

Orroroo Project Phase 1 Drilling Completed

Date: 21st December 2023

ASX Code: NFL

Capital Structure

Ordinary Shares: 38,000,000
 Unlisted Options: 9,990,000
 Listed Options: 10,999,808
 Performance Shares: 1,400,000
 Current Share Price: 23c
 Market Capitalisation: \$8.74m
 Cash: \$3.03m (30 Sept. 2023)
 Debt: Nil

Directors

Ben Phillips
 Executive Chairman

Leo Pilapil
 Technical Director

Patrick Holywell
 Non-Executive Director

Arron Canicais
 Company Secretary

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- **Aggressive Phase 1 drilling finished with 12 holes completed in December 2023**
- **Orroroo Project prospectivity expanded with 3 new drill holes delineating pU308**
- **Phase 2 drilling to commence early January 2024 to continue work in delineating sources of uranium**
- **EL6814 to see initial exploration and stakeholder engagement work commence early 2024**

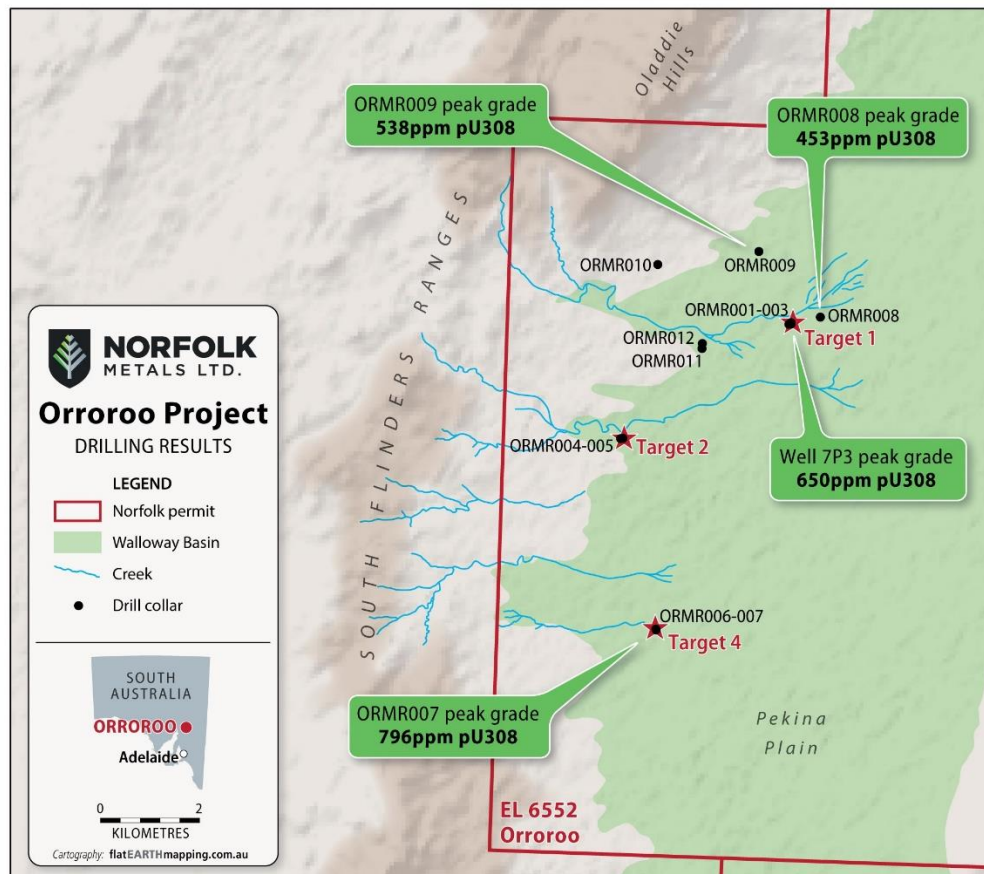


Image 1. Uranium *peak grade occurrences delineated by Norfolk Metals via Phase 1 drilling and February 2023 downhole geophysical survey

**peak grade(s) noted are the direct detection of pU308 over a 0.02m interval by Prompt Fission Neutron downhole logging within a composite intersection with a cut-off grade greater than 100ppm pU308. See previous ASX announcement from 27th February 2023 regarding uranium value reported at Well 7P3 (650ppm pU308).*

Commenting on Norfolk Metals, Executive Chairman, Ben Phillips, states:

"We are extremely pleased to execute on a program with such efficiency prior to the Christmas break and report further encouraging uranium results before taking a short break then continuing to drill at Orroroo. The synergy between Norfolk contractors and local stakeholders has been excellent. This first phase of drilling has cemented the prime location of the Orroroo project with an aligned and motivated community and company as we continue to explore the highly prospective Walloway Basin."

Phase 1 Drilling Completed

Norfolk Metals Ltd (**Norfolk** or the **Company**) is pleased to advise Phase 1 drilling has been completed with 12 holes drilled across EL6552. The program commenced with the rapid drill testing of the three known uranium occurrences at Targets 1, 2 and 4 as displayed in the Company announcement on 9th November 2023. Norfolk's' primary objective for this first phase of the program was to test the prospective palaeochannel and floodplain model. A commitment of up to nine (9) holes across the three (3) targets was made with the Company completing three (3) holes at Target 1 and two (2) holes each at both Target 2 and Target 4. While the direct delineation of palaeochannel(s) at the depths of the known uranium occurrences has not yet successfully been achieved, phase two drilling will continue to test this and the Company has gathered important information for further interpretation upon the completion of the maiden drill program.

Towards the completion of drilling at Target areas 1,2 and 4, the second hole at Target 4 (ORMR007) was tested with a Prompt Fission Neutron (PFN) tool across the horizon of elevated gamma returning a value of **147ppm pU308 over 0.36m with a peak reading of 796ppm pU308**. This is a positive reconfirmation of the previously reported uranium occurrence via spectral gamma logging of historical Linc Energy drill holes (see ASX announcement 27th February 2023).

Further Regional Uranium Occurrences Confirmed

Norfolk expanded Phase 1 of the maiden drill program, testing the previously released regional REDOX model of the Walloway Basin (see announcement 6th July 2023) within the approved drilling areas of EL6552. Two (2) of five (5) holes drilled returned very encouraging results with peak values of **453ppm pU308 at ORMR008** and **538ppm pU308 at ORMR009**. These encouraging results will be further interpreted based on all lithology logging and modelling at the end of the program.

HoleID	Easting_GDA94	Northing_GDA94	Max_Depth	Depth From	Depth To	Thickness	Average Grade (ppm pU308)	Max Grade
				(m)	(m)			(ppm pU308)
ORMR007	276725	6382330	149	116.13	116.49	0.36	147	796
ORMR008	279676	6388816	149	100.05	100.35	0.30	102	453
ORMR009	278363	6390067	149	121.95	122.15	0.20	113	538

Table 1. Phase 1 drill collars and notable intersections with peak grade

Note: No PFN logging completed on six (6) holes labelled ORMR001 through to ORMR006 due to either blockage in drill hole or the nature of initial stage of program testing palaeochannel and floodplain model. PFN logging was completed on holes ORMR010 through to ORMR012 however there are no material results to report from these three (3) holes.

Phase 2 Drilling Commencement

Phase 2 drilling is scheduled to commence early January 2024 to see the maiden campaign completed before the Australia Day weekend.

Engagement for EL6814 exploration

2024 will see Norfolk commence work on the exploration permit EL6814. The initial work to be conducted over EL6814 will be planned around the results and interpretation of the maiden drill program at EL6552. The Company remains enthusiastic on the prospectivity of the Walloway Basin outside of EL6552 where substantial areas have had no geophysical work or drilling completed. Stakeholder engagement has commenced with key members of the Johnburgh community in the northern part of EL6814.

Upcoming Events (Indicative Timeline)

January 2024 – Prospectivity and target mapping across EL6552 and EL6814;

January 2024 – Commencement of Phase 2 drilling program;

January 2024 – Results of Phase 2 drill program released to market; and,

March 2024 – Comprehensive report on results and prospectivity of EL6552 and EL6814.

END

This announcement has been authorised by the board of directors of Norfolk.

Competent Persons Statement

The information in this announcement that relates to exploration results, is based on, and fairly represents, information and supporting documentation prepared by Mr Leo Pilapil, a competent person who is a member of the Australasian Institute of Mining and Metallurgy. Mr Pilapil has a minimum of five years' 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 Joint Ore Reserves Committee Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Pilapil is a related party of the Company, being the Technical Director, and holds securities in the Company. Mr Pilapil has consented to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

About Norfolk Metals

The Roger River Project comprises two granted exploration licenses, EL20/2020, and EL17/2021, which together cover 261km², located 410km northwest of the capital city of Hobart, Tasmania. The Project is prospective for gold and copper as indicated by the intense silicification, argillisation and diatreme breccias in close proximity to the Roger River Fault along with carbonate-rich host rocks.

The Orroroo Uranium Project comprises two granted exploration licenses, EL6552, and EL6814, which together cover 659km², located approximately 274km northwest of the capital city of Adelaide, South Australia within the Walloway Basin, which is an elongate Tertiary Basin approximately 50km long and up to 15km wide. It consists of Tertiary and Quaternary sediments unconformably underlain by Adalaidian basement.

For further information please visit www.norfolkmetals.com.au.

APPENDIX 1
RAW PFN DATA
ORMR007

Depth m	BHCed grade %
116.13	0.0235
116.15	0
116.17	0
116.19	0.0188
116.21	0
116.23	0
116.25	0
116.27	0
116.29	0
116.31	0.0194
116.33	0
116.35	0.0489
116.37	0.0133
116.39	0.0133
116.41	0.0796
116.43	0
116.45	0
116.47	0.0171
116.49	0.0463

ORMR008

Depth m	BHCed grade %
100.05	0
100.07	0
100.09	0
100.11	0.0453
100.13	0
100.15	0.0324
100.17	0.0067
100.19	0.0111
100.21	0
100.23	0.0102
100.25	0.0316
100.27	0.0082
100.29	0
100.31	0.0057
100.33	0
100.35	0.0113

ORMR009

Depth m	BHCed grade %
121.95	0
121.97	0
121.99	0.04268
122.01	0.018667
122.03	0
122.05	0
122.07	0.053772
122.09	0.002103
122.11	0.006872
122.13	0
122.15	0

DRILL COLLARS

Hole_ID	Peg_ID	Easting_GDA94	Northing_GDA94	Max_Depth (m)
ORMR001	P01	279095	6388669	150
ORMR002	P02	279097	6388646	130
ORMR003	P53	279051	6388636	138
ORMR004	P18	275791	6386143	161
ORMR005	P19	275840	6386150	155
ORMR006	P46	276719	6382347	149
ORMR007	P47	276725	6382330	149
ORMR008	D	279676	6388816	149
ORMR009	C	278363	6390067	149
ORMR010	3	276342	6389690	149
ORMR011	1	277329	6388049	149
ORMR012	1.1	277330	6388150	149

JORC Code, 2012 Edition – Table 1 Report Template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Rotary mud drilling was used to obtain 2m samples in the non-target area and 1m mud /chip samples within the target area. • Downhole wireline logging using a Prompt Fission Neutron (PFN) tool was used to calculate pU3O8 from the ratio of epithermal and thermal neutrons. • The PFN used in this program was calibrated using industry standard procedures at the Australian Mineral Development Laboratories (AMDEL) calibration facility (Adelaide).
Drilling techniques	<ul style="list-style-type: none"> • 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). 	<ul style="list-style-type: none"> • All holes were drilled by Watson Drilling with typical hole diameter being 6" (152.4mm). • All holes were vertical.

Criteria	JORC Code Explanation	Commentary
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"> Caliper data show that borehole size increases in zones of unconsolidated sands, hence all pU3O8 grades were calculated and corrected for borehole size from caliper data taken every 5cm downhole using the equation $\{2.737 * \{\{EPITHERM\} / \{THERMAL\} - 0.02\}\}^{-1} * \text{Power}(10, -0.06) * \text{Power}\{\{CAL\}, 2\} + 0.0097 * \{CAL\} - 0.0313\}$
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"> Rotary mud drilling was used to obtain 2m samples in the non-target area and 1m mud /chip samples within the target area. All samples are geologically logged compliant with industry standards which included lithology, mineralogy, grain size/rounding/sorting, colour, redox All samples were photographed using a high-resolution camera.
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"> The depth of investigation of the PFN tool approximately 25-40 cm radius around the borehole to allow for accurate measurement of the ratio of epithermal/thermal neutrons for pU3O8 calculations. QA/QC of pU3O8 data included repeatability checks by regularly logging a fibreglass-cased calibration hole onsite at Alligator Energy (ASX:AGE) (MRC002, 723703E, 6324350N (GDA94), depth 84.5m). MRC002 has sufficient assay data in the target zone to compare/calibrate PFN data.
Quality of assay data and	<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. 	<ul style="list-style-type: none"> Three geophysical tools were used: Prompt Fission Neutron Tool (PFN) serial number 22

Criteria	JORC Code Explanation	Commentary
laboratory tests	<ul style="list-style-type: none"> 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. 	<p>manufactured by Geoinstruments Inc, Nacogdoches, Texas. Neutron generator 78-80kV, logging at 0.5m/minute.</p> <ul style="list-style-type: none"> Multisurvey tool (MST) serial number 24 manufactured by Geoinstruments Inc, Nacogdoches, Texas. Measures 16Normal, 64Long borehole resistance, Point Resistance, and Self Potential and uncalibrated natural gamma for depth matching. GeoVista 3-arm caliper, serial number 5589, measures the bore-hole size in millimetres for the length of the bore hole.
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"> QA/QC of pU3O8data included repeatability checks by regularly logging a fibreglass-cased calibration hole onsite at Alligator Energy (ASX:AGE) (MRC002,723703E, 6324350N (GDA94), depth 84.5m). MRC002 has sufficient assay data in the target zone to compare/calibrate PFN data. Natural gamma (on the caliper tool) was used for depth matching the PFN. No wireline stretch was observed during the program
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"> Drillholes are sited using a Garmin handheld GPS Grid System: GDA94 Projection 53H
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. 	<ul style="list-style-type: none"> Drill spacings chosen for the investigation were up to kms apart (see Figure 1 of the Announcement). Intercepts from the geophysics tools have been reported for intervals >0.02m downhole thickness with

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> Whether sample compositing has been applied. 	<p>an average of >100ppm pU308 for the PFN tool</p> <ul style="list-style-type: none"> The same parameters have been applied for the aggregate intercepts. Internal dilution of continuous zero readings no greater than 0.1m in downhole length has been included in the composite calculations.
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 should be assessed and reported if material. 	<ul style="list-style-type: none"> The mineralisation is interpreted to be contained in clay sediments. All drillholes are vertical which is appropriate for the orientation of the mineralisation.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> All samples are kept under locked security while logging is completed to then be stored at an adequate facility in Adelaide.
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 undertaken of sampling techniques to date.

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 	<ul style="list-style-type: none"> The Orroroo Project is located on exploration licenses EL6552 and EL6814 which are held 100% by Norfolk Continual engagement with the Department of Mining and Energy in South Australia, local heritage groups and stake holders is required and overseen by Norfolk management

Criteria	JORC Code Explanation	Commentary
	<p>area.</p>	
<p>Exploration done by other parties</p>	<ul style="list-style-type: none"> • <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> • Linc Energy drilled a series of wells exploring for coal and gas in the Walloway Basin (EL6552). The company used downhole wireline gamma spectrometry to determine locations of possible hydrocarbon traps.
<p>Geology</p>	<ul style="list-style-type: none"> • <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> • Walloway Basin, which is an elongate Tertiary Basin approximately 50km long and up to 15km wide. It consists of Tertiary and Quaternary sediments unconformably underlain by Adelaiddian basement. • Within the Tertiary two lithological units have been recognised, a lower interbedded fluvial sand, silt and clay, and an upper, more extensive and continuous lacustrine unit of grey, brown and black clay. Both consist of unconsolidated sediments and multiple aquifers, one of which may be artesian. The lower unit contains a known coal seam (Walloway Seam) of Lignite B rank. • The Walloway basin has no known uranium source defined in the nearby ranges and outcrops. However, the Walloway basin is underlain by granitic basement rocks which could possibly be the source of mobilized uranium. Another possible source may be the Brighton Limestone (known to have low levels of uranium) of the South Flinders Ranges located to the west of the tenement.
<p>Drill hole Information</p>	<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> 	<ul style="list-style-type: none"> • Drill hole information used in the geophysics survey is shown in Table 1 of this announcement.

Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. ● If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	
Data aggregation methods	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Intercepts from the geophysics tools have been reported for intervals >0.02m downhole thickness with an average of >100ppm pU308 for the PFN tool ● The same parameters have been applied for the aggregate intercepts. Internal dilution of continuous zero readings no greater than 0.1m in downhole length has been included in the composite calculations. ● The pU308 readings from the PFN tools have been included in the Appendix of the announcement.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ● 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'). 	<ul style="list-style-type: none"> ● For the historical Linc Energy drilling, no drilling intercepts reported ● For the PFN survey the uranium occurrence widths are considered close to true widths due to the generally flat lying orientation of the mineralisation and the use of perpendicular vertical drilling
Diagrams	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Drill hole locations regarding the geophysics survey is shown in Figure 1 of this announcement.
Balanced reporting	<ul style="list-style-type: none"> ● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting 	<ul style="list-style-type: none"> ● The accompanying document is a balanced report with a suitable cautionary note.

Criteria	JORC Code Explanation	Commentary
	of Exploration Results.	
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All meaningful information provided.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Further geophysics investigation and drilling will assist in delineating the potential paleochannels possibly containing uranium mineralization.