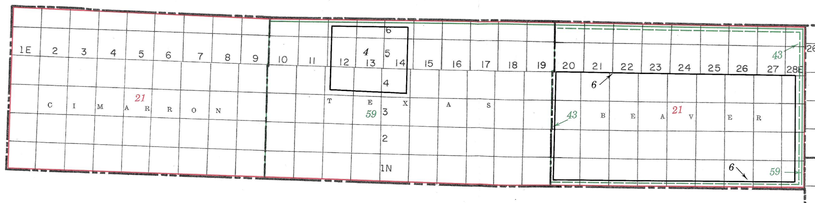

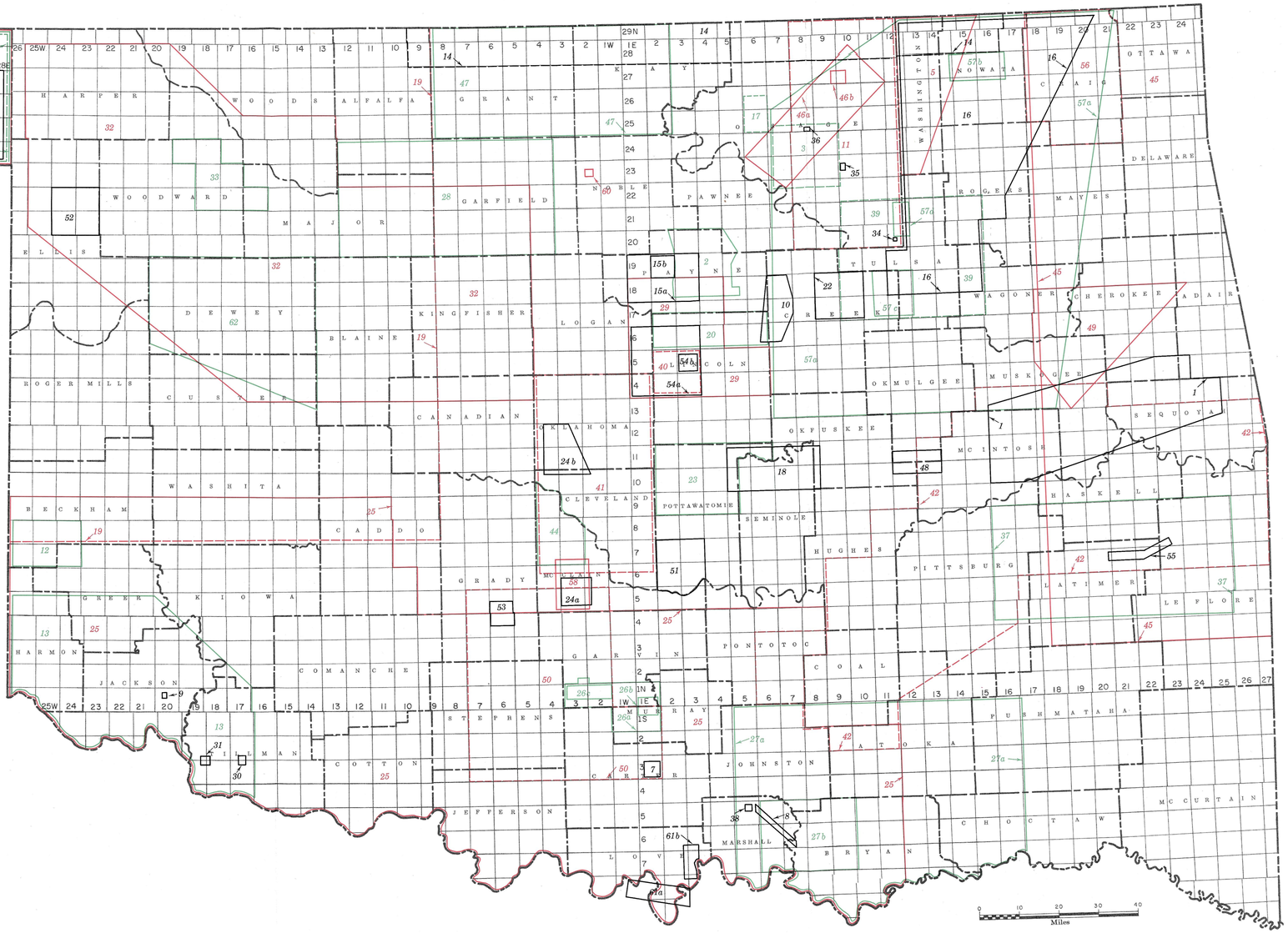

INDEX TO SUBSURFACE GEOLOGIC MAPPING IN OKLAHOMA, 1964–1966

Compiled by
Louise Jordan and John F. Roberts
1967
Second edition 1985

Areas Shown by Outline and Number

1. Amsden, T. W., and Rowland, T. L., 1965, Silurian stratigraphy of northeastern Oklahoma: OGS Bull. 105. **I:** Silurian 6/25.
2. Andreasen, G. E., Bromery, R. W., and Gilbert, F. P., 1964, Aeromagnetic map of the Glencoe-Ripley area, Payne County, Oklahoma: USGS Geophys. Inv., Map GP-469. **M:** 1/10 gammas.
3. Andreasen, G. E., Bromery, R. W., and Gilbert, F. P., 1964, Aeromagnetic map of the Hominy area, Osage County, Oklahoma: USGS Geophys. Inv. Map GP-470. **M:** 1/10 gammas.
4. Arro, Eric, 1965, Morrowan sandstones in the subsurface of the Hough area, Texas County, Oklahoma: SS, vol. 16, no. 1 (Sept.), p. 2. **I:** base Atoka-base upper Morrow sandstone, "A" (Morrow) sandstone 2.4/20; "B" (Morrow) sandstone, "C" (Morrow) sandstone, "D" (Morrow) sandstone 2.4/10.
5. Ballard, Norval, 1964, Thickness of Hogshooter Limestone: VLD. **I:** Hogshooter 2/5.
6. Barrett, L. W., II, 1964, Subsurface study of Morrowan rocks in central and southern Beaver County, Oklahoma: SS, vol. 14, no. 9 (May), p. 2. Also, SSD4, p. 425. **S:** Chester, Morrow 6/100. **O:** upper Morrow percent sand 6/0.5. **I:** Morrow 6/50.
7. Becker, R. M., 1966, The Caddo anticline, 3 S., 1 E., Carter County, Oklahoma: AGS Guidebook, Pennsylvanian of the Ardmore basin, p. 38. **S:** Sylvan 0.75/100.
8. Beckman, W. A., Jr., and Sloss, L. L., 1966, Possible pre-Springeran unconformity in southern Oklahoma: AAPG, vol. 50, p. 1342. **S:** Bromide 1/500. **I:** Goddard 1/500. **P:** pre-Goddard 1/-.
9. Beebe, B. W., 1964, Will exploration follow the dodo bird—or will management see the light?: OGJ, vol. 62, no. 2 (May 25), p. 89. **G:** 0.3/-.
10. Bennison, Alan, 1964, The Cushing field, Creek County, Oklahoma: TGSD, vol. 32, p. 158. **S:** top Arbuckle 1.6/100.
11. Berry, C. G., 1965, Stratigraphy of Cherokee group, eastern Osage County, Oklahoma: SS, vol. 16, no. 4 (Dec.), p. 78. **S:** Chester, Morrow 8/100. **I:** Cherokee, Mississippi-base Inola 8/50; Mississippi chat, Bartlesville 8/25; Inola-Pink limestone, Pink limestone-Verdigris 8/50; Red Fork, Skinner, Prue, Verdigris-base Oswego 8/10.
12. Blazenko, E. J., 1964, Geology of the south Eric gas area, Beckham and Greer Counties, Oklahoma: SS, vol. 15, no. 4 (Dec.), p. 53. **S:** "Brown" dolomite, dolomite in basal Wellington, lower anhydrite of Wellington evaporites 2.2/50.
13. Bozovich, Slobodan, 1963, Pre-Mississippian carbonate rocks in the Hollis basin of Oklahoma: OUMS. **P:** pre-Mississippian 9/- (correcting area shown on Map V1).
14. Calvin, D. G., 1965, Incidence of oil and gas in the Cottage Grove sandstone: SS, vol. 16, no. 2 (Oct.), p. 25. **S:** Kansas City 20.7/100. **I:** Kansas City, Kansas City limestone, Cottage Grove sandstone 20.7/50, isolith and isoporosity 20.7/25,50. **O:** Kansas City lithofacies 20.7/-.
15a,b. Clayton, J. M., 1965, Paleodepositional environments of the "Cherokee" sands of central Payne County, Oklahoma: SS, vol. 16, no. 3 (Nov.), p. 50. (a) **S:** Henryetta coal 2.6/50. **I:** "Cherokee" group, Red Fork sand 2.6/50. (b) **S:** Inola limestone, lower Skinner sand 1.4/10. **I:** Henryetta coal-Inola limestone 1.4/10; lower Skinner sand 1.4/5.
16. Cole, J. G., 1965, Regional surface and subsurface study of the Marmaton Group, Pennsylvanian (Desmoinesian) of northeastern Oklahoma: OUMS. **I:** Fort Scott-Breezy Hill, Lenapah 2/10; Oologah 2/20. **I-O** (lithofacies): Labette, Nowata 2/20; Bandera 2/10.
17. Cruz, J. A., 1966, Geometry and origin of the Burbank sandstone and Mississippi "Chat" in T. 25 and 26 N., R. 6 E., Osage County, Oklahoma: SS, vol. 16, no. 5 (Jan.), p. 102. **I:** "Key" limestone-top Burbank sand, "Key" limestone-bottom Burbank sandstone, Burbank sand, Mississippi "Chat"-"Key" limestone 1/10; Mississippi "Chat," Mississippi lime-"Key" limestone 1/20.
18. Catolo-Lozano, F., 1966, Subsurface stratigraphic analysis of northern Seminole County and portions of Pottawatomie and Okfuskee Counties, Oklahoma: OUMS. **S:** Checkerboard, base Pennsylvanian, Viola 1/50. **I:** Checkerboard-base Pennsylvanian 1/50. **O:** Checkerboard-base Pennsylvanian total sandstone thickness 1/20.
19. Fay, R. O., 1965, Geology and mineral resources of Woods County, Oklahoma: OGS Bull. 106. **S:** base Whitehorse Group 10/50.
20. Ferguson, D. B., 1964, Subsurface geology of northern Lincoln County, Oklahoma: SS, vol. 14, no. 10 (June), p. 4. Also SSD4, p. 444. **S:** Fernvale-Viola 3.5/25,50; pre-Pennsylvanian, Pink lime, Checkerboard 3.5/25. **I:** Mississippian and Woodford 3.5/25.
21. Forgotson, J. M., Jr., Stattler, A. T., and David, M., 1966, Influence of regional tectonics and local structure on deposition of Morrow formation in western Anadarko basin: AAPG, vol. 50, p. 518. **S:** Mississippian 35/500.
22. Furlow, Bruce, 1964, Subsurface geology of the Kellyville district, Creek County, Oklahoma: SS, vol. 15, no. 3 (Nov.), p. 32. **S:** Simpson, Oswego 1.7/50.
23. Gamero, G. A., 1965, Subsurface stratigraphic analysis of northern Pottawatomie County, Oklahoma: OUMS. **S:** Checkerboard, Viola 1/50. **S,P:** Base Pennsylvanian-pre-Pennsylvanian 1/50. **O:** sand bodies 1/-. **I:** Checkerboard-base Pennsylvanian 1/50.
24a,b. Gatewood, L. E., 1966, Some aspects of the geologic history of Cleveland, McClain, and Oklahoma Counties, Oklahoma: SS, vol. 16, no. 10 (June), p. 227. (a) **P:** Pre-Pennsylvanian 2.5/-. **S:** Hunton, Bromide 2.5/200. **I:** Viola-Bromide, Hunton, Hunton-Gibson 2.5/100. **O:** Hunton porosity 2.5/20. (b) **P,S:** pre Pennsylvanian, base Pennsylvanian 2/50,100. **I:** Oswego-base Pennsylvanian 2/10.
25. Hass, W. E., Denison, R. E., and Merritt, C. A., 1964, Basement rocks and structural evolution of southern Oklahoma: OGS Bull. 95. **S:** basement surface 6/1000,2000. **A:** basement-rock units 6/-.
26a-c. Harlton, B. H., 1964, Tectonic framework of Eola and southeast Hoover oil fields and West Timbered Hills area, Garvin and Murray Counties, Oklahoma: AAPG, vol. 48, p. 1555. (a) **O:** tectonic 3/-. (b) **S:** Viola and Simpson 1/500. (c) **S:** Viola 1/100.
27a,b. Harlton, B. H., 1966, Relation of buried Tishomingo uplift to Ardmore basin and Ouachita mountains, southeastern Oklahoma: AAPG, vol. 50, p. 1365. (a) **O:** tectonic 10.5/-. (b) **S:** Viola 3.2/500.
28. Harp, L. J., 1966, Do not overlook fractured zones: World Oil, vol. 162, no. 5 (Apr.), p. 119. **S:** Mississippian Meramec 8/100. **I:** base Osage-top Meramec 8/25.
29. Heinzelmann, G. M., Jr., 1964, Mississippian rocks in the Stillwater-Chandler area: SS, vol. 15, no. 2 (Oct.), p. 18. **S,P:** pre-Pennsylvanian 4/50. **I:** pre-Pennsylvanian-post Chattanooga 4/25.
30. Herndon, Tom, 1964, The Frederick field, Tillman County, Oklahoma: TGSD, vol. 32, p. 142. **S:** Arbuckle 0.5/100.
31. Herndon, Tom, 1964, The West Frederick field, Tillman County, Oklahoma: TGSD, vol. 32, p. 144. **S:** Arbuckle 0.5/100.
32. Hoffman, E. A., Jr., 1964, Pre-Chester Mississippian rocks in northwestern Oklahoma: SS, vol. 14, no. 5 (Jan.), p. 2. Also SSD4, p. 350. **S:** Woodford, Meramec 15/100,250. **I:** post-Woodford-pre-Chester 15/50.
33. Holmes, K. H., 1966, Stratigraphic traps in Cedardale-northwest Quinlan area, Major and Woodward Counties, Oklahoma: SS, vol. 16, no. 8 (Apr.), p. 174. **S:** base Cottage Grove, top Mississippian 6/100. **O:** Cottage Grove porosity 6/25.
34. Kennedy, L. E., and Peters, L. B., Jr., 1964, Country Club field, Osage County, Oklahoma: TGSD, vol. 32, p. 148. **S:** Arbuckle 0.4/20.
35. Kennedy, L. E., and Peters, L. B., Jr., 1964, South Canyon Creek field, Osage County, Oklahoma: TGSD, vol. 32, p. 146. **S:** Arbuckle 0.3/20.
36. Kennedy, L. E., and Peters, L. B., Jr., 1964, Whitecliff Dome field, Osage County, Oklahoma: TGSD, vol. 32, p. 150. **S:** Arbuckle 0.2/20.
37. Koinm, D. N., 1966, Growth faulting in the McAlester basin of Oklahoma: Univ. Tulsa MS. **S:** Hartshorne, Wapanucka 2/500. **I:** Atoka 2/500.
38. Kornfeld, J. A., 1965, North Madill Simpson pool, Marshall County, Oklahoma: TGSD, vol. 33, p. 219. **I:** basal Oil Creek sand (saturated) 0.3/50.
39. Krueger, R. C., 1965, Subsurface study of Mississippian rocks in the Tulsa area: SS, vol. 15, no. 8 (Apr.), p. 134. **P:** pre-Pennsylvanian subcrop 5/-.
40. Kurash, G. E., Jr., 1964, Subsurface geology of west-central Lincoln County, Oklahoma: SS, vol. 14, no. 6 (Feb.), p. 2. Also SSD4, p. 366. **S:** Fernvale-Viola, Hunton, pre-Pennsylvanian, Oswego, Pawhuska 1.8/25. **I:** Mississippian 1.8/10.
41. Levorsen, A. I., 1966, The obscure and subtle trap: AAPG, vol. 50, p. 2058. **P:** pre-Pennsylvanian 18/-.
42. Mairs, Tom, 1966, A subsurface study of the Fernvale and Viola formations in the Oklahoma portion of the Arkoma basin: TGSD, vol. 34, p. 60 (Maps updated from previous publications). **S:** Fernvale 18/500,1000. **I,P:** Fernvale-Viola 18/25,50.
43. Marine, I. W., and Schoff, S. L., 1962, Ground-water resources of Beaver County, Oklahoma: OGS Bull. 97. **S:** top of salt 12/100. **O:** water table 2/20.
44. Markas, J. M., 1966, Subsurface geology of northern McClain County, Oklahoma: SS, vol. 16, no. 9 (May), p. 198. **S:** Viola, base Pennsylvanian, Hogshooter 2.2/100. **P:** pre-Pennsylvanian 2.2/-.
45. McCracken, M. H., 1964, The Cambro-Ordovician rocks of northeastern Oklahoma and adjacent areas: TGSD, vol. 32, p. 49. **I:** Cambrian 55/100; Gasconade, Jefferson City, post-Jefferson City Canadian 55/25; Roubidoux 55/10.
46a,b. McQueen, C. H., 1964, A study of the Mississippian chat in a part of Osage County, Oklahoma: Univ. Tulsa MS. (a) **I:** Oswego-Mississippi lime, Mississippi chat 1.5/20. **S:** Oswego 1.5/50. (b) **I:** Oswego-Mississippi lime, Oswego-Mississippi chat, Mississippi chat 0.17/20. **S:** Mississippi chat 0.17/20.
47. Mikkelson, D. H., 1966, The origin and age of the Mississippian "chat" in north-central Oklahoma: SS, vol. 17, no. 2 (Oct.), p. 23. **S:** Mississippian 4/50.
48. Musgrove, C. D., 1964, Petroleum geology of the Bryant area, Okmulgee, Okfuskee, and McIntosh Counties, Oklahoma: SS, vol. 15, no. 1 (Sept.), p. 2. **S:** Fernvale-Viola, Union Valley 1.3/50; Booch 1.3/25. **I:** Atoka 2/25.
49. Norden, J. A. E., 1964, Magnetic field study of basement relief and susceptibility variation in the Muskogee-Tahlequah area, Oklahoma: OGS, Okla. Geology Notes, vol. 24, p. 147. **M:** magnetic susceptibility $8.5/1000\times10^{-6}$ cgs units.
50. Peace, H. W., II, 1965, The Springer group of southeastern Anadarko basin in Oklahoma: SS, vol. 15, no. 5 (Jan.), p. 81. **S:** Springer 7/500,2000; Sims 7/500,1000. **I:** Springer 7/500,1000; Goodwin and Cunningham 7/50,100; Britt 7/20,50; Sims 7/100,200; Humphreys, Aldridge, Markham 7/50.
51. Pybas, G. W., 1964, Petroleum geology of southwestern Pottawatomie County, Oklahoma: SS, vol. 14, no. 7 (Mar.), p. 2. Also SSD4, p. 390. **S:** Hogshooter, base Woodford, Fernvale-Viola 1.8/50.
52. Richardson, W. E., 1965, Oswego is prolific target in Oklahoma: OGJ, vol. 63, no. 51 (Dec. 20), p. 96. **S,I:** Oswego 2.4/50,100.
53. Riley, L. R., 1966, The challenge of deep exploration: the Chitwood pool, Grady County, Oklahoma: SS, vol. 17, no. 4 (Dec.), p. 66. **S:** Simpson 1/250.
54a,b. Shulman, Chaim, 1966, Stratigraphic analysis of the Cherokee Group in adjacent portions of Lincoln, Logan, and Oklahoma Counties, Oklahoma: SS, vol. 16, no. 6 (Feb.), p. 126. (a) **S:** Pink lime 3/20. **I:** "Cherokee" 3/20. (b) **S:** lower Skinner 1/20. **I:** lower Skinner-Henryetta coal, lower Skinner 1/10.
55. Six, D. A., 1964, Arkoma gas field is big complex: OGJ, vol. 62, no. 23 (June 8), p. 214. **S:** Red Oak sand 2.7/200.
56. Strong, D. M., and Huffman, G. G., 1965, Oil and gas in Craig County, in Geology and oil and gas resources of Craig County, Oklahoma: OGS Bull. 99. **S:** Arbuckle, base Fort Scott 6/100. **I:** Arbuckle, Kreb 6/100; Mississippian, Cabaniss 6/50; Chattanooga 6/10.
57a-d. Taylor, J. A., and Branan, C. B., Jr., 1964, The wandering oil fields of northeastern Oklahoma: VLD, p. 8. (a) **A:** Bartlesville 13/-. (b) **S:** Bartlesville 1.6/50. (c) **S:** structural axes 1.4/-. **I:** Bartlesville 1.4/50. (d) **S:** structural axes 1.2/-.
58. Thomas, L. E., 1965, Subsurface geology of the Criner area, McClain County, Oklahoma: SS, vol. 15, no. 10 (June), p. 176. **S:** Hart 1.8/50; Hunton, Fernvale-Viola, Bromide 1.8/100.
59. Totten, R. B., and Horn, P. H., 1960, Geology of certain gas fields of the western Anadarko basin, Texas and Oklahoma Panhandles, in Natural gas in the southwest: Southwestern Federation Geol. Socs., Trans., vol. 1, p. 39. **S:** Mississippian 15/500. **I:** Morrow 15/250.
60. Wallace, Norman, 1964, The Billings field, Noble County, Oklahoma: TGSD, vol. 32, p. 152. **S:** Arbuckle 0.6/50.
61a,b. Westheimer, J. M., 1965, Petroleum geology of Love County, in Geology and petroleum of Love County, Oklahoma: OGS Circ. 63, pt. 2, p. 48. (a) **S:** base Rocky Point 1.2/50. (b) **S:** lower Pennsylvanian 0.7/500,1000; Oil Creek sand 0.7/250,500. **P:** pre-Bostwick 0.7/-.
62. Wonick, John, 1964, Dewey, Custer Counties are Anadarko hot spots: World Oil, vol. 159, no. 5 (Oct.), p. 184. **S:** Mississippian 9/500.

Regional Maps not Outlined

Jones, V. L., and Lyons, P. L., 1964, Vertical-intensity magnetic map of Oklahoma: OGS Map GM-6. Also Geophys. Soc. Tulsa, Proc., vol. 8, pl. I. **M:** 12/100,200 gammas.

Jordan, Louise, 1964, Geology of Oklahoma—a summary: Geophys. Soc. Tulsa, Proc., vol. 8, p. 27. **P:** pre-Pennsylvanian, pre-Woodford 68/-. **S:** basement-rock surface 52/-1000,5000.

Lyons, P. L., 1964 Bouger gravity-anomaly map of Oklahoma: OGS Map GM-7. Also Geophys. Soc. Tulsa, Proc., vol. 8, pl. II. **G:** 12/6 milligals.

Schramm, M. W., Jr., 1964, Paleogeologic and quantitative lithofacies analysis, Simpson Group, Oklahoma: AAPG, vol. 48, p. 1164. **I:** Oil Creek sand 59/100. **O,I:** lithofacies on isopach, Joins, McLish, Tulip Creek, Bromide, Corbin Ranch 59/100; Oil Creek 59/200. **O:** lap-out map 59/-. **P:** pre-Viola 59/-.

Tarr, R. S., Jordan, Louise, and Rowland, T. L., 1965, Geologic map and section of pre-Woodford rocks in Oklahoma: OGS Map GM-9. **P:** pre-Woodford rocks 12/-.

Abbreviations

Type of map

A	Areal extent
G	Gravity
I	Thickness (isopach)
M	Magnetic
O	Porosity, lithofacies, and other
P	Paleogeologic
S	Structure or contour

Source

AAPG	Bulletin: Amer. Assoc. Petroleum Geologists
AGS	Ardmore Geol. Soc.
OGJ	Oil and Gas Journal
OGS	Oklahoma Geol. Survey
OUMS	Unpublished MS thesis: University of Oklahoma
SS	Shale Shaker: Oklahoma City Geol. Soc.
SSD4	Shale Shaker Digest IV (1962-1964): Oklahoma City Geol. Soc.
TGSD	Digest: Tulsa Geol. Soc.
USGS	U. S. Geol. Survey
VLD	Variations in limestone deposits: Oklahoma City Geol. Soc. and Oklahoma Geol. Survey