
ARIZONA HISTORICAL SOCIETY**949 East Second Street
Tucson, AZ 85719****Library and Archives
(520) 617-1157****ahsref@azhs.gov**

MS 1197**Sarle, Clifton James, 1875-1960
Papers, ca. 1920-ca. 1940****DESCRIPTION**

Clifton James Sarle taught geology at the University of Arizona from 1918 to 1924; he also conducted geological surveys reporting on mining and water supplies for owners of properties as well as potential investors. His work was largely in Arizona, although he did some consulting in California, Colorado, New Mexico and Mexico as well. This collection contains Sarle's reports, manuscripts and publications, maps, and photographs (predominantly panoramas) pertaining to the sites he studied. The collection contains a bare minimum of personal papers.

8 boxes, 6 folios, 9.5 linear ft.

ACQUISITION

This collection was donated to the Arizona Historical Society by Muriel Sarle Troy (daughter) in 1983, 1986, and 1995, and by Allan Sarle Troy (grandson) in 2001.

ACCESS

There are no restrictions on access to this collection.

COPYRIGHT

Requests for permission to publish material from this collection should be addressed to the Arizona Historical Society-Tucson, Archives Department.

PROCESSING

The collection was processed by Dena McDuffie in August 2001.

ARRANGEMENT

The collection is arranged topically and divided into six series: 1) Biographical materials; 2) Reports; 3) Manuscripts and Publications; 4) Photographs; 5) Maps and Atlases; and 6) Oversize.

BIOGRAPHICAL NOTES

Clifton James Sarle, geologist, mining engineer, and educator, was born in New Berlin, New York on October 1, 1875. The members of his family, whose descendents arrived in the U.S. on the Mayflower, were educated farmers. His father owned a large dairy farm and was a doctor. Sarle's father welcomed the Onadaga Indians who held ceremonies on the farm; Sarle became interested in

the artifacts surrounding those ceremonies. Then, around the turn of the last century, during the widening and deepening of the Erie Canal, Sarle discovered a suite of shale-dolomite fossils (*erypterids pittfordensis*) in an area just southeast of the city of Rochester. He earned Bachelor's and Master's degrees from University of Rochester in 1902 and 1903, and a Ph.D. from Yale in 1906. Although his father wanted him to become an oil geologist, Sarle was fascinated with paleontology and wanted to be a mining geologist. Father and son fought bitterly over Sarle's choice and it eventually encouraged Sarle's move West.

After graduation from Yale, Sarle taught for a year at New Mexico Institute of Mining and Technology in Socorro. He married Catherine Elizabeth Allan, a teacher, in 1906 in Bernalillo, New Mexico. Following a Niagara Falls honeymoon, Sarle taught briefly at St. Lawrence University in Canton, New York. But the cold weather bothered his joints and the Sarles returned to the West. They had one daughter, Muriel Elizabeth, born in El Paso in 1911 while Sarle was teaching at the Texas State School of Mines and Metallurgy.

In 1918, the Sarles moved to Tucson, Arizona, where he was professor of geology at the University of Arizona until 1924 when he quit to pursue private work as a mining engineer. Sadly, the Depression hit soon after and, although he worked for short periods of time for various government and private entities, Sarle's career was spotty thereafter. Sarle's wife Catherine, who had long suffered from cancer, died in 1934 in Tucson.

Sarle's daughter Muriel and grandson Allan lived close by and spent a great deal of time with him. Allan remembers visiting mining sites with his grandfather, sitting around a campfire while listening to the old-timers tell scary tales of Apache attacks. He remembers his grandfather as a tall, rugged, charismatic figure with a dry sense of humor.

Clifton James Sarle died in Tucson after suffering a heart attack in 1960; he was 85.

SCOPE AND CONTENT NOTE

The papers of Clifton J. Sarle span the period of approximately 1920 to 1940. The papers include reports, publications and photographs documenting Sarle's involvement with mining and geology in Arizona.

Biographical materials in this collection are sparse. It is the archivist's assumption that this is reflective of Sarle himself. Described by his grandson as a "private person," there is very little in the collection to inform the researcher about Sarle's family or his personal life.

Reports and photographs made by Sarle in the course of his work as a mining geologist make up the bulk of this collection. After leaving the University of Arizona in 1924, Sarle supported his family by conducting geological surveys for owners or potential owners of land where they hoped mining deposits would be found. Sarle used a panorama camera to document the areas he studied. These images provide an excellent geological history of many areas of the Southwest.

Publications of Sarle's work are also slim. Most of his later work was in the form of reports; very little of it was actually published. The published works in this collection include three works, all published in New York in the early 1900s, based largely on Sarle's dissertation research. Two unbound, hand-written manuscripts are also included in the collection.

The Maps and Atlases Series contains USGS bound maps as well as numerous hand-drawn maps—made by Sarle and others—defining the sites Sarle studied. Many of the hand-drawn maps are original pencil and/or ink drawings; many are blueprints of the originals. There are duplicates of some of the maps in order to show Sarle's notations as well as the original format. The hand-drawn maps are stored in folios, separate from the remainder of the collection.

The Oversize Series contains Sarle's diplomas from University of Rochester and Yale University. This series is stored in a folio, separate from the remainder of the collection.

SERIES NOTES

Series 1: Biographical Materials. The biographical materials and personal papers of Clifton Sarle are quite sparse; included are genealogical charts created by Sarle's grandson, Allan Sarle Troy.

Series 2: Reports. Sarle conducted geological surveys for owners and potential investors of properties, reporting on geology and water supplies. These reports are arranged in the following categories: 1) Mines in Arizona; 2) Mines outside Arizona; and 3) Water Supplies in Arizona. Within those categories, the reports are arranged alphabetically by county; within each county, they are arranged chronologically.

Series 3: Manuscripts and Publications. There are two unbound manuscripts in this series. Both are severely water-stained, wrinkled, and messy. Some of the text is typewritten, some is scribbled in pencil. Although some of the pages are numbered, many are not and the text is, in many instances, illegible and/or incomplete. Because of this, these papers have been left in the order in which they were found. The publications are nicely bound, academic copies of studies; they are arranged chronologically.

Series 4: Photographs. The photographs in this collection are predominantly panoramic views of landscapes (mostly mountains), roughly 5x14 inches, made by Sarle in the course of his geological studies of potential mining sites. The photographs are arranged topically. [*Note: The bracketed comments on the backs of panoramas identified with the initials T.K. were made by Ted Knipe; the bracketed comments on the backs of panoramas identified with the initials A.H. were made by Alden Hayes*].

Series 5: Maps and Atlases. Five oversize folios contain hand-drawn maps and blueprints made by Sarle and others. Some duplication of these maps occurs because different copies contain notations (presumably Sarle's) that may be helpful to the researcher.

Series 6: Oversize. One folio contains Sarle's diplomas from University of Rochester and Yale University.

BOX & FOLDER LIST

Box 1, F. 1-25

Series 1: Biographical Materials

- F. 1 Biographical information (see also Oversize)
- F. 2 Correspondence, 1916-1929
- F. 3 News clippings, n.d.

Series 2: Reports

Mines in Arizona

Cochise County

- F. 4 "Report on Black Diamond Mine, December 15, 1936"; and hand-drawn map of claims, 1913-1947
- F. 5 "Ainsworth Copper Company Prospectus" (previously King Copper Company) written by unknown author; and "Geological report on the properties of the King Copper Company located near Rodeo, Cochise County, Arizona" written by C.W. Botsford, 1919-1924
- F. 6 "The San Juan Mines" written by J. Gordon; and maps, 1923-1928
- F. 7 "Report on the Mellgren Mines, Tombstone Mining District, Cochise County, Arizona" written by Sarle with contributions by V.G. Mellgren, 1928; correspondence dated 1934; and maps (See Box 7, F. 112)
- F. 8 "Report on Alpha Copper Mining Company" written by W. Tovote; correspondence, 1929-1933
- F. 9 "Geologic reconnaissance of the Lucky Strike-Home Scheelite property in the Cochise Mining District, Cochise County, Arizona" written by Sarle, 1929-1933
- F. 9a "The Conlig-Tungsten Mines" written by J. Gordon, Tombstone, Arizona, 1930
- F. 10 "Report from a reconnaissance of the Leadville Group of Lode Mining Claims, Cochise County, Arizona" written by Sarle; Prospectus of the Holmes Copper Company; correspondence dated 1935-1936
- F. 11 "Geologic reconnaissance of the Arizona-Klondike group of Gold Lode mining claims and contiguous holdings, Dos Cabezas Mining District, Cochise County, Arizona" written by Sarle, 1948

Gila County

- F. 12 "Report of C.E. Blount, Mineral Creek Consolidated Copper Company"; and Prospectus, n.d.

Graham County

- F. 13 Letter report regarding the "Brushey-Group" of eight unpatented, lode, mining claims in Aravaipa Mining District, Graham County, Arizona written by Sarle, 1948

Greenlee County

- F. 14 Letter report regarding the Mammoth Consolation, Last Chance, Exposition and Native Copper Groups written by A.C. James; Report of the Bureau of Mines to Hon. Harold L. Ickes, Secretary of the Interior, Last Chance, Pinal County, Arizona; correspondence; and maps, 1924-1943

Maricopa County

- F. 15 "Reconnaissance report on the Pump-Gold and United-Gold Properties located in the Big Horn Mountains, Maricopa County, Ariz." written by Sarle, 1925
- F. 16 "Report of the Ballad Mine" written by C.E. Blount, 1928
- F. 17 Report written by J.C. Anderson on Christmann Barite Property; and correspondence dated 1936

Mojave County

- F. 18 Letter report written by R.C. Jacobson; Letter report written by M.S. Rogers on Silverado Group mining claims; correspondence; ore testing reports and assay certificates; and hand-drawn maps, 1926-1929
- F. 19 "Report on the Burro Creek Mine" written by C.E. Blount; Sarle's handwritten notes and map on the mine, n.d.
- F. 20 Maps of the Standard Minerals property, n.d.

Navajo County

- F. 21 "Report of Investigations, Apache Iron Deposit, Navajo County, Arizona," written by L.A. Stewart, 1947

Pima County

- F. 22 Report on Old Hat Mine written by W. Foster; report written by J.W. Daily; "Supplemental information concerning the syndicated properties, with outline of plans for their development and operating costs and profits," written by Sarle and J.W.; and subscription agreement between Sarle and J.W. Daily, 1903-1925
- F. 23 "Notes on the geology and ore deposits of the San Xavier-Mineral Hill District, Pima County, Arizona" written by J.C. Anderson; "Field Trip #4 (1921) class in physical geology-U of A, Mineral Hill-San Xavier Mining District-Sierrita uplift"; "Report on the San Xavier Mine, Pima County, Arizona," author unknown; "Report on the property of Swastika Copper and Silver Mining Company, Olive Camp, Pima County, Arizona" written by J.C. Anderson; and maps, 1920-1927
- F. 24 "Report on the property at the Helmet Peak Mining and Milling District, Pima Mining District, Pima County, Arizona" written by Sarle; and maps, 1926
- F. 25 "Report on the Catalina Mine, Old Hat Mining District, Pima County, Arizona" written by Sarle; and maps, 1928

Box 2, F. 26-51

- F. 26 "Geologic reconnaissance of the Vulcan Mining Property, Pima Mining District, Pima County, Arizona" written by Sarle (2 copies); "Report on the Vulcan Mine, Tucson, Pima County, Arizona" written by W.M. Snow; and maps, 1928
- F. 27 Letter report to the Palo Verde Mining Group written by Sarle, 1929
- F. 28 "Report on the Silver Hill Mines Company's property" and "Silver Hill Mine, Waterman Mountains, Silver Bell Mining District" both written by Sarle; photographs; maps, 1929-1945 (See Box 6, F. 96)
- F. 29 "Pre-summary of the results of an examination of the Old Yuma Mine" written by Sarle; panoramic photographs; maps, 1930 (See Box 7, F. 112)
- F. 30 Letter report to the Dove Group written by Sarle, 1934
- F. 31 "Report of a reconnaissance of the New Year's Eve Lode claims" and letter report on New Year's Eve Mine both written by Sarle; and maps, 1939 (See Box 7, F. 112)
- F. 32 "The Amargosa Group of Molybdenite copper lode claims, Pima Mining District," written by Sarle, 1942
- F. 33 "Notes from a geologic reconnaissance of the Pinacal-Group of Gold-Silver, lode mining claims, Baboquivari Mining District" written by Sarle; correspondence; maps; panoramic photograph, 1949 (See Box 7, F. 112)
- F. 34 "Reconnaissance report on the properties of the El Cajon Mines Company, Rincon Mining District, Pima County, Ariz." written by Sarle, n.d.
- F. 35 "Engineers report on the Lone Cabin Group of claims" written by B.C. Granville, n.d.
- F. 36 "The red carbonate group of mines" author unknown; and maps, n.d.

Pinal County

- F. 37 "Bunker Hill Mining Property," author unknown; "Report on property of Bunker Hill Copper Company" written by R.W. Hollis; "Report on Bunker Hill Mine" written by J.A. Poindexter; "Bunker Hill Copper Company-January 1, 1925," written by Bunker Hill Copper Company; "Report on the Bunker Hill Copper Company" written by G.G. Wald (2 copies), 1919-1925
- F. 38 "Copper Giant Exploration (Calumet and Arizona Mining Company)" written by Sarle; panoramic photographs, 1926 (See Box 7, F. 112)
- F. 39 "Report on the Bose group of mining claims, Old Hat Mining District, Pinal County, Arizona," author unknown, n.d.

Santa Cruz County

- F. 40 "Report of examination of Tres de Mayo Group of mines in the Palmetto Mining District, situated in Santa Cruz County, Arizona, 1919
- F. 41 "Geological report on the Montana and Rough and Ready Mining Properties, Santa Cruz County, Arizona" written by Sarle and drawings, 1927
- F. 42 "Report on Gold Hill mining claims in Oro Blanco Mining District, Santa Cruz County, Arizona" written by E.D. Smith; agreement for sale between Rita M. Sheehy and Elzo D. Smith, 1935

Yavapai County

- F. 43 "Owner's description of the Copper Dyke Group of copper mines" unknown author, 1929
- F. 44 "Report on the Oro Grande Consolidated Mines" written by J.C. Bray, 1931
- F. 45 "Report of the Diamond Joe Mine, Wickenburg, Arizona" written by W.B. Gohring; agreement and option to purchase between Nell Koyk and Diamond Joe Mining Company and Ida Craven and Raymond Dick; and correspondence, 1934-1935
- F. 46 "Advanced information concerning large molybdenite occurrence in Arizona" written by Sarle; information sheet about Loma Prieta Group; maps; panoramic photographs, 1935 (See Box 7, F. 112)
- F. 47 Silver-Lead Property: "Silver-lead property, large tonnage developed—fine modern mill and power-plant (a summarization written by Sarle)," 1935 (See Box 7, F. 112)
- F. 48 "Owner's description of Fairview and Fairview Extension gold mines" author unknown; letterhead for Ed. Block, n.d.
- F. 49 "Reports on the First Home Group of mining claims, Big Bug District, Yavapai County, Arizona" written by E.E. Wann; "The First Home Group of Mines" written by H. Blauvelt, n.d.
- F. 50 "Report on the Telluride mining property, Kirkland, Yavapai County, Arizona" written by G.P. Henderson, n.d.

Yuma County

- F. 51 Letter report regarding mining property in Yuma County, Arizona, written by H. McDaniel, 1938

Box 3, F. 52-64

Mines outside Arizona

California

- F. 52 "Geology of the Ashford Golden Treasure Mines: Black Mountains, Eastern Inyo County, California" written by Sarle, 1924
- F. 53 "Bonanza Mines Report" written by A.W. Hollingsworth, 1924
- F. 54 "Geologic report on the Taylor Borax lease, Shoshone, Inyo Co., California" written by Sarle, 1924

Colorado

- F. 55 "Preliminary report on Fluorspar properties, El Paso County, Colorado" written by Kinsley; and map, 1920

Mexico

- F. 56 Letter report regarding the Ures Mining District, State of Sonora, Mexico written by J.M. Libbey, 1929

New Mexico

- F. 57 "Report on the property of the Bonney Mining Company, Lordsburg, New Mexico" written by J.P. Porteus; "Notes on the Bonney Mine" written by M.M. Carpenter; letter report written by Sarle; panoramic photographs of the property; and correspondence, 1919-1928

Water Supplies in Arizona

Maricopa County

- F. 58 "Notes covering some possible sources for ground-water—found in the drainage basin of the Agua Fria River—in close proximity and tributary to Pleasant Lake Reservoir," report written by Sarle; maps; correspondence; and panoramic photographs (See photographs in Box 5, F. 86 and F. 87; numbers on the back of each image refer to numbers listed in report), 1936

Navajo County

- F. 59 "Report of the Ground Waters of that portion of the Territory of the Aztec Land and Cattle Company, lying south of Joseph City in Navajo County, Arizona," report written by Sarle, n.d.

Series 3: Manuscripts and Publications

Manuscripts

- F. 60 "The Medina formation and fauna of New York" written by Sarle, n.d.
- F. 61 "Study of Medina fossils" written by Sarle, n.d.

Publications

- F. 62 "A new Eurypterid fauna from the base of the salina of Western New York," written by Clifton J. Sarle, reprinted from *Report of the New York State Paleontologist 1902*, by University of the State of New York in 1903
- F. 63 "Economic geology of Monroe County and contiguous territory," written by Clifton J. Sarle, reprinted from the *22d Report of the State Geologist 1902*, by University of the State of New York in 1904
- F. 64 "Arthropycus and Dædalus of burrow origin: Preliminary note on the nature of Taonurus," written by Clifton J. Sarle, *Proceedings of the Rochester Academy of Science*, Vol. 4, pp. 203-214, published by the Society, 1906 (2 copies)

Box 4, F. 65-77

Series 4: Photographs

Portraits

- F. 65 Sarle family [Note: In addition to photographs, this folder includes photocopies of some images that are for reference only. Originals of these images are not owned by AHS]

Places in Arizona

- F. 66 Ajo (road to)
F. 67-71 Chiricahua Mountains
F. 72 Coyote Mountains
F. 73-77 Dos Cabezas Mountains

Box 5, F. 78-93

Places in Arizona, Continued

- F. 78-80 Dos Cabezas Mountains
F. 81 Galiuro Mountains
F. 82 Huachuca Mountains
F. 83 Little Dragoon Mountains-Texas Canyon
F. 84 Northern Arizona
F. 85 Old Yuma Mine
F. 86-87 Pleasant Lake-Maricopa County (See also Box 3, F. 58: "Notes covering some possible sources for ground-water—found in the drainage basin of the Agua Fria River—in close proximity and tributary to Pleasant Lake Reservoir," report written by Sarle [Numbers listed in report refer to numbers on the back of each photo in F. 86 and 87]), 1936
F. 88 San Pedro River
F. 89 San Simon Valley
F. 90-93 Santa Catalina Mountains

Box 6, F. 94-106

Places in Arizona, Continued

- F. 94 Santa Cruz Valley
F. 95 Santa Rita Mountains
F. 96 Silver Hills Mines Company (See Box 2, F. 28)
F. 97 Steins Pass
F. 98 Sulfur Springs Valley (Dos Cabezas Mountains—background)
F. 99 Swisshelm's—east side
F. 100 Tortolita Mountains
F. 101 Tucson, Arizona
F. 102 Tucson Mountains
F. 103-106 Unidentified Mountains

Box 7, F. 107-114

Places in Arizona, Continued

- F. 107-109 Whetstone Mountains

Places outside Arizona

- F. 110 New Mexico
F. 111 Rochester, New York

Subjects

- F. 112 Mines (See Box 1, F. 7; see Box 2, F. 29; see Box 2, F. 31; see Box 2, F. 33; see Box 2, F. 38; see Box 2, F. 46; see Box 2, F. 47)
F. 113 Native American Ruins
F. 114 Tent Camps

Box 8

Series 5: Maps and Atlases

Atlases in Arizona, bound

- Geologic Atlas of the United States, Bisbee Folio, Arizona, 1904
- Geologic Atlas of the United States, Bisbee Folio, Arizona, by F.L. Ransome, 1914
- Geologic Atlas of the United States, Bradshaw Mountains Folio, Arizona, 1905
- Geologic Atlas of the United States, Clifton Folio, Arizona, 1905
- Geologic Atlas of the United States, Globe Folio, Arizona, 1904

Atlases outside Arizona, bound

- Geologic Atlas of the United States, La Plata Folio, Colorado, 1899
- Geologic Atlas of the United States, Telluride Folio, Colorado, 1899
- Geologic Atlas of the United States, Deming Folio, New Mexico, 1917
- USGS Atlas to Accompany Monograph XXXI on the Geology of the Aspen District, Colorado, by Josiah Edward Spurr, 1898

Maps, unbound (Located on Level A Oversized Area)

Folio 1: Arizona (Cochise-Navajo counties) – hand-drawn maps and blueprints

Cochise County

- A - Conlig-Tungsten Group of Tungsten Mines, Whetstone Mining District, 1917
Plan of Workings, Side Show & Valentine Claims, San Juan Group,
Tombstone Mining District, 1926
- D - San Juan Mines, 1928
- E - Assay Plan Main Workings of San Juan Mines, Tombstone Mining District,
1930
- F - Arizona-Klondike Group-Dos Cabezas Mining District, 1947
- G - Topographic and Geological Claim Map of Arizona Klondike Gold Lode
Mining Camp, 1948
- H - Aerial Geology Tombstone Mountains Enlarged from Geological Map-State
Arizona, n.d.
- I - Dos Cabezas Mines, n.d.
- J - Mines in Dos Cabezas Area, n.d.
- K - John Lions & Kelsie Hills, n.d.
- L - Sketch Map of Mine Claims near Charleston, Tombstone Mining District, n.d

Graham County

- M - Arizona Land District Aravaipa Mining District Graham County, Arizona, 1944;
- N - Map of a Group of Mining Claims Located in Aravaipa Mining District,
Graham County, Arizona, n.d.

Folio 2: Arizona (Pima County) – hand-drawn maps and blueprints

Pima County (Located on Level A Oversized Shelves)

- A - Coyote Mountains Mines, 1923
- B - Map of Copper Properties Proposed to Consolidate Under Security Mines
Syndicate, Old Hat Mining District, 1925
- C - Map Showing Property of Allison Mining Co, 1926
- D - Helmet Peak Mines: Property of Helmet Peak Mining and Milling Co.;
Geologic Sketch Map of Helmet Peak Mining & Milling Co.; (2) Geologic Map
Showing Development of Helmet Peak Mining and Milling Co.; Elevation

- Normal to Strike of Shear Zone; Assay Plan of Developed Ore Deposits; Assay Plan of 250 ft. Level; Showing Development as of July 1, 1927; (10) Miscellaneous sketches/maps/notes about the mine; all 1927
- G - Old Yuma Mines: (6) Map of the Old Yuma Group of Mines; Assay Plan; Underground Workings, all 1930
- H - (4) Betty Lee Shaft, 1931
- I - Quijotoa Placers, 1935
- J - New Year's Eve Mine: (2) No. 1 Reconnaissance Map of the New Year's Eve Lode Claims; (2) Map of New Year's Eve Mine-Workings except Inner, Upper-Levels; and No. 3 Assay Map of Workings in Quartz-Displacement in the New Year's Eve Mine, all 1939
- K - (2) Sketch Maps of "St Louis" Mine Shaft...Greaterville, Arizona, 1943
Silver Hill Mine: (7) Claim and Areal Geologic Map; Vertical Cross Section through Allison Workings; (3) Assay Plan of the Silver Hill Shaft; Silver Hill Mine;
(2) Central Fault-Fissure, or Vein System and Position of Development Tunnel, 1929-1945
- M - Arizona Copper Bell Mines Co., 1945

Folio 3: Arizona (Pinal-Yavapai counties) – hand-drawn maps and blueprints (Located on Level A Oversize Shelves)

Pinal County

- A - Copper Giant and Associated Group of Mining Claims of Copper Creek Mining District: Claim Map, Survey No. 3118, 1930; Assay Map Copper Giant Explorations Globe Mine, n.d.; (2) Assay Map Copper Giant Explorations Copper Prince Mine, 95 foot level, n.d.; (2) Assay Map Copper Giant Explorations Copper Prince Mine, 200 foot scale, n.d.
- B - Mammoth Mine

Santa Cruz County

- C - Tres de Mayo Group of Mines: (2) Plan & Survey
- D - (5) Rough & Ready and Montana Groups and Idaho Groups

Yavapai County

- E - Golden Aster Mines, 1929
- F - (2) Westerner Vein; Map of Mining Property Belonging to Westerner Gold-Lead Mines, 1931
- G - (2) Advanced Information on Large Molybdenite Property, n.d.

Yuma County

- H - (2) San Luis Mines, Inc.

Folio 4: Outside Arizona – hand-drawn maps and blueprints (Located on Level A Oversize Shelves)

New Mexico

- A - Pacific Copper Co, Virginia Mining District, Hidalgo County: Map of the Workings of the Pacific Copper Co.; (2) Stereogram Showing Relation of Vein System to Proposed Cross-cut from #3 Shaft; (2) Property of the Pacific Copper Co.; Showing Portion of Vein System Adjacent to #3 Shaft & Position of Proposed Alternative Cross-cuts "A" and "B"; Vertical Projection of No. 4 Shaft and Workings; (2) Sketch Map of Virginia Mining District, Grant County

(2) Bonney Mining Company, Virginia Mining District, Lordsburg: Sur. No. 1591; Assay and Ore Estimate, 1927; Vertical Projection and Cross-sections, 1919; Sur. No. 1913, Manilla Group, Virginia Mining District, Hidalgo County Plat of the Claim . . . known as the Chance Mine, Virginia Mining District, Hidalgo County, 1925
Hand-drawn topo map of portion of the state

Mexico

B - Bosquejo Geologico del e. de Sonora

Folio 5: Unidentified & Miscellaneous – hand-drawn maps and blueprints (Located on Level A Oversize shelves)

Map of Sterling Group of Mining Claims, 1922
(2) Gold Eagle-and-Old Fort Group of Mining Claims, n.d.
Windsor Claim: Windsor Ore Shoot; Ore Chart of Windsor Claim; (2) 200 Foot Level
M.A. 0156, Arizona Diagram Showing "Arrow Head No 2" Placer Claim
Dark Horse Group
Exterior Lines Mercuria Claims
8 Sheets of Information on Geology
(4) Unidentified
Southern Pacific Lines Common Standard Distance Warning Sign Specs

Series 6: Oversize (Located on Level A Oversize shelves)

Folio 6: Diplomas awarded to Clifton J. Sarle: Bachelor's degree, University of Rochester, New York, 1902; Master's degree, University of Rochester, New York, 1903; Doctor of Philosophy, Yale University, New Haven, Connecticut, 1906.