MOLYBDENUM IN THE UNITED STATES
(Exclusive of Alaska and Hawaii)

by
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INTRODUCTION

The accompanying map shows the principal deposits and many minor occurrences of molybdenum in the conterminous United States. Six types are distinguished by shapes of the symbols used, and three size categories indicate the relative importance of the deposits.

The six types are (1) disseminated or stockwork molybdenum deposits in which molybdenite (MoS_2) is the chief or sole economic mineral present, (2) disseminated or "porphyry"-type copper-molybdenum deposits from which molybdenite is recovered as a byproduct or co-product of the mining of copper, (3) vein or simple fissure fillings, (4) contact-metamorphic (pyrometasomatic) deposits and replacements, (5) pegmatites, and (6) bedded deposits in sedimentary rocks.

The sizes are based on molybdenum content; both production, if any, and estimated reserves were considered in assigning categories. Cutoffs between large and medium are 100,000,000 pounds and between medium and small 100,000 pounds of molybdenum, respectively. These categories indicate only order of magnitude, however, and no pretense of precision is intended. Deposits for which insufficient data are available to estimate size are shown as being of the smallest category.

The map symbols are plotted to the nearest minute and do not necessarily distinguish between individual deposits, groups of deposits, or districts; about 445 symbols represent many more deposits because some are more closely spaced than plotting at the scale used will allow with clarity.

Where the principal molybdenum mineral is other than molybdenite an identifying letter is added beside the symbol for that deposit: J, jordisite (amorphous molybdenum disulfide, MoS_2); I, ilsemannite (molybdenum oxy-sulfate); W, wulfenite (lead molybdate, $PbMoO_4$); P, powellite (calcium molybdate-calcium tungstate, $Ca(MoW)O_4$); F, ferrimolybdite (hydrous ferric molybdate, $FeMoO_3.nH_2O$).

Deposits or localities are numbered consecutively by States and are identified in the locality index. Both published and unpublished information was used in compiling the map, and at least one reference is given for each locality if reports concerning the area are published.

GEOLOGY

Molybdenite is the most common naturally occurring molybdenum mineral, and, with the possible exceptions of ferrimolybdite, jordisite, and molybdenum-bearing iron oxides, is the only one of present commercial importance in the United States. Wulfenite was an important source of molybdenum during the first two decades of this century, and recently molybdenum has been recovered from bedded uranium ores in North and South Dakota and New Mexico that contain jordisite and from ferrimolybdite and molybdenum-bearing iron oxides at the Climax deposit. More than a dozen other minerals are known that contain molybdenum as an essential element or in trace amounts; however they have not been found to occur in deposits sufficiently large to be of economic importance.

Although molybdenum deposits are widely scattered across the nation, having been recorded in 29 of the States, 99 percent of the known reserves are contained in a few large disseminated deposits in the Rocky Mountain region of Colorado and New Mexico and in a few large porphyry copper deposits of the Basin and Range region of Arizona, Nevada, and Utah. Most molybdenum produced in the United States has come from such deposits, either ones in which molybdenum is the only or primary mineral sought or from deposits in which molybdenum is recovered as a byproduct of copper mining operations. Some molybdenum is produced as a co-product with tungsten.

Historically, molybdenum has been obtained in relatively small tonnages from pegmatites, quartz veins, and contact-metamorphic deposits, as well as from near-surface oxidized portions of base-metal deposits. The economics of mining, extraction, and refining today relegate most of these deposits to the category of specimen or geologic interest.

The disseminated or porphyry-type molybdenum deposit is widespread over the western part of the United States, from Washington and Montana on the north to Arizona and New Mexico on the south. These deposits seem to be closely related to intrusive stocks or plugs of rhyolite or quartz monzonite porphyry of Late Cretaceous to mid-Tertiary age. Pervasive hydrothermal alteration and metallization of large volumes of intensely fractured rock are the most conspicuous features of these deposits. The deposits are of relatively large dimensions but have low metal content; at Climax, the world's largest molybdenum mine, "more than 2,000 lbs. of ore must be mined to recover some 4 lbs. of molybdenum."* These deposits are of major economic importance only because they are peculiarly amenable to large-scale low-cost mining techniques and relatively simple extractive processes.

*Five minutes with molybdenum, Climax Molybdenum Company Division AMAX, 1966.

Molybdenite in quartz veins is probably the most common mode of occurrence of molybdenum in the United States. Deposits of this type are known throughout the Cascade and Sierra Nevada Ranges from Washington to California, and in the Rocky Mountains from Idaho and Montana to New Mexico; they are also scattered along the Appalachian Mountains from Maine to Alabama. The vein deposits are in intrusive rocks of granitic to dioritic composition and in associated metamorphic rocks. Molybdenite most commonly occurs with pyrite in quartz gangue, often associated with chalcopyrite, fluorite, and base-metal sulfides, and in some places with graphite, scheelite, or beryl; many gold- and silver-bearing vein deposits also contain small amounts of molybdenite. In the oxidized upper parts of some base-metal veins wulfenite is the molybdenum mineral, as at the Shenandoah mine in Nevada and at the Mammoth-St. Anthony and Rowley mines in Arizona. Vein-type deposits of molybdenum ordinarily are not profitably minable due to their limited dimensions or small reserves. The most notable exception was the Questa mine in New Mexico, from which more than 20 million pounds of molybdenum was obtained during the period from about 1920 to 1955 when high-grade veins were worked; the present operation is confined to a very large disseminated deposit.

In the contact-metamorphic deposits common to the Basin and Range Province of the western United States, molybdenum occurs as molybdenite or powellite commonly

associated with scheelite. The deposits are mostly in zones of silicated or garnetized limestone (tactite) close to contacts with granitic intrusive bodies. Molybdenum is being recovered as a by-product from the mining of copper in the pyrometasomatic replacement deposits at the Christmas mine, Arizona, and both molybdenum and tungsten concentrates are produced at the Pine Creek mine in California.

Pegmatite deposits containing molybdenite are known throughout the Rocky Mountains and in the central and northern parts of the Appalachian Mountains. Molybdenite is generally in the form of coarsely crystalline aggregates associated with quartz, feldspar, and mica, and rarely with beryl. Most deposits occur in batholithic granite bodies or in associated metamorphic rocks. Except for specimen material, these deposits have not yielded significant amounts of molybdenum in the United States and are not economically important.

Molybdenum occurs with and without uranium in bedded deposits in sedimentary rocks of Late Jurassic to mid-Tertiary age in New Mexico, Colorado, Wyoming, and North and South Dakota. The molybdenum minerals include jordisite and ilsemannite, uranium-molybdenum minerals such as umohoite and iriginite, and some molybdenum-bearing iron-oxides; however, ferrimolybdite is not known to occur in sedimentary deposits. Molybdenum in unknown mineral form also occurs with vanadium and selenium in black shales associated with phosphorites of Wyoming and adjacent areas and in small amounts in certain lignite deposits and black shales in the Dakotas, in coals of the central United States, and in black shale deposits of the southeastern United States.

In the lignite deposits of North and South Dakota, and in some of the sedimentary uranium deposits of New Mexico, the molybdenum content of the deposits is sufficiently high to provide an economic by-product.

LOCALITY INDEX

Mining district or locality	Lat. N.	Long. W.
ALABAMA		
1. Hatchet Creek Copper prospect. Molybdenite with disseminated copper sulfides.	33°17′	86°02′
ARIZONA		
1. Ithaca Peak (Mineral Park, includes Gross prospects). Molybdenite in veins and disseminated in granite. Dings, 1951.	35°22′	114°09′
2. Squaw Peak Mine. Molybdenite in quartz veins and disseminated in quartz diorite. Kirkemo, 1965.	34°29′	111°51′
3. Copper Basin deposits (Commercial, Copper Hill, and Loma Prieta mines). Molybdenite in veins in breccia pipes. Johnston and Lowell, 1961.	34°29′	112°35′
4. Bagdad mine. Molybdenite with disseminated copper sulfides. Anderson, Scholz, and Strobell, 1955.	34°35′	113°12′
5. Leviathan mines (Dudley Claims, Molybdenum Corp. mines, Deluge Wash). Molybdenite in quartz veins cutting quartz diorite. Hess, 1924.	34°51′	113°45′
6. Morenci mine. Molybdenite with disseminated copper sulfides. Reber, 1916.	33°07′	109°22′
7. Inspiration mine (Miami, Copper Cities, Castle Dome). Molybdenite with disseminated copper sulfides. Peterson, N. P., 1962.	33°25′	110°53′
8. Christmas Mine. Molybdenite with copper sulfides in pyrometasomatic replacement of limestone. Peterson and Swanson, 1956.	33°04′	110°45′
9. Ray mines. Molybdenite in disseminated copper sulfides. Ransome, 1919.	33°10′	111°00′
10. Rowley (Rawley, Reliance) mine. Wulfenite and ferrimolybdite in quartz veins cutting andesite. U.S. Geol. Survey, 1921, p. 352, 799.	33°03′	113°02′
11. Copper Creek area (Childs-Aldwinkle mine). Molybdenite in mineralized breccia pipe. Kuhn, 1941.	32°45′	110°29′
12. San Manuel mine. Molybdenite in disseminated copper sulfide deposit. Schwartz, 1953.	32°42′	110°41′
13. Mammoth-St. Anthony mine. Wulfenite and vanadinite in base metal veins. Creasey, 1950.	32°42′	110°41′
14. Silver Bell mine. Molybdenite in disseminated copper deposit. Richard and Courtright, 1954.	32°24′	111°30′
15. Pima Mine. Molybdenite in disseminated copper deposit and in pyrometasomatic replacement. Thurmond and others, 1958.	31°59′	111°04′
16. Leader mine. Molybdenite in tactite in fault zone. Creasey and Quick, 1955.	31°52′	110°46′
17. Esperanza (New Years Eve) mine. Molybdenite with disseminated copper sulfides.	31°53′	111°08′
18. Gold Bullion mine. Molybdenite in quartz veins cutting granite.	31°43′	111°36′
19. Santo Nino mine. Molybdenite in veins in feldspathized zone in quartz monzonite.	31°22′	110°48′

Mining district or locality	Lat. N.	Long. W.
ARIZONA—Continued		
20. O.K. claims. Molybdenite and wolframite in quartz veins. Schrader, 1909.	35°49′	114°13′
21. Alyce Tolino mine (Cameron). Umohoite and ilsemannite with uranium minerals in sandstone. Hamilton and Kerr, 1959.	35°53′	111°24′
22. Telluride chief (Standard Minerals). Molybdenite with wolframite and scheelite in quartz veins.	35°09′	113°37′
23. Republic mine (Johnson Camp). Molybdenite with Cu, W, and Bi in pyrometasomatic deposit in limestone. Cooper, 1950.	32°07′	110°05′
24. Sun Valley mine. Ilsemannite and jordisite(?) with uranium minerals in sandstone. Peterson, Hamilton, and Meyers, 1959.	36°43′	111°48′
25. Twin Ledge prospect. Molybdenite with pyrite in quartz vein cutting granite.	34°28′	112°28′
26. Rare Metals deposit. Molybdenite in quartz veins.	33°05′	111°02′
27. Sun Lode Claims. Molybdenite in quartz along fault and in quartz veins in diorite.	31°44′	110°52′
28. Roscoe Group. Molybdenite with copper in veins in granite.	33°23′	110°56′
29. Glove mine. Wulfenite in oxidized lead-zinc-silver veins in quartz monzonite. Olson, 1966.	31°39′	110°57′
30. Red Hill (Four Metals) mine. Molybdenite with copper sulfides disseminated in breccia pipe.	31°24′	110°44′
ARKANSAS		
1. Mo-Ti prospect (including Christy property). Molybdenite in quartz veins. Fryklund and Holbrook, 1950.	34°28′	92°51′
2. Kimzey prospect. Molybdenite in calcite. Fryklund and Holbrook, 1950.	34°27′	92°53′
CALIFORNIA		
1. Boulder Creek mine. Molybdenite in aplite cutting peridotite. Averill, 1939.	41°01′	122°27′
2. Allen Molybdenum prospect. Molybdenite in quartz veins cutting metamorphic rocks.	39°26′	120°35′
3. Fern Leaf (Cleveland, Oregon Creek) deposit. Molybdenite in quartz veins cutting slate.	39°27′	121°03′
4. Blue Speck mine. Molybdenite in quartz veins cutting granodiorite. Kirkemo and others, 1965.	38°27′	119°15′
5. Polaris Moly prospect. Molybdenite in quartz veins and pegmatite. Pabst, 1954.	38°29′	119°28′
6. White Horse-Bay Horse claims (Moore Creek). Molybdenite with scheelite in tactite. Stager, 1965.	38°28′	120°15′
7. Consumnes (Cosumnes) Copper mine. Molybdenite with chalcopyrite in skarn. Robertson and Tatlock, 1965.	38°36′	120°36′
8. September Group of claims. Molybdenite in tactite. Kirkemo and others, 1965.	37°56′	119°16′
9. Laurel Creek Molybdenum-Tungsten prospect. Molybdenite in quartz veins and in tactite. Kirkemo and others, 1965.	37°34′	118°55′
10. Pine Creek mine. Molybdenite with scheelite in contact-metamorphosed limestone. Bateman, 1956.	37°22′	118°43′
11. Atkins prospect. Molybdenite in aplite dike cutting quartz monzonite. Kirkemo and others, 1965.	37°14′	118°38′
12. War Baby prospect. Molybdenite in aplite dike cutting quartz monzonite. Kirkemo and others, 1965.	36°11′	118°02′
13. Bour mine. Molybdenite in aplite cutting granodiorite. Calkins, 1917.	33°04′	116°58′
14. Fidgie group. Molybdenite with scheelite and powellite in tactite.	35°34′	118°24′
15. White River prospect. Molybdenite in quartz veins in aplite.	35°51′	118°39′
16. Kergon mine. Jordisite and ilsemannite with uranium minerals in shear zone in granodiorite. MacKevett, 1960, Walker, Lovering, and Stephens, 1956.	35°34′	118°34′
17. Yellow Butte. Molybdenite in quartz veins.	41°33′	122°15′
18. Buchanan prospect. Molybdenite in vein in granite. Horton, 1916.	36°48′	118°36′
19. Kaweah molybdenum. Molybdenite with wolframite and scheelite disseminated in granodiorite. Krauskopf, 1953.	36°35′	118°34′

Mining district or locality	Lat. N.	Long. W.
CALIFORNIA—Continued		
20. Vancouver Pinnacles Molybdenum Co. Molybdenite in quartz veins in granite.	36°26′	121°12′
21. L. S. Wingrove's prospect. Molybdenite in quartz vein. Horton, 1916.	35°53′	118°40′
22. Imperial Lode Mining and Reduction Co. Wulfenite in vein cutting quartz porphyry.	34°44′	116°18′
23. War Eagle mine. Molybdenum and vanadium with lead ores. Wulfenite in veins.	34°27′	115°55′
24. Fletcher prospect (Corona quarry). Molybdenite in pegmatite in granite. Hess, 1908.	33°55′	117°32′
25. Campo (includes Dillbeck) prospect. Molybdenite disseminated in aplite. Weber, 1963.	32°37′	116°29′
26. Alpine mine. Molybdenite, powellite, and scheelite in tactite.	38°44′	119°58′
27. Lucky Boy prospect. Molybdenite in quartz vein.	36°50′	118°02′
28. Coso Molybdenite mine (DeSoto). Molybdenite disseminated in granite. Tucker, and Sampson, 1938.	36°08′	117°51′
29. Golden group (Ferris). Molybdenite disseminated in granite. Horton, 1916.	35°21′	118°30′
30. Monte Cristo mine. Molybdenite in quartz-pyrite veins in anorthosite. Sharp, 1959.	34°21′	118°05′
31. Winter Creek group. Molybdenite with copper sulfides in quartz veins cutting diorite. Sampson, 1937.	34°12′	118°01′
32. Lowman claims. Molybdenite in quartz veins in granite.	34°20′	118°17′
33. Cole (Neal, Williams, Camp). Molybdenum deposit. Molybdenite in veins in schist and granite.	34°15′	117°49′
34. Mayflower mine (Wisconsin and Illinois claims). Molybdenite in quartz vein. Eakle, 1923.	39°14′	120°59′
35. Red Mountain deposits. Molybdenite in quartz veins. Horton, 1916.	39°20′	120°32′
36. Excelsior mine. Molybdenite in veins.	39°24′	120°30′
37. Elder (Willit, Golden Stag) mine. Molybdenite with copper sulfides in granodiorite. Eakle, 1914.	38°58′	121°02′
38. Mohawk, Murdock, Jumbo claims. Molybdenite in veins.	39°54′	120°08′
39. Mayer's Ranch, Scheckler deposit. Molybdenite in quartz veins. Weber, 1963.	32°35′	116°45′
40. Harvey Ranch (Echo Mine). Molybdenite disseminated in aplite.	32°51′	116°49′
41. Woolsey deposit (Fernbrook mine). Molybdenite disseminated in aplite granite. Tucker and Reed, 1939.	32°58′	116°54′
42. Dewey mine. Molybdenite in vein.	33°10′	116°32′
43. Lowden Ranch. Molybdenite with ferrimolybdite in veins.	40°40′	122°56′
44. Tower Peak prospect. Molybdenite in quartz veins in schist. Turner, 1898.	38°09′	119°36′
45. MacDonald group. Molybdenite with copper minerals in granite.	34°38′	118°57′
COLORADO		
1. Nye property (Wilma Claims, Apex). Molybdenite in quartz veins. Harshman, 1965.	39°52′	105°33′
2. Urad mine. Molybdenite in quartz veins and disseminated in granite. Vanderwilt, 1947.	39°45′	105°50′
3. Climax mine. Molybdenite disseminated in granite. Vanderwilt and King, 1955.	39°22′	106°10′
4. East Red Mountain area (includes Burge group, Collins, and Mt. Ewing). Molybdenite, pyrite, and chalcopyrite in veinlets in rhyolite. Worcester, 1919.	39°02′	106°31′
5. Winfield Peak area (includes Sea Chest, Hope Mountain, and Banker). Molybdenite disseminated in quartz monzonite and in veins in granite. Worcester, 1919.	38°59′	106°28′
6. Gold Hill mines (Bonton, Mammoth, Complex, Molybdenite, Ida May, Hubnerite, and others). Molybdenite in quartz veins. Dings and Robinson, 1957.	38°41′	106°29′
7. Clyde mine. Molybdenite in quartz veins. Lovering and Tweto, 1953.	39°59′	105°30′
8. Conger and Greyback mines. Molybdenite in veins in schist. Lovering and Tweto, 1953.	39°58′	105°31′
9. Sunday vein. Molybdenite with chalcopyrite and scheelite in veins. Lovering and Tweto, 1953.	39°57′	105°30′
10. Mogul Tunnel. Molybdenite in veins in gneiss. Lindgren, 1907.	39°57′	105°34′

Mining district or locality	Lat. N.	Long. W.
COLORADO—Continued		
11. Iron King (Copper King). Molybdenite in pegmatite. Worcester, 1919, Horton, 1916.	40°51′	105°30′
12. Iron Creek. Molybdenite in mylonite zone in metamorphic rocks.	39°51′	105°56′
13. Clifford mine. Molybdenite in quartz vein in gneiss. Worcester, 1919.	39°48′	105°34′
14. Popovich and McKay's claims. Molybdenite in quartz vein in schist. Worcester, 1919.	39°26′	106°29′
15. Governor mine. Molybdenite with lead-zinc sulfides in quartz vein in sandstone. Warner and others, 1959.	39°24′	106°03′
16. Green Horn (Red Mountain and Lincoln Gulch). Molybdenite in brecciated quartz. Horton, 1916.	39°01′	106°36′
17. Geneva claim. Molybdenite in tactite. Worcester, 1919. Warner and others, 1959.	38°46′	106°24′
18. Royal Purple, Nest Egg prospects (Cree Camp). Molybdenite in quartz vein in quartz monzonite. Worcester, 1919. Warner and others, 1959.	38°35′	106°19′
19. Irene (also Jumbo No. 2) claim. Molybdenite in quartz vein in volcanic rocks. Worcester, 1919.	37°56′	107°41′
20. Mosca Pass prospect. Molybdenite in pegmatite. Worcester, 1919.	37°45′	105°26′
21. Merrimac claim (Platoro district). Molybdenite in quartz vein in granite gneiss. Worcester, 1919.	37°21′	106°32′
22. Kings Canyon mine. Molybdenite and chalcopyrite in pegmatite cutting gneiss. Steven, 1960.	40°56′	106°12′
23. Foch, Copper Mask, and other claims. Molybdenite and chalcopyrite in pegmatitic quartz veins in granite gneiss. Harshman, 1965.	40°51′	106°53′
24. Maybell area. Jordisite(?) and ilsemannite with uranium in sandstone.	40°33′	108°00′
25. Mtn. Lion-Keystone mine. Molybdenite in veins. Lovering and Goddard, 1950.	39°59′	105°22′
26. Schwartzwalder mine. Molybdenite in breccia reef.	39°51′	105°17′
27. Dr. No. 2 claims. Molybdenite in quartz veins.	39°47′	105°52′
28. Redskin mine (includes Brown, and Black Prince). Molybdenite, beryl, and uranium minerals in greisen pipes in granite. Worcester, 1919.	39°06′	105°25′
29. Wagner claims. Molybdenite and pyrite in quartz veins cutting granite and gneiss.	39°00′	106°28′
30. Yule Creek Molybdenite prospects. Molybdenite in quartz veins. Vanderwilt, 1937.	39°00′	107°07′
31. Little Guy mine (Crescent mines, Crescent Molybdenum Co.). Molybdenite in quartz veins cutting granite.	38°59′	106°25′
32. California mine. Molybdenite with beryl in quartz vein cutting quartz monzonite. Adams, 1953.	38°39′	106°16′
33. Humbug stock. Molybdenite disseminated in quartz monzonite. Horton, 1916.	39°27′	106°09′
34. D and G property. Molybdenite in tactite and quartzite. Koschmann and Wells, 1946.	39°27′	106°10′
35. Salamander and Blue Valley claims. Molybdenite in veins. Horton, 1916.	39°23′	106°05′
36. Black King No. 5 claim. Jordisite and ilsemannite with uranium minerals in sandstone. Gruner and Gardiner, 1952.	38°02′	108°03′
37. Ophir Valley (Nevada Gulch, Deadwood Tunnel, Chapman Gulch, Yellow Jacket, New Dominion, Silver Tip). Molybdenite and pyrite in veins and in breccia pipes. Vhay and Varnes, 1965.	37°51′	107°49′
38. Anchor mine. Molybdenite with pyrite and fluorite in quartz veins. Sims and others, 1963.	39°47′	105°30′
39. Paradise Pass deposit. Molybdenite in veinlets in quartz monzonite. Worcester, 1919.	38°59′	107°04′
40. Lamphere Lakes deposit. Molybdenite in quartz veins in gneiss. Worcester, 1919.	38°41′	106°36′
41 Copper King mine. Molybdenite with pyrite and chalcopyrite in veins in quartz monzonite.	38°47′	106°29′
42. Copper Hill (Clover Mtn.) deposit. Molybdenite and copper sulfides disseminated in granite. Dings and Robinson, 1957.	38°34′	106°22′

Mining district or locality	Lat N.	Long. W.
COLORADO—Continued		
43. Matterhorn Peak deposit. Molybdenite in quartz veinlets in altered volcanics.	38°04′	107°29′
44. Bighorn shaft (Red Warrior group). Molybdenite in quartz-pyrite veins in schist. Worcester, 1919.	40°01′	105°34′
45. D.M.D. claims. Molybdenite with copper and lead sulfides in veins in quartz monzonite. Worcester, 1919.	38°43′	106°17′
46. Telluride Mtn., Alum Creek. Molybdenite in veinlets in quartz monzonite.	37°24′	106°34′
47. Knight-Stacy claims. Molybdenite, pyrite, and chalcopyrite in quartz veins in diorite. Worcester, 1919, Horton, 1916.	38°06′	105°39′
48. West Creek deposit. Molybdenite in basic dike in granite.	39°10′	105°13′
49. Copper Girl and Valley View claims. Molybdenite and chalcopyrite in bands in schist. Worcester, 1919.	38°22′	105°23′
50. Liberty Bond claims. Molybdenite with pyrite and calcite in diabase dike. Worcester, 1919.	38°16′	105°23′
51. Fluorspar mine. Ilsemannite incrustations on fluorite, copper sulfides and wall rocks. Steven, 1960, Goldring, 1942.	40°56′	106°17′
52. Chicago Basin deposit. Sparse molybdenite in veinlets in rhyolite porphyry.	37°37′	107°37′
53. Oregon claims. Molybdenite in quartz veins in granite. Worcester, 1919.	37°35′	107°36′
54. Gavette and Collinson claims. Molybdenite in quartz veins in schist. Worcester, 1919.	38°50′	108°39′
55. "The Blowout" deposit. Molybdenite, pyrite, and chalcopyrite disseminated in granodiorite porphyry. Burbank, 1930.	38°02′	107°40′
56. Van Epps, White Swan, Humbug claims. Molybdenite in veins.	39°20′	106°08′
57. Kerber Creek area. Molybdenite and chalcopyrite disseminated in altered quartz monzonite. Cook, 1954.	38°15′	106°07′
58. Gold Finch, Hidden Treasure, and other claims. Molybdenite in veins in andesite and rhyolite. Worcester, 1919.	37°52′	107°43′
59. North Star deposit. Molybdenite with huebnerite, scheelite, and tungstite in quartz veins. Singewald, 1947.	39°23′	106°06′
60. Tolland deposit (East Portal). Molybdenite in pegmatite.	39°54′	105°38′
CONNECTICUT		
1. Bristol Copper mine. Molybdenite with copper sulfide in veins in schist and disseminated in sandstone. Januzzi, 1959.	41°43′	72°56′
IDAHO		
1. Virginia-Beth prospect. Molybdenite in quartz veins cutting granite. Ross, 1965.	44°45′	115°15′
2. Boulder Creek deposit. Molybdenite disseminated in quartzite and in quartz veinlets near contact with granite. Ross, 1937.	44°03′	114°34′
3. Empire mine (including Phoenix and Vaught mines). Molybdenite and powellite with copper and tungsten in contact metamorphic rocks. Cook, 1956.	43°54′	113°40′
4. Walton prospect. Molybdenite in quartz veins cutting quartz monzonite stock. Umpleby, Westgate, and Ross, 1930.	43°52′	114°16′
5. Boundary deposit. Molybdenite in veins. Hubbard, 1955.	48°48′	116°47′
6. Profile Gap mine. Molybdenite with copper and tungsten minerals in tactite. Cook, 1956.	45°04′	115°25′
7. Little Falls Creek prospect. Molybdenite disseminated in quartz monzonite.	44°05′	115°45′
8. White Mountain prospect. Molybdenite in quartz veins cutting quartz monzonite stock. Umpleby, Westgate, and Ross, 1930.	43°50′	114°14′
9. Rinebold (Roaring River) prospect. Molybdenite in quartz veins in granite. Schrader, 1924.	43°41′	115°28′
10. Decker-Hortenstine. Molybdenite in quartz veins cutting granite. Schrader, 1924.	43°39′	115°28′
11. Hines prospect (Nordman). Molybdenite in quartz veins.	48°40′	116°58′
12. Helena mine and others, Landers area. Powellite with molybdenite and scheelite in contact metamorphic deposits in limestone and granite. Cook, 1954.	45°07′	116°38′

Mining district or locality	Lat. N.	Long. W.
IDAHO—Continued		
13. International Moly Company mine. Molybdenite in pegmatitic quartz veins in granite. Kirkham and Ellis, 1926.	48°53′	116°50′
14. American Girl claims (Kent). Molybdenite in pegmatitic quartz veins in granite. Kirkham and Ellis, 1926.	48°55′	116°20′
15. Benson claims. Molybdenite with pyrrhotite in garnetized schist. Livingston, 1919.	45°14′	115°33′
16. Orogrande district (Petsite Lode). Molybdenite with pyrite, galena, and chalcopyrite in veins in granodiorite. Ross, 1941.	45°42′	115°32′
17. Blue Wing district (Ima or Patterson Mine). Molybdenite, huebnerite, galena, sphalerite, and chalcopyrite in quartz veins in quartzite. Callaghan and Lemmon, 1941, Ross, 1941.	44°32′	113°41′
18. Eight Mile Creek deposit (Blue Jay?). Molybdenite in pegmatite vein in granite. Livingston, 1919.	44°37′	113°33′
19. Spring Creek (Viola?) prospect. Molybdenite in quartz veins in granite.	45°33′	114°14′
20. IXL and Red Ledge mines. Molybdenite with chalcopyrite disseminated in granite. Cook, 1954.	44°44′	116°47′
MAINE		
1. Henderson farm prospect. Molybdenite in quartz vein in metamorphosed limestone near granite contact.	46°12′	67°48′
2. Cooper (Catherine Hill) mine. Molybdenite in pegmatite dikes, quartz veinlets, and disseminated in granite. Hess, 1908.	44°59′	67°27′
3. Sally Mtn. Molybdenite disseminated in altered zone in granite.	45°35′	70°20′
4. Catherine Hill. Molybdenite in pegmatite veins in granite. Hussey, 1958.	44°37′	68°05′
5. Douglas. Molybdenite with copper sulfides in vein in schist. Emmons, 1910.	44°24′	68°38′
6. Harvard mine (Greenwood, Noyes Mtn.). Molybdenite in pegmatite cutting biotite gneiss. Wintringham, 1955.	44°17′	70°38′
7. Bergendahl. Molybdenite with cobalt and zinc sulfides. Hussey, 1958.	43°39′	70°52′
8. Blue Hills Falls (Trio mine) deposit. Molybdenite, wolframite, scheelite, and arsenopyrite in quartz veins in granite. Morrill and Hinckley, 1959.	44°22′	68°34′
9. Marshfield Granite quarry. Molybdenite, pyrite, magnetite, zircon, and titanite in granite. Morrill and Hinckley, 1959.	44°45′	67°30′
10. Long Island deposit. Molybdenite, fluorite, chalcopyrite, and galena in greisen zone in granite. Morrill and Hinckley, 1959.	44°21′	68°29′
11. Franklin Extension mine. Ferrimolybdite with copper and silver sulfides and calcium and manganese carbonates in granite. Morrill and Hinckley, 1959.	44°35′	68°16′
12. Belfast deposit. Molybdenite with galena, arsenopyrite, hematite, and graphite in granite. Morrill and Hinckley, 1959.	44°35′	68°52′
13. Vinalhaven area (Duchesne Hill, Pequoit, and Sands quarries). Molybdenite, zircon, apatite, and magnetite in granite. Morrill and Hinckley, 1959.	44°03′	68°50′
14. Poland (Havey quarries) area. Molybdenite and ferrimolybdite with beryl. Morrill, 1958.	44°04′	70°18′
15. Fernald and Gordon Granite quarry (Bragdon). Molybdenite in granite. Morrill and Hinckley, 1959.	44°33′	68°14′
16. Pretty Marsh (Mills, Harbor) deposit. Molybdenite in veins. Morrill and Hinckley, 1959.	44°20′	68°24′
17. Candage Farm prospect. Molybdenite, wolframite, and arsenopyrite. Morrill and Hinckley, 1959.	44°21′	68°34′
18. Crocker Hill mine. Molybdenite and graphite. Morrill, 1958.	44°17′	70°27′
19. Basin Falls prospect. Molybdenite crystals. Morrill, 1958.	44°18′	70°24′
20. Dodlin Hill Granite quarry. Molybdenite, zircon, and titanite in garnetiferous zones in granite. Morrill, 1958.	44°41′	69°48′
MARYLAND		
1. H. T. Campbell quarry. Molybdenite in marble. Ostrander and Price, 1940.	39°28′	76°39′

Mining district or locality	Lat. N.	Long. W.
MARYLAND—Continued		
2. Ruby (Ruby Flint) quarry. Molybdenite in quartz veins in schist. Ostrander and Price, 1940.	39°22′	76°59′
3. Jones Falls gneiss quarries. Molybdenite in pegmatite intruding gneiss. Ostrander and Price, 1940.	39°19′	76°38′
4. Hilton (Gwynns Falls) quarry. Molybdenite in pegmatite in gneiss. Ostrander and Price, 1940.	39°17′	76°40′
MASSACHUSETTS		
1. Loudville (Southampton or Manhan Lead mine). Wulfenite with lead ore. Schrader, Stone, and Sanford, 1917.	42°16′	72°44′
MONTANA		
1. Big Ben deposit (Mansikka, Neihart). Molybdenite in quartz veins and in stockwork in granite and gneiss. Schafer, 1935.	46°58′	110°43′
2. Bismark mine. Molybdenite with copper in quartz veins cutting granite. Hart, 1933.	45°37′	112°02′
3. Emigrant Gulch (Emigrant Peak) prospect. Molybdenite in sericitized rhyolite breccia. Horton, 1916.	45°15′	110°40′
4. Hegener prospect. Molybdenite with copper, lead, and zinc sulfides in gneiss and granite porphyry. Schafer, 1935.	46°59′	110°43′
5. Quigley Ranch. Molybdenite in metamorphosed limestone. Horton, 1916.	46°40′	112°30′
6. Beaver Creek prospect. Molybdenite in quartz veins cutting andesite.	46°27′	111°40′
7. Niki mine. Molybdenite in quartz veins cutting quartz monzonite. Petar, 1932.	46°01′	112°24′
8. Mt. Con mine (Butte). Molybdenite with copper sulfides in quartz veins.	46°01′	112°30′
9. Altona mine. Molybdenite in quartz veins.	46°00′	112°30′
10. Thompson Park. Molybdenite disseminated in aplite.	45°53′	112°28′
11. Monoghan prospect. Molybdenite in quartz veins in greisen and granite.	45°26′	113°00′
12. Granite Mountain group. Molybdenite with huebnerite in quartz veins in quartz monzonite. Reid, 1957.	45°35′	112°00′

Mining district or locality	Lat. N.	Long. W.
NEVADA		
1. Robinette prospect. Molybdenite and powellite in tactite near contact with granite. Granger and others, 1957.	41°53′	115°04′
2. Osgood Mountains (Getchell, Jack, Reilly, Chase, Granite Creek). Molybdenite and powellite with scheelite in tactite surrounding granodiorite stock. Hobbs and Clabaugh, 1946.	41°10′	117°16′
3. Desert View prospect (Snow Creek, Leonard Creek). Molybdenite in quartz veins cutting granodiorite. Schilling, 1962.	41°35′	118°45′
4. Robinson (Ely) district (Nevada mines). Molybdenite disseminated in quartz monzonite. Bauer, 1960.	39°15′	114°58′
5. Hall deposit (Liberty). Molybdenite in quartz veinlets in alaskite and schist. Michell, 1945.	38°18′	117°18′
6. Climax mine (Oak Springs Area, Climax Stock, "Granite" Exploration Hole). Molybdenite and powellite with scheelite in tactite zone at contact of limestone and granodiorite. Schilling, 1962.	37°14′	116°03′
7. Sorenson prospect (Alum Gulch, Cucomungo, Tule Canyon). Molybdenite in stockwork in alaskite. Schilling, 1962.	37°21′	117°37′
8. Goodsprings district (Shenandoah mine). Wulfenite in brecciated zones cutting limestone. Schilling, 1962.	35°49′	115°34′
9. Milford mine (several prospects). Wulfenite in breccia zones cutting limestone. Schilling, 1962.	35°43′	115°30′
10. Copper Canyon mine. Molybdenite in veins and disseminated deposits. Roberts, 1951.	40°32′	117°08′
11. Barcelona mine (Spanish Belt). Molybdenite disseminated in hornfels. Kral, 1951.	38°40′	116°58′
12. Pine Tree (Mina) prospect. Molybdenite and copper minerals disseminated in sedimentary rocks. Schilling, 1962.	38°17′	118°01′

Mining district or locality	Lat. N.	Long. W.
NEVADA—Continued		
13. Rock Hill (Redlich) mine. Molybdenite in quartz veins and disseminated in quartz monzonite. Sanford and Stone, 1914.	38°10′	117°57′
14. Copper Shield Group (Effie Fay). Molybdenite in an alaskite dike. Schilling, 1962.	41°46′	114°47′
15. Bonanza mine (Dolly B.). Molybdenite in contact metasomatized limestone along contact of granodiorite. Schilling, 1962.	41°46′	114°52′
16. Ivy Wilson mine (McArdle mine). Molybdenite disseminated in contact metasomatized limestone. Schilling, 1962.	41°44′	114°49′
17. Batholith mine. Molybdenite and powellite with scheelite in a contact metasomatic deposit. Schilling, 1962.	41°47′	115°29′
18. Garnet Tungsten mine Tennessee Mtn.). Molybdenite with scheelite, powellite, and pyrite in tactite. Granger and others, 1957.	41°47′	115°41′
19. Huber Hill. Molybdenite in quartz veins in quartz monzonite. Schilling, 1962.	41°51′	115°57′
20. Owyhee. Molybdenite in quartz veins cutting slate. Schilling, 1962.	41°48′	116°16′
21. Bloody Run mine. Molybdenite with scheelite in a quartz vein in granodiorite. Kerr, 1946.	41°11′	117°47′
22. Rose Creek mine. Molybdenite in small quartz veins and disseminations in tactite. Roberts, 1943.	40°51′	117°53′
23. Tungsten-Mill City district (Stank and Humbolt mines). Molybdenite with scheelite in tactite. Kerr, 1934.	40°47′	118°08′
24. Garfield Force mine. Molybdenite with scheelite in tactite. Smith and Guild, 1942.	39°59′	119°14′
25. Scott prospect (Tungsten Mt. mine). Molybdenite with gold along shale-granite contact.	39°41′	117°43′
26. Verdi (Fleish). Molybdenite along fractures in granite. Schilling, 1962.	39°29′	119°59′
27. Antelope mine (Fish Creek Wells, Eather mine). Molybdenite in contact metasomatized limestone. Petar, 1932.	39°21′	116°09′
28. Downeyville mine. Wulfenite lead-zinc-silver ore in limestone. Kral, 1951.	38°55′	117°54′
29. Copper Mountain mine. Molybdenite disseminated in quartz monzonite porphyry and in garnetized limestone.	38°52′	118°27′
30. Garfield Hills (Luning). Molybdenite and powellite with scheelite. Schilling, 1962.	38°29′	118°08′
31. Rand mine. Wulfenite disseminated in veins cutting andesite.	38°47′	118°25′
32. Bovard mine. Molybdenite disseminated in veins in andesite.	38°46′	118°23′
33. Sweetwater Mining Co., Risue Canyon. Molybdenite in tactite. Schilling, 1962.	38°37′	119°24′
34. Black Horse (Alice) mine. Molybdenite and powellite in tactite. Schilling, 1962.	38°00′	118°08′
35. Tonopah Divide mine. Ferrimolybdite and powellite in veins in rhyolite. Pough, 1937.	38°00′	117°15′
36. Ruth mine. Wulfenite on fractures in dolomitized limestone. Schilling, 1962.	35°56′	115°30′
37. Pilgrim mine. Wulfenite in limestone. Schilling, 1962.	35°53′	115°30′
38. Mobile mine. Wulfenite in dolomite breccia. Schilling, 1962.	35°49′	115°33′
39. Whale mine. Wulfenite in veins in limestone. Schilling, 1962.	35°48′	115°33′
40. Quartette mine (Golden Treasure mine). Wulfenite in veins. Ransome, 1907.	35°27′	114°55′
41. Hoosier mine (and Hermosa). Wulfenite along breccia zone in dolomitized limestone. Schilling, 1962.	35°48′	115°30′
42. Duplex (IXL) mine. Wulfenite in veins cutting hornfels and andesite. Schilling, 1962.	35°28′	114°55′
43. Cumberland prospect (Oro Fino, Crescent). Wulfenite with base-metal ore in granite. Vanderburg, 1937.	35°29′	115°09′
44. Budget Group. Wulfenite in quartz vein. Vanderburg, 1937.	35°29′	115°11′
45. Miss Nevada claim (O'Leary). Molybdenite with pyrite in fault zone. Roberts and Arnold, 1965.	40°37′	117°05′

Mining district or locality	Lat. N.	Long. W.
NEVADA—Continued		
46. Free Tunnel (Tem Piute) deposit. Molybdenite and ilvaite with tungsten, copper, lead, and bismuth minerals in skarn zone between limestone and hornfels, and granite. Buseck, 1967.	37°38′	115°38′
NEW MEXICO		
1. Questa (Moly) mine (includes several nearby prospects). Molybdenite in quartz vein stockwork in silicified granite and in propylitized andesite. Schilling, 1956.	36°42′	105°30′
2. Chino mines (Santa Rita). Molybdenite with disseminated copper sulfides. Spencer and Page, 1935.	32°48′	108°04′
3. Baldy (Deep) mine. Molybdenite with copper sulfides in veins in shale. Eardley–Wilmot, 1925.	36°38′	105°12′
4. Romero Mining Co., El Porvenir deposit (Bert Hoover Lode No. 1). Molybdenite and scheelite in pegmatite. Horton, 1916; Anderson, 1957.	35°44′	105°25′
5. LaBajada (Lone Star(?) mine). Molybdenite in complex sulfide veins in volcanic rocks.	35°33′	106°12′
6. Homestake-Sapin sec. 15 mine. Jordisite(?) in uranium ore in sandstone. Granger and others, 1961.	35°24′	107°53′
7. Marquez mine (Poison Canyon). Jordisite with uranium ore in sandstone. Granger and others, 1961.	35°21′	107°45′
8. Sec. 33 mine (F–33 mine). Jordisite(?) in limestone and sandstone.	35°14′	107°48′
9. Copper Flat (Hillsboro area). Molybdenite with disseminated copper sulfides. Kuellmer, 1955.	32°58′	107°32′
10. Billie H. and Dona Loga prospect. Molybdenite and pyrite in quartz veins cutting quartz monzonite and granite.	32°27′	106°32′
11. Rialto group (Fulmer tunnel). Nogal. Molybdenite disseminated in quartz monzonite porphyry. Griswold and Missaghi, 1964.	33°30′	105°48′
12. Sierra Blanca deposit. Molybdenite disseminated in quartz monzonite porphyry.	33°27′	105°47′
13. Stephenson-Bennett Mine. Wulfenite in oxidized lead veins, and molybdenite in contact-metamorphic deposits. Dunham, 1935.	32°24′	106°36′
14. Eccles Canyon area, and Beaumont mine. Molybdenite with quartz microcline and biotite in pegmatite. Hewett, 1959.	32°39′	108°32′
15. Jarita Creek, Poso Springs, Russian Ranch. Molybdenite in veins and pegmatites. Just, 1937.	36°33′	106°04′
16. Haystack Butte. Ilsemannite and jordisite with uranium in bedded deposits in sedimentary rocks.	35°20′	107°57′
17. Smith Lake district. Ilsemannite and jordisite with uranium in bedded deposits in sedimentary rocks.	35°32′	108°13′
18. Austin-Amazon. Molybdenite with chalcopyrite in shear zone. Gillerman, 1964. Beaumont mine. Molybdenite in quartz veins. Gillerman, 1964.	32°37′	108°28′
19. Pacemaker. Molybdenite in pegmatitic quartz vein. Gillerman, 1964.	32°42′	108°28′
20. Palomas Gap area (Gladys Claim, White Swan vein). Wulfenite with vanadinite in oxidized lead veins. Harley, 1934.	33°03′	107°13′
21. Tyrone Mine. Molybdenite with disseminated sulfides in altered porphyry. Paige, 1922.	32°40′	108°21′
22. Bromide district. Molybdenite in veins and pegmatites. Anderson, 1957.	36°41′	106°09′
23. Kiawa Mountain. Molybdenite disseminated as flakes in quartz veins. Jahns, 1946.	36°37′	106°05′
24. Laguna district. Ilsemannite and jordisite with uranium in bedded deposits in sedimentary rocks. Granger, 1963.	35°08′	107°20′
25. Hells Canyon Area. Molybdenum in veins and pegmatite. Statz, 1912.	35°03′	106°21′
26. San Pedro. Molybdenite with powellite and scheelite in contact-metamorphic deposits. Smith and others, 1945.	35°16′	106°11′
27. Cummington Hill. Molybdenite with powellite and scheelite in contact-metamorphic deposit. Northrop, 1959.	35°20′	106°08′

Mining district or locality	Lat. N.	Long. W.
NEW MEXICO—Continued		
28. Cerrillos deposit. Molybdenite with base-metal sulphides in porphyry copper deposit.	35°27′	106°07′
29. Santa Fe district. Molybdenite in veins and pegmatite. Northrop, 1959.	35°43′	105°53′
30. Azure-Rising Sun mine. Molybdenite in veins and pegmatite. Harley, 1940.	35°50′	105°27′
31. Tecolote district. Molybdenite in veins and pegmatite. Harley, 1940.	35°28′	105°17′
32. Magdalena district. Molybdenite in contact-metamorphic deposit. Horton, 1916.	34°05′	107°11′
33. Socorro Peak district. Wulfenite in oxidized lead veins. Northrop, 1959.	34°04′	106°58′
34. Hansonburg district. Wulfenite in oxidized lead veins. Northrop, 1959.	33°52′	106°20′
35. Gallinas Mountain district. Wulfenite in oxidized lead veins. Anderson, 1957.	34°14′	105°45′
36. Jicarilla district. Molybdenite with powellite and scheelite in contact-metamorphic deposits. Griswold, 1959.	33°52′	105°41′
37. Salinas Peak district. Molybdenite in veins and pegmatite. Northrop, 1959.	33°18′	106°32′
38. Iron Mountain district. Molybdenite in contact deposits, wulfenite in oxidized lead deposits. Jahns, 1944; Dale and McKinney, 1959.	33°26′	107°38′
39. Portland Mine. Molybdenite in veins.	32°52′	108°14′
40. Bayard area. Molybdenite in veins. Lasky, 1936; Lasky and Hoagland, 1948.	32°46′	108°07′
41. Fierro iron deposits. Molybdenite in veins. Anderson, 1957.	32°51′	108°04′
42. Lake Valley district. Wulfenite in oxidized lead deposits. Jicha, 1954.	32°44′	107°33′
43. Macho district. Wulfenite in oxidized lead deposits. Jicha, 1954.	32°40′	107°35′
44. Hilltop, Baker, and Scheelite Prospects. Molybdenum with scheelite in contact-metamorphic deposits. Dale and McKinney, 1959.	32°05′	108°57′
45. Santa Maria tunnel, Faria shaft. Molybdenite in veins. Lasky, 1947.	31°51′	108°28′
46. Eagle Point. Molybdenum in contact-metamorphic deposits. Dale and McKinney, 1959.	31°47′	108°26′
47. Irish Rose mine. Molybdenite in veins. Griswold, 1961.	32°11′	108°05′
48. Texas Canyon mine. Molybdenite in veins. Dunham, 1935.	32°21′	106°31′
49. Bear Canyon district. Molybdenite in veins. Schilling, 1960.	32°32′	106°26′
50. Orogrande district. Molybdenite in veins. Schmidt and Craddock, 1964.	32°25′	106°07′
51. Schwarz Cabin. Molybdenite in veins.	33°13′	108°45′
NEW HAMPSHIRE		
1. Spofford. Molybdenite in veins.	42°53′	72°25′
2. Lincoln Molybdenum mine. Molybdenite in veins, Meyers, 1941.	42°57′	72°31′
NEW YORK		
1. Russell. Molybdenite and copper in contact-metamorphosed limestone. Newland, 1921.	44°23′	75°06′
2. Kirschnerville. Molybdenite in pegmatite veins in granite. Newland, 1921.	43°52′	75°18′
3. Tilly Foster mine. Molybdenite with magnetite in biotite schist. Januzzi, 1959.	41°25′	73°38′
NEW JERSEY		
1. Franklin (includes Sterling Hill) mine. Molybdenite in replacement bodies in metamorphosed precambrian limestone. Palache, 1935.	41°07′	74°35′
2. Stanhope (Hude, Merrill) mine. Molybdenite and ferrimolybdite with hornblende and pyrite in magnetite ore. Bayley, 1910.	40°55′	74°43′
NORTH CAROLINA		
1. Boy Scout (Jones, Dryden, Moss-Richardson) prospects. Molybdenite in quartz veins cutting granite and schist and disseminated in granite and schist. Robertson and others, 1947; Koschmann, 1943.	36°15′	77°52′
2. Robert Miller farm. Molybdenite with scheelite in tactite.	36°03′	82°16′
3. Shut-in Creek. Molybdenite with pyrite, zircon, and monazite.	35°52′	82°52′

Mining district or locality	Lat. N.	Long. W.
NORTH DAKOTA		
1. Little Missouri River Escarpment area. Molybdenum with uranium in lignite-bearing sandstone and shale. Denson and Gill, 1965.	46°50′	103°20′
OREGON		
1. Metzger group. Molybdenite and scheelite on contact between marble and granodiorite. Wolfe and White, 1951.	45°20′	117°23′
2. LeGore (Red Cloud) prospect. Molybdenite in tactite. Wolfe and White, 1951.	45°18′	117°20′
3. Contact prospect. Molybdenite in tactite. Smith and Allen, 1941.	45°17′	117°24′
4. Green prospect (Copper King, Copper Gem, Mountain Gem). Molybdenite in tactite. Smith and Allen, 1941.	45°14′	117°14′
5. Wilmot (Matterhorn) prospect. Molybdenite in contact-metamorphosed limestone. Smith and Allen, 1941.	45°16′	117°18′
6. Seeber prospect. Molybdenite in contact-metamorphosed limestone. Smith and Allen, 1941.	45°12′	117°12′
7. Frazier prospect. Molybdenite with scheelite in tactite near granite. Hess and Larsen, 1922.	45°09′	117°16′
8. Drum Lummon (Glacier Park-Copper Creek). Molybdenite in contact-metamorphosed limestone. Petar, 1932.	45°03′	117°20′
9. Kiggins mine (Oak Grove Area). Ilsemannite and jordisite with mercury minerals in veins. Staples, 1951.	45°04′	121°58′
10. Chris Kuehn. Molybdenite in aplite.	44°55′	118°11′
11. Bimetallic (Intrinsic). Molybdenite disseminated in diorite. Oregon Metal Mines Handbook, 1942.	44°43′	118°33′
12. Bowman (Molybdenite) mine. Molybdenite in quartz veins cutting biotite-quartz diorite. Oregon Metal Mines Handbook, 1942.	44°44′	118°34′
13. White King mine. Ilsemannite with uranium minerals. Peterson, 1958.	42°20′	120°31′
14. Irwin (Molybdenite prospect). Molybdenum with tin and bismuth in gold-quartz vein. Lowell, 1942.	42°26′	123°08′
15. Blue Bell prospect. Molybdenite in veins in greenstone. Diller, 1914.	42°37′	123°38′
16. Purvis prospect. Molybdenite in quartz veins cutting schist. Oregon Metal Mines Handbook, 1942.	42°01′	122°55′
PENNSYLVANIA		
1. Williams (Verdolite)quarry. Molybdenite in pegmatite. Miller and others, 1939.	40°43′	75°12′
2. Vera Cruz. Molybdenite in pegmatite in granite gneiss. Gordon, 1922.	40°30′	75°30′
3. Valentine Hartman's (Zion Church, Reading) quarry. Molybdenite in pegmatite. Gordon, 1922.	40°22′	75°52′
4. Finney's quarry. Molybdenite in gneiss. Benge and Wherry, 1906, p. 109; Gordon, 1922.	40°10′	74°59′
5. Perkiomen Copper mine (includes Ecton mine). Wulfenite with oxidized copper, lead, and zinc ores in shale. Gordon, 1922.	40°08′	75°26′
6. Phoenixville area (Wheatley and Chester mines). Wulfenite in lead-zinc-copper veins in granodiorite. Miller, 1924; Gordon, 1922.	40°06′	75°31′
7. Barber's quarry (includes Clark's quarry). Molybdenite in pegmatite in hornblende gneiss. Gordon, 1922.	40°01′	75°05′
8. Rittenhouse (includes Wayne and Penn St. quarries). Molybdenite in pegmatite in gneiss. Gordon, 1922.	40°02′	75°11′
9. Franklin Paper Mill quarry. Molybdenite in pegmatite in gneiss. Gordon, 1922.	39°56′	75°22′
10. Pequea (Pequa) mines. Wulfenite with oxidized lead and zinc ores in limestone. Gordon, 1922.	39°56′	76°19′
11. Johnson's quarry (Morton). Molybdenite in granite gneiss. Gordon, 1922.	39°56′	75°20′
12. Leiper's quarry (Avondale). Molybdenite in pegmatite in granite gneiss. Gordon, 1922.	39°53′	75°21′
13. Fairmount Park area. Molybdenite in pegmatite in gneiss. Gordon, 1922.	39°53′	75°11′
14. Peter Green's quarry. Molybdenite in pegmatite in gneiss. Gordon, 1922.	39°51′	75°23′
15. Sparvetta quarries. Molybdenite in pegmatite. Lapham and Geyer, 1959.	39°44′	76°03′

Mining district or locality	Lat. N.	Long. W.
PENNSYLVANIA—Continued		
16. Jobst magnetite mine. Molybdenite in hornblende gangue with pyrite and magnetite. Miller, 1925.	40°31′	75°28′
17. Zionsville Iron mine. Molybdenite with hornblende, titanite, and plagioclase in iron ore.	40°29′	75°31′
18. Pricetown deposit. Molybdenite with pyrite in shear zone in gneiss.	40°25′	75°49′
RHODE ISLAND		
1. Copper Mine Hill. Molybdenite with scheelite and chalcopyrite in schist and limestone. Quinn and Young, 1937.	42°00′	71°27′
SOUTH CAROLINA		
1. Haile mine. Molybdenite with pyrite and gold in slaty zone in sericite schist. Pardee and Park, 1948; Schrader, 1922.	34°35′	80°34′
SOUTH DAKOTA		
1. Cave Hills (North and South Cave Hills). Molybdenum with uranium in lignite. Denson and others, 1959.	45°45′	103°34′
2. Mendenhall Area (Slim Buttes). Molybdenum with uranium in lignite. Gill and others, 1959.	45°28′	103°12′
3. Scenic area. Molybdenum with uranium in sandstone.	43°45′	102°38′
4. Runge mine. Molybdenum with uranium in sandstone. Myers and others, 1960.	43°23′	103°49′
5. Flint Butte (Flat Top) mine. Molybdenum with uranium in lignite and carbonaceous shale.	45°50′	103°21′
TEXAS		
1. Kiam prospect. Molybdenite in quartz pegmatite cutting schist. Stenzel and Barnes, 1940.	30°38′	98°31′
2. Mable New Ranch. Molybdenum with uranium in sandstone. Eargle and Snyder, 1957.	28°34′	98°20′
3. Palangana Salt Dome. Molybdenum with uranium and vanadium in Tertiary sandstone. Weeks and Eargle, 1960.	27°42′	98°25′
4. Cave Peak. Molybdenum in hematite-manganese-bearing veins in rhyolite porphyry breccia cutting granite. Warner and others, 1959.	31°26′	104°53′
5. Galen mine. Molybdenum (jordisite and ilsemannite) with uranium and selenium in sandstone.	28°52′	98°07′
6. Sulfur Creek. Molybdenum with uranium in sandstone.	28°29′	98°05′
UTAH		
1. Utah Copper (Bingham) mine. Molybdenite with disseminated copper sulfides. Boutwell, 1935.	40°31′	112°09′
2. O.K. mine. Molybdenite with copper sulfides disseminated in quartz monzonite. Butler, 1913.	38°29′	113°08′
3. Major Bismuth mine. Molybdenite with bismuthinite, pyrite, and fluorite in tactite near quartz monzonite porphyry. Butler and others, 1920.	38°26′	112°47′
4. Happy Jack. Ilsemannite with uranium ores in sandstone. Gruner and Gardiner, 1952.	37°45′	110°18′
5. Continental-Alta (Michigan-Utah) mine. Wulfenite with lead and copper in vein cutting limestone. Hess, 1908.	40°36′	111°37′
6. Alta (Gladstone) prospect (Little Cottonwood Creek). Molybdenite in quartz vein. Butler and others, 1920.	40°35′	111°40′
7. Ouray. Ilsemannite in sedimentary rocks. Hess, 1925.	40°06′	109°42′
8. Marysvale District (Freedom No. 2 mine). Jordisite, ilsemannite, and umohoite with uranium ores in veins cutting quartz monzonite. Kerr and others, 1952.	38°30′	112°12′
9. Cactus deposit. Molybdenite disseminated in quartz monzonite. Butler, 1913.	38°29′	113°18′
10. Harrington-Hickory mine. Wulfenite with lead ore in veins. Butler, 1913.	38°23′	113°05′
11. Horn Silver mine. Wulfenite with lead-zinc ores in replacement-fissure veins in volcanic rocks. Butler and others, 1920.	38°27′	113°16′
12. Frey No. 4 mine. Jordisite(?) with uranium ores in sandstone. Gruner and Gardiner, 1952.	37°34′	110°05′
13. Notch Peak deposits. Molybdenite disseminated in quartz monzonite. Gehman, 1958.	39°10′	113°25′

Mining district or locality	Lat. N.	Long. W.
UTAH—Continued		
14. Lady Mae prospect. Molybdenite with scheelite in tactite zone between limestone and quartz monzonite. Everett, 1961.	39°10′	113°27′
15. Arthur Fork prospect. Molybdenite with rare-earth minerals and uranium in shear zone in metamorphic rocks. Eardley, 1944.	40°56′	111°46′
16. La Veta uranium prospect. Molybdenite with uranium in silicified zones in quartz monzonite. Kerr and others, 1957.	38°31′	112°10′
17. Reaper mine. Molybdenite with powellite in contact-metamorphosed limestone. Nolan, 1935.	40°07′	113°50′
18. Tecoma mine. Wulfenite in oxidized parts of lead and zinc ore shoots. Butler and others, 1920.	41°21′	113°54′
VERMONT		
1. Cuttingsville (Granite Hill). Molybdenite in granite. Jacobs, 1937.	43°28′	72°54′
WASHINGTON		
1. Bi-Metallic mine. Molybdenite in fault breccia zone in granite and aplite. Purdy, 1954.	48°51′	119°08′
2. Starr (Tonasket) mine. Molybdenite and pyrite disseminated in silicified breccia zone in granodiorite. Creasey, 1954.	48°42′	119°35′
3. Juno-Echo (Western Molybdenum Co.) mine. Molybdenite with scheelite in veins in marble and monzonite. Cooper, 1954.	48°18′	117°41′
4. Deer Trail-Monitor mine. Molybdenite in contact-metamorphic zone of garnet and silicified limestone adjacent to granodiorite intrusion. Purdy, 1954.	48°05′	118°06′
5. Glacier Peak deposit. Molybdenite with copper sulfides disseminated in brecciated granodiorite. Purdy, 1954.	48°12′	120°59′
6. Germania mine. Molybdenite with scheelite in veins. Purdy, 1954.	48°01′	118°06′
7. Spokane Molybdenum (Spokane River) mine. Molybdenite in quartz veins. Purdy, 1954.	47°53′	118°10′
8. Keefer Brothers. Molybdenite, copper-lead-zinc sulfides, and bismuth in quartz veins in granodiorite. Huntting, 1956.	48°09′	120°50′
9. 49th Parallel (OK Copper, Golden Chariot). Molybdenite with scheelite, pyrite, and chalcopyrite in quartz veins. Culver and Broughton, 1945.	48°59′	119°29′
10. Horseshoe Basin prospect. Molybdenite in pegmatite in gneiss. Purdy, 1954.	48°59′	119°55′
11. Sheep Mountain prospects. Molybdenite in quartz veins cutting granodiorite. Purdy, 1954.	48°58′	120°23′
12. Silver Creek. Molybdenite in quartz veins in granodiorite. Purdy, 1954.	48°54′	121°08′
13. Moncosilgo (Adams). Molybdenite with scheelite in veins in diorite. Culver and Broughton, 1945.	48°57′	119°27′
14. Rocky Lake (Colville district). Molybdenite in quartz veins in granite. Purdy, 1954.	48°30′	117°52′
15. Spokane (American Rand). Molybdenite, chalcopyrite, and pyrite in quartz veins.	48°53′	119°32′
16. Molybdenite Mountain. Molybdenite with pyrite in quartz vein. Huntting, 1956.	48°42′	117°17′
17. Torelle (Coffin). Molybdenite in pegmatite dike. Carithers, 1945; Park and Cannon, 1943.	48°48′	117°29′
18. Magma mine (Berglund claims). Molybdenite with scheelite in contact-metamorphosed limestone. Purdy, 1954.	48°46′	117°38′
19. Lawrence (Constitution, Judd). Molybdenite in quartz veins. Huntting, 1956.	48°47′	117°53′
20. American. Molybdenite in quartz vein. Purdy, 1954.	48°48′	117°54
21. Washington Consolidated Mines and Reduction Company (Mineral Hill, Seven Devils). Molybdenite in pegmatite dike. Jones, 1917.	48°34′	119°47′
22. Cold Spring. Molybdenite in quartz vein. Purdy, 1954.	48°16′	118°13′
23. Corson. Molybdenite in pegmatite. Huntting, 1956.	48°18′	119°28′
24. Green Lake. Molybdenite in quartz vein. Huntting, 1956.	48°27′	119°38′

Mining district or locality	Lat. N.	Long. W.
WASHINGTON—Continued		
25. Sterling. Molybdenite in quartz vein. Huntting, 1956.	48°12′	119°04′
26. Dutch John (Sherwood, Lodge). Molybdenite in pegmatite. Culver and Broughton, 1945.	48°13′	120°03′
27. Crown Point. Molybdenite in quartz veins. Horton, 1916.	48°12′	120°53′
28. Meadow Creek mine (Abe Lincoln). Molybdenite in quartz veins. Purdy, 1954.	48°04′	118°45′
29. Robischaud (Safety Harbor). Molybdenite in quartz veins. Purdy, 1954.	48°09′	120°22′
30. Handspike, California, Illinois. Molybdenite in veins in granite.	48°03′	118°41′
31. Rustler Cu-Mo prospect (Elliot-Graham-Manley). Molybdenite with copper sulfides in veins in sandstone.	48°01′	121°29′
32. Schminski (Hellgate Rapids). Molybdenite in pegmatite. Pardee, 1918.	47°57′	118°37′
33. Black Rosauer Mines Co. (Big Four, Daniels, Electric City). Molybdenite in pegmatite. Purdy, 1954.	47°57′	118°59′
34. Molly (Armament). Molybdenite disseminated in quartz diorite. Broughton, 1942.	47°54′	121°12′
35. Washington Molly Corp. (St. Theresa, Golden Eagle). Molybdenite in quartz veins cutting quartz diorite. Carithers and Guard, 1945.	47°56′	121°35′
36. Devils Canyon mine. Molybdenite in quartz veins cutting granodiorite. Purdy, 1954.	47°37′	121°30′
37. Clipper prospect. Molybdenite with copper sulfides in shear zone in granodiorite. Purdy, 1954.	47°31′	121°20′
38. Bird (Northwest Tungsten Co.). Molybdenite with scheelite in quartz veins in granodiorite. Culver and Broughton, 1945.	46°48′	121°21′
39. Mineral Creek. Molybdenite with copper sulfides in breccia zone between rhyolite and basalt. Huntting, 1956.	47°25′	121°15′
40. Bella May, Polly Molly, Metaline Contact Mines. Wulfenite in oxidized lead-zinc replacement ores in limestone. Park and Cannon, 1943.	48°51′	117°24′
41. Little Noisy. Molybdenite and copper sulfides in quartz veins in granitic rock. Park and Cannon, 1943.	48°48′	117°16′
42. Holden-Campbell. Quartz-sulfide veins contain copper sulfides, molybdenite, and scheelite. Huntting, 1956.	48°07′	120°04′
43. Malott. Molybdenite and copper sulfides in quartz pegmatite in granite. Huntting, 1956.	48°15′	119°41′
44. Iowa (Mint), Sultan King. Fracture zones in diorite and metamorphic rocks contain quartz-sulfide veins with molybdenite and scheelite. Huntting, 1956.	47°59′	121°31′
45. Copper Lake, Sunrise Rustler. Molybdenite and copper sulfides in quartz veinlets and disseminated in breccia zone in quartzite hornfels and quartz diorite. Huntting, 1956; Purdy, 1954.	48°02′	121°32′
46. North Star (Sunrise). Copper, lead, zinc sulfides and molybdenite in narrow quartz veins in granite. Purdy, 1954.	48°14′	121°40′
47. Miners Queen. Disseminated deposit of copper sulfides in altered diorite, contains a little molybdenite. Huntting, 1956.	45°47′	122°12′
48. Rightside, Columbia River. Quartz sulfide veins contain copper sulfides and a little molybdenite, in shale and argillite. Huntting, 1956.	48°38′	118°04′
49. New Leadville, Lawrence, American. Molybdenite and wulfenite in veins and replacement deposits in granite near contact with argillite and slate. Huntting, 1956; Purdy, 1954.	48°44′	117°52′
50. Merritt (Smith). Molybdenite and pyrrhotite in quartz lens in granite. Huntting, 1956.	47°47′	120°51′
51. Holden mine (Howe Sound, Irene). Zone of disseminated sulfide in metamorphic rock. Small amounts of molybdenite, pitchblende, and scheelite. Huntting, 1956.	48°12′	120°47′
52. Midnite mine. Molybdenite with uranium in breccia zones along contact of phyllite and quartz monzonite porphyry. Weis and others, 1958.	47°57′	118°05′

Mining district or locality	Lat. N.	Long. W.
WASHINGTON—Continued		
53. Quartz Creek and Lost Lode Prospect. Molybdenite in stockwork and sheeted zones in granodiorite. Huntting, 1956.	47°34′	121°33′
54. Goat Mountain. Molybdenite with copper, lead, and zinc sulfides in quartz veins in granodiorite; some powellite and scheelite. Huntting, 1956.	47°37′	121°35′
55. Monte Carlo. Molybdenite with pyrite in quartz-tourmaline vein in shear zone in granite. Huntting, 1956.	47°41′	121°32′
56. Big Chief, Rosario, Cold Springs. Small amounts of molybdenite, with copper, lead, and zinc sulfides in quartz veins in granodiorite and metamorphic rocks. Purdy, 1954.	48°14′	118°14′
57. Billy Goat, Carr, Hanks. Quartz sulfide veinlets contain molybdenite scattered through large fractured and silicified zone in volcanic rocks. Huntting, 1956.	48°47′	120°20′
58. Kaaba, Four Metals (Summit). Quartz veins in granite contain base-metal sulfides, molybdenite, and scheelite. Huntting, 1956.	48°57′	119°40′
59. Eagle Peak. Narrow high-grade copper veins in granite contain a little molybdenite. Huntting, 1956.	46°46′	121°47′
60. Chinook. Lens of high grade copper sulfide in granodiorite contains little molybdenite. Molybdenite and scheelite in veins in granodiorite. Huntting, 1956.	46°53′	121°30′
61. Midas. Small showing of molybdenite. Huntting, 1956.	48°56′	121°35′
62. Sulfide Creek (Shuksan). Molybdenite in quartz veins in metamorphic rock. Huntting, 1956.	48°48′	121°33′
WISCONSIN		
1. Payant (Chrissman). Molybdenite in pegmatite and quartz veins cutting mica schist.	45°44′	88°08′
2. Camp Five prospect. Molybdenite in quartz veins and disseminated in granite.	45°20′	88°03′

Mining district or locality	Lat. N.	Long. W.
WYOMING		
1. Lucky Mac mine. Jordisite and umohoite with uranium ores in sandstone. Coleman and Appleman, 1957, p. 657–660.	42°48′	107°40′
2. Wind River prospect (Temple Pass area). Molybdenite in quartz vein cutting granite. Osterwald and Osterwald, 1952.	42°46′	109°12′
3. Afton area. Molybdenum with vanadium, selenium, and other metals in Phosphoria Formation. Love, 1961.	42°43′	110°47′
4. Strong mine. Molybdenite in quartz veins in granite. Osterwald and Osterwald, 1952.	41°24′	105°22′
5. Kerwin (Torrey, Bryan). Molybdenite in veins in quartz monzonite. Osterwald and Osterwald, 1952.	43°53′	109°17′
6. Mormon Canyon. Molybdenite and powellite with scheelite in quartz vein. Osterwald and Osterwald, 1952.	42°45′	105°55′
7. American Molybdenum Co. prospect. Molybdenite disseminated and in veinlets in biotite-granite porphyry.	42°43′	109°12′
8. Little Man mine. Molybdenite with graphite, chalcopyrite, pyrite, and uranium in vein cutting granite.	42°18′	106°51′
9. Monte Cristo mine. Molybdenite in veins in granite. Osterwald and Osterwald, 1952.	41°08′	105°12′
10. Globe Ming Co. (C-1 and Fannie May pits). Jordisite(?) and ilsemannite with uranium in sandstone.	42°49′	107°30′
11. Shoshone, Wight, Needle Creek deposit. Disseminated molybdenite in altered porphyry stock.	44°03′	109°38′

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