. He also describes a siliceous volcanic breccia, or possibly lahar, which he compares to similar rocks at the Dusty Mac Mine 19 km to the northwest. The mineralization at the GOLD property appears to be generally related to the altered and fractured rocks.

The arsenic anomaly in soils discovered in the 1980 soil survey, as well as the magnetic low anomaly indicated in the 1982 and 1983 magnetometer surveys, occur along the same northeast-southwest trend mentioned above.

GEOCHEMICAL SURVEY

A total of 171 soil samples was collected at intervals of 25 metres along grid lines spaced 100 metres apart. Samples were collected with a grub hoe from the B or C horizons at depths ranging from 15 to 30 centimetres. The parent material varied from grey clay to brown silt and sand. Ground slopes are generally flat to gentle, with some steep slopes on line 1N.

Samples were collected in numbered Kraft paper bags and shipped to Bondar-Clegg and Company Ltd. in North Vancouver for geochemical analysis. All samples were analysed for gold, silver and arsenic. Gold was analysed by the fire assay/AA technique following digestion by aqua regia, silver by standard atomic absorption following hot acid digestion, and arsenic by a colourimetric technique following nitric-perchloric digestion.

A statistical analysis of the analytical results permitted an anomalous classification as follows:

Gold	0 - 5	parts per billion	negative
	10 - 20	parts per billion	threshold
	> 20	parts per billion	anomalous
Silver	0 - 0.2	parts per million	negative
	0.3	parts per million	threshold
	> 0.3	parts per million	anomalous
Arsenic	0 - 2	parts per million	negative
	3 - 7	parts per million	threshold
	>7	parts per million	anomalous

Arsenic values ranged from <2 to 100 parts per million (Figure 5). A large area of anomalous values trends southwesterly from west of the old trenches on the baseline at 3N to the west end of line ON. This anomaly corresponds to areas

of hydrothermally altered rock and a magnetic low anomaly. The strongest anomaly is about 200 metres west of the baseline on line 1N. A smaller anomaly is indicated on lines 0N and 1S just east of the base line.

Silver values ranged from <0.2 to 1.0 ppm (Figure 4). The higher values are clustered near the old trenches along the northwest end of the arsenic anomaly between lines 2N and 4N, immediately west of the baseline.

The gold values ranged from <5 to 265 parts per billion (Figure 3). The highest values are generally coincident with the northeast end of the large arsenic anomaly and with the smaller arsenic anomaly to the southeast.

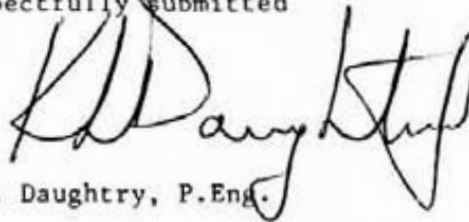
DISCUSSION AND CONCLUSIONS

The coincidence of the higher gold and silver values with the more widespread arsenic anomaly in soils suggests that the most effective geochemical approach to gold exploration on the GOLD property will be an arsenic soil survey followed by gold and silver analyses of samples from anomalous areas.

The occurrence of the pronounced magnetic low in the area of the highest arsenic values suggest that a detailed ground magnetometer survey may locate areas of more intense hydrothermal alteration.

Once defined, targets should be tested by backhoe trenching and drilling.

Respectfully submitted

A handwritten signature in black ink, appearing to read 'K.L. Daughtry', written over the typed name.

K.L. Daughtry, P.Eng.

January 20, 1984.

REFERENCES

- | | | |
|--------------------------------|--------|---|
| Church, B.N. | (1977) | Tertiary Stratigraphy in South Central B.C. in Geological Fieldwork, 1977 B.C. Ministry of Mines & Petroleum Resources. |
| --- | (1973) | Geology of the White Lake Basin. Bulletin 61 B.C. Department of Mines & Petroleum Resources. |
| --- | (1970) | GEM pp 396-402. B.C. Department of Mines and Petroleum Resources. |
| --- | (1969) | GEM pp 294-296 |
| Daughtry, K.L. | (1982) | Geophysical Assessment Report on the GOLD Property Osoyoos Mining Division, B.C. |
| Daughtry, K.L. & Gilmour, W.R. | (1981) | Geochemical Assessment Report on the GOLD property, Osoyoos Mining Division, B.C. |
| GEM | (1976) | pp E26-27 AU, RAIN |
| --- | (1975) | p E21 AU |
| --- | (1974) | p 56 AU and DUSTY MAC |
| --- | (1973) | p 47 AU |
| Kim, H. | (1975) | Report on AU-RAIN Claim Group for Granby Mining Corporation |
| Nielsen, P.P. | (1983) | Geophysical Assessment Report on the GOLDEN and GOLD Mineral Claims, Osoyoos Mining Division |
| Thompson, K.G. | (1976) | AU-RAIN Claim Group. Assessment report 5886. |
| --- | (1975) | AU-RAIN Claim Group. Assessment Report 5702. |
| Verzosa, R.S. | (1974) | Geochemical Report, AU-RAIN Claim Group Assessment Report 5009. |
| --- | (1973) | Geochemical and Geophysical Report, AU-RAIN Claim group. Assessment Report 4763. |

STATEMENT OF COSTS

1. Professional Services		
K.L. Daughtry, P.Eng.		
supervision, report writing		
1.5 days @ \$275	\$412.50	
W.R. Gilmour, geologist		
report writing		
1 day @ \$250	<u>250.00</u>	\$662.50
2. Labour		
J. Graham, prospector		
supervision		
1 days @ \$175	175.00	
T. Bissett 4 days @ \$115	460.00	
July 11 - 14		
C. Lynes 4 days @ \$125	500.00	
July 11 - 14		
J. Osterhagen 4 days @ \$150	<u>600.00</u>	1735.00
3. Transportation		
4 X 4 truck		
594 km @ \$.35	207.90	
4 days @ \$30.	<u>120.00</u>	327.90
4. Accommodaation, meals		334.20
5. Analysis		
Soil geochem		
131 Au @ 6.00	786.00	
131 Ag @ 1.90	248.90	
131 As @ 3.25	425.75	
131 sample preparations @ .75	<u>98.25</u>	1558.90
6. Field Supplies		100.00
7. Secretarial, office, printing		<u>250.00</u>
	Total	\$4968.50

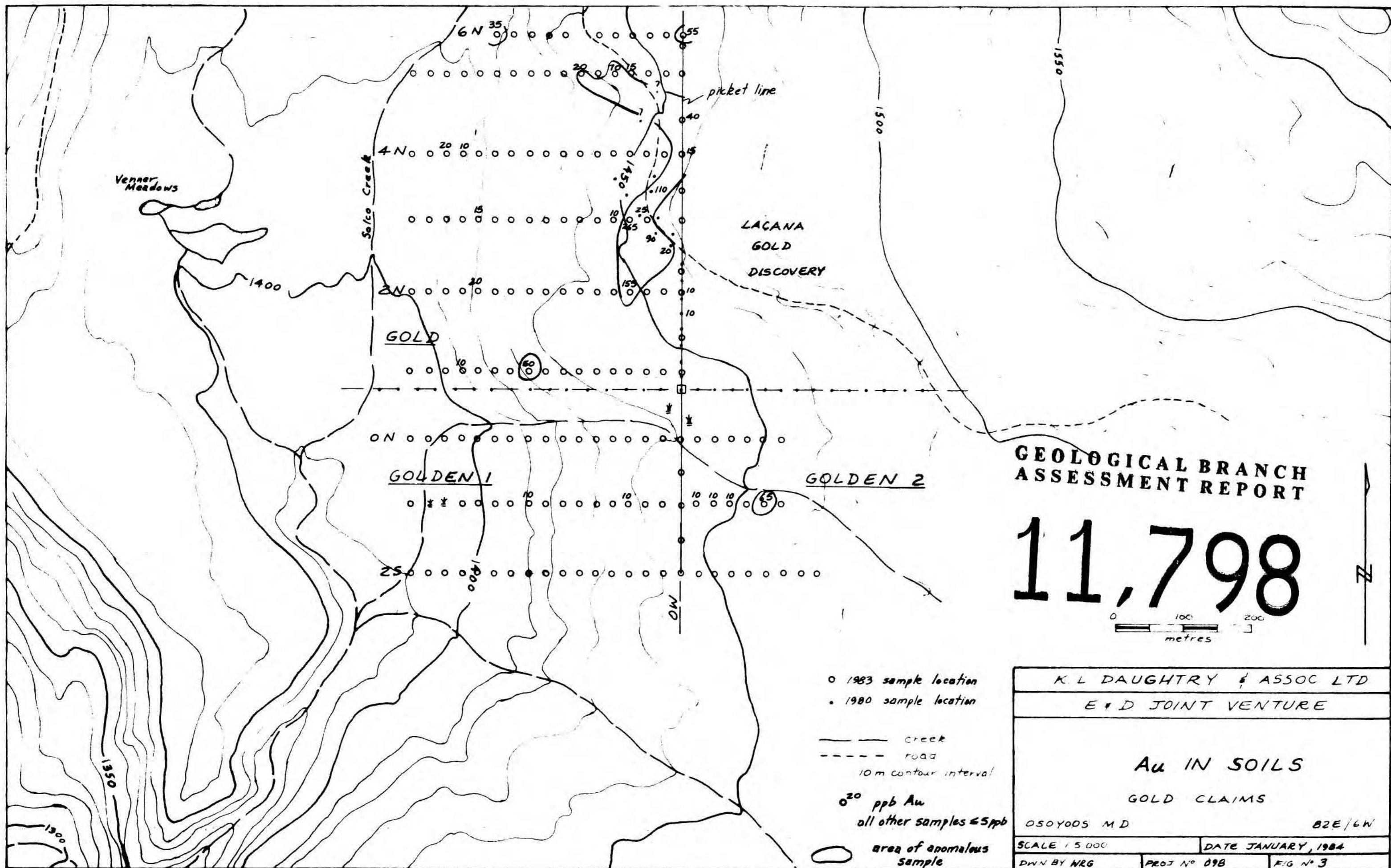
STATEMENT OF QUALIFICATIONS

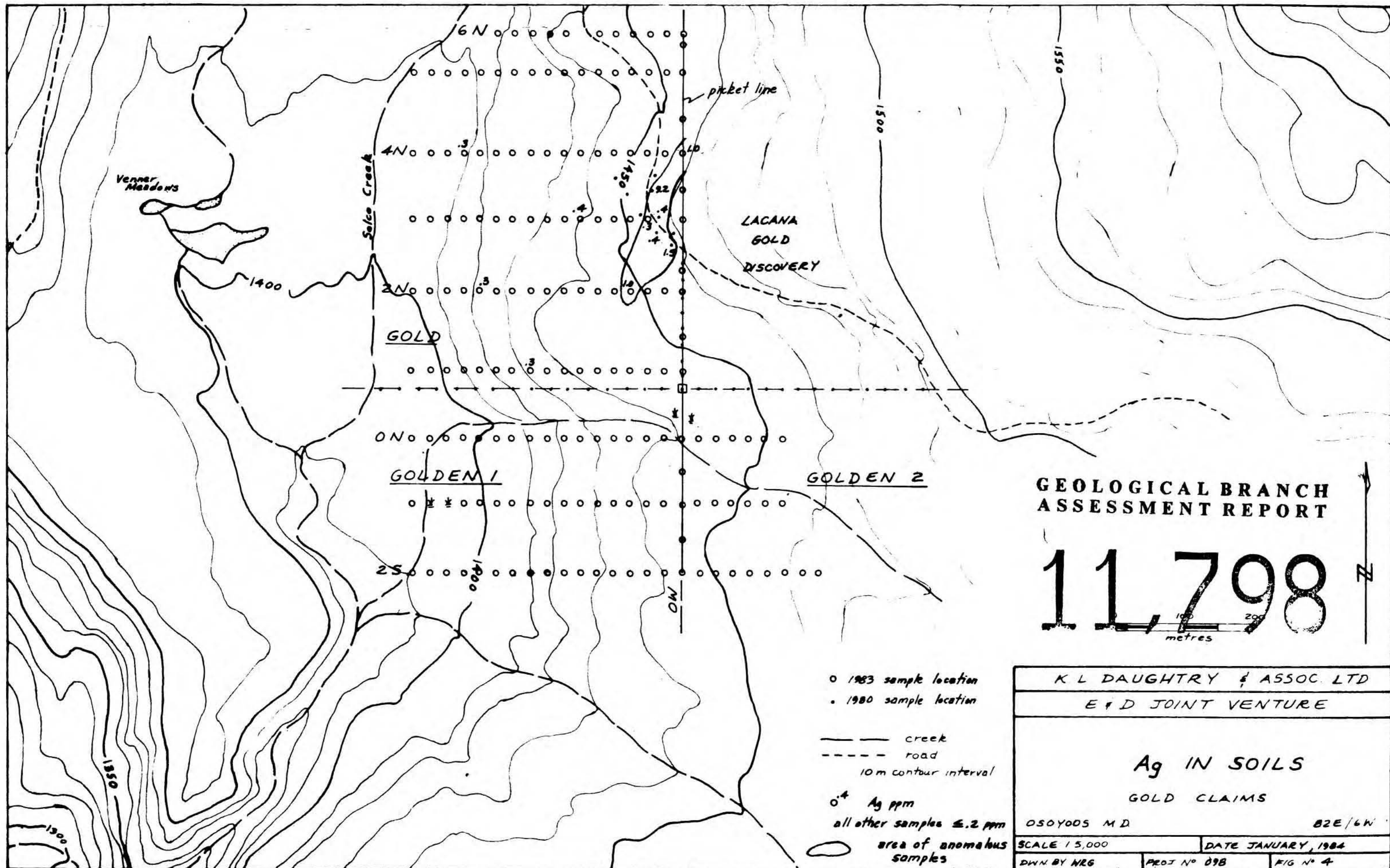
I, KENNETH L. DAUGHTRY, of R.R. #4, Vernon, British Columbia, DO HEREBY
CERTIFY that:

1. I am a Consulting Geologist in mineral exploration.
2. I have been practising my profession for nineteen years in Canada, the United States and Ireland.
3. I am a graduate of Carleton University, Ottawa, with a Bachelor of Science degree in Geology and Chemistry.
4. I am a member of the Associations of Professional Engineers of British Columbia, Ontario, and Yukon Territory, and a Fellow of the Geological Association of Canada.
5. This report is based upon knowledge of the GOLD property gained from an examination of the showings on the property, from the study of numerous assessment reports on the property, from conducting previous surveys on the property, and from supervision of the work herein described.
6. I hold a beneficial interest in the GOLD property.

Vernon, B.C.
January 20, 1984


K. L. Daughtry, P.Eng.





GEOLOGICAL BRANCH
ASSESSMENT REPORT

11,798

- 1983 sample location
- 1980 sample location
- creek
- - - road
- 10m contour interval
- 0.4 Ag ppm
- all other samples ≤ 2 ppm
- area of anomalous samples

K L DAUGHTRY & ASSOC. LTD		
E & D JOINT VENTURE		
Ag IN SOILS		
GOLD CLAIMS		
050Y005 M.D.		02E/6W
SCALE 1:5,000		DATE JANUARY, 1984
DWN BY NRG	PROJ N° 098	FIG N° 4

