

Table 9. Data derived from petrographic analysis of sandstone from the Kiowa #1 core

	Depth	Grain Size	Sorting	Quartzose	Feldspathic	Lithic	Chert	Ductiles	Carbonate	Volcanic	MonoQuartz	PolyQuartz	Plag	K-Spar	Granitic
D2	92	0.35	0.75	57.1	29.8	13.2	0.5	12.1	0	1	40.3	11.7	11.2	12.6	5.3
	151	0.5	0.5	58	31.7	10.3	0	8.2	0	1.5	38	12.8	10.3	10.3	10.3
	156	0.5	0.45	61.4	31.3	7.3	0	6	0	0.3	39	11	6	13.3	10.7
	200	0.35	0.75	50.8	42.2	7	0	6.4	0	0.6	33.7	14	12.8	15.7	13.4
	243	1.5	1.2	58.4	39.3	2.3	0	1.7	0	0.6	18.1	8.5	4.5	4.5	26
	286	0.15	1.1	45.5	22.6	31.9	0	31.3	0	0	40.5	2.5	3.7	17.8	0.6
Mean D2		0.56	0.79	55.20	32.82	12.00	0.08	10.95	0.00	0.67	34.93	10.08	8.08	12.37	11.05
D1	368	0.75	0.85	29.6	21.4	49	0	5.5	0	40.1	16.3	7.9	4.5	5.5	10.4
	429	0.15	1.1	48.1	11	40.9	1.4	36.9	0	3.6	42.5	2.1	0	10.6	0
	524	0.23	0.65	29.5	19.3	51.1	2.1	31.6	0.5	16.6	20.7	4.1	2.1	15.5	0.5
	565	0.55	1	58.6	21.9	19.6	0.9	14.8	0	4	35	13.5	1.4	13.9	4.5
	570	0.5	0.5	51.4	41.9	6.7	0.3	4	0	2.3	35	12	0	33	8.3
	619	0.15	0.9	62.3	10.3	27.4	1.5	20.2	0	6	55.7	3	1	9	0
	623	0.3	0.45	79.9	19.4	0.7	3.3	0.3	0	0.3	63.3	10	0	17.3	1.7
	852	0.08	0.55	60.8	12.8	26.4	4.5	14.3	6.8	3.8	48.1	2.3	3	9	0
	976	0.12	0.42	64.5	8.9	26.6	21.1	17.2	4	4	31.1	3.5	3	5.5	0
	1060	0.35	0.45	60.7	23.6	15.8	0.7	10.3	0	5.3	44.3	6.3	1	18	4
	1061	0.3	0.5	70.1	19.8	10	1.9	5.9	0	4.3	52.1	8.1	1.4	13.3	3.8
	1177	0.26	0.45	58.3	23.5	18.2	7.4	5.1	1.8	10.6	37.7	4.2	7.9	8.8	4.7
	1246	0.06	0.42	71.7	14.2	14.2	14.4	10.2	0.9	1.7	46.6	0.9	5.1	7.6	0
	1286	0.28	0.47	51.1	17.6	31.3	5.1	18	0	17.1	33.2	7.4	2.8	10.1	3.2
	1350	0.1	0.45	69.4	9.2	21.4	8.4	14.5	0	4.2	46.4	7.2	2.4	6	0
	1458	0.3	0.47	18.8	16.4	64.8	0.5	9.3	0	54.9	14.2	2.5	4.4	9.3	2
	1493	0.27	0.4	36.6	26.2	37.1	1.8	13.2	0	24.7	30.6	2.3	7.3	16.4	1.4
	1528	0.62	0.7	12.3	6.7	80.9	0	8.9	0	73.4	7.2	1.7	0.8	3.8	1.7
	1533	0.35	0.45	44.7	27.7	27.6	1.3	4	0	23.3	39.7	2.7	1.3	20.7	5.3
	1562	0.09	0.65	60.6	11	28.4	3.8	9.9	0	17.6	45.8	6.9	4.6	5.3	0.8
1624	0.75	1	53.5	26.8	19.7	0.9	10.3	0	9.4	38.8	10.3	0.9	21.9	3.6	
1635	1.5	1	32.3	11	56.7	1.7	1.7	0	55	9.9	7.9	0.8	4.6	4.1	
Mean D1		0.37	0.63	51.13	18.21	30.66	3.77	12.10	0.64	17.37	36.10	5.76	2.53	12.05	2.73

	Depth	Grain Size	Sorting	Quartzose	Feldspathic	Lithic	Chert	Ductiles	Carbonate	Volcanic	MonoQuartz	PolyQuartz	Plag	K-Spar	Granitic
Laramie	1720	0.35	0.45	29.7	14.5	55.8	2.7	2.7	0	50.3	21.3	3.3	0	11.7	2
Fox Hills	1861	0.32	0.45	82.6	15.7	1.7	3.3	0	0	1.7	63.7	12	2	11.7	1.7
	1883	0.35	0.6	61.5	17	1.4	3.3	0.5	0	1	56.7	19.1	2.9	12.4	1.4
	1927	0.22	0.47	75.3	17.8	6.9	6.8	3.1	0	3.1	54.5	8.9	6.3	8.9	2.1
	1963	0.11	0.4	76.3	10.7	13.1	11.7	10.2	0	2.4	47.1	2.9	1.5	8.3	0.5
	2012	0.07	0.45	73.6	8.6	17.9	9.3	10.7	6	0	54	4	3.3	4.7	0
	2046	0.07	0.4	74.2	10	15.8	11.9	10.5	2.8	0	44.1	4.9	2.1	6.3	0
	2080	0.1	0.38	60.9	16	23.1	6.4	10.9	3	6.9	39.1	6.9	9.4	5.5	0.5
Mean FH		0.18	0.45	72.06	13.69	11.41	7.53	6.56	1.69	2.16	51.31	8.39	3.93	8.26	0.89
Pierre	2131	0.1	0.38	60.6	19.4	20	8.2	9.8	4.3	2.4	39.6	3.9	5.3	12.5	0.5
	2184	0.1	0.38	65.5	14.2	20.4	7.4	11.3	5	2.5	50.3	1.2	5	7.4	0.6
	2194	0.07	0.45	64.4	12.3	23.3	8	11.7	8	1.2	46.9	2.5	6.2	4.9	0
	2220	0.1	0.42	64.8	11.7	23.5	5.9	17.1	3.5	1.8	45.9	4.7	5.3	5.9	0
	2242	0.06	0.45	60.6	9.2	30.3	3.4	16.8	9.2	0.8	48.7	3.4	5	3.4	0
Mean, PS		0.09	0.42	63.18	13.36	23.50	6.58	13.34	6.00	1.74	46.28	3.14	5.36	6.82	0.22