



**REPORT ON AMS ANALYSIS
(ANSTO Portal 11160; RUN 468)**

7 July 2017

Dr Leonard Drury
Aqua Rock Konsultants
19 Balmoral Ave
Croydon Park NSW 2133

Email: lendrury00@gmail.com

RADIOCARBON RESULTS

	ANSTO code	Sample Type	Submitter ID	$\delta(^{13}\text{C})$ per mil	percent Modern Carbon		Conventional Radiocarbon age	
					pMC	1 σ error	yrs BP	1 σ error
1	OZV690	Groundwater DIC	GW1 Irrawaddy formation 314m	-10.1 +/- 0.1	63.89 +/- 0.20		3,600 +/- 30	
2	OZV691	Groundwater DIC	GW2 Irrawaddy formation 351m	-13.4 +/- 0.1	72.68 +/- 0.28		2,565 +/- 35	
3	OZV692	Groundwater DIC	GW3 Kokkogon formation 61m	-13.3 +/- 0.1	45.00 +/- 0.18		6,415 +/- 35	
4	OZV693	Groundwater DIC	GW4 Aungban formation 158m	-17.3 +/- 0.1	70.56 +/- 0.21		2,800 +/- 25	
5	OZV694	Groundwater DIC	GW5 Aungban formation 30m	-14.1 +/- 0.1	73.67 +/- 0.23		2,455 +/- 25	
6	OZV695	Groundwater DIC	GW6 Aungban formation 223m	-14.5 +/- 0.1	60.77 +/- 0.20		4,000 +/- 30	
7	OZV696	Groundwater DIC	GW7 Irrawaddy formation 107m	-14.2 +/- 0.1	84.49 +/- 0.27		1,355 +/- 30	
8	OZV697	Groundwater DIC	GW8 Irrawaddy formation 430m	-14.6 +/- 0.1	31.92 +/- 0.15		9,175 +/- 40	
9	OZV698	Groundwater DIC	GW9 Irrawaddy formation 425m	-14.9 +/- 0.1	29.57 +/- 0.14		9,790 +/- 40	
10	OZV699	Groundwater DIC	GW10 Hot saline spring Pegu group 100m	-18.6 +/- 0.1	3.87 +/- 0.05		26,120 +/- 120	

Note:

1. $\delta(^{13}\text{C})$ values relate solely to the graphite derived from the fraction that was used for the radiocarbon measurement. It is sometimes the case that the $\delta(^{13}\text{C})$ of this fraction is not the same as that of the bulk material. Measurements are determined using EA-IRMS (except for those, if present, marked with '\$' which are accelerator based). Some $\delta(^{13}\text{C})$ values may not have an associated uncertainty due to the limited number of determinations.
2. The ages quoted are radiocarbon ages, not calendar ages.
3. The ages have been rounded according to M. Stuiver and A. Polach (1977). The definition of percent Modern Carbon and Conventional Radiocarbon age can also be found in this publication.
4. Please use the ANSTO Code number in publications. The AMS facility should be referenced as Fink *et al.* (2004).



Australian Government



Nuclear-based science benefiting all Australians

References:

D. Fink, M. Hotchkis, Q. Hua, G. Jacobsen, A. M. Smith, U. Zoppi, D. Child, C. Mifsud, H. van der Gaast, A. Williams and M. Williams (2004) The ANTARES AMS facility at ANSTO, NIM B 223-224, 109-115.

M. Stuiver and A. Polach (1977) Reporting of ^{14}C data, *Radiocarbon* 19(3), 355-363. Available on-line at: <https://journals.uair.arizona.edu/index.php/radiocarbon/article/view/493/498>