ASX and Media Release

12 September, 2013

THREE NEW NICKEL TARGETS FROM AIRCORE DRILLING AT RED BULL

KEY POINTS

- **Three significant new nickel targets outlined by initial broadly-spaced aircore drilling**
- **Intervals of up to 8m @ 0.41% Ni with anomalous Cu, Co and PGEs**
- **Targets occur within an 8km strike length of a layered mafic-ultramafic complex**
- **Geochemical signature and geological setting considered favourable for magmatic nickel sulphide deposits**

Sheffield Resources ("Sheffield", "the Company") (ASX:SFX) today announced the identification of three substantial nickel-copper-cobalt anomalies from regional aircore drilling completed at its Red Bull Nickel-Copper Project in July. Red Bull is 20km south of Sirius Resources NL's (ASX:SIR) Nova/Bollinger Nickel-Copper deposit, in the Fraser Range Nickel Province in Western Australia (Figure 5).

The three anomalies, named the Earlobe, Stud and Sleeper prospects (collectively the "Northern Targets"), occur within an 8km strike length of a layered mafic-ultramafic complex in the northern part of the Red Bull project. The anomalies remain open, with 3km of prospective strike yet to be tested by aircore drilling (Figure 1).

Significant results from each prospect include:

Stud

- **22m @ 0.26% Ni, 121ppm Cu, 223ppm Co, 7.5ppb Pt from 32m (REAC240)**
  including 8m @ 0.41% Ni, 170ppm Cu, 350ppm Co, 6.8ppb Pt from 32m
- **12m @ 0.32% Ni, 204ppm Cu, 337ppm Co, 8 ppb Pd from 37m (REAC272)**
- **8m @ 0.15% Ni, 400ppm Cu, 261ppm Co, 14.5ppb Pd, 14.5ppb Pt from 22m (REAC250)**

Earlobe

- **6m @ 0.24% Ni, 53ppm Cu, 170ppm Co, from 52m (REAC230)**

Sleeper

- **4m @ 0.16% Ni, 203ppm Cu, 301ppm Co from 44m (REAC320)**

(Refer to Table 1 for further details.)

The anomalous intervals occur at or near the base of weathering and may represent the chemical dispersion halo around a sulphide source (Figures 2 & 3). Disseminated sulphides were observed in end-of-hole samples in several drill holes, e.g. hole REAC240 (Figure 4).

Managing Director, Bruce McQuitty said the results are highly encouraging and demonstrate the potential for significant Ni-Cu mineralisation at Red Bull.

"We have identified a discrete, 8km long unit within a mafic-ultramafic complex which displays strong nickel, copper and cobalt anomalism. Elevated palladium and platinum values are a further indication that we are in the right setting for a magmatic nickel sulphide system."

"The tenor of anomalism is similar to that found in the halos to nickel deposits."

"The next phase of work will include an examination of disseminated sulphides observed in end-of-hole samples to determine if they are of magmatic origin."

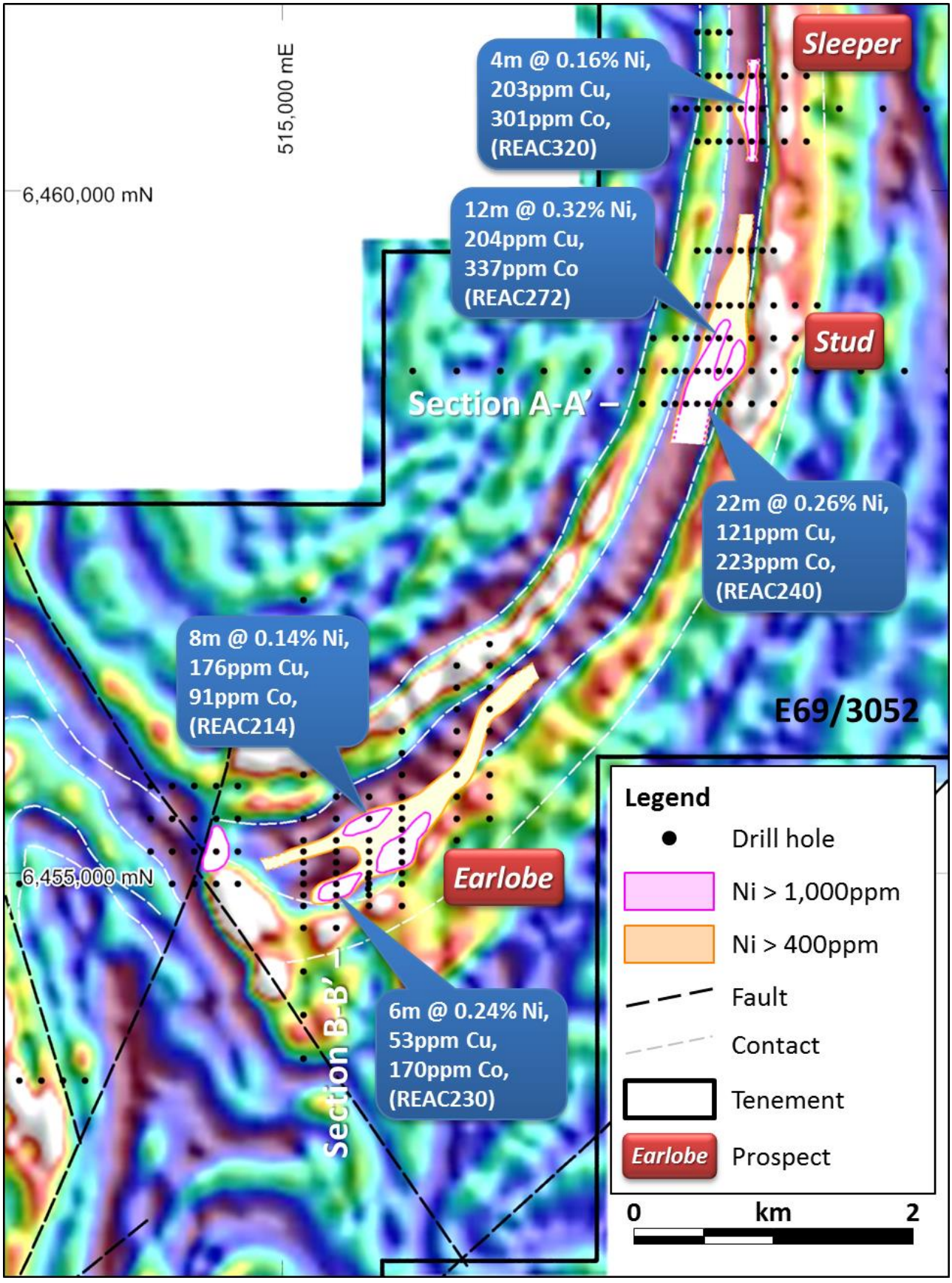

Figure 1: Northern Targets aircore drill plan on aeromagnetic image showing contours of maximum Ni in hole and selected intervals at the Earlobe, Stud and Sleeper prospects

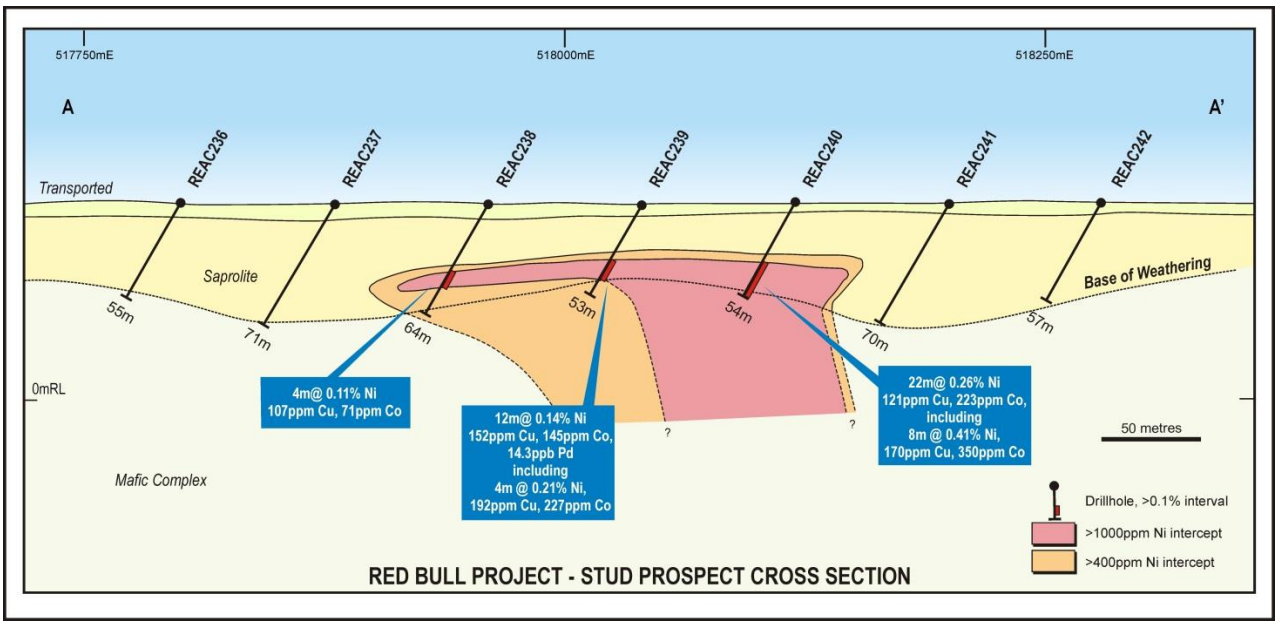

Figure 2: Section A-A', looking north

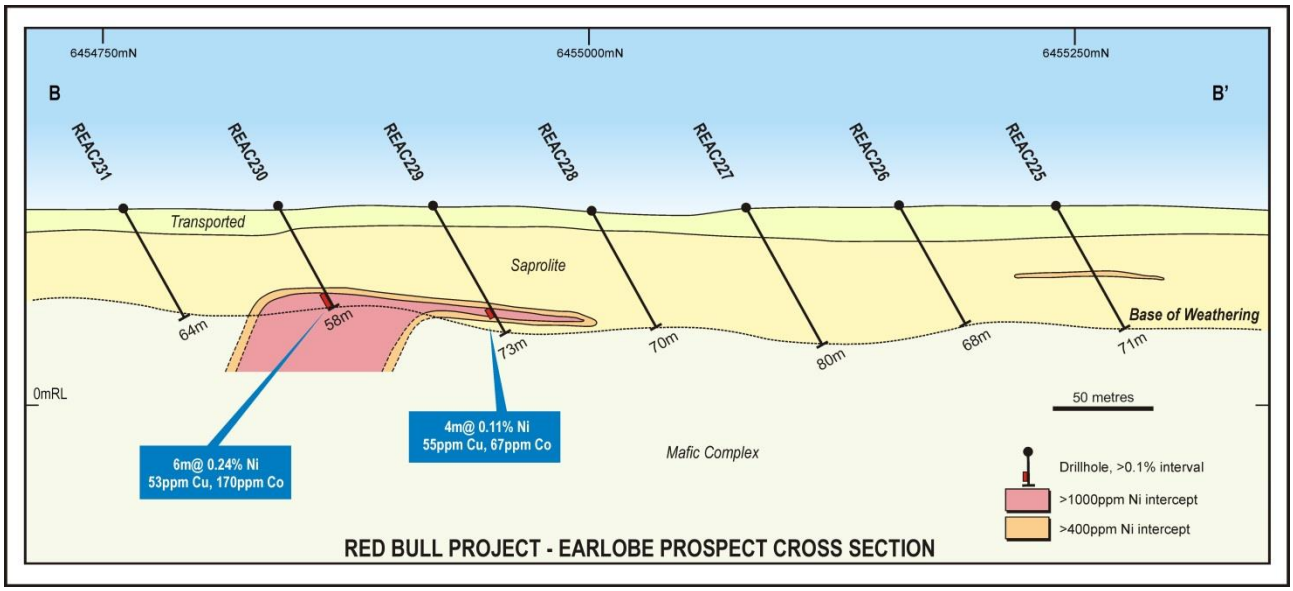

Figure 3: Section B-B', looking west

Aircore Drilling Programme

The Company's initial aircore drilling programme at Red Bull was completed in July 2013 and comprised 367 holes for 13,099m. The drilling was directed at two target areas within exploration licence E69/3052:

1. the area surrounding bedrock conductors (RB VA1 to 3) (see ASX release 17 July, 2013); and
2. the Northern Targets area which has several nickel and copper soil/historic aircore anomalies associated with a layered mafic-ultramafic sequence (see ASX release 1 May, 2013).

The Northern Targets area was drilled on broadly-spaced traverses, 250m or more apart, with holes spaced 80m apart along the sections. Aircore drilling was preferred as the initial means of target generation in this area because the presence of conductive overburden limits the effectiveness of EM geophysical prospecting techniques.

Holes were drilled to blade refusal, generally reaching the base of weathering. Samples were collected as (maximum) 4m composites with individual end-of-hole samples collected for additional lithogeochemical analysis.

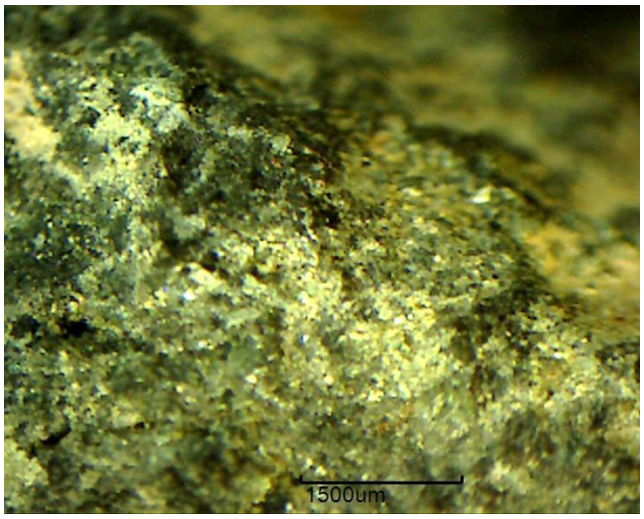

Figure 4: Disseminated and matrix sulphide (pyrrhotite - pyrite +/- chalcopyrite) hole REAC240 53-54m (eoh)

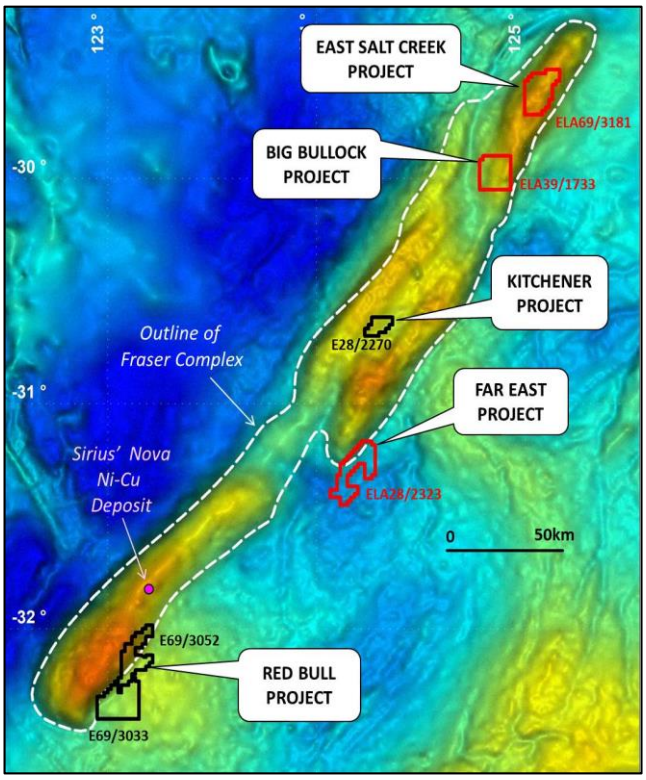

Figure 5: Location of Red Bull Project on a gravity image outlining the Fraser Complex

Northern Targets

Sheffield initially recognised the nickel potential of the Northern Targets from a review of historical exploration records. Four reconnaissance aircore drilling traverses by Gold Partners NL between 1995 and 1997 outlined an 8km long Ni-Cu-Co-(Pt-Pd) anomalous trend associated with pyroxene granulites and metagabbros. Maximum values obtained from weathered bedrock were 0.34% Ni, 670ppm Cu, 320ppm Co, 15ppb Pt, and 21ppb Pd (see ASX release 24 September 2012).

Sheffield undertook soil sampling of the Northern Targets in H1 2013. This work identified four broad zones of Ni-Cu soil anomalism coincident with a unit of low magnetic intensity within a folded and faulted layered intrusive complex (see ASX release 1 May, 2013). Three of these soil anomalies coincide with the Earlobe, Stud and Sleeper prospects.

Sheffield's recent aircore drilling has outlined three distinct areas of anomalism using a 400ppm maximum Ni in hole cut-off, within which are zones of >1,000ppm Ni (Figure 1). The anomalies are between 50 and 200m wide and from 500m to 2km in length. The highest grade nickel interval of 8m @ 0.41% Ni is from the Stud anomaly which remains open to the south.

Bedrock Conductor Targets

Drilling targeted the surface projection of bedrock conductor anomalies RBVA1-3, identified from fixed loop EM surveys. Subsequent diamond drilling of these conductors has shown they are sourced by pyrrhotite (iron sulphide) and graphite mineralisation and are not indicative of nickel sulphide mineralisation (see ASX release 17 July 2013). No anomalous Ni intervals were returned from aircore holes drilled over these conductors.

Further Work

Sheffield is currently undertaking detailed petrological and lithogeochemical studies to better understand the bedrock geology of the Northern Targets area. These studies will include an

appraisal of disseminated sulphides observed in several end-of-hole samples to determine if they are of magmatic origin.

Aeromagnetic interpretation indicates that the ultramafic complex may continue across fault offsets to the west and south. These targets will be subject to further investigations.

Further aircore drilling and ground geophysics is planned following the current phase of data interpretation.

Dampier HMS Project Update

Drilling is progressing well at Sheffield's Dampier Mineral Sands Project, with over 60% of the programme completed to date. The programme includes infill and extensional drilling at the world-class Thunderbird deposit and an initial test of the Argo prospect, located 12km west of Thunderbird. Results will be reported progressively from late Q3 2013.

ENDS

For further information please contact:

Bruce McQuitty
Managing Director
Tel: 08 6424 8440
bmcquitty@sheffieldresources.com.au

Media: Annette Ellis
Cannings Purple
Tel: 08 6314 6300
aellis@canningspurple.com.au

Website: www.sheffieldresources.com.au

COMPETENT PERSONS' STATEMENT

The information in this announcement that relates to exploration results is based on information compiled by David Boyd. Mr Boyd is a full time employee of the Company. Mr Boyd 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 Boyd 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 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", "strategy" and similar expressions.

Table 1 Red Bull aircore drilling significant intervals >1,000ppm (0.1%) Ni*.

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC188	514,520	6,455,160	61	-60	90	43	47	4	1,018	103	69	< 10	6.0
REAC207	515,880	6,455,240	77	-60	360	68	72	4	1,337	96	170	< 10	7.0
REAC208	515,880	6,455,160	80	-60	360	48	52	4	1,213	106	53	11.0	< 5
REAC209	515,880	6,455,080	65	-60	360	55	64	9	1,286	43	77	< 10	< 5
REAC214	515,640	6,455,400	54	-60	360	21	29	8	1,401	177	91	< 10	< 5
REAC229	515,400	6,454,920	73	-60	360	62	66	4	1,126	55	67	< 10	< 5
REAC230	515,400	6,454,840	58	-60	360	52	58^	6	2,416	53	170	< 10	< 5
REAC238	517,960	6,458,440	64	-60	270	41	45	4	1,107	107	71	< 10	< 5
REAC239	518,040	6,458,440	53	-60	270	30	42	12	1,471	152	145	14.3	< 5
including						*38*	*42*	*4*	*2,198*	*192*	*227*	< 10	< 5
REAC240	518,120	6,458,440	54	-60	270	32	54^	22	2,631	121	223	< 10	7.5
including						*32*	*40*	*8*	*4,140*	*170*	*350*	< 10	*6.8*
REAC249	518,040	6,458,680	64	-60	270	47	51	4	1,003	79	73	< 10	< 5
REAC250	518,120	6,458,680	66	-60	270	22	30	8	1,458	400	261	14.5	14.5
REAC252	518,280	6,458,680	70	-60	270	37	41	4	1,339	83	168	< 10	< 5
REAC272	518,200	6,458,920	60	-60	270	37	49	12	3,221	204	337	< 10	8.0
REAC305	518,440	6,460,840	62	-60	270	46	50	4	1,194	70	31	< 10	6.0
and						61	62^	1	1,013	16	68	10.0	6.0
REAC320	518,440	6,460,600	57	-60	270	44	48	4	1,585	203	301	< 10	< 5
REAC337	518,440	6,460,360	40	-60	270	39	40^	1	1,020	197	148	16.0	< 5

** Down-hole widths are quoted. Intervals calculated from 1m to 4m composite samples, 1m minimum width >1,000ppm (>0.1%) Ni, with 4m maximum internal waste. ^ denotes end of hole interval. Elements assayed by 25g aqua-regia digest with ICP-OES and ICP-MS finish. Detection limits for Pd and Pt are 10ppb and 5ppb respectively. Coordinates GDA94 MGA Zone 51 projection, grid azimuth, hole locations approximate using handheld GPS, +/- 15m accuracy.*

Appendix 1: Full drill hole listing, with significant (>1,000ppm Ni) intervals indicated where applicable.

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC001	508,081	6,442,486	12	-60	120								
REAC002	507,942	6,442,566	21	-60	120								
REAC003	507,908	6,442,586	25	-60	120								
REAC004	507,873	6,442,606	16	-60	120								
REAC005	507,838	6,442,626	10	-60	120								
REAC006	507,804	6,442,646	7	-60	120								
REAC007	507,769	6,442,666	8	-60	120								
REAC008	507,734	6,442,686	13	-60	120								
REAC009	507,700	6,442,706	10	-60	120								
REAC010	507,665	6,442,726	10	-60	120								
REAC011	507,630	6,442,746	17	-60	120								
REAC012	507,596	6,442,766	21	-60	120								
REAC013	507,561	6,442,786	19	-60	120								
REAC014	507,527	6,442,806	25	-60	120								
REAC015	507,492	6,442,826	19	-60	120								
REAC016	507,457	6,442,846	22	-60	120								
REAC017	507,388	6,442,886	19	-60	120								
REAC018	507,249	6,442,966	18	-60	120								
REAC019	507,111	6,443,046	8	-60	120								
REAC020	506,972	6,443,126	10	-60	120								
REAC021	506,834	6,443,206	9	-60	120								
REAC022	507,961	6,442,278	7	-60	120								
REAC023	507,822	6,442,358	15	-60	120								
REAC024	507,753	6,442,398	9	-60	120								
REAC025	507,684	6,442,438	12	-60	120								
REAC026	507,614	6,442,478	12	-60	120								
REAC027	507,545	6,442,518	11	-60	120								
REAC028	507,476	6,442,558	12	-60	120								
REAC029	507,407	6,442,598	14	-60	120								
REAC030	507,337	6,442,638	7	-60	120								
REAC031	507,268	6,442,678	14	-60	120								
REAC032	507,129	6,442,758	13	-60	120								
REAC033	506,991	6,442,838	7	-60	120								
REAC034	506,852	6,442,918	37	-60	120								
REAC035	507,841	6,442,070	12	-60	120								
REAC036	507,702	6,442,150	15	-60	120								
REAC037	507,564	6,442,230	20	-60	120								
REAC038	507,425	6,442,310	12	-60	120								
REAC039	507,287	6,442,390	16	-60	120								
REAC040	507,148	6,442,470	21	-60	120								
REAC041	507,009	6,442,550	29	-60	120								
REAC042	506,871	6,442,630	26	-60	120								
REAC043	506,732	6,442,710	15	-60	120								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC044	508,201	6,442,693	3	-60	120								
REAC045	508,062	6,442,773	4	-60	120								
REAC046	507,993	6,442,813	5	-60	120								
REAC047	507,924	6,442,853	6	-60	120								
REAC048	507,854	6,442,893	7	-60	120								
REAC049	507,785	6,442,933	8	-60	120								
REAC050	507,716	6,442,973	8	-60	120								
REAC051	507,647	6,443,013	7	-60	120								
REAC052	507,577	6,443,053	8	-60	120								
REAC053	507,508	6,443,093	7	-60	120								
REAC054	507,369	6,443,173	9	-60	120								
REAC055	507,231	6,443,253	5	-60	120								
REAC056	507,092	6,443,333	31	-60	120								
REAC057	506,954	6,443,413	31	-60	120								
REAC058	507,298	6,444,970	8	-60	120								
REAC059	507,229	6,445,010	16	-60	120								
REAC060	507,194	6,445,030	16	-60	120								
REAC061	507,159	6,445,050	9.5	-60	120								
REAC062	507,125	6,445,070	10.5	-60	120								
REAC063	507,090	6,445,090	10	-60	120								
REAC064	507,056	6,445,110	11	-60	120								
REAC065	507,021	6,445,130	12.2	-60	120								
REAC066	506,986	6,445,150	13	-60	120								
REAC067	506,952	6,445,170	14	-60	120								
REAC068	506,882	6,445,210	16	-60	120								
REAC069	506,813	6,445,250	17	-60	120								
REAC070	506,744	6,445,290	18	-60	120								
REAC071	507,130	6,445,159	10	-60	120								
REAC072	507,061	6,445,199	9	-60	120								
REAC073	506,992	6,445,239	16	-60	120								
REAC074	507,378	6,445,108	9	-60	120								
REAC075	507,309	6,445,148	10	-60	120								
REAC076	507,239	6,445,188	10	-60	120								
REAC077	507,170	6,445,228	11	-60	120								
REAC078	507,101	6,445,268	7	-60	120								
REAC079	507,032	6,445,308	16	-60	120								
REAC080	506,962	6,445,348	19	-60	120								
REAC081	506,893	6,445,388	21	-60	120								
REAC082	507,218	6,444,831	9	-60	120								
REAC083	507,149	6,444,871	13	-60	120								
REAC084	507,079	6,444,911	13	-60	120								
REAC085	507,010	6,444,951	17	-60	120								
REAC086	506,941	6,444,991	15	-60	120								
REAC087	506,872	6,445,031	17	-60	120								
REAC088	506,802	6,445,071	20	-60	120								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC089	506,733	6,445,111	25.2	-60	120								
REAC090	506,664	6,445,151	27	-60	120								
REAC091	506,978	6,445,148	18	-60	120								
REAC092	507,089	6,445,274	9	-60	120								
REAC093	507,970	6,446,614	29	-60	120								
REAC094	507,901	6,446,654	19	-60	120								
REAC095	507,832	6,446,694	19	-60	120								
REAC096	507,797	6,446,714	27	-60	120								
REAC097	507,762	6,446,734	36	-60	120								
REAC098	507,728	6,446,754	41	-60	120								
REAC099	507,693	6,446,774	41	-60	120								
REAC100	507,658	6,446,794	44	-60	120								
REAC101	507,624	6,446,814	65	-60	120								
REAC102	507,589	6,446,834	54	-60	120								
REAC103	507,555	6,446,854	67	-60	120								
REAC104	507,485	6,446,894	52	-60	120								
REAC105	507,416	6,446,934	29	-60	120								
REAC106	507,347	6,446,974	11	-60	120								
REAC107	507,277	6,447,014	12	-60	120								
REAC108	507,208	6,447,054	25	-60	120								
REAC109	507,139	6,447,094	13	-60	120								
REAC110	507,850	6,446,406	25	-60	120								
REAC111	507,781	6,446,446	36	-60	120								
REAC112	507,712	6,446,486	52	-60	120								
REAC113	507,642	6,446,526	43	-60	120								
REAC114	507,573	6,446,566	18	-60	120								
REAC115	507,504	6,446,606	27	-60	120								
REAC116	507,494	6,446,613	21	-60	120								
REAC117	507,435	6,446,646	20	-60	120								
REAC118	507,365	6,446,686	53	-60	120								
REAC119	507,296	6,446,726	48	-60	120								
REAC120	507,227	6,446,766	41	-60	120								
REAC121	507,157	6,446,806	32	-60	120								
REAC122	507,150	6,446,809	29	-90	120								
REAC123	507,088	6,446,846	33	-60	120								
REAC124	507,019	6,446,886	23	-60	120								
REAC125	507,730	6,446,198	31	-60	120								
REAC126	507,661	6,446,238	39	-60	120								
REAC127	507,592	6,446,278	22	-60	120								
REAC128	507,522	6,446,318	43	-60	120								
REAC129	507,453	6,446,358	48	-60	120								
REAC130	507,384	6,446,398	57	-60	120								
REAC131	507,308	6,446,438	84	-60	120								
REAC132	507,245	6,446,478	24	-60	120								
REAC133	507,243	6,446,478	10	-90	0								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC134	507,231	6,446,486	28	-90	0								
REAC135	507,176	6,446,518	54	-60	120								
REAC136	507,107	6,446,558	54	-60	120								
REAC137	507,037	6,446,598	32	-60	120								
REAC138	506,968	6,446,638	29	-60	120								
REAC139	506,899	6,446,678	44	-60	120								
REAC140	508,090	6,446,822	31	-60	120								
REAC141	508,021	6,446,862	34	-60	120								
REAC142	507,952	6,446,902	32	-60	120								
REAC143	507,882	6,446,942	41	-60	120								
REAC144	507,813	6,446,982	51	-60	120								
REAC145	507,744	6,447,022	27	-60	120								
REAC146	507,740	6,447,025	33	-90	0								
REAC147	507,675	6,447,062	22	-60	120								
REAC148	507,605	6,447,102	30	-60	120								
REAC149	507,536	6,447,142	26	-60	120								
REAC150	507,467	6,447,182	16	-60	120								
REAC151	507,397	6,447,222	6	-60	120								
REAC152	507,328	6,447,262	7	-60	120								
REAC153	507,259	6,447,302	4	-60	120								
REAC154	509,346	6,449,643	24	-60	120								
REAC155	509,277	6,449,683	21	-60	120								
REAC156	509,208	6,449,723	22	-60	120								
REAC157	509,139	6,449,763	22	-60	120								
REAC158	509,069	6,449,803	25	-60	120								
REAC159	515,160	6,455,720	11	-60	0								
REAC160	515,160	6,455,400	31	-60	0								
REAC161	515,160	6,455,240	62	-60	0								
REAC162	515,160	6,455,160	78	-60	0								
REAC163	515,160	6,455,080	97	-60	0								
REAC164	515,160	6,455,000	66	-60	0								
REAC165	515,160	6,454,920	72	-60	0								
REAC166	515,160	6,454,840	66	-60	0								
REAC167	515,160	6,454,760	82	-60	0								
REAC168	515,160	6,454,600	49	-60	0								
REAC169	515,160	6,454,280	73	-60	0								
REAC170	515,160	6,453,960	55	-60	0								
REAC171	515,160	6,453,640	43	-60	0								
REAC172	515,160	6,457,000	27	-60	0								
REAC173	515,160	6,456,680	32	-60	0								
REAC174	515,160	6,456,520	58	-60	0								
REAC175	515,160	6,456,360	57	-60	0								
REAC176	515,160	6,456,040	21	-60	0								
REAC177	514,680	6,455,640	53	-60	90								
REAC178	514,520	6,455,640	46	-60	90								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC179	514,360	6,455,640	46	-60	90								
REAC180	514,200	6,455,640	72	-60	90								
REAC181	514,040	6,455,640	51	-60	90								
REAC182	514,680	6,455,400	46	-60	90								
REAC183	514,520	6,455,400	75	-60	90								
REAC184	514,360	6,455,400	61	-60	90								
REAC185	514,200	6,455,400	74	-60	90								
REAC186	514,040	6,455,400	41	-60	90								
REAC187	514,680	6,455,160	54	-60	90								
REAC188	514,520	6,455,160	61	-60	90	43	47	4	1,018	103	69	< 10	6.0
REAC189	514,360	6,455,160	57	-60	90								
REAC190	514,200	6,455,160	38	-60	90								
REAC191	514,040	6,455,160	33	-60	90								
REAC192	514,680	6,454,920	49	-60	90								
REAC193	514,520	6,454,920	60	-60	90								
REAC194	514,360	6,454,920	47	-60	90								
REAC195	514,200	6,454,920	19	-60	90								
REAC196	514,040	6,454,920	13	-60	90								
REAC197	512,440	6,454,920	40	-60	270								
REAC198	512,760	6,454,920	17	-60	270								
REAC199	513,080	6,454,920	16	-60	270								
REAC200	513,400	6,454,920	12	-60	270								
REAC201	513,720	6,454,920	10	-60	270								
REAC202	515,880	6,455,720	45	-60	0								
REAC203	515,880	6,455,560	45	-60	0								
REAC204	515,880	6,455,480	45	-60	0								
REAC205	515,880	6,455,400	59	-60	0								
REAC206	515,880	6,455,320	54	-60	0								
REAC207	515,880	6,455,240	77	-60	0	68	72	4	1,337	96	170	< 10	7.0
REAC208	515,880	6,455,160	80	-60	0	48	52	4	1,213	106	53	11.0	< 5
REAC209	515,880	6,455,080	65	-60	0	55	64	9	1,286	43	77	< 10	< 5
REAC210	515,880	6,455,000	70	-60	0								
REAC211	515,880	6,454,920	79	-60	0								
REAC212	515,880	6,454,760	73	-60	0								
REAC213	515,640	6,455,560	24	-60	0								
REAC214	515,640	6,455,400	54	-60	0	21	29	8	1,401	177	91	< 10	< 5
REAC215	515,640	6,455,240	43	-60	0								
REAC216	515,640	6,455,160	57	-60	0								
REAC217	515,640	6,455,080	37	-60	0								
REAC218	515,640	6,455,000	57	-60	0								
REAC219	515,640	6,454,920	57	-60	0								
REAC220	515,640	6,454,840	37	-60	0								
REAC221	515,640	6,454,760	64	-60	0								
REAC222	515,640	6,454,600	81	-60	0								
REAC223	515,400	6,455,560	49	-60	0								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC224	515,400	6,455,400	62	-60	0								
REAC225	515,400	6,455,240	71	-60	0								
REAC226	515,400	6,455,160	68	-60	0								
REAC227	515,400	6,455,080	80	-60	0								
REAC228	515,400	6,455,000	70	-60	0								
REAC229	515,400	6,454,920	73	-60	0	62	66	4	1,126	55	67	< 10	< 5
REAC230	515,400	6,454,840	58	-60	0	52	58^	6	2,416	53	170	< 10	< 5
REAC231	515,400	6,454,760	64	-60	0								
REAC232	515,400	6,454,600	51	-60	0								
REAC233	515,634	6,454,964	56	-90	0								
REAC234	515,631	6,454,884	40	-90	0								
REAC235	517,640	6,458,440	50	-60	270								
REAC236	517,800	6,458,440	55	-60	270								
REAC237	517,880	6,458,440	71	-60	270								
REAC238	517,960	6,458,440	64	-60	270	41	45	4	1,107	107	71	< 10	< 5
REAC239	518,040	6,458,440	53	-60	270	30	42	12	1,471	152	145	14.3	< 5
					including	*38*	*42*	*4*	*2,198*	*192*	*227*	< 10	< 5
REAC240	518,120	6,458,440	54	-60	270	32	54^	22	2,631	121	223	< 10	7.5
					including	*32*	*40*	*8*	*4,140*	*170*	*350*	< 10	*6.8*
REAC241	518,200	6,458,440	70	-60	270								
REAC242	518,280	6,458,440	57	-60	270								
REAC243	518,440	6,458,440	37	-60	270								
REAC244	518,600	6,458,440	29	-60	270								
REAC245	517,640	6,458,680	48	-60	270								
REAC246	517,800	6,458,680	38	-60	270								
REAC247	517,880	6,458,680	43	-60	270								
REAC248	517,960	6,458,680	57	-60	270								
REAC249	518,040	6,458,680	64	-60	270	47	51	4	1,003	79	73	< 10	< 5
REAC250	518,120	6,458,680	66	-60	270	22	30	8	1,458	400	261	14.5	14.5
REAC251	518,200	6,458,680	48	-60	270								
REAC252	518,280	6,458,680	70	-60	270	37	41	4	1,339	83	168	< 10	< 5
REAC253	518,440	6,458,680	31	-60	270								
REAC254	518,600	6,458,680	28	-60	270								
REAC255	518,760	6,458,680	56	-60	270								
REAC256	518,920	6,458,680	55	-60	270								
REAC257	519,240	6,458,680	28	-60	270								
REAC258	519,560	6,458,680	45	-60	270								
REAC259	519,880	6,458,680	51	-60	270								
REAC260	520,200	6,458,680	58	-60	270								
REAC261	515,960	6,458,680	3	-60	270								
REAC262	516,280	6,458,680	12	-60	270								
REAC263	516,600	6,458,680	27	-60	270								
REAC264	516,920	6,458,680	2	-60	270								
REAC265	517,240	6,458,680	4	-60	270								
REAC266	517,480	6,458,680	33	-60	270								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC267	517,720	6,458,920	55	-60	270								
REAC268	517,880	6,458,920	79	-60	270								
REAC269	517,960	6,458,920	62	-60	270								
REAC270	518,040	6,458,920	52	-60	270								
REAC271	518,120	6,458,920	49	-60	270								
REAC272	518,200	6,458,920	60	-60	270	37	49	12	3,221	204	337	< 10	8.0
REAC273	518,280	6,458,920	60	-60	270								
REAC274	518,440	6,458,920	49	-60	270								
REAC275	518,600	6,458,920	26	-60	270								
REAC276	518,760	6,458,920	24	-60	270								
REAC277	517,800	6,459,160	61	-60	270								
REAC278	517,960	6,459,160	7	-60	270								
REAC279	518,040	6,459,160	21	-60	270								
REAC280	518,120	6,459,160	25	-60	270								
REAC281	518,200	6,459,160	47	-60	270								
REAC282	518,280	6,459,160	37	-60	270								
REAC283	518,360	6,459,160	30	-60	270								
REAC284	518,440	6,459,160	41	-60	270								
REAC285	518,600	6,459,160	43	-60	270								
REAC286	518,760	6,459,160	58	-60	270								
REAC287	518,920	6,459,160	48	-60	270								
REAC288	518,040	6,459,560	15	-60	270								
REAC289	518,120	6,459,560	7	-60	270								
REAC290	518,200	6,459,560	11	-60	270								
REAC291	518,280	6,459,560	21	-60	270								
REAC292	518,360	6,459,560	38	-60	270								
REAC293	518,440	6,459,560	44	-60	270								
REAC294	518,520	6,459,560	50	-60	270								
REAC295	518,600	6,459,560	50	-60	270								
REAC296	518,040	6,461,160	9	-60	270								
REAC297	518,120	6,461,160	39	-60	270								
REAC298	518,200	6,461,160	37	-60	270								
REAC299	518,280	6,461,160	49	-60	270								
REAC300	518,040	6,460,840	26	-60	270								
REAC301	518,120	6,460,840	43	-60	270								
REAC302	518,200	6,460,840	49	-60	270								
REAC303	518,280	6,460,840	59	-60	270								
REAC304	518,360	6,460,840	55	-60	270								
REAC305	518,440	6,460,840	62	-60	270	46	50	4	1,194	70	31	< 10	6.0
					and	61	62^	1	1,013	16	68	10.0	6.0
REAC306	518,520	6,460,840	69	-60	270								
REAC307	518,680	6,460,840	58	-60	270								
REAC308	518,682	6,460,839	64	-90	90								
REAC309	518,840	6,460,840	74	-60	270								
REAC310	517,400	6,460,600	2	-60	270								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC311	517,560	6,460,600	2	-60	270								
REAC312	517,720	6,460,600	2	-60	270								
REAC313	517,880	6,460,600	3	-60	270								
REAC314	517,960	6,460,600	3	-60	270								
REAC315	518,040	6,460,600	11	-60	270								
REAC316	518,120	6,460,600	28	-60	270								
REAC317	518,200	6,460,600	17	-60	270								
REAC318	518,280	6,460,600	37	-60	270								
REAC319	518,360	6,460,600	61	-60	270								
REAC320	518,440	6,460,600	57	-60	270	44	48	4	1,585	203	301	< 10	< 5
REAC321	518,520	6,460,600	58	-60	270								
REAC322	518,680	6,460,600	56	-60	270								
REAC323	518,840	6,460,600	78	-60	270								
REAC324	519,080	6,460,600	73	-60	270								
REAC325	519,400	6,460,600	55	-60	270								
REAC326	519,720	6,460,600	68	-60	270								
REAC327	520,040	6,460,600	84	-60	270								
REAC328	520,360	6,460,600	52	-60	270								
REAC329	520,040	6,460,280	57	-60	270								
REAC330	520,120	6,460,280	61	-60	270								
REAC331	520,200	6,460,280	63	-60	270								
REAC332	518,040	6,460,360	11	-60	270								
REAC333	518,120	6,460,360	6	-60	270								
REAC334	518,200	6,460,360	12	-60	270								
REAC335	518,280	6,460,360	7	-60	270								
REAC336	518,360	6,460,360	16	-60	270								
REAC337	518,440	6,460,360	40	-60	270	39	40^	1	1,020	197	148	16.0	5.0
REAC338	518,520	6,460,360	40	-60	270								
REAC339	518,680	6,460,360	47	-60	270								
REAC340	518,840	6,460,360	81	-60	270								
REAC341	512,600	6,453,480	38	-60	270								
REAC342	512,760	6,453,480	61	-60	270								
REAC343	512,920	6,453,480	62	-60	270								
REAC344	513,080	6,453,480	13	-60	270								
REAC345	513,240	6,453,480	41	-60	270								
REAC346	513,400	6,453,480	4	-60	270								
REAC347	513,560	6,453,480	26	-60	270								
REAC348	515,880	6,456,040	47	-60	0								
REAC349	515,880	6,455,880	22	-60	0								
REAC350	516,280	6,456,520	12	-60	0								
REAC351	516,280	6,456,360	61	-60	0								
REAC352	516,280	6,456,200	56	-60	0								
REAC353	516,280	6,456,040	78	-60	0								
REAC354	516,280	6,455,880	40	-60	0								
REAC355	516,280	6,455,720	42	-60	0								

Hole	Easting	Northing	Depth (m)	Dip	Azimuth	From (m)	To (m)	Width (m)	Ni ppm	Cu ppm	Co ppm	Pd# ppb	Pt# ppb
REAC356	516,280	6,455,560	50	-60	0								
REAC357	516,280	6,455,400	67	-60	0								
REAC358	516,280	6,455,240	57	-60	0								
REAC359	516,520	6,456,680	19	-60	0								
REAC360	516,520	6,456,520	21	-60	0								
REAC361	516,520	6,456,360	34	-60	0								
REAC362	516,520	6,456,200	51	-60	0								
REAC363	516,520	6,456,040	37	-60	0								
REAC364	516,520	6,455,880	55	-60	0								
REAC365	516,520	6,455,720	62	-60	0								
REAC366	516,520	6,455,560	62	-60	0								
REAC367	516,520	6,455,400	63	-60	0								

** Down-hole widths are quoted. Intervals calculated from 1m to 4m composite samples, 1m minimum width >1,000ppm (>0.1%) Ni, with 4m maximum internal waste. ^ denotes end of hole interval. Elements assayed by 25g aqua-regia digest with ICP-OES and ICP-MS finish. Detection limits for Pd and Pt are 10ppb and 5ppb respectively. Coordinates GDA94 MGA Zone 51 projection, grid azimuth, hole locations approximate using handheld GPS, +/- 15m accuracy.*

ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited (**Sheffield**) is a rapidly emerging heavy mineral sands (HMS) company.

ASX Code – SFX	Market Cap @ 41cps - $48.5m
Issued shares – 118.3m	Cash - $8.5m (at 30 June 2013)

Sheffield's projects are all situated within the state of Western Australia and are 100% owned by the Company.

HEAVY MINERAL SANDS

The Dampier project, located near Derby in WA's Canning Basin region, contains the large, high grade zircon-rich Thunderbird HMS deposit.

The Eneabba project comprises multiple HMS deposits and is located near Eneabba approximately 140km south of the port of Geraldton in WA's Mid-West region.

Sheffield is also evaluating the large McCalls chloride ilmenite project, located 110km to the north of Perth.

NICKEL-COPPER

Sheffield's Red Bull project is located in the highly prospective Fraser Complex within 20km of Sirius Resources NL's (ASX:SIR) Nova Ni-Cu discovery.

IRON

Sheffield holds four exploration licences prospective for iron in the North Pilbara region, all near existing iron ore mine sites or major development projects and within potential trucking distance of Port Hedland. Following its recent sale of the South Pilbara Iron tenements, Sheffield continues to seek to unlock value on its remaining Pilbara iron tenements through consolidation and/or further exploration.

POTASH

The Oxley potash project is located in the northern part of the Proterozoic Moora Basin, approximately 38km northeast of Three Springs. Sheffield is exploring the Oxley Potash project for unconventional hard rock potash mineralisation suitable for open pit mining.