The STATE HISTORICAL SOCIETY of MISSOURI

R0549  Lynton, Edward Dale, 1890-1977
Papers, 1916-1955
195 folders (three cubic feet)

This collection is available at The State Historical Society of Missouri. If you would like more information, please contact us at shsresearch@umsystem.edu.

DESCRIPTION

These are reports, maps, and other papers written and collected by Edward Dale Lynton (1890-1977), a mining engineer and geologist. They deal mostly with petroleum exploration in the United States, although there are also data concerning mineral exploration and exploitation in North Africa, South America, and Europe. Lynton was an early proponent of magnetometry in the search for mineral deposits, and these papers include results of tests in California, Texas, Wyoming, and Venezuela.

Edward Dale “Ted” Lynton was born in New York, New York, on 9 May 1890. He attended the Missouri School of Mines in Rolla, graduating with a B.S. in Mining Engineering in 1912. He was awarded an E.M. degree from the same school in 1915. During World War I he served as an officer in the U.S. Navy. He then began a career in the petroleum business in California. After World War II he became an international consultant in petroleum and mining engineering. These papers represent both stages of his long career. In 1968 Lynton donated these papers to the Geology Department of the University of Missouri-Rolla (formerly the Missouri School of Mines). Ted Lynton died on 20 December 1977 in Texas. In 1994 these materials were transferred to the Western Historical Manuscript Collection-Rolla.

The Lynton Papers contain miscellaneous reports, maps, articles, and data accumulated by E. D. Lynton during his professional career. The arrangement follows that provided at the time of their original donation to the University of Missouri. The materials are organized by state, region and country (see the Folder Inventory). Of particular interest are reports from North Africa (Algeria, Morocco, and Tunisia) prior to and during World War II, and early experiments using magnetometers to indicate the presence of underground mineral deposits.

FOLDER INVENTORY

Folders 1-23: Reports on Various Foreign Countries (1920-1953)

01 Bou Soufa copper mine and Oued El Kebir lead-zinc deposit, Algeria; November 14-22, 1952.
02 Reconnaissance for oil in the Queen Charlotte Islands of British Columbia; September 1920; with maps of Queen Charlotte Islands.
03 Opérations de prospection, de forage et d’exploration sur les chantiers Francais; 1946-1948.
04 English translation of above report.
05 Mayo-Darle Mine, French Camerouns, January-February 1953.
06 Preussische-Berwerks-Mechernich (Eigel) lead mine, Germany; January 8, 1951.
07 Schallenberg lead-zinc mine, Steinbach, Germany; January 31, 1952.
08 Azegour molybdenum mine, Atlas Mountains, Morocco, May 1943, with maps.
09 Oil possibilities of French north Africa: Morocco, Algeria and Tunisia; April 1943; with maps.
11 Ribeira and Paredes mines, Portugal; November 1951.
12 Eight mines in northern Portugal; The Atlantica Company; June 1952.
13 Argemala mine, Alpedrinha, Portugal; June 1952.
14 Seven Portuguese mines; September 1952.
15 Minas da Bejanca, Portugal; July 1953.
16 Minerales-Compostela Company, La Coruna, Spain; September 1952.
17 Minera Vulcano S.A., Berbes (Asturias), Spain; May 1953.
18 North Africa/Algeria, by Frank Reeves; 1937.
19 North Africa/French Morocco, by Frank Reeves; 1937.
20 North Africa/Tunisia, by Frank Reeves; 1937.
21 North Africa/Tunisia, by H. Schoeller; 1943.
22 Notice sur les mines de Pechelbronn; 1937 (in French).
23 Mining district at Vences, Verin, District of Orense, Galicia, Spain, by Arnold H. Miller; 1951.

**Folders 24-62: Reports on Magnetometers – California, 1827-1931**

24 Angiola district, San Joaquin Valley (and extensions), September 1928-September 1930.
25 Antelope Valley, west of Lost Hills, Kern County; March 1930.
26 Bakersfield, Kern County; March 1930.
27 Bakersfield-Delano area, Kern County; January 1928.
28 Buttonwillow, Kern County; June 1927.
29 Buttonwillow area, Kern County; February 1931.
30 Buttonwillow-Elk Hills area, Kern County; February-April 1931.
31 Carbona area, San Joaquin County; July 1930.
32 Coalinga area, Fresno County; June 1930.
33 Coalinga southeast, Fresno County; July 1930.
34 Comanche Point, Kern County; August 1928.
35 Dunnigan Hills area, Sacramento Valley; April 1931.
36 Edison area, Kern County; August 1929.
37 Elwood-Santa Barbara, Santa Barbara County; February 1929.
38 Hanford-Visalia area, Tulare and Kings counties, April 1930.
39 Inglewood Quadrangle, Los Angeles County; December 1928.
40 Kerman area, Madera and Fresno counties; September 1929.
41 Kern River/Poso Creek, Kern County; September 1927.
42 Kettleman Hills, Kings County; May 1929.
43 King County southeast, Monery and San Benito counties; February-March 1927.
44 Lost Hills/South Dome area, Kern County; October 1930.
45 Lower Ojai Valley, Ventura County; May 1930.
46 Manhattan Beach/El Segundo, Los Angeles County; April 1928.
47 Puente area. Los Angeles County; February 1931.
48 Richfield area, Orange County; August 1928.
49 Richfield area southeast, Orange County; December 1929.
50 San Fernando Valley, Los Angeles County; December 1930.
51 Saticoy, Ventura County; March 1929.
52 Shafter/Old River, Kern County; May 1929.
53 Tipton/Terra Bella area, Tulare County; October 1930.
54 Tulare Lake Basin area, Kings County; October 1930.
55 Ventura, Ventura County; May 1928.
56 Ventura progress report, Ventura County; April 1928.
57 Ventura/Oxnard, Ventura County; August 1929.
58 Ventura basin area, Ventura County; October 1930.
59 Watsonville, Santa Cruz County; November 1929.
60 Rio Vista area, Solano County; February 1931.
61 Weedpatch area, Kern County; December 1930.
62 Wheeler Ridge area, Kern County; February 1931.

Folders 63-78: Articles and miscellaneous papers

63 Translation by EDL of article by M. W. Bruderer, “Geological Description of the Moroccan Oil Deposits in the Historical Order of Their Discovery.”
64 Edward D. Lynton, “Two Years in France,” The Petroleum Engineer (October 1948).
66 Map of Kansas, 1921.
67 Miscellaneous charts and photographic negatives in re Languedoc (France).
69 “Anna Nevada.” (Program for a dance performance in Algeria).
70 Olaf P. Jenkins, “Geological Progress of the California State Division of Mines, 1930 to 1940.”
73 USGS topographic map (combined), Guadalupe and Lompoc quadrangles, California.
74 Report on mining in French Morocco, with maps and charts.
75 Report of E. O. Buck, Chairman of Conroe Engineers Committee, Association of Conroe Operators, Land and Royalty Owners, Houston, Tex., 1 November 1933.
76 Program, Tenth Annual Meeting of the South Texas Section of the American Association of Petroleum Geologists, Corpus Christi, Tex., 21-22 October 1938.
77 Road Log of Field Trip, South Texas Geological Society, Annual Meeting, 22 October 1938.
78 Houston Geological Society, Field Trip, 10-11 December 1938 (road log, with map).

Folders 79-84: Reports on Magnetometers -- Venezuela, South America, 1929

79 La Concepcion and La Paz oil fields; May 1929.
80 Larrain No. 3 Concession; May 1929.
81 C.P.E. No. 1 Concession; August 1929.
82 C.P.E. No. 2 Concession; November 1929.
83 Larrain “B” Concession, District of Perija, December 1929
84 Districts of Maracaibo, Urdaneta, and Perija, State of Zuila; December 1929.

Folders: 85-92 Miscellaneous Reports

85 Reports on bleaching earth, 1916, 1920, 1921, 1922; with map of Smoke Creek Desert, Nev.
86 Sulphur reports -- Texas and Louisiana, May 20, 1931.
87 “Time in its Flight” (fossil records and timetables).
88 Geological reports: (a) Simi Valley, Calif., 1920 and (b) Linn County, Ore., 1922.
89 Geological reports: California and Nevada, 1921-1922.
90 Last Chance Mountains sulphur region, Inyo County, Calif., June 1932.
Folders 93-103 Reports on Magnetometers – Texas, 1928-1932

93 Coastal plain, southeast Texas; March 1931.
94 Fort Stockton, Pecos County, Tex.; June-July 1929.
95 Part of north central plains, Texas; January 1931.
96 Pecos Valley area, Pecos County, Tex. (Block 10, H&GN RR Co.); Dec 1929-Jan 1930.
97 Reeves and Loving counties, Texas; February 1930-January 1932.
98 Taylor-Link area, Pecos County, Tex., August-September 1929.
99 Throckmorton, Baylor, Knox, and Haskell counties, Texas; January 1930.
100 Southeastern Ward County, Tex.; November 1929.
101 Westbrook field and Mitchell County, Tex.; April 1930.
102 Wilbarger and Foard counties, Texas; August 1929.
103 Yates field, Pecos County, Tex., July 1928.


104 Southwestern Wyoming; December 1929.

Folders 105-108 Geological Reports by Anthony Folger, geologist, 1923.

105 East-central Texas, by Anthony Folger; November 10, 1923.
106 Central Texas: Major periods of folding, by Anthony Folger; January 10, 1923.
107 Extreme north-central Texas, by Anthony Folger; January 20, 1923.
108 Geological section, Palo Pinto County to Howard County, Tex., Anthony Folger; July 25, 1923.

Folders 109-116: Reports on Magnetometers -- California -- Reports on preliminary research on vertical and horizontal Askania-Werke magnetometers, 1927-1930

109 Walnut Creek area; February 1927.
110 Magnetometer experiments, California, on known geological structures; May 1927.
111 Magnetic surveying methods; 1928.
112 Magnetometer calibration test with ice; May 1929.
113 Method of calibrating vertical magnetometer without calibrating bar; October 1929.
114 Coordinate and position correction chart for magnetometer surveys in California; Nov. 1929.
115 Galvanometric calibration of magnetometers; January 1930.
116 Magnetometer survey: Walnut Creek area; January 1927 (first research work in field).

Folders 117-124: Reports on Correlations -- California, 1930-1941

117 Magnetic core orientation and magnetic susceptibility, electrical conductivity and chemical analysis correlation methods for oil wells; February 1930.
118 Saticoy-Citrus #4 and Saticoy-Citrus #5 [correlated] with Motalvo #1 well; March 1930.
119 Magnetic, electrical and chemical well correlations of the miocene; Huntington Beach area, Orange County; 24 June 1930.
120 Magnetic, electrical and chemical well coorelations, Richfield area, Orange County, August 1930.
121 Magnetic susceptibility and chemical analysis correlations of Thomson #8, Huntington Beach, and Irvine #1, Newport; January 1931.
122 The Lane-Wells perforator and Lane-Wells magnetic fishing tool; October 9, 1933.
123 Validity and scope of Harth patent (Bentonite in drilling mud); June 1941. Field work by E. D. Lynton. A treatise on drilling mud.
124 Magnetic core orientation and magnetic susceptibility, etc.; February 1930.
Folders 125-167: Maps and Charts by state and region

**Colorado.**
125  Black Mesa, Ariz., to Dolores River, Colo.; cross-section C-C’.
126  Black Mesa, Ariz., to Dolores River, Colo.; cross-section D-D’ and E-E’.
127  Ute Peak anticline, Montezuma County, Colo.
128  Ute Peak anticline, Montezuma County, Colo.
129  Folding in SW Colorado (1919).
130  Correlation, SW Colorado to NW New Mexico.

**Nevada.**
131  North of Reno; field map.

**Utah**
132  Stratigraphy of Utah.
133  Anticlines -- San Juan oil field.
134  San Juan uplift; cross-section B-B’.
135  Elk Mountain uplift.

**Alberta**
136  Columnar sections (chart).

**Texas**
137  North-central plains magnetometer survey; magnetic contours over subsurface; contours on top of San Andres formation; 1928-1930.
138  Contours of San Andreas lime in north-central plains, \ by Crandall, in connection with magnetometer survey; 1928-1930.
139  Possible oil areas based on magnetometer and subsurface surveys; 1930.
140  North-central plains; possible oil areas based on magnetometer and subsurface surveys; 1930.
141  Western Texas and adjoining New Mexico and Mexico.
142  Childress and eastern Hall counties; possible oil areas based on magnetometer and subsurface surveys; 1930.
143  Childress and eastern Hall counties; possible oil areas based on magnetometer and subsurface surveys; 1930.
144  Mitchell County; subsurface on magnetometer survey; April 1930.
145  Shackelford County; Sedwick Lst. contours; February-March 1923.
146  Geologic map of SE front range of Trans-Pecos (from Bulletin #1753).
148  Geology of San Antonio area; 1928.

**California.**
149  Tertiary of the west coast (chart).
150  Core orientation, Kettleman Hills; sample no. 3; February 19, 1930.
151  Perkins and Moorpark anticlines; 1920.
152  Active wildcats; Ventura and adjacent counties; ca. 1925.
153  Santa Paula/Oxnard area, Ventura Co.; faults by magnetometer survey interpretation; 1926-27.
154  Las Posas area, Ventura County; faults; 1928-1930.
155  Vertical magnetometer survey; San Fernando Valley area; Owensmouth to Sunland, Los Angeles County; 1930.
156 Vertical magnetometer survey; Las Posas and Camarillo, Ventura County; subsurface basal outlined; 1927-1928.
157 Somis area, Ventura County; vertical magnetometer survey.
158 Inyo County sulphur deposit and amended location of claims; March 1932.
159 Vertical magnetometer survey; Kettleman Hills, Kings and Fresno counties; February 1929.
160 Kettleman Hills structure; February 1929.
161 Vertical magnetometer survey; Los Angeles basin; 1929-1930.
162 Kern County; Kern River/Mount Posa area; vertical magnetometer survey; September 1927.

Morocco

163 Berguent sheet; Casablanca; 1943-1944.
164 El Kansera area topographical map; 1943-1944.
165 Topographical map of port of El Kansera (enlarged); 1943-1944.
166 Roads of Morroco; 1943-1944.
167 Sidi Slimane area; 1943-1944.

Folders 168-195: Miscellaneous Maps and Charts

168 Vertical magnetometer survey; north-central plains of Texas; 1928-1930.
169 Kettleman Hills oil field, California.
170 Geologic map; area SE of Lost Hills, including East Coalinga, north, and middle Kettleman Hills, California.
171 Magnetometer survey, Kettleman Hills, Kern County, California.
172 Maricopa oil fields, Kern County, California.
173 Geological map; Buena Vista Lake area, south of Bakersfield, California.
174 Vertical magnetometer intensity 1” = 400 gammas; north of Bakersfield, Kern County, Calif.
175 Bakersfield area, Kern County; special topographical map.
176 Geologic map of the Irvine and Newport Beach areas; California; 1925.
177 Structure SE of Abilene, Tex., by A. Folger; 1923.
178 Vertical magnetometer survey; Throckmorton, Baylor, Knox, and Haskell counties, Texas; January 1930.
179 Vertical magnetometer survey; Ventura, Saticoy, Oxnard, and Hueneme areas, Calif., 1929.
180 Vertical magnetometer survey; west side of Lake Maracaibo, Venezuela.
181 Vertical magnetometer survey; San Fernanando Valley, Calif., December 1930.
182 Vertical magnetometer survey, California, to 1 January 1931.
183 Road map of northwest Africa; 1:1,000,000.
184 F. Daquin’s geologic map of the “Préféaine” region, Morocco; 1927.
185 Morocco topographical sheet; Petijean/Moulay Idriss.
186 Geological map; Chelif/Habra basin, western Algeria.
188 Algeria and Tunisia; “Principal Highways and Landing Places,” August 22, 1942 (O.S.S.).
189 Port de Casablanca
190 Plan de Casablanca
191 Port d’Alger
192 Maroc-Algerie-Tunisie road map.
193 Algeria Railroads; January 19, 1942 (C.O.I.).
194 North Africa[?], sources of petroleum (in French).
195 Geological Map Wheeler Ridge Anticline, June 7, 1923

INDEX TERMS
Alberta.
Algeria.
American Association of Petroleum Geologists.
South Texas Section.
Angiola (Calif.).
Antelope Valley (Calif.).
Arizona.
Ash Meadows (Nev.).
Association of Conroe Operators, Land and Royalty Owners.
Azegour Molybdenum Mine (Morocco).
Bakersfield (Calif.).
Ballande, Henry M.
Baylor County (Tex.).
Berguent (Morocco).
Bou Soufa Copper Mine (Algeria).
British Columbia.
Bruderer, W.
Buttonwillow (Calif.).
California.
California. Division of Mines.
Carbona (Calif.).
Callahan County (Tex.).
Casablanca (Morocco).
Castle Air Force Base (Calif.).
Catrakis, Stavros D.
Childress County (Tex.).
Chromite—California.
Coalinga (Calif.).
Colorado.
Columbo-tantalite.
Comanche Point (Calif.).
Companhia Atlantica de Desenvolvimento e Exploracao de Minas.
Companhia do Estanho do Vale do Voliga.
Companhia Portuguesa do Minas.
Conroe Oil Field (Tex.).
Contra Costa County (Calif.).
Copper mines and mining—Algeria.
Crater Mine (Inyo County, Calif.).
Death Valley (Calif.).
Delano (Calif.).
Drilling muds.
Dunnigan Hills (Calif.).
Edison (Calif.).
El Segundo (Calif.).
Elk Hills (Calif.).
Elko (Nev.).
Elwood (Calif.).
Empresa Mineira da Argemala Lda.
Fallon (Nev.).
Fluorspar—Spain.
Foard County (Tex.).
Folger, Anthony.
Fort Stockton (Tex.).
France.
French Cameroons.
Fresno County (Calif.).
Fuller’s earth.
Geomagnetism—Maps.
Germany.
Glass Mountains (Tex.).
Greece.
Hall County (Tex.).
Hanford (Calif.).
Haskell County (Tex.).
Houston Geological Society.
Howard County (Tex.).
Huntington Beach (Calif.).
Inglewood (Calif.).
Inyo County (Calif.).
Jenkins, Olaf P.
Kansas.
Kerman (Calif.).
Kern County (Calif.).
Kern River (Calif.).
Kettleman Hills (Calif.).
King City (Calif.).
Kings County (Calif.).
Knox County (Tex.).
Languedoc (France).
Lead mines and mining—Algeria.
Lead mines and mining—Germany.
Lincoln County (Wyo.).
Linn County (Ore.).
Long Beach (Calif.).
Los Angeles County (Calif.).
Lost Hills (Calif.).
Louisiana.
Loving County (Tex.).
Lynton, Edward Dale.
Madera County (Calif.).
Magnetometer.
Manhattan Beach (Calif.).
Maracaibo Basin (Venezuela).
Mayo-Darle Mine (French Cameroons).
McLaughlin, Donald H.
Merced County (Calif.).
Miller, Arnold H.
Mines and mineral resources—Algeria.
Mines and mineral resources—California.
Mines and mineral resources—France.
Mines and mineral resources—French Cameroons.
Mines and mineral resources—Germany.
Mines and mineral resources—Morocco.
Mines and mineral resources—Portugal.
Mines and mineral resources—Spain.
Mitchell County (Tex.).
Molybdenum—Morocco.
Monterey County (Calif.).
Montezuma County ( Colo.).
Montgomery County (Tex.).
Morocco.
Nevada.
Nevada, Anna.
New Mexico.
Ojai Valley (Calif.).
Oklahoma.
Old River (Calif.).
Orange County (Calif.).
Oregon.
Oued El Kebir Lead-Zinc Deposit (Algeria).
Packard. Earl L.
Palo Pinto County (Tex.).
Paredes Mine (Portugal).
Péchelbronn (France).
Pecos County (Tex.).
Peru.
Petroleum—Algeria.
Petroleum—British Columbia.
Petroleum—California.
Petroleum—France.
Petroleum—Morocco.
Petroleum—Oregon.
Petroleum—Prospecting.
Petroleum—Texas.
Petroleum—Tunisia.
Petroleum—Venezuela.
Portugal.
Poso Creek (Calif.).
Puente (Calif.).
Queen Charlotte Islands (B.C.).
Redding (Calif.).
Reeves, Frank.
Reeves County (Tex.).
Ribeira Mine (Portugal).
Richfield (Calif.).
Rio Vista (Calif.).
San Benito County (Calif.).
San Bernardino County (Calif.).
San Fernando Valley (Calif.).
San Joaquin County (Calif.).
San Juan County (Calif.).
San Patricio County (Tex.).
Sand Pass (Nev.).
Santa Barbara (Calif.).
Santa Barbara County (Calif.).
Santa Cruz (Calif.).
Santa Maria Valley (Calif.).
Saticoy (Calif.).
Schoeller, H.
Shackelford County (Tex.).
Shafter (Calif.).
Shasta County (Calif.).
Simi Valley (Calif.).
Société les Étains du Cameroun.
Solano County (Calif.).
South Dome (Calif.).
South Texas Geological Society.
Spain.
Steinbach (Germany).
Sublette County (Wyo.).
Sulphur mines and mining.
Sulphur mines and mining—California.
Sunshine Gold Mining Company.
Tantalite—Spain.
Taylor County (Tex.).
Terrabella (Calif.).
Texas.
Throckmorton County (Tex.).
Tin mines and mining—Portugal.
Tin mines and mining—Spain.
Tulare County (Calif.).
Tungsten mines and mining—Portugal.
Tungsten mines and mining—Spain.
Tunisia.
Udden, J. A.
Utah.
Venezuela.
Ventura County (Calif.).
Visalia (Calif.).
Walnut Creek (Calif.).
Ward County (Tex.).
Watsonville (Calif.).
Weedpatch (Calif.).
Wheeler Ridge (Calif.).
Wilbarger County (Tex.).
Wolframite—Portugal.
Wyoming.
Zinc mines and mining—Algeria.
Zinc mines and mining—Germany.