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ASSESSMENT REPORT

DIAMOND DRILLING

MINERAL HILL PROPERTY

NTS 93 L 10 E

Omineca Mining Division British Columbia

Latitude: 54° 31' North Longitude: 126° 44' West

for

SOUTHERN CROSS GOLD INC.

2738 Westlake Avenue LOGICAL BRANCH Coquitlam, BACSSESSMENT REPORT V3C 537

by

341

RONALD C.R. ROBERTSON, F.G.A.C. ROBERTSON, WALLIS & ASSOCIATES

708 - 1155 West Pender Street

Vancouver, B.C. V6E 2P4

April, 1988

•	RECEIVED	- And
,	APR 27 1988	THE R. LANSING MICH.
	M.R. #\$	
ļ.,	VANCOUVER, B.C.	

SUB-RECORDED

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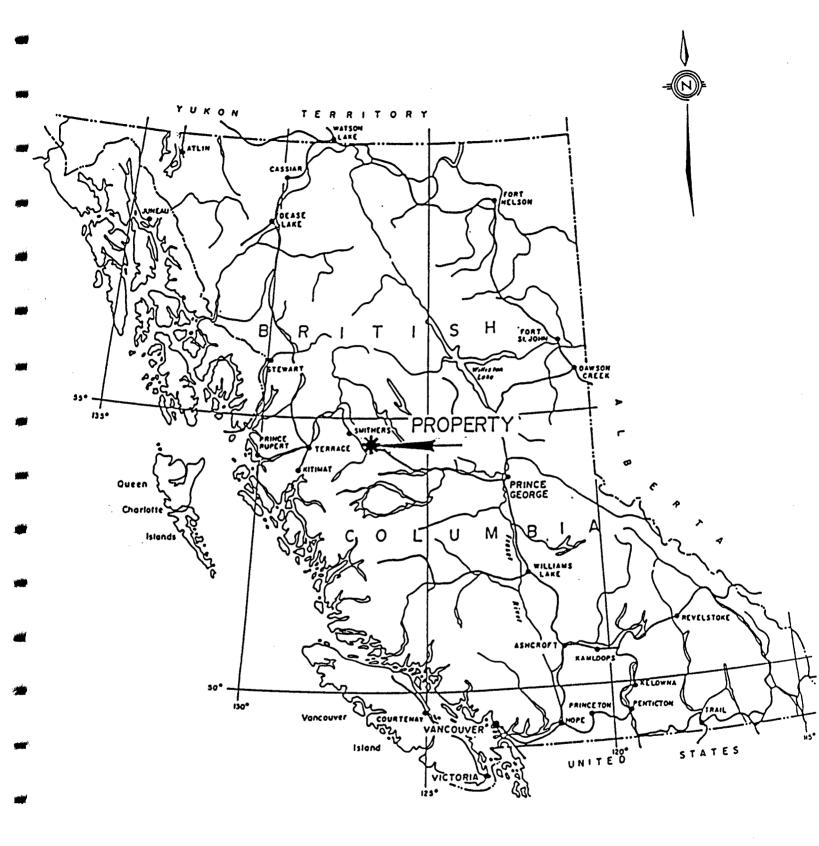
INTRODUCTION

The Mineral Hill property of Southern Cross Gold Inc. is located close to Highway 16 between Houston and Smithers in the Omineca Mining Division. The property consists of 58 claim units and 2-post mineral claims and has a long history of exploration beginning prior to 1914. Exploration in the 1960's and 1970's was directed at porphyry-style molybdenum and copper mineralization. More recently, the principal exploration target has shifted to vein or breccia-hosted precious metal mineralization.

During 1987, Southern Cross Gold Inc. completed eight diamond drill holes (NQ core) on the Mineral Hill claim (record number 206), totalling 521.8 metres. Three holes were drilled in the North, or Quartz Breccia Zone, four holes were drilled in the South, or Alaskite Zone and one hole was drilled below an old trench west of the Alaskite Zone.

LOCATION AND ACCESS

The Mineral Hill property is located approximately 14 kilometres north of Houston in north-central British Columbia, and 1 kilometre east of Highway 16 between Houston and Smithers. Geographic coordinates are 54° 31' North Latitude and 126° 44' West Longitude. Access to the area drilled in 1987 is via Highway 16 from Smithers (45 kilometres) or from Houston (20 kilometres). Smithers has daily jet service to Vancouver and is the regional centre for supplies, services and provincial government offices (mine recorder, district geologist and mine inspector). From Highway 16, a gravel road leads through property owned by G. Murphy to the Mineral Hill claims via the north end of Fishpan Lake (Figure 2). Within the property a network of roads and trails extends to all zones explored over the past 30 years; many of these trails are only accessible with four-wheel drive vehicles.



LOCATION MAP

Robertson, Wallis & Associates

FIGURE No.

100 200 300

KILOMETRES

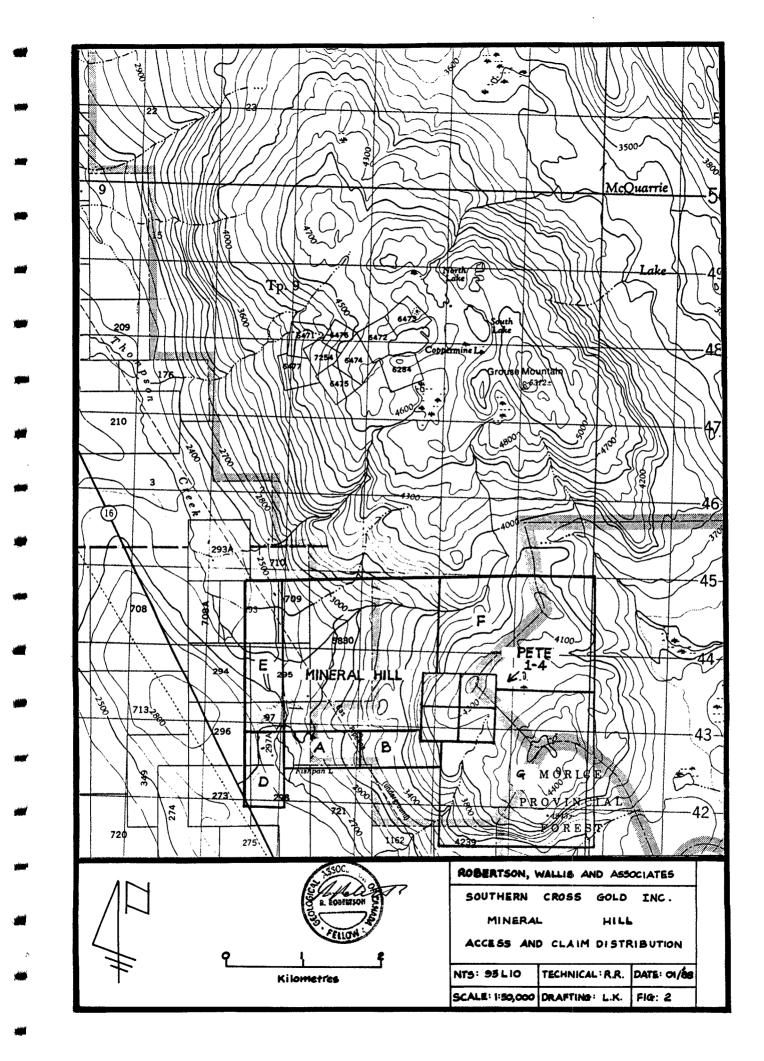
The northern CN Rail line follows the Bulkley River a few kilometres west of the property; a B.C. Hydro transmission line and a natural gas pipeline parallel the highway.

PROPERTY

The Mineral Hill property consists of seven Modified Grid mineral claims (a total of 54 units) and four 2-post mineral claims shown on claim sheet 93 L 10 E in the Omineca Mining Division (Figure 2). These claims are owned jointly by L.B. Warren and P.J. Huber, and are subject to an option agreement with Southern Cross Gold Inc.

Claim Name	Units	Record Number
Mineral Hill	16	206
Mineral Hill A	2	397
Mineral Hill B	2	398
Mineral Hill D	2	1642
Mineral Hill E	4	1643
Mineral Hill F	12	5215
Mineral Hill G	16	5216
Pete 1	1	4956
Pete 2	1	4955
Pete 3	1	4953
Pete 4	1	4954

All holes drilled in 1987 are located within the Mineral Hill claim.



PHYSIOGRAPHY, CLIMATE, VEGETATION

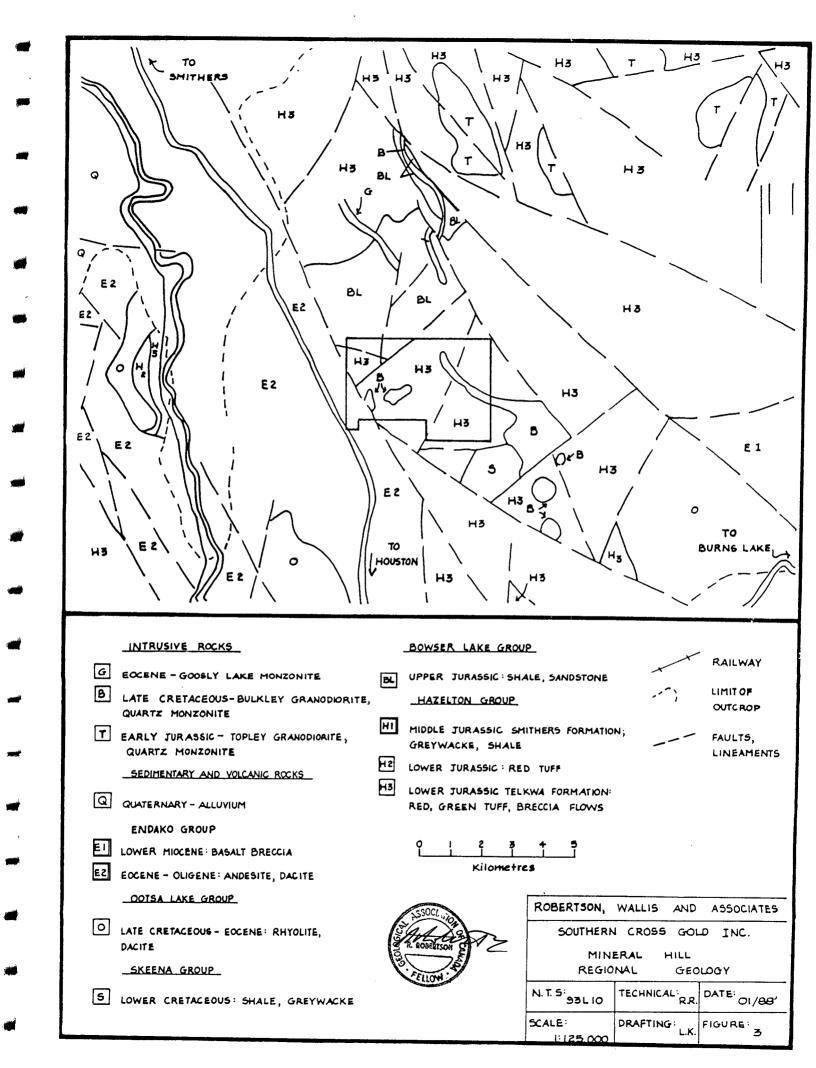
The Mineral Hill claims are situated on the western slopes and upper plateau of Mineral Hill, a subsidiary ridge of the higher Grouse Mountain range immediately to the north (Figure 2). Elevations range from 2,500 feet (760 metres) to 4,500 feet (1370 metres) at the summit of Mineral Hill. The lower western slopes (location of the 1987 diamond drill program) are quite gentle with deciduous tree cover broken by open grassy meadows. The upper plateau of Mineral Hill is an area of low rolling hills and valleys with small lakes and swamps. Between 2,800 - 4,000 feet (850 - 1220 metres), steeper slopes with a thick cover of coniferous forest hinder access and visibility.

Rock outcrop on the property is limited by overburden cover, undergrowth and swamp. The principal drainages on the property should provide adequate water for drilling purposes throughout the field season. Climate is typical of lower elevations in west-central British Columbia; field work can be carried out from early May to late October.

REGIONAL GEOLOGICAL SETTING

The property is situated within the Hazelton Trough of the Intermontane tectonic belt, an area underlain principally by Mesozoic volcanic and sedimentary rocks intruded by a variety of granitic rocks ranging in age from early Jurassic to Tertiary (Figure 3).

In the Smithers-Houston area, northwest trending lower Jurassic Hazelton Group subaerial to subaqueous red and green pyroclastic and flow rocks with intercalated sediments predominate. These are intruded by coeval Topley granitic rocks and by numerous granitic and lesser gabbroic stocks, dykes and plugs of late Cretaceous (Bulkley intrusives) and Tertiary age.



Structure of the region is dominated by northwest-striking fault structures along which vertical movement has been most prevalent.

A variety of mineral deposit types have been recognized in the general area, most common of which are polymetallic vein and replacement deposits (Cu, Pb, Zn, Ag, Mo, Au) developed in Hazelton Group layered rocks commonly adjacent to younger granitic intrusions. The region is also well known for porphyry copper and molybdenum deposits of several styles and ages (Carter, 1981). Not as well defined are volcanogenic massive sulphide deposits, of which only a few have been recognized to date. Copper-zinc mineralization on Grouse Mountain 5 km north of Mineral Hill has massive sulphide affinities although cross-cutting relationships are evident.

Silver-copper mineralization at the Equity Silver Mine, located 40 km southeast of Houston consists of disseminated vein and breccia filling sulphide and sulfosalt mineralization, sub-concordant with host-rock stratigraphy contained in a well-developed alteration zone, possibly related to hydrothermal fluid circulation at a high level in a porphyry system. Mineralization has characteristics of both massive sulphide and replacement types of mineral deposit. Production commenced in the Southern Tail deposit in 1980 and totalled 4.3 million tonnes grading 135 g/tonne silver, 0.45% copper, 1.3 g/tonne gold by December 1982. Production from the Main Zone orebody began in late 1983 with ore reserves of 21.6 million tonnes grading 109 g/tonne silver, 0.35% copper and 0.85 g/tonne gold (Cyr, Pease and Schroeter, 1984).

PROPERTY GEOLOGY AND MINERALIZATION

The Mineral Hill property is largely underlain by a northwest striking sequence of volcanic rocks of the Telkwa Formation (Hazelton Group) with lesser volumes of sedimentary rock probably belonging to the Upper Jurassic Bowser Lake Group. In the areas drilled in 1987 these rocks are strongly hornfelsed by a variety of intrusive rocks of late Cretaceous (Bulkley) age.

Volcanic rocks are predominantly andesitic flows and pyroclastics with lesser amounts of rhyolite and basalt. Sedimentary units include argillite, quartzite and greywacke with some limy varieties occurring locally. Gill and Myers (1984) reported a resistant trachytic flow unit with large feldspar laths capping low ridges on the upper plateau of Mineral Hill. This unit resembles Tertiary Goosly Lake volcanics elsewhere in the district.

Bodies of porphyritic quartz-monzonite ("quartz feldspar porphyry") and alaskite are the principal intrusive rocks occurring in the western part of the property. Further to the east on Mineral Hill are outcrops of medium grained diorite. Dykes of aplite and monzonite are present around the quartz-monzonite stock. These intrusions have produced a large area of hornfelsing (perhaps 2000 by 2500 metres) in the surrounding volcanic and sedimentary units. Hard fine-grained biotite hornfels is the most common type in the South (Alaskite) zone and green chlorite hornfels is more common in the North (Quartz Breccia) zone. Hornfelsing hardened the rocks surrounding the intrusions and made them brittle and hence more susceptible to the development of fracture and breccia zones.

Typical mineralization consists of pyrite, pyrrhotite, molybdenite and chalcopyrite with quartz, calcite, minor siderite or feldspar in fractured intrusive rocks or zones of quartz breccia in hornfels. Silver-bearing tetrahedrite with galena, sphalerite and chalcopyrite occurs within both the Alaskite and Quartz Breccia zones.

- 8 -

SUMMARY OF PREVIOUS EXPLORATION

Initial work on Mineral Hill was carried out in 1914 or earlier when a 5 metre shaft was sunk on a narrow quartz vein containing silver, copper, lead and minor gold values. A number of other showings were explored in the 1920's by trenches, short adits and shallow shafts.

During the 1960's and 1970's, considerable exploration was carried out for large tonnage molybdenum-copper mineralization. In 1966 Cominco and Molymine Exploration Ltd. completed a large program of geological, geophysical and geochemical surveys, trenching and 15 diamond drill holes (2225 metres). In 1967, Molymine completed 102 percussion drill holes (2882 metres) and 13 diamond drill holes (1308 metres) (Sharp, 1968). In 1976, Granby Mining Corporation optioned the property and drilled 12 percussion holes (683 metres) in the Granby Zone, east of the North Zone. Granby completed seven percussion holes in 1978 (James, 1979) in the east edge of the quartz monzonite (575 metres) and three widely spaced diamond drill holes (902 metres) in the area of percussion drilling, in the Alaskite Zone and in the Breccia Zone. Control of Granby Mining passed to Noranda in 1979; they carried out programs of prospecting, geochemical and geophysical surveys in 1981, 1983 and 1984 (Gill and Myers, 1984).

In summary, molybdenite grades of 0.10% MoS₂ are associated with closely spaced quartz veining and fractures in the Alaskite Zone. Some larger quartz veins peripheral to this zone carrying silver-lead-zinc values were tested by early workings and some of the more recent exploration. Molybdenite mineralization in the eastern part of the quartz monzonite ("Granite Zone") generally grades less than 0.05% MoS₂. Low molybdenite values were also found in Granby's drill testing of a hornfels zone in the northeast part of the Mineral Hill claim ("Granby Zone"; James, 1979). The Quartz Breccia Zone has approximate surface dimensions of 240 by 450 metres (Sharp, 1968) with grades of 0.05% MoS₂ indicated by extensive trenching and drilling.

Molymine's drilling in 1966-1967 indicated that a quartz vein system with sometimes significant silver values was present in the Quartz Breccia Zone. Diamond drill hole D-16 intersected a narrow vein grading 135.8 g/ton silver. Hole D-14 was the only hole completely analyzed for silver; values ranged from 0.06 to 3.7 oz/ton. Hole D-20 included a 50 foot interval grading 1.2 oz/ton silver. Hole D-16 is located approximately 300 metres southeast of holes D-14, D-20.

During 1985 the Mineral Hill property was optioned by Dafrey Resources who cleaned out and sampled some of the old trenches in the Ouartz Breccia Zone and material from dumps at old workings on silver-bearing quartz veins elsewhere on the property. One sample by N.C. Carter, P.Eng. contained 659 oz/ton silver and 0.29 oz/ton gold in a narrow tetrahedrite vein exposed in a trench in the southeast portion of the Quartz Breccia Dafrey drilled 12 percussion holes in the Quartz Breccia and Zone. Alaskite Zones. At the same time, Lacana Mining Corporation compiled much of the earlier data on the property and assayed samples from the 1985 drilling, pulps from Molymine's and Granby's percussion drilling and core from the top 200 metres of Granby's G78-1 drill hole in the Quartz Breccia Zone. These analyses indicated an area of silver mineralization within the Quartz Breccia Zone grading around 2 oz/ton silver, with dimensions of 10 by 30 by 250 metres; however, results from hole G78-1, drilled in the centre of this block, showed no significant silver values. Lacana's interest in the property expired in late 1985.

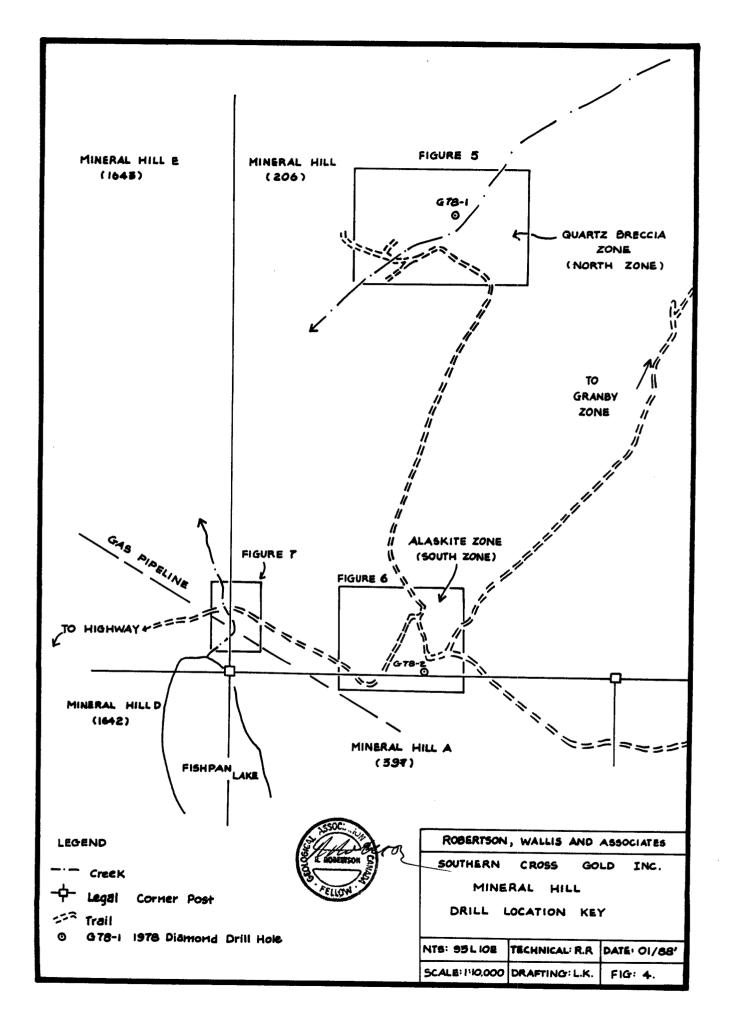
1987 DIAMOND DRILL PROGRAM

During 1987, the Dafrey option was transferred to Southern Cross Gold Inc. who diamond drilled 521.8 metres, NQ core size, in eight holes in July and August 1987. In October-November 1987, the writer surveyed these drill collars by tape and compass, in relation to trenches and old drill holes, and logged the drill core. Core is stored in Houston, B.C. at the home of Ed Westgarde. The diamond drill contractor was Coral Enterprises Ltd. of Morinville, Alberta. A summary of the 1987 drilling follows:

Hole Number	Azimuth	Dip	Depth (m)	Zone
87-A-1	-	-900	107.9	Quartz Breccia (North Zone)
87-A-2	2300	-60 ⁰	106.7	Quartz Breccia (North Zone)
87-A-3	3100	-60 ⁰	58.8	Quartz Breccia (North Zone)
87-A-4	1800	-60 ⁰	50.0	Alaskite (South Zone)
87-A-5	1550	-60 ⁰	67.0	Alaskite (South Zone)
87-A-6	200°	-60 ⁰	64.9	Alaskite (South Zone)
87-A-7	00 <i>5</i> 0	-60 ⁰	10.05	Alaskite (South Zone)
87-A-8	1800	-600	56.4	West of Alaskite Zone

Note that DDH 87-A-7 was abandoned.

Figure 4 provides a key to zone locations. Drill hole locations are shown in Figures 5, 6, and 7. Drill logs are included as Appendix 1, together with sample intervals and analytical results. Drill logs include tables of core recovery and rock quality (RQD). Core recovery is expressed as the actual length of core recovered in an interval as a percentage of the interval length. RQD is used as a guide to ground conditions and is measured as the total length of pieces of core in an interval which are 4 inches (10 cm; approximately two times the core diameter) or greater in length between natural fractures, expressed as percentage of the actual core recovered in the interval.



Eight samples of whole drill core were collected from holes 87-A-1 and A-2, prior to logging, and assayed for gold and silver by Acme Analytical Laboratories in Vancouver. After core logging, 99 samples of split drill core were analyzed for gold, silver, copper, lead, zinc and molybdenum by Bondar-Clegg and Company Ltd. in North Vancouver. Analytical results are attached as Appendix 2.

All three holes drilled in the Quartz Breccia Zone (DDH 87-A-1, 2 and 3) intersected andesitic volcanic rocks and tuffs with variable amounts of brecciation, alteration and quartz veining. In 87-A-1, the zone of alteration, breccia and veining extends from the base of overburden at 21 feet (6.4 metres) to 144.5 feet (44.0 metres); significant assays are:

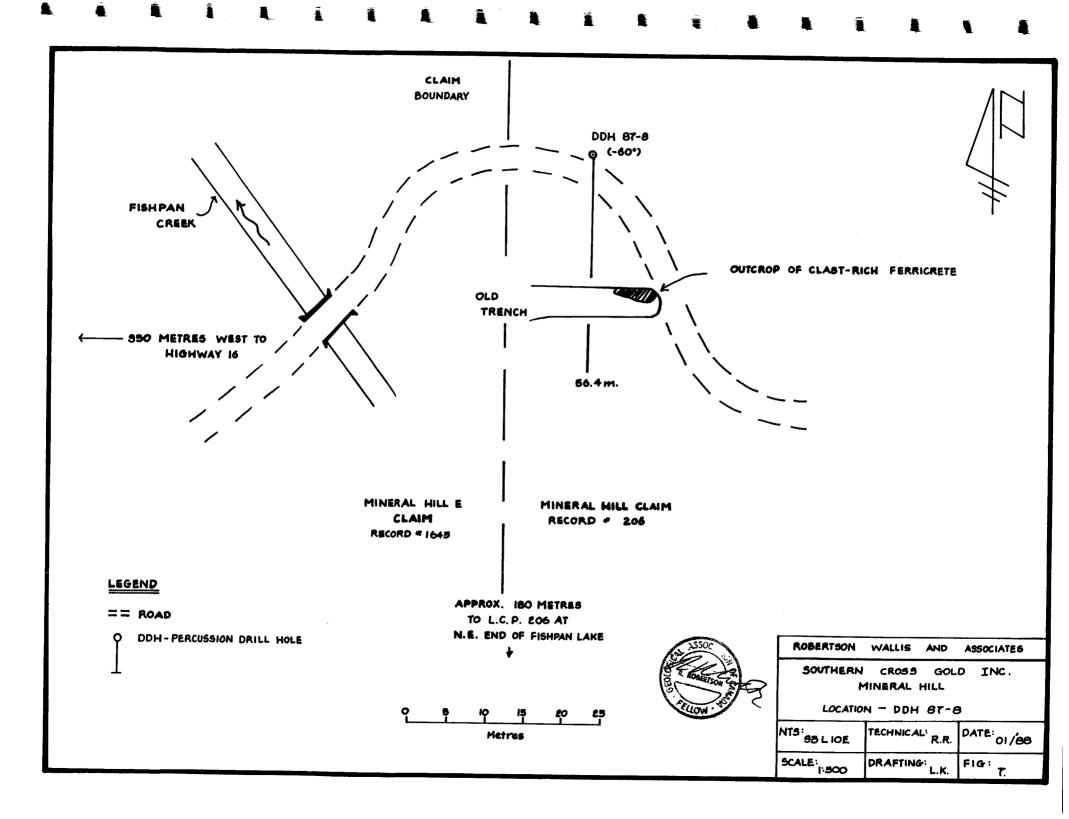
79 - 80 feet	1.09 oz/ton silver over 1 foot
92 - 94 feet	6.91 oz/ton silver over 2 feet
130 - 131.5 feet	1.51 oz/ton silver and 0.162 oz/ton gold over 1.5 feet

Hole 87-A-2 shows alteration, brecciation and quartz veining throughout, with greater intensity than in either 87-A-1 or 87-A-3. Significant results are:

246 - 255.5 feet	1.04 oz/ton silver over 9.5 feet
280 - 289 feet	1.02 oz/ton silver over 9 feet
316 - 320 feet	1 oz/ton silver over 4 feet
343.5 - 346 feet	0.71 oz/ton silver and 0.015 oz/ton gold over 2.5 feet

In hole 87-A-3, core recovery is much lower (only 70% overall). This hole is also in brecciated andesitic volcanic rocks throughout but with much less alteration or veining than in 87-A-2; there are no significant silver or gold assays. Brecciation is very clear-cut with little apparent movement of clasts, suggesting this hole may be drilled close to the edge of the zone of brecciation. Drill holes 87-A-4, A-5, A-6 and A-7 are all drilled in the Alaskite or South Zone and intersected essentially similar rock types. DDH 87-A-7 was collared in hornfelsed andesites but the rock was badly broken giving poor core recovery; this hole was abandoned at the 10 metre depth. The other three holes intersected several sections of Alaskite separated by variable amounts of hornfelsed andesite. Hole 87-A-5 showed the most alteration, quartz veining and sulphide mineralization but none of these holes carried significant silver or gold values.

Drill hole 87-A-8 (Figure 7) was located several hundred metres west of the Alaskite Zone, collared to drill under an old trench located just east of where the access road crosses the stream flowing north out of Fishpan Lake. This hole intersected hornfelsed and sitic volcanic rocks with considerable hydrothermal alteration and some quartz veining with pyrite, pyrrhotite, chalcopyrite mineralization. Core recovery was very poor towards the bottom of this hole. Samples showed no significant silver or gold values. There are apparently no records of drilling in this area before so the extent of alteration in the core is of some geological interest.



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Sellmer, H.W., 1966	:	Property Examination Report of the Mineral Hill Moly Prospect. Private report for Amax.
Sharp, W.M., 1968	:	Summary Geological Report - Mineral Hill Project. Private report for Molymine Explorations Ltd.
Tipper, H.W., Richards, T.A., 1976	:	Geology, Smithers Map Area. Geological Survey of Canada Open File 351.

APPENDIX I

DIAMOND DRILL LOGS

DIAMOND DRILL LOG Page 1 of 3

Company: S	OUTHERN CROSS GO	DLD MINES I	NC. Hole N	o.: <u>DI</u>	DH 87-A-1
Drilling Co.:	CORAL ENTERPRIS	Project	: <u>Mi</u>	neral Hill	
Started:	28 July 1987		Code:		
Completed:	1 August 1987		Locatio	on: <u>NTS</u>	93 L 10
Grid Co-ordir	nates:				·····
Elevation:					
Azimuth:		·····			
Depth:354	<u>l'(107.9 m)</u>	······	Dip:	-90)°
Core size:	NQ		Horizoi	ntal adva	ince:
Logged by:	R. Robertson (Nove	mber 1987)	Vertica	l depth:	354'
	forthe las 1	lun	Acid t	est:	None
0 - 21.0		OVERBUR	DEN: CASING RI	EMOVED	
Principal Unit (feet) 0 - 21.0 21.0 - 144.5	Sub-Unit (feet)	OVERBUR ANDESITE generally i clasts; clai altered. I actinolite feldspar, c sericite, so brecciatio in veins. I	E: Dark grey-gree fine-grained. Dark st margins and sma Dark areas have fir and epidote. Pale carbonate (calcite, ome pyrite. Exten n; minor white-cree Pyrite, minor moly	EMOVED n to pale cer areas aller clas ne biotite areas ar ankerite sive whit eam felds bdenite,	grey-green colour, are cores of large sts are paler, more e, chlorite, some e altered to chlori e), possible minor te quartz veining a spar and white calc occasional chalco-
		tion, breco DDH 87-A strong alte	eiation, veining, su -2. Original textueration, visible in c onal sections with	lphide m res destr other are amygdal	lly much less alter ineralization than oyed in areas of as; some lithic tuf: loidal and porphyrin te in quartz veins.
		30.0-33.5:	Ouartz breccia, 2 5 mm bleb of tetr	% pyrite rahedrite	e, minor molybdeni e at 31.0.
		60.5: 66.0: 69.0:	Minor tetrahedrif Masses of coarse	e with p pyrite (t	
		87.0:	faces at 25° to C		and on fracture su

Principal Unit	Sub-Unit	Description / Notes / Samples
		Coarse pyrite with molybdenite in quartz veins at 90.5 and 91.3.
		 98.2-111.0: Andesite with less alteration, veining and mineralization. 111.0-144.5: Abundant quartz veining and brecciation of altered andesite. Mineralization is primaril pyrite; occasional coarse patches in veins (as 111.3) but mostly as cubes, and disseminations in altered wallrock.
144.5-201.0		<u>LITHIC TUFF</u> : Pale grey-green. Small angular clasts (rarely larger than 1 cm) of volcanic rock with strong epidote- actinolite development in white siliceous, feldspathic matrix. No brecciation. Frequent "dry" fracturing at $20^{\circ}-45$ to CA (often fractures inter- sect in opposite senses) with grey quartz, chalcedony, pyrite or occasionally molybdenite. These veins rarely exceed 2-3 mm width.
201.0-250.0		ANDESITE: Grey-green colour, fine-grained, quite soft a broken from 201.0-218.0, with many thin stringers of quartz and calcite, some grey chalcedony and white clay. Rest of section is generally fresher and stringers are wide spaced. Veining 25-50° to CA. Locally parallel to CA. Very low sulphide content.
		202.0-207.8: Lost core. 230.0-236.8: Lost core.
250.0-277.0		ANDESITE: Generally fresher and darker green in colour with much less fracturing and veining than previous section Amygdaloidal texture evident 268.0-271.0.
277.0-288.0		ANDESITE: Grey, fine-grained, more alteration and vein than sections above and below. Veining 30-60° to CA; mostly quartz and feldspar, some carbonate, very minor sulphide.
288.0-354.0		<u>ANDESITE:</u> Dark green, fine-grained, relatively fresh wi a few epidote-rich patches. Alteration, veining and frac- turing quite minor except for a few short sections. Vein filling primarily quartz and feldspar with minor calcite, essentially no sulphides. Zones of alteration and veining:
·		319.0-320.0 330.0-332.0 341.0-349.0

Principal Unit	Sub-Unit	Description / Notes / Samples
		NOTE: 1 cm quartz, pink feldspar, molybdenite vein, 90° to CA at 336.0.
		305.6-308.7: Lost core.
354.0		END OF HOLE
	,	

SA	MP	LES

Sample #	Interval (feet)	Au	Ag	Cu	РЬ	Zn	Mo
-	30.0 - 33.5	0.001 oz/t	0 . 23 oz/t	-	-	-	-
87 A1-01	39.0 - 43.0	65	5.6	97	61	100	155
87 A1-02	43.0 - 50.0	40	10.1	94	30	361	230
87 A1-03	50.0 - 55.5	10	3.3	88	24	124	400
87 A1-04	65.0 - 70.0	15	3.2	58	16	61	105
87 A1-05	70.0 - 74.0	5	2.1	120	25	63	140
87 A1-06	74.0 - 79.0	15	2.6	75	11	59	124
-	79.0 - 80.0	0.001 oz/t	1.09 oz/t	-	-	-	-
87 A1-07	80.0 - 83.0	10	5.5	107	475	2720	197
87 A1-08	83.0 - 89.0	25	5.3	79	34	9 0	325
87 A1-09	89.0 - 92.0	15	13.0	149	14	74	360
-	92.0 - 94.0	0.001 oz/t	6.91 oz/t	-	-	-	-
87 A1-10	94.0 - 98.2	10	1.3	84	6	42	340
87 A1-11	111.0 - 113.0	15	2.8	54	24	75	54
87 A1-12	113.0 - 120.0	15	1.3	36	69	207	235
87 A1-13	120.0 - 125.0	20	2.2	101	46	136	205
87 A1-14	125.0 - 130.0	50	2.0	111	19	83	215
-	130.0 - 131.5	0.162 oz/t	1.51 oz/t	-	-	-	-

All elements quoted in ppm except gold (ppb)

DDH<u>87-A-1</u>

CORE RECOVERY/RQD

Box	From To	Run	Interval	Core Ree	covered	RQ	D
No.	(feet)	(feet)	(feet)	feet	%	feet	%
1	21 - 39	21 - 23	2	1.2	60	_	_
-		23 - 24		0.6	60	-	-
		24 - 26	$\frac{1}{2}$	1.3	65	-	_
		26 - 30	4	3.0	75	0.4	13
		30 - 33	3	*	*	*	*
		33 - 36	3	2.2	73	*	*
2	39 - 57	36 - 43	7	6.7	96	3.1	46
		43 - 50	7	6.6	94	1.8	27
3	57 - 75	50 - 60	10	7.7	77	3.5	45
		60 - 70	10	9.1	91	2.8	31
		70 - 74	4	2.7	67	-	-
4	75 - 92	74 - 83	9	8.2	91	*	*
		83 - 89	6	5.3	88	1.0	19
5	92 - 111.4	89 - 99	10	9.7	97	*	*
~		99 - 103	4	3.5	87	1.7	49
6	111.4 - 129.8	103 - 113	10	9.5	95	4.0	42
		113 - 120	7	5.6	80	1.3	23
7	129.8 - 147.5	120 - 130 120 - 127	10 7	9.4	94	1.7	18
4	129.8 - 147.5	130 - 137 137 - 147	10	6.8 9.4	97 94	4.9	
8	147.5 - 163.5	137 - 147 147 - 150	3	2.3	94 77	0.5	52 22
0	147.0 - 100.0	150 - 153	3	2.8	93	1.4	50
		153 - 154	1	0.7	70	-	
		155 - 154 154 - 155		0.6	60	-	-
		155 - 157	2	1.2	60	0.4	33
		157 - 160	3	2.8	93	0.4	14
		160 - 162	2	1.4	70	-	-
9	163.5 - 181.4	162 - 168	6	4.4	73	-	-
		168 - 172	4	3.6	90	1.5	42
		172 - 174	2	1.0	50	-	-
		174 - 183	9	. 8.8	98	4.2	48
10	181.4 - 198.7	183 - 190	7	6.3	90	1.3	21
		190 - 200	10	8.3	83	2.0	24
11	198.7 - 221.0	200 - 204	4	2.0	50	-	-
		204 - 211	7	3.2	46		-
10	0.01 0.40.0	211 - 216	5	3.5	70		29
12	221 - 242.8	216 - 223	7	6.1	87	3.0	49
		223 - 226 226 - 232	3 6	$\begin{array}{c} 2.8 \\ 4.3 \end{array}$	93 72	0.7	25
		232 - 232	7	4.3		2.1	49
13	242.8 - 261	232 - 239 239 - 249	10	2.2 9.5	95	2.0	21
10	212:0 201	239 - 249 249 - 256	7	5.8	83	1.8	31
		256 - 259	3	2.5	83	0.3	12
14	261 - 278.2	259 - 263	4	3.5	88	1.0	29
		263 - 273	10	2.9	29	1.7	59
		273 - 276	3	3.0	100	1.2	40
15	278.2 - 297	276 - 283	7	5.6	80	2.3	41
		283 - 288	5	4.0	80	1.6	40
	· · ·	288 - 296	8	7.6	95	5.5	72
16	297 - 317	296 - 303	7	7.0	100	4.8	69
		303 - 307	4	2.6	65	1.2	46
. –		307 - 311	4	2.3	57	0.3	13
17	317 - 334.1	311 - 320	9	8.6	95	3.8	44
		320 - 322	2	2.0	100	1.1	55
		322 - 332	10	10.0	100	3.0	30

CORE RECOVERY/ROD

t	r	1	CORE I	RECOVERY/I	ห			
	Box	From To	Run	Interval	Core Red	covered	R	QD
	No.	(feet)	(feet)	(feet)	feet	%	feet	%
	18 19	334.1 - 352 352 - 354	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	6 2 10 1 3	4.8 2.0 9.3 1.0 3.0	80 100 93 100 100	$ \begin{array}{c} 2.1 \\ - \\ 3.0 \\ 0.3 \\ 1.3 \end{array} $	44 - 32 30 43
-			END OF HOLE					
-	* Sec	tions removed fr	om assay prior to	o core measu	rement.			
-								
-								
*								
-								
· •••								

DIAMOND DRILL LOG Page 1 of 4 Hole No.: DDH 87-A-2 Company: SOUTHERN CROSS GOLD MINES INC. Drilling Co.: CORAL ENTERPRISES LTD. Project: Mineral Hill 2 August 1987 Code: Started: Location: NTS 93 L 10 Completed: 5 August 1987 Grid Co-ordinates: Elevation: Azimuth: _____ 230° Depth: 350' (106.7 m) Dip: -60° Core size: NQ Horizontal advance: 175.5 Logged by: R. Robertson (November 1987) Vertical depth: 302.5 hander an Alus Acid test: None Principal Unit Sub-Unit **Description / Notes / Samples** (feet) (feet) 0 - 10.0OVERBURDEN: CASING REMOVED. 10.0-350.0 ANDESITE: STrongly altered, brecciated and quartz veined throughout most of the hole. Colour variable in shades of greygreen. Occasional grey-black sections are relatively unaltered and unveined; rest is quite strongly chloritized with some areas beige coloured from development of fine albite and/or sericite. Original textures often destroyed by alteration; some sections of crystal tuff, crystal lithic tuff and agglomerate are recognizable. Larger clasts have altered edges, fresher cores. All of hole is heavily veined by white quartz with lesser amounts of creamy feldspar and white or salmon pink calcite. Veins carry variable amounts of pyrite, chalcopyrite, tetrahedrite. All vein minerals tend to grow in large coarse-grained patches. Molybdenite is present locally, with quartz, pyrite and minor amounts of pink feldspar. Several veins show several stages of filling with quartz earliest. followed by feldspar, and pink or white calcite as the last stage in the centre of the vein. Veining is often extensive enough to constitute breccia zones; clasts frequently angular and tabular with high length to width ratios. Breccia appears matrix-supported on drill core scale, but many sections of altered andesite are probably large

Principal Unit	Sub-Unit		Description / Notes / Samples
			overall the breccia is more likely clast-supported. rent movement of clasts.
		tion of and coarsercry Feldspar ar or absent in ing Hole 3	son with DDH 87-A-3, this hole has stronger altera esite, wider and more abundant quartz veining with stallization of vein minerals (including sulphides). Ind calcite are more abundant. Tetrahedrite is rare in Hole 3. Brecciation is clear-cut in Hole 3, sugges is closer to the edge of the breccia zone, with less and movement of clasts.
		34.5-37.5:	Dark grey-green medium to fine grained equigran ular intrusive rock (diorite?). Strong chlorite- epidote alteration.
		42.0-42.5: 45.0:	Abundant pyrite. Minor molybdenite with quartz, pyrite, pink felds veining.
		49.5: 54.5-56.0:	Smear of molybdenite on fracture surface. Quartz breccia - 90% white quartz vein, less than pyrite, minor fine-grained tetrahedrite.
		58.5:	Molybdenite with pyrite on fracture face parallel CA.
		64.0-66.0:	Quartz breccia zone (70% quartz with over 5% pyrite). Fine-grained tetrahedrite (64.5-66.0). Molybdenite smear on fracture face at 65.0.
		67.0-96.4:	Abundant quartz veining. Strongly altered andesi tuff (chlorite-carbonate-albite-sericite). Locally strong brecciation. Occasional large blebs (1-2 ch pyrite, chalcopyrite, tetrahedrite in veins of whit quartz and feldspar (e.g. at 70.5, 74.0, 92.8).
		82.0-83.8:	
			Occasional tiny grains of tetrahedrite. Lost core, cave.
			 Dark fine-grained andesite(?) Almost no guartz veining or sulphides.
		113.0-144.0	 Pale grey and buff altered andesite with quartz veining and brecciation. Pink calcite and cream feldspar common in wider quartz veins. Coarse blebs and cubes of pyrite common in veins; large patches of chalcopyrite sometimes present. Als lesser amounts of coarse tetrahedrite and smean of molybdenite. 127.5: Angular pyrite mass (4 cm wide). 128.5-129.0: Large pyrite cubes with chalcopyri and minor tetrahedrite. 131.0: Coarse pyrite cubes, minor tetrahedrite. 136.0-136.5: Abundant pyrite. 140.0-141.5: Strong epidote as alteration of large andesite clast. At 141.5 quartz vein with pink calcite and large pyrite masses (3 cm).

Principal Unit	Sub-Unit	I	Description / Notes / Samples
	<u> </u>	144.0-150.0:	Grey-green andesite tuff. Abundant fine fracturing and fine calcite veinlets. Lower contact 25° to CA.
		150.0-166.0:	Pale altered andesite with quartz veining and brecciation (similar to 115.8-144.0). Coarse pyrite and thin films of molybdenite; minor chalcopyrite and tetrahedrite.
			n from 152.0-172.0 is broken by late shearing (po with high core loss and much broken core.
			151.0-152.0: Pyrite, molybdenite, chalcopyrite with perhaps some fine tetrahedrite. 153.0: Similar sulphide mineralization.
		166.0-172.0:	Andesite crystal - lithic tuff. Badly broken. Shearing strongest at 168.0-170.0. Quartz and pink calcite veins sparse and overall sulphide c tent quite low.
		172.0-222.0:	Pale altered andesite with abundant quartz, feldspar, calcite veining and patchy sulphide mineralization, including a few large blebs of tetrahedrite. 186.3-188.0: Lost core. 207.5-208.0: Abundant pyrite, chalcopyrite and tetrahedrite. 214.5-215.8: Large tetrahedrite blebs with pyri in quartz veins.
		222.0-226.0:	Dark medium-grained intrusive rock (diorite?) with abundant secondary biotite, chlorite, as c in breccia. Only minor veining, primarily thin quartz-molyBdenite veinlets.
		235.0-240.5:	Pyrite, chalcopyrite, fine tetrahedrite. Pale grey-white banded siliceous unit (sheared silicified?), banding at 30-50° to CA. Quite his pyrite content as lenses and stringers parallel t banding.
		240.5-242.5:	Typical pale altered andesite with quartz veini brecciation, abundant pyrite, some chalcopyrit minor fine molybdenite, possibly tetrahedrite.
			Dark blue-green biotite-chlorite altered andes tuff. Only minor veining. Low sulphide conter
			Typical pale andesite breccia with quartz-felds pyrite veining; some blebs of tetrahedrite to 5
		248.5-249.3:	Blue-green altered andesite tuff (biotite-chlori epidote); upper contact 45° to CA; lower conta 30° to CA on quartz vein.

Principal Unit	Sub-Unit	1	Description / Notes / Samples
		249.3-255.5:	Pale green altered andesite tuff; somewhat sheared, occasional patches of pyrite- tetrahedrite and pyrite-molybdenite. Note 5 cm area of massive pyrite with quartz at 255.3. Lower contact 45° to CA.
		255.5-257.0:	White streaky banded siliceous unit (as $235.0-240.5$) with lenses and stringers of fine pyrite parallel to banding ($40-50^{\circ}$ to CA).
		257.0-277.0:	Typical pale altered, veined and brecciated andesite with abundant quartz veining and occa ional large pyrite blebs as at 261.0, 262.5, 274.
		277.0-280.0:	Pale streaky banded siliceous unit with fine pyr lenses and stringers, as 235.0-240.5 etc. Conta broken, banding 40° to CA.
		280.0-300.8:	
		300.8-302.0:	St rong epidote-hematite alteration in andesite minor pyrite.
			Normal pale, veined and brecciated andesite. Dark biotite-chlorite altered andesite with min epidote. Very little fracturing or veining; mir pyrite only.
		312.0-340.0:	Typical pale altered brecciated andesite; feldsp and epidote much commoner, and overall sulphic content decreased. Coarse pyrite (with tetrahe at 317.0-317.5. Abundant epidote at 318.0 and 319.0.
		340.0-343.5:	Dark fractured andesite with strong alteration (feldspar, biotite and/or hornblende, chlorite, s epidote), minor quartz veining. Very low sulphic content.
		343.5-346.0:	Quartz vein zone; over 80% quartz, 3-4% pyrite fine bands. Minor fine-grained tetrahedrite.
		346.0-350.0:	Pale altered andesite, some quartz veining with minor pyrite. Core badly broken.
50.0		END OF HO	

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SAMPLES

Sample #	Interval (f ee t)	Au	Ag	Cu	_Pb_	Zn	Мо
_	54.5 - 56.0	0.001 oz/t	0.01 oz/t	_	-	_	-
-	64.0 - 66.0	0.001 oz/t	0.07 oz/t	-	_	-	_
87 A2-01	67.0 - 73.0	30	1.8	90 <i>5</i>	38	154	168
87 A2-02	73.0 - 78.0	35	3.0	1850	33	236	89
87 A2-03	78.0 - 82.0	15	0.6	112	59	238	130
87 A2-04	83.8 - 87.0	15	2.1	240	35	192	125
87 A2-05	87.0 - 91.0	50	1.4	165	89	206	175
87 A2-06	91.0 - 96.4	35	1.7	170	260	88	245
87 A2-07	115.8 - 119.0	90	2.9	420	190	127	20 <i>5</i>
87 A2-08	119.0 - 123.0	60	4.6	1300	127	160	20 <i>5</i>
87 A2-09	123.0 - 129.0	150	2.2	610	142	124	155
87 A2-10	129.0 - 132.0	110	1.7	160	72	96	760
87 A2-11	132.0 - 136.0	100	2.5	215	86	130	30 <i>5</i>
87 A2-12	136.0 - 140.0	55	11.8	1200	24	328	105
87 A2-13	140.0 - 144.0	35	2.8	485	31	121	157
87 A2-14	150.0 - 155.0	35	2.8	765	162	131	315
87 A2-15	156.0 - 160.0	15	1.0	340	70	76	76
87 A2-16	160.0 - 163.0	5	2.2	330	110	346	47
87 A2-17	163.0 - 166.0	20	3.1	36 <i>5</i>	156	182	36 <i>5</i>
87 A2-18	172.0 - 178.0	190	3.0	1900	99	168	120
87 A2-19	180.0 - 186.3	75	6.9	1200	262	1170	455
87 A2-20	199.0 - 204.0	65	4.9	1650	15	255	88
87 A2-21	204.0 - 208.0	80	3.8	1350	12	228	355
87 A2-22	208.0 - 215.0	90	6.0	2300	9	367	320
87 A2-23	215.0 - 218.0	75	5.3	1800	10	312	112
87 A2-24	218.0 - 222.0	100	2.7	87 <i>5</i>	6	160	138
-	228.0 - 231.0	0.002 oz/t	0.81 oz/t		-	-	-
87 A2-25	235.0 - 240.5	5	0.2	58	4	28	755
87 A2-26 87 A2-27	240.5 - 242.5	60	5.9	440	19	121	565
87 A2-27 87 A2-28	246.0 - 248.5 249.3 - 255.5	80	18.1	1450	5	315	400
87 A2-28 87 A2-29	255.5 - 257.0	110 5	47.5	2150	37	2430	1100
87 A2-29	257.0 - 260.0	60	0.5 5.2	22	18	37	21
87 A2-31	260.0 - 264.0	50	6 . 7	340 350	4 < 2	141 87	36
87 A2-32	277.0 - 280.0	20	0.5	17			220
87 A2-33	280.0 - 282.0	170	45.2	2700	5 3	23 549	60
87 A2-34	282.0 - 289.0	90	32.4	2700 980	13	271	118 86
87 A2-35	292.0 - 297.0	80	20.2	1000	10	271	65
87 A2-36	297.0 - 300.8	130	5.9	240	9	115	390
87 A2-37	302.0 - 308.0	150	9 . 1	285	11	153	590 510
87 A2-38	316.0 - 320.0	140	34.2	880	14	225	87
-	343.5 - 346.0	0.015 oz/t	0.71 oz/t	-	17	-	-
					-	-	-

All elements quoted in ppm except gold (ppb).

DDH 87-A-2

CORE RECOVERY/RQD

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Box	From To	Run	Interval Core Recov		covered	RQI)
No.	(feet)	(feet)	(feet)	feet	%	feet	9
1	10 - 39	10 - 13	3	3.0	100	2.0	6
1	10 - 39	10 - 13 13 - 14	1	0.7	70	2.0	-
				1.4	15		
		14 - 23	9			1.0	- 2
		23 - 33	10	4.4	44	1.2	4 63
•		33 - 36	3	2.4	80	1.2	
2	39 - 56.25	36 - 42	6	4.3	72	1.1	2
		42 - 49	7	6.3	90	3.2	5
•		49 - 53	4	2.6	65	$1.2 \\ *$	4 *
3	56.25 - 73.6	53 - 58	5	4.5	90	*	י א
		58 - 66	8	7.1	89		
		66 - 67	1	0.8	80	-	-
		67 - 73	6	5.4	90	3.7	6
4	73.6 - 93.4	73 - 82	9	8.5	94	2.9	3
		82 - 91	9	7.2	80	4.2	5
5	93.4 - 112.5	91 - 100	9	8.8	98	4.7	5
		100 - 103	3	0.5	17	-	-
		103 - 107	4	3.8	95	0.9	2
		107 - 109	2	1.6	80	-	_
6	112.5 - 129	109 - 113	4	3.7	92	0.9	2
Ū	11210 120	113 - 115	2	1.7	85	0.4	2
		115 - 123	2 8	7.7	96	3.7	4
		123 - 129	6	5.3	88	2.0	5
7	129 - 144.3	123 - 123 129 - 132	3	1.7	57	2.0	-
4	129 - 144.3	132 - 132 132 - 136	4	3.0	75		
						1.3	-
		136 - 140	4	4.0	100	1 1	
0	1.1.0	140 - 144	4	3.4	85	2.0	5
8	144.3 - 163	144 - 150	6	5.1	85	1.2	2
		150 - 155	5	3.8	76	1.0	2
		155 - 156	1	0.6	60	-	-
		156 - 160	4	0.7	17	-	-
		160 - 163	3	1.6	53	-	-
9	163 - 179.2	163 - 167	4	3.4	85	-	-
		167 - 170	3	2.3	77	-	-
		170 - 178	8	7.8	91	4.2	5
10	179.2 - 197.6	178 - 188	10	8.3	83	3.8	4
		188 - 190	2	1.7	85	-	-
		190 - 191	1	0.5	50	-	-
		191 - 196	5	3.2	64	1.0	3
11	197.6 - 215.7	196 - 199	3	2.0	67	0.4	2
		199 - 208	9	9.0	100	3.5	5
		208 - 215	7	6.0	86	4.2	7
12	215.7 - 234.2	215 - 222	4	7.0	100	5.3	7
		222 - 226	4	2.7	67	1.2	4
		226 - 233	7	6.6	94	*	*
13	234.2 - 252.3	233 - 243	10	9.4	94 94	5.9	6
		243 - 249	6	5.3	88	1.3	2
14	252.3 - 269	249 - 257	8	6.3	88 79	1.3 1.3	2
* *		245 - 257 257 - 260	3	2.8	79 93	1.0	Z
						-	-
		1	4	2.8	70	-	-
-		264 - 265	1	0.3	30	-	-
15	269 - 287.2	265 - 273	8	6.3	79	2.0	3
1		273 - 282	9	. 7.8	87	4.9	6
	l						

CORE RECOVERY/RQD

Box	From To	Run	Interval	Core Rec	overed	Rର୍ମ)
No.	(feet)	(feet)	(feet)	feet	%	feet	%
16	287.2 - 303.8	282 - 292 292 - 296 296 - 303	10 4 7	8.9 3.6 7.0	89 90 100	$5.1 \\ 1.2 \\ 2.6$	5 3 3
17	303.8 - 320.8		5 3	4.3 2.0 8.8	86 67 98	1.3 0.3 4.6	3 1 5
18	320.8 - 342.3	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	9 5 4 7	1.5 2.4 6.0	30 60 86	- 0.4 1.8	- 1 3
19	342.3 - 350	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	4 2 8	2.8 2.0 5.8	$70\\100\\72$	1.4 0.6 *	5 3 *
		END OF HOLE					
* Se	ctions removed f	rom assay prior t	o core measu	rement.			
					1		

DIAMOND DRILL LOG

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Page 1 of 2

Company:	SOUTHERN CROSS	S GOLD MINES INC.	Hole No.:	DD	H 87-A-3
Drilling Co.:	CORAL ENTER	PRISES LTD.	Project:	<u>Minera</u>	<u>l Hill</u>
Started:	7 August 1987		Code:		
Completed:	8_August 1987		Location:	NTS 9	93 L10
Grid Co-ordi	nates:				
Elevation: _					
Azimuth:	310°				- <u></u>
Depth:	193' (58.8 m)		Dip:	-60°	
Core size: _	NQ		Horizonta	l advanc	e: 96.5
Logged by:	R. Robertson (Nov		Vertical d	epth:	167.3
	Kull an	But	Acid Test	:	None
0-33.0		OVERBURDEN: C	ASING REMOV	'ED.	
33.0-193.0		BRECCIATED ANI colour; strongly chl original textures la not hornfelsed(?) (tabular plagioclase andesite or andesit lithic tuff and volc Alteration produce and coarse) and les in veins (white and white patches to 2 some sericite. Ent movement, largely Clasts mostly few of angular, tabular, le aligned near-perpen- phide, usually as co with chalcopyrite. vedges of quartz ve fracture faces.	loritized throug rgely destroyed Occasional shor phenocrysts w e crystal tuff; anic agglomera s abundant chlo ser amounts of pink calcite, so cm in, or close ire section is b matrix-suppor cm to few feet ngth to width and cular to CA parse blebs and Molybdenite is	chout. F d by alte t section ere origi some de ate or vo prite (of carbona ome ank to, quan recciate ted (whi in size; ratiooft . Pyrite patches s less co	Fine-grained but eration. Probably ins with abundant s inally porphyritic finite areas of cry cleanic breccia. ten well crystalliz ate in rock matrix erite(?), feldspar (rtz veins) and prob ed, with little class te vein quartz ma smaller clasts are ten 20:1. Many cla is commonest sul in quartz veins, o mmon; often at se
		Extensive core loss recovery 70%.	and broken co	re throu	ghout - overall co

.

Principal Unit	Sub-Unit	Description / Notes / Samples	Description / Notes / Samples		
		53.0-55.0: Abundant pyrite as 5 mm cubes in quart	z veins.		
		77.0-82.0: Breccia with relatively small tabular cl to CA. Feldspar and carbonate relative in quartz veins with pyrite, chalcopyrit	ly abundan		
		108.0-113.0: Large blebs and patches of pyrite (to 3 quartz veins. Note 1 cm hematite patc vein at 110.7.	cm) in milk		
		113.0-120.0: Alteration stronger in this section. Fel calcite relatively abundant in quartz ve occasional large patches of pyrite (to 3	ins with		
		162.0-166.0: Very varied clast textures (tuff fragmer vuggy – local pyrite-rich matrix. High	nts). Matri		
		166.0-168.0: Distinctive black crystal lithic tuff with volcanic clasts and abundant tiny white plagioclase phenocrysts. Widespread th veinlets. Locally coarse pyrite in quart	n small altered in calcite		
93.0		END OF HOLE			

- 2 -

SAMPLES

Sample #	Inte rv al (f ee t)	Au	Ag	Cu	<u>Pb</u>	Zn	Mo
87 A3-01	53.0 - 55.0	10	0.4	125	11	76	265
87 A3-02	77.0 - 82.0	5	0.3	104	2	98	150
87 A3-03	108.0 - 113.0	5	15.1	50 <i>5</i>	28	152	140
87 A3-04	113.0 - 120.0	60	3.8	154	142	75	198
87 A3-05	138.0 - 141.0	10	1.7	139	3	6 <i>5</i>	310
87 A3-06	141.0 - 146.0	10	0.4	76	9	67	300
87 A3-07	146.0 - 151.0	10	0.4	92	2	62	365
87 A3-08	151.0 - 156.0	5	0.6	106	3	6 5	127
87 A3-09	162.0 - 166.0	5	0.3	54	6	70	2650

All elements quoted in ppm except gold (ppb).

DDH 87-A-3

CORE RECOVERY/RQD

Box	From To	Run	Interval	Core Re	covered	RQD	
No. (feet)		(feet)	(feet)	feet %		feet	
1	33 - 59.5	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3 8 9	2.0 2.0 2.0	67 25 22		-
2	59.5 - 82.5	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	9 2 6 5 7 4	2.0 1.7 5.6 4.2 1.9 3.5	22 85 93 84 27 87	- - 0.6 - 1.4	
3	82.5 - 104	77 - 82 82 - 88 88 - 93 93 - 99	5 6 5 6	5.0 4.4 3.0 3.0	100 73 60 50	1.5 1.7 - -	3 3 -
4	104 - 119.8	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3 4 2 5	2.2 3.7 1.7 5.0	73 92 85 100	- 0.8 0.5 1.2	- 2 2 2
5	119.8 - 137	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	7 8 . 10	6.4 5.5 9.3	91 69 93	$2.3 \\ 1.6 \\ 2.7$	3 2 2
6	137 - 155.6	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3 5 5	2.2 4.6 3.2	73 92 64	$\begin{array}{c} 1.2\\ 2.0\\ 1.3\end{array}$	5 4 4
7	155.6 - 177.5	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	6 5 4 3 3	5.4 2.7 2.0 1.8 1.4	90 54 50 60 47	2.3 0.4 0.4 1.0 -	4 1 2 5
8	177.5 - 193	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3 6 3 4 5	1.0 5.4 2.8 3.3	33 90 93 82 92	- 1.7 0.4 1.3	- 3 1 3
		END OF HOLE	0	4.6	92	3.0	6

DIAMOND DRILL LOG

Page $_1$ of $_3$

Company:	SOUTHERN CROSS	GOLD MINES I	INC. Hol	e No.:	D]	DH 87-A-4
Drilling Co.	CORAL ENTERPR	ISES LTD.	Pro	ject:	Mineral	Hill
Started: _	8 August 1987		Cod	e:		
Completed:	9 August 1987		Loc	ation:	NTS 93 I	. 10
Grid Co-ord	inates:					
Elevation:						
Azimuth:	180°					
Depth:	164' (50 m)		Dip		<u>-60°</u>	
Core size:	NQ		Hor	izontal	advance:	82.0
Logged by:	R. Robertson (Nove			tical de	epth:	142.4
	Rould a	2 Roles		d test:		None
Principal Unit (feet)	Sub-Unit (feet)		Description / 1	Notes	/ Samples	
0-8.0		OVERBURD	EN: CASING I	REMOV	ED.	
0 0 05 7		"ALASKITE'	": Pale grey, m		orained, m	adanotaler nan
8.0-85.7		phyritic with plagioclase p Tiny biotite pyrite. Abun lesser amoun veins, as thin Thin (1 mm	h fine-grained s phenocrysts con phenocrysts condant fracturin nts of pyrrhotit n films in fract	nmonly mmonly g and q e. Mol ures an einlets	s matrix. altered to y altered t juartz vein ybdenite s id local dis with tiny	Small tabular ochalky white clay o chlorite or ing with pyrite, parse, in quartz seminations. breccia clasts are
8.0-85.7		phyritic with plagioclase p Tiny biotite pyrite. Abun lesser amoun veins, as thin Thin (1 mm	h fine-grained s phenocrysts condent fracturin nts of pyrrhotit n films in fract - 1 cm) black v ccasional vein Abundant coa and 80° to CA Quartz vein a	nmonly mmonly g and q e. Mol ures an einlets ets of v rse pyr A. t 30° t	s matrix. altered to y altered to uartz vein ybdenite s id local dis with tiny l white calci ite in oper o CA with	Small tabular ochalky white clay o chlorite or ing with pyrite, parse, in quartz seminations. breccia clasts are

Principal Unit	Sub-Unit		Description / Notes / Samples			
		66.5-69.0:	Sharp contact (70° to CA) from breccia to fractured, silicified Alaskite. Thin dark veinlets decreasing by 68.0. Coarse patches of pyrite, pyrrhotite, chalcopyrite in white quartz veins (68.0-69.0).			
		69.0-70.0: 71.0-72.5:	Lost core. Common thin white quartz veins with coarse			
		73.8-77.6:	blebs of pyrite and pyrrhotite. White quart _z veins (to 8 cm) carry coarse patches of pyrite, pyrrhotite, chalcopyrite (veins $30-45^{\circ}$ to Thin ankerite and calcite veinlets.			
85.7-90.2		siliceous, fr calcite and	ESITE: Dark Grey, very fine-grained, very actured (with network of thin ladder veins of quartz). Pyrite common as small blebs around larger s. Occasional small grains of brown sphalerite at s.			
90.2-101.0		fine-grained soft white o milky white Most pyrite Overall sulp	": As previous descriptions. Altered pale grey with d siliceous matrix, feldspar phenocrysts altered to elay. Most fractures 20-45° to CA. Occasional quartz veins with patches of pyrrhotite and pyrite. in thin stringers and fracture fillings without quartz. while content relatively low. Upper contact 50° to cated by quartz veins); lower contact 55° to CA.			
101.0-155.5		described al (1-2 mm) ar with pyrite Pyrite also	ESITE: Grey-brown to grey-green colour, as ove. Hornfelsed abundant barren quartz veinlets d less frequent milky quartz veins (5 mm - 5 cm) and/or pyrrhotite. Also common thin calcite veinlets in thin stringers and patches without quartz. Pyrite associated with zones of chloritic alteration.			
		143.0-144.0	Brecciated zone with frequent quartz and calcite veinlets.			
155.5-164.0		but paler. G altered to s altered to c siliceous th white quart pyrrhotite)	": Strongly altered. Similar to previous descriptions irey-white colour. Tabular feldspar phenocrysts oft chalky white clay. Tiny mafic phenocrysts hlorite or pyrite. Matrix white, softer, less an other Alaskite intersections. Thin grey and z veins (rarely to 5 cm) carry pyrite (occasional with chlorite, sericite, some carbonate. Thin dark hairline fractures (chlorite?). Upper contact 20° to			

in)

Principal Unit	Sub-Unit	Description / Notes / Samples
·		161.0-161.3: Abundant coarse pyrite with quartz veining 25° to CA. 163.0-164.0: Rubble, high core loss.
164.0		END OF HOLE; stopped in cave.

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SAMPLES

Sample #	Interval (feet)	Au	Ag	Cu	Pb	Zn	Mo
87 A4-01	54.5 - 55.2	30	3.5	2650	12	43	435
87 A4-02	63.0 - 64.4	15	0.7	355	5	34	137
87 A4-03	64.4 - 66.5	20	0.7	261	16	83	113
87 A4-04	66.5 - 68.0	5	0.4	390	4	33	220
87 A4-05	68.0 - 69.0	25	0.7	660	4	20	290
87 A4-06	73.8 - 77.6	15	0.5	67 <i>5</i>	< 2	22	615

All elements quoted in ppm except gold (ppb).

DDH 87-A-4

feet

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0.9

4.0

1.3

1.6

2.7

3.5

3.2

3.7

3.2

5.7

5.6

3.5

1.2

2.9

2.4

1.1

3.9

1.3

2.5

6.2

3.4

1.7

2.2

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-

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Core Recovered

%

65

75

96

80

87

86

95

97

85

100

95

97

73

100

100

88

96

87

70

50

92

100

100

100

100

50

100

feet

2.6

3.0

6.7

4.0

2.6

4.0

6.9

7.6

8.7

8.5

10.0

7.6

6.8

2.2

5.0

5.3

4.0

6.7

2.6

2.1

0.5

4.6

10.0

9.0

5.0

7.0

0.5

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RQD

%

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30

60

32

61

67

51

42

42

38

57

74

51

55

58

45

27

58

50

_

_

54

62

38

34

31

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CORE RECOVERY/RQD

Run

(feet)

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END OF HOLE

12

16

23

28

31

35

43

51

60

70

80

88

95

98

103

109

113

120

123

126

127

132

142

151

156

163

164

8

12

16

23

28

31

35

43

51

60

70

80

88

95

98

103

109

113

120

123

126

127

132

142

151

156

163

Interval

(feet)

4

4

7

5

3

4

8

8

9

10

10

8

7

3

5

6

4

7

3

3

1

5

10

9

5

7

1

Box No.

1

2

3

4

5

6

7

8

9

From To

- 26.2

- 44.2

- 100.2

44.2 - 62.4

62.4 - 81.3

100.2 - 117.2

117.2 - 136.2

136.2 - 153.2

153.2 - 164

(feet)

8

26.2

81.3

-

sant	
-	

а 1**90000**

	DIA	MOND DR	ILL LOG	1	Page <u>1</u> of <u>3</u>
Company:	SOUTHERN CROSS	GOLD MINES INC	. Hole No.:	DD	0H 87-A-5
Drilling Co.	CORAL ENTERPR	ISES LTD.	_ Project: _	Minera	l Hill
Started: _	10 August 1987		Code:		
Completed:	12 August 1987		_ Location: _	NTS 93	L 10
Grid Co-ord	inates:				
Elevation:					
Azimuth:	155°		_		
Depth:	220' (67.0 m)		Dip:60	0	
Core size:	NQ		Horizontal a	dvance:	110.2
Logged by:	R. Robertson (Novem		Vertical dep	th:	190.3
	Route an	Blatter	Acid test:		None
0-2		OVERBURDEN:	CASING REMOVE	D.	
0-2 2-58.7		"ALASKITE": Pr porphyritic. Sm altered to chalky	ale grey, medium gr all tabular plagiocla	ained, mo	
		replacement by highly siliceous. 1 mm to 2 cm, r in veins and diss 0.1-0.3%. Pyrite Chalcopyrite rar 24.0-28.0: Zo (ap	Abundant veins of w arely up to 10 cm w eminated or as bleb e, pyrrhotite, molyb re, occurring only cl ne of abundant, wid prox. 30% of this ir	ritized to e. Matrix white and ide. Sulp s in rock denite in ose to qu er white nterval).	nd hornblende complete x very fine-grained, grey quartz from hides widespread matrix; average equal amounts. artz veins. quartz veins Widths from few mm
		replacement by highly siliceous. 1 mm to 2 cm, r in veins and diss 0.1-0.3%. Pyrite Chalcopyrite rar 24.0-28.0: Zoi (ap to in to	y from fresh to chlo pyrite and pyrrhotit Abundant veins of v arely up to 10 cm w eminated or as bleb e, pyrrhotite, molyb e, occurring only cl ne of abundant, wid pprox. 30% of this ir	ritized to e. Matrix white and ide. Sulp s in rock denite in ose to qu er white terval). pyrite, p l amounts	nd hornblende complete x very fine-grained, grey quartz from hides widespread matrix; average equal amounts. artz veins. quartz veins Widths from few mm yrrhotite, molybdeni

Principal Unit	Sub-Unit		Description / Notes / Samples
		64.6-68.0:	Lost core.
		70.0-72.0:	Zone of strong silicification with several 2 quartz veins and narrow Alaskite dyke (71. at 50° to CA.
		72.8-76.5:	St rong silicification, abundant thin quartz some coarse patches of pyrite and pyrrhot abundant disseminated pyrite, chalcopyrite
		78.3-79.5:	stringers and disseminations. Alaskite dyke; both contacts 5 cm zones o quartz veins and silicification. Upper cont to CA. Lower contact irregular.
		82.2-84.0:	Alaskite dyke. Highly siliceous. Common disseminated molybdenite. Contacts 55-60
		84.8-86.0:	Heavy quartz veining with coarse patches pyrrhotite.
		87.0-92.4:	Silicified zone with abundant quartz veinle Disseminated pyrite in silicified areas. La veins at 20° to CA.
		92.4-93.5:	Stronger quartz veining and silicification a tact to Alaskite. Coarse pyrite, chalcopyr abundant fine molybdenite, thin ankerite v
93.5-100.0		"ALASKITE	": As described for 2-58.7 interval.
		93.5-95.5:	Contact zone to hornfelsed andesite. Con parallel to CA. Thin ankerite veins along Hairline fractures and thin molybdenite ar veinlets brecciate Alaskite.
100.0-112.0		hornfelsed a	ESITE: Grey-brown to grey-green, fine-grain andesite with strong silicification and extens s with pyrite, pyrrhotite and minor molybder
			 Alaskite dyke. Dark grey silicified zone. Texture oblitera Patchy white clay and ankerite veinlets. I abundant disseminated sulphides (mostly p
112.0-216.2		strong alter destroyed a and highly s	": As previous descriptions. Extensive areas ation (quartz-sericite) where original texture nd rock becomes pale grey-green, very fine- iliceous. Common thin quartz veins carry py Molybdenite often extensively disseminated

Principal Unit						
		117.7-123.3:	Fine-grained pale grey-green zone of sericite alteration.			
		130.0-138.0:	Sericite alteration zone.			
			Breccia zone. Upper part is area of strong quartz veining parallel to CA with abundant pyrite in coarse grained patches (with molybdeni becoming brecciated (both vein and Alaskite) wit little sign of clast movement. Black material in hairline fractures in breccia; some molybdenite and some manganese staining. Lower section shows dark hairline fractures in sericite altered			
			Alaskite.			
		156.8-157.0:	Coarse pyrite cubes (to 2 cm) in envelope of pink altered feldspars.			
		160.5-162.0:	Green and black chloritic material on fracture surfaces at 10° and 30° to CA. Minor pyrite, molybdenite, sphalerite.			
		166.0-171.3:	Breccia. Angular and rounded clasts (1 mm to several cm) of strongly altered Alaskite (quartz and sericite) in matrix-supported breccia with calcite cement . Calcite breccia 166.0-169 Sharp contact at 169.2 at 50° to CA to dark grey breccia; highly siliceous, abundant sericite, chlor			
		171.3-177.9:	in matrix. Contact at 171.3. Altered greenish Alaskite. Well fractured. Com thin grey quartz veinlets. Sericite-chlorite alter tion. Occasional wider quartz veins (1-3 cm) and patches with molybdenite. Around 173.0 - veins 1 cm of coarse white calcite crystals crosscut we and grey quartz veins.			
16.2-220.0		META-ANDI amounts of c faces.	ESITE: As described above. Locally silicified. Mi coarse pyrite in quartz veinlets and on fracture			
20.0		END OF HO				

SAMPLES

Sample #	Interval (f ee t)	Au	Ag	Cu	Pb	Zn	Mo
87 A <i>5</i> -01	24.0 - 28.0	< 5	0.4	495	2	20	1950
87 A <i>5</i> -02	72.8 - 76.5	15	0.7	1500	< 2	131	1350
87 A <i>5</i> -03	84.8 - 86.0	< 5	0.4	640	< 2	38	1800
87 A <i>5</i> -04	87.0 - 90.4	20	0.4	1050	< 2	61	435
87 A <i>5</i> -05	90.4 - 93.5	15	0.6	890	4	51	730
87 A <i>5</i> -06	93.5 - 95.5	< 5	0.9	5 80	33	183	1000
87 A <i>5</i> -07	108.7 - 112.0	< 5	0.5	590	35	177	230
87 A <i>5</i> -08	117.7 - 123.3	< 5	0.3	355	2	20	640
87 A <i>5</i> -09	143.0 - 147.5	5	0.6	80 <i>5</i>	4	35	690
87 A <i>5</i> -10	147.5 - 153.3	10	0.7	405	46	154	1400
87 A <i>5</i> -11	160.5 - 162.0	5	1.8	295	1160	3040	520
87 A <i>5</i> -12	166.0 - 169.2	10	0.4	225	<i>5</i> 0	156	320
87 A <i>5</i> -13	169.2 - 171.3	40	0.7	225	45	53	700
87 A <i>5</i> -14	171.3 - 177.9	30	0.7	270	21	31	410

All elements quoted in ppm except gold (ppb).

DDH 87-A-5

CORE RECOVERY/RQD

Box	From To	Run	Interval	Core Rec	covered	RQI	D
No.	(feet)	(feet)	(feet)	feet	%	feet	%
1	2 - 19.8	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	2 3 2 1 3 5	$1.0 \\ 1.8 \\ 1.3 \\ 0.9 \\ 3.0$	50 60 65 90 100	- - 0.4 0.7	- - 4
2	19.8 - 38.7	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	10	4.8 9.8	96 98	0.8 6.9	1 7
3	38.7 - 55	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	5 10	5.0 9.0	100 90	$\begin{array}{c} 3.2\\ 4.2 \end{array}$	6- 4'
4	55 - 74.5	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	10 10 5	9,8 8.5 1.6	98 85 32	5.9 1.9 -	6 2: -
5	74.5 - 93	68 - 73 73 - 83 83 - 93	5 10 10	5.0 10.0 9.7	100 100 97	$ \begin{array}{c} 3.0 \\ 7.1 \\ 6.0 \end{array} $	6 7 6
6	93 - 111.3	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	6 4 10	5.6 4.0 9.0	93 100 90	5.0 3.2 6.8	8 8 7
7 8	111.3 - 129.5 129.5 - 147.5	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	10 10	10.0 10.0	100 100	5.5 5.5	5 5
9	147.5 - 164	133 - 143 143 - 153 153 - 163	10 10 10	10.0 10.0 9.4	100 100 94	7.8 6.3 3.5	7 6 3
10	164 - 181	$163 - 173 \\ 173 - 183$	10 10	10.0 10.0	100 100	1.7 3.8	1 3
11 12	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	10 10 10	9.5 10.0 10.0	95 100 100	5.5 5.0 5.7	5 5 5
13	217 - 220	213 - 220	7	6.0	86	3.3	5
		END OF HOLE					

Company: SOUTHERN CROSS GOLD MINES INC. Hole No.: DDH 87-A-6 Drilling Co.: CORAL ENTERPRISES LTD. Project: Mineral Hill Started: 12 August 1987 Code:		DIAMOND D	RILL	LOG		Page <u>1</u> of <u>3</u>
Started: 12 August 1987 Code: Completed: 13 August 1987 Location: NTE 93 L 10 Grid Co-ordinates:	Company: _	SOUTHERN CROSS GOLD MINES II	NC.	Hole No.:	DDH 8	37-A-6
Completed: 13 August 1987 Location: NTS 93 L 10 Grid Co-ordinates:	Drilling Co.:	CORAL ENTERPRISES LTD.		Project:	Mineral H	(ill
Grid Co-ordinates:	Started:	12 August 1987		Code: _		
Elevation:	Completed:	13 August 1987		Location:	NTS 93 L	10
Azimuth: 200° Depth: 213' (64.9 m) Dip: -60° Core size: NQ Horizontal advance: 106.6 Logged by: R. Robertson (November 1987) Vertical depth: 184.0 Mathematic Mathmatic Mathmater Mathmater Mathematic Mathematis Mathematic Mathmat	Grid Co-ordi	nates:				
Depth: 213' (64.9 m) Dip:	Elevation:					
Core size: NQ Horizontal advance: 106.6 Logged by: R. Robertson (November 1987) Vertical depth: 184.0 Madd Mallatt Acid test: None Principal Unit (feet) Sub-Unit Description / Notes / Samples 0-8 OVERBURDEN: CASING REMOVED. 8-111.2 META-ANDESITE: Grey-brown to grey-green colour, grained. 0-8 OVERBURDEN: CASING REMOVED. 8-111.2 META-ANDESITE: Grey-brown to grey-green colour from fin Original textures commonly preserve local amygdal texture. Extensive network of quartz veins (1 mm - 5 occasionally wider) carry pyrite and/or pyrrhotite, us coarse blebs. Fine molybdenite with wider veins only thin films near vein selvedges or as zones of dissemina grains. 10.3-10.8: Quartz veining produce chloritic alte in hornfelsed andesite. 10.3-10.8: Quartz vein 40° to CA (trace pyrite, pyr tite, molybdenite). 13.0-13.3: Quartz vein network 65-75° to CA (trace pyrite, pyrrhotite, molybdenite). 18.3-19.5: Mostly broken core. 45.0-47.5: Strong chlorite alteration with some seri and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46	Azimuth: _	200°				
Logged by: R. Robertson (November 1987) Vertical depth: 184.0 Madd Malaxt Acid test: None Principal Unit (feet) Description / Notes / Samples 0-8 OVERBURDEN: CASING REMOVED. 8-111.2 META-ANDESITE: Grey-brown to grey-green colour, grained. Probably hornfelsed - brown colour from find Original textures commonly preserved: local amygdak texture. Extensive network of quartz veins (1 mm - 5 occasionally wider) carry pyrite and/or pyrrhotite, ust coarse blebs. Fine molybdenite with wider veins only thin films near vein selvedges or as zones of dissemina grains. Zones of quartz veining produce chloritic alte in hornfelsed andesite. Calcite present in more strong altered areas - as patches and thin veinlets. 10.3-10.8: Quartz vein 40° to CA (trace pyrite, pyr tite, molybdenite). 13.0-13.3: Guartz vein network 65-75° to CA (trace pyrite, pyrrhotite, molybdenite). 18.3-19.5: Mostly broken core. Zone of silicification quartz veining with abundant pyrite (up 19.5-21.0: 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some seri and network of fine quartz veis with py pyrrhotite around Alaskite dyke (46.0-46	Depth:	213' (64.9 m)		Dip:	-60°	
Model Acid test: None Principal Unit (feet) Sub-Unit (feet) Description / Notes / Samples 0-8 OVERBURDEN: CASING REMOVED. 8-111.2 META-ANDESITE: Grey-brown to grey-green colour, grained. Probably hornfelsed - brown colour from fine Original textures commonly preserved: local amyddal texture. Extensive network of quartz veins (1 mm - 5 occasionally wider) carry pyrite and/or pyrchotite, usu coarse blebs. Fine molybdenite with wider veins only thin films near vein selvedges or as zones of disseming grains. Zones of quartz veining produce chloritic alter in hornfelsed andesite. Calcite present in more strong altered areas - as patches and thin veinlets. 10.3-10.8: Quartz vein a0% to CA (trace pyrite, pyr tite, molybdenite). 13.0-13.3: Quartz vein network 65-75% to CA (trace pyrite, pyrrhotite, molybdenite). 18.3-19.5: Mostly broken core. Zone of silicificatio quartz veining with abundant pyrite (up 19.5-21.0: 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some seri- and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46	Core size:	NQ		Horizontal	advance:	106.6
Principal Unit (feet) Sub-Unit (feet) Description / Notes / Samples 0-8 OVERBURDEN: CASING REMOVED. 8-111.2 META-ANDESITE: grained. Probably hornfelsed - brown colour from fin Original textures commonly preserved: local amygdad texture. Extensive network of quartz veins (1 mm - 5 occasionally wider) carry pyrite and/or pyrrhotite, ust coarse blebs. Fine molybdenite with wider veins only thin films near vein selvedges or as zones of disseming grains. Zones of quartz veining produce chloritic alte in hornfelsed andesite. Calcite present in more strong altered areas - as patches and thin veinlets. 10.3-10.8: Quartz vein network 65-75° to CA (trace pyrite, pyrrhotite, molybdenite). 13.0-13.3: Quartz vein network 65-75° to CA (trace pyrite, pyrrhotite, molybdenite). 18.3-19.5: Mostly broken core. Zone of silicificatit quartz veining with abundant pyrite (up 19.5-21.0: 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some seri- and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46	Logged by:	R. Robertson (November 1987)		Vertical de	epth:	184.0
Unit (feet)Sub-Unit (feet)Description / Notes / Samples0-8OVERBURDEN: CASING REMOVED.8-111.2META-ANDESITE: Grey-brown to grey-green colour, grained. Probably hornfelsed - brown colour from fine Original textures commonly preserved: local amygdald texture. Extensive network of quartz veins (1 mm - 5 occasionally wider) carry pyrite and/or pyrrhotite, us coarse blebs. Fine molybdenite with wider veins only thin films near vein selvedges or as zones of dissemina grains. Zones of quartz veining produce chloritic alte in hornfelsed andesite. Calcite present in more strong altered areas - as patches and thin veinlets.10.3-10.8:Quartz vein a0° to CA (trace pyrite, pyr tite, molybdenite).13.0-13.3:Quartz vein network 65-75° to CA (trace pyrite, pyrhotite, molybdenite).18.3-19.5:Mostly broken core. Zone of silicificatio quartz veining with abundant pyrite (up 19.5-21.0:19.5-21.0:Lost core. 45.0-47.5:45.0-47.5:Strong chlorite alteration with some seri and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46		Routh We Molerte	>	Acid test:	N	one
 grained. Probably hornfelsed - brown colour from fine Original textures commonly preserved: local amygdald texture. Extensive network of quartz veins (1 mm - 5 occasionally wider) carry pyrite and/or pyrrhotite, usu coarse blebs. Fine molybdenite with wider veins only thin films near vein selvedges or as zones of dissemina grains. Zones of quartz veining produce chloritic alte in hornfelsed andesite. Calcite present in more strong altered areas - as patches and thin veinlets. 10.3-10.8: Quartz vein 40° to CA (trace pyrite, pyr tite, molybdenite). 13.0-13.3: Quartz vein network 65-75° to CA (trace pyrite, pyrrhotite, molybdenite). 18.3-19.5: Mostly broken core. Zone of silicificatio quartz veining with abundant pyrite (up 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some seri- and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46 	0-8	OVERBURDE	N: CAS	ING REMOV	ED.	
 grains. Zones of quartz veining produce chloritic alter in hornfelsed andesite. Calcite present in more strong altered areas - as patches and thin veinlets. 10.3-10.8: Quartz vein 40° to CA (trace pyrite, pyr tite, molybdenite). 13.0-13.3: Quartz vein network 65-75° to CA (trace pyrite, pyrite, pyrhotite, molybdenite). 18.3-19.5: Mostly broken core. Zone of silicification quartz veining with abundant pyrite (up 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some series and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46) 	Unit (feet) 0-8	(feet) <u>OVERBURDE</u> <u>META-ANDES</u> grained. Prob	N: CAS BITE: Gi ably hor	ING REMOV rey-brown to	ED.	n colour, fine
 tite, molybdenite). 13.0-13.3: Quartz vein network 65-75° to CA (trace pyrite, pyrrhotite, molybdenite). 18.3-19.5: Mostly broken core. Zone of silicification quartz veining with abundant pyrite (up to 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some series and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46) 		texture. Exte occasionally w coarse blebs.	nsive ne vider) ca Fine mo	monly present twork of qua arry pyrite an olybdenite with	rved: local artz veins (nd/or pyrrh ith wider ve	amygdaloidal 1 mm - 5 cm; otite, usually eins only - as
 18.3-19.5: Mostly broken core. Zone of silicification quartz veining with abundant pyrite (up 19.5-21.0: Lost core. 45.0-47.5: Strong chlorite alteration with some series and network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46) 		texture. Exte occasionally w coarse blebs. thin films nea grains. Zones in hornfelsed a	nsive ne vider) ca Fine mo r vein se of quar andesite	monly present twork of qua arry pyrite an olybdenite with elvedges or a tz veining pr . Calcite pr	rved: local artz veins (nd/or pyrrh ith wider ve s zones of oduce chlo esent in mo	amygdaloidal 1 mm - 5 cm; otite, usually eins only - as disseminated ritic alteratic
19.5-21.0:Lost core.45.0-47.5:Strong chlorite alteration with some seriesand network of fine quartz veins with py pyrrhotite around Alaskite dyke (46.0-46)		texture. Exte occasionally w coarse blebs. thin films nea grains. Zones in hornfelsed a altered areas 10.3-10.8:	nsive ne vider) ca Fine mo r vein se of quar andesite - as pato Quartz v Cite, mo Quartz v	monly present twork of qua- arry pyrite and olybdenite with elvedges or a tz veining pr . Calcite pr ches and thir vein 40° to C lybdenite). vein network	rved: local artz veins (ad/or pyrrh ith wider ve s zones of oduce chlo esent in mo veinlets. A (trace py 65-75° to	amygdaloidal 1 mm - 5 cm otite, usually eins only - as disseminated ritic alteratione ore strongly write, pyrrho- CA (trace
		texture. Exte occasionally w coarse blebs. thin films near grains. Zones in hornfelsed a altered areas 10.3-10.8: 13.0-13.3: 18.3-19.5:	nsive ne vider) ca Fine mo r vein se of quar andesite - as pato Quartz v Quartz v Quartz v Quartz v Quartz v Quartz v Quartz v	monly present etwork of qua- arry pyrite an olybdenite with elvedges or a tz veining pr . Calcite pr ches and thir vein 40° to C lybdenite). vein network oyrrhotite, m proken core.	rved: local artz veins (id/or pyrrh ith wider ve s zones of oduce chlo esent in mo veinlets. CA (trace py 65-75° to olybdenite) Zone of sil	amygdaloidal 1 mm - 5 cm otite, usually eins only - as disseminated ritic alteratio ore strongly write, pyrrho- CA (trace discontation and

Principal Unit	Sub-Unit		Description / Notes / Samples
		52.3-54.3:	Several wide veins of milky white quartz (at 30–50° to CA) with coarse blebs of pyrrhotite; pyrite and molybdenite in fine veinlets.
		93.5-94.3:	Milky quartz vein at 50° to CA with pyrite, pyrrhotite, molybdenite.
111.2-118.7		veining (as a calcite) esp	META-ANDESITE: Hornfelsed andesite with above) altered to pale grey-green (sericite, ecially from 112.0-114.0; thin calcite and ankerit e and small patches of white clay.
118.7-151.5		small tabula minor fine b matrix. Ab with molybe coarse pyrit white chalc Molybdenite veining) and pyrite-pyrf	": Pale grey, medium-grained porphyritic with ar plagioclase phenocrysts (altered chalky white), piotite and hornblende in fine-grained siliceous bundant thin grey and white quartz veins, usually denite films or disseminations. Larger veins have te and pyrrhotite blebs. Occasional narrow (1-2 m edony veinlets and similar ankerite veinlets. e also coats fracture surfaces (without quartz d some quartz-molybdenite veins cut earlier quart hotite veins. Local coarse sericite-chlorite o pyrite-pyrrhotite veins. Strongest quartz-sulphi at: 121.0-123.0 125.0-127.0 138.7-139.8 142.5-144.0
151.5-176.5		Similar to u veining but common as altered and molybdenite	DESITE: Grey-brown/green colour. Hornfelsed. pper part of hole. Locally strong quartz-pyrite veining rarer than at top of hole. Pyrite quite coarse blebs in veins and as patches in chlorite- esite (e.g. at 157.0). Very little pyrrhotite or e. Occasional thin (1 mm) calcite veinlets. Sever of pink-brown garnet with pyrite in areas of eration.
			teration (167.0–171.0) with clay-calcite alteration cite and/or ankerite veinlets.
		Note: Quar	tz-pyrite vein parallel to CA at 176.0.
176.5-194.0		silicificatio fracture sur	": Generally similar to 118.7-151.5. Stronger n and fracturing with dark chlorite and pyrite on faces. Pyrite common but molybdenite scarce. ncore and lost core.

Principal Unit	Sub-Unit	Description / Notes / Samples
		1765 ₁ [182.0: High core loss. Mostly dark grey mud with chlorite, calcite, pyrite. 187.0-187.5: Abundant coarse pyrite. 189.0-191.0: Short section of meta-andesite.
194.0-213.0		<u>META-ANDESITE:</u> Generally as described above. Several strongly silicified sections. Quartz-pyrite veins common. Abundant fine molybdenitein quartz vein at 199.3. Upper contact (194.0-195.0) has strong clay sericite alteration.
		Strong silicification: 199.3-201.5.
213.0		END OF HOLE

.

SAMPLES

Sample #	Interval (feet)	Au	Ag	Cu	Pb	Zn	Mo
87 A6-01	18.3 - 19.5	25	0.7	1500	~ 2	114	27 5
87 A6-02	44.7 - 47.5	10	0.3	845	< 2	82	2550
87 A6-03	52.3 - 54.3	15	0.3	700	< 2	50	1550
87 A6-04	121.0 - 123.0	10	0.9	690	3	16	245
87 A6-05	125.0 - 127.8	5	0.6	670	2	16	194
87 A6-06	138.5 - 139.8	5	0.3	415	3	31	245 0
87 A6-07	142.0 - 147.0	< 5	0.3	515	< 2	26	1500
87 A6-08	157.0 - 158.3	10	0.2	540	< 2	99	197
87 A6-09	167.0 - 172.0	15	0.2	610	2	84	179
87 A6-10	176.5 - 183.0	10	0.1	445	< 2	51	345
87 A6-11	199.0 - 201.5	10	0.2	515	< 2	40	<i>5</i> 70

All elements quoted in ppm except gold (ppb).

DDH 87-A-6

CORE RECOVERY/RQD

Box	From To	Run	Interval	Core Re	covered	RG	D
No.	(feet)	(feet)	(feet)	feet	%	feet	%
1 2 3 4 5 6 7 8 9 10 11 11 12	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{c} 7\\ 8\\ 10\\ 10\\ 10\\ 10\\ 6\\ 6\\ 10\\ 8\\ 2\\ 9\\ 6\\ 6\\ 9\\ 8\\ 4\\ 8\\ 9\\ 5\\ 6\\ 6\\ 3\\ 6\\ 5\\ 4\\ 3\\ 3\\ 2\\ 4\\ 7\\ 7\end{array}$	feet 4.5 5.6 10.0 9.8 9.7 4.6 6.0 9.6 7.3 1.7 8.6 5.8 5.5 8.7 7.8 3.7 8.0 9.0 5.0 5.7 5.5 2.7 4.7 1.6 1.8 2.0 1.2 1.0 4.0 5.7 4.6 1.8 2.0 1.2 1.0 4.6 1.8 1.0 1.2 1.0 1.0 1.2 1.0 1.2 1.0 1.2 1.0 1.2 1.0 1.2 1.0 1.2 1.0 1.2 1.2 1.0 1.2 1.0 1.2	$\begin{array}{c} \% \\ 64 \\ 70 \\ 100 \\ 98 \\ 97 \\ 77 \\ 100 \\ 96 \\ 91 \\ 85 \\ 95 \\ 97 \\ 92 \\ 97 \\ 92 \\ 97 \\ 97 \\ 92 \\ 97 \\ 97$	feet $ \begin{array}{c} 1.2\\ 2.6\\ 4.4\\ 6.0\\ 6.2\\ 6.0\\ 1.3\\ 2.8\\ 4.8\\ 5.5\\ 0\\ 5.0\\ 3.9\\ 3.2\\ 5.5\\ 3.5\\ 0\\ 4.7\\ 4.6\\ 2.0\\ 3.6\\ 3.6\\ 0\\ 3.2\\ 0\\ 0\\ 0.5\\ 0\\ 0\\ 0.5\\ 0\\ 0\\ 0.6\\ 4.3\\ 1.4 \end{array} $	$\begin{array}{c} \% \\ 27 \\ 46 \\ 44 \\ 60 \\ 63 \\ 62 \\ 28 \\ 47 \\ 50 \\ 75 \\ 0 \\ 58 \\ 67 \\ 58 \\ 63 \\ 45 \\ 0 \\ 59 \\ 51 \\ 40 \\ 63 \\ 65 \\ 0 \\ 68 \\ 0 \\ 0 \\ 25 \\ 0 \\ 0 \\ 15 \\ 75 \\ 30 \end{array}$

	DIA			
Company: _	SOUTHERN CROSS	S GOLD MINES IN	C. Hole No.:	DDH 87-A-7
Drilling Co.:	CORAL ENTERI	PRISES LTD.	Project:	Mineral Hill
Started:	14 August 1987		Code:	
Completed:	14 August 1987		Location:	NTS 93 L 10
Grid Co-ordi	inates:			
Elevation: _				
Azimuth: _	005°			
Depth:	33' (10.05 m)		Dip:	-60°
Core size: _	NQ		Horizontal	advance: 16.4
Logged by:	R. Robertson (Nov	ember 1987)	Vertical de	pth:
	Romed a	Alera	Acid test:	None
Principal Unit (feet)	Sub-Unit (feet)		Acid test:	
Unit	Sub-Unit	De	<u>.</u>	' Samples
Unit (feet)	Sub-Unit	De: OVERBURDEN: <u>META-ANDESI</u> grained, probab	Scription / Notes / CASING REMOV	' Samples ED. o green colour, fine- al small amygdules.
Unit (feet) 0-8	Sub-Unit	Des OVERBURDENS META-ANDESI grained, probab very badly brok 8-15: Th	CASING REMOV CASING REMOV TE: Dark brown to by hornfelsed. Loca en; low core recove	Samples ED. green colour, fine- al small amygdules.
Unit (feet) 0-8	Sub-Unit	Des OVERBURDEN: <u>META-ANDESI</u> grained, probab very badly brok 8-15: Th at 15-25: Lo wl as	CASING REMOV CASING REMOV TE: Dark brown to hornfelsed. Loca en; low core recove in quartz veins (1- 50-70° to CA. ow recovery. Silici nite and grey quart 1-2 mm blebs in ve	Samples ED. o green colour, fine- al small amygdules. ery (18% overall). 3 mm) with minor py fied bleached wallroo z veins to 2 cm wide eins and disseminated
Unit (feet) 0-8	Sub-Unit	Des OVERBURDEN: <u>META-ANDESI'</u> grained, probab very badly brok 8-15: Tr at 15-25: Lo wh as 25-33: Mu sil	CASING REMOV CASING REMOV <u>FE:</u> Dark brown to ly hornfelsed. Loca en; low core recove nin quartz veins (1- 50-70° to CA. ow recovery. Silici nite and grey quart 1-2 mm blebs in ve naller grains in wal ostly as 8-15, with	Samples ED. ogreen colour, fine- al small amygdules. ery (18% overall). 3 mm) with minor py fied bleached wallroo z veins to 2 cm wide eins and disseminated lrock. a few small pieces o 25 and some pieces o

SAMPLES

Sample #	Interval (feet)	Notes	Au	Ag	Cu	<u>Pb</u>	Zn	Mo
87 A7-01	18.0 - 25.0	0.5' core only	< 5	0.2	430	< 2	29	1450

All elements quoted in ppm except gold (ppb).

DDH 87-A-7

CORE RECOVERY/RQD

Box	From To		Interval (feet)	Core Rec	overed	RQ	D
No.	(feet)	Run (feet)	(feet)	feet	%	feet	%
	8 - 33	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	5 5 7 8	1.5 1.5 0.5 1.0	30 30 7 12.5	- - -	
1		END OF HOLE					

DIAMOND DRILL LOG

Page <u>1</u> of <u>2</u>

Company: _	SOUTHERN CROSS	GOLD MINES	INC. Hole	: INO.:	DDH	<u> </u>
Drilling Co.:	CORAL ENTERPRI	ISES LTD.	Proje	ect:	Miner	al Hill
Started:	14 August 1987		Code	e: _		
Completed:	15 August 1987		Loca	ation:	NTS 93	L 10
Grid Co-ordi	nates:			<u></u>		
Elevation:		e				······
Azimuth:	180°					
Depth:	185' (56.4 m)	<u></u>	Dip:		-60 [°]	······
Core size:	NQ		Hori	zonta	l advance	92.5
Logged by:	R. Robertson (O	october 1987)		ical d	epth:	160.1
	thank to	2 holar	Acia	d test:	N	one
Principal Unit (feet)	Sub-Unit (feet)		Description / N	lotes	/ Sample	S
Unit			Description / N	lotes	/ Sample	S
Unit			Description / N EN: CASING R			S
Unit (feet)		OVERBURDI META-ANDI fine-grained. ment of fine quartz veinir Areas of stro abundant ser thin calcite a	EN: CASING R ESITE: Dark gro Hornfelsed; publicite. Extensing; green colour ongest alteratio icite and silica and/or ankerite , associated wit	EMOV ey-bro urple sive hy cation on are in roc veinte	YED. by to gree brown col ydrothern from seco paler gree k matrix ets. Loca	ey-green colour, lour from develog nal alteration and ondary chlorite. y-green with and occasional illy heavy pyrite,
Unit (feet) 0-30.0		OVERBURDI META-ANDI fine-grained. ment of fine quartz veinin Areas of stro abundant ser thin calcite a coarse blebs,	EN: CASING R ESITE: Dark gro biotite. Extension org; green colour ongest alteratio icite and silica and/or ankerite , associated wit ration. Abundant thin	EMOV ey-bro urple l sive hy ration on are in roc veinlo h quart	YED. own to gree brown col ydrothern from seco paler grey k matrix ets. Loca tz veinin z veins ar	ey-green colour, lour from develog nal alteration and ondary chlorite. y-green with and occasional illy heavy pyrite,
Unit (feet) 0-30.0		OVERBURD META-AND fine-grained. ment of fine quartz veinir Areas of stro abundant ser thin calcite a coarse blebs, chlorite alter	EN: CASING R ESITE: Dark gro Hornfelsed; pubiotite. Extensing; green colour ongest alteratio icite and silica and/or ankerite , associated wit ration. Abundant thin (pyrite margin Thin quartz an sericite altera	EMOV ey-bro urple sive h ration on are in roc veinlo h quart quart al to o ad/or o tion, n	YED. wwn to gree brown col ydrothern from seco paler grey k matrix ets. Loca tz veins an uartz). calcite ve minor pyr	ey-green colour, lour from develop nal alteration and ondary chlorite. y-green with and occasional illy heavy pyrite, g and areas of nd coarse pyrite inlets. Moderate ite, thin breccia
Unit (feet) 0-30.0		OVERBURDI META-ANDH fine-grained. ment of fine quartz veinin Areas of stro abundant ser thin calcite a coarse blebs, chlorite alter 33.7-37.0:	EN: CASING R ESITE: Dark gro Hornfelsed; probiotite. Extensions; green colour ongest alteration icite and silica and/or ankerite , associated wit ration. Abundant thin (pyrite margin Thin quartz an sericite altera at 92.0. Much Rusty silicified and calcite, at	EMOV ey-bro urple I sive h ration on are in roc veinle h quart al to o nd/or o tion, n core d zone oundar	YED. YED.	ey-green colour, lour from develop nal alteration and ondary chlorite. y-green with and occasional illy heavy pyrite, g and areas of nd coarse pyrite inlets. Moderate ite, thin breccia

Principal Unit	Sub-Unit	Description / Notes / Samples
		113.0–138.0: Major zone of bleaching, silicification, sericitization with thin (1 mm) ankerite and calcite veinlets. Sulphide content very low. Rock more broken towards lower end of zone
		135.8-138.0 lost. 165.9-167.0: Lost core. 168.6-175.0: Lost core - cave.
185.0		END OF HOLE

SAMPLES

Sample #	Interval (feet)	Au	Ag	Cu	Pb	Zn	Mo
87 A8-01	33.0 - 37.0	5	0.3	400	« 2	105	14
87 A8-02	83.0 - 85.0	< 5	< 0.1	171	< 2	104	11
87 A8-03	85.0 - 93.0	< 5	0.2	435	< 2	110	7
87 A8-04	93.0 - 94.0	< 5	2.6	4900	~ 2	44	24
87 A8-05	121.0 - 127.0	< 5	0.1	139	~ 2	51	10
87 A8-06	133.0 - 135.8	< 5	< 0.1	118	< 2	69	9

All elements quoted in ppm except gold (ppb).

DDH 87-A-8

CORE RECOVERY/RQD

Box	From To	Run	Interval	Core Red	covered	RQ	D
No.	(feet)	(feet)	(feet)	feet	%	feet	%
1	30 - 45.5	30 - 31	1	0.4	40	-	_
		31 - 33	2	1.5	75	-	-
		33 - 36	3	2.5	83	0.7	28
		36 - 40	4	3.4	85	-	-
		40 - 43	3	3.0	100	1.5	50
		43 - 45	2	1.0	50	_	-
2	45.5 - 62	45 - 46	1	1.0	100	_	_
-	1010 01	46 - 53	7	6.7	96	1.7	25
		53 - 58	5	5.0	100	1.5	30
3	62 - 79	58 - 68	10	9.2	92	4.9	53
Ŭ	02	68 - 69	1	1.0	100	0.3	30
		69 - 73	4	3.7	92	1.8	49
		73 - 76	3	2.4	80	-	-
		76 - 79	3	3.0	100	0.6	20
4	79 - 100	70 - 79		3.6			
4	79 - 100		4		90 100	0.7	19
		83 - 85	2	2.0	100	-	-
		85 - 92	7	2.2	31	0.9	41
-	100 115	92 - 101	9	7.0	78	3.2	46
5	100 - 115	101 - 104	3	2.0	67	-	-
		104 - 107	3	2.5	83	-	-
_		107 - 113	6	6.0	100	3.1	52
6	115 - 132	113 - 121	8	7.6	95	3.6	47
		121 - 127	6	5.5	92	1.8	33
_		127 - 133	6	6.0	100	2.7	45
7	132 - 150	133 - 138	5	2.8	56	0.5	18
		138 - 146	8	7.5	94	3.5	47
		146 - 150	5 8 4 5	4.0	100	0.4	10
8	150 - 178	150 - 155		4.0	80	0.6	15
		155 - 165	10	7.7	77	5.1	66
		165 - 167	2	0.9	45	-	-
		167 - 175		1.6	20	-	-
		175 - 180	8 5 5	1.7	34	0.3	18
9	178 - 185	180 - 185	5	0.9	18	-	_
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		END OF HOLE					
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APPENDIX II

ANALYTICAL RESULTS

ACME ANALYTICAL LABORATORIES DATE RECEIVED: AUG 18 1987 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE 253-3158 DATA LINE 251-1011 DATE REPORT MAILED: 0002.26/87.

ASSAY CERTIFICATE

- SAMPLE TYPE: CORE/ROCK AU++ AND AB++ BY FIRE ASSAY.

ASSAYER: A A

4.. DEAN TOYE, CERTIFIED B.C. ASSAYER

SOUTHERN CROSS GOLD File # 87-3394

	SAMPLE#	AG** OZ/T	AU** OZ/T
*7/1 87/2 - 87/2 -	98 143 30-33.5 54.5-56 64-66	.04 .01 .23 .01 .07	.001 .001 .001 .001 .001
87/1 - 87/1 - 87/1 - 87/2 - 87/2 -	79-80 92-94 130-131.5 228-231 343.5-346	1.09 6.91 1.51 .81 .71	.001 .001 .162 .002 .015
	RUBY	.33	.001

Bundar-Clegg & Company Ltd. 130 Pemberion Ave. North Vancouver, B.C. Canada V7P 2R5 Phone: (604) 985-(581) Telex: 04-352667

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Geochemical Lab Report

REPORT: 127-9	828						PF	ROJECT: NONE	GIVEN	Ρû
SAMPLE	ELEMENT	Cu	Ръ	Zn	No	Âg	As	-	30g	
NUMBER	UNITS	PPN	PPM	PPĦ	PPM	PPM	PPM	PPB	PPB	
D2 87-A1-01		97	61	100	155	5.6			65	
D2 87-A1-D2		94	30	361	230	10.1			40	
D2 87-A1-D3		88	24	124	400	3.3			10	
D2 87-A1-04		58	16	61	105	3.2			15	
D2 87-A1-05		120	25	63	140	2.1			5	
D2 87-A1-06		75	11	59	124	2.6			15	
D2 87-A1-D7		107	475	2720	197	5,5			10	
D2 87-A1-08		79	34	90	325	5.3			25	
D2 87-A1-09		149	14	74	360	13.0			15	
D2 87-A1-10		84	6	42	340	1.3			10	
D2 87-A1-11		54	24	75	54	2.8			15	
D2 87-A1-12		36	69	207	235	1.3			15	
D2 87-01-13		101	46	136	205	2.2			20	
D2 87-A1-14		111	19	83	215	2.0			50	
D2 87-A2-01		905	38	154	168	1.8			30	
D2 87-A2-02		1850	33	236	89	3.0			35	
D2 87-A2-D3		112	59	238	130	Ŋ.6			15	
D2 87-A2-04		240	35	192	125	2.1			15	
D2 87-A2-D5		165	89	206	175	1.4			50	
D2 87-A2-06		170	260	88	245	1.7			35	
D2 87-A2-07		420	190	127	205	2.9			90	
D2 87-A2-08		13110	127	160	205	4.6			60	
D2 87-A2-09		610	142	124	155	2.2			150	
D2 87-A2-10		160	12	96	760	1.7			110	
D2 87-A2-11		215	86	130	305	2.5			100	
D2 87-A2-12		1200	24	328	105	11.8			55	
D2 87-A2-13		485	31	121	157	2.8			35	
D2 87-A2-14		765	162	131	315	2.8			35	
D2 87-A2-15		340	70	16	76	1.0			15	
D2 87-A2-16		330	110	346	47	2.2			5	

Bondar-Clegg & Company Ltd. 130 Pemberion Ave. North Vancouver, B.C. Canada V7P 285 Phone: (604) 985-0681 Telex: 04-352667



Geochemical Lab Report

REPORT: 127-9	828						٢	KUJECI:	NONE GIVEN	PAGE 2	
SAMPLE	ELEMENT UNITS	Cu PPlt	Pb PPM	Zn PPM	No PPM	Ag PPM	As PPM	Hg PPB	Au 30g PPB		
D2 87-A2-17		365	156	182	365	3.1			20		
D2 87-A2-18		1900	99	168	120	3.0			190		
D2 87-A2-19		1200	262	1170	455	6.9			75		
D2 87-A2-20		1650	15	255	88	4.9			65		
D2 87-A2-21		1350	12	228	355	3.8			80		
		2200	0	2/7	220	(0			90		
D2 87-A2-22		2300	9	367	320	6. 0					
D2 87-A2-23		1800	10	312	112	5.3			75		
D2 87-A2-24		875	6	160	138	2.7			100		
D2 87-A2-25		58	4	28	755	0.2			5		
D2 87-A2-26		440	19	121	565	5.9			60		
D2 87-A2-27		1450	5	315	400	18.1	1 11		80		
D2 87-A2-28		2150	37	2430	1100	47.5			110		
D2 87-A2-29		22	18	37	21	0.5			5		
D2 87-A2-30		340	4	141	36	5.2			60		
D2 87-A2-31		350	<2	87	220	6.7			50		
DO 07 63 20	• · · ·	17	e	22	/0	0.5			20	· · ·	÷
D2 87-A2-32		17	5	23	60						
D2 87-A2-33		2700	3	549	118	45.2			170		
D2 87-A2-34		980	13	271	86	32.4			90		
D2 87-A2-35		1000	10	288	65	20.2			80		
D2 87-A2-36		240	9	115	390	5.9			130		
D2 87-A2-37		285	11	153	510	9.1			150		
D2 87-A2-38		88D	14	225	87	34.2			140		
D2 87-A3-01		125	11	76	265	0.4			10		
D2 87-A3-D2		104	2	9 8	150	0.3			5		
D2 87-A3-03		585	28	152	140	15.1			5		
D2 87-A3-04		154	142	75	198	3.8			60		
D2 87-A3-05		139	3	65	310	1.7			10		
D2 87-A3-D6		76	9	67	300	0.4			10		
D2 87-A3-07		92	2	62	365	0.4			10		
D2 87-A3-D8		106	3	65	127	0.6			5		
00 07 AD 00		E1	,	70	3/50	0.2			r		
<u>D2 87-A3-D9</u>			6		2650	0.3			5		
D2 87-A4-D1		2650	12	43	435	3.5			30		
D2 87-A4-O2		355	5	34	137	0.7			15		
D2 87-A4-03		261	16	83	113	0.7			20		
D2 87-A4-04		390	4	33	220	0.4			5		
D2 87-A4-05		660	4	20	290	0.7			25		
D2 87-A4-D6		675	<2	22	615	0.5			15		
D2 87-A5-D1		495	2	20	1950	0.4			<5	· · · · · · · · · · · · · · · · · · ·	
D2 87-A5-02		1500	<2	131	1350	0.7			15		
UL VI-HJ-UL		*700	×4	T'1 T	1111	U . 1			1.7		

Bondar-Clegg & Company Ltd. 130 Pemberton Ave. North Vancouver, B.C. Canada V7P 2R5 Phone: (604) 985-0681 Telex: 04-352667

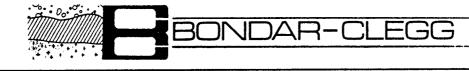


Geochemical Lab Report

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	REPORT: 127-9	020						PR	OJECT: I	NUNC.	OTALW	r hu	E 3	
	SAMPLE	ELEMENT	Cu	Pb	Zn	ňo	Ag	As	Hg		30 g			
	NUMBER	UNITS	PPM	PPM	PPM	PPM	PPM	PPN	PPB		PPB			
•	D2 87-A5-D4		1050	<2	61	435	0.4				20			
	D2 87-A5-05		890	4	51	730	0.6				15			
	D2 87-A5-06		580	33	183	1000	0.9				<5			
	D2 87-A5-07		590	35	177	230	0.5				<5			
	D2 87-A5-D8		355	2	20	640	0.3				<5			
	D2 87-A5-09		805	4	35	690	0.6				5			
	D2 87-A5-10		405	46	154	1400	0.7				10			
	D2 87-A5-11		295	1160	3040	520	1.8				5			
	D2 87-A5-12		225	50	156	320	0.4				10			
	D2 87-A5-13		225	45	53	700	0.7				40			
	D2 87-A5-14		270	21	31	410	0.7				30			
	D2 87-A6-01		1500	<2	114	275	0.7				25			
	D2 87-A6-02		845	<2	82	2550	0.3				10			
	D2 87-A6-03		700	<2	50	1550	0.3				15			
	D2 87-A6-04		690	3	16	245	0.9				10			
	D2 87-A6-05		670	2	16	194	0.6				5			
	D2 87-A6-D6		415	3	31	2450	0.3				5			
	D2 87-A6-07		515	<2	26	1500	0.3				<5			
	D2 87-A6-08		540	<2	9 9	197	0.2				10			
	D2 87-A6-09		610	2	84	179	0.2				15			
	D2 87-A6-10		445	<2	51	345	0.1				10			
	D2 87-A6-11		515	<2	40	570	0.2				10			
	D2 87-A7-01		43N	<2	29	145N	0.2				<5			-
	D2 87-A8-01		4110	<2	105	14	0.3				5			
	02 87-A8-02		171	<2	104	11	<0.1				<5			
	D2 87-A8-03		435	<2	110	7	0.2				<5		·	
	D2 87-A8-D4		4900	<2	44	24	2.6				<5			
	D2 87-A8-05		139	<2	51	10	0.1				<5			
	D2 87-A8-06		118	<2	69	9	<0.1				<5			

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Geochemical Lab Report

REPORT: 127-9828 (COMPLETE)

PROJECT: NONE GIVEN

CLIENT: ROBERTSON WALLIS & ASSOCIATES

REFERENCE INFO: SHEET ORDER #200 --> 204

SUBMITTED BY: ROBERTSON DATE PRINTED: 8-DEC-87

ORDER	EL	EMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMI	T EXTRACTION	METHOD
1	Cu	Copper	109	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
2	Ръ	Lead	104	2 PPN	HN03-HCL HOT EXTR	Atomic Absorption
3	Zn	Zinc	104	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
4	No	Nolybdenum	99	1 የዮሽ	HN03-HCL HOT EXTR	Atomic Absorption
5	Ag	Silver	109	0.1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
6	As	Arsenic	5	2 PPM	NITRIC PERCHLOR DI	G Colourimetric
7	Hg	flercury	5	5 PPB	HN03-HCL HOT EXTR	Cold Vapour AA
8		Gold 3D grams	109	5 PPB	FIRE-ASSAY	Fire Assay AA
SAMPLE	TYPES	NUMBER	SIZE FR	ACTIONS	NUHBER SAMPI	E PREPARATIONS NUMBER

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS NUMBER	

R ROCK OR BED ROCK	10	2 -150	109	CRUSH, PULVERTZE -150 109	
D DRILL CORE	99				

REPORT COPIES TO: MR. RONALD C.R. ROBERTSON MR. ROSS HOWARD INVOICE TO: MR. RONALD C.R. ROBERTSON

APPENDIX III

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STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

Invoices from Coral Enterprises Ltd. P.O. Box 1048 Morinville, Alberta TOG 1P0

Invoice 006:

July 27 - August 6, 1987	
Mobilization of drill rig to site	\$ 15,000.00
22 man days at \$75.00 per day	1,485.00
Spotting drill holes	750.00
703 ft. NQ drilling (DDH 1,2) at \$44.70/foot	 31,424.10
	\$ 48,659.10

Invoice 007:

August 7 - August 15, 1987	
18 man days at \$75.00 perday	\$ 1,350.00
1,008 ft. NQ drilling (DDH 3,4,5,6,7,8) at \$44.70/ft.	45,067.60
Spotting drill holes	750.00
Demobilization of drill rig	 5,000.00
	\$ 52,157.60

TOTAL

\$ 100,816.70

APPENDIX IV

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STATEMENT OF QUALIFICATIONS

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STATEMENT OF QUALIFICATIONS

I, RONALD C.R. ROBERTSON, of the City of Whitehorse, Yukon Territory, hereby certify that:

- 1. I am a self-employed consulting geologist with business address at P.O. Box 5474, Whitehorse, Yukon Territory.
- 2. I obtained a Bachelor of Science degree with First Class Honours in Geology from the University of Aberdeen, Scotland, in 1970 and subsequently carried out graduate studies at McMaster University, Hamilton, Ontario, and at Queen's University, Kingston, Ontario.
- 3. I am a Fellow of the Geological Association of Canada (#4858) and a member of the Prospector's and Developer's Association, the Yukon Chamber of Mines and the Canadian Institute of Mining and Metallurgy.
- 4. I have been engaged in mineral exploration for seventeen (17) years, of which nine (9) have been on mineral exploration programs in the Yukon Territory, British Columbia and Alaska.

Signed at Vancouver, B.C., this 26 day of April , 1988.

Ronald C.R. Robertson, F.G.A.C.

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