

TABLE 43. *Analyses of industrial sand samples from south Texas localities* (Mineral Technology Laboratory, 1960).

COUNTY		ATASCOSA	ATASCOSA	ATASCOSA	ATASCOSA	ATASCOSA	DIMMIT	FRIO	JACKSON	JIM HOGG	LIVE OAK	ZAVALA	ZAVALA	ZAVALA	ZAVALA	ZAVALA	DEWITT		
Field Sample No.		2-A	2-B	2-C	4-A	4-B	1	2	5	3	7	10	11	20-A	20-B	20-C	3		
Min. Tech. Lab. No.		60088	60089	60090	60091	60092	60118	60115	60321	60159	60139	60129	60130	60131	60132	60133	60315 <sup>a</sup>		
Sieve analysis of original sample as 100 percent																		Sieve analysis of HCL-insoluble residue	
Percentage passing U.S. sieve No.	Percentage retained on U.S. sieve No.																	Percentage passing U.S. sieve No.	Percentage retained on U.S. sieve No.
----	10	0.02	0.20	0.41	0.93	0.04	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	----	10	0.00
10	20	1.16	21.22	2.84	10.48	1.03	0.11	0.08	0.02	0.00	0.32	0.02	1.86	0.03	0.00	0.00	10	20	4.38
20	40	18.34	62.88	20.50	31.20	20.35	4.14	0.55	8.25	0.05	3.88	0.16	44.21	0.19	0.91	0.11	20	40	9.74
40	60	44.62	15.30	32.20	30.55	48.80	28.47	1.84	65.76	4.64	5.15	0.66	31.94	60.47	78.14	59.86	40	60	29.69
60	80	21.80	0.29	10.96	13.64	19.10	36.78	4.98	19.52	15.86	3.34	5.82	12.11	31.77	14.20	28.37	60	80	29.16
80	100	8.95	0.09	3.89	4.98	5.53	17.19	11.80	2.65	22.58	5.80	22.28	2.80	2.60	2.14	3.21	80	100	11.59
100	140	4.20	0.01	2.68	2.22	2.66	7.16	24.00	0.54	25.37	20.55	31.90	1.85	1.18	1.07	1.95	100	140	5.87
140	200	0.08	0.00	0.39	0.25	0.42	0.04	23.50	0.04	1.05	12.73	7.84	0.53	0.02	0.29	0.17	140	200	0.17
200	270	0.80	0.00	1.81	0.35	0.47	2.29	9.29	0.20	6.34	27.01	10.20	1.24	0.79	0.47	1.57	200	270	3.27
270	325	0.03	0.01	0.63	0.25	0.06	0.01	3.56	0.00	0.02	3.67	0.07	0.18	0.10	0.06	0.21	270	325	0.05
325	plus 20 microns	0.00	0.00	1.54	0.14	0.05	0.57	7.85	0.08	7.70	7.77	5.66	0.88	0.66	0.79	1.56	325	Pan	6.08
Yield of plus 20 microns		100.00	100.00	77.85	94.99	98.51	96.76	87.45	97.06	83.61	90.26	84.61	97.60	97.81	98.07	97.01	Total		100.00
Yield of plus 200-mesh fraction (glass sand)		99.17	99.99	73.89	94.25	97.93	93.89	66.75	96.78	69.55	51.81	68.68	95.30	96.26	96.75	93.67	Yield of HCL-insoluble residue		57.95%
Sieve analysis of plus 200-mesh fraction																			
----	10	0.02	0.20	0.55	0.99	0.04	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00			
10	20	1.17	21.22	3.85	11.10	1.05	0.12	0.12	0.02	0.00	0.62	0.03	1.95	0.03	0.00	0.00			
20	40	18.50	62.89	27.71	33.08	20.78	4.42	0.83	8.52	0.07	7.50	0.23	46.30	0.20	0.94	0.12			
40	60	44.69	15.30	43.60	32.40	49.84	30.36	2.76	67.96	6.66	9.97	0.96	33.57	62.82	80.80	63.95			
60	80	22.00	0.29	14.86	14.50	19.49	39.15	7.45	20.20	22.79	6.46	8.48	12.73	33.00	14.65	30.25			
80	100	9.03	0.09	5.27	5.30	5.65	18.30	17.67	2.74	32.49	11.20	32.40	2.94	2.70	2.20	3.43			
100	140	4.24	0.01	3.63	2.36	2.72	7.61	36.00	0.56	36.48	39.60	46.50	1.95	1.23	1.11	2.08			
140	200	0.8	0.00	0.53	0.27	0.43	0.04	35.17	0.04	1.51	24.57	11.40	0.56	0.02	0.30	0.18			
Totals		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			
Percentage total iron as Fe <sub>2</sub> O <sub>3</sub> in the plus 200-mesh sieve fraction		0.10	0.12	0.13	0.11	0.07	0.17	0.53	0.10	0.11	0.28	0.22	0.04	Composite percentage total iron as Fe <sub>2</sub> O <sub>3</sub> in the plus 200-mesh sieve fraction for samples 60131, 32, 33		0.08			

<sup>a</sup> A sandstone with calcium carbonate cement; not suitable for a glass sand. Iron content not determined.