

GEOLOGICAL REPORT

ON THE

MAD CLAIM GROUP

WATSON BAR CREEK

CLINTON MINING DIVISION

LAT. 51'03'; LONG. 122'07'; NTS 920/1E

FOR

SOUTHERN GOLD RESOURCES LTD.

BY

T.E. LISLE & ASSOCIATES LTD.

T.E. LISLE, P. ENG.

OCTOBER 28, 1987

10962

16713

GEOLOGICAL REPORT

ON THE

MAD CLAIM GROUP

WATSON BAR CREEK  
CLINTON MINING DIVISION

LAT. 51'03'; LONG. 122'07'; NTS 920/1E

FOR

SOUTHERN GOLD RESOURCES LTD.

BY

T.E. LISLE & ASSOCIATES LTD.  
T.E. LISLE, P. ENG.


OCTOBER 28, 1987

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

FILMED

16,713



 <b>SOUTHERN GOLD RESOURCES LTD.</b> NORTH VANCOUVER, BRITISH COLUMBIA	
<b>MAD PROSPECT</b>	
<b>LOCATION MAP</b>	
<b>CLINTON MINING DIVISION, B.C.</b>	
Work by :	N.T.S. : 92 O/1
Drawn by :	Date : OCTOBER, 1987

## CONTENTS

	<u>PAGE</u>
Summary	1
Introduction	2
Property	2
Location & Access	4
History	4
Work Program and Procedures	4
Geology	6
Mineralization	7
Exploration Targets	8
Adit Area	8
Massive Sulphide veins	9
Madson Creek	12
3200 Showings	13
Line 24+00W - 26+00W	14
Miscellaneous Targets	14
Conclusions	15
Recommendations	15
Cost Estimate	16
References	17
Appendix 1: Certification	18
Appendix 2: Cost Statement	19
Appendix 3: Assay Data	20

## MAPS

### Figure

	<u>PAGE</u>
	Front Piece
1. Location Map	3
1. Location and Claim Map	5
2. Index Map	5
3a. Adit Area - Geochemistry - Sample Location	End of Report
3b. Adit Area - Geochemistry - Gold, Arsenic	End of Report
3c. Adit Area - Geology Sketch, 1:1,000	End of Report
3d. Adit Area - Geology Sketch, 1:100	End of Report
3e. Adit Area - Assay Plan, 1:100	End of Report
4a. Massive Sulphide Veins, 1:5,000	End of Report
4b. Massive Sulphide Veins - M.S.#1, 1:250	End of Report
4c. Massive Sulphide Veins - M.S.#4, 1:1,000	End of Report
5a. Madson Creek - Sample Location, 1:5,000	End of Report
5b. Madson Creek - Geochemistry - Gold, Arsenic, 1:5,000	End of Report
5c. Madson Creek - Geological Sketch, 1:5,000	End of Report
5d. Madson Creek - Assay Plan, 1:1000	End of Report
6. 3200 Showing - Geochemistry, 1:2,000	End of Report
7a. 24+00W - 26+00W - Sample Location, 1:2,000	End of Report
7b. 24+00W - 26+00W - Geochemistry - Gold, Arsenic, 1:2,000	End of Report
7c. 24+00W - 26+00W - Geological Sketch, 1:2,000	End of Report
8. Watson Bar Creek - Geochemistry - Gold, Arsenic, 1:5,000	End of Report

**SUMMARY**

The Mad gold prospect located at Watson Bar Creek in the Clinton Mining Division was staked by Utah Mines Limited in 1982 to evaluate high geochemical responses for gold, arsenic, mercury and copper. Between 1983 and 1986, the company carried out a program of road building, geological related surveys and core drilling (12 holes aggregating 3204 metres) in an unsuccessful search for economic concentrations of gold.

The property was optioned to Southern Gold Resources Limited in March 1987, and between July 25, 1987 and September 11, 1987, more detailed examinations were carried out on a number of selected untested targets within the claims. The program included prospecting, mapping, sampling, and a limited amount of hand trenching in an effort to define more accurately targets for further work.

Of the areas examined, a mineralized zone partly investigated by a short adit near Watson Bar Creek appears to hold the highest potential for the development of ore-grade mineralization of the Blackdome type. The zone is poorly exposed in two sections. One section about 10 by 27 metres is separated from a smaller section to the east by inaccessible bluffs and talus over about 35 metres. The zone trends about 110° and includes a mass of quartz veins and veinlets mineralized with gold, arsenopyrite, scorodite, pyrite and lesser amounts of sphalerite, chalcopyrite and galena. A number of samples milled or chipped from exposures yielded from 0.003 to 0.266 opt gold with variable but significant amounts of arsenic, copper, lead and zinc.

Narrow quartz veins or lenses were found associated with conformable arsenic-rich horizons in the Madson Creek area. High gold assays from selected samples of the mineralized zone points to a need for further definition, and for further detailed prospecting in those areas of the claims showing high geochemical responses for gold, arsenic, copper and mercury.

The preliminary evaluation of a number of massive sulphide veins confirmed the presence of local high gold concentrations. The veins are narrow in the 0.1 to 0.3 metre range and average where sampled at 0.2 to 0.3 opt gold. The veins pinch and swell and the tendency to be discontinuous over short lengths, or to peter out with a change in direction, makes them very difficult targets to explore.

Geological and geochemical evaluation of other areas of interest failed to yield the encouragement necessary to recommend a more aggressive follow-up.

A further exploration program is proposed for the Mad claims to evaluate in greater detail the indicated areas of interest. This initial work includes limited prospecting of areas of geochemical interest; and survey, road access and diamond drilling to test mineralization in the adit area.

The estimated cost of the 1988 program is \$120,000.00.

INTRODUCTION

The Mad prospect was staked by Utah Mines Limited in 1982. During the ensuing four years, Utah expended considerable time and effort in an unsuccessful search for gold concentrations of the epithermal type.

The property became available for option in 1986. The author reviewed the exploration data in March, 1987, and recommended to Southern Gold Resources Limited that they obtain an option and make a detailed examination. The recommendation was not intended to 'Re-do' work on areas intensively explored by Utah. The thrust rather was to re-examine in greater detail, a number of untested targets that appeared to hold potential for gold mineralization.

In addition to a number of scattered geochemical/geophysical anomalies, other zones included a) The Madson Creek area, b) an old adit west of the junction of Madson Creek and Watson Bar Creek and c) a number of auriferous massive sulphide veins scattered in the western section of the grid area.

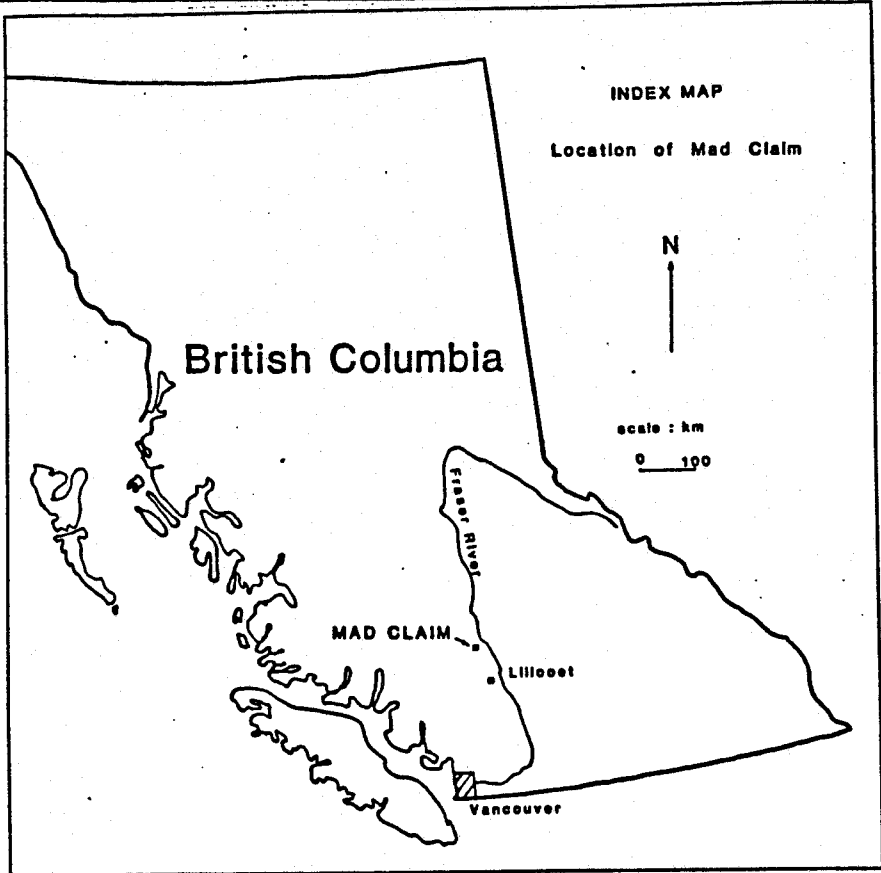
The results of the further investigations on these areas are summarized in this report and on maps accompanying this report.

PROPERTY

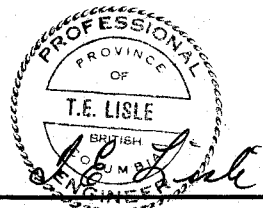
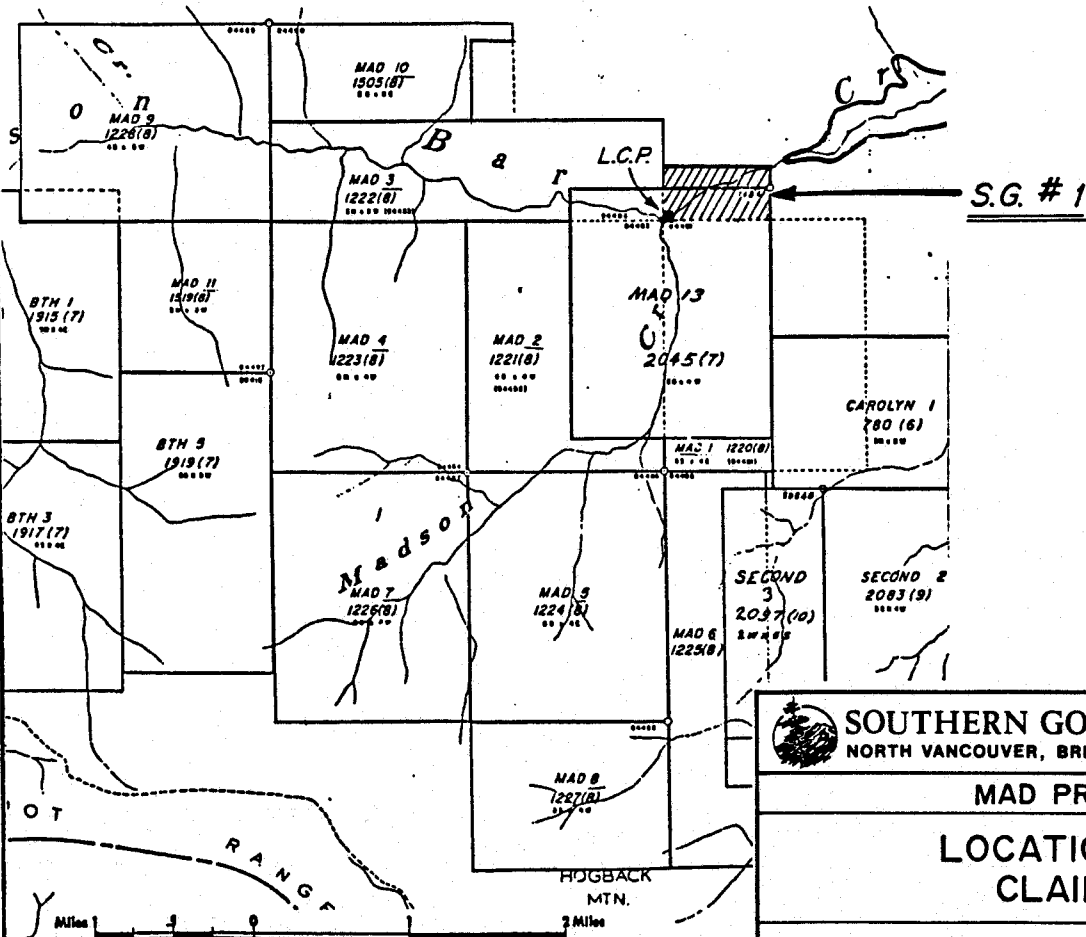
The property optioned from Utah includes the following mineral claims.


<u>CLAIM</u>	<u>UNITS</u>	<u>RECORD No.</u>	<u>ANNIVERSARY</u>
MAD 1	20	1220 (8)	1993
MAD 2	20	1221 (8)	1993
MAD 3	16	1222 (8)	1995
MAD 4	20	1223 (8)	1995
MAD 5	20	1224 (8)	1993
MAD 6	16	1225 (8)	1993
MAD 7	20	1226 (8)	1995
MAD 8	12	1227 (8)	1993
MAD 9	20	1228 (8)	1995
MAD 10	10	1505 (8)	1995
MAD 11	9	1519 (8)	1995
MAD 13*	20	2045 (8)	1987

\*The Mad 13 claim was staked at a later time and covered ground already covered by the Mad 1, 2 and 3 claims. This claim was apparently allowed to lapse as the ground would automatically be claimed by the earlier claims. However the S.G.#1 two unit claim was staked by the author on July 15, 1987 to cover open ground north of Mad 1 and east of Mad 3. The claim record is 2316, recorded July 30, 1987.



Location map of the Mad claim.



 <b>SOUTHERN GOLD RESOURCES LTD.</b> NORTH VANCOUVER, BRITISH COLUMBIA	
<b>MAD PROSPECT</b>	
<b>LOCATION AND CLAIM MAP</b>	
<b>CLINTON MINING DIVISION, B.C.</b>	
Work by :	N. T. S. : 92 0/1
Drawn by :	Date : SEPT. 1987
<b>FIGURE 1</b>	

Microfiche date 87/02/13



## LOCATION AND ACCESS

The Mad claims are located near the western margin of the Interior Plateau some 43 kilometers north-northeast of Lillooet in southern British Columbia. The claims are in and south of Watson Bar Creek valley that drains easterly to the Fraser River. The claims are centred roughly on Latitude 51'03', Longitude 122'07', NTS 920/1E. Elevations range from about 500 to more than 2,000 metres above sea-level. Much of the claim area is gently rolling, however main drainages are locally steeply incised and precipitous.

Access to the claims is by four-wheel drive road that leaves the West Pavillion Road near Lot 4695 (Hancock Ranch) approximately 80 kilometers north of Lillooet, B.C.

## HISTORY

Mr. H. Fenton of Lillooet reports visiting the adit area over 25 years ago however the date on which it was completed is unknown. A reported second adit was not located. Work by Utah included the following:

	<u>1983</u>	<u>1984</u>	<u>1985</u>
Geological Mapping (1:5,000)	300 ha	1475 ha	----
Base Line Cutting	2.2 km		
Line Cutting		49.85	
Cross Lines Flagged	15.0 km		
Road Construction		12.61 km	
Grid Soil Samples	312	500	
Contour Soil Samples	726		
Rock Geochem. Samples	296	480	
VLF-EM		79.8 km	
Magnetometer Survey		49.9 km	
I.P. Survey, Gradient		19.2 km	5.4 km
I.P. Survey, Dipole		7.4 km	.95 km
Diamond Drilling (12 holes).			10,513.4 ft

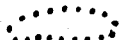


## WORK PROGRAM AND PROCEDURES

Between July 27, 1987 and September 12, 1987, a program consisting of road clearing, hand trenching, limited grid extensions, prospecting, geological mapping and soil and rock sampling was carried out at selected sites within the claims. The work was undertaken by the writer assisted by mining engineer Y. Robertson, and occasionally by a local rancher's son, T. Hancock Jr.

A total of 229 talus fine or soil samples and 152 rock samples were collected. The base line was extended from 10+00W to 0+50W. Cross lines 0+50W, 1+50W,

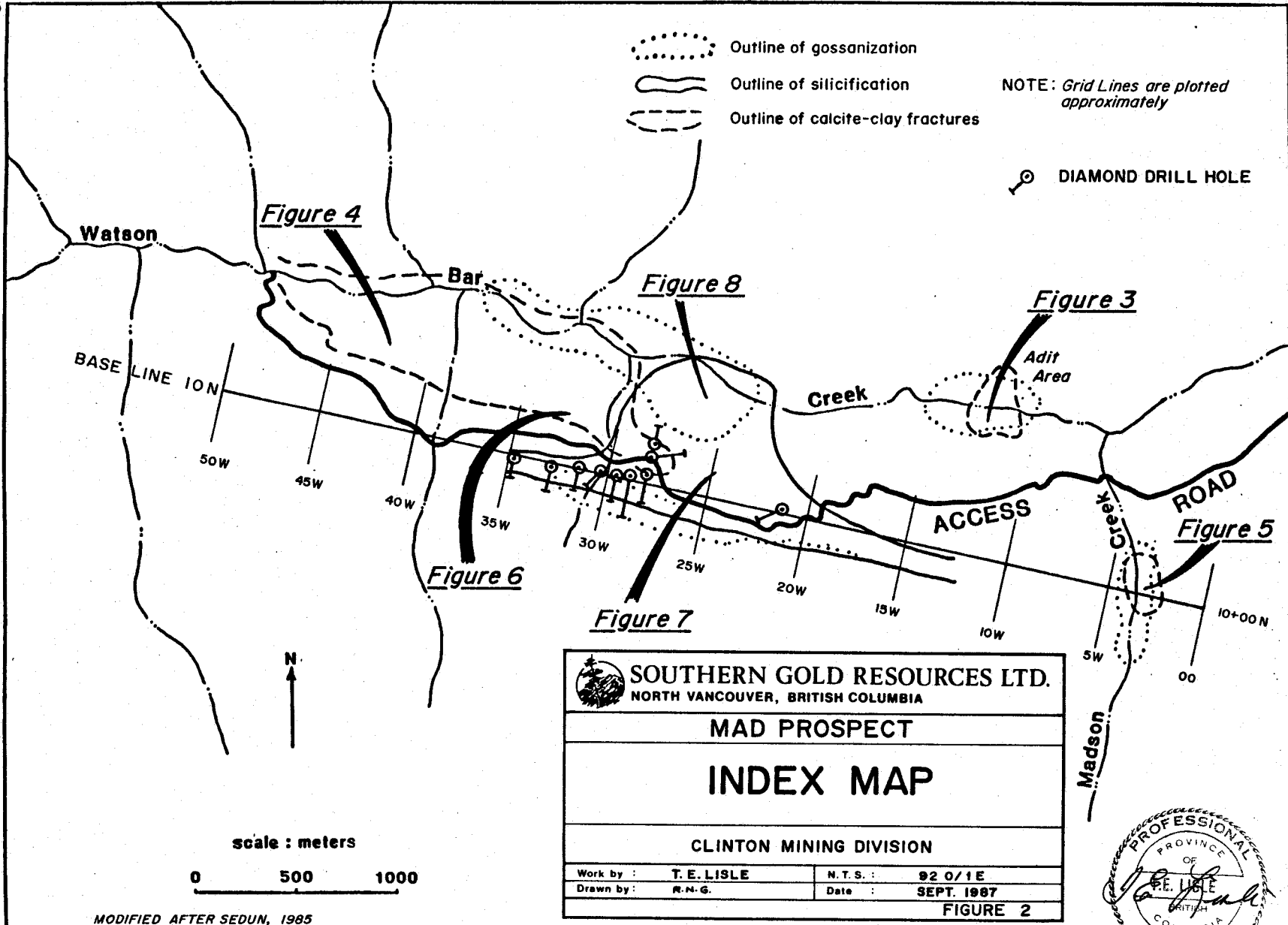
12210  
5106


12205  
5105

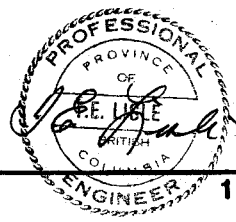
-  Outline of gossanization
-  Outline of silicification
-  Outline of calcite-clay fractures

NOTE: Grid Lines are plotted approximately

 DIAMOND DRILL HOLE



	
SOUTHERN GOLD RESOURCES LTD. NORTH VANCOUVER, BRITISH COLUMBIA	
MAD PROSPECT	
INDEX MAP	
CLINTON MINING DIVISION	
Work by :	T. E. LISLE
N.T.S. :	92 0/1 E
Drawn by :	R.N.G.
Date :	SEPT. 1987
FIGURE 2	



5104  
12210

MODIFIED AFTER SEDUN, 1985

5104  
12205

4+50W and 5+50W were completed from 5+00N to 11+00N.

All surveying was completed with belt-chain and compass. The base line was picketed at 25 metre intervals. Cross lines were picketed at 50 metre intervals and flagged at 25 metre intervals. Lines were not cut.

Soil samples were collected by use of a grub-hoe and dug at various depths ranging up to 0.50 metres. In areas of steep topography, particularly at Watson Bar Creek near the adit, and in Madson Creek valley, conventional grid lines and soil sampling was impractical, yet it was important to attempt to obtain some useful data. In these areas, samples of talus fines were collected either at 25 metre or 50 metre intervals.

Where areas of significant mineralization were encountered, samples were milled and channelled. In areas of less significant mineralization, or where it was impractical due to steepness or other factors, samples were chipped. A few samples of the 'grab' or 'select' type were also collected.

All samples were treated by conventional techniques at Acme Analytical Laboratories in Vancouver. The samples were analyzed for 30 elements by I.C.P. methods and for gold by either atomic absorption or fire assay. 157 soil and 112 rock samples were also analyzed for mercury.

## GEOLOGY

The Watson Bar Creek area is near the eastern margin of the Camelsfoot Range that is largely underlain by sedimentary rocks of the early Cretaceous Jackass Mountain Group. The Jackass Group in this area is reported to be approximately 5,300 metres thick and is comprised of volcanic-rich lithic wackes, shales and polymict conglomerates mainly of marine origin. The presence of fossils in rocks from Watson Bar Creek Valley dating some exposures as the older Relay Mountain Group was noted by T. Sedun in 1985. To the writer's knowledge this aspect of the regional geology has not been further clarified.

The Jackass Group rocks originated in the Tyaughton-Methow basin complex located at the intersection of several regional faults including the Yalakom and Fraser River faults. Movement on these structures after deposition of the sediments, thought to be related to the accretion of terranes to the Cordillera, has dissected the sedimentary assemblage and separated remnants of the formation by as much as 150 kilometers and 110 kilometers along the Yalakom and Fraser River Faults respectively (Kleinspehn). The movement has also resulted in a number of faults peripheral to and internal to the main Jackass Group remnant wedged between the Yalakom and Fraser River faults.

Watson Bar Creek flows partly along a major easterly trending lineament believed to be a cross fault to the above structures. Mapping has also shown a 95° to 110° fault on the south slope of the valley. This zone has many splays and much of the alteration and mineralization in the area is spatially related to both structures. The easterly faults have been cut and locally displaced by northeasterly faults.

Detailed mapping has shown the Watson Bar Creek area to be intruded by a small stock? of granodiorite, and by a number of dykes and sills that includes quartz-feldspar porphyry, feldspar porphyry, andesite and lamprophyre. A number of the felsic dykes? are highly altered, siliceous, and many contain very fine grained pyrite and locally fine arsenopyrite. Both the intrusions, and the widespread faulting have imparted a variable array of attitudes to the sediments.

### MINERALIZATION

The Mad property is part of a larger mineralized zone or belt near the eastern margin of the Jackass Group. This area includes Stirrup Creek to the west, and may extend southeast to the headwaters of Leon Creek. H.V. Warren reports placer gold production up to 1945 from Stirrup Creek was 3,000 to 5,000 ounces. As placer operations have continued on an intermittent basis, this figure would be significantly higher.

Exploration for gold within the belt has resulted in a number of mineralogical and geochemical characteristics commonly associated with low temperature epithermal environments. Many of these characteristics are evident in the following descriptions summarized from the Utah 1984 report.

#### a) Silicified Area:

Located on the ridge between lines 26+00W and 31+00W. The sediments have been silicified by fine stockwork-like quartz and quartz-carbonate veinlets that are locally mineralized with minor pyrite and lesser arsenopyrite and chalcopyrite. Values to be expected include: Copper 27 to 90 ppm; Arsenic 70 to 1,000 ppm; Antimony 4 to 80 ppm; Mercury 200 to 3,000 ppb; Gold 0 to 200 ppb.

#### b) Conformable veins and Replacements:

Mainly located on steep northeasterly slope between 26+00W and 28+00W. Secondary locations include the baseline 21+00 to 26+00W and 30+00 to 32+00W north of Watson Bar Creek. Mineralization is conformable, highly siliceous with variable amounts of carbonate, with banded and brecciated textures being common. The veins and replacements range from 5 to 100 cm wide and average 13 cm. They are traceable up to ten's of metres in length. The veins and replacements contain the following range of mineralization: Gold 0 to 1.0 opt; Silver 0 to 0.7 opt; Arsenopyrite 0.1 to 5.0%; Pyrite 0.1 to 3%; 250 ppm antimony and minor amounts of chalcopyrite, galena and sphalerite.

#### c) Cross cutting Veins:

Located in the same area as the conformable veins between 21+00W and 32+00W near or south of the baseline. They are limited in number and include the following: Quartz veins 0.5 to 5 cm wide containing from 0.1 to 0.8 opt gold; 4 to 10 cm arsenopyrite-scorodite veins average 0.5 opt gold, and calcite veins up to 0.80 metres wide. The veins contain minor pyrite, chalcopyrite and sphalerite. Silver content varies from 0.1 to 0.6 opt.

d) Massive sulphide veins:

Located west of line 36W, north of the baseline. Average strike 160°. Traceable for distances locally greater than 100 metres. The veins pinch and swell, range to 0.5 metres wide; contain from 15% to 100% sulphide in order of decreasing abundance, pyrrhotite, pyrite, arsenopyrite, sphalerite and minor amounts of chalcopyrite and galena. Gold and silver in the high sulphide veins is reported to be 0.75 opt and 1.5 opt respectively.

e) Mineralized siltstone:

Associated with conformable calcite veins and lenses in non-gossanous siltstone. Showings consist of arsenopyrite, either disseminated or in narrow broken bands in calcite. Associated with anomalous amounts of antimony, mercury, barium and locally gold.

EXPLORATION TARGETS

(A) Adit Area

A short, 12 metre adit about 35 metres above Watson Bar Creek and 600 metres west of the junction of Watson Bar Creek and Madson Creek, partly investigates a mineralized zone marked by a pale yellow-green colour anomaly.

Within this zone, a quartz feldspar porphyry sill? within a westerly trending argillite-sandstone assemblage dipping southerly about 30° to 40°, has been altered, fractured and mineralized with a mass of quartz veins and associated pyrite, arsenopyrite, scorodite, and lesser amounts of sphalerite, galena and chalcopyrite. Mineralization is also locally disseminated in the intrusive.

One large vein? trends southerly in the adit and dips east about 47°. Most of the veins, however are less than 3 cm wide, they pinch and swell, commonly strike southeast with steep dips, and are locally brecciated.

The main area has been partly explored by the adit and hand trenches over about 9 metres north-northeast and 26 metres west-northwest (110°). The footwall of the zone is a brown altered sandstone and the hanging wall a black sheared graphitic argillite.

A second mineralized section, possibly a faulted extension of the main zone, has been located about 43 metres on strike to the east of the adit. This section dips southerly at about 30°. The east-west trace of mineralization is partly obscured by thick talus.

Sections of both zones appear to have stratigraphic control, however faulting along Watson Bar Creek, evident mainly in thin sheared argillite horizons, has imposed a variable but locally steeper structural component. This, coupled with surface cover and uncertainty on the shape and extent of the intrusion makes interpretation difficult.

Thirty-six samples were channeled or chipped from the main adit and trench area. Six samples were collected from the easterly extension. One 10 cm select sample, #1320, was collected from the bluffs high above the adit. \*Samples from the adit area yielded the following range of assays: Gold 0.003 to 0.266 opt; Silver 0.01 to 0.41 opt; Arsenic 115 to 33,110 ppm; Lead 13 to 4700 ppm; Zinc 69 to 4509 ppm; Copper 13 to 414 ppm and Mercury 140 to 3,300 ppb. (Figure 3e).

The highest assay from the easterly zone was sample 1337 that yielded 0.186 opt gold over 0.40 metres.

Further attempts to trace mineralization in this area were made with geochemistry. Thirty-six talus fines were collected at 25-metre intervals from the south bank of Watson Bar Creek below the adit; 25 talus fines were collected also at 25 metre intervals from the north bank of the same creek, and 38 conventional soil samples were collected from the northern ends of grid lines 10+00W to 14+00 West. Analyses of these samples yielded the following range of assays (Figure 3).

\*Three samples reported in ppb gold and ppm silver.

	(A) 36 TALUS FINES <u>S. Side W. Bar Crk.</u>	(B) 25 TALUS FINES <u>N. Side W. Bar Crk.</u>	(C) GRID SAMPLES <u>10+00W - 14+00W</u>
Gold (ppb)	1 - 270	1 - 145	1 - 123
Silver (ppm)	0.1 - 0.5	0.1 - 1.0	.1 - .5
Arsenic (ppm)	9 - 751	24 - 456	1 - 163
Copper (ppm)	49 - 147	5 - 114	30 - 125
Lead (ppm)	5 - 27	6 - 41	3 - 26
Zinc (ppm)	64 - 106	40 - 189	42 - 184
*Mercury (ppb)	50 - 360	40 - 290	30 - 80

\* Partial Coverage

#### EXPLORATION TARGETS

##### (B) Massive Sulphide Veins

A number of massive sulphide veins were located and sampled in the western section of the grid in 1984. The veins were reported to range up to 0.5 metres wide, with veins heavily mineralized with sulphide assaying in the order of 0.75 opt gold. The veins were further examined in 1987 and a number of samples collected to obtain dimensions and grade data.

The veins are commonly marked by conspicuous limonitic gossans in grey unaltered rocks. The veins occur in fault and shear zones that vary from 330' to 360' and have vertical or steep dips.

Gangue minerals are quartz and calcite that are locally well mineralized with pyrrhotite, arsenopyrite, sphalerite, pyrite, chalcopyrite and galena.

The veins pinch and swell along strike. They are locally traceable for more than 100 metres along strike however within the trace, they rarely form continuous structures. In some areas, the veins simply stop and in others, they appear to 'peter out' as narrow shears with a change in direction. These characteristics may be due to a combination of host-rock lithology and post-mineral deformation.

A total of 23 samples were cut from 4 of 6 reported zones. Zone #5 was not accessible but float thought to be from the vein was selected from near Watson Bar Creek. Zone #6 was not examined or sampled for the same reason. Four of the 23 samples were cut over widths of 1.2 metres to obtain a preliminary indication of what grades might be present over possible mining widths. All of the data resulting from this work is shown on accompanying maps and tabulated below:

<u>VEIN</u>	<u>SAMPLE</u>	<u>WIDTH (M)</u>	<u>AU (opt)</u>	<u>AG (opt)</u>
MS 1	1351	0.10	1.050	2.66
MS 1	1352	0.85	0.093	0.27
MS 1	1353	0.35	0.411	1.69
MS 1	1354	0.75	0.180	0.27
MS 1	1355	0.40	0.350	0.42
MS 1	1356	1.22	0.032	0.09
MS 1	1357	0.40	0.306	0.62
MS 1	1358	1.22	0.100	0.35
MS 1	*1451	0.33	0.006	0.04
MS 1	*1452	0.30	4ppb	0.003
MS 2	1359	0.13	0.291	0.36
MS 2	1360	0.11	0.012	0.16
MS 2	*1408	0.15	0.192	0.78
MS 2	*1409	0.20	0.149	1.81
MS 2	*1410	1.20	0.040	0.30
MS 3	1361	0.18	0.266	0.18
MS 3	1362	0.15	0.149	0.31
MS 4	1363	0.15	0.770	1.00
MS 4	1364	1.22	0.073	0.17
MS 4	1365	0.20	0.740	0.19
MS 4	1366	0.23	0.348	0.33
MS 4	1367	0.61	0.226	0.09
MS 4	1368	0.15	0.448	0.62
MS 5 ?	1369	Float	0.410	0.03

\*Assays reported in ppb Au and ppm silver and converted for uniformity.



EXPLORATION TARGETS Cont.(C) Madson Creek

A preliminary water survey carried out by Utah in 1984 confirmed the results of soil and rock samples from 1983 that showed that area to contain elevated levels of arsenic. The soils also showed high levels of antimony and mercury.

During 1987, prospecting, sampling and preliminary mapping was completed in the area of interest noted on figures 5a-5d. This entailed extending the grid to the east side of Madson Creek; the collection of 52 soil samples from or near lines 0+50W; 1+50W, 4+50W and 5+50W; Eighteen talus fines from the lower banks of the valley and 30 rock samples. This work revealed a narrow gold bearing zone on the west side of Madson Creek, and also showed a number of similarities to other mineral occurrences on the property.

Where examined, Madson Creek flows northerly through topography not unlike the drilled area near line 28+00W. The west side of the valley is marked by steep limonitic bluffs that expose a number of narrow westerly trending, steeply dipping fault strands that appear to offset and bring limonitic strata into contact with grey unaltered rocks.

Prospecting along the base of the bluffs revealed a northerly trending argillaceous layer within the sandstone assemblage that is partly replaced by quartz and carbonate, mineralized with dark fine-grained sulphide, stained yellowish-green and limonitic. The horizon is exposed intermittently over about 120 metres. It has been successively down-dropped to the south (or raised to the north) from less than one to more than three metres, or possibly much greater widths. The horizon varies to about 1.1 metres in width and is similar to conformable or replacement mineral zones located near line 27+00W.

A number of other narrow zones similarly mineralized but apparently cross-cutting the strata have been located at about 4+50W from 12+00N to 12+50N; at 1+00W - 9+00N and on the Base line at 2+75W. Samples from all of these zones show a similar geochemical response: Au 1 to 25 ppb; As 2577 to 13,155 ppm; Hg 780 to 20,800 ppb and Sb 35 to 917 ppm.

Near the centre of the main zone along the bluffs, the horizon has been disrupted by narrow shears along which small lenses of quartz locally well-mineralized with chalcopyrite, arsenopyrite and pyrite occur. The best sample from this zone assayed 15,100 ppb gold over 0.10 metres. Other nearby samples also yielded anomalous responses. (Figure 5d).

The location of soil and talus fine samples in the Madson Creek area are shown on accompanying maps and assay sheets. The results are summarized herewith.

<u>SAMPLES</u>	<u>NO. OF SAMPLES</u>	<u>AU (ppb)</u>	<u>AS (ppm)</u>	<u>CU (ppm)</u>	<u>HG (ppb)</u>
T.L. Series*	10	8 - 270	187 - 513	167 - 340	120 - 1500
1578 Series*	8	11 - 195	106 - 720	126 - 274	80 - 3300
Grid	52	1 - 27	10 - 1166	24 - 375	20 - 1500

\* Talus Fines

#### EXPLORATION TARGETS Cont.

##### (D) 3200 Showing

An area of high gold-arsenic geochemistry coincident with an area of high I.P. Chargeability between 10+00N and 12+50N on lines 32+00W and 33+00W was re-examined. The area has steep topography, possibly a structural low related to cross-faults.

The general area is marked by an abundance of limonitic talus containing large blocks commonly 1 to 5 metres in diameter, some of which are veined by quartz-carbonate. The blocks locally resemble bedrock and are believed to have originated in the steep bluffs south of drill hole #5.

A further 21 soil samples and 7 rock samples were collected for comparison and evaluation. The analyses resulted in the following ranges.

<u>SAMPLES</u>	<u>NO. OF SAMPLES</u>	<u>AU (ppb)</u>	<u>AS (ppm)</u>	<u>HG (ppb)</u>
Soil 1987	21	1 - 860	94 - 868	90 - 10,400
Soil (Utah)	10	5 - 95	104 - 768	
Rock	7	1 - 425	15 - 1895	60 - 6,800

Two of the above samples were from an area of definite outcrop on the road at about 31+70W. This area has small limonitic clots with pyrite in sheared sedimentary rocks that yielded the anomalous gold content. A review of the drill log of drill hole #5 located a short distance to the south and upslope of this area showed significant alteration in the core but little encouragement in gold assays.

Examination of other soil anomalies located between lines 33+00W and 37+00W showed a coincidence with a number of ridges and draws of glacial origin.

The economic significance of this area remains in doubt. Assay data is shown on figure 6.

EXPLORATION TARGETS Cont.(E) Line 24+00W - 26+00W

Four drill holes were completed by Utah to the west of a major 050' fault located near line 27+00W. Scattered geochemical anomalies to the east of this fault were further examined by geochemical and geological surveys.

This area is underlain mainly by brown sandstone with thin argillaceous interbeds. These were found to be locally replaced by silica-carbonate and mineralized with fine dark sulphide; mainly arsenopyrite with minor stibnite? and pyrite.

A number of areas of quartz-carbonate veining are evident. The largest of these centered at 24+50N - 11+50N, trends about 050' - 060', contains local siliceous breccias, and appears to follow a fault paralleling the main cross fault noted above.

34 soil samples and 25 rock chip samples were collected. The rock samples ranged to 147 ppb gold with the higher assays from the parallel fault zone noted above. Arsenic assays ranged to 55,121 ppm the higher assays being from the replaced argillaceous horizons. This data is shown on figure 7 to this report.

Five additional soil samples were collected near 22+50W - 13+00N to re-examine a site previously shown to be anomalous. All samples returned low gold assays.

EXPLORATION TARGETS Cont.(F) Miscellaneous Targets

A number of rock samples, either individual or in clusters, were collected at widely scattered sites within the claims. In some areas, for example at 13+00W and 8+00N the samples were from cross-cutting or replacement type zones at the base of the bluffs but up-slope from areas shown by previous work to be of geochemical interest. Most of these samples yielded assays comparable to those found in other areas, however the sites are not shown on individual maps.

An IP chargeability anomaly was encountered during previous surveys on line 14+00W at 9+50N. The strength of the anomaly is comparable to the one described at line 32+00W. The anomaly is weak, and the cause is uncertain. It does not appear to constitute a significant target at this point, however if follow-up work at the near-by adit provides encouraging results, the geophysical data should again be reviewed.

## CONCLUSIONS

An important observation from the 1985 drilling program was that the best gold geochemistry occurred with cross-cutting quartz veins containing pyrite, arsenopyrite and chalcopyrite (DDH 12). Except for the massive sulphide veins, the highest gold assays encountered in 1987 were from the quartz-sulphide zone at the adit and in the quartz vein material at Madson Creek. These facts suggest that if significant gold concentrations are present, they will likely occur in the silica-rich rather than the carbonate-rich veins.

Mineralization partly explored at the adit contains significant gold content (up to 0.266 opt) in a quartz-rich zone roughly parallel to Watson Bar Creek. This zone has the highest exploration potential of all areas examined in 1987, and requires further definition as to size and grade.

Replacement-type, arsenic-rich horizons were found to be widespread in the areas examined. These zones rarely contain significant concentrations of gold mineralization. They are however locally associated with gold-bearing quartz veins or lenses, as at Madson Creek, and for this reason require careful prospecting.

The gold bearing massive sulphide veins were found to be narrow, to pinch and swell, to change direction and to be locally discontinuous. These characteristics along with indicated grades suggest them to be difficult targets to explore.

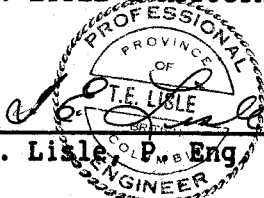
## RECOMMENDATIONS

1. Complete the evaluation of the gold occurrence at Madson Creek.
2. Continue detail prospecting of areas of geochemical interest in the claims.
3. Prepare road access to a drill site near grid Line 11+00W, 15+50N.
4. Tie in by accurate survey, the adit mineralization and proposed drill site.
5. Drill test with three NQ holes the adit mineralization. The holes should cut the adit, and areas about 50 metres to the east and west approximately 60 metres below surface.

COST ESTIMATE

Prospecting	\$4,500.00
Survey	3,000.00
Road and Site Preparation	5,000.00
Camp and Maintenance	3,000.00
Assaying	3,000.00
2200 feet NQ Drilling at \$35.00/ft	77,000.00
Geology and Supervision	10,000.00
Transportation	<u>2,000.00</u>
	107,500.00
Contingency	<u>12,500.00</u>
	<u>\$120,000.00</u>

Respectfully Submitted,  
T.E. LISLE & ASSOCIATES LTD.



T.E. Lisle, P. Eng.

October 28, 1987

REFERENCES

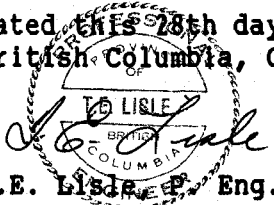
- SEDUN, L.T. The Geology and Mineralogy of the MAD Claim, Lillooet Mining Division, British Columbia.  
B.Sc. Thesis, University of British Columbia, April, 1985.
- KLEINSPEHN, K.L. Cretaceous sedimentation and tectonics, Tyaughton-Methow Basin, Southwestern British Columbia.  
Canadian Journal of Earth Science. V 22. pp 155-174. 1985.
- TRETTIN, H.P. Geology of the Fraser River Valley between Lillooet and Big Bar Creek, British Columbia.  
Department of Mines & Petroleum Resources, Bulletin 44, 1961.
- TIPPER, H.W. Geological Survey of Canada. Open File. Map 534. Taseko Lakes 92-0.
- POLLOCK, T. Geological and Geochemical Report, MAD Property, 920/1E. Utah Mines Ltd. August, 1983.
- POLLOCK, T. & ORD, R. Mad Property, Report of Activities (1984) 920/1E. Utah Mines Ltd. December, 1984.
- POLLOCK, T. Drilling Report on the Mad Property, Clinton, M.D. 920/1E. December, 1985.
- POLLOCK, T. & ORD, R. Drilling & Geophysical Report, Mad Property, Clinton, M.D., B.C. 920/1E. October, 1985.
- WARREN, H.V. The Significance of a Discovery of Gold Crystals in Overburden. Association of Exploration Geochemists. Precious Metals in the Northern Cordillera, 1982.
- PRICE, B.J. & LIVINGSTONE, K. Geochemical Report, Carolyn Claims, Clinton, M.D. for E & B Exploration Ltd. Assessment Report 9462. 1981.
- LIVINGSTONE, K. Geochemical Report, Carolyn Claim, Clinton, M.D. for E & B Exploration Ltd. Assessment Report 10381. 1981
- FOX, P.E. Geochemical Report and Line Cutting. Leon Claim, Dome Exploration, 1981. Assessment Report 9782.
- CAMERON, R.S. & TOPHAM, S.L. Geochemical Report (Roch) Leon Claims, Clinton, M.D. for Dome Exploration Ltd. Assessment Report 11693 - 1983.

APPENDIX 1

I, Thomas E. Lisle, do hereby declare:

1. That I am a geologist with business at the above address.
2. That I have practiced my profession for over twenty years, mainly in western North America.
3. That I am a member in good standing of the Association of Professional Engineers of British Columbia, and the Geological Association of Canada.
4. That I prepared this report on the Mad mineral claims. I have reviewed much of the background technical data, and spent much of the period between July 26, 1987 and September 11, 1987 at the property carrying out a work program.
5. I have no interest in the claims on which this report is based, and no interest in the securities of Southern Gold Resources Ltd. For referring the property to Southern Gold, I will receive a fee equal to 2% of funds expended by Southern Gold until such time that those expenditures match funds expended by Utah.
6. Permission to use this report in a prospectus related to the raising of funds to carry out the proposed exploration program on the Mad claims is hereby granted.

Dated this 28th day of October, 1987 in the District of North Vancouver, British Columbia, Canada.

  
T.E. Lisle, P. Eng.

APPENDIX 2COST STATEMENT, 1987 EXPLORATION PROGRAM, MAD CLAIMS, TO OCTOBER 27, 1987.

T.E. Lisle and Associates Ltd.	
Fees and Disbursements	\$16,517.51
Y. Robertson	4,169.37
T. Hancock	960.00
S.P. Quin, September 23-24	500.00
Transportation:	
Truck Rental	1,727.60
Misc. Travel Expenses, S.P. Quin and Y. Robertson	322.20
Analytical Costs, Acme Analytical Laboratories	5,899.40
Road Maintenance	400.00
Misc. Supplies	127.22
Drafting	1,391.50
Report and Map Preparation	<u>2,139.72</u>
Total Expenditures	\$34,154.52
Management Fee @ 5% of Total Expenditures	<u>\$1,707.73</u>
TOTAL	<u>35,862.25</u>

October 28, 1987



T.E. Lisle, P. Eng.



APPENDIX 3

ASSAY DATA

Assay Reports

- 3258
- 3258R
- 3403AR
- 3571R
- 3912
- 4150

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS, VANCOUVER B.C.  
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED SEPTEMBER 7 1987

DATE REPORTS MAILED

*Sept 11/87*

### ASSAY CERTIFICATE

SAMPLE TYPE : REJECT Au by Fire Assay

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RESOURCES FILE# 87-3258 R

PAGE# 1

SAMPLE	Sample wt. gm	Au-100 oz/t	Native Au mg	Average oz/t
1306	280	.263	.03	.266
1310	350	.173	.17	.187
1311	270	.168	.32	.202
1312	270	.177	.03	.180
1315	210	.163	ND	.163
1322	250	.176	ND	.176

## GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR- ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: Rock Chips AG# BY FIRE ASSAY. AU# BY FIRE ASSAY

DATE RECEIVED: SEPT 12 1987

DATE REPORT MAILED: *Sept 21/87*ASSAYER: *D. J. Toy* ..DEAN TOYE, CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RESOURCES

File # 87-3258

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AG#	AU#	HG
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	OZ/T	OZ/T	PPB	
1301	1	21	785	472	2.0	11	5	182	2.34	13550	5	2	1	68	4	11	2	12	1.42	.022	2	11	1.06	30	.01	2	.19	.04	.09	1	.05	.079	260
1302	1	58	489	812	1.6	18	10	374	2.95	11680	5	ND	1	94	4	12	2	20	2.29	.043	2	14	1.00	54	.01	2	.25	.04	.12	1	.04	.044	310
1303	4	86	5907	4509	14.1	14	8	217	3.22	18067	5	2	1	66	26	24	15	11	1.26	.032	2	9	.92	33	.01	7	.18	.04	.08	1	.41	.095	1200
1304	2	184	2986	3619	6.7	18	10	290	4.03	29158	5	2	1	83	28	22	8	16	2.14	.038	2	11	1.19	30	.01	2	.21	.05	.10	1	.20	.074	1050
1305	2	71	992	1026	1.9	18	8	245	3.06	18367	5	2	1	68	7	21	2	16	1.58	.036	2	11	1.19	25	.01	2	.18	.05	.07	1	.05	.075	320
1306	3	99	4771	1593	7.1	12	5	171	5.20	29055	5	4	1	36	10	42	2	8	1.02	.027	2	6	.44	26	.01	2	.18	.02	.10	1	.21	.178	640
1307	2	47	441	591	.8	21	11	201	4.00	27524	5	ND	1	38	5	10	2	19	.71	.018	2	6	.59	38	.01	4	.25	.03	.11	1	.02	.033	250
1308	2	110	411	457	.8	21	12	431	3.39	10344	5	ND	2	76	4	9	2	27	1.69	.040	2	9	1.42	18	.01	4	.23	.04	.10	1	.01	.021	360
1309	2	73	311	322	1.0	14	8	397	3.52	17247	5	ND	1	127	3	20	2	24	2.64	.032	2	13	1.25	21	.01	4	.28	.03	.09	1	.02	.059	380
1310	1	33	786	508	2.9	12	6	226	3.55	29046	5	3	1	51	3	40	4	8	1.37	.019	2	5	.53	40	.01	2	.12	.02	.06	1	.08	.176	260
1311	1	14	763	162	3.8	6	2	302	3.72	29604	7	3	1	83	1	58	5	5	2.20	.011	2	4	.88	15	.01	4	.08	.02	.03	1	.12	.151	3000
1312	1	18	571	352	1.3	9	6	176	4.78	29582	5	7	1	65	2	37	2	10	1.30	.018	2	6	.44	34	.01	2	.17	.02	.07	1	.06	.256	460
1313	3	80	26	93	.2	25	17	460	4.93	822	5	ND	1	173	1	8	2	33	3.67	.015	2	9	1.34	90	.01	8	.31	.02	.08	1	.01	.003	260
1314	5	69	64	135	.4	18	14	492	5.04	1979	5	ND	1	171	1	10	2	38	3.08	.018	3	9	.93	84	.01	6	.50	.03	.09	1	.01	.007	480
1315	6	61	928	220	1.5	4	2	73	4.39	29851	5	2	1	54	3	19	2	11	1.04	.023	2	5	.11	34	.01	3	.18	.02	.08	1	.06	.161	510
1316	2	414	1670	2007	4.6	16	9	511	2.97	9529	5	ND	1	127	14	20	2	26	2.40	.040	2	15	.84	45	.01	3	.25	.02	.10	1	.15	.044	1800
1317	3	360	3893	2667	7.8	12	8	382	2.91	10209	5	ND	1	80	23	35	3	15	1.95	.035	2	9	.55	32	.01	2	.21	.02	.11	1	.22	.047	1900
1318	2	185	1348	1673	3.2	15	8	282	3.23	16542	5	ND	1	91	17	17	2	14	1.78	.028	2	9	.41	34	.01	2	.22	.02	.09	1	.10	.054	810
1319	2	65	71	131	.4	28	16	442	3.59	1152	5	ND	2	182	1	10	2	25	3.09	.033	3	7	1.04	53	.01	5	.34	.02	.07	1	.01	.012	450
1320	9	13924	21	160	42.3	12	18	344	10.16	52	5	ND	1	73	2	2	2	64	.81	.030	3	7	.69	108	.02	3	2.34	.14	.11	9	1.32	.098	3300
1321	1	47	2469	770	3.7	4	2	101	2.94	28269	5	2	1	50	8	21	3	5	1.06	.030	2	5	.12	35	.01	2	.16	.02	.11	1	.11	.085	750
1322	2	92	4700	295	7.3	2	1	23	3.92	30090	5	5	1	44	7	50	2	4	.69	.029	2	3	.03	30	.01	2	.12	.02	.09	1	.24	.195	1600
1323	2	21	8	26	.2	9	4	354	2.03	326	5	ND	1	661	1	14	5	19	16.18	.016	2	10	6.29	48	.01	12	.24	.01	.02	3	.01	.001	210
1324	1	76	478	625	1.6	14	8	408	3.17	11624	5	ND	2	114	5	12	2	26	2.90	.040	2	16	1.02	32	.01	3	.27	.02	.12	1	.05	.060	900
1325	1	74	360	580	1.0	23	14	478	3.42	9039	5	ND	2	132	3	13	2	33	2.51	.038	3	18	.95	74	.01	7	.34	.03	.11	1	.03	.031	400
1326	2	113	256	882	.8	36	20	601	4.33	4835	5	ND	1	171	4	17	2	37	2.50	.067	3	12	.77	66	.01	7	.41	.03	.12	1	.02	.017	420
1327	2	124	666	1006	2.7	24	12	639	4.46	14560	5	ND	1	172	7	20	3	24	3.34	.030	3	8	1.19	65	.01	4	.31	.02	.09	1	.08	.065	820
1328	1	35	315	278	1.4	15	9	519	3.31	9076	5	ND	1	170	2	17	2	36	3.82	.015	2	19	1.38	62	.01	3	.32	.02	.08	1	.04	.044	410
1329	1	37	48	115	.3	23	13	602	3.97	1370	6	ND	1	196	1	10	2	46	5.03	.009	2	13	1.81	98	.01	4	.34	.02	.05	1	.01	.004	220
1330	2	352	4311	2263	8.9	8	3	179	2.32	16348	5	2	1	31	13	32	3	2	.72	.006	2	4	.18	16	.01	2	.07	.02	.03	1	.26	.078	1000
STD C	18	58	42	132	6.9	67	26	894	4.03	43	23	7	36	48	18	17	21	55	.49	.087	35	58	.89	172	.08	31	1.85	.08	.14	12	-	-	1300



GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
 THIS LEACH IS PARTIAL FOR MN FE CA P LA CR HG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.  
 - SAMPLE TYPE: SDIL AU ANALYSIS BY AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: SEPT 12 1987

DATE REPORT MAILED: *Sept 16/87*

ASSAYER: *R. Jager* DEAN TOYE, CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RESOURCES

File # 87-3403 R

SAMPLE#	ND	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SP	CD	SB	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	NA	K	N	AU#	HG
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	PPB
87-S-1	1	100	11	37	.1	111	31	410	4.20	2	7	ND	2	189	1	2	2	40	3.63	.076	9	45	.69	398	.02	4	3.33	.42	.05	2	1	280
B	1	68	19	95	.4	40	24	813	3.82	420	5	ND	3	185	1	2	2	47	2.72	.062	7	16	1.28	262	.01	5	.83	.08	.07	1	117	150
D+25E	1	73	21	100	.1	38	20	765	3.49	171	5	ND	2	195	1	2	2	45	2.62	.056	9	26	1.08	274	.02	14	1.52	.11	.12	1	24	100
D+50E	1	60	16	87	.2	44	17	677	3.73	54	5	ND	3	151	1	2	2	62	2.53	.061	10	37	1.50	193	.09	8	2.37	.07	.10	1	6	120
D+75E	1	56	15	98	.3	51	17	735	3.66	35	5	ND	3	151	1	2	2	48	2.25	.059	11	33	1.60	303	.06	7	1.77	.07	.12	1	4	80
D+100E	1	54	11	83	.2	30	15	747	2.95	46	5	ND	2	133	1	2	2	43	1.75	.056	8	21	1.05	281	.02	8	1.27	.05	.10	1	3	360
STD C/AU-S	18	57	42	131	6.8	67	26	1023	3.63	39	17	7	38	48	17	17	20	55	.48	.085	37	56	.91	172	.08	36	1.84	.08	.12	13	52	1300

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR NG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-3 SOIL P4 ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: SEPT 4 1987 DATE REPORT MAILED: Sept 12/87

ASSAYER: D. S. DEAN TOYE. CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RES. File # 87-3912 Page 1

Table with 31 columns (SAMPLE#, NO, CU, PB, ZN, AG, NI, CO, MN, FE, AS, U, AU, TH, SR, CD, SB, BI, V, CA, P, LA, CR, NG, BA, TI, B, AL, NA, K, W, AU, HG) and 31 rows of data points for various samples including TL-1 to TL-10, YR-1 to YR-23, and STD C/AU-S.



SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU*	HG
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	%	PPM	PPM	%	PPM	%	PPM	%	%	%	PPM	PPB	PPB
2+50W 5+00N	1	65	13	92	.1	38	14	774	3.60	97	5	ND	4	169	1	7	2	53	1.80	.033	12	32	.79	186	.08	29	2.27	.04	.17	1	5	90
2+00W 10+00N	5	250	18	135	.1	50	33	1279	9.08	1166	8	ND	4	164	1	43	2	104	1.67	.060	17	35	.83	216	.05	26	1.98	.07	.18	1	12	1500
2+00W 5+00N	1	39	16	76	.1	31	11	455	3.41	33	5	ND	2	63	1	2	2	52	.62	.017	10	32	.54	137	.13	9	2.15	.05	.20	1	1	30
1+50W 10+50N	1	188	16	74	.2	37	21	623	5.90	191	5	ND	3	117	1	2	2	88	1.83	.020	12	32	.74	202	.07	12	2.12	.09	.22	1	5	280
1+50W 10+00N	2	187	13	62	.1	36	18	391	6.38	390	5	ND	2	73	1	15	4	86	.54	.015	12	38	1.00	109	.06	22	2.21	.06	.28	1	8	130
1+50W 9+50N	2	174	18	77	.1	32	17	636	6.07	600	5	ND	5	101	1	40	2	83	.95	.020	13	28	.66	166	.08	11	2.06	.06	.31	1	4	400
1+50W 9+00N	2	136	17	88	.1	52	28	1711	5.55	207	5	ND	4	232	1	2	2	84	3.23	.065	11	29	1.19	304	.07	13	1.85	.09	.12	1	12	380
1+50W 8+50N	2	197	12	98	.1	28	30	1489	6.99	282	5	ND	1	725	1	2	2	83	8.10	.066	12	17	1.31	197	.01	15	1.36	.12	.16	1	7	600
1+50W 8+00N	2	280	15	89	.1	44	36	1443	7.28	222	5	ND	3	298	1	2	2	97	2.92	.046	14	31	.85	302	.03	29	2.66	.15	.18	1	11	230
1+50W 7+50N	1	155	5	66	.1	29	26	932	5.53	62	5	ND	1	291	1	2	2	106	4.38	.036	9	20	.93	220	.01	25	3.01	.25	.20	1	3	60
1+50W 7+00N	1	157	12	75	.4	22	32	1038	6.33	108	8	ND	2	313	1	2	2	82	4.89	.073	12	20	1.23	219	.03	20	1.58	.08	.27	1	12	420
1+50W 6+50N	1	59	15	61	.1	23	10	389	3.27	32	5	ND	4	71	1	3	5	59	.62	.025	9	23	.51	109	.08	20	1.94	.06	.16	1	1	30
1+50W 6+00N	1	148	12	76	.1	29	26	954	5.89	294	6	ND	2	313	1	22	2	84	3.95	.057	10	18	.99	167	.03	15	1.63	.09	.18	1	5	1200
1+50W 5+50N	1	113	19	80	.1	37	20	804	4.89	358	5	ND	3	129	1	15	2	72	1.33	.038	12	29	.72	182	.07	15	2.21	.06	.22	1	23	280
1+50W 5+00N	1	50	14	79	.1	52	14	431	4.23	13	5	ND	3	74	1	2	2	60	.80	.027	14	47	.82	140	.16	13	2.34	.05	.18	1	2	40
0+50W 10+50N	1	91	15	91	.2	30	18	649	4.50	111	5	ND	2	103	1	7	5	67	.86	.018	9	24	.54	211	.05	21	2.04	.05	.25	1	2	110
0+50W 10+00N	1	109	17	90	.2	31	22	687	5.94	125	5	ND	3	139	1	2	2	106	1.08	.018	9	27	.81	313	.03	18	2.91	.11	.20	1	4	50
0+50W 9+50N	5	220	17	58	.1	35	20	423	6.27	384	5	ND	3	95	1	38	2	92	.92	.016	20	31	.74	167	.07	9	2.38	.09	.10	1	27	600
0+50W 9+00N	1	74	10	59	.1	14	12	630	3.49	56	5	ND	1	186	1	2	2	57	6.69	.087	13	10	.47	81	.01	24	1.09	.07	.09	1	1	820
0+50W 8+50N	4	375	10	82	.1	47	26	1042	7.64	221	5	ND	4	151	1	2	2	94	1.62	.075	17	36	.82	217	.07	20	2.42	.09	.34	1	4	140
0+50W 8+00N	2	146	22	132	.1	43	23	791	5.60	440	5	ND	4	117	1	6	2	70	1.00	.037	13	31	.61	257	.08	20	2.05	.07	.16	1	2	100
0+50W 7+50N	1	102	12	56	.1	28	13	330	4.62	143	5	ND	4	78	1	4	2	89	.72	.033	12	34	.81	175	.10	7	2.68	.09	.40	1	4	30
0+50W 7+00N	1	116	15	62	.3	34	13	399	4.92	59	5	ND	4	88	1	2	2	84	.89	.033	15	38	.86	144	.11	13	2.81	.04	.23	1	3	80
0+50W 6+50N	1	107	11	55	.1	25	13	386	4.09	63	5	ND	4	85	1	2	2	80	.84	.036	11	32	.70	104	.07	8	2.15	.08	.10	1	1	90
0+50W 6+00N	1	62	19	62	.3	33	11	382	3.86	28	5	ND	2	92	1	2	2	69	.98	.031	13	37	.94	144	.14	8	2.91	.04	.18	1	1	40
0+50W 5+50N	1	99	13	66	.2	32	12	398	4.74	73	5	ND	5	114	1	2	2	90	.89	.030	13	40	.77	222	.09	7	3.16	.13	.24	1	4	30
0+50W 5+00N	1	24	15	109	.1	33	9	625	2.86	23	5	ND	1	42	1	5	2	49	.44	.026	7	31	.42	163	.10	7	2.04	.04	.11	1	1	20
STD C/AU-S	20	60	39	126	7.3	69	27	1082	4.08	38	18	8	40	51	19	18	22	58	.49	.083	38	61	.89	172	.08	37	1.83	.06	.14	13	50	1400



SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU	HG	
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
R-1346	1	7	18	61	.1	1	2	696	1.25	16	5	ND	3	88	1	2	2	2.52	.005	4	2	.55	1017	.01	24	.35	.01	.07	1	1	280		
R-1347	1	25	398	691	1.2	8	5	211	2.98	21365	5	2	4	62	1	13	4	8	1.45	.020	2	7	.54	31	.01	4	.17	.01	.06	1	6250	240	
R-1348	1	13	485	229	3.0	5	4	90	2.20	16082	5	3	1	22	1	14	10	2	.55	.014	2	3	.09	23	.01	3	.16	.01	.07	1	4705	140	
R-1349	1	42	250	412	.8	12	7	773	3.30	12703	5	2	3	174	3	2	2	16	4.94	.032	3	10	1.62	56	.01	5	.28	.01	.11	1	1660	210	
R-1350	1	56	16	69	.1	25	13	821	4.80	115	5	ND	5	200	1	2	2	57	3.28	.064	5	20	1.68	41	.01	6	.54	.02	.06	1	3	150	
R-1383	1	18	10	30	.1	3	5	808	3.94	129	5	ND	1	508	1	2	2	55	15.33	.012	2	10	6.46	14	.01	2	.31	.02	.01	1	6	350	
R-1384	1	55	12	278	.1	12	9	712	3.74	1240	5	ND	2	327	1	28	2	38	8.32	.043	4	13	1.76	98	.01	7	.51	.01	.08	1	19	1300	
R-1385	1	40	20	99	.1	12	7	766	3.55	6760	5	ND	1	95	1	382	2	23	6.57	.028	3	5	1.72	169	.01	7	.33	.01	.03	1	2	29800	
R-1386	1	18	5	32	.1	7	4	883	4.70	5091	5	ND	2	154	1	226	2	12	10.49	.009	2	6	2.37	74	.01	7	.15	.01	.04	1	4	8900	
R-1387	1	28	6	21	.1	20	6	518	2.60	3183	5	ND	1	125	1	223	2	17	4.85	.010	2	9	1.42	13	.01	7	.35	.01	.05	1	2	9200	
R-1388	1	66	4	42	.1	4	4	559	2.04	124	5	ND	2	136	1	2	2	20	4.12	.027	5	6	1.25	58	.01	9	.39	.02	.03	1	1	370	
R-1389	1	58	4	30	.1	4	7	806	4.07	350	5	ND	2	406	1	2	2	38	9.88	.023	5	6	3.17	15	.01	5	.43	.01	.02	1	1	1400	
R-1390	1	49	2	32	.1	7	6	524	3.00	33	5	ND	1	748	1	2	2	52	17.58	.045	5	13	1.15	27	.01	10	.36	.01	.03	1	1	210	
R-1391	1	52	6	46	.1	12	11	590	3.81	44	5	ND	4	152	1	2	2	67	2.65	.056	9	13	.90	83	.01	8	.71	.04	.06	1	1	430	
R-1392	1	66	9	81	.1	22	15	621	3.94	641	5	ND	3	60	1	50	3	56	1.86	.040	2	8	.71	24	.01	10	.60	.01	.04	1	13	2300	
R-1393	1	84	7	112	.2	10	12	810	4.62	341	5	ND	2	199	1	33	2	72	7.11	.066	3	8	1.90	28	.01	8	.55	.01	.03	1	1	2200	
R-1394	1	70	18	154	.2	5	7	1044	5.82	13155	5	ND	1	193	1	917	2	34	10.62	.012	2	5	3.24	25	.01	10	.29	.01	.03	1	95	1050	
R-1395	1	18	4	115	.3	5	6	1289	5.40	4764	6	ND	1	302	1	186	2	30	13.94	.007	3	4	3.85	251	.01	9	.27	.01	.03	1	1	1300	
R-1396	1	22	5	86	.1	4	5	815	3.55	2577	5	ND	1	171	1	85	2	32	9.17	.012	2	3	1.92	27	.01	18	.30	.01	.02	1	2	780	
R-1397	1	29	6	18	.1	4	4	1163	7.62	5787	5	ND	1	476	1	35	2	31	13.27	.014	5	3	4.69	17	.01	2	.23	.03	.01	1	2	5600	
R-1398	1	80	9	39	.1	9	7	361	2.68	611	5	ND	3	114	1	2	2	35	2.40	.033	4	7	.80	12	.01	9	.51	.05	.03	1	1	830	
R-1399	1	263	4	354	.3	14	14	555	4.53	666	5	ND	3	176	2	2	2	30	4.70	.052	3	5	.41	76	.01	16	.50	.01	.13	1	495	760	
R-1400	10	2648	7	9238	2.1	21	25	355	10.42	7880	5	6	2	56	71	28	2	19	.87	.037	2	1	.26	31	.01	10	.32	.01	.13	5	10930	1800	
R-1401	2	2370	6	1775	1.1	15	34	445	5.81	2343	5	4	1	182	13	22	10	20	5.48	.018	2	3	.71	23	.01	9	.27	.01	.06	3	5955	570	
R-1402	4	996	34	2764	1.1	17	22	508	6.04	7173	5	4	3	130	20	58	2	15	2.20	.075	3	2	.13	121	.01	7	.44	.01	.15	3	3605	430	
R-1403	1	480	8	819	.3	20	24	411	5.78	5463	5	ND	4	121	4	176	2	18	2.65	.044	2	4	.14	60	.01	16	.34	.01	.14	1	820	1100	
R-1404	2	347	3	52	.1	13	17	667	5.27	91	5	ND	2	81	1	2	2	48	6.06	.028	6	5	.42	28	.01	13	.42	.01	.11	1	27	680	
R-1405	1	59	3	30	.3	4	5	764	2.83	57	5	ND	2	1057	1	2	2	34	21.40	.016	3	5	3.51	69	.01	2	.54	.06	.02	1	5	80	
R-1406	2	111	5	53	.1	6	11	847	4.73	1233	5	ND	2	303	1	66	2	51	6.95	.035	5	9	2.27	80	.01	6	.59	.02	.06	1	1	13000	
R-1407	1	46	2	25	.1	5	2	660	2.87	130	5	ND	1	541	1	2	2	17	13.03	.009	2	4	4.02	76	.01	14	.33	.02	.03	2	25	470	
R-1408	5	475	12025	4732	26.8	13	17	1322	8.94	10000	5	3	3	67	20	43	2	77	3.59	.047	4	10	1.90	23	.01	4	2.88	.01	.07	4	6595	700	
R-1409	27	1493	17705	33821	61.9	2	16	4295	18.85	15899	15	4	3	111	134	63	2	12	10.64	.007	3	1	.12	8	.01	2	.15	.01	.03	1	5110	1990	
R-1410	7	630	3815	8059	10.2	12	15	1758	9.31	5254	5	ND	2	127	33	9	2	30	7.99	.021	4	8	.79	22	.01	6	1.80	.02	.08	1	1375	400	
R-1411	5	406	130	143	.3	5	8	264	3.94	54	5	ND	1	218	1	2	2	79	4.43	.035	3	12	.51	306	.14	17	4.86	.47	.05	1	425	120	
R-1412	3	147	369	479	1.0	13	12	533	3.46	587	5	ND	3	156	2	6	2	88	1.38	.040	4	18	1.07	79	.09	18	2.57	.24	.08	1	205	130	
STD C/AU-H	19	59	41	135	7.5	69	28	1113	4.16	38	22	9	39	52	19	17	21	60	.51	.090	39	62	.92	172	.09	36	1.88	.96	.12	12	490	1300	

ASSAY REQUIRED FOR CORRECT RESULT -

## GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO<sub>3</sub>-H<sub>2</sub>O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.  
THIS LEACH IS PARTIAL FOR MN FE CA P LA CR HG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: P1-ROCK P2-3 SOIL AU ANALYSIS BY AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMELESS AA.

DATE RECEIVED: SEPT 12 1987

DATE REPORT MAILED: *Sept 18/87*ASSAYER: *St. J. Jeyar* DEAN TOYE, CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RESOURCES

File # 87-35716 Page 1

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	HG	BA	TI	B	AL	NA	K	W	AU#	HG
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	PPH	PPH	%	PPH	%	PPH	%	%	%	PPH	PPB	PPB	
R-1370	1	65	9	71	.1	15	14	630	5.09	70	5	ND	1	272	1	2	2	89	5.03	.044	5	11	2.04	51	.01	6	.95	.10	.04	1	1	110
R-1371	1	112	9	53	.1	14	15	557	4.49	90	5	ND	1	314	1	2	2	87	4.31	.044	6	7	1.24	56	.01	8	2.59	.45	.06	1	1	300
R-1372	1	11	9	45	.1	4	4	198	1.74	1895	5	ND	1	28	1	39	2	12	.69	.033	2	1	.18	38	.01	8	.76	.02	.05	1	1	6800
R-1373	1	13	8	57	.1	5	4	554	2.42	15	5	ND	1	102	1	2	2	26	1.97	.044	9	6	.55	35	.01	6	.58	.09	.06	1	2	60
R-1374	1	36	8	55	.1	6	6	435	2.59	119	5	ND	2	84	1	2	2	28	1.97	.045	9	6	.71	25	.01	6	.71	.09	.05	1	1	560
R-1375	1	55	9	89	.2	13	12	672	4.24	896	5	ND	1	178	1	37	2	76	5.22	.065	4	10	1.45	41	.01	9	.65	.02	.08	1	6	1000
R-1376	1	38	14	99	.3	6	6	840	4.56	9134	5	ND	1	188	1	451	2	29	9.17	.012	2	1	2.62	65	.01	3	.33	.01	.06	1	15	1500
R-1377	2	4299	9	1247	7.9	18	34	357	16.83	27653	5	25	1	105	8	12	10	3	4.33	.009	2	1	.58	21	.01	2	.10	.01	.07	1	15100	1500
R-1378	1	33	10	157	.1	9	7	924	4.07	5172	5	ND	1	219	1	280	2	30	9.62	.021	2	7	2.31	38	.01	4	.27	.01	.05	1	17	8800
R-1379	1	67	13	56	.1	7	9	444	2.48	6583	5	ND	1	90	1	245	2	26	3.62	.037	2	3	.92	144	.01	8	.54	.02	.06	1	25	2200
R-1380	1	77	32	146	.1	7	8	744	4.37	11639	5	ND	1	162	1	447	3	38	7.47	.021	2	6	2.13	22	.01	4	.39	.01	.06	1	168	11200
R-1381	1	1669	23	74	.3	11	50	417	16.12	6493	5	2	1	139	1	120	2	36	2.26	.016	2	1	1.01	42	.01	4	.39	.03	.03	1	2990	34000
R-1382	1	34	3	30	.1	6	5	400	2.27	145	5	ND	1	610	1	10	5	35	14.69	.012	2	3	5.97	29	.01	2	.36	.01	.02	2	3	310
STD C/AU-R	18	58	41	131	7.0	68	27	1028	3.96	41	19	7	36	48	18	17	21	56	.48	.089	36	60	.87	172	.08	37	1.82	.08	.13	13	505	1300

SOUTHERN GOLD RESOURCES FILE # 87-3571

SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BT PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	M PPM	AU# PPB	Hg PPB
33+00N 12+25N	1	145	14	103	.1	31	24	927	5.28	187	5	ND	2	147	1	2	2	77	3.27	.063	9	23	.82	129	.01	10	1.41	.05	.06	1	17	120
33+00N 11+75N	1	97	14	78	.2	28	19	715	4.66	236	5	ND	1	151	1	2	2	72	4.88	.055	10	23	.91	98	.01	17	1.55	.03	.05	1	30	90
33+00N 11+25N	1	154	19	110	.5	33	20	602	4.83	504	5	ND	1	151	1	4	2	65	4.20	.048	6	17	.47	84	.01	12	.94	.07	.07	2	860	150
33+00N 10+75N	1	152	15	91	.2	123	37	1004	7.88	192	5	ND	1	117	1	2	2	107	2.97	.026	7	60	.54	76	.01	35	.98	.04	.03	1	13	230
33+00N 10+50N	1	120	20	114	.1	45	29	854	6.30	152	5	ND	1	171	1	4	2	88	2.25	.034	10	23	.69	100	.02	15	1.17	.06	.05	1	34	350
33+00N 10+25N	1	118	20	108	.3	59	26	683	5.84	185	5	ND	1	137	1	5	2	70	2.83	.036	6	26	.54	95	.01	9	1.40	.15	.04	1	74	330
32+50N 12+50N	1	120	16	112	.1	29	22	838	5.16	240	5	ND	1	213	1	5	2	84	3.83	.052	8	23	.83	184	.01	20	1.91	.07	.15	1	18	180
32+50N 12+25N	1	172	17	97	.1	36	26	1052	5.30	371	5	ND	1	253	1	6	2	71	4.71	.054	7	18	1.21	211	.01	27	1.10	.06	.07	1	295	280
32+50N 12+00N	1	129	18	84	.2	50	28	768	6.09	436	5	ND	1	159	1	30	2	89	2.02	.036	9	27	.88	173	.01	7	2.52	.22	.05	1	32	1800
32+50N 11+75N	1	107	16	73	.1	62	27	684	5.48	576	5	ND	1	198	1	64	2	61	3.37	.041	8	26	.94	146	.01	5	2.39	.29	.03	1	3	4500
32+50N 11+50N	1	115	22	82	.2	67	28	677	5.35	809	5	ND	1	237	1	148	2	49	5.12	.056	9	27	1.10	148	.01	4	2.34	.31	.05	1	1	10400
32+50N 11+25N	1	108	21	83	.1	65	29	737	5.25	687	5	ND	1	245	1	56	2	49	4.32	.056	9	26	1.21	137	.01	7	2.24	.30	.05	1	1	3800
32+50N 11+00N	1	106	16	83	.1	63	27	676	5.10	633	5	ND	1	247	1	56	2	48	3.97	.051	9	27	1.11	145	.01	10	2.13	.28	.05	1	6	3200
32+50N 10+75N	1	109	19	93	.1	64	29	762	5.07	771	5	ND	1	229	1	100	2	47	4.18	.056	9	24	1.04	139	.01	6	2.23	.29	.07	2	2	7000
32+50N 10+50N	1	109	17	81	.1	63	27	644	4.98	868	5	ND	1	230	1	76	2	45	4.29	.069	9	25	.96	139	.01	4	2.05	.28	.04	1	1	6000
32+50N RD	1	108	19	73	.2	76	31	768	5.37	726	5	ND	1	252	1	72	2	46	3.86	.055	7	26	1.64	114	.01	2	2.30	.35	.04	1	1	5600
32+00N 12+25N	1	113	20	92	.1	54	23	550	5.21	172	5	ND	2	136	1	7	2	56	2.21	.026	14	25	.66	171	.01	8	2.55	.21	.07	1	8	250
32+00N 11+75N	1	115	12	69	.1	81	27	602	5.56	152	5	ND	1	163	1	11	2	57	3.07	.037	6	36	.67	146	.01	12	3.00	.36	.05	1	7	1500
32+00N 11+25N	1	122	15	89	.1	83	28	633	5.81	126	5	ND	1	146	1	2	2	58	2.59	.042	5	31	.64	124	.01	10	2.85	.39	.04	1	18	200
32+00N 11+00N	1	127	28	149	.1	44	27	733	6.67	94	5	ND	4	146	1	3	2	83	1.66	.088	27	21	.85	227	.01	13	1.84	.06	.16	1	7	220
32+00N 10+75N	1	105	15	102	.3	73	27	722	5.38	207	5	ND	1	153	1	4	2	55	3.55	.033	7	31	.62	144	.01	9	2.30	.26	.06	1	19	190
N.C. 1578+350N	1	157	15	84	.2	35	30	1116	5.37	106	5	ND	1	264	1	2	2	75	3.12	.068	9	21	1.32	185	.01	8	1.59	.11	.07	1	40	160
N.C. 1578+300N	3	274	15	89	.1	33	30	1132	6.11	360	5	ND	2	161	1	13	2	72	1.74	.073	10	20	.75	209	.02	14	1.46	.11	.13	1	14	380
N.C. 1578+250N	1	130	14	105	.2	37	28	1069	6.08	312	5	ND	1	196	1	14	2	84	2.92	.062	9	21	.99	183	.01	14	1.50	.10	.07	1	39	460
N.C. 1578+200N	1	126	17	135	.2	34	29	1392	6.39	638	5	ND	2	266	1	46	2	76	3.80	.071	12	14	.99	253	.01	10	.99	.06	.08	2	36	680
N.C. 1578+160N	1	161	16	94	.3	31	28	953	5.14	451	5	ND	1	180	1	8	2	72	3.30	.061	9	18	.95	151	.01	14	1.23	.08	.07	2	61	310
N.C. 1578+115N	1	157	38	147	.4	27	25	1214	5.49	601	5	ND	2	372	1	24	2	73	4.59	.067	12	18	1.38	252	.01	13	1.57	.09	.09	1	46	630
N.C. 1578+50N	1	139	17	95	.1	35	27	1454	5.71	219	5	ND	1	172	1	7	2	98	3.11	.037	12	24	.91	211	.01	10	2.33	.13	.11	1	11	80
N.C. 1578+25N	1	138	19	96	.2	37	35	1214	5.26	720	5	ND	1	320	1	34	2	76	3.97	.067	8	14	1.08	225	.01	12	.70	.03	.09	1	195	3300
SS 01	1	147	27	106	.3	34	28	847	4.48	225	5	ND	1	158	1	2	2	66	2.34	.073	11	26	1.50	184	.01	8	2.52	.15	.10	1	42	50
SS 02	1	103	25	92	.2	34	24	759	4.41	124	5	ND	2	162	1	2	2	64	2.32	.066	11	27	1.54	179	.01	6	2.17	.14	.08	1	31	90
SS 03	1	84	15	87	.2	33	22	750	4.02	81	5	ND	2	202	1	2	2	57	3.03	.061	9	23	1.42	253	.01	7	1.68	.09	.09	2	11	80
SS 04	1	105	13	79	.2	29	21	721	3.74	55	5	ND	1	172	1	2	2	55	3.01	.052	10	24	1.24	213	.01	7	1.56	.08	.06	1	6	100
SS 05	1	59	12	77	.2	29	20	674	3.58	160	5	ND	1	165	1	2	2	38	2.91	.048	4	12	.98	107	.01	9	.48	.04	.07	2	5	180
SS 06	1	66	16	86	.1	27	19	734	3.89	73	5	ND	2	228	1	2	2	47	2.30	.073	9	18	1.17	207	.01	10	1.41	.11	.09	1	5	90
SS 07	1	70	20	84	.2	27	19	749	3.94	61	5	ND	2	138	1	2	2	48	2.25	.065	10	21	1.17	219	.01	6	1.55	.11	.07	1	1	60
STB C/AU-S	18	59	42	132	7.0	69	28	1056	3.98	39	14	8	37	50	19	16	20	57	.48	.092	37	60	.87	177	.08	33	1.82	.08	.13	13	48	1300

## SOUTHERN GOLD RESOURCES FILE # 87-3571

Page 3

SAMPLE#	MO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	M	AU#	HG
	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
SS 08	1	49	7	83	.1	25	17	470	3.88	12	5	ND	1	260	1	2	2	61	2.38	.088	8	16	1.50	202	.01	5	2.07	.03	.04	2	1	50
SS 09	1	77	8	101	.1	41	26	849	5.25	21	5	ND	1	515	1	2	2	94	2.69	.074	8	40	2.22	342	.01	10	2.81	.03	.06	1	4	190
SS 10	1	71	17	79	.2	31	18	594	3.85	24	5	ND	1	543	1	3	3	64	5.02	.050	8	26	1.76	241	.06	23	2.84	.14	.09	3	3	180
SS 11	1	59	20	82	.3	26	18	700	4.67	16	5	ND	3	434	1	3	2	119	5.02	.067	18	48	1.79	78	.01	11	2.80	.02	.04	1	1	100
SS 12	1	77	12	83	.3	39	20	709	4.71	15	5	ND	2	277	1	2	6	69	2.75	.075	7	35	2.29	120	.15	20	3.56	.11	.10	2	2	200
SS 13	1	107	12	80	.2	35	21	820	4.12	10	5	ND	1	657	1	3	4	81	7.52	.057	18	23	2.22	220	.01	16	3.32	.13	.08	1	1	130
SS 14	1	55	8	64	.2	29	14	500	3.04	21	5	ND	1	193	1	2	2	46	2.69	.055	7	21	1.09	114	.03	10	1.32	.04	.07	1	1	80
SS 15	2	59	5	75	.3	29	18	594	3.74	29	5	ND	3	212	1	2	2	53	2.29	.078	8	18	1.57	152	.01	7	1.38	.03	.07	2	1	100
SS 16	3	53	6	75	.3	31	15	561	3.58	32	5	ND	2	175	1	3	2	55	2.29	.066	7	26	1.38	153	.03	10	1.71	.03	.09	1	1	70
SS 17	2	72	14	87	.1	28	20	763	4.47	9	5	ND	2	382	1	2	2	83	3.02	.069	9	35	2.00	282	.02	17	3.80	.18	.09	3	1	110
SS 18	2	64	17	79	.3	27	20	589	3.63	19	5	ND	2	269	1	2	2	54	2.33	.055	6	22	1.37	284	.06	19	3.67	.16	.11	4	2	80
SS 19	1	79	11	79	.1	27	20	672	3.88	21	5	ND	1	246	1	2	2	60	3.01	.066	8	30	1.46	298	.05	18	3.17	.07	.09	1	1	100
SS 20	2	80	15	88	.2	33	22	669	4.34	19	5	ND	2	214	1	2	2	67	2.09	.073	7	34	1.69	186	.15	17	4.12	.10	.11	3	1	50
SS 21	1	57	9	64	.1	23	14	833	3.39	15	5	ND	2	234	1	2	2	57	5.05	.054	9	26	1.64	124	.01	8	2.96	.03	.05	2	2	80
SS 22	1	75	12	70	.3	24	16	590	3.47	23	5	ND	1	220	1	2	2	61	4.39	.076	9	22	1.40	200	.01	9	2.94	.04	.05	1	1	70
SS 23	1	84	14	89	.3	27	15	563	3.99	81	5	ND	2	155	1	2	2	72	2.85	.060	8	26	1.37	100	.11	15	2.84	.06	.06	1	17	60
SS 24	2	131	13	105	.2	32	27	766	3.90	34	5	ND	1	251	1	2	2	65	2.28	.058	7	26	1.39	256	.15	21	3.34	.06	.11	2	4	80
STD C/AU-S	19	59	42	132	7.5	71	28	1050	4.01	41	19	7	38	51	18	15	20	58	.47	.091	37	61	.88	181	.08	33	1.86	.07	.14	14	47	1400

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE CA P LA CR MG BA TI B W AND LIMITED FOR NA AND K. AU DETECTION LIMIT BY ICP IS 3 PPM. - SAMPLE TYPE: P1-2 SOIL P3-4 ROCK AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: SEPT 11 1987

DATE REPORT MAILED: Sept 24/87

ASSAYER: N. J. ... DEAN TOYE, CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RES. File # 87-4150 Page 1

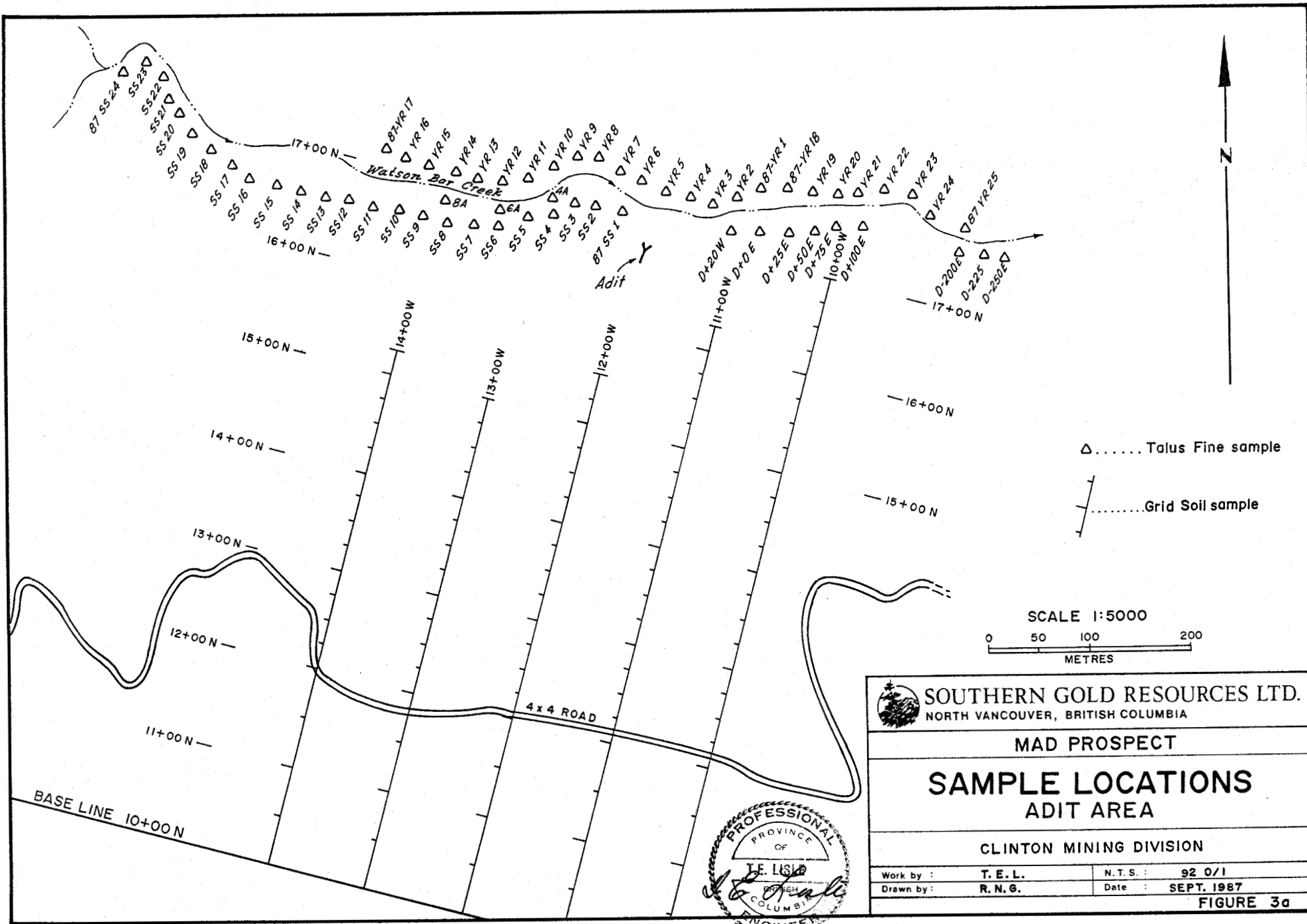
Table with columns: SAMPLE#, NO PPM, CU PPM, PB PPM, ZN PPM, AG PPM, NI PPM, CO PPM, MN PPM, FE %, AS PPM, U PPM, AU PPM, TH PPM, SR PPM, CD PPM, SB PPM, BI PPM, V PPM, CA %, P %, LA PPM, CR PPM, MG %, BA PPM, TI %, B PPM, AL %, NA %, K %, W PPM, AU8 PPM. Rows include various sample IDs like 26+00W 10+75N and 22+50W 13+00W STD C/AU-S.

Table with columns: SAMPLE#, MO, CU, PB, ZN, AG, NI, CO, MN, FE, AS, U, AU, TH, SR, CD, SB, BI, V, CA, P, LA, CR, MG, BA, TI, B, AL, NA, K, W, AU, STD C/AU-S. Rows include various sample identifiers like 22+SUN 12+75N and standard values.

SAMPLE#	NO	CU	PB	ZN	AG	NI	CO	MN	FE	AS	U	AU	TH	SR	CD	SB	BI	V	CA	P	LA	CR	MG	BA	TI	B	AL	NA	K	W	AU#
	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	PPH	PPH	PPH	PPH	PPH	PPH	PPH	PPH	%	%	%	PPH	%	%	%	PPH	%	%	%	PPH	PPH	
R 1413	1	34	9	90	.1	12	11	587	3.05	13	5	ND	4	115	1	2	2	64	1.58	.059	11	14	1.07	101	.01	5	1.17	.17	.08	1	1
R 1414	2	13	2	17	.1	1	2	372	1.43	18	5	ND	1	829	1	2	2	18	16.20	.010	2	6	7.05	30	.01	6	.24	.02	.03	1	1
R 1415	1	4	15	91	.2	1	1	239	.58	27	5	ND	3	25	1	3	2	1	.61	.017	6	2	.16	55	.01	4	.29	.03	.18	1	4
R 1416	1	17	2	18	.1	2	4	510	2.24	32	5	ND	1	719	1	2	2	15	18.10	.006	2	4	7.24	40	.01	7	.25	.01	.04	1	1
R 1417	1	37	2	53	.1	14	9	719	3.24	14	5	ND	1	594	1	3	2	42	9.95	.025	5	15	3.82	36	.01	22	.40	.01	.04	1	1
R 1418	1	22	2	33	.1	10	5	639	2.76	44	5	ND	1	727	1	2	2	37	13.57	.018	4	9	4.89	32	.01	8	.40	.01	.04	1	32
R 1419	1	20	6	32	.1	4	5	708	3.46	1028	5	ND	1	86	1	43	2	23	6.27	.010	2	6	1.69	126	.01	5	.18	.01	.02	1	1
R 1420	1	63	351	79	.7	7	8	592	5.25	55121	5	ND	1	170	1	3638	3	21	3.40	.024	2	4	.91	134	.01	2	.25	.01	.04	3	12
R 1421	1	8	5	16	.2	1	3	364	1.84	276	5	ND	1	347	1	3	2	15	10.95	.017	2	4	4.26	26	.01	13	.32	.01	.04	1	20
R 1422	1	6	2	18	.1	15	11	578	4.41	309	5	ND	1	575	1	8	2	75	12.56	.060	4	19	4.57	39	.01	5	.49	.01	.04	1	25
R 1423	1	6	2	17	.1	2	5	819	3.70	61	5	ND	1	696	1	2	2	47	16.40	.022	4	6	6.11	43	.01	2	.30	.01	.01	1	1
R 1424	1	6	6	20	.1	7	8	503	2.43	66	5	ND	1	434	1	4	2	41	13.85	.028	3	6	5.71	34	.01	8	.42	.01	.03	1	95
R 1425	1	4	2	7	.1	1	1	271	1.13	49	5	ND	1	139	1	2	6	3	3.25	.001	2	1	1.07	15	.01	6	.37	.01	.02	1	1
R 1426	1	20	3	36	.1	7	6	417	1.87	513	5	ND	1	261	1	8	2	27	6.83	.019	2	9	2.48	28	.01	5	.34	.01	.04	1	12
R 1427	1	20	2	34	.2	3	5	554	2.57	636	5	ND	1	412	1	7	2	35	10.55	.018	2	7	3.92	29	.01	3	.38	.01	.04	1	4
R 1428	1	31	17	85	.5	5	5	609	2.66	3568	5	ND	1	114	1	27	2	11	4.39	.016	2	2	1.25	23	.01	5	.28	.01	.12	1	1
R 1429	1	34	8	59	.4	11	9	665	2.98	582	5	ND	1	602	1	7	2	49	15.16	.046	5	8	3.74	36	.01	12	.42	.02	.03	1	3
R 1430	2	34	7	37	.1	1	2	779	2.02	846	5	ND	1	228	1	11	3	5	6.13	.024	3	2	1.62	54	.01	7	.31	.01	.07	1	12
R 1431	1	54	2	44	.1	11	8	334	2.13	100	5	ND	1	193	1	4	2	35	2.42	.009	2	9	.99	27	.01	5	.42	.01	.05	1	2
R 1432	1	52	11	83	.1	17	12	691	3.76	21	5	ND	1	132	1	2	3	42	5.13	.056	7	20	1.16	602	.01	2	1.66	.02	.08	1	5
R 1433	1	8	2	26	.2	13	15	909	4.38	68	5	ND	1	322	1	2	2	88	8.23	.051	4	13	2.97	30	.01	5	.49	.01	.03	1	147
R 1434	1	6	6	29	.1	11	12	373	2.78	45	5	ND	1	186	1	2	2	58	4.29	.071	5	8	1.51	55	.01	7	.56	.01	.13	1	109
R 1435	1	6	2	38	.1	16	13	631	3.35	52	5	ND	1	226	1	2	2	73	5.91	.039	6	14	1.93	41	.01	9	.50	.01	.05	1	49
R 1436	1	16	22	64	.3	8	7	1115	5.43	1671	5	ND	1	315	1	46	2	22	12.75	.004	2	3	3.10	120	.01	8	.15	.01	.03	1	1
R 1437	1	51	2	71	.1	7	9	480	2.69	56	5	ND	1	208	1	4	2	60	5.08	.025	2	12	1.91	20	.01	11	.60	.01	.03	1	1
R 1438	1	33	2	34	.1	9	6	655	2.57	43	5	ND	1	654	1	3	2	45	13.29	.018	2	14	5.06	38	.01	2	.41	.01	.01	1	1
R 1439	1	57	6	80	.1	14	12	578	4.74	2222	5	ND	1	97	1	111	2	93	.36	.037	2	16	.19	20	.01	7	.51	.01	.02	1	101
R 1440	1	131	5	64	.1	9	11	211	2.36	147	5	ND	1	225	1	29	2	28	.33	.070	2	7	.11	96	.01	4	.58	.01	.04	1	93
R 1441	1	97	9	63	.1	19	15	585	3.54	53	5	ND	1	201	1	8	2	71	3.82	.072	9	11	1.21	36	.01	4	.90	.08	.04	1	1
R 1442	1	25	7	44	.1	4	4	1007	3.70	1248	5	ND	1	277	1	28	2	17	10.39	.013	2	3	3.09	547	.01	8	.24	.01	.04	1	7
R 1443	1	46	10	68	.1	18	14	810	4.14	118	5	ND	2	253	1	3	3	85	3.85	.054	8	15	1.29	164	.01	6	.76	.10	.05	1	1
R 1444	3	38	8	41	.1	1	3	674	2.18	359	5	ND	1	139	1	9	2	12	4.37	.036	8	3	1.07	270	.01	8	.38	.01	.07	1	1
R 1445	1	44	6	51	.1	6	9	680	3.89	922	5	ND	1	238	1	24	2	15	8.55	.005	3	4	2.39	307	.01	7	.26	.01	.12	1	5
R 1446	1	104	4	91	.1	23	17	1069	5.57	34	5	ND	1	265	1	2	2	99	4.56	.060	6	23	2.30	33	.01	6	.49	.02	.02	1	3
R 1447	1	20	2	24	.2	1	3	441	2.36	20	5	ND	1	830	1	2	2	30	15.70	.010	2	4	6.29	38	.01	5	.31	.01	.01	1	1
R 1448	1	40	14	82	.1	8	9	582	2.82	1054	5	ND	1	220	1	28	2	39	7.14	.030	2	7	2.37	55	.01	4	.33	.01	.02	1	1
STD C/AU-R	19	62	44	132	7.4	67	29	1025	3.97	35	19	8	39	52	19	17	21	59	.49	.096	40	61	.88	180	.07	32	1.71	.06	.13	13	510


SAMPLE#	MO PPM	CU PPM	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	MN PPM	FE %	AS PPM	U PPM	AU PPM	TH PPM	SR PPM	CD PPM	SB PPM	BI PPM	V PPM	CA %	P %	LA PPM	CR PPM	MG %	BA PPM	TI %	B PPM	AL %	NA %	K %	W PPM	AUB PPM
R 1449	1	27	4	34	.1	5	6	495	2.49	89	5	ND	1	503	1	2	2	34	16.01	.013	2	5	6.44	23	.01	11	.35	.01	.02	1	7
R 1450	1	28	8	43	.1	6	9	630	4.07	5810	5	ND	1	265	1	435	5	29	7.86	.018	2	5	2.45	19	.01	4	.43	.01	.03	1	1
R 1451	6	446	382	3195	1.4	10	19	1315	7.71	967	5	ND	1	29	18	2	5	76	.70	.049	4	14	2.20	26	.01	7	3.31	.01	.09	1	200
R 1452	1	106	15	87	.1	15	17	556	5.81	26	5	ND	1	126	1	2	3	84	1.53	.163	5	13	1.18	22	.13	11	3.79	.18	.05	1	4





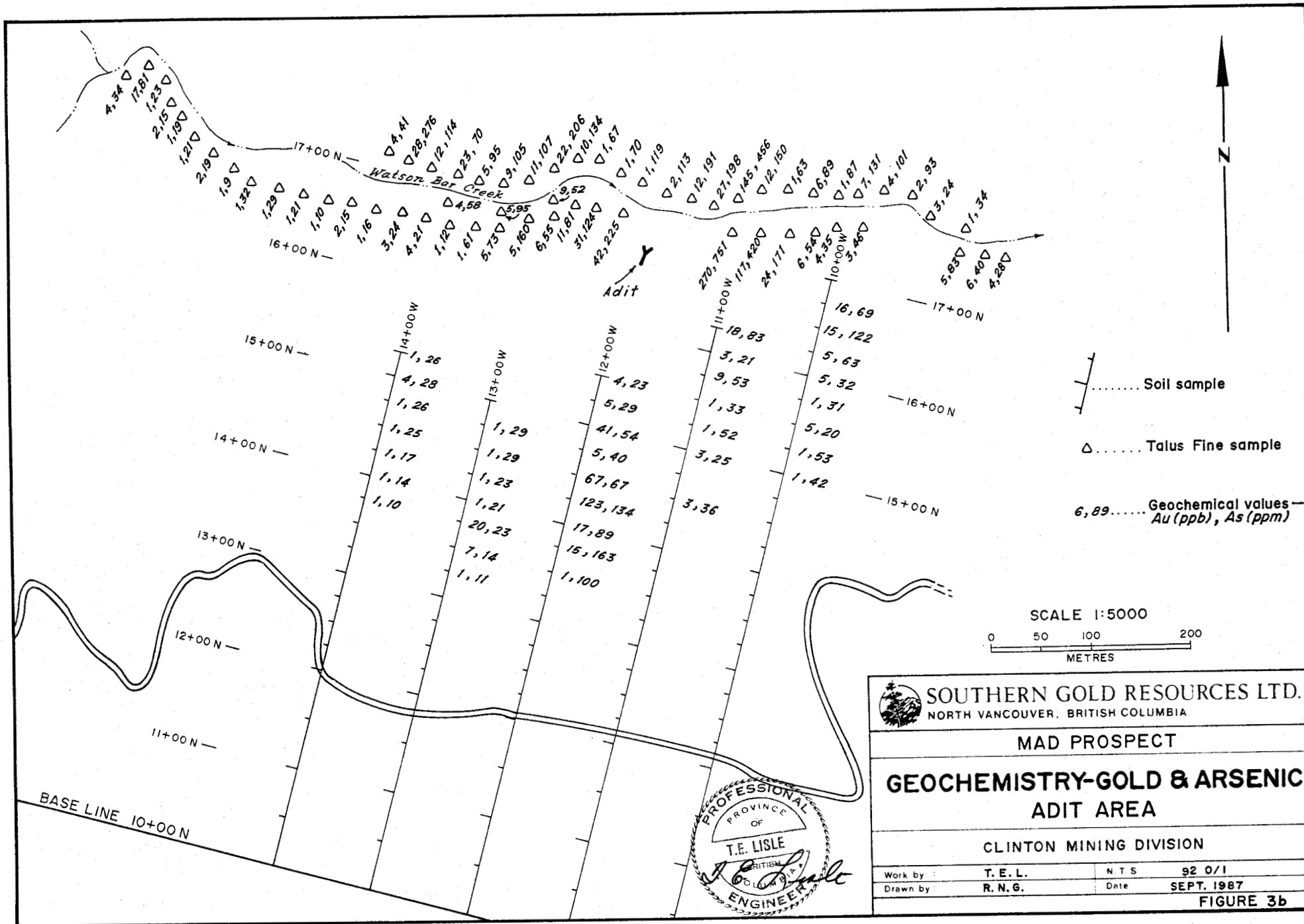
△ ..... Talus Fine sample  
 | ..... Grid Soil sample

SCALE 1:5000  
 0 50 100 200  
 METRES

 <b>SOUTHERN GOLD RESOURCES LTD.</b> NORTH VANCOUVER, BRITISH COLUMBIA	
<b>MAD PROSPECT</b>	
<b>SAMPLE LOCATIONS</b> <b>ADIT AREA</b>	
CLINTON MINING DIVISION	
Work by :	T. E. L.
Drawn by :	R. N. G.
N.T.S. :	92 0/1
Date :	SEPT. 1987

PROFESSIONAL  
 PROVINCE OF  
 B.C.  
 T. E. L.  
 ENGINEER

FIGURE 3a



# 16,713



SEE FIGURES 3d & 3e FOR DETAILS

**SOUTHERN GOLD RESOURCES LTD.**  
NORTH VANCOUVER, BRITISH COLUMBIA

**MAD PROSPECT**

**GEOLOGICAL SKETCH OF ADIT AREA**

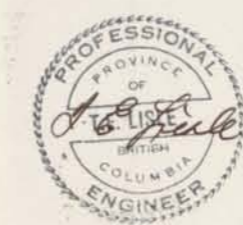
CLINTON MINING DIVISION

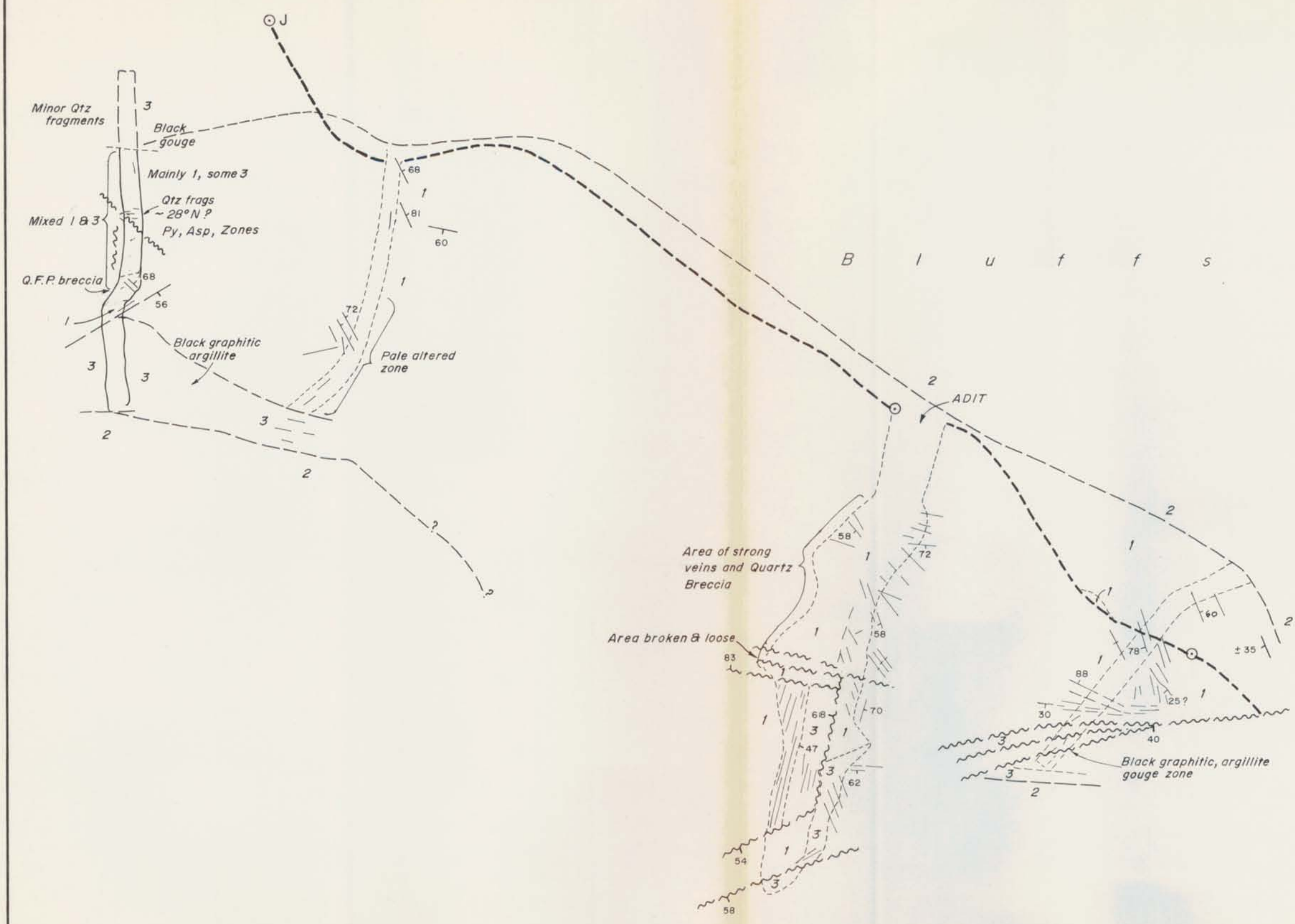
SCALE 1:1000

METRES 0 10 20 30 40 50 METRES

Work by: TOM E. LISLE N.T.S.: 92 0/1  
Drawn by: RAM N. GOPAL Date: SEPT. 1987

**FIGURE 3c**



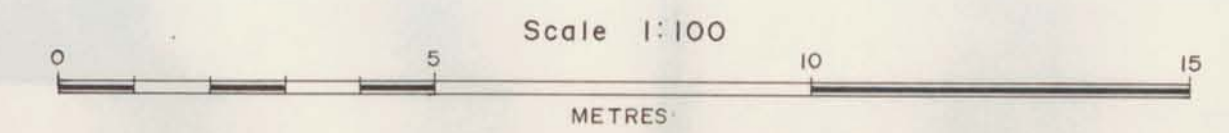


- 1 Quartz Feldspar Porphyry and Feldspar Porphyry
- 2 Sandstone, Arenaceous Siltstone, etc.
- 3 Argillite and Graphitic Argillite
- Quartz veins

- Geologic contact with dip
- Fault with dip
- Survey Point
- Trail

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**16,713**

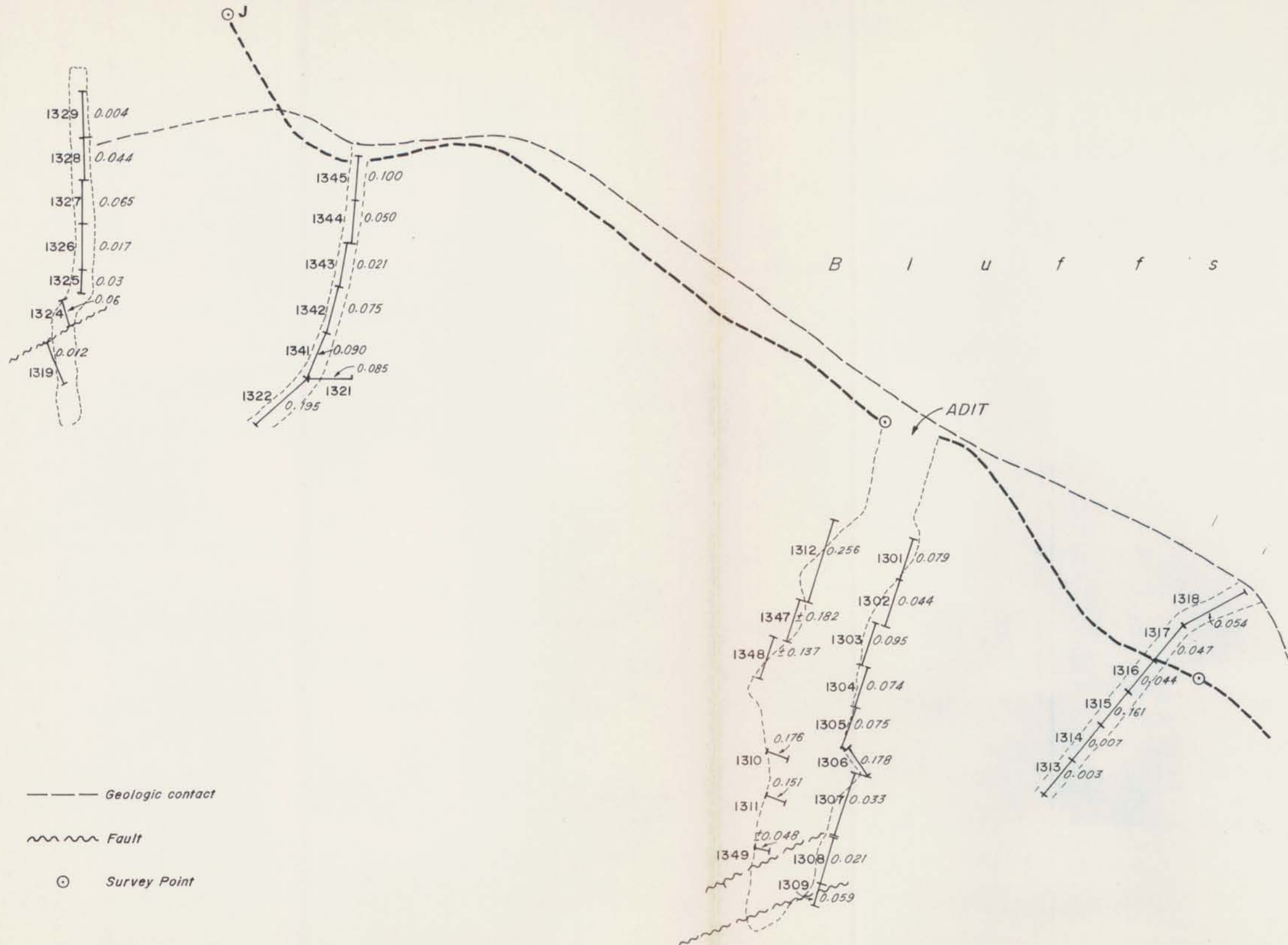


Siliceous bedded ? zone  
~280°/30° S.  
Py, Asp of to  
Adit area

Samples 1339 & 1340 are 9m and  
15.5m south of Qtz-Sulphide zone



SOUTHERN GOLD RESOURCES LTD. NORTH VANCOUVER, BRITISH COLUMBIA	
MAD PROSPECT	
GEOLOGICAL SKETCH—ADIT AREA	
CLINTON MINING DIVISION	
Work by: TOM E. LISLE	N.T.S. 92 0/1
Drawn by: RAM N. GOPAL	Date: SEPT. 1987
FIGURE 3d	



——— Geologic contact  
 ~~~~~ Fault  
 ○ Survey Point  
 Au value in oz/ton (OPT)  
 Sample width in trench or adit  
 Sample Number

| SAMPLE Nos. | TYPE               | WIDTH      | Au (OPT) | As (ppm) | Ag (OPT) | Hg (ppb) | REJECT REASSAY Au (OPT) INCLUDING NATIVE Au |
|-------------|--------------------|------------|----------|----------|----------|----------|---------------------------------------------|
| 87-1301     | Horizontal channel | 1.0 metres | 0.079    | 13 550   | 0.05     | 260      |                                             |
| 1302        | "                  | 1.0 m      | 0.044    | 11 680   | 0.04     | 310      |                                             |
| 1303        | "                  | 1.0 m      | 0.095    | 18 067   | 0.41     | 1 200    |                                             |
| 1304        | "                  | 1.0 m      | 0.074    | 29 158   | 0.20     | 1 050    |                                             |
| 1305        | "                  | 1.0 m      | 0.075    | 18 367   | 0.05     | 320      |                                             |
| 1306        | "                  | 0.5 m      | 0.178    | 29 055   | 0.21     | 640      | 0.266                                       |
| 1307        | "                  | 1.5 m      | 0.033    | 27 524   | 0.02     | 250      |                                             |
| 1308        | "                  | 1.0 m      | 0.021    | 10 344   | 0.01     | 360      |                                             |
| 1309        | "                  | 0.5 m      | 0.059    | 17 247   | 0.02     | 390      |                                             |
| 1310        | Vertical channel   | 1.1 m      | 0.176    | 29 046   | 0.08     | 260      | 0.187                                       |
| 1311        | "                  | 0.70 m     | 0.151    | 29 604   | 0.12     | 3 000    | 0.202                                       |
| 1312        | Horizontal channel | 2.0 m      | 0.256    | 29 582   | 0.06     | 460      | 0.180                                       |
| 1347*       | Horizontal chip    | 1.0 m      | ±0.182   | 21 365   | 0.035    | 240      |                                             |
| 1348*       | "                  | 1.0 m      | ±0.137   | 16 082   | 0.087    | 140      |                                             |
| 1349*       | Vertical chip      | 0.90 m     | ±0.048   | 12 703   | 0.023    | 210      |                                             |
| 1313        | Horizontal channel | 1.00 m     | 0.003    | 822      | 0.01     | 260      |                                             |
| 1314        | Channel            | 1.00 m     | 0.007    | 1 979    | 0.01     | 480      |                                             |
| 1315        | "                  | 1.00 m     | 0.161    | 29 851   | 0.06     | 510      | 0.163                                       |
| 1316        | "                  | 1.00 m     | 0.044    | 9 529    | 0.15     | 1 800    |                                             |
| 1317        | "                  | 1.00 m     | 0.047    | 10 209   | 0.22     | 1 900    |                                             |
| 1318        | "                  | 1.90 m     | 0.054    | 16 542   | 0.10     | 810      |                                             |
| 1319        | "                  | 1.00 m     | 0.012    | 1 152    | 0.01     | 450      |                                             |
| 1320        | Select             | ± 0.10 m   | 0.098    | 52       | 1.32     | 3 300    |                                             |

\* Assays reported for following samples are converted in ppm for comparison to OPT gold & OPT silver  
 1347 : (6250 Au), (1.2 Ag)  
 1348 : (4705 Au), (3.0 Ag)  
 1349 : (1660 Au), (0.8 Ag)

| SAMPLE Nos. | TYPE                  | WIDTH       | Au (OPT) | As (ppm) | Ag (OPT) | Hg (ppb) | REJECT REASSAY Au (OPT) INCLUDING NATIVE Au |
|-------------|-----------------------|-------------|----------|----------|----------|----------|---------------------------------------------|
| 87-1321     | Channel               | 1.00 m      | 0.085    | 28 269   | 0.11     | 750      |                                             |
| 1322        | "                     | 1.70 m      | 0.195    | 30 090   | 0.24     | 1 600    | 0.176                                       |
| 1324        | Horizontal channel    | 0.75 m      | 0.060    | 11 624   | 0.05     | 900      |                                             |
| 1325        | Near Vertical channel | 0.50 metres | 0.031    | 9 039    | 0.03     | 400      |                                             |
| 1326        | Horizontal channel    | 1.0 m       | 0.017    | 4 835    | 0.02     | 420      |                                             |
| 1327        | "                     | 1.0 m       | 0.065    | 14 560   | 0.08     | 820      |                                             |
| 1328        | "                     | 1.0 m       | 0.044    | 9 076    | 0.04     | 410      |                                             |
| 1329        | "                     | 1.0 m       | 0.004    | 1 370    | 0.01     | 220      |                                             |
| 1330        | General select - Adit | Select      | 0.078    | 16 348   | 0.26     | 1 000    |                                             |
| 1336        | Vertical channel      | 0.60 m      | 0.037    | 10 879   | 0.14     | 1 200    |                                             |
| 1337        | "                     | 0.40 m      | 0.186    | 9 446    | 0.05     | 1 000    |                                             |
| 1338        | "                     | 0.90 m      | 0.001    | 429      | 0.01     | 140      |                                             |
| 1350**      | " chip                | 1.00 m      | (3)      | 115      | (0.1)    | 150      |                                             |
| 1339        | Vertical chip         | 0.50 m      | 0.001    | 441      | 0.02     | 360      |                                             |
| 1340        | Select                | ~0.75 m     | 0.001    | 196      | 0.02     | 300      |                                             |
| 1341        | channel               | 1.0 m       | 0.090    | 18 399   | 0.14     | 880      |                                             |
| 1342        | Vertical channel      | 1.0 m       | 0.075    | 33 110   | 0.10     | 520      |                                             |
| 1343        | "                     | 1.0 m       | 0.021    | 5 529    | 0.11     | 860      |                                             |
| 1344        | "                     | ~1.0 m      | 0.050    | 19 181   | 0.04     | 380      |                                             |
| 1345        | "                     | 1.0 m       | 0.100    | 29 326   | 0.08     | 840      |                                             |

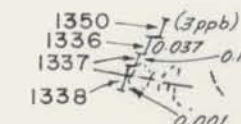
\*\* Assays for Sample 1350 are shown in brackets for Au (ppb) and Ag (ppm)

Area of Bluffs, Slide and Talus



Sample 1320 - on bluffs high above Adit - cf to 83-7-25

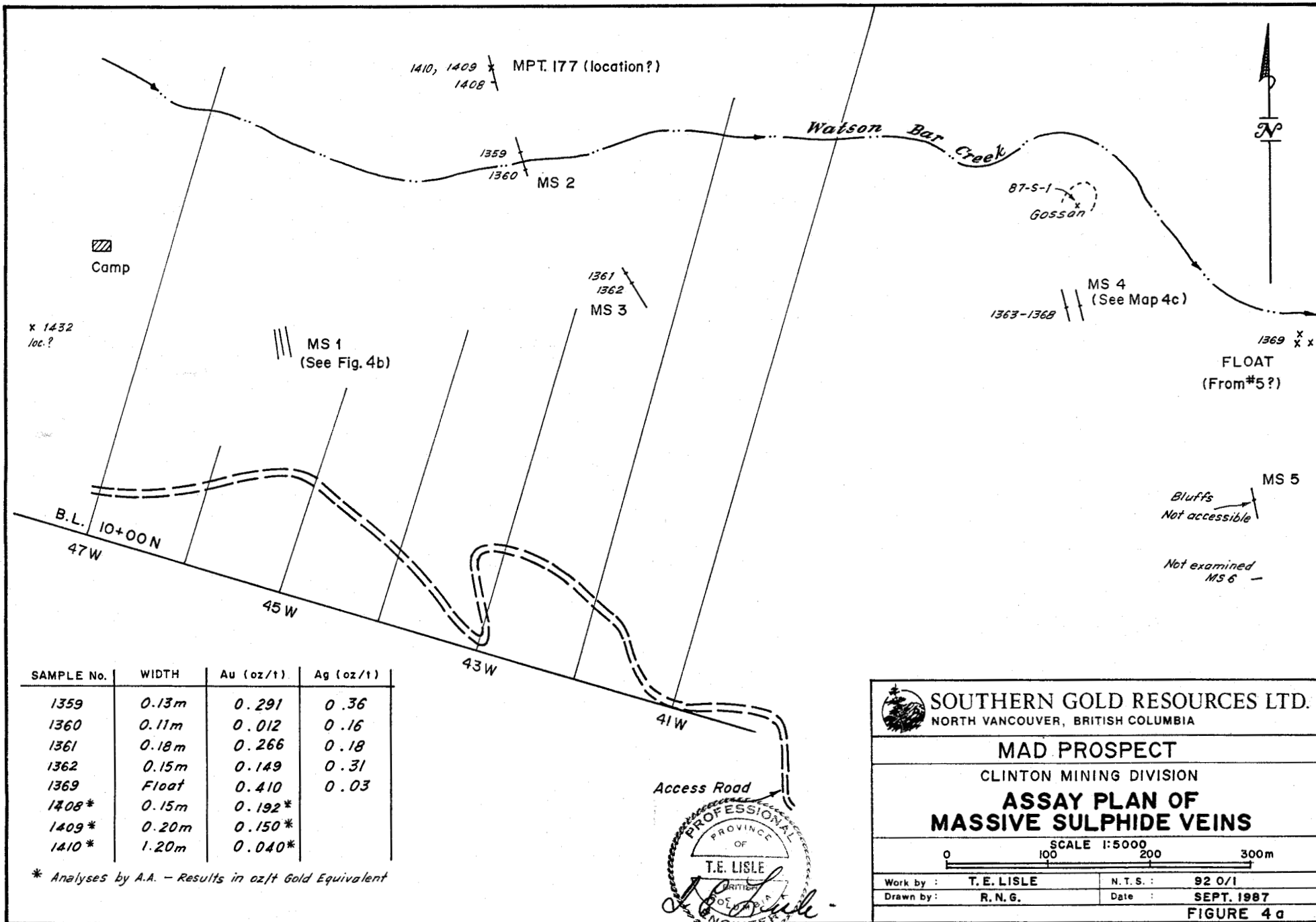
Samples 1339 & 1340 are 9 & 15.5 metres south of Sample 1336



GEOLOGICAL BRANCH ASSESSMENT REPORT

16,713

**SOUTHERN GOLD RESOURCES LTD.**  
 NORTH VANCOUVER, BRITISH COLUMBIA  
**MAD PROSPECT**  
**SKETCH OF ADIT AREA ASSAY PLAN**  
 CLINTON MINING DIVISION  
 Work by: T. E. LISLE      N.T.S.      92 0/1  
 Drawn by: R. N. GOPAL      Date:      SEPT. 1987  
**FIGURE 3e**



| SAMPLE No. | WIDTH | Au (oz/t) | Ag (oz/t) |
|------------|-------|-----------|-----------|
| 1359       | 0.13m | 0.291     | 0.36      |
| 1360       | 0.11m | 0.012     | 0.16      |
| 1361       | 0.18m | 0.266     | 0.18      |
| 1362       | 0.15m | 0.149     | 0.31      |
| 1369       | Float | 0.410     | 0.03      |
| 1408*      | 0.15m | 0.192*    |           |
| 1409*      | 0.20m | 0.150*    |           |
| 1410*      | 1.20m | 0.040*    |           |

\* Analyses by A.A. - Results in oz/t Gold Equivalent

**SOUTHERN GOLD RESOURCES LTD.**  
NORTH VANCOUVER, BRITISH COLUMBIA

**MAD PROSPECT**  
CLINTON MINING DIVISION

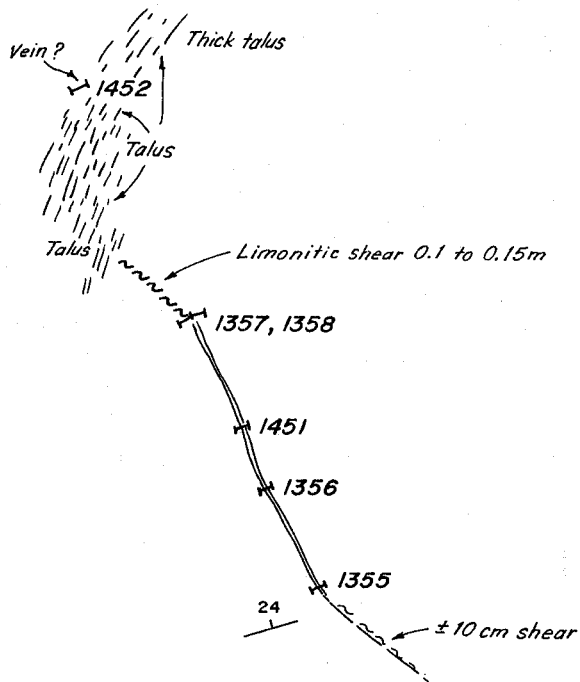
**ASSAY PLAN OF  
MASSIVE SULPHIDE VEINS**

SCALE 1:5000  
0 100 200 300m

Work by: T. E. LISLE N.T.S.: 92 O/1  
Drawn by: R. N. G. Date: SEPT. 1987

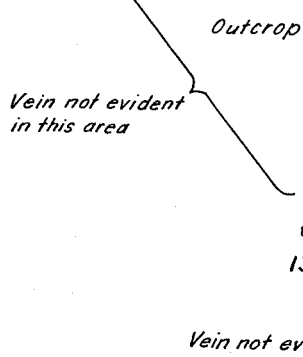
**FIGURE 4 a**

↑ Minor vein  
\* occurrence

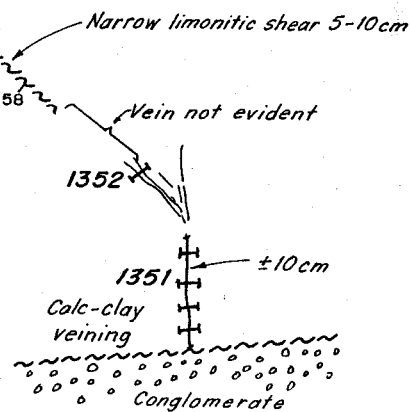
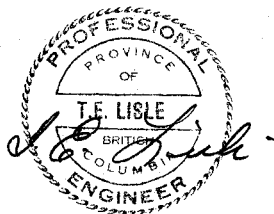


| SAMPLE Nos | WIDTH | Au(OPT) | Ag(OPT) |
|------------|-------|---------|---------|
| 87—1351    | 0.10m | 1.050   | 2.66    |
| 1352       | 0.85m | 0.093   | 0.27    |
| 1353       | 0.35m | 0.411   | 1.69    |
| 1354       | 0.75m | 0.180   | 0.27    |
| 1355       | 0.40m | 0.350   | 0.42    |
| 1356       | 1.22m | 0.032   | 0.09    |
| 1357       | 0.40m | 0.306   | 0.62    |
| 1358       | 1.22m | 0.100   | 0.35    |
| 1451*      | 0.33m | 200     | 1.40    |
| 1452*      | 0.30m | 4       | 0.10    |

\* Analyses by AA—Results in ppb Gold, ppm Ag

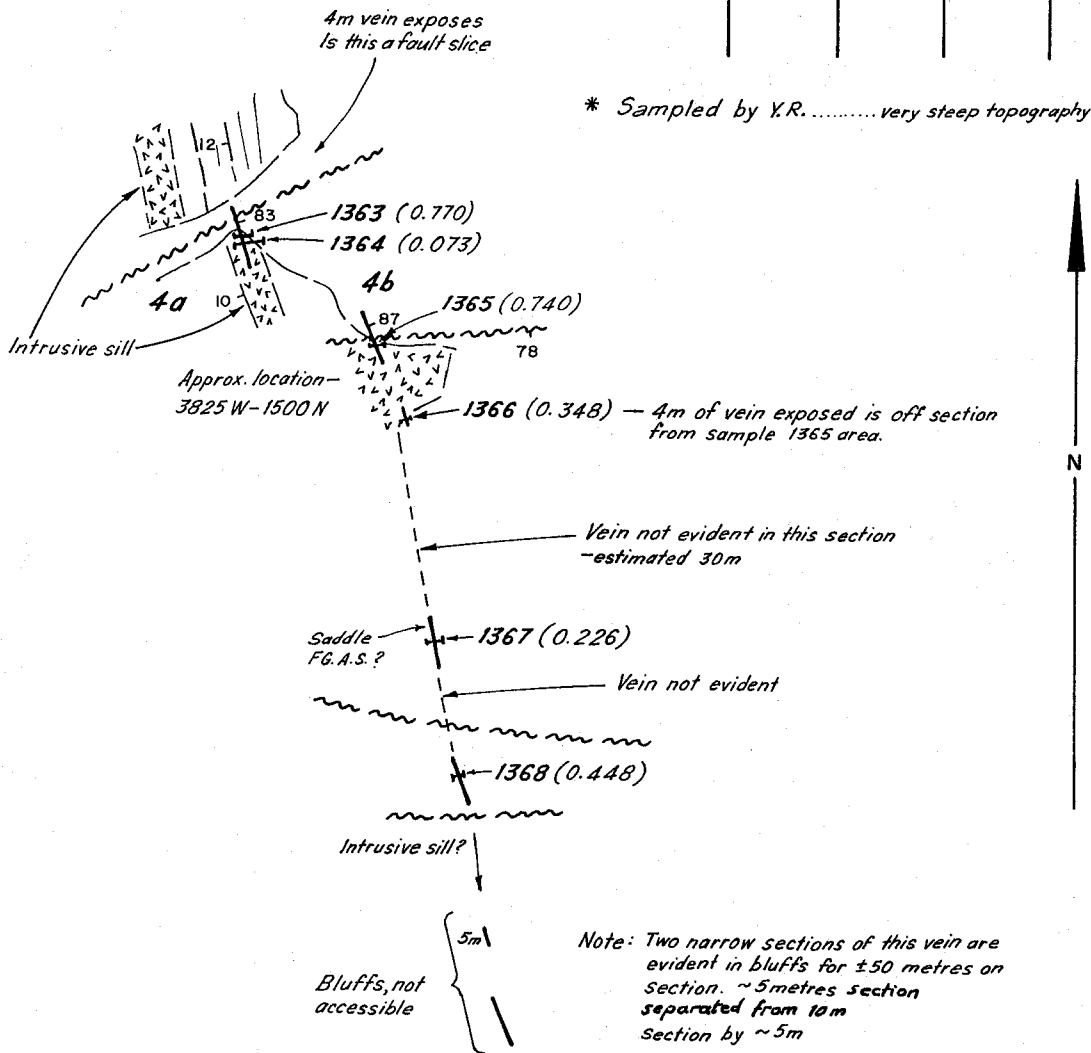


- Vein
- Shear
- Strike & dip
- Channel sample

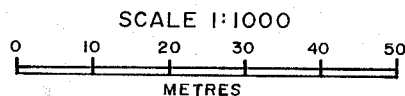


|                                                                          |             |
|--------------------------------------------------------------------------|-------------|
| <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA |             |
| MAD PROSPECT                                                             |             |
| <b>ASSAY SKETCH OF<br/>         MASSIVE SULPHIDE ZONE No.1</b>           |             |
| CLINTON MINING DIVISION                                                  |             |
| Work by :                                                                | T. E. LISLE |
| Drawn by :                                                               | R. N. G.    |
| N. T. S. :                                                               | 92 0/1      |
| Date :                                                                   |             |
| <b>FIGURE 4b</b>                                                         |             |

| SAMPLE Nos. | WIDTH  | Au (OPT) | Ag (OPT) |
|-------------|--------|----------|----------|
| 87 — 1363   | ± 15cm | 0.770    | 1.00     |
| 1364        | 1.22m  | 0.073    | 0.17     |
| 1365        | 0.20m  | 0.740    | 0.19     |
| 1366        | 0.23m  | 0.348    | 0.33     |
| 1367 *      | 0.61m  | 0.226    | 0.09     |
| 1368 *      | 0.15m  | 0.448    | 0.62     |

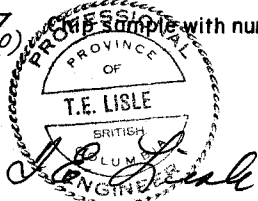


\* Sampled by Y.R. .... very steep topography



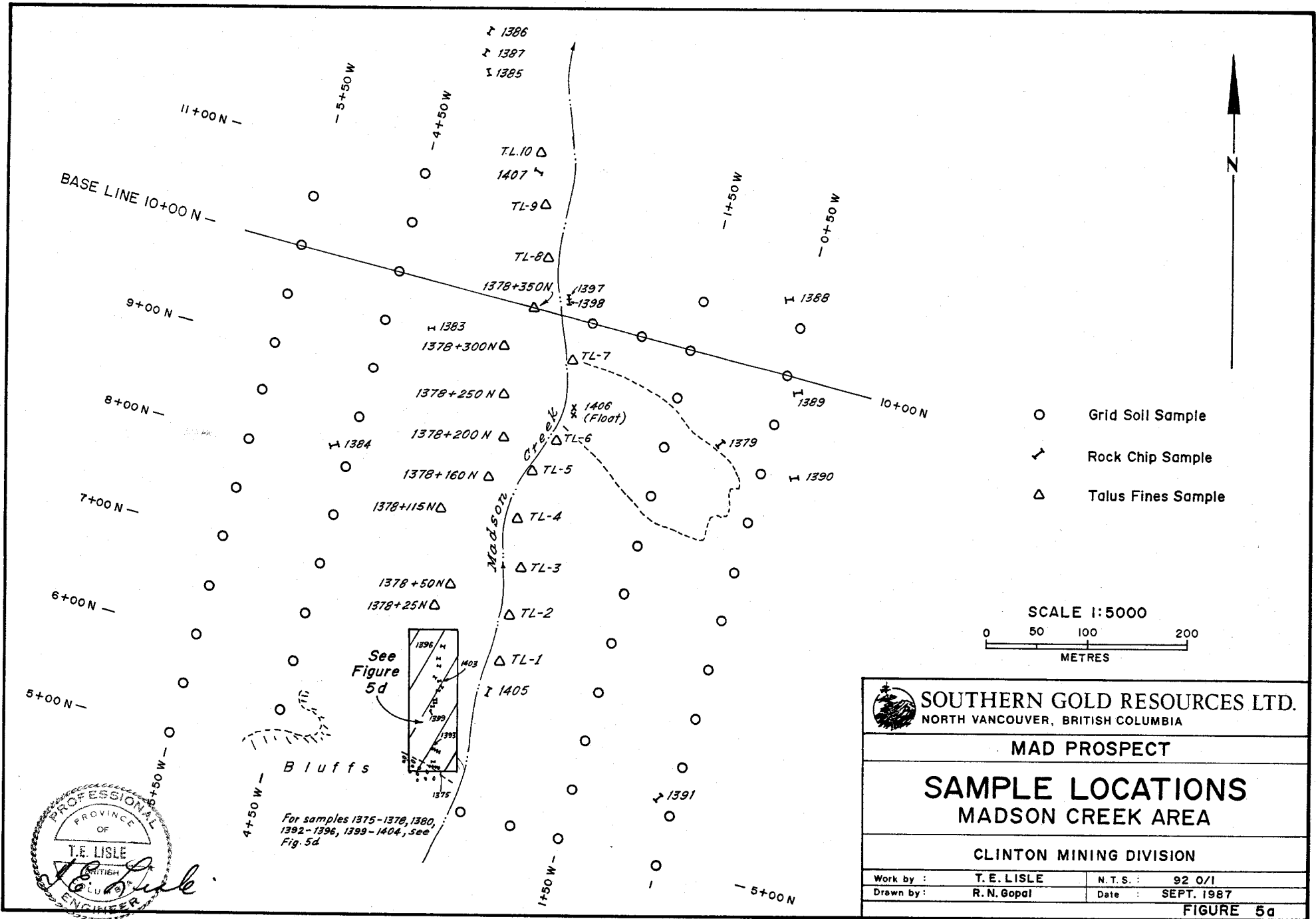
- Intrusive sill
- Fault with dip
- Vein with dip

1367 (0.740) sample with number 8 (Au in oz/ton)

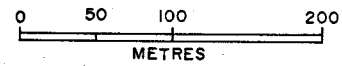



|                                                                   |            |
|-------------------------------------------------------------------|------------|
| SOUTHERN GOLD RESOURCES LTD.<br>NORTH VANCOUVER, BRITISH COLUMBIA |            |
| <b>MAD PROSPECT</b>                                               |            |
| <b>ASSAY PLAN OF<br/>MASSIVE SULPHIDE VEINS<br/>SHOWING No.4</b>  |            |
| <b>CLINTON MINING DIVISION</b>                                    |            |
| Work by :                                                         | T. E. L.   |
| Drawn by :                                                        | R. N. G.   |
| N.T.S. :                                                          | 92 0/1     |
| Date :                                                            | SEPT. 1987 |
| <b>FIGURE 4c</b>                                                  |            |

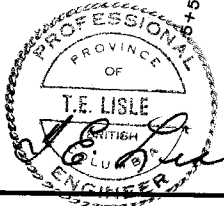




SCALE 1:5000

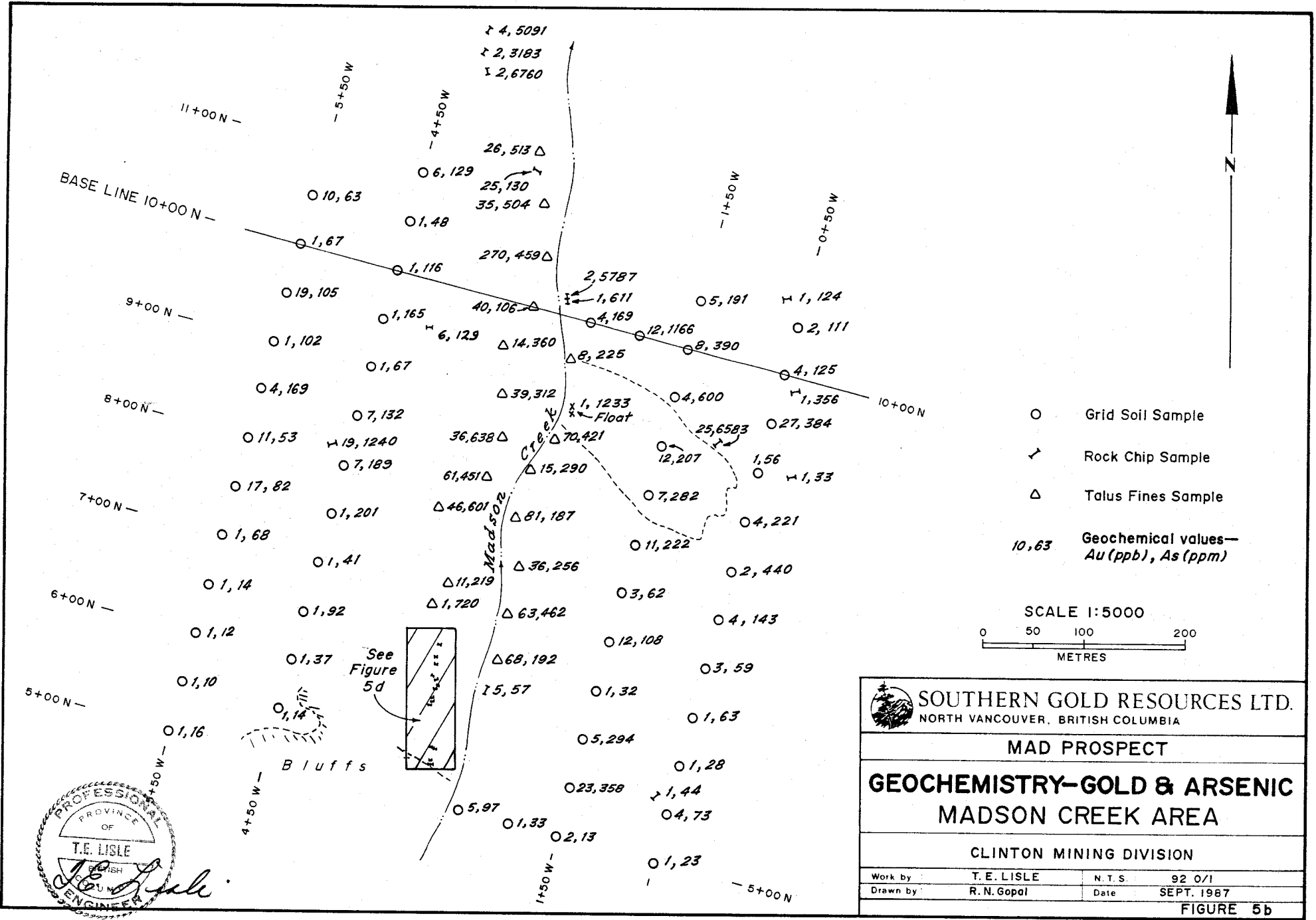


|                                                                                                                                                                |             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|  <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA |             |
| <b>MAD PROSPECT</b>                                                                                                                                            |             |
| <b>SAMPLE LOCATIONS</b><br><b>MADSON CREEK AREA</b>                                                                                                            |             |
| <b>CLINTON MINING DIVISION</b>                                                                                                                                 |             |
| Work by :                                                                                                                                                      | T. E. LISLE |
| N.T.S. :                                                                                                                                                       | 92 0/1      |
| Drawn by :                                                                                                                                                     | R. N. Gopal |
| Date :                                                                                                                                                         | SEPT. 1987  |
| <b>FIGURE 5a</b>                                                                                                                                               |             |

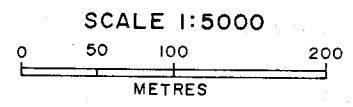


For samples 1375-1378, 1380, 1392-1396, 1399-1404, see Fig. 5d

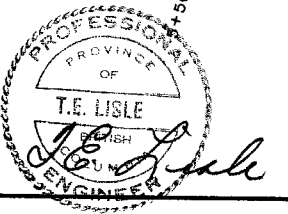
See Figure 5d

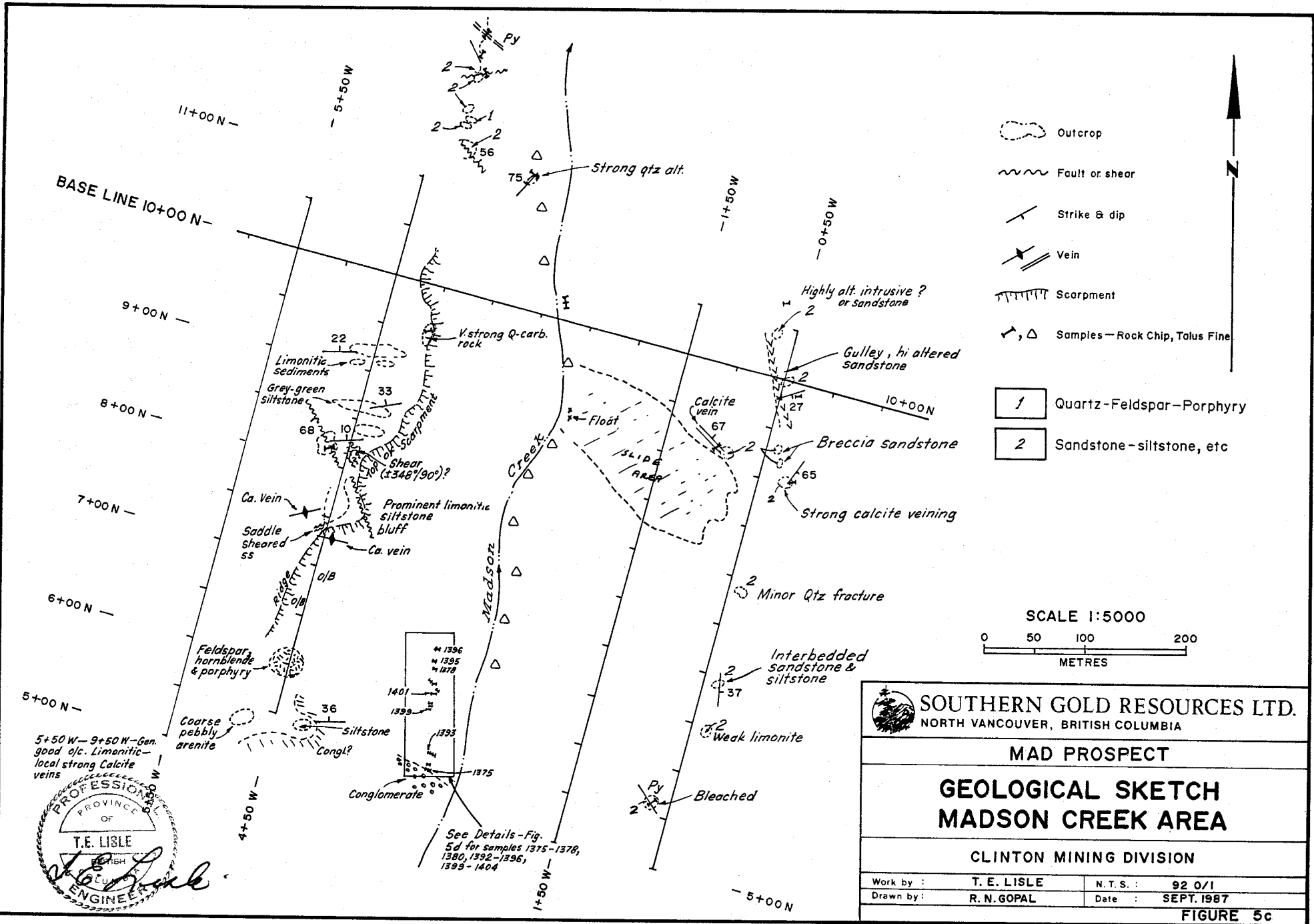


- Grid Soil Sample
- ✓ Rock Chip Sample
- △ Talus Fines Sample
- 10.63 Geochemical values—  
Au (ppb), As (ppm)



|                                                                          |             |                 |
|--------------------------------------------------------------------------|-------------|-----------------|
| <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA |             |                 |
| <b>MAD PROSPECT</b>                                                      |             |                 |
| <b>GEOCHEMISTRY-GOLD &amp; ARSENIC</b>                                   |             |                 |
| <b>MADSON CREEK AREA</b>                                                 |             |                 |
| <b>CLINTON MINING DIVISION</b>                                           |             |                 |
| Work by                                                                  | T. E. LISLE | N. T. S. 92 0/1 |
| Drawn by                                                                 | R. N. Gopal | Date SEPT. 1987 |
| <b>FIGURE 5b</b>                                                         |             |                 |





- Outcrop
- Fault or shear
- Strike & dip
- Vein
- Scarpment
- Samples - Rock Chip, Talus Fine

- 1 Quartz-Feldspar-Porphyry
- 2 Sandstone-siltstone, etc

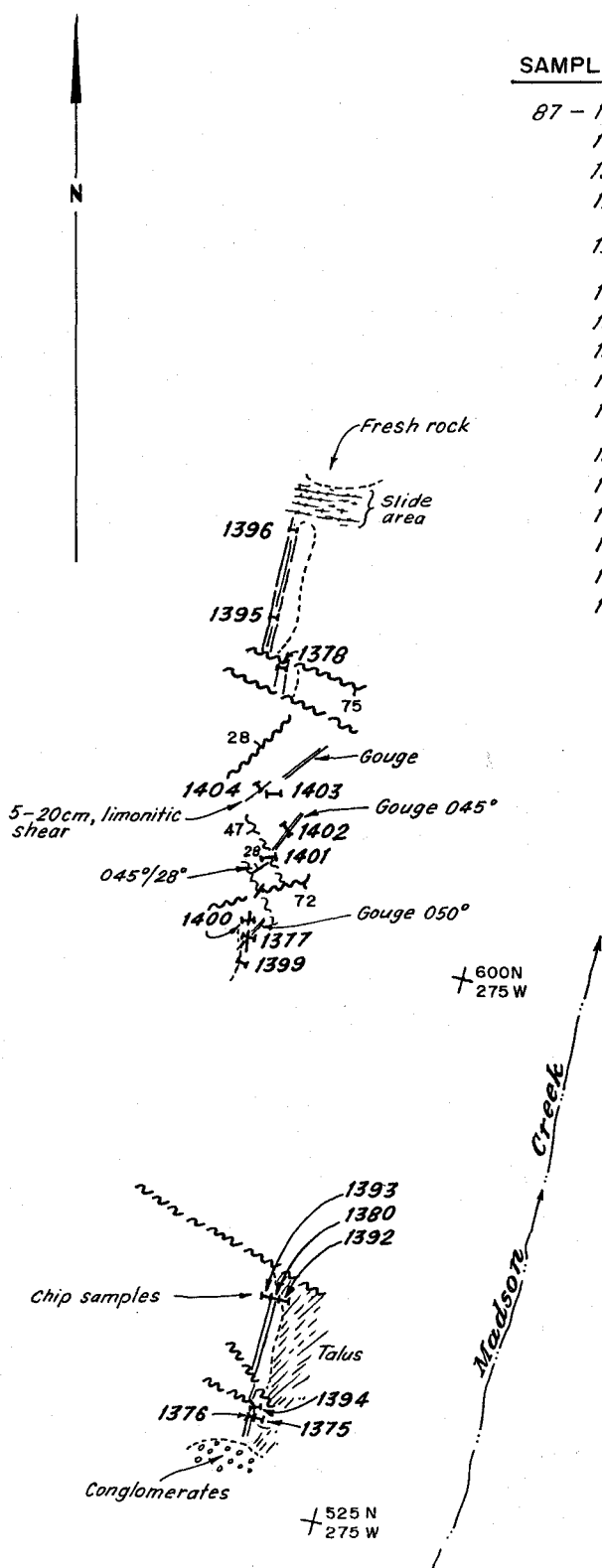
SCALE 1:5000  
 0 50 100 200  
 METRES

|                                                                          |             |
|--------------------------------------------------------------------------|-------------|
| <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA |             |
| <b>MAD PROSPECT</b>                                                      |             |
| <b>GEOLOGICAL SKETCH<br/>MADSON CREEK AREA</b>                           |             |
| <b>CLINTON MINING DIVISION</b>                                           |             |
| Work by :                                                                | T. E. LISLE |
| Drawn by :                                                               | R. N. GOPAL |
| N.T.S. :                                                                 | 92 0/1      |
| Date :                                                                   | SEPT. 1987  |
| <b>FIGURE 5c</b>                                                         |             |

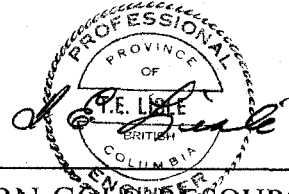
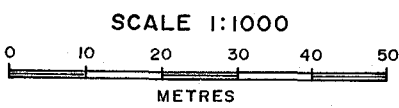
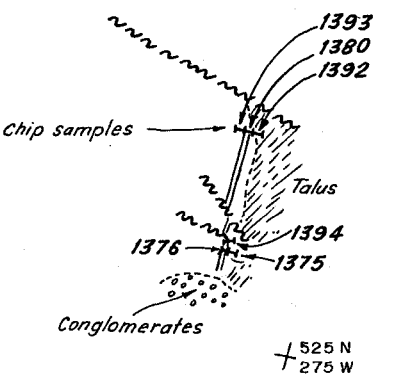
See Details - Fig. 5d for samples 1375-1378, 1380, 1392-1396, 1399-1404

PROFESSIONAL ENGINEER  
 PROVINCE OF BRITISH COLUMBIA  
**T. E. LISLE**  
 1987

| SAMPLE Nos. | WIDTH | Au (ppb) | As (ppm) | Hg (ppb) |
|-------------|-------|----------|----------|----------|
| 87 - 1375   | 0.90m | 6        | 896      | 1000     |
| 1376        | 1.10m | 15       | 9,134    | 1500     |
| 1377        | 0.10m | 15,100   | 27,653   | 1500     |
| 1378        | 0.60m | 17       | 5,172    | 8800     |
| 1380        | 1.10m | 168      | 11,639   | 11,200   |
| 1392        | 1.00m | 13       | 641      | 2300     |
| 1393        | 1.00m | 1        | 341      | 2200     |
| 1394        | 0.60m | 95       | 13,155   | 1050     |
| 1395        | 0.45m | 1        | 4,764    | 1300     |
| 1396        | 0.80m | 2        | 2,577    | 780      |
| 1399        | 1.00m | 495      | 666      | 760      |
| 1400        | 1.00m | 10,930   | 7,880    | 1800     |
| 1401        | 0.80m | 5,955    | 2,343    | 570      |
| 1402        | 1.00m | 3,605    | 7,173    | 430      |
| 1403        | 1.00m | 820      | 5,463    | 1100     |
| 1404        | 0.25m | 27       | 91       | 680      |



- ↗ 1403... Chip sample and number
- ..... Gouge
- / ..... Vein
- ..... Fault with dip  
T2



**SOUTHERN GOLD RESOURCES LTD.**  
NORTH VANCOUVER, BRITISH COLUMBIA

**MAD PROSPECT**

**ASSAY PLAN OF  
MADSON CREEK SHOWING**

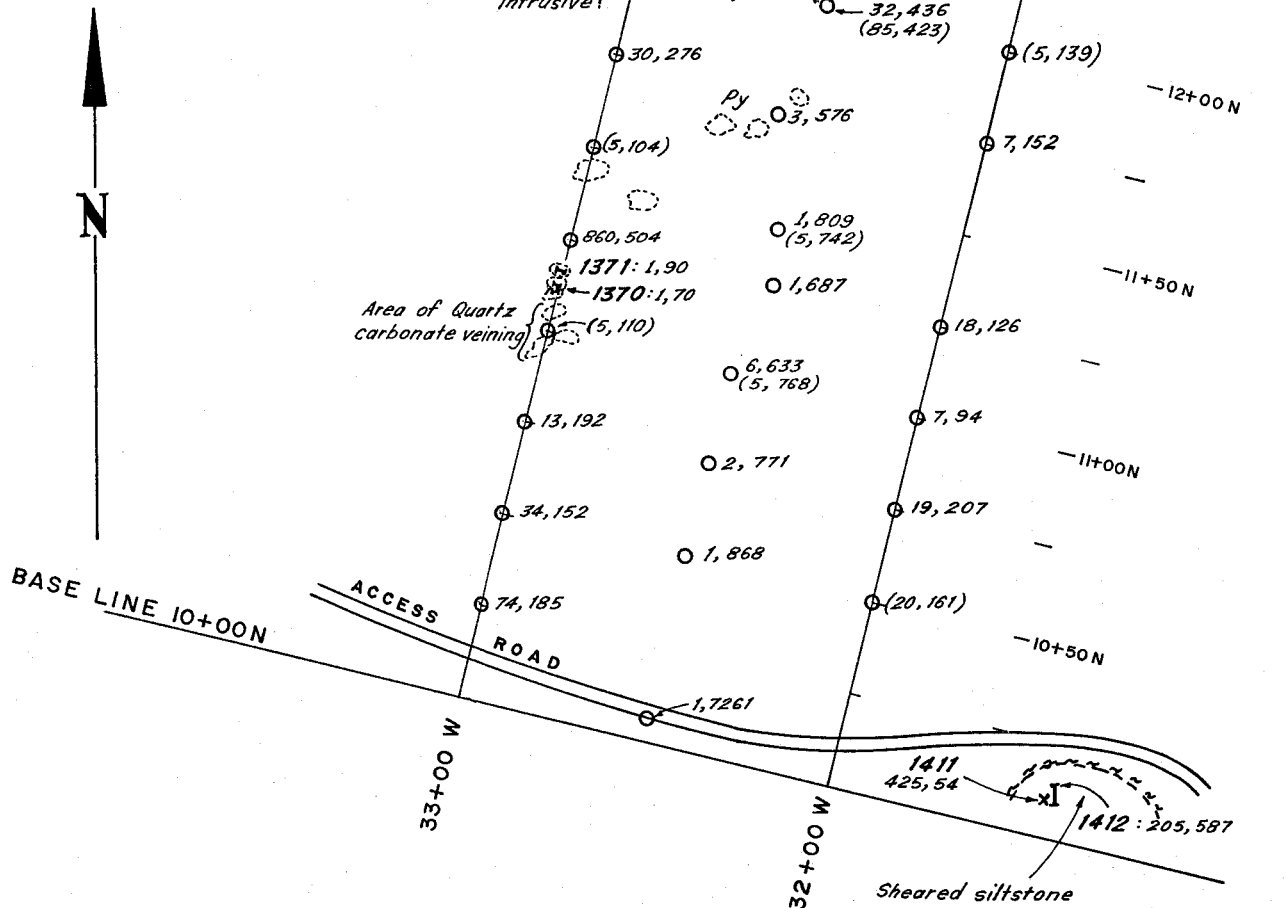
**CLINTON MINING DIVISION**

|            |          |            |            |
|------------|----------|------------|------------|
| Work by :  | T. E. L. | N. T. S. : | 92 0/1     |
| Drawn by : | R. N. G. | Date :     | SEPT. 1987 |

**FIGURE 5d**

| SAMPLE Nos. | WIDTH  | Au (ppb) | As (ppm) |
|-------------|--------|----------|----------|
| 87 - 1370*  | chip   | 1        | 70       |
| 1371        | 1.0m   | 1        | 90       |
| 1372        | 0.25m  | 1        | 1895     |
| 1373        | 1.70m  | 2        | 15       |
| 1374        | 1.00m  | 1        | 119      |
| 1411        | Select | 425      | 54       |
| 1412        | 1.40m  | 205      | 587      |

\* General chip from 2 & 5 metre outcrops

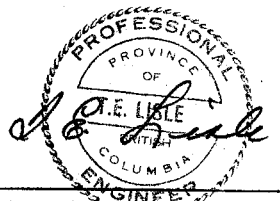
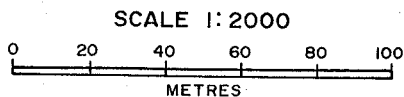



♣ 1374: 1, 119.....Chip Sample with number: Au (ppb), As (ppm)

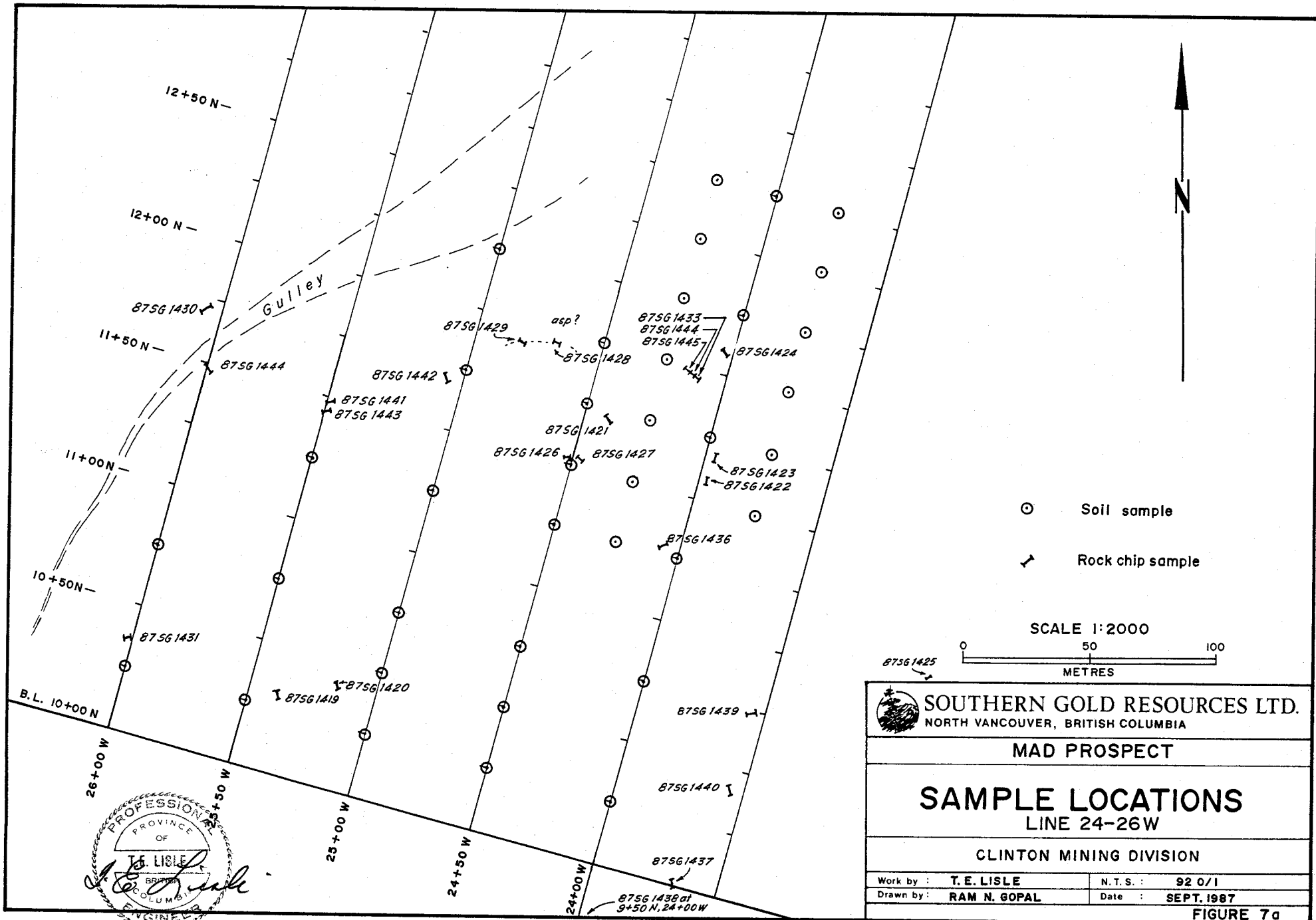
○ 6,633 (5,768).....Soil sample with Geochem values: Au (ppb), As (ppm)-1987. (pre 1987 Au, As values from UTAH shown within bracket)

○.....Outcrop

Area of large blocks commonly brown-limonitic sediments, locally with strong Quartz-carbonate veining




|                                                                                                                                                              |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|  <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA |            |
| <b>MAD PROSPECT</b>                                                                                                                                          |            |
| <b>GEOCHEMISTRY-GOLD &amp; ARSENIC</b><br><b>LINE 32+00W — 33+00W</b>                                                                                        |            |
| <b>CLINTON MINING DIVISION</b>                                                                                                                               |            |
| Work by :                                                                                                                                                    | T.E.L.     |
| Drawn by :                                                                                                                                                   | R.N.G.     |
| N.T.S. :                                                                                                                                                     | 92 0/1     |
| Date :                                                                                                                                                       | SEPT. 1987 |
| <b>FIGURE 6</b>                                                                                                                                              |            |

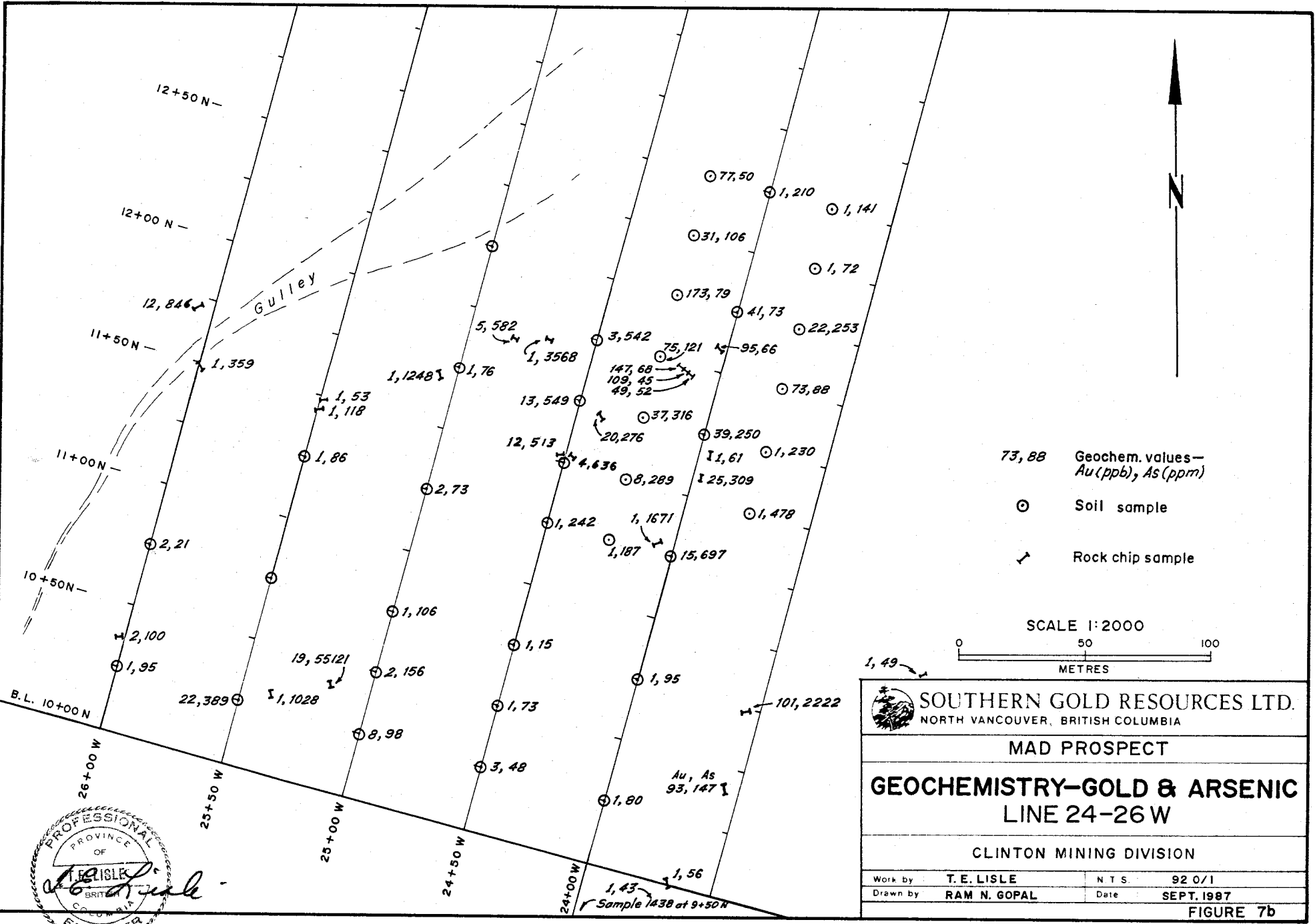


- Soil sample
- ↘ Rock chip sample

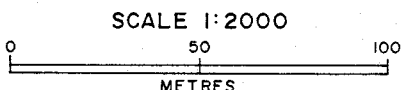
SCALE 1:2000  
 0 50 100  
 METRES

|                                                                                                                                                                |              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|  <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA |              |
| <b>MAD PROSPECT</b>                                                                                                                                            |              |
| <b>SAMPLE LOCATIONS</b><br>LINE 24-26W                                                                                                                         |              |
| CLINTON MINING DIVISION                                                                                                                                        |              |
| Work by :                                                                                                                                                      | T. E. LISLE  |
| N.T.S. :                                                                                                                                                       | 92 0/1       |
| Drawn by :                                                                                                                                                     | RAM N. GOPAL |
| Date :                                                                                                                                                         | SEPT. 1987   |
| <b>FIGURE 7a</b>                                                                                                                                               |              |

PROFESSIONAL  
 PROVINCE OF  
 BRITISH COLUMBIA  
 T. E. LISLE  
 ENGINEER



73,88 Geochem. values—  
 Au (ppb), As (ppm)  
 ⊙ Soil sample  
 X Rock chip sample



|                                                                   |              |
|-------------------------------------------------------------------|--------------|
| SOUTHERN GOLD RESOURCES LTD.<br>NORTH VANCOUVER, BRITISH COLUMBIA |              |
| MAD PROSPECT                                                      |              |
| <b>GEOCHEMISTRY—GOLD &amp; ARSENIC</b><br><b>LINE 24-26 W</b>     |              |
| CLINTON MINING DIVISION                                           |              |
| Work by                                                           | T. E. LISLE  |
| Drawn by                                                          | RAM N. GOPAL |
| N T S                                                             | 92 0/1       |
| Date                                                              | SEPT. 1987   |
| FIGURE 7b                                                         |              |

T. E. LISLE  
 BRITISH COLUMBIA  
 PROFESSIONAL ENGINEER

x 1323

x 1331

55  
1332  
x 1333

| SAMPLE Nos. | WIDTH         | Au (OPT) | As (ppm) |
|-------------|---------------|----------|----------|
| 1323        | FLOAT         | 0.001    | 326      |
| 1331        | FLOAT(Select) | 0.001    | 6957     |
| 1332        | 1.0m Chip     | 0.001    | 272      |
| 1333        | FLOAT ?       | 0.001    | 475      |
| 1334        | 1.0m Chip     | 0.001    | 232      |
| 1335        | SELECT        | 0.001    | 124      |

LINE 20W

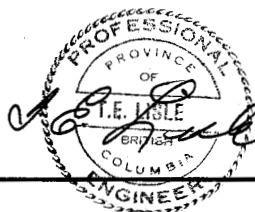
Watson Bar Creek

Samples 1334 & 1335  
approximately 18+50W -  
South side of creek



SCALE 1:5000

METRES 100 50 0 100 200 300 METRES



SOUTHERN GOLD RESOURCES LTD.  
NORTH VANCOUVER, BRITISH COLUMBIA

MAD PROSPECT

ROCK GEOCHEMISTRY  
WATSON BAR CREEK  
GOLD & ARSENIC

CLINTON MINING DIVISION

Work by: T. E. LISLE

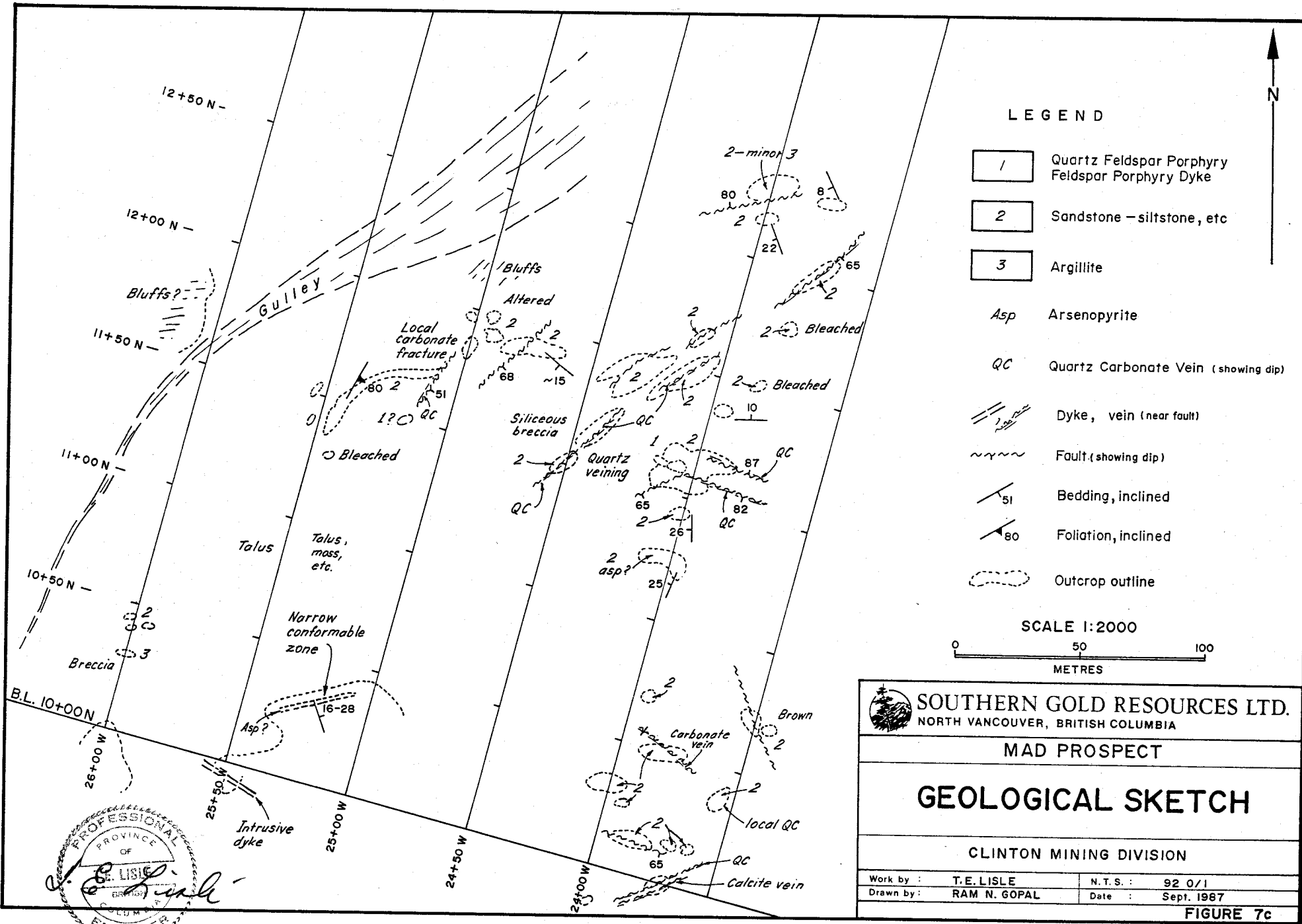
N. T. S.: 92 0/1

Drawn by: R. N. Gopal

Date: SEPT. 1987

FIGURE 8





LEGEND

- 1 Quartz Feldspar Porphyry  
Feldspar Porphyry Dyke
- 2 Sandstone - siltstone, etc
- 3 Argillite
- Asp Arsenopyrite
- QC Quartz Carbonate Vein (showing dip)
- Dyke, vein (near fault)
- Fault (showing dip)
- Bedding, inclined
- Foliation, inclined
- Outcrop outline

SCALE 1:2000



|                                                                          |                          |                   |
|--------------------------------------------------------------------------|--------------------------|-------------------|
| <b>SOUTHERN GOLD RESOURCES LTD.</b><br>NORTH VANCOUVER, BRITISH COLUMBIA | <b>MAD PROSPECT</b>      |                   |
|                                                                          | <b>GEOLOGICAL SKETCH</b> |                   |
| <b>CLINTON MINING DIVISION</b>                                           |                          |                   |
| Work by :                                                                | T.E. LISLE               | N.T.S. : 92 0/1   |
| Drawn by :                                                               | RAM N. GOPAL             | Date : Sept. 1987 |
| <b>FIGURE 7c</b>                                                         |                          |                   |

