UNITED STATES

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

in cooperation with the Oklahoma Highway Department

Topography by photogrammetric methods from aerial photographs taken 1966. Field checked 1967

1000-meter Universal Transverse Mercator grid ticks

generally visible on aerial photographs. This information is unchecked

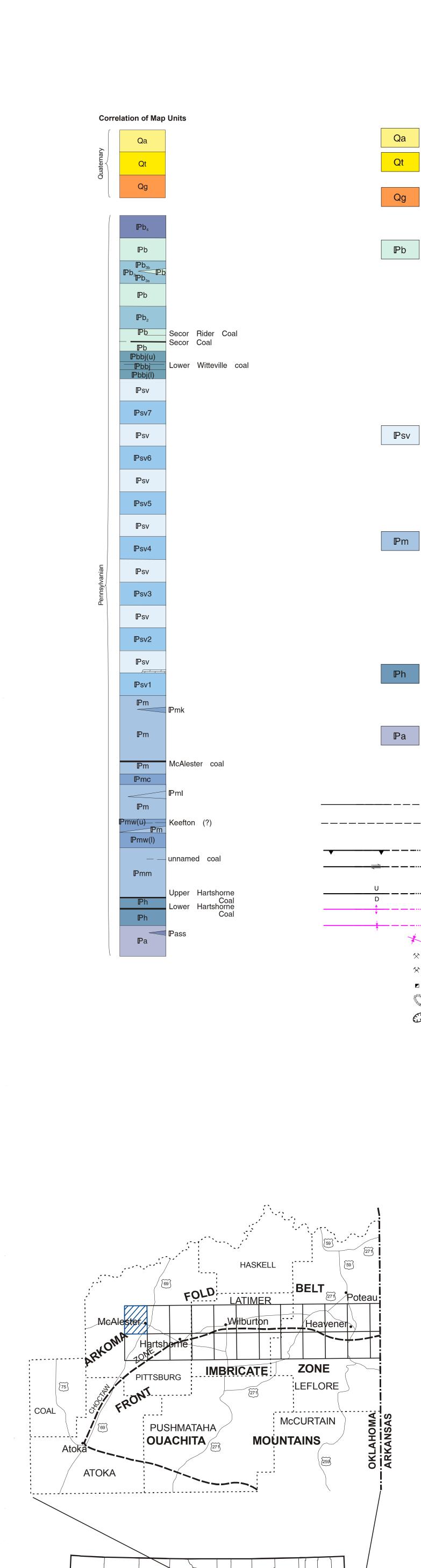
Produced in cooperation with the U.S. Geological Survey,

National Geologic Mapping Program. Partial funding from USGS STATEMAP Program Assistance Award No. 1434-94-A-1249.

Areas covered by dashed light-blue patter

are subject to controlled inundation

Control by USGS and USC&GS



ADAMSON QUADRANGLE

OKLAHOMA

7.5 MINUTE SERIES (TOPOGRAPHIC)

Medium-duty Unimproved dirt --

Revisions shown in purple compiled from aeria

photographs taken 1977. Map edited 1978

This information not field checked

U. S. Route State Route

ADAMSON, OKLA.

N3452.5-W9530/7.5

PHOTOREVISED 1978
- AMS 6853 I NE-SERIES V883

ALLUVIUM (QUATERNARY)—Gravel, sand, silt, and clay on flood plains of present-day streams. TERRACE DEPOSITS (QUATERNARY)—Subangular to subrounded cobbles, gravel, sand, and silt, forming a veneer, generally about 4-10 ft thick, on the surfaces of terraces that stand about 15-50 ft above the beds of present-day GERTY SAND (QUATERNARY)—Unsolidated gravel, sand, silt, and clay in abandoned river channel found at elevations well above modern flood plains. Main constituents of the sand and gravel are quartz, quartzite, chert, flint, jasper, and silicified wood. Thickness varies from an estimated maximum of 50 ft to a thin veneer. In places (such as parts of sec. 14, T. 6 N., R. 16 E.), siliceous, well-rounded pebbles from the Gerty are scattered on weathered Savanna Formation, but the deposits are too thin to map as Gerty. BOGGY FORMATION (PENNSYLVANIAN)—Predominantly sandy, silty grayish black (N2) to olive gray (5Y4/1) to dark yellowish brown (10YR4/2) shales and siltstones (Pb) with several mappable, scarp-forming, fine- to very fine grained sandstones (Pbbj, Pb2, Pb3, and Pb4). At the base is the Bluejacket Sandstone Member (Pbbj), mostly moderate yellowish brown (10YR5/4), about 150-200 ft thick. The Bluejacket contains a lower, very fine grained, silty, shaly, thinbedded, parallel-bedded, ripple-marked, bioturbated sandstone unit 25-50 ft thick; a middle silty shale unit (generally covered), about 50-100 ft thick; and an upper fine-grained, medium- to thick-bedded sandstone unit about 25-75 ft thick, containing large-scale trough cross-bedding, abundant soft-sediment-deformation features, and stacked-channel sequences. A thin (0.05-0.4 ft) coal bed (Lower Witteville) is present in the middle shale unit of the Bluejacket Member. It is exposed in the ditch along State Highway 31 in the SW¹/4 of sec. 15, T. 6 N., R. 16 E., and in a cut along the trail in the SE¹/4 of sec. 36, T. 6 N., R. 16 E. Pb2-Pb4 are predominantly dark yellowish brown (10YR4/2) to grayish orange (10YR7/4) to light brown, (5YR5/2), very fine grained, noncalcareous sandstones with abundant sedimentary structures such as ripples, cross-stratification, sole marks, and soft sediment deformation features. The Secor coal occurs in the shale interval between Pbbj and Pb2. It is of minable thickness in the northwestern part of the quadrangle where it is >2 ft thick. The Secor Rider coal is ~1 ft thick in this same area, and occurs -40 ft above the Secor bed. Pb2 is discontinuous, or thin bedded and generally unmappable on the flanks of Buffalo Mountain. However, the unit is mappable in sees. 16, 21, 22, 27, and 28, T. 6 N., R. 16 E., where it is mostly thin-bedded, shaly, and generally not more than -5 ft thick. Pb3 is a prominent thick, ledge-forming unit that is mapped as Pb3a and Pb3b at higher elevations on Buffalo Mountain and on the high hill in sec. 28, T 6 N., R. 16 E. In those areas it is divided into two parts by a mappable shale unit (Pb). Pb4 is preserved only on the highest elevations on Buffalo Mountain. Top of formation eroded. Thickness: 700-800 ft. SAVANNA FORMATION (PENNSYLVANIAN)—Predominantly pale yellowish brown (10YR6/2) to olive-gray (5Y3/2) to medium dark gray (N4) shales (Psv) with several mappable moderate brown (5YR4/4) to grayish orange (10YR7/4) to moderate reddish brown (10R4/6), fine- to very fine grained, noncalcareous sandstone units (Psv1, Psv2, Psv3, Psv4, Psv5, Psv6, Psv7). The sandstones are massive to thin-bedded and shaly. They commonly are cross bedded and ripple marked and in places _contain abundant soft-sediment deformation features, SoJe marks (trace fossils; brush and prod ""marks; flute, groove, and load casts) at the base of some sandstone beds are locally common. Psv1 marks the base of the formation throughout the map area. It locally grades upward into a fossilifer-ous, sandy limestone. Psv1-Psv7 are all mapped as single units, but generally contain shale beds of varying thicknesses. In sees. 1 and 2, T. 5 N., R. 16 E.; and sees. 35 and 36, T. 6 N., R. 16 E., Psv5, Psv6, and Psv7 are undifferentiated in a structurally complex area. In the extreme southwest corner of the map, Psv2, Psv3 and Psv4 are mapped as a single, undifferentiated unit, as are Psv5 and Psv6. Most shales in the Savanna include thin, unmappable sandstone units. Thickness: 1400-1500 ft. McALESTER FORMATION (PENNSYLVANIAN)—Predominantly dark gray (N3) to black (N1), blocky shales containing abundant ironstone concretions. McCurtain Shale Member (Pmm) at the base is ~~ -600 ft thick. A coal bed, -1 ft thick, crops out in the N¹/2 of sec. 30, T. 5 N., R. 17 E., in the upper part of the McCurtain Shale Member. The Warner Sandstone Member (Pmw) overlies the McCurtain Shale Member. It is a resistant, moderate reddish brown (10R4/6) to grayish orange (10YR7/4) to moderate yellowish brown (10YR5/4), finegrained, cross-bedded sandstone of variable thickness. Where exposed in the area east of Dow, it is mapped as Pmw (I), a thick sandstone unit containing intervening shales, a middle shale unit, Pmw, and an upper sandstone unit, Pmw (u). A thin coal (0.2 ft) crops out within Pmw (u) at the crest of the ridge along the road in the northern part of sec. 8, T. 5 N., R. 17 E. This coal bed may be equivalent to the Keefton coal of Muskogee County and Haskell County. Three named, moderate brown (5YR3/4), very fine grained, thin-bedded sandstone units occur in the shale (Pm) above the Warner Sandstone Member: Lequire Sandstone Member (PmI); Cameron Sandstone Member (Pmc); and Keota Sandstone Member (Pmk). The McAlester coal, about 2.0-3.5 ft thick, occurs in the shale interval above the Cameron Sandstone Member. It has been extensively mined east and west of Adamson as well as in the Dow area. Thickness: HARTSHORNE FORMATION (PENNSYLVANIAN)—Grayish orange (10YR7/4) to moderate reddish orange (10R6/6) to very light gray (N8), very fine grained, ripple-marked, bioturbated, thin-bedded to massive sandstone interbedded with silty, medium-gray (N5) shale. Contains the Lower and Upper Hartshorne coal beds. The Lower Hartshorne coal ranges in thickness from 2.5 ft to 6.0 ft — average thickness is -4.0 ft; the Upper Hartshorne coal ranges in thickness from 2.3 ft to 3.5 ft — average thickness is -3 ft. Both coals are exposed in the NE¹/4 of sec. 7, T. 5 N., R. 17 E., in a road cut, just southeast of Adamson. Thickness: approximately 250-300 ft. ATOKA FORMATION (PENNSYLVANIAN)—Predominantly silty, medium dark gray (N4) to olive black (5Y2/1) noncalcerous shale (Pa) with thin, brownish gray (5YR3/4) siltstone beds. Locally includes discontinuous, ridge-forming, moderate yellowish brown (10YR5/4) to dark yellowish orange (10YR6/6), very fine grained, dirty, micaceous sandstone (Pass) containing plant fragments and trace fossils. Approximately 2,000 ft of upper part exposed in the map area. Total thickness in subsurface in Sans Bois Mountains: THRUST FAULT—Sawteeth on upper plate; dashed where approximately _ located; dotted where concealed ~~ _______________________________FAULT—Arrows show relative horizontal movement; dashed where approximately located; dotted where concealed; queried where . FAULT—Dashed where inferred; dotted where concealed; U, upthrown side; D, downthrown side ANTICLINE—Showing crestline; arrow shows direction of plunge; dashed where approximately located; dotted where concealed

O Completion not reported as of June 1,1995

Dry hole, abandoned

⇔ Gas well

DESCRIPTION OF UNITS

SYNCLINE—Showing troughline; arrow shows direction of plunge; dashed where approximately located; dotted where concealed MINOR SYNCLINE—Showing plunge ☆ ABANDONED SMALL COAL MINE ABANDONED STONE QUARRY OR OPEN SHALE PIT ABANDONED SHAFT SPOIL PILES FROM ABANDONED COAL MINE _ SURFACE COAL MINE—Abandoned or area reclaimed STRIKE AND DIP OF BEDS ₇₀ Strike and dip of beds, upright Undulatory beds, average dip Vertical beds, ball indicates top of beds Horizontal beds ⊕ Undulatory, but more or less horizontal, beds OIL AND GAS WELLS

2 Ward B Oxley Petroleum Co. 08/19/92 Oxley Petroleum Co. 06/27/89 Oxley Petroleum Co. 1 Mary White 06/21/66 Sun ray DX Oil Co. 01/24/90 Oxley Petroleum Co. 11/24/81 SWAB Corp. (Bonanza Petroleum, Inc.) 1-14 Baldwin 1 Baldwin A 03/04/71 Snee & Eberly Snee & Eberly 07/05/63 Snee & Eberly Eberly & Meade, Inc. 12/17/88 2,750 12/20/92 Eberly & Meade, Inc. Eberly & Meade, Inc. 11/16/89 11/16/89 Eberly & Meade, Inc. (work over) 3-18 Argie Vaughn 12/31/72 8,000 Oxley Petroleum Co. Oxley Petroleum Co. (work over) 1 Argie Vaughn 12/31/72 04/28/84 Oxley Petroleum Co. 2 Argie Vaughn 06/22/73 07/13/84 1 Erie White Oxlev Petroleum Co. Oxley Petroleum Co. 2 Erie White 11/28/30 2,285 1 J.R. Hughes Cities Service Gas Co. 1 Dolly Harrison Oxley Petroleum Co. 09/15/73 11/23/76 Mark Resources Corp. 2 Toone 11/23/76 Mark Resources Corp. (work over) 06/03/71 Walter Duncan 12/14/81 Oxley Petroleum Co. 1 Lucy Mae Smith 1 E.G. Mckenzie 11/20/68 King Resources Co. 11/20/68 1 E.G. Mckenzie King Resources Co. (work over) 1-24 Oneth 09/12/91 Eberly & Meade, Inc. 08/31/93 4-18 Gladys Vaughn Eberly & Meade, Inc. Old Dominion Oil Corp. 1-21 Clifton 08/06/75 Snee & Eberly 02/25/74 8,400 Snee & Eberly 8,175 Unit Petroleum Co. 08/01/90 Samson Resources 09/02/89 ARCO Oil & Gas Co. Magnolia Petroleum Co. 1 Manschrick 12,915 1-27Cirar Snee & Eberly 1-31 Winship-Browne 09/24/79 11,226 Hamilton Brothers Oil Co. 11/15/74 Mustang Production Co. 1-33 Brown 10.950 10,438 Coquina Oil Corp. 11,917 1-10 Bernardi-Jones Hamilton Brothers Oil Co. Hamilton Brothers Oil Co. (work over) 1-10 Bernardi-Jones 1 -7 Adamson Townsite Gas Gulfstream Petroleum Corp 04/06/81 1-9M.A. Randel 12,815 Gulfstream Petroleum Corp. 11/01/78 Gulfstream Petroleum Corp. 03/01/82 C Coal & Coke Corp. Tenneco Oil Co. 6,902 Hanna Oil & Gas Co. 1 Martha Cook TXO Production Corp. 1 Cook K Midwest Oil Corp. 02/23/63 Midwest Oil Corp. (work over) 1-13 Moss A 03/19/81 Tenneco Oil Co. Zinke & Trumbo, Ltd. 1 Weber A 06/11/87 01/13/79 Gulfstream Petroleum Corp Gulfstream Petroleum Corp TXO Production Corp. 07/11/81 Samson Resources Co 01/25/75 Dyco Petroleum Corp. 11/19/49 Intex Oil Co. & Midway Premier Oil Co. Intex Oil Co. 04/02/78 Samson Resources Co 08/19/67 Shamrock Oil & Gas Corp. 1 Joe Emery, Jr., et al. Atlantic Richfield Co. 1 Lillie Welch UT 08/10/90 2 Lillie Welch Unit Vastar Resources, Inc. D-PEX Operating Co. 01/30/89 05/23/74 AMOCO Production Co 03/10/70 Sun Oil Co. Kaiser-Francis Oil Co. Samson Resources Co 12/02/84 **AMOCO Production Co** 09/30/93 Oryx Energy 05/03/69 Sun Oil Co. - DX Div. 07/20/87 Exxon Corp. Exxon Corp. (work over) 04/12/91 2 K. Anderson 08/23/68 Humble Oil & Refining Co. 1 Kathleen Anderson Unit ARCO Oil & Gas Co. 5 Pauline Bowman Atlantic Richfield Co. 2 Pauline Bowman/ sec. 20/UT Sinclair Oil & Gas Co. 1 Pauline Bowman/sec. 20 08/26/89 4 P. Bowman Nicor Exploration Co. 09/16/87 3 Pauline Bowman ARCO Oil & Gas Co. Unit Petroleum Co. 2 Bowman 3-21 Bowman Vastar Resources, Inc. 06/08/66 1 Pauline Bowman Unit Sinclair Oil & Gas Co. Austin Drilling Co. 1-28 Monroe 1 Monroe Unit Samson Resources Co Samson Resources Co 3-27 U.S. Government Vastar Resources, Inc. 09/14/79 ARCO Oil & Gas Co. 2 U.S. Government 27 12/28/70 Atlantic Richfield Co. 1 R.A. King Unit Daniel-Price Exploration Marathon Oil Co. 10/23/82 Marathon Oil Co. (work over) 2 Mass Unit 02/28/86 3 Edith Richards ARCO Oil & Gas Co. 10/19/94 Vastar Resources, Inc. 4-30 Edith Richards 3 P.O. Bowman JMC Exploration 02/04/67 1 P.O. Bowman Unit Sinclair Oil & Gas Co. 02/05/95 5-29 P.O. Bowman Vastar Resources, Inc.

4-28 USA

2 USA Sec. 28

2 Alfred Parker

1 USA Sec. 28 Unit

07/24/94

02/15/66

LIST OF WELLS SPUDDED BEFORE JUNE 1,1995

Oklahoma Geologic Quadrangle OGQ-17
Geologic Map of the Adamson 7.5' Quadrangle
(previously Open-File Report OF4-95)

GEOLOGIC MAP OF THE ADAMSON 7.5' QUADRANGLE, LATIMER AND PITTSBURG COUNTIES, OKLAHOMA

NATIONAL GEODETIC VERTICAL DATUM OF 1929

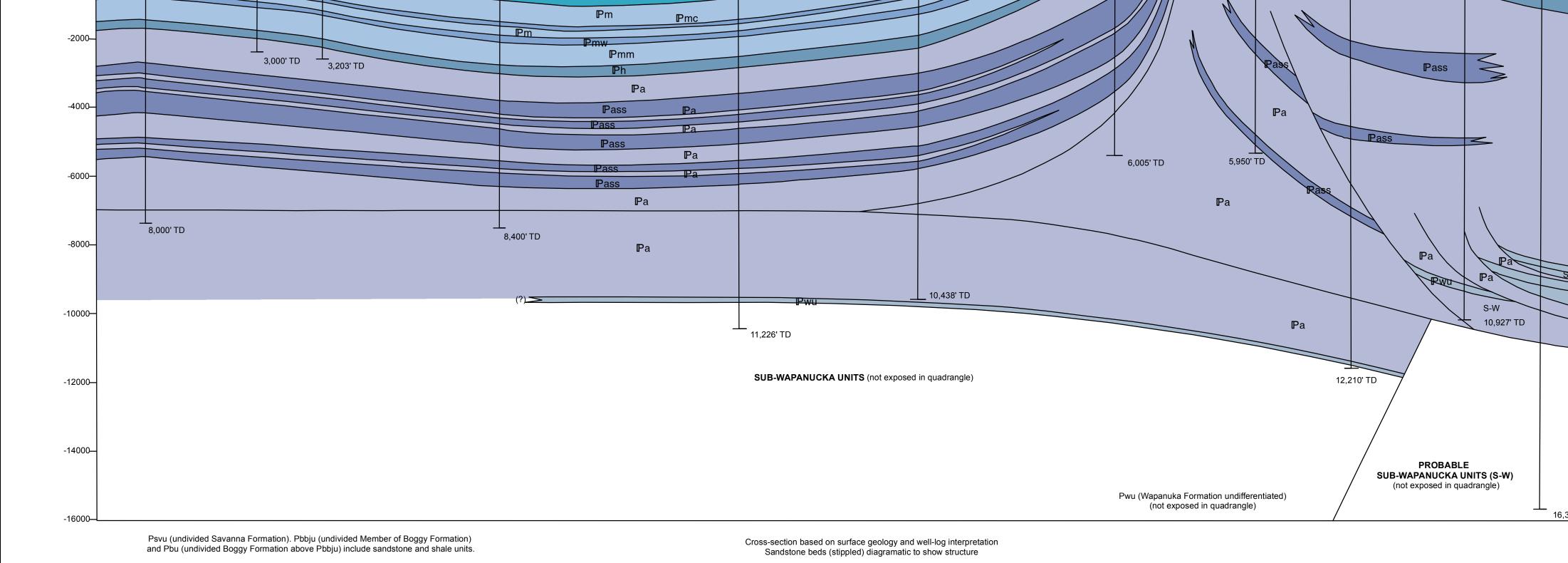
HIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092 AND BY THE OKLAHOMA GEOLOGICAL SURVEY, NORMAN, OKLAHOMA 73069

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Geology mapped in 1994-95. Digitized by Jacob Hernandez, 2014

STATE OF OKLAHOMA



Vastar Resources, Inc.

ARCO Oil & Gas Co.

Vastar Resources, Inc.

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ARCO Oil & Gas Co.