SAVAGE RIVER MINE

AUSTRALIAN BULK MINERALS

INDEPENDENT EXPERT REPORT ON RESOURCES, MINE GEOTECHNICAL AND MINING

For

GRANGE RESOURCES LIMITED

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Doc No.	1665	Ground Floor, 10 Outram Street
Date:	23rd October 2008	West Perth WA 6005
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Abbreviations Used in this Report

ABM	Australian Bulk Minerals
AusIMM	The Australasian Institute of Mining and Metallurgy
DTR	Davis Tube Recovery
Goldamere	Goldamere Proprietary Limited
Grange	Grange Resources Limited
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
Mining One	Mining One Proprietary Limited
MLEP	Mine Life Extension Project
MOZ	Main Ore Zone
MRT	Mineral Resources Tasmania
RL	Reduced level
Valmin Code	Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports

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1 INTRODUCTION

1.1 Terms of Reference

This Independent Expert Report has been prepared by Mining One Pty Ltd ("Mining One") at the request of Grange Resources Limited ("Grange") as set out in a letter of engagement between Mining One and Grange dated 24th September 2008. The purpose of Mining One's report is to assist in an Independent Valuation of Goldamere Proprietary Limited ("Goldamere") trading as Australian Bulk Minerals ("ABM") undertaken by Lonergan Edwards & Associates Limited ("Lonergan Edwards"). The valuation is being made as an Independent Report on an agreed merger between Grange and ABM which was announced to the Australian Securities Exchange on 25th September 2008.

This Expert Report is limited to Mining One's independent assessment of resources and reserves, mine operating plan and mine capital and operating costs for the Savage River Magnetite Mine operated by ABM.

The status of tenements associated with Goldamere, as presented in this report, has been sourced from the website of Mineral Resources Tasmania ("MRT"). Mining One has not independently verified the legal status of the mining leases and exploration licences involved, nor is it qualified to do so. This report has been prepared on the assumption that the tenements are, or will prove to be, lawful.

Except for the reporting of Mineral Resources, the conclusions expressed in this report are appropriate at the date of the report which is 23rd October 2008. The report is, therefore, only valid at that date and Mining One's conclusions and opinions may change with time in response to variations in economic, market, legal or political factors, in addition to ongoing mining and exploration results. The valid date for the reporting of Mineral Resources by ABM was March 2008.

All monetary values used in this report are expressed in Australian dollars (A$) unless otherwise noted.

This report has been prepared in accordance with the Code for Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports ("Valmin Code") as adopted by the Australasian Institute of Mining and Metallurgy ("AusIMM") in 2005.

1.2 Qualifications, Experience and Independence

Mining One is an independent private company which provides consulting services to the mining and mineral exploration industries.

This report has been prepared in accordance with the requirements of Australian Securities & Investments Commission Regulatory Guide 111, Content of expert reports, October 2007.

The primary authors of this report are Mr Ian Price, mining engineer with over 35 years experience in the mining industry both in Australia and internationally; Mr Tim Moran, a mining engineer with over 30 years experience in the mining industry in Australia; Mr Mick McKeown, a geologist and mining engineer with over 35 years experience in the mining industry both in

Australia and internationally; and Mr David Lucas, a geotechnical engineer with over 15 years experience in mine geotechnical engineering throughout Australia.

The Supervising Principal for this report is Mr Bill Frazer, a professional mining engineer with over 35 years experience in the mining industry both in Australia and internationally and a Director of Mining One.

The individual Experts and their areas of expertise, in accordance with the Valmin Code are summarised as follows:

- Mr Bill Frazer (Director and Principal Mining Engineer) – review report and sign-off of report.
- Mr Ian Price (Principal Mining Engineer) – Reporting.
- Mr Tim Moran (Senior Mining Consultant) – Review mining aspects and mining costs, reporting.
- Mr Mick McKeown (Senior Resources Geologist / Engineering Geologist) – Review geology, review geological data, review Mineral Resources, review Ore Reserves, reporting.
- Mr David Lucas (Principal Geotechnical Engineer) – Review geotechnical status, reporting.

Messrs Moran, McKeown and Lucas visited the Savage River Mine in April 2008. Mr McKeown worked as a contract and consultant geologist at the Savage River Mine from 1988 to 1997.

All contributing authors are appropriately qualified and experienced to act as Experts as defined in the Valmin Code and Regulatory Guide 111. Mr McKeown has the necessary qualifications, experience and independence to act as a Competent Person for the reporting of iron ore Resources and Reserves for the Savage River style of mineralisation, as defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2004 edition ("JORC Code").

1.3 Independence

The purpose of an Expert's report is to provide investors with an independent, expert opinion, which can assist them in their investment decision. Mining One confirms that neither it nor its experts have any material present or contingent interest in or association with Grange or ABM with regards to the assets under review nor assisted either Grange or ABM with regards to strategic planning in relation to the proposed transaction.

This report has been prepared in accordance with Australian Securities & Investments Commission Regulatory Guide 112, Independence of experts, October 2007.

Personnel from Mining One's Melbourne Office have carried out, and continue to carry out, mine planning and mine geotechnical consulting to ABM at Savage River Mine. None of those persons have been involved in the preparation of this report.

Mr Tim Moran holds 30,000 ordinary shares in Grange which were all acquired on the 6th September 2006. These shares amount to less than 0.03% of the issued capital of Grange at this date. Mr Moran has undertaken not to sell those shares during the course of the proposed transaction. Further he has undertaken that as a shareholder of Grange that he will abstain from voting on the proposed transaction. Mining One considers that neither of these matters

are material to the proposed transaction and do not impair either Mining One's or Mr Moran's independence. They are disclosed for transparency.

1.4 Principal Sources of Information

The principal sources of data and information used to compile this report were provided by ABM. A list of the principal sources of data and information is provided in Section 4 of this report.

The most recent site visit to the Savage River Mine was made by Messrs Moran, McKeown and Lucas in April 2008. Mr McKeown is familiar with the geological, mineral resource and ore reserve aspects of the Savage River Mine, having worked there as a Contract and Consultant Geologist from 1988 to 1997. Many discussions between Messrs Moran and McKeown and ABM staff have taken place between April and October 2008.

Mining One has made all reasonable enquiries and requests to confirm the authenticity, completeness and reliability of the data and information on which this report is based. A draft copy of the report was provided to ABM with a request to identify any significant errors, or omissions prior to final submission of the report to Grange.

1.5 Consent

Mining One and each of the experts named in this report consent to the publication of this Expert Report by Grange.

2 TECHNICAL SUMMARY OF ABM'S SAVAGE RIVER MINE

2.1 Savage River Mine

2.1.1 Setting

The Savage River Mine is a mature mining and processing operation with a production history of over 40 years and a sustained exploration history of over 50 years.

The Savage River magnetite deposits were discovered in the nineteenth century but systematic exploration did not begin until the 1950s. Open cut mining of the deposits commenced in 1967 and continues today.

Magnetite concentrate is produced at Savage River Mine most of which is manufactured into iron ore pellets at Port Latta, both located in the north-west of Tasmania (Figure 1). To date, about 180 million tonnes of ore have been mined and 75 million tonnes of iron ore pellets have been produced.

Figure 1 Location of the Savage River Mine

2.1.2 Tenure

The Savage River Mine operations take place on, and under the conditions imposed by, Tasmanian State Government Mining Leases 2M/2001 and 14M/2007 held in the name of Goldamere Proprietary Limited which expire on 7 November 2031 (Figure 2). Mining One has not reviewed the conditions and status of those leases.

Mining Lease 2M/2001 extends from the mining operations at Savage River, along the pipeline route to Port Latta, to the pelletising and ship loading operations at Port Latta (Figures 2 and 3); the total area of 2M/2001 is 4897 hectares. Mining Lease 14M/2007 is a smaller mining lease in two parts each of which is contiguous with 2M/2001 (Figure 2); the total area of 14M/2007 is 91 hectares.

In addition, Goldamere Proprietary Limited holds three exploration licences south of the Savage River Mine (Figure 2).

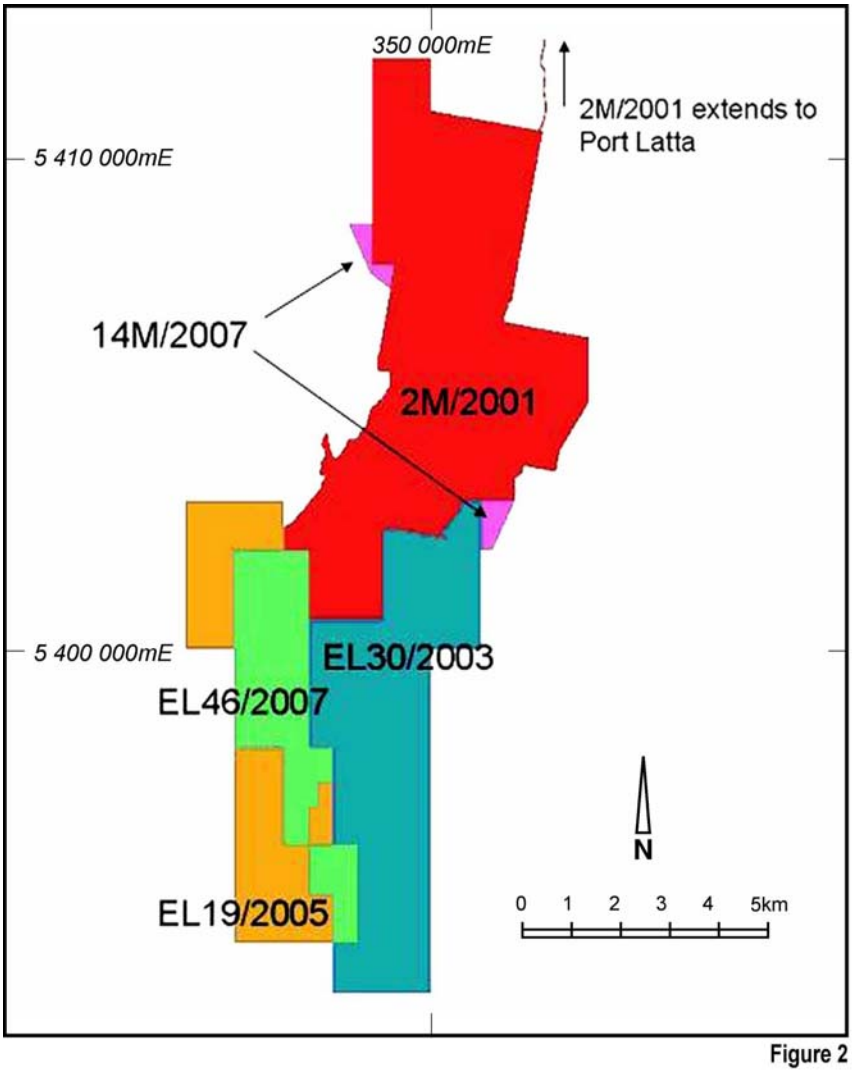

Figure 2 Savage River Mining Leases (2M/2001 and 14M/2007)

and Exploration Licences

2.1.3 Assay Procedure at Savage River Mine

At Savage River, the magnetite grade of material is the proportion of magnetite concentrate recovered from the material using a Davis Tube apparatus and magnetite grade is often referred to locally as weight recovery, or simply recovery. This is expressed and recorded as % DTR where DTR is the abbreviation for Davis Tube Recovery. To avoid confusion, mill recovery is sometimes referred to as mill efficiency.

The recovered magnetite concentrate consists mainly of magnetite but also includes minor amounts of unliberated or entrained minerals and chemically bound elements. The magnetite concentrate recovered in the Davis Tube is routinely analysed for impurities which are metallurgically or environmentally significant or commercially important: total Fe, ferrous Fe, SiO_2, MgO, TiO_2, P, S, V and Ni.

2.1.4 Geology

At Savage River, magnetite mineralisation occurs, apparently generally conformably, within a series of mafic and ultramafic rocks referred to locally as schists. The magnetite mineralisation consists of massive, layered and disseminated magnetite; gangue minerals include talc, tremolite, actinolite, chlorite, epidote, apatite, carbonate and pyrite. The magnetite mineralisation has been intruded by a series of basaltic sills and dykes. Magnesite occurs as veins, mainly to the east of the South Lens magnetite mineralisation and to the west of North Pit magnetite mineralisation. The mineralisation and host rocks are covered in part by later basalt flows which are most common from South Lens southwards, that is, they are relatively scarce in North Pit. (Figures 3 and 4).

The principal magnetite mineralisation occurs almost continuously over a strike length of about 4 kilometres from Centre Pit South to North Pit. There is a smaller occurrence at South Deposit about 1.5 kilometres south of Centre Pit South (Figure 3).

The principal magnetite occurrence is referred to as the Main Ore Zone (MOZ). The MOZ strikes just east of north and generally has a near vertical dip. The MOZ has a horizontal thickness which ranges up to 150 metres. Narrower, generally lower grade lenses of magnetite mineralisation, generally up to about 50 metres thick, occur to the east and west; at North Pit, these lenses occur only to the west of the MOZ. Ore is mined from the MOZ and from parts of the lower grade lenses.

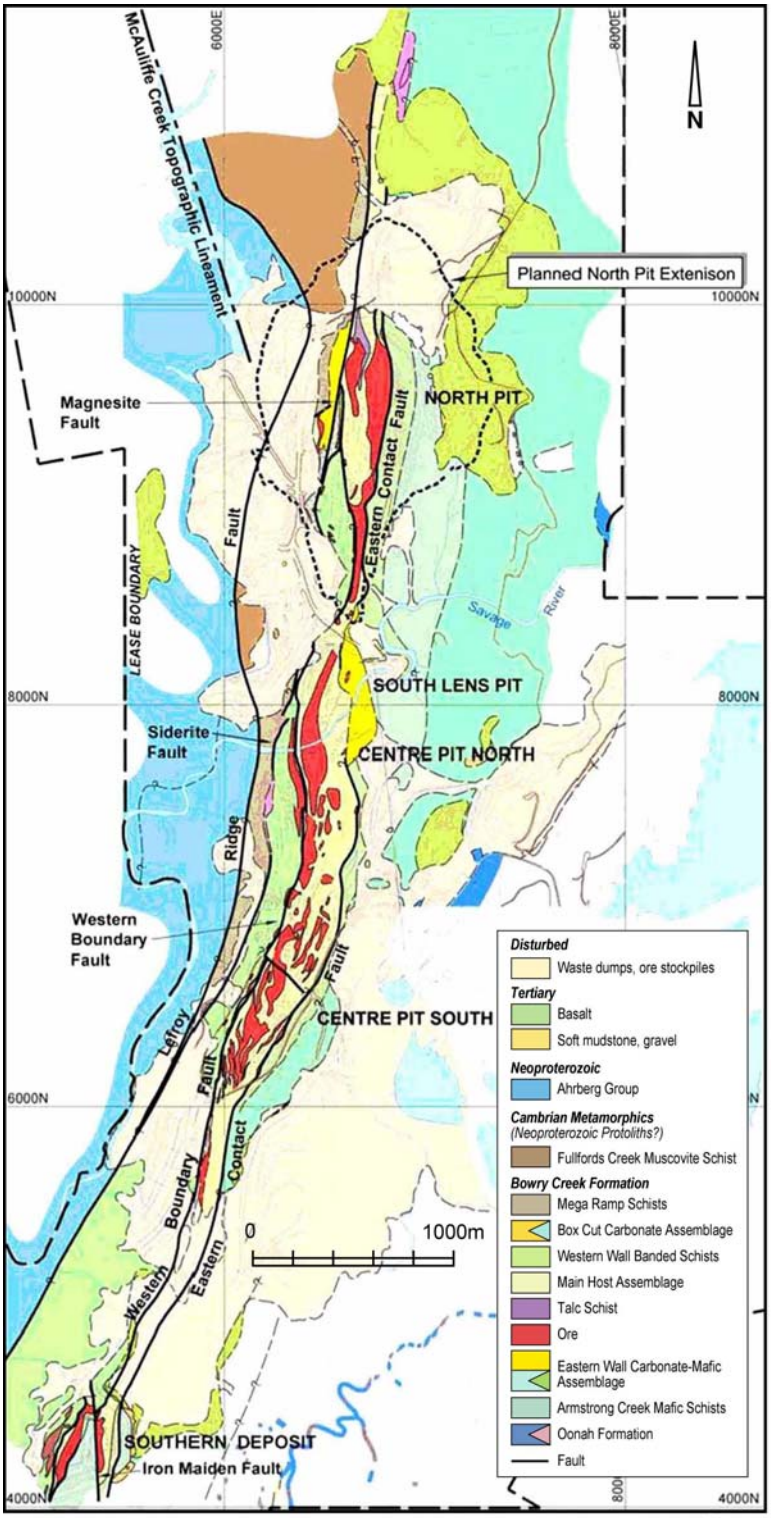

Figure 3

Figure 3 Geology of the Savage River Mine

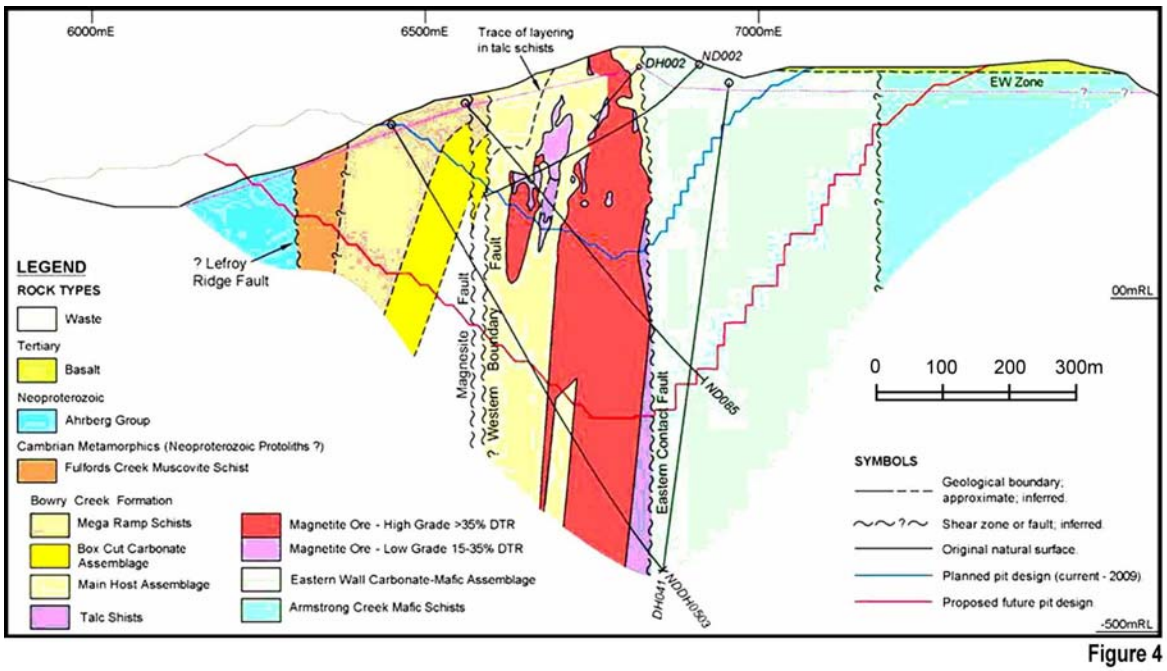

Figure 4 Cross section through North Pit

The Savage River orebody has been mined for over 40 years and is open in depth. The mineralisation is known over a strike length of over 4 kilometres, dips more or less vertically, and ranges in horizontal width up to about 150m. The mineralisation at North Pit is the widest and highest grade, and carries the least internal dilution, of the currently defined mineralisation.

2.1.5 Development and Mining History

Ore has been mined from five open pits at Savage River Mine (Figure 5), named from north to south:

- North Pit
- South Lens
- Centre Pit North
- Centre Pit South
- South Deposit

From 1963 to 1996, the Savage River Mine operations were owned by Savage River Mines, a consortium of Australian, American and Japanese interests. Since 1996, the operations have been owned by Goldamere. Goldamere is now ultimately owned by Shagang Company Limited (90%) and Stemcor Holdings Limited (10%).

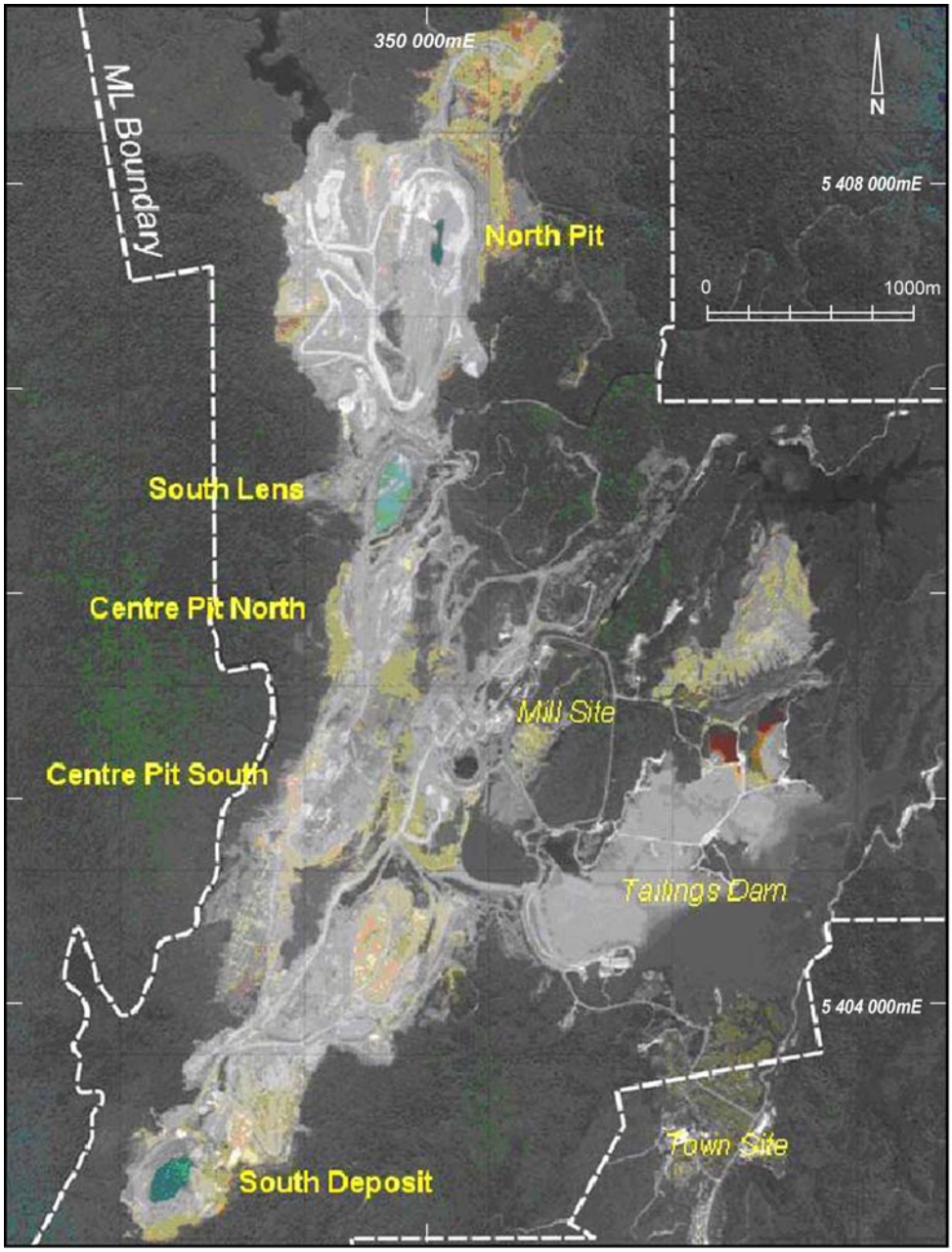

Figure 5 Location of Mine Workings at Savage River Mine

About 70% of the currently reported Ore Reserve is located at North Pit with the balance at Centre Pit South, South Deposit and in stockpiles. Currently, all production comes from North Pit.

ABM has mined out two extensions of North Pit since 1997 and is now mining Extension 3. ABM had planned to cease operations in 2009 at the end of Extension 3 at an elevation of about +50m RL. However, a feasibility study known as the Mine Life Extension Project

("MLEP"), completed in September 2006 demonstrated potential for extending the mine life by mining ore exclusively from Extension 4 of North Pit until 2018 and milling ore until 2021. Extension 4 would take the bottom of North Pit to about -180m RL.

The MLEP was used as the basis to develop an operating plan to prevent the anticipated closure in 2009 and extend the mine life to 2029; this plan is known as the Savage River 2008 Operating Plan. A lateral enlargement of Extension 4 of North Pit has been included in the most recent versions of the Savage River 2008 Operating Plan; this enlargement is referred to in this report as Extension 4+ and has extended the mine life to 2029.

ABM recently updated the 2008 Operating Plan with a 2008 Operating Forecast presented in a spreadsheet named 2008_June_Forecast_2.xls.

2.1.6 Mineral Resources

Mineral Resources at Savage River are estimated annually by ABM staff using estimation parameters recommended by Snowden Mining Industry Consultants.

In 2006, Australian Mining Consultants ("AMC") were engaged by ABM to provide a peer review service with respect to Geology, Resources and Reserves, Mining, Geotechnical, Processing and Environmental aspects of the MLEP feasibility study. AMC concluded in part that:

> "Mineral Resources and Ore Reserves have been estimated to good industry standards and reported in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). There is sufficient resource and reserve coverage both within the North Pit deposit and in other nearby deposits to support the MLEP. Seven percent of scheduled ore production is currently classified as Inferred Resources, but a drilling program planned to be completed during 2006 will probably result in most of this material being upgraded to Indicated Resources." (Stephenson, 2006)

Mining One's review of the Mineral Resource estimations for this report supports Stephenson's conclusion. Mineral Resources have been estimated to good industry standards in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition).

Mineral Resources are estimated at a cut-off grade of 15% DTR. In March 2008, ABM reported the Mineral Resources listed in Table 1.

Definitions of the Mineral Resource Categories, according to the JORC Code, are given in Section 4: GLOSSARY OF TECHNICAL TERMS.

Mineral Resource Category	March 2008	
	Tonnes	Grade % DTR
North Pit		
Measured	41,740,000	56.1
Indicated	90,690,000	52.6
Inferred	41,870,000	50.5
Sub-total	174,300,000	52.9
South Deposit		
Measured	12,290,000	44.4
Indicated	5,570,000	43.5
Inferred	11,250,000	40.9
Sub-total	29,110,000	42.9
Centre Pit South		
Measured	15,910,000	49.5
Indicated	16,240,000	48.5
Inferred	22,770,000	43.1
Sub-total	54,930,000	46.6
Centre Pit North		
Measured	17,230,000	55.0
Indicated	24,440,000	53.2
Inferred	15,670,000	49.0
Sub-total	57,340,000	52.6
Centre Pit Southern Extension		
Measured	1,790,000	47.0
Indicated	1,220,000	43.8
Inferred	650,000	44.3
Sub-total	3,670,000	45.5
Stockpiles		
Measured	**3,880,000**	**30.4**
All Sources		
Measured	92,840,000	52.0
Indicated	138,170,000	51.8
Inferred	92,220,000	47.2
Total	**323,230,000**	**50.5**

Table 1 Savage River Mine – Reported Mineral Resources March 2008

2.1.7 Mining

2.1.7.1 Mining Operations

Mining at Savage River Mine is by open cut and the process of mining is straightforward: drilling and blasting, loading by face shovels and excavators and hauling by diesel powered trucks.

The mining fleet is owner operated and the load and haul fleet is new, most equipment having been commissioned in the last year.

One important key to a profitable operation at Savage River Mine is the capacity of a new mining fleet to move material quickly and efficiently. The new mining fleet has only been fully operational from June 2008 due to delays associated with the delivery of the face shovels but the shortfall in total material movement, attributed to these delays, has been addressed by ABM.

Since there is no history of operating costs for this new fleet, mine unit operating costs and the productivities have been built up from first principles using the respective manufacturer's databases for availabilities, maintenance requirements, consumable items and labour costs. Other mine related costs have been sourced from the database of an extensive mining history at the Savage River Mine. Mining One considers that the operating costs are reasonable.

ABM has taken the opportunity presented by the MLEP to remove bottle-necks and inefficiencies caused by the location and age of the existing infrastructure such as workshops, service bays and mining administration offices. New workshops, service bays and offices have been established close to North Pit which will be the principal source of ore for the foreseeable future.

The mine plan includes routine identification of potentially acid forming waste rock; this enables the handling of potentially acid forming waste rock so as to avoid the potential for acid water drainage in the future.

2.1.7.2 Geotechnical Considerations

The Savage River Mine has a history of slope failures ranging from minor rock falls that are a hazard to personnel and equipment, up to large-scale failures that have affected entire pit walls. Designing pit slopes to prevent all failures has not been, nor would it be, economically feasible. Instead, ABM's approach to geotechnical management is to utilise comprehensive systems and processes that mitigate the risk to personnel, equipment and the mining operation as a whole, accepting that slope failures will occur and having controls in place to manage them. The systems and processes implemented by ABM are of a high standard and adequately address the key issues.

The dimensions of North Pit will increase significantly under the proposed mining plan and to ensure that the risk profile remains acceptable; mine management has introduced remotely operated machinery, which is common in underground mines, to some higher risk processes in the open pit, such as drilling and cable bolting beneath high walls.

On-going management of pit and waste dump stability is contingent on ABM providing adequate geotechnical staffing, resources and information systems for the remainder of the mine life. A key risk is the loss of geotechnical knowledge held by ABM's Principal Engineer and this is being addressed via written documentation and the transfer of knowledge to consultants. Geotechnical monitoring, support installation, drain hole installation, ongoing investigations and data collection must be continued at least to the current standard.

Geotechnical stability of ABM's key infrastructure (mill, conveyor, pipeline, river crossings and tailings dam) is managed as part of the geotechnical program. These aspects are well managed and no significant risks have been identified.

2.1.7.3 Mining Schedule

Ore and total material schedules are shown in Tables 2 and 3. Successful achievement of the material movements required has dictated a change in the mining fleet which has undergone a size shift from 160 tonne to 225 tonne trucks, and from hydraulic excavators to face shovels.

Arriving at realistic performances for inclusion in the schedule relied on the experience from the manufacturers regarding their trucks and face shovels, the application of sophisticated software to optimize haulage routes, and a comprehensive understanding of the distribution of ore and waste within the designed open cuts.

Some conservatism was introduced into the mining schedule to allow for any unplanned events or circumstances. For example, the mining schedule has assumed only 80% of the digging capacity of the face shovels as designated by the manufacturer. In addition, some trucks from the old mining fleet have been retained to alleviate a shortfall in material movement which developed in early 2008 principally due to the late commissioning of new equipment.

The process that ABM used in developing the schedule for material movement was from first principles using the best available data and Mining One considers that the results are in line with standard industry practice.

The operation has the flexibility of being able to off-set any production shortfall by utilising ore from existing stockpiles. Concentrate production can be maintained by augmenting run-of-mine ore with ore from existing low and high grade stockpiles. At present, the grade of ore from the low grade stockpile is higher than anticipated and concentrate production for 2008 will meet the requirements of the 2008 Operating Plan.

ABM recently updated the 2008 Operating Plan with a 2008 Operating Forecast presented in a spreadsheet named 2008_June_Forecast_2.xls. This forecast indicates that there will be a shortfall in total material movement during 2008. The 2008 Operating Plan called for total material movement of 26,348,000 bcm, however, the current forecast is for movement of only 12,167,000 bcm. The shortfall is due to delayed successful commissioning of the new mine fleet. It is the opinion of Mining One that, once the new mine fleet has been fully commissioned, it will have the capacity to deliver the 2008 Operating Plan.

Table 4 shows mining sources and their respective mining unit costs to the end of mining in 2029; production of concentrate continues for nine years after mining ends using stockpiled ore.

Year	North Pit Ext 4		North Pit Ext4+		South Deposit		Centre Pit South		All Sources	
	tonnes	%DTR`RR	tonnes	%DTR	tonnes	%DTR	tonnes	%DTR	tonnes	%DTR
2008	4,097,000	47.5							4,097,000	47.5
2009	11,140,000	43.0							11,140,000	43.0
2010	2,995,000	51.8							2,995,000	51.8
2011	8,672,000	42.2							8,672,000	42.2
2012	1,066,000	57.8							1,066,000	57.8
2013	9,978,000	54.0							9,978,000	54.0
2014	280,000	38.8							280,000	38.8
2015	8,298,000	49.3							8,298,000	49.3
2016	14,531,000	57.4							14,531,000	57.4
2017	8,470,000	47.0	4,249,000	47.0					12,720,000	47.0
2018			527,000	47.0					527,000	47.0
2019			2,348,000	47.0					2,348,000	47.0
2020			2,348,000	47.0					2,348,000	47.0
2021					700,000	43.9	350,000	43.4	1,050,000	43.7
2022					3,850,000	43.9	2,450,000	43.4	6,300,000	43.7
2023					3,899,000	43.9	5,600,000	43.4	9,499,000	43.6
2024							2,569,000	43.4	2,569,000	43.4
Total	**69,527,00000**	**49.6**	**9,473,000**	**47.0**	**8,449,000**	**43.9**	**10,969,000**	**43.4**	**98,418,000**	**48.2**

Table 2 Ore Mining Schedule

Year	North Pit Ext 4	North Pit Ext 4+	South Deposit	Centre Pit South	Yearly Total
	bcm	bcm	bcm	bcm	bcm
2008	18,700,000				18,700,000
2009	23,842,000				23,842,000
2010	24,622,000				24,622,000
2011	20,291,000				20,291,000
2012	20,202,000				20,202,000
2013	20,202,000				20,202000
2014	20,202,000				20,202,000
2015	17,420,000				17,420,000
2016	11,141,000	8,736,000			19,877,000
2017	5,591,000	8,736,000			14,327,000
2018		7,839,000			7,839,000
2019		3,514,000	5,500,000		9,014,000
2020		671,000	5,500,000	4,400,000	10,571,000
2021			5,500,000	8,900,000	14,400,000
2022			5,600,000	8,700,000	14,300,000
2023			1,614,000	8,700,000	10,314,000
2024				1,934,000	1,934,000
Total	**182,213,000**	**29,496,000**	**23,714,000**	**32,634,000**	**268,057,000**

Table 3 All Material Mining Schedule
(2008_June_forecast_2.xls and Bernardo)

All Material		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Material Volumes													
South Deposit	000 bcm												5,500
Central Pit South	000 bcm												
Extension 4	000 bcm	18,700	23,842	24,622	20,291	20,202	20,202	20,202	17,420	11,141	5,591		
Extension 4+	000 bcm									8,736	8,736	7,839	3,514
Total	**000 bcm**	**18,700**	**23,842**	**24,622**	**20,291**	**20,202**	**20,202**	**20,202**	**17,420**	**19,877**	**14,327**	**7,839**	**9,014**
Unit Costs													
South Deposit	$/bcm												5.32
Central Pit South	$/bcm												
Extension 4	$/bcm	5.71	4.93	3.67	5.78	6.49	5.06	4.91	5.65	7.62	8.70		
Extension 4+	$/bcm									7.62	8.70	12.80	6.30

All Material		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030 - 2033
Material Volumes												
South Deposit	000 bcm	5,500	5,500	5,600	1,614							
Central Pit South	000 bcm	4,400	8,900	8,700	8,700	1,934						
Extension 4	000 bcm											
Extension 4+	000 bcm	671										
Total	**000 bcm**	**10,571**	**14,400**	**14,300**	**10,314**	**1,934**						
Unit Costs												
South Deposit	$/bcm	5.39	5.39	5.36	6.41							
Central Pit South	$/bcm	5.84	5.72	5.81	5.81	5.81						
Extension 4	$/bcm											
Extension 4+	$/bcm	6.30										

Table 4 All Material Mining Schedule and Unit Mining Costs

2.1.7.4 Ore Reserves

Ore Reserves at Savage River Mine are estimated annually by ABM staff. Ore Reserves are estimated from Mineral Resources by taking into account mining, metallurgical, economic, marketing, legal, environmental, social and government considerations. These considerations are referred to in the JORC Code as Modifying Factors and, at Savage River Mine, are based on ABM's experience with forward projections where appropriate.

Ore Reserves are estimated at a cut-off grade of 15% DTR, using a mining recovery of 89.4% and a mining dilution rate of 10.8%.

In 2006, Australian Mining Consultants ("AMC") were engaged by ABM to provide a peer review with respect to Geology, Resources and Reserves, Mining, Geotechnical, Processing and Environmental aspects of the MLEP feasibility study. AMC concluded in part that:

> "Mineral Resources and Ore Reserves have been estimated to good industry standards and reported in compliance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). There is sufficient resource and reserve coverage both within the North Pit deposit and in other nearby deposits to support the MLEP. Seven percent of scheduled ore production is currently classified as Inferred Resources, but a drilling program planned to be completed during 2006 will probably result in most of this material being upgraded to Indicated Resources." (Stephenson, 2006)

In 2007, ABM released an Ore Reserve Statement as at June 2007 (Table 5). For that statement, Ore Reserves at North Pit were estimated within planned Extension 4. Mining One's review of the Ore Reserve estimates for 2007 supports Stephenson's conclusion.

In 2008, ABM released an Ore Reserve Statement as at March 2008 (Table 6). For that statement, Ore Reserves at North Pit were estimated within Extension 4 and a further planned extension known as Extension 5. Mining One estimated revenues from, and costs of, mining and processing the mineralisation within the Extension 5 design and concluded that not all the mineralisation within Extension 5 could be mined at a profit using those revenues and costs. Consequently, in Mining One's opinion it was not considered appropriate, according to the JORC code, to classify all the mineralisation within the Extension 5 design as Ore Reserves.

Appropriately, the Ore Schedule described in section 2.1.7.3 Mining Schedule matches ABM's 2008 Ore Reserve estimates for South Deposit and Centre Pit South.

The Ore Schedule calls for 69 million tonnes to be mined from Extension 4 of North Pit and this matches ABM's 2007 Ore Reserve estimate; this is appropriate. In addition, just over 9 million tonnes of ore are to be mined from Extension 4+ of North Pit and, although Mining One considers that ABM's 2008 Ore Reserve requires re-estimation, Mining One considers there is a reasonable expectation that that 9 million tonnes of ore can be mined beyond Extension 4.

Ore Reserve Category	June 2007	
	Tonnes	Grade % DTR
North Pit		
Proved	29,770,000	53.6
Probable	40,170,000	49.8
Sub-total	**69,940,000**	**51.4**
South Deposit		
Proved	8,270,000	39.7
Probable	1,180,000	41.9
Sub-total	**9,450,000**	**40.0**
Centre Pit South		
Proved	10,290,000	44.8
Probable	3,430,000	39.1
Sub-total	**13,720,000**	**43.4**
Stockpiles		
Proved	**5,950,000**	**32.8**
All Sources		
Proved	54,270,000	47.5
Probable	44,780,000	48.8
Total	**99,050,000**	**48.1**

Table 5 Ore Reserves June 2007 as Estimated by ABM

Ore Reserve Category	March 2008	
	Tonnes	Grade % DTR
North Pit		
Proved	37,430,000	52.5
Probable	70,300,000	49.4
Sub-total	**107,730,000**	**50.5**
South Deposit		
Proved	7,380,000	43.6
Probable	1,070,000	45.7
Sub-total	**8,450,000**	**43.9**
Centre Pit South		
Proved	8,220,000	44.8
Probable	2,740,000	39.1
Sub-total	**10,970,000**	**43.4**
Stockpiles		
Proved	**3,880,000**	**30.4**
All Sources		
Proved	56,920,000	48.7
Probable	74,110,000	49.0
Total	**131,020,000**	**48.9**

Table 6 Ore Reserves March 2008 as Estimated by ABM

2.1.7.5 Capital Costs

A total of A$180.7M has been allocated in the MLEP as capital costs for ABM's operations in the period from 2007 to 2021; of this, A$29.2M has been allocated to mining in the following way:

- Pre-stripping of clay (A$24.2M).
- Construction of near pit maintenance facilities, workshops and offices (A$8.3M).
- Provisions for cable bolting, diamond drilling and insurance spares (A$18.5M).

The mining fleet is financed on a lease-purchase arrangement and is not included in the above amounts.

Mining One considers that the capital costs allocated for mining works are reasonable.

3 PRINCIPAL SOURCES OF DATA AND INFORMATION

Mine Life Extension Project North Pit, volumes 1 to 5 and appendices. ABM, 2006.

2008_Operating_Plan.xls. ABM, 2008.

Resource and Reserve Statement June 2007. ABM 2007.

Resource and Reserve Statement March. ABM 2008.

Variography and estimation parameters. Gotley, S. and Franks, M., 2006. Snowden Group, 26 March 2006.

Stephenson, P.R., 2006. *AMC opinion, Savage River mine life extension project feasibility study.* Letter from AMC Consultants Pty Ltd to Australian Bulk Minerals, 15 September 2006.

4 GLOSSARY OF TECHNICAL TERMS

acid rock drainage	Drainage that occurs as a result of natural oxidation of sulphide minerals contained in rock that is exposed to air and water; it is not confined to mining activities, but can occur wherever sulphide-bearing rock is exposed to air and water.
actinolite	A calcium magnesium iron silicate hydroxide mineral.
apatite	A calcium phosphate mineral.
basalt	A dark grey to black volcanic rock.
BCM	Bank Cubic Metre: a cubic metre of rock in place in the ground.
cable bolt	A steel cable cemented into a hole drilled into rock.
carbonate	Strictly speaking an ion with the formula CO_3^{2-}; used by geologists to refer to minerals or rocks with a high carbonate content; carbonate minerals are usually of sedimentary or metamorphic origin; calcium and magnesium carbonates are the most common carbonate minerals.
chip	A broken shard from a pellet.
chlorite	An iron aluminium magnesium silicate hydroxide mineral similar to clay.
concentrate	The concentrated form of a mineral after processing.
conformable	Rock strata which are parallel to each other.
Davis Tube	A laboratory apparatus for determining the magnetic content of a sample.
dilution	Material of no or low value which is mixed with ore, either naturally, deliberately, or inadvertently during mining.
dilution rate	The percentage of dilution which occurs in ore.
dip	The angle at which a rock layer is inclined below the horizontal; dip can range from 0^o to 90^o.
disseminated	Fine grained material scattered through rock.

DTR	Davis Tube Recovery: the proportion of magnetite concentrate recovered from a material using a Davis Tube apparatus
dyke	A tabular body of intrusive igneous rock which cuts across the local strata.
epidote	A calcium aluminium iron silicate hydroxide mineral.
excavator	A digging machine with an articulated boom, bucket and cab which swivel on an undercarriage; in routine use, an excavator digs material below the level of the machine.
face shovel	A digging machine with an articulated boom, bucket and cab which swivel on an undercarriage; in routine use, a face shovel digs material in front of the machine.
Fe	The chemical symbol for iron.
feasibility study	A study to define the technical, economic, and legal viability of a project with a degree of predicted reliability.
ferrous Fe	Fe^{2+}: an ion of iron which has two positive charges; the ferrous Fe content of magnetite is important factor to be taken into account during the pelletisation process.
gangue	The minerals within an ore which have no value.
grade	The amount of metal in a tonne of rock expressed as troy ounces per tonne for precious metals and as a percentage for most other metals.
H	The chemical symbol for hydrogen.
host rock	A mass of rock which is a host for other rocks or mineral deposits.
hydroxide	A chemical compound containing an OH^- ion.
Indicated Mineral Resource	According to the JORC Code, an 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence.
Inferred Mineral Resource	According to the JORC Code, an 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence.
intrusive	A mass of rock formed by magma which solidifies beneath the Earth's surface.
ion	A positively or negatively charged atomic particle.
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2004).
lava	Molten rock on the surface of the Earth.
mafic	An igneous rock composed mainly of magnesium and iron silicate minerals; basalt is a mafic rock.
magma	Molten rock beneath the surface of the Earth.
magnesite	A rock consisting of more or less pure magnesium carbonate.

magnetite	An iron bearing mineral with the chemical formula Fe_2O_3; pure magnetite contains 72.4% Fe; magnetite is a magnetic mineral; also known as lodestone.
massive	A rock consisting mostly of one mineral.
Measured Mineral Resource	According to the JORC Code, a 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence.
Mg	The chemical symbol for magnesium.
MgO	The chemical formula for magnesium oxide; the magnesium oxide content of iron ore is an important factor during smelting.
mineral	A naturally occurring element or compound.
Mineral Resource	According to the JORC Code, a 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction.
mineralisation	A rock of economic interest.
mining recovery	The proportion of ore which is actually mined.
Modifying Factors	According to the JORC Code, the term 'Modifying Factors' is defined to include mining, metallurgical, economic, marketing, legal, environmental, social and governmental considerations.
MOZ	Main Ore Zone at Savage River.
Ni	The chemical symbol for nickel; the nickel content of steel affects its hardness.
O	The chemical symbol for oxygen.
ore	Naturally occurring rock which can be mined at a profit (see also Ore Reserve)
Ore Reserve	According to the JORC Code, an 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource.
P	The chemical symbol for phosphorous; the phosphorous content of steel affects its strength.
pellet	A ball of iron ore concentrate which has been mixed with minor amounts of clay and then fired in a kiln to produce a hard ball; Savage River pellets are about 1cm in diameter.
processing	Treating an ore to recover the valuable mineral or minerals present.
Probable Ore Reserve	According to the JORC Code, a 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource.
Proved Ore Resource	According to the JORC Code, a 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource.
pyrite	A mineral with the formula FeS_2; also known as fool's gold.

Reduced level	The height of a point above a particular datum; at Savage River, reduced level is the height of a point above sea level.
RL	Abbreviation for Reduced Level.
rock	A mixture of minerals.
S	The chemical symbol for sulphur; the sulphur content of rock is important in determining whether the rock may produce acid rock drainage; the sulphur content of magnetite concentrate is important in determining the potential for the production of sulphurous gases during the pelletisation process.
schist	A metamorphic rock having a foliated fabric.
Si	The chemical symbol for silicon.
silicate	The name of the large group of minerals which consist of silicon and oxygen and one ore more other common elements; oxygen and silicon are the most common elements in rocks; silicates account for over 90% of minerals in rocks.
sill	A tabular body of intrusive igneous rock which cuts across the local strata.
SiO_2	The chemical formula for silica; the silica content of iron ore is an important factor during smelting.
smelting	Smelting is the term used to descibe the separation of metal from an ore using heat.
stockpile	A temporary pile of rock kept for later use.
strike	The horizontal direction or trend of a geological structure; strike can range from 0^o to 360^o.
talc	A magnesium silicate hydroxide mineral.
TiO_2	The formula for titanium dioxide; the titanium dioxide content of magnetite concentrate is an important factor during smelting.
tremolite	A calcium magnesium iron silicate mineral; an asbestiform mineral.
ultramafic	An igneous rock which is rich in iron and magnesium but low in silica.
V	The chemical symbol for vanadium; the vanadium content of magnetite concentrate is an important factor during smelting.
vein	A tabular occurrence of rock which is much longer and wider than it is thick.
waste dump	A, usually permanent, pile of valueless rock.

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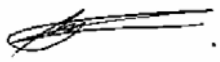
V1	Bill Frazer	Director		23/10/08