

6 April 2021

SAYONA ADVANCES EXPLORATION ACTIVITY IN CANADA & AUSTRALIA

Highlights

- **27% increase in size of Sayona's Tansim Lithium Project in Québec, Canada following acquisition of 75 additional claims, taking total project area to 20,256 ha of prospective lithium acreage**
- **In Western Australia, 3,900 line km airborne magnetic survey completed to advance gold drill targets at Deep Well and Mt Dove projects**
- **Increased exploration activity follows strong outlook for both lithium and gold, as Sayona invests in upgrading its Canadian lithium resource base and increasing the value of its West Australian gold and lithium projects.**

Emerging lithium miner Sayona Mining Limited (ASX:SYA; OTC:DMNXF) has strengthened its project pipeline, with the Company acquiring further prospective lithium acreage at its Tansim Lithium Project in Québec, Canada in addition to undertaking an airborne magnetic survey over gold targets in Western Australia.

In Québec, Sayona has acquired an additional 75 claims at its emerging Tansim Lithium Project, which is located just 82 kilometres south-west of the Company's flagship Authier Lithium Project. Tansim now encompasses 350 claims spanning 20,256 ha, a 27% increase in prospective lithium acreage following additions earlier in March (refer ASX release 11 March 2021).

The recently completed Canadian NI 43-101 report (refer ASX release 18 March 2021) determined high exploration potential for lithium pegmatites across the project, with resource drilling planned at Tansim's Viau-Dallaire and Viau prospects.

In Western Australia, drill targeting at the Deep well and Mt Dove projects has advanced with the commissioning and completion of geophysical surveying, targeting anomalies typical of the nearby Hemi gold discovery of De Grey Mining.

The moves follow a strong outlook for lithium in North America amid the electric vehicle (EV) and battery storage revolution, with Sayona’s Pilbara gold assets adding further potential upside to the Company’s international asset base.

Sayona’s Managing Director, Brett Lynch commented: *“The additional Tansim claims will further enhance the critical mass of the Tansim project and strengthen Sayona’s push to become a world-scale spodumene producer based on our Abitibi lithium hub, with the potential for downstream processing. With investor confidence growing in the future of the North American EV and battery sector, these are quickly becoming highly valuable and strategic assets.*

“We are also keen to advance exploration across our Western Australian portfolio, given favourable gold prices and the success shown by nearby explorers. These gold projects add to the potential of our lithium portfolio in the world-class Pilgangoora lithium district.”

The new Tansim claims (see Figure 1 below) are situated on the northern and south-east flank of the project. They secure prospective areas marginal to the Réservoir Decelles Batholith, a suite of monzogranite intrusions typical of the parent magma associated with spodumene bearing pegmatite systems at a worldwide scale.

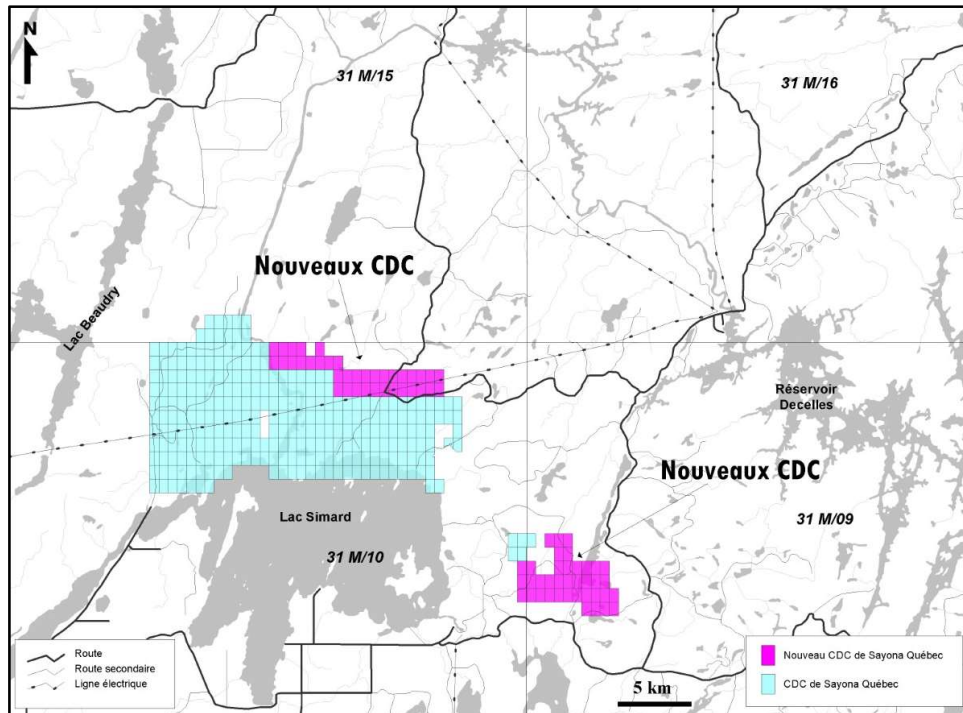


Figure 1: Tansim Lithium Project, with new claims shown in purple

The new claims also cover a similar stratigraphy to the Viau and Viau-Dallaire prospects. It is anticipated new tracks traversing the area will allow rapid and efficient exploration for spodumene pegmatites over the new area.

A 26 diamond drill drilling program for 4,200m is planned for Tansim, with some 3,400m at the Viau-Dallaire prospect and approximately 800m at the Viau prospect. An Exploration Target (refer note below) for the Viau-Dallaire prospect has been estimated at between 5 million tonnes and 25 million tonnes, at an estimated grade of 1.2-1.3% Li₂O (refer ASX release 19 November 2019).

Note: The potential quantity and grade of the Exploration Target is conceptual in nature and is therefore an approximation. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in an estimation of a Mineral Resource.

The planned drilling aims to expand the lithium mineralisation at Viau-Dallaire and provide material for mineralogical study and metallurgical testwork to support a Mineral Resource estimate.

West Australian exploration

Sayona's Pilbara project includes gold rights to nine tenements covering 824 sq km. These are considered prospective for intrusion-related gold mineralisation, similar to that of De Grey Mining's nearby Hemi discovery. This style of mineralisation is hosted within altered late stage hi-Mg diorites of the Indee Suite.

Sayona's tenement portfolio remains effectively untested for its gold potential with large areas masked by surficial cover. Interpretation of magnetic data, carried out to identify discrete, high intensity features typical of that displayed by the Hemi discovery, has identified a number of features at the Mt Dove, Deep Well, West Wodgina and Tabba Tabba East projects.

Sayona has commissioned Magspec Airborne Surveys to complete a high resolution 3,900 line km airborne magnetic survey, with flight lines at 50m spacing. This survey, completed on 4 April 2021, covered the entire area of the Deep Well project and part of the Mt Dove project, where high resolution data is not available. These tenements are in close proximity to De Grey Mining's Mallina gold project which includes Hemi (see Figure 2 below).

At Deep Well, interpretation of publicly available broad spaced magnetics data has identified 18 magnetic features. These are located over sand covered sediments of the Mallina Basin and late-stage intrusions of the Portree Suite.

Past exploration carried out by diamond explorers has investigated three of the magnetic features, recognising their discreet nature and intensity as potential kimberlite intrusions. Limited drill testing failed to identify the source of the magnetic features but identified pyritic Mallina sediments and granite in bedrock. No drill cuttings were sampled for gold and the source of the magnetic anomaly is unresolved.

It is anticipated Sayona's high resolution survey will help effective planning and drill testing of the current anomalies, as well as potentially identifying further targets.

Geochemical Orientation

A total of 96 orientation soil samples have been collected over three magnetic features at the Deep Well and Mt Dove projects. Analysis by LabWest using the CSIRO /MRIWA ultrafine technique has been completed, with results ranging from below the lower detection limit (0.5ppb Au) and 5.6ppb Au.

The subdued sample results are typical of geochemical results over the transported, largely sand blown sand which covers much of the tenement areas. Further orientation sampling is planned after the northern wet season to advance the use of geochemistry as a low-cost method of prioritising magnetic targets for drill testing.

Next Steps

The final data from the airborne magnetic survey is anticipated to be delivered in early April. Analysis of this information will help refine drill targeting of the known anomalies and identify further features of interest. Heritage surveying and statutory requirements to allow drilling to take place can then be advanced.

The results will also help frame plans for additional geophysical surveying over the remainder of the Pilbara gold projects, including the Tabba Tabba area in the east, so that combined with geological mapping and sampling, work to allow drill testing can proceed in these areas during the 2021 season.

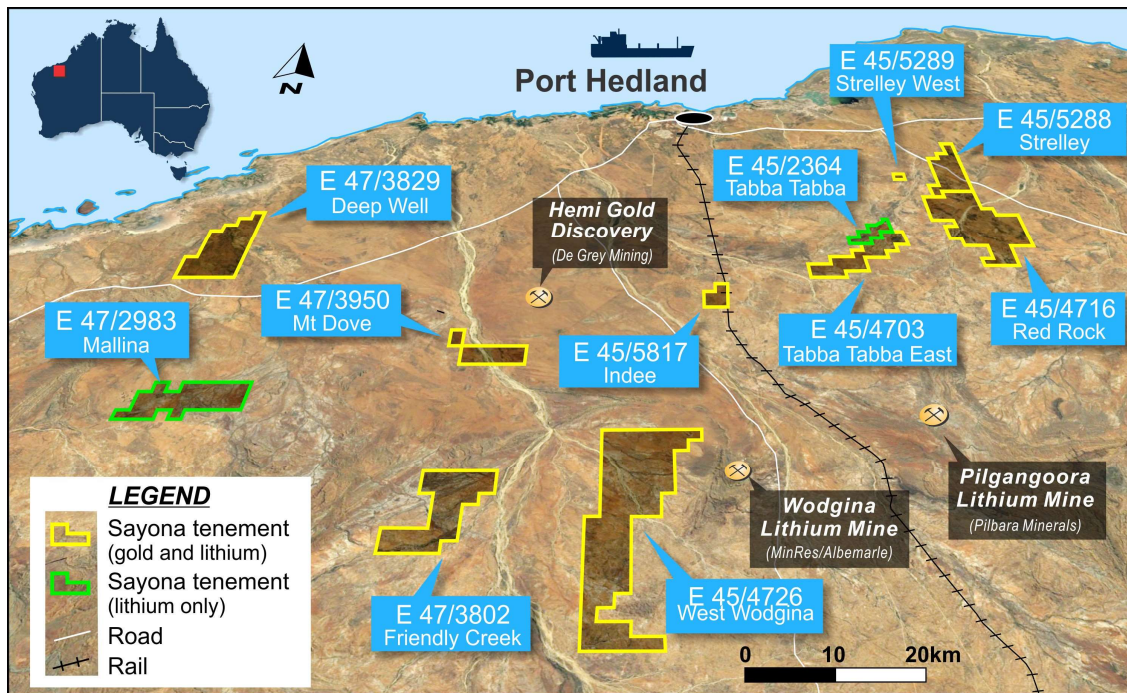


Figure 2: Sayona's Pilbara gold and lithium projects, Western Australia

This announcement is authorised by Sayona's Board of Directors.

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About Sayona Mining

Sayona Mining Limited is an emerging lithium miner (ASX:SYA; OTC:DMNXF), with projects in Québec, Canada and Western Australia.

In Québec, Sayona is progressing a bid for the North American Lithium mine with the backing of a world-class advisory team, while advancing its flagship Authier Lithium Project and its emerging Tansim Project, supported by a strategic partnership with **Piedmont Lithium Limited (ASX:PLL; Nasdaq:PLL)**.

In Western Australia, the Company holds a large tenement portfolio in the Pilbara region prospective for gold and lithium.

For more information, please visit us at www.sayonamining.com.au

Competent Person Statement

The information in this report is based on information compiled by Mr Simon Attwell, a Competent Person, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Attwell is an employee of Attgold Pty Ltd ("Attgold") which provides geological services to Sayona.

Mr Attwell has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Attwell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Targets is based on information previously released to the ASX (19 November 2019) compiled by Dr Gustavo Delendatti, a member of the Australian Institute of Geoscientists. Dr Delendatti is an independent consultant and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code (2012 Edition) of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Reference to Previous ASX Releases

This report refers to the following previous ASX releases:

- Study confirms Tansim Project's high lithium potential, 18 March 2021

- Sayona expands Tansim Project as lithium demand accelerates, 11 March 2021
- Sayona invests in WA exploration assets, 3 February 2021
- Drilling program to expand Québec lithium resources, 27 January 2021
- Sayona completes Tansim acquisition, 24 December 2020
- Gold exploration to commence over Pilbara projects for Hemi-style targets, 7 December 2020
- December 2020 Quarterly Activities Report, 29 January 2021

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and all material assumptions and technical parameters continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

JORC Code, 2012 edition – Table 1 (section 1; Sampling Techniques and Data)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> The sample material is soil collected from approximately 10cm depth as recommenced using the UltraFine+™ technique. The samples have an irregular spacing reflecting the reconnaissance nature of the assessment. Samples are representative of the soil at the sample site. The type of geochemical sampling is a standard approach during the initial style reconnaissance.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> Not applicable, no drilling has been carried out
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable, no drilling has been carried out
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, 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. 	<ul style="list-style-type: none"> Not applicable, no drilling has been carried out. This information is of insufficient detail to support any Mineral Resource Estimation.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not applicable, no drilling has been carried out No measures have been taken to ensure sampling is statistically representative of the in situ sampled material. The collection methodology is considered appropriate for this early stage assessment of the project. The sample size is considered appropriate to the analytical technique The soil sample is subsequently sieved by the laboratory to below 2 micron in grain size to ensure that only the ultrafine grain size is submitted for analysis.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> Analysis was carried out by LabWest, Perth. Analysis of gold was determined by method UFF-PE with gold and 47 elements determined by ICPMS/OES. This technique has been developed by CSIRO / AMIRA Project M462. This is considered appropriate for the type of samples submitted. Not used No additional quality control measures beyond that of the Laboratory QA/QC were implemented.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The results are considered acceptable by independent company personnel. The company conducts internal data verification protocols which have been followed. No adjustments to assay data has been undertaken
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Samples were located during collection by handheld GPS The grid system used is Australian Geodetic MGA Zone 50 (GDA94). The level of topographic control offered by the handheld GPS is considered sufficient for the work undertaken
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Soil geochemistry was carried put on MGA grid at 40m centers on lines spaced 200m apart. . The data spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation procedures. Samples have not been composited.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Sampling was carried out over small areas of the project and it is not known if they are representative. Not applicable, no drilling has been carried out

Criteria	JORC Code explanation	Commentary
	<i>should be assessed and reported if material.</i>	
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Industry standard sample collection and storage have been undertaken including use of secure commercial carriers to deliver samples to laboratory. and in the companies secured Perth office facilities.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews of the data have been conducted at this stage

JORC Code, 2012 edition – Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The tenements of the Pilbara gold Project are held 100% by Sayona Mining. Parts of Mt Dove, West Wodgina and the whole of the Friendly Creek areas are within the Yandeyarra Aboriginal Reserve. An Access Agreement is required before exploration can commence in these areas and it is uncertain when or if this may be negotiated. There are no impediments that have been identified for operating in the project areas
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Little past work has been carried out within the Companies gold tenure. At Deep Well past diamond explorers include work by Stockdale (A52193, A55633) who carried out helimag and limited drilling between 1997-1998, and Rudal Resources who carried out limited drilling (maximum depth 11.5m), (A46020 and A46075) in 1994. The Rudal drilling was only partly successful in identifying bedrock and the source of the magnetic targets was not identified.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> Gold is being targeted for the intrusion related style of gold mineralisation, associated with late stage Archaean hi-Mg diorites of the Indee Suite. These intrusions are of sanukitoid type and host gold in other parts of the Pilbara region, including the Toweranna deposit. It is anticipated the Hemi discovery of De Grey Mining will also be of the same type.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> eastings 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 	<ul style="list-style-type: none"> Drilling has not been carried out.

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No variation to laboratory reported assays has been made. <p>No aggregation has taken place.</p> <p>Not applicable</p>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i> 	<ul style="list-style-type: none"> Exploration is at an early stage and information contains insufficient data points to allow these relationships to be reported
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Sampling is an initial, small scale orientation sampling programme and further work is required to determine if results relate to bedrock or the wind-blown cover in the sample areas.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The results of relevant assay results are reported herein.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> The exploration reported herein is at a very early stage and are not conclusive.
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> The current magnetic survey will provide greater resolution of the features which can then be targeted for more extensive and definitive geochemical testing followed up by drill testing to determine the source of the magnetic features