



## **SUREFIRE UNCOVERS EXTENSIVE COPPER-ZINC ZONE EAST OF YIDBY GOLD PROJECT**

*Anomalous copper and zinc assays in residual soils over a 5km x 2km zone; gold and sulphides in Banded Iron Formation; geological setting analogous to Golden Grove Volcanogenic Hosted Massive Sulphide deposit 30km to Northwest.*

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### **Highlights:**

- The company conducted a detailed soil sampling programme over an area where previous exploration had reported anomalous copper in soil samples over an area east of the company's Yidby Gold Project.
- Laboratory assays of the soil samples have now been received and have recorded up to 1000 ppm Nickel, 310 ppm Copper; 100 ppm Zinc, 100 ppm Cobalt, 452 ppm Sulphur.
- Numerous samples over 200 ppm Copper occur in the soil samples.
- Rock sample of a gossan showed enrichment to 270 ppm Nickel, 460 ppm Copper, 200 ppm Zinc, 100 ppm Cobalt.
- The anomaly is contiguous across a width of 5km on adjacent sample lines, with samples collected at 100m intervals on each line.
- A banded Iron formation and shear zone are also proximal to the anomalous assays.
- Previous exploration noted the presence of native copper and massive sulphide blebs in drilling.
- Gold assays from previous exploration samples in the same area have assays up to 101ppm.
- The Golden Grove Volcanogenic Hosted Massive Sulphide ("VHMS") deposit is located 50km to the Northwest in a geological setting similar to that of the Banded Iron Formation, tholeiitic basalts, and structure.

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Australian resource company Surefire Resources NL (ASX: SRN) ("SRN" or the "**Company**") is pleased to announce highly anomalous copper and zinc assays from soil samples collected at its 100% owned Yidby East project in the mid-west of Western Australia.

The project area is called Phat Boy and is located on the Yidby Project's easternmost tenement, EL2426 east of the Company's Yidby Gold discovery (see figure 1) in the highly prospective Yalgoo-singleton greenstone belt, Murchison province.

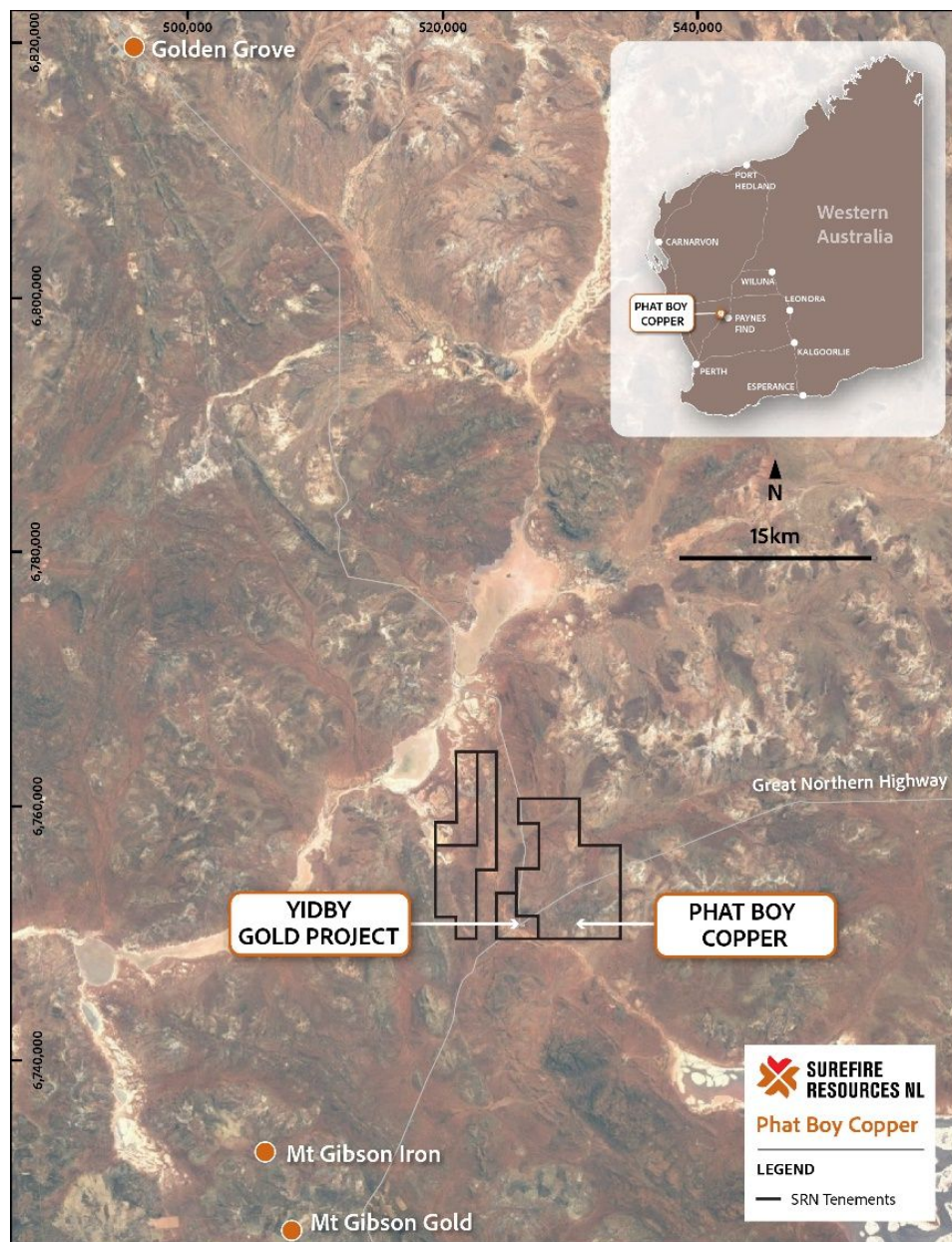


Figure 1: Location map

### Previous exploration

A review of previous exploration by Surefire revealed gossans recorded in and around the extensive banded iron formation (**BIF**) that dominates the area, with up to 2000 ppm Ni in rock chip samples and up to 101 ppm Gold in stream sediment sampling.

In addition, sulphides, including chalcopyrite and native copper were reported from drilling carried out by Prosperity Resources Ltd in 2008 during investigations of the Iron grade and potential of the BIF. Prosperity also noted that ***“the presence of disseminated sulphide mineralisation (pyrite, chalcopyrite and native copper) within high magnesian basalts, is***



*thought to be related to seafloor volcanism and may suggest that potential exists for Volcanogenic Massive Sulphide (VMS) style mineralisation within the area”* (Source: Prosperity Resources Ltd. Annual Technical Report 22 July 2007 to 21 July 2008).

Pancontinental Mining recorded a maximum gold sample result of 101ppm from stream samples originating in the banded iron formations present in the area. (source: *Pancontinental Mining Ltd. Exploration Licence 59/88 Relinquishment report, 14 October 1985*).

## Exploration Programme

### Soil Samples

In July 2024, Surefire initiated a soil sampling, mapping and geological investigations of the area. Samples were collected on north-south lines 250m apart, with samples collected at 100m intervals.

A total of 161 soil samples were collected and submitted to Nagrom Laboratory for analysis by fusion Xray Fluorescence (XRF) to give a multi element signature. Results are contained in Appendix 1.

An extensive contiguous zone of anomalous copper and zinc assays over 100 ppm were received with up to 310 ppm Copper; 100 ppm Zinc, 100 ppm Cobalt, 452 ppm Sulphur. These are shown on figures 2-4.

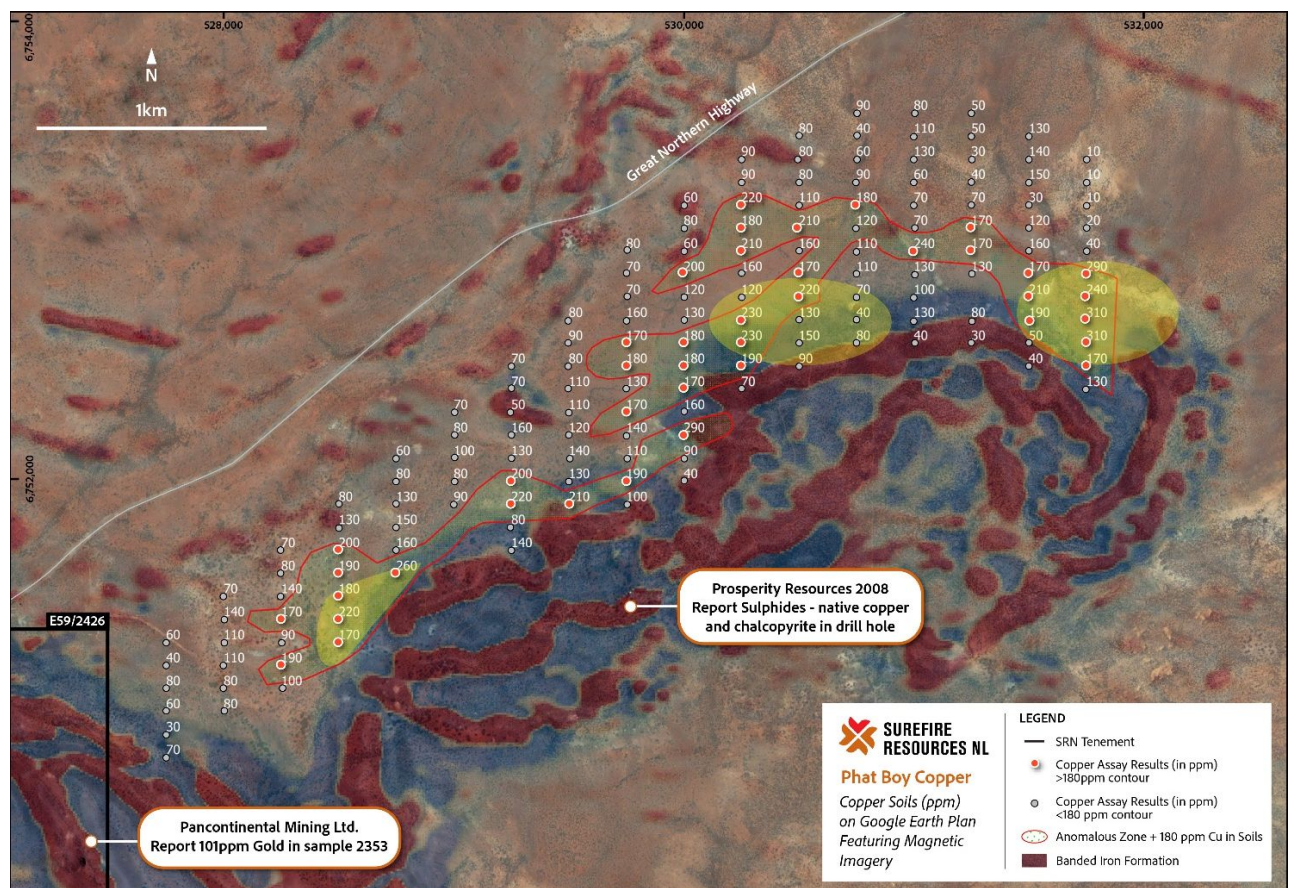


Figure 2: Contoured laboratory XRF Copper results, geology and previous exploration significant results. Yellow shaded areas are for further follow up sampling.

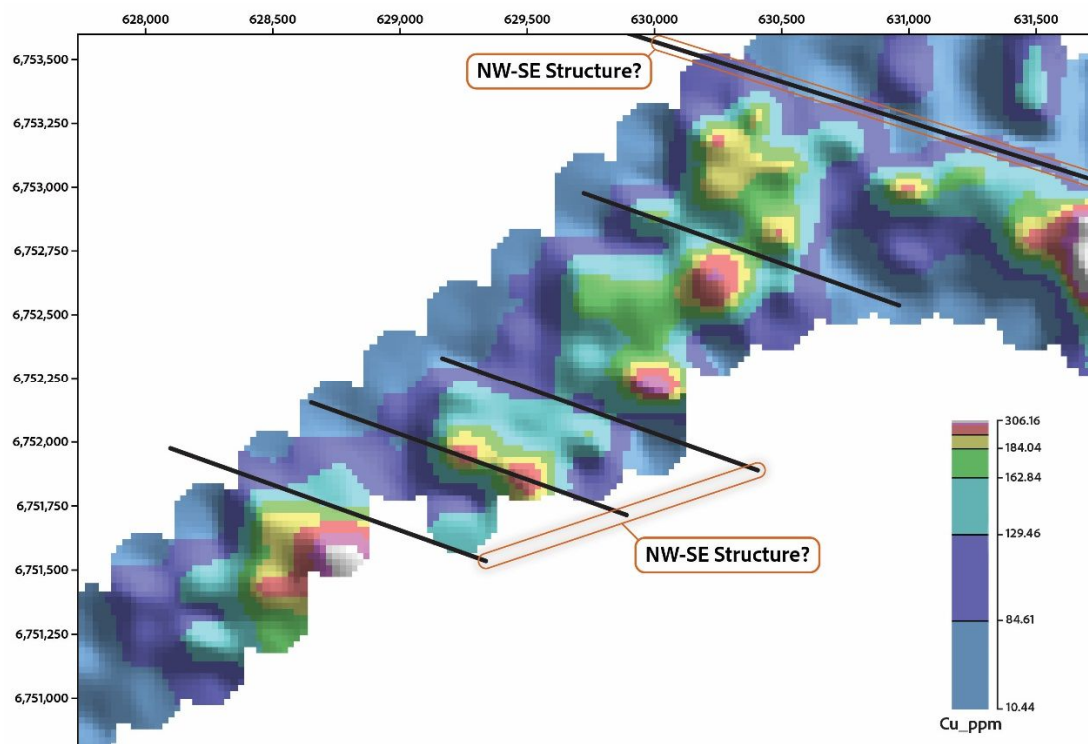


Figure 3: Colour contour of copper results with interpreted structural control and anomalies for follow up soil sampling.

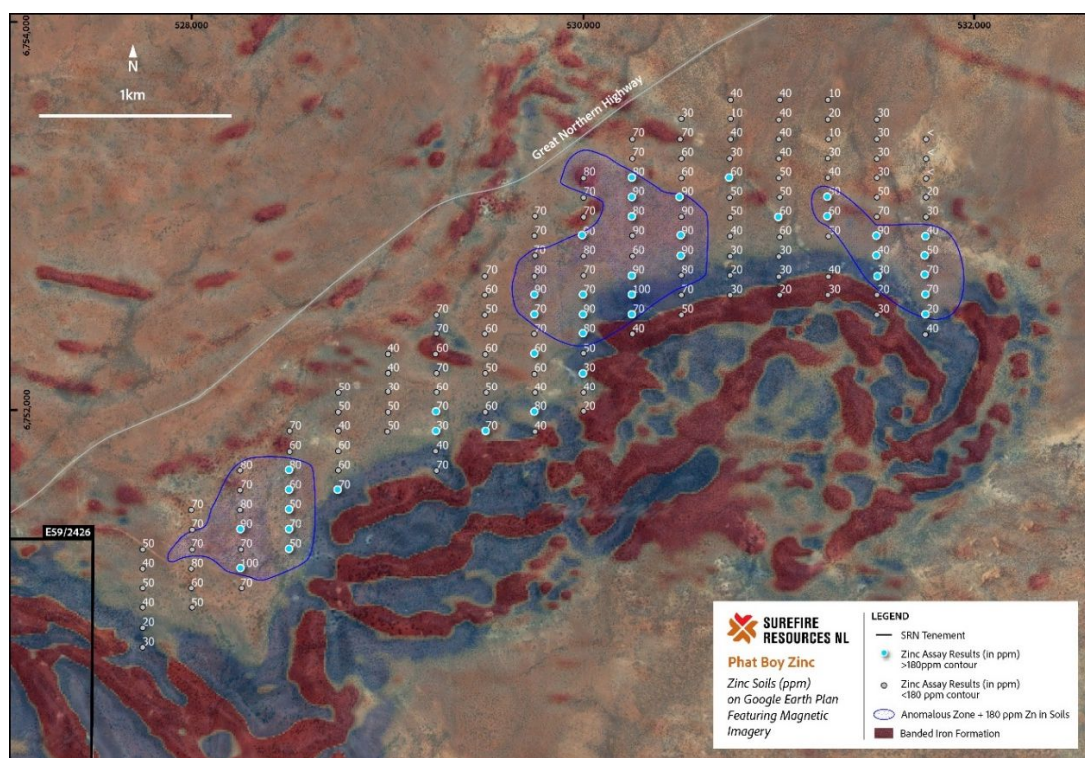


Figure 4: Contoured laboratory XRF Zinc results and geology.



### Rock samples

5 rock samples were also collected and submitted to Nagrom laboratory for fusion XRF assay. One sample, PBG002 returned elevated results with 270 ppm Nickel, 460 ppm Copper, 200 ppm Zinc, 100 ppm Cobalt.



Slide 1: Gossanous sample PBG002: XRF assays of 270ppm Ni, 460ppm Cu, 200ppm Zn (Location 531747E 6752840N)

### Geological setting

The Phat Boy project lies between two major interpreted VMS deposits, Golden Grove and Mount Gibson.

The Golden Grove Volcanic Hosted Massive Sulphide (VHMS) deposit is located 50km to the North West from Yidby East in the Warrieddar fold belt (see Figure 1), with mineralisation occurring along the north eastern flank of the structure associated with folded banded iron stones, meta volcanics and volcanic derived sediments, see figure 5; (Source: Ray Smith, CRC LEME, 2003. “*Gossan Hill Cu-Zn-Au Deposit, Western Australia*”).

The Yidby East/Phat Boy area has a similar geological and structural setting and is of the same age as the Warrieddar fold belt

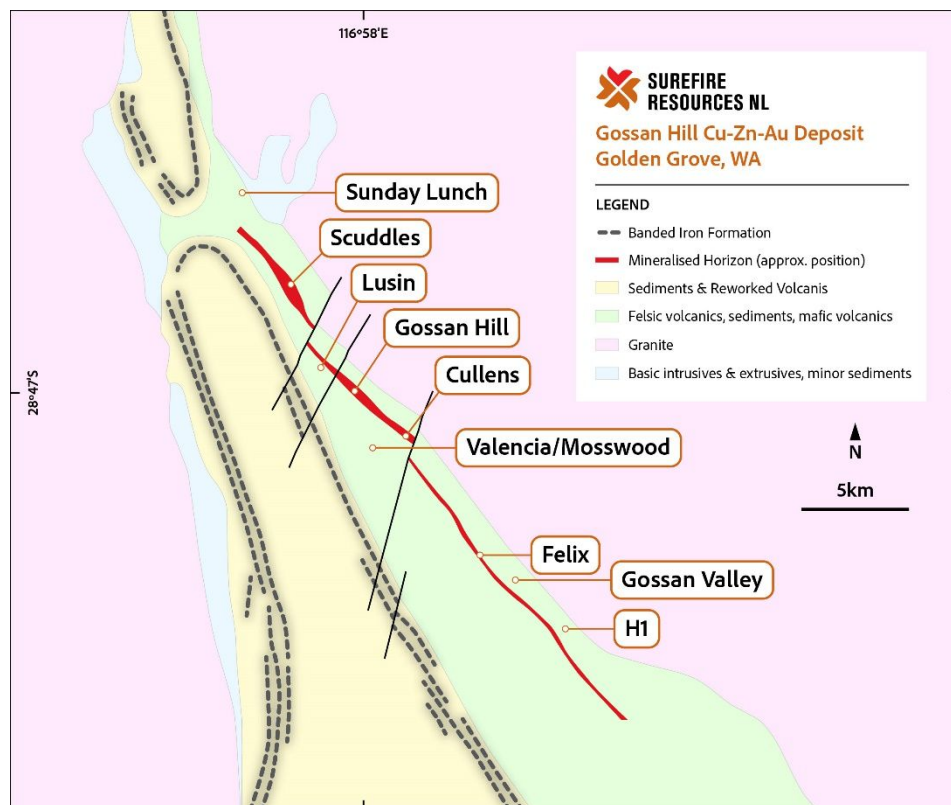


Figure 5: Regional geology of the Warriedar Fold belt, and Golden Grove deposits showing structure and scale (From Smith et al)

Capricorn Metals' Mount Gibson gold deposit is located 30 km to the South of Yidby in an extension of the greenstone and BIF package. Capricorn notes that the mineralisation at Mount Gibson is believed to have originally been a gold-copper-zinc rich Volcanogenic Hosted Massive Sulphide (VHMS) deposit that has been overprinted by a later hydrothermal gold mineralising event.

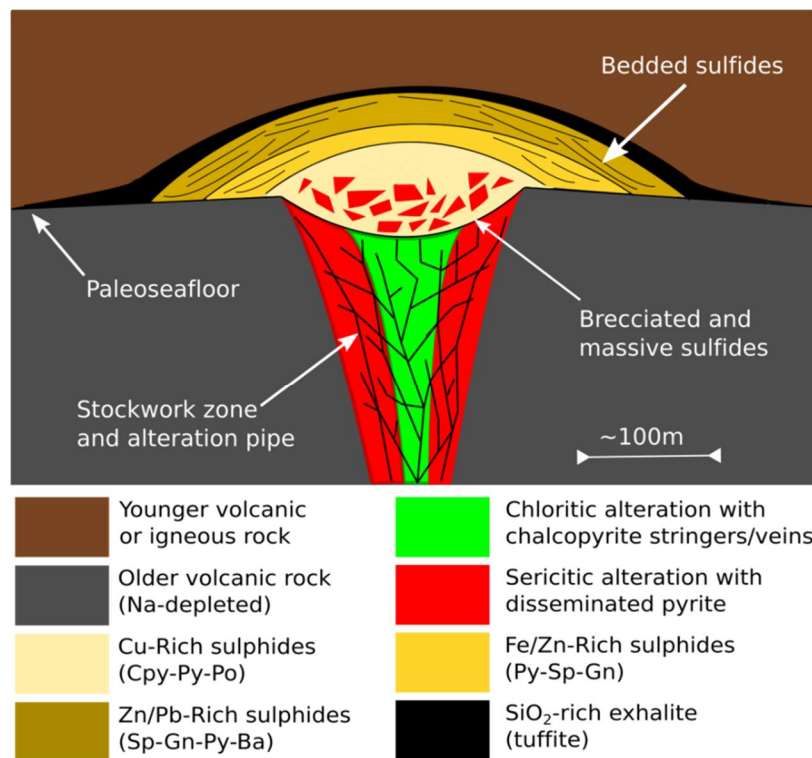
### Volcanogenic Massive Sulphide Deposits (VMS, VHMS)

Volcanogenic massive sulphide ore deposits, also known as VMS ore deposits, are a type of metal sulphide ore deposit, mainly copper-zinc which are associated with and produced by volcanic-associated hydrothermal events in submarine environments. These deposits are also sometimes called volcanic-hosted massive sulphide (VHMS) deposits.

They are predominantly stratiform accumulations of sulphide minerals that precipitate from hydrothermal fluids on or below the seafloor in various ancient and modern geological settings. They occur within environments dominated by volcanic or volcanic derived (e.g., volcano-sedimentary) rocks and they represent a significant source of the world's copper, zinc, lead, gold and silver ores.

Exploration for volcanic-hosted massive sulphide (VHMS) deposits in the Archaean Yilgarn Craton of Western Australia is hampered by a combination of a paucity of outcrop, deep weathering, and saline groundwaters in geologically complex greenstone belts. Despite the

similar age and geology of the Archaean Yilgarn Craton, Australia, and the Abitibi-Wawa sub province of the Superior Province, Canada, the disparity between the numbers of discovered deposits is striking. The Abitibi-Wawa sub province is host to over 83 VHMS deposits while in the Yilgarn Craton less than two dozen resources have been defined (S.P. Hollis et al. *A review of volcanic-hosted massive sulphide (VHMS) mineralization in the Archaean Yilgarn Craton, Western Australia: Tectonic, stratigraphic and geochemical associations.*)



**Schematic diagram of VHMS deposit structure.**

Source: Barrie, C. T., and Hannington, M. D., editors, (1999), *Volcanic-Associated Massive Sulphide Deposits: Processes and Examples in Modern and Ancient Settings*, Reviews in Economic Geology Volume 8, Society of Economic Geologists, Denver, 408 p.

### Next Steps

Further work is required to evaluate the potential for VHMS-style mineralisation. The Company is planning a follow up soil and rock chip sampling to close off the open-ended anomalous zones with the aim of identifying drill targets.

**Authorised for release to ASX by Paul Burton, Managing Director.**

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#### Competent Person Statements:

The information in this report that relates to exploration results has been reviewed, compiled, and fairly represented by Mr Horst Prumm, a Member of the Australian Institute of Mining and Metallurgy ('AusIMM') and the Australian Institute of Geoscience ('AIG') and a fulltime employee of Prumm Corporation Pty Ltd. Mr Prumm has sufficient experience relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Prumm consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

#### Forward Looking Statements:

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

### JORC Code, 2012 Edition: Section 1: Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>161 geochemical Soil Samples were taken on 250mE X 100mN MGA centres.</li> <li>Where possible samples were collected between 10 to 15 cm beneath the natural surface.</li> <li>Samples were sieved to -2mm fraction of which 500gm to 1500gm was placed in a calico bag.</li> <li>Bags were numbered in sequential order from SE to NW</li> <li>Sample id was prefixed PB signifying the prospect called "Phat Boy".</li> <li>An additional 26 rock chip samples were taken from interesting outcropping lithologies. Analysis was completed using the same techniques as the soil geochemistry.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Outcrop geology and structure noted.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>NA</li> </ul>



Criteria	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>All samples were multi element assayed at Nagrom Laboratories in Perth WA.</li> <li>All samples were assayed for Au Pt &amp; Pd using the FA 50 assay methodology</li> <li>All samples were also assayed for the full base metal suite using the XRF 101 analysis technique.</li> <li>On an average of 10 samples assayed, Nagrom provided 1 duplicate, 2 repeats, and 2 standards for gold and for base metal analysis.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>Geological and sample data was entered into spreadsheets on site and stored on the Company's database.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Siting of planned geochemical sampling locations was completed using a Garmin Etrex 10.</li> <li>Grid system MGA 2020, Zone 50.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>161 geochemical Soil Samples were taken on 250mE X 100mN MGA centres.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Samples were oriented on MGA 2020 zone 50 grid</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Samples transported by Company personnel direct to the Laboratory as soon as possible after collection.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>A full review of QAQC data will be completed once all results received.</li> </ul>

## Section 2: Reporting of Exploration Results

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

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Located 320km northeast of Perth in the mid-west region of Western Australia.</li> <li>E52 /2426 is a granted tenement with a 100% interest acquired by Surefire Resources NL under a sale agreement from the tenement holder Beau Resources Pty Ltd.</li> <li>A 2% Royalty on Gold production is payable to Beau Resources Pty Ltd.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Previous exploration work within a 4km radius has been completed at the nearby Woolshed Iron(2km), and Yidby Gold (4km) deposits. The previous explorers were Normandy, Prosperity Resources, Pancontinental, and Monarch Gold.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The Phat Boy copper mineralisation occurs within a wide, 100m to 300m, strongly sheared and ferruginised lithology interpreted as initially possibly an extrusive Meta Mafic. The Phat Boy prospect is located adjacent and peripheral to, immediately to the north and east, a mafic metasediment which hosts the Woolshed BIF Banded Iron Formation.</li> </ul>

<b>Criteria</b>	<b>Commentary</b>
<b><i>Drill hole Information</i></b>	<ul style="list-style-type: none"> <li>• NA Geochemical surface sampling.</li> </ul>
<b><i>Data aggregation methods</i></b>	<ul style="list-style-type: none"> <li>• No cutting of high-grades has been carried out. The samples results are reported as provided by Nagrom Laboratories.</li> </ul>
<b><i>Relationship between mineralisation widths and intercept lengths</i></b>	<ul style="list-style-type: none"> <li>• NA Geochemical surface sampling.</li> </ul>
<b><i>Diagrams</i></b>	<ul style="list-style-type: none"> <li>• Sample results and sampling locations are shown in Figures in the body of the release.</li> </ul>
<b><i>Balanced reporting</i></b>	<ul style="list-style-type: none"> <li>• No cutting of high-grades has been carried out. The samples results are reported as provided by Nagrom Laboratories.</li> </ul>
<b><i>Other substantive exploration data</i></b>	<ul style="list-style-type: none"> <li>• NA Geochemical Sampling and surface mapping with surficial structural observations made.</li> </ul>
<b><i>Further work</i></b>	<ul style="list-style-type: none"> <li>• The next step is follow up infill close spaced geochemical sampling which is hoped will provide drilling targets. The follow up geochemistry is in the planning stage.</li> </ul>

## APPENDIX 1

### SAMPLE RESULTS ATTACHED

Nagrom – Reference KM-2408-074105

Nagrom – Reference KM-2408-074106

Nagrom – Reference KM-2408-074107

Nagrom – Reference KM-2408-074108


Nagrom – Reference KM-2408-074109

## Surefire Resources NL

### Analytical Report

**REFERENCE** KM-2408-074105  
**REPORT DATE** August 30 2024  
**SAMPLES** 27  
**DATE RECEIVED** August 13 2024

**AUTHORISATION**

  
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KM-2408-074105	Si	Al	Fe	Mn	Ti	Zr	P	S	Mg	Ca	K	Na	V	Co	Cr	Ni	Cu	Zn
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LLD	0.01	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.01	0.01	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
PBG013 DUP	45.820	0.14	1.02	0.006	0.015	<0.001	0.002	0.002	0.02	0.02	0.011	0.06	0.001	<0.001	0.002	<0.001	<0.001	<0.001
PBG003 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PBG005 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB094a REP	4.030	4.60	48.23	0.031	3.644	0.048	0.038	0.067	0.05	0.09	0.045	0.03	0.147	0.002	0.086	<0.001	0.011	0.003
G2 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G4 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AMIS0355 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AMIS0355 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GMO04 STD	26.550	7.14	6.84	0.102	0.930	0.027	0.123	0.709	1.66	4.06	2.157	2.31	0.025	0.004	0.002	0.004	0.024	0.013
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS461 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS461 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS700 STD	22.030	5.60	16.13	0.317	0.192	0.010	0.353	0.298	1.04	5.58	1.568	1.21	0.007	0.002	0.006	0.003	0.204	0.022
OREAS751 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS751 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS999 STD	30.010	12.42	1.74	0.147	0.036	0.002	0.015	0.018	0.49	0.48	0.514	0.70	<0.001	<0.001	0.010	0.004	0.002	0.009
PBG001	8.640	1.75	46.76	0.016	0.275	0.005	0.253	0.050	0.10	0.08	0.017	0.02	0.016	0.006	0.009	0.019	0.037	0.027
PBG002	12.320	1.55	42.19	0.019	0.130	0.002	0.125	0.109	0.14	0.19	0.021	0.03	0.014	0.005	0.074	0.027	0.046	0.020
PBG003	3.780	2.05	56.58	0.014	0.151	0.006	0.060	0.076	0.16	0.73	0.027	0.02	0.012	0.002	0.013	<0.001	0.027	0.002
PBG004	2.350	2.88	52.16	0.009	5.673	0.094	0.070	0.045	0.03	0.06	0.015	0.01	0.279	0.002	0.055	<0.001	<0.001	<0.001
PBG005	6.800	5.76	42.02	0.030	0.973	0.020	0.027	0.072	0.05	0.03	0.017	0.01	0.075	0.009	0.137	0.015	0.024	0.002
PBG007a	16.010	6.39	18.48	0.016	0.658	0.008	0.011	0.052	2.65	4.20	0.129	0.09	0.035	0.004	0.158	0.015	0.016	<0.001
PBG007	45.200	0.25	1.52	0.003	0.121	0.003	0.003	0.002	<0.01	0.02	0.021	0.02	0.006	<0.001	0.005	<0.001	<0.001	<0.001
PBG008	22.910	6.18	12.09	0.198	0.966	0.012	0.049	0.007	3.26	7.22	0.571	2.00	0.030	0.007	0.016	0.011	0.017	0.012
PBG009	20.450	0.67	36.48	0.008	0.017	0.003	0.036	0.019	0.04	0.08	0.010	<0.01	0.002	0.004	0.004	<0.001	0.006	0.002
PBG010	41.370	0.38	1.08	0.025	0.027	<0.001	0.002	0.007	1.63	0.46	0.027	0.01	<0.001	<0.001	0.007	0.042	0.005	<0.001
PBG011	45.900	0.12	0.94	0.011	0.013	<0.001	0.002	<0.001	0.04	0.09	0.015	0.04	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
PBG013	45.750	0.14	1.03	0.008	0.015	<0.001	0.002	0.001	0.02	0.02	0.010	0.05	0.002	<0.001	0.003	<0.001	<0.001	<0.001
PBG014	46.320	0.09	0.55	0.008	0.008	<0.001	0.002	0.001	0.03	0.03	0.023	0.02	0.002	<0.001	0.002	<0.001	<0.001	<0.001
PB016a	35.770	6.81	0.90	0.010	0.034	0.006	0.003	<0.001	0.03	0.37	3.282	3.05	<0.001	<0.001	0.001	0.001	0.003	<0.001
PB016b	35.940	6.70	0.74	0.011	0.024	0.002	0.001	0.002	0.02	0.23	4.380	2.64	<0.001	<0.001	0.001	<0.001	0.002	<0.001
PB016c	36.600	6.24	0.83	0.022	0.028	0.008	0.003	<0.001	0.03	0.26	3.243	2.89	<0.001	<0.001	<0.001	<0.001	0.005	<0.001
PB029a	17.640	6.64	29.78	0.014	0.120	0.014	0.006	0.054	0.16	0.16	0.915	0.04	0.007	0.001	0.003	<0.001	0.001	<0.001
PB094a	4.010	4.56	48.26	0.030	3.629	0.049	0.037	0.066	0.05	0.09	0.044	0.03	0.148	0.001	0.085	0.002	0.011	0.002
PB096a	45.770	0.16	0.86	0.009	0.016	0.002	<0.001	<0.001	0.02	0.03	0.039	0.06	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
PB101a	45.750	0.19	1.11	0.010	0.013	<0.001	<0.001	0.001	0.08	0.07	0.045	0.02	<0.001	<0.001	0.003	0.001	<0.001	<0.001
PB113a	1.810	3.44	53.90	0.017	4.541	0.061	0.032	0.041	0.03	0.06	0.015	<0.01	0.244	0.002	0.132	0.002	0.003	<0.001
PB152a	45.470	0.17	1.38	0.013	0.028	0.001	0.004	0.001	0.02	0.04	0.025	0.05	0.003	<0.001	0.002	<0.001	0.001	<0.001
PB157a	2.680	2.30	56.22	0.028	3.743	0.052	0.034	0.043	0.02	0.03	0.010	<0.01	0.111	0.002	0.118	0.003	0.002	<0.001
PB160a	42.960	1.72	1.69	0.007	0.115	0.004	0.002	0.002	0.02	0.05	0.030	1.25	0.004	<0.001	0.005	<0.001	<0.001	<0.001
G2	36.440	5.78	2.91	0.016	0.290	0.018	0.015	0.006	0.06	0.06	1.889	0.22	0.005	<0.001	0.014	0.002	<0.001	0.001
G4	33.780	6.66	4.35	0.057	0.400	0.018	0.014	0.005	0.10	0.31	2.110	1.05	0.008	<0.001	0.014	0.001	<0.001	0.001
PB019	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.

KM-2408-074105	As	Pb	Ba	Sr	Sb	Mo	LOI1000	Li	Be	Cs	Nb	Rb	Sn	Ta	Th	U	Y2O3	La2O3
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	TGA002	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004
Units	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LLD	0.001	0.001	0.001	0.001	0.01	0.01	0.01	10	1	1	5	10	1	1	0.5	0.5	1	1
PBG013 DUP	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	0.16	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	5	<1
PBG003 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PBG005 REP	--	--	--	--	--	--	--	<10	1	<1	10	<10	1	1	4.5	1.5	7	3
PB094a REP	<0.001	0.004	0.010	0.005	<0.01	<0.01	6.58	--	--	--	--	--	--	--	--	--	--	--
G2 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G4 REP	--	--	--	--	--	--	--	10	1	3	5	80	1	1	12.5	2.5	13	21
AMIS0355 STD	--	--	--	--	--	--	--	7270	170	261	45	3630	472	213	5.0	6.5	6	3
AMIS0355 STD	--	--	--	--	--	--	--	7300	171	260	55	3610	463	214	5.0	6.0	5	3
GMO04 STD	<0.001	0.005	0.123	0.031	<0.01	0.79	1.40	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS461 STD	--	--	--	--	--	--	--	10	2	1	1315	10	26	25	210.5	5.0	119	3180
OREAS461 STD	--	--	--	--	--	--	--	10	2	1	1295	10	26	25	209.5	5.0	115	3174
OREAS700 STD	<0.001	0.002	0.012	0.005	<0.01	<0.01	1.94	--	--	--	--	--	--	--	--	--	--	--
OREAS751 STD	--	--	--	--	--	--	--	4460	102	48	40	490	155	29	6.5	7.0	15	18
OREAS751 STD	--	--	--	--	--	--	--	4520	106	48	40	480	154	29	6.5	7.5	16	18
OREAS999 STD	<0.001	0.001	0.006	0.003	<0.01	<0.01	0.77	--	--	--	--	--	--	--	--	--	--	--
PBG001	<0.001	0.001	0.015	0.003	<0.01	<0.01	9.74	<10	3	<1	<5	<10	<1	2	1.0	1.0	23	4
PBG002	<0.001	0.012	0.003	0.005	<0.01	<0.01	9.00	10	4	<1	<5	<10	<1	<1	0.5	1.0	23	3
PBG003	<0.001	<0.001	0.014	0.009	<0.01	<0.01	4.97	<10	<1	<1	<5	<10	<1	<1	2.0	2.0	4	3
PBG004	<0.001	0.003	0.018	0.006	<0.01	<0.01	4.48	<10	<1	<1	70	<10	9	5	4.5	1.5	10	3
PBG005	<0.001	0.002	0.014	0.003	<0.01	<0.01	11.91	<10	1	<1	10	<10	1	1	4.5	1.5	7	3
PBG007a	<0.001	<0.001	0.009	0.016	<0.01	<0.01	14.96	<10	<1	1	5	<10	1	<1	4.0	3.0	10	8
PBG007	<0.001	<0.001	<0.001	0.001	<0.01	<0.01	0.46	20	<1	<1	<5	<10	<1	<1	<0.5	<0.5	<1	<1
PBG008	<0.001	0.003	0.023	0.042	<0.01	<0.01	1.18	<10	1	<1	10	20	<1	1	2.5	0.5	37	19
PBG009	<0.001	0.004	0.003	0.005	<0.01	<0.01	2.37	<10	<1	<1	<5	<10	<1	<1	1.5	<0.5	6	3
PBG010	<0.001	<0.001	0.002	<0.001	<0.01	<0.01	5.47	<10	<1	<1	<5	<10	<1	<1	0.5	0.5	14	3
PBG011	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	0.01	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	<1	<1
PBG013	<0.001	<0.001	0.002	<0.001	<0.01	<0.01	0.17	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	5	<1
PBG014	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	0.03	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	<1	<1
PB016a	<0.001	0.002	0.011	0.008	<0.01	<0.01	0.36	10	4	3	10	220	<1	<1	17.5	3.0	6	8
PB016b	<0.001	0.001	0.011	0.005	<0.01	<0.01	0.33	<10	3	3	<5	270	<1	1	11.0	1.0	3	6
PB016c	<0.001	0.003	0.008	0.006	<0.01	<0.01	0.19	<10	4	2	5	210	<1	2	22.0	1.0	9	8
PB029a	<0.001	<0.001	0.106	0.007	<0.01	<0.01	5.18	<10	1	2	5	70	<1	<1	13.0	1.5	4	5
PB094a	<0.001	0.003	0.011	0.005	<0.01	<0.01	6.64	<10	<1	<1	40	<10	5	3	4.5	1.5	8	3
PB096a	<0.001	<0.001	<0.001	0.002	<0.01	<0.01	0.01	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	<1	<1
PB101a	<0.001	0.002	<0.001	0.001	<0.01	<0.01	0.05	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	1	<1
PB113a	<0.001	0.006	0.012	0.006	<0.01	<0.01	4.09	20	<1	<1	35	<10	7	2	6.0	2.0	12	5
PB152a	<0.001	0.001	<0.001	0.002	<0.01	<0.01	0.08	<10	<1	<1	<5	<10	<1	<1	<0.5	<0.5	2	2
PB157a	<0.001	0.008	0.019	0.006	<0.01	<0.01	2.66	<10	<1	<1	35	<10	6	3	6.0	2.0	10	2
PB160a	<0.001	0.001	<0.001	0.004	<0.01	<0.01	0.26	<10	<1	<1	<5	<10	<1	<1	3.0	<0.5	1	5
G2	<0.001	<0.001	0.064	0.007	<0.01	<0.01	3.77	20	1	3	5	70	<1	<1	12.0	2.0	14	19
G4	<0.001	<0.001	0.077	0.016	<0.01	<0.01	3.17	10	1	3	5	80	1	1	12.5	2.5	12	21
PB019	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.

KM-2408-074105	CeO2	Pr6O11	Nd2O3	Sm2O3	Eu2O3	Tb4O7	Gd2O3	Dy2O3	Ho2O3	Er2O3	Tm2O3	Yb2O3	Lu2O3	Au	Pd	Pt
Method	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	ICP004	FA50	FA50	FA50
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
LLD	1	0.5	1	0.5	0.1	0.1	0.5	0.5	0.1	0.1	0.1	0.5	0.2	0.001	0.005	0.005
PBG013 DUP	1	<0.5	<1	<0.5	<0.1	0.1	<0.5	0.5	0.2	0.4	0.1	<0.5	<0.2	<0.001	<0.005	<0.005
PBG003 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	<0.005	<0.005
PBG005 REP	13	1.0	5	2.0	0.5	0.2	2.0	2.0	0.4	1.3	0.3	1.5	<0.2	--	--	--
PB094a REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
G2 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.001	<0.005	<0.005
G4 REP	54	4.5	15	3.0	0.7	0.4	2.5	2.0	0.4	1.3	0.2	1.5	0.8	--	--	--
AMIS0355 STD	6	0.5	2	1.5	<0.1	0.2	1.5	1.0	0.1	0.3	0.1	<0.5	<0.2	--	--	--
AMIS0355 STD	6	0.5	2	1.5	<0.1	0.5	1.5	1.0	0.2	0.3	<0.1	<0.5	<0.2	--	--	--
GMO04 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	0.988	0.720	0.945
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	0.988	0.720	0.945
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	0.049	0.050	0.050
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	0.050	0.050	0.045
OREAS461 STD	4317	581.0	1909	247.5	54.6	10.7	114.0	40.0	5.2	10.1	1.0	5.0	0.6	--	--	--
OREAS461 STD	4338	584.0	1905	251.0	54.0	10.7	114.5	40.0	5.2	10.1	1.0	5.0	0.6	--	--	--
OREAS700 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS751 STD	38	4.5	16	3.0	0.6	0.5	3.5	2.5	0.5	1.4	0.2	1.0	<0.2	--	--	--
OREAS751 STD	38	4.5	16	3.5	0.7	0.5	3.5	2.5	0.5	1.5	0.2	1.5	0.2	--	--	--
OREAS999 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PBG001	7	1.5	7	2.0	0.8	0.5	3.0	4.0	0.9	3.4	0.6	3.0	0.6	<0.001	<0.005	0.005
PBG002	6	1.5	5	1.5	0.5	0.4	2.5	2.5	0.7	2.2	0.4	2.0	<0.2	<0.001	0.005	0.010
PBG003	6	1.0	4	1.0	0.2	0.1	1.0	1.0	0.2	0.7	<0.1	<0.5	<0.2	<0.001	<0.005	<0.005
PBG004	10	1.0	3	1.0	0.3	0.2	1.0	1.0	0.3	1.3	0.3	2.5	0.2	<0.001	<0.005	<0.005
PBG005	13	1.0	6	2.0	0.5	0.2	2.0	2.0	0.4	1.3	0.3	1.5	<0.2	0.002	0.010	0.015
PBG007a	9	2.0	8	2.0	0.6	0.3	2.0	2.0	0.3	1.3	0.2	1.5	<0.2	0.002	0.045	0.035
PBG007	<1	<0.5	<1	<0.5	<0.1	<0.1	<0.5	<0.5	<0.1	<0.1	<0.1	<0.5	<0.2	<0.001	<0.005	<0.005
PBG008	44	6.0	25	6.0	2.3	1.1	6.5	5.5	1.1	3.8	0.5	3.0	0.8	<0.001	<0.005	0.005




## Surefire Resources NL

### Analytical Report

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**AUTHORISATION**

  
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**NAGROM**  
the mineral processor

KM-2408-074106	Si	Al	Fe	Mn	Ti	Zr	P	S	Mg	Ca	K	Na	V	Co	Cr	Ni	Cu	Zn
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LLD	0.01	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.01	0.01	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
PB0014 DUP	24.990	7.17	15.34	0.027	0.871	0.030	0.031	0.068	0.24	0.47	0.711	0.51	0.032	0.002	0.031	0.005	0.015	0.003
PB0035 DUP	23.890	7.84	15.82	0.065	0.911	0.029	0.028	0.010	0.42	0.77	0.708	0.69	0.033	0.003	0.045	0.006	0.011	0.004
PB0055 DUP	25.400	8.69	11.74	0.070	0.937	0.031	0.020	0.008	0.64	1.06	0.604	0.70	0.027	0.004	0.049	0.010	0.009	0.004
PB0076 DUP	26.030	7.63	9.60	0.133	0.854	0.023	0.026	0.003	1.61	3.07	1.048	1.82	0.022	0.005	0.022	0.012	0.022	0.008
PB0096 DUP	27.340	7.06	9.81	0.109	0.941	0.026	0.024	0.004	1.19	2.24	0.784	1.60	0.023	0.004	0.026	0.010	0.017	0.006
PB0010 REP	29.820	7.48	9.57	0.029	0.550	0.019	0.017	0.018	0.13	0.09	0.282	0.11	0.023	<0.001	0.021	<0.001	0.001	<0.001
PB0014 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0026 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0040 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0042 REP	20.160	7.52	22.58	0.050	1.308	0.039	0.043	0.015	0.16	0.18	0.495	0.13	0.049	0.002	0.054	0.005	0.011	0.003
PB0076 REP	26.010	7.65	9.59	0.131	0.858	0.023	0.027	0.003	1.62	3.08	1.047	1.83	0.022	0.005	0.022	0.012	0.022	0.008
PB0077 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0089 REP	14.820	10.00	17.24	0.023	1.383	0.022	0.035	0.453	1.20	2.93	0.215	0.34	0.047	0.001	0.032	0.005	0.029	0.004
PB0090 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0103 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GMO04 STD	26.510	7.11	6.82	0.100	0.931	0.027	0.116	0.709	1.65	4.02	2.151	2.32	0.025	0.003	0.002	0.004	0.025	0.013
GMO04 STD	26.530	7.15	6.85	0.101	0.927	0.025	0.117	0.711	1.65	4.02	2.153	2.29	0.025	0.003	0.002	0.004	0.025	0.012
GMO04 STD	26.540	7.13	6.84	0.101	0.929	0.026	0.120	0.706	1.65	4.03	2.149	2.32	0.026	0.003	0.002	0.004	0.026	0.013
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS700 STD	22.110	5.62	16.12	0.326	0.195	0.012	0.354	0.306	1.05	5.66	1.584	1.22	0.007	0.002	0.005	0.003	0.200	0.022
OREAS700 STD	22.110	5.62	16.15	0.323	0.193	0.012	0.354	0.313	1.05	5.66	1.580	1.22	0.006	0.002	0.005	0.003	0.199	0.022
OREAS700 STD	22.120	5.63	16.15	0.326	0.195	0.011	0.352	0.306	1.06	5.66	1.580	1.23	0.007	0.002	0.005	0.004	0.204	0.022
OREAS999 STD	30.020	12.44	1.74	0.146	0.037	0.002	0.015	0.017	0.48	0.47	0.508	0.71	<0.001	<0.001	0.009	0.004	0.002	0.009
OREAS999 STD	30.010	12.39	1.74	0.147	0.036	0.002	0.016	0.018	0.48	0.47	0.503	0.71	<0.001	<0.001	0.009	0.004	0.001	0.008
OREAS999 STD	30.020	12.40	1.75	0.146	0.040	0.001	0.015	0.017	0.48	0.48	0.506	0.69	0.001	<0.001	0.009	0.005	0.002	0.008
PB0001	21.070	9.39	16.43	0.039	0.970	0.028	0.026	0.187	0.20	0.29	0.544	0.14	0.034	<0.001	0.028	0.005	0.013	0.004
PB0002	23.040	8.34	16.60	0.018	0.905	0.031	0.038	0.026	0.08	0.07	0.460	0.09	0.035	0.001	0.038	0.005	0.017	0.002
PB0003	24.720	8.04	11.00	0.110	0.895	0.022	0.022	0.006	1.51	2.59	0.714	1.20	0.024	0.004	0.019	0.010	0.031	0.007
PB0004	24.230	8.64	11.61	0.123	0.905	0.022	0.025	0.005	1.19	1.90	0.632	0.92	0.027	0.006	0.021	0.011	0.031	0.007
PB0005	26.200	7.62	11.90	0.052	0.899	0.027	0.025	0.014	0.32	0.49	0.674	0.61	0.027	0.004	0.023	0.006	0.024	0.005
PB0006	24.940	6.77	15.97	0.032	0.945	0.019	0.022	0.022	0.40	0.23	0.298	0.14	0.057	0.003	0.047	0.006	0.029	0.004
PB0007	27.040	7.64	12.64	0.033	0.840	0.036	0.035	0.012	0.10	0.09	0.533	0.11	0.030	0.002	0.032	0.004	0.004	0.003
PB0008	28.540	10.11	5.67	0.026	0.481	0.020	0.015	0.039	0.29	0.37	0.338	0.21	0.012	<0.001	0.013	0.002	0.002	0.002
PB0009	34.400	7.73	2.91	0.007	0.345	0.019	0.010	0.014	0.07	0.04	0.222	0.07	0.005	<0.001	0.007	0.002	0.001	<0.001
PB0010	29.740	7.48	9.59	0.029	0.552	0.019	0.016	0.017	0.13	0.10	0.286	0.11	0.023	0.001	0.021	0.001	<0.001	<0.001
PB0011	32.300	5.65	9.25	0.013	0.633	0.029	0.017	0.009	0.07	0.07	0.386	0.10	0.021	0.001	0.027	0.002	<0.001	<0.001
PB0012	25.640	6.94	15.16	0.029	0.843	0.030	0.030	0.013	0.20	0.34	0.682	0.43	0.032	0.002	0.034	0.005	0.013	0.003
PB0013	25.130	7.49	14.57	0.035	0.900	0.031	0.031	0.028	0.25	0.43	0.645	0.51	0.031	0.001	0.031	0.004	0.014	0.003
PB0014	24.940	7.19	15.33	0.029	0.870	0.030	0.030	0.067	0.23	0.46	0.709	0.51	0.032	0.002	0.032	0.004	0.015	0.003
PB0015	31.470	7.87	4.83	0.037	0.406	0.019	0.019	0.006	0.12	0.38	1.915	1.43	0.009	<0.001	0.014	0.003	0.003	0.003
PB0016	29.280	8.09	6.92	0.075	0.612	0.023	0.024	0.005	0.55	1.19	1.524	1.70	0.016	0.002	0.016	0.006	0.012	0.005
PB0017	27.090	7.49	9.41	0.112	0.870	0.022	0.021	0.004	1.24	2.43	0.844	1.58	0.024	0.005	0.018	0.010	0.016	0.007
PB0018	25.930	7.26	10.07	0.135	0.882	0.020	0.027	0.004	1.68	3.37	0.983	1.70	0.023	0.005	0.019	0.010	0.017	0.009
PB0019	19.480	9.48	18.21	0.064	0.978	0.025	0.046	0.125	0.38	0.48	0.650	0.69	0.038	0.003	0.031	0.005	0.021	0.004
PB0020	13.930	7.33	14.36	0.022	0.873	0.017	0.029	0.090	1.35	9.38	0.292	0.17	0.029	<0.001	0.023	0.004	0.019	0.003
PB0021	23.470	10.00	13.81	0.034	0.863	0.036	0.029	0.026	0.10	0.10	0.495	0.08	0.030	0.002	0.041	0.006	0.005	0.002
PB0022	28.120	7.36	11.95	0.036	0.737	0.039	0.029	0.012	0.10	0.20	0.618	0.07	0.022	0.001	0.046	0.005	0.004	0.003
PB0023	27.140	7.54	12.97	0.027	0.801	0.042	0.031	0.019	0.07	0.04	0.524	0.04	0.026	0.001	0.047	0.003	0.003	0.003
PB0024	24.890	9.67	12.11	0.068	0.795	0.034	0.035	0.015	0.10	0.12	0.548	0.09	0.020	<0.001	0.027	0.004	0.008	0.004
PB0026	24.970	8.70	13.22	0.049	0.856	0.035	0.037	0.014	0.16	0.19	0.670	0.26	0.025	0.002	0.034	0.005	0.013	0.005
PB0027	26.960	7.90	9.57	0.102	0.912	0.029	0.028	0.007	0.97	1.75	0.921	0.95	0.021	0.004	0.023	0.009	0.017	0.006
PB0028	27.530	7.67	10.95	0.068	0.800	0.026	0.030	0.007	0.30	0.49	0.760	0.64	0.024	0.003	0.028	0.008	0.017	0.005
PB0029	29.670	8.11	7.29	0.036	0.486	0.025	0.019	0.014	0.30	0.45	0.671	0.19	0.012	0.001	0.017	0.005	0.007	0.004
PB0030	33.050	7.53	4.70	0.032	0.364	0.021	0.013	0.005	0.29	0.22	0.673	0.16	0.008	<0.001	0.012	0.003	0.004	0.003
PB0031	24.750	9.94	12.58	0.009	0.575	0.027	0.031	0.015	0.08	0.06	0.249	0.05	0.030	<0.001	0.031	0.003	0.003	0.001
PB0032	23.210	10.24	13.84	0.030	0.654	0.036	0.033	0.016	0.11	0.08	0.445	0.11	0.034	0.002	0.043	0.005	0.005	0.002
PB0033	22.610	8.27	18.73	0.032	0.794	0.036	0.024	0.014	0.08	0.06	0.482	0.11	0.043	0.002	0.057	0.005	0.005	0.001
PB0034	25.760	7.64	13.99	0.055	0.840	0.030	0.031	0.007	0.24	0.50	0.692	0.55	0.030	0.002	0.055	0.007	0.008	0.004
PB0035	23.920	7.81	15.80	0.066	0.920	0.028	0.027	0.009	0.42	0.76	0.705	0.70	0.034	0.002	0.045	0.006	0.011	0.004
PB0036	21.030	7.5																

KM-2408-074106	As	Pb	Ba	Sr	Sb	Mo	LOI1000	Au	Pd	Pt
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	TGA002	FA50	FA50	FA50
Units	%	%	%	%	%	%	%	ppm	ppm	ppm
LLD	0.001	0.001	0.001	0.001	0.01	0.01	0.01	0.001	0.005	0.005
PB0014 DUP	<0.001	0.003	0.024	0.010	<0.01	<0.01	6.40	0.002	0.010	0.010
PB0035 DUP	<0.001	0.002	0.025	0.013	<0.01	<0.01	5.87	<0.001	<0.005	<0.005
PB0055 DUP	<0.001	0.003	0.022	0.013	<0.01	<0.01	6.51	<0.001	0.005	0.005
PB0076 DUP	<0.001	0.003	0.040	0.028	<0.01	<0.01	3.55	0.004	<0.005	0.005
PB0096 DUP	<0.001	0.002	0.027	0.026	<0.01	<0.01	3.82	0.002	<0.005	0.010
PB0010 REP	<0.001	0.002	0.023	0.004	<0.01	<0.01	6.26	--	--	--
PB0014 REP	--	--	--	--	--	--	--	0.001	0.010	0.005
PB0026 REP	--	--	--	--	--	--	--	<0.001	0.005	0.005
PB0040 REP	--	--	--	--	--	--	--	<0.001	<0.005	0.005
PB0042 REP	<0.001	0.004	0.020	0.007	<0.01	<0.01	6.42	--	--	--
PB0076 REP	<0.001	0.001	0.038	0.028	<0.01	<0.01	3.58	--	--	--
PB0077 REP	--	--	--	--	--	--	--	0.001	0.005	0.010
PB0089 REP	<0.001	<0.001	0.010	0.014	<0.01	<0.01	14.17	--	--	--
PB0090 REP	--	--	--	--	--	--	--	0.003	0.005	0.005
PB0103 REP	--	--	--	--	--	--	--	<0.001	0.005	0.010
GMO04 STD	<0.001	0.008	0.124	0.032	<0.01	0.80	1.52	--	--	--
GMO04 STD	0.001	0.007	0.124	0.031	<0.01	0.79	1.52	--	--	--
GMO04 STD	<0.001	0.009	0.123	0.032	<0.01	0.80	1.49	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	1.002	0.715	0.950
GPP-06 STD	--	--	--	--	--	--	--	0.990	0.710	0.935
GPP-06 STD	--	--	--	--	--	--	--	0.995	0.715	0.935
GPP-06 STD	--	--	--	--	--	--	--	0.999	0.710	0.935
GPP-06 STD	--	--	--	--	--	--	--	0.991	0.710	0.945
GPP-06 STD	--	--	--	--	--	--	--	0.981	0.715	0.940
GPP-12 STD	--	--	--	--	--	--	--	0.050	0.050	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.049	0.045	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.050	0.050	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.049	0.050	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.048	0.050	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.050	0.050	0.050
OREAS700 STD	<0.001	0.003	0.013	0.005	<0.01	<0.01	1.96	--	--	--
OREAS700 STD	<0.001	0.004	0.013	0.006	<0.01	<0.01	1.99	--	--	--
OREAS700 STD	<0.001	0.004	0.013	0.005	<0.01	<0.01	1.95	--	--	--
OREAS999 STD	<0.001	0.002	0.007	0.003	<0.01	<0.01	0.78	--	--	--
OREAS999 STD	<0.001	<0.001	0.007	0.002	<0.01	<0.01	0.75	--	--	--
OREAS999 STD	<0.001	<0.001	0.007	0.002	<0.01	<0.01	0.78	--	--	--
PB0001	<0.001	0.001	0.018	0.007	<0.01	<0.01	9.70	0.002	0.015	0.010
PB0002	<0.001	0.001	0.015	0.004	<0.01	<0.01	8.20	0.001	0.010	0.015
PB0003	<0.001	<0.001	0.027	0.022	<0.01	<0.01	5.50	0.001	0.005	0.005
PB0004	<0.001	0.003	0.028	0.018	<0.01	<0.01	6.33	0.001	0.010	0.010
PB0005	<0.001	0.002	0.022	0.009	<0.01	<0.01	7.64	<0.001	0.015	0.015
PB0006	<0.001	0.003	0.026	0.009	<0.01	<0.01	7.31	0.001	0.020	0.030
PB0007	<0.001	0.003	0.015	0.005	<0.01	<0.01	6.70	0.001	0.005	<0.005
PB0008	<0.001	0.002	0.016	0.005	<0.01	<0.01	8.83	<0.001	0.005	<0.005
PB0009	<0.001	<0.001	0.020	0.002	<0.01	<0.01	6.30	<0.001	0.005	<0.005
PB0010	<0.001	0.003	0.022	0.004	<0.01	<0.01	6.34	<0.001	0.005	<0.005
PB0011	<0.001	0.002	0.017	0.003	<0.01	<0.01	4.75	<0.001	<0.005	0.005
PB0012	<0.001	0.003	0.024	0.009	<0.01	<0.01	6.27	<0.001	0.005	0.005
PB0013	<0.001	0.001	0.020	0.010	<0.01	<0.01	6.62	<0.001	0.010	0.010
PB0014	<0.001	0.003	0.022	0.011	<0.01	<0.01	6.43	0.001	0.010	0.010
PB0015	<0.001	0.002	0.053	0.016	<0.01	<0.01	4.72	<0.001	0.005	<0.005
PB0016	<0.001	0.005	0.050	0.024	<0.01	<0.01	3.99	<0.001	0.010	0.005
PB0017	<0.001	0.003	0.031	0.025	<0.01	<0.01	3.84	<0.001	0.005	0.010
PB0018	<0.001	0.001	0.035	0.026	<0.01	<0.01	3.29	<0.001	0.005	0.005
PB0019	<0.001	0.002	0.018	0.009	<0.01	<0.01	8.82	0.001	0.010	0.010
PB0020	<0.001	<0.001	0.017	0.019	<0.01	<0.01	17.75	0.016	0.015	0.010
PB0021	<0.001	0.001	0.014	0.004	<0.01	<0.01	8.22	0.005	0.010	<0.005
PB0022	<0.001	0.004	0.019	0.004	<0.01	<0.01	5.77	<0.001	<0.005	<0.005
PB0023	0.001	0.002	0.016	0.004	<0.01	<0.01	6.45	<0.001	<0.005	<0.005
PB0024	<0.001	0.002	0.019	0.005	<0.01	<0.01	8.14	0.004	0.010	<0.005
PB0026	<0.001	0.002	0.024	0.007	<0.01	<0.01	7.51	<0.001	0.005	0.010
PB0027	<0.001	0.001	0.033	0.017	<0.01	<0.01	5.17	0.002	<0.005	<0.005
PB0028	<0.001	0.002	0.026	0.011	<0.01	<0.01	6.20	0.001	0.005	0.005
PB0029	<0.001	<0.001	0.021	0.006	<0.01	<0.01	7.42	0.001	<0.005	<0.005
PB0030	<0.001	<0.001	0.025	0.004	<0.01	<0.01	5.53	<0.001	0.005	<0.005
PB0031	<0.001	0.002	0.009	0.004	<0.01	<0.01	8.31	<0.001	<0.005	<0.005
PB0032	<0.001	0.003	0.017	0.005	<0.01	<0.01	8.80	<0.001	<0.005	<0.005
PB0033	0.001	0.003	0.016	0.005	<0.01	<0.01	6.45	<0.001	<0.005	<0.005
PB0034	<0.001	<0.001	0.020	0.012	<0.01	<0.01	5.82	<0.001	0.005	<0.005
PB0035	<0.001	0.002	0.026	0.013	<0.01	<0.01	5.85	<0.001	<0.005	<0.005
PB0036	<0.001	0.001	0.018	0.008	<0.01	<0.01	6.90	0.001	<0.005	<0.005
PB0037	<0.001	0.001	0.041	0.008	<0.01	<0.01	5.42	0.001	0.005	0.005
PB0038	<0.001	0.002	0.027	0.011	<0.01	<0.01	5.91	0.001	<0.005	0.005
PB0039	<0.001	0.003	0.017	0.006	<0.01	<0.01	5.70	<0.001	<0.005	<0.005
PB0040	<0.001	0.002	0.030	0.010	<0.01	<0.01	6.79	<0.001	0.005	0.005



KM-2408-074106	Si	Al	Fe	Mn	Ti	Zr	P	S	Mg	Ca	K	Na	V	Co	Cr	Ni	Cu	Zn
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LLD	0.01	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.01	0.01	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
PB0041	21.780	8.61	18.12	0.040	1.177	0.033	0.050	0.014	0.15	0.19	0.620	0.30	0.039	0.002	0.044	0.007	0.013	0.006
PB0042	20.120	7.51	22.62	0.051	1.313	0.039	0.043	0.015	0.16	0.18	0.494	0.13	0.049	0.002	0.053	0.004	0.010	0.003
PB0043	22.860	8.22	17.20	0.058	1.149	0.039	0.035	0.018	0.14	0.17	0.563	0.14	0.036	0.002	0.036	0.005	0.013	0.003
PB0044	22.340	7.55	20.67	0.044	1.070	0.041	0.030	0.007	0.09	0.10	0.486	0.07	0.043	0.002	0.060	0.004	0.004	0.002
PB0045	24.080	8.41	15.36	0.021	0.944	0.035	0.051	0.019	0.08	0.07	0.519	0.07	0.032	<0.001	0.039	0.003	0.008	0.003
PB0046	17.490	12.21	16.24	0.041	1.842	0.047	0.071	0.030	0.10	0.10	0.403	0.08	0.052	0.003	0.041	0.004	0.004	0.002
PB0047	17.990	10.95	18.16	0.060	1.888	0.049	0.069	0.050	0.13	0.16	0.465	0.09	0.065	0.003	0.045	0.004	0.007	0.003
PB0048	23.200	8.58	15.82	0.078	1.285	0.042	0.055	0.034	0.17	0.20	0.675	0.19	0.041	0.003	0.045	0.006	0.011	0.004
PB0049	26.110	8.54	10.95	0.081	0.943	0.031	0.032	0.013	0.35	0.68	0.828	0.80	0.025	0.003	0.028	0.008	0.011	0.005
PB0050	26.700	7.67	11.11	0.094	0.927	0.035	0.033	0.012	0.36	0.74	0.789	0.65	0.024	0.003	0.027	0.008	0.012	0.005
PB0051	26.210	7.88	11.69	0.057	0.845	0.028	0.038	0.013	0.47	0.77	0.769	0.49	0.023	0.003	0.049	0.009	0.018	0.006
PB0052	24.950	7.63	14.96	0.054	0.830	0.034	0.031	0.014	0.19	0.24	0.684	0.28	0.029	0.004	0.072	0.009	0.009	0.003
PB0053	24.550	11.11	9.72	0.054	0.778	0.029	0.033	0.023	0.17	0.20	0.520	0.15	0.021	0.002	0.077	0.012	0.006	0.004
PB0054	29.260	9.74	6.26	0.013	0.511	0.024	0.018	0.010	0.17	0.13	0.377	0.11	0.012	0.001	0.042	0.008	0.004	0.001
PB0055	25.410	8.66	11.72	0.069	0.934	0.030	0.021	0.008	0.63	1.06	0.604	0.70	0.026	0.003	0.048	0.009	0.009	0.004
PB0056	27.460	6.88	11.84	0.046	0.753	0.030	0.025	0.015	0.52	0.45	0.708	0.25	0.020	0.002	0.089	0.012	0.008	0.003
PB0057	25.260	7.91	10.23	0.097	0.683	0.025	0.027	0.052	2.24	1.36	0.786	0.46	0.022	0.006	0.114	0.041	0.008	0.007
PB0058	28.430	6.62	7.86	0.097	0.739	0.025	0.022	0.005	2.23	2.45	0.787	1.48	0.016	0.004	0.055	0.021	0.008	0.006
PB0059	27.860	7.67	7.84	0.096	0.832	0.024	0.031	0.016	1.14	2.32	0.836	2.18	0.017	0.003	0.023	0.009	0.011	0.006
PB0060	26.120	7.58	9.96	0.126	0.909	0.027	0.028	0.003	1.44	2.92	0.947	1.54	0.023	0.005	0.023	0.012	0.021	0.009
PB0061	26.880	7.78	9.59	0.111	0.888	0.025	0.036	0.005	1.00	2.09	1.015	1.49	0.022	0.004	0.024	0.010	0.016	0.009
PB0062	26.380	7.28	10.08	0.136	0.900	0.024	0.029	0.004	1.36	2.90	0.920	1.47	0.023	0.005	0.023	0.011	0.017	0.009
PB0063	26.180	7.36	10.68	0.138	0.927	0.027	0.035	0.005	1.19	2.51	1.016	1.20	0.023	0.006	0.026	0.012	0.022	0.009
PB0064	27.270	6.57	9.17	0.127	0.763	0.020	0.022	0.003	1.83	3.41	0.807	1.66	0.021	0.005	0.022	0.011	0.013	0.008
PB0065	26.730	7.14	11.33	0.095	0.842	0.030	0.034	0.009	0.84	1.31	0.849	1.09	0.022	0.004	0.023	0.008	0.015	0.007
PB0066	26.090	7.04	14.79	0.070	0.780	0.035	0.035	0.011	0.21	0.33	0.638	0.22	0.017	0.002	0.032	0.005	0.009	0.005
PB0068	25.540	6.26	17.19	0.060	0.691	0.034	0.047	0.011	0.16	0.23	0.683	0.17	0.016	0.002	0.033	0.004	0.007	0.004
PB0069	24.560	7.67	12.20	0.112	0.951	0.022	0.034	0.012	0.98	2.03	0.773	1.09	0.025	0.004	0.024	0.009	0.019	0.007
PB0070	24.880	7.13	11.55	0.148	0.927	0.023	0.028	0.005	1.61	3.49	0.886	1.42	0.026	0.007	0.023	0.013	0.023	0.010
PB0071	25.430	7.48	10.93	0.134	0.932	0.024	0.032	0.005	1.39	2.98	0.881	1.27	0.024	0.006	0.023	0.011	0.023	0.009
PB0072	27.190	8.04	8.03	0.103	0.694	0.022	0.025	0.004	1.35	2.36	1.002	2.43	0.018	0.003	0.017	0.008	0.012	0.006
PB0073	26.440	7.05	9.97	0.127	0.872	0.024	0.023	0.010	1.59	3.30	0.908	1.47	0.023	0.005	0.021	0.011	0.016	0.009
PB0074	26.000	7.59	10.23	0.127	0.923	0.025	0.030	0.005	1.29	2.79	0.938	1.51	0.024	0.005	0.022	0.012	0.021	0.008
PB0075	26.520	7.49	9.99	0.123	0.891	0.023	0.036	0.005	1.25	2.56	1.034	1.41	0.023	0.005	0.023	0.011	0.018	0.009
PB0076	25.990	7.64	9.57	0.130	0.851	0.024	0.027	0.003	1.61	3.07	1.045	1.82	0.022	0.005	0.022	0.012	0.022	0.008
PB0077	26.270	6.04	8.80	0.105	0.647	0.015	0.017	0.006	4.04	3.26	0.492	1.07	0.016	0.005	0.080	0.036	0.009	0.007
PB0078	27.050	6.43	8.88	0.119	0.733	0.023	0.021	0.003	2.96	2.89	0.777	1.29	0.019	0.007	0.064	0.033	0.009	0.007
PB0079	25.520	4.40	10.55	0.131	0.735	0.023	0.016	0.002	6.18	3.32	0.413	0.40	0.019	0.008	0.156	0.069	0.006	0.008
PB0080	26.060	5.64	9.39	0.131	0.807	0.021	0.017	0.002	4.49	3.93	0.505	1.13	0.021	0.006	0.086	0.033	0.008	0.007
PB0081	28.310	4.72	9.10	0.088	0.647	0.025	0.018	0.004	5.04	0.89	0.541	0.40	0.015	0.006	0.127	0.081	0.006	0.007
PB0082	26.360	7.86	9.95	0.124	0.946	0.028	0.034	0.003	1.07	2.26	0.891	1.45	0.022	0.005	0.024	0.011	0.020	0.009
PB0083	27.560	6.71	8.83	0.114	0.768	0.019	0.023	0.005	1.58	3.40	0.873	1.56	0.020	0.004	0.021	0.010	0.012	0.008
PB0084	27.070	7.23	9.20	0.114	0.836	0.025	0.025	0.005	1.51	2.82	0.767	1.36	0.021	0.004	0.024	0.010	0.013	0.007
PB0085	26.200	7.46	10.31	0.122	0.914	0.025	0.023	0.005	1.45	2.59	0.736	1.31	0.022	0.004	0.024	0.012	0.018	0.007
PB0086	26.730	7.23	9.67	0.118	0.898	0.027	0.034	0.006	1.22	2.48	0.893	1.40	0.022	0.004	0.025	0.011	0.018	0.009
PB0087	27.020	7.25	10.01	0.111	0.883	0.024	0.024	0.003	1.14	2.19	0.820	1.40	0.022	0.005	0.025	0.011	0.017	0.008
PB0088	24.680	7.62	15.88	0.059	0.844	0.034	0.046	0.010	0.18	0.21	0.695	0.29	0.027	0.004	0.041	0.006	0.016	0.005
PB0089	14.780	9.99	17.14	0.023	1.384	0.022	0.036	0.452	1.19	2.91	0.216	0.33	0.046	<0.001	0.031	0.004	0.029	0.003
PB0090	22.320	11.41	11.39	0.045	1.170	0.036	0.033	0.012	0.24	0.65	0.548	0.15	0.032	<0.001	0.041	0.007	0.009	0.004
PB0091	19.690	10.82	17.55	0.034	1.528	0.041	0.039	0.019	0.12	0.14	0.422	0.08	0.045	0.002	0.061	0.005	0.004	0.002
PB0092	27.130	7.08	12.94	0.057	0.992	0.044	0.033	0.011	0.18	0.23	0.679	0.17	0.022	0.001	0.040	0.005	0.010	0.004
PB0093	22.490	8.78	15.04	0.051	1.146	0.026	0.032	0.019	0.17	0.19	0.416	0.14	0.027	0.002	0.033	0.006	0.019	0.008
PB0094	23.510	8.30	15.26	0.058	1.202	0.036	0.047	0.015	0.21	0.30	0.571	0.30	0.041	0.002	0.065	0.006	0.011	0.004
PB0095	26.660	7.50	10.00	0.113	0.898	0.027	0.025	0.004	1.22	2.34	0.748	1.36	0.024	0.005	0.027	0.010	0.014	0.006
PB0096	27.400	7.04	9.82	0.110	0.937	0.026	0.024	0.004	1.19	2.25	0.785	1.60	0.023	0.004	0.026	0.010	0.017	0.006
PB0097	27.820	7.22	9.09	0.111	0.881	0.030	0.024	0.004	1.25	1.96	0.821	1.39	0.022	0.004	0.024	0.010	0.013	0.007
PB0098	26.740	7.43	9.54	0.110	0.924	0.027	0.027	0.006	1.19	2.39	0.875	1.34	0.023	0.004	0.025	0.011	0.018	0.007
PB0099	27.190	7.64	9.57	0.127	0.947	0.026	0.040	0.004	0.99	1.75	0.954	1.18	0.022	0.004	0.027	0.012	0.017	0.009
PB0100	27.600	7.35	8.83	0.125	0.859	0.024	0.032	0.008	1.16	2.01	0.934	1.65	0.021	0.004	0.026	0.011	0.016	0.008
PB0101	26.090	6.60	9.05	0.130	0.699	0.023	0.023	0.004	3.49	3.61	0.649	0.95	0.022	0.006	0.067	0.023	0.007	0.007
PB0102	25.350	6.13	9.69	0.167	0.705	0.019	0.021	0.003	4.03	4.48	0.480	0.99	0.023	0.006	0.083	0.029	0.007	0.007
PB0103	25.560	6.29	9.43	0.134	0.665	0.018	0.022	0.005	4.01	3.68	0.529	0.86	0.022					


KM-2408-074106	As	Pb	Ba	Sr	Sb	Mo	LOI1000	Au	Pd	Pt
	Method	XRF101	XRF101	XRF101	XRF101	XRF101	TGA002	FA50	FA50	FA50
	Units	%	%	%	%	%	%	ppm	ppm	ppm
	LLD	0.001	0.001	0.001	0.001	0.01	0.01	0.01	0.001	0.005
PB0041	<0.001	0.003	0.019	0.009	<0.01	<0.01	7.01	0.001	0.005	<0.005
PB0042	<0.001	0.003	0.021	0.006	<0.01	<0.01	6.41	0.001	0.005	0.005
PB0043	<0.001	0.002	0.020	0.006	<0.01	<0.01	7.30	0.002	0.005	0.005
PB0044	<0.001	0.004	0.015	0.005	<0.01	<0.01	5.21	<0.001	<0.005	<0.005
PB0045	<0.001	0.001	0.014	0.004	<0.01	<0.01	7.69	0.001	0.005	<0.005
PB0046	<0.001	<0.001	0.014	0.004	<0.01	<0.01	11.78	0.003	<0.005	<0.005
PB0047	<0.001	<0.001	0.016	0.005	<0.01	<0.01	9.85	<0.001	<0.005	<0.005
PB0048	<0.001	0.002	0.022	0.008	<0.01	<0.01	7.19	<0.001	<0.005	<0.005
PB0049	<0.001	<0.001	0.027	0.015	<0.01	<0.01	6.65	0.001	<0.005	<0.005
PB0050	<0.001	<0.001	0.030	0.014	<0.01	<0.01	7.21	0.001	<0.005	<0.005
PB0051	<0.001	0.001	0.027	0.011	<0.01	<0.01	6.98	0.001	<0.005	<0.005
PB0052	<0.001	<0.001	0.023	0.007	<0.01	<0.01	7.08	<0.001	0.005	0.005
PB0053	<0.001	<0.001	0.018	0.004	<0.01	<0.01	9.68	<0.001	0.010	0.005
PB0054	<0.001	<0.001	0.013	0.003	<0.01	<0.01	8.21	<0.001	0.005	<0.005
PB0055	<0.001	0.001	0.023	0.013	<0.01	<0.01	6.52	<0.001	0.005	0.005
PB0056	<0.001	0.002	0.021	0.007	<0.01	<0.01	7.11	<0.001	0.010	0.010
PB0057	<0.001	0.003	0.018	0.009	<0.01	<0.01	7.68	<0.001	0.005	0.005
PB0058	<0.001	0.002	0.032	0.020	<0.01	<0.01	3.75	<0.001	<0.005	0.005
PB0059	<0.001	0.003	0.036	0.033	<0.01	<0.01	3.84	<0.001	<0.005	<0.005
PB0060	<0.001	0.002	0.037	0.026	<0.01	<0.01	3.97	0.001	<0.005	0.005
PB0061	<0.001	0.003	0.034	0.025	<0.01	<0.01	4.44	<0.001	0.005	<0.005
PB0062	<0.001	0.003	0.036	0.028	<0.01	<0.01	4.03	0.001	<0.005	0.005
PB0063	<0.001	<0.001	0.035	0.025	<0.01	<0.01	4.42	0.001	<0.005	0.005
PB0064	<0.001	0.001	0.029	0.031	<0.01	<0.01	3.31	0.001	0.005	0.005
PB0065	<0.001	0.002	0.031	0.017	<0.01	<0.01	5.59	0.002	<0.005	0.005
PB0066	<0.001	0.001	0.021	0.007	<0.01	<0.01	6.17	0.001	<0.005	0.005
PB0068	<0.001	0.003	0.021	0.007	<0.01	<0.01	5.74	0.001	<0.005	<0.005
PB0069	<0.001	<0.001	0.025	0.020	<0.01	<0.01	6.49	0.001	<0.005	0.005
PB0070	<0.001	0.002	0.031	0.033	<0.01	<0.01	4.12	0.001	<0.005	0.010
PB0071	<0.001	0.002	0.035	0.031	<0.01	<0.01	4.54	0.003	<0.005	0.010
PB0072	<0.001	<0.001	0.035	0.032	<0.01	<0.01	3.58	0.009	<0.005	0.005
PB0073	<0.001	0.001	0.036	0.029	<0.01	<0.01	3.61	0.001	<0.005	0.005
PB0074	<0.001	0.003	0.036	0.030	<0.01	<0.01	4.17	0.003	<0.005	0.005
PB0075	<0.001	0.002	0.035	0.025	<0.01	<0.01	4.04	0.001	<0.005	0.005
PB0076	<0.001	0.002	0.039	0.028	<0.01	<0.01	3.61	0.004	<0.005	0.005
PB0077	<0.001	0.002	0.019	0.014	<0.01	<0.01	4.97	0.001	0.005	0.010
PB0078	<0.001	0.001	0.031	0.019	<0.01	<0.01	3.94	0.001	0.005	0.010
PB0079	<0.001	0.002	0.015	0.009	<0.01	<0.01	4.27	<0.001	<0.005	0.010
PB0080	<0.001	0.002	0.021	0.016	<0.01	<0.01	3.23	0.001	<0.005	0.010
PB0081	<0.001	<0.001	0.018	0.009	<0.01	<0.01	4.96	0.004	0.005	0.005
PB0082	<0.001	0.003	0.032	0.027	<0.01	<0.01	4.44	0.002	<0.005	0.005
PB0083	<0.001	0.003	0.032	0.031	<0.01	<0.01	3.38	0.003	<0.005	0.005
PB0084	<0.001	0.001	0.032	0.021	<0.01	<0.01	4.07	0.002	<0.005	0.005
PB0085	<0.001	0.002	0.028	0.022	<0.01	<0.01	4.42	0.003	<0.005	0.005
PB0086	<0.001	0.002	0.029	0.024	<0.01	<0.01	4.73	0.003	<0.005	0.005
PB0087	<0.001	0.001	0.029	0.022	<0.01	<0.01	4.34	0.001	<0.005	0.005
PB0088	<0.001	0.002	0.018	0.007	<0.01	<0.01	6.37	0.001	0.005	0.005
PB0089	<0.001	<0.001	0.009	0.013	<0.01	<0.01	14.27	0.002	0.015	0.015
PB0090	<0.001	0.001	0.019	0.005	<0.01	<0.01	9.65	0.003	0.005	0.005
PB0091	<0.001	0.003	0.014	0.005	<0.01	<0.01	8.17	0.002	<0.005	0.005
PB0092	<0.001	<0.001	0.022	0.005	<0.01	<0.01	6.24	0.002	<0.005	0.005
PB0093	<0.001	<0.001	0.013	0.005	<0.01	<0.01	10.00	0.002	0.005	0.010
PB0094	<0.001	<0.001	0.014	0.006	<0.01	<0.01	7.69	0.001	0.005	0.010
PB0095	<0.001	<0.001	0.028	0.025	<0.01	<0.01	4.32	0.002	<0.005	0.010
PB0096	<0.001	0.003	0.028	0.027	<0.01	<0.01	3.81	0.002	<0.005	0.010
PB0097	<0.001	0.002	0.030	0.022	<0.01	<0.01	4.22	0.001	<0.005	0.010
PB0098	<0.001	<0.001	0.028	0.021	<0.01	<0.01	4.69	0.002	<0.005	0.010
PB0099	<0.001	<0.001	0.027	0.020	<0.01	<0.01	4.66	0.001	<0.005	0.005
PB0100	<0.001	<0.001	0.033	0.024	<0.01	<0.01	4.42	0.001	0.005	0.005
PB0101	<0.001	0.003	0.022	0.012	<0.01	<0.01	4.14	0.001	<0.005	0.010
PB0102	<0.001	0.003	0.015	0.013	<0.01	<0.01	3.68	<0.001	<0.005	0.015
PB0103	<0.001	0.001	0.020	0.010	<0.01	<0.01	4.59	<0.001	0.005	0.010
PB0025	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
PB0067	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.

## Surefire Resources NL

### Analytical Report

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**AUTHORISATION**

  
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**NAGROM**  
the mineral processor

KM-2408-074107	Si	Al	Fe	Mn	Ti	Zr	P	S	Mg	Ca	K	Na	V	Co	Cr	Ni	Cu	Zn
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LLD	0.01	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.01	0.01	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
PB0106 DUP	27.220	7.30	9.13	0.106	0.854	0.024	0.026	0.006	1.71	2.42	0.821	1.19	0.022	0.004	0.046	0.016	0.008	0.006
PB0127 DUP	22.080	7.49	17.70	0.078	1.285	0.039	0.043	0.018	0.37	0.40	0.532	0.19	0.051	0.003	0.144	0.013	0.011	0.004
PB0147 DUP	25.750	8.05	10.38	0.080	0.886	0.021	0.030	0.019	1.19	1.08	0.768	1.36	0.022	0.004	0.034	0.012	0.015	0.009
PB0106 REP	27.280	7.30	9.14	0.104	0.854	0.025	0.026	0.005	1.72	2.41	0.821	1.20	0.021	0.004	0.046	0.016	0.008	0.007
PB0111 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0140 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0148 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PB0155 REP	23.520	6.84	19.08	0.069	0.899	0.033	0.052	0.011	0.20	0.20	0.606	0.20	0.031	0.003	0.091	0.009	0.009	0.005
GMO04 STD	26.520	7.16	6.83	0.098	0.925	0.026	0.117	0.711	1.63	4.01	2.154	2.30	0.025	0.003	0.002	0.004	0.024	0.012
GMO04 STD	26.530	7.16	6.83	0.101	0.932	0.026	0.119	0.687	1.63	4.04	2.146	2.30	0.025	0.003	0.002	0.004	0.024	0.013
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS700 STD	22.100	5.61	16.16	0.321	0.194	0.012	0.353	0.311	1.04	5.66	1.576	1.22	0.006	0.002	0.005	0.003	0.206	0.021
OREAS700 STD	22.090	5.61	16.13	0.324	0.193	0.011	0.353	0.309	1.04	5.64	1.578	1.22	0.007	0.003	0.005	0.003	0.209	0.022
OREAS999 STD	30.020	12.38	1.74	0.147	0.038	0.002	0.015	0.018	0.48	0.48	0.505	0.70	0.002	<0.001	0.010	0.004	0.002	0.009
OREAS999 STD	30.020	12.40	1.74	0.144	0.035	0.002	0.015	0.018	0.48	0.48	0.508	0.70	0.002	<0.001	0.009	0.005	0.003	0.008
PB0106	27.250	7.31	9.14	0.107	0.857	0.025	0.026	0.006	1.71	2.42	0.824	1.20	0.021	0.004	0.046	0.016	0.008	0.007
PB0107	27.440	6.77	8.84	0.099	0.715	0.019	0.022	0.007	2.12	2.22	0.700	1.02	0.020	0.004	0.058	0.020	0.009	0.006
PB0108	29.360	6.92	7.79	0.095	0.780	0.029	0.021	0.006	1.17	1.40	0.736	1.21	0.018	0.004	0.035	0.013	0.008	0.005
PB0109	28.330	7.44	8.84	0.090	0.941	0.034	0.027	0.009	0.76	1.12	0.745	1.28	0.021	0.003	0.034	0.010	0.011	0.006
PB0110	27.660	7.19	10.12	0.080	0.885	0.025	0.030	0.008	0.81	1.18	0.661	1.47	0.024	0.003	0.034	0.010	0.011	0.006
PB0111	27.290	7.69	10.78	0.063	1.104	0.035	0.033	0.015	0.36	0.42	0.738	0.46	0.028	0.003	0.039	0.009	0.012	0.005
PB0112	24.970	7.89	14.19	0.074	1.018	0.033	0.034	0.009	0.31	0.43	0.709	0.38	0.032	0.002	0.051	0.009	0.014	0.005
PB0113	24.970	7.87	13.60	0.077	1.062	0.031	0.036	0.011	0.57	1.07	0.695	0.86	0.034	0.003	0.040	0.008	0.013	0.006
PB0114	20.420	6.43	24.30	0.049	0.710	0.028	0.059	0.015	0.16	0.14	0.484	0.16	0.032	0.004	0.042	0.008	0.021	0.007
PB0115	21.720	7.78	18.80	0.072	1.031	0.041	0.050	0.018	0.23	0.30	0.508	0.13	0.072	0.003	0.131	0.016	0.014	0.007
PB0116	26.690	8.79	10.30	0.051	1.093	0.038	0.027	0.010	0.27	0.32	0.638	0.18	0.027	0.001	0.051	0.010	0.008	0.004
PB0117	22.360	8.19	16.78	0.026	1.095	0.035	0.043	0.025	0.21	0.20	0.443	0.17	0.033	0.002	0.041	0.005	0.022	0.003
PB0118	23.670	6.18	18.96	0.053	1.023	0.034	0.052	0.018	0.31	0.32	0.617	0.23	0.038	0.003	0.074	0.010	0.020	0.007
PB0119	25.930	7.56	12.99	0.080	1.001	0.034	0.041	0.012	0.54	0.40	0.719	0.48	0.030	0.004	0.086	0.015	0.013	0.006
PB0120	26.210	7.57	10.22	0.096	0.938	0.022	0.026	0.009	1.39	1.88	0.649	1.30	0.025	0.004	0.032	0.014	0.016	0.007
PB0121	27.020	6.03	8.42	0.102	0.706	0.021	0.018	0.007	3.42	3.28	0.527	1.03	0.024	0.004	0.076	0.021	0.005	0.006
PB0122	26.690	5.80	8.87	0.122	0.655	0.016	0.020	0.005	4.35	2.44	0.594	0.93	0.019	0.006	0.096	0.048	0.007	0.007
PB0123	25.270	5.60	9.85	0.080	0.528	0.012	0.022	0.033	6.43	1.11	0.381	0.47	0.017	0.008	0.110	0.101	0.007	0.007
PB0125	18.710	7.30	23.62	0.074	1.227	0.032	0.039	0.014	0.80	0.56	0.531	0.34	0.060	0.004	0.279	0.021	0.007	0.004
PB0126	20.840	6.97	21.01	0.082	1.601	0.044	0.047	0.014	0.44	0.34	0.543	0.21	0.071	0.004	0.262	0.015	0.008	0.004
PB0127	22.150	7.53	17.53	0.077	1.294	0.039	0.043	0.017	0.36	0.39	0.538	0.19	0.051	0.002	0.145	0.012	0.010	0.003
PB0128	24.840	8.74	13.96	0.059	0.979	0.036	0.047	0.013	0.16	0.11	0.660	0.10	0.039	0.003	0.086	0.010	0.008	0.005
PB0129	26.690	7.43	12.99	0.061	1.008	0.041	0.045	0.014	0.15	0.15	0.726	0.12	0.029	0.003	0.072	0.008	0.009	0.005
PB0130	23.510	6.91	16.69	0.096	0.887	0.026	0.037	0.011	0.68	1.21	0.622	0.97	0.031	0.004	0.038	0.011	0.026	0.007
PB0131	26.300	7.43	11.16	0.091	0.810	0.024	0.032	0.011	0.90	0.92	0.702	1.15	0.025	0.005	0.050	0.013	0.016	0.006
PB0132	26.000	7.53	12.28	0.057	0.831	0.029	0.027	0.011	1.14	0.35	0.586	0.22	0.025	0.003	0.098	0.020	0.015	0.006
PB0133	25.810	7.99	13.27	0.042	0.913	0.035	0.039	0.010	0.23	0.18	0.680	0.19	0.030	0.003	0.055	0.011	0.013	0.004
PB0134	23.860	7.32	16.64	0.089	1.073	0.035	0.037	0.011	0.36	0.34	0.666	0.19	0.040	0.004	0.144	0.018	0.008	0.005
PB0135	21.630	6.31	20.80	0.103	1.178	0.036	0.043	0.013	0.82	0.38	0.596	0.13	0.048	0.006	0.201	0.028	0.006	0.005
PB0136	25.370	5.75	10.77	0.114	0.798	0.022	0.026	0.007	4.63	1.94	0.475	0.76	0.023	0.007	0.107	0.058	0.008	0.007
PB0137	22.470	7.01	18.57	0.087	1.090	0.034	0.044	0.013	0.99	0.34	0.576	0.27	0.040	0.005	0.138	0.030	0.013	0.006
PB0138	22.440	10.06	12.66	0.098	0.944	0.020	0.040	0.123	0.80	0.50	0.590	0.39	0.028	0.004	0.058	0.019	0.020	0.008
PB0139	20.420	10.13	13.05	0.071	1.082	0.019	0.034	0.068	1.40	0.50	0.538	0.72	0.031	0.003	0.046	0.013	0.019	0.006
PB0140	21.330	9.29	15.71	0.071	1.088	0.027	0.035	0.060	0.82	0.28	0.511	0.40	0.038	0.002	0.062	0.011	0.018	0.005
PB0141	21.030	9.67	14.46	0.060	1.028	0.020	0.034	0.111	0.97	0.39	0.508	0.63	0.036	0.002	0.051	0.012	0.022	0.007
PB0142	23.600	9.80	12.55	0.061	0.912	0.023	0.031	0.046	0.55	0.32	0.636	0.36	0.028	0.003	0.053	0.013	0.017	0.005
PB0143	28.730	7.14	8.84	0.088	0.966	0.031	0.029	0.006	0.76	1.32	0.809	1.57	0.021	0.003	0.033	0.008	0.010	0.007
PB0144	25.430	7.29	10.07	0.144	0.915	0.025	0.028	0.013	1.51	2.81	1.022	1.57	0.024	0.008	0.021	0.010	0.019	0.010
PB0145	26.440	6.56	9.66	0.128	0.794	0.022	0.021	0.007	2.90	2.11	0.571	1.23	0.020	0.007	0.060	0.031	0.009	0.007
PB0146	26.430	7.41	9.93	0.130	0.987	0.024	0.023	0.004	1.58	2.58	0.813	1.96	0.023	0.006	0.024	0.010	0.017	0.009
PB0147	25.550	8.10	10.39	0.081	0.887	0.021	0.030	0.020	1.19	1.08	0.770	1.35	0.023	0.004	0.033	0.012	0.014	0.008
PB0148	25.570	5.74	9.88	0.111	0.648	0.017	0.023	0.009	5.12	1.89	0.434	0.74	0.019	0.008	0.130	0.077	0.008	0.007
PB0149	24.950	5.73	9.75	0.111	0.652	0.015	0.021	0.016	5.72	2.05	0.410	0.65	0.020	0.010	0.153	0.079	0.007	0.008
PB0150	26.400	5.26	9.38	0.109	0.647	0.020	0.019	0.009	6.07	0.81	0.609	0.49	0.019	0.007	0.101	0.082	0.007	0.007
PB0151	26.340	7.57	10.38	0.075	0.814	0.023	0.033	0.018	0.91	0.98	0.748	1.33	0.025	0.004	0.045	0.012	0.014	0.007
PB0152	28.880	7.00	9.11	0.093	0.972	0.030	0.030	0.005	0.83	0.99	0.835	1.28	0.022	0.00				

KM-2408-074107	As	Pb	Ba	Sr	Sb	Mo	LOI1000	Au	Pd	Pt
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	TGA002	FA50	FA50	FA50
Units	%	%	%	%	%	%	%	ppm	ppm	ppm
LLD	0.001	0.001	0.001	0.001	0.01	0.01	0.01	0.001	0.005	0.005
PB0106 DUP	<0.001	0.002	0.024	0.020	<0.01	<0.01	4.17	<0.001	<0.005	0.005
PB0127 DUP	<0.001	0.003	0.017	0.007	<0.01	<0.01	8.40	0.001	0.005	0.010
PB0147 DUP	<0.001	0.002	0.028	0.017	<0.01	<0.01	6.91	<0.001	<0.005	0.005
PB0106 REP	<0.001	0.003	0.023	0.020	<0.01	<0.01	4.15	--	--	--
PB0111 REP	--	--	--	--	--	--	--	0.001	0.005	0.005
PB0140 REP	--	--	--	--	--	--	--	<0.001	0.005	0.010
PB0148 REP	--	--	--	--	--	--	--	<0.001	0.005	0.010
PB0155 REP	0.001	0.002	0.018	0.007	<0.01	<0.01	5.88	--	--	--
GMO04 STD	<0.001	0.006	0.123	0.031	<0.01	0.81	1.53	--	--	--
GMO04 STD	<0.001	0.006	0.124	0.031	<0.01	0.78	1.49	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	0.984	0.715	0.945
GPP-06 STD	--	--	--	--	--	--	--	0.999	0.715	0.945
GPP-06 STD	--	--	--	--	--	--	--	0.985	0.715	0.940
GPP-12 STD	--	--	--	--	--	--	--	0.048	0.050	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.051	0.045	0.050
GPP-12 STD	--	--	--	--	--	--	--	0.047	0.050	0.045
OREAS700 STD	<0.001	0.004	0.012	0.005	<0.01	0.01	2.02	--	--	--
OREAS700 STD	<0.001	0.005	0.014	0.006	<0.01	0.01	2.01	--	--	--
OREAS999 STD	<0.001	<0.001	0.006	0.002	<0.01	<0.01	0.77	--	--	--
OREAS999 STD	<0.001	0.002	0.006	0.003	<0.01	<0.01	0.75	--	--	--
PB0106	<0.001	0.003	0.023	0.020	<0.01	<0.01	4.17	<0.001	<0.005	0.005
PB0107	<0.001	<0.001	0.017	0.014	<0.01	<0.01	5.21	0.002	0.005	0.005
PB0108	<0.001	0.004	0.024	0.016	<0.01	<0.01	4.76	0.002	<0.005	0.005
PB0109	<0.001	0.004	0.024	0.018	<0.01	<0.01	5.42	0.002	0.005	0.005
PB0110	<0.001	0.002	0.022	0.018	<0.01	<0.01	5.32	0.001	<0.005	0.005
PB0111	<0.001	0.004	0.023	0.009	<0.01	<0.01	6.63	0.001	<0.005	0.005
PB0112	<0.001	0.003	0.016	0.009	<0.01	<0.01	6.50	0.002	0.005	0.010
PB0113	<0.001	0.004	0.021	0.016	<0.01	<0.01	5.56	0.002	<0.005	0.010
PB0114	<0.001	0.002	0.009	0.006	<0.01	<0.01	6.32	<0.001	0.005	0.010
PB0115	<0.001	0.005	0.012	0.008	<0.01	<0.01	8.12	0.008	<0.005	0.010
PB0116	<0.001	0.001	0.018	0.006	<0.01	<0.01	7.28	0.002	0.005	0.010
PB0117	<0.001	0.001	0.015	0.005	<0.01	<0.01	8.89	0.001	0.005	0.010
PB0118	<0.001	0.002	0.019	0.007	<0.01	<0.01	6.09	<0.001	0.005	0.005
PB0119	<0.001	0.002	0.018	0.008	<0.01	<0.01	6.51	0.001	0.005	0.005
PB0120	<0.001	0.002	0.018	0.026	<0.01	<0.01	5.55	0.011	0.005	0.010
PB0121	<0.001	0.003	0.017	0.010	<0.01	<0.01	4.68	0.002	0.005	0.010
PB0122	<0.001	0.002	0.018	0.010	<0.01	<0.01	5.11	<0.001	0.005	0.010
PB0123	<0.001	<0.001	0.011	0.006	<0.01	<0.01	6.46	0.002	0.010	0.010
PB0125	<0.001	0.002	0.012	0.007	<0.01	<0.01	6.10	0.001	0.005	0.010
PB0126	<0.001	0.004	0.015	0.007	<0.01	<0.01	6.61	0.001	0.005	0.010
PB0127	<0.001	0.002	0.015	0.006	<0.01	<0.01	8.43	0.001	0.005	0.010
PB0128	<0.001	0.004	0.017	0.006	<0.01	<0.01	7.06	<0.001	0.005	0.005
PB0129	<0.001	0.005	0.022	0.007	<0.01	<0.01	6.80	0.001	<0.005	0.005
PB0130	<0.001	0.002	0.021	0.016	<0.01	<0.01	5.97	0.002	0.005	0.005
PB0131	<0.001	<0.001	0.019	0.011	<0.01	<0.01	6.53	<0.001	0.005	0.010
PB0132	<0.001	0.002	0.021	0.006	<0.01	<0.01	7.27	0.001	0.005	0.005
PB0133	<0.001	0.002	0.017	0.005	<0.01	<0.01	6.91	0.001	0.005	0.005
PB0134	<0.001	0.003	0.021	0.007	<0.01	<0.01	6.60	<0.001	<0.005	0.005
PB0135	<0.001	0.002	0.017	0.009	<0.01	<0.01	6.30	0.001	0.005	0.010
PB0136	<0.001	0.004	0.016	0.008	<0.01	<0.01	5.76	<0.001	0.005	0.010
PB0137	<0.001	0.005	0.018	0.008	<0.01	<0.01	6.75	<0.001	0.005	0.005
PB0138	<0.001	0.004	0.021	0.008	<0.01	<0.01	9.47	0.001	0.010	0.010
PB0139	<0.001	<0.001	0.014	0.007	<0.01	<0.01	11.42	0.001	0.005	0.010
PB0140	<0.001	0.003	0.015	0.007	<0.01	<0.01	8.97	0.001	0.005	0.010
PB0141	<0.001	<0.001	0.017	0.007	<0.01	<0.01	10.03	0.001	0.010	0.010
PB0142	<0.001	0.003	0.017	0.007	<0.01	<0.01	8.55	0.001	0.010	0.005
PB0143	<0.001	0.003	0.025	0.021	<0.01	<0.01	4.06	<0.001	<0.005	<0.005
PB0144	<0.001	0.002	0.027	0.022	<0.01	<0.01	5.90	0.001	0.005	0.010
PB0145	<0.001	0.003	0.020	0.017	<0.01	<0.01	5.02	0.001	<0.005	0.005
PB0146	<0.001	0.004	0.025	0.027	<0.01	<0.01	3.49	0.001	<0.005	0.005
PB0147	<0.001	0.002	0.027	0.016	<0.01	<0.01	6.96	<0.001	<0.005	0.005
PB0148	<0.001	0.004	0.011	0.009	<0.01	<0.01	6.24	<0.001	0.005	0.010
PB0149	<0.001	<0.001	0.013	0.009	<0.01	<0.01	6.61	<0.001	0.005	0.010
PB0150	<0.001	0.002	0.018	0.008	<0.01	<0.01	6.12	<0.001	0.005	0.005
PB0151	<0.001	0.001	0.020	0.015	<0.01	<0.01	6.96	<0.001	0.005	0.005
PB0152	<0.001	0.004	0.024	0.019	<0.01	<0.01	4.62	0.001	<0.005	0.005
PB0153	<0.001	0.004	0.027	0.018	<0.01	<0.01	4.08	0.001	<0.005	0.005
PB0154	<0.001	0.003	0.023	0.008	<0.01	<0.01	5.89	0.001	<0.005	0.010
PB0155	0.001	0.003	0.017	0.007	<0.01	<0.01	5.90	<0.001	0.005	0.005
PB0156	<0.001	<0.001	0.011	0.004	<0.01	<0.01	6.35	0.001	0.005	0.005
PB0157	<0.001	0.003	0.014	0.006	<0.01	<0.01	8.01	0.001	0.005	0.005
PB0158	0.001	0.002	0.018	0.005	<0.01	<0.01	7.11	0.001	0.005	0.005
PB0159	0.001	0.003	0.018	0.007	<0.01	<0.01	5.87	0.001	0.005	0.010



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## Surefire Resources NL

### Analytical Report

REFERENCE	KM-2408-074108
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AUTHORISATION

  
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**NAGROM**  
the mineral processor

KM-2408-074108	Si	Al	Fe	Mn	Ti	Zr	P	S	Mg	Ca	K	Na	V	Co	Cr	Ni	Cu	Zn
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LLD	0.01	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.01	0.01	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
B009 REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B015 REP	30.470	6.82	7.02	0.097	0.702	0.032	0.024	0.006	1.29	1.78	0.661	0.45	0.018	0.004	0.036	0.010	0.006	0.004
GMO04 STD	26.540	7.13	6.80	0.102	0.929	0.026	0.118	0.710	1.65	4.01	2.155	2.30	0.025	0.004	0.001	0.004	0.025	0.013
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS700 STD	22.120	5.63	16.14	0.325	0.196	0.010	0.353	0.311	1.06	5.66	1.577	1.23	0.006	0.003	0.005	0.004	0.202	0.022
OREAS999 STD	30.010	12.42	1.72	0.144	0.036	0.002	0.016	0.017	0.48	0.47	0.506	0.70	0.001	<0.001	0.010	0.005	0.002	0.008
B001	35.960	4.40	5.83	0.052	0.508	0.021	0.024	0.008	0.26	0.26	0.751	0.26	0.013	0.002	0.031	0.005	0.002	0.003
B002	33.310	5.54	6.23	0.075	0.578	0.023	0.026	0.004	0.87	1.06	0.721	0.39	0.015	0.002	0.032	0.007	0.003	0.004
B003	33.980	5.45	5.89	0.079	0.553	0.028	0.023	0.004	0.58	0.67	0.814	0.40	0.014	0.003	0.031	0.007	0.003	0.003
B004	32.470	6.62	6.32	0.085	0.642	0.031	0.027	0.006	0.48	0.51	1.014	0.41	0.015	0.003	0.029	0.007	0.004	0.004
B005	33.720	6.40	5.58	0.042	0.479	0.021	0.026	0.004	0.25	0.19	0.791	0.19	0.013	0.002	0.027	0.005	0.003	0.003
B006	35.650	5.19	4.85	0.040	0.428	0.021	0.020	0.004	0.28	0.29	0.748	0.22	0.011	0.001	0.026	0.005	0.003	0.002
B007	37.430	4.44	4.30	0.028	0.357	0.018	0.021	0.005	0.10	0.08	0.621	0.11	0.009	<0.001	0.023	0.003	0.002	0.002
B008	38.130	3.90	4.57	0.026	0.342	0.014	0.020	0.004	0.08	0.05	0.566	0.07	0.009	<0.001	0.025	0.003	0.001	0.002
B009	31.940	7.51	5.73	0.061	0.577	0.032	0.024	0.008	0.34	0.39	0.886	0.22	0.012	0.002	0.028	0.006	0.003	0.004
B010	32.530	6.52	5.72	0.070	0.549	0.033	0.032	0.009	0.52	0.82	0.850	0.27	0.013	0.002	0.031	0.006	0.003	0.004
B011	32.070	6.81	5.79	0.065	0.608	0.037	0.037	0.010	0.39	0.56	0.882	0.25	0.014	0.002	0.032	0.006	0.004	0.004
B012	30.740	7.30	6.21	0.080	0.574	0.033	0.030	0.026	0.83	1.06	0.883	0.45	0.015	0.002	0.031	0.007	0.006	0.005
B013	31.590	6.74	5.90	0.080	0.552	0.031	0.022	0.006	0.97	1.27	0.829	0.73	0.013	0.002	0.030	0.007	0.004	0.004
B014	30.030	6.57	7.01	0.098	0.645	0.026	0.026	0.007	1.52	2.18	0.650	0.82	0.018	0.003	0.035	0.010	0.005	0.005
B015	30.530	6.81	6.99	0.098	0.698	0.033	0.024	0.006	1.27	1.77	0.662	0.44	0.019	0.004	0.035	0.010	0.006	0.005
B016	31.190	5.60	6.70	0.091	0.660	0.027	0.021	0.006	1.94	2.08	0.615	0.40	0.018	0.003	0.046	0.011	0.004	0.004

KM-2408-074108	As	Pb	Ba	Sr	Sb	Mo	LOI1000	Au	Pd	Pt
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	TGA002	FA50	FA50	FA50
Units	%	%	%	%	%	%	%	ppm	ppm	ppm
LLD	0.001	0.001	0.001	0.001	0.01	0.01	0.01	0.001	0.005	0.005
B009 REP	--	--	--	--	--	--	--	0.001	<0.005	<0.005
B015 REP	<0.001	0.002	0.029	0.007	<0.01	<0.01	4.58	--	--	--
GMO04 STD	<0.001	0.005	0.124	0.031	<0.01	0.80	1.53	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	1.005	0.720	0.945
GPP-12 STD	--	--	--	--	--	--	--	0.048	0.050	0.050
OREAS700 STD	<0.001	0.004	0.012	0.005	<0.01	<0.01	1.97	--	--	--
OREAS999 STD	<0.001	0.002	0.007	0.003	<0.01	<0.01	0.75	--	--	--
B001	<0.001	0.003	0.031	0.005	<0.01	<0.01	3.22	<0.001	<0.005	<0.005
B002	<0.001	0.002	0.025	0.006	<0.01	<0.01	3.77	<0.001	<0.005	<0.005
B003	<0.001	0.002	0.032	0.006	<0.01	<0.01	3.70	<0.001	<0.005	<0.005
B004	<0.001	0.002	0.038	0.006	<0.01	<0.01	4.42	0.001	<0.005	<0.005
B005	<0.001	0.001	0.027	0.005	<0.01	<0.01	4.65	<0.001	<0.005	<0.005
B006	<0.001	0.001	0.028	0.004	<0.01	<0.01	3.79	<0.001	<0.005	<0.005
B007	<0.001	0.001	0.022	0.003	<0.01	<0.01	3.25	<0.001	<0.005	<0.005
B008	<0.001	<0.001	0.020	0.003	<0.01	<0.01	3.00	<0.001	<0.005	0.005
B009	<0.001	<0.001	0.034	0.005	<0.01	<0.01	5.78	0.002	<0.005	<0.005
B010	<0.001	0.001	0.033	0.005	<0.01	<0.01	5.50	<0.001	<0.005	<0.005
B011	<0.001	0.001	0.031	0.005	<0.01	<0.01	6.25	<0.001	<0.005	<0.005
B012	<0.001	0.001	0.029	0.006	<0.01	<0.01	5.93	0.001	0.005	<0.005
B013	<0.001	<0.001	0.027	0.006	<0.01	<0.01	4.45	0.001	0.005	<0.005
B014	<0.001	<0.001	0.025	0.007	<0.01	<0.01	4.59	0.003	0.005	0.010
B015	<0.001	<0.001	0.029	0.007	<0.01	<0.01	4.56	0.001	<0.005	0.010
B016	<0.001	0.003	0.022	0.006	<0.01	<0.01	3.95	<0.001	<0.005	0.010




## Surefire Resources NL

### Analytical Report

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**NAGROM**  
the mineral processor

KM-2408-074109	Si	Al	Fe	Mn	Ti	Zr	P	S	Mg	Ca	K	Na	V	Co	Cr	Ni	Cu	Zn
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101
Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
LLD	0.01	0.01	0.01	0.001	0.001	0.001	0.001	0.001	0.01	0.01	0.001	0.01	0.001	0.001	0.001	0.001	0.001	0.001
B023 REP	30.190	7.87	6.47	0.087	0.643	0.038	0.032	0.011	0.42	0.70	0.806	0.22	0.015	0.002	0.046	0.007	0.006	0.007
PR026A REP	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GMO04 STD	26.510	7.14	6.83	0.101	0.929	0.027	0.120	0.709	1.66	4.01	2.157	2.30	0.026	0.003	0.004	0.003	0.024	0.013
GPP-06 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GPP-12 STD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OREAS700 STD	22.110	5.61	16.06	0.321	0.193	0.011	0.354	0.303	1.05	5.62	1.574	1.22	0.006	0.001	0.008	0.003	0.202	0.022
OREAS999 STD	30.030	12.38	1.75	0.147	0.039	0.003	0.015	0.017	0.49	0.48	0.508	0.70	0.001	<0.001	0.010	0.005	0.002	0.010
B017	29.240	6.77	7.51	0.111	0.665	0.027	0.023	0.006	1.83	2.24	0.602	0.48	0.019	0.004	0.063	0.013	0.008	0.007
B018	30.350	6.61	6.86	0.097	0.635	0.026	0.031	0.007	1.31	1.81	0.711	0.62	0.018	0.003	0.048	0.008	0.006	0.008
B019	30.100	6.04	7.24	0.113	0.671	0.029	0.023	0.006	2.14	2.08	0.671	0.58	0.016	0.004	0.070	0.017	0.006	0.009
B020	30.220	7.12	6.51	0.092	0.588	0.029	0.025	0.006	1.32	1.57	0.756	0.57	0.015	0.003	0.049	0.009	0.006	0.007
B021	31.140	7.01	6.07	0.065	0.599	0.032	0.038	0.013	0.50	0.72	0.848	0.28	0.014	0.002	0.045	0.006	0.004	0.007
B022	33.470	5.79	5.69	0.072	0.646	0.040	0.025	0.008	0.50	0.74	0.817	0.25	0.012	0.002	0.049	0.006	0.004	0.006
B023	30.160	7.88	6.47	0.089	0.646	0.038	0.032	0.011	0.42	0.70	0.803	0.22	0.016	0.002	0.046	0.007	0.006	0.006
B024	32.740	6.28	5.91	0.066	0.663	0.043	0.028	0.009	0.40	0.60	0.894	0.25	0.013	0.002	0.043	0.005	0.004	0.006
BG001	20.060	1.26	35.89	0.025	0.177	0.005	0.219	0.035	0.07	0.18	0.067	0.02	0.009	0.003	0.010	0.026	0.022	0.023
PR026A	27.170	7.78	9.68	0.106	0.823	0.031	0.027	0.007	1.05	1.76	0.912	1.03	0.020	0.003	0.033	0.007	0.012	0.008
L2N	45.580	0.16	0.82	0.011	0.015	<0.001	0.003	0.001	0.15	0.03	0.008	0.06	0.001	<0.001	0.009	0.001	<0.001	0.002

KM-2408-074109	As	Pb	Ba	Sr	Sb	Mo	LOI1000	Au	Pd	Pt
Method	XRF101	XRF101	XRF101	XRF101	XRF101	XRF101	TGA002	FA50	FA50	FA50
Units	%	%	%	%	%	%	%	ppm	ppm	ppm
LLD	0.001	0.001	0.001	0.001	0.01	0.01	0.01	0.001	0.005	0.005
B023 REP	<0.001	0.001	0.024	0.004	<0.01	<0.01	6.93	--	--	--
PR026A REP	--	--	--	--	--	--	--	<0.001	<0.005	0.005
GMO04 STD	<0.001	0.005	0.124	0.031	<0.01	0.80	N.A.	--	--	--
GPP-06 STD	--	--	--	--	--	--	--	0.997	0.715	0.940
GPP-12 STD	--	--	--	--	--	--	--	0.049	0.050	0.050
OREAS700 STD	<0.001	0.001	0.013	0.005	<0.01	<0.01	1.94	--	--	--
OREAS999 STD	<0.001	0.002	0.072	0.004	<0.01	<0.01	0.76	--	--	--
B017	<0.001	0.003	0.019	0.007	<0.01	<0.01	4.84	0.003	0.010	0.015
B018	<0.001	0.003	0.025	0.007	<0.01	<0.01	4.98	<0.001	<0.005	0.010
B019	<0.001	0.001	0.021	0.006	<0.01	<0.01	4.23	0.001	<0.005	0.005
B020	<0.001	0.004	0.024	0.006	<0.01	<0.01	5.21	0.003	0.005	0.005
B021	<0.001	0.002	0.028	0.005	<0.01	<0.01	6.91	0.001	<0.005	<0.005
B022	<0.001	<0.001	0.029	0.004	<0.01	<0.01	4.70	<0.001	<0.005	<0.005
B023	<0.001	<0.001	0.024	0.003	<0.01	<0.01	6.95	0.002	0.010	0.005
B024	<0.001	0.002	0.028	0.005	<0.01	<0.01	5.25	0.001	<0.005	0.005
BG001	<0.001	0.002	0.011	0.004	<0.01	<0.01	1.69	<0.001	0.005	0.005
PR026A	<0.001	0.002	0.027	0.015	<0.01	<0.01	4.87	<0.001	<0.005	0.005
L2N	<0.001	0.002	0.002	<0.001	<0.01	<0.01	0.37	<0.001	<0.005	<0.005