# **ASX ANNOUNCEMENT**

**28 November 2023** 



# SHALLOW NICKEL AND COBALT SULPHIDE MINERALISATION INTERSECTED AT SPRINGFIELD

#### **HIGHLIGHTS**

- Peak Result of 29m @ 0.37% Ni, .03% Co and 0.38% S from 71m, including 10m@ 0.54% Ni and 0.033% Co from 77m
- Mineralisation extended 100m north and 140m east of SFRC16.
- Results confirm the Companies initial interpretation of a layered west dipping mineralised system.
- Potential for open cut operations enhanced.

Resources & Energy Group Limited (ASX: REZ) (REZ or the Company) is pleased to provide an update on investigations at the East Menzies "Springfield" Nickel prospect. Multi element assays for three of the four RC holes completed at Springfield during late July have intersected shallow zones of mineralisation which are enriched in Nickel and Cobalt. Of the 550m tested, 109 samples reported Nickel contents ranging from 0.15% to 0.8%, refer Appendix 1.

Drillhole SFRC022 provides a highlight with a peak result of 29m @ 0.37% Ni and 0.030% Co from 71m down the hole, including 10m@ 0.54% Ni and 0.033% Co from 77m, with individual results of up to 0.8% Ni and 0.04% Co within. This result represents a northerly extension of the mineralisation previously reported in SFRC016 of 17m @ 0.37% Ni, 282 ppm Co and 32ppb (Pt+Pd) from 96m down the hole including 8m @ 0.64% Ni, 469ppm Co and 45ppb (Pt+Pd) from 102m, (refer ASX release 5 June 2023).

The results strengthen the Company's interpretation of nickel mineralisation within the Springfield prospect. That the nickel mineralisation is associated with moderately uniform, west dipping concordant ore bodies which are hosted within a layered succession of silicified komatiites (Birbirites) and volcano-sedimentary rocks. The productive sequence occurs on the west side of the Springfield Fault Zone in area which has not been previously tested by modern exploration.

### COMMENTING ON THESE RESULTS CEO DAN MOORE SAID:

"Our exploration at Springfield continues to yield positive results which indicates potential for a large, shallow, and structurally simple zone of disseminated Nickel mineralisation. This result is our best yet and enhances prospects for open pit style of development. In addition, given strong interest and results in the Lithium potential in the broader Menzies region, the Company has commenced a review of its geochemical data sets for Lithium. In 2019-2020 the Company completed several regional programs of RAB and Air Core drilling, however the focus at that time was on gold exploration and base metals mineralisation. These data sets will now be evaluated, and any promising Lithium/Caesium results will be followed up with a detailed exploration plan.

REZ



#### **DISCUSSION**

In late July/August a program of reverse circulation and diamond drilling was completed at Springfield to recover additional samples for assay, petrological and structural analysis. These investigations were following up earlier positive results from the Companies opening drilling campaign for 2023. This included results for hole SFRC016 which intersected a principal mineralized interval of 17m @ 0.40% Ni, 295 ppm Co and 32ppb (Pt+Pd) including 8m @ 0.64% Ni, 469ppm Co and 45ppb (Pt+Pd) from 102m (See <u>ASX Announcement 5 June 2023</u>).

Borehole SFRC16 targeted an EM anomaly 600m west of the Springfield fault zone. This was a significant stepout hole which investigated an area previously untested by modern exploration. To follow up the result, four Reverse Circulation holes were drilled for an advance of 550m, with sample submitted to ALS for Multi-Element analysis.

Three of the holes completed, SFRC22, SFRC23 and SFRC24 were drilled to confirm the continuity of mineralisation along strike, and dip from SFRC16. The fourth hole SFRC25, was drilled down dip of a historical percussion hole MEPD2 which was completed by CRA in 1969 in the far south of the prospect. The location of these drillholes and completion details are shown in figure 1, and table 1 respectively. Additional information, including a JORC checklist is presented in accompanying Appendix 2.

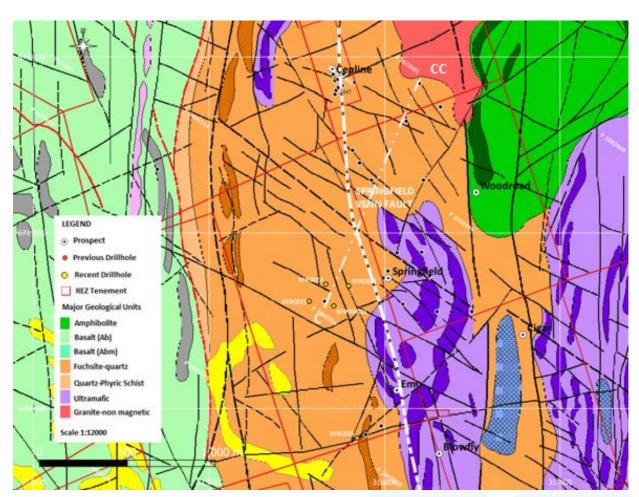


Figure 1 and Borehole Location Plan Superimposed on Interpreted Bedrock Geology



HOLE ID	East	North	Planned TD	Final TD	Dip	Azimuth	Comments
SFDDH021	315709	6710584	150	84	-60	90	53m ESE of SFRC016
SFRC022	315664	6710709	150	150	-90	0	100m N of SFRC016
SFRC023	315572	6710610	150	138	-60	90	90m W of SFRC016
SFRC024	315795	6710700	150	112	-60	90	140m NE of SFRC016
SFRC025	315844	6709833	150	150	-60	90	50m W of MEPD02

Table 1 Drillhole Completion Details

SFRC22 was drilled vertically to a planned completion depth of 150m. This hole was located 100m north of SFRC16 and was drilled to test the interpreted mineralisation along a northerly strike from this hole. The drill hole intersected a shallow zone of near surface Ni and Co enrichment between 15 and 28m with little or no overlying transported cover. Based on sulphur contents, completely and partially oxidized rocks were intersected at 60 and 67m respectively. Disseminated sulphides were intersected from 71 to 100m, which returned 29m @ 0.37% Ni and 0.030% Co from 71m down the hole, including 10m@ 0.54% Ni and 0.033% Co from 77m, with individual results of up to 0.8% Ni and 0.04% Co and 1% S within. A second zone of mineralisation was intersected from 131m to 142m. This returned 11m @0.22% Ni and 0.012% Co, refer figure 2.

The zone of mineralisation identified in SFRC16 and SFRC22 appears to be thickening towards Cepline, which is approximately 1.2km north. At Cepline earlier drilling investigations by BHP in 1985 and more recently Great Australian Resources in 2004, who reported 19m @0.64% Ni and 0.045% Co from 45m down the hole in MZR005.

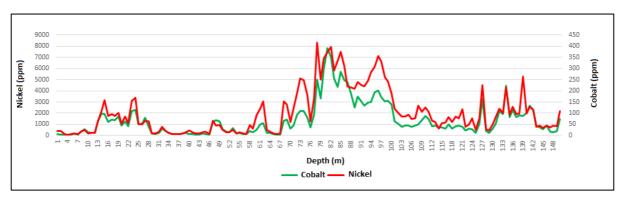


Figure 2 SFRC22 Down Hole Nickel and Cobalt Assays

SFRC24 was located 160m northeast of SFRC16 and was drilled to test base of oxidation and an interpreted updip continuation of mineralisation in that direction. The hole did not reach planned completion depth of 150m and was terminated at 112m due to adverse drilling conditions. As with SFRC22, the hole intersected a shallow zone of nickel enrichment between 7 and 19m and little or no surface cover. Based on sulphur contents, completely and partially oxidized rocks were intersected at 51 and 53m respectively.

Elevated nickel and cobalt mineralisation were intersected in fresh rock from 58m down the hole to a depth of 85m. This interval returned 27m@ 0.22% Ni and 0.018% Co from 58m, including 3m@ 0.38% Ni and 0.036% Co from 79m. A second zone of mineralisation was intersected in SFRC24 from 96m to 102m. This returned 6m @0.26% Ni and 0.02% Co, figure 3.



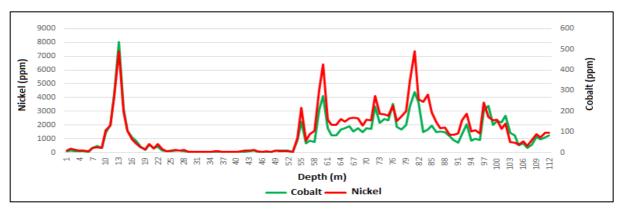


Figure 3 SFRC24 Down Hole Nickel and Cobalt Assays

SFRC23 was drilled 100m west of SFRC16 and was drilled to test interpreted down dip continuation of mineralisation. The drillhole did not reach planned completion depth of 150m and was terminated at 139m due to rod bogging issues. The bottom of hole analysis indicates the borehole had entered into and terminated within a zone of increasing nickel and sulphur content, with 10m @ 0.18% Ni and 0.6% S from 129m down the hole, figure 4.

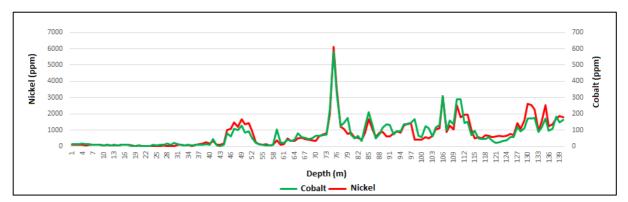


Figure 4 SFRC24 Down Hole Nickel and Cobalt Assays

SFRC25 was drilled in the far south of P29/2559 down dip of MEPD2, a percussion hole completed by CRA in 1969. With exception of a zone of lateritic enrichment between 24 and 32m, the elemental analysis suggests this hole is in for the most part fairly pure komatiite, averaging 25-30% MgO with a background of 1000-1500 ppm Ni.

The logging and elemental analysis for the drilling completed at Springfield to date indicates the mineralisation is hosted in strongly altered Birbirites, a silicified form of Komatiite. However, the nickel mineralisation is also accompanied by elevated zinc of up to 0.3% and arsenic of up to 0.2%, which suggests there has been subsequent hydrothermal overprinting.



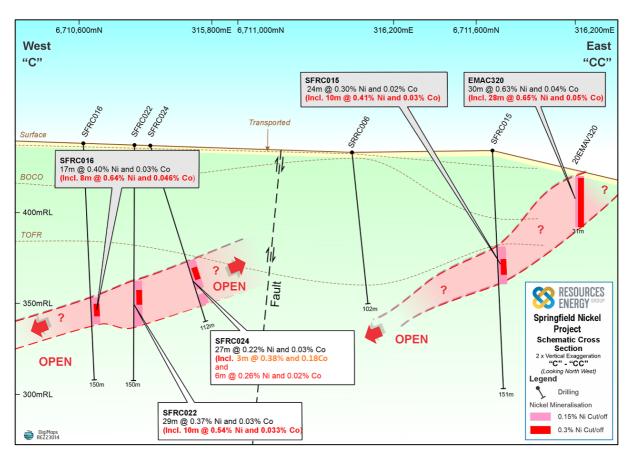


Figure 5 Schematic Long Section SW-NE

In particular, the elevated zinc is very similar to previous results; 14m @0.25% Zn in SFRC16, and by CRA in 1969 (3m @ 0.38% Zn in MEPD01), BHP in 1986 (22m @ 0.29% Zn in JR011), and Great Australian Resource in 2004 (8m @ 1.5% Zn in MZR005). The similar geochemical profile strengthens the Companies view that these results are part of the same system of mineralisation, which currently occupies a surface area of about 5.2km2 refer figure 1 and figure 5. If this can be confirmed by follow up drilling the resource potential for Springfield could be quite large.

In addition to RC drilling two diamond drillholes were completed at Springfield. This included a diamond tail over SFRC17, which was terminated short at 112m due to excessive water make. This hole was deepened to 180m. SFDDH21 was drilled adjacent to SFRC16 with the objective of recovering intact core samples for mineralogy, petrology, and structural analysis. The hole did not reach planned completion depth and was abandoned at 104m due to up-hole caving. Drill core samples from both holes has been sent to Kalgoorlie for splitting and analysis. A 50mmm casing sleave has been installed in SFDDH21 to enable completion of a downhole EM survey.

#### **NEXT STEPS**

The result from the drilling provides a clear pathway for further shallow extension of the resource, with step out and infill drilling planned to the north, towards Cepline, and east towards the Springfield Fault Zone.



#### -Ends-

Released with the authority of the board.

For further information on the Company and our projects, please visit: rezgroup.com.au

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# COMPETENT PERSONS STATEMENT

The information in this release related to Exploration Results is based on and fairly represents information compiled by Mr Michael Johnstone Principal Consultant for Minerva Geological Services (MGS). Mr Johnstone is a member of the Australian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the reporting of Exploration Results 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 Johnstone consents to the inclusion in this release of the matters based on their information in the form and context it appears.

#### ABOUT RESOURCES ENERGY GROUP



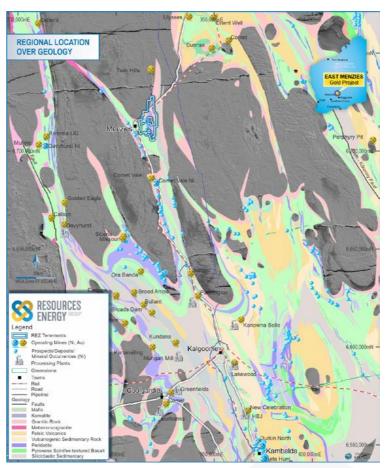


Resources and Energy Group Limited (ASX: REZ) is an ASX-listed mineral resources explorer and miner, with projects located in premier mining jurisdictions in Western Australia and Queensland. As of April 2023, the Company has gold and silver resources of 183k oz/au and 862k oz/au ag: refer to Table below.

		Cut-off		Indicated					Inferred				Indicated and Inferred				
Deposit	Material	(gt/Au)	Tonnes (kt)	Au (g/t)	Ag (g/t)	Au (koz)	Ag (koz)	Tonnes (kt)	Au (g/t)	Ag (g/t)	Au (koz)	Ag (koz)	Tonnes (kt)	Au (g/t)	Ag (g/t)	Au (koz)	Ag (koz)
Mount	Oxide	0.35	500	1.09	8	18	136	700	0.96	4	21	87	1200	1.02	6	39	223
Mackenzie (1)	Primary	0.55	1200	1.25	13	48	482	1030	1.28	5	42	157	2220	1.27	9	90	639
Goodenough (2)	Primary	1	634	1.84		38		82	1.99		5.2		716	2.07		43	
Granny Venn <sup>(3)</sup>	Primary	1	134	2.03		9		41	2.14		2.9		175	2.1		3	
Maranoa <sup>(4)</sup>	Primary	1						46			8	8.05	46	5.7		8	
Total			2468			113	618	1899			79	252	4357			183	862

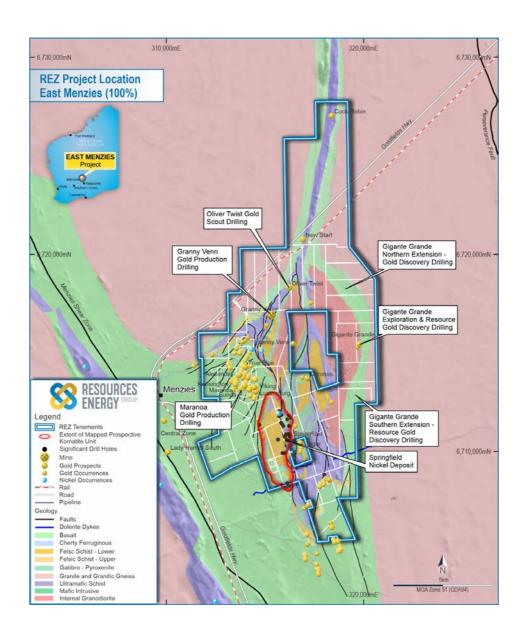
Resources and Energy Group Resources (1) Depleted for Mining Activity at GVCB
(1), (2) (4) Refer to ASX releases made on 26 February 2016, 21 June 2016 and 19 May 2020 concerning the Mt
Mackenzie Resource and 11 June 2020, 3 November 2020, 14 January 2021, 22 March 2021 and 4 May 2021 concerning
Menzies. (3) Depleted for Mining Activity at GVCB

In Western Australia, the Company's flagship is the East Menzies project (EMP), situated 130km north of Kalgoorlie.



The EMP represents a 108km² package of contiguous mining, exploration, and prospecting licenses which are prospective for precious metals, nickel, and other technology metals. The tenements are located within a significant orogenic lode gold province.





The EMP currently encompasses seven operational areas, including the Gigante Grande Gold prospect on the east side project area, which has been subdivided into three geographical domains (North, Central and South. In the southwest, drilling investigations at Springfield have intersected magmatic Ni sulphides. This is a significant and material exploration result that has opened a large tract of prospective ground for nickel, cobalt, copper, and platinum group elements. In the central west, the Company is investigating opportunities for mining operations in M29/189 Granny Venn, M29/141 Goodenough, and M29/427 Maranoa. In the north exploration planning is underway to investigate the Venn Springfield corridor, from the northern end of the Granny Venn Open Pit to the Cock Robin prospect located in E29/929.

In Queensland, the Company has a 12km² Mineral Development Licence over the Mount Mackenzie Mineral Resource and retains a further 15km² as an Exploration Permit. These tenements are prospective for high, intermediate, and low sulphidation gold and base metals mineralisation. The current MRE for Mount Mackenzie has been estimated at 3.42Mt @ 1.18g/t gold and 9g/t silver for a total of 129,000 oz gold and 862k oz silver: refer to the Resource Summary. The Company is carrying out mining, groundwater, ecological, and metallurgical studies, to inform a PFS study and an application for an Environmental Authority to develop the project.



# APPENDIX 1 Selected Elements at COG 0.15% Nickel

5 311 11 1		1	As	Со	Cr	Mg	Mn	Ni	S	Zn
Drill Hole	From	То	ppm	ppm	ppm	%	ppm	ppm	%	ppm
SFRC022	13	14	526	108	7820	8.37	739	1960	0.02	530
SFRC022	14	15	388	159	7830	7.93	856	1940	0.02	595
SFRC022	18	19	808	100	5750	5.33	331	1715	0.02	657
SFRC022	22	23	1075	155	5890	6.5	306	2210	0.01	1205
SFRC022	23	24	891	168	6610	10.25	559	2300	0.01	1370
SFRC022	26	27	380	67	5660	7.47	426	1585	<0.01	358
SFRC022	71	72	825	191	1340	0.65	423	1845	0.32	243
SFRC022	72	73	719	255	1445	0.62	440	2180	0.36	301
SFRC022	73	74	682	249	1675	0.81	503	2210	0.37	264
SFRC022	74	75	690	179	1105	0.59	352	1580	0.27	251
SFRC022	76	77	841	166	1925	0.32	138	1835	0.21	326
SFRC022	77	78	610	415	2620	2.19	548	5010	1.09	841
SFRC022	78	79	500	250	3050	2.65	741	3310	0.4	642
SFRC022	79	80	184	345	2700	2.03	968	5910	0.36	1040
SFRC022	80	81	408	372	4700	4.84	1685	7830	0.63	1145
SFRC022	81	82	1365	396	6330	7.02	1300	7020	0.55	1015
SFRC022	82	83	1655	292	6030	6.98	1935	5100	0.24	1065
SFRC022	83	84	1180	334	5840	10.1	3210	4370	0.42	718
SFRC022	84	85	1420	374	5730	11.7	3110	5710	0.68	1175
SFRC022	85	86	833	311	5210	12.15	3190	4940	0.4	523
SFRC022	86	87	347	221	4770	11.3	3820	4790	0.72	310
SFRC022	87	88	400	216	4530	11.75	3710	3760	0.6	409
SFRC022	88	89	855	209	4030	8.83	2780	2530	0.4	283
SFRC022	89	90	1755	239	5400	10.65	2380	3480	0.32	246
SFRC022	90	91	1665	227	5340	13.5	2060	3080	0.27	214
SFRC022	91	92	1465	221	5610	15.15	2930	2670	0.24	126
SFRC022	92	93	1275	246	5890	14.7	2390	2920	0.17	147
SFRC022	93	94	1645	282	5670	14.1	2830	3000	0.14	137
SFRC022	94	95	2100	307	8310	12.75	2340	3890	0.11	173
SFRC022	95	96	2340	356	8390	11.5	2330	4040	0.25	163
SFRC022	96	97	1480	331	7480	10.8	2340	3450	0.34	137
SFRC022	97	98	760	260	5630	8.93	1955	3030	0.29	101
SFRC022	98	99	1270	241	5210	7.52	1395	3100	0.33	161
SFRC022	126	127	505	227	3840	2.76	1560	3260	2.69	438
SFRC022	131	132	1030	119	2770	1.2	532	2160	0.81	72
SFRC022	132	133	877	100	2300	0.96	381	1900	1.09	82
SFRC022	133	134	1265	216	5400	0.95	275	4490	0.54	168
SFRC022	134	135	846	94	2100	0.84	267	1660	0.33	70
SFRC022	135	136	919	128	2810	0.38	182	2290	0.28	50



SFRC022	136	137	1060	97	3110	0.73	218	1645	0.3	165
SFRC022	137	138	1290	98	4660	1.18	230	1800	0.19	278
SFRC022	138	139	1295	263	3770	1.33	438	1775	0.43	213
SFRC022	139	140	518	98	2610	1.67	743	2030	1.61	50
SFRC022	140	141	171	128	3120	2.42	1075	2660	3.38	43
SFRC022	141	142	932	116	2740	3.27	1515	2300	2.02	67
SFRC024	10	11	668	130	>10000	1.67	169	2020	0.11	678
SFRC024	11	12	309	273	>10000	4.3	336	4270	0.07	1315

Deill Hala	<b>5</b> 40.40	т.	As	Со	Cr	Mg	Mn	Ni	S	Zn
Drill Hole	From	То	ppm	ppm	ppm	%	ppm	ppm	%	ppm
SFRC024	12	13	955	492	9910	4.8	388	8010	0.07	2370
SFRC024	13	14	673	197	9310	1.42	144	3200	0.09	1140
SFRC024	14	15	668	106	>10000	0.92	135	1585	0.07	825
SFRC024	54	55	476	216	1535	0.05	72	2230	0.49	955
SFRC024	63	64	166	162	2310	0.75	163	1655	0.41	111
SFRC024	64	65	169	149	2660	0.89	191	1785	0.37	119
SFRC024	65	66	218	166	2790	0.66	157	1930	0.39	138
SFRC024	66	67	335	168	2230	0.52	128	1515	0.66	102
SFRC024	67	68	334	166	2770	0.95	140	1770	0.43	287
SFRC024	68	69	185	130	1840	0.4	95	1490	0.36	108
SFRC024	69	70	175	161	1975	0.34	86	1775	0.5	677
SFRC024	70	71	224	156	2350	0.58	127	1745	0.4	537
SFRC024	71	72	405	275	3070	1.29	194	3360	0.44	1035
SFRC024	72	73	393	188	3300	1.65	220	2140	0.29	767
SFRC024	73	74	137	185	4180	1.6	224	2460	0.33	820
SFRC024	74	75	105	180	2460	0.57	116	2350	0.27	665
SFRC024	75	76	86	228	2240	0.69	125	3530	0.27	991
SFRC024	76	77	121	153	2440	1.12	176	1875	0.25	665
SFRC024	77	78	208	175	2680	1.28	179	1690	0.22	406
SFRC024	78	79	134	202	2460	1.59	248	2000	0.2	556
SFRC024	79	80	104	350	2450	1.15	193	3420	0.29	788
SFRC024	80	81	115	491	2210	1.35	213	4420	0.45	733
SFRC024	81	82	202	258	3220	2.41	371	3630	0.28	818
SFRC024	82	83	278	246	6150	2.91	491	1480	0.14	289
SFRC024	83	84	420	280	5910	3.01	530	1675	0.16	214
SFRC024	84	85	450	195	5090	3.57	562	1945	0.16	252
SFRC024	96	97	452	244	3450	13.15	1095	3020	0.4	336
SFRC024	97	98	439	173	3200	8.8	949	3410	0.42	760
SFRC024	98	99	440	157	3300	11.3	1110	2030	0.3	235
SFRC024	99	100	405	161	2490	3.27	1080	2320	0.2	594
SFRC024	100	101	75	116	2270	1.43	1050	2200	0.16	529



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SFRC024	101	102	280	139	3160	2.39	1225	2690	0.18	561
SFRC025	24	25	325	162	5810	7.7	1175	2570	<0.01	175
SFRC025	25	26	333	188	5040	8.93	1145	2200	0.01	149
SFRC025	26	27	497	198	6400	8.57	2070	2780	0.01	167
SFRC025	27	28	1470	308	6480	4.9	1885	3660	0.01	185
SFRC025	28	29	528	219	5250	7.63	2370	2760	<0.01	183
SFRC025	29	30	755	221	4330	5.88	2310	2750	<0.01	148
SFRC025	30	31	471	269	3160	5.48	2910	3340	<0.01	161
SFRC025	31	32	442	205	3480	6.27	2290	2370	<0.01	165
SFRC025	32	33	154	92	2150	7.94	1640	1350	<0.01	117
SFRC025	33	34	653	147	2430	7.05	3580	1985	<0.01	119
SFRC023	73	74	531	227	3230	1.81	395	1970	0.97	135
SFRC023	74	75	601	583	5020	4.52	577	6100	2.95	1570
SFRC023	75	76	440	319	4360	5.67	551	3470	0.92	1590
SFRC023	105	106	647	309	3270	3.42	357	3100	1.38	547
SFRC023	109	110	317	289	6160	0.41	147	2530	0.33	159
SFRC023	110	111	305	291	4890	0.35	213	1795	0.25	106

Drill Holo	- Fuore	To	As	Со	Cr	Mg	Mn	Ni	S	Zn
Drill Hole	From	То	ppm	ppm	ppm	%	ppm	ppm	%	ppm
SFRC023	111	112	154	145	3180	3.62	370	1970	0.4	206
SFRC023	112	113	337	153	3370	1.92	259	1970	0.32	247
SFRC023	128	129	619	114	3040	0.51	285	1615	0.26	51
SFRC023	129	130	907	173	4820	1.96	670	2630	0.45	179
SFRC023	130	131	258	173	5120	7.13	909	2530	0.36	435
SFRC023	131	132	95	176	4340	10.2	1225	2250	0.54	330
SFRC023	132	133	154	88	2350	4.95	966	954	0.34	116
SFRC023	133	134	893	116	3280	4.24	766	1530	0.38	255
SFRC023	134	135	1445	170	4540	4.19	943	2530	0.75	750
SFRC023	135	136	795	97	2710	3.42	573	1250	0.27	358
SFRC023	136	137	843	109	2620	1.74	382	1355	0.55	644
SFRC023	137	138	529	182	3560	2.62	1080	1725	1.18	1100
SFRC023	138	139	959	149	3350	2.38	726	1860	1.18	1490
SFRC023	139	140	894	163	2820	1.87	591	1805	1.33	1200

