

Data Repository- Appendix DRA. Formalization of the Perry Canyon Formation.

Type section of the Perry Canyon Formation	
Name	Perry Canyon Formation
Name derivation	Type area located south of Perry Canyon, Box Elder County, UT
Category& rank	lithostratigraphic formation
Type section	Starts drainage north of Facer Creek (UTM 12T 415070E 4587822N), continues northeastward, and ends at ridge (UTM: 12T 415360E 4588148N)
Upper boundary type section	Conformable contact with feldspathic quartzite of the Neoproterozoic Maple Canyon Formation
Lower boundary type location	Unconformity with leucogranite gneiss of the Archean-Paleoproterozoic Facer Formation
Unit description	<p>The formation in the type section is divided into four informal members.</p> <p>(1) Slate member- graphitic slate cross-cut by mafic dikes and sills. Slate was tectonized during Cretaceous thrusting and has a structural thickness <30 m.</p> <p>(2) Volcanic member- pillow basalt, agglomerate, dikes, and sills altered to greenstone composed of albite, epidote, actinolite, and chlorite. Pillows range from 0.2–0.4 m and are deformed. Interpillow areas are rich in epidote and may represent altered fragmental material. Thickness varies from 0 to 30 m.</p> <p>(3) Diamictite member- diamictite with cobble to boulder clasts in a sandy to micaceous matrix. Diamictite varies from massive to crudely stratified with variations in amounts of large clasts and nature of matrix. Diamictite locally includes stratified intervals of wacke and argillite. Cobble to boulder clasts are mostly surrounded to subangular and composed of ~40-70% granite and gneiss, 20-30% quartzite, 5-30% volcanic rocks, and < 10% reworked sedimentary rocks. The matrix contains variable amounts of mica, quartz, feldspar, and lithic fragments of similar composition as the larger clasts. A discontinuous, thin layer with abundant felsic clasts in a felsic matrix containing accessory REE minerals is locally present along the lower contact with the volcanic member. Stratigraphic thickness is ~300 m.</p> <p>(4) Greywacke member- greywacke and argillite with a discontinuous limestone marker bed near the base. The limestone is laminated- to medium-bedded, and variably silty with interbeds of feldspathic siltite. Coarse- to fine-grained, volcaniclastic to subfeldspathic wacke is interbedded with and grades into silty argillite within 0.3-m- to 1-m-thick packages. Packages display climbing-ripple cross-stratification, scoured horizons, flame structures and soft-sediment folds. The member is locally cross-cut by mafic to ultramafic sills and dikes. Thin quartzite beds increase in abundance near the top of the member, and the upper contact is taken as the first > 1-m-thick arkosic quartzite bed. Stratigraphic thickness is ~200 m.</p>
Geologic age	Neoproterozoic. Base of diamictite member contains younger euhedral zircon grains that define a maximum depositional age of 703 ± 6 Ma. A volcaniclastic sandstone bed in the greywacke member contains abundant euhedral zircons grains that define a maximum depositional age of 667 ± 6 Ma.
Correlations	The Perry Canyon Formation is correlated with the Edwardsburg Formation of the Windermere Supergroup (central Idaho; Lund et al., 2003), Pocatello Formation (southeast Idaho; Link et al., 1993), Trout Creek Sequence (western Utah; Misch and Hazzard, 1962), Sheeprock Group (central Utah; Christie-Blick, 1982), and Mineral Fork Formation (south-central Wasatch Range and Antelope Island, Utah; Christie-Blick, 1983)

Reference section of the Perry Canyon Formation	
Reference section	A composite reference section combines best exposures of each member on Fremont Island in Great Salt Lake, UT about 30 km west of Ogden, UT. The section runs from the southeastern-most exposure of the arkosic grit member (UTM: 12T 390393 E 4553965 N) to the diamictite member along the northern edge of the island.
Upper boundary reference section	Unexposed upper boundary on Fremont Island. The overlying Maple Canyon Formation is exposed to the north at the south end of Promontory Point.
Lower boundary reference location	Unexposed lower boundary.
Unit description	<p>The formation is divided into six informal members in the reference section.</p> <p>(1) Arkosic grit member- repeated, fining-upward packages of granule conglomerate, arkosic sandstone, and argillite. Packages are typically 0.3 to 1 m thick, have planar to slightly channelled bases, and locally contain argillite intraclasts with maximum dimensions to 0.3. Conglomerate is poorly to moderately sorted and contains granule-size polycrystalline quartz and granitic lithic fragments. Sandstone varies from coarse- to fine-grained, poorly to moderately sorted, and from lithic to arkosic wacke. Argillite contains silt-size quartz grains and micaceous matrix. The member is exposed at the SE end of the island where it has a minimum stratigraphic thickness of ~150 m; the base is not exposed.</p> <p>(2) Quartzite-grit member- interlayered quartz arenite to siltite, along with packages of arkosic sandstone and argillite. The base of this member is taken as the first thick quartzite bed. Quartz arenite is coarse- to fine-grained, moderately to well sorted, and contains mostly subrounded to rounded quartz grains with minor amounts of mica and feldspar. Fine-grained arenite grades into siltite that is poorly exposed. Upward-fining packages of arkosic sandstone and argillite are similar in character to the underlying member. The member is exposed in the SE part of the island where it has an estimated stratigraphic thickness of ~200 m.</p> <p>(3) Pebby slate member- heterolithic package comprising, from bottom to top, chloritoid slate, quartz-pebble conglomerate, pebbly slate with dropstones, and quartzite. Mafic dikes and sills, now greenstone, were intruded in the middle part of the member. The base of the member is taken as the first thick slate interval. Chloritoid slate is black to silver gray, micaceous, graphitic, and contains pyrite cubes up to 1 cm. Thin quartz arenite interbeds are present locally. A distinctive 2- to 3-m-thick conglomerate sharply overlies chloritoid slate and contains subrounded to subangular quartzite pebbles to granules, along with argillite rip-ups. Overlying pebbly slate consists of micaceous matrix with pebble quartz clasts and isolated quartzite boulders up to 2 m in size that are interpreted to be glacial dropstones (Crittenden et al., 1983). Greenish to purplish hued quartzite overlies the pebbly slate. Quartzite is medium- to thick-bedded, fine- to medium-grained, and sublithic with abundant argillite rip-ups at the base of beds. The member is exposed in the south-central part of the island where it has a structural thickness of about 200 m, but original thickness is poorly constrained due to complex deformation.</p> <p>(4) Slate member- slate with minor interbedded quartzite. Slate consists of abundant micaceous matrix along with varying amounts of silt- to fine-sand-sized quartz grains. Metamorphic chloritoid and pyrite (commonly altered to Fe-hydroxides) are present in some layers. Slate displays laminae defined by changes in hue and silty to fine-sand quartz grains. Thin beds of fine-grained quartzite are widespread, with thicker (> 0.3 m thick) beds locally present in the upper part of the member. Cleavage is at acute angles to bedding, which is locally rotated into minor folds. The member has an estimated stratigraphic thickness of 500 m. A marker unit of light yellowish-blue,</p>

	<p>thinly bedded to laminated dolostone is present at the top of the member.</p> <p>(5) Volcanic member- mafic volcanic rocks and intrusive sills and dikes. The mafic rocks have been metamorphosed to greenstone composed of albite, actinolite, chlorite, epidote, and variable amounts of calcite. Volcanic rocks include pillow lava and agglomerate. Pillows are 0.3-1.0 m across and have fine-grained, vesiculated rims. Epidote-rich inter-pillow areas may represent altered fragmental material.</p> <p>Agglomerate contains abundant mafic volcanic clasts that range in size from 0.5-10 cm, green volcaniclastic matrix, and variable amounts of siliciclastic material. Pillow lava and agglomerate are best exposed at the northwest end of the island, where they are locally interlayered with stratified intervals of diamictite, wacke, and argillite. Lenticular dikes and sills, from ~1 to 100 m wide, cross-cut the overlying diamictite member along the north-central part of the island.</p> <p>(6) Diamictite member- divided into a basal unit and main part. The basal unit comprises stratified diamictite, wacke, and argillite interlayered with mafic igneous rocks. The basal unit contains pebble to rare cobble clasts of reworked siliciclastic and carbonate sedimentary rocks. The main part comprises mostly massive, polymict diamictite with pebble to boulder (maximum size of 5 m) clasts in granule to sandy to micaceous matrix; larger clasts include ~60-80% granite and gneiss, 10-15% quartzite, <5% volcanic, and 10-20% siliciclastic sedimentary types. Distinctive green fuchsite quartzite clasts are a minor but widespread component. Matrix includes granule rock fragments, single and polycrystalline quartz and feldspar grains, and finer grained matrix with abundant biotite, muscovite, and chlorite. Crude stratification, defined by diffuse clast-rich zones and wispy sandy layers, is present in some outcrops. The member has a minimum thickness of about 300 m; the top contact is covered to the northwest beneath Great Salt Lake.</p>
Geologic age	Neoproterozoic. The main part of the diamictite member is correlated with similar polymict diamictite in the Little Mountain area that locally contains more abundant volcanic clasts and young zircon grains with a maximum depositional age of 688 Ma.
Correlations	The Fremont Island section exposes lower members of the Perry Canyon Formation not present in the type section. The volcanic and diamictite members of the two sections are correlated based on similar geochemical compositions and detrital zircon patterns.

Data Repository Table 1. LA-ICPMS detrital zircon U-Pb data.

Sample	U (ppm)	206Pb/ 204Pb		U/Th	Isotope ratios				Apparent ages (Ma)							
		206Pb*/ 207Pb*	± (%)		207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Conc (%)	
23EAB10- arkosic grit member Perry Canyon Formation, Fremont Island, UTM: 12T 390393 E 4553965 N, n=53/100																
23EAB10-1	1496	446524	7.1	13.4017	0.4	1.7860	2.8	0.1736	2.8	1031.9	26.4	1040.4	18.2	1058.2	7.8	97.5
23EAB10-78	103	27181	1.4	13.2913	4.6	1.9060	7.8	0.1837	6.3	1087.4	63.1	1083.2	51.8	1074.9	91.5	101.2
23EAB10-8	79	45486	3.4	12.8394	3.8	2.1042	4.0	0.1959	1.5	1153.5	15.6	1150.2	27.9	1143.9	74.8	100.8
23EAB10-45	59	38522	1.1	12.6787	3.8	2.0876	4.9	0.1920	3.2	1132.0	33.3	1144.7	33.9	1168.9	74.3	96.8
23EAB10-88	669	401396	4.9	11.3113	0.9	2.8694	2.7	0.2354	2.6	1362.7	31.8	1373.9	20.7	1391.3	17.6	97.9
23EAB10-53	248	139856	2.1	11.2623	0.6	2.9032	3.0	0.2371	2.9	1371.8	36.2	1382.8	22.5	1399.7	11.0	98.0
23EAB10-47	203	165394	0.9	9.7669	0.7	4.1302	2.6	0.2926	2.5	1654.3	36.8	1660.3	21.5	1667.8	13.6	99.2
23EAB10-38	1501	276177	27.1	9.7239	0.3	3.9601	2.5	0.2793	2.5	1587.8	35.6	1626.1	20.6	1676.0	5.2	94.7
23EAB10-58	389	273825	1.6	9.2487	0.4	4.5188	3.0	0.3031	3.0	1706.7	44.5	1734.4	24.9	1768.0	7.3	96.5
23EAB10-18	324	240529	2.7	9.2218	0.4	4.6738	2.2	0.3126	2.1	1753.5	32.6	1762.6	18.2	1773.3	8.0	98.9
23EAB10-57	417	291549	7.4	9.2099	0.4	4.5352	1.3	0.3029	1.3	1705.8	18.8	1737.4	11.0	1775.7	7.2	96.1
23EAB10-31	169	206973	34.1	9.2019	1.0	4.7124	2.2	0.3145	2.0	1762.8	30.6	1769.5	18.5	1777.3	17.5	99.2
23EAB10-24	137	58318	4.9	7.0725	5.9	8.0893	7.6	0.4149	4.9	2237.5	92.8	2241.1	69.1	2244.3	101.3	99.7
23EAB10-65	860	159647	3.1	6.4393	3.4	9.4290	5.0	0.4404	3.7	2352.2	72.2	2380.7	45.7	2405.1	57.1	97.8
23EAB10-36	437	195283	1.7	6.3131	1.3	10.2827	1.7	0.4708	1.2	2487.1	24.3	2460.5	16.1	2438.6	21.8	102.0
23EAB10-98	655	562737	2.8	6.2815	1.0	9.8169	3.2	0.4472	3.1	2383.0	61.1	2417.7	29.7	2447.2	16.7	97.4
23EAB10-17	133	124613	2.0	6.2746	0.5	10.1743	2.7	0.4630	2.6	2452.8	53.1	2450.7	24.6	2449.0	9.1	100.2
23EAB10-43	150	111021	1.9	6.2575	0.6	10.2524	2.9	0.4653	2.9	2462.9	58.7	2457.8	27.2	2453.6	10.6	100.4
23EAB10-93	430	390267	1.4	6.2543	0.2	10.1141	1.5	0.4588	1.5	2434.2	30.7	2445.3	14.1	2454.5	3.0	99.2
23EAB10-66	245	82934	1.3	6.2492	0.5	9.7488	3.5	0.4418	3.4	2358.9	67.7	2411.3	32.0	2455.9	9.0	96.1
23EAB10-26	156	193317	1.7	6.2403	0.6	9.9517	2.2	0.4504	2.1	2397.1	41.8	2430.3	20.1	2458.3	10.4	97.5
23EAB10-71	152	184990	1.9	6.2326	0.4	10.3076	2.0	0.4659	2.0	2465.7	40.1	2462.8	18.6	2460.3	7.6	100.2
23EAB10-37	582	428735	1.8	6.2267	0.3	10.1550	1.3	0.4586	1.2	2433.4	24.9	2449.0	11.8	2461.9	5.6	98.8
23EAB10-96	152	53081	3.4	6.2226	0.5	9.9381	2.3	0.4485	2.2	2388.6	44.2	2429.1	20.9	2463.1	8.1	97.0
23EAB10-21	527	604246	3.3	6.2195	0.2	10.3932	2.6	0.4688	2.6	2478.4	52.9	2470.4	23.9	2463.9	3.3	100.6
23EAB10-82	197	195280	1.8	6.2169	0.4	10.7301	1.7	0.4838	1.6	2543.8	33.8	2500.0	15.4	2464.6	6.4	103.2
23EAB10-20	83	90169	2.2	6.2122	0.7	10.1668	3.0	0.4581	2.9	2431.0	59.1	2450.1	27.8	2465.9	12.4	98.6
23EAB10-75	246	172497	2.5	6.2108	0.2	10.1542	2.0	0.4574	2.0	2428.0	40.2	2448.9	18.5	2466.3	4.2	98.4
23EAB10-97	327	212239	2.1	6.2070	0.3	9.6475	4.2	0.4343	4.1	2325.1	81.0	2401.7	38.3	2467.3	5.8	94.2
23EAB10-23	583	170336	8.6	5.9729	0.6	10.0242	5.1	0.4342	5.1	2324.8	99.1	2437.0	47.2	2532.0	9.8	91.8
23EAB10-61	262	195755	1.3	5.9216	0.8	10.9081	3.9	0.4685	3.8	2476.9	78.8	2515.3	36.5	2546.5	13.9	97.3
23EAB10-39	258	27055	0.9	5.7735	0.4	11.6796	2.2	0.4891	2.2	2566.6	45.7	2579.1	20.5	2588.9	6.1	99.1
23EAB10-68	233	270598	1.0	5.7683	1.6	11.8933	2.2	0.4976	1.5	2603.3	33.1	2596.0	21.0	2590.3	27.2	100.5
23EAB10-9	499	128157	3.4	5.7509	0.7	11.7582	5.9	0.4904	5.9	2572.5	125.1	2585.3	55.6	2595.4	11.2	99.1
23EAB10-32	478	47214	2.9	5.7479	0.2	11.0253	2.5	0.4596	2.4	2437.9	49.7	2525.3	22.9	2596.3	3.9	93.9
23EAB10-48	494	315634	2.5	5.7161	1.5	11.6239	3.9	0.4819	3.6	2535.5	74.5	2574.6	36.0	2605.5	24.6	97.3
23EAB10-11	690	213853	7.9	5.7112	0.3	11.8601	1.1	0.4913	1.0	2576.1	22.3	2593.4	10.2	2606.9	4.8	98.8
23EAB10-2	526	45738	3.3	5.7067	0.3	11.3557	4.6	0.4700	4.6	2483.6	95.2	2552.8	43.2	2608.2	4.3	95.2
23EAB10-95	391	422556	4.4	5.6987	0.4	11.6758	1.4	0.4826	1.4	2538.5	28.7	2578.8	13.2	2610.6	5.9	97.2
23EAB10-77	641	420292	7.1	5.6981	0.2	12.1444	2.8	0.5019	2.8	2621.9	61.1	2615.6	26.7	2610.8	3.5	100.4
23EAB10-46	903	331057	4.4	5.6944	0.3	11.7308	2.2	0.4845	2.1	2546.8	45.0	2583.2	20.2	2611.8	4.9	97.5
23EAB10-76	701	578544	7.5	5.6936	0.2	11.9140	1.3	0.4920	1.2	2579.2	26.5	2597.7	11.9	2612.1	3.7	98.7
23EAB10-3	228	170510	3.7	5.6855	0.4	11.7095	2.8	0.4828	2.8	2539.6	57.9	2581.5	26.0	2614.4	6.4	97.1
23EAB10-34	414	284855	1.3	5.6798	0.3	12.0536	2.5	0.4965	2.5	2598.9	53.9	2608.6	23.8	2616.1	5.7	99.3
23EAB10-25	230	211460	2.0	5.6737	0.5	12.0599	1.9	0.4963	1.8	2597.7	38.5	2609.1	17.5	2617.9	8.2	99.2
23EAB10-54	402	41500	1.0	5.6670	0.2	11.0758	2.7	0.4552	2.7	2418.4	53.9	2529.5	25.0	2619.9	3.4	92.3
23EAB10-15	141	148270	3.5	5.5475	0.3	12.4300	2.3	0.5001	2.3	2614.3	49.8	2637.4	22.0	2655.3	5.1	98.5
23EAB10-86	414	222106	2.2	5.5041	0.7	12.3807	3.3	0.4942	3.3	2589.0	69.5	2633.7	31.3	2668.3	11.3	97.0
23EAB10-63	739	1747880	6.8	5.4755	0.6	13.3704	3.0	0.5310	2.9	2745.5	65.3	2706.2	28.2	2676.9	10.6	102.6
23EAB10-83	251	165089	0.9	5.4582	0.3	12.4273	2.1	0.4920	2.1	2579.1	43.9	2637.2	19.6	2682.1	4.2	96.2
23EAB10-52	399	289407	2.5	5.4417	0.2	12.5485	2.6	0.4953	2.6	2593.4	55.6	2646.4	24.6	2687.1	3.8	96.5
23EAB10-59	298	120174	1.7	5.3713	0.4	13.4471	1.4	0.5239	1.3	2715.5	28.7	2711.6	12.9	2708.6	7.2	100.3
23EAB10-79	169	227977	2.4	5.3701	0.3	13.6809	2.9	0.5328	2.9	2753.4	65.2	2727.9				

25EAB10-50	107	26883	1.0	12.9831	3.4	2.0409	3.6	0.1922	1.2	1133.1	12.6	1129.3	24.6	1121.8	67.8	101.0
25EAB10-81	47	30635	1.7	12.9672	5.2	2.1287	6.6	0.2002	4.0	1176.4	43.5	1158.2	45.3	1124.2	102.9	104.6
25EAB10-82	135	38311	1.3	12.8719	1.9	2.0415	2.5	0.1906	1.7	1124.5	17.1	1129.4	17.3	1138.9	38.4	98.7
25EAB10-79	182	99542	1.9	12.8678	2.7	2.0318	3.7	0.1896	2.4	1119.3	25.2	1126.2	25.1	1139.6	54.7	98.2
25EAB10-64	171	111023	1.1	12.8200	1.7	2.0367	4.3	0.1894	3.9	1118.0	40.1	1127.9	29.1	1147.0	34.3	97.5
25EAB10-37	124	18603	2.2	12.7465	2.9	2.1381	3.3	0.1977	1.6	1162.7	16.9	1161.2	22.8	1158.3	57.2	100.4
25EAB10-5	299	146597	1.4	12.7456	1.5	2.1257	1.9	0.1965	1.2	1156.5	13.2	1157.2	13.4	1158.5	29.5	99.8
25EAB10-76	389	103995	1.2	12.7441	1.2	2.0862	2.9	0.1928	2.6	1136.6	27.3	1144.3	19.7	1158.7	23.1	98.1
25EAB10-6	302	12805	3.2	12.6787	1.3	2.0563	3.9	0.1891	3.6	1116.4	37.3	1134.4	26.3	1168.9	25.1	95.5
25EAB10-61	754	76182	2.9	12.6319	0.5	2.1570	1.9	0.1976	1.9	1162.5	19.8	1167.3	13.4	1176.3	10.5	98.8
25EAB10-74	83	8842	2.3	12.5678	3.8	2.1310	8.9	0.1942	8.1	1144.3	84.7	1158.9	61.8	1186.3	75.7	96.5
25EAB10-66	286	89949	2.5	12.5639	1.2	2.1273	2.2	0.1938	1.8	1142.2	19.1	1157.7	15.0	1186.9	23.3	96.2
25EAB10-69	162	96842	1.4	12.5522	1.6	2.1548	3.8	0.1962	3.4	1154.7	36.3	1166.6	26.4	1188.8	32.6	97.1
25EAB10-4	250	114668	2.1	12.5253	1.3	2.0475	5.2	0.1860	5.1	1099.7	51.1	1131.5	35.7	1193.0	26.3	92.2
25EAB10-94	269	222689	0.7	12.5143	2.1	2.1667	5.5	0.1967	5.1	1157.3	53.8	1170.4	38.3	1194.7	42.1	96.9
25EAB10-7	347	94991	2.7	12.3944	0.8	2.3377	6.2	0.2101	6.1	1229.6	68.6	1223.8	44.0	1213.7	16.1	101.3
25EAB10-90	1052	74874	0.6	12.2285	0.4	2.3539	2.4	0.2088	2.3	1222.2	26.2	1228.7	17.0	1240.2	8.4	98.6
25EAB10-15	344	94891	4.7	12.1361	0.8	2.4750	1.6	0.2178	1.4	1270.5	16.2	1264.7	11.7	1255.0	15.7	101.2
25EAB10-52	143	14202	3.7	12.0288	5.2	2.5260	8.3	0.2204	6.5	1283.8	75.4	1279.5	60.4	1272.3	101.0	100.9
25EAB10-99	317	30238	4.3	11.9183	1.5	2.3398	9.6	0.2022	9.5	1187.4	102.7	1224.5	68.4	1290.3	29.7	92.0
25EAB10-21	104	38592	1.1	11.8774	2.0	2.4271	3.3	0.2091	2.6	1223.9	29.0	1250.7	23.4	1297.0	38.0	94.4
25EAB10-57	347	40956	3.3	11.7394	0.7	2.6081	1.5	0.2221	1.3	1292.8	15.7	1302.9	11.1	1319.7	13.3	98.0
25EAB10-44	155	62279	1.1	11.6523	2.2	2.6625	3.5	0.2250	2.8	1308.3	33.3	1318.1	26.2	1334.1	41.8	98.1
25EAB10-97	372	448129	1.9	11.5780	0.9	2.8034	2.6	0.2354	2.5	1362.8	30.3	1356.4	19.6	1346.5	16.8	101.2
25EAB10-23	177	67549	2.7	11.5649	1.2	2.6291	2.7	0.2205	2.5	1284.6	28.5	1308.8	20.1	1348.7	23.6	95.2
25EAB10-67	468	117501	1.0	11.4295	0.4	2.5171	2.6	0.2087	2.6	1221.6	29.1	1277.0	19.2	1371.4	8.2	89.1
25EAB10-58	130	43551	2.3	11.4226	2.0	2.8605	2.3	0.2370	1.2	1371.0	14.2	1371.6	17.7	1372.5	39.4	99.9
25EAB10-20	162	47081	2.4	11.3383	1.8	2.8181	5.5	0.2317	5.2	1343.6	62.6	1360.4	40.9	1386.7	34.0	96.9
25EAB10-28	274	35643	2.5	11.0257	0.9	2.8812	3.1	0.2304	3.0	1336.6	35.9	1377.0	23.4	1440.2	16.8	92.8
25EAB10-31	135	55764	1.7	10.9333	1.8	3.1487	2.9	0.2497	2.2	1436.8	28.3	1444.7	22.0	1456.3	34.7	98.7
25EAB10-35	133	51872	1.5	10.8493	3.0	3.1125	3.9	0.2449	2.5	1412.2	31.8	1435.8	29.8	1470.9	56.1	96.0
25EAB10-70	281	82638	1.2	10.8346	0.8	3.1240	4.1	0.2455	4.1	1415.1	51.5	1438.6	31.7	1473.5	14.3	96.0
25EAB10-54	392	276929	2.5	10.8306	0.8	3.0154	5.3	0.2369	5.2	1370.4	64.6	1411.5	40.4	1474.2	15.3	93.0
25EAB10-77	241	106559	5.7	10.6170	1.4	3.0970	3.7	0.2385	3.4	1378.7	42.0	1431.9	28.1	1511.9	26.3	91.2
25EAB10-9	211	69313	1.5	9.8780	0.6	4.1547	4.2	0.2977	4.1	1679.7	61.1	1665.1	34.2	1646.9	12.0	102.0
25EAB10-30	111	68445	3.0	8.6664	0.6	5.1050	2.4	0.3209	2.3	1794.0	36.7	1836.9	20.6	1885.9	11.6	95.1
25EAB10-13	315	151876	1.0	8.6019	0.6	5.3986	2.4	0.3368	2.4	1871.3	38.7	1884.6	21.0	1899.4	10.3	98.5
25EAB10-27	296	166055	3.1	8.4604	0.4	5.4190	2.3	0.3325	2.3	1850.6	36.8	1887.9	20.0	1929.1	8.0	95.9
25EAB10-80	223	56621	4.3	7.6224	6.6	6.5373	7.4	0.3614	3.3	1988.8	55.9	2050.9	65.3	2114.0	116.7	94.1
25EAB10-100	127	44488	1.6	6.7802	1.6	8.3665	3.7	0.4114	3.3	2221.4	62.3	2271.5	33.3	2317.0	27.1	95.9
25EAB10-26	207	2951	2.0	6.5649	2.7	9.3002	3.1	0.4428	1.6	2363.2	31.7	2368.0	28.8	2372.2	46.0	99.6
25EAB10-3	222	22800	2.6	6.0318	0.3	9.6823	2.1	0.4236	2.0	2276.7	39.3	2405.0	19.0	2515.6	5.0	90.5
25EAB10-78	298	20172	0.9	5.6660	0.4	12.6579	3.2	0.5202	3.2	2699.8	69.6	2654.5	30.0	2620.2	6.8	103.0
25EAB10-10	216	33754	0.6	5.6211	0.3	12.5041	1.2	0.5098	1.1	2655.7	24.5	2643.0	10.9	2633.4	4.6	100.8
25EAB10-72	247	18770	2.0	5.5607	0.6	11.8546	3.6	0.4781	3.5	2519.0	73.8	2593.0	33.6	2651.3	9.9	95.0
25EAB10-41	169	264392	3.4	2.8819	0.8	35.5216	2.5	0.7424	2.3	3579.6	64.0	3653.3	24.3	3693.9	12.2	96.9

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)						Conc (%)		
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	
08EAB10- pebbly slate member, Perry Canyon Formation, Fremont Island, UTM: 12T 388711 E 4556423 N, n= 65/100																
08EAB10-22	462	153565	4.3	14.0730	0.6	1.5912	1.3	0.1624	1.1	970.1	10.0	966.7	7.9	959.1	12.2	101.2
08EAB10-11	135	27768	2.0	14.0697	3.5	1.5785	4.0	0.1611	2.0	962.7	17.5	961.8	24.7	959.5	70.8	100.3
08EAB10-33	213	75052	17.5	13.8544	2.9	1.6328	3.7	0.1641	2.3	979.3	20.7	982.9	23.3	991.0	59.2	98.8
08EAB10-47	67	38771	1.1	13.8409	5.0	1.6878	5.7	0.1694	2.9	1008.9	27.0	1003.9	36.6	993.0	100.8	101.6
08EAB10-97	351	101041	1.6	13.6681	1.0	1.7634	2.0	0.1748	1.7	1038.6	16.7	103				

08EAB10-27	112	28260	2.1	12.5861	3.2	2.3149	3.6	0.2113	1.7	1235.8	19.2	1216.9	25.5	1183.5	62.5	104.4
08EAB10-83	144	59330	1.5	12.5234	2.0	2.2682	4.1	0.2060	3.6	1207.5	39.7	1202.5	29.2	1193.3	40.3	101.2
08EAB10-86	52	25711	1.0	12.4505	4.0	2.3727	6.8	0.2143	5.5	1251.4	63.0	1234.4	49.0	1204.8	79.5	103.9
08EAB10-24	205	63814	1.8	12.4261	1.9	2.1885	2.6	0.1972	1.7	1160.4	17.6	1177.4	17.8	1208.7	38.3	96.0
08EAB10-8	629	217949	256.6	12.3846	0.4	2.2933	2.8	0.2060	2.8	1207.4	30.6	1210.2	19.8	1215.3	7.4	99.4
08EAB10-37	179	36884	3.6	12.3006	1.4	2.4652	2.8	0.2199	2.5	1281.5	29.0	1261.9	20.5	1228.6	26.6	104.3
08EAB10-44	356	180213	1.3	12.2930	0.9	2.4084	2.9	0.2147	2.7	1253.9	30.9	1245.1	20.6	1229.9	18.4	102.0
08EAB10-87	202	89484	2.2	12.1632	1.8	2.5068	2.1	0.2211	1.1	1287.9	12.3	1274.0	15.0	1250.6	34.7	103.0
08EAB10-5	402	171073	2.0	11.9932	0.9	2.5553	1.6	0.2223	1.3	1293.8	15.0	1287.9	11.3	1278.1	17.2	101.2
08EAB10-69	300	103301	2.7	11.7077	0.6	2.6761	2.2	0.2272	2.1	1320.0	25.3	1321.9	16.4	1324.9	12.6	99.6
08EAB10-18	96	33236	1.8	11.6454	2.3	2.5880	2.8	0.2186	1.6	1274.4	18.8	1297.2	20.4	1335.3	43.7	95.4
08EAB10-40	136	38497	1.2	11.4690	1.4	2.8098	1.5	0.2337	0.6	1354.0	7.2	1358.1	11.2	1364.7	26.5	99.2
08EAB10-28	322	80372	4.4	11.1849	0.8	2.9658	3.6	0.2406	3.5	1389.8	43.5	1398.9	27.1	1412.9	15.4	98.4
08EAB10-96	97	35960	1.3	11.1702	2.1	3.0087	2.8	0.2437	1.7	1406.2	22.0	1409.8	21.1	1415.4	41.0	99.3
08EAB10-35	38	18038	1.9	10.9874	3.4	3.3295	7.5	0.2653	6.7	1517.0	90.9	1488.0	59.0	1446.9	64.9	104.8
08EAB10-26	162	81375	4.0	10.9760	1.1	3.3123	4.6	0.2637	4.4	1508.6	59.8	1484.0	35.8	1448.8	21.8	104.1
08EAB10-41	250	163342	2.6	10.9698	0.7	3.1826	1.2	0.2532	1.0	1455.0	12.8	1452.9	9.5	1449.9	14.1	100.4
08EAB10-25	91	45810	1.1	10.9497	2.0	3.3010	4.2	0.2622	3.7	1500.8	50.1	1481.3	33.0	1453.4	37.7	103.3
08EAB10-68	653	125410	2.1	10.9107	0.3	3.1263	2.3	0.2474	2.3	1425.0	29.3	1439.2	17.8	1460.2	6.4	97.6
08EAB10-83	126	37026	1.7	10.8790	1.7	3.2910	2.7	0.2597	2.1	1488.1	27.4	1478.9	21.1	1465.7	33.2	101.5
08EAB10-54	338	143943	1.9	10.8084	1.1	3.2492	2.6	0.2547	2.4	1462.7	31.3	1469.0	20.5	1478.1	21.3	99.0
08EAB10-88	236	109871	1.1	10.7481	0.9	3.3643	2.6	0.2623	2.5	1501.4	33.1	1496.1	20.6	1488.7	17.0	100.9
08EAB10-36	1045	153646	1.8	10.6970	0.4	3.0019	3.6	0.2329	3.6	1349.6	43.9	1408.1	27.6	1497.7	8.0	90.1
08EAB10-76	559	363383	5.0	10.4402	0.7	3.3072	1.9	0.2504	1.7	1440.7	22.3	1482.8	14.6	1543.5	13.8	93.3
08EAB10-55	161	62301	1.1	9.9436	1.0	3.9829	2.1	0.2872	1.8	1627.7	25.7	1630.7	16.7	1634.6	18.7	99.6
08EAB10-7	139	79451	0.9	9.8646	0.9	4.1108	2.0	0.2941	1.8	1662.0	25.9	1656.5	16.4	1649.4	17.4	100.8
08EAB10-23	134	37869	1.3	9.7966	0.9	4.1566	2.1	0.2953	1.9	1668.1	28.0	1665.5	17.3	1662.2	16.6	100.4
08EAB10-57	102	93602	0.9	9.7609	1.8	4.1386	4.2	0.2930	3.7	1656.4	54.6	1662.0	34.1	1668.9	33.9	99.2
08EAB10-53	182	91105	4.6	9.0499	0.8	4.9625	1.3	0.3257	1.1	1817.6	17.0	1813.0	11.2	1807.6	14.2	100.6
08EAB10-39	116	42414	3.3	8.9642	1.1	4.5592	1.9	0.2964	1.6	1673.5	23.7	1741.8	16.2	1824.9	20.0	91.7
08EAB10-2	164	62117	1.0	8.1607	0.5	6.1737	1.0	0.3654	0.9	2007.7	15.7	2000.7	9.1	1993.5	9.2	100.7
08EAB10-4	184	181624	1.4	6.7802	0.6	8.7557	2.2	0.4306	2.2	2308.2	41.9	2312.9	20.5	2317.0	10.6	99.6
08EAB10-56	64	99266	1.6	6.4660	1.6	8.6346	5.3	0.4049	5.1	2191.7	94.0	2300.2	48.3	2398.0	26.9	91.4
08EAB10-29	265	239335	1.4	6.1554	0.6	10.0527	3.2	0.4488	3.1	2389.8	62.3	2439.6	29.4	2481.4	10.4	96.3
08EAB10-99	105	98907	4.3	5.4868	0.7	13.1316	1.5	0.5226	1.4	2710.0	30.8	2689.2	14.6	2673.5	11.2	101.4
08EAB10-10	221	157294	1.5	5.4178	0.4	13.3702	2.0	0.5254	1.9	2721.9	42.6	2706.2	18.5	2694.4	6.3	101.0

Sample	U (ppm)	206Pb/ 204Pb	U/Th	Isotope ratios				Apparent ages (Ma)								
				206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb*/ 238U	± (Ma)	207Pb*/ 235U	± (Ma)	206Pb* / 207Pb*	/ 207Pb*	± (Ma)
11EAB10- slate member, Perry Canyon Formation, Fremont Island, UTM: 12T 387516 E 4557983 N, n=80/100																
11EAB10-94	152	33702	2.6	13.8705	2.6	1.5641	3.6	0.1574	2.6	942.0	22.4	956.1	22.6	988.6	53.0	95.3
11EAB10-50	285	60107	2.3	13.5622	1.3	1.6110	2.5	0.1585	2.1	948.2	18.8	974.5	15.7	1034.2	26.9	91.7
11EAB10-47	1329	377772	3.6	13.5487	0.4	1.7553	1.7	0.1725	1.6	1025.8	15.2	1029.1	10.8	1036.2	8.8	99.0
11EAB10-16	526	117715	5.5	13.5101	1.1	1.6430	2.8	0.1610	2.6	962.3	23.3	986.9	17.9	1042.0	22.6	92.4
11EAB10-7	794	231843	4.0	13.4765	0.5	1.7307	1.9	0.1692	1.8	1007.5	17.2	1020.0	12.3	1047.0	10.4	96.2
11EAB10-27	1894	306718	3.8	13.4255	0.3	1.7867	1.1	0.1740	1.0	1034.0	9.8	1040.6	7.0	1054.7	6.7	98.0
11EAB10-19	545	236993	3.5	13.4036	1.1	1.7969	1.8	0.1747	1.4	1037.8	13.3	1044.3	11.5	1057.9	21.7	98.1
11EAB10-4	220	84734	0.6	13.3916	1.1	1.7890	1.6	0.1738	1.1	1032.8	10.8	1041.5	10.2	1059.7	21.8	97.5
11EAB10-9	723	229709	4.6	13.3583	0.5	1.8389	2.9	0.1782	2.9	1056.9	28.2	1059.5	19.3	1064.8	9.6	99.3
11EAB10-49	368	97812	2.0	13.3213	1.2	1.8514	2.8	0.1789	2.5	1060.8	24.9	1063.9	18.4	1070.3	23.1	99.1
11EAB10-51	209	50303	2.4	13.2815	1.7	1.8577	3.5	0.1789	3.0	1061.2	29.7	1066.2	23.1	1076.4	35.1	98.6
11EAB10-99	315	94844	1.7	13.2774	0.9	1.8388	2.5	0.1771	2.3	1050.9	22.3	1059.4	16.3	1077.0	18.2	97.6
11EAB10-60	206	126871	4.6	13.2480	1.1	1.9378	3.2	0.1862	3.0	1100.7	30.2	1094.2	21.4	1081.4	23.0	101.8
11EAB10-71	302	218905	3.8	13.2470	1.1	1.8631	2.4	0.1790	2.1	1061.5	20.4	1068.1	15.6	1081.5	22.3	98.1
11EAB10-13	383	202651	3.5	13.2358	0.8	1.9054	3.1	0.1829	3							

11EAB10-58	64	11487	3.7	12.4511	2.4	2.1616	3.6	0.1952	2.7	1149.5	28.3	1168.8	25.0	1204.7	47.0	95.4
11EAB10-57	216	49605	2.3	12.4336	2.1	2.2742	9.1	0.2051	8.9	1202.5	97.6	1204.3	64.5	1207.5	40.8	99.6
11EAB10-80	100	21916	4.5	12.3852	2.3	2.1809	3.4	0.1959	2.5	1153.3	26.3	1175.0	23.5	1215.2	44.9	94.9
11EAB10-82	481	46663	4.2	12.3777	1.7	2.2685	2.9	0.2036	2.3	1194.9	25.4	1202.5	20.1	1216.4	32.6	98.2
11EAB10-56	213	63254	3.0	12.3581	1.3	2.2788	2.3	0.2042	2.0	1198.1	21.4	1205.7	16.4	1219.5	24.6	98.2
11EAB10-45	1401	1150388	3.1	12.3340	0.2	2.3085	2.3	0.2065	2.3	1210.2	25.7	1214.9	16.6	1223.3	4.4	98.9
11EAB10-32	247	46657	2.4	12.3323	2.0	2.3114	3.8	0.2067	3.2	1211.4	35.1	1215.8	26.6	1223.6	39.3	99.0
11EAB10-44	355	103756	2.2	12.3153	0.6	2.3459	1.6	0.2095	1.4	1226.3	16.1	1226.3	11.2	1226.3	12.5	100.0
11EAB10-67	277	60542	2.2	12.3022	1.3	2.3874	4.5	0.2130	4.3	1244.8	48.5	1238.8	32.0	1228.3	24.9	101.3
11EAB10-76	89	47358	2.6	12.2144	2.2	2.2095	4.6	0.1957	4.1	1152.3	42.9	1184.0	32.2	1242.4	42.2	92.7
11EAB10-33	211	20211	1.6	11.9835	2.7	2.4027	3.2	0.2088	1.9	1222.6	20.8	1243.4	23.3	1279.7	51.7	95.5
11EAB10-35	95	17765	2.5	11.8011	2.6	2.4599	3.0	0.2105	1.6	1231.7	17.8	1260.3	21.8	1309.5	49.9	94.1
11EAB10-54	118	8824	2.8	11.7432	1.6	2.4996	3.2	0.2129	2.7	1244.2	30.8	1271.9	23.0	1319.1	31.5	94.3
11EAB10-68	118	47101	2.5	11.6346	1.4	2.6772	3.2	0.2259	2.9	1313.0	34.1	1322.2	23.7	1337.1	27.8	98.2
11EAB10-48	126	70036	1.7	11.5787	1.6	2.7930	3.5	0.2345	3.1	1358.3	37.5	1353.7	25.9	1346.4	31.7	100.9
11EAB10-39	166	72797	2.3	11.5523	0.7	2.7795	2.5	0.2329	2.4	1349.6	29.5	1350.0	18.9	1350.8	13.9	99.9
11EAB10-93	129	54389	1.6	11.4563	1.4	2.7599	2.8	0.2293	2.5	1330.9	29.5	1344.8	21.0	1366.8	26.7	97.4
11EAB10-22	185	52215	1.0	11.4428	1.3	2.8955	2.3	0.2403	1.9	1388.3	23.8	1380.7	17.6	1369.1	25.7	101.4
11EAB10-87	99	43177	1.2	11.4032	2.0	2.7110	3.7	0.2242	3.1	1304.1	36.8	1331.5	27.4	1375.8	38.4	94.8
11EAB10-73	298	105951	1.0	11.3364	0.6	2.9111	4.3	0.2393	4.3	1383.3	53.4	1384.8	32.7	1387.1	11.6	99.7
11EAB10-15	723	78164	2.7	11.1760	0.5	2.8080	2.4	0.2276	2.3	1321.9	27.6	1357.7	17.7	1414.4	10.0	93.5
11EAB10-21	79	21687	1.2	11.1708	2.3	2.9345	3.0	0.2377	2.0	1375.0	24.2	1390.9	22.9	1415.3	44.1	97.2
11EAB10-11	116	44788	1.5	11.1688	1.4	2.9863	1.8	0.2419	1.2	1396.6	15.6	1404.1	14.0	1415.6	26.0	98.7
11EAB10-83	162	51818	2.7	11.1134	1.1	3.0274	3.6	0.2440	3.4	1407.5	43.0	1414.5	27.3	1425.1	20.9	98.8
11EAB10-36	88	39354	0.8	11.0590	2.3	3.0729	2.9	0.2465	1.6	1420.2	20.8	1426.0	21.9	1434.5	44.8	99.0
11EAB10-88	514	319913	5.3	11.0529	1.3	2.9437	2.8	0.2360	2.5	1365.8	30.3	1393.2	21.0	1435.5	24.4	95.1
11EAB10-75	442	143854	2.0	11.0019	0.4	2.9666	1.3	0.2367	1.3	1369.6	15.5	1399.1	10.1	1444.4	8.5	94.8
11EAB10-61	399	29357	2.7	10.8728	0.6	2.8655	3.3	0.2260	3.2	1313.3	38.0	1372.9	24.5	1466.8	12.0	89.5
11EAB10-96	218	99374	2.7	10.8251	0.9	3.1367	2.0	0.2463	1.8	1419.2	22.4	1441.8	15.2	1475.2	17.1	96.2
11EAB10-78	526	251144	1.7	10.7957	0.6	3.2482	1.9	0.2543	1.8	1460.8	23.2	1468.8	14.4	1480.3	10.5	98.7
11EAB10-90	106	68277	1.6	10.7924	2.7	3.1738	4.4	0.2484	3.5	1430.4	44.7	1450.8	33.9	1480.9	50.6	96.6
11EAB10-64	297	171457	2.1	9.3384	0.5	4.5357	2.9	0.3072	2.8	1726.9	43.0	1737.6	24.1	1750.4	10.0	98.7
11EAB10-63	158	278726	1.0	9.3363	0.9	4.4624	2.6	0.3022	2.4	1702.0	36.2	1724.0	21.3	1750.8	16.1	97.2
11EAB10-77	249	159911	1.7	9.3005	0.3	4.6770	1.9	0.3155	1.8	1767.6	28.6	1763.1	15.7	1757.8	6.0	100.6
11EAB10-52	56	59235	1.4	9.1935	2.3	4.6530	2.5	0.3103	1.2	1741.9	17.9	1758.8	21.3	1778.9	41.3	97.9
11EAB10-97	214	67793	0.8	8.6398	0.4	5.4120	2.1	0.3391	2.1	1882.5	33.7	1886.8	18.1	1891.5	8.1	99.5
11EAB10-43	248	429547	3.7	5.4663	0.4	12.9229	2.7	0.5123	2.6	2666.6	57.7	2674.0	25.2	2679.7	6.4	99.5
11EAB10-69	56	44861	1.3	5.4084	0.8	13.1344	3.7	0.5152	3.7	2678.8	80.1	2689.4	35.3	2697.3	13.1	99.3
11EAB10-84	91	81493	0.9	5.3636	0.3	13.5824	1.4	0.5284	1.4	2734.5	30.2	2721.0	13.1	2711.0	5.0	100.9

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Conc (%)
18EAB10- lower part diamictite member, Perry Canyon Formation, Fremont Island, UTM: 12T 383349 E 4558316 N, n= 56/75																
18EAB10-53	163	539730	0.9	13.8129	2.2	1.6879	3.3	0.1691	2.4	1007.1	22.8	1004.0	20.9	997.1	44.4	101.0
18EAB10-45	299	909627	6.0	13.6896	0.9	1.7779	3.2	0.1765	3.1	1047.9	29.5	1037.4	20.7	1015.3	19.0	103.2
18EAB10-38	433	1727043	2.9	13.6678	0.8	1.7377	2.4	0.1723	2.2	1024.5	21.3	1022.6	15.4	1018.5	16.8	100.6
18EAB10-24	132	365278	2.5	13.5880	2.0	1.8454	3.2	0.1819	2.6	1077.1	25.5	1061.8	21.3	1030.3	39.6	104.5
18EAB10-7	94	403268	4.9	13.4980	3.2	1.7415	4.9	0.1705	3.8	1014.8	35.4	1024.0	31.9	1043.8	64.7	97.2
18EAB10-28	73	221614	1.8	13.4688	2.8	1.7670	4.9	0.1726	4.0	1026.5	38.2	1033.4	31.9	1048.2	56.9	97.9
18EAB10-43	148	296614	2.9	13.4686	1.8	1.9025	2.5	0.1858	1.7	1098.8	16.9	1082.0	16.3	1048.2	36.0	104.8
18EAB10-54	138	411669	2.9	13.3255	2.5	1.8218	2.7	0.1761	1.2	1045.5	11.4	1053.3	17.9	1069.7	49.4	97.7
18EAB10-13	192	439218	3.4	13.2580	1.7	1.8736	3.0	0.1802	2.4	1067.8	23.7	1071.8	19.6	1079.9	34.2	98.9
18EAB10-22	354	1062921	2.1	13.0934	0.4	1.9822	2.1	0.1882	2.0	1111.8	20.6	1109.5	13.8	1104.9	7.3	100.6
18EAB10-3	104	326511	3.0	12.9814	2.2	1.9784	3.0	0.1863	2.0	1101.1	20.1	1108.2	20.2	1122.1	44.5	98.1
18EAB10-46	232	1236937	3.8	12.7571	1.4	2.1668	2.0	0.2005	1.5	1177.9	15.6	1170.				

18EAB10-51	102	383756	2.9	8.8291	1.2	5.1940	2.5	0.3326	2.2	1850.9	34.9	1851.6	21.2	1852.4	21.9	99.9
18EAB10-50	77	295673	0.9	8.7082	1.4	5.4674	2.6	0.3453	2.3	1912.2	37.5	1895.5	22.7	1877.3	24.4	101.9
18EAB10-65	180	1526689	1.4	6.7869	0.9	8.3209	2.0	0.4096	1.8	2213.0	33.7	2266.6	18.1	2315.3	14.7	95.6
18EAB10-63	105	1269265	1.8	6.5105	0.7	9.2991	8.5	0.4391	8.5	2346.6	166.6	2367.9	78.1	2386.4	12.7	98.3
18EAB10-40	354	500313	1.6	6.4019	0.9	8.9037	1.9	0.4134	1.7	2230.5	32.5	2328.2	17.6	2415.0	14.6	92.4
18EAB10-37	78	580550	1.9	6.3502	1.2	10.3881	2.5	0.4784	2.1	2520.4	44.6	2470.0	22.8	2428.7	20.8	103.8
18EAB10-49	517	6105408	3.5	6.3131	0.3	9.7271	2.0	0.4454	2.0	2374.7	39.5	2409.3	18.4	2438.6	4.3	97.4
18EAB10-17	405	2894130	1.8	6.2825	0.1	9.3355	3.5	0.4254	3.5	2284.8	67.8	2371.5	32.4	2446.9	2.2	93.4
18EAB10-14	86	1085666	1.6	6.2678	0.5	10.2028	2.5	0.4638	2.5	2456.3	50.6	2453.3	23.5	2450.8	9.3	100.2
18EAB10-35	403	2133966	2.4	6.2664	0.4	10.6271	2.3	0.4830	2.2	2540.2	46.6	2491.1	21.0	2451.2	6.7	103.6
18EAB10-57	455	4347760	3.2	6.2520	0.2	10.6889	2.2	0.4847	2.2	2547.6	45.9	2496.5	20.3	2455.1	3.4	103.8
18EAB10-47	287	1962689	2.3	6.2513	0.2	10.2017	2.1	0.4625	2.0	2450.7	41.6	2453.2	19.0	2455.3	4.1	99.8
18EAB10-36	253	1927569	2.1	6.2511	0.2	10.3101	1.9	0.4674	1.8	2472.3	37.9	2463.0	17.2	2455.4	4.0	100.7
18EAB10-29	373	2300736	2.2	6.2419	0.2	10.1340	1.7	0.4588	1.7	2434.1	34.4	2447.1	15.8	2457.8	4.2	99.0
18EAB10-19	389	3089012	2.9	6.2402	0.3	10.3242	1.0	0.4673	1.0	2471.5	19.6	2464.3	9.3	2458.3	5.3	100.5
18EAB10-72	275	2460385	0.4	5.8072	0.3	11.1924	4.0	0.4714	4.0	2489.7	82.5	2539.3	37.3	2579.1	4.2	96.5
18EAB10-21	214	807315	2.1	5.6693	0.4	12.4691	1.4	0.5127	1.3	2668.2	29.0	2640.4	13.1	2619.2	7.2	101.9
18EAB10-67	108	2318297	1.9	5.6325	0.7	12.2093	3.1	0.4988	3.0	2608.5	64.6	2620.6	29.0	2630.0	11.7	99.2
18EAB10-27	205	1513194	1.7	5.4453	0.3	12.7428	1.3	0.5033	1.3	2627.8	28.4	2660.8	12.6	2686.0	4.4	97.8
18EAB10-30	49	333956	1.1	5.3886	0.9	13.3069	3.0	0.5201	2.9	2699.4	64.0	2701.7	28.7	2703.3	15.2	99.9
18EAB10-34	80	835459	2.0	3.6221	0.7	25.8299	2.1	0.6786	2.0	3338.8	52.6	3340.1	20.9	3340.9	11.0	99.9

Sample	U (ppm)	206Pb/ 204Pb	U/Th	Isotope ratios				Apparent ages (Ma)								
				206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Conc (%)
19EAB10- lower part diamictite member, Perry Canyon Formation, Fremont Island, UTM: 12T 383347 E 4558341 N, n= 33/75																
19EAB10-53	413	856876	1.5	14.9249	1.2	1.2175	4.7	0.1318	4.5	798.0	34.0	808.6	26.2	837.8	26.0	95.3
19EAB10-25	357	681361	4.5	14.2163	2.0	1.4569	3.2	0.1502	2.5	902.2	20.8	912.7	19.1	938.3	40.9	96.1
19EAB10-64	116	204245	4.7	13.5026	2.2	1.8298	4.2	0.1792	3.6	1062.6	35.4	1056.2	27.7	1043.1	43.8	101.9
19EAB10-12	226	479116	2.4	13.0846	2.5	1.8454	4.4	0.1751	3.7	1040.3	35.1	1061.8	29.2	1106.2	50.4	94.0
19EAB10-39	466	762534	6.8	12.8568	0.9	1.9985	6.9	0.1864	6.8	1101.6	69.1	1115.0	46.6	1141.2	17.7	96.5
19EAB10-26	191	470353	2.5	12.7562	2.1	1.9974	5.4	0.1848	4.9	1093.1	49.7	1114.6	36.3	1156.8	41.2	94.5
19EAB10-23	456	1594531	2.6	12.7385	2.3	2.0276	3.8	0.1873	3.1	1106.9	31.2	1124.8	26.0	1159.6	45.0	95.5
19EAB10-36	234	344749	3.9	12.7132	1.5	2.1513	4.1	0.1984	3.8	1166.5	41.0	1165.5	28.5	1163.5	28.9	100.3
19EAB10-16	811	1482217	5.4	12.6978	0.6	2.0476	3.6	0.1886	3.5	1113.6	36.1	1131.5	24.5	1165.9	12.2	95.5
19EAB10-49	555	1591275	6.3	12.1983	0.6	2.3766	2.7	0.2103	2.7	1230.2	30.0	1235.6	19.6	1245.0	11.4	98.8
19EAB10-32	380	1981167	4.3	11.9779	0.9	2.3259	2.4	0.2021	2.2	1186.4	24.0	1220.2	16.9	1280.6	17.3	92.6
19EAB10-33	165	682896	2.1	11.9386	1.4	2.2777	5.7	0.1972	5.5	1160.4	58.9	1205.4	40.4	1287.0	27.1	90.2
19EAB10-40	251	382063	2.4	11.8544	0.8	2.4537	5.1	0.2110	5.0	1234.0	56.1	1258.5	36.5	1300.8	15.5	94.9
19EAB10-62	323	873529	2.6	11.8406	1.3	2.3478	4.6	0.2016	4.4	1184.0	47.8	1226.9	32.9	1303.0	25.9	90.9
19EAB10-4	617	1013569	3.7	11.7850	3.0	2.5049	6.0	0.2141	5.3	1250.6	59.8	1273.5	43.9	1312.2	57.8	95.3
19EAB10-48	78	241770	1.5	10.3449	2.1	3.4350	4.1	0.2577	3.5	1478.2	46.6	1512.4	32.4	1560.7	39.9	94.7
19EAB10-71	310	1241692	2.8	9.6251	0.7	4.1338	2.0	0.2886	1.9	1634.4	27.2	1661.0	16.4	1694.8	12.9	96.4
19EAB10-45	465	994584	12.0	9.1883	3.1	4.4550	9.0	0.2969	8.4	1675.8	124.4	1722.6	74.6	1780.0	56.7	94.1
19EAB10-8	244	648877	2.0	8.7095	0.6	5.4513	5.7	0.3443	5.6	1907.5	93.2	1893.0	48.8	1877.0	11.5	101.6
19EAB10-65	423	2390224	3.5	7.9805	0.3	6.2416	2.0	0.3613	2.0	1988.2	33.6	2010.3	17.4	2033.1	5.9	97.8
19EAB10-73	838	1742140	3.1	7.9371	3.3	6.0141	7.1	0.3462	6.2	1916.4	103.5	1977.9	61.7	2042.7	59.1	93.8
19EAB10-72	515	3585271	1.7	7.0062	1.5	7.5540	8.6	0.3838	8.5	2094.2	152.0	2179.4	77.5	2260.6	25.9	92.6
19EAB10-44	180	817993	3.0	6.8484	4.4	8.0806	4.6	0.4014	1.5	2175.3	27.9	2240.1	41.7	2299.8	75.0	94.6
19EAB10-10	174	1253738	1.3	6.8132	2.2	8.1477	5.6	0.4026	5.1	2181.0	94.8	2247.6	50.4	2308.7	37.5	94.5
19EAB10-37	255	1243760	2.2	6.5152	0.9	8.5849	4.9	0.4057	4.8	2195.1	90.0	2295.0	44.7	2385.1	14.7	92.0
19EAB10-6	972	5813120	1.3	6.3703	0.4	9.8245	3.5	0.4539	3.5	2412.6	69.8	2418.4	32.2	2423.4	7.6	99.6
19EAB10-20	358	2198047	1.9	6.3126	0.5	9.6975	4.3	0.4440	4.3	2368.5	85.2	2406.5	39.8	2438.8	8.3	97.1
19EAB10-24	179	843241	1.7	6.2719	0.5	9.9331	2.0	0.4518	1.9	2403.4	37.9	2428.6	18.0	2449.7	8.4	98.1
19EAB10-68	87	280408	2.5	6.2445	1.4	9.5242	4.5	0.4313	4.2	2311.8	82.2	2389.9	41.1	2457.1	24.4	94.1
19EAB10-43	130	580678	2.1	6.2425	0.8											

13EAB10-37	615	228980	2.0	6.0351	0.3	10.2683	2.3	0.4495	2.3	2392.8	46.4	2459.2	21.7	2514.6	5.7	95.2
13EAB10-91	208	133101	1.2	6.0297	0.3	9.6763	3.8	0.4232	3.8	2274.8	72.7	2404.5	35.1	2516.1	5.8	90.4
13EAB10-73	481	496059	3.1	6.0071	0.8	10.1856	3.5	0.4438	3.4	2367.5	67.9	2451.8	32.7	2522.4	14.1	93.9
13EAB10-83	121	25097	1.4	5.9791	1.0	10.8394	3.2	0.4700	3.0	2483.7	61.9	2509.4	29.5	2530.3	16.9	98.2
13EAB10-45	132	88656	1.6	5.9734	0.8	10.6010	2.0	0.4593	1.8	2436.3	37.2	2488.8	18.5	2531.9	13.3	96.2
13EAB10-59	118	73792	1.5	5.9679	0.4	11.1504	3.1	0.4826	3.1	2538.7	64.3	2535.8	28.8	2533.4	7.4	100.2
13EAB10-39	126	264742	1.5	5.9547	0.5	10.8254	2.2	0.4675	2.1	2472.7	43.1	2508.2	20.0	2537.2	8.1	97.5
13EAB10-32	64	31844	1.6	5.9488	0.9	11.2556	1.5	0.4856	1.2	2551.7	26.3	2544.5	14.1	2538.8	14.3	100.5
13EAB10-66	818	278501	0.8	5.9474	0.4	10.1871	2.5	0.4394	2.5	2348.0	48.2	2451.9	22.9	2539.2	6.3	92.5
13EAB10-74	199	116138	1.4	5.9422	0.3	10.8027	1.8	0.4656	1.8	2464.1	36.1	2506.3	16.6	2540.7	4.3	97.0
13EAB10-67	390	142091	0.6	5.9414	0.3	10.4607	2.2	0.4508	2.2	2398.6	44.3	2476.4	20.6	2540.9	4.5	94.4
13EAB10-40	258	234108	1.7	5.9395	0.3	10.7411	2.2	0.4627	2.2	2451.5	44.3	2501.0	20.3	2541.4	4.7	96.5
13EAB10-77	268	139585	2.2	5.9267	0.2	11.3199	1.8	0.4866	1.8	2555.9	38.0	2549.8	16.9	2545.1	3.7	100.4
13EAB10-36	219	153775	2.5	5.9258	0.7	10.2947	2.7	0.4424	2.6	2361.6	51.0	2461.6	24.8	2545.3	12.5	92.8
13EAB10-52	307	241933	1.8	5.9212	0.3	10.9015	1.0	0.4682	1.0	2475.5	20.4	2514.8	9.5	2546.6	4.2	97.2
13EAB10-72	79	79005	1.4	5.9211	1.0	11.0365	1.6	0.4740	1.3	2500.9	26.1	2526.2	15.0	2546.6	16.7	98.2
13EAB10-31	91	42048	1.1	5.9206	1.1	11.3709	1.9	0.4883	1.5	2563.2	32.1	2554.0	17.7	2546.8	19.0	100.6
13EAB10-28	182	113329	2.0	5.9193	0.7	11.5930	2.6	0.4977	2.5	2603.9	54.0	2572.1	24.5	2547.1	12.3	102.2
13EAB10-70	153	96855	1.0	5.9156	0.4	11.5083	8.8	0.4937	8.8	2586.9	187.0	2565.3	82.2	2548.2	6.1	101.5
13EAB10-56	82	1104	1.6	5.9153	3.2	11.3163	7.1	0.4855	6.4	2551.1	134.5	2549.6	66.7	2548.3	53.4	100.1
13EAB10-7	236	172273	2.3	5.9099	0.7	11.7729	7.0	0.5046	6.9	2633.6	150.2	2586.5	65.4	2549.8	12.3	103.3
13EAB10-34	143	110322	0.9	5.9086	0.6	10.7666	2.1	0.4614	2.0	2445.7	40.4	2503.2	19.2	2550.2	9.8	95.9
13EAB10-54	91	42611	1.3	5.9024	0.6	11.2865	3.1	0.4832	3.1	2541.0	65.0	2547.1	29.3	2551.9	9.3	99.6
13EAB10-47	109	84505	1.5	5.9010	0.5	11.1621	1.4	0.4777	1.3	2517.3	26.9	2536.8	13.0	2552.3	8.6	98.6
13EAB10-41	196	135445	1.8	5.9004	0.2	11.3094	1.7	0.4840	1.7	2544.5	34.8	2549.0	15.6	2552.5	4.1	99.7
13EAB10-51	161	180640	1.2	5.8973	0.3	11.4288	2.1	0.4888	2.0	2565.6	42.8	2558.8	19.2	2553.4	5.6	100.5
13EAB10-25	518	390975	4.6	5.8972	0.1	11.5150	1.8	0.4925	1.8	2581.5	39.1	2565.8	17.2	2553.4	1.9	101.1
13EAB10-1	169	140216	2.3	5.8944	0.3	11.1445	2.2	0.4764	2.2	2511.7	45.6	2535.3	20.6	2554.2	4.7	98.3
13EAB10-75	454	163515	2.1	5.8940	1.3	11.0871	5.3	0.4739	5.1	2500.8	106.5	2530.5	49.5	2554.3	22.3	97.9
13EAB10-90	290	216921	1.8	5.8936	0.3	11.3726	2.9	0.4861	2.8	2553.9	60.0	2554.2	26.7	2554.4	5.2	100.0
13EAB10-21	136	132724	2.0	5.8912	0.5	11.4026	1.8	0.4872	1.7	2558.5	36.5	2556.6	16.8	2555.1	8.6	100.1
13EAB10-81	400	356579	1.4	5.8820	0.2	11.1343	1.4	0.4750	1.4	2505.4	28.2	2534.4	12.9	2557.7	4.1	98.0
13EAB10-97	336	181879	0.9	5.8815	0.1	10.7980	3.3	0.4606	3.3	2442.2	67.6	2505.9	30.9	2557.9	2.4	95.5
13EAB10-63	408	287746	1.4	5.8801	0.3	11.2861	1.3	0.4813	1.3	2533.0	27.0	2547.1	12.3	2558.3	5.0	99.0
13EAB10-69	427	321156	1.6	5.8800	0.2	11.6029	3.9	0.4948	3.9	2591.5	82.9	2572.9	36.4	2558.3	3.2	101.3
13EAB10-53	203	97538	1.6	5.8789	0.4	11.1355	1.4	0.4748	1.3	2504.5	27.7	2534.5	13.1	2558.6	7.3	97.9
13EAB10-6	248	188713	2.1	5.8721	0.4	10.9646	1.6	0.4670	1.5	2470.2	31.0	2520.1	14.6	2560.5	7.3	96.5
13EAB10-82	258	302939	1.7	5.8692	0.3	11.2107	1.7	0.4772	1.7	2515.1	35.7	2540.8	16.2	2561.4	5.1	98.2
13EAB10-26	341	20459	0.8	5.8666	0.3	10.9221	1.8	0.4647	1.8	2460.4	35.8	2516.5	16.5	2562.1	5.0	96.0
13EAB10-15	152	31538	0.9	5.8615	0.6	11.5535	1.3	0.4912	1.2	2575.7	24.7	2568.9	12.0	2563.6	9.3	100.5
13EAB10-79	317	195967	2.2	5.8614	0.4	11.5593	1.6	0.4914	1.5	2576.7	32.3	2569.4	14.7	2563.6	6.6	100.5
13EAB10-61	517	423275	2.2	5.8564	0.2	11.2263	2.1	0.4768	2.1	2513.5	43.9	2542.1	19.7	2565.0	3.0	98.0
13EAB10-8	125	126214	1.2	5.8548	0.5	11.1390	1.7	0.4730	1.7	2496.7	34.8	2534.8	16.3	2565.5	7.9	97.3
13EAB10-4	151	114744	1.0	5.8508	0.4	11.6742	1.2	0.4954	1.2	2593.9	25.3	2578.6	11.6	2566.6	5.9	101.1
13EAB10-96	1245	1279946	2.9	5.8453	0.2	11.3897	2.5	0.4829	2.5	2539.7	52.2	2555.6	23.3	2568.2	3.4	98.9
13EAB10-13	327	230892	1.1	5.8413	0.2	11.3859	0.6	0.4824	0.5	2537.5	11.1	2555.3	5.3	2569.4	3.4	98.8
13EAB10-94	183	200168	1.9	5.8348	0.4	11.4318	1.7	0.4838	1.7	2543.7	34.7	2559.0	15.9	2571.2	6.8	98.9
13EAB10-93	193	387745	1.0	5.8343	0.4	11.1981	2.1	0.4738	2.1	2500.4	43.1	2539.8	19.8	2571.3	7.0	97.2
13EAB10-88	221	181009	2.0	5.8329	0.4	11.4644	1.9	0.4850	1.9	2549.0	39.8	2561.7	18.0	2571.8	6.6	99.1
13EAB10-2	322	345022	1.7	5.8317	0.3	11.7039	1.3	0.4950	1.3	2592.4	27.1	2581.0	12.2	2572.1	4.8	100.8
13EAB10-10	590	494950	3.4	5.8244	0.1	11.4632	1.1	0.4842	1.1	2545.7	22.1	2561.6	9.9	2574.2	2.4	98.9
13EAB10-12	438	306814	0.9	5.8210	0.3	11.6748	1.1	0.4929	1.0	2583.1	21.9	2578.7	10.0	2575.2	4.9	100.3
13EAB10-89	464	530082	1.9	5.8170	0.2	11.8181	1.7	0.4986	1.7	2607.7	35.4	2590.1	15.5	2576.3	2.8	101.2
13EAB10-99	331	432948	1.4	5.8040	0.3	11.1060	2.6	0.4675	2.6	2472.6	53.7	2532.1	24.6	2580.1	5.5	95.8
13EAB10-57	401	339502	2.7	5.7922	0.2	11.8028	1.2	0.4958	1.2	2595.8	26.3	2588.9	11.7	2583.4	3.5	100.5
13EAB10-20	259	220128	1.1	5.7919	0.3	11.3157	2.1	0.4753	2.1	2506.9	43.5	2549.5	19.8	2583.5	5.6	97.0
13EAB10-71	377	285977	1.4	5.7112	0.5	11.7764	3.8	0.4878	3.7	2561.1	79.1	2586.8	35.4	2606.9	9.2	98.2
13EAB10-38	501	64398	1.6	5.6060	1.2	11.9458	2.7	0.4857	2.5	2552.0	52.0	2600.2	25.7	2637.9	20.1	96.7
13EAB10-23	119	94947	1.8	5.5326	0.6	12.6840	1.0	0.5090	0.8	2652.2	17.3	2656.5	9.1	2659.7	9.2	99.7
13EAB10-86	204	112095	1.8	5.2933	0.5	13.2440	1.9	0.5084	1.9	2650.0	41.1	2697.2	18.4	2732.8	7.5	97.0
13EAB10-44	251	345220	1.9	4.8164	0.6	15.9144	2.0	0.5559	1.9	2849.7	43.3	2871.7	18.8	2887.1	9.6	98.7
13EAB10-78	327	127337	3.7	4.7002	0.3	17.2713	2.2	0.5888	2.2	2984.4	52.2	2950.0	21.1	2926.6	4.2	102.0
13EAB10-95	108	66327	1.5	4.6440	0.6	17.0208	2.8	0.5733	2.7	2921.3	64.3	2936.0	26.9	2946.1	10.3	99.2
13EAB10-83	128	120672	1.9	4.3868	0.3	18.5708	1.9	0.5908	1.9	2992.8	44.3	3019.8	18.1	3037.8	5.1	98.5
13EAB10-42	446	89679	0.9	4.1278	0.7	20.4397	3.5	0.6119	3.4	3077.6	83.8	3112.4	33.9	3134.9	11.5	98.2
13EAB10-17	53	43561	0.7	4.0765	0.8	22.0717	1.6	0.6526	1.4	3238.2	34.7	3186.9	15.2	3154.7	12.1	102.6
13EAB10-85	258	303368	2.8	2.9108	0.2	35.7349	2.9	0.7544	2.9	3623.7	79.2	3659.2	28.3	3678.6	3.7	98.5

				Isotope ratios						Apparent ages (Ma)						
Sample	U (ppm)	206Pb/204Pb	U/Th	206Pb*/207Pb*	± (%)	207Pb*/235U	± (%)	206Pb*/238U	± (%)	206Pb*/238U	± (Ma)	207Pb*/235U	± (Ma)	206Pb*/207Pb*	± (Ma)	Conc (%)
93EAB10- diamictite member, Perry Canyon Formation, Little Mountain, UTM: 12 T 386072 E 4567520 N, n= 62/ 100																
93EAB10-85	200	78153	1.4	15.8246	4.0	0.9264	5.4	0.1063	3.6	651.4	22.6	665.7	26.5	714.7	85.0	91.1
93EAB10-5	171	38283	1.2	15.7966	3.0	0.9509	5.8	0.1089	5.0	666.6	31.9	678.6	29.0	718.5	63.0	92.8
93EAB10-75	447	58673	1.5	15.8797	1.3	0.9467	1.9	0.1090	1.3	667.2	8.4	676.4	9.2	707.3	27.5	94.3
93EAB10-98	319	39065	1.9	16.0861	2.9	0.9366	3.1	0.1093	1.0	668.5	6.4	671.1	15.1	679.8	62.1	98.3
93EAB10-80	449	62073	0.7	15.9627	1.2	0.9562	2.7	0.1107	2.4	676.8	15.2	681.3	13.2	696.2	25.5	97.2
93EAB10-86	2403	464731	1.3	15.9301	0.3	0.9702	1.8	0.1121	1.7	684.9	11.3	688.6	8.8	700.6	6.2	97.8
93EAB10-41	191	21755	1.8	16.1258	3.7	0.9622	4.4	0.1125	2.3	687.5	15.3	684.5	21.9	674.5	79.7	101.9
93EAB10-1	129	25954	1.5	15.8200	3.5	0.9898	4.0	0.1136	2.0	693.4	13.0	698.6	20.3	715.4	74.5	96.9

93EAB10-34	417	92262	1.7	15.6775	1.3	1.0002	2.1	0.1137	1.7	694.4	10.9	703.9	10.6	734.5	26.5	94.5
93EAB10-48	298	31500	1.8	15.9834	1.7	1.0155	2.8	0.1177	2.2	717.4	15.1	711.6	14.3	693.5	36.5	103.5
93EAB10-42	1284	143441	0.7	15.8056	0.4	1.0311	1.4	0.1182	1.4	720.2	9.2	719.5	7.3	717.3	9.3	100.4
93EAB10-37	739	105714	12.6	9.3649	0.4	4.3952	2.4	0.2985	2.4	1684.0	35.4	1711.4	20.1	1745.2	8.0	96.5
93EAB10-28	465	115935	23.3	9.3403	0.4	4.7260	1.1	0.3202	1.0	1790.5	15.8	1771.9	9.1	1750.0	7.6	102.3
93EAB10-62	57	20551	1.9	8.5170	1.9	5.8183	2.6	0.3594	1.8	1979.3	31.0	1949.1	22.5	1917.2	33.3	103.2
93EAB10-16	88	41661	1.4	7.6626	1.5	7.2378	3.1	0.4022	2.7	2179.3	50.6	2141.2	27.7	2104.7	25.9	103.5
93EAB10-67	125	85125	1.9	6.5451	0.8	9.5621	2.2	0.4539	2.0	2412.6	40.9	2393.5	20.2	2377.3	14.2	101.5
93EAB10-25b	165	185028	1.3	6.4135	1.7	9.8953	3.8	0.4603	3.4	2440.8	68.9	2425.1	35.1	2411.9	29.4	101.2
93EAB10-12	96	31527	1.6	6.2879	1.1	10.2854	5.6	0.4691	5.5	2479.4	112.3	2460.8	51.5	2445.4	17.9	101.4
93EAB10-56	997	19836	11.3	6.0714	0.7	10.4479	4.2	0.4601	4.2	2439.8	84.9	2475.3	39.3	2504.5	11.6	97.4
93EAB10-63	558	476693	1.2	5.9365	0.2	11.1679	2.6	0.4808	2.5	2530.9	53.3	2537.2	23.9	2542.3	4.1	99.6
93EAB10-87	1579	608545	2.7	5.9038	0.4	10.8114	4.4	0.4629	4.3	2452.5	88.7	2507.1	40.6	2551.5	6.7	96.1
93EAB10-89	455	211493	1.0	5.8936	0.3	10.7651	2.1	0.4601	2.1	2440.2	42.4	2503.1	19.6	2554.4	4.5	95.5
93EAB10-53	409	413133	1.6	5.8931	0.3	11.5753	3.4	0.4947	3.4	2591.2	72.1	2570.7	31.7	2554.6	4.6	101.4
93EAB10-26	225	143097	2.0	5.8748	0.4	11.2699	3.4	0.4802	3.4	2528.1	70.4	2545.7	31.6	2559.8	6.3	98.8
93EAB10-14	927	930723	3.9	5.8613	0.1	11.5751	1.0	0.4921	1.0	2579.6	21.4	2570.7	9.5	2563.6	1.9	100.6
93EAB10-78	347	139293	0.8	5.8478	0.3	11.4017	2.1	0.4836	2.1	2542.8	43.4	2556.6	19.5	2567.5	4.9	99.0
93EAB10-54	125	70847	1.2	5.8217	0.4	11.3127	1.3	0.4777	1.2	2517.0	25.1	2549.3	12.0	2575.0	7.4	97.8
93EAB10-19	364	220264	1.7	5.8146	0.5	11.9121	3.1	0.5024	3.0	2623.9	65.0	2597.5	28.7	2577.0	8.8	101.8
93EAB10-83	158	78096	1.2	5.8125	0.5	11.6812	2.9	0.4924	2.9	2581.2	61.6	2579.2	27.5	2577.6	8.6	100.1
93EAB10-30	435	189715	1.0	5.7959	0.4	11.8435	2.9	0.4978	2.8	2604.5	60.9	2592.1	26.8	2582.4	6.0	100.9
93EAB10-90	1377	268871	1.6	5.7700	0.2	11.4267	1.6	0.4782	1.6	2519.3	32.6	2558.6	14.7	2589.9	3.8	97.3
93EAB10-51	769	14490	3.1	5.7368	0.4	10.7811	2.4	0.4486	2.4	2388.9	47.0	2504.4	22.3	2599.5	7.4	91.9
93EAB10-21	669	629300	9.1	5.5995	0.4	12.0310	3.9	0.4886	3.9	2564.6	82.3	2606.8	36.7	2639.8	6.5	97.2
93EAB10-47	610	565588	3.8	5.5313	1.2	12.3848	4.4	0.4968	4.2	2600.2	90.8	2634.0	41.5	2660.1	20.2	97.7
93EAB10-38	1153	5734	2.1	5.4766	2.4	11.5898	7.6	0.4603	7.2	2441.1	145.7	2571.8	70.9	2676.6	40.5	91.2
93EAB10-45	740	107442	0.6	5.4516	0.5	13.1744	1.8	0.5209	1.8	2703.0	38.9	2692.2	17.3	2684.2	8.5	100.7
93EAB10-76	937	52224	8.8	5.3589	0.6	12.5542	5.7	0.4879	5.6	2561.7	119.2	2646.8	53.4	2712.5	10.0	94.4
93EAB10-35	452	660580	1.5	5.2789	0.3	14.0554	1.9	0.5381	1.9	2775.6	43.5	2753.4	18.5	2737.2	4.6	101.4
93EAB10-93	567	297393	1.9	5.2561	0.2	13.9999	1.6	0.5337	1.6	2756.9	35.9	2749.7	15.3	2744.4	4.0	100.5
93EAB10-44	589	388418	2.0	5.2491	0.4	13.7218	1.9	0.5224	1.9	2709.3	41.5	2730.7	18.1	2746.5	5.8	98.6
93EAB10-61	225	118696	1.4	5.1874	0.5	14.7291	2.8	0.5541	2.8	2842.4	63.7	2797.9	26.8	2766.0	8.3	102.8
93EAB10-60	159	130212	2.9	5.0676	7.1	13.1042	8.0	0.4816	3.5	2534.3	74.2	2687.2	75.4	2804.3	117.0	90.4
93EAB10-11	223	111835	1.5	5.0612	1.0	13.9354	5.8	0.5115	5.7	2663.1	125.0	2745.3	55.1	2806.3	15.6	94.9
93EAB10-18	760	284510	4.9	4.9834	2.4	15.8022	3.7	0.5711	2.8	2912.5	65.0	2864.9	34.9	2831.6	38.8	102.9
93EAB10-4	247	93209	2.8	4.9667	0.4	15.4969	3.3	0.5582	3.3	2859.3	76.2	2846.3	31.7	2837.1	6.5	100.8
93EAB10-46	64	36023	0.7	4.7634	4.4	15.1216	6.9	0.5224	5.3	2709.4	116.9	2822.9	65.4	2905.0	71.0	93.3
93EAB10-96	620	151207	2.4	4.7080	4.2	17.0026	10.5	0.5806	9.6	2951.1	227.8	2935.0	100.9	2924.0	67.9	100.9
93EAB10-82	340	186907	1.2	4.6413	0.8	17.3080	3.2	0.5826	3.1	2959.4	72.6	2952.1	30.4	2947.0	13.1	100.4
93EAB10-29	842	11355	3.0	4.5920	0.9	17.0740	2.8	0.5686	2.7	2902.2	62.8	2939.0	27.2	2964.3	14.7	97.9
93EAB10-13	488	498022	0.8	4.5798	0.8	18.1180	2.3	0.6018	2.2	3037.1	52.6	2996.0	22.3	2968.6	13.2	102.3
93EAB10-2	363	28413	0.5	4.4227	0.4	17.5314	3.2	0.5623	3.2	2876.3	74.4	2964.4	31.1	3024.7	6.5	95.1
93EAB10-27	146	122272	0.7	4.3493	0.5	17.8495	2.4	0.5630	2.4	2879.2	54.6	2981.7	23.1	3051.5	7.6	94.4
93EAB10-25	113	87581	1.4	4.2308	0.4	18.0178	1.4	0.5529	1.3	2837.1	29.4	2990.7	13.0	3095.6	6.7	91.6
93EAB10-92	239	97713	0.7	4.1898	0.3	20.1917	0.8	0.6136	0.7	3084.3	18.2	3100.6	7.7	3111.2	4.7	99.1
93EAB10-59	132	83976	1.0	4.1632	0.3	21.0891	2.1	0.6368	2.1	3176.3	52.7	3142.7	20.6	3121.3	5.4	101.8
93EAB10-57	385	271621	4.5	4.1566	0.1	19.8498	1.2	0.5984	1.2	3023.4	29.4	3084.1	11.9	3123.8	2.3	96.8
93EAB10-23	75	44707	1.0	4.1258	0.4	20.2947	5.6	0.6073	5.5	3059.1	135.2	3105.5	53.9	3135.6	6.3	97.6
93EAB10-55	508	213261	0.4	4.0685	3.4	22.2913	5.5	0.6578	4.3	3258.5	110.2	3196.5	53.4	3157.8	53.9	103.2
93EAB10-64	668	935562	2.5	3.4600	0.4	26.0110	5.0	0.6527	5.0	3238.9	127.3	3346.9	49.1	3412.3	6.9	94.9
93EAB10-88	1041	2745736	4.1	3.2371	1.4	28.3140	2.2	0.6647	1.8	3285.6	45.3	3430.0	21.9	3515.5	21.2	93.5
93EAB10-77	1007	336534	5.3	3.2116	0.8	29.1387	2.1	0.6787	2.0	3339.5	51.5	3458.2	21.1	3527.7	13.1	94.7

Sample	U (ppm)	Isotope ratios					Apparent ages (Ma)							
		206Pb/ 204Pb	206Pb*/ 2											

99CAT22-12	258	541703	1.0	5.7339	0.1	11.3179	1.2	0.4707	1.2	2486.5	25.1	2549.7	11.4	2600.3	2.4	95.6
99CAT22-52	196	206789	1.1	5.7001	0.4	11.6732	2.1	0.4826	2.1	2538.5	43.4	2578.6	19.6	2610.2	5.8	97.3
99CAT22-94	509	221134	5.0	5.6990	0.4	11.5248	1.1	0.4764	1.0	2511.4	20.2	2566.6	10.0	2610.5	7.5	96.2
99CAT22-60	401	43843	1.9	5.6920	0.1	11.3456	1.2	0.4684	1.1	2476.4	23.6	2552.0	10.8	2612.6	2.1	94.8
99CAT22-66	118	198091	0.5	5.6768	0.3	12.4019	2.3	0.5106	2.3	2659.2	50.4	2635.3	22.0	2617.0	5.8	101.6
99CAT22-72	312	423019	2.6	5.6624	0.3	12.1549	1.8	0.4992	1.8	2610.2	38.5	2616.4	17.0	2621.2	4.4	99.6
99CAT22-73	258	289669	1.1	5.6526	0.2	12.5278	1.4	0.5136	1.4	2672.0	31.2	2644.8	13.5	2624.1	2.6	101.8
99CAT22-74	202	161349	1.3	5.6473	0.1	12.5879	1.0	0.5156	1.0	2680.4	22.3	2649.3	9.7	2625.6	2.3	102.1
99CAT22-83	135	156676	0.9	5.6371	0.2	12.2785	4.2	0.5020	4.2	2622.4	89.7	2625.9	39.1	2628.7	3.7	99.8
99CAT22-7	212	202463	2.8	5.5908	0.2	12.1086	0.9	0.4910	0.9	2574.9	18.6	2612.9	8.5	2642.4	3.5	97.4
99CAT22-75	61	17224	0.9	5.5815	1.6	11.5794	2.2	0.4687	1.5	2478.0	31.1	2571.0	20.4	2645.1	26.1	93.7
99CAT22-56	78	115118	1.1	5.5223	0.3	12.9789	1.1	0.5198	1.1	2698.5	23.3	2678.1	10.4	2662.8	5.1	101.3
99CAT22-5	112	177950	1.9	5.4922	0.3	12.7079	2.1	0.5062	2.0	2640.4	44.4	2658.2	19.6	2671.9	5.8	98.8
99CAT22-19	86	109756	1.1	5.4908	0.3	13.3168	6.9	0.5303	6.9	2742.8	154.1	2702.4	65.3	2672.3	4.5	102.6
99CAT22-42	232	507229	1.6	5.4593	0.2	13.0992	3.5	0.5187	3.5	2693.5	76.6	2686.8	32.9	2681.8	2.9	100.4
99CAT22-77	39	34018	2.3	5.4463	0.9	13.4560	2.9	0.5315	2.8	2747.8	62.7	2712.2	27.8	2685.7	14.7	102.3
99CAT22-80	193	84993	1.3	5.4277	0.2	13.2241	0.9	0.5206	0.8	2701.6	18.3	2695.8	8.0	2691.4	3.0	100.4
99CAT22-98	251	417538	2.6	5.3855	0.1	13.3394	3.3	0.5210	3.3	2703.5	73.5	2704.0	31.5	2704.3	2.3	100.0
99CAT22-93	79	127133	0.7	5.3230	0.4	13.2536	0.9	0.5117	0.7	2663.8	15.9	2697.9	8.1	2723.5	7.4	97.8
99CAT22-100	67	16569	1.7	5.2612	0.5	13.2326	1.7	0.5049	1.6	2634.9	35.4	2696.4	16.3	2742.8	8.9	96.1
99CAT22-54	288	284801	0.9	5.0900	0.3	15.2729	2.4	0.5638	2.4	2882.4	55.2	2832.4	22.8	2797.0	5.1	103.1
99CAT22-46	182	195342	1.4	4.8880	0.5	16.5723	6.6	0.5875	6.6	2979.3	156.7	2910.4	63.1	2863.1	8.2	104.1
99CAT22-59	353	18819	1.8	4.5133	0.7	16.2083	4.3	0.5306	4.2	2743.8	94.8	2889.2	41.2	2992.1	11.6	91.7
99CAT22-23	96	109509	0.8	3.8366	0.6	24.4683	5.0	0.6809	5.0	3347.6	130.4	3287.2	49.1	3250.6	9.3	103.0

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)						Conc (%)		
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	
P87- Kelley Canyon Formation, Promontory Point, UTM: 12 T 380746 E 4564069 N, n= 85/100																
P87-61	120	65093	2.8	14.3484	3.5	1.4269	3.6	0.1485	0.6	892.5	4.7	900.2	21.4	919.4	72.9	97.1
P87-98	105	67476	2.3	13.8380	2.6	1.6560	2.8	0.1662	1.0	991.2	9.5	991.9	17.7	993.4	52.8	99.8
P87-16	134	26026	1.5	13.8241	2.2	1.6499	3.3	0.1654	2.4	986.8	22.3	989.5	21.0	995.5	45.7	99.1
P87-97	105	29270	1.5	13.7005	1.8	1.7727	2.4	0.1761	1.7	1045.9	16.1	1035.5	15.8	1013.7	35.8	103.2
P8711	87	50770	1.8	13.6520	3.1	1.7661	3.8	0.1749	2.1	1038.9	20.3	1033.1	24.5	1020.8	63.3	101.8
P87-41	173	98722	3.2	13.6145	1.9	1.8058	2.2	0.1783	1.3	1057.7	12.5	1047.6	14.7	1026.4	37.4	103.1
P87-76	218	104092	2.7	13.5856	0.9	1.7823	1.1	0.1756	0.5	1042.9	5.2	1039.0	6.9	1030.7	18.4	101.2
P87-28	66	34476	7.7	13.5077	3.6	1.8410	3.9	0.1804	1.5	1068.9	15.0	1060.2	25.5	1042.3	71.8	102.6
P87-74	174	71912	3.8	13.5011	2.1	1.8155	2.4	0.1778	1.0	1054.8	10.0	1051.1	15.4	1043.3	42.8	101.1
P87-59	73	22594	2.6	13.4947	2.3	1.7892	2.5	0.1751	1.0	1040.2	9.3	1041.5	16.0	1044.3	45.7	99.6
P87-27	107	77793	2.2	13.4411	2.7	1.8398	2.8	0.1794	0.9	1063.4	8.7	1059.8	18.5	1052.3	53.7	101.1
P87-93	280	123927	2.4	13.4411	0.7	1.8688	1.6	0.1822	1.4	1078.9	14.2	1070.1	10.4	1052.3	13.4	102.5
P87-37	396	225543	2.9	13.4154	0.4	1.8329	1.1	0.1783	1.0	1057.9	9.7	1057.3	7.1	1056.2	8.4	100.2
P87-57	144	55388	1.0	13.4118	1.9	1.7876	6.7	0.1739	6.4	1033.4	61.3	1040.9	43.6	1056.7	37.7	97.8
P87-65	122	39991	1.9	13.3569	2.1	1.8333	2.6	0.1776	1.6	1053.8	15.4	1057.5	17.1	1065.0	41.3	99.0
P87-30	75	22406	1.3	13.3061	3.1	1.9058	3.4	0.1839	1.3	1088.3	13.3	1083.1	22.6	1072.6	62.6	101.5
P87-100	275	77531	4.5	13.3053	0.6	1.8963	1.0	0.1830	0.8	1083.3	8.2	1079.8	6.9	1072.8	12.8	101.0
P87-12	225	111646	2.5	13.2618	1.2	1.9304	2.0	0.1857	1.5	1097.9	15.6	1091.7	13.2	1079.3	24.5	101.7
P87-95	270	83382	1.7	13.2591	0.8	1.9217	1.1	0.1848	0.8	1093.1	7.7	1088.7	7.5	1079.7	16.4	101.2
P87-85	274	220264	3.3	13.2158	0.6	1.9168	0.9	0.1837	0.8	1087.3	7.6	1087.0	6.3	1086.3	11.5	100.1
P87-83	136	24876	2.1	13.2085	2.1	1.8245	4.0	0.1748	3.4	1038.4	32.8	1054.3	26.4	1087.4	42.7	95.5
P87-5	67	57523	0.9	13.2016	2.6	1.9696	4.2	0.1886	3.3	1113.7	33.4	1105.2	28.2	1088.4	52.7	102.3
P87-60	83	35234	2.0	13.2000	2.1	1.9557	2.4	0.1872	1.2	1106.3	11.7	1100.4	16.1	1088.7	42.2	101.6
P87C-1	119	119788	1.6	13.1970	2.3	1.9996	2.7	0.1914	1.4	1128.9	14.4	1115.4	18.0	1089.1	45.2	103.6
P87-77	43	29980	2.6	13.1965	4.5	2.0158	4.8	0.1929	1.5	1137.2	15.5	1120.8	32.3	1089.2	90.7	104.4
P87-71	185	89070	1.3	13.1334	1.6	1.8596	2.0	0.1771	1.2	1051.3	11.2	1066.8	13.0	1098.8	31.9	95.7
P8740	74	35792	1.5	12.9635	1.7	1.9116	2.0	0.1797	1.0	1065.5	9.9	1085.1	13.2	1124.8	34.1	94.7
P87-36	106	93340	1.4	12.9414	1.7	2.0163	2.0	0.1893	1.0	1117.3	1					

P87-32	63	60850	1.6	11.4483	2.4	2.8976	2.6	0.2406	1.1	1389.8	13.4	1381.3	19.6	1368.2	45.7	101.6
P87-68	81	47943	0.6	11.4434	1.9	2.8831	7.0	0.2393	6.8	1383.0	84.2	1377.5	52.9	1369.0	35.7	101.0
P87-38	70	53336	2.5	11.4393	3.2	2.7834	3.4	0.2309	1.3	1339.4	16.2	1351.1	25.7	1369.7	61.1	97.8
P87-94	38	34269	1.3	11.3096	2.7	2.9450	3.2	0.2416	1.6	1394.8	20.1	1393.6	24.0	1391.6	52.3	100.2
P87-35	173	487886	1.4	11.2137	0.9	2.9587	1.2	0.2406	0.7	1390.0	9.0	1397.1	8.8	1407.9	17.3	98.7
P87-84	34	29693	0.6	11.0378	1.9	3.1521	3.2	0.2523	2.5	1450.5	32.8	1445.5	24.4	1438.1	36.3	100.9
P87-6	103	79668	1.1	11.0078	1.1	3.2989	1.7	0.2634	1.3	1507.1	16.9	1480.8	13.0	1443.3	21.0	104.4
P87-54	85	31323	2.1	10.9356	1.4	3.2899	2.7	0.2609	2.3	1494.6	30.7	1478.7	21.1	1455.8	27.1	102.7
P87-48	126	110771	1.8	10.9347	1.2	3.2535	2.1	0.2580	1.8	1479.7	23.3	1470.0	16.7	1456.0	23.4	101.6
P87-53	91	57891	2.0	10.9240	1.8	3.2669	2.4	0.2588	1.5	1483.8	20.2	1473.2	18.5	1457.9	34.6	101.8
P87-8	103	44148	1.1	10.9041	1.0	3.2454	1.7	0.2567	1.3	1472.7	17.0	1468.1	12.8	1461.3	19.7	100.8
P87-86	129	66346	1.5	10.8573	1.8	3.2878	4.0	0.2589	3.6	1484.2	47.3	1478.2	31.2	1469.5	34.6	101.0
P87-21	159	117282	1.7	10.8489	0.6	3.3640	2.5	0.2647	2.4	1513.8	32.3	1496.1	19.4	1471.0	12.0	102.9
P87-47	129	139544	1.6	10.8326	1.0	3.2985	1.6	0.2591	1.2	1485.5	15.8	1480.7	12.2	1473.8	19.2	100.8
P87-25	179	79535	0.8	10.8234	1.2	3.1755	1.8	0.2493	1.4	1434.7	18.4	1451.2	14.2	1475.4	22.0	97.2
P87-69	157	86056	1.8	10.8153	1.1	3.3401	1.5	0.2620	1.1	1500.0	14.7	1490.5	12.0	1476.9	20.4	101.6
P87-64	101	44536	1.1	10.7662	1.6	3.2705	1.9	0.2554	1.1	1466.1	14.0	1474.1	14.8	1485.5	30.0	98.7
P87-72	80	63633	1.8	10.7603	1.8	3.2787	2.3	0.2559	1.5	1468.7	19.7	1476.0	18.1	1486.5	33.6	98.8
P87-92	118	87783	0.9	10.2901	1.4	3.5016	2.3	0.2613	1.9	1496.6	24.8	1527.6	18.3	1570.7	26.0	95.3
P87-9	28	26576	0.7	9.9730	2.0	4.0637	2.4	0.2939	1.4	1661.1	20.5	1647.1	19.6	1629.1	36.4	102.0
P87-4	159	152687	1.0	9.5506	0.8	4.4538	1.5	0.3085	1.2	1733.4	19.0	1722.4	12.2	1709.1	14.5	101.4
P87-2	144	115485	2.2	9.4871	0.5	4.5423	2.4	0.3125	2.4	1753.2	36.7	1738.8	20.3	1721.4	9.0	101.8
P87-63	169	4760	3.3	9.2720	1.6	4.5164	2.5	0.3037	1.9	1709.7	29.1	1734.0	20.8	1763.4	28.9	97.0
P87-18	88	81084	2.0	9.1685	0.6	4.7901	1.0	0.3185	0.9	1782.5	13.3	1783.2	8.7	1783.9	10.7	99.9
P87-24	116	76469	0.8	9.1544	0.8	4.7121	1.5	0.3129	1.3	1754.8	20.4	1769.4	13.0	1786.7	14.4	98.2
P87-49	60	98699	3.4	8.9286	1.1	5.0349	1.9	0.3260	1.5	1819.2	24.1	1825.2	15.8	1832.1	19.7	99.3
P87-15	41	38541	2.0	8.8072	1.8	5.2836	2.0	0.3375	0.9	1874.6	14.9	1866.2	17.1	1856.9	32.2	101.0
P87-45	129	136594	2.6	8.7505	0.6	5.4079	1.4	0.3432	1.3	1902.1	21.1	1886.1	12.1	1868.5	10.7	101.8
P87-13	67	59398	1.1	8.4387	0.9	5.8412	1.5	0.3575	1.3	1970.3	21.6	1952.5	13.3	1933.7	15.3	101.9
P87-22	248	18913	1.4	8.4257	0.6	5.1275	2.9	0.3133	2.8	1757.1	43.0	1840.7	24.4	1936.5	11.2	90.7
P87-46	75	51251	1.6	7.8697	1.1	6.7231	1.3	0.3837	0.8	2093.7	13.8	2075.7	11.9	2057.8	19.5	101.7
P87-67	86	10813	1.2	5.4985	0.7	11.3545	9.8	0.4528	9.8	2407.7	196.4	2552.7	91.7	2670.0	11.4	90.2
P87-91	35	46621	0.9	5.4887	0.7	12.3617	2.7	0.4921	2.6	2579.7	55.4	2632.3	25.4	2672.9	11.8	96.5
P87-39	100	140016	1.0	4.5624	0.5	17.4504	3.1	0.5774	3.1	2938.2	72.6	2959.9	29.9	2974.7	7.3	98.8

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb*/ 238U	± (Ma)	207Pb*/ 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	
36EAB09- diamictite member, Perry Canyon Formation, Perry Canyon, UTM: 12T 414953 E 4588122 N, n= 59/100																
36EAB09-16	97	25004	0.6	15.8540	2.2	0.9607	3.1	0.1105	2.2	675.4	14.2	683.6	15.5	710.8	46.5	95.0
36EAB09-45	576	88628	1.4	15.8412	0.9	0.9680	2.9	0.1112	2.8	679.8	17.8	687.5	14.5	712.5	19.3	95.4
36EAB09-71	130	10231	1.4	15.7213	2.6	0.9875	3.3	0.1126	2.0	687.8	13.0	697.5	16.6	728.6	55.5	94.4
36EAB09-47	72	11908	1.6	15.5957	3.0	1.0003	3.5	0.1131	1.7	691.0	11.1	704.0	17.7	745.6	64.5	92.7
36EAB09-60	147	32025	1.5	15.7835	1.3	0.9894	3.4	0.1133	3.1	691.7	20.4	698.4	17.0	720.2	27.7	96.0
36EAB09-15	476	37599	0.9	15.7384	0.9	1.0005	1.5	0.1142	1.3	697.1	8.4	704.1	7.8	726.3	18.3	96.0
36EAB09-72	159	45052	1.3	15.7239	1.2	1.0086	3.6	0.1150	3.4	701.8	22.5	708.1	18.3	728.3	25.6	96.4
36EAB09-67	453	48364	0.5	15.5837	1.1	1.0198	2.7	0.1153	2.4	703.2	16.2	713.8	13.6	747.2	22.5	94.1
36EAB09-14	138	34831	1.4	16.0182	1.6	0.9927	2.7	0.1153	2.2	703.6	14.4	700.1	13.5	688.8	33.4	102.2
36EAB09-32	625	26928	0.9	15.6192	0.9	1.0185	1.8	0.1154	1.6	703.9	10.7	713.1	9.5	742.4	19.5	94.8
36EAB09-56	1511	112703	1.5	15.8274	0.2	1.0081	2.2	0.1157	2.2	705.9	15.0	707.9	11.5	714.3	5.2	98.8
36EAB09-73	109	30188	1.4	16.0203	2.2	0.9980	2.6	0.1160	1.4	707.2	9.4	702.8	13.4	688.6	47.8	102.7
36EAB09-91	82	21141	1.7	15.7763	3.1	1.0141	3.8	0.1160	2.1	707.7	14.4	710.9	19.3	721.2	65.9	98.1
36EAB09-19	924	181381	1.0	15.8196	0.3	1.0120	2.4	0.1161	2.3	708.2	15.6	709.9	12.0	715.4	6.9	99.0
36EAB09-87	1378	74879	1.9	15.7573	0.7	1.0164	1.8	0.1162	1.7	708.4	11.1	712.1	9.2	723.8	15.4	97.9
36EAB09-78	1562	214327	0.5	15.7475	0.6	1.0189	2.4	0.1164	2.3	709.6	15.6	713.4	12.3	725.1	12.8	97.9
36EAB09-51	101	15971	0.7	15.7233	2.7	1.0212	3.0	0.1165	1.3	710.1	8.6	714.5	15.3	728.4	56.9	97.5
36EAB09-54	552	19128	0.7	15.5728	1.5	1.0350	3.6	0.1169	3.3	712.7	22.2	721.4	18.8	748.7	32.6	95.2
36EAB09-75	94	19099	1.7	16.0311	3.0	1.										

36EAB09-21	319	237361	0.9	5.9183	0.2	10.9398	2.0	0.4696	2.0	2481.7	41.0	2518.0	18.6	2547.4	2.8	97.4
36EAB09-13	275	151447	1.2	5.9171	0.2	10.8457	2.8	0.4654	2.8	2463.5	57.9	2510.0	26.4	2547.8	4.2	96.7
36EAB09-82	184	31126	1.3	5.9073	0.8	11.0108	1.6	0.4717	1.4	2491.2	29.1	2524.0	14.9	2550.5	12.6	97.7
36EAB09-58	133	129665	0.8	5.9069	0.3	11.3177	2.9	0.4849	2.8	2548.4	59.9	2549.7	26.7	2550.7	4.8	99.9
36EAB09-36	341	234915	0.5	5.8922	0.2	11.4660	1.2	0.4900	1.2	2570.6	24.6	2561.8	10.9	2554.8	2.6	100.6
36EAB09-9	243	181343	2.9	5.8651	0.2	11.8087	1.4	0.5023	1.4	2623.7	30.0	2589.4	13.2	2562.5	3.6	102.4
36EAB09-11	511	115071	3.2	5.8593	0.3	10.8630	5.4	0.4616	5.4	2446.8	110.7	2511.5	50.7	2564.2	5.7	95.4
36EAB09-40	337	131969	1.5	5.8375	0.5	11.1659	5.9	0.4727	5.9	2495.6	122.6	2537.1	55.4	2570.4	7.8	97.1
36EAB09-25	174	121951	2.5	5.8272	3.3	10.8164	4.6	0.4571	3.2	2426.9	64.2	2507.5	42.7	2573.4	55.5	94.3
36EAB09-17	346	237552	3.5	5.8183	0.2	11.3313	2.6	0.4782	2.6	2519.3	54.9	2550.8	24.7	2575.9	3.5	97.8
36EAB09-53	138	133277	1.0	5.3971	0.1	13.1865	2.6	0.5162	2.6	2682.9	57.8	2693.1	24.9	2700.7	2.1	99.3
36EAB09-8	386	330519	3.1	5.0929	0.2	14.9639	2.1	0.5527	2.1	2836.5	47.1	2812.9	19.6	2796.1	2.7	101.4
36EAB09-77	115	28897	1.3	4.1617	1.5	20.6559	1.6	0.6235	0.6	3123.7	13.8	3122.6	15.1	3121.8	23.1	100.1
36EAB09-10	396	64674	2.9	3.8235	0.3	23.5714	2.2	0.6537	2.2	3242.5	55.2	3250.8	21.3	3256.0	4.7	99.6
36EAB09-81	326	71873	3.8	3.2775	0.5	29.4565	1.3	0.7002	1.2	3421.4	32.4	3468.9	12.9	3496.4	7.4	97.9
36EAB09-42	329	269068	2.6	3.1413	0.5	32.7460	1.9	0.7460	1.8	3592.9	50.7	3573.0	18.8	3561.8	7.8	100.9

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb*	± (Ma)	207Pb*	± (Ma)	206Pb*/ 207Pb*	± (Ma)	Conc (%)
33EAB10- diamictite member, Perry Canyon Formation, Perry Canyon, UTM: 12T 417025 E 458925N, n= 79/100																
33EAB10-70	740	22297	0.8	15.8492	1.0	0.9360	2.6	0.1076	2.4	658.8	15.2	670.8	13.0	711.4	22.2	92.6
33EAB10-83	149	25430	1.1	15.6510	2.0	0.9666	3.0	0.1097	2.2	671.1	14.0	686.7	14.8	738.1	42.1	90.9
33EAB10-37	160	57815	1.3	15.7806	2.2	0.9589	2.9	0.1097	1.9	671.3	12.1	682.7	14.6	720.6	47.7	93.2
33EAB10-76	105	13840	1.2	16.2961	5.6	0.9354	5.9	0.1106	1.9	676.0	12.3	670.5	28.9	652.0	119.7	103.7
33EAB10-87	115	25433	1.1	15.9461	6.9	0.9566	7.0	0.1106	1.4	676.4	8.8	681.5	34.8	698.5	146.5	96.8
33EAB10-19	545	141957	1.4	15.7754	1.5	0.9676	2.2	0.1107	1.7	676.9	10.8	687.2	11.1	721.3	30.9	93.8
33EAB10-99	127	36763	1.3	16.0067	2.8	0.9604	3.4	0.1115	1.9	681.4	12.5	683.5	17.1	690.4	60.6	98.7
33EAB10-39	133	65386	0.9	15.9797	6.5	0.9660	6.7	0.1120	1.7	684.1	11.2	686.4	33.4	694.0	137.9	98.6
33EAB10-95	1565	314272	1.1	15.7488	0.4	0.9817	3.9	0.1121	3.9	685.1	25.0	694.5	19.5	724.9	9.5	94.5
33EAB10-75	545	94875	1.4	15.7839	1.0	0.9844	2.0	0.1127	1.7	688.3	10.8	695.8	9.8	720.2	21.8	95.6
33EAB10-92	106	24596	1.2	15.7374	3.8	0.9902	4.6	0.1130	2.7	690.2	17.4	698.8	23.2	726.4	79.6	95.0
33EAB10-43	92	23230	1.4	16.0707	5.5	0.9717	6.1	0.1133	2.6	691.6	17.3	689.3	30.4	681.8	116.8	101.4
33EAB10-10	699	103633	1.3	15.7157	0.8	0.9941	1.6	0.1133	1.4	692.0	9.0	700.8	8.0	729.4	16.7	94.9
33EAB10-81	768	161042	1.0	15.8056	0.9	0.9908	2.4	0.1136	2.3	693.5	14.8	699.1	12.2	717.3	18.1	96.7
33EAB10-13	413	131590	1.1	15.8680	0.9	0.9873	2.1	0.1136	1.9	693.7	12.4	697.3	10.5	708.9	18.1	97.9
33EAB10-62	78	26932	1.4	15.6334	8.2	1.0073	8.5	0.1142	2.4	697.2	15.8	707.5	43.5	740.5	173.4	94.1
33EAB10-4	420	78011	1.4	15.8455	1.6	1.0011	2.4	0.1151	1.7	702.0	11.6	704.4	12.0	711.9	33.7	98.6
33EAB10-46	791	164306	1.4	15.9078	0.6	0.9990	1.4	0.1153	1.3	703.2	8.4	703.3	7.0	703.6	12.7	100.0
33EAB10-16	707	103172	2.3	15.7690	1.3	1.0092	2.0	0.1154	1.5	704.2	9.9	708.5	10.2	722.2	28.3	97.5
33EAB10-17	557	104193	1.3	15.8326	1.0	1.0071	1.8	0.1156	1.5	705.5	10.0	707.4	9.0	713.7	20.2	98.9
33EAB10-42	407	112641	1.5	15.7649	0.7	1.0152	2.4	0.1161	2.3	707.9	15.2	711.5	12.2	722.7	15.5	97.9
33EAB10-53	1410	70227	1.3	15.8459	0.7	1.0184	2.3	0.1170	2.1	713.5	14.5	713.1	11.6	711.8	15.7	100.2
33EAB10-97	660	148960	1.4	15.8129	0.4	1.0390	2.4	0.1192	2.3	725.7	16.0	723.4	12.2	716.3	7.9	101.3
33EAB10-93	241	43879	0.8	15.8223	3.0	1.0394	4.6	0.1193	3.5	726.4	24.4	723.6	24.0	715.0	63.4	101.6
33EAB10-38	514	160057	41.2	9.3724	0.4	4.3813	2.3	0.2978	2.2	1680.5	33.0	1708.8	18.7	1743.7	6.9	96.4
33EAB10-78	644	449798	24.2	8.5407	6.0	5.0315	6.5	0.3117	2.6	1748.9	39.3	1824.6	55.3	1912.2	107.8	91.5
33EAB10-31	499	130564	1.3	8.3005	0.9	5.8668	5.4	0.3532	5.3	1949.8	89.6	1956.3	46.9	1963.2	15.8	99.3
33EAB10-91	325	93122	1.0	8.0270	0.9	6.1812	8.4	0.3599	8.3	1981.5	142.3	2001.8	73.5	2022.8	16.8	98.0
33EAB10-100	867	332633	1.7	7.1969	1.3	7.0767	2.6	0.3694	2.2	2026.5	39.1	2121.1	23.2	2214.1	22.9	91.5
33EAB10-35	70	23012	1.6	6.2899	1.0	9.9164	4.0	0.4524	3.9	2405.8	77.6	2427.0	36.9	2444.9	17.4	98.4
33EAB10-68	487	36189	1.5	6.2467	0.4	10.0142	1.5	0.4537	1.4	2411.7	27.9	2436.1	13.4	2456.5	7.4	98.2
33EAB10-73	611	100651	9.0	6.1831	0.4	9.5080	2.1	0.4264	2.1	2289.4	39.7	2388.3	19.3	2473.8	7.3	92.5
33EAB10-71	177	115204	1.6	6.1560	1.4	10.4289	3.9	0.4656	3.6	2464.4	73.5	2473.6	35.8	2481.2	24.3	99.3
33EAB10-2	273	302948	2.5	6.1528	4.6	10.0332	8.8	0.4477	7.6	2385.1	151.0	2437.8	81.9	2482.1	77.3	96.1
33EAB10-3	467	163689	3.0	6.0628	0.4	10.2979	3.0	0.4528	3.0	2407.8	60.0	2461.9	27.9	2506.9	7.2	96.0
33EAB10-48	169	160410	1.2	6.0041												

33EAB10-67	659	402478	10.1	5.2541	1.3	12.8916	5.9	0.4913	5.7	2576.1	121.5	2671.8	55.2	2745.0	20.8	93.8
33EAB10-29	1363	88247	16.8	5.2221	0.3	12.7254	5.2	0.4820	5.2	2535.8	109.4	2659.5	49.3	2755.0	5.7	92.0
33EAB10-12	522	84838	2.8	5.1548	0.4	13.7095	3.8	0.5125	3.8	2667.5	82.6	2729.8	36.0	2776.3	6.1	96.1
33EAB10-59	424	43359	1.7	5.1334	0.2	13.4687	2.8	0.5015	2.8	2620.0	61.0	2713.1	26.9	2783.1	3.2	94.1
33EAB10-63	178	839557	1.7	5.1159	0.3	14.3569	1.5	0.5327	1.4	2752.8	32.1	2773.6	13.9	2788.7	4.9	98.7
33EAB10-6	310	459505	1.4	5.0955	0.1	14.5834	1.8	0.5389	1.8	2779.1	41.0	2788.5	17.3	2795.2	1.7	99.4
33EAB10-55	590	551951	2.4	5.0117	0.3	14.8964	2.8	0.5415	2.8	2789.6	63.8	2808.6	27.0	2822.4	5.3	98.8
33EAB10-30	695	494450	13.2	4.9330	0.7	14.8108	2.3	0.5299	2.2	2741.0	49.4	2803.2	22.1	2848.2	11.2	96.2
33EAB10-85	150	120171	2.0	4.8391	0.9	15.0425	3.6	0.5279	3.5	2732.8	77.3	2817.9	34.2	2879.4	14.7	94.9
33EAB10-64	157	33111	1.5	4.6723	0.6	16.2749	1.8	0.5515	1.7	2831.4	39.0	2893.1	17.2	2936.3	9.2	96.4
33EAB10-34	228	153758	2.6	4.5311	0.3	16.7914	1.7	0.5518	1.6	2832.7	37.8	2923.0	16.1	2985.8	5.1	94.9
33EAB10-60	103	133305	0.7	4.4933	0.7	17.0786	2.5	0.5566	2.4	2852.4	55.5	2939.3	24.2	2999.3	11.8	95.1
33EAB10-98	80	79582	1.3	4.3952	0.8	18.1197	4.2	0.5776	4.1	2938.9	96.7	2996.1	40.1	3034.7	12.2	96.8
33EAB10-61	133	155608	1.1	4.1297	0.3	20.6079	1.4	0.6172	1.4	3098.9	33.9	3120.3	13.7	3134.1	5.5	98.9
33EAB10-65	40	47246	0.4	4.0830	0.9	21.0605	2.5	0.6237	2.4	3124.5	58.7	3141.4	24.4	3152.2	13.6	99.1
33EAB10-90	915	1428123	2.3	3.2591	0.3	29.8032	2.3	0.7045	2.3	3437.5	61.1	3480.3	22.7	3505.1	4.4	98.1
33EAB10-18	218	291293	1.7	3.2502	0.6	30.4534	1.5	0.7179	1.4	3488.0	37.2	3501.6	14.6	3509.3	8.7	99.4
33EAB10-52	1204	249864	15.5	3.1209	0.6	29.5574	3.2	0.6690	3.2	3302.1	82.1	3472.2	31.7	3571.8	9.2	92.4
33EAB10-82	428	310234	3.7	2.8681	0.3	35.9765	1.6	0.7484	1.5	3601.4	42.4	3665.8	15.5	3701.2	4.4	97.3

Sample	U (ppm)	Isotope ratios				Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb*/ 238U	± (Ma)	207Pb*/ 235U	± (Ma)	206Pb*/ 207Pb*

38EAB09- greywacke member, Perry Canyon Formation, Perry Canyon, UTM: 12T 415178 E 4588253 N, n= 60/100

38EAB09-63	2273	85433	3.8	16.0160	0.7	0.8956	2.6	0.1040	2.5	638.0	14.9	649.4	12.3	689.1	15.3	92.6
38EAB09-24	118	28755	1.6	16.2513	2.2	0.8968	4.2	0.1057	3.6	647.7	22.0	650.0	20.3	658.0	48.1	98.4
38EAB09-33	403	88641	2.5	16.1175	1.3	0.9170	3.7	0.1072	3.5	656.4	21.8	660.8	18.1	675.7	27.2	97.2
38EAB09-46	1345	187268	1.9	16.0730	0.3	0.9198	1.7	0.1072	1.7	656.6	10.8	662.3	8.5	681.5	5.9	96.3
38EAB09-88	281	44889	1.3	16.0082	1.3	0.9261	1.8	0.1075	1.3	658.3	7.9	665.6	9.0	690.2	28.6	95.4
38EAB09-62	256	59957	1.8	16.1024	1.2	0.9240	2.1	0.1079	1.7	660.6	10.4	664.4	10.0	677.6	25.9	97.5
38EAB09-32	427	89299	2.7	16.0555	0.9	0.9280	2.5	0.1081	2.3	661.5	14.6	666.6	12.2	683.9	19.3	96.7
38EAB09-11	989	133604	1.9	16.0782	0.5	0.9273	2.2	0.1081	2.1	661.9	13.4	666.2	10.8	680.8	11.3	97.2
38EAB09-72	321	65670	1.4	16.1218	0.8	0.9367	3.4	0.1095	3.3	670.0	21.0	671.1	16.6	675.0	16.8	99.2
38EAB09-97	102	15310	2.3	15.8430	2.5	0.9543	2.8	0.1097	1.1	670.7	7.2	680.3	13.7	712.2	53.7	94.2
38EAB09-8	422	123579	3.2	16.0713	0.4	0.9409	0.6	0.1097	0.5	670.8	3.1	673.4	3.1	681.7	8.5	98.4
38EAB09-7	689	141862	2.9	16.0851	0.4	0.9430	1.3	0.1100	1.2	672.8	8.0	674.5	6.4	679.9	8.5	99.0
38EAB09-98	844	175286	2.5	16.1180	0.6	0.9414	1.5	0.1100	1.4	673.0	8.9	673.6	7.5	675.6	13.3	99.6
38EAB09-66	88	17314	2.1	16.1114	1.9	0.9429	3.8	0.1102	3.3	673.8	20.9	674.4	18.7	676.5	41.6	99.6
38EAB09-37	909	115570	3.6	16.0414	0.5	0.9490	5.9	0.1104	5.9	675.1	37.9	677.6	29.3	685.8	9.8	98.4
38EAB09-2	165	38746	1.4	16.2196	2.1	0.9395	2.5	0.1105	1.3	675.8	8.2	672.6	12.1	662.1	45.1	102.1
38EAB09-44	121	21854	1.8	15.8160	2.9	0.9662	3.3	0.1108	1.7	677.6	10.6	686.5	16.7	715.9	61.7	94.6
38EAB09-100	123	21227	1.8	16.0929	2.7	0.9518	3.0	0.1111	1.5	679.1	9.6	679.0	15.1	678.9	56.7	100.0
38EAB09-89	283	9176	2.7	15.5911	0.8	0.9828	2.2	0.1111	2.0	679.3	12.9	695.0	10.9	746.2	17.3	91.0
38EAB09-27	210	54076	1.9	15.8410	1.2	0.9723	2.8	0.1117	2.5	682.6	15.9	689.6	13.8	712.5	26.5	95.8
38EAB09-47	148	32238	1.2	16.1011	2.1	0.9609	2.4	0.1122	1.1	685.5	7.3	683.7	11.8	677.8	44.7	101.1
38EAB09-54	204	27699	1.3	15.8470	1.4	0.9763	1.8	0.1122	1.1	685.6	7.4	691.7	9.0	711.7	29.6	96.3
38EAB09-81	272	69126	1.5	16.1929	1.3	0.9672	2.1	0.1136	1.6	693.5	10.5	687.0	10.3	665.7	27.8	104.2
38EAB09-87	317	57891	1.9	15.9709	0.7	0.9811	1.2	0.1136	1.0	693.8	6.6	694.2	6.3	695.1	15.5	99.8
38EAB09-28	1147	124162	3.1	15.9469	0.5	0.9848	2.5	0.1139	2.5	695.4	16.5	696.1	12.8	698.3	9.9	99.6
38EAB09-20	1022	81492	1.5	15.9027	0.3	0.9879	3.5	0.1139	3.5	695.6	23.1	697.6	17.8	704.2	7.3	98.8
38EAB09-36	205	45463	1.3	15.6640	1.1	1.0033	2.5	0.1140	2.2	695.8	14.4	705.5	12.5	736.4	23.6	94.5
38EAB09-94	387	94426	1.6	15.9035	0.6	0.9990	1.3	0.1152	1.2	703.0	8.0	703.3	6.8	704.1	12.9	99.8
38EAB09-30	79	13962	2.7	13.2345	1.9	1.9085	3.5	0.1832	2.9	1084.4	28.8	1084.1	23.1	1083.4	38.6	100.1
38EAB09-42	254	36908	3.0	12.5594	1.3	2.0126	2.5	0.1833	2.2	1085.1	21.7	1119.8	17.0	1187.7	24.9	91.4
38EAB09-40	269	47052	2.4	11.0505	0.8	2.8476	2.7	0.2282	2.5	1325.2	30.3	1368.2	20.0	1435.9	15.7	92.3
38EAB09-58	194	49965														

38EAB09-52	99	33365	2.3	9.3731	2.5	4.6251	3.8	0.3144	2.8	1762.4	43.5	1753.8	31.6	1743.6	46.2	101.1
38EAB09-38	415	91686	3.9	9.2401	0.3	4.5149	1.8	0.3026	1.8	1704.0	26.3	1733.7	14.7	1769.7	4.7	96.3
38EAB09-10	104	27876	3.1	9.0484	0.6	4.8674	1.4	0.3194	1.3	1786.9	19.7	1796.6	11.6	1807.9	10.2	98.8

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	Conc (%)	
18JK08- Maple Canyon Formation, Perry Canyon, UTM:12T 0323626 E 5121326 N, n= 79/100																
18JK08-56	496	77364	2.1	6.1259	1.9	9.5365	2.0	0.4237	0.6	2277.3	11.5	2391.1	18.3	2489.5	32.0	91.5
18JK08-72	67	66472	1.3	6.1047	1.8	10.7074	1.9	0.4741	0.7	2501.4	13.5	2498.1	17.6	2495.3	30.0	100.2
18JK08-44	277	133448	0.8	6.0737	0.8	9.8995	1.7	0.4361	1.5	2333.1	30.0	2425.5	15.8	2503.9	12.8	93.2
18JK08-60	1127	243948	8.7	6.0718	1.0	9.4301	3.1	0.4153	2.9	2239.0	54.9	2380.8	28.1	2504.4	16.5	89.5
18JK08-61	213	202016	2.1	6.0481	1.3	10.5248	1.8	0.4617	1.3	2446.9	26.7	2482.1	17.1	2511.0	21.9	97.4
18JK08-54	167	161096	1.8	6.0448	1.1	10.8320	3.0	0.4749	2.8	2504.9	58.1	2508.8	27.8	2511.9	17.7	99.7
18JK08-57	148	160896	2.1	6.0258	1.3	10.8525	2.0	0.4743	1.6	2502.3	32.8	2510.6	18.8	2517.2	21.2	99.4
18JK08-55	82	154556	1.7	5.9989	1.1	11.1384	2.9	0.4846	2.7	2547.3	56.2	2534.8	27.0	2524.7	19.0	100.9
18JK08-58	309	205956	2.4	5.9972	1.5	11.1749	2.3	0.4861	1.7	2553.6	35.8	2537.8	21.0	2525.2	24.9	101.1
18JK08-27	289	196036	2.6	5.9948	0.9	10.3365	4.4	0.4494	4.3	2392.7	86.4	2465.4	40.8	2525.9	14.3	94.7
18JK08-53	895	296844	6.1	5.9856	1.1	10.8146	2.3	0.4695	2.0	2481.3	41.0	2507.3	21.3	2528.5	19.0	98.1
18JK08-31	81	64320	2.0	5.9831	1.2	10.6297	1.7	0.4613	1.2	2445.1	24.0	2491.3	15.7	2529.2	20.3	96.7
18JK08-15	397	222156	3.4	5.9772	1.0	11.0804	1.8	0.4803	1.5	2528.8	31.4	2529.9	16.8	2530.8	16.8	99.9
18JK08-52	365	230840	2.0	5.9751	1.1	10.9925	1.3	0.4764	0.7	2511.4	14.1	2522.5	11.8	2531.4	18.0	99.2
18JK08-47	493	85524	2.2	5.9747	1.5	10.0633	2.7	0.4361	2.2	2333.0	43.8	2440.6	24.6	2531.5	24.3	92.2
18JK08-24	414	161448	2.0	5.9465	1.6	10.2537	3.3	0.4422	2.9	2360.6	56.7	2457.9	30.5	2539.5	27.0	93.0
18JK08-21	483	191884	5.6	5.9388	0.9	10.1656	2.0	0.4379	1.8	2341.0	34.7	2450.0	18.4	2541.6	15.1	92.1
18JK08-42	1104	348204	5.2	5.9366	1.7	10.3301	3.7	0.4448	3.3	2372.0	64.5	2464.8	33.9	2542.3	28.2	93.3
18JK08-93	151	167812	1.7	5.9363	0.7	10.7705	1.8	0.4637	1.7	2455.9	34.1	2503.5	16.8	2542.3	11.4	96.6
18JK08-39	255	162496	1.7	5.9301	0.6	10.7873	2.3	0.4640	2.3	2457.0	46.2	2505.0	21.8	2544.1	10.2	96.6
18JK08-73	373	260908	1.8	5.9240	1.5	10.9878	2.4	0.4721	1.9	2492.7	40.1	2522.1	22.6	2545.8	24.5	97.9
18JK08-85	102	119428	1.5	5.9203	1.0	10.7808	1.4	0.4629	1.1	2452.4	21.8	2504.4	13.4	2546.9	16.3	96.3
18JK08-99	275	140360	0.7	5.9193	0.8	11.0822	1.8	0.4758	1.7	2508.8	34.3	2530.1	17.2	2547.2	13.7	98.5
18JK08-37	96	85748	1.4	5.9178	1.0	10.5126	2.6	0.4512	2.4	2400.6	47.3	2481.0	23.7	2547.6	16.6	94.2
18JK08-71	416	203516	1.4	5.9154	1.2	10.1903	1.5	0.4372	1.0	2338.0	20.2	2452.2	14.3	2548.3	19.3	91.8
18JK08-50	76	81624	1.7	5.9139	1.3	11.2178	1.9	0.4812	1.5	2532.3	30.8	2541.4	18.1	2548.7	21.1	99.4
18JK08-5	349	53392	3.6	5.9129	1.1	10.8592	1.7	0.4657	1.3	2464.6	25.8	2511.1	15.6	2549.0	18.6	96.7
18JK08-16	247	145456	2.1	5.8980	1.0	10.8917	1.6	0.4659	1.3	2465.6	25.8	2513.9	15.2	2553.2	17.4	96.6
18JK08-87	144	151228	1.6	5.8974	1.8	11.3563	2.7	0.4857	2.0	2552.2	41.7	2552.8	25.0	2553.4	30.3	100.0
18JK08-80	453	275816	0.7	5.8963	1.4	11.1411	1.9	0.4764	1.4	2511.7	28.9	2535.0	18.1	2553.7	22.8	98.4
18JK08-33	95	94428	1.7	5.8959	1.2	11.2187	2.0	0.4797	1.6	2526.1	33.6	2541.5	18.6	2553.8	19.8	98.9
18JK08-26	127	65752	1.2	5.8807	0.9	10.9893	1.2	0.4687	0.8	2477.9	16.0	2522.2	10.9	2558.1	14.7	96.9
18JK08-41	117	182356	2.0	5.8762	1.2	11.1576	2.1	0.4755	1.8	2507.7	36.4	2536.4	19.6	2559.4	19.4	98.0
18JK08-69	878	494936	4.8	5.8748	1.0	11.0117	3.2	0.4692	3.0	2480.0	61.4	2524.1	29.4	2559.8	17.4	96.9
18JK08-96	111	98212	1.0	5.8742	1.8	11.1422	3.2	0.4747	2.6	2504.1	53.7	2535.1	29.6	2560.0	30.8	97.8
18JK08-18	196	50548	1.3	5.8721	1.3	11.0024	5.6	0.4686	5.4	2477.3	111.1	2523.3	51.8	2560.6	22.4	96.7
18JK08-74	249	207692	1.8	5.8650	1.9	11.5326	2.4	0.4906	1.3	2573.1	28.4	2567.2	22.0	2562.6	32.5	100.4
18JK08-77	165	159480	3.3	5.8644	1.1	10.8836	2.4	0.4629	2.1	2452.4	43.0	2513.2	22.2	2562.7	18.6	95.7
18JK08-48	125	144620	2.1	5.8640	0.9	11.3063	3.0	0.4809	2.9	2531.0	61.1	2548.7	28.5	2562.9	14.7	98.8
18JK08-8	60	36416	1.0	5.8554	2.1	11.6728	3.8	0.4957	3.1	2595.4	66.7	2578.5	35.2	2565.3	35.1	101.2
18JK08-98	79	86184	1.0	5.8496	1.6	11.2481	2.3	0.4772	1.6	2515.1	33.7	2543.9	21.5	2567.0	27.4	98.0
18JK08-32	59	58852	1.8	5.8455	0.9	11.1682	2.5	0.4735	2.3	2498.8	47.4	2537.3	23.0	2568.1	15.4	97.3
18JK08-30	167	182548	5.4	5.8436	1.3	11.3582	1.8	0.4814	1.3	2533.3	26.2	2553.0	16.6	2568.7	21.1	98.6
18JK08-67	200	191896	2.0	5.8409	2.1	10.5972	2.7	0.4489	1.7	2390.5	34.2	2488.5	25.1	2569.5	35.1	93.0
18JK08-7	418	156272	1.9	5.8399	1.4	11.2384	2.4	0.4760	2.0	2509.8	41.8	2543.1	22.7	2569.7	22.9	97.7
18JK08-45	360	314952	3.4	5.8274	1.2	11.2794	2.6	0.4767	2.3	2513.0	47.2	2546.5	24.0	2573.3	20.2	97.7
18JK08-82	703	410416	2.0	5.8204	1.6											

18JK08-68	130	180244	1.9	4.8499	1.8	14.9526	1.8	0.5260	0.5	2724.4	11.1	2812.2	17.6	2875.8	28.9	94.7
18JK08-36	226	172564	9.9	4.6350	2.1	15.6352	2.2	0.5256	0.5	2722.9	11.1	2854.8	20.6	2949.2	33.9	92.3
18JK08-75	291	386980	2.1	4.4462	1.4	18.5925	2.5	0.5996	2.0	3028.0	48.3	3020.9	23.8	3016.2	23.1	100.4
18JK08-76	140	170004	0.7	4.3382	2.0	18.2287	2.3	0.5735	1.1	2922.3	26.1	3001.9	21.9	3055.6	31.8	95.6
18JK08-46	249	239764	6.6	4.2004	0.9	20.2103	1.3	0.6157	0.9	3092.8	22.8	3101.5	12.7	3107.1	14.8	99.5
18JK08-11	99	102632	0.9	4.0266	1.3	21.7696	1.9	0.6357	1.4	3172.3	35.3	3173.5	18.9	3174.3	21.2	99.9
18JK08-92	114	225384	1.1	3.8887	1.2	23.1249	2.8	0.6522	2.5	3236.8	63.6	3232.2	26.8	3229.4	18.3	100.2

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb*/ 238U	± (Ma)	207Pb*/ 235U	± (Ma)	206Pb*/ 207Pb*	/ ± (Ma)	Conc (%)
01AY12- Kelley Canyon Formation, Perry Canyon, UTM: 12 T 418635 E 4594510 N, n=79/100																
1AY12-81	66	22173	1.8	14.6659	6.4	1.4062	7.2	0.1496	3.3	898.6	28.0	891.6	42.7	874.2	132.1	102.8
1AY12-49	54	61807	1.4	14.0692	6.2	1.6269	7.0	0.1660	3.2	990.1	29.3	980.7	43.9	959.6	127.0	103.2
1AY12-82	43	12758	1.4	13.9669	5.3	1.5974	5.9	0.1618	2.5	966.9	22.6	969.2	36.9	974.5	109.1	99.2
1AY12-83	97	37328	1.6	13.7961	2.7	1.7336	3.0	0.1735	1.5	1031.2	13.9	1021.1	19.6	999.6	54.1	103.2
1AY12-85	144	44655	1.7	13.5884	1.5	1.7619	2.6	0.1736	2.2	1032.1	20.7	1031.5	16.9	1030.3	29.6	100.2
1AY12-14	104	60216	2.1	13.4501	3.8	1.7298	4.5	0.1687	2.4	1005.2	22.7	1019.7	29.3	1051.0	77.3	95.6
1AY12-7	106	49185	0.9	13.4498	2.2	1.8553	4.1	0.1810	3.5	1072.3	34.8	1065.3	27.3	1051.0	43.5	102.0
1AY12-27	46	21119	1.2	13.4486	3.7	1.7601	4.8	0.1717	3.2	1021.4	30.0	1030.9	31.4	1051.2	73.8	97.2
1AY12-96	72	44624	1.3	13.3956	4.4	1.8587	4.9	0.1806	2.0	1070.2	19.7	1066.5	32.1	1059.1	89.2	101.0
1AY12-9	420	232551	2.5	13.3799	0.6	1.8101	2.7	0.1757	2.6	1043.2	25.3	1049.1	17.7	1061.5	12.7	98.3
1AY12-10	53	25459	1.1	13.3450	8.2	1.6724	8.7	0.1619	3.1	967.2	27.5	998.1	55.4	1066.8	164.2	90.7
1AY12-66	98	56537	0.6	13.3412	4.8	1.8470	5.5	0.1787	2.7	1060.0	26.1	1062.4	36.1	1067.3	96.1	99.3
1AY12-3	124	88757	2.3	13.3212	2.6	1.8658	3.0	0.1803	1.5	1068.4	15.0	1069.0	20.2	1070.4	53.1	99.8
1AY12-69	69	23400	1.9	13.3055	5.8	1.9138	6.4	0.1847	2.8	1092.5	27.7	1085.9	42.6	1072.7	115.7	101.8
1AY12-99	45	16444	2.0	13.2662	9.4	1.8778	9.8	0.1807	2.7	1070.7	26.4	1073.3	64.9	1078.7	189.4	99.3
1AY12-89	96	133122	3.0	13.2321	3.1	1.9573	5.2	0.1878	4.2	1109.7	42.7	1101.0	35.1	1083.8	62.6	102.4
1AY12-93	227	156673	1.6	13.1851	1.1	1.9500	2.1	0.1865	1.8	1102.2	18.3	1098.4	14.3	1090.9	22.5	101.0
1AY12-72	110	63959	1.3	13.1842	1.7	1.9625	2.3	0.1877	1.5	1108.7	15.1	1102.7	15.2	1091.1	34.3	101.6
1AY12-74	135	59779	1.6	13.1659	1.7	1.9570	2.1	0.1869	1.1	1104.4	11.0	1100.9	13.8	1093.9	34.9	101.0
1AY12-100	56	17258	2.2	13.1392	4.3	2.0293	5.8	0.1934	3.9	1139.7	40.8	1125.4	39.5	1097.9	85.9	103.8
1AY12-68	92	37424	1.7	13.1336	3.5	1.9890	4.2	0.1895	2.3	1118.5	24.1	1111.8	28.6	1098.8	70.6	101.8
1AY12-21	72	30480	1.8	13.0841	2.7	1.9381	4.0	0.1839	3.0	1088.3	30.5	1094.3	27.1	1106.3	53.1	98.4
1AY12-79	57	30695	2.2	13.0666	4.8	1.9934	6.1	0.1889	3.7	1115.5	37.5	1113.3	40.9	1109.0	96.3	100.6
1AY12-97	174	233697	1.0	13.0353	2.1	2.0569	3.8	0.1945	3.2	1145.5	33.4	1134.6	26.1	1113.8	42.0	102.9
1AY12-70	53	73231	1.5	12.9496	3.7	2.0277	4.6	0.1904	2.8	1123.7	29.2	1124.8	31.6	1126.9	73.4	99.7
1AY12-80	111	69119	1.5	12.9295	1.6	2.0836	2.9	0.1954	2.4	1150.5	25.4	1143.4	19.8	1130.0	31.5	101.8
1AY12-59	88	61253	1.4	12.8071	2.7	2.1331	3.4	0.1981	2.1	1165.3	22.5	1159.6	23.5	1149.0	52.9	101.4
1AY12-50	58	32046	0.6	12.7759	3.1	2.0867	4.4	0.1934	3.2	1139.5	33.1	1144.4	30.4	1153.8	61.5	98.8
1AY12-98	122	103273	0.9	12.7500	1.7	2.2256	3.4	0.2058	3.0	1206.4	32.7	1189.1	24.1	1157.8	34.3	104.2
1AY12-76	107	78165	2.4	12.7349	2.0	2.1537	3.3	0.1989	2.7	1169.5	28.6	1166.3	23.0	1160.1	39.0	100.8
1AY12-48	109	83516	1.0	12.7183	1.3	2.1797	1.9	0.2011	1.4	1181.0	14.8	1174.6	13.4	1162.7	26.7	101.6
1AY12-78	98	56392	1.8	12.6750	2.4	2.1716	3.7	0.1996	2.8	1173.3	29.7	1172.0	25.4	1169.5	47.1	100.3
1AY12-87	57	42232	1.3	12.5880	5.7	2.1450	6.0	0.1958	2.0	1152.9	20.9	1163.5	41.5	1183.2	111.8	97.4
1AY12-2	188	31067	1.0	12.5508	1.0	2.1446	2.1	0.1952	1.8	1149.6	18.8	1163.3	14.3	1189.0	20.7	96.7
1AY12-62	286	187365	8.7	12.5178	1.3	2.1284	1.6	0.1932	1.0	1138.9	10.8	1158.1	11.2	1194.2	24.7	95.4
1AY12-84	108	41836	2.4	12.4808	1.7	2.2014	2.8	0.1993	2.2	1171.4	23.7	1181.5	19.3	1200.0	32.6	97.6
1AY12-5	31	12710	2.3	12.3844	6.1	2.3300	6.9	0.2093	3.1	1225.0	34.8	1221.5	48.9	1215.3	120.8	100.8
1AY12-15	124	47744	1.2	12.3722	1.4	2.3210	3.0	0.2083	2.7	1219.6	29.7	1218.7	21.5	1217.2	27.9	100.2
1AY12-75	54	3797	2.1	12.3664	4.0	2.2578	4.7	0.2025	2.5	1188.8	27.4	1199.2	33.0	1218.1	77.9	97.6
1AY12-91	166	47297	1.9	12.2847	5.6	2.2505	7.5	0.2005	5.0	1178.1	53.6	1197.0	52.6	1231.2	109.6	95.7
1AY12-12	95	97649	2.9	12.2368	3.5	2.3756	4.4	0.2108	2.7	1233.3	30.4	1235.3	31.7	1238.8	69.0	99.5
1AY12-20	194	92393	2.1	12.1573	1.0	2.4081	3.4	0.2123	3.3	1241.2	37.3	1245.0	24.7	1251.6	18.7	99.2
1AY12-42	98	107422	1.9	11.5550	1.5	2.7379										

1AY12-4	77	103878	3.9	9.1237	1.7	4.8196	2.9	0.3189	2.3	1784.5	36.6	1788.3	24.4	1792.8	31.0	99.5
1AY12-77	87	108344	0.8	8.9765	0.8	4.9946	2.3	0.3252	2.2	1814.9	35.0	1818.4	19.8	1822.4	14.2	99.6
1AY12-35	123	87166	6.0	8.8966	0.7	5.2417	3.3	0.3382	3.3	1878.1	53.1	1859.4	28.5	1838.6	13.3	102.1
1AY12-13	77	65040	3.3	8.8690	1.4	5.1340	2.4	0.3302	2.0	1839.5	31.5	1841.8	20.5	1844.2	25.4	99.7
1AY12-37	69	55142	1.3	8.7682	1.7	5.2181	4.8	0.3318	4.5	1847.3	72.0	1855.6	40.8	1864.9	30.6	99.1
1AY12-94	53	47869	1.8	7.9875	1.2	6.3610	2.2	0.3685	1.8	2022.3	30.6	2026.9	18.9	2031.5	22.0	99.5
1AY12-25	124	133540	1.8	5.5129	0.7	12.3116	9.2	0.4923	9.2	2580.4	196.2	2628.5	87.0	2665.6	11.0	96.8
1AY12-56	12	13319	2.1	5.4593	3.0	12.8911	3.5	0.5104	1.9	2658.4	41.8	2671.7	33.4	2681.8	49.3	99.1
1AY12-34	108	187658	1.3	5.4087	0.4	12.9805	2.1	0.5092	2.0	2653.2	44.2	2678.2	19.5	2697.2	6.0	98.4
1AY12-22	27	65785	1.0	5.4029	1.0	13.0387	2.8	0.5109	2.6	2660.6	56.3	2682.5	26.1	2699.0	16.4	98.6
1AY12-29	58	95987	2.0	3.8226	0.9	23.2845	2.3	0.6455	2.1	3210.8	53.8	3238.9	22.4	3256.4	13.7	98.6

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)						
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*

21JK08- lower part of slate member, Perry Canyon Formation, Willard Peak, UTM: 12T 417268 E 4582775 N, n= 46/100

21JK08-58	68	25268	2.0	14.6138	3.3	1.2585	3.4	0.1334	0.6	807.2	4.7	827.2	19.1	881.5	68.8	91.6
21JK08-42	220	208348	3.3	13.3631	1.3	1.8373	3.1	0.1781	2.8	1056.4	27.3	1058.9	20.4	1064.0	26.6	99.3
21JK08-71	941	184000	3.9	12.9297	2.1	1.9825	3.3	0.1859	2.6	1099.2	26.2	1109.6	22.4	1130.0	41.4	97.3
21JK08-62	297	214888	3.1	12.8653	1.3	2.1014	2.2	0.1961	1.8	1154.2	18.5	1149.3	14.8	1139.9	25.1	101.3
21JK08-49	295	264408	2.4	12.5020	1.9	2.1836	2.0	0.1980	0.6	1164.5	6.0	1175.8	13.8	1196.6	37.5	97.3
21JK08-15	251	448356	3.6	11.2663	1.3	2.9433	2.0	0.2405	1.5	1389.3	18.6	1393.1	15.0	1399.0	24.9	99.3
21JK08-73	1223	337240	6.2	9.7533	1.0	3.7837	1.7	0.2676	1.4	1528.8	19.1	1589.3	13.6	1670.4	17.8	91.5
21JK08-18	98	203776	3.5	9.6235	1.6	4.3265	2.1	0.3020	1.4	1701.1	20.9	1698.4	17.2	1695.1	28.6	100.4
21JK08-28	311	197284	1.4	9.3817	1.5	4.2699	1.8	0.2905	1.1	1644.2	15.4	1687.6	15.0	1741.9	27.3	94.4
21JK08-74	333	362148	2.0	9.3100	1.4	4.6371	1.9	0.3131	1.3	1756.0	19.8	1756.0	15.7	1755.9	25.1	100.0
21JK08-35	405	341724	7.0	7.7667	2.2	6.2011	4.6	0.3493	4.1	1931.3	67.9	2004.6	40.6	2081.0	39.3	92.8
21JK08-32	73	69204	2.1	7.5166	1.1	6.9119	1.5	0.3768	1.0	2061.3	17.5	2100.2	13.0	2138.4	18.9	96.4
21JK08-70	273	230048	2.8	6.4378	2.0	9.7373	2.2	0.4546	0.9	2415.9	17.7	2410.2	20.5	2405.5	34.7	100.4
21JK08-78	118	98716	2.1	6.3193	2.4	9.4510	2.6	0.4332	0.9	2319.9	17.7	2382.8	23.9	2437.0	41.3	95.2
21JK08-27	297	166288	2.4	6.3154	1.0	8.7187	2.3	0.3994	2.0	2166.0	37.5	2309.0	20.5	2438.0	16.3	88.8
21JK08-47	226	245412	1.6	6.3098	0.9	9.3233	3.3	0.4267	3.2	2290.6	61.3	2370.3	30.4	2439.5	15.6	93.9
21JK08-52	205	224200	1.5	6.3093	1.4	9.3294	2.0	0.4269	1.3	2291.7	25.7	2370.9	17.9	2439.7	24.2	93.9
21JK08-92	102	128004	2.0	6.3081	1.5	10.1480	2.3	0.4643	1.7	2458.4	35.6	2448.3	21.1	2440.0	24.9	100.8
21JK08-1	632	2011056	2.8	6.2921	1.2	9.5061	4.6	0.4338	4.4	2322.9	86.4	2388.1	42.3	2444.3	20.8	95.0
21JK08-30	818	392640	3.0	6.2679	0.8	9.0577	2.1	0.4118	1.9	2222.9	35.9	2343.8	18.9	2450.8	13.4	90.7
21JK08-59	157	165636	2.9	6.2503	0.8	10.2702	1.8	0.4656	1.6	2464.1	32.2	2459.4	16.2	2455.6	13.2	100.3
21JK08-31	129	123760	1.7	6.2453	1.1	9.5528	1.2	0.4327	0.6	2317.9	11.3	2392.6	11.2	2456.9	18.1	94.3
21JK08-21	243	1020820	4.0	6.2189	2.7	10.1748	3.1	0.4589	1.6	2434.8	31.6	2450.8	29.0	2464.1	46.0	98.8
21JK08-79	87	149216	2.1	6.0604	1.7	10.8312	2.4	0.4761	1.7	2510.2	35.1	2508.8	22.4	2507.6	28.8	100.1
21JK08-84	193	208668	2.8	6.0227	1.1	10.9098	1.9	0.4766	1.5	2512.2	30.4	2515.5	17.2	2518.1	19.2	99.8
21JK08-9	416	625984	3.2	5.9102	1.2	10.7697	3.0	0.4616	2.8	2446.8	56.4	2503.5	28.2	2549.7	20.6	96.0
21JK08-2	312	690156	5.3	5.7536	1.1	11.8967	1.5	0.4964	1.0	2598.5	21.2	2596.3	13.9	2594.6	18.3	100.1
21JK08-72	408	457088	2.7	5.7479	1.5	10.9184	1.8	0.4552	0.9	2418.2	18.6	2516.2	16.3	2596.3	24.8	93.1
21JK08-11	314	123496	2.2	5.7466	1.7	10.3438	7.7	0.4311	7.6	2310.7	146.8	2466.0	71.8	2596.6	27.8	89.0
21JK08-6	164	589512	1.1	5.7448	1.2	11.5541	1.9	0.4814	1.5	2533.4	31.2	2569.0	18.1	2597.2	20.7	97.5
21JK08-14	106	464832	1.2	5.6923	0.9	11.3959	2.1	0.4705	1.9	2485.6	38.6	2556.1	19.5	2612.5	15.7	95.1
21JK08-63	559	409624	4.4	5.6723	0.8	12.2089	0.9	0.5023	0.5	2623.5	10.8	2620.6	8.5	2618.3	12.6	100.2
21JK08-89	483	164452	7.4	5.4783	0.7	12.9183	3.2	0.5133	3.1	2670.6	68.2	2673.7	30.2	2676.1	11.9	99.8
21JK08-96	185	206884	1.7	5.4444	2.3	12.6118	3.3	0.4980	2.5	2605.2	52.7	2651.1	31.4	2686.3	37.2	97.0
21JK08-4	235	752700	3.6	5.4339	1.1	13.1203	1.8	0.5171	1.4	2686.8	30.8	2688.3	16.6	2689.5	17.5	99.9
21JK08-55	100	317932	1.4	5.4314	0.7	13.1951	1.7	0.5198	1.6	2698.3	34.6	2693.7	16.3	2690.3	12.1	100.3
21JK08-94	172	160176	1.1	5.3618	1.0	13.4991	2.8	0.5249	2.6	2720.1	57.0	2715.2	26.1	2711.6	16.8	100.3
21JK08-10	259	284024	0.8	5.3059	1.7	11.7637	3.9	0.4527	3.6	2407.2	71.5	2585.8	36.8	2728.9	27.3	88.2
21JK08-67	30	328908	3.7	5.2710	1.4	13.8442	1.8	0.5293	1.1	2738.3	24.3	2739.1	17.0	2739.7	23.4	99.9
21JK0																

19AY11-80	137	55896	2.6	13.3625	1.0	1.8870	1.6	0.1829	1.3	1082.7	13.0	1076.5	10.9	1064.1	20.0	101.7
19AY11-46	78	28365	1.8	13.3430	3.2	1.8970	3.7	0.1836	1.8	1086.5	17.7	1080.0	24.3	1067.1	64.2	101.8
19AY11-17	235	112622	2.3	13.3343	0.8	1.8807	1.4	0.1819	1.2	1077.3	11.4	1074.3	9.4	1068.4	16.5	100.8
19AY11-94	122	68873	3.2	13.2719	2.1	1.8309	2.5	0.1762	1.3	1046.4	12.6	1056.6	16.2	1077.8	42.1	97.1
19AY11-77	158	53795	2.9	13.2402	1.7	1.8613	2.7	0.1787	2.2	1060.1	21.3	1067.4	18.1	1082.6	33.2	97.9
19AY11-76	73	41369	2.9	13.1713	2.7	1.9024	3.3	0.1817	1.9	1076.4	18.8	1081.9	21.9	1093.0	54.1	98.5
19AY11-38	173	61059	1.8	13.1210	1.0	1.8966	1.3	0.1805	0.9	1069.6	8.7	1079.9	8.7	1100.7	19.5	97.2
19AY11-51	124	56907	1.8	13.0059	2.3	2.0431	3.2	0.1927	2.2	1136.1	23.2	1130.0	21.8	1118.3	45.8	101.6
19AY11-41	114	27417	1.4	12.7769	1.4	2.1966	1.7	0.2036	1.1	1194.4	11.6	1180.0	12.1	1153.6	27.1	103.5
19AY11-53	204	55401	2.0	12.7608	0.6	2.1313	1.2	0.1973	1.0	1160.6	10.4	1159.0	8.0	1156.1	12.1	100.4
19AY11-75	93	47913	2.4	12.7372	2.7	2.1164	3.6	0.1955	2.4	1151.1	25.0	1154.2	24.7	1159.8	53.4	99.3
19AY11-36	105	96705	2.0	12.6991	3.0	2.0783	3.3	0.1914	1.3	1129.0	13.6	1141.7	22.5	1165.7	59.5	96.9
19AY11-95	280	216515	4.5	12.6960	0.7	2.2350	1.3	0.2058	1.1	1206.4	12.0	1192.1	9.1	1166.2	14.0	103.4
19AY11-98	156	175851	1.8	12.6728	1.1	2.1751	1.2	0.1999	0.6	1174.9	6.4	1173.1	8.6	1169.8	21.5	100.4
19AY11-3	129	53999	1.5	12.6661	2.0	2.1470	2.4	0.1972	1.3	1160.4	14.0	1164.1	16.9	1170.9	40.5	99.1
19AY11-2	129	64650	4.3	12.6617	1.9	2.1661	2.0	0.1989	0.7	1169.5	7.5	1170.2	14.2	1171.6	37.9	99.8
19AY11-16	183	154461	1.9	12.6245	1.0	2.2020	4.7	0.2016	4.6	1184.0	49.8	1181.7	32.9	1177.4	19.5	100.6
19AY11-7	47	30326	2.3	12.5846	2.9	2.1229	3.6	0.1938	2.0	1141.7	20.9	1156.3	24.6	1183.7	58.2	96.5
19AY11-87	129	74991	1.2	12.5726	1.2	2.1201	1.8	0.1933	1.4	1139.3	14.4	1155.4	12.4	1185.6	23.1	96.1
19AY11-84	170	71273	1.4	12.5074	1.2	2.2306	1.8	0.2023	1.4	1187.9	14.8	1190.7	12.8	1195.8	23.8	99.3
19AY11-71	52	23662	2.7	12.4758	3.0	2.1760	3.3	0.1969	1.5	1158.6	15.8	1173.4	23.3	1200.8	59.0	96.5
19AY11-25	123	95148	3.8	12.4247	0.7	2.2539	1.9	0.2031	1.8	1192.0	19.4	1198.0	13.5	1208.9	14.3	98.6
19AY11-48	51	37804	1.0	12.3632	3.9	2.4427	4.6	0.2190	2.4	1276.7	27.8	1255.3	32.8	1218.6	76.1	104.8
19AY11-90	122	16775	1.1	12.3334	2.5	2.2573	3.6	0.2019	2.5	1185.6	27.2	1199.1	25.2	1223.4	50.0	96.9
19AY11-20	177	93272	1.0	12.3087	1.5	2.3502	1.6	0.2098	0.6	1227.8	6.2	1227.6	11.3	1227.3	29.1	100.0
19AY11-31	59	49255	2.5	12.2975	4.6	2.3620	4.7	0.2107	1.1	1232.4	12.7	1231.2	33.7	1229.1	89.9	100.3
19AY11-9	217	140178	2.6	12.2699	1.1	2.3663	2.2	0.2106	1.9	1231.9	21.7	1232.5	15.8	1233.6	21.1	99.9
19AY11-1	110	73262	5.6	12.2608	1.8	2.2452	12.7	0.1997	12.6	1173.5	135.3	1195.3	89.7	1235.0	34.5	95.0
19AY11-23	330	171547	3.3	12.1897	0.5	2.3534	1.5	0.2081	1.4	1218.5	15.4	1228.6	10.5	1246.4	10.0	97.8
19AY11-22	350	103685	2.5	11.9323	0.7	2.5041	1.3	0.2167	1.1	1264.5	13.0	1273.2	9.7	1288.0	13.9	98.2
19AY11-55	59	24825	2.4	11.9131	3.0	2.6026	3.3	0.2249	1.4	1307.6	16.7	1301.4	24.4	1291.2	58.6	101.3
19AY11-45	113	44502	1.2	11.8653	1.3	2.6050	1.9	0.2242	1.4	1303.9	16.3	1302.0	13.9	1299.0	25.1	100.4
19AY11-62	92	78327	1.5	11.7636	1.6	2.7205	2.2	0.2321	1.5	1345.5	18.8	1334.1	16.6	1315.7	31.2	102.3
19AY11-50	150	101013	1.1	11.4678	1.2	2.9233	2.5	0.2431	2.1	1403.0	27.1	1388.0	18.6	1364.9	23.1	102.8
19AY11-33	133	104287	2.4	11.0595	1.0	3.0715	1.3	0.2464	0.8	1419.7	10.2	1425.6	9.9	1434.4	19.2	99.0
19AY11-57	270	136382	3.5	10.9930	0.6	3.0610	0.9	0.2440	0.7	1407.7	8.5	1423.0	6.8	1445.9	10.9	97.4
19AY11-42	154	81344	2.3	10.9579	1.2	3.0467	3.7	0.2421	3.5	1397.8	43.5	1419.4	28.0	1452.0	22.8	96.3
19AY11-19	63	28850	2.3	10.8953	2.0	3.1596	2.2	0.2497	1.0	1436.8	12.4	1447.3	17.3	1462.9	38.3	98.2
19AY11-27	284	66636	2.0	10.8581	0.4	3.1602	0.8	0.2489	0.7	1432.6	9.2	1447.5	6.4	1469.4	7.7	97.5
19AY11-6	109	51819	2.4	10.8542	1.0	3.1977	1.3	0.2517	0.8	1447.4	10.2	1456.6	9.8	1470.1	18.8	98.5
19AY11-73	104	64108	1.2	10.5074	1.1	3.5794	2.2	0.2728	1.8	1554.9	25.2	1545.0	17.1	1531.4	21.5	101.5
19AY11-32	181	143693	2.1	10.3306	0.4	3.6927	2.0	0.2767	1.9	1574.6	27.2	1569.8	16.0	1563.3	8.4	100.7
19AY11-18	220	57997	0.9	10.0994	0.8	3.4114	1.5	0.2499	1.2	1437.8	15.9	1507.0	11.6	1605.6	15.1	89.5
19AY11-15	91	62338	1.7	9.8520	1.1	4.0926	2.2	0.2924	2.0	1653.7	28.6	1652.8	18.2	1651.7	19.8	100.1
19AY11-24	845	745339	12.6	9.7631	0.1	4.1951	1.1	0.2971	1.1	1676.7	16.6	1673.1	9.3	1668.5	2.4	100.5
19AY11-92	411	125651	1.3	9.4545	0.4	4.1686	3.6	0.2858	3.6	1620.7	51.0	1667.9	29.3	1727.7	7.5	93.8
19AY11-64	91	72898	8.5	9.2897	0.7	4.7809	1.8	0.3221	1.7	1800.0	26.7	1781.6	15.4	1759.9	12.7	102.3
19AY11-43	85	78212	0.9	9.1536	0.8	4.6601	2.2	0.3094	2.1	1737.6	31.9	1760.1	18.8	1786.9	14.9	97.2
19AY11-82	129	85241	1.2	9.0178	0.7	4.7518	1.8	0.3108	1.6	1744.6	24.5	1776.4	14.7	1814.1	13.0	96.2
19AY11-88	177	113590	1.0	8.8650	0.4	5.1927	0.9	0.3339	0.9	1857.1	14.1	1851.4	8.1	1845.0	6.6	100.7
19AY11-99	103	99734	1.0	8.7976	0.8	5.3701	1.3	0.3426	1.1	1899.4	17.7	1880.1	11.4	1858.8	14.2	102.2
19AY11-54	63	47917	1.9	8.7934	2.1	5.2041	2.5	0.3319	1.4	1847.6	22.6	1853.3	21.5	1859.7	37.9	99.3
19AY11-56	634	627838	3.5	8.2465	1.7	5.6136	2.9	0.3357	2.3	1866.2	37.1	1918.2	24.8	1974.9	31.1	94.5
19AY11-83	130	29268	1.5	6.3562	0.7	9.6843	3.4	0.4464	3.3	2379.4	66.4	2405.2	31.4	2427.1	11.4	98.0
19AY11-61	98	100320	1.6	6.2669	0.7	9.6004	2.0	0.4364	1.9	2334.3	36.4	2397.2	18.3	2451.1	12.2	95.2
19AY11-58	142	298522	1.7	6.2401	0.2	10.4831	1.9	0.4744	1.8	2503.0	38.2	2478.4	17.2	2458.3	4.2	101.8
19AY11-40	70	90778	1.5	6.2115	0.9	10.4246	1.3	0.4696	0.9	2481.9	19.4	2473.2	11.7	2466.1	14.4	100.6
19AY11-69	134	160865	1.3	6.2073	0.3	10.3283	0.7	0.4650	0.7	2461.5	13.8	2464.6	6.8	2467.2	5.0	99.8
19AY11-10	509	119128	6.9	6.0173	0.2	10.1567	1.9	0.4433	1.9	2365.2	37.4	2449.1	17.5	2519.6	2.7	93.9
19AY11-12	179	383353	1.0	6.0063	0.6	10.1388	4.9	0.4417	4.9	2358.1	97.0	2447.5	45.7	2522.7	9.3	93.5
19AY11-89	273	151887	20.5	5.8186	0.2	11.6671	2.2	0.4924	2.2	2580.9	47.6	2578.1	21.0	2575.9	3.4	100.2
19AY11-44	255	338271	1.2	5.7226	0.2	11.6635	0.9	0.4841	0.9	2545.0	18.9	2577.8	8.7	2603.6	4.0	97.8
19AY11-60	311	438960	7.5	5.6604	0.2	12.3324	1.0	0.5063	1.0	2640.8	22.3	2630.0	9.8	2621.8	2.6	100.7
19AY11-79	214	211303	2.1	5.6492	0.2	11.6684	1.7	0.4781	1.7	2518.9	35.3	2578.2	15.9	2625.1	3.0	96.0
19AY11-68	265	348770	0.7	5.6394	0.2	12.4029	0.9	0.5073	0.9	2645.0	19.4	2635.4	8.7	2628.0	3.8	100.6
19AY11-4	223	221580	1.3	5.6367	0.2	12.3215	0.8	0.5037	0.8	2629.7	17.2	2629.2	7.6	2628.8	2.6	100.0
19AY11-5	190	214424	1.2	5.5104	0.3	13.0060	1.0	0.5198	0.9	2698.3	20.6	2680.1	9.3	2666.4	5.3	101.2
19AY11-96	112	165910	1.3	5.4198	0.4	13.3612	1.1	0.5252	1.0	2721.2	23.0	2705.5	10.7	2693.8	7.4	101.0
19AY11-63	191	332853	1.0	5.3856	0.3	13.2663	1.5	0.5182	1.5	2691.5	32.9	2698.8	14.4	2704.3	4.6	99.5
19AY11-29	64	70629	2.5	4.8760	0.4	15.6403	1.4	0.5531	1.3	2838.1	30.3	2855.1	13.2	2867.1	7.0	99.0
19AY11-26	127	238944	0.9	4.4028	0.3	18.9213	1.8	0.6042	1.7							

				Isotope ratios						Apparent ages (Ma)						
Sample	U (ppm)	206Pb / 204Pb	U/Th	206Pb* / 207Pb*	± (%)	207Pb* / 235U	± (%)	206Pb* / 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Conc (%)
41EAB10- diamictite membe, Perry Canyon Formation, Willard Peak, UTM: 12T 423938 E 4575477 N, n=47/100																
41EAB10-62	408	75211	1.3	15.6966	2.0	0.9881	2.7	0.1125	1.9	687.2	12.4	697.7	13.8	732.0	41.4	93.9
41EAB10-60	270	59869	1.3	15.8904	1.4	0.9812	2.6	0.1131	2.2	690.6	14.5	694.2	13.1	705.9	29.3	97.8
41EAB10-86	118	41703	0.7	15.6614	5.4	1.0276	6.0	0.1167	2.6	711.7	17.2	717.7	31.0	736.7	115.4	96.6
41EAB10-35	261	107277	0.7	16.0838	2.1	1.0025	5.6	0.1169	5.2	712.9	35.2	705.1	28.6	680.1	44.4	104.8

41EAB10-78	447	65799	1.7	15.7799	1.0	1.0234	2.2	0.1171	1.9	714.0	13.1	715.6	11.3	720.7	22.3	99.1
41EAB10-66	150	27135	1.0	15.8405	3.8	1.0203	4.4	0.1172	2.4	714.5	15.9	714.0	22.7	712.6	79.7	100.3
41EAB10-93	154	22230	0.8	15.8469	5.4	1.0207	5.6	0.1173	1.7	715.0	11.4	714.2	28.9	711.7	114.2	100.5
41EAB10-92	456	46163	0.9	15.8023	1.4	1.0404	2.2	0.1192	1.6	726.2	11.3	724.1	11.3	717.7	30.4	101.2
41EAB10-85	146	20955	0.6	15.5424	3.3	1.0893	4.5	0.1228	3.0	746.6	21.4	748.2	23.9	752.8	70.7	99.2
41EAB10-24	145	44244	0.9	13.2314	3.0	1.8717	3.8	0.1796	2.3	1064.8	22.4	1071.1	25.0	1083.9	60.3	98.2
41EAB10-77	350	263926	1.2	11.1203	0.9	3.1420	2.6	0.2534	2.4	1456.0	31.4	1443.0	19.8	1423.9	17.4	102.3
41EAB10-7	463	31802	1.0	10.9618	0.7	3.0100	4.7	0.2393	4.7	1383.1	58.1	1410.2	36.0	1451.3	12.7	95.3
41EAB10-55	837	608481	4.1	9.7038	0.3	4.0328	4.2	0.2838	4.2	1610.6	59.9	1640.8	34.3	1679.8	6.0	95.9
41EAB10-11	718	332181	24.6	9.4882	0.2	4.1698	1.6	0.2869	1.6	1626.3	23.5	1668.1	13.5	1721.2	3.2	94.5
41EAB10-98	832	618708	2.9	9.3841	0.3	4.5677	2.8	0.3109	2.8	1745.0	42.4	1743.4	23.2	1741.4	5.4	100.2
41EAB10-87	972	331026	16.5	9.3121	4.8	4.5305	5.8	0.3060	3.2	1720.9	48.8	1736.6	48.0	1755.5	87.4	98.0
41EAB10-32	732	234825	10.0	9.0870	0.6	4.3406	1.9	0.2861	1.8	1621.8	25.3	1701.1	15.4	1800.2	11.0	90.1
41EAB10-84	1514	98887	3.4	8.8606	1.7	4.7602	3.3	0.3059	2.9	1720.5	43.2	1777.9	27.8	1845.9	30.1	93.2
41EAB10-2	1028	89247	4.3	8.2872	1.1	5.2342	1.9	0.3146	1.6	1763.3	24.3	1858.2	16.2	1966.1	19.1	89.7
41EAB10-50	686	294824	3.9	8.2860	4.7	5.2364	9.5	0.3147	8.2	1763.7	127.2	1858.6	80.9	1966.4	83.4	89.7
41EAB10-3	985	442370	1.6	7.9108	1.2	5.9647	3.1	0.3422	2.8	1897.4	46.3	1970.7	26.6	2048.6	21.2	92.6
41EAB10-51	200	97000	1.7	7.8979	4.2	6.7838	5.0	0.3886	2.8	2116.2	51.0	2083.6	44.5	2051.5	73.5	103.2
41EAB10-53	731	298278	1.7	7.5399	3.7	6.4143	10.2	0.3508	9.5	1938.2	159.7	2034.2	90.2	2133.0	65.2	90.9
41EAB10-15	1070	70093	1.3	7.4940	4.3	6.3393	6.7	0.3446	5.2	1908.5	86.1	2023.9	59.0	2143.7	74.4	89.0
41EAB10-90	541	60459	1.2	7.0972	0.5	7.4235	1.5	0.3821	1.5	2086.2	25.9	2163.8	13.7	2238.3	8.4	93.2
41EAB10-89	933	67150	0.8	6.9148	1.4	7.8829	6.1	0.3953	6.0	2147.5	108.9	2217.7	55.3	2283.2	24.3	94.1
41EAB10-41	115	60186	2.1	6.6349	1.7	9.3088	3.2	0.4479	2.7	2386.1	53.2	2368.9	29.1	2354.1	29.4	101.4
41EAB10-12	982	295623	1.9	6.6072	1.4	8.8082	5.5	0.4221	5.4	2269.9	102.8	2318.3	50.6	2361.2	23.6	96.1
41EAB10-79	1847	279325	0.5	6.4225	1.1	8.9792	3.5	0.4183	3.4	2252.5	64.2	2335.9	32.4	2409.5	18.2	93.5
41EAB10-9	213	129788	1.5	6.3474	0.4	9.3700	2.3	0.4314	2.2	2311.8	43.2	2374.9	20.7	2429.5	6.3	95.2
41EAB10-25	733	60866	0.8	6.2998	0.3	9.5913	2.8	0.4382	2.8	2342.7	55.6	2396.3	26.1	2442.2	4.6	95.9
41EAB10-71	556	179453	0.7	6.2730	0.3	10.2234	4.7	0.4651	4.7	2462.1	95.2	2455.2	43.1	2449.4	4.4	100.5
41EAB10-30	390	322097	1.0	6.2496	1.1	10.2283	3.3	0.4636	3.1	2455.5	63.0	2455.6	30.2	2455.8	18.3	100.0
41EAB10-23	226	304822	0.9	6.2401	0.5	10.2951	2.0	0.4659	1.9	2465.7	39.5	2461.7	18.4	2458.3	8.3	100.3
41EAB10-80	128	5214	0.6	6.2281	4.3	10.1487	4.6	0.4584	1.8	2432.6	36.9	2448.4	42.8	2461.6	71.9	98.8
41EAB10-13	63	40491	1.1	6.2224	0.8	10.4080	1.9	0.4697	1.8	2482.3	36.1	2471.8	18.0	2463.1	14.1	100.8
41EAB10-95	211	70514	0.7	6.1657	0.7	10.3781	3.1	0.4641	3.0	2457.6	62.1	2469.1	28.8	2478.6	11.1	99.2
41EAB10-19	182	131843	1.0	6.0546	0.4	11.2222	2.3	0.4928	2.2	2582.7	47.4	2541.8	21.0	2509.2	6.2	102.9
41EAB10-42	799	212504	2.3	5.9456	0.6	11.0198	4.1	0.4752	4.1	2506.3	84.7	2524.8	38.4	2539.7	10.4	98.7
41EAB10-44	333	42006	1.0	5.8859	0.3	11.5464	3.4	0.4929	3.4	2583.2	71.9	2568.3	31.7	2556.6	5.0	101.0
41EAB10-96	815	239714	1.1	5.8649	0.9	11.6865	8.0	0.4971	8.0	2601.3	170.5	2579.6	75.0	2562.6	14.5	101.5
41EAB10-49	289	255707	1.0	5.7973	0.4	11.5412	1.2	0.4853	1.1	2550.1	24.0	2567.9	11.4	2582.0	7.2	98.8
41EAB10-70	682	81113	1.6	5.7898	0.3	10.4427	4.0	0.4385	4.0	2343.9	78.1	2474.8	36.9	2584.2	4.2	90.7
41EAB10-10	493	186503	0.6	5.7813	0.5	11.3439	6.8	0.4756	6.8	2508.3	140.5	2551.8	63.4	2586.6	9.1	97.0
41EAB10-46	268	54895	1.7	5.7770	0.4	11.7673	2.7	0.4930	2.7	2583.8	56.8	2586.1	25.2	2587.8	6.4	99.8
41EAB10-48	410	276213	0.8	5.6301	0.2	12.4997	2.1	0.5104	2.1	2658.4	45.3	2642.7	19.6	2630.7	3.5	101.1
41EAB10-67	75	66857	1.0	5.4302	0.9	13.0690	2.6	0.5147	2.5	2676.7	53.8	2684.6	24.6	2690.6	14.3	99.5
41EAB10-52	595	302745	1.3	4.9204	1.2	14.6152	3.1	0.5216	2.9	2705.8	64.4	2790.5	29.9	2852.3	19.1	94.9

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)						Conc (%)		
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* /238U	± (Ma)	207Pb* /235U	± (Ma)	206Pb* /207Pb*	± (Ma)	
46EAB09- greywacke member, Perry Canyon Formation, Lewis Peak, UTM: 12T 423936 E 4570148 N, n=48/100																
46EAB09-32	481	125543	0.7	16.0884	1.8	0.9792	2.3	0.1143	1.4	697.4	9.3	693.2	11.4	679.5	37.9	102.6
46EAB09-28	536	175749	6.9	9.5458	1.1	4.0686	6.9	0.2817	6.8	1599.8	96.9	1648.0	56.5	1710.1	19.7	93.6
46EAB09-55	190	12041	0.8	7.2998	1.7	7.3367	3.7	0.3884	3.3	2115.5	59.0	2153.3	33.1	2189.5	30.3	96.6
46EAB09-100	141	105983	1.2	6.6954	0.5	9.2787	2.1	0.4506	2.0	2397.8	40.9	2365.9	19.3	2338.5	9.0	102.5
46EAB09-36	99	65564	0.6	6.3170	0.8	9.9096	1.7	0.4540	1.6	2413.1	31.2	2426.4	16.0	2437.6	13.0	99.0
46EAB09-86	560	411888	1.0	6.3145	0.4	9.8014	1.5	0.4489	1.5	2390.3	29.3	2416.3	14.0	2438.3	6.9	98.0
46EAB09-19	111	63428	1.3	6.2969	0.4	9.9976	2.3	0.4566	2.2	2424.5	45.1	2434.6	20.9	2443.0</		

46EAB09-41	191	176328	0.7	5.6599	0.2	12.4746	1.7	0.5121	1.7	2665.5	37.3	2640.8	16.2	2622.0	4.1	101.7
46EAB09-65	280	254620	1.0	5.6587	0.3	12.5940	0.9	0.5169	0.8	2685.9	17.5	2649.8	8.1	2622.3	5.3	102.4
46EAB09-2	339	213805	2.8	5.6326	0.3	11.3646	2.2	0.4643	2.2	2458.3	45.3	2553.5	20.9	2630.0	5.1	93.5
46EAB09-46	171	136956	0.6	5.6259	0.4	12.3276	2.9	0.5030	2.9	2626.7	62.9	2629.7	27.6	2632.0	6.5	99.8
46EAB09-91	95	108203	1.0	5.4804	0.7	13.2255	1.7	0.5257	1.6	2723.2	35.2	2695.9	16.5	2675.4	12.2	101.8
46EAB09-35	182	150918	2.7	5.4716	0.4	12.4876	1.6	0.4956	1.5	2594.7	33.0	2641.8	15.0	2678.1	6.5	96.9
46EAB09-79	138	177030	1.4	5.4682	0.4	12.8323	2.6	0.5089	2.6	2652.0	56.8	2667.4	24.9	2679.1	6.3	99.0
46EAB09-26	26	22162	0.8	5.4673	1.6	12.4519	3.3	0.4938	2.8	2586.9	60.4	2639.1	30.7	2679.4	26.9	96.5
46EAB09-45	160	126313	1.8	5.4392	0.3	12.5098	2.1	0.4935	2.1	2585.8	45.2	2643.5	20.2	2687.9	5.3	96.2
46EAB09-98	77	67448	2.1	5.4342	0.8	12.9513	2.0	0.5104	1.8	2658.5	39.7	2676.1	18.6	2689.4	12.5	98.9
46EAB09-94	261	215177	0.5	5.3968	0.3	13.1909	1.3	0.5163	1.2	2683.5	27.0	2693.4	11.9	2700.8	4.3	99.4
46EAB09-1	222	193040	1.4	5.3869	0.2	13.8702	1.1	0.5419	1.1	2791.4	24.9	2740.9	10.5	2703.9	2.6	103.2
46EAB09-14	227	190442	2.5	5.3258	0.5	13.5023	2.8	0.5215	2.8	2705.7	60.9	2715.4	26.4	2722.7	7.6	99.4
46EAB09-83	225	205829	0.5	5.3211	0.3	13.5696	1.4	0.5237	1.4	2714.8	31.1	2720.1	13.5	2724.1	4.5	99.7
46EAB09-92	44	47420	0.4	5.0747	1.0	14.9223	2.1	0.5492	1.8	2821.9	40.7	2810.3	19.6	2802.0	16.8	100.7
46EAB09-20	42	54205	0.8	4.3780	0.6	18.4089	1.7	0.5845	1.5	2967.2	36.6	3011.4	15.9	3041.0	9.5	97.6

Sample	U (ppm)	Isotope ratios						Apparent ages (Ma)								
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Conc (%)
55CD10- Maple Canyon Formation, Huntsville, UTM: 12 T 438646 E 4573210 N, n=61/120																
55CD10-22	155	111999	3.0	15.5334	4.9	0.9799	6.1	0.1104	3.6	675.0	23.1	693.6	30.5	754.0	103.0	89.5
55CD10-3	293	881714	1.0	15.8510	1.8	0.9656	5.0	0.1110	4.6	678.6	29.9	686.2	24.8	711.2	38.0	95.4
55CD10-117	133	190474	3.5	12.4710	2.1	2.1248	3.1	0.1922	2.4	1133.2	24.7	1156.9	21.7	1201.6	40.6	94.3
55CD10-14	32	81667	3.4	12.1608	9.2	2.2888	12.2	0.2019	8.1	1185.4	87.2	1208.8	86.5	1251.1	179.8	94.7
55CD10-37	327	823613	2.3	6.5887	0.5	9.4512	3.0	0.4516	3.0	2402.5	59.5	2382.8	27.6	2366.0	8.3	101.5
55CD10-15	744	280936	1.0	6.3284	1.3	9.2433	3.5	0.4242	3.3	2279.7	63.0	2362.4	32.4	2434.5	22.2	93.6
55CD10-64	279	1460024	2.5	6.2665	0.3	9.5604	1.0	0.4345	0.9	2326.0	17.6	2393.4	8.8	2451.2	5.7	94.9
55CD10-35	158	573531	1.6	6.2425	0.7	10.3741	3.7	0.4697	3.7	2482.2	75.4	2468.7	34.6	2457.7	12.3	101.0
55CD10-116	155	1284474	1.5	6.1933	0.7	9.7549	2.1	0.4382	2.0	2342.5	39.3	2411.9	19.6	2471.0	12.3	94.8
55CD10-70	147	379635	2.2	6.0782	0.7	10.7459	2.2	0.4737	2.1	2499.8	44.3	2501.4	20.9	2502.7	11.4	99.9
55CD10-4	217	887314	0.8	5.8871	0.3	11.7867	2.3	0.5033	2.3	2627.8	49.5	2587.6	21.6	2556.3	4.5	102.8
55CD10-104	145	324397	1.0	5.7988	0.5	10.9578	2.5	0.4608	2.4	2443.3	49.4	2519.6	23.0	2581.5	7.7	94.6
55CD10-49	289	1403153	0.7	5.7799	0.4	12.1015	2.5	0.5073	2.4	2645.1	52.7	2612.3	23.0	2587.0	6.2	102.2
55CD10-66	347	895594	1.7	5.7412	0.5	12.2408	5.6	0.5097	5.6	2655.3	121.0	2623.0	52.4	2598.2	7.8	102.2
55CD10-71	647	2480605	2.8	5.7379	0.2	11.5446	1.5	0.4804	1.5	2529.1	31.2	2568.2	14.1	2599.2	3.3	97.3
55CD10-62	145	401714	0.6	5.7223	0.6	11.4569	1.5	0.4755	1.4	2507.6	29.1	2561.1	14.2	2603.7	9.7	96.3
55CD10-52	374	1961170	1.0	5.7174	0.3	11.7575	5.3	0.4875	5.3	2560.0	111.8	2585.3	49.6	2605.1	4.5	98.3
55CD10-59	472	3394677	3.4	5.7161	0.2	11.6215	1.1	0.4818	1.1	2535.1	23.2	2574.4	10.6	2605.5	3.7	97.3
55CD10-1	392	1986374	2.0	5.7086	0.5	10.5666	5.8	0.4375	5.8	2339.4	113.0	2485.8	53.7	2607.7	9.1	89.7
55CD10-79	933	5115001	4.1	5.6977	0.3	12.0357	2.1	0.4974	2.0	2602.4	43.5	2607.2	19.2	2610.9	4.5	99.7
55CD10-63	333	800580	0.7	5.6926	0.3	11.8934	3.7	0.4910	3.7	2575.2	77.8	2596.0	34.4	2612.4	4.5	98.6
55CD10-86	142	383660	0.8	5.6847	0.5	11.4737	3.2	0.4731	3.2	2496.9	65.6	2562.4	29.9	2614.7	8.1	95.5
55CD10-26	257	1009347	0.7	5.6796	0.2	12.3293	2.7	0.5079	2.7	2647.5	58.4	2629.8	25.4	2616.2	3.9	101.2
55CD10-28	479	770128	3.8	5.6776	0.3	12.4415	3.4	0.5123	3.4	2666.5	74.7	2638.3	32.3	2616.7	4.4	101.9
55CD10-58	116	72381	0.7	5.6753	0.8	11.9113	3.3	0.4903	3.2	2571.9	66.9	2597.5	30.5	2617.4	13.7	98.3
55CD10-110	485	348774	1.1	5.6744	0.3	10.8978	6.4	0.4485	6.4	2388.6	128.2	2514.4	59.9	2617.7	4.5	91.2
55CD10-89	203	652255	0.6	5.6681	0.4	12.1987	2.5	0.5015	2.5	2620.1	54.2	2619.8	23.9	2619.5	6.5	100.0
55CD10-31	256	558674	0.9	5.6664	0.3	12.3934	1.3	0.5093	1.3	2653.7	28.3	2634.7	12.6	2620.0	5.3	101.3
55CD10-105	196	1249981	0.5	5.6637	0.4	11.6595	3.6	0.4789	3.6	2522.7	74.3	2577.5	33.5	2620.8	6.4	96.3
55CD10-107	336	1375722	0.7	5.6534	0.2	12.2559	2.6	0.5025	2.6	2624.6	55.5	2624.2	24.3	2623.9	3.7	100.0
55CD10-108	129	494217	0.6	5.6442	0.4	11.7497	1.6	0.4810	1.6	2531.5	32.7	2584.7	15.1	2626.6	6.9	96.4
55CD10-19	311	981040	1.9	5.6314	0.5	10.9407	5.7	0.4469	5.6	2381.2	112.5	2518.1	52.8	2630.3	7.6	90.5
55CD10-18	147	240481	0.8	5.6281	0.5	11.7383	6.4	0.4791	6.4	2523.6	132.7	2583.8	59.7	2631.3	8.6	95.9
55CD10-81	229	930535	1.4	5.5921	0.5	12.1620	2.0	0.4933	2.0	2584.8	41.7	2617.0	19.0	2642.0	8.5	97.8
55CD10-50	188	783518	3.4	5.5533	0.5	12.5312	3.1	0.5047	3.0	2634.0	65.3	2645.1	28.8	26		

55CD10-25	105	348227	0.7	3.8275	0.3	23.0262	0.9	0.6392	0.9	3185.9	22.2	3228.0	9.0	3254.4	4.6	97.9
55CD10-100	107	365921	1.2	3.6862	0.4	24.5740	2.3	0.6570	2.3	3255.4	58.8	3291.4	22.8	3313.4	6.1	98.2

Sample	U (ppm)	Isotope ratios				Apparent ages (Ma)										
		206Pb/ 204Pb	U/Th	206Pb*/ 207Pb*	± (%)	207Pb*/ 235U	± (%)	206Pb*/ 238U	± (%)	206Pb* / 238U	± (Ma)	207Pb* / 235U	± (Ma)	206Pb* / 207Pb*	± (Ma)	Conc (%)
56CD10- Kelley Canyon Formation, Huntsville, UTM: 12 T 440218 E 4574345 N, n=83/100																
56CD10-31	57	86874	1.3	15.3994	6.7	1.1586	7.6	0.1294	3.7	784.4	27.6	781.3	41.6	772.3	140.1	101.6
56CD10-13	114	378808	3.0	13.8811	1.6	1.6695	3.1	0.1681	2.7	1001.5	24.6	997.0	19.6	987.1	32.0	101.5
56CD10-85	466	802739	4.5	13.6525	0.8	1.6990	3.2	0.1682	3.1	1002.4	28.7	1008.2	20.4	1020.8	15.8	98.2
56CD10-51	202	320357	2.9	13.6430	1.3	1.7142	2.2	0.1696	1.8	1010.0	17.2	1013.9	14.4	1022.2	26.1	98.8
56CD10-3	115	272862	3.1	13.5721	1.9	1.7303	5.2	0.1703	4.9	1013.9	46.0	1019.9	33.8	1032.7	37.6	98.2
56CD10-75	714	4365838	3.4	13.5321	0.5	1.7785	1.7	0.1745	1.6	1037.1	15.6	1037.6	11.2	1038.7	11.1	99.8
56CD10-59	290	795997	3.4	13.4989	1.2	1.7028	1.8	0.1667	1.3	993.9	12.1	1009.6	11.3	1043.6	23.8	95.2
56CD10-98	104	288765	2.7	13.4860	2.4	1.8215	2.8	0.1782	1.5	1056.9	14.9	1053.2	18.4	1045.6	47.6	101.1
56CD10-54	240	307521	1.8	13.4688	1.2	1.6723	2.0	0.1634	1.7	975.4	15.2	998.1	12.9	1048.2	23.2	93.1
56CD10-40	425	1123252	4.0	13.4642	0.8	1.7617	2.1	0.1720	2.0	1023.3	18.5	1031.5	13.7	1048.9	16.1	97.6
56CD10-15	227	1118355	1.7	13.3604	1.6	1.8010	2.7	0.1745	2.2	1036.9	20.7	1045.8	17.5	1064.4	31.8	97.4
56CD10-50	318	584445	2.3	13.3321	1.4	1.7649	2.2	0.1707	1.7	1015.7	16.1	1032.7	14.4	1068.7	28.3	95.0
56CD10-53	148	248802	1.0	13.2794	1.7	1.8853	2.2	0.1816	1.4	1075.5	13.6	1075.9	14.4	1076.7	33.7	99.9
56CD10-56	911	3043832	2.8	13.2787	0.7	1.7814	2.7	0.1716	2.6	1020.7	24.6	1038.7	17.5	1076.8	14.0	94.8
56CD10-4	201	458053	2.3	13.2457	1.3	1.8319	1.6	0.1760	0.9	1045.0	8.8	1057.0	10.2	1081.8	25.2	96.6
56CD10-73	1050	7952523	36.4	13.2212	0.4	1.7480	1.9	0.1676	1.9	999.0	17.2	1026.4	12.2	1085.4	7.7	92.0
56CD10-81	35	125975	1.3	13.1866	7.1	1.7913	8.3	0.1713	4.3	1019.3	40.7	1042.3	54.3	1090.7	142.9	93.5
56CD10-99	457	2281927	2.1	13.1863	0.6	1.8341	3.6	0.1754	3.6	1041.9	34.3	1057.8	23.8	1090.7	12.3	95.5
56CD10-83	118	331805	1.8	13.1663	2.0	1.8342	2.3	0.1751	1.2	1040.4	11.6	1057.8	15.3	1093.8	39.9	95.1
56CD10-80	407	1275434	0.9	13.1368	1.0	1.8877	2.1	0.1799	1.8	1066.2	17.8	1076.8	13.7	1098.3	19.9	97.1
56CD10-14	397	897194	3.5	13.1275	1.3	2.0288	3.5	0.1932	3.3	1138.5	34.0	1125.2	23.9	1099.7	26.1	103.5
56CD10-30	471	826742	2.0	13.1233	0.5	1.8531	3.0	0.1764	2.9	1047.1	28.3	1064.5	19.6	1100.3	9.9	95.2
56CD10-93	341	1883946	1.5	13.1230	1.2	1.8586	2.2	0.1769	1.9	1050.0	18.1	1066.5	14.6	1100.4	23.7	95.4
56CD10-28	108	370098	1.4	13.0126	2.4	1.9537	4.3	0.1844	3.5	1090.9	35.5	1099.7	28.8	1117.3	48.4	97.6
56CD10-46	477	1727836	1.3	12.9610	0.6	1.8628	2.1	0.1751	2.0	1040.2	19.3	1068.0	13.9	1125.2	12.8	92.4
56CD10-24	181	342261	3.1	12.9231	1.8	2.0174	2.5	0.1891	1.7	1116.4	17.6	1121.4	16.8	1131.0	35.5	98.7
56CD10-42	142	382167	2.7	12.8789	1.8	2.0109	3.1	0.1878	2.5	1109.6	25.9	1119.2	21.1	1137.9	36.0	97.5
56CD10-2	281	412046	4.0	12.8068	0.6	2.0878	8.6	0.1939	8.5	1142.6	89.4	1144.8	58.8	1149.0	11.2	99.4
56CD10-8	123	187539	3.1	12.7712	1.4	1.9992	2.7	0.1852	2.3	1095.2	23.3	1115.2	18.2	1154.5	27.3	94.9
56CD10-29	328	2308290	1.9	12.7474	1.0	2.0112	6.2	0.1859	6.1	1099.4	61.6	1119.3	41.9	1158.2	19.6	94.9
56CD10-35	310	533492	1.9	12.7424	0.8	2.0237	1.9	0.1870	1.8	1105.2	17.8	1123.5	13.2	1159.0	16.8	95.4
56CD10-92	484	1336169	3.2	12.7063	0.5	2.1528	3.0	0.1984	3.0	1166.6	31.6	1165.9	20.8	1164.6	9.1	100.2
56CD10-84	370	1511910	3.6	12.7057	0.8	2.2055	2.1	0.2032	1.9	1192.7	20.9	1182.8	14.6	1164.7	16.4	102.4
56CD10-95	127	539250	2.1	12.6796	1.2	2.0455	3.1	0.1881	2.8	1111.1	28.7	1130.8	20.9	1168.8	24.3	95.1
56CD10-49	332	564973	2.2	12.6731	0.9	2.0011	1.5	0.1839	1.2	1088.4	12.5	1115.9	10.2	1169.8	17.0	93.0
56CD10-74	310	666872	1.8	12.6170	0.6	2.0814	1.7	0.1905	1.6	1123.9	16.3	1142.7	11.5	1178.6	11.5	95.4
56CD10-21	214	366108	2.0	12.5855	1.3	2.2077	2.2	0.2015	1.8	1183.5	19.3	1183.5	15.4	1183.5	25.6	100.0
56CD10-71	312	672648	1.0	12.5318	1.4	2.0694	2.6	0.1881	2.2	1111.0	22.8	1138.7	17.9	1192.0	26.8	93.2
56CD10-72	89	195064	1.9	12.4396	2.4	2.1998	3.2	0.1985	2.0	1167.1	21.9	1181.0	22.3	1206.6	48.2	96.7
56CD10-91	90	205991	2.6	12.3832	3.4	2.1479	4.6	0.1929	3.1	1137.1	32.2	1164.4	31.8	1215.5	66.8	93.6
56CD10-63	342	793205	3.0	12.3250	0.5	2.2717	1.9	0.2031	1.8	1191.8	20.1	1203.5	13.4	1224.7	9.4	97.3
56CD10-100	109	243538	4.1	11.9338	1.5	2.6308	3.2	0.2277	2.8	1322.5	33.7	1309.3	23.4	1287.8	28.9	102.7
56CD10-47	365	3363464	2.0	11.8060	0.8	2.5155	2.7	0.2154	2.6	1257.5	29.5	1276.5	19.7	1308.7	15.8	96.1
56CD10-70	345	1382429	1.4	11.7898	0.8	2.5695	2.2	0.2197	2.1	1280.3	24.2	1292.0	16.3	1311.4	15.5	97.6
56CD10-44	207	364194	1.9	11.7415	0.9	2.5146	1.7	0.2141	1.4	1250.8	15.8	1276.3	12.1	1319.3	17.7	94.8
56CD10-33	565	720044	2.2	11.6899	0.3	2.7833	2.7	0.2360	2.7	1365.7	33.6	1351.1	20.5	1327.9	5.5	102.9
56CD10-9	341	1426529	0.9	11.6538	0.5	2.5212	2.9	0.2131	2.8	1245.3	31.9	1278.2	20.8	1333.9	10.5	93.4
56CD10-32	253	704478	1.7	11.6289	1.0	2.5698	1.7	0.2167	1.3	1264.6	15.2	1292.1	12.2	1338.0	19.7	94.5
56CD10-61	445	1348622	2.0	11.6233	0.6	2.7623	2.4	0.2329	2.3	1349.5	28.4	1345.4	17.9	1338.9	10.9	100.8
56CD10-19	79	198796	0.8	11.3949	1.8											

56CD10-34	459	1671617	1.4	9.2150	0.5	4.6322	3.5	0.3096	3.4	1738.7	52.5	1755.1	29.2	1774.7	10.0	98.0
56CD10-22	309	1305555	1.2	9.1670	0.3	4.9097	2.1	0.3264	2.1	1821.0	32.9	1803.9	17.7	1784.2	5.9	102.1
56CD10-60	327	1533065	2.9	9.1640	0.4	4.4651	2.5	0.2968	2.5	1675.2	36.2	1724.5	20.6	1784.8	7.0	93.9
56CD10-26	257	2685766	1.4	8.8455	0.4	4.9398	2.6	0.3169	2.5	1774.6	39.5	1809.1	21.7	1849.0	6.5	96.0
56CD10-7	226	1751134	2.2	6.1588	0.4	10.0064	1.9	0.4470	1.8	2381.7	36.4	2435.4	17.2	2480.5	5.9	96.0
56CD10-6	494	4570824	1.0	5.8082	0.3	11.7127	3.0	0.4934	3.0	2585.3	64.0	2581.7	28.3	2578.9	5.1	100.3
56CD10-39	365	1643792	1.1	5.5492	0.3	12.7404	2.6	0.5128	2.6	2668.4	56.6	2660.7	24.6	2654.8	5.2	100.5
56CD10-88	32	197115	3.0	5.4640	1.0	12.4286	1.3	0.4925	0.8	2581.6	18.0	2637.3	12.2	2680.4	16.3	96.3
56CD10-20	69	548655	1.1	4.9783	0.6	14.7859	2.5	0.5339	2.4	2757.7	54.4	2801.6	23.7	2833.3	9.2	97.3
56CD10-10	72	460050	4.2	4.8989	0.6	16.1294	2.8	0.5731	2.8	2920.5	65.2	2884.5	27.2	2859.5	9.6	102.1

Notes:

1. Analyses with >10% discordance or >10% uncertainty are not listed.
2. Preferred age indicated by gray boxes- 206Pb/238U age for grains <900 Ma, 206Pb/207Pb age for grains >900 Ma
3. Subgroups of young grains used to estimate maximum deposition ages are in dark gray, based on >95% concordance and subgroup MSWD ~1.
4. Concordance is based on 206Pb/238U age / 206Pb/207Pb age.
5. All uncertainties are reported at the 1-sigma level, and include only measurement errors.
6. Analyses conducted by LA-ICPMS, as described by Gehrels et al. (2008).
7. U concentration and U/Th are calibrated relative to Sri Lanka zircon standard and are accurate to ~20%.
8. Common Pb correction is from measured 204Pb and Pb model of Stacey and Kramers (1975)
9. Common Pb composition assigned uncertainties of 1.5 for 206Pb/204Pb, 0.3 for 207Pb/204Pb, 2.0 for 208Pb/204Pb
10. U/Pb and 206Pb/207Pb fractionation calibrated relative to fragments of a Sri Lanka zircon standard
11. U decay constants and composition as follows: $238U = 9.8485 \text{ exp-10}$, $235U = 1.55125 \text{ exp-10}$, $238U/235U = 137.88$

References:

- Gehrels, G.E., Valencia, V., Ruiz, J., 2008, Enhanced precision, accuracy, efficiency, and spatial resolution of U-Pb ages by laser ablation-multicollector-inductively coupled plasma-mass spectrometry: *Geochemistry, Geophysics, Geosystems*, v. 9, Q03017, doi:10.1029/2007GC001805.
 Stacey, J.S., and Kramers, J.D., 1975, Approximation of terrestrial lead isotope evolution by a two stage model: *Earth and Planetary Science Letters*, v. 26, p. 207-221.

Data Repository Table 2. SHRIMP U-Pb zircon data

36EAB09- diamictite member, Perry Canyon Formation, Perry Canyon, UTM: 12T 414953 E 4588122 N, n= 26

Grain spot	U ppm	Th ppm	Th/U	Total Ratios			Radiogenic Ratios			Age (Ma)												
				$^{206}\text{Pb}/^{204}\text{Pb}$	$f_{^{206}\text{Pb}}$ %	$^{238}\text{U}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{235}\text{U}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$				
18.1	136	122	0.90	13	3.0E-04	0.53	9.05	0.108	0.066	0.0008	0.9	0.027	0.11	0.0013	0.42	0.061	0.0016	672	8	655	56	-3
23.1	87	58	0.67	9	2.2E-04	0.39	8.80	0.114	0.066	0.0009	1.0	0.025	0.11	0.0015	0.51	0.063	0.0014	691	9	704	47	2
1.1	154	98	0.63	15	8.9E-05	0.16	8.79	0.102	0.064	0.0006	1.0	0.018	0.11	0.0013	0.63	0.063	0.0009	694	8	707	31	2
5.1	148	132	0.89	15	4.2E-04	0.74	8.70	0.104	0.068	0.0009	1.0	0.029	0.11	0.0014	0.41	0.062	0.0017	696	8	667	58	-4
6.1	121	88	0.73	12	2.3E-04	0.40	8.71	0.105	0.065	0.0007	1.0	0.023	0.11	0.0014	0.52	0.061	0.0012	698	8	655	43	-7
20.1	228	298	1.31	23	5.4E-04	0.96	8.63	0.097	0.070	0.0015	1.0	0.044	0.11	0.0013	0.26	0.062	0.0027	700	8	668	92	-5
27.1	199	162	0.81	20	1.4E-04	0.24	8.67	0.099	0.064	0.0006	1.0	0.019	0.12	0.0013	0.59	0.062	0.0010	702	8	680	33	-3
22.1	607	359	0.59	60	1.8E-05	0.03	8.65	0.091	0.063	0.0003	1.0	0.012	0.12	0.0012	0.88	0.063	0.0004	705	7	714	12	1
21.1	130	113	0.87	13	2.9E-04	0.52	8.58	0.104	0.067	0.0013	1.0	0.029	0.12	0.0014	0.42	0.063	0.0017	707	8	707	56	0
15.1	585	390	0.67	58	3.5E-05	0.06	8.61	0.091	0.064	0.0004	1.0	0.013	0.12	0.0012	0.80	0.063	0.0005	708	7	713	17	1
17.1	262	222	0.85	27	5.9E-04	1.03	8.44	0.094	0.071	0.0005	1.0	0.024	0.12	0.0013	0.47	0.063	0.0013	715	8	705	45	-1
12.1	1230	1324	1.08	124	5.1E-06	0.01	8.51	0.087	0.063	0.0002	1.0	0.011	0.12	0.0012	0.94	0.063	0.0002	716	7	697	8	-3
13.1	135	111	0.83	14	2.2E-04	0.39	8.47	0.102	0.063	0.0007	1.0	0.023	0.12	0.0014	0.50	0.060	0.0012	717	8	612	45	-17
9.1	136	109	0.81	14	1.9E-04	0.33	8.47	0.101	0.063	0.0007	1.0	0.025	0.12	0.0014	0.47	0.061	0.0014	717	8	629	48	-14
2.1	979	1758	1.80	99	1.2E-05	0.02	8.48	0.087	0.063	0.0003	1.0	0.012	0.12	0.0012	0.92	0.063	0.0003	718	7	708	10	-1
16.1	444	304	0.69	46	8.0E-04	1.40	8.35	0.089	0.073	0.0006	1.0	0.031	0.12	0.0013	0.35	0.062	0.0018	719	7	658	63	-9
14.1	166	120	0.73	17	3.4E-05	0.06	8.37	0.097	0.062	0.0006	1.0	0.017	0.12	0.0014	0.69	0.062	0.0007	727	8	662	26	-10
4.1	135	85	0.63	14	3.9E-04	0.68	8.29	0.100	0.067	0.0008	1.0	0.027	0.12	0.0015	0.45	0.061	0.0015	730	8	652	51	-12
7.1	651	499	0.77	196	7.2E-05	0.11	2.86	0.030	0.157	0.0003	7.5	0.080	0.35	0.0036	0.96	0.156	0.0004	1930	17	2413	5	20
11.1	130	126	0.97	47	4.4E-05	0.06	2.37	0.027	0.166	0.0006	9.6	0.116	0.42	0.0048	0.94	0.165	0.0007	2268	22	2510	7	10
8.1	358	294	0.82	148	1.6E-05	0.02	2.08	0.022	0.169	0.0004	11.2	0.121	0.48	0.0051	0.98	0.169	0.0004	2527	22	2544	4	1
19.1	138	133	0.97	61	1.7E-03	2.36	1.95	0.025	0.193	0.0074	11.9	0.624	0.50	0.0070	0.27	0.172	0.0087	2613	30	2580	85	-1
10.1	293	88	0.30	126	4.5E-06	0.01	2.00	0.022	0.184	0.0006	12.7	0.143	0.50	0.0054	0.96	0.184	0.0006	2617	23	2691	5	3
26.1	121	113	0.94	54	6.6E-08	0.00	1.91	0.022	0.186	0.0014	13.4	0.187	0.52	0.0061	0.84	0.186	0.0014	2716	26	2706	13	0
3.1	58	58	1.00	28	1.2E-04	0.16	1.82	0.024	0.206	0.0009	15.5	0.218	0.55	0.0072	0.93	0.204	0.0011	2820	30	2862	8	1
25.1	315	257	0.82	160	1.4E-05	0.02	1.70	0.018	0.246	0.0019	20.0	0.267	0.59	0.0064	0.81	0.246	0.0019	2988	26	3156	13	5

38EAB09- greywacke member, Perry Canyon Formation, Perry Canyon, UTM: 12T 415178 E 4588253 N, n= 28

Grain spot	U ppm	Th ppm	Th/U	Total Ratios			Radiogenic Ratios			Age (Ma)												
				$^{206}\text{Pb}/^{204}\text{Pb}$	$f_{^{206}\text{Pb}}$ %	$^{238}\text{U}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{207}\text{Pb}/^{235}\text{U}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	$^{207}\text{Pb}/^{206}\text{Pb}$	\pm	$^{206}\text{Pb}/^{238}\text{U}$	\pm	% Disc				
6.1	573	372	0.65	53	4.1E-04	0.72	9.27	0.097	0.068	0.0004	0.9	0.014	0.11	0.0011	0.67	0.062	0.0007	656	7	667	25	2
16.1	348	143	0.41	32	1.3E-04	0.22	9.26	0.100	0.064	0.0006	0.9	0.016	0.11	0.0012	0.64	0.062	0.0008	660	7	683	28	3
25.1	87	51	0.58	8	1.3E-04	0.23	9.22	0.120	0.063	0.0009	0.9	0.024	0.11	0.0014	0.49	0.062	0.0014	662	8	661	50	0
10.1	305	115	0.38	28	7.1E-05	0.13	9.22	0.101	0.063	0.0005	0.9	0.014	0.11	0.0012	0.71	0.062	0.0007	663	7	659	23	-1
3.1	205	150	0.73	19	1.1E-04	0.20	9.19	0.104	0.063	0.0006	0.9	0.018	0.11	0.0012	0.58	0.061	0.0010	665	7	648	34	-3
17.1	317	208	0.66	30	5.0E-06	0.01	9.18	0.100	0.062	0.0005	0.9	0.012	0.11	0.0012	0.83	0.062	0.0005	666	7	672	16	1
14.1	220	138	0.63	21	1.6E-04	0.28	9.12	0.103	0.064	0.0006	0.9	0.017	0.11	0.0012	0.63	0.062	0.0009	669	7	657	30	-2
1.1	388	310	0.80	37	1.4E-04	0.24	9.09	0.098	0.064	0.0004	0.9	0.015	0.11	0.0012	0.69	0.062	0.0007	672	7	674	24	0
20.1	173	77	0.45	16	1.8E-04	0.31	9.04	0.106	0.067	0.0007	1.0	0.019	0.11	0.0013	0.59	0.064	0.0010	675	8	746	34	10
13.1	200	147	0.74	19	4.0E-06	0.01	8.93	0.102	0.062	0.0006	1.0	0.014	0.11	0.0013	0.78	0.062	0.0006	684	7	685	20	0
15.1	545	2																				

Data Repository Table 3. Zircon Hf isotopic data.

<u>grain</u>	U-Pb Age						T DM					
	$^{176}\text{Hf}/^{177}\text{Hf}$	$\pm 2\sigma$	$^{176}\text{Lu}/^{177}\text{Hf}$	$\pm 2\sigma$	(T1)	$\epsilon \text{ Hf}(0)$	$^{176}/^{177}_{\text{T}_1}$	CHUR_{T_1}	$\epsilon \text{Hf(T1)}$	$\pm 2\sigma$	DM_{T_1}	(2)
36EAB09- diamicrite member, Perry Canyon Formation, Perry Canyon, UTM: 12T 414953 E 4588122 N												
36-2	0.282139	0.000046	0.005444	0.000029	708	-22.84	0.282067	0.282338	-9.60	1.62	0.282713	2159
36-18	0.282280	0.000075	0.001854	0.000213	655	-17.87	0.282257	0.282372	-4.07	2.67	0.282751	1769
36-21	0.282215	0.000032	0.001398	0.000018	714	-20.14	0.282197	0.282334	-4.87	1.12	0.282708	1867
36-6	0.282157	0.000021	0.000713	0.000005	655	-22.19	0.282149	0.282372	-7.90	0.74	0.282751	2010
36-20	0.281811	0.000118	0.002127	0.000103	668	-34.45	0.281784	0.282363	-20.51	4.19	0.282742	2806
36-5	0.282186	0.000023	0.000828	0.000008	667	-21.18	0.282176	0.282364	-6.67	0.83	0.282742	1943
36-12	0.282035	0.000021	0.002359	0.000043	697	-26.52	0.282004	0.282345	-12.07	0.75	0.282721	2305
36-9	0.282151	0.000019	0.001340	0.000025	629	-22.43	0.282135	0.282388	-8.97	0.66	0.282770	2057
36-27	0.282081	0.000026	0.001766	0.000127	680	-24.88	0.282059	0.282356	-10.51	0.91	0.282733	2194
36-15	0.282156	0.000019	0.001558	0.000036	713	-22.26	0.282135	0.282335	-7.08	0.66	0.282709	2005
36-14	0.282161	0.000024	0.000911	0.000006	662	-22.08	0.282149	0.282367	-7.71	0.85	0.282746	2004
36-22	0.282076	0.000044	0.001656	0.000023	714	-25.08	0.282054	0.282334	-9.93	1.55	0.282708	2185
38EAB09- greywacke member, Perry Canyon Formation, Perry Canyon, UTM: 12T 415178 E 4588253 N												
38-7	0.281906	0.000069	0.002455	0.000109	688	-31.09	0.281874	0.282351	-16.88	2.45	0.282727	2597
38-5	0.281836	0.000044	0.000896	0.000017	1714	-33.56	0.281807	0.281692	4.06	1.58	0.281973	2091
38-27	0.281817	0.000013	0.000422	0.000011	1823	-34.22	0.281803	0.281622	6.43	0.46	0.281892	2025
38-3	0.281840	0.000015	0.000847	0.000009	648	-33.42	0.281830	0.282376	-19.35	0.53	0.282756	2718
38-22	0.281945	0.000024	0.001145	0.000023	1637	-29.72	0.281909	0.281742	5.92	0.85	0.282030	1912
38-26	0.281934	0.000017	0.001360	0.000041	1713	-30.11	0.281889	0.281693	6.97	0.62	0.281973	1904
38-2	0.281836	0.000043	0.000834	0.000063	1721	-33.55	0.281809	0.281688	4.30	1.53	0.281967	2081
38-17	0.281868	0.000020	0.000935	0.000007	666	-32.42	0.281856	0.282365	-18.00	0.70	0.282743	2649
38-6	0.281765	0.000059	0.000656	0.000041	660	-36.08	0.281757	0.282368	-21.67	2.09	0.282748	2871
38-25	0.281924	0.000017	0.000753	0.000035	661	-30.46	0.281914	0.282368	-16.06	0.61	0.282747	2525
38-23	0.281887	0.000015	0.000427	0.000010	1691	-31.75	0.281874	0.281707	5.90	0.54	0.281990	1955
38-24	0.281756	0.000013	0.000944	0.000015	1711	-36.38	0.281726	0.281694	1.11	0.47	0.281975	2276
38-28	0.281776	0.000015	0.001060	0.000039	1699	-35.66	0.281742	0.281702	1.43	0.53	0.281984	2246
38-18	0.281787	0.000020	0.000953	0.000052	1721	-35.30	0.281756	0.281688	2.40	0.70	0.281967	2202
38-14	0.281834	0.000055	0.001255	0.000026	657	-33.62	0.281819	0.282370	-19.54	1.95	0.282750	2737
38-13	0.281818	0.000057	0.001237	0.000023	685	-34.18	0.281802	0.282353	-19.48	2.01	0.282729	2756
38-8	0.281801	0.000021	0.001103	0.000019	1706	-34.81	0.281765	0.281698	2.39	0.75	0.281979	2191
38-4	0.282309	0.000058	0.001232	0.000035	708	-16.84	0.282292	0.282338	-1.62	2.06	0.282713	1657
38-28a	0.281831	0.000027	0.000797	0.000006	1699	-33.74	0.281805	0.281702	3.66	0.96	0.281984	2104
38-29	0.281973	0.000018	0.000676	0.000065	1707	-28.72	0.281951	0.281697	9.02	0.65	0.281978	1768
38-10	0.281859	0.000037	0.001068	0.000030	659	-32.75	0.281846	0.282369	-18.54	1.30	0.282748	2677

176Hf/177Hf 176Lu/177Hf

0.282785 0.0336 Chondritic values from Bouvier et al. (2008)
 0.283225 0.0385 present day depleted mantle values from Vervoort and Blichert-Toft (1999)
 1.867 E-11 176Lu decay constant from Soderlund et al. (2004)

References

- Bouvier, A., Vervoort, J.D., and Patchett, P.J., 2008, The Lu-Hf and Sm-Nd isotopic composition of CHUR: Constraints from unequilibrated chondrites and implications for the bulk composition of terrestrial planets, *Earth and Planetary Science Letters*, v. 273, p. 41-57.
- Vervoort, J.D., and Blichert-Toft, J., 1999, Evolution of the depleted mantle, Hf isotope evidence from juvenile rocks through time, *Geochimica et Cosmochimica Acta*, v. 63, p. 533-557.
- Soderlund, U., Patchett, P.J., Vervoort, J.D., and Isachsen, C.E., 2004, The 176Lu decay constant determined by Lu-Hf and U-Pb isotope systematics of Precambrian mafic intrusions, *Earth and Planetary Science Letters*, v. 219, p. 311-324.

Data Repository Table 4. Major and trace element geochemical data for volcanic rock samples.

Major element geochemical values (weight %)

Geochemistry Samples	Na2O	MgO	Al2O3	SiO2	K2O	CaO	TiO2	MnO	Fe2O3	P2O5	H2O+	Total
16EAB10	1.2	5.9	12.3	42.1	1.4	8.8	1.6	0.2	11.6	0.1	17.9	103.1
21EAB10	3.5	6.4	12.3	49.0	0.2	7.6	2.6	0.2	16.0	0.2	2.2	100.3
28EAB10	2.4	6.2	12.7	47.8	0.2	9.4	2.2	0.2	15.2	0.2	2.4	98.9
34EAB10	0.0	8.3	11.7	45.4	0.1	1.1	6.5	0.2	19.7	1.0	6.9	100.9
44EAB10	3.6	3.9	14.5	50.2	0.6	12.0	2.4	0.1	9.1	0.8	3.3	100.5
45EAB10	2.0	8.7	15.7	45.6	0.1	10.3	1.3	0.2	13.2	0.2	1.2	98.3
74EAB10	0.0	0.4	23.2	44.5	0.1	21.6	0.1	0.1	5.9	0.2	2.8	98.9
76EAB10	3.9	6.6	11.9	52.4	0.1	8.2	1.8	0.2	12.7	0.2	1.7	99.6
77EAB10	2.9	6.4	14.0	43.4	0.0	10.5	1.5	0.2	12.6	0.1	10.5	102.2
80EAB10	0.0	12.6	5.4	32.1	0.0	14.2	4.1	0.2	13.0	0.8	20.2	102.7
81EAB10	0.0	7.4	7.6	32.6	0.0	19.9	6.1	0.2	9.9	1.4	17.3	102.4
82EAB10	4.4	8.4	13.4	53.1	0.1	6.4	0.7	0.1	10.7	0.2	2.3	99.6
86EAB10	1.1	6.1	14.0	64.3	3.2	0.4	0.8	0.0	6.4	0.1	3.6	100.0
87EAB10	0.0	7.8	6.4	44.0	0.2	9.0	7.3	0.3	14.2	1.2	10.2	100.6
88EAB10	0.0	11.4	6.6	33.7	1.9	11.8	5.1	0.2	14.4	0.9	17.1	103.0
94EAB10	3.5	1.9	17.6	46.1	4.6	8.1	2.4	0.2	6.9	2.0	6.7	100.1
95EAB10	1.0	1.0	7.8	82.0	1.9	0.4	0.3	0.1	4.1	0.1	1.6	100.2
96EAB10	7.8	0.9	15.0	50.3	0.6	9.7	1.1	0.5	5.4	0.5	8.3	100.0
97EAB10	8.1	0.4	14.8	66.9	0.3	0.4	0.6	0.1	4.6	0.1	1.2	97.7
98EAB10	10.0	0.8	18.6	61.9	1.2	0.5	1.1	0.1	4.4	0.3	0.8	99.6
99EAB10	0.8	0.6	8.5	81.4	2.4	0.8	0.6	0.1	2.4	0.1	1.6	99.3

Minor element geochemical values (ppm)

Geochemistry Samples	Ba	Ce	Co	Cr	Cu	Hf	La	Nb	Nd	Ni	Pb	Rb	Sc	Sr	Th	V	Y	Zn	Zr
16EAB10	276	15	62	258	78	3	7	7	12	71	7	47	45	230	0	330	17	68	100
21EAB10	108	23	64	92	109	4	11	14	18	55	0	11	47	43	0	399	21	101	121
28EAB10	116	25	59	129	115	3	18	9	24	47	3	10	45	244	0	378	22	123	112
34EAB10	191	1249	80	597	45	9	842	98	746	140	0	10	30	77	0	610	113	393	297
44EAB10	216	70	64	320	19	5	46	27	29	158	2	9	36	292	2	184	28	81	189
45EAB10	189	189	25	27	4	10	103	111	94	0	5	16	13	494	8	230	36	70	399
74EAB10	64	0	33	431	14	0	4	0	0	3	9	10	17	538	0	347	10	13	71
76EAB10	61	18	55	216	40	3	10	8	14	58	1	8	44	89	0	330	20	78	95
77EAB10	25	17	57	145	125	3	13	7	13	52	0	21	43	68	0	311	13	19	80
80EAB10	114	104	87	758	61	8	52	77	63	290	0	9	38	616	0	412	18	102	309
81EAB10	156	268	49	742	9	11	132	150	125	286	4	9	36	915	5	417	40	68	485
82EAB10	254	18	66	348	98	0	24	12	9	166	0	9	31	163	0	158	15	78	74
86EAB10	954	100	27	117	54	8	50	46	39	40	11	119	11	71	24	94	31	108	290
87EAB10	214	176	77	1108	182	9	71	101	102	272	13	13	46	530	1	512	24	95	386
88EAB10	560	177	75	477	84	8	83	88	95	324	6	50	33	675	2	442	19	91	335
94EAB10	1172	119	19	14	0	3	55	123	71	10	15	138	13	272	0	96	20	118	116
95EAB10	1027	564	40	35	32	15	317	79	232	16	17	64	0	61	45	22	60	86	552
96EAB10	167	480	16	21	2	42	261	373	199	2	21	21	10	735	45	18	95	246	1530
97EAB10	8530	510	27	52	41	42	305	259	199	9	14	15	1	378	58	21	86	143	1564
98EAB10	251	493	21	13	8	42	274	284	213	12	14	45	6	252	46	26	104	357	1526
99EAB10	1435	760	38	26	18	49	412	186	297	8	29	71	1	62	77	21	122	106	1713