SPRING HILL PROJECT
NORTHERN TERRITORY

ANNUAL REPORT
FOR THE PERIOD ENDING
31 DECEMBER 1998

MLNs 789, 799, 800, 801, 802, 803, 834, 870, 871, 939

MCNs 14, 93, 130, 142, 176, 177, 178, 187, 229, 299,302, 318, 420, 421, 422, 434, 509, 596, 597, 677, 741, 742, 752, 858, 859, 896, 967, 3709 3715, 3717, 3718, 3719, 3965-3968, 4033-4066, 4195, 4196

Author: **Chris Roberts**

Date: **May 1999**

Submitted By: **Dr Greg Partington**
General Manager Exploration
ROSS MINING NL

Distribution:

NT Department of Mines and Energy (1)
Ross Mining NL (Library) (1)

CR99/229

TABLE OF CONTENTS

TABLES

FIGURES

PLATES

APPENDICES

1. INTRODUCTION

The Spring Hill Project is approximately 150 km south of Darwin in the Northern Territory (Figure 1). The prospect is situated approximately 27 km north-north-west of the township of Pine Creek and is accessed via the Stuart Highway, then along the unsealed Spring Hill Road.

The tenements that comprise the Spring Hill Project consist of 72 MCNs and 10 MLNs (Table 1). They have a total area of 1,470 hectares and cover the Spring Hill gold deposits and their immediate environment (Figure 2).

The tenements are situated in the southern part of the Pine Creek Geosyncline, which consists of Early Proterozoic metasedimentary rocks overlying a gneissic and granitic Archaean basement. A regional shear zone, the Pine Creek Shear, extends from Pine Creek in the south and passes immediately east of the Spring Hill area. The Pine Creek Shear has been a major focus for the passage of gold-bearing fluids and is spatially related to the majority of gold occurrences in the Pine Creek Geosyncline.

Historically, high-grade lodes at Spring Hill were mined in the early part of this century. More recently the tenements have been the subject of extensive exploration by Territory Resources NL, Billiton Australia ("Billiton"), and Ross Mining NL ("Ross Mining") for bulk tonnage-low grade gold deposits.

Gold mineralisation at Spring Hill is typical of the Pine Creek Geosyncline being situated on the western limb of an anticline. Mineralisation is mostly present as sheeted veins that form regular and often extensive sheeted systems such as the Hong Kong zone. Anticline-related tension fill veins, bedding parallel veins, and saddle reefs are less common but comprise a major part of the gold mineralisation in the Main and East lodes.

In 1995, Ross Mining carried out a gold resource estimate using geostatistical block modelling. The global gold resource at Spring Hill was estimated using full indicator kriging. The total gold resource including dump leach material at Spring Hill is 12.75 mt @ 0.80 g/t Au, contained gold being 328,000 ounces. The resource estimate was fully report in the 1996 Annual Report to the Department of Mines and Energy (DME).

With falling gold prices throughout 1997 and 1998, no decision was made on the future of the gold resource at Spring Hill. Work carried out of this period has been confined to rehabilitation. The program of drill hole capping and rehabilitation of drill sites and steeply graded tracks commenced in 1997on the mining tenements has been continued in 1998.

Direct exploration costs by the Billiton/Ross Mining joint venture and the subsequent ongoing expenditure by Ross Mining on the Project has totalled $4.2 million. This covers the period from inception of the joint venture in 1988, up until the end of 1997. Acquisition costs, which have resulted in Ross Mining's 100 per cent control of the Project, have been $2.51 million.

ROSS MINING N.L.

PINE CREEK INLIER
LOCATION AND REGIONAL GEOLOGY

LEGEND

- Mine or major deposit (gold unless noted otherwise)
- Fault
- Shear zone
- Younger cover
- Granitoids
- Burrell Creek Formation — FINNISS RIVER
- Gerowie Tuff Unit and Mt. Bonnie Formation — SOUTH ALLIGATOR GROUP
- Koolpin Formation — SOUTH ALLIGATOR GROUP
- Wildman Formation — MT. PARTRIDGE GROUP

DARWIN

Arnhem Hwy

Stuart Hwy

Rustler's Roost

Woodcutters (Pb, Zn)

13°00'S

Adelaide River

Howley Anticline

Brocks Creek

Burnside

Spring Hill

Union Reefs

Enterprise

Pine Creek

Pine Creek Shear Zone

Mt. Todd

Katherine

132°00'E

0 10 20 30 40 50km

SCALE 1:1,000,000

N

Map Area

Darwin

AUSTRALIA

Brisbane

Perth

Adelaide

Sydney

Melbourne

Hobart

PINECREEKINLIER.CDR7.APRIL 1998

FIGURE 1

Table 1 Spring Hill Tenements

Tenement Type	*Number*	*Name*	*Company*	*Expiry Date*	*Area (hectares)*	*Totals*
MCN	14	Spring Hill	Ross Mining	31-Dec-06	1	
MCN	93	Spring Hill	Ross Mining	31-Dec-07	3	
MCN	130	Spring Hill	Ross Mining	31-Dec-06	9	
MCN	142	Spring Hill	Ross Mining	31-Dec-05	9	
MCN	176	Spring Hill	Ross Mining	31-Dec-05	9	
MCN	177	Spring Hill	Ross Mining	31-Dec-06	9	
MCN	178	Spring Hill	Ross Mining	31-Dec-05	6	
MCN	187	Spring Hill	Ross Mining	14-Nov-06	27	
MCN	229	Spring Hill	Ross Mining	31-Dec-06	34	
MCN	299	Spring Hill	Ross Mining	31-Dec-06	6	
MCN	302	Spring Hill	Ross Mining	31-Dec-07	12	
MCN	318	Spring Hill	Ross Mining	31-Dec-05	4	
MCN	420	Spring Hill	Ross Mining	31-Dec-05	7	
MCN	421	Spring Hill	Ross Mining	31-Dec-05	12	
MCN	422	Spring Hill	Ross Mining	31-Dec-05	2	
MCN	434	Spring Hill	Ross Mining	31-Dec-04	5	
MCN	509	Spring Hill	Ross Mining	31-Dec-06	7	
MCN	596	Spring Hill	Ross Mining	31-Dec-07	2	
MCN	597	Spring Hill	Ross Mining	31-Dec-05	16	
MCN	677	Spring Hill	Ross Mining	31-Dec-05	8	
MCN	741	Spring Hill	Ross Mining	31-Dec-07	1	
MCN	742	Spring Hill	Ross Mining	31-Dec-05	4	
MCN	752	Spring Hill	Ross Mining	31-Dec-05	8	
MCN	858	Spring Hill	Ross Mining	31-Dec-06	4	
MCN	859	Spring Hill	Ross Mining	31-Dec-06	4	
MCN	896	Spring Hill	Ross Mining	31-Dec-06	10	
MCN	967	Spring Hill	Ross Mining	25-Aug-99	5	
MCN	3709	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3715	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3717	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3718	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3719	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3965	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3966	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	3967	Spring Hill	Ross MIning	03-Feb-06	37	
MCN	3968	Spring Hill	Ross Mining	03-Feb-06	37	
MCN	4033	Spring Hill	Ross Mining	31-Dec-05	28	
MCN	4034	Spring Hill	Ross Mining	31-Dec-05	13	
MCN	4035	Spring Hill	Ross Mining	31-Dec-05	4	
MCN	4036	Spring Hill	Ross Mining	31-Dec-05	11	
MCN	4037	Spring Hill	Ross Mining	31-Dec-05	23	
MCN	4038	Spring Hill	Ross Mining	31-Dec-05	18	
MCN	4039	Spring Hill	Ross Mining	31-Dec-05	12	
MCN	4040	Spring Hill	Ross Mining	31-Dec-05	24	
MCN	4041	Spring Hill	Ross Mining	31-Dec-05	36	
MCN	4042	Spring Hill	Ross Mining	31-Dec-05	26	
MCN	4043	Spring Hill	Ross Mining	31-Dec-05	39	
MCN	4044	Spring Hill	Ross Mining	31-Dec-05	37	
MCN	4045	Spring Hill	Ross Mining	31-Dec-05	36	
MCN	4046	Spring Hill	Ross Mining	31-Dec-05	38	
MCN	4047	Spring Hill	Ross Mining	31-Dec-05	21	
MCN	4048	Spring Hill	Ross Mining	31-Dec-05	30	
				Subtotal		*988*

Tenement Type	Number	Name	Company	Expiry Date	Area (hectares)	Totals
				Carried forward		*988*
MCN	4049	Spring Hill	Ross Mining	31-Dec-05	35	
MCN	4050	Spring Hill	Ross Mining	31-Dec-05	31	
MCN	4051	Spring Hill	Ross Mining	31-Dec-05	35	
MCN	4052	Spring Hill	Ross Mining	31-Dec-05	14	
MCN	4053	Spring Hill	Ross Mining	18-Mar-06	12	
MCN	4054	Spring Hill	Ross Mining	14-Nov-06	31	
MCN	4055	Spring Hill	Ross Mining	18-Mar-06	28	
MCN	4056	Spring Hill	Ross Mining	18-Mar-06	2	
MCN	4057	Spring Hill	Ross Mining	14-Nov-06	3	
MCN	4058	Spring Hill	Ross Mining	31-Dec-05	15	
MCN	4059	Spring Hill	Ross Mining	31-Dec-05	29	
MCN	4060	Spring Hill	Ross Mining	31-Dec-05	33	
MCN	4061	Spring Hill	Ross Mining	31-Dec-05	15	
MCN	4062	Spring Hill	Ross Mining	31-Dec-05	29	
MCN	4063	Spring Hill	Ross Mining	31-Dec-05	35	
MCN	4064	Spring Hill	Ross Mining	31-Dec-05	26	
MCN	4065	Spring Hill	Ross Mining	31-Dec-05	32	
MCN	4066	Spring Hill	Ross Mining	31-Dec-05	21	
MCN	4195	Spring Hill	Ross Mining	31-Dec-05	1	
MCN	4196	Spring Hill	Ross Mining	31-Dec-05	4	
MLN	789	Spring Hill	Ross Mining	31-Dec-01	8	
MLN	799	Spring Hill	Ross Mining	31-Dec-99	9	
MLN	800	Spring Hill	Ross Mining	31-Dec-99	9	
MLN	801	Spring Hill	Ross Mining	31-Dec-00	9	
MLN	802	Spring Hill	Ross Mining	31-Dec-00	9	
MLN	803	Spring Hill	Ross Mining	31-Dec-00	9	
MLN	834	Spring Hill	Ross Mining	31-Dec-08	10	
MLN	870	Spring Hill	Ross Mining	31-Dec-00	7	
MLN	871	Spring Hill	Ross Mining	31-Dec-00	7	
MLN	939	Spring Hill	Ross Mining	31-Dec-02	9	
				Total Hectares		***1470***

131°43'

131°44'

To Ban Ban Homestead

N

MCN 4064 | MCN 4065 | MCN 4066 | MCN 3965 | MCN 3717 | MCN 3718

MCN 4060 | MCN 4063 | MCN 3966 | MCN 3967 | MCN 3719

MCN 4059 | MCN 4058 | MCN 677 | MCN 742 | MCN 596 | MCN 4061 | MCN 3709 | MCN 3968 | MCN 3715

MCN 4055 | MCN 14 | MCN 752 | MCN 896 | MCN 4062

MCN 597 | MCN 318 | MCN 4056 | MCN 967 | MCN 434 | MCN 4057 | MCN 4033

MCN 4054 | MCN 4053 | MLN 871 | MCN 176 | MLN 789 | MCN 177

MCN 741 | MCN 299 | MCN 4195 | MLN 802 | EAST LODE | MLN 939

MCN 93 | MCN 302 | MAIN LODE | MLN 799 | MLN 800 | MAIN ADIT | MCN 4034

MCN 4051 | MCN 4052 | MLN 803 | WEST LODE EXTENSION

MCN 4196 | MLN 870 | MLN 801 | MCN 178 | MCN 142

SOUTH ADIT | MLN 834 | MCN 229

MCN 4049 | MCN 4050 | MCN 130 | MCN 858 | NEW ERA | MCN 4035

MCN 420 | MCN 859 | MCN 422 | MCN 4048

MCN 187 | PAY ME WELL

MCN 4047 | MCN 4046 | MCN 421 | MCN 4036

MCN 509

MCN 4045 | MCN 4039 | MCN 4037 | MCN 4038

MCN 4044 | MCN 4040

MCN 4043 | MCN 4041

MCN 4042

North

SPRING HILL STAMP BATTERY HERITAGE SITE

Australian Railway

To Pine Creek

To the Stuart Highway

13°36'

13°38'

LEGEND

- Working
- Adit
- Road
- Railway

0 500 1000m

ROSS MINING N.L.

SPRING HILL
BASE PLAN

FIGURE 2

SHILL.CDR7.APRIL 1998

2. REGIONAL GEOLOGY

The Spring Hill area is located in the southern part of the Pine Creek Geosyncline, which contains Early Proterozoic metasedimentary rocks resting on a gneissic and granitic Archaean basement. The geosynclinal sequence is dominated by mudstones, siltstones, greywackes, sandstones, tuffs, and limestones. The Pine Creek Geosyncline was folded and metamorphosed up to the amphibolite facies from ±1870-1899 ma. Transitional igneous rocks, including pre-tectonic dolerite sills and syn- to post-tectonic granitoid plutons and dolerite lopoliths and dykes, intrude the geosynclinal sequence. Detailed geology of the Pine Creek Geosyncline is discussed by Nicholson, Ormsby, and Farrar (1994).

Stratigraphy in the central Pine Creek Geosyncline has been simplified by Nicholson, Ormsby, and Farrar (1994) into the Batchelor, Frances Creek, and Finniss River Groups. The Batchelor Group consists of shallow water coarse clastics and crystalline carbonates, which are conformably overlain by the Frances Creek Group. The Frances Creek Group is subdivided into the Whites Formation, Acacia Gap Quartzite/Mundogie Sandstone, Koolpin Formation, Gerowie Tuff, and Mount Bonnie Formation. The Gerowie Tuff is a basin-wide mudstone-rich sequence with interbeds of diagenetically altered distal tuff, which is overlain by greywacke, mudstone, chert, and ironstone of the Mount bonnie Formation. The Finniss River Group overlies the Frances Creek Group and consists of a thick flysch sequence of greywacke and mudstone.

Two major phases of deformation that pre-date granitoid intrusions have been recognised in the Pine Creek Geosyncline. The earliest widely recognised structures in the Pine Creek Geosyncline are bedding-concordant fabrics and breccia zones (D1). The second phase of deformation produced the north to north-west trending folds dominant today (D2). The folds vary from open and upright to overturned and isoclinal, and were accompanied by the development of a penetrative slaty cleavage.

The Pine Creek Fault Zone is a 300 km long structure that can be mapped from Darwin to Katherine. The fault zone trends north-north-west and consists of a number of sub-parallel faults, over a 5 km corridor, with apparent sinistral movement of up to 2 km. The Pine Creek Fault Zone postdates D2 and the granite intrusions.

3. SPRING HILL GEOLOGY

Both major phases of deformation that pre-date granitoid intrusions are present in Early Proterozoic sedimentary rocks in the Spring Hill area (Melville, 1994). The older phase is represented by tight to isoclinal folds (F1) that trend north to north-west. A major anticlinal fold of this generation, the Spring Hill Anticline, is the dominant structure in the tenements.

All rocks exposed at Spring Hill belong to the Gerowie Tuff, Mount Bonnie Formation, and Burrell Creek Formation. The Mount Bonnie formation hosts all the known significant gold mineralisation and consists dominantly of massive greywacke with minor siltstone interbeds, interbedded silts and shales, and minor chert and laminated iron formations.

Gold mineralisation at Spring Hill has been recognised to occur in quartz veins that are present in several styles. Veining at Spring Hill has been classified into three main types (Sheldon, Scrimgeour, and Edwards; 1994):

1. Sheeted veins comprising extensive systems of parallel veins
2. Leader veins, which form individual thicker veins
3. Bedding parallel veins

Dark brown alteration selvages are commonly associated with veining. The selvages are due to flooding of the wall rock during veining with resulting enrichment Fe and minor K, As, P, and Zn.

Previous mining at Spring Hill was concentrated on the high grade lodes (Main, Eastern, Western, and Anticlinal Lodes). More recently sheeted veins that together comprise low-grade, bulk tonnage targets have been the focus of exploration (Hong Kong sheeted vein system). Refer to Figure 3 of this report.

Detailed geology for the Spring Hill prospect can be found in Melville (1994) and Sheldon, Scrimgeour, and Edwards (1994).

131°42'

131°44'

To Ban Ban Homestead

GEROWIE TUFF

ZBONSKY

Mt BONNIE FORMATION

North Australian Railway

VEIN HEAVEN

-13°36'

-13°36'

STEVE'S GULLY

MAIN & EAST LODES

HONG KONG

WEST LODE EXTENSION

NEW ERA

PAY ME WELL

(abandoned)

N

To Pine Creek

BURRELL CREEK FORMATION

To Stuart Highway

0 0.5 1

kilometres

-13°38'

-13°38'

Working

ROSS MINING N.L

SPRING HILL
Generalised Geology + Prospect Locations

131°44'

FIGURE 3

4. PROGRAMME TO DATE

4.1 1988-1993

The current group of 82 mineral tenements covers an area previously occupied by Exploration Licences 4793 and 4873 (see Figure 2). A joint venture between Ross Mining as owner and Billiton as operator commenced over these tenements in October 1988.

During the period up until relinquishment in October 1990, the ELs were subjected to stream sediment sampling and reconnaissance mapping and rock chip sampling. Aeromagnetic coverage was purchased as part of a multi-client survey carried out by Aerodata Holdings. Reference to this work is made in the final reports for these tenements by CR Mackay dated November 1990 for EL 4873 and EL 4793.

An ongoing programme from 1988 is in progress, initially on 15 MCNs and 8 MLNs within the then current exploration licences. Further pegging in relinquished areas and the exercising of option agreements with other tenement holders in the Project area has produced the current tenement holding.

The work conducted by Billiton until December 1991, as Ross Mining's joint venture partner, is documented in Billiton Australia Report numbers 08.4169 (Hellsten, 1989), 08.5200 (MacKay, 1990) and 08.5793 (MacKay, 1991), as referenced at the end of this report.

During this period, Billiton established a grid over the mineralised trend and carried out soil sampling, geological mapping, rock chip sampling, costeaning, diamond and reverse circulation drilling, metallurgical testing, petrological analysis, a TEM survey and structural mapping and modelling.

Billiton Australia undertook five drilling campaigns (Phases I-V) from 1989 to 1991. This included ten diamond core holes (SHDH001-010, 709 metres) and 88 reverse circulation holes (SHRC001-088, 5,322 metres) for an aggregate 6, 031 metres. Five reverse circulation drill holes (SHRC003, SHRC007, SHRC052, SHRC072, and SHRC077) were precollars for diamond core drill holes.

4.2 1993-1994

In 1993 and 1994, Ross Mining contracted Eupene Exploration Enterprises to carry out further exploration on the Spring Hill tenements, under the supervision of Ross Mining.

Eupene Exploration's work is documented in the report "Exploration Report for Spring Hill 1994" by T. Sheldon, I. Scrimgeour and D. Edwards. The work involved included re-establishing the 1989 grid, stream sediment sampling along the western side of the Project area and grid based soil sampling. A total of 84 reconnaissance, 95 geological and 16 x 25 metre channel samples were collected.

Throughout this period, 267 hectares of surface were geologically mapped at a 1:1000 scale, with 13 rock samples submitted for petrographic analysis.

In the area of old underground workings, the Main Adit was reopened to 390 metres and the South Adit completely reopened to 140 metres (see Figure 2). Mapping and sampling were undertaken along the adits, with 343 samples taken.

Three phases of drilling were carried out during this period. In 1993, thirteen reverse circulation holes were drilled (SHRC089-101). These thirteen drill holes were all 99 metres deep, for an aggregate of 1,287 metres.

Exploration in 1994 was carried out in two phases. Phase I involved mostly exploration drilling, to extend the resource in the Hong Kong area. Forty-five reverse circulation holes (SHRC102-146) were drilled during this period, for an aggregate 6,309 metres. Phase II included infill and twin drilling in the Hong Kong and the Main and East Lode areas, and exploration drilling throughout the Spring Hill tenements including Vein Heaven, Vindication Hill, and Steve's Gully. This phase of drilling included 87 reverse circulation (SHRC147-234, 9,051 metres) and nine diamond core (SHDH011-019, 949 metres) for an aggregate 10,000 metres.

4.3 1995

During 1995, the Project moved from pre feasibility water quality monitoring through to environmental investigations metallurgical testwork, resource/reserve estimations and scoping studies.

During the period from February to August 1995, AMMTEC Ltd of Perth carried out test work on a series of mineralised samples that represented the oxide, transition and sulphide zones of various Spring Hill lodes. Half HQ size core from 1994 drill holes was used for the test work and a series of reports produced.

The agitation leach tests on the six oxide and four transition zone samples returned between 95% and 99% gold extraction. The seven sulphide samples gave gold recoveries between 80% and 98%.

These tests showed that the gold bearing sulphide mineralisation can be classed as free milling. The column leach tests carried out (AMMTEC Ltd, 1995) further determined the leach characteristics of this deeper mineralisation. The results show that, unlike the oxide and transition material, the sulphide material is not suited to heap leach processing techniques.

Following an extensive infill drilling campaign in 1994, a traditional manual polygon on section gold resource was calculated. This estimate outlined a resource of 5.00 mt @ 1.64 g/t gold for 263 000 ounces of contained gold, using a 0.7 g/t Au cutoff (Richmond, March 1995).

To facilitate pit optimisation studies and a provisional mine design, a three dimensional geostatistical block model of gold grades at Spring Hill was generated in September 1995 (Richmond, September 1995). The global gold resource at

Spring Hill was estimated using full indicator kriging. The **gold resource** at Spring Hill **is 5.74 Mt @ 1.29 g/t Au, using a 0.7 g/t Au cutoff.** If dump leach mining methods are used, then the **total gold resource** at Spring Hill for **a 0.2 g/t Au cutoff is 12.75 Mt @ 0.80 g/t Au.**

With metallurgical characteristics having been established during 1995, some preliminary scoping studies were undertaken as for the best processing route for the Spring Hill mineralisation.

A final decision remains to be made, subject to a pit optimisation for the three dimensional block model.

During 1995, baseline studies were initiated, including a general survey of the landscapes and biota of the Project area by W A Low Ecological Services. Another study completed was an archaeological survey conducted by Heritage Surveys. Background geochemical and water quality surveys were conducted by EPA Environmental Services Pty Ltd.

4.4 1996

During 1996, baseline studies were carried out at Spring Hill.

Although a decision to mine at Spring Hill has not yet been made, baseline studies continued throughout 1996. Much of this work was reported in the Spring Hill Annual Report for 1995. These studies were commenced in 1995 but were not completed until the first half of 1996. As the 1995 Annual Report was not submitted until May 1996, the consequent reports produced from the studies were able to be included therein.

Those reports included were:

1. "Environmental Studies of Landscape, Flora and Fauna of the Proposed Spring Hill Project Area" by W A Low Ecological Services, April 1996.
2. "A Survey of Heritage Sites at the Proposed Spring Hill Gold Mine, Northern Territory" by Heritage Surveys, June 1995.
3. "Water Quality Report" by ERA Environmental Services, May 1996.

Follow up work was carried out in the second half of 1996 by W A Low Ecological Services. This involved a field visit, which primarily focussed on estimating the use of an old mine adit at Spring Hill by Orange Horseshoe Bats. The visit took place in August or mid dry season when the bats take advantage of the higher humidity and temperature available in caves and cave-like shelters. However, with the number of roosting bats estimated at 25 to 30 there was no increase in the population previously estimated by W A Low Ecological Services in the late wet season (April 1995). The report on this visit by W A Low Ecological Services forms Appendix A of the 1996 Annual Report.

4.5 1997

With the prevailing low gold prices in 1997, the consequent activities were on a care and maintenance basis. These activities included the evaluation of a heritage site within the Project area, capping of drill hole collars and the rehabilitation of drill hole sites.

An on-site meeting with the Department of Lands, Planning and Environment was held on 13 August 1997 to inspect the proposed Heritage Site over the old Spring Hill battery and environs. The purpose of the visit was for Ross Mining to determine if the proposed site would have any impact upon any further exploitation of the Company's defined gold resource at Spring Hill.

The Department of Lands, Planning and Environment has consequently been informed that Ross Mining has no objections to the heritage site.

In October and November of 1997, all boundaries of the 82 mining tenements of the Spring Hill Project were re-traversed to ensure that all data were legible and all corner posts, lockspits and intermediate posts were still standing and in compliance with Regulation 19(8) of the Mining Regulations. Fawcett Cattle Company of Adelaide River was contracted to carry out this work.

An inspection of drill collars at Spring Hill in August of 1997 revealed that many of the drill holes were not capped or had become uncapped in the intervening years since the completion of the last major phase of drilling in 1994/1995. Capped holes had above ground caps.

Below surface drill hole capping commenced in 1997, the capping technique carried out was to cut the PVC collars below surface with a diamond masonry blade equipped brush cutter. A below ground plastic cap ("occy" plug) was then inserted and the top of the hole back-filled.

A small bulldozer was brought onto the project area in December 1997. Other than open drill holes the primary concern was the bags of percussion hole drill samples remaining on site. Where necessary, compacted soil and clay was ripped and redistributed over the site to bury decomposing sample bags and prepare the site for re-seeding. Re-seeding of rehabilitated drill sites and back filled costeans was completed in early December 1997, using a mixture of tropical grass seeds purchased in Darwin.

Areas where water flows have been eroding along tracks were addressed. Rollovers and drains were placed to remove water flows from tracks.

5. CURRENT ACTIVITIES

5.1 Drill Hole Capping

An inspection of the site by the Department of Mines and Energy (DME) in 1998 found that many of the below ground "occy" plugs were buried at too shallow a

depth. As a result of the change of policy for drill holes to have a below ground concrete caps, the consequence of the inspection was to issue instructions to use this preferred type of capping on all drilled holes at Spring Hill. The inspection showed that the drill sites and access tracks were also not sufficiently rehabilitated.

This new phase of rehabilitation commenced in December of 1998 with Arnhem Geological Services Pty Ltd being contracted to carry out the re-capping of the holes. The same technique as used the previous year was used with the notable exception of concrete plugs being inserted into the top of the holes at a minimum depth of 30cm below ground surface and back filled. Steel fence droppers have marked holes completed. An earlier than expected finish to the year's work resulted from the advent of Cyclone Thelma. Ninety-five of the total of 245 holes drilled were completed to DME standards by the time work was abandoned for the year.
Table 2 lists the total number of holes drilled indicating those that have seen successfully capped with a concrete plug to date.

5.2 Mining Tenement Maintenance

With the transfer of MCN 596 from Biddlecombe and Sime on 20 January 1998 all 82 mining tenements (72 MCNs and 10 MLNS – see Table 1) which comprise the Spring Hill Project are now held 100% in the name of Ross Mining NL.

During 1998 the renewals were granted for MCN 596 to 31/12/2007, MCN 434 to 31/12/2004 and MLN 834 to 31/12/2008.

In 1999 renewals of MCN 967, MLN799 and MLN 800 will be applied for.

6. FORWARD PROGRAMME

The completion of this phase of rehabilitation will be carried out in 1999. With the requirement of an excavator to complete the required surface rehabilitation, approval has been given by the DME to complete the remaining drill capping in conjunction with the supervision of the surface work. To this end an excavator operator has been contracted to carry out the work under the supervision of Arnhem Geological Service in June of 1999.

7. REFERENCES

AMMTEC Ltd, 1995. Metallurgical Reports for Spring Hill Project Nos A4473 - Part A, A4473 Part B, A4636, and A4732. *Spring Hill Project 1995 Annual Report by Ross Mining NL for Northern Territory Department of Mines & Energy. Appendix 1.*

ERA Environmental Services Pty Ltd 1996. Water Quality Report. *Spring Hill Project 1995 Annual Report by Ross Mining NL for NT Department of Mines & Energy. Appendix 2.3.*

Grattridge A & Low W.A. 1996. Environmental Survey of Landscape. Flora and Fauna of the Proposed Spring Hill Project Ore. *Spring Hill Project 1995 Annual Report by Ross Mining NL for Northern Territory Department of Mines & Energy. Appendix 2.1*

Hellsten, K.J., 1989. Report on work completed for the period 9 August 1969 to 31 December 1989 and applications for renewal of Mineral Lease North 799 and 800. *Report No. 08 4169 for Northern Territory Department of Mines & Energy.*

Low, W.A., 1996. Spring Hill Audit Survey *Spring Hill Project 1996 Annual Report by Ross Mining NL for the Northern Territory Department of Mines & Energy. Appendix A.*

MacKay, C.R., 1990. Exploration Licence 4793 Spring Hill Annual and Final Report for the period ending 5 October 1990. *Report No. 08 5204 for the Northern Territory Department of Mines & Energy.*

MacKay, C.R., 1990. Exploration Licence 4873 Spring Hill West. Annual and Final Report for the period ending 5 October 1990. *Report No. 08 5201 for the Northern Territory Department of Mines & Energy.*

MacKay C.R., 1990. MCNs: 130, 142, 176-187, 299, 332, 420-422, 677, 742, 752, 858, 859, 896, and MLNs: 789, 799, 800-803, 870, 871, and 939 (Spring Hill Gold Mine Property) Annual Report for the period ending 31 December 1990. *Report No. 08 5200 for the Northern Territory Department of Mines and Energy.*

MacKay, C.R., 1991. MCNs: 130, 142, 176-178, 187, 299, 420-422, 677, 742, 752, 858, 859, 896, 3709, 3717-3719, 3965-3968 and 4033-4066 and MLNs: 789, 799, 800, 801, 802, 803, 834, and 939. Annual Report for the period ending 31 December 1991. *Report No. 085793 for the Northern Territory Department of Mines & Energy.*

Melville, P., 1994. Report on exploration completed in 1994, Spring Hill Project. *Unpublished Report for Ross Mining NL. 34p.*

Mitchell, Scott, 1995. A Survey of Heritage Sites at the Proposed Spring Hill Gold Mine, Northern Territory. *Spring Hill Project 1995 Annual Report by Ross Mining NL for the Northern Territory Department of Mines & Energy. Appendix 2.2.*

Nicholson, P.M., Ormbsby, W.R., and Famr, L., 1994. A review of the structure and stratigraphy of the central Pine Creek Geosyncline. *Proceedings AusIMM Annual Conference.*

Richmond A.J., 1995. Spring Hill Gold Resource Estimate *Spring Hill Project 1995 Annual Report by Ross Mining NL for the Northern Territory Department of Mines & Energy. Appendix 4.*

Richmond A.J., 1995. Spring Hill Gold Resource Estimate using geostatistical block modelling. *Spring Hill Project 1995 Annual Report by Ross Mining NL for the Northern Territory Department of Mines & Energy. Appendix 5.*

Sheldon, T., Scrimgeour, I., and Edwards, D., 1994. Exploration report for Spring Hill 1994, Unpublished *report by Eupene Exploration Enterprises Pty Ltd for Ross Mining NL 61p.*

APPENDIX 1

Capping Status of Spring Hill Drill Collars

APPENDIX 1 - CAPPING STATUS OF SPRING HILL DRILL HOLES

○ Hole to be Capped During 1999 | ● Hole Capped with Concrete Plug -1998 Work Program

Hole_No	Easting	Northing	Elevation	Hole_Depth	AMG_E	AMG_N	Hole capped
SHDH001	9784.00	9750.00	1184	100	793907.57	8494372.81	○
SHDH002	9877.00	9750.00	1238	100	793989.59	8494416.64	○
SHDH003	10038.50	10024.30	1247.6	150	794002.72	8494734.68	●
SHDH004	9767.40	9675.50	1178.2	158	793928.05	8494299.27	○
SHDH005	10172.00	10050.00	1250	100	794108.34	8494820.28	●
SHDH006	10150.00	10075.00	1251.85	100	794077.15	8494831.95	●
SHDH007	9975.00	10040.00	1248	159	793939.32	8494718.60	○
SHDH008	9938.41	10075.56	1249.03	259	793890.28	8494732.70	○
SHDH009	9854.00	9929.00	1242.5	217	793884.93	8494563.67	○
SHDH010	9430.00	11456.00	1247.3	249	792791.17	8495710.49	○
SHDH011	9672.15	9622.73	1195.79	61	793868.92	8494207.83	○
SHDH012	9787.66	9774.44	1194.27	150	793899.28	8494396.08	○
SHDH013	9810.68	9824.80	1217.72	111	793895.84	8494451.35	●
SHDH014	9851.72	9975.53	1239.99	115	793860.98	8494603.62	○
SHDH015	9922.21	9976.40	1240.65	120	793922.73	8494637.62	●
SHDH016	9897.15	10071.27	1251.53	51	793855.92	8494709.48	○
SHDH017	9629.25	9273.67	1141.2	111	793995.63	8493879.77	○
SHDH018	9662.17	9475.39	1170.34	117	793929.58	8494073.19	●
SHDH019	9664.54	9573.15	1186	113	793885.59	8494160.52	●
SHRC001	10000.00	10025.00	1255.02	80	793968.43	8494717.15	●
SHRC002	9973.10	10019.50	1255.6	80	793947.30	8494699.62	○
SHRC004	10080.90	10025.20	1232	92	794039.68	8494755.46	●
SHRC005	9984.90	10099.80	1252.7	92	793919.86	8494776.01	○
SHRC006	10022.62	10098.58	1245.64	100	793953.70	8494792.70	●
SHRC008	9742.90	9676.50	1173.65	100	793905.97	8494288.60	○
SHRC009	9748.10	9725.60	1193.6	105	793887.42	8494334.36	○
SHRC010	9762.75	9792.33	1201.87	100	793868.88	8494400.12	○
SHRC011	9674.30	9698.20	1190.4	101	793835.24	8494275.41	●
SHRC012	9725.96	9800.00	1216.4	100	793832.81	8494389.53	○
SHRC013	9798.10	9851.60	1215.7	100	793872.11	8494469.05	●
SHRC014	9761.20	9851.68	1217	100	793839.53	8494451.73	●
SHRC015	9878.31	10026.93	1250.67	100	793860.20	8494661.49	○
SHRC016	9721.00	9925.60	1217.6	100	793769.24	8494497.97	○
SHRC017	9751.00	9997.40	1218.5	100	793761.85	8494575.44	○
SHRC018	9746.51	9924.53	1205.84	101	793792.23	8494509.05	○
SHRC019	10061.50	10148.20	1247.74	100	793964.60	8494854.80	●
SHRC020	10106.64	10147.94	1253.24	100	794004.52	8494875.85	○
SHRC021	10140.40	10146.70	1253.4	99	794034.89	8494890.66	○
SHRC022	10166.90	10026.30	1248.2	100	794115.01	8494796.97	○
SHRC023	10068.70	10096.80	1245.2	100	793995.17	8494812.86	●
SHRC024	9988.30	9949.40	1249.2	100	793993.75	8494644.96	○
SHRC025	9845.00	9314.40	1190.6	100	794166.71	8494017.39	●
SHRC026	9406.30	9385.30	1137.2	100	793746.39	8493873.12	●
SHRC027	9446.30	9385.50	1138.5	93	793781.57	8493892.15	●
SHRC028	9486.30	9386.50	1140.7	100	793816.38	8493911.89	●
SHRC029	9526.60	9386.80	1143.6	100	793851.78	8493931.16	●
SHRC030	9618.80	9539.40	1176.2	100	793861.15	8494109.20	○
SHRC031	9652.90	9539.20	1186.8	100	793891.32	8494125.10	○
SHRC032	9628.68	9621.53	1171.48	100	793831.15	8494186.28	●
SHRC033	9671.50	9622.55	1195.93	100	793868.43	8494207.37	●
SHRC034	9671.40	9725.60	1183.5	99	793819.77	8494298.20	○
SHRC035	9708.39	9621.81	1178.97	100	793901.32	8494224.11	●
SHRC036	9707.40	9724.60	1194.1	100	793851.99	8494314.29	○
SHRC037	9752.20	9621.80	1163.2	100	793939.96	8494244.75	●
SHRC038	9788.10	9725.00	1191.09	100	793922.97	8494352.69	○
SHRC039	9869.50	10653.60	1232.6	100	793557.02	8495210.01	○
SHRC040	9882.30	10551.60	1220.4	100	793616.39	8495126.09	○
SHRC041	9913.10	10550.80	1218.8	100	793643.93	8495139.90	○
SHRC042	9828.10	10653.30	1226.3	100	793520.65	8495190.23	○
SHRC043	9974.20	9899.10	1238.2	100	794005.03	8494593.95	○
SHRC044	9930.84	9898.80	1232.42	100	793966.93	8494573.26	○
SHRC045	9890.18	9901.58	1246.57	100	793929.76	8494556.54	●
SHRC046	9852.20	9900.00	1242.5	100	793897.01	8494537.24	○
SHRC047	9915.66	9748.88	1235.85	100	794024.21	8494433.87	●

APPENDIX 1 - CAPPING STATUS OF SPRING HILL DRILL HOLES

○ Hole to be Capped During 1999	● Hole Capped with Concrete Plug -1998 Work Program

Hole_No	Easting	Northing	Elevation	Hole_Depth	AMG_E	AMG_N	Hole capped
SHRC048	9954.60	9753.90	1205.8	100	794056.18	8494456.66	○
SHRC049	9617.30	9440.10	1156.5	100	793906.64	8494020.92	●
SHRC050	9761.60	10763.50	1198.2	99	793410.05	8495256.07	○
SHRC051	9759.70	10768.20	1198.1	100	793406.16	8495259.32	○
SHRC053	10000.00	9975.00	1253	92	793992.00	8494673.06	○
SHRC054	10125.00	10025.00	1241	100	794078.67	8494776.08	●
SHRC055	10130.00	10100.00	1253	100	794047.72	8494844.58	○
SHRC056	10150.02	10099.97	1254.75	104	794065.39	8494853.99	●
SHRC057	10170.27	10099.24	1253.4	100	794083.60	8494862.89	●
SHRC058	9890.00	9894.00	1246	100	793933.17	8494549.77	○
SHRC059	9855.49	9802.69	1234.34	97	793945.78	8494452.97	●
SHRC060	9871.00	9700.00	1234	100	794007.87	8494369.72	●
SHRC061	9814.43	9899.81	1233	100	793863.79	8494519.27	○
SHRC062	9829.00	11000.00	1235	102	793358.01	8495496.41	○
SHRC063	9741.00	10888.00	1230	61	793333.20	8495356.16	○
SHRC064	9748.00	10888.00	1230	100	793339.37	8495359.46	○
SHRC065	9770.00	10950.00	1235	100	793329.55	8495424.51	○
SHRC066	9814.00	11320.00	1205	78	793193.94	8495771.56	○
SHRC067	9665.00	11400.00	1255	100	793024.81	8495771.88	○
SHRC068	9626.00	10276.00	1187	85	793520.28	8494762.21	○
SHRC069	9589.00	10265.00	1180	85	793492.83	8494735.06	○
SHRC070	9733.00	9948.00	1217.5	100	793769.25	8494523.38	○
SHRC071	9938.00	10075.00	1249.4	120	793890.19	8494732.02	○
SHRC073	9662.27	10120.78	1190.25	91	793625.43	8494642.41	○
SHRC074	9612.46	10119.98	1177.71	79	793581.88	8494618.23	○
SHRC075	9480.00	11385.00	1246.5	55	792868.74	8495671.44	○
SHRC076	9451.00	11410.00	1250	60	792831.37	8495679.82	○
SHRC078	9430.00	11456.00	1247.37	123	792791.17	8495710.49	○
SHRC079	9910.81	10050.97	1253.7	79	793877.53	8494698.01	○
SHRC080	9939.86	10049.12	1254.77	79	793904.02	8494710.07	○
SHRC081	9972.60	10049.81	1256.56	80	793932.57	8494726.12	●
SHRC082	9895.57	9975.59	1245.31	80	793899.63	8494624.35	○
SHRC083	9865.17	9974.63	1245.01	80	793873.27	8494609.17	○
SHRC084	9837.00	9973.00	1233	70	793849.19	8494594.45	○
SHRC085	9732.02	9758.55	1209.32	80	793857.70	8494355.84	○
SHRC086	9660.09	9570.82	1185.97	80	793882.76	8494156.37	●
SHRC087	9627.54	9567.09	1172.63	60	793855.81	8494137.73	●
SHRC088	10001.00	10050.00	1254.5	80	793957.53	8494739.67	○
SHRC089	9414.90	11017.70	1140.5	99	792984.47	8495316.82	○
SHRC090	9454.40	11028.60	1149.2	99	793014.16	8495345.05	○
SHRC091	9600.44	9339.96	1143.87	99	793938.98	8493924.65	○
SHRC092	9651.64	9338.51	1142.18	99	793984.82	8493947.50	●
SHRC093	9874.84	10024.78	1250.34	99	793858.15	8494657.96	○
SHRC094	9837.59	10091.66	1238.55	99	793793.78	8494699.38	○
SHRC095	9897.25	10071.83	1250.73	99	793855.74	8494710.02	○
SHRC096	9899.72	10032.32	1246.45	99	793876.54	8494676.34	○
SHRC097	9949.47	10025.41	1249.52	99	793923.67	8494693.69	○
SHRC098	9999.93	10149.54	1251.49	99	793909.66	8494826.96	○
SHRC099	9875.70	7792.20	1133.6	99	794911.35	8492689.40	●
SHRC100	9881.80	7890.10	1135.8	99	794870.57	8492778.62	●
SHRC101	9899.93	10151.44	1228.13	99	793820.57	8494781.49	○
SHRC102	9676.79	9518.43	1185.19	112	793922.18	8494118.04	●
SHRC103	9729.39	9625.48	1171.23	141	793918.11	8494237.24	○
SHRC104	9662.26	9474.65	1170.34	127	793930.01	8494072.58	●
SHRC105	9625.38	9476.17	1155.5	93	793896.77	8494056.53	●
SHRC106	9642.29	9425.61	1148.63	76	793935.51	8494019.92	●
SHRC107	9759.84	9727.11	1191.66	147	793897.06	8494341.22	○
SHRC108	9809.16	9825.82	1217.8	140	793894.02	8494451.53	●
SHRC109	9784.69	9775.07	1194.21	137	793896.36	8494395.23	○
SHRC110	9785.95	9775.06	1194.31	147	793897.48	8494395.82	○
SHRC111	9777.10	9680.63	1183.62	147	793934.19	8494308.37	○
SHRC112	9665.91	9626.01	1196.23	141	793861.87	8494207.79	○
SHRC113	9702.91	9524.14	1169.68	111	793942.52	8494135.38	○
SHRC114	9674.98	9426.57	1163.77	132	793963.89	8494036.17	●

APPENDIX 1 - CAPPING STATUS OF SPRING HILL DRILL HOLES

○ Hole to be Capped During 1999	● Hole Capped with Concrete Plug -1998 Work Program

Hole_No	Easting	Northing	Elevation	Hole_Depth	AMG_E	AMG_N	Hole capped
SHRC115	9691.91	9475.31	1179.56	123	793955.84	8494087.13	●
SHRC116	9712.75	9574.97	1161.15	133	793927.24	8494184.85	●
SHRC117	9663.79	9574.23	1186.13	99	793884.41	8494161.12	●
SHRC118	10043.07	10023.72	1247.26	135	794007.02	8494736.32	●
SHRC119	9857.66	10074.55	1246.28	131	793819.54	8494693.75	○
SHRC120	9785.90	9625.13	1178.53	140	793968.11	8494263.57	○
SHRC121	9751.71	9575.06	1175.46	147	793961.56	8494203.30	○
SHRC122	10033.23	10074.96	1243.15	140	793974.19	8494776.88	●
SHRC123	9837.61	9874.51	1239.05	141	793896.16	8494507.88	●
SHRC124	9697.44	9425.49	1170.77	147	793984.21	8494045.80	●
SHRC125	9633.26	9374.72	1140.88	99	793951.54	8493970.78	●
SHRC126	9664.62	9373.80	1149.68	130	793979.63	8493984.74	●
SHRC127	9612.66	9494.56	1170.18	147	793876.88	8494066.76	●
SHRC128	9914.59	10024.88	1251.66	141	793893.16	8494676.79	○
SHRC129	9921.39	9975.94	1240.71	191	793922.23	8494636.82	○
SHRC130	9800.63	10074.94	1236.56	80	793769.06	8494667.21	○
SHRC131	9886.91	9925.14	1246.06	236	793915.77	8494575.78	○
SHRC132	9769.28	9975.50	1218.49	130	793788.29	8494564.74	○
SHRC133	9874.71	9875.09	1247.76	172	793928.60	8494525.89	●
SHRC134	9877.51	9974.58	1245.86	147	793884.18	8494614.95	●
SHRC135	9885.86	9775.38	1241.13	241	793985.44	8494443.20	●
SHRC136	9961.73	10199.36	1248.88	147	793852.49	8494852.88	○
SHRC137	9845.43	9928.19	1241.93	210	793877.75	8494558.91	●
SHRC138	9736.77	8811.50	1126.86	94	794308.33	8493522.86	●
SHRC139	9926.11	9425.49	1232.17	93	794185.88	8494153.60	●
SHRC140	9590.28	9275.92	1136.13	81	793960.20	8493863.38	●
SHRC141	9927.48	9373.32	1231.06	120	794211.68	8494108.24	●
SHRC142	9625.17	9275.75	1140.5	120	793991.06	8493879.68	○
SHRC143	9955.79	9967.92	1247.6	190	793956.35	8494645.97	○
SHRC144	9860.75	9725.42	1233.36	243	793986.84	8494387.30	○
SHRC145	9849.33	9825.11	1238.29	180	793929.78	8494469.84	●
SHRC146	9983.20	10374.90	1217.1	130	793788.67	8495017.82	○
SHRC147	10183.72	10099.69	1248.05	99	794095.25	8494869.63	●
SHRC148	10174.23	10147.08	1250.03	105	794064.54	8494906.95	●
SHRC149	10160.12	9971.52	1244.16	99	794134.86	8494745.46	●
SHRC150	10119.99	9976.42	1236.77	105	794097.16	8494730.88	●
SHRC151	10086.07	9976.11	1226.58	99	794067.38	8494714.61	●
SHRC152	10170.23	10025.15	1248.59	135	794118.49	8494797.53	●
SHRC153	10064.75	10145.25	1247.68	99	793968.85	8494853.73	○
SHRC154	10037.62	10100.88	1242.77	110	793965.84	8494801.81	●
SHRC155	9674.15	11525.32	1218.5	99	792973.81	8495886.71	○
SHRC156	9620.13	11560.43	1236.85	99	792909.62	8495892.21	●
SHRC157	9640.03	11539.58	1233.41	99	792937.00	8495883.20	●
SHRC158	9577.70	11915.60	1184.95	99	792704.78	8496185.44	○
SHRC159	10043.96	10023.71	1247.31	110	794007.81	8494736.73	●
SHRC160	9761.99	10102.91	1232.13	80	793721.80	8494673.67	○
SHRC161	9786.20	10100.98	1235.26	105	793744.06	8494683.37	○
SHRC162	9938.14	10076.41	1249	99	793889.64	8494733.33	○
SHRC163	9595.15	9223.47	1137.33	120	793989.23	8493819.42	●
SHRC164	9564.69	9222.99	1135.54	80	793962.59	8493804.64	●
SHRC165	9525.84	9125.51	1134.25	80	793974.28	8493700.35	●
SHRC166	9524.89	12083.56	1155.27	105	792579.03	8496308.67	○
SHRC167	9521.86	11675.63	1197.22	135	792768.65	8495947.48	●
SHRC168	9957.35	9708.03	1193.87	99	794080.24	8494417.51	○
SHRC169	9221.57	11084.17	1132.17	80	792782.63	8495284.30	○
SHRC170	9257.89	11073.73	1129.42	105	792819.58	8495292.22	○
SHRC171	9250.78	11223.44	1126.81	80	792742.74	8495420.90	○
SHRC172	9228.07	11238.49	1125.1	57	792715.61	8495423.47	○
SHRC173	9577.27	12056.27	1117.72	99	792638.08	8496309.30	○
SHRC174	9459.32	11720.45	1189.39	100	792692.37	8495957.53	●
SHRC175	9513.63	11730.72	1208.37	105	792735.42	8495992.19	●
SHRC176	9532.48	11748.95	1215.52	99	792743.45	8496017.15	●
SHRC177	9355.02	11466.65	1218.68	99	792720.02	8495684.53	○
SHRC178	9742.16	8699.04	1125.22	99	794366.09	8493426.22	●

APPENDIX 1 - CAPPING STATUS OF SPRING HILL DRILL HOLES

○ Hole to be Capped During 1999	● Hole Capped with Concrete Plug -1998 Work Program

Hole_No	Easting	Northing	Elevation	Hole_Depth	AMG_E	AMG_N	Hole capped
SHRC179	9692.99	8698.79	1122.36	80	794322.85	8493402.81	●
SHRC180	9638.18	8698.06	1121.54	80	794274.85	8493376.34	●
SHRC181	9523.40	11170.96	1141.7	98	793007.90	8495503.13	○
SHRC182	9493.47	11175.18	1139.4	80	792979.52	8495492.74	○
SHRC183	9284.96	11059.65	1136.18	117	792850.09	8495292.56	○
SHRC184	9226.92	10995.13	1118.72	87	792829.32	8495208.30	○
SHRC185	9256.73	10978.09	1121.32	125	792863.64	8495207.33	○
SHRC186	9163.82	10868.32	1118.19	105	792833.44	8495066.72	○
SHRC187	9102.30	10901.06	1122.12	60	792763.76	8495066.60	○
SHRC188	9137.12	10884.62	1118.74	80	792802.22	8495068.51	○
SHRC189	9536.47	9068.84	1132.56	117	794010.36	8493655.39	●
SHRC190	9508.26	9069.01	1132.52	84	793985.41	8493642.24	●
SHRC191	9480.25	11749.66	1207.22	123	792697.06	8495993.16	○
SHRC192	9582.39	11874.18	1188.8	104	792728.43	8496151.12	○
SHRC193	9783.52	9875.12	1222.51	135	793848.17	8494482.92	●
SHRC194	9815.12	9899.41	1233.05	128	793864.58	8494519.24	○
SHRC195	9803.49	9922.79	1229.46	136	793843.31	8494534.37	○
SHRC196	9823.25	10024.05	1232.93	111	793813.00	8494632.99	○
SHRC197	9773.91	10025.09	1227.5	80	793769.00	8494610.65	○
SHRC198	9802.90	9976.33	1218.15	99	793817.55	8494581.32	○
SHRC199	9728.14	9758.87	1209.35	65	793854.13	8494354.29	●
SHRC200	9978.68	9631.29	1172.26	110	794135.22	8494359.88	○
SHRC201	9564.80	11218.84	1150.97	120	793021.85	8495564.87	○
SHRC202	9549.70	11182.33	1145.48	117	793025.74	8495525.56	○
SHRC203	9254.95	11721.71	1105.05	81	792511.53	8495862.30	○
SHRC204	9285.19	11710.64	1102.97	117	792543.42	8495866.80	○
SHRC205	9236.35	11770.51	1100.6	81	792472.13	8495896.57	○
SHRC206	9295.29	10694.13	1118.57	87	793031.51	8494975.08	○
SHRC207	9325.60	10695.98	1120.53	106	793057.37	8494990.99	○
SHRC208	9407.13	11046.07	1131.41	105	792964.24	8495338.17	○
SHRC209	9420.49	11098.77	1133.68	111	792951.18	8495390.95	○
SHRC210	9440.80	11150.28	1136	105	792944.81	8495445.95	○
SHRC211	9533.86	11481.15	1230.43	105	792870.91	8495781.63	○
SHRC212	9559.83	11474.80	1224.62	105	792896.81	8495788.26	●
SHRC213	9357.21	11816.38	1149.96	99	792557.09	8495994.00	●
SHRC214	9359.15	11815.30	1149.93	99	792559.31	8495993.96	●
SHRC215	9655.20	9272.81	1144.05	130	794018.92	8493891.24	●
SHRC216	9617.30	9223.65	1143.44	129	794008.67	8493830.03	●
SHRC217	9362.98	11467.35	1218.88	111	792726.71	8495688.90	○
SHRC218	9590.70	11475.27	1236.88	99	792923.81	8495803.23	●
SHRC219	9547.93	11340.51	1179.97	111	792949.61	8495664.23	○
SHRC220	9564.34	11299.32	1170	105	792983.50	8495635.63	○
SHRC221	9571.57	11264.60	1164.6	125	793006.25	8495608.42	○
SHRC222	9887.40	9700.48	1238.78	111	794022.10	8494377.88	○
SHRC223	9872.76	9751.99	1237.45	105	793984.92	8494416.40	○
SHRC224	9799.46	10101.27	1235.23	80	793755.61	8494689.88	○
SHRC225	9829.12	10101.80	1234.02	120	793781.52	8494704.33	○
SHRC226	9854.24	10151.28	1227.27	123	793780.35	8494759.81	○
SHRC227	9821.14	10150.04	1215.93	87	793751.75	8494743.11	○
SHRC228	10076.77	10075.01	1242.07	117	794012.56	8494797.44	●
SHRC229	9905.53	9851.02	1238.91	110	793967.13	8494519.18	●
SHRC230	9944.09	9849.18	1220.87	99	794002.00	8494535.73	○
SHRC231	9557.94	11796.13	1187.21	99	792743.66	8496070.77	○
SHRC232	9468.30	11549.56	1234.89	111	792780.84	8495811.05	●
SHRC233	9378.77	11043.29	1129.68	99	792940.53	8495322.36	○
SHRC234	9298.64	11331.40	1142.89	105	792734.06	8495538.67	○
RM001	9710.00	9726.00	1194.5	50	793853.62	8494316.75	○

MCN 4059
MCN 4058
MCN 4060
MCN 4066
MCN 3965
MCN 597
MCN 677
MCN 4063
MCN 4055
MCN 14
MCN 742
MCN 4061
MCN 3966
MCN 596
MCN 4954
MCN 318
MCN 752
MCN 434
MCN 4056
MCN 4062
MCN 967
MCN 627
MCN 896
MCN 3709
MCN 4053
MCN 4057
MCN 741
MCN 4051
MLN 871
MCN 176
MCN 3968
MCN 93
MCN 4052
MCN 299
MLN 802
MLN 789
MCN 4195
MCN 4033
MCN 302
MCN 177
MLN 799
MCN 13
MCN 4196
MLN 870
MLN 800
MCN 4050
MLN 939
MLN 801
MLN 803
MCN 130
MLN 834
MCN 178
MCN 4058
MCN 142
MCN 4034
MCN4047
MCN 858
MCN 229
MCN 187
MCN 420
MCN 859
MCN 4035
MCN 422
MCN 4044
MCN 628
MCN 509
MCN 421
MCN 4044
MCN 4039
MCN 4036
MCN 7
MCN 4037
MCN 4040
MCN 4038

LEGEND

- Drill hole either open or with substandard capping. Due for DME approved capping in 1999.
- Drill hole capped below ground surface with a concrete plug. As completed during the 1998 rehabilitation program.

ROSS MINING N.L.

SPRING HILL PROJECT

DRILL HOLE COLLAR LOCATIONS

Date:29/4/1999
Author: CJR
Office: Bris
Drawing:
Scale: 1:7500
Projection: Spring Hill Project Grid

0 125 250 500
metres

CR99/226