

ARIS SUMMARY SHEET

District Geologist, Smithers

Off Confidential: 90.02.24

ASSESSMENT REPORT 18465

MINING DIVISION: Liard

PROPERTY: Fred
LOCATION: LAT 57 35 00 LONG 127 30 00
UTM 09 6383102 589690
NTS 094E11W 094E12E

CAMP: 051 Toodoggone Camp

CLAIM(S): Adoog 8-10, Fred 1-5, Stik 1-10, Jim, Mike, Doog
OPERATOR(S): Prolific Res.
AUTHOR(S): Aussant, C.H.; Davis, J.W.
REPORT YEAR: 1989, 140 Pages

COMMODITIES

SEARCHED FOR: Copper, Gold, Silver

KEYWORDS: Triassic, Takla Group, Andesite, Quartz veins, Chalcopyrite, Chalcocite
Bornite, Jurassic, Toodoggone Volcanics

WORK

DONE: Geological, Geochemical, Physical
GEOL 8650.0 ha
Map(s) - 4; Scale(s) - 1:10 000
LINE 10.8 km
ROCK 355 sample(s) ;ME
SOIL 722 sample(s) ;ME
TREN 19.0 m 1 trench(es)

RELATED

REPORTS: 15618
MINFILE: 094E 043,094E 054,094E 090,094E

Toodoggone Properties

LOG NO	0301
FILE NO	

GEOLOGICAL, GEOCHEMICAL, AND PROSPECTING REPORT
 on the
 'TOODOGGONE' PROPERTIES
 NTS 94-E/5E,11W,12E
 Liard Mining Division
 Latitude 57°35' North
 Longitude 127°30' West
 British Columbia

FILMED

FILM

November 22, 1988

on behalf of
PROLIFIC RESOURCES LTD.
 Vancouver, British Columbia

**SUB-RECORDER
 RECEIVED**
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 VANCOUVER, B.C.

by
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GEOLOGICAL BRANCH
ASSESSMENT REPORT

18,465

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INTRODUCTION

Taiga Consultants Ltd. was contracted by Prolific Resources Ltd. of Vancouver, British Columbia, to complete a field exploration program on claims located in the Toodoggone gold camp of north-central British Columbia. The objective of this program was to locate and evaluate the gold potential of epithermal quartz-breccia systems on these claims.

Exploration consisted of prospecting, geological mapping, hand trenching, and geochemical sampling. Geochemical sampling consisted of grid-controlled soil sampling, reconnaissance soil sampling, and litho-geochemical sampling.

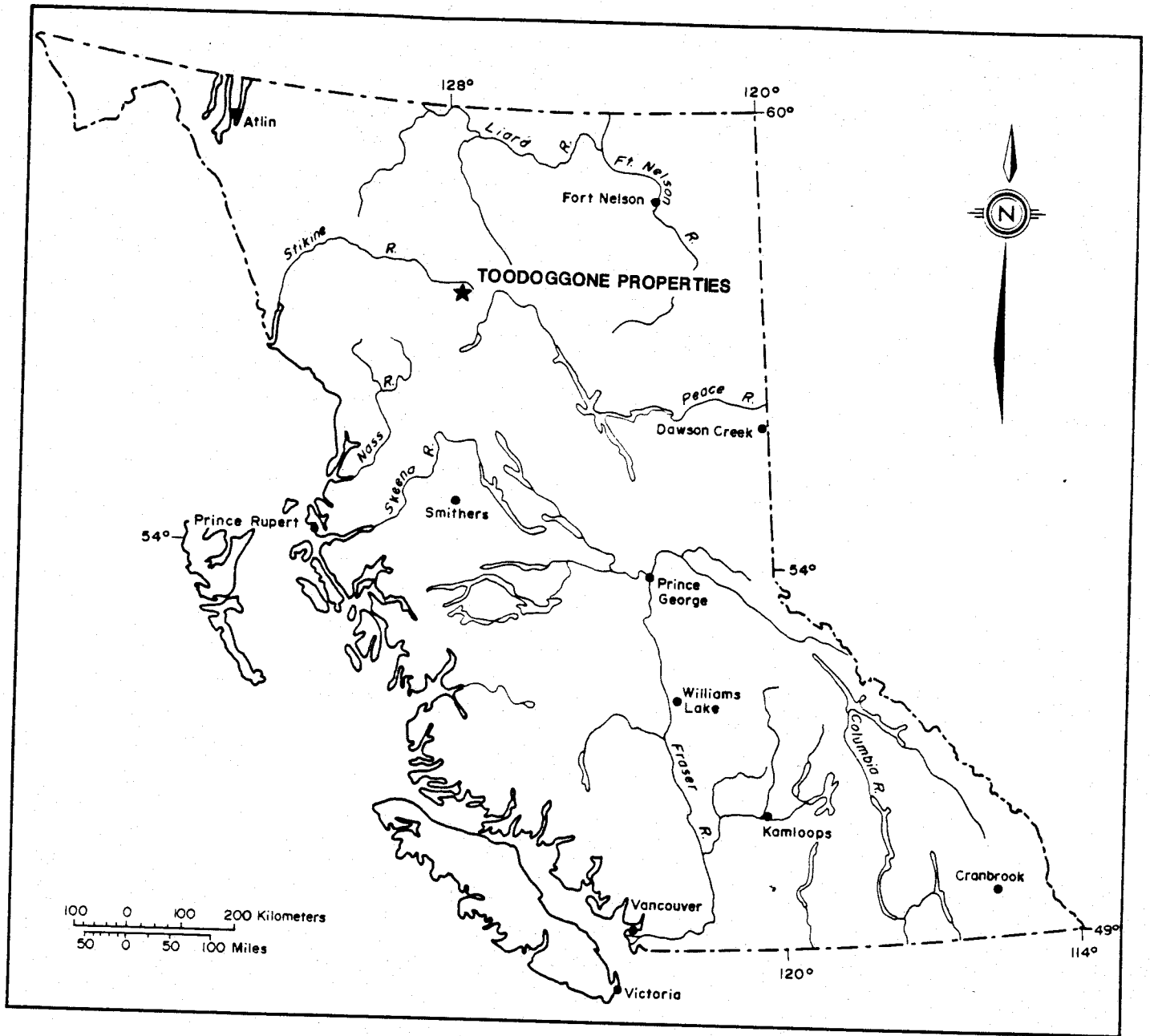
Location and Access

The 'Toodoggone' properties (Figure 1) are located approximately 300 km north of Smithers within NTS map-areas 94-E/5E, 11W, and 12E. The approximate geographic coordinates for the centre of the properties are 57°35' North latitude and 127°30' West longitude. The properties are bounded by latitude 57°30' to 57°40' North and 127°36'30" to 127°23'15" West.

Access to the properties from Smithers is via fixed-wing aircraft to the Sturdee Airstrip 300 km to the north, and then by helicopter for a distance of 42 to 60 km north-northwest. With the completion of the Omar Road Extension, which connects the Omineca Resource Road to the Cheni Mine Site, road access is now available to within 27 km at the closest point.

Property Status and Ownership

The 'Toodoggone' properties consist of one contiguous block of 18 claims and three isolated claims, within the Liard Mining Division. These claims are currently registered in the name of either Prolific Resources Ltd. or Delaware Resources Corp. Prolific Resources is the operator of the properties, having optioned Delaware's properties from them. The exact location and configuration



PROPERTY LOCATION MAP
BRITISH COLUMBIA

FIGURE 1

of the properties are illustrated in Figure 2. Relevant claim data are listed in Table 1.

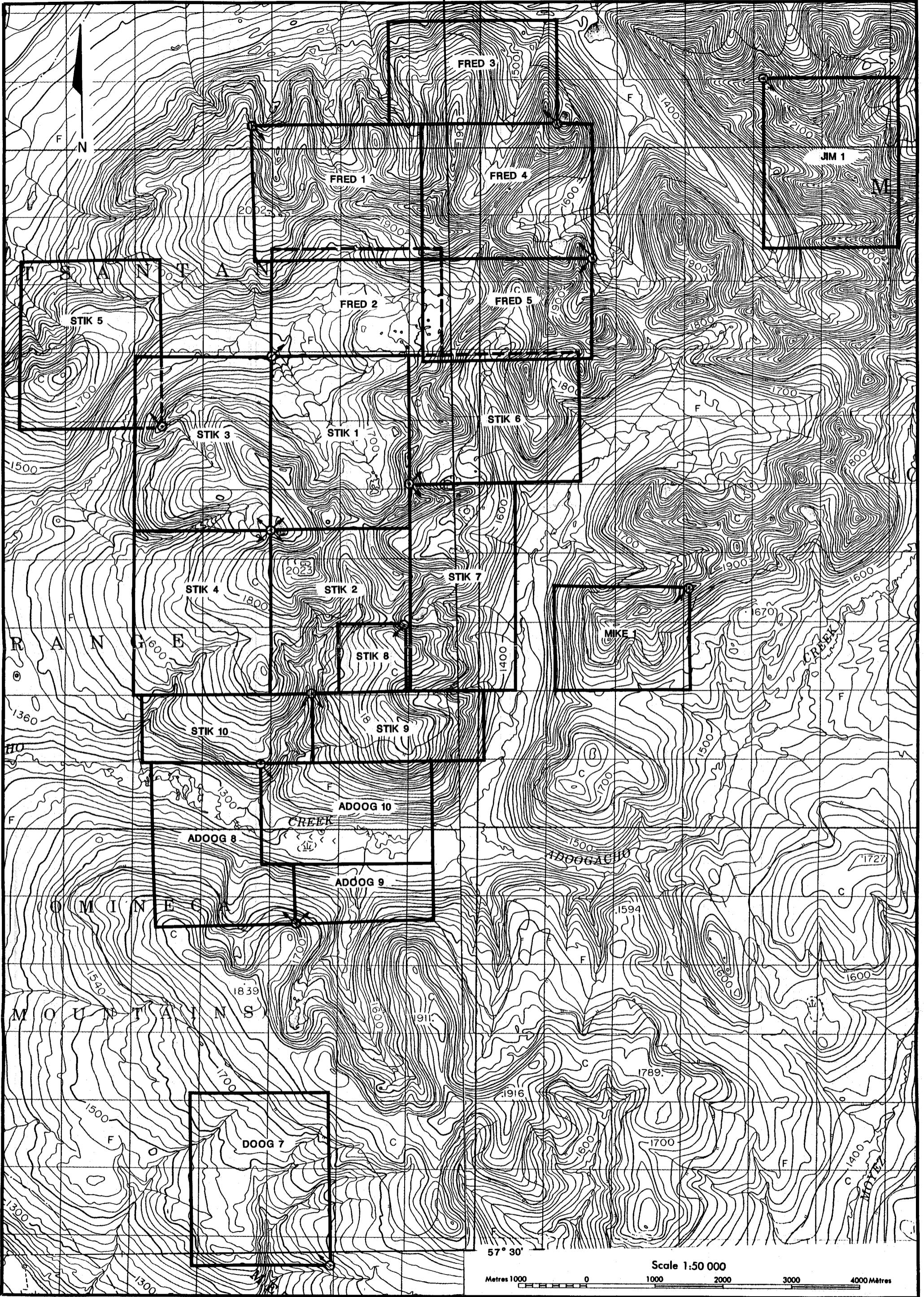
TABLE 1 - Claims Data

<u>Claim Name</u>	<u>Record Number</u>	<u>No. of Units</u>	<u>Size hectares</u>	<u>Record Date</u>	<u>Anniversary Date</u>	<u>Recorded Owner</u>
Adoog 8	3539	20	500	1985	May 02 1989	Delaware Resources
Adoog 9	3538	10	250	1985	May 02 1989	Delaware Resources
Adoog 10	4615	15	375	1987	May 17 1989	Delaware Resources
Fred 1	3537	20	500	1985	May 02 1989	Prolific Resources
Fred 2	4621	15	375	1987	May 17 1989	Prolific Resources
Fred 3	4622	15	375	1987	May 17 1989	Prolific Resources
Fred 4	4623	20	500	1987	May 17 1989	Prolific Resources
Fred 5	4624	15	375	1987	May 17 1989	Prolific Resources
Stik 1	3400	20	500	1985	May 04 1989	Delaware Resources
Stik 2	3401	20	500	1985	May 04 1989	Delaware Resources
Stik 3	3402	20	500	1985	May 04 1989	Delaware Resources
Stik 4	3403	20	500	1985	May 04 1989	Delaware Resources
Stik 5	3536	20	500	1985	May 02 1989	Prolific Resources
Stik 6	4616	20	500	1987	May 17 1989	Delaware Resources
Stik 7	4617	18	450	1987	May 17 1989	Delaware Resources
Stik 8	4618	4	100	1987	May 17 1989	Prolific Resources
Stik 9	4619	12	300	1987	May 17 1989	Delaware Resources
Stik 10	4620	10	250	1987	May 17 1989	Delaware Resources
Jim 1	4611	20	500	1987	May 17 1989	Prolific Resources
Mike 1	4612	12	300	1987	May 17 1989	Prolific Resources
Doog 7	4613	20	500	1987	May 17 1989	Delaware Resources
		<u>346</u>	<u>8,650</u>	(21,373.9 acres)		

Physiography

The claims lie within the Cassiar Mountains physiographic subdivision of the Interior Plateau. The region is entirely glaciated and is characterized by wide U-shaped drift-filled major valleys and deeply incised V-shaped interior upland valleys. Mountain peaks in the area average 1,980 m ASL, rising fairly abruptly from the major valleys. The topography of the areas underlain by Toodoggone volcanic rocks is usually more subdued than in those areas underlain by Takla Group volcanic rocks.

127° 30'



57° 30'

Scale 1:50 000

Metres 1000 0 1000 2000 3000 4000 Metres

127° 30'

CLAIM LOCATION MAP

FIGURE 2

Elevations range from 1300 m in the valley of Adoogacho Creek to 2240 m on the JIM 1 claim, giving the area a maximum relief of 940 m.

Vegetation varies from mixed woodlands consisting of spruce and poplar in the valley bottoms to alpine meadows generally located above 1600 m. The highest elevations within the claims area have permanent snow cover.

Bedrock is moderately well exposed within the area. In the valleys, bedrock for the most part is mantled by glacial and glaciofluvial deposits with occasional scattered exposures. However, in the uplands (especially above treeline), bedrock exposures and felsenmeer are abundant, allowing effective prospecting and geological mapping to be conducted.

REGIONAL HISTORY OF EXPLORATION

The Toodoggone region was initially explored for porphyry copper deposits during the period 1966-1968, most notably by Kennco Exploration (Western) Limited. While Kennco did not locate any significant base metals mineralization, their stream sediment geochemical results did indicate anomalous gold and silver concentrations. In 1969, ore-grade gold and silver values in an exposed quartz vein were discovered by Kennco on what is now the Baker Mine site. In 1973, Kennco entered into an agreement with Conwest Exploration Ltd. to carry out further exploration in the region and to instigate underground testing of the Baker deposit. The results were only marginally encouraging and the agreement lapsed that year.

In 1987, DuPont of Canada Exploration Limited optioned the Chappelle property and subsequently brought the Baker deposit into production. This mine produced some 70,000 tons of gold and silver ore with an equivalent tenor of 0.9 ounces of gold per ton while it was operating.

In 1979, the Lawyers property was optioned by SEREM Ltd., owned by the French government. The property is currently being brought into production by Cheni Mines Inc., a successor company of SEREM. Ore reserves in all categories are estimated at 1,938,000 tons grading 0.198 oz/ton gold and 7.09 oz/ton silver. A throughput of 550 tons per day is projected by February 1989.

Commencing in 1980 until the present, over 60 different companies have been involved in gold exploration in the Toodoggone camp. Significant reserves have been developed by Energex Minerals Ltd. on various zones on Albert's Hump, on the Shasta property, and on the Mets property to date. Thus, the Toodoggone district is rapidly developing into an important new gold camp in the province of British Columbia.

PROPERTY HISTORY OF EXPLORATION

The earliest documented exploration within the property area was conducted in 1973 by Sumac Mines Ltd. This exploration led to the discovery of the 'Fred' showing as a result of follow-up work on anomalous copper/silver values in a regional stream sediment geochemical program conducted a year earlier. The Fred 1 to 8 claims were acquired, and geological mapping and systematic soil sampling were completed as part of the 1973 exploration program.

The 'Fred' showing consists of thin quartz-carbonate veins, accompanied by argillic alteration of the andesitic Takla volcanics, containing chalcopryrite, malachite, galena, and sphalerite, which yielded assays of up to 0.33 oz/ton Au and 1.44 oz/ton Ag over narrow widths. The veins and adjacent propylitic alteration have a total width of 1.2 m, strike approximately east-west, and appear to be of extremely limited strike length.

The most recent geological map of the area (Diakow, et al., 1985) erroneously places the 'Fred' showing within the Fred 1 claim. The correct location of this occurrence is within the Fred 4 claim and is shown on Figure 3.

In 1974, Union Mineral Explorations and Mining Corporation Limited completed an exploration program on the Jimo 1 to 16 claims (present Jim 1 claim). The exploration consisted of surface geological mapping and reconnaissance geochemical soil surveying. They located the 'Jimo' occurrence which consists of chalcocite and malachite occurring in fractures, in or near the basal part of a porphyritic andesite unit, near its contact with volcaniclastic rocks.

Prospecting by Newmont Exploration of Canada Ltd. in 1982 on the Dar claims (present Stik 8 claim) resulted in the discovery of four relatively narrow quartz veins striking N58°E in ash flow tuffs of the Adoogacho Creek Formation of the Toodoggone Volcanics ('Dar' showing). The quartz veins are less than 2 m wide and have a strike length in the order of 20 m. Mineralization consists of chalcopryrite, galena, and sphalerite. Sampling of the occurrence yielded values of up to 670 ppb Au and 5.7 ppm Ag. In 1985, Newmont completed a reconnaissance geochemical soil survey across the property. As

with the 'Fred' showing, the 'Dar' showing is also erroneously located on the Diakow's geological map of the area. Figure 3 depicts the correct location of this showing.

In 1985, Delaware Resources Corp. completed a helicopter-supported reconnaissance geological mapping, prospecting, rock sampling, and stream silt sampling program on the Stik 1 to 4 mineral claims. A zone of quartz-barite float was discovered along a ridge directly east of the Stik 1 claim (on the present Stik 6 mineral claim), with one rock sample yielding a value of 0.257 oz/ton Au. On the Stik 2 claim, a 1.5 to 2.3 m wide quartz vein was discovered, and a silicified fracture zone was delineated on the Stik 3 claim. In 1986, an airborne magnetometer survey was flown over the Stik 2 and 4 claims, and in 1987, a brief reconnaissance prospecting program was carried out but adverse weather conditions curtailed this exploration.

In 1986, the Toodoggone Syndicate completed a prospecting and reconnaissance soil geochemical survey on their Gacho 1 mineral claim. This area is now covered by the Adoog 10 and Stik 9 claims. Several multi-element anomalies were found by soil and rock sampling.

In 1986, Delaware Resources Corp. completed a reconnaissance stream silt sampling program on the Adoog 7 (present Doog 7 claim), and the Adoog 8 and 9 claims (present Adoog 8, 9, and 10 claims). Prolific Resources completed a reconnaissance stream silt sampling program on the Stik 5 and Fred 1 claim in the same year. A brief reconnaissance geological mapping and prospecting program was carried out on these claims in 1987. Sediments from the Stik 5 claim returned two significant values of 35 and 320 ppb Au; the Fred 1 claim contained four silt samples with significant values ranging from 35 to 85 ppb Au. The 1987 prospecting program on the Fred 1 claim uncovered a quartz vein system approximately 5 m wide, traced for 20 m, which returned anomalous Au and Ag values (up to 0.22 oz/ton Au and 35.4 oz/ton Ag).

Significant results from the previous exploration programs completed on the properties is depicted on the accompanying Exploration Coverage Maps.

REGIONAL GEOLOGY

The initial geological mapping of the Toodoggone area was completed during the period 1971-1975 by H. Gabrielse of the Geological Survey of Canada. The results of this undertaking were published in 1977 at a map scale of 1:250,000 as G.S.C. Open File 483.

The British Columbia Ministry of Energy Mines and Petroleum Resources undertook geological mapping within the area from 1971 to 1984 under the direction of T. G. Schroeter. These data have been published at a scale of 1:50,000 as Preliminary Map 61 (1985). The table of formations presented as Table 2 of this report is excerpted from this publication.

The following description of the regional geology is excerpted from Schroeter's 1981 report:

The Toodoggone area lies within the eastern margin in the Intermontane Belt. The oldest rock exposed are wedges of crystalline limestone more than 150 metres thick that have been correlated with the Asitka Group of Permian age. The next oldest rocks consist of andesitic flows and pyroclastic rocks including augite-tremolite andesite porphyries and crystal and lapilli tuffs that belong to the Takla Group of Late Triassic age. The Omineca intrusions of Jurassic and Cretaceous age (potassium-argon age of 186 to 200 Ma obtained by the Geological Survey of Canada) range in composition from granodiorite to quartz monzonite. Some syenomonzonite bodies and quartz feldspar porphyry dykes may be feeders to the Toodoggone rocks which unconformably overlie the Takla Group. The 'Toodoggone' volcanic rocks (named informally by Carter, 1971) are complexly intercalated volcanic and volcanic-sedimentary rocks of Early and Middle Jurassic age, 500 metres or more in thickness, along the west flank of a northwesterly trending belt of 'basement' rocks at least 90 km in length by 15 km in width. A potassium-argon age of 186 ± 6 Ma was obtained by Carter (1971) for a hornblende separate from a sample collected from a volcanic sequence 14 km southeast of Drybrough Peak. Four principal subdivisions of 'Toodoggone' rocks have been recognized:

- (1) Lower Volcanic Division -- dominantly pyroclastic assemblage including purple agglomerate and grey to green to purple dacitic tuffs.
- (2) Middle Volcanic Division -- an acidic assemblage including rhyolites, dacites, 'orange' crystal to lithic tuffs, and quartz feldspar porphyries; includes welded tuff. The 'orange' colour of the tuffs resulted from oxidation of the fine-grained matrix while the rock was still hot. A coeval

TABLE 2 TABLE OF FORMATIONS

QUATERNARY

PLEISTOCENE AND RECENT

 UNCONSOLIDATED GLACIAL, FLUVIOGLACIAL, ALLUVIAL, AND COLLUVIAL DEPOSITS

CRETACEOUS

UPPER CRETACEOUS

SUSTUT GROUP (TANGO CREEK FORMATION)

K POLYMICTIC CONGLOMERATE, SANDSTONE, SHALE, CARBONACEOUS MUDSTONE

JURASSIC

LOWER AND (?) MIDDLE JURASSIC

"TOODOGGONE VOLCANICS" - (?) HAZELTON GROUP

9 UNDIVIDED, PREDOMINANTLY GREY, GREEN, PURPLE AND ORANGE-BROWN HORNBLЕНDE PLAGIOCLASE AND PLAGIOCLASE PHYRIC ANDESITE PORPHYRY FLOWS, TUFFS, BRECCIA, SOME LAHAR, CONGLOMERATE, GREYWACKE, SILTSTONE, RARE RHYOLITE-PERLITE, INCLUDES SOME DYKES AND SILLS

LOWER TO MIDDLE JURASSIC

"TOODOGGONE VOLCANICS" (CARTER, 1972)

"GREY DACITE"

8 DARK TO PALE GREY OR GREEN QUARTZOSE BIOTITE HORNBLЕНDE PLAGIOCLASE ASH FLOWS OF ANDESITIC AND RARELY DACITIC COMPOSITION, VARIABLY WELDED WITH LOCALLY WELL-DEVELOPED COMPACTION LAYERING; CONTAINS ABUNDANT GREY DACITE AND RARE GRANITIC CLASTS; OUTCROPS ARE COMMONLY BLOCKY AND STRONGLY JOINTED

8A POLYMICTIC CONGLOMERATE WITH ABUNDANT TAKLA AND GREY DACITE CLASTS IN A QUARTZOSE SANDSTONE MATRIX

8B GREYWACKE, CONGLOMERATE DERIVED ENTIRELY FROM GREY DACITE

TOODOGGONE CRYSTAL ASH TUFFS AND FLOWS

7 RECESSIVE, GREY, MAUVE, PURPLE QUARTZOSE PLAGIOCLASE CRYSTAL TUFF, LAPILLI TUFF, AND BRECCIA, WITH LESSER AGGLOMERATE, LAHAR, AND EPICLASTIC BEDS; INCLUDES SOME WELDED TUFFS AND PYROXENE HORNBLЕНDE FELDSPAR PORPHYRY FLOWS WHICH ARE LOCALLY DOMINANT; SOME MEMBERS CONTAIN NO QUARTZ, PINK WEATHERING WHERE LAUMONTITE IS ABUNDANT

7A EPICLASTIC RED BEDS - ARKOSIC SANDSTONE, SILTSTONE, CONGLOMERATE, AND SLIDE DEBRIS; CONTAINS SOME CRYSTAL TUFF

TUFF PEAK FORMATION

6 PALE PURPLE, GREY, AND GREEN BIOTITE AUGITE HORNBLЕНDE PLAGIOCLASE PORPHYRY FLOWS; SOME AUTOBRECCIATED FLOWS, MINOR SILLS AND PLUGS, SOME CRYSTAL AND LAPILLI TUFF

6A CONGLOMERATE OR LAHAR DERIVED FROM UNITS 6 AND 8B, WITH GRADED AND CROSSLAMINATED MUDSTONE AND SANDSTONE INTERBEDS; DEBRIS FLOWS, LAPILLI AND CRYSTAL TUFFS

8B FLOWS SIMILAR TO UNIT 6 BUT CONTAINING SPARSE ORTHOCLASE MEGACRYSTS

MCCLAIR CREEK FORMATION

5 PURPLE, LAVENDER, GREY, RARELY GREY-GREEN, "CROWDED" FINE TO MEDIUM-GRAINED PLAGIOCLASE PORPHYRITIC FLOWS; INCLUDES SOME LAPILLI TUFF, BRECCIA, AND MINOR EPICLASTIC BEDS

5A INTRUSIVE DOME WITH AUTOBRECCIATED CARAPACE AND FLANKING BRECCIA

MAFIC FLOW AND TUFF UNIT

4 BASALT FLOWS—THIN BEDDED, PURPLE TO DARK GREEN, COMMONLY EPIOTIZED, FINE-GRAINED PYROXENE BASALT FLOWS AND TUFFS, INCLUDES SOME SILLS AND DYKES

4A PURPLE TO MAUVE, MEDIUM-GRAINED PORPHYRITIC BASALT; LOCALLY MAUVE TO PINK, ZEOLITIZED WITH LAUMONTITE, POSSIBLE INTRUSIVE (LACCOLITH)

4B LAPILLI, CRYSTAL, AND ASH TUFF; WELL BEDDED, INCLUDES MINOR THINLY BEDDED SANDSTONE AND RARE CALCAREOUS SILTSTONE (MARL), TOTALLY OR IN PART EQUIVALENT TO UNIT 7

4C PYROXENE BIOTITE HORNBLЕНDE PORPHYRY FLOWS WITH TRACES OF QUARTZ AND K-FELDSPAR; INTERBEDDED MINOR BRECCIA AND LAPILLI TUFF, TOTALLY OR IN PART EQUIVALENT TO UNIT 6

JURASSIC (CONTINUED)

LOWER TO MIDDLE JURASSIC (CONTINUED)

"TOODOGGONE VOLCANICS" (CARTER, 1972) (CONTINUED)

LAWYERS—METSANTAN QUARTZOSE ANDESITE

3 GREEN TO GREY QUARTZOSE PYROXENE (?) BIOTITE HORNBLЕНDE PLAGIOCLASE PORPHYRY FLOWS AND TUFFS, QUARTZ CONTENT RANGES FROM NEGLIGIBLE TO ABOUT 3 PER CENT, IN THE NORTH FLOWS PREDOMINATE WITH LOCAL FLOW BRECCIA, LAPILLI TUFF, AND RARE WELDED TUFF UNITS; TOWARD THE SOUTH ASH FLOWS ARE COMMON, INCLUDING RARE SURGE DEPOSITS, THE UNIT CONTAINS EXTENSIVE ZONES OF EPIOTIZED, PYRITIC ROCK WITH CHARACTERISTIC SALMON, PINK, AND ORANGE PLAGIOCLASE CRYSTALS

MOYEZ CREEK VOLCANICLASTICS

2 CONGLOMERATE WITH SOME GRANITIC CLASTS, GRADED, CROSS-BEDDED GREYWACKE, WELL-BEDDED CRYSTAL TUFF EPICLASTIC SEDIMENTS; LOCAL LAMINATED CALCAREOUS SILT (MARL), RARE THIN LIMESTONE AND CHERT; LOCAL COARSE LANDSLIDE DEBRIS AND LAHAR, IN PART OR TOTALLY EQUIVALENT TO UNIT 6A

2A CRYSTAL TUFFS IN THIN, WELL-LAYERED UNITS, SOME EPICLASTIC SANDSTONE AND MUDSTONE; RARE PLANT FRAGMENTS IN SOME BEDS; MINOR LAPILLI TUFF

ADDOOGATCHO CREEK FORMATION

1 PALE REDDISH GREY TO DARK RED-BROWN QUARTZOSE BIOTITE HORNBLЕНDE PHYRIC ASH FLOWS; THE ROCKS CONTAIN MINOR SANIDINE AND RARE AUGITE, WELDING IS WIDESPREAD AND RANGES FROM INCIPENT TO EUTAXITIC, LOCALLY ORANGE TO BROWN VITROPHYRIC CLASTS ARE COMMON, INCLUDES LAPILLI TUFF AND BRECCIA UNITS AS WELL AS MINOR LAYERED GROUND SURGE DEPOSITS

1A CRYSTAL ASH TUFF, LAPILLI TUFF, AND RARE AGGLOMERATE WITH INTERSPERSED EPICLASTIC BEDS, TUFFACEOUS SEDIMENTS AND MINOR CONGLOMERATE THAT LOCALLY CONTAINS GRANITIC CLASTS; MINOR HORNBLЕНDE PLAGIOCLASE PHYRIC FLOWS FORMING SINGLE OR THIN COMPOSITE FLOW UNITS

1B QUARTZOSE PLAGIOCLASE PORPHYRY—JOINTED, DOMAL INTRUSION (?) OF HOMOGENEOUS-APPEARING GREY TO GREEN, CHLORITIZED AND EPIDOTE-ALTERED ROCK CONTAINING ABUNDANT INCLUSIONS OF TAKLA VOLCANICS AND RARE METAMORPHIC ROCK CLASTS

TRIASSIC

UPPER TRIASSIC

TALKA GROUP

V.T. DARK GREEN AUGITE PORPHYRY BASALT FLOWS AND BRECCIAS WITH LESSER FINE-GRAINED ANDESITE TO BASALT FLOWS AND MINOR INTERBEDDED SILTSTONE, TUFFACEOUS SEDIMENTS, AND CHERT CONTAINS LIMESTONE LENSES THAT MAY BE PART OF THE "ASITKA GROUP"

PALEOZOIC

PERMIAN

P ASITKA GROUP?

PREDOMINANTLY LIMESTONE (INCLUDING MARBLE AND MINOR SKARN) WITH SOME ARGILLITE, BLACK SHALE, AND CHERT UNITS COMPOSED OF LIMESTONE, CHERT, ARGILLITE, AND BASALT (Pv. c) MAY BE, IN PART OR TOTALLY TAKLA GROUP

INTRUSIVE ROCKS

JURASSIC

LOWER JURASSIC (DYKES, SILLS, AND SMALL PLUGS)

A BASALT

B AUGITE HORNBLЕНDE PORPHYRY — BASALTIC STOCK, DOMAL INTRUSION (OR TAKLA INLIER)

C BIOTITE HORNBLЕНDE DIORITE GABBRO

D PYROXENE PLAGIOCLASE PORPHYRY

LOWER TO MIDDLE JURASSIC (DYKES AND STOCKS)

E QUARTZ MONZONITE, GRANODIORITE—MEGACRYSTIC IN PART; MINOR SYENITE OR QUARTZOSE SYENITE ALONG CONTACTS

E1 GRANODIORITE, QUARTZ DIORITE — MEDIUM GRAINED, PORPHYRITIC, FOLIATED IN PART

F FELDSPAR PORPHYRY, HORNBLЕНDE FELDSPAR PORPHYRY — DYKES AND PLUGS; RARE QUARTZ FELDSPAR PORPHYRY

period of explosive volcanism included the formation of 'laharic' units and intrusion of syenomonzonite bodies and dykes. This event was accompanied by explosive brecciation along zones of weakness, predominantly large-scale faults and attendant splays, followed by silicification and deposition of precious and base metals to varying degrees in the breccias.

- (3) Upper Volcanic-Intrusive Division -- grey to green to maroon crystal tuffs and quartz-eye feldspar porphyries.
- (4) Upper Volcanic-Sedimentary Division -- lacustrine sedimentary rocks (sometimes varved), stream bed deposits, and possible local fanglomerate deposits and interbedded tuff beds.

Many Toodoggone rocks have a matrix clouded with fine hematite dust implying a subaerial origin, however, some varieties may have accumulated in shallow water. The host rock for mineralization (division 2) is an orange to chocolate brown coloured crystal tuff with varying minor amounts of lithic and vitric ash. Broken crystals of plagioclase and quartz are set in a fine-grained 'hematized' matrix of quartz and feldspar. The exact chemical composition(s) and rock name(s) await chemical analyses. Carter (1971) determined the composition of a suite of rocks collected from the Toodoggone area to range from latites to dacite.

To the west, Upper Cretaceous to Tertiary pebble conglomerates and sandstones of the Lower Tango Creek Formation of the Sustut Group unconformably overlie both Takla Group volcanic rocks and Toodoggone volcanic rocks.

The structural setting was probably the most significant factor in allowing mineralizing solutions and vapours to migrate through the thick volcanic pile in the Toodoggone area. The entire area has been subjected to repeated and extensive normal block faulting from Jurassic to Tertiary time. It is postulated that a northwesterly trending line of volcanic centres along a gold/silver-rich 'province' marks major structural breaks, some extending for 60 km or more (for example, McClair Creek system, Lawyers system). Prominent gossans are often associated with structural zones but many contain only pyrite; sulphides occur as disseminations and fracture fillings in Toodoggone and Takla Group rocks. Thrusting of Asitka Group limestones over Takla Group rocks probably occurred during Middle Jurassic time.

Today Toodoggone rocks display broad open folds with dips less than 25°. The Sustut Group sedimentary rocks have relatively flat dips and do not appear to have any major structural disruptions.

PROPERTY GEOLOGY

The oldest rocks, underlying the north and eastern portions of the property area, consist of andesitic flows and pyroclastic rocks belonging to the Takla Group of Late Triassic age. Most of the remaining property area is underlain by a succession of Lower to Middle Jurassic subaerial volcanics and volcanoclastic sediments. This succession has been collectively termed the "Toodoggone Volcanics" by Carter (1971) and has been extensively faulted and folded. Upper Cretaceous conglomerates and sandstones of the Tango Creek Formation unconformably overlie these volcanics in the extreme northwestern portion of the property area.

All of the above are overlain by a blanket of Quaternary alluvium that begins at approximately 1600 m ASL and thickens downslope.

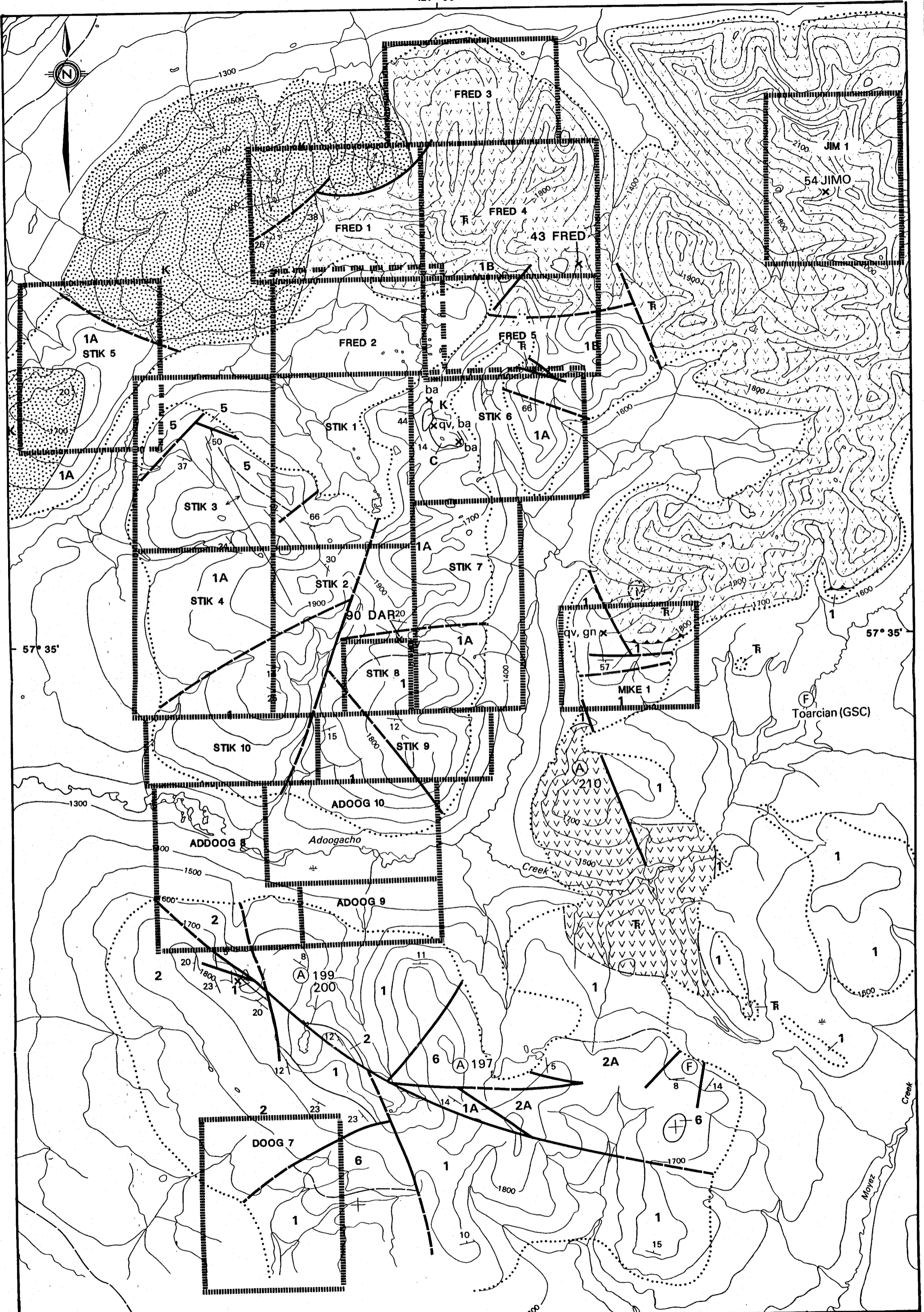
The property geology is illustrated on Figure 3, which is after mapping by Diakow, et al. (1985).

Adoog 8, 9, 10 Claims

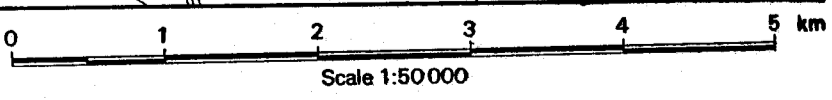
The Adoog 8 to 10 claims are underlain by Lower to Middle Jurassic Toodoggone Volcanics. Unit 1 (Adoogacho Creek Formation), comprised of numerous ash flow sheets with intercalated crystal lithic tuffs, underlies all of the Adoog 9 and 10 and most of the Adoog 8 claims. Unit 2 (Moyez Creek Volcanoclastics), which is comprised of a diverse assemblage of interbedded air fall tuff, thin ash flow sheets, and epiclastic and sedimentary rocks, underlies the western portion of the Adoog 8 claim.

Fred 1 to 5 Claims

The Upper Triassic Takla Group (Unit TR), consisting of dark green augite porphyry, basalt, breccia, and minor andesite, underlies the southern and eastern portions of the Fred 1 claim, the northeastern portion of the Fred 2



(after L.J. Diakow et al 1985)



PROPERTY GEOLOGY MAP

FIGURE 3

claim, most of the Fred 3 claim, all of the Fred 4 claim, and the northern portion of the Fred 5 claim. Unit 1B (Adoogacho Creek Formation, composed of quartzose plagioclase porphyry) underlies the southeastern portion of the Fred 5 claim. Most of the remaining property area is underlain by a younger member of the Adoogacho Creek Formation (Unit 1A), composed of ash flow sheets intercalated with crystal lithic tuffs. Conglomerates of the Upper Cretaceous Tango Creek Formation (Unit K) unconformably overlie the Takla Group volcanics in the northern and western portions of the Fred 1 claim and the northwestern corner of the Fred 2 claim. Except for the extreme northern boundary of the Fred 2 claim, the remaining claim area is mantled by a thick cover of Quaternary alluvium.

Stik 1 to 4 Claims

These claims are underlain by three members of the Toodoggone Formation. The northern portion of the Stik 3 claim and the eastern corner of the Stik 1 claim are underlain by the purple fine- to medium-grained plagioclase porphyry member of the McClair Creek Formation (Unit 5). This narrow belt is in contact with the Adoogacho Creek Formation volcanics to the south. Unit 1A (Adoogacho Creek Formation) occupies the south-central area of the Stik 3 claim, the north and north-central areas of the Stik 4 claim, the northern half of the Stik 2 claim; and as currently mapped, much of the southern and eastern areas of the Stik 1 claim. The rocks consist of a series of interbedded purple to grey crystal tuffs and rare purple agglomerate which overlies the tuff where encountered. The tuff varies from dark grey to maroon. The agglomerate consists of purple fine-grained to aphanitic volcanic clasts cemented by light grey chalcedonic silica. The southeastern part of the Stik 4 claim and much of the southern part of the Stik 2 claim are underlain by a younger member of the Adoogacho Creek Formation (Unit 1), consisting of pale reddish grey to dark red-brown quartzose biotite-hornblende pyric ash flows with rare occurrences of lapilli tuff and very narrow breccia units. Massive aphanitic leucocratic red altered rhyolitic dykes cut Units 1 and 1A as observed along ridges on the Stik 2 and 3 claims.

Stik 5 Claim

The Stik 5 claim is underlain by Unit 1A (Adoogacho Creek Formation), which is composed of ash flow sheets intercalated with crystal lithic tuffs. Conglomerates of the Tango Creek Formation (Unit K) unconformably overlie the volcanics to the northeast and southwest. Porphyritic rhyolite flows of the McClair Creek Formation (Unit 5) have been mapped in the extreme southeastern corner of the property.

Stik 6 Claim

The Stik 6 claim is underlain by two members of the Toodoggone Formation, by the Tango Creek Formation of the Cretaceous Sustut Group, and intruded in one area by a small plug of Middle Jurassic gabbro. The northeastern corner of the claim is underlain by quartzose plagioclase porphyry of the Adoogacho Creek Formation (Unit 1B). Unit 1A, which is composed of ash flow sheets intercalated with crystal lithic tuffs, underlies most of the remainder of the claim. A small outlier of conglomerates of the Tango Creek Formation (Unit K) unconformably overlies the volcanics at the eastern edge of the claim. A small plug of Middle Jurassic gabbro crops out in this same area.

Stik 7 to 10 Claims

These claims are underlain by Lower to Middle Jurassic Adoogacho Creek Formation volcanics. Unit 1A underlies the northern three-fourths of the Stik 7 claim and the northern one-third of the Stik 8 claim; it is composed of interbedded tuffs and agglomerates. Unit 1, composed of numerous ash flow sheets with intercalated crystal lithic tuffs, underlies all of the Stik 9 and 10 claims and the remainder of the Stik 7 and 8 claims.

Jim 1 Claim

The Jim 1 claim is entirely underlain by Upper Triassic Takla Group (Unit TR), consisting of dark green augite porphyry basalt and breccia, and minor andesite.

Mike 1 Claim

The northeastern portion of this claim is underlain by Upper Triassic Takla Group (Unit TR) volcanics. The remaining claim area is underlain by Unit 1 (Adoogacho Creek Formation), composed of ash flows with rare occurrences of lapilli tuff and very narrow breccias.

Doog 7 Claim

The Doog 7 claim is underlain by Lower to Middle Jurassic Toodoggone Volcanics. Unit 1 (Adoogacho Creek Formation) underlies the southern half of the claims, and is comprised of numerous ash flow sheets with intercalated crystal lithic tuffs. Unit 2 (Moyez Creek Volcaniclastics) underlies the northern portion and is comprised of a diverse assemblage of interbedded air-fall tuff, thin ash flow sheets, and epiclastic and chemical sedimentary rocks. Unit 6 (Tuff Peak Formation) is the youngest volcanic unit exposed and is composed of biotite-augite-hornblende plagioclase porphyry flows and some auto-brecciated flows and crystal and lapilli tuffs.

The property area is disrupted by a conjugate set of northwest and northeast trending faults which appear to have significant vertical and/or horizontal displacement.

ECONOMIC GEOLOGY

The focus of exploration in the Toodoggone district to date has been epithermal gold/silver mineralization associated with subaerial Lower to Middle Jurassic volcanism (Toodoggone Volcanics). Gold mineralization is also found within Late Triassic alkaline andesitic rocks (Takla Group). However, this latter mineralization is viewed as occurring in the "root zone" of the epithermal event related to Toodoggone volcanism (e.g., Baker Mine).

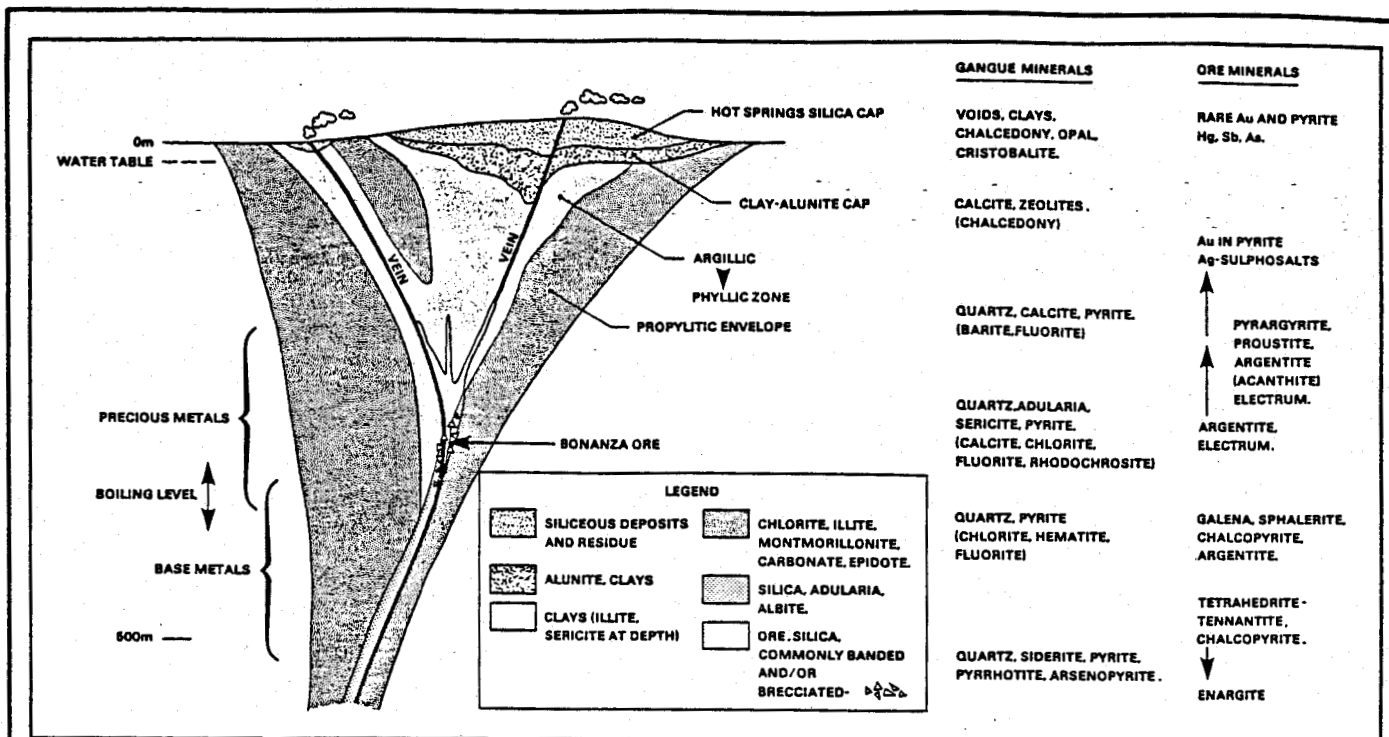
The structural settings of these epithermal vein systems is of primary importance in the development of gold mineralization within the Toodoggone Volcanics. Faulting and concomitant brecciation form the conduits for ascending hydrothermal solutions and vapours. It is often secondary tensional fractures in crudely concentric fracture systems related to collapse structures, major faults, or dilatant zones within major fault systems, which supply the necessary plumbing system for gold mineralization in this camp. It is also necessary that repeated fault movement and brecciation occur, allowing hydrothermal solutions to continue to circulate. If only a single brecciation event occurs, the ascending solutions carrying silica will eventually heal the fractures and restrict passage of additional gold-bearing solutions. Only by recurrent faulting and brecciation can the process of mineralization be carried to the stage where economic concentrations of gold can be anticipated.

Adjacent to these epithermal deposits, both lateral and vertical alteration patterns have been noted. The outer 'propylitic' zone consists of chlorite, epidote, calcite, and pyrite. This grades inward to an 'argillic/ phyllic' zone characterized by sericite, montmorillonite, illite, and silica. Finally, there is the silicified core zone consisting dominantly of silica, adularia, and/or albite, immediately adjacent to the vein system.

Hematite and manganese oxides are normally abundant in the precious metal rich occurrences. Native gold, electrum, barite, and minor pyrite have been found within these silica-rich zones along with amethystine quartz. Anomalous silver, lead, zinc, and copper values are commonly associated with the epi-

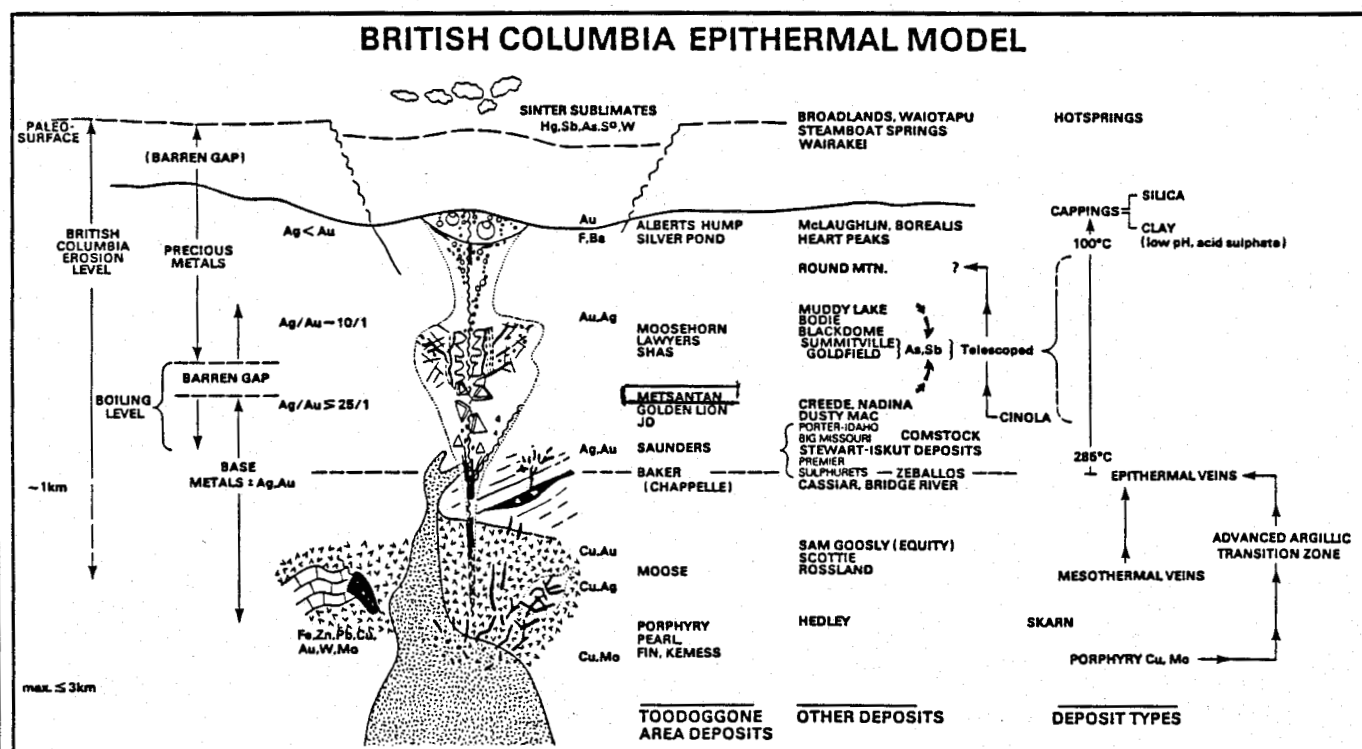
thermal vein systems. However, such systems appear to be relatively free of contaminants such as arsenic and antimony.

The pattern of gold mineralization also exhibits both vertical and lateral zonation. These variations are controlled by temperature and pressure conditions within the breccia zones which in turn control the boiling point levels for the mineralizing solutions. The upper levels of these systems are characterized by a barren silica cap, thus displaying increasing gold values with depth. This simple model is complicated by re-brecciation (which changes the physical characteristics of the system) and the changing chemical composition of hydrothermal solutions during the various pulses of mineralization. Figures 4 and 5 illustrate the epithermal model utilized in exploration for precious metals within the Toodoggone gold camp.



after Buchanan (1981)

FIGURE 4. IDEALIZED SECTION OF EPITHERMAL DEPOSIT



after T.G. Schroeter and A. Panteleyev

FIGURE 5. BRITISH COLUMBIA EPITHERMAL MODEL

1988 EXPLORATION PROGRAM AND RESULTS

The 1988 property exploration, completed July 19 to August 21, consisted of extensive prospecting, geological mapping, lithogeochemical sampling, hand trenching, and soil geochemical sampling. The soil geochemical sampling consisted of grid-controlled soil sampling, and reconnaissance single-line elevation-controlled soil sampling.

All of the samples collected were forwarded to TerraMin Research Labs Ltd. in Calgary, Alberta, for gold and silver analyses. Any samples containing values greater than 0.5 oz/ton Ag had a duplicate Au/Ag analysis completed from a second split.

The accompanying maps depict the property geology (modified after Diakow, et al., 1985) along with previous exploration results, 1988 prospecting traverses, sample locations, trench locations, grid locations, and analytical results. These results are also presented in the Appendix along with rock sample descriptions.

Descriptions of the exploration completed and the results from this exploration on each of the mineral claims follows.

Jim 1 Claim (Map 1)

The Jim 1 claim is underlain by Upper Triassic Takla Group volcanics consisting of dark green augite porphyry basalt and breccia, and minor andesite. It is centered about the 'Jimo' copper showing which consists of chalcocite and malachite occurring in fractures in or near the basal part of a porphyritic andesite unit.

A total of 45 rock samples were collected from this claim during the 1988 program. Extensive malachite staining with associated chalcopyrite and occasional bornite, was noted throughout the area, lining fracture planes and associated with quartz and calcite stringers within narrow shears. These

quartz and/or calcite stringers are frequently disseminated with galena and contain elevated silver values (0.5 to 6.1 oz/ton Ag).

Weakly elevated gold values (108 to 1560 ppb Au) from boulder or talus samples of quartz or calcite veins were collected in the southeastern portion of the claim. Check analyses of sample WM-45 (1560 ppb Au) returned a value of 284 ppb Au. A massive sulphide boulder (WM-44 0.34% Cu) was found in the same area.

A follow-up program consisting of tracing the sources of the massive sulphide boulder (WM-44) and the weakly gold-enriched quartz boulders (WM-45, DM-62, DM-63) should be completed. If positive results are received from this program, detailed rock sampling and trenching should be carried out.

Doog 7 Claim (Map 2)

The Doog 7 claim is located in an area of gentle relief and is covered by a thin blanket of Quaternary alluvium. Because of the scarcity of outcrops in the area, in addition to conventional prospecting, two reconnaissance elevation-controlled soil geochemical survey lines were emplaced across the property. A total of 98 soil samples and one rock sample were collected. No anomalous precious metals results were delineated by this exploration program.

Mike 1 Claim (Map 4)

The Mike 1 claim is underlain by Upper Triassic Takla Group volcanics and Lower Jurassic Adogacho Creek Formation ash flows, tuffs, and breccias, disrupted by a conjugate set of northwest and northeast trending faults.

The property exploration program consisted of extensive reconnaissance prospecting combined with lithochemical sampling and the emplacement of a soil geochemical grid over the central portion of the property.

Outcrops on the property are generally restricted to the north-facing slope of the ridge transecting the property. Reconnaissance prospecting of this area discovered a number of quartz-barite veins and stringers. A total of eight rock samples were collected, only one of which returned weakly elevated gold content (104 ppb).

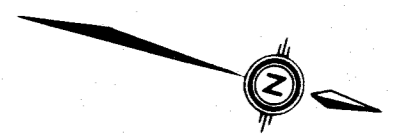
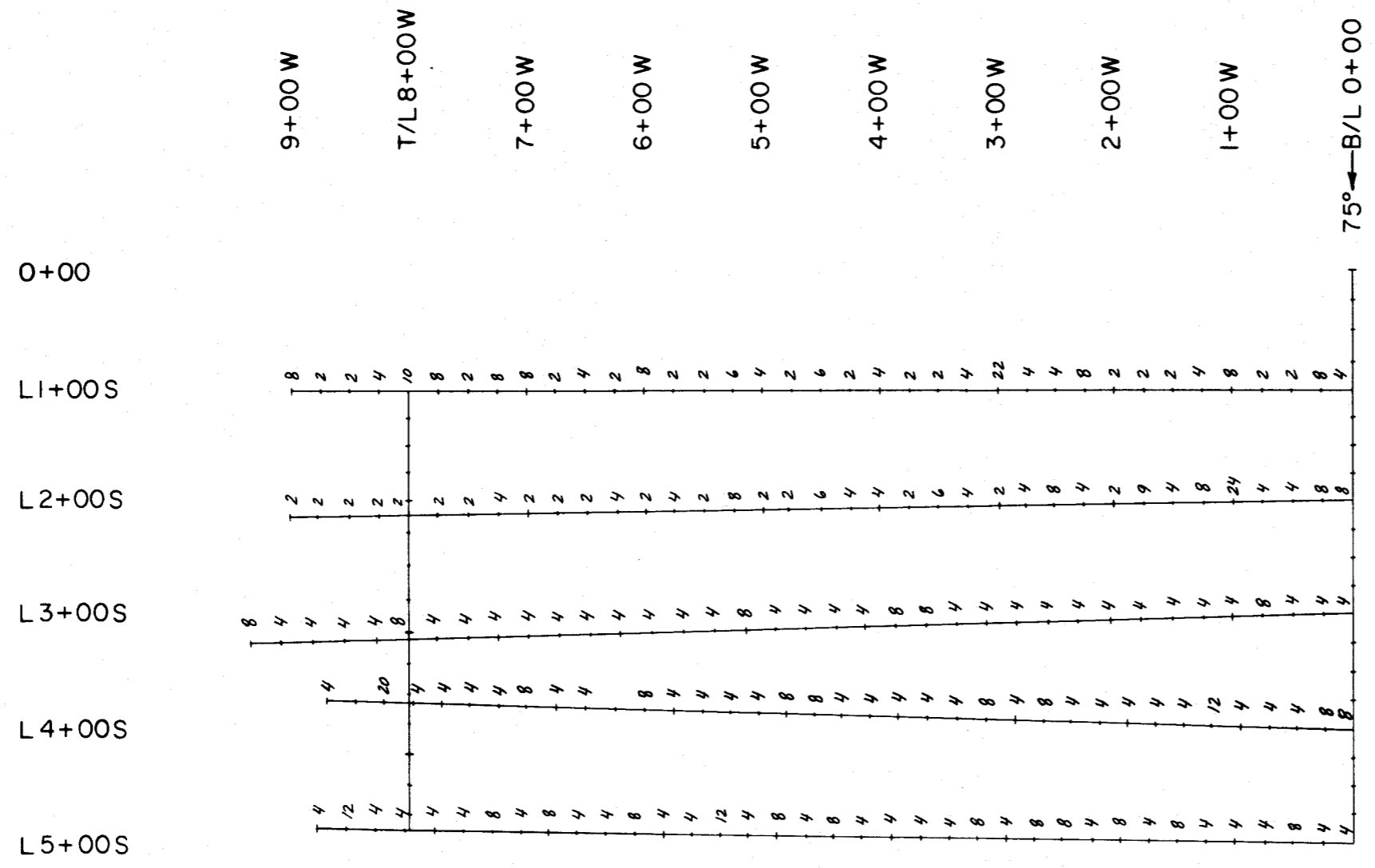
A small picketed flag-and-compass grid was emplaced over the central portion of the claim covering the south-facing grassy ridge slope. The grid covered the potential strike extension of the quartz-barite veining located on the north side of the ridge, and covered the intersection of two topographic lineaments.

A total of 183 soil samples were collected at 25 m station intervals on 100 m spaced lines. The results are presented in the Appendix and are plotted on Figures 6 and 7. There were no Au or Ag geochemical anomalies delineated by this survey.

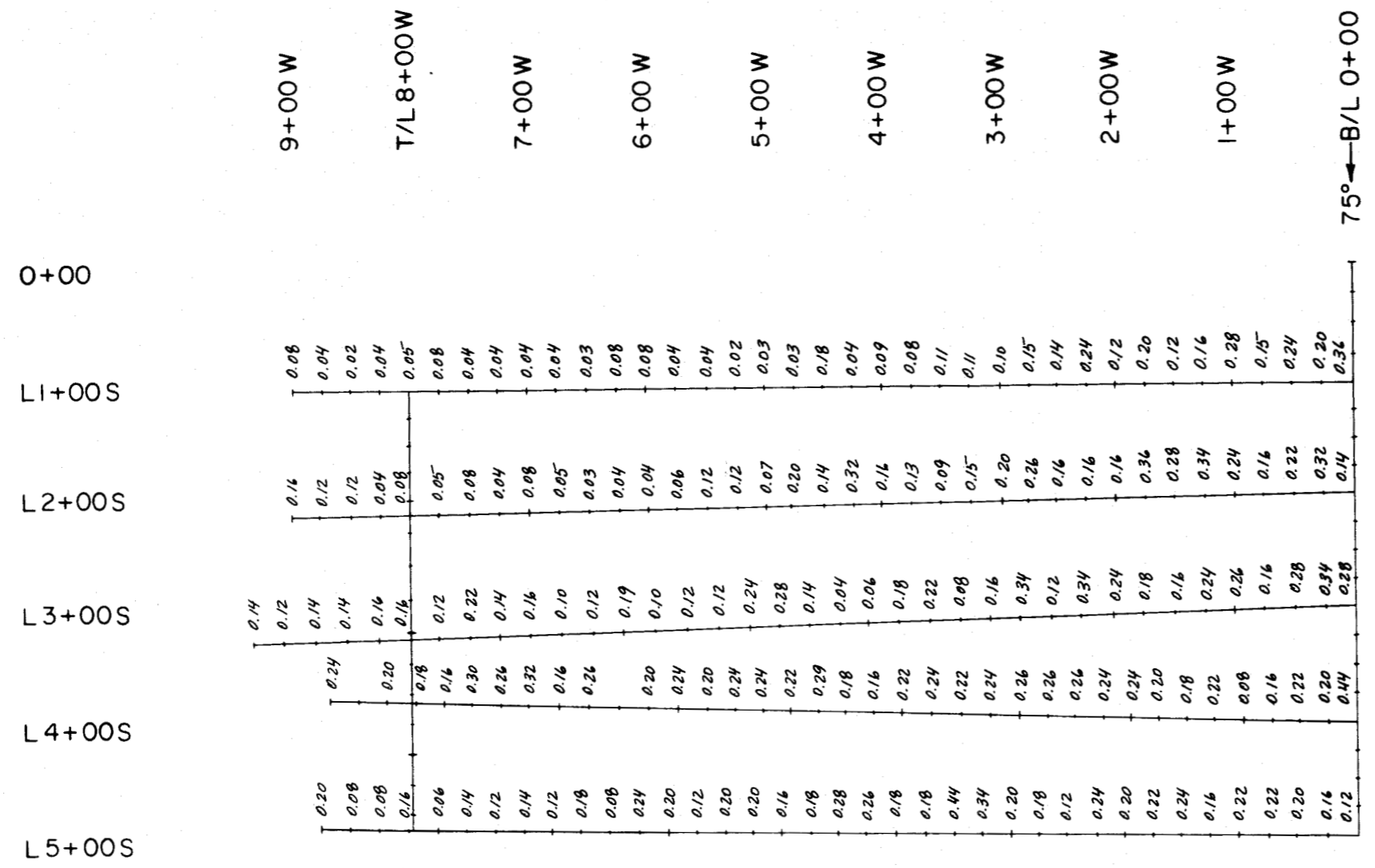
Fred 1 Claim (Map 3)

Regional geological mapping by Diakow, et al. (1985) indicates the Fred 1 claim to be underlain by Triassic Takla Group volcanics unconformably overlain in the eastern and northern portions of the claim by Upper Cretaceous Tango Creek Formation (Sustut Group) conglomerates and sandstones. Geological mapping of this area as part of the 1988 exploration program delineated a number of limestone units in the northern portion of the claim. This indicates that the regional mapping completed in this area is probably erroneous, this area being underlain, at least in part, by Triassic limestone.

Extensive reconnaissance prospecting and lithochemical sampling were completed over the claim. Copper mineralization was noted throughout the property, consisting mostly of disseminated chalcopyrite within narrow calcite stringers and veinlets, with associated secondary malachite staining, and occasional massive sulphide veinlets up to 2 cm wide.



PROLIFIC RESOURCES LTD.	
MIKE #1 CLAIM	
'M' GRID	
SOIL GEOCHEMICAL SURVEY	
Au (ppb)	
DATE SEPT., 1988	NTS 94 E/11
PROJECT BC-88-5	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1: 5000	0 100 200m
TAIGA CONSULTANTS LTD.	FIG. 6



75° ← B/L 0+00



PROLIFIC RESOURCES LTD.	
MIKE #1 CLAIM	
'M' GRID	
SOIL GEOCHEMICAL SURVEY	
Ag (ppm)	
DATE SEPT., 1988	NTS 94 E/11
PROJECT BC-88-5	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1: 5000	0 100 200m
TAIGA CONSULTANTS LTD.	FIG. 7

A total of 47 rock samples were collected from the property, nine of which returned elevated to anomalous gold geochemical results. These nine occur grouped in the east-central portion of the claim. They were collected from quartz-barite-calcite breccias within Upper Triassic Takla Group volcanics, generally containing associated disseminated galena. Previous exploration programs report anomalous gold and silver in quartz vein systems in this same general area.

Samples CS-62 (0.127 oz/ton Au) and BF-07 (0.106 oz/ton Au), the two best samples collected on the claim, were from a 30 cm wide quartz-calcite-barite breccia, traced over a strike length of 5 m.

Samples DM-1, DM-2, DM-3, and WM-1 (180, 694, 102, and 594 ppb Au respectively) were collected from two zones 30 and 80 cm wide, traced over a strike length of 10 m. These zones consist of basalt containing numerous calcite veinlets with disseminated pyrite, chalcopyrite, and galena, with minor malachite staining.

Samples DRM-5 (668 ppb Au) and JR-114 (1060 ppb Au) were talus samples of calcite-barite breccias collected from the same general area in which previous programs returned results of up to 0.22 oz/ton Au and 35.43 oz/ton Ag from narrow quartz-calcite stringers.

A detailed soil geochemical grid should be emplaced over this area of mineralized quartz-barite-calcite veining, combined with detailed geological mapping and trenching, to determine the width and extent of these veins.

Fred 2 Claim (Map 3)

The Fred 2 claim is located in an area of gentle relief and is covered by a blanket of Quaternary alluvium. Because of the lack of outcrop, a reconnaissance soil geochemical survey line was emplaced across the claim, extending on to the Fred 5 claim.

A total of 50 soil samples were collected from this claim. No anomalous gold geochemical results were delineated. A grouping of three soil samples returned silver values from 1.0 to 5.6 ppm.

Fred 3 Claim (Map 3)

The Fred 3 claim is underlain by Upper Triassic Takla Group volcanics consisting of dark green augite porphyry basalt and breccia, and minor andesite. Outcrops on the claim are generally restricted to two ridges in the southern portion of the claim; the remainder of the claim is covered by trees and shrubs.

Numerous calcite and quartz-calcite-barite stringers, veinlets, and veins (up to 30 cm wide) were located during prospecting of these two ridges. Copper mineralization consisting of chalcopyrite and occasionally chalcocite and bornite, with secondary malachite staining, is generally associated with these veinlets.

A total of 23 rock samples were collected from the Fred 3 claim during the 1988 exploration program. A series of samples collected near the south claim boundary on a ridge in the south-central portion of the claim returned elevated to anomalous gold/silver values.

Samples DM-111 to DM-114 (432, 436, 126, 204 ppb Au respectively) were collected from a number of quartz-barite veins occurring in an area approximately 25 m wide. Two talus boulder samples (DM-120, DM-110) collected down-slope from this mineralized zone returned anomalous gold values (0.03 and 0.08 oz/ton respectively).

A duplicate analysis from a second split of sample DM-110 returned a gold value of 0.239 oz/ton, an increase by a factor of 3. The variance of the two analyses indicates coarse gold is probably present.

Additional exploration is required in this area to determine the significance of this mineralized zone. This should consist of detailed geological mapping, trenching, and grid-controlled soil geochemical sampling across the ridge and extending on to the adjacent Fred 4 claim.

Fred 4 Claim (Map 3)

The Fred 4 claim is underlain by Upper Triassic Takla Group volcanics. Exposures are frequent; the ridges noted on the Fred 3 claim extend across the Fred 4 claim. As on the Fred 3 claim, numerous calcite and quartz-calcite-barite stringers, veinlets, and veins (up to 30 cm wide) were located during prospecting. Copper mineralization (up to 17% Cu), as chalcopyrite, chalcocite, and bornite with secondary malachite staining, is generally associated with these veinlets.

A total of 76 rock samples were collected from the Fred 4 claim. Eight samples returned elevated gold values (up to 0.06 oz/ton Au). These samples were collected from narrow 2 to 15 cm wide quartz veinlets. A number of samples yielded significant silver values (up to 43.17 oz/ton), likewise collected from narrow quartz/quartz-calcite veinlets.

The 'Fred' showing, discovered by Sumac Mines Ltd. in 1973, is located in the southeastern corner of the claim. This showing consists of thin quartz-carbonate veinlets accompanied by argillic alteration of the andesitic Takla volcanics. Detailed sampling was completed across this showing by Sumac Mines. A best result of 0.33 oz/ton Au was obtained from a 5 cm wide veinlet. This is similar to what was found elsewhere on the property during the present exploration program; however, resampling of the original showing returned negligible results.

Fred 5 Claim (Map 3)

The northern half of the Fred 5 claim is underlain by Upper Triassic Takla Group volcanics. As on the Fred 3 and 4 claims, numerous calcite and quartz-calcite-barite stringers, veinlets, and veins (up to 30 cm wide) were located in this area. Copper mineralization consisting of chalcopyrite, chalcocite, and bornite with secondary malachite staining is generally associated with these veinlets. None of the rock samples collected from this portion of the claim returned anomalous Au or Ag geochemical results.

The southern half of the Fred 5 claim is underlain by Lower to Middle Jurassic Adoogacho Creek Formation quartzose plagioclase porphyry and ash flow sheets intercalated with crystal lithic tuffs and volcanic agglomerates. Elevated gold values (up to 478 ppb Au) with associated weak copper mineralization were found in the east-central portion of the claim occurring in narrow quartz stringers (up to 15 cm wide) in siliceous tuffs and porphyries.

A total of 48 rock samples were collected from this claim, five of which returned elevated gold values; all of these are from the above-mentioned area.

The reconnaissance soil geochemical survey line emplaced on the Fred 2 claim extended on to the western end of the Fred 5 claim. Seven soil samples were collected but no anomalous Au or Ag values were delineated.

Stik 1 Claim (Map 3)

The Stik 1 claim is located in an area of subdued relief, covered by a blanket of Quaternary alluvium. Sparse outcrops occur in the southern and extreme eastern portions of the claim. A total of nine rock samples were collected from this area. One sample (WM-50) of a white to grey calcite boulder returned elevated gold geochemical results (204 ppb).

A reconnaissance soil geochemical survey line that was emplaced on the Stik 3 claim extended on to the Stik 1 claim. Consequently, four soil samples

were collected in the extreme northwestern corner of the claim. No anomalous Au or Ag values were delineated.

Exploration of this area in 1985 delineated mineralized quartz breccias along the eastern edge of the Stik 1 claim, on the present Stik 6 claim. A soil geochemical grid was emplaced over this area, a portion of which extends on to the Stik 1 claim. A weakly elevated Ag trend was delineated across this portion of the grid. No gold anomalies were detected.

Stik 2 Claim (Map 4)

The Stik 2 claim is also located in an area of subdued relief, covered by a thin blanket of Quaternary alluvium. Consequently, outcrops are scarce in this area.

A program of extensive prospecting was completed on this mineral claim. However, because of the scarcity of outcrops, only six rock samples were collected, none of which returned anomalous Au or Ag geochemical results.

Stik 3 Claim (Map 3)

The Stik 3 claim is located in an area of gentle relief, underlain by purple plagioclase porphyries of the McClair Creek Formation, and quartzose plagioclase porphyry and ash flow sheets with intercalated crystal lithic tuffs and volcanic agglomerates of the Adoogacho Creek Formation. The northern portion of the claim is covered by a blanket of Quaternary alluvium.

The 1988 exploration program consisted of the emplacement of a reconnaissance soil geochemical survey line across the northern portion of the claim. No anomalous Au or Ag values were delineated.

Stik 4 Claim (Map 4)

The 1988 exploration program was concentrated along the eastern edge of the claim. A total of 10 rock samples were collected and one hand trench was dug (three samples). Previous exploration in this area for Delaware Resources Corp. delineated a potentially mineralized zone ("C" Zone) in the northeastern corner of the claim. A very thick snow cover prevented a complete examination of this area. During the present exploration program, this area was re-examined. A 20 cm wide calcite veinlet was located which returned elevated gold values (0.072 oz/ton Au).

The Delaware Resources program also located a sample in the southeastern portion of the claim which returned an elevated gold value (553 ppb). This area was re-examined and numerous angular quartz breccia boulders up to 1.75 m wide were located. Grab samples collected from this area returned elevated gold values (238 to 394 ppb).

A small hand trench was dug across this zone (T-88-3, Figure 8). Bedrock was not reached. The angular quartz breccia boulders found in this trench indicate a nearby bedrock source.

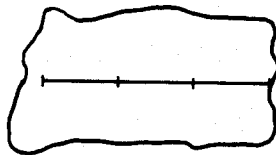
Additional exploration of this area is required. This exploration should consist of grid-controlled soil geochemical surveying coupled with trenching and additional prospecting.

Stik 5 Claim (Map 3)

The central portion of the Stik 5 mineral claim is underlain by Lower to Middle Jurassic Toodoggone volcanics, Unit 1A (Adoogacho Creek Formation), composed of numerous ash flow sheets with intercalated crystal lithic tuffs and agglomerates. Upper Cretaceous conglomerates of the Tango Creek Formation (Sustut Group) underlie the southwestern quarter of the claim.



SAMPLE No.	Au in ppb	Ag in ppm
3	42	0.10
2	28	0.11
1	10	0.06



→ 089°

PROLIFIC RESOURCES LTD.	
STIK # 4 CLAIM TRENCH DETAIL T-88-3	
DATE SEPT., 1988	NTS 94 E/12
PROJECT BC-88-5	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:100	
TAIGA CONSULTANTS LTD.	FIG. 8

Regional geological mapping of this area (Diakow, et al., 1985) indicated that the northeastern corner of the claim is also underlain by Upper Cretaceous sediments. Prospecting of this area during the current program indicates this area to be underlain by limestones. This indicates that the regional mapping completed in this area is wrong; the area underlain by limestones probably belongs to the Triassic Takla Group.

A total of 19 rock samples were collected from this claim during the 1988 program. No anomalous Au or Ag geochemical results were delineated.

Stik 6 Claim (Map 3)

The Stik 6 claim is underlain by Lower to Middle Jurassic Adoogacho Creek Formation volcanics, comprised of numerous ash flow sheets with intercalated crystal lithic tuffs and agglomerates. A small outlier of Upper Cretaceous Tango Creek Formation (Sustut Group) conglomerates unconformably overlies these volcanics in the northwestern portion of the claim. A number of small gabbro intrusions occur on the ridge located in the west-central part of the claim. Quaternary alluvium covers the central and southeastern portions of the claim.

Previous exploration programs for Delaware Resources Corp. discovered a zone ("B" Zone) of quartz-barite float and outcrop in the western portion of the claim. One sample collected from a 1.5 to 2.3 m wide quartz-barite vein returned a value of 0.257 oz/ton Au. Snow cover prevented the recovery of this sample site during the current program.

Extensive prospecting was completed in this area during the 1988 program. Numerous quartz-barite float boulders and veins up to 50 cm wide were located. No anomalous Au or Ag geochemical results were obtained from the samples collected.

A small picket flag-and-compass grid was emplaced over this area. A total of 143 soil samples were collected at 25 m station intervals on 100 m spaced lines. The results are presented in the appendix and are plotted on Figures

9 and 10. There were no gold geochemical anomalies detected by the survey. A weakly elevated silver trend was delineated, striking northwest across the grid.

Prospecting completed over the northeastern portion of the claim located a wide zone of argillic alteration coinciding with a topographic linear. Two hand trenches were dug across this zone. One trench (T-88-4, Figure 11) was mapped and sampled in detail. No geochemically anomalous Au or Ag results were obtained from the samples collected.

Although no anomalous results were obtained during the initial evaluation along this zone of argillic alteration, additional exploration should be completed to fully evaluate its potential.

Stik 7 Claim (Maps 3 and 4)

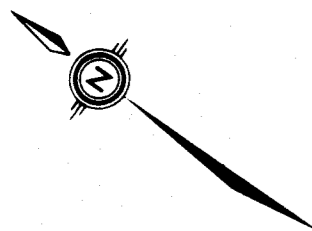
The Stik 7 claim is underlain by Lower to Middle Jurassic Adogacho Creek Formation volcanics and is covered by a blanket of Quaternary alluvium. Consequently, outcrops are scarce.

A minor amount of prospecting was done on this claim. Two talus rock samples were collected, neither of which returned anomalous gold or silver geochemical results.

Stik 8 Claim (Map 4)

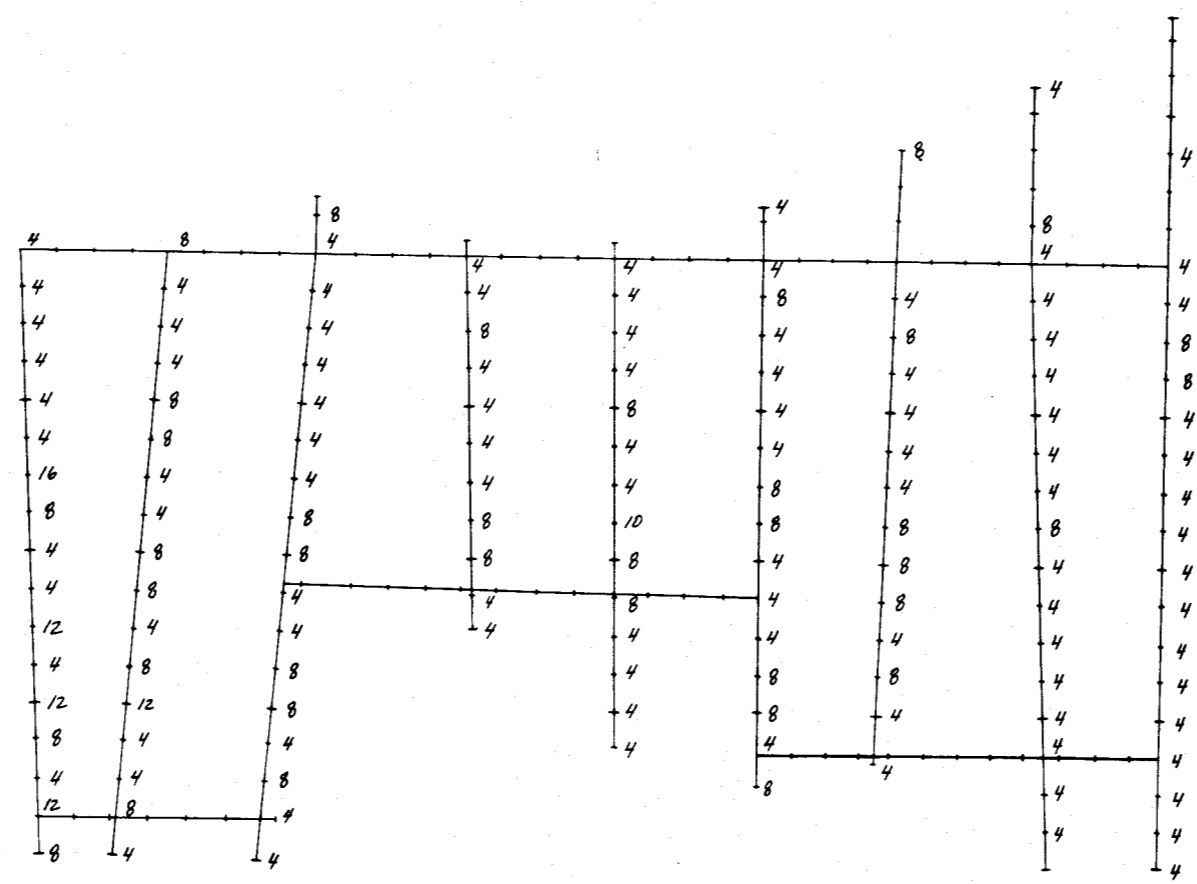
The Stik 8 claim is located in an area of subdued relief, covered by a thin blanket of Quaternary alluvium. Consequently, outcrops are scarce in the area.

This claim was previously covered by the DAR claim. Exploration carried out on that claim by Newmont Exploration of Canada Ltd. led to the discovery

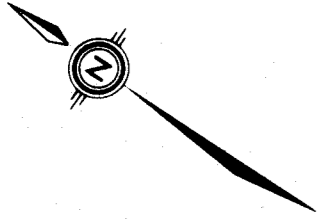


L 5+00N L 4+00N L 3+00N L 2+00N L 1+00N L 0+00 L 1+00S L 2+00S L 3+00S

1+00E
 B/L 0+00 → 145°
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 2+00 W
 T/L 2+25 W
 3+00 W
 T/L 3+25 W
 T/L 3+75 W
 4+00 W

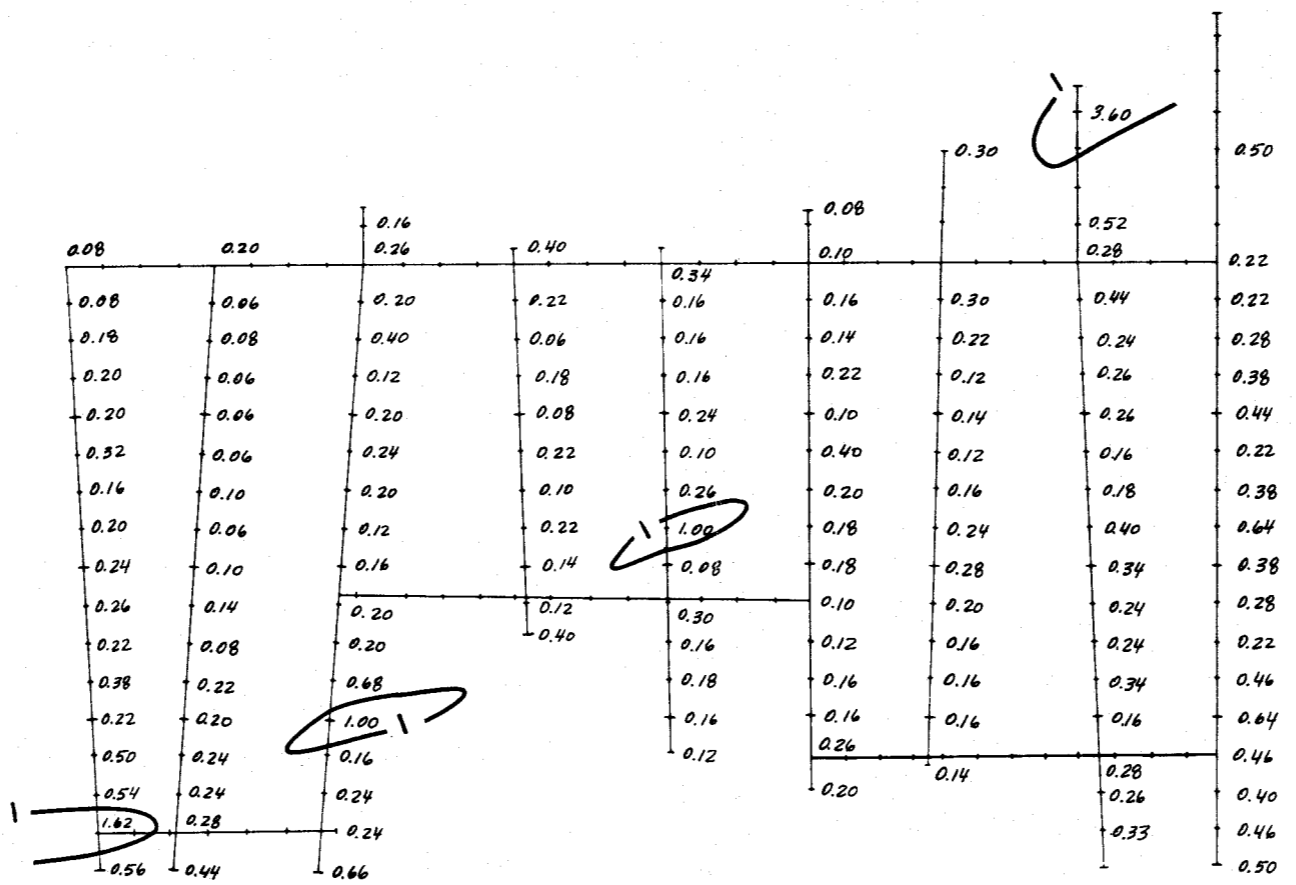


PROLIFIC RESOURCES LTD.	
STIK 6 'S' GRID SOIL GEOCHEMICAL SURVEY Au (ppb)	
DATE SEPT., 1988	NTS 94 E/ 11, 12
PROJECT BC-88-5	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:5000	0 100 200m
TAIGA CONSULTANTS LTD.	FIG. 9



L5+00N L4+00N L3+00N L2+00N L1+00N L0+00 L1+00S L2+00S L3+00S

I+00E
 B/L 0+00 → 145°
 I+00 W
 2+00 W
 T/L 2+25 W
 3+00 W
 T/L 3+25 W
 T/L 3+75 W
 4+00 W



CONTOUR INTERVAL = 1 ppm
 5 ppm

PROLIFIC RESOURCES LTD.	
STIK 6 S' GRID SOIL GEOCHEMICAL SURVEY Ag (ppm)	
DATE SEPT., 1988	NTS 94 E/ 11, 12
PROJECT BC-88-5	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:5000	0 100 200m
TAIGA CONSULTANTS LTD.	FIG. 10

[SAMPLE No. | Au in ppb | Ag in ppm]

16	4	0.70
15	8	0.86
14	4	1.00
13	10	0.88
12	4	1.06
11	4	0.90
10	6	1.37
9	6	1.40
8	2	1.27
7	4	2.40
6	2	2.40
5	4	3.60
4	10	2.80
3	4	2.60
2	6	2.50
1	4	3.40



PROLIFIC RESOURCES LTD.	
STIK # 6 CLAIM TRENCH DETAIL T-88-4	
DATE SEPT., 1988	NTS 94 E/11,12
PROJECT BC-88-5	MAPPED/ DRAWN BY C. AUSSANT
SCALE 1:100 ⁰	1 2 3 4 5m
TAIGA CONSULTANTS LTD.	FIG. 11

of the 'Dar' showing, consisting of four quartz veins (up to 2 m wide, 20 m long) mineralized with chalcopyrite, galena, and sphalerite.

Six rock samples were collected from the claim as part of the 1988 exploration program. Four samples were collected in the vicinity of the 'Dar' showing from quartz stringers and veins up to 1.5 m wide; these returned elevated to anomalous gold geochemical results. The two best results were from samples WM-24 (0.039 oz/ton Au) and WM-25 (0.055 oz/ton Au) collected from a 1.0 m and a 1.5 m quartz vein respectively mineralized with chalcopyrite, galena, and pyrite.

Additional work is required in this area to fully evaluate the significance of this showing.

Stik 9 Claim (Map 4)

The Stik 9 claim is also located in an area of subdued relief, covered by a thin blanket of Quaternary alluvium. Consequently, outcrops are scarce in this area. A limited amount of prospecting was completed on this claim as part of the 1988 exploration program, with four rock samples collected. One sample, of a lithic tuff mineralized with secondary copper, returned elevated silver geochemical results. No anomalous gold geochemical results were obtained.

Stik 10, Adoog 8, 9, 10 Claims (Map 4)

These claims are located in an area of gentle relief and are covered by a thin blanket of Quaternary alluvium. Consequently, outcrops are scarce. Because of the scarcity of outcrops in the area, along with conventional prospecting, two reconnaissance elevation-controlled soil geochemical survey lines were emplaced across the claims. A total of 189 soil samples were collected from the four claims.

A total of 26 soil samples were collected from the Stik 10 claim. No anomalous results were delineated.

A total of 68 soil samples and 2 rock samples were collected from the Adoog 8 claim. Two adjacent soil samples collected near the southeastern corner of the claim returned anomalous gold geochemical results (84 and 182 ppb). This area should be re-examined as to the significance of these results.

A total of 42 soil samples were collected from the Adoog 9 claim. Only one anomalous gold geochemical result (192 ppb) was obtained. This area should be re-examined to determine the significance of this result.

A total of 53 soil samples were collected along the survey line emplaced across the Adoog 10 claim. No anomalous results were obtained.

SUMMARY AND RECOMMENDATIONS

The 'Toodoggone' properties comprise 21 mineral claims totalling 8,650 hectares (21,373.9 acres) located approximately 300 km north of Smithers, British Columbia, directly south of the Chukachida River and east of the Stikine River.

Access to the properties from Smithers is via fixed-wing aircraft to the Sturdee Airstrip and then by helicopter for a distance of 42 km at the closest point. With the completion of the Omar Road Extension, which connects the Omineca Resource Road to the Cheni Mine site, road access is now available to within 27 km at the closest point.

The properties lie within the Toodoggone district which is one of the most active exploration camps in British Columbia. The oldest rocks, underlying the northern and eastern portions of the property area, consist of Late Triassic andesitic flows and pyroclastic rocks of the Takla Group. Most of the remaining property area is underlain by Lower to Middle Jurassic sub-aerial felsic to intermediate volcanics collectively termed the 'Toodoggone Volcanics' (Carter, 1971). This 'Toodoggone' sequence is transected by a series of fault structures, some of which have been discovered to be the locus of epithermal gold/silver mineralization. This district hosts the past-producing Baker Mine and the new Cheni Mine, currently being brought into production.

Previous exploration on the properties has consisted of geological mapping, prospecting, and soil/silt geochemical sampling. A number of quartz breccia and argillic alteration zones and quartz-barite veins have been delineated on the properties, some of which contain gold mineralization.

The 1988 exploration consisted of extensive prospecting, geological mapping, litho-geochemical sampling, hand trenching, and soil geochemical sampling. Soil geochemical sampling consisted of grid-controlled soil sampling and reconnaissance single-line elevation-controlled soil sampling. The trenching and grid-controlled soil sampling surveys investigated geological trends and geochemical results defined by this and previous exploration

programs. To investigate those areas of low relief covered by a thin blanket of Quaternary alluvium, reconnaissance elevation-controlled soil geochemical survey lines were emplaced.

Numerous calcite and quartz-calcite-barite stringers and veins up to 30 cm wide were located on the claims underlain by Takla Group volcanics (Fred 1, 3, 4, 5, and Jim 1 claims). Copper mineralization consisting of chalcopyrite and occasionally chalcocite and bornite with secondary malachite staining, is generally associated with these veinlets.

One massive sulphide talus boulder and weakly elevated gold values from talus boulders of quartz or calcite veins were found on the Jim 1 claim. A follow-up program consisting of tracing the source of the massive sulphide boulder and the weakly gold-enriched quartz boulders should be completed. If negative results are received from this program, the claim should be allowed to lapse.

Anomalous gold geochemical results up to 0.127 oz/ton were located from narrow (up to 30 cm wide) quartz-calcite-barite breccias in the east-central portion of the Fred 1 claim. A detailed soil geochemical survey combined with detailed geological mapping and trenching should be completed over this area to determine the width and extent of these veins.

A number of quartz-barite veins occurring over an area approximately 25 m wide near the southern Fred 3 claim boundary returned elevated gold values. Talus boulder samples collected from this same area returned values up to 0.239 oz/ton Au. Additional exploration consisting of detailed geological mapping, trenching, and grid-controlled soil geochemical sampling should be completed in this area extending down the ridge on to the Fred 4 claim.

A number of narrow 2 to 15 cm wide quartz veinlets returned elevated gold and silver values (up to 0.06 oz/ton Au, 43.17 oz/ton Ag) on the Fred 4 claim. The 'Fred' showing, discovered by Sumac Mines Ltd. in 1973, was re-sampled. The previously located mineralization of 0.33 oz/ton Au was returned from a 5 cm wide quartz veinlet. This is similar to what was found elsewhere on the

properties during the present exploration program; re-sampling of this showing returned negligible results.

Examination of a major topographic linear on the Stik 4 claim uncovered an area containing numerous quartz-breccia boulders up to 1.75 m wide. Grab samples collected returned elevated gold values (up to 394 ppb). A small trench was dug across this area but did not reach bedrock. Additional work is require in this area, consisting of grid-controlled soil geochemical surveying coupled with trenching and prospecting.

A wide zone of argillic alteration, coincident with a major topographic linear, was located in the northeastern portion of the Stik 6 claim. Although no anomalous results were obtained from this area, further work should be completed over this trend, consisting of trenching, prospecting, and if warranted, detailed soil geochemical surveying.

A number of quartz stringers and veins up to 1.5 m wide were found in the vicinity of the 'Dar' showing, located by Newmont Exploration of Canada Ltd. in 1982 on the northern boundary of the Stik 8 claim. Grab samples collected from this area returned values up to 0.055 oz/ton Au. Additional exploration is needed to fully evaluate the significance of the 'Dar' showing.

Three anomalous soil geochemical results were obtained from the reconnaissance sampling completed on the Adoog 8 and 9 claims. These sample sites should be re-examined as to the significance of these results.

No significant anomalous results were found on the remaining claims making up the 'Toodoggone' properties.

The Stik 1, 2, 6, and 7 mineral claims occur adjacent to areas in which additional work is required to fully evaluate mineral occurrences delineated by the current exploration program. These claims should be kept in good standing until these areas have been evaluated as to their significance. The Doog 7, Mike 1, Fred 2, Fred 5, Stik 3, Stik 5, Stik 9, Stik 10, and Adoog 10 claims should be allowed to lapse.

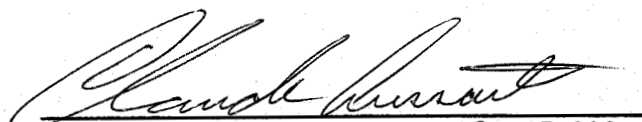
CERTIFICATE - C. H. Aussant

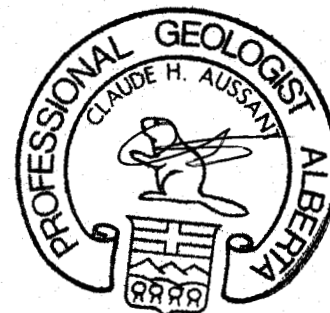
I, Claude Henry Aussant, of 31 Templebow Way N.E. in the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 - 17th Avenue S.W., Calgary, Alberta.
2. I am a graduate of the University of Calgary, B.Sc. Geology (1976), and I have practised my profession continuously since graduation.
3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
4. I am the co-author of the report entitled "Geological, Geochemical, and Prospecting Report on the Toodoggone Properties, Liard Mining Division, British Columbia", dated November 22, 1988. I personally supervised the exploration work (completed on the properties July 19 to October 21, 1988) on which this report is based.
5. I own 24,000 common shares of **Prolific Resources Ltd.** I do not expect to receive any interest (direct, indirect, or contingent) in the property described herein nor in the securities of **Prolific Resources Ltd.** in respect of services rendered in the preparation of this report.

DATED at Calgary, Alberta, this 22nd day of November, A.D. 1988.

Respectfully submitted,


C. H. Aussant, B.Sc., P.Geol., F.GAC



CERTIFICATE - J. W. Davis

I, James Wilson Davis, of 116 MacEwan Drive N.W. in the City of Calgary in the Province of Alberta, do hereby certify that:

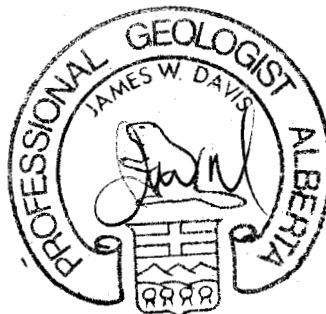
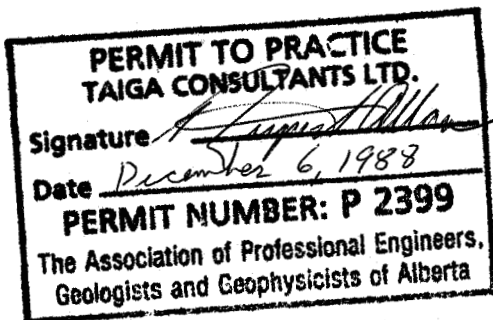
1. I am a Consulting Geologist with the firm of Taiga Consultants Ltd. with offices at Suite 400, 534 - 17th Avenue S.W., Calgary, Alberta.
2. I am a graduate of St.Louis University, B.Sc. Geology (1967) and M.Sc. Geology (1969), and I have practised my profession continuously since graduation.
3. I am a member in good standing of the Association of Professional Engineers, Geologists and Geophysicists of Alberta; and I am a Fellow of the Geological Association of Canada.
4. I am the co-author of the report entitled "Geological, Geochemical, and Prospecting Report on the Toodoggone Properties, Liard Mining Division, British Columbia", dated November 22, 1988.
5. I am the Secretary/Treasurer of Prolific Resources Ltd. and as such have a substantial position in the capital stock of Prolific Resources Ltd.

DATED at Calgary, Alberta, this 22nd day of November, A.D. 1988.

Respectfully submitted,

James W. Davis

 J. W. Davis, M.Sc., P.Geol., F.GAC



BIBLIOGRAPHY

Aussant, C.H. (1986): Geochemical Report on the ADOOG 7 Mineral Claim, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

----- (1986): Geochemical Report on the ADOOG 8 and 9 Mineral Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

----- (1986): Geochemical Report on the STIK 5 Mineral Claim, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

----- (1986): Geochemical Report on the FRED 1 Mineral Claim, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

Beattie, B.C. (1988): Reconnaissance Prospecting Report on the ADOOG 1-6 Mineral Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

----- (1988): Prospecting Report on the ADOOG 7 Mineral Claim, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

----- (1988): Prospecting report on the ADOOG 8 and 9 Mineral Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

----- (1988): Reconnaissance Geological and Prospecting Report on the STIK 5 Mineral Claim, Liard Mining Division, British Columbia; for Prolific Resources Ltd., private company report

----- (1988): Reconnaissance Geological and Prospecting Report on the FRED 1 Mineral Claim, Liard Mining Division, British Columbia; for Prolific resources Ltd., private company report

----- (1988) Reconnaissance Prospecting Report on the STIK 1-4 Mineral Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

British Columbia Ministry of Energy, Mines and Petroleum Resources

- GEM 1973 p.463; GEM 1975 p.E167; GEM 1982 p.343;
GEM 1985 p.C361; GEM 1986 p.C412-3
- assessment reports 4643, 5434, 11150, 13846, 15069

Davis, J.W. (1987): Geological Evaluation of the ADOOG 1-9, STIK 1-5, and FRED 1 Mineral Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp. and Prolific Petroleum Ltd., private company report

Diakow, L.J.; Panteleyev, A.; Schroeter, T.G. (1985): Geology of the Toodoggone River Area, NTS 94-E; B.C.Min.Energy & Mines; Prelim.Map 61

Gabrielse, H.; Dodds, C.J.; Mansy, J.L.; Eisbacher, G.H. (1977): Geology of Toodoggone River (94-E) and Ware West Half (94-F); Geol.Surv.Cda., Open File 483

Geological Survey of Canada:

- National Mineral Inventory, No.94-E/11 Cu3

Griep, J.L. (1987): Evaluation Report on the STIK 5 and FRED 1 Mineral Claims, Liard Mining Division, British Columbia; for Prolific Petroleum Ltd., private company report

Netolitzky, R.K. (1986): Reconnaissance Geological and Geochemical Report, STIK 1-4 Mineral Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

Pezzot, E.T. (1987): Geophysical Report on an Airborne Magnetometer Survey, STIK 2 and STIK 4 Claims, Liard Mining Division, British Columbia; for Delaware Resources Corp., private company report

Schroeter, T.G. (1981): Toodoggone River (94-E); in B.C. Min.Energy & Mines; Geological Fieldwork 1980, pp.6-7

A P P E N D I X

Summary of Personnel
Summary of Expenditures
Rock Sample Descriptions
Analytical Techniques
Certificates of Analysis



Toodoggone Properties

SUMMARY OF PERSONNEL

J. W. Davis, P.Geol. Calgary, Alberta	Project Supervisor	Jul.22-Aug.20	9.00
C. H. Aussant, P.Geol. Calgary, Alberta	Project Geologist	Jul.22-Aug.20	8.00
C. L. Swanson Calgary, Alberta	Assistant Geologist	Jul.22-Aug.20	21.50
B. C. Beattie Calgary, Alberta	Assistant Geologist	Jul.19-Aug.10	12.00
M. D. Jamieson Calgary, Alberta	Assistant Geologist	Aug.12-Aug.20	5.00
B. A. Fyke Calgary, Alberta	Junior Geologist	Jul.19-Aug.16	13.50
Don McLeod LaRonge, Sask.	Senior Prospector	Jul.22-Aug.20	21.25
Wally McLeod Stanley Mission, SK	Senior Prospector	Jul.22-Aug.20	20.75
Don Roberts LaRonge, Sask.	Senior Prospector	Jul.22-Aug.20	13.75
Dennis McLeod Stanley Mission, SK	Jr.Prospector/ Labourer	Jul.19-Aug.20	18.75
Irvine Roberts Stanley Mission, SK	Jr.Prospector/ Labourer	Jul.10-Aug.20	15.75
T. J. Clack Calgary, Alberta	Labourer	Jul.22-Aug.20	17.50
James Roberts Stanley Mission, SK	Labourer	Jul.22-Aug.20	17.25
Vanessa Willett Calgary, Alberta	Labourer	Jul.22-Aug.20	11.00
J. C. B. McGinnis Grande Prairie, AB	Cook	Jul.19-Aug.20	13.00
I. Q. Young Calgary, Alberta	Cat Operator/ Labourer	Jul.19-Aug.20	6.50
M. Poole [contract]	Helicopter Pilot	Jul.19-Aug.20	<u>14.50</u> <u>239.00</u>

Toodoggone Properties

SUMMARY OF EXPENDITURES

Pre-Field

Logistics, assembly of personnel and gear, data compilation 4,231.36

Field Personnel

Project Supervisor	9.00 days @ \$450/day	4,050.00	
Project Geologist	8.00 days @ \$375/day	3,000.00	
Assistant Geologists	38.50 days @ \$275/day	10,587.50	
Prospectors	75.75 days @ \$250/day	18,937.50	
Labourers	80.25 days @ \$195/day	15,648.75	
Cook	13.00 days @ \$185/day	<u>2,405.00</u>	54,628.75

Camp & Accommodation (including pilot)

239 man days @ \$50/day 11,950.00

Travel Expenses

mob & demob 7,060.13

Equipment Rentals

Generator	17 days @ \$15/day	255.00	
FM radio-telephone	17 days @ \$10/day	170.00	
HF radio-telephone	17 days @ \$ 9/day	153.00	
Water pump	17 days @ \$ 6/day	102.00	
Chainsaw	17 days @ \$ 6/day	<u>102.00</u>	782.00

Aircraft Support

Helicopter	24,446.43	
Fixed-Wing	<u>5,837.41</u>	30,283.84

Fuel

7,781.93

Geochemical Analyses

soil, silt, rock, core 11,535.63

Miscellaneous

Disposable field supplies; lumber	2,951.70	
Communications	612.81	
Maps and reproductions	884.85	
Expediting and freight	<u>6,253.33</u>	10,702.69

Post-Field

Data compilation, report writing, drafting, secretarial 10,326.57

Administration

5,896.90

GRAND TOTAL \$155,179.80

ROCK SAMPLE DESCRIPTIONS

	<u>Au</u> ppb	<u>Ag</u> ppm	<u>Ag</u> oz/T	
<u>JIM 1</u>	sample descriptions			
CA-12	8	9.70	0.283	(talus) purple basalt with numerous calcite stringers, stained with secondary malachite
CA-13	6	0.43		(talus) calcareous breccia, angular fragments, pale green, clay fracture filling in coarse-grained purple trachyandesite feldspar porphyry
CA-14	4 4	17.80 17.70	0.519	(outcrop) coarse-grained purple trachyandesite feldspar porphyry, extensive malachite stain along fractures, striking N-S/85°E, calcite lining fracture planes with a halo of Cpy stringers in the trachy porphyry, frequent number of these fractures with staining observed over a wide outcrop area (100m)
CA-15	14 10	148.00 149.00	4.317	(outcrop) calcite & quartz-calcite stringers and veinlets in purple trachyandesite feldspar porphyry, malachite staining frequent, minor galena in the calcite, activated area 2m true width, striking 160°/80°W
CA-16	8	0.71		(outcrop) shear zone, slickensides noted on edge of main brecciated calcite veinlet, numerous calcite and quartz-calcite stringers and veinlets, area of disturbance 1-2m wide, trace malachite, shearing probably associated with narrow green-grey andesite dyke intruding the trachyandesite feldspar porphyry
CA-17	17 10	27.00 28.00	0.787	(outcrop) quartz veining in a dark rusty-red tuff layer approx 2m wide, quartz and tuff impregnated with diss galena, malachite, Cpy, striking 340°
BB-16	12 14	27.00 33.00	0.788	(outcrop) trachyandesite feldspar porphyry, phenocrysts up to 1cm diameter, malachite staining diss throughout
BB-17	10 8	23.00 27.00	0.671	(outcrop) trachyandesite feldspar porphyry as above containing large Cpy blebs up to 2cm in diameter

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
BB-18	4	2.30		(outcrop) pale green tuff with calcite veinlets up to 1cm in diameter
BB-19	6 8	25.00 26.00	0.729	(outcrop) dark grey, fine grained tuff cut by numerous quartz veins, containing malachite, galena and covellite
BB-21	24	1.76		(outcrop) light green andesite porphyry, up to 5% Py as blebs and stringers, trace Cpy, minor argillic alteration, limonite staining
BB-22	16	1.12		(outcrop) same as above, pale green, limonite stained
BB-23	4	0.51		(outcrop) same as above
BB-24	2	0.91		(outcrop) light grey andesite porphyry, fine grained, occasional feldspar phenocrysts, trace galena, minor Py
BB-25	10	0.24		(outcrop) pink trachy-andesite feldspar porphyry, light grey, diss Py, trace Cpy, epidote alteration
BB-26	8	0.51		(outcrop) andesite porphyry, light grey, slightly siliceous, diss Py
DM-53	42 36	34.00 37.00	0.992	(outcrop) 20cm quartz-calcite vein in a light brown tuff, minor galena, malachite
DM-54	52 92	44.00 43.00	1.28	(outcrop) same as above
DM-55	72 66	47.00 50.00	1.37	(outcrop) same as above
DM-56	6	1.36		40cm soil sample: clay alteration, yellow-brown, medium grained with light brown tuff fragments
DM-57	6	9.10	0.265	chip sampled across 20cm in a 5-10 m mineralized zone; trachy-andesite feldspar porphyry, weak argillic alteration, trace galena, malachite, calcite stringers
DM-58	6 4	28.00 27.00	0.817	(outcrop) 6cm quartz-calcite veinlet in green andesite, minor galena, Py, trace malachite

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
DM-59	22 14	44.00 43.00	1.28	(outcrop) 30cm wide malachite stained trachy-andesite feldspar porphyry, minor diss Py
DM-60	4 4	21.00 21.00	0.613	(float) trachy-andesite feldspar porphyry, purple, 1% galena, malachite, trace Py
DM-61	14 14	18.40 19.40	0.537	(float) light brown trachy-andesite feldspar porphyry, calcite stringers and veinlets, galena and malachite along calcite veinlet edges, minor malachite staining on the calcite
DM-62	308 156	78.00 87.00	2.28	(float) calcite vein with minor galena and malachite staining
DM-63	108 82	56.00 57.00	1.63	(float) mafic volcanic, dark grey, fine grained with calcite veinlets containing galena and malachite
CS-49	12	1.02		(outcrop) medium green trachy-andesite porphyry, rusty weathering, 3-5% Py, 1% Cpy, trace secondary malachite and chrysocolla, mineralized zone 4m wide
CS-50	26	1.68		(outcrop) beige-yellow alteration clay with moderately argillically altered bleached volcanic fragments, zone 5m wide
CS-51	4	0.72		(outcrop) medium green trachy-andesite porphyry, rusty weathering, 10% Py, 1-3% Cpy, weak argillic alteration, weakly siliceous, moderate propylitic alteration
CS-52	10	0.54		(outcrop) same as above, trace of secondary malachite
CS-53	6	0.11		(outcrop) 3cm wide limonite stained calcite vein
WM-35	32 32	53.00 48.00	1.55	(outcrop) mafic volcanic dyke, 1% bornite, 1% chalcocite, secondary malachite and azurite (up to 3%), mineralized zone 40cm wide
WM-36	46 42	53.00 57.00	1.55	(outcrop) same as above

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
WM-37	14	7.00	0.204	(outcrop) 20cm calcite vein, 1% galena, specular hematite, trace malachite and chrysocolla
WM-38	32 24	32.00 34.00	0.933	(outcrop) 5cm quartz calcite vein as above
WM-39	16 20	44.00 43.00	1.28	(outcrop) rusty weathering mafic volcanic, 1% galena, trace Py, 50cm chip sample
WM-40	48 38	62.00 81.00	1.81	(outcrop) dark green silicified trachy-andesite porphyry, 1-3% galena, trace Py, trace secondary malachite, weak argillic alteration
WM-41	30 36	42.00 46.00	1.23	(outcrop) 5cm calcite veinlet, 1-3% galena, 1% secondary malachite
WM-42	10 10	37.00 38.00	1.08	(talus) trachy-andesite porphyry, purple, 1% galena, trace malachite and chrysocolla
WM-43	28 32	44.00 43.00	1.28	(talus) calcite vein in dark green mafic volcanic, 1-3% galena, trace malachite
WM-44	244	1.20		(talus) massive sulfide boulder, 40% Py, 50% bornite, 10% Cpy (3400 Cu ppm)
WM-45	<u>1560</u> 284	210.00 220.00	6.13	(0.046 Au oz/T) (talus) quartz vein, 5% bornite 1% Py, 1% Cpy, secondary malachite and chrysocolla
WM-46	6	9.60	0.28	(talus) porphyritic mafic volcanic, silicified, argillically altered, 1-3% Py as diss and blebs, 1% Cpy, secondary malachite and chrysocolla
WM-47	20	16.40	0.48	(talus) lithic tuff, 1% malachite, moderate argillic alteration

DOOG 7 Claim

Contour soil sampling

TC-1 to TC-33 incl

JR-16 to JR-50 incl

WM-51 to WM-66 incl

DM-69 to DM-82 incl

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>
JR-51	6	0.20

(talus) argillically altered andesite porphyry, diss Py, epidote alteration

MIKE 1 Claim"M" Grid - soil geochemical survey

	<u>Au</u> ppb	<u>Ag</u> ppm	
WM-9	12	0.14	(outcrop) rusty weathering trachy-andesite porphyry, relict phenocrysts of plagioclase and pyroxene up to 1.5cm diameter, 3-10% diss Py, propylitic and argillic alteration
WM-10	10	0.54	(talus) trachy-andesite porphyry, same as above
WM-11	10	0.16	(outcrop) up to 4cm wide quartz-barite vein
WM-12	18	0.20	(outcrop) quartz barite veining up to 3cm wide (frequency of 3 to 5 veins/metre over a 10x150m zone), trace Py, hematitic alteration
WM-13	104	0.12	(outcrop) same as above
CS-11	4	0.09	(talus) barite vein, white, coarsely crystalline, massive in a propylitically altered basalt
CS-12	14	0.08	(talus) 3cm wide barite vein, massive, white to beige
CS-13	10	0.11	(outcrop) quartz-barite veining (up to 3cm wide) in rusty weathering volcanics occurring in a zone 10m wide, drusy quartz, coarsely crystalline barite, trace magnetite, trace Py

FRED 1 Claim

	Au <u>ppb</u>	Ag <u>ppm</u>	Ag <u>oz/T</u>	
CS-01	2	0.15		(outcrop) basalt, dark green, brown weathering, 2cm wide quartz veinlets
CS-02	2	0.16		(outcrop) silicified dark green basalt, brown weathering
CS-03	4	0.10		(outcrop) pale green andesite with beige weathering relict phenocrysts up to 3mm long
CS-04	172	3.40		(talus) silicified volcanic agglomerate, 10% diss Py, <1% Cpy
CS-05	22	7.20		(outcrop) silicified volcanic agglomerate, 10% diss Py, <1% Cpy, sulphides occurring as blebs and disseminates
CS-06	12	0.62		(outcrop) silicified volcanic agglomerate, 8% diss Py, 2% Cpy, 90% of total sulphides occur as stringers
CS-57	48	0.41		(talus) coarsely crystalline, white barite breccia with mafic volcanic clasts, trace malachite and limonite staining
CS-58	18	0.07		(talus) white coarsely crystalline barite and sucrosic quartz, trace Py
CS-59	28	0.46		(outcrop) quartz-barite breccia with green mafic volcanic clasts, minor drusy quartz, white, coarsely crystalline, up to 3% Cpy, trace Py, minor malachite staining, maximum width 30cm
CS-60	34	4.50		(felsenmeer) massive sulphide veinlet, 2cm wide, in coarsely crystalline barite veinlet composed of 50% Py, 50% Cpy; limonite stained (6.40% Cu)
CS-61	10	0.19		(felsenmeer) massive, coarsely crystalline white barite, limonite stained
CS-62	<u>4340</u> <u>4040</u>	340.00 340.00	9.92	(0.127 Au oz/T) (outcrop) quartz-barite-calcite breccia with calcified volcanic clasts, quartz is slightly amethystine; 2% diss Py, 1% galena, 1% Cpy, trace malachite staining, 5m along strike of BF-07 & 08, max width 30cm

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
CS-63	16	0.72		(outcrop) drusy to sucrosic, white to grey quartz veinlets & massive limonite stained quartz veins up to 35cm wide (3 veins over 10m), 3% Cpy, trace Py, minor malachite staining (0.44% Cu)
WM-01	594	8.60		(outcrop) basalt with numerous calcite veinlets diss with Py Cpy, galena(?), tetrahedrite(?); propylitic alteration, mineralized zone 80cm wide
WM-02	2	0.11		(outcrop) 20cm wide barite veinlet within propylitic altered basalt, barite is massive with trace Py and Cpy
WM-03	4	0.16		(outcrop) 3cm wide barite vein with minor calcite within propylitic altered basalt, 50cm wide chip sample
WM-04	24	0.23		(outcrop) quartz-barite vein, vuggy with drusy quartz, 3-5% diss Cpy, trace malachite, within a propylitically altered basalt
WM-05	2	0.48		(outcrop) 30cm wide quartz-barite breccia, 1-3% diss Cpy, minor calcite
DM-01	180 172	15.70 17.10	0.458	(outcrop) metabasalt with veinlets of calcite containing 1-3% Py, 1-3% Cpy, zone 30cm x 5-10 m long
DM-02	694 636	22.00 22.0	0.642	(outcrop) same as above, with 1-3mm wide veinlets of galena/tetrahedrite (same location as DM-01)
DM-03	96 102	156.00 152.00	4.55	(outcrop) metabasalt with 0.5cm wide stringers of calcite containing trace Py, up to 5% Cpy, malachite staining
DM-04	4	0.41		(outcrop) dark green basalt containing a 30cm wide barite-calcite vein, trace diss Cpy, vein traced for 20m
DM-05	2	0.07		(outcrop) 30cm wide massive, coarsely crystalline white barite vein containing trace Cpy, Py and malachite, occurring in dark green basalt as above

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
DM-06	4	0.10		(outcrop) same location as DM-05, quartz-barite breccia, trace Cpy and sphalerite
DM-07	4	0.17		(outcrop) 1.2m barite vein, trace Py, Cpy and malachite
DM-08	8	0.25		(outcrop) 15-30cm white massive coarsely crystalline barite vein, trace Cpy, Py
DM-09	4	0.31		(outcrop) 15cm wide white massive barite vein, with trace drusy quartz and trace malachite staining
DM-10	4	0.23		(outcrop) 3-4m quartz-barite breccia (white, massive crystalline barite), 1-3% Cpy, trace malachite, trace Py
DM-11	4	0.18		(outcrop) same as DM-10
BF-03	34	0.64		(talus) quartz-barite vein, rusty weathered, diss Cpy, occasional Cpy blebs
BF-04	58	1.75		(talus) quartz breccia, angular rhyolite fragments, vugs lined with quartz intergrowths, diss Cpy and Py, minor malachite, minor smoky quartz, minor barite
BF-05	4	3.30		(outcrop) light to medium grey rhyolite, numerous quartz stringers fracture filling, 1cm Py veinlet adjacent to quartz stringers, malachite staining (10m south of CS-59)
BF-06	6 10	36.00 37.00	1.05	(outcrop) 7cm quartz barite veinlet, vuggy, vugs lined with drusy quartz, contains large Cpy blebs (1x6cm), malachite staining, minor bornite, hematite staining, veinlet occurs in a hematized rhyolite
BF-07	<u>3640</u>	16.30	0.475	(0.106 Au oz/T) (outcrop) quartz breccia, weakly argillically altered, minor calcite, malachite staining, diss Py

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
BF-08	88	3.40		(outcrop) 15cm barite-calcite veinlet, diss Cpy blebs up to 1 cm diameter, diss Py
BF-09	14	2.60		(outcrop) greenish grey calcareous rhyolite, 5% diss Py, argillically altered
DRM-05	668	2.50		(talus) barite-calcite breccia with silicified light green volcanic fragments, 1% Cpy, trace malachite
DRM-06	2	0.12		(outcrop) barite-quartz breccia with green mafic volcanic fragments, 1% diss Cpy
DRM-07	8	0.52		(talus) same as DRM-06, trace secondary malachite, purple volcanic fragments
JR-113	6	0.17		(talus) quartz breccia with weakly argillically altered volcanic fragments and 1% diss Cpy
JR-114	<u>1040</u> <u>1060</u>	51.00 52.00	1.49	(0.030 Au oz/T) (talus) calcite breccia with light green aphanitic volcanic fragments, 15% galena, 2% Py, trace arsenopyrite
JR-115	6	0.08		(talus) quartz breccia, weakly argillically altered volcanic fragments, 1% diss Cpy
JR-116	30	0.10		(talus) drusy quartz-calcite breccia with medium green aphanitic volcanic fragments, 1% Cpy, trace Py
JR-117	2	0.17		(talus) drusy quartz stringers up to 1cm wide in silicified beige volcanics, 1% Cpy, trace Py in quartz veinlets
JR-118	4	0.11		(talus) quartz breccia with silicified weakly argillically altered volcanic fragments, 1% Py, trace Cpy and hematite in veinlets
JR-119	4	0.48		(talus) calcite veinlets in green aphanitic volcanics, 1% diss Py, trace Cpy
JR-120	10	0.30		(talus) quartz-barite breccia with andesite porphyry fragments, 2% Cpy, trace Py, trace malachite

FRED 2 Claim

Contour soil sampling

TC-109 to TC 158 incl

FRED 3 Claim

	Au ppb	Ag ppm	Ag oz/T	
DM-110	<u>2640</u> <u>8200</u>	195.00 240.00	5.69	(0.08 Au oz/T) (6.20% Cu) (talus) quartz breccia with bleached mafic volcanic fragments and extensive malachite, chrysocolla staining, minor bornite and chalcocite
DM-111	432 440	30.00 30.00	0.875	(outcrop) quartz barite veining with minor galena and malachite staining, mineralized area approx 25m wide
DM-112	436 436	76.00 90.00	2.22	(outcrop) same as DM-111 but with 3% galena and no barite (same area as DM-111)
DM-113	126	4.90	0.143	(outcrop) same as DM-111; same area as DM-111
DM-114	204 203	31.00 42.00	0.904	(outcrop) same as DM-111
DM-115	4	0.59		(outcrop) coarsely cryst. white barite, chip sampled across limonite-stained quartz-barite vein -2m wide, 100m long
DM-116	14	0.61		(outcrop) same as DM-115 with minor Cpy and malachite
DM-117	56	3.10		(outcrop) massive white coarsely crystalline barite with trace Py, Cpy and malachite, limonite stained
DM-120	<u>1020</u>	2.40		(0.030 Au oz/T) (talus) ~20cm quartz-barite breccia vein, mafic volcanic fragments, trace malachite staining
DM-121	6	1.24		(talus) coarsely cryst. massive calcite with 1% Cpy as blebs, malachite staining
CS-65	12	0.22		(talus) white to grey, coarsely cryst. barite vein in purple trachy-andesite porphyry, minor malachite staining
CS-66	4	0.08		(felsenmeer) massive quartz-barite, coarsely crystalline white barite and sucrosic hematite stained quartz
IR-12	10	0.05		(float) barite, colour banded white to medium grey due to sheared inclusions of country rock, minor malachite staining

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
IR-13	2	0.17		(float) dark green fine-grained mafic volcanic with calcite fracture filling
WM-67	2	0.11		(outcrop) quartz-calcite vein, 1% Py, rusty stained
WM-68	4	0.33		(talus) medium-green brecciated andesite, frequent calcite stringers, 3% Py, 1% Cpy, trace chalcocite, trace bornite, up to 1% malachite and chrysocolla, weak argillic alteration
WM-69	6	1.19		(outcrop) calcite vein in mafic volcanic, 3-5% Py, 1% Cpy, 1-3% malachite and chrysocolla
WM-70	4	0.93		(outcrop) brecciated mafic volcanic with calcite, 7% Py, 1% Cpy, trace chalcocite, 2% secondary malachite, trace chrysocolla
WM-71	66	3.10		(outcrop) basalt, 10% Py as fracture fillings and diss, 3% Cpy, 1% malachite
WM-72	4	0.25		(outcrop) mafic volcanic with calcite stringers up to 1cm wide, 1-3% Py, trace malachite
DR-28	12	0.46		(outcrop) andesite breccia, quartz-calcite infilling, 1% diss Py, weak argillic alteration
DR-29	64 60	136.00 144.00	3.97	(17.1% Cu) (outcrop) up to 10cm wide quartz-calcite vein (quartz: medium crystalline, drusy, white; calcite: medium crystalline, white), up to 20% bornite, up to 25% Py, secondary malachite and chrysocolla
DR-30	26	13.00	0.38	(outcrop) up to 6cm wide quartz-calcite vein, 2% bornite, 1% Py, trace malachite

FRED 4 Claim

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
WM-73	4	0.17		(talus) massive white to grey quartz, finely crystalline, 1% Py, slight rust staining
WM-74	76 58	350.00 380.00	10.21	(17.20% Cu) (talus) brecciated mafic volcanic unit with quartz veining, 30% bornite, trace chalcocite, 5% malachite
WM-75	6	13.40	0.391	(1.21% Cu) (talus) brecciated andesite with drusy quartz veining, 7% bornite, trace Py, trace malachite, weak argillic alteration
WM-76	10	13.50	0.394	(1.52% Cu) (outcrop) quartz vein in mafic volcanic, minor calcite, 7% bornite, 3% secondary chrysocolla, series of quartz stringers in a 40cm wide zone
WM-77	6 10	34.00 390.00	0.988	(talus) quartz vein, 2% diss Py, trace Cpy, limonite stained, trace chrysocolla and malachite
WM-78	10	4.80		(outcrop) quartz veins in weakly argillically altered mafic volcanics, 1% Py, 1% galena, trace Cpy, trace malachite
WM-79	4	0.45		(outcrop) 30cm wide drusy, white quartz vein, 1% Py, trace malachite
WM-80	6	0.82		(talus) quartz-calcite-barite boulder, trace Py, trace malachite
WM-81	4	3.10		(outcrop) quartz-calcite stringers in silicified slightly brecciated andesite porphyry, trace Py, trace Cpy, trace malachite
WM-82	4	9.60	0.280	(outcrop) brecciated purple mafic volcanic with quartz-calcite stringers, 1% Py, trace Cpy, 1-3% malachite staining
WM-83	8	5.10	0.149	(outcrop) same as WM-82
WM-84	4	8.00	0.233	(outcrop) same as WM-82, 2% diss Py

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
WM-85	10 8	196.00 188.00	5.72	(11.9% Cu) (outcrop) brecciated mafic volcanics with quartz-calcite stringers containing sulphides, 10% bornite, 1-3% Py, 3% malachite
WM-86	6	0.07		(outcrop) 8cm wide brecciated bornite vein with mafic volcanic inclusions
WM-87	2	0.16		(outcrop) 10cm wide barite vein in weakly argillically altered trachy-andesite porphyry, trace diss Py, trace malachite
WM-88	22	0.93		(outcrop) silicified, brecciated, pale pink-grey trachy-andesite porphyry with quartz stringers, 1% Py and trace malachite occurring with the quartz stringers
CS-67	76 82	53.00 57.00	1.55	(talus) very siliceous mafic volcanic, 3-5% galena, 2% Py, 1% Cpy, limonite stained
CS-68	192	13.80	0.403	(talus) massive creamy white sucrosic quartz with 1-3% diss Py, 1% Cpy, trace galena, and small veinlets of white drusy quartz with 3% Cpy and chlorite
CS-69	2	0.07		(talus) massive coarsely crystalline white barite
CS-70	14	0.37		(talus) trachy-andesite porphyry, propylitically altered, 3-5% diss Py
CS-71	2	1.54		(talus) massive coarsely crystalline white barite-calcite vein in argillically altered beige mafic volcanic, <1% diss Py and Cpy
CS-72	6	0.24		(talus) drusy quartz-breccia with bleached, weakly argillically altered mafic volcanics, 1% Cpy and trace malachite
CS-73	16	0.36		(talus) same as above
DRM-2	4	1.28		(outcrop) silicified trachy-andesite porphyry, 3-5% Py, 1% Cpy
DRM-3	6	0.16		(talus) quartz breccia, weakly argillically altered andesite porphyry fragments, 1% Py, 1% Cpy, trace malachite

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/t</u>	
DRM-4	22	0.13		(talus) massive quartz-calcite boulder with 1% Cpy, trace malachite
DR-31	6	4.90	0.143	(3.20% Cu) (outcrop) epidote-calcite vein up to 6cm wide, contains stringers of bornite up to 0.5cm wide (total 10% bornite), 3% malachite, trace chalcocite
DR-32	12 18	350.00 370.00	10.21	(10.8% Cu) (outcrop) mafic volcanic, calcite stringers, 5% bornite, 1% chalcocite, 3% malachite
DM-83	12 10	28.00 28.00	0.82	(outcrop) chip sample across a moderately argillically altered volcanic outcrop, 1.5m wide and 7-10m long; at least 2 quartz veins in alteration zone approx 10cm wide striking 300°/S; 1% Cpy, 1-3% Py, minor malachite
DM-84	6	13.00	0.38	same as DM-83
DM-85	6 6	19.50 16.80	0.57	same as DM-83
DM-86	4	5.80	0.17	(outcrop) calcite-chlorite vein from above alteration zone, 2% Py, rusty stained, trace Cpy, trace malachite
DM-87	6 6	21.00 21.00	0.61	(outcrop) same as DM-86, 1% galena
DM-95	16	13.90	0.41	(talus) trachy-andesite porphyry, purple, plagioclase phenocrysts up to 1cm long, weak propylitic alteration, trace diss Cpy and malachite
DM-96	4	0.43		(outcrop) massive calcite-quartz veins and inclusions in green mafic volcanics, 1% galena in the calcite blebs
DM-97	4	0.33		(outcrop) massive coarsely crystalline white barite vein approx 20cm wide, trace galena
DM-98	6	1.41		(talus) calcite veinlets with 1% diss Py, trace Cpy and trace secondary malachite in green mafic volcanics, weakly brecciated

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
DM-99	2	15.50	0.45	(outcrop) light beige alteration clay, moderately argillically altered, bleached mafic volcanic fragments, 60cm wide zone
DM-100	6 6	127.00 146.00	3.70	(outcrop) same as DM-99
DM-101	14 18	88.00 89.00	2.57	(outcrop) rusty-beige alteration clay, moderately argillically altered, hematized volcanic fragments
DM-102	10 6	45.00 46.00	1.31	(outcrop) same as DM-101
DM-103	180 184	1480.00 1340.00	43.17	(outcrop) quartz-calcite vein, 10% diss galena/tetrahedrite, 1% diss Py in dark grey mafic volcanics
DM-104	50 38	36.00 39.00	1.05	(outcrop) collected from alteration clay, quartz-calcite boulder with 1% diss Py, trace Cpy, trace galena
DM-105	10	15.60	0.46	(felsenmeer) quartz-calcite boulder 20cm wide, containing 5% Py and trace galena
DM-106	6	0.39		(talus) green mafic tuff, with calcite stringers and 1% diss Cpy and Py
DM-107	58	0.51		(outcrop) grey alteration clay with bleached volcanic fragments
DM-108	576	2.60		(felsenmeer) quartz breccia with hematite altered volcanic clasts, trace malachite
DM-109	2	0.68		(felsenmeer) calcareous mafic volcanic, with extensive limonite staining
DM-122	74	2.80		(talus) massive sucrosic quartz-calcite boulder with 1% diss Py
DM-123	12	1.80		(talus) sucrosic pink calcite boulder, slightly brecciated, trace Cpy, 1% hematite (specularite)
DM-124	16	1.06		(talus) calcite breccia with weakly argillically altered beige volcanic fragments, up to 3% Py, trace Cpy, trace malachite

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
DM-125	48 44	19.50 19.10	0.57	(talus) quartz-calcite breccia with silicified mafic volcanic fragments, 3-5% Py, 1% Cpy, trace malachite and limonite
DM-126	90	0.98		(talus) quartz calcite breccia with very weakly argillically altered, trachy-andesite porphyry, 1% Cpy, trace Py, trace malachite
IR-1	4	0.62		(float) sucrosic quartz, vuggy, drusy quartz lining vugs, contains narrow calcareous bands which contain most of the sulphides present (chalcopyrite, Py, minor malachite staining)
IR-2	66 64	26.00 18.10	0.758	(outcrop) 7cm quartz vein, vuggy with quartz intergrowths lining vugs, intense malachite staining, up to 1cm blebs of bornite, inclusions of sheared trachy-andesite feldspar porphyry containing minor calcite, Cpy, Py
IR-3	14	5.00		(outcrop) weakly argillically altered calcareous purple to brown mafic volcanic, calcite fracture filling, minor diss Py, Cpy, malachite staining, bornite, <1% total sulphides
IR-4	8	3.10		(outcrop) 6cm wide quartz-calcite breccia vein, numerous weakly argillically altered beige mafic volcanic fragments, extensive malachite staining, minor Cpy occurring as blebs to 2mm wide
IR-5	4	0.24		(outcrop) massive mafic volcanic, greenish grey with mauve tinge, trace galena, up to 4% Py as diss and stringers
IR-6	6	0.52		(outcrop) quartz-breccia vein 50cm wide, vuggy with quartz intergrowths, quartz veinlets randomly oriented in weakly argillically altered trachy-andesite porphyry, beige coloured, minor Cpy and Py, minor malachite staining
IR-7	4	0.20		(outcrop) white crystalline barite veins, slightly calcareous and siliceous, in beige weakly argillically altered fine grained trachy-andesite porphyry, minor sulphides along edges of barite veins

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
IR-8	8	3.40		(talus) greenish grey mafic volcanic with numerous randomly oriented calcite stringers, minor bornite within the calcite stringers, diss Cpy in the volcanics and stringers, minor malachite staining
IR-9	<u>2080</u>	5.00	0.146	(0.06 Au oz/T) (outcrop) 2cm wide quartz vein containing minor Cpy, galena, Py and malachite staining within a weakly argillically altered mafic volcanic
IR-10	6	0.06		(outcrop) narrow quartz stringer, rusty weathered, calcite envelope around veinlet, minor diss Cpy in weakly argillically altered mafic volcanic
IR-11	4	0.05		(outcrop) 30cm wide coarsely crystalline massive white barite vein with trace malachite staining
JR-57	24	0.67		(outcrop) mauve-green mafic volcanic with numerous quartz stringers, diss Cpy and Py
JR-58	8	0.48		(outcrop) calcareous mafic volcanic with quartz-calcite fracture filling, diss Py and Cpy, malachite lining fracture planes
JR-59	244	9.20		(talus) rusty weathering, brecciated, siliceous, mafic volcanics, pyritic, minor Cpy, extensive malachite staining fracture planes
JR-60	134	8.30		(0.63% Cu) (talus) quartz breccia, 40-60% sulphides, galena, Py, Cpy, malachite (2/3 galena, 1/3 Py)
JR-61	176	6.00		(outcrop) 2" quartz breccia vein, rusty weathering, 5-10% sulphides, Py, minor galena, minor malachite
JR-62	<u>1060</u> <u>852</u>	36.00 42.00	1.05	(0.031 Au oz/T) (outcrop) 6" quartz breccia vein, 15-30% sulphides, extensive malachite staining, Py, Cpy, minor calcite

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
JR-63	794 664	46.00 47.00	1.34	(0.023 Au oz/T) (outcrop) 4" breccia, siliceous, minor Cpy, minor galena, minor malachite, rusty weathering, greenish to purple-grey on fresh surface, 20% sulphides, Py occurring diss in siliceous bands or as stringers
JR-64	62	1.15		(talus) quartz, minor barite breccia, 3% diss Py
JR-65	12	4.30		(boulder) mottled grey-green quartz-calcite breccia, minor barite, minor Cpy, minor galena, 1% diss Py, occ medium to dark grey quartz stringers
JR-110	12	0.82		(outcrop) silicified, slightly brecciated, trachy-andesite porphyry, 3-5% Py, 2% Cpy
JR-111	2	0.24		(talus) massive quartz-calcite boulder, 1% Cpy, trace malachite
JR-112	4	0.12		(talus) quartz breccia, weakly argillically altered bleached volcanic fragments, occ drusy quartz, trace diss Py

FRED 5 ClaimSoil Geochemical Contour Sampling
TC-159 to TC-165 incl

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
BB-5	106	1.05		(talus) silicified tuff, light grey quartz stringer, pyritic bands, limonite stained
BB-6	478	0.53		(talus) calcite vein, malachite stained, in a light grey fine-grained tuff
BB-7	108	0.74		(outcrop) quartz stringers in siliceous trachy-andesite feldspar porphyry, diss Py, Cpy, striking 030°/60°E, 15cm wide
BB-08	42	0.47		(outcrop) light grey siliceous trachy-andesite porphyry, up to 2% diss Py
BB-09	156	1.03		(outcrop) siliceous light grey fine-grained trachy-andesite porphyry, up to 1% diss Py, striking 130°/70°S
BB-10	22	0.24		(outcrop) coarse-grained, pale grey siliceous trachy-andesite porphyry, Py as diss and stringers, trace Cpy
BB-11	8	1.20		(outcrop) siliceous light grey fine-grained trachy-andesite porphyry, diss Py
BB-12	2	0.89		(outcrop) grey fine-grained siliceous trachy-andesite porphyry, up to 5% diss Py, weakly brecciated
BB-13	18	1.62		same as BB-12
BB-14	14	0.13		(outcrop) 2m barite vein in greenish grey trachy-andesite porphyry, blebs of Cpy up to 3mm diameter, diss Py, trace malachite, strike 130°
BB-15	4	0.03		(outcrop) 2 to 20cm barite vein, contains trachy-andesite porphyry fragments
CA-7	224	7.30	0.21	(talus) quartz latite, weakly rusty weathered, siliceous, med.grey, glassy quartz phenos, 5% diss Py

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
CA-8	4	0.22		(talus) pink trachy-andesite porphyry, diss Py, dark rusty weathered, glassy quartz phenos
CA-9	6	0.52		(outcrop) tuff, dark rusty weathered, siliceous, medium grey, remnant feldspar phenos, Py stringers throughout
CA-10	2	0.32		(outcrop) volcanic tuff, 15m wide zone, silicified, dark rusty weathered, highly fractured, medium grey, 5% diss Py, trends approx 330°
CA-11	12	0.93		(outcrop) rusty weathered zone, light grey siliceous andesite, 5-10% diss Py, 5m wide, trends 010°
CS-30	16	13.6	0.40	(outcrop) weakly brecciated volcanic tuff, purple on fresh surface, minor Py
CS-31	4	1.02		(outcrop) chip sampled across 40cm wide shear zone of altered mafic volcanics and calcite veining up to 0.5cm wide, trace Py, some beige alteration clays and rusty weathering
CS-32	4	0.28		(outcrop) mafic volcanoclastics found in alteration zone, 1-3% diss Py
CS-33	4	0.09		(outcrop) 5cm white coarsely crystalline barite vein
CS-34	2	0.10		(outcrop) barite breccia vein, white, coarsely crystalline, massive, volcanoclastic clasts, 1-3% Py in the clasts
CS-35	4	0.30		(outcrop) light green, moderately argillically altered volcanoclastics, 1-3% diss Py, rusty weathering, alteration zone 1.5m wide
CS-36	8	1.44		(outcrop) lahar, rusty weathering, siliceous, pyritic, clasts up to 15cm rounded to subrounded
CS-37	4	0.16		(outcrop) medium grey felsic volcanic, rusty weathering, weakly siliceous, 5-10% diss Py

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
CS-38	6	0.23		(outcrop) lahar, rusty weathering, clasts up to 30cm in diameter rounded to sub-rounded, up to 10% Py, blebs of calcite, minor veinlets and blebs of Py
CS-39	6	0.12		(talus) white coarsely crystalline barite
CS-40	4	0.14		(outcrop) same as CS-38
CS-41	4	0.35		(outcrop) pyritic volcanoclastic beige on fresh surface, up to 5% diss Py, moderate argillic alteration
CS-42	2	0.12		(felsenmeer) dacite, dark green on fresh surface, 3-5% Py as diss, stringers, blebs
CS-74	4	0.81		(outcrop) yellow-orange alteration clay with weakly bleached limonite stained volcanic fragments
CS-75	4	0.79		(outcrop) propylitically altered dacite porphyry, 3-5% diss Py, limonite staining
JR-52	6	0.88		(outcrop) purple andesite, 1-3% Py, weakly brecciated, minor quartz stringers, trace malachite and chrysocolla
JR-53	30	3.40		(talus) rhyolite with quartz stringers, 1-3% Py, 1% Cpy, trace bornite, trace malachite, rusty weathering
JR-54	6	0.98		(outcrop) 30cm calcite vein in rhyolite
JR-55	12	0.10		(talus) intermediate to mafic volcanic, irregular calcite stringers up to 2cm diameter, fractured, diss Py, minor Cpy
JR-56	16	0.67		(boulder) brecciated quartz calcite in greenish grey mafic volcanic, diss Cpy within the quartz-calcite breccia, minor malachite
DM-88	16 16	37.00 29.00	1.08	(talus) calcite veining in mafic volcanic, 1-3% galena, trace chalcocite, trace malachite, slickensides noted
DM-89	66	1.45		(talus) grey calcite with fragments of andesite porphyry, 1% Py, trace Cpy, trace malachite

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
DM-90	4	0.78		(outcrop) 10cm wide quartz-calcite vein, 1-3% diss Py, 1% Cpy, 1% malachite
DM-91	16	1.80		(outcrop) brecciated mafic volcanic with fracture fillings of epidote and calcite, rusty weathering, 3% Py, 1% Cpy, trace malachite
DM-92	6	0.44		(talus) brecciated mafic volcanic, calcite fracture filling, minor epidote, 5% Py, trace Cpy, trace malachite
DM-93	4	0.19		(talus) quartz-calcite, massive, white to grey, 1% Py, trace malachite
DM-94	14 14	32.00 27.00	0.93	(talus) brecciated mafic volcanic with calcite stringers, 1-3% bornite, 3-5% covellite, trace magnetite, trace Cpy, trace malachite
DR-33	16	2.90		(outcrop) grey andesite, disseminated white calcite flooding, with Py, Cpy and malachite
WM-89	62 44	19.10 18.10	0.56	(outcrop) light grey trachy-andesite porphyry, greenish grey, calcareous, numerous calcite stringers, diss Cpy and minor diss bornite within calcite stringers, minor malachite
WM-90	50	8.10	0.24	(outcrop) same as WM-89, with quartz stringers, Cpy diss throughout
MJ-09	14 16	24.00 18.20	0.70	(outcrop) dacite tuff, dark grey-green with 1% diss covellite, abundant malachite, thin 1 cm coarse grained barite stringers
MJ-10	4	2.40		(outcrop) dacite porphyry tuff with moderate argillic alteration, abundant limonite staining, minor quartz, gossan zone approx. 6 m wide, strike 045°/56° north

STIK 1 Claim

Contour soil geochemistry survey
 TC-34 to TC-37
 small part of "S" soil geochemical grid

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
WM-48	32 32	97.00 88.00	2.83	(talus) calcite breccia, 1% galena, trace Cpy, trace malachite
WM-49	4	1.11		(outcrop) quartz veins up to 3mm in mafic volcanic altered to chlorite and muscovite, weak rusty weathering
WM-50	204 122	37.00 46.00	1.08	(talus) white to grey calcite boulder, coarsely crystalline, <1% bornite, trace Cpy, trace malachite and chrysocolla
DM-64	4	0.13		(outcrop) 10cm wide quartz vein, white, massive
DM-65	18 14	22.00 18.10	0.64	(outcrop) purple lithic tuff, trace limonite and malachite staining, weakly siliceous
DM-66	2	0.06		(outcrop) brecciated white calcite vein, coarsely crystalline, trace galena, trace chrysocolla
DM-67	2	0.06		(outcrop) calcite vein, white to grey, coarsely crystalline, massive
DM-68	4	0.46		(talus) calcite boulder, coarsely crystalline, white, massive, trace galena, trace malachite
BF-11	6	0.56		(outcrop) coarsely crystalline white barite vein in purple trachy-andesite porphyry

STIK 2 Claim

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	
CS-54	10	0.22	(talus) brecciated dark green mafic volcanic, hematite stained, trace Py, calcite stringers
DRM-1	8	0.05	(outcrop) calcite vein in purple trachy-andesite porphyry, rusty stained
WM-23	44	0.56	(outcrop) 1cm quartz stringers in dark grey trachy-andesite feldspar porphyry, minor Py, chip sampled across 60cm
DM-42	6	0.09	(outcrop) brecciated purple mafic volcanic, calcite veinlets
DM-43	6	1.26	(talus) calcite, 1-2% galena, secondary malachite, epidote and hematite
DM-44	4	0.27	(talus) calcite, minor chrysocolla, malachite and galena

STIK 3 Claim

Contour soil geochemical survey

TC-38 to TC-64 incl

TC-87 to TC-108 incl

STIK 4 ClaimHand Trench T-88-3

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
01	10	0.06		purple andesite porphyry, weak to moderate argillic alteration, extensive limonite staining
02	28	0.11		same as 01, weakly silicified, trace Py
03	42	0.10		same as 01, moderately silicified, occ quartz stringers up to 1cm wide
<u>Rock samples</u>				
CS-43	394	0.19		(outcrop) well developed quartz breccia system with rust and manganese staining, zone 1.75m minimum width, trace Py
CS-44	238	0.15		same as CS-43
CS-45	352	0.23		same as CS-43
CS-46	16	0.05		(outcrop) pyritic purple tuff, weak argillic alteration, host rock for above quartz-breccia system
CS-47	4	0.06		(talus) quartz breccia, white massive quartz with moderate argillically altered bleached tuff clasts
CS-48	6	0.05		(talus) white quartz, weak limonite staining
CS-56	34	0.06		(outcrop) 5cm wide quartz veinlet, limonite stained, 30m west of T-88-3
WM-29	24	2.70		(talus) andesite, light brown, rusty weathered, siliceous, frequent quartz stringers, minor calcite stringers, fractured
DM-46	<u>2480</u> <u>2460</u>	24.00 29.00	0.700	(0.072 Au oz/T) (outcrop) 20cm x 1m calcite veinlet in light-brown fine-grained tuff, malachite and azurite staining, calcite veinlet
DM-47	24	1.62		(talus) calcite speckled with malachite

STIK 5 Claim

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
JR-66	6	1.26		(outcrop) light grey calcite, massive
IR-14	4	0.29		(outcrop) limestone, black with calcite fracture filling, trace Py
IR-15	4	1.00		(outcrop) limestone, black, very fine-grained, with coarse calcite fracture filling
IR-16	2	0.25		(outcrop) limestone, black to medium green, calcite fracture filling, minor Py in calcite stringers
DRM-8	2	0.91		(outcrop) limestone, black with abundant calcite fracture filling
WM-127	26 28	22.00 19.20	0.642	(outcrop) lahar, clasts up to 7cm diameter, 1-3% Py, 1% chalcocite, malachite
WM-128	14	16.80	0.488	same as WM-127, trace bornite
WM-129	44	5.60	0.163	same as WM-127, trace epidote alteration
WM-130	76	9.80	0.286	(outcrop) slightly bleached, propylitically altered andesite porphyry, 3% Py, 1% Cpy, 1% malachite and chrysocolla
WM-131	8	0.07		(talus) pyritic aphanitic dacite, limonite stained, 3-5% finely diss Py
WM-132	2	0.78		(outcrop) limestone, pale grey, trace galena
DM-127	34	0.22		(outcrop) lahar, conglomerate with 1-3% Py, 1% Cpy, trace malachite
DM-128	16	0.13		grey alteration clay, fragments moderate to strongly argillically altered (from near above lahar)
DM-129	244	3.90		(outcrop) lahar with abundant chrysocolla, trace Cpy
DM-130	174 126	18.80 17.80	0.548	(outcrop) same as DM-129

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
DM-131	62	0.83		(outcrop) boulder imbedded in conglomerate outcrop, andesite porphyry, 10-12% diss Py, replacing hornblende phenocrysts
DM-132	26 22	24.00 27.00	0.700	(float or part of conglomerate outcrop) altered andesite porphyry, slightly bleached, phenocrysts replaced by tennantite (15%) and secondary azurite and malachite
DM-133	64	4.20		(outcrop) andesite porphyry, weakly argillically altered, bleached, light green, 1% diss Cpy, trace malachite
DM-134	2	7.10		(talus) dacite tuff, medium grey, carbonized organic matter, fine-grained Py halo and inclusions in the organic matter, 1% very fine diss Py in the tuff

STIK 6 Claim

"S" soil geochemical grid

Hand Trench T-88-4

	<u>Au</u> ppb	<u>Ag</u> ppm	
01	4	3.40	greyish yellow alteration clay with bleached mod to strongly argillically altered andesite porphyry fragments
02	6	2.50	same as 01
03	4	2.60	beige alteration clay with moderately argillically altered bleached andesite fragments, weakly hematized
04	10	2.80	same as 03
05	4	3.60	greyish-yellow alteration clay with bleached argillically altered weakly siliceous andesite fragments
06	2	2.40	same as 05
07	4	2.40	beige alteration clay with fragments of limonite stained weakly argillically altered, slightly siliceous andesite
08	2	1.27	rusty beige alteration clay with fragments of limonite stained weakly argillically altered slightly siliceous andesite
09	6	1.40	same as 08, more siliceous and limonitic
10	6	1.37	same as 08
11	4	0.90	same as 08, less siliceous
12	4	1.06	same as 08
13	10	0.88	same as 08
14	4	1.00	same as 08, more siliceous and limonitic
15	8	0.86	same as 08, more limonitic, less argillic alteration
16	4	0.70	same as 08, with organic matter present

Rock Samples

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	
CS-07	6	0.25	(talus) barite breccia vein, white, coarsely crystalline, 1% galena, trace Cpy
CS-08	4	0.40	(felsenmeer) white, massive barite vein, coarsely crystalline, 1-3% galena, trace Cpy, vein width up to 10 cm
CS-09	4	0.09	(felsenmeer) extremely coarsely crystalline white barite breccia vein, trace galena, minimum width 20 cm
CS-10	2	0.19	(felsenmeer) quartz barite veinlets in weakly argillically and propylitically altered trachyte, veinlets up to 5 cm in width
DR-27	6	0.50	(talus) L.0+00 1+45W, barite vein with trace galena and Cpy
JR-14	8	6.90	(talus) L.1+50N 0+50W, light green, fine grained mafic volcanic, barite crystals with minor calcite, minor Py
JR-15	8	0.17	(talus) L.0+00 0+87W, barite with light green, fine grained, mafic fragments, trace Py
WM-06	12	1.12	(outcrop) barite pod, white, coarsely crystalline, 30 cm X 2 metres
WM-07	6	3.70	(outcrop) barite breccia, white, coarsely crystalline, 1-3% disseminated galena, <1% Py, trace malachite, chip sampled across 50 cm wide zone
WM-08	6	6.80	(felsenmeer) quartz-barite veins 20 cm wide, white, coarsely crystalline, 1-3% galena, trace covellite, trace malachite
DM-12	2	0.52	(outcrop) barite vein 20 cm wide, 2 metres long, massive, white, coarsely crystalline, 1% galena, trace malachite
DM-13	4	0.46	(outcrop) barite vein, white, coarsely crystalline, 10 cm wide, 1 metre long

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	
DM-14	4	0.08	(outcrop) barite vein, white coarsely crystalline, 10 cm wide, 1 metre long, trace galena
DM-15	6	0.34	(outcrop) andesite porphyry, rusty weathering, 3% Py, argillic alteration, zone of alteration 1 metre wide
DM-16	6	1.90	hand trench in zone of argillic alteration, alteration clays with silicified moderately altered pyritic mafic volcanic fragments, sampled at 1 metre intervals
DM-17	4	2.40	same as DM-16
DM-18	2	1.95	same as DM-16
DM-19	6	1.62	same as DM-16
DM-20	10	0.97	same as DM-16
DM-21	6	0.08	(felsenmeer) barite up to 20 cm, massive, white, coarsely crystalline
DM-22	8	0.53	hand trench in zone of argillic alteration, alteration clays with silicified moderately altered pyritic volcanic fragments, sampled at 1 metre intervals
DM-23	14	0.45	same as DM-22
DM-24	8	0.34	same as DM-22
DM-25	6	0.05	(felsenmeer) barite vein coarsely crystalline, white, collected from above clay alteration zone
DM-26			no sample description, not analyzed
CS-76	10	0.25	(outcrop) moderately argillically altered, bleached, slightly silicified, trachyandesite porphyry

STIK 7 Claim

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>
DM-45	12	0.05
DM-119	4	1.04

(talus) calcite with minor chlorite

(talus) white coarsely crystalline quartz-barite vein in purple andesite porphyry

STIK 8 Claim

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	
CS-55	6	0.05	(talus) massive white coarsely crystalline quartz, limonite stained
WM-24	<u>1320</u>	1.52	(0.039 Au oz/T) (outcrop) 1 metre wide quartz vein, grey, diss with Py, blebs of Cpy, malachite, trace galena, chip sampled
WM-25	<u>1880</u>	0.13	(0.055 Au oz/T) (outcrop) 1.5 metre wide quartz vein, minor Py, trace Cpy, chip sampled
WM-26	62	5.20	(talus) calcite vein diss with galena, trace malachite
WM-27	124	0.24	(outcrop) siliceous trachy-andesite feldspar porphyry, light grey medium grained, numerous quartz stringers, diss with Py, chip sampled across 50 cm
WM-28	158	0.21	(talus) quartz, trace galena, minor Py

STIK 9 Claim

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	<u>Ag</u> <u>oz/T</u>	
MJ-11	58	0.08		(outcrop) calcite-barite breccia, in a purple dacite porphyry
CS-64	4	0.06		(talus) purple dacite porphyry tuff with 2 cm quartz veinlets, limonite stained
DM-41	50 28	107.00 114.00	3.12	(talus) lithic tuff 1-3% chrysocolla and malachite, moderate argillic alteration
WM-22	22	6.60	0.193	(talus) 6 cm calcite veinlet

STIK 10 Claim

Contour soil geochemical survey

JR-84 to JR-109 inclusive

AD00G 8 Claim

Contour soil geochemical survey
JR-67 to JR-83 incl
IY-21 to IY-71 incl

Rock Samples:

	<u>Au</u> <u>ppb</u>	<u>Ag</u> <u>ppm</u>	
BB-27	4	0.14	(talus) 10 cm wide quartz vein in brown tuff
BF-02	8	0.08	(talus) same as BB-27

ADOOG 9 Claim

Contour soil geochemical survey

IY-1 to IY20 incl
TC-65 to TC-86 incl

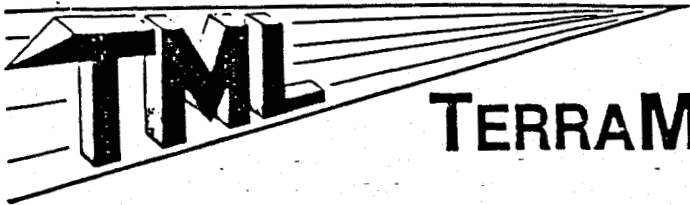
ADOOG 10 Claim

Contour soil geochemical survey

WM-92 to WM-119 incl

DR-34 to DR-57 incl

JR-66



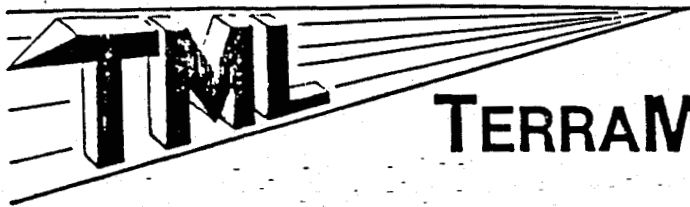
TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

SAMPLE PREPARATION

Soil and sediment samples are dried and sieved through 80 mesh nylon screen (maximum particle size 200 microns).

Rock or drill core samples are crushed to approximately 1/8" in a jaw crusher, riffled to obtain a representative sample, and pulverized to 100 mesh (180 micron particle size).

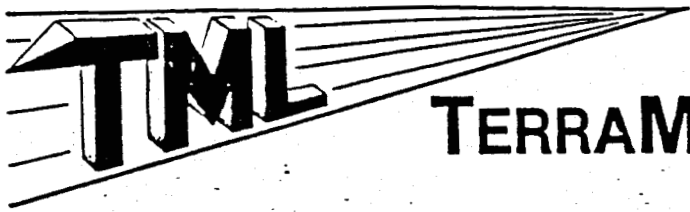


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(403) 276-8668

FIRE ASSAY/AA METHOD FOR GOLD AND SILVER PLATINUM AND PALLADIUM

Approximately 1 assay ton of prepared sample is fused with a litharge flux charge to obtain a lead button. The button is cupelled down to a precious metal prill which is then dissolved in aqua regia. The resulting solution is analysed by atomic absorption spectrophotometry to determine the precious metals.



TERRAMIN RESEARCH LABS LTD.

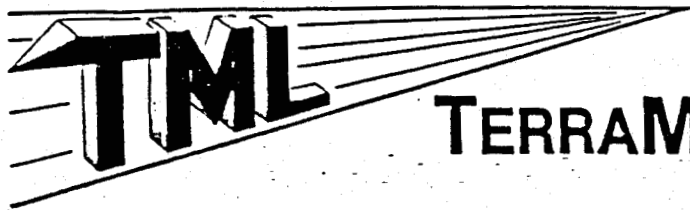
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

ANALYTICAL METHODS FOR BASE METALS

Cd, Cr, Co, Cu, Fe (soluble), Pb, Mn (soluble), Mo, Ni, Ag, Zn

A portion of the prepared sample is digested in hot nitric/perchloric acid mixture, or hot aqua regia (nitric/hydrochloric acids).

Elements are determined by atomic absorption spectrophotometry.

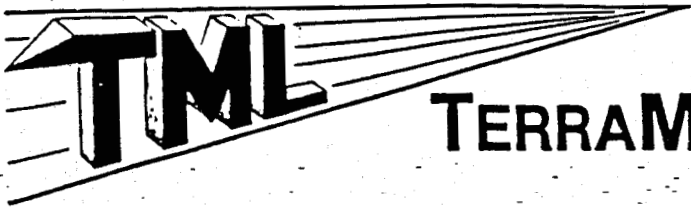


TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
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ANALYTICAL METHOD FOR ARSENIC AND ANTIMONY

A portion of the prepared sample is digested in acid at low temperature. As and Sb are determined with a vapour generation accessory with atomic absorption.



TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

ANALYTICAL METHOD FOR BARIUM

A portion of the prepared sample is fused with a flux. The resulting melt is totally dissolved in an acid matrix, and Ba is determined by atomic absorption spectrophotometry.

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: August 30, 1988

Job No: 88-336

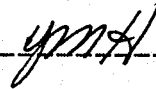
Project: BC-88-5

P.O. No:

46 Rock

326 Soil

Signed: _____

A handwritten signature in dark ink, appearing to be 'J. Davis', is written over a horizontal dashed line.

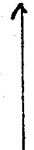
Job#: 88-336

Project: BC-88-5 Rock

Sample Number Au ppb Ag ppm Cu ppm

Jim BB-88- 21 24 1.76
 22 16 1.12
 23 4 0.51
 24 2 0.91
 25 10 0.24

Jim #1



Jim #1

STIK #6

Jim #1

DR-88- 26 8 0.51
 27 6 0.50
 Jim CS-88-49 12 1.02
 50 26 1.68
 51 4 0.72

52 10 0.54
 53 6 0.11
 Jim DM-88-53 42 34.0
 54 52 44.0
 55 72 47.0

56 6 1.36
 57 6 9.10
 58 6 28.0
 59 22 44.0
 60 4 21.0

61 14 18.4
 62 308 78.0
 63 108 56.0
 Jim WM-88-35 32 53.0
 36 46 53.0

37 14 7.00
 38 32 32.0
 39 16 44.0
 40 48 62.0
 41 30 42.0

42 10 37.0
 43 28 44.0
 44 224 1.20 3400
 45 1560 210.0
 46 6 9.60

Stik JR-88- 47 20 16.4
 14 8 6.90
 -orig 15 8 0.17
 Stik DM88 64 4 0.13
 65 18 22.0

Not Plotted

STIK #6

STIK #1

Job#: 88-336

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
---------------	--------	--------

Stik1DM88 66	2	0.06
67	2	0.06
Stik1WM88 49	4	1.11
50	204	37.0
Stik2DM88 68	4	0.46
Stik3WM88 48	32	97.0

Stik # 1

Job#: 88-336

Project: BC-88-5 "M" Grid

Sample Number	Au ppb	Ag ppm
L 1 S		
9+00 W	8	0.08
8+75	2	0.04
8+50	2	0.02
8+25	4	0.04
8+00	10	0.05
7+75	8	0.08
7+50	2	0.04
7+25	8	0.04
7+00	8	0.04
6+75	2	0.04
6+50	4	0.03
6+25	2	0.08
6+00	8	0.08
5+75	2	0.04
5+50	2	0.04
5+25	6	0.02
5+00	4	0.03
4+75	2	0.03
4+50	6	0.18
4+25	2	0.04
4+00	4	0.09
3+75	2	0.08
3+50	2	0.11
3+25	4	0.11
3+00	22	0.10
2+75	4	0.15
2+50	4	0.14
2+25	8	0.24
2+00	2	0.12
1+75	2	0.20
1+50	2	0.12
1+25	4	0.16
1+00	8	0.28
0+75	2	0.15
0+50	2	0.24
0+25	8	0.20
0+00	4	0.36
L 2 S		
9+00 W	2	0.16
8+75	2	0.12
8+50	2	0.12

Job#: 88-336

Project: BC-88-5 "M" Grid

Sample Number	Au ppb	Ag ppm
L 2 S 8+25 W	2	0.04
8+00	2	0.08
7+75	2	0.05
7+50	2	0.08
7+25	4	0.04
7+00	2	0.08
6+75	2	0.05
6+50	2	0.03
6+25	4	0.04
6+00	2	0.04
5+75	4	0.06
5+50	2	0.12
5+25	8	0.12
5+00	2	0.07
4+75	2	0.20
4+50	6	0.14
4+25	4	0.32
4+00	4	0.16
3+75	2	0.13
3+50	6	0.09
3+25	4	0.15
3+00	2	0.20
2+75	4	0.26
2+50	8	0.16
2+25	4	0.16
2+00	2	0.16
1+75	8	0.36
1+50	4	0.28
1+25	8	0.34
1+00	24	0.24
0+75	4	0.16
0+50	4	0.22
0+25	8	0.32
0+00	8	0.14
L 3 S 9+00 W	8	0.14
8+75	4	0.12
8+50	4	0.14
8+25	4	0.14
8+00	4	0.16
7+75	8	0.16

Job#: 88-336

Project: BC-88-5 "M" Grid

Sample Number	Au ppb	Ag ppm
L 3 S		
7+50 W	4	0.12
7+25	4	0.22
7+00	4	0.14
6+75	4	0.16
6+50	4	0.10
6+25	4	0.12
6+00	4	0.18
5+75	4	0.10
5+50	4	0.12
5+25	4	0.12
5+00	8	0.24
4+75	4	0.28
4+50	4	0.14
4+25	4	0.04
4+00	4	0.06
3+75	8	0.18
3+50	8	0.22
3+25	4	0.08
3+00	4	0.16
2+75	4	0.34
2+50	4	0.12
2+25	4	0.34
2+00	4	0.24
1+75	4	0.18
1+50	4	0.16
1+25	4	0.24
1+00	4	0.26
0+75	8	0.16
0+50	4	0.28
0+25	4	0.34
L 4 S		
0+00	4	0.28
9+00 W	4	0.24
8+50	20	0.20
8+25	4	0.18
8+00	4	0.16
7+75	4	0.30
7+50	4	0.26
7+25	8	0.32
7+00	4	0.16
6+75	4	0.26

Job#: 88-336

Project: BC-88-5 "M" Grid

Sample Number	Au ppb	Ag ppm
L 4 S		
6+25 W	8	0.20
6+00	4	0.24
5+75	4	0.22
5+50	4	0.24
5+25	4	0.24
5+00	8	0.22
4+75	8	0.28
4+50	4	0.18
4+25	4	0.16
4+00	4	0.22
3+75	4	0.24
3+50	4	0.22
3+25	8	0.24
3+00	4	0.26
2+75	8	0.26
2+50	4	0.26
2+25	4	0.24
2+00	4	0.24
1+75	4	0.20
1+50	4	0.18
1+25	12	0.22
1+00	4	0.08
0+75	4	0.16
0+50	4	0.22
0+25	8	0.20
L 5 S		
0+00	8	0.44
9+00 W	4	0.20
8+75	12	0.08
8+50	4	0.08
8+25	4	0.16
8+00	4	0.06
7+75	4	0.14
7+50	8	0.12
7+25	4	0.14
7+00	8	0.12
6+75	4	0.18
6+50	4	0.08
6+25	8	0.24
6+00	4	0.20
5+75	4	0.12

Job#: 88-336

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
M L S S 5+50 W	12	0.20
5+25	4	0.20
5+00	8	0.16
4+75	4	0.18
4+50	8	0.28
4+25	4	0.26
4+00	4	0.18
3+75	4	0.18
3+50	4	0.44
3+25	8	0.34
3+00	4	0.20
2+75	8	0.18
2+50	8	0.12
2+25	4	0.24
2+00	8	0.20
1+75	4	0.22
1+50	8	0.24
1+25	4	0.16
1+00	4	0.22
0+75	4	0.22
0+50	8	0.20
0+25	4	0.16
0+00	4	0.12
√ S L S N 4+00 W	8	0.56
3+75	12	1.62
3+50	4	0.54
3+25	8	0.50
3+00	12	0.22
2+75	4	0.38
2+50	12	0.22
2+25	4	0.26
2+00	4	0.24
1+75	8	0.20
1+50	16	0.16
1+25	4	0.32
1+00	4	0.20
0+75	4	0.20
0+50	4	0.18
0+25	4	0.08
0+00	4	0.08

Job#: 88-336

Project: BC-88-5 "S" Grid

Sample Number	Au ppb	Ag ppm
L 4 N		
4+00 W	4	0.44
3+75	8	0.28
3+50	4	0.24
3+25	4	0.24
3+00	12	0.20
2+75	8	0.22
2+50	4	0.08
2+25	8	0.14
2+00	8	0.10
1+75	4	0.06
1+50	4	0.10
1+25	8	0.06
1+00	8	0.06
0+75	4	0.06
0+50	4	0.08
0+25	4	0.06
0+00	8	0.20
L 3 N		
4+00 W	4	0.66
3+75	4	0.24
3+50	8	0.24
3+25	4	0.16
3+00	8	1.00
2+75	8	0.68
2+50	4	0.20
2+25	4	0.20
2+00	8	0.16
1+75	8	0.12
1+50	4	0.20
1+25	4	0.24
1+00	4	0.20
0+75	4	0.12
0+50	4	0.40
0+25	4	0.20
0+00	4	0.26
0+25 E	8	0.16
L 2 N		
2+45 W	4	0.40
2+25	4	0.12
2+00	8	0.14
1+75	8	0.22
1+50	4	0.10

Job#: 88-336

Project: BC-88-5 "S" Grid

	Sample Number	Au ppb	Ag ppm
L 2 N	1+25 W	4	0.22
	1+00	4	0.08
	0+75	4	0.18
	0+50	8	0.06
	0+25	4	0.22
	0+00	4	0.40
L 1 N	3+25 W	4	0.12
	3+00	4	0.16
	2+75	4	0.18
	2+50	4	0.16
	2+25	8	0.30
	2+00	8	0.08
	1+75	10	1.00
	1+50	4	0.26
	1+25	4	0.10
	1+00	8	0.24
	0+75	4	0.16
	0+50	4	0.16
	0+25	4	0.16
	0+00	4	0.34
L 0	3+50 W	8	0.20
	3+25	4	0.26
	3+00	8	0.16
	2+75	8	0.16
	2+50	4	0.12
	2+25	4	0.10
	2+00	4	0.18
	1+75	8	0.18
	1+50	8	0.20
	1+25	4	0.40
	1+00	4	0.10
	0+75	4	0.22
	0+50	4	0.14
	0+25	8	0.16
	0+00	4	0.10
L 1 S	0+34 E	4	0.08
	3+25 W	4	0.14
	3+00	4	0.16
	2+75	8	0.16
	2+50	4	0.16

Job#: 88-336

Project: BC-88-5 "S" Grid

	Sample Number	Au ppb	Ag ppm
L 1 S	2+25 W	8	0.20
	2+00	8	0.28
	1+75	8	0.24
	1+50	4	0.16
	1+25	4	0.12
	1+00	4	0.14
	0+75	4	0.12
	0+50	8	0.22
	0+25	4	0.30
	1+00 E	8	0.30
L 2 S	3+75 W	4	0.32
	3+50	4	0.26
	3+25	4	0.28
	3+00	4	0.16
	2+75	4	0.34
	2+50	4	0.24
	2+25	4	0.24
	2+00	4	0.34
	1+75	8	0.40
	1+50	4	0.18
	1+25	4	0.16
	1+00	4	0.26
	0+75	4	0.26
	0+50	4	0.24
	0+25	4	0.44
	0+00	4	0.28
	0+25 E	8	0.52
L 3 S	1+00	4	3.60
	4+00 W	4	0.50
	3+75	4	0.46
	3+50	4	0.40
	3+25	4	0.46
	3+00	4	0.64
	2+75	4	0.46
	2+50	4	0.22
	2+25	4	0.28
	2+00	4	0.38
	1+75	4	0.64
	1+50	4	0.38
	1+25	4	0.22

Job#: 88-336

Project: BC-88-5 "S" Grid

Sample Number	Au ppb	Ag ppm
L 3 S 1+00 W	4	0.44
0+75	8	0.38
0+50	8	0.28
0+25	4	0.22
0+00	4	0.22
0+75 E	4	0.50

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: September 7, 1988

Job No: 88-367

Project: BC-88-5

P.O. No:

13 Rock

26 Soil

Signed: ymh

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-367

Project: BC-88-5 Rock

Sample Au Ag
Number ppb ppm

Fred	DRM-5	668	2.50
	6	2	0.12
	7	8	0.52
JR	113	6	0.17
	114	1040	51.0
	115	6	0.08
	116	30	0.10
	117	2	0.17
	118	4	0.11
	119	4	0.48
	120	10	0.30
MJ	9	14	24.0
	10	4	2.40

Fred #1

ST. K # 6

Job#: 88-367

Project: BC-88-5 Soil

Sample Number	Au ppb	Ag ppm
TC 70	2	0.11
71	2	0.15
72	2	0.16
73	2	0.14
74	2	0.19
75	6	0.14
76	2	0.10
77	2	0.07
78	4	0.10
79	4	0.09
80	2	0.23
81	2	0.11
82	2	0.07
83	4	0.10
84	4	0.11
85	6	0.41
86	2	0.13
87	2	0.16
88	2	0.06
89	24	0.12
90	4	0.08
91	4	0.07
92	6	0.07
93	8	0.08
95	4	0.12
96	2	0.05

ADJOG # 9

ST. K # 3

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: August 9, 1988

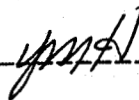
Job No: 88-314

Project: BC-88-5

P.O. No:

41 Rock

Signed: _____

A handwritten signature in dark ink, appearing to be 'JMD', is written over a dashed line.

Job#: 88-314

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
Fred 1 CS-88- 1	2	0.15
2	2	0.16
3	4	0.10
4	172	3.40
5	22	7.20
Fred 1 DM-88- 1	12	0.62
2	180	15.70
3	694	22.0
4	96	156.0
5	4	0.41
6	2	0.07
7	4	0.10
8	4	0.17
9	8	0.25
10	4	0.31
Fred 1 WM-88- 1	4	0.23
2	4	0.18
3	594	8.60
4	2	0.11
5	4	0.16
6	24	0.23
7	2	0.48
Mike 1 CS-88- 11	4	0.09
12	14	0.08
13	10	0.11
Mike 1 WM-88- 9	12	0.14
10	10	0.54
11	10	0.16
12	18	0.20
13	104	0.12
Stik 6 CS-88- 7	6	0.25
8	4	0.40
9	4	0.09
10	2	0.19
Stik 6 DM-88- 12	2	0.52
13	4	0.46
14	4	0.08
15	6	0.34
Stik 6 WM-88- 6	12	1.12
7	6	3.70
8	6	6.80

Fred #1

Mike #1

Stik #6

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: August 31, 1988

Job No: 88-350

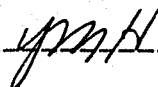
Project: BC-88-5

P.O. No:

119 Rock

98 Soil

Signed: _____



TERRAMIN RESEARCH LABS Ltd.

Job#: 88-350

Project: BC-88-5 Rock

Sample Number	Au ppb	Ag ppm	Cu %
Fred 1 BF-3	34	0.64	
4	58	1.75	
9	14	2.60	
CS-57	48	0.41	
CS-58	18	0.07	
59	28	0.46	
60	34	4.50	6.40
61	10	0.19	
62	4340	340.0	
63	16	0.72	0.44

Fred #1

Fred 1 DM-110	2640	195.0	6.20
DR-28	12	0.46	
29	64	136.0	17.1
30	26	13.0	
IR-12	10	0.05	

Fred 4.

13	2	0.17	
WM-67	2	0.11	
68	4	0.33	
69	6	1.19	
70	4	0.93	

Fred #3

Fred 4.

71	66	3.10	
72	4	0.25	

Fred #3

Fred 4 DM-83	12	28.0	
84	6	13.0	
85	6	19.5	

Fred 4

86	4	5.80	
87	6	21.0	
95	16	13.9	
96	4	0.43	
97	4	0.33	

98	6	1.41	
99	2	15.50	
100	6	127.0	
101	14	88.0	
102	10	45.0	

103	180	1480.0	
104	50	36.0	
105	10	15.6	
106	6	0.39	
107	58	0.51	

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-350

Project: BC-88-5 Rock

Sample Number	Au ppb	Ag ppm	Cu %
Fred 4 DM-108	576	2.60	
109	2	0.68	
DR-31	6	4.90	3.20
32	12	350.0	10.8
IR-1	4	0.62	
3	14	5.00	
4	8	3.10	
5	4	0.24	
6	6	0.52	
7	4	0.20	
8	8	3.40	
9	2080	5.00	
10	6	0.06	
11	4	0.05	
JR-57	24	0.67	
58	8	0.48	
59	244	9.20	
60	134	8.30	0.63
61	176	6.00	
62	1060	36.0	
63	794	46.0	
64	62	1.15	
65	12	4.30	
WM-73	4	0.17	
74	76	350.0	17.2
75	6	13.4	1.21
76	10	13.5	1.52
77	6	34.0	
78	10	4.80	
79	4	0.45	
80	6	0.82	
81	4	3.10	
82	4	9.60	
83	8	5.10	
84	4	8.00	
85	10	196.0	11.9
86	6	0.07	
87	2	0.16	
88	22	0.93	
Fred 5 DM-88	16	37.0	

Fred 4

Fred 5

Job#: 88-350

Project: BC-88-5 Rock

Sample Number	Au ppb	Ag ppm
Fred 5 DM-89	66	1.45
90	4	0.78
91	16	1.80
92	6	0.44
93	4	0.19
94	14	32.0
DR-33	16	2.90
JR-52	6	0.88
53	30	3.40
54	6	0.98
55	12	0.10
56	16	0.67
WM-89	62	19.1
90	50	8.10
IR-88- IR-2	66	26.0
Stik 2 CS-54	10	0.22
DRM-1	8	0.05
Stik 4 CS-56	34	0.06
Stik 5 JR-66	6	1.26
Stik 8 CS-55	6	0.05
T-88-3- 1	10	0.06
2	28	0.11
3	42	0.10
T-88-4- 1	4	3.40
2	6	2.50
3	4	2.60
4	10	2.80
5	4	3.60
6	2	2.40
7	4	2.40
8	2	1.27
9	6	1.40
10	6	1.37
11	4	0.90
12	4	1.06
13	10	0.88
14	4	1.00
15	8	0.86
16	4	0.70

Fred 5

FRED #4

STIK #2

STIK #4

STIK #5

STIK #3

STIK #4

STIK #6

Job#: 88-350

Project: BC-88-5 Soil

Sample Au Ag
Number ppb ppm

AD A -7 DM-69	4	0.22
70	4	0.20
71	2	0.13
72	2	0.20
73	8	0.42
74	2	0.12
75	2	0.16
76	8	0.20
77	2	0.36
78	4	0.32
79	4	0.20
80	4	0.54
81	2	0.20
82	8	0.16
AD B JR-16	2	0.16
7		
17	8	0.16
18	8	0.16
19	6	0.09
20	2	0.36
21	2	0.32
22	10	0.30
23	8	1.56
24	4	0.36
25	4	1.36
26	4	0.62
27	8	0.24
28	4	0.44
29	2	0.48
30	8	0.16
31	4	0.52
32	8	0.76
33	2	0.20
34	2	0.48
35	4	0.32
36	2	0.32
37	6	0.13
38	8	0.20
39	4	0.30
40	8	0.24
41	4	0.86

AD00G #7

JR00G #7.

Handwritten notes:
 All samples to be analyzed
 by the lab

Job#: 88-350

Project: BC-88-5 Soil

Sample Au Ag
Number ppb ppm

AD 7 JR-42 4 0.62
43 8 0.24
44 2 0.12
45 2 0.16
46 4 0.26

47 8 0.26
48 4 0.92
49 8 0.40
50 4 0.40
AD 7 TC- 1 2 0.08

2 2 0.08
3 4 0.16
4 4 0.28
5 8 0.20
6 8 0.36

7 8 0.52
8 8 0.68
9 8 0.88
10 8 0.36
11 8 0.32

12 8 0.76
13 8 0.40
14 8 0.20
15 2 0.16
16 2 0.12

17 4 0.16
18 8 1.16
19 8 0.88
20 8 0.56
21 8 0.52

22 8 0.48
23 10 0.25
24 8 0.20
25 8 0.24
26 8 0.16

27 4 0.16
28 8 0.92
29 8 0.16
30 2 0.40
31 2 0.20

ADDOG-7.

All samples this year
plotted

Job#: 88-350

Project: BC-88-5 Soil

Sample Number	Au ppb	Ag ppm
TC- 32	2	0.09
33	8	0.32
AD -7 WM-51	2	0.13
52	8	0.12
53	8	0.72
54	8	0.16
55	8	0.20
56	4	0.14
57	4	0.18
58	4	0.16
59	8	0.10
60	8	0.20
61	2	0.16
62	8	0.32
63	4	0.14
64	4	0.14
65	8	0.16
66	2	0.24

AD000-7

*AU
Ag
ppm*

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: September 13, 1988

Job No: 88-379

Project: BC-88-5

P.O. No:

19 Rock

69 Soil

Signed: ymH

Job#: 88-379

Project: BC-88-5 Stik 5

Sample Number	Au ppb	Ag ppm
DM-88-127	34	0.22
128	16	0.13
129	244	3.90
130	174	18.8
131	62	0.83
132	26	24.0
133	64	4.20
134	2	7.10
DRM-88-08	2	0.31
IR-88-14	4	0.29
15	4	1.00
16	2	0.25
MJ-88-11	58	0.08
WM-88-127	26	22.0
128	14	16.8
129	44	5.60
130	76	9.80
131	8	0.07
132	2	0.78

ST. K #5

ST. K 9.

ST. K #5

Job#: 88-379

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
TC-97	8	0.09
98	8	0.24
99	4	0.18
100	10	0.11
101	2	0.12
102	6	0.06
103	8	0.20
104	2	0.14
105	2	0.14
106	6	0.13
107	2	0.04
108	2	0.17
109	4	0.16
110	2	0.64
111	8	0.28
112	8	0.14
113	4	0.22
114	2	0.12
115	10	0.10
116	6	0.21
117	8	0.24
118	8	0.28
119	8	0.24
120	2	0.11
121	8	0.36
122	2	0.24
123	8	0.20
124	10	0.70
125	8	0.52
126	2	0.07
127	6	0.14
128	8	0.44
129	8	1.80
130	8	5.60
131	2	1.02
132	8	0.96
133	8	1.44
134	14	0.58
135	10	0.55
136	4	0.39

STICK # 3

Fuel # 2

Job#: 88-379

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
TC-137	2	0.20
138	6	0.26
139	4	0.31
140	8	0.64
141	4	0.26
142	2	0.34
143	6	0.35
144	8	0.48
145	8	1.48
146	2	0.64
147	6	0.57
148	6	0.38
149	8	0.52
150	6	0.24
151	16	0.44
152	6	0.38
153	4	0.14
154	4	0.44
155	2	0.20
156	2	0.32
157	2	0.24
158	4	0.23
159	4	0.16
160	2	0.12
161	8	0.24
162	2	0.18
163	4	0.16
164	2	0.15
165	2	0.08

Freal #2

Freal #5

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: August 24, 1988

Job No: 88-345

Project: BC-88-5

P.O. No:

74 Rock

Signed: -----

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-345

Project: BC-88-5

Sample Number	Au ppb	Ag ppm	
BB-88-5	106	1.05	
6	478	0.53	
7	108	0.74	
8	42	0.47	
9	156	1.03	
FRED 5	10	22	0.24
	11	8	1.20
	12	2	0.89
	13	18	1.62
	14	14	0.13
	15	4	0.03
J M	16	12	27.0
	17	10	23.0
I	18	4	2.30
	19	6	25.0
CA-88-7	224	7.30	
8	4	0.22	
FRED 5	9	6	0.52
	10	2	0.32
	11	12	0.93
	12	8	9.70
	13	6	0.43
	14	4	17.80
	15	14	148.0
JIM	16	8	0.71
	17	10	27.0
Fred-5-CS-30	16	13.6	
	31	4	1.02
	32	4	0.28
	33	4	0.09
	34	2	0.10
	35	4	0.30
	36	8	1.44
	37	4	0.16
	38	6	0.23
	39	6	0.12
	40	4	0.14
	41	6	0.35
	42	2	0.12
STIK-2-DM-42	6	0.09	

Fred #5

Jim #1

Fred #5

Jim #1

Fred 5

STIK #2

Job#: 88-345

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
---------------	--------	--------

Stik-2-DM-43	6	1.26
44	4	0.27

STIK # 2

Stik-4-CS-43	394	0.19
44	238	0.15
45	352	0.23

46	16	0.05
47	4	0.06
48	6	0.05

STIK # 4

Stik-4-DM-46	2480	24.0
47	24	1.62

Stik-6-DM-16	6	1.90
17	4	2.40

Stik-6-DM-18	2	1.95
19	6	1.62
20	10	0.97

STIK # 6

21	6	0.08
22	8	0.53
23	14	0.45
24	8	0.34
25	6	0.05

Stik-7-DM-45	12	0.05
--------------	----	------

STIK # 7

Stik-8-WM-23	44	0.56
--------------	----	------

STIK # 2

24	1320	1.52
25	1880	0.13
26	62	5.20

STIK # 3

27	124	0.24
28	158	0.21

Stik-9-DM-41	50	107.0
--------------	----	-------

STIK # 9

Stik-9-WM-22	22	6.60
--------------	----	------

T-88-2-0-1 m	332	20.0
--------------	-----	------

1-2 m	94	7.70
2-3 m	92	3.80
3-4 m	86	6.80

BC-88-6

Stik 4 WM-88-29	24	2.70
-----------------	----	------

STIK # 4

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: September 7, 1988

Job No: 88-359

Project: BC-88-6

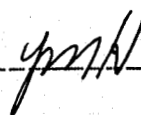
F.O. No:

39 Drill Core

65 Rock

133 Soil

Signed: _____



Job#: 88-359

Project: BC-88-6 Rock

Sample Number Au ppb Ag ppm

BF-88-2 8 0.08

10 124 5.20

BB DB-88-27 4 0.14

DM-88-48 8 0.04

49 4 0.09

50 6 0.28

51 4 0.20

52 10 0.16

118 6 0.11

JD-88-1 278 41.0

2 290 22.0

3 1680 9.60

4 678 32.0

5 462 43.0

6 442 65.0

7 166 19.2

8 214 22.0

9 126 16.2

10 230 14.6

11 46 5.60

12 488 24.0

13 126 6.30

14 28 1.57

JR - 51 6 0.20

MJ-88-1 2900 42.0

2 1280 38.0

3 464 14.2

4 258 20.0

5 8 3.60

6 1340 59.0

7 46 7.20

8 90 10.9

T-88-7-1 6 0.26

2 14 1.31

3 4 1.75

4 12 1.27

5 18 0.49

6 16 0.50

7 8 1.90

8 12 1.85

AD00G #3

METSA-TAN

AD00G #2

0.017 2.1000 0.0000 0.1000
0.008 0.02

0.005 0.642
0.040 0.250
0.020 0.217
0.012 1.254
0.013

0.005 0.560
0.006 0.342
0.004 0.277
0.007 0.426
0.001 0.163

0.014 0.700
0.004 0.154
Tr 0.046

Tr 0.005 (AD00G-T-10000)

0.037 1.103
0.014 0.414
0.008 0.583
Tr 0.105
0.039 1.721

0.001 0.210
0.003 0.313

trach 33-5

-33-5

T-38-5

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Jim Davis

Date: August 31, 1988

Job No: 88-358

Project: BC-88-5 : 6

P.O. No:

70 Rock & Core

201 Soil

Signed: _____

ymh

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Au Ag
Number ppb ppm

#33-1
37624 3240 95.0
37625 128 1.37
37626 252 4.60
37627 210 1.85
37628 74 1.32

37629 432 2.60
37630 2680 3.00

Fred 1 BF-5 4 3.30
6 6 36.0
7 3640 16.3

Fred 1

8 88 3.40

Stik 1 11 6 0.56
Stik 9 CS-64 4 0.06
Fred 3 65 12 0.22
66 4 0.08

STIK #1
STIK #9.

67 76 53.0
68 192 13.8
69 2 0.07
70 14 0.37
71 2 1.54

Fred 4.

72 6 0.24
73 16 0.36

Stik 1 DM-74 4 0.81
76 10 0.25

STIK #6

Fred 2 DM-121 6 1.24

Fred 3

Fred 3 DM-111 432 30.0
112 436 76.0
113 126 4.90
114 204 31.0
115 4 0.59

Fred 4.

116 14 0.61
117 56 3.10
120 1020 2.40

Fred 3

Fred 4 DM-122 74 2.30
123 12 1.80

124 16 1.06
125 48 19.5
126 90 0.98

Fred 4.

DRM-2 4 1.28
3 6 0.16

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
Fred4 DRM-4	22	0.13
JR-110	12	0.82
111	2	0.24
112	4	0.12
121	32	178.0

Fred 4.

Sample Number	Au ppb	Ag ppm
Stik 6 CS-75	4	0.79
Stik 7 DM-119	4	1.04

Fred 5

T-88-9-	1	16	9.70
	2	256	132.0
	3	1780	197.0
	4	146	51.0
	5	260	71.0
	6	62	77.0
	7	96	24.0
	8	284	28.0
	9	772	59.0
	10	642	34.0
	11	208	11.5
	12	84	21.0
	13	94	15.8
	14	312	39.0
	15	12	8.10
	16	4	0.92
	17	14	0.72
	18	6	0.69

STIK 7

Tr	0.293
0.007	3.95
0.052	5.75
0.004	1.49
0.009	2.07
	2.25
	0.70
0.008	0.92
0.023	1.72
0.019	0.99
0.006	0.335
	0.613
	0.461
0.009	1.138
	0.236

T-88-8-	1	14	1.65
	2	36	1.64
	3	136	2.00
	4	160	5.30
	5	26	1.07

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
AD 00G-IY 42	4	0.22
8+10 43	10	0.10
44	8	0.12
45	4	0.18
46	4	0.30
47	8	0.08
48	8	0.12
49	6	0.08
50	2	0.12
51	4	0.08
52	2	0.08
53	6	0.08
8-JR 66	2	0.16
67	2	0.16
68	4	0.08
69	2	0.12
70	2	0.12
71	2	0.08
72	6	0.05
73	2	0.18
74	2	0.07
75	2	0.10
76	4	0.12
77	4	0.18
78	4	0.21
79	2	0.17
80	2	0.06
81	2	0.15
82	2	0.05
83	2	0.06
84	2	0.07
85	6	0.07
86	4	0.16
10-DR 34	2	0.17
35	2	0.15
36	2	0.08
37	2	0.08
38	2	0.09
39	4	0.08
40	2	0.09

A0005 # 9.

A 0006 # 10

A0006 # 9

STK # 10

A0006 # 10

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
AD00G10 DR41	2	0.09
42	4	0.09
43	2	0.11
44	2	0.14
45	2	0.14
46	2	0.12
48	2	0.08
49	6	0.11
50	6	0.12
51	2	0.11
52	4	0.09
53	2	0.40
54	2	0.11
55	2	0.14
56	2	0.08
57	2	0.12
WM92	6	0.10
93	4	0.12
94	4	0.23
95	4	0.14
96	8	0.12
97	2	0.08
98	2	0.16
99	2	0.21
100	2	0.12
101	2	0.15
102	4	0.30
103	2	0.37
104	4	0.11
105	2	0.12
106	2	0.17
107	4	0.09
108	2	0.08
109	2	0.07
110	2	0.16
111	6	0.23
112	2	0.08
113	2	0.12
114	2	0.07
115	2	0.08

AD00G10

AD00G E10

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
ADDOG10 WM116	2	0.20
117	2	0.20
118	8	0.20
119	2	0.12
IV 1	8	0.24
2	8	0.16
3	2	0.16
4	2	0.16
5	12	0.10
6	8	0.20
7	2	0.16
8	4	0.28
9	10	0.24
10	8	0.12
11	2	0.12
12	2	0.28
13	2	0.17
14	2	0.22
15	192	0.20
16	4	0.14
17	14	0.12
18	2	0.12
19	2	0.16
20	4	0.09
21	4	0.08
22	2	0.08
23	8	0.16
24	4	0.22
25	4	0.06
26	6	0.27
27	84	0.12
28	182	0.21
29	6	0.10
30	2	0.28
31	26	0.16
32	4	0.13
33	2	0.12
34	8	0.35
35	2	0.44
36	2	0.10

ADDOG #10

ADDOG #9

ADDOG #8

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
IY 37	2	0.27
38	4	0.12
39	2	0.21
40	2	0.11
41	2	0.18
54	2	0.08
55	2	0.11
56	2	0.12
57	2	0.08
58	6	0.07
59	8	0.10
60	4	0.11
61	4	0.10
62	2	0.11
64	2	0.13
65	6	0.10
66	2	0.08
67	2	0.12
68	2	0.10
69	4	0.08
70	2	0.08
71	2	0.07
Stik 10 JR87	2	0.08
88	4	0.10
89	4	0.19
90	2	0.14
91	2	0.12
92	6	0.11
93	2	0.17
94	2	0.13
95	2	0.08
96	2	0.10
97	4	0.26
98	2	0.12
99	8	0.24
100	4	0.11
101	2	0.10
102	2	0.15
103	4	0.12
104	6	0.34

Ad 005 B

97, K#10

TERRAMIN RESEARCH LABS Ltd.

Job#: 88-358

Project: BC-88-5

Sample Number	Au ppb	Ag ppm
Stik10 JR 105	2	0.17
106	4	0.23
<i>Trud</i> 107	2	0.13
108	2	0.21
109	2	0.13
TC 34	2	0.20
35	2	0.11
36	4	0.36
37	2	0.10
38	2	0.12
39	4	0.18
40	4	0.26
41	4	0.09
42	2	0.20
43	6	0.23
44	8	0.10
45	2	0.11
46	4	0.08
47	4	0.11
48	4	0.09
49	2	0.31
50	8	0.26
51	4	0.15
52	18	0.17
53	2	0.15
54	2	0.08
55	16	0.11
56	4	0.08
57	8	0.20
58	2	0.08
59	2	0.08
60	2	0.10
61	2	0.08
62	6	0.12
63	2	0.16
64	2	0.11
65	2	0.12
66	2	0.10
67	8	0.16
<i>Trud</i> 68	12	0.14
69	8	0.20

STICK #10

STICK #1

STICK #3

15/11

ADDOG 9.

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Taiga Consultants Ltd.

Claude Aussant

Date: November 4, 1988

Job No: 88-472

Project: BC-88-5 & BC-88-6

P.O. No:

112 Check Assays
from 2nd split

Signed: YMA

Job#: 88-472

Project: BC-88-5 & BC-88-6

	Sample Number	Au ppb	Ag ppm		
Fred 1	DM-88-1	172	17.1	88-314	
Fred 1	DM-88-2	636	22		
Fred 1	DM-88-3	102	152		
Mets 2	DM-88-27	234	106	88-315	FRED 1
Mets 2	DM-88-28	214	129		
Mets 2	DM-88-29	206	76		
Mets 2	DM-88-31	2	240		
Mets 2	DM-88-32	444	360		METSANTAN
GN-2	DM-88-35	1260	250		
GN-2	DM-88-36	1260	189		
GN-3	DR-88-5 B	164	33		Golden Neighbour
L 15 S	7+00 W	3620	19.2		METSANTAN
Jim	DM-88-53	36	37	88-336	
Jim	DM-88-54	92	43		
Jim	DM-88-55	66	50		
Jim	DM-88-58	4	27		
Jim	DM-88-59	14	43		
Jim	DM-88-60	4	21		
Jim	DM-88-61	14	19.4		
Jim	DM-88-62	156	87		
Jim	DM-88-63	82	57		
Jim	WM-88-35	32	48		
Jim	WM-88-36	42	57		
Jim	WM-88-38	24	34		
Jim	WM-88-39	20	43		
Jim	WM-88-40	38	81		
Jim	WM-88-41	36	46		
Jim	WM-88-42	10	38		
Jim	WM-88-43	32	43		
Jim	WM-88-45	284	220		Jim 1
Stik 1	DM-88-65	14	18.1		
Stik 1	WM-88-50	122	46		
Stik 3	WM-88-48	32	88		STIK 1
BB-88-	16	14	33	88-345	
BB-88-	17	8	27		
BB-88-	19	8	26		
CA-88-	14	4	17.7		
CA-88-	15	10	149		
CA-88-	17	10	28		Jim 1
Stik 4	DM-88-46	2460	29		STIK 4

Job#: 88-472

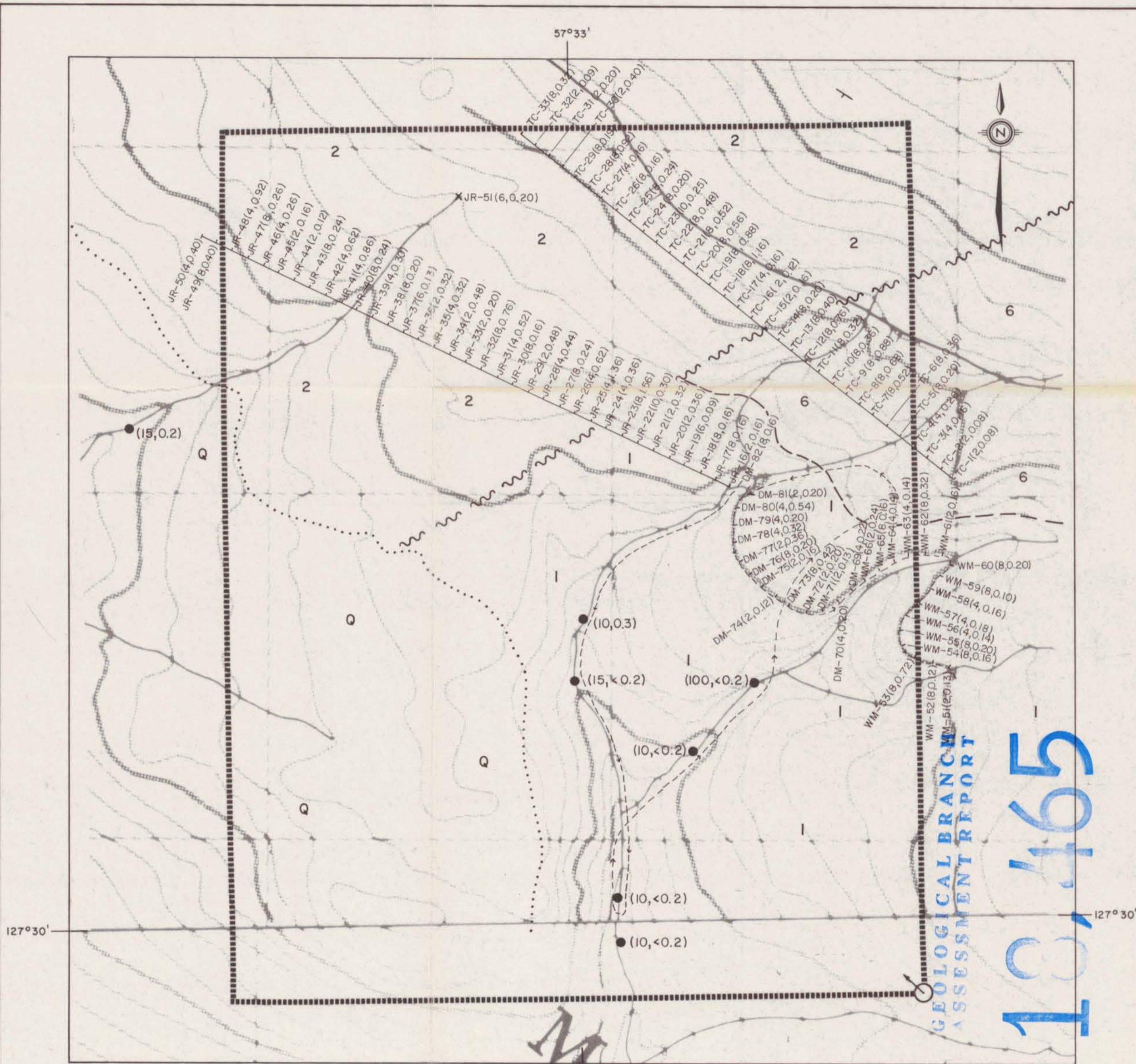
Project: BC-88-5 & BC-88-6

Sample Number	Au ppb	Ag ppm		
Stik 9	DM-88-41	28	114	88-345
T-88-2	0-1 m	304	22	
Fred 1	CS-88-62	4040	340	88-350
Fred 3	DM-88-110	8200	240	
Fred 3	DR-88-29	60	144	
Fred 4	DM-88-83	10	28	
Fred 4	DM-88-85	6	16.8	
Fred 4	DM-88-87	6	21	
Fred 4	DM-88-100	6	146	
Fred 4	DM-88-101	18	89	
Fred 4	DM-88-102	6	46	
Fred 4	DM-88-103	184	1340	
Fred 4	DM-88-104	38	39	
Fred 4	DR-88-32	18	370	
Fred 4	JR-88-62	852	42	
Fred 4	JR-88-63	664	47	
Fred 4	WM-88-74	58	380	
Fred 4	WM-88-77	10	390	
Fred 4	WM-88-85	8	188	Fred 4
Fred 5	DM-88-88	16	29	
Fred 5	DM-88-94	14	27	
Fred 5	WM-88-89	44	18.1	FRED 5
Fred 5	IR DM -88-2	64	25	Fred 4
	37624	1520	90	88-358
	BF-6	10	37	88-1 meTSANTAN
	CS-67	82	57	
	DM-111	440	30	
	DM-112	436	90	
	DM-114	202	42	
	DM-125	44	19.1	Fred 4
	JR-121	36	210	
	T-88-9-2	208	136	meTSANTAN
	T-88-9-3	1220	18.2	
	T-88-9-4	106	36	
	T-88-9-5	200	70	
	T-88-9-6	62	79	
	T-88-9-7	76	22	
	T-88-9-8	244	25	
	T-88-9-9	736	58	
	T-88-9-10	404	35	

Job#: 88-472

Project: BC-88-5 & BC-88-6

Sample Number	Au ppb	Ag ppm		
T-88-9-12	88	21	88-358	
T-88-9-14	272	37		
88-2 37661	6060	270	88-359	METSANTAN
JD-88-1	262	42		
JD-88-2	238	22		
JD-88-4	620	31		
JD-88-5	384	41		
JD-88-6	354	64		
JD-88-7	132	16.2	T-88-6	
JD-88-8	440	26		
JD-88-12	264	17.6		
MJ-88-1	3120	50		
MJ-88-2	1300	42	T-88-5	
MJ-88-4	204	17.4		
MJ-88-6	1060	60		METSANTAN
JR-114	1060	52	88-367	FRED 1
MJ-9	16	18.2		STIK 6
DM-88-130	126	17.8	88-379	
DM-88-132	22	27		
WM-88-127	28	19.2		STIK 5
88-3 37666	1420	44	88-386	METSANTAN
37699	1280	145	88-400	
88-4 37802	140	21		
37803	224	70		
37804	188	31		
37815	204	102		
37816	942	21		
37817	808	32		
37823	1360	230		
37824	688	43		
37825	5820	230		
T-10 0-1 m	620	24		



FAULT
 GEOLOGICAL CONTACT
 TRAVERSE

ANOMALOUS SILT GEOCHEMICAL SAMPLE SITE (1985) (Au in ppb, Ag in ppm)

LEGEND

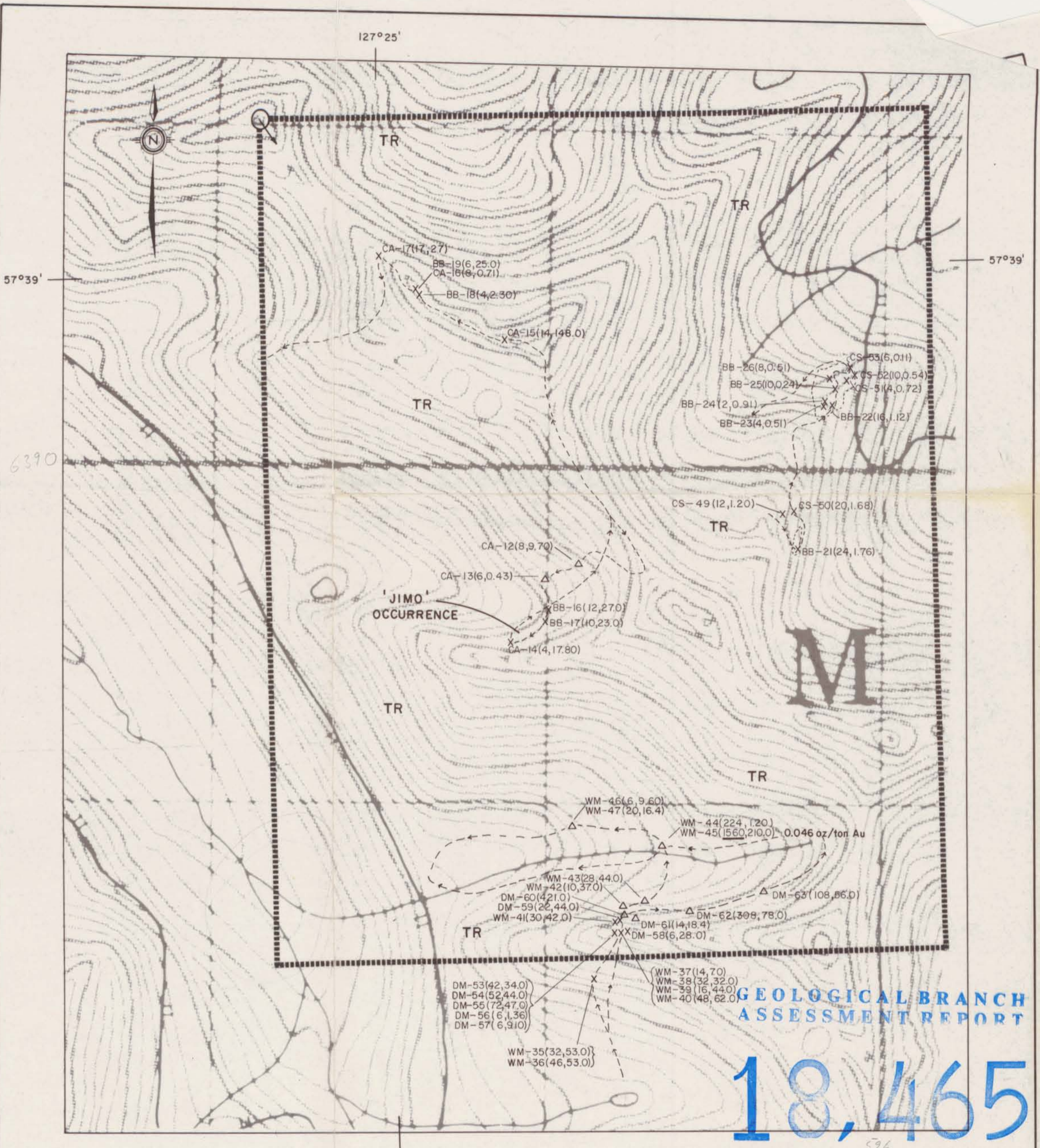
Ag in ppm
 Au in ppb
 SAMPLE No.

1 PALE REDDISH GREY TO DARK RED-BROWN QUARTZOSE BIOTITE HORNBLENDE PHYRIC ASH FLOWS: THE ROCKS CONTAIN MINOR SANIDINE AND RARE AUGITE. WELDING IS WIDESPREAD AND RANGES FROM INCIPENT TO EUTAXITIC. LOCALLY ORANGE TO BROWN VITROPHYRIC CLASTS ARE COMMON. INCLUDES LAPILLI TUFF AND BRECCIA UNITS AS WELL AS MINOR LAYERED GROUND SURGE DEPOSITS
2 CONGLOMERATE WITH SOME GRANITIC CLASTS. GRADED, CROSS-BEDDED GREYWACKE, WELL-BEDDED CRYSTAL TUFF, EPICLASTIC SEDIMENTS: LOCAL LAMINATED CALCAREOUS SILT (MARL), RARE THIN LIMESTONE AND CHERT; LOCAL COARSE LANDSLIDE DEBRIS AND LAHAR. IN PART OR TOTALLY EQUIVALENT TO UNIT 6A

CONTOUR SOIL GEOCHEMICAL SURVEY

6 PALE PURPLE, GREY, AND GREEN BIOTITE AUGITE HORNBLENDE PLAGIOCLASE PORPHYRY FLOWS. SOME AUTOBRECCIATED FLOWS, MINOR SILLS AND PLUGS, SOME CRYSTAL AND LAPILLI TUFF

PROLIFIC RESOURCES LTD.			
DOOG 7 Mineral Claim			
EXPLORATION COVERAGE			
DATE	SEPT. 1988	NTS	94 E/5,12
PROJECT	BC-88-5	MAPPED/ DRAWN BY	C. AUSSANT
SCALE	1:10,000		
TAIGA CONSULTANTS LTD.			MAP 2



TR DARK GREEN AUGITE PORPHYRY BASALT FLOWS AND BRECCIAS WITH LESSER FINE-GRAINED ANDESITE TO BASALT FLOWS AND MINOR INTERBEDDED SILTSTONE, TUFACEOUS SEDIMENTS, AND CHERT CONTAINS LIMESTONE LENSES THAT MAY BE PART OF THE 'ASITKA GROUP'

LEGEND

△ TALUS

X OUTCROP

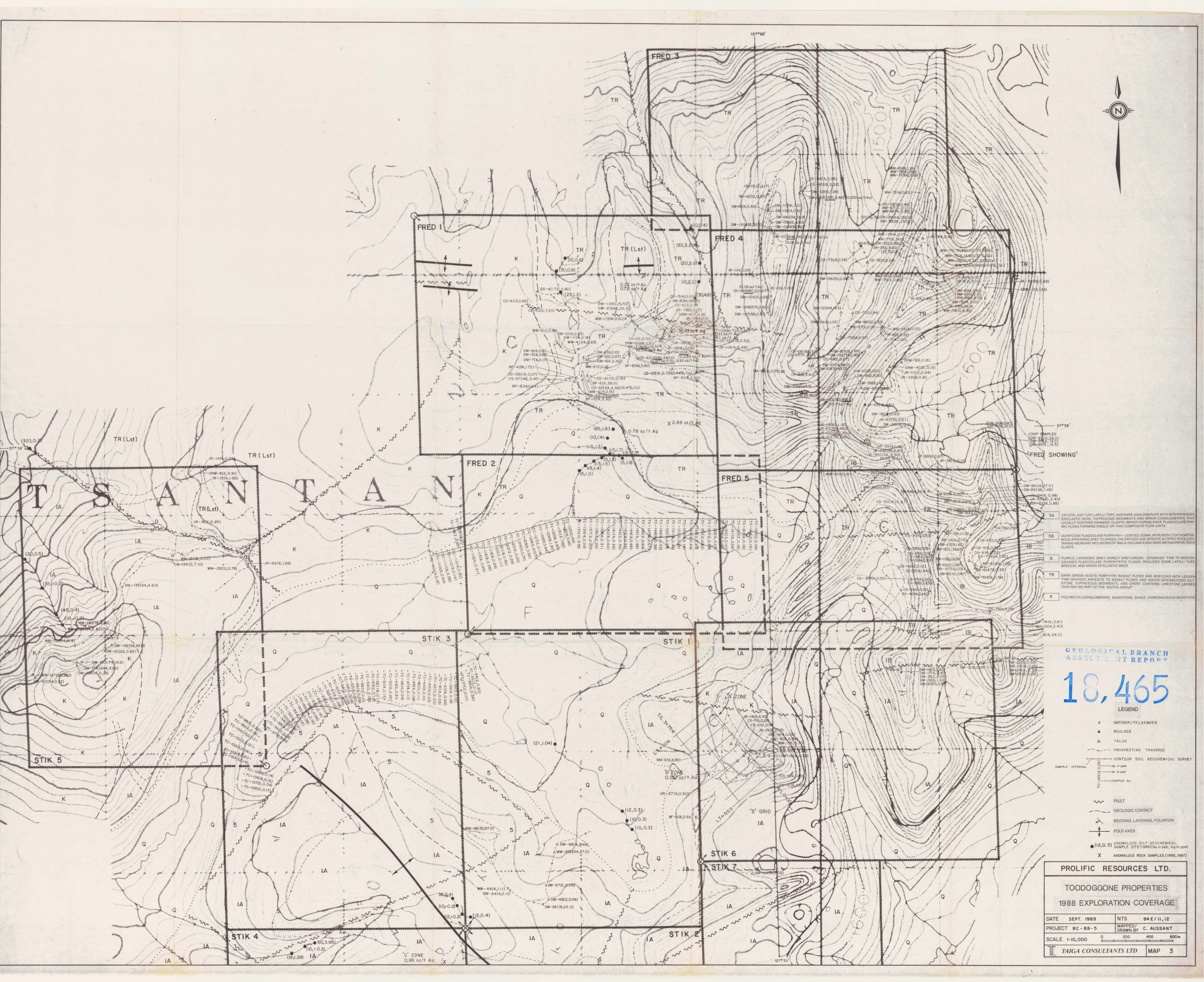
--- PROSPECTING TRAVERS

X BB-16(12,27.0)
 Ag in ppm
 Au in ppb
 SAMPLE No.
 SAMPLE LOCATION

GEOLOGICAL BRANCH ASSESSMENT REPORT

18,465

PROLIFIC RESOURCES LTD.			
JIM I			
Mineral Claim			
Exploration Coverage			
DATE	SEPT. 1988	NTS	94 E/11
PROJECT	BC-88-5	MAPPED/DRAWN BY	C. AUSSANT
SCALE	1:10,000	0 200 400m	
TAIGA CONSULTANTS LTD.			MAP 1



- 1A CRYSTAL TUFF LAPILLI TUFFS AND RARE AGGLOMERATE WITH INTERSPERSED EPICLASTIC BEDS, TUFFACEOUS SEDIMENTS AND MINOR CONGLOMERATE THAT LOCALLY CONTAINS GRANITIC CLASTS; MINOR HORNBLENDE PLAGIOCLASE PHYRIC FLOWS FORMING SINGLE OR THIN COMPOSITE FLOW UNITS
- 1B QUARTZOSE PLAGIOCLASE PORPHYRY—JOINED, DORMAL INTRUSION (?) OF HOMOGENEOUS APPEARING GREY TO GREEN CHLORITIZED AND EPIDOTE ALTERED ROCK CONTAINING ABUNDANT INCLUSIONS OF TALIA VOLCANICS AND RARE METAMORPHIC ROCK CLASTS
- 5 PURPLE, LAVENDER, GREY RARELY GREY-GREEN, "CROWDED" FINE TO MEDIUM-GRAINED PLAGIOCLASE PORPHYRY WITH INTERSPERSED SILT CLASTS, BRECCIA, AND MINOR EPICLASTIC BEDS
- TR DARK GREEN AUGITE PORPHYRY BASALT FLOWS AND BRECCIAS WITH LESSER FINE-GRAINED ANDESITE TO BASALT FLOWS AND MINOR INTERBEDDED SILTSTONE, TUFFACEOUS SEDIMENTS, AND CHERT CONTAINING LIMESTONE LENSES THAT MAY BE PART OF THE "SISTA GROUP"
- K POLYMICTIC CONGLOMERATE, SANDSTONE, SHALE, CARBONACEOUS MUDSTONE

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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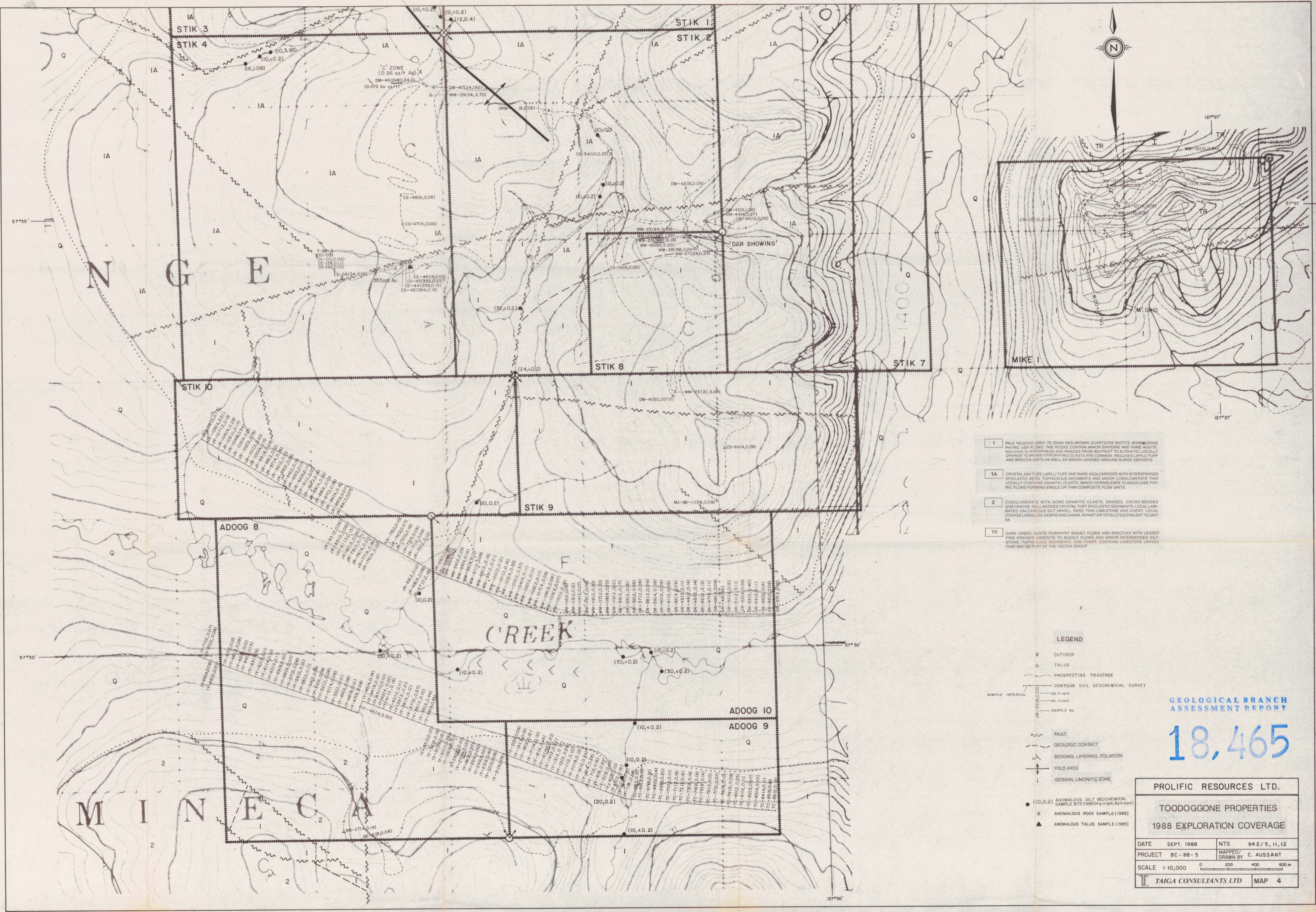
- LEGEND**
- X OUTCROP/FELSEMEER
 - ▲ BOULDER
 - △ TALUS
 - PROSPECTING TRAVERSE
 - CONTOUR SOIL GEOCHEMICAL SURVEY
 - SAMPLE INTERVAL
 - TC—1001(0.01)
 - TC—1002(0.02)
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 - TC—1196(1.96)
 - TC—1197(1.97)
 - TC—1198(1.98)
 - TC—1199(1.99)
 - TC—1200(2.00)

PROLIFIC RESOURCES LTD.

TOODOGGONE PROPERTIES
1988 EXPLORATION COVERAGE

DATE	SEPT. 1988	NTS	94 E / 11, 12
PROJECT	BC-88-5	MAPPED/DRAWN BY	C. AUSSANT
SCALE	1:10,000		

TAIGA CONSULTANTS LTD MAP 3



- 1 PALE REDDISH GREY TO DARK RED-BROWN QUARTZOSE BIOTITE HORNBLENDE PHYRIC ASH FLOWS. THE ROCKS CONTAIN MINOR SANDINE AND PARE AUGITE WELDING IS WIDESPREAD AND RANGES FROM INCIPENT TO EUTAXITIC. LOCALLY CHANGE TO KNOX VITROPHYRIC CLASTS ARE COMMON. INCLUDES LAPILLI TUFF AND BRECCIA UNITS AS WELL AS MINOR LAYERED GROUND SURGE DEPOSITS
- 1A CRYSTAL ASH TUFF, LAPILLI TUFF AND RARE AGGLOMERATE WITH INTERSPERSED EPICLASTIC BEDS, TURFACEDOUS SEDIMENTS AND MINOR CONGLOMERATE THAT LOCALLY CONTAINS GRANITIC CLASTS, MINOR HORNBLENDE, PLAGIOCLASE PHYRIC FLOWS FORMING SINGLE OR THIN COMPOSITE FLOW UNITS
- 2 CONGLOMERATE WITH SOME GRANITIC CLASTS, GRADED, CROSS-BEDDED GREYWACKE, WELL-BEDDED CRYSTAL TUFF EPICLASTIC SEDIMENTS, LOCAL LAMINATED CALCAREOUS SILT (MARL), RARE THIN LIMESTONE AND CHERT. LOCAL COARSE LANDSLIDE DEBRIS AND LAHAR. IN PART OR TOTALLY EQUIVALENT TO UNIT 1A
- TR DARK GREEN AUGITE PORPHYRY BASALT FLOWS AND BRECCIAS WITH LESSER FINE-GRAINED ANDESITE TO BASALT FLOWS AND MINOR INTERBEDDED SILTSTONE, TUFFS AND SEDIMENTS AND CHERT. CONTAINS LIMESTONE LENSES THAT MAY BE PART OF THE 'ASITKA GROUP'

- LEGEND**
- X OUTCROP
 - △ TALUS
 - PROSPECTING TRAVERSE
 - CONTOUR SOIL GEOCHEMICAL SURVEY
 - FAULT
 - GEOLOGIC CONTACT
 - BEDDING, LAYERING, FOLIATION
 - FOLD AXES
 - GOSSAN, LIMONITIC ZONE
- SAMPLE INTERVAL
- Ag in ppm
 - Ag in ppb
 - SAMPLE No.

- (10,0.2) ANOMALOUS SILT GEOCHEMICAL SAMPLE SITE (1986) (Ag in ppt, Ag in ppm)
- X ANOMALOUS ROCK SAMPLE (1985)
- ▲ ANOMALOUS TALUS SAMPLE (1985)

GEOLOGICAL BRANCH ASSESSMENT REPORT

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PROLIFIC RESOURCES LTD.			
TOODOGGONE PROPERTIES			
1988 EXPLORATION COVERAGE			
DATE	SEPT. 1988	NTS	94 E / 5, 11, 12
PROJECT	BC-88-5	MAPPED/DRAWN BY	C. AUSSANT
SCALE	1:10,000	0 200 400 600 m	
TAIGA CONSULTANTS LTD			MAP 4