

ASX ANNOUNCEMENT

3 July 2025

SEISMIC RESULTS REVEAL LARGE-SCALE NATURAL HYDROGEN POTENTIAL

Constellation Resources Limited (the "Company" or "Constellation") is pleased to advise that it has completed reprocessing and interpretation of a historical Geoscience Australia seismic line 10GA-CP2 and received the final batch of Total Organic Carbon ("TOC") results within its Edmund-Collier Natural Hydrogen Project ("Edmund-Collier" or "Project"). Edmund-Collier is part of the Company's wider natural hydrogen ("NatH₂") land portfolio which spans 87,602km² across three sedimentary basins within Western Australia.

HIGHLIGHTS

- The Edmund-Collier Project represents a first-of-its-kind opportunity in Western Australia to explore for natural hydrogen across a large, underexplored basin, with no prior deep drilling to date.
- Cross section interpretation along the seismic line indicates the **organic rich Blue Billy** and **Discovery Formations**, extend across the Edmund-Collier Basin and **may be capable of generating large-scale natural hydrogen**, given the source rock and thermal maturity analysis completed.
- The Godfrey and Talga Faults (within the Basin) are both deep regional faults that extend from the basement to surface and provide ideal targets for surface soil gas sampling to test for potential surface gas seepage.
- Enhanced exploration potential at Edmund-Collier as natural hydrogen could be generated from both radiolysis (which may also generate helium) and the thermogenesis of organic shales.
- Final batch of TOC results continue to demonstrate strong values across the entire basin (average >2% TOC over large intervals, with any results over 2% considered good to excellent for potential NatH₂ production).
- Encouraging porosity values returned with maximum values for the Blue Billy (6.84%), Discovery (13.24%), Kiangi Creek (32.23%) and Irregully/Gooragoora Formations (10.91%).
- The Company plans to undertake a soil gas survey across its NatH₂ portfolio to directly detect the potential presence for micro seepage of targeted gases in the following months.



Figure 1: Edmund Collier Conceptual Hydrogen System Against Reprocessed Seismic Image.

For further information, please contact:

Peter Woodman

Managing Director Tel: +61 8 9322 6322 Peter Muccilli Technical Director Tel: +61 8 9322 6322

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SEISMIC REPROCESSING AND INTERPRETATIONS

Seismic surveys which are used extensively by exploration companies, are considered the most effective geophysical tool to map subsurface geology (>1km). Seismic line 10GA-CP2 was acquired in 2010 by Geoscience Australia and GSWA and transects both the entire Edmund-Collier Basin and the Project area. The reprocessing of the open file seismic data was undertaken by Howman Seismic and Thunderstone Energy with the geological interpretation compiled by Good Earth Geological Consulting and Thunderstone Energy.

The Edmund Collier Basin reaches a maximum depth ~ 4.2km within the Wanna Syncline and overlays the Ashburton and Gascoyne Provinces basement units. The focus of the reprocessing was on optimising the resolution in the top four kilometres of the seismic section and the high-resolution imagery obtained has greatly enhanced the geological detail that can be extrapolated along the section. The resultant cross section interpretation along the seismic line indicates the organic rich Blue Billy and Discovery Formations (the thickness of which also appears to increase significantly to 700m, within the Wanna Syncline) extend across the Edmund Collier Basin and may be capable of generating large-scale natural hydrogen, given the source rock and thermal maturity analysis completed to date.

The Godfrey and Talga Faults are both deep regional scale faults that are interpreted to extend from the basement to surface. The fault locations provide attractive target zones for surface soil gas sampling to test for potential surface gas seepage.

The geological interpretation from the reprocessed seismic and CSIRO and laboratory results, indicate all elements that are needed to establish a viable NatH₂ system (Figure 1). These elements include a variety of source rocks, migration pathways, reservoirs, seals and potential traps.

The generation of NatH₂ can be from a variety of sources within the Company's Project area. The main sources for NatH₂ being considered are:

- 1. the basement (via radiolysis, which may also generate helium); and
- 2. organic shales (via thermogenesis) which enhance the exploration potential for the Project.

THERMOGENIC HYDROGEN ASSESSMENT – EDMUND-COLLIER NATURAL HYDROGEN

The final batch of TOC results received from **eight diamond holes** continue to return highly encouraging TOC values, consistent with previously reported results (Table 1). TOC values are an important measurement to confirm the richness of organic content within a geological formation.

Analysis by Core Laboratories of the second batch of core samples taken over regular intervals from organic-rich shales units have returned highly encouraging TOC values over large widths, including:

- DDH2: **TOC values ranging from 0.92% to 8.40%** (average 5.24%) from five core samples over a <u>141m down hole interval</u> through the Discovery Formation (0-186m).
- DDH3: TOC values ranging from 2.06% to 7.56% (average 4.17%) from eight core samples over a <u>74m down hole interval</u> through the Discovery Formation (0-115m).
- DH13: TOC values ranging from 2.15% to 4.29% (average 2.81%) from five core samples over a <u>57m</u> down hole interval through the Discovery Formation (0-78m).
- ISBD2: TOC values ranging from 0.49% to 5.17% (average 2.33%) from eleven core samples over a <u>193m down hole interval</u> through the Discovery or Kiangi Creek Formation (0-291m).



The importance of investigating the organic rich units within the Edmund-Collier is that a body of research and case examples demonstrates that during continued burial and increasing temperature, the remaining degraded organic matter and pyrobitumens can produce hydrogen, through metagenic and metamorphic processes until graphite is ultimately formed (Figure 2; Hanson and Hanson, 2023).

Optimal hydrogen generation from organic rich rocks is predicted at ~250°C to 500°C, which equates potentially to at least the minimum temperature that organic-rich shales have reached in the deepest parts of the Wanna Syncline (now at present-day ~4km depth). The collective research works invokes a hydrogen generation window that develops within a sedimentary basin where organic-rich formations have been heated beyond 250°C and **presents a potential new frontier for natural hydrogen exploration.**

There has been no deep drilling in the Wanna Syncline which is a large-scale basinal feature within the Edmund–Collier Basins, extending in excess of 300km east-west and 40km north-south.



Figure 2: Hydrogen generation model (Hanson & Hanson, 2023) with interpreted Edmund-Collier Maturation Window Plotted.



POROSITY MEASUREMENTS – EDMUND-COLLIER NATURAL HYDROGEN

An initial batch of 63 core plugs were also sent to Core Laboratories for porosity measurements and results received (Table 2 and Figure 3). The holes selected were the same publicly available diamond holes that were laid out for the TOC and thermal maturity sampling and analysis. Encouraging conventional porosity values were returned from various sedimentary formations, although values were highly heterogeneous; Blue Billy (<0.1% - 13.24%), Discovery Formation (<0.1% - 13.24%), Kiangi Creek Formation (0,1% - 32.23%), Irregully/ Gooragoora Formations (<0.1% - 10.91%). Additional, sampling and analysis are required to better understand porosity distribution within these formations.



Figure 3: Edmund-Collier Basin outcropping organic-rich shale units and drill hole sample locations



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Figure 4: Constellation SPA-AO application locations.



EDMUND-COLLIER NATURAL HYDROGEN PROJECT BACKGROUND

The Edmund-Collier Project is in the Gascoyne Province of Western Australia. The four contiguous SPA-AOs 37,288km²) are bordered to the north, east and west by gas transmission pipelines (Figure 4).

The Edmund Fold Belt is largely outcropping and contains a well-documented folded succession of up to 4-5km thick Proterozoic clastics, carbonates and dolerite sills, with associated deeply penetrating fault systems that cap radiogenic Proterozoic basement providing the elements needed for a total hydrogen system with possible reservoirs, seals, migration pathways and traps identified.

Potential sources for hydrogen along with thermogenic hydrogen from organic rich rocks includes gases generated from heat-producing radiogenic Paleoproterozoic granites (Durlacher and Moorarie Supersuites) from the hydrolysis of groundwater and from primordial degassing. Helium generation is from the extremely long-lived radiogenic decay of uranium and thorium in these radiogenic granites and potentially also from some sedimentary rocks.

A significant opportunity in the Edmund–Collier is the development of multiple and long-lived traps for gas accumulations, including anticlinal and structural traps, stratigraphic depositional pinch outs and diagenetic traps, and density driven hydrologic traps. These prospective fold-closures at surface can be extrapolated in the subsurface in various geophysical interpretations. Importantly, widespread anticline development since c. 1171 Ma and voluminous dolerite intrusions have provided traps for the potential accumulation of ongoing hydrogen and helium gases for at least one billion years.

The Company plans to undertake a soil gas survey across its entire portfolio to directly detect the potential presence for micro seepage of targeted gases in the following months.

COMPETENT PERSONS STATEMENT

The information in this announcement that relates to Exploration Results is based on information reviewed by Mr Peter Muccilli, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Muccilli is the Technical Director for Constellation Resources Limited and a holder of shares and incentive options in Constellation Resources. Mr Muccilli 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 Muccilli consents to the inclusion in the announcement 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 Results is extracted from the Company's ASX announcement dated 19 May 2025 and titled, "Thermogenic Hydrogen Potential Confirmed at Edmund-Collier" which is available to view at the Company's website on www.constellationresources.com.au. The information in the original ASX Announcement that related to Exploration Results was based on, and fairly represents information compiled by Peter Muccilli, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Muccilli is a Technical Director of Constellation Resources Limited and a holder of shares and options in Constellation Resources Limited. Mr Muccilli 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). The Company confirms that it is not aware of any information or data that materially affects the information included in the original market announcement. 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 announcement.



FORWARD LOOKING STATEMENTS

Statements regarding plans with respect to Constellation's projects are forward-looking statements. There can be no assurance that the Company's plans for development of its projects will proceed as currently expected. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

This ASX Announcement has been authorised for release by the Company's Managing Director, Mr Peter Woodman.

References

Hanson J and Hanson H, 2023, Hydrogen's organic genesis: Unconventional Resources, V 4.

Table 1: TOC Results (second batch) from Edmund–Collier Drillholes

*GDA94 UTM MGA Zone 50

Drillhole	Sample ID	Formation	Sample Depth (m)	TOC (wt%)	Easting*	Northing*	Collar Azimuth (degrees)	Collar Dip (degrees)	Total Depth (m)
DD97BC1 6	DD97BC16_54.00	Discovery Fm	54.00	3.70	677317	7311917	0	-90	466.00
DD97BC1 6	DD97BC16_110.00	Discovery Fm	110.00	0.82	677317	7311917	0	-90	466.00
DDH2	DDH2_49.99	Discovery Fm	49.99	5.81	620896	7311344	0	-60	N/A
DDH2	DDH2_70.71	Discovery Fm	70.71	8.40	620896	7311344	0	-60	N/A
DDH2	DDH2_90.22	Discovery Fm	90.22	6.85	620896	7311344	0	-60	N/A
DDH2	DDH2_109.73	Discovery Fm	109.73	4.21	620896	7311344	0	-60	N/A
DDH2	DDH2_191.00	Discovery Fm	191.01	0.92	620896	7311344	0	-60	N/A
DDH3	DDH3_89.92	Discovery Fm	89.92	1.86	618266	7311144	0	-70	N/A
DDH3	DDH3_95.40	Discovery Fm	95.40	3.71	618266	7311144	0	-70	N/A
DDH3	DDH3_104.85	Discovery Fm	104.85	4.04	618266	7311144	0	-70	N/A
DDH3	DDH3_113.08	Discovery Fm	113.08	4.45	618266	7311144	0	-70	N/A
DDH3	DDH3_124.66	Discovery Fm	124.66	6.63	618266	7311144	0	-70	N/A
DDH3	DDH3_136.70	Discovery Fm	136.70	3.04	618266	7311144	0	-70	N/A
DDH3	DDH3_150.88	Discovery Fm	150.88	7.56	618266	7311144	0	-70	N/A
DDH3	DDH3_163.93	Discovery Fm	163.93	2.06	618266	7311144	0	-70	N/A
DH13	DH13_7.01	Discovery Fm	7.01	3.22	397715	7424711	0	-90	N/A
DH13	DH13_10.36	Discovery Fm	10.36	4.29	397715	7424711	0	-90	N/A
DH13	DH13_23.77	Discovery Fm	23.77	2.09	397715	7424711	0	-90	N/A
DH13	DH13_39.35	Discovery Fm	39.34	2.15	397715	7424711	0	-90	N/A
DH13	DH13_64.13	Discovery Fm	64.14	2.31	397715	7424711	0	-90	N/A
DH4	DH4_24.79	Discovery Fm	24.79	2.13	397882	7425264	0	-90	N/A
DH4	DH4_36.19	Discovery Fm	36.20	2.46	397882	7425264	0	-90	N/A
DH4	DH4_45.31	Discovery Fm	45.31	2.65	397882	7425264	0	-90	N/A

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FD1	FD1_151.90	?Irregully/Kiangi Ck Fm	151.90	0.13	479250	7333095	140	-60	501.20
FD1	FD1_182.50	?Irregully/Kiangi Ck Fm	182.50	0.14	479250	7333095	140	-60	501.20
FD1	FD1_243.20	?Irregully/Kiangi Ck Fm	243.20	0.05	479250	7333095	140	-60	501.20
FD1	FD1_325.84	?Irregully/Kiangi Ck Fm	325.84	0.04	479250	7333095	140	-60	501.20
FD1	FD1_388.39	?Irregully/Kiangi Ck Fm	388.39	0.06	479250	7333095	140	-60	501.20
FD1	FD1_443.32	?Irregully/Kiangi Ck Fm	443.32	0.07	479250	7333095	140	-60	501.20
ISBD2	ISBD2_98.17	?Discovery/Kiangi Ck Fm	98.17	2.41	506290	7292436	60	-80	475.00
ISBD2	ISBD2_101.97	?Discovery/Kiangi Ck Fm	101.97	1.73	506290	7292436	60	-80	475.00
ISBD2	ISBD2_123.40	?Discovery/Kiangi Ck Fm	123.40	4.61	506290	7292436	60	-80	475.00
ISBD2	ISBD2_139.15	?Discovery/Kiangi Ck Fm	139.15	2.57	506290	7292436	60	-80	475.00
ISBD2	ISBD2_159.95	?Discovery/Kiangi Ck Fm	159.95	5.17	506290	7292436	60	-80	475.00
ISBD2	ISBD2_174.20	?Discovery/Kiangi Ck Fm	174.20	3.33	506290	7292436	60	-80	475.00
ISBD2	ISBD2_192.60	?Discovery/Kiangi Ck Fm	192.60	2.92	506290	7292436	60	-80	475.00
ISBD2	ISBD2_209.87	?Discovery/Kiangi Ck Fm	209.87	1.27	506290	7292436	60	-80	475.00
ISBD2	ISBD2_241.00	?Discovery/Kiangi Ck Fm	241.00	0.49	506290	7292436	60	-80	475.00
ISBD2	ISBD2_265.70	?Discovery/Kiangi Ck Fm	265.70	0.63	506290	7292436	60	-80	475.00
ISBD2	ISBD2_290.95	?Discovery/Kiangi Ck Fm	290.95	0.53	506290	7292436	60	-80	475.00

Table 2: Porosity Results from Edmund–Collier Drillholes

Drillhole	Sample ID	Formation	Lithology	Sampl e Depth (m)	Porosit y (%)	Grain Densit y (g/cc)	Easting *	Northing *	Collar Azimuth (degrees)	Collar Dip (degrees)	Total Depth (m)
E044/0051	E044/0051_87.84	Blue Billy Fm	Sandstone	87.84	0.14	2.779	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_115.33	Blue Billy Fm	Sandstone	115.33	0.24	2.884	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_119.9	Blue Billy Fm	Sandstone	119.90	0.10	2.788	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_122.27	Blue Billy Fm	Sandstone	122.27	0.25	2.704	451720	7409140	0	-90	441.4 0
17BBDD00 2	17BBDD002_125.4 0	Blue Billy Fm	Sandstone	125.40	0.46	2.727	460215	7397610	210	-80	649.0 0
E044/0051	E044/0051_130.80	Blue Billy Fm	Sandstone	130.80	0.40	2.736	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_147.10	Blue Billy Fm	Sandstone	147.10	<0.1	2.743	451720	7409140	0	-90	441.4 0
17BBDD00 2	17BBDD002_157.8 6	Blue Billy Fm	Sandstone	157.86	6.87	2.985	460215	7397610	210	-80	649.0 0
E044/0051	E044/0051_165.42	Blue Billy Fm	Sandstone	165.42	0.20	2.761	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_174.87	Blue Billy Fm	Sandstone	174.87	0.31	2.707	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_198.70	Blue Billy Fm	Sandstone	198.70	0.24	2.717	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_222.65	Blue Billy Fm	Sandstone	222.65	0.08	2.693	451720	7409140	0	-90	441.4 0
E044/0051	E044/0051_229.82	Blue Billy Fm	Sandstone	229.82	0.17	2.806	451720	7409140	0	-90	441.4 0
17BBDD00 2	17BBDD002_301.3 4	Blue Billy Fm	Siltstone/mudston e	301.34	0.76	2.620	460215	7397610	210	-80	649.0 0
17BBDD00 2	17BBDD002_325.2 7	Blue Billy Fm	Shale	325.27	0.06	2.598	460215	7397610	210	-80	649.0 0
17BBDD00 2	17BBDD002_370.5 0	Blue Billy Fm	Sandstone	370.50	0.14	2.953	460215	7397610	210	-80	649.0 0
17BBDD00 2	17BBDD002_415.7 5	Blue Billy Fm	Sandstone	415.75	0.15	2.885	460215	7397610	210	-80	649.0 0
17BBDD00 2	17BBDD002_493.5 0	Blue Billy Fm	Sandstone	493.50	0.08	2.861	460215	7397610	210	-80	649.0 0
DH13	DH13_10.26	Discovery Fm	Shale	10.26	12.60	2.618	397882	7425264	0	-90	N/A
DH4	DH4_29.74	Discovery Fm	Shale	29.74	13.24	2.676	397882	742526 <mark>4</mark>	0	-90	N/A

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DD97BC16	DD97BC16_40.80	Discovery Fm	Sandstone	40.80	<0.1	2.591	677317	7311917	0	-90	466.0 0
DD97BC16	DD97BC16_41.67	Discovery Fm	Shale	41.67	11.63	2.676	677317	7311917	0	-90	466.0 0
DDH2	DDH2_43.74	Discovery Fm	Shale	43.74	0.16	2.508	620896	7311344	0	-60	N/A
DD97BC16	DD97BC16_48.03	Discovery Fm	Shale	48.03	9.20	2.692	677317	7311917	0	-90	466.0 0
DH4	DH4_48.97	Discovery Fm	Shale	48.97	3.03	2.628	397882	7425264	0	-90	N/A
DDH2	DDH2_50.77	Discovery Fm	Shale	50.77	<0.1	2.546	620896	7311344	0	-60	N/A
DD97BC14	DD97BC14_57.65	Discovery Fm	Shale	57.65	8.69	2.521	682102	7313931	0	-90	153.3 0
DD97BC16	DD97BC16_65.40	Discovery Fm	Sandstone	65.40	4.60	3.287	677317	7311917	0	-90	466.0 0
DDH2	DDH2_73.76	Discovery Fm	Shale	73.76	2.55	2.606	620896	7311344	0	-60	N/A
DD97BC16	DD97BC16_88.15	Discovery Fm	Sandstone	88.15	1.36	3.585	677317	7311917	0	-90	466.0 0
DD97BC14	DD97BC14_88.60	Discovery Fm	Shale	88.60	7.60	2.570	682102	7313931	0	-90	153.3 0
DDH3	DDH3_96.79	Discovery Fm	Shale	96.79	1.30	2.558	618266	7311144	0	-70	N/A
ISBD2	ISBD2_102.04	Discovery Fm	Shale	102.04	0.13	2.738	506290	7292436	60	-80	475.0 0
DD97BC14	DD97BC14_107.20	Discovery Fm	Shale	107.20	8.19	2.617	682102	7313931	0	-90	153.3 0
DDH2	DDH2_113.72	Discovery Fm	Shale	113.72	6.97	2.704	620896	7311344	0	-60	N/A
DD97BC16	DD97BC16_121.65	Discovery Fm	Sandstone	121.65	1.04	3.606	677317	7311917	0	-90	466.0 0
DDH3	DDH3_127.56	Discovery Fm	Shale	127.56	<0.1	2.555	618266	7311144	0	-70	N/A
DD97BC16	DD97BC16_138.08	Discovery Fm	Sandstone	138.08	1.23	3.496	677317	7311917	0	-90	466.0 0
ISBD2	ISBD2_139.30	Discovery Fm	Shale	139.30	0.72	2.714	506290	7292436	60	-80	475.0 0
DDH3	DDH3_139.62	Discovery Fm	Shale	139.62	0.10	2.532	618266	7311144	0	-70	N/A
DDH2	DDH2_164.90	Discovery Fm	Shale	164.90	5.59	2.748	620896	7311344	0	-60	N/A
ISBD2	ISBD2_192.70	Discovery Fm	Shale	192.70	0.33	2.694	506290	7292436	60	-80	475.0 0
DDH2	DDH2_238.10	Discovery Fm	Sandy siltstone	238.10	<0.1	2.767	620896	7311344	0	-60	N/A
ISBD2	ISBD2_265.80	Discovery Fm	Shale	265.80	0.19	2.749	506290	7292436	60	-80	475.0 0
DDH3	DDH3_268.25	Discovery Fm	Sandstone	268.25	<0.1	2.720	618266	7311144	0	-70	N/A
ISBD2	ISBD2_272.58	Discovery Fm	Sandstone	272.58	0.16	2.777	506290	7292436	60	-80	475.0 0
17BBDD00 2	17BBDD002_550.6 5	Gooragoora Fm	Sandstone	550.65	0.61	2.725	460215	7397610	210	-80	649.0 0
17BBDD00 2	17BBDD002_585.9 5	Gooragoora Fm	Carbonate	585.95	0.21	2.858	460215	7397610	210	-80	649.0 0
17BBDD00 2	17BBDD002_596.7	Gooragoora Fm	Carbonate	596.75	0.19	2.844	460215	7397610	210	-80	649.0 0
HD1	HD1_92.30	Irregully Fm	Carbonate	92.30	0.81	2.861	572117	7346069	318	-61.7	616.5
FD1	FD1_369.55	Irregully Fm	Sandstone	369.55	0.08	2.807	479250	7333095	140	-60	501.2 0
FD1	FD1_448.43	Irregully Fm	Sandstone	448.43	<0.1	2.813	479250	7333095	140	-60	501.2 0
FD1	FD1_499.85	Irregully Fm	Sandstone	499.85	<0.1	2.770	479250	7333095	140	-60	501.2 0
17BBDD00 2	17BBDD002_622.2	Irregully Fm	Carbonate	622.25	0.56	2.849	460215	7397610	210	-80	649.0 0
DD97BC14	DD97BC14_143.87	Kiangi Ck Fm	Sandstone	143.87	0.75	2.745	682102	7313931	0	-90	153.3 0
DD97BC14	DD97BC14_145.95	Kiangi Ck Fm	Sandstone	145.95	0.77	2.786	682102	7313931	0	-90	153.3
DD97BC14	DD97BC14_153.20	Kiangi Ck Fm	Sandstone	153.20	0.20	2.755	682102	7313931	0	-90	153.3
HY2	HY2_80.80	Kiangi Creek Fm	Sandstone	80.80	0.45	2.754	658740	7272975	0	-90	638.5
HY2	HY2 98.30	r Kiangi Creek Fm	Sandstone	98.30	5.32	2.749	658740	7272975	0	-90	638.5
HY2	HY2 121 65	r Kiangi Creek Fm	Sandstone	121.65	8 39	2 731	658740	7272975	0	-90	0 638.5
HY2	HY2 128 20	? Kiangi Creek Fm	Sandstone	128.20	13 14	2 667	658740	7272975	0	-90	0 638.5
HV2	HV2 140 90	? Kiangi Creek Fm	Sandstone	140.00	32.72	2.007	658740	7272075	0	_00	0 638.5
MODOOA	MCD001 111 00	? Kiangi Creek Fm	Sandatar -	140.90	0.40	2.072	402405	7200004	0	-90	0 351.6
MGD001	MGD001_141.90	?	Sandstone	141.90	0.10	2.810	493405	7298234	0	-90	0

Appendix 1: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (i.e. 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.	Core samples were sourced from three publicly available diamond drill holes drilled within the boundaries of the Edmund–Collier Special Prospecting Authorities applications. The diamond drillholes are located at the Geological Survey of Western Australia Perth Core Library, 37 Harris St, Carlisle WA 6101. Standard industry cores collected by Geological of Western Australia staff. The small core samples (several centimetre lengths) were selected from the core available and delivered to the following laboratories for analyses: Core Laboratories Australia Pty Ltd located at 89 Leach Hwy, Kewdale WA 6105 and then sent to Core Laboratories in Houston, TX for analysis.
Drilling techniques	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).	Further details in the reported mineral diamond holes that are available publicly can be found in the following references; 17BBDD002: Drilled by AusQuest, refer to open file WAMEX reports A116556, A131800, A132230, A135257 E044/0051. Drilled by Alcoa of Australia Ltd refer to open file WAMEX reports A12226, A105861, A110192, A122258 and A143954 DD97BC14 and DD97BC16 Drilled by Rio Tinto Exploration refer to open file WAMEX reports A54567 and A110192 DDH2, DDH3, DDH4, DH13and DDH14 were drilled by Westfield Minerals N.L. refer to open file WAMEX reports A571 and A143954

Criteria	JORC Code explanation	Commentary
		FD1 was drilled by Dolphin Resources, refer to open file WAMEX reports A94468, A96612 and A105861
		ISBD02 was drilled by Western Mining Corporation, refer to WAMEX reports A41630, A110192 and A105861.
		MGDD001 was drilled by Sandfire Resources, refer to WAMEX report A71801 for further details.
		HY2 was drilled by Abra Mining, refer to WAMEX reports A91526, A104717 and A105586.
		See included table for Hole ID locations and intervals analysed.
Drill sample	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable.
recovery	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.	
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.	The selected holes were logged by CR1 Energy consultant lain Copp from Good Earth Consulting to interpret geological intervals and select representative sample sites for both TOC and porosity samples.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
Sub- sampling	If core, whether cut or sawn and whether quarter, half or all core taken.	Total organic carbon (TOC) analyses were carried out as part of industry standard Rock-Eval analysis used to
techniques and sample	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	determine hydrocarbon source-rock potential, maturity, and kerogen quality.
preparation	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	 Sample Preparation Finely milled rock samples (cuttings, chips, or plugs) are required for analysis, with the 1-4 mm size fraction
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	preferred for cuttings. 2. Heating and Analysis:

Criteria	JORC Code explanation	Commentary
	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.	The sample is heated under an inert gas (like helium or nitrogen) at a controlled rate. This process releases hydrocarbons and CO2, which are measured by the Rock-Eval instrument. 3. Parameter Measurement:
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The Rock-Eval pyrolysis generates several parameters, including:
		S1 and S2 Peaks: These represent the free and initially generated hydrocarbons, respectively.
		S3 Peak: This indicates the amount of CO2 released during the heating process.
		Tmax: The maximum temperature at which the pyrolysis peak occurs, reflecting the sample's thermal maturity.
		4. Shale Play Mode:
		Rock-Eval can be adapted for unconventional source rocks, using two heating stages to obtain Sh0 (free hydrocarbons), Sh1 (sorbed hydrocarbons), and Sh2 (potential hydrocarbon generation).
		5. Derived Parameters:
		From the Rock-Eval data, other parameters can be calculated, including Hydrogen Index (HI) , and Oxygen Index (OI).
		Porosity measurements were analysed from core plugs that were sources from diamond cores (whole – half cut or HQ/NQ in size), Core plugs were taken over regular intervals throughout selected formations. The diamond holes are publically available in the GSWA core library and were cut and collected from GSWA technicians. The samples were submitted to Core Laboratories Australia based in Perth.
		For each reported porosity measurement (%), the core plug location downhole has been tabled.,
Quality of assay data and laboratory	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Rock-Eval Analysis is a standard test to evaluate the hydrocarbon source-rock potential, maturity, and kerogen quality, including Total Organic Carbon (TOC) levels.
tests	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.	TOC measures the organic richness of a rock in weight per cent organic carbon. Organic richness is the first requirement for a potential thermogenic source rock. The dried samples are pulverised and treated with hot and cold hydrochloric acid to remove carbonate minerals (inorganic carbon). After acid treatment, the

Criteria	JORC Code explanation	Commentary
	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.	organic carbon content is determined by combustion of the sample in a Leco TOC. Leco TOC was performed using the Leco SC-632 instrument and Rock-Eval 6 pyrolysis analysis was performed using the Rock-Eval 6 instrument. The samples were crushed to -60 mesh prior to the analyses.
		Rock-Eval Pyrolysis. The Rock-Eval 6 Analyzer (standard model S/N 18-001) provides a rapid (30min/sample) source rock analysis of a small sample (50-70 mg) by heating the rock over temperature range of 300-650 °C. The temperature is set to hold at 300 °C for 3 minutes and increase to 650°C at 25 °C /min temperature rate. An IFP standard is used as to calibrate the instrument. This analysis quickly evaluates the concentration of volatile and soluble organic matter (S1), the amount of pyrolysable organic matter (S2) and thermal maturity (Tmax). The results identify possible source on which more detailed analyses may be performed.
		To determine the thermal maturity of samples, the reported estimated vitrinite reflectance equivalent (EqVRo) of bitumen using industry standard processes, was prepared for CSIRO under the second technical service agreement/ Constellation Resources by independent consultants Energy Resources Consulting Pty Ltd PO Box 54 Coorparoo, Qld 4151.
		For a core sample, a flat face perpendicular to bedding is prepared by grinding. This is placed in a 30 mm diameter mould along with several randomly oriented grains. The whole is mounted in epoxy resin.
		The epoxy resin samples are polished using a variety of wet and dry papers, diamond polishing compounds and colloidal silica. The polished samples are dried in a desiccator for a minimum of 12 hours prior to analysis.
		Analysis is made using a Leica MP4500P system with Hilgers DISKUS software. A mechanical stage is used to traverse the sample in a regular pattern. Mean maximum reflectance in oil of the organic matter is determined by rotating the microscope stage. Reflectance is determined of a 2 μ m2 area at 546nm using a total magnification of 500X.
		Equivalent vitrinite reflectance of solid bitumens was calculated using the conversion for Mesoproterozic solid bitumens (SB) as outlined by Luo <i>et al.</i> (2021) "Thermal evolution behaviour of the organic matter

Criteria	JORC Code explanation	Commentary
		and a ray of light on the origin of vitrinite-like maceral in the Mesoproterozoic and Lower Cambrian black shales: Insights from artificial maturation." Int J. Coal Geol (244): EqVRo = 0.87×SBRo + 0.25.
Verification of sampling and assaying	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.	The TOC levels reported in historical testwork by Pangaea Resources utilising Core Laboratories on the same holes reported similar levels. Reference source: <i>Pangaea Resources, 2016, Core Library Sampling Results</i> <i>P437: Geological Survey of Western Australia, M-series</i> <i>A110192 (open file).</i> Historical thermal maturity analyses mentioned were selected from the same holes and were also submitted to Core Laboratories for analysis (<i>Pangaea Resources,</i> 2016). Porosity measurements were carried out by accredited Laboratory, Core Laboratories Australia, using an industry standard methodology. The porosity was measured using the ULTRAPORE-300 helium-porosity automatic measuring instrument on the provided core plugss Verification of porosity measurements was achieved by collecting several plugs over regular intervals for the selected geological formations. The density of samples collected points to the heterogeneity of porosity measurements that can be recorded within a formation. More sampling and analysis are required to better understand porosity distribution within these
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.	The hole coordinates were taken from submitted DEMIRS reports, and GPS accuracy deemed appropriate for basin-scale prospectivity analysis.
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.	Deeper diamond drill holes were selected and sampled according to whether they intercepted the organic-rich shale units in the Edmund-Collier Basins as well as other geological units to get variety of porosity measurements over the stratigraphic column. TOC laboratory results analysed core plugs that were taken at over regular intervals throughout the organic shale unit. For each reported TOC grade, the core plug location downhole has been tabled. Over the reported

Criteria	JORC Code explanation	Commentary			
		interval of the organic rich unit, the number of analysis and the range of TOC values has been recorded to demonstrate variability with a ""notional" average estimated.			
		The vitrinite reflectance equivalent (EqVR) values were measured from core samples taken at intervals throughout the organic shale unit. For each reported EqVR result, the interval downhole has been tabled. The number of analysis and the range of EqVR values has also been recorded to demonstrate variability with a "notional" average estimated over the reported interval.			
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.	Diamond holes 17BBDD001, 17BBDD002 and E044/0051 intersects the organic-rich Blue Billy Formation along the northwest margins of the Pingandy Shelf. Thickness of the Blue Billy Formation within these holes are interpreted to be up to 370 metres, but elsewhere along the Pingandy Shelf, the Blue Bully Formation is interpreted to be up to 800m in thickness based from GSWA mapping. The Blue Billy Formation dips shallowly to the south and strikes northwest. These units are outcropping and both holes are drilled directly down dip.			
	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 Pingandy Shelf is located on the footwall side of the steeply south dipping Talga Fault corridor. The Talga Fault corridor defines the northern margin of the Wanna Syncline.			
		Diamond hole DD97BC16 intersects the organic-rich Discovery Formation on the Godfrey Block. The hole is located down dip of the outcropping surface around the Brumby Anticline. The Discovery Formation as interpreted here also includes underlying shales and siltstones of the uppermost Kangi Creek Formation.			
		Diamond holes DDH2 DDH3 and DH13 intersects the organic-rich Discovery Formation on the Godfrey Block.			
		Diamond Hole ISBD2 intersects the organic-rich Discovery Formation and Kiangi Formation on the Godfrey Block.			
		The Godfrey Block is located on the southern side of the Wanna Syncline along the footwall side of the Godfrey Fault – Mt Vernon Fault.			
		The Discovery Formation in DD97BC16 is shallowly dipping to the south and strikes west. The estimated			

Criteria	JORC Code explanation	Commentary
		thickness of the Discovery Formation in the area is around 700m.
Sample security	The measures taken to ensure sample security.	Not applicable.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The TOC results are being reviewed by CSIRO as part of the ongoing Technical Research Agreement.

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	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 Edmund-Collier Project is located in the Gascoyne Province of Western Australia. The four contiguous SPA-AOs (477 graticular blocks covering 37,288km ²) span an east–west strike length of approximately 380km and are bordered to the north, east and west by gas transmission pipelines
	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 Company is the preferred applicant of the SPA-AO applications. The step-by-step process tow working on an SPA-AO is highlighted below:
		1. The Company confirms its intention to proceed with the SPA-AO on the basis of the requirements outlined, including undertaking a number of regulatory requirements, namely:
		i. Entering into the expedited procedure process under the Native Title Act 1993 (Cth) future act provisions;
		ii. Engaging relevant stakeholders (pastoral stations, other tenement holders etc); and
		iii. Assessment and approval of proposed exploration work programs under the Petroleum and Geothermal Energy Resources Act 1967 (WA)("PGERA") which includes the submission of an Environment Plan which must be approved prior to commencement of any activity.
		2. It is expected the time required to complete the above regulatory requirements will be approximately six to twelve months, subject to successful stakeholder engagement.
		Once complete, the SPA-AO will proceed to be granted to allow a six-month work window, the dates of which

Criteria	JORC Code explanation	Commentary
		can be elected by the Company to assist in optimal sampling conditions.
		3. The Company then has a further six months to evaluate the exploration data collected during the field programs and if the results warrant further work, apply for a Petroleum Exploration Permit ("PEP"). The number of blocks within a single PEP permitted to be applied for is limited to 50% of the SPA-AO area and the application process for a PEP through to grant, the timeframe of which is dependent upon consultation periods with relevant stakeholders.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Limited historic analyses of both shale units indicate they contain pyrobitumen and are organic-rich and overmature (i.e. experienced high temperatures and potentially within the hydrogen window) (Pangea Resources, 2016).
Geology	Deposit type, geological setting and style of mineralisation.	The Edmund–Collier SPA comprises the western parts of the Mesoproterozoic Edmund Basin and the overlying Collier Basin (1679–1067 Ma), which together lie along the central part of the Proterozoic Capricorn Orogen.
		The shallower parts of the northern basin margin have been targeted for shale-hosted exhalative mineralisation (lead- zinc) by previous explorers in both the organic-rich Blue Billy and Discovery Formations.
		Thermogenic hydrogen from organic source-rocks forms during hydrocarbon generation, but importantly continues well after the hydrocarbon gas window begins to close at around 250°C. With increasing temperature due to continued burial, the degraded organic matter and pyrobitumens produced during hydrocarbon generation continue to release hydrogen through a metagenesis process until graphite is ultimately formed. This process also matches the temperatures and results at which laboratory experiments and petrochemical processes used to generate hydrogen-stock are currently observed.
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:	Contained in the body of text.

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Criteria	JORC Code explanation	Commentary
	 easting and northing of the drill hole collar 	
	 elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar 	
	\circ 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	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.	Not applicable.
	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.	
Relationship between mineralisation widths and intercept	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	Not applicable.
lengths	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 (eg 'down hole length, true width not known').	

Criteria	JORC Code explanation	Commentary
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.	A representative cross-section and plans of drillhole locations have been provided 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 avoiding misleading reporting of Exploration Results.	Commentary and diagrams include all key inputs for balanced reporting.
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; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	10GA-CP2 seismic reflection line acquired in 2010 and was 180 kilometres in length. The seismic line was part a subsection of a broader survey named 'The Capricorn Deep Crustal Survey' (totalling 581 line km's). The greater survey traverses the entire Capricorn Orogen under a collaboration with Geoscience Australia, the Geological Survey of Western Australia (GSWA) and AuScope Earth Imaging (a component of NCRIS).
		The Capricorn Deep Crustal Survey aim was to image the extent of the Archean crust beneath the Capricorn Orogeny at depth >4km and identify the relationship between the Pilbara and Yilgarn cratons. The processed data and images were made available to industry in 2011 and readily available on Geoscience Australia website or WAPIMS.
		10GA-CP2 seismic line transects the company land portfolio and provides valuable insights to the subsurface geology.
		The reprocessing of the open file seismic data from 10GA-CP2 was undertaken by Howman Seismic and Thunderstone Energy, focussed on optimising the resolution in the top 4 kilometres of the seismic section.
		The migrated high-resolution imagery obtained has greatly enhanced the geological detail that can be extrapolated along the section including formation architecture, basin depth and <u>lotting</u> major faults boundaries in the top 4 kilometres.
		The interpretation of the resultant imagery was undertaken by consultants from Good Earth Geological Consulting and Thunderstone Energy along Seismic line 10GA-CP2

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Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (eg 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.	Further work is planned as stated in this announcement.



Notice under section 708AA(12) of the Corporations Act 2001 (Cth)

On 22 May 2025, the Company announced the launch of a non-renounceable pro-rata entitlement offer to eligible shareholders to acquire one (1) new fully paid ordinary share (**New Share**) for every three (3) existing shares held in the Company, at an offer price of \$0.12 per New Share to raise approximately \$2.52 million (before costs) (**Entitlement Offer**).

The purpose of this notice is to inform shareholders of the changes to the Company's circumstances since the previous notices dated 23 May 2025 and 24 June 2025, issued under section 708AA(2)(f) of the *Corporations Act 2001* (Cth) (**Corporations Act**), and constitutes a notice for the purposes of section 708AA(12) of the Corporations Act, as modified by the Australian Securities and Investments Commission (**ASIC**) Corporations (Non-Traditional Rights Issues) Instrument 2016/84 (**ASIC Instrument**) in relation to the new information described in this announcement.

The Company confirms the following:

- (a) the Company will offer the New Shares under the Entitlement Offer without disclosure under Part 6D.2 of the Corporations Act;
- (b) this notice given under section 708AA(12)(f) of the Corporations Act, as modified by the ASIC Instrument, updating its previous notices under section 708AA(2)(f) of the Corporations Act dated 23 May 2025 and 24 June 2025;
- (c) as at the date of this notice, the Company has complied with:
 - (i) the provisions of Chapter 2M of the Corporations Act as they apply to the Company; and
 - (ii) sections 674 and 674A of the Corporations Act;
- (d) as at the date of this notice, on the basis of this ASX announcement dated 3 July 2025, there is no information:
 - (i) that has been excluded from a continuous disclosure notice in accordance with the ASX Listing Rules; and
 - (ii) that investors and their professional advisers would reasonably require for the purpose of making an informed assessment of:
 - (A) the assets and liabilities, financial position and performance, profits and losses and prospects of the Company; or
 - (B) the rights and liabilities attaching to the New Shares; and
- (e) the potential effect that the issue of the New Shares, under the Entitlement Offer, will have on the control of the Company is as follows:
 - (i) if all eligible shareholders take up their entitlements under the Offer, the New Shares issued under the Offer will have no effect on the control of the Company and all shareholders will hold the same percentage interest in the Company, subject only to changes resulting from ineligible shareholders being unable to participate in the Offer;
 - (ii) in the more likely event that there is a shortfall in the Offer, eligible shareholders who do not subscribe for their full entitlement of New Shares under the Offer will be diluted relative to those eligible shareholder who subscribe for some or all of their entitlement, and will be diluted by any take up of shortfall shares; and
 - (iii) in relation to any person participating in the shortfall offer, the Directors will ensure that no person will be issued, through participating in the shortfall offer, New Shares if such issue will result in their voting power in the Company exceeding 19.9%.