ASX and Media Release

1 December 2011

BROAD IRON INTERSECTIONS FROM DRILLING AT THREE POOLS

KEY POINTS

- **First pass drilling intersects broad zones of iron mineralisation from near surface**
- **Mineralisation remains open, with potential for extension down-dip and along strike**
- **Three Pools is located in a region of intense iron ore exploration and development activity (Rio Tinto, Hancock, Atlas and Brockman)**

Bulk minerals explorer Sheffield Resources ("Sheffield") (ASX:SFX) today announced broad iron intersections from a 25-hole RC drilling programme at its Three Pools iron ore project 20kms north of Newman in Western Australia's eastern Pilbara (Figure 1).

A total 1,212m was drilled at five prospects, designed as an initial test of substantial zones of iron mineralisation mapped and sampled by Sheffield's geologists earlier this year (see ASX release 11 May 2011).

Significant results (as detailed in Table 1) include:

Top Forge Prospect

50m @ 57.5% Fe from 0m (TPRC012)
42m @ 57.6% Fe from 6m (TPRC011)
44m @ 56.0% Fe from 0m – ***includes 18m @ 59.6% Fe from 26m***(TPRC017)

Crucible Prospect

52m @ 56.9% Fe from 16m (TPRC022)
46m @ 56.2% Fe from 2m – ***includes 30m @ 59.3% Fe from 16m*** (TPRC023)
44m @ 55.4% Fe from 4m – ***includes 20m @ 59.1% Fe from 28m*** (TPRC025)

The Company is of the view that the drilling results, together with previously announced mapping and sampling results, support an Exploration Target[1] for Three Pools of **20-60Mt @ 56-60% Fe**.

Three Pools is situated just 6km from the Rio Tinto–Hancock JV's $1.5 billion Hope Downs 4 project, currently in development; and is also proximal to Brockman Resources Ltd's (ASX:BRM) Coondiner, Kalgan Creek and Opthalmia Range projects and Atlas Iron Ltd's (ASX:AGO) Hickman project.

Managing Director, Bruce McQuitty said the results demonstrate substantial size potential at two of the prospects; Top Forge and Crucible.

"*This has been a very successful first pass drilling programme at Three Pools. We have discovered significant iron mineralisation close to surface with potential to extend the mineralisation at both Crucible and Top Forge,*"

"*Three Pools is one of several iron projects which we intend to drill next year as part of our strategy to discover and consolidate iron ore tonnage in the Newman to Port Hedland corridor*."

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[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.

At both Top Forge and Crucible, iron mineralisation is associated with the Boolgeeda Iron Formation. The Boolgeeda Iron Formation is known to host several significant iron deposits in the Pilbara including Atlas Iron's Hickman and McCameys North discoveries.

Top Forge
Ten holes were drilled at the Top Forge prospect (Figure 2), targeting surface iron enrichment which returned grades of up to 63.4% Fe in rock-chip samples (see ASX release 11 May 2011).

The iron enrichment intersected at Top Forge is up to 50m thick and averages 29m thickness over the area drilled (600m x 400m). Significantly, iron enrichment greater than 40m thick remains open along strike to the northwest and southeast, and down-dip to the southwest (Figure 2 &4). Mineralisation in outcrop extends over an area of 1km x 500m, with only the central part of this area drilled to date.

An 8 to 10m-thick iron depleted zone occurs just below surface (Figure 4, TPRC013-015), except where detrital iron caps the sub-surface mineralisation (Figure 4, TPRC012). This depletion zone is thought to explain why drilled iron grades were not as high as those indicated by surface rock-chip samples, as is common with iron deposits in the Pilbara.

Crucible
Five holes were drilled at the Crucible prospect (Figure 3). The drilling intersected iron enrichment up to 52m thick with an average thickness of 36m over the area drilled (250m x 100m). Mineralisation remains open down-dip, where the thickest mineralised interval of 52m was intersected in drill-hole TPRC022 (Figure 5). Only the eastern half of the prospect was drilled in this programme. Iron enrichment extends in outcrop over a total area of 600m x 150m (Figure 3).

Other Prospects
Of the three other prospects drilled: Winter Rose, Vulcan's View and Paradise; only Paradise returned significant assay results (Table 1). At Paradise, 3 holes out of the 6 drilled contain mineralised intervals above 50% iron, however these are thin (4 to 10m), and of too low grade to justify further work. These prospects are hosted by a BIF unit within the Wongarra Volcanics. Future exploration at Three Pools will focus on the more prospective Boolgeeda Iron Formation.

Further Work
Sheffield's geologists have identified several additional targets within the Boolgeeda Iron Formation which will be subject to further exploration during the 2012 field season.

ENDS

Website: www.sheffieldresources.com.au

For further information please contact:
Bruce McQuitty
Managing Director
Tel: 0409 929 121
bmcquitty@sheffieldresources.com.au

Media:
Annette Ellis / Warrick Hazeldine
Purple Communications
Tel: 08 6314 6300
AEllis@purplecom.com.au

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.

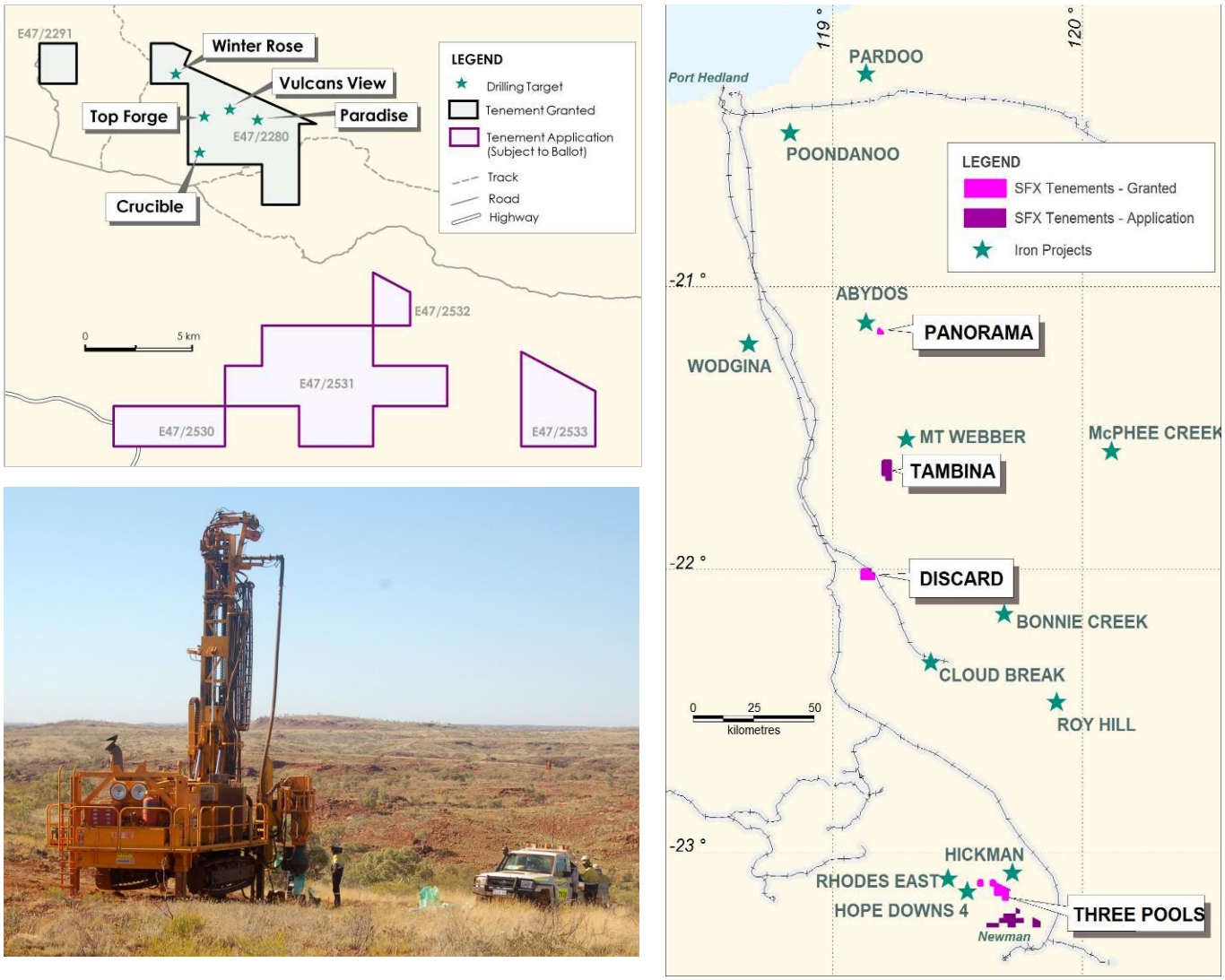

Figure 1: Project location plan (right), tenement plan (top left), RC drilling at Three Pools (bottom left)

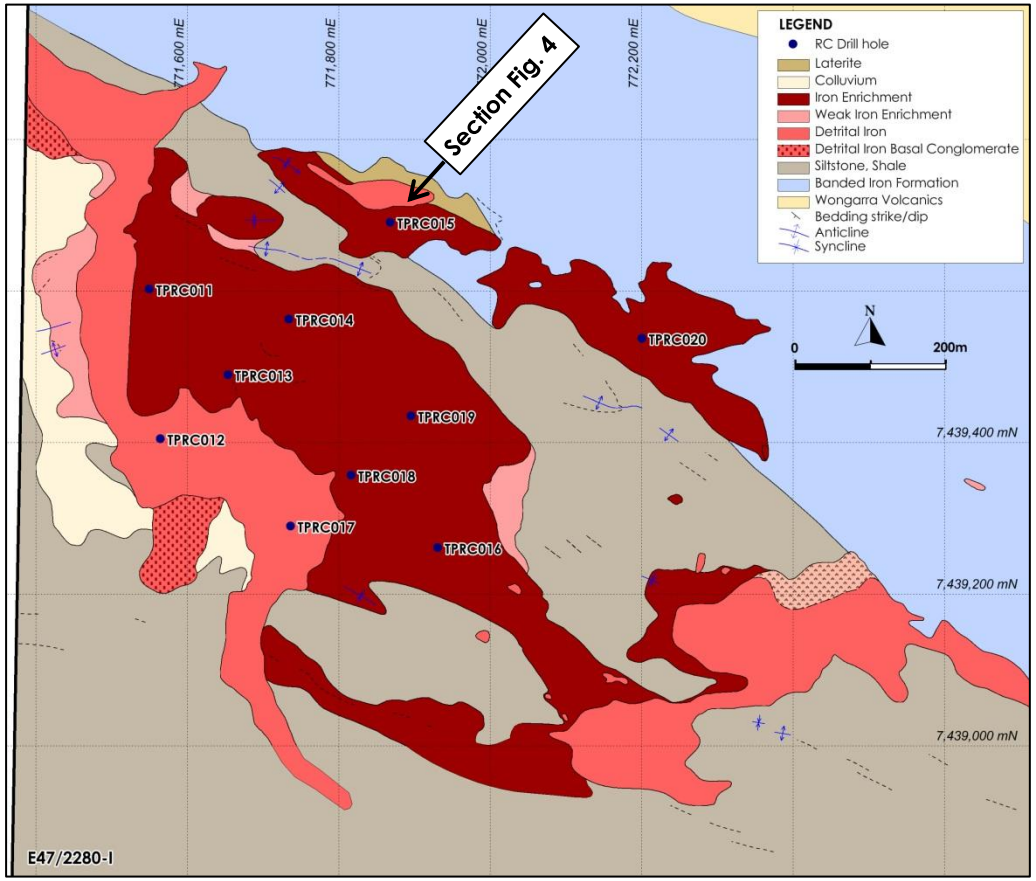

Figure 2: Top Forge Prospect surface geology and drill hole locations. Mineralisation mapped at surface remains undrilled to the southwest and southeast.

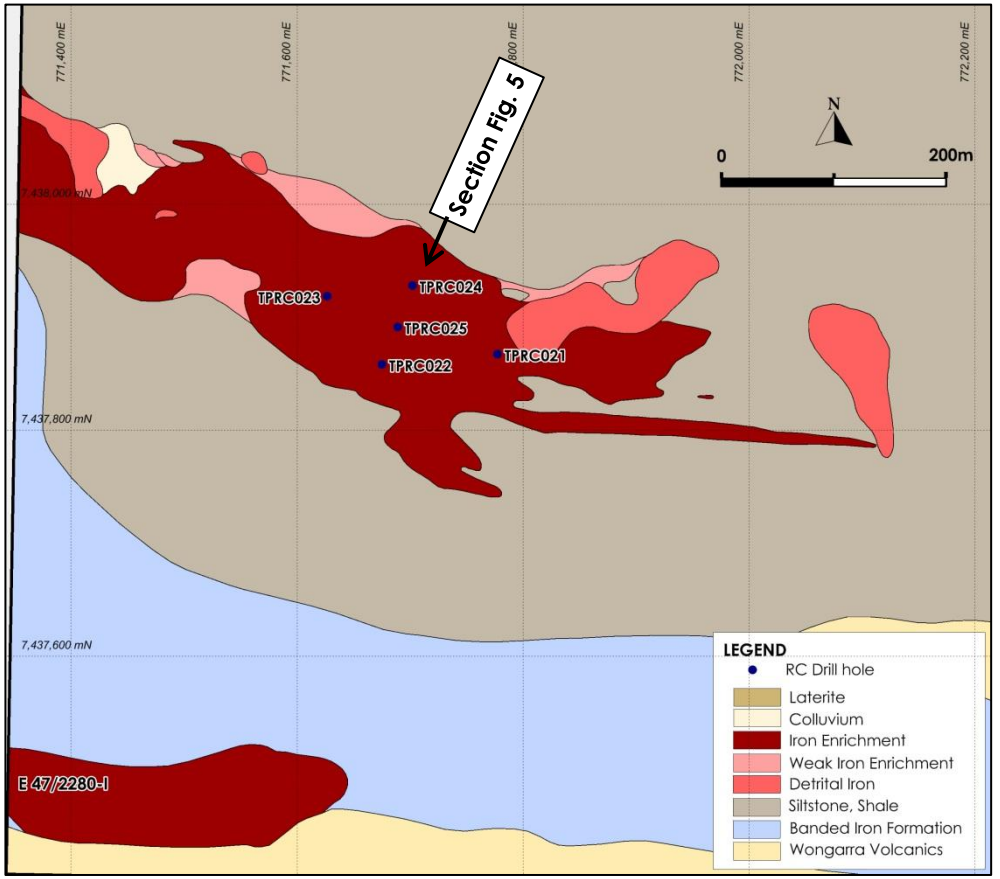

Figure 3: Crucible Prospect surface geology and drill hole locations. Mineralisation mapped at surface remains undrilled to the northwest.

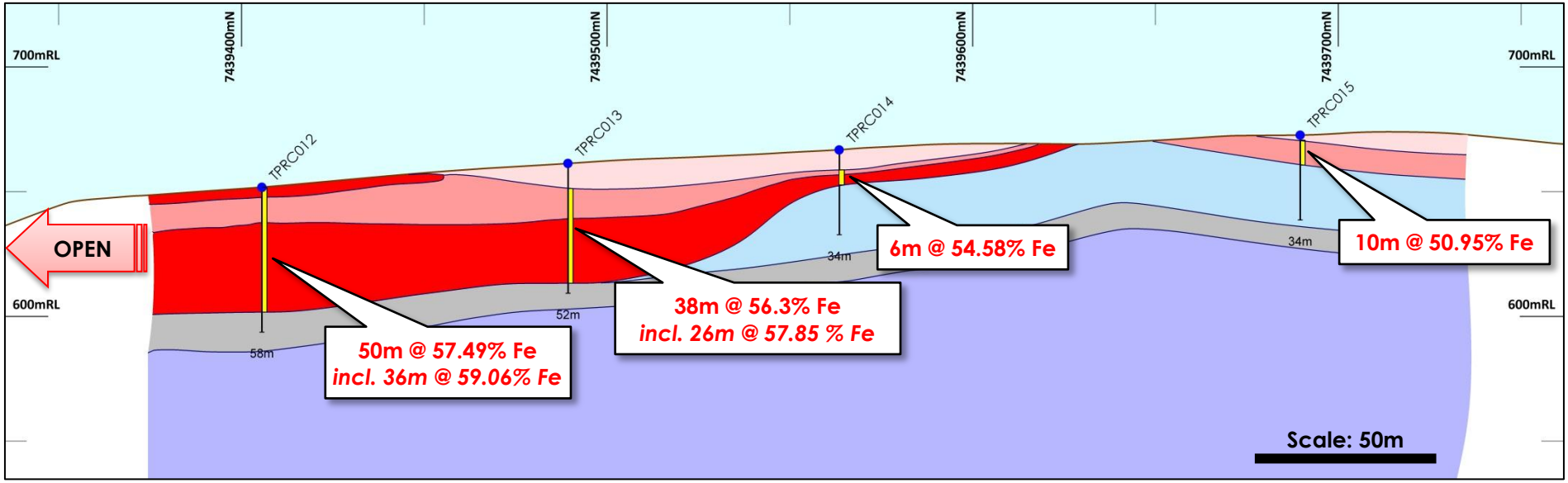

Figure 4: Cross-section through TPRC012 to TPRC015 at the Top Forge prospect.

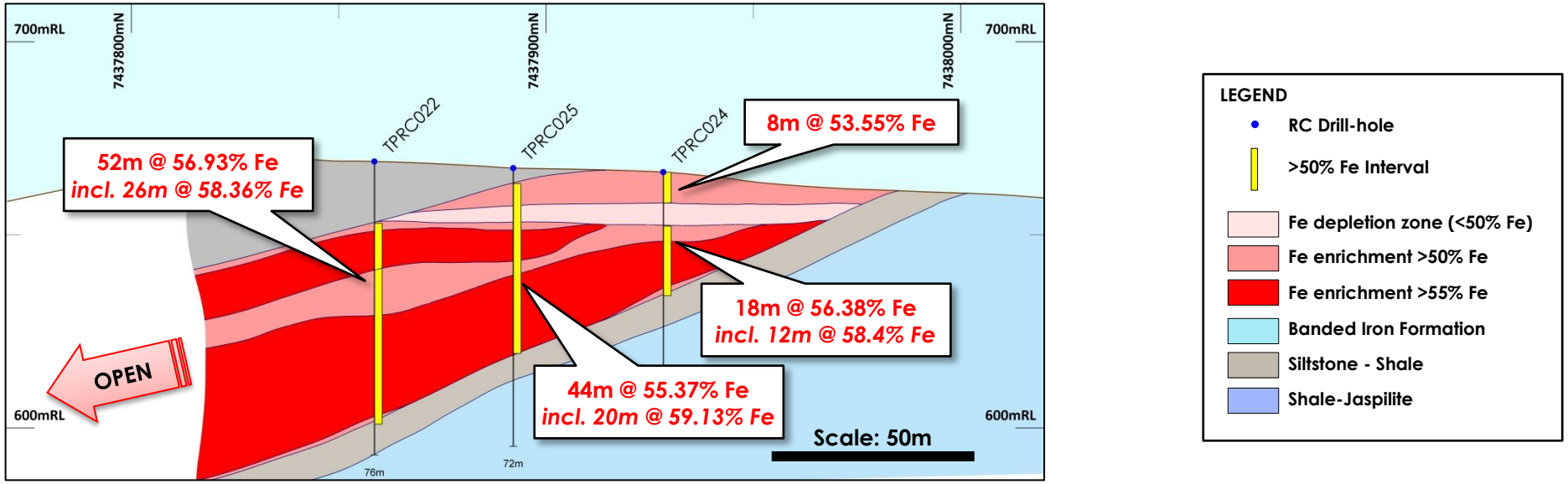

Figure 5: Cross-section through TPRC022, 025 and 024 at the Crucible prospect.

Table 1: Three Pools RC drill assay results

Prospect	Hole ID	Depth From (m)	Depth To (m)	Interval (m)	Fe (%)	SiO_2 (%)	P (%)	Al_2O_3 (%)	LOI (%)
Top Forge	TPRC011	6	48	42	57.59	6.95	0.161	4.42	5.64
	including	*14*	*48*	*34*	*58.30*	*5.92*	*0.168*	*4.63*	*5.44*
Top Forge	TPRC012	0	50	50	57.49	5.56	0.149	4.51	7.11
	including	*14*	*50*	*36*	*59.06*	*4.83*	*0.185*	*4.14*	*5.97*
Top Forge	TPRC013	10	48	38	56.33	8.25	0.114	5.35	5.27
	including	*22*	*48*	*26*	*57.85*	*6.65*	*0.126*	*5.08*	*4.97*
Top Forge	TPRC014	8	14	6	54.58	10.99	0.122	3.80	6.43
Top Forge	TPRC015	2	12	10	50.95	14.74	0.076	5.99	5.73
Top Forge	TPRC016	0	6	6	54.04	6.72	0.101	4.97	9.27
Top Forge	TPRC016	12	53*	41	54.92	8.23	0.166	5.26	6.96
	including	*32*	*53**	*21*	*58.04*	*5.45*	*0.193*	*4.63*	*5.97*
Top Forge	TPRC017	0	44	44	56.00	6.77	0.130	5.36	6.80
	including	*26*	*44*	*18*	*59.56*	*4.65*	*0.189*	*4.26*	*4.87*
Top Forge	TPRC018	0	46	46	54.79	8.48	0.140	5.52	6.74
	including	*22*	*34*	*12*	*55.89*	*7.00*	*0.163*	*6.34*	*5.99*
	including	*38*	*46*	*8*	*60.53*	*3.97*	*0.180*	*3.70*	*4.75*
Top Forge	TPRC019	8	14	6	55.51	10.74	0.092	3.95	5.09
Crucible	TPRC020	no significant interval							
Crucible	TPRC021	12	42	30	56.49	8.25	0.162	4.83	5.44
	including	*24*	*42*	*18*	*57.69*	*7.04*	*0.185*	*4.60*	*5.23*
Crucible	TPRC022	16	68	52	56.93	5.22	0.183	6.16	6.29
	including	*18*	*28*	*10*	*59.61*	*4.96*	*0.073*	*4.42*	*5.00*
	including	*40*	*66*	*26*	*58.36*	*3.68*	*0.237*	*5.98*	*5.99*
Crucible	TPRC023	2	48	46	56.23	7.89	0.162	5.36	5.68
	including	*16*	*46*	*30*	*59.29*	*4.36*	*0.184*	*5.05*	*5.18*
Crucible	TPRC024	0	8	8	53.55	9.98	0.131	3.35	9.22
Crucible	TPRC024	14	32	18	56.38	8.16	0.126	4.33	6.38
	including	*18*	*30*	*12*	*58.40*	*7.35*	*0.100*	*3.66*	*5.12*
Crucible	TPRC025	4	48	44	55.37	9.33	0.129	5.37	5.31
	including	*28*	*48*	*20*	*59.13*	*4.94*	*0.195*	*4.43*	*5.45*
Paradise	TPRC003	4	8	4	52.09	11.62	0.089	5.00	8.07
Paradise	TPRC004	8	18	10	52.78	10.88	0.129	4.87	7.70
Paradise	TPRC005	6	12	6	53.41	10.74	0.086	4.38	7.88
Paradise	TPRC006	no significant interval							
Paradise	TPRC007	no significant interval							
Paradise	TPRC008	no significant interval							

RC drill samples were collected as 2m riffle split samples. All samples were analysed by X-Ray Fluorescence Spectrometry (XRF). Loss on Ignition (LOI) values were determined using Thermo-Gravimetric Analyses at 1000°C.

Results are reported on a dry sample basis. Intersections have been calculated using 50% Fe lower cut-off, with a minimum width of 4m, and up to 4m of internal dilution. Selected higher grade intervals above 55% Fe, up to 2m internal waste have been reported as *inclusive*.

***** hole TPRC016 ended in mineralisation

Table 2: Drill-hole details, projection is GDA94 MGA Zone 50, all holes drilled vertically

Prospect	Hole ID	Easting	Northing	RL	Hole Depth (m)
Winter Rose	TPRC001	770552	7441658	675	58
Winter Rose	TPRC002	770956	7441531	677	58
Paradise	TPRC003	774907	7439514	633	40
Paradise	TPRC004	774686	7439483	639	40
Paradise	TPRC005	774573	7439396	644	42
Paradise	TPRC006	774691	7439344	640	28
Paradise	TPRC007	774384	7439523	645	32
Paradise	TPRC008	774559	7439608	641	32
Vulcans View	TPRC009	773643	7439737	653	46
Vulcans View	TPRC010	773331	7439885	665	46
Top Forge	TPRC011	771550	7439603	657	58
Top Forge	TPRC012	771564	7439406	652	58
Top Forge	TPRC013	771654	7439490	661	52
Top Forge	TPRC014	771734	7439564	667	34
Top Forge	TPRC015	771868	7439691	673	34
Top Forge	TPRC016	771930	7439262	661	53
Top Forge	TPRC017	771737	7439290	650	52
Top Forge	TPRC018	771816	7439358	658	52
Top Forge	TPRC019	771895	7439436	667	40
Top Forge	TPRC020	772200	7439538	679	28
Crucible	TPRC021	771778	7437868	668	52
Crucible	TPRC022	771675	7437859	669	76
Crucible	TPRC023	771627	7437919	668	73
Crucible	TPRC024	771702	7437928	666	56
Crucible	TPRC025	771689	7437892	667	72

ABOUT SHEFFIELD RESOURCES

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

ASX Code – SFX	Market Cap @ 30cps - $17.6m
Issued shares – 58.7m	Cash - $3.3 (at 30/9/2011)

The Company has over 6,000km^2 of highly prospective tenure, all situated within the state of Western Australia.

IRON

Sheffield's Pilbara iron ore projects consist of 5 granted tenements and 8 tenement applications, 6 of which 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. High grade iron mineralisation has been identified on three of the Company's tenements.

HEAVY MINERAL SANDS

Sheffield controls over 5,000km^2 of mineral sands tenure in the established North Perth Basin mineral sands province and the emerging Eucla and Canning Basin provinces.

The Dampier project, located near Derby in WA's Kimberley region is the most recent addition to Sheffield's heavy mineral sands project portfolio. Dampier is a large scale zircon play formerly explored by Rio Tinto.

Sheffield's North Perth Basin tenement package of over 2,500km^2 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.

TALC

Sheffield has 1,152km^2 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 Imerys 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.