

UNIVERSITY OF NEVADA BULLETIN

VOL. XXVI

DECEMBER 1, 1932

No. 6

BULLETIN OF NEVADA STATE BUREAU OF MINES AND
MACKAY SCHOOL OF MINES

METAL AND NONMETAL
OCCURRENCES
IN NEVADA

PREPARED AND PUBLISHED BY THE NEVADA STATE BUREAU OF MINES
IN COOPERATION WITH THE UNITED STATES GEOLOGICAL SURVEY

PRICE, 50 CENTS



PUBLISHED QUARTERLY
BY THE
UNIVERSITY OF NEVADA
RENO, NEVADA

CONTENTS

	PAGE
Foreword.....	5
 PART I—INTRODUCTION :	
Origin and scope of this work.....	7
Distribution of mining districts.....	7
Form and content of deposits.....	8
Classification of deposits—	
Pre-Cambrian.....	9
Post-Cambrian.....	10
Geology of Nevada.....	11
 PART II—CATALOGUE OF MINING DISTRICTS :	
Acknowledgments.....	15
Plan of the work.....	15
Classification of mining districts by predominant metal.....	17
List of districts by counties.....	17
 PART III—CATALOGUE OF NONMETAL OCCURENCES BY MINERALS :	
Nonmetals by minerals.....	91
Alphabetic list of metal mining districts.....	117
Alphabetic list of nonmetals by minerals.....	130
Publications by Nevada State Bureau of Mines and Mackay School of Mines.....	131

FOREWORD

This bulletin is supplemental to that part of United States Geological Survey Bulletin No. 507 which deals with Nevada, to which has been added a section listing the nonmetal occurrences.

The bibliography of the mining districts listed in Bulletin 507 is complete to 1912. In this bulletin the bibliography of the districts listed in Bulletin 507 covers the period between 1912 and 1932 only, so that references prior to 1912 must be looked for in Bulletin 507. The data were compiled by the United States Geological Survey. Mr. Carl Stoddard of the State Bureau of Mines checked the compilation, located the mining districts on the map and wrote the introduction, drawing freely on those parts of the United States Geological Survey Bulletin 507 that were applicable, as indicated in foot notes.

It is interesting to note that the present compilation includes nearly twice as many Nevada mining districts as Bulletin 507, and that the State is now extensively producing tungsten, quicksilver, aluminum silicate for refractories, and bentonitic clays—all of which were unimportant items prior to about 1916.

METAL AND NONMETAL OCCURRENCES IN NEVADA

PART I—INTRODUCTION

By CARL STODDARD

ORIGIN AND SCOPE OF THE WORK

The mining districts of the western United States were catalogued and maps prepared showing the location of the districts by predominant metals by Mr. J. M. Hill in 1910. The work was published as United States Geological Survey Bulletin No. 507 in 1912. In 1931 the United States Geological Survey made a new compilation of the mining districts in Nevada along the same general lines followed in Bulletin 507, but added a section on non-metal occurrences. The Nevada State Bureau of Mines contributed its data to the compilation and issued this bulletin.

Many of the localities catalogued and mapped are not mining districts in the strict legal sense or use of the term. Mining districts were created and sanctioned by law primarily for the convenience of recording the mining claims. In the early stages of development of mining in the West, transportation was slow and costly. In order to eliminate the long journeys to county seats, mining districts were organized to provide local facilities for recording.

Modern transportation has largely removed these conditions, and organized mining districts are now seldom created at new discoveries. A new discovery is merely given a name, and that suffices for its identification indefinitely.

The term "Mining District" is used in this bulletin in the broader sense; it applies to the localities where metallic ores have been mined in sufficient quantities to be worthy of note. Some reported localities were excluded from the list because of the lack of definite knowledge concerning them.

DISTRIBUTION OF DISTRICTS

All of the seventeen counties of the State are producers. Nye County, the largest, leads in the number of districts, while Storey, with its Comstock district, the site of the first lode mining in the State, comes last. In this connection it is interesting to note the comment made by the Curator of the State Museum in his

report to the State Legislature of 1881, as follows: "It would be useless to disguise the fact that confidence in the Comstock lode, heretofore considered the backbone of mining in Nevada, has greatly diminished. Attention is being turned therefrom to other mineral veins, almost everywhere in the State, and there are those who think that, even if the Comstock should fail, Nevada will still be for an indefinite period conspicuous for her great wealth of resource in precious metals."

A glance at the map shows some blank areas. In these areas the geologic structure of the mountains is unfavorable for mineral deposition. In northern Washoe and northwestern Humboldt Counties the mountains are composed of late Tertiary basaltic lava flows, with the broad valleys between covered with Quaternary alluvium. These lavas have not been subjected to any mineralizing agencies since their emplacement.

The nearly blank areas in parts of Clark and Lincoln Counties cover regions where the rocks are flat-lying Paleozoic sediments, undisturbed by igneous intrusions.

In northeastern Nye County is another lean area. This region is characterized by high, rather narrow, mountain ranges separated by broad desert valleys. The rocks are for the most part Paleozoic sediments with granitic intrusions, and few Tertiary volcanics. The scarcity of mining districts here is attributed, not to unfavorable formations, but to the isolation and comparative inaccessibility of the region, together with the fact that the average Nevada prospector is partial to regions where Tertiary volcanics predominate.

FORM AND CONTENT OF DEPOSITS

The following description of the form and content of ore deposits is by Waldemar Lindgren, in U. S. Geological Survey Bulletin 507:

FORM AND CONTENT

The form of the deposits is manifold and depends on the spaces provided for their reception or on the manner in which they made place for themselves. Practically all of them were formed by deposition from water solutions, usually ascending hot water, and as the path of such waters commonly follows fissures the resulting deposits are in large part fissure veins. The walls of the fissures were soaked by the solutions and ores were deposited in them. Some rocks like limestone are peculiarly susceptible to chemical alteration, and where traversing such rocks the mineralizing solutions spread far

and wide, causing the deposition of metallic ores. Such occurrences are called replacement deposits.

The ore minerals were in the first place sulphides of the baser metals, such as galena, pyrite, or zinc blende, or more rarely oxides such as magnetite. Gold alone has originally been deposited as native metal; more rarely it is combined with tellurium. Through the oxygen of surface waters the sulphides have usually been oxidized to various other compounds such as cerusite, hematite, and calamine; this so-called oxidized zone ordinarily reaches down to the permanent water level and in some places considerably below it. In regions of heavy precipitation the oxidized zone is thin. Where there is little rainfall the water level lies far below the surface. Within the Cordilleran region the water level is rarely more than a few hundred feet below the surface; in exceptional places such as Tintic, Utah, it may exceed 2,200 feet in depth.

The ores of the oxidized zone are, as a rule, richer than the underlying sulphides. Just below the oxidized belt secondary sulphides may be formed through concentration by descending surface waters, and this part of the deposit is likely to be exceptionally rich. Such secondary sulphides are chalcocite or copper glance and various rich silver minerals. In many copper deposits, such as those at Ely, Nevada, and Miami and Ray, Arizona, the only workable part of the deposits consists of a layer of this secondary copper glance.¹ In silver veins no such sharp division between the two zones is found. Much of the richest ore mined near the surface in the Cordilleran region is the result of secondary enrichment by descending waters.

CLASSIFICATION OF DEPOSITS

PRE-CAMBRIAN

In assigning an age to an ore deposit, the first division line is at the beginning of the Paleozoic era, with the Cambrian period. Rocks or ores older than that period are called pre-Cambrian, those that are younger post-Cambrian.

In Nevada there is only one known deposit that is of pre-Cambrian age. In the Copper King district, Clark County, a

¹However, it is interesting to note that as a result of recent intensive geologic study, followed by drilling, in the Ely district, great quantities of workable primary copper sulphides (chalcopyrite) have been proven to underlie the secondary sulphides in the district.

pre-Cambrian basic dike carries some copper, platinum and nickel. In Nevada pre-Cambrian areas are small and limited in number, and the Copper King occurrence is the only one which can be assigned to that age.

POST-CAMBRIAN

In Nevada the marked difference in the character and mode of occurrence of ore deposits of Tertiary age, and those that are older, is such that the distinction is often made by classing them as either Tertiary or pre-Tertiary deposits.

The pre-Tertiary ores are most abundantly associated with Paleozoic, and Triassic and Jurassic sedimentaries, their age in nearly all cases ranging from late Jurassic to late Cretaceous. They were for the most part formed during the great granitic intrusions which invaded the region at that time. Most of the copper, lead, and zinc mines of the State belong in this division.

The ores of Tertiary age in Nevada are nearly all confined to extrusive igneous rocks, and contain principally gold and silver, either separately or together. The Tertiary period in Nevada was one of great volcanic activity, especially in the western and southwestern parts of the State. The fracturing and fissuring of the rocks, concomitant with the volcanism, provided channels for ascending hot waters and vapors which deposited their metals in the fissures or soaked into the walls, forming ore deposits. Such metallization of the wall rocks, filling of crevices, and partial replacement of fragments of rock, created the various types of veins. The deformation of the rock by shearing resulted in "shear zones" or "shear veins," like the Packard vein in Rochester district. Shattering and crushing created zones of breccia or brecciated veins, of which the Jackson vein of Gold Circle is an example. A stockwork is a mass of rock that has been intensely fractured, with "stringers" or seams of ore in the fracture planes, which strike in all directions, creating a network of small veins. The usual procedure in mining such deposits is by the "glory hole" method, as at the Flowery Mine at Virginia City.

A fissure vein forms in a major fracture, or "fissure." It is roughly tabular in shape, and contains "shoots," "chimneys," "pipes" or "lenses" of ore, like the Comstock lode, Virginia City, or the Coalition vein at Seven Troughs.

The above types of veins may occur in either igneous or sedimentary rocks, the former being more common in Nevada. It is the deformation of the country rock and the solfateric action accompanying volcanism, that are the controlling factors in the formation of these types of veins.

Replacement deposits are formed by the chemical action of circulating waters upon the enclosing rocks. Limestone, being the most susceptible to chemical action, contains most of the deposits of this type. The metallizing solutions dissolve the lime and deposit metallic minerals; thus an exchange or replacement takes place. The lead ores at Eureka, Nevada, were formed in this manner.

Contact metamorphic deposits are formed at great depth where masses of liquid or viscous magma come in contact with the enclosing rocks, which are changed or "metamorphosed" by the gaseous vapors rising from the magma. Limestone is often changed to garnet or epidote, and metallic minerals are at times introduced in sufficient quantity to form ore deposits. The copper deposits at Yerington and the tungsten veins at Mill City, Nevada, are contact metamorphic deposits.

GEOLOGY

The record of the geologic history of Nevada begins with the rocks of the pre-Cambrian basement, which are exposed only in the extreme southern part of the State. Here the Colorado River and its tributaries have cut through the overlying Paleozoic rocks and into pre-Cambrian schists and gneisses.

No ore deposits of present economic importance have been found in the rather limited known areas where these rocks are exposed.

During the Paleozoic era the eastern two-thirds of the State was submerged at times beneath the Paleozoic seas, and the sediments laid down totaled thousand of feet in thickness. Western Nevada was a land mass. Early in the Triassic period the situation became reversed, and throughout Triassic and Jurassic times western Nevada was submerged beneath the waters of the Pacific, while the eastern Nevada land mass furnished the material for the 10,000 feet or more of sediments laid down in this Mesozoic sea. With the close of the Jurassic, the Great Basin area, comprising all of Nevada and parts of adjoining States, was elevated approximately to its present height, marking the beginning of the general physiographic features that characterize it today.

A great intrusion of granitic rocks, accompanied by faulting and folding of the Paleozoic and Mesozoic sedimentary rocks, resulted in the formation of numerous mountain ranges traversing the State from north to South.

Volcanism, with its attendant faulting, continued throughout

all Tertiary time, especially during the Miocene epoch, when great quantities of lava rocks, andesite, rhyolite, dacite and latite were extruded. Many of the great gold and silver deposits of Nevada were formed at this time. At the close of the Tertiary, extensive faulting reelevated and tilted the Sierra Nevada and desert ranges into their present attitudes.

Tertiary sedimentary rocks are relatively few, and are of minor economic importance. Some of the thin beds of shales and sandstones in Elko and Eureka Counties are presumably of Eocene age, and are tentatively correlated with the Green River series of the Uinta Basin. The oil shales of Elko County and the asphalt beds of Eureka County are members of this series. The Humboldt beds of eastern Nevada (Pliocene), the Truckee beds of western Nevada (Pliocene), and the Esmeralda formation (Miocene) of southwestern Nevada consist of unconsolidated sandstones, clays and diatomaceous earth. They occupy marginal positions at the bases of the mountain ranges, and probably underlie younger alluvium in the valley floors. In some localities the Esmeralda formation has been elevated by faulting to positions high above present valleys.

Tungsten has become an important factor of the mining industry in Nevada. The mineral scheelite (tungstate of lime) has been found in many localities. It is mined in contact metamorphic deposits at Mill City, Nightingale, Ragged Top, Osceola and Silver Dyke. Nevada now ranks first in tungsten production in the United States.

Recent high prices of quicksilver gave an added impetus to the search for that metal, and many new discoveries were made. Nearly every county in the State is a potential producer of mercury. It is found in nearly all the Tertiary igneous rocks and the older sedimentaries. The principal producing mines are near Lovelock, Virginia City, Montgomery and Mina. At Lovelock and Mina the ores occur in limestone, at Virginia City in andesite, and at Montgomery in quartzite. In the Ivanhoe district, Elko County, quicksilver mines are being developed in rhyolite.

The prevailing low price of metals has caused the prospector and miner to turn their attention to placer mining. Dry washing the gravels in shallow gulches and ravines at favorable points is now being done in many parts of the State. Hydraulic mining at Round Mountain has continued seasonally since 1915. Copper Canyon in Lander County, Tuscarora in Elko County, and American Canyon in Pershing County were heavy producers of placer gold in the past.

Viewed as a whole, Nevada presents a panorama of range after range of mountains, trending northerly and southerly, separated by desert valleys. The mountains are built of faulted and folded Paleozoic and Mesozoic sedimentary rocks, intruded by granite, and liberally plastered with Tertiary lavas. Thus the forces of nature, operating through the ages, have prepared the field, plowed huge furrows, and planted and matured a crop of precious and useful metals for man to harvest.

PART II—CATALOGUE OF MINING DISTRICTS

By CARL STODDARD

ACKNOWLEDGMENTS

The bulk of the work of assembling and arranging the data of record pertaining to each of the mining districts was done by the United State Geological Survey in its offices at Washington, D. C. The staff of the Nevada State Bureau of Mines gratefully acknowledges the indebtedness due the members of the Survey, and its hearty cooperation in all matters concerning this bulletin.

PLAN OF THE WORK

A map of Nevada (Plate I) showing the location of the mining districts by number and symbol is published with the bulletin. The number refers to the list of districts printed on the margin of the map; the symbols indicate the predominate metal produced. The lists are arranged alphabetically by counties.

Chemical symbols of the metals produced, in the order of their importance, are placed after the name of each district. Following are the abbreviations used:

Au.....Gold.	Zn.....Zinc.	Ni.....Nickel.
Ag.....Silver.	Hg.....Quicksilver.	W.....Tungsten.
Cu.....Copper.	Fe.....Iron.	Sb.....Antimony.
Pb.....Lead.	Mn.....Manganese.	Ra.....Radium.

The last four are classed as rare, and where they predominate the district is shown on the map as a rare metal district. Where placer gold is a factor in production, Pl is placed after Au.

The distance and direction by road from the nearest railroad shipping point is given—for example, 15 miles S. E. Fallon, S. P. R. R.

The following abbreviations are used for railroads in Nevada:

S. P. R. R.....	Southern Pacific Railroad
W. P. R. R.....	Western Pacific Railway
T. & G. R. R.....	Tonopah and Goldfield Railroad
V. & T. R. R.....	Virginia and Truckee Railway
S. P. L. A. & S. L. R. R.....	San Pedro, Los Angeles and Salt Lake Railroad
E. & P. R. R.....	Eureka and Palisade Railway
N. N. R. R.....	Nevada Northern Railway
U. P. R. R.....	Union Pacific Railroad
N. C. B. R. R.....	Nevada Copper Belt Railroad
N. C. R. R.....	Nevada Central Railroad
T. & T. R. R.....	Tonopah and Tidewater Railroad
A. T. & S. F.....	Atchison, Topeka and Santa Fe Railway

A statement of the geologic formation of the region gives a general idea of the rocks in which the deposits occur. The attempt has been made to name the oldest rocks first, using the terms pre-Cambrian schists, granite, or complex. The term complex is used in districts where schist, gneiss, and granite are found in intimate association. The Paleozoic or Mesozoic limestones, slates, quartzites, etc., are all combined under the terms Paleozoic or Mesozoic sediments. Intrusive rocks are said to "cut" the older formations, and volcanic flows "cap" the other formations. Where the relation is not known only the names of the rocks are given, as Paleozoic sediments, granite, andesite.

The kind of deposits found in the region are noted. No attempt has been made to discuss the deposits; simply their general character is mentioned in the belief that it may be of use. The following terms are used with the meanings indicated, which are sanctioned by the United States Geological Survey:

Vein—A single body of minerals occupying or following a fissure, both walls of which generally, though not invariably, are well defined. Where several veins are so closely spaced that the ground between them becomes in places ore bearing and in its whole width constitutes an ore body the assemblage is called a lode. In this bulletin the term vein is used for both veins and lodes.

Contact-metamorphic deposits—Ore deposits which occur at or near the contacts of intrusive rocks with sedimentary beds and which carry minerals characteristic of contact metamorphism, such as garnet, pyroxene, and epidote.

Replacement deposits—Masses of ore and gangue formed by the alteration of limestone, dolomite, and other rocks. Usually irregular in form and in many places grading into country rock.

Disseminated deposits—Deposits containing ore minerals scattered throughout the rock, such as chalcocite occurring in grains through granite porphyry. The term "impregnations" is sometimes applied to deposits of this type.

Stockwork—A deposit consisting of a complex system of small fissure veins.

Lenses—Ore bodies that are more or less elliptical in outline; thickest at the center and thinning out toward the edges—lenticular in shape.

To all of which is added a bibliography of United States Geological Survey publications relative to the district. These

publications consist of several series, which are indicated by the following abbreviations:

M.....	Monograph.
P. P.....	Professional Paper.
P. N.....	Press Notice.
Bull.....	Bulletin.
W. S. P.....	Water-Supply Paper.
Min. Res.....	Mineral Resources.
Folio.....	Folio of Geologic Atlas.
Top sheet.....	Sheet of Topographic Atlas.

DISTRIBUTION OF MINING DISTRICTS BY COUNTIES ACCORDING TO THE PREDOMINANT METAL PRODUCED

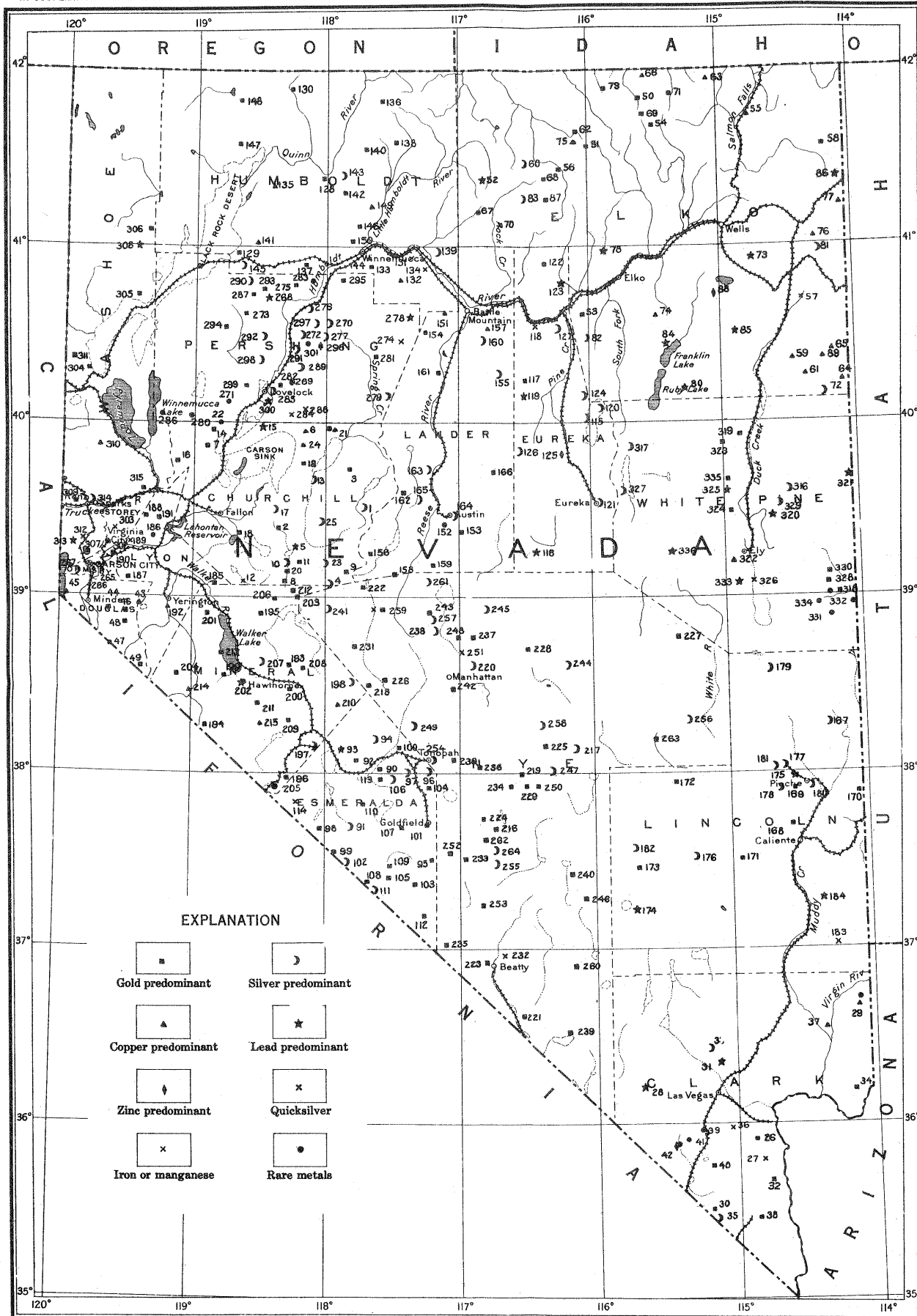
In Nevada there are 336 mining districts credited with the metallic wealth of the State. In 157 of these districts gold leads in value of the metals produced, silver in 79, copper in 32, lead in 28, zinc in 3, manganese in 7, quicksilver in 10, and tungsten in 11. Iron, antimony, radium ores and nickel are reported from one or more districts, and in one district the predominant metal is unknown.

The table on page 18 shows the distribution of the predominant metals in the mining districts, by counties. Some of the districts, while still potential sources of production, have been idle for a number of years and are credited in the table with the predominant metal last produced. In all other districts the production of 1928 governs.

LIST OF MINING DISTRICTS BY COUNTIES

CHURCHILL COUNTY

- Alpine (Clan Alpine).** Ag, Au, Mo.
79 miles by road E. Fallon, S. P. R. R.
Tertiary volcanics.
Veins, shear zones.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 1, 1923.
Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report in preparation.
Min. Res. 1920, pt. 1, p. 319.
1924, pt. 1, p. 430.
1929, pt. 1, p. 651.
U. S. G. S. Carson Sink topographic map.
- Bell Mountain.** Au, Ag.
43 miles ESE. Fallon, S. P. R. R.
Tertiary volcanics.
Veins.
Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report in preparation.
U. S. G. S. Carson Sink topographic map.



MAP OF NEVADA SHOWING LOCATION OF MINING DISTRICTS

Scale 200000
APPROXIMATELY 40 MILES TO 1 INCH
0 25 50 75 100 Miles

LIST OF MINING DISTRICTS

<p>CHURCHILL COUNTY</p> <p>1. Alpha (Clan Alpine) Silver 2. Bell Mountain Gold 3. Bernice Gold 4. Broken Hills (Quartz Mountain) Silver 5. Chalk Mountain Lead 6. Copper Kettle Copper 7. Desert (White Plains) Gold 8. Eagleville (Hot Springs) Gold 9. Eastgate Gold 10. Fairview Silver 11. Gold Basin Gold 12. Holy Cross (Fallon, Terrell) Manganese 13. I. X. L. (Silver Hill) Silver 14. Jessup Gold 15. Lake Gold 16. Leete Gold 17. Mountain Wells (La Plata) Silver 18. Sand Springs Gold 19. Shady Run Gold 20. South Fairview Gold 21. Table Mountain (Boyer, Cottonwood Canyon, Bolivia) Nickel 22. Toy (Browns) Tungsten 23. Westgate Silver 24. White Cloud (Coppered) Copper 25. Wonder (Hercules) Silver</p> <p>CLARK COUNTY</p> <p>26. Alunite (Railroad Pass, Vincent) Gold 27. Black Mountains Iron 28. Charleston Lead 29. Copper King (Bunker, Key West) Copper 30. Crescent Gold 31. Dike Lead 32. Eldorado (Colorado, Nelson) Gold 33. Gas Peak Silver 34. Gold Butte Gold 35. Ivanpah Silver 36. Las Vegas Manganese 37. Logan (St. Thomas, Muddy Mountains) Copper 38. Searchlight Gold 39. Sloan Gold 40. Susan (Lyons) Radium 41. Sutor Radium 42. Yellow Pine (Good, springs, Potots) Zinc</p> <p>DOUGLAS COUNTY</p> <p>43. Buckskin Copper 44. Gardnerville (Eagle) Gold 45. Genoa Copper 46. Mount Sigel Gold 47. Mountain House (Holbrook, Pine Nut) Gold 48. Red Canyon (Silver Lake) Gold 49. Silver Glance (Wellington) Gold</p> <p>ELKO COUNTY</p> <p>50. Alder Gold 51. Aura (Bull Run, Centennial, Columbia) Gold 52. Burner Lead 53. Carlin Gold 54. Charleston (Copper Mountain, Cornwell) Gold 55. Contact (Kit Carson, Porter, Salmon River) Copper 56. Cornucopia Gold 57. Decoy Manganese 58. Delano Gold 59. Delker Copper 60. Divide Silver 61. Dolly Varden (Mizpah, Granite) Copper 62. Edgemont (Centennial) Gold 63. Elk Mountain Gold 64. Ferber Gold 65. Ferguson Spring (Alien, gherney) Copper 66. Gold Basin (Rowland) Copper 67. Gold Circle (Midas, Summit) Gold 68. Good Hope Gold 69. Island Mountain Gold 70. Ivanhoe Quicksilver 71. Jarbridge Gold 72. Kinsley Silver 73. Lafayette Lead 74. Lee Copper 75. Line Mountain (Deep Creek) Copper 76. Lory (Lury, Leroy) Copper 77. Lucin Copper 78. Merrimac (Lone Mountain) Lead 79. Mountain City (Cope, Van Duzer) Gold 80. Mud Springs (Medicine Springs) Lead 81. Proctor Silver 82. Railroad (Bullion) Silver 83. Rock Creek (Falcon) Silver 84. Ruby Valley (Smith Creek) Lead 85. Spruce Mountain Lead 86. Teoms Lead 87. Tuscarora Gold 88. Warm Creek Zinc 89. White Horse Copper</p> <p>ESMERALDA COUNTY</p> <p>90. Alpine Gold 91. Argente Silver 92. Castle Rock Gold 93. Condale Lead 94. Crow Springs Silver 95. Cuprite Gold 96. Divide Silver 97. Dolly Silver 98. Dyer Gold 99. Fessler (Windypah) Gold 100. Gilbert (Desert) Gold 101. Goldfield Gold 102. Good Hope Silver 103. Hornsilver (Line Point) Gold 104. Klondyke (Southern Klondyke) Gold 105. Lida (Alida Valley, Tule Divide) Gold 106. Lone Mountain (West Divide) Silver 107. Montezuma Gold 108. Palmetto Gold 109. Railroad Springs Gold 110. Silver Peak Gold 111. Sylvanie (Green Mountain) Silver 112. Tokop (Gold Mountain, Bonnie Clare, Oriental Wash) Gold 113. Weepah Gold 114. White Mountains (Fish Lake Valley) Quicksilver</p> <p>EUREKA COUNTY</p> <p>115. Alpha Silver 116. Antelope Lead 117. Buckhorn Gold</p>	<p>118. Bowwaw Quicksilver 119. Cortez (Bullion Hill, Mount Tenabo) Silver 120. Diamond Silver 121. Eureka (Pinto, Prospect, Ruby Hill, Secret Canyon, Silverado, Spring Valley) Silver 122. Lynn Silver 123. Maggie Creek (Schroeder) Lead 124. Mineral Hill Silver 125. Mount Hope Zinc 126. Roberts Silver 127. Safford (Barth, Palsade) Silver</p> <p>HUMBOLDT COUNTY</p> <p>128. Amos (Awakening, Slumbering Hills) Gold 129. Black Rock Gold 130. Disaster Gold 131. Golconda Manganese 132. Gold Run Copper 133. Grandpaw Gold 134. Iron Point Manganese 135. Jackson Creek Copper 136. National Gold 137. New Central Gold 138. Paradise Valley (Mount Rose, Spring City) Gold 139. Preble (Potots) Silver 140. Rebel Creek (New Gold, fields, Willow Creek) Gold 141. Red Butte Copper 142. Sherman Iron 143. Shon Silver 144. Sonoma Mountain (Harmony) Copper 145. Sulphur (Rabbit Hole) Silver 146. Ten Mile Gold 147. Veryville (Columbia) Gold 148. Warm Springs (Vicksburg, Ashdown, Puelo) Gold 149. Willow Point Copper 150. Winnemucca (Barrett Springs) Gold</p> <p>LANDER COUNTY</p> <p>151. Battle Mountain (Bannock, Copper Basin, Copper Canyon, Cottonwood Creek, Helena, Rocky Canyon) Copper 152. Big Creek Antimony 153. Birch Creek Gold 154. Buffalo Valley Gold 155. Bullion (Campbell, Lander, Tenabo) Silver 156. Gold Basin Gold 157. Hilltop (Kimberly, Mayeville) Copper 158. Jackson (Gold Park) Gold 159. Kingston (Bunker Hill, Santa Fe, Summit, Victorine) Gold 160. Lewis (Dean, Mud Springs, Pittsburg) Silver 161. McCoy Gold 162. New Pass Gold 163. Ravenswood (Shoshone) Silver 164. Reese River (Amador, Austin, Yankee Blade) Silver 165. Skookum Silver 166. Spencer Gold</p> <p>LINCOLN COUNTY</p> <p>167. Atlanta (Silver Park, Silver Springs) Silver 168. Chief (Caliente) Gold 169. Connet Gold 170. Eagle Valley (Fay, State line) Gold 171. Ferguson (Delamar) Gold 172. Freiberg (Worthington) Gold 173. Gold Range Gold 174. Groom Lead 175. Highland Lead 176. Hiko (Pahrnagat) Silver 177. Jack Rabbit (Bristol) Silver 178. Lone Mountain Silver 179. Patterson (Cave Valley, Geyser) Silver 180. Pioche (Ely) Silver 181. Silverhorn Silver 182. Tam Plute Silver 183. Vico Manganese 184. Viola Lead</p> <p>LYON COUNTY</p> <p>185. Benway Gold 186. Churchill Tungsten 187. Como (Palmira, Indian Springs) Gold 188. Ramsey Gold 189. Red Mountain Iron 190. Silver City (Chinle, Dayton, Devils Gate, Gold Canyon) Gold 191. Talaposa Gold 192. Yerington (Ludwig, Mason) Copper</p> <p>MINERAL COUNTY</p> <p>193. Acme (Fitting) Gold 194. Aurora (Cambridge, Emeralds) Gold 195. Boyard (Copper Mountain, Rand) Gold 196. Buena Vista (Basalt, Mount Montgomery, Onecta) Gold 197. Candelaria (Belleville, Columbus) Silver 198. Cedar Mountain (Bell, Omco, Simon) Silver 199. East Walker (Mount Grant) Gold 200. Garfield Gold 201. Granite (Mountain View, Reservation) Gold 202. Hawthorne (Lucky Boy, Pamlico) Lead 203. King Silver 204. Pine Grove (Rockland, Wilson) Gold 205. Queens Tungsten 206. Rawhide (Regent in Churchill County) Gold 207. Ryan Canyon Gold 208. Santa Fe (Luning, Kinkead) Gold 209. Silver Star (Black Mountain, Gold Range, Marietta, Mina) Gold 210. Sodaville (Pilot Mountain) Copper 211. Sulphide Gold 212. Sunnyside (Hot Springs) Gold 213. Walker Lake (Buckley, Cat Creek) Silver 214. Washington Copper 215. Whiskey Flat Copper</p> <p>NEYE COUNTY</p> <p>216. Antelope Gold 217. Arrowhead Silver 218. Athens Gold 219. Bellehelen Gold</p>	<p>220. Belmont (Philadelphia, Silver Band) Silver 221. Big Dune (Lee) Gold 222. Bruner (Phonona) Gold 223. Bullfrog (Beatty, Pioneer, Rhyolite) Gold 224. Cactus Springs Gold 225. Clifford Gold 226. Cloverdale (Golden, Republic) Gold 227. Current Silver 228. Danville Gold 229. Eden (Gold Belt) Gold 230. Elendale Gold 231. Fairplay (Atwood, Goldyke) Gold 232. Fluorine (Bare Mountain, Telluride) Quicksilver 233. Gold Crater Gold 234. Golden Arrow (Blakes Camp) Gold 235. Grapevine Gold 236. Hannaph (Silverzone, Volcano) Gold 237. Jefferson Canyon (Concordia, Green Isle) Gold 238. Jett Silver 239. Johnnie Copper 240. Kawich (Gold Reed) Gold 241. Lodi (Elsworth, Mammoth, Marble, Quartz Mountain) Silver 242. Manhattan Gold 243. Milllett (North Twin River) Gold 244. Morey Silver 245. Northumberland Silver 246. Oak Springs Gold 247. Oleville Gold 248. Round Mountain Gold 249. San Antonio (Royston, San Antonio) Silver 250. Silverbow Silver 251. Spanish Belt Quicksilver 252. Stonewall Mountain Gold 253. Tolicha (Monte Cristo) Gold 254. Tonopah Silver 255. Trappmans Silver 256. Troy (Irwin Canyon, Nevada) Silver 257. Twin River Silver 258. Tybo (Hot Creek, Key Stone) Silver 259. Union (Bartlin, Ione) Quicksilver 260. Wahomie Gold 261. Washington Silver 262. Wellington (O'Briens) Gold 263. Willow Creek Gold 264. Wilsons Silver</p> <p>ORMSBY COUNTY</p> <p>265. Carson River Copper 266. Delaware (Sullivan) Copper 267. Voltaire (Eagle, Washoe Valley) Silver</p> <p>PERSHING COUNTY</p> <p>268. Antelope (Cedar) Lead 269. Black Knob Antimony 270. Buena Vista (Unionville) Silver 271. Copper Valley (Ragged Top) Tungsten 272. Echo (Rye Patch) Silver 273. Farrell (Stone House) Gold 274. Gold Banks Quicksilver 275. Haystack Gold 276. Imley (Humboldt, Prince Royal, Eldorado) Silver 277. Indian Silver 278. Iron Hat Silver 279. Jersey Silver 280. Juniper Range Tungsten 281. Kennedy Lead 282. Loring (Loveclark, Willard) Gold 283. Mill City (Central) Tungsten 284. Mineral Basin Gold 285. Muttelberry Silver 286. Nightingale Tungsten 287. Placeritos (Rabbit Hole) Lead 288. Relief Quicksilver 289. Rochester (Nenzel, Oregon) Silver 290. Rosebud Silver 291. Sacramento Silver 292. San Jacinto Silver 293. Lodi Silver 294. Seven Troughs Gold 295. Sierra (Sunshine, Dun Glen, Chafey, Or) Gold 296. Spring Valley (Fitting, American Canyon) Gold 297. Star (Santa Clara) Gold 298. Trinity (Araba, Oresana) Silver 299. Velvet Gold 300. Wild Horse Lead 301. Wrights Canyon Tungsten</p> <p>STOREY COUNTY</p> <p>302. Comstock (Virginia City, Gold Hill, Silver Star, Flawery) Gold 303. Red Mountain (Castle Peak) Quicksilver</p> <p>WASHOE COUNTY</p> <p>304. Cottonwood (Round Hole) Gold 305. Deep Hole Gold 306. Donnelly (Gerlach) Gold 307. Jumbo (West Comstock) Gold 308. Ladaville Lead 309. Peavine (Reno, Crystal Peak) Gold 310. Pyramid Copper 311. Sheephead Gold 312. Steamboat Springs Quicksilver 313. Washoe (Galena) Lead 314. Wedekind Silver 315. White Horse (Oling house) Gold</p> <p>WHITE PINE COUNTY</p> <p>316. Aurum (Muncy Creek, Queen Springs, Ruby Hill, Schellbourne) Silver 317. Bald Mountain Silver 318. Black Horse Gold 319. Cherry Creek (Egan Canyon) Silver 320. Duck Creek (Success) Lead 321. Eagle (Kern, Pleasant Valley, Regan, Tungston) Lead 322. Ely (Robinson) Copper 323. Gold Canyon Gold 324. Granite (Stephoe) Gold 325. Hunter Lead 326. Nevada Manganese 327. Newark (Strawberry) Silver 328. Osceola Gold 329. Piermont Silver 330. Sacramento Gold 331. Shoshone (Minerva, Lexington) Tungsten 332. Snake (Bonita) Tungsten 333. Taylor (Ward) Lead 334. Tungsten (Hub, Lincoln) Tungsten 335. Warm Springs Gold 336. White Pine (Hamilton) Lead</p>
---	---	---

DISTRIBUTION OF THE PREDOMINANT METALS PRODUCED IN THE MINING DISTRICTS OF NEVADA

County	Gold	Silver	Copper	Lead	Zinc	Iron	Manganese	Quick-silver	Tungsten	Antimony	Radium	Nickel	Unknown	Total
Churchill	11	1	2	2	1	1	1		1			1		22
Clark	16	1	2	1			1							21
Douglas	5	1	2											9
Elko	14	1	1	7	1		1							40
Esmeralda	16	1	11	1	1									25
Harvey	2	1		1										13
Humboldt	13	1	2	1	1		2							23
Lincoln	6	1	1	3		1	1			1				16
Lander	5	1		1										8
Mineral	15	1	3	1		1								23
Nye	30	1	2											49
Ormsby	1	1		3		1								3
Pershing	10	1		3						1				34
Storey	1	1	1	2										12
Washoe	1	1	1	1			1							21
White Pine	7	1	1	1			1							21
Totals	157	79	32	28	3	3	7	10	11	2	2	1	1	335

CHURCHILL COUNTY Continued.

Bernice. Au, Ag, Sb.

60 miles ENE. Fallon, 60 miles SE. Lovelock, S. P. R. R.

Sedimentary rocks.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 1, 1923.

Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report in preparation.

U. S. G. S. Carson Sink topographic map.

Broken Hills (Quartz Mountain). Ag, Pb, Au.

63 miles by road SE. Fallon, S. P. R. R.; 16 miles SE. Lincoln Highway at West Gate. Extends into Mineral and Nye Counties.

Volcanic tuff capped by basalt and underlain by andesite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 2, 1923.

Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report in preparation.

Min. Res. 1922, pt. 1, p. 319.

1923, pt. 1, p. 493.

1924, pt. 1, p. 430.

1925, pt. 1, p. 675.

1926, pt. 1, p. 529.

1929, pt. 1, p. 651.

U. S. G. S. Carson Sink topographic map.

Buena Vista. Fe. (See Mineral Basin, Pershing County.)

Northern extremity 25 miles SE. Lovelock, S. P. R. R.

Triassic sedimentary rocks cut by granite intrusives and covered in part by Tertiary volcanic rocks and Quaternary sediments and wash.

Schrader, F. C., Buena Vista iron deposits in Pershing and Churchill Counties, Nevada: Report in preparation for publication by Nevada State Bureau of Mines.

U. S. G. S. Carson Sink topographic map.

Chalk Mountain. Pb, Ag

40 miles ESE. Fallon, S. P. R. R.

Triassic (?) limestone.

Veins, replacements.

Schrader, F. C., The Chalk Mountain, Quartz Mountain, Gold Basin, and King mining districts, Nevada: U. S. Geol. Survey P. N. 17276, September 15, 1927.

U. S. G. S. Carson Sink topographic map.

Copper Kettle. Cu.

In Grimes Canyon, W. slope Stillwater Range.

Diorite, overlain by altered porphyry.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 2, 1923.

Min. Res. 1929, pt. 1, p. 651.

U. S. G. S. Carson Sink topographic map.

Desert (White Plains). Au.

8 miles SW. White Plains (Huxley Station), S. P. R. R.

Rich free gold ore in hematite gangue.

CHURCHILL COUNTY—Continued.**Desert (White Plains)**—Continued.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 2-3, 1923.

Min. Res. 1928, pt. 1, p. 454.

U. S. G. S. Carson Sink topographic map.

Eagleville (Hot Springs). Au, Ag (barite).

64 miles SE. Fallon, S. P. R. R.

Volcanic tuff capped by basalt and underlain by andesite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 3-4, 1923.

Min. Res. 1924, pt. 1, p. 431.

1928, pt. 1, pp. 454-455.

1929, pt. 1, p. 651.

U. S. G. S. Carson Sink topographic map.

Eastgate. Au, Ag, Pb.

60 miles ESE. Fallon, S. P. R. R., on W. slope Desotoya Range.

Broken formation of quartz and talc.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 4, 1923.

U. S. G. S. Carson Sink topographic map.

Fairview. Ag, Au, Pb, Cu.

35 miles in airline SE. Fallon, S. P. R. R.; 2 miles S. Lincoln Highway.

Mesozoic sediments overlain by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190, 191, 194, 197 and 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 4, 1923.

Schrader, F. C., Mining districts in the Carson Sink region: Report in preparation.

Min. Res. 1922, pt. 1, p. 319.

1923, pt. 1, p. 494.

1924, pt. 1, p. 430.

1925, pt. 1, p. 675.

1926, pt. 1, p. 530.

1928, pt. 1, pp. 454-455.

1929, pt. 1, p. 651.

U. S. G. S. Carson Sink topographic map.

Fireball. Au.

23 miles NE. Fernley, S. P. R. R.

Nevada has new gold find: Eng. and Min. Jour., vol. 132, No. 1, p. 34, July 13, 1931.

U. S. G. S. Wadsworth topographic map.

Gold Basin. Au, Ag.

45 miles SE. Fallon, S. P. R. R.

Tertiary volcanics, quartz-latite predominating.

CHURCHILL COUNTY—Continued.**Gold Basin**—Continued.

Veins, fine free gold.

Schrader, F. C., The Chalk Mountain, Quartz Mountain, Gold Basin and King mining districts, Nevada: U. S. Geol. Survey P. N. 17276, September 15, 1927.

U. S. G. S. Carson Sink topographic map.

Holy Cross (Fallon, Terrell). Mn, Ag, Au, Cu, Pb.

12 miles NE. Schurz, S. P. R. R.

Tertiary volcanics.

Veins, replacements.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 5-6, 1923.

Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report in preparation.

Min. Res. 1923, pt. 1, p. 494.

1924, pt. 1, p. 431.

1925, pt. 1, p. 675.

1926, pt. 1, p. 530.

U. S. G. S. Carson Sink topographic map.

I. X. L. (Silver Hill). Ag, Au, Pb, Cu.

70 miles SE. Lovelock, S. P. R. R.

Granite and slate.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 6, 1923.

Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report in preparation.

U. S. G. S. Carson Sink topographic map.

Jessup. Au, Ag.

35 miles SW. Lovelock, 10 miles NW. White Plains (Huxley Station), S. P. R. R.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, p. 182, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 6, 1923.

U. S. G. S. Carson Sink topographic map.

Lake. Pb, Ag, Sb.

E. Humboldt Lake on W. flank of Humboldt Lake Range; extends into Pershing County.

Jurassic shales.

Lodes.

Lincoln, F. C., op. cit.

U. S. G. S. Carson Sink topographic map.

Leete. Au, Ag, Pb.

In NW. Churchill County 15 miles NE. of Fernley, S. P. R. R.

Rhyolite, dacite and andesite.

Veins.

Lincoln, F. C., op. cit.

U. S. G. S. Wadsworth topographic map.

CHURCHILL COUNTY—Continued.

- Mountain Wells (LaPlata).** Ag.
30 miles E. Fallon, S. P. R. R.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 8, 1923.
U. S. G. S. Carson Sink topographic map.
- Sand Springs.** Au, Ag. (Salt.)
15 miles SE. Fallon, S. P. R. R.
Tertiary volcanics, Triassic and Jurassic sediments.
Veins.
Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report
in preparation.
Min. Res. 1923, pt. 1, p. 494.
1928, pt. 1, p. 455.
U. S. G. S. Carson Sink topographic map.
- Shady Run.** Au, Ag, Pb.
40 miles SE. Lovelock, S. P. R. R., and equal distance from Fallon.
Quartzite.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 9-10, 1923.
U. S. G. S. Carson Sink topographic map.
- South Fairview.** Au, Ag.
42 miles ESE. Fallon, S. P. R. R.
Tertiary volcanics.
Veins.
Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report
in preparation.
U. S. G. S. Carson Sink topographic map.
- Table Mountain (Boyer, Cottonwood Canyon, Bolivia).** Ni, Co, Cu, Au, Pb,
Ag, Sb.
25-60 miles SE. Lovelock, S. P. R. R.
Triassic sediments cut by diorite capped by Tertiary volcanics.
Veins.
Schrader, F. W., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 194, 196 and 199, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 11-13, 1923.
U. S. G. S. Carson Sink topographic map (southern part of district only).
- Toy (Browns).** W.
2 miles S. Toy section house (formerly Browns), S. P. R. R.
Sediments cut by granite.
Contact metamorphic.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.
Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the
United States: U. S. Geol. Survey Bull. 725, pp. 287-289, 1921.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 13, 1923.
Min. Res. 1925, pt. 1, p. 612.
U. S. G. S. Carson Sink topographic map.
- Westgate.** Ag, Pb, Au.
42-54 miles ESE. Fallon, S. P. R. R.
Jurassic limestone.

CHURCHILL COUNTY—Continued.

- Westgate—Continued.**
Veins, replacements.
Schrader, F. C., The Chalk Mountain, Quartz Mountain, Gold Basin and
King mining districts, Nevada: U. S. Geol. Survey P. N. 17276, Sep-
tember 15, 1927.
U. S. G. S. Carson Sink topographic map.
- White Cloud (Coppereid).** Cu, Zn, Fe, Ag.
35 miles SE. Lovelock, S. P. R. R.
Triassic sediments cut by granite and diorite and capped by Tertiary vol-
canics.
Replacements, contact metamorphic.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 193, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 13-14, 1923.
U. S. G. S. Carson Sink topographic map.
- Wonder (Hercules).** Ag, Au, Cu, Zn.
57 miles by road SE. Fallon, S. P. R. R.
Tertiary volcanics and lake beds.
Veins.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 190-191, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 14-16, 1923.
Ferguson, H. G., The mining districts of Nevada: Econ. Geol., vol. 24,
No. 2, March-April, 1929.
Schrader, F. C., Mining districts in the Carson Sink region, Nevada: Report
in preparation.
Min. Res. 1922, pt. 1, p. 319.
1926, pt. 1, p. 530.
U. S. G. S. Carson Sink topographic map.

CLARK COUNTY

- Alunite (Railroad Pass, Vincent).** Au.
22 miles by road SE. Las Vegas, U. P. R. R.; 12 miles E. Erie, U. P. R. R.
Igneous rocks.
Veins and stringers.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 16-17, 1923.
U. S. G. S. St. Thomas and Camp Mohave topographic maps.
- Black Mountains.** Fe, Mn.
Near Colorado River.
Mesozoic sediments overlain by Tertiary volcanics.
Longwell, C. R., Geology of the Muddy Mountains, Nevada: U. S. Geol.
Survey Bull. 798, pp. 7 and 18, 1928.
U. S. G. S. St. Thomas and Camp Mohave topographic maps.
- Charleston.** Pb, Zn, Ag.
35 miles W. Las Vegas, U. P. R. R.
Min. Res. 1926, pt. 1, p. 530.
1928, pt. 1, p. 455.
1929, pt. 1, p. 652.
U. S. G. S. Las Vegas topographic map.

CLARK COUNTY—Continued.

Copper King (Bunkerville, Great Eastern, Key West). Cu, Au, Ag, Ni, Co, Pt, W.
15 miles S. Bunkerville and 15 miles NE. St. Thomas, U. P. R. R.
Pre-Cambrian gneiss intruded by basic dikes.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192-193, 195-197, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 18-19, 1923.

Lindgren, Waldemar, and Davy, W. Myron, Nickel ores from Key West mine, Nevada: Econ. Geology, vol. 19, No. 4, pp. 309-319, June-July, 1924.

Longwell, C. R., Geology of the Muddy Mountains, Nevada, with a section through the Virgin Range to the Grand Wash Cliffs, Ariz.: U. S. Geol. Survey Bull. 798, p. 18, 1928.

Carpenter, Jay A., Mineral resources of southern Nevada: Nevada State Bureau of Mines, vol. 1, No. 1, pp. 19-20, November, 1929.

Min. Res. 1913, pt. 1, p. 818.

1915, pt. 2, pp. 752-753.

1925, pt. 1, p. 673.

1928, pt. 1, p. 455.

1929, pt. 1, p. 652.

U. S. G. S. St. Thomas topographic map.

Crescent. Au, Ag, Pb, Cu, Mo, V.

6 miles E. Nipton, U. P. R. R.

Pre-Cambrian metamorphic rocks cut by granite intrusions and basic dikes.
Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 199-200, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 19, 1923.

U. S. G. S. Ivanpah topographic map.

Dike. Pb.

1 mile N. Dike, U. P. R. R.; 15 miles N. Las Vegas, U. P. R. R.

Paleozoic limestones.

Veins.

Min. Res. 1926, pt. 1, p. 530.

U. S. G. S. Las Vegas topographic map.

Eldorado (Colorado, Nelson). Au, Ag, Cu, Pb.

24 miles N. Searchlight, B. & S. R. E., in Opal Mountains.

Pre-Cambrian granite and gneiss cut by acidic intrusives and capped by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 19-20, 1923.

Carpenter, Jay A., Mineral resources of southern Nevada: Nevada State Bur. Mines Bull., vol. 1, No. 1, pp. 20-21, 1929.

Visited by engineer of Nevada State Bureau of Mines, June, 1931.

Min. Res. 1923, pt. 1, p. 494.

1924, pt. 1, p. 431.

1925, pt. 1, p. 676.

1926, pt. 1, p. 530.

1928, pt. 1, p. 455.

1929, pt. 1, p. 652.

U. S. G. S. Camp Mohave and Nelson (adv.) topographic maps.

CLARK COUNTY—Continued.

Gass Peak. Ag, Au, Zn.

18 miles N. Las Vegas, U. P. R. R.

Paleozoic limestones.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 20-21, 1923.

U. S. G. S. Las Vegas topographic map.

Gold Butte. Au, Ag, Cu, Zn.

28 miles SE. St. Thomas, U. P. R. R.

Pre-Cambrian complex cut by acidic and basic dikes.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 21, 1923.

U. S. G. S. St. Thomas and Bonelli (adv.) topographic maps.

Ivanpah. Ag.

SW. Clark County and in California.

Hewett, D. F., Geology and ore deposits of the Ivanpah quadrangle, Calif.-Nevada: Report in preparation.

U. S. G. S. Ivanpah topographic map.

Las Vegas. Mn.

16 miles SE. Las Vegas, U. P. R. R.

Tertiary volcanics.

Replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 21-22, 1923.

Carpenter, Jay A., Mineral resources of southern Nevada: Nevada State Bur. Mines Bull., vol. 1, No. 1, p. 18, November, 1929.

Longwell, C. R., Geology of the Muddy Mountains, with a section through the Virgin Range to the Grand Wash Cliffs, Ariz.: U. S. Geol. Survey Bull. 798, pp. 18-19, 1928.

Hewett, D. F., Webber, B. N., Bedded deposits of manganese oxides near Las Vegas, Nevada: Nevada State Bureau of Mines and Mackay School of Mines Bulletin.

Min. Res. 1925, pt. 1, p. 193.

1927, pt. 1, pp. 188-189.

U. S. G. S. St. Thomas topographic map.

Logan (St. Thomas, Muddy Mountains). Cu, Ag.

26 miles SE. Moapa, S. P. L. A. & S. L. R. R.

Paleozoic and Mesozoic sediments capped by Tertiary volcanics.

Veins.

Spurr, J. E., Geology of Nevada south of the fortieth parallel: U. S. Geol. Survey Bull. 208, 1903, pp. 136-138.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 193, 1917.

Longwell, C. R., Geology of the Muddy Mountains, Nevada, with a section through the Virgin Range to the Grand Wash Cliffs, Ariz.: U. S. Geol. Survey Bull. 798, 1928.

Min. Res. 1902, p. 141.

1908, pt. 1, p. 473.

U. S. G. S. St. Thomas topographic map.

Searchlight. Au, Ag, Cu, Pb.

Station B. & S. R. R.

CLARK COUNTY—Continued.

Searchlight—Continued.

Pre-Cambrian complex cut by quartz monzonite and capped by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 24-27, 1923.

Carpenter, Jay A., Mineral resources of southern Nevada: Nevada State Bur. Mines Bull., vol. 1, No. 1, p. 20, November, 1929.

Visited by engineer of Nevada State Bureau of Mines in June, 1931.

Min. Res. 1922, pt. 1, p. 320.

1923, pt. 1, p. 494.

1924, pt. 1, p. 431.

1925, pt. 1, p. 676.

1926, pt. 1, p. 531.

1928, pt. 1, p. 455.

U. S. G. S. Camp Mohave topographic map.

Sloan. Ra.

2 miles S. Sloan, U. P. R. R.

Tertiary rhyolite flow.

Coating on walls of joints.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 27, 1923.

U. S. G. S. Ivanpah topographic map.

Sunset (Lyons). Au.

15 miles SE. Jean, U. P. R. R.

Granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 27-28, 1923.

Min. Res. 1928, pt. 1, p. 455.

U. S. G. S. Ivanpah and Goodsprings topographic maps.

Sutor. Ra.

2 miles W. Sutor, U. P. R. R.

Sandstones underlying Permian limestone.

Patches of carnotite with manganese oxide on fractures and joints.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 28, 1923.

U. S. G. S. Ivanpah topographic map.

Yellow Pine (Goodsprings, Potosi). Zn, Pb, Cu, Au, Ag, Pt, Pd, Co, Ni, Ra, Sb.

8 miles NW. Jean, U. P. R. R.

Paleozoic sediments cut by dikes.

Replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190-193, 196, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 29-33, 1923.

Varley, T., Barrett, E. P., and Stevenson, C. C., The chloride volatilization process of ore treatment: U. S. Bur. Mines Bull. 211, pp. 72-81, 1923.

Doerner, H. A., Metallurgical possibilities of the desclozite ores at Goodsprings, Nevada: U. S. Bur. Mines Rept. of Investigations No. 2433, 1923.

CLARK COUNTY—Continued.

Yellow Pine (Goodsprings, Potosi)—Continued.

Longwell, C. R., Structural studies in southern Nevada and western Arizona: Geol. Soc. America, Bull., vol. 37, pp. 551-584, 1926.

Glock, W. S., Geology of the east-central part of the Spring Mountain Range, Nevada: Am. Jour. Sci., 5th ser., vol. 17, pp. 326-341, 1927.

Longwell, C. R., Geology of the Muddy Mountains, Nevada: U. S. Geol. Survey Bull. 798, pp. 1-144, 1928.

Nolan, T. B., Notes on the stratigraphy and structure of the northwest portion of Spring Mountains, Nevada: Am. Jour. Sci., 5th ser., vol. 17, pp. 461-472, 1929.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Carpenter, J. A., Mineral resources of southern Nevada: Nevada State Bur. Mines Bull., vol. 1, No. 1, pp. 20-21, November, 1929.

Hewett, D. F., Geology and ore deposits of the Goodsprings quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 162, 172 pp., 1931.

Min. Res. 1922, pt. 1, pp. 320, 557.

1923, pt. 1, pp. 494-495.

1924, pt. 1, pp. 431-432, 470.

1925, pt. 1, pp. 676-677.

1926, pt. 1, pp. 531-532.

1927, pt. 1, p. 447.

1928, pt. 1, pp. 455-456.

1929, pt. 1, pp. 47, 652-653.

U. S. G. S. Goodsprings, Ivanpah and Las Vegas topographic maps.

DOUGLAS COUNTY

Buckskin. Cu, Fe, Au, Pl.

Adjoins Yerington district (Lyon County) on the W. and Mount Siegel district on the SW.

Triassic sediments cut by granite.

Contact metamorphic, veins and placer.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 33, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1924, pt. 1, p. 432.

1928, pt. 1, p. 456.

1929, pt. 1, p. 653.

U. S. G. S. Wellington topographic map.

Gardnerville (Eagle). Au, Cu, Ag.

14 miles SE. Minden, V. & T. R. R., on W. slope Pine Nut Range.

Diorite, Tertiary volcanics and lake beds.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 33, 1923.

Min. Res. 1923, pt. 1, p. 495.

1928, pt. 1, p. 456.

U. S. G. S. Markleeville topographic map.

Genoa. Cu, Ag, Au, Pl.

Just W. town of Genoa, on E. slope Sierra Nevada.

Triassic sediments intruded by Cretaceous granite.

Veins, replacements, and placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 34-35, 1923.

U. S. G. S. Carson topographic map.

DOUGLAS COUNTY—Continued.

Mount Siegel. Au, Pl.

20 miles E. Minden, V. & T. R. R.
Placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 35, 1923.

Min. Res. 1923, pt. 1, p. 495.
1929, pt. 1, p. 653.

U. S. G. S. Markleeville topographic map.

Mountain House (Holbrook, Pine Nut). Au, Ag.

In Pine Nut Range on California border.

Hill, J. M., Some mining districts in northeastern California and northwestern Nevada: U. S. Geol. Survey Bull. 594, p. 54, 1915.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 35, 1923.

Min. Res. 1917, pt. 1, p. 283.
1923, pt. 1, p. 495.
1924, pt. 1, p. 432.
1925, pt. 1, p. 677.
1926, pt. 1, p. 532.

U. S. G. S. Wellington and Markleeville topographic maps.

Red Canyon (Silver Lake). Au, Ag, Pb.

18 miles SE. Minden, V. & T. R. R., in S. part Pine Nut Range.

Triassic sediments cut by quartz monzonite.

Veins, contact metamorphic.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 36, 1923.

Min. Res. 1923, pt. 1, p. 495.
1926, pt. 1, p. 532.
1929, pt. 1, p. 653.

U. S. G. S. Markleeville and Wellington topographic maps.

Silver Gance (Wellington). Au, Ag, Cu.

30 miles SSE. Minden, V. & T. R. R., in SE. part Pine Nut Range.

Quartz monzonite, probably Cretaceous.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 193, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 37, 1923.

Min. Res. 1923, pt. 1, p. 495.
1924, pt. 1, p. 432.
1926, pt. 1, p. 532.

U. S. G. S. Wellington topographic map.

ELKO COUNTY

Alder. Au.

8 miles N. Gold Creek.

Min. Res. 1916, pt. 1, p. 475.

Aura (Bull Run, Columbia). Au, Pl, Ag, Pb, Zn.

70 to 95 miles NNW. Elko, S. P. R. R., W. P. R. R., in Bull Run or Centennial Range.

Paleozoic sediments cut by granodiorite.

Veins and placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 190, 192-194, 197-199,
1917.

ELKO COUNTY—Continued.

Aura (Bull Run, Centennial, Columbia)—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 37-38, 1923.

Min. Res. 1929, pt. 1, p. 653.

Burner. Pb, Ag.

10 miles W. Good Hope, in Burner Hills.

Andesite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 38, 1923.

Carlin. Au, Ag.

Station S. P. R. R., W. P. R. R.

Paleozoic sediments cut and capped by Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Min. Res. 1908, pt. 1, p. 476.

Charleston (Copper Mountain, Cornwall). Au, Pl, Cu, Ag, Pb, Sb.

95 miles NNE. Elko, 50 miles NNW. Deeth, S. P. R. R., W. P. R. R.

Paleozoic sediments cut by granite.

Contact metamorphic, replacements, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 39-40, 1923.

Contact (Kit Carson, Porter, Salmon River). Cu, Ag, Au.

Station, O. S. L.

Paleozoic sediments cut by granite.

Contact metamorphic, veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 193, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 40-41, 1923.

Schrader, F. C., Report in preparation.

Min. Res. 1922, pt. 1, p. 320.

1923, pt. 1, p. 495.

1925, pt. 1, p. 677.

1926, pt. 1, p. 532.

1928, pt. 1, p. 456.

1929, pt. 1, pp. 653-654.

Cornucopia. Au, Ag.

65 miles NNW. Elko, S. P. R. R., W. P. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 41-42, 1923.

Decoy. Mn.

8 miles E. Decoy, N. N. R. R., in Toano Range.

Carboniferous limestone.

Replacements.

Pardee, J. T., and Jones, E. L., Jr., Deposits of manganese ore in Nevada:
U. S. Geol. Survey Bull. 710-f, p. 241, 1929.

Delano (Delno). Au, Ag, Pb.

35 miles N. Montello, S. P. R. R.

ELKO COUNTY—Continued.

Delano (Delno)—Continued.

Panther mining property at Delno to mill and ship at increased clip: Salt Lake Mining Review, vol. 26, No. 3, p. 17, May 15, 1924.

Min. Res. 1918, pt. 1, p. 233.
 1919, pt. 1, p. 388.
 1920, pt. 1, p. 321.
 1921, pt. 1, p. 381.
 1922, pt. 1, p. 320.
 1923, pt. 1, p. 496.
 1924, pt. 1, p. 432.
 1925, pt. 1, p. 677.
 1926, pt. 1, pp. 532-533.
 1928, pt. 1, p. 456.
 1929, pt. 1, p. 654.

Delker. Cu.

25 miles NE. Currie, N. N. R. R.
 Limestones and quartzites; quartz monzonite.
 Veins, contact metamorphic.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 42, 1923.

Divide. Ag, Au.

8 miles NW. Tuscarora at head of Dry Creek.
 Min. Res. 1916, pt. 1, p. 474.
 1918, pt. 1, p. 233.

Dolly Varden (Mizpah, Granite). Cu, Pb, Ag, Au.

20 miles E. Mizpah, N. N. R. R., 16 miles NE. Currie.
 Carboniferous shale and limestone intruded by quartz monzonite.
 Veins, contact metamorphic.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 193, 200, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 42-43, 1923.
 Min. Res. 1925, pt. 1, p. 678.
 1926, pt. 1, p. 533.
 1929, pt. 1, p. 654.

Edgemont (Centennial). Au, Ag, Pb.

92 miles NNW. Elko, S. P. R. R., W. P. R. R.
 Paleozoic sediments.
 Veins.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 43, 1923.

Elk Mountain. Cu, Au, Sb.

90 miles SSE. Twin Falls, Idaho, O. S. L. R. R.
 Paleozoic sediments cut by granite.
 Contact metamorphic.
 Schrader, F. C., A reconnaissance of the Jarbidge, Contact, and Elk Mountain mining districts, Elko County, Nevada: U. S. Geol. Survey Bull. 497, 1912.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 193, 1917.

Ferber. Cu, Pb, Au, Ag.

SE. corner Elko County, 40 miles S. Wendover, Utah, W. P. R. R.
 Limestones cut by quartz monzonite.
 Veins, contact metamorphic.

ELKO COUNTY—Continued.

Ferber—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 44-45, 1923.
 Rohlfsing, D. P., Ore deposits of the Deep Creek Range: Salt Lake Mining Review, March 30, 1924.
 Ferber district in the Deep Creek country has potential possibilities for the future: Salt Lake Mining Review, vol. 26, No. 3, pp. 11-12, May 15, 1924.
 Min. Res. 1925, pt. 1, p. 677.

Ferguson Spring (Allegheny). Cu, Pb.

W. side Toano Range.
 Paleozoic limestones.
 Replacements.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 45, 1923.

Gold Basin (Rowland). Cu, Au.

90 miles N. Elko, S. P. R. R., W. P. R. R.
 Min. Res. 1926, pt. 1, p. 534.
 1928, pt. 1, p. 457.

Gold Circle (Midas, Summit). Au, Ag, Hg.

48 miles ENE. Goleonda, S. P. R. R.
 Tertiary volcanics.
 Veins, replacements.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 194, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 45-46, 1923.
 Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.
 Rott, Edward H., Jr., Ore deposits of the Gold Circle mining district, Elko County, Nevada: Nevada State Bur. Mines Bull. No. 5, August, 1931.
 Min. Res. 1922, pt. 1, p. 321.
 1923, pt. 1, p. 496.
 1924, pt. 1, p. 432.
 1925, pt. 1, p. 678.
 1926, pt. 1, p. 533.
 1928, pt. 1, pp. 276, 457.
 1929, pt. 1, p. 654.

Good Hope. Au, Ag.

55 miles NW. Elko, S. P. R. R., W. P. R. R.
 Tertiary volcanics.
 Veins.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 193, 194, 199, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 46-47, 1923.

Island Mountain (Gold Creek). Au, Pl, Ag.

75 miles N. Elko, S. P. R. R., W. P. R. R.
 Veins and placers.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 47, 1923.
 Min. Res. 1923, pt. 1, p. 496.
 1924, pt. 1, p. 432.
 1925, pt. 1, p. 678.
 1926, pt. 1, p. 533.
 1928, pt. 1, p. 457.

ELKO COUNTY—Continued.

Ivanhoe. Hg.

60 miles NE. Golconda, S. P. R. R., W. P. R. R.

Rhyolite flow breccia.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 47, 1923.

Min. Res. 1925, pt. 1, p. 46.

Jarbridge. Au, Ag.

95 miles S. Twin Falls, Idaho, O. S. L. R. R.; 74 miles N. Elko, S. P. R. R., W. P. R. R.

Paleozoic sediments and Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 48-50, 1923.

Par, John Furness, Mining methods of Jarbridge district, Nevada: A. I. M. M. E. Trans. (preprint), No. 1400, 11 pp., January, 1925.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 321.

1923, pt. 1, p. 496.

1924, pt. 1, pp. 432-433.

1925, pt. 1, p. 678.

1926, pt. 1, p. 533.

1928, pt. 1, p. 457.

1929, pt. 1, p. 654.

Kinsley. Ag, Cu, Pb.

8 miles SE. Currie, N. N. R. R.

Quartz monzonite porphyry intruding Cambrian limestones.

Contact metamorphic, veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 50, 1923.

Min. Res. 1914, pt. 1, p. 676.

Lafayette. Pb, Ag.

4 miles N. Tobar, W. P. R. R.

Min. Res. 1925, pt. 1, p. 678.

Lee. Cu.

30 miles SE. Elko, S. P. R. R., W. P. R. R.

Min. Res. 1917, pt. 1, p. 272.

1918, pt. 1, pp. 233-234.

1918, pt. 1, p. 389.

U. S. G. S. Halleck topographic (adv.) sheet.

Lime Mountain (Deep Creek). Cu, Au, Ag.

80 miles N. Elko, S. P. R. R., W. P. R. R.

Paleozoic limestone intruded by quartz porphyry, andesite and diabase.

Contact metamorphic.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 51, 1923.

Min. Res. 1929, pt. 1, p. 654.

Loray (Luray, Leroy). Cu, Ag, Pb, Fe.

4½ miles SE. Loray siding, S. P. R. R.

Crystalline limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 50-51, 1923.

ELKO COUNTY—Continued.

Lucin. Cu, Ag, Pb.

S. Tecoma, U. P. R. R., in Pilot Range.

Carboniferous sediments cut by igneous rocks.

Replacements.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, pp. 158-159, 1915.

Merrimac (Lone Mountain). Pb, Ag, Cu, Au.

28 miles by wagon road NW. Elko, S. P. R. R., W. P. R. R.

Carboniferous limestone intruded by quartz monzonite and quartz monzonite porphyry.

Contact metamorphic.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 51, 1923.

Min. Res. 1922, pt. 1, p. 321.

1923, pt. 1, p. 496.

1924, pt. 1, p. 433.

1925, pt. 1, p. 678.

1926, pt. 1, p. 533.

1928, pt. 1, p. 457.

1929, pt. 1, p. 655.

Mountain City (Cope, Van Duzer). Cu, Au, Ag, Pb, Zn.

90 miles N. Elko, S. P. R. R., W. P. R. R., in NE. part Bull Run Range.

Paleozoic sediments cut by granodiorite and capped by Tertiary volcanics.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geological Survey Bull. 624, pp. 191-192, 194, 197-198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 52, 58-59, 1923.

Min. Res. 1921, pt. 1, p. 582.

1925, pt. 1, p. 677.

1926, pt. 1, p. 532.

Mud Springs (Medicine Springs). Pb, Zn, Ag, barite.

40 miles WSW. Currie, N. N. R. R., N. end Ruby Hills.

Permian limestones, shales, and quartzites.

Replacements.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 52-53, 1923.

Min. Res. 1923, pt. 1, p. 496.

1924, pt. 1, p. 433.

1925, pt. 1, pp. 678-679.

1926, pt. 1, p. 534.

1928, pt. 1, p. 457.

1929, pt. 1, p. 655.

U. S. G. S. Halleck topographic (adv.) sheet.

Proctor. Ag.

Station on W. P. R. R.

Min. Res. 1917, pt. 1, p. 272.

Railroad (Bullion). Ag, Au, Cu, Pb, Zn.

27 miles SSW. Elko, 12 miles SE. Palisade, S. P. R. R., W. P. R. R.

Ordovician limestone cut by granodiorite and quartz porphyry.

Replacements, contact metamorphic, veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192-193, 195, 196, 198, 1917.

ELKO COUNTY—Continued.

Railroad (Bullion)—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 53-54, 1923.

Min. Res. 1923, pt. 1, p. 496.

1924, pt. 1, p. 433.

1925, pt. 1, p. 679.

1926, pt. 1, p. 534.

1928, pt. 1, p. 457.

1929, pt. 1, p. 655.

U. S. G. S. Halleck topographic (adv.) sheet.

Rock Creek (Falcon). Ag.

70 miles from Tuscarora, in Independence Range.

Tertiary andesite.

Veins.

Min. Res. 1922, pt. 1, p. 321.

1928, pt. 1, p. 457.

1929, pt. 1, p. 655.

Ruby Range (Ruby Mountain Range, Valley View). Pb, Zn, Ag, Au, Cu, W.
(Not mining district.)

15 miles W. Tobar, W. P. R. R.

Granitic rocks, Paleozoic sediments.

Replacements, contact metamorphic.

Hill, J. M. Notes on some mining districts in eastern Nevada: U. S. Geol. Survey Bull. 648, pp. 54-63, 1916.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 191, 1917.

Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the United States: U. S. Geol. Survey Bull. 725, pp. 245-309, 1932.

Min. Res. 1914, pt. 1, pp. 676-677.

1915, pt. 1, p. 630.

1917, pt. 1, p. 273.

1923, pt. 1, p. 497.

1924, pt. 1, p. 433.

1925, pt. 1, p. 679.

1926, pt. 1, p. 534.

1928, pt. 1, p. 457.

1929, pt. 1, p. 655.

U. S. G. S. Halleck topographic (adv.) sheet.

Ruby Valley (Smith Creek). Pb, Ag, Zn.

45 miles W. Currie, N. N. R. R.; 35 miles S. Halleck, S. P. R. R.

Paleozoic limestones intruded by biotite-granite.

Lenes.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 193, 195, 197, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 54-55, 1923.

U. S. G. S. Halleck topographic (adv.) sheet.

Spruce Mountain. Pb, Cu, Ag, Au, Mn.

58 miles S. Wells, S. P. R. R.; 15 miles NW. Mizpah, N. N. R. R.; 15 miles S. Jasper, W. P. R. R.

Paleozoic sediments cut by rhyolite.

Replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

ELKO COUNTY—Continued.

Spruce Mountain—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 55-57, 1923.

Schrader, F. C., Spruce Mountain district, Elko County, Nevada: Nevada State Bureau of Mines and Mackey School of Mines Bulletin, August, 1931.

Min. Res. 1922, pt. 1, p. 321.

1923, pt. 1, p. 497.

1924, pt. 1, p. 433.

1925, pt. 1, p. 679.

1926, pt. 1, p. 534.

1928, pt. 1, p. 458.

1929, pt. 1, p. 655.

Tecoma. Pb, Ag, Cu, Au.

10 miles NNE. Tecoma, S. P. R. R.

Limestone, overlain and underlain by quartzite.

Replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 57, 1923.

Min. Res. 1922, pt. 1, p. 321.

1923, pt. 1, p. 497.

1924, pt. 1, p. 433.

1925, pt. 1, p. 679.

1926, pt. 1, p. 534.

1928, pt. 1, p. 458.

1929, pt. 1, p. 655.

Toano Range (Gosiute Range). Cu, Pb, Fe. (Not a mining district.)

E. Cobre.

Quartzites and limestones, the latter prevailing; also igneous rocks.

Veins.

Hill, J. M., Notes on some mining districts in eastern Nevada: U. S. Geol. Survey Bull. 648, pp. 95-102, 1916.

Min. Res. 1914, pt. 1, p. 677.

Tuscarora. Au, Pl, Ag.

50 miles NW. Elko, S. P. R. R., W. P. R. R.

Tertiary volcanics.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190, 191, 193, 194, 197, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 57-58, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 321.

1925, pt. 1, pp. 679-680.

1926, pt. 1, p. 534.

1928, pt. 1, p. 458.

Warm Creek. Zn, Pb.

SE. side Warm Creek Ridge, E. Clover Valley, 25 miles SE. Halleck, S. P. R. R.

Fossiliferous limestone and shale of probable Permian age.

Replacements.

ELKO COUNTY—Continued.**Warm Creek**—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 59, 1923.

Min. Res. 1925, pt. 1, p. 680.

1926, pt. 1, p. 534.

1928, pt. 1, p. 458.

White Horse. Cu, Pb.

SW. flank Mount Pisgah, 45 miles E. Currie, N. N. R. R.

Quartz monzonite stock.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 59, 1923.

ESMERALDA COUNTY**Alpine.** Au.

Near Lone Mountain.

Paleozoic limestone and slate cut by granite.

Veins, replacements.

Spurr, J. E., Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55, pp. 81-83, 1906.

Min. Res. 1925, pt. 1, p. 680.

1926, pt. 1, p. 535.

Argentite. Ag.

40 miles S. Blair Junction, T. & G. R. R., 24 miles W. Silver Peak.

Rhyolite and limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 60, 1923.

U. S. G. S. Silver Peak topographic map.

Castle Rock. Au, Ag, Hg.

8 miles N. Blair Junction; 35 miles W. Tonopah, T. & G. R. R.

Min. Res. 1928, pt. 1, pp. 276, 458.

1929, pt. 1, p. 655.

U. S. G. S. Tonopah topographic map.

Coaldale. Pb, Ag.

Station, T. & G. R. R., in Monte Cristo Range.

Tertiary volcanics.

Veins.

Min. Res. 1926, pt. 1, p. 535.

U. S. G. S. Tonopah topographic map.

Crow Springs. Ag, Pb, Cu, Au.

11 miles NW. Millers, T. & G. R. R., in Monte Cristo Range.

Tertiary volcanics.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 62-63, 1923.

U. S. G. S. Tonopah topographic map.

Cuprite. Au, Ag, Cu, Pb, Hg.

14 miles S. Goldfield, T. & G. R. R.

Cambrian sediments cut by dikes of diorite and Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 195, 196, 1917.

ESMERALDA COUNTY—Continued.**Cuprite**—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 63-64, 1923.

U. S. G. S. Lida topographic map.

Divide (Gold Mountain). Ag, Au, Pb.

7 miles S. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 64-66, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, pp. 322-323.

1923, pt. 1, p. 498.

1924, pt. 1, p. 434.

1925, pt. 1, p. 680.

1926, pt. 1, p. 535.

1928, pt. 1, pp. 458-459.

1929, pt. 1, p. 656.

U. S. G. S. Tonopah and Lida topographic maps.

Dolly. Ag.

12 miles SW. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Min. Res. 1923, pt. 1, p. 497.

U. S. G. S. Tonopah topographic map.

Dyer. Au, Ag, Pb.

28 miles S. Coaldale, T. & G. R. R.

Paleozoic sediments cut by granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 66, 1923.

Min. Res. 1925, pt. 1, p. 680.

1926, pt. 1, p. 535.

U. S. G. S. Silver Peak and White Mountain topographic maps.

Fesler (Windypah). Au, Pl, Ag.

25 miles SW. Blair Junction, T. & G. R. R.

Paleozoic sediments cut by granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 66, 1923.

U. S. G. S. Silver Peak topographic map.

Gilbert (Desert). Au, Ag, Cu, Pb.

25 miles W. Tonopah, T. & G. R. R.

Paleozoic sediments and Tertiary volcanics.

Veins.

Opening up of a brand new mining camp in Nevada is promised by developments of a substantial kind: Salt Lake Mining Review, vol. 26, No. 20, January 30, 1925, pp. 9-11.

ESMERALDA COUNTY—Continued.

Gilbert (Desert)—Continued.

Ferguson, H. G., The Gilbert district, Nevada: U. S. Geol. Survey Bull. 795, pp. 125-145, 1928; The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Revival seen at Gilbert, Nevada: Eng. and Min. Jour., vol. 132, No. 2, p. 88, July 27, 1931.

Min. Res. 1917, pt. 1, p. 274.

1918, pt. 1, p. 235.

1920, pt. 1, p. 322.

1921, pt. 1, p. 382.

1922, pt. 1, p. 322.

1923, pt. 1, p. 497.

1924, pt. 1, p. 433.

1925, pt. 1, p. 680.

1926, pt. 1, p. 535.

1928, pt. 1, p. 458.

1929, pt. 1, p. 655.

U. S. G. S. Tonopah topographic map.

Goldfield. Au, Ag, Cu, Pb, Mn, Zn.

Station, T. & G. R. R.

Tertiary volcanics underlain by Cambrian sediments cut by granite.

Veins, replacements.

Jennings, E. P., The Goldfield district, Nevada: Can. Min. Inst., vol. 8, pp. 39-45, 1905.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190-191, 192, 193-194, 195, 196, 197, 198, 199, 200, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 67-73, 1923.

Barbour, Percy E., The rise and decadence of Goldfield: Min. & Met., August, 1923, pp. 399-405.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Interest in gold prompts activity at Goldfield: E. and M. Jour., vol. 132, No. 6, p. 272, September 28, 1931.

Min. Res. 1922, pt. 1, p. 322.

1923, pt. 1, pp. 497-498.

1924, pt. 1, p. 434.

1925, pt. 1, p. 680.

1926, pt. 1, p. 535.

1928, pt. 1, p. 459.

1929, pt. 1, p. 656.

U. S. G. S. Lida and Goldfield special topographic maps.

Good Hope. Ag.

7 miles S. Piper Peak, W. flank Silver Peak Range.

Slates, probably Ordovician, with interbedded quartzites.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 73, 1923.

U. S. G. S. Lida and Silver Peak topographic maps.

Hornsilver (Lime Point). Au, Ag, Pb, Zn, Cu.

25 miles S. Goldfield, T. & G. R. R.

Cambrian limestone and shales cut by granite.

Veins.

ESMERALDA COUNTY—Continued.

Hornsilver (Lime Point)—Continued.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194 and 196, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 73-75, 1923.

Min. Res. 1922, pt. 1, p. 323.

1923, pt. 1, p. 498.

1924, pt. 1, p. 434.

1925, pt. 1, p. 680.

1926, pt. 1, p. 535.

1928, pt. 1, p. 459.

U. S. G. S. Lida topographic map.

Klondyke (Southern Klondyke). Au, Pl, Ag, Pb, Cu.

14 miles S. Tonopah, T. & G. R. R.

Cambrian sediments cut by granite and overlain by Tertiary volcanics.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 75-76, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geol., vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 323.

1923, pt. 1, p. 498.

1924, pt. 1, p. 434.

1925, pt. 1, p. 681.

1926, pt. 1, p. 535.

1928, pt. 1, p. 459.

1929, pt. 1, p. 656.

U. S. G. S. Lida topographic map.

Lida (Alida Valley, Tule Canyon). Au, Pl, Ag, Pb, Cu.

30 miles SW. Goldfield, T. & G. R. R.

Cambrian sediments cut by quartz monzonite and capped by Tertiary volcanics.

Veins and impregnations, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 76-77, 1923.

Min. Res. 1922, pt. 1, p. 323.

1923, pt. 1, p. 498.

1924, pt. 1, p. 434.

1925, pt. 1, p. 681.

1926, pt. 1, p. 536.

U. S. G. S. Lida topographic map.

Lone Mountain (West Divide). Ag, Au, Pb, Zn, Cu.

14 miles NNW. Goldfield, T. & G. R. R.

Cambrian sediments cut by granite and diorite, capped by Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 198, 1917.

ESMERALDA COUNTY—Continued.**Lone Mountain (West Divide)**—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 77-78, 1923.

Min. Res. 1922, pt. 1, p. 323.

1924, pt. 1, p. 434.

1925, pt. 1, p. 681.

1926, pt. 1, p. 536.

1928, pt. 1, pp. 459-460.

1929, pt. 1, p. 656.

U. S. G. S. Lida and Tonopah topographic maps.

Montezuma. Au, Ag, Pb, Cu.

7 miles W. Goldfield, T. & G. R. R.

Cambrian sediments cut by granite and diorite and capped by Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 196, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 78-79, 1923.

Min. Res. 1923, pt. 1, p. 498.

1924, pt. 1, p. 434.

1925, pt. 1, p. 681.

1926, pt. 1, p. 536.

1928, pt. 1, p. 460.

1929, pt. 1, pp. 656-657.

U. S. G. S. Lida topographic map.

Palmetto. Au, Pl, Ag, Pb.

42 miles SW. Goldfield, T. & G. R. R.

Paleozoic sediments cut by granite.

Veins, contact metamorphic, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 79-80, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1913, pt. 1, p. 823.

1916, pt. 1, p. 479.

1917, pt. 1, p. 276.

1924, pt. 1, p. 434.

1928, pt. 1, p. 460.

1929, pt. 1, p. 657.

U. S. G. S. Silver Peak and Lida topographic maps.

Railroad Springs. Au, Ag, Cu.

25 miles SW. Goldfield, T. & G. R. R., T. & T. R. R.

Cambrian limestones and shales intruded by diorite dikes and capped in places by Tertiary rhyolite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 80-81, 1923.

U. S. G. S. Lida and Silver Peak topographic maps.

Silver Peak (Mineral Ridge, Red Mountain). Au, Ag, Pb.

20 miles S. Blair Station, T. & G. R. R.

Paleozoic sediments cut by granite and diorite, capped by Tertiary volcanics.

ESMERALDA COUNTY—Continued.**Silver Peak (Mineral Ridge, Red Mountain)**—Continued.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 81-82, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 323.

1923, pt. 1, p. 498.

1924, pt. 1, p. 435.

1925, pt. 1, p. 681.

1926, pt. 1, p. 536.

1928, pt. 1, p. 460.

1929, pt. 1, p. 657.

U. S. G. S. Silver Peak topographic map.

Sylvania (Green Mountain). Ag, Pb.

12 miles SE. Oasis, Calif., near California-Nevada border, in Sylvania Mountains.

Limestones and quartzites intruded by granite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 83, 1923.

Min. Res. 1928, pt. 1, p. 460.

1929, pt. 1, p. 657.

U. S. G. S. Lida topographic map.

Tokop (Old Gold Mountain, Bonnie Clare, Oriental Wash). Au, Pl, Ag, Cu, Pb.

15 miles W. Bonnie Clare, T. & T. R. R.

Cambrian sediments cut by granite and capped by Tertiary volcanics.

Veins and placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 83-84, 1923.

Min. Res. 1923, pt. 1, p. 498.

1924, pt. 1, p. 435.

1925, pt. 1, p. 681.

1926, pt. 1, p. 536.

U. S. G. S. Lida topographic map.

White Mountains (Fish Lake Valley). Hg.

72 miles SW. Tonopah, T. & G. R. R.

Rotary furnace at B. & B. quicksilver mine producing mercury each month: Nev. Mining Press, vol. 11, No. 443, November 23, 1928, p. 1.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, pp. 43-44, July, 1931. (B. & B. quicksilver mine.)

Min. Res. 1928, pt. 1, p. 274.

U. S. G. S. White Mountain topographic map.

Weepah. Au, Ag.

Near Lone Mountain.

Paleozoic limestones and slates cut by granite and alaskite.

Veins.

Spurr, J. E., Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55, pp. 80-81, 1906.

EUREKA COUNTY

Alpha. Ag, Pb.

5 miles E. Alpha, E. & P. R. R.
Devonian limestone.

Sheeted zones, replacements.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 85, 1923.

U. S. G. S. Roberts Mountains topographic map.

Antelope. Pb, Ag, Cu.

SW. corner of county.

Min. Res. 1916, pt. 1, p. 479.

1917, pt. 1, p. 277.

U. S. G. S. Roberts Mountains topographic map.

Beowawe. Hg.

Station, S. P. R. R., W. P. R. R.

Cinnabar mining at Beowawe: Nevada Mining Press, October 2, 1925.

Buckhorn (Mill Canyon). Au, Ag, Pb.

35 miles SSW. Palisade, S. P. R. R., W. P. R. R.; 30 miles S. Beowawe, S. P. R. R.

Ordovician limestone intruded by granodiorite and capped by Tertiary eruptives.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 85-86, 1923.

Schrader, F. C.: Report in preparation.

Cortez (Bullion Hill, Mount Tenabo). Ag, Pb, Au, Cu, Zn.

36 miles S. Beowawe, S. P. R. R., W. P. R. R.

Paleozoic sediments cut by granite and porphyries and capped by Tertiary volcanics.

Replacements, veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 86-87, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 324.

1926, pt. 1, p. 536.

1928, pt. 1, p. 460.

1929, pt. 1, pp. 657-658.

Diamond. Ag, Pb.

25 miles N. Eureka, E. & P. R. R.

Limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 87, 1923.

U. S. G. S. Roberts Mountains topographic map.

Eureka (Pinto, Prospect, Ruby Hill, Secret Canyon, Silverado, Spring Valley).

Ag, Pb, Au, Cu, Zn, Fe, As.

Station E. & P. R. R., 84 miles S. Palisade, S. P. R. R.

Paleozoic sediments, granite porphyry, rhyolite and basalt.

Replacements, veins.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route: U. S. Geol. Survey Bull. 612, pp. 157, 168, 1915.

EUREKA COUNTY—Continued.

Eureka (Pinto, Prospect, Ruby Hill, Secret Canyon, Silverado, Spring Valley)—Continued.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190-192, 194-198, 209, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 88-93, 1923.

Bains, Thos. H., Location of future ores of the southwest: Mining Jour., Phoenix, Ariz., vol. 11, No. 9, pp. 5-7, September 30, 1927.

Nolan, Thos. B., A late Paleozoic positive area in Nevada: Am. Jour. Sci., 5th ser., vol. 16, pp. 153-161, August, 1928.

Ferguson, H. G., The mining districts of Nevada: Econ. Geol., vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, pp. 62, 324.

1923, pt. 1, p. 499.

1924, pt. 1, pp. 40, 435.

1925, pt. 1, pp. 681-682.

1926, pt. 1, pp. 536-537.

1928, pt. 1, pp. 460-461.

1929, pt. 1, pp. 658-659.

U. S. G. S. Roberts Mountains topographic map (westerly portion).

U. S. G. S. Eureka mining district topographic map.

Lynn. Au, Pl.

20 miles NW. Carlin, S. P. R. R., W. P. R. R.

Tertiary volcanics cut by porphyritic intrusions.

Veins and placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 94, 1923.

Min. Res. 1923, pt. 1, p. 499.

1924, pt. 1, p. 435.

1925, pt. 1, p. 682.

1926, pt. 1, p. 537.

1929, pt. 1, p. 659.

Maggie Creek (Schroeder). Pb, Ag, Au, Sb, Cu.

9-15 miles NNW. Carlin, S. P. R. R., W. P. R. R.

Paleozoic sediments and Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 94-95, 1923.

Mineral Hill. Ag, Pb, Au, Cu, Zn.

5 miles SE. Mineral, E. & P. R. R.

Paleozoic sediments cut by porphyry.

Replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 197-199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 95, 1923.

Min. Res. 1922, pt. 1, p. 324.

1923, pt. 1, p. 499.

1926, pt. 1, p. 537.

EUREKA COUNTY—Continued.**Mt. Hope.** Zn, Pb, Ag.

2 miles W. Mt. Hope Station, E. & P. R. R.

U. S. G. S. Roberts Mountains topographic sheet.

Mount Tenabo. (See Cortez).**Roberts.** Ag, Pb, Cu.

42 miles SE. Austin, N. C. R. R.

Syenite and limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 96, 1923.

U. S. G. S. Roberts Mountains topographic map.

Safford (Barth, Palisade). Ag, Au, Fe, Pb, Cu.

6 miles W. Palisade, S. P. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 192, 194, 195, 198, 199,
1917.Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 96-97, 1923.

Min. Res. 1924, pt. 1, p. 435.

1929, pt. 1, p. 659.

HUMBOLDT COUNTY**Amos (Awakening, Slumbering Hills).** Au, Pl, Ag.

30 miles NW. Winnemucca, S. P. R. R., W. P. R. R.

Veins, placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 97, 1923.

Min. Res. 1924, pt. 1, p. 436.

1925, pt. 1, p. 682.

1928, pt. 1, p. 461.

1929, pt. 1, p. 659.

U. S. G. S. Disaster and Paradise topographic maps.

Black Rock. Au, Ag.

Near Sulphur, W. P. R. R.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 192, 1917.

Min. Res. 1921, pt. 1, p. 364.

1922, pt. 1, p. 324.

1923, pt. 1, p. 499.

1924, pt. 1, p. 436.

1925, pt. 1, p. 682.

1926, pt. 1, p. 537.

1928, pt. 1, p. 461.

U. S. G. S. Disaster topographic map.

Disaster. Au, Pl.

100 miles NNW. Winnemucca, S. P. R. R., W. P. R. R.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 97, 1923.

U. S. G. S. Disaster topographic map.

HUMBOLDT COUNTY—Continued.**Golconda.** Mn, Cu, Au, Pb, Zn, W, Fe.

3 miles ESE. Golconda, S. P. R. R.

Tertiary sediments and volcanics.

Bedded lenses.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 195, 197, 1917.Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 97-98, 1923.

Min. Res. 1914, pt. 1, p. 684.

1916, pt. 1, p. 481.

1920, pt. 1, p. 324.

U. S. G. S. Sonoma Range topographic (adv.) map.

Gold Run (Adelaide). Cu, Ag, Au, Pl, Pb, Zn.

15 miles S. Golconda, S. P. R. R.

Triassic sediments cut by granite.

Veins, replacements, contact metamorphic, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 195, 200, 1917.Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 99-100, 1923.

Min. Res. 1922, pt. 1, p. 324.

1923, pt. 1, p. 499.

1924, pt. 1, p. 436.

1925, pt. 1, p. 682.

1926, pt. 1, p. 537.

1928, pt. 1, p. 461.

1929, pt. 1, p. 659.

U. S. G. S. Sonoma Range topographic (adv.) map.

Grandpap. Au, Ag.

26 miles S. Winnemucca, S. P. R. R., W. P. R. R., in Grandpap Canyon.

Min. Res. 1911, pt. 1, p. 678.

U. S. G. S. Sonoma Range topographic (adv.) map.

Iron Point. Mn, Ag, Au, Pb.

S. Iron Point, S. P. R. R.

Shale and quartzite.

Lenses.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 98, 1923.

Min. Res. 1922, pt. 1, p. 324.

1923, pt. 1, p. 499.

1924, pt. 1, p. 436.

1925, pt. 1, p. 682.

1928, pt. 1, p. 461.

1929, pt. 1, p. 659.

U. S. G. S. Sonoma Range topographic (adv.) map.

Jackson Creek. Cu, Pb, Ag.

75 miles NNW. Humboldt, S. P. R. R.; 35 miles N. Sulphur, W. P. R. R.

Granite and limestone.

Veins, contact metamorphic.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 193, 1917.Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 98-99, 1923.

U. S. G. S. Disaster topographic map.

HUMBOLDT COUNTY—Continued.**National.** Au, Ag, Sb.

74 miles N. Winnemucca, S. P. R. R., W. P. R. R., W. slope Santa Rosa Range.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 1917.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route: U. S. Geol. Survey Bull. 612, p. 174, 1915.

Spurr, J. E., Tertiary gold quartz vein dike at National, Nevada: E. & M. Jour.-Press, vol. 116, No. 25, Dec. 22, 1923, p. 1078.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 100-101, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 324.

1923, pt. 1, pp. 499-500.

1924, pt. 1, p. 436.

1925, pt. 1, p. 682.

1926, pt. 1, pp. 537-538.

1928, pt. 1, p. 461.

1929, pt. 1, p. 659.

U. S. G. S. Paradise topographic map.

New Central. Au, Ag, Pb.

25 miles W. Winnemucca.

Min. Res. 1922, pt. 1, p. 324.

1924, pt. 1, p. 436.

U. S. G. S. Lovelock topographic (adv.) map.

Paradise Valley (Mount Rose, Spring City). Au, Pl, Ag.

44 miles NNE. Winnemucca, S. P. R. R., W. P. R. R.; 12 miles N. Goleconda, S. P. R. R.

Mesozoic metamorphosed slates.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 101, 1923.

Min. Res. 1922, pt. 1, p. 324.

1926, pt. 1, p. 538.

U. S. G. S. Paradise topographic map.

Preble (Potosi). Ag, Au.

5 miles E. Goleconda, S. P. R. R.

Veins.

Min. Res. 1926, pt. 1, p. 538.

1928, pt. 1, p. 461.

1929, pt. 1, p. 659.

U. S. G. S. Sonoma Range topographic (adv.) map.

Rebel Creek (New Goldfields, Willow Creek). Au, Pl, Ag.

54 miles N. Winnemucca, S. P. R. R., W. P. R. R.

Metamorphosed slates and granites.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 101-102, 1923.

HUMBOLDT COUNTY—Continued.**Rebel Creek (New Goldfields, Willow Creek)**—Continued.

Min. Res. 1922, pt. 1, p. 324.

U. S. G. S. Paradise topographic map.

Red Butte. Cu, Sb, Hg.

45 miles NW. Humboldt, S. P. R. R.; 15 miles N. Sulphur, W. P. R. R.

Gabbro cut by dikes of aplite.

Veins, disseminations.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 193, 195, 196, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 102, 1923.

Min. Res. 1919, pt. 1, p. 396.

1923, pt. 1, p. 500.

1925, pt. 1, p. 682.

U. S. G. S. Disaster topographic map.

Sherman. Au.

23 miles N. Winnemucca, S. P. R. R., in Bloody Run Range.

Veins.

Min. Res. 1928, pt. 1, p. 461.

1929, pt. 1, p. 659.

U. S. G. S. Paradise topographic map.

Shon. Ag, Au.

28 miles N. Winnemucca, S. P. R. R.

Granite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 102, 1923.

U. S. G. S. Paradise topographic map.

Sonoma Mountain (Harmony). Cu, Ag, Au, Zn.

5 miles SE. Winnemucca, S. P. R. R., W. P. R. R.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 195, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 102-103, 1923.

U. S. G. S. Sonoma Range topographic (adv.) map.

Sulphur (Rabbit Hole). Ag, Hg (Sulphur).

2 miles SE. Sulphur, W. P. R. R.

Tertiary rhyolite and water-laid tuffs.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 103-104, 1923.

U. S. G. S. Lovelock topographic (adv.) map.

Ten Mile. Au, Ag.

10 miles NW. Winnemucca, S. P. R. R., W. P. R. R.

Min. Res. 1925, pt. 1, p. 682.

1926, pt. 1, p. 538.

1928, pt. 1, p. 461.

U. S. G. S. Paradise topographic map.

Varyville (Columbia). Au, Pl.

120 miles NW. Winnemucca, S. P. R. R., W. P. R. R.

Veins, placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 104, 1923.

U. S. G. S. Disaster topographic map.

HUMBOLDT COUNTY—Continued.

- Warm Springs (Vicksburg, Ashdown, Pueblo).** Au, Ag, Cu, Pb.
120 miles NW. Winnemucca, S. P. R. R., W. P. R. R.
Mica and clay slates intruded by core of porphyry and basalt and flanked on W. by basalt.
Ore in quartz gangue.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 105, 1923.
Min. Res. 1926, pt. 1, p. 538.
U. S. G. S. Disaster topographic map.
- Willow Point.** Cu, Ag.
20 miles NNE. Winnemucca, S. P. R. R., W. P. R. R.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 105, 1923.
U. S. G. S. Paradise topographic map.
- Winnemucca (Barrett Springs).** Au, Pl, Ag, Pb, Cu.
5 miles WNW. Winnemucca, S. P. R. R., W. P. R. R.
Mesozoic metamorphosed slates, diorite.
Veins, placers.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 199, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 105-106, 1923.
Increasing gold prospecting embraces entire world; many strikes are reported: E. & M. Jour., vol. 122, No. 4, August 24, 1931, p. 182.
Min. Res. 1922, pt. 1, p. 325.
1924, pt. 1, p. 436.
1926, pt. 1, p. 538.
U. S. G. S. Paradise topographic map.

LANDER COUNTY

- Battle Mountain (Bannock, Copper Basin, Copper Canyon, Cottonwood Creek, Rocky Canyon, Galena).** Au, Pl, Ag, Cu, Sb, Pb, Zn, As.
10 miles W. Battle Mountain, S. P. R. R., W. P. R. R.
Paleozoic sediments and Tertiary volcanics.
Veins, replacements, contact metamorphic, placers.
Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route: U. S. Geol. Survey Bull. 612, pp. 170-171, 1915.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 198, 199, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 106-109, 1923.
Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.
Schrader, F. C., Notes on mining districts in eastern Nevada: Report in preparation.
Min. Res. 1922, pt. 1, pp. 62, 325.
1923, pt. 1, p. 500.
1924, pt. 1, pp. 39, 436-437.
1925, pt. 1, pp. 682-683.
1926, pt. 1, pp. 538-539.
1928, pt. 1, p. 462.
1929, pt. 1, pp. 659-660.
U. S. G. S. Sonoma Range topographic (adv.) map.

LANDER COUNTY—Continued.

- Big Creek.** Sb.
10 miles S. Austin, N. C. R. R., W. slope Toiyabe Range.
Shales and slates with thin beds of quartzite and limestone.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 109, 1923.
- Birch Creek (Big Smoky, Smoky Valley).** Au, Ag, Pb, Cu, Mo.
12 miles S. Austin, N. C. R. R., E. flank Toiyabe Range.
Sedimentary rocks intruded by granodiorite.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 109-110, 1923.
U. S. G. S. Roberts Mountains topographic map.
- Buffalo Valley.** Au.
17 miles S. Valmy, S. P. R. R.
Limestone and aplite.
Veins, replacements in limestone.
Schrader, F. C.: Report in preparation.
U. S. G. S. Sonoma Range topographic (adv.) map.
- Bullion (Campbell, Lander, Tenabo).** Ag, Au, Pl, Pb, Cu, As.
25 miles SW. Beowawe, S. P. R. R., E. slope Shoshone Range.
Paleozoic sediments capped by Tertiary volcanics.
Veins and placers.
Martin, A. H., The Lander mining district, Nevada: M. Science, vol. 61, pp. 508-511, 1910.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 197, 198, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 110-111.
Min. Res. 1922, pt. 1, p. 325.
1923, pt. 1, p. 500.
1924, pt. 1, p. 437.
1925, pt. 1, p. 683.
1926, pt. 1, p. 539.
1928, pt. 1, pp. 462-463.
1929, pt. 1, p. 660.
- Gold Basin.** Au, Ag, traces of Cu and Pb.
At Carroll, on Churchill County border.
Min. Res. 1928, pt. 1, p. 463.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 111, 1923.
- Hilltop (Kimberly, Mayesville).** Cu, Pb, Au, Ag.
18 miles SE. Battle Mountain, S. P. R. R., W. P. R. R.
Paleozoic sediments cut by diorite and andesite.
Veins.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 193, 194, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 111-112, 1923.
Min. Res. 1922, pt. 1, p. 326.
1923, pt. 1, p. 500.
1924, pt. 1, p. 437.
1925, pt. 1, p. 683.
1926, pt. 1, p. 540.
1928, pt. 1, p. 463.

LANDER COUNTY—Continued.

Horse Canyon. Au.

Near McCoy, 30 miles SSW. Battle Mountain, S. P. R. R., W. P. R. R.

Diorite and limestone.

Veins.

Schrader, F. C.: Report in preparation.

U. S. G. S. Sonoma Range topographic (adv.) map.

Jackson (Gold Park). Au.

44 miles S. of Austin, N. C. R. R. (See, also, Nye County.)

Min. Res. 1910, pt. 1, p. 520.

1911, pt. 1, p. 682.

1912, pt. 1, p. 800.

1913, pt. 1, p. 829.

1921, pt. 1, p. 385.

1925, pt. 1, p. 684.

Kingston (Bunker Hill, Santa Fe, Summit, Victorine). Au. Ag.

24 miles S. Austin, N. C. R. R., W. flank of Toiyabe Range.

Limestone interbedded with shales and slate.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 112-113, 1923.

Lewis (Dean, Mud Springs, Pittsburg). Ag, Au.

14 miles SE. Battle Mountain, S. P. R. R., W. P. R. R.

Paleozoic sediments cut by granite and andesite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 113-114, 1923.

Betty O'Neal mine: E. & M. Jour.-Press, March 15, 1924, pp. 449-452.

Min. Res. 1922, pt. 1, p. 326.

1923, pt. 1, pp. 500-501.

1924, pt. 1, p. 437.

1925, pt. 1, p. 684.

1926, pt. 1, p. 540.

1928, pt. 1, p. 463.

1929, pt. 1, p. 660.

McCoy. Au.

30 miles SSW. of Battle Mountain; access by automobile; 8 miles west of N. C. R. R.

Diorite and limestone.

Veins.

Schrader, F. C.: Report in preparation.

Min. Res. 1924, pt. 1, p. 437.

1929, pt. 1, p. 660.

U. S. G. S. Sonoma Range topographic (adv.) map.

New Pass. Au.

27 miles W. Austin, N. C. R. R., on border of Churchill County.

Limestone, porphyry and gabbro.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 114, 1923.

Ravenswood (Shoshone). Ag, Au, Cu, Pb.

20 miles NNW. Austin, N. C. R. R., 7 miles W. Silver Creek siding on N. C. R. R.

LANDER COUNTY—Continued.

Ravenswood (Shoshone)—Continued.

Cambrian shales, quartzites and limestones.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 114, 1923.

Reese River (Amador, Austin, Yankee Blade). Ag, Au, Pb, Cu, Zn, As.

Station, N. C. R. R., in Toiyabe Range.

Paleozoic sediments cut by granite and capped by Tertiary volcanics.

Veins.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route: U. S. Geol. Survey Bull. 612, p. 170, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 198, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 114-117, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res., 1922, pt. 1, pp. 62, 326.

1923, pt. 1, p. 501.

1924, pt. 1, p. 438.

1925, pt. 1, p. 684.

1926, pt. 1, p. 540.

1928, pt. 1, p. 463.

Skookum. Ag, Au.

9 miles NW. Austin, N. C. R. R.

Paleozoic sediments cut by granite.

Veins, contact metamorphic.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 117, 1923.

Min. Res. 1926, pt. 1, p. 540.

1928, pt. 1, p. 463.

Spencer. Au, Ag, Sb.

NE. Austin, N. C. R. R.

Paleozoic sediments, Tertiary volcanics.

Schrader, F. C.: Report in preparation.

U. S. G. S. Roberts Mountains topographic map.

LINCOLN COUNTY

Atlanta (Silver Park, Silver Springs). Ag, Au, Cu, Pb, Ra.

About 40 miles NW. Pioche, U. P. R. R.

Quartzites and limestones overlain by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 191, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 118, 1923.

Chief (Caliente). Au, Ag, Cu, Pb.

8 miles NNW. Caliente, U. P. R. R.

Paleozoic sediments cut by basic dikes.

Veins.

Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol. Survey Bull. 208, pp. 37-48, 1903.

LINCOLN COUNTY—Continued.

Chief (Caliente)—Continued.

- Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 118-119, 1923.
 Min. Res. 1925, pt. 1, p. 684.
 1926, pt. 1, p. 541.
 1928, pt. 1, p. 463.
 U. S. G. S. Pioche topographic map.

Comet. Au, Ag, Pb, Cu, Zn, W.

- 14 miles SW. Pioche, U. P. R. R.
 Paleozoic sediments cut by porphyry.
 Veins, replacements.
 Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol. Survey Bull. 208, pp. 151-152, 1903.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 119, 1923.
 Min. Res. 1922, pt. 1, p. 327.
 1924, pt. 1, p. 438.
 1925, pt. 1, p. 684.
 1926, pt. 1, p. 541.
 1928, pt. 1, p. 463.
 1929, pt. 1, p. 660.
 U. S. G. S. Pioche topographic map.

Eagle Valley (Fay, State line). Au, Ag, Pb.

- 21 miles NW. Modena, Utah, U. P. R. R.
 Tertiary volcanics.
 Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol. Survey Bull. 208, pp. 134-135, 1903.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 119, 1923.
 U. S. G. S. Pioche topographic map.

Ferguson (Delamar). Au, Ag.

- 30 miles WSW. Caliente, U. P. R. R.
 Paleozoic quartzite cut by basic dikes.
 Veins, replacements.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 119-120, 1923.
 Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.
 Visited by State Bureau of Mines engineer, June, 1931.
 Min. Res. 1926, pt. 1, p. 541.
 1928, pt. 1, p. 464.
 U. S. G. S. Pioche topographic map.

Freiberg (Worthington). Au, Ag.

- 75 miles W. Pioche, U. P. R. R.
 Rhyolite.
 Veins.

LINCOLN COUNTY—Continued.

Freiberg (Worthington)—Continued.

- Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 120, 1923.
 Min. Res. 1925, pt. 1, p. 685.

Groom. Pb, Ag.

- 100 miles N. Las Vegas, U. P. R. R.
 Limestones and shales.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 121, 1923.
 Longwell, C. E., Structural studies in southern Nevada: Geol. Soc. Am. Bull., vol. 37, No. 3, p. 556, 1926.
 Carpenter, Jay A., Mineral resources of southern Nevada: Nevada State Bureau of Mines Bull., vol. 1, No. 1, p. 21, 1929.
 Min. Res. 1922, pt. 1, p. 327.
 1923, pt. 1, p. 501.
 1924, pt. 1, p. 438.
 1925, pt. 1, p. 685.
 1926, pt. 1, p. 541.
 1928, pt. 1, p. 464.
 1929, pt. 1, pp. 660-661.

Highland. Pb, Ag, Au, Cu.

- 7 miles WNW. Pioche, U. P. R. R.
 Paleozoic sediments cut by dikes.
 Veins, replacements.
 Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol. Survey Bull. 208, pp. 38-45, 1903.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.
 Min. Res. 1908, pt. 1, p. 493.
 1909, pt. 1, pp. 416-417.
 1920, pt. 1, p. 326.
 1921, pt. 1, p. 386.
 1922, pt. 1, p. 327.
 1923, pt. 1, p. 501.
 1924, pt. 1, p. 438.
 U. S. G. S. Pioche and Highland topographic maps.

Hiko (Pahranagat). Ag, Pb, Cu.

- 60 miles W. Caliente, U. P. R. R.
 Paleozoic sediments.
 Veins.
 Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 123, 1923.
 History of Hiko district and the Pahranagat Valley: Salt Lake Mining Review, vol. 22, No. 18, pp. 28-29, December 30, 1920.
 Min. Res. 1922, pt. 1, p. 327.
 1924, pt. 1, p. 438.
 1925, pt. 1, p. 685.
 1926, pt. 1, p. 541.
 1928, pt. 1, p. 464.
 1929, pt. 1, p. 661.
 U. S. G. S. Pioche topographic map.

LINCOLN COUNTY—Continued.

Jack Rabbit (Bristol). Au, Pb, Au, Cu, Mn.

16 to 20 miles NW. Pioche, U. P. R. R.

Paleozoic sediments cut by rhyolite.

Replacements, veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, pp. 121-123, 1923.Bristol Silver, near Pioche, Nevada, now rated as a bonanza mine: *Salt Lake Mining Review*, vol. 22, No. 15, p. 23, November 15, 1920.Gillson, Joseph L., *Conichalcite from the Bristol mine, Lincoln County, Nevada*: *Am. Mineralogist*, vol. 11, No. 5, pp. 109-114, May, 1926.Ferguson, H. G., *The mining districts of Nevada*: *Econ. Geology*, vol. 24, No. 2, March-April, 1929.Carpenter, Jay A., *Mineral resources of southern Nevada*: *Nev. State Bur. Mines Bull.*, vol. 1, No. 1, p. 20, November, 1929.*Min. Res.* 1922, pt. 1, p. 327.

1923, pt. 1, p. 501.

1924, pt. 1, p. 438.

1925, pt. 1, p. 685.

1926, pt. 1, p. 541.

1928, pt. 1, p. 464.

1929, pt. 1, p. 661.

U. S. G. S. Bristol Range topographic map.

Lone Mountain. Ag, Pb.

16 miles W. Pioche, U. P. R. R.

Paleozoic sediments.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.

U. S. G. S. Pioche and Highland topographic maps.

Patterson (Cave Valley, Geyser). Au, Pb.

50 miles SSE. Ely, N. N. R. R.; 45 miles N. Pioche, U. P. R. R., S. end Schell Creek Mountains.

Cambrian quartzites, limestones and shales.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, p. 198, 1917.Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, pp. 123-124, 1923.Schrader, F. C., *Notes on ore deposits at Cave Valley, Patterson district, Lincoln County, Nevada*: *Univ. of Nevada Bull.*, vol. 25, No. 3, June 1, 1931.*Min. Res.* 1922, pt. 1, p. 327.

1923, pt. 1, p. 501.

1925, pt. 1, p. 685.

Pioche (Ely). Ag, Pb, Au, Cu, Zn, Mn, W.

Station, U. P. R. R.

Paleozoic sediments cut by dikes of quartz porphyry and diorite.

Replacements, veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, pp. 194, 198, 199, 200, 1917.Umpleby, J. B., *Manganese fluxing ore at Pioche, Nevada*: *E. & M. Jour.*, vol. 104, p. 760, 1917.Pardee, J. T., and Jones, E. L., Jr., *Deposits of manganese ore in Nevada*: U. S. Geol. Survey Bull. 620, p. 211, 1920.

LINCOLN COUNTY—Continued.

Pioche (Ely)—Continued.Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, pp. 124-127, 1923.Westgate, L. G., and Knopf, Adolph, *Geology of Pioche, Nevada, and vicinity*: *A. I. M. E. Trans.*, vol. 75, p. 13, 1927.Gillson, J. L., *Petrography of the Pioche district, Lincoln County, Nevada*: U. S. Geol. Survey Prof. Paper 158, pp. 77-86, 1929.Ferguson, H. G., *The mining districts of Nevada*: *Econ. Geology*, vol. 24, No. 2, March-April, 1929.Carpenter, Jay A., *Mineral resources of southern Nevada*: *Nevada State Bureau of Mines Bull.*, vol. 1, No. 1, pp. 19-21, 1929.Westgate, L. G., and Knopf, Adolph, *Geology and ore deposits of the Pioche district, Nevada*: U. S. Geol. Survey Prof. Paper 171 (in course of publication).*Min. Res.* 1922, pt. 1, p. 327.

1923, pt. 1, pp. 501-502.

1924, pt. 1, pp. 438-439.

1925, pt. 1, pp. 193, 685.

1926, pt. 1, pp. 158, 541-542.

1927, pt. 1, p. 188.

1928, pt. 1, p. 464.

1929, pt. 1, p. 661.

U. S. G. S. Pioche and Panaca (adv.) topographic maps.

Silverhorn. Ag, Ni.

23 miles NW. Pioche, U. P. R. R.

Limestones and shales cut by acid dikes.

Replacements.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, pp. 127-128, 1923.

U. S. G. S. Pioche topographic map.

Tem Piute. Ag, Pb, Cu, Zn.

In Timpahute Mountains, W. Lincoln County.

Paleozoic shales and limestone.

Lodes.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 128, 1923.*Min. Res.* 1924, pt. 1, p. 439.

1925, pt. 1, p. 685.

1928, pt. 1, p. 464.

1929, pt. 1, p. 661.

Vigo. Mn.

24 miles E. Vigo, L. A. & S. L. R. R., in Mormon Range.

Pardee, J. T., and Jones, E. L., Jr., *Deposits of manganese ore in Nevada*: U. S. Geol. Survey Bull. 710, pp. 241-242, 1920.

U. S. G. S. Pioche topographic map.

Viola. Pb, Zn, Cu, Ag.

One-fourth mile SE. Carp, U. P. R. R., in Mormon Range.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 128, 1923.*Min. Res.* 1925, pt. 1, p. 685.

U. S. G. S. Pioche topographic map.

LYON COUNTY

Benway. Au, Ag.

9 miles N. Schurz, S. P. R. R.

Granite, diorite, limestone.

Veins.

LYON COUNTY—Continued.**Benway**—Continued.

Schrader, F. C.: Report in preparation.
U. S. G. S. Carson Sink topographic map.

Churchill. W.

Few miles N. Churchill, in basin on SE. slope Churchill Butte, S. P. R. R.
Volcanic rocks, granite.
Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the
United States: U. S. Geol. Survey Bull. 725, pp. 245-309, 1922.
U. S. G. S. Wabuska topographic map.

Como (Palmyra, Indian Springs). Au, Ag.

10 miles S. Dayton, S. P. R. R.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 130, 1923.
U. S. G. S. Carson topographic map.

Pine Nut Range. Au, Pl, Ag, Pb, Cu, Fe (not a mining district).

Tertiary volcanics, Triassic sediments.
Veins and placers.
Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol.
Survey Bull. 208, pp. 120-123, 1903.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
U. S. G. S. Wabuska, Carson, Wellington, and Markleeville topographic
maps.

Ramsey. Au, Ag.

17 miles SE. Clarks, S. P. R. R., on SE. flank Virginia Range.
Tertiary volcanics.
Veins, free gold.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 130-131, 1923.
Min. Res. 1922, pt. 1, p. 328.
1923, pt. 1, p. 502.
1926, pt. 1, p. 542.
1928, pt. 1, p. 464.
U. S. G. S. Wabuska topographic map.

Red Mountain. Fe.

17 miles NE. Dayton, S. P. R. R.
Triassic sediments cut by granite.
Contact metamorphic.
Harder, E. C., Iron ores near Dayton, Nevada: U. S. Geol. Survey Bull.
430, pp. 240-246, 1910.
U. S. G. S. Wabuska topographic map.

Silver City (Chinatown, Dayton, Devils Gate, Gold Canyon). Au, Pl, Ag, Fe.

Station, V. & T. R. R.
Tertiary volcanics.
Veins, placers.
Harder, E. C., Iron ores near Dayton, Nevada: U. S. Geol. Survey Bull. 430,
pp. 240-246, 1910.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 191, 194, 195, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 130-132, 1923.
Ferguson, H. G., Mining districts of Nevada: Econ. Geology, vol. 24, No. 2,
March-April, 1929.

LYON COUNTY—Continued.**Silver City (Chinatown, Dayton, Devils Gate, Gold Canyon)**—Continued.

Activity at Silver City, Nevada: E. & M. Jour., vol. 131, No. 9, p. 429,
May 11, 1931.
Smith, Alfred Merritt, The mines and mills of Silver City, Nevada: Nevada
State Bureau of Mines and Mackay School of Mines Bull. No. 5, 1932.
Min. Res. 1922, pt. 1, p. 328.
1923, pt. 1, p. 502.
1924, pt. 1, p. 439.
1925, pt. 1, p. 686.
1926, pt. 1, p. 542.
1928, pt. 1, p. 464.
1929, pt. 1, pp. 661-662.
U. S. G. S. Carson topographic map.

Talapoosa. Au, Ag, Cu.

14 miles, S. Fernley, S. P. R. R.
Tertiary volcanics.
Veins.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 132-133, 1923.
Min. Res. 1922, pt. 1, p. 328.
1923, pt. 1, p. 502.
1924, pt. 1, p. 439.
1926, pt. 1, p. 542.
1928, pt. 1, p. 465.
1929, pt. 1, p. 662.
U. S. G. S. Wabuska topographic map.

Yerington (Ludwig, Mason). Cu, Pb, Au, Pl, Ag.

Station N. C. B. R. R.
Triassic sediments cut by granite.
Contact metamorphic, placers.
Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western
United States, Part B, The Overland Route: U. S. Geol. Survey Bull.
612, p. 184, 1915.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, pp. 191-197, 1917.
Gaby, Walter E., The Yerington district, Nevada: Min. & Sci. Press, vol. 118,
pp. 625-626, May 10, 1919.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 133-137, 1923.
Ferguson, H. G., Mining districts of Nevada: Econ. Geology, vol. 24, No. 2,
March-April, 1929.
Min. Res. 1922, pt. 1, p. 328.
1923, pt. 1, pp. 502-503.
1924, pt. 1, pp. 439-440.
1925, pt. 1, p. 686.
1926, pt. 1, pp. 542-543.
1928, pt. 1, pp. 465-466.
1929, pt. 1, pp. 661-662.
U. S. G. S. Wellington and Yerington district topographic maps.

MINERAL COUNTY**Acme (Fitting)**. Au, Ag, Pb, Cu.

Station, S. P. R. R.
Triassic sediments, Tertiary volcanics, veins, replacements.

MINERAL COUNTY—Continued.

Acme (Fitting)—Continued.

Lincoln, Francis Church, op. cit.
U. S. G. S. Hawthorne topographic sheet.

Aurora (Cambridge, Esmeralda). Au, Ag.

37 miles SW. Thorne, S. P. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 137-138, 1923.

Ferguson, H. G., Mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1928, pt. 1, p. 466.

1929, pt. 1, p. 662.

U. S. G. S. Hawthorne topographic map.

Bovard (Copper Mountain, Rand). Au, Ag, Mn, Cu, Pb.

28 miles E. Schurz, S. P. R. R., 8 miles E. Rand.

Tertiary volcanics.

Veins, replacements.

Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol. Survey Bull. 208, pp. 106-107, 1903.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 149-151, 1923.

Pardee, J. T., and Jones, E. L., Jr., Deposits of manganese ore in Nevada: U. S. Geol. Survey Bull. 710, p. 233, 1920.

Schrader, F. C.: Report in preparation.

Min. Res. 1922, pt. 1, pp. 329-330.

1923, pt. 1, p. 504.

1924, pt. 1, pp. 440-441.

1925, pt. 1, pp. 687-688.

1926, pt. 1, p. 545.

1928, pt. 1, p. 466.

1929, pt. 1, p. 663.

U. S. G. S. Hawthorne topographic map.

Buena Vista (Basalt, Mount Montgomery, Oneota). Au, Ag, Pb, Cu, Zn.

Station, S. P. R. R., 15 miles NE. Benton.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 140-141.

Schrader, F. C.: Report in preparation.

Min. Res. 1923, pt. 1, p. 503.

1924, pt. 1, p. 440.

1925, pt. 1, p. 687.

1926, pt. 1, p. 544.

1929, pt. 1, p. 663.

U. S. G. S. White Mountain topographic map.

Candelaria (Belleville, Columbus). Ag, Au, Pb, Cu, Ni.

Station, S. P. R. R.

Paleozoic sediments, Tertiary volcanics.

MINERAL COUNTY—Continued.

Candelaria (Belleville, Columbus)—Continued.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 195, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 141-142, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1921, pt. 1, p. 388.

1922, pt. 1, p. 329.

1923, pt. 1, p. 503.

1924, pt. 1, pp. 433, 440.

1925, pt. 1, p. 687.

1926, pt. 1, p. 544.

1929, pt. 1, p. 663.

U. S. G. S. Hawthorne topographic map.

Cedar Mountain (Bell, Omco, Simon). Ag, Au, Pb, Zn.

22 miles NE. Mina, S. P. R. R.

Triassic limestones, Tertiary lavas.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 138-140, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Simon silver-lead sends out sensible letter to stockholders: Salt Lake Min. Review, vol. 24, No. 16, pp. 13-14, November 30, 1922.

Geology of the Simon district: Min. & Sci. Press, September 6, 1919, pp. 344-345.

Min. Res. 1922, pt. 1, pp. 328-329.

1923, pt. 1, p. 503.

1924, pt. 1, p. 440.

1925, pt. 1, pp. 686-687.

1926, pt. 1, p. 544.

1928, pt. 1, p. 466.

1929, pt. 1, pp. 662-663.

U. S. G. S. Tonopah topographic map.

East Walker (Mount Grant). Au, Ag.

Adjoins Walker Lake district on W.; W. slope Walker River Range.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 143, 1923.

U. S. G. S. Hawthorne topographic map.

Garfield. Au, Ag, Cu, Pb.

15 miles NW. Mina, S. P. R. R.

Limestone cut by granodiorite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 144, 1923.

Min. Res. 1922, pt. 1, p. 329.

1923, pt. 1, p. 503.

1924, pt. 1, p. 440.

1925, pt. 1, p. 687.

1926, pt. 1, p. 544.

1928, pt. 1, p. 466.

1929, pt. 1, p. 663.

U. S. G. S. Hawthorne topographic map.

MINERAL COUNTY—Continued.

Granite (Mountain View, Reservation). Au, Ag, Pb, Cu.

8 miles W. Schurz, S. P. R. R.

Granite capped by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 146-147, 1923.

U. S. G. S. Hawthorne topographic map.

Hawthorne (Lucky Boy, Pamlico). Pb, Ag, Au, Cu, W.

7 miles SSW. Thorne, S. P. R. R.

Cambrian sediments cut by granite and diorite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 195, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 144-146, 1923.

Nevada Mining Press, October 2, 1925.

Ferguson, H. G., Geology of the Hawthorne and Tonopah quadrangles: U. S. G. S. report in preparation.

Min. Res. 1921, pt. 1, p. 388.

1922, pt. 1, p. 329.

1923, pt. 1, p. 504.

1924, pt. 1, p. 440.

1925, pt. 1, pp. 687-688.

1926, pt. 1, pp. 544-545.

1928, pt. 1, p. 466.

1929, pt. 1, p. 663.

U. S. G. S. Hawthorne topographic map.

King. Au, Ag, Pb.

50 miles SE. Fallon, S. P. R. R.

Tertiary volcanics underlain by Mesozoic limestone, diorite and granite.

Veins.

Schrader, F. C., The Chalk Mountain, Quartz Mountain, Gold Basin, and King mining districts, Nevada: U. S. Geol. Survey Press Notice No. 17276, September 15, 1927.

U. S. G. S. Carson Sink topographic map.

Pine Grove (Rockland, Wilson). Au, Pl, Ag.

30 miles S. Yerington, N. C. B. R. R.

Quartz monzonite cut by granite porphyry and overlain by rhyolite.

Veins and placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 148-149, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1923, pt. 1, p. 504.

1924, pt. 1, p. 440.

1926, pt. 1, p. 545.

U. S. G. S. Hawthorne and Wellington topographic maps.

Queens. W.

3 miles NE. Queens, S. P. R. R.

Volcanic rocks.

Contact metamorphic.

MINERAL COUNTY—Continued.

Queens—Continued.

Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the United States: U. S. Geol. Survey Bull. 725, p. 277, 1922.

U. S. G. S. Hawthorne and White Mountain topographic maps.

Rawhide (Regent, Churchill County). Au, Pl, Ag, Cu, Pb, W.

28 miles E. Schurz, S. P. R. R.

Tertiary volcanics.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 196, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 151-152, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Schrader, F. C.: Report in preparation.

Min. Res. 1922, pt. 1, p. 330.

1923, pt. 1, p. 504.

1924, pt. 1, p. 441.

1925, pt. 1, p. 688.

1926, pt. 1, p. 545.

1928, pt. 1, p. 467.

1929, pt. 1, p. 663.

U. S. G. S. Carson Sink topographic map.

Ryan Canyon. Ag, Au, Pb.

6 miles from Thorne.

Min. Res. 1924, pt. 1, p. 441.

U. S. G. S. Hawthorne topographic map.

Santa Fe (Luning, Kincaid). Au, Cu, Ag, Pb, Sb.

E. Luning, S. P. R. R.

Crystalline limestones intruded by granitic rocks.

Contact metamorphic.

Hill, J. M., Some mining districts in northeastern California and northwestern Nevada: U. S. Geol. Survey Bull. 594, pp. 157-171, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Clark, C. W., Geology and ore deposits of the Santa Fe district, Mineral County, Nevada: Calif. Univ., Dept. Geol. Sci., Bull., vol. 14, No. 1, pp. 1-74, September 7, 1922.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 153-154, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 330.

1924, pt. 1, p. 441.

1925, pt. 1, p. 688.

1928, pt. 1, p. 467.

1929, pt. 1, pp. 663-664.

U. S. G. S. Hawthorne topographic map.

Silver Star (Black Mountain, Gold Range, Marietta, Mina). Au, Cu, Ag, Pb, W.

Gold Range and Mina in vicinity of Mina, S. P. R. R.; Black Mountain or Marietta near Marietta, 26 miles SW. Mina, in Excelsior Mountains.

Mesozoic sediments, intruded and capped by volcanic rocks.

Veins, contact metamorphic.

MINERAL COUNTY—Continued.

Silver Star (Black Mountain, Gold Range, Marietta, Mina)—Continued.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.

Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the United States: U. S. Geol. Survey Bull. 725, pp. 245-309, 1922.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 154-155, 1923.

Carpenter, Jay A., The mineral resources of southern Nevada: Nevada State Bur. Mines Bull., vol. 1, No. 1, p. 19, 1929.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Schuetz C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, p. 45, July, 1931.

Min. Res. 1921, pt. 1, pp. 388-389.

1922, pt. 1, p. 330.

1923, pt. 1, p. 504.

1924, pt. 1, pp. 440-441.

1925, pt. 1, pp. 612, 688.

1926, pt. 1, p. 545.

1927, pt. 1, pp. 425-426.

1928, pt. 1, pp. 123, 467.

1929, pt. 1, p. 664.

U. S. G. S. Hawthorne topographic map.

Sodaville (Pilot Mountain), Cu, Mn, Hg, W, Ag, Au, Pt, Pb.

18 miles E. Sodaville, S. P. R. R.

Mesozoic sediments cut by granite and capped by Tertiary volcanics.

Veins, contact metamorphic, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 193, 197, 1917.

Pardee, J. T., and Jones, E. L., Jr., Deposits of manganese ore in Nevada: U. S. Geol. Survey Bull. 710, pp. 234-235, 1920.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 147-148, 1923.

Foshag, W. F., Quicksilver deposits of the Pilot Mountains, Mineral County, Nevada: U. S. Geol. Survey Bull. 795, pp. 113-123 (map); October 27, 1929; Min. Jour., Phoenix, Ariz., vol. 11, No. 22, pp. 5-6, 12-14 (map), April 15, 1928.

Min. Res. 1921, pt. 1, p. 116.

1922, pt. 1, p. 119.

1924, pt. 1, p. 466.

1925, pt. 1, pp. 612, 688.

1926, pt. 1, p. 545.

1928, pt. 1, pp. 276, 467.

1929, pt. 1, p. 664.

U. S. G. S. Tonopah and Hawthorne topographic maps.

Sulphide. Au, W.

18 miles SE. Hawthorne, which is 7 miles SSW. Thorne, S. P. R. R.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 155-156, 1923.

U. S. G. S. Hawthorne topographic map.

Sunnyside (Hot Springs). Au, Ag.

Between Eagleville, Churchill County, and Rawhide, Mineral County.

Quartz, diorite.

Veins.

Schrader, F. C.: Report in preparation.

U. S. G. S. Carson Sink topographic map.

MINERAL COUNTY—Continued.

Walker Lake (Buckley, Cat Creek). Au, Ag, Cu.

W. Walker Lake on E. slope Walker River or Wassuk Range.

Granodiorite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 156-157, 1923.

Min. Res. 1922, pt. 1, p. 330.

1924, pt. 1, p. 441.

U. S. G. S. Hawthorne topographic map.

Washington. Cu, Au, Ag.

30 miles S. Yerington, N. C. B. R. R., on E. Fork Walker River.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 157, 1923.

Min. Res. 1929, pt. 1, p. 664.

U. S. G. S. Hawthorne topographic map.

Whiskey Flat. Cu, Ag, Au.

16 miles SE. Hawthorne, which is 7 miles SW. Thorne, S. P. R. R.

Granite limestone contact.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 157, 1923.

U. S. G. S. Hawthorne topographic map.

NYE COUNTY

Antelope. Au, Ag.

30 miles ESE. Goldfield, T. & G. R. R.

Paleozoic sediments cut by granite and capped by Tertiary eruptives.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 158, 1923.

Min. Res. 1926, pt. 1, p. 546.

U. S. G. S. Kawich topographic map.

Arrowhead. Ag, Au.

65 miles E. Tonopah, T. & G. R. R.

Paleozoic sediments capped by Tertiary eruptives.

Veins, replacements.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 158-159, 1923.

Min. Res. 1922, pt. 1, p. 332.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Athens. Au, Ag.

30 miles by road NE. Mina, S. P. R. R.

Tertiary eruptives and later lake beds.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 159, 1923.

Min. Res. 1923, pt. 1, p. 504.

1928, pt. 1, p. 467.

U. S. G. S. Tonopah topographic map.

Bellehelen. Au, Ag.

50 miles E. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

NYE COUNTY—Continued.

Bellehelen—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 159-160, 1923.

Min. Res. 1922, pt. 1, pp. 330-331.

1923, pt. 1, p. 504.

1924, pt. 1, p. 441.

1925, pt. 1, pp. 688-689.

1926, pt. 1, p. 546.

1928, pt. 1, p. 467.

1929, pt. 1, p. 664.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Belmont (Philadelphia, Silver Bend). Ag, Pb, Cu, Hg, Au.

50 miles NNE. Tonopah, T. & G. R. R.

Paleozoic sediments cut by granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 160-161, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1914, pt. 1, p. 699.

1915, pt. 1, p. 644.

1916, pt. 1, pp. 489-490.

1917, pt. 1, p. 287.

1918, pt. 1, p. 251.

1919, pt. 1, p. 404.

1920, pt. 1, pp. 329-330.

1921, pt. 1, pp. 389-390.

1922, pt. 1, pp. 330-331.

1923, pt. 1, p. 505.

1928, pt. 1, pp. 275-276.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Big Dune (Lee). Au, Cu.

NW. Leland, T. & T. R. R., in Amargosa Desert.

Cambrian sediments.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 173, 1923.

U. S. G. S. Furnace Creek topographic map.

Bruner (Phonolite). Au, Ag.

50 miles NE. Luning, S. P. R. R.

Rhyolite and andesite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 161-162, 1923.

Min. Res. 1922, pt. 1, p. 331.

1923, pt. 1, p. 504.

1924, pt. 1, p. 442.

1925, pt. 1, p. 689.

1929, pt. 1, p. 664.

U. S. G. S. Tonopah topographic map.

Bullfrog (Beatty, Pioneer, Rhyolite). Au, Ag, Cu, Pb, Hg.

Station T. & T. R. R.

NYE COUNTY—Continued.

Bullfrog (Beatty, Pioneer, Rhyolite)—Continued.

Tertiary volcanics.

Veins.

Knopf, Adolph, Some cinnabar deposits in western Nevada: U. S. Geol. Survey Bull. 620, pp. 62-68, 1916.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 195, 196, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 162-163, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

1925, pt. 1, p. 689.

1926, pt. 1, p. 546.

1928, pt. 1, pp. 467-468.

1929, pt. 1, p. 664.

U. S. G. S. Bullfrog Special and Furnace Creek topographic maps.

Cactus Springs. Au, Ag.

24 miles E. Goldfield, T. & G. R. R., NW. end Cactus Range.

Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 164, 1923.

U. S. G. S. Kawich topographic map.

Clifford. Au, Ag.

About 35 miles E. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 165, 1923.

Cloverdale (Golden, Republic). Au, Pl, Ag, Pb, Cu.

32 miles E. Luning, S. P. R. R.; 42 miles NE. Sodaville.

Tertiary volcanics.

Veins, placers.

Spurr, J. E., Geology of Nevada south of the Fortieth Parallel: U. S. Geol. Survey Bull. 208, pp. 93-97, 1903.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 165-166, 1923.

Min. Res. 1922, pt. 1, p. 331.

1925, pt. 1, p. 689.

1926, pt. 1, p. 546.

U. S. G. S. Tonopah topographic map.

Currant. Au, Pb, Cu.

E. Currant in NE. Nye County.

Limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 166, 1923.

NYE COUNTY—Continued.

Danville. Au, Ag.

In Monitor Range, N. Nye County.

Limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 166, 1923.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Eden (Gold Belt). Au, Ag.

55 miles E. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 166, 1923.

Min. Res. 1928, pt. 1, p. 468.

U. S. G. S. Kawich topographic map.

Ellendale. Au, Ag, Cu.

Few miles E. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins, stringers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 167, 1923.

U. S. G. S. Tonopah topographic map.

Fairplay (Atwood, Goldyke). Au, Ag, W, Cu, Pb.

32 miles NE. Luning, S. P. R. R.

Granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 167, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1925, pt. 1, p. 689.

1926, pt. 1, p. 546.

1929, pt. 1, p. 664.

U. S. G. S. Tonopah topographic map.

Fluorine (Bare Mountain, Telluride). Hg, Au, Ag.

6 miles E. Beatty, T. & T. R. R.

Paleozoic sediments intruded by pegmatites and monzonite porphyry.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 167-169, 1923.

U. S. G. S. Furnace Creek topographic map.

Gold Crater. Au, Ag.

27 miles SE. Goldfield, T. & G. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

NYE COUNTY—Continued.

Gold Crater—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 169, 1923.

U. S. G. S. Kawich topographic map.

Golden Arrow (Blakes Camp). Au, Ag.

About 30 miles ESE. Tonopah, and 50 miles NE. Goldfield, T. & G. R. R.

Tertiary eruptives.

Veins, contact metamorphic.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 169-170, 1923.

U. S. G. S. Kawich topographic map.

Grapevine. Au.

22 miles W. Beatty, T. & T. R. R.

Rhyolite.

Veins.

U. S. G. S. Lida topographic map.

Hannapah (Silverzone, Volcano). Au, Ag, Hg.

20 miles E. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Spurr, J. E., Ore deposits of Tonopah and neighboring districts, Nevada: U. S. Geol. Survey Bull. 213, p. 87, 1903.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 170, 1923.

Min. Res. 1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

1925, pt. 1, p. 689.

1926, pt. 1, p. 546.

1928, pt. 1, pp. 277, 468.

1929, pt. 1, p. 664.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Jackson (Gold Park). Au, Ag, Cu, Pb.

44 miles SE. Austin, N. C. R. R.; 34 miles from Leslie, N. C. R. R., partly in Lander County.

Paleozoic sediments, granite porphyry and Tertiary volcanics.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 170-171, 1923.

U. S. G. S. Tonopah topographic map.

Jefferson Canyon (Concordia, Green Isle). Au, Ag.

70 miles NNE. Tonopah, T. & G. R. R.

Paleozoic sediments cut by porphyry.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 171-172, 1923.

U. S. G. S. Tonopah topographic map.

Jett. Ag, Pb, Zn.

45 miles N. Millers, T. & G. R. R.

Slate and limestone.

NYE COUNTY—Continued.

Jett—Continued.

Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 172, 1923.
U. S. G. S. Tonopah topographic map.

Johnnie. Au, Pl, Ag, Pb.

25 miles NE. Death Valley in NW. end Spring Mountain Range; 14 miles
SSE. Amargosa.

Paleozoic sediments.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 172-173, 1923.

Min. Res. 1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

1925, pt. 1, p. 689.

1926, pt. 1, p. 546.

1928, pt. 1, p. 468.

1929, pt. 1, p. 665.

U. S. G. S. Furnace Creek topographic map.

Kawich (Gold Reed). Au, Hg.

54 miles E. Goldfield, T. & G. R. R.

Monzonite porphyry and rhyolite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 173, 1923.

U. S. G. S. Kawich topographic map.

Lodi (Ellsworth, Mammoth, Marble). Ag, Au, Pb, Cu, W.

45 miles NNE. Luning, S. P. R. R., in Mammoth Range.

Granite and limestone.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.

Another gold excitement now developing in Nevada: Salt Lake Min.
Review, April 30, 1921, p. 20.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 174-175, 1923.

Schrader, F. C.: Report on Quartz Mountain in preparation.

Min. Res. 1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

1925, pt. 1, p. 689.

1926, pt. 1, pp. 546-547.

1928, pt. 1, pp. 468, 123.

U. S. G. S. Tonopah topographic map.

Manhattan. Au, Pl, Ag, As.

45 miles N. Tonopah, T. & G. R. R.

Paleozoic sediments cut by granite and diorite and capped by Tertiary
volcanics.

Veins, replacements, placers.

NYE COUNTY—Continued.

Manhattan—Continued.

Ferguson, H. G., Geology and ore deposits of the Manhattan district,
Nevada: U. S. Geol. Survey Bull. 723, 163 pp., 1924; The mining dis-
tricts of Nevada: Econ. Geol., vol. 24, No. 2, March-April, 1929.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 175-177, 1923.

Min. Res. 1919, pt. 1, p. 404.

1920, pt. 1, pp. 329-330.

1921, pt. 1, p. 390.

1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

1925, pt. 1, pp. 689-690.

1926, pt. 1, p. 547.

1928, pt. 1, pp. 468-469.

1929, pt. 1, p. 665.

U. S. G. S. Manhattan and vicinity and Tonopah topographic maps.

Millett (North Twin River). Au, Ag, Pb, Cu.

45 miles S. Austin, N. C. R. R.; 105 miles N. Tonopah, T. & G. R. R.

Limestone and slate.

Veins, pockets.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
pp. 177-178, 1923.

U. S. G. S. Tonopah topographic map.

Min. Res. 1908, pt. 1, p. 498.

1909, pt. 1, p. 421.

1910, pt. 1, p. 527.

1911, pt. 1, p. 690.

1912, pt. 1, p. 38.

1913, pt. 1, p. 835.

1914, pt. 1, p. 701.

1915, pt. 1, p. 646.

1916, pt. 1, p. 492.

1922, pt. 1, p. 331.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

Morey. Ag, Au, Pb.

W. Morey in Hot Creek Range.

Granite.

Veins.

Shannon, Earl V., Notes on an andorite-bearing silver ore from Nevada:
U. S. Nat. Mus. Proc., vol. 60, art. 16, 5 pp., 1922.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 178, 1923.

Min. Res. 1922, pt. 1, p. 331.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Northumberland. Ag.

W. Northumberland, in N. part of county, in Toquima Range.

Granite porphyry.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
p. 178, 1923.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

NYE COUNTY—Continued.

Oak Springs. Au, Ag, Cu, W, Mo.

80 miles SW. Caliente, U. P. R. R.

Paleozoic sediments cut by granite and capped by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 196, 197, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 178-179, 1923.

U. S. G. S. Kawich topographic map.

Reveille. Ag, Pb, Cu, Au.

70 miles E. Tonopah, T. & G. R. R.

Paleozoic sediments capped by Tertiary eruptives.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 179-180, 1923.

Min. Res. 1922, pt. 1, p. 332.

1923, pt. 1, p. 505.

1924, pt. 1, p. 442.

1926, pt. 1, p. 547.

1928, pt. 1, p. 469.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

Round Mountain. Au, Pl, Ag, Pb, W.

60 miles N. Tonopah, T. & G. R. R.

Paleozoic sediments, Tertiary volcanics.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 180-181, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 332.

1923, pt. 1, pp. 505-506.

1924, pt. 1, p. 442.

1925, pt. 1, p. 690.

1926, pt. 1, pp. 547-548.

1928, pt. 1, p. 469.

1929, pt. 1, p. 665.

U. S. G. S. Tonopah topographic map.

San Antone (Royston, San Antonio). Ag, Au, Pb, Cu.

20 to 28 miles S. and SE. Tonopah, T. & G. R. R.

Tertiary volcanics.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 181-182, 1923.

Min. Res. 1922, pt. 1, p. 332.

1923, pt. 1, p. 506.

1924, pt. 1, p. 442.

1925, pt. 1, p. 690.

1926, pt. 1, p. 548.

1928, pt. 1, p. 469.

1929, pt. 1, p. 665.

U. S. G. S. Tonopah topographic map.

NYE COUNTY—Continued.

Silverbow. Au, Ag.

46 miles E. Goldfield, T. & G. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 196, 197, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 182-183, 1923.

Min. Res. 1929, pt. 1, p. 665.

U. S. G. S. Kawich topographic map.

Spanish Belt (Barcelona). Hg, Ag.

65 miles NE. Tonopah, T. & G. R. R., between Belmont and Manhattan.

Granite and shale.

Veins.

Consolidated Spanish Belt mine soon will be producing: Salt Lake Mining Review, April 30, 1921, p. 26.

New cinnabar property being developed in Nye County, Nevada: Eng. & Min. Jour., October 13, 1928.

Min. Res. 1928, p. 276.

U. S. G. S. Tonopah topographic map.

Stonewall Mountain. Au, Ag.

17 miles SSE. Goldfield, T. & G. R. R.

Paleozoic sediments cut by granite, capped by Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 183, 1923.

Min. Res. 1926, pt. 1, p. 548.

U. S. G. S. Lida topographic map.

Telluride. (See Fluorine.)

Tolicha (Monte Cristo). Au, Ag.

20 miles E. Bonnie Clare; 50 miles SE. Goldfield, T. & G. R. R.

Tertiary rhyolite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 183-184, 1923.

Min. Res. 1923, pt. 1, p. 506.

1929, pt. 1, p. 665.

U. S. G. S. Kawich topographic map.

Tonopah. Ag, Au, Pb, Cu, W.

Station T. & G. R. R.

Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190, 192, 195, 196, 197, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 184-193, 1923.

Badelman, Herman D., Tonopah, Nevada, best-known silver district: Eng. & Min. Jour.-Press, vol. 118, No. 1, pp. 5-10, July 5, 1924.

NYE COUNTY—Continued.

Tonopah—Continued.

- Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.
 Nolan, T. B., The underground geology of the western part of the Tonopah mining district, Nevada: Univ. of Nevada Bull., vol. 24, No. 4, 1930; Geology and ore deposits of the Tonopah mining district, Nevada.
 Ferguson, H. G., Geology of the Hawthorne and Tonopah quadrangles, Nevada: Report in preparation.
 Min. Res. 1922, pt. 1, pp. 332-334.
 1923, pt. 1, pp. 506-508.
 1924, pt. 1, pp. 435, 443-444.
 1925, pt. 1, pp. 681, 690-692.
 1926, pt. 1, pp. 536, 548-551.
 1928, pt. 1, pp. 460, 469-471.
 1929, pt. 1, pp. 657, 666-667.

U. S. G. S. Tonopah and Tonopah Special topographic maps.

Trappmans. Ag, Au.

40 miles ESE. Goldfield, T. & G. R. R.

Granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 197, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 193, 1923.

U. S. G. S. Kawich topographic map.

Troy (Irwin Canyon, Nyala). Ag, Au, Pb.

About 30 miles S. Currant P. O.

Sedimentary rocks.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 193-194, 1923.

Min. Res. 1925, pt. 1, p. 692.

1926, pt. 1, p. 551.

Twin River. Ag.

50 miles S. Austin, N. C. R. R.

Slate.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 194-195, 1923.

U. S. G. S. Tonopah topographic map.

Tybo (Hot Creek, Keystone). Ag, Au, Pb, Cu, Sb, Mn.

70 miles NE. Tonopah, T. & G. R. R.

Paleozoic sediments and Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 198, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 195, 1923.

Ferguson, H. G.: Report in preparation.

Min. Res. 1925, pt. 1, p. 692.

1926, pt. 1, p. 551.

1928, pt. 1, p. 471.

1929, pt. 1, p. 667.

U. S. G. S. Morey Peak topographic (adv. 1933) map.

NYE COUNTY—Continued.

Union (Berlin, Ione). Hg, Au, Pl, Ag, Pb, Zn, Cu, W.

60 miles SW. Austin, N. C. R. R., W. slope Shoshone Range; 40 miles NE. Luning, S. P. R. R.

Carboniferous sediments and Tertiary volcanics.

Veins, placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 195, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 195-197, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, p. 335.

1923, pt. 1, p. 508.

1924, pt. 1, p. 444.

1925, pt. 1, p. 692.

1926, pt. 1, p. 551.

1928, pt. 1, pp. 277, 471.

1929, pt. 1, p. 667.

U. S. G. S. Tonopah topographic map.

Wahmonie. Ag, Au.

30 miles E. Beatty, T. & T. R. R.

Veins.

Wahmonie, Nevada: Eng. & Min. Jour., vol. 125, No. 1, March 17, 1928, p. 467.

Min. Res. 1928, pt. 1, pp. 471-472.

U. S. G. S. Furnace Creek topographic map.

Washington. Ag, Pb.

28 miles SSW. Austin, N. C. R. R., on Lander County border.

Paleozoic sediments.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 197, 1923.

Min. Res. 1909, pt. 1, p. 415.

1915, pt. 1, p. 638.

1918, pt. 1, p. 256.

1919, pt. 1, p. 410.

1920, pt. 1, p. 325.

Wellington (O'Briens). Au, Ag.

20 miles E. Cuprite.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 197-198, 1923.

U. S. G. S. Kawich topographic map.

Willow Creek. Au, Ag, Cu.

90 miles SW. Ely, N. N. R. R.; 90 miles E. Tonopah, T. & G. R. R., near S. end Railroad Valley.

Paleozoic sediments and Tertiary eruptives.

NYE COUNTY—Continued.

Willow Creek—Continued.

- Veins, replacements.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 p. 198, 1923.
 Min. Res. 1924, pt. 1, p. 444.
 1925, pt. 1, p. 692.
 1928, pt. 1, p. 472.

Wilsons. Ag, Au.

- 38 miles ESE. Goldfield, T. & G. R. R.
 Tertiary volcanics.
 Veins.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 198–199, 1923.
 U. S. G. S. Kawich topographic map.

ORMSBY COUNTY

Carson River. Cu, Au, Ag, Hg, As.

- 9 miles E. Carson City, V. & T. R. R.
 Min. Res. 1914, pt. 1, p. 707.
 1915, pt. 1, p. 650.
 1916, pt. 1, p. 495.
 1918, pt. 1, p. 256.
 1921, pt. 1, p. 393.
 1922, pt. 1, p. 62.
 1923, pt. 1, p. 508.
 1924, pt. 1, pp. 141, 445.
 1925, pt. 1, p. 692.
 1929, pt. 1, p. 667.
 U. S. G. S. Carson topographic map.

Delaware (Sullivan). Cu, Au, Ag, Pb.

- S. of V. & T. R. R. in neighborhood of Brunswick Canyon, E. Ormsby
 County.
 Andesite.
 Veins.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 199–200, 1923.
 Min. Res. 1924, pt. 1, p. 445.
 1926, pt. 1, p. 551.
 1929, pt. 1, p. 667.
 U. S. G. S. Carson topographic map.

Voltaire (Washoe, Eagle Valley). Ag, Au, Pl, Cu, As.

- W. Carson City, V. & T. R. R., in foothills Sierra Nevada.
 Triassic schists intruded by Cretaceous granodiorite.
 Veins.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 200–201, 1923.
 Min. Res. 1910, pt. 1, p. 530.
 1911, pt. 1, pp. 696–697.
 1917, pt. 1, p. 293.
 1918, pt. 1, p. 257.
 1919, pt. 1, p. 410.
 1923, pt. 1, p. 508.
 1925, pt. 1, p. 692.
 1928, pt. 1, p. 472.
 U. S. G. S. Carson topographic map.

PERSHING COUNTY

Antelope (Cedar). Pb, Ag, Zn, Au, Cu, Hg, As, Sb.

- 20 miles W. Mill City, S. P. R. R., W. P. R. R., in Trinity Range.
 Triassic slate intruded by dikes of rhyolite porphyry.

Veins.

- Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the
 United States: U. S. Geol. Survey Bull. 624, pp. 192, 195, 199, 1917.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 p. 201, 1923.
 Min. Res. 1922, pt. 1, p. 335.
 1924, pt. 1, pp. 40, 445.
 1925, pt. 1, pp. 692–693.
 1926, pt. 1, p. 551.
 1928, pt. 1, pp. 270, 472.
 1929, pt. 1, p. 667.
 U. S. G. S. Lovelock (adv.) topographic map.

Black Knob. Sb.

- N. end Humboldt Lake Range.
 Jurassic calcareous shale.
 Veins.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 201–202, 1923.
 U. S. G. S. Lovelock (adv.) topographic map.

Buena Vista (Unionville). Ag, Au, Pb, Cu, Sb, Fe.

- 25 miles by road S. Mill City, S. P. R. R., on E. slope Humboldt Range.
 Triassic sedimentary rocks cut by granite intrusives and covered in part
 by Tertiary volcanic rocks and Quaternary sediments and wash.
 Replacements.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 202–203, 1923.
 Schrader, F. C., Buena Vista iron deposits in Pershing and Churchill Coun-
 ties, Nevada: Trans. for publication by Nevada State Bureau of Mines.
 Min. Res. 1922, pt. 1, p. 336.
 1923, pt. 1, p. 509.
 1924, pt. 1, p. 446.
 1925, pt. 1, p. 693.
 1926, pt. 1, p. 552.
 1929, pt. 1, p. 669.
 U. S. G. S. Lovelock (adv.) topographic map.

Copper Valley (Ragged Top). W. Cu.

- 10 miles W. Toulon, siding on S. P. R. R.
 Limestone, cut by quartz diorite dikes.
 Contact metamorphic.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 203–204, 1923.
 U. S. G. S. Lovelock (adv.) topographic map.

Echo (Rye Patch). Ag, Au, Cu, Pb, W.

- W. flank Humboldt Range, central Pershing County.
 Limestone cut by diabase dike.
 Veins, contact metamorphic.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada,
 pp. 204–205, 1923.
 Min. Res. 1924, pt. 1, p. 446.
 1929, pt. 1, p. 668.
 U. S. G. S. Lovelock (adv.) topographic map.

PERSHING COUNTY—Continued.

Farrell (Stone House). Au.

45 miles NW. Lovelock, S. P. R. R.

Tertiary rhyolite.

Veins and lenses.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 205, 1923.

Increasing gold prospecting embraces entire world; many strikes are reported: Eng. & Min. Jour., vol. 132, No. 4, August 24, 1931, p. 182.

U. S. G. S. Lovelock (adv.) topographic map.

Gold Banks. Hg, Au, Ag.

40 miles S. Winnemucca, S. P. R. R., W. P. R. R.

Quartz porphyry.

Replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 205-206, 1923.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, p. 40, July, 1931.

Min. Res. 1925, pt. 1, p. 47.

U. S. G. S. Sonoma Range (adv.) topographic map.

Haystack. Au.

7 miles S. Jumbo, W. P. R. R.

Granite and quartzite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 206, 1923.

Min. Res. 1929, pt. 1, p. 668.

U. S. G. S. Lovelock (adv.) topographic map.

Imlay (Humboldt, Prince Royal, Eldorado). Ag, Au, Pb, Cu, Hg.

6 miles S. Imlay, S. P. R. R.; 4 miles E. Humboldt, S. P. R. R.

Jurassic sediments cut by granite and capped by Tertiary volcanics.

Veins, replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 206-207, 1923.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, p. 40, 1931.

Min. Res. 1926, pt. 1, p. 552.

U. S. G. S. Lovelock (adv.) topographic map.

Indian. Ag, Au.

Indian Canyon, E. flank Humboldt Range.

Placers, veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 207, 1923.

U. S. G. S. Lovelock (adv.) topographic map.

Iron Hat. Pb, Ag, Cu.

20 miles S. Valmy, S. P. R. R., E. slope Sonoma Range.

Limestone.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 207, 1923.

U. S. G. S. Sonoma Range (adv.) topographic map.

PERSHING COUNTY—Continued.

Jersey. Ag, Pb, Hg.

43 miles SW. Battle Mountain, S. P. R. R.; 32 miles W. Watts, N. C. R. R.

Quartzite and porphyry.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 207-208, 1923.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, pp. 42-43, July, 1931. (Ruby group of claims in Jersey Valley, 55 miles S. Battle Mountain.)

Min. Res. 1922, pt. 1, p. 335.

1923, pt. 1, p. 509.

1924, pt. 1, p. 445.

1925, pt. 1, p. 693.

1926, pt. 1, p. 552.

1928, pt. 1, p. 472.

1929, pt. 1, p. 668.

U. S. G. S. Sonoma Range (adv.) topographic map.

Juniper Range. W, Cu, Ag, Au.

20 miles NW. Huxley, S. P. R. R.; 40 miles SW. Lovelock, S. P. R. R.

Sediments intruded by quartz diorite.

Contact metamorphic.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 208, 1923.

U. S. G. S. Granite Range topographic map.

Kennedy. Au, Ag, Pb.

55 miles SW. Winnemucca, S. P. R. R., W. P. R. R.

Triassic sediments cut by granite and capped by Tertiary volcanics.

Veins.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, p. 175, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 208-209, 1923.

Min. Res. 1922, pt. 1, p. 335.

1923, pt. 1, p. 509.

1924, pt. 1, p. 445.

1926, pt. 1, p. 552.

1928, pt. 1, p. 472.

U. S. G. S. Sonoma Range (adv.) topographic map.

Loring (Lovelock, Willard). Ag, Au, W, Fe, Hg.

10 miles NE. Lovelock, S. P. R. R., in Humboldt Range.

Limestones, rhyolite and basalt dikes.

Veins, contact metamorphic.

Ransome, F. L., Notes on some mining districts in Humboldt County, Nevada: U. S. Geol. Survey Bull. 414, pp. 12, 58, 1909.

Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the United States: U. S. Geol. Survey Bull. 725, pp. 246, 294, 1922.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190, 194, 195, 198, 1917.

PERSHING COUNTY—Continued.**Loring (Lovelock, Willard)**—Continued.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 209, 1923.

Min. Res. 1924, pt. 1, p. 445.

1927, pt. 1, p. 66.

1928, pt. 1, p. 273.

U. S. G. S. Lovelock (adv.) topographic map.

Mill City (Central). W, Ag, Cu.

7 miles NW. Mill City, S. P. R. R., on SE. slope Eugene Mountains.

Sediments intruded by porphyritic rocks and granodiorite.

Replacements, contact metamorphic.

Hess, F. L., and Larsen, E. S., Contact metamorphic tungsten deposits of the United States: U. S. Geol. Survey Bull. 725, pp. 295-300, 1922.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 209-210, 1923.

Carpenter, Jay A., Mineral resources of southern Nevada: Bull. Nev. State Bur. Mines, vol. 1, No. 1, p. 19, 1929.

Min. Res. 1917, pt. 1, pp. 943-944.

1924, pt. 1, p. 466.

1925, pt. 1, p. 612.

1927, pt. 1, p. 425.

1928, pt. 1, p. 123.

U. S. G. S. Lovelock (adv.) topographic map.

Mineral Basin. Fe, Hg.

25 miles SE. Lovelock, S. P. R. R.

Triassic sediments cut by granite intrusions.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 210, 1923.

U. S. G. S. Carson Sink and Lovelock (adv.) topographic maps.

Muttieberry. Ag, Pb, Cu.

9 miles ESE. Lovelock, S. P. R. R.

Triassic and Jurassic sediments capped by Tertiary volcanics in places.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 211, 1923.

U. S. G. S. Lovelock (adv.) topographic map.

Nightingale. W.

E. side Lake Winnemucca, in Nightingale Range.

Sediments and quartz monzonite.

Contact metamorphic.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 211-212, 1923.

Min. Res. 1925, pt. 1, p. 612.

1927, pt. 1, p. 426.

1928, pt. 1, p. 123.

U. S. G. S. Granite Range topographic map.

Placerites (Rabbit Hole). Au, Pl, Cu.

50 miles N. Lovelock, S. P. R. R.

Placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 212, 1923.

Min. Res. 1929, pt. 1, p. 668.

U. S. G. S. Lovelock (adv.) topographic map.

Relief (Antelope Springs). Hg, Ag, Au, Sb.

22 miles E. Lovelock, S. P. R. R.

Triassic limestone.

PERSHING COUNTY—Continued.**Relief (Antelope Springs)**—Continued.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 212-213, 1923.

Nevada Quicksilver Mines, Inc., produce new plant: Eng. & Min. Jour., vol. 127, pp. 7-9, January 5, 1929.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, pp. 40-42, July, 1931.

Min. Res. 1927, pt. 1, p. 66.

1928, pt. 1, pp. 270-273.

U. S. G. S. Lovelock (adv.) topographic map.

Rochester (Nenzel, Oreana). Au, Pl, Ag, Pb, Cu, Sb.

9 miles E. Oreana, S. P. R. R.

Triassic volcanics.

Veins and placers.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, p. 178, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190, 191, 192, 194, 197, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 213-215, 1923.

Knopf, Adolph, Geology and ore deposits of the Rochester district, Nevada: U. S. Geol. Survey Bull. 762, 78 pp. (map), 1924.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, pp. 335-336.

1923, pt. 1, p. 509.

1924, pt. 1, pp. 445-446.

1925, pt. 1, p. 693.

1926, pt. 1, p. 552.

1928, pt. 1, pp. 472-473.

1929, pt. 1, p. 668.

U. S. G. S. Rochester Special and Lovelock (adv.) topographic maps.

Rosebud (Sawtooth). Ag, Au, Pl, Cu, Pb.

10 miles SE. Sulphur, W. P. R. R.

Jurassic sediments and Tertiary volcanics.

Veins, placers.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, p. 177, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 197, 198, 199, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 215, 1923.

Min. Res. 1922, pt. 1, p. 336.

1923, pt. 1, p. 509.

1925, pt. 1, p. 693.

1926, pt. 1, p. 552.

1929, pt. 1, p. 668.

U. S. G. S. Lovelock (adv.) topographic map.

Sacramento. Ag, Au, Pl.

W. flank Humboldt Range, in central Pershing County.

Triassic limestone.

PERSHING COUNTY—Continued.

Sacramento—Continued.

Veins and placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 215-216, 1923.

Min. Res. 1926, pt. 1, p. 552.

U. S. G. S. Lovelock (adv.) topographic map.

San Jacinto. Ag, Pb, As.

9 miles NW. Rye Patch, S. P. R. R.

Slate and granite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 216, 1923.

Min. Res. 1926, pt. 1, p. 552.

U. S. G. S. Lovelock (adv.) topographic map.

Scossa. Au.

50 miles N. Lovelock, S. P. R. R.

Slates and schists interbedded with sandstones and limestones.

Veins.

Jones, J. C., Smith, A. M., and Stoddard, Carl, The preliminary survey of the Scossa mining district, Pershing County, Nevada: Univ. of Nevada Bull., vol. 25, No. 4, June, 1931.

Nevada Mining Press, January, 1931.

Scossa excited again over high-grade strike: Eng. & Min. Jour., vol. 132, No. 5, p. 227, September 14, 1931.

U. S. G. S. Lovelock (adv.) topographic map.

Seven Troughs. Au, Ag, Cu, Pb.

30 miles NW. Lovelock, S. P. R. R.

Tertiary volcanics.

Veins.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, pp. 179-180, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 192, 194, 197, 198, 199, 200, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 216-217, 1923.

Schrader, F. C.: Report in preparation.

Min. Res. 1922, pt. 1, p. 336.

1923, pt. 1, p. 509.

1924, pt. 1, p. 446.

1925, pt. 1, p. 693.

1926, pt. 1, p. 552.

1928, pt. 1, p. 473.

1929, pt. 1, p. 668.

U. S. G. S. Lovelock (adv.) topographic map.

Sierra (Sunshine, Dun Glen, Chafey, Oro Fino). Au, Pl, Ag, Pb, Cu.

10 miles SE. Mill City, S. P. R. R.

Limestone cut by volcanics.

Veins and placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 197, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 217-218, 1923.

PERSHING COUNTY—Continued.

Sierra (Sunshine, Dun Glen, Chafey, Oro Fino)—Continued.

Min. Res. 1922, pt. 1, p. 336.

1923, pt. 1, p. 509.

1924, pt. 1, p. 446.

1925, pt. 1, p. 693.

1926, pt. 1, p. 552.

1928, pt. 1, p. 473.

1929, pt. 1, p. 668.

U. S. G. S. Sonoma Range (adv.) topographic map.

Spring Valley (Fitting, American Canyon). Au, Pl, Ag, Pb, Cu, Zn, Hg.

28 miles NE. Lovelock, S. P. R. R., E. flank Humboldt Range.

Triassic sediments cut by granodiorite; capped by Tertiary volcanics.

Veins and placers.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 218-219, 1923.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, p. 40, July, 1931.

Min. Res. 1924, pt. 1, p. 445.

1925, pt. 1, p. 693.

1926, pt. 1, p. 552.

1928, pt. 1, pp. 273-274.

1929, pt. 1, p. 668.

U. S. G. S. Lovelock (adv.) topographic map.

Star (Santa Clara). Ag, Sb.

10 miles S. Mill City, S. P. R. R.

Triassic limestones and sandstones, with rhyolite flows.

Veins, lenses.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 219-220, 1923.

U. S. G. S. Lovelock (adv.) topographic map.

Trinity (Arabia, Oreana). Ag, Pb, Sb, Au, Cu, W, Hg.

5 miles W. Oreana, S. P. R. R., on E. flank Trinity Range.

Altered granodiorite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 220-221, 1923.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, p. 40, July, 1931.

Min. Res. 1922, pt. 1, p. 335.

1923, pt. 1, pp. 508-509.

1924, pt. 1, p. 445.

1925, pt. 1, p. 693.

1926, pt. 1, pp. 551-552.

1928, pt. 1, p. 472.

1929, pt. 1, p. 668.

U. S. G. S. Lovelock (adv.) topographic map.

Velvet. Au.

10 miles W. Lovelock, S. P. R. R.

Tertiary eruptives.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 221, 1923.

U. S. G. S. Lovelock (adv.) topographic map.

PERSHING COUNTY—Continued.**Wild Horse.** Pb, Ag, As, Cu, Sb.

S. Lovelock, S. P. R. R., on E. side Humboldt Lake Range.

Triassic slates and limestones.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 221, 1923.

U. S. G. S. Lovelock (adv.) topographic map.

Wrights Canyon. W.

5 or 6 miles NE. Oreana (steep automobile road).

Limestone.

Contact metamorphic; veins.

Hess, Frank L., and Larsen, E. S., Contact metamorphic tungsten deposits of the United States: U. S. Geol. Survey Bull. 725, p. 295, 1922.

U. S. G. S. Lovelock (adv.) topographic map.

STOREY COUNTY**Castle Peak (Red Mountain).** Hg.

10 miles N. Virginia City.

Tertiary andesite and Triassic sediments.

Veins.

Nevada Mining Press, July 6, 1928.

Schuette, C. N., Occurrence of quicksilver ore bodies: A. I. M. M. E. Tech. Pub. 335, p. 44, July, 1931.

U. S. G. S. Carson topographic map.

Comstock (Virginia City, Gold Hill, Silver Star, Flowery). Au, Ag, Pb, Cu, Hg.

Virginia City station, V. & T. R. R.

Diorite and Tertiary volcanics.

Veins.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, pp. 189-190, 1915.

Emmons, W. H., The enrichment of ore deposits: U. S. Geol. Survey Bull. 625, pp. 300-302, 1917.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 222-233, 1923.

The drama of Virginia City: A partial reprint of Mon. 4, published by the Nevada Branch of the American Association of University Women, 1927.

Carpenter, Jay A., The Flowery mine and mill at Virginia City, Nevada: Eng. & Min. Jour., vol. 125, No. 17, April 28, 1928.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Increasing gold prospecting embraces entire world; many strikes are reported: Eng. & Min. Jour., vol. 132, No. 4, p. 182, August 24, 1931.

Min. Res. 1922, pt. 1, pp. 336-337.

1923, pt. 1, pp. 510-511.

1924, pt. 1, pp. 446-447.

1925, pt. 1, pp. 693-694.

1926, pt. 1, pp. 553-554.

1928, pt. 1, pp. 275, 473-474.

1929, pt. 1, p. 669.

U. S. G. S. Carson topographic map.

WASHOE COUNTY**Cottonwood (Round Hole).** Au, Ag, Pb.

E. Sano, Susanville Branch, S. P. R. R.

Sedimentary rocks intruded by quartz monzonite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 233-234, 1923.

Min. Res. 1929, pt. 1, p. 669.

U. S. G. S. Granite topographic map.

Deep Hole. Au.

Reynard, W. P. R. R., N. Smoke Creek Desert.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 234, 1923.

U. S. G. S. Granite Range topographic map.

Donnelly (Gerlach). Au, Ag.

39 miles N. Gerlach, W. P. R. R.

Sedimentary rocks intruded by granodiorite and capped by Tertiary volcanics.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 234, 1923.

Min. Res. 1929, pt. 1, p. 669.

U. S. G. S. Long Valley topographic map.

Jumbo (West Comstock). Au, Ag.

W. flank Mt. Davidson in Virginia Range.

Diorite.

Veins.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 236, 1923.

Min. Res. 1923, pt. 1, p. 511.

1924, pt. 1, p. 448.

1925, pt. 1, p. 695.

1926, pt. 1, p. 554.

U. S. G. S. Carson topographic map.

Leadville. Pb, Ag, Zn, Au.

38 miles N. Gerlach, W. P. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 236-237, 1923.

Min. Res. 1922, pt. 1, p. 337.

1923, pt. 1, p. 511.

1924, pt. 1, p. 447.

1925, pt. 1, p. 695.

1926, pt. 1, p. 554.

1928, pt. 1, p. 474.

U. S. G. S. Long Valley topographic map.

Peavine (Reno, Crystal Peak). Au, Pl, Ag, Cu, W, Pb.

10 miles NW. Reno, S. P. R. R., V. & T. R. R., W. P. R. R.

Schists and quartz monzonite, Tertiary volcanics.

WASHOE COUNTY—Continued.

Peavine (Reno, Crystal Peak)—Continued.

Veins, replacements, placer.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, pp. 237-238, 1923.

Min. Res. 1922, pt. 1, p. 237.

1923, pt. 1, p. 511.

1924, pt. 1, p. 447.

1925, pt. 1, p. 695.

1926, pt. 1, p. 554.

1928, pt. 1, p. 474.

1929, pt. 1, p. 669.

U. S. G. S. Reno topographic map.

Pyramid. Cu, Ag, Au, Pb.

32 miles N. Reno, S. P. R. R., V. & T. R. R., W. P. R. R.

Tertiary volcanics.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, p. 190, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 238, 1923.

Min. Res. 1923, pt. 1, p. 511.

1929, pt. 1, p. 669.

U. S. G. S. Reno topographic map.

Sheephead. Au.

15 miles W. Reynard, W. P. R. R.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Min. Res. 1907, pt. 1, p. 382.

U. S. G. S. Granite Range topographic map.

Steamboat Springs. Hg.

Station V. & T. R. R.

Tertiary volcanics.

Impregnations.

Lee, W. T., Stone, R. W., Gale, H. S., and others, *Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park*: U. S. Geol. Survey Bull. 612, p. 191, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, p. 192, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 239, 1923.

Schuetz, C. N., *Occurrence of quicksilver ore bodies*: A. I. M. M. E. Tech. Pub. 335, p. 45, July, 1931.

Min. Res. 1928, pt. 1, pp. 274-275.

U. S. G. S. Carson topographic map.

Washoe (Galena). Pb, Au, Ag, Zn, Cu, As.

1 mile N. Washoe, V. & T. R. R.

Granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, pp. 190, 194, 195, 198, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 235, 1923.

WASHOE COUNTY—Continued.

Washoe (Galena)—Continued.

Min. Res. 1922, pt. 1, p. 62.

1923, pt. 1, p. 511.

1924, pt. 1, pp. 447, 448.

1925, pt. 1, p. 695.

1926, pt. 1, p. 554.

1929, pt. 1, p. 669.

U. S. G. S. Carson topographic map.

Wedekind. Ag, Au, Pb, Zn.

4 miles NE. Reno, S. P. R. R.

Tertiary volcanics.

Veins, replacements.

Lee, W. T., Stone, R. W., Gale, H. S., and others, *Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park*: U. S. Geol. Survey Bull. 612, p. 188, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, pp. 239-240, 1923.

Min. Res. 1922, pt. 1, p. 337.

1923, pt. 1, p. 511.

1924, pt. 1, p. 448.

U. S. G. S. Reno topographic map.

White Horse (Olinghouse). Au, Pl, Ag.

9 miles W. Wadsworth, S. P. R. R.

Tertiary volcanics.

Veins, contacts, placers.

Lee, W. T., Stone, R. W., Gale, H. S., and others, *Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park*: U. S. Geol. Survey Bull. 612, p. 186, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 240, 1923.

Min. Res. 1922, pt. 1, p. 337.

1923, pt. 1, p. 511.

1924, pt. 1, p. 448.

1925, pt. 1, p. 695.

1926, pt. 1, p. 554.

1928, pt. 1, p. 474.

1929, pt. 1, p. 669.

U. S. G. S. Wadsworth topographic map.

WHITE PINE COUNTY

Aurum (Muncy Creek, Queen Springs, Ruby Hill, Schellbourne, Schell Creek, Siegel, Silver Canyon, Silver Mountain). Ag, Pb, Cu, Au, Mn.

18 to 36 miles SE. Cherry Creek; 10 miles E. Melvin, N. N. R. R.

Paleozoic sediments cut by granite porphyry and capped at northern end by Tertiary volcanics.

Contact metamorphic.

Wiel, S. C., *A Nevada ore deposit (Schellbourne Range)*: Min. Sci. Press, vol. 88, pp. 330-331, 1904.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, *Useful minerals of the United States*: U. S. Geol. Survey Bull. 624, p. 198, 1917.

Lincoln, Francis Church, *Mining districts and mineral resources of Nevada*, p. 241, 1923.

WHITE PINE COUNTY—Continued.

Aurum (Muncy Creek, Queen Springs, Ruby Hill, Schellbourne, Schell Creek, Siegel, Silver Canyon, Silver Mountain)—Continued.

Min. Res. 1923, pt. 1, p. 512.
1925, pt. 1, p. 696.
1926, pt. 1, p. 554.
1928, pt. 1, p. 474.
1929, pt. 1, p. 670.

Bald Mountain. Ag, Cu, Au, Pl, W, Hg.

75 miles S. Elko, S. P. R. R., W. P. R. R.

Paleozoic sediments cut by quartz monzonite porphyry.

Veins, placers.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 241-242, 1923.

Min. Res. 1928, pt. 1, p. 277.

1929, pt. 1, p. 670.

Black Horse. Au, Ag.

49 miles ESE. Ely, N. N. R. R.

Paleozoic sediments cut by granite porphyry.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 242, 1923.

Min. Res. 1925, pt. 1, p. 696.

Cherry Creek (Egan Canyon, Gold Canyon). Au, Ag, Cu, Pb, W, Mn.

In Egan Range, 90 miles S. Cobre, S. P. R. R.; 50 miles N. Ely, N. N. R. R. Quartzite and shale; limestone and quartz monzonite porphyry.

Veins; secondary enrichment.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 190, 194, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 242-244, 1923.

Cherry Creek mines may be reworked: Eng. & Min. Jour., vol. 116, No. 12, September 22, 1923.

Schrader, F. C., Cherry Creek (Egan Canyon) district, White Pine County, Nevada State Bureau of Mines and Mackay School of Mines, August, 1931.

Min. Res. 1922, pt. 1, p. 338.

1923, pt. 1, p. 512.

1924, pt. 1, p. 448.

1925, pt. 1, p. 696.

1926, pt. 1, p. 555.

1928, pt. 1, p. 474.

1929, pt. 1, p. 670.

Duck Creek (Success). Pb, Cu, Ag, Au, Zn.

3 miles NE. McGill, N. N. R. R.

Limestone and shale; Tertiary volcanics.

Replacements.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 244-245, 1923.

Min. Res. 1922, pt. 1, p. 338.

1923, pt. 1, p. 512.

1924, pt. 1, p. 448.

1925, pt. 1, p. 696.

1926, pt. 1, p. 555.

1928, pt. 1, p. 475.

1929, pt. 1, p. 670.

WHITE PINE COUNTY—Continued.

Eagle (Kern, Pleasant Valley, Regan, Tungstonia). Pb, Ag, Au, Cu, W.

65 miles SE. Cherry Creek, N. N. R. R.

Sedimentary rocks cut by granite.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 195, 198, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 245, 1923.

Min. Res. 1923, pt. 1, p. 512.

1924, pt. 1, p. 448.

1925, pt. 1, p. 696.

1926, pt. 1, p. 555.

Ely (Robinson). Cu, Au, Ag, Pb, Zn, Mn.

Station N. N. R. R., in Egan Range.

Paleozoic sediments cut by monzonite porphyry, and capped in places by Tertiary volcanics.

Veins, contact metamorphic.

Jessup, D. W., Ore deposits of the Prince Consolidated mines (Ely mining district, Nevada): Min. Sci. Press, vol. 106, pp. 773-775, 1913.

Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, p. 160, 1915.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 192, 193, 194, 196, 197, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 245-251, 1923.

Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

Min. Res. 1922, pt. 1, pp. 338-339.

1923, pt. 1, pp. 512-513.

1924, pt. 1, pp. 448-450.

1925, pt. 1, pp. 696-698.

1926, pt. 1, pp. 555-557.

1928, pt. 1, pp. 475-477.

1929, pt. 1, pp. 670-673.

U. S. G. S. Ely topographic map.

Hunter. Pb, Cu, Ag.

10 miles SW. Granite, N. N. R. R.

Dolomitic limestones overlying Cambrian quartzites.

Veins (?), replacements.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 1917.

Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 251, 1923.

Min. Res. 1923, pt. 1, p. 512.

1929, pt. 1, p. 670.

Gold Canyon. Au, Ag.

5 miles W. Cherry Creek, N. N. R. R.

Paleozoic sediments.

Veins.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.

Min. Res. 1905, p. 273.

1906, p. 303.

1907, pt. 1, p. 382.

1908, pt. 1, p. 504.

1909, pt. 1, p. 428.

WHITE PINE COUNTY—Continued.

- Granite (Steptoe).** Au, Ag, Pb.
6 miles SW. Granite, N. N. R. R.
Paleozoic sediments cut by granite.
Veins, replacements.
Hill, J. M., Notes on some mining districts in eastern Nevada: U. S. Geol. Survey Bull. 648, pp. 174-180, 1916.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 251, 1923.
Min. Res. 1923, pt. 1, p. 512.
1924, pt. 1, p. 448.
1925, pt. 1, p. 696.
1926, pt. 1, p. 555.
1928, pt. 1, p. 475.
- Nevada.** Mn, Ag.
10 miles SE. Ely, N. N. R. R., W. slope Schell Creek Range.
Limestone.
Replacements.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 252, 1923.
- Newark (Strawberry).** Ag, Pb, Cu, Au.
29 miles NNE. Eureka, E. & P. R. R., E. slope Diamond Range.
Limestone.
Veins.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 198, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 252-253, 1923.
Min. Res. 1922, pt. 1, p. 338.
- Osceola.** Au, Pl, Ag, Pb, W.
40 miles SE. Ely, N. N. R. R.
Paleozoic sediments cut by granite porphyry.
Veins, placers.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 194, 195, 197, 198, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 253, 1923.
Min. Res. 1922, pt. 1, p. 338.
1923, pt. 1, p. 512.
1924, pt. 1, p. 448.
1925, pt. 1, p. 696.
1926, pt. 1, p. 555.
1928, pt. 1, p. 475.
1929, pt. 1, p. 670.
- Piermont.** Ag, Au.
66 miles from Ely, E. slope Schell Creek Range.
Slate and quartzite.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 253-254, 1923.
Min. Res. 1926, pt. 1, p. 555.
1928, pt. 1, p. 475.
1929, pt. 1, p. 670.

WHITE PINE COUNTY—Continued.

- Sacramento.** Au, Ag, W.
At Sacramento Pass, W. flank Snake Range.
Limestone and slate.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 254, 1923.
- Shoshone (Minerva, Lexington).** W, Ag.
55 miles SE. Ely, N. N. R. R.
Limestone, veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 254-255, 1923.
- Snake (Bonita).** W, Ag.
S. Baker P. O., E. flank Snake Range on Utah border.
Granite.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 255, 1923.
Min. Res. 1929, pt. 1, p. 673.
- Taylor (Ward).** Pb, Cu, Ag, Au.
16 miles SSE. Ely, N. N. R. R.
Paleozoic sediments cut by monzonite porphyry.
Veins, contact metamorphic.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, p. 194, 198, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 255-257.
Min. Res. 1922, pt. 1, p. 339.
1923, pt. 1, p. 514.
1924, pt. 1, p. 450.
1925, pt. 1, p. 698.
1926, pt. 1, p. 557.
1929, pt. 1, p. 477.
- Tungsten (Hub, Lincoln).** W, Ag.
45 miles SE. Ely, N. N. R. R., W. flank Snake Range.
Quartzites and argillites intruded by granite porphyry.
Veins.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, p. 256, 1923.
- Warm Springs.** Au, Ag.
36 miles N. Ely, N. N. R. R., in Egan Range.
Quartz veins.
Min. Res. 1925, pt. 1, p. 699.
- White Pine (Hamilton).** Pb, Ag, Cu, Au, Zn.
36 miles W. Ely, N. N. R. R.
Paleozoic sediments cut by granodiorite and monzonite.
Veins, replacements.
Lee, W. T., Stone, R. W., Gale, H. S., and others, Guidebook of the western United States, Part B, The Overland Route, with a side trip to Yellowstone Park: U. S. Geol. Survey Bull. 612, p. 160, 1915.
Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624, pp. 191, 194, 195, 1917.
Lincoln, Francis Church, Mining districts and mineral resources of Nevada, pp. 257-259, 1923.
Ferguson, H. G., The mining districts of Nevada: Econ. Geology, vol. 24, No. 2, March-April, 1929.

WHITE PINE COUNTY—Continued.**White Pine (Hamilton)**—Continued.

- Min. Res. 1922, pt. 1, p. 339.
 1923, pt. 1, p. 514.
 1924, pt. 1, p. 450.
 1925, pt. 1, p. 699.
 1926, pt. 1, p. 557.
 1928, pt. 1, p. 478.
 1929, pt. 1, p. 673.

PART III—CATALOGUE OF NONMETAL OCCURRENCES BY MINERALS

The term mineral is used in its broader meaning here, including such items as slate, shale, stone, etc. Thirty-nine minerals are listed, occurring in 208 localities throughout the State. The list includes only those occurrences which have been noted or described by the United States Geological Survey, or other publications, and represents only a small part of the actual occurrences in the State.

The table on page 92 shows the distribution by counties of the nonmetal minerals listed in this bulletin.

NONMETALS BY MINERALS**ALUM***References—*

- Carpenter, J. A., The mineral resources of southern Nevada: Nevada State Bureau of Mines and Mackay School of Mines, vol. 1, No. 1, November, 1929.
 Duncan, L., Recovery of potash alum and sulphur at Tonopah: Chemical and Metallurgical Engineering, vol. 24, pp. 529-530, March 23, 1921.
 Gale, H. S., and Hicks, W. B., Potash in 1917: Mineral Resources of the United States, 1917, Part 2, p. 433.
 Hewett, D. F., Deposits of magnesia alum near Fallon, Nevada: U. S. Geol. Survey Bull. 750, pp. 79-86, 1925.
 Spurr, J. E., Alum deposit near Silver Peak, Esmeralda County, Nevada: U. S. Geol. Survey Bull. 225, pp. 501-502, 1904.
 Spurr, J. E., Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55, pp. 157-158, 1906.

CHURCHILL COUNTY**Fallon.**

- 16 miles southwest of Fallon, in Secs. 16 and 17, T. 18 N., R. 26 E.
 U. S. Geol. Survey Bull. 750, pp. 79-86.
 Top. sheet Wabuska.

ELKO COUNTY**Fenelon.**

- 14 miles north of Fenelon, on main line of Southern Pacific Railroad.
 Min. Res. 1917, pt. 2, p. 433.

ESMERALDA COUNTY**Silver Peak.**

- 10 miles north of Silver Peak.
 U. S. Geol. Survey Bull. 225, pp. 501-502.
 U. S. Geol. Survey Prof. Paper 55, pp. 157-158.
 Duncan, L., op. cit.
 Top. sheet Silver Peak.

CLARK COUNTY**Railroad Pass.**

- About 9 miles beyond Railroad Pass on the road to Black Canyon, and 3 miles south.
 Carpenter, J. A., op. cit.
 Top. sheet Camp Mohave.

Metal and Nonmetal Occurrences in Nevada

[illegible]

Metal and Nonmetal Occurrences in Nevada

ALUNITE

References—

- Butler, B. S., and Gale, H. S., Alunite—a newly discovered deposit near Marysville, Utah: U. S. Geol. Survey Bull. 511, pp. 44–48, 1912.
- Gale, H. S., Potash salts, 1915: Mineral Resources of the United States, 1915, Part 2, pp. 111–112.
- Gale, H. S., and Hicks, W. B., Potash in 1917: Mineral Resources of the United States, 1917, Part 2, pp. 432–433.
- Ransome, F. L., Geology and ore deposits of Goldfield, Nevada: U. S. Geol. Survey Prof. Paper 66, pp. 129–133, 1909.
- Schrader, F. C., Alunite in Patagonia, Ariz., and Bovard, Nevada: Economic Geology, vol 8, pp. 752–767, 1913.
- Schrader, F. C., Alunite at Bovard, Nevada: U. S. Geol. Survey Bull. 540, pp. 351–356, 1914.

CLARK COUNTY

Las Vegas.

- Railroad Pass, 22 miles southeast of Las Vegas.
Min. Res. 1915, pt. 2, pp. 111-112.
Top. sheet Camp Mohave.

ESMERALDA COUNTY

Cuprite.

- Min. Res. 1915, pt. 2, p. 112.
Top. sheet Lida.

Goldfield.

- U. S. Geol. Survey Bull. 511, pp. 44-48.
U. S. Geol. Survey Prof. Paper 66, pp. 129-133.
Top. sheet Goldfield Special.

HUMBOLDT COUNTY

Sulphur,

- 3 miles from Sulphur and about a mile south of the Western Pacific Railroad.
Min. Res. 1917, pt. 2, pp. 432-433.

MINERAL COUNTY

Bovard.

- 17 miles south of Rawhide and about 20 miles northeast of Thorne.
Schrader, F. C., op. cit.
U. S. Geol. Survey Bull. 540, pp. 351-356.
Top. sheet Hawthorne.

ASPHALT

Reference—

- Anderson, R., An occurrence of Asphaltite in northeastern Nevada: U. S. Geol. Survey Bull. 380, pp. 283-285, 1909.

EUREKA COUNTY

- 15 miles south Palisade.

BARITE

References—

- Hill, J. M., Barytes and strontium in 1915: Mineral Resources of the United States, 1915, Part 2, p. 176.
- Hill, J. M., Barytes and barium products in 1916: Mineral Resources of the United States, 1916, Part 2, p. 250.
- Hill, J. M., Barytes and barium products in 1917: Mineral Resources of the United States, 1917, Part 2, p. 288.
- Stose, G. W., Barytes and barium products in 1918: Mineral Resources of the United States, 1918, Part 2, p. 956.
- Stose, G. W., Barytes and barium products in 1919: Mineral Resources of the United States, 1919, Part 2, p. 340.

BARITE—Continued.**CHURCHILL COUNTY****Eagleville.**

43 miles southwest of Fallon.
Top. sheet Carson Sink.

CLARK COUNTY**Goodsprings.**

Min. Res. 1915, pt. 2, p. 176.
Top. sheet Goodsprings.

ESMERALDA COUNTY**Lone Mountain.**

Near Blair, 15 miles west of Tonopah.
Min. Res. 1915, pt. 2, p. 176.
1916, pt. 2, p. 250.
Top. sheet Lida.

Candelaria.

6 miles southeast of Candelaria.
Locality furnished by U. S. Bureau of Mines.
Top. sheet Hawthorne.

ELKO COUNTY**Carlin.**

Locality furnished by U. S. Bureau of Mines.

MINERAL COUNTY**Kincaid.**

Min. Res. 1916, pt. 2, p. 250.
1918, pt. 2, p. 956.
Top. sheet Hawthorne.

Hawthorne.

Min. Res. 1917, pt. 2, p. 288.
1918, pt. 2, p. 956.
1919, pt. 2, p. 340.
Top. sheet Hawthorne.

16 miles west of Mina.

Locality furnished by U. S. Bureau of Mines.
Top. sheet Hawthorne.

NYE COUNTY

30 miles east of Tonopah.

Locality furnished by U. S. Bureau of Mines.

WHITE PINE COUNTY

In the vicinity of Ely, near Cherry Creek.
Min. Res. 1915, pt. 2, p. 176.

BENTONITE**References—**

- Arciniega, V. M., Refinery clays mined in Nevada: Engineering and Mining Journal, vol. 121, No. 10, p. 408, March 6, 1926.
Davis, C. W., and Vacher, H. C., Bentonite, its properties, mining preparation, and utilization: Technical Paper 438, Bureau of Mines, 1928, p. 7.
Melhase, John, Mining bentonite in California: Engineering and Mining Journal, vol. 121, No. 21, pp. 837-842, May 22, 1926.

ESMERALDA COUNTY**Silver Peak.**

Silver Peak mining district.
Davis, C. W., op. cit.
Top. sheet Silver Peak.

BENTONITE—Continued.**NYE COUNTY****Ash Meadows.**

10 miles northeast of Death Valley Junction.
Arciniega, V. M., op. cit.
Davis, C. W., op. cit., p. 6.
Melhase, John, op. cit.
Top. sheet Furnace Creek.

MINERAL COUNTY**Sodaville.**

3 miles southwest of Sodaville, Sec. 12, T. 5 N., R. 34 E.
Deposit visited by G. R. Mansfield, Geological Survey.
Top. sheet Hawthorne.

BORATES**References—**

- Gale, H. S., The Callville Wash colemanite deposit: Engineering and Mining Journal, vol. 112, No. 14, pp. 524-530, October 1, 1921.
Longwell, C. R., Geology of the Muddy Mountains, Nevada, with a section through the Virgin Range to the Grand Wash Cliffs, Ariz: U. S. Geol. Bull. 798, 1928.
Noble, L. F., Colemanite in Clark County, Nevada: U. S. Geol. Survey Bull. 735, pp. 23-39, 1923.
Spurr, J. E., Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55, pp. 158-165, 1906.
Borax: Mineral Resources of the United States, 1882, pp. 568-570.

CHURCHILL COUNTY**Sand Springs.**

18 miles southeast of Fallon.
Min. Res. 1882, p. 570.
Top. sheet St. Thomas.

CLARK COUNTY**Muddy Mountains.**

22 and 34 miles northeast of Las Vegas.
U. S. Geol. Survey Bull. 735, pp. 23-39.
U. S. Geol. Survey Bull. 798.
Gale, H. S., op. cit.
Top. sheet St. Thomas.

ESMERALDA COUNTY**Fish Lake Marsh.**

18 miles southeast of Fallon.
U. S. Geol. Survey Prof. Paper 55, pp. 158-165.
Min. Res. 1882, pp. 568-569.
Top. sheet Silver Peak.

Columbus Marsh.

12 miles southeast of Candelaria.
Min. Res. 1882, p. 569.
Top. sheet Tonopah.

MINERAL COUNTY**Rhodes Marsh.**

8 miles south of Mina.
Min. Res. 1882, pp. 569-570.
Top. sheet Hawthorne.

BRUCITE**References—**

- Hill, J. M., Magnesium and its compounds in 1927: Mineral Resources of the United States, 1927, Part 2, p. 173.
Tyler, P. M., Magnesium and its compounds in 1928: Mineral Resources of the United States, 1928, Part 2, p. 135.

BRUCITE—Continued.

Tyler, P. M., Magnesium and its compounds in 1929: Mineral Resources of the United States, 1929, Part 2, p. 125.

NYE COUNTY**Downeyville.**

30 miles northeast of Luning.
Min. Res. 1927, pt. 2, p. 173.
1928, pt. 2, p. 135.
1929, pt. 2, p. 125.
Top. sheet Tonopah.

CLAY**References—**

Cox, P. E., and Moulton, D. A., A new raw material for ceramic uses: Journal American Ceramic Society, vol. 6, pp. 937-939, 1923.
Ries, Heinrich, High-grade clays of the eastern United States, with notes on some western clays: U. S. Geol. Survey Bull. 708, pp. 124-126, 1922.

CHURCHILL COUNTY

(See Pershing County.)

LINCOLN COUNTY**Elgin.**

Near Elgin.
Locality furnished by U. S. Bureau of Mines.
Top. sheet Pioche.

MINERAL COUNTY**Sodaville (Bentonitic Clay).**

3 miles southwest of Sodaville, Sec. 12, T. 5 N., R. 34 E.
Deposit visited by G. R. Mansfield, Geological Survey.
Top. sheet Hawthorne.

NYE COUNTY**Beatty.**

9 miles east and 8 miles southeast of Beatty.
U. S. Geol. Survey Bull. 708, pp. 124-126.
Cox, P. E., op. cit.
Top. sheet Furnace Creek.

PERSHING COUNTY**Oreana.**

12 miles east of Oreana (Pitt-Rowland mine).
U. S. Geol. Survey Bull. 708, pp. 121-122.
Top. sheet Rochester mining district.

Lovelock.

25 miles east by southeast of Lovelock (near boundary between Pershing and Churchill Counties—exact location not known).
U. S. Geol. Survey Bull. 708, pp. 122-123.
Top. sheet Carson Sink.

WHITE PINE COUNTY**Ely.**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Ely.

COAL**References—**

Hance, J. H., The Coaldale coal field, Esmeralda County, Nevada: U. S. Geol. Survey Bull. 531, pp. 313-322, 1913.
Spurr, J. E., Coal deposits between Silver Peak and Candelaria, Esmeralda County, Nevada: U. S. Geol. Survey Bull. 225, pp. 289-292, 1904.

COAL—Continued.**ESMERALDA COUNTY****Coaldale.**

T. 2 N., R. 37 E.
U. S. Geol. Survey Bull. 225 and 531.
Top. sheet Tonopah.

DIATOMACEOUS EARTH**References—**

Bowles, Oliver, Abrasive materials in 1928: Mineral Resources of the United States, 1928, Part 2, p. 247.
Bowles, Oliver, Abrasive materials in 1929: Mineral Resources of the United States, 1929, Part 2, p. 75.
Davis, C. W., Diatomaceous earth (with special reference to Nevada): Bureau of Mines, Reports of Investigations, Serial 2718, 1925.
Eardley-Wilmot, V. L., Diatomite, its occurrence, preparation, and uses: Department of Mines, Mines Branch, Ottawa, Canada, 1928, pp. 104-105.
Hill, J. M., Notes on the economic geology of the Ramsey, Talapoosa, and White Horse mining districts, in Lyon and Washoe Counties, Nevada: U. S. Geol. Survey Bull. 470, p. 108, 1911.
Anonymous, First mill in Nevada to treat kieselguhr completed at Carlin, Nevada: Nevada Mining Press, pp. 13-14, September 10, 1920.

CHURCHILL COUNTY**Fallon.**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Carson Sink.

Jessup.

North and south of Jessup.
Davis, C. W., op. cit.
Top. sheet Carson Sink.

Skull Creek.

8 miles southeast of Eastgate.
Davis, C. W., op. cit.

ELKO COUNTY**Carlin.**

1½ miles north of Vivian.
Davis, C. W., op. cit.
Eardley-Wilmot, V. L., op. cit.
Anonymous, op. cit.
Min. Res. 1928, pt. 2, p. 247.
1929, pt. 2, p. 75.

ESMERALDA COUNTY**Basalt and Mt. Montgomery.**

Min. Res. 1928, pt. 2, p. 247.
1929, pt. 2, p. 75.

White Mountain and Hawthorne topographic maps.

Crow Springs.

11 miles northwest of Millers.
Davis, C. W., op. cit.
Top. sheet Tonopah.

Goldfield.

Davis, C. W., op. cit.
Top. sheet Goldfield Special.

MINERAL COUNTY**Basalt.**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Hawthorne.

DIATOMACEOUS EARTH—Continued.

NYE COUNTY

Black Spring.

Northwest of Cloverdale district, northwestern Nye County.

Davis, C. W., op. cit.

Top. sheet Tonopah.

PERSHING COUNTY

Velvet and Eye Patch.

East flank of Trinity Range.

Davis, C. W., op. cit.

STOREY COUNTY

Chalk Hills (Parker and Noe).

9 miles northeast of Virginia City.

U. S. Geol. Survey Bull. 470, p. 108.

Min. Res. 1928, pt. 2, p. 247.

1929, pt. 2, p. 75.

Davis, C. W., op. cit.

Eardley-Wilmot, V. L., op. cit.

Top. sheet Carson.

WASHOE COUNTY

Peavine Peak.

Northwest of Reno on Peavine Peak.

Davis, C. W., op. cit.

Top. sheet Reno.

Verdi.

9 miles west of Reno.

Davis, C. W., op. cit.

Eardley-Wilmot, V. L., op. cit.

Top. sheet Reno.

DOLOMITE

References—

Carpenter, Jay A., The mineral resources of southern Nevada: Nevada State Bureau of Mines and Mackay School of Mines Bulletin, vol. 1, No. 1, November, 1929.

Anonymous, Unusual lime operations in far west: Rock Products, April 26, 1930, pp. 41-53.

CLARK COUNTY

Sloan.

Rock products, op. cit.

Carpenter, Jay A., op. cit.

Top. sheet Tonopah.

DUMORTIERITE

References—

Fairbanks, E. E., Dumortierite from Nevada: American Mineralogist, vol. 11, pp. 93-96, 1926.

Jones, J. C., The geology of the deposit of dumortierite in Humboldt Queen Canyon, Pershing County, Nevada; petrography; origin of the deposit: University of Nevada Bulletin, vol. 22, No. 2, pp. 23-26, 31-32, 33-34, March 15, 1928.

Knopf, Adolph, Geology and ore deposits of the Rochester district, Nevada: U. S. Geol. Survey Bull. 762, 1924.

NYE COUNTY

Round Mountain.

Jones, J. C., op. cit.

Top. sheet Tonopah.

PERSHING COUNTY

Humboldt Queen Canyon.

6 miles east of Oreana.

Jones, J. C., op. cit.

DUMORTIERITE—Continued.

PERSHING COUNTY—Continued.

Rochester.

West slope of Lincoln Hill.

Jones, J. C., op. cit.

Fairbanks, E. E., op. cit.

Knopf, Adolph, op. cit.

Top. sheet Rochester Mining District and Lovelock (adv.).

WASHOE COUNTY

Granite Range.

Southern end of Granite Range, approximately 8 miles northwest of Gerlach.

Jones, J. C., op. cit.

Top. sheet Granite Range.

FELDSPAR

References—

Carpenter, J. A., The mineral resources of southern Nevada: Nevada State Bureau of Mines and Mackay School of Mines Bulletin, vol. 1, No. 1, November, 1929.

CLARK COUNTY

Nipton.

11 miles from railroad at Nipton, Calif.

Carpenter, J. A., op. cit.

Top. sheet Ivanpah.

FLUORSPAR

References—

Davis, H. W., Fluorspar and cryolite in 1920: Mineral Resources of the United States, 1920, Part 2, p. 72.

Davis, H. W., Fluorspar and cryolite in 1921: Mineral Resources of the United States, 1921, Part 2, p. 42.

Davis, H. W., Fluorspar and cryolite in 1922: Mineral Resources of the United States, 1922, Part 2, p. 18.

Davis, H. W., Fluorspar and cryolite in 1925: Mineral Resources of the United States, 1925, Part 2, p. 11.

Davis, H. W., Fluorspar and cryolite in 1928: Mineral Resources of the United States, 1928, Part 2, p. 23.

Davis, H. W., Fluorspar and cryolite in 1929: Mineral Resources of the United States, 1929, Part 2, p. 13.

MINERAL COUNTY

Broken Hills.

5½ miles from Broken Hills, Baxter mine.

Min. Res. 1928, pt. 2, p. 23.

1929, pt. 2, p. 13.

Mt. Montgomery.

2¾ miles south of Mt. Montgomery Station.

Deposit reported by Southern Pacific Company, Geological Department.

Top. sheet White Mountain.

NYE COUNTY

Beatty.

4½ miles southeast of Beatty, Daisy mine, in Bare Mountains.

Min. Res. 1920, pt. 2, p. 72.

1921, pt. 2, p. 42.

1922, pt. 2, p. 18.

1925, pt. 2, p. 11.

1928, pt. 2, p. 23.

1929, pt. 2, p. 13.

Top. sheet Furnace Creek.

FULLER'S EARTH**ESMERALDA COUNTY****Basalt (nearest town).**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Hawthorne or White Mountain.

NYE COUNTY**Ash Meadows.****Amargosa Valley.****Bradford Siding.****Death Valley Junction.****Johannie.**

Localities furnished by U. S. Bureau of Mines.
Top. sheet Furnace Creek.

GRANITE AND RELATED ROCKS*References—*

Burchard, E. F., The stone industry in the United States in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 1367-1370.

Reid, John A., Preliminary report on the building stones of Nevada: University of Nevada Bull., vol. 1, No. 1, 1904.

ELKO COUNTY**Elko.**

Some distance north and south of Elko.
Reid, John A., op. cit.

HUMBOLDT COUNTY**Winnemucca.**

12 miles north of Winnemucca and on Winnemucca Peak.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1370.
Top. sheet Paradise.

LYON COUNTY**Mason Valley.**

In Hudson Pass.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1369.
Top. sheet Wellington.

MINERAL COUNTY**Luning.**

Near Luning.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1369.
Top. sheet Hawthorne.

ORMSBY COUNTY**Lakeview.**

South of Lakeview, 3 miles northwest of Carson City.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1369.
Top. sheet Carson.

STOREY COUNTY**Virginia City (Diorite).**

On Mt. Davidson.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1370.
Top. sheet Carson.

GRANITE AND RELATED ROCKS—Continued.**WASHOE COUNTY****Lawton.**

Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1368.
Top. sheet Reno.

Ophir.

About a mile northwest of Franktown.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1369.
Top. sheet Carson.

Verdi.

About 10 miles west of Reno.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1368.
Top. sheet Reno.

Washoe.

West of Washoe.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, pp. 1368-1369.
Top. sheet Carson.

GRAPHITE*References—*

Bastin, E. S., Graphite in 1915: Mineral Resources of the United States, Part 2, 1915, pp. 90-91.

Ferguson, H. G., Graphite in 1916: Mineral Resources of the United States, 1916, Part 2, p. 57.

MINERAL COUNTY**Rawhide.**

25 miles southwest of Rawhide.
Min. Res. 1916, pt. 2, p. 57.
Top. sheet Hawthorne.

ORMSBY COUNTY**Carson.**

4 miles by road southwest of Carson City, Secs. 25 and 26, T. 15 N., R. 19 E.
Min. Res. 1915, pt. 2, pp. 90-91.
Top. sheet Carson.

GYPSUM*References—*

Adams, G. I., and others, Gypsum deposits in the United States: U. S. Geol. Survey Bull. 223, 1904.

Stone, R. W., and others, Gypsum deposits of the United States: U. S. Geol. Survey Bull. 697, pp. 139-160, 1920. (Supersedes U. S. Geol. Survey Bull. 223.)

CLARK COUNTY**Arden.**

In the foothills of the Spring Mountain Range about 15 miles southwest of Las Vegas and about 5 miles west of the mill at Arden.
U. S. Geol. Survey Bull. 697, pp. 155-158.
Top. sheet Las Vegas.

Las Vegas.

7 miles northeast of Las Vegas.
U. S. Geol. Survey Bull. 697, pp. 159-160.
Top. sheet Las Vegas.

GYPSUM—Continued.**CLARK COUNTY—Continued.****Moapa.**

In the Muddy Range directly south of Moapa, in T. 16 S., R. 66 E.
U. S. Geol. Survey Bull. 697, p. 159.
Top. sheet St. Thomas.

Virgin River.

In the valley of Virgin River between St. Thomas and the mouth of the river.
U. S. Geol. Survey Bull. 697, p. 160.
Top. sheet St. Thomas.

LINCOLN COUNTY**Galt.**

In the Meadow Valley Range, 27 miles north of Moapa.
U. S. Geol. Survey Bull. 697, pp. 158-159.
Top. sheet Pioche.

LYON COUNTY**Ludwig and Mason.**

At the base of the western slope of the Smith Valley Range.
U. S. Geol. Survey Bull. 697, pp. 153-155.
Top. sheet Wellington.

MINERAL COUNTY**Hawthorne.**

3 miles west of Hawthorne.
U. S. Geol. Survey Bull. 697, p. 155.
Top. sheet Hawthorne.

ORMSBY COUNTY**Mound House.**

Near Mound House.
U. S. Geol. Survey Bull. 697, pp. 150-153.
Top. sheet Carson.

PERSHING COUNTY**Gerlach.**

At the western base of Luxor Peak toward the northern end of the Truckee Range and about 10 miles south of Gerlach.
U. S. Geol. Survey Bull. 697, p. 150.
Top. sheet Granite Range.

Lovelock.

In the west Humboldt Mountains east of Lovelock.
U. S. Geol. Survey Bull. 697, pp. 146-149.

Table Mountain.

26 miles a little south of east of Lovelock.
U. S. Geol. Survey Bull. 697, p. 150.

LIMESTONE**References—**

- Burchard, E. F., The production of lime in 1911: Mineral Resources of the United States, 1911, Part 2, p. 676.
Burchard, E. F., The stone industry in the United States in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 1375, 1376.
Carpenter, Jay A., The mineral resources of southern Nevada: Nevada State Bureau of Mines and Mackay School of Mines Bull., vol. 1, No. 1, 1929.
Coons, A. T., Stone in 1929: Mineral Resources of the United States, 1929, Part 2, p. 287.
Loughlin, G. F., and Coons, A. T., Lime in 1924 (p. 228), and Stone in 1924 (p. 301): Mineral Resources of the United States, 1924, Part 2.
Anonymous, Unusual lime operations in far west: Rock Products, April 26, 1930, pp. 41-53.

LIMESTONE—Continued.**CLARK COUNTY****Sloan.**

Min. Res. 1913, pt. 2, p. 1376.
1924, pt. 2, pp. 238, 301.
1929, pt. 2, p. 287.
Carpenter, Jay A., op. cit.
Anonymous, Rock Products, op. cit.
Top. sheet Ivanpah.

Jean.

Carpenter, Jay A., op. cit.
Top. sheet Ivanpah.

EUREKA COUNTY**Palisade.**

Locality furnished by U. S. Bureau of Mines.

LINCOLN COUNTY**Kyle.**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Pioche.

LYON COUNTY**Dayton.**

Min. Res. 1911, pt. 2, p. 676.
1913, pt. 2, p. 1375.
Top. sheet Carson.

Wabuska.

Min. Res. 1913, pt. 2, p. 1376.
Top. sheet Wabuska.

ORMSBY COUNTY**Carson City.**

Min. Res. 1911, pt. 2, p. 676.
1913, pt. 2, p. 1375.
Top. sheet Carson.

MAGNESITE**References—**

- Gale, H. S., Late developments of magnesite deposits in California and Nevada: U. S. Geol. Survey Bull. 540, p. 520, 1914.
Longwell, C. R., Geology of the Muddy Mountains, Nevada: U. S. Geol. Survey Bull. 798, 1928.
Yale, C. G., Magnesite in 1915: Mineral Resources of the United States, 1915, Part 2, p. 1024.
Yale, C. G., and Stone, R. W., Magnesite in 1920: Mineral Resources of the United States, 1920, Part 2, pp. 11-12.
An immense deposit of magnesite in southern Nevada: Geological Survey Press Bulletin.

CLARK COUNTY**Muddy River Valley. V.**

Several outcrops in the area between 2 miles west of Overton and 3 miles southwest of Kaolin.
Geological Survey Press Bulletin.
Min. Res. 1920, pt. 2, pp. 11-12.
U. S. Geol. Survey Bull. 798.
Top. sheet St. Thomas.

ESMERALDA COUNTY**Goldfield.**

Near Goldfield.
Min. Res. 1915, pt. 2, p. 1024.
Top. sheet Goldfield Special.

MAGNESITE—Continued.**ESMERALDA COUNTY**—Continued.**Lone Mountains.**

Near Mount Diablo base line, Rs. 39 to 41 E.
U. S. Geol. Survey Bull. 540, p. 520.
Top. sheet Lida.

NYE COUNTY**Ash Meadows.**

Near Ash Meadows, T. 17 S, R. 6 E.
U. S. Geol. Survey Bull. 540, p. 520.
Top. sheet Furnace Creek.

MARBLE**References—**

Burchard, E. F., The stone industry in the United States in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 1373-1374.
Darton, N. H., Marble of White Pine County, Nevada: U. S. Geol. Survey Bull. 340, pp. 377-388, 1908.
Reid, John A., Preliminary report on the building stones of Nevada: University of Nevada Bulletin, vol. 1, No. 1, 1904.

CLARK COUNTY**Las Vegas.**

14 miles north of Las Vegas.
Min. Res. 1913, pt. 2, p. 1374.
Top. sheet Las Vegas.

ELKO COUNTY**Lamoille Valley.**

Reid, John A., op. cit.
Min. Res. 1913, pt. 2, pp. 1373-1374.

MINERAL COUNTY**Luning.**

Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1374.
Top. sheet Hawthorne.

Mina.

Near Mina.
Top. sheet Hawthorne.

NYE COUNTY**Carrara.**

9 miles south of Beatty.
Min. Res. 1913, pt. 2, p. 1374.
Top. sheet Furnace Creek.

PERSHING COUNTY**Humboldt Mountains.**

Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1374.

WHITE PINE COUNTY**Gandy.**

In the area between 5 and 7 miles west by south of Gandy, Utah.
U. S. Geol. Survey Bull. 340.
Min. Res. 1913, pt. 2, p. 1374.

MICA**References—**

Sterrett, D. B., Mica deposits of the United States: U. S. Geol. Survey Bull. 740, pp. 105-106, 1923.
Stoddard, B. H., Mica in 1927: Mineral Resources of the United States, 1927, Part 2, p. 189.

MICA—Continued.**CLARK COUNTY****Virgin Range.**

About 15 miles east by north of Rioville, in Virgin Range.
U. S. Geol. Survey Bull. 740, pp. 105-106.
Top. sheet St. Thomas.

ELKO COUNTY**Ruby Valley.**

Mutual mica mine, 6 miles south of Ruby Valley, Sec. 15, T. 29 N., R. 58 E.
Min. Res. 1927, pt. 2, p. 189.

Ruby.

Shoshone mica mines.
Locality furnished by U. S. Bureau of Mines.

Locality approximately 50 miles south of Elko.

Locality furnished by U. S. Bureau of Mines.

WASHOE COUNTY**Gerlach.**

T. 37 N., R. 22 E, about 12 miles north of Gerlach.
U. S. Geol. Survey Bull. 523, pp. 23-25.
Top. sheet Long Valley.

NITRATE**References—**

Gale, H. S., Nitrate deposits: U. S. Geol. Survey Bull. 523, pp. 19-25, 1912.
Noble, L. F., Nitrate deposits in southeastern California, with notes on southeastern Arizona and southwestern New Mexico: U. S. Geol. Survey Bull. 820 (in press, March, 1931), pp. 86-88.

CHURCHILL COUNTY**Lovelock.**

On the west slope of the Humboldt Range on Humboldt Lake, southwest of Lovelock, in Churchill and Pershing Counties.
U. S. Geol. Survey Bull. 523, pp. 19-23.
Top. sheet Carson Sink.

CLARK COUNTY**Virgin Valley.**

Lower valley of Muddy Creek and valley of Virgin River below St. Thomas.
U. S. Geol. Survey Bull. 820, p. 86.
Top. sheet St. Thomas.

ESMERALDA COUNTY**Fish Lake Valley.**

On the east side of Fish Lake Valley.
U. S. Geol. Survey Bull. 820, p. 88.
Top. sheet Silver Peak.

HUMBOLDT COUNTY**Soldier Meadows.**

Ts. 39 and 40 N., Rs. 24 and 25 E.
Unpublished manuscript.
Top. sheet Long Valley.

NYE COUNTY**Railroad Valley.**

Canyons bordering west side of Railroad Valley.
U. S. Geol. Survey Bull. 523, p. 25.

PERSHING COUNTY**Lovelock. (See Churchill County.)****OIL SHALE****References—**

Buwalda, J. P., Nevada in oil shale in the Rocky Mountain Region: U. S. Geol. Survey Bull. 729, 1923, pp. 91-102.

OIL SHALE—Continued.

Alderson, V. C., The oil shale industry: New York, 1920, pp. 31-32, 41-44.
 Lincoln, Francis Church, Mining districts and mineral resources of Nevada, 1923.

ELKO COUNTY**Carlin.**

Near Carlin, S. P. R. R., W. P. R. R.
 Lincoln, F. C., op. cit.
 Buwalda, J. P., op. cit.

Charleston.

North of Charleston and near Copper Mountain.
 Lincoln, F. C., op. cit.

Elko.

Near Elko in western Elko County, S. P. R. R., W. P. R. R.
 Buwalda, J. P., op. cit.
 Lincoln, F. C., op. cit.
 U. S. G. S. Halleck (adv.) sheet.

NYE COUNTY**Currant.**

East of Currant in northeastern Nye County.
 Lincoln, F. C., op. cit.

WASHOE COUNTY**Peavine Mountain.**

10 miles northwest of Reno, S. P. R. R., W. P. R. R.
 Lincoln, F. C., op. cit.
 U. S. G. S. Reno top. sheet.

WHITE PINE COUNTY

At Hamilton, in White Pine Range.
 Lincoln, F. C., op. cit.

OPAL**References—**

Bray, J. C., Opal field in Nevada: The Mining American, Denver, Colo., December 11, 1915.
 Gordon, C. C., Virgin Valley opal deposits, Nevada: Mining Review, Salt Lake City, Utah, vol. 30, pp. 7-8, June 30, 1928.
 Sterrett, D. B., The production of precious stones in 1908: Mineral Resources of the United States, 1908, Part 2, pp. 831-832.
 Sterrett, D. B., The production of gems and precious stones in 1909: Mineral Resources of the United States, 1909, Part 2, p. 771.
 Sterrett, D. B., Gems and precious stones in 1911: Mineral Resources of the United States, 1911, Part 2, p. 1060.
 Sterrett, D. B., Gems and precious stones in 1912: Mineral Resources of the United States, 1912, Part 2, pp. 1049-1050.
 Sterrett, D. B., Gems and precious stones in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 677-680.

HUMBOLDT COUNTY**Virgin Valley.**

25 miles southwest of Denio, Ore.
 Min. Res. 1908, pt. 2, pp. 831-832.
 1909, pt. 2, p. 771.
 1911, pt. 2, p. 1060.
 1912, pt. 2, pp. 1049-1050.
 1913, pt. 2, pp. 677-680.
 Bray, J. C., op. cit.
 Gordon, C. C., op. cit.
 Top. sheet Long Valley.

PHOSPHATE**Reference—**

Stone, R. W., Phosphate rock in 1917: Mineral Resources of the United States, 1917, Part 2, p. 32.

CHURCHILL COUNTY**Ocala and Huxley.**

Min. Res. 1917, pt. 2, p. 12.
 Top. sheet Carson Sink.

ELKO COUNTY**Cobre.**

Top of long ridge about 6 miles N. 10° E. from Cobre.
 Reported occurrence.

WHITE PINE COUNTY**Ely and Osceola.**

Min. Res. 1917, pt. 2, p. 12.
 Top. sheet Ely.

POTASH**References—**

Dole, R. B., Exploration of salines in Silver Peak Marsh, Nevada: U. S. Geol. Survey Bull. 530, pp. 330-345, 1913.
 Gale, H. S., The search for potash in the desert basin region: U. S. Geol. Survey Bull. 530, pp. 295-312, 1913.
 Gale, H. S., Potash tests at Columbus Marsh, Nevada: U. S. Geol. Survey Bull. 540, pp. 422-427, 1914.
 Gale, H. S., and Hicks, W. B., Potash in 1917: Mineral Resources of the United States, 1917, Part 2, pp. 419-424.
 Hance, J. H., Potash in western saline deposits: U. S. Geol. Survey Bull. 540, pp. 457-469, 1914.
 Hicks, W. B., The composition of muds from Columbus Marsh, Nevada: U. S. Geol. Survey Prof. Paper 95, pp. 1-11, 1916.
 Phalen, W. C., Potash salts, summary for 1911: Mineral Resources of the United States, 1911, Part 2, pp. 890-891.
 Phalen, W. C., Potash salts, summary for 1912: Mineral Resources of the United States, 1912, Part 2, pp. 880-884.
 Phalen, W. C., Potash salts, summary for 1913: Mineral Resources of the United States, 1913, Part 2, pp. 85-86.
 Phalen, W. C., Potash salts, 1914: Mineral Resources of the United States, 1914, Part 2, pp. 15-17.

CHURCHILL COUNTY**Carson Sink.**

Min. Res. 1911, pt. 2, pp. 890-891.
 1912, pt. 2, pp. 880-882.
 U. S. Geol. Survey Bull. 530, pp. 295-312.
 U. S. Geol. Survey Bull. 540, pp. 457-469.
 Top. sheet Carson Sink.

Dixie Salt Marsh (Humboldt Salt Marsh), Dixie Valley.

East of Carson Desert and Stillwater Mountains.
 Min. Res. 1917, pt. 2, pp. 419-421.
 U. S. Geol. Survey Bull. 540, pp. 463-464.
 Top. sheet Carson Sink.

Fourmile Flat (Eightmile Flat and Sand Springs Valley).

15 to 30 miles southeast of Fallon.
 U. S. Geol. Survey Bull. 540, pp. 462-463.
 Top. sheet Carson Sink.

POTASH—Continued.**ESMERALDA COUNTY****Columbus Marsh.**

On or near the line between Esmeralda and Mineral Counties.

Min. Res. 1912, pt. 2, pp. 883-884.

1917, pt. 2, pp. 421-422.

U. S. Geol. Survey Bull. 540, pp. 422-427.

U. S. Geol. Survey Prof. Paper 95, pp. 1-11.

Top. sheets Hawthorne and Tonopah.

Fish Lake Valley.

Min. Res. 1917, pt. 2, p. 422.

Top. sheet Silver Peak.

Silver Peak Marsh.

Min. Res. 1917, pt. 2, p. 423.

U. S. Geol. Survey Bull. 530, pp. 330-345.

Top. sheet Silver Peak.

LINCOLN COUNTY**Pahrangat Lake.**

18 miles south of Pahrangat Lake.

Playa deposit examined by J. P. Buwalda. Very small amounts of potash found. Results unpublished.

Top. sheet Las Vegas.

NYE COUNTY**Ash Meadows.**

Min. Res. 1917, pt. 2, pp. 423-424.

Top. sheet Furnace Creek.

Railroad Valley.

Ts. 8 and 9 N., R. 56 E.

U. S. Geol. Survey Bull. 540, pp. 457-462.

Min. Res. 1912, pt. 2, pp. 882-883.

1913, pt. 2, pp. 85-86.

PERSHING COUNTY**Black Rock Desert.**

Northwestern Pershing County.

Min. Res. 1914, pt. 2, pp. 15-17.

Top. sheet Granite Range.

Lovelock.

7 miles north and 8 miles northeast of Lovelock.

Min. Res. 1917, pt. 2, p. 424.

WASHOE COUNTY**Smoke Creek Desert.**

4 wells drilled for potash with negative results.

Results unpublished.

Top. sheet Granite Range.

PUMICE**WASHOE COUNTY****Reno.**

5 miles west of Reno.

Locality furnished by U. S. Bureau of Mines.

Top. sheet Reno.

QUARTZ (SILICA)**CLARK COUNTY****Apex.**

1 mile southeast of Apex siding on the U. P. R. R.

Erie.

3 miles southwest of Erie siding on the U. P. R. R.

QUARTZ (SILICA)—Continued.**CLARK COUNTY—Continued.****Crystal.**

11 miles northwest of Crystal station on the U. P. R. R.

Overton.

6 miles southwest of Overton.

White Basin.

12 miles southeast of Crystal station.

NYE COUNTY**Beatty (Riders Spur).**

Locality furnished by U. S. Bureau of Mines.

Top. sheet Bullfrog Special or Furnace Creek.

SALT**References—**

Dole, R. B., Exploration of salines in Silver Peak Marsh, Nevada: U. S. Geol. Survey Bull. 530, pp. 330-345, 1913.

Gale, H. S., Potash tests at Columbus Marsh, Nevada: U. S. Geol. Survey Bull. 540, pp. 422-427, 1914.

Hance, J. H., Potash in western saline deposits: U. S. Geol. Survey Bull. 540, pp. 457-464, 1914.

Hicks, W. B., The composition of muds from Columbus Marsh: U. S. Geol. Survey Prof. Paper 95, pp. 1-11, 1916.

Phalen, W. C., Potash salts, 1915: Mineral Resources of the United States, 1915, Part 2, pp. 108-110.

Phalen, W. C., Salt resources of the United States: U. S. Geol. Survey Bull. 669, pp. 137-148, 1919.

Russell, I. C., Geological history of Lake Lahontan, a Quaternary lake of northwestern Nevada: Monograph 11, pp. 232-235, 1885.

Spurr, J. E., Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55, pp. 158-165, 1906.

CHURCHILL COUNTY**Dixie Salt Marsh.**

East of Carson Desert and Stillwater Mountains.

U. S. Geol. Survey Bull. 540, pp. 463-464.

U. S. Geol. Survey Bull. 669, pp. 140-141.

Top. sheet Carson Sink.

Leete (P. O. Fernley).

18 miles east of Wadsworth.

Mon. 11, pp. 233-234.

U. S. Geol. Survey Bull. 669, pp. 138-140.

Top. sheet Carson Sink.

Parran (P. O. Hazen).

10 miles south of Humboldt Lake.

U. S. Geol. Survey Bull. 669, p. 140.

Top. sheet Carson Sink.

Sand Springs (P. O. Fallon).

25 miles southeast of Fallon.

U. S. Geol. Bull. 540, pp. 462-463.

U. S. Geol. Survey Bull. 669, pp. 137-138.

Mon. 11, pp. 234-235.

Top. sheet Carson Sink.

White Plains (P. O. Hazen).

4 miles north of Parran and 5 or 6 miles south of Humboldt Lake.

U. S. Geol. Survey Bull. 669, p. 140.

Top. sheet Carson Sink.

SALT—Continued.**CLARK COUNTY****Virgin River.**

Between St. Thomas and the mouth of Virgin River.
Min. Res. 1915, pt. 2, pp. 108-110.
U. S. Geol. Survey Bull. 669, pp. 146-148.
Top. sheet St. Thomas.

ESMERALDA COUNTY**Columbus Marsh.**

On or near the line between Esmeralda and Mineral Counties.
U. S. Geol. Survey Bull. 540, pp. 422-427.
U. S. Geol. Survey Bull. 669, p. 142.
U. S. Geol. Survey Prof. Paper 95, pp. 1-11.
Top. sheet Hawthorne and Tonopah.

Silver Peak Marsh.

30 miles southeast of Columbus, in Clayton Valley, Ts. 1 and 2 S., Rs. 39, 40, and 41 E.
U. S. Geol. Survey Prof. Paper 55, pp. 158-165.
U. S. Geol. Survey Bull. 530, pp. 330-345.
U. S. Geol. Survey Bull. 669, pp. 142-144.
Top. sheet Lida.

MINERAL COUNTY**Rhodes Marsh.**

8 miles south of Mina.
U. S. Geol. Survey Bull. 669, pp. 141-142.
Top. sheet Hawthorne.

NYE COUNTY**Railroad Valley.**

Ts. 8 and 9 N., R. 56 E.
U. S. Geol. Survey Bull. 540, pp. 457-462.
U. S. Geol. Survey Bull. 669, pp. 144-145.

WASHOE COUNTY**Smoke Creek Desert.**

Buffalo Springs Salt Works, west side of Smoke Creek Desert.
Mon. 11, pp. 232-233.
U. S. Geol. Survey Bull. 669, pp. 145-146.
Top. sheet Granite Range.

SAND AND GRAVEL**CLARK COUNTY****Overton.**

Locality furnished by U. S. Bureau of Mines.
Top. sheet St. Thomas.

WASHOE COUNTY**Reno.**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Reno.

WHITE PINE COUNTY**McGill.**

Locality furnished by U. S. Bureau of Mines.

SANDSTONE**References—**

Burchard, E. F., The stone industry in the United States in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 1375-1376.
Reid, John A., Preliminary report on the building stones of Nevada: University of Nevada Bulletin, vol. 1, No. 1, 1904.

SANDSTONE—Continued.**CHURCHILL COUNTY****Fallon.**

Near Fallon.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1375.
Top. sheet Carson Sink.

ELKO COUNTY**Elko.**

Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1376.
Topographic map Halleck (adv.).

HUMBOLDT COUNTY**Winnemucca.**

Northeast of Winnemucca.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1375.
Top. sheet Paradise.

ORMSBY COUNTY**Carson City.**

Near Carson City.
Reid, John A., op. cit.
Min. Res. 1913, pt. 2, p. 1375.
Top. sheet Carson.

SLATE**References—**

Dale, T. N., and others, Slate in the United States: U. S. Geol. Survey Bull. 586, p. 87, 1914.
Dale, T. N., Note on a "black" roofing slate from Nevada: Mineral Resources of the United States, 1908, Part 2, p. 532.

HUMBOLDT COUNTY**Blue Mountains.**

21 miles northwest of Winnemucca.
U. S. Geol. Survey Bull. 586, p. 87.
Min. Res. 1908, pt. 2, p. 532.
Top. sheet Paradise or Disaster.

SODIUM SULPHATE**References—**

Chatard, T. M., Natural soda, its occurrence and utilization: U. S. Geol. Survey Bull. 60, pp. 46-53, 1890.
Melhase, John, Mining mirabilite near Wabuska, Nevada: Engineering and Mining Journal-Press, vol. 119, No. 24, pp. 965-967, June 13, 1925.
Russell, I. C., Geological history of Lake Lahontan, a Quaternary lake of northwestern Nevada: Monograph 11, pp. 73-80, 1885.
Wells, R. C., Sodium sulphate, its sources and uses: U. S. Geol. Survey Bull. 717, pp. 21-24, 1923.

CHURCHILL COUNTY

Sodium carbonate chiefly; also sodium sulphate.
Sodium carbonate chiefly; also sodium sulphate.
Soda lakes two miles northeast of Leeteville.
U. S. Geol. Survey Bull. 60, pp. 46-53.
U. S. Geol. Survey Bull. 717, pp. 23-24.
Mon. 11, pp. 73-80.
Top. sheet Carson Sink.

SODIUM SULPHATE—Continued.**CLARK COUNTY****Goodsprings.**

U. S. Geol. Survey Bull. 717, p. 23.
Top. sheet Goodsprings.

ESMERALDA COUNTY**Silver Peak.**

12 miles north of Silver Peak, in southwestern part of Big Smoky Valley.
U. S. Geol. Survey Bull. 717, p. 24.
Top. sheet Silver Peak.

LYON COUNTY**Wabuska.**

East and northeast of Wabuska.
Mon. 11, p. 48,
U. S. Geol. Survey Bull. 717, p. 24.
Melhase, John, op. cit.
Top. sheet Wabuska.

MINERAL COUNTY**Rhodes Marsh.**

Near Mina.
U. S. Geol. Survey Bull. 717, p. 23.
Top. sheet Hawthorne.

Rawhide.

Near Hot Springs.
Locality furnished by U. S. Bureau of Mines.
Top. sheet Carson Sink.

PERSHING COUNTY**Brown's Station (Toy).**

U. S. Geol. Survey Bull. 717, pp. 21-22.

Buena Vista Valley.

East of Buffalo Peak in the northern part of Humboldt Range.
U. S. Geol. Survey Bull. 717, p. 22.

Sou Hot Spring (Dixie Valley).

U. S. Geol. Survey Bull. 717, p. 23.

WASHOE COUNTY**Granite Mountain.**

At the springs east of Granite Mountain, on the western border of Smoke Creek Desert; and at the springs a few miles north of Granite Mountain.

U. S. Geol. Survey Bull. 717, p. 23.
Top. sheet Granite Range.

Smoke Creek Desert.

U. S. Geol. Survey Bull. 717, p. 24.
Top. sheet Granite Range.

STONE (VOLCANIC ROCK)**References—**

- Burehard, E. F., The stone industry in the United States in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 1370-1373.
Reid, John A., Preliminary report on the building stones of Nevada: University of Nevada Bulletin, vol. 1, No. 1, 1904.

LINCOLN COUNTY**Kyle (Basalt).**

Locality furnished by U. S. Bureau of Mines.
Top. sheet Pioche.

STONE (VOLCANIC ROCK)—Continued.**LYON COUNTY****Virginia City (Rhyolite).**

South of Virginia City, near the American Flat tunnel.
Min. Res. 1913, pt. 2, p. 1370.
Reid, John A., op. cit.
Top. sheet Carson.

ORMSBY COUNTY**Merrimac Station (Tuff).**

Min. Res. 1913, pt. 2, pp. 1372-1373.
Reid, John A., op. cit.
Top. sheet Carson.

PERSHING COUNTY**Lovelock (Tuff).**

Northeast of Lovelock, on Southern Pacific Railroad.
Min. Res. 1913, pt. 2, p. 1373.
Reid, John A., op. cit.
Topographic map Lovelock (adv.).

STOREY COUNTY**Virginia City (Andesite).**

2 miles east of Virginia City.
Min. Res. 1913, pt. 2, p. 1372.
Reid, John A., op. cit.
Top. sheet Carson.

WASHOE COUNTY**Fulton's Quarry (Andesite).**

North of Reno.
Min. Res. 1913, pt. 2, pp. 1371-1372.
Reid, John A., op. cit.
Top. sheet Reno.

Huffakers (Andesite).

5 miles south of Reno.
Min. Res. 1913, pt. 2, p. 1371.
Reid, John A., op. cit.
Top. sheet Carson.

Reno (Andesite).

About 4 miles southwest of Reno.
Min. Res. 1913, pt. 2, p. 1371.
Reid, John A., op. cit.
Top. sheet Carson.

Reno (Andesite).

20 miles northeast of Reno.
Min. Res. 1913, pt. 2, p. 1373.
Reid, John A., op. cit.
Top. sheet Reno.

Washoe (Tuff).

Min. Res. 1913, pt. 2, p. 1373.
Reid, John A., op. cit.
Top. sheet Carson.

SULPHUR**References—**

- Adams, G. I., The Rabbit Hole sulphur mines, near Humboldt House, Nevada: U. S. Geol. Survey Bull. 225, pp. 497-500, 1903.
Becker, G. F., Geology of the quicksilver deposits of the Pacific slope: Monograph 13, p. 346, 1888.
Crowley, A. J., A novel sulphur enterprise in Nevada: Engineering and Mining Journal-Press, vol. 118, pp. 774-776, November 15, 1924.

SULPHUR—Continued.

- Hazen, H. L., Recovering sulphur from a Nevada surface deposit: Engineering and Mining Journal, vol. 127, pp. 830-831, May 25, 1929.
- Ransome, F. L., The geology and ore deposits of Goldfield, Nevada: U. S. Geol. Survey Prof. Paper 66, pp. 109-110, 1909.
- Russell, I. C., Sulphur deposits in Utah and Nevada: New York Academy of Sciences Transactions, vol. 1, pp. 172-175, 1882.
- Smith, P. S., Sulphur, pyrite, and sulphuric acid in 1916: Mineral Resources of the United States, 1916, Part 2, pp. 410-411.
- Spurr, J. E., Alum deposit near Silver Peak, Esmeralda County, Nevada: U. S. Geol. Survey Bull. 225, pp. 501-502, 1904.
- Spurr, J. E., Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55, pp. 157-158, 1906.

ESMERALDA COUNTY**Cuprite.**

- Near Cuprite, 12 miles south of Goldfield.
- Min. Res. 1916, pt. 2, p. 410.
- U. S. Geol. Survey Prof. Paper 66, pp. 109-110.
- Top. sheet Lida.

Goldfield.

- A mile east of Tognoni Springs, east of Goldfield.
- Min. Res. 1916, pt. 2, p. 411.
- U. S. Geol. Survey Prof. Paper 66, p. 109.
- Top. sheet Lida.

Silver Peak.

- 10 miles north of Silver Peak.
- Min. Res. 1916, pt. 2, p. 411.
- U. S. Geol. Survey Bull. 225, pp. 501-502.
- U. S. Geol. Survey Prof. Paper 55, pp. 157-158.
- Top. sheet Silver Peak.

HUMBOLDT COUNTY**Sulphur (Rabbit Hole Springs).**

- Near Sulphur and 3 miles to the east.
- U. S. Geol. Survey Bull. 225, pp. 497-500.
- Min. Res. 1916, pt. 2, p. 410.
- Crowley, A. J., op. cit.
- Hazen, H. L., op. cit.

PERSHING COUNTY**Humboldt.**

- Near Humboldt.
- Min. Res. 1916, pt. 2, p. 411.
- Russell, I. C., op. cit.

WASHOE COUNTY**Steamboat Springs.**

- In vicinity of Steamboat Springs between Carson City and Reno.
- Min. Res. 1916, pt. 2, p. 411.
- Mon. 13, p. 346.
- Top. sheet Carson.

TALC AND SOAPSTONE**PERSHING COUNTY****Oreana.**

- Locality furnished by U. S. Bureau of Mines.

TURQUOISE**References—**

- Sterrett, D. B., The production of gems and precious stones in 1909: Mineral Resources of the United States, Part 2, 1909, pp. 781-787.

TURQUOISE—Continued.

- Sterrett, D. B., The production of gems and precious stones in 1910: Mineral Resources of the United States, 1910, Part 2, pp. 885-886.
- Sterrett, D. B., Gems and precious stones in 1913: Mineral Resources of the United States, 1913, Part 2, pp. 697-699.
- Sterrett, D. B., Gems and precious stones in 1914: Mineral Resources of the United States, 1914, Part 2, pp. 333-334.

CLARK COUNTY**Crescent.**

- 3 miles south 75° east of Crescent.
- Min. Res. 1913, pt. 2, pp. 697-699.
- Top. sheet Ivanpah.

ESMERALDA COUNTY**Klondyke.**

- 3 miles northeast of Klondyke.
- Min. Res. 1909, pt. 2, pp. 786-787.
- Top. sheet Lida.

Millers.

- 10½ miles north 40° west and 13 miles north of west of Millers.
- Min. Res. 1909, pt. 2, pp. 783-785.
- Top. sheet Tonopah.

Redlich.

- 12 miles north 40° east of Redlich; and about 1 mile southwest (two localities).
- Min. Res. 1909, pt. 2, pp. 785-786.
- Top. sheet Tonopah.

LANDER COUNTY**Cortez.**

- 35 miles south of Beowawe.
- Min. Res. 1914, pt. 2, pp. 333-334.

Hot Springs Mining District.

- 35 miles south of Battle Mountain.
- Min. Res. 1914, pt. 2, pp. 333-334.

LYON COUNTY**Yerington.**

- 7 miles north 75° west and 1½ miles north 25° west of Yerington.
- Min. Res. 1910, pt. 2, pp. 885-886.
- Top. sheets Wabuska and Yerington district.

NYE COUNTY**Millers.**

- 12½ miles north 12° west of Millers and 7 miles northeast of Crow Springs, and another locality about one-third mile north.
- Min. Res. 1909, pt. 2, pp. 781-783.
- Top. sheet Tonopah.

VARISCITE**References—**

- Sterrett, D. B., The production of gems and precious stones in 1909: Mineral Resources of the United States, 1909, Part 2, pp. 796-801.
- Sterrett, D. B., The production of gems and precious stones in 1910: Mineral Resources of the United States, 1910, Part 2, pp. 890-894.

ESMERALDA COUNTY**Blair Junction.**

- 9 to 11 miles east of north of Blair Junction.
- Min. Res. 1910, pt. 2, pp. 892-894.
- Top. sheet Tonopah.

VARISCITE—Continued.

ESMERALDA COUNTY—Continued.

Coaldale.

4 miles northeast of Coaldale.
Min. Res. 1910, pt. 2, pp. 890-892.
Top. sheet Tonopah.

Rock Hill Siding.

2 miles west of Rock Hill siding and 1½ miles northwest of Columbus;
localities about 2 miles apart in a northeast-southwest direction.
Min. Res. 1909, pt. 2, pp. 796-801.
Top. sheets Tonopah and Hawthorne.

MINERAL COUNTY

Candelaria.

Near the summit and on the opposite side of the mountain south of Candelaria.
Min. Res. 1910, pt. 2, p. 890.
Top. sheet Hawthorne.

Sodaville.

8 miles southwest of Sodaville.
Min. Res. 1910, pt. 2, p. 894.
Top. sheet Hawthorne.

ALPHABETIC LIST OF METAL MINING DISTRICTS

Name	County	Map No.	Page
Acme.....	Mineral.....	193	57
Adelaide.....	Humboldt.....	132	45
Alder.....	Elko.....	50	28
Alida Valley.....	Esmeralda.....	105	39
Alleghany.....	Elko.....	65	31
Alpha.....	Eureka.....	115	42
Alpine.....	Churchill.....	1	17
Alpine.....	Esmeralda.....	90	36
Alunite.....	Clark.....	26	23
Amador.....	Lander.....	164	51
Amos.....	Humboldt.....	128	44
American Canyon.....	Pershing.....	296	81
Antelope.....	Eureka.....	116	42
Antelope.....	Nye.....	216	63
Antelope.....	Pershing.....	268	75
Antelope Springs.....	Pershing.....	288	78
Arabia.....	Pershing.....	298	81
Argentite.....	Esmeralda.....	91	36
Arrowhead.....	Nye.....	217	63
Ashdown.....	Humboldt.....	148	48
Athens.....	Nye.....	218	63
Atlanta.....	Lincoln.....	167	51
Atwood.....	Nye.....	231	66
Aura.....	Elko.....	51	28
Aurora.....	Mineral.....	194	58
Aurum.....	White Pine.....	316	85
Austin.....	Lander.....	164	51
Awakening.....	Humboldt.....	128	44
Bald Mountain.....	White Pine.....	317	86
Bannock.....	Lander.....	151	48
Barcelona.....	Nye.....	251	71
Bare Mountain.....	Nye.....	232	66
Barrett Springs.....	Humboldt.....	150	48
Barth.....	Eureka.....	127	44
Basalt.....	Mineral.....	196	58
Battle Mountain.....	Lander.....	151	48
Beatty.....	Nye.....	223	64
Bell.....	Mineral.....	198	59
Bellehelen.....	Nye.....	219	63
Bell Mountain.....	Churchill.....	2	17
Belleville.....	Mineral.....	197	58
Belmont.....	Nye.....	220	64
Benway.....	Lyon.....	185	55
Beowawe.....	Eureka.....	118	42
Berlin.....	Nye.....	259	73
Bernice.....	Churchill.....	3	19
Big Creek.....	Lander.....	152	49
Big Dune.....	Nye.....	221	64

Name	County	Map No.	Page
Big Smoky	Lander	153	49
Birch Creek	Lander	153	49
Black Horse	White Pine	318	86
Black Mountains	Clark	27	23
Black Mountain	Mineral	209	61
Black Rock	Humboldt	129	44
Black Knob	Pershing	269	75
Blakes Camp	Nye	234	67
Bolivia	Churchill	21	22
Bonita	White Pine	332	89
Bonnie Clare	Esmeralda	112	41
Bovard	Mineral	195	58
Boyer	Churchill	21	22
Bristol	Lincoln	177	54
Broken Hills	Churchill	4	19
Browns	Churchill	22	22
Bruner	Nye	222	64
Buckley	Mineral	213	63
Buckskin	Douglas	43	27
Buckhorn	Eureka	117	42
Buena Vista	Churchill	284	19
Buena Vista	Pershing	270	75
Buena Vista	Mineral	196	58
Buffalo Valley	Lander	154	49
Bullfrog	Nye	223	64
Bullion	Lander	155	49
Bullion	Elko	82	33
Bullion Hill	Eureka	119	42
Bull Run	Elko	51	28
Bunker Hill	Lander	159	50
Bunkerville	Clark	29	24
Burner	Elko	52	29
Cactus Springs	Nye	224	65
Caliente	Lincoln	168	51
Cambridge	Mineral	194	58
Campbell	Lander	155	49
Candelaria	Mineral	197	58
Carlin	Elko	53	29
Carson River	Ormsby	265	74
Castle Peak	Storey	303	82
Castle Rock	Esmeralda	92	36
Cat Creek	Mineral	213	63
Cave Valley	Lincoln	179	54
Cedar	Pershing	268	75
Cedar Mountain	Mineral	198	59
Centennial	Elko	51	30
Central	Pershing	283	78
Chafey	Pershing	295	80
Chalk Mountain	Churchill	5	19
Charleston	Clark	28	23

Name	County	Map No.	Page
Charleston	Elko	54	29
Cherry Creek	White Pine	319	86
Chief	Lincoln	168	51
Chinatown	Lyon	190	56
Churchill	Lyon	186	56
Clan Alpine	Churchill	1	17
Clifford	Nye	225	65
Cloverdale	Nye	226	65
Coaldale	Esmeralda	93	36
Colorado	Clark	32	24
Columbia	Elko	51	28
Columbia	Humboldt	147	47
Columbus	Mineral	197	58
Comet	Lincoln	169	52
Como	Lyon	187	56
Comstock	Storey	302	82
Concordia	Nye	237	67
Contact	Elko	55	29
Cope	Elko	79	33
Copper Basin	Lander	151	48
Copper Canyon	Lander	151	48
Copper Kettle	Churchill	6	19
Copper King	Clark	29	24
Copper Mountain	Elko	54	29
Copper Mountain	Mineral	195	58
Coppereid	Churchill	24	23
Copper Valley	Pershing	271	75
Cornucopia	Elko	56	29
Cornwall	Elko	54	29
Cortez	Eureka	119	42
Cottonwood	Washoe	304	83
Cottonwood Canyon	Churchill	21	22
Cottonwood Creek	Lander	151	48
Crescent	Clark	30	24
Crow Springs	Esmeralda	94	36
Crystal Peak	Washoe	309	83
Cuprite	Esmeralda	95	36
Currant	Nye	227	65
Danville	Nye	228	66
Dayton	Lyon	190	56
Dean	Lander	160	50
Decoy	Elko	57	29
Deep Creek	Elko	75	32
Deep Hole	Washoe	305	83
Delano	Elko	58	29
Delaware	Ormsby	266	74
Delamar	Lincoln	171	52
Delno	Elko	58	29
Delker	Elko	59	30
Desert	Churchill	7	19

Name	County	Map No.	Page
Desert.....	Esmeralda.....	100	37
Devil's Gate.....	Lyon.....	190	56
Diamond.....	Eureka.....	120	42
Dike.....	Clark.....	31	24
Disaster.....	Humboldt.....	130	44
Divide.....	Elko.....	60	30
Divide.....	Esmeralda.....	96	37
Dolly.....	Esmeralda.....	97	37
Dolly Varden.....	Elko.....	61	30
Donnelly.....	Washoe.....	306	83
Duck Creek.....	White Pine.....	320	86
Dun-Glen.....	Pershing.....	295	80
Dyer.....	Esmeralda.....	98	37
Eagle.....	Douglas.....	44	27
Eagle.....	Ormsby.....	267	74
Eagle.....	White Pine.....	321	87
Eagle Valley.....	Lincoln.....	170	52
Eagleville.....	Churchill.....	8	20
East Gate.....	Churchill.....	9	20
East Walker.....	Mineral.....	199	59
Echo.....	Pershing.....	272	75
Eden.....	Nye.....	229	66
Edgemont.....	Elko.....	62	30
Egan Canyon.....	White Pine.....	319	86
Eldorado.....	Clark.....	32	24
Eldorado.....	Pershing.....	276	76
Elk Mountain.....	Elko.....	63	30
Ellendale.....	Nye.....	230	66
Ellsworth.....	Nye.....	241	68
Ely.....	White Pine.....	322	87
Ely.....	Lincoln.....	180	54
Esmeralda.....	Mineral.....	194	58
Eureka.....	Eureka.....	121	42
Fairplay.....	Nye.....	231	66
Fairview.....	Churchill.....	10	20
Falcon.....	Elko.....	83	34
Fallon.....	Churchill.....	12	21
Farrell.....	Pershing.....	273	76
Pay.....	Lincoln.....	170	52
Perber.....	Elko.....	64	30
Ferguson.....	Lincoln.....	171	52
Ferguson Spring.....	Elko.....	65	31
Fesler.....	Esmeralda.....	99	37
Fireball.....	Churchill.....	(*)	20
Fish Lake Valley.....	Esmeralda.....	114	41
Fitting.....	Mineral.....	193	57
Fitting.....	Pershing.....	296	81
Flowery.....	Storey.....	302	82

*Not on map.

Name	County	Map No.	Page
Fluorine.....	Nye.....	232	66
Freiburg.....	Lincoln.....	172	52
Galena.....	Lander.....	151	48
Galena.....	Washoe.....	313	84
Garfield.....	Mineral.....	200	59
Gass Peak.....	Clark.....	33	25
Gardnerville.....	Douglas.....	44	27
Genoa.....	Douglas.....	45	27
Gerlach.....	Washoe.....	306	83
Geyser.....	Lincoln.....	179	54
Gilbert.....	Esmeralda.....	100	37
Gileonda.....	Humboldt.....	131	45
Gold Banks.....	Pershing.....	274	76
Gold Basin.....	Churchill.....	11	20
Gold Basin.....	Elko.....	66	31
Gold Basin.....	Lander.....	156	49
Gold Belt.....	Nye.....	229	66
Gold Butte.....	Clark.....	34	25
Gold Canyon.....	Lyon.....	190	56
Gold Canyon.....	White Pine.....	323	87
Gold Circle.....	Elko.....	67	31
Gold Crater.....	Nye.....	233	66
Gold Creek.....	Elko.....	69	31
Golden.....	Nye.....	226	65
Golden Arrow.....	Nye.....	224	67
Goldfield.....	Esmeralda.....	101	38
Gold Hill.....	Storey.....	302	82
Gold Mountain.....	Esmeralda.....	112	37
Gold Park.....	Lander.....	158	50
Gold Range.....	Clark.....	(*)	
Gold Range.....	Mineral.....	209	61
Gold Reed.....	Nye.....	240	68
Gold Run.....	Humboldt.....	132	45
Goldyke.....	Nye.....	231	66
Good Hope.....	Elko.....	68	31
Good Hope.....	Esmeralda.....	102	38
Good Springs.....	Clark.....	42	26
Gosiute Range.....	Elko.....		35
Granite.....	Mineral.....	201	60
Granite.....	White Pine.....	324	88
Granite.....	Elko.....	61	30
Grandpap.....	Humboldt.....	133	45
Grapevine.....	Nye.....	235	67
Great Eastern.....	Clark.....	29	24
Green Isle.....	Nye.....	237	67
Green Mountain.....	Esmeralda.....	111	41
Groom.....	Lincoln.....	174	53
Hamilton.....	White Pine.....	336	89
Hannapah.....	Nye.....	236	67

*Not on map.

Name	County	Map No.	Page
Harmony	Humboldt	144	47
Hawthorne	Mineral	202	60
Haystack	Pershing	275	76
Hercules	Churchill	25	23
Highland	Lincoln	175	53
Hiko	Lincoln	176	53
Hilltop	Lander	157	49
Holbrook	Douglas	47	28
Holy Cross	Churchill	12	21
Hornsilver	Esmeralda	103	38
Horse Canyon	Lander		50
Hot Creek	Nye	258	72
Hot Springs	Churchill	8	20
Hot Springs	Mineral		62
Hub	White Pine	334	89
Humboldt	Pershing	276	76
Hunter	White Pine	325	87
Imlay	Pershing	276	76
Indian	Pershing	277	76
Indian Springs	Lyon	187	56
Ione	Nye	259	73
Iron Hat	Pershing	278	76
Iron Point	Humboldt	134	45
Irwin Canyon	Nye	256	72
Island Mountain	Elko	69	31
Ivanhoe	Elko	70	32
Ivanpah	Clark	35	25
I. X. L.	Churchill	13	21
Jackson	Lander and Nye	158	50
Jackson Creek	Humboldt	135	45
Jackrabbit	Lincoln	177	54
Jarbridge	Elko	71	32
Jefferson Canyon	Nye	237	67
Jersey	Pershing	279	77
Jessup	Churchill	14	21
Jett	Nye	238	67
Johnnie	Nye	239	68
Jumbo	Washoe	307	83
Juniper Range	Pershing	280	77
Kawich	Nye	240	68
Kennedy	Pershing	281	77
Kern	White Pine	321	87
Keystone	Nye	258	72
Key West	Clark	29	24
Kimberly	Lander	157	49
Kincaid	Mineral	208	61
King	Mineral	203	60
Kingston	Lander	159	50
Kinsley	Elko	72	32

Name	County	Map No.	Page
Kit Carson	Elko	55	29
Klondyke	Esmeralda	104	39
Lafayette	Elko	73	32
Lake	Churchill	15	21
Lander	Lander	155	49
La Plata	Churchill	17	22
Las Vegas	Clark	36	25
Leadville	Washoe	308	83
Lee	Elko	74	32
Lee	Nye	221	64
Leete	Churchill	16	21
Leroy	Elko	76	32
Lewis	Lander	160	50
Lexington	White Pine	331	89
Lida	Esmeralda	105	39
Lime Mountain	Elko	75	32
Lime Point	Esmeralda	103	38
Lincoln	White Pine	334	89
Lodi	Nye	241	68
Logan	Clark	37	25
Lone Mountain	Elko	78	33
Lone Mountain	Esmeralda	106	39
Lone Mountain	Lincoln	178	54
Loray	Elko	76	32
Loring	Pershing	282	77
Lovelock	Pershing	282	77
Lucin	Elko	77	33
Lucky Boy	Mineral	202	60
Ludwig	Lyon	192	57
Luning	Mineral	208	61
Luray	Elko	76	32
Lynn	Eureka	122	43
Lyons	Clark	40	26
Maggie Creek	Eureka	123	43
Mammoth	Nye	241	68
Manhattan	Nye	242	68
Marble	Nye	241	68
Marietta	Mineral	209	61
Mason	Lyon	192	57
Mayesville	Lander	157	49
McCoy	Lander	161	50
Medicine Springs	Elko	80	33
Merrimac	Elko	78	33
Midas	Elko	67	31
Mill Canyon	Eureka	117	42
Mill City	Pershing	283	78
Millett	Nye	243	69
Mina	Mineral	209	61
Mineral Basin	Pershing	284	78
Mineral Hill	Eureka	124	43

Name	County	Map No.	Page
Mineral Ridge.....	Esmeralda.....	110	40
Minerva.....	White Pine.....	331	89
Mizpah.....	Elko.....	61	30
Monte Cristo.....	Nye.....	253	71
Montezuma.....	Esmeralda.....	107	40
Morey.....	Nye.....	244	69
Mountain City.....	Elko.....	79	33
Mountain House.....	Douglas.....	47	28
Mountain View.....	Mineral.....	201	60
Mountain Wells.....	Churchill.....	17	22
Mount Grant.....	Mineral.....	199	59
Mount Hope.....	Eureka.....	125	44
Mount Montgomery.....	Mineral.....	196	58
Mount Rose.....	Humboldt.....	138	46
Mount Siegel.....	Douglas.....	46	28
Mount Tenabo.....	Eureka.....	119	42
Muddy Mountains.....	Clark.....	37	25
Mud Springs.....	Elko.....	80	33
Mud Springs.....	Lander.....	160	50
Muncy Creek.....	White Pine.....	316	85
Muttieberry.....	Pershing.....	285	78
National.....	Humboldt.....	136	46
Nelson.....	Clark.....	32	24
Nenzel.....	Pershing.....	289	79
Newark.....	White Pine.....	327	88
New Central.....	Humboldt.....	137	46
New Goldfields.....	Humboldt.....	140	46
New Pass.....	Lander.....	162	50
Nevada.....	White Pine.....	326	88
Nightengale.....	Pershing.....	286	78
Northumberland.....	Nye.....	245	69
North Twin River.....	Nye.....	243	69
Nyala.....	Nye.....	256	72
Oak Springs.....	Nye.....	246	70
O'Briens.....	Nye.....	262	73
Old Gold Mountain.....	Esmeralda.....	41	41
Olinghouse.....	Washoe.....	315	85
Omco.....	Mineral.....	198	59
Oncoota.....	Mineral.....	196	58
Oreana.....	Pershing.....	298	79, 81
Oriental Wash.....	Esmeralda.....	112	41
Oro Pino.....	Pershing.....	295	80
Osecola.....	White Pine.....	328	88
Pahranagat.....	Lincoln.....	176	53
Palisade.....	Eureka.....	127	44
Palmetto.....	Esmeralda.....	108	40
Palmyra.....	Lyon.....	187	56
Pamlico.....	Mineral.....	202	60
Paradise Valley.....	Humboldt.....	138	46

Name	County	Map No.	Page
Patterson.....	Lincoln.....	179	54
Peavine.....	Washoe.....	309	83
Philadelphia.....	Nye.....	220	64
Phonolite.....	Nye.....	222	64
Piermont.....	White Pine.....	329	88
Pilot Mountain.....	Mineral.....	210	62
Pine Grove.....	Mineral.....	204	60
Pine Nut.....	Douglas.....	47	28
Pine Nut Range.....	Lyon.....	.....	56
Pinto.....	Eureka.....	121	42
Pioche.....	Lincoln.....	180	54
Pioneer.....	Nye.....	223	64
Pittsburgh.....	Lander.....	160	50
Placerites.....	Pershing.....	287	78
Pleasant Valley.....	White Pine.....	321	87
Porter.....	Elko.....	55	29
Potosi.....	Clark.....	42	26
Potosi.....	Humboldt.....	139	46
Prebble.....	Humboldt.....	139	46
Prince Royal.....	Pershing.....	276	76
Proctor.....	Elko.....	81	33
Prospect.....	Eureka.....	121	42
Pueblo.....	Humboldt.....	148	48
Pyramid.....	Washoe.....	310	84
Quartz Mountain.....	Churchill.....	4	19
Queens.....	Mineral.....	205	60
Queen Springs.....	White Pine.....	316	85
Rabbit Hole.....	Humboldt.....	145	47
Rabbit Hole.....	Pershing.....	287	78
Ragged Top.....	Pershing.....	271	75
Railroad.....	Elko.....	82	33
Railroad Pass.....	Clark.....	26	23
Railroad Springs.....	Esmeralda.....	109	40
Ramsey.....	Lyon.....	188	56
Rand.....	Mineral.....	195	58
Ravenswood.....	Lander.....	163	50
Rawhide.....	Mineral.....	206	61
Rebel Creek.....	Humboldt.....	140	46
Red Butte.....	Humboldt.....	141	47
Red Canyon.....	Douglas.....	48	28
Red Mountain.....	Lyon.....	189	56
Red Mountain.....	Storey.....	303	82
Red Mountain.....	Esmeralda.....	110	40
Reese River.....	Lander.....	164	51
Regan.....	White Pine.....	321	87
Regent.....	Churchill.....	206	61
Relief.....	Pershing.....	288	78
Republic.....	Nye.....	226	65
Reno.....	Washoe.....	309	83
Reservation.....	Mineral.....	201	60

Name	County	Map No.	Page
Reveille.....	Nye.....	247	70
Rhyolite.....	Nye.....	223	64
Roberts.....	Eureka.....	126	44
Robinson.....	White Pine.....	322	87
Rochester.....	Pershing.....	289	79
Rock Creek.....	Elko.....	83	34
Rockland.....	Mineral.....	204	60
Rocky Canyon.....	Lander.....	151	48
Rosebud.....	Pershing.....	290	79
Round Hole.....	Washoe.....	304	83
Round Mountain.....	Nye.....	248	70
Rowland.....	Elko.....	66	31
Royston.....	Nye.....	249	70
Ruby Hill.....	White Pine.....	.....	85
Ruby Hill.....	Eureka.....	121	42
Ruby Mountain Range.....	Elko.....	.....	34
Ruby Range.....	Elko.....	.....	34
Ruby Valley.....	Elko.....	84	34
Ryan Canyon.....	Mineral.....	207	61
Rye Patch.....	Pershing.....	272	75
Sacramento.....	Pershing.....	291	79
Sacramento.....	White Pine.....	330	89
Safford.....	Eureka.....	127	44
Salmon River.....	Elko.....	55	29
San Antone.....	Nye.....	249	70
San Antonio.....	Nye.....	249	70
Sand Springs.....	Churchill.....	18	22
San Jacinto.....	Pershing.....	292	80
Santa Clara.....	Pershing.....	297	81
Santa Fe.....	Lander.....	159	50
Santa Fe.....	Mineral.....	208	61
Sawtooth.....	Pershing.....	290	79
Schellbourne.....	White Pine.....	316	85
Schell Creek.....	White Pine.....	316	85
Schroeder.....	Eureka.....	123	43
Seossa.....	Pershing.....	293	80
Searchlight.....	Clark.....	38	25
Secret Canyon.....	Eureka.....	121	42
Seven Troughs.....	Pershing.....	294	80
Shady Run.....	Churchill.....	19	22
Sheephead.....	Washoe.....	311	84
Sherman.....	Humboldt.....	142	47
Shon.....	Humboldt.....	143	47
Shoshone.....	White Pine.....	331	89
Shoshone.....	Lander.....	163	50
Siegal.....	White Pine.....	316	85
Sierra.....	Pershing.....	295	80
Silverado.....	Eureka.....	121	42
Silver Bend.....	Nye.....	220	64

Name	County	Map No.	Page
Silverbow.....	Nye.....	250	71
Silver Canyon.....	White Pine.....	316	85
Silver City.....	Lyon.....	190	56
Silver Glance.....	Douglas.....	49	28
Silver Hill.....	Churchill.....	13	21
Silver Horn.....	Lincoln.....	181	55
Silver Lake.....	Douglas.....	48	28
Silver Mountain.....	White Pine.....	316	85
Silver Park.....	Lincoln.....	167	51
Silver Peak.....	Esmeralda.....	110	40
Silver Springs.....	Lincoln.....	.....	51
Silver Star.....	Mineral.....	209	61
Silver Star.....	Storey.....	302	82
Silver Zone.....	Nye.....	236	67
Simon.....	Mineral.....	198	59
Skookum.....	Lander.....	165	51
Sloan.....	Clark.....	39	26
Slumbering Hills.....	Humboldt.....	128	44
Smith Creek.....	Elko.....	84	34
Smoky Valley.....	Lander.....	153	49
Snake.....	White Pine.....	332	89
Sodaville.....	Mineral.....	210	62
Sonoma Mountains.....	Humboldt.....	144	47
Southern Klondyke.....	Esmeralda.....	104	39
South Fairview.....	Churchill.....	20	22
Spanish Belt.....	Nye.....	251	71
Spencer.....	Lander.....	166	51
Spring City.....	Humboldt.....	138	46
Spring Valley.....	Eureka.....	121	42
Spring Valley.....	Pershing.....	296	81
Spruce Mountain.....	Elko.....	85	34
Star.....	Pershing.....	297	81
Stateline.....	Lincoln.....	170	52
Steamboat Springs.....	Washoe.....	312	84
Steptoe.....	White Pine.....	324	88
Stone House.....	Pershing.....	273	76
Stonewall Mountain.....	Nye.....	252	71
Strawberry.....	White Pine.....	327	88
St. Thomas.....	Clark.....	37	25
Success.....	White Pine.....	320	86
Sullivan.....	Ormsby.....	265	74
Sulphide.....	Mineral.....	211	62
Sulphur.....	Humboldt.....	145	47
Summit.....	Elko.....	67	31
Summit.....	Lander.....	159	50
Sunnyside.....	Mineral.....	212	62
Sunset.....	Clark.....	40	26
Sunshine.....	Pershing.....	295	80
Sutor.....	Clark.....	41	26
Sylvania.....	Esmeralda.....	111	41

Name	County	Map No.	Page
Table Mountain	Churchill	21	22
Talapoosa	Lyon	191	57
Taylor	White Pine	333	89
Tecoma	Elko	86	35
Telluride	Nye	232	66
Tem Pinte	Lincoln	182	55
Tenabo	Lander	155	49
Ten Mile	Humboldt	146	47
Terrell	Churchill	12	21
Toana Range	Elko	---	35
Tokop	Esmeralda	112	41
Tolicha	Nye	253	71
Tonopah	Nye	254	71
Toy	Churchill	22	22
Trappmans	Nye	255	72
Trinity	Pershing	298	81
Troy	Nye	256	72
Tule Canyon	Esmeralda	105	39
Tungsten	White Pine	334	89
Tungstonio	White Pine	321	87
Tuscarora	Elko	87	35
Twin River	Nye	257	72
Tybo	Nye	258	72
Union	Nye	259	73
Unionville	Pershing	270	75
Valley View	Elko	---	34
Van Duser	Elko	79	33
Varyville	Humboldt	147	47
Velvet	Pershing	299	81
Vicksburg	Humboldt	148	48
Victorine	Lander	159	50
Vigo	Lincoln	183	55
Vincent	Clark	26	23
Viola	Lincoln	184	55
Virginia City	Storey	302	82
Volcano	Nye	236	67
Voltaire	Ormsby	267	74
Wahmonie	Nye	260	73
Walker Lake	Mineral	213	63
Ward	White Pine	333	89
Warm Creek	Elko	88	35
Warm Springs	Humboldt	148	48
Warm Springs	White Pine	335	89
Washington	Mineral	214	63
Washington	Nye	261	73
Washoe	Washoe	313	84
Washoe Valley	Ormsby	267	74
Wedekind	Washoe	314	85
Weepah	Esmeralda	113	41

Name	County	Map No.	Page
Wellington	Douglas	49	28
Wellington	Nye	262	73
West Comstock	Washoe	307	83
West Divide	Esmeralda	106	39
Westgate	Churchill	23	22
Whiskey Flat	Mineral	215	63
White Cloud	Churchill	24	23
White Horse	Elko	89	36
White Horse	Washoe	315	85
White Mountains	Esmeralda	114	41
White Pine	White Pine	336	89
White Plains	Churchill	7	19
Wild Horse	Pershing	300	82
Willard	Pershing	282	77
Willow Creek	Humboldt	140	46
Willow Creek	Nye	263	73
Willow Point	Humboldt	149	48
Windypah	Esmeralda	99	37
Winnemucca	Humboldt	150	48
Wilson	Mineral	204	60
Wilsons	Nye	264	74
Wonder	Churchill	25	23
Worthington	Lincoln	172	52
Wrights Canyon	Pershing	301	82
Yankee Blade	Lander	164	51
Yellow Pine	Clark	42	26
Yerington	Lyon	192	57

ALPHABETIC LIST OF NONMETALS BY MINERALS

Name	Page
Alum.....	91
Alunite.....	93
Asphalt.....	93
Barite.....	93
Bentonite.....	94
Borates.....	95
Brucite.....	95
Clay.....	96
Coal.....	96
Diatomaceous Earth.....	97
Dolomite.....	98
Dumortierite.....	98
Feldspar.....	99
Fluorspar.....	99
Fuller's Earth.....	100
Granite.....	100
Graphite.....	101
Gypsum.....	101
Limestone.....	102
Magnesite.....	103
Marble.....	104
Mica.....	104
Nitrate.....	105
Oil Shale.....	105
Opal.....	106
Phosphate.....	107
Potash.....	107
Pumice.....	108
Quartz (Silica).....	108
Salt.....	109
Sand, Gravel.....	110
Sandstone.....	110
Slate.....	111
Sodium Compounds.....	111
Stone, Volcanic.....	112
Sulphur.....	113
Tale, Soapstone.....	114
Turquoise.....	114
Variscite.....	115

NEVADA STATE BUREAU OF MINES AND MACKAY SCHOOL OF MINES PUBLICATIONS

An asterisk (*) indicates the bulletin is out of print. Prepayment is required and may be made by postal or express money order, payable to the Nevada State Bureau of Mines, or in cash, exact amount, at sender's risk. Postage stamps are not accepted in payment for publications.

	PRICE
Preliminary Report on the Building Stones of Nevada, by John A. Reid, 1904*.....	
The Ventilating System at the Comstock Mines, Nevada, by George J. Young, 1909*.....	
Fires in Metalliferous Mines, by George J. Young, 1912*.....	
Manganese, by Walter S. Palmer, 1918*.....	
Mining Districts and Mineral Resources of Nevada, by Francis Church Lincoln, 1923.....	\$1.50
Vol. 1, No. 1. Mineral Resources of Southern Nevada, by Jay A. Carpenter, 1929.....	.20
Vol. 22, No. 1. Identification of Nevada's Common Minerals, with Notes on Their Occurrence and Use, by Oliver R. Grawe, 1928—	
With mineral identification chart.....	.50
Without mineral identification chart.....	.25
Vol. 22, No. 2. Dumortierite, by Mackay School of Mines Staff, 1928*.....	
Vol. 24, No. 4. The Underground Geology of the Western Part of the Tonopah Mining District, Nevada, 1930*.....	
Vol. 25, No. 3. Notes on Ore Deposits at Cave Valley, Patterson District, Lincoln County, Nevada, by F. C. Schrader, 1931.....	.20
Vol. 25, No. 4. A Preliminary Survey of the Scossa District, Pershing County, Nevada, by J. C. Jones, A. M. Smith, and Carl Stoddard, 1931.....	.20
Vol. 25, No. 5. Ore Deposits of the Gold Circle Mining District, Elko County, Nevada, by Edward H. Rott, Jr., 1931.....	.20
Vol. 25, No. 6. Bedded Deposits of Manganese Oxides near Las Vegas, Nevada, by D. E. Hewett and B. N. Webber, 1931.....	.20
Vol. 25, No. 7. Cherry Creek (Egan Canyon) District, White Pine County, Nevada, by F. C. Schrader, 1931.....	.25
The Spruce Mountain District in Elko County, Nevada, by F. C. Schrader, 1931.....	
Vol. 26, No. 5. The Mines and Mills of Silver City, Nevada, by A. M. Smith, 1932.....	.20
Vol. 26, No. 6. Metal and Nonmetal Occurrences in Nevada, 1932.....	.50
Vol. 26, No. 7. Nonmetallic Minerals in Nevada, by J. A. Fulton and A. M. Smith, 1932.....	.10
Vol. 26, No. 8. Placer Mining in Nevada, by Alfred Merritt Smith and W. O. Vanderburg, 1932.....	.25
Vol. 26, No. 9. Brucite Deposit, Paradise Range, Nevada. Preliminary Report, by Eugene Callaghan, 1932.....	.25



CARSON CITY, NEVADA
STATE PRINTING OFFICE - - JOE FARNSWORTH, SUPERINTENDENT
1932

REPRINTED BY CENTRAL OFFICE SERVICE
UNIVERSITY OF NEVADA