

Sample	Analysis date/time	standard mass (g)	Standard Uncertainty	²³³ Pa spike mass (g)	Standard Uncertainty	²³¹ Pa / ²³³ Pa	Standard Uncertainty	atoms ²³³ Pa / g spike	Standard Uncertainty
<i>Pa spike-1</i>									
TML (3)	8/4/11 19:26	4.1295	0.00005	0.1556	0.00007	0.316	2.4E-03	2.808E+10	2.1E+08
TML (5)	8/18/11 18:27	8.7162	0.00018	0.4630	0.00011	0.326	3.0E-03	1.932E+10	1.8E+08
<i>Pa spike-2</i>									
TML (4)	3/3/12 19:09	2.37100	0.00006	0.5131	0.00006	0.168	5.2E-04	9.185E+09	2.9E+07
TML (5)	3/3/12 19:35	2.34770	0.00006	0.6139	0.00007	0.140	4.5E-04	9.120E+09	3.0E+07
TML (6)	3/3/12 20:02	2.40407	0.00007	0.7152	0.00007	0.123	3.9E-04	9.170E+09	3.0E+07

Table 2

Sample	Analysis date/time	standard mass (g)	Standard Uncertainty	²³³ Pa spike mass (g)	Standard Uncertainty	²³¹ Pa / ²³³ Pa	Standard Uncertainty	years since production date	U100 ²³¹ Pa / ²³⁵ U on analysis date	atoms ²³¹ Pa / g U100 sol'n	Standard Uncertainty	atoms ²³³ Pa / g spike	Standard Uncertainty
<i>Pa spike-1</i>													
U100 #2 (1)	8/15/11 20:04	2.2618	0.00019	0.2605	0.00018	1.253	6.8E-03	52.60	5.178E-08	3.001E+09	5.7E+06	2.081E+10	1.2E+08
U100 #2 (2)	12/1/11 17:44	2.3021	0.00018	3.0534	0.00000	1.711	1.6E-02	52.90	5.207E-08	3.018E+09	5.7E+06	1.330E+09	1.3E+07
<i>Pa spike-2</i>													
U100 #2 (1)	1/31/12 15:40	2.3116	0.00008	0.7617	0.00002	0.441	2.0E-03	53.06	5.223E-08	3.027E+09	5.7E+06	2.081E+10	1.0E+08
U100 #2 (2)	1/31/12 16:06	2.3145	0.00004	0.7606	0.00000	0.443	2.0E-03	53.06	5.223E-08	3.027E+09	5.7E+06	2.079E+10	1.0E+08
U100 #2 (3)	1/31/12 16:32	2.3169	0.00007	0.7592	0.00002	0.445	2.1E-03	53.06	5.223E-08	3.027E+09	5.7E+06	2.076E+10	1.1E+08
U100 #2 (4)	2/28/12 19:16	2.3095	0.00004	1.5262	0.00000	0.457	2.9E-03	53.14	5.231E-08	3.032E+09	5.7E+06	1.005E+10	6.6E+07
U100 #2 (5)	3/19/12 18:52	2.3130	0.00002	3.0519	0.00002	0.383	1.9E-03	53.20	5.236E-08	3.035E+09	5.7E+06	6.008E+09	3.3E+07
<i>Pa spike-3</i>													
U100 #2 (1)	6/18/12 17:49	2.2897	0.00003	0.2541	0.00003	1.799	1.8E-02	53.44	5.261E-08	3.049E+09	5.8E+06	1.527E+10	1.6E+08
U100 #2 (2)	6/18/12 18:15	2.2953	0.00006	0.5069	0.00004	0.900	9.2E-03	53.44	5.261E-08	3.049E+09	5.8E+06	1.534E+10	1.6E+08
U100 #2 (3)	8/30/12 20:03	2.2915	0.00003	1.0158	0.00004	2.987	2.6E-02	53.64	5.280E-08	3.060E+09	5.8E+06	2.311E+09	2.1E+07
U100 #2 (4)	9/19/12 15:42	1.7216	0.00002	1.5327	0.00003	2.457	2.7E-02	53.70	5.286E-08	3.064E+09	5.8E+06	1.401E+09	1.6E+07

Table 3

Sample	Analysis date/time	²³³ Pa spike	Days from spike calibration date	Decay-corrected atoms ²³³ Pa / g spike	Standard Uncertainty	sample aliquot, g	Standard Uncertainty	²³³ Pa spike aliquot, g	Standard Uncertainty	²³¹ Pa / ²³³ Pa	Standard Uncertainty	atoms ²³¹ Pa / g sample	Standard Uncertainty
U005-A #1 (1)	8/30/12 17:20	Pa spike-3	72.98	2.339E+09	2.4E+07	9.2121	0.00006	1.0202	0.00008	2.546	2.3E-02	6.596E+08	9.0E+06
U005-A #1 (2)	8/30/12 18:15	Pa spike-3	73.02	2.337E+09	2.4E+07	9.2128	0.00004	1.0197	0.00004	2.566	2.3E-02	6.636E+08	9.1E+06
U005-A #2 (1)	8/30/12 18:42	Pa spike-3	73.04	2.335E+09	2.4E+07	9.2080	0.00006	1.0206	0.00006	2.076	1.9E-02	5.374E+08	7.5E+06
U005-A #2 (2)	8/30/12 19:08	Pa spike-3	73.05	2.334E+09	2.4E+07	9.2160	0.00010	1.0169	0.00010	2.085	1.9E-02	5.371E+08	7.4E+06
U030-A #1	2/28/12 17:57	Pa spike-2	28.10	1.011E+10	1.0E+08	5.8041	0.00003	0.7555	0.00004	0.311	2.3E-03	4.089E+08	3.6E+06
U030-A #2	2/28/12 18:24	Pa spike-2	28.11	1.010E+10	1.0E+08	5.7885	0.00003	0.7612	0.00003	0.208	1.4E-03	2.764E+08	2.3E+06
U100 #1	2/28/12 18:50	Pa spike-2	28.13	1.010E+10	1.0E+08	2.3018	0.00004	0.7577	0.00004	0.533	3.5E-03	1.772E+09	1.4E+07
U630 #1 (1)	3/19/12 16:38	Pa spike-2	48.04	6.053E+09	6.3E+07	7.4722	0.00004	1.0268	0.00002	2.576	1.3E-02	2.142E+09	1.5E+07
U630 #1 (2)	6/29/12 0:22	Pa spike-3	10.27	1.172E+10	1.2E+08	3.1934	0.00004	0.5057	0.00003	1.161	7.1E-03	2.156E+09	2.6E+07
U630 #2 (1)	6/29/12 1:12	Pa spike-3	10.31	1.171E+10	1.2E+08	0.5351	0.00003	0.5063	0.00004	2.275	1.4E-02	2.521E+10	3.0E+08
125-A #1 (1)	3/19/12 17:30	Pa spike-2	48.08	6.047E+09	6.3E+07	0.5630	0.00005	0.7653	0.00002	1.229	6.2E-03	1.010E+10	7.1E+07
125-A #1 (2)	6/28/12 15:00	Pa spike-3	9.88	1.184E+10	1.2E+08	0.5581	0.00003	0.5078	0.00003	0.959	1.2E-02	1.033E+10	1.7E+08
125-A #2 (1)	3/19/12 18:26	Pa spike-2	48.12	6.041E+09	6.2E+07	0.5642	0.00005	0.7651	0.00004	1.686	8.5E-03	1.381E+10	9.7E+07
125-A #2 (2)	6/28/12 15:00	Pa spike-3	9.88	1.184E+10	1.2E+08	0.5604	0.00003	0.5076	0.00003	1.317	1.7E-02	1.412E+10	2.3E+08