

TABLE 1. CHEMICAL ANALYSES (in percent)

(By Charles O. Parker & Co.)

Component	Sample Numbers																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CaO	33.30	33.91	36.67	34.16	32.37	33.55	28.33	27.46	33.34	32.04	32.73	32.68	32.94	33.04	32.18	32.73	33.70	32.47	32.53	32.47
SO ₂	46.03	44.95	47.81	45.16	43.64	45.16	38.42	37.74	46.05	46.10	46.40	46.98	45.65	47.36	46.76	46.62	42.93	44.69	43.64	45.80
H ₂ O (combined)	19.89	19.34	11.01	19.63	19.32	18.16	16.21	13.52	19.56	19.36	19.81	19.70	19.47	20.09	19.31	20.04	18.60	19.05	18.20	19.71
Fe ₂ O ₃ & Al ₂ O ₃	0.10	0.09	0.15	0.16	0.43	0.25	1.18	0.70	0.24	0.42	0.18	0.30	0.16	0.23	0.59	0.23	1.56	1.10	0.17	0.16
SiO ₂ (insoluble)	0.21	0.39	0.60	0.37	2.02	0.57	13.98	19.48	0.76	1.10	0.40	0.96	0.16	0.16	1.48	0.37	2.53	2.81	0.63	0.29
MgO	0.16	0.11	0.12	0.27	0.54	0.36	0.73	0.23	0.26	0.20	0.22	0.14	0.09	0.09	0.53	0.09	0.10	0.09	0.28	0.46
CO ₂	0.59	1.97	3.66	1.17	2.24	2.16	1.87	1.25	1.17	0.66	0.37	0.18	0.55	0.15	0.77	0.26	1.98	1.21	5.02	1.32
Total	100.28	100.76	100.02	100.92	100.56	100.21	100.72	100.38	101.38	100.88	100.11	100.94	99.02	101.12	101.62	100.34	101.40	101.42	100.47	100.21
CaSO ₄ (1)	78.2	76.5	81.3	76.9	74.2	76.9	65.3	64.1	78.4	78.4	78.9	79.9	77.6	80.4	79.6	79.2	73.0	76.0	74.1	77.9
Gypsum (2)	97.8	95.0	92.3	95.6	93.0	94.8	80.9	77.4	96.5	96.9	98.6	98.4	98.1	99.4	97.4	99.0	90.4	93.8	92.0	97.4

(1) Calculated from amount of SO₂ available.

(2) Anhydrite from (1) plus combined water, adjusted to total 100 percent with impurities listed.

Identification and location of samples:

- Sample 129-G1. Todilto gypsum near south boundary, Ojo del Espiritu Santo Grant. Grab sample from pipeline-trench excavation.
- " 129-G2. Todilto gypsum, White Mesa deposit, NW¼ sec. 13, T. 15 N., R. 1 E. Drill-hole cuttings of upper 55 feet of gypsum.
- " 129-G3. Todilto formation, White Mesa deposit; location adjoins that of No. 2. Drill-hole cuttings of entire Todilto formation, including basal limestone member.
- " 174-G1. Todilto gypsum, Mesita deposit, NW¼ sec. 12, T. 9 N., R. 5 W. Random chip sample from old quarry face.
- " 200-G1. Gypsite overlying Todilto gypsum, Suwane deposit, NW¼ sec. 30, T. 8 N., R. 2 W. Grab sample.
- " 232-G1. San Andres formation gypsum, sec. 34, T. 5 N., R. 16 E., approximately three-quarters mile northwest of Vaughn. 20-foot chip sample from old quarry face.
- " 254-G1. Gypsum dune sand from stabilized longitudinal dune, eastern border of Salt Lakes, Pinos Wells Basin, SW¼ sec. 13, T. 3 N., R. 13 E. 7-foot channel sample from wall of blowout.
- " 254-G2. Gypsum dune sand from active dune, one-half mile west of sample No. 7, SE¼ sec. 14, T. 3 N., R. 13 E. Grab sample.
- " 273-G1. Gypsite from crystalline gypsite apron below main outcrop of Cañas gypsum member of Yeso formation, north side of Mesa del Yeso, near south boundary Sevilleta Grant. Grab sample.
- " 302-G1. San Andres formation gypsum. Upper gypsum sequence in old plaster-mill quarry at Ancho, NE¼ sec. 25, T. 4 S., R. 11 E. Chip sample at 1-foot intervals.
- " G300-58-1. Cañas gypsum member of Yeso formation, south end of Chupadera Mesa, sec. 8, T. 6 S., R. 7 E. Chip-channel sample.
- " G300-Pb. Gypsum from Torres member of Yeso formation; same location as No. 11. Grab sample.
- " G348-58-1. Gypsum in upper Yeso lower San Andres formation, Phillips Hills, sec. 21, T. 10 S., R. 8 E. Chip-channel sample.
- " G368-58-1. Yeso formation gypsum, Associated Materials Co. mine, east-central Caballo Mountains, sec. 16, T. 15 S., R. 3 W. Chip-channel sample.
- " G392-58-1. Yeso formation gypsum, prospect cuts in southeastern Caballo Mountains, sec. 2, T. 17 S., R. 3 W. Chip-channel sample of gray and red porphyroblastic bed.
- " G396-18732. Gypsum dune sand from White Sands National Monument, NE¼ sec. 32, T. 18 S., R. 7 E. Channel up steep face of 37-foot-high dune.
- " G441-58-6. Gypsum from Tertiary lake beds, Apache Canyon, SW¼ sec. 31, T. 22 S., R. 1 E. Channel sample.
- " G466-Pv. Gypsum (upper bed) in Panther Seep formation, west foothills of northern Franklin Mountains, NW¼ sec. 35, T. 26 S., R. 4 E. Chip-channel sample.
- " G475-58-2. Castile formation banded gypsum, Yeso Hills, sec. 28, T. 26 S., R. 24 E. Grab sample.
- " G475-58-3. Castile formation nonbanded gypsum, Yeso Hills, sec. 28, T. 26 S., R. 24 E. Grab sample.