University of Kansas
State Geological Survey of Kansas

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1947

Oil and Gas Investigations
Preliminary Cross Section No. 3

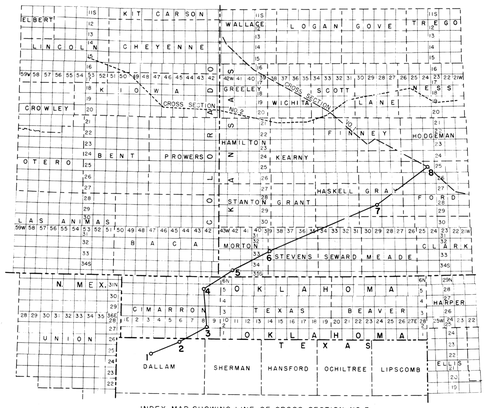
SUBSURFACE GEOLOGIC CROSS SECTION FROM FORD COUNTY, KANSAS, TO DALLAM COUNTY, TEXAS

By Fanny Carter Edon

List of wells

	Company	Farm name	Well no.	Location	Elev. in ft. above sea level
1	Pure Oil Co.	Federal Land Bank	1	NW¼ sec. 17, blk. 7, F.W.&G.O. Survey, Dallam County, Texas	4,335
2	Pure Oil Co.	Sneed Ranch	1	660 feet from north line and 660 feet from west line of sec. 1, Block 1, Original Long Subdivision Survey, Dallam County, Texas	4,013
3	Gulf Oil Corp.	Julius Cox	1	Cen. SE¼SE¼ sec. 31, T. 2 N., R. 8 E., Cimarron Meridian, Cimarron County, Oklahoma	3,854
4	Pure Oil Co.	R. E. Cox	1	SE¼SW¼SE¼ sec. 16, T. 5 N., R. 8 E., Cimarron Meridian, Cimarron County, Oklahoma	3,919
5	Esson Oil Co.	Craver	1A	SE cor. SW¼ sec. 32, T. 34 S., R. 42 W., Morton County, Kansas	3,560
6	Argus Production Co.	Christopher	2	Cen. NE¼ sec. 10, T. 33 S., R. 39 W., Stevens County, Kansas	3,216
7	Champlin Refng. Co.	Becker (Dirks)	1	Cen. NE¼SW¼ sec. 34, T. 28 S., R. 29 W., Gray County, Kansas	2,776
8	Swain et al	Taylor (Henthorne)	1	Cen. NW¼ sec. 21, T. 25 S., R. 24 W., Ford County, Kansas	2,503

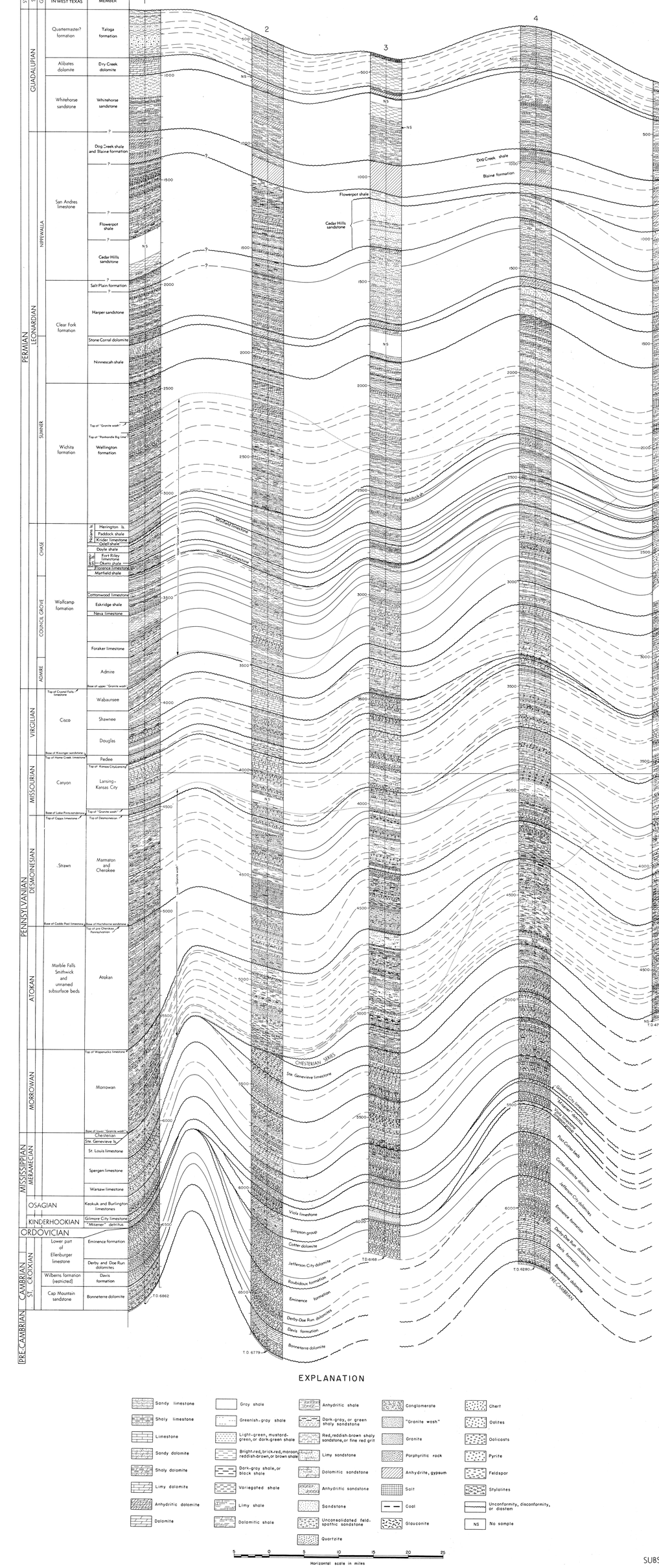
Figures at left of columns indicate depth in feet as plotted along the center lines of columns, which denote the well locations.



INDEX MAP SHOWING LINE OF CROSS SECTION NO. 3 AND PREVIOUSLY PUBLISHED SECTIONS

0 10 20 30 40 50 Miles
Scale

SYSTEM	SERIES	GROUP	GROUP OR FORMATION NAMES USED IN WEST TEXAS	FORMATION OR MEMBER
PERMIAN	GUADALUPIAN	NIPEWALLA	Quartermaster? formation	Taloga formation
			Alibates dolomite	Dry Creek dolomite
			Whitehorse sandstone	Whitehorse sandstone
			San Andres limestone	Dog Creek shale and Blaine formation
				Flowerpot shale
				Cedar Hills sandstone
	LEONARDIAN		Clear Fork formation	Salt Plain formation
				Harper sandstone
				Stone Corral dolomite
				Ninnescah shale
		SUMNER	Wichita formation	Wellington formation
		CHASE	Wolfcamp formation	Herington ls.
				Paddock shale
				Krider limestone
				Odell shale
				Doyle shale
				Fort Riley limestone
				Oketo shale
				Florence limestone
				Matfield shale
		COUNCIL GROVE		Cottonwood limestone
				Eskridge shale
				Neva limestone
				Foraker limestone
		ADMIRE		Admire
	VIRGILIAN		Cisco	Wabaunsee
				Shawnee
				Douglas
	MISSOURIAN		Canyon	Pedee
				Lansing-Kansas City
	DESMOINESIAN		Strawn	Marmaton and Cherokee
	ATOKAN		Marble Falls Smithwick and unnamed subsurface beds	Atokan
	MORROWAN			Morrowan
MISSISSIPPIAN	MERAMECIAN			Ste. Genevieve ls.
				St. Louis limestone
				Spergen limestone
				Warsaw limestone
	OSAGIAN			Keokuk and Burlington limestones
	KINDERHOOKIAN			Gilmore City limestone
				"Misener" detritus
ORDOVICIAN			Lower part of Ellenburger limestone	Eminence formation
				Derby and Doe Run dolomites
CAMBRIAN	ST. CROIXIAN		Wilberns formation (restricted)	Davis formation
			Cap Mountain sandstone	Bonneterre dolomite
PRE-CAMBRIAN				



EXPLANATION

- Sandy limestone
- Shaly limestone
- Limestone
- Sandy dolomite
- Shaly dolomite
- Limy dolomite
- Anhydritic dolomite
- Dolomite
- Gray shale
- Greenish-gray shale
- Light-green, mustard-green, or dark-green shale
- Bright-red, brick-red, maroon, reddish-brown, or brown shale
- Dark-gray shale, or black shale
- Variegated shale
- Limy shale
- Dolomitic shale
- Anhydritic shale
- Dark-gray, or green shaly sandstone
- Red, reddish-brown shaly sandstone, or fine red grit
- Limy sandstone
- Dolomitic sandstone
- Anhydritic sandstone
- Sandstone
- Unconsolidated feldspathic sandstone
- Quartzite
- Conglomerate
- "Granite wash"
- Granite
- Porphyritic rock
- Anhydrite, gypsum
- Salt
- Coal
- Glauconite
- Chert
- Oolites
- Oolicasts
- Pyrite
- Feldspar
- Stylolites
- Unconformity, disconformity, or diastem
- NS No sample

5 0 5 10 15 20 25
Horizontal scale in miles

The nomenclature and classification follow the usage of the State Geological Survey of Kansas. Not all the formation and member names are shown.

Structural features and stratigraphy shown are in part interpretations by the author.

Datum—sea level

Drafting of cross section by H. Russell Coston