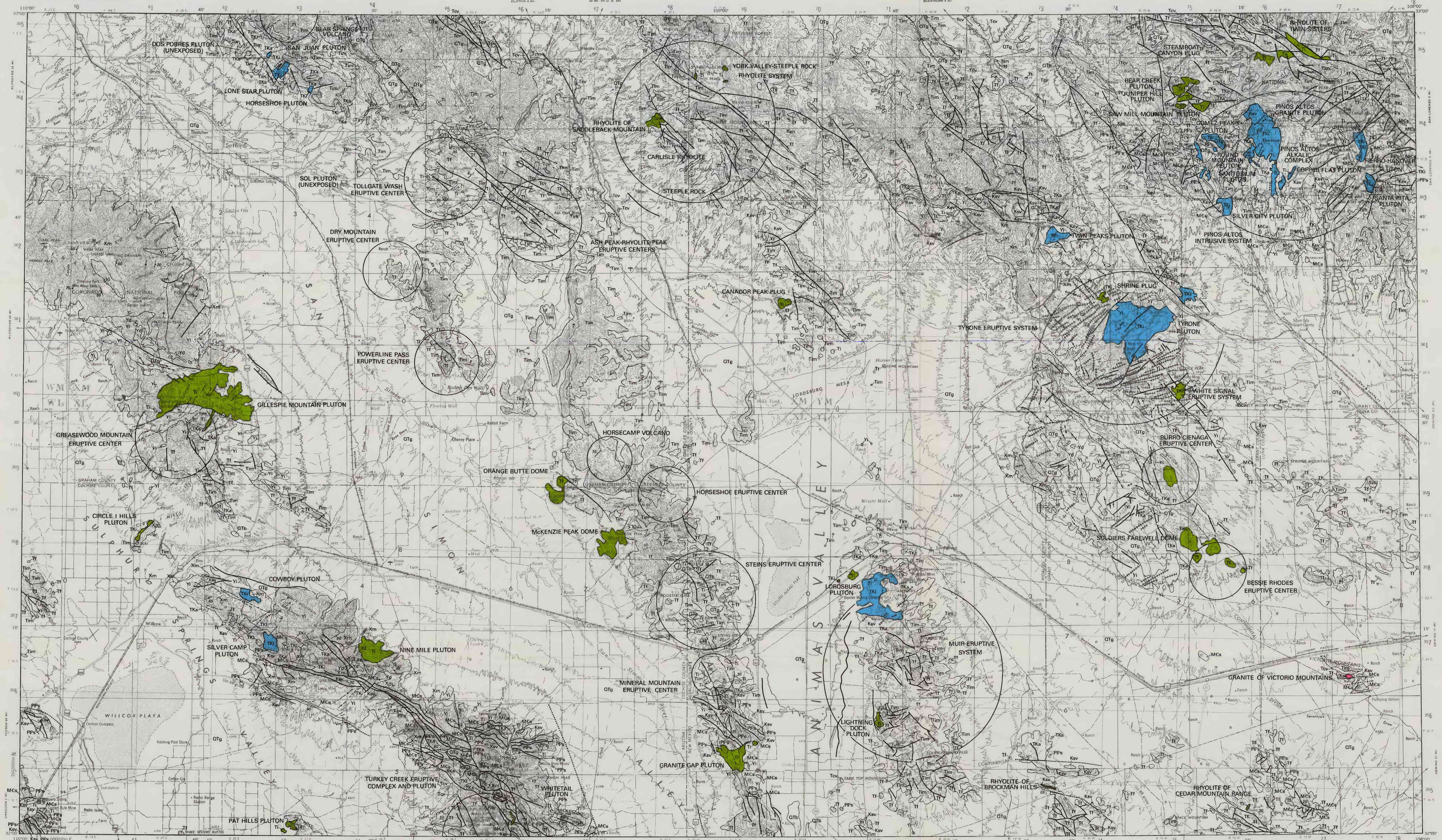

Base from U.S. Geological Survey, 1954
Revised 1970
10,000-meter Universal Transverse Mercator grid, zone 12

Geology simplified from Drewes and others, 1985

SCALE 1:250 000

5 0 5 10 15 20 25 MILES

5 0 5 10 15 20 25 KILOMETERS

CONTOUR INTERVAL 200 FEET
WITH SUPPLEMENTARY CONTOURS AT 100 FOOT INTERVALS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Map showing Mesozoic and Cenozoic granitic plutonic rocks and silicic eruptive centers, Silver City 1° × 2° quadrangle, New Mexico and Arizona

CORRELATION OF MAP UNITS

Units	Age
QTg, QTb, Tcv	QUATERNARY / TERTIARY
Tf, Tim, Ti, TKi	TERTIARY
TKa, Ksv	CRETACEOUS
PPs	PERMIAN AND PENNSYLVANIAN
MCs	MISSISSIPPIAN TO CAMBRIAN
Yd, Yi	MIDDLE PROTEROZOIC
Xm	EARLY PROTEROZOIC

DESCRIPTION OF MAP UNITS

- **QTg** **Gravel, sand, silt, and clay (Quaternary and Tertiary)**—Mainly alluvium on stream terraces, fan aprons, and pediments; colluvium on hill slopes; and lacustrine and eolian deposits in basins
- **QTb** **Basalt (Quaternary and Tertiary)**—Basalt and basaltic andesite flows and small intrusions
- **Tcv** **Conglomerate and volcanic rocks (Tertiary)**—Mainly coarse conglomerate with intercalated mafic to intermediate flows and felsic tuffs
- **Tim** **Intermediate to mafic volcanic rocks (Tertiary)**—Mainly flows, scoria cones, domes, and small intrusions. Locally includes small units of felsic volcanic rocks and volcaniclastic rocks
- **Tf** **Felsic volcanic rocks (Tertiary)**—Mainly flows, domes, and pyroclastic deposits. Locally includes small units of more mafic volcanic rocks and volcaniclastic rocks
- **Ti** **Intrusive rocks (Tertiary)**—Includes granitic rocks in plutons and aphanitic and porphyritic rocks in plugs and dikes
- **TKi** **Intrusive rocks (Tertiary and Cretaceous)**—Includes granitic rocks, commonly porphyritic, in plutons and porphyritic rocks and breccias in dikes, plugs and small stocks
- **TKa** **Andesitic rocks (Tertiary and Cretaceous)**—Flows and small intrusions. Locally includes small units of sedimentary rocks
- **Ksv** **Sedimentary and volcanic rocks (Cretaceous)**—Mainly shale, siltstone, sandstone and conglomerate; includes some limestone and felsic to intermediate volcanic rocks. Mainly Lower Cretaceous Bisbee Group to the southwest and Upper Cretaceous Colorado Formation to the northeast. Includes Jurassic and Triassic rocks in extreme southwest corner of quadrangle
- **PPs** **Sedimentary rocks (Permian and Pennsylvanian)**—Mainly limestone; includes some dolomite and sandstone. Chiefly Naco Group
- **MCs** **Sedimentary rocks (Mississippian to Cambrian)**—Mainly limestone, dolomite, shale, quartzite, and sandstone; includes some conglomerate and arkose sandstone
- **Yd** **Diabase (Middle Proterozoic)**—Includes gabbro, and metadiorite in sills, dikes and irregular masses
- **Yi** **Intrusive rocks (Middle Proterozoic)**—Granitic rocks, commonly porphyritic or porphyroblastic, in plutons
- **Xm** **Metasedimentary and Metaigneous rocks (Early Proterozoic)**—Includes Pinal Schist and unnamed gneisses

Contact

Fault—Dotted where concealed

Strike and dip of beds
- 5 **Inclined**
- **Vertical**

Strike and dip of foliation—Includes primary flow foliation of volcanic rocks and secondary metamorphic foliation of metamorphic rocks
- 50 **Inclined**
- **Vertical**

Silicic eruptive center—Approximately outlined

Granitic rocks and silicic subvolcanic rocks
- **Miocene**
- **Oligocene**
- **Laramide**

This map is part of a folio of maps of Silver City 1° × 2° quadrangle, New Mexico-Arizona, prepared under the Conterminous United States Mineral Assessment Program.

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Table 1. *Age groupings for granitic rocks and selected rhyolitic volcanic rocks in the Silver City 1° × 2° quadrangle, New Mexico and Arizona*
[Numbers in parentheses (46) refer to references]

18-26 m.y. (early Miocene to late Oligocene)		26-40 m.y. (late Oligocene to late Eocene)		40-50 m.y. (middle Eocene)		50-80 m.y. (middle Eocene to Late Cretaceous)	
Pinaleno Mountains							
Greasewood Mountain eruptive center	26 m.y.(est.) (47)	Gillespie Mountain pluton	36 m.y. (46,47)				
Quartz latite dikes	22.9 m.y. (46,47)	Circle I Hills pluton	28.4 m.y. (46,47)				
Dos Cabezas and Chiricahua Mountains							
Rhyolite Canyon Formation	25.6 m.y. (35,44)	Nine Mile pluton	29.0 m.y. (4,11)			Cowboy pluton	59.0 m.y.(4,11)
		Pat Hills pluton	29.9 m.y. (44)			Silver Camp pluton	62.4 m.y.(4,11)
		Whitetail pluton	30, 32.0 m.y.(10)				
Gila Mountains							
Bear Springs volcano	24, 26 m.y. (31)					Lone Star pluton	53.6, 62.4, 67 m.y. (3,43)
						San Juan pluton	(3,43)
						Dos Pobres pluton	69.8 m.y. (43)
						Horseshoe pluton	(43)
Northern Peloncillo and Whitlock Mountains							
Tollgate Wash eruptive center	18, 23 m.y. (40)						
Ash Peak-Rhyolite Peak eruptive center	23 m.y. (40,41)						
Dry Mountain and Powerline Pass eruptive centers	(41)						
Central Peloncillo Mountains							
Horseshoe eruptive center	25 m.y. (35)	Orange Butte dome	26.6 m.y. (42)				
Rhyolite dikes	26.1, 27.0, 27.7 m.y.(8)	McKenzie Peak dome	28.5 m.y. (42)				
		Horsecamp volcano	29.3 m.y. (42)				
		Steins eruptive center	31-35 m.y. (8,42)				
		Granite Gap pluton	31.8 m.y. (9,29) 32.5 m.y. (1)				
		Granite porphyry	30, 31.6 m.y. (1,9)				
		Latite dikes	27.0, 27.7 m.y. (1,9)				
		Mineral Mountain eruptive area	27-32 m.y. (8)				
Pyramid Mountains							
		Muir eruptive center	33 m.y. (7,10)			Lordsburg pluton	56.5, 58.8 m.y. (34,36,49)
		Lightning Dock pluton	33-35 m.y.(7)			Rhyolite plugs	52 m.y. (49)
Summit Mountains							
Rhyolite of Steeple Rock	21 m.y.	Rhyolite of York Valley	28 m.y. (14,26,27)				
		Rhyolite of Carlisle	33.1 m.y. (16)				
		Canador Peak plug	34.9 m.y. (14)				
Big Burro Mountains							
		White Signal rhyolite domes	28.1 m.y. (23,47)	White Signal rhyolite dikes	41.9 m.y. (20,22,23,47)	Tyrone pluton	56.2 m.y. (17,20) 58 m.y.(23,37)
		Shrine rhyolite plug	28.1 m.y (15,17,20,47)			Twin Peaks pluton	72.5 m.y.(15,35)
		Bessie Rhodes eruptive center	(18)				
		Soldier's Farewell dome	(18)				
		Burro Cienaga eruptive center	34 m.y. (21)				
Victorio Mountains, Brockman Hills, and Cedar Mountain Range							
Granite of Victorio Mountains	24.8 m.y. (30,51)	Rhyolite dikes	33.9, 36.2 m.				
		Rhyolite dikes	31.0, 32.0 m.				
Pinos Altos Range							
						Silver City pluton	51 m.y. (5,38,47)
						Gomez Peak pluton	63.4 m.y. (5,38,47)
						Sanatorium pluton	75.4 m.y.(38)
						Round Mountain pluton	74.6 m.y. (47)
						Santa Rita pluton	56.5-58.9 m.y. (32,37)
						Fierro-Hanover pluton	57.1-70.4 m.y. (33,37)
						Copper Flat pluton	53-73 m.y. (32,39) 58.9 m.y. (37)
						Alkalic complex of Pinos Altos	
						Pinos Altos pluton	60-80 m.y.(14) 69-80 m.y.(32) 58.9 m.y. (37)
Reading Mountain							
		Rhyolite of Twin Sisters	30.5, 30.8 m.y. (12)			Juniper Hill pluton	(13)
		Bear Creek pluton	31 m.y. (12)				
		Saw Mill Mtn. pluton	31 m.y. (12)				
		Steamboat Canyon plug	33 m.y. (13)				

Table 2. *Sample descriptions and locations of igneous rocks in the Silver City 1° × 2° quadrangle, New Mexico and Arizona*
[Analysis performed on sample: m, minor accessory analysis; a, accessory mineral assemblage; s, standard rock analysis]

Area	Sample no.	Rock type	Analysis	Location (township, range, section, and state)
		GRANITIC PLUTONS, PLUGS, DIKES		
		Gillespie Mountain pluton		
Pinaleno Mountains	78-S-13	Biotite, sphene granite	ma	T10S, R26E, sec 20, NM
	79-S-121	Biotite, sphene granite	mas	T10S, R25E, sec 22, NM
	78-T-24	Fine-grained granite dike	s	T10S, R25E, sec 35, NM
	78-T-43	Fine-grained granite dike	s	T10S, R25E, sec 34, NM
	78-T-45	Fine-grained granite dike	s	T10S, R25E, sec 34, NM
	78-T-120	Fine-grained granite dike	s	T11S, R25E, sec 4, NM
		Circle I Hills pluton		
	78-S-50	Biotite granite	mas	T12S, R25E, sec 36, NM
		Nine Mile pluton		
Chiricahua Mountains and Dos Cabesas Mountains	78-S-44	Leuco, biotite granite	mas	T14S, R28E, sec 9, NM
		Pat Hills pluton		
	78-S-49	Biotite granodiorite	mas	T16S, R27E, sec 30, NM
		Whitetail pluton		
	78-S-39	Granite (altered)	ma	T16S, R30E, sec 20, NM
		Cowboy pluton		
	78-S-47	Biotite gabbro-diorite	mas	T13S, R26E, sec 22, NM
		Silver Camp pluton		
	78-S-29	Tonalite	mas	T14S, R26E, sec 12, NM
		Pyramid Pass pluton		
	78-S-18	Granite, chloritic	ma	T25S, R21W, sec 22, NM
		Lone Star pluton		
Gila Mountains	78-S-3	Quartz monzodiorite	mas	T6S, R26E, sec 12, NM
	78-S-4	Quartz monzodiorite	ma	T6S, R26E, sec 1, NM
		San Juan pluton		
	78-S-5	Quartz monzonite	mas	T5S, R26E, sec 35, NM
		Dos Pobres pluton (not exposed)		
	79F-DR-55	Gray quartz monzonite porphyry	m	T5S, R26E, sec 27, AZ
	79F-DR-99	Red quartz monzonite porphyry	m	T5S, R26E, sec 27, AZ
		Horseshoe pluton		
	79-S-125	Quartz monzonite porphyry	m s	T6S, R27E, sec 17, AZ
		Granite Gap pluton		
Central Peloncillo Mountains	78-S-14	Biotite granite porphyry	mas	T25S, R21W, sec 27, NM
	78-S-15	Biotite granite porphyry	mas	T25S, R21W, sec 35, NM
	78-T-60	Biotite granite porphyry (meta.)	mas	T25S, R21W, sec 35, NM
	78-T-61	Biotite granite porphyry	mas	T25S, R21W, sec 35, NM
	78-S-16	Dike, biotite quartz latite	mas	T25S, R21W, sec 26, NM
	78-S-17	Border phase, biotite granite	mas	T25S, R21W, sec 26, NM
		Mineral Mountain eruptive center		
	75-D-225B	Younger rhyolite dikes	m	T24S, R21W, sec 35, NM
	75-D-230	Younger rhyolite dikes	m	T24S, R21W, sec 22, NM
	75-D-270	Younger rhyolite dikes	m	T24S, R21W, sec 16, NM
	75-D-272	Younger rhyolite dikes	m	T24S, R21W, sec 9, NM
	75-D-223A	Older rhyolite	m	T24S, R21W, sec 26, NM
	75-D-227B	Older rhyolite	m	T24S, R21W, sec 35, NM
	75-D-238B	Older rhyolite	m	T24S, R21W, sec 23, NM
		Lordsburg pluton		
	77-D-190	Quartz monzonite	m	T23S, R19W, sec 12, NM
	78-S-20	Quartz monzonite	mas	T23S, R19W, sec 12, NM
	78-S-19	Quartz monzonite plug	ma	T23S, R18W, sec 8, NM
		Lightning Dock pluton		
	78-S-21	Tonalite	a	T25S, R19W, sec 10, NM
	78-S-22	Tonalite	mas	T25S, R19W, sec 15, NM
		Plugs of Lordsburg		
	77-D-197	Quartz monzonite plug	a	T25S, R19W, sec 8, NM
		Tyrone pluton		
Big Burro Mountains	79-S-111	Biotite granite	mas	T19S, R15W, sec 20, NM
	BP-120-76	Biotite granite	a	T19S, R15W, sec 20, NM
	79-S-112	Sill phsse, granodiorite	mas	T19S, R14W, sec 12, NM
		Twin Peaks pluton (Black Hawk)		
	80-S-302	Tonalite, biotite	m s	T18S, R16W, sec 21, NM
	80-S-303	Tonalite, amphibole	m s	T18S, R16W, sec 21, NM
	R4-79	Tonalite	m	T17S, R12W, sec 16, NM
		Granite of Victorio Mountains		
Victorio Mountains	77-T-109	Leuco granite porphyry	mas	T24S, R12W, sec 29, NM
	79-S-212	Leuco granite porphyry	m	T24S, R12W, sec 29, NM
	79-S-213	Leuco granite porphyry	m	T24S, R12W, sec 29, NM
	79-S-214	Leuco granite porphyry	m	T24S, R12W, sec 29, NM
		Silver City pluton		
Pinos Altos Range	78-S-24	Biotite quartz monzonite	mas	T18S, R14W, sec 10, NM
	80-S-301	Biotite quartz monzontie	m	T18S, R14W, sec 3, NM
	81F-DR-25	Biotite quartz monzonite	m s	T18S, R14W, sec 2, NM
	81F-DR-26	Biotite quartz monzonite	m s	T18S, R14W, sec 2, NM
	81F-DR-27	Biotite quartz monzonite	m s	T18S, R14W, sec 2, NM
	81F-DR-28	Biotite quartz monzonite	m s	T18S, R14W, sec 10, NM
	81F-DR-29	Biotite quartz monzonite	m s	T18S, R14W, sec 10, NM
		Round Mountain pluton		
	81F-DR-31	Quartz monzonite	m s	T17S, R14W, sec 16, NM
		Gomez Peak pluton		
	78-S-25	Amphibole quartz monzonite	mas	T17S, R14W, sec 10, NM
		Sanitorium pluton		
	81F-DR-30	Quartz monzonite	m s	T17S, R14W, sec 28, NM
		Fierro-Hanover pluton		
	79-S-103	Tonalite	ma	T17S, R12W, sec 15, NM
	79-S-104	Tonalite	ma	T17S, R12W, sec 15, NM
	79-S-105	Tonalite	ma	T17S, R12W, sec 15, NM
	78-UVI	Tonalite	a	T17S, R12W, sec 9, NM
	7-1-76	Tonalite	a	T17S, R12W, sec 9, NM
	P-19	Tonalite	s	T17S, R12W, sec 22, NM
		Santa Rita pluton		
Pinos Altos Range	78-SR-Co-1	Granodiorite pegmatite	m	T17S, R12W, sec 27, NM
	JC-110-54	Granodiorite	s	T17S, R12W, sec 27, NM
	78-SR-1	Granodiorite	ma	T17S, R12W, sec 27, NM
		Copper Flat pluton		
	79-S-106	Granite	m	T17S, R12W, sec 3, NM
	L-2-50	Granite	s	T17S, R12W, sec 3, NM
		Pinos Altos alkalic complex		
	JC-105-54	Syeno-gabbro (Tap of Jones)[1]	s	T17S, R14W, sec 13, NM
	JC-105A-54	Syeno-diorite (Tap of Jones)[1]	s	T17S, R14W, sec 13, NM
	JC-106-54	Monzogabbro, (dike swarm)	s	T17s, R13W, sec 17, NM
	JC-103-54	Monzodiorite, small intrusive (Tpb)[1]	s	T17S, R13W, sec 7, NM
	JC-104-54	Monzodiorite, "	s	T17S, R14W, sec 13, NM
	JC-8-54	Mafic syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 8, NM
	JC-10-54	Mafic syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 7, NM
	JC-15-54	Mafic syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 17, NM
	JC-20-54	Mafic syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 8, NM
	JC-23-54	Mafic syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 17, NM
	JC-25-54	Mafic syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 17, NM
	FS-2-82	Syeno-gabbro (Tpa of Jones)[1]	m	T17S, R14W, sec 13, NM
	JC-60-54	Syeno-gabbro porphyry (Tpa)[1]	m	T17S, R14W, sec 1, NM
	JC-29-54	Alkali andesite-trachyte (TKab)[1]	m	T17S, R13W, sec 17, NM
	JC-36-54	Alkali andesite-trachyte (TKab)[1]	m	T17S, R13W, sec 9, NM
	JC-38-54	Alkali andesite-trachyte (TKab)[1]	m	T17S, R13W, sec 9, NM
	JC-107-54	Mafic trachyte breccia (TKab)[1]	s	T17S, R13W, sec 17, NM
	JC-10-62	Syeno-diorite (small intrusive, Tpc)[1]	s	T17S, R13W, sec 28, NM
	JC-11-62	Syeno-gabbro dike	s	T17S, R13W, sec 35, NM
	JC-12-54	Syeno-diorite dike	m s	T17S, R13W, sec 35, NM
	JC-2-56	Syeno-gabbro (small plug, Tpb)[1]	s	T17S, R13W, sec 28, NM
	FS-3-82	Syeno-diorite (Tpc)[1]	m	T17S, R13W, sec 28, NM
	JC-9A-56	Monzodiorite dike (Tdd)[1]	s	T17S, R13W, sec 18, NM
	JC-115-54	Tonalite (Tdc)[1]	s	T17S, R14W, sec 13, NM
	JC-109-54	Quartz monzonite-tonalite (Tda/Tdb)[1]	s	T17S, R13-14W, sec 13-18, NM
	JC-16-53	Tonalite, (Tpe)[1]	s	T17S, R13W, sec 8, NM
		Pinos Altos granite pluton		
	JC-1-53	Tonalite, granodiorite	s	T16S, R13W, sec 6, NM
	79-S-100	Tonalite	ma	T16S, R13W, sec 6, NM
	78-PA	Tonalite	a	T16S, R13W, sec 6, NM
		Twin Sisters rhyolite		
Reading Mountain	79-S-101	Massive rhyolite porphyry	ma	T15S, R13W, sec 33, NM
	79-S-102	Massive rhyolite porphyry	ma	T15S, R13W, sec 34, NM
	73-T-2B	Massive rhyolite plug	m	T15S, R15W, sec 25, NM
		Bear Creek pluton		
	79-S-108	Granodiorite	ma	T16S, R14W, sec 24, NM
	T-23-73	Granodiorite	s	T17S, R18W, sec 19, NM
		Juniper Hill pluton		
	79-S-107	Granite	mas	T16S, R14W, sec 30, NM
	79-S-109	Biotite granite	mas	T16S, R14W, sec 30, NM
	T-123-73	Granite	s	T16S, R15W, sec 25, NM
		Saw Mill Mountain pluton		
	79-S-110	Granite	mas	T15S, R14W, sec 29, NM

[1] Rock unit symbols used by Jones, Moore, and Pratt (1970).

Area	Sample no.	Rock type	Analysis	Location (township, range, section, and state)
		SILICIC ERUPTIVE CENTERS AND FLOWS		
		Greasewood Mountain eruptive center		
Pinaleno Mountains	79-T-119	Latite dome flow (altered)	m	T11S, R25E, sec 8, AZ
	79-T-121	Latite dome flow (altered)	m	T11S, R25E, sec 7, AZ
	79-T-57	Rhyolite vitrophyre	m	T11S, R25E, sec 23, AZ
	79-T-61	Rhyolite vitrophyre	m s	T11S, R25E, sec 24, AZ
	79-T-62	Rhyolite vitrophyre	m	T11S, R25E, sec 24, AZ
	80-T-60	Ash flow	m s	T11S, R25E, sec 30, AZ
	80-T-62	Ash flow	m	T11S, R25E, sec 20, AZ
	80-T-63	Ash flow	m	T11S, R25E, sec 19, AZ
	80-T-64	Ash flow	m	T11S, R25E, sec 19, AZ
	80-T-65	Ash flow	m	T11S, R25E, sec 18, AZ
	80-T-66	Ash flow	m	T11S, R25E, sec 18, AZ
	80-T-67	Ash flow	m s	T11S, R25E, sec 18, AZ
	80-T-68	Ash flow	m	T11S, R25E, sec 18, AZ
	78-S-11	Quartz biotite latite dike	ma	T9S, R26E, sec 31, AZ
	79-S-120	Quartz biotite latite dike	ma	T10S, R25E, sec 35, AZ
	79-T-1B	Quartz biotite latite dike	m	T10S, R25E, sec 12, AZ
	79-T-2B	Quartz biotite latite dike	m	T10S, R25E, sec 12, AZ
	79-T-2C	Quartz biotite latite dike	m	T10S, R25E, sec 12, AZ
	79-T-4	Quartz biotite latite dike	m	T10S, R25E, sec 7, AZ
	79-T-6A	Quartz biotite latite dike	m	T10S, R25E, sec 7, AZ
	79-T-13A	Quartz biotite latite dike	m	T10S, R25E, sec 8, AZ
	79-T-15	Quartz biotite latite dike	m	T10S, R25E, sec 13, AZ
	79-T-16A	Quartz biotite latite dike	m	T10S, R25E, sec 13, AZ
	79-T-17	Quartz biotite latite dike	m	T10S, R25E, sec 13, AZ
	79-T-19A	Quartz biotite latite dike	m	T10S, R25E, sec 13, AZ
	79-T-29	Quartz biotite latite dike	m	T10S, R25E, sec 8, AZ
	79-T-31	Quartz biotite latite dike	m	T10S, R25E, sec 34, AZ
	79-T-35	Quartz biotite latite dike	m	T10S, R25E, sec 35, AZ
	79-T-38	Quartz latite dike	m	T10S, R25E, sec 35, AZ
	79-T-41	Quartz latite dike	m	T10S, R25E, sec 25, AZ
	79-T-82B	Quartz latite dike	m	T11S, R25E, sec 10, AZ
	79-T-89	Quartz latite dike	m	T11S, R25E, sec 23, AZ
	79-T-90	Quartz latite dike	m	T11S, R25E, sec 14, AZ
	79-T-95	Quartz latite dike	m	T11S, R25E, sec 9, AZ
	79-T-109	Quartz latite dike	m	T11S, R25E, sec 13, AZ
	79-T-120	Quartz latite dike	m	T11S, R25E, sec 8, AZ
	79-T-42	Early latite flow	m	T10S, R25E, sec 22, AZ
	79-T-81	Latite dome flow	m s	T11S, R25E, sec 10, AZ
	79-T-82A	Latite dome flow	m s	T11S, R25E, sec 10, AZ
	79-T-83	Latite dome flow	m	T11S, R25E, sec 10, AZ
		Turkey Creek eruptive center		
Chiricahua Mountains	78-S-32	Ash flow tuff of Rhyolite Canyon	ma	T16S, R29E, sec 25, AZ

Area	Sample no.	Rock type	Analysis	Location (township, range, section, and state)
		Bear Springs volcano		
Gila Mountains	79-S-123	Dome rhyolite	m	T5S, R26E, sec 13, AZ
	79-S-124	Biotite amphibole porphyry dike	m	T5S, R26E, sec 14, AZ
	79-DR-45	Vitrophyre	m	T5S, R26E, sec 13, AZ
	78-S-2	Rhyolite dike	ma	T6S, R26E, sec 12, AZ
		Tollgate Wash eruptive center		
Northern Peloncillo Mountains	78-S-6	Fayalite rhyolite flow	a	T8S, R29E, sec 8, AZ
	78-S-8	Fayalite rhyolite	a	T7S, R29E, sec 8, AZ
	79-S-118	Rhyodacite flow	ma	T7S, R29E, sec 20, AZ
	78-DR-34	Rhyodacite flow	m	T7S, R29E, sec 16, AZ
	78F-DR-9	Lapilli tuff	m	T6S, R29E, sec 29, AZ
	78F-DR-55A	Tuff	m	T7S, R29E, sec 17, AZ
	78F-DR-55B	Tuff	m	T7S, R29E, sec 17, AZ
	78F-DR-65	Tuff	m	T7S, R30E, sec 28, AZ
	77-Rh-34	Tuff	s	T7S, R29E, sec 16, AZ
	77-Rh-36	Tuff	s	T6S, R29E, sec 32, AZ
		Ash Peak-Rhyolite Peak eruptive center		
	78-S-27	Rhyolite dome	ma	T8S, R30E, sec 10, AZ
	79-S-119	Rhyolite, old phase	ma	T7S, R30E, sec 33, AZ
	78-DR-17	Welded rhyolite ash flow	ma	T8S, R30E, sec 10, AZ
	78-DR-18	Altered tuff	ma	T8S, R30E, sec 10, AZ
	YV-12-80	Rhyolite plug	m	T7S, R30E, sec 35, AZ
	78-DR-83	Rhyolite	s	T7S, R29E, sec 13, AZ
	78-DR-3	Rhyolite	s	T8S, R30E, sec 10, AZ
		Dry Mountain and Powerline Pass eruptive centers		
	78-DR-60	Rhyolite ash flow	s	T8S, R30E, sec 11, AZ
	78-S-9	Rhyolite lapilli tuff	a	T8S, R30E, sec 5, AZ
		Horseshoe eruptive center		
Peloncillo Mountains	8F-4	Fine grained biotite granite	s	T12S, R32E, sec 4, AZ
		Horsecamp volcano		
	80-DR-117A	Rhyolite, crater phase	m	T11S, R31E, sec 22, AZ
	80-DR-124	Rhyolite, rim phase	m	T11S, R31E, sec 23, AZ
		Orange Butte dome		
	78-S-55	Quartz syenite	mas	T12S, R30E, sec 1, AZ
		Mckenzie Peak dome		
	78-S-52	Quartz monzonite	mas	T12S, R31E, sec 35, AZ
		Steins eruptive center		
	80-DR-142	Rhyolite, early cone	m s	T12S, R32E, sec 27, AZ
	80-VL-49	Rhyolite, late cone	m	T12S, R32E, sec 23, AZ
	78-S-54	Ash flow tuff of Steins	ma	T23S, R21W, sec 17, NM
	8F-9A	Ring dome rhyolite	m s	T22S, R21W, sec 32, NM
	75-D-298	Ring dome rhyolite	m s	T23S, R21W, sec 15, NM
	81-DHR-308	Ring dome rhyolite	m s	T23S, R21W, sec 14, NM
	8F-26	Ring dome rhyolite	m	T13S, R32E, sec 2, AZ
	8F-64	Ring dome rhyolite	m	T13S, R32E, sec 8, AZ
	8F-56	Gabbro plug	m	T13S, R32W, sec 16, AZ
	75-D-293	Rhyolite plug	m s	T23S, R21W, sec 21, NM
	8F-11	Rhyolite plug	m	T22S, R21W, sec 28, NM
	8F-12	Rhyolite plug	m	T22S, R21W, sec 32, NM
	8F-13	Rhyolite plug	s	T22S, R21W, sec 32, NM
	8F-14	Rhyolite plug	s	T22S, R21W, sec 32, NM
	8F-28	Rhyolite of ring fault	m s	T23S, R21W, sec 6, NM
		Muir eruptive system		
Pyramid Mountains	76-D-15A	Rhyolite ash flow, Pyramid Peak	m	T24S, R18W, sec 8, NM
	76-D-20	Rhyolite ash flow	m	T24S, R18W, sec 8, NM
	76-D-25	Rhyolite ash flow	m	T24S, R18W, sec 8, NM
	76D-26A,B	Rhyolite ash flow	m	T24S, R18W, sec 8, NM
	76-D-61	Rhyolite intrusive	m	T22S, R19W, sec , NM
		York Valley-Steeple Rock rhyolite system		
Summit Mountains	Yv-26-79	Rhyolite flow, Hells Hole series	m	T5S, R32E, sec 17, AZ
	Yv-27-79	Rhyolite flow, Hells Hole series	m	T5S, R32E, sec 24, AZ
	Yv-72-79	Rhyolite flow, Hells Hole series	m	T15S, R21W, sec 16, NM
	Yv-14-79	Rhyolite porphyry dike	m	T17S, R21W, sec 18, NM
	Yv-60-79	Latite porphyry dike	m	T6S, R32E, sec 20, AZ
	Yv-62-79	Rhyolite porphyry plug	m	T6S, R32E, sec 21, AZ
	Yv-80-79	Quartz latite dike	m	T16S, R21W, sec 27, NM
	Yv-89-79	Rhyolite dike	m	T6S, R32E, sec 32, AZ
	Yv-155-79	Rhyolite sill	m	T16S, R21W, sec 32, NM
	79-S-116	Rhyolite porphyry flow	mas	T6S, R32E, sec 31, AZ
	79-S-117	Rhyolite dacite flow	ma	T16S, R18W, sec 21, NM
	78-S-7	Rhyolite dike at Carlisle	ma	T7S, R21W, sec 11, NM
	SR-4-77	Rhyolite dike at Steeple Rock	m	T17S, R20W, sec 30, NM
	T-23-78	Rhyolite flow in Cliff	m	T17S, R19W, sec 24, NM
		Canador Peak plug		
	CP-24-79	Rhyodacite plug	m	T19S, R20W, sec 16, NM
		Tyrone eruptive system		
Big Burro Mountains	WM-1-78	Biotite rhyolite	s	T19S, R16W, sec 13, NM
	80-S-305	Shrine rhyolite plug	m	T19S, R16W, sec 13, NM
	80-S-306	Shrine rhyolite plug	m	T19S, R16W, sec 13, NM
	80-S-307	Shrine rhyolite plug	m	T19S, R16W, sec 13, NM
	79-S-114	White Signal rhyolite plug	m	T19S, R16W, sec 25, NM
	79-S-115	White Signal rhyolite plug	m	T20S, R15W, sec 26, NM
	80-S-308	Rhyolite dike	m	T20S, R14W, sec 14, NM
	80-S-309	Latite dike	m	T20S, R14W, sec 23, NM
	80-S-310	Rhyolite dike	m	T20S, R15W, sec 20, NM
	80-S-304	Rhyolite dike at Black Hawk	m	T18S, R16W, sec 21, NM
		Burro Cienaga eruptive center		
	79-S-205	Rhyolite vitro-lithic breccia	ma	T21S, R15W, sec 35, NM
	79-S-206	Rhyolite glass	m	T21S, R15W, sec 35, NM
	79-S-207	Rhyolite glass	m	T21S, R15W, sec 35, NM
	79-S-208	Rhyolite flow	m	T21S, R15W, sec 35, NM
	79-S-209	Rhyolite glass	m	T22S, R15W, sec 2, NM
	79-S-210	Rhyolite glass	m	T22S, R15W, sec 2, NM
		Bessie Rhodes eruptive center		
	79-S-200	Dome rhyolite	ma	T23S, R14W, sec 6, NM
	79-S-201	Dome rhyolite	ma	T23S, R14W, sec 6, NM
		Soldiers Farewell dome		
	79-S-203	Andesite	m	T22S, R14W, sec 31, NM
	79-S-204	Andesite	m	T22S, R14W, sec 31, NM
		Rhyolite of Brockman Hills		
Brockman Hills	75-T-38	Rhyolite dike	m	T26S, R17W, sec 12, NM
	75-T-45A	Rhyolite dike	m	T26S, R17W, sec 12, NM
	75-T-45B	Rhyolite dike	m	T26S, R17W, sec 12, NM
		Rhyolite of Cedar Mountain Range		
	75-T-145	Rhyolite dike and plug system	m	T26S, R14W, sec 23, NM
	75-T-146	Rhyolite porphyry	m	T26S, R14W, sec 23, NM

PETROCHEMISTRY OF IGNEOUS ROCKS, SILVER CITY 1° × 2° QUADRANGLE, NEW MEXICO AND ARIZONA

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