

TABLE 26—Whole-rock analyses (done by J. Husler, Chemistry Laboratory, Geology Department, University of New Mexico; those denoted by asterisk are by K. Emmanuel, University of New Mexico, and J. Bologna, Los Alamos National Laboratory).

	Laminated anhydrite, Salado Fm. Moore (1960b)	Castile anhydrite, avg. 60 anal. Dean (1967)	Castile anhydrite, R. Anderson's sample	Gypsum block, Big Room, Carlsbad Cavern	Capitan Ls., Big Room, Carlsbad Cavern	Gypsum block, Bottomless Pit, Carlsbad Cavern	Bell Canyon(?) Fm., Bottomless Pit, Carlsbad Cavern	Gypsum block, Gypsum Passage, Cottonwood Cave	Seven Rivers Fm., Gypsum Passage, Cottonwood Cave	Gypsum block, Sand Cave McKittrick Hill	Yates Fm., Sand Cave McKittrick Hill	Avg. of 345 limestones Pettijohn (1957)
Major Elements (wt%)												
SiO ₂	0.190	—	—	0.18	0.39	0.10	2.80	0.06	2.07	0.12	0.08	5.19
TiO ₂	0.002	—	—	<0.05	<0.02	<0.02	<0.02	<0.02	0.040	0.054	<0.02	0.06
Al ₂ O ₃	0.018	—	—	0.08	<0.01	<0.01	0.16	0.04	0.90	0.12	0.03	0.81
Fe ₂ O ₃	0.012	—	} 0.9	<0.05	<0.02	<0.02	0.04	<0.002	0.168	0.117	0.03	} 0.54
FeO	0.011	—		—	—	<0.01	<0.01	<0.01	0.11	0.03	<0.01	
MnO	0.001	—	—	<0.005	0.008	<0.001	0.034	<0.001	0.01	0.001	0.01	0.05
MgO	9.800	1.822	28.7	0.028	0.60	0.038	2.52	0.22	19.2	0.031	15.8	7.90
CaO	31.384	—	0.15	32.31	55.20	32.40	50.40	32.80	32.0	32.1	37.3	42.61
Na ₂ O	1.766	0.112	—	0.05	0.165	0.10	0.162	0.088	0.09	0.091	0.19	0.05
K ₂ O	0.090	0.050	—	0.005	0.002	<0.1	0.009	0.007	0.156	0.011	0.011	0.33
P ₂ O ₅	—	—	—	0.021	<0.01	<0.01	0.078	<0.01	0.018	0.041	0.01	0.04
SrO	0.08	2.403	—	0.006	0.014	0.005	0.058	0.011	0.009	0.007	0.010	—
SO ₃ , S	7	—	—	46.54	<0.01	46.23	<0.1	45.31	<0.1	45.85	<0.1	0.05
H ₂ O ⁺ , CO ₂	2.82	—	—	1.46	43.40	1.92	41.68	3.41	45.10	2.53	45.88	5.14
H ₂ O ⁻	0.063	—	—	19.30	0.14	19.17	0.73	17.90	0.08	18.65	0.27	0.21
Trace elements (ppm)												
Au	—	—	12	—	—	—	—	—	—	—	—	—
Br ^{82*}	<20	—	<0.1	0.6	—	—	—	—	—	—	—	—
Cl	20,500	—	—	—	—	4.6	—	—	—	—	—	—
Co	—	—	4	—	—	—	—	—	—	—	—	—
La ^{140*}	—	—	1	0.6	—	—	—	—	—	—	—	—
Np ^{239*}	—	—	—	0.3	—	—	—	—	—	—	—	—
Se	—	—	0.37	—	—	—	—	—	—	—	—	—
Sm ^{239*}	—	—	0.63	0.1	—	—	—	—	—	—	—	—
U	—	—	0.8	—	—	—	—	—	—	—	—	—
W	—	—	9.3	—	—	—	—	—	—	—	—	—
Total	—	—	—	99.98	99.92	99.86	98.67	99.85	99.95	99.75	99.62	100.9