GEOLOGICAL and GEOPHYSICAL ASSESSMENT REPORT

on the

VAULT CLAIM GROUP
OKANAGAN FALLS AREA
OSOYOOS MINING DIVISION

by

MURRAY S. MORRISON, B. Sc.

MINERAL CLAIMS:	Vault 1-13 & Vault 14-18 Fractions (79 units)
LOCATION:	The Vault Claim group is located immediately northwest of Okanagan Falls, B.C. Lat. 49°22′ N; Long. 119°37′ W; N.T.S: Map 82-E-5E
OWNER:	Aqua Regia Minerals Inc.
OPERATOR:	Aqua Regia Minerals Inc.
DATE STARTED:	September 6, 2000
DATE COMPLETED:	March 15, 2001

Kelowna, B.C.

March 31, 2001

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ILLUSTRATIONS

SUMMARY

The Vault gold property covers an area of approximately eighteen square kilometres located immediately northwest of Okanagan Falls, B.C. The central portion of the property was the site of intensive exploration in the 1980's with Riocanex Inc, Dome Exploration Canada Ltd., Seven Mile Resources Inc. and Inco Ltd. each taking a turn at conducting operations.

The Inco Ltd. (60%) and Seven Mile High Resources Inc. (40%) Vault Joint Venture persevered in the late 1980's and after diamond drilling tens of thousands of metres of core and spending in excess of three million dollars, the Joint Venture discovered two deposits of epithermal precious metals on the Vault 1 & 2 mineral claims.

The first discovery was the Central Zone on the Vault 1 mineral claim which contains an estimated geological reserve of approximately 1.3 million tonnes of 2 grams per tonne (gpt) gold. The second discovery was the North Vein on the Vault 2 mineral claim which has a drill indicated reserve of 152,000 tonnes of 14 gpt gold (plus minor silver values) to a depth of 200 metres.

The Vault Claim Group which is comprised of seven modified grid mineral claims and eleven, 2-post or fractional mineral claims is 100% owned by Aqua Regia Minerals Inc. Aqua Regia Minerals Inc. is an offshoot from the original Seven Mile High Resources Inc. In March 2000, Inco Ltd. signed their interests in the property over to Aqua Regia.

Aqua Regia Minerals Inc. financed the work program conducted by the writer which is outlined in this report. The writer staked the original Vault 1 mineral claim in 1982 and has been intermittently involved with the property ever since.

The property covers a portion of the White Lake Tertiary Basin. Three successive formations (Marron, Marama and White Lake) rest unconformably one upon the other on the property. The Marron Formation is comprised predominantly of trachytic flow rocks. The Marama Formation is made up of a lower sequence of mixed volcanoclastics, pyroclastics and

SUMMARY continued

sediments and an upper sequence comprised predominantly of dacitic flows and tuffs. The White Lake Formation is a mix of flow rocks, lahars, and sediments of several compositions.

The rocks are folded into northeasterly plunging synclines and anticlines on the Vault 1 & 4 mineral claims. Late east-west and north-south block faults have segmented the syncline on the Vault 1 mineral claim and successively dropped the most important units of the Lower Marama Formation (i.e. in terms of hosting gold mineralization) to the southeast.

The best gold values at the Central Zone occur within some of the lower units of the Lower Marama Formation. The gold is associated with small quartz veins and silica replacement zones. The North Vein is an epithermal composite quartz/calcite/adularia vein which cuts through the Marron volcanics for over 1100 metres across the Vault 2 mineral claim. The vein extends to at least 400 metres in depth, but averages only 55 cm in width.

Clearly the property hosts two different styles of mineralization, but they are undoubtably related in origin and time. The North Vein represents simple fissure filling by precipitates from multiple phases of epithermal solutions, but the model for the Central Zone is more complex.

The model suggests that epithermal solutions have ascended fissures in the Marron Formation and invaded the Lower Marama Formation. It is believed that the solutions have moved freely through the most permeable units (i.e. lahars and lapilli tuffs), but have dammed up against impervious units (i.e. mudstones or dense flow rocks). Precipitation of silica with gold values occurs where there are abrupt changes in conditions. The brecciation of brittle silicified rocks and the invasion of additional epithermal solutions have upgraded the gold values of the deposit. Inco geologists also recognized vertical zoning at the Central Zone.

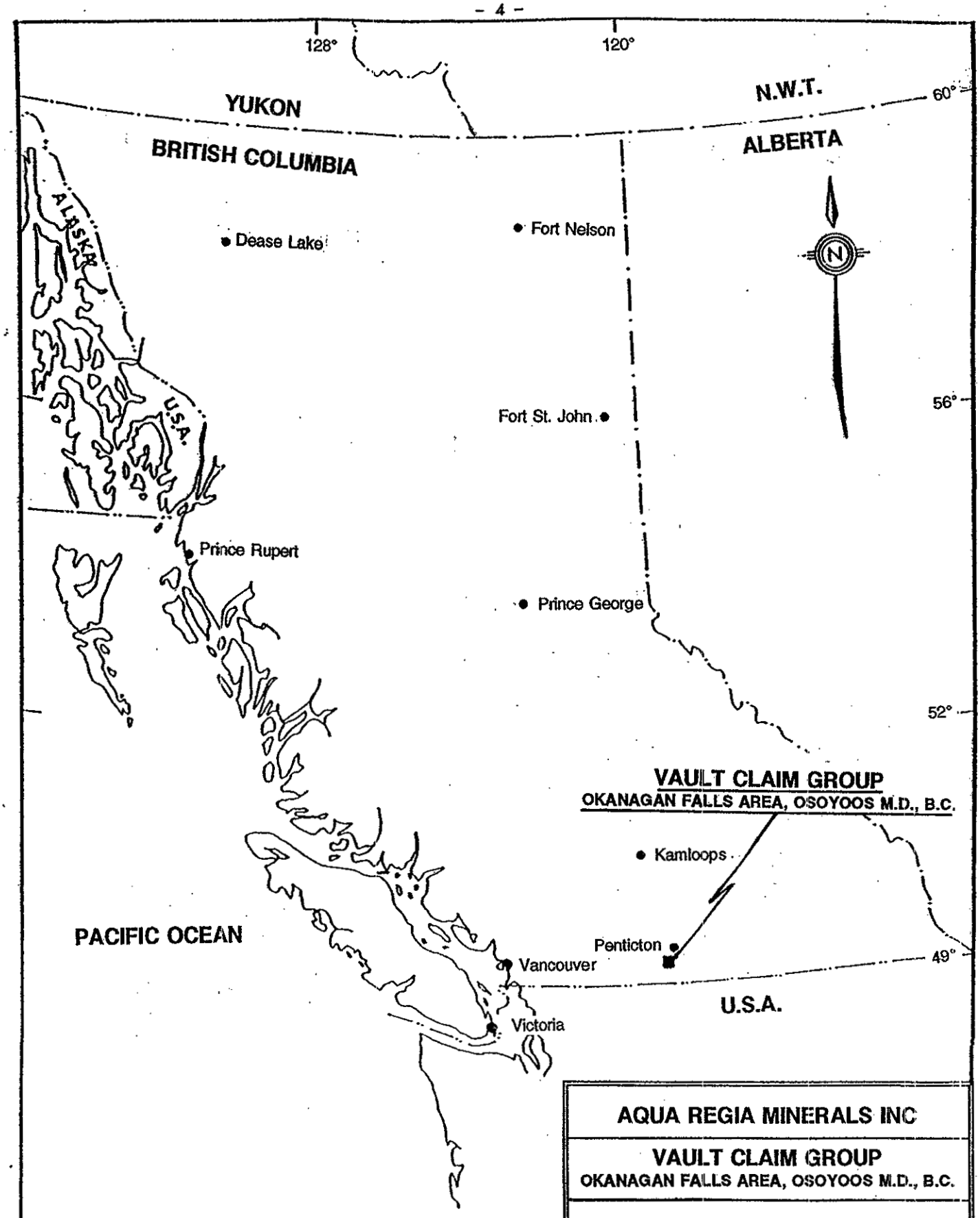
It is believed that the Vault property has the potential to host more veins like the North Vein and/or more zones like the Central Zone and the current exploration program (2000 - 2001)

SUMMARY continued

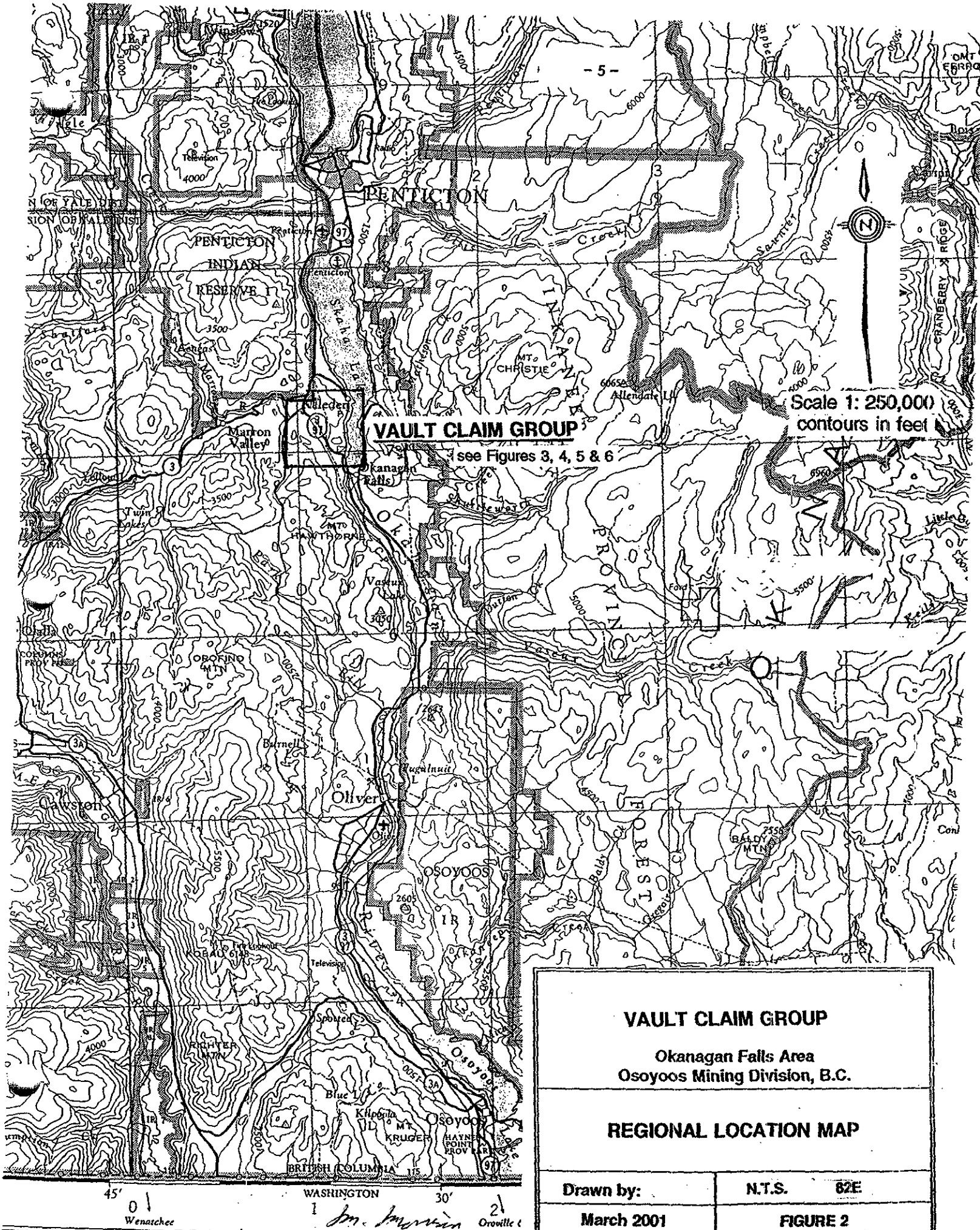
was designed to investigate portions of the property that were largely ignored by earlier workers.

The current program included detailed geological, magnetometer and altimeter surveys conducted on portions of the Vault 1, 4 & 5 mineral claims. Samples of altered and silicified rock were also collected for analyses.

As the current program progressed, it became apparent that the northwest, west and southwest edges of the syncline on the Vault 1 & 4 minerals claims offer the best potential for new gold discoveries. Most of the key rock units of the Lower Marama Formation recognized at the deep Central Zone emerge to surface around the western end of the syncline. Two surface samples which were collected this year from a silica replaced unit within the Lower Marama Formation near the northwest edge of the syncline returned values of 1646 and 5012 parts per billion gold. These samples emphasize the fact that this portion of the property warrants further exploration. Specifically, a program of Reverse Circulation drilling is recommended to test favourable units of the Lower Marama Formation at ten widely separated sites around the northwest, west and southwest edges of the syncline on the Vault 1 & 4 mineral claims. All altered or silicified rocks intercepted should be analyzed for the usual 30 ICP elements, plus gold by standard geochemical methods. It is expected that arsenic, molybdenum and silver, which proved to be effective pathfinder elements for gold mineralization at the Central Zone, will be valuable indicators for the discovery of new gold deposits on the Vault 1 & 4 mineral claims.



AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
LOCATION MAP	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	FIGURE 1



VAULT CLAIM GROUP

Okanagan Falls Area
Osoyoos Mining Division, B.C.

REGIONAL LOCATION MAP

Drawn by:	N.T.S. 82E
March 2001	FIGURE 2

INTRODUCTION

This report, written for government assessment work credits, discusses the results of geological, ground magnetometer and altimeter surveys which were conducted over portions of the Vault 1, 4 & 5 mineral claims by the writer between September 2000 and March 2001.

The work program was financed by Aqua Regia Minerals Inc. of Calgary, Alberta which owns title to the Vault Claim Group.

The Vault Claim Group which lies immediately northwest of Okanagan Falls, B.C. covers 18 square kilometres. The property is comprised of seven modified grid mineral claims and eleven, 2-post and fractional mineral claims.

The original Vault 1 mineral claim was staked by the writer in March, 1982, to cover a silicified gossan zone in Eocene rocks which contained epithermal quartz veins. The potential for an epithermal precious metal deposit was recognized immediately and "Vault" seemed to be an appropriate name for the property.

The property was subsequently optioned to Riocanex Inc. (1982 - 83), Dome Exploration (Canada) Ltd. (1984), Seven Mile High Resources Inc. (1984 - 85) and Inco Ltd. (1986 - 2000). Each company conducted exploration programs with follow-up drilling, but it was not until 1987 that Inco geologists achieved the first significant interception (10.8 grams per tonne gold over 8.36 metres).

The gold interception occurred within volcanoclastic rocks of the Lower Marama Formation on the north-central portion of the Vault 1 mineral claim. The discovery lead to an aggressive drilling program. Between 1987 and 1989 more than 60 deep diamond drill holes were drilled on the new "Central" and "East" Zones underlying the Vault 1 mineral claim by the Vault Joint Venture (Inco Ltd., 60% and Seven Mile High Resources Inc., 40%). A considerable amount of gold was discovered, but a firm reserve figure was never announced, due to the complex geology and the erratic distribution of gold values.

INTRODUCTION continued

In 1989 & 1990, the Vault Joint Venture concentrated exploration efforts on the North Vein, a composite quartz/calcite/adularia vein, which crosses the southern side of the Vault 2 mineral claim for over 1100 metres. The vein, which intrudes trachyte flows of the Marron Formation, was intercepted in over forty diamond drill holds, some of which tested the vein at depths greater than 350 metres. The reserves of the vein are stated to be 152,000 tonnes of 0.14 gpt gold, plus minor silver values.

Very little exploration was conducted on the property between 1991 and 2000.

During the aggressive exploration programs of 1986 - 90, most of the work was conducted over a narrow belt which extends up to 300 metres north and south of the boundary of the Vault 1 & 2 mineral claims. The North Vein, Central Zone and East Zones all occur within the belt. Elsewhere, the property was not explored with the same vigour in spite of apparent favourable geology. The current exploration program is, therefore, designed to evaluate ground lying up to 2 km south and 1 km west of the intensive drill programs of the 1986 - 90 seasons.

The current exploration program is based on the premise that more than one epithermal system occurs on the property. It is believed that there may be more veins like the North Vein and/or there may be more auriferous silica enriched zones like the Central Zone.

The current program involved establishing a tight grid (25 by 50 metres) over the prospective ground. Geological, magnetometer and altimeter surveys were then conducted over the new grid. The geological mapping focused on structure, alteration and mineralization (see Maps V-01-1A & B). The magnetometer survey was designed to outline some of the magnetite-rich volcanic units of the Lower Marama Formation across areas of the property which are covered by drift (see Maps V-01-2A & B). The altimeter survey was considered an important aid for interpreting the geometry of the geology on portions of the property that have very hummocky topography (see Maps V-01-3A & B).

INTRODUCTION continued

Diagrams V-01-4A, B & C illustrate an interpretation of the geology based on the surveys.

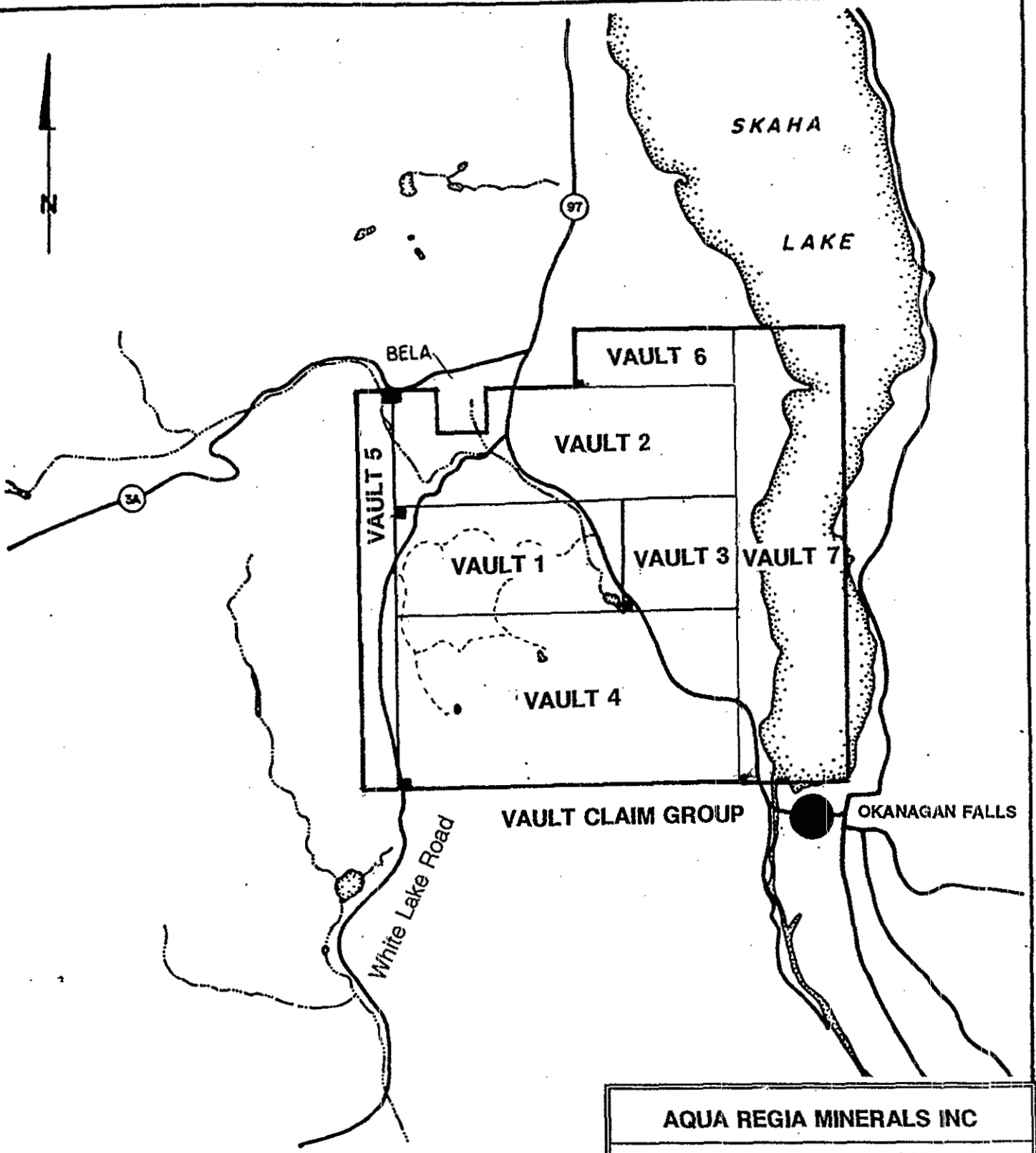
Ten lithogeochemical samples were also collected during the program, and they are described in this report.

Ten proposed drill holes are recommended based on an analysis of all of the data collected during the current program (see Discussion). The proposed drill holes are illustrated on Diagram V-01-4C.

LOCATION AND ACCESS

The Vault Claim Group is located immediately northwest of Okanagan Falls, B.C. (Lat. 49°22′ N; Long. 119°37′ W; N.T.S. 82-E-5E). The main area of exploration lies 4 kilometres northwest of town, or 10 kilometres south of the Penticton Airport.

Highway 97 cuts diagonally through the centre of the property, and the White Lake road crosses the western side of the Claim Group. Several dirt bush roads give access to the main areas of interest on the property as illustrated on Maps V-01-1A & B.



Please see Figure 4 for entire claim group.

■ LEGAL CORNER POSTS

DIRT ROADS

0 1 2 km

SCALE 1:50,000

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
MINERAL CLAIMS AND ACCESS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	FIGURE 3

PHYSICAL FEATURES AND CLIMATE

The Vault Claim Group covers a rocky, hummocky landscape immediately west of the southern end of Skaha Lake in the Okanagan Valley. Elevations range from 339 metres at Skaha Lake to 800 metres on Mount McLellan on the southern edge of the property. The average elevation of the Claim Group is 600 metres.

Much of the northern portion of the property has a light forest of Ponderosa pine, whereas Douglas fir is the more dominant forest species on the southern half of the property. North-facing slopes support a dense growth of Douglas fir. Some of the forest has been selectively logged in recent years.

The property is sometimes used as summer rangeland for cattle and shallow lakes, which are filled by small streams during the spring snow melt, provide adequate drinking water for the livestock.

Sagebrush and prickly-pear cactus grow on exposed southern slopes in the semi-arid region which receives only 40 cm of precipitation annually. Most of the rain occurs during spring and autumn months. Snow begins to accumulate in November and generally melts from the property by late March. The snow cover rarely exceeds 30 cm.

CLAIM STATUS

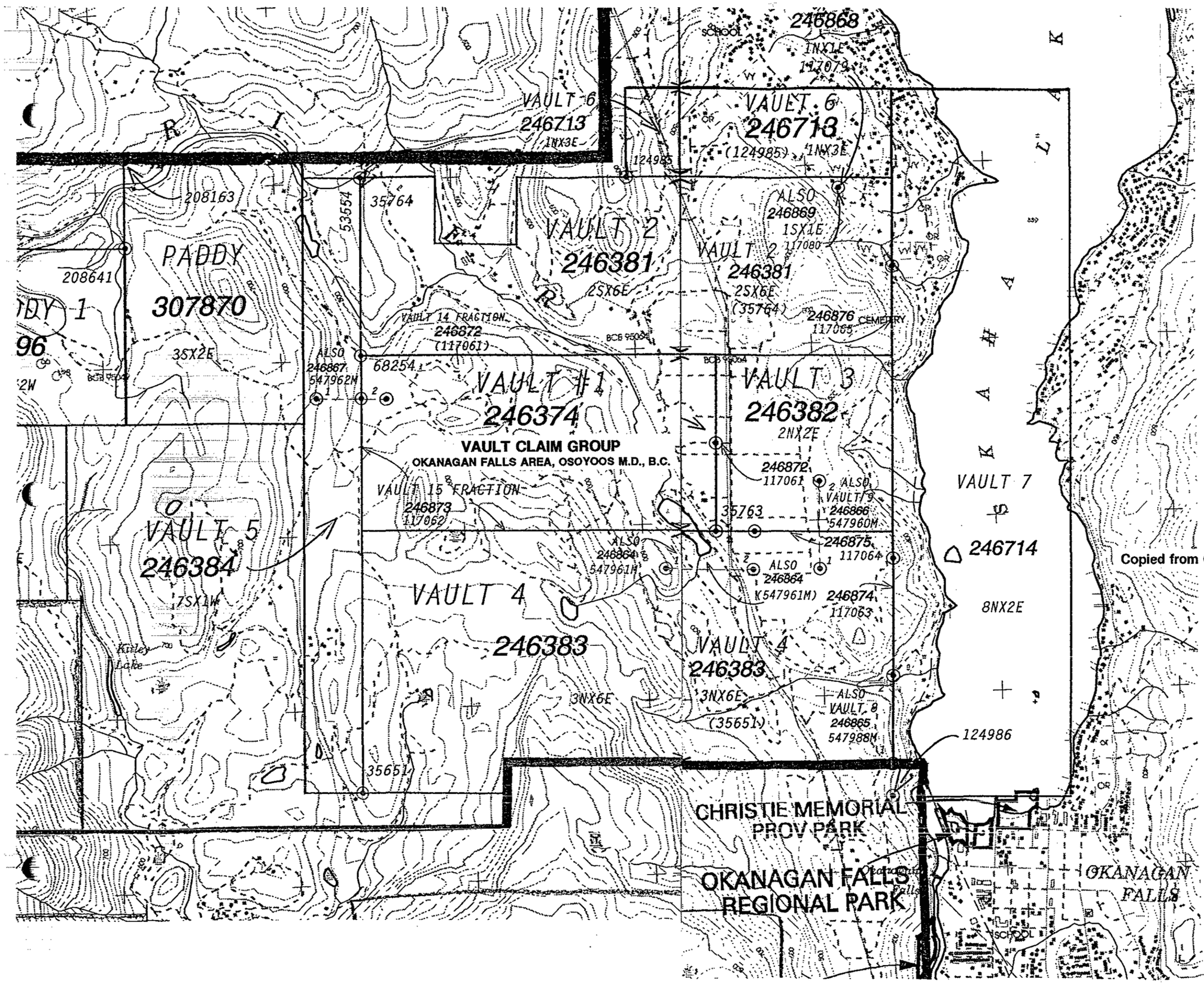
The Vault Claim Group is comprised of seven modified grid mineral claims (68 units) and eleven, 2-post and fractional mineral claims. The mineral claims are contiguous as illustrated on Figure 4.

All of the mineral claims lie within the Osoyoos Mining Division and are owned by Aqua Regia Minerals Inc. of Calgary, Alberta.

Specifics relating to each mineral claim are listed below:

CLAIM NAME	UNITS	TENURE NUMBER	EXPIRY DATE *
Vault 1	8	246374	March 22, 2002
Vault 2	12	246381	March 22, 2002
Vault 3	4	246382	March 22, 2002
Vault 4	18	246383	March 22, 2002
Vault 5	7	246384	March 22, 2002
Vault 6	3	246713	March 22, 2002
Vault 7	16	246714	March 22, 2002
Vault 8	1	246865	March 22, 2002
Vault 9	1	246866	March 22, 2003
Vault 10	1	246864	March 22, 2002
Vault 11	1	246867	March 22, 2002
Vault 12	1	246868	March 22, 2002
Vault 13	1	246869	March 22, 2002
Vault 14 Fraction	1	246872	March 22, 2002
Vault 15 Fraction	1	246873	March 22, 2002
Vault 16 Fraction	1	246874	March 22, 2002
Vault 17 Fraction	1	246875	March 22, 2002
Vault 18 Fraction	1	246876	March 22, 2002

* The Expiry Dates are based on the acceptance of this report for Assessment Work Credits.



Magnetic declination 21°30'

0 m 500 m 1000 m

Scale 1: 20,000

Copied from Government Mineral Titles Reference Map.

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	FIGURE 4

HISTORY

During the first nine years (1982 - 90), the Vault property had a robust history with several cycles of exciting exploration followed by failure and disappointment. No fewer than four operators explored the property and three of them were large, highly respected exploration companies. Over four million dollars were spent on exploration programs on the property before the dormant 1990's.

The Vault 1 mineral claim was staked March 8, 1982, by the writer, M. Morrison of Kelowna, B.C. to cover a gossanous area of silicified breccias that carried anomalous gold values. The property was soon optioned to Riocanex Inc. (May, 1982). Riocanex immediately added the Vault 2-5 mineral claims to the property and conducted geological and geochemical surveys on the Vault 1 & 2 mineral claims.

Late in the 1982 season, Riocanex drilled four Percussion Drill holes, totalling 295 metres, to test the silicified "Discovery Zone" on the Vault 1 mineral claim. In April, 1983, Riocanex followed-up the 1982 program with four N.Q. diamond drill holes to further test the silicified zone. A total 632 metres were drilled, but the results were disappointing (2 metres of 2.3 gpt gold and 13.8 gpt silver in one hole and another 2 metres of 2.3 gpt gold and 6.5 gpt silver in a second hole). Riocanex terminated their option in May, 1983.

Late in 1983, Dome Exploration (Canada) Ltd. optioned the property, and early in 1984 crews conducted 3.0 km of Induced Polarization and Ground Magnetometer Surveys over the Discovery Zone on the Vault 1 mineral claim.

Dome followed-up their geophysical surveys with the drilling of seven B.Q. diamond drill holes. The best intercept was only 1 metre of 2.50 gpt gold and 7.0 gpt silver. Dome terminated their option in August, 1984.

Seven Mile High Resources Inc. of Kelowna, B.C. optioned the Vault Claim Group in November, 1984. In April, 1985, crews, under the direction of the writer, conducted

HISTORY continued

geological and geochemical surveys over an area of three square kilometres south of the region covered by the Riocanex 1982 surveys. Five square kilometres of ground magnetometer and VLF-EM surveys were also conducted over the Vault 1 & 4 mineral claims.

In April, 1985, the surveys resulted in the discovery of a new, large, gossanous, silicified and clay-altered zone on the northern side of the Vault 4 mineral claim.

In August, 1985, a program of Percussion Drilling was conducted under the direction of the writer. Two drill holes were drilled to test the eastern extension of the Discovery Zone. These drill holes encountered fault problems and were abandoned short of their target. Five drill holes were then drilled to test the new Vault 4 target. Impressive zones of clay-alteration and silicification were encountered in several of the drill holes, but no economic minerals were intercepted. The drill holes only proved that a large epithermal system occurs on the property.

On May 1, 1986, the property was optioned by Seven Mile High Resources Inc. to Inco Ltd. Two diamond drill holes were drilled in August, 1986, by Inco Ltd. One drill hole returned negligible values, but the second hole, located 750 m east of the Discovery Zone, returned 7.4 gpt gold over 1.05 m from 373.10 - 374.15 metres from a horizon considered to be a favourable host and further drilling was recommended (E. N. Hunter, 1987).

In 1987, two drilling programs were conducted by the Vault Joint Venture. The first program involved six N.Q. diamond drill holes. The best interceptions were only 22.1 m of 1.8 gpt gold and 4.0 m of 3.1 gpt gold. Late in 1987, an additional 16 N.Q. diamond drill holes were drilled (for a total of 4665 m in 1987). In the late program, several encouraging intersections were encountered with the best coming from drill hole 72408 (10.8 gpt gold over 8.36 m) (Groeneweg, 1989).

HISTORY continued

In 1988, 49 N.Q. diamond drill holes were drilled (18,307 m) and a large auriferous epithermal system with several ore grade interceptions was defined over a length of 400 metres. This zone was later called the Central Zone.

During the 1988 program, one deep step-out drill hole was drilled 300 metres east of the Central Zone. This drill hold returned 2.93 m of 7.12 gpt gold (Groeneweg, 1989).

Also in 1988, a Legal Survey of the main Vault claim posts was conducted by S. J. Buzikievich, B.C.L.S.

In 1989, a total of 75 N.Q. diamond drill holes were drilled (13,229 m). Approximately 50 of the drill holes were drilled to test the North Vein to a depth of 200 metres.

In 1990, four deep N.Q. diamond drill holes tested the north Vein to depths of 350 metres. Also in 1990, a surface trenching program exposed the North Vein over a length of 400 metres and detailed sampling was conducted.

Seven Mile High Resources Inc. had an independent Mineral Inventory conducted for them by Orcan Mineral Associates Ltd. in 1989 (Saunders, 1989).

Exploration on the property was low key in the 1990's with the exception of an Induced Polarization and Ground Magnetometer Survey which was conducted over 3 km of lines in 1997. The survey covered portions of the Central Zone and an area lying north and east of the Central Zone. In hindsight, the Central Zone is outlined by the Induced Polarization survey.

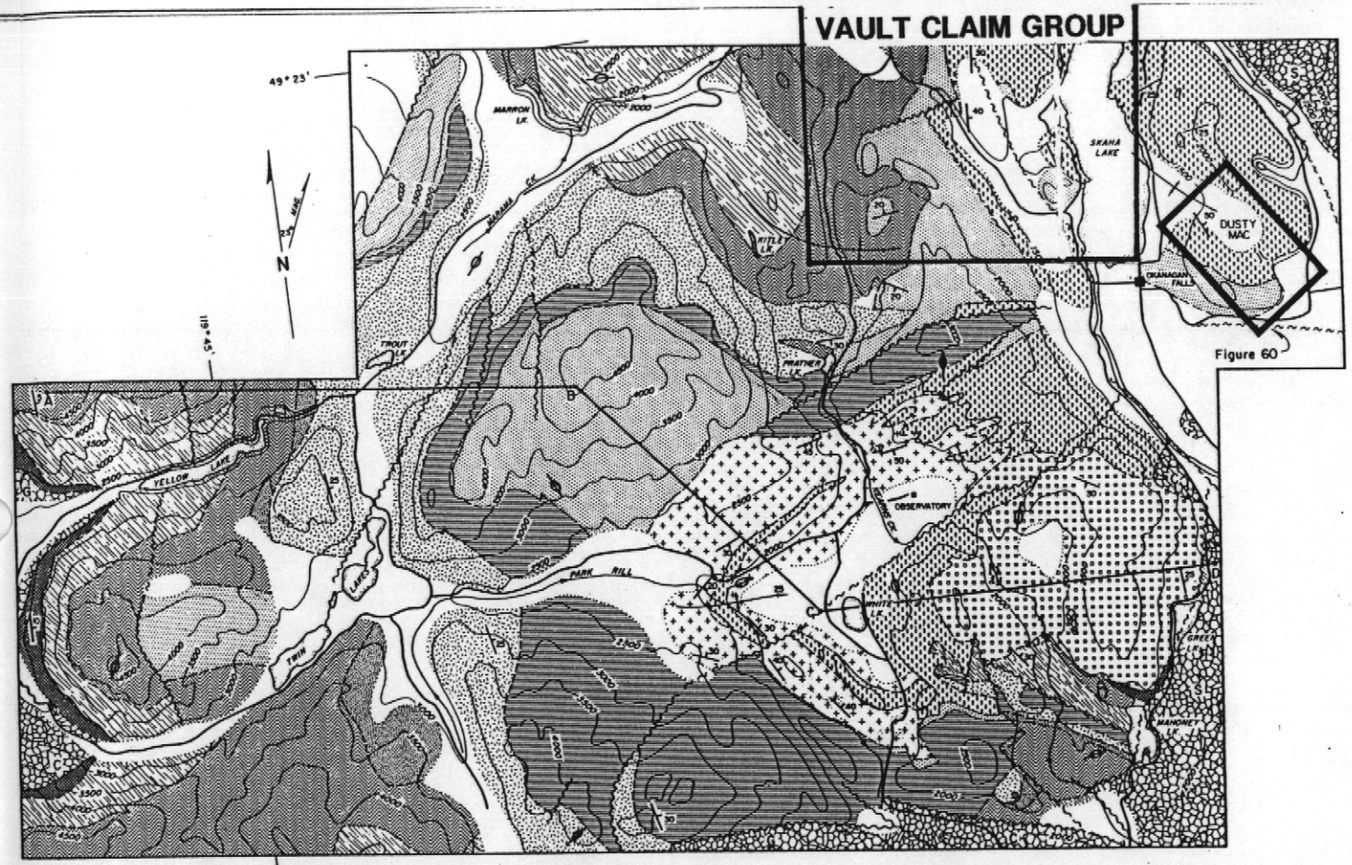
REGIONAL GEOLOGY

The regional geology of the Okanagan Falls area was mapped by B. N. Church of the B.C. Department of Mines and it is described in Bulletin 61 dated 1973.

Two of Church's maps, which appeared in earlier government publications (1969 & 70), are added to this report as Figures 5 & 6. The maps illustrate that the Vault Claim group covers volcanic and sedimentary rocks of Eocene Age. Three different Formations are recognized. The lowermost Marron Formation is unconformably covered by the Marama Formation which in turn is unconformably overlain by the White Lake Formation.

The Marron Formation is made up of extensive lava flows which are largely trachytic porphyries. There are also minor interbedded pyroclastics. The Marama Formation, which unconformably overlies the Marron Formation is made up of a Lower Unit of mixed volcanoclastic and pyroclastic sediments of trachytic and andesitic composition and an Upper Unit comprised of dacitic flows and pyroclastics. The White Lake Formation is comprised of a mix of coarse lahars, volcanic flows, tuffs and sediments which unconformably overlie the Marama Formation.

The Eocene rocks have been folded into northeasterly plunging folds and segmented by steep east-west and north-south faults.



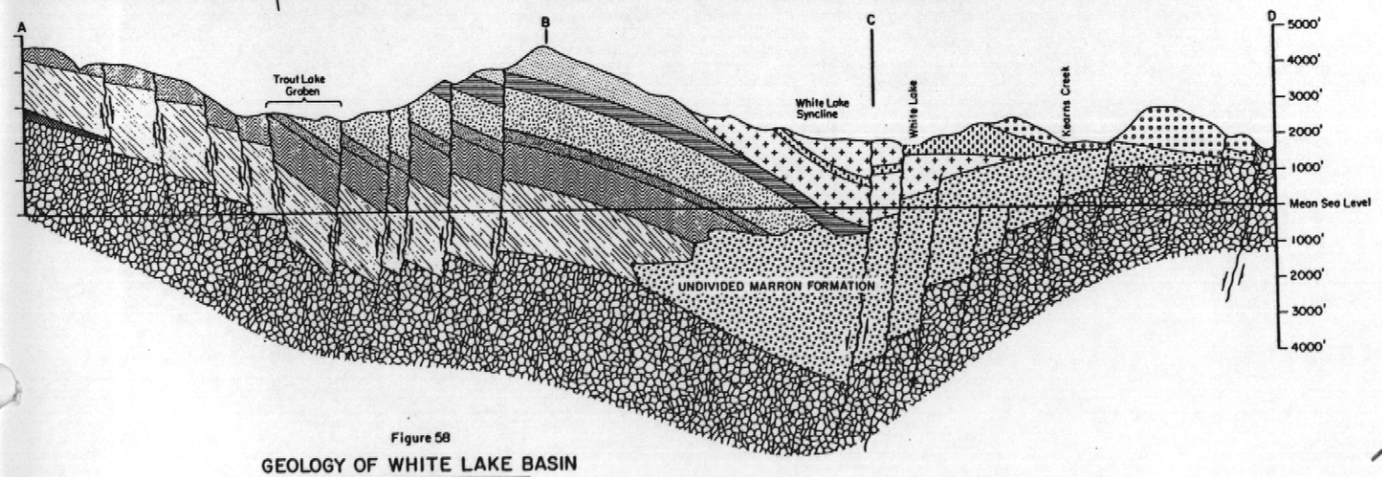


Figure 58
GEOLOGY OF WHITE LAKE BASIN
GEOLOGY BY - N. CHURCH, 1970
SCALE - MILES
B. C. DEPT. OF MINES 0 km 2 km

LEGEND

EARLY TERTIARY ROCKS

SKAHA FORMATION
UPPER MEMBER - MIXED BOULDER CONGLOMERATE.
LOWER MEMBER - MAINLY GRANITE, CHERT, AND GREENSTONE SLIDE BRECCIAS WITH INTERCALATED CONGLOMERATE AND SOME AUGITE-PORPHYRY (TEPHRITE) LAVA.

WHITE LAKE FORMATION
MUDSTONE, SANDSTONE, CONGLOMERATE, COAL, AND MINOR PYROCLASTIC ROCKS INTERCALATED WITH TRACHYTE AND TRACHYANDESITE VOLCANIC BRECCIA, PYROCLASTIC ROCKS, AND LAHAR.

MARAMA FORMATION
UNDIVIDED RHYODACITE AND RHYOLITE LAVA, SOME VOLCANIC BRECCIA AND PYROCLASTIC ROCK AND MINOR BASAL CONGLOMERATE.

MARRON FORMATION

PARK RILL MEMBER - MAINLY MEROCRYSTALLINE AND VITRIC ANDESITE LAVA.

NIMPIT LAKE MEMBER - MAINLY ROSETTE PORPHYRY, SANIDINE-PLAGIOCLASE BEARING TRACHYTE LAVA.

KEARNS CREEK MEMBER - MAINLY PYROXENE PORPHYRY, VESICULAR BASALTIC ANDESITE LAVA.

KITLEY LAKE MEMBER - MAINLY CLOT PORPHYRY, SANDINE-PLAGIOCLASE BEARING TRACHYTE AND TRACHYANDESITE LAVA.

YELLOW LAKE MEMBER - RHOMB PORPHYRIES, AUGITE-ANORTHOCLASE LAVA, VOLCANIC BRECCIA, AND PYROCLASTIC ROCK.

SPRINGBROOK FORMATION
PEBBLE AND BOULDER CONGLOMERATE, BRECCIA, AND SANDSTONE.

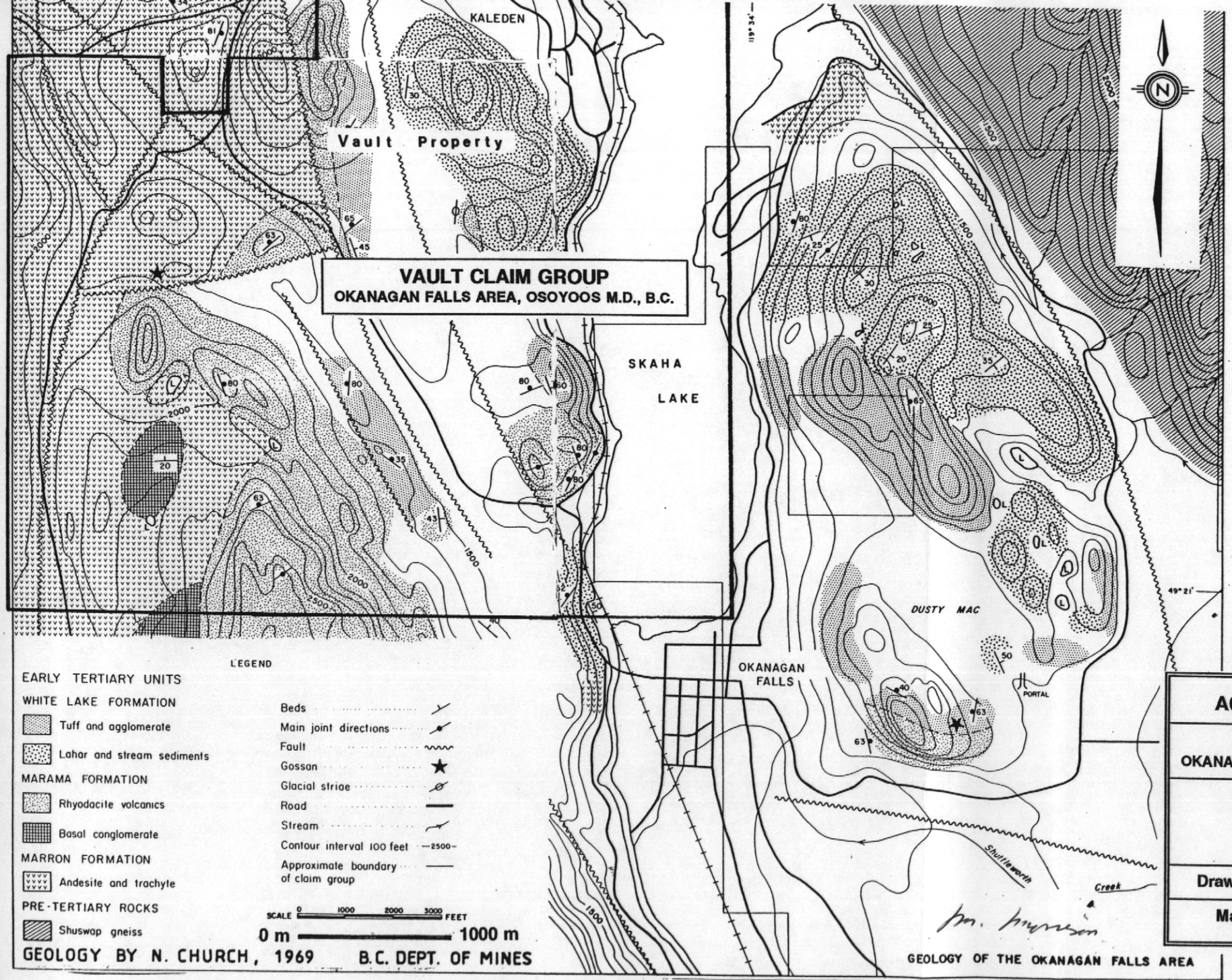
PRE-TERTIARY ROCKS

G - OLD TOM FORMATION - MAINLY GREENSTONE.
C - SHOEMAKER FORMATION - MAINLY CHERT.
S - SHUSWAP FORMATION - GNEISSIC BASEMENT COMPLEX

SYMBOLS

- BEDDING ATTITUDE
- ANTICLINAL AXIS
- SYNCLINAL AXIS
- GEOLOGICAL CONTACT
- FAULT ZONE
- BOUNDARY OF BEDROCK EXPOSURE
- TOPOGRAPHIC CONTOUR, 500' INTERVAL
- ROAD
- POSITION OF STRUCTURE SECTION
- GLACIAL STRIAE

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
REGIONAL GEOLOGY	
Drawn By:	N.T.S. 82-E-5E
March 2001	FIGURE 5



ENLARGEMENT

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP **OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.**	
REGIONAL GEOLOGY	
Drawn By:	**N.T.S. 82-E-5E**
March 2001	**FIGURE 6**

REGIONAL MINERALIZATION

The most notable example of precious metal mineralization within Eocene rocks in the Okanagan Falls region (prior to the discovery of the Vault mineralization) was the Dusty Mac occurrence located 2.5 km northeast of town. A near-surface silicified zone which carried good silver and gold values was drilled extensively by Noranda Mines in the late 1960's. The deposit was considered to be too small and uneconomic at the time and Noranda dropped their option on the property. Shortly thereafter, precious metal prices increased dramatically and Dusty Mac extracted the deposit with a profitable open pit operation during 1975 - 76. In all, 93,653 tonnes of ore grading 6.29 gpt gold and 146.59 gpt silver were mined.

The abandoned open pit allows for a good view of the epithermal deposit. A lahar unit comprised of Eocene andesite has been flooded with silica, brecciated, and flooded again. The lahar unit lies directly below a mudstone unit of the White Lake Formation. It is believed that the mudstone unit provided an impervious cap for the ascending epithermal solutions. The gold and silver mineralization is disseminated throughout the andesite/quartz breccia.

WORK PROGRAM 2000 - 2001

The current work program (2000 - 2001) involved the establishment of a measured grid to facilitate the surveys conducted over portions of the Vault 1, 4 & 5 mineral claims. The surveys included geological mapping (see Maps V-01-1A & B) as well as magnetometer and altimeter surveys (see Maps V-01-2A & B and V-01-3A & B).

GRID

Most of the grid lines and stations established by earlier workers have been obliterated over the years, and it was necessary to establish a new grid for the current work programs. The old grid numbering system was used for the new grid, but due to imperfect surveying, the new grid numbers only match the old grid numbers approximately.

Baseline 11+00S at 90 degrees was measured and flagged for 1350 metres across the northern portion of the Vault 4 mineral claim. Thirty-two flagged grid lines at 50 to 100 metre intervals were then measured for distances of up to 500 metres south and 1400 metres north of the Baseline. A secondary Baseline, 7+00S, was measured for 400 metres across a portion of the Vault 1 mineral claim to improve the survey control. Stations were flagged at each 25 metre measure along all of the grid lines to facilitate the follow-up surveys.

A Topolite belt chain and a Silva Ranger compass were used to establish the 1750 metres of Baseline and 23,800 metres of grid line which are illustrated on all of the larger maps accompanying this report.

ALTIMETER SURVEY

The Altimeter Survey was conducted in conjunction with the ground magnetometer survey, and readings were recorded at each station and at mid-points between stations on all of the grid lines.

The shallow lake on the eastern portion of the Vault 4 mineral claim was given an elevation of 575 metres by previous workers. The same lake elevation was used as a Base Elevation for establishing the elevations of Baseline Stations along Baselines 11+00S and 7+00S. Several traverses were made between the lake and the Baseline Stations to confirm the Baseline Station elevations.

ALTIMETER SURVEY continued

The survey of the grid lines involved making looped traverses that started and ended at Baseline Stations. The traverses often required up to 2 hours to complete and corrections for diurnal variation were made to all grid station values based on the Baseline Station values.

All of the corrected values are plotted and contoured at 10 metre intervals on Maps V-01-3A & B. The elevations on our new maps are 15 metres lower than elevations on the new government series of 1: 20,000 scale topographic maps. A copy of the government map for the area was not obtained until after we had completed our survey.

GROUND MAGNETOMETER SURVEY

Program

A Scintrex MF-2 Portable Fluxgate Magnetometer was used to survey the property. The magnetometer with a resolution of 5 gammas was considered suitable for the survey.

Baseline station values were established by making a double traverse along the Baseline on a day of slight diurnal variation. The Baseline stations were then corrected for diurnal variations, and the corrected values were used during the survey.

Looped traverses were made along pairs of grid lines, starting and ending at baseline stations (usually within 2 hours), and corrections were made to all values for diurnal variations. During this years' survey, intermediate readings were taken midway between all flagged grid stations in addition to the grid station readings to increase the detail of the survey. All of the corrected readings are plotted on the contoured magnetometer maps, V-01-2A & B, accompanying this report. A constant value of 50,000 gammas has been subtracted from all of the values on the maps for ease of plotting and clarity.

GROUND MAGNETOMETER SURVEY continued

Results

Note: The following discussion refers to the magnetic values plotted on Maps V-01-2A & B. As mentioned earlier, a constant value of 50,000 gammas has been subtracted from all field readings for easier plotting on the maps.

The results of the current survey displayed on Maps V-01-2A & B illustrate that the survey area has low magnetic relief. The range of values throughout the area is only 1330 gammas (i.e. 240 to 1510 gammas).

There is very little magnetic character east of L6-00E where much of the bedrock geology is comprised of dacitic flows, lahars and tuffs of the Upper Marama Formation.

The magnetic highs of 1000 gammas on L9-00E at 12+85S and 14+50S and 930 gammas on L10+00E at 13+30S are all coincident with ridges underlain with Unit 3c dacitic rocks. A linear high of 900 to 1000 gammas located immediately south of Baseline 11+00S occurs in an area covered by drift. The linear high may represent a dyke.

West of L0+50W there is also very little magnetic character. It is believed that drift in excess of 5 metres deep masks the magnetic features of the bedrock geology on this portion of the property.

Most of the magnetic character occurs between 9+00S and 14+50S and between 6+00E and 0+50W where rock exposures are more plentiful. South of Baseline 11+00S much of the bedrock is trachyte of the Marron Formation. The higher magnetic values (i.e. greater than 1000 gammas) often occur where the magnetic readings were taken directly over trachytic bedrock - often on small ridges. The lower readings (i.e. 500 to 1000 gammas) occur in narrow valleys or small depressions between the outcrop ridges.

GROUND MAGNETOMETER SURVEY continued

Results continued

North of Baseline 11+00S many of the magnetic values over 1000 gammas are coincident with ridges that are underlain by Unit 2b andesites and basalts or by Unit 2c mafic sandstones which lie adjacent the 2b volcanics.

In general, the magnetometer survey results agree well with the mapped geology and very little unexpected was encountered. Magnetic highs of 1050 gammas on L5+00E at 8+50S, 1330 gammas on L4+00E at 7+60S and 1120 gammas on L3+50E at 6+75S are all coincident with the top of a dacitic ridge.

The survey did prove to be useful in tracing the 2b volcanic unit. Values on the southeast limb of the anticline which coincide with Unit 2b include:

1130 gammas on L5+00E at 13+50S,
1340 gammas on L5+50E at 12+50S and
900 gammas on L5+50E at 11+25S.

Values on the northeast limb of the anticline that coincide with Unit 2b volcanics include

1100 gammas on L5+00E at 10+40S,
1360 gammas on L4+50E at 10+25S,
1330 gammas on L4+00E at 10+25S,
1090 gammas on L3+50E at 10+40S,
1100 gammas on L3+00E at 10+ 10S,
1330 gammas on L2+50E at 9+35S,
1300 gammas on L1+50E at 9+00S and
1060 gammas on L0+50W at 9+50S.

GROUND MAGNETOMETER SURVEY continued

Results continued

West of L0+50W where there is deep overburden, Unit 2b can only be traced indirectly. Magnetic highs of 940 gammas on L2+00W at 9+85S and 1030 gammas on L2+50W at 9+75S may represent the 2b volcanic unit.

West of L2+50W and south of Baseline 7+00S, the magnetic expression of Unit 2b is entirely obscured by overburden.

On Map V-01-2B, the 2b volcanic unit occurs on the southeast limb of the syncline on the Vault 1 mineral claim. The high magnetic values of 840 gammas on L1+00W at 1+00S, 890 gammas on L2+00W at 2+00S, 870 gammas on L2+50W at 2+35S and 810 gammas on L3+00W at 2+60S may all represent the 2b volcanic unit. The magnetic expression of Unit 2b is obscured by deep drift southwest of L3+00W.

Elsewhere on Map V-01-2B, a magnetic high of 810 gammas is recorded on L5+00W at 3+75S. The magnetic high occurs in a meadow at a good distance from the nearest outcrop and it can not be explained.

Magnetic highs of 1290 gammas on L3+00W at 0+90S and 940 gammas on L2+50W at 1+00S occur at the edge of a high bench and they are probably caused by topography as opposed to bedrock geology.

Back on Map V-01-A, a mafic sandstone (Unit 2c) can be traced around the anticline adjacent the 2b volcanic unit. The sandstone unit is less magnetic than the volcanic unit with magnetic values often recorded at 800 to 900 gammas (barely above background values). On some grid lines, however, the sandstone is coincident with notable magnetic high values.

GROUND MAGNETOMETER SURVEY continued

Results continued

Examples are:

1120 gammas on L3+50E at 9+25S,
1100 gammas on L3+00E at 9+00S,
1170 gammas on L1+50E at 8+75S and
930 gammas on L1+00W at 9+25S.

The sandstone may also be represented by higher than background magnetic values recorded on the drift covered portion of the property west of L1+00W. Values of 740 gammas on L2+50W at 8+75S, 700 gammas on L3+50W at 8+40S and 740 gammas on L4+00W at 8+00S may all represent the sandstone. Northwest of L3+50W, 8+40S all magnetic expression of the sandstone is lost under deep drift.

In summary, the results of the magnetometer survey appear to have been useful in outlining the 2b volcanic and 2c sandstone units well to the west of where the bedrock geology disappears beneath an extensive cover of drift. An interpretation of the magnetic results has allowed for a better understanding of the geology on the western side of the Vault Claim Group as illustrated on Maps V-01-1A & B and on Diagrams V-01-4A, B & C.

PROPERTY GEOLOGY

Summary of Property Geology

The three Eocene Formations (i.e. Marron, Marama and White Lake) described under the title Regional Geology occur on the Vault Claim Group. They are folded into asymmetrical anticlines and synclines and are cut by east-west and north-south faults. Epithermal solutions ascending fractures in the Marron Formation have flooded out into the permeable horizons of the Lower Marama Formation. Strong argillic alteration and silica replacement occur within lahars and other permeable sediments.

Precious metals occur within epithermal quartz/calcite/adularia veins cutting through the Marron formation and with quartz veins and silica replacement zones within the Lower Marama Formation. Some significant ore grade gold intervals have been encountered in drill holes.

The property geology is described in more detail under several titles to follow.

Early Eocene Marron Formation - Unit 1a

The Marron Formation (Unit 1a) is believed to underlie all other rocks on the Vault Claim Group. The Marron Formation occurs at, or near, surface on the northern half of the Vault 1 mineral claim, on much of the Vault 2 & 5 mineral claims, and on the western half of the Vault 4 mineral claim.

In the current project area, a large area of Marron Formation is exposed south of Baseline 11+00S between lines 0+50W and 5+50E. Marron rocks also occur near L5+00W from 10+00S to 11+00S on Map V-01-1A and on several grid lines on the northwest corner of Map V-01-1B.

PROPERTY GEOLOGY continued

Early Eocene Marron Formation - Unit 1a continued

The Marron Formation is generally comprised of massive flows of porphyritic trachyte with only minor intercalated flow breccias and lahars of trachytic composition. Zones of well-fractured trachyte or lahar are indicated on Map V-01-1A.

The trachyte exhibits very little variation from one outcrop to the next. The purple porphyritic trachyte consists of 30% large tabular phenocrysts of potassium feldspar up to 5 mm in size that are set in a groundmass of fine K-spar laths. Minor constituents are quartz, hematite, dolomite, sericite and clay (resulting from alteration). The altered trachyte is light green or white.

Eocene Lower Marama Formation - Unit 2

The Lower Marama Formation is a mixed sequence of sediments, volcanoclastics and pyroclastics that is sandwiched between the underlying trachytes of the Marron Formation and the overlying dacitic flows and tuffs of the Upper Marama Formation.

The Lower Marama Formation reaches its greatest thickness within the syncline which underlies the southern half of the Vault 1 mineral claim, but it is also believed to underlie much of the current project area covered by Maps V-01-1A & B. The Lower Marama rocks do not stand up to erosion like the Upper Marama dacites and much of the Lower Marama occurs only as scattered poorly exposed outcrops. A large amount of the Lower Marama is covered by drift.

In spite of the lack of good exposure, units comprising the Lower Marama have been mapped for distances of up to 350 metres north of Baseline 11+00S from 1+00W to 6+00E and as far south as 15+50S on line 4+50E. The outlines of the major units comprising the Lower Marama Formation define an asymmetrical anticline on map V-01-1A. One limb dips

PROPERTY GEOLOGY continued

Eocene Lower Marama Formation - Unit 2 continued

moderately northeast towards the Vault 1 syncline and the other limb dips moderately southeast.

Although the Lower Marama Formation is comprised of a real mix of intercalated sediments and volcanics, five general mappable units have been recognized and these are described under the titles that follow.

Basal Mixed Sediments - Unit 2a

Unit 2a sediments rest unconformably over trachytes of the Marron Formation on much of the property. The sediments are comprised of thin-bedded or thick-bedded cobble conglomerates, pebble conglomerates, grits, greywackes, siltstones and tuffs that are grey to light green. All of the clastic material is comprised of Marron Formation trachyte. Much of the clastic material is sub-angular and it is believed that deposition was rapid.

Often siltstones are interbedded with conglomerates and a fast-changing depositional environment is indicated.

Geological mapping indicates that the 2a sediments thicken towards the west from L3+00E to L5+00W where they may be 25 metres thick. The sediments dip gently towards the northeast and they effectively cover the Marron Formation over a large area as illustrated on Maps V-01-1A & B.

An important outcrop of highly silicified and auriferous 2a sediments is located on L2+00W at 1+25S.

PROPERTY GEOLOGY continued

Debris Flows and Lahars with Trachytic Clasts - Unit 2bt

At several sites, the sediments of Unit 2a are covered by debris flows or lahars that are comprised of Marron Formation trachytic clasts up to 40 cm. The modal size of the sub-angular to sub-rounded clasts is 15 cm. There is very little matrix material and, therefore, these rocks have abundant void space and good permeability.

The 2bt unit is widespread across the property and it is believed to have played a large role in the development of mineralized zones discovered on the Vault 1 mineral claim.

Notable occurrences of Unit 2bt in the current project area occur near Baseline 11+00S on lines 1+00W and 1+50W and between lines 5+00W and 5+50W at 8+00S on Map V-01-01A.

Andesitic and Mafic Flows and Lahars - Unit 2b

A sequence of thin andesitic and mafic flows, flow breccias and lahars lies above Unit 2bt. The sequence is collectively mapped as unit 2b on Maps V-01-1A & B and it ranges from 60 to 65 metres in thickness. The andesites and basalts (?) are sometimes very porous with large vesicules, but they can also be dense and impervious. Drill logs by previous workers indicate that there are intercalated sediments, but none were recognized in the current map area. It is also difficult to trace individual flows across the map area due to limited bedrock exposure.

The flow breccias and lahars of Unit 2b are like those of Unit 2bt with clasts up to 40 cm and very little matrix material. They have abundant void space and good permeability. These rocks are often altered and limonitic and locally they are replaced with silica.

Some of the altered and silicified rocks were collected for geochemical analysis (see Mineralization and Alteration).

PROPERTY GEOLOGY continued

Andesitic and Mafic Flows and Lahars - Unit 2b continued

Augite phenocrysts are common in some of the andesites, but they range in size from flow to flow. Some andesites also contain white plagioclase phenocrysts. Olivine crystals occur in the basalts (?).

The 2b rocks occur as a wide mappable unit which circles the northeasterly plunging anticline on the Vault 4 mineral claim. The 2b rocks disappear under drift west of L2+00W. One isolated outcrop of Unit 2b occurs on L2+00W at 1+50S on Map V-01-1B.

Sandstone - Unit 2C

A green to black sandstone (Unit 2C) lies immediately above the volcanic rocks of Unit 2b, and the composition of the sandstone appears to be derived from eroded 2b rocks. The sandstone is thin bedded and medium to fine grained. There are some siltstone interbeds. The sandstone unit which averages 15 metres in thickness has been mapped on both the northwest and southeast limbs of the anticline on Map V-01-1A.

Felsic Crystal and Lapilli Tuff - Unit 2d

A chalky, white to tan, kaolinite altered crystal and/or lapilli tuff (Unit 2d) lies above the 2c sandstone unit on both the northwest and southeast limbs of the anticline on Map V-01-1A. The 2d unit averages 25 metres in thickness.

The 2d tuff is referred to as a "Felsic Unit" in drill logs by earlier workers and the unit appears to have played a role in the deposition of gold at the Central Zone on the Vault 1 mineral claim.

PROPERTY GEOLOGY continued

Porphyritic Andesite - Unit 2e

A massive porphyritic andesite flow (Unit 2e) occurs immediately above the 2d tuff unit on L0+00W on Map V-01-1A.

The andesite is comprised of 10% rusty, altered orthoclase phenocrysts up to 5 mm and 3% augite microphenocrysts which are set in a light green, very fine-grained groundmass.

Eocene Upper Marama Formation - Unit 3

Massive flows of light grey, very fine-grained dacite (Unit 3a) occur above Units 2d or 2e of the Lower Marama Formation on the northwest and southeast limbs of the anticline on Map V-01-1A. The dacite is resistant to erosion and forms a semi-circle of distinct ridges coincident with the anticline on the Vault 1 & 4 mineral claims.

Northeast and east of the dacite flows (Unit 3a) on Map V-01-1A there are crystal and lapilli tuffs (Unit 3b) and debris flows/lahars (Unit 3c) which are comprised of the same material as the dacitic flows.

The tuffs are soft and crumbly and rarely occur as outcrop. North of the shallow lake on lines 7+00E and 8+00E dacitic feeder dykes intrude some of the 3b tuffs.

The Upper Marama Formation exceeds 300 metres in thickness on portions of the Vault property.

Thin section studies of the dacite indicate that the composition is predominantly plagioclase, with 15% k-spar, 5% augite and no quartz (E. N. Hunter, 1987). Much of the dacite is unaltered.

PROPERTY GEOLOGY continued

Eocene (?) White Lake Formation - Unit 4

The White Lake Formation (Unit 4) occurs on the northeast portion of the property beyond the current mapping program. The formation is comprised of lahars, volcanic flows, tuffs, and sedimentary rocks which range from mudstones to coarse conglomerates. The White Lake Formation unconformably overlies the Upper Marama Formation (E. N. Hunter, 1987).

Structural Geology and Faulting

The Eocene Marama Formation which unconformably overlies the Early Eocene Marron Formation is folded into a syncline on the Vault 1 mineral claim and an asymmetrical anticline on the Vault 4 mineral claim. The axes of the folds strike and plunge northeasterly. The Marama Formation wedges out to expose the underlying Marron Formation on the western sides of the Vault 1, 4 & 5 mineral claims. To the east, the Marama Formation thickens to at least 450 metres.

On the Vault 1 mineral claim, the Marama Formation is successively down dropped to the south by a series of east-west block faults, and dropped to the east by another series of north-south block faults.

A late fault crosses much of the property from southwest to northeast (see Maps V-01-1A & B) and drops the geology on the southeast side by as much as 100 metres.

Mineralization and Alteration

Much has been written about the mineralization and alteration on the Vault property (see References) and it is suffice here to give only a brief summary of the two main styles of mineralization which are represented by the North Vein and the Central Zone.

PROPERTY GEOLOGY continued

North Vein

The North Vein is a precious metal bearing epithermal composite vein comprised of quartz, calcite and adularia. The vein cuts through brittle trachyte flow rocks of the Marron Formation which underlie the southern side of the Vault 2 mineral claim. The vein is exceedingly persistent and extends over 1100 metres in an east-west direction and dips steeply south to a depth of at least 400 metres.

The vein is irregular in width (5 to 100 cm) and pinches and swells along strike and dip. The upper 200 metres of the vein have been drilled extensively and a reserve of 152,000 tonnes of 14 gpt gold (plus minor silver values) has been calculated over an average vein width of 55 cm. Electrum is the main ore mineral. Pyrite (2 to 3%) is the only notable sulphide.

The trachyte within the shear zone is fragmented and clay altered. Moderate silicification and/or clay alteration extends for up to 20 metres into the hanging wall rocks on the south side of the vein. Quartz and carbonate veinlets within the trachyte also become more numerous as the vein is approached from the south.

Central Zone

The Central Zone on the northern side of the Vault 1 mineral claim has been penetrated by over 50 diamond drill holes. The main host rocks for precious metal mineralization are the lahars and lapilli tuffs of the Lower Marama Formation. These volcanic rocks have been flooded with epithermal silica solutions, fractured, and injected again. Intercalated mudstones and flow rocks appear to have acted as effective dams for epithermal solutions that ascended through the permeable lahar and tuff units. Repeat brecciation and multiphase veinlets are characteristic of portions of the deposit.

PROPERTY GEOLOGY continued

Central Zone continued

Precious metal bearing quartz veins and veinlets often have an east-west strike and they are most numerous between 0+50S and 1+50S. Some of the best precious metal values of the Central Zone occur within the upper portions of a lahar unit and the lower portions of a felsic unit near the contact of the two units. These units are called 2b and 2d, respectively, in the current project area.

Grades as high as 15.0 gpt gold over 8.8 metres and 10.0 gpt gold over 13.4 metres were reported by the Vault Joint Venture, and tonnage estimates range from 61,000 tonnes of 10 gpt gold or 505,000 tonnes of 3 gpt gold to 1.3 million tonnes of 2 gpt gold. (Due to the lack of in-fill drilling and data, all of the reserve figures are reported with qualifying statements.)

The dimensions of the Central Zone, if projected vertically to surface, occur from 0+50S to 1+50S and from 5+50E to 8+00E.

Some significant interceptions of gold have also been recorded from holes drilled up to 300 metres east of the Central Zone (i.e. 2.93 m of 7.12 gpt gold).

The dominant gold bearing mineral is electrum, while pyrite (2-10%) is the most common assessory sulphide. Very fine-grained pyrite (1-2%) is disseminated throughout the rocks for several tens of metres from the Central Zone. Silver, arsenic and molybdenite occur in anomalous values for several tens of metres above the main gold values and are important pathfinder elements.

Argillic alteration and silica replacement are common and can extend through the permeable rock units for hundreds of metres beyond the significant gold values.

PROPERTY GEOLOGY continued

Mineralized or Altered Zones Sampled During the Current Program

Localized zones of clay alteration, limonite staining, quartz veining and silicification are widespread across the property, and it is thought that not all of the zones are related to the main epithermal system associated with the Central Zone.

Some of the zones are far removed (i.e. 1600 metres) from the Central Zone and it is suggested that there are other epithermal systems on the property.

Rock chips were selected from 10 areas of alteration or silicification and submitted for 30 element ICP and gold geochemical analyses. It was hoped that the geochemical results might indicate the direction of origin of the epithermal solutions. It is known that anomalous silver, arsenic and molybdenum all extend for several tens of metres out from the main gold values at the Central Zone.

The samples weighed approximately 3.5 kg each and they were sent to Acme Analytical Laboratories Ltd. in Vancouver for analysis (see Appendix C for results).

Sample Descriptions and Significant Lithogeochemical Values

Sample V-01, near grid 9+00E, 15+00S. The sample was selected from fine talus on a 30 degree slope immediately west of the grid station. It is comprised of dacitic flow rock that is cut by 5% banded epithermal quartz veinlets. Fracturing and remending has occurred. It is thought that the fractured dacite sample may represent the lowermost portion of nearby dacitic flows.

Out of the 30 elements analyzed only barium at 357 parts per million (ppm) was anomalous.

PROPERTY GEOLOGY continued

Sample Descriptions and Significant Lithogeochemical Values continued

Sample V-02, near grid 8+00E, 13+00S. The sample was selected from fine talus on a 30 degree slope over a distance of 7 metres east from the grid station. Banded epithermal quartz veinlets of 1-3 mm make up 2% of the sample which is a weakly hematite stained and clay altered lapilli tuff.

None of the 30 elements yielded significant values

Sample V-03, near grid 5+00E, 10+50S. The sample was selected from 1 metre breccia pockets located 5 to 10 metres northeast of the grid station. The breccia zones contain 3-5% limonite and 2-80% silica replacement (including quartz). The sample contains an average of 50% silica.

Significant values include: 122 ppm molybdenum and 410 ppm arsenic. The silver content is negligible and the gold content is low (2.4 parts per billion).

Sample V-04, near grid 3+00E, 10+25S. The sample was collected from angular float over an area of 2 x 3 metres on a slope immediately northeast of the grid station. The sample is comprised of a moderately clay altered augite andesite flow breccia that is well stained with limonite and manganese on fractures. No veinlets are visible.

Significant values include: 64 ppm molybdenum, 517 ppm arsenic and 23.7 ppb gold. The silver value is negligible.

Sample V-05, grid 2+50E, 9+62S. The sample is comprised of pieces of angular float that were collected from a 1 metre zone on the grid line. The sample is a well clay altered, limonite and manganese stained augite andesite.

PROPERTY GEOLOGY continued

Sample Descriptions and Significant Lithogeochemical Values continued

Significant values include: 109 ppm molybdenum, 566 ppm arsenic and 52.5 ppb gold. The silver value is negligible.

Sample V-06, near 0+90E, 9+75S. Angular float occurs over a 10 square metre area and samples were selected from the float which is comprised of 100% grey and white silica (replacement).

The arsenic content of the sample is 49 ppm and the gold content is just 3.1 ppb.

Sample V-07, from L0+50E at 11+85 to 11+90S. The sample was selected from a trachyte flow breccia with 5-10% banded epithermal quartz veinlets filling void space in the breccia.

Significant values include: 61 ppm arsenic and 178 ppm barium. The gold value is low at 2.6 ppb.

Sample V-08, grid 1+88W, 1+23S. The sample was collected from the northeast end of a 7 x 1 metre zone of silica replacement in sediments of the Lower Marama Formation. The sample is comprised of sugary white and grey quartz which replaces 80% of the sediments. Limonite (5%) fills small voids and fractures in the quartz.

Significant values include: 46 ppm molybdenum, 4.1 ppm silver, 110 ppm arsenic and a very significant 1646.5 ppb gold.

Sample V-09, grid 1+95W, 1+27S. The sample was collected from the southwest end of the zone described above. The sample is comprised of 90% sugary white and grey quartz with 5% limonite filling small voids and fractures.

PROPERTY GEOLOGY continued

Sample Descriptions and Significant Lithogeochemical Values continued

Significant values include: 54 ppm molybdenum, 7.2 ppm silver, 53 ppm arsenic and a highly significant 5012.5 ppb gold.

Sample V-10, grid 3+65E, 15+50S. The sample was selected from a one square metre area, and it is comprised of moderately clay altered trachyte with a 5% stockwork of 1-10(mm banded epithermal quartz veinlets filling fractures.

The arsenic content is significant at 209 ppm, while the gold content is only moderately elevated at 18.9 ppb.

Comment on the Lithogeochemical Results

The high gold values (1646 and 5012 ppb) contained in samples V-08 and V-09 are of great interest in that the samples are comprised of quartz that lies immediately against a mudstone near the top of Unit 2a of the Lower Marama Formation. These samples represent the best gold values that have ever been obtained on surface from the Lower Marama Formation. The sample site occurs 750 metres west of the Central Zone on an area of the property that was overlooked by earlier workers. Notably the silver, molybdenum and arsenic values of the two samples are also elevated.

Samples V-03 to V-06 were all selected from Unit 2b. Samples V-03 to V-05 contain anomalous molybdenum and arsenic values, while samples V-04 and V-05 also contain elevated gold values. Silver is low in all four samples, but the molybdenum and arsenic values are considered a good indication that significant gold values may occur down-dip within Unit 2b on this portion of the property.

PROPERTY GEOLOGY continued

Comment on the Lithogeochemical Results continued

Samples V-07 and V-10 represent epithermal quartz veinlets which fill fractures and voids in Marron trachyte. The elevated values of arsenic in both samples and the 18.9 ppb gold in sample V-10 are of interest. These samples may indicate that other epithermal systems do occur on the property.

The epithermal quartz veinlets of Samples V-01 and V-02 contain no values of significance.

DISCUSSION

The surveys conducted during the current program have led to a much better understanding of the geology in the project area. Several mappable units of the Lower Marama Formation have been traced and they indicate that an asymmetrical anticline with a northeasterly plunge crosses the northern portion of the Vault 4 mineral claim. The northwest limb of the anticline forms the southeast limb of the syncline on the Vault 1 mineral claim. The significance of this observation is that some of the prime host rocks for gold deposition within the deep Central Zone emerge to surface on the Vault 4 mineral claim. Of particular note are the trachytic lahars (Unit 2bt) which have allowed for silica flooding at the Central Zone and the felsic tuffs (Unit 2d) which have a close association with the best gold assays at the Central Zone.

It is thought that the combination of the 2a, 2bt, 2b, 2c and 2d units on maps V-01-1A & B constitute the same favourable conditions for precious metal deposition on the northwest flank of the anticline as they do on the northwest limb of the syncline at the Central Zone. The permeable rocks allow for the passage of large volumes of epithermal solutions, while the impermeable rocks (i.e. mudstones or dense lava flows) cause damming of these solutions and the deposition of silica (plus gold?).

The North Vein and Central Zones clearly represent different epithermal episodes with different temperature/pressure conditions and there is no reason to believe that other epithermal systems with other temperature/pressure conditions do not occur on the property.

In the current project area, there are indications that other epithermal systems do occur. Areas with considerable clay alteration and limonite staining are separated from one another by zones of weak alteration - even within permeable rock units. This observation would suggest that epithermal solutions are entering the rock from different directions (and different sources?). Notable examples occur at 5+20W, 10+00S where the 2a sediments are clay altered and limonitic even though this outcrop is located 1600 metres southwest of the Central Zone.

DISCUSSION continued

Another example occurs at 1+90W, 1+25S where strong silica replacement (with up to 5012 ppb gold) occurs in 2a sediments immediately below Unit 2b lahars 750 metres west of the Central Zone. Several localized limonitic, clay altered and silica replaced zones also occur in 2b volcanics between L5+00E and L1+00E 1000 metres southwest of the Central Zone.

South of Baseline 11+00S there are also zones within the Marron Formation trachytes with 1 to 5% epithermal quartz veinlets that are far removed from the Central Zone (i.e. 1400 metres).

There is widespread evidence across the property that the well fractured contact (unconformity) between the Marron Formation and the overlying Lower Marama Formation was a main conduit for epithermal solutions. It is believed that epithermal solutions ascending from fissures in the Marron Formation flowed laterally along this contact for great distances from the vents. The only recognized feeder vein on the property which cuts through the Marron Formation is the North Vein, but this vein is located 400 metres north of the Central Zone and it is not believed to have played a role in the development of that deposit. It seems that there has to be other sub-parallel "feeder veins" on the property to account for the widespread alteration. Such veins constitute one of the exploration targets on the property.

Alteration and silicification are not confined to the Marron/Lower Marama Unconformity. They also occur within several permeable units of the Lower Marama Formation. It is believed that epithermal solutions have moved both laterally and vertically through the Lower Marama Formation. It is thought that they have moved laterally through permeable units sandwiched between impervious units and then vertically where there are breaks in the impervious horizons. From each "source vent" the solutions are thought to have penetrated the Lower Marama Formation units in a series of steps, first laterally, then vertically up fractures, and then laterally again along upper permeable horizons, and so on, until the strength of the system was spent.

DISCUSSION continued

With each sudden change in temperature/pressure conditions there is the possibility of silica deposition (with gold?). Most of the better gold values should occur where large volumes of silica have been precipitated below impervious horizons or where vertical quartz veins have filled fracture zones. The drill hole logs and assays from the Central Zone indicate that this is indeed the case.

Although the general model is well understood, the challenge of exploration is to locate the narrow feeder fissures, and figure out the route of the epithermal solutions travelling through the great assortment of permeable and impervious rock units which comprise the Lower Marama Formation

Much of the geology in the current program area is covered with drift, but detailed mapping of available rock coupled with the results of the magnetometer and altimeter surveys has allowed for the mapping of the syncline illustrated on Maps V-01-1A & 1B. The Cross-Sectional Profiles on Diagrams V-01-4A & B & C illustrate a "best guess" interpretation of the three dimensional geology in the target area. The diagrams show the relationship between the main permeable and impervious units of the Lower Marama Formation. Based on the results obtained at the Central Zone, it is considered that portions of the 2a, 2bt, 2b and 2d units are all very favourable hosts for precious metal deposition.

A program of Reverse Circulation Percussion Drilling is recommended to test all units of the Lower Marama Formation down to the Marron Formation contact around the northwest, west and southwest edges of the syncline on Maps V-01-1A & B.

Ten drill holes spaced at 150 to 200 metre intervals around the edge of the syncline are proposed and these drill holes are illustrated on Diagram V-01-4C.

It suggested that the drill hole on Section A-A' be given top priority based on the high gold content (1646 and 5012 ppb) found in Samples V-08 and V-09. If the first drill hole is

DISCUSSION continued

successful, then the drill holes on Sections B-B′ and C-C′ should be drilled next. Following drill hole 3, the drill holes on Sections I-I′ and J-J′ should be drilled (based on the lithogeochemical results from the samples collected on surface - see Property Geology). The last five drill holes should be drilled in an order dictated by the results of the first five drill holes.

All drill intercepts that are well altered or silica replaced should be analyzed for the standard 30 ICP elements and for gold by common geochemical methods. In addition to gold, particular attention should be directed towards the silver, arsenic and molybdenum content in the samples. It is expected that a study of the variation of the content of these three elements in drill samples will be useful for determining the direction of origin of epithermal solutions. The quantity of each of the three elements will also give an indication of the strength of the system. The results obtained from the 1980's Central Zone drilling project can be used for comparative purposes. Silver, arsenic and molybdenum proved to be good pathfinder elements for gold at the Central Zone.

CONCLUSIONS AND RECOMMENDATIONS

The results of the current exploration program (2000 - 2001) conducted on portions of the Vault 1, 4 & 5 mineral claims indicate that there are large areas of the Vault Claim Group that warrant further exploration for epithermal precious metal deposits.

It has been determined that the Lower Marama Formation underlies more of the property than was previously thought and that the very permeable volcanoclastic and pyroclastic rock units which host the best gold values at the Central Zone (see Property Geology) emerge to surface around the northwest, west and southwest edges of a syncline on the Vault 1, 4 & 5 mineral claims. These rocks exhibit epithermal alteration and silica replacement at distances far removed (i.e. up to 1600 m) from the Central Zone, and it is believed that more than one epithermal system may have been active on the property.

Some of the altered and silicified rock contains anomalous arsenic (up to 566 ppm) and molybdenum (up to 122 ppm) values. Samples of quartz (replacement) at 1+90W, 1+25S contain up to 5012 ppb gold.

It is believed that there is excellent potential for finding more quartz veins like the North Vein and/or more silica replacement deposits like the Central Zone (see Property Geology) on the Vault Claim Group.

Based on an analysis of all of the new geological and lithogeochemical data, ten drill sites have been selected. It is recommended that a Reverse Circulation Drill be used to drill through the most favourable units of the Lower Marama Formation around the edge of the syncline on the Vault 1 & 4 mineral claims (see Discussion). The first drill hole is designed to intercept the down-dip extension of the auriferous silica replacement zone at 1+90W, 1+25S.

CONCLUSIONS AND RECOMMENDATIONS continued

The 5012.5 ppb gold value obtained from the zone at 1+90W, 1+25S is the best gold value ever found on surface within the Lower Marama Formation, and it may represent a significant new near-surface discovery 750 metres west of the deep Central Zone.

All of the proposed drill sites are readily accessible. They occur on an area of the property that was largely ignored by earlier workers, because drift covers much of the bedrock geology.

Kelowna, B.C.
March 31, 2001

Murray Morrison, B.Sc.

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* Assessment Reports on file with the Ministry of Energy and Mines of British Columbia.

APPENDIX A

STATEMENT OF QUALIFICATIONS

I, Murray Morrison, of the City of Kelowna, in the Province of British Columbia, do hereby state that:

1. I graduated from the University of British Columbia in 1969 with a B.Sc. Degree in Geology.

2. I have been working in all phases of mining exploration in Canada for the past thirty-two years.

3. During the past thirty-two years, I have intermittently held responsible positions as a geologist with various mineral exploration companies in Canada.

4. I have conducted several geological, geochemical, and geophysical surveys on mineral properties in Southern British Columbia during the past thirty-two years.

5. I conducted the geological, ground magnetometer and altimeter surveys outlined in this report.

6. I own a 4% Net Profit Interest in the Vault Claim Group.

March 31, 2001
Kelowna, B.C.

Murray Morrison - B.Sc.

APPENDIX B

STATEMENT OF EXPENDITURES - ON THE VAULT CLAIM GROUP

Statement of Expenditures in connection with Geological, Ground Magnetometer and Altimeter Surveys carried out on the Vault Claim Group, located immediately northwest of Okanagan Falls, B.C. (N.T.S. Map 82-E-5E) during 2000 - 2001.

GEOLOGICAL MAPPING PROGRAM (150 ha)

M. Morrison, geologist	25 days @ $300.00/day		$ 7,500.
Automobile (including gasoline and insurance)	25 days @ $45.00/day		1,125.
Meals and lodging	no charge		-
Flagging and belt chain thread			109.
		Sub-total	$ 8,734.

ASSAYING COSTS

ICP for 30 elements, plus gold geochem	10 samples @ $17.92 each		$ 179.
Shipping samples to lab			18.
		Sub-total	$ 197.

COMBINED GROUND MAGNETOMETER and ALTIMETER SURVEYS (23.8 km)

M. Morrison, geologist	9 days @ $300.00/day		$ 2,700.
Automobile (including gasoline and insurance)	9 days @ $45.00/day		405.
Meals and Lodging	no charge		-
Magnetometer rental	9 days @ $35.00/day		315.
		Sub-total	$ 3,420.

STATEMENT OF EXPENDITURES continued

REPORT PREPARATION COSTS

M. Morrison, geologist	10 days @ $300.00/day	$3,000.

(Work included: calculating diurnal variations for both the Magnetometer Survey and Altimeter Surveys as well as plotting and contouring the results; drawing geological cross sections based on interpretation; analyzing all data and writing the report.)

Fifty percent of the report preparation costs should be apportioned to the Magnetometer and Altimeter Surveys and 50% should be apportioned to the Geological Mapping Program.

Drafting (including materials)		259.
Typing		150.
Copying maps and report		40.
	Sub-total	$ 3,449.
	GRAND TOTAL	**$15,800.**

I hereby certify that the preceding statement is a true statement of monies expended in connection with the Ground Magnetometer and Altimeter Surveys and the Geological Mapping Program conducted between September 6, 2000 and March 15, 2001.

March 31, 2001
Kelowna, B.C.

Murray Morrison, Geologist

ACME ANALYTICAL LABORATORIES LTD.

852 East Hastings,, Vancouver, B.C., CANADA V6A 1R6
Phone: (604) 253-3158 Fax: (604) 253-1716
Our GST # 100035377 RT

MORRISON, M.S.
684 Balsam Road
Kelowna, BC
V1W 1B9

Inv.#: **A101033**
Date: Apr 26 2001

QTY	ASSAY	PRICE	AMOUNT
10	30 ELEMENT ICP + GEOCHEM AU (10 gm) ANALYSIS @	12.00	120.00
10	ROCK SAMPLE PREPARATION @	4.75	47.50
	GST Taxable		167.50
	7.00% GST		11.73
	CAD $		**179.23**

Project: Vault
Samples submitted by M.S. Morrison

COPIES 1

Please pay last amount shown. Return one copy of this invoice with payment.
TERMS: Net two weeks. 1.5 % per month charged on overdue accounts.

[COPY 2]

APPENDIX C

GEOCHEMICAL ANALYSIS CERTIFICATE

ACME ANALYTICAL LABORATORIES LTD. (ISO 9002 Accredited Co.) 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

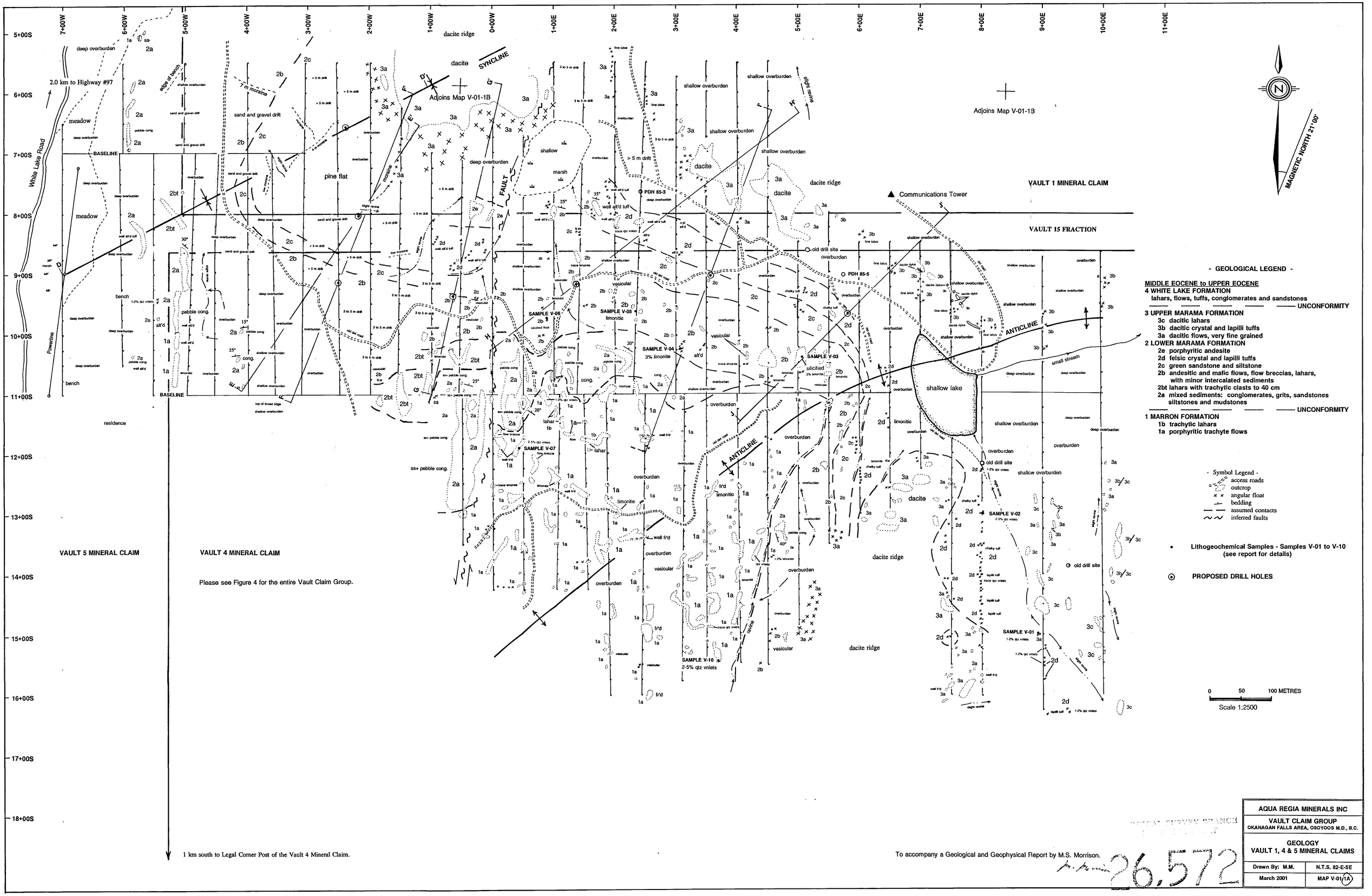
Morrison, M.S. PROJECT Vault File # A101033

684 Balsam Road, Kelowna BC V1W 1B9 Submitted by: M.S. Morrison

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb
V-01	2	26	7	38	<.3	7	4	249	1.45	2	<8	<2	3	61	.3	<3	<3	23	1.57	.051	11	25	.46	357	.01	<3	.43	.05	.04	<2	<.2
V-02	2	40	8	50	<.3	6	5	365	1.89	4	<8	<2	3	80	<.2	<3	3	43	1.66	.064	11	20	.16	88	.01	4	.54	.03	.07	<2	<.2
V-03	122	12	8	18	<.3	38	6	163	2.60	410	<8	<2	<2	49	<.2	8	<3	30	.16	.042	8	62	.17	47	.04	4	.39	.02	.11	3	2.4
V-04	64	39	27	63	.3	367	36	232	7.58	517	<8	<2	7	97	<.2	<3	<3	112	.31	.230	35	585	.56	54	<.01	3	1.08	.04	.41	<2	23.7
V-05	109	14	16	6	.3	20	1	45	4.68	566	8	<2	4	95	<.2	4	<3	50	.05	.108	19	120	.17	155	.01	<3	.48	.08	.38	<2	52.5
V-06	5	13	4	6	<.3	105	10	1790	.95	49	<8	<2	<2	100	.2	<3	<3	15	5.67	.009	6	36	.68	23	<.01	9	.28	.01	.04	4	3.1
V-07	5	14	22	56	.4	28	12	304	3.29	61	<8	<2	13	42	<.2	<3	<3	43	.71	.155	66	64	.82	178	.02	<3	1.10	.04	.18	<2	2.6
V-08	46	6	4	18	4.1	14	3	105	1.52	110	<8	<2	2	78	<.2	5	<3	30	.23	.121	12	43	.03	53	<.01	<3	.21	.01	.09	2	1646.5
RE V-08	47	5	4	17	4.1	16	3	105	1.55	114	<8	<2	<2	80	<.2	4	<3	27	.24	.121	12	49	.03	51	.01	<3	.21	.01	.08	2	1614.7
V-09	54	5	4	11	7.2	14	2	91	1.05	53	<8	5	<2	151	<.2	<3	<3	20	.21	.078	5	35	.03	35	<.01	<3	.19	<.01	.09	3	5012.5
V-10	4	12	15	47	.3	15	12	418	2.95	209	<8	<2	15	25	<.2	3	<3	40	1.03	.150	78	24	.16	79	.01	<3	.77	.03	.20	<2	18.9
STANDARD C3/AU-R	27	65	33	164	6.3	34	11	806	3.58	60	26	2	22	27	24.1	13	24	83	.57	.093	19	170	.62	147	.08	20	1.85	.04	.17	22	450.0
STANDARD G-2	2	3	<3	44	<.3	8	4	563	2.17	<2	<8	<2	5	71	<.2	<3	<3	44	.68	.101	7	80	.64	229	.13	3	.96	.08	.50	2	-

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 AU* BY ACID LEACHED, ANALYZE BY ICP-MS. (10 gm)
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: APR 17 2001 DATE REPORT MAILED: Apr 26/2001 SIGNED BY J. Wang ..D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS



- GEOLOGICAL LEGEND -

MIDDLE EOCENE to UPPER EOCENE

4 WHITE LAKE FORMATION
lahars, flows, tuffs, conglomerates and sandstones

——— ——— ——— ——— ——— UNCONFORMITY

3 UPPER MARAMA FORMATION
- 3c dacitic lahars
- 3b dacitic crystal and lapilli tuffs
- 3a dacitic flows, very fine grained

2 LOWER MARAMA FORMATION
- 2e porphyritic andesite
- 2d felsic crystal and lapilli tuffs
- 2c green sandstone and siltstone
- 2b andesitic and mafic flows, flow breccias, lahars, with minor intercalated sediments
- 2bt lahars with trachytic clasts to 40 cm
- 2a mixed sediments: conglomerates, grits, sandstones siltstones and mudstones

——— ——— ——— ——— ——— UNCONFORMITY

1 MARRON FORMATION
- 1b trachytic lahars
- 1a porphyritic trachyte flows

- Symbol Legend -
- access roads
- outcrop
- angular float
- bedding
- assumed contacts
- inferred faults

- Lithogeochemical Samples - Samples V-01 to V-10 (see report for details)

⊙ PROPOSED DRILL HOLES

To accompany a Geological and Geophysical Report by M.S. Morrison.

26,572

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
GEOLOGY VAULT 1, 4 & 5 MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	MAP V-01-1A

7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W 0+00W 1+00E 5+00E 10+00E

5+00N 4+00N 3+00N 2+00N 1+00N 0+00N 1+00S 2+00S 3+00S 4+00S 5+00S 6+00S

800 m north to the Legal Corner Post of the Vault 2 & 5 Mineral Claims.

Legal Corner Post

VAULT 1

VAULT 5 MINERAL CLAIM

to Highway 97
1 km

NORTH VEIN

Portion of North Vein exposed during 1990 trenching program.

VAULT 2 MINERAL CLAIM

NORTH VEIN

Portion of North Vein exposed during 1990 trenching program.

FAULT

VAULT 14 FRACTION

VAULT 1 MINERAL CLAIM

Please see Figure 4 for the entire Vault Claim Group.

DISCOVERY ZONE

MAIN ZONE

Detailed Geology Mapped in 1982

FAULT

SYNCLINE

Detailed Geology Mapped in 1982

Powerline

White Lake Road

pine flat
pine
edge of bench
1a
weak vnlt smoothic
2-5% qtz veinlets
3 to 5 m drift
2 m ridge
3 m ridge
very shallow drift
sagebrush bench
top of bench
old dirt road
bench
> 5 m drift
shell stream
bar ridge
SAMPLE V-09
20-50% qtz replacement
SAMPLE V-08
brecciated sediments
2a
2b
limonitic
top of sloped bench
sloped bench
piedmont
top of second bench
dacite
3a
dacite ridge
sand and gravel drift
meadow
overburden
shallow overburden
top of boulder bench
top of slope
A
A'
B
B'
C
C'

- GEOLOGICAL LEGEND -

MIDDLE EOCENE to UPPER EOCENE

4 WHITE LAKE FORMATION
lahars, flows, tuffs, conglomerates and sandstones
UNCONFORMITY

3 UPPER MARAMA FORMATION
- 3c dacitic lahars
- 3b dacitic crystal and lapilli tuffs
- 3a dacitic flows, very fine grained

2 LOWER MARAMA FORMATION
- 2e porphyritic andesite
- 2d felsic crystal and lapilli tuffs
- 2c green sandstone and siltstone
- 2b andesitic and mafic flows, flow breccias, lahars, with minor intercalated sediments
- 2bt lahars with trachytic clasts to 40 cm
- 2a mixed sediments: conglomerates, grits, sandstones siltstones and mudstones

UNCONFORMITY

1 MARRON FORMATION
- 1b trachytic lahars
- 1a porphyritic trachyte flows

- Symbol Legend -
- access roads
- outcrop
- angular float
- bedding
- assumed contacts
- inferred faults

Lithogeochemical Samples - Samples V-01 to V-10 (see report for details)

PROPOSED DRILL HOLES

0m 50m 100 metres
Scale 1:2500

Adjoins Map V-01-1A

Adjoins Map V-01-1A

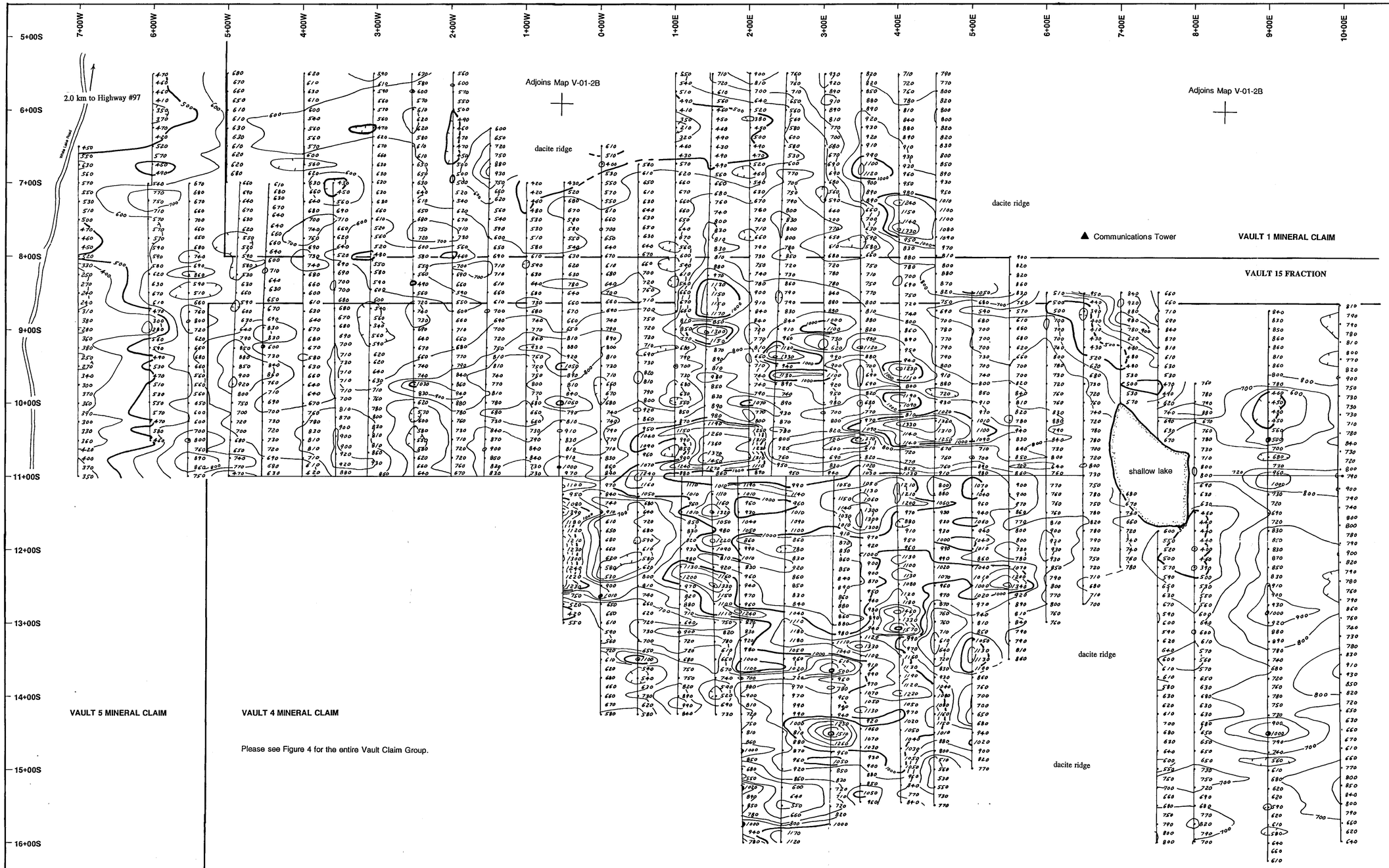
GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,572

To accompany a Geological and Geophysical Report by M.S. Morrison.

M. Morrison

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
GEOLOGY VAULT 1, 4 & 5 MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	MAP V-01-1B



AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
GROUND MAGNETOMETER SURVEY VAULT 1, 4 & 5 MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	MAP V-01-2A

TO ACCOMPANY A GEOPHYSICAL REPORT BY M.S. MORRISON

7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W 0+00W 5+00E 10+00E

6+00N 5+00N 4+00N 3+00N 2+00N 1+00N 0+00N 1+00S 2+00S 3+00S 4+00S 5+00S 6+00S

800 m north to the Legal Corner Post of the Vault 2 & 5 Mineral Claims.

1 km to Highway 97

VAULT 2 MINERAL CLAIM

VAULT 14 FRACTION

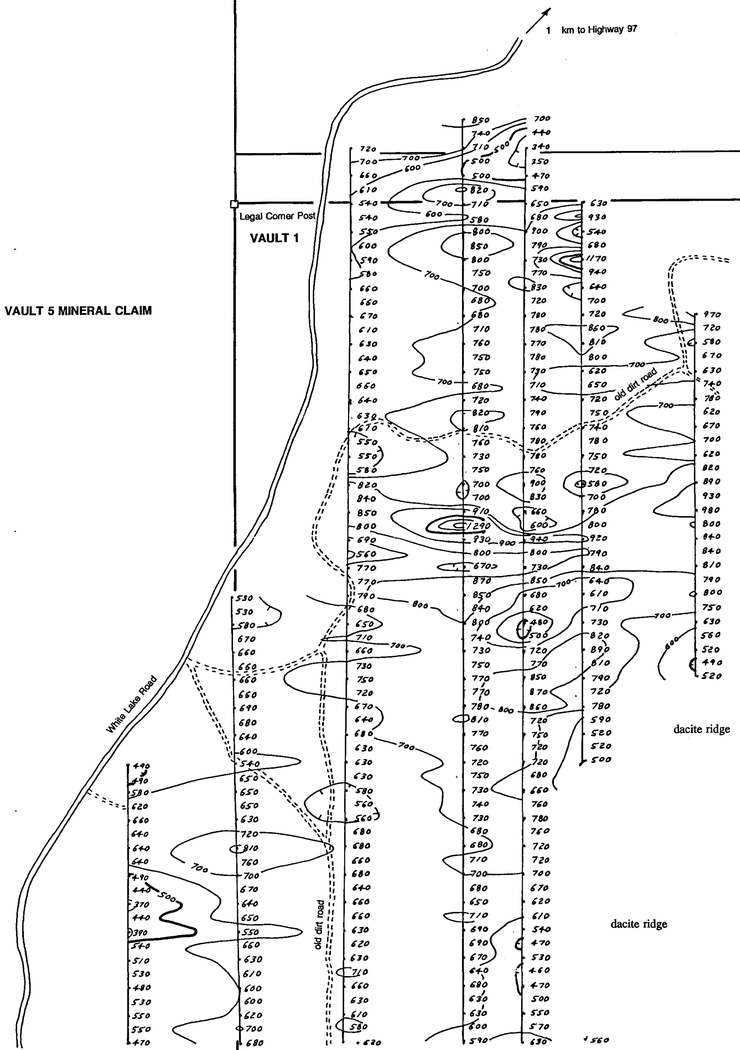
VAULT 1 MINERAL CLAIM

Legal Corner Post

VAULT 1

VAULT 5 MINERAL CLAIM

Please see Figure 4 for the entire Vault Claim Group.



Adjoins Map V-01-2A

Adjoins Map V-01-2A

MAGNETIC NORTH 21°00'

INSTRUMENT - SCINTREX MF-2-100 PORTABLE FLUXGATE MAGNETOMETER

1S0MAGNETIC CONTOURS (ADD 50,00 GAMMAS FOR VERTICAL FIELD)

500 GAMMAS

100 GAMMAS

Please see Maps V-01-1A & B for Geology.

0m 50m 100 metres

Scale 1:2500

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,572

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
GROUND MAGNETOMETER SURVEY VAULT 1, 4 & 5 MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	MAP V-01-2B

TO ACCOMPANY A GEOPHYSICAL REPORT BY M.S. MORRISON

M. Morrison

7+00W 6+00W 5+00W 4+00W 3+00W 2+00W 1+00W 0+00W 1+00E 2+00E 3+00E 4+00E 5+00E 6+00E 7+00E 8+00E 9+00E 10+00E 11+00E

5+00S 6+00S 7+00S 8+00S 9+00S 10+00S 11+00S 12+00S 13+00S 14+00S 15+00S 16+00S

2 km to Highway 97

White Lake Road

Adjoins Map V-01-3B

Adjoins Map V-01-3B

dacite ridge

shallow

marsh

dacite ridge

VAULT 1 MINERAL CLAIM

Communications Tower

VAULT 15 FRACTION

small stream

shallow lake

dacite ridge

VAULT 5 MINERAL CLAIM

VAULT 4 MINERAL CLAIM

Please see Figure 4 for the entire Vault Claim Group.

1 km south to Legal Corner Post of the Vault 4 Mineral Claim.

Instrument: Thommen Altimeter

Elevations in Metres Above Sea Level

Contour Interval 10 metres

Elevations on this map are 15 metres lower than elevations on the new Government 1: 20,000 scale topographic maps

Please see Figure 4 for the entire Vault Claim Group.

Please see Maps V-01-1A & B for Geology.

MAGNETIC NORTH 21°00'

0m 50m 100 metres

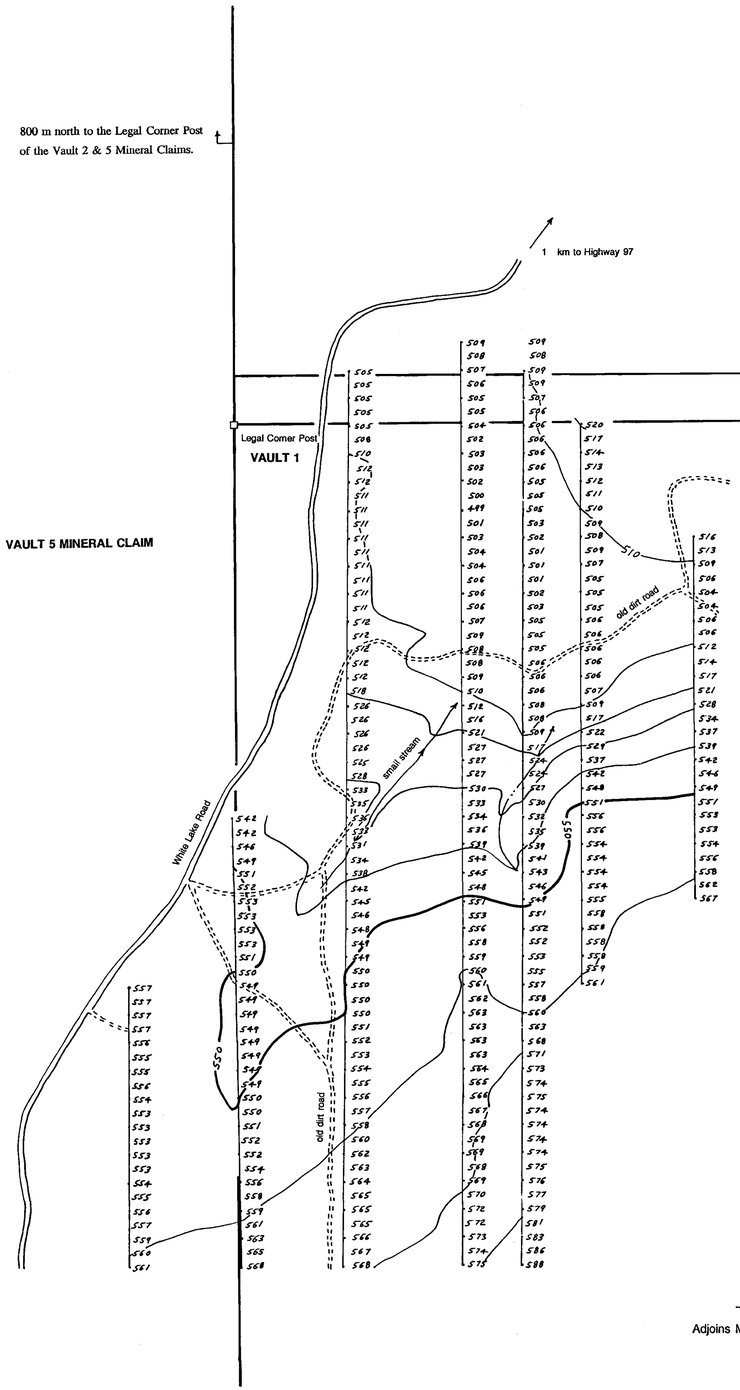
Scale 1:2500

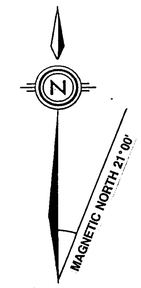
To accompany a Geological and Geophysical Report by M.S. Morrison.

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,572

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
ALTIMETER SURVEY VAULT 1, 4 & 5 MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	MAP V-01-3A





VAULT 2 MINERAL CLAIM

VAULT 14 FRACTION

VAULT 1 MINERAL CLAIM

Please see Figure 4 for the entire Vault Claim Group.

Instrument: Thommen Altimeter

Elevations in Metres Above Sea Level

Contour Interval 10 metres

Elevations on this map are 15 metres lower than elevations on the new Government 1: 20,000 scale topographic maps

Please see Maps V-01-1A & B for Geology.

0m 50m 100 metres

Scale 1:2500

Adjoins Map V-01-3A

Adjoins Map V-01-3A

26,572

To accompany a Geological and Geophysical Report by M.S. Morrison.

Tom Morrison

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
ALTIMETER SURVEY VAULT 1, 4 & 5 MINERAL CLAIMS	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	MAP V-01-3B

15+00S 14+00S 13+00S 12+00S 11+00S 10+00S 9+00S 8+00S 7+00S 6+00S

- GEOLOGICAL LEGEND -

MIDDLE EOCENE to UPPER EOCENE

4 WHITE LAKE FORMATION
lahars, flows, tuffs, conglomerates and sandstones

—— —— —— —— —— UNCONFORMITY

3 UPPER MARAMA FORMATION
- 3c dacitic lahars
- 3b dacitic crystal and lapilli tuffs
- 3a dacitic flows, very fine grained

2 LOWER MARAMA FORMATION
- 2e porphyritic andesite
- 2d felsic crystal and lapilli tuffs
- 2c green sandstone and siltstone
- 2b andesitic and mafic flows, flow breccias, lahars, with minor intercalated sediments
- 2bt lahars with trachytic clasts to 40 cm
- 2a mixed sediments: conglomerates, grits, sandstones siltstones and mudstones

—— —— —— —— —— UNCONFORMITY

1 MARRON FORMATION
- 1b trachytic lahars
- 1a porphyritic trachyte flows

— — — — — Assumed Contacts

600 m
550 m
1a 2a 2bt 2b 2c 2d 2e? 3a
PROFILE OF L1+50W

650 m
600 m
550 m
1a 2a 2bt 2b 2c 2d 2e? 3a
PROFILE OF L1+00W

Elevation Above Sea Level

650 m
600 m
1a 1a 2a 2bt 2b 2c 2d 2e 3a
PROFILE OF L0+50W

650 m
600 m
550 m
1a 1a 2a 2b 2c 2d 2e 3a
PROFILE OF L0+00W

650 m
600 m
550 m
1a 1a 2a 2b 2c 2d
PROFILE OF L0+50E

650 m
600 m
550 m
1a 1a 2a 2b 2c 2d 3a
PROFILE OF L1+00E

650 m
600 m
550 m
1a 1a 2a 2b 2c 2d 3a
PROFILE OF L1+50E

Elevation Above Sea Level

700 m
650 m
600 m
550 m
1a 1a 2a 2b 2c 2d 3a
PROFILE OF L2+00E

Elevation Above Sea Level

0m 50m 100 metres
Scale 1:2500

Horizontal Scale = Vertical Scale

To accompany a Geological and Geophysical Report by M.S. Morrison.
Please see Maps V-01-1A & B for Geology.

M. Morrison

15+00S 14+00S 13+00S 12+00S 11+00S 10+00S 9+00S 8+00S

AQUA REGIA MINERALS INC

VAULT CLAIM GROUP
OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.

CROSS SECTIONS
VAULT 1, 4 & 5 MINERAL CLAIMS

Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	DIAGRAM 4A

16+00S 15+00S 14+00S 13+00S 12+00S 11+00S 10+00S 9+00S 8+00S 7+00S 6+00S

PROFILE OF L2+50E

650 m
600 m
550 m

1a 2a 2b 2c 2d 3a

PDH 85-3

PROFILE OF L3+00E

700 m
650 m
600 m
550 m

1a 2a 2b 2c 2d 3a

PROFILE OF L3+50E

700 m
650 m
600 m
550 m

1a 2a 2b 2c 2d 3a

PROFILE OF L4+00E

700 m
650 m
600 m
550 m

1a 2a 2b 2c 2d 3a

PROFILE OF L4+50E

650 m
600 m
550 m

2b 1a 2a 2b 2c 2d 3a

This portion of Cross Section is oblique to geology

PROFILE OF L5+00E

3a
650 m
600 m
550 m

2b 2b 1a 2b 2c 2d 3a

This portion of Cross Section is oblique to geology

Elevation Above Sea Level

PROFILE OF L5+50E

650 m
600 m
550 m

3a 2c 2b 1a 2b 2c 2d 3a

This portion of Cross Section is oblique to geology

PDH 85-5 (20 m East)

Elevation Above Sea Level

PROFILE OF L6+00E

650 m
600 m
550 m

3a 2d 2c 2b 2b 2c 2d 3a

This portion of Cross Section is oblique to geology

0m 50m 100 metres

Scale 1:2500

Horizontal Scale = Vertical Scale

Assumed Contacts

- GEOLOGICAL LEGEND -

MIDDLE EOCENE to UPPER EOCENE

4 WHITE LAKE FORMATION
lahars, flows, tuffs, conglomerates and sandstones

UNCONFORMITY

3 UPPER MARAMA FORMATION
- 3c dacitic lahars
- 3b dacitic crystal and lapilli tuffs
- 3a dacitic flows, very fine grained

2 LOWER MARAMA FORMATION
- 2e porphyritic andesite
- 2d felsic crystal and lapilli tuffs
- 2c green sandstone and siltstone
- 2b andesitic and mafic flows; flow breccias, lahars; with minor intercalated sediments
- 2bt lahars with trachytic clasts to 40 cm
- 2a mixed sediments: conglomerates, grits, sandstones siltstones and mudstones

UNCONFORMITY

1 MARRON FORMATION
- 1b trachytic lahars
- 1a porphyritic trachyte flows

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Jm. Morrison

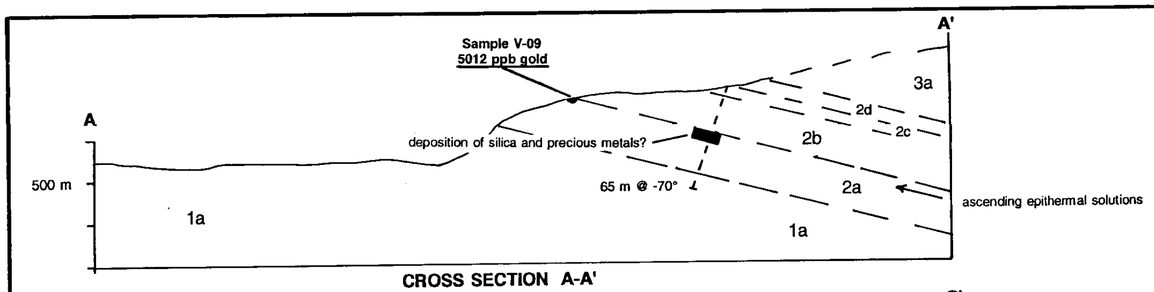
AQUA REGIA MINERALS INC

VAULT CLAIM GROUP
OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.

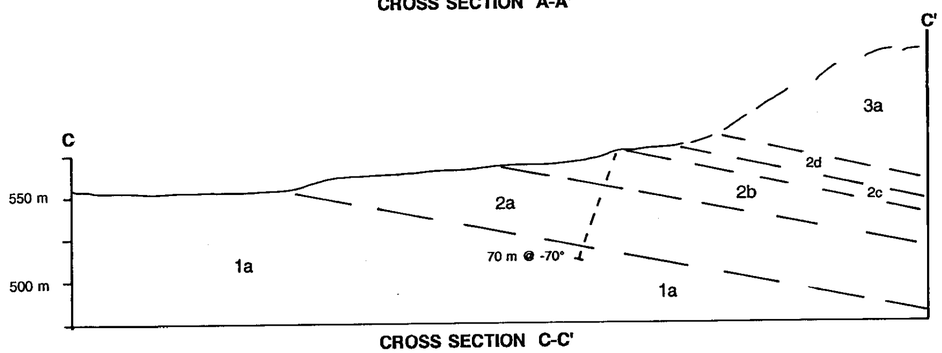
CROSS SECTIONS
VAULT 1, 4 & 5 MINERAL CLAIMS

Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	DIAGRAM 4B

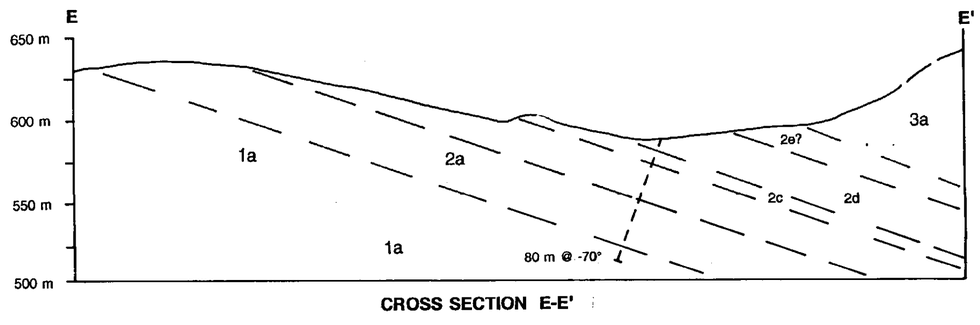
16+00S 15+00S 14+00S 13+00S 12+00S 11+00S 10+00S 9+00S 8+00S



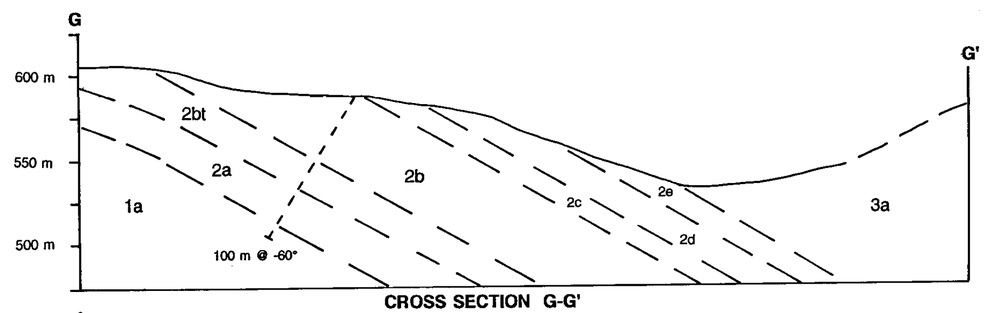
CROSS SECTION A-A'



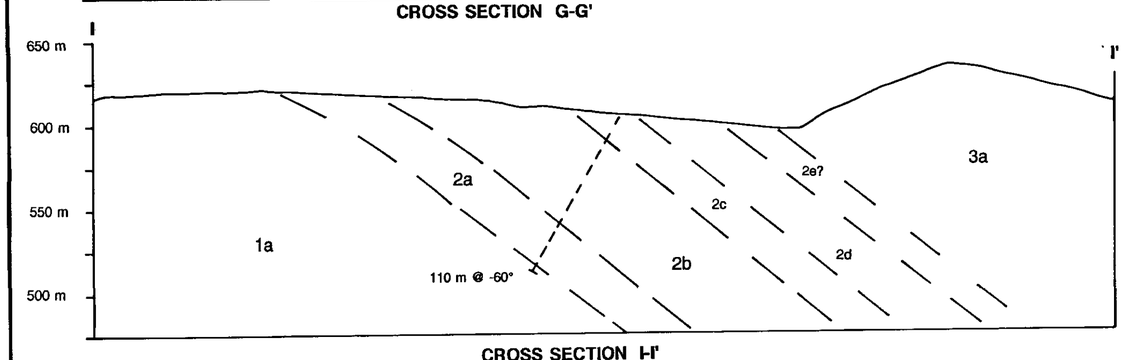
CROSS SECTION C-C'



CROSS SECTION E-E'



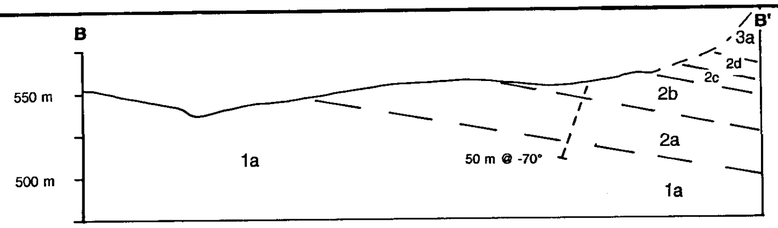
CROSS SECTION G-G'



CROSS SECTION I-I'

Elevation Above Sea Level

Proposed Drill Holes



CROSS SECTION B-B'

- GEOLOGICAL LEGEND -

MIDDLE EOCENE to UPPER EOCENE

4 WHITE LAKE FORMATION
lahars, flows, tuffs, conglomerates and sandstones

UNCONFORMITY

3 UPPER MARAMA FORMATION
- 3c dacitic lahars
- 3b dacitic crystal and lapilli tuffs
- 3a dacitic flows, very fine grained

2 LOWER MARAMA FORMATION
- 2e porphyritic andesite
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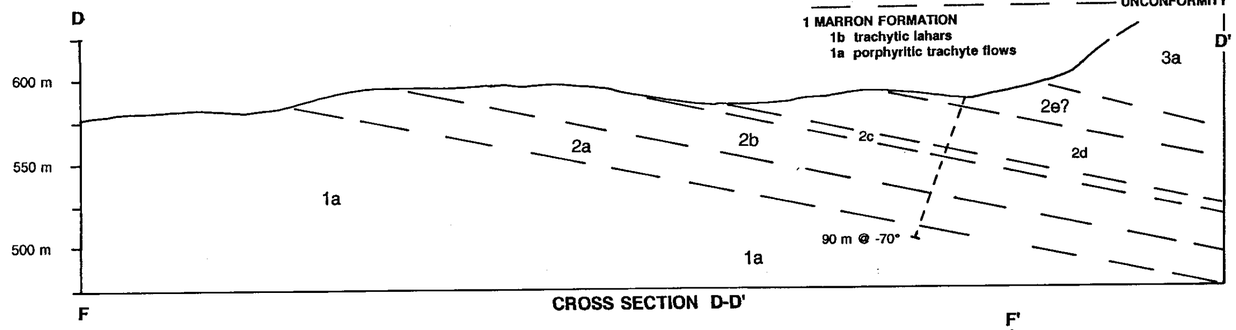
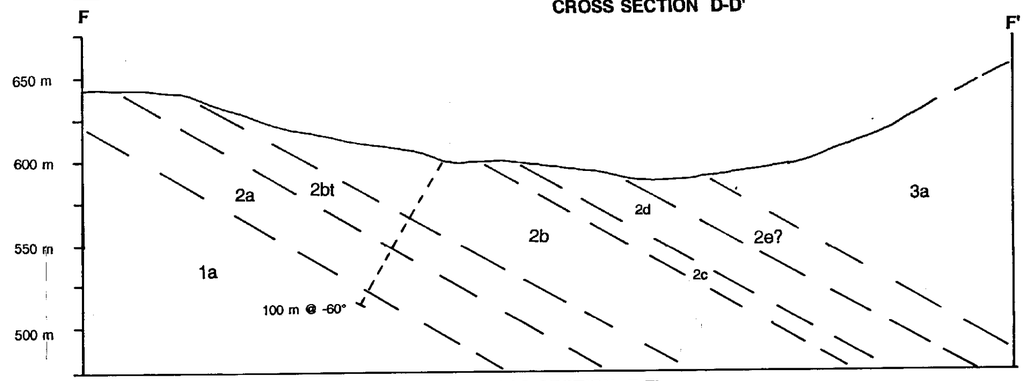
- 2bt lahars with trachytic clasts to 40 cm
- 2a mixed sediments: conglomerates, grits, sandstones siltstones and mudstones

UNCONFORMITY

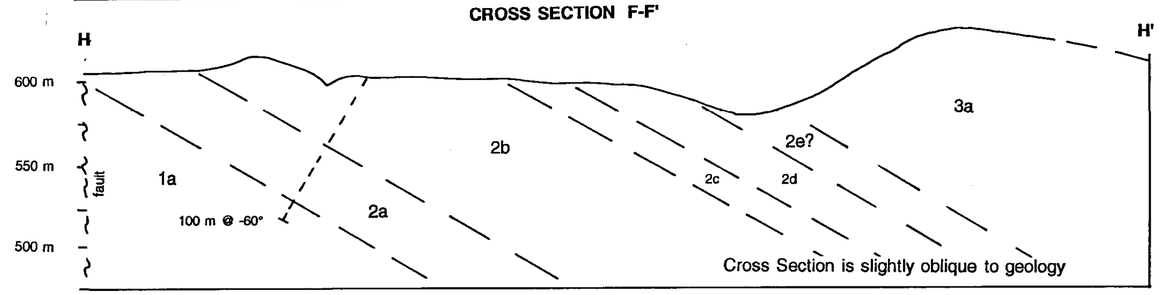
1 MARRON FORMATION
- 1b trachytic lahars
- 1a porphyritic trachyte flows



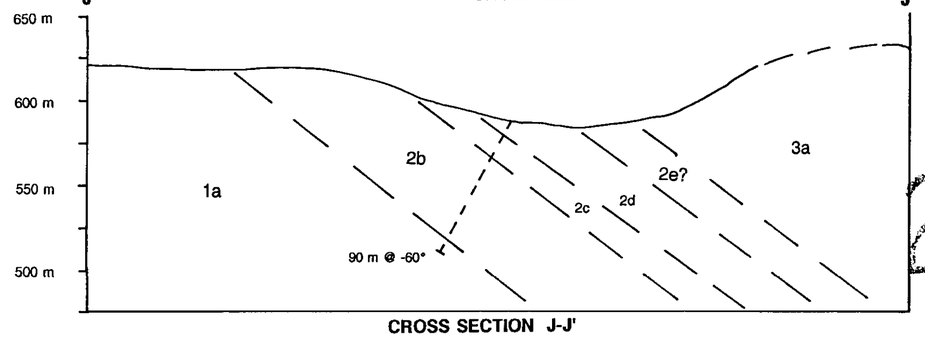
CROSS SECTION D-D'



CROSS SECTION F-F'



CROSS SECTION H-H'



CROSS SECTION J-J'

Elevation Above Sea Level

Assumed Contacts

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Please see Maps V-01-1A & B for Geology.

0m 50m 100 metres

Scale 1:2500

Horizontal Scale = Vertical Scale

AQUA REGIA MINERALS INC	
VAULT CLAIM GROUP OKANAGAN FALLS AREA, OSOYOOS M.D., B.C.	
CROSS SECTIONS & PROPOSED DRILL HOLES	
Drawn By: M.M.	N.T.S. 82-E-5E
March 2001	DIAGRAM 4C