

NEW LARGE HIGH GRADE DISCOVERY SOUTH OF THUNDERBIRD

HIGHLIGHTS

- 46.5m @ 5.50% HM from 57.0m, including 21.0m @ 9.12% HM from 64.5m at Buckfast
- Three substantial new mineral sands discoveries outlined at Buckfast, Bohemia and Concorde
- Opens up an exciting new 60km long highly prospective corridor south of Thunderbird
- Results conclude a highly successful 2018 exploration drilling campaign:
 - Multiple discoveries made along a 160km-long fertile trend
 - Night Train confirmed as a major new mineral sands deposit
 - Strategic value of Company's Dampier Project tenements demonstrated
- New tenement applications lodged to cover additional 600km² of prospective ground

Sheffield Resources Limited ("Sheffield", "the Company") (ASX: SFX) is pleased to announce significant results from regional exploration drilling at the Buckfast, Bohemia and Concorde prospects at the Dampier Mineral Sands Project near Derby in northern Western Australia. These prospects are all new discoveries and are located between 40km and 55km south of the Company's world class Thunderbird Mineral Sands Project (Figure 2).

The latest results include the following broad, high grade intervals:

- 46.5m @ 5.50 % HM from 57.0m (NLAC025), including 21.0m @ 9.12% HM from 64.5m (Buckfast)
- 33m @ 4.00% HM from 61.5m (NLAC023), including 21m @ 5.20% HM from 66m (Buckfast)
- 37.5m @ 5.01% HM from 67.5m (NLAC027), including 25.5m @ 5.74% HM from 75m (Buckfast)
- 43.5m @ 2.35% HM from 16.5m (NLAC018), including 10.5m @ 4.25% HM from 25.5m (Bohemia)

Intervals reported above a 1% HM cut-off, including above 3% HM cut-off max., refer to Table 1 and Appendix 1 for full details

These results conclude the highly successful 2018 regional exploration drilling program and follow the recently announced discoveries at the zircon-rich Night Train deposit (see ASX release 9 October 2018) and the Cold Duck, Porphyry Pearl, Cisco and Nomad prospects (ASX release dated 17 October 2018). The drilling program targeted additional large, zircon-rich deposits suitable for downstream processing at the Thunderbird Dry Mineral Separation Plant (see ASX release 1 August 2018).

Fourteen zones of significant mineralisation have now been identified along a 160km long highly mineralised trend which extends from Seagull in the north to Runaway in the south (Figure 1). This includes the world class Thunderbird deposit which has a Mineral Resource of **3.23 billion tonnes @ 6.9% HM** above a 3.0% HM cut-off (Measured, Indicated and Inferred), including a high-grade component of **1.05 billion tonnes @ 12.2% HM** above 7.5% HM cut-off (Measured, Indicated and Inferred) (see ASX release 03 October 2018).

Sheffield's Managing Director Bruce McFadzean said that the outstanding results received from this year's regional drilling program have exceeded expectations.

"Our recent low-cost exploration program has delivered multiple mineral sands discoveries within a 160km long underexplored and highly fertile region controlled by Sheffield.

"These new discoveries, including the zircon-rich Night Train deposit, are all located in close proximity to the world class Thunderbird deposit, adding to the growing global significance and strategic value of the Dampier Mineral Sands Project. As we close in on development of the world class Thunderbird Project, we will continue to progress all funding options including ongoing discussions with potential strategic partners".



“The Company will deliver a maiden resource estimate for the Night Train deposit during Q1 2019 and will recommence exploration drilling, including the high grade Night Train, Bohemia and Buckfast prospects in H1 2019.”

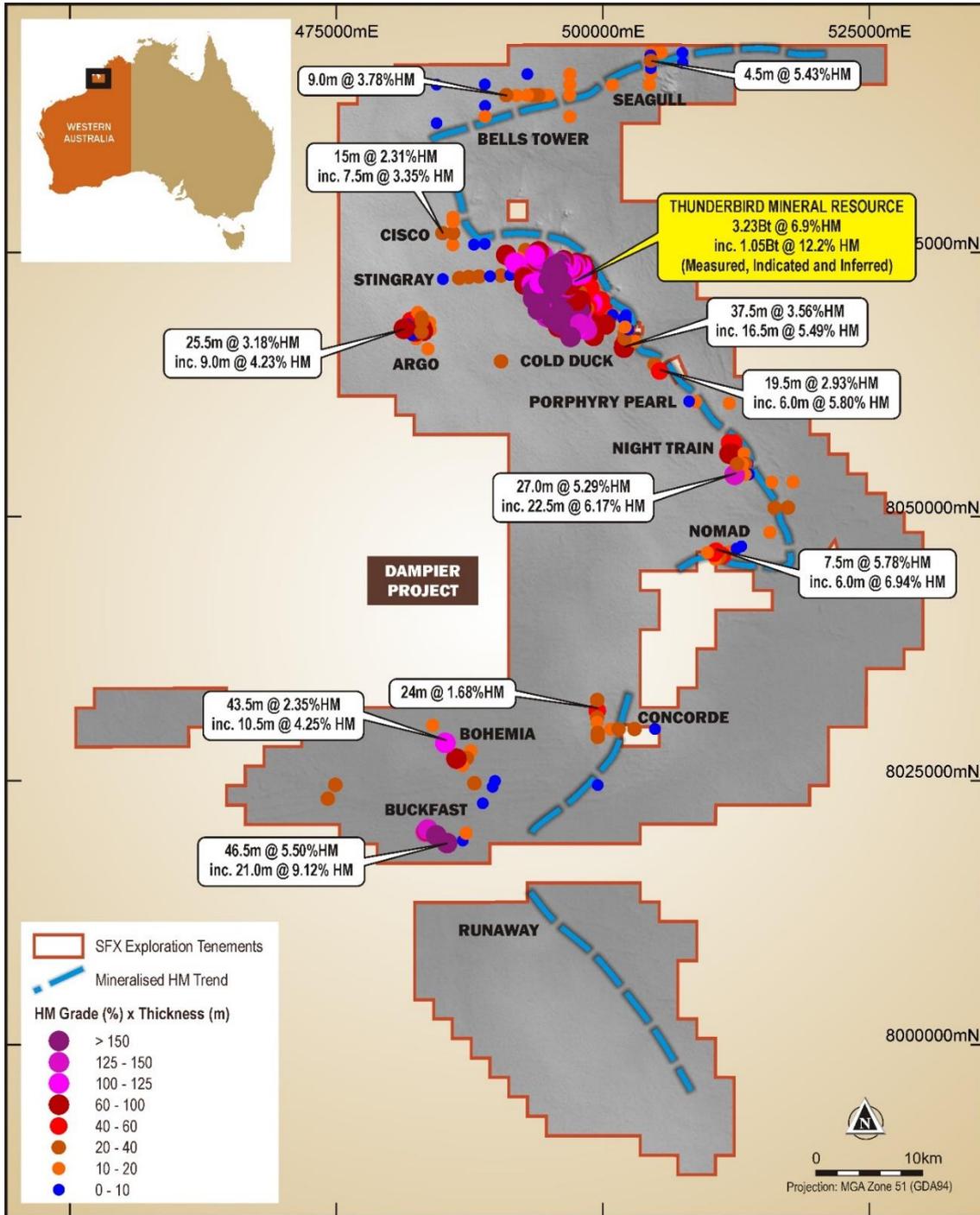


Figure 1: Regional drilling compilation showing grade times thickness¹ and prospect locations

The outstanding drilling results have confirmed the emergence of the Canning Basin as a new zircon-rich mineral sands province with every prospect tested in 2018 returning significant intersections (Figure 1) including exceptional grades and thicknesses at Night Train, Buckfast and Bohemia.

¹HM grade times thickness for intervals. All intervals calculated using 1% HM lower cut, 3m minimum width, maximum 3m internal waste, if multiple intersections per hole the maximum interval is used. Includes Sheffield drill holes, Rio Tinto historic drill holes (Muggeridge 2007, Muggeridge 2008), and Iluka historic drill holes (Northcott 2017) excluding Runaway. Background HM grade in holes at Thunderbird and Cold Duck has been halved to account for dilution by iron oxides.



The drilling results in this announcement relate to 28 drill holes for a total of 1,748m completed at the Bohemia, Concorde and Buckfast prospects (Figure 2). These are the final drill results to be reported from the Dampier Project regional exploration program totalling 94 holes for 4,829m. All prospects targeted during the 2018 program returned significant heavy mineral (HM) intersections with diverse mineral assemblage composition and geological characteristics.

The new discoveries at Buckfast, Bohemia and Concorde are characterised by broad sheet-like geometries, thick (up to 51m) intersections, and mineral assemblages featuring high proportions of valuable heavy mineral (VHM) dominated by leucoxene, altered ilmenite and zircon with low to moderate levels of trash.

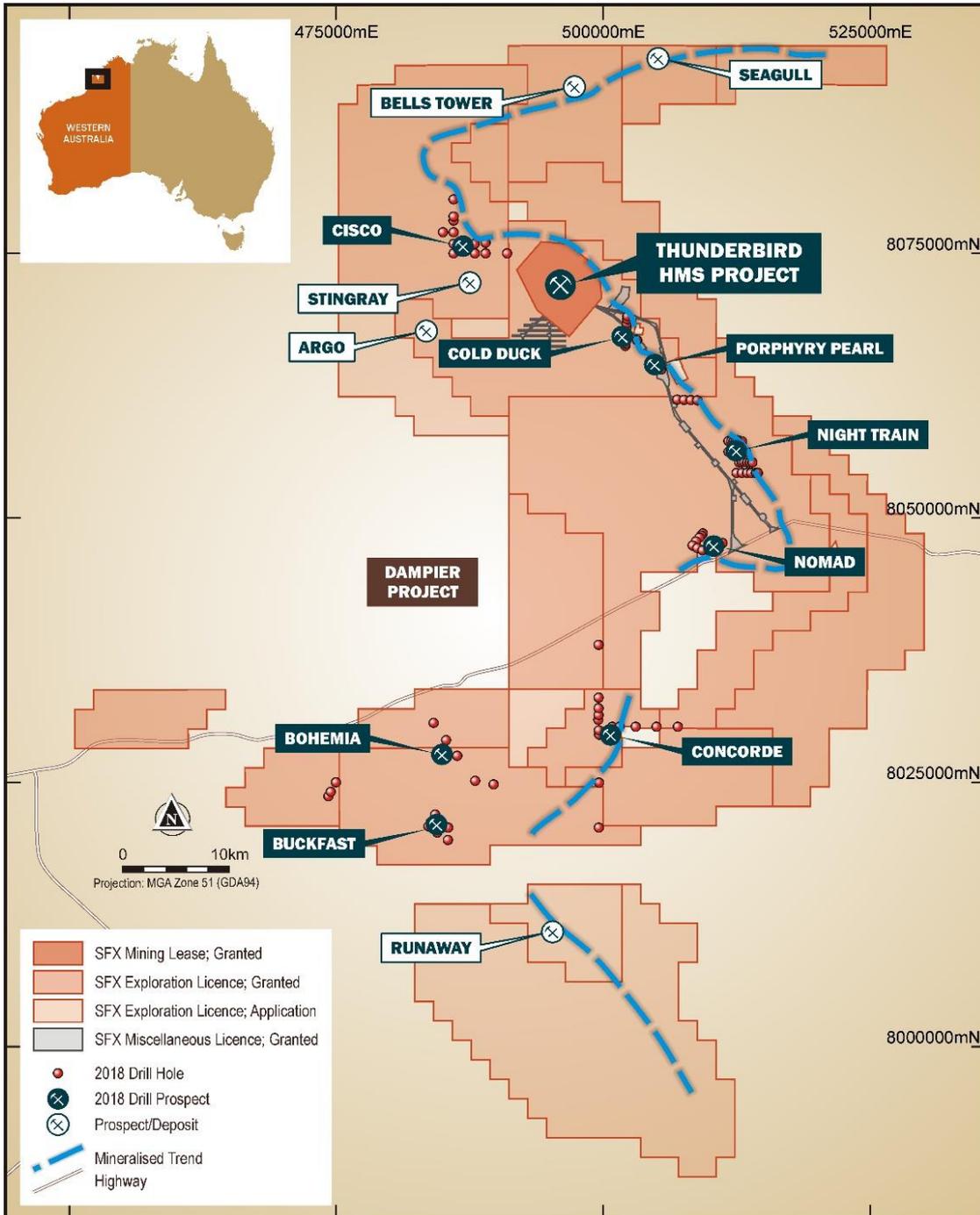


Figure 2: Prospect location plan – Dampier project (not showing recent tenement applications)

Buckfast Prospect

Buckfast is located 13km south of the Great Northern Highway and approximately 50km south of the Thunderbird deposit (Figures 1-3). Thick zones of high-grade mineralisation have been identified at Buckfast through recent and historical drilling. Buckfast represents an exciting and highly significant new target which requires further follow-up drilling to define the broad, high grade mineralised horizon which is open in all directions and in particular as it trends up-dip towards the surface.

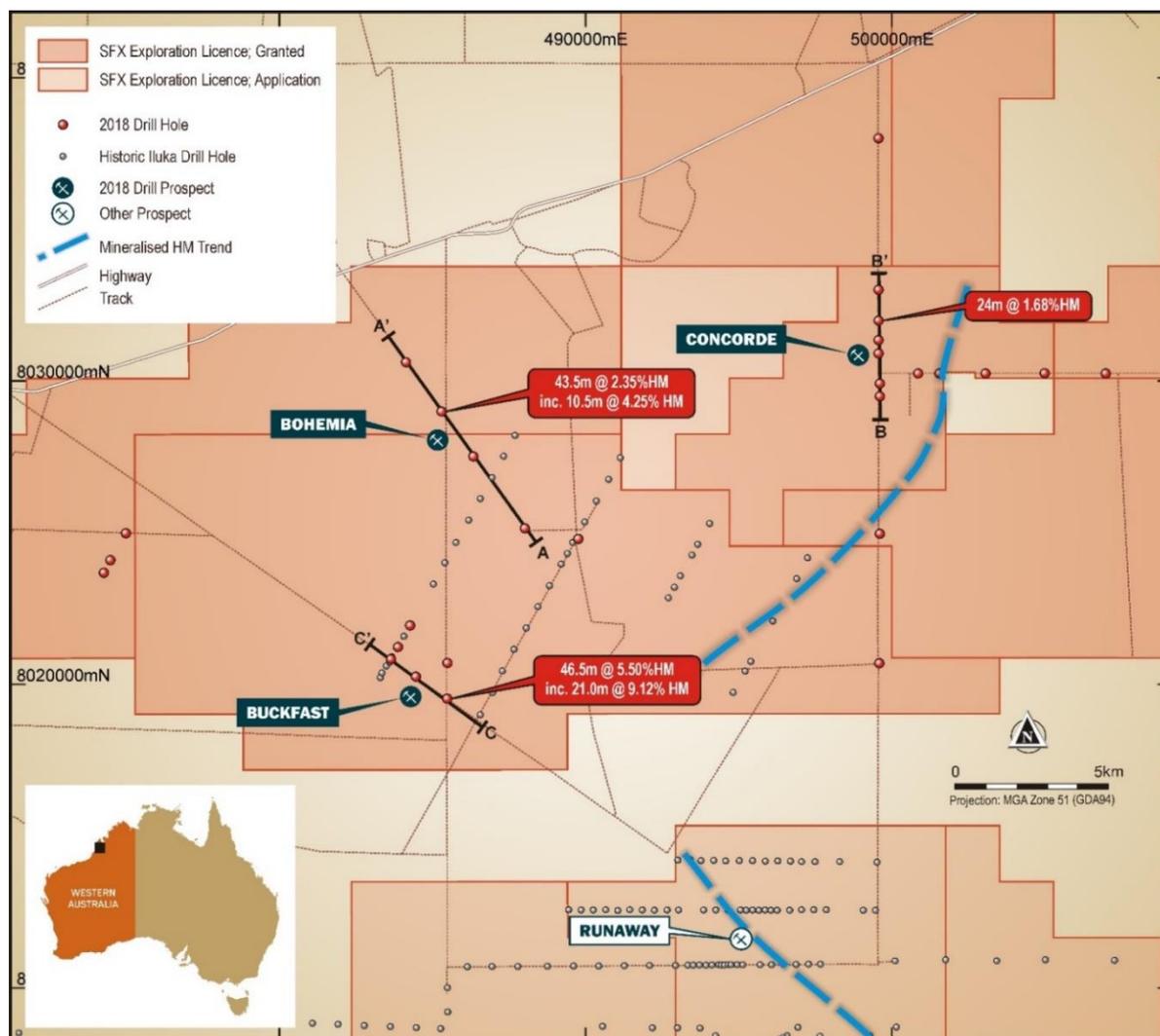


Figure 3: Plan of the Buckfast, Bohemia and Concorde prospects showing significant drill intersections

The prospect was first drilled by Iluka Resources Limited (Iluka, ASX:ILU) with reconnaissance aircore drilling during 2015 (Northcott, 2017). The majority of Iluka drill holes located in the Buckfast region were not of sufficient depth to intersect the mineralisation, only portions of the drill holes were assayed, and the assay method utilised a lower screen size that is too coarse for this style of mineralisation. The tenement was subsequently surrendered on 16 June 2017. Sheffield applied for E04/2494 covering the Buckfast region on 19 June 2017.

A detailed review by Sheffield of historic Iluka drill hole assay data obtained from statutory technical reports identified the presence of significant intervals of mineralisation in two aircore holes at Buckfast, both of which ended in mineralisation. All other Iluka drill holes located in the vicinity of Buckfast were too shallow to intersect this mineralisation. No mineral assemblage testwork was reported from the Iluka drilling.

Sheffield's recent drilling at Buckfast comprised six aircore holes for 507m. The purpose of the drilling was to establish the HM grade of the mineralisation at Buckfast, obtain an indication of the geometry of the mineralisation and collect sufficient samples for mineral assemblage testwork.

Significant results from holes drilled by Sheffield at Buckfast include:

- **46.5m @ 5.50 % HM** from 57.0m (NLAC025), including **21.0m @ 9.12% HM** from 64.5m
- **33m @ 4.00% HM** from 61.5m (NLAC023), including **21m @ 5.20% HM** from 66m
- **37.5m @ 5.01% HM** from 67.5m (NLAC027), including **25.5m @ 5.74% HM** from 75m

(intervals reported above a 1% HM cut-off, including above 3% HM cut-off refer to Table 1 and Appendix 1 for full details. The Sheffield samples that were submitted for HM determination were screened to -1mm to +38µm fraction)

Significant results from historic holes drilled by Iluka at Buckfast include:

- **34.5m @ 3.96% HM** from 67.5m (CBR1562), including **21m @ 5.36% HM** from 73.5m
- **27.0m @ 3.59% HM** from 72.0m (CBR1564), including **19.5m @ 3.97% HM** from 72.0m

(intervals reported above a 1% HM cut-off, including above 3% HM cut-off refer to Table 1 and Appendix 1 for full details. The Iluka samples that were submitted for HM determination were screened to -710µm to +53µm fraction)

At a 1% heavy mineral (HM) cut-off, the mineralisation has been defined over an area of 2.5 km² and varies from 27m to 46.5m in thickness. At a 3% HM cut-off, the mineralisation has been defined over an area of 2.5 km² and varies from 19.5m to 25.5m in thickness. The mineralisation has been intersected from 57.0m to 72.0m depth, open in all directions and appears to be shallowing to the southeast (Figure 5). Future drilling programs will be designed to track the high-grade mineralisation further up-dip, closer to the surface.



Figure 4: Panned HM hosted by brown sands, from Buckfast drill hole NLAC027

Visual examination of the HM from Buckfast indicates that the heavy mineral assemblage is clean, dominated by valuable heavy mineral with intercalated bands containing proportions of iron oxides. The host sequence comprises brown to yellow, fine-medium grained sands with low oversize and moderate to low slimes (Figure 4). Visual assessment of the mineral indicates that the composition contains zircon, leucoxene, altered ilmenite and intercalated bands with iron oxides.

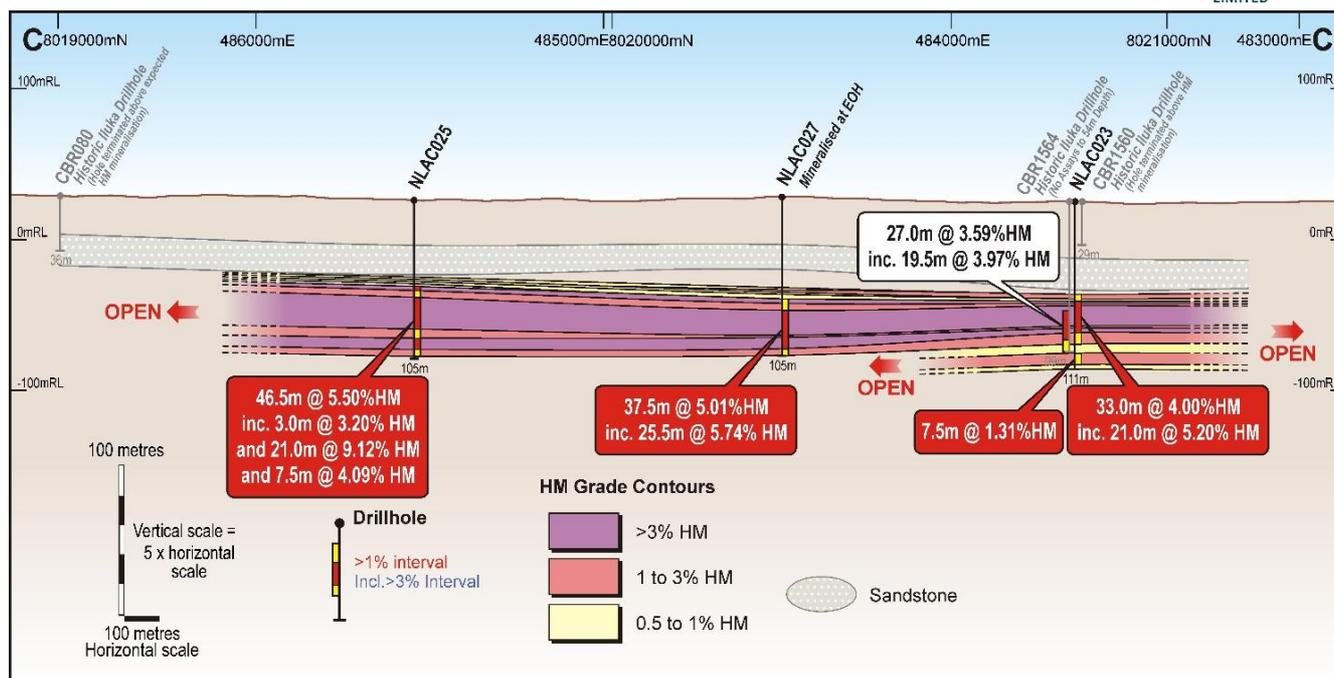


Figure 5: Buckfast - Section C-C'

Bohemia Prospect

The Bohemia prospect is a significant new discovery located 45km to the south-southwest of Thunderbird, just 6km south of the Great Northern Highway and approximately 70km east of Broome (Figures 1-3). The mineralisation is defined by seven aircore drill holes predominantly located on one exploration drill traverse with mineralisation intersected over a length of 8km. Drilling at Bohemia has delineated significant widths of relatively shallow mineralisation with depths to the top of the thickest mineralised zone of between 7.5m and 15m.

The prospect was first drilled by Iluka with reconnaissance aircore drilling during 2015. Only three Iluka drill holes (CBR001-003) intersected the mineralisation, not all intervals were assayed and two of the drill holes ended in mineralisation (Northcott, 2017).

The prospect is currently defined by four Sheffield reconnaissance drill holes along a single drill traverse (Figure 6) and three historic Iluka drill holes. In the central portion of the section, two Sheffield aircore drill holes (NLAC017 & 018) intersected significant thicknesses of shallow mineralisation returning intervals of 51.0m and 43.5m thickness respectively (at 1%HM cut-off) with both holes ending in mineralisation. The mineralisation at Bohemia remains open along strike to the northeast and southwest.

Significant results from holes drilled by Sheffield at Bohemia include:

- **43.5m @ 2.35% HM** from 16.5m (NLAC018), including **10.5m @ 4.25% HM** from 25.5m
 - **51m @ 1.85% HM** from 15m (NLAC017), including **6m @ 4.84% HM** from 18m
 - **4.5m @ 3.11% HM** from 37.5m (NLAC019)
- (intervals reported above a 1% HM cut-off, including above 3% HM cut-off refer to Table 1 and Appendix 1 for full details. The Sheffield samples that were submitted for HM determination were screened to -1mm to +38µm fraction)

Significant results from historic holes drilled by Iluka at Bohemia include:

- **10.5m @ 2.04% HM** from 18m (CBR002), including **3m @ 3.10% HM** from 18m
- **9.0m @ 1.17% HM** from 40.5m (CBR003)
- **7.5m @ 1.58% HM** from 28.5m (CBR001)

(intervals reported above a 1% HM cut-off, including above 3% HM cut-off refer to Table 1 and Appendix 1 for full details. The Iluka samples that were submitted for HM determination were screened to -710µm to +53µm fraction)

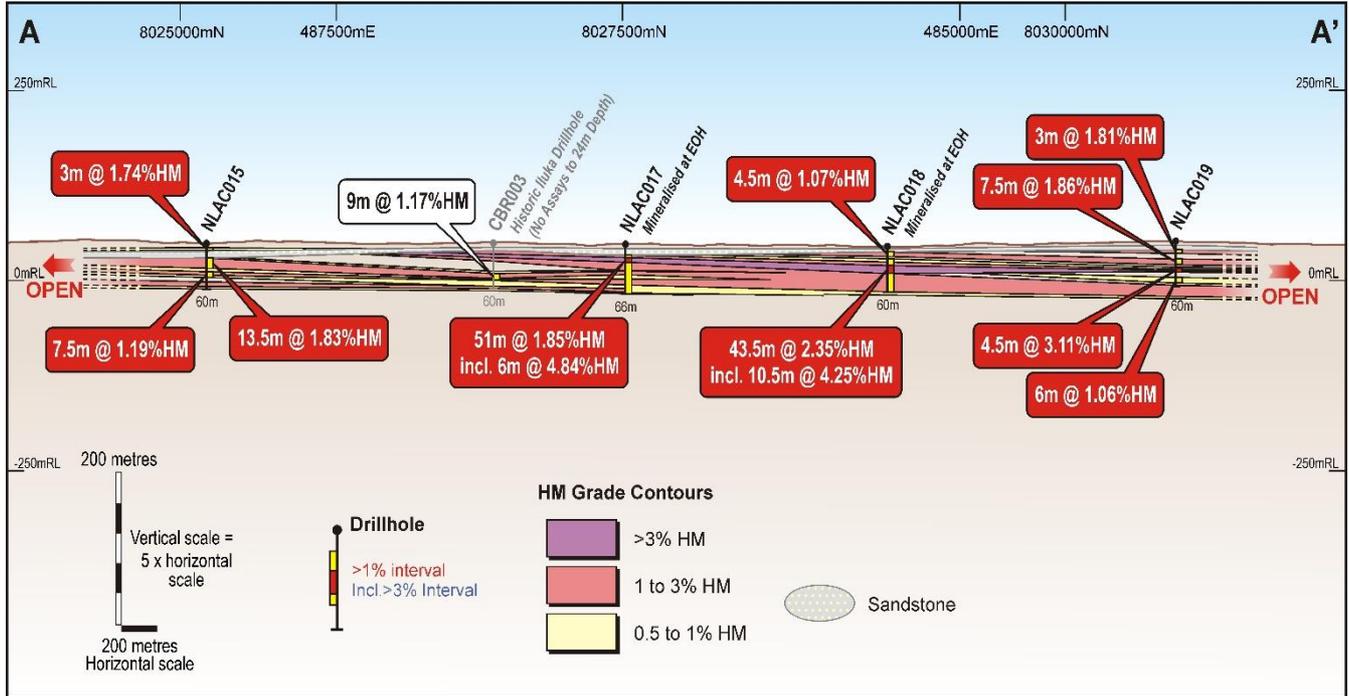


Figure 6: Bohemia - Section A-A'

Visual examination of the heavy mineral from Bohemia indicates some similarity with the mineral assemblage at Night Train. The heavy mineral appears to be dominated by VHM, comprising predominantly leucoxene, altered ilmenite and zircon. The heavy mineral is generally free from coatings, has minimal iron staining, is low in trash minerals and exhibits little evidence of a weathering overprint (Figure 7).

The mineralisation is hosted by soft, fine, clean, predominantly light grey quartz sand. The extensive thick and shallow mineralisation at Bohemia, characterised by high value mineral assemblage, presents a very attractive exploration target and will be the focus of follow-up drilling during 2019.

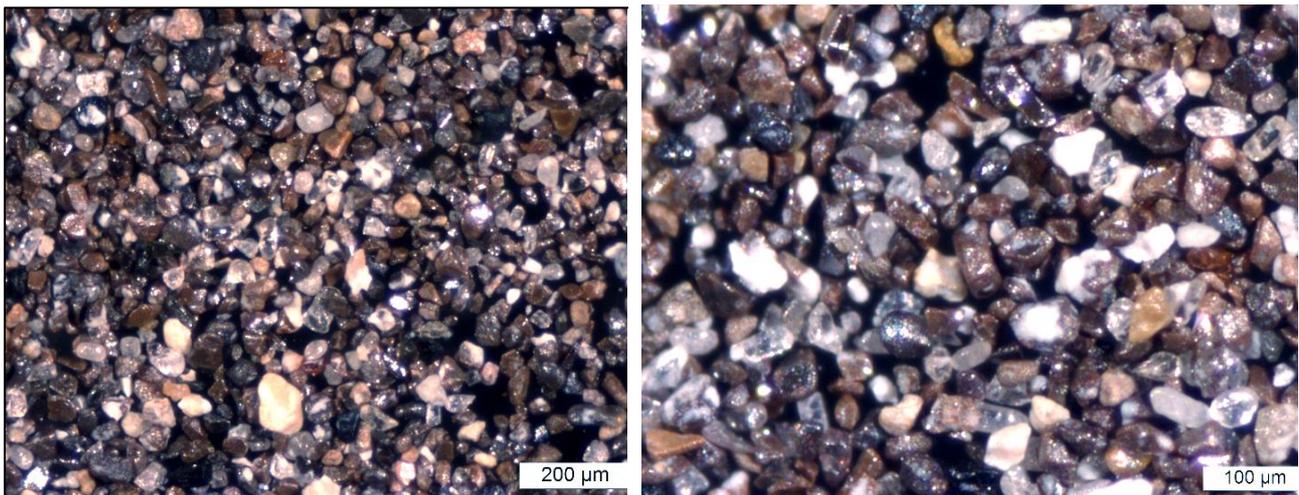


Figure 7: Photomicrograph of HM concentrate from Bohemia, drill hole NLAC017 (19.5-21m)

Concorde Prospect

Concorde is located 14km east-northeast of Bohemia, 10km south of the Great Northern Highway and 40km to the south of Thunderbird (Figures 2 and 3). The prospect is defined by nine drill holes, predominantly located on one north-south and one east-west drill traverse, with the mineralisation defined over a 3km strike length.

At a 1% heavy mineral (HM) cut-off, the mineralisation is 5.0 km wide and from 9m to 24m in thickness. The mineralisation is open along strike to the north, west and northeast. Mineralisation has a very shallow dip to the north and daylightings just to the south of drill hole NLAC007 which intersected the top of the mineralised zone at 4.5m depth (Figure 8).

Significant results from holes drilled at Concorde to date include:

- **24m @ 1.68%HM** from 34.5m (NLAC001)
- **18m @ 1.35%HM** from 18m (NLAC002) and **3m @ 3.79%HM** from 57m
- **13.5m @ 1.26%HM** from 25.5m (NLAC003)
- **15m @ 1.45%HM** from 55.5m (NLAC004)
- **16.5m @ 1.27%HM** from 7.5m (NLAC006)
- **18m @ 1.36%HM** from 4.5m (NLAC007)
- **9m @ 1.24%HM** from 13.5m (NLAC010)

(intervals reported above a 1% HM cut-off, including above 3% HM cut-off refer to Table 1 and Appendix 1 for full details)

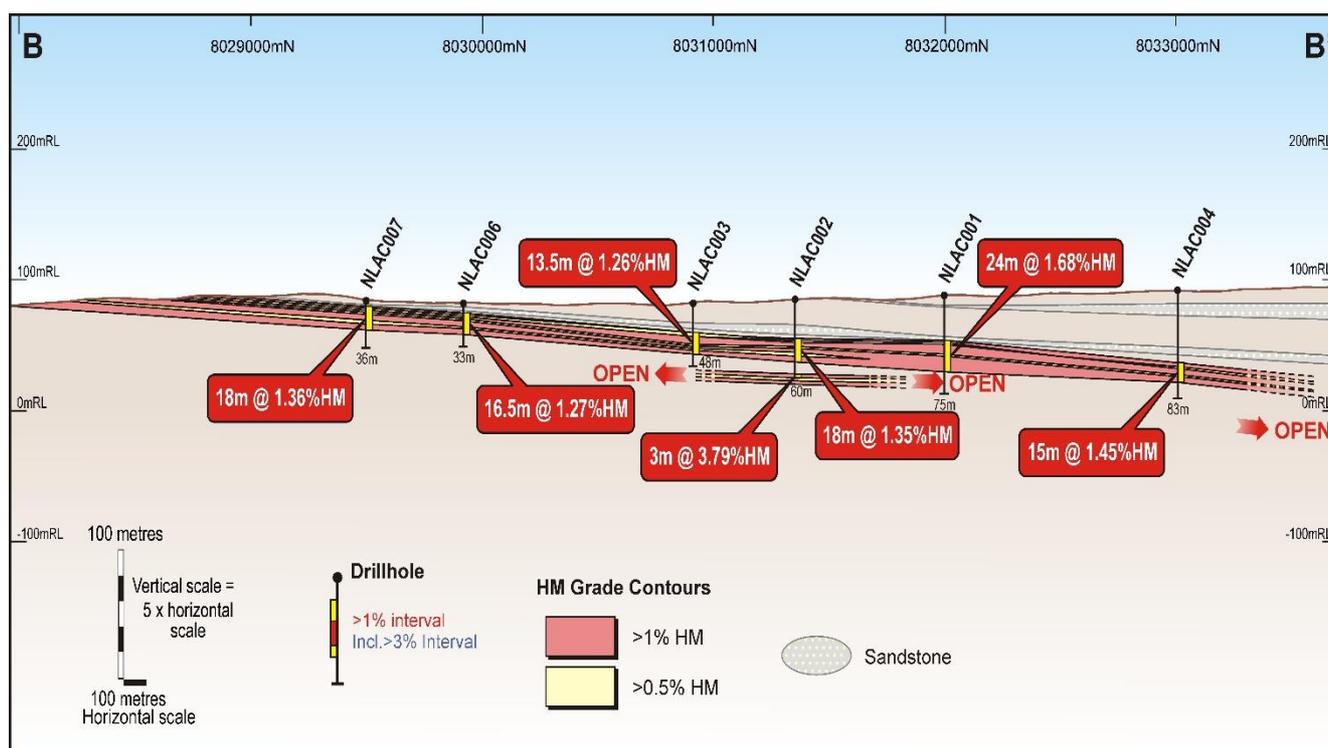


Figure 8: Concorde - Section B-B'

Visual examination of the HM from Concorde indicates some similarity with the Night Train mineralisation in terms of mineral assemblage. The mineral assemblage comprises predominantly leucoxene, altered ilmenite and zircon. The heavy mineral appears to be dominated by VHM, is free from coatings, has minimal iron staining, is low in trash minerals and exhibits little evidence of a weathering overprint (Figure 9).

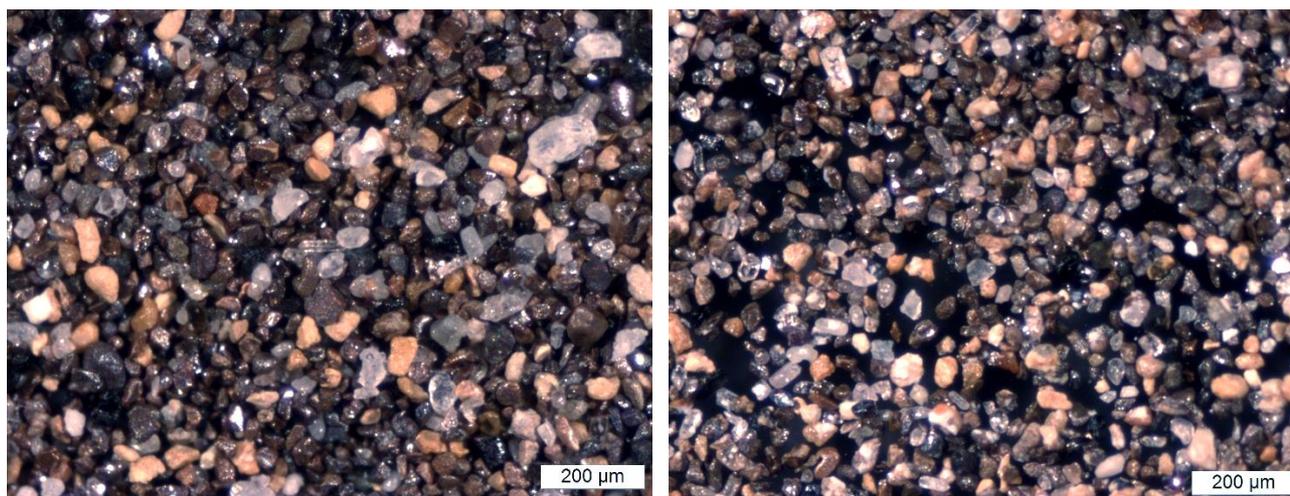


Figure 9: Photomicrograph of HM concentrate from Concorde, left - drill hole NLAC001 (42-43.5m), right - drill hole NLAC007 (12-13.5m)

The mineralisation occurs below a thin sequence of fine to coarse grained, highly weathered and partially indurated to indurated sandstones of the Melligo Formation (Figure 8). This sequence of variably weathered sandstone appears to have shielded the underlying mineralisation from any iron oxide overprint associated with more recent weathering processes. The mineralisation is hosted by soft, clean, well sorted, fine to medium grained, predominantly white unconsolidated sands (Figure 10).



Figure 10: Panned HM from Concorde, drill hole NLAC001

Regional potential of the Dampier Project

The recently completed regional drilling program has identified multiple new styles of mineralisation with varying mineral assemblages, grain size and geological setting along the target stratigraphic horizon now defined over a strike length of approximately 160km. This is the first extensive drilling program undertaken since 2015 and the outstanding results demonstrate that Sheffield has only just started unlocking the exploration potential of the region.

Exploration drilling on the Dampier Project has shown that the region hosts Cretaceous marine coastal systems containing widespread HM mineralisation, including the world class Thunderbird deposit and the recently discovered Night Train deposit. The region is covered by thin but extensive Pindan soil plains which conceal large portions of the target horizon.

Exploration has so far identified fourteen individual prospects containing large, laterally extensive fine-medium grained sheet-like or lobate heavy mineral accumulations deposited in the Late Cretaceous. The variable mineral assemblages identified at these prospects suggest a variety of depositional environments and hinterland sources. The high value zircon and leucoxene rich mineral assemblage observed at many of the new discoveries (i.e. Night Train, Cisco, Concorde, Bohemia etc) provides for very attractive exploration targets.

Mineralisation has been discovered at higher stratigraphic levels (i.e. Argo and possibly Bohemia) above the extensively mineralised Thunderbird stratigraphic position. The different mineralised zones are thought to represent potential stacked shoreline facies that accumulated during marine transgressions in the Cretaceous. This opens up the potential for multiple target horizons on which to focus future exploration programs.

Based on the outstanding results of the 2018 drilling campaign, the Company has recently applied for an additional 600km² of prospective exploration tenure adjoining its Dampier Project.

Further work

Mineral assemblage testwork will be undertaken on all prospects drilled during the 2018 exploration campaign, including Buckfast, Bohemia and Concorde, with results expected during Q4 2018. Resource estimation work on the Night Train deposit is scheduled to commence in the current quarter and is targeted for completion in Q1 2019. A follow-up aircore drilling program designed to extend and further understand the defined mineralisation is scheduled for Q2-Q3 2019.

External References

Muggeridge G. D. (2007) Combined Annual Report (C96/2003 Mt Jowlaenga) for the Period 21 July 2006 to 20 July 2007 E04/1373 Jowlaenga 1, E04/1375 Jowlaenga 3, E04/1376 Jowlaenga 4 and E04/1378 Jowlaenga 6 Western Canning Basin West Australia. Rio Tinto Exploration Pty Ltd statutory annual report to the Department of Mines, Infrastructure and Regulatory Safety (a75902)

Muggeridge G. D. (2008) Combined Annual Report (C96/2003 Mt Jowlaenga) for the Period 21 July 2007 to 20 July 2008 E04/1373 Jowlaenga 1, E04/1375 Jowlaenga 3, E04/1376 Jowlaenga 4 and E04/1378 Jowlaenga 6 Western Canning Basin West Australia. Rio Tinto Exploration Pty Ltd statutory annual report to the Department of Mines, Infrastructure and Regulatory Safety (a79432)

Northcott N. (2017) Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, 11 August 2017. Iluka Resources Limited statutory partial surrender report to the Department of Mines, Infrastructure and Regulatory Safety (a114453)



Figure 11: Sheffield field crew at Concorde

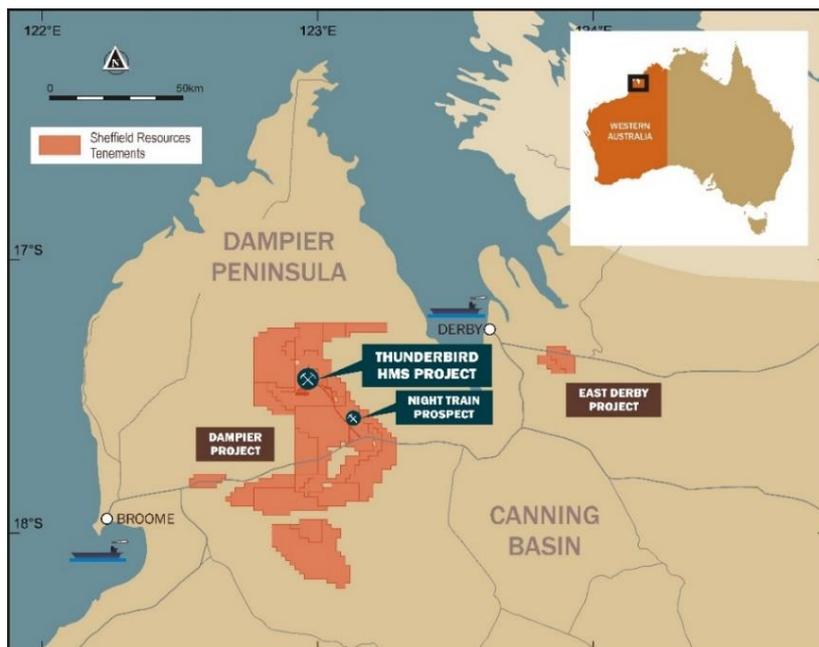


Figure 12: Location of Thunderbird Mineral Sands Project



Figure 13: Sheffield field crew at Buckfast

ENDS

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Table 1: Exploration aircore drill results 13 November, 2018

Prospect	Hole ID	Depth From (m)	Depth To (m)	Interval Width (m)*	HM wt%	Slimes wt%	Osize wt%	Drill Hole Information			
								Easting	Northing	RL	Depth (m)
Concorde	NLAC001	34.5	58.5	24	1.68	12.8	0.6	499,576	8,031,997	88	75.0
	NLAC002 and	30	48	18	1.35	13.6	1.8	499,573	8,031,352	85	60.0
		57	60	3	3.79	17.6	15.8				
	NLAC003	25.5	39	13.5	1.26	10.4	2.0	499,569	8,030,911	83	48
	NLAC004	55.5	70.5	15	1.45	14.0	0.2	499,576	8,033,006	92	83
	NLAC005	No significant intersect						499,571	8,038,000	86	84
	NLAC006	7.5	24	16.5	1.27	14.9	6.0	499,613	8,029,918	87	33.0
	NLAC007	4.5	22.5	18	1.36	15.1	5.0	499,619	8,029,497	87	36.0
	NLAC008	No significant intersect						499,618	8,024,968	62	66.0
	NLAC009	No significant intersect						499,601	8,020,705	48	39
	NLAC010	13.5	22.5	9	1.24	20.2	0.3	500,864	8,030,253	82	45.0
	NLAC011	9	24	15	1.45	15.8	0.4	501,562	8,030,252	88	39
	NLAC012	13.5	34.5	21	1.30	14.5	5.1	503,066	8,030,252	107	45
	NLAC013	No significant intersect						504,999	8,030,254	99	45
NLAC014	No significant intersect						506,993	8,030,250	83	48	
Bohemia	NLAC015 and and	6	9	3	1.74	19.9	1.7	488,021	8,025,149	49	60
		19.5	33	13.5	1.83	16.4	4.1				
		37.5	45	7.5	1.19	11.3	1.1				
	NLAC016	43.5	46.5	3	1.62	8.4	1.4	489,761	8,024,803	52	60
	NLAC017^ including	15	66	51	1.85	19.3	3.0	486,339	8,027,515	48	66
		18	24	6	4.84	24.1	4.7				
	NLAC018^ and including	7.5	12	4.5	1.07	15.8	16.1	485,296	8,029,000	45	60
		16.5	60	43.5	2.35	20.4	1.0				
	NLAC019 and and and	25.5	36	10.5	4.25	21.7	0.5	484,135	8,030,625	52	60
13.5		16.5	3	1.81	10.9	8.2					
24		31.5	7.5	1.86	15.0	3.1					
	37.5	42	4.5	3.11	16.7	0.4					
	48	54	6	1.06	24.5	0.2					
Regional	NLAC020	No significant intersect						474,482	8,024,095	31	60
	NLAC021	13.5	18	4.5	1.01	28.0	0.6	474,987	8,024,989	32	60
	NLAC022	34.5	52.5	18	1.20	12.6	10.9	474,265	8,023,679	25	69

*All intervals calculated using 1% HM lower cut, 3m minimum width, maximum 3m internal waste; "including" intervals >3% HM, 3m minimum width, maximum 3m internal waste. HM, Slimes and Oversize ("Osize") determined by Heavy Liquid Separation (HLS) using TBE (sg. 2.96g/cc); screen sizes: slimes 38µm and oversize ("Osize") +1mm. Intervals less than 34%SL and visual assessed mineralisation. Drill hole collar locations were determined by handheld GPS with expected accuracy of +/- 15m horizontal. RL determined by projection to a regional DTM model created from SRTM data. Easting and Northing coordinate system is MGA Zone 51 (GDA94), RL is AHD. All holes were drilled vertically.

^Hole ended in mineralisation



Prospect	Hole ID	Depth From (m)	Depth To (m)	Interval Width (m)*	HM wt%	Slimes wt%	Osize wt%	Drill Hole Information			
								Easting	Northing	RL	Depth (m)
Buckfast	NLAC023	61.5	94.5	33	4.00	7.9	3.8	483,645	8,020,834	25	111
	<i>including</i>	66	87	21	5.20	8.2	3.5				
	and	100.5	108	7.5	1.31	7.0	2.8				
	NLAC024	No significant intersect						484,267	8,021,946	36	84
	NLAC025	57	103.5	46.5	5.50	5.8	3.1	485,478	8,019,535	26	105
	<i>including</i>	57	60	3	3.20	3.8	4.6				
	<i>also including</i>	64.5	85.5	21	9.12	4.2	4.4				
	<i>also including</i>	91.5	99	7.5	4.09	4.6	1.6				
	NLAC026	No significant intersect, hole not to depth						485,493	8,020,708	32	42
	NLAC027^	67.5	105	37.5	5.01	8.6	4.7	484,460	8,020,263	28	105
<i>including</i>	75	100.5	25.5	5.74	8.5	3.8					
NLAC028	No significant intersect, hole not to depth						483,869	8,021,235	29	60	

*All intervals calculated using 1% HM lower cut, 3m minimum width, maximum 3m internal waste; "including" intervals >3% HM, 3m minimum width, maximum 3m internal waste. HM, Slimes and Oversize ("Osize") determined by Heavy Liquid Separation (HLS) using TBE (sg. 2.96g/cc); screen sizes: slimes 38µm and oversize ("Osize") +1mm. Intervals less than 34%SL and visual assessed mineralisation.. Drill hole collar locations were determined by handheld GPS with expected accuracy of +/- 15m horizontal. RL determined by projection to a regional DTM model created from SRTM data. Easting and Northing coordinate system is MGA Zone 51 (GDA94), RL is AHD. All holes were drilled vertically.

^Hole ended in mineralisation

Table 2: Significant historic hole intersects

Prospect	Hole ID	Depth From (m)	Depth To (m)	Interval Width (m)*	HM wt%	Slimes wt%	Osize wt%	Drill Hole Information			
								Easting	Northing	RL	Depth (m)
Bohemia	CBR001^	28.5	36	7.5	1.58	14.0	12.4	487,701	8,028,212	50	36
	CBR002	18	28.5	10.5	2.04	27.7	6.3	487,326	8,027,521	50	51
	<i>including</i>	18	21	3	3.10	23.5	14.7				
	and	33	45	12	1.21	23.3	1.7				
	CBR003^	40.5	49.5	9	1.17	20.7	0.4	486,943	8,026,822	50	60
and	57	60	3	1.15	15.5	0.3					
Buckfast	CBR1562^	67.5	102	34.5	3.96	5.9	4.3	483,489	8,020,607	24	102
	<i>including</i>	73.5	94.5	21	5.36	5.9	5.4				
	CBR1564^	72	99	27	3.59	12.7	5.4	483,603	8,020,732	49	99
	<i>including</i>	72	91.5	19.5	3.97	12.6	5.9				

*All intervals calculated using 1% HM lower cut, 3m minimum width, maximum 3m internal waste; "including" intervals >3% HM, 3m minimum width, maximum 3m internal waste. HM, Slimes and Oversize ("Osize") determined by Heavy Liquid Separation (HLS) using TBE (sg. 2.96g/cc); screen sizes: slimes 38µm and oversize ("Osize") +1mm. +1mm. Intervals less than 34%SL and less than 25% OS. Drill hole collar locations were determined by reported location with an unknown accuracy. RL quoted in historic report. Easting and Northing coordinate system is MGA Zone 51 (GDA94), RL is AHD. All holes were drilled vertically. See Appendix 1 for further details. Data sourced from Iluka Resources Limited, Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, Nickolas Northcott, 11 August 2017.

^Hole ended in mineralisation

COMPLIANCE STATEMENTS

EXPLORATION RESULTS

The information in this report that relates to Exploration Results is based on information compiled by Mr Seb Gray, a Competent Person who is a Member of Australian Institute of Geoscientists (AIG). Mr Gray is a full-time employee of Sheffield Resources Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gray consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

PREVIOUSLY REPORTED INFORMATION

This report includes information that relates to Exploration Results which were prepared and first disclosed under the JORC Code 2012. The information was extracted from the Company's previous ASX announcements as follows

- Three new discoveries: "THREE NEW MINERAL SAND DISCOVERIES NEAR THUNDERBIRD", 17 October 2018
- Night Train results: "EXCEPTIONAL RESULTS CONFIRM MAJOR DISCOVERY AT NIGHT TRAIN", 09 October 2018
- Mineral Resource and Ore Reserve Statement: "MINERAL RESOURCE AND ORE RESERVE STATEMENT", 03 October 2018
- Drilling commences: "SHEFFIELD COMMENCES 8,000m REGIONAL DRILLING PROGRAM AT THUNDERBIRD", 01 August 2018
- Quarterly report: "QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 30 JUNE 2018" 12 July 2018
- Night Train metallurgical scoping results: "PREMIUM ZIRCON AT NIGHT TRAIN", 14 April, 2016
- Thunderbird Mineral Resource: "SHEFFIELD DOUBLES MEASURED MINERAL RESOURCE AT THUNDERBIRD" 5 July, 2016
- Night Train Discovery: "NEW MINERAL SANDS DISCOVERY AT NIGHT TRAIN" 22 September, 2015
- Regional drilling results: "THREE NEW MINERAL SANDS DISCOVERIES IN CANNING BASIN" 25 February, 2015
- Quarterly report: "QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2015" 27 January 2015
- Argo: "HIGH GRADE DRILLING RESULTS FROM THUNDERBIRD" 11 November, 2013

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of reporting of Ore Reserves and Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

FORWARD LOOKING AND CAUTIONARY STATEMENTS

Some statements in this report regarding estimates or future events are forward-looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include, but are not limited to, statements concerning the Company's exploration programme, outlook, target sizes and mineralised material estimates. They include statements preceded by words such as "anticipated", "expected", "targeting", "likely", "scheduled", "intends", "potential", "prospective" and similar expressions.

ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on developing its 100% owned, world class Thunderbird Mineral Sands Project, located in north-west Western Australia. Sheffield continues to also assess other regional exploration opportunities.

THUNDERBIRD MINERAL SANDS

Thunderbird is one of the largest and highest grade mineral sands discoveries in the last 30 years.

Sheffield's Bankable Feasibility Study shows Thunderbird is a technically low risk, modest capex project that generates strong cash margins from globally significant levels of production over an exceptionally long mine life of 42 years.

Thunderbird will generate a high-quality suite of mineral sands products with specifications suited to market requirements. These products include Premium Zircon suitable for the ceramic sector and LTR Ilmenite which will be one of the highest-grade sulfate feedstocks available globally.

Thunderbird is located in one of the world's most attractive mining investment jurisdictions and is well placed to deliver long term, secure supply of high quality products to a range of potential customers.

The Company is targeting initial production in 2020. The initial planned production profile is aligned with expected emerging supply gaps in global mineral sands markets.

ASX Code:	SFX	Market Capitalisation:	A\$201m
Issued shares:	230.5m	Cash (unaudited, 30 Sep 2018):	A\$13.7m



Appendix 1: JORC (2012) Table 1 Report (13 October, 2018 regional drilling results)

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> NQ (70mm) diameter aircore drilling was used by Sheffield to collect rotary split 1-3kg samples at 1.5m intervals down-hole Aircore drilling was used by Iluka to collect 1.5m intervals down-hole. Split size, rod diameter and method not stated in source report. See 'Verification of Sampling and Assay' section for Iluka report title The air core method of drilling by Sheffield used at Bohemia, Concorde and Buckfast is an Industry Standard for Mineral sands deposits See below for Sheffield sample and QAQC procedures and analysis
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Sheffield aircore system approx. 70mm diameter holes. Sheffield used an aircore system utilising a blade (face sampling) drill bit, NQ size. Sheffield drill system used as an industry standard. Iluka aircore system not stated in source report
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Sheffield drilling used a rotary splitter to collect a 1-3 kg sub-sample from 1.5m intervals. Sample weight was recorded at the laboratory. Duplicate samples for Sheffield drill holes were collected at the drill site (see below) to enable analysis of data precision. Sample condition of Sheffield holes (wet to dry and good to poor qualitative recovery) was logged at the drill site. The sample quality is considered appropriate, for example, to establish context of exploration results and support Mineral Resource estimation. Iluka sample quality, QAQC and sample weight was not reported in the source report
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant 	<ul style="list-style-type: none"> Sheffield logging every drill sample is washed and panned, then geologically logged on-site in 1.5m intervals Sheffield recorded primary, secondary and oversize lithology, qualitative hardness, grain size, rounding, sorting, and washability, visual estimates of HM%, SL% and OS%, and depth to water table recorded. Iluka recorded lithology, colour, grainsize, cement, oversize hardness, washability.



Criteria	JORC Code explanation	Commentary
	<p><i>intersections logged.</i></p>	<ul style="list-style-type: none"> • Sheffield heavy mineral sachets were examined under a microscope following heavy medium separation by laboratory and assessed as to whether sand or from rock. • The entire length of the drill hole is logged for both Sheffield and Iluka; minimum (nominal) interval length is 1.5m. • Logging is suitable such that interpretations of grade and deposit geology can be used to support the information within this release.
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>HM%, SL% OS% Determination</p> <p>Sheffield Drill Site</p> <ul style="list-style-type: none"> • A 1-3kg sample was collected at 1.5m intervals in numbered bags at the drill site via rotary splitter at the cyclone discharge point. • Sheffield sampled every interval • Duplicate samples (field duplicates) collected at drill site 1 in every 40 samples. • Reference standard and blank material samples inserted 1 each in every 40 samples. • Duplicate samples (field duplicates) collected at drill site. • Reference blank (builders sand) and standard samples material samples inserted at site. <p>Iluka drill site</p> <ul style="list-style-type: none"> • Samples were collected at 1.5m intervals • Method of sampling and size of samples has not been stated • No QAQC or duplicate information is within the source report • Iluka samples were collected at the field geologist discretion based on observations and therefore not all intervals were sampled <p>Sheffield Laboratory</p> <ul style="list-style-type: none"> • Samples submitted to an external laboratory for heavy liquid separation (HLS) determination of weight per cent heavy mineral (HM%), slimes (SL%) and oversize (OS%) at a screen split of -38µm, +38µm and +1mm • Laboratory provides a sachet containing the heavy mineral concentrate (HMC) for each sample • Visual estimates of HM%, SL% and OS% logged at the drill site are compared against laboratory results to identify any significant errors. • Spacing of duplicate, standard, blank and laboratory repeat samples for Sheffield drilling are designed to identify sample misplacement or misallocation during sample collection and laboratory analysis. • Laboratory repeats are conducted 1 in every 20 samples, and laboratory reference standard inserted 1 in every 40 samples. • The 200g sample is soaked overnight in water then screened and weighed. • Analysis of duplicates show the data has acceptable precision, indicating sampling techniques are appropriate for the deposit style.



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> • The 1-3kg sample is sub-sampled via a rotary splitter to approx. 200g for analysis. • Sample submitted to external laboratory for heavy liquid separation (HLS) determination of weight per cent Heavy Mineral (HM), Slimes (SL) and Oversize (OS). • 1-3kg drill sample sub-split via rotary splitter to approx. 200g for analysis. • HM, SL and OS calculated as percentage of total sample weight. <p>Iluka Laboratory</p> <ul style="list-style-type: none"> • Samples submitted to Iluka Hamilton Laboratory for heavy liquid separation (HLS) determination of weight per cent heavy mineral (HM%), slimes (SL%) and oversize (OS%) at a screen split of -53µm and +1mm. HM determination was screened to -710µm to +53µm • Visual estimates of HM%, SL% and OS% were not reported in geological logs. • QAQC data is absent. • The sample is de-slimes and a 100g split is weighted • HM, SL and OS calculated as percentage of total sample weight. <p>All</p> <ul style="list-style-type: none"> • Techniques are considered appropriate for use in public reporting of exploration results.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	<p>HM%, SL% OS% Determination</p> <p>Sheffield</p> <ul style="list-style-type: none"> • Sheffield assay and laboratory procedures are industry standard for HMS, although laboratories' methods and heavy liquid composition vary slightly. TBE (2.96g/ml) is used for these results. • SL% determined using a -38µm screen. • OS% was determined using a +1mm screen. • Method produces a total grade as weight per cent of the primary sample. • Method does not determine the relative amounts of valuable (saleable or marketable) and non-valuable heavy mineral species. • QAQC sample frequency is described above. The HM reference sample used is a field-homogenised bulk sample with expected values and ranges determined internally from assay results. • Blank material used is commercially available builder's sand. • Reference standards and blanks are examined for performance over time and within laboratory batches. Batches or sub-batches are re-analysed if unacceptable QAQC data are returned. • Analysis of reference standards, blanks and laboratory repeats show the data to be of acceptable accuracy and precision for use in public reporting of exploration results and Mineral Resource estimation.



Criteria	JORC Code explanation	Commentary
		<p>Iluka</p> <ul style="list-style-type: none"> No QAQC data has been captured from the Iluka report SL% determined using a -53µm screen. OS% was determined using a +1mm screen Split screened at 710 µm LST separation at 2.85 specific gravity Method does not determine the relative amounts of valuable (saleable or marketable) and non-valuable heavy mineral species.
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Significant intervals are reviewed by senior Sheffield personnel prior to release. Data is logged electronically using “validation at point of entry” systems prior to storage in the Company’s drill hole database, which is managed by Company personnel and an external consultancy. Documentation related to data custody and validation are maintained on the Company’s server. No assay data have been adjusted. NLAC015 significant intersect was calculated from 6m and not 1.5m due to strong induration NLAC018 significant intersect was calculated from 7.5m and not 4.5m due to laterisation NLAC019 significant intersect was calculated from 13.5m and not 10.5m due to strong induration Iluka data sourced from the DMIRS WAMEX system entitled ‘Iluka Resources Limited, Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, Nickolas Northcott, 11 August 2017’ (#a114453)
<p>Location of data points</p>	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Sheffield drill hole collar locations were determined by handheld GPS with expected accuracy of +/- 5m horizontal. Sheffield RL was determined by projection to a regional DTM model created from SRTM data. Iluka drill collar locations as reported in Northcott 2017 appendices Iluka drill RL level as reported in Northcott 2017 appendices Coordinates are referenced to the Map Grid of Australia (MGA) zone 51 on the Geographic Datum of Australia (GDA94), RL are AHD. Digital elevation models (DEM) were obtained by Sheffield from Landgate, with an accuracy of +/- 1.5m, for the Dampier Project area. The drill hole collar data was projected to the DEM surfaces to determine the collar elevations for sections The quality and accuracy of the topographic control is considered sufficient for the reporting of exploration results.
<p>Data spacing and distribution</p>	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> Holes were drilled to test regional targets and spaced at appropriate distance to enable Sheffield geologists to determine the trends in mineralisation At Bohemia holes were drilled between 1800m and 2,900m apart along an oblique northwest-southeast axis



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Concorde holes are 400m to 4,500m apart. Holes were drilled along two drill traverses north-south and east-west At Buckfast holes were drilled between 450m and 1250m apart in a cusped arrangement Holes drilled regionally to the northwest of Buckfast were drilled in a northeast-southwest orientation Significant intervals are reported as indicated in the relevant table(s) in the body of the announcement.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Mineralisation is generally flat-lying, vertical drill holes therefore approximate true thickness and perpendicular intersection of mineralisation. Note sections in the body of the announcement are displayed with 5 x vertical exaggeration to ensure clarity. The true strike direction of the mineralisation at Bohemia, Concorde and Buckfast is yet to be determined due to the exploratory first pass nature of the drilling. Dip direction along the drilled corridors are 0.1° dipping to the south at Bohemia, dipping 0.7° to the west and 0.2° to the north at Concorde and 0.1° to the south at Buckfast.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Sample security is not considered a significant risk given the location of the deposit and bulk nature of mineralisation. Nevertheless, the use of recognised transport providers, and sample dispatch procedures directly from the field to the laboratory are considered sufficient to ensure appropriate sample security.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No formal external audits or review of sample techniques or data have been conducted. Audits are not considered necessary at this stage, Industry-standard methods are being employed. All data has been validated by at least two Company geologists

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Statement	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<ul style="list-style-type: none"> The exploration results reported are from Exploration Licence E04/2081, E04/2349, E04/2350, E04/2400, E04/2456 and E04/2494, located on the Dampier Peninsula about 60km west of Derby, and 20km north of the sealed Great Northern Hwy joining Derby and Broome. Tenement E04/2081, E04/2349, E04/2350, E04/2400 and E04/2494 are held by Thunderbird Operations Pty Ltd a 100% subsidiary of Sheffield Resources Ltd. Tenement E04/2456 is held by Sheffield Resources Ltd E04/2081 was granted on 02/05/2012 and is due to expire on 01/05/2022. E04/2349 was granted on 25/11/2015 and is due to expire on 24/11/2020. E04/2350 was granted on 25/11/2015 and is due to expire on 24/11/2020.



Criteria	Statement	Commentary
		<p>E04/2400 was granted on 24/03/2017 and is due to expire on 23/03/2022. E04/2494 was granted on 30/05/2018 and is due to expire on 29/05/2023. E04/2456 was granted on 08/02/2017 and is due to expire on 07/02/2022</p> <ul style="list-style-type: none"> • There are no known or experienced impediments to obtaining a licence to operate in the area. • Sheffield has been operating successfully in the region for more than 7 years to date.
Exploration done by other parties	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Bohemia and Buckfast were initially identified by Iluka during a regional air core campaign. See DMIRS report Iluka Resources Limited, Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, Nickolas Northcott, 11 August 2017 (#a114453) • Significant intersects have been calculated from historic data based on the same criteria calculated for Sheffield drill data (see data aggregate methods) • <i>Grade (%) x thickness (m) diagram (figure 1) contains intersects reported by Rio Tinto Pty Ltd (Annual Reports – Combined Annual Report Mt Jowlaenga - Group C96/2003, for the Period 21 July 2007 to 20 July 2008, G D Muggeridge, September 2007 and Combined Annual Report Mt Jowlaenga - Group C96/2003, for the Period 21 July 2006 to 20 July 2007, G D Muggeridge, September 2008). and Iluka Holes (Iluka Resources Limited, Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, Nickolas Northcott, 11 August 2017).</i> • Field evidence for previous drilling has been noted at Concorde, although this data could not be located in historic DMIRS reports
Geology	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • The Dampier Project is located within the Canning Basin in the Kimberley region of Western Australia. The Canning Basin is an intracratonic basin which contains Ordovician to Cretaceous deposits covered by Cenozoic sediments. • Bohemia is located 45 km to the south-southwest of Thunderbird and consists of mineralisation with similarities to Night Train in terms of visual assemblage with leucoxene and zircon dominant. Sand is clean and predominantly light grey and fine grain size. • Concorde is located 40 km to the south of Thunderbird and consists of mineralisation with similarities to Night Train in terms of visual assemblage with leucoxene and zircon dominant. Sand is clean and predominantly light khaki to grey, fine to medium grain size. • Buckfast is located 50 km to the south-southwest of Thunderbird and consists of mineralisation with similarities to Night Train in terms of visual assemblage with leucoxene and zircon dominant. Sand is clean and predominantly moderate brown, fine to medium grain size.
Drill hole Information	<ul style="list-style-type: none"> • <i>A summary of all information material to the understanding of the exploration results including</i> 	<ul style="list-style-type: none"> • Information relating to the number of drill holes, assayed samples, location accuracy, orientation



Criteria	Statement	Commentary
	<p>a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<p>etc. is included in this table, and in the body of the announcement.</p> <ul style="list-style-type: none"> • Historic drill holes are stated in Iluka data sourced from the DMIRS WAMEX system entitled 'Iluka Resources Limited, Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, Nickolas Northcott, 11 August 2017' (#a114453). • Diagrams in the body of the announcement show the location of and distribution of drill holes. <p>Grade (%) x thickness (m) diagram (Figure 1)</p> <ul style="list-style-type: none"> • All intervals calculated using 1% HM lower cut, 3m minimum width, maximum 3m internal waste, if multiple intersections per hole the maximum interval is used • Contains intersects reported by Rio Tinto Pty Ltd (Annual Reports – Combined Annual Report Mt Jowlaenga - Group C96/2003, for the Period 21 July 2007 to 20 July 2008, G D Muggeridge, September 2007 and Combined Annual Report Mt Jowlaenga - Group C96/2003, for the Period 21 July 2006 to 20 July 2007, G D Muggeridge, September 2008). and Iluka Holes (Iluka Resources Limited, Partial Surrender Report - Canning Basin North - Group C170/2012, for the Period 6 July 2011 to 5 July 2017, Nickolas Northcott, 11 August 2017). • Grade (%) x thickness (m) diagram has a 0.5 dilution factor at Thunderbird and Cold Duck to account for iron oxides within the assemblage
Data aggregation methods	<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • Criteria for calculating significant intervals are included at the end of Table 1 and 2 in the body of the announcement. Minimum widths, maximum internal waste intervals and cut-off grades have been selected to most-appropriately represent the mineralisation. Higher-grade components of significant intervals are detailed in Table 1 and 2 preceded by the term "including". • All intervals calculated using 1% HM lower cut, 3m minimum width, maximum 3m internal waste • "Including" intervals >3% HM, 3m minimum width, maximum 3m internal waste. HM, Slimes and Oversize ("Osize") • Visual examination of mineralised zones in which induration prevents liberation of HM have been deducted from the table of significant intersects • High slimes intersect equal and greater than 34% have been deducted from the table of significant intersects. • Both Sheffield and Iluka historic data have had the same criteria applied
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<ul style="list-style-type: none"> • Mineralisation is generally flat-lying to less than 01 degree dip and drill holes vertical, so representing approximate true thickness. • Refer to diagrams in the body of the announcement for visual representation of drill hole orientation vs. deposit orientation, note the vertical exaggeration used.
Diagrams	<ul style="list-style-type: none"> • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for 	<ul style="list-style-type: none"> • See body of announcement for plan and cross section views and tabulation of results (Table 1).

Criteria	Statement	Commentary
	<i>any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	
Balanced reporting	<ul style="list-style-type: none"> Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> All current drill hole results are reported in this announcement. Where results do not meet the criteria of significant interval these are reported in Table 1 as “no significant interval” or “no significant intersect, hole not to depth”. All information considered material to the reader’s understanding of the exploration results have been reported.
Other substantive exploration data	<ul style="list-style-type: none"> Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> Where relevant this information has been referred to in the body of this announcement.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<ul style="list-style-type: none"> Refer to the Further Work section in the body of announcement.