### ASX ANNOUNCEMENT

ASX: SIR

**ABN**: 46 009 150 083

Street address:

Unit 5, 5 Mumford Place, Balcatta 6021, Western Australia

Postal address:

PO Box 1011, Balcatta 6914, Western Australia

Tel: +61 8 9240 8914

Fax: +61 8 9240 8915

#### Email:

admin@siriusresources.com.au

Web: www.siriusresources.com.au

Projects:

Fraser Range nickel-copper, gold

Polar Bear gold, nickel

Canyon Creek molybdenum, copper, gold

Youanmi nickel, copper, PGM's

Collurabbie nickel, copper, PGM's



## EXPLORATION UPDATE – NOVA, THE EYE AND REGIONAL

Sirius

**3 DECEMBER 2012** 

- Large EM conductor identified at new target
- Prospectivity of the western contact of the Eye revealed
- DHEM extends conductor 5 down dip
- More good intersections in Nova drilling

Sirius Resources NL (ASX:SIR) ("Sirius" or the "Company") advises that exploration is progressing on a number of fronts at its Nova deposit and surrounding prospects.

#### New EM conductor 20 kilometres west of Nova

Sirius has commenced exploring other Nova-style targets in its broader Fraser Range project area. The first reconnaissance moving loop electromagnetic (MLEM) survey on one of these targets has defined a large conductor situated 20 kilometres west of the Nova nickel-copper deposit (*see Figure 1*).

This conductor is approximately the same size as Nova, being 1,500 metres long, 600 metres wide, dipping 65 degrees to the northwest and plunging gently to the northeast (*see Figure 2*). Further EM is required to close off the south western end of the conductor as a prerequisite for drilling, which is planned for the first quarter of 2013.

#### The bigger picture at the Eye

As Nova goes into the resource definition phase, the scope of drilling is broadening to include all targets along the western contact of the Eye, which appears to be the key mineralised trend.

As described in the last ASX announcement, the first drilling of the IP anomaly some 500 metres north of Nova has confirmed the presence of disseminated sulphide mineralisation in the corridor linking Nova with conductor 3.

3D visualisation of this corridor (as shown in Figure 3) reveals the



disposition of Nova, conductor 5, the disseminated sulphides intersected in hole SFRD0133 and the location of conductor 3 over a strike length of 3 kilometres. Drilling will continue to track the disseminated sulphides along the IP corridor and also test conductor 3.

The 3D distribution of mineralisation discovered to date indicates that the entire prospective western contact of the Eye dips gently to the east, so broad spaced deeper drilling of this zone will commence with the dual aim of defining its position, locating additional mineralisation on this contact and undertaking systematic DHEM to search for deeper, blind deposits.

#### **DHEM extends conductor 5**

Down hole electromagnetics (DHEM) undertaken on the initial holes testing conductor 5 has shown that this conductor extends over a larger area than previously defined (*see Figure 4*).

Conductor 5 now measures 260 by 170 metres and is located largely to the east (down dip) of the drilling to date, at a depth which is consistent with the favourable basal contact of the mineralisation intersected to date. Its conductivity is consistent with matrix or stringer style sulphides so this may represent a larger zone of this style of mineralisation than previously known.

#### Nova drilling

Ongoing resource definition drilling at Nova has encountered better than expected mineralisation at the southern (near surface) end of the deposit on line 550N, with hole SFRD0134 intersecting:

- **5.1 metres of massive sulphides with abundant pentlandite** (nickel sulphide) from 177.9 metres (*see Figure 5*), and;
- **2.1 metres of massive chalcopyrite** (copper sulphide) from 189 metres (see Figure 6).

Drilling around the peripheries of the Nova deposit continues to add additional zones of mineralisation, which is yet to be fully closed off down dip on three lines.

Assays received from infill drilling around the periphery of Nova continue to confirm the robustness of the deposit, with examples being:

- **22.07 metres @ 2.94% nickel and 0.7% copper** from 314 metres in SFRD0114, an infill hole on the 750N line.
- **17.57 metres @ 1.67% nickel and 0.69% copper** from 355.43 metres in SFRD0120, an infill hole on the 550N line.

Ron-

Mark Bennett, Managing Director and CEO



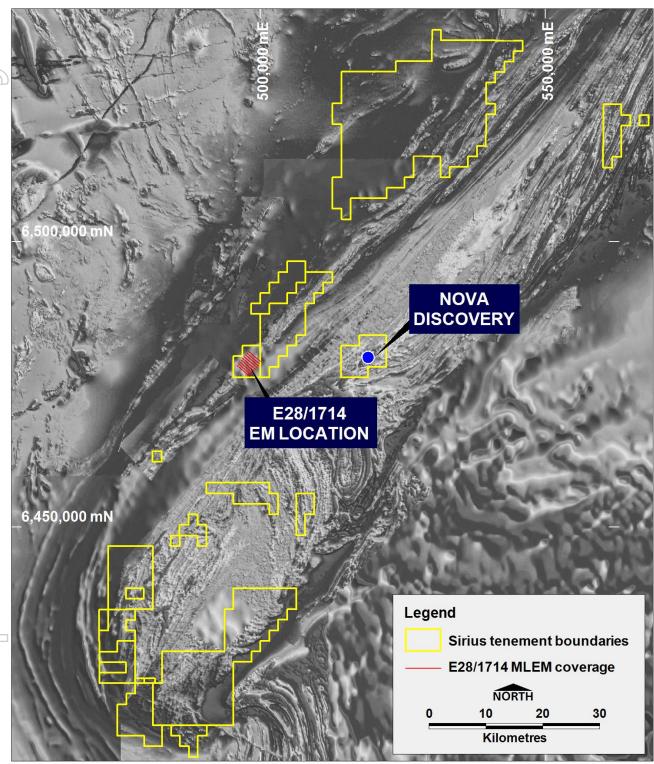
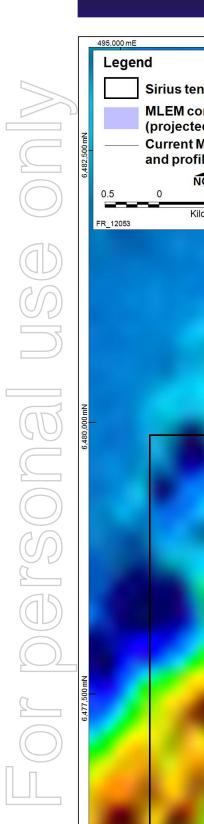


Figure 1. Location of the new EM anomaly relative to the Nova nickel-copper deposit.





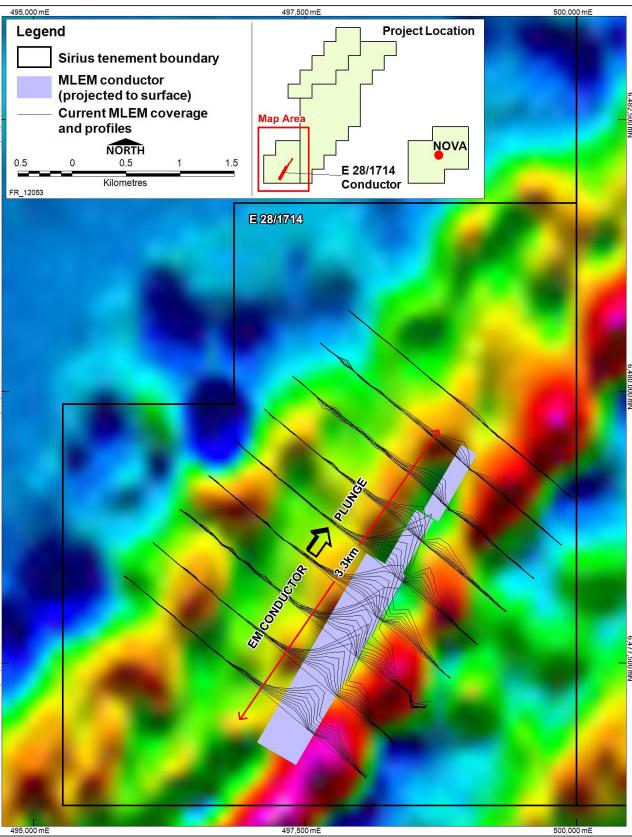


Figure 2. Detail of the new EM anomaly.



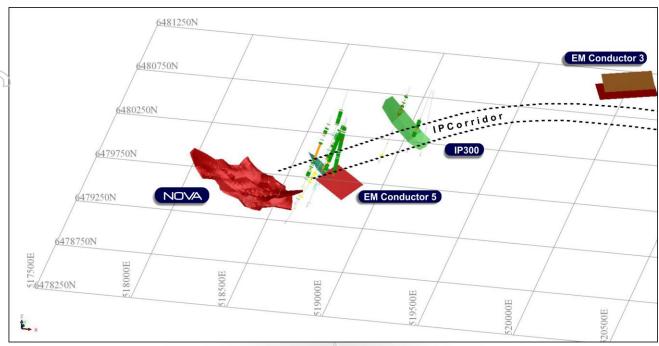


Figure 3. 3D view of the western contact of the Eye prospect, showing the distribution of Nova, the new expanded conductor 5, the disseminated sulphides recently intersected in hole SFRD0133 (400 metres north of conductor 5) and conductor 3.

#### About the Nova nickel discovery

- The Nova deposit is a blind (ie concealed by transported sediments) virgin discovery which vindicates Sirius' exploration methodologies and corporate strategy of identifying high leverage greenfields opportunities in stable jurisdictions.
- It was discovered by Sirius' target identification expertise and systematic use of geological, geophysical and geochemical exploration techniques.
- Drilling at conductor 1 has delineated a major nickel-copper sulphide deposit approximately 500 metres long, up to 400 metres across and up to 80 metres thick.
- The EM conductor that represents the Nova deposit is the first EM target at the Eye nickel-copper prospect to be tested.
- The mineralisation comprises pyrrhotite, pentlandite and chalcopyrite within very strongly metamorphosed rocks termed granulites. The sulphide minerals are coarse grained and high tenor and will likely produce a clean high value concentrate and the accompanying silicate minerals are likely to be highly amenable to conventional separation techniques.
- The sulphides occur in a variety of styles typical of magmatic sulphide deposits. These include massive, matrix, net textured, breccia, blebby and disseminated sulphides.
- The host rock is a hypersthene-augite-garnet-hornblende-labradorite-quartz gneiss interpreted to represent a strongly metamorphosed mafic-ultramafic intrusion of predominantly gabbroic composition.



P ANOMAL

900N

800N

Fault

SFRD0129: 35m of mixed Disseminated Matrix, Breccia and Massive Sulphide

SFRD0123: 13.8m mixed Stringer and Breccia Sulphide and 10.7m mixed Sulphide zone

including 6.95m of Massive Sulphide (AWR)

SFRD0131: 7.1m of Disseminated Sulphide

SFRD0132: 29.5m of mixed Massive and

SFRD0135: 4.7m of Stringer Sulphide including 0.5m of Massive Sulphide (AWR) SFRD0134: 5.1m of Massive Sulphide and 2.1m of Massive Chalcopyrite (AWR)

**CONDUCTOR 5** 

 $\cap$ 

SFRD0122: 14.65m Disseminated to Blebby Sulphide and 0.55m Stringer Sulphide and 0.88m Disseminated to Blebby Sulphide (AWR)

SFRD0118: 23.8m of Disseminated to Blebby

Sulphides, 0.35m of Breccia Sulphides and 0.95m of Stringer Sulphides (AWR)

SFRD0125: 33.8m of Disseminated to Blebby

... 850N

00

(AWR)

518.500 mF

C

(AWR)

Stringer Sulphide (AWR)

Sulphide and 6.5m mainly Stringer Sulphide (AWR)

SFRD0013: 17.4m of Trace to Disseminated Sulphides (AWR)

00

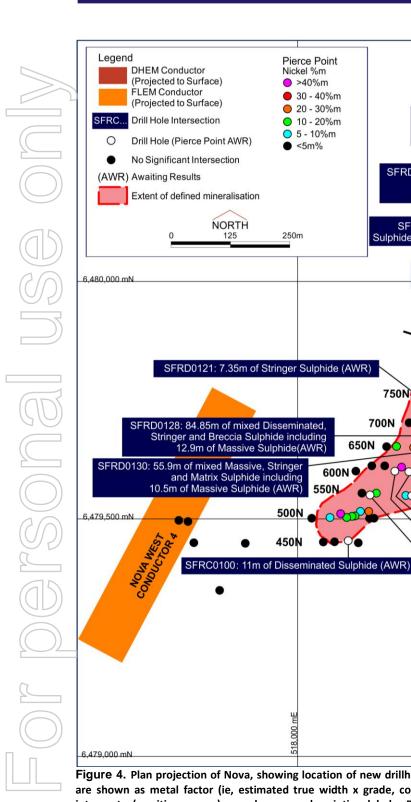


Figure 4. Plan projection of Nova, showing location of new drillholes and assayed intersections. Previously reported intercepts are shown as metal factor (ie, estimated true width x grade, commonly referred to as %metre, %m or metal factor). Visual intercepts (awaiting assays) are shown as descriptive labels. Refer to Table 1 and previous announcements for assayed intersections.

750N

700N

650N

600N S

QO

550N

500N

450N

518.000 mE

Pierce Point

Nickel %m

○ >40%m

**O** 30 - 40%m

🔵 20 - 30%m

🔵 10 - 20%m ○ 5 - 10%m

<5m%</p>

250m







- The deposit is only 40km north of the Eyre Highway and closer, via sealed road, to the port of Esperance than any operating nickel sulphide mine/concentrator in Western Australia.
- Planned metallurgical testwork will better quantify the mineralisation in terms of its crushing, grinding and flotation characteristics, the deportment of nickel and copper within the sulphides and the level (if any) of any deleterious or penalty elements in such a concentrate.

#### About the Fraser Range Joint Venture

The Fraser Range Joint Venture is a joint venture between Sirius Resources (70%) and companies of the Creasy Group (30%), owned by Mark Creasy who is also Sirius' major shareholder through his investment company, Yandal Holdings Pty Ltd.

The joint venture ground covers over 100 strike kilometres of the prospective belt and Sirius, together with various private companies owned by Mark Creasy, control the majority of this new nickel province.

Sirius acknowledges the assistance provided by the WA Government co-funded drilling program, which sponsored a previous reconnaissance drill hole on the project area (see previous ASX announcements).

Hole No.	North	East	Dip	Azim	From, m	To, m	Width m	Grade, % Ni, Cu, Co & g/t Ag, Au, Pt, Pd	
SFRC0024	6479500	518210	60	270	174	175	1	0.76% Ni, 1.36% Cu, 0.03% Co, 4.0g/t Ag	
	-	And		V	178	181	3	0.31% Ni, 0.68% Cu, 0.01% Co, 1.4g/t Ag	
	ł	And			191	195	4	4.02% Ni, 1.41% Cu, 0.12% Co, 2.2g/t Ag	
SFRC0025	6479500	518080	60	270	-	-	-	Missed target	
SFRC0026	6479500	518140	60	270	123	136	13	4.30% Ni, 1.83% Cu, 0.12% Co, 3.1g/t Ag, 0.09g/t Pd, 0.08g/t Pt	
Including					128	136	8	5.81% Ni, 2.26% Cu, 0.16% Co, 3.7g/t Ag, 0.12g/t Pd, 0.12g/t Pt	
SFRC0027	6479500	518250	60	270	229	238	9	1.48% Ni, 0.86% Cu, 0.05% Co, 2.5g/t Ag, 0.15g/t Au	
			229	232	3	1.45% Cu, 0.4% Ni, 4.9g/t Ag, 0.34g/t Au			
			232	238	6	1.84% Ni, 0.57% Cu			
	Inc	luding		_	236	237	1	4.70% Ni, 0.40% Cu, 0.12% Co	
SFRC0028	6479450	518140	60	270	116	120	4	0.48% Ni, 0.38% Cu, 0.02% Co, 0.09g/t Ag	
And					156	164	8	0.25% Ni, 0.22% Cu, 1.5g/t Ag	
SFRC0029	6479600	518300	60	270	234	236	2	0.96% Ni, 0.46% Cu, 1.3g/t Ag	
SFRC0030	6479600	518250	60	270	188	196	8	0.41% Ni, 0.40% Cu, 0.02% Co, 1.78g/t Ag	
SFRC0031	6479600	518200	60	270	-	-	-	Missed target	
SFRC0032	6479500	518085	75	270	60	64	4	1.47% Ni, 0.17% Cu, 0.05% Co, 0.25g/t Ag	
and					80	82	2	2.11% Ni, 1.12% Cu, 0.07% Co, 4.25g/t Ag	
SFRC0033	6479500	518155	75	270	165	171	6	3.16% Ni, 0.49% Cu, 0.10% Co, 1.12g/t Ag	
SFRC0034	6479500	518230	60	270	200	204	4	0.22% Ni, 1.07% Cu, 0.01% Co, 2.8g/t Ag	
			212	219	7	1.27% Ni, 0.35% Cu, 0.04% Co, 0.84g/t Ag			
			216	219	3	2.63% Ni, 0.45% Cu, 0.08% Co, 1.13g/t Ag			
And					220	224	4	0.18% Ni, 0.47% Cu, 1.1g/t Ag	
SFRD0035	6479500	518155	70	270	146.70	152.90	6.20	1.68% Ni, 0.36% Cu, 0.05% Co, 0.3g/t Ag	
Including					149.20	152.90	2.90	2.52% Ni, 0.44% Cu, 0.08% Co, 0.5g/t Ag	
SFRC0036	6479800	518500	90	n/a	n/a	n/a	n/a	Abandoned	
SFRD0037	6479600	518300	60	270	263.90	268.40	4.50	0.23% Ni, 1.16% Cu, 0.01% Co, 3.9g/t Ag, 0.1g/t Pt	
			268.40	281.70	13.30	3.9% Ni, 2.0% Cu, 0.12% Co, 3.7g/t Ag			
Including					271.85	279.00	7.15	5.1% Ni, 2.36% Cu, 0.15% Co, 4.0g/t Ag	
SFRD0037	6479600	518300	60	270	263.90	268.40	4.50	0.23% Ni, 1.16% Cu, 0.01% Co, 3.9g/t Ag	
SFRD0038	6479500	518300	70	270	285.4	286.1	0.7	2.85% Ni, 0.33% Cu, 0.08% Co	
SFRD0039	6479600	518350	69	270	270.0	271.0	1.0	1.71% Ni, 0.51% Cu, 0.06% Co, 0.8g/t Ag	
And					272.97	273.24	0.27	6.58% NI, 0.98% Cu, 0.21% Co, 1.6g/t Ag	
And					298.1	313.52	15.42	2.74% Ni, 1.09% Cu, 0.09% Co, 2.54g/t Ag	



r		luding						1
			298.1	301.7	3.6	4.83% Ni, 1.73% Cu, 0.15% Co, 3.98g/t Ag		
And				311.3	313.5	2.22	5.92% Ni, 0.82% Cu, 0.19% Co, 1.85g/t Ag	
SFRD0041 6479600 518350 76 270				293.4	329.0	35.6	3.47% NI, 1.44% Cu, 0.10% Co, 3.19g/t Ag	
		luding			293.4	308.9	15.5	4.72% Ni, 1.98% Cu, 0.15% Co, 4.7g/t Ag
		luding			302.17 321.66	308.9 326.68	6.73 5.02	6.11% Ni, 2.14% Cu, 0.19% Co, 4.95g/t Ag 6.11% Ni, 2.57% Cu, 0.19% Co, 5.64g/t Ag
		And Also			321.00	344.0	3.0	1.86% Ni, 1.26% Cu, 0.05% Co, 4.61g/t Ag
		And			349.6	350.5	0.9	6.15% Ni, 1.25% Cu, 0.19% Co, 2.5g/t Ag
SFRD0042	6479700	518400	60	270	361.3	384.0	22.7	0.91% Ni, 0.73% Cu, 0.02% Co, 6.55g/t Ag, 0.1g/t Au
		and			392.72	413.65	20.93	1.56% Ni, 0.65% Cu, 0.05% Co, 1.85g/t Ag
SFRD0043	6479600	518400	74	270	314.4	319.8	5.4	4.72% Ni, 2.01% Cu, 0.14% Co, 3.98g/t Ag
	í	and			330.74	344.57	13.83	3.11% Ni, 0.97% Cu, 0.10% Co, 2.6g/t Ag, 0.12g/t Pt
	incl	luding			338.73	344.57	5.84	5.11% Ni, 1.4% Cu, 0.16% Co, 3.46g/t Ag, 0.26g/t Pt
SFRD0044	6479600	518400	80	270	327.8	332.38	4.58	2.33% Ni, 0.67% Cu, 0.07% Co, 1.3g/t Ag
		and			348.05	349.91	1.86	1.17% Ni, 0.99% Cu, 0.04% Co
		and			356.0	363.21	7.21	2.2% Ni, 1.27% Cu, 0.07% Co, 3.8g/t Ag, 0.1g/t Au
SFRD0045	6479550	518350	60	270	248.95	250.75	1.80	1.21% Ni, 0.49% Cu, 0.04% Co, 0.45g/t Ag
SFRD0046	č	and			255.11	257.19	2.08	1.93% Ni, 0.35% Cu, 0.07% Co, 0.28g/t Ag
W1	6479700	518500	67	270	363.75	384.0	20.25	1.94% Ni, 0.53% Cu, 0.06% Co, 1.67g/t Ag
		luding			364.82	367.43	2.61	7.45% Ni, 0.98% Cu, 0.25% Co, 1.94g/t Ag, 0.1g/t Pd
		and			402.75	405.02	2.27	5.18% Ni, 1.63% Cu, 0.16% Co, 3.81g/t Ag
SFRD0047	6479550	518350	70	270	265.37	272.67	7.3	0.64% Ni, 0.36% Cu, 0.02% Co
		and			296.1	300.91	4.81	1.09% Ni, 0.41% Cu, 0.03% Co
SFRD0049	6479600	518550	60	270	405.74	426.0	20.26	1.57% Ni, 0.51% Cu, 0.05% Co, 1.66g/t Ag
SFRD0050	6479600	518560 and	70	270	362.94 398.0	363.95 404.8	1.01 6.8	4.92% Ni, 1.06% Cu, 0.16% Co
		and			412.85	404.8	6.22	0.79% Ni, 0.5% Cu, 0.03% Co 1.77% Ni, 0.41% Cu, 0.06% Co
SFRD0051	6479550	518200	82	270	206.0	209.0	3.0	1.25% Ni, 0.15% Cu, 0.03% Co
011120001		and			218.0	223.8	5.8	2.05% Ni, 0.79% Cu, 0.06% Co
	incl	luding	-	-	221.0	223.8	2.8	3.06% Ni, 0.91% Cu, 0.09% Co
SFRD0052	6479550	518200	60	270	159.0	164.0	5.0	0.57% Ni, 2.36% Cu, 0.03% Co, 10.01g/t Ag, 0.15g/t Au
	Incl	luding			159.0	161.0	2.0	0.43% Ni, 4.68% Cu, 0.03% Co, 19.21g/t Ag, 0.21g/t Au
SFRD0053	6479700	518500	60	270	376.0	383.3	7.3	2.2% Ni, 0.6% Cu, 0.07% Co
		and			393.0	410.0	17.0	3.68% Ni, 3.82% Cu, 0.12% Co
		luding			398.9	410.0	11.1	4.31% Ni, 5.03% Cu, 0.14% Co
SFRD0054	6479600	518500	79	270	392.44	405.07	12.63	2.57% Ni, 1.85% Cu, 0.08% Co
SFRD0055	6479650	518400 and	70	270	310.5 331.06	312.07 366.28	1.57 35.22	1.99% Ni, 0.57% Cu, 0.07% Co 3.09% Ni, 1.06% Cu, 0.10% Co
		luding			354.75	366.28	11.53	5.42% Ni, 1.83% Cu, 0.17% Co
SFRD0056	6479650	518400	60	270	276.24	277.44	1.35	0.86% Ni, 3.11% Cu, 0.04% Co
511120030		and	00	270	282.77	292.8	10.03	0.85% Ni, 0.49% Cu, 0.03% Co
		and			301.0	304.0	3.0	0.26% Ni, 1.18% Cu, 0.02% Co
		and			309.0	326.72	17.72	1.58% Ni, 0.72% Cu, 0.05% Co
	incl	luding			321.1	326.72	5.62	3.48% Ni, 1.12% Cu, 0.11% Co
SFRD0057	6479700	518600	70	270	393.01	431.91	38.9	3.23% Ni, 1.46% Cu, 0.10% Co
		luding			407.05	423.49	16.44	5.23% Ni, 2.19% Cu, 0.16% Co
		luding			413.38	423.49	10.11	6.0% Ni, 2.75% Cu, 0.19% Co
SFRD0058	6479700	518350	77	270	298.0	345.2	47.2	1.86% Ni, 0.57% Cu, 0.06% Co
		luding			309.2	345.2	36.0	2.23% Ni, 0.65% Cu, 0.08% Co
SFRD0059	6479800	luding 518600	71	270	309.2 416.48	312.25 422.22	3.05 5.74	6.1% Ni, 1.31% Cu, 0.19% Co 3.3% Ni, 0.8% Cu, 0.1% Co
SFRD0059 SFRD0060	6479800	518600	60	270	368.0	422.22 376.0	8.0	0.89% Ni, 0.46% Cu, 0.1% Co
51120000		and	00	2/0	395.0	410.45	15.45	4.61% Ni, 2.19% Cu, 0.15% Co
including					396.25	405.1	8.85	6.29% Ni, 3.08% Cu, 0.21% Co
	and					423.0	6.0	2.02% Ni, 1.01% Cu, 0.06% Co
SFRD0061	6479650	518520	67	270	361.82	423.5	61.68	3.4% Ni, 1.27% Cu, 0.10% Co
including					361.82	364.21	2.39	6.56% Ni, 1.5% Cu, 0.19% Co
and					384.08	406.93	22.85	5.83% Ni, 2.03% Cu, 0.17% Co
SFRD0065 6479800 518600 65 270					404.0	422.05	18.05	4.11% Ni, 1.74% Cu, 0.13% Co
		luding		0-0	410.3	419.4	9.1	6.2% Ni, 2.67% Cu, 0.20% Co
SFRD0066	6479700	518600	75	270	412.02	420.47	8.45	4.19% Ni, 1.6% Cu, 0.12% Co
SFRD0070	6479800	518600	60	270	379.82 394.92	384.63	4.81	0.93% Ni, 0.33% Cu, 0.02% Co
	and including					423.00 405.5	28.08 6.21	4.48% Ni, 1.77% Cu, 0.14% Co 5.93% Ni, 2.55% Cu, 0.18% Co
including				399.29	403.3	0.21	3.33% IVI, 2.33% CU, V.18% CU	



6.5% Ni, 2.48% Cu, 0.20% Co

4.43% Ni. 1.42% Cu. 0.16% Co

		i	and				
	SFRD0076	6479700	518600				
		i	and				
	SFRD0077	6479650	518520				
		inc	luding				
	SFRD0078	6479800	518500				
	and						
			and				
	SFRD0079	6479700	518740				
	SFRD0086	6479650	518250				
			and				
(( ))	6500007		and				
	SFRD0087	6479800	518500				
	and						
			luding luding				
(15)	SFRD0090	6479750					
	3110090		luding				
	SFRD0093	6479800	518450				
$(\mathcal{C}(\mathcal{A}))$	511120055		luding				
$\bigcirc \bigcirc \bigcirc \bigcirc$			and				
	SFRD0094	6479700	518350				
			and				
		and					
	SFRD0095	6479900					
		inc	luding				
	SFRD0098	6479750	518540				
ad	SFRD0107	6479850	518570				
(((U))	SFRD0108	6479550	518435				
			luding				
		1	luding				
	SFRD0109	6479650	518275				
	SFRD0110	6479750	518710				
( )	65550444	6470000	540745				
	SFRD0111	6479800	518745				
	SFRD0112	6470550	518435				
$(\mathcal{C}(\mathcal{A}))$	JENDUI12	6479550	516435				
$\forall \mathcal{I}$	SFRD0113	6479750	518420				
1	51100113		and				
	Including						
615			and				
((    ))	SFRD0114	6479750	518520				
	SFRD0115	6479500	517600				
	SFRD0116	6479850	518520				
	SFRD0117	6479650	518250				
	1	inc	luding				
	SFRD0120	6479550	518435				
5							
	Table 1. Drill	results fron	n the Nov				
(())	Competent	t Darcone	statom				
	The informatio						
ΠΠ	company. Dr B						
	fellow of the G						
	under consider						
		,					

362.5 365.0 2.5 1.04% Ni, 0.4% Cu, 0.04% Co 3520 75 270 349.0 412.6 63.6 3.41% Ni, 1.3% Cu, 0.11% Co 363.0 378.23 15.23 7.01% Ni, 2.36% Cu, 0.22% Co 270 3500 66 343.0 346.0 3.0 0.95% Ni, 0.12% Cu, 0.03% Co 358.0 363.0 0.96% Ni, 0.24% Cu, 0.03% Co 5.0 377.3 383.3 6.0 4.63% Ni, 0.84% Cu, 0.15% Co 3740 270 380.0 71 381.6 1.6 0.85% Ni, 0.34% Cu, 0.02% Co 3250 84 270 395.95 400.0 1.09% Ni, 0.42% Cu, 0.04% Co 4.05 0.71% Ni, 0.52% Cu, 0.03% Co 405.0 412.5 7.5 416.35 421.0 4.65 2.32% Ni, 0.86% Cu, 0.07% Co 3500 270 60 327.0 330.0 0.88% Ni, 0.42% Cu, 0.02% Co 3.0 353.0 375.65 1.58% Ni, 0.59% Cu, 0.05% Co 22.65 363.0 12.65 375.65 2.26% Ni, 0.79% Cu, 0.07% Co 373.0 375.65 2.65 5.47% Ni, 0.96% Cu, 0.16% Co 270 376.11 409.91 4.03% Ni, 1.69% Cu, 0.13% Co 33.8 401 96 388.96 13.0 5.43% Ni, 2.25% Cu, 0.18% Co 3450 60 270 307.0 323.6 16.6 1.31% Ni, 0.54% Cu, 0.04% Co 321.4 323.6 2.2 4.02% Ni, 1.18% Cu, 0.12% Co 0.73% Ni, 10.9% Cu, 0.05% Co 330.65 331.0 0.35 350 66 270 244.9 248.0 3.1 1.32% Ni, 0.23% Cu, 0.05% Co 289.3 289.8 0.5 6.53% Ni, 1.14% Cu, 0.19% Co 295.4 294.0 1.4 0.67% Ni, 1.6% Cu, 0.03% Co 270 270.0 285.0 15.0 0.52% Ni, 0.28% Cu, 0.03% Co 279.0 1.01% Ni, 0.45% Cu, 0.05% Co 282.0 3.0 60 270 394.35 415.07 3540 20.72 3.13% Ni, 1.93% Cu, 0.10% Co 3570 60 270 NSI 435 270 340.8 356.8 16.0 1.66% Ni, 0.64% Cu, 0.05% Co 65 2.55% Ni, 0.62% Cu, 0.08% Co 340.8 349.0 8.2 341.4 345.45 4.05 3.82% Ni, 0.87% Cu, 0.11% Co 3275 60 270 183.0 185.01 2.01 1.1% Ni, 6.66% Cu, 0.06% Co 3710 0.85% Ni, 0.32% Cu, 0.03% Co 60 270 441.25 458.2 16.95 3745 60 270 NSI 3435 80 270 344.65 345.95 1.3 1.06% Ni, 0.35% Cu, 0.04% Co 3420 69 270 273.12 274.45 1.33 1.35% Ni, 0.62% Cu, 0.03% Co 312.0 2.25% Ni, 1.1% Cu, 0.07% Co 352.4 40.4 327.9 336.44 8.54 5.24% Ni, 1.01% Cu, 0.16% Co 348.15 352.4 4.76% Ni, 3.1% Cu, 0.16% Co 4.25 3520 60 270 314.0 336.07 22.07 2.94% Ni, 0.7% Cu, 0.09% Co 600 60 090 NSI - conductor 4 3520 270 250.73 253.33 2.6 60 0.65% I, 1.79% Cu, 0.01% Co 3250 72 270 342.0 416.0 70.0 3.44% Ni, 1.29% Cu, 0.09% Co 349.97 372.55 22.58 6.77% Ni, 2.24% Cu, 0.18% Co 3435 61 270 335.43 353.0 17.57 1.67% Ni, 0.69% Cu, 0.05% Co

412.4

346.0

82

270

423.0

349.6

10.6

3.6

Nova deposit. Visual estimates are not included here until assays are received.

#### ement

nat relates to Exploration Results is based on information compiled by Mark Bennett who is an employee of the per of the Australasian Institute of Mining and Metallurgy, a fellow of the Australian Institute of Geologists and a f London. Dr Bennett has sufficient experience of relevance to the styles of mineralisation and the types of deposits consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Bennett consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Exploration results are based on standard industry practices, including sampling, assay methods, and appropriate quality assurance quality control (QAQC) measures. Reverse circulation (RC), aircore (AC) and rotary air blast (RAB) drilling samples are collected as composite samples of 4 or 2 metres and as 1 metre splits (stated in results). Mineralised intersections derived from composite samples are subsequently re-split to 1 metre samples to better define grade distribution. Core samples are taken as half NQ core or quarter HQ core and sampled to geological boundaries where appropriate. The quality of RC drilling samples is optimised by the use of riffle and/or cone splitters, dust collectors, logging of various criteria designed to record sample size, recovery and contamination, and use of field duplicates to measure sample representivity.

For soil samples, PGM and gold assays are based on an aqua regia digest with Inductively Coupled Plasma (ICP) finish and base metal assays may be

Sirius Resources ASX/Media Announcement



based on aqua regia or four acid digest with inductively coupled plasma optical emission spectrometry (ICPOES) or atomic absorption spectrometry (AAS) finish. In the case of reconnaissance RAB, AC, RC or rock chip samples, PGM and gold assays are based on lead or nickel sulphide collection fire assay digests with an ICP finish, base metal assays are based on a four acid digest and inductively coupled plasma optical emission spectrometry (ICPOES) and atomic absorption spectrometry (AAS) finish, and where appropriate, oxide metal elements such as Fe, Ti and Cr are based on a lithium borate fusion digest and X-ray fluorescence (XRF) finish. In the case of strongly mineralised samples, base metal assays are based on a special high precision four acid digest (a four acid digest using a larger volume of material) and an AAS finish using a dedicated calibration considered more accurate for higher concentrations.

Sample preparation and analysis is undertaken at Minanalytical, Genalysis Intertek and Ultratrace laboratories in Perth, Western Australia. The quality of analytical results is monitored by the use of internal laboratory procedures and standards together with certified standards, duplicates and blanks and statistical analysis where appropriate to ensure that results are representative and within acceptable ranges of accuracy and precision.

Where quoted, nickel-copper intersections are based on a minimum threshold grade of 0.5% Ni and/or Cu, and gold intersections are based on a minimum gold threshold grade of 0.1g/t Au unless otherwise stated. Intersections are length and density weighted where appropriate as per standard industry practice. All sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated. Exploration results obtained by other companies and quoted by Sirius have not necessarily been obtained using the same methods or subjected to the same QAQC protocols. These results may not have been independently verified because original samples and/or data may no longer be available.

The information in this report that relates to Mineral Resources is based on information compiled by Andrew Thompson who is an employee of the company. Mr Thompson is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2004 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thompson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Mineral Resources, if stated, have been estimated using standard accepted industry practices, as described in each instance. Top cuts have been applied to the composites based on statistical analysis and consideration of the nature and style of mineralization in all cases. Where quoted, Mineral Resource tonnes and grade, and contained metal, are rounded to appropriate levels of precision, which may cause minor apparent computational errors. Mineral Resources are classified on the basis of drill hole spacing, geological continuity and predictability, geostatistical analysis of grade variability, sampling analytical spatial and density QAQC criteria, demonstrated amenability of mineralization style to proposed processing methods, and assessment of economic criteria.

# Sinus Resources