

DOCUMENT SOURCE	Lawrence Berkeley Laboratory Archives and Records Office	
RECORDS SERIES TITLE	Applied Science Division: Scientists' Papers - Papers of William E. Siri	
ACCESSION NO.	434-91-0131	COPY
FILE CODE NO.	19-14-18	
CARTON NO.	7	
FOLDER NAME	Dr. Leo Meyer (Marshall Island Natives)	
NOTES		
FOUND BY	Perry Hall	

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PRIVACY ACT MATERIAL REMOVED

TRITIATED PLASMA SAMPLES

Dr. Leo Meyer
May, 1966

HOLE POS.	SAMPLE	VOL.	INT. STD.	Scpm	Topm	Tcorr	T-S	S-b	S-b _{corr}	T-S S-b _{corr}	TBW (l)
148	NC Std.	—		27,057					(x1.014)		
149	Ref. Bkg	—		37					↓		
150	H ₂ O Blk	2ml	.1947	42	5364	5643	5601				
1		2ml	↓	2645	7663	8061	5416	2603	2639	2.052	52.49 ⁶
2		2ml		3121	8270	8700	5579	3079	3122	1.787	45.892
3		2ml		3126	8193	8619	5493	3084	3127	1.757	45.125
4		2ml		3775	8641	9090	5315	3733	3785	1.404	36.056
5		2ml		2497	7465	7853	5356	2455	2489	2.152	55.261
6		2ml		2665	7638	8035	5370	2623	2660	2.019	51.850
7		2ml		2830	7934	8347	5517	2788	2827	1.952	50.129
8		2ml		3212	8313	8745	5533	3170	3214	1.722	44.223
9		2ml		3205	8240	8668	5463	3163	3207	1.703	43.735
10		1ml		1858	8604	9137	7279	1816	1814	3.954	50.769
11		2ml		3179	8269	8699	5520	3137	3181	1.735	44.557
12		2ml		3844	9015	9484	5635	3807	3860	1.460	37.494
13		0.25ml		618	9217	9715	9097	576	584	15.577	50.002

S = sample

T = Sample + Int. Std.

TBW = Total Body Water

S-b_{corr} = S-b (1.014), to correct for 4-6 hrs.

$$TBW(\text{liters}) = \frac{(\text{H}^2\text{O dilution}) (\text{Sample Vol}) (\text{Vol. H}^2\text{O given}) (T-S)}{\text{Int. Std. Vol.} (S-b_{\text{corr}})}$$

$$TBW(\text{Kg}) = TBW(\text{l}) \times 0.985$$

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NAME	BODY WEIGHT:		TBW (Kg)	TBW (%)	$100 - \left(\frac{\%TBW}{0.72}\right) = \text{Approx. \% FAT}$
	lbs.	Kg.			
	230	104.55	51.91	49.65	31.04
	157	71.36	45.20	63.34	12.03
	167	75.91	44.45	58.56	18.67
	150	68.18	35.52	52.10	27.64
	200	90.91	54.44	59.88	16.83
	185	84.09	51.07	60.73	15.65
	190	86.36	49.38	57.18	20.58
	155	70.45	43.56	61.83	14.12
	185	84.09	43.08	51.23	28.85
	185	84.09	50.01	59.47	17.40
	178	80.91	43.89	54.25	24.65
	135	61.36	36.93	60.19	16.40
	170	77.27	49.25	63.74	11.47

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May, 1966

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148	NC Std.	—	—	27,057					(x1.014)		
149	Ref. Std.	—	—	37					↓		
150	H ₂ O Blk	2 ml	1947	42	5364	5643	5601				
1		2 ml	↓	2645	7663	8061	5416	2603	2639	2.052	52.497 ⁶
2		2 ml		3121	8270	8700	5579	3079	3122	1.787	45.892
3		2 ml		3126	8193	8619	5493	3084	3127	1.757	45.122
4		2 ml		3775	8641	9090	5315	3733	3785	1.404	36.056
5		2 ml		2497	7465	7853	5356	2455	2489	2.152	55.266
6		2 ml		2665	7638	8035	5370	2623	2660	2.019	51.850
7		2 ml		2830	7934	8347	5517	2788	2827	1.952	50.129
8		2 ml		3212	8313	8745	5533	3170	3214	1.722	44.223
9		2 ml		3205	8240	8668	5463	3163	3207	1.703	43.735
10		1 ml		1358	8604	9137	7279	1816	1814	3.954	50.769
11		2 ml		3179	8269	8699	5520	3137	3181	1.735	44.557
12		2 ml		3849	9015	9484	5635	3807	3860	1.460	37.494
13		0.25 ml		618	9217	9715	9097	576	584	5.577	50.002

S = sample

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TBW = Total Body Water

S-b_{corr} = S-b (1.014), to correct for 4-6 hrs.

$$TBW(\text{liters}) = \frac{(\text{H}_2\text{O dilution}) (\text{Sample Cpl}) (\text{Vol. H}_2\text{O given}) (T-S)}{\text{Int. Std. Vol.} (S-b_{\text{corr}})}$$

$$TBW(\text{Kg}) = TBW(\text{l}) \times 0.985$$

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	200	90.91	54.44	59.88	16.83
	185	84.09	51.07	60.73	15.65
	190	86.36	49.38	57.18	20.58
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	185	84.09	43.08	51.23	28.85
	185	84.09	50.01	59.47	17.40
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	135	61.36	36.93	60.19	16.40
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TBW = Total Body Water

S-b_{corr} = S-b (1.014), to correct for 4-6 hrs.

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$$TBW(\text{liters}) = \frac{(\text{H}_2\text{O dilution})}{2500} (\text{Sample Vol}) \left(\frac{\text{Vol. H}_2\text{O}}{\text{given}} \right) \left(\frac{T-S}{S-b_{\text{corr}}} \right)$$

$$TBW(\text{Kg}) = TBW(\text{l}) \times 0.985$$