DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN-FILE REPORT
83-624-B

FEB 17 1984
U.S. GEOLOGICAL SURVEY
DENVER, COLORADO

B — WEST — B' — EAST

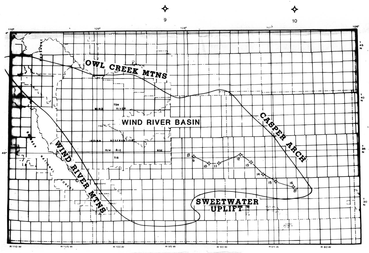
	9	10	11	12	13	14	15	16
	SUN OIL CO. 1 WOLF-FEDERAL NW¼ SE¼ sec. 31, T. 35 N., R. 92 W.	CASTLE GARDEN FIELD SINCLAIR OIL AND GAS CO. 1 CASTLE GARDEN NW¼ NW¼ sec. 13, T. 34 N., R. 91 W.	APACHE CORP. 1 SMELTING-STATE NE¼ NW¼ sec. 16, T. 34 N., R. 90 W.	DIAMOND SHAMROCK CO. 1-27 CONOCO-COAL BANK NE¼ NW¼ sec. 27, T. 35 N., R. 88 W.	WALLACE CREEK FIELD BAY PETROLEUM CO. 1 WALLACE CREEK SW¼ NE¼ sec.15, T. 34 N., R. 87 W.	NORTH GREVE FIELD DIAMOND SHAMROCK CO. 3 GREVE NORTH NW¼ SE¼ sec. 23, T. 33 N., R. 86 W.	GREVE FIELD CITIES SERVICE 1 GOVT. GREVE NW¼ SW¼ sec. 10, T. 32 N., R. 85 W.	SHOW OIL OF KEM 1-34 YOUNG RANCH NW¼ SE¼ sec. 34, T. 32 N., R. 87 W.
	KB 5600	GR 5824	KB 6104	KB 6305	DF 6111	KB 6492	DF 6464	KB 5984

ERA: CENOZOIC — SYSTEM: TERTIARY — SERIES: PALEOCENE, EOCENE — FORMATION: Fort Union Formation, Wind River Formation — MEMBER

MESOZOIC — CRETACEOUS — UPPER

Lewis Formation — Meeteetse Formation — Mesaverde Formation — Cody Shale — Wahoo Formation — Frontier Formation — Mowry Shale — Thermopolis Shale — Muddy Sandstone — Lower Black 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
Wallace Creek Tongue Marine (shale)
Fales Sandstone Member
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)
Continental and marginal marine
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 7400 Elevation of Kelly Bushing in feet

GR 7400 Elevation of ground surface in feet

DF 7400 Elevation of derrick floor in feet

Cross section datum is the top of the Rawlins Shale.

Dry and abandoned well

Rotary Fuel

REFERENCES

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

Keefer, W. R., 1972, Frontier, Cody, and Mesaverde Formations in the Wind River and Southern Bighorn Basins, Wyoming: U.S. Geological Survey Professional Paper 495-E, 77 pp.

Shearer, J. S. Jr., 1978, Depositional environments and correlation of the Mesaverde Formation, Wind River Basin, Wyoming: Rocky Mountain Geological Association 29th Annual Field Conference Guidebook, Resources of the Wind River Basin, p. 167-182.

ABBREVIATIONS

cf	Fracture formation
fm	Muddy Sandstone Member
Kcl	Coalbed
Kfu	Fort Union Formation
Kls	Lewis Shale
Kt	Teapot Sandstone Member
DST	Drill Stem test
Hor	Horizontal
INCR	Increase
LW	Leak
M	Mean
MCFD	Million cubic feet per day
SAND	Sand
SDTO	See to surface
SIP	Initial flow pressure
SIPP	Initial shut in pressure
SIPP	Final shut in pressure
FHP	Final hydrostatic pressure
FHP	Final hydrostatic pressure
MCFD	Thousand cubic feet per day
SWCM	Salt water cushion
SGCM	Slightly gas cut mud
SOCM	Oil cut mud
SWCM	Salt water
WTR	Water
WCM	Mud cut water
SCW	Slightly gas cut water
WCM	Water cushion
WGCM	Oil and slightly gas cut mud
BHT	Bottom hole temperature
cft	Cubic feet
cc	Cubic centimeters
ppi	Pounds per square inch

Metric Equivalents:

1 ft = 0.30 m
1 psi = 0.07 kg/cm² = 1 kg/cm²
1 bopd = 159 liters of oil per day
1 mcfd = 28.32 m³ of gas per day
1 bwpd = 159 liters of water per day

Logs: ITPG ISOT DATA
Compiled from Petroleum Information Corporation Well History Control System (WHCS) Data.

WELL #3
DST 1 9020-9054 Ft Kf
REC 30 Ft MCO
SIP 3151 psi
IHP 4141 psi FFP 42 psi
ISIP 42 psi 30 M
FFP 1252 psi ISIP 3151 psi
IHP 4322 psi FHP 4322 psi
Weak blow-died in 30 M

WELL #10
DST 1 9474-9482 Ft Kf
REC 90 Ft SOCM
IHCT IP 15 M

DST 2 9475-9502 Ft Kf
REC 180 Ft SOCM 810 Ft WCM
IHCT IP 15 M

DST 3 9567-9707 Ft Kf
(15) IH 5 M W 5 MCFD
REC 80 Ft SCM
IHCT IP 30 M

DST 4 9524-9595 Ft Kf
REC 60 Ft SOCM
IHCT IP 1 H

WELL #11
DST 1 9488-9498 Ft Kf
Wildcat

DST 2 9352-9410 Ft Kf
REC 475 Ft MCW 3270 Ft
SIP 3215 psi 30 M
REC 75.5 Cc WTR
IHCT IP 5 M
IHP 4141 psi FFP 254 psi
SHT IN
FHP 4141 psi 45 M
FSIP 3988 psi 1 H 30 M
IHP 3905 psi FHP 3906 psi

DST 5 9484-9497 Ft Kf
Wildcat

DST 6 9352-9410 Ft Kf
REC 475 Ft MCW 3270 Ft
SIP 3215 psi 30 M
REC 75.5 Cc WTR
IHCT IP 5 M
IHP 4141 psi FFP 254 psi
SHT IN
FHP 4141 psi 45 M
FSIP 3988 psi 1 H 30 M
IHP 3905 psi FHP 3906 psi

DST 7 9484-9497 Ft Kf
Wildcat

DST 1 10,000-10,020 Ft Kf
REC 1050 Ft GCM 400 Ft SWTR
IHCT IP 1 H

DST 2 10,015-10,027 Ft Kv
REC 1050 Ft GCM 400 Ft SWTR
IHCT IP 1 H

DST 3 7370-7387 Ft Kv
REC 720 Ft GCM
IHCT IP 1 H

DST 4 6464-6494 Ft Kv
REC 100 Ft MCW
IHCT IP 1 H
FSIP 2985 psi 73 M
FHP 1650 psi

DST 5 5238-5270 Ft Kv
Wildcat

DST 6 5243-5270 Ft Kv
Wildcat

WELL #15
DST 1 8580-8740 Ft Kv
REC 1000 Ft MCW
IHCT IP 1 H FFP 40 psi
FSIP 2985 psi 73 M
FHP 1650 psi

DST 2 11026-11090 Ft Kv
RAN 1500 Ft W
REC 782 Ft MCW 540 Ft
IHP 5151 psi FHP 5151 psi
IHCT IP 2 H FFP 1005 psi
FFP 2612 psi FSIP 2612

WELL #16
DST 1 9466-9567 Ft Kv
Wildcat (Niobrara)
IHCT IP 1 H
FFP 1361 psi FHP 96 psi
SHT IN
ISIP 466 psi 1 H
IHP 4651 psi FHP 4651 psi

DST 2 12064-12123 Ft Kv
RAN 3000 Ft W
REC 2000 Ft GCM 2950 cf MCW
IHCT IP 1 H
IFP 1277 psi FFP 1394 psi
SHT IN 1 H
ISIP 1442 psi FHP 1441 psi
IHCT ISOT
IFP 1277 psi 1 H
FSIP 1381 psi 1 H 30 M
IHP 6451 psi FHP 6464 psi

DST 3 9432-9494 Ft Kv
Wildcat

DST 4 9430-9454 Ft Kv
Wildcat

DST 5 9430-9462 Ft Kv
Wildcat

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
JAMES E. FOX AND ROBERT L. PRIESTLEY

1983