

GEOPHYSICAL REPORT

on the

GOLDEN and GOLD MINERAL CLAIMS

OSOYOOS MINING DIVISION, B.C.

Owner: P.P. Nielsen
Operator: K.L. Daughtry.

Longitude: 119° 18.4' W
Latitude: 49° 16.6' N
NTS: 82E/6W

<u>Claim Name</u>	<u>Record No.</u>	<u>Anniversary</u>
GOLD	652	March 1, 1983
GOLDEN 1	1561	July 15, 1983
GOLDEN 2	1562	July 15, 1983

By P.P. Nielsen
Nielsen Geophysics Ltd.
Vernon, B.C.

March 1983

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

11,276

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INTRODUCTION

During the period February 25 to March 1, 1983, a programme consisting of a grid installation and a ground magnetometer survey was carried out on the Gold and Golden mineral claims east of O.K. Falls, B.C. These claims are referred to as the "Gold" property.

The purpose of the survey was to test the results of an orientation survey done the previous year which suggested that magnetic lows could reflect zones of hydrothermal alteration and gold/silver mineralization in areas exhibiting anomalous soil geochemical values.

The work was executed by Nielsen Geophysics Ltd. of Vernon, B.C. A total of 5 km of lines were installed and magnetically surveyed. Progress was severely hampered by adverse snow-shoeing conditions, dense stands of peckerpole pine, windfalls and access problems due to heavy logging truck traffic.

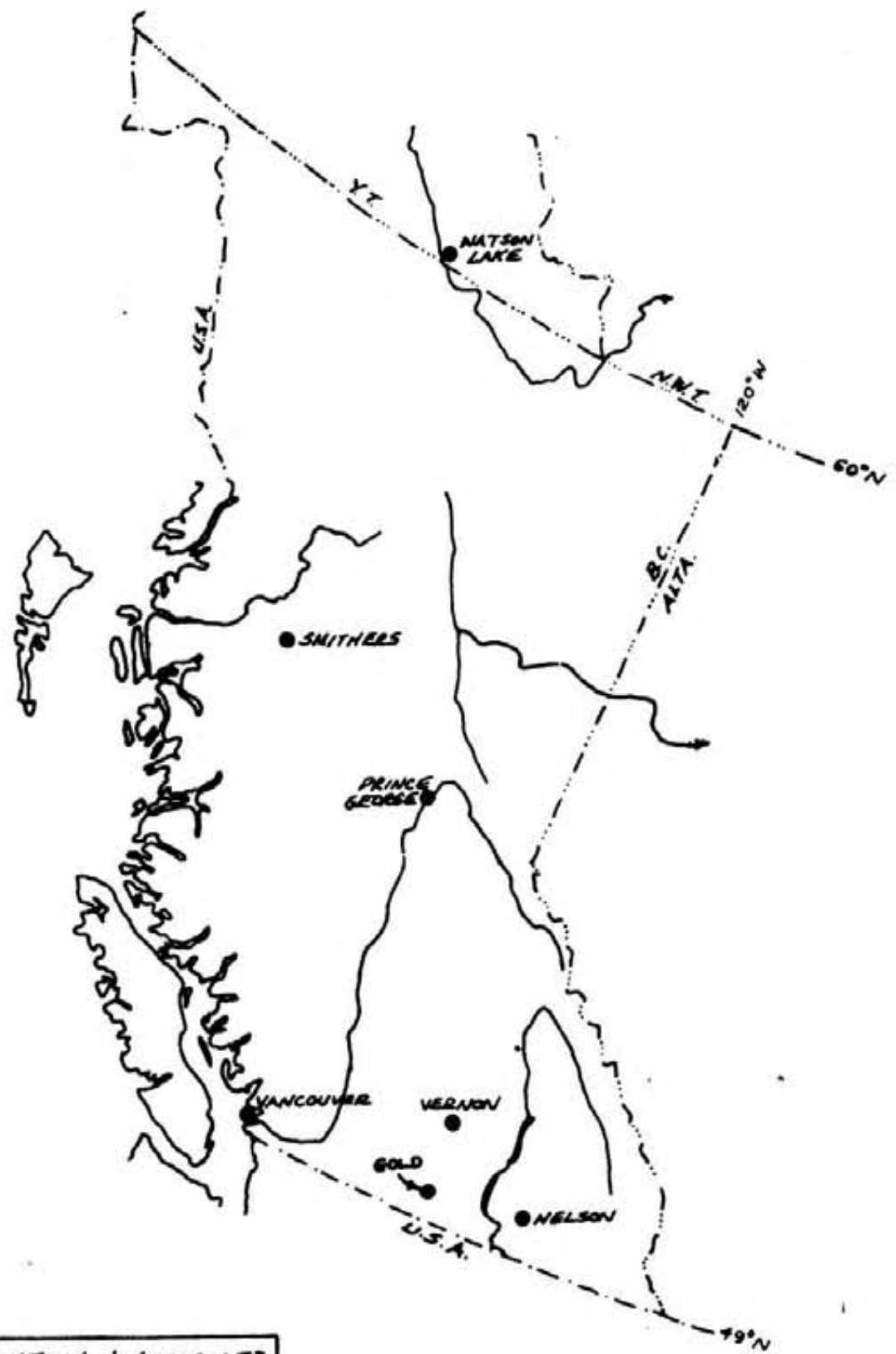
LOCATION, ACCESS, TOPOGRAPHY

The GOLD property is located astride Solco (Fish) Creek, a southerly-flowing tributary of Vaseux Creek, 20 km southeast of Okanagan Falls, B.C. Venner Meadows is on the central part of the south boundary, and Solco (Fish) Lake is 8.5 km north-northeast of the centre of the 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.

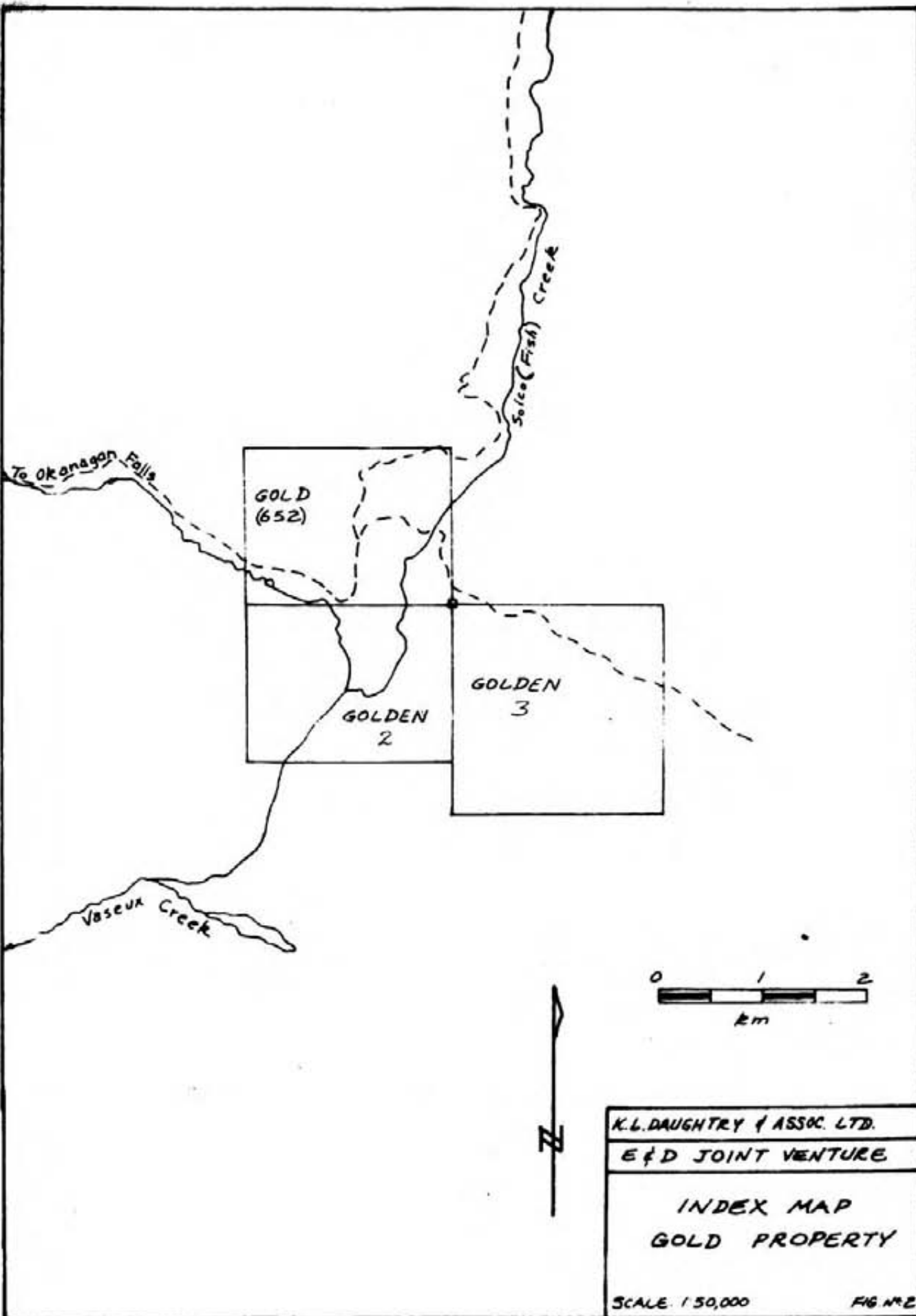
Good access is provided to the property by driving up the Shuttleworth Creek logging road from Okanagan Falls for 27 km. Much of the claim is covered by second growth with abundant windfalls and peckerpole pine.

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

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K.L. DAUGHTRY & ASSOC. LTD
E & D JOINT VENTURE
LOCATION MAP GOLD PROPERTY Osoyoos M.D.
Project No 098 FIG. NO. 1



K.L. DAUGHTRY & ASSOC. LTD.
E & D JOINT VENTURE
INDEX MAP
GOLD PROPERTY
SCALE 1:50,000
FIG. NO. 2

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, 1983
GOLDEN 1	1561	12	K.L. Daughtry	July 15, 1983
GOLDEN 2	1562	20	K.L. Daughtry	July 15, 1983

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.

GEOLOGY

The GOLD property is 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 occurs along the same northeast-southwest trend mentioned above.

GRID INSTALLATION

The grid consisted of 9 cross-lines spaced 100 metres apart varying from 300 metres to 600 metres long turned off normal to the re-habilitated north-south claim line running through the common legal claim post of Gold 1, Golden 1 and 2.

The lines were installed using the hip-chain and compass method with a 25 metre station interval using numbered flagging attached to tree limbs.

As shown on the Values & Contour Map, Line 1N is located 25 metres north of the Legal Corner Post.

THE GROUND MAGNETOMETER SURVEY

Instrument Used: Magnetic readings were taken using a Geometrics Unimag II nuclear precession (total field) magnetometer.

Survey Method: A base-station was established at the Legal Corner Post and the base-line run twice to establish values for each cross-line at the Base-line.

The cross-lines were done in pairs looping and closing in less than 45 minutes per pair of lines.

Readings on the Cross-lines were taken at a station interval of 25 metres.

Treatment of Data and Presentation: The absolute magnetic readings were corrected for diurnal variations and the day-to-day corrections were also made. The resulting data was subtracted from a base absolute value of 57,000 gammas δ for ease and clarity in plotting.

The results were contoured using a contour interval of 50 δ 's. Local relative highs and lows are indicated on the Values & Contour map in the pocket of this report.

Other features such as trenches, roads, creeks, claim lines and interpreted faults are also illustrated on the map.

Discussion of Results

A total of 180 readings were taken which varied from a total field low of 57 δ 's to a high of 750 δ 's for a total magnetic field relief of 697 δ 's.

The Contour & Values map illustrates a fairly complex pattern of magnetic highs and lows in an area of gentle to moderate topographic relief. Virtually no outcrop exists in this area of interest thus increasing the difficulty of interpreting the results of the magnetic survey.

However, the data does show that the magnetic low along the claim line west of the L.C.P., which was detected the previous year as the result of a magnetic orientation survey, is valid. The line was re-run this year and plotted on the accompanying map 25 metres south of N.P. Line 1N. The areally small, local highs and lows suggest that a smaller inter-line spacing of 25 metres should be used. The interpreted faults and suggested regional component of the total magnetic field would indicate that a cross-line direction of north-west would be more feasible for future work.

The area of interest would seem to be confined to the 250 δ and below contours. Due to the lack of rock-type information it is not clear if these lows are due to:

1.) areas of hydrothermal alteration (magnetic lows) adjacent to remnants of rocks exhibiting a higher magnetic susceptibility such as tertiary volcanics which is known to exist in the area

or

2.) contact metamorphic mineralization in the form of dyke-like bodies

exhibiting a dipolar magnetic signature (magnetic low with adjacent related high).

Two north-easterly striking faults are interpreted which bound the prominent magnetic low along the western claim line. The more easterly of these faults passes through the old trenches where the logging road crosses the Base-line (N-S claim line).

Another fault is interpreted striking E-W between Line 1N and Line 2N. This feature cuts off the two prominent magnetic lows to the north and is somewhat suspect as it is parallel to the survey lines even though the data is known to be valid.

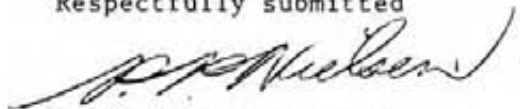
CONCLUSIONS & RECOMMENDATIONS

The present magnetometer survey has shown that the areas of high arsenic geochemical values, which are likely related to gold, occur within or immediately adjacent to magnetic lows (relative) below 250 gammas. Old trenches from previous exploration programs also coincide with these lows.

Although very little geological information as to rock types was available to the author, the survey suggests that the magnetic lows could be caused by hydrothermal alteration with related gold/silver mineralization. These zones appear to be fault controlled.

Trenching and/or drilling is recommended in the western claim line area over the magnetic low between stations 1+50W and 3+00W, and at the partially closed low on L1N between stn. 0+00 and stn. 0+50W. Should the results prove encouraging, it is recommended that a permanent detailed grid be installed with cross-lines spaced 25 metres apart on a northwest bearing over the present reconnaissance grid and eventually extended to the south and southwest. This grid will then be used for the ground magnetic survey geological mapping and geochemical soil surveying.

Respectfully submitted



NIELSEN GEOPHYSICS LTD.

REFERENCES

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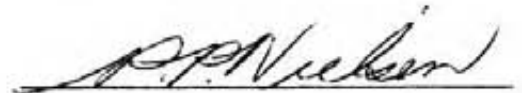
STATEMENT OF COSTS

1.)	<u>Personnel</u>		
(a)	P.P. Nielsen - Geophysicist & magnetometer operator 4 days @\$225/day	\$900.00	
(b)	D. Stirling - Line-cutter 4 days @\$125/day	<u>500.00</u>	\$1400.00
2.)	<u>Food & Accommodation</u> 8 man days @\$28.75/man day		230.00
3.)	<u>Instrument Rental:</u> 5 days @\$25/day		125.00
4.)	<u>Materials</u> flagging, hip-chain thread, etc.		20.00
5.)	<u>Transportation</u>		
(a)	Truck Rental (4X4): 4 days @\$30/day	120.00	
(b)	Mileage: 720 km @\$.32/km	231.00	
(c)	Gas & oil	<u>140.00</u>	491.00
6.)	<u>Administration</u> Report, telephone, etc.		<u>750.00</u>
	TOTAL AMOUNT		\$3016.00



STATEMENT OF AUTHOR'S QUALIFICATIONS

1. I am a geophysicist residing at Okanagan Landing Road, Vernon, British Columbia.
2. I am a graduate of the University of British Columbia with a B.Sc. degree (1969) in Geophysics.
3. I carried out the survey and am the author of this report.
4. I have been practising my profession and have been involved in all aspects of mining geophysics in North America, Africa and Australia for the past eighteen years.
5. I am a member of the Society of Exploration Geophysicists and the Vernon Exploration Group.



P.P. Nielsen, B.Sc.

DATED at Vernon, B.C.

This 14th day of April, 1983.

PERSONNEL

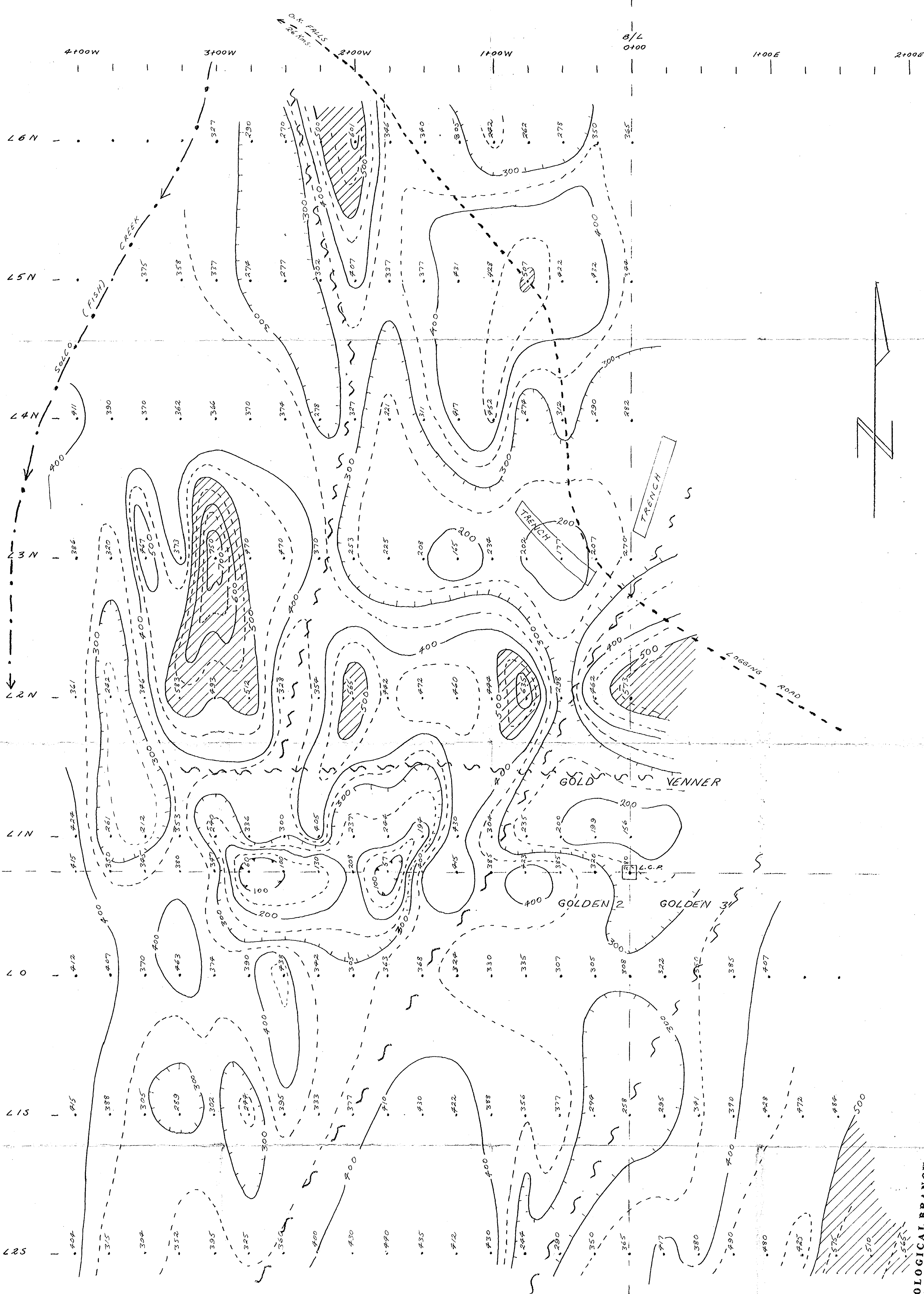
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P.P. Nielsen - Geophysicist, magnetometer operator and author of report.

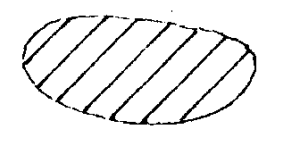
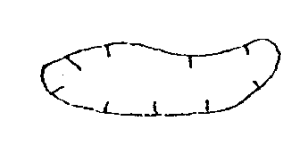
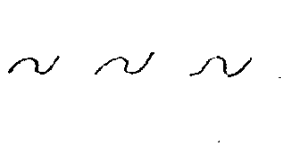

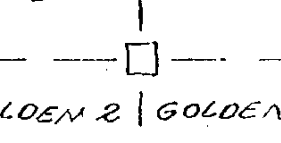

D. Stirling - Line-cutter.

K.L. DAUGHTRY & ASSOCIATES LTD.

S. Robatzek - typist.



LEGEND

-  RELATIVE MAGNETIC HIGH (> 500 GAMMAS)
-  RELATIVE MAGNETIC LOW (< 300 GAMMAS)
-  INTERPRETED FAULT
-  CREEK
-  GOLD VANNER LEGAL CORNER POST (L.C.P.)
-  GOLDEN 2 | GOLDEN 3 CLAIM LINES

INSTRUMENT USED
 GEOMETRICS UNIMAG II
 NUCLEAR PRECISION
 TOTAL FIELD MAGNETOMETER

NOTE: - ALL GAMMA VALUES RELATIVE TO BASE VALUE OF 57,000 G'S (TOTAL FIELD)

TO ACCOMPANY REPORT BY:
P. Nielsen
 P.R. NIELSEN, B.Sc., GEOPHYSICIST.

GOLD PROPERTY, O.K. FALLS, B.C.
 GROUND MAGNETOMETER SURVEY
 CONTOUR, VALUES AND INTERPRETATION MAP

0309003 M.D. M.T.S. 828/6W
 NIELSEN GEOPHYSICS LTD.
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1:1250
 SCALE IN METRES

11,276
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