

ASX Announcement



7 May 2024

ABN: 45 116 153 514

ASX: TMX

Airborne electromagnetic (VTEM) survey has now commenced over the Nova-style “EYE” at Lort River

Terrain Minerals Limited (ASX: TMX) ('Terrain' or the 'Company') is pleased to advise that the airborne electromagnetic (AEM) survey has now commenced over the distinctive 'EYE' feature located at its 100% owned Lort River Project, ~50km NW of Esperance, Western Australia (refer to diagram 1).

Key Investment Points:

- **Helicopter AEM Survey (VTEM Max) has now commenced.**
- **Survey will take ~3 weeks to complete - Plus ~3 weeks data processing.**
- **Survey aims to better define the New Conductor, recently identified by Terrain & test the whole 'EYE' feature & tenement.**



Picture 1: Helicopter with VTEM survey sensor array.

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Terrain's exploration team has prioritised this new target at the Lort River exploration project from the beginning. Within ten and a half (10.5) weeks of announcing the discovery of the priority 'EYE' feature and with a newly identified conductor sitting within the 'EYE', Terrain has now commenced the AEM survey using UTS Geophysics (which operates the VTEM Max Time Domain Electromagnetic System or VTEM for short) refer to ASX release on the 22 February 2024.

The discovery of the Nova-Bollinger nickel-copper deposit, which is located approximately 300 kilometres north of Terrain's Lort River, Fraser Range Project, was a direct result of Sirius Resources recognising the importance of an "EYE" feature within the aeromagnetic images over their Fraser Range tenement. This "EYE" feature at Nova-Bollinger proved to be the geophysical signature of the intrusion associated with the nickel-copper ore bodies (refer to diagram 2 and ASX release 22 February 2024).

AEM survey offers a proven, fast, and inexpensive method for detecting potential nickel-copper ore bodies across the Albany-Fraser belt, with Sirius Resources repeatedly expressing a view that electromagnetics continued to be a reliable exploration tool during their exploration and development of the Nova-Bollinger nickel-copper deposit.

The now scheduled helicopter borne AEM survey over the Lort River "EYE" feature, will take approximately three (3) weeks to completely (subject to weather). The interpretation and modelling of the existing and additional conductors identified from the survey is estimated to take a further three (3) weeks to complete.

In addition to detecting nickel sulphide mineralisation, the AEM survey has been designed to also map zones of potential clay-hosted rare earth elements (REEs) across the tenement. By targeting two styles of mineralisation (being Nickel and REE), Terrain aims to optimise the outcome of the survey and maximize value-per-dollar.

Terrain is committed to fast-tracking exploration of this potential repetition of the Nova-Bollinger style magnetic nickel-copper at Lort River (E63/2447). This strategy is consistent with Terrain's goal of adding value to shareholders through advancing exploration with the aim of making a company making discovery. Terrain will update the market accordingly as information becomes available.



Diagram 1. Terrain Minerals' 100% owned Lort River Project is located approximately 50 kilometres northwest of Esperance, and within the highly prospective Albany-Fraser Belt, being home to Nova-Bollinger nickel-copper ore bodies.

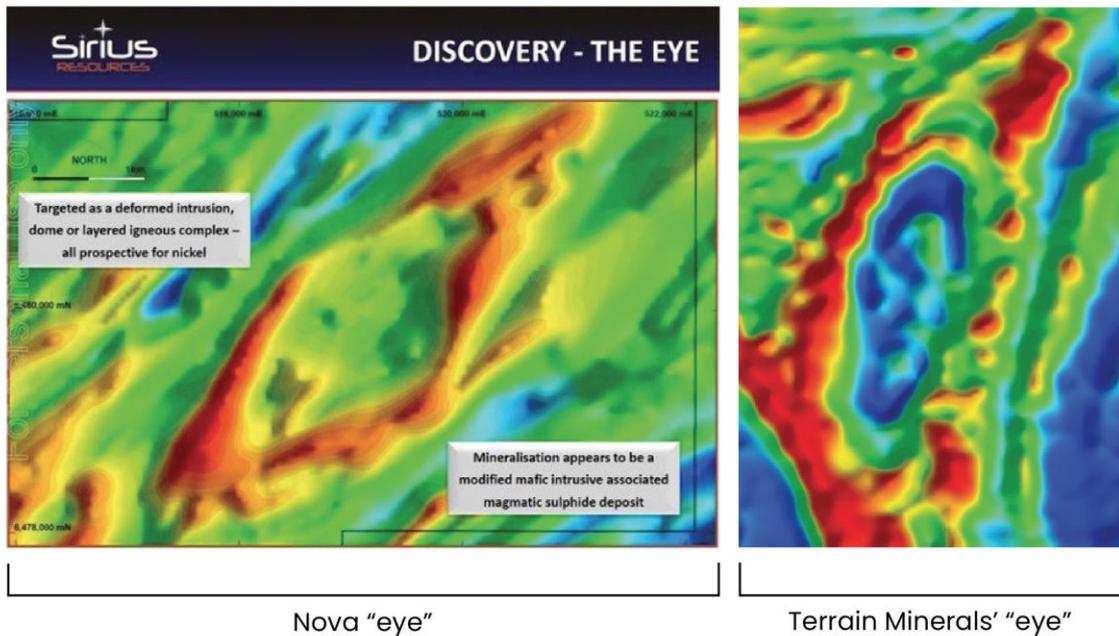


Diagram 2. Host geology of the Nova-Bollinger nickel-copper orebody appears as a very distinctive "eye" in the aeromagnetic data (left image). Terrain has identified a possible repetition of the Nova-style eye feature within its recently granted tenement E63/2447 (right image). Source: (Sirius Resources' ASX announcement dated 4 October 2012).

For further information, please contact:

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ABOUT TERRAIN MINERALS LIMITED:

Terrain Minerals Limited (ASX: TMX) is a mineral exploration company with an asset portfolio that includes:

Trade Opportunities:

Terrain is open to commercial discussions in relation to the full or partial sale, and/or joint venture of the Company's non-core assets.

Smokebush Exploration Project

100% owned exploration project located within the prospective Yalgoo Mineral Field of Western Australia and which neighbours Warriedar Resources Limited's (ASX: WAB) Golden Dragon Project. The Company's previous exploration campaign have targeting gold, and other commodities across the tenement package:

- **Larin's Lane - REE & Gallium Project:**

Larin's Lane project located within the emerging mid-west clay-hosted rare earth elements (REE) district of Western Australia, which is quickly earning a reputation as Australia's premier destination for REE mineralisation. The Company's maiden drilling program in late 2023 intersected broad zones of high-grade REE mineralisation over ~9 kilometres of interpreted strike. This mineralisation remains open in all directions and has the potential to grow into a significant clay hosted REE project. The project area benefits from year-round access and within close proximity to established mining infrastructure. A Stage One Mineral Resource definition drill program is presently being contemplated for this project with a currently proposed April 2024 commencement date. Currently results from ~5,000m of drill are due mid-May 2024.

Continues next page:

- **Lightning/Monza Gold Prospect:**

In 2023, a series of induced polarisation (IP) geophysical surveys identified multiple chargeability anomalies within the bedrock geology. These anomalies were interpreted to be related to sulphide mineralisation associated with gold bearing structures. The Lightning IP target was subsequently drilled tested by the Company in late 2023, which appears to have confirmed the presence of gold mineralisation. Further details are available in the company's ASX release dated 14 November 2023. In light of the results described in the Company's 14 November 2023 ASX release, Terrain proposes to undertake a targeted 4-hole reverse circulation (RC) drill program at its Lightning Gold Prospect during 2024 to determine if gold grade and thickness increases at depth, as appears to be the case at the neighbouring Warriedar Resources project area (see Warriedar Resources announced of 1 February 2024 for further information).

Lort River Exploration Project

100% owned exploration project that covered more than ~500 square kilometres of highly prospective exploration acreage located approximately 50 kilometres northwest of Esperance, Western Australia.

- **Lort River - Nickel Project:**

Is situated within the highly prospective Albany-Fraser Belt, being home to Nova-Bollinger nickel-copper ore bodies. The host geology of the Nova-Bollinger nickel-copper orebody appears as a very distinctive "eye" in the aeromagnetic data. Terrain has identified a possible repetition of the Nova-style eye feature within its recently granted tenement E63/2447 within its Lort River Project. Consequently, in keeping with its 22 February 2024 ASX release, Terrain remains committed to fast-tracking exploration of this potential repetition of the Nova-Bollinger style magnetic nickel-copper in tenement E63/2447. Refer to ASX release on the 16 April 2024. Refer to the above release.

- **Lort River - REE and Gallium:**

The maiden drilling campaign has confirmed the project is highly prospective for clay REE and Gallium, mineralisation. The initial roadside drilling campaign targeting REEs in 2023, with the results released to the market via ASX announcements dated 19 October 2023 and 23 October 2023. The approvals for drilling (POW) have been delayed at the department. As well as focus moving to the above-mentioned Nickel target which is now the company's current priority at Lort River for the time being.

Wild Viper Gold Project:

100% owned gold exploration project located 70 kilometres north of Leonora, Western Australia. The Company's Wild Viper Project strategically surrounds Red5 Limited's (ASX: RED) Great Western Mine and is likewise located adjacent to Northern Star Resources Limited's (ASX: NST) Bundarra gold deposits. Terrain is of the view that the Wild Viper Project potentially offers the Company a clear path forward to establish a gold Mineral Resource within the coming 18 to 24 months via exploration targeting interpreted gold-bearing zones located below 150 metres from surface.

Project Review:

Terrain continues to investigate potential projects across various commodities including gold, copper, nickel, rare earth elements and industrial minerals. Whilst Western Australian based projects are the Company's current focus, other parts of Australia are being seriously examined and considered as are other jurisdictions including, but not limited to, Africa, Europe, and the Americas.

Pending Applications:

Terrain has several pending tenement (packages) applications across Australia. These applications include:

Biloela: Copper & Gold Project is located along strike of the Cracow Gold Mine in Queensland (See ASX release dated 21 June 2023 for more information on the rationale, geological setting and walk-up drill targets already identified within this key project area).

Carlindie: Lithium Project is strategically located between Wildcat Resources (ASX: WC8) and Kali Metals (ASX: KM1) tenements in the East Pilbara of Western Australia. The Company has prioritised the granting of its Carlindie tenement package and is continuing to work successfully towards achieve its goal. Terrain anticipates providing further updates on the grant process of this highly prospective tenement package over the course of the next 6 months.

Mukinbudin: Niobium and Rare Earth Elements Project is located within the Mukinbudin region of Western Australia, with the tenement package neighbouring both Rio Tinto's (ASX: RIO) and IGO Limited (ASX: IGO) landholdings in the region.

Note: Terrain incurs no addition costs until pending applications are granted. Terrain's board also believes that having a strong project pipe line into the future ensures investors are able to see future value opportunities by being a shareholder of the Terrain Minerals Limited (ASX:TMX).

Authority

This announcement has been authorised for release by Mr Justin Virgin, Executive Director of Terrain Minerals Ltd.

Competent Person's Statements

The information in this report that relates to gold and base metal Exploration Results are based on information compiled by Mr. Benjamin Bell, who is a Member of the Australian Institute of Geoscientists and is a consultant retained by Terrain Minerals Ltd in the position of Head of Exploration. Mr Bell is a shareholder and options holder of Terrain Minerals Ltd. Mr Bell has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. Bell consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

ASX Listing Rule 14.3

In accordance with ASX Listing Rule 14.3 and its Constitution, the Company advises that valid nominations for the position of director remain open throughout the year.

Compliance Statement

The Company notes that within the announcement, all the information is referenced directly to the relevant original ASX market releases of that technical data.

Terrain Minerals Ltd would like to confirm to readers that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of the estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

Disclaimer

Information included in this release constitutes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue" and "guidance" or other similar words, and may include, without limitation, statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production outputs.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company's actual results, performance, and achievements to differ materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of reserves, political and social risks, changes to the regulatory framework within which the company operates or may in the future operate environmental conditions including extreme weather conditions, staffing and litigation.

Forward looking statements are based on the company and its management's assumptions made in good faith relating to the financial, market, regulatory and other relevant environments that exist and effect the company's business operations in the future. Readers are cautioned not to place undue reliance on forward looking statements.

Forward looking statements are only current and relevant for the date of issue. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the company does not undertake any obligation to publicly update or revise any of the forward looking statements or advise of any change in events, conditions or circumstances on which such statement is based.

JORC Code, 2012 Edition

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • <i>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.</i> • <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> • <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • No drill sample assays have been reported in this release. • The airborne magnetics images have been imaged from the geological survey of WA 40m grid of open file surveys. • One single line of airborne electromagnetics from the AustAEM survey is present in the survey area. The SkyTEM312Fast system was used.
Drilling techniques	<ul style="list-style-type: none"> • <i>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).</i> 	<ul style="list-style-type: none"> • No drilling has been reported in this release.
Drill sample recovery	<ul style="list-style-type: none"> • <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> • <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • No drilling has been reported in this release.
Logging	<ul style="list-style-type: none"> • <i>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.</i> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> • No drilling has been reported in this release.
Sub-sampling techniques and	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> 	<ul style="list-style-type: none"> • No drill sample assays have been reported in this release.

Criteria	JORC Code explanation	Commentary
sample preparation	<ul style="list-style-type: none"> • 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. 	
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"> • No drill sample assays have been reported in this release. • Airborne Magnetic imaging used the open file surveys and was merged and gridded by GSWA and imaged by Southern Geoscience Consultants.
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"> • No drill sample assays have been reported in this release. • Airborne magnetic and Airborne Electromagnetic data were stored and supplied by geological survey of WA.
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"> • No drilling has been reported in this release. • Any coordinates quoted in relation to the Lort River Project were recorded in MGA Zone 51 GDA94
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"> • No drilling has been reported in this release. • Airborne magnetic survey is a mixture of 200m and 400m line spacing.
Orientation of data in relation	<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 	<ul style="list-style-type: none"> • No drilling has been reported in this release. • Airborne magnetic and Airborne Electromagnetic survey were flown with East-west line direction.

Criteria	JORC Code explanation	Commentary
<i>to geological structure</i>	<p><i>deposit type.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> No drill sample assays have been reported in this release.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No drill sample assays are reported in this release.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Any exploration results referenced within this release are from the Western Australian tenement of E63/2447, located approximately 50 kilometres northwest of Esperance. Tenement E63/2447 is 100% owned and operated by Terrain Minerals. There are no known material issues with third parties in relation to this tenement. Tenement E63/2447 is in good standing with no known impediments to exploration.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The historic exploration across the Company's Lort River Project is summarized, acknowledged and appraised in the Company's ASX announcement dated 30 May 2022 (see http://terrainminerals.com.au/upload/documents/InvestorRelations/Releases/20220530DraftLortRiver-REERreviewJVfinalSN.pdf) The Company is unaware of any additional material exploration beyond that described in its 30 May 2022 ASX release.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> Terrain Minerals' working thesis mirrors that of IGO Limited (ASX: IGO) in that the Nova-Bollinger discovery, along with other known magmatic nickel-copper sulphide occurrences within the Albany-Fraser Belt (within with the Company's tenement E63/2447 is located), are proof of the fertility of the region for more discoveries, and like IGO's exploration team, Terrain Minerals is convinced that this belt should host multiple significant magmatic nickel-copper sulphide deposits, analogous to the Thompson Belt in Canada.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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</i> 	<ul style="list-style-type: none"> No drilling has been reported in this release.

Criteria	JORC Code explanation	Commentary
	<i>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 drill sample assay results have been reported in this release.
<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"> No drill sample assay results have been reported in this release.
<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"> The appropriate exploration maps and diagrams have been included within the main body of this release.
<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"> No drill sample assay results have been reported in this release.
<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, ground-water, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i> 	<ul style="list-style-type: none"> All the relevant data has been included in this release.
<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 nature and scale of planned further work has been detailed within the main body of this release.