

87-198-15835

4/88

DRILLING AND GEOLOGICAL REPORT

SPRAY CLAIM GROUP

SPRAY 1,2: RECORD NO'S 3129, 3130
FOAM 1,2,3 RECORD NO'S 3205, 3270, 3269
HOME 1,2: RECORD NO'S 3271, 3272

LILLOOET MINING DIVISION, BRITISH COLUMBIA

N.T.S. 92 I/12W.
LATITUDE: 50° 32'41"N
LONGITUDE: 121° 53'21"W.

SUMMARY REPORT

ON THE

SPRAY CREEK GOLD PROJECT B.C.

OF

SOUTHERN GOLD RESOURCES LTD.

BY

REBAGLIATI GEOLOGICAL CONSULTING LTD.

15,835

GEOLOGICAL BRANCH
ASSESSMENT REPORT

Owner: G. McKillop
Operator: Southern Gold Resources Ltd.

FILMED

for:
MIRAMAR ENERGY CORPORATION.
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SUMMARY AND CONCLUSIONS

The Spray Creek gold property lies within the Lillooet placer gold district. Gold on the property was first discovered in quartz veins by conventional prospecting in the 1960's. This occurrence was subsequently rediscovered as a result of regional multielement geochemistry undertaken during porphyry molybdenum exploration in 1978.

In 1981, Duval International Corporation drilled four holes in the Spray Creek area to test porphyry molybdenum mineralization associated with two porphyritic quartz diorite intrusions. Holes CH81-1 and CH81-2 cut low grade porphyry mineralization. Holes CH81-3 and CH81-4, drilled within coincident gold, arsenic and molybdenum soil anomalies, cut potentially significant gold intersections with hole CH81-3 returning 3.0 m of 2100 ppb gold (0.061 oz/ton) and hole CH81-4 assaying 3670 ppb gold (0.107 oz/ton) across 21 metres.

In September and October of 1986, Southern Gold Resources Ltd. undertook investigative geological examinations and a 6-hole, 264 m diamond drilling program to substantiate Duval's results and to ascertain the characteristics of the gold-bearing structure.

The surface geological work determined that a series of white quartz veins cross-cut porphyry molybdenum mineralization which is hosted by porphyritic quartz diorite and by enclosing biotite hornfelsed sediments. The quartz veins are widely distributed throughout Duval's coincident gold, arsenic and molybdenum soil geochemical anomalies. The veins range from 0.1 m to 1.6 m thick, frequently branch and have consistent east-southeasterly strikes (90° - 130°) and moderate to steep northerly dips. Chip samples of surface exposures of these veins demonstrated that some contain anomalous concentrations of gold in spite of strong surface oxidation.

The 1986 Phase I diamond drilling program returned potentially significant intersections from holes 86-1, 86-4 and 86-5, where 1.75 m, 1.01 m and 0.88 m intervals contained 3200, 3300 and 10270 ppb gold respectively, substantiating that appreciable gold concentrations exist within the core of porphyry molybdenum mineralization hosted by the porphyritic quartz diorite intrusion. The gold mineralization is associated with a set of late, cross cutting, white

quartz veins and possibly with an earlier set of grey coloured quartz veins. Continuity of the veins and gold mineralization within the veins has not been established.

Additional exploration comprising extensive systematic rock and talus fines (soil) sampling followed, on a success-contingent basis, by diamond drilling, is warranted to evaluate the auriferous mineral zones on the Spray Creek property. A two-stage \$252,000 program is proposed.

INTRODUCTION

In September 1986, Rebagliati Geological Consulting Ltd. was commissioned by S. Quin, Vice-President of Southern Gold Resources Ltd., to undertake a geological investigation in conjunction with a Phase I diamond drilling program on the Company's Spray Creek gold property situated south of Lillooet, British Columbia and to make an appraisal of the results.

Work in the district dates back to the 1860's with the discovery of placer gold on gravel bars along the Fraser River below Lillooet. The Spray Creek area was staked in the 1960's to cover auriferous quartz veins hosted by gossanous porphyritic quartz diorite and gossanous biotite hornfelsed sediments. Other than modest hand trenching on a few veins, little work was apparently undertaken. During the period 1978 to 1981, Duval International Corporation staked the Spray Creek area to cover silt samples anomalous in molybdenum, arsenic and gold. A soil (talus fines) geochemical survey outlined a 500 x 1000 m gold, arsenic and molybdenum anomaly situated over a porphyritic quartz diorite intrusion and the immediately-enclosing hornfelsed sediments. Four diamond drill holes were sunk by Duval to investigate the porphyry molybdenum potential of two intrusions. All holes intersected typical porphyry-type quartz stockwork mineralization throughout their lengths. Grades averaged in the order of 200 to 300 ppm Mo. Fifteen metre composite samples were checked for gold. Hole CH81-3 returned a three-metre interval grading 2100 ppb gold and hole CH81-4 returned 21 m grading 3670 ppb gold, including a 3 m interval grading 7860 ppb gold (McKillop 1981).

Other than one-day property examinations made by geologists from other companies, little exploration of consequence has been undertaken on the property since Duval's work. A small reconnaissance soil survey undertaken by P. Christopher, P. Eng., in 1985 returned values anomalous in gold and arsenic. This anomaly has not been re-examined.

This report is based upon a study of all available data, including government publications, private company reports and field examinations by the writer conducted concurrently with the supervision of the diamond drilling program during the period September 21 to October 12, 1986.

LOCATION AND ACCESS

The Spray property is situated 6 km west of the Fraser River and 16 km south-southwest of the village of Lillooet, in the Lillooet Mining Division. It is centered at 50° 32'N latitude, 121° 53'W longitude in south-central British Columbia (Fig. 1).

Lillooet, located on the British Columbia Railway main line, is a regional supply centre. Driving time from Lillooet to Vancouver, via Highway 12 and the TransCanada Highway or alternately via the Duffy Lake road and Highway 99, is approximately 4.5 hours.

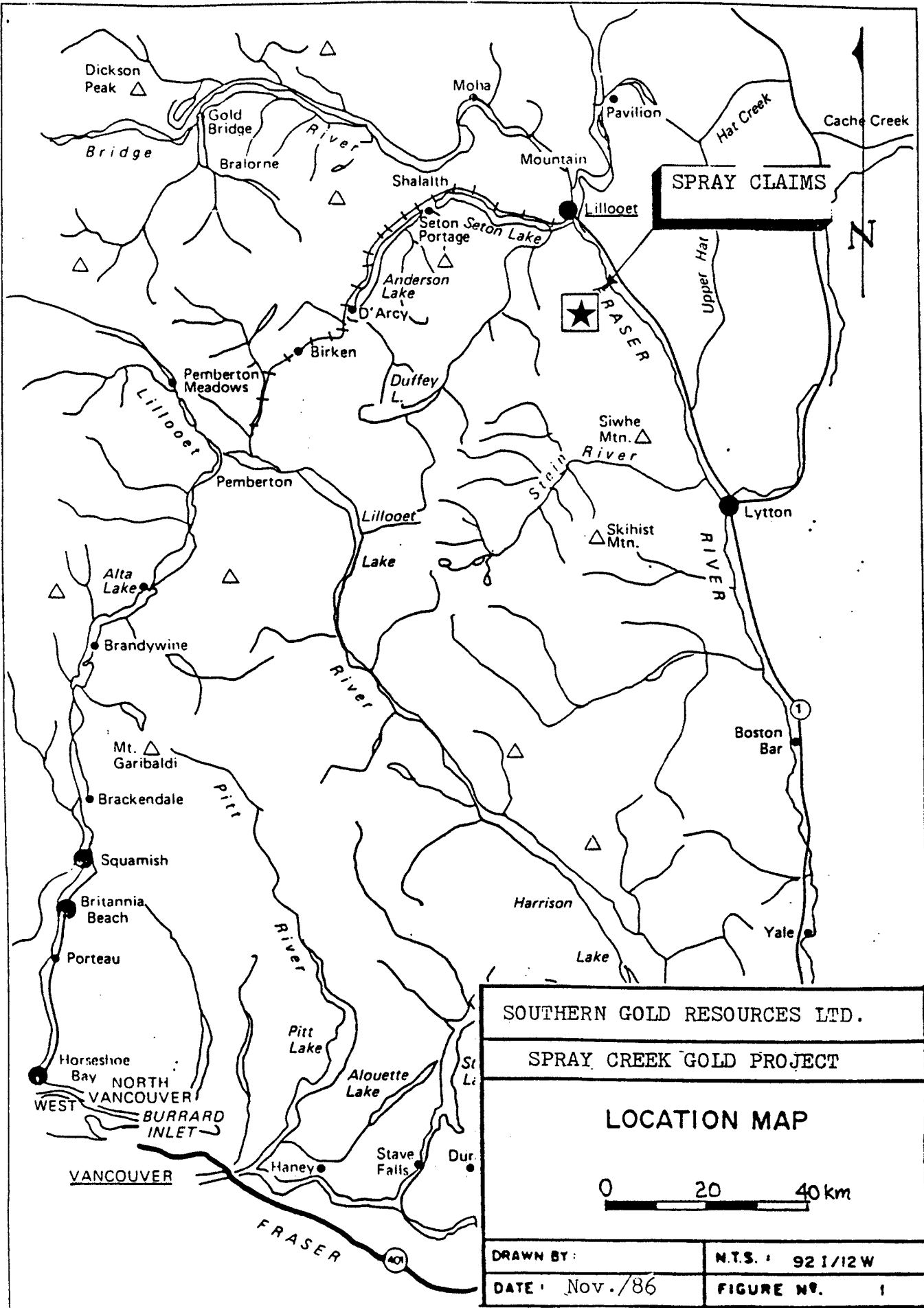
Access to the claims is by helicopter. Utilizing a Bell 206B helicopter, average flight time from the Lillooet airfield to the area drilled is 0.3 hours.

There is currently no road access to the claims. Road access could be constructed from the Texas Creek-Molybdenum Creek road with considerable difficulty. Precipitous cliffs at lower elevations, avalanche shoots and considerable outcrop at higher elevations represent major obstacles to road construction. Construction costs of a road built to logging road standards is estimated at \$85,000/km.

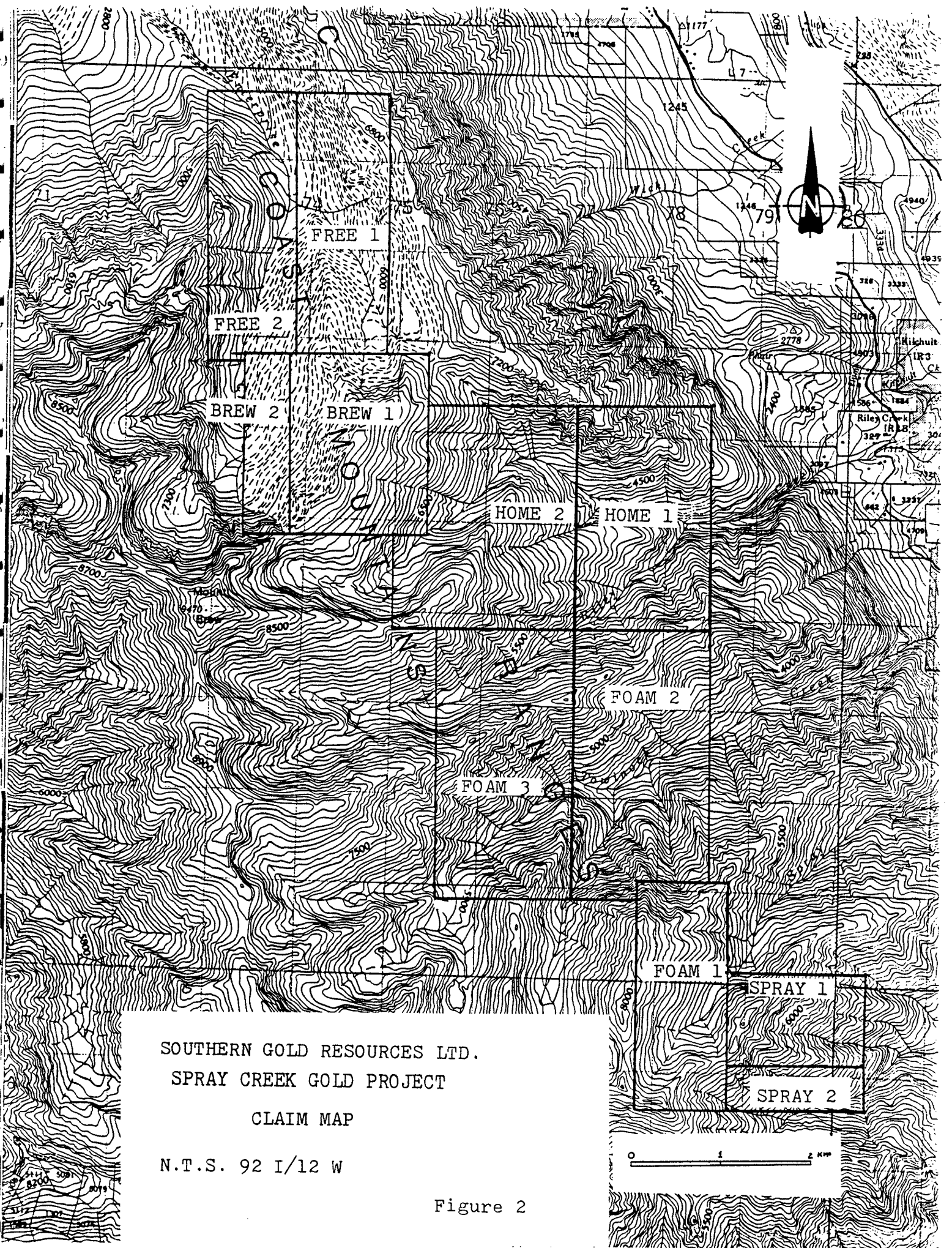
The area experiences light to moderate rainfall in the fall and early spring. Summers are hot and dry. Above 2000 m the area is virtually devoid of trees with variably thick stands of jack pine and spruce occurring at lower elevations.

CLAIMS

The property is comprised of 11 Modified Grid claims totalling 130 units. The writer examined only the Legal Corner Posts for the Spray 1 and Spray 2 claims and can pass no opinion on the manner of staking, nor can he verify the position of the claims as depicted on the accompanying plan (Fig. 2). The following information was obtained from government and company records.



SOUTHERN GOLD RESOURCES LTD.	
SPRAY CREEK GOLD PROJECT	
LOCATION MAP	
0 20 40 km	
DRAWN BY:	N.T.S. : 92 I/12 W
DATE: Nov./86	FIGURE NO. 1



SOUTHERN GOLD RESOURCES LTD.
SPRAY CREEK GOLD PROJECT
CLAIM MAP

N.T.S. 92 I/12 W

Figure 2

<u>Claim Name</u>	<u>Record *</u>	<u>Tag #</u>	<u>Units</u>	<u>Staking Date</u>	<u>Expiry Date</u>
SPRAY 1	3129	97592	6	April 9, 1985	April 10, 1988
SPRAY 2	3130	97591	3	April 9, 1985	April 10, 1988
FOAM 1	3205	66626	10	May 27, 1985	June 3, 1987
FOAM 2	3270	81052	18	July 2, 1985	July 5, 1987
FOAM 3	3269	81053	18	July 2, 1985	July 5, 1987
HOME 1	3271	81054	15	July 2, 1985	July 5, 1987
HOME 2	3272	81055	20	July 2, 1985	July 5, 1987
BREW 1	3132	72825	12	April 9, 1985	April 10, 1988
BREW 2	3133	72824	4	April 9, 1985	April 10, 1988
FREE 1	3273	81056	12	July 2, 1985	July 5, 1987
FREE 2	3274	81057	12	July 2, 1985	July 5, 1987

EXPLORATION HISTORY

Mining in the Lillooet district began in the 1860's with the discovery of placer gold on gravel bars along the Fraser River below Lillooet. Placer gold was subsequently mined from the Bridge River and Cayoosh Creek.

The Spray Creek area was staked in the 1960's to cover auriferous quartz veins hosted by gossanous porphyritic quartz diorite and gossanous biotite hornfelsed sediments. Other than limited hand trenching, little exploration was apparently undertaken.

In the late 1970's and early 1980's a number of companies conducted regional reconnaissance stream sediment surveys through the area. This work led to the staking of claims to cover base and precious metal anomalies in the Enterprise, Riley and Spray Creek drainages. Duval International Corporation explored the Spray Creek region during the period 1978 - 1983. A soil (talus fines) geochemical survey by Duval, on ground now covered by the Spray claims, identified a 500 m x 1000 m gold, arsenic and molybdenum anomaly centered over a porphyritic quartz diorite intrusion.

In 1981 Duval sunk four diamond drill holes to test two molybdenum targets. No record is available for the location of the "North Zone" where holes CH81-1 and

CH81-2 were drilled. These holes averaged approximately 250 ppm Mo. No gold values are reported but are assumed to be low. The molybdenum (gold, arsenic) anomaly was tested by holes CH81-3 and CH81-4 (Fig. 3). Hole CH81-3 intersected 3.0 m grading 2100 ppb gold and hole CH81-4 cut 3670 ppb gold across 21 m, including 3.0 m of 7860 ppb gold. Molybdenum values were in the order of 220 ppm. Other than a short prospecting program in 1983 in the Riley, Towinock and Spray Creek drainages to assess the area's gold potential, no follow-up of the gold intersections in holes CH81-3 and CH81-4 was undertaken.

In April of 1985, on the abandonment of the Duval Claims, G. McKillop, a former Duval geologist, staked the Spray and Brew claim blocks.

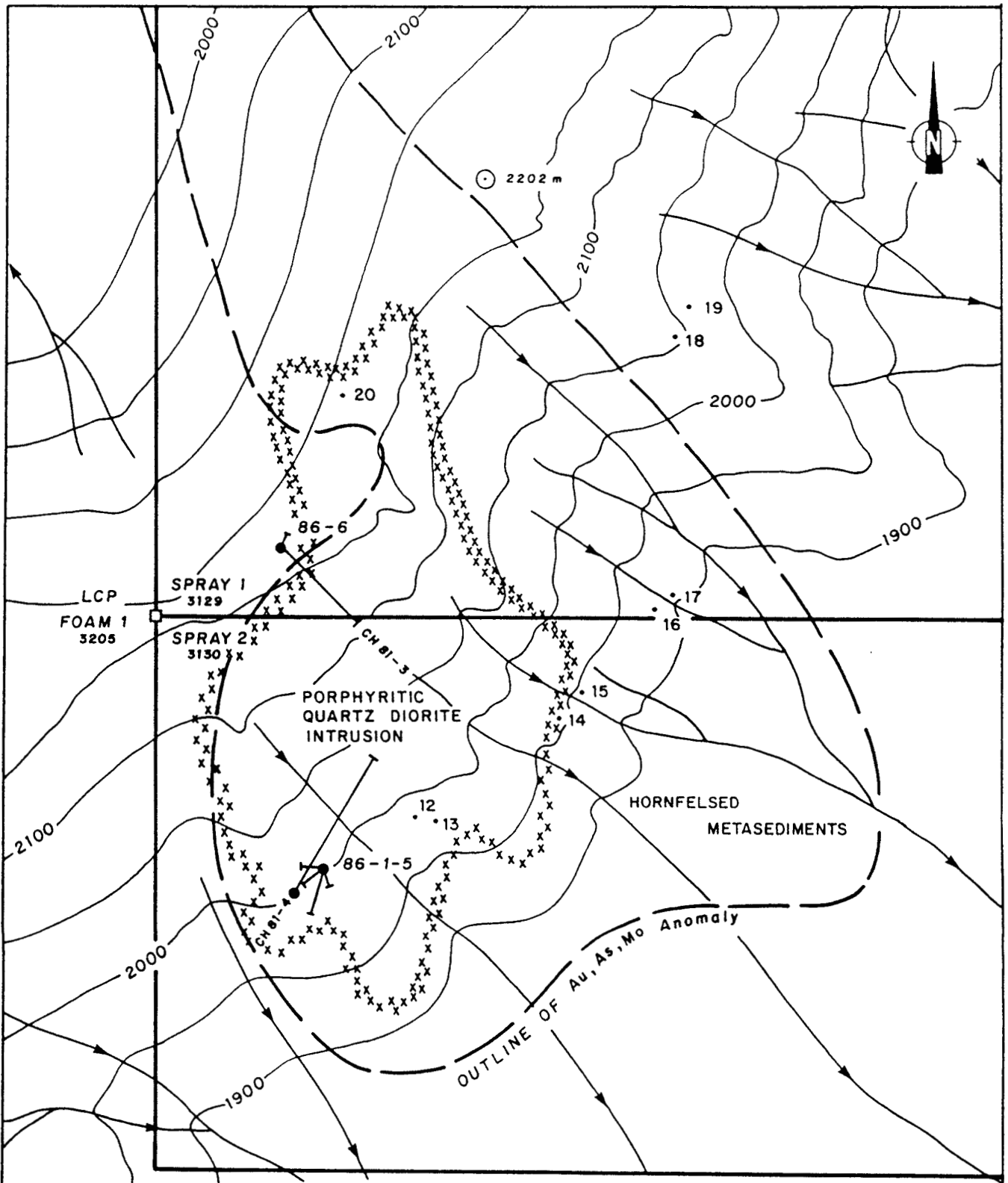
In 1985, P. Christopher, P. Eng., collected 26 soil (talus fines) samples from the Brew 1 and 2 claims. Many of these samples returned anomalous gold and arsenic concentrations. No additional work has since been undertaken on the Brew claims.

REGIONAL GEOLOGICAL SETTING

Geological Survey of Canada maps indicate that the claims are underlain by Jurassic-Cretaceous Relay Mountain Group Sediments, comprising argillites, phyllites, schists and minor volcanics. The Marshall Creek Fault, a major northwest splay off the Fraser River Fault, passes northeast of the property and separates the Relay Mountain Group from rocks of the Pre-Jurassic Bridge River Complex. West of the property, the Phair Creek Thrust Fault has superimposed Bridge River Group rocks on Relay Mountain Group rocks.

PROPERTY GEOLOGY AND MINERALIZATION

The Spray claims are underlain by a thick sequence of schistose argillites which have been intruded by a 200+m thick sill-like body of porphyritic quartz diorite. A northerly-trending swarm of vertical to steep west-dipping micro-quartz diorite/dacite dykes intrude the sediments and the porphyritic quartz diorite. These dykes may represent a late stage of a related large deep-seated porphyritic quartz diorite pluton. The micro-quartz diorite dykes are, in turn, cut by a later set of northwesterly trending andesite dykes. Mapping by McKillop (1979) elsewhere on the property has outlined several similar



Legend

- 12 Rock chip sample site + sample number
- Drill site

SOUTHERN GOLD RESOURCES LTD.

COMPILATION MAP

Geology, Geochemistry, Rock
Sample & Drill Sites

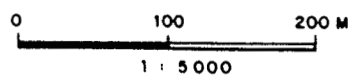


Figure 3

Modified after B. Price, 1986

To accompany Report by C.M. Rebagliati P.Eng.
Nov. 1986

porphyritic intrusions and associated dykes. Rare unaltered, narrow, basalt dykes cut all other rock types. Offsets are negligible.

The porphyritic quartz diorite and, to a lesser degree, the enclosing sediments, have undergone multiple episodes of fracturing and related quartz veining. Disseminated pyrrhotite and subordinate pyrite are ubiquitous. The molybdenite and (minor) chalcopyrite mineralization associated with the quartz stockwork veining is characteristic of porphyry-type mineral deposits. A later set of larger (5 cm to 160 cm) 90° to 130° trending pyrrhotite, pyrite, molybdenite, sphalerite and arsenopyrite-bearing quartz veins cut the porphyritic quartz diorite and the enclosing metasediments. These larger veins occur where rock and soil geochemistry (McKillop 1981) indicate enhanced gold and arsenic concentrations within the larger area of anomalous molybdenum values. The micro-quartz diorite dykes crosscut the late quartz veins and are not veined or mineralized.

An extensive biotite hornfels aureole postdating the porphyry-type mineralization, envelopes the intrusion and the sediments. Weak hornfelsing of the north-trending micro-quartz diorite dykes and the set of later crosscutting andesite dykes also suggests that a large deep-seated pluton underlies the Spray Creek claim area.

Investigative diamond drilling of the porphyry molybdenum system in 1981 by Duval Corporation led to the discovery of significant gold values in two holes. Hole CH81-3 returned 2100 ppb gold (0.061 ounces/ton) over 3 metres and hole CH81-4 returned 3670 ppb gold (0.107 ounces/ton) over 21 metres. Duval's detailed drill logs describing the nature of the mineralization are not available. A series of easterly-trending, 70°N-dipping, branching quartz veins which range from 5 cm to 130 cm in thickness, outcrop in the area of diamond drill hole CH81-4. Similar parallel veins which occur intermittently for 600 m to the north and possibly beyond are most abundant in the porphyritic quartz diorite and the immediately-enclosing metasediments. Sulphide minerals are rarely observed as all veins are severely oxidized at surface. The veins, which display considerable and abrupt pinch and swell, are generally 10 cm to 40 cm thick with infrequent swellings up to 160 cm. Numerous branch veins splay off the dominant veins at low angles in a northwest direction and tend to have shallower dips. Although

poorly exposed, indications are that individual veins have strike and dip lengths up to 200 m. Branch veins commonly extend 10 to 30 metres from the main veins before pinching out.

Zones of intense silicification, with accompanying sericitization, in which all porphyritic textures and most quartz veinlets have been obscured, appear to parallel the late quartz veins and are thought to have formed independently of and prior to the late quartz veins.

VEIN SAMPLING

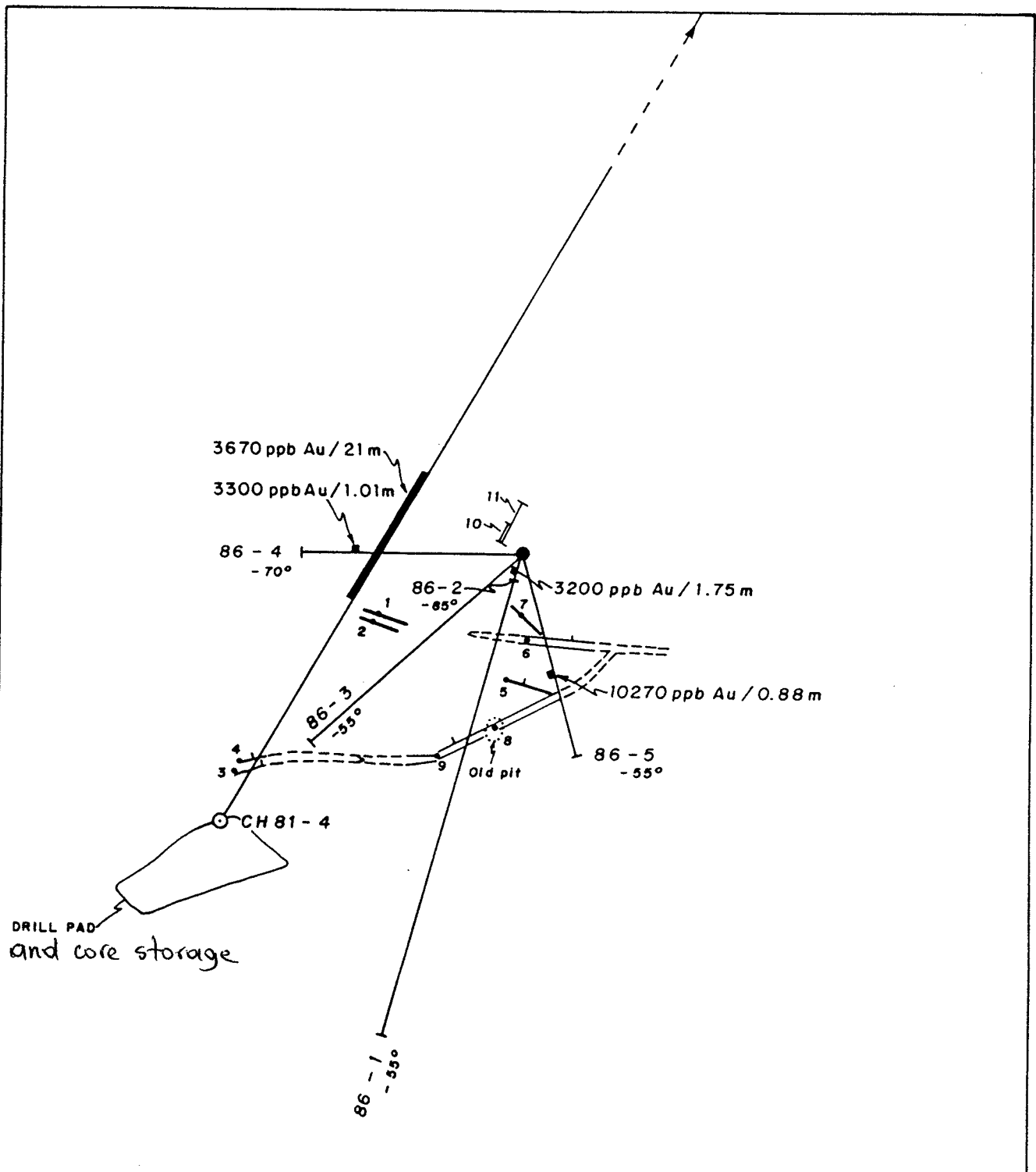
Eighteen of the late quartz veins, which are distributed across a 600 m wide area within the soil geochemical anomaly, were sampled by the writer (Figs. 3 & 4). All occur within the area of porphyry mineralization.





Surface oxidation has leached nearly all sulphide minerals from the exposed surface of the veins. Gold values in the late veins ranged from 1 to 990 ppb gold (Appendix 1). When geochemically enhanced, the veins generally contained in the order of 150 to 350 ppb gold. With the limited sampling undertaken, no discernible pattern of gold distribution across the zone of veining is evident.

Unoxidized rock from a freshly-blasted area at drill site 86-1, containing quartz stockwork veining and a few narrow late quartz veins, is geochemically enhanced in gold but is not significantly mineralized (samples 10 and 11).

DIAMOND DRILLING

A series of five short DBD diamond drill holes, comprising 264.62 metres, were sunk in a fan from a single drill site to substantiate Duval's results and to ascertain the characteristics and attitude of the auriferous structure(s). All holes intersected a fine to medium-grained biotitic porphyritic quartz diorite with irregular intervals of chlorite and silica alteration. Porphyry-type molybdenum (and copper) mineralization occurred throughout all holes. Three possible modes of gold mineralization were identified: porphyry-type grey quartz stockwork veining; pervasively silicified zones; and the late, white, branching quartz veins. Megascopic examination of the core did not identify the specific source of the gold nor explain the reported long mineralized interval



- Legend**
-  Gold intersection
 -  Large late veins
 -  Small late veins
 -  Vein sample site

SOUTHERN GOLD RESOURCES LTD.
 DIAMOND DRILL HOLE PLAN
 HOLES 86-1, 86-5 & CH 81-4

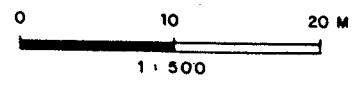


Figure 4
 To accompany Report by C.M. Rebagliati P. Eng.
 Nov. 1986

intersected in Duval's hole CH81-4. Hole 86-4, oriented to penetrate the auriferous interval in CH81-4, was the only hole to cut an arsenopyrite-bearing quartz vein. This vein was, however, cut well before the anticipated intersection of the auriferous structure and contained a weighted average of only 7.3 ppb gold across 1.50 m (samples 407, 408 from 22.66 m to 24.16 m).

Hole 86-6 was drilled to test the updip projection of the gold mineralization cut in hole CH81-3 but was abandoned, without any recovered core, at 19.21 m in highly oxidized dissaggregated (rock?) material.

DISCUSSION OF RESULTS

The rock chip samples of surface exposures of late white quartz veins and split core samples from nine similar vein intersections returned gold concentration ranging from 1 to 3300 ppb. It is apparent from both sample sets that gold is not uniformly distributed in the late veins and zoning is not indicated in the clusters of late veins which are distributed across the broad geochemical anomaly.

The closely-spaced drill holes, sunk to assess the 21 m interval of gold mineralization encountered in Duval's hole CH81-4, have demonstrated that individual veins near the Duval intersection do carry some significant concentrations of gold. Continuity of the veins and gold mineralization within the veins have not yet been established.

A second mode of gold mineralization was encountered in hole 86-5, in a 0.88 m interval from 17.68 m to 18.56 m, where typical-looking porphyritic quartz diorite containing disseminated pyrrhotite and pyrite, porphyry-type molybdenum-bearing quartz stringers, and a 13 cm thick brecciated grey quartz vein graded 10,270 ppb gold (0.289 oz/ton gold). Two similar intervals from holes 86-1 and 86-3 ran 605 ppb and 730 ppb gold respectively.

Bad ground conditions and the resulting lack of recovered core prevented the testing of the gold-bearing structure indicated in Duval's hole CH81-3.

Rebagliati Geological Consulting Ltd.

Geologically and/or geochemically significant intervals are tabulated below:

Hole	Interval (m) (m)	Length (m)	Sample No.	Sample Length (m)	ppb Gold	Description
1	17.23-18.06	0.83	101	1.0	107	late white quartz vein
	12.80-13.30	0.5	107	0.5	605 (0.018 oz/t)	chlorite/biotite altered porphyritic quartz diorite
2	6.6-7.0	0.4	204	0.4	1	late white quartz vein
	27.90-28.55	0.65	208	0.65	3	late white quartz vein
	28.95-30.70	1.75	210	1.75	3200 (0.093 oz/t)	late white quartz vein
3	12.80-13.33	0.53	308	0.53	42	late white quartz vein
	15.60-16.10	0.50	311	0.50	730 (0.021 oz/t)	grey pyrite-rich quartz vein
	21.40-22.16	0.75	316	0.75	24	late white quartz vein
4	22.66-24.12	1.46	407/408	1.50	7.3	late white quartz vein - arsenopyrite bearing
	31.18-31.68	0.5	414	0.5	1	late white quartz vein
	42.43-43.44	1.01	417	1.01	3300 (0.096 oz/t)	late white quartz vein
	44.60-46.41	1.81	420	1.86	880 (0.026 oz/t)	pyritic, quartz sericite mylonite
5	17.68-18.56	0.88	505	0.88	10 270 (0.289 oz/t)	chloritic, porphyritic quartz diorite containing a 13 cm brecciated grey quartz vein.

RECOMMENDATIONS

A two-phase, success-contingent exploration program is recommended.

Phase I

Prospecting, Geological Mapping, Rock Chip Sampling and Soil Sampling

- a) Prospect and geologically map the property to locate and define quartz veins and zones of quartz stockwork development.
- b) Sample veins at 5 to 10 metre intervals to identify possible oreshoots. Similarly, areas with extensive quartz stockwork veining require careful sampling to define gold-bearing zones similar to the one intersected in hole 86-5. In areas where residual soils or talus obscures bedrock, soil samples will be required to compliment the rock sampling program.
- c) Prospect and soil sample the area on the Brew 1 and 2 claims where reconnaissance soil sampling in 1986 by P. Christopher, P. Eng., indicated anomalous gold and arsenic concentrations.

Phase II

Diamond Drilling 1000m

- a) Diamond Drill to test the strike and dip projections of the auriferous zone(s) encountered in the 1986 drilling program - 500 m.
- b) Drill to evaluate new auriferous zones identified by the rock and soil sampling programs - 500 m.

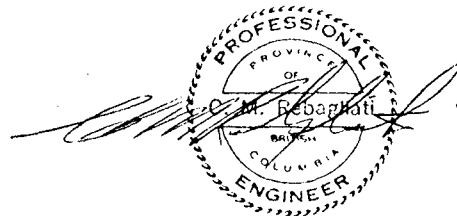
PROPOSED BUDGET

Phase I **Prospecting, Geological Mapping, Rock Sampling and Soil Sampling**

Salaries	\$ 12,000	
Accommodation, Meals and Travel	3,000	
Communication and Freight	400	
Vehicle Expenses	1,500	
Geochemical Analyses and Assays	5,000	
Reproductions and Maps	600	
Helicopter	7,000	
Technical Report	<u>2,500</u>	
Sub Total		\$ 32,000

Phase II: **Diamond Drilling.**

Diamond Drilling		
all inclusive 1000m @ \$220/m		<u>\$ 220,000</u>
TOTAL		<u><u>\$ 252,000</u></u>

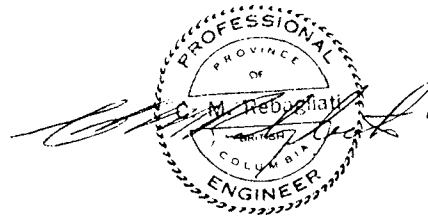


STATEMENT OF EXPENDITURES
SPRAY CREEK GOLD PROJECT - DIAMOND DRILLING PROGRAM
September - October 1986

Rebagliati Geological Consulting Ltd. Professional Services	\$ 8,224.90
Truck Rental, including mileage	1,297.59
Accommodation, Meals and Incidentals	1,795.99
Radio Rental SBX 11A 444l	300.00
Drill Site Preparation	3,706.82
Helicopter 33.1 hours @ \$521.20/hour	17,251.72
Diamond Drilling 867.53 feet @ \$20/foot	24,869.00
Summary Report - preparation, drafting and printing	<u>1,750.00</u>
	<u>\$ 60,414.56</u>

NOTE: Drilling was done by by Allan Harvey, Clinton, B.C., using a DBD helicopter transportable drill rig coring a 43 mm (1+11/16 in) diameter core.

Work was done from the 29th of September to the 10th of October, 1987, under the supervision of C.M.Rebagliatti, P.Eng., and S.Quinn, P.Eng.



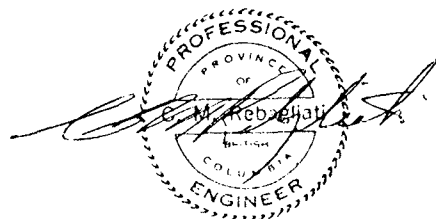
BIBLIOGRAPHY

- Christopher, P.A., Ph.D., P.Eng., and Price, B.J. 1986; Geology Report, Spray 1 and 2 Claims, for Miramar Energy Corporation.
- Duffel, S., and McTaggart, K.C.; 1952. Ashcroft map-area, British Columbia Geological Survey of Canada, Memoir 262, 122p.
- Hollister, V.F.; 1979. Preliminary Report on the Geology and Geochemistry of the Tow 1 and 2 Claim Groups. Assessment Report 7211.
- McKillop, G.R.; 1979. Report on the Geology and Geochemistry of the Tow 1, 2, 3 and 4 Claims. Assessment Report 7569.
- 1980. Report on Geological and Geochemical Surveys and Physical Work Conducted on the Tow 1, 2, 3 and 4 Claims. Assessment Report 8347.
 - 1981. Report on Diamond Drilling on the Tow 1 Claim. Assessment Report 9405.
 - 1981. Report on Diamond Drilling on the Tow 2 Claim. Assessment Report 9427.
 - 1981. Copper Harrison Project, Brief Summary of 1981 work and results - Duval Corporation, Inter-office Memorandum.
 - 1983. Copper Harrison Project, 1983 Summary. Duval Corporation Inter-office Memorandum.
- Monger, J.W., 1985; Structural Evolution of the Southwest Intermontane Belt, Ashcroft and Hope Map Areas, British Columbia, in: Current Research, Part A, G.S.C. Paper 85-1A, p. 349-358.
- Price, B.J., 1986; Geological Report, Brew 1 and Brew 2 Claims Lillooet Mining Division, British Columbia.
- Roddick, J.A. and Hutchison, W.W., 1973. Pemberton (East Half) map area, British Columbia. Geological Survey of Canada, Paper 73-17, 21p.

CERTIFICATE OF QUALIFICATIONS

I, Clarence Mark Rebagliati, of 3536 West 15th Avenue, Vancouver, B.C., hereby certify that:

1. I am a consulting Geological Engineer with offices at 3536 West 15th Avenue, Vancouver, B.C.
2. I am a graduate of the Provincial Institute of Mining, Haileyburg, Ontario (Mining Technology, 1966).
3. I am a graduate of the Michigan Technological University, Houghton, Michigan, U.S.A. (B.Sc., Geological Engineering, 1969).
4. I have practiced my profession continuously since graduation.
5. I am a member in good standing of the Association of Professional Engineers of British Columbia.
6. The foregoing report is based on:
 - a) A study of all available company and government reports; and
 - b) My personal examination of the property during the period September 22 to October 12, 1986.
7. I have not directly or indirectly received or expect to receive any interests, direct or indirect, in the property of Southern Gold Resources Ltd., or any affiliate, or beneficially own, directly or indirectly, any securities of Southern Gold Resources Ltd., or any affiliate.
8. I consent to the inclusion of this report in a prospectus or statement of material facts.



APPENDIX I

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

DATE RECEIVED OCT 6 1986

DATE REPORTS MAILED Oct 9/86

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : P1-ROCKS P2-3 CORES

Au# - 10 GM. IONIZED. HOT AQUA REGIA LEACHED. MIBK EXTRACTION. AA ANALYSIS.

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

SOUTHERN GOLD RESOURCES FILE# 86-3061

PAGE# 1

SAMPLE	Au#
<i>Chip Samples</i>	<i>ppb</i>
1 Quartz Vein, 8cm, 116°-68N	1
2 Quartz Vein, 22cm, 115°-70N	260
3 Quartz Vein, 20-45cm, 106°-55-73°N	7
4 Quartz Vein, 6-15cm, 106°-62°N	1
5 Quartz Vein, 18cm, 127°-66N	990
6 Banded Quartz Vein, 46-100cm, 111°-73°N	1
7 Quartz Vein, 8cm, 135°-76°NE	1
8 Quartz Vein, 110cm, 81°, -57°N	1
9 Quartz Vein, 100cm, 81°-57°N	51
10 Porphyritic quartz diorite, quartz stringers with 3cm quartz vein, 114°-80N, 20m sample min arsenopyrite	190
11 Porphyric quartz diorite, quartz stringers with 10cm quartz vein, 110°-74°N	37

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PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED OCT 14 1986
DATE REPORTS MAILED Oct 18/86

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : P1-ROCKS P2-4 CORES
Au* - 10 GM. IGNITED, HOT AQUA REGIA LEACHED, NIBK EXTRACTION. AA ANALYSIS.

ASSAYER Dean Toye DEAN TOYE . CERTIFIED B.C. ASSAYER.

SOUTHERN GOLD PROJECT SPRAY CREEK FILE# 86-3197 PAGE# 1

SAMPLE	Au*
	ppb
12 Quartz Vein, 18cm, 127°-84N	29
13 Composite of 4 closely spaced quartz veins 9-23cm 100°-70°N	142
14 Quartz Vein, 15cm, 130°-77N	9
15 Composite of 2 quartz veins 10+17cm, 5% pyrite	9
16 Quartz Vein, 20-54cm, 109°-56°N	137
17 Quartz Vein, 10-40cm, 114°-85°N	360
18 Quartz Vein, 9cm, 115°-74°N	6
19 Quartz Vein - loose block 46x100cm	4
20 Quartz Vein, 35cm,	72

SAMPLE	Au*
<i>DRILL CORE</i>	oob
101	107
102	4
103	21
104	2
105	80
106	139
107	605
108	41
109	4
110	119
111	7
112	142
113	20
114	66
115	93
116	36
117	175
118	35
119	39
120	9
121	12
122	2
123	1
124	5
125	2
126	5
127	20
128	5
129	10
130	4
131	12
132	148
133	155
134	24
201	3
202	14

SAMPLE	Au*
	opp
203	5
204	1
205	3
206	3
207	5
208	3
209	31
210	3200
211	139

SAMPLE	Au*
	opb
135	88
136	2
137	1
138	12
139	4
140	3
141	31
142	10
143	7
212	3
213	1
214	4
215	1
216	1
217	1
218	1
219	10
220	6
221	4
301	18
302	3
303	1
304	1
305	2
306	4
307	3
308	38
308A	46
309	72
310	16
311	730
312	11
313	4
314	13
315	27
316	24

SAMPLE	Au*
	ppb
317	8
318	11
319	15
320	9
321	34
322	20
323	175
401	2
402	1
403	4
404	2
405	1
406	12
407	1
408	20
409	17
409A 410	1
411	6
411A 412	2
413	6
413A	4
414	1
415	9
416	17
417	3300
418	290
419	96
420	880
421	27
422	11
501	1
502	2
503	56
504	19
505	10270
506	79

SOUTHERN GOLD PROJECT SPRAY CREEK FILE# 86-3197

PAGE# 4

SAMPLE

Au*

opp

507

20

509

22

APPENDIX II

DIAMOND DRILL LOG

PROPERTY: Spray Creek HOLE No.: 86-1 CLAIM: _____

HOLE SURVEY		
FOOTAGE	BEARING	DIP
75 m		56

COLLAR SURVEY :

LATITUDE: _____ SECTION: _____
 DEPARTURE: _____ BEARING: 195°
 ELEVATION: 1997m DIP: -55

DATE BEGUN: Sept 29/86 SHEET No.: 1
 DATE FINISHED: Oct 3/86 LOGGED BY: C.M. Rebagliati
 TOTAL DEPTH: 75.30m DATE: Oct 3, 1986
 CORE SIZE: DBD 43mm
(1 1/16")

metres

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES							
FROM	TO														
0	1.33	Casing to bedrock													
1.83	2.44	Casing in bedrock													
2.44	11.28	Porphyritic Quartz Diorite: 1-3mm corroded and fractured plagioclase phenocrysts are set in a fine-grained groundmass of feldspar, brown biotite and quartz. Colour varies from grey to greenish grey as chlorite replaces biotite in abundance. The brown biotite appears to be secondary (alteration) after hornblende and pyroxene and is at times sufficiently abundant to impart a brownish hue. Chloritic alteration of the interstitial brown biotite is common and highly variable. The rock has undergone several	121	2.44	4.44	2.0	1.6m		12						
			122	4.44	6.44	2.0			2						
			123	6.44	8.44	2.0			1						
			124	8.44	9.25	0.81			5						
			109	9.25	11.25	2.0			4						

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES						
FROM	TO													
		Late white quartz (calcite) veins occur at 3.66m (10cm thick) and 7.32m (4cm).												
		The biotite, porphyritic quartz diorite continues to the end of the hole. The following subdivisions reflect the types and intensity of alteration rather than a change in lithology.												
11.28	12.87	Intensely silicified rock with 5% disseminated pyrrhotite. Original porphyry textures have been obliterated. Indistinct siliceous fractures carry appreciable pyrrhotite and often molybdenite. Minor but frequent chalcocyanite grains occur within the pyrrhotite. Sericite imparts a pale greenish hue. A late 5cm quartz vein occurs at 11.74m.	108	11.25	12.80	1.55			41					
12.87	14.12	Alternating biotite/chlorite alteration with nearly complete obliteration of original porphyritic texture in the quartz diorite. Less quartz veining and lower sulphide content than the interval 2.44 to 11.28m above. Late quartz veins at 13.57m (7cm) and 14.02m.	107 106 105	12.80 13.30 13.80	13.30 13.80 15.85	0.5 0.5 2.05			605 139 80					

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES						
FROM	TO													
		(10cm). latter vein has a sulphide-rich brecciated upper contact. Sulphides present py > po > cpy > MoS ₂												
14.12	15.55	Intensely silicified (sericitic) rock similar to 11.28-12.87m interval. Indistinct quartz veins relatively rich in MoS ₂												
15.55	17.23	Chloritic / biotitic quartz diorite - porphyritic texture is variably preserved. Feldspar is variably saussuritized. Abundance of quartz veinlets. Generally similar to interval 2.44 to 11.28 m: late quartz vein at 17.07 (7cm)	104	15.85	16.57	0.72			2					
			103	16.57	17.07	0.5			21					
17.23	18.06	Major late ^{white} quartz vein - minor muscovite and calcite - low sulphide content. Hanging wall at 65° to C.A. (83cm thick) Minor Sph, po, py + cpy.	101	17.07	18.07	1.0	0.82		107					
18.06	19.24	Chloritic to biotitic quartz diorite - porphyritic texture variably preserved. Similar to (15.85 to 17.23). Late quartz veins at 18.48 m (6cm), 26.75 (21cm), 28.43 (13cm), 30.26 m (10cm), 30.56m (7cm).	102	18.07	18.57	0.5			4					
			117	18.57	20.73	2.16			175					
			135	20.73	22.73	2.0			88					
			136	22.73	24.13	2.0			2					

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES					
FROM	TO												
		30.89 (7cm), 31.59m (20cm), 36.06m (22cm) and	137	24.73	26.30	1.57m			1				
		48.53 (18cm).	116	26.30	26.80	0.50			36				
		20-40 quanta vesicels per metre	110	26.80	27.30	0.5			119				
		1/2 pc. py, trace chalcopyrite, significant MoS_2	111	27.30	28.60	1.30			7				
*	25.25	25.65	Fine-grained andesite dyke - biotite hornfelsed at 40° F. C.A.	112	28.60	29.10	0.5		142				
	49.24	49.50	Intensely silicified rock sericitic and chloritic	113	29.10	30.20	1.1		20				
			5% sulphide $Py > Py > MoS_2 > Cpy$.	114	30.20	31.20	1.0		66				
				115	31.20	31.70	0.5		93				
	48.80	50.4	Alternating biotitic / chloritic alteration of	118	31.70	32.0	0.5		35				
			quartz diorite porphyry - porphyritic texture	138	32.0	33.0	1.0		12				
			variably preserved.	119	33.0	33.5	0.5		39				
				139	33.5	36.08	2.59		4				
	50.4	52.74	Strongly silicified rock - sericitic, 1% sulphide,	120	36.08	36.58	0.5		9				
			only qtzs of feldspar preserved. Pyrrhotite	140	36.58	38.58	2.0		3				
			has replaced biotite.	125	47.87	49.27	1.4		2				
	52.74	59.70	Biotitic porphyritic Quartz diorite	126	49.27	49.77	0.5		5				
			White quartz vein at 56.16 (30cm)	127	49.77	50.42	0.65		20				
				128	50.42	52.74	2.32		5				
	58.70	59.94	Patchy strong silicification	141	52.74	54.74	2.0		31				
				142	54.74	56.10	1.36		10				
	59.94	67.68	Biotitic porphyritic quartz diorite - minor	129	56.10	56.60	0.5		10				
			slight intrusion of intense silicification	143	56.60	59.70	2.10		7				

DIAMOND DRILL LOG

PROPERTY: Spray Creek HOLE No.: 86-3 CLAIM: _____

HOLE SURVEY		
FOOTAGE	BEARING	DIP
43		63

COLLAR SURVEY :

LATITUDE: _____ SECTION: _____
 DEPARTURE: _____ BEARING: 228°
 ELEVATION: 1997m DIP: -55°

DATE BEGUN: Oct 5/86 SHEET No.: 1
 DATE FINISHED: Oct 7/86 LOGGED BY: C.M. Robey
 TOTAL DEPTH: 43.29m DATE: Oct. 7 1986
 CORE SIZE: DBD 43mm

Metres

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES							
FROM	TO														
0	0.76	Casing in bedrock													
0.76	11.38	Biotitic, porphyritic quartz diorite - similar to that intersected in hole 86-1 - Brownish hue imparted by brown secondary biotite. Patchy saussuritization of 1-4 mm plagioclase phenocrysts and fine-grained groundmass. Locally chloritic. Several generations of fracturing and 0.1-10mm quartz veining, which have a low sulphide content comprised of Pb , Zn , Pb , MoS_2 & trace Cu . Veining typical of porphyry systems.	301	0.76	2.83	2.07m			18						
			302	2.83	4.83	2.0			3						
			303	4.83	6.83	2.0			1						
			304	6.83	8.83	2.0			1						
			305	8.83	10.88	2.05			2						
			306	10.88	11.38	0.5			4						
11.38	12.80	Intensely silicified rock. Complete obliteration of porphyritic texture. All biotite	307	11.38	12.80	1.42			3						

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES						
FROM	TO													
		is replaced by pyrrhotite (2 1/2) and lesser py and disseminated MoS ₂												
12.80	13.33	late white quartz vein with minor calcite, muscovite pyrrhotite and pyrite Footwall contact at 45° to CA. only 26 cm of quartz recovered	308	12.80	13.33	0.53	0.40		38/46					
			309	13.33	13.83	0.50			72					
13.33	15.60	Variably silicified biotitic porphyritic quartz diorite - 20-40 quartz veins per metre. white quartz vein at 14.66 (10cm) 45°/CA	310	13.83	15.60	1.77			16					
15.60	16.10	Pyrite-rich grey quartz vein with brecciated footwall - chloritic streaks, disseminated MoS ₂ vein at 30°/CA	311	15.60	16.10	0.50			730					
16.10	21.40	Patchy biotitic / chloritic / silicified quartz diorite. Porphyritic texture virtually obliterated 1% po after biotite. white pyrite quartz vein at 18.42 (10cm). Heavily veined with sulphide-rich quartz veins.	312	16.10	17.10	1.0			11					
			313	17.10	19.10	2.0			4					
			314	19.10	20.90	1.80			13					
			315	20.90	21.40	0.50			27					
21.40	22.15	late white quartz vein - some calcite, muscovite and chlorite.	316	21.40	22.15	0.75			24					

DIAMOND DRILL LOG

PROPERTY: Spray Creek HOLE No.: 86-4 CLAIM: _____

HOLE SURVEY		
FOOTAGE	BEARING	DIP
55.0		74°

COLLAR SURVEY :

LATITUDE: _____ SECTION: _____
 DEPARTURE: _____ BEARING: 270°
 ELEVATION: 1997m DIP: -70°

DATE BEGUN: Oct. 8, 1986

SHEET No.: 1

DATE FINISHED: Oct. 9, 1986

LOGGED BY: C. M. Reber/Acti

TOTAL DEPTH: 55.49m

DATE: Oct. 9, 1986

CORE SIZE: DBD 43mm

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES							
FROM	TO														
0	1.22	Casing in bed-rock													
1.22	5.07	Variably biotitic/chloritic/sericitic porphyritic quartz diorite with multiple fractures healed with quartz stringers (40-50/m). Minor carbonate accompanies the quartz. A few pyrite-rich veinlets of Py > Po > MnS ₂ trace cpy. (Similar to that intersected in hole 86-1.) The following subdivisions refer to the type and intensity of alteration rather than a change in the original lithology.													
5.07	7.62	Intensely silicified rock. Bleached to a light grey color - contains minor carbonate and sericite. Porphyritic texture obliterated. Chlorite and	401	5.07	6.62	1.55			2						
			402	6.62	7.62	1.0			1						

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES					
FROM	TO												
		pyrrhotite have replaced all biotite - minor MoS ₂ .											
7.62	22.66	Variably biotitic / chloritic porphyritic quartz diorite similar to interval 1.22 to 5.07 above.	403	7.62	8.12	0.5			4				
		2 1/2 Pa > Py > MoS ₂ traces of Cpy.	404	8.12	9.20	1.08			2				
		white quartz veins at 7.94m (20cm) 30°/CA,	405	9.20	9.70	0.50			1				
		9.46m (25cm) latter contains heavy pyrrhotite, pyrite and chlorite 32°/PA	409	20.16	22.16	2.0			17				
			406	22.16	22.66	0.50			12				
22.66	24.12	Late white quartz vein with coarse 1-6mm grains of euhedral arsenopyrite. Very low sulphide content except for two vuggy pyrite-chlorite seams at the foot wall contact. The chloritic foot wall contact is at 29°/CA hanging wall contact at 52° to PA.	407	22.66	23.66	1.0			1				
			408	23.66	24.16	0.5			20				
24.12	31.18	Variably biotitic porphyritic quartz diorite with patchy chloritic / saussuritic / or silicious intervals. 25-40 quartz veins/10m.	410	24.16	26.16	2.0			1				
			411	26.16	28.16	2.0			6				
			412	28.16	30.16	2.0			2				
			413	30.16	31.18	1.02			6				
31.18	31.68	Late white quartz vein with pyrite, sphalerite, chlorite and calcite seams. Hanging wall 55°/CA	414	31.18	31.68	0.50			1				

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES						
FROM	TO													
31.68	33.48	Variably biotitic porphyritic quartz diorite with patchy chloritic / saussuritic / or siliceous intervals (similar to interval from 24.12 to 31.18 m) 30-40 quartz veinlets per metre	415	31.68	32.18	0.5			9					
33.48	38.52	Variably biotite hornfelsed, fine-grained, green andesite dyke with a brecciated interval of brecciated quartz veining and chloritic porphyritic quartz diorite from 33.80 m to 35.50 m.												
38.52	42.43	Biotitic porphyritic quartz diorite with patchy chloritic and strongly silicified intervals.	416	41.93	42.43	0.50			17					
42.43	43.44	Late white quartz vein with pyrite, sphalerite chlorite and calcite seams, some of which are wiggly	417	42.43	43.44	1.01			3300					
43.44	44.60	Transitional zone from biotitic porphyritic quartz diorite to pyritic quartz-sericite mylonite. Quartz stringers are progressively granulated.	418 419	43.44 43.94	43.94 44.60	0.50 0.66			290 96					

DIAMOND DRILL LOG

PROPERTY: Spray Creek HOLE No.: 86-5 CLAIM: _____

HOLE SURVEY		
FOOTAGE	BEARING	DIP

COLLAR SURVEY :

LATITUDE: _____ SECTION: _____
 DEPARTURE: _____ BEARING: 165
 ELEVATION: 1997m DIP: -55°

DATE BEGUN: Oct 9/86

SHEET No.: 1

DATE FINISHED: Oct 10/86

LOGGED BY: C.M. Rebusliati

TOTAL DEPTH: 31.40m

DATE: Oct 10, 1986

CORE SIZE: DBD 43mm

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES					
FROM	TO												
0	2.44	Casing											
2.44	7.56	Biotitic porphyritic quartz diorite cut by numerous quartz stringers bearing pyrite, pyrrhotite, minor molybdenite and traces of chalcocopyrite. Typical of porphyry style mineralization. Pyrrhotite and chlorite variably replace brown secondary biotite. Late white quartz vein at 4.66m (15cm)											
7.56	10.15	Intensely silicified interval - porphyritic texture obscured. Minor sericite and chlorite. Disseminated pyrite, pyrrhotite and molybdenite which is associated with the quartz stringers.	501	7.56	8.56	1.0			1				
			502	8.56	10.15	1.59			2				

FOOTAGE		DESCRIPTION	SAMPLE NO.	FROM	TO	WIDTH	RECOV.	SULPHIDES				
FROM	TO											
10.15	14.0	Biotitic porphyritic quartz diorite cut by numerous quartz stringers bearing pyrrhotite pyrite minor MoS_2 and trace chalcopyrite. Hanging wall contact of a 10cm quartz vein at 9.35m at 80° to CA										
14.0	28.85	Chloritic, porphyritic quartz diorite. Most of the biotite has been altered to chlorite or replaced by pyrrhotite and pyrite. 20-30 quartz veinlets per metre. Pyritic quartz veins at 16.50m (28cm) with minor chalcopyrite 30° to C.A. Brecciated quartz veins at 17.70m (13cm) at 35° to C.A. Pyrite and sphalerite at the margin of a quartz vein at 20.36m (13cm) at 31° to C.A. Coarse pyrite, chlorite, sphalerite with minor molybdenite and trace chalcopyrite in the interval from 21.40m to 22.78m in a quartz vein trending down the core.	503	16.43	16.93	0.50		56				
			504	16.93	17.68	0.75		19				
			505	17.68	18.56	0.88		10270				
			506	20.23	20.73	0.50		79				
			507	20.73	21.40	0.67		20				
			508	21.40	22.78	1.38		NS				
28.85	29.83	In intensely silicified interval - sericitic chlorite of fracture plane. low sulphide content.	509	28.85	29.85	1.0		22				

