

**GEOLOGICAL AND PROSPECTING ASSESSMENT REPORT
ON THE CLAIR CLAIMS**

CLAIR PROPERTY

Clair 20 through 39

NTS 82F/9

Latitude 49° 36' N Longitude 116° 17' W

Owner – Black Bull Resources Inc.

548 Beatty Street,
Vancouver, B.C.
V6B 2L3

Operator – Same as above.

Consultant – Anderson Minsearch Consultants Ltd.

3205 6th. St. South
Cranbrook, B.C.
VIC 6K1

**Authors – Douglas Anderson, Geologist
Thomas Kennedy, Prospector**

Submitted – January 10, 2001

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

26,442

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GEOLOGICAL AND PROSPECTING REPORT ON THE CLAIR PROPERTY

1.00 Introduction

The Clair property which is the subject of this report consists of a north-south block of claims stretching across the St. Mary river valley about 20 kilometres southwest of Kimberley, B.C. One kilometre wide by approximately 5 kilometres long, the claims cover modest relief, mostly river bottom around 980 metres to a maximum 1400 metres. Mixed vegetation occurs across the valley bottom, succeeded by moderately thick forest cover on the flanks of the valley. Access is via two major roads from Highway 95A, the St. Mary Lake road or the River road which is a logging access road on the south side of the river. In more detail, access to the south side of the Clair leaves the River road around 24 kilometres as the Hellroaring then Meachen creek logging roads. (See enclosed Figure 1, Location Map.)

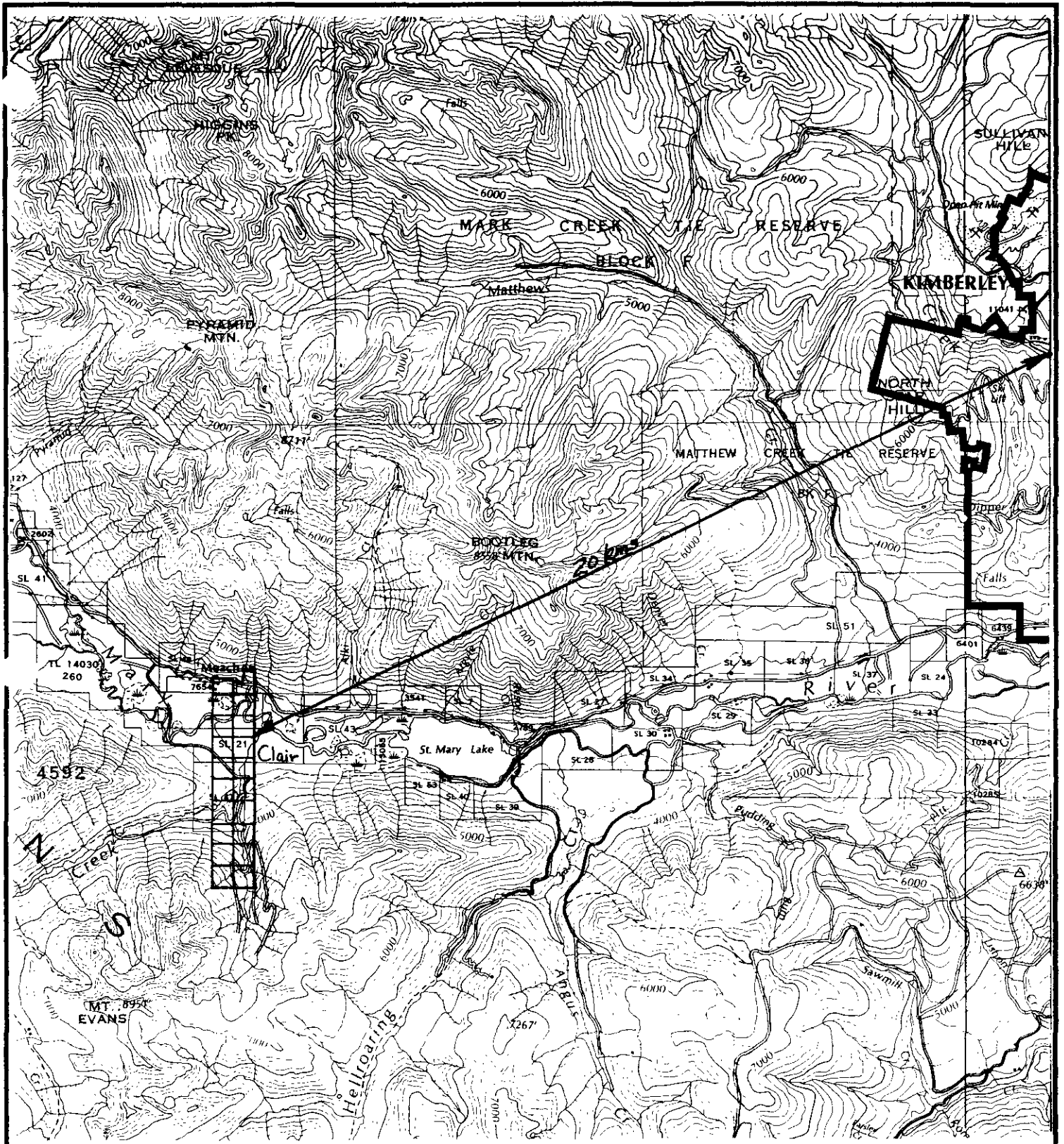
1.10 Property Definition, History, Background Information

The Clair property includes the following claims:

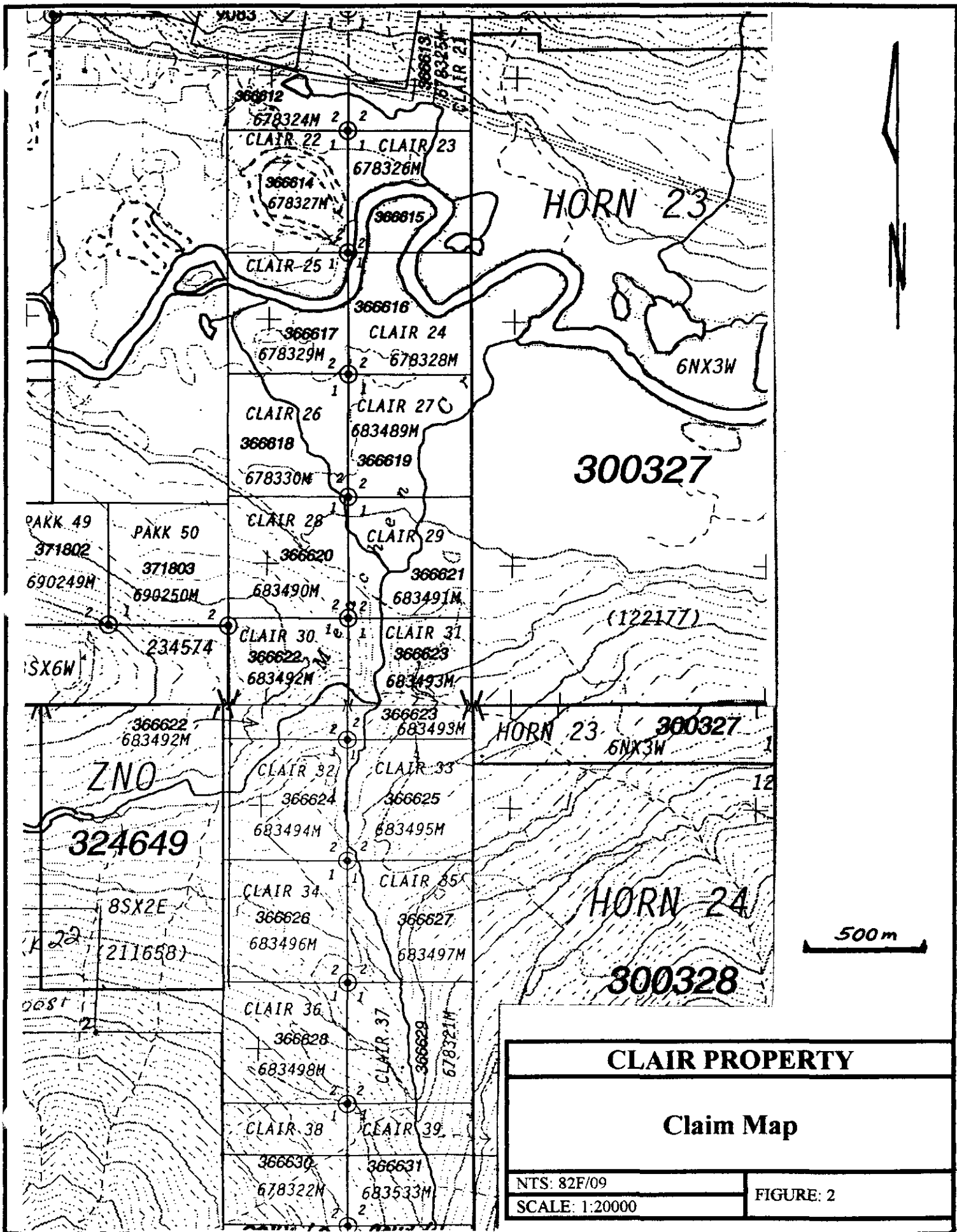
<u>Clair Claim</u>	<u>Units</u>	<u>Record #</u>	<u>Anniv. Date</u>
Clair 20	1u	366612	2002/10/13
Clair 21	1u	366613	"
Clair 22	1u	366614	"
Clair 23	1u	366615	"
Clair 24	1u	366616	"
Clair 25	1u	366617	"
Clair 26	1u	366618	"
Clair 27	1u	366619	"
Clair 28	1u	366620	"
Clair 29	1u	366621	2002/10/13
Clair 30	1u	366622	2002/10/14
Clair 31	1u	366623	"
Clair 32	1u	366624	"
Clair 33	1u	366625	"
Clair 34	1u	366626	"
Clair 35	1u	366627	"
Clair 36	1u	366628	"
Clair 37	1u	366629	"
Clair 38	1u	366630	"
Clair 39	1u	366631	2002/10/14

The current owner is Black Bull Resources Inc. of Vancouver who have optioned the claims. The claims involved are shown on Figure 2 enclosed.

The exploration history of the immediate area and the Clair property itself is mostly recent, ie the last twenty years. A small showing just to the northwest, the Dominion Group was early exploration employing adits to explore lead/zinc/copper/arsenic mineralization in quartz veins within a Moyie intrusion. Much later, Cominco pursued the area on both sides of the valley for Sedex-style mineralization. Because the



CLAIR PROPERTY	
Location Map	
NTS: 82F/09	FIGURE: 1
SCALE: As shown	



CLAIR PROPERTY	
Claim Map	
NTS: 82F/09	FIGURE: 2
SCALE: 1:20000	

Lower/Middle Aldridge contact was identified with a footwall of fragmental rock, Cominco explored the flanks of the valley, particularly just to the east of the Clair claims. Mapping, soil geochem, and UTEM geophysics, and limited diamond drilling were employed to evaluate the ground encompassing a sizable area which included the current Clair being discussed. The soil geochem shows scattered Pb/Zn/As anomalous results with no concentrations of anomalous samples. The EM geophysics was done on wide-spaced lines and resulted in anomalies which were evaluated and discounted as surficial. The drilling included two holes, one on each side of the valley (east of the present Clair) to test the LMC close to known fragmentals in outcrop. No significant sulfides were intersected. Later work (1990's) was done over some of the same ground by Sedex Mining Inc. This effort included more geophysics surveys and drilling of several holes, the results of which are not well known. Suffice to say no significant sulfides have been located.

1.20 Summary of Work Done

The 2000 exploration program for the Clair 20-39 claims was limited in scope, with a large part of the property requiring subsurface work due to extensive overburden cover. Work during the year included prospecting of the claims and immediately adjacent ground and mapping of any outcrops on the north and south extremities of the property.

2.00 Prospecting Report

Prospecting on the Clair block was concentrated on the Clair 28 to Clair 33 claims where the majority of outcrop on the property occurs. Two main features of interest were noted in the area: structural zones and mineralization.

Structural Zones

Two fault zones were encountered on the property (Fig.P1). The northern most fault trends to the northwest while the southern fault strikes northeast. The sediments within and adjacent to both fault zones are weakly albitized and chloritic, and are highly sheared and foliated. Minor patchy silicification of the sediments was noted as well as narrow quartz veinlets in the heart of both structures. The northwest striking fault hosts a 1.5-3m wide intensely sheared gabbro dyke which contains narrow quartz veinlets and minor epidote alteration.

Mineralization

Two styles of mineralization were found on the property: quartz vein related mineralization; and disseminated mineralization in Lower Aldridge sediments.

Quartz Vein Style Mineralization

Quartz vein mineralization was located in both of the above mentioned structural zones and consisted of narrow (1-3cm wide) quartz veins with chlorite, carbonate, pyrite and rare galena and sphalerite. These veins are parallel to the structures and form anastomizing lenses. A bedding parallel ribboned quartz vein was found adjacent to the northwest trending fault zone. It contained clots of coarse grained galena and pyrite with rare sphalerite and arsenopyrite as well as disseminated tourmaline needles within the

black graphitic layers. Also milky white quartz float with pyrite and rare arsenopyrite was found on the switchback of the East Sinclair logging road (Fig.P1).

Disseminated Style Mineralization

Disseminated sphalerite was located in three different areas on the claim block (Fig.P1). This style of mineralization consists of very fine grained purple/pink sphalerite within sericitic Lower Aldridge sediments. Most of this mineralization is discontinuous and is associated with narrow sericitic fractures. The northern most zone however appears to be more continuous and was the widest mineralized interval seen (1.5m wide), and could potentially represent a distal sedex horizon.

Seven rock samples were collected while prospecting; their locations are shown on Figure P2. Descriptions of the samples are as follows. These samples have not been analyzed.

- | | |
|----------|------------------------------------------------------------------------------------------|
| Clair -1 | Finely disseminated sphalerite in Lower Aldridge sediments. |
| Clair -2 | Finely disseminated sphalerite in Lower Aldridge sediments. |
| Clair -3 | Narrow quartz veins with pyrite and rare galena and sphalerite. |
| Clair -4 | Narrow quartz veins with pyrite and chlorite with rare sphalerite. |
| Clair -5 | 1.5m wide zone of finely disseminated sphalerite in Lower Aldridge sediments. |
| Clair -6 | 10cm wide ribboned quartz vein with galena, pyrite and rare sphalerite and arsenopyrite. |

3.00 Geological Report

Mapping was completed north and south of the river valley at a scale of 1:5000 which is here recorded at 1:10,000 to cover the property on one convenient map. No loss of information occurred in completing the scale change. Some information was gathered adjacent to the claims because it is pertinent to understanding the geological setting on the claims.

The Clair property covers a panel of lower stratigraphy in the Aldridge Formation together with several Moyie intrusions. The Aldridge is the oldest formation of the Proterozoic Belt-Purcell Supergroup. The Supergroup is a thick sequence of terrigenous clastic, carbonate, and minor volcanic rocks of Middle Proterozoic age. The basal Aldridge Formation, as exposed in Canada, is siliciclastic turbidites about 4000 meters thick. It is informally divided into the Lower, Middle, and Upper members. To the north and east in the basin, the Lower Aldridge, the base of which is not exposed, is about 1500 meters of rusty weathering (due to pyrrhotite), thin to medium bedded argillite, wacke and quartzitic wacke generally interpreted as distal turbidites. The Sullivan orebody occurs at the top of this division. To the south and west in the basin in Canada, the upper part of the Lower Aldridge is dominated by grey weathering, medium to thick bedded quartz wackes considered to be proximal turbidites. The Lower Aldridge is commonly host to a proliferation of Moyie intrusions, principally as sills. The Middle Aldridge is about 2500 meters of grey to rusty weathering, dominantly medium bedded quartzitic wacke turbidites with periodic inter-turbidite intervals of thin bedded, rusty weathering argillites some of which form finely laminated marker beds (time stratigraphic units

correlated over great distances within the Aldridge/Prichard basin). The Upper Aldridge is about 300 meters of thin bedded to laminated, rusty weathering, dark argillite and grey siltite often in couplet-style beds.

The claims cover about 50% river valley bottom with estimated depths of overburden from a few metres to quite likely several hundred metres in the centre of the valley. On the north side, the entire section encountered was Middle Aldridge hosting at least two Moyie intrusions. These sediments are all part of a west-dipping package not far above the Lower/Middle Contact (LMC) of the Aldridge Formation which is known to be present within a few hundreds of metres to the east. The sediments are dominated by medium-thick bedded, grey weathering, quartzitic wacke to quartz wacke turbidites with much thinner intervals of thin-bedded, more rusty weathering, inter-turbidite wacke to argillite. Two NNE-trending fault zones were identified. The gabbro occurrence on the east side may be a dyke along one of the faults.

On the south side of the river the confluence of Sinclair and Meachen creeks forms a canyon with quite abundant outcrop but the flanks above this are almost devoid of outcrop. The area setting is established by looking beyond the claim boundaries somewhat. A major thrust has been recognized by previous workers about 800 metres east of the claims. The footwall side (east) is approximately at the LMC (Sullivan Time) with bedded and fragmental rocks of the Lower Aldridge exposed. To the west is covered until Meachen creek where Lower Aldridge and Footwall Quartzites are exposed ranging up into consistent Lower Aldridge. About one kilometre farther west is a sequence of very thick bedded to non-bedded, massive quartzites which probably occur at the LMC. Middle Aldridge is established to the west of these outcrops.

The core of outcrop along Meachen creek is somewhat problematic because of an apparent mix of sedimentation styles. This alternating character to the sediments is explained by the degree of folding and faulting. The rocks in this area are 75% quartzitic units with medium to thick beds of grey weathering, quartzitic wacke to quartz wacke. The bedding dips shallowly to steeply to the west/southwest with a few fold limbs dipping northeast. This panel is interpreted as part or all of the footwall quartzite sequence which at the Sullivan Mine occurs about 150 metres below Sullivan Time. Rusty weathering, thin-bedded wacke to argillite are also noted as typical of Lower Aldridge sediments. Such argillaceous units are recognized at Sullivan within the footwall quartzite sequence. A more consistent section of Lower Aldridge appears to develop to the west, just outside the claims along the Meachen creek draw. Again the package is west-dipping eventually exposing higher stratigraphy to the west at the interpreted LMC. If this interpretation is correct then the Sullivan Time to top of footwall quartzite sequence is about 100% thickened in comparison to the standard at the Sullivan Mine.

The sediments along the northern-most exposures in Meachen creek are quite deformed, possibly due to being in the hangingwall of the thrust. There is tight, asymmetric folding along northwest-trending axes. The folds are small in scale perhaps up to 30 metres across. Also noted were high strain zones striking northwest. If the stratigraphic

interpretation is correct across the area, no significant movement has occurred on any faults.

The prospecting addressed any mineralization located on the claims. No significant sulfide mineralization was noted during the mapping.

4.00 Summary and Conclusions

The Clair claims are underlain on the north by Middle Aldridge sediments and Moyie intrusions known to be located just above the Lower/Middle Aldridge contact. The south side geology is different due to a major thrust fault occurring to the east of the claims on this side of the valley. The main area of outcrop is hangingwall to the thrust and is part of a west-dipping, younging to the west package. The sediments are interpreted as some 300 metres below Sullivan Time within the Lower Aldridge. No significant mineralization was located but a large part of the claim block is overburden covered.

5.00 Itemized Cost Statement

Geological Contractor

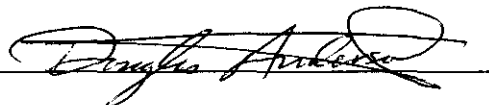
Douglas Anderson, P.Eng.	Geological mapping, report writing 6 days @ \$330.00/day	\$ 1,980.00
Truck costs	4 days @ \$81.25/day	325.00

Prospecting Services

Tom and Sean Kennedy, Kimberley, B.C.		
	Tom Kennedy 4 days @ \$220/day (includes report writing)	880.00
	Sean Kennedy 3 days @ \$165/day	495.00
Truck Costs	3 days @ \$88.00/day	<u>264.00</u>

TOTAL = \$ 3,944.00

Dated this 8th day of January, 2001



Douglas Anderson, P.Eng., B.A.Sc., FGAC
Consulting Geological Engineer

6.00 AUTHOR'S QUALIFICATIONS

I, Douglas Anderson, Consulting Geological Engineer, have my office at 3205 6th. St. South in Cranbrook, B.C., V1C 6K1.

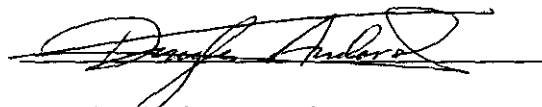
I graduated from the University of British Columbia in 1969 with a Bachelor of Applied Science in Geological Engineering.

I have practiced my profession since 1969, predominantly with one large mining company, in a number of capacities all over Western Canada.

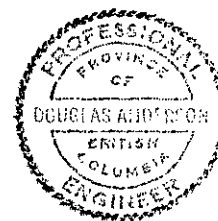
I am a Registered Professional Engineer and member of the Association of Professional Engineers and Geoscientists of B.C., and I am authorized to use their seal which has been affixed to this report.

I am also a Fellow of the Geological Association of Canada.

Dated this 8th day of January, 2001



Douglas Anderson, P.Eng., B.A.Sc., FGAC
Consulting Geological Engineer



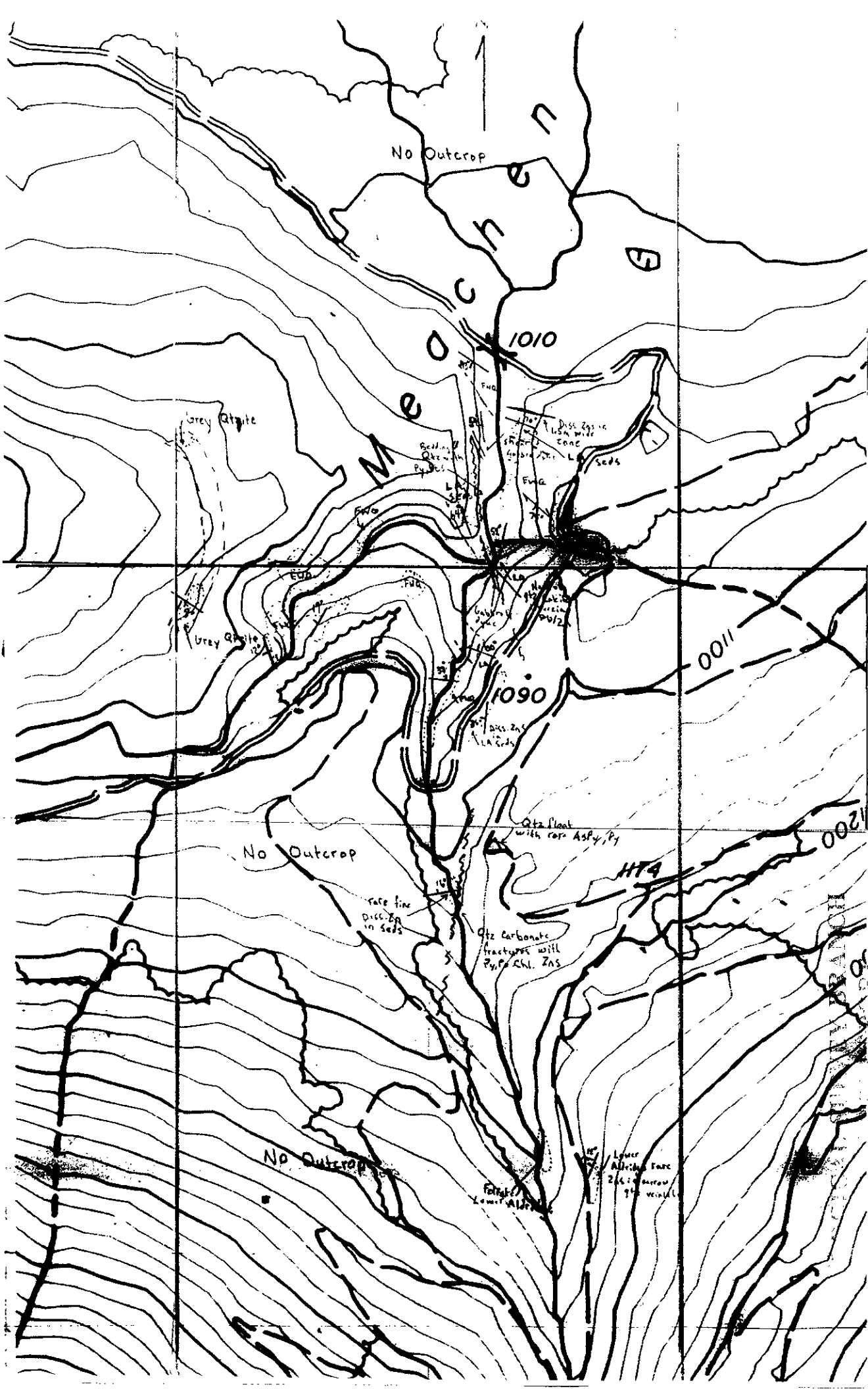


FIGURE P1:
CLAIR PROSPECTING
MAP

LEGEND

- FNQ - Footwell Quartzite Unit
- LA - Lower Aldridge Unit
- - Unit Boundary
- ~~~~ - Fault zone
- - Outcrop Boundary
- - Claim Boundary

SCALE 1:10,000

0 1000 2000 3000

27792
 26192

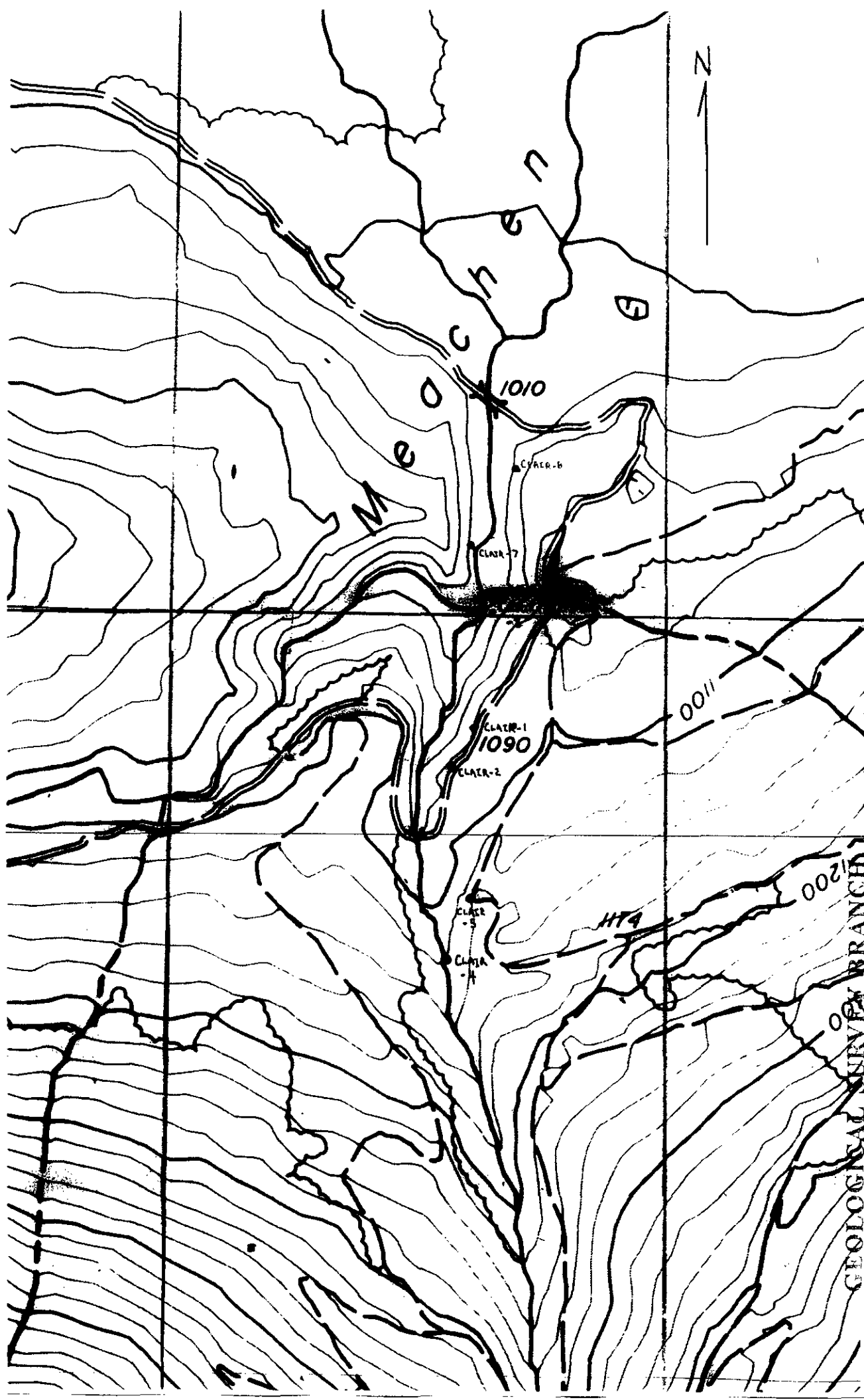


FIGURE 2.
CLAIR SAMPLE
SITES

LEGEND

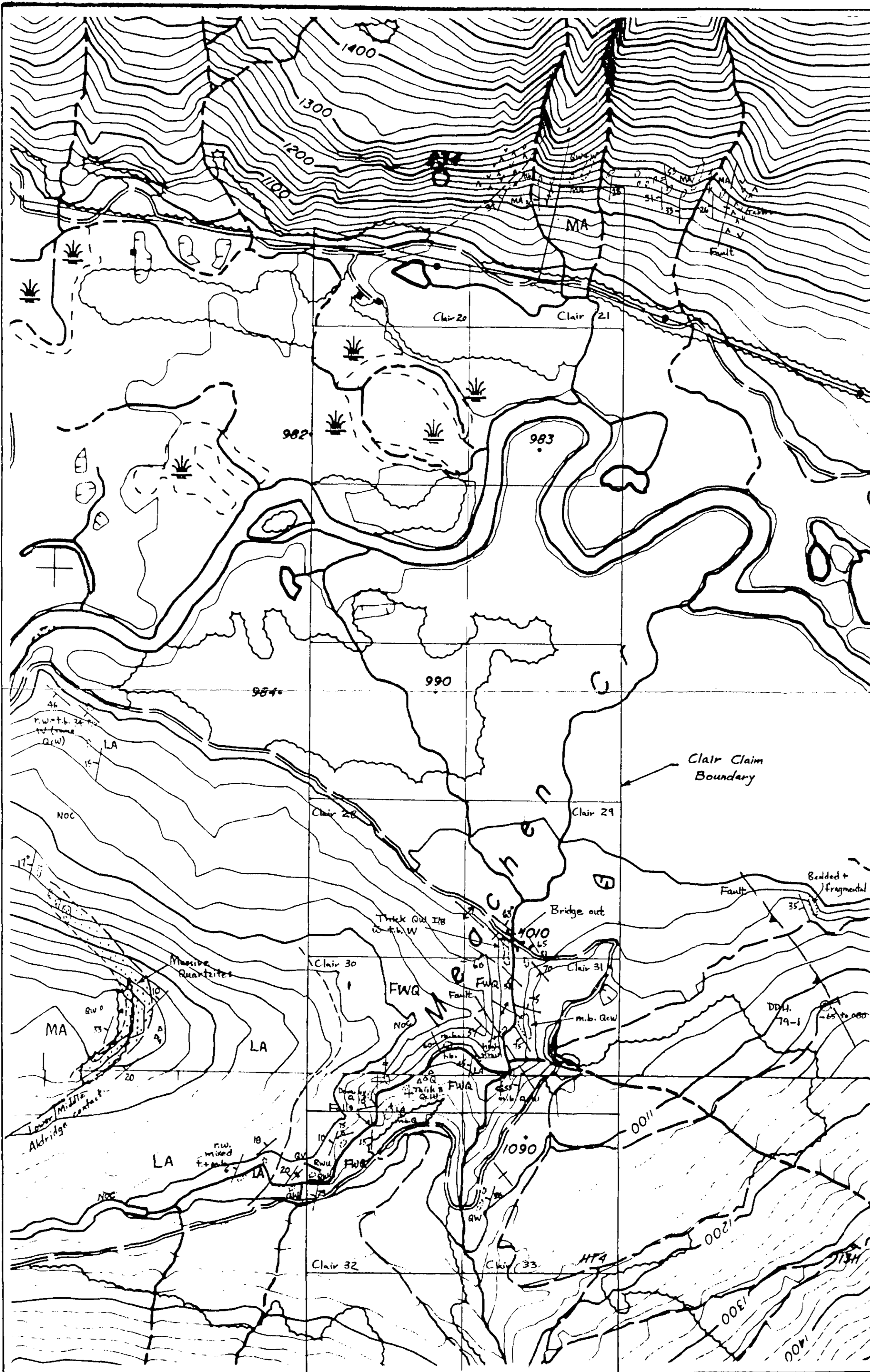
● - Sample Site

SCALE 1:10,000

0m 100m 200m 300m

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

26,442



GEOLOGICAL SURVEY BRANCH
 MINERAL REPORT

26,442

500 m

LEGEND

- Moyie Intrusions
- Middle Aldridge – dominated by grey, medium bedded quartzitic wackes of turbidite origin.
- Lower Aldridge – dominated by rusty weathering, thin-bedded wackes/subwackes of distal turbidite origin.
- Footwall Quartzites – similar to MA with medium to thick bedded quartzites.
- Faults
- Anticline
- Syncline
- Bedding (So)
- Cleavage (S1)
- Shearing
- = quartz wacke
- = quartzitic wacke
- = wacke
- = medium bedded
- = thin bedded

CLAIR PROPERTY

GEOLOGY MAP

NTS: 82F/09
 SCALE: 1:10000
 FIGURE 3