

ASX:LEG

9 May 2017

ASX Announcement

Drilling and FLTEM Identify High Priority Conductor at Rockford (Fraser Range)

- Strong bedrock conductor N1 defined at Area N by FLTEM survey
- N1 conductor closely associated with gravity feature and aeromagnetic high
- Petrology confirms mafic rocks with supergene nickel minerals and copper sulphide (chalcopyrite)
- Drillhole RKAC068 returned 37m @ 0.1% Ni, 0.01% Cu from 24m to BOH, including values of 4m @ 0.14% Ni and 4m @ 0.02% Cu
- Drillhole RKAC119, 100m west of RKAC068, shows similar geology assays awaited
- Follow up diamond drilling planned to test N1 conductor in June 2017

Legend Mining Limited ("Legend") is pleased to announce the results of recent exploration activities over Area N at its Rockford Project in the Fraser Range district of Western Australia.

Fixed loop electromagnetic (FLTEM) surveying has modelled two conductors (N1-N2), with modelling of N1 defining a strong conductor (6,000-12,000S) at 500-550m depth. The N1 conductor lies on the SE margin of both a gravity feature and an aeromagnetic high, near the centre of a larger folded structure. This survey is a follow up on the previously announced conductors identified at Area N using Legend's innovative moving loop EM Surveys (MLTEM).

Assays from a single line of aircore drilling over conductor N1 returned anomalous nickel-copper (Ni-Cu) values of 37m @ 0.1% Ni and 0.01% Cu from 24m to bottom of hole (BOH) including values of 4m @ 0.14% Ni and 4m @ 0.02% Cu in RKAC068, see Figure 1. Follow up petrology on the BOH sample identified a favourable mafic host rock.



Legend Managing Director Mark Wilson said; "We have prioritised RC/diamond drill testing of the N1 conductor once a rig becomes available. The anomalous nickel and copper numbers in the aircore hole and the confirmation of favourable mafic rock in the bottom of hole certainly elevate the prospectivity of this area. The similar lithologies encountered in the aircore hole 100m away have given a dimension of a minimum 200m width for the mafic unit".

Figure 1: Aircore Drillhole RKAC068 (61m) at Area N



Technical Discussion

Area N

Area N is located in the northern part of the Rockford Project, approximately 60km from the Trans Australian Railway, see Figure 2.

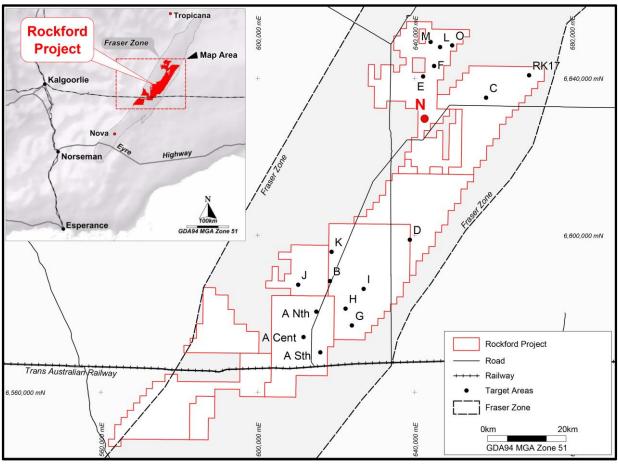


Figure 2: Area N Location

Area N is characterised by a large folded and/or intrusive feature with generally low magnetic response closely associated with a 2.5 x 0.5km NE-SW trending gravity feature, see Figure 3. Nine 500m spaced regional lines of MLTEM were originally completed over Area N identifying two strong to moderate conductive bodies (N1-N2), as reported in Legend ASX announcement 22 December 2016.

FLTEM Survey

Infill MLTEM and follow up FLTEM surveying was completed over both N1 and N2, aimed at better defining the conductors and allowing accurate geophysical modelling. The survey successfully defined the two conductors, which are shown on Figure 3 and summarised in Table 1. The original modelling of MLTEM data over N1 indicated two oppositely dipping conductors, however the focussed FLTEM survey resolved the conductor into a single steeply dipping body.

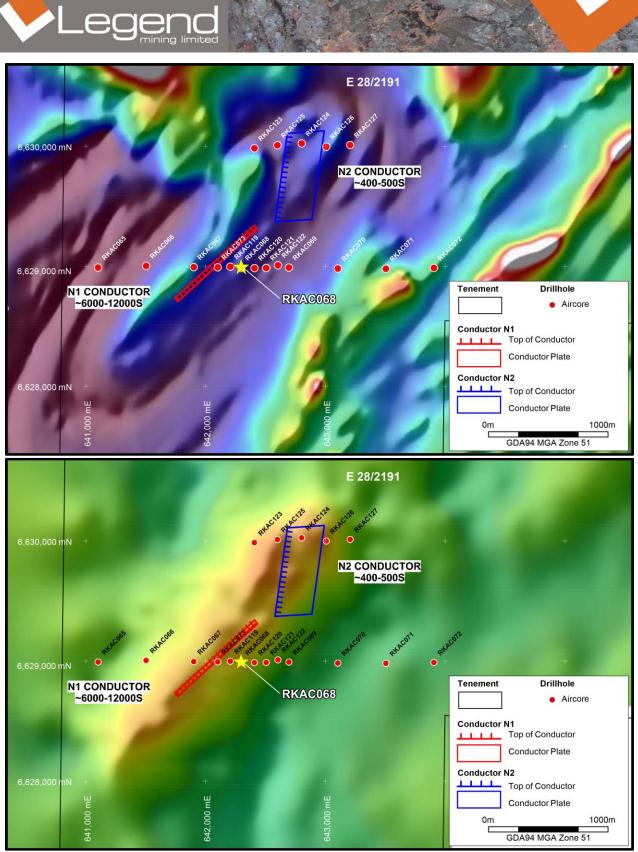


Figure 3: Area N Conductors on Aeromagnetics (Top) and Gravity (Bottom)

Table 1: Area N Conductor Description					
Conductor	Conductance	Dimensions	Depth to Top	Plate Orientation	
N1	6,000-12,000S	850m x 300m	500-550m	75-85 ⁰ NW dip	
N2	400-500S	700m x 600m	300-400m	50-65° E dip	



The modelling of conductor N1 indicates a strong bedrock conductor (6,000-12,000S) with dimensions 850m x 300m, a NE-SW strike, a steep $75-85^{\circ}$ NW dip and an estimated depth to top of source of 500-550m. The conductor lies on the SE margin of both the NE-SW trending gravity feature and central aeromagnetic high, see Figure 3. The coincidence of these three features greatly enhances the prospectivity of N1.

The conductance of the N2 conductor (400-500S) is an order of magnitude lower than N1 and considered a lower priority target at this stage.

Aircore Drilling

Two aircore drill traverses were completed at Area N aimed at providing bedrock information over the top of the N1-N2 conductors and gravity/aeromagnetic features, see Figure 3 and Table 2 for details.

Table 2: Aircore Drillhole Details for Area N							
Drillhole	Easting	Northing	RL (m)	Dip	Azimuth	Depth (m)	Conductor
RKAC065	641101	6628998	205	-90	0	22	N1
RKAC066	641502	6629011	204	-90	0	37	N1
RKAC067	641899	6629001	204	-90	0	81	N1
RKAC068	642296	6628995	206	-90	0	61	N1
RKAC069	642694	6628997	206	-90	0	66	N1
RKAC070	643102	6628989	206	-90	0	43	N1
RKAC071	643504	6628987	205	-90	0	27	N1
RKAC072	643905	6628994	204	-90	0	45	N1
RKAC073	642100	6629000	205	-90	0	54	N1
RKAC119	642205	6629005	205	-90	0	51	N1
RKAC120	642407	6628993	206	-90	0	33	N1
RKAC121	642505	6628995	206	-90	0	32	N1
RKAC122	642602	6629017	206	-90	0	38	N1
RKAC123	642407	6629991	207	-90	0	18	N2
RKAC124	642801	6630032	205	-90	0	45	N2
RKAC125	642597	6630017	206	-90	0	29	N2
RKAC126	643005	6630005	206	-90	0	28	N2
RKAC127	643205	6630018	207	-90	0	35	N2
Total						745	

Note: Co-ordinates GDA94 MGA Zone 51

The aircore traverse over the N1 conductor comprised 13 holes (RKAC065-073, 119-122) for 590m, intersecting a 200-300m wide central package of mafics flanked by felsic granulite, see Figure 4. Petrological analysis of a bottom of drillhole sample from RKAC068 identified a hornblende-rich metamorphosed mafic with an interpreted original igneous composition rich in orthopyroxene/clinopyroxene, with subordinate plagioclase and olivine and a cumulate texture. The petrology also revealed the presence of supergene nickel minerals along with chalcopyrite (copper sulphide) further confirming it as a highly favourable host rock.

This central metamorphosed mafic package is closely associated with the gravity feature, a localised aeromagnetic high, and importantly correlates with the up dip projection of the N1 conductor, see Figure 4.



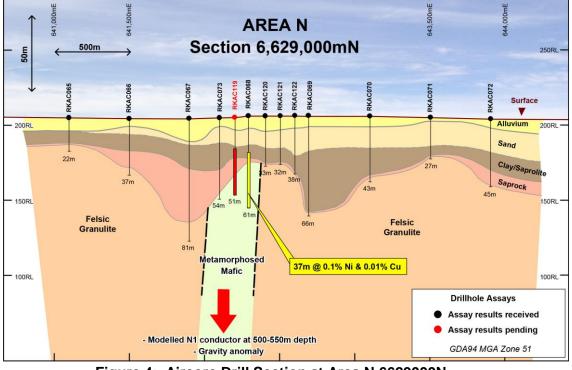


Figure 4: Aircore Drill Section at Area N 6629000N

Laboratory assay results from the drill traverse (4m composite samples) over the N1 conductor have been received with anomalous results returned from RKAC068, see Table 3. These assay results confirm the petrological observation of nickel and copper minerals and increase the potential of the mafic package hosting further mineralisation at depth.

	Table 3: Aircore Drillhole RKAC068 Results							
Drillhole	From (m)	To (m)	Int (m)	Ni (%)	Cu (%)	Co (%)	Cr (%)	MgO (%)
RKAC068	24	61 BOH	37	0.1	0.01	0.01	0.11	12.23
RKAC068	24	28	4	0.07	0.02	0.01	0.11	0.63
RKAC068	28	32	4	0.14	0.01	0.02	0.11	7.80
RKAC068	32	36	4	0.09	0.02	0.01	0.10	11.33
RKAC068	36	40	4	0.11	0.01	0.01	0.12	13.59
RKAC068	40	44	4	0.11	<0.01	0.01	0.12	14.42
RKAC068	44	48	4	0.10	0.01	0.01	0.11	15.69
RKAC068	48	52	4	0.09	0.01	0.01	0.10	15.58
RKAC068	52	56	4	0.10	0.01	0.01	0.14	14.99
RKAC068	56	61 BOH	5	0.08	0.01	0.01	0.11	15.30

Note: Results are from 4m composite samples BOH – Bottom of Hole

Subsequent to the drilling of RKAC068, four infill holes were completed to define the extent of the favourable mafic host rock. Drillhole RKAC119 located 100m to the west of RKAC068 intersected similar mafic lithologies, as did RKAC073, indicating a minimum 200m width for the mafic unit. Assay results for RKAC119 are pending.

A second aircore drill traverse comprising five holes (RKAC123-127) for 155m was completed over the northern margin of conductor N2 and the gravity anomaly, see Figure 3. Lithologies



intersected included a package of mafic and felsic granulite, with all assays from these drillholes pending.

Area N Summary

Area N is considered a very high priority target with a summary of positive features given below:

- Strong (6,000-12,000S) FLTEM bedrock conductor defined at N1
- N1 conductor closely associated with a gravity feature and aeromagnetic high
- Aircore drillhole RKAC068 over the up-dip projection of the N1 conductor intersected favourable metamorphosed mafic host rocks
- RKAC068 returned assay results of 37m @ 0.1% Ni, 0.01% Cu from 24m to BOH including values of 4m @ 0.14% Ni and 4m @ 0.02% Cu.

Future Activities

A diamond drilling programme with follow up downhole EM has been designed to test the N1 conductor and is planned to commence in June 2017 pending statutory approvals.

Competent Person Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr Derek Waterfield, a Member of the Australian Institute of Geoscientists and a full time employee of Legend Mining Limited. Mr Waterfield has sufficient experience that is relevant to the styles of mineralisation and types 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" (JORC Code). Mr Waterfield consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Visit <u>www.legendmining.com.au</u> for further information and announcements.

For more information:

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Appendix 1: Legend Mining Ltd – EM Survey/Aircore Drilling Programme Rockford Project JORC Code Edition 2012: Table 1

Section 1:	Sampling	Techniques and Data	
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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. 	 Aircore drilling was undertaken on broad spaced traverses testing aeromagnetic and gravity targets. The residual (non-transported) portion only of each drillhole was sampled as 4m composites to the end of hole, with a 1m bottom of hole sample also collected. All samples weighed 2-3kg. QAQC standards and duplicate samples were included routinely (approximately 1 each every 50 samples). Samples were submitted to an independent commercial assay laboratory. A four acid digest was used, with samples analysed for; Au by fire assay and a multi-element suite including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr by ICP-MS. Bottom of hole samples were also analysed for a suite of REE including Dy, Er, Eu, Gd, Ho, Lu, Nd, Pr, Sm, Tb, Tm, Yb by ICP-MS.
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.). 	 The aircore drilling technique was used, utilising a 85mm bit and completed by Drillpower.
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 	 Sample recoveries are visually estimated for each metre by the supervising rig geologist with poor or wet samples recorded in drill and sample log sheets. The sample cyclone is routinely cleaned at the end of each rod (3m) and when deemed necessary. No relationship has been determined



Criteria	JORC Code Explanation	Commentary
	grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	between sample recoveries and grade and there is insufficient data to determine if there is a sample bias.
Logging	 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 	 Geological logging of all drillholes included; lithology, grainsize, texture, deformation, mineralisation, alteration, veining, colour, weathering. Logging is qualitative and based on 1m intervals. Representative drill chips from the bottom of hole are retained in chip trays. All drillholes were logged in their entirety.
Sub-sampling techniques and sample preparation	 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. 	 No drillcore was collected. All aircore drill samples were collected using a PVC spear or scoop as 4m composites (2-3kg). Other composites of 2m, 3m and 5m and individual 1m samples were collected where required, i.e. bottom of hole. Both wet and dry samples were collected. The samples are dried and pulverised before analysis. QAQC reference samples and duplicates were routinely submitted with each sample batch. The size of the sample is considered appropriate for the mineralisation style sought and for the analytical technique used.
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 	 Aircore samples were analysed for Au by 50g fire assay with an ICP-OES finish, and for a multi-element suite by ICP-MS following a four acid digest. These assay methods are considered appropriate. QAQC standards and duplicate samples were included routinely (approximately 1 each every 50 samples). In addition reliance is placed on laboratory procedures and internal laboratory batch standards and blanks. All samples were analysed by Intertek Genalysis Laboratory Services Perth using methods; FA50/OE04 (Au), 4A/MS48 (multi-elements) and



Criteria	JORC Code Explanation	Commentary
	whether acceptable levels of	4A/MS48R (REE extended suite).
	accuracy (i.e. lack of bias) and precision have been established.	
Verification of sampling and assaying		 Primary data was collected in the field using a set of standard logging templates and entered into a laptop computer. The data was forwarded to Legend's database manager for validation and loading into the company's drilling database. No adjustments of assay results have
	 verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	been undertaken.
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. 	 Aircore drillhole collars are surveyed with a handheld GPS unit with an accuracy of ±5m which is considered sufficiently accurate for the purpose of the drillhole. All co-ordinates are expressed in GDA94 datum, Zone 51. Regional topographic control has an accuracy of ±2m based on detailed DTM data.
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. 	 Aircore drill traverses are not regular or grid based, with the location of traverses governed by aeromagnetic/gravity targets. Individual drillholes along traverses are spaced at 400m with minor infill to 200m were deemed necessary. Drillholes are sampled in the residual portion of the profile only as 4m composites on a routine basis or as 2m, 3m and 5m composites at the end of holes as required. Where anomalous values are returned, 1m samples may be submitted for assay.
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 orientation of the aircore drill traverses and broad spacing of the individual drillholes is considered to achieve unbiased sampling.
Sample security	The measures taken to ensure sample security.	 Individual calico sample bags were placed in polyweave bags and delivered directly to the assay laboratory prep facility in Kalgoorlie by company personnel.



Criteria	JORC Code Explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Internal audits/reviews of procedures are ongoing, however no external reviews have been undertaken.

Section 2: Reporting of Exploration Results

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. 	 The Rockford Project comprises nine granted exploration licences and three applications, covering 2,792km². Rockford JV tenements: E28/2188-2192 (70% Legend, 30% Rockford Minerals Pty Ltd), E28/1718 & E28/1727 (70% Legend, 30% Ponton Minerals Pty Ltd). Legend 100% owned: E28/2404-2405 & ELA28/2638-2640. The Project is located 280km east of Kalgoorlie mostly on vacant crown land with the eastern portion on Kanandah Pastoral Station. There are no Native Title Claims over tenements E28/2188-2192 & E28/2405. Tenements E28/1718, E28/1727 & E28/2404 are covered 90%, 20% and 100% respectively by the Ngadju Native Title Claim. The tenements are in good standing and there are no known impediments.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	Not applicable, not referred to.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The primary target is Nova style nickel- copper mineralisation hosted in high grade mafic granulites within the Fraser Complex. A secondary target is Tropicana style structurally controlled gold mineralisation.
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 	Refer to table of collars in body of report.



Criteria	JORC Code Explanation	Commentary
	from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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. 	 Weighted averaging based on sample interval has been used in the reporting of the aircore drilling results. No high grade results were returned (therefore not included in aggregate intercepts) and no metal equivalent values have been reported.
Relationship between mineralisation 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 geometry of anomalous nickel- copper assays with respect to the aircore drilling angle and orientation is unknown. All drillhole intercepts are measured downhole in metres.
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. 	 Project location, FLTEM conductor and drillhole location maps have been included in the body of the report.
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. 	All significant results are reported.
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; 	 Detailed high quality aeromagnetic and gravity datasets have been used in the targeting of FLTEM surveys and aircore drilling. Highpower EM Geophysical Services Pty Ltd have undertaken high powered fixed loop electromagnetic surveying over the Rockford Project.



Criteria	JORC Code Explanation	Commentary
	metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	 FLTEM Details Loop Sizes: 400mx600m up to 800mx800m, single turn Line/Station Spacing: 150m spaced lines with 100m stations Transmitter: HPTX (270-290 amps) Receiver: GDD Nordic EM24 Sensor: EMIT Fluxgate 3 component B field sensor Time base/frequency: 0.125Hz (2000msec time base), ~1.75msec and 10msec ramp
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. 	 Diamond drill testing and follow up downhole electromagnetics of the N1 conductor is planned.