DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
83-624-B

FEB 17 1984

B — WEST — B′ — EAST

9 SUN OIL CO. 1 WOLF-FEDERAL NW¼ SE¼ sec. 31, T. 35 N., R. 92 W. KB 5600

10 CASTLE GARDEN FIELD — SINCLAIR OIL AND GAS CO. 1 CASTLE GARDEN NW¼ NW¼ sec. 13, T. 34 N., R. 91 W. GR 5824

11 APACHE CORP. 1 SMELTING-STATE NE¼ NW¼ sec. 16, T. 34 N., R. 90 W. KB 6104

12 DIAMOND SHAMROCK CO. 1-27 CONOCO-COAL BANK NE¼ NW¼ sec. 27, T. 35 N., R. 88 W. KB 6305

13 WALLACE CREEK FIELD — BAY PETROLEUM CO. 1 WALLACE CREEK SW¼ NE¼ sec.15, T. 34 N., R. 87 W. DF 6111

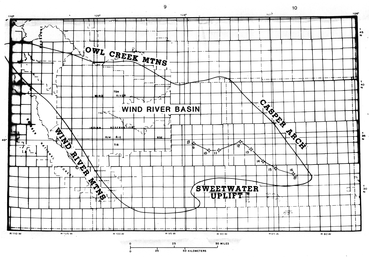
14 NORTH GREVE FIELD — DIAMOND SHAMROCK CO. 3 GREVE NORTH NW¼ SE¼ sec. 23, T. 33 N., R. 86 W. KB 6492

15 GREVE FIELD — CITES SERVICE 1 GOVT. GREVE NW¼ SW¼ sec. 12, T. 32 N., R. 85 W. DF 6464

16 SNOW OIL OF KANSAS 9-13A YOUNG RANCH NE¼ SE¼ sec. 34, T. 32 N., R. 87 W. KB 5984

ERA	SYSTEM	SERIES	FORMATION	MEMBER
CENOZOIC	TERTIARY	EOCENE	Wind River Formation	
		PALEOCENE	Fort Union Formation	
MESOZOIC	CRETACEOUS	UPPER	Lewis Formation	
			Meeteetse Formation	
			Mesaverde Formation	
			Cody Shale	
			Niobrara Formation	
			Frontier Formation	
		LOWER	Mowry Shale	Upper Black Shale, Middle Black Shale, Lower Black Shale
			Thermopolis Shale	
			Dakota Formation	

Wind River Formation
Fluvial (sandstone, siltstone, and shale)
Fort Union Formation
Fluvial (sandstone, siltstone, and shale)
Fluvial and paludal (sandstone, siltstone, shale, and coal)
Fluvial and paludal (sandstone, siltstone, shale, and coal)
Fluvial and paludal (sandstone, siltstone, shale and coal)
Lewis Shale (upper marine tongue)
Teapot Sandstone Member
Lewis Shale (lower marine tongue)
Unnamed Middle Member of Mesaverde
Continental and marginal marine (sandstone, siltstone, and shale)
Parkman Sandstone Member
Fales Sandstone Member
Wallace Creek Tongue Marine (shale)
Marginal marine-deltaic (sandstone and shale)
Marine (shale, siltstone, and sandstone)
Marine (chalk)
Marine (sandstone, shale, and siltstone)
Marine (shale)
Marine (shale)
Marine (sandstone and siltstone)
Marine (shale)
Continental and marginal marine (sandstone, siltstone, and shale)



INDEX MAP

EXPLANATION

Spontaneous Potential Curve — Resistivity Curve — Conductivity Curve

Depth in feet, in feet below Kelly Bushing (KB)

Correlation line at formation or member boundaries – Queried where correlation is uncertain.

Correlation line within a formation or member – Queried where correlation is uncertain.

Correlation line along an unconformity – Queried where correlation is uncertain.

Interval and identification number of drill stem test (DST)

Cored interval

KB 7600 Elevation of Kelly Bushing in feet

GR 7600 Elevation of ground surface in feet

DF 7600 Elevation of derrick floor in feet

Cross section datum is the top of the Mowry Shale.

Dry and abandoned well

Metric Equivalents:

1 ft = 0.30 m
1 psi = 6.895 x 10^{-3} kg/cm^2
1 bwpd = 159 liters of oil per day
1 mcfd = 28.32 m^3 of gas per day
1 bwpd = 159 liters of water per day

ABBREVIATIONS

LF	Frontier Formation
Fa	Muddy Sandstone Member
Ks	Cody Shale
Kn	Niobrara Formation
Klw	Lewis Shale
Klt	Teapot Sandstone Member
DST	Drill Stem test
DC	Decreased
INCT	Initial
IP	Open
K	Hour
MCF	Mcf/day
GTS	Gas to surface
IFP	Initial flow pressure
FFP	Final flow pressure
ISIP	Initial shut in pressure
FSIP	Final shut in pressure
IHP	Initial hydrostatic pressure
FHP	Final hydrostatic pressure
MCFD	Thousand cubic feet per day
INCR	Increased
SOCM	Slightly gas cut mud
GCM	Gas cut mud
SGCM	Slightly gas cut mud
WTR	Water
MCW	Mud cut water
SCW	Slightly gas cut water
WCW	Water cut water
WCM	Water cushion
SGCMW	Oil and slightly gas cut mud
BHT	Bottom hole temperature
cft	Cubic foot
cc	Cubic centimeters
psi	Pounds per square inch

REFERENCES

Keefer, W. R., 1965, Stratigraphy and geologic history of the uppermost Cretaceous, Paleocene, and lower Eocene rocks in the Wind River Basin, Wyoming: U.S. Geological Survey Professional Paper 495-A, 77p.

Keefer, W. R., 1972, Frontier, Cody, and Meeteetse Formations in the Wind River and Southern Bighorn Basins, Wyoming: U.S. Geological Survey Professional Paper 495-B, 21p.

Shepard, L. R., 1976, Depositional environments and correlation of the Meeteetse Formation, Wind River Basin, Wyoming: Rocky Mountain Geological Association 26th Annual Field Conference Guidebook, Resources of the Wind River Basin, p. 187-192.

DATA ITEMS TAKEN FROM DATA
Compiled from Petroleum Information Corporation Well History Control System (WHCS) Data

WELL #9

DST 1 9600-9704 Ft Kf
REC 30 Ft MCO
IHP 4800 psi
IFP 41 psi FFP 42 psi
ISIP 41 psi 30 M
FSIP 1000 psi 30 M
FHP 4800 psi FHP 4800 psi

WELL #10

DST 1 5414-5460 Ft Kf
REC 90 Ft SGCM
INCT OF 30 M

DST 2 5470-5500 Ft Kf
REC 180 Ft SGCM 810 Ft WTR
INCT OF 30 M

DST 3 5667-5707 Ft Kf
rec. 30 Ft W & Ft MCFD
REC 80 Ft SCW
INCT OF 30 M

DST 4 5524-5965 Ft Kf
REC 90 Ft SCW
INCT OF 1 H

WELL #11

DST 1 6686-6696 Ft Kf
MISRUN

DST 2 6924-6970 Ft Kf
REC 435 Ft MCW 1074 Ft
IHP 3400 psi FHP 3400 psi
REC 75.5 cc WTR
INCT OF 5 M
IFP 41 psi
FFP 207 psi FFP 254 psi
ISIP 1267
FSIP 1000 psi 45 M
FHP 3400 psi 1 H 30 M
IHP 3400 psi FHP 3400 psi

DST 5 6684-6697 Ft Kf
MISRUN

DST 6 7000-7040 Ft Kf
REC 1000 Ft GCM 400 Ft SWTR
INCT OF 1 H

DST 7 7101-7182 Ft Kc
REC 90 Ft SCW
REC 720 Ft GCM
INCT OF 1 H

DST 8 6484-6494 Ft Kf
GTS 15 IN 8 Ft MCFD
REC 30 Ft WCM
IHP 3400 psi
FIHP 1 H 0
IFP 126 psi FFP 173 psi
ISIP 1
ISIP 2635 psi 30 M
FSIP 2737 psi 30 M
FHP 3400 psi FHP 3400 psi

WELL #12

DST 1 5100-5167 Ft Kf
REC 1000 Ft GCM
INCT OF 30 M

DST 2 1705-1907 Ft Kf
REC 1000 Ft GCM
INCT OF 30 M
IFP 380 psi FFP 380 psi
FIHP 1 H 0
FFHP 1 H 0
ISIP 2 M 0
FSIP 1000 psi 30 M
FHP 1000 psi FHP 1000 psi

DST 3 1705-1907 Ft Kf
REC 1000 Ft GCM
INCT OF 1 H
IFP 73 psi FFP 73 psi
FIHP 1 H 0
ISIP 1000 psi 1 H
FSIP 1000 psi 1 H

DST 4 1115b-1121 Ft Kf
MISRUN

DST 5 1115b-1121 Ft Kf
REC 1000 Ft WCM
INCT OF 30 M
IFP 73 psi FFP 73 psi
FIHP 1 H 0
ISIP 1000 psi 1 H
FSIP 1000 psi 1 H

DST 6 1115b-1121 Ft Kf
REC 1000 Ft WCM
INCT OF 30 M
IFP 73 psi FFP 73 psi
FIHP 1 H 0
ISIP 1000 psi 1 H
FSIP 1000 psi 1 H

DST 7 1115b-1121 Ft Kf
REC 90 Ft SCW
INCT OF 1 H

DST 8 1121b-1127 Ft Kc
REC 1000 Ft WCM
INCT OF 1 H

DST 9 1121b-1127 Ft Kc
REC 1000 Ft WCM
INCT OF 30 M
IFP 73 psi FFP 73 psi
FIHP 1 H 0
ISIP 1000 psi 1 H
FSIP 1000 psi 1 H

DST 10 1121b-1127 Ft Kc
REC 90 Ft SCW
INCT OF 1 H

DST 11 1121b-1127 Ft Kc
REC 1000 Ft GCM 400 Ft SWTR
INCT OF 1 H

DST 12 1121b-1127 Ft Kc
REC 720 Ft GCM
INCT OF 1 H

DST 13 5238-5270 Ft Kc
MISRUN

DST 14 5243-5270 Ft Kc
MISRUN

WELL #15

DST 1 5300-5347 Ft Kc
REC 90 Ft SCW
INCT OF 1 H FFP 42 psi
FSIP 2695 psi 15 M
FHP 4400 psi

DST 2 1102b-1109 Ft Kc
RAN 1060 Ft WC
REC 782 Ft WTR 540 Ft
IHP 5 psi FFP 5 psi
INCT OF 2 H ISIP 1025 psi
FFP 2612 psi FSIP 2612
FHP 5 psi

WELL #16

DST 1 9400-9507 Ft Kc
REC 90 Ft SGCM
INCT OF 1 H
FIHP 1 H 0
ISIP 1000 psi FFP 94 psi
INCT 30M
FSIP 400 psi 1 H
FHP 4400 psi 1 H 30 M
IHP 4453 psi FHP 4531 psi

DST 2 12954-13123 Ft Kcl
RAN 3000 Ft WC
REC 2000 Ft WC 2950 cc WCM
INCT OF 15 M
IFP 127 psi FFP 1394 psi
ISIP 1 M
FSIP 1402 psi FFP 1461 psi
INCT 30M
IHP 6 psi FHP 1 H
FHP 1301 psi 1 H 30 M
IHP 6957 psi FHP 6464 psi

DST 3 9420-9454 Ft Klw
MISRUN

DST 4 9420-9454 Ft Klw
MISRUN

DST 5 9430-9452 Ft Klw
MISRUN

This chart is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature.

PRELIMINARY CHART B-B′ SHOWING ELECTRIC LOG CORRELATION, FACIES, AND TEST DATA OF SOME CRETACEOUS AND TERTIARY ROCKS, WIND RIVER BASIN WYOMING

BY
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1983