TABLE 8.—*Geologic and commercial data for mines in the Southern Death Valley–Kingston Range district, California*

Mine or prospect	Country rock	Form and size of talc deposits; depth of mining	Kinds and grades of talc rock mined	Chemical composition										Mineral composition	Production	Remarks
				SiO_2	Al_2O_3	Fe_2O_3	CaO	MgO	K_2O	Na_2O	H_2O-	H_2O+	CO_2			
Acme mine	Hanging wall, cherty dolomite; footwall, diabase.	Tabular body >550 ft long, 10 ft thick; mined 225 ft downdip; 1–3 ft talc schist along hanging wall.	Massive to thinly laminated tremolite rock.	[1] 49.71	1.84	0.16	9.20	28.71	0.61	1.80	-------	7.90	-------	Mostly tremolite; calcite about 10 percent; some talc.	19,100 tons through 1955	Southern extension of main deposit in Western mine.
Amargosa mine	Dolomite and diabase	Tabular mass 350 ft long, as much as 10 ft thick; mined 150 ft deep (estimated), probably unbottomed.	Talc schist												Few thousand tons (estimated), all prior to 1927.	Deposits and country rocks highly faulted.
Annex mine	Hanging wall, dolomite; footwall, diabase.	Part of a zone 1,500 ft long, which is 2–20 ft wide in this mine. Commercial talc bodies discontinuous.													<1,000 tons (estimated).	
Berryhill (Riggs) mine	----do----	Southern extension of zone in Annex mine. Two bodies each about 150 in exposed length and 5–15 ft thick.													<3,000 tons (estimated)	Granitic dikes cut talc deposits.
Bonnie mine	Siliceous dolomite(?); diabase in footwall.	Mined layer more than 500 ft long; 12 ft average width. Poorly exposed.	Talc schist	[1] 49.40	2.62	.28	13.78	18.80	.40	.52	-------	14.00	-------	Mostly talc	About 2,300 tons through 1955	Talcose layer and overlying subcommercial silicated rock form septum about 150 ft thick and more than 1,000 ft long in diabase.
Booth mine	Hanging wall, cherty dolomite; gneiss and diabase in footwall.	Zone about 1,100 ft long, as much as 20 ft wide.	Massive to schistose talc rock.	[2] 53.00	3.15	.91	7.37	24.41	.22	.30	.43	4.48	5.61		12,000 tons (estimated) through 1955.	Deposits lie along gently dipping post-talc thrust fault.
Caliente mine	Hanging wall, dolomite; footwall, diabase.	Workings mostly in layer at least 150 ft long and 10 ft in average width; mined 280 ft downdip.	Blocky talc-tremolite rock.	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	Mostly tremolite; carbonate abundant.	6,900 tons through 1959.	
Ceramic (Silurian Hills) mine	Hanging wall, limestone; footwall, diabase.	Lens about 250 ft long, 2–5 ft wide.														
Crystal Spring (Prado) mine	Hanging wall, cherty dolomite; footwall, quartzite.	Largest exposed body about 200 ft long and as much as 25 ft wide.	Blocky to schistose talc rock; deposit undeveloped.	[3] 54.37	2.73	.23	5.36	27.10	-------	-------	.03	11.93			<1,000 tons through 1955.	
Death Valley mine	Cherty dolomite, silicated in hanging wall; diabase in footwall.	Two principal bodies, about 1,300 ft and about 2,200 ft in exposed length, respectively. Each shows two persistent layers; lower is blocky talc rock about 12 ft thick, upper is mostly talc schist about 8 ft thick.	Mostly blocky talcose rock; some talc schist.	[4] 55.80	2.23	.91	5.45	26.85	-------	-------		8.20			Several hundred tons (estimated); 63,000 tons through 1959.	
Donna Loy (Paulson) mine	Hanging wall, cherty dolomite; footwall, granite gneiss.	Several lenses exposed, largest about 200 ft long.	Mostly pulverized talc rock.	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------		Several tens of tons through 1955.	Deposits hightly crushed, discontinuous, along post-talc fault.
Eclipse mine	Hanging wall, cherty dolomite; footwall, diabase.	Trace of body about 1,700 ft long, average width 12 ft; laminated rock near footwall, schistose near hanging wall.	Mostly laminated talc rock and talc schist.	[4] 52.50	2.43	.17	8.80	28.10	-------	-------		8.20			45,000 tons (estimated) through 1959.	Rocks highly faulted, offset about 150 ft horizontally by cross fault.
Excelsior mine	Cherty dolomite, silicated in hanging wall; diabase in footwall.	Irregular body, mostly talc schist, several hundred feet long and as much as 20 ft thick.	Talc schist, banded tremolite rock blend (analyzed).	[1] 55.70	1.49	.33	7.16	30.73	1.60	1.70		3.54		Mostly talc, subordinate tremolite; platy, acicular.	46,700 tons through 1959	Claims along 9,000-ft zone containing many lenses of talc and tremolite; several bodies of commercial interest.
Giant (Jim Francis) mine	Cherty dolomite near contact with diabase.	Lens about 125 ft long and as much as 30 ft thick.	Mostly talc schist	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------		2,000–3,000 tons, all prior to 1944	Lenticular mass extends into dolomite from upper margin of a diabase sill.
Grantham (Warm Spring) mine.	Siliceous dolomite, silicated rock, diabase.	Deposits have estimated combined length of several thousand feet; depth of mining, 350 ft (estimated) downdip. Two persistent layers: Lower, 10–15 ft thick, is thinly laminated talc in lower half and blocky talc in upper half; upper, about 8 ft thick, is talc schist.	Laminated to blocky talc rock and talc schist.	[3] 57.35 [3] 56.62	.75 1.14	.35 .18	5.70 5.91	27.95 27.75	.58 .44	1.81 1.13	.57 .10	3.22 3.94	3.05 4.40	Mostly talc	346,000 tons through 1959	Discontinuously exposed along 2-mile belt low in Warm Springs Canyon.
Ibex (Moorehouse) mine	Limestone(?); silicated carbonate rock	Largest body about 700 ft long, as much as 80 ft wide, very irregular; mined about 200 ft downdip.	Mostly talc schist	[2] 54.77	1.08	.38	5.81	26.05	.21	.27	.23	4.58	4.56	Mostly talc	61,800 tons through 1959	Rocks around mine highly faulted; other deposits appear much smaller.
Mammoth mine	Hanging wall, cherty dolomite; footwall, diabase.	Lens 250 ft long, mostly 15–30 ft wide.	Talc schist, laminated tremolite rock.	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------		4,000 tons through 1959	Upper third of body mostly talc schist; lower two-thirds mostly laminated tremolite rock.
Monarch mine	Hanging wall, dolomite; footwall, diabase.	Irregular bed as much as 80 ft thick; exposed length 300 ft. Mined 250 ft downdip.	Mostly talc schist; subordinate tremolite rock.	[2] 54.80	1.15	.18	6.24	26.82	.72	1.71	.42	3.63	4.75	Mostly talc, subordinate tremolite.	49,700 tons through 1959	
Montgomery mine	Dolomite, silicated, and locally diabase	Two parallel layers, each about 15 ft thick and 400 ft long, mined about 100 ft downdip.	Blocky to schistose talc rock	[2] 56.42	.58	.28	5.63	28.11	.02	.12	.09	4.12	4.46	Mostly talc	7,000 tons through 1955	Other deposits on property, poorly exposed.
Omega mine	Hanging wall, siliceous dolomite; footwall, quartzite.	Zone about 2,000 ft long contains silicated rock and layers of commercial talc.	----do----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	----do----	6,000 tons (estimated) through 1959.	
Panamint mine	Dolomite, diabase, and siliceous dolomite(?).	Two principal bodies: One at dolomite-diabase contact, 400 ft long and of irregular thickness; the other, part of septum in diabase, 200 ft long, 10 ft thick.	----do----	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------		4,700 tons through 1959.	
Pleasanton mine	Hanging wall, dolomite; footwall, diabase.	Crescentic lens about 600 ft long, as much as 60 ft wide; mined 100 ft downdip.	Mostly talc schist	[2] 46.38	1.87	.34	10.76	23.80	.97	1.28	.18	2.22	8.17	Mostly talc, subordinate tremolite.	11,000 tons through 1955	
Pongo mine	Hanging wall, diabase; footwall, dolomite.	Talcose zone about 600 ft long, discontinuously exposed. Mined lens about 150 ft long, 13 ft wide; mined 220 ft downdip.	Mostly blocky talc rock; subordinate tremolite rock.	[1] 51.30	1.08	.88	6.20	29.52	.05	.16		10.65		Mostly talc, subordinate tremolite; acicular.	13,000 tons through 1955	Zone poorly exposed. There may be other bodies beneath recent alluvium.
Rainbow mine	Hanging wall, dolomite; footwall, silicated dolomite.	Zone more than 2,000 ft long. Body, where mined, about 15 ft thick.	Massive tremolite rock	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	Tremolite-carbonate mixture.	13,800 tons through 1959.	
Rogers (Gladding, McBean and Co.) mine.	Hanging wall, cherty dolomite; footwall, diabase, locally cherty dolomite.	Zone about 2,000 ft long with many small poorly-exposed bodies of commercial talc.													Little or none	At several places along zone, talc rock about 10 ft thick is exposed, but grade and continuity not proved.
Saratoga mine	Dolomite, silicated, and diabase	Production mainly from zone more than 150 ft long, 5–20 ft in exposed width.	Massive tremolitic talc rock	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	Mostly talc	5,800 tons through 1959	Talc bodies are in silicated septa in diabase sill. Talc rock abundant but in discontinuous bodies; much faulted.
Sheep Creek mine	Dolomite, diabase, and silicated rock	Largest more than 1,000 ft long, 10 ft in average width.	Blocky tremolite rock; some talc schist.	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------		20,600 tons through 1959	Mine workings in part of much longer zone in large sliver in the Garlock and Death Valley fault zones.
Snow White mine	Hanging wall, siliceous dolomite; footwall, diabase.	Layer about 500 ft long, 8–20 ft thick	Talc schist	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------			Talc zone contains abundant inclusions of subcommercial rock.
Superior mine	Argillite; dolomite, silicated; diabase in hanging wall.	Zone about 1,000 ft long has persistent talc body about 12 ft in average width. Mined 550 ft downdip. Shorter body 12 ft thick lies beneath.	Blocky to schistose talc rock	[2] 56.88	.45	.63	4.92	31.29	-------	-------		5.33		Mostly talc: acicular, platy	140,800 tons through 1959	Two bodies separated by a layer of noncommercial tremolite rock about 80 ft. thick. Silicated zone above diabase sill is apparently noncommercial.
Tecopa (Smith) mine	Hanging wall, cherty dolomite; footwall, quartzite,	Lens about 1,600 ft long and as much as 25 ft thick; mined 150 ft downdip; other smaller deposits above main body.	----do----	[2] 55.90	1.24	.31	4.77	28.77	.28	.44	.10	4.40	4.36	Mostly talc	30,000 tons through 1955 (estimated).	
Vulcan mine	Hanging wall, diabase; footwall, shale and quartzite.	Talcose zone poorly exposed over 1½ mile length. As much as 50 ft wide and contains irregular bodies of talc schist interlayered with waste rock.	Mostly talc schist	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------		9,000 tons (estimated) through 1959.	
Western mine	Hanging wall, cherty dolomite and silicated rock; footwall, diabase.	Two main bodies, more than 5,000 and 3,000 ft long, respectively; each 10–80 ft wide; each mined to maximum depth of 350 ft.	Blend	[5] 54.30	1.74	.46	7.04	25.56	.75	.49		8.37		Laminated tremolite rock on footwall side; talc schist and massive talc-tremolite rock on hanging wall side of deposit.	309,600 tons through 1959	Longest continuous deposit known in district.
White Cap mine	Hanging wall, silicated rock and diabase; footwall, diabase.	Lens about 400 ft long and as much as 20 ft wide; mined 200 ft downdip.	Blocky to schistose talc rock	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	Mostly talc	6,000 tons through 1955	Silicated rock and talc largely within septum that extends into diabase sill from footwall side of diabase.

[1] Analysis supplied by Southern California Minerals Co.
[2] Analysis by Alberta V. MacArthur, Sierra Talc and Clay Co.
[3] Source unknown.
[4] Analysis supplied by Kennedy Minerals Co.
[5] Analysis supplied by Western Talc Co.