

Datashare 64:

Cenozoic paleogeography of the Andean foreland and retroarc hinterland of Colombia

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/235U	± (%)	206Pb/238U	± (%)		207Pb/235U (Ma)	± (Ma)	206Pb/238U (Ma)	± (Ma)	207Pb/206Pb (Ma)				± (Ma)
1072-133, Early Paleocene Lower Socha Formation (N = 98)														
1072133az1_1_Zrn	1.782	0.047	0.176	0.007	6.364	1038.938	47.264	1045.313	43.175	1022.367	65.068	1022.367	65.068	-2.244
1072133az1_2_Zrn	4.836	0.123	0.326	0.012	3.258	1791.242	121.135	1818.194	79.590	1758.322	57.294	1758.322	57.294	-3.405
1072133az1_3_Zrn	4.349	0.110	0.303	0.012	3.400	1702.709	109.136	1708.440	74.111	1696.457	57.681	1696.457	57.681	-0.706
1072133az1_4_Zrn	1.727	0.044	0.172	0.007	6.376	1018.498	44.558	1024.519	42.173	1004.223	64.025	1004.223	64.025	-2.021
1072133az1_5_Zrn	1.559	0.040	0.158	0.006	4.097	954.195	40.706	947.783	38.828	968.855	64.842	947.783	38.828	2.175
1072133az1_6_Zrn	1.683	0.043	0.169	0.006	6.439	1002.084	43.141	1005.937	41.337	991.393	63.836	991.393	63.836	-1.467
1072133az1_7_Zrn	3.490	0.090	0.268	0.010	3.924	1524.867	89.173	1530.497	65.546	1517.936	59.565	1517.936	59.565	-0.828
1072133az1_8_Zrn	3.039	0.080	0.247	0.009	4.349	1417.462	79.188	1421.376	60.503	1407.562	61.212	1407.562	61.212	-0.981
1072133az1_9_Zrn	4.740	0.121	0.314	0.012	3.191	1774.314	118.854	1761.263	76.749	1789.202	57.086	1789.202	57.086	1.562
1072133az1_10_Zrn	3.458	0.088	0.265	0.010	3.903	1517.791	87.667	1516.418	64.800	1517.553	59.230	1517.553	59.230	0.075
1072133az1_11_Zrn	4.637	0.118	0.314	0.012	3.283	1756.000	116.468	1762.799	76.771	1748.703	57.403	1748.703	57.403	-0.806
1072133az1_12_Zrn	3.381	0.086	0.258	0.010	3.851	1499.979	85.519	1477.094	62.923	1531.915	59.002	1531.915	59.002	3.579
1072133az1_13_Zrn	3.334	0.093	0.251	0.010	4.112	1489.057	92.737	1444.319	64.770	1553.011	63.867	1553.011	63.867	6.999
1072133az1_14_Zrn	3.189	0.082	0.255	0.010	4.164	1454.567	81.584	1462.563	62.304	1443.809	60.125	1443.809	60.125	-1.299
1072133az1_15_Zrn	3.338	0.086	0.261	0.010	4.035	1489.927	85.292	1494.597	63.848	1483.018	59.835	1483.018	59.835	-0.781
1072133az1_16_Zrn	1.623	0.043	0.163	0.006	4.112	979.045	43.605	972.434	39.991	989.095	66.026	972.434	39.991	1.684
1072133az1_17_Zrn	3.062	0.079	0.246	0.009	4.209	1423.113	78.471	1415.444	60.096	1431.329	60.251	1431.329	60.251	1.110
1072133az1_18_Zrn	3.300	0.084	0.256	0.010	3.963	1480.951	83.715	1468.301	62.557	1498.502	59.385	1498.502	59.385	2.015
1072133az1_19_Zrn	2.289	0.059	0.206	0.008	5.103	1208.809	58.763	1205.269	50.277	1214.587	61.983	1214.587	61.983	0.767
1072133az1_20_Zrn	0.090	0.003	0.013	0.000	3.886	87.421	3.402	81.365	3.162	249.333	95.703	81.365	3.162	67.367
1072133az1_21_Zrn	1.447	0.039	0.152	0.006	4.084	908.579	39.058	914.018	37.325	895.656	67.029	914.018	37.325	-2.050
1072133az1_22_Zrn	4.622	0.118	0.309	0.012	3.236	1753.159	116.196	1736.692	75.621	1771.309	57.323	1771.309	57.323	1.954
1072133az1_23_Zrn	4.980	0.128	0.320	0.012	3.095	1815.988	126.073	1788.104	78.435	1845.610	57.130	1845.610	57.130	3.116
1072133az1_24_Zrn	1.636	0.042	0.164	0.006	4.099	984.087	42.298	981.252	40.217	989.190	64.202	981.252	40.217	0.802
1072133az1_25_Zrn	4.590	0.120	0.306	0.012	3.271	1747.543	118.172	1721.069	75.045	1778.851	58.189	1778.851	58.189	3.248
1072133az1_26_Zrn	3.337	0.086	0.260	0.010	4.006	1489.716	85.099	1489.023	63.548	1489.020	59.657	1489.020	59.657	0.000
1072133az1_27_Zrn	0.158	0.004	0.023	0.001	3.857	148.924	4.235	149.022	5.748	144.593	75.381	149.022	5.748	-3.063
1072133az1_30_Zrn	4.245	0.139	0.292	0.011	4.022	1682.830	136.731	1653.676	72.476	1718.381	69.113	1718.381	69.113	3.765
1072133az1_31_Zrn	1.432	0.037	0.149	0.006	4.076	902.364	37.571	897.469	36.583	910.418	65.615	897.469	36.583	1.422
1072133az1_32_Zrn	2.223	0.059	0.200	0.008	5.177	1188.473	58.585	1173.833	49.012	1215.477	62.920	1215.477	62.920	3.426
1072133az1_34_Zrn	4.554	0.116	0.307	0.012	3.255	1740.897	114.112	1726.273	74.914	1758.312	57.226	1758.312	57.226	1.822
1072133az1_35_Zrn	3.559	0.092	0.267	0.010	3.820	1540.512	90.856	1527.103	65.371	1551.921	59.289	1551.921	59.289	1.599
1072133az1_36_Zrn	1.414	0.038	0.149	0.006	4.081	894.714	37.768	893.509	36.462	894.912	66.589	893.509	36.462	0.157
1072133az1_37_Zrn	3.584	0.093	0.267	0.010	3.772	1546.052	92.052	1524.228	65.420	1575.189	59.413	1575.189	59.413	3.235
1072133az1_38_Zrn	4.617	0.118	0.313	0.012	3.282	1752.294	116.219	1753.789	76.456	1751.226	57.482	1751.226	57.482	-0.146
1072133az1_39_Zrn	0.930	0.172	0.096	0.007	7.929	667.607	167.098	592.919	47.013	930.344	374.516	592.919	47.013	36.269
1072133az1_40_Zrn	5.749	0.147	0.347	0.013	2.877	1938.808	144.226	1921.460	85.018	1954.087	56.217	1954.087	56.217	1.670
1072133az1_41_Zrn	4.238	0.117	0.288	0.011	3.440	1681.344	115.327	1631.045	73.489	1747.484	60.114	1747.484	60.114	6.663
1072133az1_42_Zrn	4.925	0.126	0.322	0.012	3.157	1806.528	124.375	1798.684	78.908	1813.293	57.237	1813.293	57.237	0.806
1072133az1_43_Zrn	0.079	0.004	0.011	0.000	4.063	76.846	3.834	71.364	2.899	239.415	118.198	71.364	2.899	70.192
1072133az1_44_Zrn	0.093	0.003	0.013	0.000	3.928	90.166	3.394	81.978	3.220	290.372	92.256	81.978	3.220	71.768
1072133az1_45_Zrn	4.856	0.127	0.318	0.012	3.196	1794.572	124.726	1780.614	78.593	1807.497	57.775	1807.497	57.775	1.487
1072133az1_46_Zrn	3.997	0.105	0.285	0.011	3.575	1633.607	103.705	1616.983	70.630	1652.757	59.079	1652.757	59.079	2.165
1072133az1_47_Zrn	2.671	0.069	0.226	0.009	4.577	1320.333	68.808	1312.083	55.450	1335.476	61.125	1335.476	61.125	1.752
1072133az1_48_Zrn	3.529	0.090	0.269	0.010	3.844	1533.758	89.394	1534.399	65.781	1536.283	59.048	1536.283	59.048	0.123
1072133az1_49_Zrn	3.427	0.089	0.264	0.010	3.961	1510.565	88.048	1509.055	64.672	1511.038	59.858	1511.038	59.858	0.131
1072133az1_51_Zrn	0.812	0.022	0.099	0.004	3.996	603.652	22.157	611.046	24.415	573.506	70.941	611.046	24.415	-6.546

1072133az1_52_Zrn	4.377	0.112	0.301	0.011	3.350	1708.088	110.645	1698.050	73.898	1725.320	57.806	1725.320	57.806	1.581
1072133az1_54_Zrn	0.839	0.022	0.101	0.004	3.992	618.396	21.938	620.634	24.774	608.989	68.508	620.634	24.774	-1.912
1072133az1_55_Zrn	0.079	0.002	0.012	0.000	3.842	76.994	2.147	75.592	2.905	116.051	76.647	75.592	2.905	34.863
1072133az1_56_Zrn	0.068	0.002	0.010	0.000	3.900	66.613	2.107	64.639	2.521	138.106	83.887	64.639	2.521	53.197
1072133az1_57_Zrn	3.352	0.086	0.258	0.010	3.944	1493.295	85.522	1481.376	63.237	1508.989	59.518	1508.989	59.518	1.830
1072133az1_58_Zrn	3.308	0.087	0.255	0.010	4.006	1483.014	86.076	1463.767	62.560	1507.215	60.382	1507.215	60.382	2.883
1072133az1_59_Zrn	0.243	0.006	0.035	0.001	3.866	221.064	6.471	223.725	8.648	192.803	74.276	223.725	8.648	-16.038
1072133az1_60_Zrn	5.081	0.129	0.324	0.012	3.040	1832.920	126.963	1809.665	79.153	1860.018	56.541	1860.018	56.541	2.707
1072133az1_61_Zrn	2.554	0.065	0.220	0.008	4.702	1287.552	64.903	1281.526	53.772	1295.724	60.921	1295.724	60.921	1.096
1072133az1_62_Zrn	3.088	0.124	0.240	0.013	5.993	1429.698	122.158	1385.468	85.812	1496.169	89.669	1496.169	89.669	7.399
1072133az1_63_Zrn	3.731	0.095	0.270	0.010	3.593	1578.033	94.406	1542.569	66.308	1626.418	58.439	1626.418	58.439	5.155
1072133az1_65_Zrn	1.575	0.040	0.162	0.006	4.094	960.542	40.444	966.254	39.561	947.903	64.268	966.254	39.561	-1.936
1072133az1_66_Zrn	1.657	0.043	0.164	0.006	4.103	992.237	43.002	980.060	40.215	1018.167	64.116	980.060	40.215	3.743
1072133az1_67_Zrn	4.459	0.113	0.302	0.012	3.283	1723.345	111.954	1703.675	73.935	1747.737	57.371	1747.737	57.371	2.521
1072133az1_68_Zrn	0.634	0.017	0.079	0.003	3.980	498.354	16.885	488.864	19.456	544.383	70.173	488.864	19.456	10.199
1072133az1_69_Zrn	5.447	0.139	0.340	0.013	2.979	1892.211	136.562	1888.129	83.243	1897.331	56.530	1897.331	56.530	0.485
1072133az1_70_Zrn	3.248	0.083	0.254	0.010	4.010	1468.612	82.148	1459.386	62.142	1480.906	59.389	1480.906	59.389	1.453
1072133az1_71_Zrn	2.737	0.070	0.228	0.009	4.443	1338.638	69.692	1325.171	55.850	1361.664	60.498	1361.664	60.498	2.680
1072133az1_72_Zrn	4.381	0.113	0.297	0.011	3.295	1708.817	111.136	1674.791	72.930	1753.955	57.794	1753.955	57.794	4.513
1072133az1_73_Zrn	2.587	0.066	0.222	0.008	4.689	1297.096	65.906	1293.933	54.394	1300.811	61.000	1300.811	61.000	0.529
1072133az1_74_Zrn	3.803	0.097	0.278	0.011	3.590	1593.455	95.866	1581.516	67.940	1621.983	58.221	1621.983	58.221	2.495
1072133az1_75_Zrn	1.028	0.027	0.115	0.004	4.058	717.761	27.524	703.050	28.528	760.400	68.169	703.050	28.528	7.542
1072133az1_76_Zrn	4.634	0.118	0.312	0.012	3.256	1755.374	116.503	1749.080	76.143	1761.885	57.362	1761.885	57.362	0.727
1072133az1_77_Zrn	2.469	0.063	0.219	0.008	4.979	1263.118	63.053	1277.819	53.629	1237.333	61.604	1237.333	61.604	-3.272
1072133az1_78_Zrn	3.983	0.102	0.284	0.011	3.508	1630.737	100.559	1610.178	69.260	1656.290	58.106	1656.290	58.106	2.784
1072133az1_79_Zrn	5.123	0.131	0.328	0.012	3.070	1839.983	128.861	1829.502	80.315	1852.882	56.886	1852.882	56.886	1.262
1072133az1_80_Zrn	2.605	0.066	0.222	0.008	4.623	1301.908	66.301	1293.003	54.354	1316.237	60.844	1316.237	60.844	1.765
1072133az1_81_Zrn	4.573	0.116	0.307	0.012	3.244	1744.277	114.781	1727.140	75.039	1765.648	57.270	1765.648	57.270	2.181
1072133az1_82_Zrn	3.498	0.090	0.261	0.010	3.778	1526.839	89.383	1495.981	64.356	1569.772	59.303	1569.772	59.303	4.701
1072133az1_83_Zrn	4.472	0.114	0.304	0.012	3.299	1725.837	112.708	1710.265	74.327	1744.894	57.570	1744.894	57.570	1.985
1072133az1_85_Zrn	2.916	0.075	0.235	0.009	4.233	1386.169	74.757	1361.122	57.870	1426.454	60.386	1426.454	60.386	4.580
1072133az1_86_Zrn	1.657	0.046	0.164	0.006	4.124	992.258	45.845	981.241	40.466	1012.807	67.147	981.241	40.466	3.117
1072133az1_87_Zrn	5.012	0.127	0.322	0.012	3.066	1821.428	125.364	1798.150	78.623	1848.105	56.664	1848.105	56.664	2.703
1072133az1_88_Zrn	4.513	0.115	0.304	0.012	3.260	1733.321	113.330	1712.311	74.353	1758.182	57.319	1758.182	57.319	2.609
1072133az1_89_Zrn	0.896	0.023	0.105	0.004	3.994	649.781	23.110	645.685	25.788	657.345	67.325	645.685	25.788	1.774
1072133az1_91_Zrn	4.609	0.120	0.305	0.012	3.245	1750.854	118.737	1718.445	74.941	1789.763	58.076	1789.763	58.076	3.985
1072133az1_92_Zrn	3.252	0.085	0.257	0.010	4.127	1469.660	84.060	1473.998	63.010	1462.878	60.377	1462.878	60.377	-0.760
1072133az1_93_Zrn	4.649	0.119	0.312	0.012	3.236	1758.111	116.917	1749.694	76.266	1769.915	57.279	1769.915	57.279	1.143
1072133az1_94_Zrn	2.718	0.080	0.224	0.009	4.875	1353.329	79.912	1300.671	60.087	1393.018	67.908	1393.018	67.908	6.629
1072133az1_95_Zrn	3.210	0.084	0.254	0.010	4.136	1459.643	83.232	1457.526	62.200	1463.762	60.539	1463.762	60.539	0.426
1072133az1_97_Zrn	5.106	0.130	0.323	0.012	3.019	1837.074	128.197	1802.479	79.033	1875.900	56.627	1875.900	56.627	3.914
1072133az1_98_Zrn	4.878	0.124	0.316	0.012	3.104	1798.412	122.157	1772.572	77.359	1829.083	56.779	1829.083	56.779	3.090
1072133az1_99_Zrn	4.699	0.120	0.315	0.012	3.236	1767.093	118.603	1763.268	76.981	1774.036	57.412	1774.036	57.412	0.607
1072133az1_101_Zrn	5.169	0.133	0.328	0.013	3.061	1847.565	131.171	1829.552	80.721	1865.596	57.104	1865.596	57.104	1.932
1072133az1_102_Zrn	3.959	0.103	0.279	0.011	3.509	1625.784	101.816	1588.529	68.907	1673.486	58.716	1673.486	58.716	5.077
1072133az1_103_Zrn	3.367	0.086	0.255	0.010	3.852	1496.740	85.850	1465.639	62.637	1538.948	59.278	1538.948	59.278	4.764
1072133az1_104_Zrn	4.254	0.109	0.296	0.011	3.425	1684.603	108.243	1673.707	72.749	1697.242	58.124	1697.242	58.124	1.387
1072133az1_105_Zrn	5.204	0.133	0.325	0.012	2.977	1853.304	130.461	1816.080	79.577	1895.451	56.426	1895.451	56.426	4.187
1072133az1_106_Zrn	3.387	0.087	0.255	0.010	3.815	1501.411	86.307	1466.431	62.676	1551.919	59.212	1551.919	59.212	5.509
1072133az1_107_Zrn	1.654	0.042	0.164	0.006	4.106	991.041	42.473	980.348	40.257	1014.983	63.637	980.348	40.257	3.412
1072133az1_108_Zrn	2.753	0.071	0.228	0.009	4.429	1342.790	70.453	1326.455	56.087	1368.339	60.606	1368.339	60.606	3.061
1072133az1_109_Zrn	3.273	0.084	0.257	0.010	4.053	1474.674	83.677	1474.039	62.931	1476.539	59.848	1476.539	59.848	0.169
1072133az1_110_Zrn	0.653	0.017	0.082	0.003	3.963	510.149	17.121	509.573	20.193	511.711	69.685	509.573	20.193	0.418

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1072-138, Early Paleocene Lower Socha Formation (N = 101)														
1072138az1_1_Zrn	4.618	0.118	0.310	0.012	3.255	1752.527	116.574	1739.926	75.899	1765.670	57.481	1765.670	57.481	1.458
1072138az1_2_Zrn	2.169	0.057	0.201	0.008	5.524	1171.059	56.957	1181.337	49.488	1150.004	63.521	1150.004	63.521	-2.725
1072138az1_3_Zrn	2.148	0.059	0.190	0.007	5.213	1164.388	58.833	1121.377	47.327	1239.125	64.591	1239.125	64.591	9.503
1072138az1_4_Zrn	3.727	0.096	0.277	0.011	3.743	1577.105	95.075	1574.307	67.947	1578.096	59.071	1578.096	59.071	0.240
1072138az1_5_Zrn	5.024	0.132	0.327	0.013	3.157	1823.304	129.576	1822.088	80.645	1823.190	57.565	1823.190	57.565	0.060
1072138az1_6_Zrn	2.799	0.074	0.234	0.009	4.585	1355.232	73.809	1357.394	57.620	1355.328	62.142	1355.328	62.142	-0.152
1072138az1_7_Zrn	4.634	0.119	0.310	0.012	3.253	1755.349	117.343	1742.333	76.106	1769.720	57.562	1769.720	57.562	1.548
1072138az1_8_Zrn	2.617	0.067	0.222	0.008	4.592	1305.359	66.956	1294.021	54.471	1326.438	60.904	1326.438	60.904	2.444
1072138az1_9_Zrn	2.507	0.065	0.217	0.008	4.831	1274.005	65.216	1268.113	53.514	1282.994	61.984	1282.994	61.984	1.160
1072138az1_10_Zrn	4.777	0.122	0.317	0.012	3.194	1780.838	120.527	1772.750	77.589	1793.860	57.294	1793.860	57.294	1.177
1072138az1_11_Zrn	0.077	0.002	0.011	0.000	3.904	75.730	2.321	71.735	2.801	199.559	80.684	71.735	2.801	64.053
1072138az1_12_Zrn	4.249	0.110	0.290	0.011	3.346	1683.522	108.976	1639.140	71.502	1740.120	58.217	1740.120	58.217	5.803
1072138az1_13_Zrn	4.802	0.124	0.314	0.012	3.167	1785.175	121.808	1762.279	77.046	1811.986	57.379	1811.986	57.379	2.743
1072138az1_14_Zrn	2.777	0.071	0.231	0.009	4.457	1349.291	71.186	1340.607	56.720	1362.630	60.738	1362.630	60.738	1.616
1072138az1_15_Zrn	1.681	0.044	0.170	0.007	6.657	1001.381	44.394	1011.185	41.845	979.276	65.191	979.276	65.191	-3.258
1072138az1_16_Zrn	1.701	0.044	0.170	0.006	6.478	1009.011	44.517	1013.141	41.805	998.171	64.657	998.171	64.657	-1.500
1072138az1_17_Zrn	1.528	0.041	0.158	0.006	4.116	941.810	41.670	948.163	39.030	925.958	67.249	948.163	39.030	-2.398
1072138az1_18_Zrn	4.753	0.123	0.315	0.012	3.230	1776.571	120.851	1766.345	77.320	1786.305	57.703	1786.305	57.703	1.117
1072138az1_19_Zrn	2.116	0.054	0.194	0.007	5.319	1153.942	54.398	1142.392	47.556	1173.149	62.401	1173.149	62.401	2.622
1072138az1_20_Zrn	3.183	0.082	0.253	0.010	4.169	1453.051	81.928	1455.631	62.067	1448.103	60.374	1448.103	60.374	-0.520
1072138az1_21_Zrn	4.454	0.114	0.300	0.011	3.270	1722.495	112.315	1692.435	73.457	1758.014	57.480	1758.014	57.480	3.730
1072138az1_22_Zrn	3.015	0.077	0.242	0.009	4.214	1411.364	77.037	1399.641	59.345	1427.536	60.155	1427.536	60.155	1.954
1072138az1_23_Zrn	2.637	0.070	0.221	0.008	4.619	1311.048	69.873	1284.563	54.512	1349.978	62.349	1349.978	62.349	4.846
1072138az1_24_Zrn	0.078	0.003	0.011	0.000	3.867	76.585	3.258	70.164	2.713	250.400	102.636	70.164	2.713	71.979
1072138az1_25_Zrn	0.368	0.010	0.049	0.002	3.923	318.240	9.779	310.432	12.177	374.740	72.024	310.432	12.177	17.161
1072138az1_26_Zrn	7.036	0.184	0.379	0.015	2.582	2116.030	178.651	2073.564	93.954	2158.360	55.721	2158.360	55.721	3.929
1072138az1_27_Zrn	3.319	0.085	0.257	0.010	3.953	1485.462	84.281	1472.897	62.804	1501.294	59.342	1501.294	59.342	1.891
1072138az1_28_Zrn	4.711	0.121	0.310	0.012	3.177	1769.184	119.020	1740.848	76.096	1803.294	57.293	1803.294	57.293	3.463
1072138az1_29_Zrn	3.356	0.086	0.254	0.010	3.850	1494.236	85.816	1459.571	62.356	1541.294	59.335	1541.294	59.335	5.302
1072138az1_30_Zrn	3.300	0.084	0.257	0.010	4.001	1481.074	84.014	1475.160	62.940	1489.041	59.581	1489.041	59.581	0.932
1072138az1_32_Zrn	1.670	0.044	0.163	0.006	4.137	997.229	44.539	975.039	40.334	1043.424	65.146	975.039	40.334	6.554
1072138az1_33_Zrn	11.878	0.304	0.488	0.019	1.998	2594.818	287.043	2562.059	119.523	2620.465	52.358	2620.465	52.358	2.229
1072138az1_34_Zrn	1.616	0.042	0.160	0.006	4.108	976.553	42.301	958.926	39.394	1013.634	64.517	958.926	39.394	5.397
1072138az1_35_Zrn	4.381	0.112	0.298	0.011	3.306	1708.721	110.681	1680.050	72.924	1743.090	57.626	1743.090	57.626	3.617
1072138az1_36_Zrn	2.514	0.064	0.217	0.008	4.747	1276.131	64.245	1265.036	53.068	1288.392	61.160	1288.392	61.160	1.813
1072138az1_37_Zrn	4.628	0.118	0.307	0.012	3.211	1754.389	116.715	1726.906	75.212	1784.979	57.319	1784.979	57.319	3.253
1072138az1_38_Zrn	4.287	0.111	0.293	0.011	3.357	1690.847	109.590	1656.234	72.247	1733.666	58.198	1733.666	58.198	4.466
1072138az1_39_Zrn	1.699	0.045	0.169	0.006	6.366	1008.124	44.728	1008.225	41.753	1008.116	64.172	1008.116	64.172	-0.011
1072138az1_40_Zrn	4.609	0.117	0.310	0.012	3.261	1750.822	115.928	1742.508	75.859	1759.777	57.381	1759.777	57.381	0.981
1072138az1_41_Zrn	3.937	0.101	0.285	0.011	3.596	1621.304	99.989	1614.047	69.704	1629.971	58.608	1629.971	58.608	0.977
1072138az1_42_Zrn	2.102	0.055	0.192	0.007	5.332	1149.612	55.061	1132.099	47.054	1183.162	63.089	1183.162	63.089	4.316
1072138az1_43_Zrn	1.729	0.046	0.172	0.007	6.535	1019.362	46.010	1025.800	42.355	1001.527	65.449	1001.527	65.449	-2.424
1072138az1_44_Zrn	4.054	0.103	0.286	0.011	3.467	1645.093	102.304	1623.463	70.062	1673.303	58.009	1673.303	58.009	2.979
1072138az1_45_Zrn	0.698	0.021	0.088	0.003	3.998	537.800	21.008	543.446	21.725	509.038	77.213	543.446	21.725	-6.759
1072138az1_46_Zrn	3.193	0.082	0.253	0.010	4.101	1455.557	81.566	1453.516	61.950	1460.737	59.901	1460.737	59.901	0.494

1072138az1_47_Zrn	0.817	0.021	0.099	0.004	3.987	606.429	21.434	610.476	24.342	587.065	68.897	610.476	24.342	-3.988
1072138az1_48_Zrn	3.607	0.093	0.270	0.010	3.788	1551.001	92.486	1538.440	66.071	1567.185	59.368	1567.185	59.368	1.834
1072138az1_49_Zrn	1.685	0.044	0.167	0.006	4.121	1002.776	43.883	994.862	40.998	1017.332	64.327	994.862	40.998	2.209
1072138az1_50_Zrn	3.914	0.103	0.278	0.011	3.518	1616.478	101.645	1580.588	68.814	1677.269	58.999	1677.269	58.999	5.764
1072138az1_51_Zrn	2.659	0.068	0.228	0.009	4.672	1317.216	68.035	1321.897	55.793	1308.342	61.129	1308.342	61.129	-1.036
1072138az1_52_Zrn	1.505	0.040	0.156	0.006	4.113	932.269	40.560	935.866	38.490	919.137	66.786	935.866	38.490	-1.820
1072138az1_53_Zrn	3.228	0.083	0.250	0.010	3.972	1463.873	82.836	1436.237	61.516	1506.588	59.837	1506.588	59.837	4.670
1072138az1_54_Zrn	5.073	0.130	0.326	0.012	3.093	1831.631	127.888	1821.341	80.034	1843.078	57.001	1843.078	57.001	1.179
1072138az1_55_Zrn	3.432	0.087	0.263	0.010	3.877	1511.667	86.738	1503.415	64.176	1522.874	59.042	1522.874	59.042	1.278
1072138az1_56_Zrn	4.808	0.123	0.319	0.012	3.207	1786.335	120.922	1786.584	78.083	1786.062	57.271	1786.062	57.271	-0.029
1072138az1_57_Zrn	4.603	0.117	0.311	0.012	3.269	1749.763	115.876	1744.589	76.004	1756.916	57.431	1756.916	57.431	0.702
1072138az1_58_Zrn	4.193	0.107	0.296	0.011	3.466	1672.674	105.891	1670.031	72.385	1674.547	58.033	1674.547	58.033	0.270
1072138az1_59_Zrn	86.490	4.092	1.074	0.052	1.868	4540.311	2261.930	4702.575	333.286	4469.969	83.498	4469.969	83.498	-5.204
1072138az1_60_Zrn	0.082	0.003	0.012	0.000	3.983	80.464	3.460	77.998	3.106	182.209	105.273	77.998	3.106	57.193
1072138az1_61_Zrn	6.274	0.162	0.357	0.014	2.710	2014.893	157.745	1968.302	87.789	2060.288	55.842	2060.288	55.842	4.465
1072138az1_62_Zrn	5.035	0.129	0.325	0.012	3.097	1825.283	126.533	1813.972	79.427	1837.478	56.904	1837.478	56.904	1.279
1072138az1_63_Zrn	3.276	0.084	0.260	0.010	4.086	1475.359	83.346	1488.450	63.458	1462.351	59.751	1462.351	59.751	-1.785
1072138az1_64_Zrn	5.154	0.131	0.330	0.013	3.066	1845.055	129.279	1838.824	80.656	1851.596	56.770	1851.596	56.770	0.690
1072138az1_65_Zrn	0.262	0.007	0.038	0.001	3.893	236.428	7.010	238.039	9.268	214.782	74.324	238.039	9.268	-10.828
1072138az1_66_Zrn	2.573	0.205	0.182	0.007	8.918	1293.044	198.222	1077.816	47.156	1668.844	148.832	1668.844	148.832	35.415
1072138az1_67_Zrn	5.157	0.131	0.330	0.013	3.055	1845.605	128.827	1840.294	80.661	1852.411	56.582	1852.411	56.582	0.654
1072138az1_68_Zrn	0.796	0.020	0.097	0.004	3.988	594.413	20.703	594.051	23.691	595.377	68.394	594.051	23.691	0.223
1072138az1_69_Zrn	4.742	0.121	0.313	0.012	3.174	1774.723	119.023	1756.882	76.562	1796.445	57.028	1796.445	57.028	2.202
1072138az1_71_Zrn	0.422	0.011	0.057	0.002	3.933	357.489	11.086	355.208	13.971	391.611	71.133	355.208	13.971	9.296
1072138az1_72_Zrn	1.675	0.043	0.166	0.006	4.111	999.173	43.116	987.589	40.599	1022.262	63.710	987.589	40.599	3.392
1072138az1_73_Zrn	5.280	0.135	0.330	0.013	2.984	1865.581	132.569	1837.304	80.759	1894.863	56.534	1894.863	56.534	3.038
1072138az1_74_Zrn	3.460	0.089	0.266	0.010	3.907	1518.152	87.995	1518.150	65.002	1518.395	59.331	1518.395	59.331	0.016
1072138az1_75_Zrn	2.847	0.073	0.234	0.009	4.362	1367.937	72.688	1355.525	57.326	1385.712	60.439	1385.712	60.439	2.178
1072138az1_76_Zrn	5.172	0.133	0.332	0.013	3.088	1848.036	130.556	1848.625	81.402	1846.924	57.035	1846.924	57.035	-0.092
1072138az1_77_Zrn	4.927	0.134	0.315	0.012	3.186	1806.957	131.345	1764.650	77.336	1856.595	59.143	1856.595	59.143	4.952
1072138az1_79_Zrn	3.728	0.095	0.277	0.011	3.729	1577.437	94.282	1578.229	67.807	1574.094	58.705	1574.094	58.705	-0.263
1072138az1_81_Zrn	4.100	0.105	0.291	0.011	3.497	1654.296	103.520	1647.896	71.267	1662.419	58.138	1662.419	58.138	0.874
1072138az1_82_Zrn	0.088	0.003	0.013	0.000	3.880	85.973	2.996	80.128	3.109	253.285	87.732	80.128	3.109	68.365
1072138az1_83_Zrn	1.180	0.030	0.129	0.005	4.039	791.265	30.530	781.043	31.549	818.100	65.812	781.043	31.549	4.530
1072138az1_84_Zrn	1.697	0.044	0.168	0.006	4.109	1007.278	43.764	998.402	41.022	1025.780	63.754	998.402	41.022	2.669
1072138az1_85_Zrn	5.015	0.128	0.323	0.012	3.088	1821.808	125.928	1804.163	79.077	1842.020	56.883	1842.020	56.883	2.055
1072138az1_86_Zrn	4.263	0.109	0.297	0.011	3.431	1686.190	107.930	1678.326	72.839	1693.205	58.101	1693.205	58.101	0.879
1072138az1_87_Zrn	3.221	0.084	0.247	0.010	3.952	1462.250	83.161	1425.126	61.264	1517.763	59.982	1517.763	59.982	6.104
1072138az1_88_Zrn	0.089	0.003	0.012	0.000	3.851	86.585	2.975	78.971	3.041	293.328	85.894	78.971	3.041	73.078
1072138az1_89_Zrn	2.360	0.061	0.208	0.008	4.892	1230.521	61.491	1216.355	51.323	1267.499	62.009	1267.499	62.009	4.035
1072138az1_90_Zrn	4.986	0.127	0.325	0.012	3.123	1816.879	124.856	1812.730	79.336	1820.610	56.866	1820.610	56.866	0.433
1072138az1_91_Zrn	5.077	0.129	0.328	0.012	3.099	1832.328	127.280	1829.290	80.189	1833.741	56.831	1833.741	56.831	0.243
1072138az1_92_Zrn	1.650	0.042	0.165	0.006	4.104	989.463	42.348	982.577	40.325	1003.813	63.732	982.577	40.325	2.116
1072138az1_93_Zrn	6.661	0.170	0.374	0.014	2.649	2067.526	165.907	2048.725	91.475	2088.055	55.304	2088.055	55.304	1.884
1072138az1_94_Zrn	4.735	0.121	0.316	0.012	3.221	1773.397	118.975	1768.865	77.188	1777.194	57.235	1777.194	57.235	0.469
1072138az1_95_Zrn	4.037	0.103	0.289	0.011	3.513	1641.756	101.658	1634.891	70.555	1652.483	58.056	1652.483	58.056	1.065
1072138az1_96_Zrn	4.736	0.121	0.317	0.012	3.239	1773.635	119.198	1774.398	77.527	1770.951	57.355	1770.951	57.355	-0.195
1072138az1_97_Zrn	3.486	0.089	0.263	0.010	3.829	1524.052	88.694	1507.282	64.417	1545.536	59.172	1545.536	59.172	2.475
1072138az1_98_Zrn	5.432	0.139	0.340	0.013	2.988	1889.911	136.402	1885.795	83.097	1893.297	56.568	1893.297	56.568	0.396
1072138az1_99_Zrn	5.029	0.129	0.318	0.012	3.034	1824.207	126.806	1781.996	78.010	1872.807	56.816	1872.807	56.816	4.849
1072138az1_101_Zrn	3.390	0.087	0.260	0.010	3.899	1502.015	86.071	1490.997	63.691	1518.922	59.226	1518.922	59.226	1.838
1072138az1_102_Zrn	3.635	0.093	0.272	0.010	3.784	1557.167	92.678	1553.142	66.702	1563.231	59.148	1563.231	59.148	0.645

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072138az1_103_Zrn	0.072	0.004	0.010	0.000	4.015	70.544	3.933	63.624	2.554	303.025	129.314	63.624	2.554	79.004
1072138az1_104_Zrn	4.871	0.125	0.320	0.012	3.167	1797.248	122.718	1790.353	78.291	1805.546	57.176	1805.546	57.176	0.841
1072138az1_105_Zrn	3.470	0.089	0.266	0.010	3.894	1520.393	88.167	1519.043	65.012	1522.811	59.297	1522.811	59.297	0.247
1072138az1_106_Zrn	6.636	0.170	0.381	0.015	2.725	2064.179	165.818	2082.565	93.298	2044.389	55.700	2044.389	55.700	-1.867
1072138az1_108_Zrn	0.272	0.007	0.038	0.001	3.889	244.494	7.375	239.066	9.298	296.007	73.793	239.066	9.298	19.236
1072138az1_109_Zrn	0.792	0.021	0.095	0.004	4.020	592.074	21.300	582.443	23.412	626.444	69.399	582.443	23.412	7.024
1072138az1_110_Zrn	4.911	0.125	0.322	0.012	3.147	1804.086	123.171	1797.802	78.582	1810.878	56.986	1810.878	56.986	0.722
1072-140, Early Paleocene Cacho Formation (N = 103)														
1072140az_1_Zrn	0.121	0.005	0.016	0.001	4.203	116.155	5.472	102.070	4.290	400.646	108.582	102.070	4.290	74.524
1072140az_2_Zrn	0.123	0.004	0.017	0.001	4.165	117.973	4.264	108.736	4.529	301.566	90.007	108.736	4.529	63.943
1072140az_3_Zrn	0.102	0.006	0.013	0.001	4.304	98.763	6.512	85.209	3.667	415.478	145.912	85.209	3.667	79.491
1072140az_4_Zrn	0.102	0.005	0.014	0.001	4.289	98.319	4.778	91.037	3.905	274.312	115.501	91.037	3.905	66.813
1072140az_5_Zrn	0.723	0.020	0.089	0.004	4.282	552.472	20.425	548.694	23.492	566.393	74.637	548.694	23.492	3.125
1072140az_6_Zrn	0.092	0.005	0.012	0.001	4.215	89.764	4.664	79.864	3.366	349.190	120.666	79.864	3.366	77.129
1072140az_7_Zrn	0.189	0.007	0.027	0.001	4.226	175.909	6.751	169.960	7.183	244.948	93.203	169.960	7.183	30.614
1072140az_8_Zrn	0.661	0.019	0.084	0.003	4.276	515.283	18.970	518.459	22.172	491.928	76.440	518.459	22.172	-5.393
1072140az_9_Zrn	4.420	0.158	0.296	0.014	4.370	1716.109	154.604	1670.057	91.980	1772.970	77.481	1772.970	77.481	5.805
1072140az_11_Zrn	0.751	0.023	0.089	0.004	4.447	569.014	23.422	548.108	24.372	652.300	79.615	548.108	24.372	15.973
1072140az_12_Zrn	0.150	0.005	0.021	0.001	4.173	141.636	4.635	136.068	5.678	240.818	83.946	136.068	5.678	43.497
1072140az_13_Zrn	0.684	0.020	0.085	0.004	4.284	529.450	19.933	527.989	22.621	528.613	76.721	527.989	22.621	0.118
1072140az_14_Zrn	1.621	0.045	0.163	0.007	4.428	978.505	45.074	974.183	43.136	994.133	69.267	974.183	43.136	2.007
1072140az_15_Zrn	1.487	0.042	0.153	0.006	4.409	925.280	41.867	918.468	40.491	938.378	70.443	918.468	40.491	2.122
1072140az_16_Zrn	0.197	0.006	0.028	0.001	4.177	182.382	5.658	178.813	7.470	201.635	80.377	178.813	7.470	11.318
1072140az_17_Zrn	0.109	0.006	0.014	0.001	4.233	105.447	5.749	90.803	3.844	448.129	122.386	90.803	3.844	79.737
1072140az_18_Zrn	1.613	0.045	0.159	0.007	4.416	975.369	45.587	953.321	42.101	1020.848	69.761	953.321	42.101	6.615
1072140az_19_Zrn	0.087	0.004	0.013	0.001	4.260	84.701	3.584	83.060	3.538	127.516	106.793	83.060	3.538	34.863
1072140az_20_Zrn	0.089	0.003	0.013	0.001	4.163	86.570	3.237	83.745	3.487	158.102	95.753	83.745	3.487	47.031
1072140az_21_Zrn	0.262	0.007	0.037	0.002	4.204	236.015	7.565	235.235	9.889	246.465	79.880	235.235	9.889	4.557
1072140az_22_Zrn	2.928	0.151	0.230	0.013	7.351	1389.228	148.183	1334.069	85.573	1474.749	108.411	1474.749	108.411	9.539
1072140az_23_Zrn	2.444	0.069	0.215	0.009	5.342	1255.589	68.698	1252.879	56.737	1261.015	67.369	1261.015	67.369	0.645
1072140az_24_Zrn	0.068	0.002	0.010	0.000	4.146	66.702	2.251	62.534	2.593	219.547	88.496	62.534	2.593	71.517
1072140az_25_Zrn	1.450	0.040	0.149	0.006	4.406	909.670	40.549	896.799	39.516	941.397	70.105	896.799	39.516	4.737
1072140az_26_Zrn	0.079	0.005	0.011	0.000	4.291	77.501	4.602	72.805	3.124	219.591	138.963	72.805	3.124	66.845
1072140az_27_Zrn	0.146	0.004	0.021	0.001	4.156	138.185	4.519	131.159	5.451	258.926	83.667	131.159	5.451	49.345
1072140az_28_Zrn	0.097	0.003	0.014	0.001	4.163	93.601	3.144	87.303	3.634	248.948	86.910	87.303	3.634	64.931
1072140az_29_Zrn	0.873	0.025	0.104	0.004	4.325	637.416	24.939	639.175	27.643	624.946	74.571	639.175	27.643	-2.277
1072140az_30_Zrn	0.095	0.008	0.012	0.001	4.442	91.951	7.790	79.610	3.536	419.133	183.718	79.610	3.536	81.006
1072140az_31_Zrn	0.272	0.008	0.038	0.002	4.215	244.029	8.051	240.549	10.140	269.504	81.139	240.549	10.140	10.744
1072140az_32_Zrn	0.099	0.003	0.014	0.001	4.163	95.800	3.240	89.074	3.708	257.667	87.111	89.074	3.708	65.431
1072140az_33_Zrn	0.809	0.024	0.096	0.004	4.303	602.090	24.091	591.755	25.462	629.167	76.557	591.755	25.462	5.946
1072140az_34_Zrn	0.107	0.007	0.015	0.001	4.277	102.990	7.058	98.144	4.197	208.950	156.534	98.144	4.197	53.030
1072140az_35_Zrn	0.086	0.003	0.012	0.001	4.159	84.000	3.110	79.105	3.290	217.050	94.092	79.105	3.290	63.554
1072140az_36_Zrn	2.220	0.062	0.203	0.008	5.765	1187.344	62.447	1191.428	53.611	1180.946	68.087	1180.946	68.087	-0.888
1072140az_37_Zrn	0.575	0.016	0.073	0.003	4.266	461.078	16.215	456.971	19.492	482.633	75.620	456.971	19.492	5.317
1072140az_38_Zrn	0.078	0.003	0.011	0.000	4.179	75.871	3.132	72.939	3.048	154.698	103.484	72.939	3.048	52.851
1072140az_39_Zrn	0.355	0.010	0.049	0.002	4.208	308.204	10.151	307.314	12.933	318.079	78.508	307.314	12.933	3.384

1072140az_40_Zrn	1.954	0.054	0.183	0.008	6.031	1099.943	54.235	1086.058	48.578	1126.679	67.951	1126.679	67.951	3.605
1072140az_41_Zrn	0.280	0.010	0.041	0.002	4.250	259.737	9.793	256.024	10.881	198.350	92.407	256.024	10.881	-29.077
1072140az_42_Zrn	1.006	0.028	0.116	0.005	4.356	706.903	28.421	706.137	30.759	709.842	73.025	706.137	30.759	0.522
1072140az_43_Zrn	1.340	0.039	0.144	0.006	4.413	863.059	38.869	867.655	38.288	847.211	72.853	867.655	38.288	-2.413
1072140az_44_Zrn	0.091	0.003	0.014	0.001	4.204	88.125	2.771	86.953	3.656	118.132	85.066	86.953	3.656	26.394
1072140az_45_Zrn	0.101	0.006	0.014	0.001	4.417	97.462	6.126	89.810	3.967	277.918	144.122	89.810	3.967	67.685
1072140az_46_Zrn	4.725	0.131	0.311	0.013	3.452	1771.595	129.255	1747.323	82.561	1800.773	62.168	1800.773	62.168	2.968
1072140az_47_Zrn	2.111	0.059	0.191	0.008	5.591	1152.457	58.824	1127.397	50.732	1205.102	67.378	1205.102	67.378	6.448
1072140az_48_Zrn	0.147	0.008	0.021	0.001	4.284	138.825	7.780	132.955	5.696	242.698	128.307	132.955	5.696	45.218
1072140az_49_Zrn	0.100	0.004	0.014	0.001	4.211	96.838	4.356	88.567	3.730	299.189	107.264	88.567	3.730	70.398
1072140az_50_Zrn	2.383	0.067	0.211	0.009	5.388	1237.457	66.520	1231.832	55.863	1245.950	67.130	1245.950	67.130	1.133
1072140az_51_Zrn	1.141	0.032	0.124	0.005	4.391	773.105	32.608	752.742	33.054	831.359	72.224	752.742	33.054	9.457
1072140az_52_Zrn	0.835	0.023	0.098	0.004	4.326	616.413	23.549	602.509	26.064	663.624	73.325	602.509	26.064	9.209
1072140az_53_Zrn	2.468	0.068	0.218	0.009	5.370	1262.740	68.346	1273.581	57.853	1243.348	66.766	1243.348	66.766	-2.432
1072140az_54_Zrn	0.708	0.020	0.089	0.004	4.297	543.647	20.030	547.306	23.520	526.828	75.170	547.306	23.520	-3.887
1072140az_55_Zrn	0.714	0.021	0.088	0.004	4.327	546.839	21.043	541.215	23.416	573.408	76.749	541.215	23.416	5.614
1072140az_56_Zrn	0.140	0.004	0.020	0.001	4.169	133.050	4.455	126.407	5.270	243.204	85.390	126.407	5.270	48.024
1072140az_57_Zrn	0.073	0.003	0.010	0.000	4.219	71.764	3.129	65.091	2.746	284.026	105.769	65.091	2.746	77.083
1072140az_58_Zrn	0.768	0.022	0.095	0.004	4.312	578.694	21.847	586.092	25.274	548.755	75.233	586.092	25.274	-6.804
1072140az_60_Zrn	1.574	0.044	0.159	0.007	4.431	960.002	44.090	950.472	42.119	978.454	69.724	950.472	42.119	2.860
1072140az_61_Zrn	0.089	0.003	0.013	0.001	4.259	86.576	3.275	80.876	3.444	230.313	95.741	80.876	3.444	64.884
1072140az_62_Zrn	3.439	0.111	0.253	0.011	4.443	1513.424	109.743	1451.724	71.521	1601.301	71.139	1601.301	71.139	9.341
1072140az_63_Zrn	1.246	0.035	0.135	0.006	4.406	821.405	35.544	818.209	36.048	819.291	72.322	818.209	36.048	0.132
1072140az_65_Zrn	0.254	0.007	0.037	0.002	4.210	229.802	7.583	232.282	9.780	201.689	82.287	232.282	9.780	-15.169
1072140az_66_Zrn	1.076	0.031	0.119	0.005	4.360	741.562	30.829	726.150	31.658	788.179	72.752	726.150	31.658	7.870
1072140az_67_Zrn	0.548	0.016	0.069	0.003	4.261	443.605	16.342	431.118	18.370	505.670	78.143	431.118	18.370	14.743
1072140az_68_Zrn	1.451	0.047	0.149	0.006	4.481	910.457	46.740	893.269	40.031	949.049	77.231	893.269	40.031	5.878
1072140az_69_Zrn	10.590	0.294	0.467	0.019	2.298	2487.811	278.462	2470.010	123.395	2501.700	57.485	2501.700	57.485	1.267
1072140az_70_Zrn	0.207	0.007	0.029	0.001	4.229	191.254	6.678	187.120	7.912	229.204	86.778	187.120	7.912	18.361
1072140az_71_Zrn	0.277	0.008	0.039	0.002	4.205	247.909	8.016	246.801	10.379	250.964	80.025	246.801	10.379	1.659
1072140az_72_Zrn	1.357	0.038	0.145	0.006	4.405	870.708	38.105	871.765	38.403	866.821	70.962	871.765	38.403	-0.570
1072140az_73_Zrn	0.080	0.002	0.012	0.000	4.183	77.871	2.461	76.113	3.184	127.330	85.497	76.113	3.184	40.224
1072140az_74_Zrn	1.693	0.048	0.164	0.007	4.443	1006.006	48.175	978.679	43.479	1066.602	69.573	978.679	43.479	8.243
1072140az_75_Zrn	6.510	0.182	0.371	0.015	2.938	2047.281	176.782	2032.896	98.057	2059.849	60.526	2059.849	60.526	1.308
1072140az_76_Zrn	0.082	0.003	0.012	0.000	4.172	80.412	3.026	74.913	3.125	240.161	94.916	74.913	3.125	68.807
1072140az_77_Zrn	0.190	0.005	0.028	0.001	4.185	176.883	5.574	175.575	7.348	194.225	81.537	175.575	7.348	9.602
1072140az_78_Zrn	5.151	0.143	0.330	0.014	3.330	1844.595	140.223	1836.904	87.097	1852.722	61.701	1852.722	61.701	0.854
1072140az_79_Zrn	0.108	0.005	0.014	0.001	4.249	104.369	5.510	88.659	3.767	469.077	118.744	88.659	3.767	81.099
1072140az_80_Zrn	0.399	0.015	0.051	0.002	4.265	340.615	14.758	323.417	13.795	435.372	92.590	323.417	13.795	25.715
1072140az_81_Zrn	0.116	0.008	0.017	0.001	4.361	111.217	8.280	106.785	4.657	195.060	168.002	106.785	4.657	45.255
1072140az_82_Zrn	0.417	0.012	0.056	0.002	4.232	353.978	11.749	348.483	14.746	388.890	76.669	348.483	14.746	10.390
1072140az_83_Zrn	1.769	0.050	0.171	0.007	6.472	1034.041	49.768	1015.879	45.272	1067.409	69.080	1067.409	69.080	4.828
1072140az_84_Zrn	0.582	0.017	0.074	0.003	4.280	465.940	16.760	458.644	19.629	499.899	76.442	458.644	19.629	8.253
1072140az_85_Zrn	0.263	0.008	0.037	0.002	4.197	237.051	7.750	234.103	9.826	267.015	80.725	234.103	9.826	12.326
1072140az_86_Zrn	0.283	0.008	0.039	0.002	4.214	252.717	8.218	248.746	10.482	286.032	79.784	248.746	10.482	13.036
1072140az_87_Zrn	0.092	0.004	0.013	0.001	4.234	89.444	3.588	81.439	3.448	299.147	98.494	81.439	3.448	72.776
1072140az_88_Zrn	0.099	0.004	0.014	0.001	4.290	96.137	3.840	87.890	3.770	288.073	97.943	87.890	3.770	69.490
1072140az_89_Zrn	0.271	0.008	0.039	0.002	4.219	243.617	7.826	245.795	10.371	223.393	80.194	245.795	10.371	-10.028
1072140az_90_Zrn	0.264	0.008	0.036	0.002	4.244	237.960	8.579	228.938	9.716	323.029	85.529	228.938	9.716	29.128
1072140az_92_Zrn	3.297	0.100	0.249	0.011	4.398	1480.461	99.470	1433.631	67.893	1551.817	68.246	1551.817	68.246	7.616
1072140az_93_Zrn	0.716	0.021	0.088	0.004	4.292	548.302	21.233	542.291	23.277	568.547	77.161	542.291	23.277	4.618
1072140az_94_Zrn	0.092	0.003	0.013	0.001	4.178	88.987	3.422	83.868	3.504	219.814	96.710	83.868	3.504	61.846

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Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072140az_95_Zrn	0.248	0.007	0.036	0.001	4.190	224.919	7.363	226.627	9.496	200.286	82.204	226.627	9.496	-13.152
1072140az_96_Zrn	0.137	0.004	0.020	0.001	4.164	130.617	4.266	125.942	5.244	209.565	84.626	125.942	5.244	39.903
1072140az_97_Zrn	1.644	0.046	0.165	0.007	4.434	987.241	46.196	984.697	43.664	991.021	69.831	984.697	43.664	0.638
1072140az_98_Zrn	0.306	0.009	0.042	0.002	4.201	271.212	9.265	268.290	11.272	289.695	81.906	268.290	11.272	7.389
1072140az_99_Zrn	0.153	0.005	0.021	0.001	4.182	144.780	5.471	136.593	5.713	282.203	92.400	136.593	5.713	51.598
1072140az_100_Zrn	1.603	0.045	0.156	0.006	4.438	971.471	45.600	936.984	41.584	1047.734	69.926	936.984	41.584	10.570
1072140az_101_Zrn	1.508	0.042	0.156	0.006	4.408	933.773	41.867	932.669	41.108	935.319	69.773	932.669	41.108	0.283
1072140az_102_Zrn	2.306	0.064	0.204	0.008	5.364	1214.034	63.646	1198.004	54.020	1243.660	66.705	1243.660	66.705	3.671
1072140az_103_Zrn	2.995	0.135	0.234	0.014	6.717	1406.386	132.730	1353.572	89.654	1487.339	99.911	1487.339	99.911	8.994
1072140az_104_Zrn	0.095	0.003	0.014	0.001	4.147	91.817	2.814	88.206	3.658	175.247	82.610	88.206	3.658	49.668
1072140az_105_Zrn	0.179	0.005	0.025	0.001	4.180	167.140	5.529	161.586	6.755	240.203	83.884	161.586	6.755	32.729
1072140az_106_Zrn	0.575	0.018	0.073	0.003	4.278	461.358	18.533	455.446	19.484	484.803	82.893	455.446	19.484	6.055
1072140az_107_Zrn	0.281	0.008	0.040	0.002	4.209	251.740	8.118	254.019	10.691	282.894	80.028	254.019	10.691	-11.955
1072140az_108_Zrn	0.647	0.019	0.082	0.003	4.281	506.801	19.096	508.829	21.784	492.383	77.843	508.829	21.784	-3.340
1072140az_109_Zrn	1.660	0.047	0.165	0.007	4.446	993.535	47.369	986.136	43.843	1008.095	70.402	986.136	43.843	2.178
1072140az_110_Zrn	0.090	0.003	0.013	0.001	4.163	87.514	3.187	81.517	3.393	246.041	92.503	81.517	3.393	66.869
1072-141, Early Paleocene Cacho Formation (N = 102)														
1072141az_1_Zrn	0.319	0.009	0.043	0.002	4.197	281.161	9.611	272.980	11.457	333.521	81.036	272.980	11.457	18.152
1072141az_2_Zrn	0.157	0.006	0.022	0.001	4.212	147.650	6.434	139.695	5.884	264.155	103.559	139.695	5.884	47.116
1072141az_3_Zrn	2.063	0.057	0.194	0.008	6.085	1136.604	57.407	1144.758	51.430	1120.507	68.179	1120.507	68.179	-2.164
1072141az_4_Zrn	0.081	0.003	0.012	0.000	4.143	79.438	2.587	74.877	3.102	209.637	85.874	74.877	3.102	64.283
1072141az_5_Zrn	0.089	0.003	0.013	0.001	4.277	86.160	2.892	82.594	3.532	182.592	88.490	82.594	3.532	54.766
1072141az_6_Zrn	0.098	0.004	0.014	0.001	4.241	94.815	3.885	89.382	3.791	230.630	101.475	89.382	3.791	61.245
1072141az_7_Zrn	0.106	0.006	0.013	0.001	4.240	102.295	5.650	84.119	3.566	539.012	121.879	84.119	3.566	84.394
1072141az_8_Zrn	1.494	0.041	0.154	0.006	4.406	927.834	41.411	921.479	40.602	942.360	69.667	921.479	40.602	2.216
1072141az_9_Zrn	0.182	0.006	0.026	0.001	4.192	169.918	5.920	162.901	6.830	257.864	86.667	162.901	6.830	36.827
1072141az_10_Zrn	0.168	0.005	0.024	0.001	4.168	157.268	5.095	153.372	6.392	205.948	83.403	153.372	6.392	25.529
1072141az_12_Zrn	2.126	0.058	0.195	0.008	5.728	1157.163	58.489	1149.056	51.485	1172.313	67.145	1172.313	67.145	1.984
1072141az_13_Zrn	2.711	0.080	0.225	0.009	5.000	1331.440	79.448	1306.868	59.712	1369.108	68.451	1369.108	68.451	4.546
1072141az_14_Zrn	1.861	0.054	0.180	0.007	6.578	1067.336	53.728	1065.020	47.618	1070.422	70.412	1070.422	70.412	0.505
1072141az_15_Zrn	0.637	0.018	0.081	0.003	4.287	500.669	18.286	502.432	21.540	488.261	76.542	502.432	21.540	-2.903
1072141az_16_Zrn	0.127	0.034	0.015	0.001	7.821	121.163	33.889	96.845	7.575	629.586	536.635	96.845	7.575	84.618
1072141az_17_Zrn	0.256	0.007	0.036	0.001	4.184	231.514	7.454	230.602	9.649	235.273	80.538	230.602	9.649	1.985
1072141az_18_Zrn	0.177	0.006	0.025	0.001	4.192	165.265	5.957	158.884	6.660	249.979	89.008	158.884	6.660	36.441
1072141az_19_Zrn	0.084	0.003	0.012	0.001	4.143	81.786	2.588	78.840	3.266	159.350	85.002	78.840	3.266	50.524
1072141az_20_Zrn	0.510	0.015	0.064	0.003	4.257	418.302	15.126	400.018	17.029	502.147	77.137	400.018	17.029	20.339
1072141az_21_Zrn	0.255	0.007	0.036	0.001	4.181	230.230	7.567	228.317	9.545	237.366	81.656	228.317	9.545	3.812
1072141az_22_Zrn	2.169	0.060	0.199	0.008	5.767	1171.269	60.077	1171.146	52.647	1170.573	67.502	1170.573	67.502	-0.049
1072141az_23_Zrn	0.603	0.018	0.076	0.003	4.264	479.005	18.004	469.633	20.024	517.242	78.178	469.633	20.024	9.204
1072141az_24_Zrn	0.190	0.009	0.025	0.001	4.292	176.243	9.278	159.264	6.835	410.140	116.552	159.264	6.835	61.168
1072141az_25_Zrn	0.158	0.006	0.021	0.001	4.231	149.266	6.461	135.122	5.717	373.427	100.893	135.122	5.717	63.816
1072141az_26_Zrn	0.370	0.014	0.050	0.002	4.246	319.780	13.911	312.838	13.284	363.189	94.798	312.838	13.284	13.864
1072141az_27_Zrn	0.097	0.003	0.014	0.001	4.198	94.424	3.163	90.921	3.817	182.643	87.736	90.921	3.817	50.219
1072141az_29_Zrn	1.681	0.048	0.170	0.007	7.272	1001.225	48.012	1012.152	45.015	973.900	70.820	973.900	70.820	-3.928
1072141az_30_Zrn	0.093	0.003	0.013	0.001	4.171	90.675	3.305	83.406	3.479	280.451	91.857	83.406	3.479	70.260
1072141az_31_Zrn	0.190	0.007	0.026	0.001	4.198	176.675	6.917	162.727	6.831	361.977	92.413	162.727	6.831	55.045

1072141az_32_Zrn	1.282	0.035	0.137	0.006	4.381	837.865	35.534	829.990	36.364	858.153	70.522	829.990	36.364	3.282
1072141az_33_Zrn	0.079	0.004	0.011	0.000	4.207	77.478	3.584	70.859	2.981	279.831	111.556	70.859	2.981	74.678
1072141az_34_Zrn	0.137	0.008	0.019	0.001	4.338	129.972	8.587	118.343	5.134	349.666	145.126	118.343	5.134	66.155
1072141az_35_Zrn	2.103	0.059	0.193	0.008	5.843	1149.741	58.683	1140.189	51.068	1161.685	67.873	1161.685	67.873	1.850
1072141az_36_Zrn	0.308	0.009	0.042	0.002	4.203	272.922	9.291	267.897	11.261	311.112	81.356	267.897	11.261	13.891
1072141az_37_Zrn	0.226	0.015	0.028	0.001	4.311	206.684	14.857	176.254	7.599	545.681	147.674	176.254	7.599	67.700
1072141az_38_Zrn	0.084	0.003	0.011	0.000	4.164	81.462	3.241	73.471	3.059	311.145	97.938	73.471	3.059	76.387
1072141az_39_Zrn	2.130	0.063	0.198	0.008	6.205	1158.540	62.584	1164.472	52.411	1138.306	70.630	1138.306	70.630	-2.299
1072141az_40_Zrn	0.095	0.004	0.014	0.001	4.192	92.573	4.255	88.507	3.710	194.903	111.530	88.507	3.710	54.589
1072141az_41_Zrn	1.786	0.050	0.173	0.007	6.525	1040.231	50.244	1026.170	45.713	1061.399	69.261	1061.399	69.261	3.319
1072141az_42_Zrn	0.800	0.023	0.096	0.004	4.314	596.994	23.008	588.889	25.404	624.879	74.933	588.889	25.404	5.760
1072141az_43_Zrn	0.167	0.005	0.024	0.001	4.185	156.757	4.977	153.872	6.440	199.984	82.483	153.872	6.440	23.058
1072141az_44_Zrn	0.091	0.003	0.013	0.001	4.169	88.825	3.019	85.267	3.555	175.141	88.972	85.267	3.555	51.315
1072141az_45_Zrn	0.169	0.008	0.023	0.001	4.246	158.475	8.565	148.185	6.292	316.425	121.605	148.185	6.292	53.169
1072141az_46_Zrn	0.097	0.005	0.013	0.001	4.263	94.343	4.952	81.011	3.454	439.714	119.886	81.011	3.454	81.577
1072141az_47_Zrn	0.157	0.011	0.022	0.001	4.311	147.934	10.639	143.081	6.169	211.314	159.434	143.081	6.169	32.290
1072141az_49_Zrn	0.595	0.017	0.077	0.003	4.251	474.352	16.971	475.843	20.227	462.984	76.341	475.843	20.227	-2.777
1072141az_50_Zrn	0.157	0.006	0.023	0.001	4.234	148.305	6.145	146.593	6.206	153.655	101.441	146.593	6.206	4.596
1072141az_51_Zrn	0.174	0.006	0.025	0.001	4.193	163.152	5.670	159.233	6.677	218.969	87.250	159.233	6.677	27.281
1072141az_52_Zrn	3.432	0.095	0.260	0.011	4.131	1511.658	94.125	1490.364	68.911	1549.389	64.011	1549.389	64.011	3.810
1072141az_53_Zrn	0.192	0.008	0.025	0.001	4.255	178.050	8.508	157.096	6.685	423.830	107.268	157.096	6.685	62.934
1072141az_54_Zrn	1.788	0.049	0.176	0.007	6.638	1040.928	49.429	1043.628	46.448	1034.520	68.675	1034.520	68.675	-0.880
1072141az_55_Zrn	0.849	0.024	0.100	0.004	4.320	624.255	24.064	616.630	26.640	645.961	73.870	616.630	26.640	4.541
1072141az_56_Zrn	0.292	0.008	0.042	0.002	4.196	260.049	8.381	265.741	11.151	209.594	80.137	265.741	11.151	-26.788
1072141az_57_Zrn	0.326	0.011	0.044	0.002	4.223	286.747	10.724	275.034	11.614	378.018	85.503	275.034	11.614	27.243
1072141az_58_Zrn	0.087	0.003	0.013	0.001	4.159	84.946	2.624	81.998	3.410	165.302	83.341	81.998	3.410	50.395
1072141az_59_Zrn	0.567	0.016	0.073	0.003	4.261	455.968	15.979	455.805	19.420	454.674	75.942	455.805	19.420	-0.249
1072141az_60_Zrn	0.345	0.010	0.049	0.002	4.220	301.273	10.608	305.863	12.907	259.182	83.218	305.863	12.907	-18.011
1072141az_61_Zrn	0.304	0.009	0.043	0.002	4.204	269.690	8.748	271.553	11.415	250.435	79.673	271.553	11.415	-8.432
1072141az_62_Zrn	0.102	0.004	0.014	0.001	4.274	98.549	4.480	91.155	3.896	256.287	109.656	91.155	3.896	64.433
1072141az_63_Zrn	0.538	0.016	0.066	0.003	4.273	437.173	16.666	413.018	17.647	563.769	79.601	413.018	17.647	26.740
1072141az_64_Zrn	0.828	0.023	0.100	0.004	4.312	612.264	23.670	615.462	26.536	599.197	74.870	615.462	26.536	-2.714
1072141az_65_Zrn	0.173	0.005	0.024	0.001	4.181	162.033	5.447	155.857	6.516	252.879	84.739	155.857	6.516	38.367
1072141az_66_Zrn	24.014	0.662	0.646	0.027	1.614	3268.942	580.770	3210.950	170.003	3304.740	53.346	3304.740	53.346	2.838
1072141az_67_Zrn	0.701	0.020	0.086	0.004	4.294	539.649	20.158	531.740	22.830	571.289	75.428	531.740	22.830	6.923
1072141az_68_Zrn	0.204	0.006	0.029	0.001	4.186	188.112	6.366	184.774	7.735	226.332	84.795	184.774	7.735	18.361
1072141az_69_Zrn	0.879	0.025	0.105	0.004	4.327	640.410	24.783	641.856	27.771	632.455	73.752	641.856	27.771	-1.487
1072141az_70_Zrn	0.286	0.008	0.040	0.002	4.203	255.313	8.576	251.980	10.592	276.976	81.556	251.980	10.592	9.003
1072141az_71_Zrn	0.203	0.006	0.029	0.001	4.208	187.453	6.295	182.904	7.697	233.901	84.283	182.904	7.697	21.805
1072141az_72_Zrn	0.272	0.008	0.038	0.002	4.192	244.059	7.742	241.240	10.112	270.748	78.886	241.240	10.112	10.899
1072141az_73_Zrn	0.081	0.005	0.012	0.001	4.393	79.418	5.035	73.801	3.242	248.082	146.705	73.801	3.242	70.252
1072141az_74_Zrn	0.173	0.005	0.024	0.001	4.159	162.350	5.160	155.974	6.487	246.646	81.577	155.974	6.487	36.762
1072141az_75_Zrn	0.078	0.003	0.011	0.000	4.156	76.018	2.681	70.611	2.935	238.079	90.601	70.611	2.935	70.341
1072141az_76_Zrn	0.583	0.016	0.075	0.003	4.270	466.526	16.639	464.039	19.815	476.303	76.308	464.039	19.815	2.575
1072141az_77_Zrn	2.042	0.056	0.189	0.008	5.811	1129.546	56.526	1113.421	49.884	1161.978	67.519	1161.978	67.519	4.179
1072141az_78_Zrn	0.658	0.018	0.082	0.003	4.272	513.390	18.391	510.497	21.810	533.594	74.465	510.497	21.810	4.329
1072141az_79_Zrn	0.705	0.020	0.086	0.004	4.277	542.006	19.883	532.426	22.775	577.865	74.375	532.426	22.775	7.863
1072141az_80_Zrn	0.100	0.004	0.015	0.001	4.254	97.201	3.636	94.138	4.005	171.534	95.294	94.138	4.005	45.120
1072141az_81_Zrn	0.547	0.016	0.072	0.003	4.276	442.954	15.822	445.666	19.058	425.796	77.720	445.666	19.058	-4.667
1072141az_82_Zrn	4.919	0.136	0.320	0.013	3.399	1805.514	133.984	1788.919	84.596	1822.191	61.929	1822.191	61.929	1.826
1072141az_83_Zrn	0.170	0.007	0.024	0.001	4.209	159.579	6.701	153.998	6.482	233.859	100.259	153.998	6.482	34.149
1072141az_84_Zrn	3.193	0.088	0.253	0.010	4.449	1455.577	87.854	1453.634	66.859	1457.885	64.862	1457.885	64.862	0.292
1072141az_85_Zrn	1.316	0.037	0.141	0.006	4.384	852.684	37.407	847.569	37.154	864.758	71.589	847.569	37.154	1.988

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Continued

Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072141az_86_Zrn	0.644	0.018	0.081	0.003	4.281	504.670	18.093	502.954	21.532	504.318	75.211	502.954	21.532	0.270
1072141az_87_Zrn	0.153	0.007	0.019	0.001	4.207	144.742	7.380	123.952	5.215	503.250	112.285	123.952	5.215	75.370
1072141az_88_Zrn	5.688	0.157	0.343	0.014	3.097	1929.540	153.521	1900.734	90.713	1962.491	60.770	1962.491	60.770	3.147
1072141az_89_Zrn	0.171	0.005	0.024	0.001	4.180	160.140	5.182	151.985	6.353	280.348	82.264	151.985	6.353	45.787
1072141az_90_Zrn	0.414	0.012	0.056	0.002	4.250	351.731	11.936	352.989	15.003	354.395	78.482	352.989	15.003	0.397
1072141az_91_Zrn	0.673	0.019	0.083	0.003	4.285	522.583	19.350	512.976	21.983	565.459	75.487	512.976	21.983	9.282
1072141az_92_Zrn	0.561	0.016	0.073	0.003	4.258	452.045	15.856	453.216	19.297	442.285	76.259	453.216	19.297	-2.471
1072141az_93_Zrn	2.356	0.066	0.207	0.009	5.395	1229.325	65.448	1214.392	54.835	1241.937	67.007	1241.937	67.007	2.218
1072141az_94_Zrn	0.575	0.016	0.075	0.003	4.259	461.107	16.566	466.440	19.868	425.878	77.446	466.440	19.868	-9.524
1072141az_95_Zrn	0.167	0.005	0.024	0.001	4.200	156.892	5.114	153.037	6.428	213.062	83.816	153.037	6.428	28.173
1072141az_96_Zrn	0.173	0.005	0.025	0.001	4.212	162.035	5.451	159.432	6.716	191.884	85.850	159.432	6.716	16.912
1072141az_97_Zrn	0.101	0.004	0.013	0.001	4.412	97.612	4.526	85.862	3.788	387.289	109.428	85.862	3.788	77.830
1072141az_99_Zrn	0.179	0.015	0.025	0.001	5.658	167.110	15.486	162.222	9.179	221.423	204.420	162.222	9.179	26.737
1072141az_100_Zrn	0.185	0.005	0.027	0.001	4.181	172.750	5.361	170.935	7.147	196.722	80.801	170.935	7.147	13.108
1072141az_101_Zrn	5.505	0.152	0.342	0.014	3.206	1901.445	148.320	1897.571	90.210	1903.487	61.022	1903.487	61.022	0.311
1072141az_102_Zrn	3.925	0.108	0.280	0.012	3.804	1618.835	107.087	1591.990	73.982	1656.327	63.008	1656.327	63.008	3.884
1072141az_103_Zrn	2.991	0.083	0.239	0.010	4.502	1405.393	82.266	1381.319	63.467	1443.826	64.998	1443.826	64.998	4.329
1072141az_104_Zrn	0.632	0.018	0.081	0.003	4.270	497.566	18.264	504.623	21.549	464.702	77.052	504.623	21.549	-8.591
1072141az_105_Zrn	0.101	0.003	0.014	0.001	4.169	97.256	3.438	89.590	3.735	281.305	89.587	89.590	3.735	68.152
1072141az_106_Zrn	0.188	0.007	0.025	0.001	4.192	174.869	6.713	161.231	6.758	341.436	91.565	161.231	6.758	52.779
1072141az_107_Zrn	0.295	0.009	0.040	0.002	4.193	262.418	9.003	252.576	10.590	338.977	81.704	252.576	10.590	25.489
1072141az_108_Zrn	3.230	0.090	0.250	0.010	4.324	1464.290	89.444	1437.743	65.938	1499.007	64.810	1499.007	64.810	4.087
1072141az_109_Zrn	0.084	0.002	0.013	0.001	4.149	82.174	2.496	80.356	3.334	132.355	82.991	80.356	3.334	39.288
1072141az_110_Zrn	1.058	0.030	0.120	0.005	4.359	733.070	30.291	732.349	31.924	757.648	72.939	732.349	31.924	3.339
1072-146, Early Paleocene Lower Socha Formation (N = 108)														
1072146az1_1_Zrn	1.593	0.045	0.159	0.006	4.082	967.514	45.486	952.297	38.874	994.402	69.115	952.297	38.874	4.234
1072146az1_2_Zrn	4.894	0.123	0.319	0.012	3.125	1801.178	121.496	1786.630	77.398	1818.048	56.807	1818.048	56.807	1.728
1072146az1_3_Zrn	3.277	0.082	0.258	0.010	4.039	1475.685	81.814	1481.010	62.460	1466.193	59.215	1466.193	59.215	-1.011
1072146az1_4_Zrn	3.720	0.094	0.273	0.010	3.644	1575.654	93.213	1556.825	66.242	1604.196	58.449	1604.196	58.449	2.953
1072146az1_5_Zrn	5.091	0.135	0.320	0.012	3.130	1834.566	132.753	1788.073	80.032	1879.671	58.827	1879.671	58.827	4.873
1072146az1_6_Zrn	4.751	0.120	0.314	0.012	3.192	1776.214	118.786	1762.453	76.205	1793.605	57.246	1793.605	57.246	1.737
1072146az1_7_Zrn	2.640	0.066	0.222	0.008	4.500	1311.995	66.341	1294.441	53.849	1341.514	60.363	1341.514	60.363	3.509
1072146az1_8_Zrn	3.330	0.083	0.256	0.010	3.888	1488.065	82.902	1471.641	62.067	1511.795	58.780	1511.795	58.780	2.656
1072146az1_9_Zrn	5.028	0.132	0.319	0.012	3.107	1824.112	129.906	1782.933	77.437	1869.439	58.082	1869.439	58.082	4.627
1072146az1_10_Zrn	1.930	0.052	0.181	0.007	5.806	1091.516	51.657	1073.322	44.053	1117.287	64.866	1117.287	64.866	3.935
1072146az1_12_Zrn	2.530	0.064	0.217	0.008	4.649	1280.835	63.856	1264.801	52.509	1307.731	60.798	1307.731	60.798	3.283
1072146az1_13_Zrn	4.040	0.102	0.287	0.011	3.468	1642.300	100.611	1624.144	69.364	1666.622	57.801	1666.622	57.801	2.549
1072146az1_14_Zrn	2.385	0.060	0.212	0.008	4.978	1238.030	60.183	1238.797	51.329	1233.274	61.390	1233.274	61.390	-0.448
1072146az1_15_Zrn	4.459	0.112	0.304	0.011	3.287	1723.413	110.552	1709.054	73.427	1739.513	57.184	1739.513	57.184	1.751
1072146az1_16_Zrn	3.423	0.086	0.261	0.010	3.841	1509.795	85.479	1495.378	63.232	1530.210	58.781	1530.210	58.781	2.276
1072146az1_17_Zrn	4.508	0.113	0.306	0.012	3.274	1732.451	111.657	1720.108	74.055	1745.297	57.145	1745.297	57.145	1.443
1072146az1_18_Zrn	3.276	0.084	0.259	0.010	4.084	1475.254	83.105	1482.690	62.618	1465.955	59.873	1465.955	59.873	-1.142
1072146az1_19_Zrn	5.653	0.142	0.343	0.013	2.866	1924.281	139.140	1903.016	83.044	1946.565	55.781	1946.565	55.781	2.237
1072146az1_20_Zrn	2.517	0.063	0.216	0.008	4.662	1277.069	63.175	1263.336	52.399	1299.850	60.603	1299.850	60.603	2.809
1072146az1_21_Zrn	3.345	0.084	0.259	0.010	3.949	1491.623	83.990	1485.791	62.768	1499.491	59.221	1499.491	59.221	0.914
1072146az1_22_Zrn	2.080	0.056	0.195	0.007	5.749	1142.282	55.694	1148.854	47.563	1128.887	64.895	1128.887	64.895	-1.769

1072146az1_23_Zrn	2.469	0.063	0.214	0.008	4.779	1263.001	62.600	1252.704	52.195	1282.050	61.268	1282.050	61.268	2.289
1072146az1_24_Zrn	3.327	0.085	0.256	0.010	3.947	1487.460	84.824	1469.794	62.066	1513.261	59.724	1513.261	59.724	2.872
1072146az1_25_Zrn	4.640	0.116	0.311	0.012	3.211	1756.456	114.680	1744.270	75.108	1771.268	56.871	1771.268	56.871	1.524
1072146az1_26_Zrn	3.016	0.077	0.244	0.009	4.272	1411.777	76.955	1406.656	59.081	1414.915	60.443	1414.915	60.443	0.584
1072146az1_27_Zrn	3.313	0.084	0.258	0.010	3.994	1484.115	83.688	1481.261	62.596	1490.440	59.533	1490.440	59.533	0.616
1072146az1_28_Zrn	0.293	0.009	0.041	0.002	3.857	261.088	8.940	261.369	10.080	247.680	81.291	261.369	10.080	-5.527
1072146az1_29_Zrn	2.616	0.066	0.222	0.008	4.586	1305.082	65.864	1293.495	53.820	1321.604	60.605	1321.604	60.605	2.127
1072146az1_30_Zrn	3.580	0.091	0.267	0.010	3.725	1545.182	90.203	1524.160	64.712	1576.912	58.745	1576.912	58.745	3.345
1072146az1_31_Zrn	1.271	0.033	0.138	0.005	4.015	832.770	32.946	833.558	33.469	830.132	66.087	833.558	33.469	-0.413
1072146az1_32_Zrn	4.476	0.117	0.307	0.012	3.399	1726.466	115.293	1723.552	74.477	1731.143	58.837	1731.143	58.837	0.438
1072146az1_33_Zrn	3.260	0.082	0.257	0.010	4.055	1471.648	81.660	1476.529	62.281	1463.806	59.360	1463.806	59.360	-0.869
1072146az1_34_Zrn	3.216	0.081	0.252	0.009	4.013	1461.030	80.367	1451.008	61.072	1474.159	59.165	1474.159	59.165	1.570
1072146az1_35_Zrn	4.556	0.115	0.307	0.012	3.257	1741.219	114.011	1723.796	74.402	1762.256	57.402	1762.256	57.402	2.182
1072146az1_36_Zrn	3.196	0.081	0.253	0.010	4.103	1456.298	80.483	1456.050	61.354	1453.967	59.656	1453.967	59.656	-0.143
1072146az1_37_Zrn	4.941	0.125	0.319	0.012	3.092	1809.267	122.990	1786.820	77.453	1835.146	56.751	1835.146	56.751	2.633
1072146az1_38_Zrn	3.493	0.088	0.265	0.010	3.817	1525.608	87.589	1512.891	64.096	1541.221	58.829	1541.221	58.829	1.838
1072146az1_39_Zrn	4.669	0.119	0.312	0.012	3.235	1761.773	117.078	1749.757	75.649	1774.642	57.415	1774.642	57.415	1.402
1072146az1_40_Zrn	5.092	0.129	0.328	0.012	3.084	1834.790	126.730	1828.137	79.332	1840.198	56.751	1840.198	56.751	0.655
1072146az1_41_Zrn	3.168	0.081	0.247	0.009	4.010	1449.486	80.308	1422.275	59.810	1486.632	59.612	1486.632	59.612	4.329
1072146az1_42_Zrn	2.391	0.061	0.213	0.008	5.036	1239.875	60.971	1245.417	51.709	1228.462	61.866	1228.462	61.866	-1.380
1072146az1_43_Zrn	2.542	0.065	0.220	0.008	4.770	1284.286	65.205	1281.812	53.497	1291.093	61.589	1291.093	61.589	0.719
1072146az1_44_Zrn	7.304	0.186	0.396	0.015	2.557	2149.287	180.413	2149.905	96.154	2148.971	54.939	2148.971	54.939	-0.043
1072146az1_45_Zrn	0.667	0.017	0.084	0.003	3.937	519.021	17.315	521.630	20.535	506.275	69.563	521.630	20.535	-3.033
1072146az1_46_Zrn	0.660	0.017	0.082	0.003	3.935	514.782	17.431	509.251	20.038	534.933	70.107	509.251	20.038	4.801
1072146az1_47_Zrn	4.368	0.109	0.303	0.011	3.356	1706.249	108.192	1704.711	73.185	1707.750	57.320	1707.750	57.320	0.178
1072146az1_48_Zrn	2.502	0.064	0.217	0.008	4.800	1272.713	63.780	1266.853	52.779	1280.314	61.461	1280.314	61.461	1.051
1072146az1_49_Zrn	0.830	0.023	0.099	0.004	3.941	613.783	23.476	607.462	23.940	625.675	72.195	607.462	23.940	2.911
1072146az1_50_Zrn	4.882	0.123	0.321	0.012	3.154	1799.124	121.263	1794.669	77.747	1803.647	56.885	1803.647	56.885	0.498
1072146az1_51_Zrn	4.988	0.126	0.321	0.012	3.080	1817.335	124.416	1795.195	77.883	1844.582	56.813	1844.582	56.813	2.677
1072146az1_52_Zrn	4.594	0.116	0.312	0.012	3.294	1748.093	114.812	1750.931	75.666	1744.481	57.458	1744.481	57.458	-0.370
1072146az1_53_Zrn	3.236	0.082	0.254	0.010	4.019	1465.761	81.330	1457.465	61.519	1477.625	59.388	1477.625	59.388	1.364
1072146az1_54_Zrn	3.431	0.090	0.261	0.010	3.932	1511.588	89.367	1494.108	63.476	1535.981	60.395	1535.981	60.395	2.726
1072146az1_55_Zrn	3.254	0.083	0.252	0.010	3.997	1470.219	83.051	1449.142	61.250	1497.876	59.864	1497.876	59.864	3.254
1072146az1_56_Zrn	4.765	0.120	0.319	0.012	3.231	1778.760	118.704	1785.535	77.307	1769.997	57.186	1769.997	57.186	-0.878
1072146az1_57_Zrn	2.551	0.064	0.218	0.008	4.638	1286.628	64.265	1272.735	52.970	1308.155	60.679	1308.155	60.679	2.708
1072146az1_58_Zrn	3.359	0.087	0.260	0.010	3.988	1494.896	86.036	1491.026	63.185	1502.699	59.928	1502.699	59.928	0.777
1072146az1_59_Zrn	3.789	0.097	0.272	0.010	3.568	1590.319	96.461	1549.033	66.386	1648.430	58.813	1648.430	58.813	6.030
1072146az1_60_Zrn	4.496	0.113	0.308	0.012	3.317	1730.266	111.993	1733.128	74.648	1730.643	57.399	1730.643	57.399	-0.144
1072146az1_61_Zrn	4.972	0.125	0.323	0.012	3.107	1814.569	123.494	1806.197	78.344	1826.778	56.750	1826.778	56.750	1.127
1072146az1_62_Zrn	2.348	0.061	0.210	0.008	5.071	1227.077	60.764	1226.299	50.983	1230.242	62.388	1230.242	62.388	0.321
1072146az1_63_Zrn	1.632	0.041	0.162	0.006	4.068	982.478	41.610	966.643	39.323	1017.295	63.619	966.643	39.323	4.979
1072146az1_64_Zrn	2.605	0.066	0.221	0.008	4.574	1302.034	65.962	1285.996	53.559	1328.149	60.755	1328.149	60.755	3.174
1072146az1_65_Zrn	5.162	0.130	0.324	0.012	2.998	1846.427	128.204	1811.594	78.734	1882.624	56.432	1882.624	56.432	3.773
1072146az1_66_Zrn	3.221	0.082	0.254	0.010	4.093	1462.154	82.025	1457.680	61.572	1465.195	59.968	1465.195	59.968	0.513
1072146az1_67_Zrn	4.240	0.107	0.294	0.011	3.363	1681.847	105.623	1659.368	71.138	1709.762	57.508	1709.762	57.508	2.947
1072146az1_68_Zrn	4.704	0.119	0.311	0.012	3.190	1767.937	117.614	1745.945	75.507	1792.508	57.176	1792.508	57.176	2.598
1072146az1_69_Zrn	3.599	0.092	0.267	0.010	3.719	1549.204	90.955	1524.491	64.828	1582.469	58.855	1582.469	58.855	3.664
1072146az1_70_Zrn	2.579	0.066	0.218	0.008	4.556	1294.685	65.693	1271.825	53.113	1335.232	60.834	1335.232	60.834	4.749
1072146az1_71_Zrn	5.096	0.130	0.322	0.012	3.021	1835.426	127.444	1798.005	78.272	1875.173	56.654	1875.173	56.654	4.115
1072146az1_72_Zrn	3.339	0.084	0.253	0.010	3.822	1490.283	83.838	1455.588	61.499	1539.689	58.840	1539.689	58.840	5.462
1072146az1_73_Zrn	1.528	0.040	0.157	0.006	4.061	941.727	40.258	941.480	38.232	958.226	65.769	941.480	38.232	-0.347
1072146az1_74_Zrn	3.580	0.092	0.269	0.010	3.839	1545.213	91.784	1538.099	65.675	1553.014	59.617	1553.014	59.617	0.960

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Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072146az1_75_Zrn	3.337	0.087	0.256	0.010	3.976	1489.825	86.938	1467.073	62.513	1521.420	60.497	1521.420	60.497	3.572
1072146az1_76_Zrn	1.623	0.044	0.159	0.006	4.092	979.072	44.133	950.468	38.896	1042.303	66.175	950.468	38.896	8.811
1072146az1_77_Zrn	2.433	0.062	0.214	0.008	4.920	1252.347	62.021	1251.018	52.124	1253.342	61.663	1253.342	61.663	0.185
1072146az1_78_Zrn	2.428	0.062	0.212	0.008	4.881	1250.839	62.245	1241.750	51.726	1265.525	61.770	1265.525	61.770	1.879
1072146az1_79_Zrn	3.322	0.084	0.258	0.010	3.987	1486.335	84.000	1481.262	62.793	1491.947	59.479	1491.947	59.479	0.716
1072146az1_80_Zrn	3.806	0.097	0.273	0.010	3.554	1594.022	96.463	1554.331	66.392	1647.060	58.537	1647.060	58.537	5.630
1072146az1_81_Zrn	6.428	0.199	0.388	0.017	3.314	2036.130	192.639	2113.869	106.180	1956.320	64.840	1956.320	64.840	-8.053
1072146az1_82_Zrn	2.552	0.065	0.219	0.008	4.676	1287.145	65.193	1277.502	53.365	1308.527	61.188	1308.527	61.188	2.371
1072146az1_83_Zrn	5.079	0.129	0.321	0.012	3.031	1832.543	127.079	1795.694	78.068	1870.372	56.696	1870.372	56.696	3.993
1072146az1_84_Zrn	0.135	0.004	0.019	0.001	3.939	128.985	4.465	122.498	4.825	236.712	86.565	122.498	4.825	48.250
1072146az1_85_Zrn	0.606	0.016	0.078	0.003	3.948	481.018	16.176	481.753	19.020	476.399	71.233	481.753	19.020	-1.124
1072146az1_86	4.545	0.116	0.310	0.012	3.346	1739.195	114.426	1743.137	75.434	1731.179	57.918	1731.179	57.918	-0.691
1072146az1_87_Zrn	4.956	0.126	0.318	0.012	3.078	1811.781	123.924	1778.926	77.162	1848.043	56.885	1848.043	56.885	3.740
1072146az1_88_Zrn	1.457	0.038	0.148	0.006	4.051	912.581	38.692	890.275	36.069	965.452	65.927	890.275	36.069	7.787
1072146az1_89_Zrn	3.279	0.082	0.253	0.010	3.910	1476.111	81.681	1455.912	61.287	1504.455	58.827	1504.455	58.827	3.227
1072146az1_90_Zrn	3.059	0.078	0.245	0.009	4.211	1422.472	77.891	1413.430	59.424	1430.787	60.251	1430.787	60.251	1.213
1072146az1_91_Zrn	5.712	0.143	0.345	0.013	2.843	1933.159	140.639	1908.659	83.364	1959.218	55.695	1959.218	55.695	2.581
1072146az1_92_Zrn	5.891	0.148	0.349	0.013	2.795	1959.920	145.308	1930.620	84.501	1989.217	55.603	1989.217	55.603	2.946
1072146az1_93_Zrn	3.230	0.082	0.255	0.010	4.067	1464.414	81.277	1463.430	61.780	1464.150	59.551	1464.150	59.551	0.049
1072146az1_94_Zrn	2.631	0.069	0.221	0.008	4.629	1309.457	68.776	1289.068	53.859	1340.480	62.048	1340.480	62.048	3.835
1072146az1_95_Zrn	4.496	0.113	0.304	0.011	3.258	1730.154	111.502	1711.455	73.557	1752.896	57.113	1752.896	57.113	2.364
1072146az1_96_Zrn	2.346	0.059	0.204	0.008	4.751	1226.244	59.243	1195.177	49.548	1283.992	61.002	1283.992	61.002	6.917
1072146az1_97_Zrn	3.217	0.081	0.252	0.009	4.002	1461.294	80.383	1449.785	61.059	1478.668	59.170	1478.668	59.170	1.953
1072146az1_98_Zrn	3.287	0.083	0.255	0.010	3.953	1478.009	82.369	1464.409	61.760	1496.111	59.148	1496.111	59.148	2.119
1072146az1_99_Zrn	3.359	0.085	0.259	0.010	3.930	1494.835	84.310	1487.052	62.923	1505.999	59.182	1505.999	59.182	1.258
1072146az1_100_Zrn	3.370	0.086	0.260	0.010	3.945	1497.418	85.192	1489.188	62.932	1507.489	59.466	1507.489	59.466	1.214
1072146az1_101_Zrn	2.417	0.062	0.215	0.008	5.009	1247.710	62.064	1253.928	52.094	1238.441	62.037	1238.441	62.037	-1.250
1072146az1_102_Zrn	2.957	0.076	0.242	0.009	4.343	1396.640	75.308	1397.846	58.844	1395.287	60.602	1395.287	60.602	-0.183
1072146az1_103_Zrn	4.914	0.124	0.321	0.012	3.136	1804.586	122.070	1796.844	77.735	1813.068	56.861	1813.068	56.861	0.895
1072146az1_104_Zrn	3.037	0.078	0.246	0.009	4.272	1417.064	77.206	1419.931	59.701	1412.765	60.359	1412.765	60.359	-0.507
1072146az1_105_Zrn	1.526	0.039	0.156	0.006	4.042	940.886	39.151	932.529	37.697	957.916	64.418	932.529	37.697	2.650
1072146az1_106_Zrn	4.888	0.123	0.321	0.012	3.139	1800.241	120.767	1795.946	77.657	1805.395	56.677	1805.395	56.677	0.523
1072146az1_107_Zrn	4.406	0.111	0.299	0.011	3.272	1713.540	109.494	1686.248	72.445	1748.015	57.197	1748.015	57.197	3.534
1072146az1_108_Zrn	2.237	0.059	0.200	0.008	5.195	1192.572	59.104	1173.325	48.572	1221.517	63.458	1221.517	63.458	3.945
1072146az1_109_Zrn	3.435	0.086	0.262	0.010	3.839	1512.344	85.567	1499.757	63.398	1529.061	58.695	1529.061	58.695	1.916
1072146az1_110_Zrn	3.389	0.085	0.258	0.010	3.831	1501.836	84.570	1480.327	62.553	1532.866	58.722	1532.866	58.722	3.427
1072-153, Early Paleocene Lower Socha Formation (N = 100)														
1072153az1_1_Zrn	4.757	0.120	0.317	0.012	3.210	1777.287	118.433	1773.632	76.641	1779.186	57.113	1779.186	57.113	0.312
1072153az1_2_Zrn	0.081	0.002	0.012	0.000	3.805	78.648	2.233	76.467	2.910	137.414	77.544	76.467	2.910	44.353
1072153az1_3_Zrn	2.563	0.065	0.223	0.008	4.782	1290.132	64.653	1299.124	54.013	1275.950	61.021	1275.950	61.021	-1.816
1072153az1_4_Zrn	5.137	0.130	0.327	0.012	3.032	1842.234	127.470	1822.068	79.006	1863.393	56.504	1863.393	56.504	2.218
1072153az1_6_Zrn	2.173	0.057	0.201	0.008	5.558	1172.379	57.413	1178.993	48.897	1153.173	64.093	1153.173	64.093	-2.239
1072153az1_7_Zrn	4.715	0.118	0.312	0.012	3.171	1769.898	116.522	1751.475	75.468	1789.801	56.759	1789.801	56.759	2.141
1072153az1_8_Zrn	0.079	0.005	0.012	0.000	3.938	77.427	5.050	75.002	2.953	143.123	151.738	75.002	2.953	47.596
1072153az1_9_Zrn	4.710	0.119	0.315	0.012	3.220	1769.025	117.221	1763.605	76.277	1774.766	57.156	1774.766	57.156	0.629
1072153az1_10_Zrn	0.560	0.015	0.073	0.003	3.924	451.820	14.752	455.797	17.886	428.312	71.743	455.797	17.886	-6.417

1072153az1_11_Zrn	3.370	0.087	0.261	0.010	4.029	1497.412	86.851	1497.296	63.437	1495.447	60.245	1495.447	60.245	-0.124
1072153az1_12_Zrn	3.383	0.085	0.261	0.010	3.898	1500.443	84.367	1493.274	63.074	1509.929	58.856	1509.929	58.856	1.103
1072153az1_13_Zrn	0.811	0.023	0.097	0.004	3.965	603.172	23.033	597.139	23.678	623.376	72.742	597.139	23.678	4.209
1072153az1_14_Zrn	3.126	0.080	0.247	0.009	4.122	1439.169	79.911	1421.736	59.904	1460.676	60.215	1460.676	60.215	2.666
1072153az1_15_Zrn	1.617	0.041	0.163	0.006	4.052	976.663	41.141	974.228	39.474	979.246	63.882	974.228	39.474	0.512
1072153az1_16_Zrn	4.276	0.108	0.298	0.011	3.384	1688.660	106.475	1679.175	72.061	1702.422	57.607	1702.422	57.607	1.366
1072153az1_17_Zrn	3.448	0.086	0.264	0.010	3.873	1515.356	85.981	1511.548	63.932	1518.859	58.823	1518.859	58.823	0.481
1072153az1_18_Zrn	3.193	0.080	0.251	0.009	4.003	1455.555	79.422	1443.029	60.636	1473.501	58.989	1473.501	58.989	2.068
1072153az1_19_Zrn	4.775	0.120	0.315	0.012	3.165	1780.426	117.997	1767.563	76.263	1793.148	56.755	1793.148	56.755	1.427
1072153az1_20_Zrn	2.625	0.067	0.224	0.008	4.672	1307.761	66.881	1304.826	54.327	1309.028	61.152	1309.028	61.152	0.321
1072153az1_21_Zrn	5.405	0.136	0.337	0.013	2.962	1885.585	133.754	1872.248	81.534	1898.604	56.235	1898.604	56.235	1.388
1072153az1_22_Zrn	3.049	0.077	0.246	0.009	4.197	1420.014	76.644	1416.382	59.555	1424.002	59.762	1424.002	59.762	0.535
1072153az1_23_Zrn	0.088	0.003	0.013	0.001	3.903	85.663	2.980	82.844	3.234	166.677	89.310	82.844	3.234	50.297
1072153az1_24_Zrn	1.487	0.044	0.158	0.006	4.083	924.913	43.866	944.554	38.562	869.259	72.296	944.554	38.562	-8.662
1072153az1_25_Zrn	3.411	0.086	0.262	0.010	3.880	1506.984	85.292	1498.225	63.330	1518.431	58.919	1518.431	58.919	1.331
1072153az1_27_Zrn	2.656	0.068	0.226	0.009	4.660	1316.404	68.182	1310.936	54.709	1318.461	61.443	1318.461	61.443	0.571
1072153az1_29_Zrn	3.331	0.085	0.259	0.010	4.013	1488.384	84.882	1483.100	62.648	1492.090	59.871	1492.090	59.871	0.603
1072153az1_30_Zrn	3.377	0.085	0.260	0.010	3.906	1499.098	84.312	1492.007	63.072	1508.482	58.918	1508.482	58.918	1.092
1072153az1_31_Zrn	3.157	0.080	0.251	0.009	4.117	1446.799	79.203	1446.131	60.888	1446.634	59.556	1446.634	59.556	0.035
1072153az1_32_Zrn	1.579	0.041	0.160	0.006	4.060	962.046	41.524	954.970	38.768	974.589	65.381	954.970	38.768	2.013
1072153az1_33_Zrn	0.430	0.011	0.059	0.002	3.867	363.020	11.046	368.375	14.247	327.840	71.204	368.375	14.247	-12.364
1072153az1_34_Zrn	3.315	0.083	0.255	0.010	3.883	1484.653	82.676	1465.349	61.798	1514.143	58.801	1514.143	58.801	3.223
1072153az1_35_Zrn	3.418	0.088	0.261	0.010	3.930	1508.641	87.283	1496.844	63.373	1521.186	59.790	1521.186	59.790	1.600
1072153az1_36_Zrn	0.557	0.015	0.072	0.003	3.904	449.649	14.692	447.486	17.471	452.153	70.964	447.486	17.471	1.032
1072153az1_37_Zrn	4.634	0.118	0.310	0.012	3.244	1755.406	116.033	1743.071	75.125	1769.147	57.389	1769.147	57.389	1.474
1072153az1_38_Zrn	3.299	0.083	0.255	0.010	3.924	1480.770	82.494	1464.912	61.889	1504.356	59.030	1504.356	59.030	2.622
1072153az1_39_Zrn	5.715	0.147	0.336	0.013	2.804	1933.660	144.366	1866.252	82.439	2011.774	56.401	2011.774	56.401	7.234
1072153az1_40_Zrn	1.829	0.047	0.174	0.007	5.861	1055.815	47.491	1035.805	42.634	1087.897	63.760	1087.897	63.760	4.788
1072153az1_41_Zrn	5.310	0.133	0.334	0.013	2.983	1870.412	130.844	1859.377	80.882	1882.577	56.159	1882.577	56.159	1.232
1072153az1_42_Zrn	3.368	0.086	0.260	0.010	3.972	1497.099	85.758	1491.734	63.307	1504.680	59.765	1504.680	59.765	0.860
1072153az1_43_Zrn	3.381	0.090	0.258	0.010	4.006	1500.085	89.242	1480.708	62.776	1524.921	61.088	1524.921	61.088	2.899
1072153az1_44_Zrn	4.753	0.120	0.313	0.012	3.168	1776.552	118.712	1753.000	75.787	1803.197	57.131	1803.197	57.131	2.784
1072153az1_45_Zrn	0.585	0.016	0.076	0.003	3.932	467.593	16.658	472.316	18.572	439.296	75.010	472.316	18.572	-7.517
1072153az1_46_Zrn	0.840	0.022	0.101	0.004	3.972	618.981	22.423	617.631	24.531	619.019	69.725	617.631	24.531	0.224
1072153az1_47_Zrn	0.635	0.017	0.081	0.003	3.934	499.490	16.722	501.390	19.723	491.384	70.433	501.390	19.723	-2.036
1072153az1_48_Zrn	2.199	0.059	0.196	0.007	5.172	1180.648	58.586	1154.342	47.689	1230.636	63.647	1230.636	63.647	6.200
1072153az1_49_Zrn	3.462	0.087	0.266	0.010	3.883	1518.513	86.493	1519.576	64.368	1516.075	58.866	1516.075	58.866	-0.231
1072153az1_50_Zrn	2.230	0.057	0.202	0.008	5.168	1190.496	57.002	1183.874	49.085	1202.115	62.129	1202.115	62.129	1.517
1072153az1_51_Zrn	3.312	0.085	0.256	0.010	3.990	1483.779	84.882	1470.561	62.360	1502.553	59.945	1502.553	59.945	2.129
1072153az1_52_Zrn	5.230	0.132	0.332	0.013	3.017	1857.496	129.769	1849.105	80.571	1869.281	56.398	1869.281	56.398	1.079
1072153az1_53_Zrn	3.277	0.085	0.256	0.010	4.089	1475.639	84.621	1471.260	62.579	1479.719	60.509	1479.719	60.509	0.572
1072153az1_54_Zrn	3.544	0.093	0.270	0.010	3.958	1537.187	92.262	1540.622	65.652	1528.427	60.502	1528.427	60.502	-0.798
1072153az1_55_Zrn	1.723	0.044	0.172	0.007	6.449	1017.311	44.562	1025.613	41.842	998.793	64.413	998.793	64.413	-2.685
1072153az1_56_Zrn	3.408	0.090	0.263	0.010	4.029	1506.233	89.240	1506.844	63.928	1509.312	60.809	1509.312	60.809	0.164
1072153az1_57_Zrn	0.654	0.017	0.083	0.003	3.946	510.930	17.419	515.788	20.353	483.184	71.092	515.788	20.353	-6.748
1072153az1_58_Zrn	1.135	0.030	0.124	0.005	3.992	770.133	30.154	752.702	30.044	806.035	67.345	752.702	30.044	6.617
1072153az1_59_Zrn	3.367	0.086	0.261	0.010	3.960	1496.801	85.305	1492.421	63.079	1503.212	59.528	1503.212	59.528	0.718
1072153az1_60_Zrn	0.933	0.025	0.108	0.004	3.972	669.248	24.735	663.332	26.348	689.879	68.593	663.332	26.348	3.848
1072153az1_61_Zrn	3.304	0.083	0.258	0.010	3.982	1481.925	82.509	1482.042	62.528	1483.755	59.085	1483.755	59.085	0.115
1072153az1_62_Zrn	4.861	0.122	0.321	0.012	3.163	1795.484	120.333	1796.759	77.755	1795.924	56.800	1795.924	56.800	-0.047
1072153az1_63_Zrn	0.576	0.015	0.074	0.003	3.899	461.931	14.989	460.146	17.942	472.978	70.055	460.146	17.942	2.713
1072153az1_64_Zrn	2.502	0.064	0.218	0.008	4.816	1272.739	63.772	1271.101	52.854	1276.355	61.464	1276.355	61.464	0.412

(continued)

Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072153az1_65_Zrn	3.417	0.086	0.262	0.010	3.895	1508.200	85.980	1500.356	63.439	1519.019	59.165	1519.019	59.165	1.229
1072153az1_66_Zrn	2.532	0.064	0.218	0.008	4.699	1281.359	63.731	1273.786	52.914	1293.764	60.795	1293.764	60.795	1.544
1072153az1_67_Zrn	0.071	0.002	0.011	0.000	3.817	69.700	2.198	68.545	2.616	116.882	84.137	68.545	2.616	41.355
1072153az1_68_Zrn	3.422	0.086	0.261	0.010	3.848	1509.548	85.485	1496.273	63.275	1528.520	58.822	1528.520	58.822	2.110
1072153az1_69_Zrn	4.560	0.114	0.307	0.012	3.227	1741.962	112.836	1723.976	74.095	1764.253	56.929	1764.253	56.929	2.283
1072153az1_70_Zrn	1.400	0.035	0.147	0.006	4.035	888.921	35.708	884.800	35.705	902.418	64.702	884.800	35.705	1.952
1072153az1_71_Zrn	3.130	0.079	0.246	0.009	4.015	1440.005	78.553	1416.148	59.636	1477.269	59.319	1477.269	59.319	4.137
1072153az1_72_Zrn	2.281	0.059	0.206	0.008	5.211	1206.409	58.897	1206.939	49.874	1201.476	62.612	1201.476	62.612	-0.455
1072153az1_73_Zrn	3.427	0.087	0.265	0.010	3.945	1510.696	86.562	1513.189	64.066	1506.517	59.432	1506.517	59.432	-0.443
1072153az1_74_Zrn	0.245	0.007	0.034	0.001	3.844	222.705	7.601	217.824	8.373	273.630	81.819	217.824	8.373	20.395
1072153az1_75_Zrn	0.959	0.024	0.110	0.004	3.986	682.536	24.707	672.940	26.824	714.141	67.115	672.940	26.824	5.769
1072153az1_76_Zrn	0.167	0.006	0.023	0.001	3.875	156.765	6.214	147.465	5.714	296.037	93.837	147.465	5.714	50.187
1072153az1_77_Zrn	2.971	0.074	0.241	0.009	4.216	1400.208	73.982	1392.902	58.279	1410.682	59.477	1410.682	59.477	1.260
1072153az1_78_Zrn	4.645	0.147	0.302	0.013	3.731	1757.443	144.024	1700.096	84.848	1826.592	68.144	1826.592	68.144	6.925
1072153az1_79_Zrn	3.308	0.083	0.259	0.010	4.002	1482.980	82.782	1484.287	62.657	1479.830	59.217	1479.830	59.217	-0.301
1072153az1_80_Zrn	3.322	0.083	0.257	0.010	3.933	1486.162	83.054	1475.731	62.293	1501.210	59.049	1501.210	59.049	1.697
1072153az1_81_Zrn	2.475	0.063	0.215	0.008	4.796	1264.743	62.622	1257.706	52.178	1275.134	61.158	1275.134	61.158	1.367
1072153az1_82_Zrn	4.527	0.114	0.304	0.011	3.222	1735.914	112.118	1711.127	73.574	1767.795	56.962	1767.795	56.962	3.206
1072153az1_83_Zrn	0.603	0.016	0.077	0.003	3.903	479.388	15.808	476.658	18.604	485.941	70.224	476.658	18.604	1.910
1072153az1_84_Zrn	2.649	0.066	0.224	0.008	4.545	1314.373	66.407	1305.357	54.313	1328.147	60.366	1328.147	60.366	1.716
1072153az1_85_Zrn	1.771	0.045	0.173	0.007	5.988	1034.981	44.787	1027.804	41.875	1051.545	62.966	1051.545	62.966	2.258
1072153az1_86_Zrn	2.796	0.070	0.231	0.009	4.343	1354.348	69.947	1338.275	55.788	1379.154	59.899	1379.154	59.899	2.964
1072153az1_88_Zrn	5.012	0.126	0.327	0.012	3.132	1821.302	124.344	1825.181	79.173	1814.568	56.830	1814.568	56.830	-0.585
1072153az1_89_Zrn	3.323	0.084	0.253	0.010	3.859	1486.476	83.663	1452.786	61.237	1531.145	59.083	1531.145	59.083	5.118
1072153az1_90_Zrn	0.202	0.010	0.024	0.001	3.818	187.003	9.659	154.386	5.895	610.242	108.229	154.386	5.895	74.701
1072153az1_91_Zrn	4.859	0.124	0.319	0.012	3.184	1795.250	122.424	1786.654	77.414	1804.853	57.460	1804.853	57.460	1.008
1072153az1_92_Zrn	2.554	0.066	0.215	0.008	4.627	1287.581	66.277	1257.797	52.285	1334.636	61.756	1334.636	61.756	5.757
1072153az1_93_Zrn	0.082	0.003	0.012	0.000	3.817	80.132	2.916	75.684	2.889	205.089	91.751	75.684	2.889	63.097
1072153az1_94_Zrn	5.472	0.139	0.331	0.013	2.878	1896.204	136.865	1841.971	80.675	1957.654	56.333	1957.654	56.333	5.909
1072153az1_95_Zrn	3.360	0.084	0.258	0.010	3.873	1495.124	83.673	1479.968	62.421	1516.828	58.747	1516.828	58.747	2.430
1072153az1_96_Zrn	4.386	0.110	0.302	0.011	3.334	1709.721	108.681	1703.668	73.148	1717.914	57.279	1717.914	57.279	0.829
1072153az1_97_Zrn	3.411	0.085	0.259	0.010	3.796	1506.914	84.747	1482.616	62.504	1540.456	58.471	1540.456	58.471	3.755
1072153az1_98_Zrn	5.166	0.130	0.331	0.012	3.053	1847.053	128.111	1840.921	80.015	1852.616	56.557	1852.616	56.557	0.631
1072153az1_99_Zrn	3.431	0.086	0.260	0.010	3.820	1511.483	85.826	1490.583	63.035	1539.019	58.787	1539.019	58.787	3.147
1072153az1_100_Zrn	1.160	0.030	0.126	0.005	4.007	781.833	30.072	764.461	30.628	835.436	66.071	764.461	30.628	8.496
1072153az1_101_Zrn	0.773	0.020	0.095	0.004	3.939	581.732	19.738	583.674	22.991	579.289	67.926	583.674	22.991	-0.757
1072153az1_102_Zrn	1.522	0.045	0.163	0.006	4.097	939.105	45.199	974.646	39.928	855.546	72.547	974.646	39.928	-13.921
1072153az1_103_Zrn	0.089	0.009	0.010	0.000	4.342	86.888	8.936	61.540	2.672	851.751	205.185	61.540	2.672	92.775
1072153az1_104_Zrn	5.607	0.142	0.344	0.013	2.910	1917.201	139.509	1903.999	83.376	1932.696	56.235	1932.696	56.235	1.485
1072153az1_105_Zrn	5.300	0.137	0.328	0.012	2.991	1868.850	134.486	1830.925	79.962	1910.144	57.136	1910.144	57.136	4.147
1072153az1_106_Zrn	2.075	0.052	0.190	0.007	5.283	1140.682	52.579	1123.738	46.175	1172.793	61.953	1172.793	61.953	4.183
1072153az1_107_Zrn	3.495	0.088	0.262	0.010	3.742	1525.984	87.502	1497.614	63.351	1565.578	58.581	1565.578	58.581	4.341
1072153az1_108_Zrn	0.068	0.004	0.009	0.000	3.975	66.710	4.192	58.187	2.313	383.350	141.102	58.187	2.313	84.821
1072153az1_109_Zrn	5.890	0.149	0.350	0.013	2.805	1959.789	146.242	1934.786	84.877	1989.677	55.804	1989.677	55.804	2.759
1072153az1_110_Zrn	1.604	0.044	0.156	0.006	4.065	971.703	44.153	934.912	38.006	1043.779	66.705	934.912	38.006	10.430

1072-160, Early Paleocene (Base) Lower Socha Formation (N = 100)

1072160az1_1_Zrn	2.473	0.058	0.215	0.007	4.412	1264.026	57.965	1255.138	47.721	1277.219	56.354	1277.219	56.354	1.729
1072160az1_2_Zrn	2.699	0.062	0.230	0.008	4.212	1328.139	62.341	1336.819	51.028	1317.415	55.496	1317.415	55.496	-1.473
1072160az1_3_Zrn	0.093	0.003	0.013	0.000	3.555	90.575	3.140	83.157	2.956	277.294	85.639	83.157	2.956	70.011
1072160az1_4_Zrn	3.168	0.078	0.250	0.009	3.882	1449.359	77.949	1436.019	55.266	1464.356	56.847	1464.356	56.847	1.935
1072160az1_5_Zrn	0.811	0.020	0.098	0.003	3.617	602.875	19.865	604.916	21.878	591.071	64.177	604.916	21.878	-2.342
1072160az1_6_Zrn	2.095	0.049	0.196	0.007	5.056	1147.260	49.010	1152.589	43.434	1134.589	57.369	1134.589	57.369	-1.586
1072160az1_7_Zrn	0.081	0.005	0.011	0.000	3.787	78.654	4.927	69.049	2.615	380.303	140.583	69.049	2.615	81.844
1072160az1_8_Zrn	2.691	0.062	0.231	0.008	4.247	1325.853	61.764	1339.692	51.079	1304.279	55.397	1304.279	55.397	-2.715
1072160az1_9_Zrn	3.300	0.077	0.253	0.009	3.570	1481.093	76.489	1455.148	56.295	1521.521	54.312	1521.521	54.312	4.362
1072160az1_11_Zrn	2.786	0.068	0.233	0.008	4.245	1351.697	68.216	1347.922	51.547	1353.483	57.450	1353.483	57.450	0.411
1072160az1_12_Zrn	3.286	0.086	0.253	0.009	3.900	1477.850	85.894	1451.769	56.231	1514.606	59.063	1514.606	59.063	4.149
1072160az1_13_Zrn	3.061	0.071	0.247	0.009	3.848	1423.032	70.972	1423.723	54.712	1426.222	54.874	1426.222	54.874	0.175
1072160az1_14_Zrn	4.708	0.108	0.315	0.011	2.936	1768.590	107.158	1764.515	69.630	1775.749	52.132	1775.749	52.132	0.633
1072160az1_16_Zrn	3.452	0.081	0.263	0.009	3.552	1516.337	80.459	1502.902	58.161	1532.669	54.440	1532.669	54.440	1.942
1072160az1_17_Zrn	2.568	0.060	0.222	0.008	4.343	1291.447	60.050	1292.961	49.298	1292.118	56.117	1292.118	56.117	-0.065
1072160az1_18_Zrn	3.513	0.082	0.264	0.009	3.480	1530.047	81.550	1512.476	58.653	1554.854	54.111	1554.854	54.111	2.726
1072160az1_19_Zrn	2.125	0.050	0.198	0.007	5.153	1157.113	49.919	1164.965	44.435	1134.458	58.459	1134.458	58.459	-2.689
1072160az1_20_Zrn	4.111	0.095	0.293	0.010	3.204	1656.414	94.184	1657.172	64.845	1655.308	53.031	1655.308	53.031	-0.113
1072160az1_21_Zrn	2.162	0.073	0.195	0.007	6.179	1169.020	73.072	1147.843	43.172	1201.362	74.234	1201.362	74.234	4.455
1072160az1_22_Zrn	1.670	0.039	0.169	0.006	6.085	997.044	39.648	1006.661	37.654	975.019	59.329	975.019	59.329	-3.245
1072160az1_23_Zrn	4.511	0.104	0.308	0.011	3.032	1733.016	102.991	1732.077	68.158	1731.403	52.501	1731.403	52.501	-0.039
1072160az1_25_Zrn	5.068	0.116	0.325	0.011	2.790	1830.766	114.938	1813.637	71.795	1849.868	51.607	1849.868	51.607	1.959
1072160az1_26_Zrn	3.275	0.076	0.258	0.009	3.723	1475.055	76.099	1478.730	57.138	1469.401	54.699	1469.401	54.699	-0.635
1072160az1_27_Zrn	3.317	0.077	0.256	0.009	3.571	1485.003	76.465	1468.521	56.701	1514.835	54.087	1514.835	54.087	3.057
1072160az1_28_Zrn	2.228	0.052	0.201	0.007	4.666	1189.969	51.671	1178.972	44.461	1209.272	56.420	1209.272	56.420	2.506
1072160az1_29_Zrn	0.666	0.016	0.083	0.003	3.594	518.521	16.133	511.745	18.390	553.239	63.997	511.745	18.390	7.500
1072160az1_30_Zrn	3.370	0.078	0.258	0.009	3.533	1497.465	77.328	1478.627	57.078	1524.954	53.870	1524.954	53.870	3.038
1072160az1_31_Zrn	1.841	0.043	0.180	0.006	5.507	1060.372	42.780	1066.448	39.852	1048.949	57.771	1048.949	57.771	-1.668
1072160az1_32_Zrn	3.139	0.073	0.251	0.009	3.811	1442.210	72.954	1442.145	55.484	1440.309	54.887	1440.309	54.887	-0.127
1072160az1_33_Zrn	4.785	0.112	0.316	0.011	2.915	1782.291	110.329	1772.498	70.397	1801.566	52.519	1801.566	52.519	1.613
1072160az1_34_Zrn	2.567	0.060	0.221	0.008	4.308	1291.175	59.821	1286.551	48.896	1298.591	55.941	1298.591	55.941	0.927
1072160az1_35_Zrn	4.987	0.116	0.323	0.011	2.844	1817.042	114.391	1803.157	71.600	1831.774	52.104	1831.774	52.104	1.562
1072160az1_36_Zrn	3.477	0.081	0.267	0.009	3.573	1522.103	80.424	1526.546	59.286	1516.609	54.195	1516.609	54.195	-0.655
1072160az1_37_Zrn	4.631	0.108	0.314	0.011	3.030	1754.878	106.832	1762.098	69.748	1744.021	52.836	1744.021	52.836	-1.037
1072160az1_39_Zrn	1.595	0.038	0.164	0.006	3.725	968.078	37.724	978.754	36.454	944.980	59.366	978.754	36.454	-3.574
1072160az1_40_Zrn	1.705	0.041	0.169	0.006	5.834	1010.573	41.369	1004.913	37.625	1022.297	59.644	1022.297	59.644	1.700
1072160az1_42_Zrn	2.661	0.063	0.222	0.008	4.132	1317.743	62.693	1293.393	49.517	1353.919	55.944	1353.919	55.944	4.470
1072160az1_43_Zrn	0.777	0.020	0.094	0.003	3.633	583.996	19.943	581.061	21.112	589.150	66.176	581.061	21.112	1.373
1072160az1_44_Zrn	2.170	0.053	0.197	0.007	4.953	1171.484	53.547	1156.743	44.110	1193.030	59.091	1193.030	59.091	3.042
1072160az1_45_Zrn	2.110	0.050	0.197	0.007	5.106	1152.175	50.431	1159.128	43.830	1138.735	58.140	1138.735	58.140	-1.791
1072160az1_46_Zrn	4.641	0.108	0.311	0.011	2.975	1756.729	107.093	1744.495	69.069	1769.915	52.653	1769.915	52.653	1.436
1072160az1_47_Zrn	2.161	0.053	0.199	0.007	4.923	1168.568	52.685	1168.655	44.858	1187.422	58.455	1187.422	58.455	1.580
1072160az1_48_Zrn	2.822	0.068	0.234	0.008	4.101	1361.285	67.955	1354.592	52.461	1374.269	56.356	1374.269	56.356	1.432
1072160az1_49_Zrn	3.550	0.084	0.275	0.010	3.663	1538.367	83.921	1564.241	61.376	1503.819	55.090	1503.819	55.090	-4.018
1072160az1_50_Zrn	2.662	0.062	0.226	0.008	4.184	1317.885	61.838	1311.953	50.058	1328.610	55.584	1328.610	55.584	1.254
1072160az1_51_Zrn	4.744	0.110	0.313	0.011	2.914	1775.131	109.045	1757.742	69.599	1795.334	52.322	1795.334	52.322	2.094
1072160az1_52_Zrn	4.301	0.100	0.296	0.010	3.075	1693.563	99.094	1670.740	65.737	1719.527	52.874	1719.527	52.874	2.837
1072160az1_53_Zrn	0.168	0.004	0.024	0.001	3.496	158.032	4.250	154.845	5.413	202.697	69.804	154.845	5.413	23.608
1072160az1_54_Zrn	3.266	0.075	0.255	0.009	3.642	1472.898	75.230	1463.563	56.516	1488.529	54.219	1488.529	54.219	1.677
1072160az1_55_Zrn	5.188	0.122	0.328	0.011	2.775	1850.639	119.816	1828.594	72.761	1877.297	52.094	1877.297	52.094	2.594
1072160az1_56_Zrn	4.696	0.109	0.314	0.011	2.961	1766.570	107.775	1762.652	69.801	1770.884	52.429	1770.884	52.429	0.465

(continued)

Continued

Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Discord (%)		
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)		Preferred Age (Ma)	± (Ma)
1072160az1_57_Zrn	0.820	0.019	0.099	0.003	3.621	608.062	19.580	610.952	22.125	594.671	62.942	610.952	22.125	-2.738
1072160az1_59_Zrn	2.424	0.057	0.216	0.007	4.598	1249.879	57.327	1258.462	47.908	1238.879	56.960	1238.879	56.960	-1.581
1072160az1_60_Zrn	4.519	0.106	0.305	0.011	3.014	1734.412	105.191	1717.141	67.988	1755.871	52.924	1755.871	52.924	2.206
1072160az1_61_Zrn	3.816	0.091	0.279	0.010	3.384	1596.094	90.581	1584.693	62.144	1610.409	54.504	1610.409	54.504	1.597
1072160az1_62_Zrn	0.156	0.007	0.022	0.001	3.925	147.122	6.627	139.891	5.491	262.488	103.515	139.891	5.491	46.706
1072160az1_63_Zrn	4.861	0.113	0.318	0.011	2.908	1795.489	112.027	1779.774	70.973	1808.983	52.603	1808.983	52.603	1.615
1072160az1_64_Zrn	1.693	0.043	0.166	0.006	3.743	1005.748	43.538	990.209	37.065	1036.196	62.103	990.209	37.065	4.438
1072160az1_65_Zrn	1.454	0.034	0.151	0.005	3.701	911.586	34.169	904.744	33.485	933.295	59.131	904.744	33.485	3.059
1072160az1_66_Zrn	4.648	0.108	0.311	0.011	2.962	1757.954	106.761	1744.115	68.869	1772.649	52.504	1772.649	52.504	1.610
1072160az1_67_Zrn	4.219	0.100	0.288	0.010	3.089	1677.700	98.810	1632.837	65.063	1736.518	53.633	1736.518	53.633	5.971
1072160az1_68_Zrn	3.211	0.081	0.247	0.009	3.804	1459.852	80.349	1424.391	57.841	1514.940	57.623	1514.940	57.623	5.977
1072160az1_70_Zrn	2.348	0.054	0.209	0.007	4.562	1226.923	54.594	1221.002	46.202	1234.984	56.342	1234.984	56.342	1.132
1072160az1_71_Zrn	4.499	0.104	0.303	0.010	2.979	1730.735	103.007	1706.815	67.089	1759.150	52.405	1759.150	52.405	2.975
1072160az1_74_Zrn	5.063	0.117	0.322	0.011	2.777	1829.880	115.709	1799.437	71.438	1865.853	51.817	1865.853	51.817	3.560
1072160az1_75_Zrn	3.407	0.079	0.263	0.009	3.592	1505.976	79.060	1503.077	58.227	1513.619	54.369	1513.619	54.369	0.696
1072160az1_76_Zrn	3.251	0.075	0.255	0.009	3.683	1469.508	75.087	1463.005	56.480	1476.864	54.391	1476.864	54.391	0.938
1072160az1_77_Zrn	5.237	0.121	0.329	0.011	2.728	1834.316	119.194	1834.316	72.875	1888.058	51.503	1888.058	51.503	2.846
1072160az1_78_Zrn	3.825	0.155	0.271	0.014	5.203	1598.034	151.643	1544.215	91.561	1669.749	86.876	1669.749	86.876	7.518
1072160az1_79_Zrn	0.818	0.020	0.098	0.003	3.606	606.703	20.122	604.696	21.807	611.065	64.064	604.696	21.807	1.042
1072160az1_80_Zrn	4.388	0.103	0.302	0.010	3.086	1710.050	101.986	1699.209	66.796	1722.967	53.179	1722.967	53.179	1.379
1072160az1_81_Zrn	4.979	0.115	0.318	0.011	2.787	1815.725	113.460	1781.279	70.492	1856.425	51.738	1856.425	51.738	4.048
1072160az1_82_Zrn	4.760	0.117	0.311	0.011	2.960	1777.862	115.249	1744.968	71.398	1836.901	54.368	1836.901	54.368	5.005
1072160az1_83_Zrn	0.090	0.003	0.012	0.000	3.510	87.323	3.004	79.814	2.801	285.417	84.722	79.814	2.801	72.036
1072160az1_84_Zrn	5.596	0.130	0.347	0.012	2.707	1915.488	128.017	1922.573	76.987	1908.455	51.658	1908.455	51.658	-0.740
1072160az1_85_Zrn	4.808	0.112	0.314	0.011	2.864	1786.307	110.201	1758.696	69.620	1820.041	52.134	1820.041	52.134	3.371
1072160az1_86_Zrn	4.688	0.125	0.298	0.011	2.937	1765.051	123.074	1683.307	70.681	1864.303	54.759	1864.303	54.759	9.708
1072160az1_87_Zrn	0.089	0.004	0.013	0.000	3.561	87.003	3.723	80.585	2.869	266.666	101.747	80.585	2.869	69.780
1072160az1_88_Zrn	0.648	0.015	0.081	0.003	3.578	507.349	15.383	502.123	17.965	531.170	63.284	502.123	17.965	5.468
1072160az1_89_Zrn	3.148	0.073	0.249	0.009	3.737	1444.415	72.660	1434.384	55.164	1458.711	54.505	1458.711	54.505	1.668
1072160az1_90_Zrn	5.892	0.136	0.353	0.012	2.582	1960.086	133.149	1948.154	77.989	1971.974	50.912	1971.974	50.912	1.208
1072160az1_91_Zrn	5.237	0.124	0.331	0.012	2.795	1858.658	122.189	1845.482	74.037	1875.089	52.413	1875.089	52.413	1.579
1072160az1_92_Zrn	1.787	0.043	0.174	0.006	5.577	1040.791	42.761	1031.897	38.978	1054.845	58.825	1054.845	58.825	2.176
1072160az1_93_Zrn	3.647	0.086	0.272	0.009	3.448	1559.795	85.192	1551.072	60.549	1571.769	54.196	1571.769	54.196	1.317
1072160az1_94_Zrn	4.420	0.107	0.298	0.011	3.030	1716.059	106.072	1680.637	67.603	1764.812	53.474	1764.812	53.474	4.770
1072160az1_95_Zrn	3.218	0.081	0.257	0.009	4.036	1461.541	80.569	1476.785	57.715	1435.218	57.928	1435.218	57.928	-2.896
1072160az1_96_Zrn	4.757	0.114	0.316	0.011	2.946	1777.416	112.332	1770.097	70.948	1785.737	52.599	1785.737	52.599	0.876
1072160az1_97_Zrn	1.723	0.040	0.171	0.006	5.753	1017.051	40.555	1016.103	37.968	1017.127	58.519	1017.127	58.519	0.101
1072160az1_98_Zrn	3.458	0.081	0.265	0.009	3.593	1517.584	81.081	1515.700	59.057	1520.454	54.636	1520.454	54.636	0.313
1072160az1_99_Zrn	5.613	0.134	0.338	0.012	2.660	1918.099	131.721	1876.206	75.848	1959.862	52.134	1959.862	52.134	4.268
1072160az1_101_Zrn	0.817	0.022	0.097	0.003	3.637	606.127	21.759	595.812	21.668	633.789	67.441	595.812	21.668	5.992
1072160az1_102_Zrn	5.308	0.124	0.336	0.012	2.785	1870.091	122.511	1866.718	74.677	1871.832	52.128	1871.832	52.128	0.273
1072160az1_103_Zrn	4.693	0.109	0.308	0.011	2.876	1766.038	107.301	1731.168	68.274	1809.762	52.057	1809.762	52.057	4.343
1072160az1_104_Zrn	0.587	0.014	0.075	0.003	3.571	469.050	14.096	465.204	16.615	482.330	64.363	465.204	16.615	3.551
1072160az1_105_Zrn	4.116	0.096	0.291	0.010	3.180	1657.559	94.868	1648.026	64.610	1671.880	53.169	1671.880	53.169	1.427
1072160az1_106_Zrn	2.044	0.049	0.192	0.007	5.176	1130.288	48.824	1133.495	42.740	1124.327	58.191	1124.327	58.191	-0.815
1072160az1_107_Zrn	5.070	0.121	0.320	0.011	2.792	1831.040	119.485	1788.405	72.125	1884.626	52.624	1884.626	52.624	5.106

1072160az1_108_Zrn	1.369	0.032	0.144	0.005	3.694	875.706	32.440	869.341	32.114	895.076	59.839	869.341	32.114	2.875
1072160az1_109_Zrn	4.752	0.110	0.310	0.011	2.867	1776.462	109.156	1740.637	68.983	1821.878	52.226	1821.878	52.226	4.459
1072160az1_110_Zrn	3.238	0.075	0.251	0.009	3.610	1466.413	74.382	1445.321	55.646	1497.706	54.072	1497.706	54.072	3.498
1072-165, Early Paleocene Barco Formation (N = 103)														
1072165az1_1_Zrn	1.646	0.054	0.160	0.007	4.912	987.926	53.953	957.602	47.038	1049.338	79.671	957.602	47.038	8.742
1072165az1_2_Zrn	4.631	0.141	0.311	0.014	3.903	1754.803	138.649	1746.556	90.936	1765.271	68.896	1765.271	68.896	1.060
1072165az1_3_Zrn	2.772	0.084	0.230	0.010	5.273	1348.150	83.864	1333.477	67.100	1371.515	72.315	1371.515	72.315	2.773
1072165az1_4_Zrn	3.502	0.107	0.264	0.012	4.543	1527.716	105.518	1509.654	77.069	1554.604	70.627	1554.604	70.627	2.891
1072165az1_6_Zrn	2.899	0.090	0.235	0.011	5.158	1381.606	89.095	1361.534	68.881	1411.355	72.794	1411.355	72.794	3.530
1072165az1_7_Zrn	2.980	0.091	0.243	0.011	5.141	1402.647	90.317	1402.394	70.965	1403.678	72.157	1403.678	72.157	0.091
1072165az1_8_Zrn	3.220	0.099	0.248	0.011	4.729	1461.968	97.964	1427.725	72.802	1511.987	71.504	1511.987	71.504	5.573
1072165az1_9_Zrn	5.709	0.174	0.351	0.016	3.490	1932.784	169.378	1938.144	102.253	1930.976	67.394	1930.976	67.394	-0.371
1072165az1_10_Zrn	4.540	0.139	0.306	0.014	3.932	1738.339	136.373	1721.862	89.473	1756.642	69.075	1756.642	69.075	1.980
1072165az1_11_Zrn	4.270	0.131	0.291	0.013	3.976	1687.554	128.645	1646.787	85.211	1742.563	69.289	1742.563	69.289	5.496
1072165az1_12_Zrn	1.647	0.050	0.163	0.007	4.903	988.481	50.435	974.909	47.799	1017.588	76.328	974.909	47.799	4.194
1072165az1_13_Zrn	3.264	0.105	0.246	0.011	4.746	1472.427	103.806	1419.952	72.317	1546.082	73.374	1546.082	73.374	8.158
1072165az1_14_Zrn	3.280	0.102	0.255	0.012	4.844	1476.405	100.911	1462.914	74.459	1490.423	72.196	1490.423	72.196	1.846
1072165az1_15_Zrn	4.435	0.135	0.304	0.014	4.006	1718.865	133.052	1710.607	88.724	1727.722	69.213	1727.722	69.213	0.991
1072165az1_16_Zrn	3.023	0.092	0.241	0.011	4.956	1413.435	91.563	1391.208	70.398	1447.837	71.748	1447.837	71.748	3.911
1072165az1_17_Zrn	3.081	0.097	0.241	0.011	4.908	1427.901	96.405	1391.381	71.600	1488.999	73.083	1488.999	73.083	6.556
1072165az1_18_Zrn	5.162	0.157	0.327	0.015	3.618	1846.398	153.554	1821.755	95.207	1874.103	67.801	1874.103	67.801	2.793
1072165az1_19_Zrn	4.677	0.281	0.307	0.014	6.352	1763.105	267.177	1724.711	89.431	1805.222	114.665	1805.222	114.665	4.460
1072165az1_20_Zrn	5.055	0.154	0.324	0.015	3.680	1828.525	150.610	1811.477	94.744	1849.729	68.071	1849.729	68.071	2.068
1072165az1_21_Zrn	5.573	0.171	0.337	0.015	3.454	1911.960	166.445	1870.227	98.326	1954.836	67.524	1954.836	67.524	4.328
1072165az1_22_Zrn	1.801	0.055	0.174	0.008	7.082	1045.928	55.210	1035.065	50.941	1070.334	75.800	1070.334	75.800	3.295
1072165az1_23_Zrn	1.634	0.050	0.165	0.008	4.901	983.432	50.302	985.397	48.295	977.220	77.027	985.397	48.295	-0.837
1072165az1_24_Zrn	0.866	0.030	0.096	0.004	4.801	633.447	30.580	592.824	28.462	778.708	87.090	592.824	28.462	23.871
1072165az1_25_Zrn	2.656	0.082	0.224	0.010	5.478	1316.402	81.963	1300.394	65.404	1342.838	73.565	1342.838	73.565	3.161
1072165az1_26_Zrn	4.248	0.131	0.292	0.013	4.036	1683.441	128.806	1651.284	85.564	1726.749	69.686	1726.749	69.686	4.370
1072165az1_27_Zrn	4.682	0.143	0.311	0.014	3.843	1764.073	140.434	1745.941	90.751	1788.415	68.724	1788.415	68.724	2.375
1072165az1_28_Zrn	0.379	0.012	0.052	0.002	4.666	326.444	12.405	328.133	15.310	306.653	89.036	328.133	15.310	-7.005
1072165az1_29_Zrn	5.489	0.168	0.337	0.015	3.512	1898.820	163.466	1873.441	98.489	1924.989	67.597	1924.989	67.597	2.678
1072165az1_30_Zrn	4.152	0.127	0.289	0.013	4.071	1664.696	124.978	1634.273	84.422	1706.595	69.478	1706.595	69.478	4.238
1072165az1_31_Zrn	3.953	0.121	0.286	0.013	4.312	1624.613	118.889	1622.215	83.551	1625.033	70.065	1625.033	70.065	0.173
1072165az1_33_Zrn	4.535	0.138	0.306	0.014	3.926	1737.467	135.719	1723.368	89.439	1754.360	68.881	1754.360	68.881	1.767
1072165az1_34_Zrn	4.535	0.140	0.305	0.014	3.932	1737.459	137.431	1714.065	89.156	1764.820	69.390	1764.820	69.390	2.876
1072165az1_35_Zrn	6.472	0.198	0.374	0.017	3.286	2042.147	191.897	2046.387	109.166	2035.526	66.879	2035.526	66.879	-0.534
1072165az1_36_Zrn	4.206	0.131	0.290	0.013	4.005	1675.098	129.061	1643.002	85.829	1749.954	70.089	1749.954	70.089	6.112
1072165az1_37_Zrn	2.347	0.072	0.213	0.010	6.209	1226.798	72.026	1242.970	62.165	1201.587	74.608	1201.587	74.608	-3.444
1072165az1_38_Zrn	2.464	0.075	0.215	0.010	5.769	1261.592	75.188	1252.991	62.771	1276.247	73.626	1276.247	73.626	1.822
1072165az1_39_Zrn	0.082	0.003	0.012	0.001	4.618	80.213	2.751	77.085	3.560	173.901	92.684	77.085	3.560	55.673
1072165az1_40_Zrn	0.978	0.030	0.114	0.005	4.802	692.831	30.538	695.427	33.393	684.117	81.192	695.427	33.393	-1.653
1072165az1_41_Zrn	4.448	0.136	0.301	0.014	3.944	1721.288	133.760	1694.972	87.866	1752.373	69.114	1752.373	69.114	3.276
1072165az1_42_Zrn	3.206	0.098	0.250	0.011	4.816	1458.684	97.583	1439.592	73.214	1487.612	71.647	1487.612	71.647	3.228
1072165az1_43_Zrn	1.354	0.042	0.144	0.007	4.860	869.443	41.809	869.855	42.277	864.288	78.431	869.855	42.277	-0.644
1072165az1_44_Zrn	4.625	0.142	0.313	0.014	3.964	1753.743	139.746	1755.042	91.513	1752.087	69.461	1752.087	69.461	-0.169
1072165az1_45_Zrn	3.237	0.100	0.254	0.012	4.862	1466.115	98.675	1456.679	74.200	1478.048	71.857	1478.048	71.857	1.446
1072165az1_46_Zrn	2.937	0.092	0.233	0.011	5.034	1391.451	91.708	1348.746	68.467	1454.850	73.242	1454.850	73.242	7.293
1072165az1_47_Zrn	2.415	0.074	0.212	0.010	5.860	1247.171	73.835	1239.886	62.109	1260.184	73.842	1260.184	73.842	1.611
1072165az1_48_Zrn	5.815	0.179	0.344	0.016	3.377	1948.714	174.044	1908.106	100.975	1996.206	67.412	1996.206	67.412	4.413
1072165az1_49_Zrn	3.054	0.095	0.245	0.011	5.088	1421.347	93.835	1412.382	71.648	1428.207	72.673	1428.207	72.673	1.108
1072165az1_51_Zrn	3.303	0.101	0.255	0.012	4.743	1481.659	99.951	1465.018	74.581	1503.025	71.286	1503.025	71.286	2.529

(continued)

Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)								
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)	Preferred Age (Ma)	± (Ma)	Discord (%)
1072165az1_52_Zrn	0.810	0.025	0.100	0.005	4.773	602.715	25.579	612.698	29.241	559.494	83.485	612.698	29.241	-9.509
1072165az1_53_Zrn	2.902	0.089	0.235	0.011	5.085	1382.457	88.145	1360.456	68.651	1417.799	72.102	1417.799	72.102	4.045
1072165az1_54_Zrn	5.592	0.170	0.343	0.016	3.490	1914.934	165.978	1899.890	99.990	1931.124	67.402	1931.124	67.402	1.617
1072165az1_55_Zrn	4.510	0.137	0.305	0.014	3.924	1732.869	134.646	1718.266	89.081	1752.378	68.770	1752.378	68.770	1.947
1072165az1_56_Zrn	1.491	0.045	0.153	0.007	4.877	926.837	45.658	919.885	44.864	945.924	77.059	919.885	44.864	2.753
1072165az1_57_Zrn	2.650	0.091	0.218	0.011	5.796	1314.659	90.161	1272.581	70.007	1383.880	80.205	1383.880	80.205	8.042
1072165az1_58_Zrn	2.028	0.068	0.186	0.009	6.869	1124.792	67.439	1101.729	55.007	1157.409	79.507	1157.409	79.507	4.811
1072165az1_59_Zrn	3.150	0.098	0.248	0.011	4.906	1444.949	96.950	1425.740	72.521	1474.979	72.368	1474.979	72.368	3.338
1072165az1_60_Zrn	3.245	0.099	0.253	0.012	4.803	1468.100	98.064	1456.204	74.036	1485.189	71.333	1485.189	71.333	1.952
1072165az1_61_Zrn	3.391	0.104	0.265	0.012	4.825	1502.219	102.564	1515.407	77.416	1481.374	71.477	1481.374	71.477	-2.297
1072165az1_62_Zrn	0.665	0.022	0.083	0.004	4.759	517.461	21.830	513.887	24.458	530.412	86.160	513.887	24.458	3.115
1072165az1_64_Zrn	4.451	0.135	0.301	0.014	3.928	1721.972	133.057	1696.138	87.851	1752.247	68.829	1752.247	68.829	3.202
1072165az1_66_Zrn	4.718	0.144	0.315	0.014	3.857	1770.459	140.730	1763.776	91.783	1777.821	68.570	1777.821	68.570	0.790
1072165az1_67_Zrn	3.229	0.099	0.247	0.011	4.683	1464.185	97.821	1423.883	72.301	1519.470	71.161	1519.470	71.161	6.291
1072165az1_68_Zrn	1.442	0.044	0.149	0.007	4.879	906.666	44.624	893.123	43.571	928.321	77.855	893.123	43.571	3.792
1072165az1_69_Zrn	3.304	0.100	0.255	0.012	4.700	1481.986	99.469	1462.029	74.324	1509.420	70.947	1509.420	70.947	3.140
1072165az1_70_Zrn	2.833	0.086	0.235	0.011	5.257	1364.290	85.836	1358.453	68.531	1376.205	72.347	1376.205	72.347	1.290
1072165az1_71_Zrn	2.416	0.076	0.216	0.010	6.176	1247.348	75.384	1260.068	63.206	1220.050	75.348	1220.050	75.348	-3.280
1072165az1_72_Zrn	0.739	0.023	0.089	0.004	4.742	561.608	22.925	550.235	26.092	607.513	81.791	550.235	26.092	9.428
1072165az1_73_Zrn	3.480	0.106	0.263	0.012	4.554	1522.638	104.785	1502.839	76.693	1551.104	70.637	1551.104	70.637	3.112
1072165az1_74_Zrn	3.134	0.096	0.248	0.011	4.928	1441.138	94.991	1430.073	72.584	1455.849	71.745	1455.849	71.745	1.771
1072165az1_75_Zrn	3.291	0.104	0.249	0.012	4.731	1478.879	102.848	1435.704	74.429	1540.066	72.862	1540.066	72.862	6.776
1072165az1_76_Zrn	2.490	0.076	0.217	0.010	5.816	1269.227	76.090	1267.422	63.597	1268.978	73.805	1268.978	73.805	0.123
1072165az1_77_Zrn	3.435	0.104	0.262	0.012	4.622	1512.456	103.385	1498.535	76.395	1530.585	70.747	1530.585	70.747	2.094
1072165az1_78_Zrn	3.823	0.117	0.279	0.013	4.355	1597.701	115.093	1586.473	81.499	1611.478	70.187	1611.478	70.187	1.552
1072165az1_79_Zrn	3.416	0.105	0.257	0.012	4.553	1508.036	104.285	1476.225	75.471	1563.674	71.193	1563.674	71.193	5.593
1072165az1_80_Zrn	3.739	0.120	0.272	0.012	4.472	1579.840	118.254	1548.899	79.791	1621.399	72.510	1621.399	72.510	4.471
1072165az1_81_Zrn	4.221	0.129	0.293	0.013	4.077	1678.036	127.158	1654.685	85.643	1704.043	69.470	1704.043	69.470	2.897
1072165az1_82_Zrn	2.009	0.062	0.190	0.009	6.778	1118.712	61.940	1119.747	55.611	1115.703	75.627	1115.703	75.627	-0.362
1072165az1_83_Zrn	2.629	0.080	0.224	0.010	5.545	1308.923	79.976	1302.460	65.530	1316.615	73.001	1316.615	73.001	1.075
1072165az1_84_Zrn	2.667	0.083	0.229	0.010	5.657	1319.353	82.499	1327.213	67.132	1308.129	74.006	1308.129	74.006	-1.459
1072165az1_85_Zrn	4.545	0.140	0.306	0.014	3.922	1739.321	137.306	1718.726	89.525	1763.493	69.165	1763.493	69.165	2.538
1072165az1_86_Zrn	4.899	0.150	0.319	0.014	3.749	1802.002	146.482	1782.846	93.012	1823.668	68.374	1823.668	68.374	2.238
1072165az1_87_Zrn	4.547	0.139	0.308	0.014	3.947	1739.647	136.357	1729.888	89.957	1748.087	68.993	1748.087	68.993	1.041
1072165az1_88_Zrn	0.256	0.008	0.037	0.002	4.642	231.221	8.121	236.607	10.984	174.305	89.217	236.607	10.984	-35.743
1072165az1_89_Zrn	3.324	0.102	0.259	0.012	4.803	1486.669	100.830	1484.515	75.661	1488.156	71.469	1488.156	71.469	0.245
1072165az1_90_Zrn	3.675	0.113	0.277	0.013	4.585	1565.992	111.768	1574.269	80.986	1552.945	71.206	1552.945	71.206	-1.373
1072165az1_91_Zrn	2.250	0.069	0.202	0.009	6.092	1196.716	68.596	1183.943	58.980	1216.544	74.107	1216.544	74.107	2.680
1072165az1_92_Zrn	0.088	0.003	0.013	0.001	4.657	85.575	3.139	82.061	3.822	173.108	96.574	82.061	3.822	52.595
1072165az1_93_Zrn	0.086	0.005	0.012	0.001	4.756	83.813	4.649	77.462	3.684	263.825	131.946	77.462	3.684	70.639
1072165az1_94_Zrn	4.073	0.125	0.288	0.013	4.175	1648.975	122.813	1630.013	84.180	1671.890	69.797	1671.890	69.797	2.505
1072165az1_95_Zrn	2.553	0.078	0.220	0.010	5.683	1287.428	78.181	1283.555	64.549	1294.269	73.559	1294.269	73.559	0.828
1072165az1_96_Zrn	0.791	0.025	0.096	0.004	4.753	591.901	25.304	588.306	27.960	599.370	83.421	588.306	27.960	1.846
1072165az1_97_Zrn	2.892	0.090	0.238	0.011	5.255	1379.923	89.247	1375.645	69.662	1391.060	73.104	1391.060	73.104	1.108
1072165az1_98_Zrn	3.340	0.102	0.259	0.012	4.738	1490.392	101.186	1482.354	75.638	1504.305	71.267	1504.305	71.267	1.459
1072165az1_99_Zrn	1.819	0.056	0.176	0.008	7.148	1052.250	55.761	1046.187	51.604	1062.633	75.954	1062.633	75.954	1.548

1072165az1_100_Zrn	3.216	0.103	0.253	0.012	5.014	1461.108	102.322	1451.411	74.305	1475.480	73.974	1475.480	73.974	1.631
1072165az1_101_Zrn	0.072	0.003	0.010	0.000	4.689	70.747	2.896	64.594	3.029	275.186	104.067	64.594	3.029	76.527
1072165az1_102_Zrn	2.967	0.092	0.245	0.011	5.297	1399.296	91.231	1413.436	71.787	1380.618	73.126	1380.618	73.126	-2.377
1072165az1_103_Zrn	2.841	0.101	0.224	0.010	5.477	1366.383	99.884	1302.960	66.577	1457.031	79.802	1457.031	79.802	10.574
1072165az1_104_Zrn	1.597	0.049	0.160	0.007	4.896	968.939	48.989	959.228	46.962	990.542	76.710	959.228	46.962	3.161
1072165az1_105_Zrn	3.351	0.102	0.259	0.012	4.727	1493.100	101.140	1484.095	75.707	1505.066	71.151	1505.066	71.151	1.393
1072165az1_106_Zrn	4.593	0.140	0.310	0.014	3.907	1748.029	137.341	1738.859	90.369	1760.849	68.795	1760.849	68.795	1.249
1072165az1_107_Zrn	4.618	0.141	0.308	0.014	3.870	1752.517	138.162	1731.153	89.950	1775.796	68.715	1775.796	68.715	2.514
1072165az1_108_Zrn	3.329	0.102	0.259	0.012	4.789	1487.923	101.109	1485.325	75.761	1493.011	71.496	1493.011	71.496	0.515
1072165az1_109_Zrn	1.094	0.034	0.125	0.006	4.827	750.276	34.027	759.282	36.652	723.555	80.550	759.282	36.652	-4.938
1072165az1_110_Zrn	2.575	0.080	0.218	0.010	5.503	1293.506	79.296	1269.219	64.047	1334.867	73.454	1334.867	73.454	4.918
1072-166, Early Paleocene (Base) Barco Formation (N = 99)														
1072166az1_1_Zrn	3.664	0.287	0.260	0.023	7.270	1563.613	272.576	1491.915	145.030	1661.821	120.819	1661.821	120.819	10.224
1072166az1_3_Zrn	1.894	0.061	0.181	0.008	7.203	1079.059	60.712	1073.593	53.100	1083.847	78.064	1083.847	78.064	0.946
1072166az1_5_Zrn	1.800	0.055	0.176	0.008	7.302	1045.511	55.081	1046.231	51.481	1041.282	76.038	1041.282	76.038	-0.475
1072166az1_6_Zrn	3.044	0.093	0.246	0.011	5.040	1418.794	91.995	1416.344	71.743	1424.992	71.827	1424.992	71.827	0.607
1072166az1_7_Zrn	4.553	0.138	0.308	0.014	3.923	1740.688	135.941	1728.988	89.718	1753.664	68.791	1753.664	68.791	1.407
1072166az1_9_Zrn	5.146	0.158	0.328	0.015	3.678	1843.803	154.107	1828.718	95.735	1856.302	68.275	1856.302	68.275	1.486
1072166az1_10_Zrn	1.731	0.058	0.168	0.008	7.692	1020.281	57.878	1001.962	49.456	1049.891	80.761	1049.891	80.761	4.565
1072166az1_11_Zrn	2.883	0.088	0.234	0.011	5.115	1377.412	87.490	1355.692	68.357	1410.270	72.134	1410.270	72.134	3.870
1072166az1_12_Zrn	3.046	0.093	0.247	0.011	5.106	1419.152	92.627	1421.585	72.117	1415.044	72.251	1415.044	72.251	-0.462
1072166az1_13_Zrn	3.144	0.096	0.254	0.012	5.060	1443.505	95.039	1457.841	74.076	1421.492	71.921	1421.492	71.921	-2.557
1072166az1_14_Zrn	3.099	0.095	0.247	0.011	4.981	1432.337	94.264	1421.546	72.080	1445.285	71.989	1445.285	71.989	1.642
1072166az1_15_Zrn	4.168	0.138	0.285	0.014	4.277	1667.797	135.280	1615.323	88.902	1736.816	74.291	1736.816	74.291	6.995
1072166az1_16_Zrn	2.882	0.089	0.239	0.011	5.313	1377.099	88.249	1381.090	69.787	1372.503	72.918	1372.503	72.918	-0.626
1072166az1_17_Zrn	2.666	0.081	0.228	0.010	5.571	1319.218	80.833	1325.309	66.654	1310.146	72.993	1310.146	72.993	-1.157
1072166az1_18_Zrn	4.673	0.142	0.309	0.014	3.810	1762.331	139.493	1733.604	90.032	1796.398	68.449	1796.398	68.449	3.496
1072166az1_19_Zrn	4.623	0.141	0.313	0.014	3.932	1753.374	138.033	1755.257	91.253	1750.415	68.829	1750.415	68.829	-0.277
1072166az1_20_Zrn	3.339	0.102	0.258	0.012	4.746	1490.269	100.993	1480.963	75.420	1501.394	71.257	1501.394	71.257	1.361
1072166az1_21_Zrn	2.967	0.092	0.235	0.011	4.945	1399.185	90.875	1363.178	69.098	1458.980	72.142	1458.980	72.142	6.566
1072166az1_22_Zrn	4.618	0.142	0.311	0.014	3.930	1752.564	138.983	1745.673	90.877	1759.616	69.156	1759.616	69.156	0.792
1072166az1_24_Zrn	2.750	0.086	0.225	0.010	5.273	1341.971	85.497	1307.464	66.844	1398.760	73.763	1398.760	73.763	6.527
1072166az1_25_Zrn	4.718	0.144	0.315	0.014	3.869	1770.476	140.932	1764.465	91.936	1776.669	68.741	1776.669	68.741	0.687
1072166az1_26_Zrn	4.661	0.144	0.309	0.014	3.866	1760.227	141.264	1733.466	90.375	1792.224	69.279	1792.224	69.279	3.279
1072166az1_27_Zrn	0.092	0.003	0.013	0.001	4.598	89.332	3.537	80.398	3.697	320.433	99.564	80.398	3.697	74.910
1072166az1_28_Zrn	4.142	0.127	0.288	0.013	4.089	1662.656	125.022	1632.475	84.478	1702.877	69.638	1702.877	69.638	4.134
1072166az1_30_Zrn	4.523	0.138	0.301	0.014	3.857	1735.158	135.508	1693.979	87.868	1782.256	68.733	1782.256	68.733	4.953
1072166az1_31_Zrn	2.539	0.080	0.213	0.010	5.549	1283.374	79.868	1244.489	63.740	1349.164	74.861	1349.164	74.861	7.759
1072166az1_32_Zrn	3.133	0.096	0.247	0.011	4.867	1440.791	95.174	1420.775	72.113	1473.166	71.699	1473.166	71.699	3.556
1072166az1_34_Zrn	4.671	0.142	0.311	0.014	3.852	1761.978	139.516	1745.738	90.755	1780.974	68.611	1780.974	68.611	1.978
1072166az1_35_Zrn	5.073	0.155	0.327	0.015	3.711	1831.623	152.000	1821.730	95.535	1843.559	68.414	1843.559	68.414	1.184
1072166az1_36_Zrn	3.557	0.154	0.256	0.014	5.737	1539.999	151.055	1471.627	88.627	1635.230	93.815	1635.230	93.815	10.005
1072166az1_38_Zrn	5.784	0.176	0.346	0.016	3.408	1944.049	171.671	1916.547	101.047	1970.973	67.162	1970.973	67.162	2.761
1072166az1_39_Zrn	3.965	0.130	0.273	0.013	4.274	1626.981	128.101	1555.562	83.097	1715.649	73.332	1715.649	73.332	9.331
1072166az1_40_Zrn	4.303	0.131	0.301	0.014	4.109	1693.873	129.128	1694.179	87.726	1691.229	69.487	1691.229	69.487	-0.174
1072166az1_41_Zrn	3.054	0.094	0.243	0.011	4.976	1421.172	92.804	1404.183	71.156	1445.182	71.917	1445.182	71.917	2.837
1072166az1_42_Zrn	4.940	0.151	0.320	0.015	3.745	1809.070	147.694	1790.506	93.404	1826.011	68.381	1826.011	68.381	1.944
1072166az1_43_Zrn	3.338	0.103	0.260	0.012	4.835	1490.008	101.627	1490.932	76.098	1484.291	71.769	1484.291	71.769	-0.447
1072166az1_44_Zrn	3.074	0.096	0.241	0.011	4.908	1426.338	95.341	1393.786	70.674	1479.747	72.629	1479.747	72.629	5.809
1072166az1_45_Zrn	4.356	0.133	0.301	0.014	4.054	1704.118	130.693	1697.296	87.969	1710.271	69.330	1710.271	69.330	0.759
1072166az1_46_Zrn	2.155	0.074	0.188	0.009	6.388	1166.524	73.860	1107.989	57.526	1262.724	80.661	1262.724	80.661	12.254
1072166az1_47_Zrn	3.318	0.101	0.257	0.012	4.752	1485.321	100.468	1472.552	74.966	1500.363	71.294	1500.363	71.294	1.854

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072166az1_48_Zrn	2.387	0.144	0.202	0.014	9.406	1238.808	141.580	1185.838	91.117	1332.160	125.308	1332.160	125.308	10.984
1072166az1_49_Zrn	4.632	0.141	0.311	0.014	3.886	1755.039	138.421	1744.581	90.674	1768.543	68.733	1768.543	68.733	1.355
1072166az1_50_Zrn	4.578	0.141	0.307	0.014	3.934	1745.333	138.672	1725.815	90.306	1767.518	69.527	1767.518	69.527	2.359
1072166az1_51_Zrn	3.126	0.096	0.245	0.011	4.863	1439.017	95.387	1412.744	71.745	1478.069	71.871	1478.069	71.871	4.420
1072166az1_52_Zrn	4.459	0.139	0.301	0.014	3.949	1723.387	136.019	1696.266	88.674	1764.208	69.673	1764.208	69.673	3.851
1072166az1_53_Zrn	4.508	0.137	0.303	0.014	3.909	1732.454	135.000	1707.144	88.594	1761.959	68.872	1761.959	68.872	3.111
1072166az1_54_Zrn	4.629	0.141	0.312	0.014	3.926	1754.509	138.693	1752.065	91.077	1755.479	68.922	1755.479	68.922	0.194
1072166az1_55_Zrn	4.351	0.133	0.299	0.014	4.017	1703.147	130.441	1686.447	87.316	1721.996	69.171	1721.996	69.171	2.064
1072166az1_56_Zrn	3.305	0.102	0.258	0.012	4.840	1482.328	100.624	1479.940	75.358	1482.163	71.740	1482.163	71.740	0.150
1072166az1_57_Zrn	5.514	0.168	0.339	0.015	3.502	1902.763	163.544	1882.927	98.939	1924.490	67.387	1924.490	67.387	2.160
1072166az1_58_Zrn	2.593	0.079	0.222	0.010	5.621	1298.590	78.888	1294.592	65.009	1302.791	73.234	1302.791	73.234	0.629
1072166az1_59_Zrn	3.803	0.193	0.267	0.018	6.487	1593.478	187.439	1526.543	115.700	1683.183	109.189	1683.183	109.189	9.306
1072166az1_60_Zrn	5.238	0.161	0.332	0.015	3.652	1858.797	156.761	1847.497	97.191	1868.222	68.228	1868.222	68.228	1.109
1072166az1_61_Zrn	4.510	0.138	0.306	0.014	3.966	1732.766	135.280	1723.196	89.478	1742.761	69.122	1742.761	69.122	1.123
1072166az1_62_Zrn	4.694	0.143	0.314	0.014	3.872	1766.115	140.047	1760.597	91.570	1772.679	68.636	1772.679	68.636	0.682
1072166az1_63_Zrn	2.955	0.090	0.240	0.011	5.108	1396.080	89.569	1385.663	70.065	1411.624	72.103	1411.624	72.103	1.859
1072166az1_64_Zrn	1.621	0.050	0.166	0.008	4.904	978.512	50.265	988.352	48.464	955.690	77.645	988.352	48.464	-3.418
1072166az1_65_Zrn	2.981	0.095	0.247	0.011	5.413	1402.858	93.779	1421.331	72.342	1374.612	74.407	1374.612	74.407	-3.399
1072166az1_66_Zrn	2.873	0.087	0.238	0.011	5.268	1374.764	86.907	1374.630	69.395	1373.463	72.352	1373.463	72.352	-0.085
1072166az1_67_Zrn	4.349	0.133	0.299	0.014	4.024	1702.769	130.478	1687.218	87.361	1720.409	69.228	1720.409	69.228	1.929
1072166az1_69_Zrn	2.770	0.085	0.230	0.010	5.303	1347.552	84.493	1333.604	67.231	1371.449	72.722	1371.449	72.722	2.759
1072166az1_70_Zrn	6.215	0.189	0.357	0.016	3.251	2006.595	183.758	1967.307	104.224	2047.328	66.551	2047.328	66.551	3.909
1072166az1_71_Zrn	4.883	0.149	0.318	0.014	3.750	1799.365	145.750	1779.264	92.803	1821.541	68.305	1821.541	68.305	2.321
1072166az1_72_Zrn	2.699	0.083	0.230	0.010	5.580	1328.158	82.363	1334.898	67.255	1313.955	73.315	1313.955	73.315	-1.594
1072166az1_73_Zrn	4.496	0.138	0.304	0.014	3.899	1730.286	135.212	1713.193	89.016	1770.097	69.008	1770.097	69.008	3.215
1072166az1_74_Zrn	4.699	0.143	0.312	0.014	3.858	1767.014	140.656	1751.034	91.138	1781.305	68.731	1781.305	68.731	1.699
1072166az1_75_Zrn	4.426	0.135	0.303	0.014	3.993	1717.133	132.409	1708.019	88.551	1729.203	69.042	1729.203	69.042	1.225
1072166az1_76_Zrn	4.772	0.146	0.317	0.014	3.847	1779.999	142.762	1775.725	92.570	1785.539	68.697	1785.539	68.697	0.550
1072166az1_77_Zrn	2.960	0.090	0.243	0.011	5.191	1397.378	89.844	1401.531	70.898	1390.151	72.160	1390.151	72.160	-0.819
1072166az1_78_Zrn	4.514	0.138	0.301	0.014	3.866	1733.619	135.421	1697.174	88.042	1778.737	68.773	1778.737	68.773	4.585
1072166az1_79_Zrn	4.601	0.141	0.311	0.014	3.942	1749.498	138.406	1744.471	90.833	1753.938	69.142	1753.938	69.142	0.540
1072166az1_80_Zrn	2.933	0.090	0.237	0.011	5.095	1390.487	89.370	1371.414	69.437	1419.319	72.313	1419.319	72.313	3.375
1072166az1_81_Zrn	4.557	0.139	0.305	0.014	3.882	1741.445	136.513	1714.738	89.005	1772.742	68.810	1772.742	68.810	3.272
1072166az1_82_Zrn	4.623	0.141	0.309	0.014	3.887	1753.477	138.549	1736.153	90.212	1771.119	68.840	1771.119	68.840	1.974
1072166az1_83_Zrn	3.973	0.209	0.280	0.018	5.708	1628.645	201.932	1592.199	117.168	1675.952	95.664	1675.952	95.664	4.997
1072166az1_84_Zrn	5.762	0.175	0.346	0.016	3.412	1940.767	170.744	1915.343	100.928	1966.460	67.098	1966.460	67.098	2.599
1072166az1_86_Zrn	3.051	0.095	0.248	0.011	5.196	1420.369	94.553	1426.798	72.520	1410.058	73.262	1410.058	73.262	-1.187
1072166az1_87_Zrn	4.823	0.148	0.316	0.014	3.790	1788.834	144.743	1767.972	92.124	1811.276	68.646	1811.276	68.646	2.391
1072166az1_88_Zrn	3.051	0.095	0.243	0.011	5.025	1420.431	93.919	1403.204	71.258	1444.230	72.579	1444.230	72.579	2.841
1072166az1_89_Zrn	3.120	0.095	0.250	0.011	5.001	1437.678	94.347	1439.677	73.099	1435.406	71.781	1435.406	71.781	-0.298
1072166az1_90_Zrn	2.558	0.079	0.226	0.010	5.971	1288.771	78.988	1314.621	66.193	1248.108	74.531	1248.108	74.531	-5.329
1072166az1_91_Zrn	4.907	0.150	0.322	0.015	3.787	1803.437	146.631	1797.393	93.855	1807.704	68.465	1807.704	68.465	0.570
1072166az1_92_Zrn	3.340	0.102	0.252	0.011	4.569	1490.558	100.987	1451.061	73.871	1549.398	70.793	1549.398	70.793	6.347
1072166az1_93_Zrn	4.568	0.139	0.307	0.014	3.903	1743.365	136.647	1727.354	89.741	1763.207	68.822	1763.207	68.822	2.033
1072166az1_94_Zrn	2.652	0.082	0.224	0.010	5.511	1315.298	81.334	1304.009	65.694	1331.983	73.406	1331.983	73.406	2.100
1072166az1_95_Zrn	2.614	0.126	0.214	0.013	7.451	1304.545	123.690	1251.043	82.830	1393.260	103.814	1393.260	103.814	10.207

1072166az1_96_Zrn	3.270	0.100	0.255	0.012	4.795	1474.054	99.162	1462.466	74.527	1490.038	71.451	1490.038	71.451	1.850
1072166az1_97_Zrn	2.978	0.092	0.242	0.011	5.140	1402.124	91.010	1396.612	70.804	1410.098	72.480	1410.098	72.480	0.956
1072166az1_98_Zrn	5.865	0.178	0.353	0.016	3.414	1956.014	173.515	1948.223	102.850	1964.449	67.061	1964.449	67.061	0.826
1072166az1_99_Zrn	4.119	0.133	0.285	0.013	4.181	1658.012	130.940	1618.220	86.141	1712.339	71.588	1712.339	71.588	5.497
1072166az1_100_Zrn	17.528	0.580	0.595	0.028	2.162	2964.191	516.972	3008.768	176.945	2949.479	63.771	2949.479	63.771	-2.010
1072166az1_101_Zrn	3.375	0.103	0.259	0.012	4.696	1498.656	102.263	1484.434	75.725	1516.158	71.200	1516.158	71.200	2.092
1072166az1_102_Zrn	3.034	0.093	0.246	0.011	5.096	1416.171	92.050	1415.813	71.785	1414.764	72.102	1414.764	72.102	-0.074
1072166az1_103_Zrn	5.811	0.177	0.354	0.016	3.468	1948.123	172.342	1952.628	103.254	1940.923	67.316	1940.923	67.316	-0.603
1072166az1_104_Zrn	4.621	0.141	0.307	0.014	3.845	1753.147	138.186	1727.647	89.768	1783.981	68.591	1783.981	68.591	3.158
1072166az1_105_Zrn	3.467	0.117	0.260	0.012	4.871	1519.639	115.259	1491.374	79.380	1560.882	76.038	1560.882	76.038	4.453
1072166az1_107_Zrn	4.749	0.145	0.314	0.014	3.812	1775.995	141.721	1758.235	91.498	1795.179	68.440	1795.179	68.440	2.058
1072166az1_108_Zrn	3.118	0.096	0.249	0.011	4.999	1437.099	95.022	1434.612	72.926	1442.339	72.097	1442.339	72.097	0.536
1072166az1_109_Zrn	4.183	0.128	0.289	0.013	4.054	1670.685	125.682	1638.227	84.622	1710.788	69.364	1710.788	69.364	4.241
1072166az1_110_Zrn	2.610	0.081	0.225	0.010	5.734	1303.438	80.412	1309.443	66.021	1291.246	74.046	1291.246	74.046	-1.409
1072-167, Early Paleocene (Top) Guaduas Formation (N = 107)														
1072167az1_1_Zrn	2.570	0.079	0.219	0.010	5.561	1292.056	78.348	1278.981	64.110	1315.753	73.167	1315.753	73.167	2.795
1072167az1_2_Zrn	1.512	0.051	0.154	0.007	4.900	935.290	51.114	921.345	45.148	958.912	82.389	921.345	45.148	3.918
1072167az1_3_Zrn	2.579	0.079	0.223	0.010	5.687	1294.765	78.570	1295.363	65.034	1290.964	73.416	1290.964	73.416	-0.341
1072167az1_4_Zrn	3.252	0.099	0.255	0.012	4.822	1469.605	97.833	1465.902	74.458	1476.082	71.181	1476.082	71.181	0.690
1072167az1_5_Zrn	4.641	0.141	0.313	0.014	3.908	1756.694	138.595	1757.879	91.437	1759.636	68.759	1759.636	68.759	0.100
1072167az1_7_Zrn	3.251	0.100	0.252	0.011	4.780	1469.319	99.173	1447.821	73.693	1500.052	71.700	1500.052	71.700	3.482
1072167az1_8_Zrn	3.108	0.095	0.250	0.011	5.038	1434.791	93.796	1440.705	73.105	1425.375	71.817	1425.375	71.817	-1.076
1072167az1_9_Zrn	3.229	0.099	0.253	0.011	4.832	1464.244	97.651	1454.393	73.903	1478.129	71.430	1478.129	71.430	1.606
1072167az1_10_Zrn	2.270	0.073	0.196	0.009	5.935	1202.885	73.032	1154.692	59.015	1291.576	76.656	1291.576	76.656	10.598
1072167az1_11_Zrn	2.648	0.081	0.224	0.010	5.482	1313.985	80.432	1303.481	65.463	1329.802	72.894	1329.802	72.894	1.979
1072167az1_12_Zrn	4.778	0.145	0.317	0.014	3.836	1780.975	142.515	1774.958	92.446	1786.473	68.532	1786.473	68.532	0.645
1072167az1_13_Zrn	3.196	0.097	0.252	0.011	4.884	1456.223	96.495	1450.651	73.616	1462.717	71.433	1462.717	71.433	0.825
1072167az1_14_Zrn	3.460	0.107	0.263	0.012	4.685	1518.259	106.066	1507.619	77.108	1530.857	71.716	1530.857	71.716	1.518
1072167az1_15_Zrn	3.560	0.108	0.267	0.012	4.523	1540.663	106.944	1527.330	78.001	1557.850	70.465	1557.850	70.465	1.959
1072167az1_16_Zrn	1.491	0.047	0.155	0.007	4.883	926.699	46.694	927.486	45.292	920.335	78.575	927.486	45.292	-0.777
1072167az1_17_Zrn	2.584	0.079	0.221	0.010	5.578	1296.013	78.584	1285.351	64.478	1311.121	73.135	1311.121	73.135	1.966
1072167az1_18_Zrn	4.959	0.152	0.320	0.015	3.732	1812.370	148.782	1789.628	93.447	1835.171	68.489	1835.171	68.489	2.482
1072167az1_19_Zrn	4.357	0.133	0.295	0.013	3.954	1704.286	131.124	1667.434	86.470	1750.089	69.206	1750.089	69.206	4.723
1072167az1_20_Zrn	2.610	0.079	0.221	0.010	5.486	1303.505	79.091	1288.918	64.682	1326.827	72.789	1326.827	72.789	2.857
1072167az1_21_Zrn	3.094	0.095	0.242	0.011	4.840	1431.244	94.671	1396.401	71.321	1488.401	72.040	1488.401	72.040	6.181
1072167az1_22_Zrn	3.385	0.103	0.265	0.012	4.837	1500.857	102.245	1516.882	77.466	1477.171	71.452	1477.171	71.452	-2.688
1072167az1_23_Zrn	2.625	0.080	0.229	0.010	5.763	1307.622	79.791	1327.187	66.786	1275.084	73.486	1275.084	73.486	-4.086
1072167az1_24_Zrn	3.221	0.100	0.259	0.012	5.115	1462.207	99.242	1487.013	75.948	1425.199	72.901	1425.199	72.901	-4.337
1072167az1_25_Zrn	2.638	0.080	0.227	0.010	5.612	1311.214	80.064	1316.585	66.144	1302.938	73.116	1302.938	73.116	-1.047
1072167az1_26_Zrn	3.015	0.095	0.244	0.011	5.209	1411.455	94.624	1405.888	71.396	1416.632	73.791	1416.632	73.791	0.758
1072167az1_27_Zrn	4.536	0.138	0.306	0.014	3.911	1737.621	135.748	1719.089	89.197	1760.227	68.840	1760.227	68.840	2.337
1072167az1_28_Zrn	1.602	0.050	0.160	0.007	4.907	970.921	50.330	958.114	47.011	996.298	77.935	958.114	47.011	3.833
1072167az1_29_Zrn	1.662	0.051	0.164	0.007	4.904	994.316	51.146	976.655	47.894	1037.435	76.341	976.655	47.894	5.859
1072167az1_30_Zrn	4.611	0.141	0.308	0.014	3.874	1751.184	137.933	1731.604	89.963	1774.240	68.741	1774.240	68.741	2.403
1072167az1_31_Zrn	2.503	0.076	0.215	0.010	5.626	1273.000	76.125	1257.085	62.878	1300.719	73.176	1300.719	73.176	3.355
1072167az1_32_Zrn	4.222	0.129	0.296	0.013	4.133	1678.257	127.202	1669.211	86.337	1686.625	69.709	1686.625	69.709	1.033
1072167az1_33_Zrn	5.010	0.153	0.325	0.015	3.731	1821.013	149.430	1813.042	94.763	1829.512	68.254	1829.512	68.254	0.900
1072167az1_34_Zrn	2.735	0.087	0.224	0.010	5.364	1338.112	86.681	1302.240	67.204	1397.214	74.945	1397.214	74.945	6.797
1072167az1_35_Zrn	3.281	0.100	0.255	0.012	4.764	1476.625	99.089	1464.821	74.469	1494.535	71.206	1494.535	71.206	1.988
1072167az1_36_Zrn	2.592	0.079	0.222	0.010	5.578	1298.441	78.663	1291.556	64.781	1309.242	73.024	1309.242	73.024	1.351
1072167az1_37_Zrn	2.602	0.081	0.218	0.010	5.457	1301.094	80.289	1273.117	63.725	1345.777	73.441	1345.777	73.441	5.399
1072167az1_38_Zrn	0.792	0.024	0.096	0.004	4.753	592.510	24.410	588.626	27.980	606.624	81.389	588.626	27.980	2.967

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Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072167az1_39_Zrn	2.462	0.075	0.215	0.010	5.771	1260.808	75.083	1252.864	62.681	1274.794	73.571	1274.794	73.571	1.720
1072167az1_40_Zrn	2.429	0.074	0.215	0.010	5.928	1251.173	74.047	1252.852	62.724	1246.326	73.888	1246.326	73.888	-0.524
1072167az1_41_Zrn	2.619	0.080	0.225	0.010	5.625	1305.991	79.435	1308.656	65.726	1299.628	73.109	1299.628	73.109	-0.695
1072167az1_42_Zrn	5.323	0.162	0.335	0.015	3.597	1872.581	158.081	1862.747	97.717	1882.861	67.722	1882.861	67.722	1.068
1072167az1_43_Zrn	1.565	0.049	0.161	0.007	4.896	956.591	48.914	960.926	47.044	944.029	78.178	960.926	47.044	-1.790
1072167az1_44_Zrn	4.558	0.139	0.305	0.014	3.885	1741.684	136.718	1714.874	89.130	1773.012	68.886	1773.012	68.886	3.279
1072167az1_45_Zrn	2.994	0.091	0.241	0.011	5.044	1405.994	90.541	1393.576	70.442	1424.531	71.852	1424.531	71.852	2.173
1072167az1_46_Zrn	4.396	0.135	0.297	0.014	3.935	1711.529	132.429	1673.961	86.902	1757.723	69.175	1757.723	69.175	4.765
1072167az1_47_Zrn	3.041	0.093	0.243	0.011	4.992	1417.876	92.272	1402.063	71.013	1440.369	71.900	1440.369	71.900	2.659
1072167az1_48_Zrn	1.658	0.052	0.165	0.008	4.913	992.627	51.856	987.233	48.507	1008.232	77.477	987.233	48.507	2.083
1072167az1_49_Zrn	3.656	0.141	0.261	0.014	5.083	1561.855	138.457	1492.431	87.711	1658.203	84.282	1658.203	84.282	9.997
1072167az1_50_Zrn	2.806	0.085	0.235	0.011	5.377	1357.107	84.959	1360.983	68.637	1349.586	72.570	1349.586	72.570	-0.844
1072167az1_51_Zrn	1.946	0.060	0.185	0.008	6.930	1097.011	60.293	1094.850	54.497	1098.985	76.156	1098.985	76.156	0.376
1072167az1_52_Zrn	4.657	0.142	0.313	0.014	3.893	1759.471	139.491	1753.600	91.309	1768.305	68.833	1768.305	68.833	0.832
1072167az1_53_Zrn	2.843	0.087	0.237	0.011	5.367	1366.899	86.368	1373.428	69.413	1354.696	72.712	1354.696	72.712	-1.383
1072167az1_54_Zrn	3.060	0.096	0.249	0.011	5.215	1422.728	95.232	1432.501	72.983	1408.411	73.452	1408.411	73.452	-1.710
1072167az1_55_Zrn	0.781	0.029	0.096	0.004	4.793	585.994	29.022	591.057	28.331	559.339	93.613	591.057	28.331	-5.671
1072167az1_56_Zrn	3.922	0.120	0.283	0.013	4.314	1618.315	118.580	1608.555	82.828	1628.444	70.252	1628.444	70.252	1.221
1072167az1_57_Zrn	3.343	0.104	0.251	0.011	4.571	1491.064	102.511	1443.293	73.763	1561.338	71.370	1561.338	71.370	7.561
1072167az1_58_Zrn	2.558	0.079	0.220	0.010	5.720	1288.710	78.874	1282.067	64.374	1293.584	73.987	1293.584	73.987	0.890
1072167az1_59_Zrn	2.743	0.084	0.230	0.010	5.369	1340.294	83.105	1332.839	67.078	1351.575	72.563	1351.575	72.563	1.386
1072167az1_60_Zrn	4.559	0.139	0.310	0.014	3.954	1741.875	136.293	1740.505	90.398	1742.848	68.915	1742.848	68.915	0.134
1072167az1_61_Zrn	4.752	0.145	0.319	0.014	3.889	1776.428	142.039	1782.946	93.026	1768.527	68.781	1768.527	68.781	-0.815
1072167az1_62_Zrn	4.508	0.137	0.308	0.014	3.974	1732.460	134.693	1728.417	89.689	1735.065	68.947	1735.065	68.947	0.383
1072167az1_63_Zrn	4.835	0.149	0.316	0.014	3.792	1791.082	145.874	1771.497	92.629	1813.263	68.767	1813.263	68.767	2.303
1072167az1_64_Zrn	3.092	0.096	0.247	0.011	5.032	1430.800	94.835	1424.747	72.444	1439.760	72.452	1439.760	72.452	1.043
1072167az1_65_Zrn	3.446	0.105	0.261	0.012	4.578	1514.935	104.016	1493.057	76.151	1545.908	70.767	1545.908	70.767	3.419
1072167az1_66_Zrn	4.308	0.132	0.300	0.014	4.089	1694.832	129.509	1689.880	87.541	1699.896	69.501	1699.896	69.501	0.589
1072167az1_67_Zrn	4.532	0.138	0.307	0.014	3.935	1736.913	135.486	1726.248	89.588	1749.834	68.863	1749.834	68.863	1.348
1072167az1_68_Zrn	3.640	0.112	0.270	0.012	4.493	1558.230	110.277	1540.999	78.880	1575.386	70.775	1575.386	70.775	2.183
1072167az1_69_Zrn	4.434	0.135	0.304	0.014	3.994	1718.669	132.927	1708.844	88.566	1730.911	69.125	1730.911	69.125	1.275
1072167az1_70_Zrn	3.130	0.096	0.250	0.011	4.978	1439.996	94.889	1436.452	72.832	1442.833	71.831	1442.833	71.831	0.442
1072167az1_71_Zrn	4.506	0.153	0.293	0.014	3.877	1732.136	149.809	1657.117	90.787	1825.990	70.791	1825.990	70.791	9.248
1072167az1_72_Zrn	2.882	0.089	0.238	0.011	5.319	1377.227	88.310	1378.408	69.744	1372.482	73.007	1372.482	73.007	-0.432
1072167az1_73_Zrn	3.053	0.100	0.243	0.011	5.235	1421.019	99.191	1401.219	71.173	1440.343	75.397	1440.343	75.397	2.716
1072167az1_74_Zrn	3.332	0.103	0.256	0.012	4.744	1488.487	101.695	1470.590	75.069	1510.851	71.670	1510.851	71.670	2.665
1072167az1_75_Zrn	4.325	0.132	0.295	0.013	3.984	1698.220	129.797	1668.073	86.265	1735.107	69.122	1735.107	69.122	3.863
1072167az1_76_Zrn	4.497	0.137	0.304	0.014	3.933	1730.346	134.338	1713.486	88.841	1750.256	68.829	1750.256	68.829	2.101
1072167az1_77_Zrn	3.047	0.093	0.244	0.011	5.005	1419.521	92.692	1406.567	71.204	1438.864	72.022	1438.864	72.022	2.245
1072167az1_78_Zrn	3.457	0.105	0.260	0.012	4.540	1517.393	104.266	1489.254	75.960	1556.701	70.675	1556.701	70.675	4.333
1072167az1_79_Zrn	3.093	0.095	0.246	0.011	4.952	1430.926	93.894	1415.756	71.828	1415.080	71.859	1451.080	71.859	2.434
1072167az1_80_Zrn	2.861	0.088	0.238	0.011	5.352	1371.658	87.416	1375.603	69.608	1363.602	72.978	1363.602	72.978	-0.880
1072167az1_81_Zrn	1.591	0.050	0.161	0.007	4.902	966.556	49.855	960.754	47.092	976.067	77.999	960.754	47.092	1.569
1072167az1_82_Zrn	3.143	0.096	0.251	0.011	4.988	1443.402	95.491	1442.737	73.260	1442.588	71.962	1442.588	71.962	-0.010
1072167az1_83_Zrn	2.509	0.077	0.217	0.010	5.681	1274.735	76.297	1263.767	63.336	1290.506	73.320	1290.506	73.320	2.072
1072167az1_84_Zrn	3.274	0.100	0.255	0.012	4.801	1474.813	99.164	1465.300	74.595	1488.040	71.447	1488.040	71.447	1.528

1072167az1_85_Zrn	4.725	0.144	0.311	0.014	3.809	1771.678	141.113	1747.887	90.916	1798.196	68.488	1798.196	68.488	2.798
1072167az1_86_Zrn	2.745	0.084	0.230	0.010	5.376	1340.714	83.287	1332.416	67.096	1351.575	72.655	1351.575	72.655	1.418
1072167az1_87_Zrn	3.023	0.095	0.240	0.011	5.035	1413.382	94.678	1384.504	70.041	1455.909	73.305	1455.909	73.305	4.904
1072167az1_88_Zrn	4.319	0.164	0.287	0.015	4.671	1696.953	160.165	1628.395	97.361	1782.746	83.270	1782.746	83.270	8.658
1072167az1_89_Zrn	3.321	0.102	0.257	0.012	4.758	1486.035	100.650	1476.006	75.234	1500.255	71.389	1500.255	71.389	1.616
1072167az1_90_Zrn	11.280	0.361	0.465	0.022	2.505	2546.560	336.902	2460.729	140.851	2616.417	65.532	2616.417	65.532	5.950
1072167az1_92_Zrn	3.034	0.093	0.245	0.011	5.085	1416.312	92.041	1415.177	71.696	1417.528	72.088	1417.528	72.088	0.166
1072167az1_93_Zrn	1.669	0.052	0.165	0.008	4.921	996.709	51.922	982.174	48.329	1027.834	77.064	982.174	48.329	4.442
1072167az1_94_Zrn	5.671	0.173	0.347	0.016	3.500	1926.955	168.666	1922.139	101.431	1930.267	67.566	1930.267	67.566	0.421
1072167az1_95_Zrn	2.878	0.088	0.237	0.011	5.239	1376.202	87.513	1369.615	69.151	1383.837	72.493	1383.837	72.493	1.028
1072167az1_96_Zrn	3.591	0.109	0.264	0.012	4.398	1547.627	107.980	1512.509	77.219	1595.847	70.178	1595.847	70.178	5.222
1072167az1_97_Zrn	2.503	0.077	0.219	0.010	5.824	1272.886	76.320	1276.966	64.002	1265.316	73.697	1265.316	73.697	-0.921
1072167az1_98_Zrn	4.611	0.141	0.311	0.014	3.926	1751.232	138.074	1747.277	90.911	1756.104	68.948	1756.104	68.948	0.503
1072167az1_99_Zrn	2.276	0.070	0.204	0.009	6.139	1204.818	70.198	1196.693	59.784	1217.736	74.751	1217.736	74.751	1.728
1072167az1_100_Zrn	4.678	0.143	0.313	0.014	3.887	1763.390	139.828	1756.591	91.403	1768.836	68.754	1768.836	68.754	0.692
1072167az1_101_Zrn	2.691	0.083	0.226	0.010	5.454	1326.030	82.253	1314.843	66.218	1341.242	73.147	1341.242	73.147	1.968
1072167az1_102_Zrn	2.990	0.092	0.243	0.011	5.169	1404.986	91.697	1401.748	71.069	1407.338	72.742	1407.338	72.742	0.397
1072167az1_103_Zrn	4.067	0.124	0.286	0.013	4.115	1647.725	121.855	1619.482	83.336	1685.345	69.356	1685.345	69.356	3.908
1072167az1_104_Zrn	3.610	0.111	0.268	0.012	4.491	1551.748	109.640	1531.600	78.442	1578.034	70.867	1578.034	70.867	2.942
1072167az1_105_Zrn	0.779	0.027	0.094	0.004	4.763	584.903	26.789	577.240	27.494	611.611	87.726	577.240	27.494	5.620
1072167az1_106_Zrn	3.781	0.115	0.277	0.013	4.365	1588.816	113.785	1574.533	80.831	1608.162	70.195	1608.162	70.195	2.091
1072167az1_107_Zrn	2.992	0.091	0.239	0.011	4.979	1405.704	90.361	1384.068	69.931	1438.939	71.648	1438.939	71.648	3.813
1072167az1_108_Zrn	1.655	0.052	0.164	0.007	4.904	991.362	51.943	977.021	47.917	1018.422	77.612	977.021	47.917	4.065
1072167az1_109_Zrn	3.455	0.105	0.263	0.012	4.601	1517.072	103.847	1503.170	76.594	1535.643	70.649	1535.643	70.649	2.115
1072167az1_110_Zrn	3.185	0.097	0.251	0.011	4.864	1453.429	96.336	1442.765	73.253	1470.002	71.495	1470.002	71.495	1.853
1072-135, Early-Middle Eocene Picacho Formation (N = 89)														
1072135az1_1_Zrn	1.934	0.051	0.189	0.007	6.143	1093.085	50.821	1114.460	46.293	1049.045	64.440	1049.045	64.440	-6.236
1072135az1_2_Zrn	0.218	0.006	0.031	0.001	3.877	199.880	6.385	197.532	7.659	222.726	79.087	197.532	7.659	11.312
1072135az1_3_Zrn	2.798	0.072	0.233	0.009	4.450	1354.986	71.405	1349.573	56.979	1361.666	60.594	1361.666	60.594	0.888
1072135az1_4_Zrn	4.775	0.122	0.313	0.012	3.148	1780.581	119.883	1754.806	76.490	1810.528	56.992	1810.528	56.992	3.078
1072135az1_5_Zrn	4.395	0.112	0.302	0.012	3.352	1711.470	110.935	1702.249	73.987	1722.687	57.752	1722.687	57.752	1.186
1072135az1_6_Zrn	1.665	0.044	0.164	0.006	4.109	995.343	44.487	979.221	40.237	1029.120	65.346	979.221	40.237	4.849
1072135az1_7_Zrn	0.347	0.009	0.048	0.002	3.915	302.341	9.253	302.308	11.835	280.949	73.640	302.308	11.835	-7.602
1072135az1_8_Zrn	6.839	0.174	0.381	0.014	2.620	2090.836	169.290	2081.336	92.995	2100.265	55.027	2100.265	55.027	0.901
1072135az1_9_Zrn	4.754	0.121	0.314	0.012	3.187	1776.764	119.088	1762.269	76.710	1789.308	57.027	1789.308	57.027	1.511
1072135az1_10_Zrn	3.410	0.087	0.261	0.010	3.892	1506.653	86.266	1495.062	63.783	1518.985	59.122	1518.985	59.122	1.575
1072135az1_11_Zrn	0.621	0.016	0.080	0.003	3.951	490.730	16.334	493.314	19.492	475.683	70.262	493.314	19.492	-3.707
1072135az1_12_Zrn	3.287	0.085	0.255	0.010	3.980	1478.083	84.090	1463.001	62.367	1499.749	59.696	1499.749	59.696	2.450
1072135az1_13_Zrn	1.606	0.042	0.160	0.006	4.093	972.359	41.976	957.628	39.192	1004.836	64.546	957.628	39.192	4.698
1072135az1_14_Zrn	1.562	0.043	0.162	0.006	4.107	955.320	42.793	968.969	39.792	921.792	67.499	968.969	39.792	-5.118
1072135az1_15_Zrn	2.448	0.070	0.214	0.008	5.271	1256.807	69.662	1250.870	52.752	1259.576	66.386	1259.576	66.386	0.691
1072135az1_16_Zrn	3.228	0.084	0.255	0.010	4.135	1463.898	83.208	1464.688	62.441	1459.327	60.347	1459.327	60.347	-0.367
1072135az1_17_Zrn	3.361	0.093	0.252	0.010	3.885	1495.264	92.288	1447.484	64.643	1563.290	60.737	1563.290	60.737	7.408
1072135az1_18_Zrn	4.587	0.116	0.309	0.012	3.249	1746.939	114.853	1734.996	75.336	1760.143	57.184	1760.143	57.184	1.429
1072135az1_19_Zrn	0.706	0.020	0.084	0.003	3.968	542.546	20.127	518.805	20.586	632.144	72.417	518.805	20.586	17.929
1072135az1_20_Zrn	2.479	0.064	0.214	0.008	4.757	1266.018	63.655	1250.345	52.363	1290.302	61.378	1290.302	61.378	3.097
1072135az1_21_Zrn	3.994	0.102	0.285	0.011	3.521	1633.010	101.015	1615.383	69.671	1654.502	58.248	1654.502	58.248	2.364
1072135az1_22_Zrn	0.293	0.012	0.041	0.002	3.948	260.825	12.612	255.958	10.105	287.657	105.472	255.958	10.105	11.020
1072135az1_25_Zrn	2.064	0.053	0.189	0.007	5.359	1136.821	53.308	1117.897	46.451	1169.171	62.661	1169.171	62.661	4.385
1072135az1_26_Zrn	2.490	0.064	0.214	0.008	4.690	1269.124	63.692	1249.555	52.330	1302.961	61.112	1302.961	61.112	4.099
1072135az1_27_Zrn	2.233	0.057	0.201	0.008	5.131	1191.482	57.557	1180.007	49.418	1213.127	62.248	1213.127	62.248	2.730
1072135az1_28_Zrn	4.523	0.115	0.304	0.012	3.248	1735.220	113.763	1710.482	74.325	1765.656	57.349	1765.656	57.349	3.125

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Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)								
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)	Preferred Age (Ma)	± (Ma)	Discord (%)
1072135az1_29_Zrn	1.392	0.039	0.155	0.006	4.102	885.347	38.862	926.609	38.010	779.885	70.021	926.609	38.010	-18.814
1072135az1_30_Zrn	0.164	0.007	0.022	0.001	3.877	154.000	6.731	137.834	5.344	409.116	98.928	137.834	5.344	66.309
1072135az1_34_Zrn	3.342	0.087	0.257	0.010	3.959	1490.806	86.352	1473.488	62.821	1514.941	59.978	1514.941	59.978	2.736
1072135az1_35_Zrn	1.572	0.041	0.159	0.006	4.102	959.019	41.508	949.212	38.933	979.759	65.306	949.212	38.933	3.118
1072135az1_37_Zrn	0.208	0.008	0.030	0.001	3.975	191.524	8.349	191.544	7.613	188.573	101.783	191.544	7.613	-1.576
1072135az1_38_Zrn	1.345	0.034	0.142	0.005	4.062	865.449	34.654	855.530	34.749	889.521	64.977	855.530	34.749	3.821
1072135az1_39_Zrn	3.185	0.084	0.247	0.009	4.056	1453.603	83.512	1420.546	60.434	1497.486	60.743	1497.486	60.743	5.138
1072135az1_40_Zrn	1.493	0.038	0.155	0.006	4.080	927.483	38.480	928.524	37.880	915.812	64.742	928.524	37.880	-1.388
1072135az1_41_Zrn	4.685	0.120	0.314	0.012	3.240	1764.567	118.400	1761.202	76.793	1774.557	57.495	1774.557	57.495	0.753
1072135az1_42_Zrn	1.672	0.043	0.167	0.006	4.107	997.997	43.095	992.961	40.781	1009.615	63.874	992.961	40.781	1.650
1072135az1_43_Zrn	2.119	0.054	0.195	0.007	5.304	1154.940	54.033	1146.501	47.581	1169.985	62.054	1169.985	62.054	2.007
1072135az1_45_Zrn	3.281	0.085	0.255	0.010	4.035	1476.476	84.983	1465.051	62.664	1495.173	60.329	1495.173	60.329	2.015
1072135az1_46_Zrn	4.567	0.117	0.308	0.012	3.269	1743.231	115.404	1728.809	75.164	1761.147	57.564	1761.147	57.564	1.836
1072135az1_47_Zrn	1.479	0.039	0.153	0.006	4.109	921.891	39.612	915.272	37.606	935.496	66.166	915.272	37.606	2.162
1072135az1_48_Zrn	3.715	0.095	0.269	0.010	3.607	1574.670	94.656	1537.450	66.096	1625.423	58.629	1625.423	58.629	5.412
1072135az1_49_Zrn	4.151	0.107	0.289	0.011	3.416	1664.443	105.476	1637.101	70.990	1699.222	58.052	1699.222	58.052	3.656
1072135az1_50_Zrn	3.267	0.085	0.260	0.010	4.159	1473.318	84.448	1490.239	63.983	1452.061	60.390	1452.061	60.390	-2.629
1072135az1_51_Zrn	5.383	0.156	0.330	0.013	3.177	1882.175	152.850	1836.589	81.301	1930.140	61.325	1930.140	61.325	4.847
1072135az1_52_Zrn	4.639	0.119	0.305	0.012	3.163	1756.367	117.548	1714.881	74.850	1810.682	57.279	1810.682	57.279	5.291
1072135az1_53_Zrn	1.068	0.029	0.116	0.005	4.103	737.854	28.977	709.999	29.134	814.321	68.238	709.999	29.134	12.811
1072135az1_54_Zrn	4.411	0.115	0.300	0.012	3.341	1714.347	113.705	1690.379	74.084	1742.979	58.227	1742.979	58.227	3.018
1072135az1_55_Zrn	0.755	0.020	0.091	0.003	4.007	571.003	19.860	562.312	22.534	605.391	68.818	562.312	22.534	7.116
1072135az1_56_Zrn	4.559	0.119	0.307	0.012	3.299	1741.833	117.195	1727.783	75.977	1758.926	58.028	1758.926	58.028	1.771
1072135az1_57_Zrn	3.726	0.097	0.271	0.010	3.690	1577.036	96.442	1546.623	66.957	1609.294	59.376	1609.294	59.376	3.894
1072135az1_58_Zrn	3.416	0.092	0.263	0.010	4.038	1508.183	91.226	1503.353	65.417	1512.813	61.080	1512.813	61.080	0.625
1072135az1_59_Zrn	3.169	0.082	0.249	0.009	4.091	1449.743	81.409	1433.097	61.069	1469.432	60.121	1469.432	60.121	2.473
1072135az1_60_Zrn	2.480	0.064	0.215	0.008	4.799	1266.204	63.908	1254.460	52.704	1284.220	61.624	1284.220	61.624	2.317
1072135az1_61_Zrn	4.519	0.116	0.307	0.012	3.315	1734.433	114.769	1723.839	75.128	1746.477	57.887	1746.477	57.887	1.296
1072135az1_62_Zrn	4.970	0.127	0.321	0.012	3.107	1814.177	125.276	1794.106	78.589	1835.825	57.031	1835.825	57.031	2.272
1072135az1_63_Zrn	4.918	0.126	0.315	0.012	3.070	1805.393	123.908	1763.334	77.113	1853.430	56.899	1853.430	56.899	4.861
1072135az1_64_Zrn	2.529	0.064	0.216	0.008	4.644	1280.555	64.443	1261.188	52.879	1311.248	60.893	1311.248	60.893	3.818
1072135az1_66_Zrn	0.870	0.023	0.103	0.004	4.001	635.599	23.112	632.151	25.291	649.570	68.846	632.151	25.291	2.682
1072135az1_67_Zrn	2.849	0.090	0.227	0.010	4.702	1368.586	89.438	1318.175	63.581	1449.360	68.152	1449.360	68.152	9.051
1072135az1_68_Zrn	3.343	0.085	0.259	0.010	3.946	1491.167	84.414	1486.044	63.322	1499.272	59.156	1499.272	59.156	0.882
1072135az1_69_Zrn	0.730	0.024	0.087	0.003	4.193	556.379	24.351	536.014	22.476	639.617	82.044	536.014	22.476	16.198
1072135az1_70_Zrn	3.979	0.102	0.287	0.011	3.573	1629.827	100.603	1624.784	70.210	1634.506	58.400	1634.506	58.400	0.595
1072135az1_72_Zrn	0.288	0.008	0.041	0.002	3.886	256.932	7.937	259.198	10.072	229.397	75.661	259.198	10.072	-12.991
1072135az1_73_Zrn	1.627	0.049	0.159	0.007	4.526	980.590	49.495	952.061	43.093	1046.306	73.296	952.061	43.093	9.007
1072135az1_74_Zrn	2.273	0.058	0.204	0.008	5.016	1203.869	57.784	1195.740	49.829	1225.183	61.452	1225.183	61.452	2.403
1072135az1_75_Zrn	4.415	0.113	0.299	0.011	3.284	1715.170	111.390	1685.606	73.238	1752.699	57.563	1752.699	57.563	3.828
1072135az1_76_Zrn	0.155	0.004	0.023	0.001	3.872	146.601	4.323	144.463	5.594	171.513	76.988	144.463	5.594	15.772
1072135az1_77_Zrn	2.245	0.059	0.200	0.008	5.108	1195.217	58.974	1175.522	49.053	1229.989	62.833	1229.989	62.833	4.428
1072135az1_79_Zrn	0.681	0.018	0.087	0.003	3.979	527.649	18.356	536.583	21.348	498.547	71.191	536.583	21.348	-7.629
1072135az1_80_Zrn	3.271	0.083	0.258	0.010	4.057	1474.294	82.841	1477.880	62.934	1467.037	59.524	1467.037	59.524	-0.739
1072135az1_81_Zrn	0.302	0.008	0.042	0.002	3.893	268.009	8.146	263.329	10.251	307.044	73.588	263.329	10.251	14.238
1072135az1_82_Zrn	0.298	0.008	0.041	0.002	3.904	264.871	7.947	258.335	10.085	319.578	72.849	258.335	10.085	19.164

1072135az1_83_Zrn	4.653	0.118	0.311	0.012	3.217	1758.864	116.780	1748.016	76.127	1777.622	57.182	1777.622	57.182	1.665
1072135az1_84_Zrn	0.449	0.012	0.061	0.002	3.919	376.709	11.930	379.699	14.879	354.642	72.168	379.699	14.879	-7.066
1072135az1_85_Zrn	1.770	0.045	0.174	0.007	6.157	1034.360	45.643	1034.378	42.636	1035.099	63.734	1035.099	63.734	0.070
1072135az1_86_Zrn	0.601	0.016	0.076	0.003	3.957	477.713	15.760	469.797	18.590	514.194	69.716	469.797	18.590	8.634
1072135az1_87_Zrn	3.390	0.087	0.262	0.010	3.974	1502.031	86.546	1501.084	64.134	1500.706	59.635	1500.706	59.635	-0.025
1072135az1_88_Zrn	3.160	0.087	0.243	0.010	4.012	1447.512	86.435	1400.016	61.809	1544.886	61.985	1544.886	61.985	9.377
1072135az1_90_Zrn	2.622	0.068	0.225	0.009	4.728	1306.850	67.690	1310.191	55.199	1301.839	61.547	1301.839	61.547	-0.642
1072135az1_91_Zrn	0.295	0.008	0.042	0.002	3.903	262.590	7.872	265.511	10.363	233.820	74.002	265.511	10.363	-13.554
1072135az1_92_Zrn	0.298	0.008	0.042	0.002	3.887	264.873	7.858	262.440	10.201	283.276	72.703	262.440	10.201	7.355
1072135az1_93_Zrn	4.440	0.113	0.305	0.012	3.349	1719.819	111.790	1717.974	74.646	1721.831	57.670	1721.831	57.670	0.224
1072135az1_94_Zrn	3.700	0.094	0.273	0.010	3.669	1571.394	93.321	1554.773	66.605	1593.640	58.478	1593.640	58.478	2.439
1072135az1_95	3.658	0.548	0.237	0.028	10.767	1562.282	491.949	1372.502	179.615	1829.377	196.975	1829.377	196.975	24.974
1072135az1_96_Zrn	0.545	0.014	0.070	0.003	3.935	441.681	14.135	435.635	17.140	470.781	69.671	435.635	17.140	7.465
1072135az1_97_Zrn	0.293	0.008	0.042	0.002	3.885	260.893	8.178	263.421	10.234	234.996	76.150	263.421	10.234	-12.096
1072135az1_98_Zrn	3.486	0.090	0.265	0.010	3.891	1524.101	89.472	1515.945	64.873	1532.006	59.609	1532.006	59.609	1.048
1072135az1_99_Zrn	4.668	0.119	0.312	0.012	3.220	1761.496	117.164	1748.264	76.172	1776.662	57.214	1776.662	57.214	1.598
1072135az1_100_Zrn	3.720	0.097	0.276	0.011	3.766	1575.726	96.121	1571.311	67.811	1581.158	59.551	1581.158	59.551	0.623
1072135az1_103_Zrn	0.156	0.004	0.023	0.001	3.866	147.600	4.209	148.471	5.740	133.970	75.706	148.471	5.740	-10.824
1072135az1_104_Zrn	3.375	0.099	0.252	0.011	4.223	1498.537	98.420	1450.829	68.217	1566.709	66.165	1566.709	66.165	7.396
1072135az1_105_Zrn	0.415	0.011	0.056	0.002	3.913	352.115	10.781	349.464	13.675	366.870	71.020	349.464	13.675	4.744
1072135az1_106_Zrn	4.351	0.111	0.298	0.011	3.337	1703.108	109.690	1682.592	73.012	1727.796	57.656	1727.796	57.656	2.616
1072135az1_107_Zrn	0.174	0.005	0.025	0.001	3.901	163.060	5.483	161.296	6.292	188.674	83.818	161.296	6.292	14.511
1072135az1_108_Zrn	4.184	0.107	0.290	0.011	3.397	1670.889	106.083	1641.031	71.057	1707.599	58.006	1707.599	58.006	3.898
1072135az1_110_Zrn	0.154	0.005	0.022	0.001	3.889	145.609	5.065	142.308	5.535	195.949	86.333	142.308	5.535	27.375
1072-136, Early-Middle Eocene Picacho Formation (N = 101)														
1072136az1_1_Zrn	0.379	0.013	0.051	0.002	4.014	326.203	13.285	323.280	12.977	328.871	88.879	323.280	12.977	1.700
1072136az1_2_Zrn	0.910	0.028	0.108	0.004	4.022	657.158	28.298	659.129	26.508	636.453	77.047	659.129	26.508	-3.563
1072136az1_3_Zrn	1.648	0.043	0.167	0.006	4.111	988.695	43.427	994.216	40.869	977.421	65.189	994.216	40.869	-1.718
1072136az1_4_Zrn	3.890	0.099	0.285	0.011	3.649	1611.603	98.326	1616.032	69.666	1604.422	58.553	1604.422	58.553	-0.724
1072136az1_5_Zrn	3.301	0.086	0.261	0.010	4.152	1481.307	85.386	1497.144	63.973	1457.296	60.501	1457.296	60.501	-2.734
1072136az1_6_Zrn	4.756	0.121	0.314	0.012	3.183	1777.201	119.364	1762.731	76.842	1793.657	57.096	1793.657	57.096	1.724
1072136az1_7_Zrn	4.724	0.120	0.311	0.012	3.162	1771.482	118.356	1745.947	75.993	1801.414	56.959	1801.414	56.959	3.079
1072136az1_8_Zrn	0.076	0.002	0.011	0.000	3.836	74.770	2.156	71.527	2.744	178.230	77.566	71.527	2.744	59.868
1072136az1_9_Zrn	0.076	0.002	0.011	0.000	3.852	74.626	2.160	72.435	2.790	146.212	78.379	72.435	2.790	50.459
1072136az1_10_Zrn	2.483	0.063	0.217	0.008	4.854	1267.179	63.352	1268.496	53.213	1263.552	61.339	1263.552	61.339	-0.391
1072136az1_11_Zrn	0.046	0.002	0.007	0.000	3.871	46.148	1.720	43.802	1.695	165.314	95.288	43.802	1.695	73.504
1072136az1_12_Zrn	2.135	0.056	0.192	0.007	5.201	1160.075	55.704	1131.862	47.030	1205.462	62.695	1205.462	62.695	6.106
1072136az1_13_Zrn	4.566	0.117	0.309	0.012	3.293	1743.125	115.244	1736.299	75.602	1749.808	57.613	1749.808	57.613	0.772
1072136az1_14_Zrn	3.178	0.083	0.250	0.010	4.130	1451.714	82.527	1438.698	61.240	1467.553	60.604	1467.553	60.604	1.966
1072136az1_15_Zrn	2.718	0.075	0.231	0.009	4.824	1333.469	74.481	1338.925	56.561	1324.920	63.916	1324.920	63.916	-1.057
1072136az1_16_Zrn	2.424	0.062	0.212	0.008	4.840	1249.857	61.795	1240.440	51.934	1266.195	61.287	1266.195	61.287	2.034
1072136az1_18_Zrn	6.649	0.169	0.372	0.014	2.627	2065.844	164.467	2038.998	90.811	2093.968	55.001	2093.968	55.001	2.625
1072136az1_19_Zrn	0.781	0.021	0.095	0.004	3.995	585.819	21.439	582.872	23.287	597.458	70.991	582.872	23.287	2.441
1072136az1_20_Zrn	3.360	0.087	0.259	0.010	3.980	1495.143	86.380	1486.252	63.522	1505.848	59.928	1505.848	59.928	1.301
1072136az1_21_Zrn	3.334	0.087	0.257	0.010	3.995	1488.955	86.597	1473.621	63.042	1509.549	60.302	1509.549	60.302	2.380
1072136az1_22_Zrn	11.817	0.305	0.480	0.018	1.997	2590.013	288.540	2526.800	118.050	2640.793	52.745	2640.793	52.745	4.317
1072136az1_23_Zrn	4.977	0.127	0.321	0.012	3.092	1815.401	125.257	1792.655	78.480	1842.455	56.965	1842.455	56.965	2.703
1072136az1_24_Zrn	1.340	0.035	0.144	0.005	4.076	863.242	35.463	868.023	35.378	845.852	66.661	868.023	35.378	-2.621
1072136az1_25_Zrn	0.081	0.002	0.011	0.000	3.847	79.480	2.476	73.616	2.832	249.105	80.954	73.616	2.832	70.448
1072136az1_26_Zrn	4.447	0.113	0.301	0.011	3.282	1721.140	111.871	1696.031	73.688	1750.956	57.465	1750.956	57.465	3.137
1072136az1_28_Zrn	4.944	0.128	0.322	0.012	3.159	1809.795	125.591	1799.207	78.950	1820.585	57.511	1820.585	57.511	1.174
1072136az1_29_Zrn	4.470	0.114	0.301	0.011	3.270	1725.386	112.942	1696.250	73.716	1760.887	57.573	1760.887	57.573	3.671

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Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072136az1_30_Zrn	2.653	0.068	0.225	0.009	4.621	1315.345	68.268	1308.407	55.205	1325.948	61.270	1325.948	61.270	1.323
1072136az1_31_Zrn	4.946	0.126	0.321	0.012	3.105	1810.222	123.782	1793.498	78.353	1829.078	56.796	1829.078	56.796	1.945
1072136az1_32_Zrn	2.920	0.074	0.235	0.009	4.204	1387.218	74.146	1363.065	57.535	1424.829	59.897	1424.829	59.897	4.335
1072136az1_33_Zrn	2.923	0.077	0.238	0.009	4.375	1387.899	76.783	1374.357	58.340	1406.922	61.555	1406.922	61.555	2.315
1072136az1_34_Zrn	0.159	0.006	0.022	0.001	3.858	149.866	6.042	139.062	5.365	306.896	94.415	139.062	5.365	54.688
1072136az1_35_Zrn	0.057	0.003	0.007	0.000	3.847	56.188	3.374	44.307	1.705	585.437	130.914	44.307	1.705	92.432
1072136az1_36_Zrn	0.164	0.004	0.024	0.001	3.852	153.968	4.478	153.283	5.905	157.345	76.188	153.283	5.905	2.581
1072136az1_37_Zrn	1.715	0.044	0.168	0.006	6.088	1014.312	44.189	1000.603	41.221	1044.618	63.593	1044.618	63.593	4.213
1072136az1_38_Zrn	1.940	0.050	0.186	0.007	5.783	1094.853	49.782	1097.770	45.376	1089.297	62.992	1089.297	62.992	-0.778
1072136az1_39_Zrn	1.574	0.041	0.156	0.006	4.126	959.916	40.895	935.506	38.596	1015.981	64.314	935.506	38.596	7.921
1072136az1_40_Zrn	2.968	0.077	0.245	0.009	4.439	1399.501	76.663	1414.113	60.028	1375.041	61.043	1375.041	61.043	-2.842
1072136az1_41_Zrn	1.221	0.031	0.131	0.005	4.046	810.036	31.568	791.538	32.027	858.422	65.431	791.538	32.027	7.791
1072136az1_42_Zrn	3.269	0.084	0.253	0.010	3.995	1473.807	83.943	1455.283	62.025	1498.708	59.874	1498.708	59.874	2.998
1072136az1_43_Zrn	1.563	0.040	0.160	0.006	4.094	955.833	40.576	955.622	39.119	953.094	64.725	955.622	39.119	-0.265
1072136az1_44_Zrn	1.598	0.041	0.160	0.006	4.097	969.581	41.263	959.031	39.294	990.506	64.138	959.031	39.294	3.178
1072136az1_45_Zrn	3.068	0.079	0.247	0.009	4.228	1424.660	79.019	1421.912	60.550	1430.427	60.484	1430.427	60.484	0.595
1072136az1_46_Zrn	4.140	0.106	0.289	0.011	3.420	1662.144	104.405	1637.463	70.778	1692.868	57.899	1692.868	57.899	3.273
1072136az1_47_Zrn	2.215	0.057	0.198	0.008	5.074	1185.650	56.885	1165.269	48.575	1221.595	61.980	1221.595	61.980	4.611
1072136az1_48_Zrn	0.164	0.006	0.023	0.001	3.890	154.102	5.909	149.647	5.822	208.015	92.608	149.647	5.822	28.059
1072136az1_50_Zrn	4.592	0.118	0.307	0.012	3.232	1747.846	115.965	1724.182	75.068	1775.685	57.382	1775.685	57.382	2.900
1072136az1_51_Zrn	2.216	0.057	0.201	0.008	5.216	1186.230	57.204	1179.635	49.174	1195.577	62.366	1195.577	62.366	1.333
1072136az1_53_Zrn	4.343	0.112	0.298	0.011	3.353	1701.604	110.387	1679.371	72.837	1728.998	57.976	1728.998	57.976	2.870
1072136az1_54_Zrn	0.165	0.004	0.024	0.001	3.856	154.742	4.544	150.233	5.792	218.954	75.900	150.233	5.792	31.386
1072136az1_55_Zrn	4.008	0.102	0.285	0.011	3.506	1635.783	101.192	1618.057	69.766	1658.021	58.131	1658.021	58.131	2.410
1072136az1_57_Zrn	0.847	0.024	0.101	0.004	4.024	622.833	24.230	620.122	24.954	630.483	72.565	620.122	24.954	1.643
1072136az1_58_Zrn	0.676	0.017	0.085	0.003	3.968	524.328	17.577	523.176	20.761	529.813	69.150	523.176	20.761	1.253
1072136az1_59_Zrn	1.600	0.041	0.160	0.006	4.100	970.132	41.268	959.219	39.326	994.644	64.040	959.219	39.326	3.562
1072136az1_60_Zrn	3.320	0.085	0.257	0.010	3.935	1485.778	84.047	1472.651	62.739	1505.055	59.220	1505.055	59.220	2.153
1072136az1_61_Zrn	0.581	0.017	0.075	0.003	3.973	464.842	17.459	464.226	18.444	462.972	77.453	464.226	18.444	-0.271
1072136az1_62_Zrn	0.161	0.018	0.021	0.001	3.856	151.286	18.215	133.931	5.165	428.762	243.654	133.931	5.165	68.763
1072136az1_63_Zrn	3.324	0.085	0.257	0.010	3.963	1486.637	84.929	1474.529	63.024	1502.033	59.524	1502.033	59.524	1.831
1072136az1_64_Zrn	2.605	0.067	0.224	0.009	4.735	1302.090	67.175	1304.940	54.958	1299.343	61.528	1299.343	61.528	-0.431
1072136az1_65_Zrn	4.757	0.127	0.307	0.012	3.195	1777.378	124.721	1724.986	76.740	1839.158	58.757	1839.158	58.757	6.208
1072136az1_66_Zrn	0.907	0.024	0.107	0.004	4.006	655.543	23.927	656.554	26.304	665.761	68.304	656.554	26.304	1.383
1072136az1_67_Zrn	1.638	0.049	0.160	0.006	4.134	984.914	49.428	955.995	39.523	1037.774	71.205	955.995	39.523	7.880
1072136az1_68_Zrn	3.434	0.088	0.260	0.010	3.845	1512.160	87.429	1490.871	63.761	1540.750	59.247	1540.750	59.247	3.237
1072136az1_69_Zrn	0.300	0.008	0.043	0.002	3.896	266.206	8.339	270.601	10.542	224.068	76.240	270.601	10.542	-20.768
1072136az1_70_Zrn	0.597	0.016	0.077	0.003	3.946	475.510	16.589	478.089	18.865	473.292	72.876	478.089	18.865	-1.014
1072136az1_71_Zrn	3.164	0.081	0.249	0.009	4.082	1448.405	80.765	1435.079	60.940	1466.113	59.840	1466.113	59.840	2.117
1072136az1_72_Zrn	0.670	0.018	0.085	0.003	3.984	520.712	18.270	527.574	21.020	487.105	72.042	527.574	21.020	-8.308
1072136az1_73_Zrn	4.472	0.114	0.304	0.012	3.292	1725.720	112.428	1709.876	74.236	1745.403	57.462	1745.403	57.462	2.035
1072136az1_74_Zrn	4.494	0.124	0.303	0.012	3.387	1729.808	121.740	1705.072	74.925	1756.214	59.489	1756.214	59.489	2.912
1072136az1_75_Zrn	1.290	0.033	0.138	0.005	4.070	841.370	33.517	831.268	33.831	866.794	65.621	831.268	33.831	4.098
1072136az1_76_Zrn	3.315	0.084	0.256	0.010	3.923	1484.652	83.812	1470.839	62.676	1507.932	59.160	1507.932	59.160	2.460
1072136az1_77_Zrn	5.519	0.147	0.329	0.013	2.910	1903.587	143.563	1835.318	81.327	1977.502	57.536	1977.502	57.536	7.190
1072136az1_78_Zrn	0.091	0.003	0.013	0.001	3.855	88.108	2.731	84.513	3.258	174.912	81.376	84.513	3.258	51.683

1072136az1_79_Zrn	5.091	0.130	0.325	0.012	3.052	1834.661	127.444	1815.490	79.487	1856.417	56.649	1856.417	56.649	2.205
1072136az1_80_Zrn	3.235	0.085	0.259	0.010	4.261	1465.695	84.558	1486.736	63.538	1434.081	61.104	1434.081	61.104	-3.672
1072136az1_81_Zrn	4.684	0.143	0.306	0.013	3.609	1764.386	140.634	1719.445	80.364	1818.150	65.616	1818.150	65.616	5.429
1072136az1_82_Zrn	3.066	0.079	0.247	0.009	4.240	1424.175	78.613	1422.791	60.498	1424.135	60.384	1424.135	60.384	0.094
1072136az1_84_Zrn	0.300	0.008	0.043	0.002	3.892	266.074	7.957	268.894	10.466	242.298	73.625	268.894	10.466	-10.977
1072136az1_85_Zrn	3.474	0.091	0.263	0.010	3.880	1521.339	89.981	1504.096	64.530	1545.050	59.942	1545.050	59.942	2.651
1072136az1_86_Zrn	3.980	0.103	0.289	0.011	3.628	1630.173	101.624	1634.709	70.707	1622.718	58.870	1622.718	58.870	-0.739
1072136az1_88_Zrn	3.275	0.087	0.252	0.010	4.043	1475.019	86.595	1448.985	62.119	1509.498	61.036	1509.498	61.036	4.009
1072136az1_89_Zrn	0.292	0.008	0.042	0.002	3.886	259.917	8.049	264.433	10.277	209.793	75.956	264.433	10.277	-26.044
1072136az1_90_Zrn	3.148	0.084	0.245	0.009	4.117	1444.603	83.514	1412.775	60.096	1489.427	61.314	1489.427	61.314	5.146
1072136az1_91_Zrn	0.148	0.004	0.021	0.001	3.869	140.433	4.446	134.471	5.203	233.919	80.197	134.471	5.203	42.514
1072136az1_92_Zrn	0.305	0.008	0.042	0.002	3.925	270.686	8.549	265.213	10.410	338.343	74.874	265.213	10.410	21.614
1072136az1_93_Zrn	13.117	0.334	0.516	0.020	1.924	2688.133	313.951	2680.383	125.789	2695.263	51.870	2695.263	51.870	0.552
1072136az1_94_Zrn	0.740	0.019	0.090	0.003	3.967	562.441	19.058	557.010	22.096	576.316	68.131	557.010	22.096	3.350
1072136az1_95_Zrn	0.310	0.009	0.044	0.002	3.937	274.455	9.549	278.159	10.952	240.433	81.867	278.159	10.952	-15.691
1072136az1_96_Zrn	3.376	0.089	0.257	0.010	3.954	1498.897	88.683	1474.820	63.040	1532.306	60.590	1532.306	60.590	3.752
1072136az1_97_Zrn	3.975	0.102	0.281	0.011	3.485	1629.084	100.575	1597.693	68.958	1669.097	58.174	1669.097	58.174	4.278
1072136az1_98_Zrn	0.598	0.015	0.077	0.003	3.954	476.204	15.671	477.529	18.880	467.731	70.210	477.529	18.880	-2.095
1072136az1_100_Zrn	1.822	0.046	0.177	0.007	5.961	1053.287	46.640	1050.240	43.294	1059.541	63.157	1059.541	63.157	0.878
1072136az1_101_Zrn	0.300	0.009	0.042	0.002	3.890	266.050	8.719	263.624	10.256	281.063	77.802	263.624	10.256	6.205
1072136az1_102_Zrn	3.355	0.086	0.258	0.010	3.906	1493.951	85.012	1477.596	63.009	1515.918	59.205	1515.918	59.205	2.528
1072136az1_103_Zrn	12.351	0.330	0.486	0.019	2.006	2631.449	310.473	2552.499	122.944	2701.715	54.190	2701.715	54.190	5.523
1072136az1_104_Zrn	2.386	0.061	0.210	0.008	4.912	1238.412	61.175	1230.554	51.621	1252.367	61.517	1252.367	61.517	1.742
1072136az1_105_Zrn	0.044	0.001	0.007	0.000	3.888	43.361	1.212	42.318	1.645	110.907	77.291	42.318	1.645	61.843
1072136az1_106_Zrn	0.180	0.005	0.027	0.001	3.878	168.468	4.939	169.464	6.571	151.877	76.295	169.464	6.571	-11.579
1072136az1_107_Zrn	3.617	0.098	0.266	0.010	3.841	1553.294	96.978	1519.559	67.336	1598.554	61.404	1598.554	61.404	4.942
1072136az1_108_Zrn	0.080	0.003	0.012	0.000	3.996	77.818	2.766	77.762	3.107	75.580	92.918	77.762	3.107	-2.887
1072136az1_109_Zrn	0.067	0.002	0.010	0.000	3.880	65.930	2.381	62.022	2.406	198.822	91.533	62.022	2.406	68.806
1072136az1_110_Zrn	0.855	0.022	0.102	0.004	4.010	627.221	22.606	626.596	25.125	627.479	68.798	626.596	25.125	0.141
1072-143, Early-Middle Eocene (Top) Bogotá Formation (N = 102)														
1072143az_1_Zrn	0.059	0.002	0.008	0.000	4.172	58.033	2.202	54.066	2.255	221.119	96.746	54.066	2.255	75.549
1072143az_2_Zrn	0.336	0.013	0.043	0.002	4.284	293.828	12.690	273.400	11.712	455.016	94.132	273.400	11.712	39.914
1072143az_3_Zrn	0.059	0.002	0.008	0.000	4.169	58.585	2.311	53.547	2.232	254.395	99.273	53.547	2.232	78.951
1072143az_4_Zrn	0.068	0.003	0.009	0.000	4.206	66.852	3.402	54.866	2.308	508.517	116.095	54.866	2.308	89.211
1072143az_5_Zrn	0.181	0.006	0.025	0.001	4.206	168.720	6.453	160.841	6.765	270.352	92.671	160.841	6.765	40.507
1072143az_6_Zrn	0.058	0.002	0.008	0.000	4.193	57.012	2.411	54.251	2.275	167.659	106.294	54.251	2.275	67.642
1072143az_7_Zrn	0.588	0.017	0.075	0.003	4.291	469.860	17.112	466.856	20.033	485.266	77.201	466.856	20.033	3.798
1072143az_8_Zrn	0.060	0.002	0.009	0.000	6.403	59.211	2.529	54.729	2.333	239.363	106.611	54.729	2.333	77.136
1072143az_9_Zrn	1.791	0.049	0.174	0.007	6.269	1042.048	49.270	1032.087	45.822	1062.797	68.117	1062.797	68.117	2.890
1072143az_10_Zrn	0.158	0.006	0.022	0.001	4.266	149.195	6.036	142.390	6.074	253.130	97.734	142.390	6.074	43.748
1072143az_11_Zrn	0.080	0.008	0.011	0.001	5.323	78.498	7.632	70.500	3.753	328.528	215.077	70.500	3.753	78.541
1072143az_12_Zrn	0.080	0.003	0.011	0.000	4.199	78.357	3.045	72.519	3.045	255.482	97.577	72.519	3.045	71.615
1072143az_13_Zrn	2.267	0.064	0.203	0.008	5.619	1202.192	64.309	1192.199	53.902	1215.317	68.288	1215.317	68.288	1.902
1072143az_14_Zrn	0.197	0.012	0.025	0.001	4.287	182.986	12.031	161.892	6.941	459.474	138.979	161.892	6.941	64.766
1072143az_15_Zrn	0.067	0.003	0.009	0.000	4.323	65.986	2.930	57.956	2.506	366.112	105.958	57.956	2.506	84.170
1072143az_16_Zrn	0.264	0.008	0.037	0.002	4.179	237.560	7.645	236.924	9.901	241.536	80.168	236.924	9.901	1.909
1072143az_17_Zrn	1.444	0.040	0.151	0.006	4.402	907.401	40.127	909.301	40.026	902.914	70.180	909.301	40.026	-0.707
1072143az_19_Zrn	0.057	0.006	0.008	0.000	4.822	55.814	6.486	50.603	2.440	281.882	256.584	50.603	2.440	82.048
1072143az_20_Zrn	0.318	0.013	0.041	0.002	4.301	280.552	12.921	259.813	11.175	432.468	100.129	259.813	11.175	39.923
1072143az_21_Zrn	0.071	0.009	0.009	0.000	5.015	69.273	9.280	58.735	2.946	442.971	283.411	58.735	2.946	86.741
1072143az_22_Zrn	0.328	0.010	0.044	0.002	4.249	288.205	9.944	280.604	11.922	345.594	81.419	280.604	11.922	18.805
1072143az_25_Zrn	0.745	0.022	0.091	0.004	4.324	565.340	22.134	560.091	24.219	583.872	77.216	560.091	24.219	4.073

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Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072143az_26_Zrn	0.110	0.008	0.014	0.001	4.374	105.549	8.492	86.819	3.797	548.228	170.013	86.819	3.797	84.164
1072143az_27_Zrn	0.182	0.006	0.025	0.001	4.198	169.918	6.133	160.912	6.755	291.175	88.427	160.912	6.755	44.737
1072143az_28_Zrn	0.062	0.003	0.009	0.000	4.708	60.924	3.424	54.660	2.573	301.868	139.528	54.660	2.573	81.893
1072143az_29_Zrn	0.158	0.006	0.023	0.001	4.210	149.044	5.687	144.611	6.088	209.686	94.231	144.611	6.088	31.035
1072143az_30_Zrn	1.292	0.040	0.131	0.005	4.366	842.267	40.021	796.100	34.759	959.088	74.641	796.100	34.759	16.994
1072143az_31_Zrn	0.070	0.009	0.009	0.000	5.572	68.306	9.607	56.131	3.128	513.508	299.088	56.131	3.128	89.069
1072143az_33_Zrn	2.019	0.056	0.191	0.008	6.064	1121.825	55.683	1124.340	50.271	1117.420	67.758	1117.420	67.758	-0.619
1072143az_34_Zrn	0.056	0.002	0.008	0.000	4.174	55.059	2.424	48.727	2.034	343.259	106.141	48.727	2.034	85.805
1072143az_35_Zrn	0.311	0.010	0.043	0.002	4.230	275.321	10.042	272.217	11.514	296.089	85.697	272.217	11.514	8.062
1072143az_36_Zrn	0.100	0.005	0.014	0.001	4.243	96.897	5.308	87.732	3.723	319.870	125.893	87.732	3.723	72.573
1072143az_37_Zrn	0.170	0.006	0.024	0.001	4.209	159.145	6.033	153.258	6.450	244.437	92.705	153.258	6.450	37.302
1072143az_39_Zrn	0.061	0.002	0.009	0.000	4.176	60.220	2.518	55.917	2.335	224.692	103.882	55.917	2.335	75.114
1072143az_40_Zrn	0.168	0.007	0.024	0.001	4.382	157.485	7.334	152.060	6.664	241.437	109.130	152.060	6.664	37.919
1072143az_41_Zrn	0.060	0.003	0.008	0.000	4.294	59.364	2.994	53.158	2.283	309.746	119.932	53.158	2.283	82.838
1072143az_42_Zrn	0.057	0.002	0.008	0.000	4.206	56.666	2.176	52.554	2.211	221.630	97.666	52.554	2.211	76.287
1072143az_44_Zrn	0.300	0.009	0.041	0.002	4.236	266.473	8.799	257.974	10.927	343.961	79.274	257.974	10.927	24.999
1072143az_45_Zrn	0.065	0.003	0.009	0.000	4.212	63.598	2.762	56.966	2.399	304.264	105.552	56.966	2.399	81.277
1072143az_46_Zrn	1.566	0.046	0.155	0.006	4.440	956.732	45.941	927.705	41.191	1023.331	71.470	927.705	41.191	9.345
1072143az_47_Zrn	1.448	0.040	0.148	0.006	4.410	908.983	40.463	890.769	39.284	951.258	69.834	890.769	39.284	6.359
1072143az_48_Zrn	0.058	0.003	0.008	0.000	4.341	57.287	2.854	51.026	2.215	327.580	118.597	51.026	2.215	84.423
1072143az_49_Zrn	0.065	0.003	0.009	0.000	4.238	64.283	3.530	54.960	2.329	402.156	126.195	54.960	2.329	86.334
1072143az_50_Zrn	0.162	0.005	0.024	0.001	4.219	152.667	5.047	154.325	6.511	131.544	85.962	154.325	6.511	-17.319
1072143az_51_Zrn	0.068	0.004	0.009	0.000	4.440	67.261	4.198	55.170	2.450	520.770	138.684	55.170	2.450	89.406
1072143az_52_Zrn	0.061	0.003	0.008	0.000	4.416	60.252	2.908	53.099	2.345	360.949	115.925	53.099	2.345	85.289
1072143az_53_Zrn	1.844	0.051	0.176	0.007	4.271	1061.386	51.314	1046.854	46.746	1090.138	68.364	1090.138	68.364	3.971
1072143az_54_Zrn	0.158	0.009	0.023	0.001	4.315	149.290	8.787	145.730	6.288	183.543	134.560	145.730	6.288	20.602
1072143az_55_Zrn	0.178	0.005	0.026	0.001	4.187	166.626	5.511	163.621	6.851	198.903	84.346	163.621	6.851	17.738
1072143az_56_Zrn	0.077	0.003	0.011	0.000	4.218	75.779	3.297	70.560	2.976	239.263	106.775	70.560	2.976	70.510
1072143az_57_Zrn	0.060	0.003	0.008	0.000	4.199	59.563	2.799	52.874	2.220	315.931	112.701	52.874	2.220	83.264
1072143az_58_Zrn	0.067	0.004	0.009	0.000	4.304	65.575	4.305	55.176	2.375	465.721	145.933	55.176	2.375	88.153
1072143az_59_Zrn	0.611	0.018	0.077	0.003	4.276	484.291	17.847	477.633	20.423	509.064	77.040	477.633	20.423	6.174
1072143az_60_Zrn	2.462	0.068	0.211	0.009	5.070	1260.830	68.200	1233.262	55.662	1307.121	66.267	1307.121	66.267	5.650
1072143az_61_Zrn	0.068	0.004	0.009	0.000	4.276	66.692	4.041	58.007	2.480	386.669	138.026	58.007	2.480	84.998
1072143az_62_Zrn	0.648	0.018	0.083	0.003	4.278	507.240	18.601	511.531	21.883	490.602	76.424	511.531	21.883	-4.266
1072143az_63_Zrn	0.323	0.009	0.045	0.002	4.219	284.419	9.516	281.673	11.883	300.950	80.329	281.673	11.883	6.405
1072143az_64_Zrn	1.811	0.050	0.177	0.007	6.527	1049.514	50.136	1048.012	46.661	1050.458	68.568	1050.458	68.568	0.233
1072143az_65_Zrn	0.058	0.005	0.007	0.000	4.426	57.683	4.642	46.201	2.045	562.559	174.127	46.201	2.045	91.787
1072143az_66_Zrn	2.285	0.064	0.203	0.008	5.465	1207.793	63.728	1192.885	53.836	1231.035	67.275	1231.035	67.275	3.099
1072143az_67_Zrn	0.061	0.002	0.009	0.000	4.175	60.452	2.302	55.730	2.327	242.090	96.729	55.730	2.327	76.979
1072143az_68_Zrn	0.057	0.002	0.008	0.000	4.220	56.064	2.331	51.156	2.159	266.589	103.662	51.156	2.159	80.811
1072143az_69_Zrn	2.284	0.066	0.199	0.008	5.349	1207.263	65.633	1170.453	53.994	1273.777	68.131	1273.777	68.131	8.112
1072143az_70_Zrn	0.060	0.002	0.008	0.000	4.170	58.748	2.410	51.604	2.152	354.336	100.424	51.604	2.152	85.436
1072143az_71_Zrn	1.561	0.043	0.157	0.006	4.419	955.060	43.271	940.013	41.536	988.163	69.182	940.013	41.536	4.873
1072143az_72_Zrn	0.302	0.009	0.042	0.002	4.211	268.100	9.375	262.631	11.059	312.858	83.129	262.631	11.059	16.054
1072143az_73_Zrn	0.063	0.004	0.008	0.000	4.204	62.506	3.892	49.209	2.069	607.422	135.921	49.209	2.069	91.899
1072143az_74_Zrn	0.055	0.002	0.008	0.000	4.193	54.666	2.174	51.748	2.170	179.234	101.395	51.748	2.170	71.128

1072143az_75_Zrn	0.152	0.015	0.020	0.001	4.147	143.497	14.925	127.265	5.277	402.564	214.831	127.265	5.277	68.386
1072143az_76_Zrn	0.059	0.002	0.009	0.000	4.198	58.376	2.234	55.394	2.325	178.512	98.405	55.394	2.325	68.969
1072143az_77_Zrn	0.652	0.018	0.082	0.003	4.271	510.015	18.358	506.850	21.647	528.445	74.932	506.850	21.647	4.087
1072143az_78_Zrn	1.064	0.031	0.121	0.005	4.353	735.684	31.118	736.236	32.046	721.446	74.627	736.236	32.046	-2.050
1072143az_79_Zrn	0.242	0.007	0.035	0.001	4.184	220.136	6.823	219.305	9.177	228.332	78.855	219.305	9.177	3.953
1072143az_80_Zrn	0.207	0.008	0.027	0.001	4.250	190.731	7.602	170.148	7.232	327.977	93.449	170.148	7.232	48.122
1072143az_82_Zrn	0.075	0.018	0.007	0.000	4.705	72.999	18.673	46.188	2.173	1082.165	447.253	46.188	2.173	95.732
1072143az_83_Zrn	0.099	0.004	0.013	0.001	4.194	95.922	3.938	84.886	3.560	375.516	98.729	84.886	3.560	77.395
1072143az_84_Zrn	0.055	0.002	0.008	0.000	4.216	54.803	2.312	51.646	2.178	188.408	105.922	51.646	2.178	72.588
1072143az_85_Zrn	0.060	0.002	0.008	0.000	4.216	59.068	2.393	54.311	2.290	235.740	101.449	54.311	2.290	76.961
1072143az_86_Zrn	0.061	0.003	0.008	0.000	4.244	60.127	3.309	53.151	2.256	330.560	128.016	53.151	2.256	83.921
1072143az_87_Zrn	0.066	0.002	0.009	0.000	4.203	65.220	2.429	60.428	2.540	233.053	94.785	60.428	2.540	74.071
1072143az_88_Zrn	1.329	0.038	0.139	0.006	4.383	858.382	38.100	836.209	36.652	906.353	71.577	836.209	36.652	7.739
1072143az_89_Zrn	0.063	0.007	0.008	0.000	5.006	62.060	6.644	50.802	2.543	521.442	228.694	50.802	2.543	90.257
1072143az_90_Zrn	0.204	0.006	0.029	0.001	4.236	188.875	6.554	183.793	7.786	244.456	86.396	183.793	7.786	24.816
1072143az_91_Zrn	0.067	0.005	0.009	0.000	4.620	66.270	5.256	57.128	2.639	390.044	176.029	57.128	2.639	85.353
1072143az_92_Zrn	0.062	0.003	0.008	0.000	4.208	61.139	3.323	52.549	2.211	409.586	125.171	52.549	2.211	87.170
1072143az_93_Zrn	0.183	0.006	0.026	0.001	4.173	170.883	5.656	164.656	6.871	258.330	83.467	164.656	6.871	36.261
1072143az_94_Zrn	0.671	0.022	0.081	0.003	4.260	521.586	21.768	503.909	21.468	595.501	81.471	503.909	21.468	15.381
1072143az_95_Zrn	14.046	0.491	0.509	0.025	2.408	2752.851	446.229	2653.262	159.526	2826.867	68.064	2826.867	68.064	6.141
1072143az_96_Zrn	1.017	0.028	0.117	0.005	4.339	712.473	28.421	713.049	30.939	717.352	72.410	713.049	30.939	0.600
1072143az_97_Zrn	1.740	0.048	0.171	0.007	6.600	1023.436	48.121	1015.321	45.099	1039.518	68.612	1039.518	68.612	2.328
1072143az_98_Zrn	0.053	0.003	0.007	0.000	4.237	52.718	3.132	47.005	1.992	314.144	138.193	47.005	1.992	85.037
1072143az_99_Zrn	0.164	0.005	0.024	0.001	4.182	154.074	5.006	152.171	6.365	176.871	84.174	152.171	6.365	13.965
1072143az_101_Zrn	0.063	0.004	0.008	0.000	4.269	61.696	3.590	53.047	2.265	411.707	132.572	53.047	2.265	87.115
1072143az_102_Zrn	5.742	0.158	0.349	0.014	3.122	1937.640	154.340	1929.306	92.020	1945.173	60.733	1945.173	60.733	0.816
1072143az_103_Zrn	0.741	0.021	0.091	0.004	4.304	562.720	21.475	562.436	24.209	560.440	76.113	562.436	24.209	-0.356
1072143az_104_Zrn	0.785	0.023	0.094	0.004	4.333	588.427	23.717	580.355	25.145	618.209	77.664	580.355	25.145	6.123
1072143az_105_Zrn	0.061	0.004	0.008	0.000	4.305	60.163	3.653	51.257	2.207	431.460	138.043	51.257	2.207	88.120
1072143az_106_Zrn	0.067	0.003	0.009	0.000	4.185	65.739	2.966	56.637	2.370	410.268	106.883	56.637	2.370	86.195
1072143az_107_Zrn	6.159	0.170	0.353	0.015	2.931	1998.691	165.627	1949.700	93.282	2050.455	60.096	2050.455	60.096	4.914
1072143az_108_Zrn	0.169	0.005	0.024	0.001	4.195	158.562	5.066	152.895	6.414	237.192	82.362	152.895	6.414	35.540
1072143az_109_Zrn	0.272	0.008	0.038	0.002	4.177	244.285	7.848	238.227	9.952	290.890	79.205	238.227	9.952	18.104
1072143az_110_Zrn	0.171	0.005	0.025	0.001	4.162	160.518	4.965	156.821	6.527	209.661	80.660	156.821	6.527	25.203
1072-148, Early-Middle Eocene Picacho Formation (N = 101)														
1072148az1_1_Zrn	0.702	0.018	0.088	0.003	3.935	539.720	18.475	543.660	21.395	521.491	70.144	543.660	21.395	-4.251
1072148az1_2_Zrn	0.678	0.018	0.085	0.003	3.924	525.346	17.822	524.020	20.560	522.677	70.014	524.020	20.560	-0.257
1072148az1_3_Zrn	3.185	0.081	0.255	0.010	4.155	1453.591	80.275	1462.240	61.719	1439.650	59.820	1439.650	59.820	-1.569
1072148az1_4_Zrn	1.603	0.041	0.163	0.006	4.073	971.524	41.705	971.211	39.556	973.815	64.846	971.211	39.556	0.267
1072148az1_5_Zrn	0.088	0.002	0.013	0.000	3.796	86.090	2.440	82.131	3.118	192.510	76.398	82.131	3.118	57.337
1072148az1_6_Zrn	2.185	0.055	0.199	0.007	5.190	1176.427	54.831	1171.280	48.215	1185.236	61.509	1185.236	61.509	1.178
1072148az1_7_Zrn	0.759	0.019	0.093	0.003	3.930	573.336	19.235	573.293	22.533	572.791	67.743	573.293	22.533	-0.087
1072148az1_8_Zrn	3.758	0.103	0.269	0.011	3.648	1583.899	102.182	1534.651	68.218	1650.386	60.213	1650.386	60.213	7.013
1072148az1_9_Zrn	0.792	0.020	0.095	0.004	3.946	592.499	20.335	585.693	23.109	622.239	67.710	585.693	23.109	5.873
1072148az1_10_Zrn	0.059	0.006	0.008	0.000	4.076	57.840	6.269	52.657	2.147	292.544	234.833	52.657	2.147	82.000
1072148az1_11_Zrn	0.650	0.019	0.082	0.003	3.958	508.658	19.188	506.546	20.050	510.302	76.187	506.546	20.050	0.736
1072148az1_12_Zrn	0.145	0.008	0.020	0.001	3.933	137.235	8.108	126.412	4.972	319.063	132.138	126.412	4.972	60.380
1072148az1_13_Zrn	5.173	0.129	0.328	0.012	3.002	1848.246	127.282	1829.019	79.265	1869.842	56.136	1869.842	56.136	2.183
1072148az1_14_Zrn	1.671	0.051	0.168	0.006	7.529	997.546	50.966	1003.619	40.924	965.677	72.706	965.677	72.706	-3.929
1072148az1_15_Zrn	2.742	0.069	0.229	0.009	4.459	1339.839	69.069	1330.137	55.541	1354.222	60.383	1354.222	60.383	1.779
1072148az1_16_Zrn	2.590	0.069	0.219	0.008	4.648	1297.848	68.398	1275.292	54.344	1337.250	62.161	1337.250	62.161	4.633

(continued)

Continued

Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072148az1_17_Zrn	2.740	0.069	0.228	0.009	4.430	1339.328	69.044	1324.744	55.215	1361.315	60.303	1361.315	60.303	2.686
1072148az1_18_Zrn	2.278	0.058	0.202	0.008	4.985	1205.475	57.865	1186.842	48.980	1236.156	61.616	1236.156	61.616	3.989
1072148az1_19_Zrn	0.240	0.007	0.033	0.001	3.828	218.565	6.608	211.312	8.089	293.254	74.947	211.312	8.089	27.942
1072148az1_20_Zrn	0.179	0.008	0.025	0.001	3.904	167.057	7.627	156.697	6.117	301.435	104.711	156.697	6.117	48.016
1072148az1_21_Zrn	5.073	0.128	0.327	0.012	3.070	1831.544	125.610	1823.480	79.015	1842.566	56.565	1842.566	56.565	1.036
1072148az1_22_Zrn	3.311	0.084	0.259	0.010	4.000	1483.752	83.068	1482.861	62.616	1482.660	59.304	1482.660	59.304	-0.014
1072148az1_23_Zrn	0.067	0.005	0.008	0.000	3.929	65.860	4.946	54.441	2.139	486.856	163.344	54.441	2.139	88.818
1072148az1_25_Zrn	0.333	0.010	0.046	0.002	3.883	291.864	10.254	292.317	11.351	275.151	81.591	292.317	11.351	-6.239
1072148az1_26_Zrn	0.891	0.025	0.109	0.004	3.980	646.886	25.132	665.384	26.481	574.955	72.896	665.384	26.481	-15.728
1072148az1_27_Zrn	6.320	0.181	0.359	0.015	2.965	2021.187	176.272	1977.982	95.296	2065.483	61.233	2065.483	61.233	4.236
1072148az1_28_Zrn	1.354	0.036	0.142	0.005	4.060	869.226	36.140	854.058	34.671	904.971	66.853	854.058	34.671	5.626
1072148az1_29_Zrn	2.545	0.065	0.219	0.008	4.717	1284.985	64.493	1278.032	53.141	1295.001	61.088	1295.001	61.088	1.310
1072148az1_30_Zrn	1.744	0.045	0.169	0.006	6.031	1025.090	44.975	1009.298	41.119	1056.859	63.741	1056.859	63.741	4.500
1072148az1_31_Zrn	4.426	0.113	0.300	0.011	3.290	1717.162	111.463	1689.944	73.018	1751.924	57.638	1751.924	57.638	3.538
1072148az1_32_Zrn	2.650	0.067	0.224	0.008	4.568	1314.664	67.040	1303.400	54.231	1329.414	60.722	1329.414	60.722	1.957
1072148az1_33_Zrn	3.125	0.080	0.246	0.009	4.082	1438.983	79.490	1417.188	59.545	1467.976	59.927	1467.976	59.927	3.460
1072148az1_34_Zrn	2.512	0.063	0.218	0.008	4.756	1275.474	63.435	1271.379	52.778	1282.480	60.997	1282.480	60.997	0.866
1072148az1_35_Zrn	0.630	0.044	0.074	0.003	4.233	495.846	44.465	459.907	19.470	661.832	154.769	459.907	19.470	30.510
1072148az1_36_Zrn	0.086	0.004	0.011	0.000	3.860	83.439	3.896	73.585	2.840	341.144	109.607	73.585	2.840	78.430
1072148az1_37_Zrn	1.927	0.049	0.185	0.007	5.792	1090.384	49.492	1091.604	44.779	1092.833	63.294	1092.833	63.294	0.112
1072148az1_38_Zrn	3.575	0.094	0.264	0.010	3.806	1544.103	93.482	1512.320	64.423	1585.964	60.356	1585.964	60.356	4.644
1072148az1_39_Zrn	2.580	0.065	0.220	0.008	4.634	1295.004	65.200	1282.270	53.245	1312.343	60.815	1312.343	60.815	2.292
1072148az1_40_Zrn	0.566	0.015	0.073	0.003	3.909	455.509	14.725	456.046	17.826	449.589	70.378	456.046	17.826	-1.436
1072148az1_41_Zrn	1.620	0.041	0.164	0.006	4.056	977.931	41.031	978.983	39.703	975.499	63.722	978.983	39.703	-0.357
1072148az1_42_Zrn	2.612	0.071	0.221	0.008	4.800	1303.895	70.931	1285.775	53.773	1329.654	63.819	1329.654	63.819	3.300
1072148az1_43_Zrn	2.993	0.076	0.241	0.009	4.210	1405.799	75.410	1394.375	58.498	1422.724	59.894	1422.724	59.894	1.993
1072148az1_44_Zrn	0.308	0.008	0.043	0.002	3.855	272.441	8.054	273.645	10.549	260.615	72.965	273.645	10.549	-5.000
1072148az1_45_Zrn	0.563	0.014	0.073	0.003	3.907	453.730	14.365	451.978	17.659	469.156	69.128	451.978	17.659	3.662
1072148az1_46_Zrn	0.643	0.017	0.081	0.003	3.917	504.203	16.838	503.911	19.737	504.850	70.016	503.911	19.737	0.186
1072148az1_47_Zrn	4.478	0.113	0.300	0.011	3.221	1726.965	111.321	1689.969	72.638	1771.188	57.058	1771.188	57.058	4.586
1072148az1_48_Zrn	5.595	0.141	0.342	0.013	2.889	1915.363	138.539	1897.930	82.975	1938.865	56.017	1938.865	56.017	2.111
1072148az1_49_Zrn	0.692	0.021	0.090	0.003	3.952	534.262	20.841	558.375	22.065	426.779	78.168	558.375	22.065	-30.835
1072148az1_50_Zrn	0.211	0.007	0.031	0.001	3.845	194.042	6.603	195.099	7.502	174.571	84.037	195.099	7.502	-11.759
1072148az1_51_Zrn	0.558	0.015	0.072	0.003	3.907	450.415	14.703	450.104	17.586	453.280	70.876	450.104	17.586	0.701
1072148az1_52_Zrn	0.986	0.025	0.111	0.004	3.992	696.665	25.675	677.434	27.042	756.505	67.090	677.434	27.042	10.452
1072148az1_53_Zrn	0.738	0.019	0.090	0.003	3.927	561.348	18.947	557.770	21.901	572.367	68.331	557.770	21.901	2.550
1072148az1_54_Zrn	5.012	0.126	0.322	0.012	3.066	1821.362	124.071	1800.740	77.944	1843.239	56.510	1843.239	56.510	2.306
1072148az1_55_Zrn	0.619	0.016	0.079	0.003	3.913	488.912	15.908	491.955	19.251	474.488	69.529	491.955	19.251	-3.681
1072148az1_56_Zrn	4.242	0.107	0.295	0.011	3.379	1682.271	105.593	1667.179	71.498	1702.648	57.525	1702.648	57.525	2.083
1072148az1_57_Zrn	3.422	0.086	0.257	0.010	3.783	1509.457	85.820	1476.955	62.359	1553.599	58.774	1553.599	58.774	4.933
1072148az1_58_Zrn	1.558	0.041	0.159	0.006	4.063	953.633	41.454	948.904	38.554	963.681	66.015	948.904	38.554	1.533
1072148az1_59_Zrn	0.101	0.005	0.014	0.001	3.904	97.798	4.797	88.805	3.467	318.213	114.275	88.805	3.467	72.093
1072148az1_60_Zrn	2.139	0.057	0.196	0.007	5.472	1161.559	56.839	1152.582	47.826	1173.443	64.209	1173.443	64.209	1.778
1072148az1_61_Zrn	0.215	0.008	0.029	0.001	3.861	197.599	7.660	184.869	7.138	338.772	89.938	184.869	7.138	45.430
1072148az1_62_Zrn	1.707	0.043	0.169	0.006	6.179	1011.300	43.166	1005.293	40.904	1022.846	63.204	1022.846	63.204	1.716
1072148az1_63_Zrn	2.503	0.065	0.220	0.008	4.940	1273.014	64.509	1281.972	53.592	1256.964	62.096	1256.964	62.096	-1.990

1072148az1_64_Zrn	0.759	0.021	0.091	0.003	3.976	573.548	20.953	561.107	22.307	615.905	71.386	561.107	22.307	8.897
1072148az1_65_Zrn	3.290	0.085	0.255	0.010	4.007	1478.755	84.627	1465.699	61.934	1501.574	60.163	1501.574	60.163	2.389
1072148az1_66_Zrn	0.566	0.015	0.072	0.003	3.926	455.417	15.010	448.053	17.590	497.421	70.657	448.053	17.590	9.925
1072148az1_67_Zrn	3.333	0.084	0.258	0.010	3.926	1488.760	83.206	1480.083	62.419	1501.520	58.951	1501.520	58.951	1.428
1072148az1_68_Zrn	0.151	0.005	0.021	0.001	3.846	142.663	5.211	136.265	5.241	246.829	89.030	136.265	5.241	44.794
1072148az1_69_Zrn	1.812	0.046	0.174	0.007	5.828	1049.888	46.050	1034.127	42.337	1079.141	62.888	1079.141	62.888	4.171
1072148az1_70_Zrn	0.077	0.003	0.011	0.000	3.896	75.536	3.292	69.716	2.716	248.780	105.460	69.716	2.716	71.977
1072148az1_72_Zrn	0.258	0.017	0.031	0.001	4.147	233.383	16.766	198.606	8.235	589.191	143.757	198.606	8.235	66.292
1072148az1_73_Zrn	1.959	0.050	0.184	0.007	5.548	1101.702	50.127	1086.444	44.521	1130.736	62.736	1130.736	62.736	3.917
1072148az1_74_Zrn	3.486	0.087	0.265	0.010	3.829	1524.063	86.866	1516.938	64.175	1532.392	58.674	1532.392	58.674	1.008
1072148az1_75_Zrn	4.671	0.117	0.311	0.012	3.202	1761.973	115.837	1747.623	75.370	1777.150	56.913	1777.150	56.913	1.662
1072148az1_76_Zrn	0.654	0.018	0.082	0.003	3.929	510.942	17.762	509.038	20.000	519.310	71.572	509.038	20.000	1.978
1072148az1_77_Zrn	0.744	0.021	0.093	0.004	3.984	564.608	21.657	570.782	22.739	534.941	75.082	570.782	22.739	-6.700
1072148az1_78_Zrn	1.781	0.048	0.174	0.007	6.346	1038.533	47.887	1035.058	42.372	1037.277	65.826	1037.277	65.826	0.214
1072148az1_79_Zrn	2.174	0.060	0.197	0.007	5.476	1172.856	59.554	1156.970	47.810	1191.948	65.269	1191.948	65.269	2.935
1072148az1_80_Zrn	1.662	0.046	0.161	0.006	4.078	994.196	46.113	963.304	39.282	1054.662	67.044	963.304	39.282	8.662
1072148az1_81_Zrn	0.716	0.019	0.087	0.003	3.935	548.283	19.008	537.188	21.141	593.267	69.568	537.188	21.141	9.453
1072148az1_82_Zrn	5.126	0.130	0.327	0.012	3.047	1840.364	127.722	1822.782	79.218	1859.701	56.661	1859.701	56.661	1.985
1072148az1_83_Zrn	0.177	0.006	0.025	0.001	3.847	165.094	5.732	157.197	6.047	170.745	84.687	157.197	6.047	41.939
1072148az1_84_Zrn	0.085	0.003	0.012	0.000	3.845	82.428	2.825	77.139	2.966	223.724	87.458	77.139	2.966	65.521
1072148az1_85_Zrn	1.937	0.049	0.182	0.007	5.567	1094.104	49.291	1078.233	44.263	1124.554	62.598	1124.554	62.598	4.119
1072148az1_86_Zrn	2.530	0.063	0.217	0.008	4.639	1280.762	63.393	1268.200	52.664	1302.119	60.409	1302.119	60.409	2.605
1072148az1_87_Zrn	2.557	0.067	0.218	0.008	4.788	1288.490	67.335	1273.212	53.082	1308.882	62.663	1308.882	62.663	2.725
1072148az1_88_Zrn	0.600	0.015	0.077	0.003	3.904	477.098	15.366	475.669	18.568	483.669	69.200	475.669	18.568	1.654
1072148az1_89_Zrn	0.197	0.006	0.028	0.001	3.831	182.524	5.585	178.657	6.845	226.831	77.579	178.657	6.845	21.238
1072148az1_90_Zrn	3.640	0.119	0.256	0.010	4.136	1558.336	116.982	1471.648	63.437	1677.870	69.404	1677.870	69.404	12.291
1072148az1_91_Zrn	2.325	0.058	0.207	0.008	4.947	1219.969	58.454	1212.047	50.108	1236.621	61.174	1236.621	61.174	1.987
1072148az1_92_Zrn	0.622	0.016	0.079	0.003	3.910	491.118	15.870	490.969	19.196	489.128	68.944	490.969	19.196	-0.376
1072148az1_93_Zrn	10.332	0.261	0.457	0.017	2.116	2465.005	249.075	2425.981	110.679	2494.653	52.775	2494.653	52.775	2.753
1072148az1_95_Zrn	1.953	0.050	0.185	0.007	5.643	1099.499	49.857	1094.857	44.913	1112.573	62.787	1112.573	62.787	1.592
1072148az1_96_Zrn	3.292	0.083	0.259	0.010	4.025	1479.244	82.325	1486.262	62.777	1471.165	59.213	1471.165	59.213	-1.026
1072148az1_97_Zrn	3.416	0.090	0.256	0.010	3.868	1508.152	89.758	1467.784	62.231	1564.869	60.526	1564.869	60.526	6.204
1072148az1_98_Zrn	2.479	0.063	0.215	0.008	4.735	1265.823	62.515	1253.103	52.046	1286.364	60.915	1286.364	60.915	2.586
1072148az1_99_Zrn	6.240	0.157	0.361	0.014	2.715	2010.101	153.374	1985.880	87.354	2035.178	55.255	2035.178	55.255	2.422
1072148az1_100_Zrn	3.400	0.086	0.259	0.010	3.850	1504.433	85.344	1484.227	62.830	1530.627	58.931	1530.627	58.931	3.031
1072148az1_101_Zrn	0.603	0.018	0.081	0.003	3.943	478.851	17.765	503.788	19.867	356.395	77.907	503.788	19.867	-41.357
1072148az1_102_Zrn	1.614	0.041	0.163	0.006	4.079	975.646	41.622	972.578	39.667	979.725	64.444	972.578	39.667	0.730
1072148az1_103_Zrn	2.657	0.068	0.228	0.009	4.717	1316.525	68.165	1324.052	55.505	1303.944	61.508	1303.944	61.508	-1.542
1072148az1_104_Zrn	0.092	0.003	0.013	0.001	3.855	89.762	2.856	86.017	3.316	172.121	83.220	86.017	3.316	50.025
1072148az1_105_Zrn	2.048	0.052	0.191	0.007	5.477	1131.672	52.024	1127.762	46.459	1138.880	62.378	1138.880	62.378	0.976
1072148az1_106_Zrn	0.858	0.038	0.089	0.003	4.009	629.055	38.383	550.441	22.069	899.351	98.935	550.441	22.069	38.796
1072148az1_107_Zrn	1.505	0.039	0.156	0.006	4.068	932.288	38.812	936.797	38.112	927.283	64.884	936.797	38.112	-1.026
1072148az1_108_Zrn	3.348	0.085	0.256	0.010	3.883	1492.266	84.175	1469.861	62.256	1521.167	59.070	1521.167	59.070	3.373
1072148az1_109_Zrn	0.171	0.005	0.024	0.001	3.857	160.148	5.520	151.875	5.858	276.574	84.475	151.875	5.858	45.087
1072148az1_110_Zrn	1.894	0.048	0.181	0.007	5.781	1078.905	48.265	1072.819	44.002	1090.134	63.025	1090.134	63.025	1.588
1072-151, Early-Middle Eocene (Top) Picacho Formation (N = 99)														
1072151az1_1_Zrn	0.867	0.021	0.103	0.004	3.625	633.893	21.032	633.479	22.966	634.114	63.221	633.479	22.966	0.100
1072151az1_2_Zrn	0.164	0.005	0.023	0.001	3.509	154.352	5.384	147.581	5.179	254.553	83.694	147.581	5.179	42.024
1072151az1_3_Zrn	3.344	0.081	0.258	0.009	3.695	1491.288	80.641	1477.110	57.221	1511.123	55.831	1511.123	55.831	2.251
1072151az1_4_Zrn	0.159	0.005	0.023	0.001	3.530	149.779	4.729	145.959	5.153	212.422	78.422	145.959	5.153	31.289
1072151az1_6_Zrn	2.799	0.065	0.235	0.008	4.118	1345.207	64.782	1360.593	52.023	1345.396	55.399	1345.396	55.399	-1.130
1072151az1_7_Zrn	3.118	0.074	0.248	0.009	3.844	1437.167	73.959	1428.318	55.034	1446.772	55.607	1446.772	55.607	1.276

(continued)

Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)								
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)	Preferred Age (Ma)	± (Ma)	Discord (%)
1072151az1_8_Zrn	1.464	0.042	0.150	0.005	3.730	915.558	42.043	901.037	33.606	935.351	68.307	901.037	33.606	3.669
1072151az1_9_Zrn	0.620	0.018	0.079	0.003	3.609	490.014	17.992	487.957	17.610	497.077	73.340	487.957	17.610	1.835
1072151az1_10_Zrn	3.284	0.078	0.257	0.009	3.748	1477.170	77.642	1476.618	57.165	1477.101	55.366	1477.101	55.366	0.033
1072151az1_11_Zrn	3.155	0.074	0.250	0.009	3.781	1446.117	73.381	1440.941	55.545	1451.666	54.886	1451.666	54.886	0.739
1072151az1_12_Zrn	4.641	0.110	0.305	0.011	2.959	1756.716	108.874	1718.294	67.892	1796.945	53.167	1796.945	53.167	4.377
1072151az1_13_Zrn	3.120	0.072	0.245	0.008	3.708	1437.686	72.142	1414.884	54.555	1471.163	54.544	1471.163	54.544	3.825
1072151az1_14_Zrn	4.038	0.096	0.288	0.010	3.258	1641.965	94.771	1630.545	63.732	1654.395	53.897	1654.395	53.897	1.442
1072151az1_15_Zrn	2.471	0.057	0.215	0.007	4.365	1263.727	57.081	1254.697	47.586	1277.720	55.776	1277.720	55.776	1.802
1072151az1_16_Zrn	2.483	0.058	0.216	0.007	4.401	1267.226	57.916	1262.535	48.001	1276.188	56.169	1276.188	56.169	1.070
1072151az1_17_Zrn	4.400	0.102	0.302	0.010	3.056	1712.338	100.853	1701.927	66.910	1723.819	52.684	1723.819	52.684	1.270
1072151az1_18_Zrn	4.221	0.097	0.293	0.010	3.099	1678.038	96.591	1658.614	64.978	1701.783	52.740	1701.783	52.740	2.537
1072151az1_19_Zrn	4.395	0.102	0.299	0.010	3.028	1711.343	100.977	1687.407	66.497	1740.626	52.710	1740.626	52.710	3.057
1072151az1_20_Zrn	4.246	0.099	0.291	0.010	3.070	1683.042	98.191	1648.396	64.853	1725.632	52.979	1725.632	52.979	4.476
1072151az1_21_Zrn	3.231	0.076	0.250	0.009	3.646	1464.566	75.899	1436.630	55.710	1505.688	54.891	1505.688	54.891	4.586
1072151az1_24_Zrn	2.016	0.047	0.191	0.007	5.221	1120.931	47.292	1127.909	42.352	1104.503	57.662	1104.503	57.662	-2.119
1072151az1_25_Zrn	1.984	0.047	0.186	0.006	5.145	1110.051	47.063	1100.140	41.251	1125.420	57.903	1125.420	57.903	2.246
1072151az1_26_Zrn	4.882	0.115	0.312	0.011	2.820	1799.110	113.218	1748.952	69.608	1857.273	52.368	1857.273	52.368	5.832
1072151az1_28_Zrn	2.495	0.058	0.216	0.007	4.360	1270.695	58.396	1260.682	47.988	1289.659	56.234	1289.659	56.234	2.247
1072151az1_29_Zrn	0.249	0.006	0.035	0.001	3.521	225.853	5.985	223.251	7.861	255.122	66.901	223.251	7.861	12.492
1072151az1_30_Zrn	1.784	0.043	0.175	0.006	5.640	1039.773	42.788	1038.174	38.810	1046.307	59.015	1046.307	59.015	0.777
1072151az1_31_Zrn	0.292	0.007	0.041	0.001	3.516	260.356	7.177	259.963	9.141	258.859	67.858	259.963	9.141	-0.426
1072151az1_32_Zrn	2.640	0.062	0.222	0.008	4.184	1311.822	62.099	1294.364	49.317	1339.555	56.045	1339.555	56.045	3.374
1072151az1_33_Zrn	1.673	0.039	0.166	0.006	3.726	998.167	39.544	989.852	36.886	1016.034	58.613	989.852	36.886	2.577
1072151az1_34_Zrn	0.305	0.008	0.044	0.002	3.537	270.174	7.834	277.334	9.809	197.937	70.770	277.334	9.809	-40.112
1072151az1_35_Zrn	4.469	0.103	0.302	0.010	2.990	1725.315	102.102	1703.300	66.964	1751.187	52.356	1751.187	52.356	2.735
1072151az1_36_Zrn	2.924	0.068	0.238	0.008	3.887	1388.054	67.556	1375.537	52.747	1411.658	54.878	1411.658	54.878	2.559
1072151az1_37_Zrn	2.810	0.068	0.226	0.008	4.008	1358.184	68.139	1311.857	51.468	1422.041	56.998	1422.041	56.998	7.748
1072151az1_38_Zrn	4.331	0.100	0.299	0.010	3.085	1699.202	99.266	1687.607	66.274	1710.089	52.754	1710.089	52.754	1.315
1072151az1_39_Zrn	2.539	0.060	0.220	0.008	4.383	1283.339	59.621	1281.172	48.949	1284.633	56.304	1284.633	56.304	0.269
1072151az1_40_Zrn	4.309	0.102	0.295	0.010	3.102	1695.008	100.710	1668.176	66.002	1721.941	53.421	1721.941	53.421	3.122
1072151az1_41_Zrn	3.241	0.076	0.253	0.009	3.696	1467.008	75.882	1454.309	56.318	1484.872	54.876	1484.872	54.876	2.058
1072151az1_42_Zrn	0.292	0.008	0.041	0.001	3.573	259.798	8.214	260.300	9.302	255.290	74.898	260.300	9.302	-1.962
1072151az1_43_Zrn	3.231	0.075	0.253	0.009	3.701	1464.541	75.182	1455.103	56.280	1477.250	54.669	1477.250	54.669	1.499
1072151az1_44_Zrn	0.229	0.006	0.033	0.001	3.515	209.768	5.778	208.598	7.333	219.141	69.543	208.598	7.333	4.811
1072151az1_45_Zrn	3.638	0.085	0.273	0.009	3.441	1557.823	84.599	1555.725	60.636	1571.336	54.066	1571.336	54.066	0.993
1072151az1_46_Zrn	0.308	0.009	0.042	0.001	3.572	272.739	8.944	264.478	9.448	334.282	75.493	264.478	9.448	20.882
1072151az1_47_Zrn	3.756	0.263	0.234	0.017	3.746	1583.388	250.587	1355.034	111.329	1886.197	70.662	1886.197	70.662	28.161
1072151az1_49_Zrn	1.607	0.039	0.164	0.006	3.760	972.972	39.650	979.839	36.842	939.075	61.201	979.839	36.842	-4.341
1072151az1_50_Zrn	3.490	0.085	0.265	0.009	3.607	1524.983	84.114	1513.038	59.106	1538.174	55.486	1538.174	55.486	1.634
1072151az1_51_Zrn	3.324	0.079	0.250	0.009	3.532	1486.744	78.708	1440.914	56.023	1552.155	54.818	1552.155	54.818	7.167
1072151az1_52_Zrn	0.046	0.002	0.007	0.000	3.605	45.529	1.888	42.731	1.541	194.910	102.545	42.731	1.541	78.076
1072151az1_54_Zrn	0.740	0.018	0.090	0.003	3.638	562.584	18.512	555.113	20.194	586.290	64.880	555.113	20.194	5.318
1072151az1_55_Zrn	1.546	0.039	0.157	0.006	3.786	948.890	38.993	937.426	35.492	971.348	61.710	937.426	35.492	3.492
1072151az1_56_Zrn	3.484	0.083	0.267	0.009	3.641	1523.522	82.735	1523.143	59.976	1520.129	55.350	1520.129	55.350	-0.198
1072151az1_57_Zrn	3.721	0.097	0.260	0.009	3.344	1575.823	96.303	1490.376	60.118	1694.980	56.678	1694.980	56.678	12.071
1072151az1_58_Zrn	0.749	0.020	0.090	0.003	3.680	567.844	20.031	556.274	20.473	607.944	67.655	556.274	20.473	8.499

1072151az1_60_Zrn	0.846	0.023	0.101	0.004	3.724	622.656	22.921	618.237	23.024	638.288	68.101	618.237	23.024	3.141
1072151az1_61_Zrn	3.462	0.082	0.269	0.009	3.700	1518.611	81.818	1535.661	60.154	1492.501	55.219	1492.501	55.219	-2.892
1072151az1_62_Zrn	0.979	0.025	0.112	0.004	3.725	693.307	24.808	682.093	25.405	731.281	64.562	682.093	25.405	6.726
1072151az1_63_Zrn	4.808	0.113	0.313	0.011	2.900	1786.351	111.966	1753.118	69.755	1820.997	52.815	1820.997	52.815	3.728
1072151az1_64_Zrn	0.816	0.036	0.093	0.003	3.789	605.705	36.407	571.168	21.642	717.411	100.565	571.168	21.642	20.385
1072151az1_65_Zrn	4.562	0.106	0.307	0.011	2.990	1742.382	105.140	1726.769	68.190	1758.777	52.587	1758.777	52.587	1.820
1072151az1_66_Zrn	1.722	0.041	0.169	0.006	5.687	1016.821	41.000	1008.724	38.053	1035.692	58.896	1035.692	58.896	2.604
1072151az1_67_Zrn	3.997	0.098	0.283	0.010	3.307	1633.522	97.274	1606.527	64.113	1659.001	54.864	1659.001	54.864	3.163
1072151az1_68_Zrn	4.426	0.106	0.303	0.011	3.116	1717.235	105.278	1707.802	68.328	1727.040	53.821	1727.040	53.821	1.114
1072151az1_69_Zrn	3.468	0.082	0.266	0.009	3.622	1520.047	81.701	1518.723	59.475	1516.913	54.945	1516.913	54.945	-0.119
1072151az1_70_Zrn	6.800	0.162	0.375	0.013	2.409	2085.700	157.765	2051.424	83.858	2122.676	51.128	2122.676	51.128	3.357
1072151az1_71_Zrn	2.884	0.069	0.236	0.008	4.011	1377.693	68.652	1365.889	52.793	1395.269	55.958	1395.269	55.958	2.106
1072151az1_72_Zrn	1.810	0.051	0.175	0.006	6.173	1048.922	50.834	1037.330	39.685	1062.139	65.561	1062.139	65.561	2.336
1072151az1_73_Zrn	5.131	0.119	0.330	0.011	2.822	1841.321	117.691	1836.917	73.250	1843.981	52.042	1843.981	52.042	0.383
1072151az1_74_Zrn	2.287	0.054	0.205	0.007	4.686	1208.254	54.109	1202.876	45.725	1217.861	57.070	1217.861	57.070	1.230
1072151az1_75_Zrn	1.420	0.034	0.150	0.005	3.736	897.207	33.986	898.259	33.556	899.032	60.232	898.259	33.556	0.086
1072151az1_76_Zrn	1.489	0.038	0.158	0.006	3.787	926.107	38.019	943.458	35.727	881.880	63.257	943.458	35.727	-6.983
1072151az1_77_Zrn	3.431	0.084	0.263	0.009	3.665	1511.480	83.475	1505.533	59.895	1522.056	55.790	1522.056	55.790	1.086
1072151az1_78_Zrn	0.854	0.021	0.098	0.003	3.693	626.620	20.884	602.835	22.264	705.740	62.752	602.835	22.264	14.581
1072151az1_79_Zrn	2.683	0.067	0.225	0.008	4.306	1323.868	66.989	1308.011	51.474	1349.023	58.088	1349.023	58.088	3.040
1072151az1_80_Zrn	0.416	0.011	0.055	0.002	3.744	353.220	11.404	346.748	12.983	388.672	70.785	346.748	12.983	10.786
1072151az1_81_Zrn	5.173	0.127	0.323	0.011	2.824	1848.128	124.986	1803.391	73.412	1895.468	53.532	1895.468	53.532	4.858
1072151az1_83_Zrn	3.719	0.091	0.274	0.010	3.480	1575.421	90.755	1559.803	62.380	1589.725	55.322	1589.725	55.322	1.882
1072151az1_84_Zrn	5.334	0.132	0.335	0.012	2.847	1874.311	130.024	1864.358	76.482	1882.362	53.582	1882.362	53.582	0.956
1072151az1_86_Zrn	4.813	0.115	0.314	0.011	2.927	1787.250	113.708	1761.186	70.472	1815.674	53.141	1815.674	53.141	3.001
1072151az1_87_Zrn	1.217	0.030	0.131	0.005	3.732	808.396	29.749	793.208	29.599	850.144	61.542	793.208	29.599	6.697
1072151az1_88_Zrn	3.349	0.079	0.262	0.009	3.691	1492.479	78.230	1500.846	58.370	1483.162	54.750	1483.162	54.750	-1.192
1072151az1_89_Zrn	3.414	0.081	0.265	0.009	3.699	1507.696	80.856	1517.025	59.287	1491.856	55.187	1491.856	55.187	-1.687
1072151az1_90_Zrn	3.341	0.078	0.261	0.009	3.686	1490.796	77.813	1497.413	58.038	1482.175	54.630	1482.175	54.630	-1.028
1072151az1_91_Zrn	3.414	0.080	0.261	0.009	3.571	1507.540	79.737	1496.185	58.282	1525.062	54.459	1525.062	54.459	1.894
1072151az1_92_Zrn	5.389	0.127	0.333	0.012	2.705	1883.054	124.729	1850.624	74.161	1916.753	51.847	1916.753	51.847	3.450
1072151az1_93_Zrn	1.814	0.094	0.173	0.010	9.275	1050.605	93.552	1027.087	63.080	1088.716	100.982	1088.716	100.982	5.661
1072151az1_94_Zrn	0.087	0.004	0.012	0.000	3.956	84.376	3.592	79.617	3.150	200.707	101.447	79.617	3.150	60.332
1072151az1_95_Zrn	0.311	0.010	0.041	0.001	3.690	274.989	10.592	261.755	9.659	364.289	84.532	261.755	9.659	28.146
1072151az1_96_Zrn	3.003	0.073	0.240	0.008	3.893	1408.320	72.379	1384.424	54.031	1443.308	56.185	1443.308	56.185	4.080
1072151az1_97_Zrn	4.562	0.112	0.292	0.010	2.887	1742.355	111.119	1652.262	66.876	1851.023	53.434	1851.023	53.434	10.738
1072151az1_99_Zrn	0.325	0.011	0.042	0.002	3.729	285.732	10.942	266.877	9.953	426.691	82.325	266.877	9.953	37.454
1072151az1_100_Zrn	3.097	0.080	0.229	0.008	3.576	1431.830	79.681	1328.595	53.615	1581.625	56.566	1581.625	56.566	15.998
1072151az1_101_Zrn	4.779	0.120	0.301	0.011	2.903	1781.137	118.388	1693.993	69.261	1880.784	54.593	1880.784	54.593	9.932
1072151az1_102_Zrn	1.613	0.044	0.162	0.006	3.891	975.155	44.616	966.305	37.595	982.335	65.705	966.305	37.595	1.632
1072151az1_103_Zrn	4.822	0.119	0.315	0.011	2.997	1788.735	117.530	1763.827	71.768	1811.657	54.289	1811.657	54.289	2.640
1072151az1_104_Zrn	5.284	0.134	0.337	0.012	2.953	1866.346	131.389	1870.162	77.993	1860.799	54.948	1860.799	54.948	-0.503
1072151az1_105_Zrn	1.121	0.030	0.121	0.004	3.863	763.674	30.374	733.450	28.333	868.829	64.565	733.450	28.333	15.582
1072151az1_106_Zrn	1.277	0.033	0.135	0.005	3.859	835.305	33.713	817.780	31.558	878.770	63.621	817.780	31.558	6.940
1072151az1_107_Zrn	5.526	0.139	0.337	0.012	2.808	1904.590	136.036	1874.135	77.655	1929.339	54.173	1929.339	54.173	2.861
1072151az1_108_Zrn	4.005	0.099	0.287	0.010	3.358	1635.179	98.204	1628.640	65.651	1648.965	55.376	1648.965	55.376	1.233
1072151az1_109_Zrn	3.288	0.082	0.256	0.009	3.878	1478.161	81.782	1469.630	58.760	1477.646	57.300	1477.646	57.300	0.542
1072151az1_110_Zrn	0.312	0.008	0.043	0.002	3.574	276.019	7.975	272.439	9.737	299.428	69.187	272.439	9.737	9.014
1072-152, Early-Middle Eocene Concentración Formation (N = 97)														
1072152az1_1_Zrn	4.912	0.113	0.327	0.011	2.921	1804.292	111.516	1823.470	72.269	1781.902	52.043	1781.902	52.043	-2.333
1072152az1_2_Zrn	0.100	0.003	0.015	0.001	3.489	96.500	2.616	93.644	3.267	161.606	72.278	93.644	3.267	42.054
1072152az1_3_Zrn	4.925	0.114	0.325	0.011	2.891	1806.471	112.119	1811.916	71.731	1799.940	52.027	1799.940	52.027	-0.665

(continued)

Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072152az1_4_Zrn	4.805	0.111	0.319	0.011	2.922	1785.794	109.856	1783.880	70.648	1788.235	52.260	1788.235	52.260	0.244
1072152az1_5_Zrn	3.388	0.081	0.255	0.009	3.531	1501.686	80.495	1465.456	56.811	1555.549	54.929	1555.549	54.929	5.792
1072152az1_6_Zrn	0.769	0.018	0.095	0.003	3.616	578.944	18.314	583.391	21.098	564.617	63.154	583.391	21.098	-3.325
1072152az1_7_Zrn	2.986	0.069	0.241	0.008	3.863	1403.967	69.087	1391.559	53.334	1419.884	54.852	1419.884	54.852	1.995
1072152az1_8_Zrn	2.921	0.069	0.242	0.008	4.071	1387.345	68.813	1395.435	53.606	1373.151	55.904	1373.151	55.904	-1.623
1072152az1_9_Zrn	3.121	0.076	0.247	0.009	3.882	1437.829	75.883	1421.139	54.889	1456.125	56.529	1456.125	56.529	2.403
1072152az1_10_Zrn	4.448	0.104	0.297	0.010	2.964	1721.282	102.907	1676.631	66.340	1777.252	52.686	1777.252	52.686	5.662
1072152az1_11_Zrn	1.417	0.034	0.148	0.005	3.702	896.311	34.175	887.376	32.850	916.328	60.329	887.376	32.850	3.160
1072152az1_12_Zrn	3.342	0.079	0.257	0.009	3.616	1491.012	78.625	1473.620	57.111	1515.223	54.788	1515.223	54.788	2.746
1072152az1_13_Zrn	0.723	0.019	0.090	0.003	3.642	552.273	19.084	553.972	20.175	543.479	68.217	553.972	20.175	-1.931
1072152az1_14_Zrn	1.701	0.048	0.169	0.006	6.691	1008.837	48.494	1006.444	38.332	1008.070	67.450	1008.070	67.450	0.161
1072152az1_15_Zrn	2.893	0.067	0.235	0.008	3.903	1379.966	66.968	1362.186	52.191	1407.991	54.947	1407.991	54.947	3.253
1072152az1_16_Zrn	3.104	0.072	0.247	0.008	3.772	1433.784	72.046	1421.267	54.811	1451.186	54.740	1451.186	54.740	2.062
1072152az1_17_Zrn	3.369	0.079	0.259	0.009	3.576	1497.233	78.404	1483.708	57.436	1521.111	54.392	1521.111	54.392	2.459
1072152az1_18_Zrn	0.170	0.005	0.024	0.001	3.507	159.005	4.914	150.950	5.294	273.606	76.207	150.950	5.294	44.829
1072152az1_20_Zrn	4.622	0.107	0.309	0.011	2.949	1753.190	105.634	1735.873	68.436	1773.670	52.305	1773.670	52.305	2.131
1072152az1_21_Zrn	0.598	0.014	0.076	0.003	3.577	476.173	14.368	471.327	16.862	496.706	64.180	471.327	16.862	5.109
1072152az1_22_Zrn	4.433	0.103	0.299	0.010	2.984	1718.516	101.834	1685.110	66.423	1760.527	52.534	1760.527	52.534	4.284
1072152az1_23_Zrn	1.264	0.032	0.141	0.005	3.710	829.713	32.684	852.685	31.632	762.039	64.907	852.685	31.632	-11.895
1072152az1_24_Zrn	4.345	0.101	0.298	0.010	3.047	1701.921	99.580	1680.125	65.933	1727.716	52.641	1727.716	52.641	2.755
1072152az1_25_Zrn	3.359	0.078	0.260	0.009	3.631	1494.862	78.055	1488.709	57.594	1501.635	54.522	1501.635	54.522	0.861
1072152az1_26_Zrn	4.694	0.109	0.312	0.011	2.935	1766.093	108.002	1749.320	69.243	1787.938	52.469	1787.938	52.469	2.160
1072152az1_27_Zrn	2.638	0.063	0.223	0.008	4.266	1311.293	63.361	1299.918	50.140	1331.212	56.792	1331.212	56.792	2.351
1072152az1_28_Zrn	0.683	0.017	0.083	0.003	3.619	528.843	17.491	512.466	18.547	594.487	66.098	512.466	18.547	13.797
1072152az1_29_Zrn	3.940	0.092	0.281	0.010	3.246	1621.930	91.674	1598.312	62.664	1650.082	53.558	1650.082	53.558	3.137
1072152az1_31_Zrn	0.043	0.002	0.006	0.000	3.639	42.561	1.841	37.626	1.369	322.639	103.949	37.626	1.369	88.338
1072152az1_32_Zrn	3.560	0.085	0.268	0.009	3.539	1540.586	84.178	1531.064	59.880	1548.543	54.804	1548.543	54.804	1.129
1072152az1_33_Zrn	2.790	0.069	0.227	0.008	4.103	1352.809	69.171	1320.132	51.241	1404.604	57.638	1404.604	57.638	6.014
1072152az1_34_Zrn	2.846	0.069	0.227	0.008	3.874	1367.701	68.709	1317.275	51.036	1451.522	56.226	1451.522	56.226	9.249
1072152az1_35_Zrn	5.329	0.125	0.339	0.012	2.792	1873.483	122.692	1881.882	75.177	1865.453	52.080	1865.453	52.080	-0.881
1072152az1_36_Zrn	2.536	0.059	0.219	0.008	4.341	1282.401	59.281	1276.921	48.746	1292.768	56.120	1292.768	56.120	1.226
1072152az1_37_Zrn	3.210	0.075	0.253	0.009	3.729	1459.601	74.917	1452.562	56.073	1470.499	54.836	1470.499	54.836	1.220
1072152az1_39_Zrn	3.321	0.077	0.255	0.009	3.587	1486.055	76.962	1466.524	56.720	1513.187	54.285	1513.187	54.285	3.084
1072152az1_40_Zrn	2.472	0.057	0.217	0.007	4.424	1263.769	57.256	1264.468	48.023	1265.012	55.969	1265.012	55.969	0.043
1072152az1_41_Zrn	3.044	0.073	0.246	0.008	3.978	1418.787	73.097	1417.900	54.671	1417.809	56.398	1417.809	56.398	-0.006
1072152az1_42_Zrn	3.108	0.074	0.242	0.008	3.697	1434.589	73.597	1396.861	54.430	1493.999	55.226	1493.999	55.226	6.502
1072152az1_43_Zrn	3.010	0.084	0.239	0.008	4.295	1410.138	83.676	1381.878	53.469	1449.469	62.255	1449.469	62.255	4.663
1072152az1_44_Zrn	4.849	0.112	0.320	0.011	2.894	1793.415	110.761	1788.055	70.815	1800.893	52.126	1800.893	52.126	0.713
1072152az1_45_Zrn	2.156	0.052	0.196	0.007	4.899	1166.937	52.127	1155.262	43.724	1188.805	58.239	1188.805	58.239	2.822
1072152az1_47_Zrn	1.430	0.033	0.150	0.005	3.696	901.649	33.518	899.178	33.232	910.464	59.189	899.178	33.232	1.240
1072152az1_48_Zrn	4.539	0.106	0.309	0.011	3.042	1738.155	105.037	1733.646	68.631	1742.712	53.019	1742.712	53.019	0.520
1072152az1_49_Zrn	1.857	0.043	0.178	0.006	5.274	1065.880	43.462	1057.219	39.538	1093.326	57.659	1093.326	57.659	3.302
1072152az1_51_Zrn	0.154	0.007	0.022	0.001	3.621	145.659	7.312	137.850	4.991	269.118	114.179	137.850	4.991	48.777
1072152az1_53_Zrn	3.277	0.076	0.256	0.009	3.667	1475.680	75.460	1471.808	56.820	1480.746	54.299	1480.746	54.299	0.604
1072152az1_54_Zrn	1.796	0.044	0.172	0.006	5.508	1043.867	44.175	1025.668	38.386	1083.992	59.704	1083.992	59.704	5.380
1072152az1_55_Zrn	3.435	0.080	0.257	0.009	3.455	1512.508	80.019	1475.688	57.364	1565.360	54.080	1565.360	54.080	5.728

1072152az1_56_Zrn	0.641	0.015	0.079	0.003	3.592	503.019	15.495	492.831	17.702	550.514	63.867	492.831	17.702	10.478
1072152az1_57_Zrn	2.513	0.061	0.214	0.007	4.318	1275.839	60.543	1252.381	47.748	1321.531	57.061	1321.531	57.061	5.233
1072152az1_58_Zrn	3.217	0.077	0.251	0.009	3.743	1461.267	77.129	1443.635	55.739	1488.096	55.706	1488.096	55.706	2.988
1072152az1_59_Zrn	0.078	0.002	0.011	0.000	3.496	76.351	2.444	71.446	2.498	225.377	81.077	71.446	2.498	68.299
1072152az1_60_Zrn	0.291	0.007	0.041	0.001	3.556	259.369	7.335	259.789	9.238	255.835	69.243	259.789	9.238	-1.545
1072152az1_61_Zrn	0.587	0.015	0.074	0.003	3.601	469.111	14.840	460.660	16.588	502.750	66.517	460.660	16.588	8.372
1072152az1_62_Zrn	3.050	0.071	0.244	0.008	3.813	1420.127	70.787	1409.497	54.187	1438.721	54.861	1438.721	54.861	2.031
1072152az1_63_Zrn	3.459	0.080	0.263	0.009	3.496	1517.919	79.444	1503.816	58.203	1538.833	53.803	1538.833	53.803	2.276
1072152az1_64_Zrn	0.617	0.023	0.081	0.003	3.750	488.266	23.659	499.388	18.726	435.899	94.130	499.388	18.726	-14.565
1072152az1_65_Zrn	1.608	0.038	0.159	0.005	3.707	973.448	38.541	953.195	35.338	1014.155	59.223	953.195	35.338	6.011
1072152az1_66_Zrn	2.597	0.061	0.219	0.008	4.199	1299.672	61.351	1275.529	48.742	1338.000	56.176	1338.000	56.176	4.669
1072152az1_67_Zrn	5.944	0.139	0.352	0.012	2.580	1967.737	136.557	1943.613	78.193	1991.544	51.378	1991.544	51.378	2.407
1072152az1_68_Zrn	3.268	0.077	0.258	0.009	3.768	1473.352	77.154	1479.105	57.340	1466.747	55.274	1466.747	55.274	-0.843
1072152az1_70_Zrn	3.360	0.080	0.260	0.009	3.657	1495.139	79.510	1489.192	57.952	1506.266	55.090	1506.266	55.090	1.134
1072152az1_71_Zrn	4.054	0.095	0.291	0.010	3.252	1645.163	93.883	1647.088	64.673	1644.147	53.471	1644.147	53.471	-0.179
1072152az1_72_Zrn	2.427	0.056	0.212	0.007	4.413	1250.500	56.515	1238.432	47.048	1271.614	56.117	1271.614	56.117	2.609
1072152az1_73_Zrn	3.068	0.072	0.246	0.008	3.841	1424.679	71.444	1419.012	54.574	1432.272	55.014	1432.272	55.014	0.926
1072152az1_74_Zrn	4.730	0.111	0.317	0.011	2.978	1772.511	109.521	1773.252	70.269	1771.914	52.765	1771.914	52.765	-0.076
1072152az1_75_Zrn	1.617	0.037	0.161	0.006	3.715	976.825	37.646	964.250	35.820	1003.460	58.156	964.250	35.820	3.907
1072152az1_76_Zrn	3.293	0.089	0.251	0.009	3.930	1479.375	87.947	1445.579	60.789	1526.670	59.993	1526.670	59.993	5.312
1072152az1_77_Zrn	0.176	0.004	0.025	0.001	3.532	164.265	4.365	159.010	5.616	238.760	68.531	159.010	5.616	33.402
1072152az1_79_Zrn	0.345	0.008	0.048	0.002	3.601	301.115	8.595	304.311	10.957	267.877	68.240	304.311	10.957	-13.601
1072152az1_80_Zrn	4.431	0.114	0.287	0.010	3.060	1718.065	112.634	1628.952	66.381	1824.220	55.815	1824.220	55.815	10.704
1072152az1_81_Zrn	2.784	0.070	0.225	0.008	4.103	1351.290	69.487	1308.896	52.224	1415.400	58.076	1415.400	58.076	7.525
1072152az1_83_Zrn	2.917	0.139	0.215	0.011	5.947	1386.378	136.284	1255.020	72.329	1594.825	94.841	1594.825	94.841	21.307
1072152az1_84_Zrn	4.375	0.103	0.297	0.010	3.058	1707.686	102.324	1676.766	66.489	1743.137	53.313	1743.137	53.313	3.808
1072152az1_85_Zrn	3.832	0.092	0.274	0.010	3.280	1599.571	91.059	1560.062	61.548	1652.617	54.209	1652.617	54.209	5.601
1072152az1_86_Zrn	5.190	0.122	0.327	0.011	2.774	1851.005	120.643	1822.427	72.869	1882.145	52.204	1882.145	52.204	3.173
1072152az1_87_Zrn	3.368	0.080	0.263	0.009	3.716	1496.924	79.600	1504.832	58.753	1485.596	55.204	1485.596	55.204	-1.295
1072152az1_88_Zrn	3.479	0.083	0.264	0.009	3.567	1522.564	82.208	1511.434	58.976	1534.690	54.736	1534.690	54.736	1.515
1072152az1_89_Zrn	4.231	0.101	0.295	0.010	3.196	1679.982	100.243	1667.429	66.277	1689.117	53.992	1689.117	53.992	1.284
1072152az1_90_Zrn	0.697	0.016	0.087	0.003	3.619	537.108	16.636	537.165	19.441	537.438	63.293	537.165	19.441	0.051
1072152az1_91_Zrn	2.654	0.063	0.223	0.008	4.154	1315.669	62.816	1295.347	49.753	1350.248	56.091	1350.248	56.091	4.066
1072152az1_92_Zrn	4.898	0.117	0.323	0.011	2.969	1801.927	115.228	1803.424	72.397	1793.991	53.264	1793.991	53.264	-0.526
1072152az1_93_Zrn	3.459	0.081	0.264	0.009	3.570	1517.970	80.827	1512.364	58.918	1525.246	54.447	1525.246	54.447	0.845
1072152az1_94_Zrn	1.912	0.045	0.182	0.006	5.278	1085.200	45.595	1075.818	40.730	1104.605	58.301	1104.605	58.301	2.606
1072152az1_95_Zrn	0.234	0.006	0.033	0.001	3.554	213.357	5.855	210.293	7.474	244.865	68.903	210.293	7.474	14.119
1072152az1_96_Zrn	3.515	0.117	0.252	0.010	4.266	1530.567	115.314	1449.402	65.986	1644.832	70.169	1644.832	70.169	11.881
1072152az1_97_Zrn	6.236	0.151	0.353	0.012	2.503	2009.569	147.411	1949.922	79.674	2072.405	51.865	2072.405	51.865	5.910
1072152az1_98_Zrn	4.938	0.116	0.323	0.011	2.902	1808.767	114.285	1806.032	71.972	1809.200	52.505	1809.200	52.505	0.175
1072152az1_99_Zrn	1.675	0.041	0.168	0.006	3.761	999.258	41.118	999.430	37.586	998.804	60.266	999.430	37.586	-0.063
1072152az1_100_Zrn	0.713	0.017	0.089	0.003	3.648	546.261	17.172	549.999	20.065	530.900	63.852	549.999	20.065	-3.598
1072152az1_101_Zrn	3.380	0.080	0.255	0.009	3.520	1499.770	79.777	1463.078	57.086	1553.098	54.668	1553.098	54.668	5.796
1072152az1_102_Zrn	0.694	0.017	0.088	0.003	3.636	535.432	16.703	541.892	19.701	505.900	64.161	541.892	19.701	-7.114
1072152az1_103_Zrn	3.409	0.082	0.265	0.009	3.723	1506.409	81.484	1515.775	59.213	1493.160	55.597	1493.160	55.597	-1.515
1072152az1_104_Zrn	4.894	0.117	0.326	0.011	3.002	1801.286	115.747	1819.478	73.263	1781.451	53.475	1781.451	53.475	-2.135
1072152az1_105_Zrn	4.319	0.105	0.294	0.010	3.108	1696.934	103.527	1660.820	66.499	1736.759	53.985	1736.759	53.985	4.372
1072152az1_106_Zrn	1.715	0.040	0.171	0.006	5.845	1014.074	40.282	1018.587	38.095	1001.175	58.520	1001.175	58.520	-1.739
1072152az1_107_Zrn	4.684	0.123	0.299	0.011	3.033	1764.463	120.865	1684.958	70.677	1860.005	56.417	1860.005	56.417	9.411
1072152az1_108_Zrn	2.703	0.064	0.227	0.008	4.146	1329.241	63.572	1318.891	50.622	1346.482	55.831	1346.482	55.831	2.049
1072152az1_109_Zrn	3.574	0.085	0.271	0.009	3.559	1543.810	84.322	1546.361	60.445	1541.672	54.861	1541.672	54.861	-0.304
1072152az1_110_Zrn	3.506	0.082	0.269	0.009	3.567	1528.524	81.266	1534.534	59.759	1520.770	54.251	1520.770	54.251	-0.905

(continued)

Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072-155, Early-Middle Eocene (Top) Upper Socha Formation (N = 104)														
1072155az1_1_Zrn	4.261	0.112	0.296	0.011	3.474	1685.881	110.293	1671.689	72.767	1700.405	59.075	1700.405	59.075	1.689
1072155az1_2_Zrn	2.697	0.068	0.227	0.009	4.518	1327.671	68.101	1319.726	55.140	1340.712	60.579	1340.712	60.579	1.565
1072155az1_3_Zrn	1.462	0.038	0.157	0.006	4.089	914.671	38.653	938.619	38.378	853.875	66.763	938.619	38.378	-9.925
1072155az1_4_Zrn	5.118	0.131	0.327	0.012	3.080	1839.036	128.612	1825.374	79.633	1852.416	57.059	1852.416	57.059	1.460
1072155az1_5_Zrn	4.941	0.124	0.321	0.012	3.093	1809.334	121.683	1794.927	77.610	1824.734	56.437	1824.734	56.437	1.633
1072155az1_6_Zrn	0.427	0.011	0.058	0.002	3.876	361.107	10.998	360.607	13.976	359.877	70.934	360.607	13.976	-0.203
1072155az1_7_Zrn	0.657	0.017	0.082	0.003	3.935	513.051	17.311	509.767	20.057	529.014	70.051	509.767	20.057	3.638
1072155az1_8_Zrn	1.909	0.051	0.177	0.007	5.582	1084.179	50.901	1049.247	42.978	1153.061	64.366	1153.061	64.366	9.003
1072155az1_9_Zrn	4.603	0.115	0.310	0.012	3.240	1749.870	113.747	1741.924	74.949	1757.386	56.942	1757.386	56.942	0.880
1072155az1_10_Zrn	3.146	0.083	0.250	0.009	4.227	1443.989	82.208	1437.733	60.607	1448.677	61.230	1448.677	61.230	0.755
1072155az1_11_Zrn	3.474	0.090	0.263	0.010	3.865	1521.264	89.087	1505.276	63.783	1545.804	59.739	1545.804	59.739	2.622
1072155az1_12_Zrn	2.159	0.055	0.193	0.007	5.068	1168.062	54.987	1136.664	47.139	1222.656	61.959	1222.656	61.959	7.033
1072155az1_13_Zrn	3.456	0.087	0.265	0.010	3.870	1517.328	86.091	1515.623	64.059	1518.399	58.757	1518.399	58.757	0.183
1072155az1_14_Zrn	5.696	0.143	0.348	0.013	2.876	1930.823	139.832	1924.429	83.985	1937.218	55.709	1937.218	55.709	0.660
1072155az1_15_Zrn	1.364	0.035	0.143	0.005	4.033	873.479	34.775	863.842	34.835	902.201	64.717	863.842	34.835	4.252
1072155az1_16_Zrn	0.663	0.017	0.083	0.003	3.920	516.629	17.272	514.731	20.180	522.299	69.610	514.731	20.180	1.449
1072155az1_17_Zrn	0.573	0.015	0.073	0.003	3.904	459.831	14.857	455.786	17.792	476.091	69.902	455.786	17.792	4.265
1072155az1_18_Zrn	0.995	0.026	0.112	0.004	3.978	701.326	25.896	682.803	27.162	762.328	66.919	682.803	27.162	10.432
1072155az1_19_Zrn	2.216	0.056	0.203	0.008	5.215	1186.025	55.957	1190.941	49.159	1185.148	61.809	1185.148	61.809	-0.489
1072155az1_20_Zrn	5.311	0.134	0.336	0.013	3.016	1870.669	131.986	1866.008	81.225	1875.241	56.550	1875.241	56.550	0.241
1072155az1_21_Zrn	2.583	0.066	0.223	0.008	4.774	1295.903	66.386	1295.730	53.893	1291.773	61.667	1291.773	61.667	-0.306
1072155az1_22_Zrn	3.495	0.088	0.263	0.010	3.757	1526.068	87.390	1503.730	63.650	1559.692	58.603	1559.692	58.603	3.588
1072155az1_23_Zrn	5.148	0.130	0.329	0.012	3.054	1844.011	128.031	1833.974	79.708	1855.101	56.657	1855.101	56.657	1.139
1072155az1_24_Zrn	1.138	0.029	0.126	0.005	4.000	771.624	29.143	765.636	30.628	787.332	66.008	765.636	30.628	2.756
1072155az1_25_Zrn	5.171	0.130	0.325	0.012	2.978	1847.815	127.426	1814.609	78.617	1884.049	56.116	1884.049	56.116	3.686
1072155az1_26_Zrn	0.148	0.004	0.022	0.001	3.804	140.553	3.960	140.022	5.327	147.069	75.303	140.022	5.327	4.792
1072155az1_27_Zrn	5.138	0.129	0.327	0.012	3.012	1842.482	126.497	1822.025	78.939	1865.369	56.178	1865.369	56.178	2.324
1072155az1_28_Zrn	4.187	0.105	0.296	0.011	3.449	1671.472	104.159	1669.860	71.608	1673.275	57.712	1673.275	57.712	0.204
1072155az1_29_Zrn	2.678	0.077	0.224	0.009	4.959	1322.509	77.085	1302.174	54.827	1342.518	66.576	1342.518	66.576	3.005
1072155az1_31_Zrn	4.457	0.113	0.305	0.012	3.332	1722.970	111.442	1717.701	73.970	1728.948	57.606	1728.948	57.606	0.650
1072155az1_32_Zrn	1.442	0.037	0.150	0.006	4.044	906.703	36.757	902.780	36.509	916.753	64.530	902.780	36.509	1.524
1072155az1_33_Zrn	2.198	0.055	0.200	0.008	5.175	1180.358	55.439	1173.958	48.341	1191.721	61.672	1191.721	61.672	1.491
1072155az1_34_Zrn	0.630	0.017	0.080	0.003	3.913	496.140	16.784	496.339	19.421	493.384	70.942	496.339	19.421	-0.599
1072155az1_35_Zrn	0.305	0.010	0.042	0.002	3.855	270.347	9.902	262.385	10.114	325.329	83.884	262.385	10.114	19.348
1072155az1_36_Zrn	0.091	0.003	0.014	0.001	3.830	88.390	2.693	87.143	3.338	117.308	81.488	87.143	3.338	25.714
1072155az1_37_Zrn	0.264	0.007	0.037	0.001	3.846	238.172	6.810	234.701	9.027	272.144	71.965	234.701	9.027	13.759
1072155az1_38_Zrn	0.098	0.003	0.014	0.001	3.839	94.491	3.172	87.350	3.353	270.517	84.935	87.350	3.353	67.710
1072155az1_39_Zrn	0.794	0.020	0.095	0.004	3.937	593.164	20.652	586.054	23.075	617.599	68.458	586.054	23.075	5.108
1072155az1_40_Zrn	3.429	0.086	0.261	0.010	3.843	1511.085	85.755	1496.667	63.311	1530.666	58.830	1530.666	58.830	2.221
1072155az1_41_Zrn	0.173	0.006	0.023	0.001	3.840	162.066	5.850	146.398	5.622	386.561	85.695	146.398	5.622	62.128
1072155az1_42_Zrn	2.043	0.055	0.190	0.007	5.672	1130.128	54.982	1121.132	45.928	1141.747	64.762	1141.747	64.762	1.806
1072155az1_43_Zrn	1.774	0.045	0.174	0.007	6.072	1036.016	44.964	1033.820	42.163	1040.631	63.187	1040.631	63.187	0.654
1072155az1_44_Zrn	0.160	0.010	0.022	0.001	3.889	150.843	9.889	141.311	5.496	299.998	143.501	141.311	5.496	52.896
1072155az1_45_Zrn	0.857	0.024	0.099	0.004	4.064	628.335	24.453	609.404	24.764	701.759	72.501	609.404	24.764	13.160
1072155az1_46_Zrn	0.662	0.017	0.083	0.003	3.921	515.595	17.194	512.679	20.104	524.791	69.463	512.679	20.104	2.308

1072155az1_47_Zrn	0.857	0.023	0.103	0.004	3.965	628.307	23.671	629.340	24.953	613.607	71.481	629.340	24.953	-2.564
1072155az1_48_Zrn	1.581	0.041	0.159	0.006	4.059	962.731	41.112	950.600	38.585	991.511	64.737	950.600	38.585	4.126
1072155az1_49_Zrn	2.941	0.074	0.240	0.009	4.261	1392.630	73.466	1388.715	58.168	1401.015	59.701	1401.015	59.701	0.878
1072155az1_50_Zrn	0.708	0.018	0.086	0.003	3.924	543.585	18.132	534.425	20.969	557.967	68.422	534.425	20.969	4.219
1072155az1_51_Zrn	0.718	0.032	0.087	0.003	3.982	549.282	31.821	538.932	21.459	571.867	103.595	538.932	21.459	5.759
1072155az1_52_Zrn	22.407	0.565	0.631	0.024	1.530	3201.539	504.978	3154.994	152.945	3229.954	49.429	3229.954	49.429	2.321
1072155az1_53_Zrn	4.509	0.113	0.306	0.012	3.280	1732.590	111.725	1722.174	74.002	1742.141	57.140	1742.141	57.140	1.146
1072155az1_54_Zrn	0.632	0.016	0.080	0.003	3.917	497.613	16.556	498.450	19.526	491.848	70.118	498.450	19.526	-1.342
1072155az1_55_Zrn	3.217	0.081	0.252	0.009	4.015	1461.253	80.591	1450.557	61.052	1476.245	59.269	1476.245	59.269	1.740
1072155az1_56_Zrn	1.598	0.040	0.161	0.006	4.056	969.239	40.588	963.400	39.079	981.778	63.819	963.400	39.079	1.872
1072155az1_57_Zrn	3.381	0.085	0.262	0.010	3.941	1499.963	84.670	1498.247	63.380	1500.365	59.128	1500.365	59.128	0.141
1072155az1_58_Zrn	1.705	0.047	0.167	0.006	4.105	1010.236	46.918	997.443	40.941	1030.070	67.052	997.443	40.941	3.167
1072155az1_59_Zrn	3.137	0.081	0.251	0.009	4.194	1441.893	80.557	1443.161	60.825	1442.548	60.507	1442.548	60.507	-0.042
1072155az1_60_Zrn	0.664	0.017	0.083	0.003	3.921	516.899	17.321	513.073	20.119	530.389	69.636	513.073	20.119	3.265
1072155az1_61_Zrn	0.915	0.023	0.107	0.004	3.963	659.748	23.674	653.549	25.900	675.333	67.575	653.549	25.900	3.226
1072155az1_62_Zrn	4.980	0.125	0.320	0.012	3.057	1815.947	122.893	1791.932	77.489	1843.982	56.369	1843.982	56.369	2.823
1072155az1_63_Zrn	4.802	0.121	0.320	0.012	3.195	1785.259	118.936	1790.067	77.404	1781.130	56.903	1781.130	56.903	-0.502
1072155az1_64_Zrn	2.238	0.058	0.200	0.008	5.129	1193.095	57.891	1177.344	48.702	1219.428	62.546	1219.428	62.546	3.451
1072155az1_65_Zrn	2.506	0.064	0.217	0.008	4.794	1273.794	63.897	1266.905	52.677	1282.363	61.478	1282.363	61.478	1.205
1072155az1_66_Zrn	1.635	0.045	0.160	0.006	4.066	983.708	45.340	958.745	38.980	1036.443	67.146	958.745	38.980	7.497
1072155az1_67_Zrn	3.349	0.086	0.262	0.010	4.039	1492.600	85.080	1499.795	63.387	1480.774	59.806	1480.774	59.806	-1.285
1072155az1_68_Zrn	0.619	0.016	0.079	0.003	3.909	489.255	16.615	490.347	19.168	476.249	71.477	490.347	19.168	-2.960
1072155az1_69_Zrn	1.311	0.033	0.139	0.005	4.028	850.623	33.660	838.240	33.766	881.016	65.228	838.240	33.766	4.855
1072155az1_70_Zrn	1.443	0.037	0.152	0.006	4.042	907.146	37.229	909.871	36.779	900.654	65.227	909.871	36.779	-1.023
1072155az1_71_Zrn	3.227	0.081	0.254	0.010	4.052	1463.603	81.082	1460.692	61.552	1467.479	59.461	1467.479	59.461	0.462
1072155az1_72_Zrn	0.844	0.022	0.100	0.004	3.958	621.102	22.619	615.361	24.356	638.757	69.623	615.361	24.356	3.663
1072155az1_73_Zrn	4.734	0.119	0.316	0.012	3.200	1773.224	117.407	1768.287	76.296	1780.129	56.961	1780.129	56.961	0.665
1072155az1_74_Zrn	3.481	0.087	0.265	0.010	3.828	1523.006	86.848	1515.181	64.111	1533.635	58.713	1533.635	58.713	1.203
1072155az1_75_Zrn	1.971	0.052	0.184	0.007	5.603	1105.546	52.310	1088.593	44.755	1145.077	64.156	1145.077	64.156	4.933
1072155az1_76_Zrn	0.257	0.011	0.037	0.001	3.965	232.290	11.194	233.159	9.244	220.155	107.731	233.159	9.244	-5.907
1072155az1_77_Zrn	0.820	0.021	0.100	0.004	3.951	608.223	21.388	615.621	24.320	580.612	68.971	615.621	24.320	-6.030
1072155az1_78_Zrn	13.324	0.334	0.516	0.019	1.892	2702.877	313.535	2683.486	124.658	2716.556	51.403	2716.556	51.403	1.217
1072155az1_79_Zrn	2.245	0.058	0.210	0.008	5.428	1195.359	57.677	1228.305	51.317	1155.187	62.702	1155.187	62.702	-6.330
1072155az1_80_Zrn	10.618	0.449	0.452	0.026	3.191	2490.293	411.697	2401.997	163.849	2563.117	81.781	2563.117	81.781	6.286
1072155az1_81_Zrn	3.550	0.092	0.265	0.010	3.810	1538.506	91.698	1514.252	64.213	1570.945	59.854	1570.945	59.854	3.609
1072155az1_82_Zrn	1.625	0.042	0.162	0.006	4.104	980.011	42.190	968.138	39.736	1012.376	64.553	968.138	39.736	4.370
1072155az1_83_Zrn	2.547	0.064	0.220	0.008	4.737	1285.460	64.336	1282.131	53.378	1287.908	61.012	1287.908	61.012	0.449
1072155az1_84_Zrn	10.008	0.251	0.450	0.017	2.134	2435.500	240.025	2396.312	108.907	2468.776	52.675	2468.776	52.675	2.935
1072155az1_85_Zrn	0.078	0.009	0.011	0.001	4.994	76.665	8.804	71.516	3.571	228.460	255.247	71.516	3.571	68.697
1072155az1_86_Zrn	4.852	0.123	0.315	0.012	3.115	1793.877	121.034	1767.275	76.299	1826.085	56.890	1826.085	56.890	3.221
1072155az1_87_Zrn	2.851	0.075	0.235	0.009	4.474	1369.040	74.277	1361.939	57.008	1376.586	61.594	1376.586	61.594	1.064
1072155az1_88_Zrn	4.441	0.112	0.306	0.012	3.348	1720.032	110.957	1719.383	74.136	1722.038	57.653	1722.038	57.653	0.154
1072155az1_89_Zrn	4.972	0.125	0.322	0.012	3.081	1814.560	122.768	1797.342	77.751	1833.515	56.488	1833.515	56.488	1.973
1072155az1_90_Zrn	9.811	0.252	0.440	0.017	2.169	2417.220	240.690	2352.332	107.933	2473.136	53.636	2473.136	53.636	4.885
1072155az1_91_Zrn	1.874	0.048	0.179	0.007	5.797	1072.046	48.014	1063.789	43.535	1090.239	63.201	1090.239	63.201	2.426
1072155az1_92_Zrn	0.240	0.006	0.034	0.001	3.836	218.540	6.460	215.457	8.265	246.784	74.366	215.457	8.265	12.694
1072155az1_93_Zrn	0.057	0.002	0.008	0.000	3.792	56.711	1.788	50.794	1.926	309.737	81.421	50.794	1.926	83.601
1072155az1_94_Zrn	0.716	0.024	0.089	0.003	3.956	548.277	24.512	552.087	21.840	523.532	84.733	552.087	21.840	-5.454
1072155az1_95_Zrn	0.577	0.015	0.074	0.003	3.905	462.235	14.873	460.121	17.968	468.684	69.750	460.121	17.968	1.827
1072155az1_96_Zrn	2.240	0.057	0.204	0.008	5.203	1193.623	57.245	1197.702	49.500	1195.156	62.190	1195.156	62.190	-0.213
1072155az1_97_Zrn	1.713	0.044	0.169	0.006	6.144	1013.558	43.708	1004.570	40.947	1033.306	63.485	1033.306	63.485	2.781
1072155az1_98_Zrn	3.453	0.089	0.264	0.010	3.918	1516.515	88.201	1508.837	64.032	1525.757	59.783	1525.757	59.783	1.109

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072155az1_99_Zrn	1.657	0.042	0.167	0.006	4.067	992.177	41.968	993.788	40.421	988.676	63.603	993.788	40.421	-0.517
1072155az1_100_Zrn	0.642	0.017	0.081	0.003	3.928	503.715	16.849	503.841	19.791	495.965	70.213	503.841	19.791	-1.588
1072155az1_101_Zrn	0.890	0.023	0.104	0.004	3.961	646.333	23.114	638.029	25.275	673.395	67.776	638.029	25.275	5.252
1072155az1_102_Zrn	0.671	0.017	0.083	0.003	3.929	521.122	17.247	516.094	20.277	543.727	68.759	516.094	20.277	5.082
1072155az1_103_Zrn	2.820	0.071	0.231	0.009	4.305	1360.812	70.972	1338.214	56.052	1395.421	60.067	1395.421	60.067	4.100
1072155az1_104_Zrn	2.277	0.059	0.204	0.008	5.142	1205.124	58.939	1196.346	49.521	1217.358	62.599	1217.358	62.599	1.726
1072155az1_105_Zrn	2.504	0.063	0.217	0.008	4.738	1273.228	63.396	1265.594	52.542	1288.303	61.042	1288.303	61.042	1.763
1072155az1_106_Zrn	2.232	0.058	0.198	0.007	5.083	1191.096	57.771	1164.142	48.165	1229.639	62.502	1229.639	62.502	5.327
1072155az1_107_Zrn	0.649	0.017	0.083	0.003	3.937	507.783	16.967	513.989	20.234	477.407	70.407	513.989	20.234	-7.663
1072155az1_108_Zrn	2.615	0.067	0.224	0.008	4.692	1304.745	66.804	1302.340	54.334	1306.488	61.299	1306.488	61.299	0.317
1072155az1_109_Zrn	1.409	0.035	0.148	0.006	4.029	892.764	35.663	888.765	35.808	898.601	64.390	888.765	35.808	1.095
1072155az1_110_Zrn	3.355	0.084	0.259	0.010	3.911	1493.903	83.988	1482.235	62.678	1508.630	58.998	1508.630	58.998	1.750
1072-156, Early-Middle Eocene (Base) Picacho Formation (N = 107)														
1072156az1_1_Zrn	1.627	0.051	0.166	0.008	4.908	980.671	51.266	987.803	48.480	963.130	78.370	987.803	48.480	-2.562
1072156az1_2_Zrn	5.084	0.155	0.329	0.015	3.729	1833.457	151.878	1832.803	96.083	1831.854	68.311	1831.854	68.311	-0.052
1072156az1_3_Zrn	3.243	0.105	0.246	0.012	4.686	1467.536	104.251	1419.857	74.191	1571.384	73.634	1571.384	73.634	9.643
1072156az1_4_Zrn	6.663	0.206	0.378	0.017	3.242	2067.750	198.809	2066.237	110.563	2065.989	66.985	2065.989	66.985	-0.012
1072156az1_5_Zrn	0.128	0.005	0.018	0.001	4.643	121.895	4.796	117.643	5.462	198.544	99.984	117.643	5.462	40.747
1072156az1_6_Zrn	0.178	0.007	0.025	0.001	4.630	166.573	6.672	157.047	7.272	284.278	98.046	157.047	7.272	44.756
1072156az1_7_Zrn	0.055	0.002	0.008	0.000	4.692	54.360	2.177	49.028	2.300	285.905	102.098	49.028	2.300	82.852
1072156az1_8_Zrn	2.634	0.082	0.225	0.010	5.665	1310.094	81.680	1310.589	66.255	1308.785	74.148	1308.785	74.148	-0.123
1072156az1_9_Zrn	1.685	0.052	0.169	0.008	7.709	1002.889	51.996	1004.266	49.323	997.937	76.932	997.937	76.932	-0.634
1072156az1_10_Zrn	2.155	0.066	0.198	0.009	6.373	1166.691	65.481	1166.308	57.937	1167.726	74.418	1167.726	74.418	0.121
1072156az1_11_Zrn	2.339	0.074	0.203	0.009	5.838	1224.352	73.497	1189.882	60.243	1284.048	74.965	1284.048	74.965	7.334
1072156az1_12_Zrn	3.106	0.104	0.252	0.012	5.463	1434.204	102.591	1449.849	73.977	1404.566	76.730	1404.566	76.730	-3.224
1072156az1_13_Zrn	0.890	0.027	0.104	0.005	4.776	646.610	27.503	638.547	30.495	673.466	80.719	638.547	30.495	5.185
1072156az1_14_Zrn	1.883	0.064	0.180	0.008	7.480	1075.051	63.841	1067.550	52.838	1084.602	81.129	1084.602	81.129	1.572
1072156az1_15_Zrn	0.329	0.011	0.044	0.002	4.666	288.872	10.859	276.382	12.896	389.544	88.384	276.382	12.896	29.050
1072156az1_16_Zrn	0.760	0.025	0.092	0.004	4.761	573.946	25.574	568.098	27.049	593.464	86.686	568.098	27.049	4.274
1072156az1_17_Zrn	2.887	0.115	0.234	0.012	6.373	1378.520	113.351	1356.771	79.950	1410.717	89.909	1410.717	89.909	3.824
1072156az1_18_Zrn	0.763	0.023	0.092	0.004	4.752	575.769	23.632	564.808	26.840	615.343	81.613	564.808	26.840	8.212
1072156az1_19_Zrn	2.562	0.079	0.222	0.010	5.776	1289.884	78.500	1293.445	64.968	1278.356	73.834	1278.356	73.834	-1.180
1072156az1_20_Zrn	3.740	0.114	0.273	0.012	4.359	1579.937	112.773	1555.156	79.676	1611.055	70.228	1611.055	70.228	3.470
1072156az1_21_Zrn	4.781	0.150	0.309	0.014	3.792	1781.517	147.056	1734.607	90.431	1836.405	69.636	1836.405	69.636	5.543
1072156az1_22_Zrn	2.380	0.076	0.211	0.010	6.182	1236.566	76.058	1235.724	61.970	1236.071	76.416	1236.071	76.416	0.028
1072156az1_23_Zrn	0.070	0.005	0.010	0.000	4.781	69.085	4.706	65.927	3.152	180.605	160.620	65.927	3.152	63.496
1072156az1_24_Zrn	4.763	0.145	0.319	0.014	3.884	1778.367	142.354	1782.916	92.995	1770.744	68.768	1770.744	68.768	-0.687
1072156az1_25_Zrn	1.278	0.040	0.140	0.006	4.862	835.768	40.089	841.921	40.932	814.930	79.960	841.921	40.932	-3.312
1072156az1_26_Zrn	4.723	0.145	0.315	0.014	3.894	1771.270	142.420	1765.636	92.091	1775.746	69.142	1775.746	69.142	0.569
1072156az1_27_Zrn	4.506	0.139	0.300	0.014	3.882	1732.092	136.182	1690.613	87.963	1781.261	69.156	1781.261	69.156	5.089
1072156az1_28_Zrn	3.214	0.098	0.253	0.011	4.852	1460.519	96.899	1453.073	73.832	1470.293	71.343	1470.293	71.343	1.171
1072156az1_29_Zrn	1.605	0.050	0.161	0.007	4.901	972.275	49.976	963.954	47.241	986.321	77.514	963.954	47.241	2.268
1072156az1_30_Zrn	3.326	0.109	0.253	0.012	4.880	1487.197	107.906	1453.812	74.143	1527.916	74.569	1527.916	74.569	4.850
1072156az1_31_Zrn	1.965	0.060	0.185	0.008	6.698	1103.716	60.093	1094.601	54.132	1122.205	75.170	1122.205	75.170	2.460
1072156az1_32_Zrn	3.169	0.101	0.252	0.011	5.111	1449.659	100.521	1447.833	73.821	1450.450	74.132	1450.450	74.132	0.180
1072156az1_33_Zrn	0.090	0.003	0.012	0.001	4.611	87.890	3.513	78.851	3.635	328.084	100.190	78.851	3.635	75.966

1072156az1_34_Zrn	2.201	0.068	0.199	0.009	6.272	1181.502	68.034	1171.473	58.309	1195.566	74.989	1195.566	74.989	2.015
1072156az1_35_Zrn	1.654	0.050	0.164	0.007	4.902	991.175	50.559	979.800	48.029	1015.919	76.202	979.800	48.029	3.555
1072156az1_36_Zrn	0.576	0.024	0.066	0.003	4.746	461.972	23.732	414.762	19.683	699.520	98.869	414.762	19.683	40.708
1072156az1_37_Zrn	0.090	0.004	0.012	0.001	4.613	87.357	4.297	76.371	3.523	355.092	116.360	76.371	3.523	78.493
1072156az1_38_Zrn	1.858	0.057	0.180	0.008	7.143	1066.350	57.390	1065.698	52.626	1067.681	76.267	1067.681	76.267	0.186
1072156az1_39_Zrn	1.564	0.049	0.157	0.007	4.887	955.962	49.232	942.208	46.045	980.204	78.165	942.208	46.045	3.876
1072156az1_40_Zrn	4.613	0.140	0.312	0.014	3.936	1751.555	137.783	1752.410	91.131	1749.584	68.860	1749.584	68.860	-0.162
1072156az1_41_Zrn	3.276	0.100	0.254	0.012	4.748	1475.270	98.950	1458.759	74.239	1499.835	71.208	1499.835	71.208	2.739
1072156az1_42_Zrn	2.045	0.063	0.192	0.009	6.745	1130.465	63.283	1131.680	56.104	1124.073	75.817	1124.073	75.817	-0.677
1072156az1_43_Zrn	4.843	0.149	0.314	0.014	3.753	1792.363	145.833	1758.531	91.787	1830.416	68.699	1830.416	68.699	3.927
1072156az1_44_Zrn	0.091	0.010	0.012	0.001	4.982	88.367	10.496	74.174	3.695	493.621	247.757	74.174	3.695	84.974
1072156az1_45_Zrn	6.388	0.195	0.370	0.017	3.285	2030.614	188.567	2030.650	107.928	2028.528	66.641	2028.528	66.641	-0.105
1072156az1_46_Zrn	4.593	0.140	0.311	0.014	3.952	1747.932	137.741	1745.304	90.726	1747.920	69.074	1747.920	69.074	0.150
1072156az1_47_Zrn	1.448	0.049	0.146	0.007	4.885	909.004	48.962	876.968	42.842	979.589	82.209	876.968	42.842	10.476
1072156az1_48_Zrn	0.102	0.007	0.013	0.001	4.810	98.531	7.014	82.931	3.989	486.326	156.601	82.931	3.989	82.947
1072156az1_49_Zrn	5.383	0.166	0.330	0.015	3.506	1882.085	161.597	1836.516	96.386	1935.815	67.872	1935.815	67.872	5.130
1072156az1_50_Zrn	2.453	0.076	0.220	0.010	6.107	1258.260	75.363	1279.471	64.238	1220.656	74.549	1220.656	74.549	-4.818
1072156az1_51_Zrn	3.394	0.106	0.260	0.012	4.753	1503.029	105.180	1490.076	76.119	1521.326	72.309	1521.326	72.309	2.054
1072156az1_52_Zrn	4.444	0.136	0.303	0.014	3.982	1720.507	133.605	1707.121	88.567	1737.752	69.203	1737.752	69.203	1.763
1072156az1_53_Zrn	0.057	0.003	0.008	0.000	4.682	55.926	3.186	48.386	2.265	377.507	133.582	48.386	2.265	87.183
1072156az1_54_Zrn	0.254	0.009	0.035	0.002	4.676	229.993	9.341	220.586	10.314	316.128	96.634	220.586	10.314	30.223
1072156az1_55_Zrn	0.183	0.008	0.023	0.001	4.685	170.267	8.536	147.572	6.913	486.485	112.759	147.572	6.913	69.666
1072156az1_56_Zrn	0.178	0.006	0.024	0.001	4.634	166.072	6.316	154.678	7.167	301.289	94.487	154.678	7.167	48.661
1072156az1_57_Zrn	3.147	0.096	0.245	0.011	4.771	1444.184	95.010	1413.106	71.628	1492.183	71.192	1492.183	71.192	5.299
1072156az1_58_Zrn	0.274	0.010	0.039	0.002	4.663	245.522	9.647	248.264	11.577	213.456	95.433	248.264	11.577	-16.307
1072156az1_59_Zrn	2.541	0.078	0.221	0.010	5.790	1283.818	77.739	1286.266	64.581	1274.619	73.801	1274.619	73.801	-0.914
1072156az1_60_Zrn	0.088	0.003	0.012	0.001	4.627	85.418	3.340	78.632	3.638	268.784	99.705	78.632	3.638	70.745
1072156az1_61_Zrn	1.768	0.054	0.172	0.008	7.117	1033.847	53.931	1020.772	50.138	1062.323	75.607	1062.323	75.607	3.911
1072156az1_62_Zrn	1.683	0.052	0.168	0.008	7.632	1002.286	51.956	1001.350	49.255	1006.505	76.820	1006.505	76.820	0.512
1072156az1_63_Zrn	2.523	0.077	0.217	0.010	5.622	1278.612	76.953	1264.344	63.372	1303.838	73.304	1303.838	73.304	3.029
1072156az1_64_Zrn	14.987	0.457	0.528	0.024	2.133	2814.440	418.330	2732.801	153.898	2873.084	61.284	2873.084	61.284	4.883
1072156az1_65_Zrn	0.160	0.007	0.022	0.001	4.848	150.850	7.454	142.972	6.931	237.383	117.480	142.972	6.931	39.771
1072156az1_66_Zrn	3.377	0.104	0.263	0.012	4.810	1499.038	102.505	1505.790	76.982	1487.837	71.560	1487.837	71.560	-1.207
1072156az1_67_Zrn	0.169	0.013	0.022	0.001	5.080	158.519	13.597	138.979	7.059	458.916	183.368	138.979	7.059	69.716
1072156az1_68_Zrn	4.766	0.146	0.316	0.014	3.833	1779.011	142.736	1767.967	92.147	1790.915	68.653	1790.915	68.653	1.281
1072156az1_69_Zrn	3.794	0.117	0.274	0.013	4.348	1591.435	115.564	1563.430	80.393	1624.900	70.655	1624.900	70.655	3.783
1072156az1_70_Zrn	3.333	0.102	0.257	0.012	4.703	1488.798	100.537	1473.088	74.999	1510.348	71.031	1510.348	71.031	2.467
1072156az1_71_Zrn	2.088	0.064	0.193	0.009	6.438	1144.861	63.604	1136.643	56.345	1159.012	74.614	1159.012	74.614	1.930
1072156az1_72_Zrn	0.760	0.023	0.093	0.004	4.751	574.126	23.532	574.405	27.288	573.615	82.088	574.405	27.288	-0.138
1072156az1_73_Zrn	2.560	0.079	0.220	0.010	5.667	1289.176	78.290	1282.086	64.375	1298.008	73.561	1298.008	73.561	1.227
1072156az1_74_Zrn	2.855	0.088	0.234	0.011	5.227	1370.240	87.317	1356.059	68.566	1391.645	72.742	1391.645	72.742	2.557
1072156az1_75_Zrn	0.263	0.008	0.038	0.002	4.630	237.442	8.184	240.053	11.114	210.165	87.431	240.053	11.114	-14.221
1072156az1_76_Zrn	5.443	0.166	0.332	0.015	3.471	1891.649	161.612	1849.096	96.999	1939.334	67.322	1939.334	67.322	4.653
1072156az1_77_Zrn	0.092	0.003	0.013	0.001	4.608	89.083	3.375	83.806	3.862	232.478	97.942	83.806	3.862	63.951
1072156az1_78_Zrn	4.484	0.139	0.300	0.014	3.917	1727.948	136.097	1690.736	88.555	1775.998	69.574	1775.998	69.574	4.801
1072156az1_79_Zrn	3.615	0.112	0.263	0.012	4.385	1552.833	110.321	1507.598	77.020	1613.428	70.756	1613.428	70.756	6.559
1072156az1_80_Zrn	0.315	0.012	0.044	0.002	4.727	278.095	11.924	277.115	13.099	283.108	99.319	277.115	13.099	2.117
1072156az1_81_Zrn	2.951	0.092	0.239	0.011	5.125	1395.193	91.112	1381.966	70.063	1421.631	72.853	1421.631	72.853	2.790
1072156az1_83_Zrn	0.081	0.003	0.012	0.001	4.595	79.298	2.634	76.763	3.527	146.918	91.025	76.763	3.527	47.751
1072156az1_84_Zrn	0.612	0.019	0.077	0.004	4.732	485.042	19.638	477.912	22.616	508.995	84.985	477.912	22.616	6.107
1072156az1_85_Zrn	1.031	0.032	0.118	0.005	4.801	719.340	31.817	717.395	34.441	726.628	79.985	717.395	34.441	1.271
1072156az1_86_Zrn	2.065	0.064	0.191	0.009	6.556	1137.403	63.933	1129.025	55.975	1151.426	75.486	1151.426	75.486	1.946

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072156az1_87_Zrn	2.742	0.084	0.228	0.010	5.373	1339.850	84.006	1326.168	66.757	1359.543	73.055	1359.543	73.055	2.455
1072156az1_88_Zrn	6.457	0.198	0.372	0.017	3.268	2040.009	191.994	2040.754	109.057	2040.577	66.678	2040.577	66.678	-0.009
1072156az1_89_Zrn	3.230	0.101	0.250	0.011	4.851	1464.331	100.486	1438.918	73.544	1497.173	72.626	1497.173	72.626	3.891
1072156az1_90_Zrn	1.614	0.050	0.162	0.007	4.901	975.496	49.799	965.247	47.307	998.865	76.914	965.247	47.307	3.366
1072156az1_91_Zrn	1.552	0.049	0.158	0.007	4.907	951.279	49.390	945.702	46.405	958.778	79.078	945.702	46.405	1.364
1072156az1_92_Zrn	0.101	0.005	0.014	0.001	4.686	98.058	5.392	89.821	4.209	295.568	129.088	89.821	4.209	69.611
1072156az1_93_Zrn	0.316	0.011	0.042	0.002	4.656	278.492	10.750	264.549	12.317	394.032	90.141	264.549	12.317	32.861
1072156az1_94_Zrn	0.680	0.022	0.085	0.004	4.768	527.016	22.023	525.882	25.072	532.162	85.277	525.882	25.072	1.180
1072156az1_95_Zrn	1.532	0.048	0.157	0.007	4.891	943.114	47.773	939.402	45.950	954.691	77.940	939.402	45.950	1.602
1072156az1_96_Zrn	5.613	0.172	0.347	0.016	3.534	1918.035	167.269	1919.799	101.244	1915.823	67.703	1915.823	67.703	-0.208
1072156az1_97_Zrn	3.299	0.102	0.255	0.012	4.787	1480.913	101.198	1466.406	74.687	1501.777	71.896	1501.777	71.896	2.355
1072156az1_98_Zrn	2.796	0.088	0.229	0.010	5.298	1354.530	87.571	1329.142	67.147	1394.280	73.865	1394.280	73.865	4.672
1072156az1_99_Zrn	0.083	0.003	0.012	0.001	4.593	80.983	3.073	74.632	3.428	265.544	97.677	74.632	3.428	71.895
1072156az1_100_Zrn	0.240	0.008	0.035	0.002	4.642	218.560	7.919	219.048	10.169	187.856	91.464	219.048	10.169	-16.604
1072156az1_102_Zrn	6.389	0.195	0.367	0.017	3.254	2030.751	188.998	2014.633	107.087	2047.263	66.612	2047.263	66.612	1.594
1072156az1_103_Zrn	1.638	0.051	0.164	0.007	4.908	985.073	51.194	981.598	48.181	991.741	77.661	981.598	48.181	1.023
1072156az1_104_Zrn	2.348	0.072	0.206	0.009	5.845	1227.099	71.451	1207.944	60.211	1258.908	73.581	1258.908	73.581	4.048
1072156az1_105_Zrn	0.312	0.010	0.043	0.002	4.655	275.966	10.076	269.325	12.538	332.845	87.813	269.325	12.538	19.084
1072156az1_106_Zrn	0.175	0.006	0.026	0.001	4.641	163.623	6.497	165.821	7.696	126.210	100.554	165.821	7.696	-31.385
1072156az1_107_Zrn	3.151	0.098	0.249	0.011	4.970	1445.139	96.926	1435.834	72.992	1457.775	72.448	1457.775	72.448	1.505
1072156az1_108_Zrn	0.050	0.002	0.007	0.000	4.626	49.561	1.879	46.707	2.161	186.786	100.467	46.707	2.161	74.994
1072156az1_109_Zrn	4.394	0.135	0.296	0.013	3.932	1711.306	132.294	1669.984	86.663	1757.628	69.106	1757.628	69.106	4.987
1072156az1_110_Zrn	2.152	0.066	0.195	0.009	6.225	1165.656	65.558	1150.613	57.187	1193.768	74.306	1193.768	74.306	3.615
1072-161, Early-Middle Eocene (Top) Upper Socha Formation (N = 106)														
1072161az1_1_Zrn	0.090	0.004	0.012	0.000	3.552	87.755	4.340	78.423	2.785	333.348	112.861	78.423	2.785	76.474
1072161az1_2_Zrn	0.184	0.006	0.026	0.001	3.587	171.800	5.606	164.115	5.887	277.291	79.115	164.115	5.887	40.815
1072161az1_3_Zrn	2.171	0.050	0.202	0.007	4.953	1171.929	50.286	1185.037	44.716	1147.290	56.831	1147.290	56.831	-3.290
1072161az1_4_Zrn	0.321	0.012	0.045	0.002	3.602	282.859	11.953	281.387	10.136	287.562	92.485	281.387	10.136	2.147
1072161az1_5_Zrn	0.064	0.002	0.009	0.000	3.512	63.260	1.726	60.781	2.135	162.465	73.399	60.781	2.135	62.588
1072161az1_6_Zrn	0.095	0.005	0.014	0.000	3.684	91.831	5.443	86.527	3.187	223.826	135.544	86.527	3.187	61.342
1072161az1_7_Zrn	0.251	0.009	0.035	0.001	3.603	226.994	9.043	222.684	8.023	256.804	90.610	222.684	8.023	13.286
1072161az1_9_Zrn	0.096	0.005	0.013	0.000	3.615	93.031	5.308	80.390	2.906	420.752	126.680	80.390	2.906	80.894
1072161az1_10_Zrn	0.099	0.003	0.014	0.000	3.498	95.786	3.256	89.216	3.121	264.135	83.771	89.216	3.121	66.223
1072161az1_11_Zrn	0.082	0.005	0.010	0.000	3.572	80.398	4.749	64.095	2.289	598.398	126.936	64.095	2.289	89.229
1072161az1_12_Zrn	1.978	0.046	0.187	0.006	5.105	1108.112	45.961	1103.465	41.391	1119.855	57.168	1119.855	57.168	1.464
1072161az1_13_Zrn	0.093	0.004	0.013	0.000	3.572	90.484	4.349	82.828	2.959	291.981	111.607	82.828	2.959	71.632
1072161az1_14_Zrn	0.275	0.007	0.038	0.001	3.525	246.896	7.063	239.822	8.453	313.513	69.256	239.822	8.453	23.505
1072161az1_15_Zrn	0.100	0.003	0.014	0.000	3.556	96.382	3.376	89.650	3.188	270.410	85.706	89.650	3.188	66.847
1072161az1_16_Zrn	0.375	0.019	0.047	0.002	4.008	323.011	19.400	293.616	11.767	530.159	119.167	293.616	11.767	44.617
1072161az1_17_Zrn	0.170	0.005	0.025	0.001	3.547	159.242	4.861	156.402	5.547	204.800	76.506	156.402	5.547	23.632
1072161az1_18_Zrn	0.095	0.004	0.014	0.000	3.542	92.592	3.574	86.523	3.064	253.170	92.805	86.523	3.064	65.824
1072161az1_19_Zrn	0.087	0.003	0.012	0.000	3.505	84.953	3.162	74.230	2.602	396.703	88.408	74.230	2.602	81.288
1072161az1_21_Zrn	2.439	0.057	0.216	0.007	4.572	1254.273	57.363	1263.265	48.140	1239.891	56.691	1239.891	56.691	-1.885
1072161az1_22_Zrn	0.188	0.007	0.025	0.001	3.556	175.081	6.788	160.308	5.700	364.267	88.417	160.308	5.700	55.992
1072161az1_23_Zrn	2.176	0.053	0.197	0.007	4.901	1173.345	53.231	1160.848	44.465	1191.892	58.414	1191.892	58.414	2.605
1072161az1_24_Zrn	2.217	0.053	0.201	0.007	4.796	1186.328	52.804	1180.357	45.002	1195.639	57.347	1195.639	57.347	1.278

1072161az1_25_Zrn	0.423	0.010	0.057	0.002	3.555	358.077	10.441	355.348	12.633	371.346	66.700	355.348	12.633	4.308
1072161az1_26_Zrn	0.099	0.003	0.014	0.000	3.539	95.475	3.293	87.896	3.111	268.282	85.001	87.896	3.111	67.237
1072161az1_28_Zrn	0.154	0.006	0.021	0.001	3.631	145.238	6.097	133.093	4.832	323.928	96.679	133.093	4.832	58.913
1072161az1_29_Zrn	0.338	0.008	0.047	0.002	3.540	295.932	8.195	295.543	10.462	306.028	66.579	295.543	10.462	3.426
1072161az1_30_Zrn	2.544	0.061	0.221	0.008	4.460	1284.757	60.524	1288.071	49.242	1276.583	56.931	1276.583	56.931	-0.900
1072161az1_31_Zrn	2.093	0.050	0.192	0.007	4.969	1146.465	50.529	1132.481	42.777	1173.379	58.308	1173.379	58.308	3.485
1072161az1_32_Zrn	0.173	0.005	0.025	0.001	3.538	161.813	4.621	157.186	5.562	229.101	72.330	157.186	5.562	31.390
1072161az1_33_Zrn	0.088	0.003	0.012	0.000	3.576	85.680	2.869	79.750	2.852	253.661	83.277	79.750	2.852	68.561
1072161az1_34_Zrn	0.173	0.004	0.025	0.001	3.510	161.990	4.265	161.527	5.670	168.931	69.138	161.527	5.670	4.383
1072161az1_35_Zrn	0.185	0.006	0.026	0.001	3.556	172.181	6.017	163.670	5.821	278.048	82.749	163.670	5.821	41.136
1072161az1_36_Zrn	1.786	0.042	0.176	0.006	5.669	1040.257	42.064	1044.950	39.151	1030.009	58.390	1030.009	58.390	-1.451
1072161az1_37_Zrn	0.093	0.004	0.013	0.000	3.581	90.733	4.465	83.514	2.991	274.929	114.484	83.514	2.991	69.623
1072161az1_39_Zrn	0.097	0.003	0.014	0.000	3.519	94.251	3.127	88.834	3.126	212.338	83.105	88.834	3.126	58.164
1072161az1_40_Zrn	0.094	0.004	0.014	0.000	3.559	90.800	4.148	86.601	3.082	193.872	108.435	86.601	3.082	55.331
1072161az1_41_Zrn	0.092	0.003	0.013	0.000	3.512	89.719	3.420	84.854	2.980	213.807	93.176	84.854	2.980	60.313
1072161az1_42_Zrn	0.088	0.003	0.013	0.000	3.550	85.683	3.458	82.584	2.932	157.603	98.633	82.584	2.932	47.600
1072161az1_43_Zrn	2.302	0.053	0.206	0.007	4.581	1212.944	53.134	1205.744	45.554	1224.936	56.119	1224.936	56.119	1.567
1072161az1_44_Zrn	0.076	0.003	0.011	0.000	3.574	74.513	3.001	70.033	2.503	219.710	98.487	70.033	2.503	68.125
1072161az1_45_Zrn	2.386	0.056	0.208	0.007	4.425	1238.310	55.692	1219.570	46.347	1269.777	56.187	1269.777	56.187	3.954
1072161az1_46_Zrn	0.097	0.005	0.013	0.000	3.685	93.744	4.884	82.045	3.023	390.314	117.406	82.045	3.023	78.980
1072161az1_47_Zrn	0.173	0.005	0.025	0.001	3.585	162.381	5.032	159.455	5.717	201.915	77.091	159.455	5.717	21.029
1072161az1_48_Zrn	0.067	0.004	0.009	0.000	3.819	66.291	4.317	58.769	2.244	344.842	147.128	58.769	2.244	82.958
1072161az1_49_Zrn	0.286	0.007	0.041	0.001	3.531	255.190	7.247	256.082	9.042	238.201	69.599	256.082	9.042	-7.507
1072161az1_50_Zrn	0.448	0.011	0.060	0.002	3.550	375.786	10.770	377.613	13.406	363.706	65.660	377.613	13.406	-3.824
1072161az1_51_Zrn	0.088	0.003	0.012	0.000	3.584	85.442	3.365	79.715	2.857	241.026	95.579	79.715	2.857	66.927
1072161az1_52_Zrn	3.398	0.079	0.260	0.009	3.566	1503.829	78.568	1492.111	57.824	1519.754	54.190	1519.754	54.190	1.819
1072161az1_53_Zrn	1.297	0.031	0.138	0.005	3.686	844.488	30.968	835.097	30.779	876.014	60.289	835.097	30.779	4.671
1072161az1_54_Zrn	2.029	0.048	0.193	0.007	5.136	1125.189	47.920	1137.922	43.164	1120.597	57.551	1120.597	57.551	-1.546
1072161az1_55_Zrn	0.292	0.007	0.042	0.001	3.539	260.094	7.472	263.685	9.331	224.711	70.277	263.685	9.331	-17.344
1072161az1_56_Zrn	0.743	0.018	0.091	0.003	3.606	564.390	17.835	561.937	20.265	573.594	63.289	561.937	20.265	2.032
1072161az1_57_Zrn	3.801	0.092	0.278	0.010	3.410	1592.879	90.979	1583.704	62.996	1604.296	54.712	1604.296	54.712	1.284
1072161az1_58_Zrn	0.085	0.004	0.012	0.000	4.031	83.125	3.573	74.932	3.020	327.839	100.998	74.932	3.020	77.144
1072161az1_59_Zrn	0.150	0.009	0.021	0.001	3.637	141.587	9.224	132.519	4.819	282.982	142.114	132.519	4.819	53.170
1072161az1_60_Zrn	0.085	0.002	0.012	0.000	3.512	82.981	2.491	76.086	2.672	286.964	76.248	76.086	2.672	73.486
1072161az1_61_Zrn	1.480	0.035	0.154	0.005	3.702	922.119	35.173	921.618	34.114	928.537	59.619	921.618	34.114	0.745
1072161az1_62_Zrn	1.967	0.047	0.186	0.006	5.274	1104.139	46.797	1101.262	41.346	1104.033	58.230	1104.033	58.230	0.251
1072161az1_63_Zrn	0.176	0.006	0.024	0.001	3.524	164.307	5.724	152.091	5.360	339.772	82.124	152.091	5.360	55.237
1072161az1_64_Zrn	0.069	0.005	0.009	0.000	3.707	68.007	4.861	60.063	2.227	335.182	159.417	60.063	2.227	82.081
1072161az1_65_Zrn	3.168	0.074	0.252	0.009	3.790	1449.397	74.122	1449.171	55.888	1452.866	55.066	1452.866	55.066	0.254
1072161az1_66_Zrn	0.171	0.004	0.024	0.001	3.497	160.491	4.370	155.329	5.432	229.899	70.028	155.329	5.432	32.436
1072161az1_67_Zrn	0.536	0.015	0.069	0.002	3.571	436.088	14.684	427.269	15.257	481.434	70.329	427.269	15.257	11.251
1072161az1_68_Zrn	0.197	0.005	0.028	0.001	3.518	182.499	5.195	178.243	6.271	234.375	71.648	178.243	6.271	23.949
1072161az1_69_Zrn	0.064	0.002	0.010	0.000	3.505	63.293	1.963	61.344	2.150	133.154	81.187	61.344	2.150	53.930
1072161az1_70_Zrn	0.456	0.013	0.060	0.002	3.563	381.643	13.544	378.440	13.485	398.719	75.461	378.440	13.485	5.086
1072161az1_71_Zrn	0.638	0.016	0.081	0.003	3.613	501.006	15.876	504.005	18.211	492.094	65.927	504.005	18.211	-2.420
1072161az1_72_Zrn	0.100	0.003	0.014	0.000	3.498	96.836	3.144	90.174	3.154	255.318	81.130	90.174	3.154	64.682
1072161az1_73_Zrn	0.160	0.005	0.023	0.001	3.546	150.310	5.047	145.018	5.142	223.042	82.228	145.018	5.142	34.982
1072161az1_74_Zrn	0.061	0.002	0.008	0.000	3.494	60.112	2.209	54.371	1.900	278.801	90.348	54.371	1.900	80.498
1072161az1_75_Zrn	1.744	0.041	0.170	0.006	5.453	1024.993	40.733	1010.817	37.655	1060.515	57.832	1060.515	57.832	4.686
1072161az1_76_Zrn	0.064	0.004	0.008	0.000	3.489	62.757	3.745	53.081	1.852	438.132	131.954	53.081	1.852	87.885
1072161az1_77_Zrn	1.527	0.035	0.157	0.005	3.703	941.487	35.608	940.248	34.820	947.881	58.697	940.248	34.820	0.805
1072161az1_78_Zrn	0.104	0.004	0.014	0.000	3.513	100.387	3.687	91.335	3.209	315.587	88.179	91.335	3.209	71.059

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Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
1072161az1_79_Zrn	0.094	0.003	0.014	0.000	3.496	90.768	2.627	86.515	3.025	191.053	75.495	86.515	3.025	54.717
1072161az1_80_Zrn	2.057	0.051	0.189	0.007	5.100	1134.694	50.928	1114.987	43.082	1162.589	59.287	1162.589	59.287	4.094
1072161az1_81_Zrn	0.096	0.004	0.013	0.000	3.624	92.944	4.111	85.018	3.081	287.317	103.478	85.018	3.081	70.410
1072161az1_82_Zrn	0.085	0.003	0.012	0.000	3.529	82.939	2.636	77.268	2.727	244.825	80.168	77.268	2.727	68.439
1072161az1_83_Zrn	0.058	0.002	0.008	0.000	3.531	57.556	1.845	54.010	1.907	206.193	81.747	54.010	1.907	73.806
1072161az1_84_Zrn	2.142	0.050	0.199	0.007	4.985	1162.558	50.300	1170.460	44.320	1149.273	57.296	1149.273	57.296	-1.843
1072161az1_85_Zrn	0.086	0.003	0.012	0.000	3.516	84.087	2.822	79.095	2.781	224.072	83.934	79.095	2.781	64.701
1072161az1_86_Zrn	0.394	0.010	0.054	0.002	3.558	337.416	9.736	338.292	12.036	327.068	67.344	338.292	12.036	-3.432
1072161az1_87_Zrn	0.097	0.004	0.013	0.000	3.653	94.302	3.738	85.815	3.134	315.321	93.875	85.815	3.134	72.785
1072161az1_88_Zrn	0.070	0.003	0.010	0.000	3.725	68.774	2.594	62.223	2.318	300.084	90.968	62.223	2.318	79.265
1072161az1_89_Zrn	3.367	0.082	0.252	0.009	3.525	1496.707	81.113	1447.528	56.999	1569.443	55.323	1569.443	55.323	7.768
1072161az1_90_Zrn	2.075	0.051	0.186	0.007	4.769	1140.715	50.836	1099.727	42.149	1221.162	58.232	1221.162	58.232	9.944
1072161az1_91_Zrn	0.732	0.018	0.091	0.003	3.600	557.658	17.764	560.763	20.187	541.394	64.328	560.763	20.187	-3.578
1072161az1_92_Zrn	0.078	0.003	0.011	0.000	3.511	75.793	2.732	71.421	2.507	205.594	89.510	71.421	2.507	65.261
1072161az1_93_Zrn	0.828	0.019	0.099	0.003	3.610	612.752	19.480	610.610	22.044	619.045	62.080	610.610	22.044	1.363
1072161az1_94_Zrn	0.058	0.005	0.008	0.000	3.828	56.899	5.517	53.131	2.034	226.655	216.573	53.131	2.034	76.559
1072161az1_95_Zrn	2.084	0.049	0.191	0.007	4.839	1143.471	48.663	1126.876	42.430	1176.323	56.918	1176.323	56.918	4.204
1072161az1_96_Zrn	0.063	0.003	0.009	0.000	3.520	62.244	2.780	54.671	1.924	360.318	103.815	54.671	1.924	84.827
1072161az1_97_Zrn	0.086	0.002	0.013	0.000	3.488	84.172	2.394	81.211	2.833	160.262	75.290	81.211	2.833	49.326
1072161az1_98_Zrn	1.023	0.025	0.113	0.004	3.701	715.242	24.743	689.049	25.504	806.369	61.768	689.049	25.504	14.549
1072161az1_99_Zrn	1.339	0.047	0.136	0.006	4.603	863.000	47.242	822.182	37.843	968.558	73.717	822.182	37.843	15.113
1072161az1_100_Zrn	0.176	0.005	0.025	0.001	3.646	164.212	4.639	158.701	5.787	240.096	71.434	158.701	5.787	33.901
1072161az1_101_Zrn	2.364	0.057	0.207	0.007	4.541	1231.778	56.708	1212.171	46.637	1262.366	57.326	1262.366	57.326	3.976
1072161az1_102_Zrn	1.880	0.044	0.178	0.006	5.230	1073.910	44.303	1055.344	39.765	1106.334	57.866	1106.334	57.866	4.609
1072161az1_103_Zrn	0.102	0.006	0.013	0.000	3.663	99.013	5.615	84.665	3.102	451.622	125.431	84.665	3.102	81.253
1072161az1_104_Zrn	0.064	0.002	0.009	0.000	3.535	63.059	2.189	57.540	2.034	258.636	86.538	57.540	2.034	77.753
1072161az1_105_Zrn	0.103	0.004	0.014	0.001	3.590	99.423	4.310	92.164	3.309	271.848	102.202	92.164	3.309	66.097
1072161az1_106_Zrn	0.711	0.017	0.089	0.003	3.612	545.539	17.404	547.887	19.792	535.212	64.512	547.887	19.792	-2.368
1072161az1_107_Zrn	0.075	0.009	0.010	0.000	3.502	73.786	9.076	61.915	2.168	465.025	256.145	61.915	2.168	86.686
1072161az1_108_Zrn	0.186	0.005	0.026	0.001	3.558	173.234	5.402	164.681	5.859	285.737	76.029	164.681	5.859	42.366
1072161az1_109_Zrn	0.170	0.005	0.025	0.001	3.525	159.344	4.674	159.102	5.609	159.624	74.705	159.102	5.609	0.327
1072161az1_110_Zrn	0.581	0.014	0.074	0.003	3.575	465.035	13.792	462.520	16.534	479.644	63.842	462.520	16.534	3.570
1072-162, Early-Middle Eocene (Top) Upper Socha Formation (N = 96)														
1072162az1_1_Zrn	3.449	0.079	0.266	0.009	3.578	1515.732	79.105	1520.175	58.808	1508.176	53.956	1508.176	53.956	-0.796
1072162az1_2_Zrn	2.663	0.062	0.228	0.008	4.239	1318.287	61.654	1322.647	50.456	1312.537	55.635	1312.537	55.635	-0.770
1072162az1_3_Zrn	2.667	0.061	0.226	0.008	4.161	1319.360	61.437	1312.972	49.991	1329.070	55.305	1329.070	55.305	1.211
1072162az1_4_Zrn	1.687	0.041	0.170	0.006	6.111	1003.801	40.966	1012.237	37.817	983.389	60.091	983.389	60.091	-2.934
1072162az1_5_Zrn	5.369	0.124	0.334	0.011	2.695	1879.945	121.899	1856.338	73.814	1905.674	51.349	1905.674	51.349	2.589
1072162az1_6_Zrn	3.351	0.077	0.258	0.009	3.571	1492.981	76.920	1480.791	57.182	1511.380	53.967	1511.380	53.967	2.024
1072162az1_7_Zrn	6.541	0.153	0.374	0.013	2.471	2051.415	149.241	2047.876	82.676	2058.442	50.873	2058.442	50.873	0.513
1072162az1_8_Zrn	2.569	0.059	0.220	0.008	4.264	1291.977	59.496	1283.960	48.804	1305.547	55.668	1305.547	55.668	1.654
1072162az1_9_Zrn	4.458	0.104	0.301	0.010	3.006	1723.154	102.701	1698.322	66.916	1753.202	52.696	1753.202	52.696	3.130
1072162az1_10_Zrn	4.426	0.103	0.303	0.010	3.051	1717.243	101.892	1706.898	67.145	1729.242	52.766	1729.242	52.766	1.292
1072162az1_11_Zrn	3.735	0.086	0.275	0.009	3.344	1578.815	85.896	1564.727	60.808	1599.212	53.480	1599.212	53.480	2.156
1072162az1_12_Zrn	1.596	0.038	0.162	0.006	3.713	968.644	37.796	969.031	35.976	967.282	59.158	969.031	35.976	-0.181
1072162az1_13_Zrn	3.001	0.073	0.240	0.008	3.913	1407.933	72.357	1384.878	53.271	1439.894	56.336	1439.894	56.336	3.821

1072162az1_14_Zrn	3.356	0.080	0.257	0.009	3.624	1494.168	79.527	1475.039	57.044	1520.529	55.103	1520.529	55.103	2.992
1072162az1_15_Zrn	0.089	0.005	0.013	0.000	3.605	86.870	4.593	81.461	2.937	232.645	123.047	81.461	2.937	64.985
1072162az1_16_Zrn	5.311	0.132	0.328	0.011	2.804	1870.702	129.490	1831.085	73.135	1922.339	53.906	1922.339	53.906	4.747
1072162az1_17_Zrn	0.805	0.020	0.098	0.003	3.607	599.737	19.764	603.234	21.756	581.606	64.279	603.234	21.756	-3.719
1072162az1_18_Zrn	3.273	0.077	0.255	0.009	3.662	1474.769	76.241	1465.735	56.509	1491.711	54.624	1491.711	54.624	1.741
1072162az1_19_Zrn	1.579	0.038	0.161	0.006	3.733	961.802	38.286	962.561	35.935	962.136	60.172	962.561	35.935	-0.044
1072162az1_20_Zrn	3.650	0.085	0.272	0.009	3.444	1560.416	84.994	1552.634	60.648	1571.392	54.112	1571.392	54.112	1.194
1072162az1_21_Zrn	4.636	0.109	0.314	0.011	3.038	1755.713	107.889	1759.471	69.835	1748.635	53.116	1748.635	53.116	-0.620
1072162az1_22_Zrn	0.653	0.018	0.083	0.003	3.632	510.376	18.131	514.339	18.680	491.313	71.189	514.339	18.680	-4.687
1072162az1_23_Zrn	1.629	0.040	0.162	0.006	3.756	981.620	40.247	965.894	36.283	1014.916	60.348	965.894	36.283	4.830
1072162az1_25_Zrn	4.870	0.116	0.324	0.011	2.984	1797.060	114.204	1808.020	72.440	1782.262	53.183	1782.262	53.183	-1.445
1072162az1_26	3.335	0.079	0.258	0.009	3.664	1489.317	78.610	1479.093	57.529	1500.900	54.988	1500.900	54.988	1.453
1072162az1_27_Zrn	2.996	0.070	0.240	0.008	3.933	1406.488	69.580	1388.147	54.164	1425.717	56.068	1425.717	56.068	2.635
1072162az1_28_Zrn	1.966	0.047	0.186	0.006	5.257	1104.083	47.108	1100.882	41.604	1111.516	58.436	1111.516	58.436	0.957
1072162az1_29_Zrn	3.245	0.077	0.255	0.009	3.746	1467.902	76.714	1462.626	56.635	1476.465	55.304	1476.465	55.304	0.937
1072162az1_30_Zrn	4.720	0.111	0.309	0.011	2.894	1770.831	109.278	1734.185	68.760	1813.167	52.477	1813.167	52.477	4.356
1072162az1_31_Zrn	5.255	0.125	0.333	0.012	2.810	1861.557	122.716	1853.791	73.974	1870.322	52.562	1870.322	52.562	0.884
1072162az1_32_Zrn	3.498	0.081	0.266	0.009	3.518	1526.856	80.710	1520.517	58.978	1534.628	53.990	1534.628	53.990	0.920
1072162az1_34_Zrn	3.404	0.078	0.264	0.009	3.604	1505.283	78.041	1510.311	58.417	1498.726	54.015	1498.726	54.015	-0.773
1072162az1_35_Zrn	3.416	0.080	0.262	0.009	3.568	1508.128	79.319	1499.075	58.203	1522.729	54.336	1522.729	54.336	1.553
1072162az1_36_Zrn	1.517	0.036	0.158	0.005	3.721	937.206	36.040	945.271	35.178	917.622	59.687	945.271	35.178	-3.013
1072162az1_37_Zrn	2.181	0.052	0.195	0.007	4.706	1175.033	51.633	1149.354	43.391	1214.156	57.135	1214.156	57.135	5.337
1072162az1_38_Zrn	4.865	0.113	0.315	0.011	2.844	1796.209	111.449	1766.577	69.978	1829.373	52.030	1829.373	52.030	3.433
1072162az1_39_Zrn	3.530	0.082	0.265	0.009	3.459	1534.050	81.757	1517.410	58.920	1559.527	53.948	1559.527	53.948	2.701
1072162az1_41_Zrn	4.942	0.114	0.325	0.011	2.879	1809.393	112.921	1814.923	72.040	1808.682	52.064	1808.682	52.064	-0.345
1072162az1_42_Zrn	3.427	0.081	0.261	0.009	3.549	1510.583	80.149	1492.592	58.018	1534.910	54.468	1534.910	54.468	2.757
1072162az1_43_Zrn	3.371	0.090	0.250	0.009	3.729	1497.760	89.620	1436.448	56.278	1590.774	59.321	1590.774	59.321	9.701
1072162az1_44_Zrn	4.032	0.094	0.287	0.010	3.222	1640.686	93.340	1628.256	63.859	1657.227	53.393	1657.227	53.393	1.748
1072162az1_45_Zrn	1.399	0.038	0.146	0.005	3.704	888.432	37.855	877.694	32.510	912.822	65.520	877.694	32.510	3.848
1072162az1_46_Zrn	3.385	0.079	0.259	0.009	3.535	1500.979	78.183	1483.626	57.372	1529.104	54.056	1529.104	54.056	2.974
1072162az1_48_Zrn	2.877	0.068	0.234	0.008	3.953	1375.927	67.893	1354.528	51.954	1409.108	55.705	1409.108	55.705	3.873
1072162az1_49_Zrn	4.448	0.103	0.305	0.010	3.033	1721.395	101.557	1715.016	67.408	1730.815	52.497	1730.815	52.497	0.913
1072162az1_50_Zrn	3.234	0.076	0.253	0.009	3.676	1465.259	75.283	1452.887	56.027	1486.573	54.645	1486.573	54.645	2.266
1072162az1_51_Zrn	0.547	0.013	0.071	0.002	3.575	442.890	12.941	442.221	15.807	445.118	64.124	442.221	15.807	0.651
1072162az1_52_Zrn	2.559	0.060	0.220	0.008	4.287	1289.054	59.561	1281.188	48.767	1302.937	55.863	1302.937	55.863	1.669
1072162az1_53_Zrn	0.163	0.005	0.024	0.001	3.551	153.110	4.610	153.049	5.435	155.817	76.470	153.049	5.435	1.777
1072162az1_54_Zrn	2.536	0.060	0.222	0.008	4.457	1282.382	59.580	1292.189	49.415	1267.247	56.482	1267.247	56.482	-1.968
1072162az1_55_Zrn	3.368	0.080	0.258	0.009	3.606	1497.051	79.448	1479.733	57.535	1521.826	54.874	1521.826	54.874	2.766
1072162az1_56_Zrn	3.339	0.078	0.259	0.009	3.653	1490.172	77.650	1486.245	57.624	1493.966	54.580	1493.966	54.580	0.517
1072162az1_57_Zrn	4.739	0.111	0.311	0.011	2.899	1774.180	109.703	1747.413	69.434	1809.434	52.450	1809.434	52.450	3.428
1072162az1_60_Zrn	0.090	0.002	0.013	0.000	3.511	87.734	2.400	84.262	2.958	173.491	72.752	84.262	2.958	51.432
1072162az1_61_Zrn	5.169	0.120	0.332	0.011	2.812	1847.518	118.187	1850.472	73.650	1845.285	51.882	1845.285	51.882	-0.281
1072162az1_62_Zrn	3.361	0.079	0.262	0.009	3.677	1495.375	78.320	1501.163	58.260	1487.519	54.695	1487.519	54.695	-0.917
1072162az1_63_Zrn	4.852	0.113	0.319	0.011	2.898	1794.009	111.274	1786.176	70.758	1802.483	52.231	1802.483	52.231	0.905
1072162az1_64_Zrn	1.640	0.040	0.163	0.006	3.727	985.559	39.794	975.386	36.352	1010.315	59.750	975.386	36.352	3.457
1072162az1_65_Zrn	3.865	0.091	0.280	0.010	3.321	1606.310	90.332	1590.567	62.531	1623.424	53.919	1623.424	53.919	2.024
1072162az1_67_Zrn	4.894	0.116	0.315	0.011	2.881	1801.278	114.684	1766.243	70.652	1835.810	52.882	1835.810	52.882	3.789
1072162az1_68_Zrn	1.862	0.045	0.179	0.006	5.498	1067.843	45.284	1059.499	39.665	1079.382	59.341	1079.382	59.341	1.842
1072162az1_69_Zrn	4.719	0.110	0.314	0.011	2.946	1770.615	108.618	1760.832	69.582	1782.456	52.505	1782.456	52.505	1.213
1072162az1_71_Zrn	4.603	0.107	0.309	0.011	2.962	1749.786	105.503	1734.967	68.396	1768.777	52.390	1768.777	52.390	1.911
1072162az1_73_Zrn	4.856	0.114	0.314	0.011	2.859	1794.737	112.558	1762.013	70.443	1838.727	52.569	1838.727	52.569	4.172
1072162az1_74_Zrn	4.287	0.099	0.296	0.010	3.073	1690.837	98.113	1672.849	65.547	1713.752	52.658	1713.752	52.658	2.387

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Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072162az1_75_Zrn	4.769	0.111	0.313	0.011	2.875	1779.379	109.287	1755.905	69.382	1813.935	52.144	1813.935	52.144	3.199
1072162az1_76_Zrn	5.043	0.137	0.316	0.012	2.971	1826.531	134.991	1771.357	75.700	1894.701	56.295	1894.701	56.295	6.510
1072162az1_77_Zrn	3.279	0.077	0.258	0.009	3.726	1476.179	76.462	1480.543	57.329	1470.395	54.780	1470.395	54.780	-0.690
1072162az1_78_Zrn	3.349	0.079	0.257	0.009	3.589	1492.482	78.376	1473.835	57.243	1521.703	54.615	1521.703	54.615	3.146
1072162az1_79_Zrn	5.753	0.136	0.337	0.012	2.572	1939.334	133.722	1874.497	75.485	2007.541	51.631	2007.541	51.631	6.627
1072162az1_81_Zrn	6.305	0.146	0.364	0.013	2.490	2019.188	143.376	1999.800	80.633	2040.591	50.801	2040.591	50.801	1.999
1072162az1_82_Zrn	0.094	0.003	0.014	0.000	3.533	90.786	2.725	89.092	3.148	127.571	78.570	89.092	3.148	30.163
1072162az1_83_Zrn	1.570	0.037	0.159	0.006	3.745	958.258	37.353	950.627	35.596	971.739	59.354	950.627	35.596	2.173
1072162az1_84_Zrn	0.299	0.008	0.043	0.001	3.525	265.514	7.728	268.475	9.463	236.870	70.549	268.475	9.463	-13.343
1072162az1_85_Zrn	5.355	0.124	0.333	0.012	2.708	1877.722	122.487	1853.766	74.047	1907.403	51.661	1907.403	51.661	2.812
1072162az1_86_Zrn	0.262	0.006	0.037	0.001	3.526	236.587	6.331	234.306	8.261	253.143	67.160	234.306	8.261	7.441
1072162az1_87_Zrn	4.482	0.104	0.303	0.010	2.999	1727.597	102.888	1705.758	67.206	1750.353	52.494	1750.353	52.494	2.548
1072162az1_88_Zrn	5.739	0.162	0.338	0.013	2.920	1937.274	158.478	1877.445	81.617	2001.717	58.449	2001.717	58.449	6.208
1072162az1_89_Zrn	0.923	0.025	0.103	0.004	3.882	663.715	25.636	631.009	24.496	783.603	67.070	631.009	24.496	19.473
1072162az1_90_Zrn	4.830	0.115	0.310	0.011	2.840	1790.163	113.107	1739.426	69.425	1850.270	52.552	1850.270	52.552	5.991
1072162az1_91_Zrn	5.057	0.119	0.324	0.011	2.826	1828.856	117.062	1807.082	72.120	1853.465	52.376	1853.465	52.376	2.503
1072162az1_92_Zrn	1.731	0.041	0.170	0.006	5.608	1019.977	40.938	1013.171	37.803	1043.691	58.526	1043.691	58.526	2.924
1072162az1_93_Zrn	4.352	0.149	0.292	0.013	4.074	1703.270	145.476	1652.481	84.217	1766.220	71.952	1766.220	71.952	6.440
1072162az1_94_Zrn	4.337	0.100	0.298	0.010	3.054	1700.519	99.216	1683.063	66.044	1722.336	52.603	1722.336	52.603	2.280
1072162az1_95_Zrn	3.275	0.078	0.253	0.009	3.679	1475.245	77.895	1452.685	56.195	1505.018	55.370	1505.018	55.370	3.477
1072162az1_97_Zrn	4.407	0.102	0.297	0.010	2.995	1713.707	101.407	1675.709	66.045	1758.907	52.673	1758.907	52.673	4.730
1072162az1_98_Zrn	3.063	0.075	0.240	0.008	3.821	1423.395	74.686	1386.632	53.650	1479.548	56.529	1479.548	56.529	6.280
1072162az1_100_Zrn	0.088	0.003	0.013	0.000	3.565	85.573	2.896	83.401	2.973	134.836	86.493	83.401	2.973	38.146
1072162az1_101_Zrn	4.214	0.098	0.290	0.010	3.056	1676.764	96.728	1642.263	64.333	1724.187	52.693	1724.187	52.693	4.751
1072162az1_102_Zrn	0.257	0.006	0.037	0.001	3.517	232.426	6.394	231.695	8.149	234.387	68.693	231.695	8.149	1.148
1072162az1_103_Zrn	3.644	0.089	0.263	0.009	3.415	1559.189	88.082	1503.685	59.772	1621.617	55.374	1621.617	55.374	7.272
1072162az1_104_Zrn	3.369	0.079	0.261	0.009	3.636	1497.113	78.634	1492.858	57.860	1502.588	54.636	1502.588	54.636	0.648
1072162az1_105_Zrn	5.145	0.120	0.326	0.011	2.784	1843.625	118.549	1820.782	72.419	1869.959	52.060	1869.959	52.060	2.630
1072162az1_106_Zrn	2.003	0.047	0.189	0.007	5.107	1116.534	46.775	1114.448	41.908	1122.639	57.332	1122.639	57.332	0.730
1072162az1_107_Zrn	3.333	0.077	0.256	0.009	3.562	1488.806	76.907	1467.830	56.673	1518.756	54.092	1518.756	54.092	3.353
1072162az1_108_Zrn	0.720	0.017	0.090	0.003	3.612	550.843	17.295	555.415	20.064	530.314	63.916	555.415	20.064	-4.733
1072-044, Late Cretaceous Arenisca Tierna Formation (N = 76)														
107244az1_4_Zrn	1.850	0.044	0.176	0.006	5.406	1063.421	44.374	1046.846	39.278	1085.347	58.672	1085.347	58.672	3.547
107244az1_5_Zrn	3.702	0.086	0.276	0.010	3.420	1571.812	85.509	1572.323	61.130	1573.848	53.819	1573.848	53.819	0.097
107244az1_6_Zrn	1.706	0.041	0.170	0.006	5.902	1010.607	40.873	1012.546	37.719	1005.039	59.317	1005.039	59.317	-0.747
107244az1_7_Zrn	2.105	0.051	0.197	0.007	5.169	1150.507	50.962	1157.434	43.757	1134.960	58.664	1134.960	58.664	-1.980
107244az1_8_Zrn	3.348	0.078	0.256	0.009	3.558	1492.371	77.850	1470.459	57.057	1526.833	54.326	1526.833	54.326	3.692
107244az1_10_Zrn	1.170	0.030	0.131	0.005	3.681	786.835	29.918	796.246	29.309	761.435	64.320	796.246	29.309	-4.572
107244az1_11_Zrn	3.619	0.084	0.272	0.009	3.449	1553.816	83.190	1552.536	60.300	1557.584	53.727	1557.584	53.727	0.324
107244az1_12_Zrn	2.646	0.061	0.229	0.008	4.347	1313.506	61.427	1328.406	50.728	1286.915	55.945	1286.915	55.945	-3.224
107244az1_13_Zrn	3.215	0.077	0.252	0.009	3.767	1460.735	77.129	1450.444	56.343	1482.453	55.839	1482.453	55.839	2.159
107244az1_14_Zrn	4.825	0.112	0.317	0.011	2.900	1789.310	110.614	1776.993	70.376	1802.230	52.270	1802.230	52.270	1.400
107244az1_15_Zrn	4.734	0.110	0.316	0.011	2.956	1773.364	108.991	1770.144	70.076	1775.996	52.498	1775.996	52.498	0.330
107244az1_16_Zrn	4.704	0.111	0.316	0.011	2.994	1767.961	109.337	1768.385	70.139	1766.399	52.884	1766.399	52.884	-0.112
107244az1_17_Zrn	4.954	0.142	0.328	0.011	3.386	1811.512	139.756	1829.227	72.869	1787.608	60.528	1787.608	60.528	-2.328
107244az1_20_Zrn	5.235	0.122	0.336	0.012	2.818	1858.288	119.788	1869.789	74.500	1844.162	51.973	1844.162	51.973	-1.390

107244az1_21_Zrn	2.277	0.053	0.204	0.007	4.610	1205.148	52.940	1194.541	45.196	1223.708	56.417	1223.708	56.417	2.383
107244az1_22_Zrn	4.795	0.112	0.320	0.011	2.960	1783.974	110.397	1790.613	70.875	1776.328	52.585	1776.328	52.585	-0.804
107244az1_23_Zrn	3.586	0.090	0.265	0.009	3.573	1546.481	89.079	1517.739	58.805	1580.075	56.459	1580.075	56.459	3.945
107244az1_24_Zrn	4.851	0.113	0.318	0.011	2.894	1793.820	111.396	1781.025	70.529	1807.443	52.304	1807.443	52.304	1.462
107244az1_27_Zrn	5.139	0.131	0.321	0.012	2.944	1842.558	129.094	1792.283	75.289	1899.782	55.928	1899.782	55.928	5.658
107244az1_28_Zrn	3.371	0.078	0.259	0.009	3.571	1497.743	77.560	1487.037	57.461	1513.403	54.041	1513.403	54.041	1.742
107244az1_30_Zrn	4.784	0.111	0.320	0.011	2.959	1782.009	109.830	1788.928	70.900	1775.571	52.536	1775.571	52.536	-0.752
107244az1_31_Zrn	3.532	0.081	0.269	0.009	3.504	1534.502	81.003	1533.570	59.430	1534.879	53.789	1534.879	53.789	0.085
107244az1_32_Zrn	3.658	0.159	0.268	0.014	5.606	1562.335	154.926	1530.693	89.661	1605.372	90.002	1605.372	90.002	4.652
107244az1_34_Zrn	4.557	0.109	0.305	0.011	3.024	1741.403	107.431	1716.316	68.804	1773.266	53.631	1773.266	53.631	3.212
107244az1_35_Zrn	3.272	0.076	0.254	0.009	3.629	1474.537	75.410	1460.734	56.400	1493.614	54.206	1493.614	54.206	2.201
107244az1_36_Zrn	1.994	0.046	0.188	0.007	5.152	1113.389	46.637	1112.951	41.872	1116.212	57.507	1116.212	57.507	0.292
107244az1_39_Zrn	7.831	0.244	0.394	0.016	2.618	2211.778	233.804	2141.688	104.883	2277.352	59.614	2277.352	59.614	5.957
107244az1_40_Zrn	3.453	0.083	0.259	0.009	3.556	1516.563	82.998	1485.738	57.650	1558.358	55.411	1558.358	55.411	4.660
107244az1_41_Zrn	6.329	0.154	0.358	0.013	2.439	2022.501	150.595	1970.939	81.131	2076.474	50.646	2076.474	50.646	5.082
107244az1_42_Zrn	2.514	0.060	0.220	0.008	4.528	1276.004	60.384	1281.993	48.965	1267.590	57.399	1267.590	57.399	-1.136
107244az1_45_Zrn	3.720	0.086	0.271	0.009	3.305	1575.611	85.772	1545.919	60.134	1616.401	53.422	1616.401	53.422	4.360
107244az1_46_Zrn	4.669	0.108	0.310	0.011	2.924	1761.731	106.603	1742.274	68.665	1784.359	52.171	1784.359	52.171	2.359
107244az1_47_Zrn	3.376	0.080	0.260	0.009	3.647	1498.835	79.362	1491.410	57.906	1505.745	54.907	1505.745	54.907	0.952
107244az1_48_Zrn	3.422	0.079	0.259	0.009	3.488	1509.395	79.015	1484.744	57.536	1546.156	53.931	1546.156	53.931	3.972
107244az1_49_Zrn	6.051	0.141	0.355	0.012	2.548	1983.245	138.272	1957.406	78.968	2007.568	51.161	2007.568	51.161	2.499
107244az1_50_Zrn	1.397	0.034	0.151	0.005	3.712	887.714	34.171	905.107	33.593	839.837	61.711	905.107	33.593	-7.772
107244az1_53_Zrn	1.720	0.041	0.170	0.006	5.764	1015.879	40.799	1011.257	37.906	1023.094	58.974	1023.094	58.974	1.157
107244az1_54_Zrn	4.390	0.103	0.298	0.010	3.028	1710.487	101.708	1682.815	66.345	1745.843	52.866	1745.843	52.866	3.610
107244az1_56_Zrn	5.310	0.123	0.337	0.012	2.770	1870.442	121.438	1872.357	74.737	1869.988	51.806	1869.988	51.806	-0.127
107244az1_57_Zrn	2.734	0.065	0.228	0.008	4.127	1337.879	64.870	1323.504	50.889	1361.300	56.186	1361.300	56.186	2.776
107244az1_58_Zrn	3.583	0.084	0.267	0.009	3.435	1545.798	83.502	1524.094	59.336	1575.492	54.119	1575.492	54.119	3.262
107244az1_59_Zrn	2.944	0.068	0.244	0.008	4.012	1393.222	68.130	1405.641	54.062	1374.450	55.137	1374.450	55.137	-2.269
107244az1_60_Zrn	5.977	0.140	0.357	0.012	2.594	1972.455	136.989	1966.808	79.164	1979.204	51.348	1979.204	51.348	0.626
107244az1_61_Zrn	5.257	0.124	0.327	0.011	2.740	1861.924	122.115	1823.736	73.121	1902.681	52.131	1902.681	52.131	4.149
107244az1_63_Zrn	1.734	0.043	0.164	0.006	3.831	1021.185	43.228	979.855	37.543	1115.226	60.405	979.855	37.543	12.138
107244az1_64_Zrn	2.550	0.060	0.227	0.008	4.617	1286.560	60.059	1318.730	50.571	1232.217	56.889	1232.217	56.889	-7.021
107244az1_65_Zrn	4.609	0.108	0.303	0.011	2.913	1750.908	107.232	1704.957	67.621	1807.384	52.658	1807.384	52.658	5.667
107244az1_66_Zrn	4.067	0.096	0.287	0.010	3.203	1647.729	94.849	1627.794	64.090	1671.529	53.546	1671.529	53.546	2.617
107244az1_68_Zrn	2.799	0.065	0.233	0.008	4.050	1355.366	65.068	1348.751	51.737	1366.975	55.358	1366.975	55.358	1.333
107244az1_70_Zrn	4.520	0.105	0.309	0.011	3.056	1734.704	104.286	1737.814	68.743	1730.226	52.882	1730.226	52.882	-0.439
107244az1_71_Zrn	4.681	0.111	0.308	0.011	2.935	1763.777	109.697	1733.179	69.140	1806.514	53.013	1806.514	53.013	4.059
107244az1_72_Zrn	11.447	0.265	0.487	0.017	1.877	2560.237	252.881	2558.654	107.886	2558.992	48.026	2558.992	48.026	0.013
107244az1_73_Zrn	5.629	0.131	0.346	0.012	2.669	1920.527	128.523	1914.382	76.717	1928.831	51.481	1928.831	51.481	0.749
107244az1_75_Zrn	5.000	0.116	0.323	0.011	2.842	1819.358	114.580	1806.535	71.664	1832.395	52.070	1832.395	52.070	1.411
107244az1_77_Zrn	3.230	0.077	0.252	0.009	3.712	1464.292	76.469	1448.666	56.460	1486.414	55.177	1486.414	55.177	2.539
107244az1_78_Zrn	3.073	0.072	0.249	0.009	3.909	1425.870	71.991	1433.269	55.349	1415.769	55.340	1415.769	55.340	-1.236
107244az1_79_Zrn	2.143	0.052	0.200	0.007	5.135	1162.914	51.815	1175.497	44.748	1140.195	58.546	1140.195	58.546	-3.096
107244az1_81_Zrn	4.662	0.110	0.312	0.011	2.993	1760.535	108.339	1752.911	69.684	1766.980	52.892	1766.980	52.892	0.796
107244az1_82_Zrn	5.705	0.133	0.349	0.012	2.656	1932.184	130.893	1928.066	77.436	1940.064	51.536	1940.064	51.536	0.618
107244az1_83_Zrn	4.688	0.109	0.309	0.011	2.908	1765.074	107.656	1736.536	68.613	1797.749	52.283	1797.749	52.283	3.405
107244az1_84_Zrn	4.022	0.095	0.283	0.010	3.187	1638.648	94.098	1606.600	63.261	1682.902	53.627	1682.902	53.627	4.534
107244az1_85_Zrn	3.328	0.081	0.257	0.009	3.733	1487.591	80.877	1473.818	57.454	1504.549	56.160	1504.549	56.160	2.043
107244az1_86_Zrn	2.377	0.056	0.208	0.007	4.418	1235.558	55.686	1217.512	46.365	1273.055	56.243	1273.055	56.243	4.363
107244az1_90_Zrn	3.609	0.162	0.257	0.013	5.443	1551.620	158.175	1476.935	86.622	1654.886	90.073	1654.886	90.073	10.753
107244az1_91_Zrn	4.633	0.110	0.310	0.011	2.987	1755.299	108.850	1739.489	69.298	1779.393	53.143	1779.393	53.143	2.243
107244az1_92_Zrn	3.821	0.098	0.265	0.010	3.310	1597.250	96.818	1517.283	61.836	1705.250	56.449	1705.250	56.449	11.023

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Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
107244az1_93_Zrn	5.106	0.122	0.331	0.012	2.900	1837.154	119.878	1844.249	74.241	1823.025	52.875	1823.025	52.875	-1.164
107244az1_94_Zrn	5.688	0.135	0.346	0.012	2.681	1929.567	132.725	1914.548	77.551	1941.598	52.048	1941.598	52.048	1.393
107244az1_95_Zrn	3.497	0.086	0.269	0.010	3.729	1526.431	85.408	1537.689	61.373	1507.316	56.206	1507.316	56.206	-2.015
107244az1_97_Zrn	2.584	0.074	0.202	0.008	4.081	1296.183	73.494	1188.518	50.215	1481.444	60.457	1481.444	60.457	19.773
107244az1_99_Zrn	0.572	0.014	0.073	0.003	3.655	459.561	14.115	454.255	16.603	480.065	65.359	454.255	16.603	5.376
107244az1_100_Zrn	3.886	0.235	0.260	0.017	5.734	1610.768	225.240	1488.008	109.688	1774.652	101.754	1774.652	101.754	16.152
107244az1_101_Zrn	6.168	0.147	0.367	0.013	2.609	1999.948	143.645	2013.075	82.170	1986.364	51.831	1986.364	51.831	-1.345
107244az1_103_Zrn	3.892	0.093	0.285	0.010	3.397	1612.090	92.707	1616.381	64.216	1606.857	54.589	1606.857	54.589	-0.593
107244az1_104_Zrn	3.583	0.101	0.261	0.009	3.814	1545.836	100.066	1496.357	59.913	1604.858	61.204	1604.858	61.204	6.761
107244az1_106_Zrn	4.240	0.125	0.284	0.011	3.383	1681.887	123.534	1611.258	72.299	1783.821	60.353	1783.821	60.353	9.674
107244az1_107_Zrn	6.432	0.640	0.218	0.010	2.765	2036.690	563.614	1271.136	63.850	3415.452	94.445	3415.452	94.445	62.783
107244az1_108_Zrn	3.402	0.123	0.241	0.011	4.120	1504.777	121.551	1392.451	67.999	1670.010	68.804	1670.010	68.804	16.620
1072-045, Late Cretaceous Arenisca Tierna Formation (N = 88)														
107245az1_1_Zrn	2.882	0.067	0.237	0.008	3.961	1377.242	66.682	1369.339	52.501	1389.644	55.046	1389.644	55.046	1.461
107245az1_3_Zrn	13.051	0.301	0.515	0.018	1.764	2683.324	285.115	2678.209	113.881	2685.515	47.385	2685.515	47.385	0.272
107245az1_6_Zrn	3.340	0.077	0.257	0.009	3.573	1490.524	76.909	1472.259	56.813	1513.012	54.060	1513.012	54.060	2.693
107245az1_7_Zrn	2.481	0.057	0.214	0.007	4.325	1266.550	57.307	1252.734	47.495	1287.948	55.707	1287.948	55.707	2.734
107245az1_9_Zrn	3.058	0.072	0.246	0.009	3.896	1422.169	71.858	1419.115	54.743	1423.725	55.465	1423.725	55.465	0.324
107245az1_10_Zrn	4.478	0.105	0.301	0.010	2.998	1726.972	104.316	1694.572	66.894	1766.997	52.971	1766.997	52.971	4.099
107245az1_11_Zrn	1.736	0.041	0.170	0.006	5.630	1021.906	41.450	1011.389	37.780	1045.373	58.854	1045.373	58.854	3.251
107245az1_12_Zrn	3.518	0.088	0.278	0.010	3.911	1531.204	87.191	1581.657	61.542	1462.618	57.208	1462.618	57.208	-8.139
107245az1_13_Zrn	5.639	0.131	0.345	0.012	2.655	1922.022	128.474	1912.709	76.511	1934.280	51.360	1934.280	51.360	1.115
107245az1_14_Zrn	2.593	0.062	0.220	0.008	4.312	1298.711	62.297	1280.415	48.902	1322.658	57.034	1322.658	57.034	3.194
107245az1_15_Zrn	5.613	0.130	0.341	0.012	2.636	1918.029	127.711	1891.039	75.671	1947.009	51.321	1947.009	51.321	2.875
107245az1_16_Zrn	5.755	0.133	0.350	0.012	2.632	1939.689	130.970	1933.028	77.404	1947.208	51.255	1947.208	51.255	0.728
107245az1_17_Zrn	3.269	0.077	0.258	0.009	3.752	1473.812	76.758	1477.457	57.213	1468.541	55.093	1468.541	55.093	-0.607
107245az1_18_Zrn	3.464	0.080	0.263	0.009	3.498	1518.950	79.280	1507.279	58.242	1535.158	53.703	1535.158	53.703	1.816
107245az1_19_Zrn	2.487	0.057	0.215	0.007	4.338	1268.363	57.414	1258.037	47.705	1283.951	55.699	1283.951	55.699	2.018
107245az1_20_Zrn	4.458	0.104	0.302	0.010	3.015	1723.202	102.810	1700.779	67.146	1750.618	52.777	1750.618	52.777	2.847
107245az1_21_Zrn	2.055	0.049	0.192	0.007	5.061	1134.076	48.707	1130.958	42.554	1141.283	57.755	1141.283	57.755	0.905
107245az1_22_Zrn	2.543	0.061	0.222	0.008	4.509	1284.519	60.711	1294.356	49.496	1266.956	57.124	1266.956	57.124	-2.163
107245az1_23_Zrn	1.995	0.048	0.187	0.006	5.152	1113.904	48.281	1105.495	41.530	1137.568	58.607	1137.568	58.607	2.819
107245az1_24_Zrn	3.103	0.073	0.251	0.009	3.939	1433.389	72.672	1445.577	56.107	1412.540	55.635	1412.540	55.635	-2.339
107245az1_26_Zrn	4.349	0.103	0.293	0.010	3.019	1702.648	101.789	1658.428	65.697	1760.773	53.158	1760.773	53.158	5.813
107245az1_27_Zrn	2.703	0.064	0.233	0.008	4.372	1329.258	64.219	1349.040	52.037	1296.385	56.679	1296.385	56.679	-4.062
107245az1_28_Zrn	2.525	0.059	0.219	0.008	4.364	1279.151	58.978	1274.926	48.615	1285.931	56.116	1285.931	56.116	0.856
107245az1_30_Zrn	4.558	0.115	0.309	0.011	3.093	1741.564	113.884	1736.627	71.313	1744.403	53.951	1744.403	53.951	0.446
107245az1_31_Zrn	3.004	0.070	0.244	0.008	3.920	1408.671	70.125	1405.176	54.117	1411.551	55.332	1411.551	55.332	0.452
107245az1_32_Zrn	5.971	0.138	0.350	0.012	2.529	1971.581	135.704	1932.579	77.504	2011.380	50.866	2011.380	50.866	3.918
107245az1_34_Zrn	2.348	0.055	0.210	0.007	4.646	1226.917	55.341	1227.511	46.656	1225.314	56.933	1225.314	56.933	-0.179
107245az1_35_Zrn	2.713	0.063	0.230	0.008	4.187	1331.907	63.176	1332.561	50.962	1331.126	55.736	1331.126	55.736	-0.108
107245az1_36_Zrn	6.020	0.142	0.357	0.012	2.591	1978.725	139.364	1969.629	79.273	1991.218	51.597	1991.218	51.597	1.084
107245az1_37_Zrn	2.475	0.058	0.218	0.008	4.504	1264.734	58.118	1270.847	48.401	1255.558	56.553	1255.558	56.553	-1.218
107245az1_38_Zrn	1.529	0.036	0.156	0.005	3.713	942.106	35.808	932.648	34.633	965.422	58.643	932.648	34.633	3.395
107245az1_39_Zrn	2.275	0.057	0.201	0.007	4.793	1204.581	57.241	1180.134	45.031	1242.859	59.568	1242.859	59.568	5.047
107245az1_40_Zrn	4.503	0.105	0.305	0.011	3.019	1731.468	103.964	1715.408	67.813	1748.365	52.786	1748.365	52.786	1.885

107245az1_41_Zrn	0.652	0.020	0.083	0.003	3.762	509.980	19.881	514.379	19.353	493.739	76.507	514.379	19.353	-4.180
107245az1_42_Zrn	1.669	0.039	0.165	0.006	3.727	996.729	39.478	983.866	36.672	1024.352	58.623	983.866	36.672	3.952
107245az1_43_Zrn	4.544	0.105	0.307	0.011	2.985	1739.001	104.167	1724.958	68.010	1758.175	52.477	1758.175	52.477	1.889
107245az1_45_Zrn	5.238	0.122	0.334	0.012	2.798	1858.777	120.310	1858.186	74.102	1859.574	52.024	1859.574	52.024	0.075
107245az1_46_Zrn	4.651	0.108	0.312	0.011	2.959	1758.505	106.558	1748.193	69.016	1770.615	52.388	1770.615	52.388	1.266
107245az1_47_Zrn	4.425	0.104	0.302	0.010	3.050	1716.963	102.914	1701.709	66.998	1740.002	53.070	1740.002	53.070	2.201
107245az1_48_Zrn	1.580	0.040	0.167	0.006	3.754	962.446	40.479	995.198	37.360	882.323	63.277	995.198	37.360	-12.793
107245az1_49_Zrn	5.757	0.134	0.347	0.012	2.626	1939.919	131.745	1921.960	77.130	1958.091	51.423	1958.091	51.423	1.845
107245az1_50_Zrn	2.137	0.057	0.191	0.007	5.059	1160.917	56.840	1125.863	43.044	1224.116	61.925	1224.116	61.925	8.026
107245az1_52_Zrn	4.409	0.103	0.303	0.010	3.074	1713.955	101.977	1706.926	67.490	1721.607	52.924	1721.607	52.924	0.853
107245az1_53_Zrn	3.021	0.070	0.244	0.008	3.864	1412.905	70.089	1405.859	54.106	1420.534	54.888	1420.534	54.888	1.033
107245az1_56_Zrn	2.796	0.066	0.230	0.008	4.065	1354.502	65.841	1335.913	51.164	1373.110	55.813	1373.110	55.813	2.709
107245az1_57_Zrn	2.405	0.056	0.210	0.007	4.471	1244.001	56.418	1231.466	46.856	1262.482	56.440	1262.482	56.440	2.457
107245az1_58_Zrn	3.315	0.078	0.257	0.009	3.662	1484.662	77.302	1476.933	57.295	1492.661	54.654	1492.661	54.654	1.054
107245az1_59_Zrn	9.219	0.362	0.416	0.019	2.731	2360.038	338.012	2243.397	120.834	2453.427	66.996	2453.427	66.996	8.561
107245az1_60_Zrn	2.537	0.059	0.218	0.008	4.284	1282.799	58.890	1270.927	48.308	1301.558	55.764	1301.558	55.764	2.353
107245az1_61_Zrn	3.201	0.078	0.253	0.009	3.847	1457.422	77.322	1452.735	56.274	1461.789	56.237	1461.789	56.237	0.619
107245az1_62_Zrn	1.396	0.033	0.144	0.005	3.733	887.037	33.399	865.623	32.313	962.289	59.473	865.623	32.313	10.045
107245az1_63_Zrn	2.959	0.071	0.236	0.008	3.861	1397.180	70.968	1363.562	53.026	1449.499	55.965	1449.499	55.965	5.929
107245az1_64_Zrn	0.791	0.020	0.100	0.003	3.628	592.007	20.309	612.234	22.215	513.362	67.000	612.234	22.215	-19.260
107245az1_66_Zrn	3.706	0.087	0.267	0.009	3.299	1572.737	86.656	1525.200	59.704	1634.420	53.926	1634.420	53.926	6.682
107245az1_67_Zrn	2.513	0.059	0.213	0.007	4.206	1275.842	59.208	1243.180	47.353	1334.422	56.132	1334.422	56.132	6.838
107245az1_68_Zrn	3.351	0.085	0.250	0.009	3.647	1493.091	84.555	1439.135	57.948	1569.332	57.226	1569.332	57.226	8.296
107245az1_69_Zrn	2.756	0.065	0.232	0.008	4.160	1343.791	64.509	1343.916	51.492	1341.275	55.800	1341.275	55.800	-0.197
107245az1_70_Zrn	4.425	0.103	0.300	0.010	3.013	1717.006	102.282	1689.233	66.704	1751.212	52.763	1751.212	52.763	3.539
107245az1_72_Zrn	4.008	0.093	0.282	0.010	3.168	1635.876	92.724	1602.022	62.679	1679.522	53.202	1679.522	53.202	4.614
107245az1_73_Zrn	3.201	0.154	0.243	0.012	5.917	1457.473	150.707	1400.091	80.148	1541.360	91.198	1541.360	91.198	9.165
107245az1_74_Zrn	4.611	0.109	0.310	0.011	3.019	1751.171	108.118	1741.625	69.232	1762.100	53.189	1762.100	53.189	1.162
107245az1_75_Zrn	5.615	0.131	0.340	0.012	2.638	1918.377	128.787	1886.950	75.493	1951.056	51.460	1951.056	51.460	3.286
107245az1_76_Zrn	3.318	0.078	0.260	0.009	3.698	1485.408	77.405	1489.528	57.742	1480.586	54.748	1480.586	54.748	-0.604
107245az1_77_Zrn	3.233	0.076	0.257	0.009	3.793	1465.049	75.722	1472.630	57.037	1452.808	55.108	1452.808	55.108	-1.364
107245az1_80_Zrn	4.691	0.114	0.312	0.011	3.030	1765.569	112.251	1750.684	70.643	1774.686	53.767	1774.686	53.767	1.352
107245az1_81_Zrn	3.658	0.089	0.261	0.009	3.315	1562.360	88.039	1496.353	59.035	1652.541	54.787	1652.541	54.787	9.451
107245az1_82_Zrn	3.748	0.092	0.273	0.010	3.437	1581.591	91.299	1555.147	62.258	1619.274	55.659	1619.274	55.659	3.960
107245az1_83_Zrn	6.903	0.167	0.376	0.013	2.347	2099.040	162.822	2055.823	84.752	2175.385	51.052	2175.385	51.052	5.496
107245az1_84_Zrn	3.824	0.091	0.279	0.010	3.356	1597.772	90.353	1585.061	62.408	1618.467	54.314	1618.467	54.314	2.064
107245az1_85_Zrn	5.878	0.141	0.356	0.012	2.688	1957.943	138.099	1965.155	80.124	1944.786	52.282	1944.786	52.282	-1.047
107245az1_86_Zrn	3.960	0.114	0.272	0.010	3.430	1625.969	112.292	1550.682	67.041	1723.603	59.118	1723.603	59.118	10.033
107245az1_87_Zrn	2.812	0.068	0.232	0.008	4.116	1358.832	67.981	1347.004	52.522	1373.704	56.540	1373.704	56.540	1.944
107245az1_88_Zrn	2.846	0.068	0.232	0.008	4.006	1367.721	68.002	1346.150	52.235	1397.391	55.984	1397.391	55.984	3.667
107245az1_89_Zrn	2.965	0.070	0.241	0.008	3.944	1398.765	70.144	1393.587	54.033	1408.831	55.563	1408.831	55.563	1.082
107245az1_90_Zrn	2.576	0.062	0.225	0.008	4.505	1293.915	61.573	1305.737	50.354	1267.264	57.086	1267.264	57.086	-3.036
107245az1_91_Zrn	3.278	0.078	0.257	0.009	3.755	1475.949	78.117	1471.973	57.639	1477.766	55.486	1477.766	55.486	0.392
107245az1_92_Zrn	3.230	0.079	0.248	0.009	3.703	1464.449	79.074	1429.259	56.076	1519.627	56.273	1519.627	56.273	5.947
107245az1_93_Zrn	5.936	0.140	0.351	0.012	2.592	1966.564	137.616	1941.715	78.597	1991.931	51.623	1991.931	51.623	2.521
107245az1_94_Zrn	5.940	0.140	0.348	0.012	2.570	1967.152	137.605	1927.364	78.060	2008.827	51.621	2008.827	51.621	4.055
107245az1_95_Zrn	5.746	0.136	0.350	0.012	2.671	1938.298	133.220	1933.574	78.126	1941.955	51.865	1941.955	51.865	4.432
107245az1_96_Zrn	7.510	0.178	0.398	0.014	2.312	2174.231	172.945	2160.198	89.047	2187.816	50.580	2187.816	50.580	1.262
107245az1_97_Zrn	5.870	0.139	0.352	0.012	2.640	1956.848	136.018	1943.573	78.507	1965.533	51.886	1965.533	51.886	1.117
107245az1_100_Zrn	4.183	0.097	0.294	0.010	3.160	1670.610	96.141	1661.712	65.169	1677.585	53.019	1677.585	53.019	0.946
107245az1_102_Zrn	3.303	0.078	0.253	0.009	3.600	1481.747	77.257	1455.122	56.536	1518.597	54.667	1518.597	54.667	4.180
107245az1_103_Zrn	4.629	0.109	0.312	0.011	3.007	1754.511	107.446	1749.974	69.444	1758.685	52.876	1758.685	52.876	0.495

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
107245az1_104_Zrn	10.798	0.253	0.461	0.016	1.891	2505.898	241.461	2442.350	102.462	2558.108	48.366	2558.108	48.366	4.525
107245az1_105_Zrn	6.485	0.150	0.368	0.013	2.445	2043.905	146.926	2022.249	81.682	2066.998	50.542	2066.998	50.542	2.165
107245az1_106_Zrn	2.947	0.070	0.241	0.008	3.968	1394.151	69.472	1389.774	53.668	1401.403	55.605	1401.403	55.605	0.830
107245az1_109_Zrn	4.360	0.102	0.301	0.010	3.103	1704.715	101.323	1698.421	67.271	1713.547	53.178	1713.547	53.178	0.883
107245az1_110_Zrn	5.792	0.136	0.346	0.012	2.619	1945.196	133.959	1916.624	77.355	1972.443	51.653	1972.443	51.653	2.830
1072-046, Late Cretaceous Chipaque Formation (N = 61)														
107246az1_1_Zrn	6.139	0.136	0.364	0.012	2.450	1995.785	133.348	1998.858	77.209	1992.183	48.812	1992.183	48.812	-0.335
107246az1_2_Zrn	2.967	0.068	0.236	0.008	3.694	1399.274	68.021	1366.009	51.182	1453.105	53.671	1453.105	53.671	5.994
107246az1_3_Zrn	3.008	0.067	0.245	0.008	3.733	1409.549	66.520	1410.789	51.957	1409.679	52.625	1409.679	52.625	-0.079
107246az1_6_Zrn	7.388	0.165	0.388	0.013	2.174	2159.539	160.536	2113.975	82.647	2202.970	47.885	2202.970	47.885	4.040
107246az1_9_Zrn	4.163	0.093	0.292	0.010	3.011	1666.676	92.061	1651.516	62.093	1690.335	50.892	1690.335	50.892	2.297
107246az1_10_Zrn	3.984	0.092	0.286	0.010	3.196	1630.853	91.228	1620.219	62.083	1645.592	52.587	1645.592	52.587	1.542
107246az1_11_Zrn	2.921	0.066	0.239	0.008	3.825	1387.302	65.652	1380.946	51.104	1394.000	53.315	1394.000	53.315	0.936
107246az1_15_Zrn	4.286	0.100	0.285	0.010	2.907	1690.699	99.517	1618.836	62.182	1784.364	51.879	1784.364	51.879	9.277
107246az1_16_Zrn	3.072	0.071	0.247	0.008	3.740	1425.835	71.067	1421.459	53.424	1435.568	53.694	1435.568	53.694	0.983
107246az1_17_Zrn	5.539	0.125	0.340	0.011	2.592	1906.663	122.730	1884.766	72.635	1923.142	49.856	1923.142	49.856	1.995
107246az1_18_Zrn	2.958	0.067	0.239	0.008	3.759	1396.781	67.005	1380.982	51.279	1418.152	53.307	1418.152	53.307	2.621
107246az1_21_Zrn	3.325	0.113	0.242	0.010	4.208	1487.003	111.511	1396.415	62.770	1621.242	68.219	1621.242	68.219	13.868
107246az1_22_Zrn	2.869	0.066	0.237	0.008	3.933	1373.907	65.525	1373.336	51.102	1373.184	54.010	1373.184	54.010	-0.011
107246az1_23_Zrn	4.820	0.110	0.316	0.011	2.826	1788.355	108.858	1772.357	68.156	1804.103	50.988	1804.103	50.988	1.760
107246az1_25_Zrn	3.344	0.077	0.256	0.009	3.485	1491.484	76.538	1469.305	55.324	1519.953	52.963	1519.953	52.963	3.332
107246az1_27_Zrn	3.315	0.074	0.255	0.008	3.424	1484.584	74.102	1462.945	54.509	1523.067	52.151	1523.067	52.151	3.947
107246az1_31_Zrn	3.966	0.143	0.268	0.011	3.723	1627.358	140.403	1531.967	68.137	1788.662	66.600	1788.662	66.600	14.351
107246az1_35_Zrn	4.130	0.099	0.288	0.010	3.095	1660.330	98.180	1633.061	63.976	1699.682	52.598	1699.682	52.598	3.920
107246az1_37_Zrn	5.610	0.125	0.339	0.011	2.524	1917.595	123.105	1882.668	72.352	1955.866	49.359	1955.866	49.359	3.743
107246az1_40_Zrn	2.556	0.060	0.217	0.007	4.196	1288.028	59.888	1265.603	47.565	1326.042	55.640	1326.042	55.640	4.558
107246az1_41_Zrn	5.525	0.122	0.337	0.011	2.538	1904.484	120.166	1874.206	71.767	1936.358	49.147	1936.358	49.147	3.210
107246az1_42_Zrn	5.626	0.127	0.342	0.011	2.555	1920.167	125.322	1897.803	73.580	1952.539	49.879	1952.539	49.879	2.803
107246az1_45_Zrn	4.437	0.117	0.295	0.011	3.218	1719.311	115.764	1664.972	69.498	1785.628	57.465	1785.628	57.465	6.757
107246az1_47_Zrn	4.736	0.105	0.316	0.010	2.821	1773.546	103.576	1770.315	67.095	1776.673	50.114	1776.673	50.114	0.358
107246az1_48_Zrn	5.675	0.135	0.333	0.011	2.580	1927.506	132.724	1852.397	73.451	2009.430	51.836	2009.430	51.836	7.815
107246az1_49_Zrn	3.862	0.091	0.274	0.009	3.194	1605.727	90.758	1561.633	60.361	1664.417	53.162	1664.417	53.162	6.175
107246az1_51_Zrn	4.831	0.107	0.317	0.011	2.773	1790.242	105.903	1777.243	67.540	1804.518	50.045	1804.518	50.045	1.512
107246az1_52_Zrn	5.827	0.129	0.350	0.012	2.498	1950.386	127.234	1933.226	74.337	1965.988	49.120	1965.988	49.120	1.666
107246az1_54_Zrn	9.195	0.223	0.430	0.015	2.101	2357.617	215.101	2306.549	96.847	2403.879	50.506	2403.879	50.506	4.049
107246az1_55_Zrn	4.575	0.101	0.309	0.010	2.866	1744.651	100.212	1738.089	65.780	1753.559	50.263	1753.559	50.263	0.882
107246az1_56_Zrn	2.506	0.056	0.215	0.007	4.114	1273.794	55.802	1257.392	45.864	1301.275	53.539	1301.275	53.539	3.372
107246az1_57_Zrn	2.837	0.064	0.229	0.008	3.713	1365.283	63.530	1327.225	48.859	1426.857	52.981	1426.857	52.981	6.983
107246az1_58_Zrn	5.094	0.113	0.323	0.011	2.657	1835.122	111.751	1803.240	68.671	1869.939	49.691	1869.939	49.691	3.567
107246az1_59_Zrn	5.693	0.126	0.345	0.011	2.517	1930.240	124.259	1908.705	73.269	1953.535	49.165	1953.535	49.165	2.295
107246az1_60_Zrn	4.169	0.094	0.288	0.010	2.993	1667.854	93.689	1631.819	61.984	1717.464	51.410	1717.464	51.410	4.987
107246az1_62_Zrn	3.020	0.067	0.242	0.008	3.669	1412.673	67.161	1397.270	51.560	1435.474	52.674	1435.474	52.674	2.661
107246az1_65_Zrn	4.031	0.090	0.285	0.009	3.065	1640.442	89.629	1616.311	61.059	1675.234	51.344	1675.234	51.344	3.517
107246az1_68_Zrn	2.638	0.060	0.227	0.008	4.179	1311.176	59.801	1317.327	48.280	1298.908	54.276	1298.908	54.276	-1.418
107246az1_69_Zrn	3.246	0.073	0.252	0.008	3.505	1468.338	72.438	1450.093	53.832	1493.235	52.334	1493.235	52.334	2.889
107246az1_70_Zrn	0.811	0.019	0.099	0.003	3.468	603.278	18.782	609.082	21.121	579.166	61.059	609.082	21.121	-5.165

107246az1_71_Zrn	3.000	0.070	0.245	0.008	3.891	1407.572	69.995	1410.567	52.355	1401.473	54.526	1401.473	54.526	-0.649
107246az1_72_Zrn	4.323	0.098	0.292	0.010	2.911	1697.769	96.937	1652.592	62.811	1754.575	51.069	1754.575	51.069	5.812
107246az1_74_Zrn	3.092	0.073	0.239	0.008	3.568	1430.793	73.121	1378.935	52.300	1511.177	53.919	1511.177	53.919	8.751
107246az1_77_Zrn	4.174	0.096	0.286	0.010	2.953	1668.968	95.545	1623.039	61.838	1746.538	51.575	1746.538	51.575	7.071
107246az1_78_Zrn	3.342	0.076	0.254	0.008	3.424	1490.970	75.283	1458.157	54.545	1532.741	52.479	1532.741	52.479	4.866
107246az1_82_Zrn	12.886	0.290	0.494	0.016	1.673	2671.382	275.204	2586.144	105.730	2735.849	45.770	2735.849	45.770	5.472
107246az1_83_Zrn	5.716	0.130	0.342	0.011	2.521	1933.858	127.820	1897.159	73.495	1976.417	49.828	1976.417	49.828	4.010
107246az1_85_Zrn	5.853	0.133	0.348	0.012	2.511	1954.348	130.554	1927.386	74.786	1982.446	49.777	1982.446	49.777	2.777
107246az1_86_Zrn	5.136	0.123	0.316	0.011	2.664	1842.048	121.403	1771.141	69.769	1923.002	51.225	1923.002	51.225	7.897
107246az1_87_Zrn	2.657	0.063	0.220	0.008	4.009	1316.722	63.412	1281.309	48.549	1381.300	55.381	1381.300	55.381	7.239
107246az1_88_Zrn	2.831	0.066	0.227	0.008	3.763	1363.707	65.601	1317.426	49.135	1435.433	54.016	1435.433	54.016	8.221
107246az1_90_Zrn	5.963	0.132	0.357	0.012	2.480	1970.496	129.607	1969.385	75.891	1971.436	48.885	1971.436	48.885	0.104
107246az1_91_Zrn	0.087	0.003	0.012	0.000	3.385	85.106	3.244	75.976	2.572	333.934	90.685	75.976	2.572	77.248
107246az1_92_Zrn	4.002	0.124	0.276	0.011	3.873	1634.550	122.421	1570.740	71.026	1717.939	66.531	1717.939	66.531	8.568
107246az1_95_Zrn	4.947	0.114	0.315	0.011	2.746	1810.356	112.976	1766.524	67.569	1860.616	51.100	1860.616	51.100	5.057
107246az1_96_Zrn	7.261	0.162	0.391	0.013	2.226	2144.083	157.856	2127.338	83.087	2162.526	48.147	2162.526	48.147	1.627
107246az1_98_Zrn	5.683	0.129	0.347	0.012	2.586	1928.738	127.273	1919.297	74.755	1942.585	50.229	1942.585	50.229	1.199
107246az1_99_Zrn	4.761	0.106	0.320	0.011	2.866	1778.042	105.120	1787.703	67.978	1763.743	50.541	1763.743	50.541	-1.359
107246az1_104_Zrn	4.366	0.102	0.292	0.010	2.946	1705.904	101.392	1651.321	63.836	1772.863	52.234	1772.863	52.234	6.856
107246az1_105_Zrn	0.550	0.013	0.073	0.002	3.449	444.922	13.361	452.092	15.594	423.655	64.713	452.092	15.594	-6.712
107246az1_106_Zrn	3.417	0.078	0.261	0.009	3.443	1508.299	77.301	1494.694	55.775	1529.873	52.670	1529.873	52.670	2.300
107246az1_109_Zrn	1.773	0.063	0.164	0.006	4.112	1035.801	62.525	979.072	40.260	1155.803	79.502	979.072	40.260	15.291
107246az1_110_Zrn	5.885	0.132	0.348	0.012	2.476	1958.984	129.689	1925.305	74.410	1994.808	49.401	1994.808	49.401	3.484
1072-052, Late Cretaceous Dura Formation (N = 59)														
107252az1_2_Zrn	10.015	0.220	0.451	0.015	1.873	2436.152	211.992	2399.123	95.479	2467.069	46.206	2467.069	46.206	2.754
107252az1_3_Zrn	2.157	0.048	0.201	0.007	4.801	1167.292	47.978	1180.722	42.700	1139.097	54.693	1139.097	54.693	-3.654
107252az1_4_Zrn	4.202	0.093	0.295	0.010	3.006	1674.387	92.305	1666.024	62.703	1686.758	50.707	1686.758	50.707	1.229
107252az1_6_Zrn	5.007	0.151	0.315	0.013	3.368	1820.585	147.346	1765.131	84.269	1884.650	63.480	1884.650	63.480	6.342
107252az1_9_Zrn	3.498	0.078	0.268	0.009	3.407	1526.767	77.591	1528.177	56.746	1525.663	51.978	1525.663	51.978	-0.165
107252az1_11_Zrn	3.077	0.070	0.242	0.008	3.611	1426.933	69.603	1398.608	51.975	1469.657	53.067	1469.657	53.067	4.834
107252az1_12_Zrn	4.989	0.113	0.316	0.011	2.684	1817.411	111.322	1769.152	67.772	1871.469	50.231	1871.469	50.231	5.467
107252az1_14_Zrn	3.371	0.075	0.260	0.009	3.454	1497.753	74.680	1488.302	55.261	1507.411	52.060	1507.411	52.060	1.268
107252az1_16_Zrn	5.955	0.133	0.358	0.012	2.500	1969.352	130.357	1971.346	76.131	1966.948	49.174	1966.948	49.174	-0.224
107252az1_17_Zrn	4.818	0.107	0.319	0.011	2.799	1787.981	105.576	1785.988	67.843	1788.893	50.070	1788.893	50.070	0.162
107252az1_20_Zrn	4.706	0.105	0.317	0.010	2.866	1768.284	103.652	1775.665	67.391	1759.408	50.430	1759.408	50.430	-0.924
107252az1_21_Zrn	2.979	0.066	0.244	0.008	3.767	1402.159	65.664	1406.274	51.779	1396.074	52.594	1396.074	52.594	-0.731
107252az1_23_Zrn	3.201	0.071	0.251	0.008	3.526	1457.394	70.557	1444.289	53.325	1475.546	52.034	1475.546	52.034	2.118
107252az1_24_Zrn	4.934	0.110	0.323	0.011	2.766	1808.158	108.999	1803.606	68.648	1815.395	50.208	1815.395	50.208	0.649
107252az1_33_Zrn	4.454	0.098	0.301	0.010	2.855	1722.446	97.299	1697.346	63.890	1755.754	50.126	1755.754	50.126	3.327
107252az1_38_Zrn	2.837	0.063	0.236	0.008	3.884	1365.472	62.995	1365.531	50.143	1365.459	53.033	1365.459	53.033	-0.005
107252az1_39_Zrn	3.465	0.111	0.258	0.010	4.138	1519.258	109.638	1479.071	65.702	1573.690	65.122	1573.690	65.122	6.013
107252az1_42_Zrn	5.579	0.128	0.336	0.011	2.560	1912.907	125.679	1865.528	72.833	1965.124	50.310	1965.124	50.310	5.068
107252az1_43_Zrn	2.945	0.067	0.239	0.008	3.776	1393.630	66.912	1378.936	50.846	1417.130	53.515	1417.130	53.515	2.695
107252az1_44_Zrn	2.552	0.057	0.220	0.007	4.157	1287.043	56.977	1283.304	46.807	1292.645	53.737	1292.645	53.737	0.723
107252az1_45_Zrn	5.857	0.129	0.353	0.012	2.497	1954.943	127.378	1948.414	74.869	1961.834	48.980	1961.834	48.980	0.684
107252az1_46_Zrn	3.611	0.080	0.272	0.009	3.326	1551.857	79.661	1550.790	57.740	1552.942	51.649	1552.942	51.649	0.139
107252az1_47_Zrn	2.816	0.063	0.236	0.008	3.924	1359.839	62.585	1363.309	50.017	1354.442	53.155	1354.442	53.155	-0.655
107252az1_48_Zrn	4.097	0.121	0.293	0.012	3.891	1653.606	118.940	1655.604	74.167	1651.907	64.280	1651.907	64.280	-0.224
107252az1_49_Zrn	4.517	0.101	0.309	0.010	2.937	1734.115	100.304	1734.320	65.694	1731.910	50.869	1731.910	50.869	-0.139
107252az1_54_Zrn	1.864	0.041	0.180	0.006	5.106	1068.546	41.309	1065.421	38.164	1077.227	55.005	1077.227	55.005	1.096
107252az1_56_Zrn	4.684	0.112	0.306	0.011	2.933	1764.450	110.809	1723.427	68.166	1812.971	53.183	1812.971	53.183	4.939
107252az1_57_Zrn	4.565	0.102	0.310	0.010	2.890	1742.918	100.604	1739.813	65.936	1747.600	50.506	1747.600	50.506	0.446

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Analysis ID	Isotopic Ratios				Uncertainty (%)	Apparent Ages (Ma)						Preferred Age (Ma)	± (Ma)	Discord (%)
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)		207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)	± (Ma)			
107252az1_59_Zrn	4.424	0.098	0.302	0.010	2.904	1716.836	97.182	1699.565	64.172	1737.889	50.467	1737.889	50.467	2.205
107252az1_60_Zrn	5.617	0.124	0.348	0.011	2.581	1918.703	122.535	1923.464	73.809	1912.837	49.367	1912.837	49.367	-0.556
107252az1_61_Zrn	4.269	0.094	0.295	0.010	2.949	1687.372	93.646	1666.802	62.766	1714.211	50.557	1714.211	50.557	2.766
107252az1_62_Zrn	4.367	0.201	0.281	0.010	4.756	1706.132	194.794	1598.124	65.450	1841.179	87.564	1841.179	87.564	13.201
107252az1_64_Zrn	2.476	0.055	0.215	0.007	4.219	1264.908	55.106	1257.732	45.803	1274.479	53.771	1274.479	53.771	1.314
107252az1_65_Zrn	2.168	0.048	0.201	0.007	4.750	1170.988	48.494	1181.295	42.751	1153.510	54.791	1153.510	54.791	-2.409
107252az1_67_Zrn	4.656	0.111	0.304	0.010	2.911	1759.348	110.010	1710.679	67.300	1819.500	52.972	1819.500	52.972	5.981
107252az1_71_Zrn	4.589	0.103	0.308	0.010	2.877	1747.321	102.209	1729.235	65.859	1770.182	50.933	1770.182	50.933	2.313
107252az1_72_Zrn	3.199	0.071	0.254	0.008	3.604	1456.915	70.705	1458.214	53.978	1451.583	52.318	1451.583	52.318	-0.457
107252az1_73_Zrn	4.780	0.106	0.316	0.010	2.781	1781.431	104.556	1769.584	67.089	1797.112	49.978	1797.112	49.978	1.532
107252az1_74_Zrn	4.468	0.102	0.298	0.010	2.870	1724.998	101.447	1681.879	63.486	1784.538	51.212	1784.538	51.212	5.753
107252az1_75_Zrn	4.729	0.105	0.311	0.010	2.772	1772.391	103.874	1743.576	66.205	1807.423	50.096	1807.423	50.096	3.532
107252az1_76_Zrn	3.985	0.089	0.285	0.009	3.104	1631.056	88.314	1618.406	60.875	1650.748	51.244	1650.748	51.244	1.959
107252az1_79_Zrn	5.751	0.134	0.349	0.012	2.600	1939.004	131.289	1930.993	75.104	1943.970	50.546	1943.970	50.546	0.668
107252az1_80_Zrn	2.402	0.062	0.207	0.007	4.619	1243.189	62.139	1211.650	47.624	1301.088	60.096	1301.088	60.096	6.874
107252az1_81_Zrn	4.298	0.096	0.294	0.010	2.944	1692.984	95.601	1662.214	62.875	1730.797	50.954	1730.797	50.954	3.963
107252az1_82_Zrn	5.143	0.121	0.322	0.011	2.729	1843.211	118.826	1801.819	70.609	1893.373	51.676	1893.373	51.676	4.835
107252az1_83_Zrn	4.597	0.102	0.310	0.010	2.855	1748.722	100.847	1738.608	65.734	1761.232	50.280	1761.232	50.280	1.285
107252az1_84_Zrn	4.986	0.116	0.318	0.011	2.752	1816.999	114.666	1779.372	68.994	1869.526	51.444	1869.526	51.444	4.822
107252az1_86_Zrn	3.988	0.097	0.279	0.010	3.034	1631.722	96.658	1584.694	62.021	1696.164	51.463	1696.164	51.463	6.572
107252az1_91_Zrn	4.749	0.105	0.313	0.010	2.784	1775.905	104.176	1756.132	66.559	1798.202	50.055	1798.202	50.055	2.340
107252az1_93_Zrn	1.576	0.036	0.161	0.005	3.567	960.848	35.733	959.724	34.238	956.793	56.814	959.724	34.238	-0.306
107252az1_94_Zrn	2.620	0.064	0.216	0.008	4.054	1306.387	64.337	1261.226	48.370	1381.569	56.011	1381.569	56.011	8.711
107252az1_96_Zrn	2.855	0.275	0.224	0.022	8.019	1370.096	262.022	1304.823	141.569	1473.376	118.144	1473.376	118.144	11.440
107252az1_101_Zrn	3.374	0.075	0.266	0.009	3.582	1498.449	75.212	1519.912	56.555	1466.729	52.541	1466.729	52.541	-3.626
107252az1_102_Zrn	2.638	0.058	0.226	0.007	4.082	1311.433	58.138	1315.026	48.009	1302.697	53.182	1302.697	53.182	-0.946
107252az1_103	3.452	0.079	0.266	0.009	3.509	1516.390	78.640	1519.671	56.646	1512.130	53.055	1512.130	53.055	-0.499
107252az1_104_Zrn	6.087	0.135	0.357	0.012	2.425	1988.331	132.201	1966.959	75.781	2010.458	48.747	2010.458	48.747	2.164
107252az1_106_Zrn	4.152	0.100	0.286	0.010	3.166	1664.557	99.500	1622.937	64.381	1717.682	54.387	1717.682	54.387	5.516
107252az1_107_Zrn	0.626	0.014	0.077	0.003	3.471	493.663	14.667	479.183	16.630	563.138	61.746	479.183	16.630	14.908
107252az1_108_Zrn	5.934	0.131	0.358	0.012	2.491	1966.281	128.622	1970.875	75.788	1962.517	48.878	1962.517	48.878	-0.426
1072-053, Late Cretaceous Dura Formation (N = 47)														
107253az1_1_Zrn	0.790	0.018	0.097	0.003	3.468	591.156	18.036	595.334	20.649	569.660	60.670	595.334	20.649	-4.507
107253az1_4_Zrn	4.104	0.202	0.275	0.015	3.000	1655.124	195.802	1566.903	97.631	1767.632	53.032	1767.632	53.032	11.356
107253az1_7_Zrn	4.727	0.141	0.295	0.011	2.808	1772.003	138.365	1666.998	72.811	1906.170	53.530	1906.170	53.530	12.547
107253az1_8_Zrn	0.159	0.054	0.012	0.001	6.822	149.756	54.007	78.663	5.367	1506.908	583.526	78.663	5.367	94.780
107253az1_9_Zrn	3.847	0.089	0.275	0.009	3.207	1602.607	88.683	1566.802	59.944	1649.196	52.886	1649.196	52.886	4.996
107253az1_13_Zrn	3.066	0.068	0.248	0.008	3.726	1424.179	68.164	1427.679	52.743	1415.943	52.760	1415.943	52.760	-0.829
107253az1_16_Zrn	4.006	0.092	0.281	0.009	3.091	1635.407	91.238	1598.719	60.961	1685.085	52.079	1685.085	52.079	5.125
107253az1_17_Zrn	4.876	0.110	0.318	0.011	2.781	1798.098	109.004	1777.852	67.736	1821.381	50.651	1821.381	50.651	2.390
107253az1_19_Zrn	4.635	0.102	0.310	0.010	2.826	1755.509	101.345	1740.208	65.828	1772.910	50.099	1772.910	50.099	1.845
107253az1_20_Zrn	3.062	0.096	0.241	0.010	4.556	1423.306	95.440	1393.231	63.994	1468.017	66.879	1468.017	66.879	5.094
107253az1_21_Zrn	4.386	0.097	0.302	0.010	2.932	1709.778	96.208	1698.889	64.011	1721.548	50.476	1721.548	50.476	1.316
107253az1_23_Zrn	5.761	0.127	0.351	0.012	2.526	1940.599	125.197	1940.197	74.556	1943.220	49.087	1943.220	49.087	0.156
107253az1_26_Zrn	2.891	0.106	0.237	0.008	5.529	1379.520	104.671	1373.212	51.011	1386.399	76.656	1386.399	76.656	0.951
107253az1_27_Zrn	4.340	0.096	0.298	0.010	2.916	1700.992	94.748	1682.882	63.251	1724.917	50.290	1724.917	50.290	2.437

107253az1_28_Zrn	4.818	0.107	0.313	0.010	2.742	1787.959	105.935	1755.639	66.766	1826.363	50.070	1826.363	50.070	3.872
107253az1_29_Zrn	1.752	0.050	0.172	0.006	6.439	1027.749	50.161	1022.615	39.720	1037.737	66.824	1037.737	66.824	1.457
107253az1_30_Zrn	4.353	0.100	0.298	0.010	2.978	1703.449	99.008	1679.871	64.363	1735.812	51.699	1735.812	51.699	3.223
107253az1_32_Zrn	5.980	0.132	0.358	0.012	2.479	1972.938	129.894	1972.039	75.866	1973.321	48.927	1973.321	48.927	0.065
107253az1_35_Zrn	2.354	0.060	0.204	0.007	4.690	1228.630	59.664	1197.854	46.960	1283.126	60.175	1283.126	60.175	6.646
107253az1_38_Zrn	3.110	0.069	0.245	0.008	3.549	1435.217	68.795	1410.077	51.982	1471.810	52.235	1471.810	52.235	4.194
107253az1_39_Zrn	5.492	0.121	0.341	0.011	2.583	1899.372	119.721	1889.122	72.327	1910.266	49.340	1910.266	49.340	1.107
107253az1_40_Zrn	3.175	0.071	0.251	0.008	3.596	1450.981	70.468	1445.653	53.465	1458.094	52.439	1458.094	52.439	0.853
107253az1_41_Zrn	6.149	0.163	0.351	0.013	2.439	1997.171	158.758	1938.184	81.303	2062.106	50.287	2062.106	50.287	6.010
107253az1_44_Zrn	5.754	0.127	0.343	0.011	2.466	1939.569	125.248	1899.481	72.817	1982.414	48.892	1982.414	48.892	4.183
107253az1_45_Zrn	4.987	0.118	0.313	0.011	2.713	1817.150	116.890	1753.523	69.008	1900.441	51.568	1900.441	51.568	7.731
107253az1_47_Zrn	7.528	0.167	0.397	0.013	2.178	2176.272	163.000	2154.989	84.395	2197.442	47.855	2197.442	47.855	1.932
107253az1_48_Zrn	3.442	0.089	0.258	0.009	3.648	1514.115	88.014	1479.294	58.289	1571.309	57.316	1571.309	57.316	5.856
107253az1_52_Zrn	2.431	0.058	0.210	0.007	4.215	1251.717	57.731	1226.751	46.000	1316.066	55.470	1316.066	55.470	6.786
107253az1_55_Zrn	4.891	0.108	0.322	0.011	2.759	1800.659	106.542	1797.526	68.216	1804.646	49.798	1804.646	49.798	0.395
107253az1_58_Zrn	3.339	0.074	0.262	0.009	3.539	1490.142	73.722	1502.110	55.764	1473.708	52.157	1473.708	52.157	-1.927
107253az1_61_Zrn	1.629	0.040	0.159	0.006	3.724	981.629	39.958	951.524	35.430	1051.597	59.258	951.524	35.430	9.516
107253az1_67_Zrn	1.798	0.046	0.171	0.006	5.261	1044.818	45.994	1017.484	38.947	1103.055	58.029	1103.055	58.029	7.758
107253az1_68_Zrn	4.373	0.097	0.304	0.010	2.986	1707.315	96.395	1712.809	64.736	1701.328	50.796	1701.328	50.796	-0.675
107253az1_72_Zrn	3.268	0.097	0.249	0.010	4.286	1473.358	96.068	1431.423	62.529	1534.299	65.757	1534.299	65.757	6.705
107253az1_73_Zrn	4.350	0.097	0.298	0.010	2.934	1702.926	96.515	1680.625	63.764	1731.774	50.819	1731.774	50.819	2.954
107253az1_74_Zrn	4.138	0.096	0.288	0.010	3.087	1661.761	95.133	1629.486	61.996	1699.724	52.477	1699.724	52.477	4.132
107253az1_77_Zrn	3.187	0.072	0.251	0.008	3.602	1454.038	71.966	1441.582	53.161	1469.395	52.921	1469.395	52.921	1.893
107253az1_82_Zrn	4.718	0.107	0.309	0.010	2.799	1770.490	106.154	1737.024	66.591	1812.385	50.737	1812.385	50.737	4.158
107253az1_86_Zrn	3.682	0.081	0.271	0.009	3.212	1567.511	80.930	1546.327	57.512	1594.825	51.230	1594.825	51.230	3.041
107253az1_87_Zrn	5.483	0.122	0.336	0.011	2.552	1897.899	119.811	1865.326	71.429	1932.075	49.300	1932.075	49.300	3.455
107253az1_90_Zrn	3.838	0.086	0.278	0.009	3.177	1600.775	85.961	1579.047	59.684	1630.933	51.812	1630.933	51.812	3.181
107253az1_91_Zrn	4.570	0.103	0.307	0.010	2.834	1743.891	102.188	1726.877	65.794	1781.957	50.493	1781.957	50.493	3.091
107253az1_96_Zrn	1.022	0.148	0.089	0.003	4.107	714.677	145.398	548.383	22.524	1279.550	274.550	548.383	22.524	57.142
107253az1_97_Zrn	1.758	0.039	0.171	0.006	5.230	1030.012	39.534	1015.065	36.507	1064.667	55.680	1064.667	55.680	4.659
107253az1_98_Zrn	4.297	0.095	0.299	0.010	2.966	1692.805	93.950	1685.089	63.349	1702.093	50.480	1702.093	50.480	0.999
107253az1_103_Zrn	2.334	0.199	0.199	0.017	8.479	1222.607	192.352	1168.722	109.336	1318.990	111.831	1318.990	111.831	11.393
107253az1_105_Zrn	2.971	0.067	0.239	0.008	3.728	1400.257	67.101	1381.785	50.808	1426.918	53.196	1426.918	53.196	3.163
107253az1_110_Zrn	5.150	0.114	0.327	0.011	2.654	1844.439	112.401	1825.196	69.622	1868.476	49.583	1868.476	49.583	2.316
1072-145, Late Cretaceous Guaduas Formation (N = 99)														
1072145az1_1_Zrn	3.189	0.081	0.256	0.010	4.189	1454.466	81.081	1467.537	62.160	1436.641	60.188	1436.641	60.188	-2.151
1072145az1_2_Zrn	1.625	0.042	0.164	0.006	4.061	979.942	42.420	980.051	39.797	978.360	65.023	980.051	39.797	-0.173
1072145az1_3_Zrn	3.098	0.078	0.247	0.009	4.101	1432.234	77.556	1420.498	59.689	1449.305	59.439	1449.305	59.439	1.988
1072145az1_5_Zrn	3.333	0.084	0.260	0.010	3.969	1488.825	83.396	1487.437	62.789	1489.911	59.138	1489.911	59.138	0.166
1072145az1_6_Zrn	3.168	0.079	0.249	0.009	4.020	1449.281	79.090	1434.415	60.329	1471.881	59.177	1471.881	59.177	2.545
1072145az1_7_Zrn	4.744	0.119	0.314	0.012	3.178	1775.109	117.581	1761.617	75.984	1789.604	56.878	1789.604	56.878	1.564
1072145az1_8_Zrn	4.569	0.115	0.306	0.012	3.236	1743.613	113.972	1721.507	74.307	1770.410	57.295	1770.410	57.295	2.762
1072145az1_9_Zrn	3.393	0.085	0.257	0.010	3.815	1502.772	84.693	1476.773	62.298	1538.093	58.679	1538.093	58.679	3.987
1072145az1_10_Zrn	2.935	0.074	0.240	0.009	4.276	1390.912	73.712	1384.793	58.091	1401.616	59.938	1401.616	59.938	1.200
1072145az1_11_Zrn	4.002	0.101	0.288	0.011	3.540	1634.608	99.688	1630.861	69.679	1638.729	58.004	1638.729	58.004	0.480
1072145az1_13_Zrn	3.896	0.100	0.279	0.011	3.540	1612.780	99.332	1587.145	68.435	1648.936	58.374	1648.936	58.374	3.747
1072145az1_14_Zrn	1.457	0.037	0.155	0.006	4.056	912.873	37.238	926.165	37.565	880.916	64.991	926.165	37.565	-5.137
1072145az1_16_Zrn	3.063	0.079	0.237	0.009	3.995	1423.607	78.949	1369.664	57.761	1506.164	60.176	1506.164	60.176	9.063
1072145az1_17_Zrn	3.294	0.083	0.257	0.010	3.982	1479.592	82.842	1475.319	62.245	1490.364	59.342	1490.364	59.342	1.009
1072145az1_18_Zrn	3.332	0.086	0.262	0.010	4.079	1488.537	85.180	1498.091	63.459	1474.676	60.150	1474.676	60.150	-1.588
1072145az1_19_Zrn	3.283	0.082	0.255	0.010	3.940	1477.000	81.949	1463.436	61.719	1496.376	58.960	1496.376	58.960	2.201
1072145az1_20_Zrn	2.630	0.067	0.225	0.008	4.656	1309.180	66.819	1308.506	54.506	1310.990	61.043	1310.990	61.043	0.189

(continued)

Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072145az1_21_Zrn	4.317	0.109	0.301	0.011	3.409	1696.539	108.083	1694.539	72.965	1696.463	57.839	1696.463	57.839	0.113
1072145az1_22_Zrn	3.329	0.096	0.247	0.010	4.065	1487.905	95.686	1423.965	64.799	1578.657	64.165	1578.657	64.165	9.799
1072145az1_23_Zrn	3.363	0.085	0.264	0.010	4.056	1495.852	84.883	1512.070	64.314	1470.605	59.652	1470.605	59.652	-2.820
1072145az1_24_Zrn	3.452	0.087	0.264	0.010	3.884	1516.258	86.741	1510.314	64.027	1521.439	59.090	1521.439	59.090	0.731
1072145az1_25_Zrn	3.887	0.098	0.278	0.010	3.515	1610.894	97.319	1582.274	67.502	1649.652	57.993	1649.652	57.993	4.084
1072145az1_26_Zrn	4.652	0.118	0.310	0.012	3.234	1758.727	116.891	1741.422	75.275	1777.659	57.487	1777.659	57.487	2.038
1072145az1_27_Zrn	3.456	0.087	0.262	0.010	3.806	1517.336	86.605	1498.405	63.455	1544.830	58.799	1544.830	58.799	3.005
1072145az1_28_Zrn	4.487	0.115	0.309	0.012	3.385	1728.643	113.683	1733.588	74.710	1719.684	58.208	1719.684	58.208	-0.809
1072145az1_29_Zrn	3.949	0.099	0.285	0.011	3.549	1623.738	98.285	1615.343	68.970	1634.188	57.992	1634.188	57.992	1.153
1072145az1_30_Zrn	4.534	0.114	0.308	0.012	3.278	1737.285	112.378	1730.107	74.413	1743.636	57.151	1743.636	57.151	0.776
1072145az1_31_Zrn	2.522	0.065	0.218	0.008	4.815	1278.475	65.081	1273.890	53.022	1285.627	61.908	1285.627	61.908	0.913
1072145az1_32_Zrn	3.304	0.085	0.259	0.010	4.094	1481.929	84.664	1485.348	63.046	1472.213	60.277	1472.213	60.277	-0.892
1072145az1_33_Zrn	1.912	0.048	0.182	0.007	5.673	1085.129	48.337	1076.031	43.990	1102.107	62.527	1102.107	62.527	2.366
1072145az1_34_Zrn	3.501	0.088	0.263	0.010	3.764	1527.402	87.268	1507.233	63.787	1555.009	58.533	1555.009	58.533	3.072
1072145az1_35_Zrn	4.394	0.112	0.298	0.011	3.269	1711.271	110.241	1682.687	72.417	1759.818	57.521	1759.818	57.521	4.383
1072145az1_36_Zrn	4.767	0.120	0.314	0.012	3.146	1779.092	117.976	1758.300	75.853	1803.498	56.736	1803.498	56.736	2.506
1072145az1_37_Zrn	4.248	0.109	0.289	0.011	3.336	1683.280	107.774	1635.327	71.013	1745.760	58.239	1745.760	58.239	6.326
1072145az1_38_Zrn	4.369	0.112	0.297	0.011	3.326	1706.432	111.018	1676.137	72.999	1750.452	58.217	1750.452	58.217	4.246
1072145az1_39_Zrn	4.536	0.114	0.306	0.012	3.248	1737.538	112.550	1721.030	74.162	1759.576	57.148	1759.576	57.148	2.191
1072145az1_40_Zrn	1.604	0.040	0.162	0.006	4.050	971.800	40.665	969.404	39.259	975.483	63.744	969.404	39.259	0.623
1072145az1_41_Zrn	1.422	0.036	0.150	0.006	4.030	898.161	36.112	900.775	36.300	889.375	64.619	900.775	36.300	-1.282
1072145az1_42_Zrn	2.561	0.065	0.221	0.008	4.748	1289.705	64.929	1287.961	53.661	1288.040	61.160	1288.040	61.160	0.006
1072145az1_44_Zrn	1.622	0.041	0.163	0.006	4.066	978.813	41.486	972.363	39.540	992.873	63.964	972.363	39.540	2.066
1072145az1_45_Zrn	4.484	0.114	0.305	0.012	3.312	1728.019	112.194	1718.171	74.183	1736.290	57.500	1736.290	57.500	1.044
1072145az1_47_Zrn	3.629	0.092	0.270	0.010	3.736	1555.891	91.638	1541.284	65.805	1574.199	58.814	1574.199	58.814	2.091
1072145az1_48_Zrn	2.497	0.064	0.216	0.008	4.795	1271.242	64.051	1261.604	52.596	1286.753	61.700	1286.753	61.700	1.954
1072145az1_49_Zrn	4.060	0.103	0.290	0.011	3.522	1646.398	101.577	1642.379	70.243	1649.573	58.098	1649.573	58.098	0.436
1072145az1_50_Zrn	2.432	0.062	0.215	0.008	4.929	1252.207	61.563	1256.441	52.114	1245.867	61.412	1245.867	61.412	-0.849
1072145az1_51_Zrn	5.809	0.154	0.352	0.014	2.979	1947.821	150.225	1946.250	87.422	1940.859	57.809	1940.859	57.809	-0.278
1072145az1_52_Zrn	3.542	0.089	0.266	0.010	3.761	1536.716	88.295	1522.976	64.455	1555.392	58.503	1555.392	58.503	2.084
1072145az1_53_Zrn	3.938	0.099	0.289	0.011	3.645	1621.543	98.209	1637.316	69.976	1599.530	58.305	1599.530	58.305	-2.362
1072145az1_54_Zrn	2.631	0.066	0.224	0.008	4.587	1309.335	66.091	1302.972	54.259	1318.399	60.476	1318.399	60.476	1.170
1072145az1_55_Zrn	4.061	0.102	0.291	0.011	3.513	1646.559	101.069	1646.598	70.428	1647.804	57.883	1647.804	57.883	0.073
1072145az1_56_Zrn	3.035	0.076	0.239	0.009	4.054	1416.563	76.106	1383.839	58.081	1465.154	59.392	1465.154	59.392	5.550
1072145az1_57_Zrn	3.309	0.084	0.260	0.010	4.035	1483.112	83.200	1490.054	63.048	1472.659	59.427	1472.659	59.427	-1.181
1072145az1_58_Zrn	1.798	0.045	0.175	0.007	5.969	1044.626	45.655	1037.479	42.378	1056.990	63.089	1056.990	63.089	1.846
1072145az1_59_Zrn	7.577	0.192	0.400	0.015	2.488	2182.135	185.712	2169.013	96.964	2190.459	54.503	2190.459	54.503	0.979
1072145az1_60_Zrn	3.421	0.089	0.268	0.010	4.089	1509.139	88.020	1533.133	65.440	1476.863	60.384	1476.863	60.384	-3.810
1072145az1_61_Zrn	4.210	0.106	0.296	0.011	3.436	1676.047	105.311	1669.179	71.768	1683.736	57.848	1683.736	57.848	0.865
1072145az1_62_Zrn	5.932	0.149	0.349	0.013	2.774	1965.965	146.365	1929.702	84.551	2001.573	55.517	2001.573	55.517	3.591
1072145az1_63_Zrn	5.085	0.129	0.332	0.013	3.132	1833.548	127.115	1846.518	80.685	1820.514	57.021	1820.514	57.021	-1.428
1072145az1_64_Zrn	3.995	0.101	0.286	0.011	3.528	1633.280	100.232	1623.223	69.419	1647.733	58.124	1647.733	58.124	1.488
1072145az1_65_Zrn	1.662	0.044	0.163	0.006	4.068	993.985	44.239	975.607	39.691	1029.731	65.375	975.607	39.691	5.256
1072145az1_66_Zrn	4.180	0.105	0.295	0.011	3.438	1670.086	103.934	1664.525	71.269	1677.239	57.661	1677.239	57.661	0.758
1072145az1_67_Zrn	4.628	0.117	0.310	0.012	3.227	1754.364	115.175	1742.098	75.152	1770.243	57.123	1770.243	57.123	1.590
1072145az1_68_Zrn	3.666	0.092	0.270	0.010	3.659	1564.031	91.343	1541.960	65.353	1592.229	58.258	1592.229	58.258	3.157

1072145az1_69_Zrn	3.351	0.084	0.256	0.010	3.841	1493.091	83.776	1467.309	61.935	1530.473	58.785	1530.473	58.785	4.127
1072145az1_70_Zrn	2.524	0.064	0.219	0.008	4.715	1278.980	63.477	1276.651	53.027	1289.152	60.786	1289.152	60.786	0.970
1072145az1_71_Zrn	2.892	0.074	0.237	0.009	4.385	1379.759	74.076	1372.525	57.729	1388.911	60.901	1388.911	60.901	1.180
1072145az1_73_Zrn	4.402	0.111	0.302	0.011	3.328	1712.795	109.488	1702.031	73.163	1724.781	57.395	1724.781	57.395	1.319
1072145az1_74_Zrn	4.543	0.114	0.309	0.012	3.284	1738.943	112.731	1735.590	74.774	1742.053	57.201	1742.053	57.201	0.371
1072145az1_76_Zrn	4.700	0.118	0.315	0.012	3.230	1767.248	116.620	1765.498	76.194	1767.238	57.081	1767.238	57.081	0.098
1072145az1_78_Zrn	4.697	0.121	0.308	0.012	3.196	1766.618	119.319	1729.061	75.846	1812.594	57.923	1812.594	57.923	4.609
1072145az1_80_Zrn	3.000	0.076	0.246	0.009	4.314	1407.719	75.351	1417.382	59.513	1390.829	60.000	1390.829	60.000	-1.909
1072145az1_81_Zrn	3.866	0.097	0.278	0.010	3.545	1606.616	96.428	1583.047	67.493	1637.620	58.051	1637.620	58.051	3.332
1072145az1_82_Zrn	0.682	0.017	0.085	0.003	3.919	527.838	17.325	524.425	20.550	541.670	68.212	524.425	20.550	3.184
1072145az1_83_Zrn	0.330	0.010	0.044	0.002	3.911	289.765	9.816	279.437	10.929	343.974	78.427	279.437	10.929	18.762
1072145az1_84_Zrn	1.716	0.045	0.169	0.006	6.309	1014.449	45.496	1003.908	41.685	1038.162	65.494	1038.162	65.494	3.299
1072145az1_85_Zrn	3.044	0.077	0.248	0.009	4.295	1418.662	77.181	1426.431	60.020	1404.488	60.326	1404.488	60.326	-1.562
1072145az1_86_Zrn	4.826	0.121	0.319	0.012	3.168	1789.435	119.706	1783.668	77.091	1795.665	56.886	1795.665	56.886	0.668
1072145az1_87_Zrn	3.200	0.080	0.252	0.009	4.017	1457.093	79.686	1447.248	60.858	1470.725	59.074	1470.725	59.074	1.596
1072145az1_88_Zrn	4.474	0.113	0.311	0.012	3.378	1726.127	111.430	1743.579	75.119	1704.845	57.589	1704.845	57.589	-2.272
1072145az1_89_Zrn	3.334	0.083	0.257	0.010	3.889	1489.123	83.015	1472.894	62.165	1511.736	58.786	1511.736	58.786	2.569
1072145az1_90_Zrn	3.277	0.090	0.251	0.010	4.134	1475.603	89.111	1443.797	63.404	1521.386	62.892	1521.386	62.892	5.100
1072145az1_91_Zrn	4.093	0.103	0.292	0.011	3.497	1652.966	101.835	1652.354	70.612	1653.681	57.829	1653.681	57.829	0.080
1072145az1_92_Zrn	4.406	0.113	0.301	0.011	3.352	1713.543	111.579	1696.711	73.266	1733.331	58.108	1733.331	58.108	2.113
1072145az1_93_Zrn	3.164	0.080	0.254	0.010	4.195	1448.454	79.999	1457.753	61.489	1430.863	60.020	1430.863	60.020	-1.879
1072145az1_95_Zrn	4.272	0.110	0.295	0.011	3.402	1688.075	108.279	1667.092	72.297	1713.207	58.289	1713.207	58.289	2.692
1072145az1_96_Zrn	3.438	0.088	0.263	0.010	3.912	1513.191	87.067	1506.107	63.758	1519.010	59.422	1519.010	59.422	0.849
1072145az1_97_Zrn	1.932	0.063	0.179	0.008	6.483	1092.138	63.194	1060.272	51.067	1177.103	76.311	1177.103	76.311	9.925
1072145az1_98_Zrn	2.517	0.063	0.219	0.008	4.738	1277.032	62.868	1275.413	52.910	1278.729	60.591	1278.729	60.591	0.259
1072145az1_99_Zrn	14.783	0.373	0.527	0.020	1.789	2801.358	347.440	2728.921	127.946	2855.075	51.082	2855.075	51.082	4.419
1072145az1_100_Zrn	3.302	0.084	0.262	0.010	4.132	1481.465	83.868	1498.112	63.311	1452.835	60.027	1452.835	60.027	-3.116
1072145az1_102_Zrn	1.467	0.040	0.144	0.006	4.103	916.990	40.118	869.242	35.668	1012.775	66.837	869.242	35.668	14.172
1072145az1_103_Zrn	4.607	0.116	0.307	0.012	3.211	1750.545	114.750	1726.266	74.506	1778.207	57.106	1778.207	57.106	2.921
1072145az1_104_Zrn	13.312	0.337	0.510	0.019	1.893	2702.027	316.429	2658.695	123.617	2732.047	51.713	2732.047	51.713	2.685
1072145az1_105_Zrn	3.117	0.080	0.245	0.009	4.066	1436.930	79.728	1411.526	59.820	1473.282	59.901	1473.282	59.901	4.192
1072145az1_106_Zrn	3.530	0.090	0.270	0.010	3.877	1533.913	89.003	1539.820	65.631	1523.742	59.076	1523.742	59.076	-1.055
1072145az1_107_Zrn	2.590	0.085	0.211	0.009	4.871	1297.747	84.708	1235.792	57.888	1403.579	68.367	1403.579	68.367	11.954
1072145az1_108_Zrn	3.961	0.102	0.278	0.011	3.482	1626.291	100.612	1582.764	67.875	1677.288	58.404	1677.288	58.404	5.636
1072145az1_109_Zrn	3.886	0.098	0.280	0.011	3.566	1610.779	97.611	1589.957	67.918	1635.086	58.311	1635.086	58.311	2.760
1072145az1_110_Zrn	1.631	0.042	0.165	0.006	4.073	982.243	41.858	984.293	40.092	974.891	64.329	984.293	40.092	-0.964
1072-168, Late Cretaceous (Base) Guaduas Formation (N = 100)														
1072168az1_1_Zrn	4.455	0.136	0.302	0.014	3.949	1722.683	133.406	1702.962	88.329	1746.636	68.972	1746.636	68.972	2.500
1072168az1_2_Zrn	2.825	0.086	0.235	0.011	5.328	1362.134	85.913	1361.442	68.711	1363.756	72.666	1363.756	72.666	0.170
1072168az1_3_Zrn	4.639	0.141	0.312	0.014	3.896	1756.312	138.415	1750.028	90.969	1763.346	68.697	1763.346	68.697	0.755
1072168az1_5_Zrn	4.763	0.145	0.316	0.014	3.838	1778.411	142.401	1768.834	92.134	1788.074	68.630	1788.074	68.630	1.076
1072168az1_6_Zrn	2.897	0.090	0.237	0.011	5.237	1381.024	89.394	1369.999	69.220	1395.875	73.099	1395.875	73.099	1.854
1072168az1_7_Zrn	4.790	0.146	0.316	0.014	3.805	1783.142	143.247	1768.011	92.144	1800.665	68.524	1800.665	68.524	1.813
1072168az1_8_Zrn	4.970	0.152	0.319	0.015	3.690	1814.194	148.458	1784.660	93.227	1848.069	68.191	1848.069	68.191	3.431
1072168az1_9_Zrn	4.674	0.142	0.310	0.014	3.841	1762.678	139.615	1742.597	90.564	1785.284	68.576	1785.284	68.576	2.391
1072168az1_10_Zrn	4.543	0.139	0.307	0.014	3.942	1738.858	136.550	1726.165	89.759	1753.687	69.132	1753.687	69.132	1.569
1072168az1_12_Zrn	2.942	0.090	0.238	0.011	5.116	1392.775	89.456	1378.853	69.724	1412.406	72.252	1412.406	72.252	2.376
1072168az1_13_Zrn	3.177	0.097	0.251	0.011	4.898	1451.588	96.058	1444.000	73.345	1461.131	71.559	1461.131	71.559	1.172
1072168az1_14_Zrn	3.079	0.096	0.249	0.011	5.142	1427.483	94.973	1432.021	72.903	1419.199	72.980	1419.199	72.980	-0.903
1072168az1_15_Zrn	3.259	0.100	0.253	0.012	4.775	1471.409	99.457	1452.608	74.047	1496.231	71.447	1496.231	71.447	2.916
1072168az1_16_Zrn	3.248	0.128	0.246	0.013	5.705	1468.628	126.038	1417.997	83.814	1542.437	87.996	1542.437	87.996	8.068
1072168az1_17_Zrn	3.370	0.103	0.261	0.012	4.780	1497.418	102.175	1493.645	76.162	1494.807	71.452	1494.807	71.452	0.078

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Continued

Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072168az1_19_Zrn	4.616	0.141	0.314	0.014	3.954	1752.130	138.050	1758.073	91.473	1743.994	68.961	1743.994	68.961	-0.807
1072168az1_20_Zrn	2.583	0.080	0.227	0.010	5.949	1295.751	79.736	1321.170	66.529	1252.303	74.504	1252.303	74.504	-5.499
1072168az1_22_Zrn	4.628	0.141	0.310	0.014	3.882	1754.299	138.137	1740.963	90.461	1769.028	68.677	1769.028	68.677	1.586
1072168az1_23_Zrn	4.563	0.139	0.310	0.014	3.940	1742.601	136.324	1739.499	90.360	1747.829	68.865	1747.829	68.865	0.477
1072168az1_24_Zrn	2.490	0.077	0.210	0.010	5.517	1269.109	77.081	1228.756	61.962	1339.392	73.889	1339.392	73.889	8.260
1072168az1_25_Zrn	4.604	0.141	0.311	0.014	3.931	1750.061	137.984	1744.357	90.758	1754.952	68.983	1754.952	68.983	0.604
1072168az1_26_Zrn	4.347	0.132	0.301	0.014	4.049	1702.387	130.254	1694.883	87.817	1710.662	69.270	1710.662	69.270	0.922
1072168az1_27_Zrn	4.219	0.129	0.294	0.013	4.083	1677.774	126.473	1660.455	85.837	1698.724	69.358	1698.724	69.358	2.253
1072168az1_28_Zrn	2.044	0.062	0.191	0.009	6.646	1130.207	62.390	1128.473	55.872	1128.773	75.023	1128.773	75.023	0.027
1072168az1_29_Zrn	6.023	0.184	0.354	0.016	3.340	1979.145	178.880	1951.971	103.281	2006.043	67.004	2006.043	67.004	2.695
1072168az1_30_Zrn	2.698	0.082	0.228	0.010	5.475	1327.823	81.669	1324.982	66.623	1329.004	72.758	1329.004	72.758	0.303
1072168az1_31_Zrn	2.757	0.084	0.227	0.010	5.255	1343.862	83.949	1319.819	66.425	1380.975	72.569	1380.975	72.569	4.428
1072168az1_32_Zrn	3.468	0.105	0.264	0.012	4.617	1520.015	104.271	1510.349	77.023	1531.601	70.707	1531.601	70.707	1.388
1072168az1_33_Zrn	3.432	0.111	0.254	0.012	4.617	1511.817	109.403	1457.582	74.407	1584.600	73.158	1584.600	73.158	8.016
1072168az1_34_Zrn	2.710	0.083	0.228	0.010	5.422	1331.323	82.334	1323.524	66.598	1342.847	72.805	1342.847	72.805	1.439
1072168az1_35_Zrn	4.233	0.131	0.291	0.013	4.006	1680.457	128.535	1644.893	85.526	1738.944	69.666	1738.944	69.666	5.409
1072168az1_36_Zrn	4.275	0.130	0.295	0.013	4.042	1688.615	128.132	1668.590	86.202	1712.703	69.224	1712.703	69.224	2.576
1072168az1_37_Zrn	3.095	0.095	0.248	0.011	5.014	1431.424	93.871	1429.526	72.482	1434.531	71.921	1434.531	71.921	0.349
1072168az1_38_Zrn	3.023	0.093	0.244	0.011	5.081	1413.390	92.274	1405.246	71.178	1423.377	72.322	1423.377	72.322	1.274
1072168az1_39_Zrn	4.205	0.131	0.289	0.013	4.086	1674.971	128.844	1635.895	85.486	1723.161	70.410	1723.161	70.410	5.064
1072168az1_40_Zrn	4.869	0.148	0.318	0.014	3.767	1796.898	145.264	1781.976	92.950	1814.698	68.358	1814.698	68.358	1.803
1072168az1_41_Zrn	3.192	0.098	0.252	0.011	4.897	1455.238	96.899	1448.355	73.639	1464.855	71.732	1464.855	71.732	1.126
1072168az1_42_Zrn	2.991	0.091	0.242	0.011	5.082	1405.327	90.379	1399.650	70.798	1414.878	71.910	1414.878	71.910	1.076
1072168az1_43_Zrn	4.897	0.149	0.320	0.015	3.757	1801.695	145.966	1787.715	93.168	1817.144	68.277	1817.144	68.277	1.620
1072168az1_44_Zrn	4.598	0.148	0.300	0.014	3.912	1748.820	144.738	1691.486	87.918	1813.504	70.947	1813.504	70.947	6.728
1072168az1_45_Zrn	4.379	0.134	0.300	0.014	4.010	1708.345	131.923	1690.862	87.846	1731.142	69.413	1731.142	69.413	2.327
1072168az1_46_Zrn	2.966	0.101	0.239	0.012	5.518	1398.937	99.999	1379.947	74.939	1427.599	78.773	1427.599	78.773	3.338
1072168az1_47_Zrn	4.225	0.129	0.291	0.013	4.030	1678.844	126.868	1647.081	85.128	1719.177	69.288	1719.177	69.288	4.194
1072168az1_48_Zrn	2.681	0.082	0.229	0.010	5.559	1323.332	81.609	1327.012	66.774	1315.862	73.146	1315.862	73.146	-0.847
1072168az1_49_Zrn	3.142	0.096	0.251	0.011	4.961	1443.134	95.254	1441.207	73.109	1447.183	71.788	1447.183	71.788	0.413
1072168az1_50_Zrn	3.476	0.108	0.264	0.012	4.671	1521.870	106.347	1508.289	77.348	1537.160	71.802	1537.160	71.802	1.878
1072168az1_52_Zrn	3.295	0.101	0.256	0.012	4.779	1479.846	99.586	1470.448	74.889	1491.993	71.307	1491.993	71.307	1.444
1072168az1_53_Zrn	10.287	0.314	0.456	0.021	2.550	2460.943	296.431	2420.203	132.972	2493.519	63.579	2493.519	63.579	2.940
1072168az1_54_Zrn	4.189	0.128	0.291	0.013	4.062	1671.823	125.639	1644.964	84.891	1706.161	69.302	1706.161	69.302	3.587
1072168az1_55_Zrn	3.280	0.101	0.254	0.012	4.754	1476.391	99.729	1457.411	74.299	1504.137	71.513	1504.137	71.513	3.106
1072168az1_56_Zrn	4.489	0.137	0.300	0.014	3.890	1729.010	134.786	1693.412	87.834	1771.211	68.908	1771.211	68.908	4.392
1072168az1_57_Zrn	3.511	0.107	0.266	0.012	4.600	1529.770	106.209	1518.403	77.653	1542.591	70.956	1542.591	70.956	1.568
1072168az1_58_Zrn	2.594	0.080	0.219	0.010	5.476	1299.016	79.332	1276.005	64.194	1336.895	73.214	1336.895	73.214	4.555
1072168az1_59_Zrn	3.296	0.101	0.257	0.012	4.789	1480.009	99.661	1473.352	75.019	1489.726	71.336	1489.726	71.336	1.099
1072168az1_60_Zrn	4.519	0.138	0.304	0.014	3.898	1734.524	135.191	1709.123	88.625	1764.458	68.775	1764.458	68.775	3.136
1072168az1_62_Zrn	4.424	0.135	0.304	0.014	4.023	1716.832	132.978	1712.085	88.805	1723.026	69.325	1723.026	69.325	0.635
1072168az1_63_Zrn	2.950	0.090	0.242	0.011	5.200	1394.855	89.627	1396.130	70.638	1392.087	72.386	1392.087	72.386	-0.290
1072168az1_64_Zrn	2.950	0.090	0.239	0.011	5.092	1394.757	89.539	1381.554	69.931	1416.463	72.132	1416.463	72.132	2.465
1072168az1_65_Zrn	2.751	0.084	0.230	0.010	5.370	1342.443	83.626	1334.350	67.219	1354.146	72.719	1354.146	72.719	1.462
1072168az1_66_Zrn	4.385	0.159	0.295	0.015	3.911	1709.561	155.320	1665.659	93.813	1763.268	68.954	1763.268	68.954	5.536
1072168az1_67_Zrn	3.363	0.104	0.262	0.012	4.855	1495.937	103.228	1501.099	76.697	1485.736	72.130	1485.736	72.130	-1.034

1072168az1_68_Zrn	2.920	0.090	0.240	0.011	5.233	1387.172	88.963	1387.542	70.281	1386.858	72.576	1386.858	72.576	-0.049
1072168az1_69_Zrn	4.844	0.148	0.321	0.015	3.840	1792.510	144.936	1792.244	93.590	1789.087	68.695	1789.087	68.695	-0.176
1072168az1_71_Zrn	4.685	0.143	0.313	0.014	3.864	1764.507	139.782	1753.501	91.181	1775.478	68.601	1775.478	68.601	1.238
1072168az1_72_Zrn	4.723	0.144	0.313	0.014	3.831	1771.259	141.177	1756.719	91.449	1789.588	68.562	1789.588	68.562	1.837
1072168az1_73_Zrn	5.518	0.168	0.338	0.015	3.486	1903.336	163.643	1875.848	98.494	1931.553	67.327	1931.553	67.327	2.884
1072168az1_74_Zrn	3.137	0.096	0.252	0.011	5.037	1441.732	95.652	1448.402	73.866	1428.867	71.970	1428.867	71.970	-1.367
1072168az1_75_Zrn	4.629	0.141	0.308	0.014	3.856	1754.423	138.421	1733.140	90.039	1779.968	68.640	1779.968	68.640	2.631
1072168az1_76_Zrn	4.474	0.136	0.308	0.014	4.025	1726.125	133.767	1732.194	89.927	1717.316	69.130	1717.316	69.130	-0.866
1072168az1_77_Zrn	4.331	0.132	0.299	0.014	4.038	1699.211	129.924	1684.673	87.260	1715.684	69.277	1715.684	69.277	1.807
1072168az1_78_Zrn	3.913	0.126	0.274	0.013	4.267	1616.339	124.123	1561.632	83.185	1699.868	72.539	1699.868	72.539	8.132
1072168az1_79_Zrn	3.281	0.102	0.257	0.012	4.866	1476.634	100.628	1472.976	75.099	1481.718	72.106	1481.718	72.106	0.590
1072168az1_80_Zrn	2.710	0.084	0.229	0.010	5.544	1331.097	83.604	1329.053	67.067	1330.242	73.751	1330.242	73.751	0.089
1072168az1_81_Zrn	5.015	0.156	0.319	0.015	3.683	1821.775	152.213	1786.229	93.515	1868.295	68.819	1868.295	68.819	4.393
1072168az1_82_Zrn	4.560	0.139	0.307	0.014	3.910	1741.995	136.703	1723.809	89.541	1762.738	68.924	1762.738	68.924	2.208
1072168az1_83_Zrn	3.388	0.103	0.259	0.012	4.645	1501.551	102.418	1483.195	75.632	1528.032	70.980	1528.032	70.980	2.934
1072168az1_84_Zrn	4.213	0.128	0.292	0.013	4.063	1676.504	126.317	1653.957	85.429	1704.769	69.264	1704.769	69.264	2.981
1072168az1_85_Zrn	2.801	0.088	0.232	0.011	5.382	1355.753	87.252	1343.631	67.885	1371.495	73.816	1371.495	73.816	2.032
1072168az1_86_Zrn	3.333	0.103	0.260	0.012	4.821	1488.797	101.524	1488.360	75.950	1488.127	71.746	1488.127	71.746	-0.016
1072168az1_87_Zrn	3.007	0.094	0.241	0.011	5.103	1409.351	93.203	1392.254	70.539	1431.604	73.051	1431.604	73.051	2.749
1072168az1_88_Zrn	2.411	0.074	0.211	0.010	5.829	1245.778	73.449	1234.208	61.710	1263.550	73.655	1263.550	73.655	2.322
1072168az1_89_Zrn	4.797	0.146	0.311	0.014	3.736	1784.334	143.531	1745.189	90.845	1829.685	68.351	1829.685	68.351	4.618
1072168az1_90_Zrn	4.572	0.140	0.310	0.014	3.958	1744.114	137.297	1741.292	90.582	1747.075	69.147	1747.075	69.147	0.331
1072168az1_91_Zrn	4.510	0.137	0.303	0.014	3.900	1732.796	134.970	1706.854	88.545	1763.946	68.801	1763.946	68.801	3.237
1072168az1_92_Zrn	2.777	0.086	0.230	0.010	5.400	1349.507	85.947	1337.102	67.451	1362.436	73.572	1362.436	73.572	1.859
1072168az1_93_Zrn	3.248	0.101	0.252	0.012	4.845	1468.772	100.261	1451.089	73.927	1493.146	72.343	1493.146	72.343	2.817
1072168az1_94_Zrn	4.419	0.135	0.306	0.014	4.052	1715.819	132.474	1719.503	89.234	1710.642	69.310	1710.642	69.310	-0.518
1072168az1_95_Zrn	4.601	0.140	0.309	0.014	3.888	1749.416	137.201	1735.222	90.036	1765.138	68.631	1765.138	68.631	1.695
1072168az1_96_Zrn	3.316	0.102	0.258	0.012	4.809	1484.725	100.813	1480.138	75.512	1489.972	71.657	1489.972	71.657	0.660
1072168az1_97_Zrn	4.181	0.128	0.290	0.013	4.060	1670.323	125.588	1641.440	84.700	1708.026	69.348	1708.026	69.348	3.898
1072168az1_98_Zrn	4.352	0.133	0.296	0.013	3.961	1703.338	130.707	1669.256	86.407	1744.382	69.090	1744.382	69.090	4.307
1072168az1_100_Zrn	11.060	0.338	0.471	0.021	2.468	2528.220	316.801	2488.783	137.588	2558.352	63.144	2558.352	63.144	2.719
1072168az1_102_Zrn	5.207	0.161	0.325	0.015	3.603	1853.814	157.028	1813.239	95.552	1898.232	68.402	1898.232	68.402	4.477
1072168az1_103_Zrn	3.221	0.100	0.250	0.011	4.851	1462.107	99.209	1440.506	73.444	1488.889	72.220	1488.889	72.220	3.250
1072168az1_104_Zrn	4.393	0.135	0.300	0.014	4.003	1710.972	132.352	1691.091	87.796	1732.181	69.346	1732.181	69.346	2.372
1072168az1_105_Zrn	3.265	0.102	0.253	0.012	4.841	1472.807	101.118	1452.837	74.115	1494.914	72.369	1494.914	72.369	2.815
1072168az1_106_Zrn	3.888	0.124	0.274	0.013	4.327	1611.209	122.473	1559.902	83.023	1678.624	72.640	1678.624	72.640	7.073
1072168az1_107_Zrn	2.200	0.082	0.192	0.010	6.829	1181.163	81.309	1131.350	63.120	1270.795	86.784	1270.795	86.784	10.973
1072168az1_108_Zrn	3.360	0.105	0.259	0.012	4.756	1495.163	103.864	1483.381	75.893	1517.124	72.148	1517.124	72.148	2.224
1072168az1_109_Zrn	3.462	0.105	0.261	0.012	4.543	1518.637	104.234	1494.180	76.161	1553.595	70.579	1553.595	70.579	3.824
1072168az1_110_Zrn	4.542	0.138	0.307	0.014	3.922	1738.666	135.859	1724.886	89.492	1754.435	68.806	1754.435	68.806	1.684
1072-169, Late Cretaceous Arenisca Tierna Formation (N = 94)														
1072169az1_1_Zrn	3.437	0.104	0.260	0.012	4.562	1512.918	103.423	1487.524	75.764	1547.380	70.596	1547.380	70.596	3.868
1072169az1_2_Zrn	4.160	0.132	0.284	0.013	4.074	1666.235	129.405	1609.240	84.847	1742.426	70.981	1742.426	70.981	7.644
1072169az1_3_Zrn	2.835	0.088	0.232	0.011	5.244	1364.804	87.905	1343.871	67.910	1398.370	73.329	1398.370	73.329	3.897
1072169az1_4_Zrn	3.192	0.100	0.247	0.011	4.879	1455.260	99.464	1423.091	72.293	1491.602	72.773	1491.602	72.773	4.593
1072169az1_5_Zrn	4.533	0.199	0.300	0.014	4.973	1736.957	192.971	1690.406	87.985	1793.037	89.176	1793.037	89.176	5.724
1072169az1_6_Zrn	2.746	0.084	0.231	0.010	5.409	1340.942	83.335	1339.771	67.471	1344.572	72.731	1344.572	72.731	0.357
1072169az1_7_Zrn	3.260	0.099	0.252	0.011	4.735	1471.667	98.396	1450.486	73.735	1502.093	71.128	1502.093	71.128	3.436
1072169az1_9_Zrn	4.657	0.143	0.314	0.014	3.923	1759.565	140.115	1760.737	91.948	1758.571	68.988	1758.571	68.988	-0.123
1072169az1_10_Zrn	4.599	0.140	0.304	0.014	3.828	1749.096	137.370	1712.964	88.931	1792.488	68.615	1792.488	68.615	4.437
1072169az1_11_Zrn	3.060	0.094	0.248	0.011	5.134	1422.697	93.577	1427.161	72.409	1413.324	72.558	1413.324	72.558	-0.979
1072169az1_12_Zrn	3.434	0.105	0.262	0.012	4.654	1512.231	103.714	1501.369	76.540	1525.039	70.975	1525.039	70.975	1.552

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Analysis ID	Isotopic Ratios					Apparent Ages (Ma)					Preferred Age (Ma)	± (Ma)	Discord (%)	
	207Pb/ 235U	± (%)	206Pb/ 238U	± (%)	Uncertainty (%)	207Pb/ 235U (Ma)	± (Ma)	206Pb/ 238U (Ma)	± (Ma)	207Pb/ 206Pb (Ma)				± (Ma)
1072169az1_13_Zrn	2.917	0.089	0.239	0.011	5.212	1386.213	88.809	1383.191	69.988	1391.114	72.503	1391.114	72.503	0.570
1072169az1_14_Zrn	4.526	0.139	0.300	0.014	3.846	1735.844	136.419	1690.589	87.875	1790.463	68.866	1790.463	68.866	5.578
1072169az1_15_Zrn	2.816	0.114	0.224	0.012	5.676	1359.825	112.876	1301.469	78.560	1452.775	82.463	1452.775	82.463	10.415
1072169az1_16_Zrn	2.632	0.081	0.226	0.010	5.658	1309.673	80.478	1314.506	66.086	1299.414	73.516	1299.414	73.516	-1.162
1072169az1_17_Zrn	4.468	0.136	0.304	0.014	3.950	1725.008	133.398	1709.555	88.567	1742.976	68.841	1742.976	68.841	1.917
1072169az1_18_Zrn	2.696	0.083	0.228	0.010	5.499	1327.285	82.475	1322.699	66.582	1332.161	73.259	1332.161	73.259	0.710
1072169az1_19_Zrn	4.237	0.129	0.291	0.013	4.017	1681.124	126.964	1648.955	85.137	1721.281	69.146	1721.281	69.146	4.202
1072169az1_20_Zrn	4.281	0.130	0.295	0.013	4.015	1689.680	128.190	1666.093	86.088	1721.419	69.116	1721.419	69.116	3.214
1072169az1_21_Zrn	0.751	0.024	0.092	0.004	4.771	568.577	24.506	565.727	26.993	571.746	85.280	565.727	26.993	1.053
1072169az1_22_Zrn	2.719	0.083	0.230	0.010	5.494	1333.750	82.914	1336.538	67.399	1330.856	73.119	1330.856	73.119	-0.427
1072169az1_23_Zrn	4.458	0.136	0.303	0.014	3.946	1723.107	133.276	1705.379	88.349	1745.412	68.880	1745.412	68.880	2.294
1072169az1_24_Zrn	4.248	0.129	0.295	0.013	4.052	1683.365	127.063	1664.629	85.916	1706.755	69.160	1706.755	69.160	2.468
1072169az1_25_Zrn	2.921	0.091	0.234	0.011	5.092	1387.284	90.357	1356.206	68.935	1434.294	73.028	1434.294	73.028	5.444
1072169az1_26_Zrn	2.626	0.082	0.224	0.010	5.664	1307.995	81.555	1301.568	65.535	1310.613	74.234	1310.613	74.234	0.690
1072169az1_27_Zrn	1.571	0.049	0.159	0.007	4.891	958.971	48.776	950.491	46.489	975.191	77.477	950.491	46.489	2.533
1072169az1_29_Zrn	2.244	0.074	0.195	0.009	6.149	1194.898	73.967	1148.674	60.141	1280.037	78.709	1280.037	78.709	10.262
1072169az1_30_Zrn	3.278	0.100	0.254	0.012	4.740	1475.872	98.809	1459.367	74.176	1499.428	71.073	1499.428	71.073	2.672
1072169az1_31_Zrn	2.661	0.083	0.222	0.010	5.441	1317.745	82.518	1295.044	65.112	1354.375	73.687	1354.375	73.687	4.381
1072169az1_33_Zrn	2.495	0.076	0.216	0.010	5.689	1270.446	76.017	1260.049	63.051	1289.978	73.392	1289.978	73.392	2.320
1072169az1_34_Zrn	1.547	0.049	0.158	0.007	4.889	949.307	48.794	946.273	46.267	949.623	78.598	946.273	46.267	0.353
1072169az1_35_Zrn	2.829	0.087	0.235	0.011	5.369	1363.213	86.565	1362.802	68.821	1360.096	73.025	1360.096	73.025	-0.199
1072169az1_36_Zrn	3.281	0.101	0.255	0.012	4.804	1476.527	99.912	1465.234	74.580	1491.823	71.662	1491.823	71.662	1.782
1072169az1_38_Zrn	4.470	0.137	0.303	0.014	3.950	1725.501	134.258	1707.996	88.774	1749.524	69.113	1749.524	69.113	2.374
1072169az1_39_Zrn	2.674	0.082	0.225	0.010	5.448	1321.198	81.224	1310.592	65.902	1337.117	72.841	1337.117	72.841	1.984
1072169az1_40_Zrn	3.333	0.117	0.248	0.012	5.034	1488.767	115.520	1428.840	79.131	1575.102	79.296	1575.102	79.296	9.286
1072169az1_41_Zrn	3.330	0.102	0.255	0.012	4.696	1488.093	101.301	1462.679	74.547	1520.219	71.391	1520.219	71.391	3.785
1072169az1_42_Zrn	3.583	0.117	0.264	0.012	4.676	1545.780	115.741	1511.212	80.147	1593.094	74.497	1593.094	74.497	5.140
1072169az1_43_Zrn	7.000	0.214	0.382	0.017	3.092	2111.445	206.449	2084.792	111.417	2135.610	66.037	2135.610	66.037	2.380
1072169az1_45_Zrn	3.227	0.099	0.255	0.012	4.929	1463.594	98.042	1463.301	74.525	1457.971	71.870	1457.971	71.870	-0.366
1072169az1_46_Zrn	2.766	0.085	0.230	0.010	5.352	1346.430	84.364	1334.729	67.313	1361.278	72.854	1361.278	72.854	1.950
1072169az1_47_Zrn	2.727	0.085	0.226	0.010	5.396	1335.808	84.961	1314.925	66.422	1369.029	73.880	1369.029	73.880	3.952
1072169az1_48_Zrn	4.267	0.130	0.293	0.013	4.016	1687.055	127.996	1658.532	85.718	1722.458	69.175	1722.458	69.175	3.711
1072169az1_49_Zrn	2.985	0.092	0.238	0.011	4.975	1403.818	90.931	1375.292	69.447	1446.822	71.983	1446.822	71.983	4.944
1072169az1_55_Zrn	2.083	0.064	0.190	0.009	6.340	1143.125	64.026	1122.785	55.755	1180.694	74.860	1180.694	74.860	4.905
1072169az1_56_Zrn	4.397	0.134	0.302	0.014	4.021	1711.857	132.121	1701.557	88.164	1723.226	69.284	1723.226	69.284	1.257
1072169az1_57_Zrn	2.967	0.090	0.239	0.011	5.031	1399.145	89.692	1380.245	69.729	1427.253	71.810	1427.253	71.810	3.294
1072169az1_58_Zrn	3.338	0.102	0.257	0.012	4.707	1490.061	100.823	1475.144	75.141	1510.513	71.106	1510.513	71.106	2.341
1072169az1_59_Zrn	3.109	0.095	0.246	0.011	4.929	1434.814	94.456	1419.716	71.943	1456.765	71.810	1456.765	71.810	2.543
1072169az1_60_Zrn	2.806	0.087	0.231	0.011	5.301	1357.069	86.761	1339.124	67.635	1383.640	73.340	1383.640	73.340	3.217
1072169az1_61_Zrn	5.504	0.168	0.339	0.015	3.512	1901.288	163.352	1883.644	98.967	1920.042	67.441	1920.042	67.441	1.896
1072169az1_62_Zrn	2.748	0.085	0.227	0.010	5.291	1341.565	84.271	1319.213	66.675	1379.295	72.976	1379.295	72.976	4.356
1072169az1_63_Zrn	3.062	0.095	0.245	0.011	5.048	1423.192	93.977	1412.861	71.755	1436.925	72.533	1436.925	72.533	1.675
1072169az1_65_Zrn	2.920	0.091	0.237	0.011	5.192	1387.072	90.026	1373.609	69.434	1405.496	72.968	1405.496	72.968	2.269
1072169az1_67_Zrn	3.990	0.127	0.278	0.013	4.246	1632.231	125.251	1583.789	83.933	1697.999	72.101	1697.999	72.101	6.726
1072169az1_69_Zrn	4.853	0.149	0.321	0.015	3.845	1794.219	145.806	1796.838	94.046	1788.838	68.777	1788.838	68.777	-0.447
1072169az1_71_Zrn	4.604	0.140	0.311	0.014	3.915	1749.938	137.743	1743.665	90.694	1758.941	68.858	1758.941	68.858	0.868

1072169az1_72_Zrn	3.688	0.113	0.273	0.012	4.444	1568.851	111.176	1556.042	79.762	1584.914	70.430	1584.914	70.430	1.822
1072169az1_73_Zrn	2.819	0.086	0.235	0.011	5.332	1360.592	85.497	1360.881	68.686	1360.587	72.552	1360.587	72.552	-0.022
1072169az1_74_Zrn	3.299	0.101	0.256	0.012	4.775	1480.739	99.791	1469.978	74.811	1493.744	71.321	1493.744	71.321	1.591
1072169az1_75_Zrn	3.462	0.106	0.265	0.012	4.662	1518.574	104.690	1514.054	77.383	1524.420	71.075	1524.420	71.075	0.680
1072169az1_76_Zrn	3.243	0.099	0.256	0.012	4.898	1467.487	97.946	1470.141	74.813	1460.014	71.511	1460.014	71.511	-0.694
1072169az1_77_Zrn	1.599	0.051	0.164	0.007	4.917	969.963	51.061	979.132	48.141	941.858	79.394	979.132	48.141	-3.958
1072169az1_78_Zrn	2.354	0.074	0.207	0.009	6.021	1228.706	74.252	1212.647	60.784	1254.122	75.508	1254.122	75.508	3.307
1072169az1_79_Zrn	5.508	0.168	0.343	0.016	3.567	1901.821	164.158	1900.671	100.155	1901.358	67.812	1901.358	67.812	0.036
1072169az1_80_Zrn	2.863	0.088	0.238	0.011	5.318	1372.222	87.349	1375.001	69.589	1368.663	72.783	1368.663	72.783	-0.463
1072169az1_81_Zrn	3.186	0.099	0.246	0.011	4.788	1453.801	97.824	1420.032	72.537	1501.185	71.883	1501.185	71.883	5.406
1072169az1_82_Zrn	2.945	0.091	0.241	0.011	5.235	1393.469	89.952	1394.270	70.716	1388.580	72.694	1388.580	72.694	-0.410
1072169az1_83_Zrn	4.655	0.143	0.306	0.014	3.827	1759.214	140.381	1723.083	89.808	1800.709	68.916	1800.709	68.916	4.311
1072169az1_84_Zrn	1.571	0.050	0.160	0.007	4.898	958.997	49.936	955.365	46.797	963.433	78.856	955.365	46.797	0.837
1072169az1_86_Zrn	4.238	0.132	0.305	0.014	4.234	1681.449	130.237	1715.968	89.468	1669.177	70.665	1669.177	70.665	-2.803
1072169az1_87_Zrn	4.891	0.149	0.317	0.014	3.740	1800.628	146.347	1775.870	92.657	1828.513	68.380	1828.513	68.380	2.879
1072169az1_88_Zrn	4.844	0.149	0.317	0.014	3.804	1792.598	145.594	1774.752	92.671	1807.047	68.742	1807.047	68.742	1.787
1072169az1_89_Zrn	3.164	0.149	0.229	0.013	4.424	1448.389	145.571	1328.715	85.185	1631.721	72.184	1631.721	72.184	18.570
1072169az1_90_Zrn	4.852	0.150	0.313	0.014	3.707	1794.016	146.486	1756.566	92.113	1851.920	68.660	1851.920	68.660	5.149
1072169az1_92_Zrn	3.084	0.094	0.249	0.011	5.051	1428.820	93.386	1432.052	72.647	1424.139	71.938	1424.139	71.938	-0.556
1072169az1_93_Zrn	2.895	0.088	0.240	0.011	5.251	1380.678	87.862	1385.906	70.119	1379.358	72.435	1379.358	72.435	-0.475
1072169az1_94_Zrn	4.354	0.133	0.300	0.014	4.020	1703.749	130.520	1689.528	87.498	1720.602	69.168	1720.602	69.168	1.806
1072169az1_95_Zrn	1.509	0.046	0.158	0.007	4.892	933.980	46.399	945.651	46.261	907.585	77.700	945.651	46.261	-4.194
1072169az1_96_Zrn	4.132	0.140	0.281	0.014	4.285	1660.630	137.318	1598.445	87.400	1744.049	74.729	1744.049	74.729	8.349
1072169az1_97_Zrn	2.828	0.087	0.235	0.011	5.306	1362.868	86.014	1359.225	68.682	1368.809	72.626	1368.809	72.626	0.700
1072169az1_98_Zrn	4.219	0.129	0.289	0.013	4.003	1677.726	126.992	1634.208	84.389	1730.057	69.258	1730.057	69.258	5.540
1072169az1_99_Zrn	2.922	0.091	0.238	0.011	5.235	1387.745	90.607	1376.398	69.714	1400.048	73.299	1400.048	73.299	1.689
1072169az1_100_Zrn	3.207	0.098	0.254	0.012	4.888	1458.759	97.025	1457.276	74.145	1464.201	71.568	1464.201	71.568	0.473
1072169az1_101_Zrn	4.033	0.124	0.283	0.013	4.159	1640.782	122.548	1604.469	83.091	1686.424	70.141	1686.424	70.141	4.860
1072169az1_102_Zrn	4.663	0.142	0.310	0.014	3.844	1760.682	139.397	1739.844	90.466	1785.181	68.627	1785.181	68.627	2.540
1072169az1_103_Zrn	1.585	0.049	0.162	0.007	4.901	964.317	49.066	967.750	47.434	954.367	77.616	967.750	47.434	-1.402
1072169az1_104_Zrn	2.760	0.085	0.231	0.011	5.417	1344.729	84.702	1340.025	67.515	1351.566	73.208	1351.566	73.208	0.854
1072169az1_105_Zrn	2.804	0.086	0.233	0.011	5.348	1356.699	85.759	1351.001	68.257	1364.632	72.979	1364.632	72.979	0.999
1072169az1_106_Zrn	3.119	0.096	0.249	0.011	5.026	1437.367	94.924	1434.832	72.922	1435.660	72.154	1435.660	72.154	0.058
1072169az1_107_Zrn	3.096	0.094	0.247	0.011	4.952	1431.668	93.719	1423.469	72.180	1447.881	71.697	1447.881	71.697	1.686
1072169az1_108_Zrn	3.190	0.097	0.249	0.011	4.815	1454.809	96.466	1435.658	72.884	1482.011	71.357	1482.011	71.357	3.128
1072169az1_109_Zrn	2.620	0.080	0.222	0.010	5.477	1306.213	79.538	1291.525	64.843	1330.453	72.862	1330.453	72.862	2.926
1072169az1_110_Zrn	3.417	0.104	0.261	0.012	4.650	1508.198	103.256	1495.105	76.237	1526.767	70.992	1526.767	70.992	2.074