

Suite 1/9 Hampden Road Nedlands WA 6009 Tel: +61 8 9386 8382 Fax: +61 8 6183 4892 ABN: 59 151 155 734 www.santafeminerals.com.au

5 April 2022 Company Announcements Office ASX Limited

EXPLORATION UPDATE

• Mt Murray Project

- El Paso (Nickel-Copper-PGE target) Large target concealed beneath shallow sandplain with only two small strongly silicified and altered ultramafic outcrops. Rock chip results returned anomolous Nickel up to 1040ppm.
- Ridgeback (Copper-Lead-Zinc-Gold target) identified by historic multielement stream sediment anomalies associated with a historic strong airborne electromagnetic (AEM) anomaly – Rock chip results in previously untested strongly weathered outcrop returned 59ppb Au, 450ppb Ag, 3080 ppm As, 629 ppm Cu. Rock chips taken from nearby historic Kin workings confirm high grade copper up to 11%.
- Highway (Lead-Zinc target) rock chip samples confirm high grades at historic workings with peak SFM assay showing <u>12% Pb, 272 g/t Ag, 0.244</u> <u>g/t Au and 1270ppm Zn.</u>

A detailed Aeromagnetics survey is scheduled to commence at Mt Murray in April 2022.

- Challa Project
 - Watsons Well (Vanadium-Titanium-Magnetite target) detailed mapping has identified and sampled several cumulate magnetite layers. New rock chip results received returning <u>1.33% V2O5, 15.2% TiO2 and 52.74% Fe.</u> Reverse Circulation Drilling planned for the June 2022 quarter.

Santa Fe Minerals Ltd (ASX: SFM) (**SFM**, the **Company**) is pleased to provide an exploration update for its Mt Murray (Base Metals) and Challa (Vanadium) projects.



Figure 1: Project locations.

Mt Murray Base Metals Project – SFM has an option to earn 80%

The Mt Murray project covers a 9km north south trending zone of poly metallic copper-leadzinc-silver-gold mineralisation adjacent to a 4.2km x 1.2km magnetic high zone considered to represent a mafic-ultramafic intrusive package prospective for nickel-copper-PGE mineralisation similar to the recently discovered tier one Julimar Ni-Cu-PGE deposit (Chalice Mining Ltd).



Figure 2: Mt Murray tenements and prospects over 400m line spaced magnetics

El Paso Intrusive (Ni-Cu-PGE)

The El Paso zone is a 5km long high magnetic zone interpreted as a mafic to ultramafic intrusive complex prospective for Ni-Cu-PGE mineralization. Previous exploration identified a small outcrop of ultramafic rocks with only one rock chip sample that returned 2,965ppm Cu, 781 ppm Ni, 5.4% Mg, 1.8g/t Ag and 419ppm S. Apart from this small outcrop and a second outcrop of silicified ultramafic rocks located by SFM, the interpreted intrusive complex is completely covered by shallow sand and alluvial cover. SFM considers the interpreted mafic-ultramafic complex within the Mt Murray project has potential to host nickel-copper-palladium-platinum mineralisation.

SFM Rock Chip Sampling

SFM undertook a site reconnaissance trip in December 2021 and visited the previously located outcrop confirming strong silicification and alteration. A second outcrop of altered ultramafic was located 500m to the south-west. The intervening area is covered by sandplain. SFM collected a total of 6 rock chip samples which were submitted for a nickel/PGE suite analysis. The results confirm the historic samples with Ni to 1040ppm, Cr to 1280 ppm Mg to 12.97%.

Orientation Ultrafine Soil Sampling

SFM completed an orientation Ultrafine Fraction (UFF) soil program across the interpreted position of the intrusive complex. It was considered traditional sieved soil sampling would not be effective due to the prevalence of wind-blown sand which would swamp the geochemical response to background levels geochemistry. The UFF soil sample technique is an ultrasensitive new exploration technique developed by CSIRO in conjunction with LabWest that was successfully demonstrated in a combined CSIRO/ MRIWA Project. SFM collected 49 x 300g -1mm sieved soil samples spaced at 50m along 2 lines orientated across the interpreted position of the targeted intrusive complex. One line was 2km long and the second line, 3km to the south, was 400m long. The samples were split to a -1mm traditional sieved soil and the UFF (-2-micron clay fraction) technique.

A comparison of the results showed:

- 1. Analytical quality of the UFF -2 micron was significantly better than the -1mm results.
- 2. UFF samples returned higher absolute concentrations when compared with the -1mm samples.
- 3. Lithological and regolith controls are subtle in the UFF samples and better resolved than the -1mm samples.

It is expected that a gridded soil sample program using the UFF technique will be able to better resolve geochemical anomalies and outline the targeted intrusive beneath the shallow sand cover. The UFF soil sampling program is planned for the June 2022 quarter.

The UFF soil sampling and a planned 100m line spacing detailed aeromagnetic survey (current line spacing is 400m) contracted to be flown early in the June 2022 quarter will provide robust data sets for additional geophysics and drilling.



Figure 3: El Paso Silicified ultramafic outcrop surrounded by sand plains.



Figure 4: El Paso Ni-Cu-PGE Target with SFM rock chip and UFF soil sampling over magnetics.

Ridgeback Cu-Pb-Zn-Ag-Au

The Ridgeback target is located 700m south of the historic Kin copper occurrences. The area was previously highlighted by a zone of anomalous Cu-Pb-Zn-As-Au from stream sediment sampling and a strong late time airborne electromagnetic anomaly that may indicate the presence of massive sulphide mineralisation at depth (ASX announcement 12th January 2022). No follow up exploration of this zone has been reported. SFM completed

reconnaissance of the Ridgeback zone in December 2021, identifying multiple broad and strike extensive quartz ironstone veins associated with the historic anomalous zone (Figure 6).

A total of 5 rock samples were collected and submitted for multi-element analysis. The sample results exhibit a strong Au-Ag-As-Cu-Sn association, similar to the Kin copper prospects located 700m to the north. **The best results from the Ridgeback rock chip samples are 59ppb Au, 450ppb Ag, 3080 ppm As, 629 ppm Cu**. A rock chip from the Kin copper pits returned a high 11% Cu with 1490ppm As, 72 ppb Au, 300ppb Ag and 561ppm Sn. Mineralization has now been identified over 2.5km strike from the Ridgeback prospect through to north of the historic Kin prospects. To the north of here the wind-blown sand conceals the bedrock and any possible mineralization. This area, adjacent to the El Paso Ni-Cu-PGE target, will be explored by the UFF soil sample technique discussed above.



Figure 5: Ridgeback zone showing quartz ironstone veins. The image is facing north.



Figure 6: Ridgeback Target with Rock chip samples.

Highway (Pb-Zn)

The Highway Pb-Zn-Ag-Au prospect (The Hill) is located adjacent to the North-West Coastal Highway west of the El Paso nickel-copper target. Historic rock chip samples returned very high results of up to 39.6% Pb, 134g/t Ag, 0.46g/t Au and 0.1% Zn. SFM rock chip sampling in December 2021 confirmed the historic samples with results of 12% Pb, 272 ppm Ag, 244 ppb Au and 1270ppm Zn. The mineralisation is hosted in chert and quartz over about 300m strike. The mineralization may extend along strike to the south and north however it is

hidden beneath shallow sand cover. Despite the high grades, no drilling has been recorded at the Highway prospect.

The potential strike extent of the high-grade Highway prospect will be tested north and south by the ultrafine fraction (UFF) soil technique in the June 2022 quarter.



Figure 7: Highway Target with rock chip samples over magnetics.

CHALLA PROJECTS



Figure 8 - Challa Project area

Watson's Well - Vanadium

The results of the rock chip samples collected from several discrete 1m wide bands of magnetite rich cumulate units bounded by gabbro associated with the 7km long high magnetic zone are reported here. The samples were collected as part of geological fact mapping of the Watsons Well V-Ti-Fe target zone. A total of 10 rock samples were collected from small widely spaced outcrops over the 7km strike of the target zone. All rock chips returned high grades as follows:

- V2O5 1.18% to 1.33%
- TiO2 9.97% to 15.2%
- Fe 44.12% to 52.74%

Sample	East	North	Fe	SiO2	AI2O3	TiO2	V2O5
	GDA 94 Z50	GDA 94 Z50	%	%	%	%	%
MWW01	642663	6788364	52.74	3.32	3.2	15.2	1.23
MWW02	642736	6788328	50.38	5.69	5.34	11.6	1.27
MWW04	643658	6791023	51.03	4.34	3.77	11.7	1.29
MWW05	644877	6792691	50.67	4.19	4.22	14.8	1.2
MWW06	644882	6792700	50.64	4.87	4.29	13.7	1.18
MWW07	642746	6788604	52.72	3.68	4.34	13	1.31
MWW08	642758	6788690	52.68	3.92	4.4	12.4	1.32
MWW09	643568	6790971	44.12	10.08	6.9	9.97	1.09
MWW10	643479	6791009	50.61	5.74	4.98	12.5	1.2
MWW11	643617	6791028	50.87	4.45	4.82	12.2	1.33

Table 1: Watsons Well rock chip sample results.

SFM is encouraged by these results which are comparable to the higher-grade V-Ti-Fe Resources reported for the Murchison Region of Western Australia.

The next exploration program will be two lines of RC drilling of 10-20 holes for 2,000 to 2,500m to test both the outcropping high grade magnetite cumulate units and deeper unexposed and potentially thicker magnetite cumulate units near the gabbro footwall. SFM is currently planning and permitting this program. Timing will depend on securing a suitable RC drilling contractor, however drilling is anticipated in the June Quarter 2022.



Figure 8 – Outcrop and sample locations at the Watson's Well Project.

Corporate

The Company currently has a balance of \$4,043,730 in liquid assets comprising of \$3,985,849 in cash and shares held in listed entities with a market value of \$57,881.

Authorised for release by the Board of Directors.

- ENDS -

For further information, please contact:

Doug Rose Managing Director +61 409 465 511

COMPLIANCE STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Mr. Reginald Beaton who is a Member of the Australian Institute of Geoscientists. Mr. Beaton is an employee of Santa Fe Minerals Limited and has sufficient experience which is relevant to the style of mineralisation under consideration to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Beaton consents to the inclusion in the report of the matters based on the information compiled by him, in the form and context in which it appears.

The Company is not aware of any new information or data that materially affects the information included in the above.

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Soil Sampling- The samples were collected in the field by digging to 20cm depth. Soil Samples were sieved to -1mm for a nominal 300gram sample. Soil samples were retained in pre numbered calico sample bags. Rock Chip samples were collected on an ad hock basis of lithology types or mineralization styles. Representative rock chips of 1-3kg were selected and stored in prenumbered calico sample bags.
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.). 	No drilling completed
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	No drilling completed
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, 	No drilling completed.

Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	 mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 Soil samples were split in the Labwest laboratory. -1mm subsample for a conventional soil analysis. A UFF subsample sieved to -2 microns and analysed.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	 Rock chip samples from Mt Murray and Watsons Well projects were submitted to Bureau Veritas Minerals Pty Ltd, 58 Sorbonne Crescent Canning Vale WA. Standard sample preparation and assay techniques were used. The MT Murray samples were digested with Aqua Regia with Au, Ag, As, Bi, Co, Cr, Cu, Ni, Mo Pb, Pt, Pd, Sb, Ti, V, W, Zn determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry. Submitted duplicate and certified standard samples with each batch. The laboratory monitored QC via duplicates and standards. Rock Chip samples from Watsons Well analysed for a Fe suite of elements. Samples cast using 66:34 flux Lithium nitrate added to form a glass bead. Fe, SiO2, Al2O3, TiO2, Mn, CaO. Elements determined by XRF – MgO, K2O, Zn, Pb, Cu, Ba, Cr, Cl, As, Ni, Co, Sn, Sr, Zr, V2O5. Soil samples were submitted to labWest in Malaga WA. Aqua regia microwave digest The UFF -2-micron soil fraction were analysed for Ag, Al As, Au, Ba, Be, bi, Ca, Cd, Ce, Co, Cr, Cs, Fe, Ga, Ge, Hf, Hg, In, K La, Li, Mg, Mn, Mo, Nb, Ni, Pb, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Th, Ti, TI. U, V, W, Y, Zn, Zr. by a ICP-EOS/MS

Criteria	JORC Code explanation	Commentary
		 method. The -1mm soils were analysed by the MAR-04 method. Microwave digest, aqua regia 50 elements by ICP-MS/ ICP/OES. Same elements as for the UFF
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 The sampling was for geochemistry purpose only and no significant intersection reported. No twinned holes completed. Result checked and loaded into SFM database. No adjustment of assay data was done.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Hand-held GPS was used to locate the sample locations. The Grid system is GDA94 Z 50. The terrain is flat and topographic control was provided by government topographic maps.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 The soil samples were spacing along the lines at 50m intervals. This is considered appropriate for the early-stage nature of the exploration. No data compositing has been applied.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 The soil sample line is approximately perpendicular to the interpreted strike of the geology.
Sample security	The measures taken to ensure sample security.	• SFM personnel collected the samples and delivered the samples to a commercial transport company in Onslow. The samples were trucked to the SFM office in Perth and then transported to the laboratory by SFM personnel.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews completed.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Watsons Well: E59/2257 (Challa Minerals Pty Ltd) Mt Murray: Previous Pastoral Lease. Mt Murray: The Cane River Conservation Park is immediately north. Mt Murray: E08/3230, E08/2978, M08/139 North West Stone Pty Ltd. ELA08/3461 Challa Minerals Pty Ltd. Mt Murray SFM option agreement to earn upto 80% of Mt Murray tenements excluding marble. The tenements are in good standing and no known impediments exist.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Watsons Well: Windimurra Resources, 1998, WAMEX A055389. WMC Resources, 2004, WAMEX A070457. Maximus Resources, 2008 Ltd 2008 WAMEX A081908. Mt Murray: Previous exploration Completed by Contact Resources Ltd 2006-2008, WAMEX A073007, A077473, A078762. BRL Exp Pty Ltd 2010, A088615. Northern Gold NL 1988-1990, A028686, A028687.
Geology	 Deposit type, geological setting and style of mineralisation. 	 Mt Murray – Magmatic Ni-Cu-PGE mineralization. Fault associated Cu-Pb- Zn-Ag-Au mineralization. Watsons Well: V-Ti-Fe mineralization in igneous magnetite cumulate layers in anorthosite.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 A plan showing all the soil and rock sample locations is provided in the text of this report.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	No aggregated intersections are reported.
Relationship between mineralisati on widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. down hole length, true width not known'). 	 The sampling is for geochemistry purposes only. The geometry of the mineralization is unknown.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 Appropriate diagrams summarizing key data interpretations included in the body of this announcement.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 The interpretations expressed in the announcement are not considered to be overstated or misleading.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 All relevant data has been included within the report.
Further work	 The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 A range of techniques will be considered to progress exploration including additional soil sampling and geophysics. Refer to figures in the body of this announcement.