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Mineral Resource Areas of the Basin and Range
Province of Texas

Compiled by
Christopher D. Henry and Jonathan G. Price,
Bureau of Economic Geology, The University of Texas at Austin,
Austin, Texas,
and Michelle Frodey Hutchins,
U.S. Geological Survey

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INTRODUCTION

The purpose of this map (pl. 1) and table 1 is to identify the mineralized areas within the Basin and Range Province which include areas of past or present mining and prospecting activity as well as areas of potential resources based on projection of geologic data. The limits of the resource areas shown on the accompanying map are not legal Mining District boundaries and may include more than one district (see table 1) as well as adjacent areas having resource potential. Informal names are used for those areas that have no formal name. Resource areas containing only building materials are not included. This is a preliminary evaluation and is subject to review and to future identification of additional occurrences.

Table 1 tabulates basic information for each resource area, including location, commodities, short description of the type and age of the deposit and the enclosing rock, and a few pertinent references.

Mineral deposits within the Basin and Range Province in West Texas occur largely as vein and replacement deposits containing base and precious metals and mercury, and as low grade disseminations of molybdenum, tin, and tungsten in intrusive rocks. Most deposits are low temperature hydrothermal and are relatively small with only minor production records. Some minor but significant production of mercury came from the Terlingua area. Most of the mines in the region are small and many areas have only shallow prospects or open cuts.

Table 1.--Mining areas of the Basin and Range province of Texas (by counties)

County	Mining area	Location	Commodities	Description of deposit and host rock	References
Brewster	Altuda Mountains	East of Alpine, south of U.S. 90. ~30°21'N. lat.; 103°31'W. long.	Ag, Pb, Mo, Cu, Zn	Replacement bodies in Permian Capitan Formation (limestone) adjacent to breccia pipe-intrusive complex. Deeper porphyry-type mineralization in breccia pipe-intrusive complex.	13, 31, 34
	Southern Davis Mountains	South of Alpine along both sides of State Highway 118. ~30°4'N. lat.; 103°33'W. long.	U	Mineralization in lignite and reduced lacustrine limestone and tuff of the Tertiary Pruett Formation.	32
	Christmas Mountains	North of Big Bend National Park, east of State Highway 118. ~29°28'N. lat.; 103°27'W. long.	Fluorite, U, Mo, Hg	Open-space filling and replacement deposits in Cretaceous limestone and shale, and in Tertiary rhyolitic intrusions.	9, 13, 23
	Mariscal	Southernmost part of Big Bend National Park. ~29°06'N. lat.; 103°11'W. long.	Hg, fluorite	Deposits in caverns and fractured zones in Cretaceous limestones and shales and, locally, in fractured intrusive rocks.	4, 36
	Solitario	South Brewster Presidio Counties. ~29°26'N. lat.; 103°47'W. long.	Ag, Pb, Zn, Mo	Veins in Cretaceous Santa Elena Limestone and in Tertiary rhyolites. Minor mineralization in a granitic intrusion underlying The Solitario.	8
	Terlingua	In the vicinity of 29°20'N. lat.; 103°40'W. long.	Hg, fluorite	Mineral deposits in Cretaceous Santa Elena Limestone, intruded by dikes, sills, and laccoliths of basaltic to rhyolitic composition.	4, 41
Culberson	Apache Mountains	Apache Mountains, north of Interstate 10. ~31°12'N. lat.; 104°26'W. long.	Zn	Irregular veins in limestone of the Permian Capitan Formation.	5
	Guadalupe	South of New Mexico boundary and north of U.S. Highway 62, 180. ~31°58'N. lat.; 104°48'W. long.	Cu, Pb, Zn; fluorite	Deposits in calcite veins in Permian limestone of the Carlsbad Group.	17, 35
	Seven Heart Gap	Northwest of Van Horn. 31°15'N. lat.; 104°29'W. long.	Barite	Replacement of anhydrite beds and breccia matrix in Permian Castille Formation.	6, 10, 21
	Van Horn-Allamore	East of Allamore Talc, north of Van Horn mining area along the county boundary. 31°10'N. lat.; 104°52'W. long.	Ag, barite, Cu, Pb, Zn	Veins and tabular ore bodies in volcanic rocks, sandstones, and limestone clast conglomerates of Precambrian Allamore and Hazel Formations; barite vein deposits in lower Paleozoic limestones.	6, 10, 12, 13, 36

Table 1.--Mining areas of the Basin and Range province of Texas (by counties)--Continued

County	Mining area	Location	Commodities	Description of deposit and host rock	References
Culberson	Van Horn Mountains	The western flank of the Van Horn Mountains along the county boundary. 30°50'N. lat.; 104°52'W. long.	Ag, Cu, feldspar, mica (muscovite, biotite)	Disseminated Ag and Cu deposits along bedding planes in sandstone within Permian Powwow Conglomerate Member of Hueco Limestone; mica and feldspar in Precambrian pegmatites.	12, 13, 35 28b
El Paso	Franklin Mountains	From the city of El Paso north to the state boundary. 31°53'N. lat.; 106°29'W. long.	Cu, Sn, W	Quartz veins in Precambrian granite and related placer deposits.	13, 16, 20, 26, 35
Hudspeth	Allamore Talc	In the vicinity of 31°10'N. lat.; 105°10'W. long.	Talc	Talc rock in phyllites with interbedded chert, carbonates, and volcanic rocks, all within Precambrian Allamore Formation.	7, 13, 18, 26
	Briggs	Northern Malone Mountains. 31°15'N. lat.; 105°35'W. long.	Anhydrite, gypsum	Deposits in Permian Briggs Formation.	1, 26, 40
	Carrizo Mountains	Carrizo Mountains, southwest of Van Horn. ~31°02'N. lat.; 104°56'W. long.	Cu, Ag, Zn	Veins in metamorphic rocks of the Precambrian Carrizo Mountain Group.	18
	Cave Peak	Margin of Diablo Plateau and Salt Basin. ~31°27'N. lat.; 104°53'W. long.	Mo, Sn, W	Porphyry-type mineralization in Tertiary breccia pipe-intrusion complex.	37
	Cornudas Mountains	Along the northern state boundary. 31°59'N. lat.; 105°32'W. long.	Be	Permian sandstones, Cretaceous sedimentary rocks, and intrusive rocks of Tertiary age.	20
	Eagle Mountains	In the vicinity of 30°55'N. lat.; 105°05'W. long.	Ag, Cu, fluorite, Pb, Zn	Open-space fillings in Cretaceous sedimentary rocks and Tertiary volcanic rocks; replacement deposits in Cretaceous limestone along faults or fractures; some deposits in Precambrian Carrizo Mountain Formation.	10, 12, 13, 14, 35
	Indio Mountains	Southern tip of county. ~30°46'N. lat.; 105°00'W. long.	Ag, Cu, Pb, Zn, barite	Veins in sandstone and conglomerates of Cretaceous Yucca Formation.	38, 39
	Quitman Mountains	Southwest of Sierra Blanca. ~31°11'N. lat.; 105°30'W. long.	Ag, Pb, Zn, W	Veins in Tertiary quartz monzonite intrusion and skarns in adjacent Cretaceous sedimentary rocks.	12, 25, 27, 35
	Salt Flat	Just north of U.S. Highway 180. 31°47'N. lat.; 105°02'W. long.	Salt	Evaporite deposits around salt lakes.	36

Table 1.--Mining areas of the Basin and Range province of Texas (by counties)--Continued

County	Mining area	Location	Commodities	Description of deposit and host rock	References
	Sierra Blanca	Northwest of Sierra Blanca. -31°17'N. lat.; 105°27'W. long.	Be, fluorite	Replacement deposits in Cretaceous limestone adjacent to contacts with Tertiary rhyolitic intrusions.	23, 24
Jeff Davis	Medley	Southern Davis Mountains. -30°32'N. lat.; 104°10'W. long.	Kaolin, rutile	Kaolinite and minor pods of rutile in silicified Tertiary volcanic rocks.	19, 35
Presidio	Buckshot	Sierra Vieja, northwestern part of county. -30°27'N. lat.; 104°48'W. long.	U	Mineralization in cavities and fractures in Tertiary Buckshot Ignimbrite.	3, 15, 28, 32
	Infiernito	Northern Chinati Mountains. -30°02'N. lat.; 104°21'W. long.	Mo, Ag	Veins and stockwork veinlets in Tertiary quartz monzonite porphyry.	29
	Loma Plata	Southern Sierra Vieja. -30°29'N. lat.; 104°34'W. long.	Ag, Pb; Mn	Hydrothermal pipes in Lower Cretaceous limestone; fracture fillings in Tertiary rhyolitic ash-flow tuff.	2, 12
	Pinto Canyon	Northern Chinati Mountains. -30°00'N. lat.; 104°30'W. long.	U	Mineralization in fracture zones in Tertiary rhyolitic intrusions.	2
	Shafter	South edge of Chinati Mountains. -29°49'N. lat.; 104°20'W. long.	Ag, Pb, Zn; Mo, Cu	Mantos and minor veins in dolomitic limestone of Permian Mina Grande Formation. Porphyry Mo-Cu mineralization in quartz monzonite.	12, 25, 30, 33
	West Chinati Stock	Northwestern part of Chinati Mountains. -30°29'N. lat.; 104°34'W. long.	Ag, Pb, Zn, fluorite; Cu	Veins in Tertiary intrusive rocks of the West Chinati stock.	13, 22, 36

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