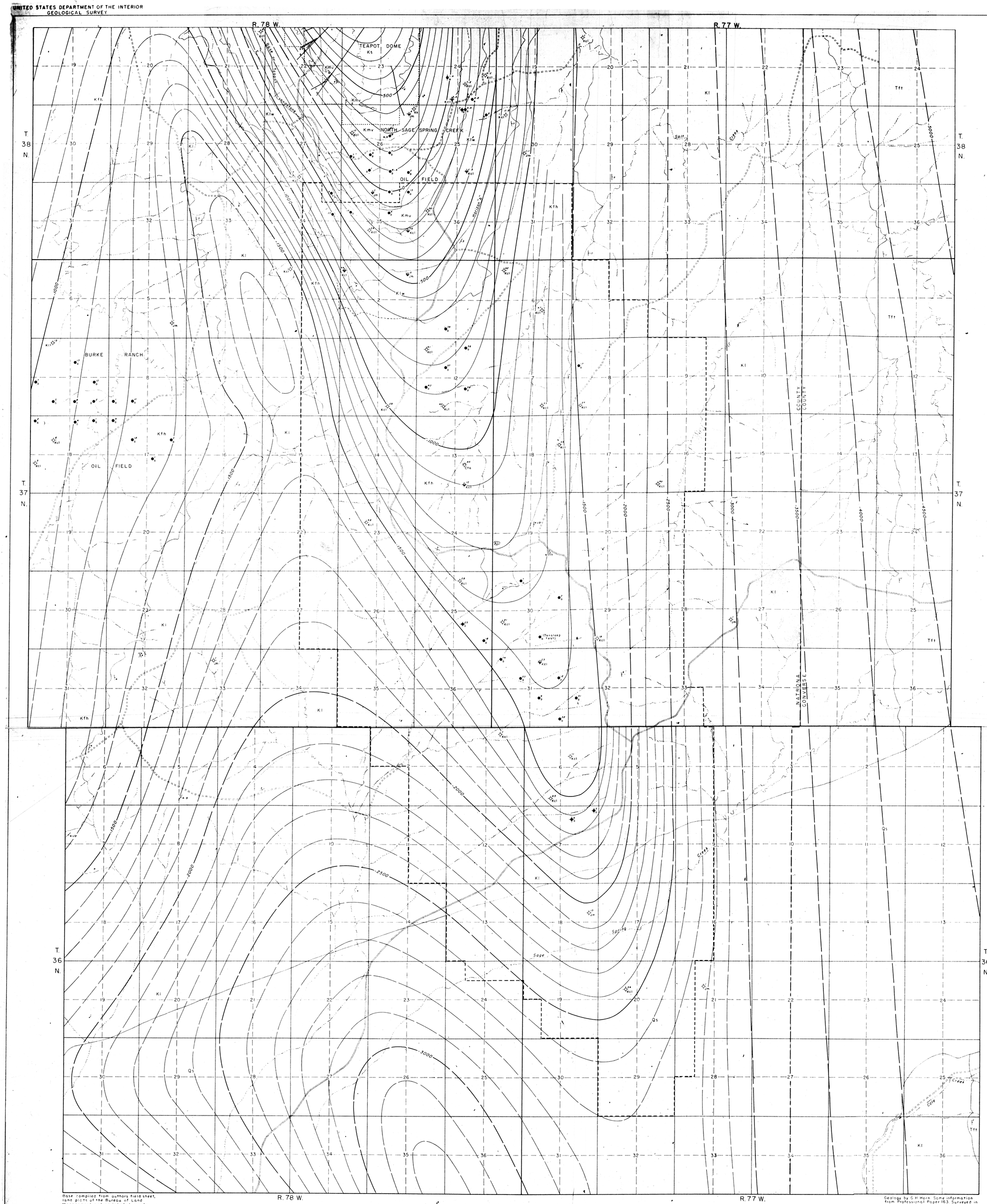

Base compiled from authors field sheet, land plats of the Bureau of Land Management and aerial photographs

Geology by G.H. Horn. Some information from Professional Paper 163. Surveyed in 1950.

EXPLANATION

EXPOSED ROCKS

QUATERNARY	Qs	Sand dunes
TERTIARY, Paleocene	Tft	Tullock member of Fort Union formation
CRETACEOUS, Upper Cretaceous	Kl	Lance formation
	Kfh	Fox Hills sandstone
	Klw	Lewis shale (Lower part below Fox Hills sandstone)
	Kmv	Mesaverde formation
	Ks	Steele shale

WELL SYMBOLS

- Drilling well
- Oil well
- Abandoned oil well

Note: Letters beside oil well denote producing formation as follows: w Muddy sand, s Dakota sand

- Dry hole
- Dry hole, with show of oil
- Dry hole, with show of gas

Note: Letters beside dry hole are columnar section symbol for lowest formation reached

Well number indicates operator's designation
Well status as of January 1, 1958

STRUCTURAL SYMBOLS

500

Structure contours drawn on top of the Dakota sand, dashed where inferred. Contour interval 100 feet (light line) and 500 feet (heavy line) datum mean sea level

Surface fault (D, downthrown side)

Strike and dip of beds

MISCELLANEOUS

Triangulation mark (United States Coast and Geodetic Survey) and altitude in feet above sea level (vertical angle elevation)

Boundary of U.S. Naval Petroleum Reserve No. 3

Boundary of Sage Spring Creek Unit area

Abandoned coal mine

COLUMNAR SECTION LITHOLOGIC SYMBOLS

Sandstone; Calcareous shale; Thin-bedded shaly sandstone or sandy shale; Limestone or dolomite; Siltstone; Gypsum or anhydrite; Shale; Bentonite; Coal; Granite

U. S. Geological Survey
OPEN FILE REPORT
This map or illustration is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

COLUMNAR SECTION

SYSTEM	SERIES	GROUP	FORMATION AND MEMBER	SYMBOL
QUATERNARY	Recent		"Sand Dunes	Qs
TERTIARY	Paleocene		Fort Union formation Tullock member	Tft
CRETACEOUS	Upper Cretaceous	Montana	Lance formation 2400'-3000'	Kl
			Fox Hills sandstone 800'	Kfh
			Lewis shale 600' (Horizon "A")	Klw
			Teapot sandstone 50'	
			Mesaverde formation 875'	Kmv
			Parkman sandstone 450'	
			Steele shale 2850'	
			Shannon sandstone	Ks
			Niobrara formation 500'	Kn
		Colorado	Carlile shale 230'	Kc
			"First Wall Creek sand"	
			Frontier formation 800'	
			"Second Wall Creek sand"	Kf
	Lower Cretaceous		Mowry shale 280'	Km
			"Muddy sand"	
			Thermopolis shale 180'	Kt
			"Dakota sand"	
			Cloverly formation 90'	Kcl
JURASSIC			Morrison formation 220'	Jm
			Sundance formation 320'	
TRIASSIC			Alcova limestone	
			Chugwater formation 700'	
PERMIAN			Red shales and siltstones, limestones and gypsum sequence 310'	
CARBONIFEROUS	Pennsylvanian		Tensleep sandstone and Amsden formation Undivided 730'	
	Mississippian		Madison limestone 240'	
CAMBRIAN			Deadwood formation 525'	
PRE-CAMBRIAN			"Granite"	

Oil producing zones

Drilled / Undrilled

VERTICAL SCALE 0, 100, 200, 400, 600, 800, 1000 FT.

GEOLOGIC AND STRUCTURE MAP OF THE SAGE SPRING CREEK OIL FIELD AND VICINITY, NATRONA AND CONVERSE COUNTIES, WYOMING

SCALE
0 1/4 1/2 3/4 1 2 3 Miles

1958
George H. Horn