Sheffield Resources Ltd
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31 January 2014

QUARTERLY REPORT FOR PERIOD ENDING 31 DECEMBER 2013

HIGHLIGHTS

Dampier HMS project

- Thunderbird resource update underway following receipt of all assay results from 2013 drilling campaign
- Exceptional drilling results underscore the large scale, high grade and strong continuity of the Thunderbird deposit
- Extensive, thick lobe of high grade mineralisation with north-south orientation outlined by infill drilling
- Mineralisation extended down-dip and along strike by excellent results from step-out drilling
- Resource update to be incorporated in Scoping Study due for completion in Q1 2014

Red Bull Nickel project

- Interval of **5m** @ **0.73% Ni** from 33m depth from 1m resampling of Phase 1 aircore drill hole REAC240
- Trace amounts of Violarite ($FeNi_2S_4$), a supergene nickel sulphide mineral associated with the weathering and oxidation of primary pentlandite, observed in two end-of-hole samples
- Phase 2 aircore drilling of Northern Targets completed – results pending

Pilbara Iron project

- Further field work undertaken at Mt Vettel high grade DSO target – results pending
- Maiden drilling programme scheduled for Q2 2014

Cash position

- Cash reserves of $3.4 million bolstered by receipt of $1.2 million from 2013 R & D tax return and $386,000 from exercise of options

As at 31/12/13:

Issued Shares	**119.6M**	ASX Code	**SFX**	Closing Price	**$0.55**
Market Cap	**$65.8M**	Cash Reserves	**$3.4M**		

SUMMARY

Sheffield's flagship Dampier Heavy Mineral Sands (HMS) project is located in the Canning Basin region of Western Australia and contains the world class Thunderbird mineral sands deposit (Figures 1 & 2).

During the quarter, all outstanding assay results were returned from the 2013 drilling campaign at Dampier. Results from the Thunderbird deposit have outlined an extensive, thick zone of high grade mineralisation.

Work commenced on a resource upgrade for Thunderbird which will be incorporated into the current scoping study, due for completion in Q1 2014.

An aircore drilling programme of 96 holes for 4,334m was completed at the Red Bull Nickel project (results pending).

Exploration expenditure for the quarter is estimated to be $3,248,000. This figure includes all outstanding amounts relating to the 2013 drilling campaign at Dampier. Exploration expenditure for Q1 2014 is estimated to be $1 million.

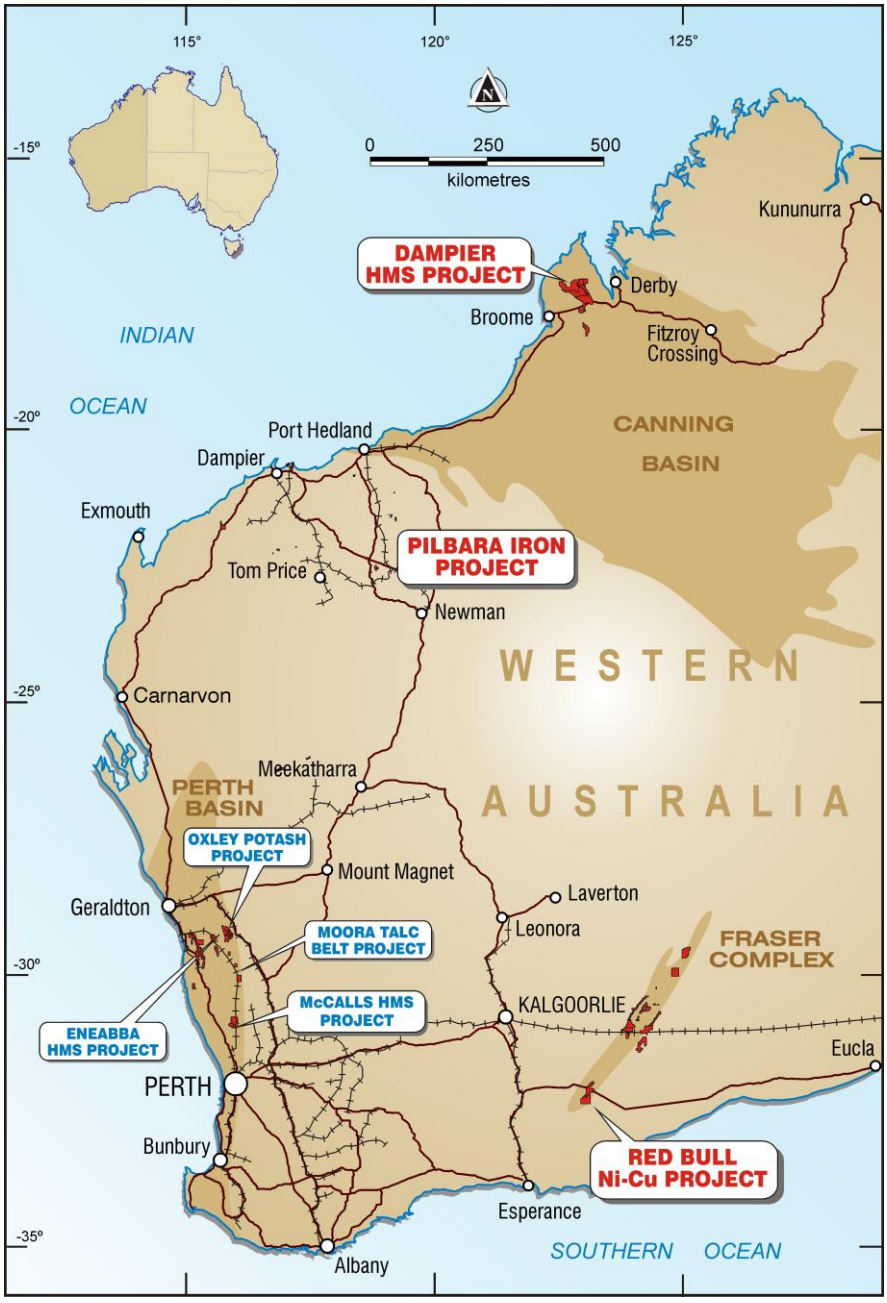


Figure 1: Location of Sheffield's Projects

DAMPIER HEAVY MINERAL SANDS

Thunderbird is one of the largest and highest grade mineral sands deposits to be discovered in the last decade. In December 2012, Sheffield released a maiden mineral resource for Thunderbird of **1.37Bt @ 6.1% HM** (Indicated & Inferred) for 83Mt of contained HM (at 2% HM cut-off). This resource contains 5.7Mt of zircon, 1.3Mt of rutile, 3.6Mt of leucoxene and 24Mt of ilmenite (Appendix 1).

Within the resource is a coherent high grade core of **517Mt @ 10.1% HM** (Indicated and Inferred) containing 3.6Mt of zircon, 0.8Mt of rutile, 2.2Mt of leucoxene and 15.2Mt of ilmenite (at 7.5% HM cut-off).

Metallurgical testwork and marketing studies indicate that Thunderbird will generate high quality, marketable products, including premium grade zircon, using conventional processing technology.

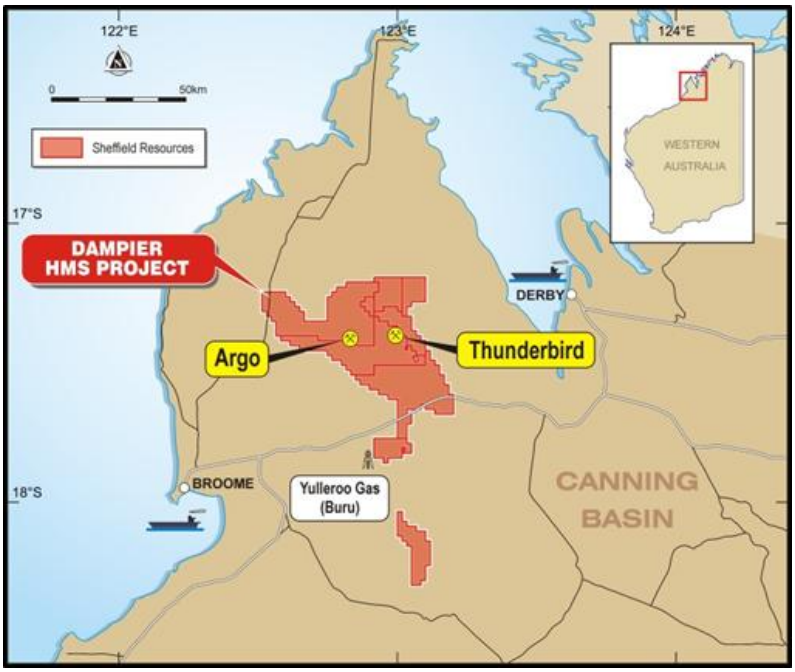


Figure 2: Location of Dampier HMS project

Following a highly successful 2013 aircore drilling campaign, Sheffield is now working on a resource update for Thunderbird, which will be finalised during Q1 2014.

All assay results have now been received from the drilling which comprised 281 holes for 18,841m at Thunderbird and 45 holes for 2,902m at Argo.

At Thunderbird infill drilling was completed on a 250m x 500m pattern across the deposit, with an additional three crosses of closely spaced (~60m) holes drilled to obtain bulk samples for metallurgical testwork and to demonstrate short range grade continuity (Figure 3).

The results include some of the best intersections obtained so far, for example:

Thunderbird infill drilling:

- **55.5m @ 10.0% HM** from 4.5m (THAC352), including **19.5m @ 21.0% HM** from 12m
- **46m @ 12.4% HM** from 30.5m (THAC404), including **28m @ 17.9% HM** from 32m
- **52.5m @ 8.37% HM** from 9m (THAC348), including **18m @ 17.2% HM** from 16.5m
- **40.5m @ 11.7% HM** from 24m (THAC403), including **24m @ 16.1% HM** from 25.5m
- **58m @ 9.61% HM** from 27.5m (THAC400), including **32.5m @ 14.5% HM** from 29m
- **46.5m @ 9.73% HM** from 3m (THAC370), including **27m @ 14.3% HM** from 12m
- **62.5m @ 9.14% HM** from 33.5m (THAC401), including **29.5m @ 13.3% HM** from 36.5m
- **40.5m @ 9.30% HM** from 1.5m (THAC246), including **22.5m @ 13.3% HM** from 1.5m
- **55.5m @ 10.0% HM** from 30m (THAC344), including **49.5m @ 11.0% HM** from 30m

Thunderbird step-out drilling:

- **58.5m** @ **9.17% HM** from 37.5m (THAC436), including **28m** @ **13.4% HM** from 42.5m
- **51.5m** @ **8.05% HM** from 32.5m (THAC411), including **26m** @ **12.5% HM** from 41.5m
- **46m** @ **6.95% HM** from 21.5m (THAC409), including **16.5m** @ **13.2% HM** from 38m
- **50m** @ **8.22% HM** from 63m (THAC502), including **33m** @ **10.6% HM** from 75m

(>2% HM cut-off, including >7.5% HM cut-off). (Refer to Sheffield's ASX releases of 21 October 2013, 11 November 2013, 25 November 2013 and 16 December for full details).

The infill results confirm the presence of a thick, highly continuous zone of high grade mineralisation (>7.5% HM), trending in a north-south direction through the deposit (Figure 4). This thick high grade zone is at least 6km long and 2.5km wide. Sheffield's Scoping Study will focus on initial production from this thick and extensive high grade zone during the early production years.

Significantly, the step-out drill holes demonstrate the continuity of mineralisation well beyond the December 2012 resource envelope as shown in Figures 4 & 5.

Mineral assemblage determination work is being undertaken on 569 composite samples collected from various domains interpreted within the deposit, using a combination of magnetic separations, XRF and QEMSCAN. This work is in progress and the results will be incorporated into the updated resource estimate.

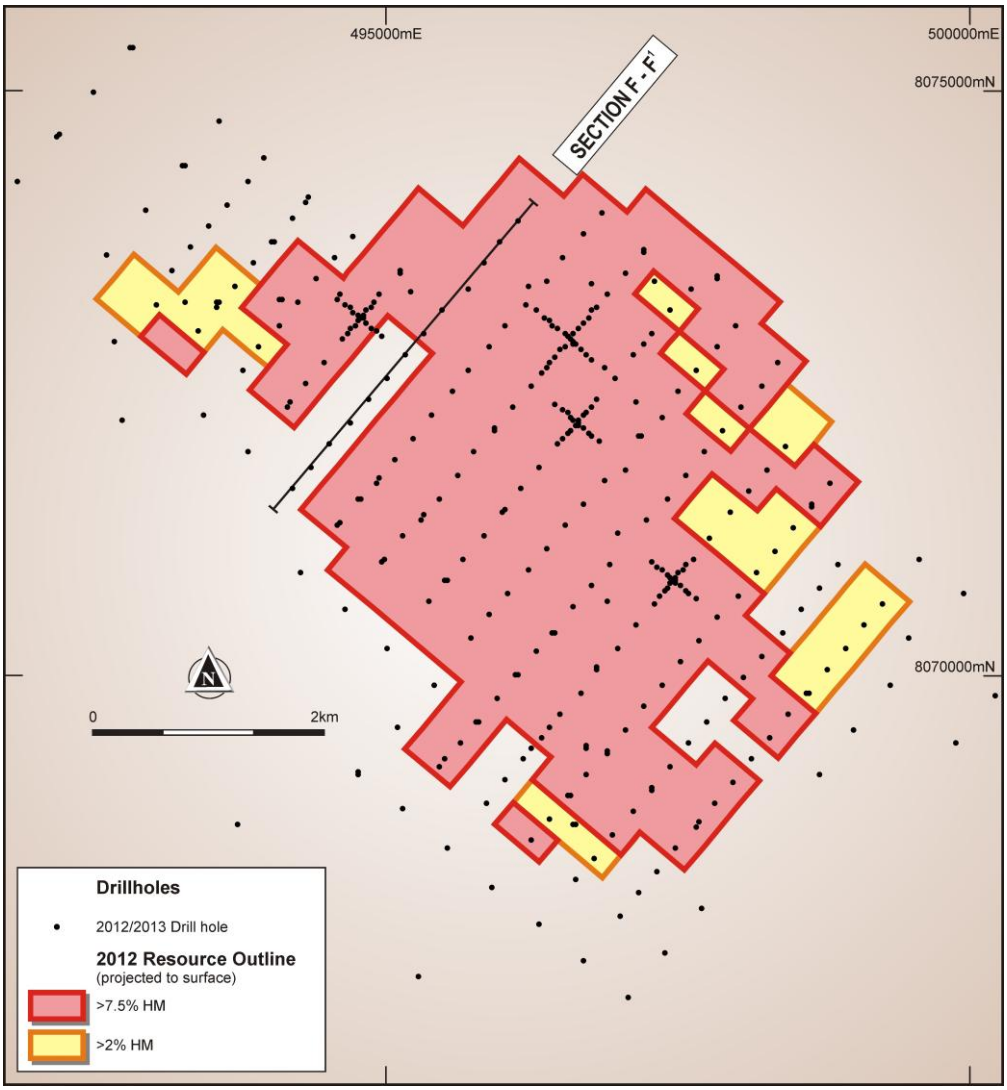


Figure 3: Thunderbird drill collar plan showing location of drill holes and outline of blocks in the current (Dec 2012) resource above 7.5% HM and 2% HM, projected to surface

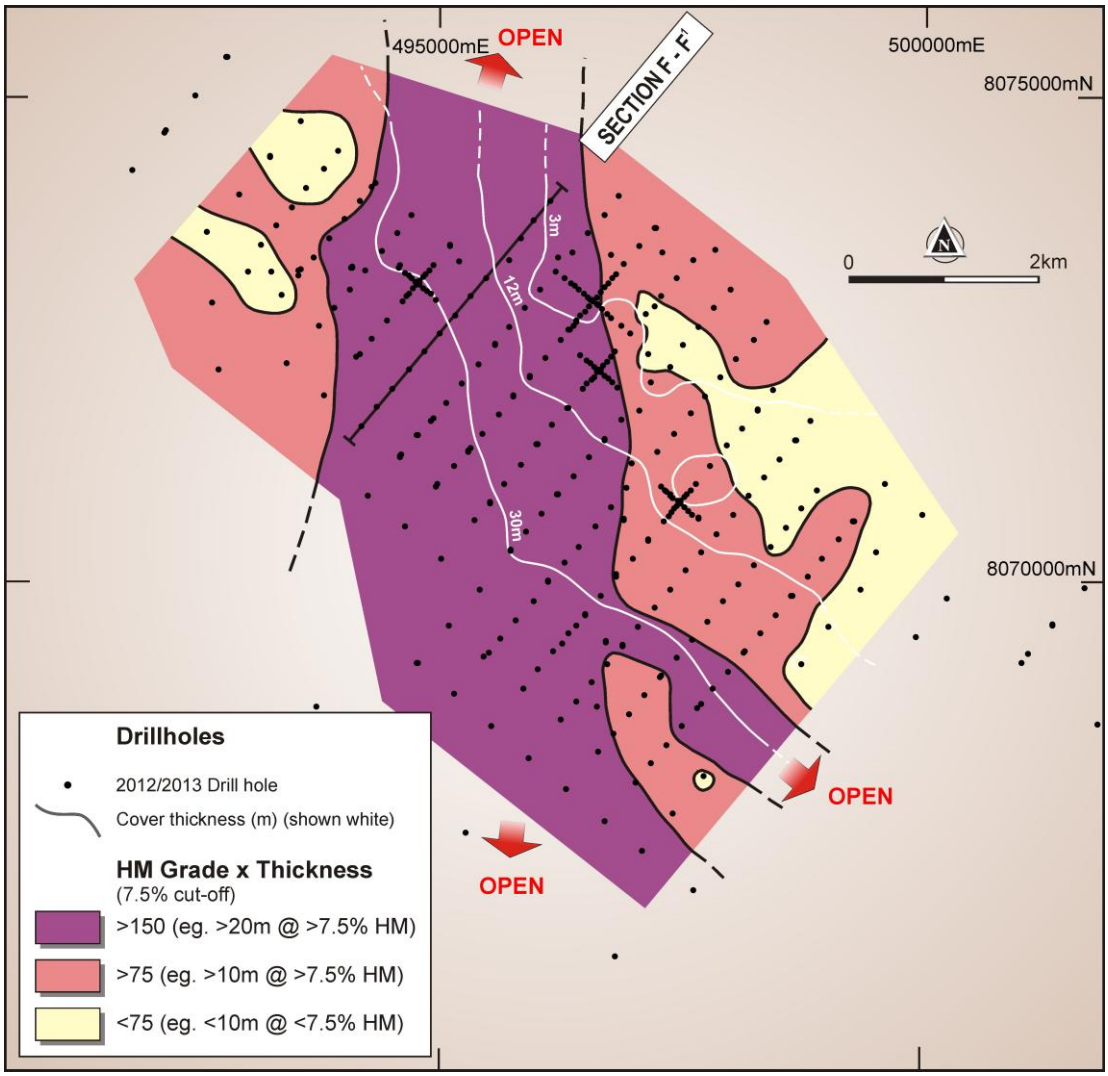


Figure 4: Thunderbird drill collar plan with HM grade x thickness contours, using a 7.5% HM cut off

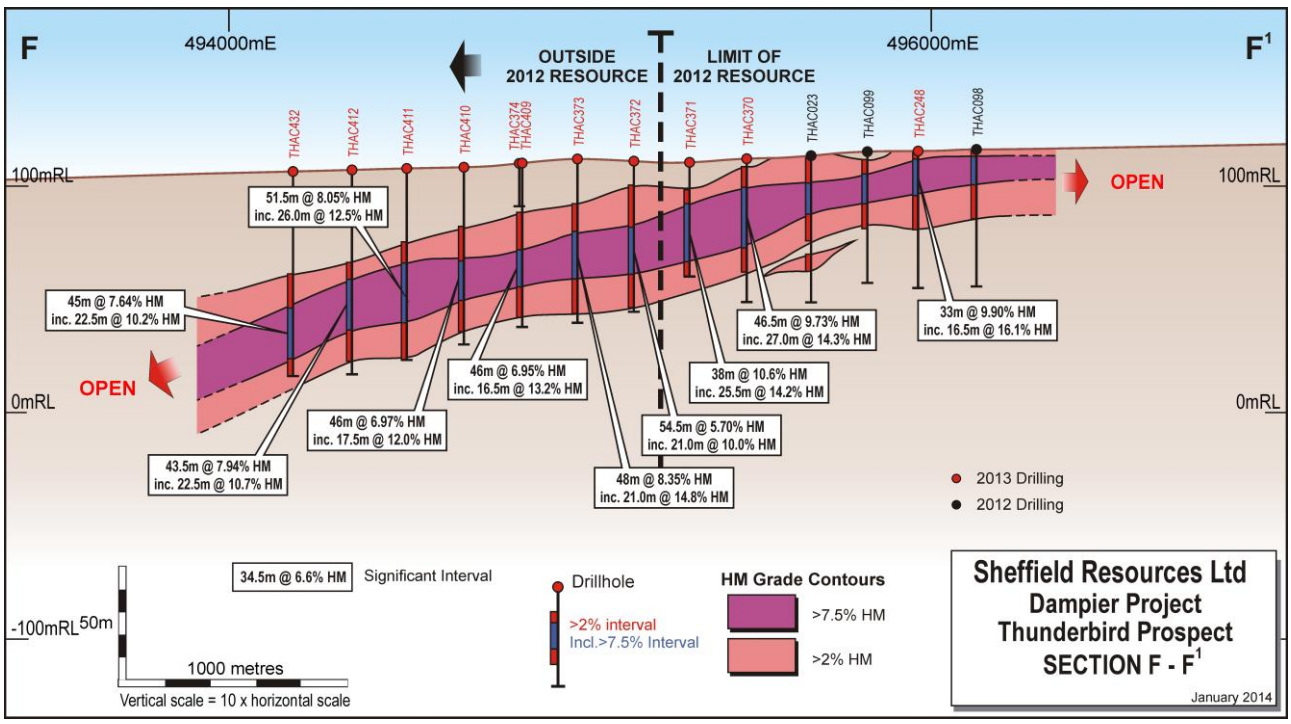


Figure 5: Section F-F' looking northwest - note extension of mineralisation outside 2012 resource

Thunderbird Scoping Study and Environmental Studies

Sheffield is awaiting the results of the current resource update to finalise pit optimization and mine scheduling in order to complete the scoping study. Some aspects of scoping study are at the pre-feasibility level – it is anticipated that work on Thunderbird will transition to a PFS during Q2 2014.

A processing flowsheet has been designed using the results of metallurgical testwork carried out over the past year. Bulk sample material totaling 30 tonnes was collected during the 2013 drilling campaign at Thunderbird and this will be used for further process refinement during PFS.

Sheffield commissioned *Ecologia* environmental consultants to undertake a desktop assessment, and a Level 1 flora survey over the Thunderbird project area in 2012. In 2013, the study area was expanded and Level 2 surveys completed (i.e. the second phase of the Level 2 flora and vegetation assessment and the first phase of the Level 2 fauna assessment). Reports on these surveys are nearing completion.

Argo

Assay results were received for 45 aircore drill holes for 2,902m drilled at Argo during Q3 2013. The drilling was a first pass test of anomalous heavy mineral identified on a single historical drill transect by previous explorer, Rio Tinto.

Significant results (>2% HM) were returned from four holes:

- **19.5m** @ **3.69% HM** from 84m (ARAC043), and **4.5m** @ **2.52% HM** from 69m
- **27m** @ **2.35% HM** from 49.5m (ARAC022)
- **18m** @ **2.46% HM** from 55.5m (ARAC030)
- **7.5m** @ **2.80% HM** from 52.5m (ARAC041)

(Refer to ASX release of 11 November 2013 for full details).

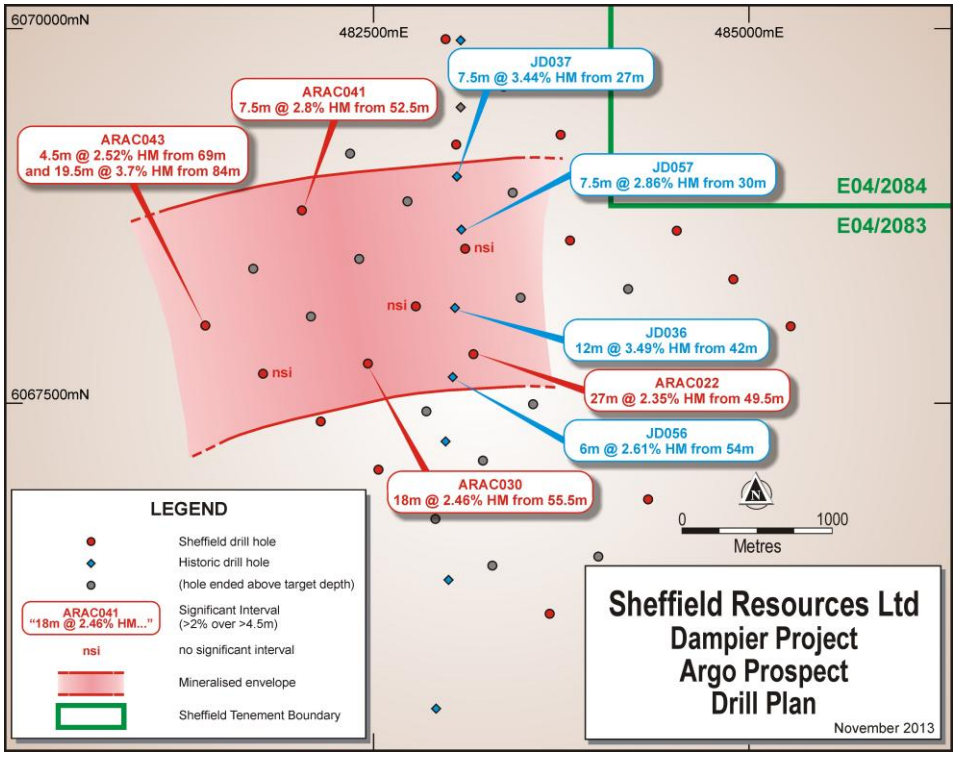


Figure 6: Argo prospect with Sheffield and historic drill results and outline of mineralisation projected to surface

Initial drilling has to date outlined mineralisation over a 2km x 1.5km area, with an average interval thickness of 13m and depth to top of 49m (Figure 6). The mineralisation is relatively low-grade and occurs at depth. The drill pattern is widely spaced (500m x 500m) and higher grade zones may exist within the target horizon. Historic work by Rio Tinto showed potential for the mineral assemblage to contain between 7.4% zircon (AutoGeoSEM) and 17.3% zircon (420kg bulk sand sample), depending on the method of analysis (see Sheffield's ASX release of 7 September 2011).

Sheffield will undertake mineral assemblage testwork from the drilling to determine the zircon content of the Argo mineralization during Q2 2014. Future exploration will attempt to track the mineralisation closer to surface and will target higher grade strandline targets.

Dampier Regional

Regional scale mapping and reconnaissance was undertaken on all Sheffield's Dampier project tenements. This work is aimed at generating new mineral sands targets for drilling during 2014. Interpretation of the results of this work is ongoing.

RED BULL NICKEL

The Red Bull project comprises two tenements with a total area of 525km^2 located 120km east of Norseman in WA. The northern tenement E69/3052 lies within 20km of Sirius Resources NL's (ASX:SIR) Nova and Bollinger Ni-Cu deposits and covers mafic and ultramafic rocks of the Fraser Complex which are prospective for magmatic Ni-Cu deposits.

The Company continued to build its position in the Fraser Range region during the quarter by applying for a further 11 exploration licences. Seven of these have multiple competing applications, with the successful applicant likely to be determined by ballot.

In addition to Red Bull, and the 11 applications referred to above, Sheffield has a further 4 tenements in the Fraser Range, for a total of 17, with a combined area of 2,420km^2. The majority of these tenements lie over the large regional gravity high associated with the prospective, denser mafic/ultramafic rocks of the Fraser Complex (Figure 7).

The Big Bullock Exploration Licence E39/1773, located in the northern portion of the Fraser Complex, was granted during the quarter. The tenement is situated along strike and to the south west of Orion Gold NL's (ASX: ORN) Peninsular Nickel-Cu-PGE project.

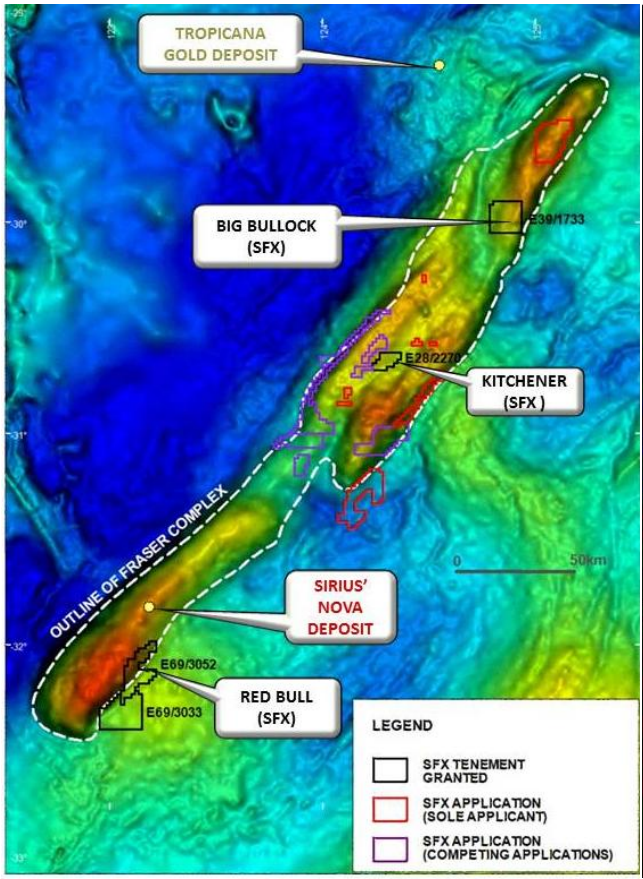


Figure 7: Location of Sheffield's Fraser Range tenements on gravity image

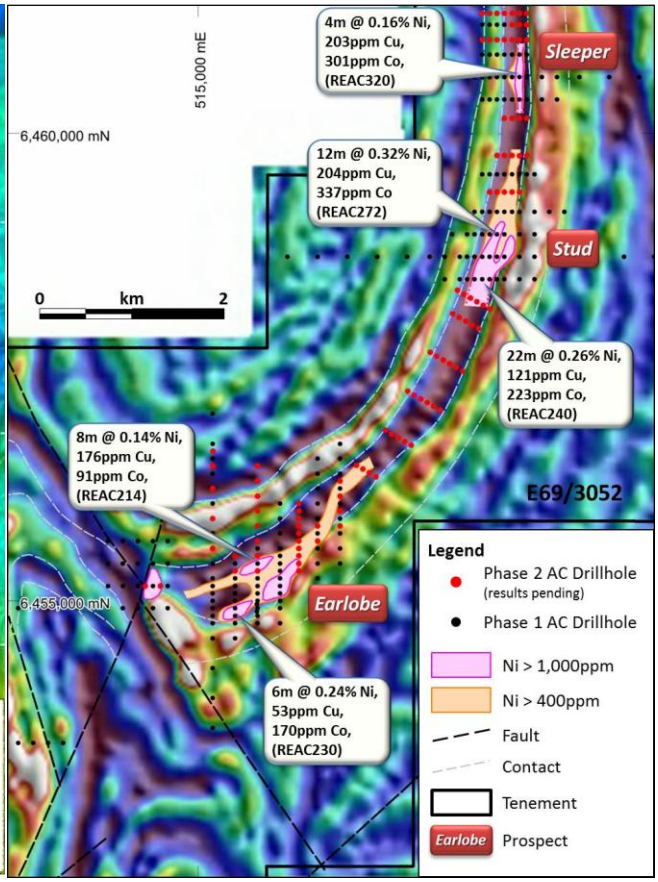


Figure 8: Northern Targets: end-of-hole nickel anomalies from aircore drilling on TMI magnetics

During December 2013, the Company completed a second phase of aircore drilling on the Northern Targets at Red Bull. The Phase 2 programme of 96 holes for 4,334m follows the successful Phase 1 programme completed earlier in 2013 which identified the Earlobe, Stud and Sleeper prospects (Figure 8). The Phase 2 drilling tested potential extensions to each prospect and a further 3km strike-length of the 8km-long host mafic-ultramafic intrusive sequence. Results are expected mid-Q1 2014.

Significantly, the Phase 2 programme is targeting along strike from drill hole REAC240 at the Stud prospect, which returned the strongest nickel results from Phase 1 drilling. During the quarter, 1m resampling and re-assaying of this drill hole, using a four acid digest with an ICP-OES & MS finish, returned higher Ni-Cu-Co values, including the following significant interval:

- **22m @ 0.39% Ni**, 138ppm Cu, 272ppm Co from 32m (REAC240), including:
- **5m @ 0.73% Ni**, 168ppm Cu, 466ppm Co from 33m

(Refer to ASX release 27 November 2013 for full details).

Petrological studies were completed by Roger Townend and Associates, Consulting Mineralogists, on 32 polished thin sections from end-of-hole samples from Phase 1 aircore drilling. Disseminated sulphides were observed in 22 samples, with the most commonly observed species being pyrite (after pyrrhotite) and trace amounts of chalcopyrite (copper sulphide).

Significantly, nickel sulphide mineral Violarite $FeNi_2S_4$, a supergene sulphide mineral associated with the weathering and oxidation of primary pentlandite $(Fe,Ni)_9S_8$, was observed in trace amounts in two drill holes (REAC273 and REAC238). Pentlandite and chalcopyrite are common ore minerals in magmatic nickel sulphide deposits.

Trace amounts of gersdorffite, NiAsS, a nickel arsenic sulphide mineral were observed in samples from drill hole REAC362. Gersdorffite is commonly found in hydrothermal veins containing nickel sulphides.

The tenor of aircore drilling results received to date, and identification of nickel-sulphide minerals associated with a layered mafic-ultramafic intrusive sequence, highlights the potential of the Red Bull project to host a significant nickel sulphide deposit.

Lithogeochemical analysis of Sheffield's large Red Bull soil sampling database has resulted in the identification of several new targets located to the north and west of the Earlobe to Sleeper trend (Figure 8). This region occurs along strike from targets currently being tested by Matsa Resources Limited (ASX:MAT). Future work on the new soil anomalies delineated within Sheffield's tenement will include infill sampling and field checking prior to follow-up aircore drilling.

Assay results were received from 3 diamond drill holes REDD001, REDD002 and REDD003, drilled during Q2 2013 which targeted 3 strong bedrock conductors. As previously reported (ASX release dated 17 July 2013) each hole intersected pyrrhotite (iron sulphide) and graphite mineralisation which was determined to be the conductive source. As expected, there were no base metal results of significance.

The best graphite interval was 11.7m @ 4.7% TGC (Total Graphitic Carbon) including 2m @ 8.4% TGC (REDD003) as shown in Table 1.

Table 1: Total Graphitic Carbon Intercepts

Hole ID	Easting	Northing	Azimuth	Dip	Depth	Sample From	Sample To	Interval Width (m)*	C-TGC %
REDD001	507047	6445120	120	-60	179.7	42	90.8	48.8	4.7
					including	*77.6*	*88.0*	*10.4*	*6.1*
REDD002	507040	6442645	90	-60	480	133.1	134.0	0.9	6.1
					and	364.9	373.4	8.5	4.1
REDD003	507335	6442645	90	-60	402	314.3	325.4	11.1	4.7
					including	*315*	*317.0*	*2.0*	*8.4*

** intervals calculated on geological criteria according to visually logged graphite concentration, downhole widths quoted. Refer to Appendix 2 for futher details.*

A sample of graphite from drill hole REDD001 was examined by Roger Townend and Associates, who observed that the graphite occurs as flakes rarely wider than 50µm, with long dimensions frequently greater than 250µm.

Sheffield considers these graphite results to be significant, and will consider the best means to extract value from the discovery.

PILBARA IRON

Sheffield is targeting direct shipping iron ore (DSO) on four granted exploration licences situated in the North Pilbara region (Figure 9). The tenements are all located near existing iron ore mines or major development projects and within potential trucking distance of Port Hedland. The Company has previously identified high grade outcropping iron mineralisation at Panorama and, most recently, at Mt Vettel (E45/4029).

Iron mineralisation at Mt Vettel occurs as high grade hematite-rich bedded iron mineralisation (BID) with some minor capping detrital iron mineralisation (DID). The mineralisation outcrops over a total strike length of 1km and varies between 15m and 130m in width (average 50m).

The BID mineralisation at surface is characterised by high iron grades (average 61.2% Fe from 37 samples) with very low contaminant levels, particularly phosphorous (average 0.038% P). (Refer to ASX release of 23 October 2013 for full details).

Mt Vettel lies 20km to the west of Atlas Iron's (ASX:AGO) Mt Webber iron project, within potential trucking distance of Port Hedland.

During the quarter, Sheffield undertook a second phase of mapping and rock chip sampling at Mt Vettel. Results are pending.

A Programme of Work has been lodged for a maiden RC drilling programme, scheduled for Q2 2014.

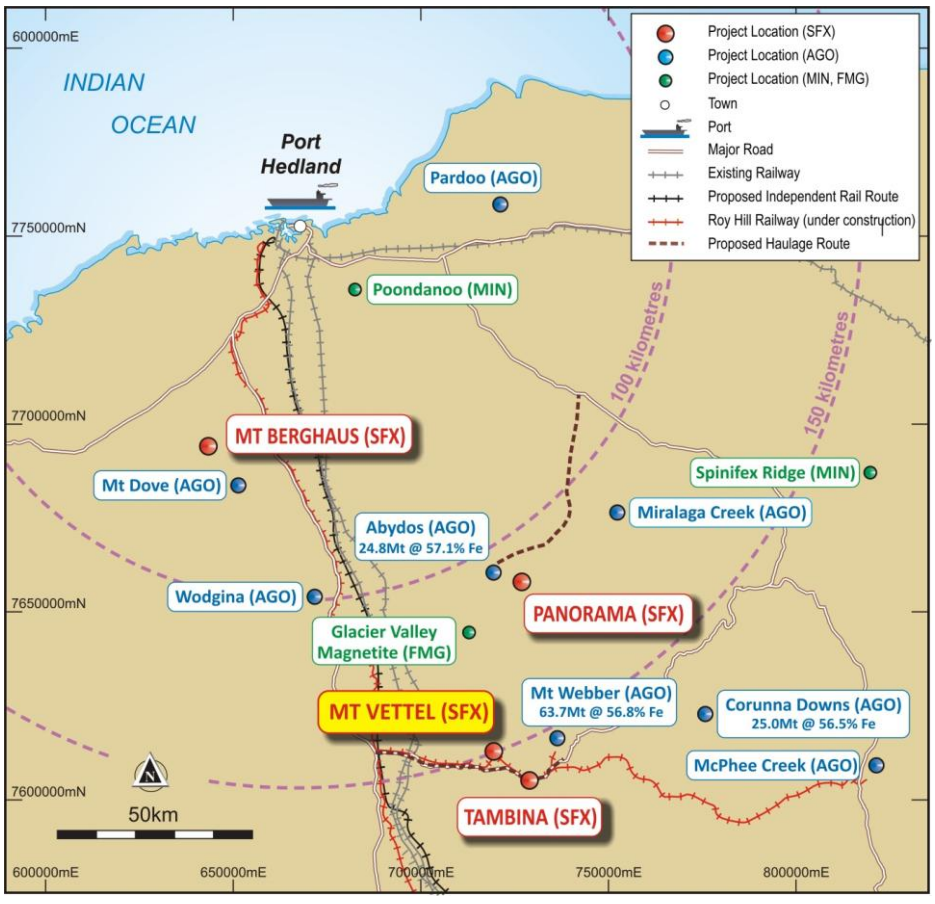


Figure 9: Location of Sheffield's North Pilbara Iron Projects

ENEABBA HEAVY MINERAL SANDS

Sheffield's Eneabba HMS Project contains five mineral sands deposits: West Mine North, Ellengail, Yandanooka, Durack and Drummond Crossing with combined resources of 6.76Mt of HM (Appendix 1). Sheffield's strategy is to evaluate these deposits with a view to developing a sequential mining operation, whilst actively exploring the region for further deposits.

In addition, the Company has identified four dunal-style HM exploration targets (Thomsons, Robbs Cross, Ding Road and Mt Adams), located along the Gingin Scarp (Figure 10). Details of these targets are contained in the Company's ASX release on 30 October 2013.

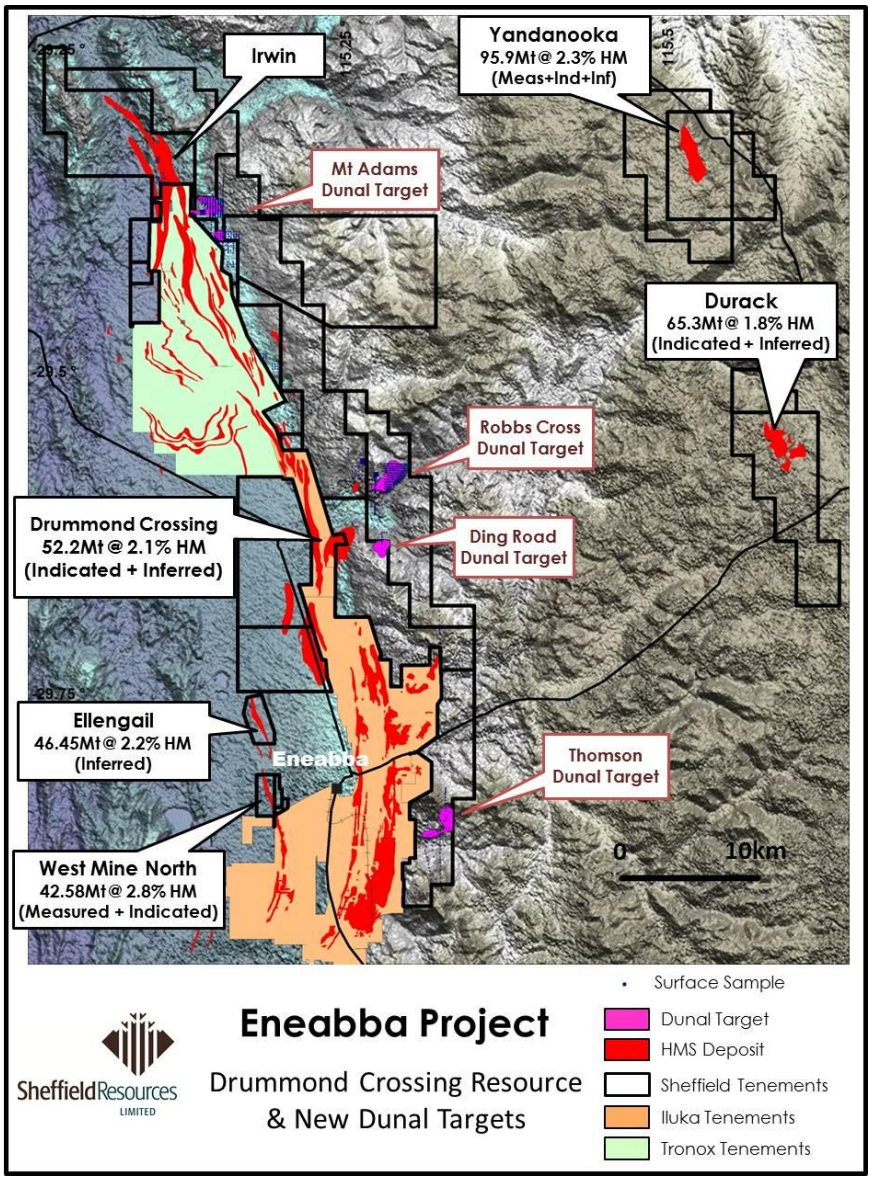


Figure 10: Location of Sheffield's HMS deposits in the Eneabba region

During the quarter, Sheffield commenced an optimization study on the West Mine North deposit. The optimization study is part of the Company's ongoing scoping assessment of the overall Eneabba project.

West Mine North is located on freehold property, 6km west of Eneabba and is held under granted Mining Leases. The deposit has a mineral resource of 42.58Mt @ 2.8% HM (Measured and Indicated) (at 0.9% HM cut-off) including a high grade component of **10.09Mt @ 7.7% HM** containing 779,000t of HM (Measured and Indicated) (at 1.5% HM cut-off). (Refer to Appendix 1 and ASX release of 7 November 2011 for full details).

OXLEY POTASH

The Oxley potash project is located near Morawa in Western Australia's Mid-west region. Oxley has an unconventional, hard rock style of potash mineralisation, hosted by a series of ultrapotassic microsyenite lavas, which typically contain over 90% sanidine (potash) feldspar. Sheffield controls the entire 32km strike extent of the prospective units within the northern Moora Basin.

Sheffield's maiden drilling programme at Oxley (which was co-funded by the State Government under its Exploration Incentive Scheme), returned thick, high grade potash intervals averaging 8.4% K_2O over 36m width with higher grade intervals averaging 9.9% K_2O over 15m width. (Refer to ASX release of 19 July 2013 for full details).

During the quarter, Sheffield commenced preliminary metallurgical testwork to evaluate the process required to upgrade and extract potassium from the sanidine feldspar to produce products suitable for the fertiliser market. This work is expected to be completed during Q1 of 2014.

MCCALLS HEAVY MINERAL SANDS

Heavy mineral sink fractions from samples assayed (and reported) in Q2 2013 were composited for QEMSCAN mineral assemblage determination. The McCalls samples will be submitted for QEMSCAN analysis once higher priority work relating to the Thunderbird resource upgrade has been completed.

Preliminary geotechnical studies were undertaken to evaluate the McCalls deposit's suitability for dredge mining. Four cone penetrometer test-holes were completed. A report on the results is pending.

MOORA TALC

Sheffield's current focus in the Moora Talc Project is the Fowlers talc deposit, located near Marchagee. Sheffield has previously outlined an Exploration Target[1] of 5-8 million tonnes of talc at Fowlers, based on a keel-shaped deposit with a maximum area of 520m x 220m, a mineralised thickness of between 45m and 90m and a bulk density of 2.7t/m^3 (refer to Sheffield's June 2013 Quarterly Report for full details).

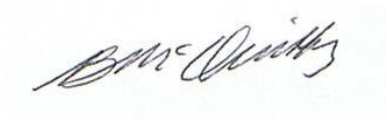
The Fowlers talc has extremely low calcium content but the elevated iron content and low brightness limit the potential commercial applications (see ASX release dated 4/10/2011).

During the quarter, the Company commenced beneficiation testwork to investigate cost effective ways of reducing the iron content and increasing the brightness of the talc. The testwork is being done on core samples from diamond drill hole MODD008, drilled by Sheffield in 2011. Much of the iron in the talc occurs as films along fracture planes, and as fine iron-rich clays, whereas the massive, competent talc has a lower iron content. The work will investigate whether simple processes such as crushing, screening and washing can achieve marketable specifications.

CASH POSITION

As at 31 December 2013, the Company had cash reserves of approximately $3.4 million.

During the quarter Sheffield received $1.2 million from its 2013 Research and Development tax return and $386,000 from the exercise of 1.285 million 30c options with expiry 30 November 2013.



Bruce McQuitty
Managing Director
31 January 2014

[1]Sheffield Resources has not yet reported Mineral Resources for Fowlers 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.

Schedule 1: Interests in Mining Tenements at the end of the quarter as required under ASX Listing Rule 5.3.3

Project	Tenement	Holder	Interest	Location[3]	Status
Mineral Sands	E04/2081	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2083	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2084	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2159	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2171	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2191	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2192	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2193	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E04/2194	Sheffield Resources Ltd	100%	Canning Basin	Granted
Mineral Sands	E70/3761	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3762	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3812	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3813	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3814	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3846	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3901	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3929	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3931	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3967	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3970	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4190	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4273	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4292	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4313	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4314	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4434	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/4484	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	M70/872[1]	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	M70/965[1]	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	M70/1153[1]	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	R70/35[1]	Sheffield Resources Ltd	100%	Perth Basin	Granted
Mineral Sands	E70/3859	Sheffield Resources Ltd	100%	Perth Basin	Pending
Mineral Sands	E70/4542	Sheffield Resources Ltd	100%	Perth Basin	Pending
Mineral Sands	L70/150	Sheffield Resources Ltd	100%	Perth Basin	Pending
Nickel	E69/3033	Sheffield Resources Ltd	100%	Fraser Range	Granted
Nickel	E69/3052	Sheffield Resources Ltd	100%	Fraser Range	Granted
Nickel	E28/2270	Sheffield Resources Ltd	100%	Fraser Range	Granted
Nickel	E39/1733	Sheffield Resources Ltd	100%	Fraser Range	Granted
Nickel	E69/3181	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2323	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2374	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2426	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2427	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2428	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2429	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2430	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2431	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2432	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2448	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2449	Sheffield Resources Ltd	100%	Fraser Range	Pending
Nickel	E28/2450	Sheffield Resources Ltd	100%	Fraser Range	Pending
Iron	E45/3662-I	Ironbridge Resources Pty Ltd[2]	100%	Pilbara	Granted
Iron	E47/2642-I	Sheffield Resources Ltd	100%	Pilbara	Granted
Iron	E45/3822-I	Sheffield Resources Ltd	100%	Pilbara	Granted
Iron	E45/4029	Sheffield Resources Ltd	100%	Pilbara	Granted
Iron	E47/2793-I	Sheffield Resources Ltd	100%	West Pilbara	Pending
Iron	E47/2794-I	Sheffield Resources Ltd	100%	West Pilbara	Pending
Iron	E08/2457-I	Sheffield Resources Ltd	100%	West Pilbara	Pending
Iron	E47/2861-I	Sheffield Resources Ltd	100%	West Pilbara	Pending
Iron	E51/1608-I	Sheffield Resources Ltd	100%	Mid-West	Pending
Iron	E20/843-I	Sheffield Resources Ltd	100%	Mid-West	Pending
Iron	E47/3031-I	Sheffield Resources Ltd	100%	Pilbara	Pending

Project	Tenement	Holder	Interest	Location	Status
Iron	E47/3032-I	Sheffield Resources Ltd	100%	Pilbara	Pending
Iron	E47/3033-I	Sheffield Resources Ltd	100%	Pilbara	Pending
Talc	E70/3776	Moora Talc Pty Ltd[2]	100%	Moora	Granted
Talc	E70/3778	Moora Talc Pty Ltd[2]	100%	Moora	Granted
Talc	E70/3779	Moora Talc Pty Ltd[2]	100%	Moora	Granted
Talc	E70/4004	Moora Talc Pty Ltd[2]	100%	Moora	Granted
Talc	E70/4167	Moora Talc Pty Ltd[2]	100%	Moora	Granted
Potash	E70/3777	Moora Talc Pty Ltd[2]	100%	Morawa	Granted
Potash	E70/4318	Sheffield Resources Ltd	100%	Morawa	Granted
Potash	E70/4319	Sheffield Resources Ltd	100%	Morawa	Granted
Potash	E70/4320	Sheffield Resources Ltd	100%	Morawa	Granted
Potash	E70/4378	Sheffield Resources Ltd	100%	Morawa	Granted

Notes:
[1]Iluka Resources Ltd (ASX:ILU) retains a gross sales royalty of 1.5% in respect to tenements R70/35, M70/872, M70/965 & M70/1153.
[2]Moora Talc Pty Ltd and Ironbridge Resources Pty Ltd are 100% owned subsidiaries of Sheffield Resources Ltd.
[3]All tenements are located in the state of Western Australia.

Details of tenements and/or beneficial interests acquired/disposed of during the December 2013 Quarter are provided in Section 6 of the Company's Appendix 5B notice for the December 2013 Quarter.

COMPLIANCE STATEMENTS

EXPLORATION RESULTS

The information in this report that relates to Exploration Results is based on information compiled by Mr David Boyd, a Competent Person who is a Member of Australian Institute of Geoscientists (AIG). Mr Boyd is a full-time employee of Sheffield Resources Ltd and has sufficient experience that is relevant to the styles of mineralisation and types 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 Boyd 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:

- Thunderbird Drilling Results: "*THUNDERBIRD HIGH GRADE MINERALISATION EXTENDS BEYOND DEFINED RESOURCE*", 16 December 2013.

This report also includes information that relates to Exploration Targets, Exploration Results and Mineral Resources which were prepared and first disclosed under the JORC Code 2004. The information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. The information was extracted from the Company's previous ASX announcements as follows:

- Argo Historic Exploration Results: "*NEW LICENCE GRANTED OVER HIGH GRADE ZIRCON PROJECT*", 7 September 2011.
- Fowlers Talc Drilling Results: "*ASSAY RESULTS CONFIRM HIGH QUALITY TALC INTERSECTIONS*", 4 October 2011.
- Ellengail Mineral Resource: "*1MT CONTAINED HM INFERRED RESOURCE AT ELLENGAIL*", 25 October 2011.
- West Mine North Mineral Resource: "*WEST MINE NORTH MINERAL RESOURCE ESTIMATE EXCEEDS EXPECTATIONS*", 7 November 2011.
- McCalls Mineral Resource: "*4.4 BILLION TONNE MAIDEN RESOURCE AT MCCALLS HMS PROJECT*", 20 February 2012.
- Durack Mineral Resource: "*ENEABBA PROJECT RESOURCE INVENTORY EXCEEDS 5MT HEAVY MINERAL*", 28 August 2012.
- Thunderbird Mineral Resource: "*LARGE HIGH GRADE MAIDEN RESOURCE FOR THUNDERBIRD HMS DEPOSIT*", 18 December 2012.
- Yandanooka Mineral Resource: "*YANDANOOKA RESOURCE UPGRADE AND METALLURGICAL RESULTS*", 30 January 2013.
- Drilling of 3 Bedrock Conductors at Red Bull: "*RED BULL PROJECT - DRILLING UPDATE*", 17 July 2013.
- Oxley Potash Drilling Results: "*MAJOR NEW POTASH DISCOVERY IN WA'S MID-WEST*", 19 July 2013.
- Fowlers Talc Exploration Target: "*QUARTERLY REPORT FOR PERIOD ENDING JUNE 2013*", 31 July 2013.

- Thunderbird Drilling Results: "*RECORD DRILL INTERSECTION AT THUNDERBIRD*", 21 October 2012.
- Mt Vettel Iron Sample Results: "*HIGH GRADE IRON RESULTS FROM NORTH PILBARA PROJECT*", 23 October 2013.
- Drummond Crossing Mineral Resource and Sampling Results from Dunal-Style HM Targets, Eneabba Project: "*1Mt HEAVY MINERAL RESOURCE ADDED TO ENEABBA PROJECT*", 30 October 2013.
- Thunderbird Drilling Results: "*HIGH GRADE DRILLING RESULTS FROM THUNDERBIRD*", 11 November 2013.
- Thunderbird Drilling Results: "*RECORD GRADES FROM WORLD CLASS THUNDERBIRD DEPOSIT*", 25 November 2013.
- Red Bull Nickel Targets from Soil Sampling and Petrography Results: "*AIRCORE DRILLING UNDERWAY AT RED BULL NICKEL PROJECT*", 27 November 2013.

These announcements are available to view on Sheffield Resources Ltd's web site www.sheffieldresources.com.au.

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

FORWARD LOOKING AND EXPLORATION TARGET 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", "target", "scheduled", "intends", "potential", "prospective" and similar expressions.

The terms "Target" and "Exploration Target", where used in this report, should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code 2012, 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.

APPENDIX 1: MINERAL RESOURCES

Table 1: Sheffield's contained Valuable HM (VHM) Resource inventory[1] at 30 October 2013

Deposit	Resource Category	Zircon (kt)*	Rutile (kt)*	Leuc. (kt)*	Ilmenite (kt)*	**Total VHM (kt)***
Thunderbird	Indicated	1,483	344	924	6,256	**9,007**
Thunderbird	Inferred	4,270	990	2,661	18,007	**25,927**
Yandanooka	Measured	13	2	3	87	**105**
Yandanooka	Indicated	240	81	83	1,439	**1,843**
Yandanooka	Inferred	4	1	2	23	**29**
Durack	Indicated	144	29	52	703	**928**
Durack	Inferred	26	5	13	121	**164**
Drummond Crossing	Indicated	143	101	37	542	**823**
Drummond Crossing	Inferred	7	5	1	28	**41**
Ellengail	Inferred	92	90	19	658	**859**
West Mine North	Measured	18	33	42	200	**293**
West Mine North	Indicated	71	87	46	506	**709**
McCalls	Inferred	3,491	1,063	2,576	42,911	**50,041**
Total	Measured	31	35	45	287	**398**
Total	Indicated	2,081	641	1,141	9,446	**13,310**
Total	Inferred	7,889	2,154	5,272	61,746	**77,062**
Total	**All**	**10,001**	**2,830**	**6,458**	**71,479**	**90,770**

* Tonnes have been rounded to reflect the relative uncertainty of the estimates. [1] The contained HM tonnages shown in the Table above are sourced from Table 2, below.

Table 2: Sheffield's HMS Mineral Resource[2] Inventory at 30 October 2013

Project	Deposit	Resource Category	Cut-off (% HM)[4]	Material (Mt)*	Bulk Density	HM %	Slimes %[4]	Osize %	Insitu HM (Mt)*	Mineral Assemblage[3] Zircon %	Rutile %	Leuc. %	Ilm. %
Dampier	Thunderbird	Indicated	2.0	299	2.1	7.2	19	14	21.5	6.9	1.6	4.3	29
	Thunderbird	Inferred	2.0	1,075	2.1	5.8	17	16	61.9	6.9	1.6	4.3	29
	Total Dampier	**All**	**2.0**	**1,374**	**2.1**	**6.1**	**17**	**15**	83.4	**6.9**	**1.6**	**4.3**	**29**
Eneabba	Yandanooka	Measured	0.9	2.9	2.0	4.1	15	14	0.12	10.6	1.9	2.2	72
	Yandanooka	Indicated	0.9	90.1	2.0	2.3	16	15	2.09	11.5	3.9	3.9	69
	Yandanooka	Inferred	0.9	2.8	2.0	1.2	18	21	0.03	11.2	3.9	4.6	68
	Yandanooka	All	0.9	95.9	2.0	2.3	16	15	2.25	11.4	3.8	3.9	69
	Durack	Indicated	0.9	50.3	2.0	2.0	15	21	1.02	14	2.8	5.1	69
	Durack	Inferred	0.9	15.0	1.9	1.2	14	17	0.18	14	2.5	7.2	66
	Durack	All	0.9	65.3	2.0	1.8	15	20	1.20	14	2.8	5.6	68
	Drummond Crossing	Indicated	1.1	48.7	2.0	2.1	16	9	1.02	14	10	3.6	53
	Drummond Crossing	Inferred	1.1	3.5	2.0	1.5	16	8	0.05	13	10	2.8	55
	Drummond Crossing	All	1.1	52.2	2.0	2.1	16	9	1.07	14	10	3.5	53
	Ellengail	Inferred	0.9	46.45	2.0	2.2	15.6	2.1	1.04	8.9	8.7	1.9	63.5
	Ellengail	All	0.9	46.45	2.0	2.2	15.6	2.1	1.04	8.9	8.7	1.9	63.5
	West Mine North	Measured	0.9	6.47	2.0	5.6	14.8	1.2	0.36	4.9	9.1	11.6	54.9
	West Mine North	Indicated	0.9	36.11	1.9	2.3	13.1	2.8	0.84	8.4	10.3	5.4	60.0
	West Mine North	All	0.9	42.58	1.9	2.8	13.4	2.5	1.21	7.9	10.1	6.4	59.2
	Total Eneabba	Measured	var.	9.4	2.0	5.2	15	5	0.48	6.7	6.8	8.7	60
	Total Eneabba	Indicated	var.	225.3	2.0	2.2	15	13	4.98	12.1	6.0	4.4	64
	Total Eneabba	Inferred	var.	67.7	2.0	1.9	15	6	1.30	10.3	7.2	3.2	64
	Total Eneabba	**All**	**var.**	**302**	**2.0**	**2.2**	**15**	**11**	**6.76**	**11.6**	**6.3**	**4.2**	**64**
McCalls	McCalls	Inferred	0.9	4,431	2.3	1.2	26.5	1.4	53	6.6	2.0	4.9	80.8
	Total McCalls	**All**	**0.9**	**4,431**	**2.3**	**1.2**	**26.5**	**1.4**	**53**	**6.6**	**2.0**	**4.9**	**80.8**

**Tonnes have been rounded to reflect the relative uncertainty of the estimate.*

[2] This estimate is classified and reported in a manner compliant with the JORC code and guidelines (JORC, 2004). Further details on the Mineral Resource at each deposit can be found in this document and on the ASX Announcements page of the Company's website. [3] The Mineral Assemblage is represented as the percentage of the Heavy Mineral (HM) component of the deposit, as determined by QEMSCAN. TiO_2 minerals defined according to the following ranges: Eneabba Project: Rutile >95% TiO_2; Leucoxene 85-95% TiO_2; Ilmenite <55-85% TiO_2; Dampier Project: Rutile >95% TiO_2; Leucoxene 70-95% TiO_2; Ilmenite 40-70% TiO_2. [4] West Mine North, Durack, Drummond Crossing and McCalls are reported below a 35% Slimes upper cutoff

Appendix 2: JORC (2012) Table 1 Report, Red Bull Diamond Results, total graphitic carbon (TGC).

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.*	• Diamond drill core • Full core was cut using a rock saw and quarter core samples taken on geological boundaries in visually-identified mineralised zones, with maximum intervals approximately 1m. • Samples prepared for assay as detailed below.
Drilling techniques	• *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).*	• Diamond core drilling. • REDD001: 0-9m rolled, 9-179.7m HQ^2 • REDD002: 0-123.6m RC pre-collar, 123.6 to 480m NQ^2 • REDD003: 0-112m RC pre-collar, 112-402m NQ^2 • Core orientated using Reflex ACT system.
Drill sample recovery	• *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.*	• Core recovery was recorded and averaged 98.12% for the three holes. • Rock Quality Designation (RQD) was recorded. • Considering the use of drill core, the sampling method, and high core recovery, it is very unlikely any sampling bias has been introduced, and none relevant to reporting of early stage exploration results.
Logging	• *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 intersections logged.*	• 100% of diamond core was logged using a coded logging system for rock type, grain size, colour, alteration and any other relevant observations. • All core has been photographed both wet and dry. • Logging is suitable such that interpretations of grade and deposit geology can be used, for example, to establish context of exploration results and support Mineral Resource estimation.
Sub-sampling techniques and sample	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled,*	Sub-sampling • Full core was cut using a rock saw and quarter core samples taken on geological

Criteria	JORC Code explanation	Commentary
preparation	*rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	boundaries in visually-identified mineralised zones, with maximum intervals approximately 1m. • Blank material samples inserted 1 each in every 40 samples. • Reference standard samples inserted 1 each in every 40 samples. TGC reference standard not used, reliance on laboratory internal references considered sufficient. Laboratory • Entire sample dry crushed ~10mm, and pulverised to nominal 85% passing 75µm. • Sub-sample split for analysis, weight determined by laboratory appropriate for element and analysis method. • Laboratory check assays completed 1 in 20 samples, 4% laboratory standards analysed, 2 check blanks. All • Spacing of standard, blank and repeat samples are designed to identify sample misplacement or misallocation during sample collection and laboratory analysis. • Sample representivity and data precision has been determined as acceptable through analysis of results from laboratory repeats. • Techniques are considered appropriate for use in public reporting of exploration results.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Total Graphitic Carbon (TGC) analysis is by CS analyser following weak acid digestion and 420°C roast. • Petrology of one sample from 87m downhole depth in hole REDD001 indicates no other likely sources of elemental C in sample other than graphite. Graphite present as flakes, average size >50µm x >250µm. • QAQC sample frequency is described above. One reference standard used from certified provider. Quartz aggregate used as a blank material. • 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. • Some TGC contamination between samples in sample prep stage is evident at TGC >~5%, with maximum 2% of TGC carried over. At these levels, e.g. 0.2% TGC in blank following 9% TGC sample, any contamination is considered insignificant given the context of the results reported here. • 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	• Significant intervals are reviewed by senior Sheffield personnel prior to release. • Data is logged electronically using

Criteria	JORC Code explanation	Commentary
	• *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.*	"validation at point of entry" systems prior to storage in the Company's drillhole 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.
Location of data points	• *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.*	• Drill holes were located using a DGPS system with expected accuracy of +/- <1m horizontal and +/- 2m vertical. • Coordinates are referenced to the Map Grid of Australia (MGA) zone 51 on the Geographic Datum of Australia (GDA94). • Vertical datum geoid model is AUSGEOID98 (Australia). • Holes gyroscopically surveyed downhole
Data spacing and distribution	• *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.*	• Significant intervals are reported as indicated in the relevant table(s) in the body of the announcement, note downhole intervals quoted. • Intervals have been determined on geological boundaries. • Results announced are from single, isolated drillholes which were drilled only to test the source of conductive anomalies, and not their extent. No extension of mineralisation away from the drillhole intervals quoted should be implied from the supplied data.
Orientation of data in relation to geological structure	• *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.*	• The angle at which the prevailing geology/mineralised structures have been intersected by the drillhole for each quoted interval is unknown at this stage. • However, geophysical modelling to determine the shape and orientation of the conductive source tested, believed to be graphitic mineralisation, was used to design the drillholes to intersect the modelled conductive body as close to perpendicular as practicable. Therefore the (downhole) interval widths quoted in the body of the announcement can be considered an approximation only of true width at this stage. • Nevertheless, the results announced are from single, isolated drillholes which were drilled only to test the source of the conductive anomalies, and not their extent. No extension of mineralisation away from the drillhole intervals quoted should be implied from the supplied data.
Sample security	• *The measures taken to ensure sample security.*	• Sample security is not considered a significant risk given the location of the prospect. • Nevertheless, the use of recognised transport providers, sample dispatch procedures directly from the field to the laboratory, and interval QAQC procedures are considered sufficient to ensure appropriate sample security and identify whether this security has been compromised, or not.
Audits or	• *The results of any audits or reviews of*	• No formal external audits or review of

Criteria	JORC Code explanation	Commentary
reviews	*sampling techniques and data.*	sample techniques or data have been conducted. • Audits are not considered necessary at this stage of the Project's development. Industry-standard methods are being employed.

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	• 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.	• Data reported is from Exploration Licence E69/3052 which was granted on 27/07/2012 and is due to expire on 26/07/2017. The tenement is held 100% by Sheffield Resources Ltd. • 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 12 months to date.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• No exploration by other parties has been conducted in the area to which the reported results relate.
Geology	• Deposit type, geological setting and style of mineralisation.	• The Red Bull Project is within The Fraser Range Complex and comprises predominantly mafic garnet-biotite gneisses, metaquartzites and felsic intrusives. Structurally the Complex is an up-faulted thrust slice of a lower crustal layer, and has experienced significant folding and metamorphism. • A persistent regolith cover of Mesozoic saprolite has formed, overlain by mid to post-Eocene sediments. • The intervals quoted are interpreted to be within a structurally complex sequence of metasediment.
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o 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.	• Included in the body of announcement.
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate	• Significant intervals are reported as indicated in the relevant table(s) in the body of the announcement, note downhole intervals quoted. • Intervals have been determined on geological boundaries.

Criteria	Statement	Commentary
	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.	
Relationship between mineralisation widths and intercept lengths	• 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 (eg 'down hole length, true width not known').	• The angle at which the prevailing geology/mineralised structures have been intersected by the drillhole for each quoted interval is unknown at this stage. • However, geophysical modelling to determine the shape and orientation of the conductive source tested, believed to be graphitic mineralisation, was used to design the drillholes to intersect the modelled conductive body as close to perpendicular as practicable. Therefore the (downhole) interval widths quoted in the body of the announcement can be considered an approximation only of true width at this stage. • Nevertheless, the results announced are from single, isolated drillholes which were drilled only to test the source of the conductive anomalies, and not their extent. No extension of mineralisation away from the drillhole intervals quoted should be implied from the supplied data.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for 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.	• The results of the drilling quoted are not considered indicative of a significant discovery, and so detailed plans and cross-sections are not provided.
Balanced reporting	• 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.	• Only TGC results from sections of the core identified visually as containing anomalous concentrations of graphite have been reported.
Other substantive exploration data	• 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.	• The holes targeted EM conductors, the details of which are included in previous ASX announcements and available from the Company's website at: www.sheffieldresources.com.au • No other data other than that reported here is considered relevant to the reporting of these exploration results.
Further work	• 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.	• No further work related to the graphite intervals reported is planned at this stage. • Sheffield continues to pursue an aggressive exploration program targeting Ni-Cu mineralisation elsewhere within the tenement and throughout its other Fraser Range Ni-Cu Project tenements.