

87-316-16099

PERCUSSION DRILLING  
ASSESSMENT REPORT

ON THE

MUSTANG GROUP OF MINERAL CLAIMS  
BRUSSELS CREEK, SAVONA AREA  
KAMLOOPS MINING DIVISION  
Lat. 50° <sup>42.4'</sup> ~~42.4'~~; Long 120° <sup>42.7'</sup> ~~42.7'~~  
N.T.S. 92 - I - 10 E + W

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

16,099

CLAIMS Mustang 2 and 7, Golden Ring #1 and  
British 3 (31 Units)

OWNER(s): M. Morrison  
*Vault Explorations Inc.*

OPERATOR VAULT EXPLORATIONS INC.  
675 Willow Park Road  
Kelowna, British Columbia  
V1X 5H9

FILMED

BY

BRIAN CALLAGHAN, B.Sc.  
May 19th, 1987

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SUMMARY

709.6 metres of percussion drilling was performed by Vault Explorations Inc. of Kelowna, B.C. on the Golden Ring #1, British 3 and Mustang 2 and 7 mineral claims between 9th to 20th December 1986. The claims are located in the Kamloops Mining Division, 27 km. west of Kamloops and 5 km south of Kamloops Lake.

Nine short holes ranging in depth between 36.5 to 106.6 metres were drilled in selected carbonate silica alteration zones within Upper Triassic Nicola Group rocks thought to represent the upper levels of epithermal gold-bearing veins.

The alteration zones drilled match other carbonate silica replacement zones in the Savona area. Late pyrite-bearing quartz veinlets cutting carbonate silica replacement were found to have low but slightly elevated values in arsenic, antimony and copper in PHD's 86-3, 4, 7, and 9. Sizable alteration zones were found to be peripheral to shallow lying intrusives in PDH's 86-3, 5 and 6.

Mineralization drilled is too low grade to justify further drilling at this time. However, if further drilling were to be warranted, then a programme of diamond drilling is recommended.

The programme would include several deep holes up to possibly 1000 feet in depth on the Golden Ring #1 to test for underlying gold and silver stockwork bearing veins. Additional geological mapping is recommended to better define fault systems and associated alteration zones before further drilling.

## INTRODUCTION

A percussion drill programme was carried out on the Mustang Property from 9th December - 20th December, 1986 by the writer at the request of Vault Explorations Inc. Nine short drill holes were placed in selected alteration zones as suggested by Mr. H. Jones, P.Eng. after a property examination with Mr. M. Morrison, geologist, and owner of the claims in June 1986.

The purpose of the drill programme was to test for typical indicators of epithermal gold-bearing veins in carbonate and silica alteration zones located on the Mustang property from the 1986 geological mapping programme.

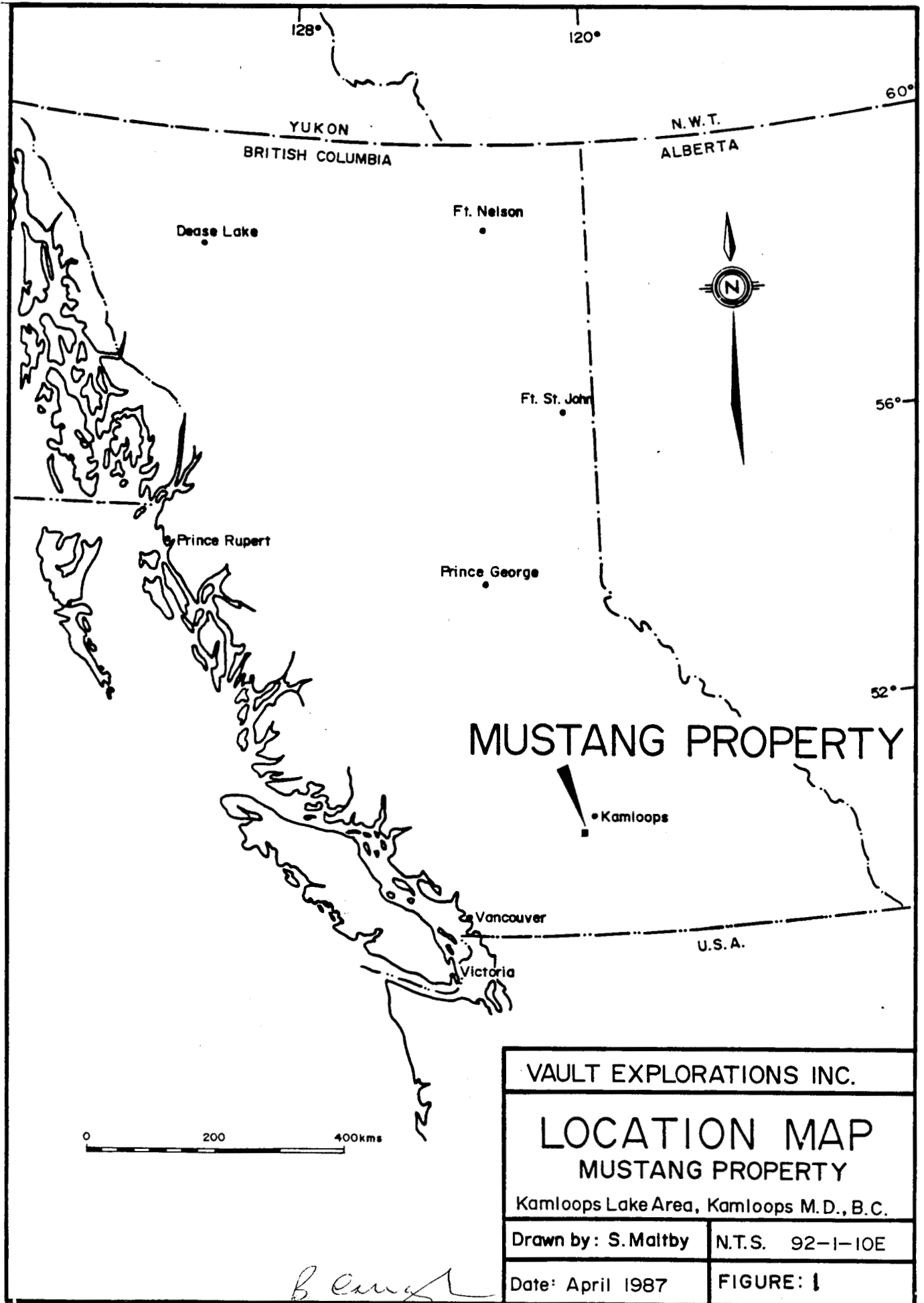
Seven hundred nine point six (709.6) metres of drilling was carried out on the Golden Ring #1, British 3, Mustang 7 and Mustang 2 mineral claims by H. D. Drilling Co. Ltd. of Kamloops, B.C. at the request of Vault Explorations Inc.

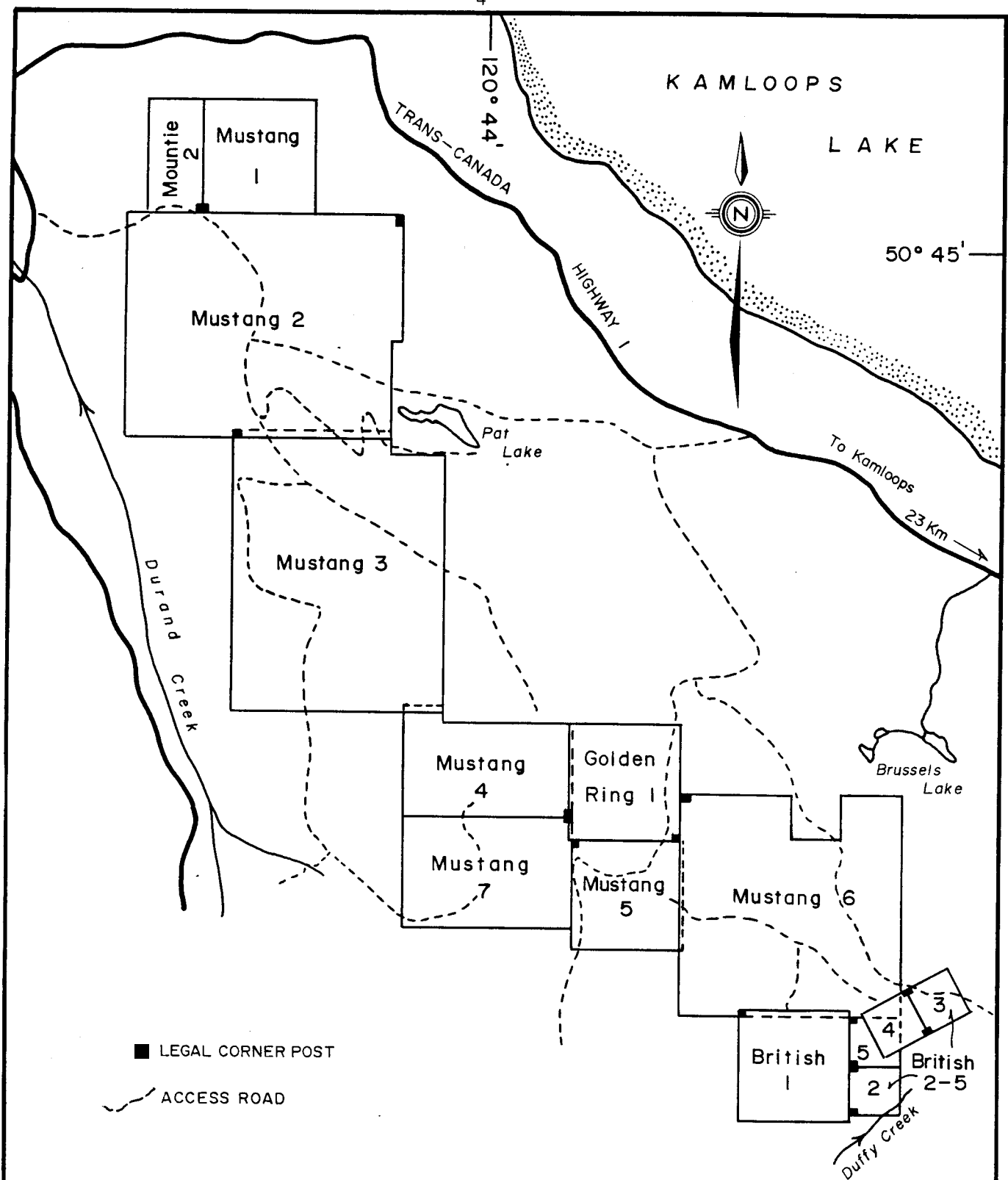
## LOCATION AND ACCESS

The Mustang property is located approximately 25 kilometres west of Kamloops and 8 kilometres southwest of Savona (Figure 1).

Access to the Mustang 2 and 7 mineral claims is via gravel road leaving the Tunkwa Lake Road approximately one kilometre from the Trans-Canada Highway or via a direct road that passes by Pat Lake (Six-Mile Lake).

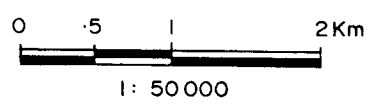
Access to the Golden Ring and British 3 mineral claims is via the Old Kamloops Road that leaves the Trans-Canada Highway approximately 30 kilometres west of Kamloops. Several logging roads that branch off this road provide good access to these claims. The British claims can be reached at a point approximately 7 kilometres from the Trans-Canada Highway via both gravel and dirt logging roads. (Figure 2)





■ LEGAL CORNER POST

- - - ACCESS ROAD



VAULT EXPLORATIONS INC.	
MUSTANG PROPERTY	
CLAIMS & ACCESS	
Kamloops Lake Area, Kamloops M.D., B.C.	
Scale 1: 50 000	N.T.S. 92-1-10,15
January 1987	FIGURE 2

*B. Carr*

## PHYSIOGRAPHY AND VEGETATION

Elevations range from approximately 518 metres on the Mustang 2 mineral claim to 1088 metres on the Mustang 7 mineral claim.

The Mustang 2 is characterized by vegetation typical of the semi arid belt of British Columbia consisting of grasses, sagebrush and a light scattering of ponderosa pine. Moderate stands of Douglas Fir and pine characterize the Golden Ring #1 and mostly Douglas Fir predominates at the higher elevations on the Mustang 7 and British 3 mineral claims. Much of the mature timber has been selectively logged.

The Mustang 2 is characterized by flat lying low areas with rounded northwesterly trending ridges and hummock with abundant rock outcroppings. Several alkali lakes occur at these lower elevations. The claims at higher elevations are characterized by larger hummocky and continuous northwest trending ridges separated by deeper valley bottoms.

## HISTORY

The Mustang 2 and 7, Golden Ring #1 and British 3 belong to Mr. M. Morrison of Kelowna, B.C. and are held under an option to purchase agreement by Vault Explorations Inc. of Kelowna, B.C.

The above claims represent part of the Mustang Group that is comprised of fourteen continuous claims totaling 90 units. The claims are staked within the historic Savona Mercury Belt that runs 20 kilometres north and south of the west end of Kamloops Lake. Economic deposits in close proximity to the Mustang Group include, Afton Mine (copper, gold and silver) the Old Copper King Mine (copper, gold and silver) and the Iron Mask Mine (copper, gold and silver).

The claims were either staked or restaked by Mr. Morrison between 1981 - 1986 in an attempt to relocate several Savona area cinnabar occurrences thought to represent the upper levels of gold-bearing epithermal systems.

Several intense ankeritic alteration zones located on the Brussels Group of claims 4 kilometres to the east of the Mustang Group were test drilled by Goldstone Exploration Ltd. in 1985. Assays up to 1500 ppm. As 80 ppb Au and 10 ppm Ag were obtained from pyrite bearing quartz veinlets in ankerite alteration.

The Sprout Group of claims immediately to the west of Goldstones Brussel Group was explored by Newmont Exploration in 1982. Newmont obtained an assay of .23 ounces/ton gold over a one metre wide band of silicification intersected by a northeast striking

HISTORY (cont'd)

felsite dyke. This zone is thought by Mr. Morrison (1986) to represent the precious metals zone of an epithermal vein system. Local highs of 1000 ppb or more Hg were obtained from their geochemical soil sampling programme on the Sprout property.

The Mustang 1-7 was staked in 1986 by Mr. Morrison to cover ground along the mercury belt and to make his claims continuous. These claims were then optioned by Vault Explorations Inc. referred to as the Mustang Group. A programme of geological mapping, rock and soil sampling over much of the property was conducted in an effort to define fault zones and associated carbonate alteration zones.

Indicator elements including slight to moderate concentrations of mercury, antimony and arsenic were obtained from several carbonate alteration zones, which were in turn selected as targets for drilling in 1986.

Several reports by Mr. M. Morrison from 1985 - 1986 detail results of exploration programmes carried out on the British 1-5, Golden Ring #1 and Mustang Group of mineral claims. These reports provide a simplistic epithermal model for the Mustang Property.

CLAIMS STATUS

The claims included in the Mustang Group and covered by this report are as follows:

CLAIM NAME	UNITS	RECORD NO.	MINING DIVISION	EXPIRY DATE
Mustang 2	20	6602(4)	Kamloops	April 23/89
Mustang 7	6	6664(6)	Kamloops	June 12/88
British 3	1	5621(5)	Kamloops	May 10/89
Golden Ring #1	4	3324(3)	Kamloops	March 16/91

REGIONAL GEOLOGY

The Mustang Property is extensively underlain by the Upper Triassic Nicola Group consisting of volcanic derived sedimentary rocks. They are predominantly andesites, basalts with associated breccia agglomerate and tuff. Sedimentary rocks include mostly limestone, conglomerates and argillites.



PROPERTY GEOLOGY (cont'd)

conglomerates to siltstones. They are strongly carbonate altered and exhibit 30 - 90 percent replacement and 10% veining by ankerite or dolomite.

The porphyry dyke is both partly kaolinized and silicified along an apparent northwest striking fault. Anomalous values of 843 ppm arsenic were obtained from the pyritized, silicified portions of the dyke. No appreciable precious metals or indicator elements were found in the carbonate zones.

Widespread limonitic carbonate alteration on the Mustang 2 mineral claim varies from 10-90% replacement with 5-10% veining by ankerite or dolomite. Trace amounts of pyrite occur in many of the carbonate alteration zones. Much of the claim is underlain by both andesitic or basaltic pebble conglomerates, siltstones and sandstones. Limestones are most noticeable to the west of the Old Highway whilst conglomerates derived from trachy-andesites and basalt occur to the east.

Silicified, brecciated float mineralized with minor pyrite and cinnabar is associated with intense carbonate alteration that extends intermittently over a length of 500 metres on the Mustang 7 mineral claim. Anomalous mercury values were obtained from sampled float during the 1986 mapping.

The alteration zones on both the Mustang 2 and 7 mineral claims are coincident with major faulting that crosses the entire property at 330 degrees. This major faulting is believed by Morrison (1986) to represent the Southern extension of the Sabiston Creek Fault mapped to the north of Kamloops Lake by Monger et al.

Carbonate alteration zones on the Golden Ring #1 contain quartz vein stockworks returning very high assays in mercury. The highest gold values taken from the property of 5300 ppb was obtained from a sample of chalcopyrite in a two centimetre quartz vein in the northeast quadrant of the Golden Ring #1 associated with a northwest striking fault zone.

A brecciated, ankerite chalcedonic alteration zone in the southeast quadrant of the Golden Ring #1 is coincident with an inferred northwest striking fault. Anomalous values of mercury were obtained from samples exhibiting one-half to two percent (1/2 - 2%) late quartz and chalcedonic veinlets. Hematite staining is associated with deep weathering of the fault zone.

REGIONAL GEOLOGY (cont'd)

The northerly trending belt extends approximately 50 kilometres north and 170 kilometres south of Kamloops Lake.

The Nicola Group are intruded by Jurassic cretaceous rocks related to the coast intrusives and range in composition from granite and syenite to pyroxenite.

Cockfield (1961) has concluded that Nicola rocks are folded in an asymmetric anticline with its axis trending north. It is apparent that the geology of the Savona District has a northwesterly trend with major faulting aligned with Deadman River, Sabiston Creek, Carabine Creek and Durand (Monger and McMillan 1984). The Sabiston Creek fault and associated lineaments pass through the Mustang Group in addition to the Sprout Group of claims and Brussels claims to the north and east of the Mustang Group.

Early Tertiary intrusives with related carbonate and siliceous alteration zones are coincident with these lineaments.

Mercury showings occur in Nicola Group rocks as well as Late Cretaceous sedimentary and volcanic rocks. To the north of Kamloops Lake along Carabine Creek mercury showings occur in Cretaceous or Tertiary volcanics and sediments associated with Tertiary Copper Creek Intrusives. At Criss Creek at the north end of the mercury belt, gold-bearing quartz veins also occur in similar rocks of the same age as above and are associated with Copper Creek Intrusives.

It is thought that hydrothermal solutions originating from the Copper Creek Intrusives underlie the mercury-bearing carbonate alteration zones thought to represent the upper levels of epithermal gold-bearing systems. (Morrison 1986)

Such a zone is thought to exist on Newmont's Sprout Property located approximately 4.5 kilometres from the British Group and another on Goldstones Explorations' Brussels Property 5 kilometres north of the British property.

PROPERTY GEOLOGY

Geological mapping of the Mustang 2 and a small part of the Mustang 7 in addition to the British 3 and Golden Ring mineral claims was conducted during the 1986 field season.

The British 3 mineral claim is underlain by volcanic derived sedimentary rocks of the Upper Triassic Nicola Group that have been intruded by quartz-eye porphyry dykes (Morrison 1986). A 700 metre long segmented dyke possibly equivalent to a rhyolite or syenite intrusive overlies rocks made up of predominantly andesitic clasts. They range from boulder and cobble

## DRILLING

A total of 709.6 metres was drilled using a truck-mounted percussion drill (O.D. 6.99 cm I.D. 5.40 cm) contracted from H. D. Drilling Co. Ltd. of Kamloops, B.C. A thousand gallon water/service truck was used where necessary to truck water for wet drilling from accessible lakes on the property. The drill crew included three men in addition to one sampler and geologist. Depth of holes ranged from 36.5 to 106.6 metres.

Drilling was conducted dry where possible. Samples weighing on average 30 kg were collected in 5 gallon plastic containers for each three-metre rod length. Each sample was then split to approximately 15 kg and then further split to 5 kg by the sampler using a dry sample splitter.

Wet samples were passed through a centrifugal splitter containing an electrical motor that rotated and split the sample to approximately 5 kg for each three-metre rod length. Samples were decanted in plastic bags and shipped for analysis.

Chips for logging were sieved and washed from the waste material of the splitting process. The chips are stored in vials at the offices of Vault Exploration Inc. in Kelowna, B.C.

A copy of the drill logs showing footages and samples assayed along with a copy of the assay certificates are included with this report.

One hundred fifty-five drill chip samples were shipped to Chemex Labs in North Vancouver. Each sample was analyzed for 30 elements by the ICP method using a nitri-aqua region digestion.

The samples were dried and crushed in two stages using jaw and cone crushers and then pulverized and screen sampled to 140 mesh. The +140 mesh fraction was hand pulverized and homogenized with the original sample.

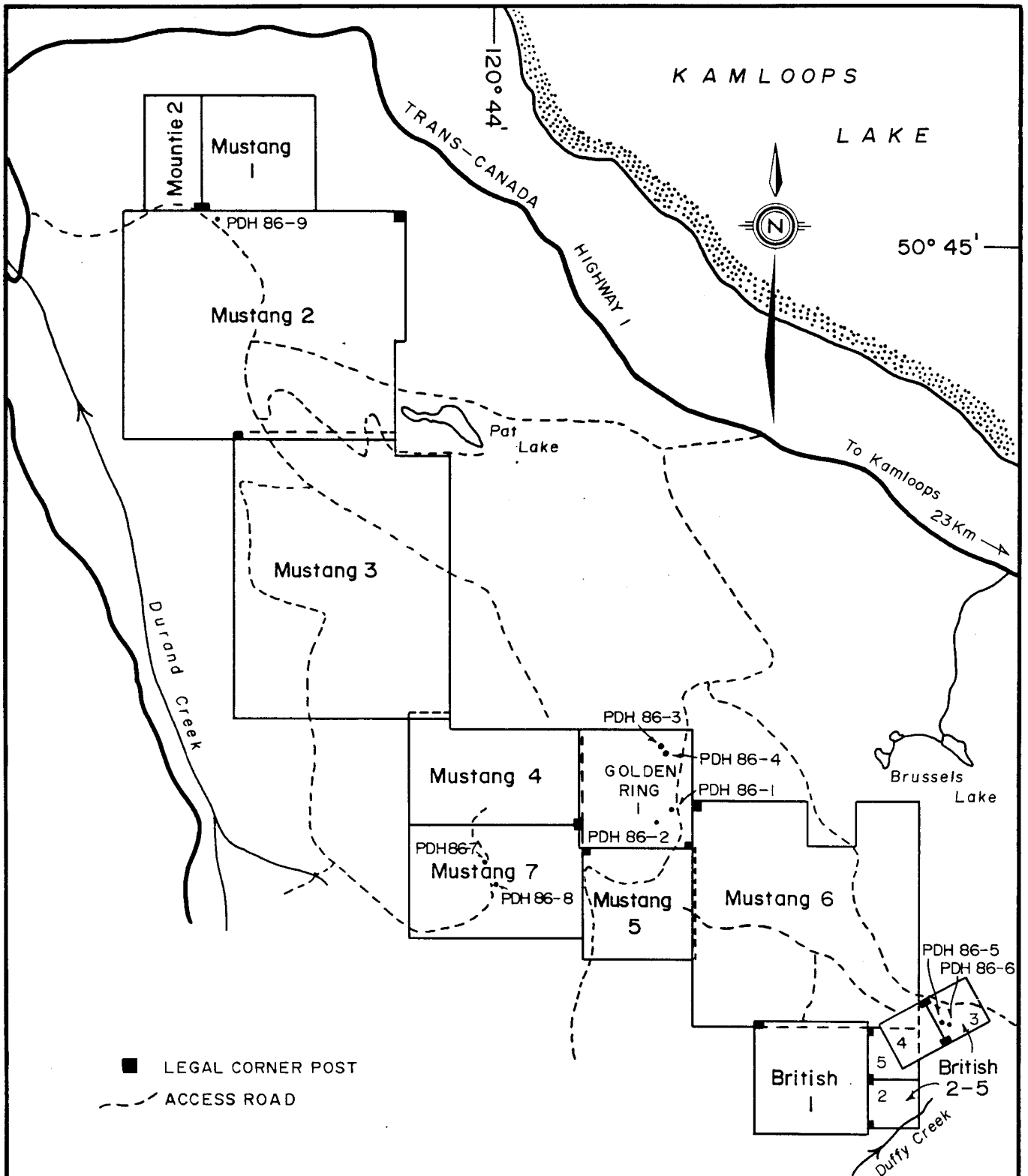
Thirty-eight of the pulps were analyzed for gold using fire assay and atomic absorption finish. Values of selected elements are listed next to each sample number and interval on the drill logs.

The Laboratory results for the rest of the 30 elements are listed in Appendix "D".

## DRILL TARGETS

The Golden Ring #1, British 3, Mustang 2 and 7 with significant carbonate silica alteration zones located by the 1986 geological mapping programme were chosen as priority targets for drilling.

Locations for the drill holes are illustrated on Figure 3.



<b>VAULT EXPLORATIONS INC.</b>	
<b>MUSTANG PROPERTY DRILL HOLE LOCATIONS</b>	
Kamloops Lake Area, Kamloops M.D., B.C.	
Scale 1 50 000	N.T.S. 92-1-10,15
January 1987	FIGURE 3

*B. C. Corp.*

DRILL TARGETS (cont'd)

Surface mapping of the Golden Ring #1 indicated an ankerite outcrop exposure containing quartz vein stockworks that extends for approximately 150 metres in a northwesterly direction. Holes 3 and 4 were each collared in this zone. (See map 1). Hole 3 was drilled in close proximity to sample MP 19 with values up to 53,000 ppb obtained from the 1986 rock geochem sampling programme.

Hole 4 was collared approximately 65 metres to the southeast of Hole 3 near sample site MP 20 with 14,000 ppb Hg.

Holes 1 and 2 were also drilled on the Golden Ring #1. Hole 1 was drilled to intercept intense carbonate alteration zone with late quartz veining and high mercury values up to 7800 ppb. Hole 2 was collared in a brecciated, ankeritic, chalcedonic alteration zone in which high values up to 2500 ppb of mercury were obtained from sample MP 31.

Holes 5 and 6 were each collared on the British 3 mineral claim illustrated on Plan Map 2. The holes were targeted to intercept silicification and kaolinization of a quartz-eye porphyry overlain by strong carbonate alteration that extends approximately 100 metres in a northwest trending direction.

Holes 7 and 8 were each collared in a moderate to intensely carbonate altered zone on the Mustang 7 that extends intermittently for 500 metres in a northwest direction. Holes 7 and 8 are illustrated on Plan Map 3.

Hole 7 was collared to intercept a possible siliceous sub-crop along a major northwest trending fault in close proximity to silicified, brecciated float mineralized with minor pyrite and cinnabar.

Hole 8 was collared approximately 150 metres southeast of Hole 7 in intense carbonate alteration. Hole 9 was collared in a zone of moderate carbonate alteration coincident with the Mountie Fault zone on the Mustang 2 mineral claim. Hole 9 is illustrated on Plan Map 4.

DRILLING RESULTS

All drill holes intersected replacement zones with uniformly low grade gold and silver values. Values for arsenic and antimony were only slightly elevated in silicified zones containing trace amounts of pyrite.

Drill holes PDH 86-1,2,3, and 4 are illustrated on Plan Map 1.

DRILLING RESULTS (cont'd)

Hole 86-1 penetrated intense carbonate and silica replacement of Nicola Group Volcanics. The zone is approximately 30 metres in thickness with up to 20% silica replacement containing traces of fine grained disseminated pyrite. Traces of cinnabar and chalcopryrite in several chips were noticeable at approximately 36 metres. Values for arsenic and antimony were low (£5 ppm) and (£5 ppm) copper values (up to 91 ppm) were found to be higher closer to surface.

Hole 86-2 was abandoned at 62.4 metres due to water loss from a possible fault zone. A zone of intense carbonate and silica replacement of Nicola Group Volcanics with trace amounts of pyrite extends the entire length of the hole. Values for all elements were disappointingly low. Significant values of mercury were recorded during the 1986 sampling from a brecciated ankeritic-chalcedony alteration zone.

Both holes 86-3 and 86-4 intersected intense zones of carbonate and silica replacement of Nicola Group Volcanic rocks. Within the replacement zones quartz veining totaled 2 to 15% over approximately 18 metres in Hole 3 and 2 to 10% over 25 metres in Hole 4. Pyrite content ranged from .5 to 1.5% in the quartz veined drill intercepts. Values for gold and silver were uniformly low in both Holes 3 and 4. Values for copper (up to 69 ppm), arsenic (up to 90 ppm), and zinc (up to 70 ppm) were slightly elevated within or in close proximity to the quartz veined drill intercepts in Hole 3. 86-3 Values for arsenic (up to 90 ppm), copper (81 ppm) and zinc (up to 60 ppm) were also slightly elevated in Hole 4 over the same silicious zone.

A possible fault contact was noticeable in Hole 4 at approximately 28 metres. The alteration zones in Hole 3 are peripheral to shallow lying intrusives intersected at approximately 42.5 metres.

PDH 86-5 and 6 were each drilled on the British 3 mineral claim and are illustrated on Plan Map 2. Drilling on the British 3 has shown that the kaolinized quartz-eye porphyry dyke extends in depth to approximately 41 metres and thickens more towards the east. The overlying intensely carbonate altered volcanics shown consistently low values for arsenic and antimony but higher values (up to 153 ppm) for copper below the dyke. Portions of the dyke were only slightly pyritized and silicified with 1 to 2% quartz veinlets and trace disseminated pyrite. Kaolinization of the dyke appears more intense in 86-6 below a possible contact at approximately 35 metres.

DRILLING RESULTS (cont'd)

Holes 86-7 and 8 are illustrated on Plan Map 3. Slightly elevated values of arsenic (up to 35 ppm) and antimony (up to 10 ppm) were encountered in a 10 to 15 metre silicified replacement zone containing trace elements of disseminated pyrite. The alteration zones are associated with evidence of faulting at approximately 58 metres and a shallow lying felsic intrusion at approximately 15 metres.

Hole 86-8 was drilled vertically in intense carbonate alteration. Copper values (up to 118 ppm) were encountered in the more intense carbonate zones containing one percent quartz veins. The hole was abandoned after intersecting much less carbonate altered Nicola Group andesites and basalts.

Hole 86-9 illustrated on Plan Map 4 was collared in moderate carbonate alteration to approximately 18.3 metres where fresher less carbonate altered volcanics were encountered. Higher arsenic values (up to 90 ppm) were recorded in the more intense carbonate altered zones containing trace amounts of disseminated pyrite. No apparent fault zones were intersected.

CONCLUSIONS AND RECOMMENDATIONS

The 1986 drilling programme did not intersect any ore grade mineralization associated with the mercury bearing carbonate silica replacement zones. Values for arsenic, antimony and copper were slightly elevated in zones associated with late pyrite bearing quartz veinlets cutting carbonate silica replacement in PDH's 86-3, 4, 7, and 9. Sizable alteration zones were found to be peripheral to shallow lying intrusives in PDH's 86-3, 5 and 6. The alteration zones drilled match other carbonate-silica replacement zones in the Savona area.

The mineralization drilled has proved too low grade to justify any further drilling at this time.

If further drilling were to be warranted, then it is recommended that a programme of diamond drilling be carried out on the Golden Ring #1 mineral claim. The programme would include several deep holes up to possibly 1000 feet to test for underlying gold and silver bearing stockwork veins.

Further geological mapping would also be recommended to better define fault systems and associated alteration zones before further drilling.

BIBLIOGRAPHY

- COCKFIELD, W. E. (1961) Geology and Mineral Deposits of Nicola Map Area, British Columbia G.S.C. Mem. 249
- JONES, H. M. (1986) A Report on the Mustang Property, Brussels Creek, Savona Area, Kamloops Mining Division (Company Report For Vault Explorations Inc. of Kelowna, British Columbia)
- MONGER, J. W. H. (1984) Bed Rock Geology of Ashcroft (92-1) Map Area, G.S.C. Open File 980
- MORRISON, M. (1986) Percussion Drilling Assessment, Report Brussels Group of Mineral Claims, Kamloops Mining Division, B.C. Assess. Report March 15, 1986
- (1986) Geological Assessment Report British 1-5 Mineral Claims, Kamloops Mining Division, B.C. Assess. Report June 1, 1986
- (1986) Geological Assessment Report Mustang Group of Mineral Claims Kamloops Mining Division, B.C. Assess. Report August 15, 1986




APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Brian Callaghan, of the City of Kelowna in the Province of British Columbia, do hereby state that:

1. I am a graduate of Brandon University, Manitoba with a Bachelor of Science degree in Geology, 1980.
2. I have been working in all phases of mining exploration in Canada for the past seven years.
3. I personally supervised the percussion drilling programme carried out on the Mustang Property during December 9th to 20th, 1986.
4. At the time of drilling, I was a director and shareholder of Vault Explorations Inc.
5. At the date of writing of the report, I was neither a director or shareholder of the company and have no position or plan to hold a future position with the company.

May 20th, 1987  
Kelowna, B.C.

  
\_\_\_\_\_  
Brian Callaghan, B.Sc.

APPENDIX "B"

ITEMIZED COST STATEMENT - FOR DRILL PROGRAMME ON MUSTANG GROUP OF CLAIMS

DRILLING

Contract with H.D. Drilling Co. of Kamloops, B.C.  
 Truck-mounted percussion drill (O.D. 6.99cms I.D. 5.39 cms)  
 709.6 m drilled @ \$27.09/m (all costs included) \$ 22,370.00

PERSONNEL (FIELDWORK)

Maltby S. 10th - 19th Dec. 1986 10 days @ \$100/day 1,000.00  
 Sampler

Callaghan B. 9th - 20th Dec 1986 19 1/2 days @ \$200/day 3,900.00  
 Geologist 12th - 19th Jan 1987

ACCOMMODATION 9th - 20th Dec. 1986 @ \$36/day 468.67  
 Meals ditto @ \$29.83/day 357.97

TRUCK RENTAL For 4x4 Pickup @ \$68.73/day 824.77  
 (gas included)

ASSAYS

Chemex Labs Ltd.: 38 drill chip samples  
 Analyzed for gold @ \$7.75/sample 294.50  
 155 samples for ICP Analysis @ \$10.25/sample 1,588.75

SHIPPING Samples from Kamloops To Vancouver 141.30

MISCELLANEOUS EXPENSES (Grass seed, sample bags, viles) 211.02

CATWORK

DC 6 Road Building, Drill pads 20 hours @ \$75./hour 1,500.00  
 low bedding 276.00

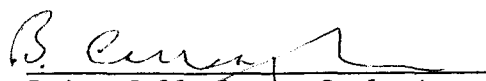
REPORT PREPARATION COSTS

Report writing Geologist 4 days @ \$200/day 800.00  
 Drafting 800.00  
 Typing 150.00  
 Copying 50.00

TOTAL EXPENDITURE: \$ 34,732.98

I hereby certify that the preceding statement is a true statement of monies expended in connection with the Percussion Drill Program carried out December 9th to 20th, 1986.

April 28th, 1987.

  
 Brian Callaghan - Geologist.

APPENDIX "C"

DRILL LOGS

Location: 3+35N 19+86W

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 150°

Hole No: PDH 86-1

Dip: 70° Length: 70.1 m Elevation: 863 m (Approx)

Mineral Claim: GOLDEN RING

Date Started: 10<sup>th</sup> Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"

Date Logged: 14 Jan 1987

Section:

Date Completed: 11<sup>th</sup> Dec 1986 Dip Tests:

Logged by: B. CALLAGHAN

Purpose: To test for gold, silver mineralization in a zone of silica-carbonate alteration anomalous in mercury

Drilling Contractor: H.D. DRILLING Co Ltd KAMLOOPS B.C.

Metres from	Metres to	Description	Sample No.	Metres from	Metres to	Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite F	Pyrite C
0	3.1	OVER BURDEN															
3.1	33.5	TRIASSIC-NICOLA GROUP VOLCANICS	16867	3.1	6.1	3		0.2	<5	91	90		50	1	3	tr	
		Andesite (?) moderately-intensely altered	16868	6.1	9.1	3		0.2	<5	92	88		50	1	5	tr	
		12.2-15.2 m - 30% of chips moderately carbonate altered	16869	9.1	12.2	3.1		0.2	<5	74	90		30	5	3	tr	
		- 10% of chips intense carbonate altered															
		- 5% of chips finer grained-grey, black	16870	12.2	15.2	3		0.2	<5	74	56	2	30	1	3	tr	
		- Very minor green apple stain															
		- moderately oxidized - (hematite)	16871	15.2	18.3	3.1		0.2	<5	72	62	10	60	1	5	tr	
		15.2-18.3 m - trace cinnabar in grey siliceous chips															
		21.3-24.4 m - more limonite, trace cinnabar	16872	18.3	21.3	3		0.2	<5	43	58	10	60		5		
		24.4-30.5 m - 25% of chips light green, grey white to salmon pink highly carbonate altered andesite (?)	16873	21.3	24.4	3.1	<0.002	0.2	<5	78	72	15	80	1	5	tr	
		Trace fine grained disseminated pyrite and fine grained specular hematite.	16874	24.4	27.4	3	<0.002	0.2	<5	56	80	15	80	2	5	tr	
		27.4-33.5 m - 30% of chips light pink to pale rusty brown, carbonate containing black scattered subhedral metallic sulphide	16875	27.4	30.5	3.1	<0.002	0.2	<5	37	62	15	80		5	tr	
		weak chlorite altered dark grey basalt (?)	16876	30.5	33.5	3		0.2	<5	50	64	20	80		5	tr	
33.5	70.1	BASALT biotite fresh 2% of chips intensely carbonate altered heavily limonitic and	16877	33.5	36.6	3.1		0.2	<5	61	66		15	5	1	tr	



## Percussion Drill Record

Location: 3+32N 21+47W

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 060°

Hole No: PDH 86-2

Dip: 70° Length: 62.4 Elevation: 875m (Approx)

Mineral Claim: GOLDEN RING

Date Started: 11<sup>th</sup> Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"Date Logged: 15<sup>th</sup> Jan 1987

Section:

Date Completed: 11<sup>th</sup> Dec 1986 Dip Tests:

Logged by: B. CULLAGHAN

Purpose: To test for gold silver mineralization in a brecciated ankerite  
chaledonic alteration zone anomalous in mercury

Drilling Contractor: H.D. DRILLING CO. LTD. KAMLOOPS

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite		
from	to			from	to											F	C	
0	.9	OVERBURDEN																
.9	62.4	TRIASSIC NICOLA GROUP VOLCANICS	16801	.9	3.0	2.1		0.2	5	22	60	40	50	1	5		Tr	
		Andesite (?) Intense carbonate altered, light grey, pale green to light brown; cut by 2-5% barren ankerite veinlets of 1% quartz veinlets. Some chips contain siliceous grey zones with trace disseminated cubic pyrite.	16802	3.0	6.1	3.1		0.2	10	24	50	40	50	2	5		Tr	
			16803	6.1	9.1	3.0		0.2	<5	31	36	40	50	2	5		Tr	
			16804	9.1	12.2	3.1		0.2	<5	27	32	40	50	2	5		Tr	
			16805	12.2	15.2	3.0		0.2	5	25	24	30	60	1	7		Tr	
		.9 - 3.0 m 20% of chips up to 1cm may be caved material all chips appear to have a white clayey coating on surfaces with limonite staining	16806	15.2	18.3	3.1		0.2	5	24	30	30	60	2	5		Tr	
			16807	18.3	21.3	3.0		0.2	<5	22	56	40	60	1	5		Tr	
			16808	21.3	24.4	3.1		0.2	5	22	60	30	70	1	2		Tr	.5
		9.1 - 12.2 m - 5% ankerite veinlets with trace disseminated cubic pyrite in contact with siliceous zones	16809	24.4	27.4	3.0		0.2	15	23	58	20	70	1	2		Tr	
		- 1% specular Hematite (?)	16810	27.4	30.5	3.1		0.2	<5	26	26	20	60	1	5		Tr	
		15.2 - 18.3 m - Trace cinnabar (?) disseminated and surrounds tarnished pyrite in siliceous zones	16811	30.3	33.5	3.0		0.2	5	17	18	20	70	1	10		Tr	
			16812	33.5	36.6	3.1		0.2	<5	17	16	30	60	2	5		Tr	
			16813	36.6	39.6	3.0		0.2	<5	26	18	30	60	2	5		Tr	
		cut by ankerite veinlets - visible in one chip	16814	39.6	42.6	3.0		0.2	<5	28	20	30	60	3	5		Tr	
		18.3 - 21.3 m - 30% of chips up to maximum of 1cm in length are fine grained, uniformly granular, siliceous with patches of ankerite and disseminated fine grained cubic pyrite.	16815	42.6	45.7	3.1		0.2	10	35	30	10	20	1	1		Tr	
			16816	45.7	48.7	3.0		0.2	5	25	24	10	20	2	1		Tr	
			16817	48.7	51.8	3.1		0.2	<5	20	22	10	20	1	1		Tr	
			16818	51.8	54.8	3.0		0.2	<5	14	18		10	5	1		Tr	
		- black sooty coating occurs on flatter surfaces pyrolusite (?)	16819	54.8	57.9	3.1		0.2	<5	24	28		30	2			Tr	
			16820	57.9	60.9	3.0		0.2	<5	26	24		15	1	1			
		21.3 - 24.4 - 2% of chips up to maximum 1cm in length 5% fine grained disseminated and scattered	16821	60.9	62.4	1.5		0.2	<5	35	28		15	1	2		Tr	







## Percussion Drill Record

Location: 8+60N 18+42W

## VAULT EXPLORATIONS

Property: MUSTANG GROUP

Azimuth: 245°

Hole No: PDH 86-3

Dip: 70° Length: 106.6m Elevation: 861m (Approx)

Mineral Claim: GOLDEN RING

Date Started: 14<sup>th</sup> Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"Date Logged: 17<sup>th</sup> Jan 1987

Section: —

Date Completed: 15<sup>th</sup> Dec 1986 Dip Tests: —

Logged by: B. CALLAGHAN

Purpose: To test for gold and silver mineralization below an ankerite

outcrop containing quartz vein stockworks anomalous in mercury

Drilling Contractor: H. D. DRILLING CO L<sup>td</sup>. KAMLOOPS, B.C.

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite	
from	to			from	to											F	C
0	9.1	OVERBURDEN TALUS - 20% of chips intense carbonate altered	16851	57.9	60.9	3.0		0.2	25	19	48		2		1	tr	
		altered	16852	60.9	64.0	3.1	<0.002	0.2	10	23	48		2		1	tr	
		-60-80% of chips grey green fine grained, siliceous - felsic dyke (?)	16853	64.0	67.0	3.0	<0.002	0.2	20	35	38		2			tr	
		6.1-9.1m - 1% of chips intense carbonate altered	16854	67.0	70.1	3.1	<0.002	0.2	10	26	38		2		1	tr	
		trace fine grained cubic pyrite	16855	70.1	73.1	3.0	<0.002	0.2	40	26	68	2	10		1	tr	
9.1	33.5	TRIASSIC-NICOLA GROUP VOLCANICS:	16857	76.1	79.2	3.1	<0.002	0.2	25	21	50	10	30	2	1	1	
		Andesite (?) Slight chloritic alteration and minor hematite staining, trace fine grained scattered cubic pyrite	16858	79.2	82.2	3.0	<0.002	0.2	20	44	48	10	30	1	1	1	
		Individual clasts angular to sub rounded	16859	82.2	85.3	3.1	<0.002	0.2	35	33	40	15	30	1	1	1	
		18.3-21.3m - Minor carbonate veining - barren, white with limonitic staining on fracture surfaces	16860	85.3	88.3	3.0	<0.002	0.2	25	42	52	10	30	1		1	
		30.5-33.5m - Weak moderate chloritic alteration with minor hematite staining	16861	88.3	91.4	3.1	<0.002	0.2	20	56	62	5	20			.5	
		- 1% of chips white barren carbonate	16862	91.4	94.4	3.0	<0.002	0.2	20	56	62	5	20			.5	
		- 30% of chips basaltic - fresh olivine, biotite	16863	94.4	97.5	3.1	<0.002	0.2	15	49	70	2	10			.5	
			16864	97.5	100.5	3.0	<0.002	0.2	25	45	64	-	5			tr	
			16865	100.5	103.6	3.1	<0.002	0.2	55	55	68	-	2			tr	
33.5	70.1	BASALT (?) - fresh minor chlorite alteration	16866	103.6	106.6	3.0		0.2	30	69	62	-	2			tr	
42.6	48.7	LATE CRETACEOUS (?) or EARLY TERTIARY? INTRUSIVE;	16845	39.6	42.6	3.0		0.2	10	33	50		2				
		42.6-45.7m - 50% of chips basaltic	16846	42.6	45.7	3.1		0.2	10	35	52		2				
		- 30-40% of chips, fine grained, grey intrusive	16847	45.7	48.7	3.0		0.2	<5	32	42		2				
		fresh quartz monzonite?	16848	48.7	51.8	3.1		0.2	<5	32	42		2				
		- 2% of chips white barren carbonate	16849	51.8	54.8	3.0		0.2	20	27	42		2				
		45.7-48.7m - 80-90% of chips comprised of nicola group basalt	16850	54.8	57.9	3.1		0.2	15	23	50		2				





## Percussion Drill Record

Location: B+05 N 18+55 W

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 239°

Hole No: PDH 86-4

Dip: 70 Length: 88.3 m Elevation: 853 m

Mineral Claim: GOLDEN RING 1

Date Started: 15<sup>th</sup> Dec 1986 Drill Diameter: OD 2<sup>3</sup>/<sub>4</sub>" ID 2<sup>1</sup>/<sub>8</sub>"Date Logged: 21<sup>st</sup> Jan 1987

Section:

Date Completed: 17<sup>th</sup> Dec 1986 Dip Tests:

Logged by: B CALLAGHAN

Purpose:

Drilling Contractor: H. D. DRILLING CO LTD KAMLOOPS BC.

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite		
from	to			from	to											F	C	
0	12.2	OVERBURDEN - Predominantly triassic - Nicola Group Basalt and minor Andesite weakly carbonate altered																
12.2	33.5	TRIASSIC NICOLA GROUP VOLCANICS:	16822	12.2	15.2	3.0		0.2	15	24	24		1					
		BASALT (?) Slight chlorite altered, fine to medium grained, dark grey green. Very minor hematite stain	16823	15.2	18.3	3.1		0.2	20	29	29		1				Tr	
		18.3 - 21.3 m - 1% of chips comprised of andesite (?)	16824	18.3	21.3	3.0		0.2	20	35	35		1				Tr	
		- slickensided surfaces	16825	21.3	24.4	3.1		0.2	15	30	38		1				Tr	
		27.4 - 30.5 m - Possible fault zone 25% large chips comprised of friable, clayey intense carbonate altered material, limonitic	16826	24.4	27.4	3.0		0.2	25	29	29		1		.5			
		trace fine grained cubic pyrite	16827	27.4	30.5	3.1		0.2	5	25	25		20				Tr	
		30.5 - 33.5 m - 15% of chips comprised of intense carbonate altered limonitic material with 2% carbonate veining trace disseminated pyrite	16828	30.5	33.5	3.0		0.2	35	21	22		30		2			
			16829	33.5	36.6	3.1	<0.002	0.2	75	16	28	5	30		5		1	
			16830	36.6	39.6	3.0	<0.002	0.2	55	10	20	10	30	2	5		1	
			16831	39.6	42.6	3.0	<0.002	0.2	90	8	18	10	30	1	5		1.5	
			16832	42.6	45.7	3.1	<0.002	0.2	70	18	38	10	20	1	2		1.5	
			16833	45.7	48.7	3.0	<0.002	0.2	55	31	50	10	10	1	1		1.5	
			16834	48.7	51.8	3.1	<0.002	0.2	45	49	60	10	20	1	.5		1.5	
33.5	88.3	TRIASSIC - NICOLA GROUP VOLCANICS	16835	51.8	54.8	3.0		0.2	30	81	60	5	10				.5	
		Andesite (?) Light green to cream, salmon pink, intense carbonate alteration, 5%ankerite veinlets	16836	54.8	57.9	3.1		0.2	20	46	56	2	10				.5	
		malachite staining in siliceous zones with trace stibnite (?)	16837	57.9	60.9	3.0		0.2	20	41	54		10		1		.5	
		1% disseminated, scattered pyrite, trace galena (?) scattered	16838	60.9	64.0	3.1		0.2	30	55	50		15		1		.5	
		very fine grained	16839	64.0	67.0	3.0	<0.002	0.2	20	69	50		10				Tr	
		36.5 - 39.6 m - 60% of chips comprised of silica with	16840	67.0	70.1	3.1	<0.002	0.2	15	82	54		10				Tr	
			16841	70.1	73.1	3.0	<0.002	0.2	10	82	50		5				Tr	





## Percussion Drill Record

Location: S+63N 19+10W

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 200°

Hole No: PDH 86-5

Dip: 70° Length: 80.7m Elevation: 861m (Approx)

Mineral Claim: BRITISH 3

Date Started: 12th Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"

Date Logged: 26th Jan 1987

Section:

Date Completed: 13th Dec 1986 Dip Tests:

Logged by: B. CALLAGHAN

Purpose: To test for gold mineralization associated with strong carbonate alteration

Zones that overlie Early Tertiary quartz eye porphyry intrusives

Drilling Contractor: H.D. DRILLING CO.

KAMLOOPS B.C.

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite	
from	to			from	to											F	C
0	3.0	OVERBURDEN															
		TRIASSIC NICOLA GROUP VOLCANICS, moderate to intensely carbonate altered andesite (?) cut by 5% ankrite veinlets, limonite staining	16880	3.0	6.1	3.1		0.2	<5	103	66		40	1	5		
			16881	6.1	9.1	3.0		0.2	<5	102	56		40	1	5		
			16882	9.1	12.2	3.1		0.2	<5	104	62		30	2	5	tr	
		3.0-6.1m - 15% of chips comprised of quartz porphyry, hematite stained and weakly carbonate altered cut by 2% quartz carbonate veinlets	16883	12.2	15.2	3.0		0.2	<5	116	62		20	1	2		
			16884	15.2	18.3	3.1		0.2	<5	100	50		20	1	2		
			16885	18.3	21.3	3.0		0.2	<5	94	46		20	1	2	tr	
			16886	21.3	24.4	3.1		0.2	<5	78	54		10	2	2		
		6.1-12.2m - several surfaces slickensided	16887	24.4	27.4	3.0		0.2	<5	65	64		10	1			
		- 15-25% of chips comprised of hematite stained quartz porphyry (?)	16888	27.4	30.5	3.1		0.2	<5	92	56		15	1	2	tr	
		- several fracture surfaces coated with a platy black oxide	16889	30.5	33.5	3.0		0.2	<5	96	54		10	1	2		
			16890	33.5	36.5	3.0	<0.002	0.2	<5	104	64		10		2	tr	
			16891	36.5	39.6	3.1	<0.002	0.2	<5	92	54		10		2	tr	
		15.2-18.3m - moderately oxidized, limonitic slight sericite alteration of intrusive chips	16892	39.6	42.6	3.0	<0.002	0.2	<5	87	48		2		2		
			16893	42.6	45.7	3.1	<0.002	0.2	<5	82	56		2	1	2	tr	
		18.3m-21.3m - 5% of chips comprised of barren white hematite stained quartz	16894	45.7	48.7	3.0	<0.002	0.2	<5	97	62		2	1		tr	
			16895	48.7	51.8	3.1	<0.002	0.2	<5	109	58		2		1		
21.3	60.9	LATE CRETACEOUS (?) or EARLY TERTIARY (?) Intrusives	16896	51.8	54.8	3.0	<0.002	0.2	<5	100	58		2	1		tr	
		fine grained pink quartz porphyry (?) 2-5% quartz crystals 1-2mm, trace very fine grained biotite,	16897	54.8	57.9	3.1	<0.002	0.2	<5	119	84		2	1			
		moderately oxidized with moderate sericite alteration and trace disseminated pyrite	16898	57.9	60.9	3.0	<0.002	0.2	<5	134	96		2	2			
			16899	60.9	64.0	3.1		0.2	<5	145	64		10	1	2	tr	
			16900	64.0	67.0	3.0		0.2	<5	132	62		10		2	tr	
			16901	67.0	70.1	3.1		0.2	<5	138	64		10		2		









## Percussion Drill Record

Location: 5+05N 18+42W

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 200°

Hole No: PDH 86-6

Dip: 70 Length: 91.4 Elevation: 858m (Approx)

Mineral Claim: BRITISH 3

Date Started: 11th Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"

Date Logged: 25th Jan 1987 Section:

Date Completed: 11th Dec 1986 Dip Tests:

Logged by: B. CACCAGHAN

Purpose: To test for gold mineralization associated with strong carbonate alteration zones that overlie Early Tertiary quartz eye porphyry intrusives anomalous in arsenic.

Drilling Contractor: H.D. DRILLING Co Ltd KAMLOOPS BC

Metres from	to	Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite		
				from	to											F	C	
0	24.4	OVERBURDEN - Consisting of mostly Triassic-Nicola Group Volcanics and LATE CRETACEOUS (?) or EARLY TERTIARY (?) Intrusives.	16906	30.5	33.5	3.0		0.2	<5	96	60		1	2				
24.4	48.7	TRIASSIC NICOLA GROUP Volcanics that includes weakly carbonate altered andesite, slight chlorite altered with 1% ankerite veinlets and trace disseminated pyrite.	16907	33.5	36.6	3.1		0.2	<5	114	66		5	1	1			
		27.4 - 30.5 m - .5% barren white calcite veinlets	16908	36.6	39.6	3.0		0.2	<5	116	70		5	2	1			tr
		30.5 - 33.5 m - 1% of chips medium grained grey, pink quartz-eye porphyry, minor epidote and trace disseminated pyrite.	16909	39.6	42.6	3.0		0.2	<5	125	64		2					tr
		33.5 - 36.5 m - Possible fault zone, pale green pink clays infill and coat friable andesite and minor intrusive chips.	16910	42.6	45.7	3.1		0.2	5	123	66		2		1			tr
		36.5 - 39.6 m - limonite staining and moderate chlorite alteration.	16911	45.7	48.7	3.0		0.2	<5	119	58		5	2	1			tr
		- 25% of chips comprised of weakly 'kaolinized' pink intrusives, minor hematite stain.	16912	48.7	51.8	3.1		0.2	<5	147	70			2				
			16913	51.8	54.8	3.0		0.2	5	69	66			1				tr
			16914	54.8	57.9	3.1		0.2	5	59	64		2	1	.5			tr
			16915	57.9	60.9	3.0		0.2	5	82	68		5	2	1			tr
			16916	60.9	64.0	3.1		0.2	5	58	62		5	2	1			tr

## Percussion Drill Record

Location: S+05N 18+42W

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 200°

Hole No: PDH 86-6

Dip: 70° Length: 91.4 Elevation: 858m (Approx)

Mineral Claim: BRITISH 3

Date Started: 11th Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"

Date Logged: 25th Jan 1987

Section:

Date Completed: 11th Dec 1986 Dip Tests:

Logged by: B. CALLAGHAN

Purpose: To test for gold mineralization associated with strong carbonate alteration zone that overlies

Early Tertiary quartz eye porphyry intrusives anomalous in arsenic.

Drilling Contractor: H. D. DRILLING Co Ltd. KAMLOOPS BC

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite	
from	to			from	to											F	C
		39.6 - 42.6 m - Trace disseminated black metallic sulphide hematite (?) in 25% of chips comprised of pink quartz monzonite	16917	64.0	67.0	3.0		0.2	<5	63	64		2	5	1		
		39.6 - 48.7 m - hematite staining	16918	67.0	70.1	3.1		0.2	5	63	58		5	2	2	tr	
48.7	91.4	LATE CRETACEOUS (?) EARLY TERTIARY (?) INTRUSIVES															
		dark pink crimson fine to medium grained quartz porphyry cut by 2% - 5% quartz veinlets minor hematite staining	16919	70.1	73.1	3.0		0.2	<5	57	72		2	5	.5		
		48.7 - 60.9 m - 10 - 15% of chips pale green carbonate altered andesite	16920	73.1	76.1	3.0		0.2	<5	71	64		2	5		tr	
		54.8 - 60.9 m - trace disseminated fine grained pyrite in andesite	16921	76.1	79.2	3.1		0.2	5	74	72		2	5		tr	
		67.0 - 70.1 m - surfaces of porphyry covered with whitish pink sooty coating	16922	79.2	82.2	3.0		0.2	<5	85	78		2	5		tr	
		moderate hematite stain with trace metallic sulphide - specular hematite	16923	82.2	85.3	3.1		0.2	5	63	72		2	5		tr	
		73.1 - 76.1 m - trace disseminated pyrite in quartz porphyry	16924	85.3	88.3	3.0		0.2	<5	79	72		2	5		tr	
		79.2 - 82.2 m - 15% of chips pale apple green - cream andesite - weakly carbonate altered	16925	88.3	91.4	3.1		0.2	<5	91	64		2	5		tr	



## Percussion Drill Record

Location: 50+95 W, 38+32 N

VAULT EXPLORATIONS INC

Property: MUSTANG GROUP

Azimuth: 055°

Hole No: PDH 86-7

Dip: 70° Length: 67 m Elevation: 1088 m (Approx)

Mineral Claim: MUSTANG 7

Date Started: 18<sup>th</sup> Dec 1986 Drill Diameter: OD 2 3/4" ID 2 1/8"Date Logged: 22<sup>nd</sup> Jan 1987

Section:

Date Completed: 19<sup>th</sup> Dec 1986 Dip Tests:

Logged by: B. CACCAGHAN

Purpose: To test for gold and silver mineralization below an  
ankerite alteration zone possibly associated with a silicious sub-cap

Drilling Contractor: H.D. DRILLING CO. LTD KAMLOOPS B.C.

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite	
from	to			from	to											F	C
0	3.0	OVERBURDEN															
3.0	9.1	TRIASSIC NICOLA GROUP VOLCANICS Andesite, Intense carbonate alteration slightly oxidized and limonitic 2-5% carbonate veinlets with trace fine grained pyrite	16934	3.0	6.1	3.1		0.2	45	128	72		40	.5	2-5		tr
		30-6.1 m - 25% of chips part caved fine grained grey-black calc-silicate(?) with minor quartz veinlets	16935	6.1	9.1	3.0		0.2	35	112	64		40	1	2-5		
		30-6.1 m - 25% of chips part caved fine grained grey-black calc-silicate(?) with minor quartz veinlets	16936	9.1	12.2	3.1		0.2	<5	108	58		40	1	2		
		30-6.1 m - 25% of chips part caved fine grained grey-black calc-silicate(?) with minor quartz veinlets	16937	12.2	15.2	3.0		0.2	<5	101	56		30		2		tr
9.1	33.5	BASALT 40-50% of chips fine grained grey black basalt - slight hematite staining	16938	15.2	18.3	3.1		0.2	10	111	64		40		5		tr
		15.2-18.3 m - 10% of chips comprised of grey white granular unaltered aplite (?) trace very fine grained pyrite	16939	18.3	21.3	3.0		0.2	15	101	58		40	.5	5		tr
		18.3-24.4 m - 15% to 20% of chips comprised of grey aplite (?)	16940	21.3	24.4	3.1		0.2	35	120	62		40		5		tr
		24.4-30.5 m - 60% of chips fine grained grey black fresh basalt 30%-40% of chips intensely carbonate altered	16941	24.4	27.4	3.0		0.2	35	112	66		30	.5	2		
		30.5-33.6 m - 70% of chips grey-black fine grained basalt weakly carbonate altered 30% of chips intensely carbonate altered cut by 5%	16942	33.5	36.5	3.0		0.2	15	101	62		30		5		tr
		30.5-33.6 m - 70% of chips grey-black fine grained basalt weakly carbonate altered 30% of chips intensely carbonate altered cut by 5%	16943	39.6	42.7	3.1		0.2	35	114	62	5	10		2		tr
		30.5-33.6 m - 70% of chips grey-black fine grained basalt weakly carbonate altered 30% of chips intensely carbonate altered cut by 5%	16944	45.7	48.7	3.0		0.2	35	115	64	5	2				tr









## Percussion Drill Record

Location: EDGE OF OLD HIGHWAY NEAR NORTH BOUNDARY  
OF MUSTANG 2 99N 43+95W  
 Azimuth: 240°

VAULT EXPLORATIONS INC.

Property: MUSTANG GROUPHole No: PDH 86-9

Dip: 70° Length: 60.9m Elevation: 578.7m (Approx)

Mineral Claim: MUSTANG #2

Date Started: 19<sup>th</sup> DEC 1986 Drill Diameter: 2 3/4" OD 2 1/8" ID

Date Logged: 9 JAN 1987

Section: .

Date Completed: 19 DEC 1986 Dip Tests: -

Logged by: B. CALLAGHAN

Purpose: To TEST VERTICAL EXTENT OF SLIGHTLY ANOMALOUS ANTIMONY,

ARSENIC VALUES DISCOVERED IN MODERATE CARBONATE ALTERED ANDESITE PEP. CONG. Drilling Contractor: H. D. DRILLING Co Ltd KAMLOOPS, B.C.

Metres		Description	Sample No.	Metres		Width m	Au oz/t	Ag ppm	As ppm	Cu ppm	Zn ppm	SiO <sub>2</sub> %	Carb %	Qtz veins	Carb veins	Pyrite	
from	to			from	to											F	C
0	3.1	OVERBURDEN															
3.1	60.9	TRIASSIC NICOLA GROUP VOLCANICS:	16949	3.1	6.1	3.0		0.2	10	117	86		80	1	5	tr	0
		Andesite (?) Fine grained moderately to highly carbonate, altered at surface grading to less altered andesite at depth; cut by 5% barren limoniticankerite veining and 1-2% grey quartz veins Trace disseminated pyrite	16950	6.1	9.1	3.0		0.2	90	30	50		80	1.5-2		tr	0
		2% of chips made up of grey quartz	16751	9.1	12.2	3.1		0.2	15	39	44		70	.5	1	-	-
		3.1-15.2m oxidized and limonitic	16752	12.2	15.2	3.0		0.2	45	37	38		70	.5	1	-	-
		6.1-9.1m 2% of chips comprised of grey quartz															
		9.1-12.2m 5% carbonate altered chips part stained apple green	16753	15.2	18.3	3.1		0.2	50	39	36		50	-	1	tr	-
		12.2-15.2m 5% of chips comprised of grey quartz vein material with limonite staining	16754	18.3	21.3	3.0		0.2	10	33	56		50	-	1	tr	-
		15.2-18.3m Section of less carbonate altered rock 10% limonitic carbonate altered chips with trace disseminated pyrite	16755	21.3	24.4	3.1		0.2	30	20	30		20		1-2	tr	-
		18.3-60.9 grey, part banded, granular andesitic conglomerate with 1-2% white barren carbonate veining. 1% of chips limonite stained															
		30.5-33.5 10% limonitic stained chips															
		42.6-45.7 5% slight hematite stain															
		48.7-60.9 Trace fine grained pyrite in limy coated chips															
		END OF HOLE @ 60.9m															

Hole Drilled Dry

APPENDIX "D"

GEOCHEMICAL LAB REPORTS



# Chemex Labs Ltd.

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

• Analytical Chemists • Geochemists • Registered Assayers

Phone: (604) 984-0221  
Telex: 043-52597

\*\*\* INVOICE \*\*\*

o : VAULT EXPLORATIONS INCORPORATED

\*\* Invoice # : I8622699

204 - 347 LEON AVE.  
KELOWNA, BC  
V1Y 8C7

Date : 21-JAN-87  
P.O. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8622699-001 to -004

quantity	code	description	unit	price	amount
155	921 - Al	%			
	922 - Ag	ppm			
	923 - As	ppm			
	924 - Ba	ppm			
	925 - Be	ppm			
	926 - Bi	ppm			
	927 - Ca	%			
	928 - Cd	ppm			
	929 - Co	ppm			
	930 - Cr	ppm			
	931 - Cu	ppm			
	932 - Fe	%			
	933 - Ga	ppm			
	934 - K	%			
	935 - La	ppm			
	936 - Mg	%			
	937 - Mn	ppm			
	938 - Mo	ppm			
	939 - Na	%			
	940 - Ni	ppm			
	941 - P	ppm			
	942 - Pb	ppm			
	943 - Sb	ppm			
	944 - Sr	ppm			
	945 - Ti	%			
	946 - Tl	ppm			
	947 - U	ppm			
	948 - V	ppm			
	949 - W	ppm			
	950 - Zn	ppm		6.50	1007.50
Sample preparation and other charges :					
155	207 - Assay - PULVERIZE			3.75	581.25
155	238 - ICP aqua-regia digestion			0.00	0.00

TOTAL \$ 1588.75

Please pay this amount ----> \$ 1588.75

NET 30 DAYS

18 % per month (18 % per annum) charged on overdue accounts



# Chemex Labs Ltd.

212 Brooksbank Ave.  
North Vancouver, B.C.  
Canada V7J 2C1

• Analytical Chemists • Geochemists • Registered Assayers

Phone: (604) 984-0221  
Telex: 043-52597

\*\*\* INVOICE \*\*\*

TO : VAULT EXPLORATIONS INCORPORATED

\*\* Invoice # : I8622700

204 - 347 LEON AVE.  
KELOWNA, BC  
V1Y 8C7

Date : 12-JAN-87  
P.O. # : NONE  
Project

Invoice for analytical work reported on certificate(s) A8622700-001

quantity	code	description	unit	price	amount
38	398 - Au		oz/T	7.75	294.50

Sample preparation and other charges :

38	214 -	Received as pulp		0.00	0.00
----	-------	------------------	--	------	------

TOTAL \$ 294.50

Please pay this amount ----> \$ 294.50

5 -- NET 30 DAYS

5 % per month (18 % per annum) charged on overdue accounts



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

212 BROOKSBANK AVE., NORTH VANCOUVER,

BRITISH COLUMBIA, CANADA V7J-1C1

PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622099

To: \*\*VAULT EXPLORATIONS INCORPORATED

Page No. : i-A

Tot. Pages: 4

Date : 21-JAN-87

Invoice #: I-8622600

P.O. #: NONE

204 - 347 LEON AVE.

KELOWNA, BC

V1Y 8C7

Project :

Comments: ATTN: M HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mb ppm	Na %
16751	207 238	0.69	0.2	15	610	< 0.5	4	10.80	< 0.5	16	12	39	3.63	< 10	0.27	< 10	0.67	695	< 1	0.02
16752	207 238	0.49	0.2	45	290	< 0.5	2	12.55	< 0.5	18	9	37	3.25	< 10	0.13	< 10	0.84	762	< 1	0.02
16753	207 238	0.50	0.2	50	100	< 0.5	4	13.85	< 0.5	21	9	39	3.14	< 10	0.15	< 10	1.18	770	< 1	0.02
16754	207 238	1.35	0.2	10	330	< 0.5	< 2	10.60	< 0.5	16	17	33	4.07	< 10	0.27	< 10	0.94	743	< 1	0.04
16755	207 238	0.53	0.2	30	270	< 0.5	2	14.05	< 0.5	19	10	20	3.02	< 10	0.18	< 10	0.84	705	< 1	0.02
16801	207 238	1.27	0.2	5	750	< 0.5	< 2	2.78	< 0.5	19	99	22	4.43	< 10	0.15	< 10	3.42	687	< 1	0.02
16802	207 238	0.78	0.2	10	730	< 0.5	< 2	4.76	< 0.5	32	202	24	4.38	< 10	0.14	< 10	4.73	765	< 1	< 0.01
16803	207 238	0.66	0.2	< 5	240	< 0.5	< 2	4.33	< 0.5	32	199	31	4.28	< 10	0.13	< 10	5.43	775	< 1	< 0.01
16804	207 238	0.84	0.2	< 5	120	< 0.5	< 2	5.70	< 0.5	33	309	27	4.16	< 10	0.10	< 10	6.58	832	< 1	< 0.01
16805	207 238	0.69	0.2	5	140	< 0.5	< 2	4.99	< 0.5	33	308	25	3.88	< 10	0.10	< 10	8.45	755	< 1	< 0.01
16806	207 238	1.46	0.2	5	600	< 0.5	< 2	4.39	< 0.5	32	382	24	4.28	< 10	0.06	< 10	7.83	793	< 1	0.01
16807	207 238	1.60	0.2	< 5	1380	< 0.5	< 2	3.39	< 0.5	19	115	22	4.18	< 10	0.24	< 10	3.57	726	< 1	0.04
16808	207 238	1.34	0.2	5	1320	< 0.5	< 2	3.53	< 0.5	20	63	22	4.16	< 10	0.30	< 10	3.13	770	< 1	0.04
16809	207 238	1.32	0.2	15	1070	< 0.5	< 2	4.28	< 0.5	20	75	23	4.05	< 10	0.36	< 10	3.50	740	< 1	0.02
16810	207 238	0.55	0.2	< 5	560	< 0.5	< 2	7.95	< 0.5	33	316	26	3.88	< 10	0.13	< 10	6.09	745	< 1	< 0.01
16811	207 238	0.54	0.2	< 5	120	< 0.5	< 2	7.48	< 0.5	33	320	17	4.11	< 10	0.13	< 10	7.03	726	< 1	< 0.01
16812	207 238	0.69	0.2	< 5	110	< 0.5	< 2	7.23	< 0.5	32	324	17	3.61	< 10	0.10	< 10	7.35	768	< 1	< 0.01
16813	207 238	0.67	0.2	< 5	300	< 0.5	< 2	5.77	< 0.5	33	336	26	3.75	< 10	0.09	< 10	7.87	684	< 1	< 0.01
16814	207 238	1.27	0.2	< 5	590	< 0.5	< 2	5.09	< 0.5	33	462	28	3.77	< 10	0.05	< 10	7.92	701	< 1	< 0.01
16815	207 238	2.26	0.2	10	310	< 0.5	< 2	3.61	< 0.5	49	540	35	4.60	< 10	< 0.01	< 10	9.40	727	< 1	< 0.01
16816	207 238	2.12	0.2	5	290	< 0.5	< 2	4.12	< 0.5	45	499	25	4.28	< 10	< 0.01	< 10	9.65	718	< 1	< 0.01
16817	207 238	2.00	0.2	< 5	330	< 0.5	< 2	3.20	< 0.5	43	459	20	4.38	< 10	0.05	< 10	9.77	741	< 1	0.01
16818	207 238	0.56	0.2	< 5	140	< 0.5	< 2	5.18	< 0.5	33	277	14	3.57	< 10	0.09	< 10	8.81	696	< 1	< 0.01
16819	207 238	0.79	0.2	< 5	440	< 0.5	< 2	4.94	< 0.5	32	263	24	3.94	< 10	0.11	< 10	6.82	730	< 1	0.02
16820	207 238	0.89	0.2	< 5	530	< 0.5	< 2	6.41	< 0.5	33	327	26	3.76	< 10	0.11	< 10	6.89	839	< 1	0.02
16821	207 238	1.51	0.2	< 5	460	< 0.5	< 2	6.17	< 0.5	33	488	35	3.98	< 10	0.10	< 10	7.44	810	< 1	0.01
16822	207 238	1.51	0.2	15	100	< 0.5	< 2	1.74	< 0.5	58	432	24	4.37	< 10	0.19	10	11.55	778	< 1	0.03
16823	207 238	1.67	0.2	20	90	< 0.5	< 2	1.67	< 0.5	68	579	29	4.78	< 10	0.16	10	12.65	830	< 1	0.03
16824	207 238	2.96	0.2	20	840	< 0.5	< 2	1.51	< 0.5	53	486	35	4.94	< 10	0.07	10	10.65	664	< 1	0.05
16825	207 238	1.97	0.2	15	540	< 0.5	< 2	2.06	< 0.5	65	627	30	4.75	< 10	0.07	10	11.35	731	< 1	0.03
16826	207 238	1.76	0.2	25	430	< 0.5	< 2	2.72	< 0.5	65	645	29	4.59	< 10	0.08	< 10	11.10	759	< 1	0.03
16827	207 238	1.42	0.2	5	150	< 0.5	< 2	4.38	< 0.5	57	598	25	4.30	< 10	0.05	< 10	9.63	802	< 1	0.03
16828	207 238	0.82	0.2	35	300	< 0.5	< 2	6.93	< 0.5	45	578	21	4.07	< 10	0.02	< 10	8.14	954	< 1	0.02
16829	207 238	0.65	0.2	75	500	< 0.5	< 2	7.19	< 0.5	45	548	16	4.61	< 10	0.13	< 10	6.23	994	< 1	0.01
16830	207 238	0.72	0.2	55	500	< 0.5	2	3.59	< 0.5	22	200	10	2.78	< 10	0.21	< 10	3.60	628	< 1	0.01
16831	207 238	0.75	0.2	90	490	< 0.5	< 2	2.03	< 0.5	19	151	8	2.30	< 10	0.20	< 10	2.73	396	< 1	0.01
16832	207 238	0.83	0.2	70	500	< 0.5	< 2	4.65	< 0.5	32	265	18	3.47	< 10	0.17	< 10	3.48	738	< 1	0.01
16833	207 238	0.89	0.2	55	410	< 0.5	< 2	5.26	< 0.5	32	309	31	4.57	< 10	0.18	< 10	4.06	989	< 1	0.02
16834	207 238	1.16	0.2	45	470	< 0.5	< 2	5.11	< 0.5	30	321	49	5.66	< 10	0.26	< 10	3.83	1190	< 1	0.02
16835	207 238	0.84	0.2	30	820	< 0.5	< 2	4.55	< 0.5	30	200	81	5.43	< 10	0.33	< 10	3.34	1215	< 1	0.02

CERTIFICATION :

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
 212 BROOKSBANK AVE., NORTH VANCOUVER,  
 BRITISH COLUMBIA, CANADA V7J-2C1  
 PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A862 99

To: \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
 KELOWNA, BC  
 V1Y 8C7

Page No. : 1-B  
 Tot. Pages: 4  
 Date : 21-JAN-87  
 Invoice # : I-8622699  
 P.O. # : NONE

Project :  
 Comments : ATTN: M HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Ti ppm	U ppm	V ppm	W ppm	Zn ppm						
16751	207 238	10	1240	8	< 5	143	< 0.01	< 10	< 10	61	< 5	44						
16752	207 238	13	1070	8	< 5	126	< 0.01	< 10	< 10	69	< 5	38						
16753	207 238	18	1080	< 2	< 5	114	< 0.01	< 10	< 10	59	< 5	36						
16754	207 238	10	1220	6	< 5	131	< 0.01	< 10	< 10	95	< 5	56						
16755	207 238	14	1190	< 2	< 5	113	< 0.01	< 10	< 10	59	< 5	30						
16801	207 238	70	1440	2	< 5	241	< 0.01	< 10	< 10	96	< 5	60						
16802	207 238	330	640	8	< 5	502	< 0.01	< 10	< 10	69	< 5	50						
16803	207 238	391	230	< 2	< 5	476	< 0.01	< 10	< 10	66	< 5	36						
16804	207 238	504	190	2	< 5	608	< 0.01	< 10	< 10	67	< 5	32						
16805	207 238	519	160	< 2	< 5	522	< 0.01	< 10	< 10	65	< 5	24						
16806	207 238	552	520	2	< 5	438	< 0.01	< 10	< 10	80	< 5	30						
16807	207 238	107	1290	6	< 5	280	< 0.01	< 10	< 10	90	< 5	56						
16808	207 238	54	1250	2	< 5	266	< 0.01	< 10	< 10	80	< 5	60						
16809	207 238	84	940	4	< 5	329	< 0.01	< 10	< 10	77	< 5	58						
16810	207 238	416	150	4	< 5	914	< 0.01	< 10	< 10	62	< 5	26						
16811	207 238	447	180	< 2	< 5	933	< 0.01	< 10	< 10	69	< 5	18						
16812	207 238	533	120	8	< 5	1090	< 0.01	< 10	< 10	59	< 5	16						
16813	207 238	568	100	2	< 5	877	< 0.01	< 10	< 10	63	< 5	18						
16814	207 238	602	210	4	< 5	605	< 0.01	< 10	< 10	71	< 5	20						
16815	207 238	716	350	< 2	< 5	437	< 0.01	< 10	< 10	89	< 5	30						
16816	207 238	677	340	< 2	< 5	650	< 0.01	< 10	< 10	86	< 5	24						
16817	207 238	673	340	< 2	< 5	531	< 0.01	< 10	< 10	85	< 5	22						
16818	207 238	476	120	< 2	< 5	561	< 0.01	< 10	< 10	55	< 5	18						
16819	207 238	347	410	< 2	< 5	538	< 0.01	< 10	< 10	67	< 5	28						
16820	207 238	344	380	2	< 5	553	< 0.01	< 10	< 10	71	< 5	24						
16821	207 238	408	420	< 2	< 5	568	< 0.01	< 10	< 10	78	< 5	28						
16822	207 238	867	260	< 2	< 5	215	0.03	< 10	< 10	61	< 5	38						
16823	207 238	945	260	< 2	< 5	275	0.03	< 10	< 10	72	< 5	38						
16824	207 238	511	670	< 2	< 5	251	0.03	< 10	< 10	98	< 5	50						
16825	207 238	792	350	< 2	< 5	258	0.02	< 10	< 10	79	< 5	38						
16826	207 238	847	290	< 2	< 5	355	0.02	< 10	< 10	68	< 5	32						
16827	207 238	758	270	< 2	< 5	536	0.01	< 10	< 10	59	< 5	30						
16828	207 238	580	200	< 2	< 5	696	< 0.01	< 10	< 10	47	< 5	22						
16829	207 238	550	160	< 2	< 5	447	< 0.01	< 10	< 10	52	< 5	28						
16830	207 238	248	280	2	< 5	199	< 0.01	< 10	< 10	27	< 5	20						
16831	207 238	184	280	4	< 5	144	< 0.01	< 10	< 10	20	< 5	18						
16832	207 238	271	360	4	< 5	195	< 0.01	< 10	< 10	56	< 5	38						
16833	207 238	305	450	< 2	< 5	200	< 0.01	< 10	< 10	84	< 5	38						
16834	207 238	265	570	2	< 5	200	< 0.01	< 10	< 10	130	< 5	50						
16835	207 238	190	620	2	< 5	221	< 0.01	< 10	< 10	107	< 5	60						

CERTIFICATION :

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
212 BROOKSBANK AVE. NORTH VANCOUVER,  
BRITISH COLUMBIA, CANADA V7J-2C1  
PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A862 99

To: \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
KELOWNA, BC  
VIY 8C7

Page No. : 2-A  
Tot. Pages: 4  
Date : 21-JAN-87  
Invoice #: I-8622699  
P.O. #: NONE

Project :  
Comments: ATTN: M. HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %
16836	207 238	1.36	0.2	20	560	< 0.5	< 2	5.13	< 0.5	31	304	46	5.03	< 10	0.44	< 10	4.39	1075	< 1	0.03
16837	207 238	1.20	0.2	20	1150	< 0.5	< 2	5.13	< 0.5	29	204	41	4.65	< 10	0.45	< 10	3.86	1000	< 1	0.03
16838	207 238	1.49	0.2	30	1040	< 0.5	< 2	5.00	< 0.5	31	233	55	4.99	< 10	0.43	< 10	4.37	1030	< 1	0.04
16839	207 238	1.30	0.2	20	850	< 0.5	< 2	5.14	< 0.5	31	182	69	4.95	< 10	0.32	< 10	3.97	1030	< 1	0.04
16840	207 238	1.47	0.2	15	920	< 0.5	< 2	5.20	< 0.5	31	190	82	5.26	< 10	0.35	< 10	4.06	1040	< 1	0.04
16841	207 238	1.68	0.2	10	780	< 0.5	< 2	4.58	< 0.5	31	207	82	5.11	< 10	0.31	< 10	4.08	1000	< 1	0.05
16842	207 238	1.78	0.2	20	740	< 0.5	< 2	4.09	< 0.5	31	219	87	5.19	< 10	0.25	< 10	4.12	966	< 1	0.05
16843	207 238	1.90	0.2	20	870	< 0.5	< 2	3.98	< 0.5	30	221	89	5.20	< 10	0.23	< 10	3.92	934	< 1	0.06
16844	207 238	1.86	0.2	80	1740	< 0.5	< 2	4.54	< 0.5	31	275	73	4.91	< 10	0.20	< 10	4.26	935	< 1	0.05
16845	207 238	1.95	0.2	10	510	< 0.5	< 2	2.29	< 0.5	56	586	33	4.65	< 10	0.16	10	9.76	808	< 1	0.08
16846	207 238	1.74	0.2	10	390	< 0.5	< 2	2.56	< 0.5	43	471	35	4.31	< 10	0.17	10	7.88	784	< 1	0.08
16847	207 238	1.87	0.2	< 5	420	< 0.5	< 2	1.59	< 0.5	61	603	32	4.52	< 10	0.34	10	11.40	804	< 1	0.05
16848	207 238	1.76	0.2	< 5	320	< 0.5	< 2	1.58	< 0.5	68	637	32	4.63	< 10	0.23	10	12.30	827	< 1	0.04
16849	207 238	1.96	0.2	20	280	< 0.5	< 2	1.70	< 0.5	69	650	27	4.72	< 10	0.18	10	12.15	820	< 1	0.05
16850	207 238	1.75	0.2	15	250	< 0.5	< 2	3.60	< 0.5	62	764	23	4.41	< 10	0.12	< 10	11.10	892	< 1	0.04
16851	207 238	1.57	0.2	25	570	< 0.5	< 2	3.97	< 0.5	41	414	19	3.91	< 10	0.20	< 10	6.22	890	< 1	0.04
16852	207 238	1.77	0.2	10	530	< 0.5	< 2	4.12	< 0.5	45	501	23	4.22	< 10	0.21	< 10	7.70	871	< 1	0.04
16853	207 238	1.57	0.2	20	440	< 0.5	< 2	3.80	< 0.5	58	709	35	4.34	< 10	0.06	< 10	9.23	800	< 1	0.04
16854	207 238	1.23	0.2	10	490	< 0.5	< 2	5.84	< 0.5	45	629	26	4.03	< 10	0.08	< 10	7.81	954	< 1	0.03
16855	207 238	0.93	0.2	40	590	< 0.5	< 2	6.82	< 0.5	46	529	26	3.74	< 10	0.14	< 10	6.07	1010	< 1	0.03
16856	207 238	1.38	0.2	35	490	< 0.5	< 2	5.06	< 0.5	34	426	16	3.30	< 10	0.23	< 10	5.35	824	< 1	0.03
16857	207 238	1.41	0.2	25	450	< 0.5	< 2	5.16	< 0.5	31	357	21	3.23	< 10	0.23	< 10	5.09	858	< 1	0.03
16858	207 238	1.39	0.2	20	750	< 0.5	< 2	6.12	< 0.5	32	290	44	4.12	< 10	0.29	< 10	5.47	962	< 1	0.03
16859	207 238	1.18	0.2	35	690	< 0.5	< 2	5.61	< 0.5	28	222	33	3.68	< 10	0.23	< 10	4.87	909	< 1	0.03
16860	207 238	1.93	0.2	25	740	< 0.5	< 2	5.23	< 0.5	31	287	42	4.85	< 10	0.32	< 10	5.30	1000	< 1	0.04
16861	207 238	2.30	0.2	20	1140	< 0.5	< 2	5.07	< 0.5	31	309	56	5.01	< 10	0.39	< 10	5.54	1050	< 1	0.05
16862	207 238	2.22	0.2	20	1300	< 0.5	< 2	4.83	< 0.5	31	286	56	4.89	< 10	0.22	< 10	5.00	940	< 1	0.07
16863	207 238	1.89	0.2	15	1130	< 0.5	< 2	5.19	1.0	32	233	49	4.57	< 10	0.41	< 10	4.57	922	< 1	0.05
16864	207 238	1.31	0.2	25	910	< 0.5	< 2	5.12	< 0.5	32	248	45	4.37	< 10	0.26	< 10	4.76	969	< 1	0.04
16865	207 238	1.20	0.2	55	880	< 0.5	< 2	5.14	0.5	32	274	55	4.77	< 10	0.26	< 10	4.80	1055	< 1	0.04
16866	207 238	1.40	0.2	30	1030	< 0.5	< 2	5.39	0.5	31	283	69	4.68	< 10	0.36	< 10	4.82	1110	< 1	0.04
16867	207 238	2.30	0.2	< 5	90	< 0.5	< 2	6.64	< 0.5	25	43	91	4.92	< 10	0.29	< 10	1.62	1125	< 1	0.01
16868	207 238	2.15	0.2	< 5	180	< 0.5	< 2	6.38	< 0.5	23	32	92	4.76	< 10	0.26	< 10	1.03	955	< 1	0.01
16869	207 238	2.01	0.2	< 5	550	< 0.5	< 2	7.66	< 0.5	22	38	74	4.25	10	0.14	< 10	1.29	965	< 1	0.12
16870	207 238	0.86	0.2	< 5	1090	< 0.5	< 2	7.35	< 0.5	18	24	74	4.56	< 10	0.14	< 10	2.14	1030	< 1	0.02
16871	207 238	1.53	0.2	< 5	480	< 0.5	< 2	8.30	< 0.5	20	36	72	4.31	10	0.14	< 10	1.60	1020	< 1	0.03
16872	207 238	1.33	0.2	< 5	80	< 0.5	< 2	11.20	< 0.5	17	31	43	3.62	10	0.10	< 10	1.42	903	< 1	0.03
16873	207 238	2.29	0.2	< 5	190	< 0.5	< 2	6.87	< 0.5	17	37	78	4.38	< 10	0.22	< 10	1.51	850	< 1	0.03
16874	207 238	1.10	0.2	< 5	240	< 0.5	< 2	10.85	< 0.5	21	36	56	4.99	10	0.10	< 10	1.47	1195	< 1	0.02
16875	207 238	1.09	0.2	< 5	150	< 0.5	< 2	9.55	< 0.5	17	29	37	3.94	10	0.07	< 10	2.08	1005	< 1	0.03

CERTIFICATION : Hart Buchler





# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers  
 212 BROOKSBANK AVE. NORTH VANCOUVER,  
 BRITISH COLUMBIA, CANADA V7J-2C1  
 PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622 99

To: \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
 KELOWNA, BC  
 V1Y 8C7

Page No. : 2-B  
 Tot. Pages: 4  
 Date : 21-JAN-87  
 Invoice #: I-8622699  
 P.O. #: NONE

Project  
 Comments: ATTN: M HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm						
16836	207 238	268	770	6	5	305	< 0.01	< 10	< 10	95	< 5	56						
16837	207 238	185	930	4	5	291	< 0.01	< 10	< 10	87	< 5	54						
16838	207 238	212	810	2	5	289	< 0.01	< 10	< 10	106	< 5	50						
16839	207 238	166	890	4	< 5	294	< 0.01	< 10	< 10	117	< 5	50						
16840	207 238	166	970	< 2	< 5	281	< 0.01	< 10	< 10	122	< 5	54						
16841	207 238	175	930	< 2	< 5	268	0.01	< 10	< 10	131	< 5	50						
16842	207 238	185	950	< 2	< 5	262	0.03	< 10	< 10	142	< 5	50						
16843	207 238	165	990	2	< 5	276	0.04	< 10	< 10	151	< 5	48						
16844	207 238	202	830	4	< 5	326	0.02	< 10	< 10	133	< 5	46						
16845	207 238	708	710	4	< 5	226	0.13	< 10	< 10	87	< 5	50						
16846	207 238	545	940	< 2	< 5	203	0.16	< 10	< 10	88	< 5	52						
16847	207 238	840	410	< 2	< 5	146	0.06	< 10	< 10	78	< 5	42						
16848	207 238	912	340	< 2	< 5	188	0.05	< 10	< 10	73	< 5	42						
16849	207 238	884	350	< 2	< 5	213	0.05	< 10	< 10	75	< 5	42						
16850	207 238	818	330	2	< 5	295	0.04	< 10	< 10	67	< 5	40						
16851	207 238	436	890	8	< 5	252	0.03	< 10	< 10	56	< 5	48						
16852	207 238	551	760	< 2	< 5	392	0.03	< 10	< 10	62	< 5	48						
16853	207 238	752	360	< 2	< 5	541	0.02	< 10	< 10	60	< 5	38						
16854	207 238	608	410	< 2	< 5	461	0.02	< 10	< 10	55	< 5	38						
16855	207 238	496	400	4	< 5	359	0.01	< 10	< 10	44	< 5	68						
16856	207 238	350	450	8	< 5	292	0.01	< 10	< 10	38	< 5	56						
16857	207 238	315	490	8	< 5	267	0.01	< 10	< 10	41	< 5	50						
16858	207 238	278	650	< 2	< 5	291	0.01	< 10	< 10	63	< 5	48						
16859	207 238	220	580	2	< 5	255	< 0.01	< 10	< 10	53	< 5	40						
16860	207 238	241	710	4	< 5	258	0.01	< 10	< 10	94	< 5	52						
16861	207 238	255	720	8	< 5	270	0.02	< 10	< 10	105	< 5	62						
16862	207 238	214	700	8	< 5	282	0.04	< 10	< 10	124	< 5	62						
16863	207 238	198	620	4	< 5	266	0.02	< 10	< 10	104	< 5	70						
16864	207 238	233	550	4	< 5	257	0.01	< 10	< 10	80	< 5	64						
16865	207 238	248	470	2	< 5	242	0.01	< 10	< 10	86	< 5	68						
16866	207 238	253	540	2	< 5	208	0.01	< 10	< 10	86	< 5	62						
16867	207 238	20	1530	8	< 5	251	< 0.01	< 10	< 10	173	< 5	90						
16868	207 238	18	1620	12	< 5	223	< 0.01	< 10	< 10	167	< 5	88						
16869	207 238	20	1340	24	< 5	278	0.02	< 10	< 10	151	< 5	90						
16870	207 238	14	1290	4	< 5	255	0.01	< 10	< 10	149	< 5	56						
16871	207 238	17	1390	6	< 5	228	< 0.01	< 10	< 10	153	< 5	62						
16872	207 238	15	1250	8	< 5	260	0.01	< 10	< 10	135	< 5	58						
16873	207 238	16	1240	22	< 5	202	< 0.01	< 10	< 10	155	< 5	72						
16874	207 238	19	1190	8	< 5	258	< 0.01	< 10	< 10	166	< 5	80						
16875	207 238	12	930	6	< 5	295	< 0.01	< 10	< 10	147	< 5	62						

CERTIFICATION :

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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

PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622-99

To: \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
KELOWNA BC  
V1Y 8C7

Page No. : 3-A  
Tot. Pages: 4  
Date : 21-JAN-87  
Invoice #: I-8622699  
P.O. #: NONE

Project :  
Comments: ATTN: M. HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %
16876	207 238	1.29	0.2	< 5	170	< 0.5	< 2	9.05	< 0.5	19	31	50	4.03	< 10	0.14	< 10	2.32	992	< 1	0.17
16877	207 238	1.54	0.2	< 5	270	< 0.5	< 2	8.29	< 0.5	20	30	61	4.32	< 10	0.15	< 10	2.08	1035	< 1	0.27
16878	207 238	2.14	0.2	< 5	280	< 0.5	< 2	6.73	< 0.5	22	47	75	5.48	< 10	0.28	< 10	2.06	1180	< 1	0.23
16879	207 238	1.50	0.2	< 5	120	< 0.5	< 2	7.38	< 0.5	22	40	150	4.55	< 10	0.22	< 10	2.13	1065	< 1	0.26
16880	207 238	1.47	0.2	< 5	890	< 0.5	< 2	5.81	< 0.5	23	7	103	4.59	< 10	0.47	< 10	1.83	1135	< 1	0.03
16881	207 238	1.69	0.2	< 5	880	< 0.5	< 2	5.31	< 0.5	20	6	102	4.49	< 10	0.58	< 10	1.66	1115	< 1	0.01
16882	207 238	1.69	0.2	< 5	2310	< 0.5	< 2	6.28	< 0.5	24	6	104	4.92	< 10	0.50	< 10	1.92	1255	< 1	0.01
16883	207 238	1.79	0.2	< 5	560	< 0.5	< 2	5.13	< 0.5	22	5	116	4.94	< 10	0.55	< 10	1.23	1150	< 1	0.02
16884	207 238	1.81	0.2	< 5	570	< 0.5	< 2	5.79	< 0.5	20	5	100	4.99	< 10	0.49	< 10	1.94	1225	< 1	0.02
16885	207 238	1.19	0.2	< 5	150	< 0.5	< 2	4.83	< 0.5	18	9	94	4.19	< 10	0.24	< 10	1.41	1080	< 1	0.01
16886	207 238	0.79	0.2	< 5	80	< 0.5	< 2	5.48	< 0.5	20	10	78	4.39	< 10	0.17	< 10	2.06	1040	< 1	0.03
16887	207 238	0.82	0.2	< 5	70	< 0.5	< 2	7.49	< 0.5	23	12	65	4.70	< 10	0.17	< 10	2.84	1235	< 1	0.03
16888	207 238	1.12	0.2	< 5	690	< 0.5	< 2	5.91	< 0.5	22	12	92	4.68	< 10	0.25	< 10	2.01	1245	< 1	0.03
16889	207 238	0.95	0.2	< 5	710	< 0.5	< 2	5.86	< 0.5	21	10	96	4.52	< 10	0.23	< 10	1.99	1180	< 1	0.03
16890	207 238	0.96	0.2	< 5	650	< 0.5	< 2	6.42	< 0.5	22	12	104	4.94	< 10	0.19	< 10	2.20	1255	< 1	0.03
16891	207 238	1.42	0.2	< 5	630	< 0.5	< 2	5.49	< 0.5	20	11	92	4.41	< 10	0.25	< 10	1.87	1140	< 1	0.03
16892	207 238	1.61	0.2	< 5	560	< 0.5	< 2	4.29	1.0	17	6	87	3.84	< 10	0.25	< 10	1.46	971	< 1	0.03
16893	207 238	1.28	0.2	< 5	520	< 0.5	< 2	6.36	0.5	21	10	82	4.63	< 10	0.25	< 10	2.20	1275	< 1	0.03
16894	207 238	1.23	0.2	< 5	580	< 0.5	< 2	7.03	< 0.5	23	11	97	4.63	< 10	0.20	< 10	2.48	1255	< 1	0.04
16895	207 238	1.43	0.2	< 5	610	< 0.5	< 2	5.17	< 0.5	21	12	109	4.39	< 10	0.26	< 10	1.83	1085	< 1	0.05
16896	207 238	1.17	0.2	< 5	490	< 0.5	< 2	5.30	< 0.5	20	11	100	4.33	< 10	0.26	< 10	1.86	1075	< 1	0.05
16897	207 238	1.10	0.2	< 5	420	< 0.5	< 2	5.66	0.5	24	12	119	5.08	< 10	0.23	< 10	2.06	1225	< 1	0.04
16898	207 238	1.30	0.2	< 5	680	< 0.5	< 2	5.23	< 0.5	26	16	134	5.28	< 10	0.26	< 10	2.03	1265	< 1	0.04
16899	207 238	1.31	0.2	< 5	490	< 0.5	< 2	5.04	0.5	25	14	145	5.01	< 10	0.28	< 10	1.88	1195	< 1	0.03
16900	207 238	1.20	0.2	< 5	440	< 0.5	< 2	4.67	0.5	24	14	132	4.96	< 10	0.26	< 10	1.73	1130	< 1	0.04
16901	207 238	1.30	0.2	< 5	440	< 0.5	< 2	4.75	< 0.5	24	16	138	4.92	< 10	0.24	< 10	1.79	1105	< 1	0.06
16902	207 238	0.88	0.2	< 5	440	< 0.5	< 2	5.31	< 0.5	22	13	115	4.64	< 10	0.20	< 10	1.97	1090	< 1	0.04
16903	207 238	0.76	0.2	< 5	690	< 0.5	< 2	5.85	< 0.5	23	16	107	4.85	< 10	0.20	< 10	2.17	1150	< 1	0.03
16904	207 238	0.80	0.2	< 5	650	< 0.5	< 2	5.53	0.5	23	16	118	4.80	< 10	0.19	< 10	2.03	1125	< 1	0.03
16905	207 238	1.14	0.2	< 5	760	< 0.5	< 2	6.01	< 0.5	24	18	153	5.03	< 10	0.20	< 10	2.21	1185	< 1	0.03
16906	207 238	1.63	0.2	< 5	160	< 0.5	< 2	5.38	0.5	24	31	96	5.07	< 10	0.18	< 10	1.84	1150	< 1	0.04
16907	207 238	2.26	0.2	< 5	170	< 0.5	< 2	7.31	< 0.5	29	42	114	5.81	< 10	0.21	< 10	2.53	1375	< 1	0.03
16908	207 238	1.79	0.2	< 5	370	< 0.5	< 2	6.77	< 0.5	29	39	116	5.13	< 10	0.20	< 10	2.00	1305	< 1	0.03
16909	207 238	1.37	0.2	< 5	610	< 0.5	< 2	6.53	< 0.5	28	32	125	5.65	< 10	0.21	< 10	2.35	1445	< 1	0.04
16910	207 238	2.11	0.2	< 5	930	< 0.5	< 2	6.63	< 0.5	29	35	123	5.25	< 10	0.19	< 10	2.02	1220	< 1	0.18
16911	207 238	1.39	0.2	< 5	810	< 0.5	< 2	7.27	< 0.5	27	30	119	5.14	< 10	0.17	< 10	2.39	1250	< 1	0.04
16912	207 238	1.62	0.2	< 5	730	< 0.5	< 2	5.96	< 0.5	27	28	147	5.63	< 10	0.21	< 10	2.19	1265	< 1	0.02
16913	207 238	1.24	0.2	< 5	630	< 0.5	< 2	5.20	< 0.5	22	17	69	4.85	< 10	0.25	< 10	1.92	1165	< 1	0.03
16914	207 238	1.27	0.2	< 5	1930	< 0.5	< 2	5.46	< 0.5	21	16	59	4.70	< 10	0.23	< 10	1.95	1140	< 1	0.03
16915	207 238	1.10	0.2	< 5	1600	< 0.5	< 2	6.53	< 0.5	23	15	82	4.63	< 10	0.19	< 10	2.44	1140	< 1	0.02

CERTIFICATION : Hart Buchler



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

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PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622 19

To: \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
KELOWNA, BC  
V1Y 8C7

Page No. : 3-B  
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Date : 21-JAN-87  
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Project :  
Comments: ATTN: M. HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm						
16876	207 238	14	1030	6	< 5	296	0.02	< 10	< 10	142	< 5	64						
16877	207 238	15	1130	8	< 5	243	0.03	< 10	< 10	155	< 5	66						
16878	207 238	17	1190	6	< 5	334	0.12	< 10	< 10	196	< 5	74						
16879	207 238	17	1220	4	< 5	233	0.11	< 10	< 10	177	< 5	56						
16880	207 238	5	1460	10	< 5	141	< 0.01	< 10	< 10	135	< 5	66						
16881	207 238	4	1420	4	< 5	108	< 0.01	< 10	< 10	148	< 5	56						
16882	207 238	5	1400	6	< 5	171	< 0.01	< 10	< 10	161	< 5	62						
16883	207 238	4	1580	8	< 5	128	< 0.01	< 10	< 10	179	< 5	62						
16884	207 238	2	1410	6	< 5	156	< 0.01	< 10	< 10	188	< 5	50						
16885	207 238	3	1240	< 2	< 5	120	< 0.01	< 10	< 10	158	< 5	46						
16886	207 238	7	1210	6	< 5	95	< 0.01	< 10	< 10	162	< 5	54						
16887	207 238	7	1090	6	< 5	121	< 0.01	< 10	< 10	171	< 5	64						
16888	207 238	7	1220	6	< 5	139	0.01	< 10	< 10	174	< 5	56						
16889	207 238	5	1150	4	< 5	128	< 0.01	< 10	< 10	167	< 5	54						
16890	207 238	7	1200	6	< 5	135	< 0.01	< 10	< 10	194	< 5	64						
16891	207 238	7	1080	< 2	< 5	131	0.01	< 10	< 10	170	< 5	54						
16892	207 238	2	1020	< 2	< 5	159	0.02	< 10	< 10	126	< 5	48						
16893	207 238	7	1090	8	< 5	140	0.01	< 10	< 10	171	< 5	56						
16894	207 238	6	1070	8	< 5	137	< 0.01	< 10	< 10	167	< 5	62						
16895	207 238	7	1110	4	< 5	124	0.01	< 10	< 10	157	< 5	58						
16896	207 238	6	1120	4	< 5	117	0.01	< 10	< 10	163	< 5	58						
16897	207 238	8	1120	6	< 5	115	0.01	< 10	< 10	187	< 5	84						
16898	207 238	10	1150	8	< 5	115	0.01	< 10	< 10	189	< 5	96						
16899	207 238	8	1150	6	< 5	106	< 0.01	< 10	< 10	186	< 5	64						
16900	207 238	10	1270	6	< 5	132	0.01	< 10	< 10	180	< 5	62						
16901	207 238	11	1290	8	< 5	143	0.02	< 10	< 10	182	< 5	64						
16902	207 238	8	1200	4	< 5	131	0.01	< 10	< 10	171	< 5	56						
16903	207 238	13	1170	2	< 5	131	0.01	< 10	< 10	178	< 5	92						
16904	207 238	11	1140	4	< 5	120	0.01	< 10	< 10	179	< 5	72						
16905	207 238	13	1170	2	< 5	122	< 0.01	< 10	< 10	196	< 5	64						
16906	207 238	11	1230	4	< 5	209	0.07	< 10	< 10	214	< 5	60						
16907	207 238	13	1600	8	< 5	305	0.03	< 10	< 10	236	< 5	66						
16908	207 238	16	1310	2	< 5	244	0.03	< 10	< 10	205	< 5	70						
16909	207 238	15	1320	8	< 5	281	0.02	< 10	< 10	212	< 5	64						
16910	207 238	15	1220	2	< 5	326	0.06	< 10	< 10	203	< 5	66						
16911	207 238	10	860	8	< 5	274	0.02	< 10	< 10	205	< 5	58						
16912	207 238	13	1010	10	< 5	160	0.01	< 10	< 10	227	< 5	70						
16913	207 238	10	1120	2	< 5	130	0.02	< 10	< 10	186	< 5	66						
16914	207 238	8	1060	4	< 5	154	0.01	< 10	< 10	175	< 5	64						
16915	207 238	9	1010	8	< 5	175	0.01	< 10	< 10	173	< 5	68						

CERTIFICATION :

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists \* Geochemists \* Registered Assayers

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

PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A862-699

To: \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
KELOWNA, BC  
VIY 8C7

Page No. : 4-A  
Tot. Pages: 4  
Date : 21-JAN-87  
Invoice # : I-8622699  
P.O. # : NONE

Project :

Comments: ATTN: M. HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Al %	Ag ppm	As ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Ga ppm	K %	La ppm	Mg %	Mn ppm	Mo ppm	Na %
16916	207 238	1.22	0.2	< 5	570	< 0.5	< 2	6.45	< 0.5	25	19	58	4.86	< 10	0.20	< 10	2.65	1100	< 1	0.
16917	207 238	1.35	0.2	< 5	860	< 0.5	< 2	6.65	< 0.5	25	21	63	4.91	< 10	0.19	< 10	2.37	1100	< 1	0.
16918	207 238	1.34	0.2	< 5	520	< 0.5	< 2	6.41	< 0.5	24	21	63	4.88	< 10	0.17	< 10	2.45	1085	< 1	0.
16919	207 238	1.16	0.2	< 5	1280	< 0.5	< 2	7.17	< 0.5	23	25	57	4.68	< 10	0.14	< 10	2.59	1075	< 1	0.
16920	207 238	1.32	0.2	< 5	570	< 0.5	< 2	6.64	< 0.5	26	25	71	5.42	< 10	0.23	< 10	2.74	1205	< 1	0.
16921	207 238	1.21	0.2	< 5	610	< 0.5	< 2	6.46	< 0.5	26	30	74	5.35	< 10	0.22	< 10	2.56	1160	< 1	0.
16922	207 238	1.46	0.2	< 5	970	< 0.5	< 2	6.20	< 0.5	28	44	85	5.82	< 10	0.18	< 10	2.65	1215	< 1	0.
16923	207 238	1.45	0.2	< 5	1310	< 0.5	< 2	6.64	< 0.5	28	37	63	5.55	< 10	0.17	< 10	2.74	1235	< 1	0.
16924	207 238	1.18	0.2	< 5	960	< 0.5	< 2	5.97	< 0.5	24	26	79	4.84	< 10	0.20	< 10	2.27	1085	< 1	0.
16925	207 238	1.27	0.2	< 5	690	< 0.5	< 2	5.12	< 0.5	24	25	91	4.77	< 10	0.22	< 10	2.05	1045	< 1	0.
16926	207 238	1.75	0.2	< 5	350	< 0.5	< 2	5.83	< 0.5	25	33	101	5.28	< 10	0.39	< 10	2.20	1195	< 1	0.
16927	207 238	2.20	0.2	< 5	360	< 0.5	< 2	6.87	< 0.5	27	32	63	5.39	< 10	0.32	< 10	2.27	1125	< 1	0.
16928	207 238	1.34	0.2	< 5	290	< 0.5	< 2	6.34	< 0.5	27	33	76	5.47	< 10	0.33	< 10	2.15	1180	< 1	0.
16929	207 238	1.38	0.2	< 5	330	< 0.5	< 2	5.33	< 0.5	21	20	99	4.34	< 10	0.26	< 10	2.05	1080	< 1	0.
16930	207 238	1.99	0.2	< 5	370	< 0.5	< 2	4.30	< 0.5	25	26	114	5.36	< 10	0.31	< 10	1.77	1120	< 1	0.
16931	207 238	1.01	0.2	< 5	70	< 0.5	< 2	8.56	< 0.5	25	25	118	4.87	< 10	0.21	< 10	2.84	1165	< 1	0.
16932	207 238	1.52	0.2	< 5	700	< 0.5	< 2	5.61	< 0.5	25	26	104	5.04	< 10	0.33	< 10	1.94	1220	< 1	0.
16933	207 238	1.21	0.2	< 5	460	< 0.5	< 2	5.95	< 0.5	23	26	88	4.87	< 10	0.33	< 10	2.10	1170	< 1	0.
16934	207 238	1.05	0.2	45	110	< 0.5	< 2	6.45	< 0.5	24	29	128	5.15	< 10	0.21	< 10	1.28	1005	< 1	0.
16935	207 238	1.31	0.2	35	210	< 0.5	< 2	8.22	< 0.5	24	38	112	4.75	< 10	0.18	< 10	2.29	1040	< 1	0.
16936	207 238	1.13	0.2	< 5	660	< 0.5	< 2	6.48	< 0.5	24	40	108	4.75	< 10	0.29	< 10	2.32	1015	< 1	0.
16937	207 238	1.29	0.2	< 5	1180	< 0.5	< 2	6.00	< 0.5	23	41	101	4.81	< 10	0.28	< 10	2.20	1015	< 1	0.
16938	207 238	0.88	0.2	10	430	< 0.5	< 2	6.10	< 0.5	24	24	111	4.93	< 10	0.19	< 10	2.18	995	< 1	0.
16939	207 238	1.24	0.2	15	300	< 0.5	< 2	6.15	< 0.5	21	23	101	4.32	< 10	0.21	< 10	2.12	905	< 1	0.
16940	207 238	1.61	0.2	35	120	< 0.5	< 2	5.51	< 0.5	22	25	120	4.42	< 10	0.14	< 10	2.02	906	< 1	0.
16941	207 238	1.76	0.2	35	90	< 0.5	< 2	6.24	< 0.5	21	24	112	4.51	< 10	0.17	< 10	2.40	937	< 1	0.
16942	207 238	1.65	0.2	15	320	< 0.5	< 2	6.32	< 0.5	23	28	101	4.83	< 10	0.23	< 10	2.34	1050	< 1	0.
16943	207 238	2.03	0.2	35	230	< 0.5	< 2	5.67	< 0.5	22	27	114	4.72	< 10	0.15	< 10	2.13	969	< 1	0.
16944	207 238	1.65	0.2	35	120	< 0.5	< 2	6.06	< 0.5	22	32	115	4.66	< 10	0.06	< 10	2.33	1010	< 1	0.
16945	207 238	2.06	0.2	25	100	< 0.5	< 2	7.02	< 0.5	23	41	105	4.83	< 10	0.07	< 10	2.57	1060	< 1	0.
16946	207 238	1.95	0.2	15	90	< 0.5	< 2	7.19	< 0.5	23	41	91	4.86	< 10	0.08	< 10	2.67	1055	< 1	0.
16947	207 238	1.82	0.2	5	170	< 0.5	< 2	7.10	< 0.5	24	32	85	4.93	< 10	0.25	< 10	2.52	1145	< 1	0.
16948	207 238	1.63	0.2	< 5	250	< 0.5	< 2	5.53	< 0.5	23	26	82	4.65	< 10	0.20	< 10	2.16	1095	< 1	0.
16949	207 238	1.73	0.2	10	840	< 0.5	< 2	6.94	< 0.5	22	39	117	5.14	< 10	0.53	< 10	1.07	1310	< 1	0.
16950	207 238	0.89	0.2	90	550	< 0.5	< 2	10.20	< 0.5	25	17	30	4.60	10	0.25	< 10	0.98	1075	< 1	0.

CERTIFICATION :

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

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

PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622 19

To \*\*VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
KELOWNA, BC  
VIY 8C7

Page No. : 4-B

Tot. Pages: 4

Date : 21-JAN-87

Invoice # : I-8622699

P.O. # : NONE

Project :

Comments: ATTN: M. HAMELIN

SAMPLE DESCRIPTION	PREP CODE	Ni ppm	P ppm	Pb ppm	Sb ppm	Sr ppm	Ti %	Tl ppm	U ppm	V ppm	W ppm	Zn ppm						
16916	207 238	14	820	8	< 5	165	0.01	< 10	< 10	192	< 5	62						
16917	207 238	13	880	2	< 5	175	0.01	< 10	< 10	177	< 5	64						
16918	207 238	14	880	6	< 5	164	0.01	< 10	< 10	186	< 5	58						
16919	207 238	16	690	6	< 5	198	0.01	< 10	< 10	164	< 5	72						
16920	207 238	17	930	10	< 5	164	0.01	< 10	< 10	208	< 5	64						
16921	207 238	18	1030	14	< 5	160	0.01	< 10	< 10	211	< 5	72						
16922	207 238	24	1100	8	< 5	151	0.01	< 10	< 10	221	< 5	78						
16923	207 238	14	1040	10	< 5	144	0.01	< 10	< 10	225	< 5	72						
16924	207 238	15	990	6	< 5	122	0.01	< 10	< 10	191	< 5	72						
16925	207 238	13	1060	6	< 5	117	0.01	< 10	< 10	176	< 5	64						
16926	207 238	15	1440	10	< 5	181	0.03	< 10	< 10	202	< 5	60						
16927	207 238	12	1420	8	< 5	286	0.06	< 10	< 10	213	< 5	56						
16928	207 238	18	1370	6	< 5	175	0.02	< 10	< 10	218	< 5	60						
16929	207 238	11	930	4	< 5	152	0.02	< 10	< 10	150	< 5	54						
16930	207 238	15	1190	4	< 5	170	0.04	< 10	< 10	199	< 5	62						
16931	207 238	11	1010	8	< 5	172	0.01	< 10	< 10	181	< 5	56						
16932	207 238	14	1200	6	< 5	138	0.01	< 10	< 10	169	< 5	62						
16933	207 238	12	1100	6	< 5	137	0.01	< 10	< 10	153	< 5	56						
16934	207 238	19	1360	8	< 5	152	< 0.01	< 10	< 10	113	< 5	72						
16935	207 238	13	1150	8	< 5	189	< 0.01	< 10	< 10	146	< 5	64						
16936	207 238	13	1140	4	< 5	208	< 0.01	< 10	< 10	122	< 5	58						
16937	207 238	13	1130	4	< 5	216	< 0.01	< 10	< 10	135	< 5	56						
16938	207 238	16	900	6	< 5	178	< 0.01	< 10	< 10	124	< 5	64						
16939	207 238	12	1010	4	< 5	172	< 0.01	< 10	< 10	115	< 5	58						
16940	207 238	11	790	2	< 5	147	< 0.01	< 10	< 10	142	< 5	62						
16941	207 238	11	900	10	< 5	153	< 0.01	< 10	< 10	149	< 5	66						
16942	207 238	13	870	8	< 5	184	< 0.01	< 10	< 10	168	< 5	62						
16943	207 238	18	680	8	< 5	168	< 0.01	< 10	< 10	164	< 5	62						
16944	207 238	19	730	6	10	145	< 0.01	< 10	< 10	163	< 5	64						
16945	207 238	15	700	6	10	172	< 0.01	< 10	< 10	185	< 5	66						
16946	207 238	14	740	4	< 5	167	< 0.01	< 10	< 10	183	< 5	64						
16947	207 238	12	860	8	< 5	148	< 0.01	< 10	< 10	168	< 5	64						
16948	207 238	11	920	6	< 5	122	0.03	< 10	< 10	153	< 5	60						
16949	207 238	12	1260	8	< 5	141	< 0.01	< 10	< 10	123	< 5	86						
16950	207 238	18	1290	6	< 5	117	< 0.01	< 10	< 10	85	< 5	50						

CERTIFICATION :

*Hart Buchler*



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers  
 212 BROOKSBANK AVE., NORTH VANCOUVER.  
 BRITISH COLUMBIA, CANADA V7J-2C1  
 PHONE (604) 984-0221

## CERTIFICATE OF ANALYSIS A8622 0

To: VAULT EXPLORATIONS INCORPORATED

204 - 347 LEON AVE.  
 KELOWNA, BC  
 V1Y 8C7

Page No. : 1  
 Tot. Pages: 1  
 Date : 12-JAN-87  
 Invoice # : I-8622700  
 P.O. # : NONE

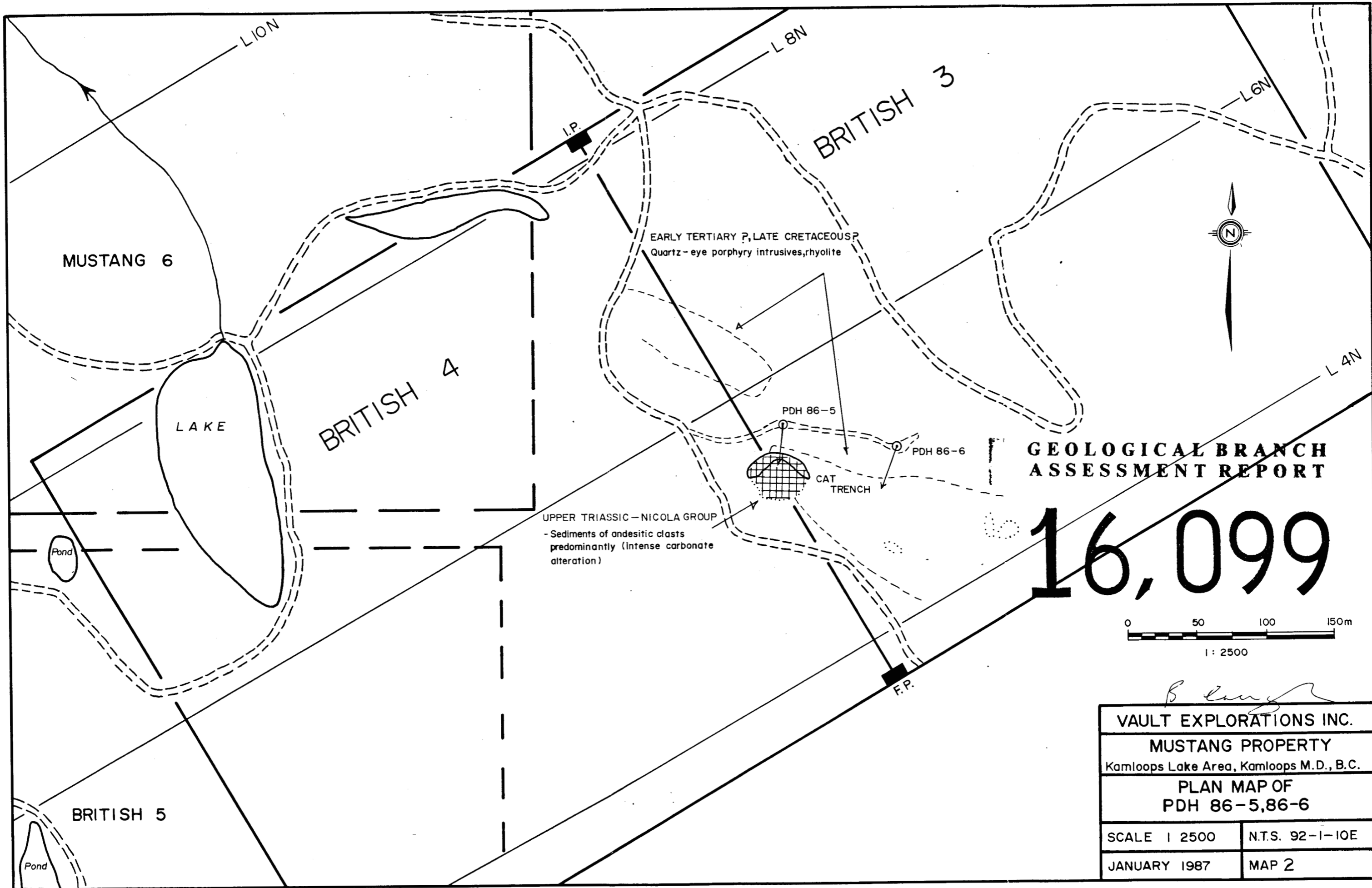
Project :  
 Comments:

SAMPLE DESCRIPTION	PREP CODE	Au oz/T										
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16832	214	---	<< 0.002									
16833	214	---	<< 0.002									
16834	214	---	<< 0.002									
16839	214	---	<< 0.002									
16840	214	---	<< 0.002									
16841	214	---	<< 0.002									
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16853	214	---	<< 0.002									
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16859	214	---	<< 0.002									
16860	214	---	<< 0.002									
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16863	214	---	<< 0.002									
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16895	214	---	<< 0.002									
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16897	214	---	<< 0.002									
16898	214	---	<< 0.002									
16945	214	---	<< 0.002									
16946	214	---	<< 0.002									
16947	214	---	<< 0.002									

ALL ASSAY DETERMINATIONS ARE PERFORMED OR SUPERVISED BY B.C. CERTIFIED ASSAYERS

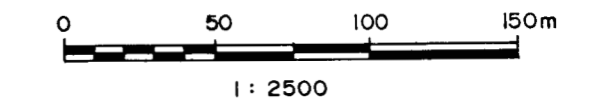
CERTIFICATION :

*P. Swartz*



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,099**



*B. Lang*

VAULT EXPLORATIONS INC.	
MUSTANG PROPERTY	
Kamloops Lake Area, Kamloops M.D., B.C.	
PLAN MAP OF PDH 86-5, 86-6	
SCALE 1:2500	N.T.S. 92-1-10E
JANUARY 1987	MAP 2

B.L. 50W

L 40N

MUSTANG 4

L.C.P.  
L.C.P.

GOLDEN RING 1 M.C.

MUSTANG 5 M.C.



UPPER TRIASSIC-NICOLA GROUP  
Sediments of andesitic clasts predominantly  
- boulder and cobble conglomerates

Intense alteration

angular float

PDH 86-7

MUSTANG 7

# GEOLOGICAL BRANCH ASSESSMENT REPORT

# 16,099

LAKE

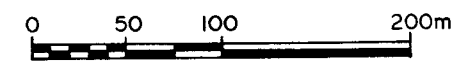
PDH 86-8

UPPER TRIASSIC-NICOLA GROUP  
Sediments of andesitic clasts predominantly  
- boulder and cobble conglomerates

Sediments of basaltic clasts predominantly  
- boulder and cobble conglomerates

LAKE

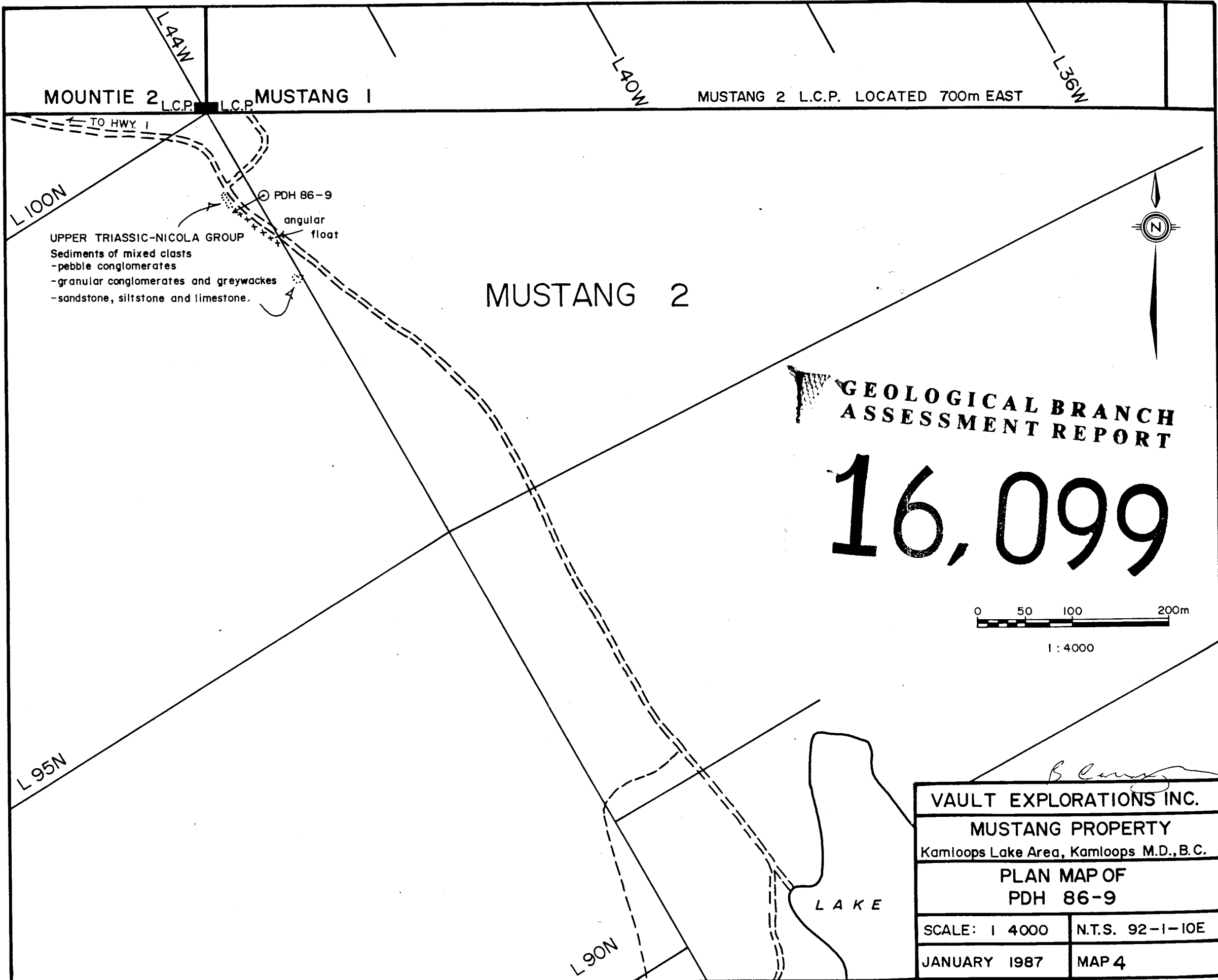
1 KM O.L.



1:4000

VAULT EXPLORATIONS INC.	
MUSTANG PROPERTY	
Kamloops Lake Area, Kamloops M.D., B.C.	
PLAN MAP OF	
PDH 86-7, 86-8	
SCALE 1:4000	N.T.S. 92-1-10E
JANUARY 1987	MAP 3





MOUNTIE 2 L.C.P. MUSTANG 1 L.C.P.

MUSTANG 2 L.C.P. LOCATED 700m EAST

UPPER TRIASSIC-NICOLA GROUP  
Sediments of mixed clasts  
-pebble conglomerates  
-granular conglomerates and greywackes  
-sandstone, siltstone and limestone.

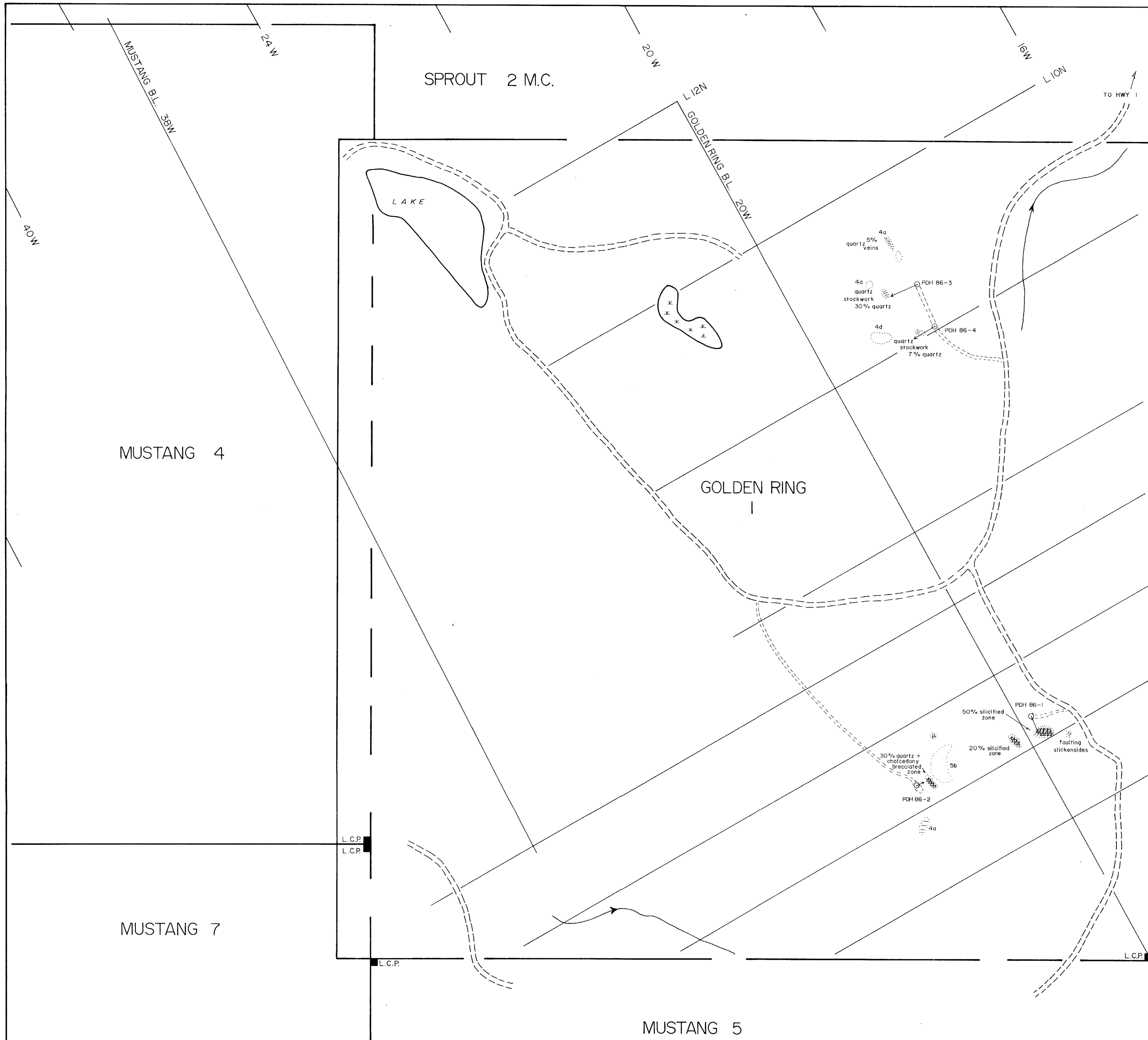
MUSTANG 2

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,099**

0 50 100 200m  
1 : 4000

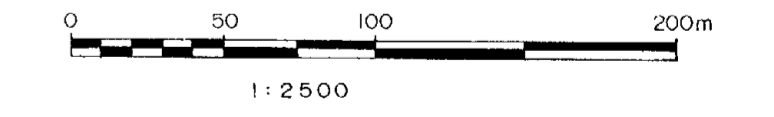
VAULT EXPLORATIONS INC.	
MUSTANG PROPERTY	
Kamloops Lake Area, Kamloops M.D., B.C.	
PLAN MAP OF PDH 86-9	
SCALE: 1 4000	N.T.S. 92-1-10E
JANUARY 1987	MAP 4



- LEGEND**
- EARLY TERTIARY**      **LATE CRETACEOUS**
- 5 Quartz-eye porphyry intrusives, rhyolite
  - 5a felsic dykes with less than 2% quartz eyes
  - 5b highly altered felsic dykes
- UPPER TRIASSIC-NICOLA GROUP**
- 4 Sediments of andesitic clasts predominantly
- Sub units
- a boulder and cobble conglomerates
  - b pebble conglomerates
  - d sandstones
- CARBONATE ALTERATION**
- ||| weak
  - === moderate
  - intense
  - with late quartz veining
- Outcrop
- Roads
- Creeks
- Marshes

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,099**



<b>VAULT EXPLORATIONS INC.</b>		
<b>MUSTANG PROPERTY</b>		
Kamloops Lake Area, Kamloops M.D., B.C.		
<b>PLAN MAP OF</b>		
<b>PDH 86-1,86-2,86-3,86-4</b>		
DRAWN BY S.MALTB	JANUARY 1987	N.T.S. 92-1-10E
<i>S. Malte</i>	SCALE 1:2500	MAP 1