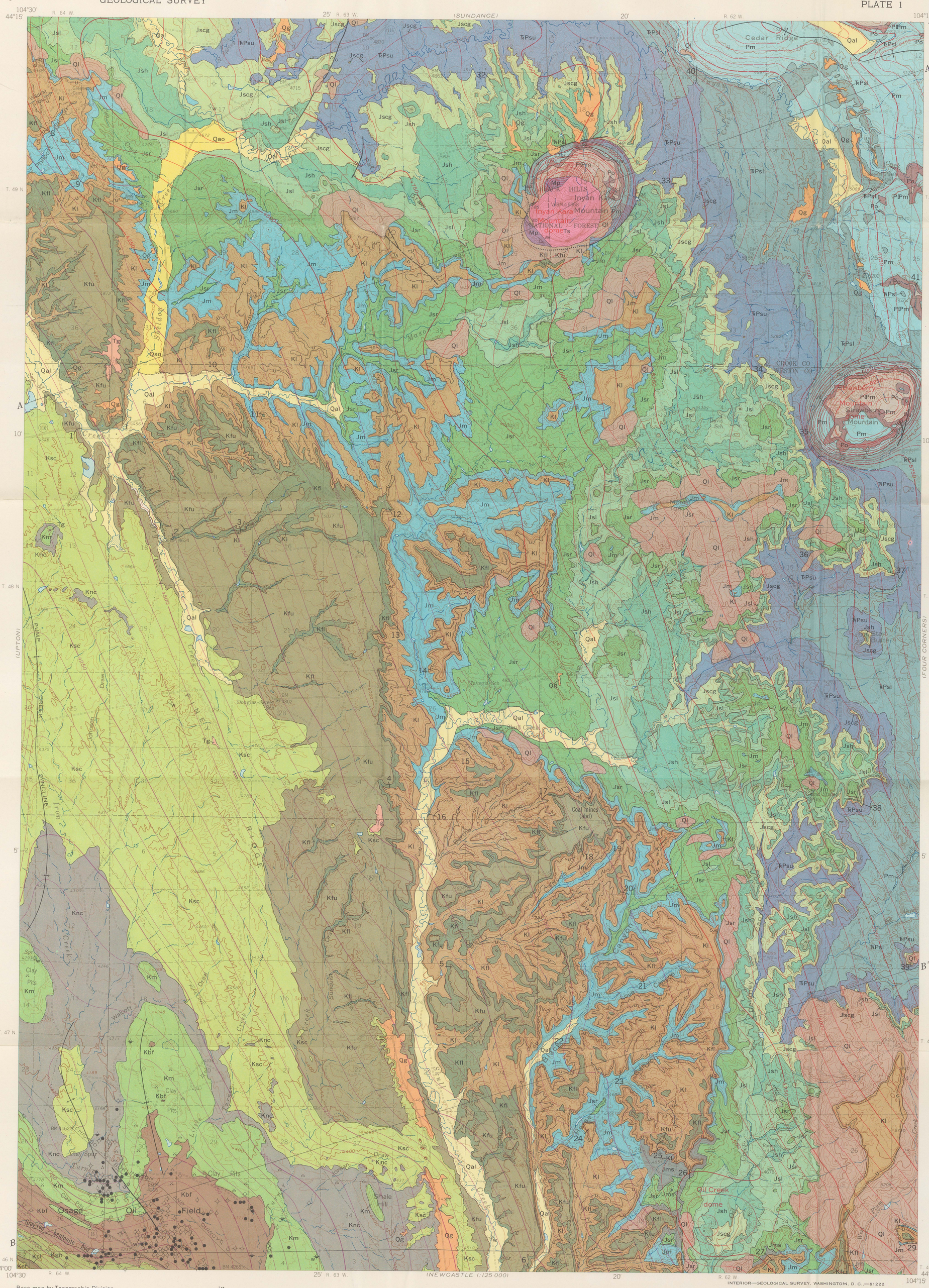
PLEASE REPLACE IN POCKET IN BACK OF BOUND VOLUME

U. S. GEOLOGICAL SURVEY WASHINGTON LIBRARY




Base map by Topographic Division
U. S. Geological Survey, 1958

APPROXIMATE MEAN DECLINATION, 1962

Geology by W. J. Mapel, C. L. Pillmore, and R. F. Schryver, 1956–58

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—61222

## EXPLANATION

**QUATERNARY**

Qal, Qao — Alluvium
Qal, *younger alluvium.*
Qao, *older alluvium along Sheldon Creek*

Ql — Landslide material
*Includes talus deposits at Inyan Kara Mountain*

**TERTIARY AND QUATERNARY**

Qg, Tg — Terrace and pediment gravel
Qg, *lower and younger deposits.*
Tg, *higher and older deposits*

**TERTIARY(?)**

Ts — Syenite porphyry and closely related rocks

**CRETACEOUS**

*Upper Cretaceous*

Kct, Kcl — Carlile shale
Kct, *Turner sandy member.*
Kcl, *lower unnamed member*

Kgh — Greenhorn formation

Kbf — Belle Fourche shale

Km — Mowry shale

Knc — Newcastle sandstone

Ksc — Skull Creek shale

*Lower Cretaceous*

Inyan Kara group

Kfu, Kfl — Fall River formation
Kfu, *upper part.*
Kfl, *lower part*

UNCONFORMITY

Kl — Lakota formation
u, *local unconformity shown on plate 3 and referred to in text*

**JURASSIC**

*Upper Jurassic*

Jm, Jms — Morrison formation
Jms, *local sandstone facies*

*Middle and Upper Jurassic*

Jsr, Jsl, Jsh, Jscg — Sundance and Gypsum Spring formations
Jsr, *Redwater shale member.*
Jsl, *Lak member.*
Jsh, *Hulett sandstone member.*
Jscg, *Stockade Beaver shale and Canyon Springs sandstone members of the Sundance formation and Gypsum Spring formation, undivided*

UNCONFORMITY

**TRIASSIC**

TRPsu, TRPsl — Spearfish formation
TRPsu, *upper part.*
TRPsl, *lower part*

**PERMIAN**

Pm — Minnekahta limestone

Po — Opeche formation

UNCONFORMITY

**PENNSYLVANIAN**

PIPm — Minnelusa formation

UNCONFORMITY

**MISSISSIPPIAN**

Mp — Pahasapa limestone

**CARBONIFEROUS**

Symbols used on sections

| | |
|---|---|
| Qal, Qao, | Alluvium |
| Qg, Tg, | Surficial gravel deposit |
| Ql, | Landslide material |
| Ts, | Syenite porphyry and closely related rocks |
| Kgh, | Greenhorn formation |
| Kbf, | Belle Fourche shale |
| Km, | Mowry shale |
| Knc, | Newcastle sandstone |
| Ksc, | Skull Creek shale |
| Kf, | Fall River formation |
| Kl, | Lakota formation |
| Jm, | Morrison formation |
| Jsg, | Sundance and Gypsum Spring formations, undivided |
| TRPs, | Spearfish formation |
| Pmo, | Minnekahta limestone and Opeche formations, undivided |
| PIPm, | Minnelusa formation |
| Mpe, | Pahasapa and Englewood limestones, undivided (Mississippian) |
| Oww, | Whitewood dolomite and Winnipeg formation, undivided (Ordovician) |
| O€d, | Deadwood formation (Cambrian and Ordovician) |
| p€u, | Precambrian rocks, undivided |

Contact
*Dashed where approximately located*

Fault
*Dashed where approximately located; dotted where concealed.* U, *upthrown side;* D, *downthrown side*

Axis of anticline

Axis of syncline

Strike and dip of beds

Strike and dip of overturned beds

Structure contours
*Drawn on top of the Lakota formation. Dashed where approximately located or where the contour horizon is above the ground surface. Contour interval 50 feet; datum is mean sea level*

Structure contours
*Drawn on top of the Gypsum Spring formation, or on top of the Spearfish formation where the Gypsum Spring formation is absent. Dashed where approximately located or where the contour horizon is above the ground surface. Contour interval 50 feet; datum is mean sea level*

Well drilled for oil or gas

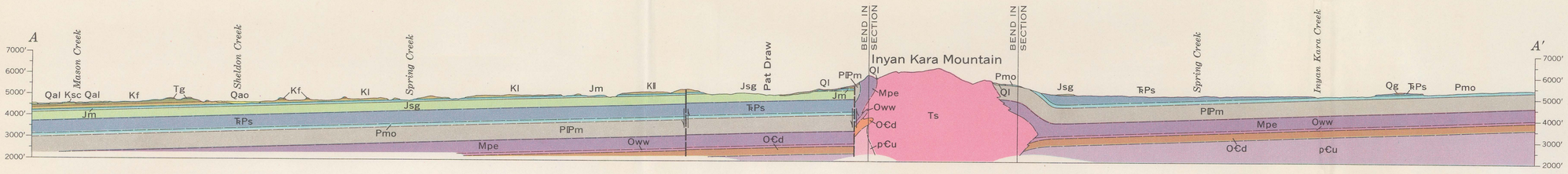
Record of oil production — Show of oil

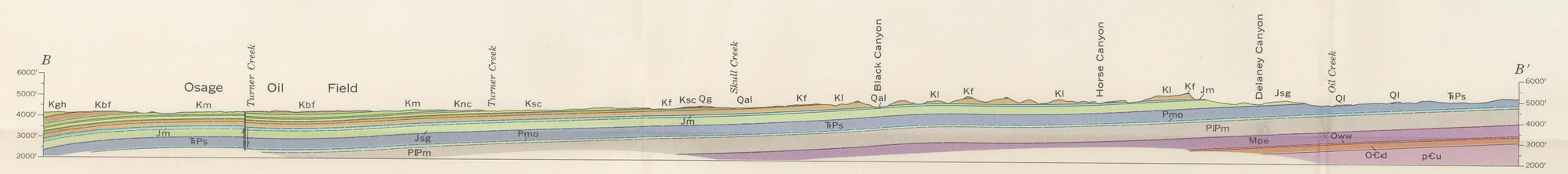
Dry hole — Dry hole completed as water well

Abandoned well, original status unknown

*Well data compiled to Sept. 1959 from records [on file] of U. S. Geological Survey Conservation Division, Denver, Colo.*

Location of measured section
*Shown graphically on plates 2 or 3*




# GEOLOGIC MAP AND SECTIONS OF THE INYAN KARA MOUNTAIN QUADRANGLE CROOK AND WESTON COUNTIES, WYOMING

SCALE 1:48 000

1 ½ 0 1 2 3 MILES

CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL