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ROSS MINING N.L.

REPORT ON WORK COMPLETED DURING THE CURRENT TERMS OF TENURE AND APPLICATIONS FOR RENEWAL OF MINERALS CLAIMS NORTH 176, 178, 742 and 752

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SUMMARY

This report summarises exploration activity within four MCN's constituting part of the Spring Hill project during the last period of tenure.

Mineral Claims North 742 and 752 were granted in 1984 for 10 year terms and MCN's 176 and 178 were granted in 1989 for 5 year terms. All tenements are due for renewal during 1994.

In September, 1988 these tenements were purchased from Territory Resources N.L. by Ross Mining N.L. as part of a large tenement package covering the historical Spring Hill gold workings. Subsequently the Spring Hill Joint Venture Agreement was signed by Ross Mining and The Shell Company of Australia Limited with the latter becoming manager and operator. The joint venture took effect from 1st October, 1988.

This report details the work conducted and results gained during the period from granting in 1984 and 1989 until 31st December, 1993. Details of work completed prior to the Spring Hill Joint Venture are generally poorly documented and hence the reporting of earlier work may be incomplete.

Work completed by Territory Resources from 1985 to 1988 included gridding, mapping, costeaning, and a low altitude multispectral scanning survey. Work completed over the tenements by the Spring Hill Joint Venture partners from October, 1988 to the present time includes gridding, mapping/rockchip sampling, soil sampling, ground magnetics, induced polarisation (IP) techniques, TEM survey, reverse circulation and diamond drilling, preliminary metallurgical work, and petrological studies.

Exploration activities have detected a significant gold resource (Hong Kong sheeted veining) in MLN 801 and surrounding tenements. All tenements under review lie in a strategic position if this mineralisation is to be exploited.

In March 1992, Ross Mining reached agreement to purchase Shell's 50% interest in Spring Hill.

Proposed work for the initial 5 years of the renewal period is likely to involve:-

(i) infill drilling on the Hong Kong sheeted vein resource

(ii) further metallurgical test work and feasibility study of the Hong Kong resources

(iii) additional exploration in surrounding tenements including stream, rock and soil sampling and drilling

(iv) assessment of the underground resource potential of reefs upon which previous production was based

CONTENTS

APPENDICES

LIST OF FIGURES

1.0 INTRODUCTION

The tenements dealt with in this report belong to and form part of the Spring Hill project. MCN's 742 and 752 were granted in 1984 for ten year terms and MCN's 176 and 178 were granted in 1989 for five year terms; consequently all four tenements expire during 1994.

Table 1: TENEMENT STATUS

Tenement	Date Granted	Expiry Date	Size (Ha)
MCN 176	25.08.89	24.08.94	9
MCN 178	25.08.89	24.08.94	6
MCN 742	24.03.84	20.03.94	4
MCN 752	21.03.84	20.03.94	8

Ross Mining N.L. acquired a number of tenements covering the Spring Hill area from Territory Resources N.L. in September, 1988. Subsequently the Spring Hill Joint Venture Agreement was signed by Ross Mining and The Shell Company of Australia Limited with the latter being manager and operator. The joint venture took effect from 1st October, 1988.

This report details the exploration programme undertaken over the four tenements listed in Table 1 during the current period of tenure. Details of work completed prior to the Spring Hill Joint Venture are generally poorly documented.

The Spring Hill project became a wholly owned Ross Mining venture when the Company acquired Shell's 50% equity in March 1992.

Mineral Claims North 176, 178, 742 and 752 have been referred to collectively in this report as "The Tenements".

2.0 LOCATION AND ACCESS

The Spring Hill tenements are located approximately 27 km north northwest (NNW) of the Pine Creek township along a prominent NNW trending ridge with an elevation of approximately 180 metres above the surrounding country.

The location of the tenements the subject of this report is shown is Figure 1.

Access to the tenements is from the Stuart Highway via Spring Hill Road or via the Mt Wells and Pine Creek Roads. The Spring Hill Road accesses the south east corner of the property whilst the Pine Creek Road provides access to the northeast corner of the tenements. The Spring Hill Road has been upgraded, with concrete floodways recently being constructed over creek crossings, enabling access during the wet season in all but periods of extremely high rainfall. Graded tracks pass from both roads into the property providing reasonable access throughout.

3.0 GEOLOGICAL SETTING AND MINERALISATION

The Spring Hill area lies in the southern part of the Pine Creek Geosyncline. The geosyncline contains Early Proterozoic metasedimentary rocks resting on a gneissic and granitic Archean basement. From approximately 1870-1899 Ma it was folded and metamorphosed mostly to greenchist facies, and in places to amphibolite facies. The geosynclinal sequence is intruded by transitional igneous rocks including pre-tectonic dolerite sills and syn- to post- tectonic granitoid plutons and dolerite lopoliths and dykes.

A broad zone of shear deformation - the Pine Creek Shear - extends from Pine Creek in the south and passes immediately east of the Spring Hill area. The Pine Creek Shear Zone has been a major locus for the passage of gold bearing fluids and is spatially associated with the majority of gold occurrences in the Pine Creek Geosyncline.

Two major phases of folding can be recognised in the Early Proterozoic Sediments of the region, both pre-dating granitoid intrusions.

The older (F1 folds) are tight to isoclinal, and have north to northwest trending axes. A major anticlinal fold of this generation (The Spring Hill Anticline) represents the dominant structure in the tenement block. The westerly dipping axis of Spring Hill Anticline passes through the centre of the tenement area and can be traced along some 10 kilometres of strike. The fold plunges at varying degrees to the south. The folding is a composite of parallel folding in competent sandstone/greywacke units and similar folding in pelitic units. A penetrative slaty to phyllitic cleavage is present in pelitic rocks and a less-prominent spaced fracture cleavage in sandstone. Both cleavages are the axial plane surfaces to the F_1 folds and are either near vertical or dip to the south west.

At Spring Hill there is a general younging trend to the south due to the gentle southerly plunge of a series of tight to isoclinal synclines and anticlines. The oldest rocks of the area are shales (commonly carbonaceous) and cherts of the Koolpin Formation. These are overlain by a series of volcanoclastics sediments and tuffs known as the Gerowie Tuff. A silicified mudstone/tuff is the most common Gerowie Tuff lithology at Spring Hill. These mudstone/tuff beds sometimes contain silicified ex-carbonate concretions. The Gerowie Tuff in turn underlies the Mount Bonnie Formation, a suite of generally immature shale, siltstone, and greywacke with rare tuffs and chert. Unconformably overlying the Mt Bonnie Formation is a thick sequence of shales, siltstones with lesser greywacke and rare conglomerates known as the Burrell Creek Formation. In most areas the Burrell Creek Formation forms topographic lows and is covered by alluvium and colluvium. Dolerite dykes are found north of Spring Hill (near Teacup) and east of Spring Hill in the Pine Creek Shear Zone. Rare small occurrences of dolerite have been found in the Spring Hill grid area.

Structurally the Spring Hill tenements are dominated by the Spring Hill Anticline. The Spring Hill Anticline has been found to be more complex than that mapped by the BMR with the hinge zone consisting of at least three well formed parasitic folds.

Vein geometries at Spring Hill are tightly controlled by their location in the Spring Hill Anticline. Bedding parallel veins are found in either major fold limbs or in the limbs of the parasitic folding in the hinge zone of the Anticline. Saddle reef development can be quite extensive in the hinge zones of the parasitic anticlines within the hinge zone of the Anticline.

As well as bedding controlled veining sub-parallel en-echelon sets of tension gash veining can be found in the limb areas of folding. This style of veining is concentrated on the western limb of the Spring Hill Anticline. It is suspected this is due to the steep westerly dip of the anticlinal axis. Where these tension gash veins pass through thick sandstone units they appear as regular and continuous sheeted veining. At present it is suspected that the gold-bearing vein systems are genetically associated with a northeast (030-040°MN) trending fault structure.

The majority of gold obtained from Spring Hill was won from the Main or Western Lode which lies on the western flank of one of the parasitic folds in the hinge of the Spring Hill Anticline. The lode's geometry has been controlled by a combination of tension gash and bedding parallel structures with an overall steep easterly dip and southerly plunge (45°). Old reports describe the lode as consisting of quartz, banded ironstone and mineralised country rock with pyrite and arsenopyrite in the primary zone.

The Middle Lode lies some 70m east of the Main Lode being hosted in the same parasitic anticline. The Middle Lode consists of saddle reef quartz-sulphide veining located in the hinge zone of the anticline.

The Eastern Lode lies in the core of another parasitic anticline come 70m east of the Middle Lode. The veining is typically of the saddle reef style with a complex system of irregular discontinuous and tightly folded veins and pods. Like the Main Lode the Middle and Eastern Lodes both plunge to the south, parallel to the axial plunge of the Spring Hill Anticline (Figure 2)

Extensive tension gash veining is found concentrated as sheeted veins in several sandstone beds on the western limb of the Spring Hill Anticline (Hong Kong). These parallel veins range from 0.5 metres to several millimetres in width and consist of quartz-pyrite-gold. Intensely veined areas contain up to 15 veins/metre.

All gold bearing veining from which economic gold results can be obtained are located within rocks of the Mt Bonnie Formation.

Anomalous gold results can be obtained from both tension gash (sheeted veining) and bedding controlled veining within rocks of the Gerowic Tuff. However economic results have not been forthcoming to date.

Rocks of the Burrell Creek Formation contain some significant buck quartz veins which are barren of gold.

Immature alluvials resting on rocks of the Burrell Creek Formation on the western and eastern sides of Spring Hill contain varying amounts of gold. Several prospectors currently work these alluvials using a trommel setup. The gold in the alluvials on the western side of the Spring Hill seem to be sourced from the Hong Kong sheeted vein system.

4.0 MINING HISTORY

The Spring Hill Gold mine was one of the largest mines in the region last century. Total recorded gold production from Spring Hill amounts to 21,170 ounces (680.7 kg). Most of this was recovered between 1882 and 1885 from oxidised ores on the Main Lode which were extracted from a 109 metre shaft. From 1886 up to 1905 limited shallow mining was continued by Chinese tributers.

In 1933 Spring Hill Gold Mining Company commenced driving an adit from the eastern side of Spring Hill at a level some 120 metres below the surface exposure of the Main Lode. By 1938 funds had been exhausted and the adit had only progressed 300 metres, well short of the Main Lode. However, the East and Middle Lodes were intersected at 204 metres and 290 metres respectively.

In 1948 the Northern Territory Prospecting and Development Company extended the tunnel to 427 metres and reached the Main Lode. The company carried out limited development and sampling work on the East Lode where they reported an average assay of 40.98 g/t Au over an average 0.61 metre width in 24 metres length of drive. These results were presented in a prospectus for the float of Spring Hill Gold N.L. which claimed that 31,000 tonnes of ore containing in excess of one ounce (31.1g) of gold per tonne was available on the Eastern Lode above the adit level. Spring Hill Gold N.L. set up a ten head stamp battery and carried out limited mining of the East Lode. Ore crushings were severely limited by a lack of water. Recorded production during the period 1950-1966 was 20.2 kg of gold from ore averaging 18.6 g/t Au.

The mine briefly re-opened in 1965-66, but there has been no mining since that time.

5.0 PREVIOUS EXPLORATION

There is no record of exploration or mining activities within the tenements until 1985. From this time till September 1988 exploration was conducted by Territory Resources. From the commencement of the Spring Hill Joint Venture (1st October, 1988) exploration activities have been managed by Billiton Australia, The Metals Division of The Shell Company of Australia Limited on behalf of the J.V. partners.

During 1985 a literature review of the Spring Hill Gold Mine was conducted on behalf of Territory Resources by a consultant. Of this work little referred to the area covered by the tenements. It seems that little work was carried out in the past on the tenements and this is evidenced by the few old workings that can be found. The only old workings include several small pits and trenches. The great majority of old workings at Spring Hill are confined to MLN 779 and MLN 800 which cover the Main and Middle Lodes.

Work completed by Territory Resources during the period 1985-1988 was confined to the Eastern, Middle and Main Lodes and included gridding, mapping costeaning and drilling.

In May 1987 the Spring Hill area was covered by a low altitude multispectral scanning survey conducted by Geo-Flite Research Pty Ltd. The Geo-Flite method was aimed primarily at detecting alteration associated with mineralisation.

A number of 'potentially mineralised' targets were identified in the Spring Hill area but no significant follow up was completed. No plans from this survey have as yet been located.

6.0 CURRENT EXPLORATION PROGRAMME AND RESULTS

From the inception of the Spring Hill Joint Venture a very substantial exploration programme has been conducted within the JV area including the area covered by MCN's 176, 178, 742 and 752

6.1 Gridding

A detailed grid using 50 metre line spacing with 25 metre infill was erected. This has been used as a control for detailed geological mapping, soil sampling, and ground magnetic surveying (Figure 2)

All tenements owned by Ross Mining have been professionally surveyed by consultants during the last two years.

6.2 Grid Mapping

The tenements have been mapped along grid lines (Figure 2) spaced generally at 100 metres with infill line spacing of 50 metres. The geology for these areas has been compiled at 1:1000 scale (Figures 3 to 6)

6.3 Soil Sampling

The Spring Hill grid has been completely covered with Bulk Cyanide Leach (BCL) sampling. Samples were collected over 5 metres along grid lines with 5 samples (covering a nominal width of 25 metres) composited into one 2 kg sample. Sampling was completed on 50 metre line spacings and despatched to Australian Assay Laboratories in Townsville for gold analysis using the Bulk Cyanide Leach method . Results of the soil sampling were generally low in gold. Some spiky higher results were thought to be related to contamination of soils by past mining activity.

A second stage soil sampling programme was implemented to provide infill and cover extensions of the grid. Soil samples were collected every 5 metres along lines with 5 samples (covering a nominal width of 25 metres) composited into one 500g sample, which was despatched to Classic Comlabs in Darwin for gold analysis using the bottleroll BCL method. Gold results obtained from the 500g bottleroll samples were up to one order of magnitude higher than those received from the 2 kg BCL samples, particularly in highly anomalous areas.

The sample results (Figure 7) have proved very successful in outlining mineralised zones.

6.4 Geophysical Surveys

6.4.1. Ground Magnetics

Detailed ground magnetic surveying on 50 metre grid lines using a 5 metre station spacing confirmed regional airborne magnetic data with a totally flat response over the tenements (Figures 8 and 9)

6.4.2. TEM Survey

In early August 1990, a fixed loop Sirotem survey was completed at Spring Hill including portion of the areas covered by the tenements. Standard times and Z component were measured along 200 metre spaced lines.

No electromagnetic conductors were detected within the tenements (Figures 10 and 11)

6.5 Drilling

To date eight (8) reverse circulation percussion drill holes have been completed within the tenements.

Table 2 - SUMMARY OF DRILLING

Hole Number	Tenement	Significant
SHRC 038	MCN 178	4m @ 1.87 g/t (21-25m) 3m @ 2.62 g/t (69-72m) 4m @ 2.84 g/t (96-100m)
SHRC 040	MCN 176	2m @ 1.86 g/t (52-54m)
SHRC 041	MCN 176	No significant intercept
SHRC 060	MCN 178	No significant intercept
SHRC 063	MCN 752	No significant intercept
SHRC 064	MCN 752	No significant intercept
SHRC 065	MCN 752	No significant intercept
SHRC 067	MCN 742	No significant intercept

The reverse circulation holes were completed during 1989 and 1990 Resources using a track mounted CD350 rig with a 4.5 inch hammer and Gaden Drilling using a Universal 650. Approximately 2 kg of sample collected (split twice through a riffle splittler) and sent to Classic Laboratories in Darwin for 50g charge fire assay.

The drillhole sections and assay results are shown in figures 12 to 17 inclusive. Geological logs for these holes have been compiled in Appendix I.

7.0 ENVIRONMENTAL CONSIDERATIONS

The Spring Hill ridge is extremely steep and hence is susceptible to erosion. To prevent unnecessary disturbance the Spring Hill Joint Venture partners have taken the following steps:

1. Utilising existing tracks where possible and encouraging staff to proceed on foot rather than drive in steep terrain.

2. A small, mobile track mounted drilling rig has been utilised to markedly decrease the access preparation/bulldozing required, particularly with regard to drilling pads, prior to each programme. For example, the CD350 rig required a pad of only 5 metres square to operate adequately whereas conventional truck mounted rigs require pads of at least 20 x 7 metres.

3. All access tracks follow the topographic contours as closely as possible and adequate drainage is provided for run-off during the wet season.

4. All sample bags are UV resistant and have been removed to a central sample farm for safe storage.

5. All rubbish is taken from the camp and drill sites to a waste disposal site to prevent build-up of waste products.

6. All drill holes have been capped.

7. If exploration is deemed completed within a certain part of Spring Hill due to negative results rehabilitation works are initiated. This work include ripping of drill pads/access tracks and seeding, securing of steep (easily erodible) drill pads with organimatting and seeding, and creation of adequate drainage.

   The Company will continue to make every effort to ensure damage caused to the environment by exploration activities is minimised and rehabilitated where practical.

8.0 PROPOSED FUTURE WORK

Exploration activities within the Spring Hill Project Area have identified a significant sheeted vein gold resource amenable to heap leach processing. Additional drilling and metallurgical test work is required to further upgrade the resource and provide confidence in recovery estimates.

The tenements, the subject of this report do not constitute part of the indicated gold resource and exploration to date has downgraded the potential of these tenements.

Proposed work for the initial 5 years of the renewal period is likely to involve:

(1) infill drilling on the Hong Kong Sheeted Veining to more accurately define its extent, continuity and grade.

(2) detailed and comprehensive metallurgical test work of the Hong Kong resource.

(3) feasibility study of the project

(4) further exploration of tenements adjacent to the Hong Kong sheeted vein resource. This work is likely to include mapping, sampling and drilling.

APPENDIX 1

Drill Hole Logs

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC038**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9788.10	Northing: 9725.10	RI: 1191.00
Total Depth: 100.00	Logged by: M.Cossins	Date:
Drilled by: Civil Drilling	Drill Type: Rig 15	Date: 30/09/89

Survey Depth	Grid Azimuth	Inclination
0	270	-60
50	278	-56
90	281	-54

Holename: **SHRC038**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
0.00	1.00	154275	0.350	0.350	-0.900	0.0	LtRdBn	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
1.00	2.00	154276	0.080	0.080	-0.900	0.0	LtRdBn	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
2.00	3.00	154277	0.020	0.020	-0.900	0.0	LtRdBn	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
3.00	4.00	154278	0.610	0.610	-0.900	0.0	LtRdBn	D	S	W	Vflb	Si	Tr	20.0	0.0	0.0	0.0		
4.00	5.00	154279	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Vflb	Si	Tr	0.0	0.0	0.0	0.0		
5.00	6.00	154280	0.040	0.040	-0.900	0.0	LtPk	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
6.00	7.00	154282	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
7.00	8.00	154283	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
8.00	9.00	154284	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi	Tr	0.5	0.0	0.0	0.0		
9.00	10.00	154285	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
10.00	11.00	154286	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
11.00	12.00	154287	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
12.00	13.00	154288	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
13.00	14.00	154289	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
14.00	15.00	154290	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
15.00	16.00	154291	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
16.00	17.00	154292	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
17.00	18.00	154293	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
18.00	19.00	154294	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
19.00	20.00	154295	0.001	0.001	-0.900	0.0	LtPk	D	S	W	Fnlb	SsSi		0.0	0.0	0.0	0.0		
20.00	21.00	154296	0.215	0.215	-0.900	0.0	LtPk	D	S	W	Fnlb	Ss		0.0	0.0	0.0	0.0		
21.00	22.00	154297	1.125	1.125	-0.900	0.0	LtPk	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
22.00	23.00	154298	1.250	1.250	-0.900	0.0	GrGnBn	D	S	W	Vf	SiSs		0.0	0.0	0.0	0.0	Se??Wk	
23.00	24.00	154299	2.150	2.150	-0.900	0.0	GrGnBn	D	S	W	Vf	SiSs	Tr	5.0	0.0	0.0	0.0	Se??Wk	
24.00	25.00	154300	2.950	2.950	-0.900	0.0	GrRdBn	D	S	W	Fn	SsSi	Tr	5.0	0.0	0.0	0.0		
25.00	26.00	154302	0.060	0.060	-0.900	0.0	RdBn	D	S	W	VfLm	SiSh		0.0	0.0	0.0	0.0		
26.00	27.00	154303	0.040	0.040	-0.900	0.0	RdBn	D	S	W	FnLm	Ss		0.0	0.0	0.0	0.0		
27.00	28.00	154304	0.110	0.110	-0.900	0.0	RdBn	D	S	W	FnLm	SiSs		0.0	0.0	0.0	0.0		
28.00	29.00	154305	0.320	0.320	-0.900	0.0	RdBn	D	S	W	VfLm	Si		0.0	0.0	0.0	0.0		
29.00	30.00	154306	0.250	0.250	-0.900	0.0	RdBn	D	S	W	VfLm	Si		0.0	0.0	0.0	0.0		
30.00	31.00	154307	0.210	0.210	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
31.00	32.00	154308	0.840	0.840	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs	Tr	3.0	0.0	0.0	0.0		
32.00	33.00	154309	0.220	0.220	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
33.00	34.00	154310	0.270	0.270	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
34.00	35.00	154311	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
35.00	36.00	154312	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
36.00	37.00	154313	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
37.00	38.00	154314	0.420	0.420	-0.900	0.0	RdBn	D	S	W	VfLm	SiSs		0.0	0.0	0.0	0.0		
38.00	39.00	154315	0.260	0.260	-0.900	0.0	BnGr	D	S	T	VfLm	SiSs	Tr	2.0	0.0	0.0	0.0		
39.00	40.00	154316	0.001	0.001	-0.900	0.0	BnGr	D	S	W	FnLm	Ss		0.0	0.0	0.0	0.0		
40.00	41.00	154317	0.140	0.140	-0.900	0.0	LtPpBn	D	S	W	FnLm	Ss		0.0	0.0	0.0	0.0		
41.00	42.00	154318	1.550	1.550	-0.900	0.0	KkBn	D	S	W	FnLm	Ss		0.0	0.0	0.0	0.0		
42.00	43.00	154319	0.510	0.510	-0.900	0.0	Bn	D	S	W	FnLm	Ss		0.0	0.0	0.0	0.0		
43.00	44.00	154320	0.030	0.030	-0.900	0.0	Bn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
44.00	45.00	154322	0.015	0.015	-0.900	0.0	Bn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
45.00	46.00	154323	0.020	0.020	-0.900	0.0	Bn	D	S	W	Fn	Ss	Tr	10.0	0.0	0.0	0.0		
46.00	47.00	154324	0.001	0.001	-0.900	0.0	Bn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
47.00	48.00	154325	0.001	0.001	-0.900	0.0	RdGrBn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
48.00	49.00	154326	0.001	0.001	-0.900	0.0	GrGn	D	S	W	Fn	Ss	Tr	2.0	0.0	0.0	0.0		
49.00	50.00	154327	0.800	0.800	-0.900	0.0	GrGn	D	S	W	Fn	Ss	Tr	0.5	0.0	0.0	0.0		
50.00	51.00	154328	0.160	0.160	-0.900	0.0	GrBn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
51.00	52.00	154329	0.020	0.020	-0.900	0.0	GrBn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
52.00	53.00	154330	0.001	0.001	-0.900	0.0	GrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
53.00	54.00	154331	0.060	0.060	-0.900	0.0	BnGrGn	D	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
54.00	55.00	154332	0.130	0.130	-0.900	0.0	BnGrGn	D	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
55.00	56.00	154333	0.060	0.060	-0.900	0.0	GrGn	D	S	T	Fn	SsSi		0.0	0.0	0.0	0.0		

Holename: **SHRC038**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
56.00	57.00	154334	0.240	0.240	-0.900	0.0	GrGn	D	S	T	Fn	SsSi	Tr	2.0	0.0	0.0	0.0		
57.00	58.00	154335	0.310	0.310	-0.900	0.0	GrGn	D	S	T	Fn	SsSi	Tr	1.0	0.0	0.0	0.0		
58.00	59.00	154336	0.030	0.030	-0.900	0.0	GrGn	D	S	T	Fn	SsSi		0.0	0.0	0.0	0.0		
59.00	60.00	154337	0.150	0.150	-0.900	0.0	GrGn	D	S	T	Fn	SsSi		0.0	0.0	0.0	0.0		
60.00	61.00	154338	0.040	0.040	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
61.00	62.00	154339	0.125	0.125	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
62.00	63.00	154340	0.240	0.240	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
63.00	64.00	154342	0.070	0.070	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss	Tr	1.0	0.0	0.0	0.0		
64.00	65.00	154343	0.210	0.210	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss	Tr	3.0	0.0	0.0	0.0		
65.00	66.00	154344	0.001	0.001	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
66.00	67.00	154345	0.400	0.400	-0.900	0.0	LtGrGn	D	S	W	Fn	Ss	Tr	10.0	0.0	0.0	0.0	ChSe??	
67.00	68.00	154346	0.050	0.050	-0.900	0.0	GrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
68.00	69.00	154347	0.150	0.150	-0.900	0.0	GrGn	D	S	W	Fn	Ss	Tr	0.5	0.0	0.0	0.0		
69.00	70.00	154348	3.750	3.750	-0.900	0.0	GrGn	D	S	W	Fn	Ss	Tr	0.5	0.0	0.0	0.0		
70.00	71.00	154349	2.350	2.350	-0.900	0.0	GrGn	D	S	W	Fn	Ss	Tr	1.0	0.0	0.0	0.0		
71.00	72.00	154350	1.750	1.750	-0.900	0.0	GrGn	D	S	W	Fn	Ss	Tr	1.0	0.0	0.0	0.0		
72.00	73.00	154351	0.010	0.010	-0.900	0.0	GrGn	D	S	W	Fn	Ss		0.0	0.0	0.0	0.0		
73.00	74.00	154352	0.001	0.001	-0.900	0.0	GrGn	D	S	T	Fn	Ss		0.0	0.0	0.0	0.0	ChPv	
74.00	75.00	154353	0.050	0.050	-0.900	0.0	GrGn	D	S	T	Fn	Ss		0.0	0.0	0.0	0.0	ChPv	
75.00	76.00	154354	1.800	1.800	-0.900	0.0	GrGn	D	S	T	Fn	SsSi		0.0	0.0	0.0	0.0	ChPv	
76.00	77.00	154355	0.180	0.180	-0.900	0.0	DkGnGr	D	S	F	Vf	Si		0.0	0.0	0.0	0.0		
77.00	78.00	154356	0.020	0.020	-0.900	0.0	DkGnGr	D	S	F	Vf	Si		0.0	0.0	0.0	0.0		
78.00	79.00	154357	0.050	0.050	-0.900	0.0	DkGnGr	D	S	F	Vf	Si		0.0	0.0	0.0	0.0		
79.00	80.00	154358	0.020	0.020	-0.900	0.0	YwBn	D	S	T	Vf	Si		0.0	0.0	0.0	0.0		
80.00	81.00	154359	0.001	0.001	-0.900	0.0	YwBnGr	D	S	T	Vf	Si		0.0	0.0	0.0	0.0		
81.00	82.00	154360	0.040	0.040	-0.900	0.0	YwBnGr	D	S	T	Fn	SsSi		0.0	0.0	0.0	0.0		
82.00	83.00	154362	0.001	0.001	-0.900	0.0	YwBnGr	D	S	T	Fn	SsSi		0.0	0.0	0.0	0.0		
83.00	84.00	154363	0.030	0.030	-0.900	0.0	YwBnGr	D	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
84.00	85.00	154364	0.010	0.010	-0.900	0.0	YwBnGr	W	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
85.00	86.00	154365	0.001	0.001	-0.900	0.0	YwBnGr	W	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
86.00	87.00	154366	0.050	0.050	-0.900	0.0	YwBnGr	W	S	T	Fn	SsSi		0.0	0.0	0.0	0.0		
87.00	88.00	154367	0.050	0.050	-0.900	0.0	YwBnGr	W	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
88.00	89.00	154368	0.120	0.120	-0.900	0.0	YwBnGr	W	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
89.00	90.00	154369	0.660	0.660	-0.900	0.0	YwBnGr	W	S	T	Fn	SiSs		0.0	0.0	0.0	0.0		
90.00	91.00	154370	0.230	0.230	-0.900	0.0	DkGnGr	W	M	T	Vf	Si		0.0	0.0	0.0	0.0		
91.00	92.00	154371	0.930	0.930	-0.900	0.0	DkGnGr	W	M	T	Vf	Si	Bk	0.5	0.0	0.0	0.0		
92.00	93.00	154372	0.450	0.450	-0.900	0.0	DkGnGr	D	M	T	Vf	Si	Bk	5.0	0.0	0.0	0.0		
93.00	94.00	154373	0.625	0.625	-0.900	0.0	DkGnGr	D	M	T	Fn	Ss	Bk	20.0	0.0	0.0	0.0		
94.00	95.00	154374	0.300	0.300	-0.900	0.0	DkGnGr	D	M	T	Fn	Ss	Bk	20.0	0.0	0.0	0.0		
95.00	96.00	154375	0.950	0.950	-0.900	0.0	DkGnGr	D	M	T	Fn	Ss	Tr	5.0	0.0	0.0	0.0	Mt	
96.00	97.00	154376	2.900	2.900	-0.900	0.0	DkGnGr	D	M	T	Fn	Si	Tr	5.0	0.0	0.0	0.0	Mt	
97.00	98.00	154377	2.850	2.850	-0.900	0.0	DkGnGr	D	M	T	Fn	Si	Tr	5.0	0.0	0.0	0.0	Mt	
98.00	99.00	154378	2.400	2.400	-0.900	0.0	DkGnGr	D	M	T	Fn	Si	Tr	5.0	0.0	0.0	0.0	Mt	
99.00	100.00	154379	3.200	3.200	-0.900	0.0	DkGnGr	D	M	T	Fn	Si	Bk	30.0	0.0	0.0	0.0	Mt	

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC040**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9882.30	Northing: 10551.60	RI: 1220.40
Total Depth: 100.00	Logged by: M.Cossins	Date:
Drilled by: Civil Drilling	Drill Type: Rig 15	Date: 02/10/89

Survey Depth	Grid Azimuth	Inclination
0	270	-60
50	274	-59
90	278	-57

Holename: **SHRC040**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
0.00	1.00	154487	0.100	0.100	-0.900	0.0	KkPpBn	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
1.00	2.00	154488	0.060	0.060	-0.900	0.0	YwPpBn	D	S	W	Vflb	Si		0.0	0.0	0.0	0.0		
2.00	3.00	154489	0.035	0.035	-0.900	0.0	YwRdBn	D	S	W	Vflb	Si	Tr	20.0	0.0	0.0	0.0		
3.00	4.00	154490	0.130	0.130	-0.900	0.0	YwRdBn	D	S	W	Vflb	SsSi	Tr	10.0	0.0	0.0	0.0		
4.00	5.00	154491	0.630	0.630	-0.900	0.0	LtGrGn	D	S	W	FnIb	Ss	Tr	40.0	0.0	0.0	0.0	SeMd	
5.00	6.00	154492	0.200	0.200	-0.900	0.0	LtGrGn	D	S	W	FnIb	Ss	Tr	50.0	0.0	0.0	0.0	SeSt	
6.00	7.00	154493	0.140	0.140	-0.900	0.0	LtGrGn	D	S	W	FnIb	Ss	Tr	70.0	0.0	0.0	0.0	SeSt	
7.00	8.00	154494	0.220	0.220	-0.900	0.0	LtGrGn	D	S	W	FnIb	Ss	Tr	90.0	0.0	0.0	0.0	SeSt	
8.00	9.00	154495	0.150	0.150	-0.900	0.0	LtGrGn	D	S	W	FnIb	Ss	Tr	70.0	0.0	0.0	0.0	SeSt	
9.00	10.00	154496	0.020	0.020	-0.900	0.0	LtGrGn	D	S	W	FnIb	Ss	Tr	5.0	0.0	0.0	0.0	SeMd	
10.00	11.00	154497	0.095	0.095	-0.900	0.0	GnGr	D	S	W	FnIb	Si	Tr	2.0	0.0	0.0	0.0		
11.00	12.00	154498	0.030	0.030	-0.900	0.0	RdGnGr	D	S	W	FnIb	Si	Tr	0.5	0.0	0.0	0.0		
12.00	13.00	154499	0.040	0.040	-0.900	0.0	RdGnGr	D	S	W	FnIb	Si		0.0	0.0	0.0	0.0		
13.00	14.00	154500	0.030	0.030	-0.900	0.0	LtGrBn	D	S	W	FnIb	SsSi	Bk	5.0	0.0	0.0	0.0		
14.00	15.00	154502	0.001	0.001	-0.900	0.0	BnGnGr	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
15.00	16.00	154503	0.001	0.001	-0.900	0.0	BnGnGr	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
16.00	17.00	154504	0.001	0.001	-0.900	0.0	BnGnGr	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
17.00	18.00	154505	0.001	0.001	-0.900	0.0	GnGrBn	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
18.00	19.00	154506	0.030	0.030	-0.900	0.0	GnGrBn	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
19.00	20.00	154507	0.001	0.001	-0.900	0.0	GnGrBn	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
20.00	21.00	154508	0.001	0.001	-0.900	0.0	GrGnBn	D	S	W	FnIb	Si	Bk	1.0	0.0	0.0	0.0		
21.00	22.00	154509	0.001	0.001	-0.900	0.0	GrGnBn	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
22.00	23.00	154510	0.210	0.210	-0.900	0.0	GrGnBn	D	S	W	FnIb	Si	Bk	30.0	0.0	0.0	0.0	SeMd	
23.00	24.00	154511	0.080	0.080	-0.900	0.0	GrGnBn	D	S	W	FnIb	Si	Bk	50.0	0.0	0.0	0.0	SeSt	
24.00	25.00	154512	0.001	0.001	-0.900	0.0	GrGnBn	D	S	W	FnIb	Si	Bk	60.0	0.0	0.0	0.0	SeSt	
25.00	26.00	154513	0.001	0.001	-0.900	0.0	BnGrGn	D	S	W	FnIb	Si	Bk	10.0	0.0	0.0	0.0	SeMd	
26.00	27.00	154514	0.001	0.001	-0.900	0.0	BnGrGn	D	S	W	FnIb	Si	Bk	60.0	0.0	0.0	0.0	SeSt	
27.00	28.00	154515	0.050	0.050	-0.900	0.0	BnGrGn	D	S	W	FnIb	Si	Bk	60.0	0.0	0.0	0.0	SeSt	
28.00	29.00	154516	0.060	0.060	-0.900	0.0	GnGrBn	D	S	W	FnIb	Si	Bk	20.0	0.0	0.0	0.0	SeWk	
29.00	30.00	154517	0.001	0.001	-0.900	0.0	GrGn	D	S	W	FnIb	Si	Bk	5.0	0.0	0.0	0.0	??ChSe	
30.00	31.00	154518	0.001	0.001	-0.900	0.0	BnGrGn	D	S	W	Vflb	SiSs	Bk	5.0	0.0	0.0	0.0	??ChSe	
31.00	32.00	154519	0.001	0.001	-0.900	0.0	BnGrGn	D	S	W	Vflb	SiSs	Bk	10.0	0.0	0.0	0.0	ChWk	
32.00	33.00	154520	0.001	0.001	-0.900	0.0	BnGrGn	D	S	W	Vflb	SiSs	Bk	5.0	0.0	0.0	0.0	ChWk	
33.00	34.00	154522	0.001	0.001	-0.900	0.0	BnGrGn	D	S	W	Vflb	SiSs	Bk	5.0	0.0	0.0	0.0	ChSeWk	
34.00	35.00	154523	0.001	0.001	-0.900	0.0	GnGr	D	S	W	Vflb	Si	Bk	20.0	0.0	0.0	0.0	ChSeWk	
35.00	36.00	154524	0.001	0.001	-0.900	0.0	GnGr	D	S	W	Vflb	Si	Bk	70.0	0.0	0.0	0.0	SeSt	
36.00	37.00	154525	0.001	0.001	-0.900	0.0	GnGr	D	S	W	Vflb	Si	Bk	30.0	0.0	0.0	0.0	ChSt	
37.00	38.00	154526	0.001	0.001	-0.900	0.0	GnGr	D	S	W	Vflb	Si	Bk	30.0	0.0	0.0	0.0	ChSt	
38.00	39.00	154527	0.040	0.040	-0.900	0.0	DkGnGr	D	S	W	Vflb	SsSi	Bk	2.0	0.0	0.0	0.0	ChSt	
39.00	40.00	154528	0.030	0.030	-0.900	0.0	BnGrGn	D	S	W	Vflb	SsSi	Bk	1.0	0.0	0.0	0.0	ChSt	
40.00	41.00	154529	0.020	0.020	-0.900	0.0	BnGrGn	D	S	W	Vflb	SsSi	Bk	5.0	0.0	0.0	0.0	ChSt	
41.00	42.00	154530	0.130	0.130	-0.900	0.0	BnGrGn	D	S	W	Vflb	SsSi	Bk	1.0	0.0	0.0	0.0	ChSt	
42.00	43.00	154531	0.280	0.280	-0.900	0.0	BnKk	D	S	W	Vflb	SsSi	Bk	2.0	0.0	0.0	0.0	ChSt	
43.00	44.00	154532	0.300	0.300	-0.900	0.0	BnKk	D	S	W	FnIb	Ss	Bk	5.0	0.0	0.0	0.0	ChSt	
44.00	45.00	154533	0.370	0.370	-0.900	0.0	BnKk	D	S	W	FnIb	Ss	Bk	5.0	0.0	0.0	0.0	ChSt	
45.00	46.00	154534	0.260	0.260	-0.900	0.0	BnKk	D	S	W	FnIb	Ss	Bk	5.0	0.0	0.0	0.0	ChSt	
46.00	47.00	154535	0.050	0.050	-0.900	0.0	DkGnGr	D	M	T	FnIb	SsSi	Bk	1.0	0.0	0.0	0.0		
47.00	48.00	154536	0.100	0.100	-0.900	0.0	DkGnGr	D	M	T	FnIb	SiSh	Bk	1.0	0.0	0.0	0.0		
48.00	49.00	154537	0.080	0.080	-0.900	0.0	DkGnGr	D	M	T	FnIb	SiSh	Bk	0.5	0.0	0.0	0.0		
49.00	50.00	154538	0.030	0.030	-0.900	0.0	DkGnGr	D	M	T	FnIb	SiSh	Bk	1.0	0.0	0.0	0.0		
50.00	51.00	154539	0.060	0.060	-0.900	0.0	GrGnBn	D	M	T	FnIb	Ss	Bk	0.0	0.0	0.0	0.0		
51.00	52.00	154540	0.090	0.090	-0.900	0.0	DkBnGr	D	M	T	FnIb	SiSh	Bk	0.5	0.0	0.0	0.0		
52.00	53.00	154542	1.600	1.600	-0.900	0.0	DkBnGr	D	M	T	FnIb	SiSh	Bk	3.0	0.0	0.0	0.0		
53.00	54.00	154543	2.125	2.125	-0.900	0.0	DkBnGr	D	M	T	Vflb	SiSh	Tr	2.0	0.0	0.0	0.0		
54.00	55.00	154544	0.070	0.070	-0.900	0.0	DkBnGr	D	M	T	Vflb	SiSh	Tr	5.0	0.0	0.0	0.0		
55.00	56.00	154545	0.660	0.660	-0.900	0.0	DkBnGr	D	M	T	FnIb	SsSi	Tr	0.5	0.0	0.0	0.0		

Holename: **SHRC040**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
56.00	57.00	154546	0.020	0.020	-0.900	0.0	GnGr	D	M	T	FnIb	SiSs	Bk	5.0	0.0	0.0	0.0		
57.00	58.00	154547	0.445	0.445	-0.900	0.0	GnGr	D	M	T	FnIb	SiSs	Bk	5.0	0.0	0.0	0.0		
58.00	59.00	154548	1.250	1.250	-0.900	0.0	GnGr	D	M	T	FnIb	SsSi	Bk	2.0	0.0	0.0	0.0		
59.00	60.00	154549	0.900	0.900	-0.900	0.0	GnGr	D	M	T	FnIb	SsSi	Bk	2.0	0.0	0.0	0.0		
60.00	61.00	154550	0.450	0.450	-0.900	0.0	BnGnGr	D	M	T	FnIb	Ss	Bk	5.0	0.0	0.0	0.0		
61.00	62.00	154551	0.180	0.180	-0.900	0.0	YwBn	D	M	T	FnIb	Ss	Bk	0.5	0.0	0.0	0.0		
62.00	63.00	154552	0.060	0.060	-0.900	0.0	BnGnGr	D	M	T	FnIb	SsSi	Bk	10.0	0.0	0.0	0.0		
63.00	64.00	154553	0.240	0.240	-0.900	0.0	BnGr	D	M	T	FnIb	Ss	Bk	10.0	0.0	0.0	0.0		
64.00	65.00	154554	1.300	1.300	-0.900	0.0	DkBnGr	D	M	T	FnIb	SiSs	Bk	10.0	0.0	0.0	0.0		
65.00	66.00	154555	0.070	0.070	-0.900	0.0	GrGn	D	M	T	FnIb	SiSs	Bk	5.0	0.0	0.0	0.0		
66.00	67.00	154556	0.280	0.280	-0.900	0.0	DkGnGr	D	M	T	VfIb	SiSs	Bk	2.0	0.0	0.0	0.0		
67.00	68.00	154557	0.030	0.030	-0.900	0.0	BnGnGr	D	M	T	VfIb	SiSs	Bk	0.5	0.0	0.0	0.0		
68.00	69.00	154558	0.030	0.030	-0.900	0.0	BnGnGr	D	M	T	VfIb	SiSs	Bk	5.0	0.0	0.0	0.0		
69.00	70.00	154559	0.020	0.020	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	3.0	0.0	0.0	0.0		
70.00	71.00	154560	0.020	0.020	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	5.0	0.0	0.0	0.0		
71.00	72.00	154562	0.030	0.030	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	2.0	0.0	0.0	0.0		
72.00	73.00	154563	0.020	0.020	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	5.0	0.0	0.0	0.0		
73.00	74.00	154564	0.040	0.040	-0.900	0.0	DkGr	D	M	T	VfIb	SiSs	Bk	5.0	0.0	0.0	0.0		
74.00	75.00	154565	0.020	0.020	-0.900	0.0	DkGr	D	M	T	VfIb	SiSs	Bk	10.0	0.0	0.0	0.0		
75.00	76.00	154566	0.080	0.080	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	2.0	0.0	0.0	0.0		
76.00	77.00	154567	0.170	0.170	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	3.0	0.0	0.0	0.0		
77.00	78.00	154568	0.090	0.090	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	10.0	0.0	0.0	0.0		
78.00	79.00	154569	0.430	0.430	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	10.0	0.0	0.0	0.0		
79.00	80.00	154570	0.060	0.060	-0.900	0.0	DkGr	D	M	T	VfIb	SiSh	Bk	5.0	0.0	0.0	0.0		
80.00	81.00	154571	0.030	0.030	-0.900	0.0	DkGr	D	M	T	VfIb	Si	Bk	15.0	0.0	0.0	0.0		
81.00	82.00	154572	0.140	0.140	-0.900	0.0	BnGnGr	D	M	T	VfIb	Si	Bk	15.0	0.0	0.0	0.0		
82.00	83.00	154573	0.160	0.160	-0.900	0.0	BnGnGr	D	M	T	VfIb	Si	Bk	15.0	0.0	0.0	0.0		
83.00	84.00	154574	0.090	0.090	-0.900	0.0	DkBnGr	D	M	T	VfIb	SiSs	Bk	0.0	0.0	0.0	0.0		
84.00	85.00	154575	0.020	0.020	-0.900	0.0	DkGr	D	M	T	VfIb	Si	Bk	0.0	0.0	0.0	0.0		
85.00	86.00	154576	0.001	0.001	-0.900	0.0	DkGr	D	M	T	VfIb	Si	Bk	0.0	0.0	0.0	0.0		
86.00	87.00	154577	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	VfIb	Si	Bk	0.0	0.0	0.0	0.0		
87.00	88.00	154578	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	VfIb	Si	Bk	0.0	0.0	0.0	0.0		
88.00	89.00	154579	0.020	0.020	-0.900	0.0	DkGrBn	D	M	T	VfIb	Si	Bk	0.5	0.0	0.0	0.0		
89.00	90.00	154580	0.020	0.020	-0.900	0.0	DkGrBn	D	M	T	VfIb	Si	Bk	0.5	0.0	0.0	0.0		
90.00	91.00	154582	0.001	0.001	-0.900	0.0	DkBnGr	W	M	T	VfIb	Si	Bk	0.0	0.0	0.0	0.0		
91.00	92.00	154583	0.001	0.001	-0.900	0.0	DkGr	M	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
92.00	93.00	154584	0.001	0.001	-0.900	0.0	DkGr	D	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
93.00	94.00	154585	0.001	0.001	-0.900	0.0	DkGr	B	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
94.00	95.00	154586	0.001	0.001	-0.900	0.0	BnGrGr	D	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
95.00	96.00	154587	0.001	0.001	-0.900	0.0	BnGrGr	D	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
96.00	97.00	154588	0.001	0.001	-0.900	0.0	BnGrGr	M	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
97.00	98.00	154589	0.110	0.110	-0.900	0.0	BnGrGr	D	M	T	VfWf	SiSh	Bk	0.5	0.0	0.0	0.0		
98.00	99.00	154590	0.001	0.001	-0.900	0.0	BnGrGr	B	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		
99.00	100.00	154591	0.001	0.001	-0.900	0.0	BnGrGr	D	M	T	VfWf	SiSh	Bk	0.0	0.0	0.0	0.0		

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC041**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9913.10	Northing: 10550.80	Rl: 1218.80
Total Depth: 100.00	Logged by: M.Cossins	Date:
Drilled by: Civil Drilling	Drill Type: Rig 15	Date: 03/10/89

Survey Depth	Grid Azimuth	Inclination
0	270	-60

Holename: **SHRC041**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
0.00	1.00	154593	0.001	0.001	-0.900	0.0	RdBnKk	D	S	W	VfIb	Si	Bk	5.0	0.0	0.0	0.0		
1.00	2.00	154594	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Bk	0.5	0.0	0.0	0.0		
2.00	3.00	154595	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Bk	0.0	0.0	0.0	0.0		
3.00	4.00	154596	0.440	0.440	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	5.0	0.0	0.0	0.0		
4.00	5.00	154597	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	5.0	0.0	0.0	0.0		
5.00	6.00	154598	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	5.0	0.0	0.0	0.0		
6.00	7.00	154599	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	5.0	0.0	0.0	0.0		
7.00	8.00	154600	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	5.0	0.0	0.0	0.0		
8.00	9.00	154602	0.040	0.040	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	5.0	0.0	0.0	0.0		
9.00	10.00	154603	0.001	0.001	-0.900	0.0	YwRdBn	D	S	W	FnIb	SsSs	Tr	1.0	0.0	0.0	0.0		
10.00	11.00	154604	0.001	0.001	-0.900	0.0	RdGrBn	D	S	W	FnIb	SsSs	Tr	3.0	0.0	0.0	0.0		
11.00	12.00	154605	0.001	0.001	-0.900	0.0	RdGrBn	D	S	W	FnIb	SsSi	Tr	0.0	0.0	0.0	0.0		
12.00	13.00	154606	0.050	0.050	-0.900	0.0	RdGrBn	D	S	W	VfIb	SiSs	Tr	1.0	0.0	0.0	0.0		
13.00	14.00	154607	0.001	0.001	-0.900	0.0	RdGrBn	D	S	W	VfIb	Si	Tr	0.5	0.0	0.0	0.0		
14.00	15.00	154608	0.001	0.001	-0.900	0.0	RdGrBn	D	S	W	VfIb	SiSs	Tr	0.5	0.0	0.0	0.0		
15.00	16.00	154609	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	1.0	0.0	0.0	0.0		
16.00	17.00	154610	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	5.0	0.0	0.0	0.0		
17.00	18.00	154611	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	10.0	0.0	0.0	0.0		
18.00	19.00	154612	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	0.5	0.0	0.0	0.0		
19.00	20.00	154613	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	Si	Tr	0.0	0.0	0.0	0.0		
20.00	21.00	154614	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	0.5	0.0	0.0	0.0		
21.00	22.00	154615	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	Si	Tr	0.0	0.0	0.0	0.0		
22.00	23.00	154616	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	Si	Tr	0.0	0.0	0.0	0.0		
23.00	24.00	154617	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	0.0	0.0	0.0	0.0		
24.00	25.00	154618	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	0.0	0.0	0.0	0.0		
25.00	26.00	154619	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	1.0	0.0	0.0	0.0		
26.00	27.00	154620	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	0.0	0.0	0.0	0.0		
27.00	28.00	154622	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SiSs	Tr	0.0	0.0	0.0	0.0		
28.00	29.00	154623	0.001	0.001	-0.900	0.0	GnBn	D	S	W	VfIb	SiSs	Tr	0.0	0.0	0.0	0.0		
29.00	30.00	154624	0.001	0.001	-0.900	0.0	RdBn	D	S	W	VfIb	SsSi	Tr	40.0	0.0	0.0	0.0	SiSt	
30.00	31.00	154625	0.001	0.001	-0.900	0.0	RdBn	D	S	W	FnIb	Ss	Tr	0.5	0.0	0.0	0.0	SiSt	
31.00	32.00	154626	0.001	0.001	-0.900	0.0	RdBn	D	S	W	FnIb	Ss	Tr	0.5	0.0	0.0	0.0	SiSt	
32.00	33.00	154627	0.001	0.001	-0.900	0.0	RdBn	D	S	W	FnIb	SsSi	Tr	0.0	0.0	0.0	0.0	SiSt	
33.00	34.00	154628	0.001	0.001	-0.900	0.0	RdBn	D	S	W	FnIb	SsSi	Tr	0.0	0.0	0.0	0.0	SiSt	
34.00	35.00	154629	0.001	0.001	-0.900	0.0	RdBn	D	S	W	FnIb	Ss	Tr	0.0	0.0	0.0	0.0	SiSt	
35.00	36.00	154630	0.001	0.001	-0.900	0.0	RdBn	D	M	T	FnIb	SsSi		0.0	0.0	0.0	0.0		
36.00	37.00	154631	0.050	0.050	-0.900	0.0	RdBn	D	M	T	FnIb	SsSi	Tr	10.0	0.0	0.0	0.0		
37.00	38.00	154632	0.390	0.390	-0.900	0.0	RdBn	D	M	T	FnIb	Ss	Tr	20.0	0.0	0.0	0.0		
38.00	39.00	154633	0.090	0.090	-0.900	0.0	BnGr	D	M	T	FnIb	Ss	Tr	0.0	0.0	0.0	0.0		
39.00	40.00	154634	0.040	0.040	-0.900	0.0	BnGr	D	M	T	FnIb	SsSi	Tr	0.5	0.0	0.0	0.0		
40.00	41.00	154635	0.110	0.110	-0.900	0.0	BnGr	D	M	T	FnIb	Si	Tr	30.0	0.0	0.0	0.0	ChWk	
41.00	42.00	154636	0.030	0.030	-0.900	0.0	RdBnGr	D	M	T	FnIb	Si	Tr	1.0	0.0	0.0	0.0		
42.00	43.00	154637	0.001	0.001	-0.900	0.0	GnGr	D	M	T	FnIb	Si	Tr	0.0	0.0	0.0	0.0		
43.00	44.00	154638	0.001	0.001	-0.900	0.0	KkGrBn	D	M	T	Ib	Si		0.0	0.0	0.0	0.0		
44.00	45.00	154639	0.001	0.001	-0.900	0.0	RdGnGr	D	M	T	Ib	Si		0.0	0.0	0.0	0.0		
45.00	46.00	154640	0.001	0.001	-0.900	0.0	RdGnGr	D	M	T	Ib	Si		0.0	0.0	0.0	0.0		
46.00	47.00	154642	0.001	0.001	-0.900	0.0	GnGrBn	D	M	T	Ib	Si	Bk	0.5	0.0	0.0	0.0		
47.00	48.00	154643	0.001	0.001	-0.900	0.0	GnGrBn	D	M	T	Ib	Si	Bk	25.0	0.0	0.0	0.0		
48.00	49.00	154644	0.030	0.030	-0.900	0.0	GnGrBn	D	M	T	Ib	Si	Bk	30.0	0.0	0.0	0.0		
49.00	50.00	154645	0.010	0.010	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.2	0.0	0.0	0.0		
50.00	51.00	154646	0.030	0.030	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.2	0.0	0.0	0.0		
51.00	52.00	154647	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		
52.00	53.00	154648	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		
53.00	54.00	154649	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		
54.00	55.00	154650	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		
55.00	56.00	154651	0.001	0.001	-0.900	0.0	GnGrBn	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		

Holename: **SHRC041**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
56.00	57.00	154652	0.001	0.001	-0.900	0.0	DkGnGr	D	M	T	Ib	Si	Tr	0.5	0.0	0.0	0.0		
57.00	58.00	154653	0.001	0.001	-0.900	0.0	DkGnGr	D	M	T	Ib	Si	Tr	5.0	0.0	0.0	0.0		
58.00	59.00	154654	0.001	0.001	-0.900	0.0	GnGrBn	D	M	T	Ib	Si	Tr	0.5	0.0	0.0	0.0		
59.00	60.00	154655	0.050	0.050	-0.900	0.0	RdBnGr	D	M	T	Ib	Si	Tr	3.0	0.0	0.0	0.0		
60.00	61.00	154656	0.200	0.200	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	10.0	0.0	0.0	0.0		
61.00	62.00	154657	0.001	0.001	-0.900	0.0	GnGrBn	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		
62.00	63.00	154658	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	Ib	Si	Bk	0.0	0.0	0.0	0.0		
63.00	64.00	154659	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	SiSs	Bk	0.0	0.0	0.0	0.0		
64.00	65.00	154660	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	SiSs	Bk	0.0	0.0	0.0	0.0		
65.00	66.00	154662	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	SiSs	Bk	0.0	0.0	0.0	0.0		
66.00	67.00	154663	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	SiSs	Bk	0.0	0.0	0.0	0.0		
67.00	68.00	154664	0.001	0.001	-0.900	0.0	GnGr	D	M	T	FnIb	SiSh	Bk	0.0	0.0	0.0	0.0		
68.00	69.00	154665	0.001	0.001	-0.900	0.0	GnGr	D	M	T	FnIb	SiSh	Bk	0.0	0.0	0.0	0.0		
69.00	70.00	154666	0.001	0.001	-0.900	0.0	GnGr	D	M	T	FnIb	SiSh	Bk	0.0	0.0	0.0	0.0		
70.00	71.00	154667	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.0	0.0	0.0	0.0		
71.00	72.00	154668	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.0	0.0	0.0	0.0		
72.00	73.00	154669	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.0	0.0	0.0	0.0		
73.00	74.00	154670	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.0	0.0	0.0	0.0		
74.00	75.00	154671	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.0	0.0	0.0	0.0		
75.00	76.00	154672	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.5	0.0	0.0	0.0		
76.00	77.00	154673	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	Si	Bk	0.0	0.0	0.0	0.0		
77.00	78.00	154674	0.001	0.001	-0.900	0.0	BnGnGr	D	M	T	FnIb	SiSs	Bk	0.0	0.0	0.0	0.0		
78.00	79.00	154675	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	Si	Bk	0.5	0.0	0.0	0.0		
79.00	80.00	154676	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
80.00	81.00	154677	0.001	0.001	-0.900	0.0	DkGrBn	D	M	T	FnIb	Si	Bk	2.0	0.0	0.0	0.0		
81.00	82.00	154678	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	Si	Bk	1.0	0.0	0.0	0.0		
82.00	83.00	154679	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
83.00	84.00	154680	0.140	0.140	-0.900	0.0	DkGrBn	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
84.00	85.00	154682	0.001	0.001	-0.900	0.0	DkGrBn	D	M	T	FnIb	SiSh	Bk	0.2	0.0	0.0	0.0		
85.00	86.00	154683	0.060	0.060	-0.900	0.0	DkGrBn	W	M	T	FnIb	SiSh	Bk	0.1	0.0	0.0	0.0		
86.00	87.00	154684	0.001	0.001	-0.900	0.0	DkGrBn	W	M	T	FnIb	Si	Bk	0.5	0.0	0.0	0.0		
87.00	88.00	154685	0.001	0.001	-0.900	0.0	DkGr	W	M	T	FnIb	Si	Bk	0.2	0.0	0.0	0.0		
88.00	89.00	154686	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
89.00	90.00	154687	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
90.00	91.00	154688	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
91.00	92.00	154689	0.001	0.001	-0.900	0.0	DkBnGr	D	M	T	FnIb	Si	Bk	0.1	0.0	0.0	0.0		
92.00	93.00	154690	0.150	0.150	-0.900	0.0	DkBnGr	D	M	T	FnIb	Si	Bk	5.0	0.0	0.0	0.0		
93.00	94.00	154691	0.001	0.001	-0.900	0.0	DkBnGr	W	M	T	FnIb	Si	Bk	1.0	0.0	0.0	0.0		
94.00	95.00	154692	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	SiSh	Bk	0.0	0.0	0.0	0.0		
95.00	96.00	154693	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	SiSh	Bk	0.5	0.0	0.0	0.0		
96.00	97.00	154694	0.001	0.001	-0.900	0.0	DkGr	W	M	T	FnIb	SiSh	Bk	1.0	0.0	0.0	0.0		
97.00	98.00	154695	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	SiSh	Bk	0.5	0.0	0.0	0.0		
98.00	99.00	154696	0.001	0.001	-0.900	0.0	DkGr	D	M	T	FnIb	SiSh	Bk	0.0	0.0	0.0	0.0		
99.00	100.00	154697	0.001	0.001	-0.900	0.0	DkGr	W	M	T	FnIb	SiSh	Bk	0.3	0.0	0.0	0.0		

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC060**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9871.00	Northing: 9700.00	Rl: 1234.00
Total Depth: 100.00	Logged by: CRM	Date: 19/06/90
Drilled by: Gaden Drill	Drill Type: 650	Date:

Survey Depth	Grid Azimuth	Inclination
0	90	-60
50	101	-47
100	113	-38

Holename: **SHRC060**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
0.00	1.00	157775	0.040	0.040	-9.000	0.0	RdPp	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0	MdSe	Clay fracture fill
1.00	2.00	157776	0.110	0.110	-9.000	0.0	RdCm	D	M	W	Fn	Sh		1.0	0.0	0.0	0.0		
2.00	3.00	157777	0.190	0.190	-9.000	0.0	KkRd	D	M	W	Fn	Sh		1.0	0.0	0.0	0.0		
3.00	4.00	157778	0.060	0.060	-9.000	0.0	KkRd	D	M	W	Fn	ShSi		0.0	0.0	0.0	0.0		
4.00	5.00	157779	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	0.0		
5.00	6.00	157780	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	0.0		
6.00	7.00	157781	0.120	0.120	-9.000	0.0	RdPp	D	M	W	Fn	SiSh		0.0	0.0	0.0	0.1		
7.00	8.00	157782	0.000	0.000	-9.000	0.0	RdKk	D	M	W	Fn	Si		0.0	0.0	0.0	0.0		
8.00	9.00	157783	0.020	0.010	0.020	0.0	RdKk	D	M	W	FnMd	ShSs		3.0	0.0	0.0	0.0		
9.00	10.00	157784	0.010	0.010	-9.000	0.0	Rd	D	M	W	Md	Si		2.0	0.0	0.0	1.0		
10.00	11.00	157785	0.000	0.000	-9.000	0.0	RdKk	D	M	W	F	SiSh		0.0	0.0	0.0	0.0		
11.00	12.00	157786	0.020	0.020	-9.000	0.0	RdKk	D	M	W	F	Si		0.0	0.0	0.0	0.0		
12.00	13.00	157787	1.200	1.140	1.250	0.0	Rd	D	M	W	F	Si		5.0	0.0	0.0	0.1		
13.00	14.00	157788	2.490	3.120	1.860	0.0	Rd	D	M	W	Md	Ss		20.0	0.0	0.0	0.0		Chert or qtz vein
14.00	15.00	157789	0.220	0.220	-9.000	0.0	RdKk	D	M	W	Fn	Si		2.0	0.0	0.0	0.0		
15.00	16.00	157790	0.170	0.170	-9.000	0.0	Rd	D	M	W	Fn	Si	Mk	40.0	0.0	0.0	2.0	WkFe	
16.00	17.00	157791	0.030	0.030	0.020	0.0	RdKk	D	M	W	Fn	Si		1.0	0.0	0.0	0.0		
17.00	18.00	157792	1.250	1.020	1.470	0.0	Kk	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0		Spotted shale
18.00	19.00	157793	0.070	0.070	-9.000	0.0	BnKk	D	M	W	FnPo	Sh		0.0	0.0	0.0	0.0		Spotted shale
19.00	20.00	157794	0.010	0.010	-9.000	0.0	Kk	D	M	W	FnPo	Sh		2.0	0.0	0.0	0.0	MdChSc	Spotted shale
20.00	21.00	157795	0.000	0.000	-9.000	0.0	RdKk	D	M	W	FnMd	ShSi		0.0	0.0	0.0	0.0		
21.00	22.00	157796	0.000	0.000	-9.000	0.0	RdKk	D	M	W	FnMd	ShSi		0.0	0.0	0.0	0.0		
22.00	23.00	157797	0.000	0.000	-9.000	0.0	RdBn	D	M	W	FnMd	SiShCh	Ch	25.0	0.0	0.0	0.0		Chert or qtz
23.00	24.00	157798	0.000	0.000	-9.000	0.0	RdBn	D	M	W	FnMd	SiCh	Ch	20.0	0.0	0.0	0.0	WkScFe	
24.00	25.00	157799	0.000	0.000	-9.000	0.0	RdBn	D	M	W	Fn	SiSh		0.0	0.0	0.0	0.0		Spotted
25.00	26.00	157800	0.010	0.010	-9.000	0.0	Gr	D	H	W	Fn	ShCh	Ch	98.0	0.0	0.0	1.0	MdSc	Spotted chert?
26.00	27.00	157801	0.010	0.000	0.020	0.0	BnMs	D	M	W	Fn	SiSh		0.0	0.0	0.0	0.0		Spotted shale
27.00	28.00	157802	0.030	0.030	-9.000	0.0	KkRd	D	H	W	FnPo	Sh		0.0	0.0	0.0	0.0	WkCbFe	Spotted shale
28.00	29.00	157803	0.010	0.010	-9.000	0.0	Rd	D	M	W	Fn	Si	Mk	40.0	0.0	0.0	0.5	WkFe	
29.00	30.00	157804	0.050	0.050	-9.000	0.0	RdKk	D	M	W	FnMd	Si		0.0	0.0	0.0	0.0	WkFe	
30.00	31.00	157805	0.070	0.070	-9.000	0.0	Kk	D	H	W	FnMd	Si	Mk	5.0	0.0	0.0	0.0	WkFeSc	
31.00	32.00	157806	0.210	0.210	-9.000	0.0	RdGr	D	H	W	MdPo	Ss	Mk	1.0	0.0	0.0	0.0	WkFeCb	Spotted sandstone
32.00	33.00	157807	0.110	0.110	-9.000	0.0	RdGr	D	H	W	Fn	SiSh	Mk	1.0	0.0	0.0	0.0	WkFe	
33.00	34.00	157808	0.090	0.090	-9.000	0.0	RdGr	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.1	FeMdSc	
34.00	35.00	157809	0.040	0.040	0.040	0.0	RdGr	D	H	W	Fn	Sh		20.0	0.0	0.0	0.1	Fe	
35.00	36.00	157810	0.040	0.040	-9.000	0.0	RdGr	D	H	W	Fn	Si		0.0	0.0	0.0	0.2	WkFeCb	Spotted silt (white spots) - ex carbonate
36.00	37.00	157811	0.000	0.000	-9.000	0.0	BnKk	D	M	W	FnPo	SiSh		0.0	0.0	0.0	0.0	WkFeCb	
37.00	38.00	157812	0.010	0.010	-9.000	0.0	DkKk	D	H	W	FnPo	SiSh		0.0	0.0	0.0	0.0	WkFeCb	
38.00	39.00	157813	0.010	0.010	-9.000	0.0	Kk	D	H	W	FnPo	Sh		1.0	0.0	0.0	0.0	WkFeCb	
39.00	40.00	157814	0.000	0.000	-9.000	0.0	KkGr	D	H	W	FnPo	ShSi		5.0	0.0	0.0	0.1	WkFeCb	
40.00	41.00	157815	0.000	0.000	-9.000	0.0	DkKk	D	H	W	FnPo	SiSh		0.0	0.0	0.0	0.0	MdScCb	Spotted silicified silt/shale
41.00	42.00	157816	0.430	0.430	-9.000	0.0	RdKk	D	H	W	FnPo	SiSh		0.0	0.0	0.0	0.0	MdScCb	
42.00	43.00	157817	0.000	0.000	-9.000	0.0	RdKk	D	H	W	FnPo	SiSh		0.0	0.0	0.0	0.0	MdScCb	
43.00	44.00	157818	0.050	0.050	-9.000	0.0	RdKk	D	H	W	FnPo	SiSh	Mk	60.0	0.0	0.0	0.5	MdScCb	
44.00	45.00	157819	0.010	0.010	-9.000	0.0	RdGr	D	H	W	FnMd	ShSi	Mk	35.0	0.0	0.0	1.0	WkScCb	
45.00	46.00	157820	0.040	0.040	-9.000	0.0	Rd	D	M	W	FnMd	Si	Ch	20.0	0.0	0.0	0.0	WkFe	
46.00	47.00	157821	0.050	0.050	-9.000	0.0	RdKk	D	H	W	Fn	SiCh	Ch	15.0	0.0	0.0	0.0	WkFe	Chert or quartz vein
47.00	48.00	157822	0.650	0.650	-9.000	0.0	GrKk	D	H	W	Fn	ShCh	Ch	60.0	0.0	0.0	1.0	WkFe	Chert or quartz vein
48.00	49.00	157823	0.220	0.220	-9.000	0.0	Kk	D	M	W	FnPo	Sh	Mk	10.0	0.0	0.0	1.0	WkFe	Spotted shale
49.00	50.00	157824	0.180	0.180	-9.000	0.0	RdKk	D	M	W	Fn	ShSi	Mk	40.0	0.0	0.0	5.0	WkFeSe	
50.00	51.00	157825	0.050	0.050	-9.000	0.0	RdKk	D	M	W	Fn	ShSi	Mk	10.0	0.0	0.0	5.0	WkFeSe	White clay lined fractures
51.00	52.00	157826	0.100	0.100	-9.000	0.0	RdKk	D	M	W	Fn	ShSi	Mk	5.0	0.0	0.0	5.0	WkFeSe	
52.00	53.00	157827	0.080	0.080	-9.000	0.0	RdKk	D	M	W	Fn	SiSh	Mk	0.5	0.0	0.0	0.0		
53.00	54.00	157828	0.130	0.130	-9.000	0.0	RdKk	D	M	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkFe	
54.00	55.00	157829	0.020	0.020	-9.000	0.0	KkGn	D	M	W	Fn	ShSi	Mk	10.0	0.0	0.0	0.1	WkFe	
55.00	56.00	157830	0.030	0.020	0.030	0.0	DkKk	D	H	W	FnPo	Sh		0.0	0.0	0.0	0.0	FeStSc	Silicified shale - chert

Holename: **SHRC060**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
56.00	57.00	157831	0.040	0.040	-9.000	0.0	DkKk	D	H	W	FnPo	Sh		0.0	0.0	0.0	0.0	FeStSc	
57.00	58.00	157832	0.080	0.080	-9.000	0.0	GrRd	D	H	W	Fn	ShSi		0.0	0.0	0.0	0.5	MdFe	
58.00	59.00	157833	0.020	0.020	-9.000	0.0	GrRd	D	H	W	Fn	ShSi	Mk	5.0	0.0	0.0	2.0	WkFe	
59.00	60.00	157834	0.060	0.060	-9.000	0.0	GrRd	D	M	W	Fn	ShSi	Mk	2.0	0.0	0.0	2.0	WkFe	
60.00	61.00	157835	0.010	0.010	-9.000	0.0	RdGr	D	M	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkFe	
61.00	62.00	157836	0.280	0.280	-9.000	0.0	RdGr	D	M	W	Fn	ShSi	Mk	5.0	0.0	0.0	2.0	WkFe	
62.00	63.00	157837	0.010	0.010	-9.000	0.0	DkGr	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkFe	
63.00	64.00	157838	0.020	0.010	0.030	0.0	RdGr	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0	WkFe	
64.00	65.00	157839	0.040	0.040	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	1.5	WkFe	
65.00	66.00	157840	0.260	0.260	-9.000	0.0	Rd	D	M	W	Fn	Si	Ch	5.0	0.0	0.0	5.0	MdFe	
66.00	67.00	157841	0.120	0.120	-9.000	0.0	Rd	D	M	W	Fn	Si	Ch	2.0	0.0	0.0	0.5	MdFe	
67.00	68.00	157842	0.010	0.010	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	0.5	MdFe	
68.00	69.00	157843	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	1.0	MdFe	
69.00	70.00	157844	0.000	0.000	-9.000	0.0	RdBn	D	M	W	FnMd	SiSs		0.0	0.0	0.0	1.0	MdFe	
70.00	71.00	157845	0.200	0.200	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	0.5	MdFe	
71.00	72.00	157846	0.010	0.010	-9.000	0.0	Rd	D	M	W	Fn	Si		1.0	0.0	0.0	5.0	MdFe	
72.00	73.00	157847	0.010	0.010	-9.000	0.0	RdGr	D	M	W	Fn	Sh		0.5	0.0	0.0	0.0	WkFe	
73.00	74.00	157848	0.160	0.160	-9.000	0.0	RdGr	D	M	W	Fn	Si		0.1	0.0	0.0	0.0	WkFe	
74.00	75.00	157849	0.010	0.010	-9.000	0.0	Rd	D	M	W	Fn	Sh		0.1	0.0	0.0	0.0	WkFe	
75.00	76.00	157850	0.010	0.010	-9.000	0.0	Rd	D	M	W	Fn	ShSi		0.0	0.0	0.0	0.5	WkFe	
76.00	77.00	157851	0.000	0.000	-9.000	0.0	RdGr	D	M	W	Fn	Sh		0.1	0.0	0.0	0.0	WkFe	
77.00	78.00	157852	0.000	0.000	-9.000	0.0	RdGr	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0	WkFe	
78.00	79.00	157853	0.000	0.000	0.000	0.0	Rd	D	M	W	Fn	Si		1.0	0.0	0.0	0.2	WkFe	
79.00	80.00	157854	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0		
80.00	81.00	157855	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	SiSh		0.0	0.0	0.0	0.5		
81.00	82.00	157856	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	SiSh		0.0	0.0	0.0	1.0	WkFe	
82.00	83.00	157857	0.000	0.000	-9.000	0.0	Rd	D	H	W	Fn	Si	Mk	1.0	0.0	0.0	1.0	WkFe	Fe altration on fractures
83.00	84.00	157858	0.000	0.000	-9.000	0.0	Rd	D	H	W	Fn	SiSh	Mk	2.0	0.0	0.0	2.0	WkFe	Thick shale/silt unit
84.00	85.00	157859	0.020	0.020	-9.000	0.0	Rd	D	H	W	Fn	Si	Mk	1.0	0.0	0.0	2.0	WkFe	
85.00	86.00	157860	0.000	0.000	-9.000	0.0	RdBn	D	H	W	Fn	SiCh	Ch	20.0	0.0	0.0	3.0	WkFe	Chert or quartz vein?
86.00	87.00	157861	0.710	0.680	0.730	0.0	RdGr	D	M	W	Fn	Si	Mk	1.0	0.0	0.0	2.0	WkFe	
87.00	88.00	157862	0.400	0.400	-9.000	0.0	Rd	D	M	W	Fn	Si		2.0	0.0	0.0	2.0	WkFe	
88.00	89.00	157863	0.120	0.120	-9.000	0.0	RdGr	D	M	W	Fn	Sh	Mk	10.0	0.0	0.0	3.0	WkFe	
89.00	90.00	157864	0.000	0.000	-9.000	0.0	RdGr	D	M	W	Fn	Sh	Mk	1.0	0.0	0.0	1.5	WkFe	
90.00	91.00	157865	0.000	0.000	-9.000	0.0	RdGr	D	M	W	Fn	Sh		0.2	0.0	0.0	0.5	WkFe	
91.00	92.00	157866	0.020	0.020	-9.000	0.0	RdGr	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0		
92.00	93.00	157867	0.000	0.000	-9.000	0.0	Rd	D	M	W	Fn	Si		0.0	0.0	0.0	0.0	WkFe	
93.00	94.00	157868	0.070	0.070	-9.000	0.0	BnGr	D	M	W	Fn	Si		1.0	0.0	0.0	0.3	WkFe	
94.00	95.00	157869	0.000	0.000	-9.000	0.0	RdKk	D	M	W	Fn	Sh		3.0	0.0	0.0	0.5	WkFe	
95.00	96.00	157870	0.000	0.000	-9.000	0.0	RdGr	D	H	W	Fn	Sh		0.5	0.0	0.0	0.0	WkFe	
96.00	97.00	157871	0.000	0.000	-9.000	0.0	RdGr	D	H	W	Fn	Sh		0.5	0.0	0.0	0.0	WkFe	
97.00	98.00	157872	0.000	0.000	-9.000	0.0	Bn	D	H	W	Fn	Sh		0.1	0.0	0.0	0.0	WkFe	
98.00	99.00	157873	0.000	0.000	-9.000	0.0	Bn	D	H	W	Fn	Sh		0.0	0.0	0.0	0.2	WkFe	
99.00	100.00	157874	0.000	0.000	-9.000	0.0	Bn	D	H	W	Fn	Si		0.0	0.0	0.0	0.1	WkFe	EOH

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC063**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9741.00	Northing: 10888.00	Rl: 1230.00
Total Depth: 61.00	Logged by: CC	Date: 28/06/90
Drilled by: Gaden Drill	Drill Type: 650	Date: 28/06/90

Survey Depth	Grid Azimuth	Inclination
0	90	-60
60	97	-58

Holename: **SHRC063**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
0.00	1.00	158358	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	1.0	0.0	0.0	0.0	WkFe	Surficil alteration
1.00	2.00	158359	0.070	0.070	-9.000	0.0	RdGn	D	H	W	MdFn	SsSi	Tr	3.0	0.0	0.0	0.0		
2.00	3.00	158360	0.010	0.010	-9.000	0.0	GnPp	D	H	W	Md	Ss	Tr	95.0	0.0	0.0	0.0	SeSc	
3.00	4.00	158361	0.060	0.060	-9.000	0.0	Gn	D	H	W	MdFn	SsSh	Tr	0.5	0.0	0.0	0.0	Se	
4.00	5.00	158362	0.140	0.140	-9.000	0.0	Gn	D	H	W	MdFn	ShSs	Tr	3.0	0.0	0.0	0.0	Se	
5.00	6.00	158363	0.080	0.080	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	0.0	ScWkFe	
6.00	7.00	158364	0.010	0.010	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	30.0	0.0	0.0	0.0	Fe	
7.00	8.00	158365	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Md	Ss	Tr	5.0	0.0	0.0	0.0	WkFe	
8.00	9.00	158366	0.100	0.100	0.090	0.0	Gn	D	H	W	Md	Ss	Tr	90.0	0.0	0.0	0.0	Sc	
9.00	10.00	158367	0.060	0.060	-9.000	0.0	GnPp	D	H	W	MdFn	ShSsSi	Tr	60.0	0.0	0.0	0.0	ScSe	
10.00	11.00	158368	0.180	0.180	-9.000	0.0	GnPp	D	H	W	MdFn	SsSi	Tr	95.0	0.0	0.0	1.0	Sc	
11.00	12.00	158369	0.310	0.310	-9.000	0.0	Gn	D	H	W	MdFn	SiSs	Tr	5.0	0.0	0.0	0.0	Se	
12.00	13.00	158370	0.230	0.230	-9.000	0.0	RdGn	D	H	W	MdFn	SsSi	Tr	35.0	0.0	0.0	0.0	WkSe	
13.00	14.00	158371	0.040	0.040	-9.000	0.0	Gn	D	H	W	MdFn	SsSi	Tr	5.0	0.0	0.0	0.0	ScSe	
14.00	15.00	158372	0.160	0.160	-9.000	0.0	Gn	D	H	W	Fn	SiSh	Tr	60.0	0.0	0.0	0.0	Se	
15.00	16.00	158373	0.000	0.000	-9.000	0.0	Wh	D	H	F	Fn		Tr	99.9	0.0	0.0	0.0	Sc	
16.00	17.00	158374	0.250	0.250	-9.000	0.0	GnRd	D	H	W	MdFn	SsSi	Tr	85.0	0.0	0.0	0.5	WkFe	
17.00	18.00	158375	0.010	0.020	0.000	0.0	RdGn	D	H	W	FnMd	SiSs	Tr	2.0	0.0	0.0	0.5		
18.00	19.00	158376	0.010	0.010	-9.000	0.0	GnRd	D	H	W	Fn	SiCh	Tr	0.5	0.0	0.0	0.0	WkSc	
19.00	20.00	158377	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkSc	
20.00	21.00	158378	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkScFe	
21.00	22.00	158379	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkSc	
22.00	23.00	158380	0.000	0.000	-9.000	0.0	Gn		D	H	TfN	SiSh	Tr	2.0	0.0	0.0	0.0		
23.00	24.00	158381	0.140	0.140	-9.000	0.0	GnRd	D	H	W	FnMd	SiShSs	Tr	4.0	0.0	0.0	0.0	WkScSe	
24.00	25.00	158382	0.350	0.350	-9.000	0.0	Gn	D	H	W	Fn	SiSh	Tr	0.5	0.0	0.0	0.0	WkSeSc	
25.00	26.00	158383	0.890	0.890	-9.000	0.0	GnBn	D	H	W	FnMd	SiShSs	Tr	10.0	0.0	0.0	0.5		
26.00	27.00	158384	0.020	0.020	-9.000	0.0	GnBn	D	H	W	Fn	SiSh	Mi	10.0	0.0	0.0	0.0	Sc	
27.00	28.00	158385	0.460	0.460	-9.000	0.0	GnBn	D	H	W	Fn	ShSi	Tr	10.0	0.0	0.0	0.0	Sc	
28.00	29.00	158386	0.040	0.040	-9.000	0.0	LtGn	D	M	W	FnMd	ShSsSi		0.0	0.0	0.0	0.0	WkSeSc	
29.00	30.00	158387	0.070	0.070	-9.000	0.0	RdLtGn	D	H	W	Fn	Si	Tr	50.0	0.0	0.0	1.0	SeSc	
30.00	31.00	158388	0.060	0.060	-9.000	0.0	RdLtGn	D	H	W	Fn	Si	Tr	50.0	0.0	0.0	0.0	SeSc	
31.00	32.00	158389	0.120	0.120	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	15.0	0.0	0.0	0.0	WkSc	
32.00	33.00	158390	0.080	0.080	-9.000	0.0	GnRd	D	H	W	Fn	SiSh	Tr	2.0	0.0	0.0	0.0	WkScSe	
33.00	34.00	158391	0.070	0.070	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	3.0	0.0	0.0	0.0	WkSe	
34.00	35.00	158392	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	5.0	0.0	0.0	0.0	WkSc	
35.00	36.00	158393	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0		
36.00	37.00	158394	0.000	0.000	-9.000	0.0	Gn	D	H	T	Fn	Si	Tr	3.0	0.0	0.0	0.0	Sc	
37.00	38.00	158395	0.000	0.000	-9.000	0.0	RdBnGn	D	H	W	Fn	Si	Tr	4.0	0.0	0.0	0.0		
38.00	39.00	158396	0.190	0.190	-9.000	0.0	RdGnBn	D	H	W	Fn	SiSh	Tr	5.0	0.0	0.0	0.5	WkSc	
39.00	40.00	158397	0.100	0.100	-9.000	0.0	GnRd	D	H	W	Fn	SiSh	Tr	4.0	0.0	0.0	0.0	WkScSe	
40.00	41.00	158398	0.260	0.260	-9.000	0.0	RdGn	D	H	W	Fn	Si	Tr	10.0	0.0	0.0	0.0	Sc	
41.00	42.00	158399	0.130	0.130	0.120	0.0	GnBn	D	H	W	Fn	Si	Tr	55.0	0.0	0.0	0.0	Sc	
42.00	43.00	158400	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	Si	Tr	1.0	0.0	0.0	0.0	WkSc	
43.00	44.00	158401	0.040	0.040	-9.000	0.0	GnRd	D	H	W	Fn	SiSh	Tr	40.0	0.0	0.0	1.0	Se	
44.00	45.00	158402	0.080	0.080	-9.000	0.0	GnBn	D	H	W	Fn	SiSh	Tr	7.0	0.0	0.0	0.5	WkSe	
45.00	46.00	158403	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	SiShCh	Tr	1.0	0.0	0.0	0.0		
46.00	47.00	158404	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	SiShCh	Tr	1.0	0.0	0.0	0.5		
47.00	48.00	158405	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkSe	
48.00	49.00	158406	0.000	0.000	-9.000	0.0	RdGn	D	H	W	FnMd	SiSs	Tr	1.0	0.0	0.0	0.0		
49.00	50.00	158407	0.000	0.000	-9.000	0.0	RdGn	D	H	W	FnMd	SiSs	Tr	0.5	0.0	0.0	0.0		
50.00	51.00	158408	0.000	0.000	-9.000	0.0	GnBn	D	H	W	FnMd	SiSs	Tr	1.0	0.0	0.0	0.0		
51.00	52.00	158409	0.010	0.010	-9.000	0.0	GnBn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkSc	
52.00	53.00	158410	0.020	0.020	-9.000	0.0	BnGn	D	H	W	Fn	Si	Tr	0.5	0.0	0.0	0.0	WkSc	
53.00	54.00	158411	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkSc	
54.00	55.00	158412	0.010	0.010	-9.000	0.0	LtGn	D	H	T	Fn	Si	Tr	5.0	0.0	0.0	0.0	WkScSe	
55.00	56.00	158413	0.010	0.010	-9.000	0.0	GnRd	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkSe	

Holename: **SHRC063**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
56.00	57.00	158414	0.000	0.000	-9.000	0.0	GnRd	D	H	W	FnMd	SiSs	Tr	3.0	0.0	0.0	0.0		
57.00	58.00	158415	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	SiCh	Tr	0.5	0.0	0.0	0.0	WkSc	
58.00	59.00	158416	0.000	0.000	-9.000	0.0	RdLtGn	D	H	W	FnMd	SsSi	Tr	3.0	0.0	0.0	0.0	WkFeSc	
59.00	60.00	158417	0.000	0.000	0.000	0.0	RdGn	D	H	W	Fn	Si	Tr	7.0	0.0	0.0	0.0	WkFe	
60.00	61.00	158418	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	0.5	0.0	0.0	0.0	WkScSc	EOH

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC064**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9748.00	Northing: 10888.00	Rl: 1230.00
Total Depth: 100.00	Logged by: CC	Date: 28/06/90
Drilled by: Gaden Drill	Drill Type: 650	Date: 28/06/90

Survey Depth	Grid Azimuth	Inclination
0	270	-60
50	276	-52
100	282	-47

Holename: **SHRC064**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
2.00	3.00	158419	0.020	0.020	-9.000	0.0	GnRd	D	H	W	MdFn	SsSi	Tr	20.0	0.0	0.0	0.0	Se	
3.00	4.00	158420	0.000	0.000	0.000	0.0	GnRd	D	H	W	MdFn	SiSs	Tr	30.0	0.0	0.0	0.0	SeSc	
4.00	5.00	158421	0.000	0.000	-9.000	0.0	GnPp	D	H	W	MdFn	SsSi	Tr	25.0	0.0	0.0	0.0	Se	
5.00	6.00	158422	0.000	0.000	-9.000	0.0	GnYw	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	5.0	SeSc	
6.00	7.00	158423	0.040	0.040	-9.000	0.0	GnPp	D	H	W	MdFn	SsSi	Tr	5.0	0.0	0.0	0.0	SeSc	
7.00	8.00	158424	0.010	0.010	-9.000	0.0	Rd	D	H	W	Fn	SsSi	Tr	0.5	0.0	0.0	0.0	WkFe	
8.00	9.00	158425	0.020	0.000	0.040	0.0	GnRd	D	H	W	Fn	SsSi	Tr	5.0	0.0	0.0	1.0	Se	
9.00	10.00	158426	0.050	0.050	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0	Se	
10.00	11.00	158427	0.000	0.000	-9.000	0.0	Rd	D	H	W	MdFn	SsSi	Tr	50.0	0.0	0.0	0.0	Fe	
11.00	12.00	158428	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	25.0	0.0	0.0	0.0	Fe	
12.00	13.00	158429	0.000	0.000	-9.000	0.0	Rd	D	H	W	MdFn	SsSi	Tr	40.0	0.0	0.0	0.0	Fe	
13.00	14.00	158430	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	5.0	0.0	0.0	0.0	Fe	
14.00	15.00	158431	0.010	0.000	0.030	0.0	RdGn	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0	Fe	
15.00	16.00	158432	0.000	0.000	-9.000	0.0	RdGnYw	D	H	W	Md	Ss	Tr	2.0	0.0	0.0	1.0	Fe	
16.00	17.00	158433	0.000	0.000	-9.000	0.0	RdDkGn	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	Fe	Strongly oxidised
17.00	18.00	158434	0.000	0.000	-9.000	0.0	RdLtGn	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFe	Partly leached
18.00	19.00	158435	0.030	0.030	-9.000	0.0	GnLtPp	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkSeSc	Partly leached
19.00	20.00	158436	0.000	0.000	-9.000	0.0	LtGn	D	H	W	Fn	ShSiCh		0.0	0.0	0.0	0.0	Se	
20.00	21.00	158437	0.020	0.020	-9.000	0.0	GnPp	D	H	W	Fn	SiShCh		0.0	0.0	0.0	0.0	Se	
21.00	22.00	158438	0.000	0.000	-9.000	0.0	GnPp	D	H	W	Fn	ShSi		0.0	0.0	0.0	0.0	WkSeSc	
22.00	23.00	158439	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	Sh		0.0	0.0	0.0	0.0		
23.00	24.00	158440	0.010	0.020	0.000	0.0	RdGn	D	H	W	Fn	ShSi		0.0	0.0	0.0	0.0		
24.00	25.00	158441	0.000	0.000	-9.000	0.0	RdGn	D	H	W	MdFn	SiSs		0.0	0.0	0.0	0.0	Fe	Increased oxidation
25.00	26.00	158442	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0		
26.00	27.00	158443	0.030	0.030	-9.000	0.0	Gn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkScSe	
27.00	28.00	158444	0.000	0.000	-9.000	0.0	Gn	D	H	W	MdFn	SiSs		0.0	0.0	0.0	0.0		
28.00	29.00	158445	0.000	0.000	-9.000	0.0	LtGnGr	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0	WkSeSc	
29.00	30.00	158446	0.000	0.000	-9.000	0.0	LtGn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0	Se	
30.00	31.00	158447	0.000	0.000	-9.000	0.0	LtGn	D	H	W	Fn	SiSs		0.0	0.0	0.0	0.0	Se	
31.00	32.00	158448	0.000	0.000	-9.000	0.0	Gn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	Se	
32.00	33.00	158449	0.000	0.000	-9.000	0.0	Gn	D	H	W	FnMd	SiSs		0.0	0.0	0.0	0.0		
33.00	34.00	158450	0.000	0.000	0.000	0.0	Gn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkSe	
34.00	35.00	158451	0.000	0.000	-9.000	0.0	GnRd	D	H	T	Fn	SiSs		0.0	0.0	0.0	0.0	WkSeSc	
35.00	36.00	158452	0.000	0.000	-9.000	0.0	Gn	D	H	T	Fn	Si		0.0	0.0	0.0	0.0	WkSc	
36.00	37.00	158453	0.000	0.000	-9.000	0.0	Gn	D	H	T	Fn	SiSh		0.0	0.0	0.0	0.0	Se	
37.00	38.00	158454	0.000	0.000	-9.000	0.0	RdGn	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0	WkSc	
38.00	39.00	158455	0.030	0.030	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	0.0	ScWkSe	
39.00	40.00	158456	0.040	0.040	-9.000	0.0	RdGn	D	H	W	Md	Ss	Tr	2.0	0.0	0.0	0.0		
40.00	41.00	158457	0.020	0.020	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	2.0	0.0	0.0	0.0		
41.00	42.00	158458	0.100	0.100	-9.000	0.0	GnMs	D	H	W	Md	Ss	Tr	40.0	0.0	0.0	0.0	WkSc	
42.00	43.00	158459	0.050	0.050	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	70.0	0.0	0.0	1.0	WkFeSc	
43.00	44.00	158460	0.200	0.180	0.210	0.0	GnBn	D	H	W	Fn	ShSi	Tr	50.0	0.0	0.0	0.0		
44.00	45.00	158461	0.060	0.060	-9.000	0.0	Gn	D	H	W	MdFn	SsSh	Tr	3.0	0.0	0.0	0.0	WkSc	
45.00	46.00	158462	0.040	0.040	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	3.0	0.0	0.0	0.0	WkSc	
46.00	47.00	158463	0.020	0.020	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	35.0	0.2	0.0	0.5		
47.00	48.00	158464	0.120	0.120	-9.000	0.0	GnBn	D	H	W	MdFn	SsSh	Tr	30.0	0.0	0.0	0.0	WkFe	
48.00	49.00	158465	0.030	0.030	-9.000	0.0	GnBn	D	H	W	FnMd	ShSs	Tr	15.0	0.0	0.0	0.0		
49.00	50.00	158466	0.030	0.030	-9.000	0.0	GnBn	D	H	W	MdFn	SsSh	Tr	35.0	0.0	0.0	0.5	WkFe	
50.00	51.00	158467	0.400	0.400	-9.000	0.0	GnBn	D	H	W	MdFn	SsSi	Tr	40.0	0.0	0.0	0.5	WkFe	
51.00	52.00	158468	0.130	0.130	-9.000	0.0	GnBn	D	H	W	Fn	ShSi	Tr	20.0	0.0	0.0	0.0		
52.00	53.00	158469	0.370	0.370	-9.000	0.0	Gn	D	H	W	Fn	SiSh	Tr	2.0	0.0	0.0	0.0		
53.00	54.00	158470	0.060	0.060	-9.000	0.0	Gn	D	H	T	Fn	SiSsSh		0.0	0.0	0.0	0.0	WkChSe	
54.00	55.00	158471	0.430	0.430	-9.000	0.0	RdGn	D	H	W	Md	Ss	Tr	2.0	0.0	0.0	0.0		
55.00	56.00	158472	0.030	0.030	-9.000	0.0	RdPpGn	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFe	
56.00	57.00	158473	0.010	0.010	-9.000	0.0	Gn	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkSe	
57.00	58.00	158474	0.060	0.060	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	2.0	0.0	0.0	0.0		

Holename: **SHRC064**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
58.00	59.00	158475	0.150	0.150	-9.000	0.0	GnRdBn	D	H	W	Md	Ss	Tr	10.0	0.0	0.0	0.5	WkFe	
59.00	60.00	158476	0.300	0.300	-9.000	0.0	GnRd	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0		
60.00	61.00	158477	0.540	0.540	-9.000	0.0	Gn	D	H	T	Md	Ss		0.0	0.0	0.0	0.0		
61.00	62.00	158478	0.450	0.450	-9.000	0.0	DkGn	D	H	T	Fn	SiSh		0.0	0.0	0.0	0.0	Ch	
62.00	63.00	158479	0.090	0.090	-9.000	0.0	DkGn	D	H	T	FnMd	SsSi		0.0	0.0	0.0	0.0	Ch	
63.00	64.00	158480	0.510	0.530	0.490	0.0	RdGn	D	H	W	FnMd	SsSi	Tr	30.0	0.0	0.0	0.0	WkSe	
64.00	65.00	158481	0.050	0.050	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	1.0	0.0	0.0	0.0		
65.00	66.00	158482	0.110	0.110	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	5.0	0.0	0.0	0.5		
66.00	67.00	158483	0.170	0.170	-9.000	0.0	GnKk	D	H	W	Md	Ss	Tr	15.0	0.0	0.0	0.0		
67.00	68.00	158484	0.050	0.050	-9.000	0.0	DkGn	D	H	T	MdFn	SsSi		0.0	0.0	0.0	0.0	Ch	
68.00	69.00	158485	0.130	0.130	-9.000	0.0	DkGn	D	H	T	MdFn	SsSi	Tr	3.0	0.0	0.0	0.0	WkCh	
69.00	70.00	158486	0.060	0.060	-9.000	0.0	GnBn	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0		
70.00	71.00	158487	0.080	0.080	-9.000	0.0	GnBn	D	H	W	MdFn	SsSi	Tr	5.0	0.0	0.0	0.0		
71.00	72.00	158488	0.060	0.060	-9.000	0.0	GnKk	D	H	W	Md	Ss	Tr	40.0	0.0	0.0	0.0		
72.00	73.00	158489	0.020	0.020	-9.000	0.0	DkGn	D	H	T	Md	Ss	Tr	0.5	0.0	0.0	0.0	WkCh	
73.00	74.00	158490	0.040	0.040	0.040	0.0	Gn	D	H	T	Md	Ss		0.0	0.0	0.0	0.0		
74.00	75.00	158491	0.110	0.110	-9.000	0.0	GnBn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0		
75.00	76.00	158492	0.260	0.260	-9.000	0.0	GnPp	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkCh	
76.00	77.00	158493	0.130	0.130	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	35.0	0.0	0.0	0.0	WkFeSc	
77.00	78.00	158494	0.040	0.040	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	15.0	0.0	0.0	0.0		
78.00	79.00	158495	0.160	0.160	-9.000	0.0	Gn	D	H	W	MdFn	SiSs	Tr	60.0	0.0	0.0	0.0		
79.00	80.00	158496	0.030	0.030	-9.000	0.0	GnBn	D	H	W	MdFn	SsSh	Tr	0.5	0.0	0.0	0.0		
80.00	81.00	158497	0.040	0.040	-9.000	0.0	DkGn	D	H	T	MdFn	SsSi	Tr	0.5	0.0	0.0	0.0	Ch	
81.00	82.00	158498	0.030	0.030	-9.000	0.0	DkGnPp	D	H	T	FnMd	SiSs		0.0	0.0	0.0	0.0	Ch	
82.00	83.00	158499	0.070	0.070	-9.000	0.0	GnYw	D	H	W	Md	Ss	Tr	12.0	0.0	0.0	0.5	WkSc	
83.00	84.00	158500	0.110	0.070	0.140	0.0	GnBn	D	H	W	Md	Ss	Tr	5.0	0.0	0.0	0.0		
84.00	85.00	158501	0.030	0.030	-9.000	0.0	GnBn	D	H	W	MdFn	SsSh		0.0	0.0	0.0	0.0	Ch	
85.00	86.00	158502	0.110	0.110	-9.000	0.0	DkGn	D	H	T	Md	Ss		0.0	0.0	0.0	0.0	WkCh	
86.00	87.00	158503	0.020	0.020	-9.000	0.0	GnMs	D	H	W	Md	Ss	Tr	60.0	0.0	0.0	1.0	WkSeSc	
87.00	88.00	158504	0.400	0.400	-9.000	0.0	GnBn	D	H	W	MdFn	SsSiSh	Tr	2.0	0.0	0.0	0.5		
88.00	89.00	158505	0.310	0.310	-9.000	0.0	GnPp	D	H	T	Md	Ss		0.0	0.0	0.0	0.0		
89.00	90.00	158506	0.370	0.370	-9.000	0.0	DkGn	D	H	T	Md	Ss		0.0	0.0	0.0	0.0	WkCh	
90.00	91.00	158507	0.110	0.110	-9.000	0.0	GnBn	D	H	T	Md	Ss	Tr	5.0	0.0	0.0	0.0		
91.00	92.00	158508	0.140	0.140	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	3.0	0.0	0.0	0.5	WkSeSc	
92.00	93.00	158509	0.090	0.090	-9.000	0.0	DkGn	D	H	T	Fn	Si		0.0	0.0	0.0	0.0	Ch	
93.00	94.00	158510	0.330	0.330	0.330	0.0	DkGn	D	H	T	Fn	SiSh		0.0	0.0	0.0	0.0	Ch	
94.00	95.00	158511	0.080	0.080	-9.000	0.0	Gn	D	H	T	FnMd	ShSs	Tr	35.0	0.0	0.0	0.0	WkCh	
95.00	96.00	158512	0.020	0.020	-9.000	0.0	Gn	D	H	T	Md	Ss	Tr	3.0	0.0	0.0	0.0	WkCh	
96.00	97.00	158513	0.010	0.010	-9.000	0.0	DkGn	D	H	T	MdFn	SsShSi		0.0	0.0	0.0	0.0	Ch	
97.00	98.00	158514	0.010	0.010	-9.000	0.0	DkGn	D	H	T	MdFn	SiSs		0.0	0.0	0.0	0.0	Ch	
98.00	99.00	158515	0.030	0.030	-9.000	0.0	DkGn	D	H	T	Fn	Si	Tr	4.0	0.0	0.0	0.0	Ch	
99.00	100.00	158516	0.000	0.000	-9.000	0.0	GnPp	D	H	W	Fn	Si		0.0	0.0	0.0	0.0		EOH

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC065**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9770.00	Northing: 10950.00	Rl: 1235.00
Total Depth: 100.00	Logged by: CC	Date: 30/06/90
Drilled by: Gaden Drill	Drill Type: 650	Date: 30/06/90

Survey Depth	Grid Azimuth	Inclination
0	270	-60
5	271	-60
50	280	-57
100	282	-55

Holename: **SHRC065**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
5.00	6.00	158524	0.070	0.070	-9.000	0.0	LtGn	D	M	W	Fn	Si	Tr	2.0	0.0	0.0	0.0	WkSe	
6.00	7.00	158525	0.030	0.030	-9.000	0.0	RdGn	D	H	W	Fn	SiCh	Tr	1.0	0.0	0.0	0.0	WkSeSc	
7.00	8.00	158526	0.060	0.060	-9.000	0.0	LtGnRd	D	H	W	Fn	Si	Tr	3.0	0.0	0.0	0.5	WkSc	
8.00	9.00	158527	0.140	0.140	-9.000	0.0	LtGn	D	H	W	Fn	Si	Tr	5.0	0.0	0.0	0.0	WkSc	
9.00	10.00	158528	0.080	0.080	-9.000	0.0	LtGn	D	H	W	Fn	SiSh	Tr	0.5	0.0	0.0	0.0	Se	
10.00	11.00	158529	0.060	0.060	-9.000	0.0	LtGnBn	D	H	W	FnMd	ShSs		0.0	0.0	0.0	0.0	WkSe	
11.00	12.00	158530	0.000	0.000	0.000	0.0	LtGnPp	D	H	W	Fn	SiSs		0.0	0.0	0.0	0.0	WkSc	
12.00	13.00	158531	0.080	0.080	-9.000	0.0	LtGnPp	D	H	W	Fn	SiCh		0.0	0.0	0.0	0.0	WkScSe	
13.00	14.00	158532	0.130	0.130	-9.000	0.0	LtGnBn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkScSe	
14.00	15.00	158533	0.020	0.020	-9.000	0.0	BnLtGn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0		
15.00	16.00	158534	0.010	0.010	-9.000	0.0	LtGn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkScSe	
16.00	17.00	158535	0.000	0.000	-9.000	0.0	Gn	D	H	W	Fn	SiSs		0.0	0.0	0.0	0.0		
17.00	18.00	158536	0.170	0.170	-9.000	0.0	Gn	D	H	W	Fn	SiSs	Tr	20.0	0.0	0.0	0.0	WkSc	
18.00	19.00	158537	0.020	0.020	-9.000	0.0	Gn	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0	WkScSe	
19.00	20.00	158538	0.040	0.040	-9.000	0.0	GnPp	D	H	W	Fn	SsSi	Tr	15.0	0.0	0.0	0.0		
20.00	21.00	158539	0.060	0.060	-9.000	0.0	LtGn	D	H	W	Md	Ss	Tr	75.0	0.0	0.0	1.0	StSc	
21.00	22.00	158540	0.090	0.090	0.090	0.0	LtGnBn	D	M	W	MdFn	SsSi	Tr	35.0	0.0	0.0	1.0	Se	
22.00	23.00	158541	0.030	0.030	-9.000	0.0	LtGnPp	D	H	W	Fn	SiCh	Tr	0.5	0.0	0.0	0.0		
23.00	24.00	158542	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	ShSs	Tr	0.5	0.0	0.0	0.0		
24.00	25.00	158543	0.030	0.030	-9.000	0.0	GnRd	D	H	W	FnMd	SsShCh		0.0	0.0	0.0	0.0		
25.00	26.00	158544	0.010	0.010	-9.000	0.0	RdGn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0		
26.00	27.00	158545	0.020	0.020	-9.000	0.0	RdGn	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0		
27.00	28.00	158546	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	SsSi	Tr	1.0	0.0	0.0	0.0		
28.00	29.00	158547	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFe	
29.00	30.00	158548	0.020	0.020	-9.000	0.0	RdGn	D	H	W	FnMd	SsSi		0.0	0.0	0.0	0.0		
30.00	31.00	158549	0.080	0.080	-9.000	0.0	RdGn	D	H	W	Fn	SiSs		0.0	0.0	0.0	0.0	WkFe	
31.00	32.00	158550	0.080	0.080	-9.000	0.0	GnRd	D	H	W	Fn	SiSs		0.0	0.0	0.0	0.0		
32.00	33.00	158551	0.030	0.000	0.050	0.0	RdGn	D	H	W	Fn	SsSi		0.0	0.0	0.0	0.0	WkFe	
33.00	34.00	158552	0.050	0.050	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	0.5	0.0	0.0	0.0	Fe	
34.00	35.00	158553	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	0.0	Fe	
35.00	36.00	158554	0.030	0.030	-9.000	0.0	RdGn	D	H	W	MdFn	SsSi	Tr	0.5	0.0	0.0	0.0	Fe	
36.00	37.00	158555	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFeSe	
37.00	38.00	158556	0.250	0.250	-9.000	0.0	RdGn	D	H	W	MdFn	SsCh	Tr	30.0	0.0	0.0	0.0	WkFeSe	
38.00	39.00	158557	0.570	0.570	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	3.0	0.0	0.0	0.0	WkScSe	
39.00	40.00	158558	0.120	0.130	0.100	0.0	Gn	D	H	W	Md	Ss	Tr	5.0	0.0	0.0	0.0	WkSeSc	
40.00	41.00	158559	0.050	0.050	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	80.0	0.0	0.0	1.0	WkSc	
41.00	42.00	158560	0.000	0.000	-9.000	0.0	GnPp	D	M	W	Fn	SsSi	Tr	5.0	0.0	0.0	0.0	Se	
42.00	43.00	158561	0.120	0.120	-9.000	0.0	PpRdGn	D	M	W	Md	Ss	Tr	50.0	0.0	0.0	0.0	ScFe	
43.00	44.00	158562	0.250	0.250	-9.000	0.0	RdGn	D	M	W	Md	Ss	Tr	70.0	0.0	0.0	0.0	Fe	
44.00	45.00	158563	0.050	0.050	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	0.0		
45.00	46.00	158564	0.040	0.040	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	90.0	0.0	0.0	0.0		
46.00	47.00	158565	0.010	0.010	-9.000	0.0	GnBn	I	H	W	Md	Ss	Tr	50.0	0.0	0.0	0.0		
47.00	48.00	158566	0.130	0.130	0.130	0.0	GnBn	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	1.0		
48.00	49.00	158567	0.070	0.070	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	97.0	0.0	0.0	1.0	StSc	
49.00	50.00	158568	0.070	0.070	-9.000	0.0	GnPpRd	D	H	W	Md	Ss	Tr	90.0	0.0	0.0	0.0	Sc	
50.00	51.00	158569	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	40.0	0.0	0.0	0.5	FeWkSc	
51.00	52.00	158570	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	1.0	0.0	0.0	0.0	WkFe	
52.00	53.00	158571	0.110	0.110	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	90.0	0.0	0.0	2.0	Sc	
53.00	54.00	158572	0.840	0.770	0.910	0.0	Gn	D	H	W	Md	Ss	Tr	10.0	0.0	0.0	0.0		
54.00	55.00	158573	0.090	0.090	-9.000	0.0	GnRd	D	M	W	Md	Ss	Tr	90.0	0.0	0.0	0.5	Sc	
55.00	56.00	158574	0.130	0.130	-9.000	0.0	RdGn	D	H	W	Md	Ss	Tr	60.0	0.0	0.0	0.0	WkFe	
56.00	57.00	158575	0.580	0.580	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	50.0	0.0	0.0	0.5	WkFeSc	
57.00	58.00	158576	0.140	0.140	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	85.0	0.0	0.0	1.0	Sc	
58.00	59.00	158577	1.800	1.810	1.790	0.0	GnRd	D	H	W	MdFn	SsSi	Tr	30.0	0.0	0.0	0.0		
59.00	60.00	158578	0.180	0.180	-9.000	0.0	GnRd	D	H	W	MdFn	SiSs	Tr	2.0	0.0	0.0	0.0		

Holename: **SHRC065**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
60.00	61.00	158579	0.230	0.230	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	7.0	0.0	0.0	1.0	WkSc	
61.00	62.00	158580	0.060	0.060	-9.000	0.0	RdGn	D	H	W	Md	Ss	Tr	2.0	0.0	0.0	0.0		
62.00	63.00	158581	0.030	0.030	-9.000	0.0	GnRd	D	H	W	Fn	SsSi	Tr	5.0	0.0	0.0	0.0		
63.00	64.00	158582	0.010	0.010	-9.000	0.0	RdGn	D	M	W	Md	Ss	Tr	35.0	0.0	0.0	0.0	Fe	
64.00	65.00	158583	0.000	0.000	-9.000	0.0	Rd	D	H	W	MdFn	SsSi	Tr	60.0	0.0	0.0	0.0	Fe	
65.00	66.00	158584	0.010	0.010	0.000	0.0	RdGn	D	H	W	Fn	SsSi	Tr	25.0	0.0	0.0	0.0	Fe	
66.00	67.00	158585	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	SsSi	Tr	20.0	0.0	0.0	0.0	WkFeSc	
67.00	68.00	158586	0.010	0.010	-9.000	0.0	RdGn	D	H	W	Fn	SsSi	Tr	3.0	0.0	0.0	0.0		
68.00	69.00	158587	0.020	0.020	-9.000	0.0	RdGn	D	H	W	Md	Ss	Tr	85.0	0.0	0.0	0.0	FeSc	
69.00	70.00	158588	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	5.0	0.0	0.0	0.0	WkFe	
70.00	71.00	158589	0.000	0.000	-9.000	0.0	BnRd	D	H	W	Fn	Ss	Tr	5.0	0.0	0.0	0.0	WkFe	
71.00	72.00	158590	0.000	0.000	-9.000	0.0	BnRdGn	D	H	W	Fn	Ss	Tr	3.0	0.0	0.0	0.0		
72.00	73.00	158591	0.000	0.000	-9.000	0.0	RdBnGn	D	H	W	Fn	SsSi	Tr	5.0	0.0	0.0	0.0		
73.00	74.00	158592	0.000	0.000	0.000	0.0	BnGn	D	H	W	Fn	SsSi	Tr	7.0	0.0	0.0	0.0		
74.00	75.00	158593	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	SsSi	Tr	5.0	0.0	0.0	0.0		
75.00	76.00	158594	0.000	0.000	-9.000	0.0	BnGn	D	H	W	Fn	Si	Tr	1.0	0.0	0.0	0.0		
76.00	77.00	158595	0.010	0.010	-9.000	0.0	BnGn	D	H	W	Fn	Si	Tr	4.0	0.0	0.0	0.0		
77.00	78.00	158596	0.000	0.000	-9.000	0.0	GnBn	D	H	W	Fn	SiSs	Tr	3.0	0.0	0.0	0.0		
78.00	79.00	158597	0.050	0.050	-9.000	0.0	GnBn	D	H	W	Fn	SiSs	Tr	3.0	0.0	0.0	0.0		
79.00	80.00	158598	0.010	0.010	-9.000	0.0	GnBn	D	H	W	Fn	SiSs	Tr	7.0	0.0	0.0	0.0		
80.00	81.00	158599	0.000	0.000	-9.000	0.0	BnGn	D	H	W	Fn	SiSs	Tr	10.0	0.0	0.0	0.0		
81.00	82.00	158600	0.020	0.020	-9.000	0.0	GnBnRd	D	H	W	FnMd	Ss	Tr	25.0	0.0	0.0	1.0		
82.00	83.00	158601	0.080	0.080	-9.000	0.0	GnBn	D	H	W	MdFn	Ss	Tr	40.0	0.0	0.0	0.0		
83.00	84.00	158602	0.140	0.140	-9.000	0.0	GnBnRd	D	H	W	MdFn	SsSiSh	Tr	15.0	0.0	0.0	0.5	WkSc	
84.00	85.00	158603	0.070	0.070	-9.000	0.0	GnBn	D	H	W	Fn	SsSi	Tr	10.0	0.0	0.0	0.0		
85.00	86.00	158604	0.050	0.050	-9.000	0.0	GnKkRd	D	M	W	MdFn	SsSi	Tr	3.0	0.0	0.0	0.0		
86.00	87.00	158605	0.060	0.060	-9.000	0.0	Gn	D	H	W	FnMd	SsSi	Tr	3.0	0.0	0.0	0.0		
87.00	88.00	158606	0.270	0.270	-9.000	0.0	RdPpGn	D	H	W	Md	Ss	Tr	10.0	0.0	0.0	0.0		
88.00	89.00	158607	0.370	0.370	-9.000	0.0	GnRd	D	H	W	MdFn	SsSi	Tr	30.0	0.0	0.0	0.5		
89.00	90.00	158608	0.140	0.140	-9.000	0.0	Gn	D	H	W	Fn	SsSiSh		0.0	0.0	0.0	0.0	Ch	
90.00	91.00	158609	0.170	0.130	0.210	0.0	DkGn	D	H	T	Fn	ShSiSs		0.0	0.0	0.0	0.0	Ch	
91.00	92.00	158610	0.100	0.100	-9.000	0.0	DkGn	D	H	T	FnMd	SiSs		0.0	0.0	0.0	0.0	WkCh	
92.00	93.00	158611	0.110	0.110	-9.000	0.0	DkGn	D	H	T	Fn	Si		0.0	0.0	0.0	0.0	Ch	
93.00	94.00	158612	0.060	0.060	-9.000	0.0	DkGnBn	D	H	T	Fn	SiSs		0.0	0.0	0.0	0.0	WkCh	
94.00	95.00	158613	0.050	0.050	-9.000	0.0	DkGn	D	H	T	Fn	Si		0.0	0.0	0.0	0.0	Ch	
95.00	96.00	158614	0.080	0.080	-9.000	0.0	GnLtGr	D	H	W	FnMd	SiSs		0.0	0.0	0.0	0.0	WkCh	
96.00	97.00	158615	0.050	0.050	-9.000	0.0	DkGn	D	H	T	Fn	Ss		0.0	0.0	0.0	0.0	Ch	
97.00	98.00	158616	0.030	0.030	-9.000	0.0	DkGn	D	H	T	MdFn	ShSiSs		0.0	0.0	0.0	0.0	Ch	
98.00	99.00	158617	0.030	0.030	0.020	0.0	DkGn	D	H	T	FnMd	SiSs		0.0	0.0	0.0	0.0	Ch	
99.00	100.00	158618	0.070	0.070	-9.000	0.0	DkGn	D	H	T	FnMd	SiSs		0.0	0.0	0.0	0.0	Ch	EOH

Billiton Australia

The Metals Division of the Shell Company of Australia

Drill Hole Log

Holename: **SHRC067**

Prospect: SPHILL	Holetype: RC	Grid North: 323.5AMG
Easting: 9665.00	Northing: 11400.00	Rl: 1255.00
Total Depth: 100.00	Logged by: CC	Date: 01/08/90
Drilled by: Gaden Drill	Drill Type: 650	Date: 04/07/90

Survey Depth	Grid Azimuth	Inclination
0	270	-60
5	272	-60
50	280	-52
100	281	-51

Holename: **SHRC067**

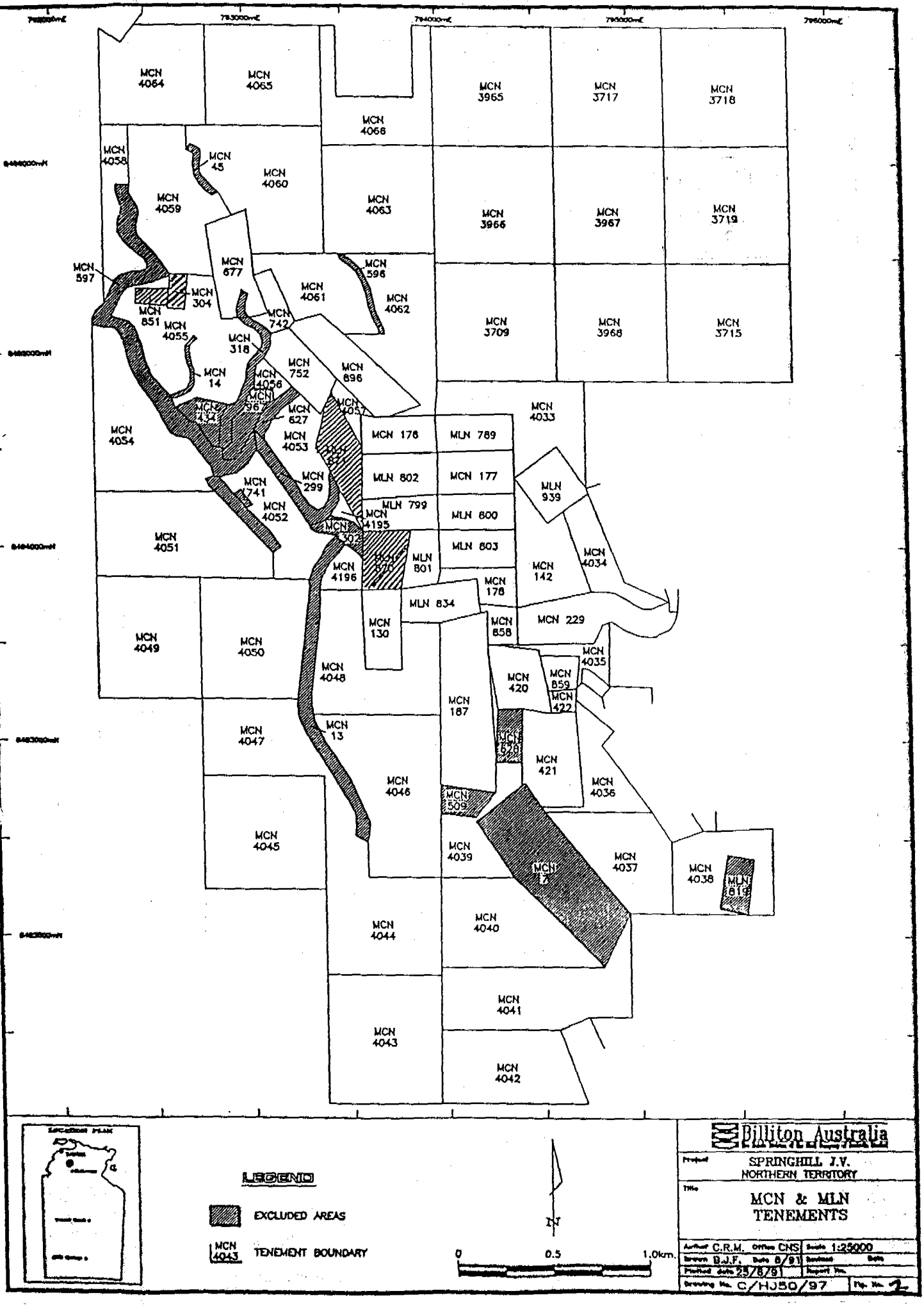
Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
0.00	1.00	158720	0.040	0.040	-9.000	0.0	LtBnGn	D	H	W	Fn	SsSi		0.0	0.0	0.0	0.0	WkSe	
1.00	2.00	158721	0.080	0.080	-9.000	0.0	LtGnBn	D	H	W	Fn	SiSh		0.0	0.0	0.0	0.0	WkSe	
2.00	3.00	158722	0.210	0.210	-9.000	0.0	LtGn	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0	Se	
3.00	4.00	158723	0.000	0.000	-9.000	0.0	LtGn	D	M	W	Fn	ShSi	Tr	1.0	0.0	0.0	0.0	Se	
4.00	5.00	158724	0.090	0.090	-9.000	0.0	LtGn	D	M	W	Fn	Sh	Tr	2.0	0.0	0.0	0.0	Se	
5.00	6.00	158725	0.080	0.080	-9.000	0.0	LtGn	D	H	W	Fn	SsSh		0.0	0.0	0.0	0.0	Se	
6.00	7.00	158726	0.000	0.000	-9.000	0.0	LtGnPp	D	M	W	Fn	Sh		0.0	0.0	0.0	0.0	WkSe	
7.00	8.00	158727	0.110	0.110	0.110	0.0	LtGnPp	D	M	W	FnMd	ShSs		0.0	0.0	0.0	0.0	WkSe	
8.00	9.00	158728	0.130	0.130	-9.000	0.0	LtBn	D	M	W	FnMd	SsSiSh		0.0	0.0	0.0	0.0		
9.00	10.00	158729	0.020	0.020	-9.000	0.0	YwBn	D	M	W	FnMd	SsSi	Tr	3.0	0.0	0.0	0.0		
10.00	11.00	158730	0.070	0.070	-9.000	0.0	BnGn	D	H	W	FnMd	SsSi	Tr	10.0	0.0	0.0	1.0		
11.00	12.00	158731	0.250	0.250	-9.000	0.0	LtBnGn	D	H	W	Fn	SiSs	Tr	2.0	0.0	0.0	0.0		
12.00	13.00	158732	0.030	0.030	-9.000	0.0	RdBnPp	D	H	W	Md	Ss	Tr	35.0	0.0	0.0	3.0	Fe	
13.00	14.00	158733	0.010	0.010	-9.000	0.0	RdBn	D	M	W	Md	Ss		0.0	0.0	0.0	0.0	Fe	
14.00	15.00	158734	0.030	0.030	-9.000	0.0	LtBnPp	D	H	W	MdFn	SsSi	Tr	25.0	0.0	0.0	2.0	Fe	
15.00	16.00	158735	0.010	0.000	0.010	0.0	LtBnPp	D	H	W	MdFn	SsSi	Tr	2.0	0.0	0.0	0.5	Wk	
16.00	17.00	158736	0.010	0.010	-9.000	0.0	YwBn	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFe	
17.00	18.00	158737	0.010	0.010	-9.000	0.0	LtGnBn	D	M	W	Fn	Si	Tr	2.0	0.0	0.0	0.5		
18.00	19.00	158738	0.000	0.000	-9.000	0.0	RdLtBn	D	H	W	FnMd	SiSs	Tr	2.0	0.0	0.0	0.0	WkFe	
19.00	20.00	158739	0.000	0.000	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	25.0	0.0	0.0	0.5	Fe	
20.00	21.00	158740	0.000	0.000	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	20.0	0.0	0.0	0.0	Fe	
21.00	22.00	158741	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	35.0	0.0	0.0	0.0	Fe	
22.00	23.00	158742	0.080	0.080	-9.000	0.0	LtRdBn	D	M	W	Md	Ss	Tr	30.0	0.0	0.0	1.0	WkFe	
23.00	24.00	158743	0.060	0.060	-9.000	0.0	LtGnBn	D	S	W	MdFn	SiSs	Tr	8.0	0.0	0.0	0.0		
24.00	25.00	158744	0.000	0.000	-9.000	0.0	LtGnPp	D	M	W	Fn	Si	Tr	40.0	0.0	0.0	0.0		
25.00	26.00	158745	0.150	0.150	-9.000	0.0	PpRdGn	D	H	W	Md	Ss	Tr	30.0	0.0	0.0	1.0	WkFe	
26.00	27.00	158746	0.070	0.070	-9.000	0.0	Bn	D	H	W	Md	Ss	Tr	70.0	0.0	0.0	3.0	WkFe	
27.00	28.00	158747	0.110	0.110	-9.000	0.0	Rd	D	H	W	MdFn	SsSi	Tr	50.0	0.0	0.0	0.0	Fe	
28.00	29.00	158748	0.460	0.460	-9.000	0.0	PpBn	D	S	W	Fn	Si	Tr	80.0	0.0	0.0	2.0	Fe	
29.00	30.00	158749	0.120	0.120	-9.000	0.0	LtBnPp	D	M	W	Fn	Si	Tr	75.0	0.0	0.0	0.0		
30.00	31.00	158750	0.360	0.360	-9.000	0.0	RdPp	D	H	W	Md	Ss	Tr	95.0	0.0	0.0	2.0	WkFe	
31.00	32.00	158751	0.280	0.290	0.270	0.0	Rd	D	S	W	MdFn	SsSi	Tr	25.0	0.0	0.0	2.0	Fe	
32.00	33.00	158752	0.710	0.710	-9.000	0.0	RdPp	D	M	W	Fn	Si		0.0	0.0	0.0	0.0	Fe	
33.00	34.00	158753	0.510	0.510	-9.000	0.0	RdPp	D	M	W	MdFn	SsSi		0.0	0.0	0.0	0.0	Fe	
34.00	35.00	158754	0.500	0.500	-9.000	0.0	RdPpGn	D	M	W	FnMd	SiSsSh		0.0	0.0	0.0	0.0	WkFe	
35.00	36.00	158755	0.510	0.510	-9.000	0.0	RdGn	D	H	W	Fn	ShSi		0.0	0.0	0.0	0.0		
36.00	37.00	158756	0.160	0.160	-9.000	0.0	Rd	D	M	W	Fn	SiSsSh		0.0	0.0	0.0	0.0	Fe	
37.00	38.00	158757	0.190	0.190	-9.000	0.0	RdPp	D	M	W	Fn	SsSi		0.0	0.0	0.0	0.0	Fe	
38.00	39.00	158758	0.090	0.090	-9.000	0.0	Rd	D	M	W	Fn	Ss	Tr	15.0	0.0	0.0	0.0	Fe	
39.00	40.00	158759	0.230	0.240	0.210	0.0	Rd	D	M	W	FnMd	SsSi	Tr	20.0	0.0	0.0	1.0	Fe	
40.00	41.00	158760	0.010	0.010	-9.000	0.0	Bn	D	H	W	Md	Ss	Tr	20.0	0.0	0.0	0.0		
41.00	42.00	158761	0.010	0.010	-9.000	0.0	LtBnGn	D	H	W	Md	Ss	Tr	40.0	0.0	0.0	0.0		
42.00	43.00	158762	0.110	0.110	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	30.0	0.0	0.0	0.0		
43.00	44.00	158763	0.010	0.010	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	15.0	0.0	0.0	0.0		
44.00	45.00	158764	0.000	0.000	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	20.0	0.0	0.0	0.0		
45.00	46.00	158765	0.000	0.000	-9.000	0.0	LtBnRd	D	H	W	Md	Ss	Tr	25.0	0.0	0.0	0.0	WkFe	
46.00	47.00	158766	0.030	0.030	-9.000	0.0	RdBn	D	H	W	MdFn	SsFn	Tr	7.0	0.0	0.0	0.0	WkFe	
47.00	48.00	158767	0.050	0.050	-9.000	0.0	LtGnBn	D	M	W	Fn	SiSh	Tr	2.0	0.0	0.0	0.0	WkSe	
48.00	49.00	158768	0.020	0.020	-9.000	0.0	RdGn	D	H	W	FnMd	SiSs		0.0	0.0	0.0	0.0	WkFe	
49.00	50.00	158769	0.080	0.080	-9.000	0.0	LtGnRd	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0		
50.00	51.00	158770	0.240	0.240	-9.000	0.0	LtRdGn	D	H	W	FnMd	SsSi	Tr	1.0	0.0	0.0	0.0		
51.00	52.00	158771	0.020	0.020	-9.000	0.0	Rd	D	H	W	Md	Ss	Tr	0.5	0.0	0.0	0.0	Fe	
52.00	53.00	158772	0.030	0.030	-9.000	0.0	RdBn	D	H	W	Fn	Si	Tr	3.0	0.0	0.0	0.5	WkFe	
53.00	54.00	158773	0.010	0.010	-9.000	0.0	BnLtGn	D	H	W	FnMd	SiSs	Tr	2.0	0.0	0.0	0.0		
54.00	55.00	158774	0.050	0.050	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	15.0	0.0	0.0	0.0		
55.00	56.00	158775	0.050	0.050	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	30.0	0.0	0.0	0.0		

Holename: **SHRC067**

Assay and Geological Drill Hole Log

Metre From	Metre To	Sample Number	Average Au	Au	Aur	Wt	Colour	Wa	H	We	Text	Rock Type	Quartz T	Quartz %	Py-rite	Ars-prte	Lim-nite	Alter-ation	Comments
56.00	57.00	158776	0.100	0.100	-9.000	0.0	Bn	D	H	W	Md	Ss	Tr	7.0	0.0	0.0	0.0		
57.00	58.00	158777	0.070	0.080	0.060	0.0	GnBn	D	H	W	Md	Ss	Tr	10.0	0.0	0.0	0.0		
58.00	59.00	158778	0.050	0.050	-9.000	0.0	BnGn	D	H	W	MdFn	SsSi	Tr	20.0	0.0	0.0	0.0		
59.00	60.00	158779	0.030	0.030	-9.000	0.0	GnBn	D	H	W	MdFn	SsSi	Tr	10.0	0.0	0.0	0.0		
60.00	61.00	158780	0.080	0.080	-9.000	0.0	RdGn	D	H	W	Fn	SiSs	Tr	1.0	0.0	0.0	0.0		
61.00	62.00	158781	0.120	0.120	-9.000	0.0	GnRd	D	H	W	Md	Ss	Tr	3.0	0.0	0.0	0.0		
62.00	63.00	158782	0.100	0.100	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	15.0	0.0	0.0	0.0		
63.00	64.00	158783	0.060	0.060	-9.000	0.0	RdGn	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0	WkFe	
64.00	65.00	158784	0.090	0.090	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	3.0	0.0	0.0	0.0		
65.00	66.00	158785	0.040	0.040	-9.000	0.0	RdGnPp	D	H	W	Md	Ss		0.0	0.0	0.0	0.0		
66.00	67.00	158786	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFe	
67.00	68.00	158787	0.000	0.000	-9.000	0.0	RdGnYw	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0		
68.00	69.00	158788	0.280	0.280	-9.000	0.0	RdBn	D	H	W	Md	Ss	Tr	3.0	0.0	0.0	0.0	WkFe	
69.00	70.00	158789	0.060	0.060	-9.000	0.0	GnBn	D	H	W	Md	Ss	Tr	10.0	0.0	0.0	0.0		
70.00	71.00	158790	0.570	0.570	-9.000	0.0	Gn	D	H	W	Md	Ss	Tr	8.0	0.0	0.0	0.0		
71.00	72.00	158791	0.560	0.560	-9.000	0.0	GnLtBn	D	H	W	MdFn	SsSi		0.0	0.0	0.0	0.0		
72.00	73.00	158792	0.080	0.080	-9.000	0.0	BnBn	D	H	W	FnMd	SsSi		0.0	0.0	0.0	0.0		
73.00	74.00	158793	0.110	0.110	-9.000	0.0	GnBn	D	H	W	FnMd	SsSi	Tr	8.0	0.0	0.0	0.0		
74.00	75.00	158794	0.010	0.000	0.020	0.0	GnRd	D	H	W	Md	Ss		0.0	0.0	0.0	0.0		
75.00	76.00	158795	0.000	0.000	-9.000	0.0	Rd	D	H	W	Md	Ss		0.0	0.0	0.0	0.0	WkFe	
76.00	77.00	158796	0.280	0.280	-9.000	0.0	RdPpGn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkFe	
77.00	78.00	158797	0.040	0.040	-9.000	0.0	Rd	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkFe	
78.00	79.00	158798	0.690	0.690	-9.000	0.0	RdGn	D	H	W	FnMd	SsSi		0.0	0.0	0.0	0.0	WkFe	
79.00	80.00	158799	0.030	0.030	-9.000	0.0	RdGn	D	H	W	Fn	SsSiSh		0.0	0.0	0.0	0.0	WkFe	
80.00	81.00	158800	0.070	0.070	-9.000	0.0	GnRd	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkFe	
81.00	82.00	158801	0.000	0.000	-9.000	0.0	GnRd	D	H	W	Fn	Si		0.0	0.0	0.0	0.0	WkFe	
82.00	83.00	158802	0.030	0.030	-9.000	0.0	RdGn	D	H	W	Fn	Si	Tr	1.0	0.0	0.0	0.0		
83.00	84.00	158803	0.020	0.020	-9.000	0.0	RdLtGn	D	H	W	Fn	SsSiCb	Tr	15.0	0.0	0.0	0.0	WkSc	
84.00	85.00	158804	0.000	0.000	-9.000	0.0	RdLtGn	D	H	W	Fn	Si	Tr	5.0	0.0	0.0	0.0	WkSe	
85.00	86.00	158805	0.000	0.000	-9.000	0.0	LtGnRd	D	H	W	Fn	SsSi	Tr	40.0	0.0	0.0	1.0	WkSeSc	
86.00	87.00	158806	0.000	0.000	-9.000	0.0	Rd	D	H	W	MdFn	SsSi	Tr	15.0	0.0	0.0	0.0		
87.00	88.00	158807	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	SsSi		0.0	0.0	0.0	0.0		
88.00	89.00	158808	0.000	0.000	-9.000	0.0	RdGn	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0	WkSc	
89.00	90.00	158809	0.020	0.020	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	2.0	0.0	0.0	0.0	WkSc	
90.00	91.00	158810	0.150	0.130	0.170	0.0	Gn	D	H	W	Fn	Si	Tr	1.0	0.0	0.0	0.0		
91.00	92.00	158811	0.060	0.060	-9.000	0.0	Gn	D	H	W	Fn	Si	Tr	15.0	0.0	0.0	0.0		
92.00	93.00	158812	0.060	0.060	-9.000	0.0	GnRd	D	H	W	Fn	Si	Tr	1.0	0.0	0.0	0.5		
93.00	94.00	158813	0.100	0.100	-9.000	0.0	GnRd	D	H	W	Fn	SiSh	Tr	10.0	0.0	0.0	1.0	WkSc	
94.00	95.00	158814	0.040	0.040	-9.000	0.0	GnRd	D	H	W	FnMd	SiSs	Tr	8.0	0.0	0.0	0.0		
95.00	96.00	158815	0.130	0.130	-9.000	0.0	Gn	D	H	T	Fn	Si	Tr	3.0	0.0	0.0	0.0		
96.00	97.00	158816	0.020	0.020	-9.000	0.0	GnBn	D	H	W	Fn	SiSs	Tr	20.0	0.0	0.0	0.0		
97.00	98.00	158817	0.040	0.040	-9.000	0.0	GnBn	D	H	W	Fn	Si	Tr	1.0	0.0	0.0	0.0		
98.00	99.00	158818	0.030	0.030	-9.000	0.0	BnGn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0		
99.00	100.00	158819	0.020	0.020	-9.000	0.0	GnBn	D	H	W	Fn	Si		0.0	0.0	0.0	0.0		EOH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MCN 4065
MCN 4066
MCN 3965
MCN 3717
MCN 3718
MCN 4058
MCN 45
MCN 4060
MCN 4059
MCN 4063
MCN 3966
MCN 3967
MCN 3719
MCN 597
MCN 677
MCN 596
MCN 4061
MCN 4062
MCN 304
MCN 851
MCN 4055
MCN 742
MCN 3709
MCN 3968
MCN 3715
MCN 318
MCN 14
MCN 752
MCN 896
MCN 4056
MCN 967
MCN 4057
MCN 434
MCN 627
MCN 4033
MCN 4054
MCN 4053
MCN 178
MLN 789
MLN 802
MCN 177
MLN 939
MCN 741
MCN 299
MLN 799
MLN 800
MCN 4052
MCN 4195
MCN 4051
MLN 803
MLN 801
MCN 4034
MCN 4196
MCN 142
MCN 178
MLN 834
MCN 229
MCN 130
MCN 858
MCN 4049
MCN 4050
MCN 4035
MCN 420
MCN 859
MCN 422
MCN 4048
MCN 187
MCN 13
MCN 4047
MCN 421
MCN 4046
MCN 4036
MCN 509
MCN 4045
MCN 4039
MCN 4037
MCN 4038
MLN 819
MCN 4044
MCN 4040
MCN 4041
MCN 4043
MCN 4042
LEGEND
EXCLUDED AREAS
MCN 4043 TENEMENT BOUNDARY
N
0
0.5
1.0km.
Billiton Australia
Project SPRINGHILL J.V. NORTHERN TERRITORY
Title MCN & MLN TENEMENTS
Author C.R.M. Office CNS
Scale 1:25000
Drawn B.J.F. Date 8/91
Checked date 25/8/91
Drawing No. C/HJ50/97
Fig. No. 2

EL 4793

EL 4873

LOST RIDGE

LASAGNA

HONG KONG

MAIN LODE/ EAST LODE

Mt. Bonnie Formation

Burrell Ck. Formation

11500N

11000N

10500N

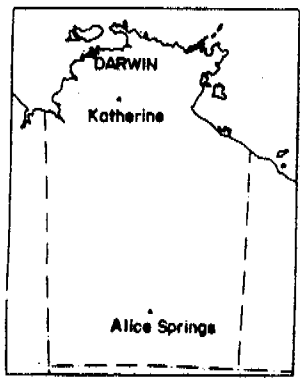
10000N

9500N

9000N

8500N

F



LEGEND

- Sandstone/Greywacke
- Gerowie Tuff
- Vein systems
- F — Fault
- Syncline
- Anticline

Local Grid North

AMG North

28°07'30"

0 100 300 500m.

Billiton Australia			
Project	SPRING HILL J.V. NORTHERN TERRITORY		
Title	GRID GEOLOGY		
Author C.R.M.	Date 9/90	Scale 1:10000	
Drawn B.J.F.	Office CNS	Revised	Date
Drawing No.			Fig. No.

SHEET INDEX

LOCAL GRID NORTH
AMG NORTH
MAG NORTH
28°07'30"
approx 5°

- Alluvium
- Sandstone
- Siltstone
- Interbedded Shale with lesser siltstone & cherts
- Mudstone
- Quartz veins
- Quartz scree
- Costean
- Intense sheeted/Stockwork quartz/Limonite veining
- Weak–moderate sheeted/Stockwork quartz/limonite veining
- Workings, Abandoned shaft, Mullock dump
- Mapped, Inferred geological boundary
- Bedding, Foliation, Strike & dip
- Strike & dip of Qtz veins
- Syncline
- Anticline
- Possible fault
- Cliff
- Rock chip location & number

SCALE IN METRES 20 0 50

Billiton Australia

Project	SPRINGHILL J.V.
Title	SHEET 3 GEOLOGICAL FACT MAP
Author C.R.M.	Office CNS
Drawn K.S.J.	Date 3/90
Scale	1:1000
Revised	Date
Report No.	
Drawing No.	Fig. No.

MLN 870

MLN 857

MLN 800

MLN 803

MLN 834

MCN 178

MCN 187

STRAWBERRY PASTRY

TOOTHPASTE

NEW ERA MINE

WEST LODE EXTENSION

HONG KONG

SHRC14 SHRC13 SHRC46 SHRC44 SHRC45 SHRC12 SHRC11 SHRC10 SHRC9 SHRC8 SHRC7 SHRC34 SHRC36 SHRC38 SHRC37 SHRC32 SHRC33 SHRC35 SHRC31 SHRC30 SHRC49 SHRC48 SHRC47

9900N 9800N 9700N 9600N 9500N 9400N

9500E 9600E 9700E 9800E 9900E 10000E 10100E 10200E 10300E

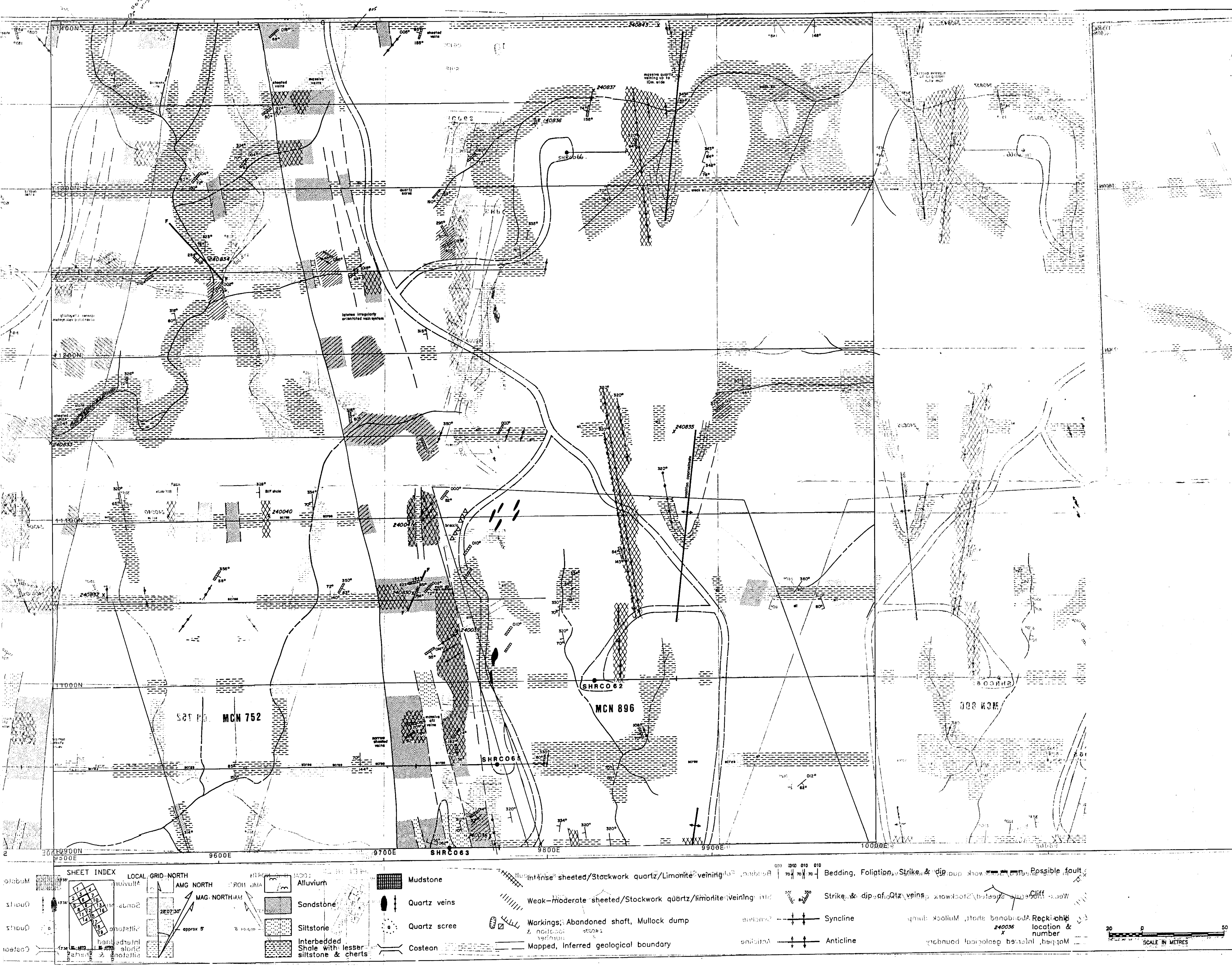
Billiton Australia

Project: SPRINGHILL J.V.

Title: SHEET 4
GEOLOGICAL FACT MAP

Author: C.R.M. Written: CMS Scale: 1:1000
Drawn: K.S.J. Date: 3/90 Reviewed: Date:
Report No.
Drawing No. Fig. No.

MCN 752
MCN 896
MLN 871
MCN 176
MLN 802
MLN 789
EAGLE'S HOLE
LASAGNA
ENLARGEMENT 1:20
SHRC51
SHRC50
SHRC42
SHRC39
SHRC40
SHRC41
240028
waterfall
rockwall
scree
'Great Walls of China'
alluvial walls
RESISTANT TO WEATHERING? (MINERALISATION?)
NOT GRIDDED EXTREMELY RUGGED
hydrothermal cracked/milled brecciation
fault zone
2 dominant vein sets
sub-horizontal veining
lenticular sheeted veining
sheeted veining
10900N
10800N
10700N
10600N
10500N
10400N
10300E
9500E
9600E
9700E
9800E
9900E
10000E
10100E
10200E
SHEET INDEX
LOCAL GRID NORTH
AMG NORTH
MAG NORTH
28°07'30"
approx 5°
Alluvium
Sandstone
Siltstone
Interbedded Shale with lesser siltstone & cherts
Mudstone
Quartz veins
Quartz/scree
Costean
Intense sheeted/Stockwork quartz/limonite veining
Weak-moderate sheeted/Stockwork quartz/limonite veining
Workings, Abandoned shaft, Mullock dump
Mapped, inferred geological boundary
Bedding, Foliation Strike & dip
Strike & dip of Qtz veins
Syncline
Anticline
Possible fault
Cliff
Rock chip location & number
SCALE IN METRES
Billiton Australia
Project SPRINGHILL J.V.
SHEET 9
GEOLOGICAL FACT MAP
Author C.R.M.
Drawn K.S.J.
Date 4/90
Scale 1:1000


11400N
11300N
11200N
11100N
11000N
10900N
9500E
9600E
9700E
9800E
9900E
10000E
MCN 752
MCN 896
SHRC062
SHRC063
SHRC065
SHRC066
240837
240836
240834
240835
240040
240041
240030
240035
240036
240832
240833
240843
massive quartz veining up to 10m. wide
intense irregularly orientated vein system
sheeted veins
massive veins
quartz scree
scree
SHEET INDEX
LOCAL GRID NORTH
AMG NORTH
MAG. NORTH
28°07'30"
approx 5°
Alluvium
Sandstone
Siltstone
Interbedded Shale with lesser siltstone & cherts
Mudstone
Quartz veins
Quartz scree
Costean
Intense sheeted/Stockwork quartz/Limonite veining
Weak-moderate sheeted/Stockwork quartz/limonite veining
Workings; Abandoned shaft, Mullock dump
Mapped, Inferred geological boundary
Bedding, Foliation, Strike & dip
Strike & dip of Qtz veins
Syncline
Anticline
Possible fault
Cliff
Rock chip location & number
240036
20
0
50
SCALE IN METRES

Billiton Australia

Project SPRINGHILL J.V.

Title SHEET 6

GEOLOGICAL FACT MAP

Author C.R.M.	Office CNS	Scale 1:1000	
Drawn B.J.F.	Date 3/90	Revised	Date
		Report No.	
Drawing No.			Fig. No.

EL 4793

EL 4873

11500N

10500N

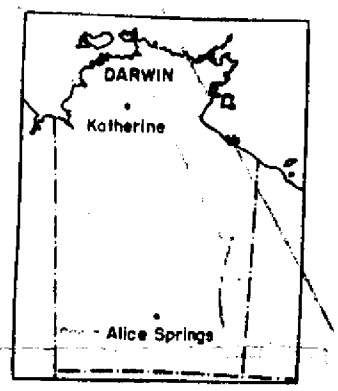
10000N

9500N

9000N

8500N

10000E



LEGEND

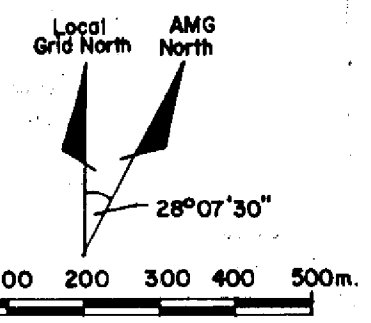
CONTOUR INTERVALS

64 ppb

128 ppb

256 ppb

512 ppb



Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project: **SPRING HILL J.V.**
NORTHERN TERRITORY

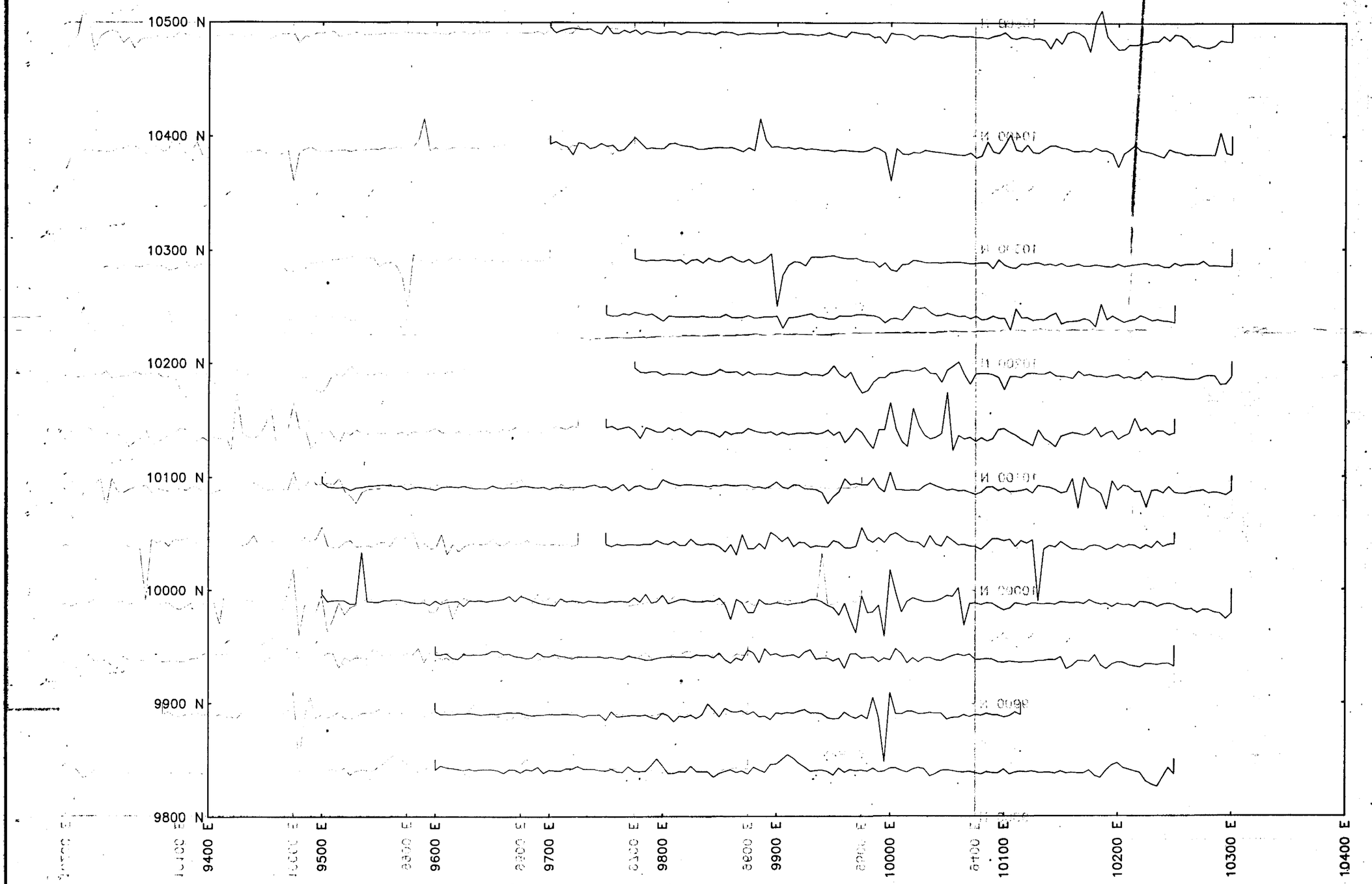
Title: **BCL Au SOIL CONTOURS** 9

Author C.R.M.	Date 9/90	Scale 1:10000	
Drawn B.J.F.	Office CNS	Revised	Date
Drawing No.			Fig. No.

SPRING HILL PROSPECT

EL 4793 & EL 4873
GROUND MAGNETIC DATA

8/89



BASE LEVEL : 47350nT

PLOT SCALE : 50

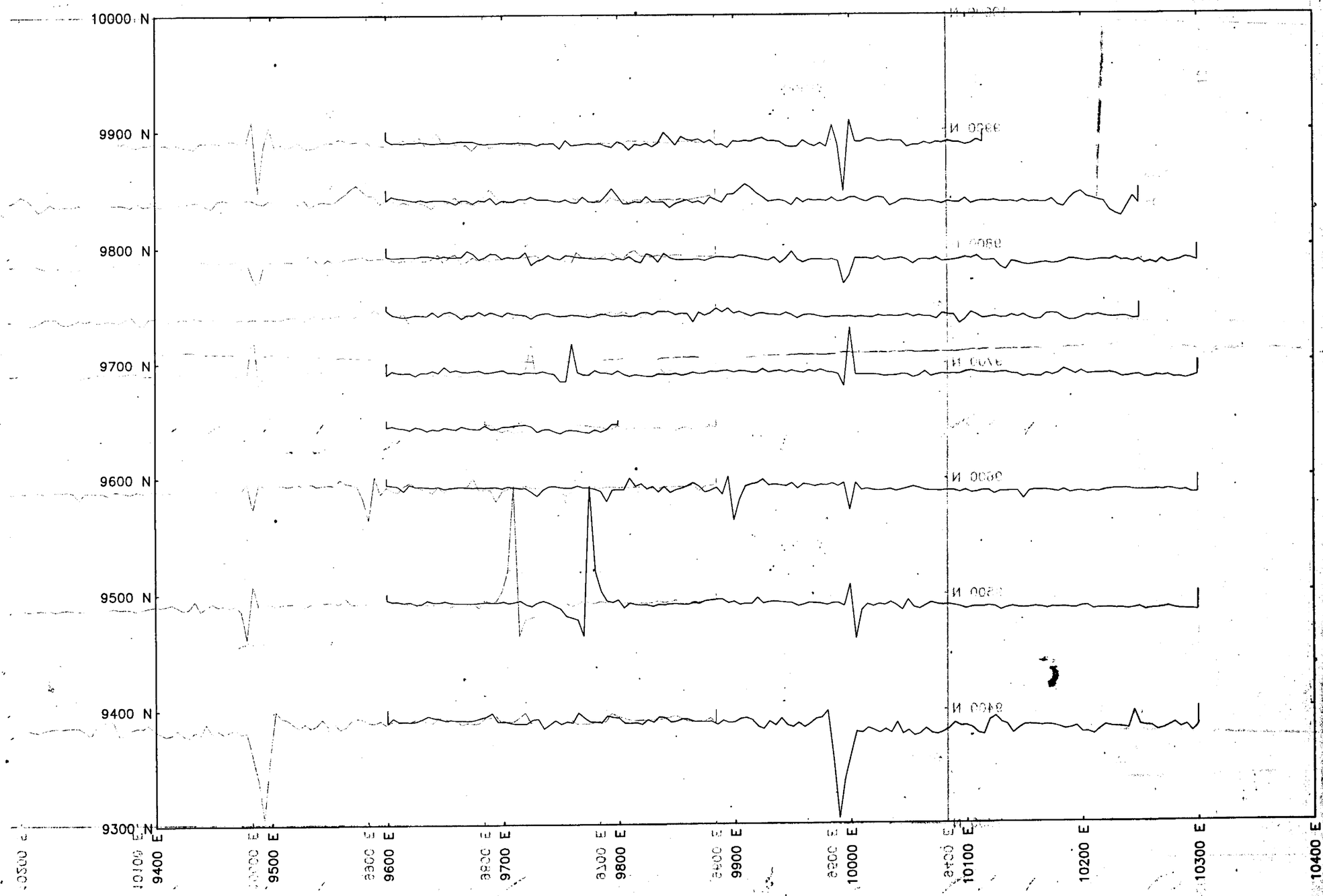
Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project	SPRINGHILL J.V. EL 4793 & EL 4873 NORTHERN TERRITORY
Title	GROUND MAGNETIC DATA 89
Author P.B. Dept. CNS	Scale 1:1000
Drawn GHD Date 8/89	Revised Date
Checked Date	S'ceded Date
Sheet No.	Drawing No. C/HJ50/30

SPRING HILL PROSPECT

EL 4793 & EL 4873

GROUND MAGNETIC DATA 8/89



BASE LEVEL : 47350 nT

PLOT SCALE : 50

Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project	SPRINGHILL J.V. EL 4793 & EL 4873 NORTHERN TERRITORY
Title	GROUND MAGNETIC DATA

Author P.B	Dept. CNS	Scale 1:1000	
Drawn GHD	Date 8/89	Revised	Date
Checked	Date	S'coded	Date
Sheet No.		Drawing No.	C/HJ50/31

9675E 9875E 10075E 10275E 10475E

10850N

10250N

10050N

9850N

9650N

9450N

CONTOUR INTERVAL 4msec

INSTRUMENTATION USED

Rx TYPE : Huntec Mk IV s/n

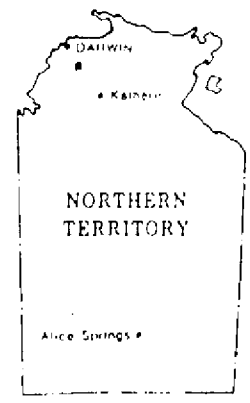
Tx TYPE : Huntec Mk IV 7.5 kW

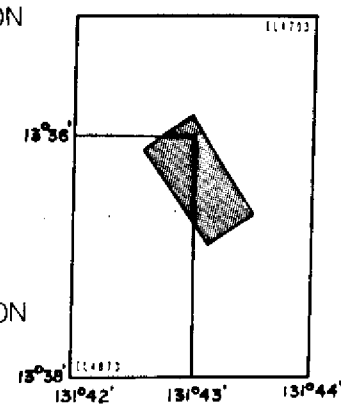
SURVEY : I.P. & RESISTIVITY

METHOD : Dipole, Dipole Array L= 50

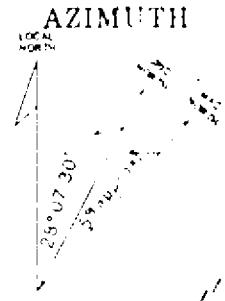
Time sequence : 2 sec on. 2 sec off
Integration time recorded : Channels 0
Integration time plotted : Channels 0
Delay time,TD : 50 msec. after cut off
Linear channel width : 150 msec

LOCATION MAP





AZIMUTH



Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project **SPRINGHILL J.V.**
NORTHERN TERRITORY

Title **GRADIENT ARRAY SURVEY**

TOTAL CHARGEABILITY
(msec)

Author B.F.H.	Date 10/89	Scale 1:5000	
Drawn B.J.F.	Office CNS	Revised	Date
Drawing No			Fig. No.

9675E 9875E 10075E 10275E 10475E

10850N

10250N

10050N

9850N

9650N

9450N

LOGARITHMIC CONTOURS
ohm-m

INSTRUMENTATION USED

Rx TYPE Huntec Mk IV s/n

Tx TYPE Huntec Mk IV 7.5 kW

SURVEY : I.P. & RESISTIVITY

METHOD : Dipole, Dipole Array L = 50

Time sequence : 2 sec on. 2 sec off

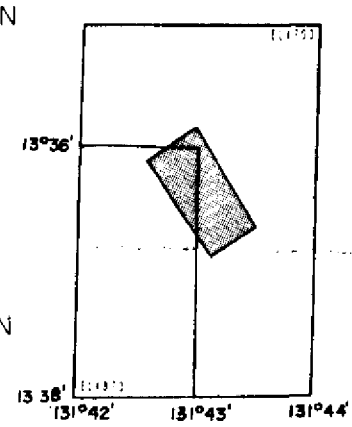
Integration time recorded : Channels 0

Integration time plotted : Channels 0

Delay time,TD : 50 msec. after cut off

Linear channel width 150 msec

LOCATION MAP



AZIMUTH

Billiton Australia
The Metals Division of the Shell Company of Australia Limited

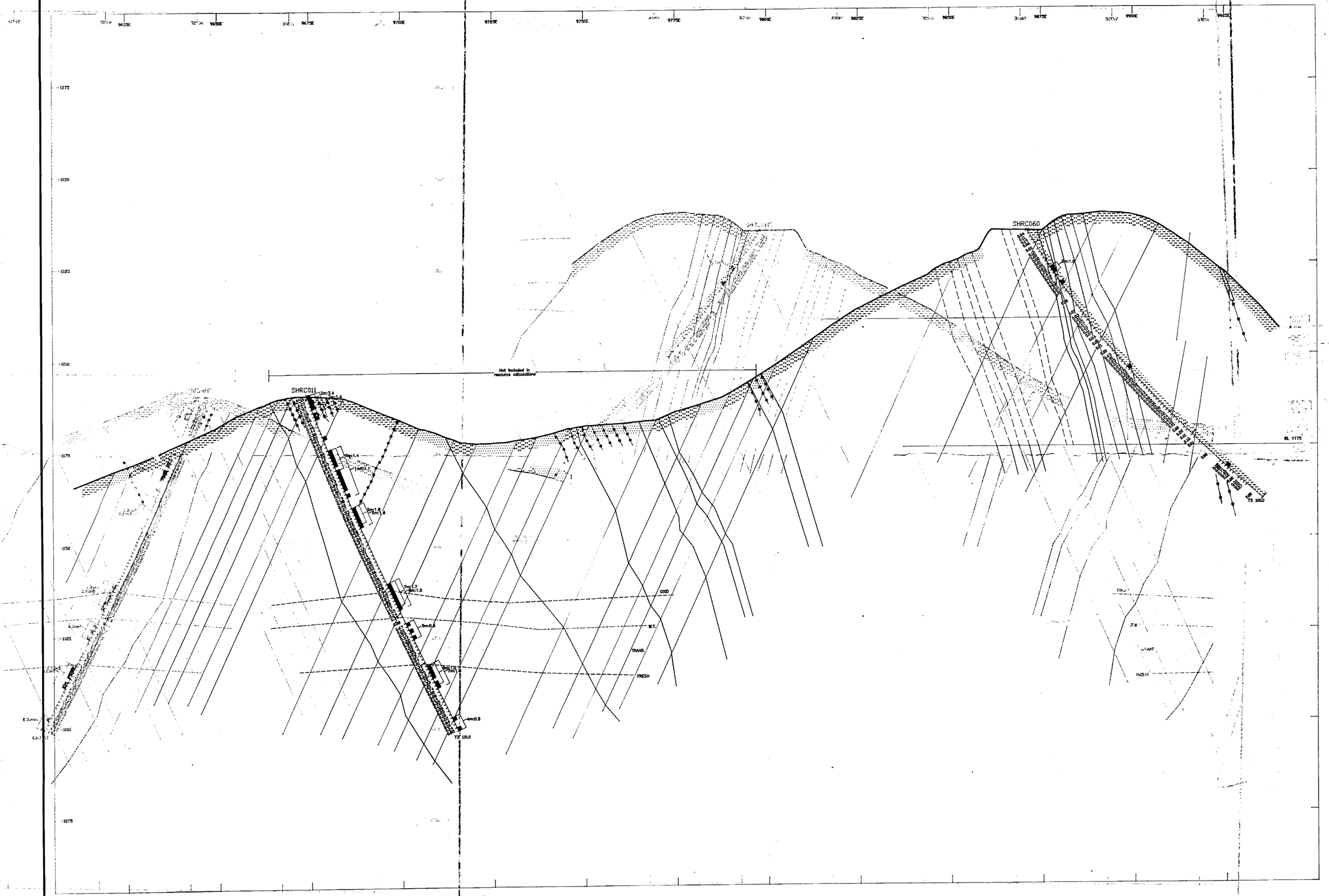
Project SPRING HILL J.V. EL 4793 & 4873
NORTHERN TERRITORY

Title **GRADIENT ARRAY SURVEY**

APPARENT RESISTIVITY

OHM/M

Author B.F.H.	Date 10/89	Scale 1:5000	
Drawn B.J.F.	Office CNS	Revised	Date
Drawing No			Fig No



LEGEND

GEOLOGY

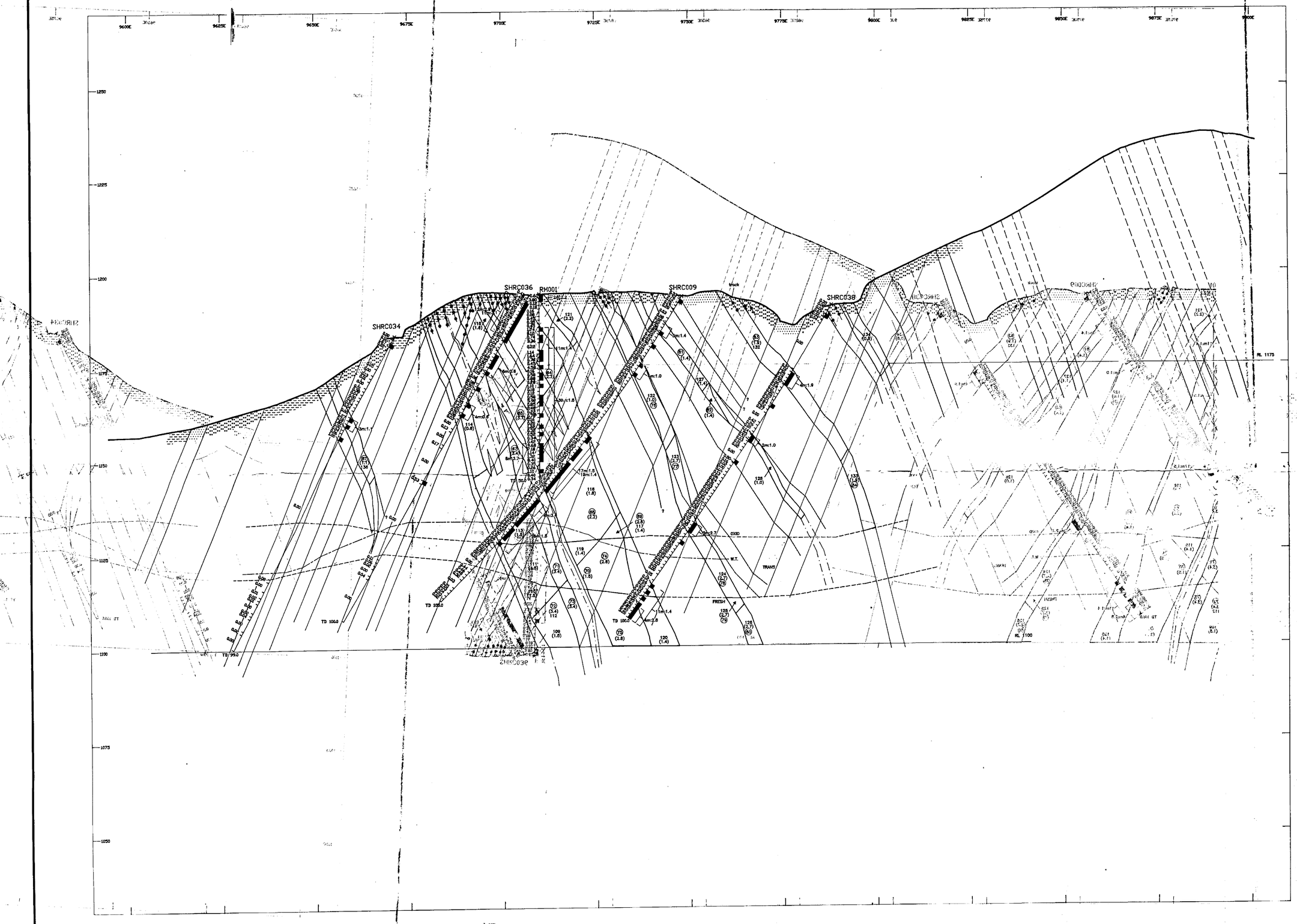
- Sandstone
- Siltstone
- Shale

MINERALISATION

- Weak/moderate quartz (±sulphide) veining
- Intense quartz (±sulphide) veining
- Mapped quartz (+sulphide) veins & orientation
- Zone of shearing
- Outlines of mineralised zones (downhole quartz % & surface mapping)
- 1.0g/t Au cut off resource block
- 0.5g/t Au cut off resource block
- Potential resource outlines
- Number & gold grade of resource block (6.5)
- Continuation of 1.0g/t Au cutoff resource (outside resource blocks)
- Continuation of 0.5g/t Au cutoff resource (outside resource blocks)

Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project	SPRINGHILL J.V. NORTHERN TERRITORY
Title	DRILL CROSS SECTION ON LINE 9700N GEOLOGY
Author C.R.M. Office CNS	Scale 1:500
Drawn B.J.F. Date 1/91	Revised / Date
Plotted date 11/91	Report No.
Drawing No. C/HJ50/110	Fig. No.



LEGEND

GEOLOGY

- Sandstone
- Siltstone
- Shale

MINERALISATION

- Weak/moderate quartz (±sulphide) veining
- Intense quartz (±sulphide) veining
- Mapped quartz (+sulphide) veins & orientation
- Zone of shearing
- Outlines of mineralised zones (downhole quartz % & surface mapping)
- 1.0g/t Au cut off resource block
- 0.5g/t Au cut off resource block
- Potential resource outlines
- Number & gold grade of resource block (6.5)
- Continuation of 1.0g/t Au cutoff resource (outside resource blocks)
- Continuation of 0.5g/t Au cutoff resource (outside resource blocks)

Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project	SPRINGHILL J.V. NORTHERN TERRITORY
Title	DRILL CROSS SECTION ON LINE 9725N GEOLOGY
Author C.R.M. Office CNS	Scale 1:500
Drawn B.J.F. Date 11/91	Revised Date
Plotted date 11/91	Report No.
Drawing No. C/HJ50/111	Fig. No.

9600E 9650E 9700E 9750E 9800E 9850E 9900E 9950E

1250m

1200m

1150m

1100m

SHRC040

SHRC041

highly interbedded Sh, Si, Ss

Oxidation

WT

Trans

Fresh

TD 100.0

LOCATION PLAN

DARWIN

Katherine

Tennant Creek

Alice Springs

131°42' 131°44'

13°35'

13°36'

13°38'

EL4873 EL4793

LEGEND

GEOLOGY

Sandstone

Siltstone

Shale

MINERALISATION

Weak/moderate quartz (±sulphide) veining

Intense quartz (±sulphide) veining

Mapped quartz (±sulphide) veins & orientation

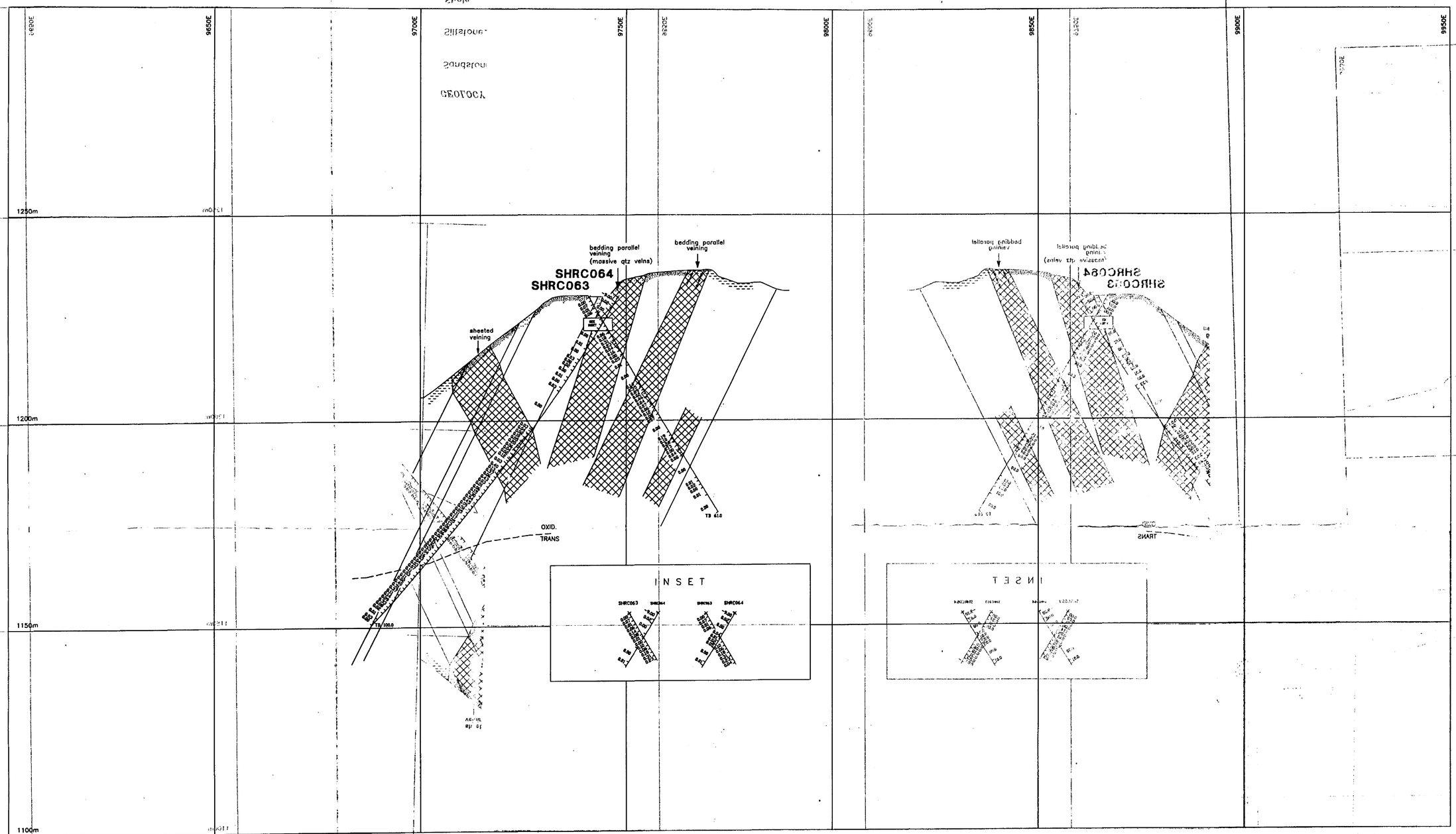
Zone of shearing

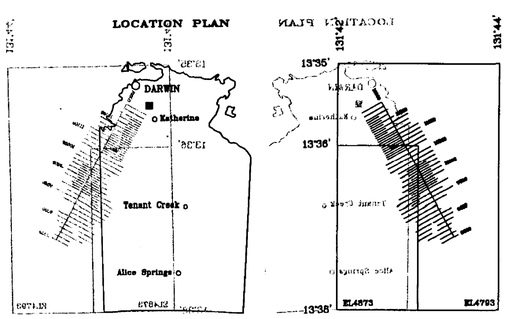
Billiton Australia
The Metals Division of The Shell Company of Australia Limited

Project NORTHERN TERRITORY
SPRINGHILL J.V. EL4793 & EL4873

Title SECTION ON LINE 10550N

Author C.M	Office CNS	Scale 1:500	
Drawn K.J.	Date 3/90	Revised	Date
		Report No.	
Drawing No. C/HJ50/60			Fig. No.





LEGEND

GEOLOGY

- Sandstone
- Siltstone
- Shale

MINERALISATION

- Weak/moderate quartz (±sulphide) veining
- Intense quartz (+sulphide) veining
- Mapped quartz (+sulphide) veins & orientation
- Zone of shearing

Author C.R.M.	Office CNS
Drawn K.J./B.F.	Date 11/90
Scale 1:500	
Revised	Date
Report No.	
Drawing No. C/HJ50/87	Fig. No.

Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project NORTHERN TERRITORY
SPRINGHILL J.V. EL4793 & EL4873

Title SECTION ON LINE 10900N

9600E 9650E 9700E 9750E 9800E 9850E 9900E 9950E

1250m

1200m

1150m

1100m

SHRC065

OXID

TRANS

LOCATION PLAN

DARWIN

Katherine

Tennant Creek

Alice Springs

13°35'

13°36'

13°38'

EL4873

EL4793

LEGEND

GEOLOGY

Sandstone

Siltstone

Shale

MINERALISATION

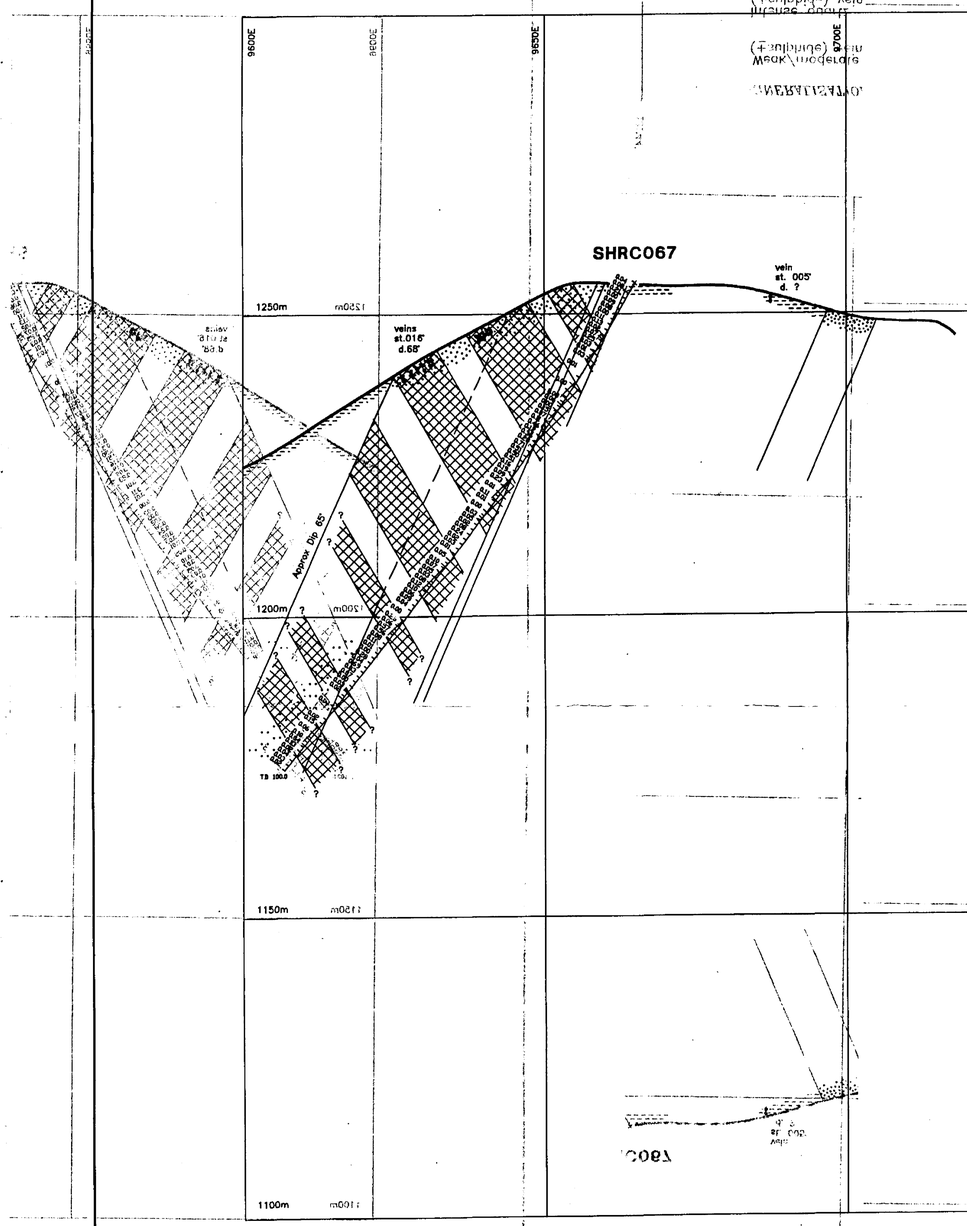
Weak/moderate quartz (±sulphide) veining

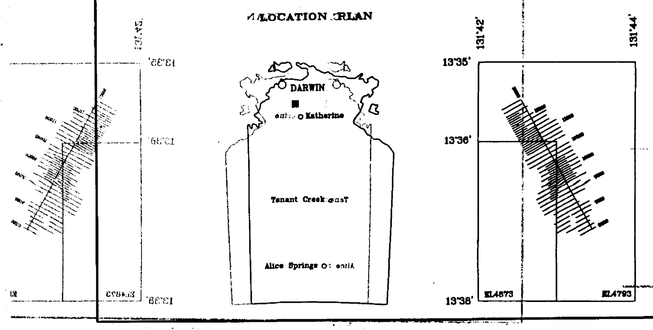
Intense quartz (+sulphide) veining

Mapped quartz (+sulphide) veins & orientation

Zone of shearing

Billiton Australia The Metals Division of The Shell Company of Australia Limited	
Project	NORTHERN TERRITORY SPRINGHILL J.V. EL4793 & EL4873
Title	SECTION ON LINE 10950N
Author C.R.M. Office CNS	Scale 1:500
Drawn K.S.J. Date 11/90	Revised Date
	Report No.
Drawing No. C/HJ50/86	Fig. No.





LEGEND

MINERALISATION

- Weak/moderate quartz (±sulphide) veining
- Intense quartz (+sulphide) veining
- Mapped quartz (+sulphide) veins & orientation
- Zone of shearing

GEOLOGY

- Sandstone
- Siltstone
- Shale

Billiton Australia
The Metals Division of the Shell Company of Australia Limited

Project NORTHERN TERRITORY
SPRINGHILL J.V. EL4793 & EL4873

Title
SECTION ON LINE 11400N

Author C.R.M.	Office CNS	Scale 1:500	
Drawn K.S.J.	Date 11/90	Revised	Date
		Report No.	
Drawing No. C/HJ50/83		Fig. No.	