

RECEIVED

SEP 11 1998

Gold Commissioner's Office
VANCOUVER, B.C.

Red Sep 9 in Vict.

DRILLING REPORT
ON
CD GROUP #1

FORT STEELE MINING DIVISION
BRITISH COLUMBIA

6305000E, 5480000N UTM ZONE 11U
NTS 82G/6

For
R. H. STANFIELD
380 - 4723 1st Street S.W.
Calgary, Alberta T2G 4Y8

By
MASTER MINERAL RESOURCE SERVICES LTD.
32 Midpark Gardens S.E.
Calgary, Alberta T2X 1N7

September 1998

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

25,637

MASTER MINERAL RESOURCE SERVICES LTD.

CONTENTS

	<u>Page</u>
Introduction	1
Location, Accessibility & Topography	1
Geology	2
Lithology And Stratigraphy	2
Types Of Mineralisation	3
Structure And Structural Evolution	4
The Western Rocky Mountains	5
The Sand Creek-Lizard Range Domain	5
The Rocky Mountain Trench	6
Drilling Program	7
Objectives and Summary Results	7
Recommendations	8
General Information on C8-2-96/97	9
Costs of Drilling Program	9
References	11
Certificate, Pilsum Master, P.Geol.	13
Certificate, Phil deSouza, P.Eng	14
Appendix 1 - Drill Logs	
Appendix 2 - Forms - Statement of Work	

FIGURES

	<u>After Page</u>
Figure 1: Site Location	1
Figure 2: Composite Map: Topo and Culture (TRIM), Drill Holes, Mineral Deposits and Claim Boundaries	In pocket
Figure 3: General Geology – Tectono-Stratigraphic Domains	5
Figure 4: Claim Map And Location of Drill Holes	7
Figure 5: DIGHEM 1992 Aeromagnetic Anomaly, Drill Holes	In Pocket

INTRODUCTION:

A drilling program of two drill holes was completed between October 1996 and May 1997 on the claim Cedar #7 of the former Cedar Group #3A, and the drill logs were included in the September 1977 assessment report. The hole C8-2-96/97 was extended in the 1997 – 1998 reporting period, and this assessment report deals with the results of that phase of the drilling program. In addition, the claims were regrouped in to CD GROUP # 1, as shown in Table 1.

As reported in the September 1997 assessment report, the two collar sites designated C8-1-96/97 and C8-2-96/97 are within a few meters of one another. Both holes were started with percussion drilling, cuttings from which were collected for every 0.61 meters and examined. Some of the cuttings were analysed for some key elements. In both of the drill holes steel casing was used and subsequently one of the holes has been by diamond drilling during the time frame of this report. Core from the diamond drilling was examined and logged. Hole C8-1-96/97 was subsequently used to supply water for the diamond drilling program.

Table 1: CD GROUP # 1:

Claim Name	Tenure No.	No. of Units	Current Expiry Date	\$ value to be applied	Years applied	New Expiry Date
Cedar #7	209697	20	99/06/17	0	0	02/06/17
Dogwood #16	209714	20	99/07/07	20,000	5	04/07/07
Dogwood #17	209715	20	99/07/07	20,000	5	04/07/07
Dogwood #19	209803	20	99/07/11	12,000	3	02/07/11
Dogwood #20	209717	20	99/07/07	20,000	5	04/07/07

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

LOCATION, ACCESSIBILITY AND TOPOGRAPHY:

The claim group is in southeastern British Columbia approximately 40 kilometres by Highway 3 from Cranbrook and then approximately 4.5 kilometres by secondary road to the southwest corner of the claim group. A secondary all-weather road follows the Sand Creek valley to its headwaters and this road provides access to the Dogwood 17 and 20 claims and the mineralised **TOM ZONE**. A four-wheel drive road from the valley bottom provides access to the mineral deposits called the **G ZONE** just west of the Cedar #7 claim boundary. Access to the showings is usually possible by a short walk from several points along this road. **Figure 2** is a composite map showing topographic contours and cultural features from TRIM digital data, the outline of the claims, and the known mineralised zones.

The claim group is centred approximately 49°25'30"N, 115°15'W, UTM Zone 11U co-ordinates at approximate work sites on the claims at 5476500N, 626700E, in NTS quadrant 82G/6. The claims are in the Fort Steele Mining Division. Topographic relief



SITE LOCATION

ranges from 910 meters to 2200 meters, with steep gradients over most of the five claims in the claim group.

GEOLOGY

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 CD Group #1 property. 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.

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 MINERALISATION:

The following is a brief description of the types of mineralisation known on the property and in the surrounding area with similar to identical geology.

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 just west of 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 meters wide. The Tom Zone in the northern portion of the property has been reported as copper-iron mineralisation 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 gold 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 is 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 3**). 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. Most of the Dogwood Group #1A is within this segment. 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.

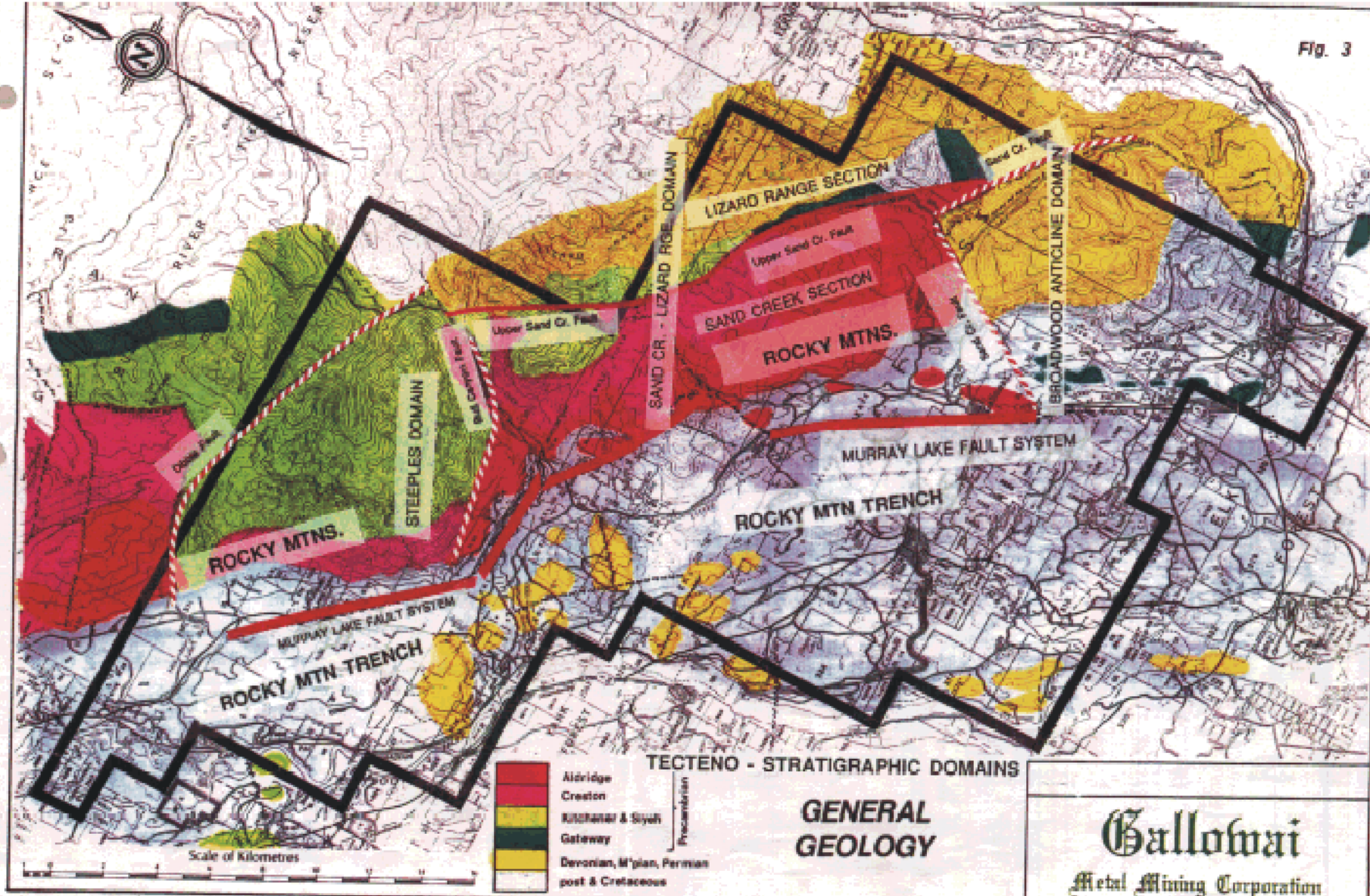
The southern most domain is the BROADWOOD ANTICLINE bounded in the north by the Sand Creek Fault (different than the Upper Sand Creek Fault), and has a southern boundary off the property near Mt. Broadwood.

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.

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 a 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. The backbone of the range is made up by resistant portions of Devonian and Mississippian formations, while its eastern slopes are underlain by softer Mesozoic strata.

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.

The Rocky Mountain Trench:

The Rocky Mountain Trench underlies a small fraction of Cedar #7 claim in the group. Topographically it is very distinct from the Rocky Mountains, and forms the valley of the Kootenay Rive system in this area. However, its true structural eastern margin is variable, partly because of thrust faulting northeastward over the tecteno-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-erosion 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.

DRILLING PROGRAM:

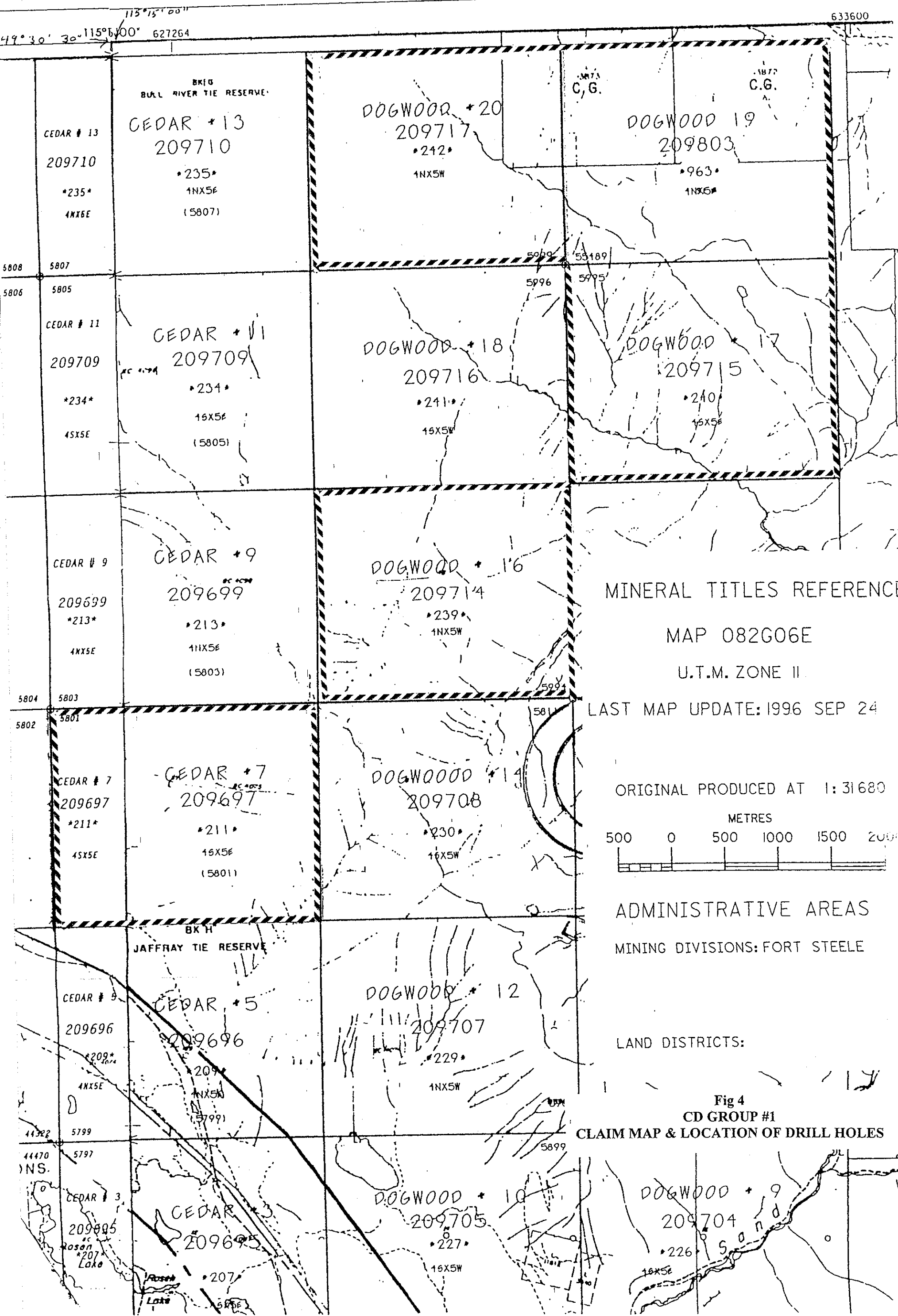
In the 1996-1997 reporting period, the drilling program consisted of two drill holes located within a few meters of each other. There were two drill hole collar sites. In both holes steel casing was used and subsequently one of the holes was extended by diamond drilling, while the other was used to supply water for the drilling, and may also be extended subsequently by diamond drilling. Core from the diamond drilling was examined and logged. Both holes were vertical at the collar.

In the 1997-1998 reporting period hole C8-1-96/97 was extended from 667.27 meters to 1425.2 meters depth, and the core was logged and the drill log is in Appendix 1 of this report.

Figure 4 shows the location of the drill program area with respect to the claim boundaries superimposed on topography from the 1:50,000 map 82G/6.

Objectives and Summary Results

The claim group is adjacent to and includes at least two mineral deposits, the G ZONE and the TOM ZONE. It is mostly in the Sand Creek Section of the Sand Creek- Lizard Range Domain of the Rocky Mountain tectono-stratigraphic province, and a small portion extends in to the Rocky Mountain Trench province. More importantly in both provinces within the claim group the bedrock is mostly of argillaceous sediments of Proterozoic age Aldridge-Creston Formations, and Moyie diorite dykes and sills. The Proterozoic sequence overlies younger Palaeozoic sediments due to folding and thrusting associated with the Hosmer Thrust of the Rocky Mountains.



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

- 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 downdip or enechelon to the known showings.

In 1982 a helicopter borne multi-frequency EM and magnetic survey was completed by Apex Airborne Surveys Ltd. For the R. H. Stanfield group of companies (in company files). In 1992 a helicopter borne geophysical survey by DIGHEM for the Stanfield Group also located a distinct high magnetic trend over the same location. **Figure 5** shows a portion of the distinct NE trending magnetic high that crosses this claim group. The survey also outlined a high conductivity zone and several EM trends south of the magnetic high over a portion of this claim group. This anomaly is described in an assessment report in 1992-93. The two drill holes C8-1-96/97 and C8-2-96/97 are located just off the magnetic high, as close as existing road access would allow proximity to the side of the hill as was possible without having to construct new access roads.

The drilling up to May 1997 did not provide any distinct evidence for the cause of the anomaly, and extension of the holes to greater depth was recommended. On the ridge north-east of the work sites, and within the same magnetic trend, several outcrops of basic dykes and sills have been located, with strong evidence of contact metamorphism. Previous workers have designated these rocks as "migmatites".

Appendix 1 contains the geologic logs of the diamond drill extension of C8-2-96/97. No new evidence was found to determine the exact cause of the aeromagnetic anomaly(s), and further drilling on or closer to the actual target is recommended. The core from the diamond drilling program is stored at the R. H. Stanfield campsite near Galloway.

RECOMMENDATIONS:

In the 1996 -1997 drilling report it was suggested that the bedrock cause of the magnetic anomaly is at greater depth. 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. Extension of the drill holes was recommended, together with ground based detail geologic mapping and geophysical surveys on the ridges above the Trench.

Extension of one of these drill holes in the 1997- 1998 reporting period to 1425 meters has failed to pinpoint the cause of the magnetic anomaly. Further drilling to the north and east, is recommended after ground- based magnetic surveys have more precisely outlined drill targets.

GENERAL INFORMATION ON C8-2-96/97 (as supplied by Bul River mineral Corporation):

Diamond Drilling

	C8-2-96/97	May 21, 1997 – September 30, 1997
rill Crew	Driller- Mr. Gordon Peterson	Box 94, Galloway BC
	Helper- Mr. Jeff Brewster	Box 94, Galloway BC
	Helper- Mr. Gary Jonasson	Box 94, Galloway BC
Site Crew	Manager- Mr. R. Stanfield Jr.	Box 94, Galloway BC
	Co-ordinator: Mr. T. Hewison	Box 94, Galloway BC
Equipment	1 Longyear 44 Diamond Drill- heavy duty mast and all-weather skid shack, Petter and Submersible Pumps, Kawasaki GE 5000 Generator, 3-F250 4x4 Pickup Trucks with Bush Boxes, Case 580 Super D Backhoe for Sump Construction, Caterpillar D7F Tractor.	

COSTS OF DRILLING PROGRAM (C8-2-96/97):
(as supplied by Bul River Mineral Corporation)

Diamond Drilling

Direct Costs

Drilling Costs

Owning and Operating Costs for M/c, String and Bits	13.958 \$/ft
Moving, Aligning, Surveying, Pumping, etc.	0.938
Ancillary Charges @ 50% Industry Average (0.5965 of above)	8.885
Contingency allowance (8% of above)	<u>1.903</u>
	25.684 \$/ft

Total Hole Depth	4725'
Previously Used	<u>2427'</u>

Depth Diamond Drilled	2298'
-----------------------	-------

Diamond Drill Direct Costs (2298' x \$25.684/ft)	<u>\$59021.84</u>
---	--------------------------

Indirect Costs

Drillers' Wages 252.95/day x 68	17200.60
Drill Helper Wages 177.03/day x 68	12038.04
R+B @ \$65/man/day 68 days	8840.00
Drillers' 4x4 (including slip tank) \$50/day x 68	3400.00
Foreman 680hrs. @ \$20.00 per/hour	13600.00
Foreman 68 days 4X4 @50.00	3400.00
Foreman R+B \$65/day 68 days	4420.00
Co-ordinator sampling, site reclaim. \$140/day x40	5600.00
Co-ordinator 4X4 \$50/day x40	2000.00
Co-ordinator R+B \$65/day 40 days	-2600.00
Consultant (Logging of drill Core, map and report)	900.00
Consultant 4X4 \$50/day x 1	50.00
Consultant R+B \$65/day 1 days	65.00
Kawasaki GE 5000 generator \$30/day x 68	2040.00
D7E Tractor 16 Hrs. x \$110/hr	1760.00
Case 580D Backhoe 16 Hrs. x \$42/hr	672.00

Total Indirect Costs

\$78585.64**Total Costs****\$137,607.48**

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.

Lamb, A. T., Smith, D. W.; 1962; Refraction Profiles Over the Southern Rocky Mountain Trench Area of BC; Journal of Alberta Society of Petroleum Geologists, vol. 10, no 7, pp. 428-437

Leech, G. B.; 1962; Structure of the Bull River Valley near Latitude 49° 35'; Journal of the Alberta Society of Petroleum Geologists; vol. 10, no. 7, pp. 396-407

Leech, G. B.; 1960; Map 11 – 1960; Geology, Fernie (West Half), British Columbia; Geological Survey of Canada

Leech, G. B.; 1958; Fernie, Map-Area, West Half, British Columbia; Geological Survey of Canada, Paper 58-10

Master, P.; 1990; General Geology of the Gallowai Property, A Tecteno-Stratigraphic Classification; Report in company files.

Master, P.; 1993; DIGHEM Airborne Survey on the Balsam 1A, Cedar 2A, Cedar 3A, Dogwood 3A Claim Blocks; Covering report for Assessment Report filed by DIGHEM Surveys.

Master, P.; 1997; Drilling Report On Cedar Group #3A; Assessment report filed in September 1997 for R. H. Stanfield.

McMechan, M. E.; 1981; The Middle Proterozoic Purcell Supergroup in the Southwestern Rocky and Southeastern Purcell Mountains, BC, and the Initiation of the Cordilleran Miogeocline, Southern Canada and adjacent United States; Bulletin of Canadian Petroleum Geology, vol. 29, no. 4, pp. 583-621.

McMechan, M. E.; 1978; Geology of the Mount Fisher-Sand Creek Area, Southeastern BC; Notes and Preliminary Map 34; Ministry of Energy, Mines and Petroleum Resources, BC.

McMechan, M. E., Price, R. A.;1982; Transverse Folding and Superimposed Deformation, Mount Fisher Area, Southern Canadian Rocky Mountain Thrust and Fold Belt; Canadian Journal of Earth Sciences; vol. 19, no. 5; pp. 1011-1024

CERTIFICATE

I, Pilsum Master of 32 Midpark Gardens S.E. Calgary, Alberta certify that:

I am a graduate of the University of Bombay, India and a graduate of the University of New Mexico, U.S.A., and hold the following degrees:

B.Sc., 1963, Geology/Chemistry
 M.Sc., 1965, Geology
 M.Sc., 1968, Geology/Mineralogy

I am a Registered Professional Geologist (Association of Professional Engineers, Geologists and Geophysicists of Alberta) and a member of the American Institute of Mining, Metallurgical and Processing Engineers.

I am the President of Master Mineral Resource Services Ltd. of Calgary, Alberta with Permit to Practice Number P5336 from the Association of Professional Engineers, Geologists and Geophysicists of Alberta.

I have practised my profession for the past twenty-eight years.

This Report on the CD GROUP #1 is based upon my involvement in the compilation of geological literature, examination of drill sites, logging of drill core, and the evaluation and compilation of data.

My company and I do not hold any interest in the properties or securities of R. H. Stanfield, or affiliates thereof, nor do my company and I expect to receive any directly or indirectly.

 Pilsum Master, M.Sc., M.Sc., P.Geol.
 President
 Master Mineral Resource Services Ltd.

PERMIT TO PRACTICE	
MASTER MINERAL RESOURCE SERVICES LTD.	
Signature	<i>Pilsum Master</i>
Date	<i>Aug 10, 98</i>
PERMIT NUMBER: P 5336	
The Association of Professional Engineers, Geologists and Geophysicists of Alberta	

CERTIFICATE

September 8, 1998

I, Phil D. de Souza, certify that:

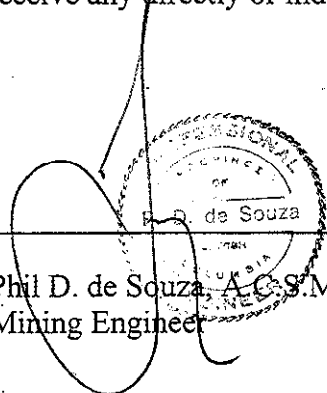
I am a graduate of the Camborne School of Mines, Cornwall, England and that I hold the degree of ACSM First Class in Mining Engineering therefrom.

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-three years.

This report by Pilsum master, P.Geol. (Alberta) entitled: "Drilling Report on CD Group #1", 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., P.Eng.
Mining Engineer

APPENDIX 1

DRILL LOGS

DIAMOND DRILL LOG

MASTER MINERAL RESOURCE SERVICES LTD.

Hole No.: C8 - 2 - 96/97		Page 1 of 2		Project: CEDAR		Property: CEDAR GROUP #3A	
Collar Survey Date		Location : 5476200N, 626700E		UTM Zone 11U		Elevation: 946m	
Objective				Length of Hole: 667.27m to May 10, 1997			
Commenced: December 6, 1996		Logged by: Pilsum Master, P.Geol.		Collar Bearing/Dip: 0° azimuth, -90° dip, @350m: -78°			
Completed: Reported to May 10, 1997		Sampled by		Dates Logging: April 17, May 21, 1997, July 29, 1997, October 7, 1997		Depth: 350m Bearing/Dip: 72°/78° Depth: 266.24m Bearing/Dip: 72°/78° Depth: 145.6m Bearing/Dip: 0°/57°	

From	To	Description	Sample No.	From - To	Width	Analysis							
0	68.18	Overburden, see Percussion drill log	No samples taken										
68.18	269.70	Quartzitic Argillite (Qtzitic-Arg): almost argillite, banding not pronounced, but at @ 85-90° to CA, some Broken core at irregular intervals											
269.70	381.82	Qtzitic-Arg: banding more pronounced 304.85 - 309.09: carbonate (CO ₃) veinlets and stringers irregular and discontinuous 310.61 - 325.76: some clots and stringers of pyrite (py) and pyrrhotite (pyrrh) 339.39 - 341.82: broken core											
381.82	392.12	Qtzitic-Arg: banding @ 45-60° to CA, broken core @ 381.82 over 60cm.											
392.12	466.67	Qtzitic-Arg: banding @ 80-90° to CA, slightly lighter coloured, with characteristic darker bands clustered In 2-3cm wide sections											
466.67	553.64	Qtzitic-Arg: banding @ 80-90° to CA 466.67: 30cm of fault gouge and breccia(bx) with CO ₃ - chlorite 521.18 - 522.42: irregular and discontinuous stringers of white CO ₃ 533.33 - 553.64: broken core											
553.64	640.61	Mixed banded Qtzitic-Arg and uniform Argillite (Arg) 600.91 - 640.61: broken core											
640.61	652.42	Argillite: uniform gray, lots of disseminated and clots of py-pyrrh and discordant stringers of py-pyrrh											
652.42	667.27	Qtzitic-Arg: quite banded @ 80° to CA, little or no sulphides, some py-CO ₃ along fractures, broken core											
667.27	733.03	Qtzitic-Arg: quite banded @ 80° to CA, little or no sulphides, some py-CO ₃ along fractures, broken core 676.67 - 677.88: bleached looking, contact zone of Diorite (D1) intrusive (?) Same rock type @ 695.33 (30cm), 706.97 (30cm)											
733.03	873.33	Argillaceous-Quartzite (Arg-Qtzite): green coloured, flow banding @ approx 30° to CA 778.49 - 80cm of quartz-carbonate-chlorite, fault (?) no crackle zone, no quartz vein or sulphides											
873.33	905.76	Bleached looking core of Arg-Qtzite, CONTACT ZONE (?) some foliation still apparent, irregularly Distributed disseminations, clots and stringers of py, pyrrh, <5%											
905.76	911.52	Diorite: fine grained texture, green, massive and slightly silicified											
911.52	916.67	Arg-Qtzite: bleached looking, gray-green, not much foliation or banding, CONTACT ZONE (?)											
916.67	1034.9	Arg-Qtzite: not so silicified, green, flow banding with alternating lighter coloured material											
1034.9	1040.9	CONTACT ZONE (?) green Arg-Qtzite interfingering with Diorite											
1040.9	1308.8	Diorite or Dolomite: coarse grained texture, propylitic alteration, irregular and discontinuous stringers and veins of quartz (white opaque). Some sections medium grained texture 1060.6 - 1064.2: more porphyritic 1154.2: quartz with some pyrrhotite 1263.9 - 30cm quartz vein, clots of sulphide											

DIAMOND DRILL LOG

MASTER MINERAL RESOURCE SERVICES LTD.

[illegible]

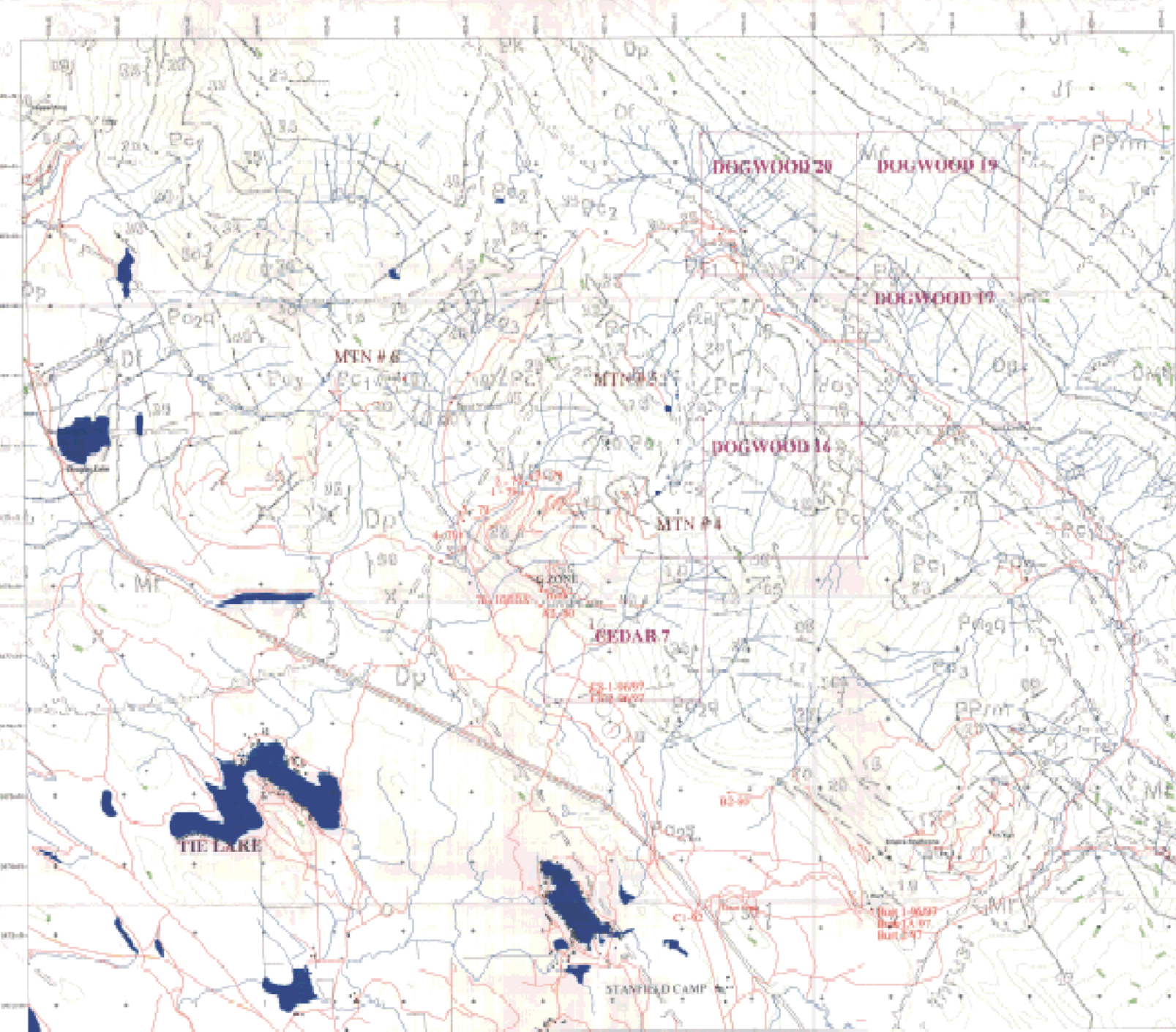


FIGURE 2

25,637

Geology from T. Hoy (Bul River Rd)
Topo and Culture from TRIM digital data

Outline of claims approximate

Bul River Mineral Corporation



B. S. STAPFELT GROUP AN GROUP OF LORAIN L. COOPERSON INC. 11, 15, 20	
COMPILATION MAP 1000 BUL RIVER Duluth, GA 31801 Preparation: 07/01/01	
DATE: 07/01/01	BY: STAPFELT GROUP
WORK: 1000 BUL RIVER	PROJECT: 1000 BUL RIVER

PROPERTY OF STAPFELT GROUP
This map is the property of the Stapfelt Group and is not to be reproduced or used in any way without the written consent of the Stapfelt Group.
Copyright © 2001 by the Stapfelt Group

