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**Diamond Drilling Report**  
Clair Mineral Claims  
Fort Steele Mining Division, B.C.  
NTS 82F/9W  
Latitude 49° 25'N, Longitude 116°20'E

**Report by:** G.Rodgers, P.Eng.  
P.O. Box 63,  
Skookumchuck, B.C. V0B 2E0

**For:** Abitibi Mining Corp. (Operator)  
P.O. Box 215,  
Cranbrook, B.C. VIC 4H7

**Owner:** Abitibi Mining Corp.  
(Optioned from Cominco Ltd.)

June 15, 1999

GEOLOGICAL SURVEY BRANCH  
DIAMOND REPORT

26,028

GOVERNMENT AGENT CRANBROOK  
SEP 27 1999  
AMT. # .....  
TRANS. # .....

(i)

### Summary

One diamond drill hole was drilled by Abitibi Mining Corp. on the Clair 14 mineral claim (#209798) October 25-31, 1998. Abitibi Mining Corp. was the operator and the claims are optioned to Abitibi Mining Corp. From Cominco Ltd. (owner). The hole encountered siltstones, argillites and quartzites of the Middle Aldridge Formation with a 15m section of tourmalinized breccia .

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## 1.0 Introduction

### 1.1 Location and Access

The claims are located approximately 6km west of St. Mary Lake which is 20 km west of Kimberley, B.C.. The claims are located along the St. Mary Valley and are cut by the St. Mary Forest Service Road. Terrain is relatively flat, marshy and sparsely wooded with many logged areas in the valley bottom but very steep, rugged and sparsely treed north or south of the valley.

### 1.2 History

The St. Mary Valley area has been the focus of exploration by Cominco Ltd. between 1979 and early 1990's for Sullivan style mineralization.

### 1.3 Economic Assessment

The claims overlay stratigraphy thought to be prospective for base metal mineralization. The middle Aldridge Formation underlies the claims. This environment hosted the 160 million tonne Sullivan Pb,Zn,Ag deposit worth approximately \$20billion.

### 1.4 New Work Performed and Objectives

During 1998 diamond drilling totaling 443 meters in one hole was done in order to try to reach the bottom contact of the Clair Fragmental which outcrops 2km to the east.

### 1.5 Claim Status

The Clair claim block optioned to Abitibi Mining Corp consists of 65 claim units. The claims that this assessment report pertains to are listed on the Statement of Work (s) # 3135298. Fig.2a is a claim map showing the immediate claim worked on ( Clair14).

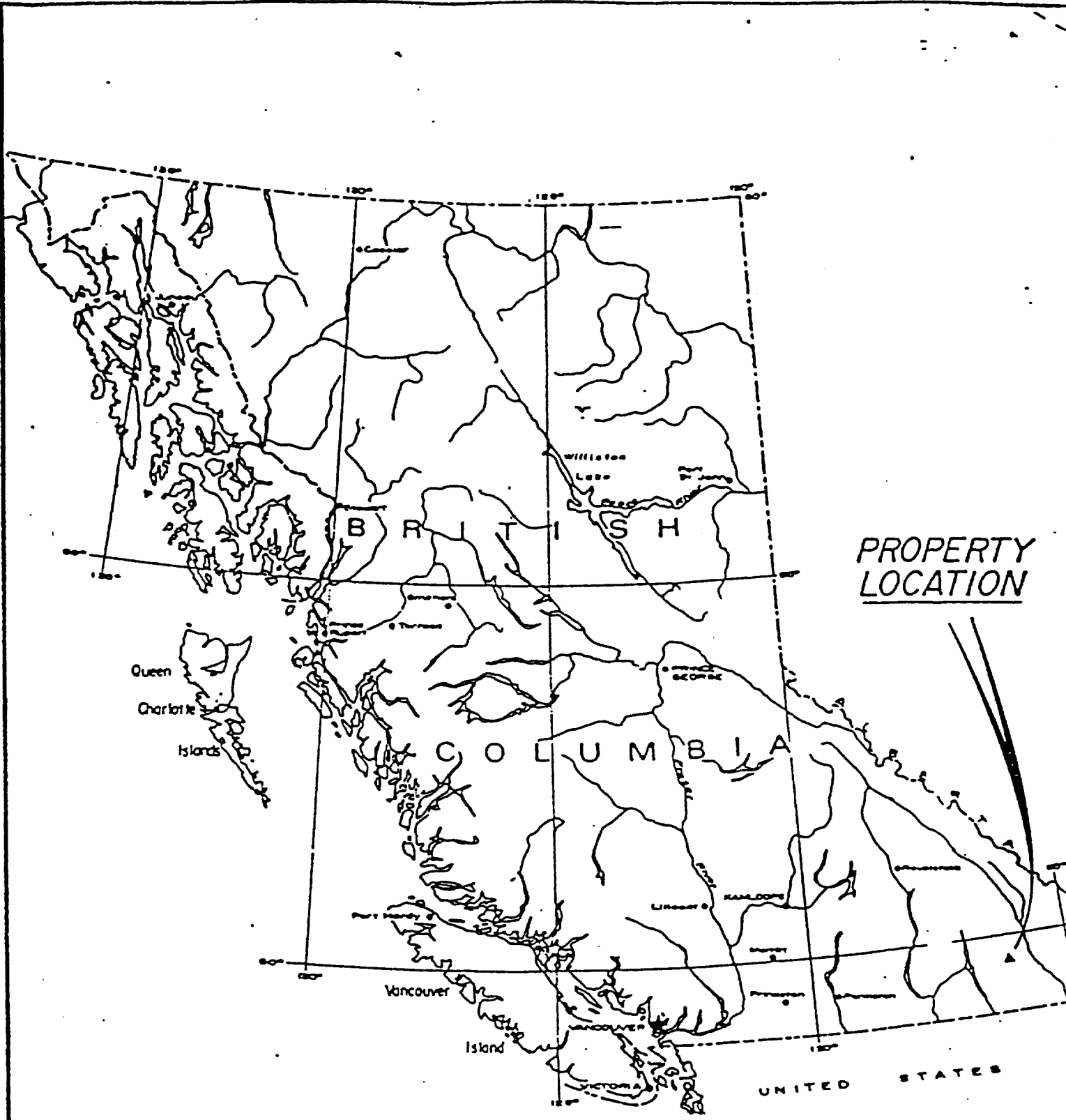


Figure 1

LOCATION MAP

SCALE

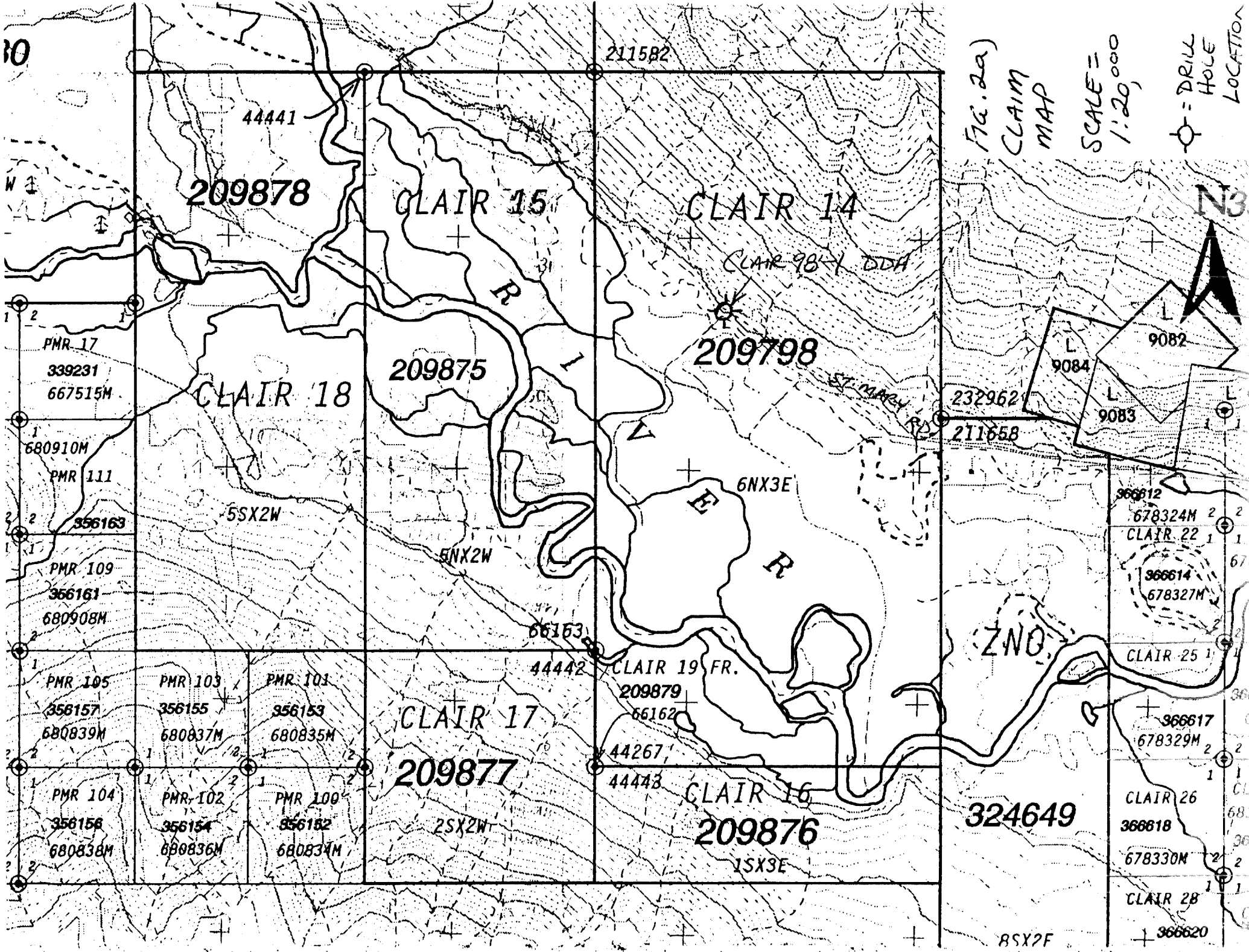


Fig. 2a)  
CLAIM  
MAP  
SCALE =  
1:20,000  
○ = DRILL  
HOLE  
LOCATION



8SX2F  
+ 36620

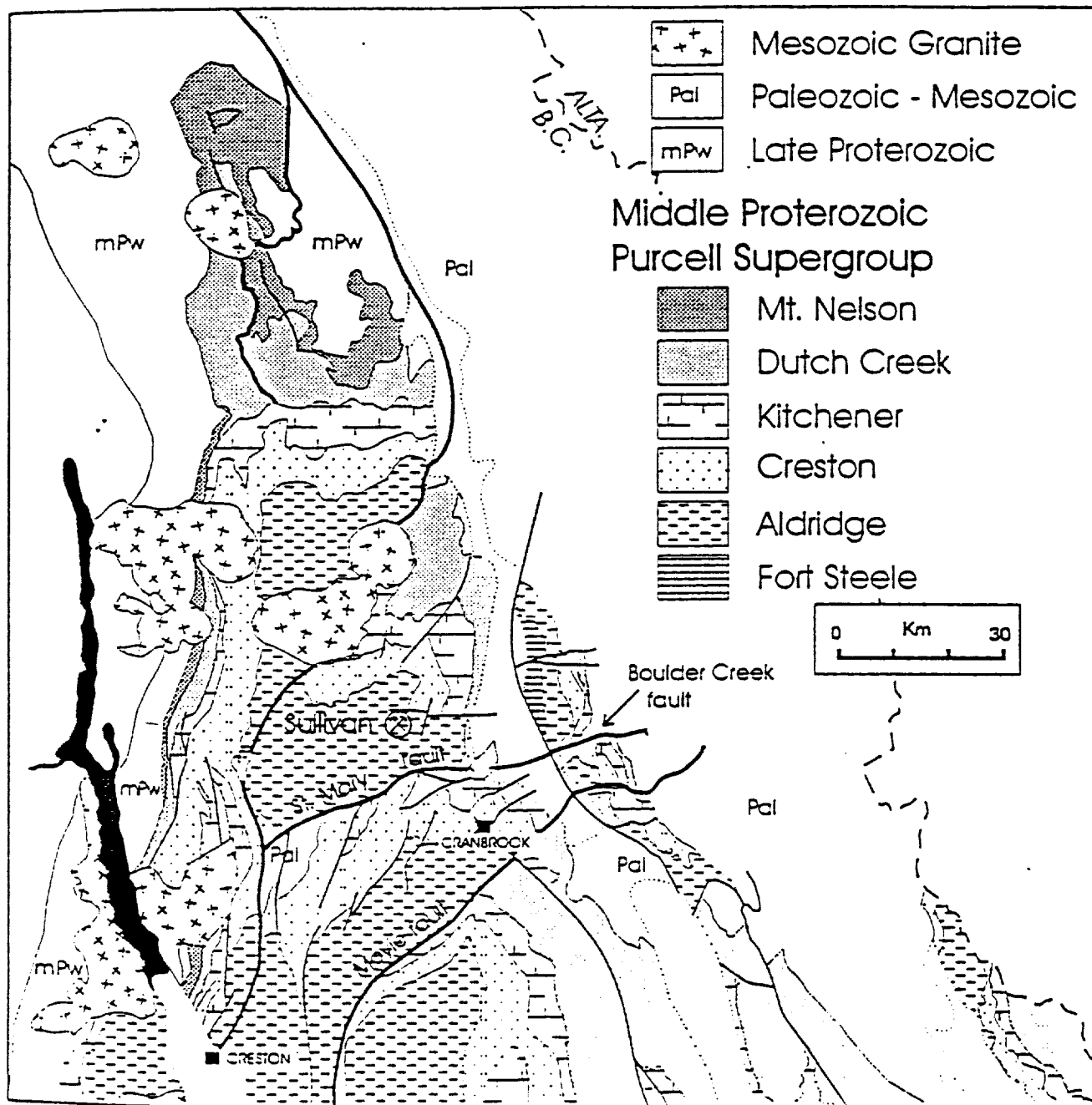


Figure 2b. Regional geology map of the Purcell Supergroup, Southeastern British Columbia.

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## **2.0 Regional Geology**

The area is underlain by rocks of the Purcell Supergroup in Helikian and Hadrynian aged rocks.

The Sullivan lead-zinc deposit is located 20km east at Kimberely, B.C.. The Sullivan deposit is located 20-30m below the upper contact of the Lower Aldridge Formation. Overlying the Lower Aldridge lie the +3,000m thick quartz wackes, subwackes and argillites of the Middle Aldridge Formation. A number of gabbro sills (locally up to 125m thick) are present on the Lower and Middle Aldridge Formations. These sills (and dikes) were intruded into wet, unconsolidated sediments and have been dated to 1445 Ma. The Middle Aldridge is conformably overlain by the 300-400m thick thin, fissile, rusty weathering siltites and argillites of the Upper Aldridge Formation.

Conformably overlying the Upper Aldridge Formation is the Creston Formation comprising over 1,800m of grey, green and maroon, cross-bedded and ripple-marked platformal quartzites and mudstones. The Kitchner-Syeh Formation consists of 1200-1600m of shallow water grey-green-buff dolomitic mudstones and overlies the Creston Formation. Fig.2 shows the regional geology.

## **2.1 Property Geology**

Outcrop is abundant north of the 1998 drilling area. Previous drilling by Abitibi Mining Corp. intercepted Lower Aldridge and gabbro sills south of the St. Mary River in 1997. Mapping by Abitibi Mining Corp. in 1997 north of the drilled area indicated that Middle Aldridge Formation sediments which lie just above the Sullivan Horizon would project under the valley bottom in the vicinity of the 1998 drill hole.

## **3.0 Diamond Drilling**

Diamond Drilling during 1998 was done on the Clair14 mineral claim (#209798).

One diamond drill hole totaling 443m was drilled beside the main St. Mary River road at its junction with a side road which leads south to the St. Mary River.

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#### 4.0 Conclusions and Recommendations

The diamond drill hole (C98-1) failed to intersect the Sullivan Horizon (Lower - Middle Aldridge contact). A fragmental bed was intercepted between 242.1m and 266.4m which contained trace sphalerite. A 20m shear/breccia zone below this contains tourmaline and abundant (10%) iron sulphides.

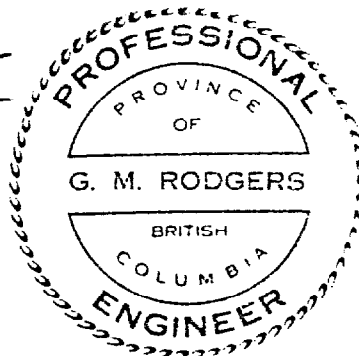
It is recommended to deepen this hole in the future in order to reach the Lower- Middle Aldridge contact.

#### 5.0 Statement of Costs

Diamond Drilling (Lone Ranger Diamond Drilling)	\$ 30,538.54
Supervision, Core Logging, Report (P. VanAngeram, G. Rodgers)	\$ 2,760.
4x4 trucks, accommodation, meals, etc.	\$ 900.
Hastings Management (10%) management fee	\$ 3,420.
<hr/>	
Total =	\$ 37,618.

Certified as a true accounting of costs occurred ,

  
(G.M. Rodgers, P.Eng.)



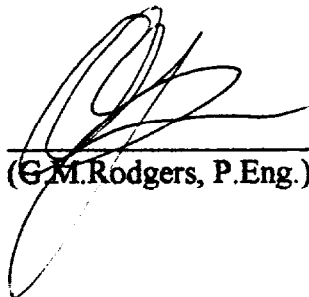


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### 7.0 Statement of Qualifications

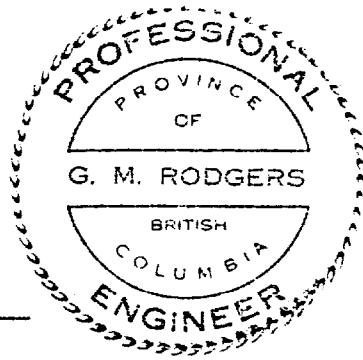
I, Glen M. Rodgers of P.O. Box 63 ,Skookumchuck, B.C.  
do certify that:

- I am a graduate of the University of Manitoba (1977) with a degree in Geological Engineering.
- I have practiced my profession continuously over the last 22 years working primarily in mineral exploration throughout North and Central America.
- I am registered as a member of the APEGBC as a P.Eng..
- I have based this report on time personally spent on the Clair claim block.
- I do not expect to receive any share consideration as a result of writing this report for Abitibi Mining Corp..



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(G.M.Rodgers, P.Eng.)



**APPENDIX I**  
**(Diamond Drill Logs)**

# Drill Hole # C98-1

## CLAIR Project

Location: St.Mary's road @ km35.3  
 UTM-N:  
 UTM-E:  
 Elevation:  
 Started: Oct 25 1998  
 Completed: Oct 31 1998  
 Logged By: PvA, Oct/Nov 1998

Core Size: NQ  
 Depth (m): 443.0  
 Inclination (°): -60.0  
 Azimuth (°): 268.0  
 Incl EOH (°): -46.0

From (m)	To (m)	Unit	Description	Sample	From (m)	To (m)	Size (m)
0.0	24.3	O/B	<b>Casing:</b> Overburden; casing left in hole. Capped.				
24.3	42.6	a2	<b>Ss/silt/argil:</b> Middle Aldridge Quartzitic sandstone with argillaceous silty tops. Medium-bedded. Quartzite=grey, no internal structure; 0.2 to >1.0m thick. Siltstone tops=brown, biotitic, thinly bedded (<1cm); 10-30 cm thick. Occasional patch of garnetiferous "migmatite" in quartzite (<20cm). Narrow sections <<0.5m with mud chips &/or soft-sed deformation. Many hairline fractures + qtz/chl/ms/po. Bedding ATC: 28°-33° Fractures ATC: 10°-15°				
42.6	54.4	F	<b>Fault:</b> Broken, limonitic quartzite. Abundant fracturing in two directions. 15° set=qtz/chl frags. 75° set=qtz/chl/ser/po veinlets (<<1cm). Fracture ATC: 15° and 75°				
54.4	136.8	a2	<b>Ss/silt/argil:</b> Middle Aldridge Quartzitic, biotitic, sandstone with argillaceous silty tops. Medium-bedded to thin-bedded. Quartzite=grey, no internal structure; 0.1 to 1.0m thick. Siltstone tops=brown, biotitic, thinly bedded (<1cm); 5-40 cm thick. Some siltstone=10-20cm psuedomarker (eg: 111.5 & 114.1). Many siltstone bands have minor soft-sed deformation. Rare mud-chip + sparse, white, quartzite chips, all <2cm. Abundant siliceous migmatic/garnetiferous patches in quartzite.				
88.0	106.0	a2+po	Weak pyrrhotite section. Disseminated & fracture-controlled po <1%. Bedding ATC: 36°-45°				
136.8	142.3	F	<b>Fault:</b> Silicified, heavily fractured quartzitic sandstone. Vuggy fractures with chl/po. Fracts ATC: 0°-15°				
142.3	194.1	a2	<b>Ss/silt/argil:</b> Middle Aldridge Similar to 54.4-136.8. Medium-thick bedded. Beds up to 2.0m thick.				
165.8	167.5		Cherty, laminated/varved, biotitic siltstone/argillite. No sulphides.				
167.9	168.1		Fault gouge, mud seam.				
175.3	194.1		Abundant qtz/chl/po hairline fractures (bedding-plane & cross-cutting).				
182.2	183.5		Cherty, laminated, siltstone/argillite+<1%po. Bedding ATC: 41°-45°				

194.1	219.8	m	<b>Moyie intrusive:</b> "Gabbro" Fine-grained to medium-grained diorite. Non-magnetic. Sharp contacts, with chilled margins within 3m of such. Several quartz veins (<15cm) @ 10-20° ATC.
219.8	242.1	a2	<b>Ss/silt/argil:</b> Middle Aldridge Quartzitic, biotitic, sandstone with thin argillaceous silty tops. Medium/thick bedded. Beds 0.1 to 1.0m thick. Tops <30cm. Several migmatic/garnet zones, qtz/py/po veinlets, quartzite chips. Bedding ATC: 50°-58°.
242.1	266.4	af	<b>Fragmental:</b> Middle Aldridge Quartzitic, sericitic sandstone with little or no silty tops. Thick bedded to massive. Beds >2.5m thick. Locally biotitic, mostly bleached (sericitic), locally coarser-grained. No discernable bedding except in occasional silty band <10cm thick. Upper contact gradational, biotitic over 3m. Abundant ghostly fragments of coarser-grained biotitic sandstone. Clasts are subrounded to subangular, <1cm to 3cm. Matrix-supported, sparse concentrations of clasts, <20%. Occasional mud-chip and quartzite clast <2cm. Several migmatic/garnet patch, qtz/py veinlet <0.5cm.
256.3	256.4		Trace ZnS? in small ghostly patches <0.5cm. Content <<1%.
266.4	397.5	a2	<b>Ss/silt/argil:</b> Middle Aldridge Ditto 54.4-136.8. Brown quartzitic, biotitic, sandstone with argillaceous silty tops. Medium-bedded to thin-bedded. Beds 0.2-1.5m thick. Progressively larger silty component towards bottom. Upper portion=80%quartzitic sst, lower portion=60-70%. Bleached, fractured, 2% diss & fract-controlled As + trace po
283.8	284.5		Several bedding-plane, hairline chl/po partings.
283.8	285.6		Silty tops strongly disrupted + rip-ups and silt clasts.
317.6	323.7		Silicified, clasts, qtz/chl/po hairline bedding-plane fract. Tr PbS/As.
359.2	371.8		Brecciated+qtz/po/PbS veins. PbS<2%. ZnS?
360.9	363.4		Bleached, greenish, chloritized/sericitized.
395.9	397.5		Bedding ATC: 58°-65°.
397.5	402.3	S	<b>Shear:</b> Middle Aldridge Dark brown, foliated, qtz/biot/chl/py "schist". Bedding parallel? Crudely bedded to gneissic. Coarse and fine grained sections. Remnant fragments (quartzite and argillaceous) to 3cm. Remnant bedding (coarse vs fine grained; biotitic vs chloritic zones). Several disjointed qtz veinlets <0.5cm. Pyrite is cubic, 1mm to 5mm. Biot>40%, Qtz>25%, Chl>20%, Py=5%, Ms/Ser/Alb<10%
402.3	417.8	Bx	<b>Breccia:</b> Massive, white qtz/alb?/ser±Tourmaline alteration zone & breccia. Heavily fractured to intensely brecciated. Breccia zones <30cm thick. No remnant bedding/clasts visible. Sugary to Medium-grained. Matrix is qtz/felds/ser with grains & lathes of black ?tourmaline ± py. Fractures and bx are filled with massive chl, po, aphanitic tourmaline. Sulphides+tourmaline <15%. Tourmaline=black tremolite??? Py is cubic <5mm. Po in fract is patchy, <2cm. Fracts ATC: 10°-75°
417.8	432.5	S	<b>Shear:</b> Middle Aldridge Ditto 397.5-402.3.

427.6	430.7		Several quartzite beds <20cm + qtz/po/tourmaline veinlets. Sharp contacts, bedding plane parallel.				
432.5	442.9	a2	Ss/silt/argil: Middle Aldridge Ditto 219.8-242.1. Quartzitic, biotitic, sandstone with thin argillaceous silty tops. Medium/thick bedded. Beds 0.3 to 1.0m thick. Tops <30cm. Several migmatic/garnet zones, qtz/py/po veinlets, quartzite chips. Upper 3.5m weakly chloritized and sericitized. Bedding ATC: 55°-60°.				
442.9	EOH		-46°				

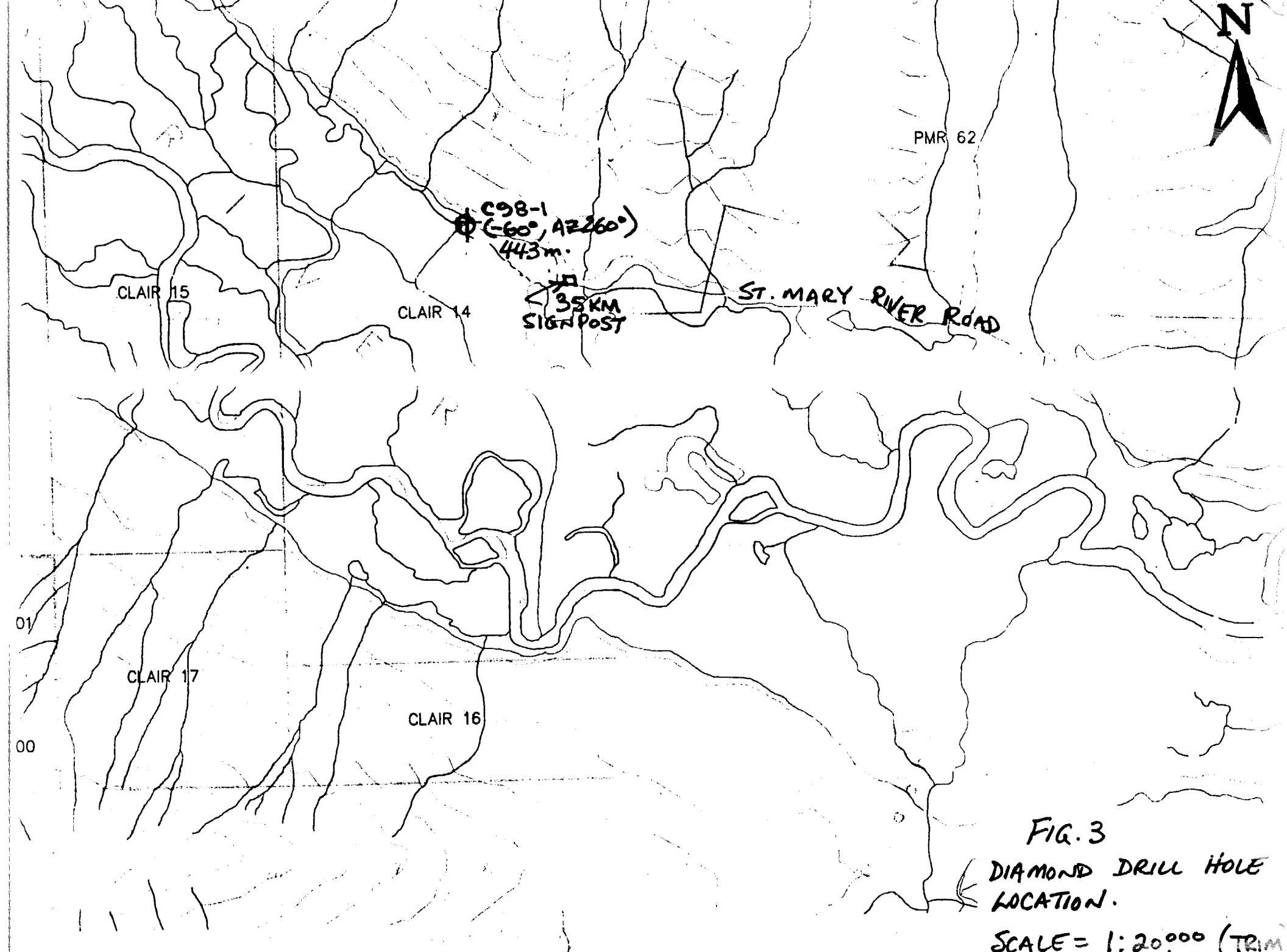


FIG. 3  
DIAMOND DRILL HOLE  
LOCATION.  
SCALE = 1:20,000 (TRIM)