#### REPORT ON

ROCK AND STREAM SEDIMENT GEOCHEMISTRY SAMPLING
(with some geological mapping and magnetic surveying)

ON THE

DAVE CLAIM GROUP

NASWHITO CREEK, NORTH OKANAGAN LAKE AREA

VERNON MINING DIVISION

BRITISH COLUMBIA

PROPERTY

- : 18 km N75°W (285°E) of Vernon, B.C., on Naswhito Creek
- : 50° 18' North Latitude 119° 31' West Longitude
- : N.T.S. 82L/5E

OWNER

: GEOTRONICS SURVEYS LTD. Y-H TECHNICAL SERVICES LTD. \$530 - 800 West Pender Street Vancouver, B.C., V6C 2V6

WRITTEN BY

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DATED

: October 2, 1989



GEOTRONICS SURVEYS LTD. Engineering & Mining Geophysicists VANCOUVER, CANADA





### Province of British Columbia

Ministry of Energy, Mines and Petroleum Resources

# ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TYPE OF REPORT/SURVEY(S)	TOTAL COST
Geochemistry	0.00
David G. Mark AUTHOR(S)	1 1 // -
Administry	
DATE STATEMENT OF EXPLORATION AND DEVELOPMENT FILE	n July 4/89 YEAR OF WORRS/'8
PROPERTY NAME(S) Dave Claims	
<b>1. 1. 1. 1. 1. 1. 1. 1.</b>	
COMMODITIES PRESENT	
B.C. MINERAL INVENTORY NUMBER(S), IF KNOWN	
	NTS82L/5E
	•
	ugitude .119°.31. west
NAMES and NUMBERS of all mineral tenures in good standing (when wor (12 units); PHOENIX (Lot 1706); Mineral Lease M 123; Mining or Certified	k was done) that form the property [Examples: TAX 1-4, FIRE 2 Mining Lease ML 12 (claims involved)]:
Dave 1 - 18 unite - #2771 -	July 4th July 4th
Dave 2 - 18 units - #2777 -	July 4th
DWNER(S)	•
Geotronics Surveys Ltd.	Y-H Technical Services Ltd.
MAILING ADDRESS	
530-800 West Pender Street	Box. 298
Vancouver, B.C., V6C 2V6	Vernon, B.C., VIT 6M2
PERATOR(S) (that is, Company paying for the work)	
1) As above (2)	Aş.above
MAILING ADDRESS	
:UMMARY GEOLOGY (lithology, age, structure, alteration, mineralization,	size, and attitude):
Carboniferous and Triassic Thompson As	
and volcanics. Gold occurs within	quartz (vuggy) (6 to 7 metres
wide?). Epithermal veining and alter	ation noted throughout property.
Northwest faulting and shearing predom	inate.
Geochemical an EFERENCES TO PREVIOUS WORK	nd geological surveying on Nash
Claims reported by Nelles, January, 19	84.

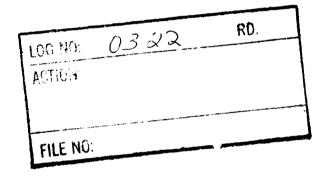
EXTENT OF WORK TYPE OF WORK IN COST (IN METRIC UNITS) ON WHICH CLAIMS THIS REPORT **APPORTIONED** 1,800.0 Dave 1 and 2 GEOLOGICAL (scale, area) minor Ground Photo GEOPHYSICAL (line-kilometres) Ground Dave 1 and 2 400.00 .10 readings Magnetic Electromagnetic Induced Polarization Radiometric Seismic Other Airborne GEOCHEMICAL (number of samples analysed for ....) Soil - 32 element ICP Dave 1 and 2 Stream Silt 13 - 32 element ICP Rock Other DRILLING (total metres; number of holes, size) Core Non-core RELATED TECHNICAL Sampling/assaying Petrographic Mineralogic Metallurgic PROSPECTING (scale, area) PREPARATORY/PHYSICAL Legal surveys (scale, area) Topographic (scale, area) Photogrammetric (scale, area) Line/grid (kilometres) Road, local access (kilometres) Trench (metres) Underground (metres) TOTAL COST · \$5;123··0 NAME OF PAC ACCOUNT DEBIT CREDIT REMARKS: FOR MINISTRY USE ONLY Value work done (from report) ...... Value of work approved . . . . Value claimed (from statement) Value credited to PAC account Value debited to PAC account Accepted ..... Date Information Class Rept. No.

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GEOLOGICAL BRANCH ASSESSMENT REPORT

19,152

GEOTRONICS SURVEYS LTD. +

#### SUMMARY

Rock and stream sediment geochemistry sampling was carried out over portions of the Dave claim during June, 1988 and June and July, 1989. There was also a minor amount of geological mapping and magnetic surveying done.

The property was staked during the 1988 Huntington rush since it was recognized to contain strong potential for epithermal gold mineralization. The purpose of the current work was therefore to further determine the potential as well as to locate actual epithermal alteration zones.

The property is located within the Vernon Mining Division on Naswhito Creek about 9 km west of the northern part of Okanagan Lake and 18 km N75°W of the Okanagan town of Vernon. The terrain is somewhat steep along the main creeks but becomes more gentle away from the creeks. The vegetation consists of a moderately dense forest, some of it having been logged.

The property is mostly underlain by sediments and volcanics of the Carboniferous and Triassic Thompson Assemblage. The north-west corner of the southwest edge is underlain by the young Kamloops volcanics that overlie the Thompson Assemblage. The gold-copper I.O.U. prospect, which has not been located, apparently occurs about 3 km east of the Dave claims. Also of particular interest are placer workings from which there has been gold production. Though they occur about 4 km downstream of the Dave claims, the source is thought to occur within the Dave claims.

The geochemistry sampling consisted of (1) four stream sediment samples acquired by using a hand-fed sluice box set up at natural trap points within the streams, and (2) 13 rock samples from outcrops of economic interest. A minor amount of geological mapping was also done by tying in zones of volcanic interest to the road marks. In addition, spot readings of the magnetic field were taken to determine whether the magnetometer may be a usful mapping tool.

#### CONCLUSIONS

- 1. An epithermal system consisting of a quartz vein within an alteration zone has been mapped on the property within the S.E. corner of the Dave 1 claim. Geochemical analysis of the vein material and adjacent rocks show anomalous to highly anomalous values in elements that are indicative of the system containing gold mineralization.
- 2. A second area of alteration located within the northern part of the Dave 2 claim, was the site of the best sample result, returning a value of 5,730 ppb gold which converts to 0.167 oz/ton. The sample consisted of hematite/limonite-stained vuggy quartz material taken along a six- to seven-metre length. There are indications the mineralization is epithermal.
- 3. White clay blobs that appear to be the product of epithermal alteration were located in a ditch within the south central part of the Dave 1 claim. This therefore suggests that gold mineralization may occur nearby.
- 4. There are other rock samples that returned anomalously low values in gold and/or anomalous to highly anomalous values in elements that are pathfinders for gold.
- 5. One stream sediment sample returned a very anomalous value of 380 ppb indicating its source to be gold mineralization probably occurring on the property.
- 6. About 4.5 km downstream of the claims are gold placer workings for which the source of its gold may occur on the Dave claims.

7. The magnetic readings that were taken have shown that, if needed, a magnetic survey would be useful in mapping rock-types as well as possibly alteration zones.

#### RECOMMENDATIONS

Gold mineralization, as mentioned above is definitely shown to occur on the Dave claims. The type of mineralization is probably epithermal and therefore probably occurs in more than one location. Further work is definitely warranted and should be carried out as follows: -

- 1. The property should be prospected and geologically mapped at least near and around the favourable areas of exploratin interest discovered to date. Only a cursory examination along the roads has been carried out so far meaning that the exploration potential of most of the property is totally unknown.
- 2. It may be desirable to carry out excavater trenching to assist in geological mapping, especially to check out potential areas of epithermal alteration which often occur in topographic low areas that are therefore usually overburdencovered.
- 3. Carry out a more complete program of stream sediment sampling using a portable sluice box. The best time of the year would be during the spring run-off when the most water is available.
- 4. Carry out resistivity mapping along suspected and known epithermal zones. The purpose would be to locate potential areas for the highest concentration of gold mineralization or, in other words, optimum drill targets.
- 5. Carry out diamond drilling over targets selected from the above work.

#### REPORT ON

# ROCK AND STREAM SEDIMENT GEOCHEMISTRY SAMPLING (with some geological mapping and magnetic surveying)

ON THE

#### DAVE CLAIM GROUP

#### NASWHITO CREEK, NORTH OKANAGAN LAKE AREA

#### **VERNON MINING DIVISION**

#### BRITISH COLUMBIA

#### INTRODUCTION AND GENERAL REMARKS

This report discusses the survey procedure, compilation of data and interpretation of rock and stream sediment geochemistry sampling as well as minor geological mapping and magnetic surveying carried out over the Dave claim group on July 7th and 8th, 1988, as well as from June 30th to July 4th, 1989.

All of the field work was carried out and supervised by R.W. Yorke-Hardy, exploration technician, along with several different assistants.

The sampling consisted of thirteen rock samples, and four stream sediment samples. All samples were tested for gold plus a 32 element ICP package. The magnetic surveying consisted of 10 readings throughout a wide area.

The Dave claims were staked during the 1988 Huntington rush when the spectacular results from a diamond drill hole were announced (235 feet [71.6 m] of 2.03 oz/ton gold). It was reported that the mineralization was epithermal-type occurring along a northwesterly striking structure on Whiteman Creek, which is located only a few km due south of the Dave claims. The Dave property was staked on geological features favourable to the occurrence of epithermal gold mineralization recognized by R.W. Yorke-Hardy.

The purpose of the current work was therefore to further determine the property's potential for epithermal gold mineralization through minor prospecting as well as stream sediment sampling and sampling of favourable rock-types. The purpose of the magnetic surveying was to determine its usefulness as a geological mapping tool.

The program consisted of seven field days of work which included:

- A sampling program comprised of sluicing stream alluvial material and the collecting of a variety of rock-types and vein-type material;
- Chain and compass surveying to tie in the sample sites to the main road system;
- 3. A preliminary mapping program conducted along the main road-cut to examine rock-types, alteration zones, zones of quartz and quartz/calcite veining, and to determine major structural trends. Each of the sights examined, mapped and/or sampled required considerable hand mucking in order to expose rock in place.

#### PROPERTY AND OWNERSHIP

The property is located in the Vernon Mining Division and consists of two claims totalling 36 units as shown on Map 2 and as described below:

Claim Name	No. Units	Record No.	Expiry Date
Dave 1	18	2771	July 4, 1991
Dave 2	18	2772	July 4, 1991

The expiry dates shown include one year assessment credits from submitting the work discussed in this report, plus one year from an additional submittal for road work.

The Dave claims are jointly owned by Geotronics Surveys Ltd. of Vancouver, B.C. and Y-H Technical Services Ltd. of Vernon, B.C. The registered owner is R.W. Yorke-Hardy of Vernon, B.C.

#### LOCATION AND ACCESS

The property is located on Naswhito Creek to the west of the northern part of Okanagan Lake, 18 km N75°W (285°E) of Vernon, B.C. The geographical coordinates are 50° 18' north latitude and 119° 31' west longitude.

Access to the property is easily gained by a 2-wheel drive vehicle, though in wet weather, a 4-wheel drive vehicle is preferable. From Vernon one travels to the north around Okanagan Lake and then south along the west side of the Lake for 28 km. At this point one turns onto a forestry access road to the west and travels for 9.5 km along the north side of Naswhito Creek to the property's eastern boundary. A number of logging roads occur throughout the property.

#### **PHYSIOGRAPHY**

Nelles in his report states:

"The property lies on the western margin of the Omineca geological belt of the Canadian Cordillera. The claim group runs along, and approximately parallel to the middle section of Naswhito Creek. The terrain is similar on both sides of the valley; fairly steep slopes near the creek, becoming more gentle into the uplands of the surrounding hills."

"Vegetation is more dense and diverse on the north facing slopes and here includes Douglas fir and cedar with lesser growths of larch, birch and pine. Shrubs such as juniper, boxwood, willow and Oregon grape are also common. The south facing slopes support good stands of pine for the most part, with varying amounts of underbrush and grasses."

Elevations of the Dave claims range from 700 m to 1300 m. The main water source is Naswhito Creek which flows easterly through the property.

#### PROPERTY HISTORY

Nelles stated:

"Naswhito Creek has had a history of placer workings, with a total recorded production of over 1,622 oz gold. The source of this gold, however, was never located. Minor hardrock exploration was undertaken on a copper prospect in the vicinity but details are lacking."

The I.O.U. prospect occurs about three km east of the Dave claims on Naswhito Creek. It has had very little work done on it.

In February, 1983, the area of the Dave claims was staked as the Nash 1 to 4 claims by Golden Porphyrite Ltd. of Vancouver, B.C. The Nash claims were staked on high returns in gold from heavy sediment sampling. (The Dave 1 and 2 claims cover most of the previous Nash 1 and 3 claims). They carried out geological mapping, prospecting, soil geochemistry, and heavy sediment sampling on the creek. Nelles reported the results in a January, 1984 report. There were some positive results but the property was allowed to lapse.

The Dave claims were staked in June, 1988. No work has been done on the property other than what is described in this report.

#### **GEOLOGY**

The following is quoted from Nelles' report:

"Property geology was mapped at a scale of 1:25,000 using elevation, topography and roads as controls. Having been glaciated during the Quarternary, the property is covered with a layer of till, masking most of the outcrop. Much of the mapping was therefore confined to road cuts. An area of 10 kilometres was covered.

"The predominant unit encountered on the property was the Carboniferous and Triassic Thompson Assemblage, consisting of interbedded grey-beige limestone, calcareous argillite, conglomerate and chert with minor volcanics or volcanosediments. The

sediments have a general strike direction of southeast with moderate dip to the northeast, for the most part. Much of the outcrop appeared to be altered and/or oxidized especially near the shear zones which were localized throughout the sequence. Secondary quartz veining parallel to bedding was exposed in road cuts within Nash 1.

"The second and youngest unit mapped on the property lay to the west and stratigraphically above the sediments. These green to red coloured flood basalts are believed to be part of the Upper Cretaceous-Oligocene Kamloops Group. The rocks were locally vesicular or brecciated. The contact between this unit and the sediments, over which they lie, roughly followed the contour, indicating outflow over sub-horizontal strata. No sulphide or other mineralization was located within the basalts."

The minor amount of geological mapping done by Yorke-Hardy is shown on map #3 (1:10,000) and confirms much of what Nelles reported. Along the road within the northern part of the Dave 2 claim are mapped altered tuffs and volcanics as well as an alteration zone containing quartz calcite veins. Also of exploration interest is an epithermal vein located within the southeast corner of the Dave 1 claim and white clay blobs located within the south central part of the Dave 1 claim. The white clay is probably an alteration product of an epithermal system.

Also shown on map #3 and taken from Memoir 296 is a fault striking N20°W (340°E) and a sedimentary bedding trend striking N70°W (290°E). In addition, the contact between the Kamloops Group and the Thompson Assemblage has been sketched in and this was taken from a map within Nelles' report.

The I.O.U. prospect occurs about three km east of the Dave claims on Naswhito Creek, but the exact location is unknown.

The 1899 report of the Minister of Mines states that is consists of a six-foot (180 cm) ledge, or quartz vein, occurring between "lime and porphyry" and carrying copper and gold values.

Of particular interest are placer workings occurring four km east of the Dave claims on Naswhito Creek. As stated above, the source has not been located, but there is a good possibility that the source occurs on the Dave claims.

#### SAMPLING PROGRAM

The sampling program was divided into two parts. One part consisted of sampling streams and the second part consisted of sampling outcrops of geological economic interest.

Stream samples were collected at four locations, two on the North Fork of Naswhito Creek, one on a small side drainage which ultimately drains into Naswhito Creek and one on Ternier Creek. These samples were taken at points where the gradient and/or the change in direction of the creek provided a site for deposition of alluvial material during spring run-off. Each site was selected based on its potential to act as a trap point for heavy minerals during high water.

At each sample site three or more, three-gallon pails of deposited alluvial material were collected and slowly hand fed across a one-metre long portable sluice box. In each case the sluice had been set up in the stream in a position that allowed a sufficient portion of the stream flow to pass over the riffles and to thereby "wash" the collected material as it was placed on the apron at the upper end of the sluice. The lighter material was washed from the box by the current and the "heavy fraction" was retained in the riffles. The total sample was processed at

which time the retained heavy material was flushed from the sluice box into a plastic bag.

Each sample and sample site was marked with an identifying number. The samples were forwarded to Chemex Labs in Vancouver, B.C. for analysis after they had dried. The samples were crushed and pulverized and a fraction of each was digested in aqua regia and subjected to a 32 element I.C.P. analysis. Each was also analyzed for gold by geochem techniques using fire assay/A.A. methods. The certificates of the results have been included in Appendix I of this report, but results of nine of the elements have been given below.

Sample #	Au ppb	Ag ppm	As ppm	Co ppm	Cr ppm	Cu ppm	Mn ppm	Mo ppm	Zn ppm
01	< 5	<0.2	< 5	16	66	40	860	1	72
02	< 5	0.4	15	21	51	62	665	2	152
03	< 5	0.6	15	79	29	69	1505	4	438
04	< 5	1.0	< 5	263	41	97	7590	4	1070
05	5730	0.2	10	5	168	20	525	< 1	26
06	20	<0.2	160	15	72	128	1185	1	98
07	< 5	0.2	< 5	5	41	40	370	ī	52
08	< 5	0.2	< 5	15	93	25	745	2	74
09	< 5	0.2	65	4	15	14	85	< 1	48
10	380	<0.2	25	14	66	21	600	1	74
11	20	<0.2	25	11	32	46	915	< 1	40
12	< 5	0.2	< 5	12	66	15	520	2	72
13	< 5	0.2	35	15	14	30	480	< 1	86
14	< 5	<0.2	5	8	16	13	290	< 1	48
15	< 5	<0.2	50	10	36	24	570	. 1	58
16	< 5	0.2	650	13	45	20	50	17	64
17	< 5	<0.2	< 5	5	50	11	1230	2	58

#### DESCRIPTION OF SAMPLES

#### Sluiced Stream Sediments

Dave #1

Dave #1 from three 3-gallon pails of coarse to fine sand and gravel; very little organic material.

Sampled material was a wet deposit of alluvial material located near the head of a culvert. This site and material were not of particularly good quality; however, the alluvial material exhibited considerable altered rock, quartz and some float with sulphides.

Dave #8

Ten 3-gallon pails of sand and gravel containing some fines/silt and minor organic matter.

This site represented deposition from part of the main channel of the north fork of Naswhito Creek at high water. The material sampled was deposited downstream of a log that acted as a natural riffle.

The material sampled contained some red jasperoid and hematitic units and dark volcanics in addition to some rusty altered material and quartz.

Some black sand was noted on clean-up as was some pyrite(?) and possible visible gold.

Dave #10

Four 3-gallon pails of sand and gravels with some fines; one pail was not considered good because of high water content.

This site is located 235 metres upstream from Dave #8. Alluvial material sampled was located on the inside of a corner immediately downstream of a large altered and sheared zone with considerable quartz veining; some black sand, pyrite(?) and possible visible gold were noted on clean-up.

Dave #12

Three 3-gallon pails of mixed sand and gravels with silt, roots and mosses.

Located on Ternier Creek approxiamtely 27 metres above road crossing. Deposit on inside of curve downstream of large tree root. Mostly dark to red volcanics; some jasperoid material. Black sand on clean-up with possible visible gold(?).

#### Rock Samples

Dave #2

Grab sample along 60 metre exposed length of altered zone in road cut (approx. 9.75 km on road accessing the North Fork of Naswhito Ck).

Dave #3

Grab sample along epithermal alteration zone and vein. White low pH zone and greenish illite zone up to 40 cms wide including rusty reddish vein which strikes 305 to 315° and dips steeply north.

Vein is hosted in altered, broken volcanics and mixed argillites.

Dave #4

Channel sample across 36 cm wide epithermal altered zone and vein. Zone is comprised of a hematitic iron-rich vein approx. 10 cms wide with clay zones on both north and south sides; hosted in fractured rhyolite(?).

Dave #5, #6 & #7

Grab sample along six- to seven-metre length. Sample was collected from fractured rock (sub-outcrop) below the root line along the upper edge of the road cut bank; approximately 175 metres above the 11 km mark on Naswhito main road.

Dave #5 sample was comprised of hematite/limonite-stained vuggy quartz material along full length of zone.

Dave #6 sample was comprised of altered rock units located along full length of zone.

Dave #7 sample was comprised of cherty material located along full length of zone.

The physical relationship between these various components is as yet unknown.

Dave #9 & #15

Dave #9 chip sample across approx. 46 cm of silicified/altered volcanics and rhyolites located approx. 20 metres upstream and west of Dave #10.

Rib of rock resistive to erosion, situated amongst more highly eroded altered rock units.

Dave #15 grab sample of assorted altered material in vicinity of Dave #9; altered zone >10 metres wide, contains numerous vuggy veins.

Dave #11

Chip sample across 30 cm quartz vein/silicified volcanics (varies with minor galena and chalcopyrite(?).

Dave #13

Grab sample. Represents one particularly heavily pyritized piece of float found at the Dave #1 site.

Dave #14

Epithermal clay alteration

Located in ditch at approx. 12.15 km on Naswhito Main road in place since it was turned up by grader during ditching but source unknown.

Dave #16

Grab. Mineralized boulder located in gravels near 13.5 km on Ternier Main road, just past creek.

Dave #17

Grab. Altered limonitic brecciated float composed of argillaceous and volcanic material; located in gravels at approx. 11.5 km on Naswhito Main road.

Sample sites were tied into identifiable locations along the main roads by using a hip chain to measure the distance. Various rock outcrops were tied in to the plan map by measuring the distance from kilometre markers using the vehicle odometer, while some points were compassed and chained into specific features along the roads. The altered zone located on the North Fork of Naswhito Creek was chained along the creek from the culvert under the main road.

#### MAGNETOMETER SURVEY

#### (A) Instrumentation and Theory

The magnetic survey was carried out with a Scintrex MP-2 proton precession magnetometer. This instrument reads directly in gammas the Earth's total magnetic field to an accuracy of  $\pm 1$  gamma, over a range of 20,000 - 100,000 gammas. Operating temperature range is  $-35^{\circ}$  to  $\pm 50^{\circ}$  C, and gradient tolerance is up to 5,000 gammas per meter.

Only two commonly occurring minerals are strongly magnetic, magnetite and pyrrhotite; magnetic surveys are therefore used to detect the presence of these minerals in varying concentrations. Magnetics is also useful as a reconnaissance tool for mapping geologic lithology and structure since different rock types have different background amounts of magnetite and/or pyrrhotite.

#### (B) Field Procedure

The magnetic survey was carried out reading the instrument at ten stations located throughout and adjacent to the property as shown on map 3. The diurnal variation was not monitored in the field due to the widely spaced stations.

#### (C) Compilation of Data

The magnetic field values were plotted on map 3 at a scale of 1:10,000. For ease of plotting, 55,000 gammas were subtracted from each value.

#### **DISCUSSION OF RESULTS**

#### A) Rock and Stream Sediment Sampling

The results are very positive, definitely indicating gold occurs on the property in economic grades. Many of the samples were anomalous directly in gold or in elements considered to be pathfinders for gold. Because of the nature of the occurrence of gold, pathfinders are relied on to locate zones of possible gold mineralization. Gold often occurs as very small discrete amounts irregularly scattered throughout a mineralized zone and therefore a sample from a zone of gold mineralization may not test positive for gold, but may test positive in other elements that are associated with the gold mineralization. Also these elements may occur in anomalous amounts within adjacent areas to the gold mineralized zone.

The sample that gave the best return was #5 which is a rock sample with a result of 5,730 ppb gold which converts to 0.167 oz/ton. As mentioned above, this sample consists of hematite/limonite-stained vuggy quartz material taken along a six to seven metre length (not channel sampled).

Sample #6 consisted of altered rock occurring along the same zone. Its gold content was barely anomalous but it contained anomalous amounts of arsenic and copper and a sub-anomalous amount of manganese (a strong indicator of epithermal mineralization).

Sample #7 consisted of cherty material along the same zone but was not anomalous in any elements.

Other samples of strong exploration interest are no.'s 2, 3 and 4 taken from and adjacent to an epithermal zone within the southeast corner of the Dave 1 claim. Sample #4 was highly anomalous in manganese, zinc, cobalt and iron as well as being anomalous in silver and cadmium. Sample #3 was also anomalous in these elements though not as high as #4. In addition, it was somewhat anomalous in strontium. Both of these samples were taken from the epithermal alteration and vein. Sample # 2 was taken from a nearby alteration zone and only contained little better than sub-anomalous amounts of cadmium and zinc.

Another rock sample containing strong results is #16 which is highly anomalous in arsenic and molybdenum. This is a grab sample for which the source is probably on the property.

Sample #11 contains a slightly anomalous amount of gold (20 ppb). It was a chip sample taken across 30 cm of quartz vein/silicified volcanics.

Samples #9 and #15 are somewhat anomalous in arsenic. #9 was taken as a chip sample across 46 cm of silicified altered volcanics. #15 was a grab sample taken of assorted altered material in the vicinity of #9.

nhe only stream sediment sample anomalous in anything was #10 which was highly anomalous in gold at 380 ppb. It was taken near the mouth of the northern arm of Naswhito Creek. It is very possible the source of the gold occurs on the Dave claims.

#### B) Magnetic Results

The higher values such as 3,530 gammas along the west side of the Dave 1 claim, 4,850 gammas to the immediate west of the maparea (therefore not shown), and 4,904 gammas to the north of the Dave 1 claim are highly-indicative of Tertiary Kamloops basalts. The lower values of 1,605 to 2,360 gammas are indicative of sediments and altered volcanics such as occur within the Thompson assembalge and such as are found throughout most of the property.

The above agrees with the airborne magnetic map for the area. To the west and up to the western boundary of the property, the magnetic field is very noisy being characterized with thumbprint-type highs and lows. This reflects the Tertiary basalts. East of this and over most of the property, the magnetic field is very quiet indicating the Thompson Assemblage sediments and volcanics.

A low value of 760 gammas occurs north of the Dave 1 claim. It could reflect an alteration zone. This is supported by the occurrence of a swamp in this area which can be caused by the weathering of an alteration zone.

Respectfully submitted GEOTRONICS SURVEYS LTD.

David G. Mark Geophysicist

51/G448

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Nelles, David M., Assessment Report on Geological Prospecting, and Geochemical Surveys, Nash Claim Group, Vernon M.D., B.C., for Golden Porphyrite Ltd., by Searchlight Consultants Inc., January, 1984

#### GEOPHYSICIST'S CERTIFICATE

I, DAVID G. MARK, of the City of Vancouver, in the Province of British Columbia, do hereby certify:

That I am a Consulting Geophysicist of Geotronics Surveys Ltd., with offices located at #530-800 West Pender Street, Vancouver, British Columbia.

#### I further certify:

- 1. I am a graduate of the University of British Columbia (1968) and hold a B.Sc. degree in Geophysics.
- I have been practising my profession for the past 21 years and have been active in the mining industry for the past 24 years.
- This report is compiled from data obtained from rock and stream sediment sampling, minor geological mapping/prospecting and magnetometer testing carried out by Geotronics Surveys Ltd. under the supervision of myself and by Y-H Technical Services Ltd., under the supervision of R.W. Yorke-Hardy, exploration technician, on June 7th and 8th, 1988, and from June 30th to July 4th, 1989.
- 4. Geotronics Surveys Ltd. is a 50% owner in the Dave 1 and 2 claims, with Y-H Technical Services owning the other 50%. I am the principal in Geotronics and R.W. Yorke-Hardy is the principal in Y-H Technical.

David G Mark Geophysicist

October 2, 1989

51/G448

### WORK SCHEDULE

Personnel and Dates Worked:	
July 7, 1988 - R.W. Yorke-Hardy, Prospecting, 1 man day	\$ 250
July 8, 1988 - R.W. Yorke-Hardy, Prospecting/geology, 1/2 man day Doug Symonds, Geology, 1/2 man day	125 300
June 30, 1989 - R.W. Yorke-Hardy, Prospecting/sampling, 1 man day	250
<pre>July 1, 1989 -    R.W. Yorke-Hardy,    Prospecting/sampling/mapping, 1 man day    W.D. Yorke-Hardy,    Prospecting/hand mucking, 1 man day</pre>	250 150
July 2, 1989 - R.W. Yorke-Hardy, Prospecting/sampling, 1 man day Matthew Yorke-Hardy, Helper/labourer, 1 man day	250 50
July 3, 1989 - R.W. Yorke-Hardy, Mapping/sampling, 1 man day W.D. Yorke-Hardy, Prospecting/hand mucking, 1 man day Michael Yorke-Hardy, Helper/labourer, 1 man day Matthew Yorke-Hardy, Helper/labourer, 1 man day	250 150 50
July 4, 1989 - R.W. Yorke-Hardy, Technical/ geophysical, 1/2 man day A.K. Yorke-Hardy, Helper, 1/2 day	250 50

225

200 1,615

5,123

#### AFFIDAVIT OF EXPENSES

This is to certify that rock and stream sediment sampling, a minor amount of geological mapping/prospecting, and test magnetometer surveying were carried out on the Dave 1 and 2 claims situated on Naswhito Creek in the Vernon M.D., B.C. on July 7th and 8th, 1988 and from June 30th to July 4th, 1989 to the value of the following:

FIELD:		
Personnel, as described above,		\$ 2,425
4 X 4 vehicle, 7 days @ \$100/day		700 35
Supplies Magnetometer rental, 1 day @ \$50/day		50
		3,210
LABORATORY:		
32 element ICP, gold FA+AA, rock geochem - ring, aqua regia digestion		
17 samples at \$17.50/sample	say	298
DEDODE.		
REPORT:		F 40
Geophysicist, 12 hours @ \$45/hour		540
Drafting and printing		650

Respectfully submitted, GEOTRONICS SURVEYS LTD.

David G. Mark, Geophysicist

Exploration technician, 5 hours @ \$25/hour Word processing, photocopying and compilation

Manager

51/G448

GRAND TOTAL

#### APPBNDIX

DAVE 1 AND 2 CLAIMS

ASSAY RESULTS



Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE , NORTH VANCOUVER. BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: GEOTRONICS SURVEYS LTD.

530 - 800 W. PENDER ST. VANCOUVER, B.C.

V6C 2V6

Project : DAVE & NC

Comments: CC: Y-H TECH. SERVICES LTD.

##Page No. :1-A

Tot. Pages: 1

:11-SEP-89 Date Invoice #: I-8924721

P.O. # : NONE

#### CERTIFICATE OF ANALYSIS A8924721

i	1 :																			
SAMPLE DESCRIPTION	PREP CODE	Au ppb FA-I-AA	A1 %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	<b>Ca</b> %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	Hg ppm	K %	La ppin	Mag %o	Ma ppm
DESCRIPTION	COL	1711741	70	Pre:	ppn	Pixii	ppm	ppm	70	ppm	ppm	Print	ppm	70	ppm	ppm	N	pp.	70	· pp.
DAVE 01/89	205 238	< 5	2.43	< 0.2	< 5	110	< 0.5	2	1.66	< 0.5	16	66	40	4.47	< 10	< 1	0.16	10	1.56	86
DAVE 02/89	205 238	< 5	2.26	0.4	15	100	< 0.5	2	0.23	1.0	21	51	62	6.12	< 10	< i	0.20	20	0.64	66
DAVE 03/89	205 238	< 5	2.58	0.6	15	120	< 0.5	< 2	0.18	1.5	79	29	69	7.41	< 10	< 1	0.17	20	0.21	150
DAVE 04/89	205 238	< 5	1.50	1.0	< 5	190	< 0.5	< 2	0.09	3.0	263	41	97	-15.00	10	1 >	0.19	10	0.08	759
DAVE 05/89	205 238	5730	0.22	0.2	10	20	< 0.5	< 2	0.82	< 0.5	5	168	20	2.02	< 10	< 1	0.01	< 10	0.10	52
DAVE 06/89	205 238	20	1.04	< 0.2	160	90	< 0.5	4	1.63	1.5	1.5	72	128	5.71	< 10	< 1	0.10	10	0.42	118
DAVE 07/89	205 238	< 5	0.77	0.2	< 5	110	< 0.5	< 2	0.36	< 0.5	5	41	40	2.13	< 10	< 1	0.10	10	0.26	37
DAVE 08/89	205 238	< 5	1.76	0.2	< 5	150	< 0.5	< 2	0.97	0.5	15	93	25	4.48	< 10	< 1	0.19	20	1.27	· 74
DAVE 09/89	205 238	< 5	0.79	0.2	6.5	60	< 0.5	< 2	0.03	0.5	4	15	14	4.52	< 10	< 1	0.07	< 10	0.03	8
DAVE 10/89	205 238	380	1.67	< 0.2	25	120	< 0.5	2	0.89	< 0.5	14	66	21	4.02	< 10	< 1	0.16	20	1.24	60
DAVE 11/89	205 238	20	0.44	< 0.2	25	60	< 0.5	< 2	5.67	0.5	11	32	46	3.85	< 10	< 1	0.19	< 10	1.52	91
DAVE 12/89	205 238	< 5	1.25	0.2	< 5	120	< 0.5	< 2	1.00	< 0.5	12	66	15	3.40	< 10	< 1	0.18	30	1.21	52
DAVE 13/89	205 : 238	< 5	1.24	0.2	3.5	160	< 0.5	< 2	0.20	0.5	1.5	14	30	5.85	< 10	< 1	0.18	10	0.22	48
DAVE 14/89	205 238	< 5	2.10	< 0.2	5	50	0.5	< 2	1.00	< 0.5	8	16	13	1.90	< 10	< 1	0.10	20	1.00	29
DAVE 15/89	205 238	< 5	0.93	< 0.2	50	60	< 0.5	< 2	1.00	0.5	10	36	24	4.55	< 10	< 1	0.05	< 10	0.48	57
DAVE 16/89	205 238	< 5	1.03	0.2	650	110	< 0.5	2	0.63	< 0.5	13	45	20	5.23	< 10	< 1	0.16	40	0.22	5
DAVE 17/89	205 238	< 5	0.65	< 0.2	< 5	700	< 0.5	< 2	0.41	0.5	5	50	11	1.87	< 10	< 1	0.14	< 10	0.10	123
NC-I	205 238	< 5	1.74	< 0.2	< 5	180	< 0.5	< 2	2.78	1.0	11	81	28	3.68	< 10	< 1	0.26	0	1.10	60
NC-2	205   238	< 5		< 0.2	- < 5	110	< 0.5	2	4.36	0.5	13_	76	49	<del>- 4.29 -</del>	< 10	< 1	0.53	< 10	1.51	73
NC-3	205 238	< 5	2.19	< 0.2	< 5	700	< 0.5	< 1	1.64	40.7	15	68	71	4.50	< 10	< 1	0.78	10	1.59	71
NC-4	203 238	10	1.66	0.8	5	200	< 0.5	4	0.98	1.5	17	137	41	5.16	< 10	< 1	0.25	20	1.10	

CERTIFICATION: .



### Chemex Labs Ltd.

212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7.J-2C1
PHONE (604) 984-0221

To: GEOTRONICS SURVEYS LTD.

530 - 800 W. PENDER ST. VANCOUVER, B.C. V6C 2V6

Project : DAVE & NC

Comments: CC: Y-H TECH SERVICES LTD

##Page No.:1-B Tot. Pages:1

Date :11-SEP-89 Invoice #:I-8924721 P.O. #:NONE

#### CERTIFICATE OF ANALYSIS A8924721

SAMPLE	PREP	Mo	Na	Ni	P	Рb	Sb	Sc	Sr	Ti	Ti	U	$\mathbf{v}$	w	Zn	
DESCRIPTION	CODE	ppm	%	ppn	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	
DAVE 01/89	205 238	1	0.06	26	810	8	< 5	10	47	0.14	< 10	< 10	111	< 10	72	 
AVE 02/89	205   238	2	0.02	22	1080	6	5	9	46	< 0.01	< 10	< 10	81	< 10	152	
AVE 03/89	205   238	4	0.02	52	2270	< 2	< 5	13	130 -	< 0.01	< 10	< 10	61	< 10	438	
AVE 04/89	205 238	4	0.03	77	1280	2	< 5	10	26 -	< 0.01	< 10	< 10	36	< 10	1070	
AVE 05/89	205 238	< 1	0.01	5	220	< 2	< 5	4	18 -	< 0.01	< 10	< 10	23	< 10	26	
AVE 06/89	205   238	1	0.01	7	840	. 4	< 5	15	32 •	< 0.01	< 10	< 10	66	< 10	98	 
AVE 07/89	205 238	1	0.02	2	3 30	2	< 5	3	12 •	< 0.01	< 10	< 10	10	< 10	52	
DAVE 08/89	205   238	2	0.08	34	1140	< 2	< 5	8	57	0.14	< 10	< 10	94	< 10	74	
DAVE 09/89	205 238	< 1	0.01	2	450	< 2	5	9	8 -	< 0.01	< 10	< 10	39	< 10	48	
AVE 10/89	205 238	1	0.07	34	1240	< 2	< 5	7	58	O.15	< 10	< 10	97	< 10	74	
AVE 11/89	205 238	< 1	0.03	4	390	4	5	12	152	< 0.01	< 10	< 10	21	< 10	40	 
AVE 12/89	205 238	2	0.11	31	1560	2	< 5	7	101	0.21	< 10	< 10	97	< 10	72	
AVE 13/89	205 : 238	< 1	0.01	7	6 50	8	5	9	21	0.01	< 10	< 10	42	< 10	86	
DAVE 14/89	205 238	< 1	0.03	14	670	8	< 5	5	73	0.02	< 10	< 10	43	< 10	48	
AVE 15/89	205 238	1	0.02	4	690	2	10	16	39 -	< 0.01	< 10	< 10	59	< 10	58	
AVE 16/89	205 238	17	0.07	21	1990	10	< 5	5	64	0.03	< 10	< 10	54	< 10	64	
AVE 17/89	205 238	2	0.01	66	430	< 2	5	3	20 -	< 0.01	< 10	< 10	16	< 10	58	 
(C-1	205 -238		0.04	24	690	6	< 5	5	115	0.09	< 10	< 10	58	< 10	98	
<b>1C-</b> 2	205   238	2	0.06	24	1100		5	8	181	0.12	< 10	ــملـکـــ	<del>109</del>	< 10	106	
<b>VC-</b> 3	205   238	1	0.07	14	1570	< 2	< 5		114	0.10	< 10	< 10	152	< 10	96	
C-4	205   238	2	0.03	38	1200	10	< 5	5	86	0.13	< 10	< 10	79	20	138	

CERTIFICATION: B. Cargli

