PARTIAL CHEMICAL AND SEMIQUANTITATIVE SPECTROGRAPHIC ANALYSES OF DRILL-CORE AND MILL-PULP SAMPLES OF THE SHINARUMP MEMBER OF THE CHINLE FORMATION FROM THE HIDEOUT NO. 1 ORE DEPOSIT, DEER FLAT AREA, WHITE CANYON DISTRICT, SAN JUAN COUNTY, UTAH

[Analysts: y, Radiometr S.P. Furman; chemistry, H. Bivens, R. F. DuFour, W. D. Goss, J. Johnson, H. H. Lipp, E. C. Mallory, J. W. Patton, J. P. Schuch, J. L. Siverley, D. L. Skinner, D. L. Stockwell, C. E. Thompson, and James Wahlberg; spectrography, J. C. Hamilton and R. G. Havens]

Serial No.	Field No.[1]	Depth (ft)	eU_3O_8 (percent)	U_3O_8 (percent)	$CaCO_3$ (percent)	Cu (percent)	Cu (ppm)	Si	Al	Fe	Ti	Mn	Ca	Mg	Na	K	Ag	B	Ba	Be	Co	Cr	Cu	Ga	La	Li	Mo	Ni	Pb	Sc	Sr	U	V	Y	Yb	Zn	Zr
Analyses of 43 drill-core samples																																					
D-98021	DF-1-1	119.3–119.6	0.013	--------	--------	--------	40	xx. 0	x. 0+	x. 0−	0. x−	0. 00x	x. 0−	0. x−	0. x−	x. 0−	0	0. 00x	0. 0x	0	0. 00x+	0. 00x+	0. 00x+	0. 00x−	0	0	0. 00x	0. 00x+	0. 00x	0. 000x	0. 00x+	0	0. 0x−	0. 00x−	0. 000x	0. 0x−	0. 0x
98022	1-2	119.6–119.9	.033	--------	--------	--------	50	xx	x. +	x. −	. x−	. 00x	x. −	. x−	. x−	x. −	0	. 00x	. 0x	. 000x−	. 00x+	. 0x−	. 0x−	. 00x−	0	0	. 00x+	. 00x+	. 00x	. 000x	. 00x+	0	. 0x−	Tr.	. 000x−	0	. 0x−
98023	1-3	119.9–120.5	.16	0.17	0.1	0.60	--------	xx	x. +	x	. x	. 00x	x. −	. x	. x−	x. −	Tr.	. 00x+	. 0x	. 000x	. 0x−	. 0x−	x. −	. 00x−	0	0	. 00x	. 00x+	. 00x+	. 000x	. 0x−	. x−	. 0x−	. 00x−	0	. 0x
98024	1-4	120.5–121.4	.050	.046	.8	.58	--------	xx	x	x. −	. x−	. 0x	. x +	. x	0	0	Tr.	0	. 0x	0	. 00x	. 00x+	x. −	Tr.	0	0	. 0x+	. 00x	. 00x+	0	. 00x+	. x−	. 00x+	. 00x−	0	. 0x
98025	1-5	121.4–121.7	.034	--------	--------	.09	--------	xx	. x+	x. −	. 0x+	. 0x+	x. −	. x +	0	0	0	0	. 0x	0	. 000x+	. 00x+	. x−	0	0	0	. 0x−	. 00x−	0	0	. 00x	0	. 00x	0	0	. 00x+
98026	1-6	121.7–122.0	.027	--------	--------	.64	--------	xx	. x+	x. −	. 0x+	. 0x	x. −	. x+	0	0	0	0	. 0x	0	. 000x+	. 00x+	x. −	0	0	0	. 00x	. 00x−	0	0	. 00x+	0	. 00x	Tr.	Tr.	0	. 00x+
98027	1-7	122.0–122.6	.027	--------	--------	1.39	--------	xx	. x+	x	. 0x	. 0x+	x	. x+	0	0	0	0	. 0x	0	0	. 00x+	x	0	0	0	. 00x−	. 00x−	0	0	. 00x+	0	. 00x	. 00x−	. 000x−	0	. 00x+
98028	1-8	122.6–123.2	.17	.20	3.8	1.94	--------	xx	. x+	x	. 0x	. 0x	x. −	. x+	0	0	0	0	. 0x	0	. 000x+	. 00x+	x	0	0	0	. 00x−	. 00x−	0	0	. 00x+	. x−	. 00x	. 00x	. 000x	0	. 0x−
98029	1-9	123.2–124.1	.051	.044	.7	.70	--------	xx	x. +	x. −	. x−	. 0x−	. x+	. x+	. x*	x. −	0	. 00x	. 0x+	. 000x−	. 000x+	. 0x−	x. −	. 00x	0	0	0	. 00x−	. 00x−	Tr.	. 0x−	0	. 0x−	. 00x	. 000x	0	. 0x−
98037	4-1	129.0–129.9	.049	.045	.6	--------	100	xx	x. +	x. −	. x−	. 0x−	. x	. x−	. 0x+	0	0	. 00x	. x−	0	. 00x+	. 00x+	. 0x	. 00x−	0	0	. 00x−	. 00x+	. 00x+	Tr.	. 00x+	0	. 00x+	Tr.	Tr.	. 0x+	. 0x−
98038	4-2	129.9–130.2	.087	.092	.3	.20	--------	xx	x. +	x	. x−	. 0x+	. x−	. x−	. x−	. x+	. 000x+	. 00x	. 0x+	0	. 0x−	. 00x+	. x+	. 00x−	0	0	. 0x−	. 00x+	. 0x−	Tr.	. 00x+	. x−	. 0x−	. 00x−	. 000x	. 0x	. 0x−
98039	4-3	130.2–130.5	.01	--------	--------	.20	--------	xx	x. +	x	. x−	. 0x	. x−	. x−	. x−	. x+	. 000x+	. 00x	. 0x	0	. 00x+	. 00x+	. x+	. 00x−	0	0	. 0x−	. 00x+	. 00x+	0	. 00x+	0	. 0x−	Tr.	. 000x	. 0x	. 0x−
98040	4-4	130.5–131.0	.54	.78	.4	2.14	--------	xx	x. +	x	. x−	. 0x	. x−	. x	. x−	0	. 00x+	. 00x	. 0x	. 000x−	. 00x+	. 00x+	x	. 000x+	0	0	. 0x−	. 00x+	. 0x	. 00x−	. 00x+	. x+	. 00x+	. 00x+	. 000x	. 0x	. 0x−
98041	4–5 (M)	131.0–131.3	.031	--------	--------	.13	--------	xx	xx	x. +	x	. 0x	. x	x. −	x. −	x. +	0	. 00x+	. 0x+	. 000x	. 000x+	. 00x+	. x−	. 00x+	. 00x	0	. 00x−	. 00x	. 00x	. 00x−	. x	0	. 0x−	. 00x	. 000x	0	. 0x−
202040	23-1	134.8–135.2	.030	--------	--------	--------	100	xx	x. +	x. −	. x−	. 0x−	. x−	. x	. 0x+	0	0	0	. 0x+	0	. 00x+	. 00x+	. 0x−	Tr.	0	0	. 0x−	. 00x	. 00x	Tr.	. 00x+	0	. 00x+	Tr.	. 000x	. 0x	. 0x−
202041	23-2	135.2–135.7	.59	.78	.2	1.32	--------	xx	x. +	x. −	. x−	. 0x−	. x−	. x	. 0x+	. x+	. 000x	0	. 0x	. 000x−	. 00x	. 00x+	x	. 000x+	0	0	. 0x+	. 00x	. 0x	. 00x−	. 00x+	. x+	. 0x−	. 00x+	. 000x+	. 0x	. 0x−
202042	23-3 (M)	135.7–136.3	.19	.19	.3	.34	--------	xx	xx	x. +	x. −	. 0x	. x	x. −	x. −	x. +	0	. 00x+	. 0x+	. 000x+	. 000x+	. 0x−	. x	. 00x+	. 00x	0	0	. 00x	. 00x+	. 00x−	. x+	. x−	. 0x−	. 00x+	. 000x	0	. 0x−
202043	23-4	136.3–136.5	1.0	1.36	.5	3.34	--------	xx	x	x	. 0x+	. 0x	. x	. x+	. x+	x. −	. 000x+	. 00x	. 0x	. 000x	. 00x	. 00x+	x. +	. 00x−	0	0	0	. 00x+	. 0x−	. 00x−	. 0x−	x. −	. 00x+	. 00x+	. 000x+	. 0x	. 0x−
202044	23–5 (M)	136.5–136.8	.15	.13	6.8	.55	--------	xx	x. +	x. +	. x−	. 0x+	x	x. −	x	x. +	Tr.	. 00x	. 0x+	. 000x	. 000x+	. 00x+	. x+	. 00x	Tr.	0	0	. 00x	. 00x	. 00x−	. 0x+	. 0x+	. 0x−	. 00x	. 000x−	0	. 0x−
202045	23–6 (M)	136.8–137.4	.045	.037	7.8	.14	--------	xx	xx	x. +	. x−	. 0x+	x	x	x	x. +	Tr.	. 00x+	. 0x+	. 000x	. 000x+	. 00x+	. x−	. 00x	Tr.	0	0	. 00x	. 00x	. 00x−	. x−	0	. 0x−	. 00x	. 000x−	0	. 00x+
202046	23–7 (M)	137.7–138.0	.022	--------	--------	.14	--------	xx	xx	x. +	. x	. 0x+	x. −	x. −	x	x. +	Tr.	. 00x+	. 0x+	. 000x+	. 00x	. 00x+	. x−	. 00x+	. 00x	0	0	. 00x−	. 00x	. 00x	. x−	0	. 0x−	. 00x	. 000x+	0	. 0x−
203844	26-1	131.3–131.6	.018	--------	--------	--------	50	xx	x. +	. x+	. x	. 0x−	. 0x+	. x−	. x−	x. −	0	. 00x	. 0x	. 000x	. 000x+	. 0x−	. 00x+	. 00x	0	0	. 00x	. 00x	. 00x−	Tr.	. 00x+	0	. 00x+	. 00x−	. 000x	0	. 0x−
203845	26-2	131.9–133.1	.035	.043	.1	--------	150	xx	xx	x. −	. x	. 0x−	. 0x+	. x	. x−	x. −	0	. 00x	. 0x	. 000x	. 00x+	. 00x+	. 0x	. 00x	0	0	. 00x+	. 00x+	. 00x+	. 000x	. 0x−	0	. 0x−	. 00x−	. 000x	0	. 0x−
203846	26-3	133.4–133.7	.050	.032	.3	--------	800	xx	x. +	x. −	. x−	. 0x−	. x−	. x	. x−	. x+	0	0	. 0x	. 000x	. 000x+	. 00x+	. x−	. 00x−	0	0	. 00x	. 00x	. 00x	Tr.	. 00x+	0	. 00x+	0	. 000x−	. 0x−	. 00x+
203847	26-4	133.7–134.0	.19	.17	.1	.15	--------	xx	x. +	x. −	. x−	. 0x−	. 0x+	. x−	. x−	. x+	Tr.	. 00x	. 0x	0	. 00x+	. 00x+	. x	. 00x−	0	0	. 00x+	. 00x+	. 0x−	Tr.	. 00x+	. 0x+	. 0x−	Tr.	. 000x−	. 0x−	. 00x+
203848	26-5	134.0–134.2	.11	.10	.3	--------	130	xx	x. +	x	. x−	. 0x−	. x	. x	. 0x+	0	0	. 00x	. 0x	. 000x−	. 00x+	. 00x+	. 0x	Tr.	0	0	. 00x	. 00x+	. 00x	Tr.	. 00x+	. 0x+	. 0x−	0	. 000x−	. 0x−	. 0x−
203849	26-6	134.2–134.7	1.4	1.82	.4	2.73	--------	xx	x	x	. x−	. 0x−	. x−	. x	. 0x+	0	Tr.	. 00x	. 0x+	. 000x−	. 00x+	. 00x+	x. +	. 000x+	0	0	. 00x−	. 00x+	. 0x−	. 00x−	. 00x+	x. −	. 00x+	. 00x+	. 000x−	. 0x−	. 0x
203850	26-7	134.7–135.4	.43	.54	.6	1.17	--------	xx	x	x	x−	. 0x	. x	. x+	. 0x+	0	Tr.	0	. 0x	0	. 000x+	. 00x+	x	. 000x+	0	0	. 00x−	. 00x−	. 0x−	Tr.	. 00x+	. x+	. 00x+	. 00x−	. 000x	. 0x	. 0x−
203851	26-8	135.4–135.6	.12	.069	.2	.62	--------	xx	xx	x. −	. x	. 00x+	. 0x+	. x	. x	x	0	. 00x+	. 0x	. 000x	0	. 0x−	x. −	. 00x	0	. 0x+	0	. 00x−	. 0x−	0	. 0x−	0	. 0x−	0	. 000x−	. 0x−	. 00x+
203852	26-9	135.6–136.3	.25	.17	.3	3.25	--------	xx	x	x. −	. 0x+	. 0x	. x	. x	. 0x+	0	Tr.	0	. 0x	0	. 00x	. 00x	x. +	Tr.	0	0	. 00x+	. 00x	. 0x+	0	. 00x	. x+	. 00x	. 00x−	. 000x	. 0x−	. 0x−
203853	26-10	136.3–137.5	1.2	1.54	.5	3.44	--------	xx	. x+	x. +	. x−	. 0x	. x+	. x	0	0	0	0	. 0x	0	. 00x	. 00x	x. +	0	0	0	. 00x	. 00x−	. 00x+	0	. 00x	x. −	. 00x	. 00x−	. 000x−	. 0x	. 0x−
203854	26-11	137.5–138.3	1.4	1.50	2.4	1.10	--------	xx	. x+	x. +	. 0x+	. 0x	x. −	. x+	0	0	0	0	. 0x	0	. 00x	. 00x	x	0	0	0	. 00x	. 00x−	. 00x	0	. 00x+	x. −	. 0x−	Tr.	. 000x−	. 0x	. 00x+
203855	26-12	138.3–138.7	2.3	2.60	1.3	4.75	--------	xx	x	x. +	. x−	. 0x−	. x+	. x+	. x−	0	0	. 00x−	. 00x	. 0x+	. 000x	. 00x+	. 00x+	x. +	. 000x+	0	0	. 00x	. 00x+	. 0x	Tr.	. 0x−	x	. 0x−	. 00x+	. 000x	. 0x	. 0x−
203856	26-13	138.7–139.6	.16	.13	.5	1.30	--------	xx	x	x. +	. x−	. 0x−	. x	. x+	. x−	0	Tr.	. 00x	. 0x+	. 000x−	. 000x+	. 00x+	x	. 000x+	0	0	0	. 00x−	. 00x+	0	. 00x+	. 0x+	. 0x−	Tr.	. 000x−	. 0x	. 00x+
203857	26-14	139.6–140.3	.19	.17	.5	1.24	--------	xx	x	x. +	. 0x+	. 0x−	. x	. x+	. x−	0	Tr.	. 00x	. 0x	. 000x−	. 00x+	. 00x	x	. 000x+	0	0	0	. 00x	. 00x+	0	. 00x	. 0x+	. 0x−	0	. 000x−	. 0x	. 00x+
203858	26-15	140.3–140.6	.30	.36	.5	.76	--------	xx	x	x. +	. 0x+	. 0x−	. x+	. x+	. 0x+	0	0	0	. 0x−	0	. 00x	. 00x−	x. −	Tr.	0	0	. 00x	. 00x−	. 00x+	0	. 00x+	. x+	. 00x	. 00x−	. 000x	. 0x−	. 0x−
203859	26-16	140.9–141.4	.047	.055	.8	.42	--------	xx	x. −	x. +	. 0x+	. 0x−	x. −	. x+	. 0x+	0	0	0	. 0x	0	. 00x+	. 00x−	x. −	0	0	0	. 00x−	. 00x	. 00x−	0	. 00x+	0	. 00x	0	0	. 0x	. 00x+
203860	26-17	141.6–143.4	.039	.029	1.6	--------	500	xx	xx	x. +	. x	. 0x	x. −	x. −	x. −	x. +	. 000x+	. 00x+	. 0x+	. 000x+	. 00x	. 00x+	. x−	. 00x+	. 00x	0	. 00x−	. 0x−	. 00x	. 00x−	. x−	0	. 0x−	. 00x−	. 000x+	. 0x	. 0x−
203870	32-1	157.4–158.3	.063	.085	.4	2.55	--------	xx	x. +	x. −	. x	. 00x+	. x	. x−	. 0x+	0	. 00x	0	. 0x	0	. 00x−	. 00x	x	Tr.	0	0	0	. 00x−	. 00x	Tr.	. 00x	. x−	. 00x+	. 000x+	. 000x−	0	. 0x−
203871	32-2 (M)	159.6–160.1	.048	.039	.4	--------	200	xx	xx	x	. x	. 0x−	. x	x. −	x. −	x. +	0	. 00x+	. 0x+	. 000x	. 00x−	. 00x+	. 0x	. 00x+	. 00x	0	0	. 00x	. 00x	. 00x−	. x	0	. 0x−	. 00x−	. 000x	0	. 00x+
209815	51-1	205.0–205.3	.015	--------	--------	--------	280	xx	xx	x	. x	. 00x+	. 0x+	. x−	. 0x+	0	. 000x+	. 00x	. 00x+	0	. 0x−	. 00x+	. 0x	. 00x	0	0	. 0x−	. 0x−	. 0x−	Tr.	. 00x+	0	. 0x−	. 000x+	. 000x	. 0x	. 0x−
209816	51-2	205.3–206.2	.16	.20	.24	--------	488	xx	xx	x. −	. x−	. 0x−	. x−	. x−	. 0x+	0	0	. 00x	. 00x+	0	. 00x	. 00x+	. 0x	Tr.	0	0	. 0x−	. 00x	. 00x	Tr.	. 0x−	. x−	. 00x+	. 000x+	. 000x	. 0x	. 0x−
209817	51-3	206.2–206.5	.056	.063	.42	1.08	--------	xx	x. +	x	. x−	. 0x	. x+	. x	0	0	0	0	. 0x−	0	. 00x	. 00x+	x. −	Tr.	. 00x+	0	. 0x−	. 0x−	. 00x+	Tr.	. 0x	. 0x+	. 00x+	. 00x−	. 000x	. 0x	. 0x−
Analyses of five mill-pulp samples																																					
D-221439	MP-1	--------	0.44	0.51	--------	1.18	--------	xx. 0	x. −	x. −	0. 0x+	0. 0x−	0. x	0. x	0. 0x+	0	0	0	0. 0x	0	0. 00x	0. 00x−	0. x+	0	0	0	0. 00x+	0. 00x	0. 00x+	0	0. 00x+	0. x	0. 00x	0. 00x−	0. 000x−	0	0. 00x+
221440	2	--------	.49	.58	--------	1.30	--------	xx	x. −	x. −	. 0x+	. 0x−	. x	. x	. 0x+	. x	0	0	. 0x	0	. 00x	. 00x−	x. −	0	0	0	. 00x+	. 00x	. 00x	0	. 0x−	. x	. 00x	. 00x	. 000x	0	. 00x+
221441	3	--------	.33	.36	--------	.87	--------	xx	x. −	x. −	. 0x+	. 0x−	. x	. x	. 0x+	. x	0	0	. 0x	0	. 00x	. 00x−	. x+	0	0	0	. 00x+	. 00x	. 00x	0	. 00x+	. x−	. 00x+	. 00x−	. 000x−	0	. 00x+
221442	4	--------	.27	.28	--------	.76	--------	xx	x. −	x. −	. 0x+	. 0x−	. x	. x	. 0x+	. x	0	0	. 0x	0	. 00x	. 00x−	. x+	0	0	0	. 00x+	. 00x	. 00x	0	. 00x+	. x−	. 00x+	. 000x+	. 000x−	. 0x−	. 00x+
221443	5	--------	.29	.31	--------	.82	--------	xx	x. −	x. −	. 0x+	. 0x−	. x	. x	. 0x+	. x	0	0	. 0x	0	. 00x	. 00x−	. x+	0	0	0	. 00x+	. 00x	. 00x	0	. 00x+	. x−	. 00x+	. 00x−	. 000x−	. 0x−	. 00x+

[1] Samples with (M) following the field number are mudstone, the rest are gray sandstone.