ASSESSMENT REPORT

on the

BURRELL PROPERTY

GREENWOOD MINING DIVISION

NTS 82E/8W and 82E/9W

49° 28′ North latitude
118° 22′ West longitude

DAVID COFFIN

MARCH 1992

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ARIS SUMMARY SHEET

District Geologist, Nelson Off Confidential: 93.10.25

ASSESSMENT REPORT 22907 MINING DIVISION: Greenwood

PROPERTY: Burrell
LOCATION: LAT 49 28 00 LONG 118 22 00
UTM 11 5480013 400974
NTS 082E08W
CLAIM(S): Dave's,Fault,Switchback 1-8,Chewmi,Shorts
OPERATOR(S): Coffin, D. Coffin, E. Davies, S.
AUTHOR(S): Coffin, D.
REPORT YEAR: 1992, 36 Pages
COMMODITIES
SEARCHED FOR: Gold,Silver,Copper,Lead,Zinc
KEYWORDS: Basalts,Trachyte porphyry,Trachytes,Tuffs
WORK
DONE: Prospecting
PROS 1800.0 ha
Map(s) - 3; Scale(s) - 1:1000,1:5000,1:10 000
RELATED
REPORTS: 18197,19504,22015

SUMMARY

The Burrell mineral property consists of 92 claim units totalling 2,300 hectares, located 50 km north of Grand Forks in British Columbia's southern interior region. The property was staked in 1987 and has been jointly owned and operated since then by Eric Coffin, Stu Davies and David Coffin.

The property encompasses an Eocene lithologic, structural and alteration regime which is analogous to that of the Republic mining camp located 70 km to the south in Washington State. Epithermal gold-silver mineralization at Republic is localized by faults developed in a graben of Eocene age; the fault forming the eastern boundary of the Republic graben continues north as the Granby fault and crosses through the Burrell property. At Republic, high grade veins consist of banded chalcedony with iron, copper and antimony sulphides, and various sulfosalts, selenides and adularia. The top of the systems are low grade stockworks and disseminated deposits which coalesce into well defined high grade veins at depth.

Initial programs at the Burrell property were directed at locating replacement and vein filling mineralization related to Jurassic intrusion of granodiorite into a Permian to Triassic volcano-sedimentary sequence, the model for mineral emplacement at the Franklin Camp 5 km to the north. Several small gold bearing showings were known in greenstone regionally mapped as part of the Permo-Triassic sequence. Preliminary traversing over the Tertiary Granby fault located large amounts of epithermal style alteration adjacent to the fault within an area believed to be Jurassic batholithic intrusion. After locating narrow veins with up to 2 g/t gold adjacent and parallel to the Tertiary fault in 1991, it was recognized that determining the relationships between the known mineral showings, and of the showings to alteration, was needed to prioritize further work.

The 1992 program focused on examining well exposed areas of dated Tertiary volcanics on newly staked claims to the south of the previous work and using this information to determine the age of the poorly exposed altered rock in the original property area. The work was successful in recognizing that remnants of the Eocene Marron volcanics sequence are extensive along are the host for a large portion of the alteration previously found. The strike of the alteration zone along the main fault trend was also increased from about 1.5 km to 3.5 km, and fault bounded zonation recognized within it.

Further detail was done to date the greenstone hosting the several showings in the 1989 grid area. The Eocene Marron formation volcanics were traced into the grid area and a comparison of the greenstone made to massive chlorite alteration of the Marron rocks elsewhere on the property. By relating this information to the regional stratigraphy for the Marron sequence it was decided that the greenstone and adjacent rock types are a portion the lower Marron sequence which have been altered by intrusion of Eocene Coryell syenite and granite. The WSW and Zap showings contained by these rocks trend west-northwest which is normal to the main Tertiary fault trend, and they probably relate to cross faulting of the Tertiary system. A number of Tertiary and possible Tertiary gold deposits in the region are emplaced in cross faults. Relating the WSW and Zap showings to Tertiary cross faulting validates several similarly oriented VLF-EM conductors, located between them, as exploration targets.

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1.1 INTRODUCTION

The Burrell property has been the subject of several exploration projects since 1987 to determine the potential for gold mineralization. This work indicated potential for and exitance of epithermal gold bearing mineralization spatially related to Eocene faulting. As the age of some rock units containing the broadly dispersed mineralization was in doubt, it was decided that further detail was needed to fit various lithologies, and particularly those hosting the WSW and Zap showings, into the regional stratigraphy. During September 1992 a program of mapping and prospecting was conducted to expand and detail known areas of epithermal alteration on older portions of the property and preliminary traverses conducted on new portions of the property. As a result of this work several new lithologies were recognized and a better understanding of the sequence of emplacement gained. The results of the 92 exploration are presented in this report. Maps which accompany this assessment report record new work only.

1.2 CLAIMS STATUS

The property consists of four perimeter staked mineral claims and twelve two-post claims located in the Greenwood Mining Division on mineral title maps 82E/8W and 82E/9W.

Name	Record No.	Units	Record Date	Title
Shorts	215060	20	28/09/87	S. Davies
Chewmi	215061	20	28/09/87	S. Davies
Annes 1-2	215979-80	2 x1	15/11/90	E. Coffin
Annes 3-4	215981-82	2 x1	15/11/90	D. Coffin
Dave's	306157	20	26/10/91	D. Coffin
Fault	306158	20	27/10/91	E. Coffin
Switchback 1-4	310238-41	4 x1	09/06/92	E. Coffin
Switchback 5-8	310242-45	4 x1	09/06/92	D. Coffin

The Shorts and Chewmi claims are in good standing to Sept/93 and the Annes 1-4 to Nov/94; assessment work described in this report will be applied to maintain the Dave's and Fault claims until Oct/93 and the Switchback 1-8 claims until June 1994, respectively.

1.3 LOCATION AND ACCESS

The property is located on Burrell Creek, 17 kilometres north of Burrell Creek's confluence with the Granby River and 50 km north of the town of Grand Forks, British Columbia. Grand Forks is located on the British Columbia/Washington State border in B. C.'s interior region and is the government, commercial and transport hub for the Boundary District. The Burrell property is reached from Grand Forks by following an all-weather asphalt road along the east side of Granby River for 46 km, crossing Burrell Creek just above its confluence with the Granby River and then continuing for a further 12 km on a main gravel road that follows the Creek. Fair weather roads traverse the southern and central portions of the property.

1.4 PHYSIOGRAPHY and LAND USE

Burrell Creek is a southerly flowing main tributary of the Granby River which is in turn a major tributary of the Kettle River portion of the Columbia River system; the Columbia River empties into the Pacific Ocean at the boundary of Washington and Oregon States of the U.S.A. St. Annes and Deadeye Creeks are westerly flowing tributaries of Burrell Creek which occupy steep walled, V-shaped valleys respectively cutting the central and southern portions of the property; northerly flowing Nicoll Creek and southerly flowing Knappen Creek drain the extreme northeastern and southern portions of the property.

The property underlies westerly facing slopes and ridge crests adjacent to Burrell Creek. Elevation varies from 780 metres ASL along Burrell Creek to 1,240 m ASL on the southeastern property boundary. Side-hills slope up to 42° over 500 metres but are usually between 15° and 30°; bench-like plateaus lying along northerly trending air-photo linears break the slopes in several places. Portions of the property directly adjacent to Burrell Creek and at the outflow of St. Annes and Deadeye Creeks are flat lying and covered by considerable sections of

pebble and cobble sized alluvial material. Rock outcrops are abundant on southerly facing slopes and along ridge crests but are otherwise fairly scarce.

The Burrell property underlies part of the western foothills portion of the Columbia Mountains Physiographic Region. Precipitation is moderate, falling largely as snow from October through April. Most of the property is covered by stands of pine, cedar and mixed spruce and poplar trees, largely regenerated after a fire about 30 years ago, while southerly facing slopes are usually open grass lands.

Small areas are active clear cut logging sites or in early stage regeneration and others have been selectively logged for cedar shake blocks. The area is also used to graze cattle.

2.1 REGIONAL GEOLOGY

The last regional mapping of the property area was by Little in 1957, for the GSC, at a scale of 1:253,440 and the last compilation which includes the property area was by Tempelman-Kluit (1989), also for the GSC, completed in 1986 at a scale of 1:250,000. Much of the dating during Little's mapping was based on similarities to rock which had been mapped in greater detail in the Greenwood area, 50 km to the southwest. Subsequent work in the Greenwood area by Little and others altered the region's stratigraphy of several layered series into discrete sections, and similar intrusive suites to separate Epochs based on new radiometric dating. The result of this is the inclusion of intrusive rock similar to that of property to Eocene time rather than Jurassic to Eocene and the re-dating of (?)preEocene layered rock from Permian to uncertain, but probable ?Jurassic and/or Eocene periods.

The oldest rocks in the region are late Proterozoic to (?)Jurassic volcano-sedimentary formations and altered equivalents which are divided into five assemblages for the Greenwood area by Little(1983). All of these have been intruded by a series of Jurassic and/or Cretaceous felsic to intermediate rocks of the Interior Batholith. Overlying all of the above are Eocene Kettle River detrital sediments and intermediate volcanics, in turn overlain and cut by Eocene Marron intermediate to felsic volcanics and nearly contemporaneous Coryell intrusives of generally felsic composition, which are in turn overlain by late basalt flows. Cutting all units except the late basalt are northerly trending coarse grained and porphyritic felsic dykes.

Little(1957) and previous regional mappers had assigned a Jurassic age to a sequence of granitic and granodioritic intrusions running northwards from the property for 50 km on the assumption that they were contemporaneous with the Nelson Batholith located east of the area. Subsequent work indicates that older portions of the suite in Greenwood are of Cretaceous age. Recent radiometric dating by Parrish and Carr

at Ladybird Ridge, 50 km to the north of the property, indicates an age of 59 to 55 million years for granite to granodiorite which Little had called the Valhalla, and had mapped in the property, series and which he considered Jurassic post-Nelson in age. This rock is referred to by Carr and Parrish as the Ladybird granite suite.

The Ladybird suite is described as "homogenous, biotite (+/- muscovite, +/- garnet) bearing leucocratic quartz monzonite to granite batholiths, stocks and pegmatites." (Carr, 1989). This suite, with the successive Averill monzonite/pyroxinite and the Coryell syenite suites form an Eocene intrusive complex for the area. Further work by Carr restricted movement on the Granby Fault to post-Coryell, or roughly 50 million years, although evidence on the property indicates movement during emplacement of the intrusions. The Granby Fault is discussed in greater detail in subsequent sections.

Layered rock making up the area north of the St. Annes Creek outflow area was mapped by Little(1957) as Permian-Triassic Anarchist greenstone, a usage which is discontinued in Little's 1983 Greenwood stratigraphy (although it is still used elsewhere). The 1983 stratigraphy also segregated a portion of the Permian Knob Hill Group, which had formerly been encompassed by the Anarchist Group, to a separate sequence of Jurassic greenstone, phyllite and siltstone/wacke (Map Units Jv, Jph, and Js) which may be related to the Rossland volcanics found east of the map area or the Nicola Group found to the west. Map Unit Jv is lithologically similar to the "Anarchist" units found on the property, and prior to the 1992 field work were assumed by Coffin to be related to it.

2.2 REGIONAL MINERAL DEPOSITS

Ore deposits in the region have been of two main types: copper-gold-silver skarns resulting from the alteration of Permo-Triassic limestone, generally related to intrusion of the Cretaceous granodioritic suite; or gold-silver in sulphide poor epithermal quartz veins within Eocene and older rocks adjacent to and within regional fault systems. Both deposit types have included producers with extensive mining histories.

The most notable of the skarn deposits are in the Greenwood camp, 7 km northwest of Grand Forks. The largest deposit group, which represents the bulk of regional skarn production, is the Phoenix mines which produced almost 27 million tonnes of ore at bulk recovered grades of 0.85% copper, 1.12 g/t gold and 7.1 g/t silver. Between 1900 and 1920 about 12.5 million tonnes of high grade ore, including fissure fillings within the skarn, were mined from underground stopes while most of the balance was recovered as lower grade ore from pits mined between 1959 and 1976. A second important skarn deposit group is the Mother Lode mines which produced about 4.25 million tonnes at bulk recovered grades of 0.82% copper, 1.27 g/t gold and 5.04 g/t silver during periods similar to those of the Phoenix camp. In both areas ore was developed as pyrite-chalcopyrite-magnetite bodies within garnet-epidote-chlorite alteration of Triassic Brooklyn Formation limestone; the Brooklyn Formation is in the upper portion of the unit mapped as Anarchist Group by Little (1957). The above descriptions and figures are from Church (1986).

Eocene epithermal deposits are best represented by the Republic district located in Washington State, 20 km south of the Phoenix camp and 70 km south of the Burrell property. The deposits are developed within the Eocene aged Republic graben; the fault bounding the east side of the graben is a southern extension of the regional Granby fault which transects the Burrell property and localizes epithermal style alteration within it. To the end of 1987 the Republic district had

produced about 4 million tonnes at grades of 19.1 g/t gold and 111 g/t silver; at the end of 1987 Hecla Mining Co.'s Golden Promise veins, which began new production that year, had a reserve base of 467,059 tonnes at 27.4 g/t gold and 64.1 g/t silver. Mineralization is found in fissure veins contained by the northeasterly trending main faults or subsidiary parallel structures dipping at moderate to steep angles. The veins consist of banded chalcedony and usually adularia with black stringers or bands which contain the gold and silver with minor copper and antimony sulphides, various sulfosalts and selenides, as well as pyrite, marcasite and fluorite. Near the top of the mineralizing systems lower grade stockworks and disseminated deposits are found which coalesce into well defined high grade veins at depth (Dayton, 1988).

A second Eocene epithermal deposit type is represented at Wenatchee, Washington, where deposits formed in strata bound alteration zones located within the Chiwaukum graben. Between 1949 and 1967 a total of 940 thousand tonnes at 13.6 g/t gold and 20.8 g/t silver were produced from the Lovitt Mine. In 1985 Asamera Minerals began production at the Cannon mine with a reserve base of about 4.8 million tonnes at grades of 7.34 g/t gold and 17 g/t silver. A mineral assemblage similar to that at Republic formed in a developing arkosic sandstone which acted as lateral aquifers for hydrothermal fluids. The alteration is zoned outward from a zone of silica breccia and flooding to argillization and then broadly propylitic areas (Margolis, 1989).

Recent work on epithermal targets in the Burrell area has lead to the discovery by INCO Ltd. of the Outback property 20 km northwest of Burrell property. Reporting of mapping and drilling during 1989-91 indicate that values up to 14.5 g/t gold over 2.5 metres were obtained from drusey quartz veining associated with a late quartz-feldspar porphyry and associated alteration which is similar to that of the northern Chile porphyry belt (Bohme, 1991), and describes the Outback as lying along the western edge of the Republic graben's fault system.

Five kilometres north of the Burrell property is the Franklin mining camp. Mineralization similar to that described above was found here in 1896. Numerous small bodies of skarn and fissure vein deposition containing pyrite, chalcopyrite, galena, sphalerite and gold-silver mineralization where found. The most significant of these, the Union, mined 171,000 tonnes of ore averaging 14 g/t gold, 340 g/t silver and varying amounts of zinc, lead and copper from an easterly trending (080/V) fissure vein cutting Anarchist units proximal to the granodiorite intrusive. The Union deposit has been assumed to be of the same (historically Jurassic) age as that which formed the skarns in the Greenwood camp, but the granodiorite is now considered of uncertain but possible Eocene age. As well, the fissure which hosts the Union deposit is normal to, and located at a flexure in, the Granby regional fault. In the Greenwood camp several fissure veins of this sort have been mined, the most important being the Jewel Lake from which over 120,000 tonnes has been extracted at bulk recovered grades of 9.9 g/t gold, 58 g/t silver, 0.13% lead and minor zinc. The Jewel Lake vein, which is the north end of the Greenwood camp, cuts the youngest of the Cretaceous plutons and younger dykes and may therefor itself be part of the Eocene epithermal systems.

Recent work at Franklin camp has also included the investigation of the early Tertiary "Averill" mafic intrusives for platinum group elements (PGE) deposition. Platinum is found in the augite or biotite rich core of small, northwesterly trending, zoned, mafic-rich monzonite plugs. The PGE are associated with chalcopyrite and iron sulphides, but have not been found in economic concentrations.

2.3 PROPERTY HISTORY

The property area was prospected in the early part of this century when the Franklin Camp was active; no mineralization was reported east of Burrell Creek, but a number of occurrences were staked in greenstone west of the Creek.

During 1973 and 1974, the east side of Burrell Creek was opened by logging roads. Prospecting at this time by Walter Buller discovered three areas of mineralization on which he staked small claim blocks.

The Shorts and Chewmi claims were staked in September of 1987. In May and June of 1988 a preliminary program was conducted to locate Buller's showings, and to assess the geochemistry of the property and its potential for further work. Two of Buller's showings, WSW and Burr, were located and sampled. Soil geochemistry was tested with a small suite of samples at the Burr showing.

In 1989 a small north-south trending grid was emplaced in the area of the WSW showing and used to conduct VLF-EM and magnetometer surveys and soil samples collected over several anomalous responses. The Annes 1-4 claims were staked in 1990 to cover extensions of the anomalies. During reconnaissance traverses the northerly trending Ridge alteration zone was discovered, as was similar alteration adjacent to northerly and northeasterly trending faults seen along St. Annes Creek. The base line was extended to cross the Ridge alteration and geophysical profiles obtained.

In 1991 the grid was expanded and infill lines added. New VLF-EM data was collected and further mapping conducted. The Zap showing was discovered during this work. The Ridge Veins were discovered adjacent to the alteration zone, and the LJ showing re-located. Soils were collected to box a spot high from the '89, results and to provide an east-west profile over the Ridge alteration. The Dave's and Fault claims were staked in late 1991 to cover the extension of the main fault trend, during which time the Switchback zone was discovered.

3.1 1992 EXPLORATION

A number of preliminary traverses were conducted across the thick sections of Eocene dated volcanics on the Dave's, Fault and Switchback claims. Lithologies and stratigraphy known on the Shorts and Chewmi claims which was used in detailing portions of the grid area. In addition, detailing of alteration along the north side of St. Annes Creek indicated it is more extensive then previously known, and preliminary traverses north of the "Ridge Veins" indicates that volcanic rock and alteration are much more extensive than had been previously known. Detail mapping of the 1989 grid area, including tracing of units from the south, indicated that much of the rock in this area, and in particular the unit hosting the Zap showing, is of likely Eocene age.

Because of the multiple phases of intrusive in the property, most of which are altered by quartz and feldspar over large areas, the following lithology types are used in this section: **granodiorite** indicates the earliest phase of "Ladybird" (?) or older granitic to monzonitic, coarse grained intrusive which is felt to predate the Eocene volcanic units; **syenite** is used to denote rock silica and mafics poor of intrusive or uncertain emplacement which is felt to be concurrent with or younger than the Eocene volcanics, while **trachyte** is used to indicate rock for which definite extrusive characteristics or relationships have been seen; **granite** indicates a late phase, quartz rich and mafics poor unit which is felt to be part of the Coryell intrusives; **Coryell** is used to indicate late phase syenite or granite which is distinctively pink in colour and usually distinguished from older, similar units by fine, disseminated magnetite.

3.2 SOUTHERN CLAIMS MAPPING

Traverses along the lower portion of **Deadeye Creek** and the main logging road to the south of it indicated the following sequence from west to east from a lowest elevation of 840 metres on the Creek:

Biotitic basalt. Fine grained grey to dark green flows which typically containing 0.5-2% biotite as scattered phenocrysts up to 1 mm across and which may contain up to 10% finely disseminated pyrite and/or clots and fracture fillings of calcite. The lowest portion seen displayed weak columnar jointing, and the higher portions were interbedded with trachyte porphyry.

Trachyte porphyry. Mauve to buff or pink coloured flows with 10-20% feldspar phenocrysts to 1 cm across which are often partly altered to chlorite. Where interbedded with basalt, lower contacts typically contain smaller and more abundant phenocrysts while upper contacts are more massive and may contain thin flow breccia and chloritic seams. Similar features were seen further up section to the east, where the unit appears to grade into hypabyssal trachyte.

Hypabyssal trachyte. White to pink, fine crystalline, felsic and quartz poor rock. Includes portions up to 15 metres across of crystalline orthoclase, and of chloritic seams. Probably a shallow intrusive equivalent of the trachyte porphyry and distinct from Coryell syenite and related intrusives mapped elsewhere on the property.

Further to the east of the hypabyssal trachyte is massive, fine grained, orange to pink rock which may be alteration of the trachyte related to a fault seen on the Deadeye Creek Main road, or a non-porphyry trachyte which has not been seen elsewhere.

Traverses on the side-hill and ridge between Deadeye and St Annes Creeks, overlying the trachyte porphyry, is a sequence of green and grey-green andesite lapilli and crystal tuffs, and overlying andesite to dacite fine grained and feldspar porphyry flows. At 860 metres elevation on the on the northwest shoulder of the ridge, overlooking St. Annes Creek, is an outcrop of conglomerate consisting of sub-angular pebbles and rare cobbles of intermediate volcanics; the local section is 5 metres vertically and grades into a volcanic conglomerate but the extent of the unit is not known. Measurable bedding was not seen but the location of the various units, without reference to probable intervening faults, indicates a general north-south strike.

3.3 NORTHERN CLAIMS MAPPING

Some outcrops on the **Shorts claim** which had previously been mapped as contact or sheeted portions of the Coryell syenite are similar to the trachyte porphyry and, after re-examination, have been re-mapped as such. In addition, portions of the Coryell intrusive were recognized

as late, quartz rich "granite" phase which is adjacent to areas of bleaching. Below the trachyte porphyry are outcrops of andesite to basalt which are equivalent to the "biotite basalt".

The alteration on the north side of St. Annes Creek was examined in greater detail and is now divided into three fault bounded blocks. The western block is composed of basalt-trachyte intruded by Coryell syenite and granite (quartz-feldspar), small portions of which have been altered near quartz-feldspar contacts, and which is separated from the central block by a northeastern trending fault. The central block is a quartz-chlorite alteration of ?Coryell syenite in which the alteration minerals are both replacing the earlier material and filling narrow fractures. This zone extends vertically from the Creek at 840 metres to 980 metres, above which are is unaltered Coryell syenite; along the Creek the zone has lateral extent of 500 metres. Three felsic dykes (see below) which are each about 1 metre thick and which trend 000° or 020° and dip near vertically, cut the alteration zone.

The central block is separated from the eastern block by a 000° to 020° trending fault (the Middle fault). The eastern block is composed of massive, white alteration which sometimes has a reddish or brown surface coating and in which quartz eyes were occasionally seen; staining of samples from this zone indicated a varied mix of plagioclase, orthoclase and quartz in the lower portion and a more quartz rich upper portion. The zone extends vertically from 960 metres on the Creek to the top of the ridge at 1040 metres where it is lost under overburden, and has a lateral extent of 300-400 metres along the Creek and 50-75 metres on the ridge top. Outcrops to the east of the alteration zone are composed of gneiss and, though the contact area does not outcrop, it is likely that the alteration at least partially replaces gneiss.

Preliminary traverses were conducted on the northern part of the main ridge in the central portion of the Chewmi claim. Previous work

on the lower slopes in this area had located several areas of chlorite and quartz filling fractures in granodiorite with minor pyrite and chalcopyrite. Above and east of these areas is broad zone of altered granodiorite and what appear to be felsic volcanics. Northerly trending bands of green and light coloured, fine grained rock of uncertain origin rest on or are replacements of granodioritic and syenitic rock. Some sections of cherty or nobbily silica are clearly replacement zones while other glassy sections look like rhyolite. Similarly, some of the darker sections look like chlorite-epidote alteration zones while others are andesitic to dacitic porphyry flows. One zone of cherty replacement with about 3% fine disseminated pyrite appeared to be up to 100 metres across. The amount of replacement type outcrops, and of syenite (rather than granodiorite), increases towards the projected extension the Middle fault. The zone of heavily altered outcrops is 400 metres across, with a flat, overburden covered area of 200-400 metres to the east of it before the projected extension of the Middle fault trend. This altered zone was seen along a strike of 1,400 metres, with the southern most exposure being about 400 metres north of the Ridge Alteration and Veins zone found in earlier programs.

The St. Annes', Ridge and northern extensions of the alteration zone have now been seen along a strike of 3,000 metres and over a rough average of 400 meters width. Chlorite alteration seen on the south side of St. Annes' Creek and opposite to the quartz-chlorite alteration described in the St. Annes' section, would extend the total strike of the zone for a further 500 metres. The zone remains open to the south. The presence of andesitic porphyry from the upper part of the Eocene volcanics sequence plus the extent and fine grained nature of the silica alteration indicates a likely epithermal origin of the alteration suite.

Further detail of the **1989 grid area** was done to date the volcanics in that sequence and relate them to intrusive activity. Dating of the units in the grid area, and particularly those hosting the WSW and Zap showings, has been problematic because of small

scattered outcrops which include numerous altered igneous units. Tie-lines were run to record the obvious deflections of the compass lines noted in earlier programs. Several of the largest deflections were checked by compassing along the lines, indicating they a partly due to local magnetic features.

The biotitic basalt seen on Deadeye Creek were traced into the southeastern part of the grid, where they are intruded by Coryell granite; this unit was also seen in earlier reconnaissance work on the old Franklin Camp road to the west of Burrell Creek and about 1.5 km SW of its location in the grid area. The basalt-trachyte porphyry units appear to be part of the central division 4B of the Marron formation established by Monger (1967) in the Greenwood area, and the overlying andesitic sequence corresponds with his upper 4C division. Underlying 4B in Monger's (and subsequent) stratigraphy are sodic trachytes and lessor phonolite in pyroxene-feldspar porphyry flows, grading upwards from brecciated through coarse then fine grained units. The Marron sequence is considered regionally extensive, though sub-divisions are missing in some areas. Below the lower Marron are Kettle River feldspathic and lithic volcanic sandstones with lessor shales, conglomerates and dacite. Below the Kettle River are various pre-Tertiary formations.

Several scattered outcrops of mudstone and silty limestone found during earlier programs had been an indicator that the these rocks might be part of the Permian-Triassic marine sedimentary sequence mapped 5 km to the north in the Franklin camp. While thin mudstone units from lake bed environments are known in the Eocene stratigraphy of Washington State, limestone has not been reported. However, since the calcareous sections seen rest on top of the mudstone and are not more than a 1 metre thick, they may have developed as fresh water marl deposits. One outcrop contained limy concretions within a calcareous matrix having a blocky, conchoidal fracture, which is typical of marlstone.

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The most prominent outcrops in the grid area are massive greenstone which have been reported to contain thin limestone members and which therefore conform to the Little's new (1983) Jv reassignment of Anarchist units in the Greenwood area. Unlike the Jv unit, no evidence could be found of flow breccia which is typical of that unit. One outcrop of greenstone, at 4+20S/0+15E, grades into a chlorite porphyry of a felsic ?flow unit. All the greenstone seen is close to Eocene intrusives, usually syenite, and is often close to less obviously altered calcareous andesite which has only been seen in those locations. These factors in combination with the presence of massive chlorite alteration of volcanics elsewhere on the property indicate that chlorite alteration in the greenstone might be caused by thermal transfer from the Eocene intrusion and fluid movements rather then strictly regional, depth related metamorphism. Since there is no obvious alteration of the WSW vein showing its emplacement presumably post-dates the greenstone development.

The most extensive "layered" unit in the grid area is an altered white to light green rock which typically has a greasy or waxy appearance. Portions of this unit are a mass of indistinct feldspar crystals or fragments while others are friable and fine grained. Several small outcrops of dacite to rhyolite flows were seen in several locations, as were several pink coloured flows or dykes, one of which contained feldspar phenocrysts to 4 mm, which are similar to the trachyte porphyry unit. The waxy appearance and massive nature of the unit is typical of nepheline rich phonalites, which are reported in the lower section of Marron but not, to my knowledge, in any of the older igneous sequences. Whole rock chemistry and/or thin section analysis is needed to verify the lithology (labelled "waxy green ?andesite" on Figure 5), but the sequence as whole seems to best fit the lower Marron in regional stratigraphy. The Zap showing is located in waxy green andesite.

3.4 MINERALIZATION

The **Switchback** showing was found during staking of the Dave's and Fault claims in October 1991 and the Switchback 1-8 claims were staked to cover it in July 1992. The showing, located in a logging road 100 metres west of the Dave's 4S claim post, is an area of subcrop containing rusty weathering and vuggy cobbles of cherty silica and lesser clay minerals with fine to coarse grained pyrite and ?marcasite. The sulphides are found disseminated, in coarse clots, filling fractures and crudely banded, and constitute up to 25% of the volume of large cobbles. The showing area is located within and near the top of the trachyte porphyry unit.

Material from the showing was collected and segregated by form into 3 samples (BRC 211-213) and analyzed for 30 elements using ICP and for gold using AA. All three had low but locally elevated copper of 178-270 ppm. Similarly, a disseminated sulphides sample (211) had 261 ppm molybdenum, a high sulphide banded sample (212) had 2.3 ppm silver and 53 ppm arsenic, and a low sulphide cherty sample (213) had 120 ppb gold. A series of silicified and sulphide poor outcrops were traced for 280 metres along a trend of 014° in July 1992 and 2 samples (BRE 201-202) were collected which did not return elevated values when analyzed.

The **Ridge Veins** area was further prospected with the result that 20 plus individual veins were located along a total strike of about 400 metres. Some of the veins are found in banded chlorite-silica/feldspar alteration and andesitic volcanics similar to those to the north in the central Chewmi claim. In addition to narrow veins in place several areas of massive silica float were seen. Samples BRE 208-211 were collected, but did not return elevated gold values; BRE 211, the only high lead and zinc sample from the property to date which did not carry gold, is from a rubble zone of milky quartz with clots of chalcopyrite, magnetite and garnet which is different from the gold bearing quartz veins.

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Samples BRE 204 and 205 were collected from the **St. Annes alteration** zones, respectively the chlorite-quartz and massive sections. Trace element analysis did not return anomalies; whole rock analysis was also done, but it should be cautioned that sample 204 from the chlorite-quartz alteration is of a quartz vein and is not representative of the system as a whole.

The newly discovered alteration in the **central Chewmi** claim were tested by samples BRE 206 and 212-14. None of these samples returned elevated gold values and they are also low in base metal values.

Samples BRC 301 and 302 were collected from the **1989 grid area.** 301 is from sulphide poor, silica filling fractures in bleached float adjacent to the Zap showing and on trend with larger of the two VLF-EM anomalies. 302 is from bleached and hematite altered Coryell granite. Neither sample returned anomalous values; whole rock was done on both.

4.1 CONCLUSIONS and RECOMMENDATIONS

Epithermal style chloritic and quartz-feldspar alteration has been found along a 3.5 km strike of the Tertiary Granby-Burrell fault zone. Much of the altered material is Eocene Marron volcanics lying near the contact with syenite and granite of similar age. After comparing greenstone and adjacent rock which had previously considered of Permo-Triassic or Jurassic age with the regional Marron sequence and with altered Marron rock on the property, it is concluded that the greenstone area is an altered portion of the lower Marron sequence; this places the mineral showings contained by greenstone within the Eocene regime and indicates the importance of tracing mineralization in faults which cross-cut the main trend.

In order to begin testing the alteration main fault trend, flag lines should be emplaced across the trend and used to collect soil samples and detail the geology, to be followed up by shallow hand trenches were applicable. Several portions of the VLF-EM conductors from the 1991 program can also be tested by hand trenching.

Preliminary scale mapping of the Dave's and Fault claims should be completed, with particular emphasis on tracing the extension of the main alteration trend from the northern claims and on determining the relationship of the cross structures visible on airphotos to lithology and alteration.

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4.3 AUTHORS QUALIFICATIONS

Haileybury School of Mines, Ontario, department of Mining Technology, from 1975 to 1977. Subsequent to that I have completed university courses in geography and economics, and several short courses and seminars dealing with geochemistry and Cordilleran geology and mineral deposits.

Since 1974 I have worked at a variety of jobs in the Canadian mineral exploration field, including regional and detailed prospecting, detailed geological mapping, core logging, property management and program development.

My experience has included: three years with Canada Tungsten Mining Corp Ltd. on the early phases of the Dublin Gulch, Yukon tungsten skarn and gold vein program; two years with SEREM Ltd on the preliminary underground phase of the Lawyers Creek gold-silver veins mine; and a total of four years conducting reconnaissance and preliminary property work on Tertiary epithermal deposits in southern B.C. for Kerr Addison Mines Ltd and for MineQuest Exploration Consultants Ltd.

Since 1986 I have been a self employed exploration consultant and partner in the firm of Vanguard Consulting Ltd. Much of the work involved contract and sub-contract supervision of early stage exploration programs for small mining companies, largely for vein type gold deposits in coastal and interior B.C.

I have held a direct interest in the Burrell Property from its inception and have conducted or supervised all of the work completed to date.

Appendix A

COST BREAKDOWN

June 8 - 10

D. Coffin,	3 days @	$325.00	$ 975.00
E. Coffin,	3 days @	$225.00	675.00

September 18 - 28

D. Coffin,	11 days @	$325.00	$ 3,575.00
E. Coffin,	11 days @	$225.00	2,475.00

Expenses:

Analytical Costs	$ 352.50
Base Maps	56.62
Field Supplies	102.65
Groceries, maeals and Accommodations	624.92
Office supplies, Lond Distance Charges	46.20
Vehicle rentals and fuel	976.35

TOTAL COSTS: **$ 9,859.24**

APPLIED TO:

DAVE'S	2,000.00
FAULT	2,000.00
SWITCHBACK 1-8	800.00
BALANCE, APPLIED TO PAC ACCOUNT FOR DAVID COFFIN.	$4,059.24

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Appendix B - Figures 1-2

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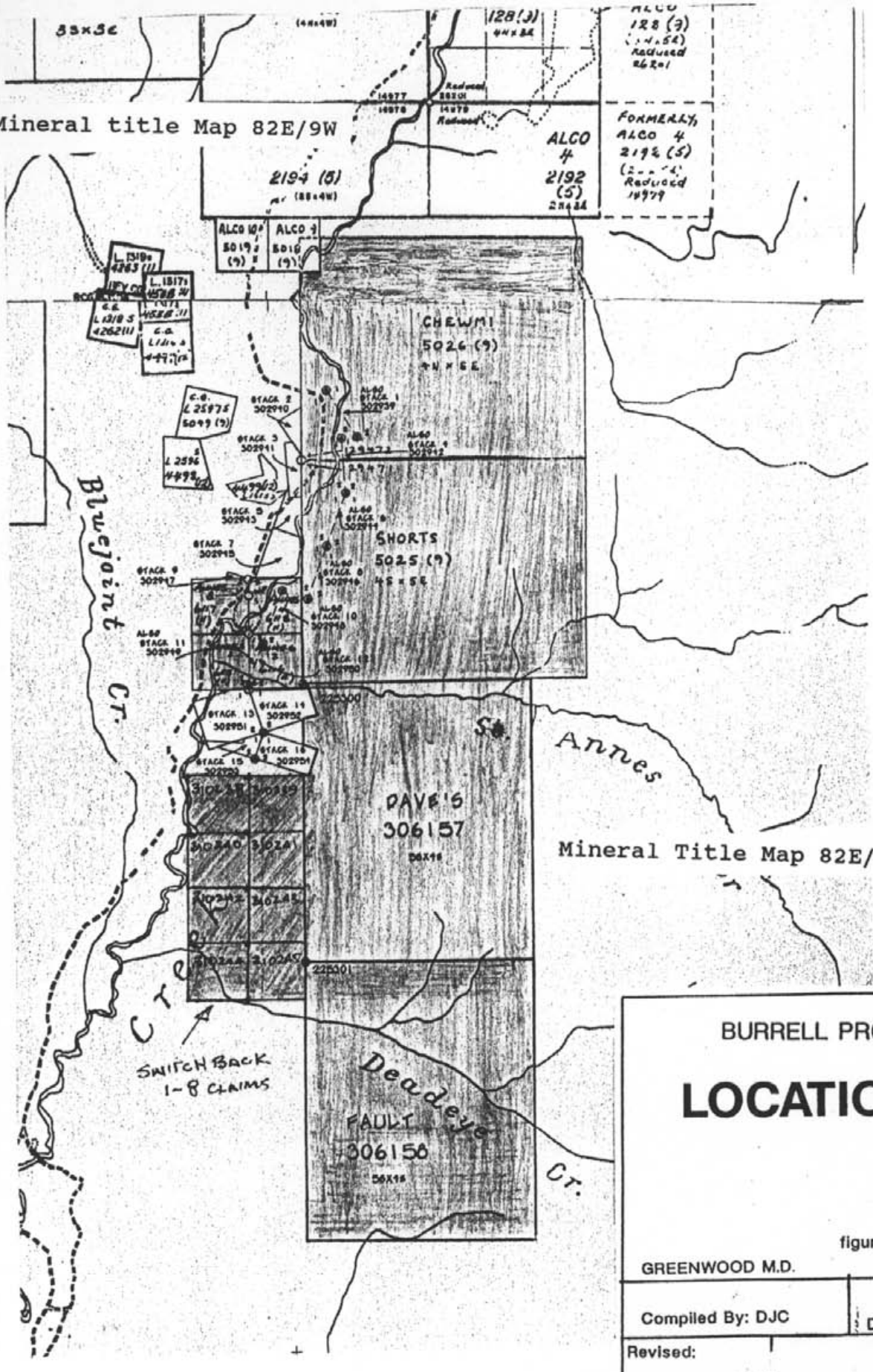
118 15'



49 30'

BURRELL PROPERTY

LOCATION MAP

figure 1

GREENWOOD M.D. NTS 82E/8W & 9W

Compiled By: DJC	Drawn by: DJC	Date: December 1988

Revised: APRIL 1993

FIGURE 2

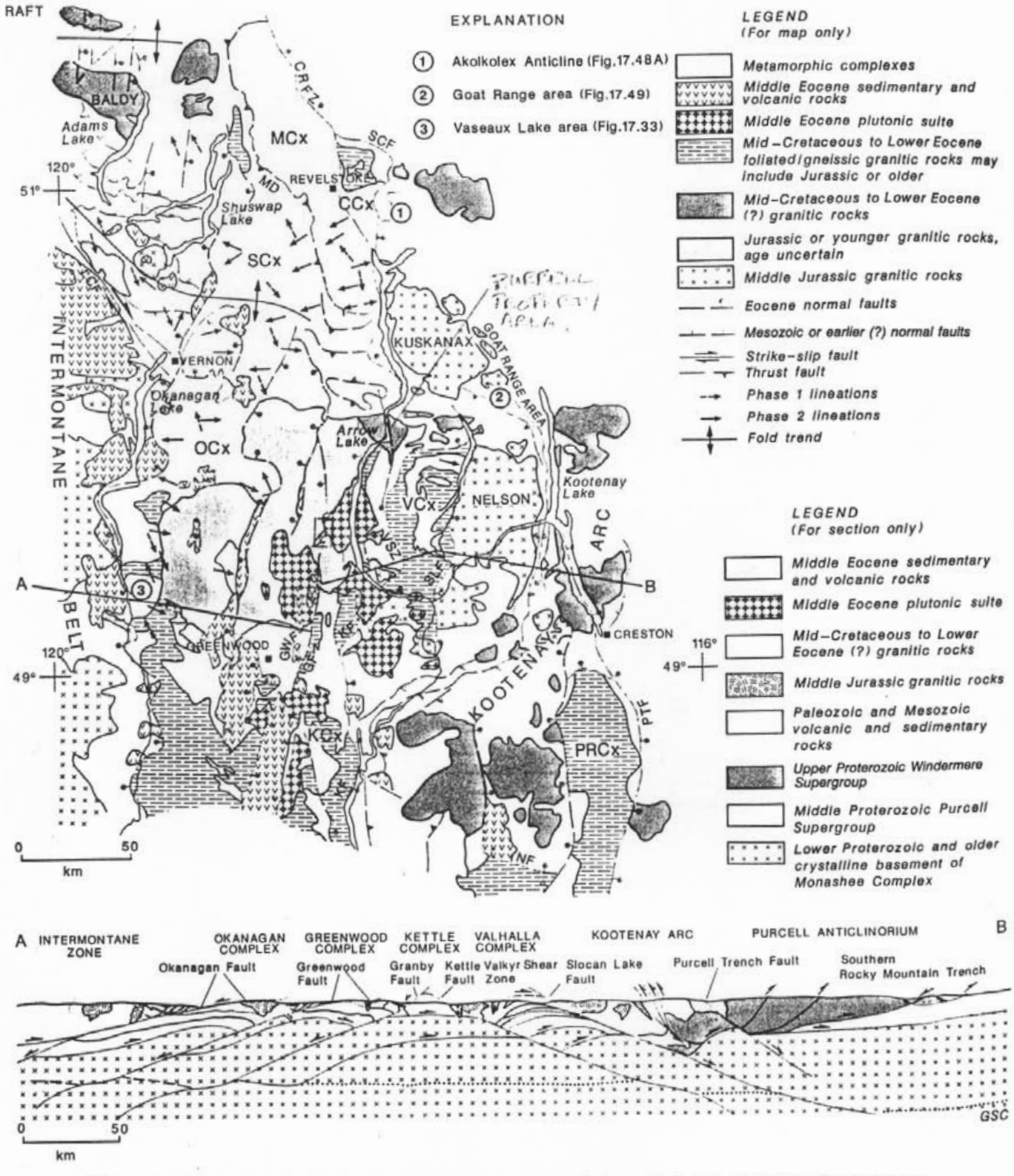


Figure 17.32. Main structural elements of the southeastern Omineca Belt. Data from R.R. Parrish (pers. comm., 1986). MCx, Monashee Complex; CCx, Clachnacudainn Complex; SCx, Shuswap Complex; OCx, Okanagan Complex; VCx, Valhalla Complex; KCx, Kettle Complex; PRCx, Priest River Complex; MD, Monashee Décollement; CRFZ, Columbia River Fault Zone; SCF, Standfast Creek Slide Fault; PTF, Purcell Trench Fault; NF, Newport Fault; SLF, Slocan Lake Fault; VSZ, Valkyr Shear Zone; KF, Kettle Fault; GF,

Appendix C - Laboratory Results

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Vanguard Consulting Ltd. PROJECT BURR File # 92-1439

701 - 518 Beatty St., Vancouver BC V6G 2L3

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
BRE-201	78	41	10	31	.1	5	4	270	1.53	5	5	ND	5	47	.5	2	2	18	.70	.074	8	16	1.04	45	.16	2	1.26	.04	.11	1	3
BRE-202	19	100	11	50	.1	10	11	458	2.01	5	5	ND	5	72	.5	2	2	32	.99	.083	8	20	1.26	38	.14	2	1.62	.03	.10	1	7
FRC-001	11	54	30	47	26.4	10	9	375	1.72	67	5	ND	1	8	.2	6	2	30	.19	.029	2	14	.50	18	.01	2	.62	.01	.06	1	460
RE FRC-001	11	51	30	46	26.8	10	9	353	1.63	62	5	ND	1	8	.2	6	2	29	.18	.028	2	14	.49	17	.01	3	.60	.01	.06	1	497

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JUN 12 1992 **DATE REPORT MAILED:** June 17/92 **SIGNED BY** ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Vanguard Consulting Ltd. PROJECT BURR File # 92-1286

701 - 518 Beatty St., Vancouver BC V6G 2L3

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
ROCK SAMPLE	19	72	10	3181	.6	7	12	1047	3.01	3	5	ND	40	65	16.3	2	6	43	3.63	.003	2	9	.37	18	.03	2	.76	.01	.02	1	7
RE ROCK SAMPLE	18	70	14	3165	.4	5	11	1017	2.84	2	5	ND	41	65	16.2	2	6	42	3.61	.001	2	9	.37	15	.03	2	.77	.01	.01	1	4

LOCATE: ON MAP AS "BRS 203"

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: JUN 4 1992 **DATE REPORT MAILED:** June 8/92 **SIGNED BY.** C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Vanguard Consulting Ltd. PROJECT BURR File # 92-3635

701 - 518 Beatty St., Vancouver BC V6G 2L3

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	Tl ppm	Hg ppm	Au* ppb
BRE 204	3	20	7	8	.3	5	1	151	.33	19	5	ND	3	14	.2	2	2	1	.43	.002	2	8	.01	23	.01	2	.10	.02	.07	3	2	1	6
BRE 205	3	19	13	51	.1	6	2	267	1.50	22	5	ND	20	38	.2	2	3	11	.26	.041	14	6	.29	30	.11	2	.68	.05	.08	1	2	1	7
BRE 206	4	8	12	48	.1	4	4	280	1.61	11	5	ND	12	47	.2	2	2	10	.58	.049	38	24	.39	58	.02	2	.61	.04	.12	1	2	1	25
RE BRE 210	6	701	8	124	3.7	35	43	395	10.80	2	5	ND	3	102	.4	2	4	60	.70	.007	4	30	.32	21	.02	2	.69	.01	.03	4	2	1	11
BRE 207	1	14	3	10	.1	5	2	280	.46	7	5	ND	1	26	.2	3	2	3	.57	.004	5	3	.04	255	.01	2	.13	.02	.09	1	2	1	2
BRE 208	6	23	24	86	.3	7	4	199	.95	13	5	ND	1	13	.2	2	2	16	.18	.010	2	13	.28	16	.05	3	.40	.01	.04	2	2	1	7
BRE 209	4	12	4	35	.1	12	4	271	.88	22	5	ND	1	12	.2	2	2	13	.41	.005	2	10	.27	20	.01	3	.30	.01	.02	1	2	1	6
BRE 210	6	682	11	123	3.6	37	43	378	10.47	3	5	ND	2	99	.2	2	2	58	.68	.007	3	28	.32	18	.02	2	.67	.02	.03	4	2	1	8
BRE 211	15	1334	983	3822	60.8	8	45	785	14.77	3	5	ND	1	55	15.1	2	542	142	1.67	.010	2	5	.39	19	.07	2	.98	.01	.03	1	2	1	11
BRE 212	1	15	21	149	.2	4	4	696	2.74	4	5	ND	28	28	.2	2	2	17	.42	.053	65	3	.32	58	.21	2	.93	.04	.15	1	2	1	2
BRE 213	3	9	4	9	.1	7	1	220	.31	10	5	ND	1	45	.2	2	2	2	1.48	.001	2	9	.01	31	.01	2	.11	.01	.06	1	2	1	3
BRE 214	7	17	7	1	.1	11	3	163	.46	10	5	ND	1	4	.2	2	3	3	.16	.004	2	54	.05	17	.01	2	.10	.01	.02	1	2	1	9
BRC 301	1	32	19	126	.9	8	7	577	1.73	6	5	ND	1	62	.2	2	9	10	.75	.024	5	5	.08	1077	.01	2	.21	.02	.07	1	2	1	1
BRC 302	2	7	11	96	.1	4	5	821	1.92	4	5	ND	11	33	.2	2	2	12	.63	.060	28	4	.25	234	.01	4	.62	.04	.14	1	2	1	1
BRC 303	3	8	15	1	.1	59	10	322	1.84	9	5	ND	1	19	.3	2	2	43	.20	.053	10	93	1.43	28	.01	2	1.07	.02	.03	1	2	1	2
CRC 201	2	63	2	30	.2	9	23	144	3.53	25	5	ND	1	162	.3	2	2	14	2.59	.302	2	13	.26	17	.19	4	2.36	.31	.04	1	2	1	7
STANDARD C\AU-R	18	58	38	139	7.5	69	32	1046	3.96	43	20	7	40	52	18.5	15	21	57	.50	.084	39	60	.94	191	.09	35	1.88	.07	.14	10	2	2	480

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE. Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 14 1992 **DATE REPORT MAILED:** Oct 22/92 **SIGNED BY.** C. Leong D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

WHOLE ROCK ICP ANALYSIS

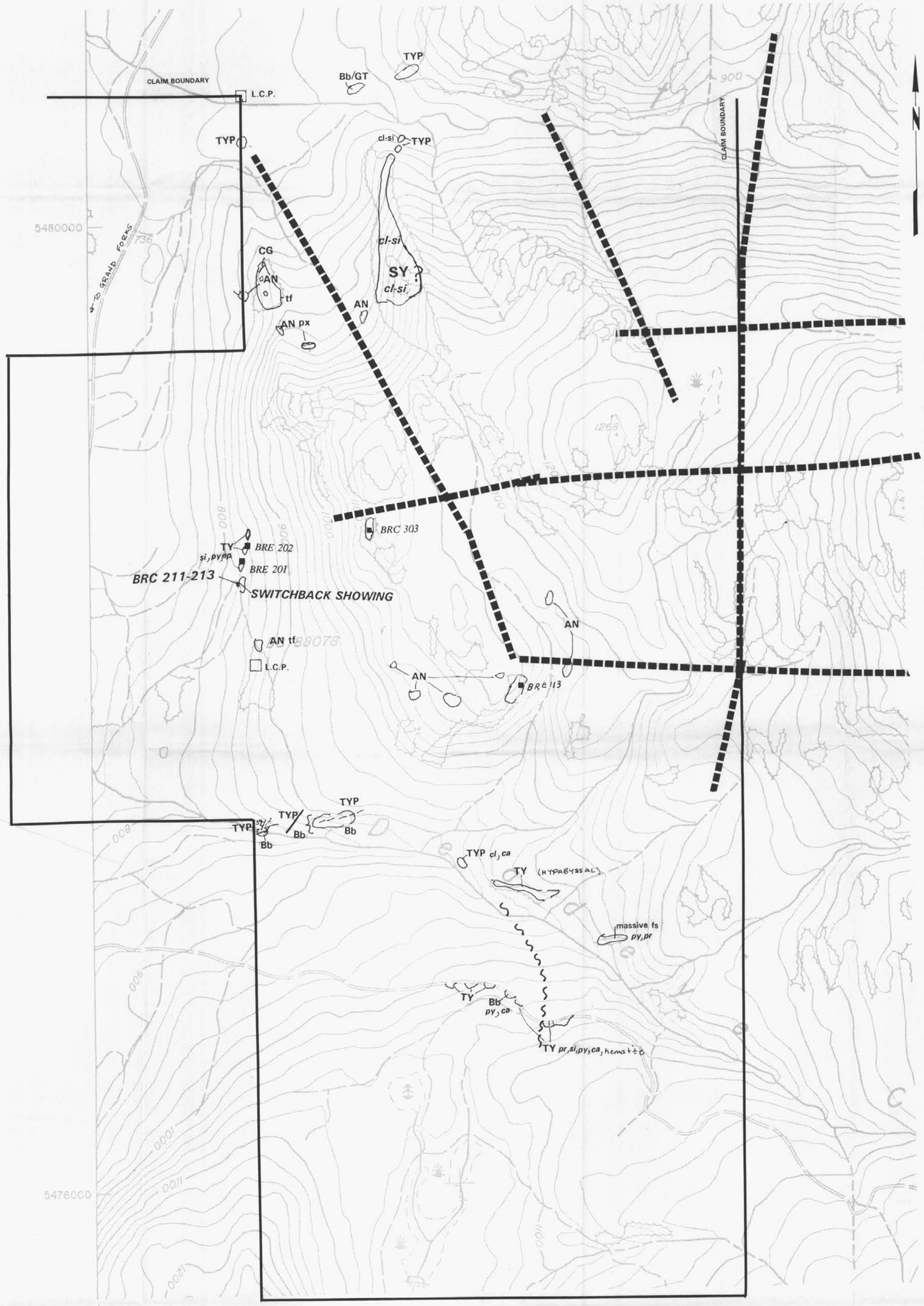
Vanguard Consulting Ltd. PROJECT BURR File # 92-3635

701 - 518 Beatty St., Vancouver BC V6G 2L3

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ba ppm	Sr ppm	Zr ppm	Y ppm	Nb ppm	LOI %	SUM %
BRE 204	91.66	3.92	.56	.05	.63	.86	1.30	.03	.01	.02	.003	245	132	8	17	5	.9	99.99
BRE 205	71.59	14.13	2.80	.27	1.93	3.33	3.73	.27	.11	.04	.002	1476	700	89	13	24	1.4	99.95
BRE 206	70.10	14.67	2.88	.40	1.68	3.41	4.24	.29	.14	.04	.004	1755	803	104	11	22	1.7	99.97
RE BRC 301	87.91	4.02	2.94	.13	.98	1.05	.80	.16	.05	.07	.002	1322	90	16	6	5	1.6	99.95
BRE 212	62.92	17.60	4.10	.35	1.17	4.96	6.23	.64	.13	.10	.002	803	325	254	26	64	1.5	99.92
BRC 301	88.00	4.06	2.94	.13	.98	1.06	.76	.16	.07	.07	.002	1432	90	15	6	5	1.5	99.99
BRC 302	68.96	15.19	3.33	.35	.96	4.35	3.88	.36	.17	.10	.002	1348	494	113	12	25	2.0	99.96
BRC 303	87.32	4.01	3.00	2.15	.27	.99	.21	.18	.16	.04	.018	81	114	28	6	5	1.6	99.98
CRC 201	52.33	16.75	5.85	2.30	11.76	3.71	.68	1.99	.94	.08	.002	233	768	94	50	20	3.4	99.94
STANDARD SO-4	68.31	10.54	3.58	.98	1.60	1.30	2.14	.56	.22	.08	.008	849	194	320	24	14	10.4	99.93

.200 GRAM SAMPLES ARE FUSED WITH 1.2 GRAM OF LIBO2 AND ARE DISSOLVED IN 100 MLS 5% HNO3.
- SAMPLE TYPE: ROCK Samples beginning 'RE' are duplicate samples.

DATE RECEIVED: OCT 14 1992 **DATE REPORT MAILED:** Oct 22/92 **SIGNED BY.** C. Leong D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS



LEDGEND

LITHOLOGIES

LAYERED ROCKS:

AN - ANDESITE; px-PORPHYRY, tf-TUFF
CG - CONGLOMERATE
TY - TRACHYTE; TYP-TRACHYTE PORPHYRY
Bb - BASALT
MS - MUDSTONE
LS - LIMESTONE

INTRUSIVES:

GT - GRANITE
SY - SYENITE
GN - GNEISS
GD - GRANODIORITE

MINERALIZATION
& ALTERATION:

ca - CALCITE
cl - CHLORITE
ep - EPIDOTE
fs - FELDSPAR
mg - MAGNETITE
pr - PYRRHOTITE
py - PYRITE
si - SILICA
bx - BRECCIA
px - PORPHYRY

Geological contact: definite
approximate
assumed

Shear
Fracture with dip
Fault with dip
Joint with dip
Outcrop
Subcrop
Airphoto Linear
Creek
Road
Rock sample, with number: *BRE 201*

GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,907

BURRELL PROPERTY

GEOLOGY - SOUTH HALF

FIGURE 3

GREENWOOD M.D.

NTS 82E/8W SCALE: 1: 10,000

DRAWN BY: DJC APRIL 1993

VANGUARD CONSULTING LTD

0 200 400 600 metres

118° 24' 00"
49° 30' 00"

400000

CLAIM BOUNDARY

CLAIM BOUNDARY

LJ SHOWING

BURR SHOWING

WSW SHOWING

ZAP SHOWING

SEE FIGURE 5 FOR GRID AREA DETAIL

RIDGE VEINS AREA

ALTERED VOLCANICS +/- INTRUSIVES

BRE 201

BRE 202

BRE 203

BRE 204

BRE 205

massive si
massive si-fs

BRE 206

BRE 207

BRE 208

BRE 209

BRE 210

BRE 211

BRE 212

BRE 213

BRE 214

cl-si

si-fs

fs-si

si-fs-cl

GD

GD ?
si-fs

AN
si

SY
cl-si

SY ?
cl-si

SY

SY/GT

GT

TY

AN

GN

0+00E 100E 200E 300E 400E 500E 600E 700E 800E 900E 1000E 1100E 1200E 1300E 1400E 1500E Base Line

L.C.P.

1172

1100

1000

900

800

786

1065

TO GRAND FORKS

0 100 200 300 metres

N

LEDGEND

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py - PYRITE
si - SILICA
bx - BRECCIA
px - PORPHYRY

Geological contact: definite, approximate, assumed
Shear
Fracture with dip
Fault with dip
Joint with dip
Outcrop
Subcrop
Airphoto Linear
Creek
Road
Rock sample, with number: BRE 201

BURRELL PROPERTY

GEOLOGY - NORTH HALF

FIGURE 4

GREENWOOD M.D.

NTS 82E/8W SCALE: 1: 5,000

DRAWN BY: DJC APRIL 1993

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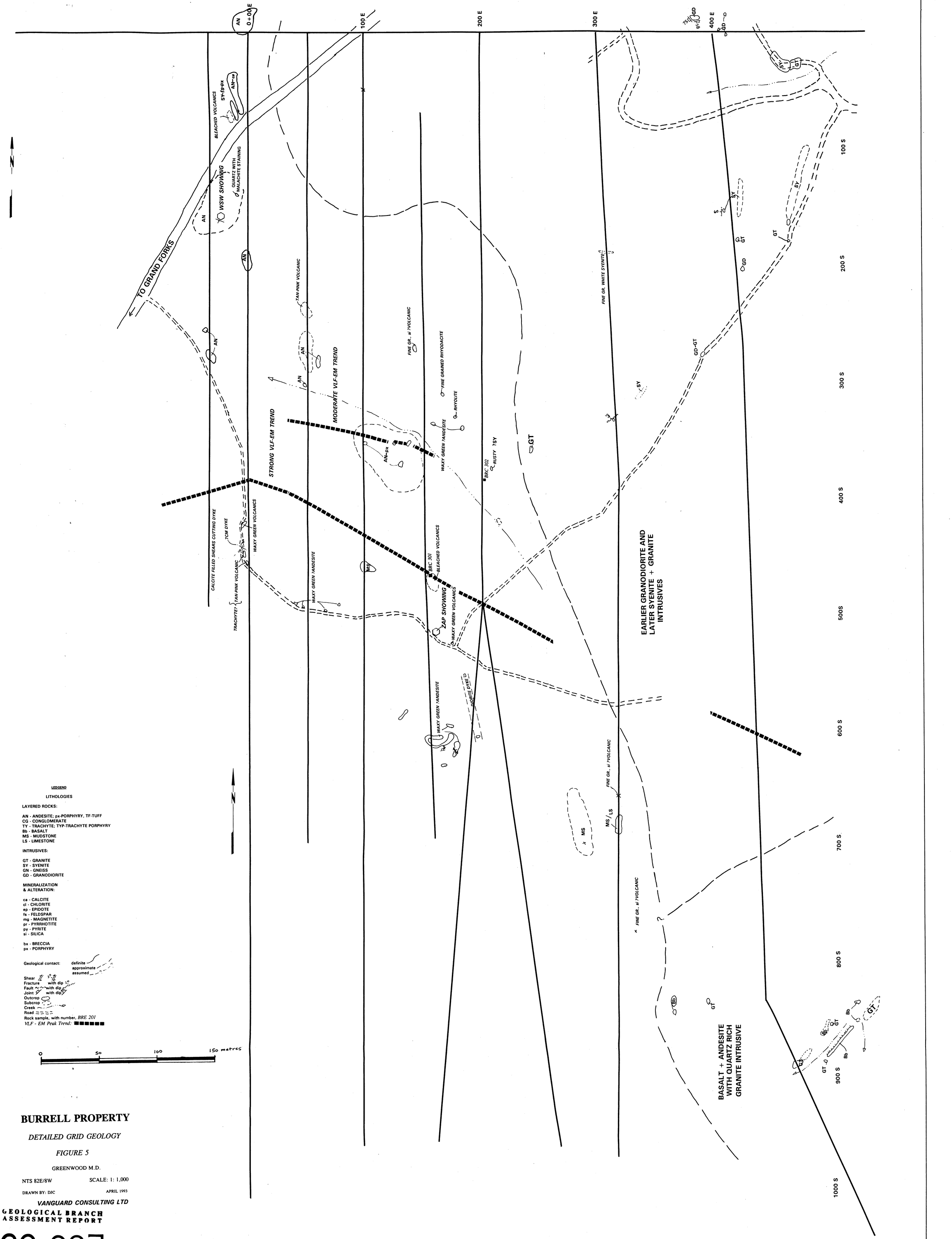
GEOLOGICAL BRANCH
ASSESSMENT REPORT

22,907



LEDGEND

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pr - PYRRHOTITE
py - PYRITE
si - SILICA

bx - BRECCIA
px - PORPHYRY

Geological contact: definite, approximate, assumed
Shear
Fracture with dip
Fault with dip
Joint with dip
Outcrop
Subcrop
Creek
Road
Rock sample, with number, *BRE 201*
VLF - EM Peak Trend:

BURRELL PROPERTY

DETAILED GRID GEOLOGY

FIGURE 5

GREENWOOD M.D.

NTS 82E/8W SCALE: 1: 1,000

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GEOLOGICAL BRANCH ASSESSMENT REPORT

22,907