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Projects:

Polar Bear gold and nickel

Fraser Range gold and nickel

Youanmi base metals, gold and PGM's

Collurabbie base metals and PGM's

NICKEL-COPPER IN DRILLING AT THE EYE, FRASER RANGE

Sirius Resources (**ASX:SIR**) advises that results from its recent broad spaced reconnaissance drilling at the Eye prospect (Fraser Range) indicate zones of nickel-copper enrichment possibly related to sulphide mineralisation in bedrock in addition to confirming an extensive zone of near surface nickel-copper-cobalt enrichment (laterite).

120 reconnaissance aircore holes drilled on a very wide (400 metres by 160 or 80 metres) hole spacing identified a broad area of lateritic nickel-cobalt enrichment and, importantly, several zones where nickel and copper enrichment appears to be greatest in the end of the drill holes, within moderately weathered ultramafic rocks – the preferred host rock for the style of deposit being sought.

Key deeper intersections related to potential bedrock sourced nickel include:

- **8m @ 1.06% Ni and 0.12 % Cu** from 68m to near the end of hole, at the base of a broader overlying lateritic intersection of 52m @ 0.61% Ni, 0.06% Cu and 0.07% Co from 20m, in SFRA0468.
- **7m @ 0.49% Ni and 0.1% Cu** from 72m to the end of hole in SFRA0450.
- **3m @ 0.45% Ni and 0.1% Cu** from 84m to the end of hole in SFRA0457.

In addition to the **52m @ 0.61% Ni** highlighted above, other intersections related to lateritic nickel mineralisation include:

- **16m @ 0.67% Ni, 0.05% Cu and 0.13% Co** from 40m to the end of hole in SFRA0467.
- **44m @ 0.59% Ni, 0.07% Cu and 0.07% Co** from 28m in SFRA0469.

These intersections occur closer to surface in a horizontal blanket of lateritic nickel, where the nickel enrichment is associated with relatively high cobalt (up to 4m @ 0.28% Co) and manganese levels.

The deeper intersections are of most importance as they may indicate the presence of oxidised nickel-copper sulphide mineralisation rather than just lateritic enrichment of silicate hosted nickel. Key samples will be assayed for platinum and palladium (which are more diagnostic indicators of magmatic sulphide derived nickel and copper) to clarify this.

Figure 1 shows the distribution of nickel in the recent wide spaced drilling relative to the location of the recently identified electromagnetic (EM) conductors which may represent massive sulphides. These conductors have not yet been tested by drilling because they occur at depth within fresh rock whereas the aircore drilling only penetrates to the base of the weathered rock. The priority EM target is the 1 kilometre long conductor situated on the ultramafic contact beneath the zone of nickel enrichment (*see Fig 1*).

Over the next three months infill aircore drilling (at a more appropriate, tighter spacing) will better define these anomalous areas. Follow up fixed loop electromagnetics (FLEM) will also better constrain the position of the EM anomalies prior to undertaking targeted RC and/or diamond drilling of them.

About the Fraser Range project

Sirius has a 70% interest in the Fraser Range Joint Venture, with Mark Creasy retaining a 30% free carried interest to the completion of a bankable feasibility study. The project covers over 120 kilometres strike length of the Albany-Fraser province, encompassing the southern extension of the Tropicana belt and the parallel Fraser Complex. The tenements are considered highly prospective for gold mineralisation and mafic-ultramafic intrusion-hosted magmatic nickel, copper, chrome and platinum group metal (PGM) deposits.

Mark Bennett

Mark Bennett, Managing Director and CEO

Competent Persons statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Dr Mark Bennett, who is an employee of the company. Dr Bennett is a Member of the Australasian Institute of Mining and Metallurgy and a Fellow of the Australian Institute of Geoscientists 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. 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. 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 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. Sample preparation and analysis is undertaken at Genalysis Intertek and Ultratrace laboratories in Perth, Western Australia. 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. The quality of analytical results is monitored by the use of internal laboratory procedures 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. 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.

Where quoted, nickel-copper intersections are based on a minimum threshold grade of 0.3% Ni and gold intersections are based on a minimum gold threshold grade of 0.1g/t Au unless otherwise stated. All sample and drill hole co-ordinates are based on the GDA/MGA grid and datum unless otherwise stated.

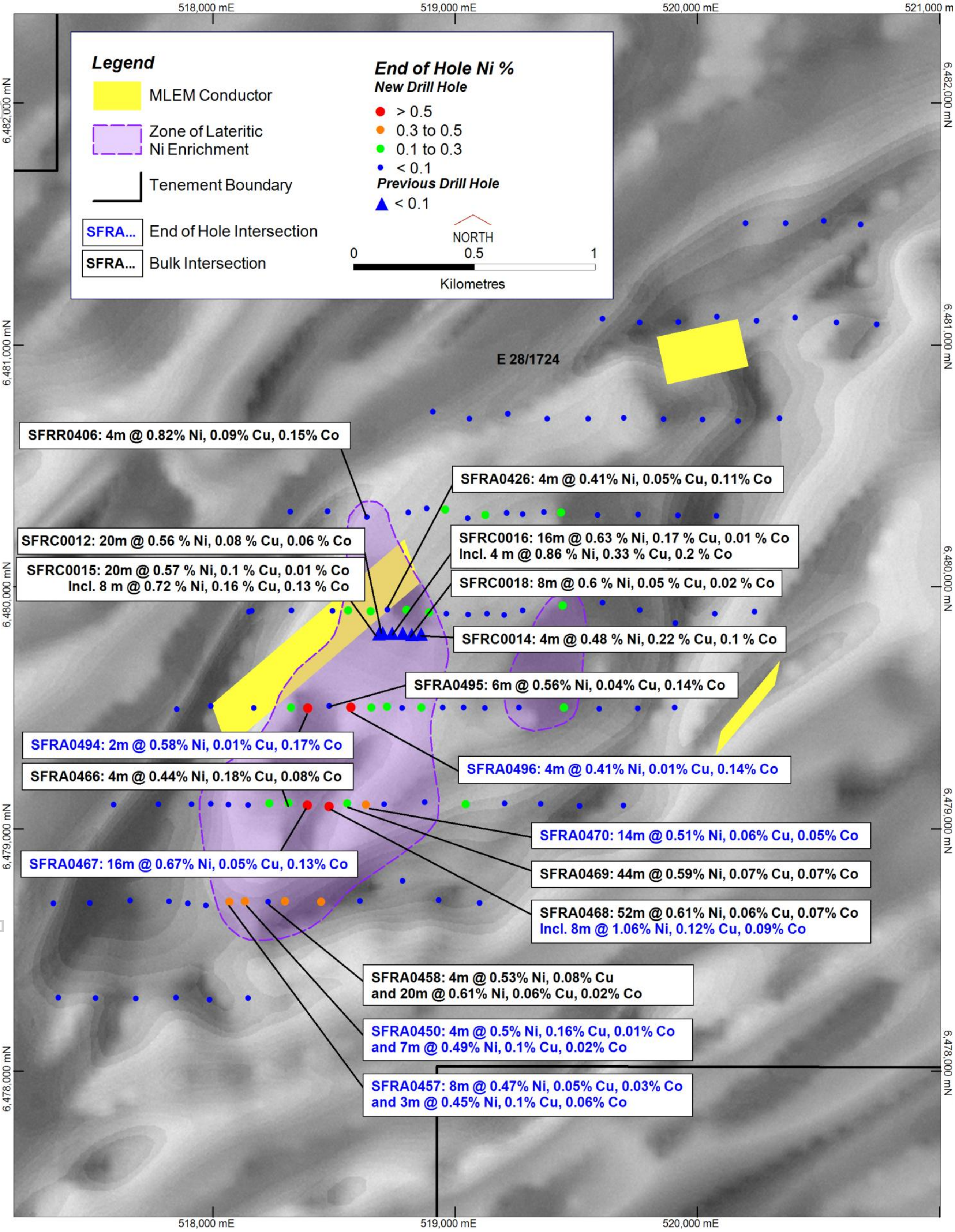

Figure 1. The Eye, showing key nickel intersections (bulk intersections related to laterite enrichment and also end of hole intersections which may represent nickel enrichment potentially derived from bedrock sulphides) together with the location of recently identified EM anomalies. The EM conductors are deeper than the aircore drilling and have not yet been drilled.

Hole ID	Easting	Northing	Azi	Dip	From (m)	To (m)	Width (m)	Ni %	Cu %	Co %	Comment
SFRR0382	520200	6481505	N/A	Vertical							No significant intercept
SFRR0383	520365	6481499	N/A	Vertical							No significant intercept
SFRR0384	520524	6481511	N/A	Vertical							No significant intercept
SFRR0385	520677	6481495	N/A	Vertical							No significant intercept
SFRR0386	519610	6481106	N/A	Vertical							No significant intercept
SFRR0387	519764	6481091	N/A	Vertical							No significant intercept
SFRR0388	519923	6481093	N/A	Vertical							No significant intercept
SFRR0389	520082	6481115	N/A	Vertical							No significant intercept
SFRR0390	520244	6481097	N/A	Vertical							No significant intercept
SFRR0391	520404	6481111	N/A	Vertical							No significant intercept
SFRR0392	520576	6481091	N/A	Vertical							No significant intercept
SFRR0393	520741	6481083	N/A	Vertical							No significant intercept
SFRR0394	520341	6480695	N/A	Vertical							No significant intercept
SFRR0395	520169	6480682	N/A	Vertical							No significant intercept
SFRR0396	520022	6480689	N/A	Vertical							No significant intercept
SFRR0397	519861	6480692	N/A	Vertical							No significant intercept
SFRR0398	519697	6480696	N/A	Vertical							No significant intercept
SFRR0399	519550	6480693	N/A	Vertical							No significant intercept
SFRR0400	519382	6480693	N/A	Vertical							No significant intercept
SFRR0401	519218	6480713	N/A	Vertical							No significant intercept
SFRR0402	519060	6480693	N/A	Vertical							No significant intercept
SFRR0403	518908	6480721	N/A	Vertical							No significant intercept
SFRR0404	518319	6480308	N/A	Vertical							No significant intercept
SFRR0405	518475	6480310	N/A	Vertical							No significant intercept
SFRR0406	518637	6480286	N/A	Vertical	24	28	4	0.82	0.09	0.15	
SFRR0407	518807	6480306	N/A	Vertical							No significant intercept
SFRR0408	518883	6480323	N/A	Vertical							No significant intercept
SFRR0409	518959	6480318	N/A	Vertical							Anomalous 24 m @ 0.21 % Ni, 0.07 % Cu
SFRR0410	519052	6480281	N/A	Vertical							Anomalous 4 m @ 0.21 % Ni, 0.06 % Cu, 0.02 % Co
SFRR0411	519126	6480295	N/A	Vertical							Anomalous 8 m @ 0.3 % Ni, 0.18 % Cu, 0.06 % Co
SFRR0412	519214	6480303	N/A	Vertical							No significant intercept
SFRR0413	519278	6480299	N/A	Vertical							No significant intercept
SFRR0414	519367	6480307	N/A	Vertical							No significant intercept
SFRR0415	519439	6480305	N/A	Vertical							No significant intercept
SFRR0416	519588	6480296	N/A	Vertical							No significant intercept
SFRR0417	519756	6480297	N/A	Vertical							No significant intercept
SFRR0418	519920	6480294	N/A	Vertical							No significant intercept
SFRR0419	520080	6480292	N/A	Vertical							No significant intercept
SFRR0420	518161	6479900	N/A	Vertical							No significant intercept
SFRA0421	518325	6479901	N/A	Vertical							No significant intercept

Hole ID	Easting	Northing	Azi	Dip	From (m)	To (m)	Width (m)	Ni %	Cu %	Co %	Comment
SFRA0422	518147	6479895	N/A	Vertical							No significant intercept
SFRA0423	518494	6479900	N/A	Vertical							No significant intercept
SFRA0424	518559	6479901	N/A	Vertical							No significant intercept
SFRA0425	518650	6479898	N/A	Vertical							Anomalous 13 m @ 0.23 % Ni, 0.05 % Cu, 0.02 % Co
SFRA0426	518720	6479904	N/A	Vertical	24	28	4	0.41	0.05	0.11	
SFRA0427	518799	6479902	N/A	Vertical							Anomalous 8 m @ 0.28 % Ni, 0.05 % Cu, 0.06 % Co
SFRA0428	518893	6479892	N/A	Vertical							Anomalous 8 m @ 0.28 % Ni, 0.08 % Cu, 0.03 % Co
SFRA0429	518963	6479887	N/A	Vertical							No significant intercept
SFRA0430	519054	6479884	N/A	Vertical							No significant intercept
SFRA0431	519131	6479887	N/A	Vertical							No significant intercept
SFRA0432	519203	6479882	N/A	Vertical							No significant intercept
SFRA0433	519281	6479901	N/A	Vertical							No significant intercept
SFRA0434	519444	6479921	N/A	Vertical							Anomalous 12 m @ 0.27 % Ni, 0.08 % Cu, 0.01 % Co
SFRA0435	519610	6479933	N/A	Vertical							No significant intercept
SFRA0436	519763	6479902	N/A	Vertical							No significant intercept
SFRA0437	519910	6479899	N/A	Vertical							No significant intercept
SFRA0438	517362	6478301	N/A	Vertical							No significant intercept
SFRR0439	517515	6478295	N/A	Vertical							No significant intercept
SFRR0440	517682	6478298	N/A	Vertical							No significant intercept
SFRR0441	517847	6478301	N/A	Vertical							No significant intercept
SFRA0442	517987	6478293	N/A	Vertical							No significant intercept
SFRA0443	518147	6478300	N/A	Vertical							No significant intercept
SFRA0444	519101	6478692	N/A	Vertical							No significant intercept
SFRA0445	518932	6478704	N/A	Vertical							No significant intercept
SFRA0446	518783	6478784	N/A	Vertical							No significant intercept
SFRA0447	518607	6478701	N/A	Vertical							No significant intercept
SFRA0448	518446	6478697	N/A	Vertical							Anomalous 6 m @ 0.28 % Ni, 0.15 % Cu, 0.04 % Co
SFRA0449	518297	6478699	N/A	Vertical							Anomalous 29 m @ 0.23 % Ni, 0.15 % Cu, 0.01 % Co
SFRA0450	518135	6478699	N/A	Vertical	36	40	4	0.50	0.16	0.01	
		and			72	79	7	0.49	0.10	0.02	To end of hole
SFRA0451	517971	6478683	N/A	Vertical							No significant intercept
SFRA0452	517818	6478699	N/A	Vertical							No significant intercept
SFRA0453	517658	6478702	N/A	Vertical							No significant intercept
SFRA0454	517493	6478693	N/A	Vertical							No significant intercept
SFRA0455	517342	6478691	N/A	Vertical							No significant intercept
SFRA0456	517896	6478690	N/A	Vertical							No significant intercept
SFRA0457	518069	6478697	N/A	Vertical	60	68	8	0.47	0.05	0.03	
		and			84	87	3	0.45	0.10	0.06	To end of hole
SFRA0458	518228	6478698	N/A	Vertical	20	24	4	0.53	0.08	-	

Hole ID	Easting	Northing	Azi	Dip	From (m)	To (m)	Width (m)	Ni %	Cu %	Co %	Comment
and					36	56	20	0.61	0.06	0.02	
SFRA0459	517591	6479099	N/A	Vertical							No significant intercept
SFRA0460	517774	6479101	N/A	Vertical							No significant intercept
SFRA0461	517912	6479101	N/A	Vertical							No significant intercept
SFRA0462	517991	6479102	N/A	Vertical							No significant intercept
SFRA0463	518066	6479099	N/A	Vertical							Anomalous 8 m @ 0.24 % Ni, 0.02 % Cu, 0.07 % Co
SFRA0464	518146	6479097	N/A	Vertical							Anomalous 16 m @ 0.29 % Ni, 0.03 % Cu, 0.07 % Co
SFRA0465	518235	6479104	N/A	Vertical							Anomalous 32 m @ 0.27 % Ni, 0.09 % Cu, 0.03 % Co
SFRA0466	518313	6479105	N/A	Vertical	24	28	4	0.44	0.18	0.08	
SFRA0467	518391	6479098	N/A	Vertical	40	56	16	0.67	0.05	0.13	To end of hole
SFRA0468	518482	6479094	N/A	Vertical	20	72	52	0.61	0.06	0.07	To end of hole
including					60	68	8	1.06	0.12	0.09	Near end of hole
SFRA0469	518555	6479104	N/A	Vertical	28	72	44	0.59	0.07	0.07	
SFRA0470	518632	6479099	N/A	Vertical	56	70	14	0.51	0.06	0.05	To end of hole
SFRA0471	518707	6479101	N/A	Vertical							No significant intercept
SFRA0472	518874	6479109	N/A	Vertical							No significant intercept
SFRA0473	519044	6479101	N/A	Vertical							No significant intercept
SFRA0474	519204	6479103	N/A	Vertical							No significant intercept
SFRA0475	519353	6479102	N/A	Vertical							No significant intercept
SFRA0476	519514	6479094	N/A	Vertical							No significant intercept
SFRA0477	519695	6479095	N/A	Vertical							No significant intercept
SFRA0478	519907	6479500	N/A	Vertical							No significant intercept
SFRA0479	519756	6479496	N/A	Vertical							No significant intercept
SFRA0480	519595	6479495	N/A	Vertical							No significant intercept
SFRA0481	519451	6479499	N/A	Vertical							Anomalous 12 m @ 0.24 % Ni, 0.1 % Cu, 0.01 % Co
SFRA0482	519264	6479500	N/A	Vertical							Anomalous 4 m @ 0.21 % Ni, 0.06 % Cu, 0.02 % Co
SFRA0483	519123	6479498	N/A	Vertical							No significant intercept
SFRA0484	519036	6479499	N/A	Vertical							No significant intercept
SFRA0485	518950	6479499	N/A	Vertical							No significant intercept
SFRA0486	518862	6479499	N/A	Vertical							No significant intercept
SFRA0487	518780	6479498	N/A	Vertical							Anomalous 12 m @ 0.27 % Ni, 0.04 % Cu, 0.05 % Co
SFRA0488	518719	6479503	N/A	Vertical							No significant intercept
SFRA0489	520238	6479895	N/A	Vertical							No significant intercept
SFRA0490	520072	6479888	N/A	Vertical							No significant intercept
SFRA0491	517852	6479493	N/A	Vertical							No significant intercept
SFRA0492	518170	6479498	N/A	Vertical							No significant intercept
SFRA0493	518323	6479499	N/A	Vertical							Anomalous 8 m @ 0.3 % Ni, 0.02 % Cu, 0.09 % Co
SFRA0494	518393	6479500	N/A	Vertical	36	38	2	0.58	0.01	0.17	To end of hole
SFRA0495	518481	6479507	N/A	Vertical	44	48	4	0.41	0.01	0.14	

Hole ID	Easting	Northing	Azi	Dip	From (m)	To (m)	Width (m)	Ni %	Cu %	Co %	Comment
SFRA0496	518571	6479503	N/A	Vertical	40	46	6	0.56	0.04	0.14	To end of hole
SFRA0497	518656	6479499	N/A	Vertical							Anomalous 8 m @ 0.22 % Ni, 0.06 % Cu, 0.05 % Co
SFRA0498	517991	6479507	N/A	Vertical							No significant intercept

Table 1. Drill intersections from the Eye, Fraser Range. Co-ordinates are MGA. Widths quoted are downhole widths. True widths are not known at this time. Intersections are based on 4 metre composites with a lower cutoff of 0.4% Ni (=4,000ppm Ni). NSI means no significant intersection (ie, less than 0.4% Ni), but significant anomalous intercepts below this threshold are noted in the comments.