

REPORT ON TRENCHING AND
EXAMINATION OF TRENCHES

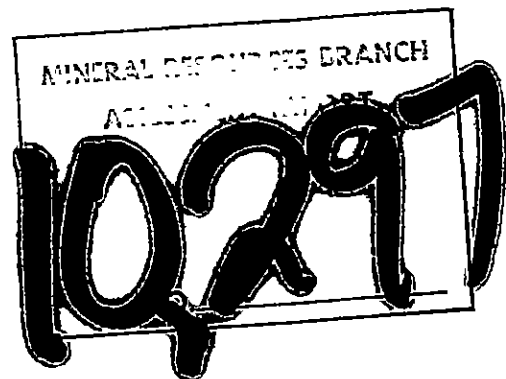
by

I.G. Sutherland, B.Sc.

from the

JD M.C.

(in the JD-81 Group)



situated near Moosehorn Creek
in the Omineca Mining Division

57°26'W, 127°09'W

NTS 94E/6E

owned by: Kidd Creek Mines Ltd.
(formerly Texasgulf Canada Ltd.)

work by: Kidd Creek Mines Ltd.
(formerly Texasgulf Inc.)

April 1982

Vancouver, B.C.

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INTRODUCTION

Location, Access and Terrain

The 'JD-81' claim group is located east of the Stikine River and north of the Toodoggone River in north-central British Columbia (Figure 1). The nearest supply and transportation centres are Smithers, 300 km due south, and Watson Lake in the Yukon, 300 km to the north.

Access to the claims is by a combination of fixed wing aircraft from Smithers or Watson Lake to the Sturdee Valley Airstrip 30 km southeast of the property, and helicopter thereafter. There is no road access although it has been suggested that the Omineca mining road to the south may be extended into the Toodoggone River area in the future.

The claim groups are situated at the eastern boundary of the Spatsizi Plateau and cover moderate to steep ridges between the broad valleys of Moosehorn and McClair Creeks (Figure 2). All trenching was carried out on the JD mineral claim on the slopes of a steep, east-west ridge.

Vegetation below 1500 metres consists of a dense growth of spruce and fir trees. Alpine areas above 1500 metres are sparsely vegetated with moss, grasses and alpine flowers.

Property History and Definition

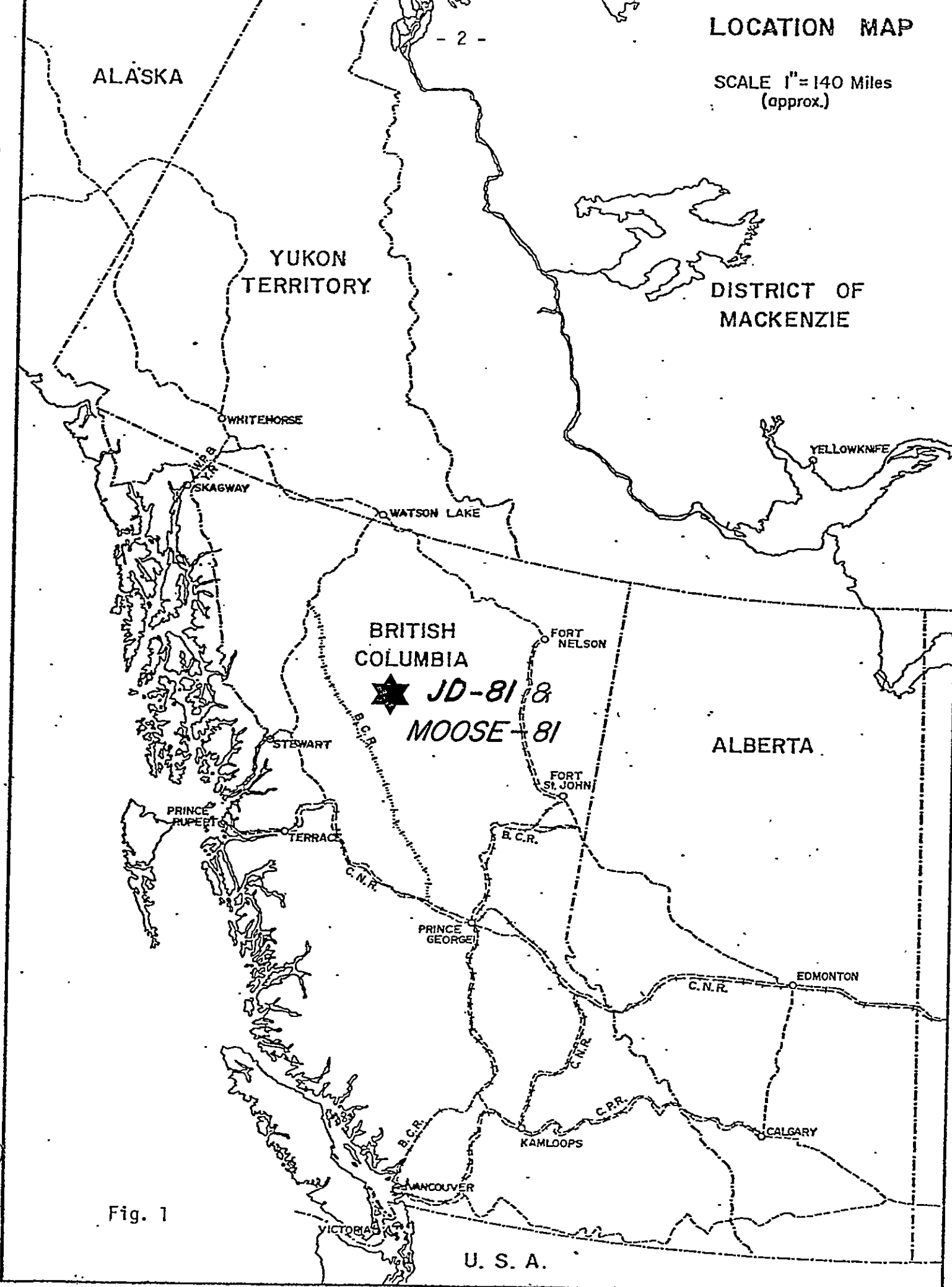
Attention was first focussed on McClair Creek in 1931 when Chas. McClair was reported to have taken several thousand dollars worth of gold from placer workings near the confluence of this creek and the Toodoggone River. The remains of the placer workings are still to be found along the lower portion of McClair Creek.

The present property area was originally staked in 1971 to cover showings discovered by Sullivan and Rodgers, consultants who were undertaking a reconnaissance programme for Sumac Mines Ltd. Geochemical

LOCATION MAP

SCALE 1" = 140 Miles
(approx.)

- 2 -



ALASKA

YUKON
TERRITORY

DISTRICT OF
MACKENZIE

WHITEHORSE

YELLOWKNIFE

SKAGWAY

WATSON LAKE

BRITISH
COLUMBIA

FORT
NELSON

★ JD-81 &
MOOSE-81

ALBERTA

STEWART

FORT
ST. JOHN

PRINCE
RUPERT

TERRACE

B.C.R.

PRINCE
GEORGE

C.N.R.

EDMONTON

PRINCE
GEORGE

KAMLOOPS

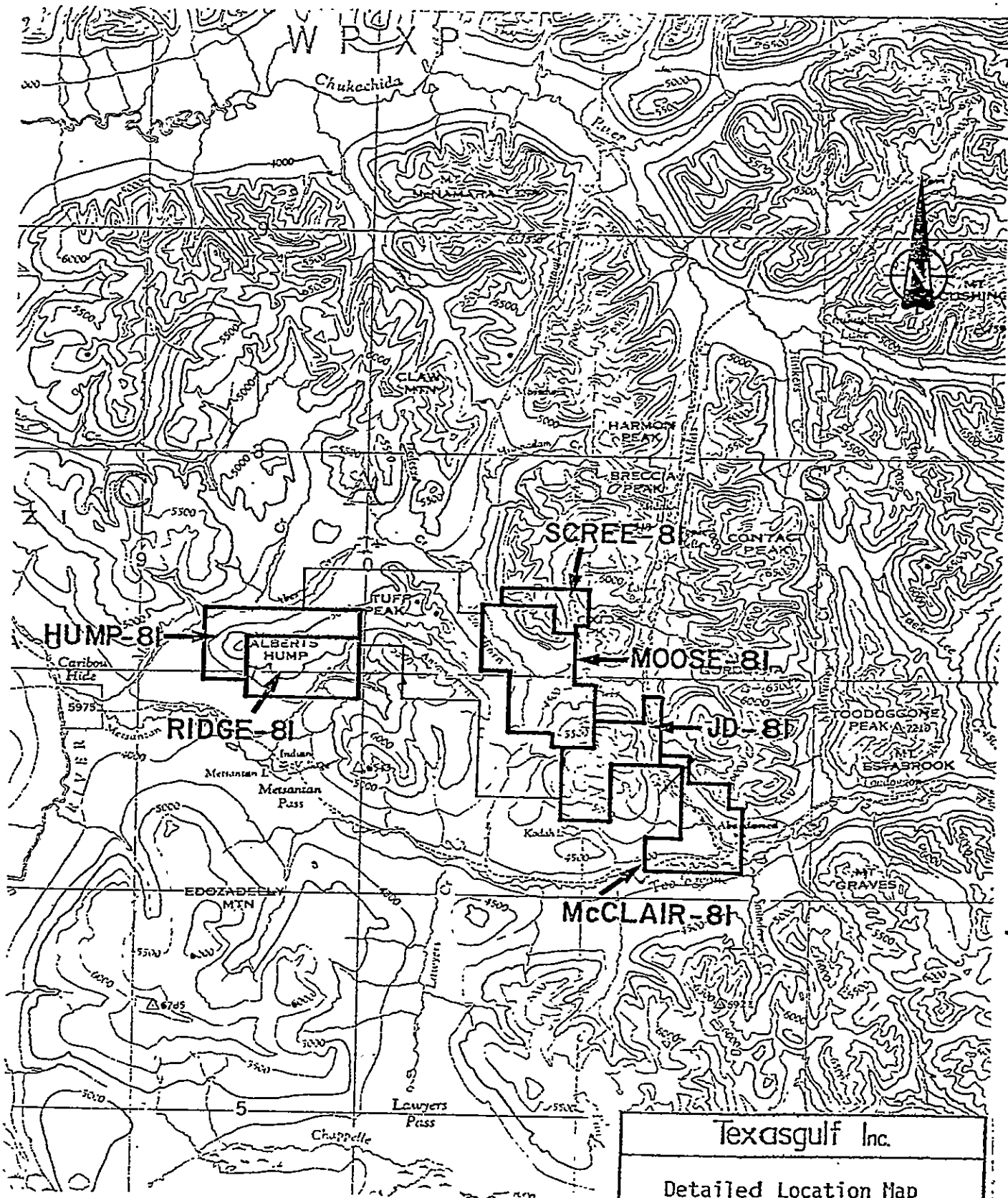
CALGARY

VANCOUVER

VICTORIA

U. S. A.

Fig. 1



Texagulf Inc.

Detailed Location Map
MOOSE and JD Claims

WORK BY	DRAWN BY	DATE	DRAW. NO.

2500 0 2500 5000 7500 10,000
Scale in Metres

Map Sheet 94E "Toadoggone River" Figure 2

surveys and trenching in the area of the showings outline two Zn, Ag and Au anomalous zones separated by a steep-sided valley. In 1974 the anomalies were tested by one 122 m BQ diamond drill hole; additional work was effectively pre-empted by the diversion of Sumac's exploration funds to the newly-found Kutcho Creek massive sulphide deposit. The claims were allowed to lapse in 1977, but were restaked the following year by Petra Gem and Energex interests, who completed some additional geochemistry and trenching which served to enlarge the area of interest. In 1980, work by Texasgulf Inc. outlined a zone of mineralized silicified breccia float with significant Au and Ag values and carried out further soil sampling. Work described in this report was done by Texasgulf Inc. on behalf of its wholly owned subsidiary Texasgulf Canada Ltd., the registered owner of the claims at the time the work was done. A recent name change has resulted in a transfer of ownership to Kidd Creek Mines Ltd.

Summary of Work Completed

Trenching and subsequent sampling on the JD-81 claim group took place between Aug. 8 and Sept. 14, 1981. Physical work was initially done by D. Price of Talisman Resources from Aug. 8 to Aug. 12, followed by the work of various members of a four-man team from BEMA Industries Ltd.; assistance was given by numerous Texasgulf employees. I. Sutherland supervised the work and sampled the trenches, with the assistance of G.R. Peatfield for one day.

A total of 55 rock samples were collected from the various trenches and were assayed for Au, Ag, Cu, Pb and Zn. An addition, 23 of these samples were analysed geochemically for Se, Te, V, Mn, Hg, Sn and Sb. Figures 3 through 7b show the sample locations and analyses.

Work Distribution

All work described herein was carried out on the JD M.C., part of the 'JD-81' claim group.

GEOLOGY

Regional Setting

The property lies near the eastern margin of a Mesozoic volcanic arc assemblage bounded on the west and south by the Sustut and Bowser basin assemblages and to the east by the Omineca Crystalline Belt. The property is underlain by a sequence known informally as "Toodoggone" volcanic rocks. Mapping was initially carried out by Gabrielse *et. al.* from 1971-1975 with a summary by Carter (1972) of the geology as understood in 1971.

More recent mapping by Schroeter (1982) summarizes the regional geology as follows:

The Toodoggone volcanic sequence consists of a pile of complexly intercalated and varicoloured subaerial andesitic, dacitic, and trachytic tuffs, ash flow sheets, and minor epiclastic rocks that is 1000 metres or more in thickness. They are tentatively correlated with very Early Jurassic rocks of the Hazelton Group. K-Ar and Sb-Sr dates obtained from whole rock and mineral samples, including alunite from Alberts Hump (which is believed to be contemporaneous with the major pulse of epithermal mineralization), range between 179 and 1980 \pm 7 Ma.

Property Geology

The geology of the JD property was originally mapped at a scale of 1"=400' by T. Rodgers in 1972. Mapping (1:5000) by H.R. Schmitt in 1980 attempted to define in greater detail some of the differences in lithology, alteration and mineralization. Recent mapping, also at a scale of 1:5000, (Figure 3) reinterpreted the lithologies and their variations in terms of a tuffaceous subaerial volcanic environment. A comprehensive interpretation of the geology is limited by scarcity of outcrop and by the rapid changes in lithologies characteristic of these subaerial volcanics.

In summary, the claims are underlain by a thick succession of Lower to Middle Jurassic feldspar-hornblende, andesitic crystal and crystal-lapilli tuffs and tuff breccias along with lesser volcanic flow and dyke equivalents. The general lack of exposed contacts makes differentiation of these lithologies difficult. These rocks are greyish-green to orange-grey on the fresh surface and consist of up to 35% white to pink subhedral feldspar grains with less than 5% each of euhedral biotite flakes and subhedral, prismatic hornblende crystals. The crystal fragments or phenocrysts are less than 3 mm on average and are set in a grey to locally maroon, fine-grained andesitic matrix.

Tuff breccias, where recognizable, are generally of the same composition as their tuffaceous matrix and often can only be distinguished on clean, slightly weathered exposures. The general lack of such outcrops has made definition of these and other units most difficult.

Structure

The sequence of volcanic rocks has a prominent northwest strike with shallow to moderate, east and northeast dips.

Various joint and fracture trends in the volcanic rocks reflect local and regional fault trends. The most prominent joint set corresponds with the main, regional structural orientations. It strikes northwest (305° to 320°) with moderate southwest dips of about 60° . There is some suggestion that this is the latest of the structural trends and that it is associated with normal block faulting. Relative displacements are not known. The best example of the northwest structure is the fault which cuts through the area known as the "Schmitt Showing" (Area A, Figure 3). Similar faults occur throughout the property.

Two other fracture sets are recognized and reflect additional fault activity. One of these strikes at 070° to 100° dipping north at 60° to 80°. This structural trend transects much of Area B (Figure 3) and corresponds with the mineralized vein orientation observed in trench 7. Here the vein lies in contact with about 1 m of hanging wall fault gouge.

The third fracture trend strikes 350° to 020° and dips west at 45° to 80°. This fracture system does not appear to be associated with major faulting.

Trenching

A total of 7 trenches were completed, accounting for about 101 linear metres of work (Figure 4). Drilling in rocks and permafrost was done with an Atlas Copco 'plugger', and trenches were cleared by hand following blasting.

The presence of permafrost and deep overburden resulted in slow progress along with only limited exposure of bedrock. Trenches were dug as deep as 3.5 m where possible. Only trench 7 exposed in situ, mineralized vein material. Two sets of channel samples were taken from this trench (Figure 7a) then a set of 9.5 m x 1.0 m panel samples was taken across the vein and altered wallrock (Figure 7b) following expansion of the trench. Only selective 'grab' samples could be taken from the rest of the trenches due to the lack of suitable exposure.

Trenches 1 through 6 were located in an attempt to expose the source of gold- and silver-bearing, silicified breccia vein material of the "Schmitt Showing" (Area A, Figure 3). This showing consists of two linear trains of float material in a small depression just north and below a saddle on the ridge line. These two separate 'trains' of frost-heaved debris are generally covered by snow and ice until late July. One of these

trends roughly E-W along the bottom of the depression and the other trends almost N-S from the eastern edge of the saddle down to the bottom of the depression.

The vein mineralization consists of angular fragments (≤ 2 cm) of mineralized quartz vein material hosted in a fine-grained and locally amethystine, silicified matrix and mineralized with chalcopyrite, galena, sphalerite and acanthite. The mineralized float occurs in blocks as large as 70 cm on a side which appears to have been derived from an east-west vein system.

Trench 1 was situated over the E-W train and, upon completion, appeared more like a pit than a trench. The pit was roughly 2 m in diameter and the maximum depth tested was just under 2 m. An additional 0.6 m was probed with a rock drill. No bedrock was encountered and the 'train' of mineralized float proved to be very much a surface feature with no significant mineralization observed in the pit.

Trench 2, also located in hopes of exposing the source of this transported float, was started adjacent to an outcrop and near some scattered mineralized float, and directed down into the depression towards trench 1. A projection of a steeply dipping, exposed rock surface from the top part of the trench implies the accumulation of at least 5 m of overburden at the bottom. A final blast set in this deep overburden at the bottom of the depression, exposed a few large boulders of silicified breccia mineralization at a depth of about 2 m.

Trench 3 is an offset, southward extension of trench 2 that extends along the top of the saddle into the depression to the north. A single piece of breccia material has been found near the top of the slope above the depression. This trench tested the possibility of a source of

L I W

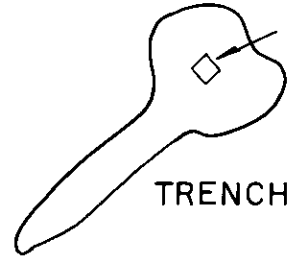


TRENCH 1



69340 - 43

TRENCH 2



69334 - 39

TRENCH 3



I+00N

L2E

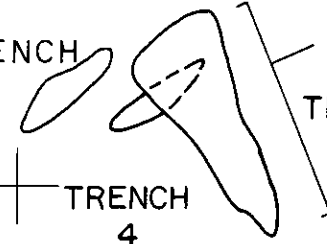
10,297

TRENCH 5

69320 - 32

TRENCH 6

TRENCH 4

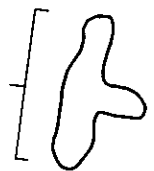


B

69301 - 19

TRENCH 7

70976 - 80



I+00S

L2E

L I W

Kidd Creek Mines Ltd.

J.D. CLAIMS
TRENCH LOCATION
MAP

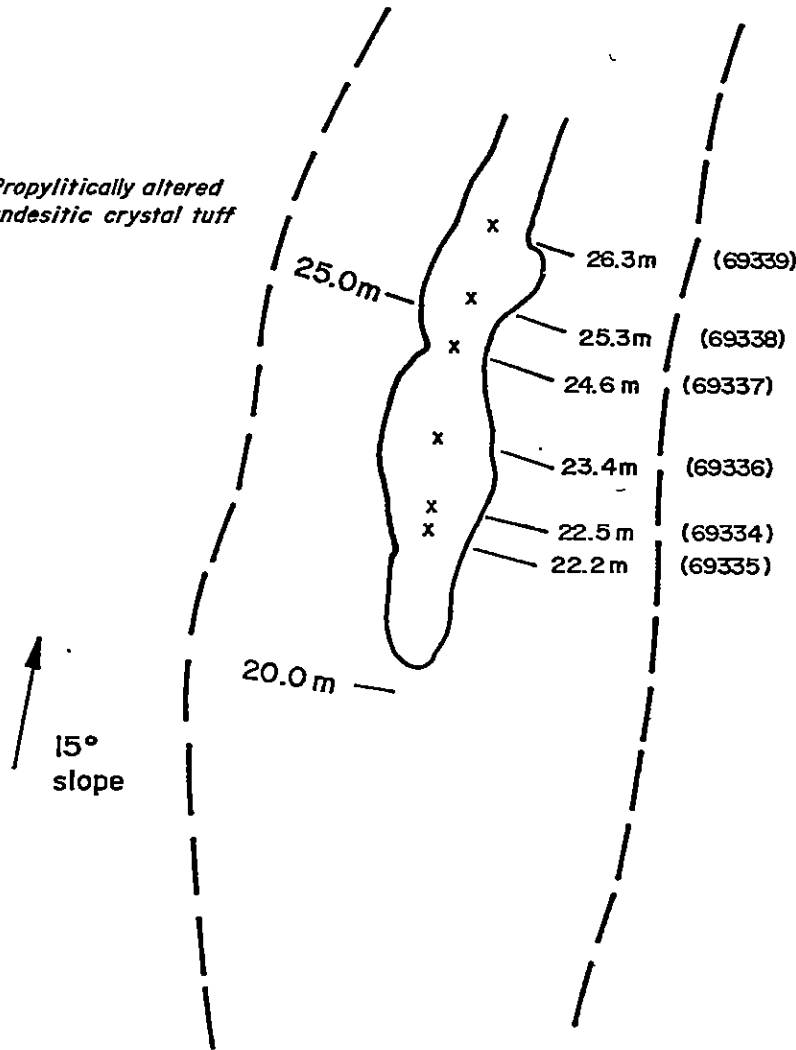
WORK BY	DRAWN BY	DATE
I.G.S.	E.R.	MARCH 18, 1982

0 10 15
SCALE IN METRES

Figure: 4



Propylitically altered andesitic crystal tuff



15°
slope

Cu(%)	Pb(%)	Zn(%)	Ag(g/t)	Au(g/t)
<0.01	<0.01	0.01	0.69	<0.07
<0.01	<0.01	0.03	1.37	<0.07
<0.01	<0.01	0.03	4.11	0.14
<0.01	<0.01	0.03	0.69	<0.07
<0.1	<0.01	0.02	0.69	<0.07
<0.01	<0.01	0.03	<0.69	<0.07

26.3m Distance along trench
(69339) Geochem/Assay No.

Kidd Creek Mines Ltd.

**J.D. CLAIMS
TRENCH MAPPING
TRENCH No. 3**

WORK BY	DRAWN BY	DATE:
I.G.S.	E.R.	MARCH 18, 1982



Figure: 5

this mineralization to the south of the mineralized float train associated with trenches 1 and 2. Deep overburden and permafrost were encountered at the top and bottom ends of the trench and, as a consequence, only a short, discontinuous section of bedrock, similar to that of trench 2, was exposed. The exposed rocks consisted of propylitically altered, grey to green tuffs cut by narrow carbonate (+ minor sulphates and quartz), fracture-controlled veinlets. Narrow zones of strong quartz-pyrite alteration, trending roughly east-west, were also rarely observed.

Trenches 4 and 5 were situated across the north-south trending train of mineralized float along the eastern margin of the saddle. A maximum depth of 2.5 m was reached in trench 4 without encountering bedrock. Similar problems with deep overburden and permafrost were encountered down-slope in trench 5 resulting in the ultimate abandonment of both trenches.

Trench 6 trends roughly north-south across trenches 4 and 5 and is located only a few metres from the major outcrop along the eastern margin of the saddle. It was hoped that bedrock might be encountered at slightly shallower depths since outcrop was so near. Unfortunately, permafrost and talus that formed the eastern bank of the trench hampered the trenching. Considerable quartz-pyrite altered host rock and silicified breccia material were found near the north end of the trench.

Also present was a narrow zone of in situ buff fault gouge. The trend of a topographic 'low' through the saddle and showing area to the northwest suggests faulting along this trend. The clay gouge observed may be related to this particular faulting, but confirmation of this is not possible because of the lack of exposure.

A different mineralized breccia vein was exposed in trench 7, 220 metres ESE of trench 6. A small 'pophole' had previously exposed Ag-Au mineralization along with accessory base metal sulphides in a carbonate breccia vein. Exposure from this earlier work was limited to the vein itself and the vein orientation was not observed. Recent trenching exposed



LO
LO

Cu(%) / Pb(%) / Zn(%) / Ag(g/t) / Au(g/t)

<0.01 / 0.08 / 0.38 / 3.43 / <0.07

<0.01 / 0.09 / 0.41 / 4.46 / <0.07

<0.01 / 0.06 / 0.25 / 47.31 / <0.07

0.02 / 0.14 / 0.34 / 159.43 / 0.14

0.01 / 0.14 / 0.09 / 318.86 / 0.10

<0.01 / 0.01 / 0.03 / 4.11 / <0.07

<0.01 / <0.01 / 0.06 / 2.06 / <0.07

<0.01 / 0.12 / 0.21 / 20.91 / 0.07

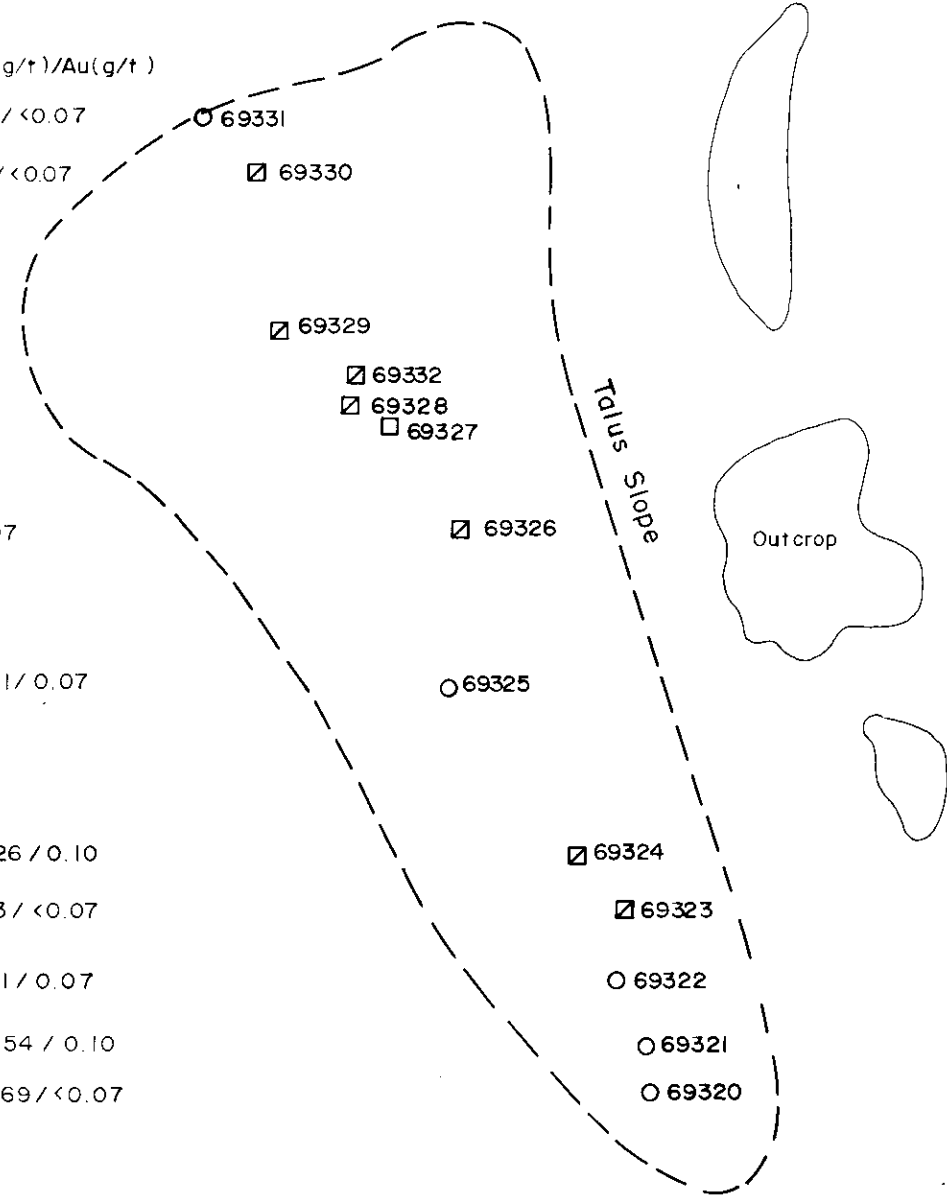
0.01 / 0.13 / 0.13 / 117.26 / 0.10

<0.01 / <0.01 / 0.11 / 3.43 / <0.07

0.01 / 0.10 / 0.15 / 47.31 / 0.07

0.01 / 0.08 / 0.15 / 151.54 / 0.10

<0.01 / <0.01 / 0.03 / 0.69 / <0.07



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Samples:

-travelled
-very local
-in situ

Kidd Creek Mines Ltd.

J.D. CLAIMS
TRENCH MAP No.6

WORK BY	DRAWN BY	DATE
I.G.S.	E.R.	MARCH 18, 1982

0 1 2 3
SCALE IN METRES

Figure: 6a



Mn / Hg / V / Sb
3650/300/151 / <2
5250 / 330 / 147 / 11

Te / Se / Sn
0.4 / 2 / <5

<0.2 / <1 / <5

2900/490/178/12
1900/310/ 68/82
3000/300/ 51/105
3250/70/201 / <2

<0.2 / <1 / <5

0.3 / <1 / <5
<0.2 / <1 / <5

2050/10 / 164 / 2

<0.2 / <1 / <5

600/180/91/5

<0.2 / <1 / <5

4200/450/ 58 / 80

0.2 / <1 / <5

2500/ 30 / 193 / 7

<0.2 / <1 / <5

1600 / 250 / 89 / 14

0.2 / <1 / <5

3250 / 230 / 31 / 120

0.3 / <1 / <5

2600 / 40 / 155 / 7

<0.2 / <1 / 5

Hg in ppb

Mn, V, Sb, Sn, Te, Se in ppm

Samples:

-travelled
-very local
- in situ

Kidd Creek Mines Ltd.

**J.D. CLAIMS
TRENCH MAPPING
TRENCH No. 6**

WORK BY I.G.S.	DRAWN BY E.R.	DATE: MARCH 18, 1982
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0 1 2 3m
SCALE IN METRES

Figure: 6b





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Cu(%) / Pb(%) / Zn(%) / Ag(g/t) / Au(g/t)

0.13 / 0.18 / 0.22 / 1049.15 / 37.03

0.57 / 0.25 / 3.15 / 255.77 / 4.11

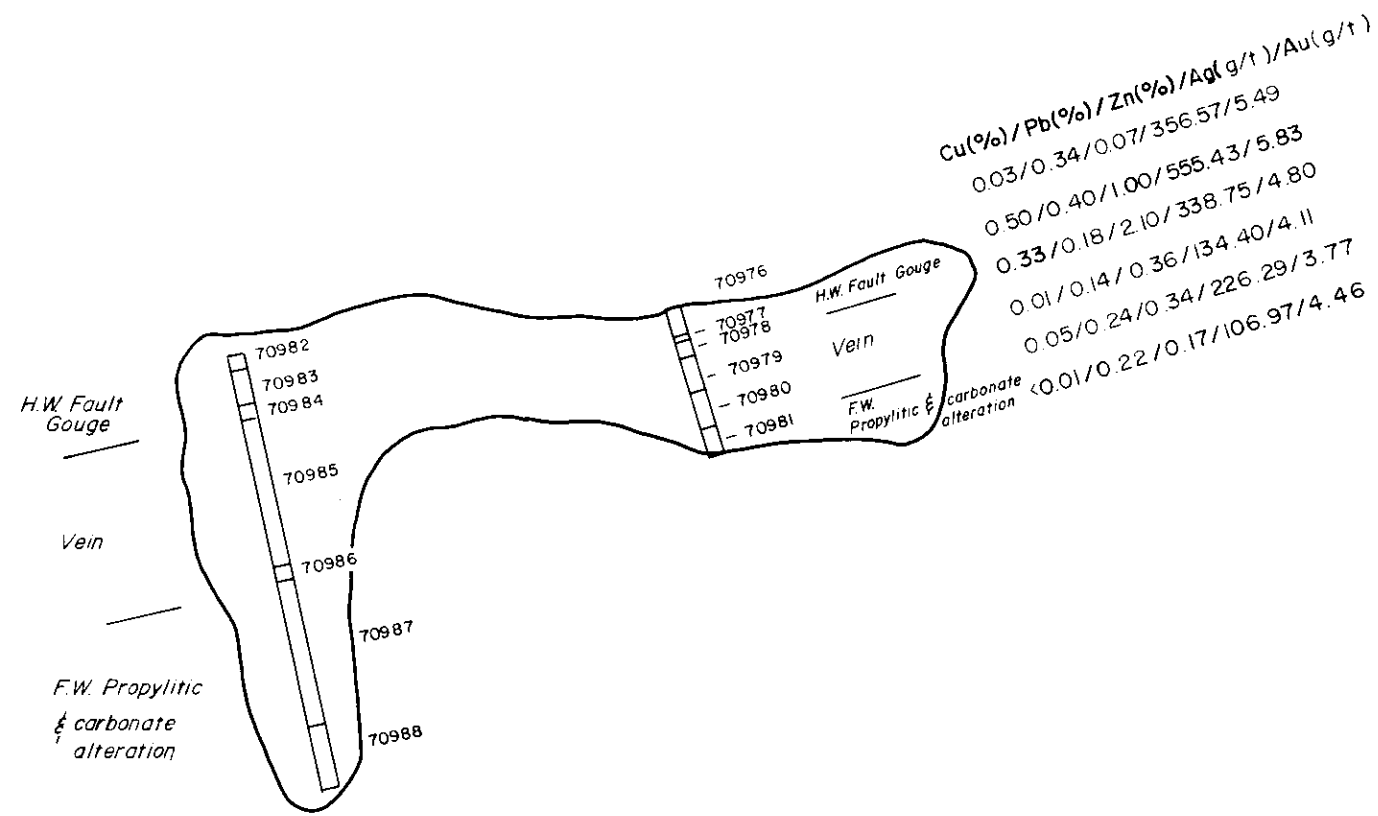
0.02 / 0.51 / 0.96 / 555.43 / 12.00

0.02 / 0.48 / 0.37 / 870.86 / 12.34

<0.01 / 0.07 / 0.08 / 80.23 / 2.67

<0.01 / 0.03 / 0.22 / 15.43 / 1.10

<0.01 / 0.03 / 0.15 / 5.49 / 0.17



Kidd Creek Mines Ltd.		
J.D. CLAIMS		
TRENCH MAP No.7		
WORK BY I.G.S.	DRAWN BY E.R.	DATE MARCH 18, 1982
 SCALE IN METRES		
Figure: 70		



Cu(%) / Pb(%) / Zn(%) / Ag(g/t) / Au(g/t)

<0.01 / <0.01 / 0.03 / 3.09 / <0.07

<0.01 / 0.04 / 0.12 / 4.11 / <0.07

<0.01 / 0.05 / 0.12 / 7.20 / <0.07

<0.01 / <0.01 / 0.04 / 2.06 / <0.07

<0.01 / 0.04 / 0.15 / 3.77 / <0.07

<0.01 / 0.06 / 6.23 / 4.80 / <0.07

0.02 / 0.12 / 0.19 / 44.57 / <0.07

0.04 / 0.42 / 0.08 / 41.83 / 1.41

0.08 / 0.40 / 0.09 / 106.29 / 3.43

0.05 / 0.36 / 0.09 / 24.12 / 2.54

0.12 / 0.30 / 0.66 / 473.15 / 6.86

0.03 / 0.31 / 0.26 / 356.57 / 5.49

0.01 / 0.13 / 0.17 / 118.63 / 2.02

<0.01 / 0.04 / 0.17 / 12.69 / 1.13

<0.01 / 0.04 / 0.12 / 13.03 / 0.48

0.01 / 0.08 / 0.12 / 13.71 / 1.58

<0.01 / 0.07 / 0.10 / 12.00 / 1.37

<0.01 / 0.03 / 0.06 / 6.17 / 0.51

<0.01 / 0.01 / 0.05 / 6.51 / 0.10

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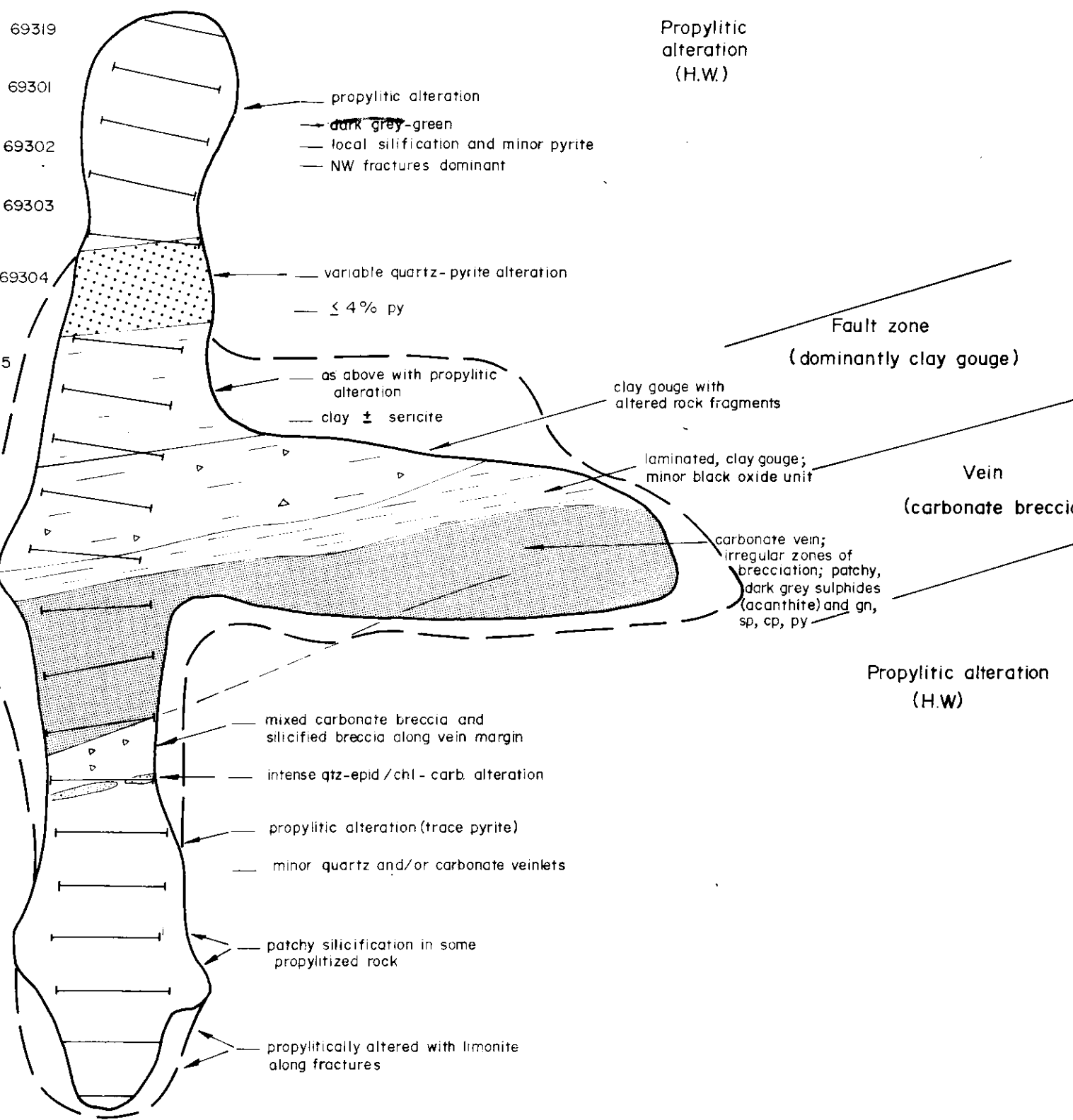
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Kidd Creek Mines Ltd.		
J.D. CLAIMS		
TRENCH MAP No.7		
WORK BY I.G.S.	DRAWN BY E.R.	DATE MARCH 18, 1982
SCALE IN METRES		
Figure: 7b		

about 6 metres of vein length including the hanging wall and footwall rocks. The vein trends roughly east-west and the schistosity of the hanging wall fault gouge suggests a steep, northward dip.

The vein is a complex breccia with two carbonate phases hosting fine-grained disseminations of acanthite, galena, pyrite and traces of sphalerite and chalcopyrite. The earlier carbonate hosts most of the mineralization and is characteristically composed of white to light brown, very coarse-grained calcite locally with up to 60% sulphides. Fragments of this material are set in a fine- to medium-grained orange weathering, carbonate matrix (probably sideritic) with accessory fine-grained quartz.

GEOCHEMISTRY

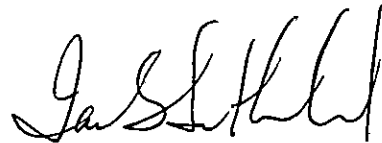
A total of 55 rock samples were collected from the trenches and shipped to Bondar-Clegg and Co. Ltd. of North Vancouver for analysis. All samples were fire assayed for Au, Ag, Cu, Pb and Zn and of these, 23 samples from trenches 2, 3 and 6 were analysed geochemically for Mn, Hg, Se, Te, V, Sn, Sb. A summary of the extraction and analytical techniques is as follows:

<u>Element</u>	<u>Extraction</u>	<u>Analysis</u>
Mn	HNO ₃ - HCl hot extraction	Atomic absorption
Hg	Controlled Aqua Regia	Cold vapour atomic absorption
Te	Multi-acid total digestion	Colourimetric
Se	Multi-acid total digestion	Colourimetric
V	Multi-acid total digestion	Atomic absorption
Sn, Sb	Multi-acid total digestion	X-ray fluorescence

The results of all analyses are plotted on Figures 5 through 7b.

The most encouraging assay results were obtained from the three sample sets taken from trench 7 (Table 1). Sample sets #1 and #2 are channel samples across the vein about metres apart. Sample set #3 is a set of panel samples located approximately over top of set #2; the former was taken following extension of the trench into the hanging wall and footwall host rocks. Some correlation in average Au and Ag values can be inferred between sample sets #1 and #3, but the significance of this is dubious since set #3 was sampled over twice the width of set #1. Sample set #2 has surprisingly high Au and Ag values relative to the other two sets; near-surface enrichment of precious metals may be a factor in this inconsistency. Nonetheless, the values obtained suggest good potential for this mineralization and a more detailed investigation is required.

Results from the other trenches are inconclusive due to the lack of significant exposure caused by problems with overburden and permafrost.



Ian G. Sutherland

TABLE I

TRENCH 7 - ASSAY RESULTS

Sample Set # 1 (Channel Sample)

<u>Sample #</u>	<u>Thickness (m)</u>	<u>Material</u>	<u>Au (ppm)</u>	<u>Ag (ppm)</u>
70976	0.20	clay gouge	5.49	356.57
70977	0.02	clay gouge	5.83	555.43
70978	0.10	black oxide	4.80	338.75
70979	0.25	carbonate vein	4.11	134.40
70980	0.25	carbonate vein	3.77	226.29
70981	<u>0.25</u>	carbonate vein	<u>4.46</u>	<u>106.97</u>
Total	1.07		Avg. 4.46	218.06

Sample Set #2 (Channel Sample)

70982	0.10	clay gouge	37.03	1049.15
70983	0.23	black oxide	4.11	255.77
70984	0.10	altered rock & vein	12.00	555.43
70985	1.00	carbonate vein	12.34	870.86
70986	<u>0.10</u>	carbonate vein	<u>2.67</u>	<u>80.23</u>
Total	1.53		Avg. 12.00	717.61

Sample Set #3 (Panel Sample)

69308	0.5	clay gouge	3.43	106.29
69309	0.5	clay gouge	2.54	124.12
69310	0.5	carbonate vein	6.86	473.15
69311	0.5	carbonate vein	5.49	356.57
69312	<u>0.5</u>	quartz-carbonate vein	<u>2.02</u>	<u>118.63</u>
Total	2.5		Avg. 4.07	212.03

The interval 69309 through 69311 (1.5 m) averages 5.00 ppm Au and 317.9 ppm Ag.

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APPENDIX A

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I.G. Sutherland - Geologist

Ian Sutherland obtained his B.Sc. (Hons) degree in Geology from the University of Western Ontario in 1976. He has held various geological positions in Industry and Government (Ontario Geological Survey) and joined Texasgulf in Vancouver in March 1981.

P. R. H. H. H. H.

APPENDIX B

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

SALARIES AND FRINGE BENEFITS

Dave Price - Contract trencher Period: Aug 8-12, 1981	3 days @ \$275	825.00	
BEMA Industries - Contract trenching crew Period: Aug 17-Sept 13, 1981-25 man-days 28.6% (time basis) of \$40,677.05		11,633.64	
G.R. Peatfield - Geologist Period: Aug 23, 1981	1 day @ \$220	220.00	
I.G. Sutherland - Geologist Period: Aug 8-Sept 14, 1981	5 days @ \$140	700.00	
F. Renaudat - Assistant Period: Aug 8-12, 1981	3 days @ \$ 65	195.00	
J. Gosselin - Assistant Period: Aug. 11-28, 1981	2 days @ \$ 60	120.00	
G. Murray - Assistant Period: Aug 12, 1981	1 day @ \$ 55	55.00	
S. Bending - Assistant Period: Aug 13-15, 1981	2 days @ \$ 55	110.00	
M. Cathro - Assistant Period: Aug 9, 1981	1 day @ \$50	50.00	
L. Haering - Assistant Period: Aug 31, 1981	1 day @ \$ 50	50.00	
J. Leigh - Assistant Period: Aug 28, 1981	1 day @ \$ 45	45.00	
G. Ruckle - Assistant Period: Aug 9, 1981	1 day @ \$ 40	40.00	
P. Edwards - Assistant Period: Aug 13-30, 1981	3.5 days @ \$40	<u>140.00</u>	
		14,183.64	14,183.64

MATERIALS

Explosives			1,346.13
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ROOM AND BOARD

Contract and Tg personnel	49.5 man-days @ \$70		3,465.00
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Cont'd...

C. Fwd

18,994.77

HELICOPTER SUPPORT

Texasgulf Bell 206B 9.5 hrs @ \$400 3,800.00

ANALYTICAL COSTS

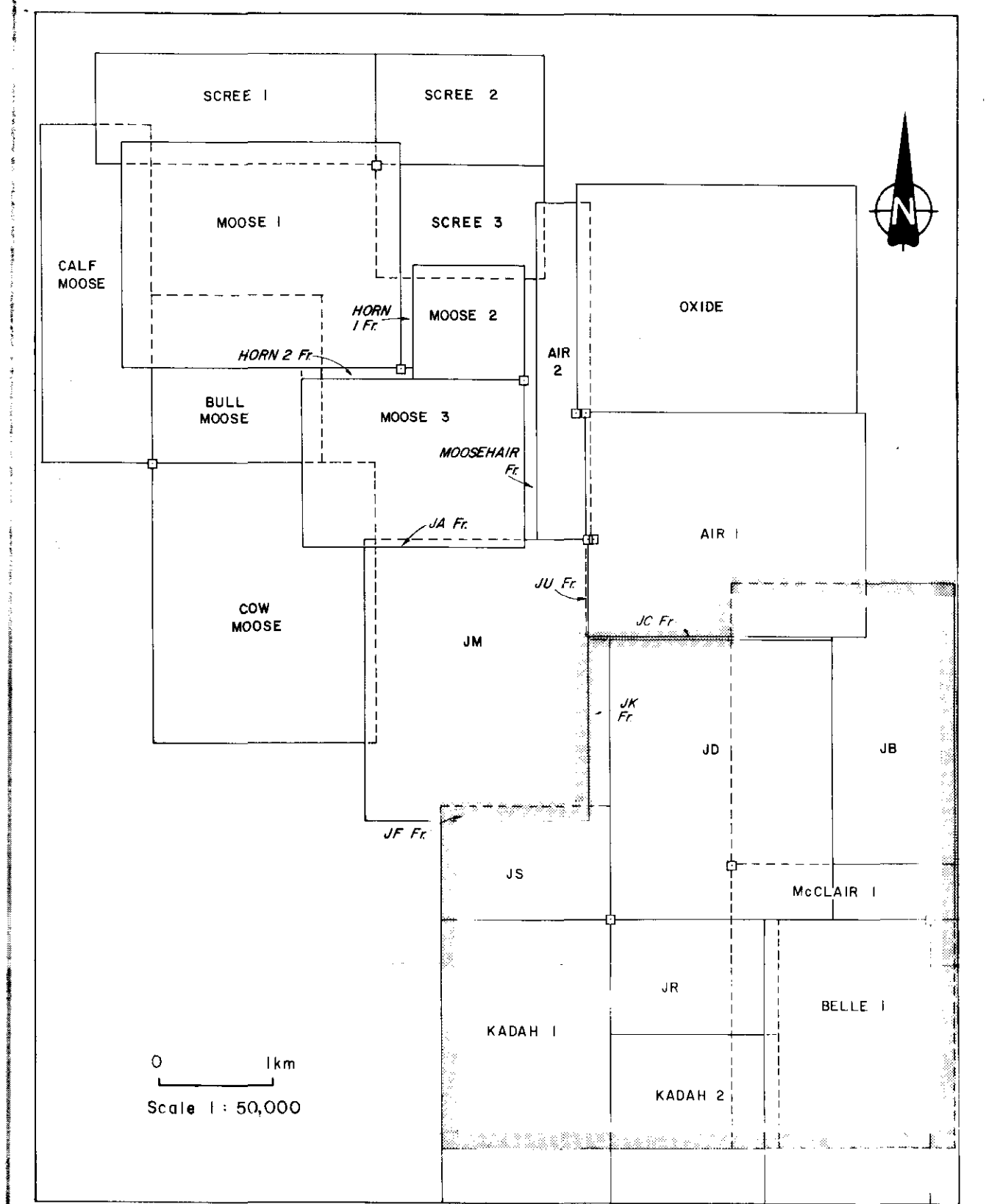
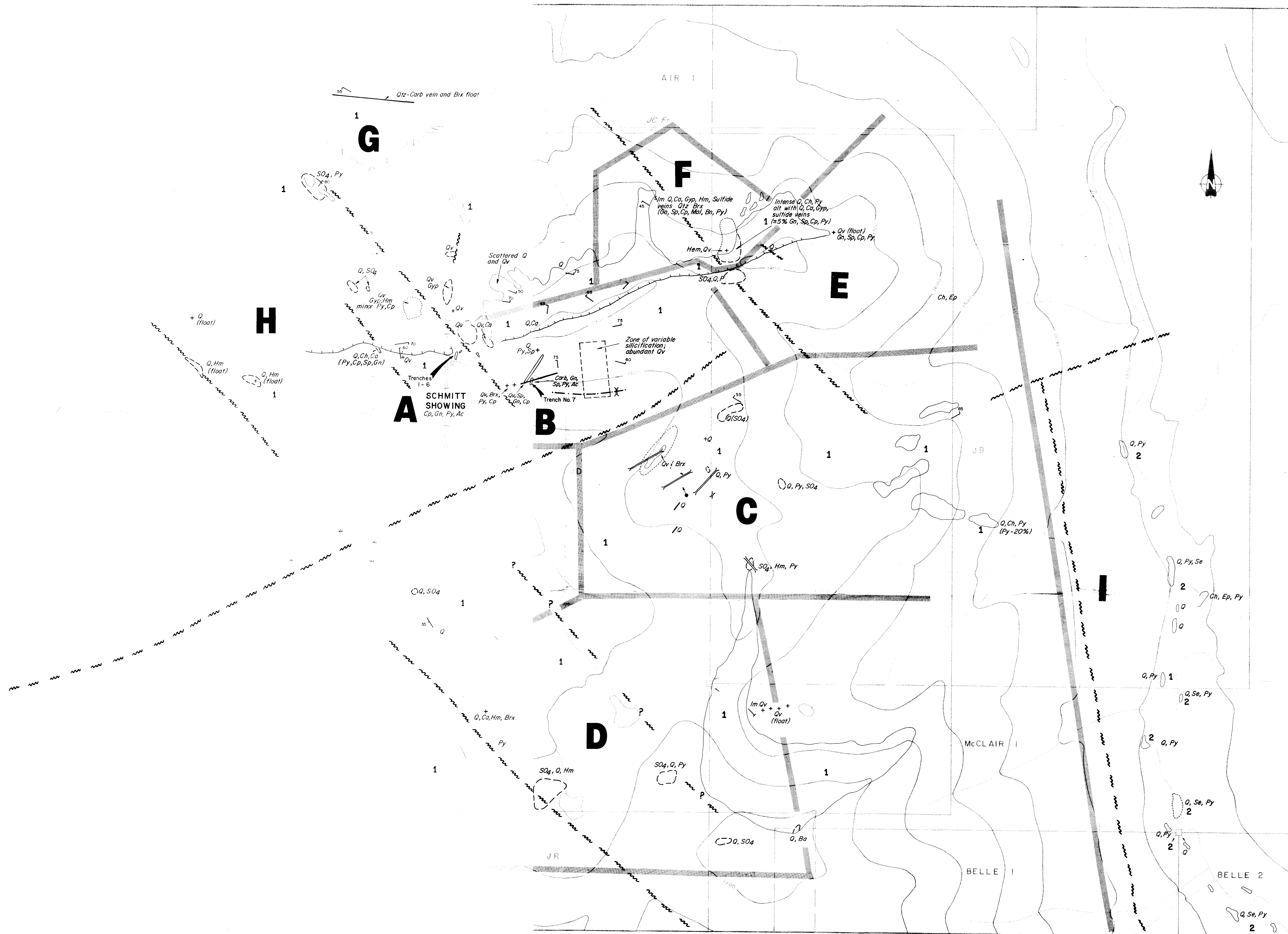
55 Au, Ag, Cu, Pb, Zn assays	@ 29.50	1,622.50	
23 Mn, Sn, Sb, Hg, V, Se, Te	@ 24.00	552.00	
55 sample preparations	@ 2.59	<u>142.45</u>	
		2,316.95	2,316.95

MISCELLANEOUS

Sample shipping charges		23.00	
Explosives shipping charges		1,250.00	
Report preparation; I.G. Sutherland, 2 days @ \$140		280.00	
Reproductions, Secretarial, etc.		150.00	
Drafting		<u>250.00</u>	
		1,953.00	<u>1,953.00</u>
			27,064.72

Of this total, the sum of \$4,664.72 can be attributed to geological examination, sampling and analysis.

R. R. Velamuri



- LEGEND**
- MIDDLE JURASSIC**
- 2 Omnesca intrusive - multiphase, granodioritic intrusive complex; inequigranular, porphyritic and felsitic textures; minor mafic hybrid phases
- LOWER OR MIDDLE JURASSIC**
- 1 Toadogone Volcanics - andesitic crystal and lapilli tuffs, tuff breccias and flows; minor possible intrusive equivalents

- SYMBOLS**
- Strike and dip
 - Joints and fractures with strike and dip
 - Mineralized veins
 - Faults and shears
 - Area of outcrop
 - Area of float concentration
 - Area of strong generally pervasive alteration
 - Old trench
 - Bench line
 - Cliff face

- Q - Quartz alteration
- SO₄ - Sulphate(s)
- Gyp - Gypsum
- Ba - Barite
- Hm - Hematite
- Ch - Chlorite
- Ca - Calcite
- Carb - Carbonate
- Se - Sericite
- Ep - Epidote
- Py - Pyrite
- Ch - Chalcopyrite
- Sp - Sphalerite
- Ga - Galena
- Ac - Acanthite
- Qv - Qtz vein
- Brx - Breccia

1927

FIGURE NO. 3

Texasgulf Inc.
 JD-81 & MOOSE-81
GEOLOGY

WORK BY	DRAWN BY	DATE	DRWG NO.
I.S.	E.R.	DECEMBER 4, 1981	

Scale in Metres 1:5,000