

**GROUND GEOPHYSICAL, GEOLOGICAL AND GEOCHEMICAL REPORT  
ON THE  
MOUNTAIN GROUP OF CLAIMS**

**MINERAL TITLES BRANCH**  
Rec'd \_\_\_\_\_  
**SEP 11 2000**  
File \_\_\_\_\_  
**VANCOUVER, B.C.**

**FORT STEELE MINING DIVISION  
BRITISH COLUMBIA**

**613100E, 5473000N UTM ZONE 11U  
NTS 82G/34, 82G/35, 83G/44, 82G/45**

**For  
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**September 2000**

**GEOLOGICAL SURVEY BRANCH  
ARCHIVED BOOK**

**26,321**

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## INTRODUCTION:

In 1999, the Stanfield Mining Group initiated a total field magnetic and VLF ground geophysical survey over a number of claims within the Mountain Group of claims. A total of approximately 50 line kilometres was traversed over portions of Dogwood 8, 10, and 12, Cedar 3, 5, 6, 7, and 8 claims.

Also, within the Mountain Group (Dogwood #18, #16, Cedar # 7 And #9) a small geochemical program, consisting of ground truthing and the collection of five sediment samples was initiated to explain a large linear magnetic high and accompanying magnetic low pockets, picked up from a 1992 DIGHEM helicopter borne geophysical survey (in company files). One rock grab sample was collected from the Tom Zone (see Figure 9 in back pocket for location of Tom Zone). All samples were sent to CanTech Laboratories Inc. in Calgary for preparation and analysis.

Assessment costs on these individual claims were applied to the entire Mountain Group of claims.

**Table 1: Mountain Group:**

Claim Name	Claim No.	No. Of Units	Assessment Date	Assessment to be applied	Assessment applied	Expiry Date
Cedar #1	209693	20	00/06/17	4,000	1	01/06/17
Cedar #2	209694	20	00/06/17	4,000	1	01/06/17
Cedar #3	209695	20	00/06/17	4,000	1	01/06/17
Cedar #4	209779	20	00/06/24	4,000	1	01/06/24
Cedar #5	209696	20	00/06/17	4,000	1	01/06/17
Cedar #12	209701	20	00/06/17	4,000	1	01/06/17
Cedar #14	209711	20	00/07/07	4,000	1	01/07/07
Dogwood #13	209712	20	00/07/07	4,000	1	01/07/07
Dogwood #15	209713	20	00/07/07	4,000	1	01/07/07
Dogwood #18	209716	20	00/07/07	4,000	1	01/07/07
Dogwood #7	364138	20	00/07/20	2,000	1	01/07/20
Dogwood #6	370870	20	00/08/11	2,000	1	01/08/11
Elderberry #2	370865	20	00/08/11	2,000	1	01/08/11
Elderberry #5	349117	20	00/07/23	4,000	1	01/07/23
Elderberry #6	349118	20	00/07/29	4,000	1	01/07/29
Elderberry #7	370484	20	00/07/28	2,000	1	01/07/28
Elderberry #8	370485	20	00/07/28	2,000	1	01/07/28
Elderberry #9	370486	20	00/07/28	2,000	1	01/07/28
Elderberry #10	370487	20	00/07/28	2,000	1	01/07/28
Elderberry #11	370482	20	00/07/16	2,000	1	01/07/16
Elderberry #12	370483	20	00/07/16	2,000	1	01/07/16
Elderberry #13	209754	20	00/07/05	4,000	1	01/07/05
Elderberry #14	209702	20	00/06/14	4,000	1	01/06/14
Echo #3	338438	20	00/08/02	4,000	1	01/08/02
Echo #4	338439	20	00/08/02	8,000	2	02/08/02

## **Location, Accessibility and Topography:**

The claim group is in the Fort Steele Mining Division of southeastern British Columbia. Access is via highway # 3 from Jaffrey through to Elko, on a number of Forestry Service Roads (FSR's), i.e., Sand Creek road and Galloway logging road. Additional access is through back roads off the FSR's. The majority of access onto the claim group is by helicopter, off road vehicles, or by foot. Topographic relief varies from approximately 870.0 m to 2150.0 m.

The claim group is approximately centred in UTM zone 11U at co-ordinates 613100E 5473000N UTM, NTS quadrants 82G/34, 82G/35, 82G/44, and 82G/45. Assessment work used for this report is centred at 628000E 5476000N (geophysical survey) and 628500E 5480500N (geochemical survey).

**Figure 1** is a map showing the Site Location in southeastern British Columbia

**Figure 2** shows the physiography and proximity of the claim group to known points of interest.

**Figure 3** is a zoomed image of the claim group and it's physiographic nature. Note location of work projects within the group. Refer to map insert (Figure 3A) at the back for a 1:50000 image of the claim group.

## **Regional Geology and Types of Mineralization**

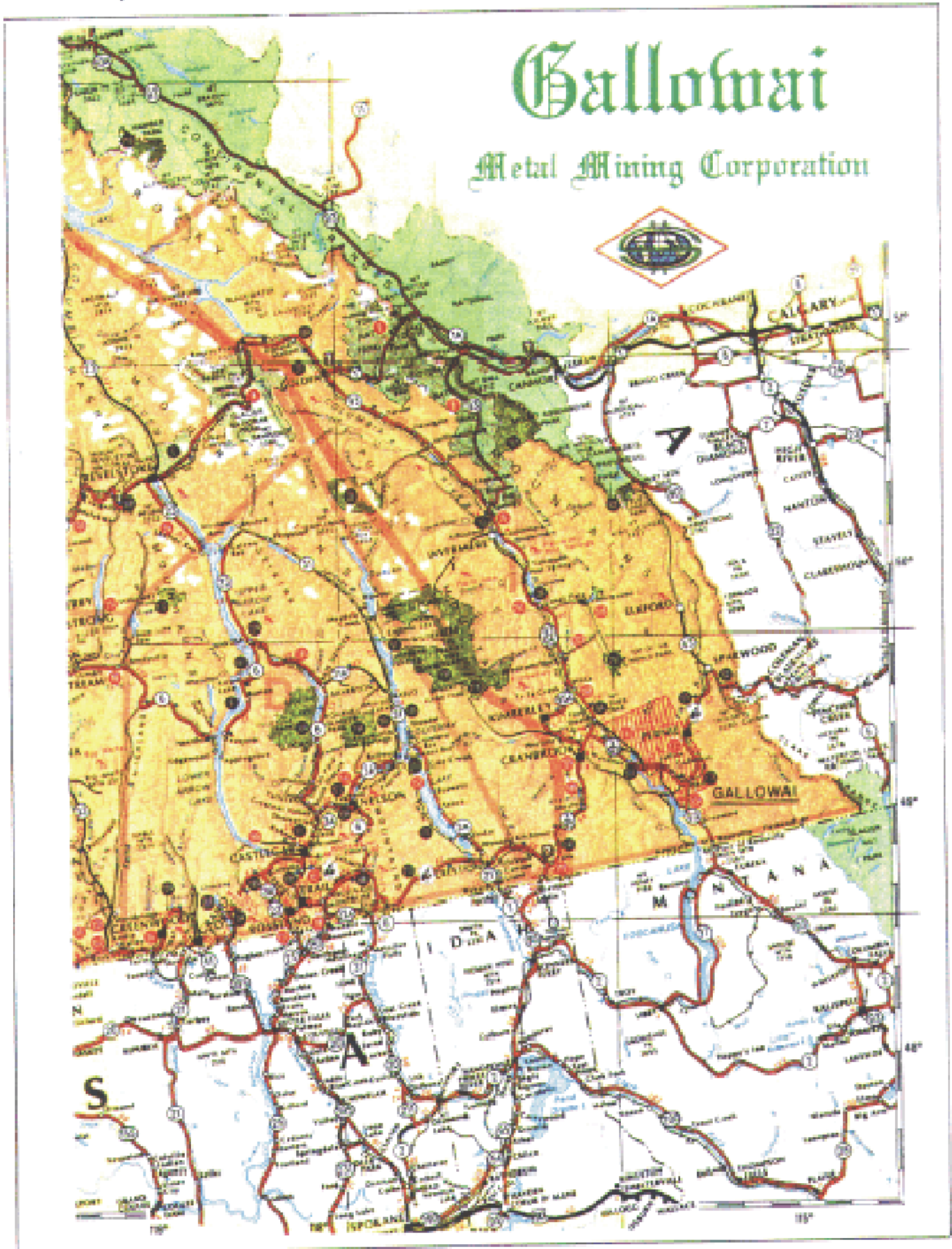
The deciphering and understanding of the structure and structural evolution of the Rocky Mountain Trench and the western edge of the Rocky Mountains of southeastern British Columbia are necessary to determine the economic potential of the Mountain Group of claims. In addition, the mode of occurrence of the different types of mineral deposits in the area, including the ones on the property, provide clues to the location and identification of other exploration targets.

## **Lithology and Stratigraphy**

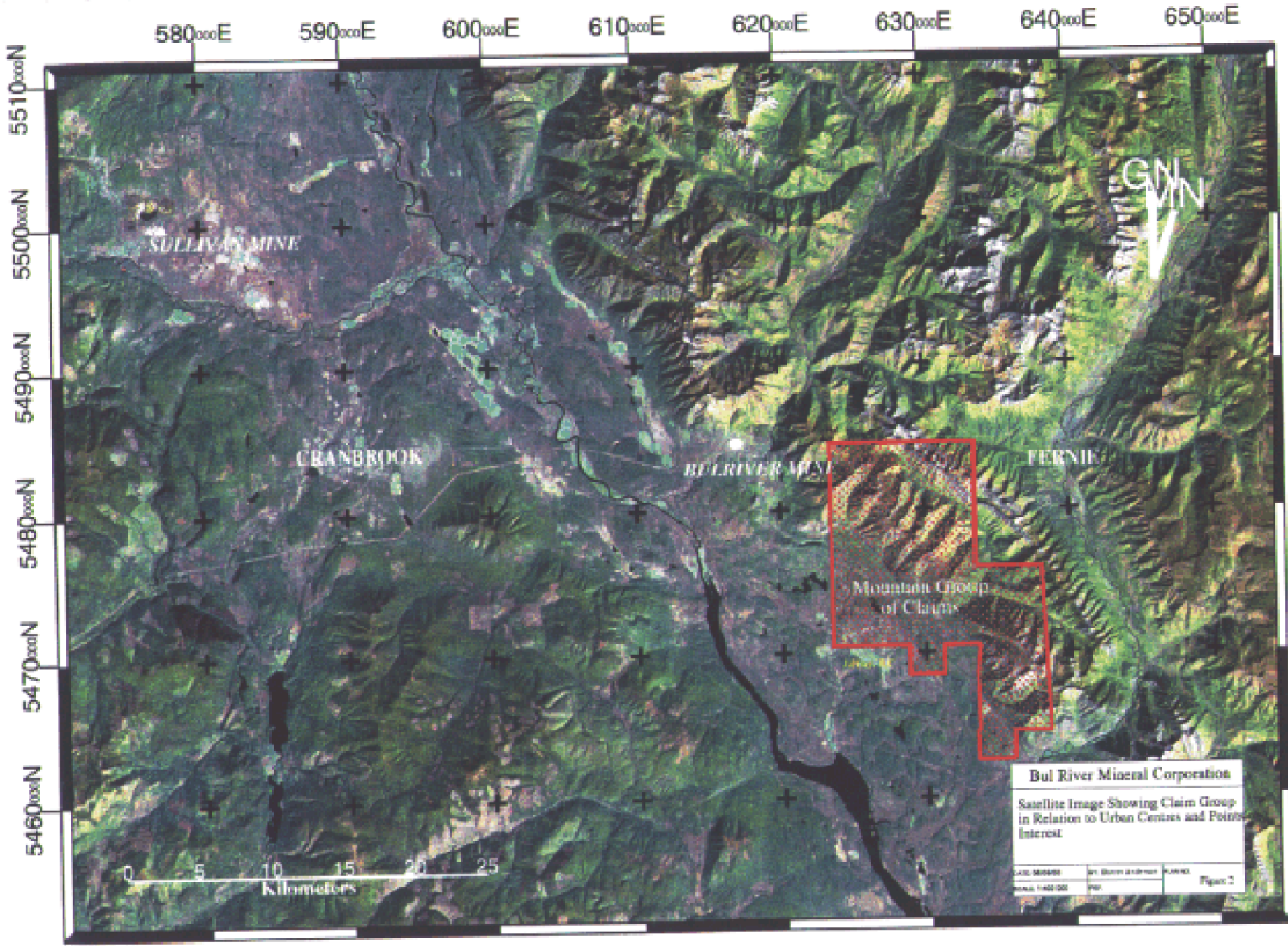
The following Table (from McMechan, 1978) summarizes the lithology and stratigraphy of the area, including this property. In addition, Cretaceous-Tertiary intrusives near the margins of the Trench are worth noting. The Trench itself is filled with Pleistocene and Recent sediments of gravel, sand, silt, till, colluvium and alluvium.

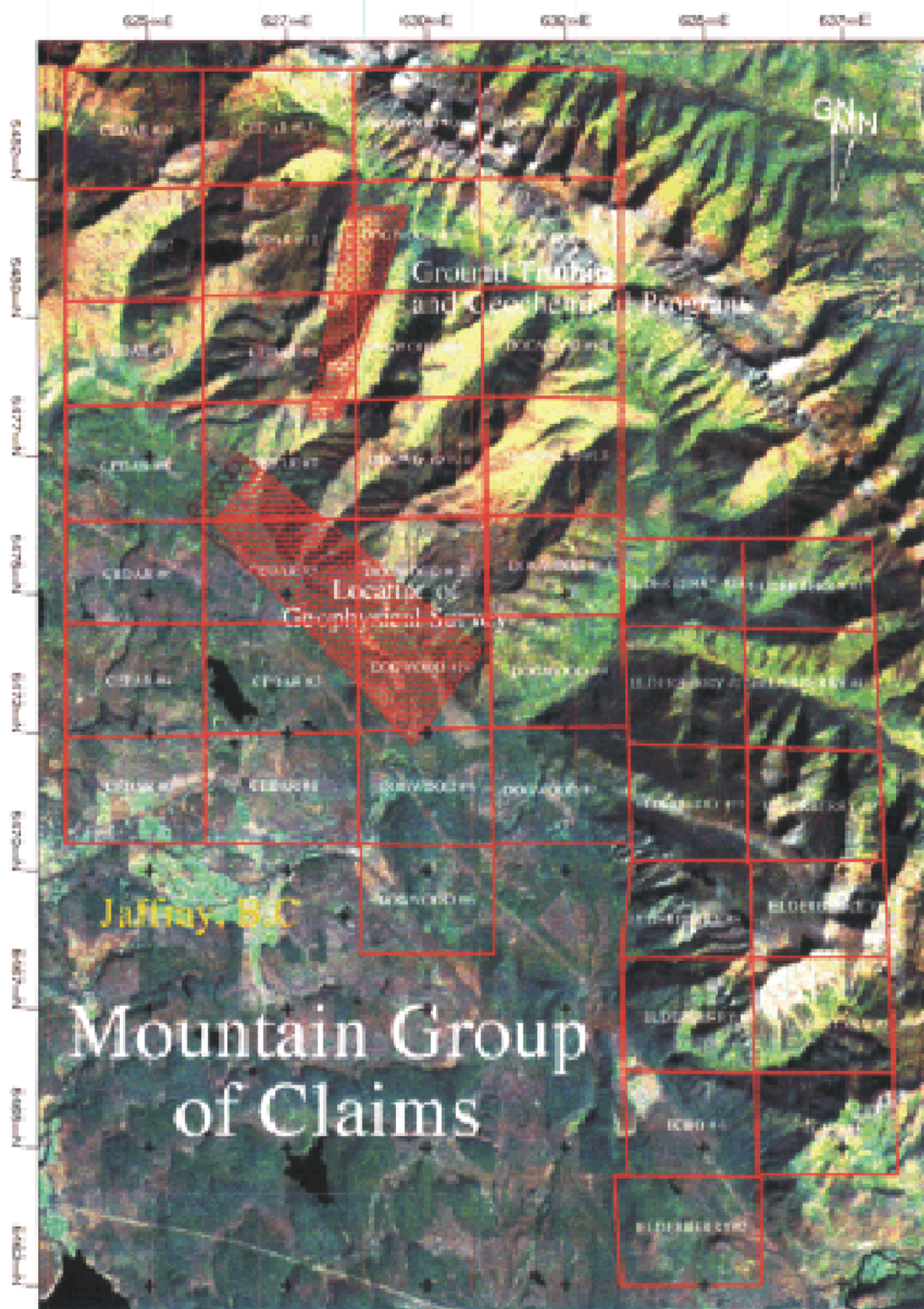
### **UPPER DEVONIAN TO PERMIAN**

Undifferentiated Fairholme Group, Palliser Formation, Exshaw Formation, Banff Formation, Rundle Group, Rocky Mountain Group; Limestone, Shale Limestone, Shale, Quartzite, and Dolomitic Quartzite.



**SITE LOCATION**







## MIDDLE DEVONIAN AND (?) EARLIER

Upper unit (Burnais and Harrogate Formations): Shaly Limestone, Shaly Dolomite, Limestone Breccia, and Gypsum; Basal Unit: Dolomitic Sandstone, Sandy Dolomite, Breccia, Conglomerate, and Shale

## CAMBRIAN

"Tanglefoot Unit": Shaly Limestone, Limestone, Sandy Shale, and Dolomite

Eager Formation: Shale, Limestone, Siltstone, and Quartzite; Cranbrook Formation: Quartzite and Granule Conglomerate

## MIDDLE PROTEROZOIC

Moyie Sill: Hornblende Metadiorite to Metagabbro

## PURCELL SUPERGROUP

Phillips Formation: Red Micaceous Quartzite and Siltite

Gateway Formation: Green, Purple Siltite, Minor Quartzite, and Dolomitic Siltite near top.

Sheppard Formation: Stromatolitic Dolomite, Green, Purple Siltite, Quartzite, and Silty Dolomite

"Lava and Sediment" Unit: Massive to Amygdaloidal "Andesitic" Lava, Volcanic and Feldspathic Sandstone, Siltite, and Minor Dolomitic Siltite

"Non-Dolomitic Siltite" Unit: Green, Locally purple Siltite

### KITCHENER FORMATION

Upper Unit (North of Dibble Creek Fault): Silty Dolomite, Grey Dolomitic Siltite, Grey Siltite, Sandy Dolomite, and Stromatolitic Dolomite

Lower Unit (North of Dibble Creek Fault): Green or Grey Dolomitic Siltite, Green Siltite, and minor Dolomitic Quartzite

### CRESTON FORMATION

Upper Subunit: Green, Lesser purple Siltite, Dolomitic Siltite near top, white quartzite

Lower Subunit: Purple, Grey or green, very coarse-grained Siltite to fine-grained quartzite, white quartzite, and green, purple Siltite

Upper Subunit: Purple Siltite with white quartzite

Middle Subunit: Green Siltite

Lower Subunit: Grey Siltite (north of Bull Canyon Fault), green, fine-grained quartzite, with Grey Siltite (south of Bull Canyon Fault-Unit)

### ALDRIDGE FORMATION

Grey Siltite and Argillite, with two Dolomitic Siltite Horizons near top, South of Bull Canyon Fault

Quartzite, Grey Siltite and Argillite: Quartzite predominant, Siltite and Argillite predominant

## Types of Mineralization

The following is a brief description of the types of mineralization known on the property and in the surrounding area.

### Quartz-Carbonate-Sulphide VEIN SYSTEMS in SHEAR ZONE envelopes:

Vein systems can be massive, tens of feet wide to a few inches width in stockworks and horsetails. Sulphides are chalcopyrite, pyrite, pyrrhotite mainly, with minor galena and arsenopyrite. Quartz is the major gangue mineral followed by carbonates (dolomite and siderite). Gold is associated with the sulphides and/or occurs as free gold in the quartz gangue and within silicified zones in the shear envelopes.

Host rocks are partly silicified and chloritised argillites, argillaceous quartzites, and quartzites mainly of the Aldridge formation. Other host rocks include the argillites of the Creston and Gateway formations. The meta diorite dykes and sills of the Moyie Sill group have some degree of spatial relationship to the vein systems, but their role in the mode of origin of mineralisation is not clear.

The Bull River Mine north of the property is an excellent example of this type of mineralisation. Other related examples of this type include the Strathcona-Empire, the Rex-Zone, the Dean Zone, the Treasure Zone, the Don and Rimrock Zones.

The G Zone on the property is a high-grade silver-lead deposit associated with a shear zone striking north 65-77 degrees southeast and vertical dip. It is 3-6 metres wide. The Tom Zone in the northern portion of the property has been reported as copper-iron mineralization and has been explored in the past with ground based geophysical surveys.

### Conformable (Syngenetic?) Massive Sulphide Deposit

These are characterised by mainly conformable (to bedding) massive sulphides within the Aldridge formation. Sulphides are galena, sphalerite, pyrrhotite, with zones of massive pyrite. Zoning of sulphides is common, so is alteration, such as chloritisation and tourmaline. The host rock lithology is very similar to the Bull River Mine. The Sullivan Mine is a prime example of this type, and is located west-northwest of the property, on the other side of the Trench. Location of a Sullivan Type of ore body east of the Trench has been a long-term exploration goal in this part of British Columbia.

### Quartz Lode Type with Sulphides and/or Free Gold:

The Cretaceous-Tertiary quartz-monzonite and granodiorite intrusives in the area have potential for this type of mineralisation, and may be source areas for some of the placer told deposits.

## Vein Type Galena-Sphalerite Mineralisation associated with Major Structures:

This type of mineralisation has been found to date in the Aldridge, Creston, and the Lower Cambrian formations. Mineralisation occurs as fillings and replacement with faults and associated fissure systems. Examples of this type adjacent to the property are the Burt, OK Zones, and possibly the Great Western Zone just north of the property. The Estella Mine and the Kootenay King Mine further north of the property are also of this type, and so is the St. Eugene Mine across the Trench to the west.

## Structure and Structural Evolution

The property and the immediate area are divided into a number of tectono-stratigraphic domains. The primary divisions include the ROCKY MOUNTAIN TRENCH on the west of the property and the WESTERN ROCKY MOUNTAINS on the east half of the property.

### **The Western Rocky Mountains:**

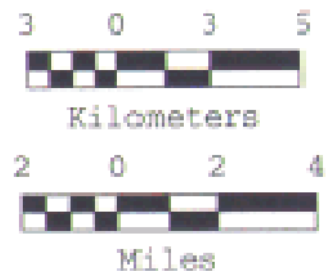
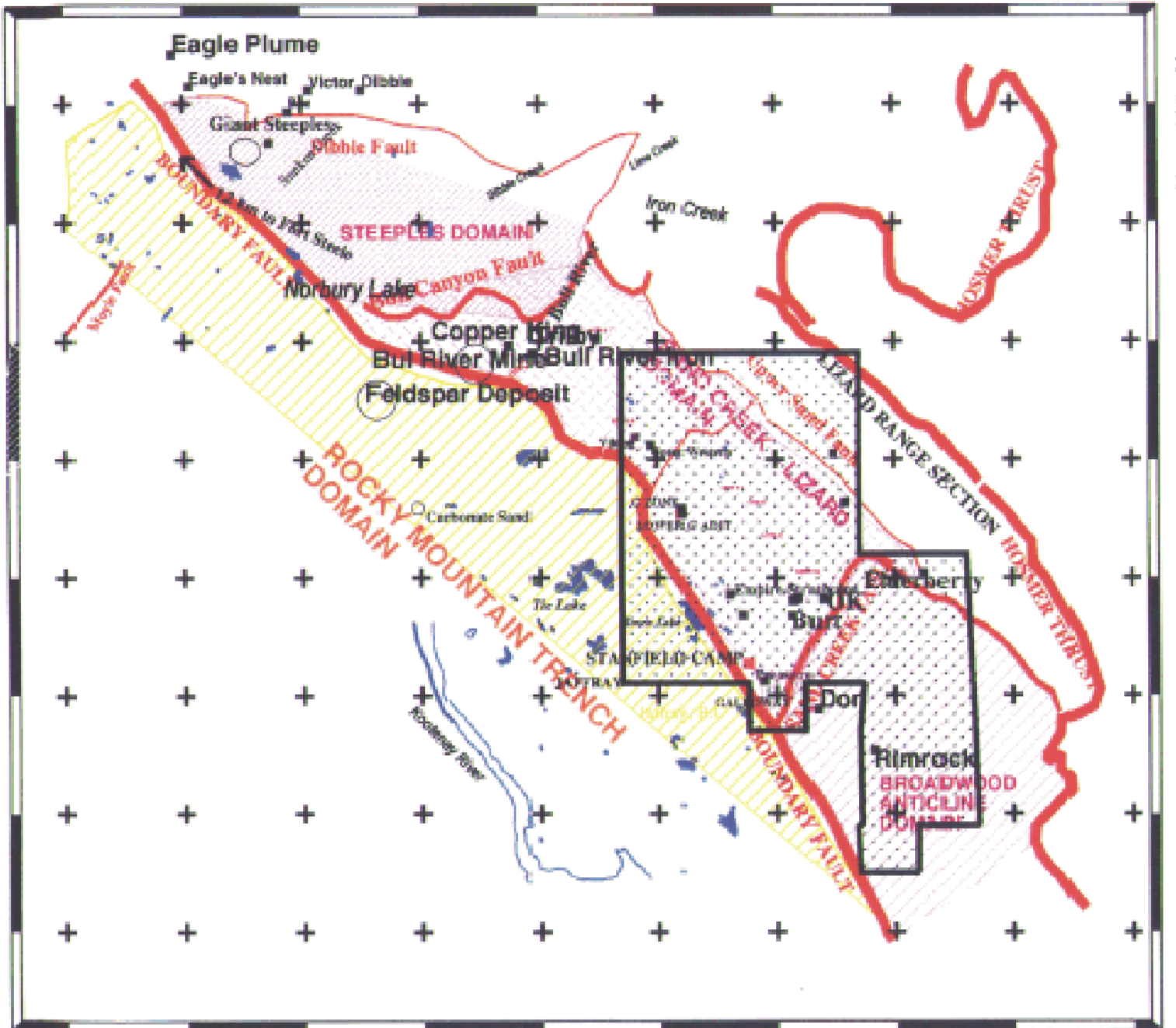
The Western Rocky Mountains form the eastern edge of the Purcell anticlinorium, against the Rocky Mountain thrust belt. The geology is fairly complex, with structural evolution mainly tied to the Hosmer Thrust. This complex history is discussed in a subsequent section of the report.

The Western Rocky Mountains in this area are further subdivided into three major tectono-stratigraphic terrains by EAST trending REVERSE FAULT SYSTEM (see **Figure 4**). The northern segment is the STEEPLES RANGE DOMAIN, whose northern boundary is marked by the DIBBLE FAULT SYSTEM and the southern boundary by the BULL CANYON FAULT SYSTEM. The middle segment is the relatively complex SAND CREEK – LIZARD RANGE DOMAIN, that includes the Lizard Range. It is bounded in the north partly by the BULL CANYON FAULT and to the south by the SAND CREEK FAULT. Both of the Steeples and the Sand Creek – Lizard Range Domains are part of the LIZARD SEGMENT of the HOSMER THRUST, and is part of the structurally highest portion of the southern Rocky Mountains.

The southern most domain is the BROADWOOD ANTICLINE bounded in the north by the Sand Creek Fault (different that the Upper Sand Creek Fault), and has a southern boundary off the property near Mt. Broadwood.

### **The Sand Creek – Lizard Range Domain:**

This domain is divided into two longitudinal sections by the NW trending UPPER SAND CREEK thrust fault. The western segment is designated by us as the SAND CREEK SECTION, and the eastern segment is the LIZARD RANGE SECTION.



- Project Areas (except Diamonds)
- Mineral Deposits

5495000N  
5490000N  
5485000N  
5480000N  
5475000N  
5470000N  
5465000N  
5460000N

EAGLE RIVER MINERAL CORPORATION	
MOUNTAIN GROUP SUPERIMPOSED ON TECTONICS	
THE TOPOGRAPHY-CULTURAL FEATURES	
Mountain Group with black outline	
DATE: 05/20/00	BY: James A. Anderson, Jr. (JAA)
SCALE: 1:25,000	REF: <a href="http://www.mrc.com">www.mrc.com</a> Fig. 4

600000E 605000E 610000E 615000E 620000E 625000E 630000E 635000E 640000E 645000E

The BULL CANYON FAULT marks the northern boundary of the Sand Creek Section. It is a left-lateral reverse fault with about 2-3 km of stratigraphic separation, and dips southward. The locus of the fault suggests that its origin is tied into the stress associated with the Dibble monocline. Also, the contrasts in the Purcell succession across the fault suggest that it may follow the locus of an older structure that controlled Purcell deposition. Although the Lower Purcell group of rocks are found on both sides of the fault, the NE trending structures in the Steeples Domain, north of the fault do not extend on the hangingwall side of this fault. In addition, the large anticline north of the fault (in the Steeples Domain) is not one of the NE trending structures caused by compression during movement on the Dibble fault, but is formed during the Bull Canyon Fault displacement, and does not have a counterpart on the hangingwall (south) side of the fault.

In the Sand Creek-Lizard Range domain, the mechanics and structural history of the UPPER SAND CREEK FAULT are critical in understanding the stratigraphy of this domain. This fault is considered to be a splay from the Hosmer Thrust. The Domain is part of the HOSMER NAPPE which has a shallow NW plunge. Strata in the overturned forelimb are west dipping while strata in the backlimb are generally northeast dipping.

The Upper Sand Creek Fault cuts through this nappe, causing the backlimb and bow of the nappe to be thrust over the overturned forelimb. This has thrust the Precambrian Purcell Series of rocks from the backlimb of the nappe against the overturned Devonian and Mississippian strata of the forelimb. The Purcell Series forms a range with generally rounded slopes, and structurally also is part of the crest and east limb of an anticline (superimposed on the backlimb of the nappe) that plunges gently northwest. This range is the SAND CREEK SEGMENT of the domain.

East of the Upper Sand Creek Fault the second division of the domain forms the LIZARD RANGE. It essentially consists of the overturned forelimb of the Hosmer Nappe forming a prism of sediments. Resistant portions of Devonian and Mississippian formations make up the backbone of the range, while softer Mesozoic strata underlie its eastern slopes.

While the north boundary of the Sand Creek segment is mainly marked by the Bull Canyon Fault, the Lizard Range segment's north end is crumpled by complex faults and nappe-like folds that are overturned to the southeast and south, causing the strata to bend sharply from a NW trend to NE near the drainage area of Iron Creek. This trend continues NE off the property to Sulphur Creek where the NW trend and folds overturned east-northeast resumes to form the mountains north of Fernie and between the upper Elk and upper Bul Rivers.

Approximately 90% of the claims within the MOUNTAIN GROUP are located within the SAND CREEK – LIZARD RANGE structural domain (refer to **Figure 4**).

## **The Rocky Mountain Trench:**

The Rocky Mountain Trench underlies approximately 10% of the Mountain Group claims. Topographically it is very distinct from the Rocky Mountains, and forms the valley of the Kootenay River system in this area. However, its true structural eastern margin is variable, partly because of thrust faulting northeastward over the tectono-stratigraphic elements of the Rocky Mountains, and partly due to the cut back eastward of the fault-line scarp that marks the normal-faulted edge of the Trench. The longitudinal Murray Lake Fault system probably represents the pre-erosional position of the fault scarp.

In this area, the Trench is synclinal with major west dipping faults on its east side. Details of the nature of faulting are not discussed here, but features significant to the location of economic mineral deposits are referred to.

The flexuring of the Murray Lake fault system at Bull River and the NE trend portion of the Bull Canyon Fault system may be due to back-sliding (reversal of the older displacement to the NW), that also caused hinge faults transverse to the Trench, i.e. N and NE trends. Similar NE trends are the Sand Mountain and Supply Creek Faults in the Sand Creek Section of the Sand Creek – Lizard Range Domain of the Rocky Mountains.

Another evidence that block faulting rather than strike slip faulting resulted in the formation of the Trench in this area, is the continuation of major Paleozoic-Mesozoic structures across the trench, e.g. The Moyie-Dibble Fault system. These cross features are also probably responsible for the formation of structural lows within the Trench, which are detectable by gravity surveys. One such structural low is located on the Gallowai property near Jaffray. Gravity surveys indicate that these cross features form the divides (structural highs) between these lows.

The Trench is probably located above a break in the Earth's crust formed in Precambrian time. During the deposition of the Purcell sediments the Trench marked the boundary between an ancient geosyncline to the west and an ancient shelf to the east. The uplifted terrain in the west supplied detritus intermittently through Mesozoic time. In late Cretaceous-Tertiary time this supply of detritus was cut off, perhaps due to the initial formation of the Rocky Mountain Trench. It essentially became a depositional basin in the Cenozoic.

## **Previous Work**

The Mountain Group of claims contain a number of showings which can be classified as mineral deposits, G ZONE, TOM ZONE, Empire-Strathcona, OK, Burt, Elderberry, and Rimrock (**Figure 4**). Approximately 90% of the claim block is underlain by argillaceous sediments of Proterozoic age Aldridge-Creston Formations, and Moyie diorite dykes and sills. A good portion of the mineable deposits (past producers, producers) in the regional area are hosted within the Aldridge Formation.

Over the past twenty years the R. H. Stanfield Group of companies has initiated a series of programs of airborne geophysics, satellite imagery, and ground examination to fulfil the following objectives.

- a. Determine the strike and dip extensions of the individual deposits.
- b. Increase the tonnage potential of the deposits by either connecting these adjacent deposits along strike (or connections at depth), or discovering other deposits in the strike directions or down dip or enechelon to the known showings.

The programs are ongoing, and this report covers a portion of the effort covering this claim group.

In 1982, Apex Airborne Surveys Ltd completed a helicopter borne multifrequency EM and magnetic survey for the R. H. Stanfield group of companies (in company files). A strong NE trending magnetic high was found through the northeast corner of Cedar #6 through Cedar #7 up to Cedar #11. The survey also outlined a high conductivity zone and several EM trends south of the magnetic high over a portion of this claim group.

In 1992 a helicopter borne geophysical survey by DIGHEM for the Stanfield Group also located a distinct high magnetic trend over the same location. This has been reported in an assessment report in 1992-93, and the anomaly is shown in Figure 6 and map in back pocket.

Prior drill holes in the area suggest that the bedrock cause of the magnetic anomaly is at greater depth (refer to September 1999 assessment report on Cedar Group #3A). The area immediately adjacent to the magnetic trend northeast of the drill sites has been the site of several geophysical (EM) conductors and mineral deposits associated with shear zones.

## **OBJECTIVES AND SUMMARY RESULTS OF CURRENT WORK**

During the 1999 assessment period the Stanfield Mining Group initiated a ground Total Field Magnetic and VLF survey over an anomalous area previously defined by Dighem's airborne magnetic survey. Approximately 50 line kilometres were traversed over portions of Dogwood 8, 10, and 12, Cedar 3, 5, 6, 7, and 8 claims (Figure 3, 6, 7, 8).

The instrument used for the survey was a Gem GSM-19 magnetometer with Total Field Magnetic and VLF capabilities. Sample Cycle time for the field unit was set at two second intervals for the "mag", providing magnetic data at a density of approximately 1.5 metres per reading. Density varied on topography and vegetation. VLF readings were taken at 25-metre intervals. One VLF station, Seattle, 24.8 kHz, was used for the entire survey.

Line spacing for the survey was 200 metres with 50 metre infill lines over a targeted anomaly (Figure 6, 7, 8).

A second GSM-19 unit was setup as a base station to provide diurnal corrections. Sampling time was set at 3 second intervals. The internal clocks of both systems instruments were synchronized to within 0.01 seconds.

Collected data was then processed using Geosoft Mapping and Processing System. See maps in the back pockets for VLF, Total Field Magnetic profiles and Total Field Magnetic colour contours.

Results from the survey show areas with strong magnetic highs with coincident VLF anomalies, and strong local magnetic highs.

A small geochemical program, consisting of ground truthing and the collection of five sediment samples was initiated to explain magnetic lows adjacent to a large linear magnetic high (see Figure 5 and Figure 9), located from a 1992 DIGHEM helicopter borne geophysical survey (in company files). Also, one rock grab sample was collected from the Tom Zone for analysis.

All samples were sent to CanTech Laboratories Inc. in Calgary for preparation and analysis (refer to Appendix 1 for results). Samples were split into +80 and -80 mesh size and analysed separately for Au, Ag, Cu, Pb, Zn, Ni, and Cd. The rock grab sample was crushed and pulverized and analysed for the same elements.

All sediment samples returned some anomalous values, particularly with base metals. The majority of samples analysed at -80 mesh had higher results than the +80 mesh samples (see Certificate of Analysis). This indicates a distal source(s) for these elements rather than a proximal location.

One rock grab sample from the Tom Zone came back with high base metal content, primarily copper (see Certificate of Analysis)

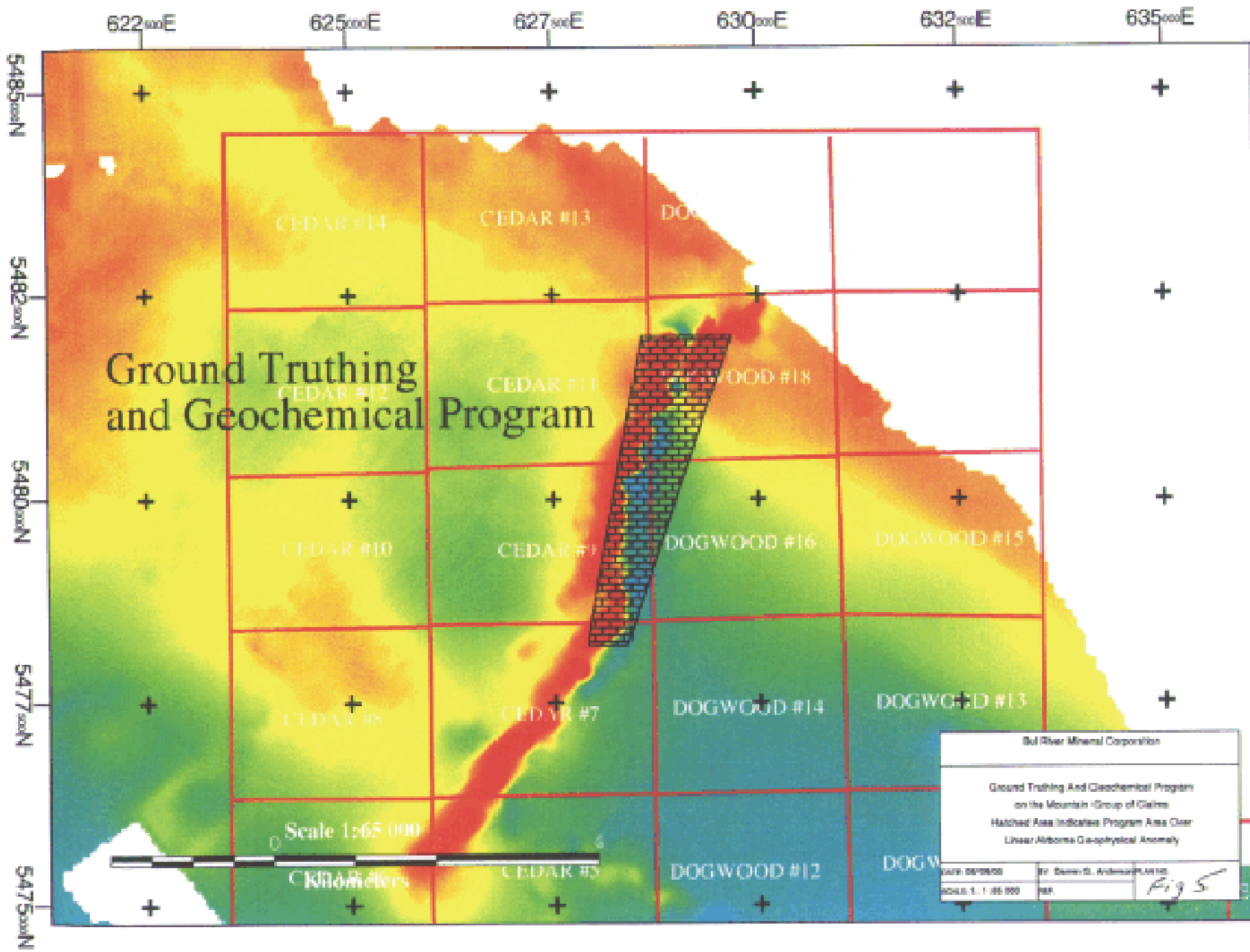
Ground truthing the area was brief, however the magnetic high seems to be caused by a large gabbroic dyke transecting Aldridge or Creston (?) sediments, which are displaying a weaker magnetic signature. The magnetic lows found adjacent to the dyke was not fully understood, as vegetation cover was too thick in these area but could possibly be reflectance from the adjacent highs.

## **RECOMMENDATIONS:**

The ground geophysical survey has shown anomalous areas to exist. Addition follow-up work is required such as geological mapping, geochemical surveys and ultimately some diamond drilling. Continual work on this property could ultimately lead to new mineral discoveries or extensions of known mineral deposits.

Additional follow-up work is required to help explain the magnetic lows associated with the gabbroic dyke (Figure 9). A geochemical sampling program over the entire area is





essential to determine if the anomalous sediment samples are sourced from this area or further up-hill.

Additional work is required, i.e. some trenching or diamond drilling on the Tom Zone to delineate the mineral deposit.

## **1999 EXPLORATION PROGRAM-COST STATEMENTS**

Aug 17/1999 to Apr 18/2000

### **A: Rentals and Supplies**

Gem GSM-19 magnetometer w/Total field magnetic and VLF w/Gem GSM-19 basestation as invoiced (Oct 8, Oct 19/99, Apr. 14/2000)	<b>\$ 16,747.14</b>
Crew Ford 4x4 Pick-up Truck (55 days @ \$50.00/day)	<b>\$ 2750.00</b>
Geologist Ford 4x4 Diesel Pick-up (7 days @ \$50.00/day)	<b>\$ 350.00</b>
Management/Support Pick-up Truck (55 days @ \$50.00/day)	<b>\$ 2750.00</b>
4x4 Quad All Terrain 5 days @ \$150.00/day	<b>\$ 750.00</b>
GPS Geoplorer II and Base-Station Coordinates (30 day rental)	<b>\$ 642.00</b>

### **B: Employee Wages**

<b>Rotating 4 Man Crew (69 Man Days @ \$200.00/day)</b>	<b>\$ 13,800.00</b>
Brian Chore (50 days); Brandon Rook (9 days); Brent Skene (5 days); Ross Stanfield (3 days); Kirk Halwas, Pilsum Master (1 day)	

<b>Management/Support Staff (55 days @ \$250.00/day)</b>	<b>\$ 13,750.00</b>
Ross Stanfield (35 days); Tim Hewison (20 days)	

<b>Staff Geologist wage (14 days @ \$400.00/day)</b>	<b>\$ 5,600.00</b>
<b>Darren Anderson</b>	
Field Work (7 days)	
Map generation, Report Writing, and Analysis (7 days)	

### **C: Room and Board Facilities**

Field/Staff Geologist 14 days @ \$65.00/day	<b>\$ 910.00</b>
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Rotating 4 Man Crew R&B 73 Man days @ \$65.00/day	<b>\$ 4,745.00</b>
Management/Support Staff (55 days @ \$65.00/day)	<b>\$ 3,575.00</b>

Note: See Above for Daily Labour Breakdown

D: Laboratory Analysis

Metals Analyses of 9 Stream Sediment Samples	<b>\$ 342.50</b>
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<b>Total Cost for Mountain Exploration Program</b>	<b><u>\$ 66,711.64</u></b>
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## REFERENCES:

**Hoy, T., Van Der Heyden,;** 1988; Geochemistry, Geochronology, and Tectonic Implications of two Quart Monzonite Intrusions, Purcell Mountains, Southeastern British Columbia; Canadian Journal of Earth Science, vol. 25, pp. 106-115.

**Hoy, T.;**1993; Geology of the Purcell Supergroup in the Fernie West-Half Map Area, Southeastern British Columbia; Bulletin 84, Mineral Resource Division, Ministry of Energy, Mines and Petroleum Resources, British Columbia

**Hoy, T. and Carter, G.;** 1993; Geology of the Fernie W1/2 Map Sheet (and part of Nelson E1/2), Map to accompany Bulletin 84.

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**STATEMENT OF QUALIFICATION:**

**CERTIFICATE**


I, Darren G. Anderson of 729 Queenston Terrace S.E. Calgary, Alberta certify that:

I am a graduate of the University of Regina, Regina, Saskatchewan at which I hold or am entitled to a Bachelor of Science Degree in Geology

I have practiced my profession within the exploration and mining industry for the past five years and I am member of The Society for Geology Applied to Mineral Deposits.

This report on the Mountain Group of claims is based on my direct involvement in the planning of the exploration programs.

I certify that I do not hold any interest in the properties of R. H. Stanfield, or affiliates thereof, nor do I expect to receive any directly or indirectly.



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Darren G. Anderson, B.Sc. (Geology)

**CERTIFICATE**

September 7, 2000

I, Phil D. de Souza, certify that:

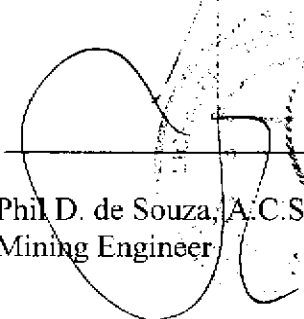
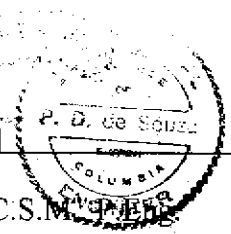
I am a graduate of the Camborne School of Mines, Cornwall, England and that I hold the degree of ACSM First Class in Mining Engineering therefrom.

I am a member of the Canadian Institute of Mining and Metallurgy and a member of the American Institute of Mining, Metallurgical and Processing Engineers.

I am a licensed Professional Engineer of the Province of Alberta, British Columbia and Ontario, Canada, and have been practising my profession for the past thirty-two years.

This report by Darren G. Anderson, B. Sc entitled: "GROUND GEOPHYSICAL, GEOLOGICAL AND GEOCHEMICAL REPORT ON THE MOUNTAIN GROUP OF CLAIMS", for R. H. Stanfield has been reviewed by me and results from my direct involvement in the Stanfield Group since 1987.

I certify that neither I nor my Associates or Partners hold any interest or securities in any of the four corporations owning an interest in the properties, nor do I, or we expect to receive any directly or indirectly.

Phil D. de Souza, A.C.S.M.  
Mining Engineer

**APPENDIX 1**  
**CERTIFICATE OF ANALYSIS**



CanTech Laboratories Inc.

**Bull River Mineral Corporation**

3 Flr, 4723 - 1st S.W.

Calgary, Alberta

T2G 4Y8

Attention: Darren Anderson

Final Report

# Certificate of Analysis

Work Order: 99413

May 9, 2000

4200B 10 Street N.E.

Calgary, Alberta

Canada T2E 6K3

Tel: (403) 250 1901

Fax: (403) 250 8265

TOTAL P. 01

Sample Id.	Au ppb	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	Cd ppm
<i>Sediment -80 fraction</i>							
Dibble #1	5	<0.2	19	24	39	10	0.2
Dibble #2	8	0.3	21	27	41	10	0.3
Dibble #3	<5	<0.2	26	14	44	11	0.2
Dibble #4	<5	0.3	24	13	37	13	<0.2
Spine #1	9	<0.2	47	8	112	18	<0.2
Spine #2	7	0.2	81	20	75	19	0.2
Spine #3	<5	0.2	21	18	128	12	0.2
Spine #4	<5	0.2	38	14	54	21	<0.2
Spine #5	<5	0.2	30	44	103	16	0.6
<i>Sediment +80 fraction</i>							
Dibble #1	<5	<0.2	11	10	24	9	0.2
Dibble #2	<5	<0.2	20	21	43	12	0.2
Dibble #3	7	<0.2	23	8	39	14	<0.2
Dibble #4	5	<0.2	18	6	33	13	<0.2
Spine #1	<5	<0.2	46	2	138	20	<0.2
Spine #2	6	0.2	65	12	67	19	<0.2
Spine #3	6	<0.2	17	11	86	15	<0.2
Spine #4	<5	<0.2	24	10	44	20	<0.2
Spine #5	5	<0.2	19	21	87	16	<0.2
Rock #7	>10	2.0	2550	<2	42	17	0.2

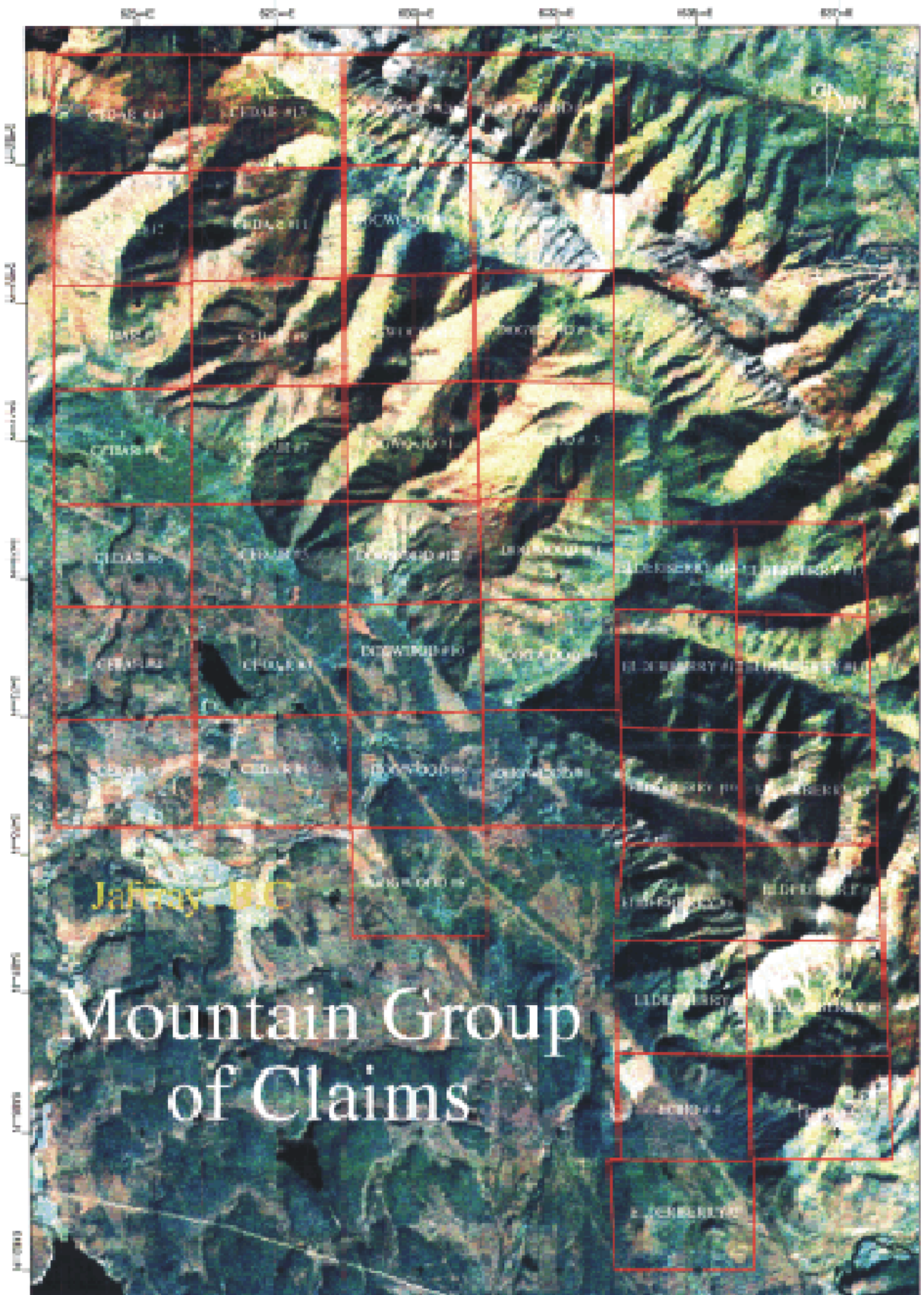
10-1-03-2000 09:05AM FROM

10

FROM

10-1-03-2000 09:05AM FROM





Jahway, BC

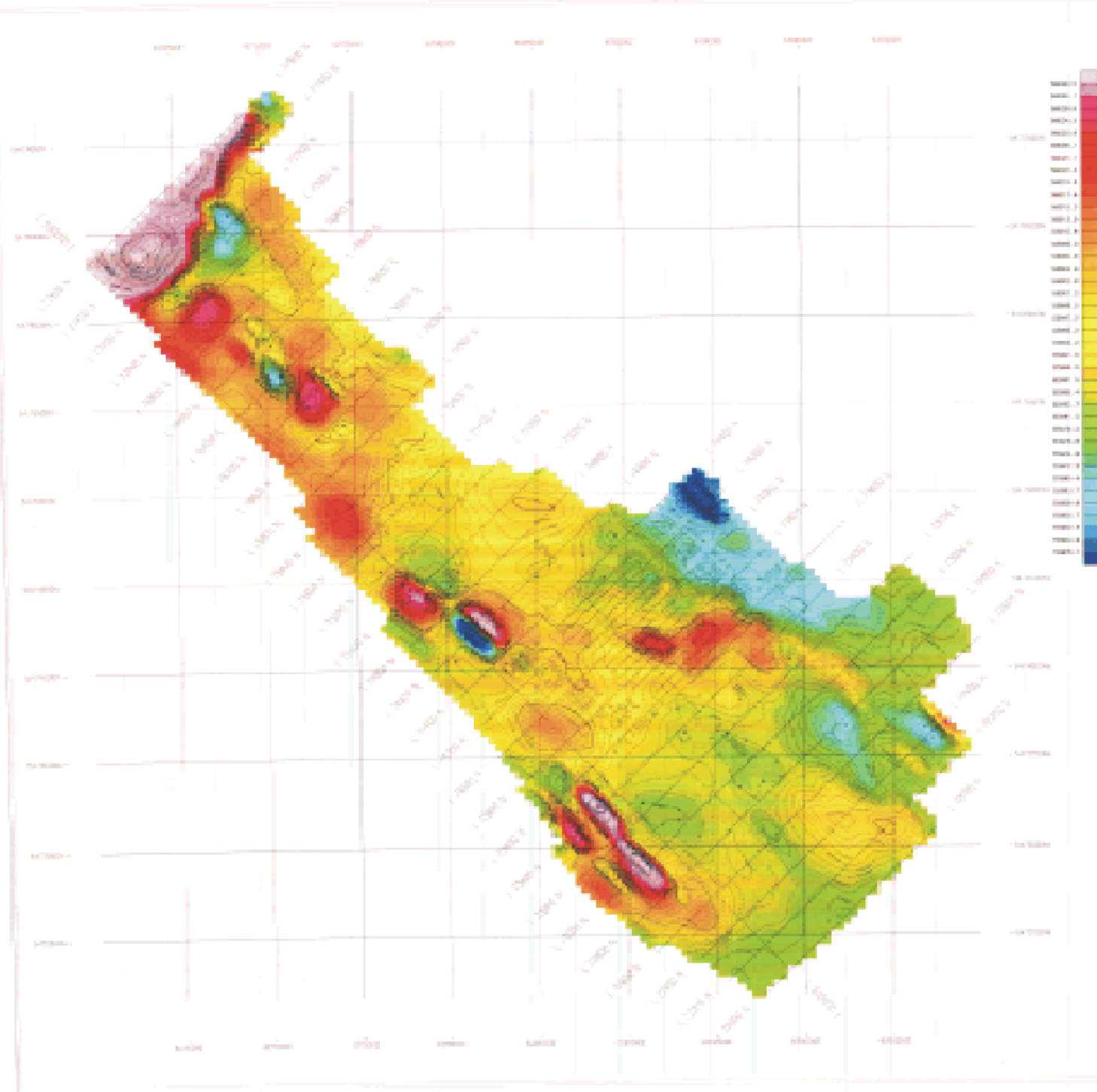
# Mountain Group of Claims



Bul River Mineral Corporation		
Satellite Image Showing Physiography of the Mountain Group of Claims		
Date: Sept 1991	Prepared by: J. Ardmore	Project:
Mapsheet: Bul	Fig # 34	

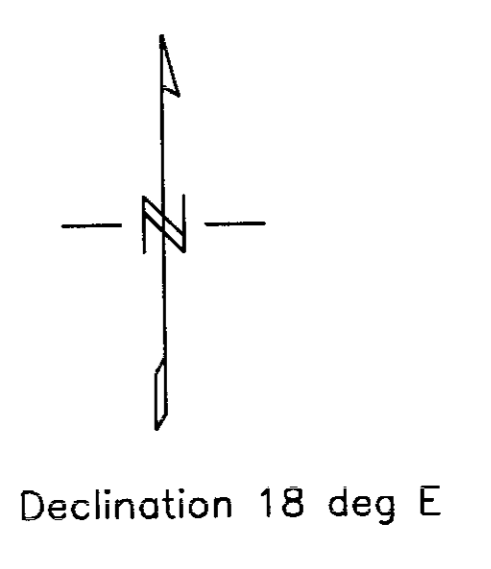
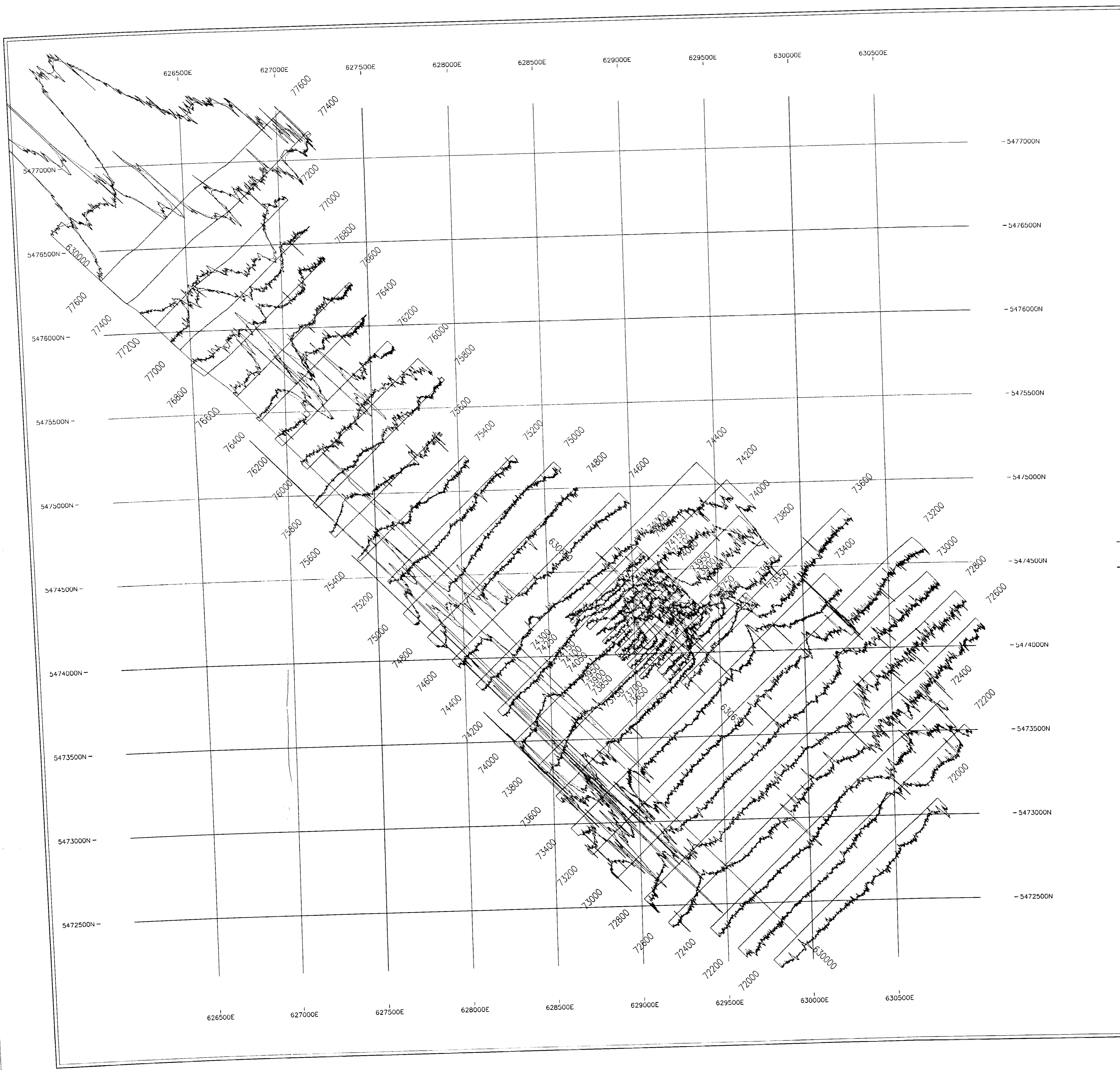
26.521

①



Direction: 17 deg E  
 2 m  
 10 m  
 50 m  
 UTM Suezika 200 meters  
 Sample Spacing: Approx. 1.5 meters  
 Base Line: 135 - 310 deg.  
 Grid Line: 45 - 275 deg.

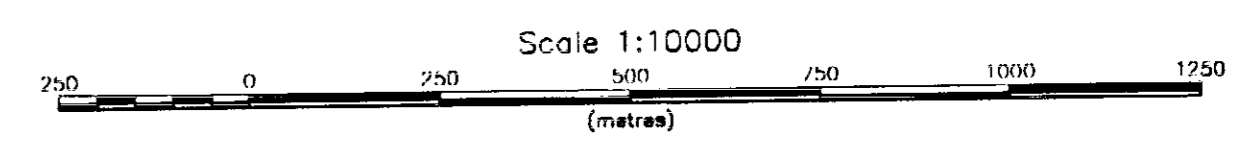
Elul River Mineral Corp.  
 Total Field Magnetic Contours  
 Golova Camp - Sept, 2000  
 Non-Linear/Low-Pass Filtered  
 Datum: WGS-84 - NRS 50/2  
 Merid: Corrected with Base Station  
 S. Omer  
 321



**LEGEND**

— Raw Magnetic Field Strength  
 - - - NL Magnetic Field Strength  
 Magnetic Field Datum Level = 56000 nT  
 1 cm = 25 nT

*Line Spacing 200 Meters  
 Sample Spacing Approx 1.5 meters  
 Base Line 135° - 315°  
 Grid Lines 45° - 225°*

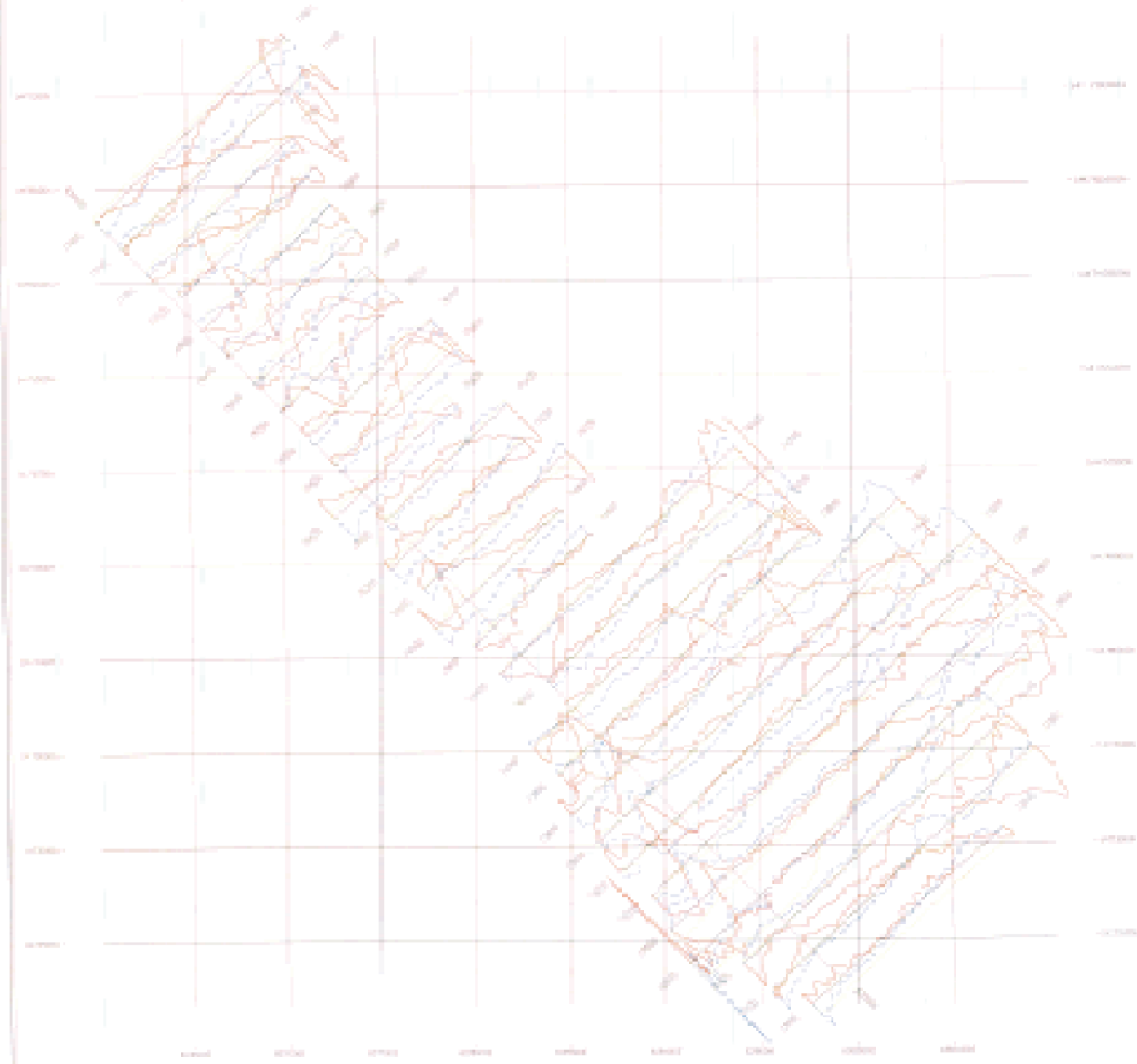


Bul River Mineral Corp.  
 Total Field Magnetic Profiles  
 Galloway Camp  
 Raw vs Nonlinear  
 Datum WGS-84 NTS 866/2  
 Diurnal Corrected with Base Station

82  
 26,321  
 B. Choro Fig # 7

BRANCH  
 82  
 26,321  
 3

10000 9000 8000 7000 6000 5000 4000 3000 2000 1000



### LEGEND

NJK, Seattle, WA

- In-Place
- Geostatic
- Field Strength 1 cm = 10 units on 30 base level

Line Spacing 200 meters  
 Sample Spacing 25 meters  
 Base Line 1.0" = 100'  
 Grid Lines 10" = 250'



But River Mineral Corp.  
 NJK, Seattle, WA WF-EM PROFILES  
 Galloway Camp  
 Datum WGS-84  
 MTS + 26.32  
 22

