GEOLOGICAL REPORT

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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



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GEOLOGICAL BRANCH ASSESSMENT REPORT





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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 moiled 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 arsenicrich 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

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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.

CLAIM	UNI	TS RECO	RD No. ANNIVERSA	<u>RY</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	B 12	1227	(8) 1993	
MAD	9 20	1228	(8) 1995	
MAD 1	0 10	1505	(8) 1995	
MAD 1	1 9	1519	(8) 1995	
MAD 1	3* 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 AND ACCESS

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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.

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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,



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 moiled 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 absorbtion 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. <u>They are limited in number</u> 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

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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 10+00W - 14+00W
Gold (ppb)	1 - 270	1 - 145	1 - 123
Silver (ppm)	0.1 - 0.5	0.1 - 1.0	.15
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

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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 that 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 postmineral 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:

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VEIN	SAMPLE	WIDTH (M)	<u>AU (opt)</u>	AG (opt)
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

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

EXPLORATION TARGETS Cont.

(C) <u>Madson Creek</u>

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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 crosscutting 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 wellmineralized 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.

SAMPLES	NU. UP SAMPLES	AU (DDb)	AS (ppm)	CU (ppm)	HG (ppb)
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

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EXPLORATION TARGETS Cont.

(D) <u>3200 Showing</u>

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 reexamined. 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 guartz-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.

SAMPLES	SAMPLES	AU (ppb)	AS (ppm)	HG (ppb)
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.

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(E) <u>Line 24+00W - 26+00W</u>

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 $050^{\circ} - 060^{\circ}$, 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

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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 guartz-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

A CONTRACTOR

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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		2,000.00
		107,500.00
Contingency		12,500.00

\$120,000.00

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

Ø T.E. Lisle, P. Eng GINEER October 28, 1987

REFERENCES

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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.

inte T.E. LISIR P. Eng.

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APPENDIX 2

COST 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	2,139.72
Total Expenditures	\$34,154.52
Management Fee @ 5% of Total Expenditures	<u>\$1,707.73</u>
TOTAL	"·Sabsith2.25
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October 28, 1987	A GTE DE
	T.E. Lisle, P. Eng.
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APPENDIX 3 Assay data

Assay Reports

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- 3403AR
- 3571R - 3912
- 4150

ACME ANALYTICAL LABORATORIES LTD. DATE RECEIVED SEPTEMBER, 7 1987 852 E. HASTINGS, VANCOUVER B.C. PH: (604)253-3158 COMPUTER LINE: 251-1011 DATE REPORTS MAILED

Contraction of the

r 1

ASSAYER

ASSAY CERTIFICATE

SAMPLE TYPE : REJECT Au by Fire Assay

DEAN TOYE , CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RESOURCES FILE# 87-3258 R

FAGE# 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

ACME ANALYTICAL LABORATORIES

ES 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LI

DATA LINE 251-1011

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GEOCHEMICAL/ASSAY CERTIFICATE

.500 FRAM SAMPLE IS DIGESTED WITH 3HL 3-1-2 HCL-HN03-H20 AT 95 DEG.C FOR- ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. This leach is partial for NN 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: 1/87 ASSAYER. N. Supp. . DEAN TOYE. CERTIFIED B.C. ASSAYER

SOUTHERN GOLD RESOURCES File # 87-3258

SAMPLEN	PPH) () Pl	iu Mi P	PB PN	ZN PPM	AG PPM	NI. PPN	CO PPN	NN PPH	FE 1	AS PPM	U PPM	AU PPN	TH PPN	SR PPN	CD PPM	SB PPN	BI PPM	V PPN	CA Z	Р . 2	LA .PPN	CR PPN	MG 7.	BA PPM	11	PPN	AL I	NA Z	K Z	N Pph	A6## 02/T	AU## OZ/T	H6 . PPB
1301	1		1 7	85	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		8 4	89	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		6 59	07 4	1509	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	1	4 29	86 3	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		1 9	92 1	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	,	9 47	71 1	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	1 4	7 4	41	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	1	0 4	11	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		3 3	11	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	.057	380
1310	. 1	. ?	3 7	86	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	i	1	4 7	63	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	1	8 5	71	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	6	0	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	(9	64 ·	135	.4	18	. 14.	492	5.04	1979	5	ND	1	171	1	10	- 2	38	3.08	.019	3	9	.93	84	.01	6	.50	.03	.09	- 1	.01	.007	480
1315	- 6	•	1 9	28	220	1.5	. 4	2	73	4.39 2	29851	5	2	1	54	- 3	19	2	-11	1104	.023	2	5	.11	34	.01	3	. 18	.02	.09	1	.06	.161	510
1316	2	41	4 16	70 2	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	- 36	0 38	93 2	2667	7.8	12	8	382	2.91	0209	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	18	5 13	48 1	673	3.2	15	8	262	3.23	16542	5	· ND	1	91	17	17	2	- 14	1.78	.029	2	9	.41	34	.01	- 2	.22	.02	.09	1	.10	.054	810
1319	- 2	6	5	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	1392	4	21	160	42.3	12	19	344	10.16	52	5	ND	1	73	2	2	2	64	.81	.030	3	- 7	.69	108	.02	2	2.34	.14	.11	9	1.32	.098	3300
1321	1	4	7 24	69	770	3.7	4	2	101	2.94 2	8269	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	9	2 47	00 :	295	7.3	2	1	23	3.92 3	50090	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	2	1	8	26	.2	9	- 4	354	2.03	326	5	NÐ	1	661	1	- 14	5	19	16.19	.016	2	10	6.29	48	.01	12	.24	.01	.02	3	.01	.001	210
1324	1	1	6 4	78	625	1.6	- 14	8	408	3.17	1624	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	7	4 3	60	580	1.0	23	14	478	3.42	9039	5	NÐ	2	132	3	13	2	33	2.51	.038	3	18	.95	74	.01	7	.34	.03	.11	1	.03	.031	400
1326	2	11	3 2	56	882	.9	36	20	601	4.33	4835	5	ND	1	171	4	17	2	37	2.50	.067	2	12	.77	66	.01	7	.41	.03	.12	1	.02	.017	420
1327	2	12	4 6	66 1	006	2.7	24	12	639	4.46 1	4560	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	- 3	5 3	15 🔅	270	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	3	7 4	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	35	2 43	11 2	263	8.9	8	3	179	2.32 1	6348	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	19	5	8	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

ACME ANALYTICAL LABORATORIES

SEPT 12 1987

DATE RECEIVED:

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158 DATA LINE 251-1011

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GEOCHEMICAL/ASSAY CERTIFICATE

.500 GRAM SAMPLE IS DIGESTED WITH 3HL 3-1-2 HCL-HN03-H20 AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 NL 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: Nock Chips AGI BY FIRE ASSAY, AUI BY FIRE ASSAY

DATE REPORT MAILED: Sept 16/87 ASSAYER. A. A. J. J. DEAN TOYE, CERTIFIED B.C. ASSAYER SOUTHERN GOLD RESOURCES File # 87-3403A R SAMPLES CO MN FE AS CU PB ZN A6 NI MÐ U AU TH SR CD SB BI V EA P LA CR #6 BA П ₿ AL NA K N AGEE AUEE HG PPH PPM PPN PPM PPN PPH PPH PPN 2 PPM PPN PPN PPN PPN PPN PPN PPN PPN 1 1 PPN PPN X PPH Z PPN 2 2 2 PPN 02/1 02/1 PPB 1331 1 29 24 80 .2 10 559 3.33 6957 264 29 5.46 .038 9 5 ND 1 1 119 2 4 6 1.23 92 .01 12 .57 .02 .06 1 .02 .001 2600 1332 2 96 18 80 .2 16 13 657 4.20 272 5 ND 3 192 1 2 2 42 5.35 .042 8 1.75 36 .01 0 . 65 6 .04 .13 1 .03 .001 380 1333 2 44 6 579 .3 653 3.33 475 792 4 3 5 ND 1 3. 2 2 29 19.79 .005 2 10 9.44 23 .01 9 .26 .03 .01 1 .03 .001 80 1334 43 14 249 .1 .11 804 4.13 232 5 ND 1 295 1. 11 1 2 2 40 5.20 .049 10 8 1.93 201 .01 6.51 .03 .06 1 .01 .001 110 1335 14 10 170 .1 3 3 882 3.18 124 5 1 855 1 ND 1 2 2 18 15.43 .020 6 5 5.39 76 .01 7 .32 .02 .05 1 .02 .001 50 1336 2 214 1427 1/36 4.6 15 12 596 3.83 10879 2 124 5 ND 11 19 2.53 .029 34 .01 9 .36 .02 .12 2 .14 .037 1200 6 3 2 ĥ . 60 1337 3 39 563 2045 1.8 В 6 453 2.50 9446 5 ND 1 220 14 2 16 5.05 .018 2 3 11 2.09 32 .01 5 .23 .01 .07 2 .05 .186 1000 13 1338 1 35 135 .1 17 12 620 3.70 429 5 ND 1 330 1 2 2 48 7.40 .024 3 17 3.11 30 .01 5 .53 .02 .05 1 .01 .001 140 1339 1 106 44 561 30 19 995 7.24 441 5 ND 3 137 .4 3 2 42 3.17 .073 14 .84 2 7 51 .01 5 .66 .09 .11 1 .02 .001 360 1340 64 33 180 .2 22 12 762 5.80 196 5 1 ND 1 256 1 2 2 29 7.22 .043 11 2.67 5 .51 1 .02 6 64 .01 .04 .07 .001 300 1341 2 179 2150 1784 4.2 6 337 3.26 18399 -11 5 2 1 55 9 17 2 9 1.52 .031 2 10 .29 42 . 01 6 .21 .01 .11 4 .14 .090 880 1342 2 151 2518 351 3.4 1 2 41 4.33 33110 5 .2 1 39 6 11 3 5 1.34 .038 2 4 .04 50 .01 5 .16 .01 .12 6 .10 .075 520 1343 3 104 1932 1242 3.4 12 .5 96 3.70 5529 5 NÐ 1 60 10 2 2 9 39 1.36 .015 13 .06 45 .01 5 .34 .02 .17 2 .11 .021 860 1344 734 1336 1.0 5 2 68 24 11 456 4.60 19181 ND 2 115 28 2.28 .027 10 13 2 2 18 .70 50 .01 5.32 .01 .13 4 .04 .050 380 1345 1 112 1784 444 2.7 8 4 144 4.10 29326 5 2 83 4 41 2 12 1.93 .015 2 .17 .23 1 8 43 .01 2 .01 .09 6 .08 .100 840 1351 29 1935 20374 47170 92.0 3 11 3344 17.73 29306 9 27 68 190 134 2 .06 1 43 7 8.28 .001 2 6 .01 3 .01 .01 .02 6 2.66 1.050 5400 24 791 1208 34797 11.1 1352 5 11 19 1485 14.12 9448 2 2 60 150 17 16 13 3.14 .026 3.22 5 .27 .093 2600 3 26 .01 7 .54 .02 .12 1353 8 1015 22173 9281 67.4 75 6 11 1767 9.49 20576 5 14 1 37 104 2 14 8.43 .018 4 5.30 18 .01 3 .95 .01 .08 7 1.69 .411 3000 1354 13 1067 966 20297 10.1 19 1482 15.86 18189 5 2 2 72 85 24 57 4.27 .026 8 6 3 9 1.51 16 .01 2 2.16 .04 .07 6 .27 .180 3500 1355 18 783 2641 26012 16.4 7 -18 1384 11.98 29413 5 8 2 34 113 27 20 39 1.68 .023 3 9 .96 26 .01 4 1.92 .02 .11 5 .42 .350 2300 1356 3 318 731 4574 3.0 19 19 1527 6.94 3005 5 ND 1 -94 20 - 5 2 80 4.97 .072 4 18 2.44 26 .01 6 3.31 .02 .11 5 .09 .032 280 17 622 6892 24181 24.7 1357 12 18 1518 12.57 20838 5 8 2 51 90 54 6 29 4.11 .031 3 7 .63 26 .01 6 1.30 .01 .11 7 .62 .306 2700 1358 12 955 1088 16135 11.4 18 22 1499 10.08 3427 5 ND 3 71 66 2 2 58 3.93 .051 5 10 1.70 29 .01 2 2.63 .02 .11 1 .35 .100 1700 1359 9 285 3734 10034 10.1 4 12 6586 7.94 32721 7 3 1 247 50 78 6 7 23.45 .007 10 3 .17 2 .38 10 .01 .01 .03 8 .36 .291 4200 1360 5 457 1052 5784 4.2 7 14 1694 7.89 6387 5 ND -1 193 28 870 5 16 15.97 .012 6 5 2.46 28 .01 2 .28 .01 .05 4 .16 .012 7600 12 566 955 15151 7.3 1361 11 15 1829 6.55 21927 5 11 133 12 1 65 9 21 12.19 .198 5 B .41 21 .01 6 1.97 .02 .09 8 .18 .266 1700 9 1319 402 11666 6.9 24 9.70 .014 1362 7 11 1890 8.17 9272 5 3 1 120 63 3 6 5 9.38 21 .01 7 2.36 .02 .09 5 .31 .149 1500 1363 27 4628 1042 43611 25.6 21 460 24.46 36580 5 16 3 9 257 24 143 2 6.15 4 .25 4 10 .81 .006 15 .01 .01 .06 5 1.00 .770 3000 15 2313 180 21030 5.5 13 765 12.26 11123 1364 19 5 NÐ 4 52 131 2 25 51 1.87 .046 46 1.27 29 .04 2 1.68 .02 .08 4 .17 .073 720 6 1365 31 1961 81 52859 5.4 7 8 679 11.98 45932 5 15 -3 15 312 7 86 18 .60 .035 4 23 .50 34 .01 7 .79 .01 .12 7 .19 .740 680 23 1481 151 34285 10.8 10 841 11.22 17408 1366 12 5 .0 3 66 203 8 58 33 3.74 .044 5 29 1.00 29 .03 2 1.66 .02 .12 6 .33 .348 2800 1367 15 919 34 19874 3.7 11 14 1156 7.85 5788 5 2 2 45 126 28 53 2.54 .056 4 5 19 1.93 37 .01 4 2.71 .01 .12 7 .09 .226 2200 5 14 3 5 562 52 1368 45 4316 604 88424 20.9 2 19 427 28.61 52140 92 4 .28 .002 2 2 .05 2 .15 .01 .04 11 .01 7 .62 .448 28000 5 1369 1 89 -14 605 .1 14 49 1148 3.96 30030 ND 1 54 4 16 2 2 5.89 .007 2 3 .10 13 .01 2.20 .01 .03 3 .03 .410 60 STĐ C 17 57 43 134 6.8 62 27 1024 4.07 42 17 7 37 47 17 17 20 53 .49 .083 35 57 .90 173 .08 30 1.80 .06 .13 11 -1400

ASSAY REQUIRED FOR 136 AS = 10,000 ppm 7n = 20,000 ppm Ag = 35 ppm 14 = 10 ppm

ACHE ANALYTICAL LABORATORIES

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852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA

DATA LINE 251-1011

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GEOCHEMICAL ICP ANALYSIS

.500 GRAN SAMPLE IS DIGESTED WITH 3NL 3-1-2 HCL-HN03-H20 AT 93 DEG.C FOR ONE HOUR AND 18 DILUTED 10 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR NN 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: SDIL AUT ANALYSIS BY AA FROM 10 GRAM SAMPLE. HG ANALYSIS BY FLAMLESS AA.

DATE RECEIVED: SEPT 12 1987 DATE REPORT MAILED: Suft 16/87 ASSAYER. W. August DEAN TOYE, CERTIFIED B.C. ASSAYER

SANPLER	ND PPN	CU PPM	PB PPM	ZN PPM	AG PPN	NI PPN	CO PPM	<i>I</i> N PPN	FE 1	AS PPN	U PPM	AU PPM	TH PPN	SR PPM	CD PPM	SB PPM	BI PPM	V "PPM	CA Z	P ž	LA FPN	CR • PPM	MG Z	BA PPM	11 2	B PPN	AL Z	NA Z	K Z	N PPN	AUT PPB	HG PPB
87-5-1	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
D	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
0+25E	1	73	21	100	.1	38	20	765	3.49	171	5	ND	2	195	1	2	2	45	2.62	.056	ę	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	153	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	•	80
D+100E STD C/AU-S	1 18 -	54 57	11 42	83 131	.2	30 67	15 26	747 1023	2.95	46 . 39	5	ND ?	2 30	133 - 48	1 17	2 17	2 20	43 155	1.75	.056	8 37	21 56	1.05	281 172	.02 .08	8 36	1.27	.05	.10	1	3 52	360 1300

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 FHONE 253-3158 DATA LINE 251-1011

GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3HL 3-1-2 HCL-HN03-H20 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 PPN. - SAMPLE TYPE: P1-3 SOIL P4 ROCK AU\$ ANALYSIS BY AA FROM 10 GRAM SAMPLE. H6 AWALYSIS BY FLAMLESS AA.

DATE RECEIVED: SEPT 4 1987 DATE REPORT MAILED: Jeff 12/67 ASSAYER. A. DEAN TOYE. CERTIFIED B.C. ASSAYER SOUTHERN GOLD RES. File # 87-3912 Fage 1

SAMPLE	NO PPh	CU PPN	PB PPH	ZN PP n	AG PPM	NI PPM	CO PPM	NN PPH	FE Z	AS PPN	U PPM	AU PPM	.TH PPN	SR PPN	CD PPM	SB PPN	BI PPM	V PPN	CA Z	P Z	LA PPM	CR PPM	MG X	BA PFM	TI Z	B PPM	AL Z	NA Z	K Z	¥ PPH	aut PPB	HG PPB
TL-1	' . 1	176	17	69	.2	22	31	895	4.58	192	5	ND	. 9	392	1	5	2	74	4.34	.068	10	16	1.21	230	.01	12	1.54	.10	.11	1	68	280
TL-2	2	244	15	81	.1	28	34	1150	7.08	462	5	NÐ	7	353	1	- 11	2	95	4.00	.087	12	19	1.19	227	.01	5	1.41	.10	.12	1	63	1500
11-3	-1	225	12	107	.4	- 33	40	1367	7.00	256	5	ND	8	259	1	2	2	107	2.87	.062	16	25	.89	314	.01	23	2.26	.10	.14	1	36	160
TL-4	1	244	12	129	.3	41	- 41	1727	6.14	107	5	ND	5	325	1	2	- 2	88	3.44	.130	11	26	1.04	206	.02	32	1.57	.07	.15	· 1	81	340
TL-SS-4A	1	106	19	70	.5	23	16	643	3.45	52	5	ND	7	157	1	2	2	70	2.55	.060	12	20	1.12	153	.03	13	1.52	.05	.08	1	-9-	70
TL-5	1	274	21	78	. 3	33	35	1049	6.98	290	5	ND	8	250	1	2	2	102	3.14	.060	13	25	1.19	378	.03	24	2.22	.15	.14	1	15	190
TL-6	2	328	13	94	.2	37	37	1170	7.89	421	5	ND	5	238	1	7	2	106	2.77	.083	13	26	. 95	225	.03	18	2.24	- 14	.19	1	70	320
TL-SS-6A	1	84	23	90	.2	28	23	817	4.40	95	5	ND	6	196	1	2 .	2	63	3.57	.074	13	25	1.30	250	.01	14	1.68	.09	.10	1	5	80
1L-7	2	340	9	82	•2	37	43	1285	10.16	225	. 5	ND		279	1	2	2	146	1.83	.031	10	27	1.60	250	.06	20	2.81	.32	.29	1	8	160
11-8	1,	203	Ÿ	137	.4	54	29	1145	5.88	433	5	ND	5	154	1	3	2	88	2.35	.048	12	26	.83	312	.02	29	1.67	.07	.15	1	- 270	129
TL-SS-8A	1	78	15 -	92	.2	25	20	640	4.13	58	5	NÐ	5	236	i	2	3	61	2.51	.084	10	21	1.31	294	.01	20	1.97	.03	.12	1	4	60
1L-9	- 3	225	19	143	-1	- 34	27	1375	5.84	504	. 5	ND	5	143	1	6	- 3	83	1.82	.100	11	26	.95	243	.02	21	1.55	.07	.13	1	35	100
11-10	1	167	10	119	.!	. 57	35	1234	5.30	513	5	ND	. 3	298	1	4	. 3	85	4,90	.071	- 14	25	1.20	297	.01	17	1.15	.04	.08	1	26	150
TN-1	1	24	1/	. 8/	•	33	18	882	3.62	120	2.	ND	Ş	149	1	2	2	41	2.48	.048	9	21	1.12	552	.01	10	1.51	14	.09	. 1	12	149
18-2	1	/4	24	108	• 1	. 21	22	859	3.97	435	0	NIJ	2	170	1	2	4.	20	2.61	.024	R	19	1.10	2/4	.01	12	1.14	.08	.08		- 143	110
YH-3	1	85	19	100	.2	29	22	854	4.40	198	5	ND	7	176	1	2	2	61	2.75	. 060	9	21	1.05	378	.01	12	1.21	.07	.07	1	27	100
YR-4	1	93	20	95	.1	- 36	23	793	4.55	191	5	NÐ	6	146	1	2	2	58	2.25	.058	8	21	.96	295	.01	10	1.30	.10	.07	- 1	12	130
YH-5	. 1	. 99	19	99	.2	29	21	892	4.74	.113	5	ND	5	153	1	2	2	60	2.74	.064	9	17	.93	333	.01	. 19	1.15	.06	.07	1	. 2	129
YR-6	- 1	86	17	85	.1	39	23	?75	4.33	119	5	ND	5	198	1	2	2	. 47	2.86	.060	7	19	1.10	377	.01	7	1.36	-14	.07	-1	1	220
Yk-7	. 1	64	13	73	.3	23	20	632	3.44	70	5	ND	5	163	1	2	2	43	2.24	. 106	9	12	. 84	543	.01	11	1.05	.04	.09	1	1	60
YR-8	1	85	11	84	.2	28	21	707	4.11	67	5	ND	6	177	1	2	2	57	2.93	.083	10	16	1.02	526	.01	9	1.43	.Oc	.08	· · 1	1	100
YR-9	1	99	29	108	.1	32	24	812	4.20	134	5	ND	5	185	1	2	2	58	2.67	.090	10	20	1.16	702	.01	14	1.67	.08	.12	· 1	10	80
YR-10	2	70	31	134	.1	37	21	1231	4.17	206	5	ND	6	146	1	2	2	56	1.51	.062	12	25	1.28	373	.03	18	1.73	.06	.16	. 1	22	.70
YR-11	2	97	21	119	.2	42	22	2109	3.66	197	5	ND	6	291	1	2	2	64	2.73	.075	9	25	3.22	189	.09	20	2.12	.16	.21	1	11	130
¥R-12	- 1	78	21	124	•2	35	21	1067	4.30	105	5	ND	5	103	.1	2	2	61	1.27	.055	12	28	.93	485	.07	14	2.06	.09	.25	1	9	70
¥R-13	1	72	22	99	.1	43	19	777	3.96	95	5	ND	6	99	1	2	3	58	1.42	.027	9	30	1.07	297	.07	19	2.29	.12	.21	. 1	5	60
YR-14	· 1	113	20	111	.1	87	29	957	5.45	70	5	ND	3	158	1	2	2	-63	2.27	.068	. 8	42	2.19	410	.08	43	3.10	.34	.15	1	23	110
YR-15	1	104	18	132	. 6	43	20	793	4.13	114	5	ND	5	166	1	. 2 .	2	64	3.68	.048	10	31	1.39	292	.06	21	2.55	.11	. 19	. 1	12	160
YR-16	2	114	41	189	1.0	53	24	1106	4.52	276	5	ND	4	131	1	2	. 4	60	1.90	.052	11	31	1.40	343	.05	19	2.56	.16	.18	1	28	130
YR-17	1	m	12	88	.1	57	29	846	5.04	41	5	ND	5	172	1	2	2	68	2.76	.056	10	32	1.45	421	.03	19	2.27	.21	.15	1	1	260
YF-18	1	52	14	78	.1	22	14	833	2.45	63	5	ND	5	161	1	2	2	26	2.65	.033	9	13	.82	484	.01	9	.17	.96	.09	1	1	280
YH-19	2	62	.21	87	•1	24	18	863	2.74	89	5	ND	5	193	1	. 2	4	36	2.82	.038	9	15	1.09	468	.02	12	1.16	.96	.08	1	5	-190
YK-20	1	61	6	72	-1	-21	21	502	2.88	- 87	5	ND	5	123	1	2	2	49	1.00	.020	2	3	1.10	415	.01	7	.40	.01	.07	. 1	1	210
18-21	L .	61 60	14	20		- 25	24	643	2.31	131	2	ND ND		- 6 Ĥ	1	2	5	33	1.09	.028	6	12	.63	5/9	.01	12	. 12	.04	. 99	. 1	1	160
18-22	1	22	14	. <i>11</i> 	· • 1.	23	14	245	2.25	101	2	NŲ	0	104	1	2	2	42	1.15	.044	ð	- 17	1.02	370	.04	12	1.13	•91	164	.	•	110
YH-23	2	10	19	90	.1		6	571	.76	93	5	ND	2	75	1	2	2	4	. 48	.011	7	2	. 20	463	.01	11	.31	.01	.13	1	2	299
5/8 L/A8-5	. 4	02	46	132	1.1	. 67	- 21	1046	3.76	5/	21	Ý.	45	20	14	1/	21	61	. 53	1661	.41	50		167	*6A	40	1.82	.05	-14	14	29	:490

SOUTHERN GOLD RES. FILE # 87-3912

Page	2	

SAMPLE	NO PPN	CU PPH	PB PPM	ZN PPM	AG PPM	NI PPM	CO PPM	nn PPn	FE 2	AS Pfn	U PPN	AU Ppn	TH PPM	SR PPM	CD PPM	SB PPM	. BI ₽PM	V PPN	CA Z	P	LA Pfm	CR FPN	M6 X	BA PPM	TI 2	B PPM	AL Z	NA Z	K Z	N PPM	aut FPB	H6 PPt
YR-24	1	5	20	40	.1	1	2	- 341	.44	24	5	ND	2	47	1	2	2	3	.55	.011	5	. 3	. 08	473	.01	3	.19	.01	.09	2	3	40
YR-25	2	88	72	96	.2	29	17	689	4.78	34	5	ND	1	112	1	2	7	49	1.54	. 076	10	30	1.25	203	.02	13	2.14	. 07	.10		1	80
11+00H 14+50N	2	114	16	106	1	35	17	840	3.87	34	Å	MD		159	i	2	2	54	1.41	067	17	.31	58	191	07	20	1 99	64	21	÷	1	50
10400N 14475N	-	51	25	78		77	14	417	7 74	40		10		01	÷		10	51	71	075	11	71	70	171	00		1 70	04	17	÷	16	30
10+00W 18+72H	2	54	22	00	1 .		17	401	2.34 A 04	107	5	97 10	÷	00		2	10	50	./1	.033	11	01	1 05	227	. VO	7	3.17		+ 17	1	10	30
10-00W 15-30M	2	24	22	70		40	10	021	4.00	122		RU.	د .		4	4	3.		.00	.022	12	41	1.02	227	.07	'	2.30	.02	.10	1	13	40
10+00W 16+25N	2	- 65	25	109	.1	56	18	850	4.39	63	5	ND	4	85	1	2	4	-59	. 90	.035	13	44	1.26	186	.10	5	2.32	.04	.24	. 1	5	5Ú
10+00W 16+00N	. 2	56	23	94	1	54	17	673	4.04	32	5	ND	2	80	1	2	3	55	.83	.032	13	42	1.09	153	.11	5	2.01	.04	.19	. 1	5	30
10+00W 15+75N	. 1	67	21	88	.1	47	16	636	3.83	31	5 -	ND	3	93	1.	2	4	53	1.22	.049	13	36	1.00	176	.09	7	1.87	.04	.16	1	1	60
10+00W 15+50N	. 1	56	24.	84	1	44	13	497	3.58	20	6	ND	4	92	1	2	3	49	1.34	.039	12	35	.90	129	.10	8	1.57	.04	.14	1	5	40
10+00W 15+25N	1	91	25	119	.5	35	20	1015	4.02	53	5	ND	1	290	t	2	2	55	2.63	.096	12	33	. 98	234	.05	17	1.81	.03	.22	1	ļ.	60
10+00W 15+00N	1	44	21	73	.3	43	12	560	3.03	42	5	ND	4	118	1	2	2	46	1.70	.055	12	30	1.03	153	.07	11	1.46	.04	.11	1	1	80
5+50W 10+50N	1	42	19	106	.2	25	12	719	2.58	63	5	NÐ	3	82	1	2	2	45	.79	.021	8	22	. 44	166	. 08	. 4	1.31	.04	.07	- 1.	10	50
5+50W 10+00N	- 1	37	17	71	. 1	15	9	412	2.16	67	5	ND	3	74	1	2	- 4	40	.84	.013	8	14	.32	88	.08	6	.96	.03	.07	1 L	1	60
5+50W 9+50N	1	65	29	-98	.1	30	16	658	4.08	105	5	NÐ	3	81	1	2	2	54	1.28	.020	13	29	.42	139	.07	15	1.29	.03	.07	1	19	150
5+50W 9+00N	1	73	21	80	.2	28	15	834	3.45	102	5	ND	2	113	1	2	2	49	1.92	.024	13	23	.44	156	.07	- 11	1.34	.03	.10	. 1	1	70
5+50W 8+50N	1	91	46	9y	.t.	36	23	1121	5.11	169	5	ND	4	96	- 1	2	2	61	2.17	.037	18	27	. 63	171	.05	7	1.69	.02	.12	1	4	170
2+20M 8+00N	1.	. 41	19	77	-1	23	12	8 27	3.03	53	5	ND	2	61	1	2	3	44	.55	.015	12	24	.40	161	.09	14	1.87	.03	- 11	1	11	50
5+50W 7+50N	2	42	15	95	•1	30	12	629	3.42	82	5	ND	2	65	1	2	2	52	. 66	.019	11	- 31	. 46	159	.09	2	2.18	.03	.13	1	17	40
5+50W 7+00N	. 2.,	31	20	74	.1	35	10	288	3.53	68	5	NÐ	2 .	42	1	2	2	59	.41	.017	10	42	.55	118	.11	· 9	2.19	.03	- 14 .	1	· 1	30
5+50W 6+50N	2	31	23	59	•1	41	12	308	4.17	14	5	NÐ	3	59	1	2	2	69	.74	.019	-14	58	.73	124	. 12	2	2.76	.02	.08	1	1	40
5+50# A+00M	. 1	79	17	75	1	12	11	461	4 28	12	5	ND	۲	67	1	2	7	72	80	023	10	40	90	05	09		7 91	02	68	1	1	30
SASON SASON		79	17	71		29	- 11	5.79	4.95	10		ND.		76	- ÷	5	2	71	.00	.020	10	70	4.1	45		,	1 95	01	07	1	÷	50
5450M 5400M	1	24	19	45	.,	10	12	100	3 70	14		MD	7	40	1	2	5	11	.00	.027	10	- C 60	- 01	107		e	7 10	.01			-	20
4450H 11400H		70	10	104		74	14.	575	4 04	10	. J E	NU MB		10	1	· · ·	2	70/	.03	.011	13	20	10	147	.10	3	2.07	.V2	.07		1	20
4+30# 11+00M	1	70	17	176	• 4		10	2/3	9.79	127	2				1.	. 4	-	. 12	.01	.018	10	41	./8	229	.97		2.30	.00	.13	- -	•	4U 20
4+20W 10+20N	1	30	10	11	.1	14	-10	344	2.48	48	ò	ND	2	22	1	2	2	44	. 44	.013	6	18	. 38	135	.08	ų	1.32	.05	.05	1	1	20
4+50W 10+00N	1	85	15	90	.3	27	16	527	3.79	116	5	NÐ	3	112	1	2	2	59	2.62	.018	11	29	. 66	110	.05	17	1.62	.04	.10	1	1	90
4+50W 9+50N	1	87	17	91	.2	32	22	959	4.90	165	5	ND	4	109	1	2 -	2	69	1.46	.020	14	27	.57	183	.04	14	1.73	.04	.11	1	- 1	70
4+50# 9+00N	2	95	15	-94	.1	32	16	479	4.94	67	5	ND	3	94	1	2	2	72	.90	.017	17	33	.79	192	.07	11	2.58	.10	.09	1	-1	50
4+50N 8+50N	2	86	19	130	.3	40	29	1284	6.24	132	5	NÐ	- 5	89	1	2	2	85	.90	.027	21	31	. 66	194	.05	10	1.91	.03	.16	1	7	110
4+50W 8+00N	2	87	22	104	.1	39	21	706	5.85	489	5	ND.	4	82	i	12	2	60	.90	.029	15	27	. 49	260	.06	. 7	1.89	.02	.11	1	7	230
4+50N 7+50N	2	110	26	127	.5	45	28	1326	6.66	201	6	ND	5	66	1	2	2	75	.85	.070	30	28	.63	151	.04	6	1.60	.02	.11	1	1	130
4+50# 7+00N	1	53	12	91	.5	37	14	847	4.77	41	5	ND	. 3	108	1	2	2	82	4.58	.052	14	49	1.55	103	.02	11	2.60	.03	. 12	1.	1	70
4+50W 6+50N	· 1	75	14	89	.1	32	15	504	4.63	92	5	NÐ	4	69	1	2	2	76	.69	.022	13	41	.73	184	.10	13	2.65	.07	.23	1	1.	40
4+50W 6+00N	2	50	18	-86	.1	42	13	440	4.38	37	5	ND	1	63	1	5	4	75	.73	.026	12	55	. 78	135	. 09	9	2.75	.02	.13	1	1	50
4+50N 5+50N	2	61	7	90	.2	38	14	687	5.01	<u>14</u>	5	ND	5	69	1	2	2	89	.93	.027	9	52	1.20	71	.10	5	3.51	.05	.07	1	1	30
2+50W 10+00N	1	79	15	52	.1	11	10	374	2.82	169	5	ND	2	90	1	5	4 -	50	.87	.026	7	14	.43	124	.08	8	1.24	.06	. 10	1	. 4	160
STD C/AU-S	19	59	39	130	7.2	70	26	1065	3.93	40	19	7	40	51	17	18	22	58	.47	.087	39	61	.87	182	.08	37	1.84	.06	.12	13	52	1300

SOUTHERN GOLD RES. FILE # 87-3912

SAMPLE	NO PEN	CU PPN	PB PPM	Z N PPH	AG PPN	NI PPN	CO PP#	AN PPN	FE 7	AS	U PPN	AU	TH PPN	SR PPN	CD PPN	SB PPN	B) PPN	V PPM	CA	P	LA	ER	ЯG	BA	п	8 85 M	AL	NA	ĸ		AUC	H6
									•					1.1.11			, rra	FLU	- 6	•	rrn	-rrn	-	rrn	. 4	rrn	. 4	4	7	rrn	PPB	PP B
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	259	-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	30
1+50N 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	207	. 07	12	2.12	.09	. 22	i	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+50N 9+50N	2	174	18	11	.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+50N 9+00N	2	136	17	88	.1	52	20	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	i	12	380
1+50N 8+50N	2	197	12	98	1	28	30	1489	6.99	282	5	ND	1	725	i	2	2	83	8.10	. 066	12	17	1.31	197	. 01	15	1.36	.12	16	÷		A00 -
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	÷	- 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	229	.01	25	3.01	.25	.20	1	3	60
1+50# 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	i	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	ť	5	1200
1+500 5+50N	1	113	19	80	.1	37	20	804	4.89	358	5	NÐ	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	NÐ	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	19	649	4.50	111	5	ND	2	103	1	7	5	67	. 86	. 018	. 9	74	.54	211	.05	21	2 64	05	75	1	2	110
0450W 10400N	1	109	17	90	.2	31	22	687	5.94	125	Ś	ND	3	130	1	2	2	106	1.08	.018	ģ	27	81	717	01	19	2.01	11	20	÷	Å.	50
0+50N 9+50N	5	220	17	50	.1	35	20	423	6.27	384	5	ND	3	95	1	38	2	92	. 92	.016	20	31	.74	167	.07	Ģ	2.38	. 69	.10	i	27	608
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	Rt	.01	74	1.09	07	09		1	820
0+50# 8+50N		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	NÐ	4	117	1	6	2	70	1.00	.037	13	31	.61	257	.08	-20	2.05	.07	-16	1	2	100
0+50N 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	-	30
0+50N 7+00N	1	115	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+50N 6+50N	1	107	11	55	11	25	13	386	4.09	63	5	NÐ	4	85	1	2	2	80	.84	.036	11	32	.70	104	.07	â	2.15	08	10	i	ĩ	-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+50N 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		i	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

Page 3

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Page 4

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SOUTHERN GOLD RES. FILE # 87-3912

																				_						-						· · · ·	
SAMPLE		NO	CU	PB	ZN	Ab	NI.	03		H	AS	U	AU	IH .	SR	CD	58	81	V CA	P	LA	CR	76	BA	H	B	AL	- NA	K	N.	AUT	HG	
		PPħ	PPR	<u>.</u> PPB	PPR	254	. 111	PPN	PPR	1	PPH	654		PPN	PPR	PPN	PPH	PPN	PPN Z	· 1	PPN	PPR	2	PPR	7	PPM	1	2	ĩ	PPR	PPB	PPB	
								•		1 75	.,			-					2 2 5 2	0.05		2				-	76					204	
8~1346		1	1	- 15	10		1		070	1.23	10		70		88	1	2	2	2 2.52	.005		4	.25	1017	.01	- 24	. 32	.01	.07	1	1	280	
K-1347			23	378	671	1.2		2	- 211	2.70	21303	2	. 4	•	02	1	13	- -	8 1.40	.020	4	1	+34	31	.01	- 1	•17	.01	.00	1	6200	240	
R-1348		1	13	485	229	3.0	. 3	- 4	90	2.20	16082	5	5	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	-m	3.30	12703	5	2	3	174	5	.2	2	16 4.94	.032	3	10	1.62	56	.01	5	.28	.01	.11	1	1660	210	
k-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	.05	1	2	150	
\$-17#1		,	19	10	30	1	٦,	5	909	7 94	129	5	ND	,	569	· 1	2	,	55 15 77	017	n	10	L'11	14	61	,	31	ú2	ô1	,		75.0	
6-139A		- 1	55	12	270	•••	12		712	7 74	1210	5	MR.	-	707	1	10	2	70 0 77	047	4	17	0,70	17	.01	4	- 101 - 51		.V: 60		10	1700	
- N= 1 304			10	14	2/0	•	12	7	712	7.55	1249		NU MD	4	327		20	4	- 30 0.32	.093		13	1.70	70	• • •		. 31		.00		7	1300	
N-1383		1			77		12		/00	3.22	6/60	2	NU	. <u>1</u>	72		282	4	23 6.37	.028	2	2	1.72	169	.01	. (. 25	.01	.03	1	· 2 ·	29800	
8-1360		1	10	3	32	1	· /.		883	4.70	3071	2	RU	2	124	1	225	Ž	12 10.49	.009		0	4.37	/4	161	· /		.01	.04	1		9900	
K-1781		1	20	0	21	•1	20	ò	218	2.60	2182	5	μŲ	1	125	1	225	2	1/ 4.85	.010	2	Ÿ.	1.42	13	.01	/	. 55	.01	.05	1	-2	9200	
K-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	Ģ		.02	.03	1	1	370	
R-1384		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	
8-1390		1	49	2	32	.1	7	6	524	3.00	33	5	NÐ	1	748	1	2	2	52 17.58	.045	5	13	1.15	27	.01	10	. 36	.01	.03	1	1	210	
8-1391		1	52	6	46	.1	12	11	590	3.81	44	5	ND	4	152	1	2	2	67 2.65	.056	Q	13	.90	83	.01	A	.71	.04	. 06	1	1	430	
8-1392		1	66	9	81		22	15	621	3.94	641	5	ND	3	60	i	50	3	56 1.86	.040	,	R	.71	74	.01	10	.60	.01	.04	i	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	196	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	NÐ	3	114	1	2	2	35 2.40	.033	4	7	.80	12	.01	9	.51	.05	.03	i 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	1	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	.91	:13	5	10930	1800	
R-1401		2	2370	6	1775	1.1	15	34	445	5.01	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	• 2	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	£9	.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	.05	1	1	13000	
k-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	
K-1408		5	475	12025	1 4732	126.8	1.13	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	
8-1409		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	- B	.01	2	.15	.01	.03	1	5110	1900	
k-1410		7	630	3815	8059	10.2	12	15	1750	9.31	5254	5	NÐ	2	127	33	9	2	30 7.99	.021	4	8	.77	22	.01	6	1.80	.02	.09	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	30e	.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	2	156	2	6	2	88 1.38	.040	4	18	1.07	. 79	.09	10	2.57	.24	.08	· 1	205	130	
STD C/AU	-K	19	59	41	135	7.5	69	28	1113	4.16	38	22	Ģ	39	52	19	17	21	60 .51	.090	39	62	.92	172	.09	36	1.68	.96	.12	12	490	1300	

ASSAY REQUIRED FOR CORRECT RESULT -

ACME ANALYTICAL LABORATORIES

852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011

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GEOCHEMICAL ICP ANALYSIS

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.500 GRAN SANPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 AT 95 DEG.C FOR ONE HOUR AND IS DILUTED TO 10 HL WITH WATER. THIS LEACH IS PARTIAL FOR NW 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 AUS ANALYSIS BY AA FROM 10 GRAM SAMPLE, HE ANALYSIS BY FLAMLESS AA. 111

. . /

DAT	E REC	EIVE	D	SEPT	12 198	97 E	ATE	REP	ORT	MAI	LED	l K	Syd	F18	187	A	SSA	YER.	. <u>A</u>	- L	cje1	. DEA	N T	DYE.	CEF	RTIF	IED	B.C.	AS	ISAY	ER	
								8	OUTH	HERN	GOL	D R	r ESOL	JRCE	s ·	Fi	le (# 87	-357	′1 ≮	P,	aqe	1									
SAMPLE	NO PPN	CU PPN	PB PPM	ZN PPH	A5 PPN	NI PPN	CD PPN	HN PPH	FE X	AS Pph	U PPN	AU PPN	TH PPN	SR PPN	CD PPN	SB PPN	BI PPM	V PPN	CA Z	P 1	LA PPH	CR PPN	NG Z	BA PPN	T1 7	B PPN	AL. 1	NA T	K I	N PPN	AU1 PPB	HS PP9

R-1370	1	65	. 9	71	.1	15	- 14	630	5.09	70	5	ND	1	272	i 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	56
R-1375	1	55	9	87	.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	i	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	1	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	1	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	31(
STA FIANA GTA	10	50	41	171	7.0	49	27	1029	10 7		19	7	15	49	19	17	21	56	49	000	37	60	87	172	. 68	37	1.82	.08	: 13	13	505	130

									E	OUT	HERN	GOL	DR	ESO	URCE	S	FIL	.E. #	87-	-357	1											Paqe	2
SAMPLE	NO PPN	CU PPN	PB PPN	ZN PPN	AG PPH	NI. PPM	CO PPM	NN PPN	FE Z	AS PPM	U PPM	AU PPN	TH PPN	SR PPM	CD PPN	SB PPM	BI PPN	V PPM	CA X	P Z	LA PPN	CR PPM	MG Z	BA PPM	II I	B PPN	AL X	NA Z	K 1	N PPH	AU1 PPB	H6 PP8	
33+00N 12+25N	1	145	14	103	.1	31	24	927	5.28	197	5	ND	2	147	i	2	2	77	3.27	.063	9	23	.82	129	.01	10	1.41	.05	. 06	1	17	120	
33+00W 11+75N	1	97	14	78	.2	20	19	715	4.66	236	5	ND	1	151	1	2	2	72	4.00	.055	10	23	.91	98	.01	17	1.55	.03	.05	. 1	30	90	
33+00W 11+25N	1	154	19	110	.5	33	20	602	4.83	504	5	ND	1	151	. 1	- 4	2	65	4.20	.04B	6	17	.47	84	.01	12	.94	.07	.07	2	860	150	
33+00W 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+00W 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+00W 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	I	74	330	
32+50W 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+50W 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	290	
32+50W 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+50W 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+50W 11+50N	1	115	22	82	.2	67	29	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+50W 11+25W	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+50W 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	4	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+50W 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	4	6000	
32+50W 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	Ť.	1	5600	
32+00W 12+25N	1	113	20	92	.1	54	23	550	5.21	172	- 5	NÐ	2	136	1	1	2	56	2.21	.026	14	25	. 66	171	. 01	8	2.55	.21	.07	- 1	8	250	
32+00W 11+75N	1	115	12	69	.1	61	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	1	1500	
32+00W 11+25W	1	122	15	89	.1	83	28	633	5.81	126	5	ND	1	146	1	2	2	50	2.59	.042	5	31	.64	124	.01	10	2.85	. 39	.04	1,1	19	200	
32+00W 11+00N	. 1	127	28	149	.1	44	27	733	6.67	94	5	NÐ	4	146	1	3	2	83	1.66	. 088	27	21	.85	227	.01	13	1.84	.06	.16	1	. 1	220	
32+00W 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	193	.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	3.00	.071	12	14	. 99	253	.01	10	.99	.06	.08	2	36	680	
N.C. 1578+160W	1	-141	16	94	.3	31	28	953	5.14	451	5	ŅD	1	180	1	ß	2	72	3.30	.061	9	18	.95	151	.01	-14	1.23	.08	.07	2	61	310	
H.C. 1578+115M	i	157	38	147		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	. i.	139	17	95		35	27	1454	5.71	219	5	ND	1	172	i	7	2	98	3.11	.037	12	24	. 91	211	.01	10	2.33	.13	.11	1	- 11	80	
N.C. 1578+25N	÷	139	19	96	.2	37	35	1214	5.26	720	5	ND	ī	320	1	34	2	76	3.97	.067	8	14	1.08	225	.01	12	.70	.03	.09	Í.	195	3300	
SS 01	<u> </u>	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	
CC 07	· .	107	25	92		T.A	24	750	4 44	124	5	ND	2	162	,	,	,	64	2.32	-064	11	27	1.54	179	.01		2.17		. 08	- 1	-31	90	
55 VL	¥. 1	143	4J 15	97	. 4	਼ ਹਾ 17	- 27	757	1.11	124	. J 5	ND.	2	202		2		57	1.01	.061		27	1.42	253	.01	7	1.69	. 69	. 09	;	11	80	
55 04		105	1.0	70		70	21	721	3.74	55	5	MB -	1	177	1	5	2	55	3, 61	.052	10	74	1.74	213	.01		1.56	.08	.06	1	4	100	
55 A5			12	77		20	51 70	67A	1.50	140	5	ND	1	145	1	,	- 2	38	2.91	.04R		12	.99	107	.01		.48	.04	.07	2	5	180	
AG 22	1	57 64	14	84	.1	27	10	734	3.89		5	ND	,	228	-1	,	,	47	2.30	.073	9	18	1.17	207	.01	10	1.41	.11	.09	ī	5	90	
20 VU	•	00	10	00	••	.,	.,	707	,		5		د		•	•	•	.,	21.04		•			•••			••••			•			
SS 07	1	70	20	84	.2	27	19	749	3.94	61	5	ND	2	130	1	2	2	48	2.25	.065	10	21	1.17	219	.01	6	1.55	.11	.07	1	1	60 1300	
510 L/AU-S	18	. 34	42	132	. /.0	67	26	1030	2.48	24	14	- 11	31	20	14	10	20	- 3/	• 40	• • • • 2	31	00	.0/	111	.00		1.02	. va	.13	13	. 70	1000	

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SOUTHERN GOLD REBOURCES FILE # 87-3571

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SAMPLE	NO PPH	CU PPH	PB PPM	ZN PPM	AG PPM	NI PPN	CO PPH	MN PPH	FE 1	AS PPH	U PPH	AU PPN	TH PPM	SR PPN	CD PPN	SB PPM	BI P p n	V PPN	CA Z	P I	LA PPN	CR PPM	NG X	BA PPM	TÌ Z	B PPN	AL	NA Z	X	. N PPM	AU1 PPB	NG PPB	
SS 08	1	49	7	83	.1	25	17	470	3.00	12	5	ND	1	260	1	2	2	61	2.38	.068	8	16	1.50	202	.01	5	2.07	.03	.04	2	. 1	50	
SS 09	1	11	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	
55 10	÷1	71	17	79	.2	-31	18	594	3.05	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	1.1	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 _	. 17	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.	2		81	7.52	.057	18	23	2.22	220	.01	36	3.32	.13	.09	· . 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	÷ .,
5S 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	1.30	.03	.07	2	1	100	
SS 16	3	53	6	75	.3	31	15	561	3.50	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	ŧ	110	
SS 18	2	64	17	79	.3	27	20	589	3.63	19	5	NO	2	269	1	2	2	54	2.33	.055	6	22	1.37	284	.06	19	3.67	.16	.11	4	2	90	
SS 19	1	79	. 11	79	.1	27	20	672	3.68	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	.09	33	1.86	07	.14	. 14	. 47	1400	

AC "NAL " ™AL L/‴ **RATO**₽ 2 E STINE T. DUVE C. 1R PE 253 B TA 251 , GEOCHEMICAL ICP ANALYSIS .500 GRAN SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 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 AUS ANALYSIS BY AA FROM 10 GRAM SAMPLE. DATE REPORT MAILED: Sept 24/87 ASSAYER ACHINI. .. DEAN TOYE, CERTIFIED B.C. ASSAYER DATE RECEIVED: SEPT 11 1987 SOUTHERN GOLD RES. File # 87-4150 Fage 1 SAMPLE# HO. CU PB ZN AG NI CØ 8N FE AS U. AU SR TH CD SB BI ٧ CA Ρ LA CR #6 8A П R AL NA ĸ . AUS PP# **PHN** PPR PPR PPN FPR PPN PPN 2 PPM PPN PPM PPH PPH PPN PPN PPN. PPN ĩ 2 PPN PPN 2 PPN 2 PPN 2 1 2 PPN PPB 26+00W 10+75N 1 36 20 58 .1 12 5 240 1.72 21 5 ٥0 2 37 86 1 2 1.43 .034 8 .13 .30 79 .05 12 .97 .04 .04 2 26+00W 10+25N 63 15 31 18 1 68 .1 617 3.44 95 5 NÐ 1 109 1 2 2 60 2.78 .017 10 26 . 58 193 :04 12 1.97 .03 .06 ŧ 1 25+50W 11+25N 48 15 75 .f 34 15 526 3.70 1 86 5 ND 83 2 1 1 2 58 .83 .011 8 29 .52 234 .06 11 2.77 .09 .10 1 1 37 25+50# 10+25N 1 151 17 97 .1 28 1141 4.37 389 299 5 ND 1 1 54 2 61 7.10 .032 12 27 .74 481 21 2.24 .03 .04 .11 22 1 25+00M 11+75M 1 -115 13 67 .1 26 18 488 3.68 76 5 ND 270 2 1 -1 2 85 7.11 .059 23 6 1.15 219 .11 21 1.91 .05 .26 1 1 25+00W 11+25N 83 - 3 44 18 303 4.37 73 1 61 .1 5 ND 1 95 1 2 2 60 1.08 .007 7 37 .54 120 .03 17 2.71 .13 .04 2 25+00W 10+75N 76 15 31 1 102 .1 16 468 3.60 106 5 ND 95 2 2 60 1.00 .017 12 28 1 1 .63 205 .05 18 2.39 .04 .07 1 25+00# 10+50N 13 1 119 101 .2 28 21 1097 3.81 156 5 ND 165 2 2 1 1 63 2.06 .028 13 27 .71 332 .05 21 2.15 -03 .08 2 1 25+00W 10+25N 48 17 78 26 1 .1 15 694 3.43 98 5 ND 65 1 1 2 2 63 .74 .015 13 30 .61 247 .06 9 2.82 .27 .07 1 8 24+50H 12+00H 1 46 14 69 .4 41 17 666 3.34 542 5 ND 2 164 4 2 47 3.03 .029 1 11 33 1.11 183 .05 16 1.65 .05 . 08 1 3 24+50W 11+75N 2 52 15 84 46 20 715 4.32 549 .1 5 ND t 125 1 2 2 55 1.94 .016 10 37 .76 228 .07 16 2.09 .04 .13 13 1 24+50W 11+25N -39 11 87 31 13 276 3.41 1 .1 242 5 ND 61 2 2 1 1 55 . 58 .011 8 29 .45 168 . 05 11 2.54 .06 .10 1 1 24+50W 10+75N 1 36 20 69 .1 15 9 368 1.98 15 5 NO 80 1 1 2 2 41 1.03 .013 6 15 .39 117 .06 10 1.15 .04 .03 1 1 24+50W 10+50N 1 88 17 90 .1 30 23 707 4.59 73 5 ND 86 1 2 2 77 .87 1 .020 14 26 .63 220 .04 12 2.20 .03 .09 1 1 24+50H 10+25N 61 15 99 1 .1 30 21 931 3.83 48 5 ND 136 2 2 69 1.31 .032 15 1 1 27 .58 403 .06 23 2.33 .09 .15 1 3 24+25W 12+75N 50 37 1 7 67 22 752 3.90 .1 80 5 ND 2 119 1 2 2 58 1.56 .020 11 29 .83 229 .05 7 2.33 .05 .11 77 1 24+25H 12+50N 40 12 85 1071 3.88 1 .1 40 29 106 5 ND 2 181 2 1 2 61 2.71 .035 9 30 .82 277 .04 18 2.25 .04 -13 31 1 24+25W 12+25N 42 7 55 1 .2 34 19 581 3.14 79 5 ND 1 173 2 3.97 1 -2 50 .023 11 26 .79 200 .05 16 1.92 .04 .11 1 173 24+25H 12+00N 1 38 13 66 .2 37 29 875 3.72 121 5 ND 2 151 1 2 2 58 2.80 .024 9 24 .87 257 .04 15 1.84 .03 .13 75 1 24+25W 11+75N 39 1 14 61 .3 27 22 802 3.10 316 132 5 ND 1 2 2 1 47 2.22 .035 7 17 .50 183 .02 18 1.08 37 .02 .10 1 24+25W 11+50N -44 16 88 30 409 3.55 1 .1 16 289 2 89 5 2 2 53 .94 .023 30 .47 152 15 2.07 1 10 .06 .03 :13 R 1 24+25N 11+25N 1 24 15 87 25 328 .1 11 2.72 87 5 NÐ 1 57 1 2 2 46 .52 .012 8 26 .39 176 .07 11 2.14 .04 .08 1 1 24+00W 12+75N 1 156 14 71 .1 34 28 929 4.17 210 5 ND 2 151 1 2 4 58 2.50 .027 11 24 .77 206 .03 13 1.90 .03 2 .13 1 24+000 12+25N 49 18 1 67 .1 32 23 730 3.66 73 5 2 158 ND 1 2 2 58 2.28 .016 10 29 .89 221 .06 16 2.42 .04 .11 1 41 24+00# 11+75H 1 43 15 85 -1 40 24 989 3.83 250 5 ND 2 119 2 2 28 1 55 1.40 .037 9 .90 266 .04 13 1.88 .03 .19 1 39 24+00W 11+25N 1 72 21 124 16 13 534 2.20 .8 697 5 185 1 8 2 25 3.38 .023 9 .52 189 .01 17 .94 .02 4 .12 15 -1 24+00# 10+75N 122 1 20 .2 104 36 26 555 4.73 95 5 105 5 1.11 .019 жÐ 1 1 2 88 13 28 .65 223 .05 11 2.48 .03 .11 1 Ł 24+00W 10+25N 1 69 17 101 .1 27 14 591 3.37 80 5 ND 1 99 1 2 2 56 .97 .021 11 29 .52 189 .06 16 2.05 .03 .07 1 1 23+75# 12+75N 109 1 14 79 .1 39 22 718 3.95 141 5 NÐ 1 132 1 4 2 1.72 32 58 .020 10 .90 255 .05 23 2.33 .04 .14 2 1 23+75# 12+50# 1 93 14 59 .4 41 20 746 3.51 72 5 NÐ 2 167 1 2 3 54 5.02 .037 29 10 .88 210 .04 12 1.59 .04 .07 1 1 23+75W 12+25N 40 1 5 68 .1 36 24 839 3.80 253 -5 ND 132 2 2 55 2.49 .025 9 25 231 .04 15 1.75 22 1 .67 .03 .16 1 23+75W 12+00N 1 40 8 58 .1 32 18 583 88 3.19 5 NÐ 118 2 2 1 1 49 1.89 .015 25 .05 9 .67 177 11 1.86 .03 .11 1 73 23+75W 11+75N 1 42 21 76 .2 38 22 943 3.77 230 5 ND 3 154 1 2 2 50 1.87 .022 10 26 .74 248 .04 23 1.94 .04 .23 1 1 23+75W 11+50N 59 24 121 29 1 .1 17 670 3.44 478 5 ND 1 118 1 4 2 44 1.14 .019 7 22 .47 226 .02 18 2.04 .07 .19 1 1 22+75H 13+00N 1 96 15 80 .2 36 23 738 3.56 -54 5 192 NÐ 2 1 2 2 58 4.64 .049 13 29 1.17 188 :04 16 2.31 .04 .09 1 1 22+50W 13+00W 57 1 H 65 .2 44 618 3.12 16 27 5 ΝŪ 3 204 1 2 2 61 3.29 .054 7 43 1.59 55 .10 37 2.30 .06 .06 1 2 STD C/AU-S 19 62 38 135 7.2 68 28 1041 3.89 37 18 40 51 18 18 20 57 .48 .085 183 12 8 39 60 .86 .07 36 1.84 .06 .13 -51

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SAMPLEN	10 1991	CU PPM	РВ (РРМ	- ZN 1441	A6 144	NI PPN	CO PPN	NN FPN	FE Z	AS PPM	U PPN	AU PPN	TH Ppn	SR PPN	CD PPN	SØ PPM	BI FFM	V FPN	CA Z	Р 2	.LA FPN	CR PPM	#6 2	ba PPN	11 1	8 Prn	AL Z	NA Z	. K 2	- W PPN	AU t PPB		-
22+50W 12+75N	- 1	28	11	50	.1	20	9	286	1.93	31	5	ND	- 1	62	1	2	2	43	.56	-025		16	. 34	94	.07	12	1 20	05	67		1		
22+25W 13+00N	1	92	13	76	.1	47	21	593	4.52	57	5	ND	1	149	1	2	2	75	4.40	.025	12	19	1.04	149		12	2 57	.00	10	. 7			
22+25# 12+75N	1	57	17	54	.3	45	14	430	2.87	23	7	ND	ī	195	1	2	2	56	4.53	.053		17	40	103	10	14	1 17	.VQ .vQ	.10		1		
14+00W 15+25N	2	43	1/	61	1 .	69	17	490	3.40	26	6	NĐ	3	121	1	2	2	55	7.86	.059	- 11-		1 79	107	11	11	1 24	. UJ.	.07	1			
14+00W 15+00N	2	55	24	88	.1	48	18	697	3.98	28	5	ND	1	113	1	2	2	71	1.03	.035	10	43	1.11	169	.11	16	2.76	.05	.09	2	. 4		
14+00N 14+75N	1	92	7	68	.1	34	20	763	4.20	26	5	ND	. 1	162	1	2	2	Bu	3.40	.066	10	34	1.58	132	.07	- 21	2. HV	67	60	1	· .		
14+00W 14+50N	2	42	3	77	.1	49	15	621	3.48	25	5	ND	. 2	69	1	6	2	61	.61	.019	11	44	.73	133	.13	12	2.72	- DA	19	;	-		
14+00W 14+25N	. 2	41	20	78	.1	44	15	573	3.43	17	5	ND	2	73	1	2	2	61	.59	.017	11	42	.76	140	13		2 30				. 1		
14+00W 14+00N	- 2	41 -	15	83	.1	42	14	490	3.33	- 14	5	ND	3	77	1.	2	2	55	.61	.013	11	40	. 49	163	.12	14	2.53	04	27	4			
14+00W 13+75N	1	30	11	46	.1	33	12	580	2.87	10	5	ND	1	68	1	2	2	49	.52	.015	°9	33	. 60	186	.12	7	2.20	.04	.20	1	1		
13+00W 14+75N	1	74	14	83	.1	42	18	648	4.26	29	5	ND	1	80	1	2	2	74	1.53	.033	9	35	.85	130	.07	15	2.39	.04	. 16	.1	i		
13+00w 14+50N	1	74	12	102	.1	43	19	737	4.33	29	5	ND	2	78	1	2	2	71	.72	.029	10	35	. 80	162	.07	- 11	2.51	. 05	. 29	. i	i		
13+00# 14+25N	. 1	73	17	89	1	42	17	558	4.18	23	5	ND	1	81	- 1	2	2	68	.71	.017	- II	37	.79	168	.09	14	2.83	.05	.27	- 1			
13+00N 14+00N	- 1	66	18 -	42	.1	48	17	702	4.01	21	5	ND -	2	81	1	2	2	65	.77	.025	11	40	.93	143	.11	12	2.61	.04		1	1		
13+00W 13+75N	1	56	8	84	. 1	40	15	601	3.72	23	5	ND	2	17	1	2	2	60	.71	.020	12	40	.74	143	.11	13	2.60	.04	.26	1	20		
13+00W 13+50N	i	50	18	88	.1	41	16	588	3.57	14	5	ND	2	70	1	2	2	60	. 62	.016	12	41	. 66	135	.12		2.70	.04	27	2	7		
13+00W 13+25N	2	39	-14	81	.1	- 42	13	609	3.19	11	5	ND	2	71	1	2	2	53	.61	.017	15	44	.60	141	.12	10	7.76	.04	.21	1	· · · · •		
12+00W 15+50N	1	95	10	95	.1	46	21	653	4.07	23	5	ND	1	115	1	2	2	62	1.79	.026	14	38	. 90	266	- 06	14	3.09	04	10		· 1		
12+00W 15+25N	. 1	125	- 24 -	84	.2	41	23	653	3.88	29	5	ND	1	179	1	-2	2	64	3.09	.045	14	33	1.43	179	.04	18	2.45	07	12	-	, i		
12+00W 15+00N	2	107	17	91	.3	45	28	1052	4.59	54	5	ND	1	198	1	2	2	59	4.04	.059	18	30	1.62	177	.03	15	2.29	.04	.15	1	41		
12+00W 14+75N	1	120	6	100	.3	40	25	932	4.89	40	5	ND	2	141	1	2	2	76	2.69	612	14	20	1 01	100		14	2 77	05	12				
12+00W 14+50N	. 1	97	15	100	.4	34	21	708	5.29	67	5	ND	2	165	1	2	2	76	A 09	051	17	21	1.01	1.7.7	- 64	10	2.13	+VJ	- 22	1	- 3		
12+00W 14+25N	1	79	17	184	.1	32	15	584	3.63	134	5	NÐ	2	106	i	2	2	54	1 11	025	10	23	170 76	104	.04	10	2.07	+ V7 07	. 20	- 2	0/		
12+00N 14+00N	1	57	13	95	.1	32	13	434	3.41	89	5.	ND	3	82	÷	2	2	50	1 15	.023	4	- 27	+1-1	100	.03	17	4.00	,03	• 27	- <u>-</u>	123		
12+00W 13+75N	2	88	20	102	.1	33	15	467	4.42	163	5	ND	2	70	i	2	2	72	.67	.028	10	33	.73	118	.07	17	2.33	.04	.31	- 1	17		
12+00N 13+50N	1	5/	9	109	.3	37	15	611	4.18	100	5	NÐ	4	80	1	2	2	72	59	. 025	11	31	. 67	143	- 69	14	2 22	05	26				
11+00W 16+25N	. 1	76	26	. 98	.3	52	22	661	4.34	83	. 7 .	ND	4	103	ī	2	2	AA	.91	.029	17	10	97	214		. 14) 67	07	. 40		10		
11+00W 16+00N	- 1	70	6	97	.3	48	15	429	4.20	21	5	ND	i.	95	1	2		60	07	074	17	42	07	174	.00	10	2.11	.0/	. 22		10		
11+00W 15+75N	1	63	12	117	.3	47	20	804	3.76	53	5	ND	2	164	i	2	1	57	1.75	652	11	12	1.70	102	+V7 02	10	2.00		- 44	- 4 -	- J - A		
11+00W 15+50N	1	100	17	113	.3	42	22	836	4.01	33	5	ND	3	111	1	2	2	61	1.30	.037	17	34	.94	257	.05	19	2.56	.04	.28	2	7. 1,	.•	
11+00W 15+25N	- 1,	82	14	102	.1	43	25	910	4.37	52	5	ND	2	137	1	2	2	64	2.70	.025	15	32	1.05	176	.04	11	2.26	.03	.19	1	.1		
11+00W 15+00N	1	78	20	98	.2	36	16.	698	3.72	25	5	ND	2	111	1	2	2	59	1.41	.036	14	29	.91	207	.06	12	2.05	.04	.20	1	3		
9+ 20W	2	75	26	93	.3	43	27	723	4.04	751	5	ND	2	186	1	2	2	51	2.29	.066	6	18	1.31	272	.01	12	.83	.06	.08	1	270		
D+ 200E	1	81	19	98	.4	28	19	731	3.68	83	5	ND	3	234	.1	2	2	67	2.57	.054	10	25	1.06	375	.05	27	2.62	.06	.21	- 1	5		
D+ 225E	, 1 .	47	21	78	.1	18	12	616	2.35	40	5	ND	1	180	1	2	2	41	2.30	.031	8	17	.81	654	.03	17	1.66	.04	.13	1	6		
D+ 250E	2	61	9	88	.2	49	19	655	3.78	29	5	ND	4 -	174	1	2	2	69	2.37	.061	11	42	1.42	138	.11	11	2.43	. 06	- 12	1	4		
STD C/AU-S	20	60	42	131	7.3	69	29	1002	3.72	40	18	8	39	52	19	17	19	58	.46	.086	39	62	.82	177	.07	38	1.90	.06	.15	13	53		

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٠	SAMPLE	P	NO Ph	CU PPM	PB PPN	ZN . PPH	AG PPN	NI PPH	CO PPN	HN PPN	FÉ X	AS PPM	U PPM	AU PPM	TH PP N	SR PPN	CD PPM	SB. PPM	BI PPN	V PPM	CA I Z	P Z	LA PPN	CR PPM	MG 7	BA PPH	TI X	B PPM	AL Z	NA Z	К. Х	W PPN	AUS PPB		
	R 1413 R 1414		1 2	34 13	9 2	90 17	.1 .1	12 1	11 2	507 372	3.05	13 18	5 5	ND ND	4	115 829	1	2	2	64 18	1.58	.059	11 2	14 6	1.07	101 30	.01	- 5	1.17	.17	.08	1. 1.	1		
	R 1415 R 1416 R 1417		1	4 17 37	15 2 2	91 18 53	.2	1 2 14	1 .4 9	239 510 719	.58 2.24 3.24	27 32 14	5 5 5	NÐ ND ND	-1 1	25 719 594	1	3 2 3	2 2 2	1 15 47	.61 18.10	.017 .006	625	2	.16 7.24	55 40 34	.01	4 7 22	.29	.03	.18	1	4		
	R 1418 R 1419		1	22	2	33	.1	10	5	639	2.76	44	5	ND	1	727	1	2	2	37	13.57	.019	4	-9	4.89	32	.01	8	.40	.01	.04	1	32		
	R 1420 R 1421 R 1427		1	63 8	351 5 2	79 16	.7	- 7	8	592 364	5.25	55121 276	5	ND ND	1	170 347	1	3638 3	3	23 21 15	3.40	.024	2 2 2	4	.91 4.26	126	.01	2	.18	.01 .01 .01	.02 .04 .04	1 3	1 12 20		
	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	19	4.5/ 6.11	43	.01	3 2	. 49	.01	.04	1	25		
	R 1425 R 1425 R 1426 R 1427		1 1 1	4 20 20	2 3 2	20 7 36 34	.1 .1 .2	1 7 3	1 6 5	271 417 554	2.43 1.13 1.87 2.57	49 513 636	5 5 5	ND ND ND	1	434 139 261 412	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 2 8 7	2622	41 3 27 35	13.85 3.25 6.83	.028 .001 .019	3 2 2 2 2 2	6 1 9 7	5.71 1.07 2.48	34 15 28 29	.01 .01 .01	8 6 5 7	.42 .37 .34	.01 .01 .01	.03	1	95 1 12		
	R 1428 R 1429		1	31 34	17	85 59	.5 .4	5	5	609 665	2.66	3568 582	- 5 5	ND ND	1	114 602	1	27 7	2	11 49	4.39	.016	2	, 2 8	1.25	23 36	.01	5 12	.28	.01	.12	1	1 -		
	R 1430 R 1431 R 1432	••••••	2 1 1	34 54 52	7 2 11	37 44 83	.1 .1 .1	- 1 11 17	2 8 12	779 334 691	2.02 2.13 3.76	846 100 21	5 5 5	ND ND ND	1 1 1	229 193 132	1 1 _1	11 4 2	3 2 3	5 35 42	6.13 2.42 5.13	.024 .009 .056	3 2 7	2 9 20	1.62 .99 1.16	54 27 602	.01 .01 .01	7 5 2	.31 .42 1.66	.01 .01 .02	.07 .05 .08	1	12 2 5		
	R 1433 R 1434		1	8	2	26 29	.2 .1	13 11	15 12	909 373	4.38 2.78	68 45	5	ND ND	1	322 186	1	22	2 2	89 58	8.23 4.29	.051 .071	4 5	13 8	2.97 1.51	30 55	.01 .01	5 7	.49 .56	.01 .01	.03 .13	1 1	147 109		
	R 1435 R 1436 R 1437		1 1 1	6 16 51	2 22 2	38 64 71	.1 .3 .1	16 0 7	13 7 9	631 1115 480	3.35 5.43 2.69	52 1671 56	5 5 5	ND ND ND	1 1 1	226 315 208	1 1 1	2 46 4	2 2 2	73 22 60	5.91 12.75 5.08	.039 .004 .025	6 2 2	14 3 12	1.93 3.10 1.91	41 120 20	.01 .01 .01	9 8 11	.50 .15 .60	.01 .01 .01	.05 .03 .03	1 1 1	49 1 1		
	R 1438 R 1439		1	33 57	2	34 80	.1	9 14	6 12	655 578	2.57	43 2222	5	ND ND	1 1	654 97	1	3 111	22	45 93	13.29	.010 .037	2 2	14 16	5.06	38 20	.01 .01	2	.41 .51	.01	.01 .02	1	1 101		
	R 1440 R 1441 R 1442		1 1 1	97 25	3 9 7	63 44	•1 •1 •1	. 9 19 4	11 15 4	211 585 1007	2.36 3.54 3.70	147 53 1248	5 5 5	ND ND ND	- 1 1 1	225 201 277	1 1 1	29 8 28	2 2 2	28 71 17	.33 3.82 10.39	.070 .072 .013	2 9 2	7 11 3	.11 1.21 3.09	-96 	.01 .01 .01	4	.58 .90 .24	.01 .08 .01	.04 .04 .04	1 1	93 1 7		
	R 1443 R 1444 R 1445		1	46 38	10	69 41	.1 .1	18	14 3	810 674	4.14 2.18	118 359	5	ND ND	2	253 139	1	39	32	85 12	3.85 4.37	.054	8	15 3	1.29	164 270	.01 .01	6 8	.76 .30	.10	.05	1	1		
	R 1446 R 1447			04 20	4	91 24	.1	23 1	17 3	1069 441	5.57 2.36	34 20	5	ND ND	1 1 1	265 830	1 1	2 2 2	2 2 2	15 99 30	8.55 4.56 15.70	.040 .060 .010	3 6 2	4 23 4	2.39 2.30 6.29	307 33 38	.01 .01 .01	7 6 5	.26 .49 .31	.01 .02 .01	.12 .02 .01	1	5 3 1		
	R 1448 STD C/AU-R	1	l 7	40 62	14 44.	82 132	- 1 7.4	8 67	9 29	502 1025	2.82 3.97	1054 35	5 19	ND 8	1 39	220 52	1 19	28 17	2 21	39 59	7.14 .49	.030 .096	2 40	7 61	2.37 .88	55 180	.01 .07	4 32	.33 1.71	.01 .06	.02	1 13	1 510		· ·

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•	SANPLE#	00 1911	CU PPN	PB PPM	ZN PPH	ag Prn	NI PPN	CO PPM	nn. Pph	FE 2	AS PPN	U PPN	au PPn	TH PPM	SR PPN	CD PPN	58 FPN	BI PPN	V Pfn	CA Z	Р 2	LA PP N	CR PPN	116 2	BA PPM	TI 2	B PPM	AL Z	NA Z	K Z	N PPN	AU r PP b			ł
	R 1449 R 1450 R 1451 R 1452	1 1 6 1	27 28 446 106	4 8 382 15	34 43 5195 87	.1 .1 1.4 .1	5 6 10 15	6 9 19 17	495 630 1315 556	2.49 4.07 7.71 5.81	89 5810 967 26	5 5 5 5	ND ND ND	1 1 1 1	503 265 29 126	1 1 18 1	2 435 2 2	2 5 5 3	34 29 76 84	16.01 7.86 .70 1.53	.013 .018 .049 .163	2 2 4 5	5 5 14 13	6.44 2.45 2.20 1.18	23 19 26 22	.01 .01 .01 .13	11 4 7 11	.35 .43 3.31 3.79	.01 .01 .01 .19	.02 .03 .09 .05	1 1 1	7 1 200 4			. (

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Quartz Feldspar Porphyry and Feldspar Porphyry Sandstone, Arenaceous Siltstone, etc. Argillite and Graphitic Argillite Quartz veins 1 tetc. Talus, Bluffs -----1 1 1 Black graphitic, argillite gouge zone 1 Scale 1:100 METRES

Geologic contact with dip Fault with dip O Survey Point

---- Trail

GEOLOGICAL BRANCH ASSESSMENT REPORT



Siliceous bedded?zone ~280% 30°S. Py, Aspcf to Adit area

- (7/1-) 30--

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



SOUTHERN GOLD RESOURCES LTD.

MAD PROSPECT

GEOLOGICAL SKETCH-ADIT AREA

CLINTON MINING DIVISION

Vork By -	TOM E. LISLE	N.T.S.	92 0/1
rawn by	RAM N. GOPAL	Date	SEPT. 1987



						REJECT REASSAY								REJECT REASSAY		
SAMPLE Nos.	TYPE	WIDTH A	u(OPT) As	(ppm) Ag(OPT) Hg(p	pb) INCLUDING	SAMPLE No	s. TYPE	WIDTH	AU(OPT)	As(ppm)	Ag (OPT)	Hg(ppb)	NATIVE AU		
87-1301	(Horizontal channel	1.0 metres	0.079 1	3 550 0.	.05	260	87-1321	Channel	1.00m	0.085	28 269	0.11	750			
1302	D. 11	1.0 m	0.044 1	1 680 0.	.04 3	10	1322	23	1.70 m	0.195	30 090	0.24	1600	0.176		
1303	17 17	1.0 m	0.095 1	8 067 0.	.41 12	200	1324	Horizontal channel	0,75 m.	0.060	11 624	0.05	900			
1305	11 11	1.0m	0.075	8 367 0.	.05 3	20	1326	Horizontal channel	1.0 m	0.017	4 835	0.02	420			
1306	21. 0	0.5m	0.178 2	9 055 0.	. 21 6	40 0.266	1327	er – 0	1.0 m	0.065	14 560	0.08	820			–
1307	K n n	1.5 m	0.033 2	7 524 0.	. 02 2	250	1328	11 II II	1.0 m	0.044	9 076	0.04	410			
1308		1.0 m	0.021 1	0 344 0.	.01 3	160 180	1329		1.0 m	0.004	1370	0.01	220			
1310	Vertical channel	1.1 m	0.176 2	9 046 0.	.08 2	260 0.187	1330	General select - Adit	Select	0.078	16 348	0.26	1 000			
1311	× " "	0.70 m	0.151 2	29604 0.	. 12 30	00 0.202	1336	Vertical channel	0.60 m	0.037	10 879	0.14	1 200			
1312	Horizontal channel	2.0 m	0.256 2	29 582 0.	.06 4	60 0.180	1337	11 11 11 10	0.40 m	0.186	9 4 4 6	0.05	1 000			
1348*	11 11	1.0m ±	0.137 1	6 082 0.	087 1	40	1350**	i chip	1.00m	(3)	115	(0.1)	150			
1349 *	Vertical chip	0.90m ±	0.048 1	2 703 0.	. 023 2	210	1339	Vertical chip	0.50 m	0.001	441	0.02	360			N
								Select	~0.75m	0.001	196	0.02	300			T
1313	Horizontal channel	1.00 m	0.003	822 0.	.01	260										
1314	Channel	1.00 m	0.007	1979 0.	.01 4	180			10.000							
1315		1.00 m	0.044	9 529 0.	. 15 1 8	800	1341	- channel	10 m	0.090	18399	0.14	880		H F	
1317	15	1.00 m	0.047 10	0 209 0.	.22 15	900	1342	Vertical channel	1.0 m	0.075	5 529	0.10	520		UA	1 4 1
1318	T.	1.90 m	0.054 1	6 542 0.	.10	810	1344	in	~1.0 m	0.050	19 181	0.04	380		ZC	*
1319	11	1.00 m	0.012	1 152 0.	.01 .	450	1345	<i>0</i> (1	1.0 m	0.100	29 326	0.08	840		A A	
1320	Select	±0.10 m	0.098	52 1,	.32 33	300										and the second s
/ / /	Areo	/ of B	* Assays For con	reported for mporison to 0 1347 : (6250 1348 : (4705 1349 : (1660 A 5 , Sli	following so OPT gold & OP Du) , (1:2 Ag Au) , (30 Ag Au) , (0:8 Ag	mples are conve or silver)))) a n d	alus	**Assays for Sample 1350	are shown in br	ackets for	Au (ppb) an	1350 1336 1337 338	(3ppb) 037 0.186	SC NO	T I N I N I N I N I N I N I N I N I N I	D RESCHERCES LTD.
								1	/						MAD PRO	SPECT
									5	ample 1320 Adit - cf to 8	- on bluff. 3-T-25	s high abo	ve	S	KETCH OF	ADIT AREA
				0	1. 1.10	0			c	amples 173	9 & 1210 -	98 164	meteor		ASSAY	PLAN
	0		5	Sca	ite 1:10	10		15	5	outh of Sar	mple 1336		merres		CLINTON MINH	NG DIVISION
				1	METRES							1		Work by !	T. E. LISLE	N T.S. 92.0/1
														Drawn by	R N. GOPAL	FIGURE 3e









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FIGURE 4b



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Py -50 W 40 11+00 N-C. 43 56 Cutcrop Δ Strong qtz alt. BASE LINE 10+00 Nmm Fault or shear -1+50W 75 🎘 -0+20 W Δ Strike & dip Vein Å Δ Highly alt. intrusive ? ill. TTTTT Scarpment 9+00N -V.strong Q-carb. ✓, △ Samples - Rock Chip, Talus Fine 22 rock Gulley , hi altered Limonitic. Sandstone Sediments Grey-green Siltstone 10+00N 14 8+00 N -Calcite (vein Quartz-Feldspar-Porphyry 127 Float 67 68 Breccia sandstone 2 Sandstone-siltstone, etc SL. Shear (1348°/90°)? 65 AR 7+00 N -Ca. Vein 2 Prominent limonitie Strong calcite veining siltstone Δ MINS bluff Saddle sheared Ca. vein 55 Mads Δ ² Minor Qtz fracture 6+00 N -SCALE 1:5000 50 100 200 Feldspar, hornblende & porphyry # /3⁹6 Interbedded sandstone & siltstone 4 1395 4 1378 METRES Δ * 5+00 N-1401 - 37 SOUTHERN GOLD RESOURCES LTD. 36 13.99 Coorse (pebbly NORTH VANCOUVER, BRITISH COLUMBIA Weak limonite Siltstone 1793 TITI Congl? 5+50 W - 9+50 W-Gen. arenite 1,1 x MAD PROSPECT good o/c. Limoniticlocal strong Calcite veins ESSIO 1375 2 Py **GEOLOGICAL SKETCH** Conglomerate Bleached 2 011 4+50 MADSON CREEK AREA ¹ See Details-Fig. 5d for samples 1375-1378, 1380,1392-1396, 1399-1404 T.E. LISLE CLINTON MINING DIVISION ≿ T. E. LISLE Work by N. T. S. : 92 0/1 8 - 5+00N Drawn by: R. N. GOPAL GINE Date SEPT. 1987 ź FIGURE 5c

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