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ASX Release

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Beneficiation and metallurgical test work drilling program complete at Letlhakane Uranium Project, Botswana.

HIGHLIGHTS:

Multiple thick lodes intersected in drilling, best results include:-

- **GODD0093 8.0m @ 448 ppm U_3O_8 [45.3m], including 1.1m @ 1,942 ppm U_3O_8**
- **GODD0094 7.2m @ 224 ppm U_3O_8 [38.7], including 0.9m @ 739 ppm U_3O_8**
- **GODD0097 7.4m @ 192 ppm U_3O_8 [43.5m]**
- **GODD0099 6.3m @ 227 ppm U_3O_8 [28.0m]**
- **MOKD0114 10.6m @ 182 ppm U_3O_8 [9.0m]**
- **MOKD0120 6.8m @ 371 ppm U_3O_8 [38.8m], including 1.4m @ 708 ppm U_3O_8**
- **SEDD0029 16.1m @ 276 ppm U_3O_8 [36.5m], including 1.0m @ 954 ppm U_3O_8**
- **SEDD0031 8.0m @ 358 ppm U_3O_8 [55.0m], including 0.8m @ 2,260 ppm U_3O_8**
- **SEDD0033 7.9m @ 487 ppm U_3O_8 [31.8m], including 2.4m @ 1,167 ppm U_3O_8**

A-Cap Energy Limited (ASX:ACB) has returned major uranium intersections in drilling at its flagship Letlhakane Project in Botswana, host to one of the world's top 10 undeveloped uranium resources.

The 1,406m diamond drill core program over 24 PQ triple tube holes program collected approximately 2 tonne of mineralised material for beneficiation, leaching, and metallurgical testwork already underway *(See Figure 1 & Table 1).*

A-Cap Managing Director Dr Andrew Tunks said the diamond drilling intercepts confirmed Letlhakane' phenomenal potential.

"It is a massive low-grade deposit with thick mineable lenses of mineralisation that are very continuous. The next steps are to get this sample material to Australia and commence a raft of beneficiation testwork to determine the potential to upgrade the ore and reduce the acid consuming minerals. These two factors will have an enormous impact on an updated feasibility study which we will commence once the data is received," Dr Tunks said.

Samples from Gorgon South, Kraken, and Serule West were selected as representative of likely Run Of Mine (ROM) ore using criteria which:

- includes the most dominant ore types in the Resource Model (dominantly primary ore)
- is spatially representative of optimised pits from 2015 Feasibility Study
- includes material which was scheduled early in the mining plan from the same 2015 Study.

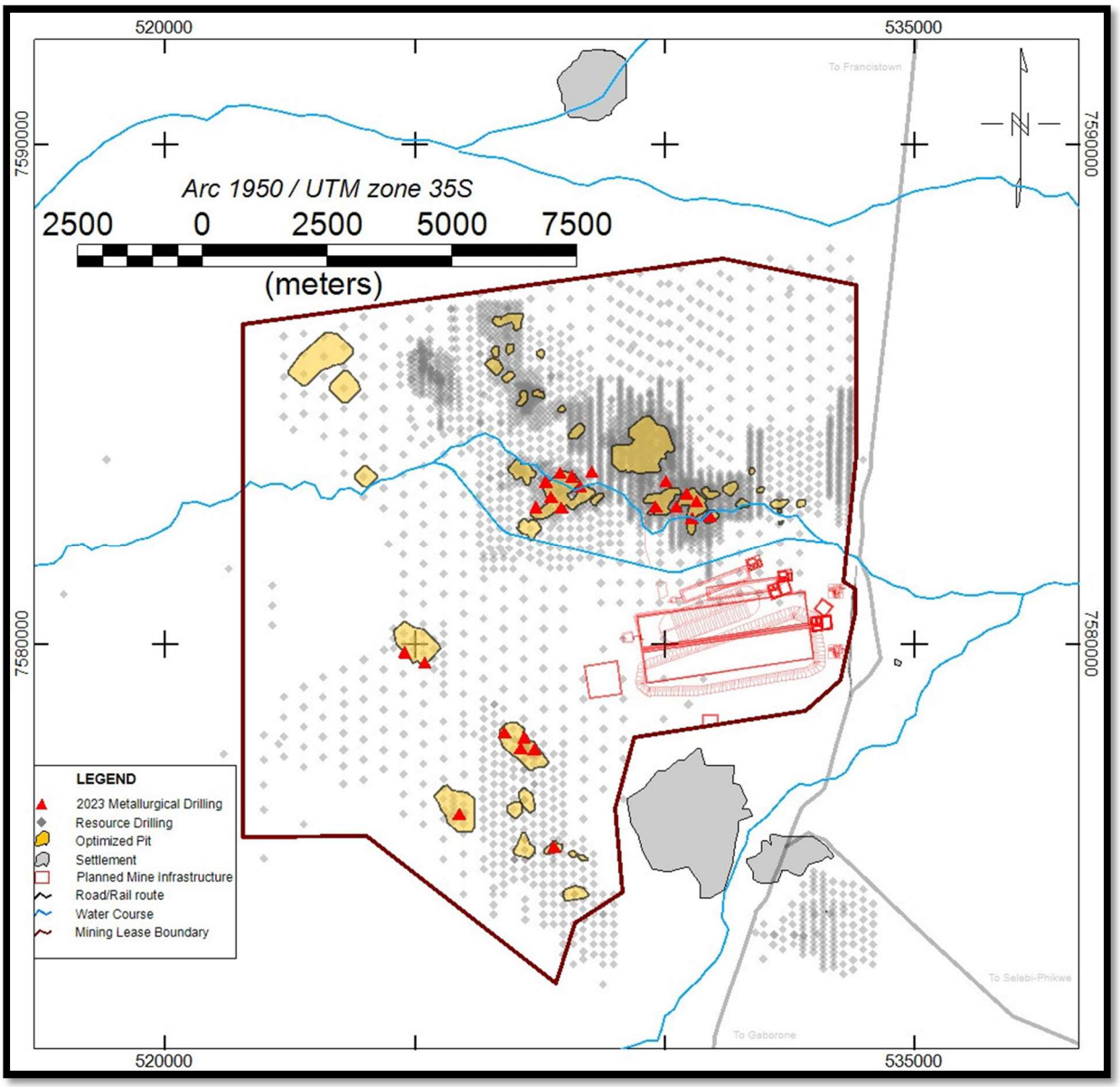

Figure 1: *Drillhole locations*

Best intersections include[1]:

- GODD0091 - 1.9m @ 347 ppm U_3O_8 [35.9m]

[1] Refer Appendix 1 for Mineralised Intercept Table

- GODD0092 - 4.1m @ 252 ppm U_3O_8 [30.1m]
- GODD0093 – 8.0m @ 448 ppm U_3O_8 [45.3m], including 1.1m @ 1,942 ppm U_3O_8
- GODD0094 – 7.2m @ 224 ppm U_3O_8 [38.7], including 0.9m @ 739 ppm U_3O_8
- GODD0096 – 2.7m @ 265 ppm U_3O_8 [45.6m]
- GODD0097 – 7.4m @ 192 ppm U_3O_8 [43.5m]
- GODD0099 – 6.3m @ 227 ppm U_3O_8 [28.0m]
- MOKD0114 – 10.6m @ 182 ppm U_3O_8 [9.0m]
- MOKD0115 – 4.3m @ 393 ppm U_3O_8 [22.3m], including 0.8m @ 742 ppm U_3O_8
- MOKD0116 – 2.3m @ 333 ppm U_3O_8 [25.1m], including 0.8m @ 742 ppm U_3O_8
- MOKD0117 – 5.0m @ 282 ppm U_3O_8 [24.5m], including 0.8m @ 735 ppm U_3O_8
- MOKD0119 – 2.1m @ 635 ppm U_3O_8 [40.4m] , including 1.4m @ 854 ppm U_3O_8
- MOKD0120 – 6.8m @ 371 ppm U_3O_8 [38.8m], including 1.4m @ 708 ppm U_3O_8
- SEDD0028 – 4.8m @ 270 ppm U_3O_8 [47.5m]
- SEDD0028 – 3.8m @ 608 ppm U_3O_8 [53.8m], including 0.8m @ 2,130 ppm U_3O_8
- SEDD0029 – 16.1m @ 276 ppm U_3O_8 [36.5m], including 1.0m @ 954 ppm U_3O_8
- SEDD0031 – 8.0m @ 358 ppm U_3O_8 [55.0m], including 0.8m @ 2,260 ppm U_3O_8
- SEDD0032 – 3.2m @ 473 ppm U_3O_8 [64.4m], including 0.9m @ 853 ppm U_3O_8
- SEDD0033 – 7.9m @ 487 ppm U_3O_8 [31.8m], including 2.4m @ 1,167 ppm U_3O_8

***Table 1**: 2023 Beneficiation & Metallurgical Testwork Drilling Program - PQ drill hole summary.*

DEPOSIT	HOLE_ID	X_UTM Z35S	Y_UTM Z35S	Z_UTM Z35S	DEPTH (m)
GORGON SOUTH	GODD0091	528545.00	7583419.00	932.32	73.20
GORGON SOUTH	GODD0092	528342.00	7583109.00	934.42	47.70
GORGON SOUTH	GODD0093	528518.00	7583423.00	934.28	59.70
GORGON SOUTH	GODD0094	527955.00	7583007.00	934.28	61.34
GORGON SOUTH	GODD0095	527726.00	7582921.00	935.33	38.75
GORGON SOUTH	GODD0096	527624.14	7583213.57	934.15	71.75
GORGON SOUTH	GODD0097	528125.61	7583359.00	933.83	71.75
GORGON SOUTH	GODD0098	527226.73	7583214.61	935.68	65.75
GORGON SOUTH	GODD0099	527425.27	7582713.20	936.31	44.75
KRAKEN	MOKD0114	530022.00	7583230.00	930.12	37.20
KRAKEN	MOKD0115	530439.22	7582970.45	929.59	44.75
KRAKEN	MOKD0116	530639.74	7582822.27	927.85	38.65
KRAKEN	MOKD0117	530241.05	7582730.53	928.16	41.30
KRAKEN	MOKD0118	529820.61	7582721.37	929.19	32.04
KRAKEN	MOKD0119	530544.87	7582498.53	926.72	59.75
KRAKEN	MOKD0120	530829.93	7582524.80	926.61	62.75
SERULE WEST	SEDD0027	527393.94	7577846.28	947.44	61.07
SERULE WEST	SEDD0028	527116.34	7577874.25	948.39	71.75
SERULE WEST	SEDD0029	526796.14	7578195.74	947.77	56.75
SERULE WEST	SEDD0030	527185.98	7578098.50	947.30	74.75
SERULE WEST	SEDD0031	525197.13	7579590.17	941.21	86.75
SERULE WEST	SEDD0032	524798.06	7579792.43	941.55	81.75
SERULE WEST	SEDD0033	525890.31	7576555.89	957.24	80.75
SERULE WEST	SEDD0034	527791.48	7575898.70	956.41	41.75
Total	**24 holes**				**1,406.45**

Beneficiation Studies

There is >2,500 kg of mineralised material grading 277 ppm U_3O_8 (with ~1,200 kg grading 470 ppm U_3O_8). The application for an Export Permit to ship the sample to Australia is being prepared.

To increase Letlhakane's profitability, A-Cap has engaged technical partners with world-leading expertise in uranium ore sorting and processing that specialise in increasing the ore feed grade to the mill as well as removing acid consuming gangue utilising advances in sorting technology.

The ore material collected in recent drilling will be sent to mineral processing leaders **Nagrom** in Perth for sample preparation before being sent to magnetic separation company **Steinert Australia** for sorting/beneficiation testwork utilising radiometric, XRT, and hyperspectral sensors as well as beneficiation techniques by gravity separation using spiral and dense media separation.

Steinert have been highly successful upgrading uranium ore with sorting programs for other clients in recent years[2], using radiometric information to pre-classify the ore into product and waste for their program development.

Once they have a "pre-classified" ore and waste fraction, they process these fractions through a sorter with multiple sensors and record all the information from the sensors available on this sorter (colour, laser, induction and XRT). Subsequently they use proprietary software to detect variations in sensor data between the ore and waste fractions either in: density, colour or any of the other sensors in combination.

There are over 200 parameters recorded and they use multiple sensor combinations to find the best potential sorting algorithm to sort the specific ore.

A-Cap Energy's Board has authorised the release of this announcement to the market.

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[2] Refer Lotus Resources (ASX:LOT) ASX Release 5 July 2021 *Ore sorting testwork exceeds expectations*

About A-Cap Energy

A-Cap Energy is an Australian resources company focused on the development of critical minerals serving the world's path to carbon net zero. Amid renewed global focus on nuclear energy, the company's flagship Letlhakane Uranium Project in Botswana hosts one of the world's top 10 undeveloped uranium resources – 365.7 million pounds of contained U_3O_8 (100ppm U_3O_8 cut-off).

A-Cap's Wilconi Project, which represents the company's first nickel-cobalt laterite project interest, is being advanced in response to the significant growth expectation in the supply of battery materials to the OEM automotive and battery industries. The company aims to establish key strategic and commercial relationships to take advantage of material processing and refinery technologies according to the highest Environmental, Social and Governance (ESG) standards.

JORC Resources

	Total Indicated			Total Inferred			Global Total		
	Mt	U_3O_8 ppm	U_3O_8 Mlbs	Mt	U_3O_8 ppm	U_3O_8 Mlbs	Mt	U_3O_8 ppm	U_3O_8 (Mlbs)
100	197.1	197	85.5	625	203	280.1	822.1	202	365.7
200	59.2	323	42.2	209.7	321	148.2	268.9	321	190.4
300	22.2	463	22.7	81.6	446	80.3	103.8	450	102.9

Competent person's statement

Information in this report relating to Uranium Exploration results, is based on information compiled by Mr Peter Sheehan, an employee of A-Cap Energy Limited and a member of AusIMM. Mr Sheehan has sufficient experience that 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 under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Sheehan consents to the inclusion of the data in the form and context in which it appears.

Appendix 1 Mineralised Intercept Table

Prospect	Hole ID	From (m)	To (m)	Width (m)	U_3O_8_ppm
SERULE WEST	SEDD0027	*Rods stuck in Hole - no Gamma readings*			
SERULE WEST	SEDD0028	44.8	46.3	1.5	139
		47.5	52.4	4.8	270
		53.8	**57.6**	**3.8**	**607**
	including	***54.3***	***55.0***	***0.8***	***2,130***
		62.6	**64.3**	**1.7**	**487**
SERULE WEST	SEDD0029	28.5	30.5	2.0	173
		36.5	52.6	16.1	276
	including	***50.9***	***51.9***	***1.0***	***954***
SERULE WEST	SEDD0030	28.3	29.3	1.0	181
		46.0	47.0	1.0	135
		51.3	55.9	4.7	160
		63.0	66.3	3.4	176
SERULE WEST	SEDD0031	**55.0**	**62.9**	**8.0**	**358**
	including	***61.9***	***62.7***	***0.8***	***2,260***
		64.7	69.4	4.7	288
	including	***67.8***	***69.2***	***1.4***	***537***
		73.8	75.0	1.2	353
SERULE WEST	SEDD0032	64.4	67.6	3.2	473
	including	***64.5***	***65.4***	***0.9***	***853***
		72.5	78.3	5.8	216
SERULE WEST	SEDD0033	18.8	20.0	1.2	175
		31.8	**39.7**	**7.9**	**487**
	including	***37.0***	***39.4***	***2.4***	***1,167***
		41.4	42.4	1.0	124
		62.8	64.0	1.2	271
		70.8	73.0	2.3	318
SERULE WEST	SEDD0034	**21.9**	**23.2**	**1.3**	**448**
		32.5	35.2	2.8	169
GORGON SOUTH	GODD0091	8.4	10.7	2.3	133
		35.9	37.8	1.9	347
		47.1	48.3	1.2	196
GORGON SOUTH	GODD0092	30.1	34.2	4.1	252
GORGON SOUTH	GODD0093	41.4	42.6	1.2	313
		45.3	**53.3**	**8.0**	**448**
	including	***49.0***	***50.1***	***1.1***	***1942***
GORGON SOUTH	GODD0094	10.3	15.1	4.8	156
		19.0	20.5	1.5	376
		34.0	36.2	2.1	203
		38.7	45.9	7.2	224
	including	***38.9***	***39.8***	***0.9***	***739***

Prospect	Hole ID	From (m)	To (m)	Width (m)	U_3O_8_ppm
GORGON SOUTH	GODD0095	**17.8**	**19.8**	**2.0**	**417**
		30.4	32.7	2.3	291
GORGON SOUTH	GODD0096	15.4	17.1	1.7	148
		45.6	48.3	2.7	265
		49.8	51.2	1.4	258
		62.3	65.6	3.3	103
GORGON SOUTH	GODD0097	**36.1**	**37.1**	**1.1**	**403**
		43.5	50.9	7.4	192
		58.0	59.5	1.6	113
GORGON SOUTH	GODD0098	28.6	31.3	2.7	213
		35.3	36.8	1.5	120
		49.4	54.7	5.3	146
GORGON SOUTH	GODD0099	12.5	14.1	1.6	299
		17.9	18.9	1.0	200
		23.8	25.0	1.2	140
		28.0	34.3	6.3	227
		39.5	41.0	1.5	329
KRAKEN	MOKD0114	9.0	19.6	10.6	182
KRAKEN	MOKD0115	8.8	10.3	1.5	179
		22.3	**26.6**	**4.3**	**393**
	including	***23.3***	***24.1***	***0.8***	***887***
KRAKEN	MOKD0116	35.9	37.8	1.9	347
		25.1	27.4	2.3	333
	including	***26.6***	***27.3***	***0.8***	***742***
		30.8	33.7	2.9	137
KRAKEN	MOKD0117	21.1	26.1	5.0	282
	including	***24.8***	***25.5***	***0.8***	***735***
KRAKEN	MOKD0118	17.5	18.6	1.1	269
		27.0	**28.0**	**1.0**	**408**
KRAKEN	MOKD0119	36.7	37.7	1.0	170
		40.4	**42.5**	**2.1**	**635**
	including	*40.6*	*42.0*	*1.4*	*854*
KRAKEN	MOKD0120	37.7	44.4	6.8	371
	including	***39.0***	***40.4***	***1.4***	***708***

** min 1m width, lower cut 100ppm, max 1m internal dilution*

*** including: min 0.75m width, lower cut 400ppm, max 0.5m internal dilution*

Appendix 2 JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	Commentary
Sampling techniques	• The primary method of grade determination is gamma logging for equivalent uranium (eU3O8) using a Geovista natural gamma sonde equipped with a Sodium Iodide crystal. • The sonde used for the data collection was calibrated in the Adelaide (SA) in November of 2022 and calibration factors were obtained using the K-Factor and Deadtime method by Borehole Wireline. • Checks using a gamma source of known activity are performed prior to logging at each hole to determine crystal integrity. • The gamma tool is lowered down the inside of the completed PQ3 diamond drill holes (free from rods & casing), and readings were obtained at 1 cm intervals in the hole. • Chemical assays on previous drill campaigns were used to check for correlation with gamma probe grades and disequilibrium was found to be negligible for the orebody.
Drilling techniques	• 24 Diamond coring PQ3 diameter holes were completed. • The orebody is known to be flat (dipping at 1 degree to SW) and the drill holes were vertical so orienting the core was not deemed necessary.
Drill sample recovery	• Core recoveries are recorded at the drill rig by A-Cap staff and were extremely good (>95%). • On several occasions where recovery was very poor at the top of the hole (majority of material washed away) the drillers were instructed to redrill the hole. • The nature of sampling (gamma log of inside of the hole) does not allow any bias due to loss/gain of fine/course material.
Logging	• All drill core is marked up at the rig, placed in core trays, then delivered to A-Cap core facility for geologic logging. • Logging is qualitative with geologist recording: colour, oxidation, grainsize, texture, lithology, alteration, veining and mineralisation (the geologists use a scintillometer to assist with this). • Core is photographed in the trays before sampling. The geologist selects intervals in and around the mineralisation for density measurements by the immersion method. • The entire hole is logged.
Sub-sampling and sample preparation	• No sub sampling was undertaken, as all results reported are derived downhole gamma responses. Gamma responses are derived from the in-situ material on the inside of the hole drilled.
Quality of assay data and laboratory tests	• The primary method of grade determination is gamma logging for equivalent uranium (eU3O8) using a Geovista natural gamma sonde equipped with a Sodium Iodide crystal. • The sonde used for the data collection was calibrated in the Adelaide Models in November of 2022 and calibration factors were obtained using the K-Factor and Deadtime method by Borehole Wireline.

Criteria	Commentary
Verification of sampling and assaying	• Significant intersections are reviewed by geologists with the aid of a scintillometer. • The designed drill holes were targeting mineralised sample for metallurgical & beneficiation test work and as such are designed within 5m-10m of existing holes with known mineralisation. • Data is captured on tablets using templates from the Acquire database. It is emailed to dedicated Database Administrator who validates the data before loading it into Acquire database on server in Gaborone Office (Botswana). A backup to the Cloud is routinely done. • As mentioned previously, equivalent U grades are reported which are derived from gamma readings down the hole.
Location of data points	• Collar positions were recorded using a Garmin handheld. This is considered sufficient for these holes as they are not being used for Resource Estimation. • The holes are recorded in UTM Arc 1950 (Zone 35S). • The project area is extremely flat. Given the spacing of the holes and the lack of topography changes the Garmin handheld GPS is considered adequate.
Data spacing and distribution	• The holes are at a random spacing as they were targeting characteristic material from within deposits already defined by min. 100m x 100m spacing. A previous geostatistical analysis was completed by drill holes spaced 20m apart to assist with resource estimation. • Equivalent uranium grade was calculated every 1cm down the hole. Samples were composited to 10cm before being reported: lower cut 100ppm U, min 1 m width, max 1m internal dilution.
Orientation of data	• All drill holes are vertical. The mineralisation is flat, dipping between 1-3 degrees to the SW.
Sample security	• Holes are generally gamma logged within 48 hours of completion of the hole to minimize risk of any contamination down the hole. The core is kept in a fenced core yard with 24 hour guards.
Audits or reviews	• Gamma data and data calculations to eU3O8 was carried out under the guidance of Brian Nyangu from A-Cap Resources. • Audits and reviews on sampling and assaying are not relevant as no physical samples or assays were used in the results being released.

Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	• Mining License No. 2016/16L was granted on 12 September 2016 and expires 11 September 2038. • A-Cap are attending to all compliance requirements as and when they fall due.
Exploration done by other parties	• The Letlhakane uranium deposit was discovered by A-Cap Resources in 2006 and was extensively drilled through to 2014 (>150,000m drilling) culminating in resource estimate of
Geology	• Geologically, the Letlhakane uranium mineralisation is hosted within shallow, flat lying sedimentary rocks of the Karoo Super Group. These Permian to Jurassic aged sediments were deposited in a shallow, broad, westerly dipping basin, generated during rifting of the African continent. The source area for the sediments was the extensively weathered, uranium-bearing, metamorphic rocks of the Archaean Zimbabwe Craton which outcrop in the eastern portion of our license. The sandstone hosted mineralisation has roll front characteristics, where the uranium was precipitated at redox boundaries. Three ore types have been identified; Primary Ore, Secondary Ore and Oxide Ore. The most abundant is the Primary ore.
Drill hole Information	• See Table 1
Data aggregation methods	• Mineralised intercepts are aggregated by weighted average where: the grade will be a minimum of 200ppm, over a minimum of 1m, with a maximum of 1m internal dilution. • Shorter, higher grade intercepts are aggregated by weighted average where: the grade will be a minimum of 400ppm, over a minimum of 0.75m, with a maximum of 0.5m internal dilution. • No metal equivalents are stated.
Mineralisation widths and intercept lengths	• Due to the flat nature of the deposit (dipping between 1-3 degrees), intersections can be determined as true width as the difference of dip will fall within the fluctuations of mineralised thicknesses between holes.
Diagrams	• See Figure 1 in body of text above.
Balanced reporting	• All intersections of 1m width, and > 200ppm U3O8 have been reported in Appendix 1.
Other substantive exploration data	• The reported drilling program was successful in collecting >2,500 kg of mineralised material grading 277 ppm U3O8 (with ~1,200 kg grading 470 ppm U3O8).
Further work	• Refer main body of text.