

ASX and Media Release

27 July 2011

SHEFFIELD UPDATE: LARGE IRON EXPLORATION TARGET OUTLINED

KEY POINTS

- **Large DSO exploration target of 20 to 60 million tonnes at 58 to 64% Fe¹ at Three Pools**
- **Five zones of iron mineralisation outlined by detailed mapping and sampling**
- **Heritage survey planned, drilling scheduled for Q4 2011**

Bulk minerals explorer Sheffield Resources ("Sheffield") (ASX:SFX) today announced further high grade iron results from rock chip sampling at the Company's Three Pools project 20km north of Newman in Western Australia's eastern Pilbara (Figure 1).

Detailed mapping and sampling undertaken by Sheffield's geologists has confirmed the extent, continuity and grade of surface iron enrichment at five prospects (Figures 2-5, Tables 1-3).

Based on the results of mapping and sampling to date, the Company considers the Three Pools project to contain an exploration target of between 20 and 60 million tonnes at 58% to 64% Fe¹. This target is derived from the total mapped area of enrichment (approximately 789,470m²), a mineralisation thickness of between 10m and 30m and typical bulk densities for high grade bedded iron deposits.

Managing Director, Bruce McQuitty said the results at Three Pools demonstrate the Company's ability to rapidly advance iron ore drilling targets from greenfields projects.

"This is a terrific start for Sheffield. Our experienced exploration team has a history of delivering on our exploration target predictions. We plan to test each of these targets fairly quickly and to consolidate further iron projects with the aim of building a significant iron project north of Newman."

An aboriginal heritage survey has been planned for July and drilling is scheduled for the fourth quarter 2011, subject to regulatory approvals and drill rig availability.

The recent programme comprised 40 rock chip samples (16 point and 24 traverse samples). The traverse samples were taken to provide an indication of representative grades over true widths of mineralisation. Sample interval lengths varied from 24.6 to 85.6 metres.

¹ Sheffield has not yet reported Mineral Resources at the Three Pools project and any discussion in relation to targets and Mineral Resources is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

In total 70 rock chip samples have been collected from iron enrichment at the Three Pools project (E47/2280). These samples returned an average grade of 61.89% Fe (with values up to 66.6% Fe) and 0.097% P. Sample traverse results include;

- 372.2m at 60.48% Fe - Top Forge prospect
- 337.4m at 62.46% Fe - Top Forge prospect
- 230.9m at 60.22% Fe - Paradise prospect
- 135.8m at 61.26% Fe - Crucible prospect

The iron mineralisation at Three Pools is associated with both the Boolgeeda Iron Formation and a banded iron formation within the Wongarra Volcanics. The Boolgeeda Iron Formation is known to host several significant iron deposits in the Pilbara including Atlas Iron's Hickman and McCamey's North discoveries.

ENDS

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COMPETENT PERSONS' STATEMENT

The information in this announcement that relates to exploration results is based on information compiled by David Archer. Mr Archer is a full time employee of the Company. Mr Archer is a Member of the Australasian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity to which they are undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code")'. Mr Archer consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

FORWARD LOOKING AND EXPLORATION TARGET STATEMENTS

Some statements in this announcement 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 "expected", "planned", "target", "scheduled", "intends", "potential", "prospective", "seek" and similar expressions. The terms "Direct Shipping Ore (DSO)", "Target" and "Exploration Target", where used in this announcement, should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004), and therefore the terms have not been used in this context. Exploration Targets are conceptual in nature and it is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Reserve.

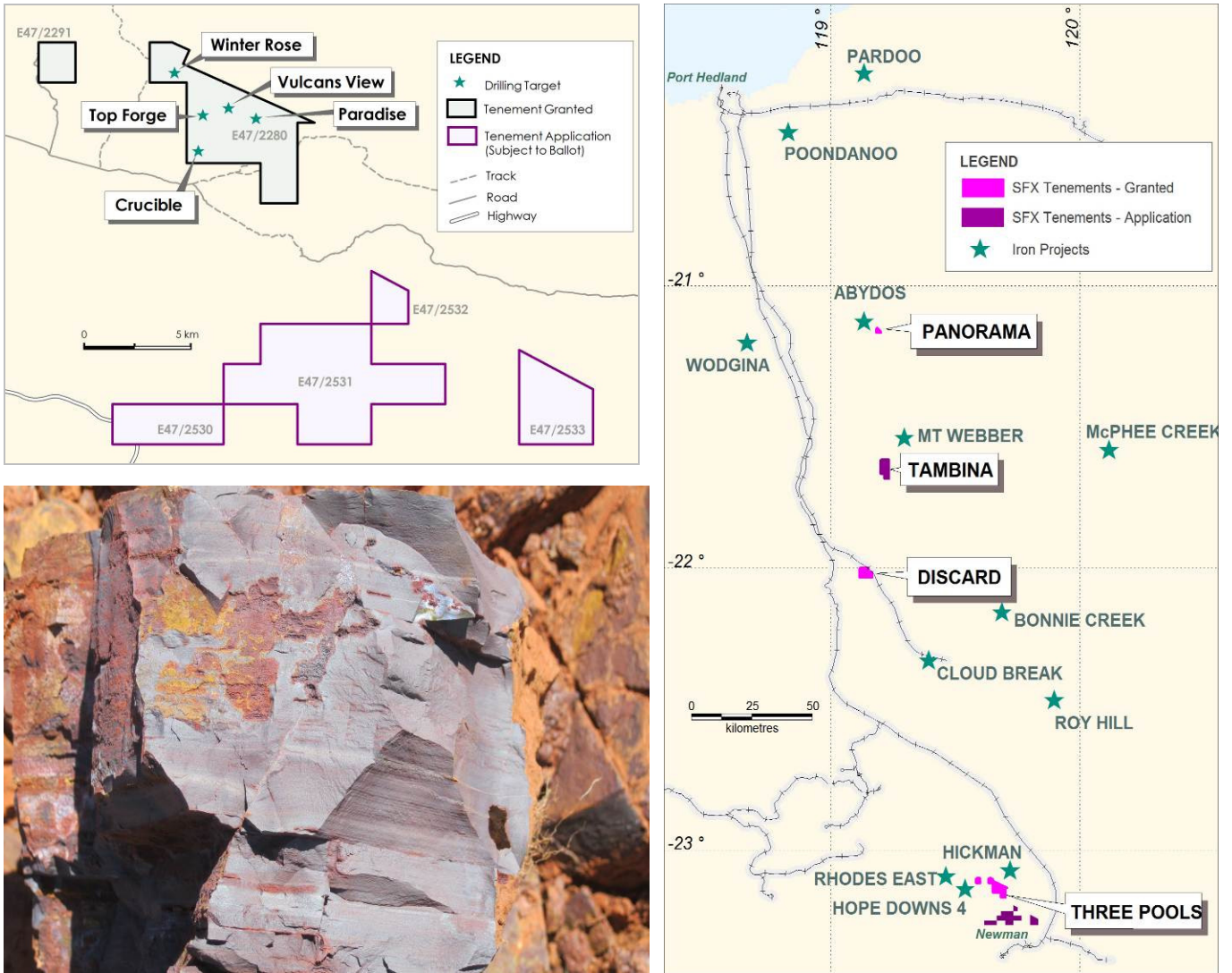


Figure 1: Project location plan (right) and tenement plan (top left), iron enrichment at Top Forge (bottom left)

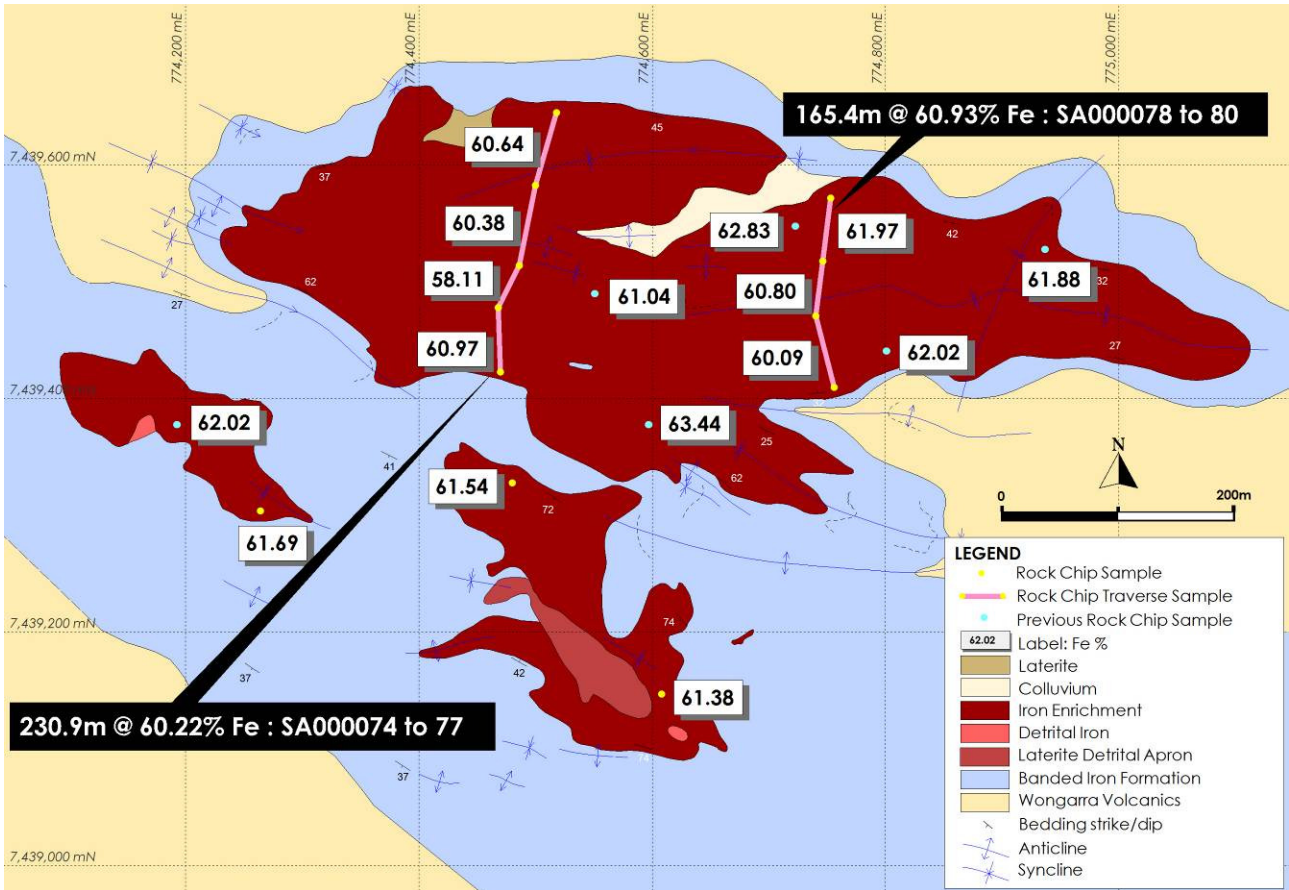


Figure 2: Paradise prospect – mapped iron enrichment and rock chip sample results

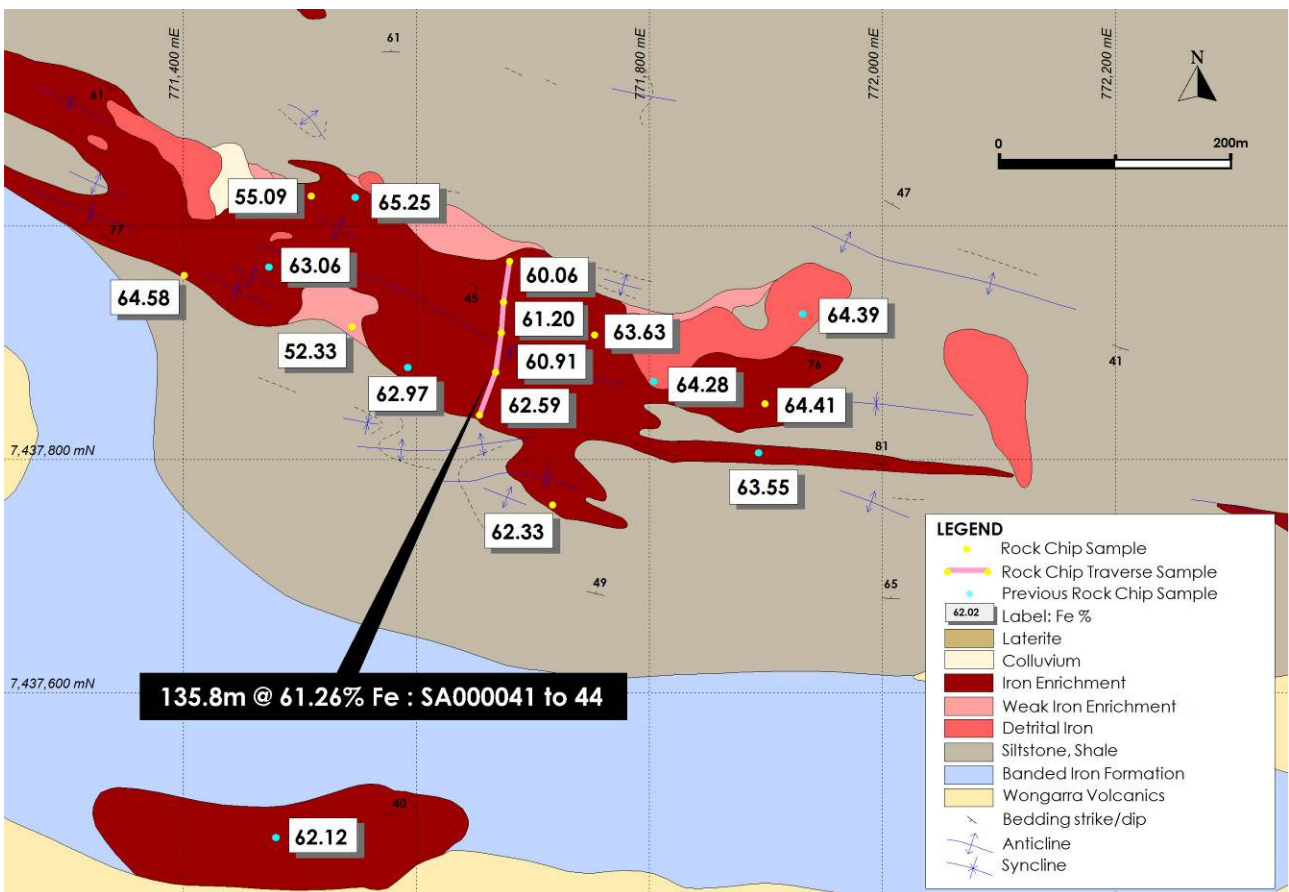


Figure 3: Crucible prospect – mapped iron enrichment and rock chip sample results

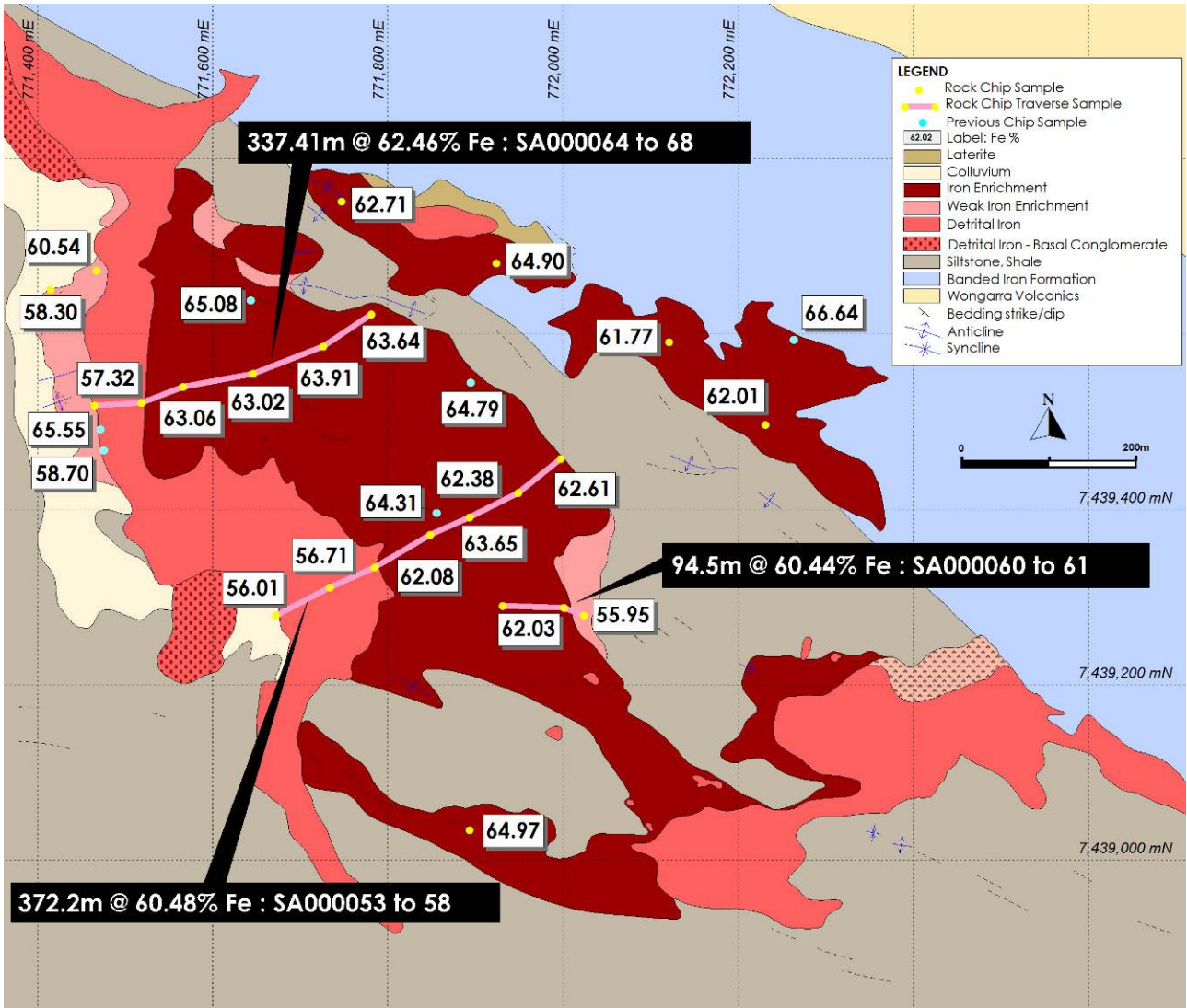


Figure 4: Top Forge prospect – mapped iron enrichment and rock chip sample results

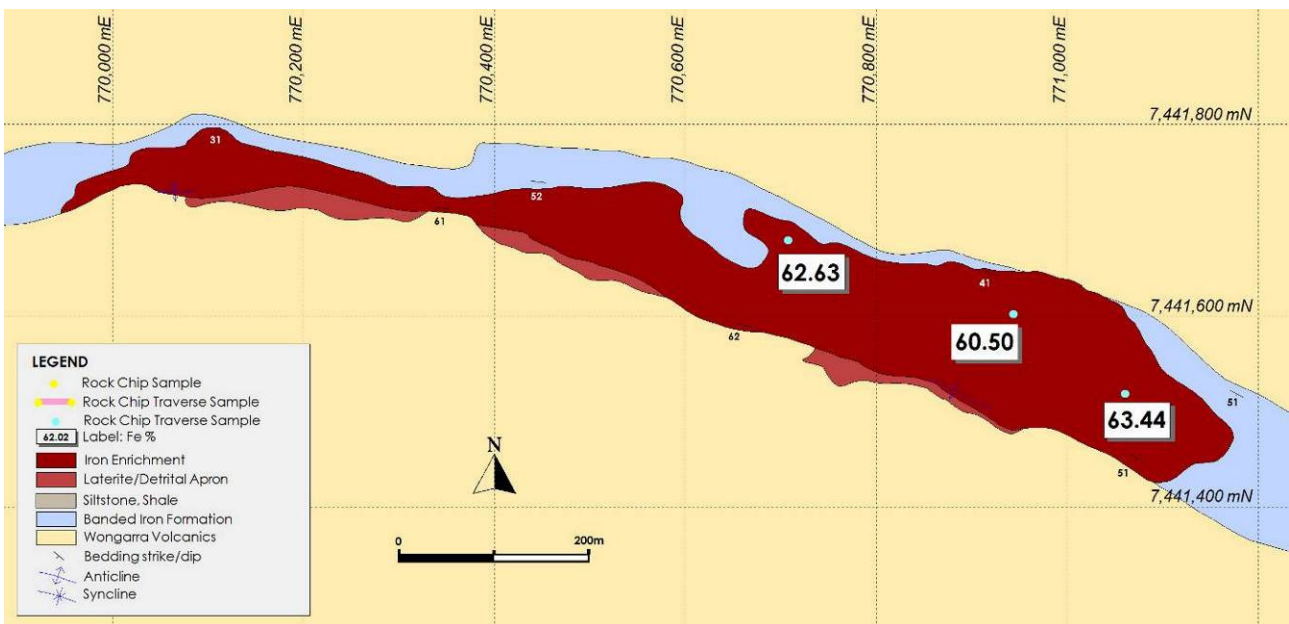


Figure 5: Winter Rose prospect – mapped iron enrichment and rock chip sample results

Table 1: Three Pools Results – Traverse Rock Chip Samples

Sample No	Start Coordinates		End Coordinates		Width m	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %
	Easting	Northing	Easting	Northing						
SA000041	771680	7437970	771675	7437935	35.5	60.06	4.90	2.29	0.10	6.35
SA000042	771675	7437935	771673	7437909	26.2	61.20	3.86	2.73	0.12	5.11
SA000043	771673	7437909	771668	7437875	34.4	60.91	4.59	2.18	0.12	5.38
SA000044	771668	7437875	771654	7437838	39.8	62.59	2.38	2.32	0.11	5.17
SA000053	771997	7439458	771949	7439419	61.9	62.61	2.63	2.73	0.10	4.84
SA000054	771949	7439419	771893	7439391	62.6	62.38	2.88	2.87	0.09	4.23
SA000055	771893	7439391	771848	7439371	49.2	63.65	1.99	1.86	0.12	4.51
SA000056	771848	7439371	771785	7439334	73.0	62.08	2.15	2.36	0.12	5.67
SA000057	771785	7439334	771734	7439311	55.9	56.71	4.99	5.89	0.07	5.89
SA000058	771734	7439311	771672	7439279	69.7	56.01	5.77	6.67	0.06	5.31
SA000060	772024	7439279	772001	7439288	24.7	55.95	9.76	4.12	0.10	5.32
SA000061	772001	7439288	771931	7439290	69.9	62.03	4.08	2.42	0.08	4.29
SA000064	771465	7439519	771519	7439522	53.9	57.32	3.51	4.55	0.06	9.49
SA000065	771519	7439522	771566	7439540	50.3	63.06	2.56	2.46	0.09	4.16
SA000066	771566	7439540	771646	7439555	81.3	63.02	2.59	2.78	0.07	4.34
SA000067	771646	7439555	771726	7439586	85.7	63.91	2.93	1.70	0.09	3.74
SA000068	771726	7439586	771781	7439623	66.2	63.64	3.22	1.47	0.07	4.01
SA000074	774518	7439645	774500	7439583	64.8	60.64	5.44	2.49	0.12	4.99
SA000075	774500	7439583	774486	7439514	70.6	60.38	3.58	2.07	0.10	7.76
SA000076	774486	7439514	774468	7439478	40.4	58.11	3.90	3.52	0.18	8.76
SA000077	774468	7439478	774470	7439423	55.2	60.97	3.35	2.17	0.13	6.85
SA000078	774753	7439572	774746	7439518	54.6	61.97	4.30	2.06	0.09	4.75
SA000079	774746	7439518	774740	7439471	47.6	60.80	3.17	2.32	0.11	6.90
SA000080	774740	7439471	774756	7439410	63.3	60.09	6.28	1.99	0.11	5.49

Coordinates are GDA94 Zone 50. BID = Bedded Iron Deposit. All samples were analysed by X-Ray Fluorescence Spectrometry (XRF). Loss on Ignition (LOI) values were determined using Thermo-Gravimetric Analyses between 110 and 1000°C.

Rock chip traverse sampling method involved collection a sample totalling approximately 1 to 2 kilogram of rock chips collected by hammering surface outcrop at nominal 1 meter spacing along a predetermined traverse generally across strike of mineralization. Several rock chips are collected at each nominal 1 m spaced sampling spot.

Table 2: Three Pools Results – Traverse Rock Chip Sample - Weighted Average Grades

Prospect	Sample No Range	Total Traverse Length m	Weighted Average				
			Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %
Crucible	SA000041 - SA000044	135.8	61.26	3.89	2.36	0.11	5.52
Top Forge	SA000053 - SA000058	372.2	60.48	3.44	3.78	0.09	5.10
Top Forge	SA000060 - SA000061	94.5	60.44	5.56	2.86	0.09	4.56
Top Forge	SA000064 - SA000068	337.4	62.46	2.94	2.48	0.07	4.92
Paradise	SA000074 - SA000077	230.9	60.22	4.10	2.47	0.13	6.94
Paradise	SA000078 - SA000080	165.4	60.93	4.73	2.11	0.10	5.65

Coordinates are GDA94 Zone 50. BID = Bedded Iron Deposit. All samples were analysed by X-Ray Fluorescence Spectrometry (XRF). Loss on Ignition (LOI) values were determined using Thermo-Gravimetric Analyses between 110 and 1000°C.

Rock chip traverse sampling method involved collection a sample totalling approximately 1 to 2 kilogram of rock chips collected by hammering surface outcrop at nominal 1 meter spacing along a predetermined traverse generally across strike of mineralization. Several rock chips are collected at each nominal 1 m spaced sampling spot.

Table 3: Three Pools Results – Point Rock Chip Samples

Sample No	Easting	Northing	Fe %	SiO ₂ %	Al ₂ O ₃ %	P %	LOI %
SA000045	771545	7437914	52.33	15.14	3.60	0.10	5.02
SA000046	771401	7437958	64.58	2.61	1.34	0.08	3.36
SA000047	771510	7438026	55.09	7.41	4.78	0.08	8.29
SA000048	771753	7437907	63.63	3.09	1.49	0.11	3.93
SA000049	771899	7437848	64.41	2.57	1.90	0.07	3.04
SA000050	771717	7437761	62.33	3.52	2.44	0.10	4.26
SA000051	772231	7439497	62.01	4.28	1.98	0.08	4.76
SA000052	772121	7439591	61.77	2.84	2.40	0.10	5.98
SA000059	771893	7439034	64.97	1.01	1.34	0.11	4.59
SA000062	771415	7439651	58.30	2.29	2.23	0.25	7.81
SA000063	771467	7439673	60.54	4.61	3.32	0.19	4.78
SA000069	771747	7439752	62.71	3.17	2.65	0.06	4.32
SA000070	771924	7439681	64.90	3.53	1.57	0.05	1.98
SA000071	774608	7439147	61.38	2.73	1.38	0.11	7.98
SA000072	774264	7439304	61.69	2.47	0.93	0.09	7.91
SA000073	774480	7439328	61.54	2.89	1.52	0.11	7.38

Coordinates are GDA94 Zone 50. BID = Bedded Iron Deposit. All samples were analysed by X-Ray Fluorescence Spectrometry (XRF). Loss on Ignition (LOI) values were determined using Thermo-Gravimetric Analyses between 110 and 1000°C.

ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited (**Sheffield**) is a new exploration company with a bulk minerals focus. The Company's Projects are geared towards the steel industry feed cycle (iron ore and tungsten) and the emerging fillers-ceramics-pigments cycle (talc, zircon, titanium dioxide).

ASX Code – SFX

Market Cap @ 26cps - \$15.2m

Issued shares – 58.3m

Cash - \$4.1 (approx.)

The Company has over 6,000km² of highly prospective tenure, all situated within the state of Western Australia.

TALC

Sheffield has 1,152km² of tenure over the 175km-long Moora Talc Belt which represents a dominant ground position over a region that has, for the last 50 years, been exclusively controlled by major mining companies.

The Moora Talc Belt includes the large Three Springs mine which is owned by Rio Tinto Limited subsidiary Luzenac Australia Pty Ltd. Three Springs is renowned for producing high purity talc and is a relatively simple "dig-and-deliver" operation.

The existing infrastructure is excellent. A railway and a sealed highway transect the project and connect to Geraldton port approximately 170km to the northwest.

Sheffield's large tenement holding contains numerous talc occurrences and has the potential to become a strategic talc asset. Sheffield therefore represents a unique opportunity for investors to gain exposure to one of the few high-grade talc explorers in the world.

HEAVY MINERAL SANDS

Sheffield controls over 5,000km² of mineral sands tenure in the established North Perth Basin mineral sands province and the emerging Carnarvon, Eucla and Canning Basin provinces.

Sheffield's North Perth Basin tenement package of over 2,500km² contains seven advanced exploration projects: West Mine North, Ellengail, Yandanooka, Durack, Beekeepers, and Irwin which are located near Eneabba and the large McCalls deposit - a former BHP project located near Gingin. These projects are well located close to existing mineral sands operations and to a network of highways and railway lines connecting to Geraldton and Fremantle/Kwinana ports. Sheffield's strategy is, subject to exploration success, to build multiple HMS projects capable of supporting a flexible mobile mining plant.

IRON

Sheffield's Pilbara iron ore projects consist of five granted tenements and 12 tenement applications, of which three are second-in-time applications and five are subject to ballot with multiple competing parties. Sheffield's strategy is to target hematite mineralisation adjacent to infrastructure in the world class Pilbara iron province and to build up consolidated tenement holdings over time. Reconnaissance mapping has so far identified iron enrichment on three of the Company's tenements.