

31 January 2019

ASX Announcement

DECEMBER 2018 QUARTERLY ACTIVITIES REPORT

Highlights**Unaly Hill Vanadium**

- All drill holes intersected vanadium mineralisation with individual high grades up to 0.90% V₂O₅
- Intersection widths with significant grade include:
 - 40m @ 0.44% V₂O₅ from 82m in UHRC008 Including 24m @0.51% V₂O₅
 - 34m @ 0.53% V₂O₅ from 79m in UHRC009 including 16m @0.69% V₂O₅
 - 36m @ 0.43% V₂O₅ from 64m in UHR007 including 14m @0.58% V₂O₅
- Mineralisation continues to show robust grades at shallow depths (<150m)
- Results provide strong support for an extensive vanadium resource
- Mineralisation is still open for several km along strike and at depth
- Metallurgical testwork shows excellent V₂O₅ concentrate grades with low impurities at relatively coarse grind size and low magnetic intensity

Kooline Lead-Silver-Copper- Gold

- Intra-cratonic magmatic copper-gold (IMCG) mineral system
- Extensive untested areas of structural complexity, and thin cover that could host Lead-Silver-Copper-Gold mineralisation
- Gold and Copper potential largely untested

During the quarter, Surefire Resources NL (“**the Company**”) has significantly advanced its Unaly Hill Vanadium project towards a Scoping and Pre-Feasibility study. The assays of the Reverse Circulation (RC) exploration drilling have provided excellent grade and resource data and the metallurgical testwork programme has been completed with very positive vanadium grades and recoveries. In addition, the comprehensive review of the Kooline project area by geological consultants CSA Global Pty Ltd has indicated that the historic Kooline Pb-Ag-Cu workings are indicative of an Intra Magmatic Copper Gold (IMCG) mineralisation system. The report findings provide a structural framework for the mineral potential and areas of new exploration targets for both the high grade lead-silver area and base metal -gold potential.

Unaly Hill Vanadium Project

During the quarter the Company received the assay results of the September 2018 RC drilling programme completed at the Unaly Hill Vanadium Project near Sandstone, in the Murchison Region of WA.

The widely spaced drilling covered an additional 4km of the magnetic anomaly delineating the vanadiferous–magnetite mineralisation. A total of 10 RC drill holes ranging in down-hole depth from 100m to 200m were completed along six traverses for an aggregate of 1,258m. From this a total of 524 drill samples were transported from site and submitted to ALS Laboratories at Malaga, Western Australia for ME-XRF21 analysis.

All the drill holes intersected a number of vanadiferous titano-magnetite layers and assay results have confirmed the presence of consistent bands of significant grades of vanadium mineralisation up to 40m in down-hole width. The list of the main intersections is contained in Table 1. The new results confirm extensive areas of vanadium-bearing magnetite mineralisation some 4km north of the current established JORC Inferred resource of 86Mt @ 0.42% V_2O_5 . (@ 0.3% Cut-off). The mineralisation occurs as wide adjacent parallel bands, dipping steeply easterly on some sections with relatively shallow levels of weathered/oxidized cover. The mineralisation remains open along strike and depth

Significant results include:

- Individual composite intersections of grades up to 0.90% V_2O_5
- 15 intersections greater than 0.50% V_2O_5 and wider than 4 metres
- Significant intersection widths of:
 - 40m @ 0.44% V_2O_5 from 82m in UHRC008 Including 24m @ 0.51% V_2O_5
 - 34m @ 0.53% V_2O_5 from 79m in UHRC009 including 16m @ 0.69% V_2O_5
 - 36m @ 0.43% V_2O_5 from 64m in UHR007 including 14m @ 0.58% V_2O_5
- Drilling results are consistent with grades attained from historic resource drilling

Table 1

Hole ID	From (m)	To (m)	Int. (m)	V ₂ O ₅ %	TiO ₂ %	Fe %
18UHRC003	10	19	9	0.52	6.49	25.59
18UHRC003 <i>including</i>	10	14	4	0.83	10.14	39.07
18UHRC003	45	63	18	0.46	6.27	24.37
18UHRC003 <i>including</i>	51	59	8	0.58	7.88	30.02
18UHRC003	71	81	10	0.34	4.93	19.3
18UHRC005	106	116	10	0.48	6.69	25.28
18UHRC006	22	30	8	0.47	5.68	21.97
18UHRC006	101	133	32	0.35	4.51	18.68
18UHRC006 <i>including</i>	107	117	10	0.42	5.24	22.03
18UHRC007	28	34	6	0.5	6	24.26
18UHRC007	64	100	36	0.42	5.64	22.82
18UHRC007 <i>including</i>	74	88	14	0.58	7.8	29.95
18UHRC008	18	24	6	0.48	5.65	22.7
18UHRC008	30	34	4	0.53	6.4	25.2
18UHRC008	82	122	40	0.44	5.54	22.08
18UHRC008 <i>including</i>	82	106	24	0.51	6.45	25.35
18UHRC008	146	162	16	0.45	6.11	24.03
18UHRC008	154	162	8	0.59	7.89	29.97
18UHRC008	168	176	8	0.38	5.14	20
18UHRC009	28	34	6	0.59	7.61	29.75
18UHRC009	40	52	12	0.51	6.71	25.46
18UHRC009	79	113	34	0.53	7.2	27.71
18UHRC009 <i>including</i>	89	105	16	0.69	9.34	34.52
18UHRC010	38	54	16	0.37	4.5	18.69
18UHRC010 <i>including</i>	40	46	6	0.49	5.92	24.1
18UHRC011 <i>including</i>	20	26	6	0.68	8.53	33.03
18UHRC011	54	60	6	0.55	7.12	26.79
18UHRC011	88	116	28	0.4	5.6	22.36
18UHRC012	32	48	16	0.33	4.12	16.38
18UHRC012	90	98	8	0.45	5.86	23.42
18UHRC012 <i>including</i>	92	96	4	0.72	9.07	34.8
18UHRC012	106	114	8	0.48	6.33	23.73
18UHRC013	4	12	8	0.3	3.68	15
18UHRC013	16	30	14	0.33	4.27	16.59
18UHRC013	38	68	30	0.34	4.15	16.51
18UHRC013 <i>including</i>	44	58	14	0.41	5.1	19.95

The intersections are calculated with a cut-off grade of 0.2% V₂O₅.

In-Fill Drilling Programme

The excellent drill results from the RC programme indicate a robust resource with potential for increased grade over the current JORC resource grade and enable Company to progress its plan for an extended in-fill drilling programme to advance the resource to an Indicated JORC status. During the quarter Surefire engaged CSA Global (CSA) to assess the historic exploration data for the project area and provide recommendations for target areas and drill density in order to achieve the Indicated JORC Resource objective.

CSA recommended a 100 m (along strike) by 50 m (across strike) drill pattern that should be prioritised in two main areas: These are:

1. The area immediately north and south of drill holes UHN105 and UDHM001. There is a 350m to 400m distance to the adjacent section lines to the north and south, which will be targeted initially, to a depth of approximately 200 m. This represents a strike length of approximately 800m.
2. Focus is also to be placed on the area between drill holes 18UHRC006 and 18UHRC0011. This represents a strike length of approximately 1,500 m.

Metallurgical Testwork Programme

During the quarter the final stages of a comprehensive metallurgical testwork programme was completed on the Unaly vanadiferous magnetite core obtained from diamond drill hole UHDM001 (Figure 1). The programme, developed and supervised by METS Engineering Group based in Perth, Western Australia focused on the salt roasting process, a commonly used process for the processing of vanadiferous titanomagnetites that recovers vanadium as a product from the ore. The testwork looked at the effects of grind size on mineral liberation and magnetic separation and addressed the following parameters:

- Comminution and physical characterisation
- Mineralogy
- Magnetic beneficiation
- Salt roasting



Figure 1: Diamond Drill Core UHDM001 showing massive magnetite

Assays of the core mineralisation revealed three main mineralised zones, all identified as fresh ore and that were primarily disseminated with small massive intervals. These zones were classified into Low, Medium and High-grade composites based on the average vanadium grade and three composites were formed, one for each mineralised zone identified in the hole.

Comminution

Comminution testwork was performed to assess the crushing and grinding characteristics of the ore. Overall it was found that the ore is hard with good crushing characteristics. The Bond Ball Work index (BBWi) was determined to be high; however, this is common for vanadiferous titanomagnetites. The abrasion index is relatively low compared to other vanadiferous magnetites and indicates that wear rates are going to be moderate to low.

Magnetic Beneficiation Testwork

1. Davis Tube Recovery

Davis Tube Recovery (DTR) tests were initially conducted to assess the grind size sensitivity and magnetic field intensity sensitivity for each composite. The optimum grind size was found to be around 106 µm which is relatively standard and is considered a good result. The grade and recovery of the magnetic concentrate were relatively insensitive to the magnetic field strength over the range tested, indicating the potential to achieve similar results with lower field strengths. Notably, Composite 1, the lowest feed grade, achieved excellent vanadium upgrade considering the higher percentage of gangue minerals present in the feed. The vanadium concentrate grade and recoveries are shown in table 2 below.

Table 2: Vanadium recoveries and grades for the P₈₀ 106 µm

Gauss	Composite 1		Composite 2		Composite 3	
	Grade (%)	Recovery (%)	Grade (%)	Recovery (%)	Grade (%)	Recovery (%)
2000	1.39	72.54	1.43	80.51	1.33	79.84
3000	1.38	74.70	1.42	80.55	1.33	79.81
4000	1.33	71.76	1.41	80.18	1.33	80.18

Source: J5033 – Unaly Hill Vanadium Testwork Report METS Engineering (Nicol 2018)

2. Low Intensity Magnetic Separation

The next stage involved a series of Low Intensity Magnetic Separation (LIMS) tests performed at the selected grinding product P₈₀ of 106 µm (80% passing 106 microns). Tests were run using triple pass LIMS methodology at a magnetic intensity of 1,200 gauss. The purpose of the tests was to confirm the DTR results on larger scale equipment that more closely resembles LIMS processing on a plant. Mineralogical analysis of the products produced from the Composite 1 LIMS test at P₈₀ of 106 µm indicated that recovery of Fe-Ti-V-oxides to the concentrate is close to the maximum recovery achievable.

The results and comparison to the DTR results are shown in Table 3:

Table 3

Composite	Test	Mass Yield (%)	V ₂ O ₅ (%)		SiO ₂ (%)		Al ₂ O ₃ (%)	
			Grade	Dist'n	Grade	Dist'n	Grade	Dist'n
Composite 1	DTR 4000G	20.2	1.33	71.8	2.65	1.6	2.09	2.4
	LIMS	20.7	1.40	74.7	2.12	1.3	1.77	2.0
Composite 2	DTR 4000G	27.5	1.41	80.2	2.15	2.1	1.48	2.5
	LIMS	27.9	1.40	80.5	2.25	2.3	1.55	2.6
Composite 3	DTR 4000G	38.1	1.33	80.2	1.46	2.8	1.31	4.6
	LIMS	38.6	1.34	80.4	1.65	3.2	1.40	4.9

Source: J5033 – Unaly Hill Vanadium Testwork Report METS Engineering (Nicol 2019)

Salt Roasting

Sighter testwork for salt roasting primarily looked at the effect of different salt (sodium carbonate) additions for each composite. The influence of salt roast temperature was also looked at in two sighter tests. All three composites were shown to behave similarly, with vanadium extractions following a consistent trend when the data is compared. With temperature having a large impact on vanadium recovery. Overall the vanadium recovery results were good in the range of 86-91% at 1200C and initial indications are that the salt requirements are also within an acceptable range.

Key Metallurgical Results

Consistent vanadium grades and recoveries across the three mineralised zones tested

- 192% to 367% vanadium upgrade
- V₂O₅ Concentrate Grades up to 1.43% achieved
- Lower grade mineralised zone beneficiates exceptionally well
- Ore below a nominal cut-off grade shown to beneficiate to similar grades as high-grade zones
- Excellent rejection of gangue minerals
 - Up to 99.5% rejection for silica
 - Up to 99.0% rejection for alumina
- Good salt roast vanadium recoveries

Geological Setting

The Unaly Hill Vanadium project licence area, E57/1068 lies within the Atley Igneous Complex located approximately 48 km south of Sandstone in the East Murchison Mineral field of Western Australia (Figure 2). The Atley Intrusion is a layered gabbroic body that is elongate in an NNE/SSW orientation and runs along the axis of the regional scale Youanmi Fault, a regionally dominant geological feature. It has a maximum thickness of 4.5 km and there are exposures over a strike length of 17 km. The compositional layers recognized are gabbro, leucogabbro, pyroxenite (completely altered to talc, chlorite and tremolite), anorthosite and magnetite rock. The iron-vanadium-titanium mineralisation is situated within cyclical cumulous layers within the intrusive complex.

The Company has previously established a substantial vanadium resource from drilling 3 kilometres of the anomalous magnetic anomaly.

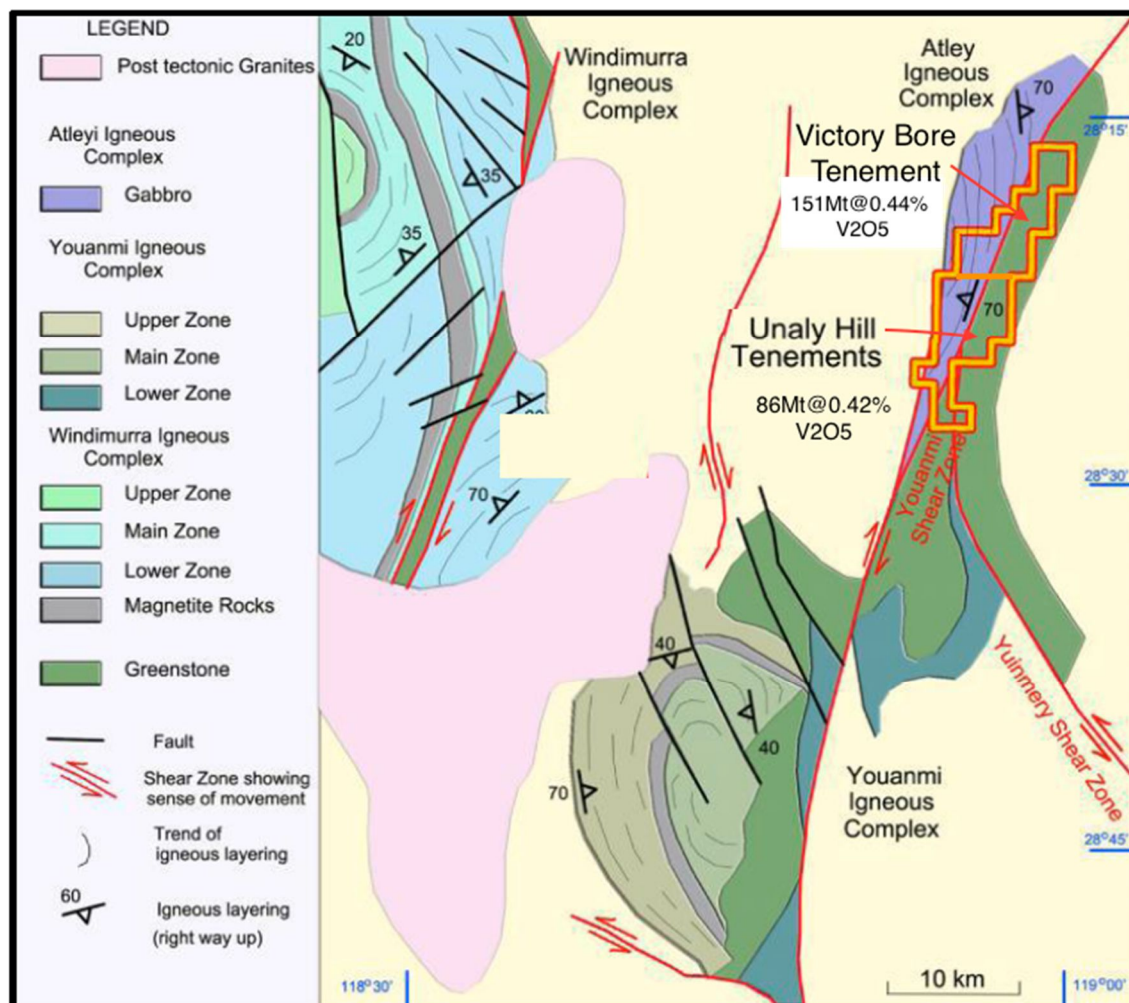


Figure 2: Regional Geology and Unaly Hill and Victory Bore Licence areas

Kooline Project Lead-Silver-Copper-Gold Project

During the quarter activity on the project centred on the comprehensive review by CSA Global of the historic data on regional geochemistry and the project area's target potential based on the compilation of all available geochemical data. The project review by CSA and an earlier review on the historic lead-silver workings by Unearthed Elements have both been additionally assessed by Dr Steven Batty, an independent geological consultant. The reviews have highlighted promising mineralisation potential.

The CSA work has indicated that the historic Kooline lead-silver-copper (Pb/Ag/Cu) workings are indicative of an Intra Cratonic Magma Copper Gold (IMCG) mineralisation system. The IMCG deposit class is derived from magmatic fluids and is a broad group of deposits that include, Iron oxide copper gold (IOCG) and the Abra Pb- (Cu-Au) deposit located approximately 250km SE of Kooline.

The main findings of the review are:

- The Kooline project is interpreted to lie immediately south of a major regional structure (the Baring Downs Suture) that channelled mineralised fluid into the project area.
- Compilation of all available historic geochemical data from surface sampling and drilling clearly shows that only a limited area of the project area has been tested.
- Where the area has been tested, anomalous results are common

The historic exploration focus by other workers has been on the high-grade Lead-Silver-Copper veins associated with the artisanal workings. There has been no coherent exploration to define the potential for large volume Lead-Silver-Copper deposits. Copper appears to have been treated as a by-product and Gold, despite an historic intercept of 1m @ 3.87g/t Au (AK09RC04 at 25m) at the Bilrose working and minor artisanal gold workings in the area, has not been the focus of any previous coherent exploration programme.

The field reconnaissance and mapping of the Kooline workings by consultants Unearthed Elements (M. Dormer) during 2018, also provided:

- Evidence for pinch and swell and énéchelon vein systems indicate the potential for the historic high-grade Lead-Silver-Copper veins to thicken or be repeated along-strike and at depth;
- Broad areas of outcrop containing mineralised thin net-veins that were not historically mined. These areas indicate a broader mineralised system could be present and host a greater volume of Lead-Silver-Copper to complement the historic artisanal mined high-grade veins;

- Structures and stratigraphy that host mineralised high-grade Lead-Silver-Copper and Gold veins trend under thin cover, but have never been tested;
- Shallow historic workings are typically less than 10 metres deep, with only the main working at the Gift mine reaching a depth of 52 metres;
- Field evidence and structural mapping suggests that the few RC drill holes that are recorded in the area, have been largely ineffective at testing either the high-grade Lead-Silver-Copper veins or the broader net-veined Lead-Silver-Copper areas; and
- Rock chips containing very high-grade galena, cerussite and silver were collected with results¹ previously reported of up to 79% Pb and 232g/t Ag indicating numerous untested potential.

Exploration Targets

All the observations above suggest the area has not been effectively explored spatially or at depth and that the mineral system that could be present within the Kooline tenements presents numerous target opportunities for further exploration.

Lead-silver have been the historically mined in this area, and the short- to mid-term market conditions for lead make this commodity an interesting proposition to pursue. In addition, the exploration upside to potentially define base metals and gold in this area is extremely encouraging.

From the evaluation of the available geochemical data compiled by CSA, a handful of elements feature prominently in the element associations that are interpreted as mineralisation in surface and drill samples: CSA proposed a metric: INDEX_5 based on log indexes of five elements Pb, Au, Cu, As and Sb which they consider to be a very good way to highlight mineralisation. From this data two clear trends: are apparent as shown in Figure 3.

- Area 1 hosts highly anomalous results even with the broad spaced data and the area is also in close proximity to the potentially major mineralised fluid pathway in the Baring Downs Suture.
- Area 2 hosts the historic Kooline Pb-Ag-Cu workings plus additional anomalies, including gold either along strike or sub-parallel to the main mineralised trends

¹ ASX announcement by Surefire Resources NL, 22 May 2018

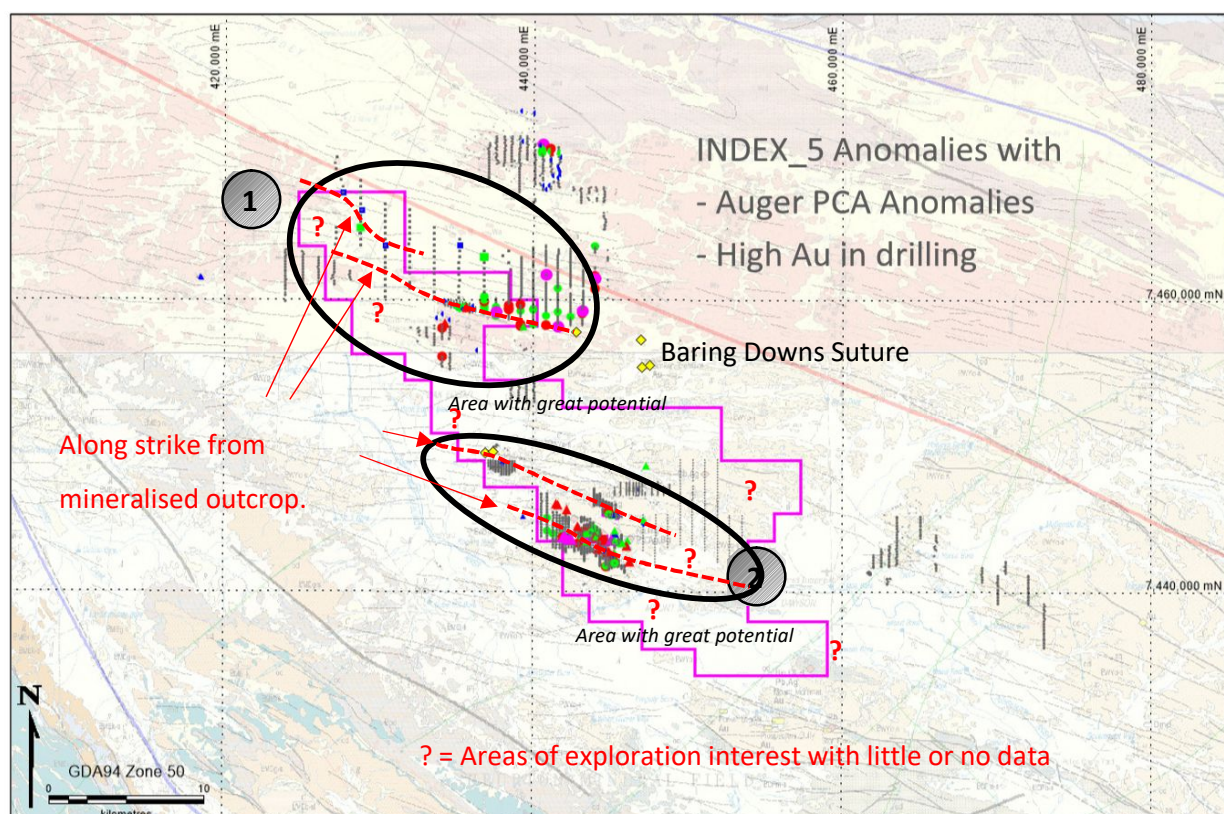


Figure 3: Anomalous INDEX 5 scores for combined surface and drill sample dataset combined with anomalous Fortescue Metals Auger samples and high-Au in Au-only drilling (background image from CSA 2018). Targets generated for this release.

As a result of these reviews and analysis, programmes will be planned to test the historic shallow Lead-Silver-Copper workings at depth and in areas of structural complexity where the mineralisation has the potential to increase in thickness. In addition, geochemical programmes will be planned to evaluate the potential along strike and under cover from known mineralisation where no work has previously been undertaken. Areas with gold potential will also be pursued

Background

The Kooline Project is centred 55 kilometres south of the Paulsen's goldmine and 190 kilometres WNW of Paraburdoo within the Ashburton province of Western Australia. The project area tenements consists of granted Exploration Licence, E08/2373 and E 08/2956 (Figure 4) on the 48 km of contiguously striking licenses that link numerous clusters of high-grade historic artisanal Lead-Silver-Copper workings

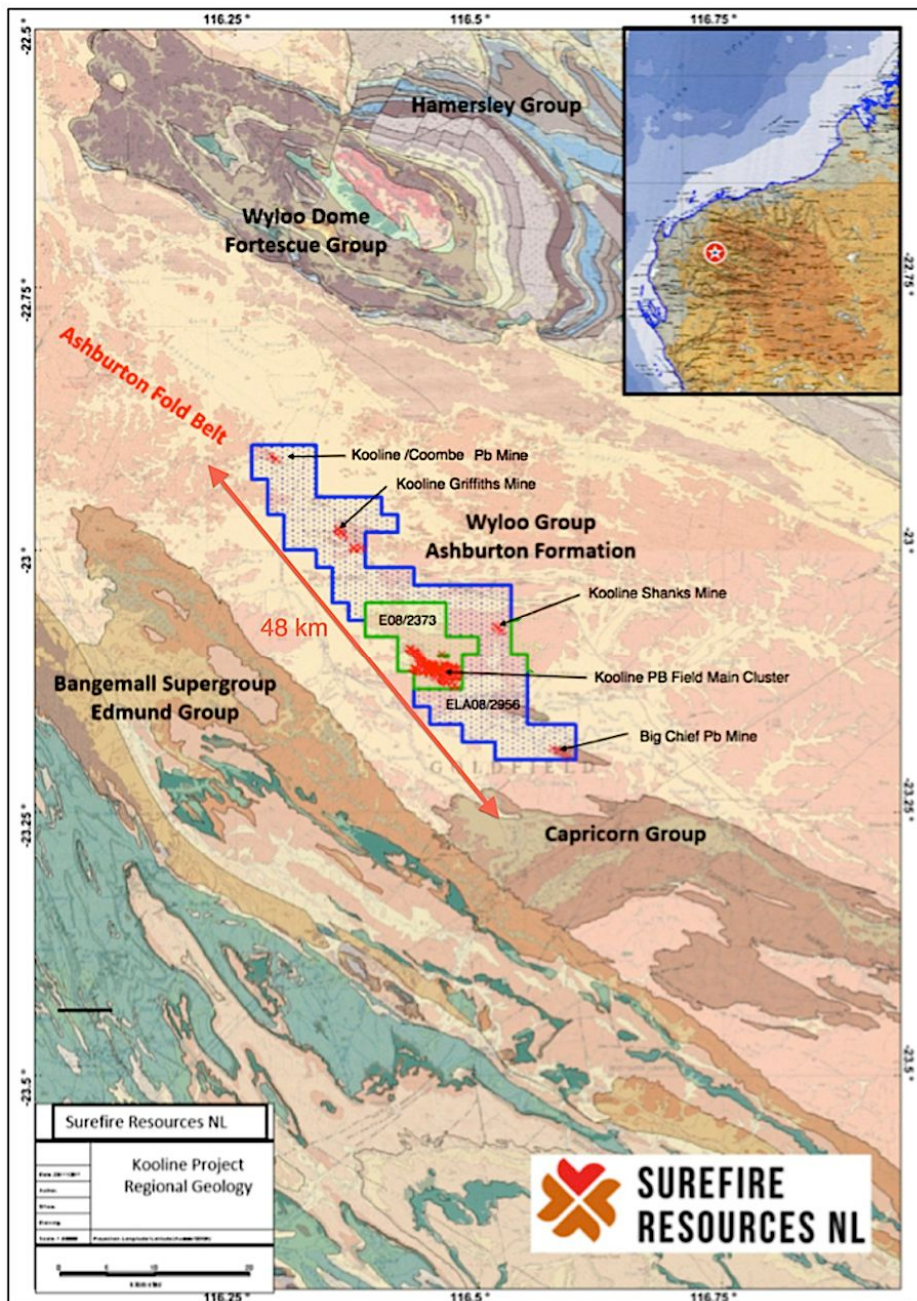


Figure 4: Project tenements and location.

APPENDIX 1

TENEMENT HOLDINGS AT 31 DECEMBER 2018

Tenement	Nature of Interest	Project	Equity (%)
E08/2372	Granted	Kooline Lead/Silver – Ashburton Region	100%
E08/2373	Granted	Kooline Lead/Silver – Ashburton Region	100%
ELA08/2956	Application	Kooline Lead/Silver – Ashburton Region	100%
E57/1068	Granted	Unaly Hill – Sandstone Region	100%