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SHREE MINERALS LTD

NELSON BAY RIVER IRON ORE PROJECT

METALLURGICAL TESTWORK REPORT

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1.0 EXECUTIVE SUMMARY

Engenium Ltd was asked by Shree Minerals Ltd to develop and supervise a testwork programme for Beneficiable Feed Ore (BFO) from the Company's Nelson Bay River Iron Project (NBR).

The programme was performed on cores taken from three freshly drilled PQ diamond drill holes. Based on material characteristics of cores two composite samples for metallurgical testing were prepared. The first composite (Composite1) consists of cores from drill hole NBR12A, while the second composite (Composite2) was made from cores of drill hole NBR13A and NBR14A. Drill hole NBR12A is located near surface adjacent to, and immediately south of, the magnetite resource while drill holes NBR13A and NBR14A are located on top of the magnetite resource hole.

The testwork was performed at the Ammtec laboratory in Perth, WA.

The composites' head assays are listed below, in Table 1.1.

NBR Composite	Fe	SiO_2	Al_2O_3	P	S	LOI
Composite 1	53.0	16.8	0.69	0.027	0.04	6.1
Composite 2	53.1	13.9	2.58	0.013	0.05	4.0

Table 1.1 – Composite Head Assays

The iron grades for both composites are 53% but they represent different mineralisation. Composite 1 contains more hematite and the head assay showed a high silica content but low (<1%) levels of alumina, as well as low (<0.1%) phosphorous and sulphur. Composite 2 is differentiated from Composite 1 by its location and higher magnetite content. The Composite 2 head assay shows high silica and greater than 1% alumina contents, but still good Phosphorous and Sulphur contents.

A sample of Composite 2 was crushed and tested by passing over a coarse LIMS unit at a variety of magnetic strengths. The 600 Gauss pass produced an upgraded product with grades; Fe 57.5%, $SiO_2$11.5%, Al_2O_3 1.55% at 82.3% mass recovery. The LIMS test results are given below, in Table 1.2.

Composite 2, crushed to -1 mm							
Magnetic Strength	Mass Recovery	Fe Grade	Fe Recovery	SiO_2 Grade	SiO_2 Recovery	Al_2O_3 grade	Al2O3 Recovery
Gauss	%	%	%	%	%	%	%
1100	88.0	56.5	91.8	12.1	78.8	1.74	63.1
900	84.0	57.6	88.5	11.3	71.7	1.53	54.8
600	82.3	57.5	87.3	11.5	69.7	1.55	52.0
Calc head	100	54.4	100.0	13.4	100.0	2.41	100.0

Table 1.2 –Composite 2 LIMS on -1mm Material

Both composites were crushed and subjected to gravity testing using jigs and a shaking table. Composite 1 material responded poorly to gravity separation recovering only 16% of the feed to concentrate. Composite 2 produced a 69% mass recovery to concentrate, therefore it is worthy of further testing.

The upgrade process for BFO should be based on Low Intensity (600 Gauss) Magnetic Separation. Later on, some of the equipment used for this could be transferred to the coarse cobbing circuit of the main magnetic production plant. The mass recovery at approximately 82% is attractive. Moreover, this also suggests a substantial reduction in capital cost compared to a Gravity Separation route and hence preferred over the latter. Additionally, the reduction in alumina of the LIMS BFO concentrate makes it a viable product for furnace feed blend.

It is estimated that the BFO operation could cost some $2 million to build and $1.09/tonne to operate.

2.0 ACRONYMS AND DEFINITIONS

The following terms are used throughout this report:

Term	Definition
Al_2O_3	Alumina
Company	Shree Minerals Limited (ASX: SHH)
Engineer	Engenium Pty Ltd (Engenium)
Project	Nelson Bay River Iron Ore Project (NBR)
BFO	Beneficiable Feed Ore
BIF	Banded Iron Formation
CaFe	Calcined Iron
CWI	(Bond) Crushing Work Index
DR	Direct Reduction (iron production)
DTR	Davis Tube Recovery
Fe	Iron
LIMS	Low Intensity Magnetic Separation
LOI	Loss On Ignition
P	Phosphorous
P80	80% Passing
PFS	Pre-Feasibility Study
RC	Reverse Circulation (drilling)
Representative	A typical example or specimen of a group, quality, or kind
SG	Specific Gravity
SiO_2	Silica
SS	Scoping Study
UCS	Unconfined Compressive Strength
µ	microns

Table 2.1 – Acronyms and Definitions

3.0 INTRODUCTION

Shree Mineral's Nelson Bay River Iron Ore Project includes two contiguous tenements, EL41/2004 (Nelson Bay River) and EL54/2008 (Rebecca Creek), located in the northwest of Tasmania.

Figure 3.1 – Nelson Bay River Tenement Location

The mineralisation centres upon a magnetite skarn in the northwest of the deposit and includes an oxidised zone near surface (Figure 3.2).

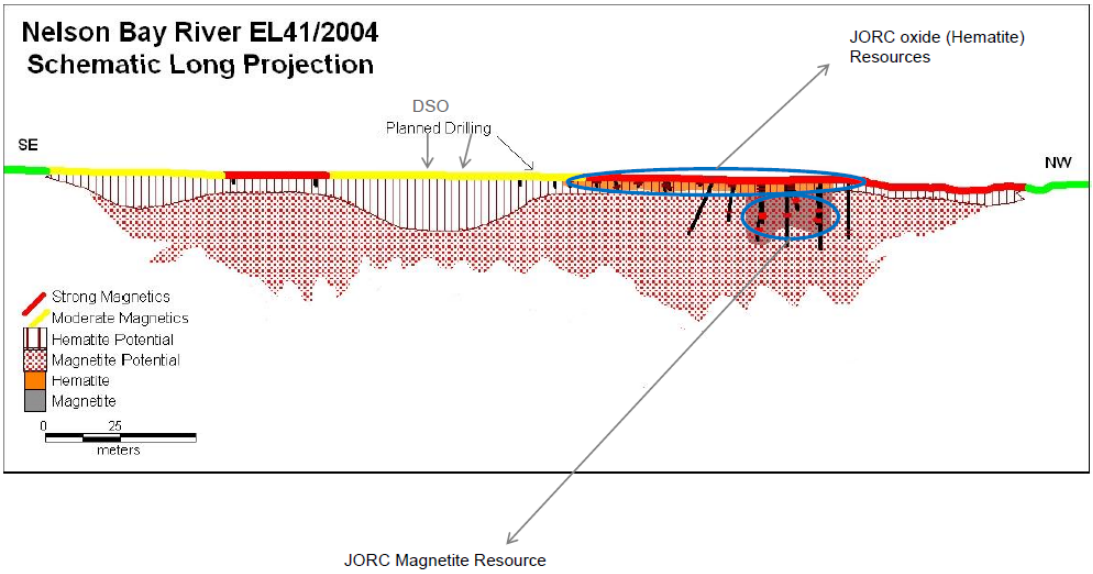


Figure 3.2 – Nelson Bay River Iron Resource Long Section with Ore Zones

The oxidised resource, as reported in Shree's ASX announcement May 13, 2011, denoted below in Table 3.1 below. This report is concerned with the metallurgical evaluation of the zone labelled "NBR North" with remarks Beneficiable Material.

Area	Mass	Grade (%)							Remarks
	(Mt)	Fe	SiO_2	Al_2O_3	P	S	LOI	CaFe	
NBR South	0.5	57.8	8.8	1.4	0.06	0.03	6.3	61.7	DSO
NBR North	0.7	46.8	23.7	2.7	0.02	0.07	4.7	49.1	Beneficiable material
Total	1.2	51.0	18.	2.2	0.04	0.05	5.3	53.9	
Note: The resource estimate is estimated at 30% Fe cut off and with an average density of 3t/m3; The CaFe grade is the calcined iron grade with the loss on ignition material removed from the block grade value [CaFe=Fe/(1-LOI/100)]. The resources are of Inferred Category.									

Table 3.1 – Goethite–Hematite Resource

4.0 SAMPLING AND COMPOSITING

The testwork was performed on PQ cores taken from three drillholes that twinned the previous drillholes NBR12, NBR13 and NBR14 (the new holes were referenced as NBR12A, NBR13A and NBR14A). The drillhole locations are shown in Figure 4.1.

Holes NBR13A and NBR14A were located in the weathered zone above the Magnetite Resource (located between 9900 mN and 10200mN), and drill hole NBR12A was located near surface adjacent to & immediately south of the magnetite resource at 9800mN.

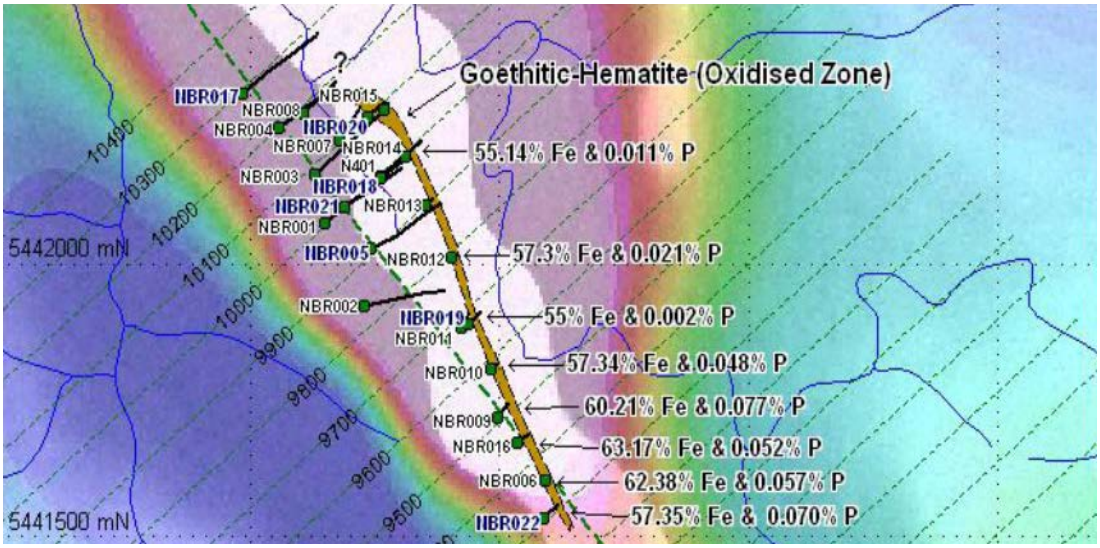


Figure 4.1 – Nelson Bay River Selected Drillhole Locations

Photos of the core from the three drillholes are given in Appendix C.

Ammtec Ltd performed the work, at their Perth laboratory.

4.1 Drillhole Composites

A compositing plan was developed based on the original drillholes' interval grades, magnetic susceptibility readings and observation of the new core.

Two composites were prepared. One composite (Composite 1) used intervals from hole NBR12A and the other (Composite 2) a combination of holes NBR13A and NBR14A. The composite intervals, and their magnetic susceptibilities, are shown in Table 4.1.

Composite	Hole Reference	From	To	Magnetic Susceptibility
Composite1	NBR012A	7.5	17.75	19
Composite 2	NBR013A	14.95	26.42	433
	NBR014A	5.4	16.8	250

Table 4.1 – Composite Development

5.0 TESTPLANS

Metallurgical testwork has to be performed in a controlled manner, especially when tests are performed under different conditions. This control results from using testplans, schematic diagrams that show the workflow for the programme. A testplan was drawn up for the two Beneficiable Feed Ore (BFO) composites.

5.1 Beneficiated Ore Composite Testwork

The NBR composites were to be subjected to beneficiation, based on magnetic separation. The grind size is critical so it was assessed for each ore type to clarify the project grind size further.

In industrial operations, magnetic separation is usually performed using Low Intensity Magnetic Separators (LIMS) to target the magnetite rather than the hematite material. However, in this instance there is a significant amount of hematite mineralisation so a gravity based testwork programme was performed in parallel with the LIMS to assess the potential of hematite upgrade.

A Wet High Intensity Separation (WHIMS) stage was included as a magnetic scavenger to assess the full magnetic recovery potential of the ore.

Physical testwork had already been performed on this ore so was excluded from this programme.

This work was performed following the testplan shown in Figure 5.1 overleaf.

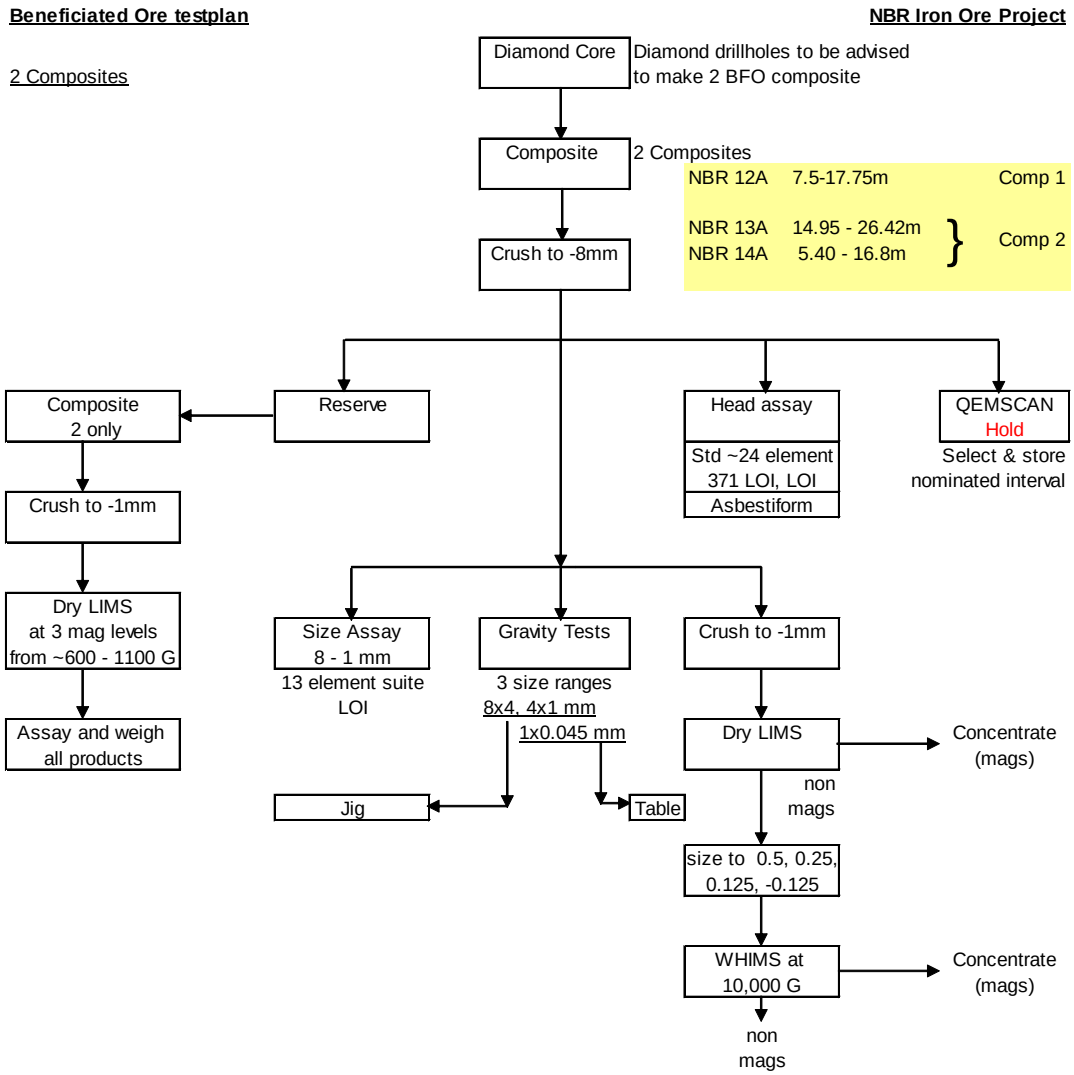


Figure 5.1 – Beneficiated Ore Composite Testplan

6.0 RESULTS AND DISCUSSION

The test results were reported progressively. The results are summarised and discussed in the following sections. A description of the metallurgical testwork is in Appendix A. The full laboratory report from Ammtec is in Appendix B.

The tests were performed on crushed composites and included:

- Head Assay:
  - Head analysis,
  - Asbestiform survey,
- Ore Beneficiation Tests, including:
  - Assay by Size,
  - Gravity Based Beneficiation, and
  - Magnetic Separation Based Beneficiation.

6.1 Head Assay

A number of tests were performed on each composite's head sample.

The main test is the head assay to determine the analysis of the ore.

The presence of asbestiform material is critical for the Occupational Health and Safety aspects of the Project going forward, so was also assessed.

6.1.1 Head Analysis

A head sample determines the chemical constituents of the sample. The full assay is shown in Appendix B but the major components are listed below in Table 6.1.

Composite	Fe%	SiO_2%	Al_2O_3%	P%	S%	LOI%	CaFe%
1	53.0	16.8	0.69	0.027	0.04	6.1	56.4
2	53.1	13.9	2.58	0.013	0.05	4.0	55.3

Table 6.1 – Composite Head Assays

Although the iron grade for both composites is 53%, but they have different mineral composition.

Composite 1 contains more hematite but the head assay showed high silica, but low levels of alumina, phosphorous and sulphur.

Composite 2 is differentiated from Composite 1 by its location and higher magnetite content, determined via visual inspection and measurement of magnetic susceptibility (Table 4.1). Composite 2 has high silica and (>2%) alumina contents (Table 1.1 and Table 6.1).

Calcined iron grade is the iron grade of the material once the volatile compounds are removed by heating to an elevated temperature, usually 1000°C.

6.1.2 Asbestiform Assessment

The two composites' head samples were examined by a mineralogist for the presence of fibrous mineralisation.

The Mineralogist did not detect any asbestos-like fibres in either sample.

There were fibres of unknown genesis detected Composite 2; this would need further investigation in future programmes. The full, unabridged Mineralogy report is in Appendix D.

6.2 Ore Beneficiation Testwork

The ore from both composites is not of a grade that could normally be sold as DSO material, so it needs upgrading. Such upgrading is termed “beneficiation”. The beneficiation potential of the material was tested using:

- a size assay,
- gravity tests, and
- magnetic tests.

6.2.1 Size Assay

The samples were crushed to a nominal 80% passing 8mm and sized on a standard screen stack, to 1mm. The various size fractions were weighed and assayed to give the size assay. This indicates whether there is formation of a high grade fraction, which could be the basis of a product stream. The size assay results from this testwork are in Table 6.2 overleaf.

The calculated head values correlate well with the head assays showing that the sampling techniques used are appropriate and the ore tested is consistent.

Unconventionally, the ore improved in both iron grade and impurities with decreasing size for both composites. However, all of the size fractions assayed an iron grade in the BFO range and there was no significantly higher (or lower) grade size fraction generated from the crushing and screening, showing that the potential for such simple beneficiation is low. As such, there is little to be gained by further assessment of this data to show how the iron behaves at various sizings.

Composite 1							
Size (mm)	Wt. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI (%)
6.3	14.1	51.7	18.8	0.62	0.025	0.03	6.0
4.0	25.3	52.6	17.3	0.56	0.027	0.03	6.2
2.0	19.6	52.7	17.1	0.66	0.029	0.04	6.4
1.0	10.7	52.8	16.6	0.76	0.029	0.04	6.4
Pan	30.3	53.9	15.1	0.82	0.025	0.05	6.1
Calc'd Head	100.0	52.9	16.7	0.69	0.027	0.04	6.2
Assay Head		53.0	16.8	0.69	0.027	0.04	6.1

Composite 2							
Size (mm)	Wt. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI (%)
6.3	12.9	51.4	14.8	3.56	0.017	0.05	4.7
4.0	24.4	52.9	14.0	2.62	0.012	0.04	4.0
2.0	18.0	53.0	13.7	2.50	0.012	0.05	3.9
1.0	10.8	53.7	14.1	2.42	0.013	0.05	3.6
Pan	33.9	54.4	13.7	2.16	0.012	0.05	3.6
Calc'd Head	100.0	53.3	14.0	2.54	0.013	0.05	3.9
Assay Head		53.1	13.9	2.58	0.013	0.05	4.0

Table 6.2 – Composite Size Assays

6.2.2 Gravity Based Beneficiation

In the initial study of gravity based beneficiation, both composites were crushed to 8mm and sized into three test size ranges. Jigging testwork was performed at the coarser size ranges of -8, +4mm and -4, +1mm and shaking table testwork was performed at -1mm.

6.2.2.1 Jigging Testwork

The jig test consists of putting the sample into a stack of cylindrical strata elements. The entire stack is stroked and pulsed to stratify the sample. Each stratum is then assayed.

The strata data for Composite 1, both the -8, +4 mm and -4, +1 mm material is below in Table 6.3.

-8, +4mm Composite 1								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Feed	39.4	52.3	18.5	0.59	0.026	0.03	5.9	55.6
Top	3.2	49.3	20.5	0.79	0.024	0.046	7.4	53.2
Upper	13.2	48.2	22.9	0.60	0.024	0.038	6.9	51.7
Upper Central	15.9	49.3	21.6	0.71	0.028	0.032	6.8	52.9
Lower Central	19.3	51.6	17.9	0.64	0.029	0.033	6.6	55.3
Lower	19.7	53.8	15.8	0.47	0.027	0.027	61	5738
Bottom	28.7	55.2	15.9	0.35	0.024	0.023	51	58.2
Calc'd HEAD	100.0	52.2	18.2	0.53	0.026	0.028	6.2	55.6

-4, +1mm Composite 1								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Feed	30.3	52.9	17.0	0.67	0.028	0.04	6.3	56.5
Top	14.4	49.8	20.4	0.82	0.026	0.042	6.9	53.5
Upper	13.4	52.0	17.8	0.70	0.029	0.036	6.8	55.8
Upper Central	14.7	52.1	17.6	0.70	0.028	0.035	6.8	55.9
Lower Central	17.3	52.7	16.7	0.68	0.030	0.036	6.8	56.5
Lower	16.0	53.7	15.8	0.60	0.029	0.032	6.4	57.4
Bottom	24.2	56.0	14.1	0.44	0.028	0.027	5.7	59.4
Calc'd HEAD	100.0	53.1	16.7	0.64	0.028	0.028	6.5	56.7

Table 6.3 – Composite 1, Jigging Individual Strata Results

The cumulative data, starting from the lowest strata, are shown in Table 6.4.

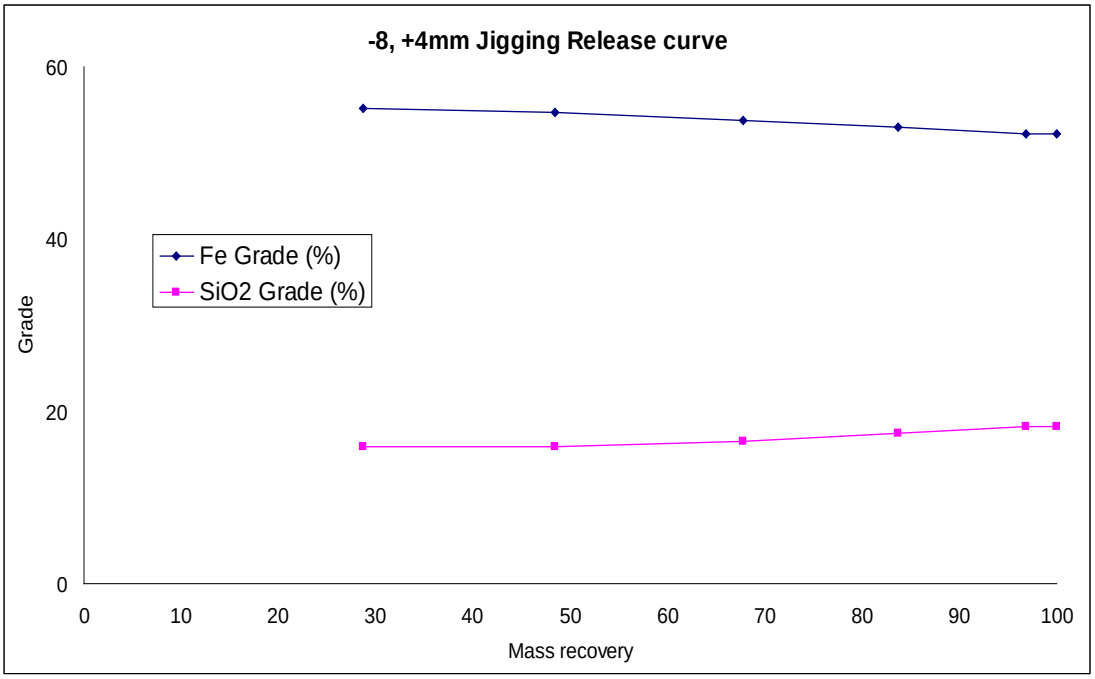
-8, +4mm Composite 1								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Top	100.0	52.2	18.2	0.53	0.026	0.03	6.2	55.6
Upper	96.8	52.3	18.2	0.53	0.026	0.03	6.1	55.7
Upper Central	83.7	52.9	17.4	0.51	0.027	0.03	6.0	56.3
Lower Central	67.7	53.8	16.4	0.47	0.026	0.03	5.8	57.1
Lower	48.4	54.6	15.9	0.40	0.025	0.02	5.5	57.8
Bottom	28.7	55.2	15.9	0.35	0.024	0.02	5.1	58.1

-4, +1mm Composite 1								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Top	100.0	53.1	16.7	0.64	0.028	0.03	6.5	56.7
Upper	85.6	53.6	16.1	0.60	0.029	0.03	6.4	57.3
Upper Central	72.1	53.9	15.8	0.59	0.029	0.03	6.4	57.6
Lower Central	57.4	54.4	15.4	0.56	0.029	0.03	6.2	58.0
Lower	40.2	55.1	14.8	0.50	0.028	0.03	6.0	58.6
Bottom	24.2	56.0	14.1	0.44	0.028	0.03	5.7	59.4

Table 6.4 – Composite 1, Cumulative Strata Jigging Results

The jigging results from Composite 1 show, as expected, an improvement in iron grade and impurity levels down the strata. A lower silica grade and corresponding improved iron grade is better achieved with the -4mm test. However, this improvement is not enough to reach the grades required for traditional saleable Australian iron ore.

Starting with the heaviest material and developing the cumulative iron distributions and grades from that product, gradually diluted with each successive stratum, gives the release curves shown in Figure 6.1.



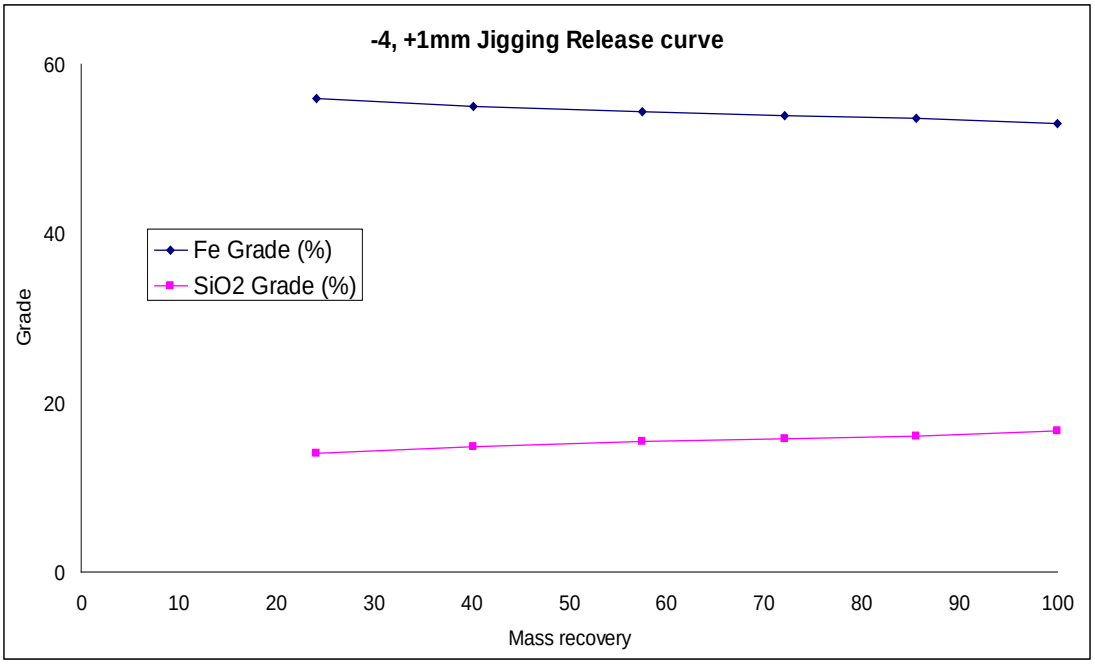


Figure 6.1 –Composite 1 Jigging Release Curves

The individual strata results for the Composite 2 jigging test are in Table 6.5, with the cumulative data in Table 6.6 below.

-8, +4mm Composite 2								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Feed	37.3	52.4	14.1	3.17	0.014	0.04	4.4	54.8
Top	17.2	42.9	22.1	6.59	0.032	0.072	7.15	46.2
Upper	15.2	46.7	17.8	5.98	0.019	0.058	6.36	49.9
Upper Central	14.6	50.5	15.2	4.08	0.014	0.045	5.25	53.3
Lower Central	17.1	54.8	12.9	1.62	0.011	0.049	3.86	57.0
Lower	16.3	57.5	10.9	1.03	0.008	0.036	3.30	59.5
Bottom	19.6	58.9	10.0	0.85	0.008	0.037	2.37	60.3
Calc'd HEAD	100.0	52.1	14.7	3.25	0.015	0.05	4.6	54.7

-4, +1mm Composite 2								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Feed	28.8	53.6	13.9	2.33	0.013	0.05	4.0	55.8
Top	12.8	43.4	23.0	4.93	0.027	0.072	6.8	46.5
Upper	13.4	47.4	18.7	4.22	0.021	0.060	5.8	50.3
Upper Central	15.6	50.9	15.1	3.30	0.015	0.050	5.0	53.6
Lower Central	17.2	55.4	12.0	1.79	0.010	0.037	3.5	57.4
Lower	16.6	57.9	10.5	1.09	0.008	0.035	2.7	59.5
Bottom	24.4	60.2	9.0	0.78	0.007	0.032	1.9	61.4
Calc'd HEAD	100.0	53.7	13.8	2.39	0.013	0.05	4.0	55.9

Table 6.5 –Composite 2, Jigging Individual Strata Results

-8, +4mm Composite 2								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Top	100.0	52.1	14.7	3.25	0.015	0.05	4.6	54.7
Upper	82.8	54.1	13.1	2.56	0.012	0.04	4.1	56.4
Upper Central	67.6	55.7	12.1	1.79	0.010	0.04	3.6	57.8
Lower Central	53.0	57.1	11.2	1.15	0.009	0.04	3.1	59.0
Lower	35.9	58.3	10.4	0.93	0.008	0.04	2.8	59.9
Bottom	19.6	58.9	10.0	0.85	0.008	0.04	2.4	60.3

-4, +1mm Composite 2								
Jig Strata	Mass Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Top	100.0	53.7	13.8	2.39	0.013	0.05	4.0	55.9
Upper	87.2	55.2	12.5	2.02	0.011	0.04	3.5	57.2
Upper Central	73.8	56.6	11.3	1.62	0.010	0.04	3.1	58.4
Lower Central	58.2	58.1	10.3	1.17	0.008	0.03	2.6	59.7
Lower	41.0	59.3	9.6	0.91	0.007	0.03	2.2	60.6
Bottom	24.4	60.2	9.0	0.78	0.007	0.03	1.9	61.4

Table 6.6 –Composite 2, Cumulative Strata Jigging Results

The cumulative strata results of the Composite 2 jigging test show that, as expected, there is an improvement in iron grade and impurity levels toward the bottom strata, especially in the silica and alumina grade. A lower silica grade and corresponding improved iron grade is better achieved with the -4mm test.

This shows that the jig does produce an iron grade material that would be considered saleable.

Starting with the heaviest material and developing the cumulative iron distributions and grades from that product, gradually diluted with each successive stratum gives the release curves shown in Figure 6.2.

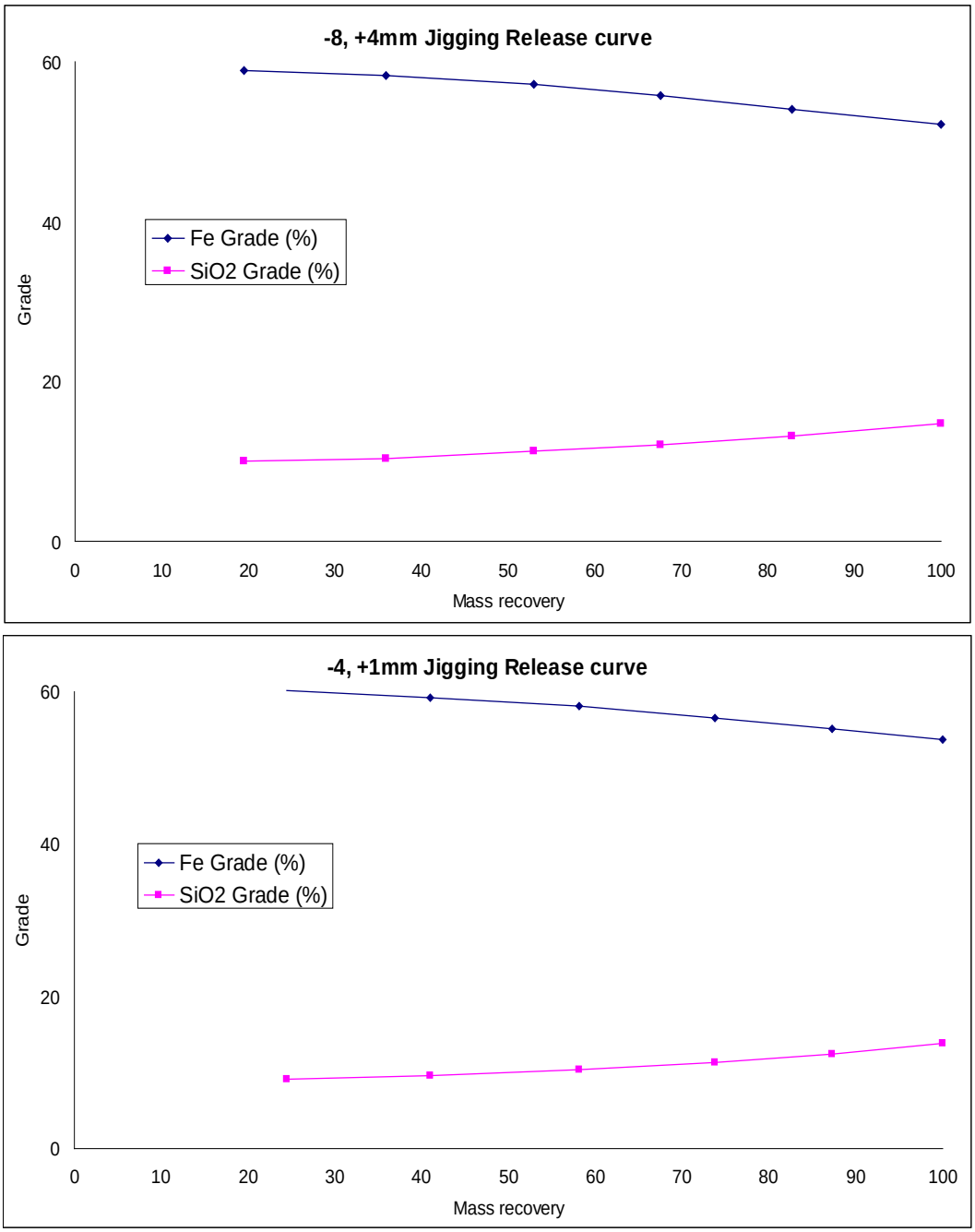


Figure 6.2 –Composite 2 Jigging Release Curves

The potential Composite 2 gravity beneficiated product recoveries and grades are summarised in Table 6.9.

6.2.2.2 Shaking Table Testwork

The shaking table test is used to investigate the potential of low G Force concentrators, such as spirals and is performed on fine ore.

The -1 mm material from the two composites was subjected to the Shaking Table. The cumulative results are in Table 6.7 and Table 6.8, with the appropriate release curves as Figure 6.3 and Figure 6.4.

Table Product	Weight Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Feed	30.3	54.2	15.1	0.80	0.025	0.03	6.1	57.7
Con 1	17.9	63.0	5.0	0.43	0.019	0.02	3.7	65.4
Con 1-2	43.3	58.4	9.9	0.58	0.023	0.03	5.2	61.7
Con 2- 3	71.4	55.7	13.2	0.68	0.025	0.03	5.8	59.2
Con 3- 4	80.3	55.2	13.9	0.72	0.025	0.03	5.9	58.6
Con 4-5	84.9	54.8	14.3	0.74	0.025	0.03	6.0	58.3
Con 5-6	87.6	54.7	14.4	0.76	0.025	0.03	6.0	58.2
Con 6-7	92.6	54.5	14.7	0.77	0.025	0.03	6.0	58.0
Tails	100.0	54.1	15.1	0.80	0.025	0.03	6.1	57.7

Table 6.7 –Composite 1 Cumulative Shaking Table Products

The potential low grade gravity beneficiated product recovery and grade is summarised in Figure 6.3.

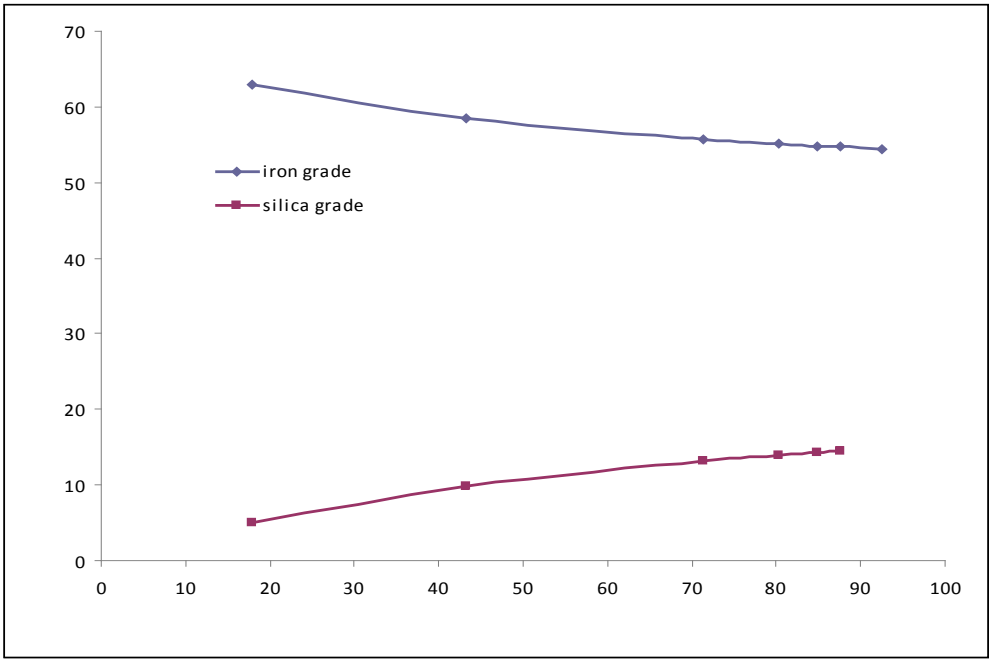


Figure 6.3 –Composite 1 Shaking Table Release Curve

Table Product	Weight Dist. (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Feed	33.9	54.7	13.5	2.12	0.012	0.05	3.7	56.8
Con 1	15.8	67.6	2.6	0.36	0.005	0.01	-0.4	67.3
Con 1-2	43.1	63.6	6.0	0.75	0.008	0.02	1.1	64.3
Con 2- 3	67.5	60.1	9.0	1.20	0.010	0.03	2.1	61.4
Con 3- 4	81.2	57.9	11.0	1.53	0.011	0.03	2.7	59.5
Con 4-5	87.2	57.0	11.8	1.71	0.011	0.03	2.9	58.7
Con 5-6	88.0	56.8	11.9	1.74	0.011	0.03	3.0	58.6
Con 6-7	91.7	56.2	12.4	1.87	0.012	0.03	3.2	58.1
Tails	100.0	55.0	13.5	2.10	0.012	0.03	3.6	57.1

Table 6.8 –Composite 2 Cumulative Shaking Table Products

The potential medium grade gravity beneficiated product recovery and grade is summarised in Table 6.9.

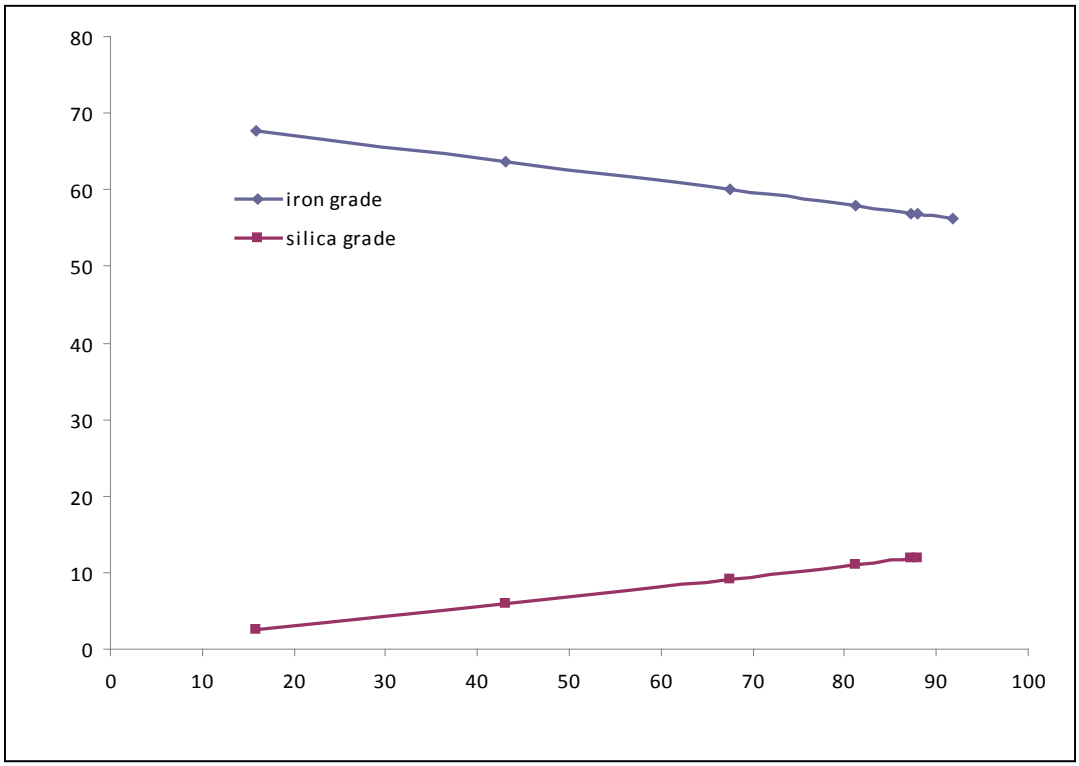


Figure 6.4 –Composite 2 Shaking Table Release Curve

6.2.2.3 Gravity Beneficiation Testwork BFO Product

The results from Composite 2 are more encouraging as the higher grade leads to higher mass recovery at the saleable grade. This recovery matrix is shown below as Table 6.9.

Product	Mass Recovery (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Coarse Jig	19.8	57.1	11.2	1.15	0.009	0.041	3.1	59.0
Fine Jig	19.6	57.1	11.0	1.47	0.009	0.037	3.0	58.8
Table	29.6	57.0	11.8	1.71	0.011	0.032	2.9	58.7
Final	68.9	57.1	11.4	1.48	0.010	0.036	3.0	58.8

Table 6.9 –Composite 2 Gravity BFO Product

While there is a grade improvement the mass recovery of the Composite 1 material is poor. This would, in all likelihood make processing this material uneconomical.

The gravity performance of Composite 2 is considered suitable for further consideration. It makes a suitable grade at a reasonable mass recovery. The alumina value of the concentrate makes it a viable feed blend.

6.2.3 Magnetic Beneficiation

The BFO ore is likely to have developed by oxidation of the magnetite content of the ore body. As such there may be some residual ferro-magnetic minerals, such as magnetite or maghemite, which would respond to magnetic separation. The initial study of the magnetic beneficiation was performed using both the Low Intensity Magnetic Drum Separator (LIMS) and the High Intensity Magnetic Drum Separator (WHIMS).

In this instance, the sample was subjected to a two stage-magnetic separation. After crushing to -1mm, the ore was treated by a dry LIMS, also termed *coarse cobbing*, to concentrate the ferro-magnetic material. The non ferro-magnetic stream was then further reduced in size by grinding, prior to beneficiation through WHIMS at 10,000 Gauss in order to determine the upgrade potential of para-magnetic components.

6.2.3.1 LIMS Testwork

The results of the LIMS tests are supplied below in Table 6.10 and Table 6.11.

Dry LIMS @1100 Gauss	Weight (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI (%)	CaFe (%)
Mags	10.0	55.0	15.3	0.53	0.019	0.04	4.5	57.6
N-Mags	90.0	53.2	16.2	0.72	0.027	0.04	6.3	56.8
Calc'd Head	100	53.4	16.1	0.70	0.026	0.04	6.1	56.9

Table 6.10 – Composite 1; 1st Stage LIMS

The Composite 1 LIMS results show that there is low ferro-magnetic content in this hematite based ore, with a magnetic product of 10% by mass. The magnetic concentrate is of poor iron and silica grade.

The grade and recovery could be improved with higher magnetic intensity WHIMS processing, as this should recover para-magnetic hematite at finer grind sizes. For this reason, WHIMS testing was conducted on the dry LIMS non-mags, in the second stage of the magnetic beneficiation testwork.

Dry LIMS @1100 Gauss	**Weight (%)**	**Fe (%)**	**SiO_2 (%)**	**Al_2O_3 (%)**	**P (%)**	**S (%)**	**LOI (%)**	**CaFe (%)**
Mags	83.6	56.1	11.9	1.72	0.010	0.04	2.9	57.8
N-Mags	16.4	38.9	23.2	6.53	0.030	0.08	8.5	42.5
Calc'd Head	100	53.3	13.8	2.51	0.013	0.05	3.8	55.4

Table 6.11 – Composite 2; 1st Stage LIMS

The Composite 2 LIMS results have a good mass recovery to the mags concentrate at 83.6%.

Following the results of this testwork, further dry LIMS was conducted, at lower Gauss, to determine if a higher grade, lower mass recovery was possible.

The ore was crushed to pass 3 and 1 mm, and subjected to LIMS at varying magnetic strength. The test results are shown below, in Table 6.12.

The low alumina content of the concentrate is likely to be well favoured by customers.

Crushed to -3 mm							
Gauss	Mass Recovery	Fe Grade	Fe Recovery	SiO_2 Grade	SiO_2 Recovery	Al_2O_3 Grade	Al_2O_3 Recovery
1100	88.7	56.5	92.3	12.3	79.9	1.68	61.0
900	83.8	56.3	88.1	12.6	73.9	1.46	50.4
600	83.1	57.1	87.7	11.8	71.9	1.44	49.8
Calc head	100	54.0	100.00	13.9	100	2.42	100
Crushed to -1 mm							
Gauss	Mass Recovery	Fe Grade	Fe Recovery	SiO_2 Grade	SiO_2 Recovery	Al_2O_3 grade	Al_2O_3 Recovery
1100	88.0	56.5	91.8	12.1	78.8	1.74	63.1
900	84.0	57.6	88.5	11.3	71.7	1.53	54.8
600	82.3	57.5	87.3	11.5	69.7	1.55	52.0
Calc head	100	54.4	100.0	13.4	100.0	2.41	100.0

Table 6.12 – Composite 2; Lower Strength LIMS

The lower magnetic strength did have a lower mass recovery (thus a higher rejection rate), at a marginally higher iron grade and a depleted silica grade.

The results show that the coarse LIMS is fairly insensitive to size, so there is little advantage in spending the energy and equipment to crush the material to extreme fines. At 600 Gauss there is a rejection of 17% of the mass, with 30% rejection of silica and 50% of the alumina, and only 13% of the iron lost. This means that the iron upgrades 2.5% while the silica and alumina drop 1.7% and 1.0% respectively.

The lowest magnetic field strength tested was 600 Gauss. As the recovery matrix performance was reasonably insensitive to magnetic strength, the performance of the two sizes at 600 G is shown below in Figure 6.5.

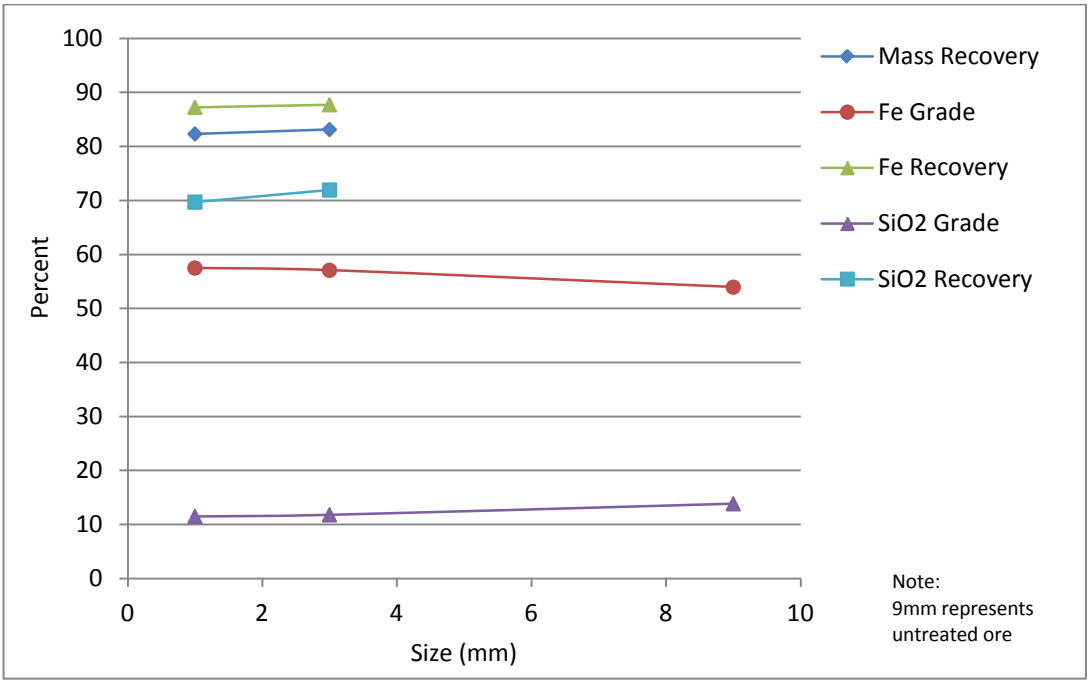


Figure 6.5 –Composite 2 LIMS performance at 600 G

6.2.3.2 WHIMS Testwork

The results of the WHIMS Testwork, on the non-magnetic products of the 1st Stage LIMS, are given in Table 6.13 and Table 6.14 below.

WHIMS @10,000 Gauss	Weight (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI (%)	CaFe (%)
Mags	91.0	54.2	14.6	0.73	0.028	0.029	6.4	57.9
N-Mags	9.0	38.7	36.2	1.42	0.027	0.043	5.5	40.9
Calc'd Head	100.0	52.8	16.5	0.79	0.028	0.030	6.32	56.4

Table 6.13 – Composite 1; 2nd Stage WHIMS

WHIMS @10,000 Gauss	Weight (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI (%)	CaFe (%)
Mags	91.5	39.8	22.3	6.62	0.031	0.067	8.60	43.5
N-Mags	8.5	30.8	40.4	5.47	0.029	0.056	7.47	33.3
Calc'd Head	100.0	39.0	23.8	6.52	0.031	0.066	8.50	42.6

Table 6.14 – Composite 2; 2nd Stage WHIMS

The iron silica relationships determined from the WHIMS testwork for both composites are shown in Figure 6.6 and Figure 6.7 below. The Iron/Silica formulas for these relationships are included.

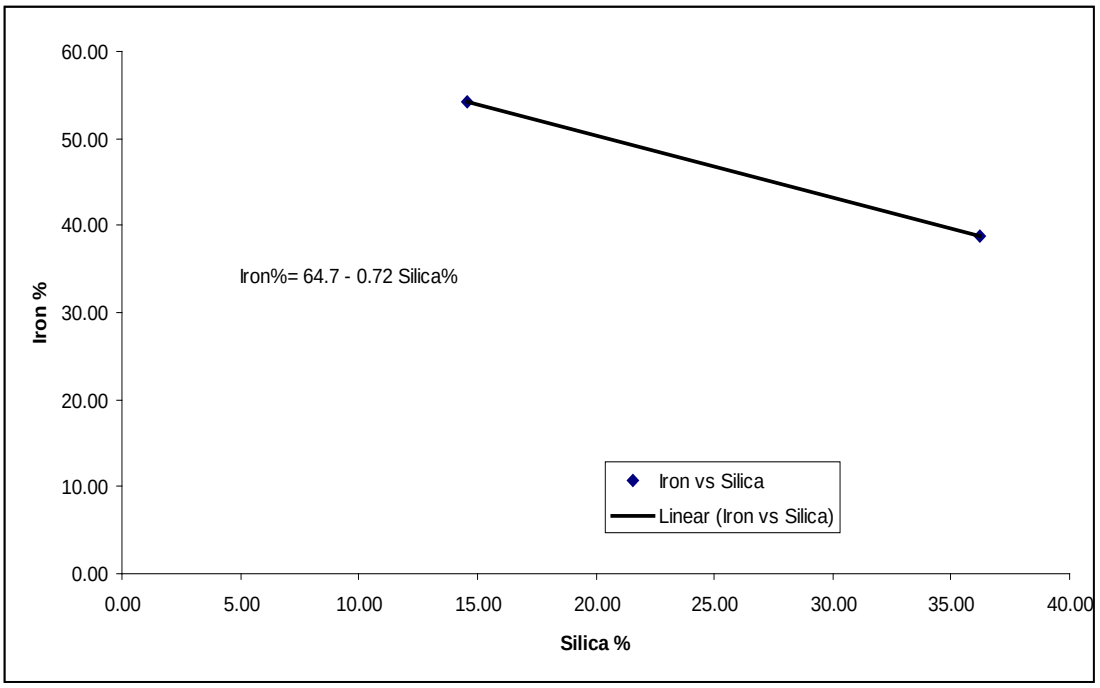


Figure 6.6 – Composite 1 WHIMS Iron vs Silica

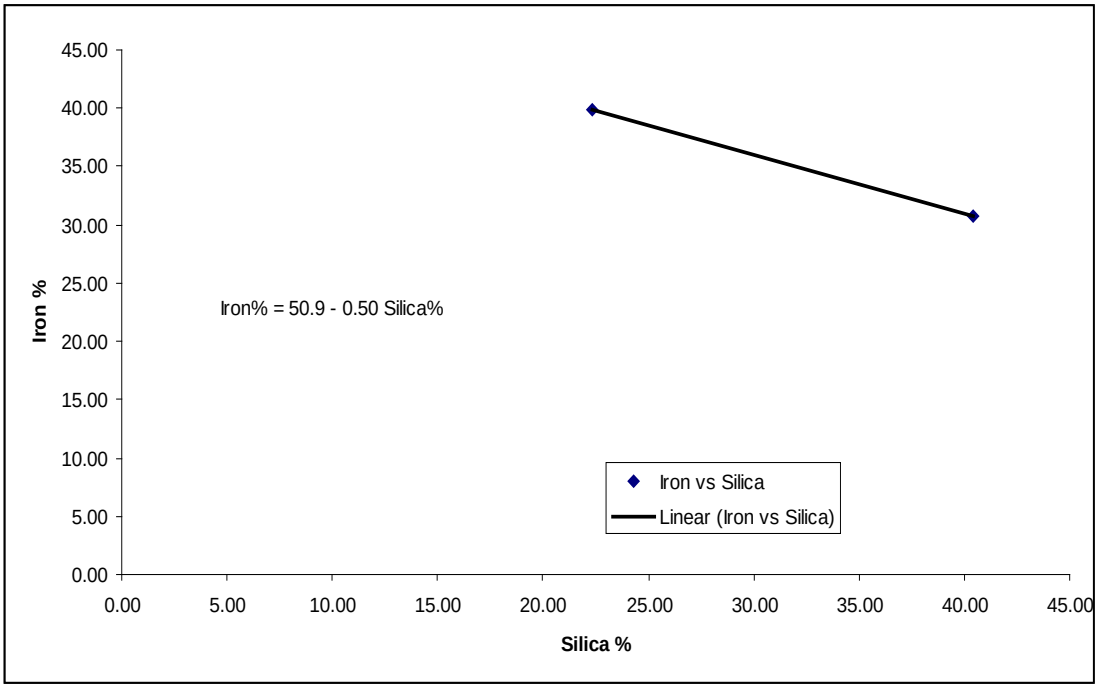


Figure 6.7 – Composite 2 WHIMS Iron vs Silica

For a pure magnetite concentrate, the iron values at zero silica are equal to the iron content of pure magnetite, 72.4%, and the relationship is linear. A pure hematite concentrate at zero silica, and no other impurities, would contain 69.9% iron.

The iron/silica relationship formulas and WHIMS test results show that at zero silica 64.7% is achieved with Composite 1 and 50.9% for Composite 2. This shows the mineralogy of the material is such that even removing the silica, using WHIMS, would not increase the iron grade of the product.

Thus, there is little benefit in high magnetic strength beneficiation of the materials from either of the two composite samples.

7.0 BFO TREATMENT

The BFO operation is mooted to be a transition between the DSO operation and the magnetite production stage of the Project. It is proposed that the contractor will supply feed to the BFO section as a -3mm size ore stream and this ore will be upgraded by LIMS. This stage is expected to be in operation for about one year.

The actual LIMS unit will be subsequently transferred to the main magnetite plant, for use as the coarse cobbing stage of the operation.

The BFO flowsheet is shown schematically as Figure 7.1.

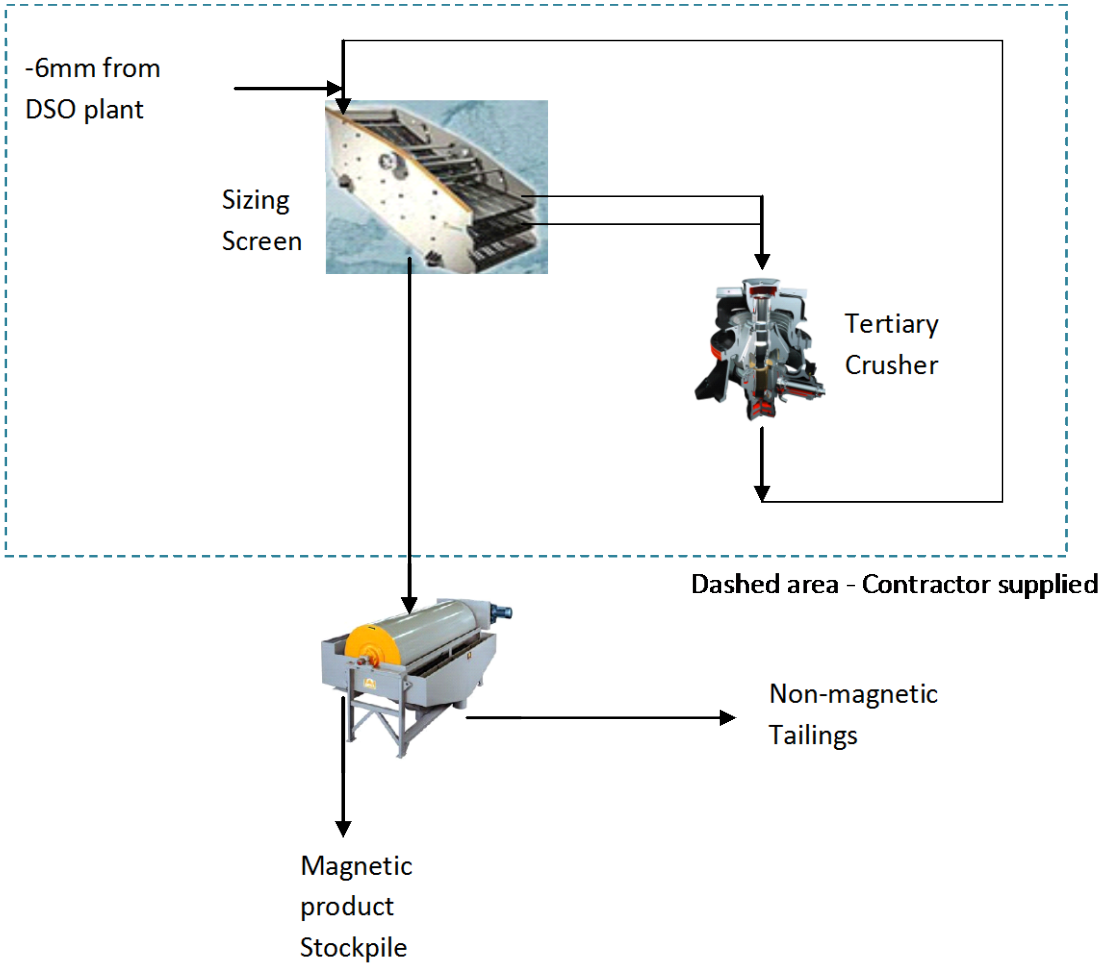


Figure 7.1 – Beneficiable Feed Ore Flowsheet

The equipment for the BFO processing is listed in Table 7.1 below.

Equipment Description	Supplier	Model	Size	Power kW	Price $,000
LIMS	WPE	SDFA25	90Øx180	7.5	114
LIMS Feed Conveyor*	TBA	600 w	30 m	7.5	125
Waste Conveyor*	TBA	600 w	50 m	7.5	190
Product Conveyor*	TBA	600 w	80 m	11	300

Table 7.1 – Equipment Listing for BFO Operation

* Denotes items that may be reused in the main plant.

The total capital cost for these items is $0.83M. If we apply a two and a half times factor for installation and commissioning an installed price of $2.07M applies.

The rest of the process needs to be assessed as a operating cost.

Assuming 12c/kWhr for electrical power and 55 dtph throughput rate gives a rate of $0.10/tonne of ore feed for power.

Assuming one person will operate this section of the plant, at a cost of $125,000 per year, gives a rate of $0.32/tonne of ore feed for labour.

Taking a maintenance rate of 8% of capital cost gives a rate of $0.42/tonne of ore feed for maintenance.

Summing these costs and adding 30% for management and contingency gives a total production cost of $1.09/tonne. This acts as a basis for further discussions.

So, we estimate that the BFO operation could cost some $2 million to build and $1.09/tonne to operate. These figures will need to be confirmed by a more definitive study as the Project progresses.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The two composites are of similar iron grade but have different mineralogical compositions. Neither composite was suitable for direct sale.

The Mineralogist did not detect any asbestos like fibres either sample. There were fibres of unknown genesis detected in Composite 2, which will need further investigation in future programmes.

By combining the products of the gravity based beneficiation testwork, at a cut off grade of 57% iron, the following recoveries and grades could be achieved.

Product	Mass Recovery (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Table	16.5	57.0	11.5	0.58	0.023	0.03	5.2	61.7
Final	16.5	57.0	11.5	0.58	0.023	0.03	5.2	61.7

Table 8.1 – Composite 1 Gravity BFO Product

Product	Mass Recovery (%)	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)	CaFe (%)
Coarse Jig	19.8	57.1	11.2	1.15	0.009	0.041	3.1	59.0
Fine Jig	19.6	57.1	11.0	1.47	0.009	0.037	3.0	58.8
Table	29.6	57.0	11.8	1.71	0.011	0.032	2.9	58.7
Final	68.9	57.1	11.4	1.48	0.010	0.036	3.0	58.8

Table 8.2 – Composite 2 Gravity BFO Product

While there is a grade improvement the mass recovery of the low grade material is poor. This would, in all likelihood make processing this material uneconomical.

The gravity performance of the material from Composite 2 is considered suitable for further consideration. It makes a suitable grade at a reasonable mass recovery.

The Composite 1 LIMS results show that there is low ferro-magnetic content in this hematite-based ore with a magnetic product of 10% by mass. The magnetic concentrate is of poor iron grade with high silica content. The para-magnetic material was not improved by WHIMS treatment as there was little separation; it reported excessively to the magnetic fraction.

The Composite 2 LIMS did show some improvement so the test was repeated on a finer sample, at lower magnetic intensity. The LIMS results for these tests are below, in Table 8.3.

Composite 2, crushed to -1 mm							
Gauss	Mass Recovery	Fe Grade	Fe Recovery	SiO_2 Grade	SiO_2 Recovery	Al_2O_3 grade	Al2O3 Recovery
1100	88.0	56.5	91.8	12.1	78.8	1.74	63.1
900	84.0	57.6	88.5	11.3	71.7	1.53	54.8
600	82.3	57.5	87.3	11.5	69.7	1.55	52.0
Calc head	100	54.4	100.0	13.4	100.0	2.41	100.0

Table 8.3 –Composite 2 LIMS on -1mm material

The lower magnetic strength did have a lower mass recovery (hence a higher rejection rate) at a higher iron grade and depleted silica and alumina grades.

The test showed that the coarse LIMS is fairly insensitive to size so there is little advantage in spending the energy and equipment to crush the material to extreme fines.

The upgrade process should be based on Low Intensity Magnetic Separation (600 Gauss). Later on the equipment used for this could be transferred to the coarse cobbing circuit of the main magnetite production plant. The mass recovery at approximately 82% is attractive. Moreover, this also suggests a substantial reduction in capex cost compared to a gravity separation route and hence is preferred over the latter.

Additionally, the reduction in alumina of the LIMS BFO concentrate makes it a viable product in a feed blend.

It is estimated that the BFO operation could cost some $2 million to build and $1.09/tonne to operate.

9.0 APPENDICES

9.1 Appendix A – Metallurgical Testwork Description

9.2 Appendix B – Ammtec Laboratory Report

9.3 Appendix C – Drill Core Photographs

9.4 Appendix D – Mineralogists' Asbestiform Report

APPENDIX A – METALLURGICAL TESTWORK DESCRIPTION

APPENDIX A – METALLURGICAL TESTWORK DESCRIPTION

The testwork carried out on the composites, providing the results as described in the report, are further detailed in this section.

1.0 ASSAYS

Assays allow for the determination of the grade and level of impurities in the measured ore as an indication of the represented ore types. Results give an indication of potential products, processing requirements and the potential for upgrade.

The assay items include:

1.1 Head Assay

A head assay determines the components of the ore to test for the valuable minerals as well as any deleterious compounds in the ore.

The head grade is the paramount parameter in assessing an ore. In an iron ore this is further emphasised as the suite of impurities is also important. Iron ore is sold on a price per metric tonne unit (mtu), which is the grade, in percentage, of iron in the ore. This price discounts according to the impurity levels. The major impurities encountered in Australian iron ores are Silica (SiO_2) Alumina (Al_2O_3) and Phosphorous (P). Each impurity is assessed on its own merits according to its effect on the iron making process.

1.1.1 Iron

The iron grade of an ore is critical as the impurities make up the rest of the ore. Thus, if the iron grade is too low the impurities are too high, making an ore less valuable. In a magnetite orientated ore the FeO content of the ore is also assessed as this gives an indication of the extent of weathering. A pure magnetite sample will assay 31% FeO while a pure hematite sample will contain no FeO.

The RC chip samples have been tested for magnetic susceptibility and DTR response by the lab so these head assays will be similarly tested, to reconcile the analyses.

1.1.2 Silica

Silica is usually the major impurity and is removed as a flux in the blast furnace, making a (usually) valueless slag. This slag production uses energy and labour for its production and handling, so is minimised. Iron ore usually has silica grades less then 6% by weight.

1.1.3 Alumina

Alumina is another major contaminant, usually at a lower content, but higher penalty rate to silica. Alumina attacks the blast furnace lining and decreases the quality of the blast furnace slag, increasing its viscosity. To enable the slag to be handled well, the alumina in the slag must either be diluted to less than 15% alumina, making a more costly slag, or by increasing the temperature of the melt, which uses more energy. The alumina content of an ore is usually minimised, usually being less than 3% by weight.

1.1.4 Phosphorous

Phosphorous is a contaminant that reports to the iron phase. It makes the iron brittle and is hard to remove. It is critical and rarely sold at levels above 0.1% P in iron ores.

1.1.5 **Sulphur**

Sulphur can be a major concern as its presence leads to penalties in the product pricing due to the need to clean the blast furnace gasses. If it is in a sulphide it can lead to AMD and thus environmental issues.

1.1.6 **Loss On Ignition**

Another major parameter measured in iron ores is called the Loss On Ignition (LOI). This measures the percentage loss of weight of the ore as it is heated to an elevated temperature, usually 900 or 1000°C. This weight is attributable to;

- Water of crystallisation of minerals such as limonite and goethite,
- Carbon dioxide calcined from carbonates minerals such as siderite, limestone and magnesite,
- A weight gain when magnetite oxidises to hematite (this records as a negative LOI.)

The LOI can vary from -3%, for a nearly pure magnetite, to 10% for goethite. This parameter gives an appreciation of the sample mineralogy.

1.1.7 **Asbestiform**

In the interests of Occupational Health and Safety it is prudent to check for the presence of hazardous fibrous mineralisation. While not all asbestiform minerals are a health hazard their presence, or lack thereof, is a major design consideration. Thus a sub sample of the head assay sample is sent for asbestiform assessment to determine if this mineralisation will be an issue for the Project.

Representative portions of each sample are mounted for examination by a mineralogist under optical examination in conjunction with dispersive staining techniques, using AS4964.2004 as the basis for the analysis. The examinations are performed in triplicate. Any suspect fibres are extracted for examination in appropriate refractive index oils, by polarised light microscopy. This method has a detection limit in the range of 1 part in a quantity between 1,000 and 10,000.

1.2 Size Assay

Size assay results for direct saleable ore (DSO) allow calculation of the lump and fines products generated from crushing and assessment of the mineral distribution by size. There may be a grade differentiation between the lump and fines products, or the ore may have potential for the grade to be improved by removal of certain size fractions.

The calculated head values are compared to the head assays to ensure they correlate well; this indicates that the sampling techniques used are appropriate and the ore is consistent.

For ore requiring beneficiation, the knowledge of how each size forms and behaves is critical. The ore composites should be control crushed and screened to the expected product size. This may show the potential to remove either a high-grade, or a low-grade, component early in the process.

Various intermediate products will also be size assayed to assess the beneficiation process so it can be directed to an optimum.

1.3 Mineralogical Assessment

The mineralogy of any ore being beneficiated is always critical as the objective is only to remove enough of the impurity (predominantly silica) to make a saleable grade. A number of size ranges of the samples are studied. To this end, the mineralogical study will focus on

the sizing and liberation of the silica mineralisation. The QEMSCAN or MLA study will assess;

- The composition of the ore minerals,
- The size of the ore particles,
- The liberation characteristics of the commercial mineral from the host particles.

2.0 ORE BENEFICIATION

Ore with a grade that precludes its sale as DSO would need to be upgraded to achieve cut-off product grades. This upgrading by physical means is termed 'beneficiation'. Beneficiation testwork indicates the most suitable method of separating or upgrading ore and can also demonstrate the degree of liberation required to achieve desired product grades.

The test items include:

2.1 Gravity Separation Testwork

Gravity separation testwork is performed on a range of size fractions from 8 to below 0.1 mm. This allows the relationship between size and product grade to be assessed so that larger sized samples can be used to make the testwork flowsheet more robust.

2.1.1 Jigging

Gravity separation of the coarser particles, from 8mm to 1mm, is assessed using jigging. Jigging is a process where light particles are "floated" off a bed of ore. The ore is wetted and passed to a machine where it is subject to a pulsating water flow, which separates the light and heavy particles. The heavy mineral flows to the base of the bed, displacing the lighter materials to overflow into a launder. A simple jig is shown in **Error! Reference source not found.**Figure 1.

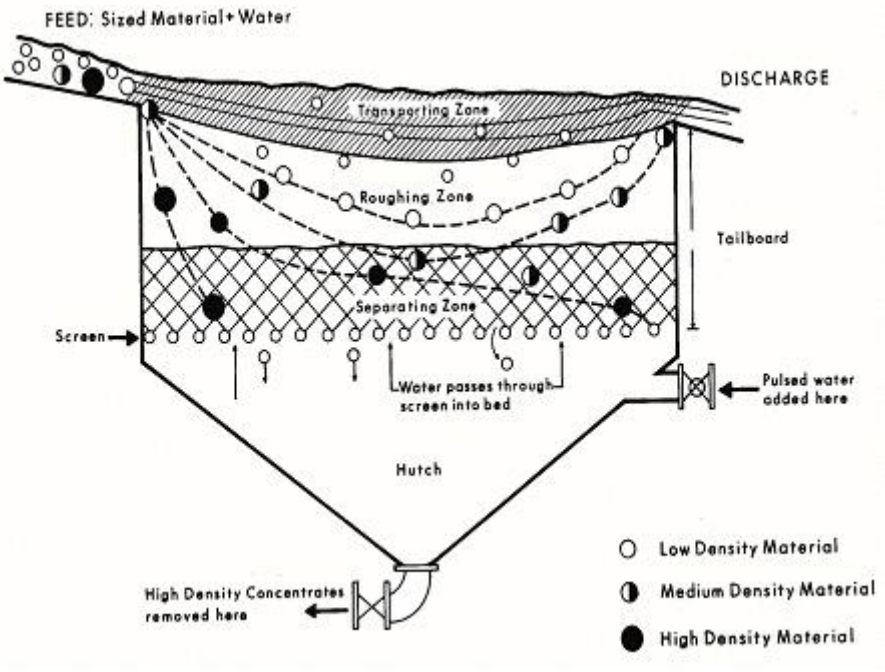


Figure 1 – Typical Jig Cross Section

The jig test consists of putting the sample into a stack of cylindrical strata elements. The entire stack is stroked to stratify the sample. Each stratum is then assayed.

2.1.2 **Shaking Table**

Gravity separation of the -1mm size fraction is assessed using a wet shaking table to separate the heavy particles from the light particles. The shaking table test is used to investigate the potential of low G force concentrators, such as spirals. The slurry is fed to the corner of a shaking table and the shaking action stratifies the light and heavy particles for removal at different points of the table, as in Figure 2, which demonstrates collection of a beneficial mineral with higher relative SG.

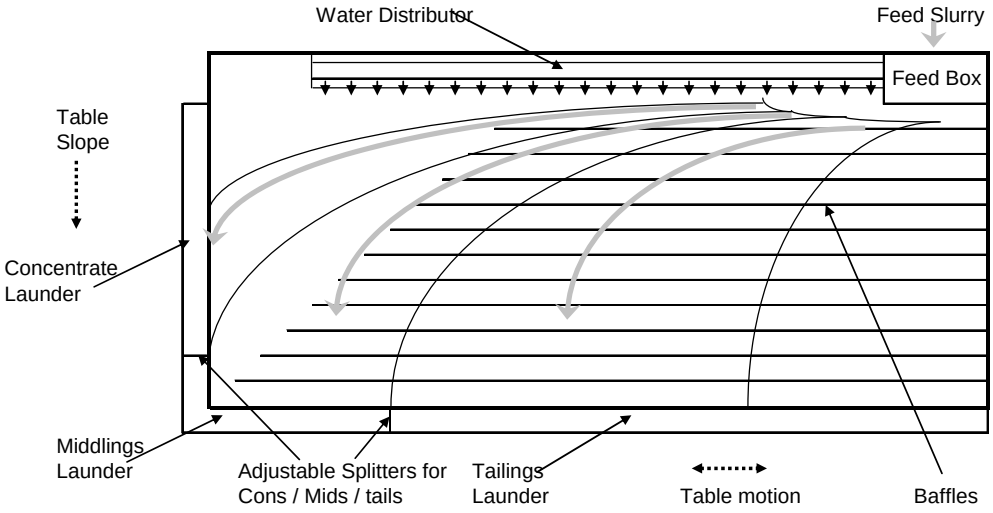


Figure 2 –Action of a Wet Shaking Table

Dry shaking tables, or air tables, are used in the dry separation of fine particles such as zircon. The shaking table is covered in cloth, with low pressure air forced through the cloth to partially fluidise the particles. This combined with the shaking action segregates the particles according to SG and size. The collection points are opposite to the wet shaking table; the lighter particles are removed at the top of the table and the heavier particles discharge at the bottom.

2.2 Magnetic Separation Testwork

Magnetic separation uses the magnetic quality of a mineral (such as magnetite) to either be removed from a holding stream and be actively separated from the host rock or be attracted to a surface while the non-magnetics are allowed to fall or be swept off so the magnetic material is passively separated. The ore will respond to magnetic separation if it contains magnetite or if oxidation to hematite has resulted in residual ferro-magnetic minerals, such as residual magnetite and maghemite. Other iron containing minerals, such as ilmenite and pyrrhotite, may be weakly or strongly magnetic.

Both the magnetic and the non-magnetic fractions are size assayed. The magnetic fraction is assessed to determine if further liberation is required to achieve an improved product grade. The non-magnetic fraction is assessed to investigate any preferential separation from the size assay of the original composite.

Davis Tube Testing assesses the magnetic separation performance at the exploration stage. The Davis Tube is a low tonnage laboratory unit so the actual performance of the ore must be gauged by its response to equipment used commercially. This is performed using the cross belt separator, Low Intensity Magnetic Drum Separator (LIMS), High Intensity Magnetic Drum Separator (WHIMS) and Rare Earth Magnetic Rolls (RER).

2.2.1 **Davis Tube Testing**

Davis Tube Testing assesses the magnetic separation performance at the exploration stage. The Davis Tube is an especially designed magnetic separator operated to a specific condition to produce consistent results. Thus any variation in results is due to the quality of the ore or its preparation. A Davis Tube is shown in Figure 3.

A number of composite samples are ground to a range of sizings and subjected to Davis Tube testing, to determine the quantity and quality of concentrate produced at different sizings.

Industry benchmarks for magnetite concentrates are generally considered to be <2% silica for the premium Direct Reduction (DR) concentrate and < 5% silica for Blast Furnace (BF) grade. Pure magnetite has a grade of 72.4% Fe, but is more conventionally sold as a ~68% Fe product.

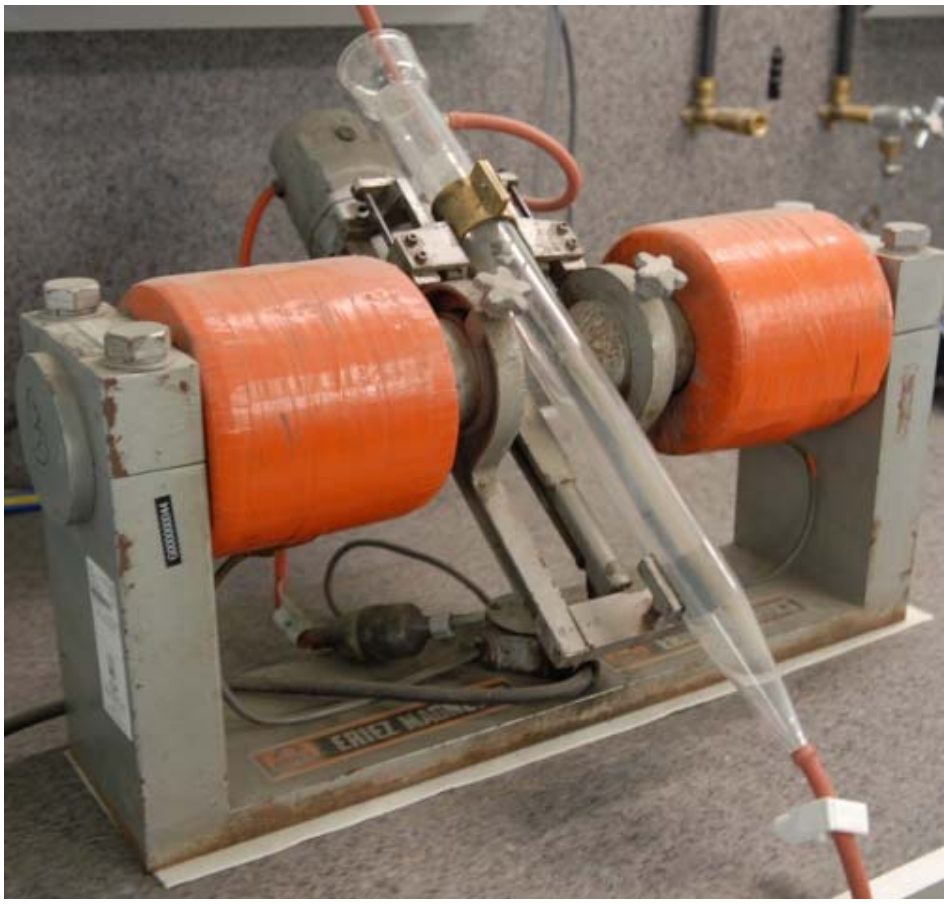


Figure 3 – Davis Tube, General View

2.2.2 **Low Intensity Magnetic Separation**

The LIMS drum is based on a hollow shell outside of a magnetic sector that remains stationary. Slurry is introduced to the feed zone and flows to the magnetic zone where it is attracted to the drum. The magnetic strength of the LIMS is less than 1000 Gauss and attracts only ferro-magnetic material. The non-magnetic particles flow from the drum freely. The magnetic material remains on the drum until it enters a discharge zone free of magnetic forces where it is washed into a specific launder. See Figure 4 below:

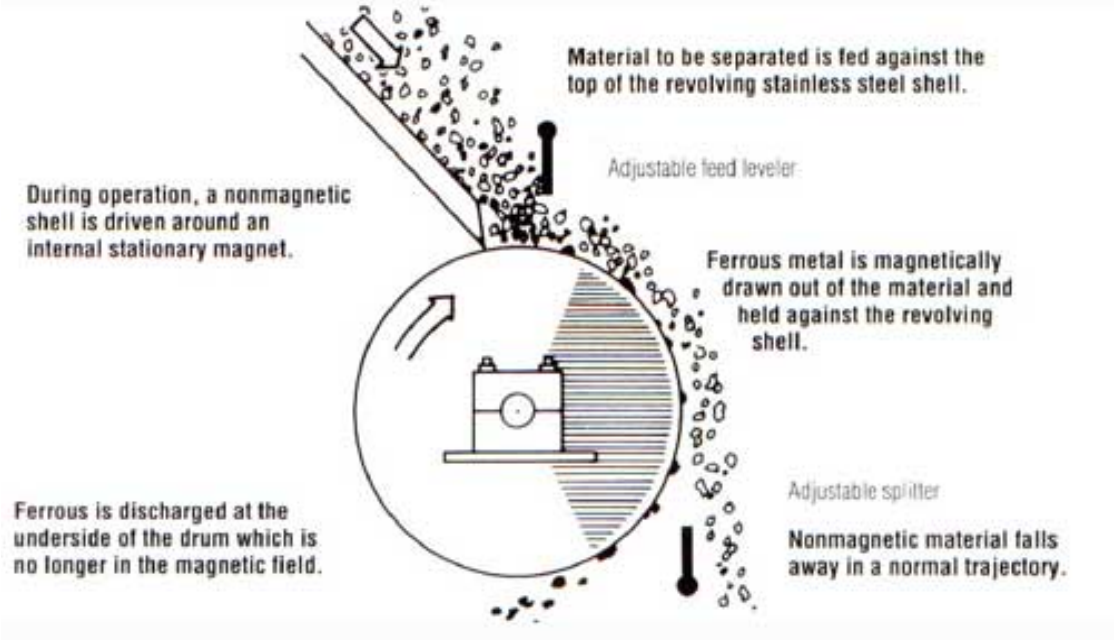


Figure 4 – Principle of Operation of LIMS

Coarse cobbing is performed in a similar manner to the LIMS test with the test material being dry and between 1 and 3mm in size.

2.2.3 **Wet High Intensity Magnetic Separation**

With a magnetic strength of 10000 Gauss, the WHIMS drum attracts both ferro-magnetic and para-magnetic material. If the ore contains both ferro-magnetic and para-magnetic constituents, this can result in higher recovery at the expense of lower grade.

Coarse cobbing, LIMS and WHIMS can be performed in succession in order to determine if the removal of coarse gangue prior to utilising grinding detracts from the performance of the ore. The results should show whether ferro-magnetic material can be removed earlier in the circuit at potentially lower cost.

APPENDIX B – AMMTEC LABORATORY REPORT

Beneficiation Testing

conducted upon

Two (2) BFO Composites of Nelson Bay River Iron Ore

for

Shree Minerals/Engenium

Report No. A13636

November 2011

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FIGURES

APPENDICES

SUMMARY

Mr Neville Dowson of Engenium, and on behalf of Shree Minerals, requested ALS Ammtec to carry out a metallurgical test program on two (2) BFO composites formed from three (3) drill core holes received.

Testing performed on these samples provided the results below:

• Head Assay Analysis

HEAD ASSAYS						
Sample ID	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)
Composite 1	53.00	16.80	0.69	0.03	0.035	6.11
Composite 2	53.10	13.90	2.58	0.01	0.047	3.98

• Asbestiform Analysis

Asbestiform analysis was carried out externally on portions of the composites.

ALS Ammtec Ref.	SGS Reference	Matrix/Description	Fibre Identification
Composite 1	PE058329.001	Soil, 500 g	No Asbestos Detected
Composite 2	PE058329.002	Soil, 500 g	No Asbestos Detected

• Size Assay Analysis

ASSAY BY SIZE ANALYSIS - COMPOSITE 1														
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
-8.0+6.3	14.1	51.70	13.8	18.80	15.9	0.62	12.7	0.03	13.2	0.030	11.5	5.99	13.7
-6.3+4.0	25.3	52.60	25.1	17.30	26.1	0.56	20.6	0.03	25.5	0.032	21.9	6.15	25.2
-4.0+2.0	19.6	52.70	19.5	17.10	20.0	0.66	18.8	0.03	21.3	0.035	18.6	6.36	20.2
-2.0+1.0	10.7	52.80	10.7	16.60	10.6	0.76	11.8	0.03	11.6	0.038	11.0	6.38	11.1
-1.0	30.3	53.90	30.8	15.10	27.3	0.82	36.1	0.03	28.3	0.045	36.9	6.08	29.8
CALC'D HEAD	100.0	52.91	100.0	16.73	100.0	0.69	100.0	0.03	100.0	0.037	100.0	6.17	100.0
ASSAY HEAD		53.00		16.80		0.69		0.03		0.035		6.11	

ASSAY BY SIZE ANALYSIS – COMPOSITE 2															
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
–8.0+6.3	12.9	51.40	12.4	14.80	13.7	3.56	18.0	0.02	17.2	0.048	13.1	4.65	15.4
–6.3+4.0	24.4	52.90	24.2	14.00	24.5	2.62	25.2	0.01	23.0	0.043	22.3	4.03	25.2
–4.0+2.0	18.0	53.00	17.9	13.70	17.7	2.50	17.7	0.01	17.0	0.049	18.8	3.94	18.2
–2.0+1.0	10.8	53.70	10.9	14.10	10.9	2.42	10.3	0.01	11.0	0.049	11.3	3.61	10.0
–1.0	33.9	54.40	34.6	13.70	33.2	2.16	28.8	0.01	31.9	0.048	34.5	3.59	31.2
CALC'D HEAD	**100.0**	**53.32**	**100.0**	**13.96**	**100.0**	**2.54**	**100.0**	**0.01**	**100.0**	**0.047**	**100.0**	**3.90**	**100.0**
ASSAY HEAD		**53.10**		**13.90**		**2.58**		**0.01**		**0.047**		**3.98**	

- ## Stratification Jig

JIG STRATIFICATION RESULTS – COMPOSITE 1 (–8.0+4.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	**1**	28.7	55.20	30.3	15.90	25.0	0.35	18.8	0.02	26.3	0.023	22.1	5.07	23.6
	2	19.7	53.80	20.3	15.80	17.1	0.47	17.4	0.03	20.3	0.027	17.8	6.08	19.4
	3	19.3	51.60	19.1	17.90	19.0	0.64	23.2	0.03	21.4	0.033	21.4	6.64	20.8
	4	15.9	49.30	15.1	21.60	18.9	0.71	21.2	0.03	17.0	0.032	17.1	6.84	17.7
	5	13.2	48.20	12.2	22.90	16.5	0.60	14.8	0.02	12.1	0.038	16.7	6.88	14.7
	6	3.2	49.30	3.0	20.50	3.6	0.79	4.7	0.02	2.9	0.046	4.9	7.36	3.8
CALC'D HEAD		**100.0**	**52.18**	**100.0**	**18.24**	**100.0**	**0.53**	**100.0**	**0.03**	**100.0**	**0.030**	**100.0**	**6.17**	**100.0**
ASSAY HEAD			**52.30**		**18.50**		**0.59**		**0.03**		**0.030**		**5.94**	

JIG STRATIFICATION RESULTS – COMPOSITE 1 (-4.0+1.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	24.2	56.00	25.5	14.10	20.3	0.44	16.7	0.03	23.9	0.027	19.2	5.69	21.2
	2	16.0	53.70	16.2	15.80	15.1	0.60	15.1	0.03	16.4	0.032	15.1	6.45	15.9
	3	17.3	52.70	17.2	16.70	17.2	0.68	18.5	0.03	18.3	0.036	18.3	6.80	18.1
	4	14.7	52.10	14.4	17.60	15.4	0.70	16.2	0.03	14.5	0.035	15.1	6.84	15.5
	5	13.4	52.00	13.2	17.80	14.3	0.70	14.8	0.03	13.8	0.036	14.3	6.78	14.0
	6	14.4	49.80	13.6	20.40	17.6	0.82	18.7	0.03	13.2	0.042	17.9	6.88	15.3
CALC'D HEAD		100.0	53.06	100.0	16.74	100.0	0.64	100.0	0.03	100.0	0.034	100.0	6.49	100.0
ASSAY HEAD			52.90		17.00		0.67		0.03		0.036		6.30	

JIG STRATIFICATION RESULTS – COMPOSITE 2 (-8.0+4.0 mm)														
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	19.6	58.90	22.1	9.97	13.3	0.85	5.1	0.01	10.3	0.037	14.7	2.37	10.0
	2	16.3	57.50	18.0	10.90	12.1	1.03	5.2	0.01	8.6	0.036	11.9	3.30	11.6
	3	17.1	54.80	18.0	12.90	15.1	1.62	8.5	0.01	12.4	0.049	17.0	3.86	14.3
	4	14.6	50.50	14.1	15.20	15.1	4.08	18.3	0.01	13.5	0.045	13.3	5.25	16.6
	5	15.2	46.70	13.6	17.80	18.4	5.98	27.9	0.02	19.0	0.058	17.9	6.36	20.9
	6	17.2	42.90	14.2	22.10	25.9	6.59	34.9	0.03	36.3	0.072	25.2	7.15	26.6
CALC'D HEAD		100.0	52.14	100.0	14.66	100.0	3.25	100.0	0.02	100.0	0.049	100.0	4.63	100.0
ASSAY HEAD			52.40		14.10		3.17		0.01		0.044		4.43	

JIG STRATIFICATION RESULTS – COMPOSITE 2 (-4.0+1.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	24.4	60.20	27.4	9.04	16.0	0.78	8.0	0.01	12.8	0.032	17.3	1.90	11.7
	2	16.6	57.90	17.9	10.50	12.6	1.09	7.6	0.01	9.9	0.035	12.9	2.73	11.4
	3	17.2	55.40	17.8	12.00	15.0	1.79	12.9	0.01	12.9	0.037	14.1	3.54	15.4
	4	15.6	50.90	14.8	15.10	17.0	3.30	21.5	0.02	17.5	0.050	17.3	4.99	19.7
	5	13.4	47.40	11.9	18.70	18.2	4.22	23.7	0.02	21.1	0.060	17.9	5.85	19.9
	6	12.8	43.40	10.3	23.00	21.3	4.93	26.4	0.03	25.8	0.072	20.4	6.75	21.8
CALC'D HEAD		100.0	53.68	100.0	13.82	100.0	2.39	100.0	0.01	100.0	0.045	100.0	3.95	100.0
ASSAY HEAD			53.60		13.90		2.33		0.01		0.048		3.96	

- ***Wilfley* Table Separation**

WILFLEY TABLE SEPARATION TEST RESULTS FOR HG COMPOSITE -1.00 mm FRACTION													
Wilfley Table Cons	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Con 1	17.9	63.00	20.8	4.97	5.9	0.43	9.6	0.019	13.8	0.022	13.1	3.72	10.9
Con 2	25.3	55.20	25.8	13.40	22.5	0.69	21.8	0.026	26.6	0.032	27.0	6.32	26.3
Con 3	28.1	51.60	26.8	18.30	34.2	0.83	29.2	0.027	30.7	0.034	31.8	6.68	30.8
Con 4	8.9	50.60	8.3	19.00	11.2	1.04	11.6	0.026	9.3	0.035	10.3	6.81	9.9
Con 5	4.6	49.10	4.2	21.40	6.6	1.17	6.8	0.026	4.9	0.026	4.0	6.81	5.2
Con 6	2.7	50.70	2.5	18.80	3.4	1.11	3.7	0.025	2.7	0.032	2.9	6.79	3.0
Con 7	5.0	50.10	4.6	19.40	6.4	1.11	6.9	0.024	4.8	0.027	4.5	6.80	5.6
Tails	7.4	50.20	6.9	19.80	9.7	1.12	10.4	0.024	7.2	0.026	6.4	6.78	8.2
CALC'D HEAD	100.0	54.15	100.0	15.06	100.0	0.80	100.0	0.025	100.0	0.030	100.0	6.09	100.0
ASSAY HEAD		54.20		14.90		0.80		0.024		0.043		6.07	

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 1 (HG)–1.00 mm FRACTION													
Wilfley Table Cons	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Con 1	15.8	67.60	19.4	2.55	3.0	0.36	2.7	0.005	6.4	0.011	5.4	-0.44	-1.9
Con 2	27.3	61.30	30.4	8.02	16.3	0.98	12.8	0.009	19.8	0.027	22.8	1.99	15.1
Con 3	24.4	53.80	23.8	14.40	26.1	1.99	23.1	0.013	25.6	0.039	29.4	3.87	26.3
Con 4	13.7	47.50	11.8	20.40	20.8	3.17	20.7	0.017	18.8	0.049	20.8	5.42	20.7
Con 5	6.0	43.70	4.8	23.80	10.6	4.12	11.8	0.018	8.7	0.044	8.2	6.43	10.8
Con 6	0.8	42.70	0.6	23.70	1.4	4.73	1.8	0.020	1.3	0.034	0.8	7.59	1.7
Con 7	3.7	42.10	2.9	24.20	6.7	4.92	8.8	0.020	6.0	0.034	3.9	7.96	8.3
Tails	8.3	41.60	6.3	24.70	15.2	4.64	18.3	0.020	13.4	0.034	8.7	8.24	19.0
CALC'D HEAD	100.0	55.03	100.0	13.46	100.0	2.10	100.0	0.012	100.0	0.032	100.0	3.58	100.0
ASSAY HEAD		54.70		13.50		2.12		0.012		0.047		3.66	

- **Dry LIMS**

COARSE COBBING – DRY LIMS TEST @ P_{100} 1.00 mm – COMPOSITE 1													
Dry LIMS @ 1100 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	10.0	55.00	10.3	15.30	9.5	0.53	7.6	0.019	7.3	0.040	10.5	4.54	N/A
Non–Mags	90.0	53.20	89.7	16.20	90.5	0.72	92.4	0.03	92.7	0.04	89.5	6.28	N/A
CALC'D HEAD	100.0	53.38	100.0	16.11	100.0	0.70	100.0	0.026	100.0	0.038	100.0	6.11	0.0
ASSAY HEAD		53.00		16.80		0.69		0.03		0.035		6.11	

COARSE COBBING – DRY LIMS TEST @ P_{100} 1.00 mm – COMPOSITE 2													
Dry LIMS @ 1100 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	83.6	56.10	88.0	11.90	72.3	1.72	57.3	0.010	62.9	0.039	10.5	2.90	N/A
Non–Mags	16.4	38.90	12.0	23.20	27.7	6.53	42.7	0.030	37.1	0.080	89.5	8.51	N/A
CALC'D HEAD	100.0	53.28	100.0	13.75	100.0	2.51	100.0	0.026	100.0	0.038	100.0	3.82	0.0
ASSAY HEAD		53.10		13.90		2.58		0.01		0.047		3.98	

- **Dry LIMS Non-Magnetics Size Assay Analysis**

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 1													
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
-1.0-0.50	30.3	52.00	29.6	17.60	32.5	0.69	27.9	0.03	32.5	0.033	34.5	6.74	32.3
-0.50+0.25	19.5	52.60	19.2	17.40	20.6	0.74	19.3	0.03	20.9	0.033	22.2	6.40	19.8
-0.25+0.125	15.9	54.80	16.3	15.40	14.9	0.65	13.8	0.03	14.7	0.029	15.9	5.66	14.2
-0.125	34.4	54.00	34.9	15.30	32.0	0.85	39.0	0.03	31.8	0.023	27.3	6.18	33.7
CALC'D HEAD	100.0	53.25	100.0	16.42	100.0	0.75	100.0	0.03	100.0	0.029	100.0	6.31	100.0
ASSAY HEAD		53.20		16.20		0.72		0.03		0.038		6.28	

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 2													
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
-1.0-0.50	34.1	38.90	33.9	23.30	33.7	6.74	35.4	0.03	35.1	0.077	38.6	8.52	34.0
-0.50+0.25	22.2	38.30	21.8	22.90	21.6	7.49	25.6	0.03	26.8	0.076	24.8	8.38	21.8
-0.25+0.125	17.8	38.90	17.6	24.70	18.6	5.95	16.3	0.03	17.0	0.076	19.8	8.41	17.5
-0.125	25.9	40.40	26.7	23.70	26.0	5.70	22.7	0.02	21.1	0.044	16.7	8.84	26.8
CALC'D HEAD	100.0	39.15	100.0	23.56	100.0	6.50	100.0	0.03	100.0	0.068	100.0	8.55	100.0
ASSAY HEAD		38.90		23.20		6.53		0.03		0.081		8.51	

- **WHIMS**

WHIMS @ 10000 GAUSS ON DRY LIMS NON-MAGS (<1.00 mm) - COMPOSITE 1													
WHIMS @ 10000 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	91.0	54.20	93.4	14.60	80.4	0.73	83.9	0.028	91.3	0.029	87.3	6.40	N/A
Non-Mags	9.0	38.70	6.6	36.20	19.6	1.42	16.1	0.03	8.7	0.04	12.7	5.48	N/A
CALC'D HEAD	**100.0**	**52.81**	**100.0**	**16.53**	**100.0**	**0.79**	**100.0**	**0.028**	**100.0**	**0.030**	**100.0**	**6.32**	**0.0**
ASSAY HEAD		**53.20**		**16.20**		**0.72**		**0.03**		**0.038**		**6.28**	

WHIMS @ 10000 GAUSS ON DRY LIMS NON-MAGS (<1.00 mm) - COMPOSITE 2													
WHIMS @ 10000 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	91.5	39.80	93.3	22.30	85.5	6.62	92.8	0.031	92.0	0.067	92.8	8.60	N/A
Non-Mags	8.5	30.80	6.7	40.40	14.5	5.47	7.2	0.03	8.0	0.06	7.2	7.47	N/A
CALC'D HEAD	**100.0**	**39.03**	**100.0**	**23.85**	**100.0**	**6.52**	**100.0**	**0.031**	**100.0**	**0.066**	**100.0**	**8.50**	**0.0**
ASSAY HEAD		**38.90**		**23.20**		**6.53**		**0.03**		**0.081**		**8.51**	

1. INTRODUCTION

Mr Neville Dowson representing Engenium, and on behalf of Shree Minerals, requested ALS Ammtec to carry out the following metallurgical test program on two (2) BFO composites formed from three (3) drill core holes received.

- Composite selection by client
- Crush to -19 mm and mix/split for testwork
- Crush approximately 90 kg to -8 mm and mix/split for testwork
- Head assay analysis
- Asbestiform analysis
- Size assay analysis -8 mm material
- Dry screening into -8+4, -4+1 and -1 mm
- Stratification jig separation
- *Wilfley* table separation
- Crush portion to -1 mm for dry LIMS
- Dry LIMS -1 mm material
- Size assay analysis - dry LIMS non-magnetics
- WHIMS at 10000 gauss - dry LIMS non-magnetics

The testwork was controlled by Mr Neville Dowson on behalf of Shree Minerals. Lee Hung supervised the program on behalf of ALS Ammtec. Test results were communicated between ALS Ammtec and the client as they became available, in this way the program progressed on a fully informed basis.

RON GROGAN
Chief Executive – Metallurgy

LEE HUNG
Senior Metallurgist

2. COMPOSITE FORMATION

Composites 1 and 2 were formed from the PQ drill received as per the following:

COMPOSITE DETAILS					
Composite	**Hole No.**	**From (m)**	**To (m)**	**Wet (kg)**	**Dry (kg)**
1	**NBR 012A**	7.7	16.7	99.6	93.3
2	**NBR 013A**	14.9	26.42	289.5	269.7
	NBR 014A	5.4	16.8		

3. ANALYTICAL

Chemical analysis was carried out by ALS Ammtec analytical laboratories in Balcatta, Western Australia.

4. SAMPLE PREPARATION

The following sample preparation was undertaken on the two (2) test composites:

1. Crush to -19 mm and mix/split for testwork.
2. Crush approximately 90 kg to -8 mm and mix/split for testwork.
3. Crush portion to -1 mm for dry LIMS.

5. HEAD ASSAYS

A portion of each of the test composite was sent to ALS Ammtec analytical laboratories for twenty-four (24) element iron ore suite XRF analysis and LOI-1000.

A summary of the head assay is shown below:

HEAD ASSAYS						
Sample ID	Fe (%)	SiO_2 (%)	Al_2O_3 (%)	P (%)	S (%)	LOI-1000 (%)
Composite 1	53.00	16.80	0.69	0.03	0.035	6.11
Composite 2	53.10	13.90	2.58	0.01	0.047	3.98

The complete head assay results can be found in Appendix I.

6. ASBESTIFORM ANALYSIS

Representative portions from each of the three two (2) composites were sent to SGS Environmental Laboratories in Newburn, Western Australia for asbestiform analysis.

A summary of the asbestiform assay results is given below:

ALS Ammtec Ref.	SGS Reference	Matrix/Description	Fibre Identification
Composite 1	PE058329.001	Soil, 500 g	No Asbestos Detected
Composite 2	PE058329.002		

The complete head asbestiform analysis can be found in Appendix II.

7. SIZE ASSAY ANALYSIS

Representative sub-samples of the two (2) test composites at -8 mm underwent size assay analysis.

7.1 Test Procedure

The test procedure is as follows:

(1) Dry screen at 8.0, 6.3, 4, 2 and 1 mm on a *Cheers* mechanical screen shaker.

(2) Screening was continued until it was "judged" that screening was complete.

(3) Recover, weigh and assay each screen fraction.

(4) From the test data calculate the element and weight distribution.

7.2 Test Results

A summary of the size assay analysis is shown below:

ASSAY BY SIZE ANALYSIS - COMPOSITE 1													
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
-8.0+6.3	14.1	51.70	13.8	18.80	15.9	0.62	12.7	0.03	13.2	0.030	11.5	5.99	13.7
-6.3+4.0	25.3	52.60	25.1	17.30	26.1	0.56	20.6	0.03	25.5	0.032	21.9	6.15	25.2
-4.0+2.0	19.6	52.70	19.5	17.10	20.0	0.66	18.8	0.03	21.3	0.035	18.6	6.36	20.2
-2.0+1.0	10.7	52.80	10.7	16.60	10.6	0.76	11.8	0.03	11.6	0.038	11.0	6.38	11.1
-1.0	30.3	53.90	30.8	15.10	27.3	0.82	36.1	0.03	28.3	0.045	36.9	6.08	29.8
CALC'D HEAD	**100.0**	**52.91**	**100.0**	**16.73**	**100.0**	**0.69**	**100.0**	**0.03**	**100.0**	**0.037**	**100.0**	**6.17**	**100.0**
ASSAY HEAD		**53.00**		**16.80**		**0.69**		**0.03**		**0.035**		**6.11**	

ASSAY BY SIZE ANALYSIS – COMPOSITE 2													
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
–8.0+6.3	12.9	51.40	12.4	14.80	13.7	3.56	18.0	0.02	17.2	0.048	13.1	4.65	15.4
–6.3+4.0	24.4	52.90	24.2	14.00	24.5	2.62	25.2	0.01	23.0	0.043	22.3	4.03	25.2
–4.0+2.0	18.0	53.00	17.9	13.70	17.7	2.50	17.7	0.01	17.0	0.049	18.8	3.94	18.2
–2.0+1.0	10.8	53.70	10.9	14.10	10.9	2.42	10.3	0.01	11.0	0.049	11.3	3.61	10.0
–1.0	33.9	54.40	34.6	13.70	33.2	2.16	28.8	0.01	31.9	0.048	34.5	3.59	31.2
CALC'D HEAD	100.0	53.32	100.0	13.96	100.0	2.54	100.0	0.01	100.0	0.047	100.0	3.90	100.0
ASSAY HEAD		53.10		13.90		2.58		0.01		0.047		3.98	

Full details of the results are found in Appendix III.

8. STRATIFICATION JIG SEPARATION

Approximately 80 kg of the two (2) test composites at -8 mm were dry screened at 4 and 1 mm prepared for stratification jig testwork. Separate jigging tests on -8+4 and -4+1 mm were undertaken with the -1 mm fraction reserved for *Wilfley* table concentration.

8.1 Test Procedure

The test procedure was as follows:

(1) Portions of the test material were placed into the stratification chamber of the jig apparatus and the hutch filled with water.

(2) The jig was run at set parameters of pulse height, pulse cycle rate and residence time to achieve effective separation.

(3) Each stratification chamber was removed and the strata recovered.

(4) The jig products were sub-sampled for assay.

(5) From the test data calculate the element and weight distribution.

8.2 Test Results

A summary of the test results is provided in the following tables:

JIG STRATIFICATION RESULTS – COMPOSITE 1 (-8.0+4.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	28.7	55.20	30.3	15.90	25.0	0.35	18.8	0.02	26.3	0.023	22.1	5.07	23.6
	2	19.7	53.80	20.3	15.80	17.1	0.47	17.4	0.03	20.3	0.027	17.8	6.08	19.4
	3	19.3	51.60	19.1	17.90	19.0	0.64	23.2	0.03	21.4	0.033	21.4	6.64	20.8
	4	15.9	49.30	15.1	21.60	18.9	0.71	21.2	0.03	17.0	0.032	17.1	6.84	17.7
	5	13.2	48.20	12.2	22.90	16.5	0.60	14.8	0.02	12.1	0.038	16.7	6.88	14.7
	6	3.2	49.30	3.0	20.50	3.6	0.79	4.7	0.02	2.9	0.046	4.9	7.36	3.8
CALC'D HEAD		100.0	52.18	100.0	18.24	100.0	0.53	100.0	0.03	100.0	0.030	100.0	6.17	100.0
ASSAY HEAD			52.30		18.50		0.59		0.03		0.030		5.94	

JIG STRATIFICATION RESULTS – COMPOSITE 1 (-4.0+1.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	24.2	56.00	25.5	14.10	20.3	0.44	16.7	0.03	23.9	0.027	19.2	5.69	21.2
	2	16.0	53.70	16.2	15.80	15.1	0.60	15.1	0.03	16.4	0.032	15.1	6.45	15.9
	3	17.3	52.70	17.2	16.70	17.2	0.68	18.5	0.03	18.3	0.036	18.3	6.80	18.1
	4	14.7	52.10	14.4	17.60	15.4	0.70	16.2	0.03	14.5	0.035	15.1	6.84	15.5
	5	13.4	52.00	13.2	17.80	14.3	0.70	14.8	0.03	13.8	0.036	14.3	6.78	14.0
	6	14.4	49.80	13.6	20.40	17.6	0.82	18.7	0.03	13.2	0.042	17.9	6.88	15.3
CALC'D HEAD		100.0	53.06	100.0	16.74	100.0	0.64	100.0	0.03	100.0	0.034	100.0	6.49	100.0
ASSAY HEAD			52.90		17.00		0.67		0.03		0.036		6.30	

JIG STRATIFICATION RESULTS – COMPOSITE 2 (-8.0+4.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	19.6	58.90	22.1	9.97	13.3	0.85	5.1	0.01	10.3	0.037	14.7	2.37	10.0
	2	16.3	57.50	18.0	10.90	12.1	1.03	5.2	0.01	8.6	0.036	11.9	3.30	11.6
	3	17.1	54.80	18.0	12.90	15.1	1.62	8.5	0.01	12.4	0.049	17.0	3.86	14.3
	4	14.6	50.50	14.1	15.20	15.1	4.08	18.3	0.01	13.5	0.045	13.3	5.25	16.6
	5	15.2	46.70	13.6	17.80	18.4	5.98	27.9	0.02	19.0	0.058	17.9	6.36	20.9
	6	17.2	42.90	14.2	22.10	25.9	6.59	34.9	0.03	36.3	0.072	25.2	7.15	26.6
CALC'D HEAD		100.0	52.14	100.0	14.66	100.0	3.25	100.0	0.02	100.0	0.049	100.0	4.63	100.0
ASSAY HEAD			52.40		14.10		3.17		0.01		0.044		4.43	

JIG STRATIFICATION RESULTS – COMPOSITE 2 (-4.0+1.0 mm)															
Jig Strata		Mass (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Products	1	24.4	60.20	27.4	9.04	16.0	0.78	8.0	0.01	12.8	0.032	17.3	1.90	11.7
	2	16.6	57.90	17.9	10.50	12.6	1.09	7.6	0.01	9.9	0.035	12.9	2.73	11.4
	3	17.2	55.40	17.8	12.00	15.0	1.79	12.9	0.01	12.9	0.037	14.1	3.54	15.4
	4	15.6	50.90	14.8	15.10	17.0	3.30	21.5	0.02	17.5	0.050	17.3	4.99	19.7
	5	13.4	47.40	11.9	18.70	18.2	4.22	23.7	0.02	21.1	0.060	17.9	5.85	19.9
	6	12.8	43.40	10.3	23.00	21.3	4.93	26.4	0.03	25.8	0.072	20.4	6.75	21.8
CALC'D HEAD		100.0	53.68	100.0	13.82	100.0	2.39	100.0	0.01	100.0	0.045	100.0	3.95	100.0
ASSAY HEAD			53.60		13.90		2.33		0.01		0.048		3.96	

Full details of the results are found in Appendix IV.

9. *WILFLEY* TABLE CONCENTRATION

Portions of the two (2) test composites -1 mm fraction underwent *Wilfley* table separation.

9.1 Test Procedure

The test procedure was as follows for each sample:

(1) The dry sample was slowly fed onto a 2 by 4 foot laboratory *Wilfley* shaking table.

(2) The operating conditions (table angle, feed and water rates) were adjusted to optimise separation.

(3) Each concentrate and tailings product was recovered, dried, weighed, and sub-sampled for assay.

(4) From the test data the weight and elemental distribution were calculated.

9.2 Test Results

A summary of the *Wilfley* table bulk screening results has been included below:

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 1-1.00 mm FRACTION													
Wilfley Table Cons	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Con 1	17.9	63.00	20.8	4.97	5.9	0.43	9.6	0.019	13.8	0.022	13.1	3.72	10.9
Con 2	25.3	55.20	25.8	13.40	22.5	0.69	21.8	0.026	26.6	0.032	27.0	6.32	26.3
Con 3	28.1	51.60	26.8	18.30	34.2	0.83	29.2	0.027	30.7	0.034	31.8	6.68	30.8
Con 4	8.9	50.60	8.3	19.00	11.2	1.04	11.6	0.026	9.3	0.035	10.3	6.81	9.9
Con 5	4.6	49.10	4.2	21.40	6.6	1.17	6.8	0.026	4.9	0.026	4.0	6.81	5.2
Con 6	2.7	50.70	2.5	18.80	3.4	1.11	3.7	0.025	2.7	0.032	2.9	6.79	3.0
Con 7	5.0	50.10	4.6	19.40	6.4	1.11	6.9	0.024	4.8	0.027	4.5	6.80	5.6
Tails	7.4	50.20	6.9	19.80	9.7	1.12	10.4	0.024	7.2	0.026	6.4	6.78	8.2
CALC'D HEAD	**100.0**	**54.15**	**100.0**	**15.06**	**100.0**	**0.80**	**100.0**	**0.025**	**100.0**	**0.030**	**100.0**	**6.09**	**100.0**
ASSAY HEAD		**54.20**		**14.90**		**0.80**		**0.024**		**0.043**		**6.07**	

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 2-1.00 mm FRACTION													
Wilfley Table Cons	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Con 1	15.8	67.60	19.4	2.55	3.0	0.36	2.7	0.005	6.4	0.011	5.4	-0.44	-1.9
Con 2	27.3	61.30	30.4	8.02	16.3	0.98	12.8	0.009	19.8	0.027	22.8	1.99	15.1
Con 3	24.4	53.80	23.8	14.40	26.1	1.99	23.1	0.013	25.6	0.039	29.4	3.87	26.3
Con 4	13.7	47.50	11.8	20.40	20.8	3.17	20.7	0.017	18.8	0.049	20.8	5.42	20.7
Con 5	6.0	43.70	4.8	23.80	10.6	4.12	11.8	0.018	8.7	0.044	8.2	6.43	10.8
Con 6	0.8	42.70	0.6	23.70	1.4	4.73	1.8	0.020	1.3	0.034	0.8	7.59	1.7
Con 7	3.7	42.10	2.9	24.20	6.7	4.92	8.8	0.020	6.0	0.034	3.9	7.96	8.3
Tails	8.3	41.60	6.3	24.70	15.2	4.64	18.3	0.020	13.4	0.034	8.7	8.24	19.0
CALC'D HEAD	**100.0**	**55.03**	**100.0**	**13.46**	**100.0**	**2.10**	**100.0**	**0.012**	**100.0**	**0.032**	**100.0**	**3.58**	**100.0**
ASSAY HEAD		**54.70**		**13.50**		**2.12**		**0.012**		**0.047**		**3.66**	

Full details of the results are found in Appendix V.

10. DRY LOW INTENSITY MAGNETIC SEPARATION (LIMS)

Portions of the two (2) test composites -1 mm fractions were passed separately through a laboratory dry LIMS separator at 1200 gauss and 25 rpm. For each test the dry LIMS magnetic and non-magnetic products were recovered, weighed and assayed.

10.1 Test Procedure

The test procedure was as follows:

(1) Samples were passed through an *Eriez* dry LIMS drum at nominally 1200 gauss and 25 rpm.

(2) The dry LIMS magnetics and non-magnetics were recovered.

(3) Each product was split for assay.

(4) From the test data, the weight and element distribution were calculated.

10.2 Test Results

A summary of the dry LIMS separations is shown below:

COARSE COBBING – DRY LIMS TEST @ P_{100} 1.00 mm – COMPOSITE 1													
Dry LIMS @ 1100 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	10.0	55.00	10.3	15.30	9.5	0.53	7.6	0.019	7.3	0.040	10.5	4.54	N/A
Non–Mags	90.0	53.20	89.7	16.20	90.5	0.72	92.4	0.03	92.7	0.04	89.5	6.28	N/A
CALC'D HEAD	100.0	53.38	100.0	16.11	100.0	0.70	100.0	0.026	100.0	0.038	100.0	6.11	0.0
ASSAY HEAD		53.00		16.80		0.69		0.03		0.035		6.11	

COARSE COBBING – DRY LIMS TEST @ P_{100} 1.00 mm – COMPOSITE 2													
Dry LIMS @ 1100 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI–1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	83.6	56.10	88.0	11.90	72.3	1.72	57.3	0.010	62.9	0.039	10.5	2.90	N/A
Non–Mags	16.4	38.90	12.0	23.20	27.7	6.53	42.7	0.030	37.1	0.080	89.5	8.51	N/A
CALC'D HEAD	100.0	53.28	100.0	13.75	100.0	2.51	100.0	0.026	100.0	0.038	100.0	3.82	0.0
ASSAY HEAD		53.10		13.90		2.58		0.01		0.047		3.98	

Full details of the results are found in Appendix VI.

11. WET SIZE ASSAY ANALYSIS

Portions of the two (2) test composites -1 mm fractions dry LIMS non-magnetics underwent a wet size assay analysis.

11.1 Test Procedure

The test procedure is as follows:

(1) Split out about 1000 g of fines by rotary division.

(2) Wet screen the sample at 0.125 mm.

(3) Dry screen the oversize at 1.0, 0.5, 0.25 and -0.125 mm using a *Ro-tap* sieve shaker for 10 minutes.

(4) Recover and weigh each screen fraction.

(5) From the weights and assays the elemental distribution was calculated.

11.2 Test Results

A summary of the fines wet size assay analysis is shown below:

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 1													
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
-1.0-0.50	30.3	52.00	29.6	17.60	32.5	0.69	27.9	0.03	32.5	0.033	34.5	6.74	32.3
-0.50+0.25	19.5	52.60	19.2	17.40	20.6	0.74	19.3	0.03	20.9	0.033	22.2	6.40	19.8
-0.25+0.125	15.9	54.80	16.3	15.40	14.9	0.65	13.8	0.03	14.7	0.029	15.9	5.66	14.2
-0.125	34.4	54.00	34.9	15.30	32.0	0.85	39.0	0.03	31.8	0.023	27.3	6.18	33.7
CALC'D HEAD	100.0	53.25	100.0	16.42	100.0	0.75	100.0	0.03	100.0	0.029	100.0	6.31	100.0
ASSAY HEAD		53.20		16.20		0.72		0.03		0.038		6.28	

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 2													
Size (mm)	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
-1.0-0.50	34.1	38.90	33.9	23.30	33.7	6.74	35.4	0.03	35.1	0.077	38.6	8.52	34.0
-0.50+0.25	22.2	38.30	21.8	22.90	21.6	7.49	25.6	0.03	26.8	0.076	24.8	8.38	21.8
-0.25+0.125	17.8	38.90	17.6	24.70	18.6	5.95	16.3	0.03	17.0	0.076	19.8	8.41	17.5
-0.125	25.9	40.40	26.7	23.70	26.0	5.70	22.7	0.02	21.1	0.044	16.7	8.84	26.8
CALC'D HEAD	100.0	39.15	100.0	23.56	100.0	6.50	100.0	0.03	100.0	0.068	100.0	8.55	100.0
ASSAY HEAD		38.90		23.20		6.53		0.03		0.081		8.51	

Full details of the fines wet size assay analysis are found in Appendix VII.

12. WHIMS SEPARATION

Wet high intensity magnetic separation (WHIMS) at a range of gauss settings was performed on the -1 mm dry LIMS non-magnetics for the two (2) test composites. The WHIMS magnetic and non-magnetic products were recovered, weighed and assayed.

12.1 Test Procedure

The test procedure for each sample is detailed below:

(1) A 30 g portion was passed through an *Eriez* WHIMS L4 separator, set at 10000 gauss and using CEX Matrix.

(2) From the test data, the weight and elemental distribution were calculated.

12.2 Test Results

A summary of the WHIMS results has been included below:

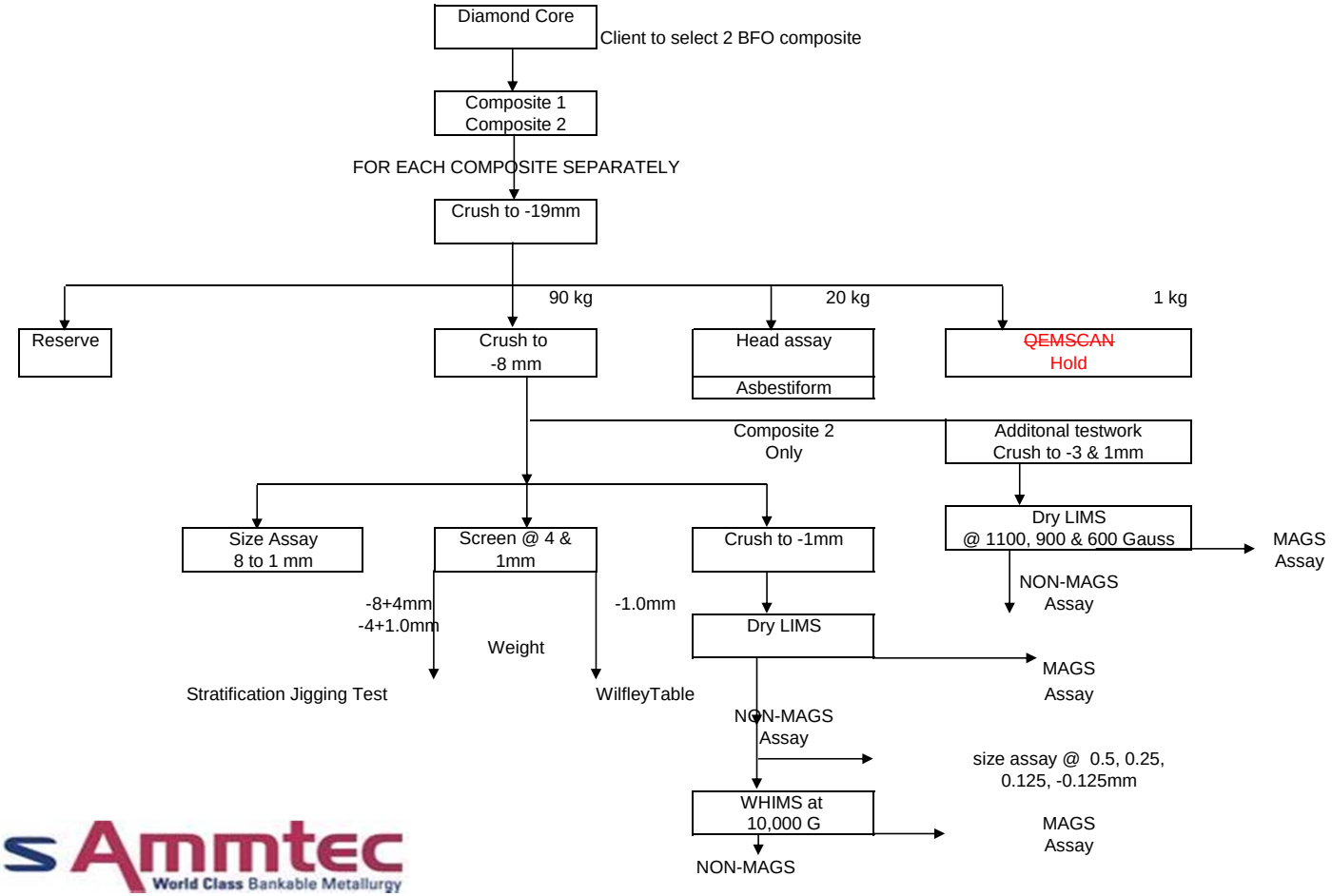
WHIMS @ 10000 GAUSS ON DRY LIMS NON-MAGS (<1.00 mm) - COMPOSITE 1													
WHIMS @ 10000 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	91.0	54.20	93.4	14.60	80.4	0.73	83.9	0.028	91.3	0.029	87.3	6.40	N/A
Non-Mags	9.0	38.70	6.6	36.20	19.6	1.42	16.1	0.03	8.7	0.04	12.7	5.48	N/A
CALC'D HEAD	**100.0**	**52.81**	**100.0**	**16.53**	**100.0**	**0.79**	**100.0**	**0.028**	**100.0**	**0.030**	**100.0**	**6.32**	**0.0**
ASSAY HEAD		**53.20**		**16.20**		**0.72**		**0.03**		**0.038**		**6.28**	

WHIMS @ 10000 GAUSS ON DRY LIMS NON-MAGS (<1.00 mm) - COMPOSITE 2													
WHIMS @ 10000 Gauss	Wt. Dist'n (%)	Fe (%)		SiO_2 (%)		Al_2O_3 (%)		P (%)		S (%)		LOI-1000 (%)	
		Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Mags	91.5	39.80	93.3	22.30	85.5	6.62	92.8	0.031	92.0	0.067	92.8	8.60	N/A
Non-Mags	8.5	30.80	6.7	40.40	14.5	5.47	7.2	0.03	8.0	0.06	7.2	7.47	N/A
CALC'D HEAD	**100.0**	**39.03**	**100.0**	**23.85**	**100.0**	**6.52**	**100.0**	**0.031**	**100.0**	**0.066**	**100.0**	**8.50**	**0.0**
ASSAY HEAD		**38.90**		**23.20**		**6.53**		**0.03**		**0.081**		**8.51**	

Full details of the results are found in Appendix VIII.

FIGURES

Figure 1 NBR Iron Ore Project



ASSAY FOR 24 elements XRF suite PLUS LOI 1000

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A13636

SHREE MINERALS - Nelson Bay River Iron Ore Project

APPENDICES

APPENDIX I

Head Assay Analysis Results

ALS Ammtec
World Class Bankable Metallurgy

6 MacAdam Place, Balcatta
Western Australia 6021
Telephone: (08) 9344 2416
Facsimile: (08) 9345 4688

A 13636 HEAD ASSAYS - SHREE MINERALS IRON ORE PROJECT

Sample ID	Fe(%)	SiO2(%)	Al2O3(%)	CaO(%)	MnO(%)	P(%)	S(%)	MgO(%)	Na2O(%)	Zn(%)	TiO2(%)	K2O(%)	LOI 1000(%)
COMPOSITE 1	53.00	16.80	0.69	0.01	0.13	0.03	0.035	0.005	0.01	0.01	0.01	0.005	6.11
COMPOSITE 2	53.10	13.90	2.58	0.02	1.71	0.01	0.047	0.530	0.02	0.01	0.08	0.066	3.98

Sample ID	As(%)	Ba(%)	Cl(%)	Co(%)	Cr(%)	Cu(%)	Ni(%)	Pb(%)	Sn(%)	Sr(%)	V(%)	Zr(%)
COMPOSITE 1	0.003	0.005	0.004	0.001	0.001	0.063	0.002	0.001	0.001	0.001	0.001	0.001
COMPOSITE 2	0.005	0.010	0.006	0.001	0.001	0.130	0.004	0.001	0.001	0.001	0.001	0.010

APPENDIX II

Asbestiform Analysis Report

ANALYTICAL REPORT

WORLD RECOGNISED ACCREDITATION

CLIENT DETAILS

Contact	Lee Hung
Client	Ammtec Ltd
Address	6 MacAdam Place BALCATTA WA 6021
Telephone	08 9344 2416
Facsimile	08 9345 4688
Email	lee.hung@ammtec.com.au
Project	**A13636_Asbestos Analysis**
Order Number	(Not specified)
Samples	2

LABORATORY DETAILS

Manager	Said Hirad
Laboratory	SGS Newburn Environmental
Address	10 Reid Rd Newburn WA 6105
Telephone	(08) 9373 3500
Facsimile	(08) 9373 3556
Email	au.environmental.perth@sgs.com
SGS Reference	PE058329 R0
Report Number	0000021522
Date Reported	17/06/2011 3:17:14PM
Date Received	13 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(898/20210).

Sample # 2:
Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.
Confirmation by another independent analytical technique may be necessary

Fibre Identification performed by Approved Identifier Karin White.

SIGNATORIES

Karin White
NATA Signatory

Said Hirad
Laboratory Manager

ANALYTICAL REPORT

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w
PE058329.001	Composite 1: NBR 12A	Soil	brown, 499g	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
PE058329.002	Composite 2: NBR 12A + 13A	Soil	brown, 495g	10 Jun 2011	Organic Fibres Detected Unknown Mineral Fibres Detected	

METHOD SUMMARY

PE058329 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic 'clues', which provide a reasonable degree of certainty, dispersion staining is a mandatory 'clue' for positive identification. If sufficient 'clues' are absent, then positive identification of asbestos is not possible. Accreditation does not cover the identification of Organic or Synthetic Mineral Fibres.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed Not Required
Crocidolite	-	Blue Asbestos	*	-	Not Accredited

AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:
"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1 000 to 1 in 10 000 parts by weight, equivalent to 1 to 0.1 g/kg."

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australia Department of Health Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia-May 2009.

Sampled by the client

Where reported: 'Asbestos Detected':
Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'No Asbestos Detected':
No Asbestos detected by polarized light microscopy, including dispersion staining

Where reported: 'UMF Detected':
Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.
Confirmation by another independent analytical technique may be necessary

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy.
This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: http://www.au.sgs.com/sgs-mp-au-env-qu-022-qa-qc-plan-en-09.pdf

APPENDIX III

Size Assay Analysis Results

Shree Minerals - Nelson Bay River Project - A13636

ASSAY BY SIZE ANALYSIS Test Results

ALS Ammtec
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ASSAY BY SIZE ANALYSIS - COMPOSITE 1

SIZE	FRACTION WEIGHT	Wt. DISTn.	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
			Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-8.0+6.3	282.4	14.1	51.70	13.8	18.80	15.9	0.62	12.7	0.005	14.1	0.180	18.3	0.03	13.2	0.030	11.5	0.005	14.1	0.01	11.2	0.007	16.1	0.011	22.9	0.009	20.4	5.99	13.7
-6.3+4.0	505.4	25.3	52.60	25.1	17.30	26.1	0.56	20.6	0.005	25.3	0.120	21.9	0.03	25.5	0.032	21.9	0.005	25.3	0.02	35.5	0.006	24.7	0.002	7.5	0.006	24.4	6.15	25.2
-4.0+2.0	392.2	19.6	52.70	19.5	17.10	20.0	0.66	18.8	0.005	19.6	0.140	19.8	0.03	21.3	0.035	18.6	0.005	19.6	0.01	15.5	0.006	19.2	0.009	26.0	0.004	12.6	6.36	20.2
-2.0+1.0	214.4	10.7	52.80	10.7	16.60	10.6	0.76	11.8	0.005	10.7	0.150	11.6	0.03	11.6	0.038	11.0	0.005	10.7	0.01	11.3	0.006	10.5	0.005	7.9	0.005	8.6	6.38	11.1
-1.0	605.3	30.3	53.90	30.8	15.10	27.3	0.82	36.1	0.005	30.3	0.130	28.4	0.03	28.3	0.045	36.9	0.005	30.3	0.01	26.6	0.006	29.6	0.008	35.7	0.007	34.0	6.08	29.8
Calc'd HEAD	1999.7	100.0	52.91	100.0	16.73	100.0	0.69	100.0	0.005	100.0	0.139	100.0	0.03	100.0	0.037	100.0	0.005	100.0	0.01	100.0	0.006	100.0	0.007	100.0	0.006	100.0	6.17	100.0
ASSAY HEAD			53.00		16.80		0.69		0.01		0.13		0.03		0.035		0.005		0.01		0.006		0.007		0.005		6.11	

ASSAY BY SIZE ANALYSIS - COMPOSITE 1

SIZE	FRACTION WEIGHT	Wt. DISTn.	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
			As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-8.0+6.3	282.4	14.1	0.003	11.9	0.005	14.1	0.004	18.8	0.001	14.1	0.001	8.1	0.056	12.7	0.003	15.1	0.001	14.1	0.001	14.1	0.001	14.1	0.001	12.8	0.003	30.5
-6.3+4.0	505.4	25.3	0.004	28.4	0.005	25.3	0.004	33.7	0.001	25.3	0.002	28.9	0.058	23.6	0.003	27.0	0.001	25.3	0.001	25.3	0.001	25.3	0.001	22.8	0.001	18.2
-4.0+2.0	392.2	19.6	0.003	16.5	0.005	19.6	0.001	6.5	0.001	19.6	0.002	22.4	0.058	18.3	0.003	21.0	0.001	19.6	0.001	19.6	0.001	19.6	0.001	17.7	0.001	14.1
-2.0+1.0	214.4	10.7	0.003	9.0	0.005	10.7	0.003	10.7	0.001	10.7	0.001	6.1	0.062	10.7	0.004	15.3	0.001	10.7	0.001	10.7	0.001	10.7	0.002	19.4	0.002	15.4
-1.0	605.3	30.3	0.004	34.1	0.005	30.3	0.003	30.3	0.001	30.3	0.002	34.6	0.071	34.6	0.002	21.6	0.001	30.3	0.001	30.3	0.001	30.3	0.001	27.3	0.001	21.8
Calc'd HEAD	1999.7	100.0	0.004	100.0	0.005	100.0	0.003	100.0	0.001	100.0	0.002	100.0	0.062	100.0	0.003	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0
ASSAY HEAD			0.003		0.005		0.004		0.001		0.001		0.063		0.002		0.001		0.001		0.001		0.001		0.001	

Shree Minerals - Nelson Bay River Project - A13636

ASSAY BY SIZE ANALYSIS Test Results

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ASSAY BY SIZE ANALYSIS - COMPOSITE 2

SIZE	FRACTION WEIGHT	Wt. DISTn.	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
			Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-8.0+6.3	257.6	12.9	51.40	12.4	14.80	13.7	3.56	18.0	0.040	22.8	1.780	13.5	0.02	17.2	0.048	13.1	0.680	16.8	0.02	10.8	0.009	16.0	0.100	16.3	0.068	13.6	4.65	15.4
-6.3+4.0	487.9	24.4	52.90	24.2	14.00	24.5	2.62	25.2	0.020	21.6	1.820	26.1	0.01	23.0	0.043	22.3	0.610	28.5	0.03	30.7	0.007	23.5	0.087	26.9	0.068	25.8	4.03	25.2
-4.0+2.0	360.3	18.0	53.00	17.9	13.70	17.7	2.50	17.7	0.020	16.0	2.020	21.4	0.01	17.0	0.049	18.8	0.540	18.6	0.03	23.5	0.007	17.4	0.073	16.7	0.077	21.5	3.94	18.2
-2.0+1.0	216.5	10.8	53.70	10.9	14.10	10.9	2.42	10.3	0.020	9.6	1.930	12.3	0.01	11.0	0.049	11.3	0.520	10.8	0.02	9.6	0.007	10.4	0.070	9.6	0.076	12.8	3.61	10.0
-1.0	677.1	33.9	54.40	34.6	13.70	33.2	2.16	28.8	0.020	30.0	1.350	26.8	0.01	31.9	0.048	34.5	0.390	25.3	0.02	25.3	0.007	32.7	0.071	30.5	0.050	26.3	3.59	31.2
Calc'd HEAD	1999.4	100.0	53.32	100.0	13.96	100.0	2.54	100.0	0.023	100.0	1.704	100.0	0.01	100.0	0.047	100.0	0.522	100.0	0.02	100.0	0.007	100.0	0.079	100.0	0.064	100.0	3.90	100.0
ASSAY HEAD			53.10		13.90		2.58		0.02		1.71		0.01		0.047		0.530		0.02		0.007		0.084		0.066		3.98	

ASSAY BY SIZE ANALYSIS - COMPOSITE 2

SIZE	FRACTION WEIGHT	Wt. DISTn.	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
			As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-8.0+6.3	257.6	12.9	0.007	18.0	0.005	9.0	0.005	12.5	0.001	12.9	0.001	12.9	0.130	13.6	0.005	13.1	0.001	12.9	0.001	12.9	0.001	12.9	0.001	12.9	0.012	17.1
-6.3+4.0	487.9	24.4	0.004	19.5	0.010	34.3	0.005	23.6	0.001	24.4	0.001	24.4	0.120	23.8	0.005	24.8	0.001	24.4	0.001	24.4	0.001	24.4	0.001	24.4	0.009	24.3
-4.0+2.0	360.3	18.0	0.005	18.0	0.010	25.3	0.006	20.9	0.001	18.0	0.001	18.0	0.130	19.0	0.004	14.6	0.001	18.0	0.001	18.0	0.001	18.0	0.001	18.0	0.009	17.9
-2.0+1.0	216.5	10.8	0.005	10.8	0.005	7.6	0.008	16.8	0.001	10.8	0.001	10.8	0.120	10.6	0.006	13.2	0.001	10.8	0.001	10.8	0.001	10.8	0.001	10.8	0.009	10.8
-1.0	677.1	33.9	0.005	33.8	0.005	23.8	0.004	26.2	0.001	33.9	0.001	33.9	0.120	33.0	0.005	34.4	0.001	33.9	0.001	33.9	0.001	33.9	0.001	33.9	0.008	29.9
Calc'd HEAD	1999.4	100.0	0.005	100.0	0.007	100.0	0.005	100.0	0.001	100.0	0.001	100.0	0.123	100.0	0.005	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.009	100.0
ASSAY HEAD			0.005		0.010		0.006		0.001		0.001		0.130		0.004		0.001		0.001		0.001		0.001		0.010	

APPENDIX IV

Stratification Jig Results

Shree Minerals - Nelson Bay River Project - A13636
JIG STRATIFICATION Test Results

ALS Ammtec
World Class Bankable Metallurgy

A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 1 (-8.0+4.0mm)

Jig Strata		Mass Weight	Mass	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
				Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	6350.0	28.7	55.20	30.3	15.90	25.0	0.35	18.8	0.01	25.3	0.07	12.8	0.02	26.3	0.023	22.1	0.005	15.0	0.00	9.2	0.01	26.8	0.00	11.4	0.002	12.9	5.07	23.6
	2	4368.1	19.7	53.80	20.3	15.80	17.1	0.47	17.4	0.01	17.4	0.16	21.6	0.03	20.3	0.027	17.8	0.020	41.2	0.00	6.4	0.01	21.5	0.01	19.6	0.007	31.1	6.08	19.4
	3	4282.5	19.3	51.60	19.1	17.90	19.0	0.64	23.2	0.01	17.1	0.28	37.1	0.03	21.4	0.033	21.4	0.005	10.1	0.01	28.0	0.01	24.1	0.01	26.9	0.007	30.5	6.64	20.8
	4	3529.1	15.9	49.30	15.1	21.60	18.9	0.71	21.2	0.01	14.1	0.13	14.2	0.03	17.0	0.032	17.1	0.010	16.6	0.01	23.1	0.01	14.9	0.01	25.3	0.003	10.8	6.84	17.7
	5	2913.3	13.2	48.20	12.2	22.90	16.5	0.60	14.8	0.01	23.2	0.12	10.8	0.02	12.1	0.038	16.7	0.010	13.7	0.01	29.7	0.01	10.2	0.00	10.5	0.004	11.9	6.88	14.7
	6	706.3	3.2	49.30	3.0	20.50	3.6	0.79	4.7	0.01	2.8	0.16	3.5	0.02	2.9	0.046	4.9	0.010	3.3	0.01	3.6	0.01	2.5	0.01	6.3	0.004	2.9	7.36	3.8
Calc'd HEAD		**22149.3**	**100.0**	**52.18**	**100.0**	**18.24**	**100.0**	**0.53**	**100.0**	**0.01**	**100.0**	**0.15**	**100.0**	**0.03**	**100.0**	**0.030**	**100.0**	**0.010**	**100.0**	**0.01**	**100.0**	**0.01**	**100.0**	**0.01**	**100.0**	**0.004**	**100.0**	**6.17**	**100.0**
HEAD ASSAY				**52.30**		**18.50**		**0.59**		**0.01**		**0.11**		**0.03**		**0.030**		**0.020**		**0.02**		**0.006**		**0.005**		**0.006**		**5.94**	

A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 1 (-8.0+4.0mm)

Jig Strata		Mass Weight	Mass	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
				As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	6350	28.7	0.001	24.7	0.01	28.7	0.003	21.5	0.001	28.7	0.001	28.7	0.031	17.4	0.001	23.9	0.001	21.1	0.001	28.7	0.001	28.7	0.001	28.7	0.001	28.7
	2	4368.1	19.7	0.001	17.0	0.01	19.7	0.004	19.7	0.001	19.7	0.001	19.7	0.032	12.3	0.002	32.9	0.001	14.5	0.001	19.7	0.001	19.7	0.001	19.7	0.001	19.7
	3	4282.5	19.3	0.001	16.7	0.01	19.3	0.003	14.5	0.001	19.3	0.001	19.3	0.044	16.6	0.001	16.1	0.002	28.5	0.001	19.3	0.001	19.3	0.001	19.3	0.001	19.3
	4	3529.1	15.9	0.002	27.5	0.01	15.9	0.006	23.9	0.001	15.9	0.001	15.9	0.054	16.8	0.001	13.3	0.001	11.7	0.001	15.9	0.001	15.9	0.001	15.9	0.001	15.9
	5	2913.3	13.2	0.001	11.3	0.01	13.2	0.005	16.4	0.001	13.2	0.001	13.2	0.097	25.0	0.001	11.0	0.002	19.4	0.001	13.2	0.001	13.2	0.001	13.2	0.001	13.2
	6	706.3	3.2	0.001	2.8	0.01	3.2	0.005	4.0	0.001	3.2	0.001	3.2	0.190	11.9	0.001	2.7	0.002	4.7	0.001	3.2	0.001	3.2	0.001	3.2	0.001	3.2
Calc'd HEAD		**22149.3**	**100.0**	**0.001**	**100.0**	**0.01**	**100.0**	**0.004**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.051**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**
HEAD ASSAY				**0.003**		**0.005**		**0.002**		**0.001**		**0.001**		**0.057**		**0.003**		**0.001**		**0.001**		**0.001**		**0.001**		**0.002**	

Note1: Strata 1 - bottom of JIG

Shree Minerals - Nelson Bay River Project - A13636
JIG STRATIFICATION Test Results

ALS Ammtec
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A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 1 (-4.0+1.0mm)

Jig Strata		Mass Weight	Mass	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
				Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	6621.8	24.2	56.00	25.5	14.10	20.3	0.44	16.7	0.01	24.2	0.14	24.6	0.03	23.9	0.027	19.2	0.005	21.1	0.00	10.0	0.01	24.6	0.01	30.4	0.004	23.9	5.69	21.2
	2	4386.1	16.0	53.70	16.2	15.80	15.1	0.60	15.1	0.01	16.0	0.14	16.3	0.03	16.4	0.032	15.1	0.005	14.0	0.00	6.6	0.01	18.6	0.01	24.2	0.005	19.8	6.45	15.9
	3	4733.8	17.3	52.70	17.2	16.70	17.2	0.68	18.5	0.01	17.3	0.15	18.9	0.03	18.3	0.036	18.3	0.005	15.1	0.01	21.4	0.01	17.6	0.01	10.9	0.005	21.3	6.80	18.1
	4	4019.9	14.7	52.10	14.4	17.60	15.4	0.70	16.2	0.01	14.7	0.12	12.8	0.03	14.5	0.035	15.1	0.010	25.6	0.00	6.1	0.01	14.9	0.01	14.8	0.002	7.2	6.84	15.5
	5	3685.7	13.4	52.00	13.2	17.80	14.3	0.70	14.8	0.01	13.4	0.15	14.7	0.03	13.8	0.036	14.3	0.005	11.7	0.02	50.0	0.01	11.7	0.00	3.4	0.003	10.0	6.78	14.0
	6	3959	14.4	49.80	13.6	20.40	17.6	0.82	18.7	0.01	14.4	0.12	12.6	0.03	13.2	0.042	17.9	0.005	12.6	0.00	6.0	0.01	12.6	0.01	16.4	0.005	17.8	6.88	15.3
Calc'd HEAD		**27406.3**	**100.0**	**53.06**	**100.0**	**16.74**	**100.0**	**0.64**	**100.0**	**0.01**	**100.0**	**0.14**	**100.0**	**0.03**	**100.0**	**0.034**	**100.0**	**0.006**	**100.0**	**0.00**	**100.0**	**0.01**	**100.0**	**0.01**	**100.0**	**0.004**	**100.0**	**6.49**	**100.0**
HEAD ASSAY				**52.90**		**17.00**		**0.67**		**0.01**		**0.13**		**0.03**		**0.036**		**0.005**		**0.01**		**0.007**		**0.007**		**0.004**		**6.30**	

A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 1 (-4.0+1.0mm)

Jig Strata		Mass Weight	Mass	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
				As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	6621.8	24.2	0.001	24.2	0.01	24.2	0.003	21.3	0.001	24.2	0.001	24.2	0.028	12.8	0.002	38.9	0.004	30.9	0.002	38.9	0.001	24.2	0.001	24.2	0.001	24.2
	2	4386.1	16.0	0.001	16.0	0.01	16.0	0.002	9.4	0.001	16.0	0.001	16.0	0.040	12.1	0.001	12.9	0.004	20.5	0.001	12.9	0.001	16.0	0.001	16.0	0.001	16.0
	3	4733.8	17.3	0.001	17.3	0.01	17.3	0.003	15.3	0.001	17.3	0.001	17.3	0.055	18.0	0.001	13.9	0.003	16.6	0.001	13.9	0.001	17.3	0.001	17.3	0.001	17.3
	4	4019.9	14.7	0.001	14.7	0.01	14.7	0.003	13.0	0.001	14.7	0.001	14.7	0.057	15.9	0.001	11.8	0.004	18.8	0.001	11.8	0.001	14.7	0.001	14.7	0.001	14.7
	5	3685.7	13.4	0.001	13.4	0.01	13.4	0.005	19.8	0.001	13.4	0.001	13.4	0.057	14.5	0.001	10.8	0.002	8.6	0.001	10.8	0.001	13.4	0.001	13.4	0.001	13.4
	6	3959	14.4	0.001	14.4	0.01	14.4	0.005	21.3	0.001	14.4	0.001	14.4	0.097	26.6	0.001	11.6	0.001	4.6	0.001	11.6	0.001	14.4	0.001	14.4	0.001	14.4
Calc'd HEAD		**27406.3**	**100.0**	**0.001**	**100.0**	**0.01**	**100.0**	**0.003**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.053**	**100.0**	**0.001**	**100.0**	**0.003**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**
HEAD ASSAY				**0.001**		**0.005**		**0.001**		**0.001**		**0.001**		**0.060**		**0.003**		**0.001**		**0.001**		**0.001**		**0.001**		**0.001**	

Note1: Strata 1 - bottom of JIG

Shree Minerals - Nelson Bay River Project - A13636
JIG STRATIFICATION Test Results

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A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 2 (-8.0+4.0mm)

Jig Strata		Mass Weight	Mass	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
				Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	1872.9	19.6	58.90	22.1	9.97	13.3	0.85	5.1	0.02	19.1	2.05	21.5	0.01	10.3	0.037	14.7	0.360	10.4	0.02	23.0	0.01	16.3	0.04	6.6	0.073	19.2	2.37	10.0
	2	1563.6	16.3	57.50	18.0	10.90	12.1	1.03	5.2	0.01	4.0	2.12	18.5	0.01	8.6	0.036	11.9	0.430	10.3	0.01	13.5	0.01	15.5	0.04	6.4	0.080	17.5	3.30	11.6
	3	1638.5	17.1	54.80	18.0	12.90	15.1	1.62	8.5	0.02	16.7	2.17	19.9	0.01	12.4	0.049	17.0	0.560	14.1	0.01	14.2	0.01	16.3	0.06	9.9	0.092	21.1	3.86	14.3
	4	1398.7	14.6	50.50	14.1	15.20	15.1	4.08	18.3	0.03	21.3	1.94	15.2	0.01	13.5	0.045	13.3	1.010	21.7	0.01	13.1	0.01	17.4	0.14	18.5	0.070	13.7	5.25	16.6
	5	1454.3	15.2	46.70	13.6	17.80	18.4	5.98	27.9	0.03	22.2	1.66	13.5	0.02	19.0	0.058	17.9	1.100	24.6	0.01	5.2	0.01	18.1	0.21	28.9	0.075	15.3	6.36	20.9
	6	1648.5	17.2	42.90	14.2	22.10	25.9	6.59	34.9	0.02	16.8	1.25	11.5	0.03	36.3	0.072	25.2	0.740	18.8	0.03	30.9	0.01	16.4	0.19	29.7	0.057	13.2	7.15	26.6
Calc'd HEAD		**9576.5**	**100.0**	**52.14**	**100.0**	**14.66**	**100.0**	**3.25**	**100.0**	**0.02**	**100.0**	**1.87**	**100.0**	**0.02**	**100.0**	**0.049**	**100.0**	**0.678**	**100.0**	**0.01**	**100.0**	**0.01**	**100.0**	**0.11**	**100.0**	**0.075**	**100.0**	**4.63**	**100.0**
HEAD ASSAY				**52.40**		**14.10**		**3.17**		**0.02**		**1.75**		**0.01**		**0.044**		**0.650**		**0.02**		**0.008**		**0.100**		**0.069**		**4.43**			

A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 2 (-8.0+4.0mm)

Jig Strata		Mass Weight	Mass	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
				As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	1872.9	19.6	0.001	11.6	0.01	19.6	0.002	7.2	0.001	19.6	0.001	19.6	0.110	16.0	0.002	12.5	0.001	9.8	0.002	32.7	0.001	19.6	0.001	19.6	0.001	1.9
	2	1563.6	16.3	0.001	9.7	0.01	16.3	0.005	15.0	0.001	16.3	0.001	16.3	0.110	13.4	0.002	10.4	0.001	8.2	0.001	13.7	0.001	16.3	0.001	16.3	0.003	4.7
	3	1638.5	17.1	0.001	10.1	0.01	17.1	0.005	15.7	0.001	17.1	0.001	17.1	0.160	20.4	0.003	16.4	0.003	25.8	0.001	14.3	0.001	17.1	0.001	17.1	0.005	8.2
	4	1398.7	14.6	0.001	8.6	0.01	14.6	0.009	24.1	0.001	14.6	0.001	14.6	0.140	15.2	0.003	14.0	0.001	7.3	0.001	12.2	0.001	14.6	0.001	14.6	0.013	18.3
	5	1454.3	15.2	0.001	9.0	0.01	15.2	0.008	22.3	0.001	15.2	0.001	15.2	0.150	17.0	0.004	19.4	0.003	22.9	0.001	12.7	0.001	15.2	0.001	15.2	0.022	32.1
	6	1648.5	17.2	0.005	51.0	0.01	17.2	0.005	15.8	0.001	17.2	0.001	17.2	0.140	18.0	0.005	27.4	0.003	25.9	0.001	14.4	0.001	17.2	0.001	17.2	0.021	34.8
Calc'd HEAD		**9576.5**	**100.0**	**0.002**	**100.0**	**0.01**	**100.0**	**0.005**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.134**	**100.0**	**0.003**	**100.0**	**0.002**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.010**	**100.0**
HEAD ASSAY				**0.004**		**0.005**		**0.004**		**0.001**		**0.001**		**0.130**		**0.004**		**0.001**		**0.001**		**0.001**		**0.001**		**0.012**			

Note1: Strata 1 - bottom of JIG

Shree Minerals - Nelson Bay River Project - A13636
JIG STRATIFICATION Test Results

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A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 2 (-4.0+1.0mm)

Jig Strata		Mass Weight	Mass	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
				Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	6324.1	24.4	60.20	27.4	9.04	16.0	0.78	8.0	0.02	24.4	2.15	25.8	0.01	12.8	0.032	17.3	0.240	12.2	0.01	28.3	0.01	17.0	0.04	12.4	0.083	25.9	1.90	11.7
	2	4292.2	16.6	57.90	17.9	10.50	12.6	1.09	7.6	0.02	16.6	2.22	18.1	0.01	9.9	0.035	12.9	0.320	11.0	0.01	14.8	0.01	16.1	0.04	10.0	0.081	17.2	2.73	11.4
	3	4462	17.2	55.40	17.8	12.00	15.0	1.79	12.9	0.02	17.2	2.23	18.9	0.01	12.9	0.037	14.1	0.480	17.2	0.01	10.7	0.01	16.8	0.06	15.1	0.087	19.2	3.54	15.4
	4	4040.7	15.6	50.90	14.8	15.10	17.0	3.30	21.5	0.02	15.6	1.96	15.0	0.02	17.5	0.050	17.3	0.660	21.4	0.01	12.5	0.01	17.3	0.10	21.3	0.076	15.2	4.99	19.7
	5	3478.3	13.4	47.40	11.9	18.70	18.2	4.22	23.7	0.02	13.4	1.84	12.1	0.02	21.1	0.060	17.9	0.710	19.8	0.01	13.2	0.01	16.8	0.12	22.0	0.073	12.5	5.85	19.9
	6	3312.4	12.8	43.40	10.3	23.00	21.3	4.93	26.4	0.02	12.8	1.62	10.2	0.03	25.8	0.072	20.4	0.690	18.4	0.02	20.5	0.01	16.0	0.11	19.2	0.061	10.0	6.75	21.8
Calc'd HEAD		**25909.7**	**100.0**	**53.68**	**100.0**	**13.82**	**100.0**	**2.39**	**100.0**	**0.02**	**100.0**	**2.04**	**100.0**	**0.01**	**100.0**	**0.045**	**100.0**	**0.481**	**100.0**	**0.01**	**100.0**	**0.01**	**100.0**	**0.07**	**100.0**	**0.078**	**100.0**	**3.95**	**100.0**
HEAD ASSAY				**53.60**		**13.90**		**2.33**		**0.02**		**2.08**		**0.01**		**0.048**		**0.510**		**0.02**		**0.007**		**0.070**		**0.079**		**3.96**	

A13636 Shree Minerals - Jig Stratification Results - COMPOSITE 2 (-4.0+1.0mm)

Jig Strata		Mass Weight	Mass	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
				As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
		(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
PRODUCTS	1	6324.1	24.4	0.001	13.5	0.01	39.2	0.004	21.5	0.001	24.4	0.001	15.9	0.094	19.4	0.002	15.5	0.002	20.8	0.001	24.4	0.001	24.4	0.001	24.4	0.001	3.7
	2	4292.2	16.6	0.001	9.2	0.01	13.3	0.003	10.9	0.001	16.6	0.001	10.8	0.100	14.0	0.001	5.3	0.001	7.1	0.001	16.6	0.001	16.6	0.001	16.6	0.003	7.5
	3	4462	17.2	0.001	9.6	0.01	13.8	0.005	18.9	0.001	17.2	0.001	11.2	0.110	16.1	0.001	5.5	0.001	7.4	0.001	17.2	0.001	17.2	0.001	17.2	0.006	15.6
	4	4040.7	15.6	0.002	17.3	0.01	12.5	0.005	17.2	0.001	15.6	0.001	10.1	0.130	17.2	0.003	14.8	0.003	20.0	0.001	15.6	0.001	15.6	0.001	15.6	0.011	25.8
	5	3478.3	13.4	0.002	14.9	0.01	10.8	0.004	11.8	0.001	13.4	0.005	43.7	0.140	15.9	0.011	46.8	0.004	22.9	0.001	13.4	0.001	13.4	0.001	13.4	0.013	26.3
	6	3312.4	12.8	0.005	35.5	0.01	10.3	0.007	19.7	0.001	12.8	0.001	8.3	0.160	17.3	0.003	12.2	0.004	21.8	0.001	12.8	0.001	12.8	0.001	12.8	0.011	21.2
Calc'd HEAD		**25909.7**	**100.0**	**0.002**	**100.0**	**0.01**	**100.0**	**0.005**	**100.0**	**0.001**	**100.0**	**0.002**	**100.0**	**0.118**	**100.0**	**0.003**	**100.0**	**0.002**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.001**	**100.0**	**0.007**	**100.0**
HEAD ASSAY				**0.005**		**0.005**		**0.006**		**0.001**		**0.001**		**0.130**		**0.005**		**0.001**		**0.001**		**0.001**		**0.001**		**0.008**	

Note1: Strata 1 - bottom of JIG

APPENDIX V

Wilfley Table Separation Results

Shree Minerals - Nelson Bay River Project - A13636

WILFLEY TABLE SEPARATION Test Results

ALS Ammtec World Class Bankable Metallurgy

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 1 (-1.00 mm FRACTION)

WILFLEY TABLE CONS	CONS WEIGHT (g)	WEIGHT DIST. (%)	Fe Grade (%)	Fe DISTn. (%)	SiO_2 Grade (%)	SiO_2 DISTn. (%)	Al_2O_3 Grade (%)	Al_2O_3 DISTn. (%)	CaO Grade (%)	CaO DISTn. (%)	Mn Grade (%)	Mn DISTn. (%)	P Grade (%)	P DISTn. (%)	S Grade (%)	S DISTn. (%)	MgO Grade (%)	MgO DISTn. (%)	Na_2O Grade (%)	Na_2O DISTn. (%)	Zn Grade (%)	Zn DISTn. (%)	TiO_2 Grade (%)	TiO_2 DISTn. (%)	K2O Grade (%)	K2O DISTn. (%)	LOI-1000 Grade (%)	LOI-1000 DISTn. (%)
CON 1	557.2	17.9	63.00	20.85	4.97	5.91	0.43	9.63	0.01	9.74	0.10	14.08	0.019	13.75	0.022	13.11	0.01	10.25	0.002	3.24	0.005	13.99	0.006	15.24	0.00	1.83	3.72	10.94
CON 2	787.8	25.3	55.20	25.83	13.40	22.55	0.69	21.84	0.01	13.77	0.13	25.87	0.026	26.61	0.032	26.96	0.01	14.50	0.016	36.69	0.006	23.73	0.002	7.18	0.01	15.53	6.32	26.28
CON 3	874.5	28.1	51.60	26.80	18.30	34.18	0.83	29.16	0.01	15.28	0.14	30.93	0.027	30.67	0.034	31.80	0.01	16.09	0.009	22.91	0.007	30.74	0.005	19.93	0.01	22.99	6.68	30.83
CON 4	276.5	8.9	50.60	8.31	19.00	11.22	1.04	11.55	0.01	4.83	0.14	9.78	0.026	9.34	0.035	10.35	0.01	5.09	0.011	8.85	0.006	8.33	0.010	12.60	0.01	9.08	6.81	9.94
CON 5	144.3	4.6	49.10	4.21	21.40	6.59	1.17	6.78	0.02	10.08	0.14	5.10	0.026	4.87	0.026	4.01	0.01	5.31	0.020	8.40	0.006	4.35	0.030	19.72	0.07	31.76	6.81	5.18
CON 6	84.0	2.7	50.70	2.53	18.80	3.37	1.11	3.75	0.02	5.87	0.12	2.55	0.025	2.73	0.032	2.88	0.02	6.18	0.016	3.91	0.008	3.37	0.013	4.98	0.01	3.59	6.79	3.01
CON 7	155.3	5.0	50.10	4.62	19.40	6.43	1.11	6.92	0.03	16.28	0.12	4.71	0.024	4.84	0.027	4.48	0.03	17.14	0.028	12.65	0.008	6.24	0.008	5.66	0.01	6.12	6.80	5.57
TAILS	230.4	7.4	50.20	6.87	19.80	9.74	1.12	10.37	0.03	24.16	0.12	6.99	0.024	7.18	0.026	6.41	0.03	25.44	0.005	3.35	0.008	9.26	0.014	14.70	0.01	9.09	6.78	8.24
Calc'd HEAD	**3110.0**	**100.0**	**54.15**	**100.00**	**15.06**	**100.00**	**0.80**	**100.00**	**0.01**	**100.00**	**0.13**	**100.00**	**0.025**	**100.00**	**0.030**	**100.00**	**0.01**	**100.00**	**0.011**	**100.00**	**0.006**	**100.00**	**0.007**	**14.70**	**0.01**	**100.00**	**6.09**	**100.00**
ASSAY HEAD			**54.20**		**14.90**		**0.80**		**0.01**		**0.13**		**0.024**		**0.043**		**0.01**		**0.013**		**0.006**		**0.010**		**0.01**		**6.07**	

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 1 (-1.00 mm FRACTION)

WILFLEY TABLE CONS	CONS WEIGHT (g)	WEIGHT DIST. (%)	As Grade (%)	As DISTn. (%)	Ba Grade (%)	Ba DISTn. (%)	Cl Grade (%)	Cl DISTn. (%)	Co Grade (%)	Co DISTn. (%)	Cr Grade (%)	Cr DISTn. (%)	Cu Grade (%)	Cu DISTn. (%)	Ni Grade (%)	Ni DISTn. (%)	Pb Grade (%)	Pb DISTn. (%)	Sn Grade (%)	Sn DISTn. (%)	Sr Grade (%)	Sr DISTn. (%)	V Grade (%)	V DISTn. (%)	Zr Grade (%)	Zr DISTn. (%)
CON 1	557.2	17.9	0.003	16.27	0.005	17.92	0.004	10.23	0.001	17.92	0.001	11.01	0.040	10.80	0.001	5.27	0.001	13.16	0.001	17.12	0.001	17.92	0.001	17.92	0.001	14.10
CON 2	787.8	25.3	0.004	30.68	0.005	25.33	0.005	18.07	0.001	25.33	0.002	31.14	0.060	22.89	0.006	44.72	0.001	18.61	0.001	24.21	0.001	25.33	0.001	25.33	0.001	19.94
CON 3	874.5	28.1	0.003	25.54	0.005	28.12	0.006	24.07	0.001	28.12	0.002	34.56	0.067	28.38	0.002	16.55	0.001	20.65	0.001	26.87	0.001	28.12	0.001	28.12	0.001	22.13
CON 4	276.5	8.9	0.003	8.07	0.005	8.89	0.004	5.07	0.001	8.89	0.001	5.46	0.082	10.98	0.003	7.85	0.001	6.53	0.001	8.50	0.001	8.89	0.001	8.89	0.003	20.99
CON 5	144.3	4.6	0.003	4.21	0.005	4.64	0.049	32.43	0.001	4.64	0.003	8.55	0.090	6.29	0.009	12.28	0.004	13.63	0.002	8.87	0.001	4.64	0.001	4.64	0.003	10.95
CON 6	84.0	2.7	0.003	2.45	0.005	2.70	0.006	2.31	0.001	2.70	0.001	1.66	0.092	3.74	0.003	2.38	0.001	1.98	0.001	2.58	0.001	2.70	0.001	2.70	0.001	2.13
CON 7	155.3	5.0	0.004	6.05	0.005	4.99	0.008	5.70	0.001	4.99	0.001	3.07	0.090	6.77	0.003	4.41	0.001	3.67	0.001	4.77	0.001	4.99	0.001	4.99	0.001	3.93
TAILS	230.4	7.4	0.003	6.73	0.005	7.41	0.002	2.11	0.001	7.41	0.001	4.55	0.091	10.16	0.003	6.54	0.004	21.77	0.001	7.08	0.001	7.41	0.001	7.41	0.001	5.83
Calc'd HEAD	3110.0	100.0	0.00	100.00	0.01	100.00	0.01	100.00	0.00	100.00	0.00	100.00	0.07	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00
ASSAY HEAD			**0.00**		**0.01**		**0.01**		**0.00**		**0.00**		**0.064**		**0.002**		**0.00**		**0.001**		**0.001**		**0.001**		**0.00**	

Shree Minerals - Nelson Bay River Project - A13636

WILFLEY TABLE SEPARATION Test Results

ALS Ammtec World Class Bankable Metallurgy

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 2 (-1.00 mm FRACTION)

WILFLEY TABLE CONS	CONS WEIGHT (g)	WEIGHT DIST. (%)	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
			Fe Grade (%)	Fe DISTn. (%)	SiO_2 Grade (%)	SiO_2 DISTn. (%)	Al_2O_3 Grade (%)	Al_2O_3 DISTn. (%)	CaO Grade (%)	CaO DISTn. (%)	Mn Grade (%)	Mn DISTn. (%)	P Grade (%)	P DISTn. (%)	S Grade (%)	S DISTn. (%)	MgO Grade (%)	MgO DISTn. (%)	Na2O Grade (%)	Na2O DISTn. (%)	Zn Grade (%)	Zn DISTn. (%)	TiO2 Grade (%)	TiO2 DISTn. (%)	K2O Grade (%)	K2O DISTn. (%)	LOI-1000 Grade (%)	LOI-1000 DISTn. (%)
CON 1	623.1	15.8	67.60	19.45	2.55	3.00	0.36	2.72	0.01	5.83	0.48	5.47	0.005	6.39	0.011	5.39	0.03	1.23	0.002	2.23	0.002	4.53	0.063	14.38	0.01	4.32	-0.44	-1.94
CON 2	1074.4	27.3	61.30	30.40	8.02	16.26	0.98	12.76	0.02	20.09	1.45	28.47	0.009	19.83	0.027	22.80	0.16	11.34	0.010	19.25	0.005	19.51	0.075	29.52	0.05	28.73	1.99	15.15
CON 3	959.0	24.4	53.80	23.82	14.40	26.06	1.99	23.12	0.02	17.94	1.87	32.77	0.013	25.57	0.039	29.39	0.42	26.58	0.014	24.05	0.008	27.87	0.071	24.94	0.07	34.19	3.87	26.30
CON 4	539.3	13.7	47.50	11.83	20.40	20.76	3.17	20.71	0.03	15.13	1.69	16.65	0.017	18.80	0.049	20.77	0.70	24.91	0.027	26.08	0.009	17.63	0.071	14.03	0.06	16.56	5.42	20.71
CON 5	237.0	6.0	43.70	4.78	23.80	10.64	4.12	11.83	0.05	11.08	1.49	6.45	0.018	8.75	0.044	8.19	0.80	12.51	0.013	5.52	0.010	8.61	0.079	6.86	0.05	5.87	6.43	10.80
CON 6	30.7	0.8	42.70	0.61	23.70	1.37	4.73	1.76	0.07	2.01	1.19	0.67	0.020	1.26	0.034	0.82	0.73	1.48	0.021	1.16	0.011	1.23	0.073	0.82	0.04	0.65	7.59	1.65
CON 7	147.1	3.7	42.10	2.86	24.20	6.72	4.92	8.77	0.07	9.63	1.15	3.09	0.020	6.03	0.034	3.93	0.71	6.89	0.027	7.12	0.012	6.41	0.060	3.23	0.04	3.06	7.96	8.30
TAILS	326.0	8.3	41.60	6.26	24.70	15.19	4.64	18.33	0.06	18.29	1.08	6.43	0.020	13.37	0.034	8.71	0.70	15.06	0.025	14.60	0.012	14.21	0.052	6.21	0.04	6.62	8.24	19.03
Calc'd HEAD	**3936.6**	**100.0**	**55.03**	**100.00**	**13.46**	**100.00**	**2.10**	**100.00**	**0.03**	**100.00**	**1.39**	**100.00**	**0.012**	**100.00**	**0.032**	**100.00**	**0.38**	**100.00**	**0.014**	**100.00**	**0.007**	**100.00**	**0.069**	**6.21**	**0.05**	**100.00**	**3.58**	**100.00**
ASSAY HEAD			**54.70**		**13.50**		**2.12**		**0.01**		**1.35**		**0.012**		**0.047**		**0.39**		**0.013**		**0.007**		**0.067**		**0.05**		**3.66**	

WILFLEY TABLE SEPARATION TEST RESULTS FOR COMPOSITE 2 (-1.00 mm FRACTION)

WILFLEY TABLE CONS	CONS WEIGHT (g)	WEIGHT DIST. (%)	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
			As Grade (%)	As DISTn. (%)	Ba Grade (%)	Ba DISTn. (%)	Cl Grade (%)	Cl DISTn. (%)	Co Grade (%)	Co DISTn. (%)	Cr Grade (%)	Cr DISTn. (%)	Cu Grade (%)	Cu DISTn. (%)	Ni Grade (%)	Ni DISTn. (%)	Pb Grade (%)	Pb DISTn. (%)	Sn Grade (%)	Sn DISTn. (%)	Sr Grade (%)	Sr DISTn. (%)	V Grade (%)	V DISTn. (%)	Zr Grade (%)	Zr DISTn. (%)
CON 1	623.1	15.8	0.002	6.19	0.010	25.51	0.002	11.08	0.001	14.62	0.001	15.83	0.037	4.97	0.001	4.94	0.001	7.28	0.002	27.33	0.001	15.83	0.001	15.83	0.004	8.12
CON 2	1074.4	27.3	0.004	21.35	0.005	21.99	0.003	28.65	0.001	25.20	0.001	27.29	0.088	20.38	0.003	25.53	0.003	37.67	0.001	23.56	0.001	27.29	0.001	27.29	0.007	24.50
CON 3	959.0	24.4	0.005	23.82	0.005	19.63	0.003	25.58	0.001	22.50	0.001	24.36	0.130	26.87	0.004	30.39	0.001	11.21	0.001	21.03	0.001	24.36	0.001	24.36	0.008	24.99
CON 4	539.3	13.7	0.007	18.75	0.005	11.04	0.003	14.38	0.001	12.65	0.001	13.70	0.150	17.44	0.004	17.09	0.003	18.91	0.001	11.83	0.001	13.70	0.001	13.70	0.011	19.32
CON 5	237.0	6.0	0.007	8.24	0.005	4.85	0.005	10.53	0.001	5.56	0.001	6.02	0.170	8.68	0.004	7.51	0.004	11.08	0.001	5.20	0.001	6.02	0.001	6.02	0.012	9.26
CON 6	30.7	0.8	0.008	1.22	0.005	0.63	0.005	1.37	0.001	0.72	0.001	0.78	0.190	1.26	0.004	0.97	0.003	1.08	0.001	0.67	0.001	0.78	0.001	0.78	0.010	1.00
CON 7	147.1	3.7	0.008	5.85	0.005	3.01	0.002	2.62	0.001	3.45	0.001	3.74	0.200	6.34	0.005	5.83	0.003	5.16	0.001	3.23	0.001	3.74	0.001	3.74	0.009	4.31
TAILS	326.0	8.3	0.009	14.58	0.010	13.35	0.002	5.80	0.002	15.30	0.001	8.28	0.200	14.05	0.003	7.75	0.002	7.62	0.001	7.15	0.001	8.28	0.001	8.28	0.008	8.50
Calc'd HEAD	3936.6	100.0	0.01	100.00	0.01	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.12	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.00	100.00	0.01	100.00
ASSAY HEAD			**0.01**		**0.01**		**0.01**		**0.00**		**0.00**		**0.120**		**0.004**		**0.00**		**0.001**		**0.001**		**0.001**		**0.01**	

APPENDIX VI

Dry LIMS Results

Shree Minerals - Nelson Bay River Project - A13636

COARSE COBBING - DRY LIMS Test Results

ALS Ammtec
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A13636 Shree Minerals - COARSE COBBING - DRY LIMS TEST @ P100 1.0mm - COMPOSITE 1																												
			Fe		SiO_2		Al_2O_3		CaO		MnO		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
DRY LIMS @ 1100 GAUSS	FRACTION WEIGHT (Kg)	Wt. DISTn. (%)	Fe Grade (%)	Fe DISTn. (%)	SiO_2 Grade (%)	SiO_2 DISTn. (%)	Al_2O_3 Grade (%)	Al_2O_3 DISTn. (%)	CaO Grade (%)	CaO DISTn. (%)	MnO Grade (%)	MnO DISTn. (%)	P Grade (%)	P DISTn. (%)	S Grade (%)	S DISTn. (%)	MgO Grade (%)	MgO DISTn. (%)	Na2O Grade (%)	Na2O DISTn. (%)	Zn Grade (%)	Zn DISTn. (%)	TiO2 Grade (%)	TiO2 DISTn. (%)	K2O Grade (%)	K2O DISTn. (%)	LOI-1000 Grade (%)	LOI-1000 DISTn. (%)
Mags	0.62	10.0	55.00	10.3	15.30	9.5	0.53	7.6	0.03	40.0	0.13	10.0	0.019	7.3	0.040	10.5	0.03	40.0	0.011	10.9	0.005	8.5	0.013	12.6	0.012	21.1	4.54	N/A
N-Mags	5.58	90.0	53.20	89.7	16.20	90.5	0.72	92.4	0.01	60.0	0.13	90.0	0.03	92.7	0.04	89.5	0.01	60.0	0.01	89.1	0.01	91.5	0.01	87.4	0.01	78.9	6.28	N/A
Calc'd HEAD	6.20	100.0	53.38	100.0	16.11	100.0	0.70	100.0	0.01	100.0	0.13	100.0	0.026	100.0	0.038	100.0	0.01	100.0	0.010	100.0	0.006	100.0	0.010	100.0	0.006	100.0	6.11	0.0
ASSAY HEAD			53.00		16.80		0.69		0.01		0.13		0.03		0.035		0.005		0.01		0.006		0.007		0.005		6.11	

A13636 Shree Minerals - COARSE COBBING - DRY LIMS TEST @ P100 1.0mm - COMPOSITE 1																										
			As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
DRY LIMS @ 1100 GAUSS	FRACTION WEIGHT (g)	Wt. DISTn. (%)	As Grade (%)	As DISTn. (%)	Ba Grade (%)	Ba DISTn. (%)	Cl Grade (%)	Cl DISTn. (%)	Co Grade (%)	Co DISTn. (%)	Cr Grade (%)	Cr DISTn. (%)	Cu Grade (%)	Cu DISTn. (%)	Ni Grade (%)	Ni DISTn. (%)	Pb Grade (%)	Pb DISTn. (%)	Sn Grade (%)	Sn DISTn. (%)	Sr Grade (%)	Sr DISTn. (%)	V Grade (%)	V DISTn. (%)	Zr Grade (%)	Zr DISTn. (%)
Mags	0.62	10.0	0.002	6.9	0.005	10.0	0.004	8.2	0.001	10.0	0.004	12.9	0.051	8.3	0.006	11.8	0.002	18.2	0.001	10.0	0.001	10.0	0.001	10.0	0.002	10.0
N-Mags	5.58	90.0	0.003	93.1	0.005	90.0	0.005	91.8	0.001	90.0	0.003	87.1	0.063	91.7	0.005	88.2	0.001	81.8	0.001	90.0	0.001	90.0	0.001	90.0	0.002	90.0
Calc'd HEAD	6.20	100.0	0.003	100.0	0.005	100.0	0.005	100.0	0.001	100.0	0.003	100.0	0.062	100.0	0.005	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.002	100.0
ASSAY HEAD			0.003		0.005		0.004		0.001		0.001		0.063		0.002		0.001		0.001		0.001		0.001		0.001	

Shree Minerals - Nelson Bay River Project - A13636

COARSE COBBING - DRY LIMS Test Results

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World Class Bankable Metallurgy

A13636 Shree Minerals - COARSE COBBING - DRY LIMS TEST @ P100 1.0mm - COMPOSITE 2																												
			Fe		SiO_2		Al_2O_3		CaO		MnO		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
DRY LIMS @ 1100 GAUSS	FRACTION WEIGHT (Kg)	Wt. DISTn. (%)	Fe Grade (%)	Fe DISTn. (%)	SiO_2 Grade (%)	SiO_2 DISTn. (%)	Al_2O_3 Grade (%)	Al_2O_3 DISTn. (%)	CaO Grade (%)	CaO DISTn. (%)	MnO Grade (%)	MnO DISTn. (%)	P Grade (%)	P DISTn. (%)	S Grade (%)	S DISTn. (%)	MgO Grade (%)	MgO DISTn. (%)	Na2O Grade (%)	Na2O DISTn. (%)	Zn Grade (%)	Zn DISTn. (%)	TiO2 Grade (%)	TiO2 DISTn. (%)	K2O Grade (%)	K2O DISTn. (%)	LOI-1000 Grade (%)	LOI-1000 DISTn. (%)
Mags	14.17	83.6	56.10	88.0	11.90	72.3	1.72	57.3	0.01	56.0	1.39	67.6	0.010	62.9	0.039	71.0	0.40	66.7	0.019	76.3	0.007	74.8	0.051	52.0	0.048	63.6	2.90	N/A
N-Mags	2.78	16.4	38.90	12.0	23.20	27.7	6.53	42.7	0.04	44.0	3.39	32.4	0.03	37.1	0.08	29.0	1.02	33.3	0.03	23.7	0.01	25.2	0.24	48.0	0.14	36.4	8.51	N/A
Calc'd HEAD	16.95	100.0	53.28	100.0	13.75	100.0	2.51	100.0	0.01	100.0	1.72	100.0	0.013	100.0	0.046	100.0	0.50	100.0	0.021	100.0	0.008	100.0	0.082	100.0	0.063	100.0	3.82	0.0
ASSAY HEAD			53.10		13.90		2.58		0.02		1.71		0.01		0.047		0.530		0.02		0.007		0.084		0.066		3.98	

A13636 Shree Minerals - COARSE COBBING - DRY LIMS TEST @ P100 1.0mm - COMPOSITE 2																								
			As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
DRY LIMS @ 1100 GAUSS	FRACTION WEIGHT (g)	Wt. DISTn. (%)	As Grade (%)	As DISTn. (%)	Ba Grade (%)	Ba DISTn. (%)	Cl Grade (%)	Cl DISTn. (%)	Co Grade (%)	Co DISTn. (%)	Cr Grade (%)	Cr DISTn. (%)	Cu Grade (%)	Cu DISTn. (%)	Ni Grade (%)	Ni DISTn. (%)	Pb Grade (%)	Pb DISTn. (%)	Sn Grade (%)	Sn DISTn. (%)	Sr Grade (%)	Sr DISTn. (%)	V Grade (%)	V DISTn. (%)	Zr Grade (%)	Zr DISTn. (%)
Mags	14.17	83.6	0.003	68.6	0.005	83.6	0.003	54.0	0.001	83.6	0.010	98.1	0.100	69.9	0.021	95.5	0.001	83.6	0.001	71.8	0.001	71.8	0.001	83.6	0.006	58.2
N-Mags	2.78	16.4	0.007	31.4	0.005	16.4	0.013	46.0	0.001	16.4	0.001	1.9	0.220	30.1	0.005	4.5	0.001	16.4	0.002	28.2	0.002	28.2	0.001	16.4	0.022	41.8
Calc'd HEAD	16.95	100.0	0.004	100.0	0.005	100.0	0.005	100.0	0.001	100.0	0.009	100.0	0.120	100.0	0.018	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.009	100.0
ASSAY HEAD			0.005		0.010		0.006		0.001		0.001		0.130		0.004		0.001		0.001		0.001		0.001		0.010	

APPENDIX VII

Dry LIMS Non-Magnetics
Size Assay Analysis Results

Shree Minerals - Nelson Bay River Project - A13636

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS Test Results

ALS Ammtec World Class Bankable Metallurgy

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 1

SIZE	FRACTION WEIGHT	Wt. DISTn.	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
			Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-1.0-0.50	212.3	30.3	52.00	29.6	17.60	32.5	0.69	27.9	0.010	22.5	0.150	34.2	0.03	32.5	0.033	34.5	0.005	14.9	0.02	29.2	0.007	32.6	0.005	18.5	0.006	26.3	6.74	32.3
-0.50+0.25	136.5	19.5	52.60	19.2	17.40	20.6	0.74	19.3	0.010	14.5	0.140	20.5	0.03	20.9	0.033	22.2	0.005	9.6	0.02	21.3	0.007	21.0	0.011	26.2	0.007	19.7	6.40	19.8
-0.25+0.125	111.2	15.9	54.80	16.3	15.40	14.9	0.65	13.8	0.010	11.8	0.120	14.3	0.03	14.7	0.029	15.9	0.005	7.8	0.02	16.3	0.006	14.6	0.009	17.5	0.004	9.2	5.66	14.2
-0.125	241.0	34.4	54.00	34.9	15.30	32.0	0.85	39.0	0.020	51.2	0.120	31.0	0.03	31.8	0.023	27.3	0.020	67.7	0.02	33.2	0.006	31.7	0.009	37.8	0.009	44.8	6.18	33.7
Calc'd HEAD	700.9	100.0	53.25	100.0	16.42	100.0	0.75	100.0	0.013	100.0	0.133	100.0	0.03	100.0	0.029	100.0	0.010	100.0	0.02	100.0	0.006	100.0	0.008	100.0	0.007	100.0	6.31	100.0
ASSAY HEAD			53.20		16.20		0.72		0.01		0.13		0.03		0.038		0.005		0.01		0.006		0.010		0.005		6.28	

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 1

SIZE	FRACTION WEIGHT	Wt. DISTn.	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
			As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-1.0-0.50	212.3	30.3	0.003	28.5	0.005	30.3	0.011	40.5	0.002	41.4	0.001	26.1	0.060	28.8	0.001	30.3	0.001	22.4	0.001	30.3	0.001	30.3	0.001	30.3	0.002	36.6
-0.50+0.25	136.5	19.5	0.003	18.3	0.005	19.5	0.008	19.0	0.001	13.3	0.001	16.8	0.060	18.5	0.001	19.5	0.002	28.8	0.001	19.5	0.001	19.5	0.001	19.5	0.002	23.5
-0.25+0.125	111.2	15.9	0.002	10.0	0.005	15.9	0.008	15.4	0.002	21.7	0.002	27.4	0.056	14.1	0.001	15.9	0.002	23.4	0.001	15.9	0.001	15.9	0.001	15.9	0.002	19.2
-0.125	241.0	34.4	0.004	43.2	0.005	34.4	0.006	25.1	0.001	23.5	0.001	29.7	0.071	38.7	0.001	34.4	0.001	25.4	0.001	34.4	0.001	34.4	0.001	34.4	0.001	20.8
Calc'd HEAD	700.9	100.0	0.003	100.0	0.005	100.0	0.008	100.0	0.001	100.0	0.001	100.0	0.063	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.002	100.0
ASSAY HEAD			0.003		0.005		0.005		0.001		0.003		0.063		0.005		0.001		0.001		0.001		0.001		0.002	

Shree Minerals - Nelson Bay River Project - A13636

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS Test Results

ALS Ammtec World Class Bankable Metallurgy

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 2

SIZE	FRACTION WEIGHT	Wt. DISTn.	Fe		SiO_2		Al_2O_3		CaO		Mn		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
			Fe Grade	Fe DISTn.	SiO_2 Grade	SiO_2 DISTn.	Al_2O_3 Grade	Al_2O_3 DISTn.	CaO Grade	CaO DISTn.	Mn Grade	Mn DISTn.	P Grade	P DISTn.	S Grade	S DISTn.	MgO Grade	MgO DISTn.	Na2O Grade	Na2O DISTn.	Zn Grade	Zn DISTn.	TiO2 Grade	TiO2 DISTn.	K2O Grade	K2O DISTn.	LOI-1000 Grade	LOI-1000 DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-1.0-0.50	205.9	34.1	38.90	33.9	23.30	33.7	6.74	35.4	0.050	28.6	3.630	38.4	0.03	35.1	0.077	38.6	1.030	34.6	0.04	34.9	0.011	33.3	0.260	38.7	0.150	38.0	8.52	34.0
-0.50+0.25	134.3	22.2	38.30	21.8	22.90	21.6	7.49	25.6	0.050	18.7	3.950	27.3	0.03	26.8	0.076	24.8	1.210	26.5	0.04	23.3	0.011	21.7	0.260	25.3	0.170	28.1	8.38	21.8
-0.25+0.125	107.2	17.8	38.90	17.6	24.70	18.6	5.95	16.3	0.060	17.9	3.350	18.4	0.03	17.0	0.076	19.8	0.890	15.5	0.04	19.1	0.011	17.3	0.260	20.2	0.140	18.4	8.41	17.5
-0.125	156.2	25.9	40.40	26.7	23.70	26.0	5.70	22.7	0.080	34.8	1.980	15.9	0.02	21.1	0.044	16.7	0.920	23.4	0.04	22.6	0.012	27.6	0.140	15.8	0.081	15.6	8.84	26.8
Calc'd HEAD	603.5	100.0	39.15	100.0	23.56	100.0	6.50	100.0	0.060	100.0	3.224	100.0	0.03	100.0	0.068	100.0	1.017	100.0	0.04	100.0	0.011	100.0	0.229	100.0	0.135	100.0	8.55	100.0
ASSAY HEAD			38.90		23.20		6.53		0.04		3.39		0.03		0.081		1.020		0.03		0.012		0.240		0.140		8.51	

ASSAY BY SIZE ANALYSIS ON DRY LIMS NON-MAGS - COMPOSITE 2

SIZE	FRACTION WEIGHT	Wt. DISTn.	As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
			As Grade	As DISTn.	Ba Grade	Ba DISTn.	Cl Grade	Cl DISTn.	Co Grade	Co DISTn.	Cr Grade	Cr DISTn.	Cu Grade	Cu DISTn.	Ni Grade	Ni DISTn.	Pb Grade	Pb DISTn.	Sn Grade	Sn DISTn.	Sr Grade	Sr DISTn.	V Grade	V DISTn.	Zr Grade	Zr DISTn.
(mm)	(g)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
-1.0-0.50	205.9	34.1	0.007	33.9	0.010	39.2	0.019	35.4	0.001	24.4	0.001	22.3	0.200	33.7	0.001	22.3	0.003	45.3	0.001	34.1	0.003	44.4	0.002	50.9	0.021	34.0
-0.50+0.25	134.3	22.2	0.006	19.0	0.010	25.6	0.021	25.5	0.002	31.8	0.001	14.5	0.210	23.1	0.001	14.5	0.002	19.7	0.001	22.2	0.003	29.0	0.001	16.6	0.021	22.2
-0.25+0.125	107.2	17.8	0.007	17.7	0.010	20.4	0.017	16.5	0.002	25.4	0.004	46.3	0.200	17.6	0.004	46.3	0.003	23.6	0.001	17.8	0.002	15.4	0.001	13.2	0.020	16.8
-0.125	156.2	25.9	0.008	29.4	0.005	14.9	0.016	22.6	0.001	18.5	0.001	16.9	0.200	25.6	0.001	16.9	0.001	11.5	0.001	25.9	0.001	11.2	0.001	19.3	0.022	27.0
Calc'd HEAD	603.5	100.0	0.007	100.0	0.009	100.0	0.018	100.0	0.001	100.0	0.002	100.0	0.202	100.0	0.002	100.0	0.002	100.0	0.001	100.0	0.002	100.0	0.001	100.0	0.021	100.0
ASSAY HEAD			0.007		0.005		0.013		0.001		0.001		0.220		0.005		0.001		0.002		0.002		0.001		0.022	

APPENDIX VIII

WHIMS Results

Shree Minerals - Nelson Bay River Project - A13636

WHIMS TESTWORK - WHIMS ON DRY LIMS NON-MAGS Test Results

ALS Ammtec World Class Bankable Metallurgy

A13636 Shree Minerals - WHIMS @ 10000GAUSS ON DRY LIMS N-MAGS (< 1.0mm) - COMPOSITE 1																												
			Fe		SiO_2		Al_2O_3		CaO		MnO		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
WHIMS @ 10,000 GAUSS	FRACTION WEIGHT (Kg)	Wt. DISTn. (%)	Fe Grade (%)	Fe DISTn. (%)	SiO_2 Grade (%)	SiO_2 DISTn. (%)	Al_2O_3 Grade (%)	Al_2O_3 DISTn. (%)	CaO Grade (%)	CaO DISTn. (%)	MnO Grade (%)	MnO DISTn. (%)	P Grade (%)	P DISTn. (%)	S Grade (%)	S DISTn. (%)	MgO Grade (%)	MgO DISTn. (%)	Na2O Grade (%)	Na2O DISTn. (%)	Zn Grade (%)	Zn DISTn. (%)	TiO2 Grade (%)	TiO2 DISTn. (%)	K2O Grade (%)	K2O DISTn. (%)	LOI-1000 Grade (%)	LOI-1000 DISTn. (%)
Mags	45.55	91.0	54.20	93.4	14.60	80.4	0.73	83.9	0.01	29.8	0.14	86.6	0.028	91.3	0.029	87.3	0.01	22.0	0.006	35.7	0.008	85.3	0.013	77.2	0.007	59.7	6.40	N/A
N-Mags	4.48	9.0	38.70	6.6	36.20	19.6	1.42	16.1	0.12	70.2	0.22	13.4	0.03	8.7	0.04	12.7	0.18	78.0	0.11	64.3	0.01	14.7	0.04	22.8	0.05	40.3	5.48	N/A
Calc'd HEAD	50.03	100.0	52.81	100.0	16.53	100.0	0.79	100.0	0.02	100.0	0.15	100.0	0.028	100.0	0.030	100.0	0.02	100.0	0.015	100.0	0.009	100.0	0.015	100.0	0.011	100.0	6.32	0.0
ASSAY HEAD			53.20		16.20		0.72		0.01		0.13		0.03		0.038		0.005		0.01		0.006		0.010		0.005		6.28	

A13636 Shree Minerals - WHIMS @ 10000GAUSS ON DRY LIMS N-MAGS (< 1.0mm) - COMPOSITE 1																								
			As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
WHIMS @ 10,000 GAUSS	FRACTION WEIGHT (g)	Wt. DISTn. (%)	As Grade (%)	As DISTn. (%)	Ba Grade (%)	Ba DISTn. (%)	Cl Grade (%)	Cl DISTn. (%)	Co Grade (%)	Co DISTn. (%)	Cr Grade (%)	Cr DISTn. (%)	Cu Grade (%)	Cu DISTn. (%)	Ni Grade (%)	Ni DISTn. (%)	Pb Grade (%)	Pb DISTn. (%)	Sn Grade (%)	Sn DISTn. (%)	Sr Grade (%)	Sr DISTn. (%)	V Grade (%)	V DISTn. (%)	Zr Grade (%)	Zr DISTn. (%)
Mags	45.55	91.0	0.001	77.2	0.005	91.0	0.003	96.8	0.001	91.0	0.001	77.2	0.063	88.8	0.001	62.9	0.001	71.8	0.001	91.0	0.001	91.0	0.001	91.0	0.004	64.9
N-Mags	4.48	9.0	0.003	22.8	0.005	9.0	0.001	3.2	0.001	9.0	0.003	22.8	0.081	11.2	0.006	37.1	0.004	28.2	0.001	9.0	0.001	9.0	0.001	9.0	0.022	35.1
Calc'd HEAD	50.03	100.0	0.001	100.0	0.005	100.0	0.003	100.0	0.001	100.0	0.001	100.0	0.065	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.001	100.0	0.006	100.0
ASSAY HEAD			0.003		0.005		0.005		0.001		0.003		0.063		0.005		0.001		0.001		0.001		0.001		0.002	

Shree Minerals - Nelson Bay River Project - A13636

WHIMS TESTWORK - WHIMS ON DRY LIMS NON-MAGS Test Results

ALS Ammtec
World Class Bankable Metallurgy

A13636 Shree Minerals - WHIMS @ 10000GAUSS ON DRY LIMS N-MAGS (< 1.0mm) - COMPOSITE 2																												
			Fe		SiO_2		Al_2O_3		CaO		MnO		P		S		MgO		Na_2O		Zn		TiO_2		K2O		LOI-1000	
WHIMS @ 10,000 GAUSS	FRACTION WEIGHT (Kg)	Wt. DISTn. (%)	Fe Grade (%)	Fe DISTn. (%)	SiO_2 Grade (%)	SiO_2 DISTn. (%)	Al_2O_3 Grade (%)	Al_2O_3 DISTn. (%)	CaO Grade (%)	CaO DISTn. (%)	MnO Grade (%)	MnO DISTn. (%)	P Grade (%)	P DISTn. (%)	S Grade (%)	S DISTn. (%)	MgO Grade (%)	MgO DISTn. (%)	Na2O Grade (%)	Na2O DISTn. (%)	Zn Grade (%)	Zn DISTn. (%)	TiO2 Grade (%)	TiO2 DISTn. (%)	K2O Grade (%)	K2O DISTn. (%)	LOI-1000 Grade (%)	LOI-1000 DISTn. (%)
Mags	45.75	91.5	39.80	93.3	22.30	85.5	6.62	92.8	0.06	88.9	3.47	96.9	0.031	92.0	0.067	92.8	1.05	94.2	0.027	87.6	0.013	90.9	0.250	97.3	0.140	95.8	8.60	N/A
N-Mags	4.27	8.5	30.80	6.7	40.40	14.5	5.47	7.2	0.08	11.1	1.17	3.1	0.03	8.0	0.06	7.2	0.69	5.8	0.04	12.4	0.01	9.1	0.08	2.7	0.07	4.2	7.47	N/A
Calc'd HEAD	50.02	100.0	39.03	100.0	23.85	100.0	6.52	100.0	0.06	100.0	3.27	100.0	0.031	100.0	0.066	100.0	1.02	100.0	0.028	100.0	0.013	100.0	0.235	100.0	0.134	100.0	8.50	0.0
ASSAY HEAD			38.90		23.20		6.53		0.04		3.39		0.03		0.081		1.020		0.03		0.012		0.240		0.140		8.51	

A13636 Shree Minerals - WHIMS @ 10000GAUSS ON DRY LIMS N-MAGS (< 1.0mm) - COMPOSITE 2																										
			As		Ba		Cl		Co		Cr		Cu		Ni		Pb		Sn		Sr		V		Zr	
WHIMS @ 10,000 GAUSS	FRACTION WEIGHT (g)	Wt. DISTn. (%)	As Grade (%)	As DISTn. (%)	Ba Grade (%)	Ba DISTn. (%)	Cl Grade (%)	Cl DISTn. (%)	Co Grade (%)	Co DISTn. (%)	Cr Grade (%)	Cr DISTn. (%)	Cu Grade (%)	Cu DISTn. (%)	Ni Grade (%)	Ni DISTn. (%)	Pb Grade (%)	Pb DISTn. (%)	Sn Grade (%)	Sn DISTn. (%)	Sr Grade (%)	Sr DISTn. (%)	V Grade (%)	V DISTn. (%)	Zr Grade (%)	Zr DISTn. (%)
Mags	45.75	91.5	0.007	91.5	0.010	84.3	0.004	91.5	0.003	97.0	0.001	84.3	0.210	92.6	0.006	92.8	0.002	81.1	0.001	91.5	0.002	95.5	0.001	91.5	0.022	92.2
N-Mags	4.27	8.5	0.007	8.5	0.020	15.7	0.004	8.5	0.001	3.0	0.002	15.7	0.180	7.4	0.005	7.2	0.005	18.9	0.001	8.5	0.001	4.5	0.001	8.5	0.020	7.8
Calc'd HEAD	50.02	100.0	0.007	100.0	0.011	100.0	0.004	100.0	0.003	100.0	0.001	100.0	0.207	100.0	0.006	100.0	0.002	100.0	0.001	100.0	0.002	100.0	0.001	100.0	0.022	100.0
ASSAY HEAD			0.007		0.005		0.013		0.001		0.001		0.220		0.005		0.001		0.002		0.002		0.001		0.022	

APPENDIX C – DRILL CORE PHOTOGRAPHS

NBR012A 1.6-22.7m


15.2m
18.2m
18.5m
19.7m
21.2m
22.7m

NBR013A 12.5m-28.9m


25 77

NBR014A 0.0m-23.85m


10.8m
1.5m
16.8m
1.5m
19.8m
1.5m
HQ S-1

APPENDIX D – MINERALOGIST'S ASBESTIFORM REPORT

ANALYTICAL REPORT

NATA WORLD RECOGNISED ACCREDITATION

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Lee Hung	Manager	Said Hirad
Client	Ammtec Ltd	Laboratory	SGS Newburn Environmental
Address	6 MacAdam Place BALCATTA WA 6021	Address	10 Reid Rd Newburn WA 6105
Telephone	08 9344 2416	Telephone	(08) 9373 3500
Facsimile	08 9345 4688	Facsimile	(08) 9373 3556
Email	lee.hung@ammtec.com.au	Email	au.environmental.perth@sgs.com
Project	A13636_Asbestos Analysis	SGS Reference	PE058329 R0
Order Number	(Not specified)	Report Number	0000021522
Samples	2	Date Reported	17/06/2011 3:17:14PM
		Date Received	13 Jun 2011

COMMENTS

The document is issued in accordance with NATA's accreditation requirements.
Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(898/20210).

Sample # 2:
Mineral fibres of unknown type detected by polarized light microscopy, including dispersion staining.
Confirmation by another independent analytical technique may be necessary

Fibre Identification performed by Approved Identifier Karin White.

SIGNATORIES

K. White

Karin White
NATA Signatory

S. Hirad

Said Hirad
Laboratory Manager

SGS

ANALYTICAL REPORT

PE058329 R0

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w
PE058329.001	Composite 1: NBR 12A	Soil	brown, 499g	10 Jun 2011	No Asbestos Detected Organic Fibres Detected	
PE058329.002	Composite 2: NBR 12A + 13A	Soil	brown, 495g	10 Jun 2011	Organic Fibres Detected Unknown Mineral Fibres Detected	