DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

PREPARED IN COOPERATION WITH THE MISSOURI DEPARTMENT OF NATURAL RESOURCES, DIVISION OF GEOLOGY AND LAND SURVEY

MISCELLANEOUS FIELD STUDIES
MAP MF-1830-C
FOLIO OF THE SPRINGFIELD 1° X 2° QUADRANGLE, MISSOURI
SHEET 2 OF 2

Table 1.—Location and reference information for mines and prospects of barite, copper, iron, lead, pyrites, and zinc in the Springfield 1° × 2° quadrangle, Missouri
(MGS, Missouri Geological Survey; Cu, copper; Fe, iron; Pb, lead; Zn, zinc; conc., concentrate)

Map No.	Name	Section Township Range Location	Commodity	References	Comments
	Camden County				
1	Cullen bank	S17 T37N R16W	Fe	Schmidt, 1872-73, p. 101-102	Prospect, no known shipments.
2	Tier bank (Ambrosia bank)	S31 T37N R16W	Fe	Schmidt, 1872-73, p. 102	Prospect, no known shipments.
3	The Ozarks Exploration Co., Inc. (Wheeler mines, Fielding-Clark diggings)	S32 T37N R16W	Pb, Zn Pegmatite	MGS correspondence files, Camden Co., Decaturville Structure; Ozarks Exploration Co. reports, corresp.; Robertson, 1890-92, p. 8-9; Winslow, 1894, p. 717; Tarr, 1918, p. 61-62; Offield and Pohn, 1979	Interpreted as a meteor impact structure by Offield and Pohn (1979). The main Pb-Zn occurrence are SW in secs. 5 & 6 T36N R16W, Laclede Co. Small output of Pb-Zn; Upper Cambrian Davis Formation is host rock in open cuts.
4	Marrow mine	S22 T37N R19W	Pb	Bishop, 1940's, data for Camden Co.	Prospect.
5	Old Harold mines	S25 T38N R15W	Pb	Winslow, 1894, p. 717	About 100 tons lead ore mined, 1876-1886, mostly from surficial clays above Ordovician bedrock.
6	J.B. Harris prospect	S26 T38N R15W	Pb	McLaughlin, 1900, p. 29	Minor production.
7	Buelah Church prospect	S3 T36N R14W	Pb	Tarr, 1918, p. 67	Old diggings, minor production.
8	Big Niangua bank	S32/33 T38N R17W	Fe	Schmidt, 1872-73, p. 70	Reported occurrence.
	Cedar County				
1	Prospect	S2 T33N R26W	Fe	Broadhead, 1874, p. 72	Limonite surface rubble; negative results from excavations. Now in Stockton State Park.
2	Prospect	S16 T34N R27W	Zn	Buckley, 1902, p. 48-50; 1903, p. 36-37	2 shafts in S1/2; 70 & 216 ft deep. ZnS shows in Mississippian Burlington Limestone. No record of shipments.
3	Prospect	S10 T33N R25W	Fe	Broadhead, 1874, p. 72	Surface limonite rubble.
4	Jack Simmons' land	S4 T34N R25W	Fe	Broadhead, 1874, p. 72-73	Sandy limonite float near ferruginous sandstone outcrops in NW1/4.
5	Callahan's land	S20 T34N R25W	Fe	Broadhead, 1874, p. 72	Scattered sandy limonite occurrences in E1/2 NE1/4.
6	Prospect	S15 T34N R27W	Fe	Broadhead, 1874, p. 73	Large masses (400-500 lbs) of siliceous limonite on hilltop. 1840's excavation shows 2 ft ore zone.
7	Prospect	S22 T34N R28W	Fe	Broadhead, 1874, p. 73-75	Hillside exposures of ochre and soft limonite. Broadhead described development potential in some detail.
8	Prospect	S26/27 T34N R28W	Fe	Buckley, 1902, p. 49; 1903, p. 36-37	Brown iron ore having high sulfur (pyrite) content.
	Christian County				
1	Robertson Mining Co.	S29/30 T27N R21W	Zn	Buehler, 1919, p. 104	Mostly Zn carbonate ore from shallow levels in Mississippian bedrock. ZnS ore reported deeper and 150-ton mill under construction in 1916. Production reported 1916-1918, but not amounts.
2	---	S18 T27N R22W	Fe	Bishop, 1940's	Reported occurrence in SW1/4.
3	---	S7 T27N R23W	Fe	Swallow, 1859, p. 28, 35	Reported occurrence.
4	Angus mine	S18 T27N R23W	Fe	Swallow, 1859, p. 28; Crane, 1912, p. 203, 254-255	8 shipments totaling 1,928 tons limonite "bomb" ore from pits in E1/2 SW1/4.
5	---	S19 T27N R23W	Fe	Swallow, 1859, p. 28-35	Occurrences reported in W1/2.
6	Frisco mine	S4 T27N R24W	Fe	Buehler, 1906, p. 59-60; Crane, 1910, p. 45; Crane, 1912, p. 203-204, 254-255	Operated 1904-1907; used a log washer; produced 23,000 tons of ore. Located near center sec. 4; shallow cut 960 ft long by 35-100 ft wide; 2-20 ft deep.
7	---	S14/15 T27N R24W	Fe	Swallow, 1859, p. 28, 35	Reported occurrences.
8	---	S23 T27N R24W	Fe	Swallow, 1859, p. 35	Reported occurrences in E1/2.
9	Arnt (Smart's) mine	S24 T27N R24W	Fe	Swallow, 1859, p. 28, 35; Crane, 1912, p. 203, 254-255	Fibrous brown hematite in SE1/4 SE1/4. Produced 1,162 tons of ore from a cut 150 ft long by 30-50 ft wide by 10 ft deep from cherty material.
	Dade County				
1	Stogdill's land	S2 T30N R25W	Cu	Swallow, 1859, p. 67	Reported occurrence in SW1/4 NW1/4.
2	---	S7 T30N R25W	Zn	Williams, 1877, p. 118; Winslow, 1894, p. 642	Reported occurrence.
3	---	S11 T30N R25W	Fe	Stinchcomb, 1960	Old brown iron ore diggings.
4	---	S13 T30N R25W	Zn	Williams, 1877, p. 118; Winslow, 1894, p. 642	Reported occurrence.
5	---	S23 T30N R25W	Cu	Swallow, 1859, p. 67	Reported occurrence in SE1/4 NE1/4
6	Compton mine	S35/36 T30N R25W	Fe	Nason, 1891, p. 26-27; Nason, 1892, p. 184-185; Crane, 1912, p. 223	One 53-ft shaft and several pits, maximum 10 ft deep. Mining in 1905 yielded 40 tons of ore.
7	Reported occurrences (Not plotted individually)	S8/9,16/17,21, 25/26,29-32 T31N R25W	Zn	Williams, 1877, p. 118; Winslow, 1894, p. 642	Occurrences attributed to C. P. Williams, 1877. No specific data. Center of cluster plotted.
8	"New Mines" Howard's, Brown's and Langwell's shafts	S16/17 T31N R25W	Zn	Williams, 1877, p. 56; Williams, 1878, p. 16-17; Winslow, 1894, p. 641	Zn carbonate, silicate, and sulfide ores mostly in clay just above Mississippian bedrock; shafts range from 12 to 30 ft deep. Located in SW1/4 sec. 16, E1/2 SW1/4 sec. 17, and SE1/4 sec. 17.
9	Morrison and McDowell Land	S12 T31N R27W	Pb	Williams, 1877, p. 88-89	Some past lead mining and exploration.
10	---	S7,19,31 T32N R25W	Zn	Williams, 1877, p. 118	Reported occurrences only; center of cluster plotted.
11	Corry Mines (Dade County Mining & Smelting Co. at Corry)	S30/32 T32N R25W	Zn, Pb	Williams, 1878, p. 20-21; Robertson, 1890-92, p. 5-7; Winslow, 1893, p. 28-29; Winslow, 1894, p. 639-641; Bishop, 1950, p. 52	Lead ores smelted in 3 company furnaces on the property; zinc shipped elsewhere. Locations are W1/2 SW1/4 NW1/4 sec. 30 and NW1/4 sec. 32. From 1874 to 1877, shipped 1,000 tons of pig lead and 5,000 tons of oxidized Zn ore to St. Louis. In 1891 Corry Mining Co. shipped 100 tons Pb ore and 150 tons Zn ore to Joplin. Mississippian Burlington Limestone bedrock and rubble. Minor investigations in 1950.
12	---	S1,12,14,23-25, 35/36 T32N R26W	Zn, Pb	Williams, 1877, p. 118; Winslow, 1894, p. 642	Reported occurrences; center of cluster plotted.
13	J. M. Carlock	S20 T32N R26W	Fe	MGS correspondence files	Limonite occurrence reported in 1906.
14	"Old Mines"	S25/36 T32N R26W	Zn	Williams, 1877, p. 58-59; Williams, 1878, p. 17-20; Winslow, 1894, p. 641-642	1,000 tons high-grade $ZnCO_3$ and calamine mined 1874-1877 from cut 250 by 175 ft and 35 ft maximum depth. Disturbed ground was hydraulic mined and Williams reported another 1,000 tons of Zn ore recovered in 2 1/2 months in 1877. Located in SE1/4 sec. 25 & N1/2 NE1/4 sec. 36. Mississippian bedrock.
15	Pemberton zinc mines	S36 T32N R26W	Zn	Williams, 1877, p. 57-58; Winslow, 1893, p. 29; Winslow, 1894, p. 641	Shallow diggings in clay yielded substantial oxidized Zn ores, mainly in SE1/4 SE1/4. Developed on Mississippian bedrock.
16	---	S35 T33N R26W	Pb	Unknown	Occurrence in NE1/4 NW1/4 reported in 1901.
	Dallas County				
1	Hoff land	S1 T33N R20W	Fe	MGS correspondence files, Dallas Co.	Reported occurrence of limonite.
2	---	S5 T34N R18W	Pb	Winslow, 1893, p. 31; 1894, p. 722	Shaft 30-40 ft deep in S1/2 yielded some lead ore from pockets.
3	---	S20 T34N R19W	Pb	Winslow, 1893, p. 30; 1894, p. 722	Pockets of galena in face of bluff on E side of river in SE1/4 NE1/4 yielded 1,000 lbs of galena.
4	Zugler diggings	S22 T34N R19W	Pb	Winslow, 1893, p. 30; 1894, p. 722	Minor production of galena.
5	Chapman land	S29 T34N R19W	Pb	MGS correspondence files, Dallas Co.	Galena occurrences in residual clays in NW1/4 NW1/4 reported in 1951.
6	---	S25 T34N R20W	Pb	Winslow, 1893, p. 30; 1894, p. 722	80-ft shaft in dolomite in NW1/4 NE1/4. Very little galena in small pockets.
7	Rambo mine	S1 T35N R19W	Pb	Winslow, 1893, p. 32-33; Winslow, 1894, p. 721-722; Hughes, 1910, NB-475, p. 80-81; Buehler, 1911, p. 40-41; Hendriks, 1942, p. 111	Clay-filled circle 60 ft diameter and 150 ft or more deep in SW1/4 SW1/4. Upper 30 ft mined in a pit; the rest by 3 shafts. Produced about 500 tons of galena from 1868 to 1870, mostly between 10 and 60 ft depths. Final mining by cable tram and bucket. Ordovician bedrock.
8	Siegel mines	S35 T35N R19W	Zn	Winslow, 1893, p. 31; Winslow, 1894, p. 722; Hughes, 1910b, p. 82; Buehler, 1911, p. 41	NE-SW crevice with ZnS and calcite; shaft 185 ft deep through-out near N line sec. 35. Owner claimed (1908) 15 tons of ZnS mined. 40-ft shaft 50 ft SW. Ordovician bedrock.
9	Day land	S1 T35N R20W	Fe	Crane, 1912, p. 223	Limonite float in S1/2, one test pit, but no further developments.
10	Henry Booth land	S2 T35N R20W	Fe	Crane, 1912, p. 223	Outcrops of massive limonite and float in S1/2, but not enough to warrant development.
11	James Evans prospect	S34 T35N R20W	Pb	Hughes, 1910b, p. 73; Buehler, 1911, p. 38	Considerable residual PbS mined from stream banks in NE1/4 NE1/4.
12	Henry Booth land	S34 T35N R20W	Pb, Zn	Hughes, 1910b, p. 74; Buehler, 1911, p. 38	40 ft shaft in NW1/4 SW1/4. Upper 10 ft good residual PbS; next 10 ft has clay pockets with PbS and minor ZnS, FeS_2 and calcite in the dolomite bedrock.
13	Hatfield diggings	S16 T36N R19W	Pb	Hughes, 1910b, p. 78; Buehler, 1911, p. 39-40	3 shafts on a thin N-S fissure filled with clay, breccia and pockets of PbS. Ordovician bedrock.
14	Hildebrand diggings	S21 T36N R19W	Pb	Winslow, 1893, p. 31; Winslow, 1894, p. 722; Hughes, 1910b, p. 77; Buehler, 1911, p. 39	Dirt circle 100 ft in diameter mined by shafts, one 100 ft deep. Located 1/4 mi N of Tunas. Several tons PbS mined. Ordovician bedrock.
15	Tunas shaft	S21 T36N R19W	Pb, Zn	Hughes, 1910b, p. 76; Buehler, 1911, p. 39	85 ft shaft on narrow NE-SW fissure (6-18 inches wide), west edge of Tunas.
16	Smith mines (Nasalrod diggings)	S35 T36N R20W	Pb	Winslow, 1893, p. 31; Winslow, 1894, p. 722; Hughes, 1910b, p. 75; Buehler, 1911, p. 38-39	Probably in SE1/4. Three shafts, one 100 ft deep. Probable fissure, striking NE-SW, with 3 ft maximum width, reportedly yielded about 50 tons PbS. Ordovician bedrock.
17	Thomas land	S34 T36N R20W	Pb	Hayes, 1957	Prospect; 15-20 tons of ore mined in SW1/4 NE1/4 SE1/4.
	Douglas County				
1	M'Crary land	S14 T27N R11W	Fe	Nason, 1892, p. 244; Crane, 1912, p. 238	Limonite float covering 1/2 acre in W1/2 NW1/4.
2	Summers land	S3 T27N R14W	Fe	Anderson, 1953	Limonite rubble in SW1/4 NE1/4 prospected around 1900, but no mining done.
3	Shaft near Granada	S18 T27N R16W	Pb, Zn	Buehler, 1911, p. 41	60 ft shaft with considerable drifting at that level in which there are cavities with PbS, ZnS, and tetrahedrite(?). One mile N of Granada.
4	Ellison farm	S23 T27N R17W	Pb, Zn	MGS correspondence file, Douglas Co. lead and zinc; USBM Strategic Minerals statement (property submitted), Oct. 9, 1944	Reported occurrence in NE1/4 near Tigris. No record of an examination.
	Greene County				
	Pierson Creek mines zinc-lead district (Nos. 1 - 9)	S1 T28N R21W & S26/27,35/36 T29N R21W	Zn, Pb	Schoolcraft, 1819, p. 254; Winslow, 1894, p. 624-626; Shepard, 1898, p. 174-182; Shepard, 1914; Corless, 1916; Ruhl and Ballinger, 1949; Fellows, 1970, p. 11; Melton, 1978, p. 14-31	Limited mining in 1844 and again in 1875; more sustained beginning in 1885-1886. Production through 1916 estimated by Ruhl and Ballinger as 3,000 tons PbS & 29,000 ZnS concentrates. Principal host rocks are the Mississippian Northview and Compton Formations; minor production from the underlying Ordovician Cotter Dolomite.
1	Phelps mines (including Gem mine)	S1 T28N R21W	Zn, Pb	Winslow, 1894, p. 624-625; Shepard, 1898, p. 179-182, 196-197; Eagle-Picher Co., 1958	Production began in NE1/4 for ex-Governor McClurg in 1844. Notes of Shepard give output up to 1892 of 552 tons of zinc ore and 117 tons of lead ore.
2	Eversol & Eaton (Ananias) and Suffolk mines	S36 T29N R21W	Zn, Pb	Winslow, 1894, p. 624-626; Eagle-Picher Co., 1958	Mines in SW1/4 developed in same NW-trending crevice as that in the Phelps mines. 12.5 tons ZnS ore.
3	Daisy tract mines Nathalie Mining Co.	S35 T29N R21W	Zn, Pb	Winslow, 1894, p. 624-626; Shepard, 1898, p. 196-197; Corless, 1916; Eagle-Picher Co., 1958	Group of mines mostly in NE1/4 SE1/4 include Pierson Creek or Gumbo and Kodak; Santa Claus and Snowball shafts. 1,950 tons of Zn and 215 tons Pb ores from Nathalie mine.
4	Meyers, Choteau & Clas shafts	S35 T29N R21W	Zn, Pb	Corless, 1916; Eagle-Picher Co., 1958	Located just E of Pierson Creek, near center of E1/2.
5	Clark mine; Clark and Lewis & Benz shafts	S35 T29N R21W	Zn, Pb	Corless, 1916; Eagle-Picher Co., 1958	Mines in N25°W crevice near Frisco RR, parallel to and about 400 ft WSW of Meyers and other crevice structures.
6	O'Day mine & Diemer shaft	S35 T29N R21W	Zn, Pb	Corless, 1916	Crevice structure mostly in NE1/4 NW1/4 of sec. 35.
7	Wolverine and Wolverine no. 2 and no. 3 mines	S35/36 T29N R21W (S26 T29N R21W)	Zn, Pb	Corless, 1916	Northernmost crevice structure in sec. 35-36 trend sequence. No. 3 mine in SE corner SW1/4 SW1/4 sec. 26.
8	Missing Link mine	S27 T29N R21W	Zn, Pb	Corless, 1916	Near center S1/2 S1/2. Crevice structure is parallel, but nearly 1,000 ft SWS of Wolverine structure.
9	Badger & Eslinger mines	S27 T29N R21W	Zn, Pb	Corless, 1916	Mines in NE1/4 SW1/4, and SW1/4 NW1/4 sec. 27, at north end of Pierson Creek group.
	Brookline Camp zinc-lead mines (Nos. 10 & 11)	S2,11 T28N R23W	Zn, Pb	Winslow, 1894, p. 630; Shepard, 1898, p. 173-174	Includes Potter shaft and Armstrong, Old Silicate, and Deputy diggings. Discovered in 1873, active to 1878, then again in 1887 and 1891-1892. Winslow reports only about 200 tons each of lead and zinc ores had been mined here through 1893. Mississippian bedrock.
10	Potter shaft	S2 T28N R23W	Pb, Zn	Shepard, 1898, p. 196-197	Located in SE1/4 SE1/4, the site of the initial discovery. Later shafts were the Citizen's, "Line", Wilson, & Nixon. 150 tons PbS ore, over 60 tons of Zn silicate ore.
11	Armstrong diggings, Old Silicate diggings, Deputy diggings	S11 T28N R23W	Zn, Pb	Winslow, 1894, p. 630; Shepard, 1898, p. 173-174, p. 196-197	All of these diggings were probably located in the E1/2. More than 1,000 tons Zn silicate and 40 tons of PbS ore mined.
12	Studley mine	S4 T28N R23W	Fe	Swallow, 1859, p. 35; Hughes, 1910a, p. 19; Crane, 1912, p. 253-255	Two pits located in SW1/4 SE1/4; a total of 112 tons of limonite ore were shipped in 1905 and 1907.
13	Bayliss land	S16 T28N R23W	Fe	Hughes, 1910a, p. 18; Crane, 1912, p. 251, 254-255	Iron ore prospect in W1/2 SW1/4. A half acre of limonite rubble having one old cut.
14	Jackson bank	S11 T28N R24W	Fe	Hughes, 1910a, p. 17; Crane, 1912, p. 251-252, 254-255; McFarland, 1980	Widely scattered boulders and fragments of limonite in the NE1/4 SE1/4 and SW1/4 SE1/4. Two 8-foot pits in the former area show good ore, but no shipments reported. Disturbed area in SW1/4 SE1/4 seen in 1979 MILS airphoto study may be the John Jackson mine site shown below in sec. 12.
15	John Jackson mine	S12? T28N R24W	Fe	Hughes, 1910a, p. 16; Crane, 1912, p. 252, 254-255	Reported in NW1/4 SE1/4 of sec. 12(?), but actual location probably in sec. 11. Mining during 1905-1907 yielded 7,882 tons of ore; 11 shipments had average grade of 51 percent Fe.
16	Welsh mine	S6 T29N R23W	Fe	Hughes, 1910a, p. 20; Crane, 1912, p. 253-255	Mine cut for limonite in N1/2 NW1/4 yielded 61 tons of ore in 1904.
17	Noble mine	S1 T29N R24W	Fe	Hughes, 1910a, p. 21; Crane, 1912, p. 252	Several mine cuts covering an acre in S1/2 NE1/4. Three shipments totaling 206 tons of limonite ore were made in 1907.
18	Haralson prospect	S10 T29N R24W	Cu	Swallow, 1859, p. 67, 72	14 ft pit in Burlington Limestone in W1/2. Chalcopyrite and malachite associated with calcite. Some mining but unprofitable.
19	---	S24/25 T29N R24W	Fe	Swallow, 1859, p. 31, 35	Brown hematite occurrence reported earlier by Broadhead.
20	Helm mine	S26 T29N R24W	Fe	Hughes, 1910a, p. 22; Crane, 1912, p. 250, 254-255	Mine cuts in NW1/4 SW1/4 SW1/4 yielded 3,370 tons of ore mined between 1904 and 1907.
21	Pickerel Creek mines	S33/34 T29N R24W	Pb	Williams, 1877, p. 70; Robertson, 1890-92a, p. 23; Winslow, 1894, p. 629; Shepard, 1898, p. 186-188	Discovered in 1875, 200 shallow pits in NE1/4 sec. 33 and NW1/4 sec. 34. By 1877, 4,000 tons of lead ore, much of it cerussite, had been shipped to Ash Grove. Mississippian bedrock.
22	Pollack mine	S4 T30N R23W	Fe	Hughes, 1910a, p. 23; Crane, 1912, p. 251-154	Several shallow pits in 3-acre area of limonite surface rubble in SE1/4 SE1/4. 100 tons of ore of good grade has been shipped.
23	Jennings bank	S9 T30N R23W	Fe	Hughes, 1910a, p. 24; Crane, 1912, p. 250, 254-255	Boulders and fragments of limonite strewn over NW1/4 NE1/4, and numerous prospect pits; but no reported ore shipments.
24	Clutter mine	S23 T30N R23W	Fe	Hughes, 1910a, p. 25; Crane, 1912, p. 251, 254-255	Fairly large pit in NE1/4 exposed good concentration of limonite in clay, but probably restricted in area. One carload of ore stockpiled at the mine.
	Ash Grove mines Nos. 25-30	S6 T29N R24W & S28/29,32/33 T30N R24W	Zn, Pb	Winslow, 1889, p. 24-27; Williams, 1877, p. 52-54; Winslow, 1894, p. 626-629; Shepard, 1898, p. 182-186; Martin, 1946, p. 32	Lead found in 1850's, but prospecting and mining did not begin until 1867. A discovery on Duncan land in 1888 renewed activity. About 3,400 tons of lead and zinc ores were shipped between 1881 and 1892. Mississippian bedrock. Reported total by USBM for Ash Grove-Everton mines through 1945 is 5,431 tons Zn conc. and 788 tons Pb conc.
25	Dorrel land	S6 T29N R24W	Zn, Pb	Winslow, 1889, p. 26	Reported diggings in NW1/4 SW1/4; southernmost of the Ash Grove mines.
26	Taylor & Dunlop shafts (McCord land)	S6 T29N R24W	Zn, Pb	Shepard, 1898, p. 183-184	Good production in 1889-96 from 75 ft and 135 ft shafts mostly in NE1/4; galena, zinc silicate, and ZnS ores.
27	The Pennsylvania Co.'s shaft (Corum diggings)	S28 T30N R24W	Pb, Zn	Williams, 1877, p. 52-54; Winslow, 1894, p. 627-629; Shepard, 1898, p. 182-184	Several shafts near the center and in the S1/2. At least 100 tons of lead ore and a lot of cerussite. Pennsylvania Co. shaft was 250 ft deep.
28	Murray mine Hutchins land	S32 T30N R24W	Zn, Pb	Winslow, 1889, p. 24-25; Winslow, 1894, p. 626-629; Shepard, 1898, p. 183	Discovered in 1867; located near center SE1/4 NE1/4. Mining revitalized in 1888 with new zinc discovery 1/4 mi S on Duncan's land. Shaft 70 ft deep.
29	J.K.P. Duncan's land	S32 T30N R24W	Zn, Pb	Winslow, 1889, p. 24-25; Winslow, 1894, p. 626-629; Shepard, 1898, p. 183	Important zinc silicate discovery in 1888 in SW1/4 SE1/4; shaft 95 ft deep.
30	Getty diggings	S33 T30N R24W	Zn, Pb	Winslow, 1889, p. 26; Winslow, 1894, p. 627; Shepard, 1898, p. 185	A number of shafts in NW1/4 NE1/4 sunk to 20-30 ft depths. Galena and zinc silicate were produced.
31	Dr. Cowden shaft	S29 T31N R20W	Pb	Shepard, 1898, p. 196-197	Prospect with galena shines in the NW1/4 SE1/4.
32	Bull Winkle or Bass mine	S25 T31N R21W	Pb	Winslow, 1894, p. 629; Shepard, 1898, p. 192-193, 196-197	Ore discovered in 1873, mining began in 1890. Shafts about 30 ft deep located near SW corner NW1/4 SE1/4. Only about 1,200 lbs of lead ore were shipped.
33	Cash prospect	S32 T31N R21W	Pb	Shepard, 1898, p. 196-197	Disseminated galena reported in SW1/4 NW1/4 SE1/4 in 1845.
	Hickory County				
1	Kincaid land	S17/20 T36N R21W	Zn, Pb	Bishop, 1947, p. 25-26	Old workings for zinc in SW1/4 sec. 17, for Pb-Zn in NW1/4 sec. 20; little potential.
2	Elmer Pitts land	S21 T36N R21W	Pb	Bishop, 1947, p. 26	Many old pits and an adit in NW1/4. PbS shows in residuum; probably small production years ago.
3	---	S2 T36N R22W	Pb	Robertson, 1890-92, p. 27; Winslow, 1894, p. 718	Reported occurrence of lead in clay; never mined.
4	---	S3 T36N R22W	Cu	Robertson, 1890-92, p. 27	Reported occurrence of Cu minerals in a thin calcite vein.
5	Parson & Dorman lands	S10 T36N R22W	Pb	Bishop, 1947, p. 27	Lead shows in clay and bedrock at 3 sites in SE1/4.
6	Silver Queen mine (Tatum mines)	S11/14 T36N R22W	Pb	Robertson, 1890-92, p. 25-26; Winslow, 1894, p. 718; Hughes, 1913, p. 33-36	60 ft shaft, many small holes, and an incline. Galena in residual soil and in brecciated band of chert in Ordovician dolomite. Hughes reported additional shafts, no data on output. Location in SE1/4 sec. 11 and NE1/4 NW1/4 sec. 14.
7	Thatch mine	S18 T36N R22W	Pb, Zn	Robertson, 1890-92, p. 24; Winslow, 1894, p. 719; Bishop, 1947, p. 29	3 shafts and tunnel in NW1/4 in Burlington Limestone. Ore reported to have been in clay pockets; last worked in 1916-1917.
8	Pittsburg mines Big Ten, Little Bachelor	S25 T36N R22W	Zn	Hughes, 1913, p. 37-38	Group of mines in and near town, mostly in SW1/4. Shafts were 75 ft, 80 ft, and 120 ft deep; ZnS in clay pockets, fairly large dumps, but no available production data. Mostly in Ordovician bedrock.
9	United Central Lead & Zinc Co. "Mining Forty"	S12/13 T36N R23W	Zn, Pb	Buehler, 1923-25?, p. 16-17; Bishop, 1947, p. 28-29	Brief summary of prospect drilling of 3 holes in SW1/4 sec. 12, and 10 or 11 in NW1/4 NW1/4 sec. 13 (Mining Forty). Joplin mill built in 1927; 2 carloads Zn conc. (about 50 tons) shipped.
10	United Central Lead & Zinc Co.	S15/21/22 T36N R23W	Zn, Ba	Buehler, 1923-25?, p. 18	Some Zn and barite shows in drillhole in sec. 15.
11	United Central Lead & Zinc Co.	S17/19/20 T36N R23W	Zn, Pb	Buehler, 1923-25?, p. 17, 18	Favorable show of zinc in drillhole in NW1/4 SW1/4 sec. 17, and Pb-Zn in NE1/4 NW1/4 sec. 20.
12	United Central Lead & Zinc Co.	S24/26 T36N R23W	Zn	Buehler, 1923-25?, p. 17, 18	Some Zn shows in drillhole in SW1/4 NW1/4 sec. 26.
13	United Central Lead & Zinc Co.	S31 T36N R23W	Pb, Zn	Buehler, 1923-25?, p. 17, 18	Prospect hole drilled in NE1/4 SE1/4.
14	Berry tract	S20 T37N R21W	Pb, Zn	Bishop, 1940's, card set and map 43	Map and drill logs compiled by Netzeband. Location in NW1/4. No known production.
15	Peterson mine	S29 T37N R21W	Pb, Zn	Bishop, 1940's, card set and map 43; see Hickory Co. mineral correspondence files for misc. additional data up to 1961; Bishop, 1947, p. 19, p. 28	Shown on Hermitage 15-minute quad, in SE1/4 NE1/4 SW1/4. Past output (1942) was 70 tons PbS and 3 tons ZnS ores, mostly in 1934-1935. Ordovician bedrock.
16	Bergstrom tract	S29 T37N R21W	Pb, Zn	Bishop, 1940's, card set and map 43.	Located in S1/2 NW1/4 and NW1/4 SE1/4; no known production.
17	---	S12 T36N R24W	Pb	Beveridge, 1951, p. 100	Reported PbS occurrence in NE1/4 SE1/4 SW1/4, visited but nothing found.
	Hickory County (continued)				
18	Rex Consolidated Mining Co.	S30 T37N R21W & S25 T37N R22W	Pb, Barite (Zn)	Hughes, 1913, p. 39-44	Open cuts, 500 tons-per-day jig mill, last worked in 1908. Production record not available. ZnS and pyrite present. Location in central W1/2 sec. 30, E1/2 sec. 25. Ordovician bedrock.
19	Hinkle-White No. 1 (Admire prospect)	S6 T37N R21W	Barite	Mather, 1945, p. 20-21; Peugnet, 1962	Trenches and pits in NE1/4 SW1/4 exposed barite in clay and Ordovician bedrock veins. Three carloads shipped in 1943 (about 150 tons).
20	Hinkle-White No. 2	S7 T37N R21W	Barite	Mather, 1945, p. 22	Series of shallow trenches in NE1/4 NW1/4; a chunk of barite weighing 840 lbs was mined here, but total output not given.
21	Chester Rife prospect	S7 T32N R22W	Zn	Hickory Co. correspondence file, Barite. Letter from Mr. Rife, 6-1983	Report of ZnS in water well at 290-300 ft in N1/2 N1/2 Lot 2 of SW1/4. Driller's log and assay in files.
22	Ogden prospect	S21 T37N R22W	Barite	Wharton, 1967, p. 85	Small barite mill, minor production of "glass tiff" from surface clays near the center SE1/4. Inactive in 1967.
23	Tatum prospect	S33 T37N R22W	Pb, Barite	Robertson, 1890-92, p. 27; Winslow, 1894, p. 718	Small diggings in a creek exposed pockets of barite enclosing fragments of galena in rocks of Mississippian age.
24	John Brown prospect	S34 T38N R23W	Pb, Zn Barite	Buckley, 1902, p. 54-55; 1903, p. 38	50 ft shaft in SW1/4 SE1/4 reported to have closed down in 1900. No record of output.
	Howell County				
1	Bedwell land	S2 T27N R10W	Fe	Markos, 1953a, p. 73	Two limonite prospects in N1/2. Hand-mining in NW1/4 NE1/4 in 1930's but no record of output.
2	Havel land	S2 T27N R10W	Fe	Markos, 1953b	Reported occurrence in SW1/4 not visited.
3	Moody land	S11 T27N R10W	Fe	Hanss, 1953, p. 6	One acre area of scattered limonite fragments in E1/2 NW1/4 SE1/4. No evidence of development.
4	---	S14 T27N R10W	Mn	Hughes, 1918, p. 4-5	Old shaft 31 ft deep in NE1/4 NE1/4 had clays with seams and impregnations of Mn oxides; oxides also formed matrix in chert breccias. Thin seams were good grade, but too small to be important. Second shaft, 15 ft away, was barren of Mn.
5	Linebaugh land	S23 T27N R10W	Fe	Smith, 1953-54, p. 47	Estimated 60 tons of limonite and hematite ores shipped from 2 cuts in SE1/4 NE1/4 SE1/4 before World War I.
	Laclede County				
1	Bear Creek prospect	S25 T36N R14W	Fe	Swallow, 1859, p. 29, 31, 34; Shumard, 1873, p. 220	Large masses of brown iron ore observed by a Mr. Engelmann and reported by Shumard.
2	The Ozarks Exploration Company mine (Wheeler mines) (Fielding Clark diggings)	S5/6 T36N R16W	Pb, Zn	Shumard, 1873, p. 220; Winslow, 1894, p. 717; Ozarks Exploration Co. data in MGS Camden County correspondence files; Offield and Pohn, 1979	Some shafts on line between NW1/4 sec. 5 and NE1/4 sec. 6 yielded small amounts of lead and zinc ores before 1870. In the 1950's and 1960's, the Ozarks Co. started an open cut mine and built a mill at the site, which is on the SW edge of the Decaturville structure. Mineralization in deformed Upper Cambrian Davis Formation in the open cut.
3	Ambrose Clark bank	S6 T36N R16W & S31 T37N R16W	Fe	Schmidt, 1873, p. 101-102	Large boulders of good grade limonite. One 12-ft prospect shaft, but no record of production.
4	Gregory bank	S3 T36N R17W	Fe	Schmidt, 1873, p. 104	Limonite bank reported to have been mined by Draper, McClurg and Company.
5	Orla magnetic anomaly	S18/19 T33N R14W & S13-15, 22-24, T33N R15W	Fe Pb, Zn	Missouri Geological Survey, 1943; Kisvarsanyi, 1975, p. 9	Site of several deep coring tests for Precambrian iron ore at the center of the "high"; and for Pb-Zn deposits on the flanks, between 1957 and 1968.
	Lawrence County				
1	---	S1 T27N R25W	Fe	McNutt, 1910b, p. 32, 33	Limonite prospect in SW1/4 SW1/4 SE1/4; pits only 5 ft deep, and no record of shipments.
2	---	S1 T27N R25W	Zn	McNutt, 1910b, p. 32, 33	40-ft prospect shaft in NE1/4 SW1/4 NW1/4, shines of ZnS in the dump. No record of production.
3	---	S3 T27N R25W	Fe	McNutt, 1910b, p. 23	Minor occurrences of ochre, pipe ore, limonite float in NE1/4 SE1/4.
4	---	S7 T27N R25W	Fe	McNutt, 1910b, p. 27	Iron ore prospect in S1/2 SE1/4 SE1/4; 6 or 7 ft of limonite in red clay, no developments.
5	---	S16 T27N R25W	Zn	Ford, 1910, p. 52	Two reported drill holes in SE1/4 with good ZnS shows at about 120 ft depths.
6	---	S18/19 T27N R25W	Fe	McNutt, 1910b, p. 24	Limonite ore excavated from a cut in a large draw in the SE1/4 SW1/4 SW1/4 sec. 18 and NE1/4 NE1/4 NW1/4 sec. 19.
7	---	S23 T27N R25W	Zn	McNutt, 1910b, p. 8	Prospect shaft 93 ft deep and drill hole to 145 ft near NE corner SW1/4 NW1/4. Considerable ZnS in the drill hole.
	Aurora zinc-lead district (Nos. 8 and 9)	S5-8,18 T26N R25W & S31 T27N R25W		Winslow, 1894, p. 524, 614-620; Rutledge, 1924, p. 109-125; Clark, 1938; Martin, 1946, p. 32-33. Annual reports and production data of the State Mine Inspector U.S. Geological Survey and U.S. Bureau of Mines	Most of this important district is outside the Springfield 1°x2° quadrangle, but summary production data are given due to its close proximity. Mine production was recorded from 1886 to 1951, and total estimates are: 35,008 tons of lead conc. valued at $1,389,452 and 404,092 tons of zinc conc. valued at $11,528,696; total value $12,918,148.
8	Red Wasp & Arrow mines	S31 T27N R25W	Zn, Pb	Rutledge, 1923, p. 97-99, 110-115; Rutledge, 1924, p. 125-126, Pl XIII; Thiel, 1928, p. 78; Martin, 1946, p. 32-33	Located near the SE corner SW1/4 NE1/4, the Arrow mine was on a northern extension of the Red Wasp orebody. Output from 1916-1918 was 4,471 tons of concentrate valued at $380,000. Mostly ZnS, some calamine, very minor PbS. Three parallel runs strike about N10°W. Red Wasp mine near NE corner NW1/4 SE1/4. Ore in Mississippian Reeds Spring and Elsey Formations, minor production from Ordovician rocks. Later mine development at Red Wasp in 1928 and 1940, but output unknown.
9	Scott & Phelps shaft	S31 T27N R25W	Zn, Pb	Rutledge, 1923, p. 135-136; Thiel, 1928, p. 78-79	Shaft 250 ft deep located in E1/2 NW1/4 NE1/4 near Arrow mine. Some ZnS production, but no record given.
10	---	S5 T27N R26W	Zn, Pb	Winslow, 1893, p. 27; McNutt, 1910a, p. 6-7	Six prospect shafts from 35-80 ft deep, and a 300 ft drillhole near center of NE1/4 SE1/4. Some Zn-Pb mineralization found in all of them.
11	---	S9 T27N R26W	Pb	Rutledge, 1922-23, p. 95	Two 140 ft shafts S of center of section. A little PbS taken out; no ZnS and not considered promising.
12	---	S23 T27N R26W	Zn, Pb	Rutledge, 1923, p. 78	Seven shallow prospect pits in NE1/4 SE1/4.
13	---	S32 T27N R26W	Zn	Rutledge, 1922, p. 64	ZnS shines from limestone section in drillhole in NW1/4 NW1/4.
14	---	S17 T27N R27W	Zn, Pb	Bodman, 1910, p. 35-37	Prospect shaft 174 ft deep in SW1/4. Shines of ZnS at 120 ft.
15	---	S20 T27N R27W	Zn, Pb	Bodman, 1910, p. 37-40	Three prospect shafts in NE1/4. One 15 ft, others 44 ft and 50 ft deep. No mineralization.
16	---	S34 T27N R27W	Pb, Zn	McNutt, 1910a, p. 42	Prospect shaft 110 ft deep near N line in the NW1/4 NE1/4, had a few ZnS shines. Nearby 240-ft drillhole had PbS shows from depths of 180-240 ft, but no ZnS.
17	---	S2 T27N R28W	Zn, Pb	Rutledge, 1922, p. 80-81	Three prospect shafts in SE1/4 SE1/4. One was 100 ft deep, all were barren.
18	Greenland property	S2 T27N R28W	Zn, Pb	Brichta and Needham, 1948	Two check drillholes were put down by USBM in 1944 in SE1/4 NE1/4. Minor Zn-Pb values from depths of 160-200 ft.
19	Shipman mine (Lucky Jack mine)	S11 T27N R28W	Zn, Pb	Rutledge, 1922, p. 80, 99; Rutledge, 1923, p. 152-153.	Two shafts, one with large chat pile in SW1/4 NE1/4. Drilled and first shaft sunk to 120 ft in 1898-1899. Later deepened to 175 ft and second shaft sunk. 150-ton mill built and 20 cars (about 500 tons) shipped after MOPAC RR was built.
20	---	S19 T28N R25W	Fe	Albertson, 1910b, p. 17	1/4 acre of limonite and chert rubble on surface near SE corner SW1/4. No record of development.
21	---	S28 T28N R25W	Zn, Pb	Rutledge, 1923, p. 17	Water well near center SE1/4 NW1/4, 103 ft deep. At 60 ft, Zn 1.5 percent, Pb 0.9 percent; at 80 ft, Zn 2.2 percent, Pb 1.0 percent.
22	---	S32 T28N R25W	Zn, Pb	Rutledge, 1923, p. 39, 42	Near center of SE1/4, 2 shafts 80 ft and 90 ft deep. Barren except small crystals of FeS_2, ZnS, calcite in Mississippian Carterville Formation shales.
23	---	S33 T28N R25W	Zn, Pb	Rutledge, 1923, p. 42-43	30-ft shaft into Carterville Formation in NE1/4 SW1/4, barren.
24	---	S5 T28N R26W	Fe	Swallow, 1859, p. 35	Brown iron ore pit identified in SE1/4 NE1/4.
25	---	S19 T28N R26W	Zn, Pb	Albertson, 1910a, p. 5	30-ft shaft and 160-ft drillhole, probably in SW1/4. Mineralization reported at 70 ft and between 100 ft and 150 ft.
26	---	S28 T28N R26W	Zn, Pb Barite	Albertson, 1910a, p. 24-26	Two shallow shafts in NW1/4 had barite and limonite in dumps. Considerable drilling for Zn-Pb here and elsewhere in sec. 28.
27	---	S1 T28N R27W	Fe	Swallow, 1859, p. 35	Reported occurrence in NE1/4.
28	---	S6 T28N R27W	Zn, Pb	Rutledge, 1922, p. 90	Well in SE1/4 SE1/4 hit Zn-Pb shines in Burlington Limestone, 20-24 ft.
29	---	S24 T28N R27W	Zn, Pb	Albertson, 1910a, p. 1-4	Many prospect shafts and some drillholes in W1/2 and NE1/4 with reported Zn-Pb shows, but no mine production.
30	---	S27 T28N R27W	Zn	Rutledge, 1922, p. 86-87	Slight show of ZnS in Elsey Formation outcrop in SW1/4.
31	Bekemier farm	S30 T28N R27W	Zn, Pb	Brichta and others, 1943-45 (1943)	Prospects in E1/2 SW1/4 and NW1/4 NW1/4 examined and summary War Minerals Report prepared 12-11-43. No known production.
32	---	S10 T28N R28W	Pb	Rutledge, 1922, p. 92	Dug well 32-ft deep in SW1/4 SE1/4 had good PbS shines in upper Burlington Limestone.
	Stotts City mines (Nos. 33-36) Mount Vernon Mining Co., 1893 Gundling Mining Co., 1917 Shirley D. Mining Co., 1928 Locklyn Lead & Zinc Co., 1933 St. Louis Lead & Zinc Co., 1936 Capital Mining Co., 1941-1943	S26,35/36 T28N R28W	Zn, Pb	Winslow, 1894, p. 620-621; Rutledge, 1922, p. 95-98; Rutledge, 1924, p. 126-129; Thiel, 1931, p. 32-35; Clark, E. L., 1938, p. 139-143; Soulé, 1943; Martin, 1946, p. 53; Brichta and Needham, 1948	Mining began in 1888, but only minor development until 1893. Total recorded output 1898-1944 (USBM, 1948): 28,817 tons zinc conc. and 997 tons Pb conc. Last production 1941-1943 by Capital Mining Co.: 2,296 tons ZnS and 56 tons PbS conc. In the War Minerals investigations by the USBM in 1943-1944, 21 churn drillholes were completed. Mineralization mostly in Mississippian Reeds Spring Formation. USBM totals through 1945: 31,144 tons Zn conc. and 1,039 tons Pb conc.
	Lawrence County (continued)				
33a	Julia West shaft	S26 T28N R28W	Zn, Pb	Robertson, 1891-92b, p. 76-77; Winslow, 1893, p. 26; Winslow, 1894, p. 620-621; Buehler, 1904, p. 17-18; Richard, 1906, p. 69; Rutledge, 1922, p. 95-98; Brichta and Needham, 1948	At N end of main N25°W run (see Brichta and Needham, 1948, fig. 3). Located in SE1/4 NE1/4 SE1/4.
33b	Boston Loy shaft	S26 T28N R28W	Zn, Pb	Richard, 1906, p. 69; Rutledge, 1922, p. 97; Brichta and Needham, 1948	Located 100 yds SE of Julia West shaft.
33c	Illinois shaft	S26 T28N R28W	Zn, Pb	Same as 33b	Located NW1/4 SE1/4 SE1/4.
33d	Spring River, Southworth & CCC shafts	S26 T28N R28W	Zn, Pb	Same as 33b	Located SW1/4 SE1/4 SE1/4.
34a	Keystone & Mystic Valley shafts	S35/36 T28N R28W	Zn, Pb	Same as 33b	Located SE1/4 NE1/4 NE1/4.
34b	Mill, Field & Childress shafts (Shirley D & Locklyn mines)	S35 T28N R28W	Zn, Pb	Same as 33b	Western "run", about 1,000 ft SW and roughly parallel to main ore trend. Located mostly in NW1/4 NE1/4 sec. 35.
35	F. W. Jones farm	S26 T28N R28W	Zn, Pb	Brichta and others, 1943-45 (1944, 1945)	Property covers NE1/4 NW1/4 and NW1/4 NE1/4. No reported production.
36	Henry Bekemier farm	S36 T28N R28W	Zn, Pb	Brichta and others, 1943-45 (1943)	Located in SW1/4 NW1/4, no record of production.
37	---	S33 T28N R28W	Zn, Pb	Rutledge, 1922, p. 83	Three shallow prospect pits in SE1/4 SW1/4. Deepest pit shows some Pb and Zn, and also pyrite and limonite concretions in the shale.
38	T. H. Williams mine	S2 T29N R25W	Pb	Swallow, 1859, p. 63	Lead mine reported by Broadhead in NE1/4.
39	---	S3 T29N R25W	Pb, Zn	Rutledge, 1924, p. 134	Many shallow pits and shafts for PbS and Zn silicate ores located in NE1/4.
40	Lawrenceburg mines	S3 T29N R25W	Pb, Zn	Rutledge, 1922, p. 71	Shallow lead mines opened in 1894 in SW1/4. 120 ft shaft sunk in 1905; some PbS and Zn silicate. Total output about 250 tons of PbS concentrate.
41	---	S15 T29N R26W	Zn	Rutledge, 1922-23, p. 60	Old prospect shaft on fault in NW1/4 NE1/4 SE1/4. Some ZnS and calcite from surface to 40 ft depth.
42	---	S24 T29N R26W	Zn	Thiel, 1931, p. 21	Two old prospect shafts in N1/2 yielded small amount ZnS. Drillhole nearby had ZnS shines from surface to 190 ft depth.
43	---	S2 T29N R28W	Pb	Broadhead, 1874, p. 84	34 ft shaft in SE1/4 SW1/4 with abundant PbS in cherty clay residuum.
44	E. B. Lewis shaft	S9 T29N R28W	Zn	Rutledge, 1922-23, p. 10-11	177 ft shaft sunk in 1915 in NE1/4 NE1/4. Drillholes from the shaft bottom allegedly struck good Zn ore 40-60 ft deeper.
45	Norman Gibbs land	S35 T29N R28W	Pb	Winslow, 1893, p. 27	Well on E line of NW1/4 SW1/4 said to have struck vein of galena, 2 or 3 inches thick, at 20 ft or 30 ft depth.
	Polk County				
1	J. W. Mitchell land	S1 T31N R23W	Pb	Shepard, 1898, p. 198-199	Reported float lead locality.
2	Mrs. Treadham's land	S3 T31N R23W	Pb	Shepard, 1898, p. 198-199	Float lead reported in SW1/4 NW1/4.
3	---	S8 T31N R23W	Pb	Shepard, 1898, p. 198-199	Lead shines in NE1/4.
4	Dr. Miller's land	S31 T32N R23W	Pb	Shepard, 1898, p. 198-199	Reported float lead locality.
5	Wood farm	S24 T32N R24W	Pb, Zn	Robertson, 1890-92, p. 2; Winslow, 1894, p. 721	Minor occurrences in bedrock in SE1/4 NW1/4.
6	Henney mine	S35 T32N R24W	Fe	Hughes, 1910a, p. 2; Crane, 1912, p. 302	99 tons of limonite ore shipped from 2 cuts in NW1/4 NW1/4 in 1910. Probably Mississippian bedrock.
7	Plummer farm	S10/11 T33N R21W	Pb	Robertson, 1890-92, p. 2; Winslow, 1894, p. 721	Considerable ore mined in the past in SE1/4 NE1/4 sec. 10 and NW1/4 NW1/4 sec. 11.
8	J. C. Alsard land	S5 T3N R24W	Fe	Hughes, 1910a, p. 1; Crane, 1912, p. 302	Thick surface exposure of limonite boulders and fragments over 1/2 acre in SW1/4 NE1/4, but no development.
9	Thomas Barger	S3 T34N R21W	Pb	Robertson, 1890-92, p. 1; Winslow, 1894, p. 721	Reported 60 ft shaft with mineral top to bottom; 3,000-4,000 lbs PbS taken out and development continuing.
10	Ingalls Creek	S10 T35N R21W	Pb	Robertson, 1890-92, p. 2; Winslow, 1894, p. 721	Considerable lead taken from surface clays in NW1/4 NE1/4.
11	---	S31/32 T35N R22W	Pb, Zn	Robertson, 1890-92, p. 2; Winslow, 1894, p. 721	Samples submitted from reported occurrences in the 2 sections.
	Pulaski County				
1	Old Indian Lead mine	S17 T35N R11W	Pb	Waynesville 7-1/2' quadrangle topographic map	Located in NW1/4 NE1/4 SE1/4 in the Ft. Leonard Wood Military Post. No data in MGS records.
2	Judge Colly land	S6 T35N R13W	Pb	Shumard, 1873, p. 230	A few pieces of galena reportedly found in this section.
3	G. W. Lane mine	S30 T36N R11W	Fe	Swallow, 1859, p. 31; Shumard, 1873, p. 229; Crane, 1912, p. 303; USBM Strategic Minerals statement (property submitted), Sept. 15, 1943	Mine cut near SE corner NE1/4 NE1/4 at St. Roberts, reported to have yielded 65 cars (about 3,000 tons) of limonite and hematite around 1930. Ordovician bedrock.
4	V. G. Atwell prospect	S6 T37N R11W	Fe	Bishop, 1947, p. 17	Limonite prospect in SE1/4 NW1/4 examined in 1947, looked small and unpromising.
5	Pipe Ore bank	S21 T37N R12W	Fe	Schmidt, 1872a, p. 116	Limonite prospect reportedly owned by W. James, Meramec Iron Company.
6	---	S29 T37N R12W	Fe	Swallow, 1859, p. 34	Iron prospect reported by Shumard, not described.
7	Moccasin Bend mine (Thornsberry mine)	S31 T37N R12W	Fe (Pyrites)	Swallow, 1859, p. 31; Schmidt, 1872a, p. 115; Grawe, 1945, p. 444-445	Blue hematite and limonite deposit in E1/2 NE1/4 NE1/4. Despite early favorable reports and shipments to the Meramec iron furnace, in the early 1870's, only a few hundred tons of ore were mined. One carload shipped to Granite City Steel Co. in 1934. Ordovician bedrock.
8	Keeth prospect	S13 T37N R13W	Pyrites	Grawe, 1945, p. 443-444	Two shafts, 60 ft and 25 ft deep; shallower one in 1940's for pyrites. Only minor shows of pyrites and iron ore. Located in NW1/4 NW1/4.
	St. Clair County				
1	---	S20 T37N R24W	Pb	Beveridge, 1951, p. 100	Galena float reported near center of north line SW1/4 but could not be found.
2	Crystal mine (Harmon prospect)	S10 T37N R25W	Barite	Missouri Geological Survey Mineral Resources Corresp. Files: St. Clair County - Barite. Data includes 2 consultant reports, in particular Peugnet, 1962; Wharton, 1967, p. 76; Wharton, 1969, p. 61; Clark, 1970, p. 16, 18, 23	Coarsely crystalline, clear barite in veins and fracture fillings in sandstone of probable Mississippian or Pennsylvanian age. Considerable trenching in 1960's and some production. Located in SE1/4 NW1/4 NW1/4. This is a unique barite occurrence in Missouri, because the host rock is a sandstone of probable Pennsylvanian age. Small washer-jig plant located at Vista during 1960's.
3	Evans land	S10 T37N R27W	Fe	Hughes, 1913, p. 28-29	25 ft shaft in S1/2 reportedly hit a seam of ochre and limonite up to 15 ft thick between 22 ft to 37 ft depth. Boulders of limonite are fairly common nearby.
4	Capp's shaft	S25 T37N R28W	Zn, Pb	Hughes, 1913, p. 25-26	40 ft shaft in SW1/4 reportedly encountered a few small lenses of ZnS. No development. An earlier lead prospect shaft is located 100 ft south.
	Texas County				
1	Lead Hill diggings	S6 T28N R11W	Zn, Pb(Cu)	Gage, 1874, p. 632; Winslow, 1894, p. 644; Melton, 1978, p. 88-95	12 ft shaft in SW1/4 SW1/4 atop Lead Hill into a cave system, devoid of mineralization in Ordovician bedrock. Very minor ZnS, PbS recovered from the shaft.
2	Reported occurrence	S7 T28N R11W	Fe	Lonsdale, 1892, p. 63	Minor surface shows of limonite in NW1/4 SE1/4.
3	Reported occurrence	S18 T28N R11W	Fe	Nason, 1892, p. 267; Crane, 1912, p. 342	Located in NW1/4 SE1/4 and NW1/4 NE1/4; no description.
4	Beck prospect	S23 T28N R11W	Fe	Lonsdale, 1892, p. 62	Reported occurrence of limonite, no exact location or details.
5	Sheahan prospect	S33 T28N R11W	Pb (Fe, U)	Hanss, 1953, p. 14	Old lead prospect pit in NW1/4 SE1/4 NE1/4. Owner claims some radioactivity. No signs of mineralization.
6	Stump prospect	S34 T28N R11W	Mn	Hanss, 1953, p. 15	Reported occurrence in NW1/4 NW1/4 NE1/4. No details.
7	Smalley prospect	S36 T28N R11W	Fe	Nason, 1892, p. 266; Crane, 1912, p. 342	Half acre of limonite float near foot of steep slope. Reported to be sandy and cherty; no further details.
8	Burnett's diggings (Brunet diggings)	S22 T28N R12W	Pb	Gage, 1874, p. 631-632; Winslow, 1894, p. 644	Large galena crystals attached to walls of small cave system. Several prospect shafts failed to find lead in bedrock.
9	J. C. LaReau prospect	S26 T29N R11W	Zn	Lonsdale, 1892, p. 37	Reported occurrence, no details.
10	Reported occurrences	S2/3,10/11,23/24 T29N R12W	Pb	Swallow, 1859, p. 65	The tabulation attributed to Shumard gives no details, and the lack of later reports suggests their lack of importance. Center of cluster plotted.
11	McCanless (Murphy) Barite mine	S28 T30N R10W	Barite	Muilenburg, 1942; Kidwell, 1946, p. 849-850; Wharton, 1982, p. 96-97	First prospected in 1916 and initially mined by shafts; final mining in 1940's by open-cut methods. Located in NW1/4 SW1/4 SE1/4, pit measures 300 ft N-S and up to 75 ft wide. At least 1,300 tons produced. Host rock is Ordovician Jefferson City and Cotter Dolomites.
12	Brown prospect	S14 T31N R12W	Fe	Smith, 1953-54, p. 46	Limonite float over 80 ft by 100 ft area on NW slope of ridge in SE1/4 SE1/4. No signs of prospecting or mining.
	Webster County				
1	Hemphill Lead prospect	S13 T28N R18W	Pb	Wharton, 1973, p. 90	Pocket of coarsely crystalline galena exposed in fractured Ordovician dolomite in clearing for stock pond in SW1/4 SW1/4.
2	Reported occurrences	S27 T28N R18W	Pb	Buckley, 1902, p. 102	Hillside stripping exposed veinlets of galena and calcite in SW1/4 NW1/4 and NW1/4 SE1/4. No development.
3	Reported occurrence	S36 T28N R18W	Fe	Buckley, 1902, p. 102	Limonite cements residual chert breccias in S1/2 SE1/4. Not considered important.
4	Gates mine area	S3 T28N R19W & S34 T29N R19W	Pb, Zn	Winslow, 1894, p. 624; Shepard, 1898, p. 193-194; Melton, 1978, p. 32-44	Located near the NW corner sec. 3, a drift gives access to the mine workings. Numerous shallow pits are also located 1,000 ft N in the SW1/4 sec. 34. Large galena output. Bedrock is Ordovician Jefferson City and Cotter Dolomites.
5	Devil's Den area (Old Lunke diggings)	S3 T28N R19W	Pb	Robertson, 1891-92a, p. 9; Winslow, 1894, p. 624; Shepard, 1898, p. 38, 193-195; Buckley, 1902, p. 99	Residual galena discovered near here in NE1/4 NW1/4 in 1838; enough mined by McClurg and Murphy to support a smelter here for a year.
	Webster County (continued)				
6	McClurg's Place	S3 T28N R19W	Pb	Robertson, 1891-92a, p. 10	40 to 50 old shafts in Jefferson City Dolomite in the E1/2 SW1/4.
7	Galloway prospect	S8 T28N R19W	Zn	Bishop, 1940's, 1942 War Minerals memo and map location	Reported occurrence in NW1/4.
8	Sherman prospect	S10 T28N R19W	Pb	Shepard, 1898, p. 194-195	Reported occurrence in the Burlington Limestone.
9	Company shaft	S8 T29N R16W	Pb	Robertson, 1891-92a, p. 6	Shallow pits and float mineral observed.
10	Copely mine	S33 T29N R16W	Pb	Robertson, 1891-92a, p. 8	Mainly residual deposit of galena in the clays, abandoned in 1891.
11	Trusty mines	S5 T29N R17W	Pb	Robertson, 1891-92a, p. 3; Winslow, 1894, p. 624	Once important group with 75 to 100 shafts, deepest 35 ft, located in W1/2 Lot 1 in NE1/4. Mining between 1875-1882, mostly in residual clays, yielded about 25 tons of galena. Ordovician bedrock.
12	Teague Creek mines (Taylor & Polly shafts)	S6 T29N R17W	Pb, Zn, Cu	Robertson, 1891-92a, p. 3-5; Winslow, 1894, p. 623-624; Melton, 1978, p. 53-59	Over 100 shallow pits in a few acres in the SW1/4 SE1/4. The Taylor shaft was 101 ft deep and yielded 250-350 tons of lead in 1875-1876; but mostly from upper 20 ft of residual clays. The Polly shaft, 58 ft deep, had the deepest and richest residual lead and zinc ores. Ordovician bedrock.
13	Hazelwood mining camp	S16 T29N R17W	Pb (Zn)	Robertson, 1891-92a, p. 1-2; Winslow, 1894, p. 623	Formerly important mines discovered in W1/2 by McClurg in 1843 with good output 1844-1861. Subsequent efforts failed. Total output 150-175 tons of galena, mostly from residual clays above bedrock, Ordovician Jefferson City and Cotter Dolomites.
14	Star (Porter) mine	S18 T29N R17W	Zn	Melton, 1978, p. 45-52; U.S. Geological Survey 7-1/2' quadrangle topographic map	Located in SE1/4 SE1/4 NW1/4 NE1/4 in James River flood plain, 2 shafts 30-40 ft deep and mill foundation. Owner reports mine-mill operations for about a year in 1927-1928. Ordovician bedrock.
15	Duncan prospect	S28 T29N R18W	Pb	Buckley, 1902, p. 102	Several shafts by Duncan and others in SE1/4 SE1/4. Galena in bunches in strata about 5 ft below surface on Lee land.
16	Duncan land	S32 T29N R18W	Pb, Zn	Buckley, 1902, p. 100-101	Several drillholes and shafts, one 164 ft deep and still sinking (in 1902), in NE1/4 NE1/4. Some pockets with ZnS and calcite, but not very promising.
17	Klinkenspor's lease	S33 T29N R18W	Pb	Buckley, 1902, p. 100	Covers SE1/4 and SW1/4 NW1/4. Some faulting or slumping, but not promising.
18	Mrs. Welch's & T. S. Florence lands	S4 T29N R19W	Pb	Shepard, 1898, p. 194-195	Lead prospects reported in E1/2 Lot 8 in NW1/4 and near middle of section.
19	McClellan diggings	S8 T29N R19W	Pb, Zn	Robertson, 1891-92a, p. 10; Winslow, 1894, p. 632 (wrong township)	Discovered in 1860 and some lead mined. Shaft sunk on crevice striking N70°E in 1880 and some zinc ores produced.
20	McClellan land	S9 T29N R19W	Pb, Zn	Winslow and Weller, 1890, p. 100; Shepard, 1898, p. 194-195	Location in SE1/4 NW1/4; 1,000 lbs of lead-zinc ores produced. Several shafts; deepest 20 ft. E-W fissure veins.
21	Johnson mines	S27 T29N R19W	Pb	Robertson, 1891-92a, p. 10; Shepard, 1898, p. 194-195	Much lead mined here in SW1/4 NW1/4 in 1846, and hauled to Hazelwood smelter.
22	Johnson (Jackson?) mines	S28 T29N R19W	Pb, Zn	Robertson, 1891-92a, p. 10; Winslow, 1894, p. 624; Shepard, 1898, p. 194-195	Large amount of lead-zinc mined in NE1/4 NE1/4 in 1846.
23	Harper's mines	S33/34 T29N R19W	Pb	Robertson, 1891-92a, p. 9; Winslow, 1894, p. 624, 632; Shepard, 1898, p. 194-195; Melton, 1978, p. 32-33	Large amounts of galena mined in SE1/4 SE1/4 sec. 33 in 1873 and hauled to Marshfield. Crevices strike N35°E. Workings probably extended into sec. 34.
24	Oliver Ewing land	S34 T29N R19W	Pb, Zn	Shepard, 1898, p. 194-195	Large amounts of lead and zinc mined in SW1/4 NW1/4 in 1886, crevice strikes N20°W.
25	Marshfield Mining Co.	S24 T30N R18W	Zn	Robertson, 1891-92a, p. 6-7; Winslow, 1894, p. 624	140 ft shaft sunk in 1891, has some ZnS with calcite in hard, quartzitic sandstone at the bottom.
26	Wommach prospect	S8 T30N R19W	Pb	Shepard, 1898, p. 196-197	Lead prospect in Ordovician dolomite in N1/2 SE1/4.
27	Wommach prospect	S17 T30N R19W	Pb	Shepard, 1898, p. 196-197	Lead prospect in Ordovician dolomite in NW1/4 NW1/4.
28	Dishman prospect	S18 T30N R19W	Pb	Shepard, 1898, p. 196-197	Float mineral reported in SW1/4 NW1/4.
29	---	S18 T30N R19W	Fe	Swallow, 1859, p. 35	Iron ore occurrence reported by Broadhead.
	Wright County				
1	Cabool Mining Co.	S21 T28N R12W	Zn, Pb	Robertson, 1891-92b, p. 47-49; Winslow, 1894, p. 644 (incorrect section and county)	Two shafts 53 ft and 90 ft deep and several small ones located at center E1/2 sec. 21. Some lead and zinc mined from latter pits. 53 ft shaft barren; deeper shaft hit ZnS and silicate at 36 ft. Owner claims he shipped 3 cars of zinc ore (about 70 tons) and 5 tons PbS ore.
2	Hinote (Mook) prospect	S36 T28N R14W	Pyrites	Grawe, 1945, p. 447-450	Located in W1/2 SW1/4, the deposit was drilled in 1918, a 45-ft shaft sunk, and a carload of pyrites shipped the same year. Ore in fractures and cavities in Ordovician bedrock - Jefferson City and Cotter Dolomites.
	Mansfield or Lead Hill Mining District Nos. 3-23, 27 and 32	T28&29N R15&16W	Zn, Pb	West, 1890's; Winslow, 1894, p. 636-638, fig. 187	Deposits are fissure vein types in segments of the Mansfield faults. Host rocks are Jefferson City and Cotter Dolomites. Total district estimate: 3,000 tons Zn, 500 tons Pb ores.
3	Alma Lead & Zinc Co. mine	S5 T28N R15W	Zn, Pb	West, 1890's	Mine reported in NE1/4 SW1/4; no details.
4	West mine	S5 T28N R15W	Zn, Pb	West, 1890's	Mine dump visible in SE1/4 SW1/4.
5	Newton Mining Co.	S6 T28N R15W	Zn, Pb	West, 1890's	Prospects reported in E1/2 SE1/4.
6	McClain & West lands	S6 T28N R15W	Zn, Pb	West, 1890's	Prospects reported in SW1/4 SE1/4.
	Wright County (continued)				
7	Red Bird mine	S6 T28N R15W	Zn, Pb	West, 1890's; Melton, 1978, p. 76-79	One of the Berry group of mines, located in SE1/4 SW1/4. 70 ft shaft and dumps first worked around 1876, but later as recently as 1916-1917.
8	Dodson Lead & Zinc Co. land	S7 T28N R15W	Zn, Pb	West, 1890's	Diggings in SE1/4 SE1/4 NE1/4, but no record of output.
9	Alma Lead & Zinc Co. land	S8 T28N R15W	Zn, Pb	West, 1890's	Minor and Upoton prospects in E1/2 NW1/4. No data.
10	McMullin (McMullen) mines	S8 T28N R15W	Zn, Pb	West, 1890's; Winslow, 1894, p. 636-638, fig. 187; Melton, 1978, p. 76, fig. 25, p. 61	Between 1876 and 1877, 225 tons of Zn ore and 5 tons of lead ore, but in all, 50 carloads of Zn silicate ore (about 1,200 tons) and 10 tons of PbS ore were mined (Robertson, 1891). One 52 ft shaft and many shallow pits located in S1/2 SW1/4.
11	Cochran zinc prospect	S17 T28N R15W	Zn	Bishop, 1940's, 1942 USGS War Minerals Investigations in Wright Co.	Prospect located in NE1/4, inspected in 1942.
12	Headley mines	S20 T28N R15W	Zn (Pb)	Winslow, 1893, p. 34-35; Winslow, 1894, p. 636-638, figs. 187-188; Melton, 1978, p. 76 and fig. 25, p. 61	Three mines in NE1/4 yielded 425 tons of Zn ores during 1877-1879 and 1886-1893.
12a	Old Headley shaft	S20 T28N R15W	Zn, Pb	Winslow, 1893, p. 34-35; Winslow, 1894, p. 636-638, figs. 187-188	Located in SE1/4 NW1/4 NE1/4; 70 ft deep, 2 ft vein structure; mostly ZnS, some smithsonite and galena.
12b	Headley No. 1 shaft	S20 T28N R15W	Zn	Same as 12a	Located in NW1/4 NW1/4 NE1/4; 51 ft deep; upper 20 ft clay, next 10 ft smithsonite, then ZnS. Strikes N30°W, dips about 80°W, yielded 25 tons of Zn ore.
12c	Headley No. 2 shaft	S20 T28N R15W	Zn	Same as 12a	Located in NE1/4 SW1/4 NE1/4; 32 ft deep; vein similar to those above.
13	Mansfield Mining Co. shaft	S21 T28N R15W	Pb	Winslow, 1894, p. 638	120 ft shaft in NE1/4 NE1/4; body of lead ore 5 ft thick reported at bottom. Not examined.
14	Chickasaw mine	S27 T28N R15W	Zn, Pb	West, 1890's	Diggings visible in 1949 airphoto in W1/2 NE1/4 NE1/4 NE1/4,; no data on output.
15	St. Joe mine	S27 T28N R15W	Zn, Pb	West, 1890's	Diggings present in W1/2 NE1/4 SE1/4 SE1/4; no further data.
16	Dodson Lead & Zinc, Midland Lead & Zinc Co.	S30 T28N R15W	Zn, Pb	West, 1890's	Dodson land in N1/2 N1/2, Midland land adjoining to the south. No data on either property.
17	Tarbutton & Gaskill mines	S1 T28N R16W	Zn	Robertson, 1891-92b, p. 53, 79; Winslow, 1894, p. 636-637, fig. 187	Group of shallow shafts and pits, located mostly in E1/2 NE1/4, yielded Zn silicate and ZnS. Northwest extension of Berry mines veins.
18	Berry or Roote mines	S1 T28N R16W	Zn	Robertson, 1891-92b, p. 52-53, 79; Winslow, 1893, p. 36-37; Winslow, 1894, p. 636-637; Melton, 1978, p. 77-87, figs. 35-40	Located in NE1/4 SE1/4, shaft was 185 ft deep. Mining in 1876-1877, 1885-1886 and 1893. N20°W vein contained ZnS and silicate, 2 to 3 1/2 ft thick; reportedly yielded 620 tons of Zn ores. Host rock is Ordovician Jefferson City and Cotter Dolomites.
19	Crow mine	S22 T28N R16W	Pb, Zn	West, 1890's; McFarland, 1980	Diggings seen in SW1/4 SE1/4 in 1980 airphoto study; no further data.
20	Lead Hill or Davis mines	S25 T28N R16W	Pb (Zn)	Robertson, 1891-92b, p. 50-51; Winslow, 1894, p. 636-637, fig. 187; Melton, 1978, p. 60-75, figs. 25, 26, 30	15 to 20 shafts, some 80-100 ft deep, and a 100-ft drift mine in the E1/2 NE1/4. PbS in clay-filled crevices striking E-W. About 325 tons mined 1876-1878 and some activity up to 1893. Robertson reported possibly 800-1,000 tons raised. Melton mapped two drift mines on either side and parallel to the so-called Lead Hill fault, one of the NW-trending Mansfield faults. Bedrock is Ordovician Jefferson City and Cotter Dolomites.
21	Conway mine	S27 T28N R16W	Pb, Zn	West, 1890's; McFarland, 1980	Pit seen in airphoto in SE1/4 SE1/4 SW1/4; no further data.
22	Baltimore mine	S27 T28N R16W	Pb, Zn	Same as 21	Diggings visible in airphotos near SW corner NW1/4 SE1/4; no further data.
23	---	S34 T28N R16W	Pb, Zn	Same as 21	Diggings visible in airphotos in NW1/4 NW1/4; no further data.
24	Brazelton mines (Follansbee prospect)	S22 T29N R13W	Pb	Robertson, 1891-92b, p. 53; Winslow, 1894, p. 638; Bishop, 1940's, 1943 USBM War Minerals Investigations	Two or three shafts in the center common line of SW1/4 NW1/4 and NW1/4 NW1/4. Abundant PbS in clays to a depth of as much as 40 ft. Bedrock looked barren. USBM told that some lead mining was done here as recently as 1925 (Follansbee prospect). Probably several hundreds of tons mined.
25	Spark's land	S23 T29N R14W	Pb	Shumard, 1873, p. 211	About 10 lbs of galena obtained here from dolomite bedrock in 1850's.
26	Pickels land	S6 T29N R15W	Zn	Robertson, 1891-92b, p. 54	Surface zinc showing led to sinking a 40-ft shaft and drilling to 100 ft in the bottom. 3 ft of ZnS mineralization reported at 70 ft depth, but work was stopped.
27	--- (Mansfield district mine)	S32 T29N R15W	Pb, Zn	West, 1890's; McFarland, 1980	Pit seen on hilltop in SW1/4 NW1/4 in airphoto study; no further data.
28	Preston Prock land	S1&2 T29N R16W	Pb	Shumard, 1873, p. 210-211, map p. 204	Reported lead occurrences in cotton rock, in cavities but not in veins, in the N1/2 of the 2 sections near Wood's Fork branch.
29	Prock's diggings	S11 T29N R16W	Pb	Shumard, 1873, p. 210; Winslow, 1894, p. 636	150 lbs of PbS taken from cavities in bedrock in the SW1/4 in 1856. Some bunches of galena float reported in SE1/4. No veins were found.
30	Copely mine(?)	S15 T29N R16W	Pb	Robertson, 1891-92a, p. 8	Residual lead deposits previously mined in SW1/4; some question about township location.
31	Prock prospect	S23 T29N R16W	Pb	Shumard, 1873, p. 210	Galena float reported by Prock in the NE1/4 in 1856.
32	Gaskill shaft (Mansfield district mine)	S36 T29N R16W	Zn	Winslow, 1894, p. 636-637, fig. 187	Shaft shown in SE1/4 SW1/4 SE1/4 in fig. 187 of Winslow. Northwest extension of veins of Tarbutton & Gaskill mines (no. 17), Berry mines (no. 18).

REFERENCES CITED

Albertson, M., 1910a, Missouri Geological Survey field notebook no. 495.
_____1910b, Missouri Geological Survey field notebook no. 497.
Anderson, 1953, Mineral Property Survey sheet, Iron deposits, Douglas County.
Beveridge, T. R., 1951, Geology of the Weaubleau Creek area, Missouri: Missouri Geological Survey and Water Resources, 2d series, v. 32, 111 p.
Bishop, O. M., 1940's: (1) set of mineral file cards under county headings prepared as part of U.S. Bureau of Mines War Minerals investigations in Missouri; (2) numbered prospects are plotted on a set of county maps, scale 1:125,000, issued by the Missouri State Highway Department. The mineral file cards and county maps are available for inspection at the Missouri Geological Survey offices in Rolla.
_____1947, Missouri Geological Survey field notebook no. 860.
_____1950, Missouri Geological Survey field notebook no. 990.
Bodman, J. W., 1910, Missouri Geological Survey field notebook no. 491.
Brichta, L. C., and others, 1943-45, Memoranda and summary reports of War Minerals examinations by U.S. Bureau of Mines; see also Bishop, 1940's.
Brichta, L. C., and Needham, A. B., 1948, Churn drilling at the Capital and Greenland zinc mines, Lawrence County, Missouri: U.S. Bureau of Mines Report of Investigations 4318, 24 p.
Broadhead, G. C., 1874, Report on the Geological Survey of the State of Missouri, including field work of 1873-1874: Rolla, Missouri Geological Survey, 734 p.
Buckley, E. R., 1902, Missouri Bureau of Geology and Mines field notebook no. 388.
_____1903, Biennial report of the State Geologist to the 42nd General Assembly, 1901-1902: Missouri Bureau of Geology and Mines, 83 p.
Buehler, H. A., 1904, Missouri Geological Survey field notebook no. 362.
_____1906, Missouri Geological Survey field notebook no. 364.
_____1911, Biennial report of the State Geologist to the 46th General Assembly, 1909-1910: Missouri Bureau of Geology and Mines, 68 p.
_____1919, Biennial report of the State Geologist to the 50th General Assembly, 1917-1918: Missouri Bureau of Geology and Mines, 117 p.
_____1923-25, Missouri Geological Survey field notebook no. 511B.
Clark, C. N., 1970, Trace elements in Missouri barites: University of Missouri-Columbia, Master's thesis, 50 p.
Clark, E. L., 1938, The geology of Lawrence County and parts of Newton and Jasper Counties, Missouri: Missouri Geological Survey manuscript file C-1358, 236 p.
Corless, J. B., 1916, Pierson Creek mines, Springfield, Missouri [Mine and property map, scale 1:7,920]: Missouri Geological Survey map 326-2-2 folder.
Crane, G. W., 1910, Missouri Geological Survey field notebook no. 455.
_____1912, The iron ores of Missouri: Missouri Bureau of Geology and Mines, 2d series, v. 10, 434 p.
Eagle-Picher Company, 1958, Pierson Creek mines, Springfield, Missouri: Missouri Geological Survey Map 326-2-2 folder, scale 1:2,400.
Fellows, L. D., 1970, Geology of the Galloway quadrangle, Greene County, Missouri: Missouri Geological Survey and Water Resources Geologic Quadrangle Map Series 5, scale 1:24,000, 15 p.
Ford, H. P., 1910, Missouri Geological Survey field notebook no. 498.
Gage, J. R., 1874, Lead mines--southeast Missouri; in Report on the Geological Survey of the State of Missouri, including field work of 1873-1874: Rolla, Missouri Geological Survey, p. 602-637.
Grawe, O. R., 1945, Pyrites deposits of Missouri: Missouri Geological Survey and Water Resources, 2d series, v. 30, 282 p.
Hanss, R., 1953, Missouri Geological Survey field notebook no. 1066.
Hayes, W. C., Jr., 1957, Data in Missouri Geological Survey correspondence files for lead and zinc in Dallas County.
Hendriks, H. E., 1942, Geology of the Macks Creek quadrangle, Missouri: Iowa City, University of Iowa, Master's thesis, 117 p. [Missouri Geological Survey manuscript file C-353.]
Hughes, V. H., 1910a, Missouri Geological Survey field notebook no. 462.
_____1910b, Missouri Geological Survey field notebook no. 475.
_____1913, Missouri Geological Survey field notebook no. 476.
_____1918, Missouri Geological Survey field notebook no. 567.
Kidwell, A. L., 1946, Blue barite from Texas County, Missouri: Rocks and Minerals, v. 21, no. 12, p. 849-850.
Kisvarsanyi, E. B., 1975, Data on Precambrian in drillholes of Missouri including rock type and surface configuration: Missouri Department of Natural Resources, Geological Survey, Report of Investigations 56, map at scale 1:1,000,000, 19 p.
Lonsdale, E. H., 1892, Missouri Geological Survey field notebook no. 161a.
Markos, L. J., 1953a, Missouri Geological Survey field notebook no. 1046.
_____1953b, Missouri Geological Survey mineral property survey sheet--Howell County.
Martin, A. J., 1946, Summarized statistics of production of lead and zinc in the Tri-State (Missouri-Kansas-Oklahoma) mining district: U.S. Bureau of Mines Information Circular no. 7383, 67 p.
Mather, W. B., 1945, Missouri Geological Survey field notebook no. 802.
McFarland, M. C., 1980, Inventory of mines and affected areas, Wright County: U.S. Bureau of Mines Materials Availability System, Mineral Industry Location System (MILS), data base for Missouri.
McLaughlin, A. C., 1900, Missouri Geological Survey field notebook no. 184.
McNutt, V. H., 1910a, Missouri Geological Survey field notebook no. 493.
_____1910b, Missouri Geological Survey field notebook no. 496.
Melton, D. C., Jr., 1978, Base metal mineralization in south central Missouri: University of Missouri-Rolla, Master's thesis, 138 p.
Missouri Geological Survey, 1943, Magnetic map of Missouri, showing anomalies of vertical intensity: 1 sheet, scale 1:500,000, contour interval 100 gammas.
Muilenburg, G. A, 1942, McCanless barite mine, Texas County, Missouri: Rolla, Missouri School of Mines, Department of Geology.
Nason, F. L., 1891, Missouri Geological Survey field notebook no. 159.
_____1892, A report on the iron ores of Missouri: Missouri Geological Survey, 1st series, v. 2, 366 p.
Offield, T. W., and Pohn, H. A., 1979, Geology of the Decaturville impact structure, Missouri: U.S. Geological Survey Professional Paper 1042, 48 p.
Peugnet, A. A., 1962, Examination of barite prospects of Alton Realty Co. near Vista, Avery, and Hermitage, Missouri: Consultant report, 5 p.
Richard, L. M., 1906, Missouri Geological Survey field notebook no. 429.
Robertson, J. D., 1890-92, Missouri Geological Survey field notebook no. 166.
_____1891-92a, Missouri Geological Survey field notebook no. 96.
_____1891-92b, Missouri Geological Survey field notebook no. 152.
Ruhl, Otto, and Ballinger, H. J., 1949, Ore deposits in Reeds Spring and Fern Glen Formations other than in the Galena camp--Pierson Creek camp, Greene County, Missouri, Appendix to Investigation of the zinc-lead deposits in horizons below the Grand Falls Chert, Galena district, Cherokee County, Kansas: U.S. Bureau of Mines, Report of Investigations 4398, p. 16-17.
Rutledge, R. B., 1922, Missouri Geological Survey field notebook no. 615.
_____1922-23, Missouri Geological Survey field notebook no. 616.
_____1923, Missouri Geological Survey field notebook no. 617.
_____1924, The geology of Lawrence County and parts of Newton and Barry Counties, Missouri: University of Missouri-Columbia, Ph.D. dissertation, 174 p. [Missouri Geological Survey manuscript file C-1357.]
Schmidt, Adolph, 1872a, Missouri Geological Survey field notebook no. 270.
_____1872b, Missouri Geological Survey field notebook no. 272.
_____1872-73, Missouri Geological Survey field notebook no. 273.
_____1873, The iron ores of Missouri; part 1, chap. 3 of Preliminary report on the iron ores and coal fields from the field work of 1872: Rolla, Missouri Geological Survey, p. 45-214.
Schoolcraft, H. R., 1819, A view of the lead mines of Missouri (including observations on the mineralogy, geology, geography, antiquities, soil, climate, population and productions of Missouri and Arkansas, and other sections of the western country): New York, privately published by author, 299 p.
Shepard, E. M., 1898, A report on Greene County: Missouri Geological Survey, 1st series, v. 12 (Sheet Report no. 5), p. 13-245.
_____1914, Lead and zinc; in History of Greene County, Missouri: Missouri Geological Survey manuscript file 25017, 20 p.
Shumard, B. F., 1873, Chapters on Wright, Laclede, and Pulaski Counties; in Broadhead, G. C., Meek, F. B., and Shumard, B. F., Reports on the geological survey of the State of Missouri, 1855-1871: Missouri Bureau of Geology and Mines, p. 205-232.
Smith, E. S., 1953-54, Missouri Geological Survey field notebook no. 1048.
Soulé, J. H., 1943, Capital Mining Company, Lawrence County, Missouri: U.S. Bureau of Mines War Minerals Report 162, March 1943, 5 p.
Stinchcomb, B. L., 1960, Outcrops map, Everton 7 1/2' quadrangle: Missouri Geological Survey map SP-6019 (vault).
Swallow, G. C., 1859, Geological report of the country along the line of the southwestern branch of the Pacific Railroad, State of Missouri: St. Louis, George Knapp and Co., map, 93 p.
Tarr, W. A., 1918, Missouri Geological Survey field notebook no. 598.
Thiel, J. M., 1928, Missouri Geological Survey field notebook no. 690.
_____1931, Missouri Geological Survey field notebook no. 724.
West, S. B., 1890's(?), Lead Hill mining district, Wright County, Missouri: Missouri Geological Survey, map 322-13-C folder.
Wharton, H. M., 1967, Missouri Geological Survey field notebook no. 1292.
_____1969, Missouri Geological Survey field notebook no. 1325.
_____1973, Missouri Geological Survey field notebook no. 1326.
_____1982, Missouri Geological Survey field notebook no. 1395.
Williams, C. P., 1877, Missouri Geological Survey field notebook no. 292.
_____1878, Dade County: Missouri Geological Survey manuscript file C-702, 21 p.
Winslow, Arthur, 1889, Missouri Geological Survey field notebook no. 31.
_____1893, Missouri Geological Survey field notebook no. 246.
_____1894, Lead and zinc deposits: Missouri Geological Survey, 1st series, v. 6-7, 763 p.
Winslow, Arthur, and Weller, S., 1890, Missouri Geological Survey field notebook no. 98.

MINES, PROSPECTS, AND OCCURRENCES OF METALLIC MINERALS AND BARITE, SPRINGFIELD 1° X 2° QUADRANGLE, MISSOURI

By
Heyward M. Wharton
Missouri Department of Natural Resources

1987

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1987
For sale by Branch of Distribution, U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225