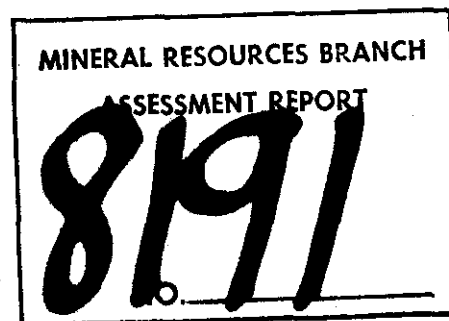


GUICHON EXPLORCO LIMITED  
GEOLOGICAL AND GEOCHEMICAL SURVEYS  
D.M. CLAIMS - KAMLOOPS MINING DIVISION, B.C.



N.T.S. 92I/15W      50°56'N & 120°57'W

J. Ireland

December, 1979

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1. Map showing location of D.M. Claims scale 1:506,880
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- 3c Geological map of claim D.M.-3 and D.M.-4
- 4a Geochemical map of D.M.-1
- 4b Geochemical map of D.M.-2
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- 6b Geological and Geochemical map, Claim D.M.-2 " " scale 1:4000
- 6c Geological and Geochemical map, Claims D.M.-3 and -4 Back pocket  
scale 1:4000

GEOLOGICAL AND GEOCHEMICAL SURVEY  
OF THE D.M. CLAIMS, KAMLOOPS MINING DIVISION  
BRITISH COLUMBIA

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Gold, mercury and arsenic occur in altered Triassic volcanics and sediments and in altered Tertiary volcanics at Deadman Valley, Kamloops Mining Division, British Columbia. Mineralization is associated with block and transcurrent faulting that released epithermal solutions during Tertiary volcanism and tectonism. Hematite mineralization is associated with carbonatization and de-silicification in the altered zones.

Three gold anomalies with values ranging from 25 ppb to 60 ppb ( $10^{-9}$  g/Tonne) occur in the survey area. Mercury and arsenic anomalies occur as well defined, gradational zones around two of the gold anomalies located on claims D.M.-2 and D.M.-3. The third gold anomaly has no associated mercury or arsenic values that are anomalous. Anomalous mercury values exceed 10 ppm ( $10^{-6}$  g/Tonne) and anomalous arsenic values exceed 50 ppm. Threshold anomalous values for gold, mercury and arsenic are 20 ppb, 500 ppb and 50 ppm respectively.

It is proposed that a more detailed geochemical

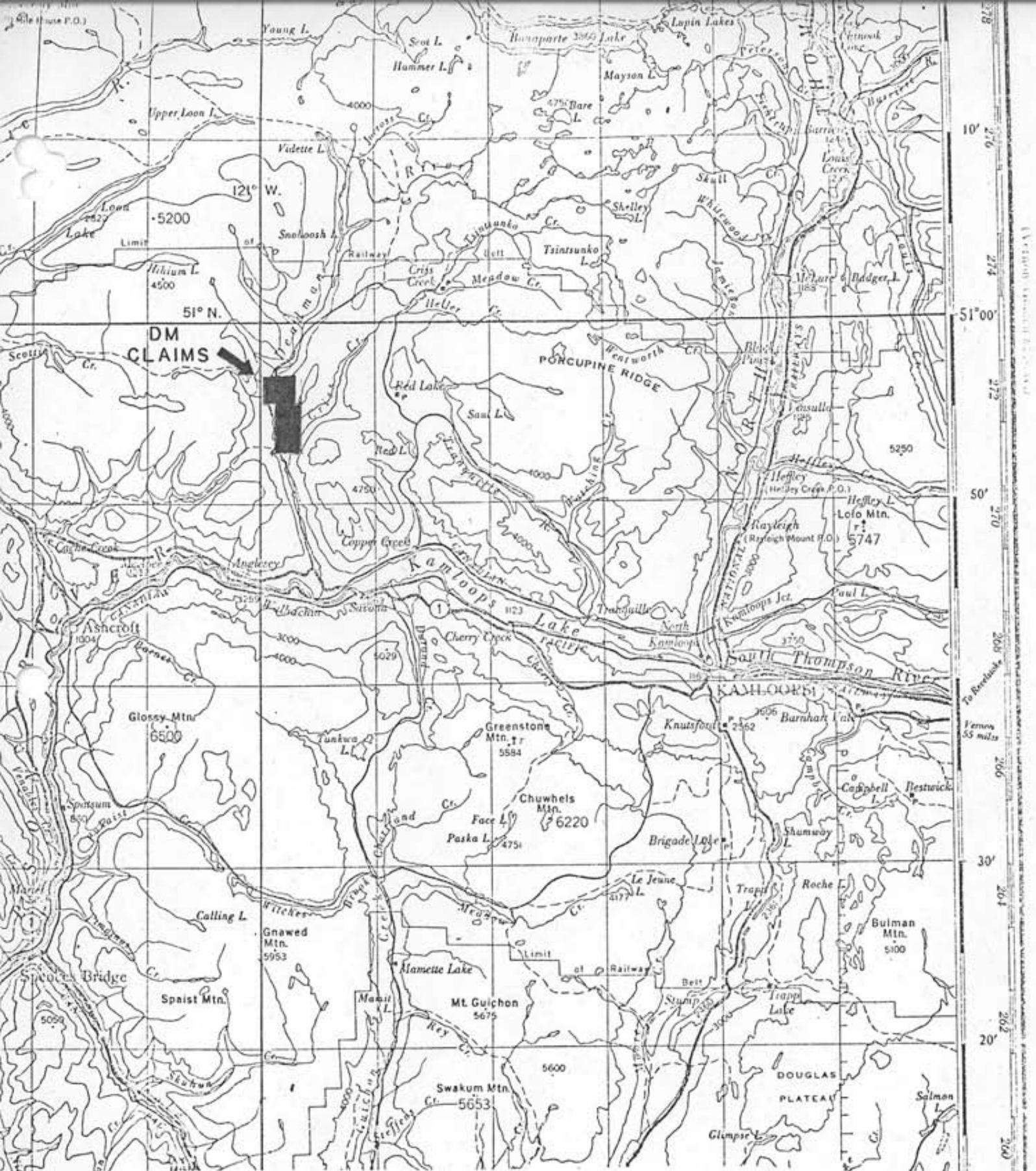


Figure 1; map showing location of D.M. claims

Scale 1:506,880 (1 inch equals 8 miles)

sampling program be employed over anomalous zones on claims D.M.-2 and D.M.-3. Trenching should be utilized in areas of poor outcrop exposure where practical. Open ground adjacent to claim D.M.-3 should be claimed and included in the sampling program.

PROPERTY

The D.M. gold prospect is located 20 kilometers N20°W from Savona, British Columbia and lies on the east side of Deadman River, north of Criss Creek. One claim extends west into the valley at the north end of the prospect (Figures 1 & 2). Latitude near the center of the claim area is 50° 56'N and longitude is 120° 57'W. Deadman River is a tributary of the Thompson River. The confluence of the two drainages is about 2.5 kilometers west of Kamloops Lake. Road distance to Savona from the D.M. claims is 35 kilometers.

The claims, D.M.-1, D.M.-2, D.M.-3, and D.M.-4 contain 70 units, all in good standing. Record numbers and dates are as follows:-

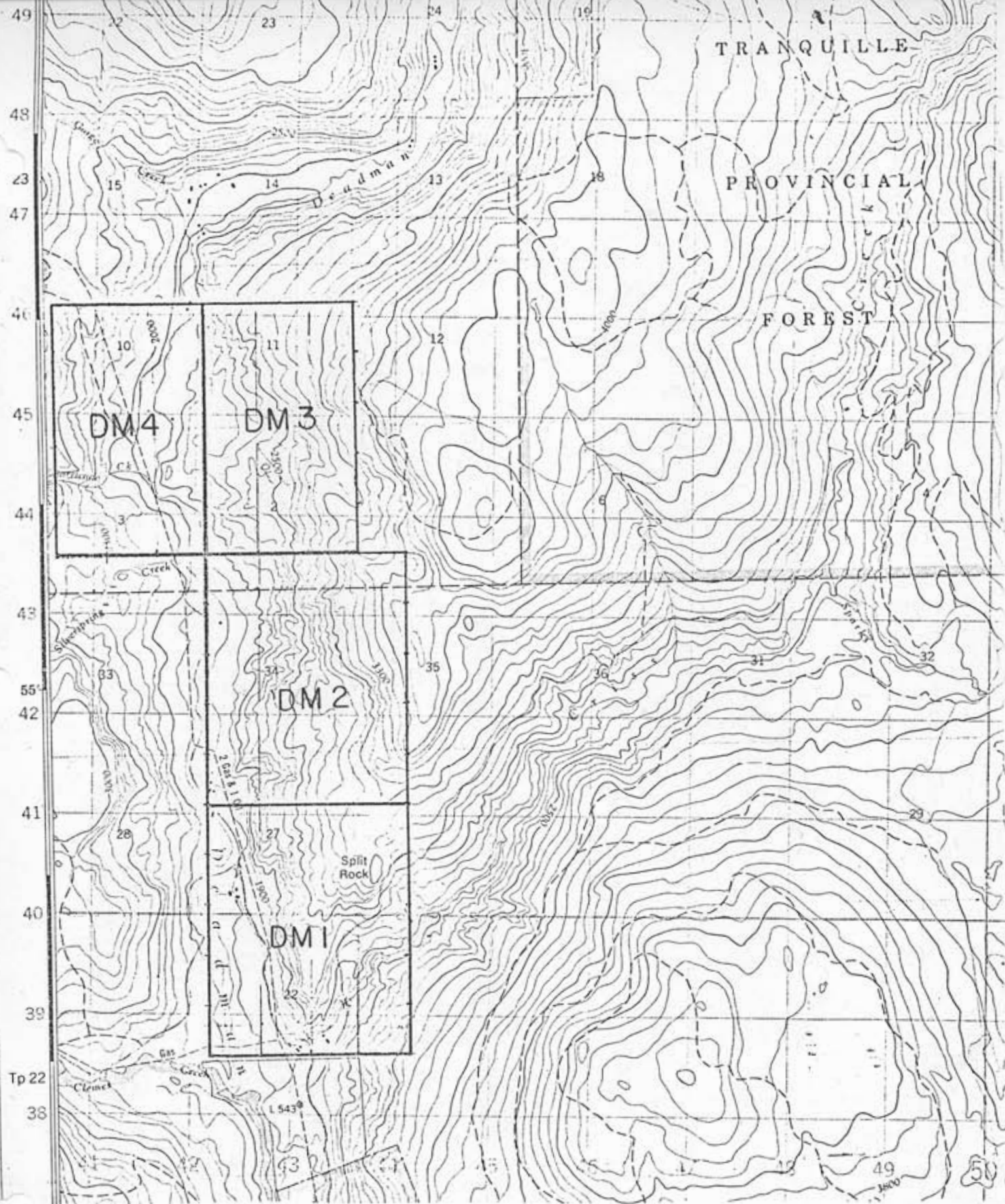


Figure 2; topographic map of D.M. claims

Scale 1:50,000

<u>CLAIM NAME</u>	<u>RECORD DATE</u>	<u>RECORD NUMBER</u>	<u>NO. UNITS*</u>
D.M. No. 1	Oct. 31, 1979	2214	20
D.M. No. 2	Oct. 31, 1979	2215	20
D.M. No. 3	Oct. 31, 1979	2216	15
D.M. No. 4	Oct. 31, 1979	2217	15

\* Unit dimensions 500 meters X 500 meters.

Much of the area was staked previously, but there is no record of assessment done on the claims, which were allowed to lapse. The D.M. claims were staked in 1979 for the account of Guichon Explorco Limited of Toronto. Geochemical and geological work was carried out in November and December, 1979.

#### GEOLOGY

The oldest rocks in the claims area belong to the late Triassic Nicola group and include andesite, dacite and carbonate-chert-sandstone units. The volcanics (Unit 1) are submarine, often exhibiting pillow structures in the andesites. They are often highly fractured and brecciated as a result of intense faulting. Epidotization and silicification is present to varying degrees in all the volcanics, occurring as erratic veinlets and as joint and fracture fillings.

**LEGEND**

**RECENT**

- 7 Unconsolidated glacial material, landslide debris

**TERTIARY or LATER**

**Intrusive**

- 6 Breccia Pipe

**Kamloops Group**

- 5 Tremouille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine felspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

**TRIASSIC**

**Nicole Group**

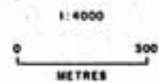
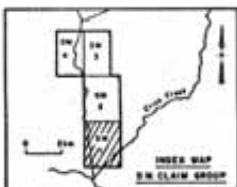
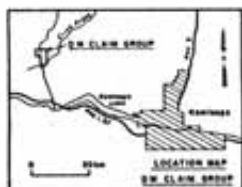
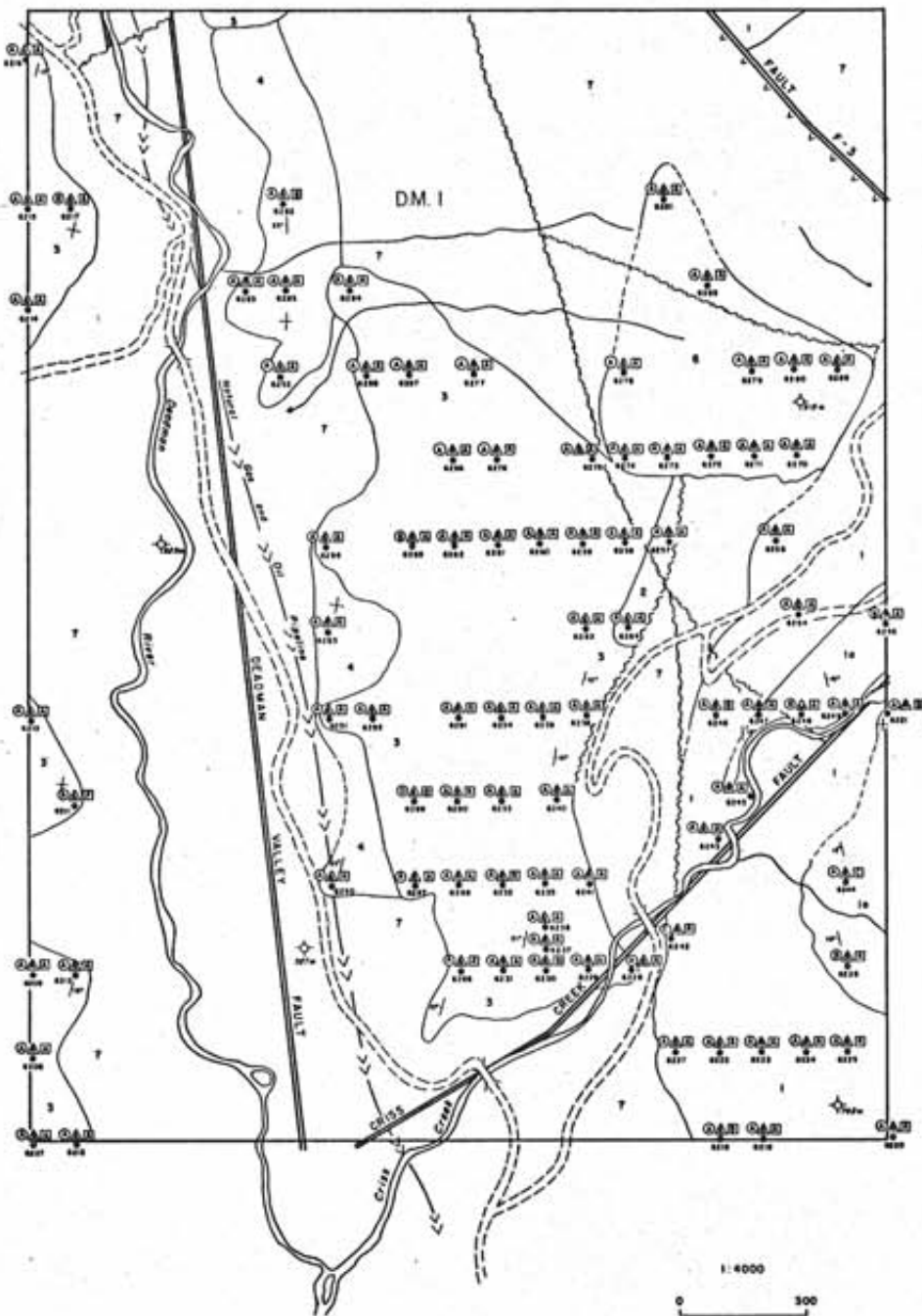
- 1 Andesitic to dacitic flows - some sections fractured, commonly epidotized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often gypitic

**SYMBOLOLOGY**

- Bedding, inclined, horizontal, vertical
- - - Geological contact, observed, inferred
- /// Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- ◆ Elevation markers

**GEOCHEMICAL LEGEND**

- ⊙ Δ ⊠ Geochemical values
- Sample location
- 4334 Sample number
- ⊙ Hg ppb - contour interval A - 0 to 100, B - 101 to 500, C - 501 to 1000, and every 1000 to P which is > 10,000
- Δ As ppm - contour interval every 50 from A to L and M which is > 500
- ⊠ Au ppb - contour interval every 5 from A to M



**FIG. 3 A**

**SELCO MINING CORPORATION**  
 EDUCATION BRANCH  
 D.M. CLAIM GROUP - BRITISH COLUMBIA  
 KAMLOOPS MINING DIVISION NTS 921 WE  
 GEOLOGY - GEOCHEMISTRY - CLAIM 1  
 SHEET 1 OF 2  
 1968 - SM 2850



**LEGEND**

**RECENT**

- 7 Unconsolidated glacial material, landslide debris

**TERTIARY or LATER**

**Intrusive**

- 8 Breccia Pipe

**Kamloops Group**

- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine felspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

**TRIASSIC**

**Nicola Group**

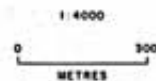
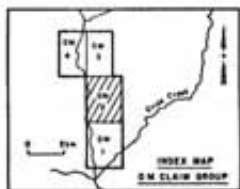
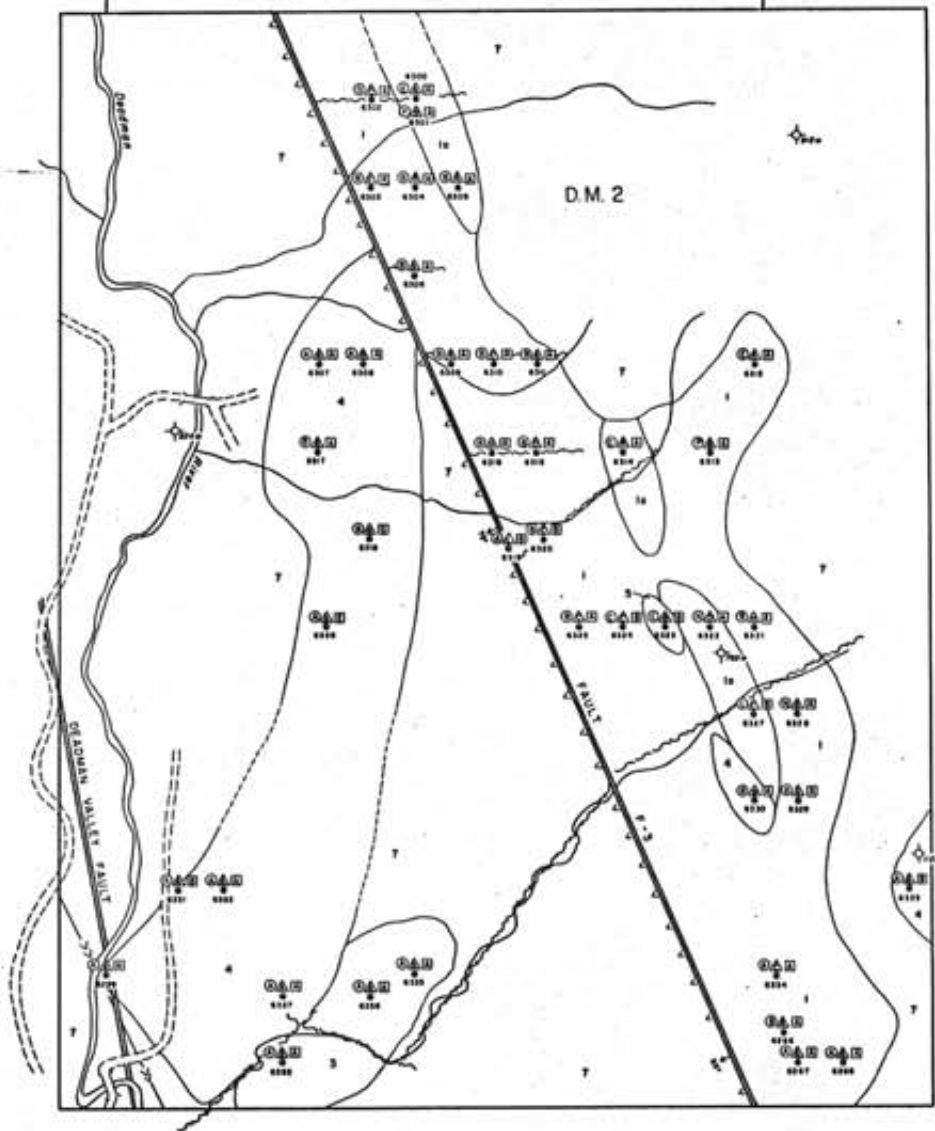
- 1 Andesitic to dacitic flows - some sections fractured, commonly epidatized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

**SYMBOLS**

- /// Bedding, inclined, horizontal, vertical
- Geological contact, observed, inferred
- Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- ◆ Elevation markers

**GEOCHEMICAL LEGEND**

- ⊙ ⊠ Geochemical values
- \* Sample location
- 4234 Sample number
- ⊙ Hg ppb - contour interval A - 0 to 100, B - 101 to 500, C - 501 to 1000, and every 1000 to P which is > 10,000
- △ As ppm - contour interval every 30 from A to L and M which is > 500
- ⊠ Au ppb - contour interval every 5 from A to H



SHEET 2 OF 3

FIG. 3 B

**SELCO MINING CORPORATION**  
 RAMLOOPS MINING DIVISION - BRITISH COLUMBIA  
 RAMLOOPS MINING DIVISION NTS 921 NE  
 GEOLOGY / GEOCHEMISTRY - CLAIM 2  
 - 3M 2851

**LEGEND**

**RECENT**

- 7 Unconsolidated glacial material, landslide debris

**TERTIARY or LATER**

**Intrusive**

- 6 Breccia Pipe Kamloops Group
- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

**TRIASSIC**

**Nicola Group**

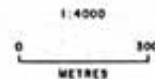
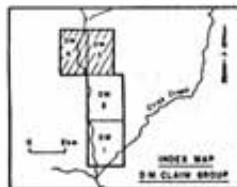
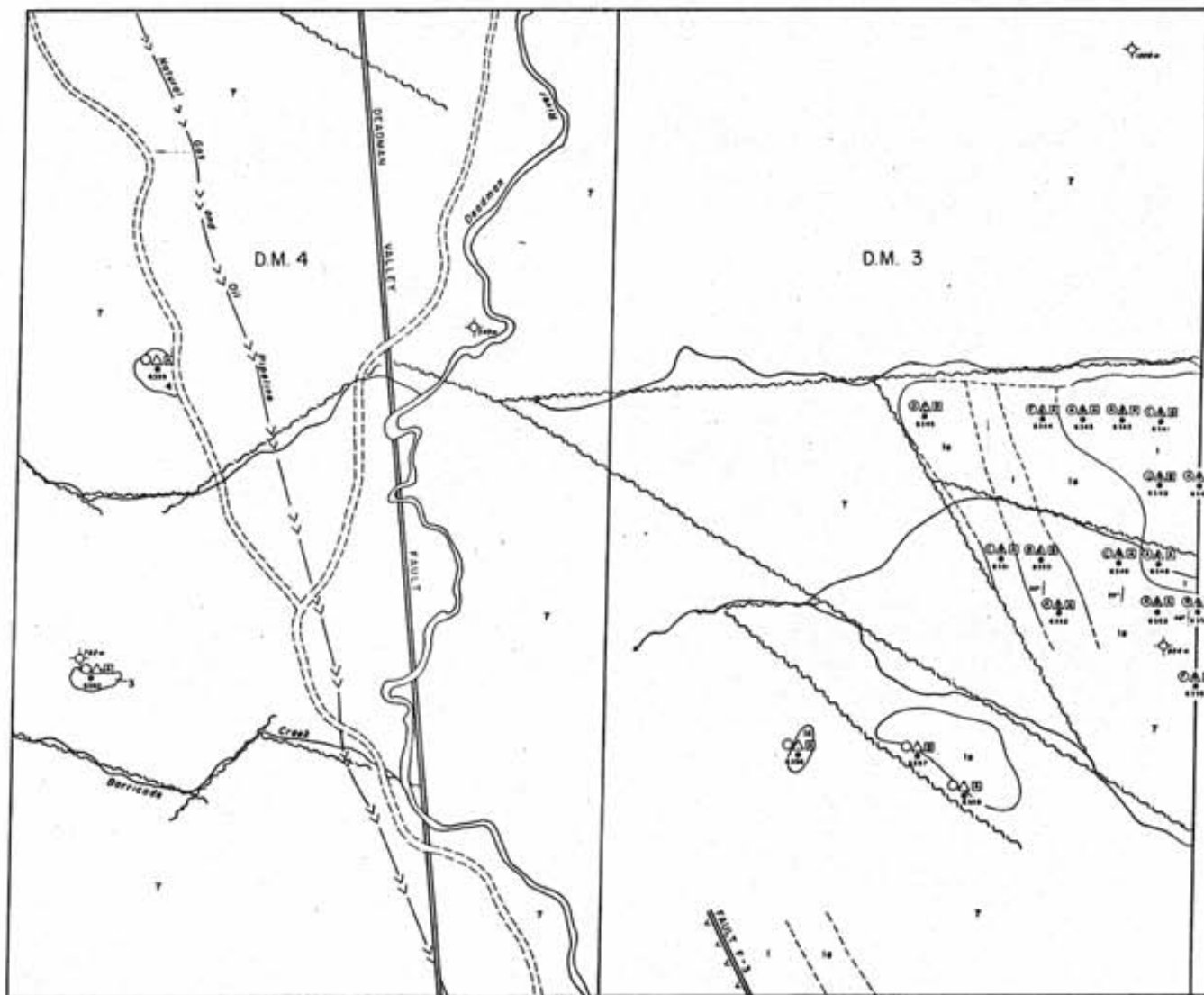
- 1 Andesitic to dacitic flows - some sections fractured, commonly epiditized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

**SYMBOLS**

- Bedding, inclined, horizontal, vertical
- Geological contact, observed, inferred
- Major tectonic faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- Elevation markers

**GEOCHEMICAL LEGEND**

- Geochemical values
- Sample location
- Sample number
- Hg ppb - contour interval A - 0 to 100, B - 101 to 500, C - 501 to 1000, and every 1000 to P which is >10,000
- As ppm - contour interval every 50 from A to L and M which is >500
- Au ppb - contour interval every 5 from A to N



**FIG. 3 C**

**SELCO MINING CORPORATION**  
 D.M. CLAIM GROUP - BRITISH COLUMBIA  
 KAMLOOPS MINING DIVISION NTS 921 NE  
 GEOLOGY AND GEOCHEMISTRY - CLAIMS 184  
 SM 2852

Brecciation is common along faults and fragments of Nicola volcanics are invariably cemented by carbonate, often containing visible cinnabar and/or hematite. Immediately adjacent to fault F-3 in claim D.M.-2, (Figure 3b), the volcanics have been subjected to epithermal solutions and carbonatization and de-silicification has occurred. Primary features have been largely obliterated but locally the alteration can be seen grading into unaltered volcanics. Hematite staining, occurring as sheets up to 2cm thick locally, is a highly visible feature of the epithermal activity on the volcanics, turning them to a bright scarlett.

Sediments within the Nicola group (Unit 1A) are characteristically cherty. Cherty carbonate units make up the greatest proportion of the sedimentary sequence, occurring in beds up to 50 meters thick. Discontinuous lenses of grey, pyritiferous, banded chert occur sporadically throughout the sedimentary sequence, often reaching thicknesses greater than 20 meters. Chert lenses also occur in the volcanic rocks of Unit 1. Variable thicknesses of quartzo-feldspathic sandstone occur at the base of Unit 1A, usually in direct contact with the volcanics. In the thicker sequences, the sandstone is often bracketed between carbonate and banded chert. Outcrops of sandstone are rusty weathering, due in part

to the porous nature of the rock and in part to the presence of finely disseminated sulphides. The matrix of the sandstone appears to be calcareous. Alteration is not a prevalent feature in the sedimentary units, and primary bedding features are well preserved. They strike north or slightly east or west of north and dip gently to moderately east. Variations in strike and dip are due to complex block faulting and subsequent transcurrent faulting.

The intense alteration observed in portions of the Nicola group is believed due to the release of meso-epithermal solutions during Tertiary tectonism and volcanism.

Tertiary volcanic and volcanoclastic units belonging to the Kamloops group unconformably overlie the Nicola group. At the contact, variable thicknesses of glacial-lacustrine sediments (Unit 2) occur. The major component is a poorly sorted polymictic conglomerate containing cobbles and fragments of both Triassic and Tertiary volcanics and minor granitic fragments. Varicoloured, poorly consolidated sandstone and yellow shale occur in lesser amounts locally.

Interfingered with and overlaying Unit 2 is a thick sequence of subaerial and submarine volcanic rocks (Unit 3).

They range compositionally from augitic to feldspathic and are predominantly porphyritic. Augitic porphyry basalts occupy the lower sequence and phenocrysts up to 5<sup>mm</sup> diameter have developed. Feldspar laths 1<sup>mm</sup> to 3<sup>mm</sup> long have formed in the upper, felsic porphyritic flows. Vesicles are common locally near the top of the flows which average 1 to 3 meters thick. Chalcedony is the most common infilling. Minor amygdaloidal basalt flows with zeolite infillings also occur locally, usually between the upper and lower flow sequences.

Unit 3 is overlain conformably by thick units of ash, tuff flows and breccia flows with occasional thin (1-3 M) vesicular basalt flows (Unit 4). This unit is poorly lithified and is very porous. Chalcedony and opal occur throughout the sequence as vesicle infillings and as sheet-like masses. Small amounts of malachite occur as dusty coatings on the chalcedony throughout the unit.

Unit 5, the Tranquille Beds, is exposed in only one locality, near the center of claim D.M.-2. This unit, as exposed, is made up of clastic debris at the base, becoming progressively well sorted up sequence. Conglomerate composed of Tertiary volcanic cobbles tops the unit. Beds are 1 to 3 meters thick. The matrix of the Tranquille Beds is mostly white ash with a fair amount of sand.

The only intrusive found in the claims area is a breccia pipe (Unit 6), located on claim D.M.-1, at coordinates 1W+00E and 1S+00N. Locally known as Split Rock, the pipe forms a prominent topographic feature in the area. The breccia pipe intrudes both Nicola and Kamloops groups and is compositionally different from all other rocks in the area. It is a slightly vitreous, black to grey aphanitic rock that exhibits a sub-conchoidal fracture. A rusty, yellow zeolitic powder has been deposited along fractures and this acts as a binding agent. Individual breccia fragments are closely interlocked and range in size from 0.1 to 0.5 meters along the longest axis. The breccia pipe has been intruded by fine grained, mafic dikes and sills ranging in thickness from 0.1 to 2 meters.

Deep accumulations of Recent glacial debris, landslide debris and tillus (Unit 7) occur throughout the claims area. The Deadman Valley has the thickest accumulations, but considerable thicknesses of glacial material cover the east side of the valley as well. Best outcrop exposure occurs along fault scarps and road cuts.

## STRUCTURE

At least three major transcurrent faults and many more subsequent tear and shear faults occur in the claims area. Block faulting and the development of graben structures has made interpretation of the geology more complicated.

The Deadman Valley fault strikes roughly north-south and is the largest of the three major faults. It appears to have originated from the intrusion during the Triassic of the Guichon batholith, located about 27 kilometers south of the D.M. claims. Study of faults subsequent to the Deadman Valley fault indicate it is a transcurrent fault. Deadman Valley seldom exceeds one kilometer in width except at the triple point of major faults. The fault divides about one half kilometer north of the D.M. claims, shifting east for one half kilometer, then resuming its north-south strike. The shift is believed due to a poorly exposed granitic intrusion that resisted the faulting.

The Criss Creek fault is the second major transcurrent fault occurring in the claims area. It strikes N60°E from the confluence of the Deadman River and Criss Creek, located at the south end of claim D.M.-1. The north-west side has been downthrown and carbonatization and de-silicification

has occurred along shear zones that strike normal to the Criss Creek fault. Shearing is greatest in the sediments of Unit 1A, but is of limited aerial extent.

The third major fault observed in the claims area strikes across the north-east corner of claim D.M.-1 and into D.M.-2 at an angle of N45°W; it is designated Fault F-3. The fault dips 65° to 80° south-west with relative motion downthrown to the south-west, creating a well defined fault scarp. Shearing is extensive and well exposed east of the fault, with extensive epithermal alteration associated. Carbonatization, de-silicification, brecciation and cinnabar-hematite mineralization are encountered along this fault in rocks of the Nicola group.

#### GEOCHEMICAL SURVEY

One hundred forty-nine rock and tallus samples were collected in the claims area and three rock samples, Nos. 6338, 6339 and 6340, were taken off the map area in the vicinity of Snohoosh Lake, located 20 kilometers north of the D.M. claims. Claims D.M.-1 and D.M.-2 are each 2500 meters north-south by 2000 meters east-west; claims D.M.-3 and 4 are each 2500 meters north-south by 1500 meters east-west for a total area



sampled of 8.75 square kilometers. Samples were taken from outcrops and tallus slopes encountered during a grid sampling program. East-west lines were spaced 200 meters apart along a north-south baseline and samples, if any, were taken at 100 meter intervals - all traverse lines were chained and flagged every 100 meters. Ninety-one line kilometers were traversed.

Samples were bagged and shipped to Vancouver where analyses were done by Chemex Laboratories Limited, for mercury, arsenic, gold and silver (partial). Assay values of rock and tallus samples range from 10 parts per billion ( $10^{-9}$  g/Tonne) mercury to greater than 10 parts per million mercury; from 0.1 parts per million arsenic to greater than 500 parts per million arsenic; and from less than 5 parts per billion ( $10^{-9}$  g/Tonne) gold to 60 parts per billion gold. Silver never exceeded 0.4 parts per million and was omitted from the results. Distribution of values is shown below:-

1) Greater than $10 \times 10^3$ ppb Hg	2 samples
9001-10,000	2
4001-3,000	1
3001-4,000	1
2001-3,000	3
1001-2,000	4
501-1,000	7
101-500	23
0-100	<u>106</u>
TOTAL	149

2) Greater than 500 ppm As	1 sample(s)
451-500	1 "
351-400	1 "
301-350	1 "
201-250	1 "
151-200	3 "
101-150	8 "
51-100	9 "
0-50	<u>124</u>
TOTAL	149

3) 56-60 ppb Au	1
31-35	1
26-30	1
21-25	1
11-15	3
6-10	17
0-5	<u>125</u>
TOTAL	149

Mercury and arsenic were determined using atomic absorption and gold was determined by using a combination fire assay and atomic absorption method.

Three small gold anomalies occur. Anomaly one (30 ppb Au) is located on the west side of Deadman Valley at sample site 6211 (see Figures 3a and 4a) in the south-west corner of D.M.-1. There were no anomalous or elevated mercury-arsenic values associated with the gold anomaly. The sample was taken from red stained, gossan veined Tertiary basalts - some of which are prophyritic (Unit 3).

**LEGEND**

**RECENT**

- 7 Unconsolidated glacial material, landslide debris

**TERTIARY or LATER**

**Intrusive**

- 6 Breccia Pipe

**Kamloops Group**

- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

**TRIASSIC**

**Nicola Group**

- 1 Andesitic to dacitic flows - some sections fractured, commonly epidolized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

**SYMBOLY**

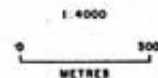
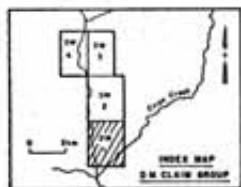
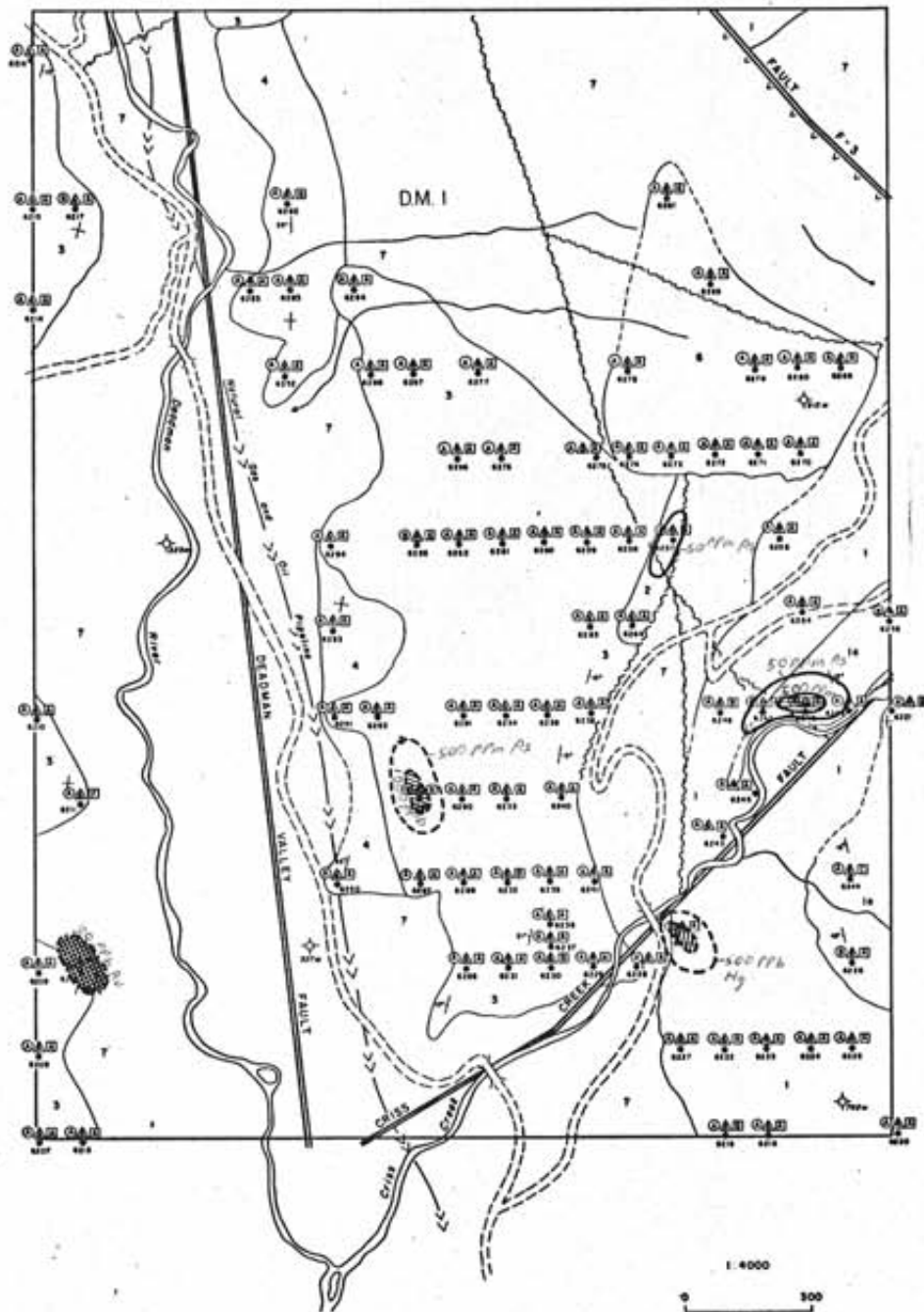
- /// Bedding, inclined, horizontal, vertical
- Geological contact, observed, inferred
- /// Major tectonic faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- ◆ Elevation markers

**GEOCHEMICAL LEGEND**

- ⊙ ⊠ Geochemical values
- \* Sample location
- 8234 Sample number
- ⊙ Hg ppb - contour interval A - D to 100, B - 101 to 500, C - 501 to 1000, and every 1000 to P which is > 10,000
- ⊠ As ppm - contour interval every 50 from A to L and M which is > 500
- ⊡ Au ppb - contour interval every 5 from A to N

**ANOMALIES**

- - - Hg - 500 ppb threshold contour
- ⊠ Hg - Highly anomalous zone
- As - 50 ppm threshold contour
- ⊠ As - Highly anomalous zone
- - - Au - 20 ppb threshold contour
- ⊠ Au - Highly anomalous zone



**FIG. 4 A**

**SELCO MINING CORPORATION**  
REGISTRATION DIVISION  
**DM CLAIM GROUP - BRITISH COLUMBIA**  
 KAMLOOPS MINING DIVISION NTS 921 NE  
 GEOLOGY AND GEOCHEMISTRY - CLAIM 1  
SHEET 1 OF 2  
SCALE 1:50,000  
— - - SM 2870

**LEGEND**

**RECENT**

- 7 Unconsolidated glacial material, landslide debris

**TERTIARY or LATER**

**Intrusive**

- 6 Breccia Pipe

**Kamloops Group**

- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

**TRIASSIC**

**Nicola Group**

- 1 Andesitic to dacitic flows - some sections fractured, commonly epidotized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

**SYMBOLS -**

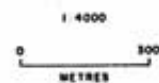
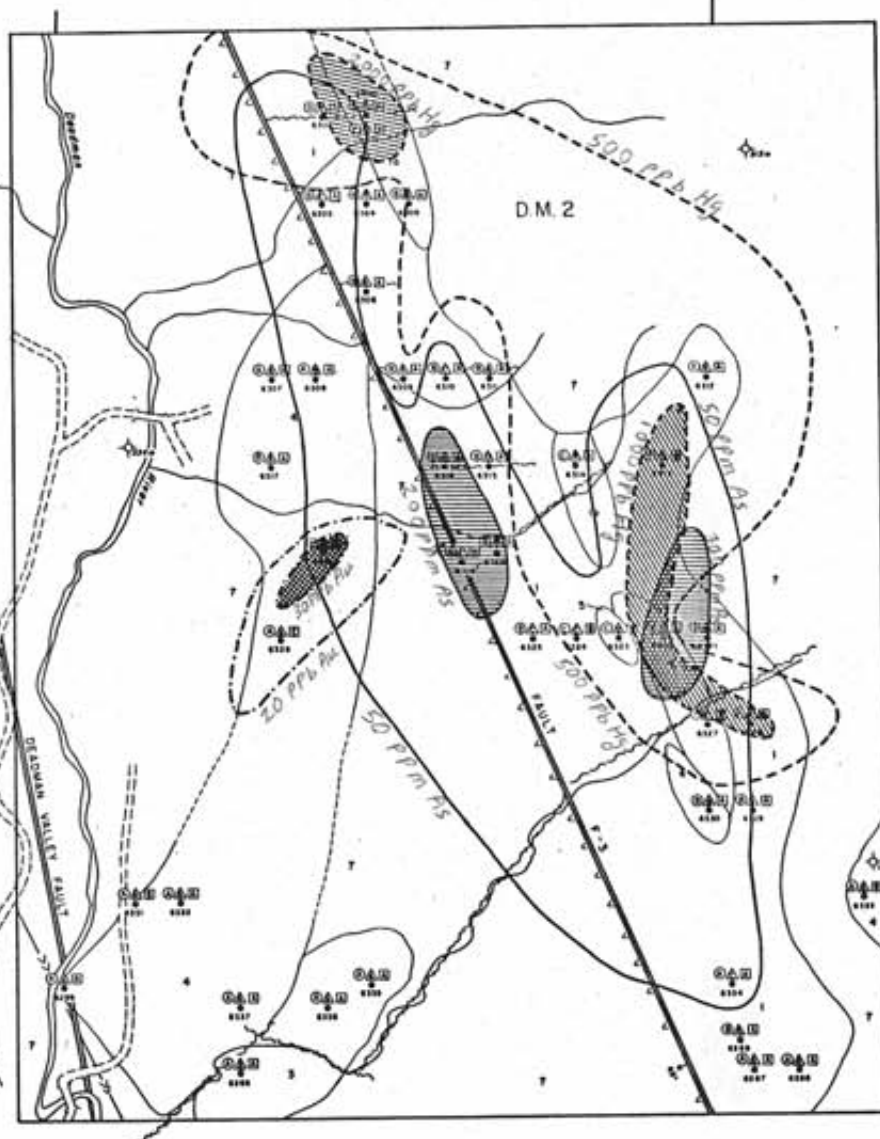
- Bedding, inclined, horizontal, vertical
- Geological contact, observed, inferred
- Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- Elevation markers

**GEOCHEMICAL LEGEND**

- Geochemical values
- Sample location
- Sample number
- Hg ppb - contour interval A - 0 to 100, B - 101 to 300, C - 301 to 1000, and every 1000 to P which is > 10,000
- As ppm - contour interval every 50 from A to L and M which is > 500
- Au ppb - contour interval every 5 from A to N

**ANOMALIES**

- Hg - 500ppb threshold contour
- Hg - Highly anomalous zone
- As - 50 ppm threshold contour
- As - Highly anomalous zone
- Au - 20ppb threshold contour
- Au - Highly anomalous zone



**FIG. 4 B**

**SELCO MINING CORPORATION**  
 KAMLOOPS MINING DIVISION  
 D.M. CLAIM GROUP - BRITISH COLUMBIA  
 KAMLOOPS MINING DIVISION NTS 921 NE  
 GEOLOGICAL AND GEOCHEMISTRY - CLAIM 2  
 SHEET 6 OF 8

**LEGEND**

**RECENT**

- 7 Unconsolidated glacial material, landslide debris

**TERTIARY or LATER**

**Intrusive**

- 6 Breccia Pipe

**Kamloops Group**

- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloid phases
- Basal Sediments - conglomerate, minor sandstone and shale

**T.S.C.**

**Triassic Group**

- 1 Andesitic to dacitic flows - some sections fractured, commonly epidolized
- 2a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often syntitic

**SYMBOLS**

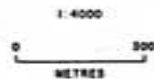
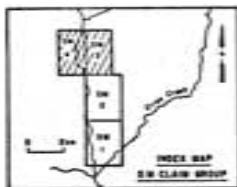
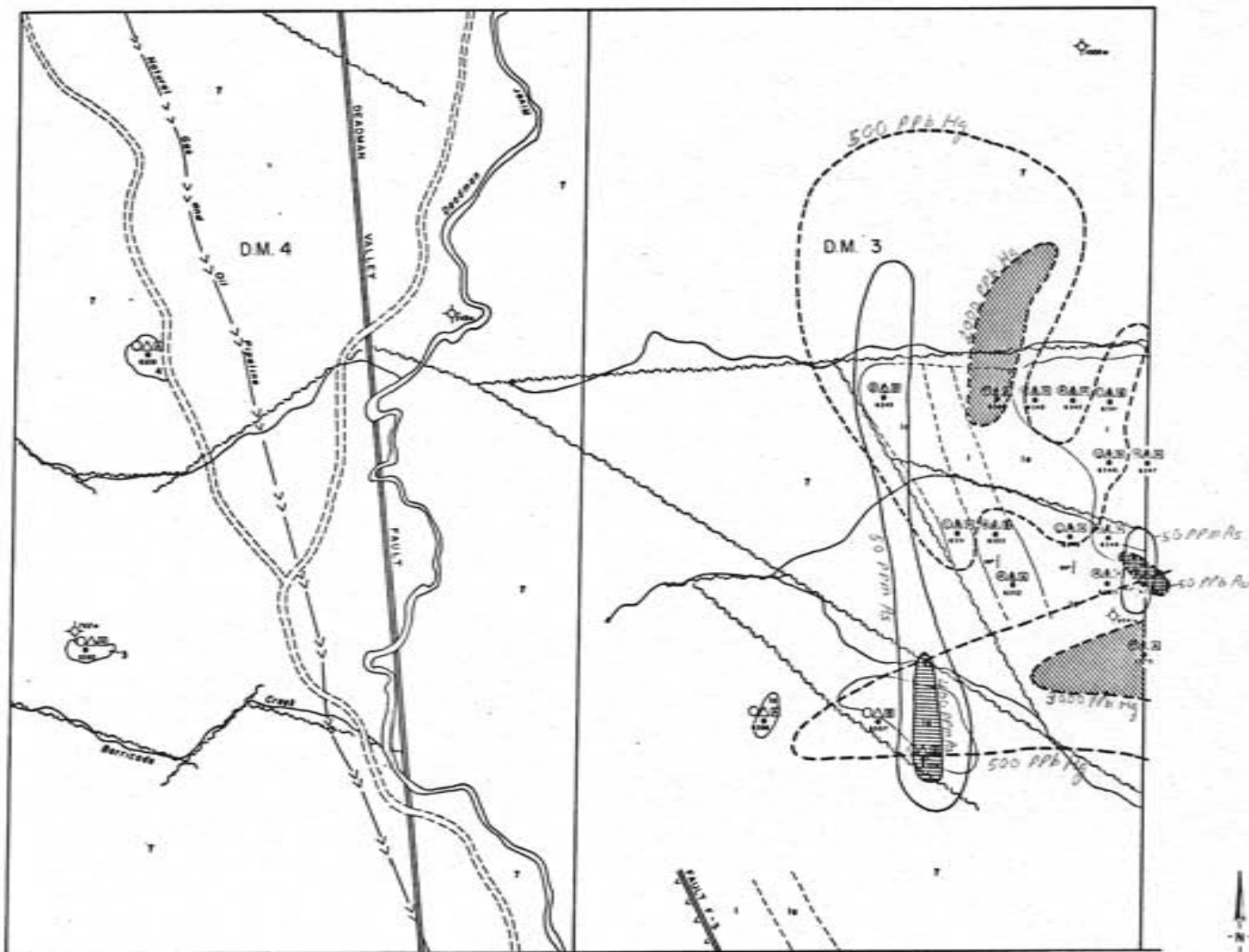
- Bedding, inclined, horizontal, vertical
- Geological contact, observed, inferred
- Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- Elevation markers

**GEOCHEMICAL LEGEND**

- Geochemical values
- Sample location
- Sample number
- Hg ppb - contour interval A - 0 to 100, B - 101 to 500, C - 501 to 1000, and every 1000 to P which is >10,000
- As ppm - contour interval every 50 from A to L and M which is >500
- Au ppb - contour interval every 5 from A to R

**ANOMALIES**

- Hg - 500ppb threshold contour
- Hg - Highly anomalous zone
- As - 50ppm threshold contour
- As - Highly anomalous zone
- Au - 20ppb threshold contour
- Au - Highly anomalous zone



**FIG. 4 C**

**SELCO MINING CORPORATION**  
 A CORPORATION OF BRITISH COLUMBIA  
 DM CLAIM GROUP - BRITISH COLUMBIA  
 BANLOOPS MINING DIVISION NTS 521 NE  
 GEOLOGY AND GEOCHEMISTRY CLAIMS 384  
 SHEET 3 OF 8  
 52172

The second anomaly is located near the center of D.M.-2 at sample sites 6318 and 6326 (35 ppb and 25 ppb Au respectively). These samples were collected on a ridge of poorly exposed, deeply weathered rocks of Unit 4 (see Figures 3b and 4b). The anomalous zone is on the hanging wall of Fault F-3, about 250 meters west of the fault contact. Outcrops are highly altered, red stained and deeply weathered. Anomalous arsenic and mercury zones are associated with the gold anomaly (see Figure 4b).

Gold anomaly number 3 is located on the east boundary of D.M.-3 (see Figure 3c and 4c) at sample site 6354 (60 ppb Au). There are several threshold values (6-10 ppb Au) scattered around the anomalous zone. The sample was taken from a quartzo-feldspathic sandstone unit that weathers to a rusty red (Unit 1A). Anomalous arsenic and mercury zones are associated with the gold anomaly. This area is poorly exposed but appears to be highly sheared.

Two large mercury anomalous zones occur within the claim area. The largest (10 ppm Hg) is centered in and around highly altered members of Unit 1A located at sample site 6322 on D.M.-2. The anomalous zone occurs as an elongate lens 2100 meters long and 800 meters wide at its widest. The zone trends parallel to and about 200 meters east of Fault F-3.

A parallel zone of anomalous arsenic occurs between the mercury zone and the gold zone. It has a strike length of 2500 meters and is 1000 meters at its widest point. Arsenic values up to 500 ppm occur within this zone.

The second mercury anomaly is associated with gold anomaly No. 3 on D.M.-3. Values up to 5000 ppb Hg occur as a small halo 100 to 300 meters away from the gold anomaly. Arsenic is anomalous immediately adjacent to the gold anomaly and a second, elongate arsenic zone occurs 600 meters west, on the outer edge of the mercury zone.

Distribution of mercury and arsenic is structurally controlled but gold does not appear to have controls. Controls for gold might be determined if a more complete distribution pattern were developed. Anomalous threshold values of 20 ppb for gold, 500 ppb for mercury and 50 ppm for arsenic were calculated using figures obtained during a regional geochemical survey of S.E. British Columbia during the summer of 1979.

Estimated field cost of the Deadman claims exploration program to date are shown as follows:-

D.M. CLAIMS - COST STATEMENT

<u>SAMPLING</u>	41 days @ \$79.59 per day	\$ 3,263.19
(Geochemical)	41 days @ \$45.00 per day	1,845.00
<u>ACCOMODATION</u>	41 crew days @ \$22.56/crew day	924.96
<u>FOOD</u>	41 crew days @ \$27.29/crew day	1,118.89
<u>SUPPORT</u>		270.70
(Flagging sample bags, etc.)		
<u>TRANSPORTATION</u>		
Truck Rental	41 days @ \$24.39 per day	999.99
Vehicle Operation	41 days @ \$15.00 per day	615.00
<u>SAMPLE ANALYSIS</u>	154 Soil and Rock Samples (Au, Ag, Hg)	823.90
<u>REPORT &amp; DRAFTING</u>	30 days @ \$45.00 per day	1,350.00
	17 days @ \$65.00 per day	1,105.00
		<u>\$12,316.65</u>



## CONCLUSIONS

Gold, mercury, and arsenic occur in altered Triassic volcanics and sediments of the Nicola group and in Tertiary volcanics of the Kamloops group. Three anomalous gold zones with values ranging from 20 ppb ( $10^{-9}$  g/tonne) to 60 ppb gold occur in the survey area. Two of the gold anomalies occur in the vicinity of a major block-fault system and are associated with anomalous mercury and arsenic zones. The mercury and arsenic anomalies are distributed in well defined zones around the gold anomalies. The mineralized areas are highly sheared and most of the host rocks have been carbonatized and de-silicified. Extensive hematite staining of the altered rocks exposed over much of the mineralized area indicates epithermal activity was prevalent in the vicinity of the fault.

## RECOMMENDATIONS

A follow-up geochemical sampling program with trenching should be carried out over gold anomalies No. 2 and claim D.M.-2 and No. 3 claim D.M.-3. Targets should be centered around the gold anomalies with attention paid to the areal extent and zoning of mercury and arsenic anomalies, the alteration of volcanic and sedimentary rocks, and fracture patterns. Samples should be analyzed for gold, arsenic, and mercury.

Open ground east of claim D.M.-3 should be claimed as soon as possible and included in the sampling program.

## REFERENCES

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92I/east half. Geological Survey of Canada.

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G.S.C. Memoir 296.

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Minister of Mines, B.C. Ann. Rpt. 1933, P. 182

CERTIFICATE

I, JAMES C. IRELAND of Capreol, Ontario do hereby certify:-

1. That I am a junior geologist in the employ of Guichon Explorco Limited, of Toronto, Ontario.
2. That I am actively pursuing an Honours Bachelor of Science degree at Laurentian University, Sudbury, Ontario.
3. That I have practised my profession for more than two years.
4. That I mapped geologically and sampled the area described herein, and interpreted the results of the survey.
5. That I was accompanied at all times during the survey by Robert Lucas, a junior geologist in the employ of Guichon Explorco Limited, Toronto, Ontario.
6. That the results of the survey are correct to my knowledge.

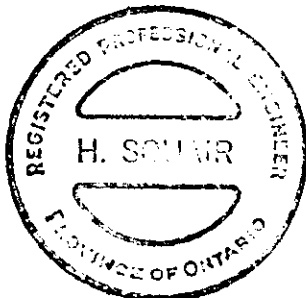
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James C. Ireland,  
Party Leader.

SUPERVISOR'S CERTIFICATE

I, HUGH SQUAIR, of 174 Tracina Drive, Oakville,  
Ontario hereby certify as follows:-

1. I am a geologist residing at the above address.
2. I am a graduate of the Universities of Saskatchewan and London (England) with Ba (1959) and Phd (1965) degrees in Geology and Mining Geology.
3. I am registered as a member of the Association of Professional Engineers of the Province of Ontario.
4. I supervised the geological and geochemical work carried out on the D.M. Claim group by Mr. James Ireland and Mr. R. Lucas and attest that values presented and their spacial relationships to each other are correct within reasonable limits of error.
5. I hold no interest direct or indirect in the D.M. Claim group which is the subject of this report.



Respectfully submitted,

*Hugh Squair*  
Hugh Squair.

Toronto, Ontario  
May 16, 1980.

APPENDIX

TABLE 1 - Rock sample number, coordinates, claim location,  
description and assay results.

TABLE 1

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE*	Au ppb	Hg ppb	As ppm	REMARKS
6207	D.M.-1 5S+00N 4W+00E	Red to grey, slightly vesicular feldspar porphyry flows	Kam	< 5 <sup>t</sup>	10	4.5	
6208	D.M.-1 5S+250N 4W+00E	Some as 6207-some augite porphyry flows	Kam	< 5	40	2.0	
6209	D.M.-1 5S+100N 4W+00E	Gossan stained altered porphyritic volcanics-shear zone	Kam	< 5	80	15	
6210	D.M.-1 3S+00N 4W+00E	Fresh augite porphyry flows	Kam	< 5	20	1.0	
6211	D.M.-1 4S+300N 4W+100E	Altered and gossan veined volcanics-basaltic	Kam	30	10	12	
6212	D.M.-1 5S+400N 4W+100E	Altered carbonate veined, deeply weathered volcanics	Kam	< 5	30	1.0	
6213	D.M.-1 5S+00N 4W+100E	Gossan stained porphyritic volcanics	Kam	< 5	60	4.5	
6214	D.M.-1 2S+450N 4W+00E	Vesicular basalt-chalcedony infilling -magnetite rich	Kam	< 5	60	1.0	
6215	D.M.-1 1S+200N 4W+00E	Fresh augite porphyry basalt	Kam	< 5	100	1.0	
6216	D.M.-1 1S+400N 4W+00E	Red stained magnetite rich volcanics-deeply weathered	Kam	< 5	70	1.0	
6217	D.M.-1 1S-200N 4W+100E	Same as 6216	Kam	5	240	1.0	
6218	D.M.-1 5S+00N 1W+100E	Andesitic volcanics - epidote veining	Nicola	10	60	1.0	
6219	D.M.-1 5S+00N 1W+200E	Same as 6218 - some shearing	Nicola	< 5	50	1.0	
6220	D.M.-1 5S+00N 1W+500E	Fracture zone in carbonate veined, epidotized andesite	Nicola	< 5	50	1.0	
6221	D.M.-1 3S+00N 1W+500E	Dacitic porphyritic -sheared sections, quartz blebs	Nicola	10	20	4.0	
6222	D.M.-1 5S+200N 1W+100E	Same as 6221	Nicola	< 5	50	1.0	
6223	D.M.-1 5S+200N 1W+200E	Same as 6221-weathered, slightly gossanous	Nicola	< 5	50	1.0	
6224	D.M.-1 5S+200N 1W+300E	Same as 6221-finer grained	Nicola	< 5	10	1.0	
		<sup>t</sup> - symbol "<" denotes "less than" * Kam represents rock of Tertiary age Nicola represents rock of Jurassic or Cretaceous age					

TABLE 1

- 2 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6225	D.M.-1 5S+200N 1W+400E	Same as 6221-visible magnetite	Nicola	< 5	20	1.0	
6226	D.M.-1 5S+400N 1W+400E	Shear zone in sandstone and jasper units-Malachite	Nicola	< 5	170	29	
6227	D.M.-1 5S+200N 1W+00E	Basalt flows	Nicola	< 5	60	1.0	
6228	D.M.-1 5S+400N 2W+400E	Feldspar and augite porphyry flows-vesicular to amygdaloidal	Kam	< 5	70	1.0	
6229	D.M.-1 5S+400N 2W+300E	Same as 6228	Kam	< 5	50	4.0	
6230	D.M.-1 5S+400N 2W+200E	Thin vesicular basalt flows in breccia flows-malachite stains	Kam	< 5	40	1.0	
6231	D.M.-1 5S+400N 2W+112E	Same as 6230	Kam	< 5	60	1.0	
6232	D.M.-1 4S+100N 2W+100E	Deeply weathered feldspar porphyry volcanics	Kam	< 5	50	1.0	
6233	D.M.-1 4S+300N 2W+100E	Vesicular basalt-carbonate infilling	Kam	< 5	20	1.0	
6234	D.M.-1 3S+00N 2W+100E	Vesicular, amygdaloidal and porphyritic flows-gossan stained	Kam	< 5	70	1.0	
6235	D.M.-1 4S+300N 2W+200E	Slightly vesicular porphyritic flows-gossan veinlets	Kam	< 5	60	1.0	
6236	D.M.-1 4S+050N 2W+200E	Porphyry basalt-gossan veinlets throughout	Kam	< 5	20	1.0	
6237	D.M.-1 5S+450N 2W+200E	Vesicular basalt-highly fractured, gossan veinlets	Kam	< 5	60	1.0	
6238	D.M.-1 3S+00N 2W+300E	Feldspar porphyry flows-red and green stained-gossan veinlets	Kam	< 5	50	1.0	
6239	D.M.-1 3S+00N 2W+200E	Vesicular basalt-black to purple stained	Kam	< 5	50	1.0	
6240	D.M.-1 4S+300N 2W+250E	Shear zone-altered and gossan veined porphyry flows	Kam	< 5	30	1.0	
6241	D.M.-1 4S+100N 2W+300E	Porphyritic flows, minor gossan staining	Kam	< 5	20	1.0	

TABLE 1

- 3 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6242	D.M.-1 5S+460N 1W+00E	Shear Zone in Mafic volcanics-Malachite and carbonate	Kam	< 5	2900	50	
6243	D.M.-1 4S+180N 1W+100E	Andesitic flows-quartz-epidote veins	Nicola	< 5	70	1.0	
6244	D.M.-1 4S+100N 1W+400E	Water lain tuffs, argillites and impure limestone	Nicola	15	50	4.5	
6245	D.M.-1 4S+300N 1W+280E	Sheared, schistose andesites, dacites-silicified	Nicola	< 5	80	11	
6246	D.M.-1 3S+00N 1W+100E	Slightly vitreous breccia (from pipe) friable matrix	Kam	10	50	11	
6247	D.M.-1 3S+00N 1W+200E	Shear zone-bleached andesite, tuff, sandstone, impure limestone	Nicola	5	70	68	
6248	D.M.-1 3S+00N 1W+300E	Same as 6247-chert breccia	Nicola	5	240	500	
6249	D.M.-1 3S+00N 1W+400E	Carbonate-shattered zones, rusty sections	Nicola	< 5	20	32	
6250	D.M.-1 4S+100N 3W+200E	Ash and pebbly volcanic tuff-thin porphyry flows	Kam	< 5	80	1.0	
6251	D.M.-1 3S+00N 3W+200E	Porphyry and vesicular flows-deeply weathered	Kam	< 5	70	1.0	
6252	D.M.-1 2S+300N 3W+100E	Vesicular basalt-minor malachite on agate	Kam	< 5	80	1.0	
6253	D.M.-1 1S+00N 3W+00E	Breccia flows, ash flow and tuffs-some malachite	Kam	< 5	80	5.0	
6254	D.M.-1 3S+250N 1W+300E	Highly sheared, epidotized andesites	Nicola	< 5	60	5.0	
6255	D.M.-1 3S+200N 1W+500E	Siliceous carbonate, sandstone, pyritic chert	Nicola	< 5	140	17	
6256	D.M.-1 3S+400N 1W+250E	Schistose andesite, weakly magnetic	Nicola	< 5	60	9.0	
6257	D.M.-1 3S+400N 1W+00E	White to grey volcanic ash-highly fractured	Kam	< 5	70	58	
6258	D.M.-1 3S+400N 2W+400E	Vesicular feldspar porphyry flows-red stained	Kam	< 5	50	1.0	



TABLE 1

- 4 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6259	D.M.-1 3S+400N 2W+300E	Same as 6258-some bleached sections	Kam	< 5	50	1.0	
6260	D.M.-1 3S+400N 2W+200E	Same as 6258-some bleached sections	Kam	< 5	60	1.0	
6261	D.M.-1 3S+400N 2W+100E	Mafic, magnetite rich flows	Kam	< 5	40	1.0	
6262	D.M.-1 3S+400N 2W+00E	Vesicular augite porphyry	Kam	< 5	40	2.0	
6263	D.M.-1 3S+200N 2W+300E	Feldspar porphyry flows-pink	Kam	< 5	40	1.0	
6264	D.M.-1 3S+200N 2W+400E	Conglomerate-poorly sorted, polymict-rusty weathering-some laminated sandstone units 12-30cm thick	Kam	< 5	30	1.0	
6265	D.M.-2 1N+400N 3W+00E	Sandstone unit in vesicular basalt-purple to green	Kam	< 5	40	1.0	
6266	D.M.-2 1N+400S 1W+400E	Epidotized and mineralized carbonate bearing tuffs	Nicola	< 5	30	1.5	
6267	D.M.-2 1N+400S 1W+300E	Shear zone-altered tuff-carbonate units-minute sulphides	Nicola	< 5	70	4.0	
6268	D.M.-2 1W+350S 1W+250E	Fault breccia-magnetite in carbonate matrix-diss. sulphides	Nicola	< 5	110	11	
6269	D.M.-1 2S+300N 1W+300E	Breccia pipe-aphanitic slightly vitreous-friable matrix	Kam	< 5	80	20	
6270	D.M.-1 2S+100N 1W+300E	Base of breccia pipe	Kam	< 5	40	1.5	
6271	D.M.-1 2S+100N 1W+200E	Same as 6270	Kam	< 5	20	1.0	
6272	D.M.-1 2S+100N 1W+100E	Same as 6270	Kam	< 5	60	4.0	
6273	D.M.-1 2S+100N 1W+00E	Shear zone-gossan stained-malachite + chalcedony-flows?	Kam	< 5	50	1.0	
6274	D.M.-1 2S+100N 2W+400E	Same as 6273-some small porphyritic dikes or flows	Kam	< 5	70	2.0	
6275	D.M.-1 2S+100N 2W+325E	Red to grey feldspar porphyry flows-red breccia flow tops	Kam	< 5	60	1.0	

TABLE 1

- 5 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6276	D.M.-1 2S+100N 2W+100E	Same as 6275-rusty veins throughout	Kam	< 5	50	1.0	
6277	D.M.-1 2S+300N 2W+050E	Same as 6275	Kam	< 5	40	1.0	
6278	D.M.-1 2S+300N 2W+400E	Breccia pipe-scoria- ceous zones, mafic fragments	Kam	< 5	50	1.0	
6279	D.M.-1 2S+300N 2W+400E	Same as 6278	Kam	< 5	40	1.0	
6280	D.M.-1 2S+300N 1W+200E	Same as 6278-top of pipe	Kam	< 5	70	1.0	
6281	D.M.-1 1S+200N 1W+00E	Breccia pipe-cut by mafic dike	Kam	< 5	60	1.0	
6282	D.M.-1 1S+200N 3W+100E	Vesicular basalt flows rusty infillings	Kam	10	80	1.0	
6283	D.M.-1 1S+00N 3W+100E	Breccia flows-thick units-weathered	Kam	< 5	60	1.0	
6284	D.M.-1 1S+00N 1W+280E	Shear zone-red stained altered feldspar porphyry flows	Kam	< 5	50	1.0	
6285	D.M.-1 1S+00N 1W+400E	Same as 6281-no dike visable	Kam	< 5	40	1.0	
6286	D.M.-1 5S+400N 2W+00E	Stained breccia, flows -thin vesicular basalt flows	Kam	< 5	60	1.0	
6287	D.M.-1 4S+100N 3W+400E	Altered, silicified, grey volcanics, probably porphyritic	Kam	< 5	50	1.0	
6288	D.M.-1 4S+100N 2W+00E	Red, aphanitic dike, disseminated magnetite- carbonate veins	Kam	< 5	50	1.0	
6289	D.M.-1 4S+300N 2W+00E	Porphyritic breccia flows, pyroxene and feldspar porphyry flows	Kam	10	1600	20	
6290	D.M.-1 4S+300N 3W+00E	Porphyritic breccia flows-some bleached zones	Kam	< 5	70	1.0	
6291	D.M.-1 3S+00N 2W+00E	Feldspar porphyry flows-fresh	Kam	< 5	80	1.0	
6292	D.M.-1 3S+00N 3W+300E	Porphyritic basalt- augite altered	Kam	< 5	70	1.0	
6293	D.M.-1 3S+200N 3W+200E	Thick basaltic breccia flows-some zones bleached	Kam	< 5	70	1.0	
6294	D.M.-1 3S+400N 3W+250E	Bleached feldspar porphyry flows	Kam	< 5	50	1.0	

TABLE 1

- 6 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6295	D.M.-1 3S+400N 3W+400E	Augite porphyry basalt -vesicular with opaline infillings	Kam	< 5	40	1.0	
6296	D.M.-1 2S+100N 2W+00E	Bleached vesicular basalt-solution passages	Kam	< 5	70	1.0	
6297	D.M.-1 2S+300N 3W+400E	Feldspar porphyry flows, vesicular basalt-some zones bleached	Kam	5	60	1.0	
6298	D.M.-1 2S+300N 3W+300E	Bleached augite porphyry flows	Kam	< 5	60	1.0	
6299	D.M.-2 1N+200S 4W+100E	Silicified breccia flows-zeolitic veinlets	Kam	< 5	70	20	
6300	D.M.-2 5N+200S 3W+300E	Completely altered rocks; brecciated, veined, silicified, carbonatized	Nicola	< 5	4650	56	
6301	D.M.-2 5N+200S 3W+300E	Same as 6300-duplicate sample	Nicola	< 5	10,000	120	
6302	D.M.-2 5N+200S 3W+200E	Deeply weathered volcanics-hematite stained, silicified	Nicola	< 5	1300	120	
6303	D.M.-2 5N+400S 3W+200E	Hematite stained, highly altered breccia flows-some porphyritic	Kam	< 5	460	255	
6304	D.M.-2 5N+400S 3W+300E	Red stained, altered porphyritic flows, agglomerate; highly fractured	Kam?	< 5	400	23	
6305	D.M.-2 5N+400S 3W+400E	Conglomerate overlying mafic volcanic rocks, highly altered and sheared-hematite veining in volcanics	Kam	< 5	500	24	
6306	D.M.-2 4N+100S 3W+300E	Altered, hematite stained, de-silicified volcanics-sheared and veined	Nicola?	< 5	120	43	
6307	D.M.-2 4N+300S 3W+100E	Deeply weathered augite porphyry flows, breccia flows	Kam	< 5	90	9.5	
6308	D.M.-2 4N+300S 3W+200E	Deeply weathered siliceous ash unit	Kam	< 5	70	90	
6309	D.M.-2 4N+300S 3W+400E	Breccia zone-epidotized andesites grading to highly de-silicified zeolitized fault breccia along shears about 3-5 meters wide hematite stained	Nicola	< 5	440	44	

TABLE 1

- 7 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6310	D.M.-2 4N+300S 2W+00E	Breccia zone-same as 6309	Nicola	< 5	140	132	
6311	D.M.-2 4N+300S 2W+100E	Highly fractured and veined porphyritic volcanics	Kam?	< 5	400	12	
6312	D.M.-2 4N+300S 1W+100E	Silicified volcanics, some gossan stained zones	Nicola	< 5	2500	31	
6313	D.M.-2 3N+00S 2W+300E	Silicified breccia zone-volcanics	Nicola	< 5	10,000	94	
6314	D.M.-2 3N+00S 2W+300E	Hematite stained, silicified volcanic breccia-highly altered	Nicola	< 5	900	24	
6315	D.M.-2 3N+00S 2W+100E	Same as 6314	Nicola	< 5	320	180	
6316	D.M.-2 3N+00E 2W+00E	Same as 6314	Nicola	< 5	160	360	
6317	D.M.-2 3N+00S 3W+100E	Purple, vesicular basalt, thin green flows, some breccia flows	Kam	< 5	180	10	
6318	D.M.-2 3N+200S 3W+200E	Red stained, gossanous deeply weathered and highly altered volcanics	Kam	35	130	68	
6319	D.M.-2 3N+200S 2W+020E	Fault zone-breccia of highly altered volcanics-fumarolic activity-hematite stained, carbonatized veined throughout	Nicola	10	60	500	
6320	D.M.-2 3N+200S 2W+100E	Same as 6319	Nicola	5	440	200	
6321	D.M.-2 3N+400S 1W+100E	Altered, rusty siliceous volcanics	Nicola	5	130	310	
6322	D.M.-2 3N+400S 1W+00E	Fractured, veined, rusty banded chert	Nicola	< 5	10,000	200	
6323	D.M.-2 3N-400S 2W+400E	Conglomerate and flows breccia flows	Kam	10	800	70	
6324	D.M.-2 5N+400S 2W+300E	Breccia zone-hematite rich matrix-volcanics de-silicified	Nicola	10	740	130	
6325	D.M.-2 3N+400S 2W+200E	Talus-hematite matrix in brecciated andesite	Nicola	< 5	120	120	
6326	D.M.-2 3N+400S 3W+100E	Deeply weathered vesicular basalts	Kam	25	80	4.0	

TABLE 1

- 8 -

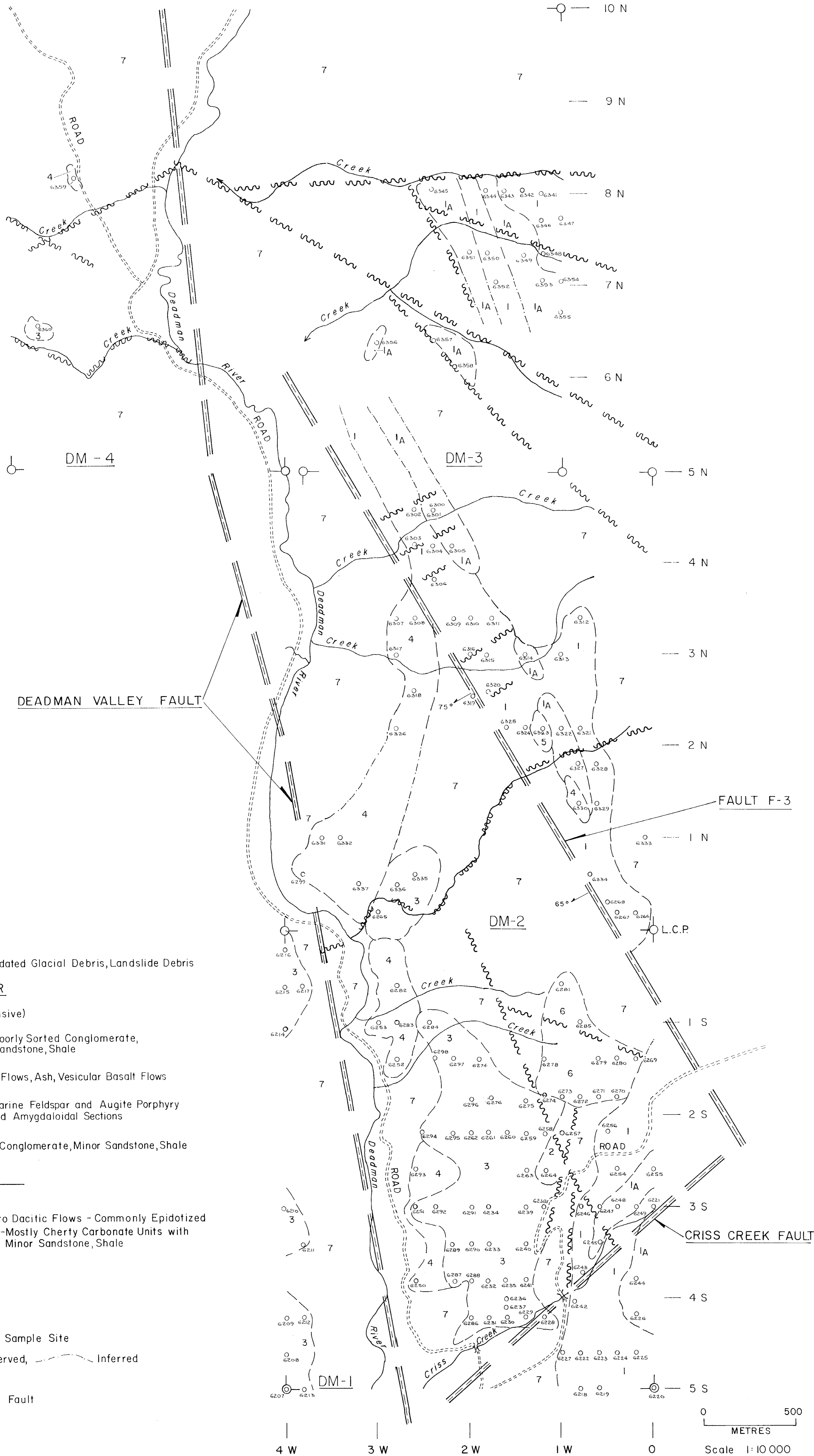
SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6327	D.M.-2 2N+100S 1W+100E	Finely brecciated hematite stained zones in volcanics	Nicola	10	740	150	
6328	D.M.-2 2N+100S 1W+200E	Sheared and jointed dacitic flows-hematite abundant	Nicola	< 5	9750	17	
6329	D.M.-2 2N+300S 1W+200E	Same as 6328	Nicola	5	120	36	
6330	D.M.-2 2N+300S 1W+100E	Amygdaloidal basalt-carbonate infilling -some rusty zones	Nicola	< 5	310	85	
6331	D.M.-2 1N+00S 4W+200E	Poorly consolidated conglomerate and vesicular basalt	Kam	10	20	1.0	
6332	D.M.-2 1N+00S 4W+300E	Same as 6331	Kam	< 5	40	2.0	
6333	D.M.-2 1N+00S 1W+500E	Amygdaloidal flows and pillowed basalt flows -zeolite infilling	Kam	10	30	1.0	
6334	D.M.-2 1N+200S 1W+150W	Silicified, hematitic volcanics-highly altered; carbonate veining	Nicola	5	50	115	
6335	D.M.-2 1N+200S 3W+200E	Siliceous quartz-feldspar porphyritic flows	Nicola	< 5	40	1.0	
6336	D.M.-2 1N+250S 3W+100E	Siliceous tuff	Kam	< 5	40	1.0	
6337	D.M.-2 1N+250S 4W+400E	Purple-red breccia flows	Kam	< 5	40	1.0	
6338							
6339	Samples taken north of D.M. - claims		- off map area				
6340							
6341	D.M.-3 3S+400N 3E+100W	Altered, silicified volcanics	Nicola	10	750	38	
6342	D.M.-3 3S+400N 3E+200W	Epidotized, fractured flows, some porphyritic (pyroxene)	Nicola	< 5	80	2.0	
6343	D.M.-3 3S+400N 3E+300W	Siliceous volcanic flows and tuffs	Nicola	< 5	60	39	
6344	D.M.-3 3S+400N 3E+400W	Altered and veined (carbonate) rusty volcanics-and unaltered equivalents	Nicola	5	2050	13	
6345	D.M.-3 3S+400N 3E+200W	Brecciated carbonate and argillite units -carbonate veining	Nicola	10	1050	115	

TABLE 1

- 9 -

SAMPLE NO.	COORDINATES AND CLAIM (METRIC)	SAMPLE DESCRIPTION	AGE	Au ppb	Hg ppb	As ppm	REMARKS
6346	D.M.-3 3S+200N 3E+100W	Breccia zone-silicified carbonate and volcanic rocks	Nicola	10	1050	13	
6347	D.M.-3 3S+200N 3E+00W	Brecciated, pyritic volcanics	Nicola	< 5	80	7.0	
6348	D.M.-3 3S+00N 3E+130W	Epidotized and silicified mottled volcanics-pyritic	Nicola	5	60	13	
6349	D.M.-3 3S+00N 3E+230W	Silicified, brecciated carbonate unit-pyritic old pits	Nicola	5	800	36	
6350	D.M.-3 3S+00N 3E+400N	Epidotized and silicified volcanics-sulphide blebs	Nicola	10	170	4.0	
6351	D.M.-3 3S+00N 2E+00W	Sedimentary unit-siltstone-carbonate, brecciated zones	Nicola	5	800	20	
6352	D.M.-3 4S+300N 3E+340W	Epidotized and silicified greenstones-sulphide blebs	Nicola	5	90	17	
6353	D.M.-3 4S+300N 3E+100W	Carbonate-chert unit in siliceous volcanics abundant pyrite	Nicola	< 5	70	23	
6354	D.M.-3 4S+300N 3E+00W	Quartzo-feldspathic sandstone unit in carbonate-chert unit of 6353-abundant pyrite	Nicola	60	150	85	
6355	D.M.-3 4S+100N 3E+00W	Rusty weathering carbonate and sandy sediments	Nicola	5	3800	6.0	
6356	D.M.-3 5S+400N 1E+00W	Brecciated argillaceous sediments-minor sulphides	Nicola	5	100	31	
6357	D.M.-3 5S+400N 2E+200W	Mineralized cherty sediments-talus	Nicola	10	1550	31	
6358	D.M.-3 5S+200N 2E+100W	Same as 6357	Nicola	5	470	250	
6359	D.M.-4 2S+100N 3W+250E	Deeply weathered vesicular flows and ash	Kam	5	60	1.0	
6360	D.M.-4 4S+300N 3W+200E	Acid vesicular and amygdaloidal volcanics	Kam	5	40	1.0	

3 W 2 W 1 W 0 L.C.P. 1 E 2 E 3 E



**LEGEND**

**LITHOLOGY**

7 RECENT - Unconsolidated Glacial Debris, Landslide Debris

**TERTIARY or LATER**

6 Breccia Pipe (intrusive)

5 Tranquille Beds - Poorly Sorted Conglomerate, Sandstone, Shale

4 Breccia Flows, Tuff Flows, Ash, Vesicular Basalt Flows

3 Subaerial to Submarine Feldspar and Augite Porphyry Flows - Vesicular and Amygdaloidal Sections

2 Basal Sediments - Conglomerate, Minor Sandstone, Shale

**TRIASSIC**

1 IA NICOLA GROUP -

I - Andesitic to Dacitic Flows - Commonly Epidotized

IA - Sediments - Mostly Cherty Carbonate Units with Minor Sandstone, Shale

**STRUCTURE**

- Geochemical Sample Site
- Contact Observed, --- Inferred
- ~ Block Fault
- == Transcurrent Fault

MINERAL RESOURCES BRANCH  
EXPLORATION REPORT  
**8191**

**SELCO MINING CORPORATION**  
(EXPLORATION DIVISION) LIMITED

THE D.M. CLAIM GROUP  
KAMLOOPS M.D.  
GEOLOGY  
BRITISH COLUMBIA

DRAWN BY J.I. DATE OCT. NOV. 1972 PLAN NO. SM. 2849  
TRACED BY M.S. DATE JAN. 1980

LEGEND

RECENT

- 7 Unconsolidated glacial material, landslide debris

TERTIARY or LATER

- Intrusive
- 6 Breccia Pipe
- Kamloops Group
- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
  - 4 Breccia flows, tuff and ash flows, vesicular basalt flows
  - 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloidal phases
  - 2 Basal Sediments - conglomerate, minor sandstone and shale

TRIASSIC

- Nicola Group
- 1 Andesitic to dacitic flows - some sections fractured, commonly epidotized
  - 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

SYMBOLOLOGY

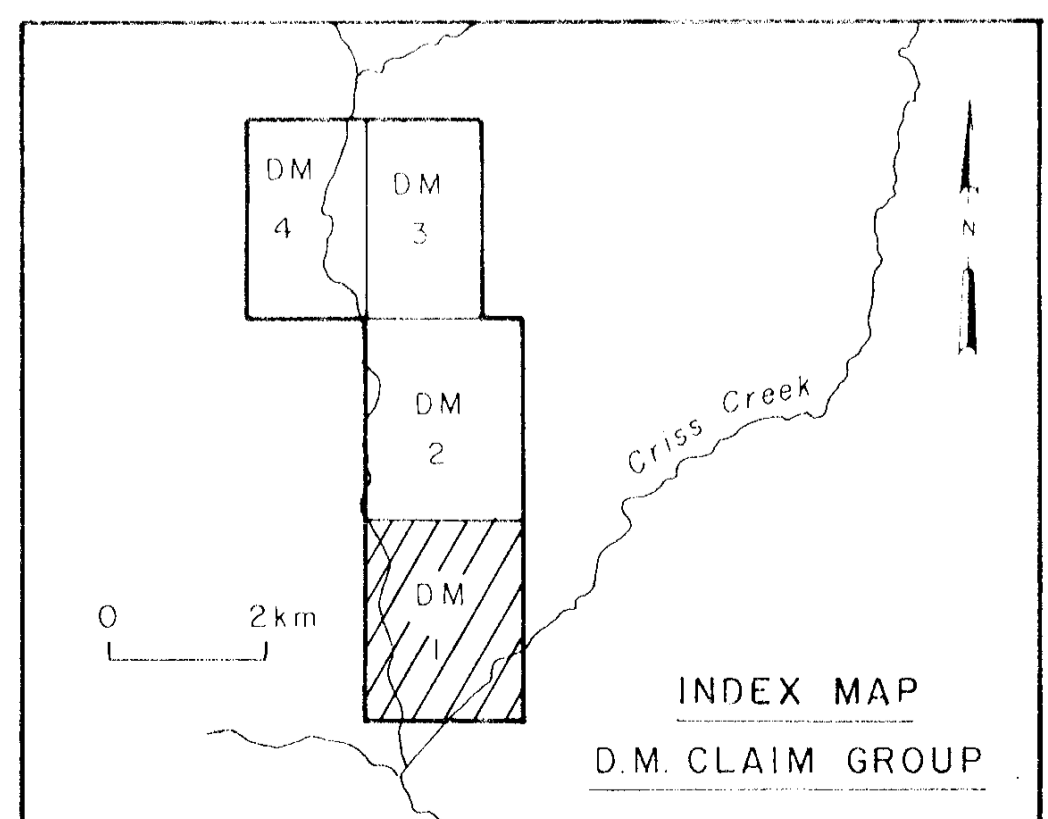
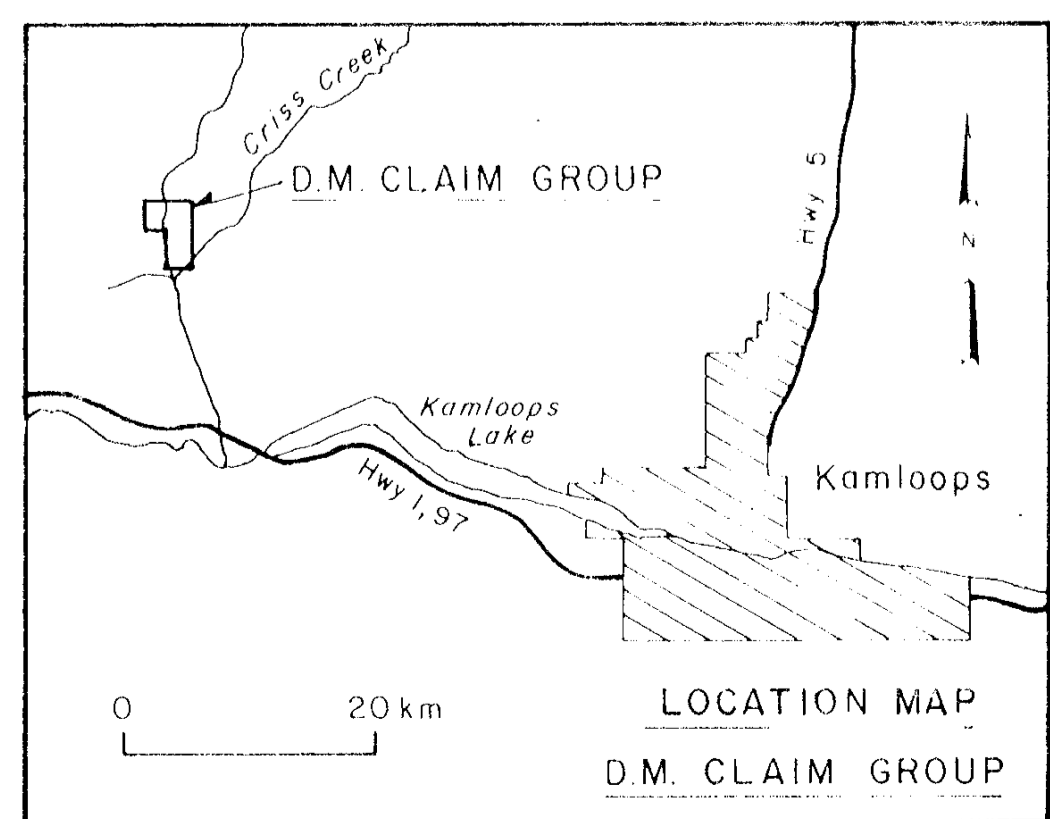
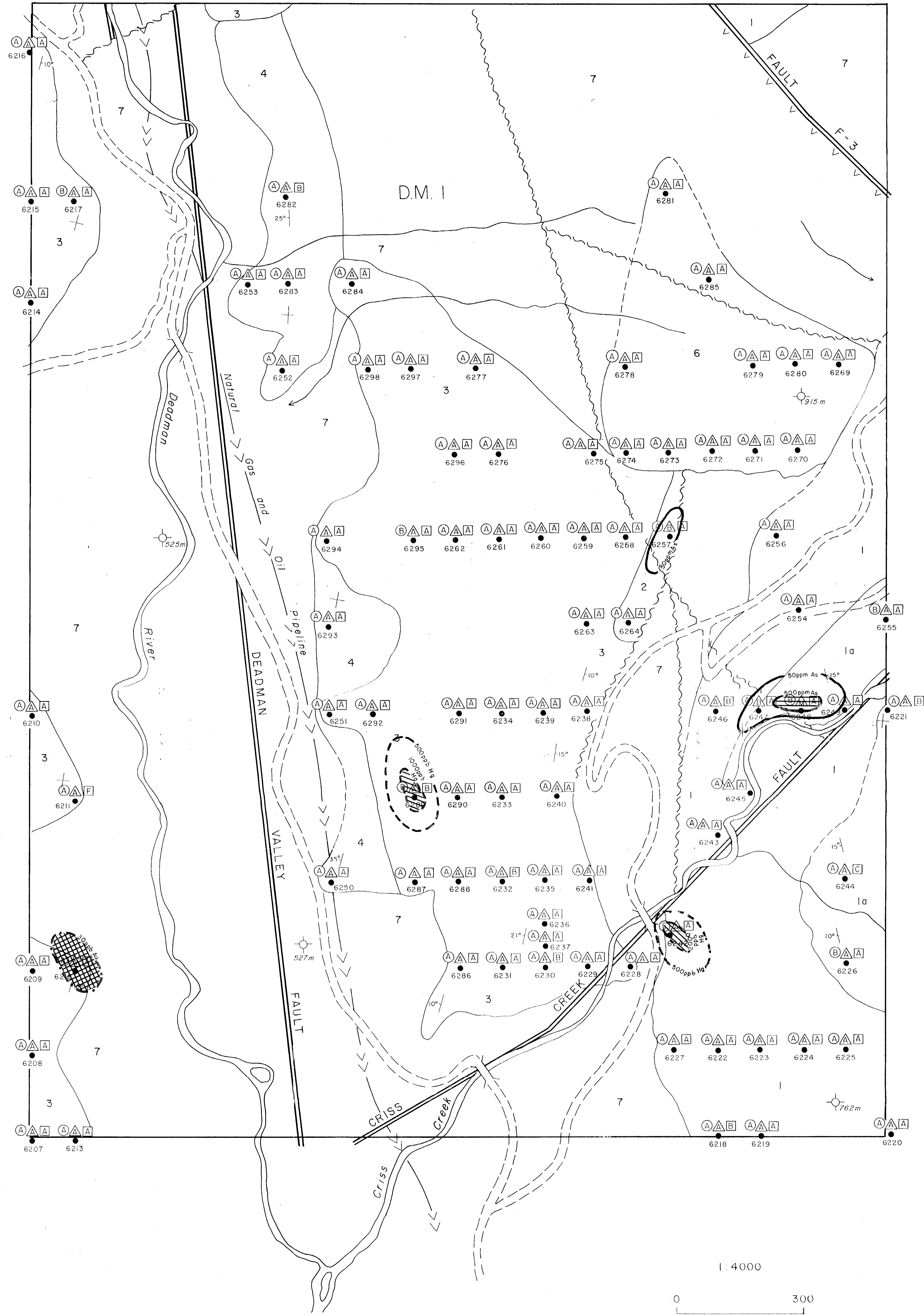
- Bedding; inclined, horizontal, vertical
- Geological contact; observed, inferred
- Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- Elevation markers

GEOCHEMICAL LEGEND

- Geochemical values
- Sample location
- 6234 Sample number
- Hg ppb - contour interval A=0 to 100; B=101 to 500; C=501 to 1000, and every 1000 to P which is >10,000
- As ppm - contour interval every 50 from A to L and M which is >500
- Au ppb - contour interval every 5 from A to N

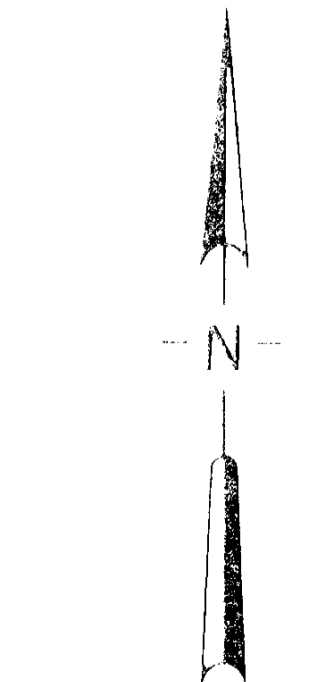
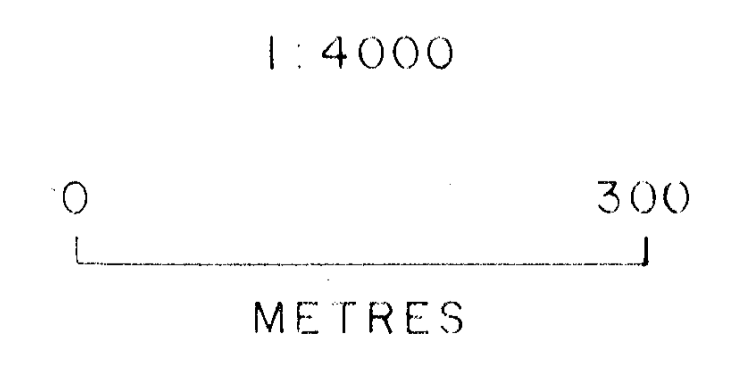
ANOMALIES

- Hg - 500ppb threshold contour
- Hg - Highly anomalous zone
- As - 50 ppm threshold contour
- As - Highly anomalous zone
- Au - 20ppb threshold contour
- Au - Highly anomalous zone



MINERAL RESOURCES DIVISION  
**8191**

**SELCO MINING CORPORATION**  
 LIMITED  
 D.M. CLAIM GROUP - BRITISH COLUMBIA  
 KAMLOOPS MINING DIVISION NTS 921 NE  
 GEOLOGY AND GEOCHEMISTRY - CLAIM I





LEGEND

RECENT

- 7 Unconsolidated glacial material, landslide debris

TERTIARY or LATER

Intrusive

- 6 Breccia Pipe

Kamloops Group

- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

TRIASSIC

Nicola Group

- 1 Andesitic to dacitic flows - some sections fractured, commonly epidotized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

SYMBOLOLOGY

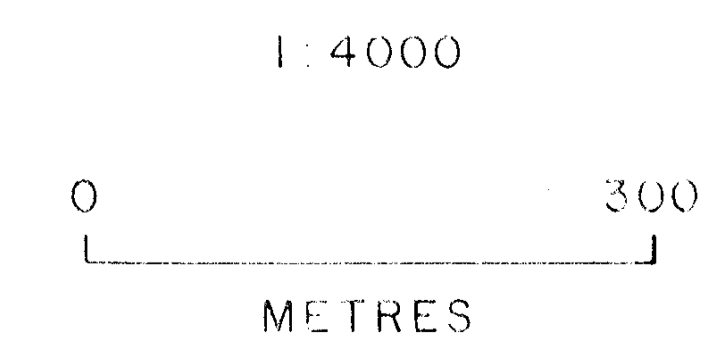
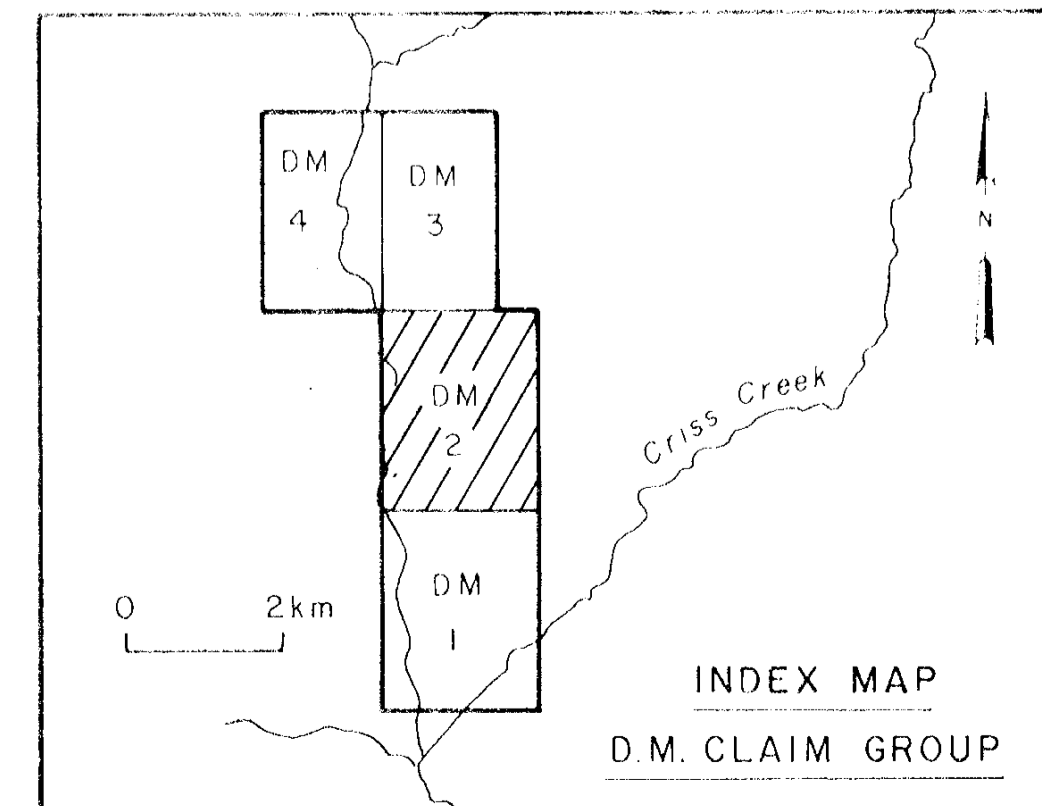
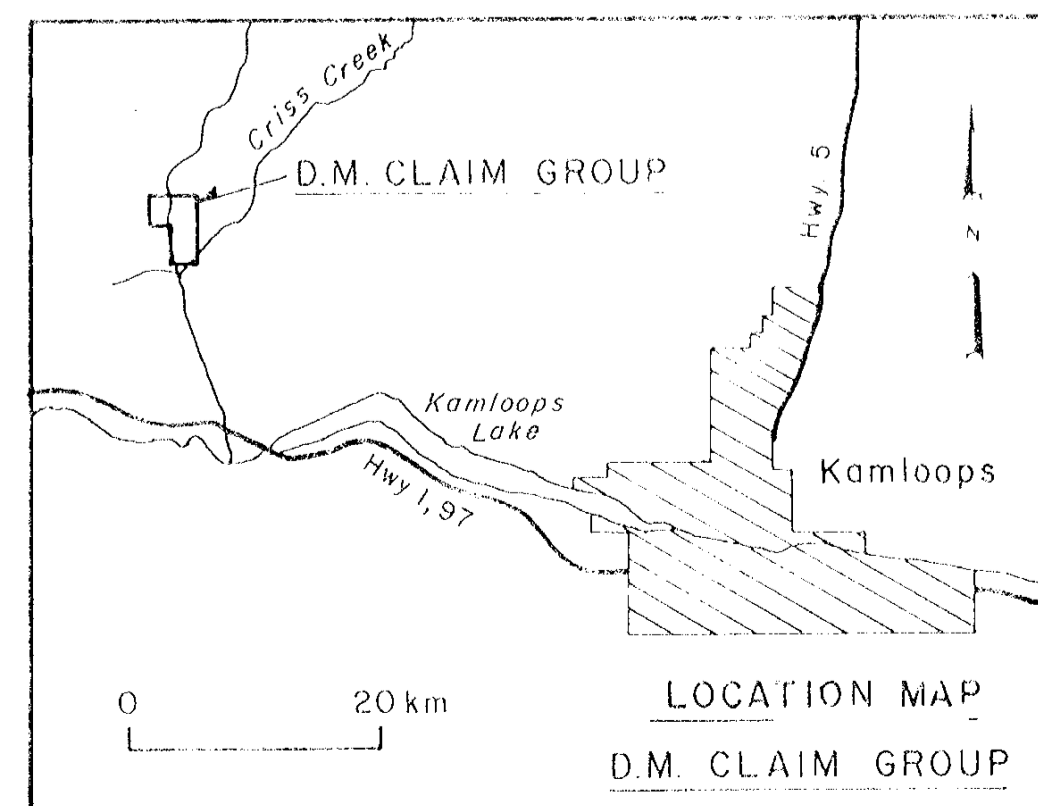
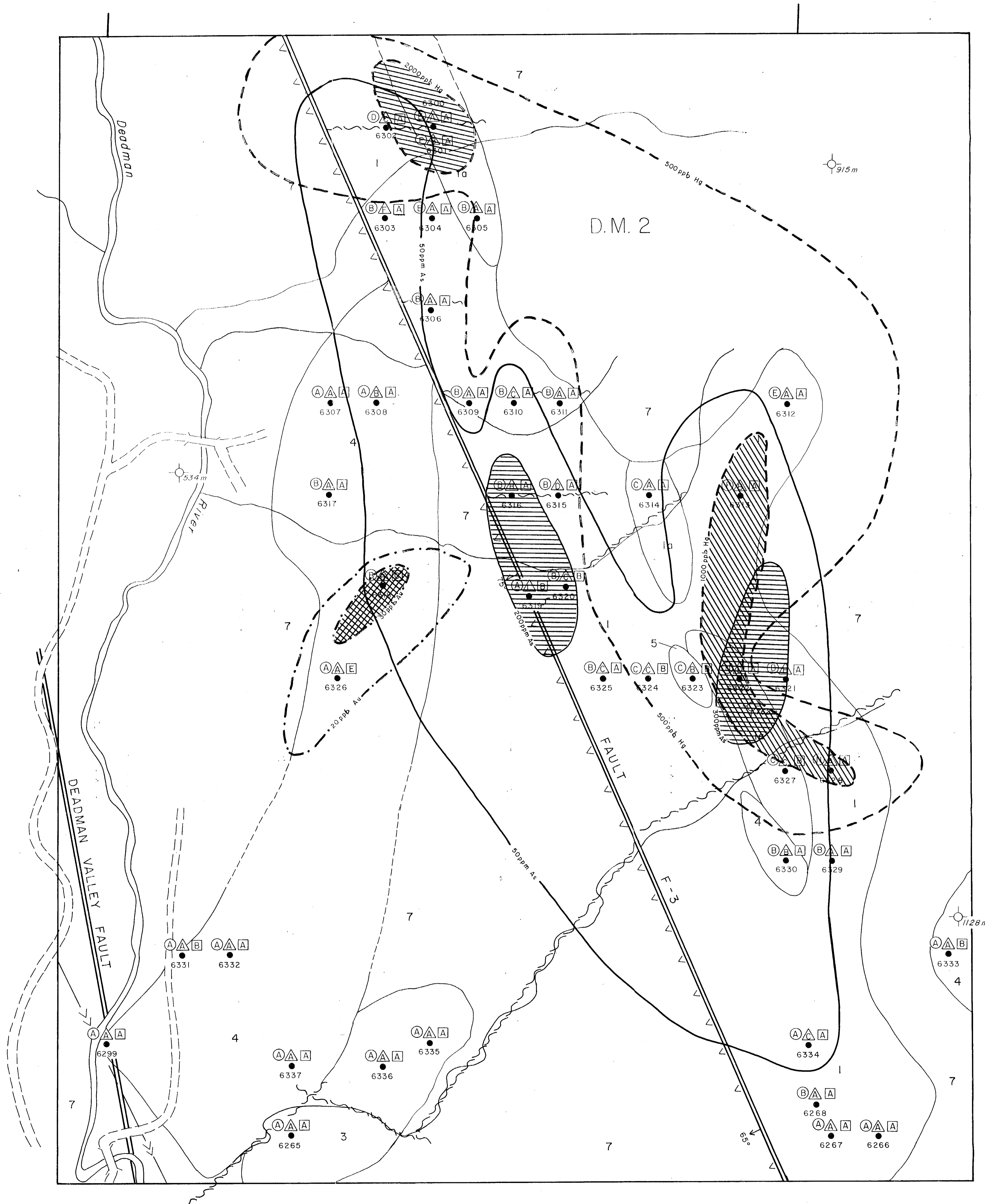
- Bedding; inclined, horizontal, vertical
- Geological contact; observed, inferred
- Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
- Elevation markers

GEOCHEMICAL LEGEND

- Geochemical values
- Sample location
- Sample number
- Hg ppb - contour interval A - 0 to 100, B - 101 to 500, C - 501 to 1000, and every 1000 to P which is > 10,000
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ANOMALIES

- Hg - 500 ppb threshold contour
- Hg - Highly anomalous zone
- As - 50 ppm threshold contour
- As - Highly anomalous zone
- Au - 20 ppb threshold contour
- Au - Highly anomalous zone



MINERAL RESOURCES BRANCH  
REGULATORY REPORT  
**8191**

**SELCO MINING CORPORATION**  
EXPLORATION DIVISION LIMITED  
D.M. CLAIM GROUP - BRITISH COLUMBIA  
KAMLOOPS MINING DIVISION NTS 921 NE  
GEOLOGY AND GEOCHEMISTRY - CLAIM 2

LEGEND

RECENT

- 7 Unconsolidated glacial material, landslide debris

TERTIARY or LATER

Intrusive

- 6 Breccia Pipe

Kamloops Group

- 5 Tranquille Beds - poorly assorted conglomerate, sandstone and shale
- 4 Breccia flows, tuff and ash flows, vesicular basalt flows
- 3 Subaerial to submarine feldspar and augite porphyry flows - vesicular and amygdaloidal phases
- 2 Basal Sediments - conglomerate, minor sandstone and shale

TRIASSIC

Nicola Group

- 1 Andesitic to dacitic flows - some sections fractured, commonly epidotized
- 1a Sediments - mostly cherty carbonate units with minor feldspathic sandstone and shale, often pyritic

SYMBOLOLOGY

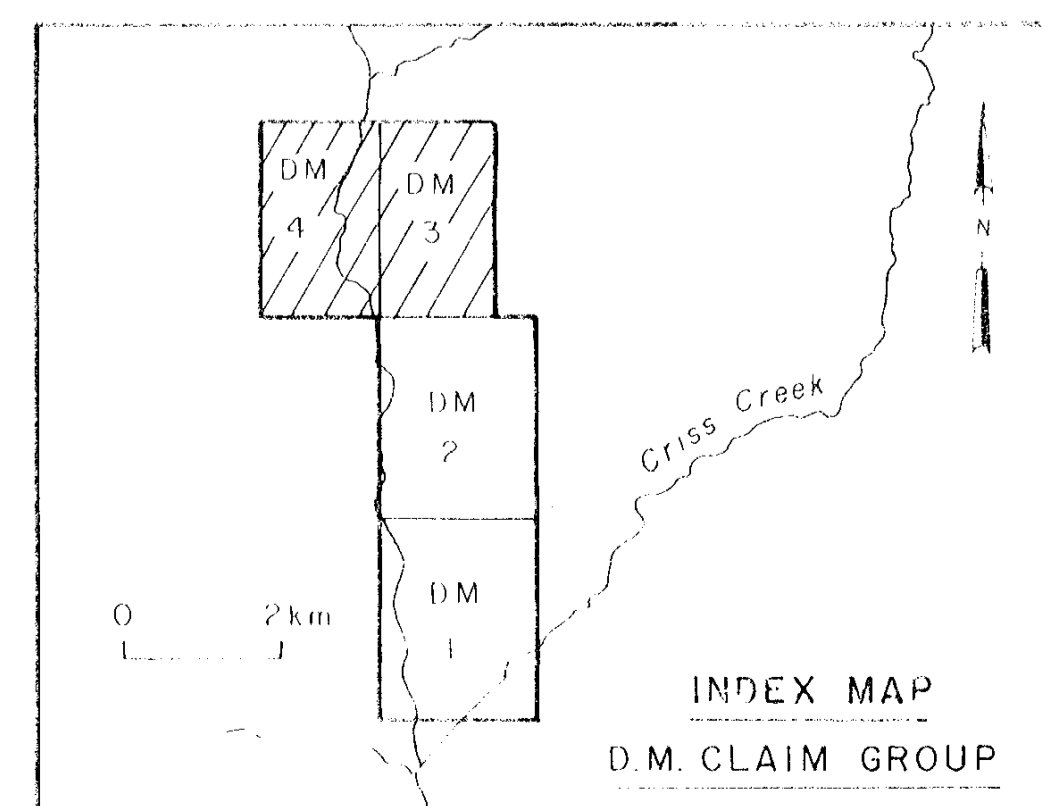
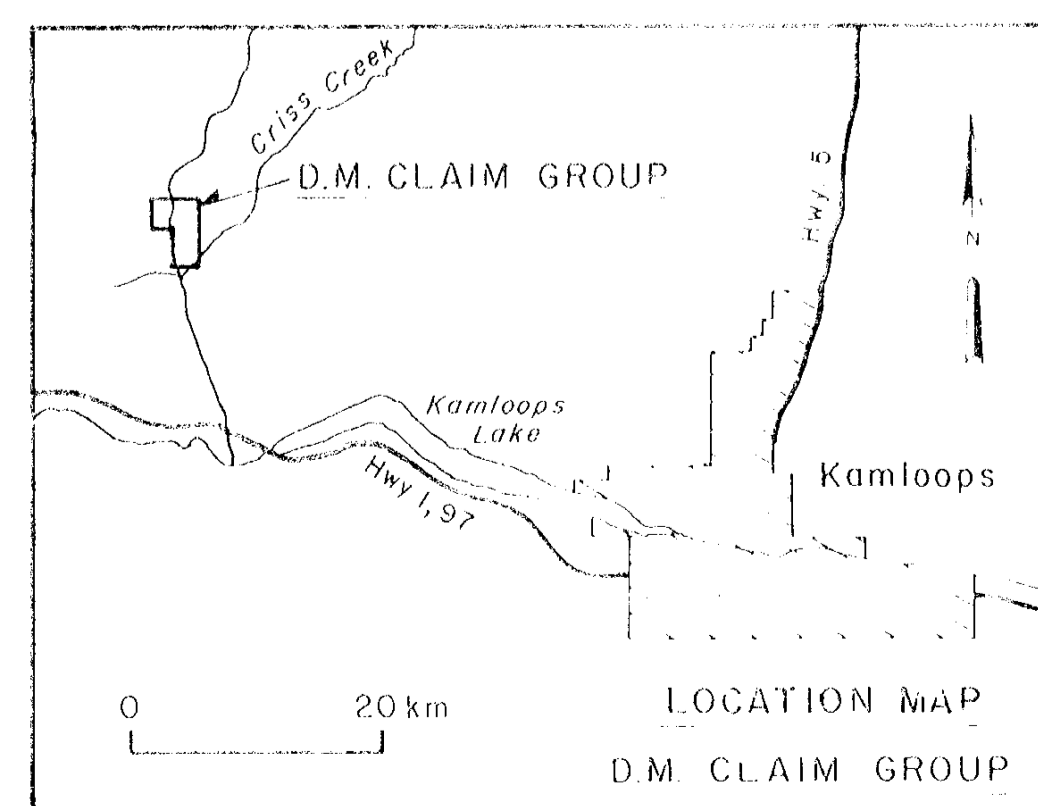
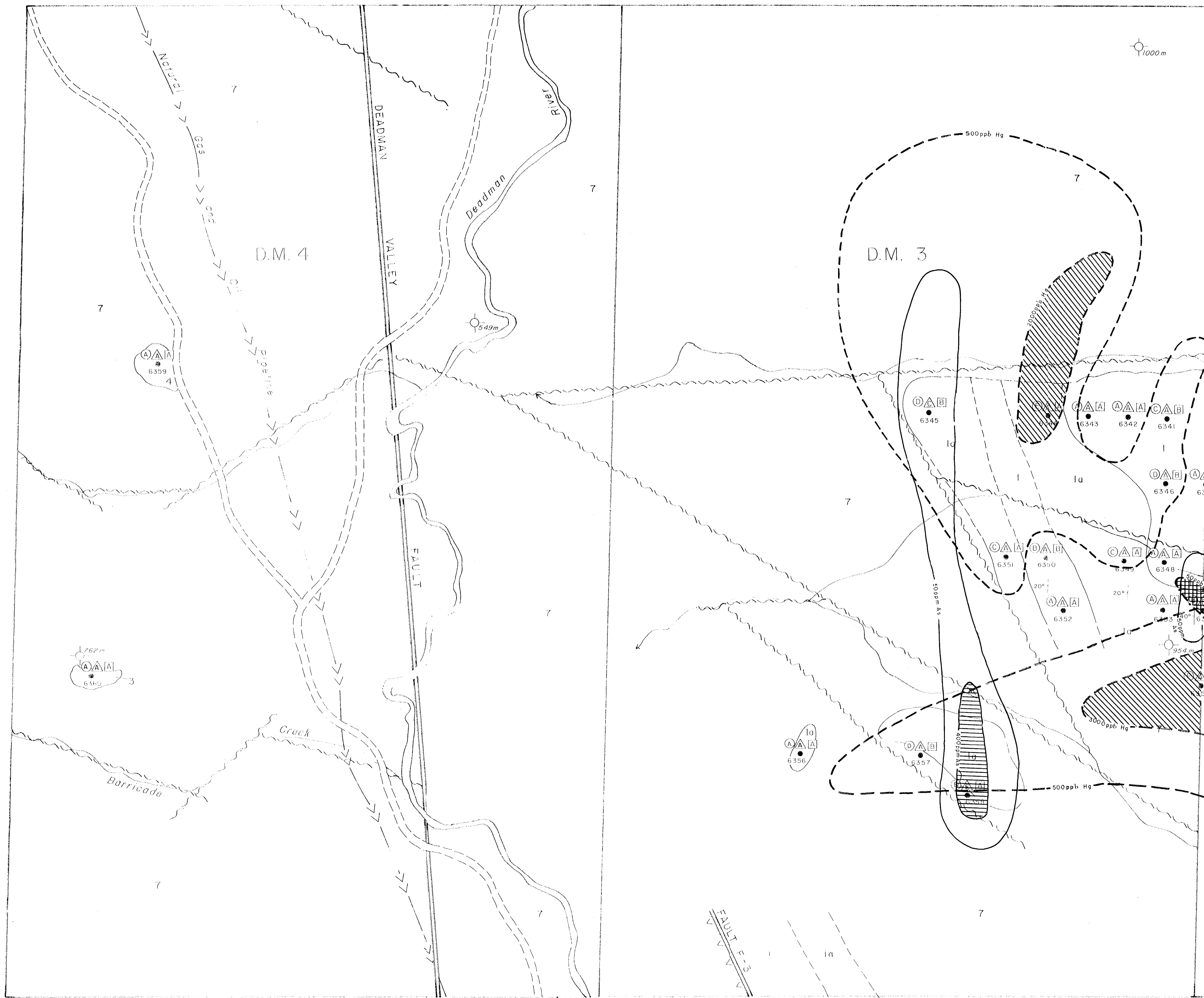
- Bedding; inclined, horizontal, vertical
- Geological contact; observed, inferred
- Major tensional faults
- Major block fault, indicating dip of fault and downthrown side of fault
- Secondary faults, mostly shear
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GEOCHEMICAL LEGEND

- Geochemical values
- Sample location
- Sample number
- Hg ppb - contour interval A=0 to 100, B=101 to 500, C=501 to 1000, and every 1000 to P which is >10,000
- As ppm - contour interval every 50 from A to L and M which is >500
- Au ppb - contour interval every 5 from A to H

ANOMALIES

- Hg - 500 ppb threshold contour
- Hg - Highly anomalous zone
- As - 50 ppm threshold contour
- As - Highly anomalous zone
- Au - 20 ppb threshold contour
- Au - Highly anomalous zone



MINERAL RESOURCES BRANCH  
ASSESSMENT REPORT  
**8191**

**SELCO MINING CORPORATION**  
LIMITED  
D.M. CLAIM GROUP - BRITISH COLUMBIA  
KAMLOOPS MINING DIVISION NTS 921 NE  
GEOLOGY AND GEOCHEMISTRY - CLAIMS 3 & 4

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METRES