

28-12-19e



TULSA, OKLAHOMA
KANSAS CITY, MO.

MINNEAPOLIS, MINN.
OMAHA, NEBR.

SKELLY OIL COMPANY

PRODUCER, REFINER AND DISTRIBUTOR OF
PETROLEUM AND ITS PRODUCTS

EL DORADO, KANSAS

April 9th, 1929.

C. R. THOMAS
CHIEF GEOLOGIST
KANSAS DIVISION

Dr. K.K. Landes,
Geological Survey of Kansas,
Lawrence, Kansas.

Dear Dr. Landes:-

I very much appreciate the cut of samples on the Smith well in Douglass County. According to my interpretation, the well encountered the Chattanooga Shale from 1802 to 1892; the Urschel from 1892 to 2074; the St. Peter from 2074 to 2134; and the Siliceous Lime from 2134 to the total depth of 2370.

If at any time in the future we can furnish you with cuttings in which you are interested, we will be more than glad to do so.

Yours very truly,

J.S. BARWICK>

JSB*MAS

(SKELLY)
AROMAX
GASOLINE

SKELLY
TAGOLENE
MOTOR OIL

SKELLY
Refractionated
GASOLINE

Oct

SAMPLE RECORD

by Ackerman

State Kansas Co. Douglas Farm Smith No. 1 Sec. 28 Twp. 13 Rge. 19 E.

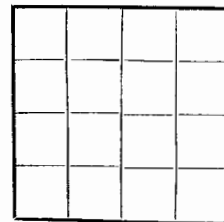
Location SW cor. SW SE

Company Smith et al

Date Drilled 8/4/27

Elevation

Total Depth 2832'



Marmaton

695-706 Fine angular sandstone
 706-738 Soft greenish gray shale
 738-842 Soft greenish gray shale
 842-847 Green and red shale
 847-850 Dark gray to black shale
 850-855 Buff finely crystalline limestone
 855-875 Dark gray shale
 875-880 Buff finely crystalline limestone
 880-905 Greenish gray shale
 905-913 Buff dense and granular limestone

Cherokee shale

913-950 Soft greenish gray shale
 950-987 Fine angular sandstone
 987-1025 Soft greenish gray shale
 1025-1033 Fine angular micaceous sandstone
 1033-1036 Coal streak
 1036-1070 Soft gray shale
 1070-1075 Greenish gray and reddish shale
 1075-1108 Black shale, some coal and fine sand
 1108-1133 Soft dark gray shale
 1133-1145 Soft dark gray shale
 1145-1147 Brown shale, green shale
 1147-1165 Soft greenish gray shale
 1165-1220 Moderately hard dark gray shale
 1220-1235 Greenish gray shale, little sand
 1235-1250 Greenish gray shale, little sand
 1250-1258 Soft greenish gray shale
 1258-1277 Black shale and coal
 1277-1295 Soft greenish gray shale
 1295-1299 Fine angular sandstone
 1299-1305 Gray shale
 1305-1325 Gray shale
 1325-1330 Fine angular micaceous sand
 1330-1398 Soft gray shale
 1398-1404 Gray sandy limestone, coarse sand
 1404-1411 Soft, black shale
 1411-1445 Moderately coarse angular sand
 1445-1471 Coarse sand, some weathered chert.

Mississippi lime

1471-1474 Coarse white chert and limestone.

1471
1472
1473
1474
1475

12-19

SAMPLE RECORD

by Ockerman

State Kansas Co. Douglas Farm Smith No. 1 Sec. 28 Twp. 12 Rge. 19E

Location SW SW SE

Company Smith et al Date Drilled _____

Elevation 1025 Topog. Total Depth 2370

Mississippi lime

- 1471-1474 Weathered white chert, sand
- 1480-1485 " " " "
- 1485-1490 Dense white chert, weathered chert
- 1493-1498 Coarse subangular to rounded, frosted sand
- 1498-1505 White weathered chert, little gray crystalline ls.
- 1505-1510 " " " " " " "
- 1510-1515 " " " " " " "
- 1515-1520 Coarse subangular to rounded, frosted sand
- 1520-1525 " " " " " "
- 1525-1530 Light gray earthy limestone, dense chert, dark shale
- 1530-1534 Light gray finely crystalline limestone, dense chert, dark shale
- 1534-1575 Light gray finely crystalline limestone, white chert
- 1580-1585 White coarsely crystalline limestone, white chert
- 1590-1596 " " " " " "
- 1596-1602 " " " " " "
- 1602-1608 Buff dolomite ls., dead white chert
- 1608-1614 " " " " " "
- 1614-1620 Dead white chert, buff dolomitic limestone
- 1620-1625 Dead white chert, buff dolomitic limestone
- 1625-1630 Dead white chert, buff dolomitic limestone
- 1630-1635 Dull white chert, buff dolomitic limestone
- 1635-1640 Dull white chert, soft white limestone
- 1640-1645 Dull white chert, buff crystalline limestone
- 1645-1650 Dull white chert, buff crystalline limestone
- 1650-1655 Soft buff crystalline limestone, white chert
- 1655-1660 " " " " " "
- 1650-1665 " " " " " "
- 1665-1670 " " coarsely crystalline limestone.
- 1670-1675 Dull gray chert, buff crystalline ls.
- 1675-1680 Soft white coarsely crystalline limestone, white chert
- 1680-1685 " " " " " "
- 1685-1690 Soft white and buff coarsely crystalline limestone.
- 1690-1695 Gray finely crystalline dolomitic limestone
- 1695-1700 Soft white earthy limestone, white chert
- 1700-1705 Gray finely crystalline dolomitic limestone
- 1710-1715 Gray crystalline dolomitic limestone
- 1715-1720 White and brown dense chert, buff dolomitic limestone
- 1720-1725 Dull gray chert, buff dolomitic limestone
- 1725-1730 Gray crystalline limestone, dull gray chert
- 1730-1735 Gray crystalline limestone, dull gray chert
- 1735-1740 Gray crystalline limestone, dull gray chert
- 1740-1745 Gray crystalline limestone, dull gray chert
- 1745-1750 Dull gray chert, gray crystalline limestone
- 1750-1755 Dull gray chert, gray crystalline limestone

SAMPLE RECORD

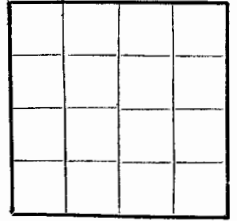
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State _____ Co. _____ Farm Smith No. _____ Sec. 28 Twp. 12 Rge. 19E

Location _____

Company _____ Date Drilled _____

Elevation _____ Total Depth _____



1755-1760 Dull gray crystalline limestone, gray chert.
 1760-1765 " " " " " "
 1765-1770 " " " " " "
 1770-1775 " " " " " "
 1775-1780 " " " " " "
 1780-1785 " " " " " "
 1785-1790 " " " " " "
 1790-1795 " " " " " "
 1795-1802 " " " " " "

Hinderhook shale

1802-1808 Dark gray shale
 1805-1810 Dark gray shale
 1810-1815 Dark gray shale
 1815-1820 Soft light gray shale
 1820-1825 Soft light gray shale
 1825-1830 Soft gray micaceous shale
 1830-1835 " " " "
 1835-1840 " " " "
 1840-1845 " " " "
 1845-1850 Dark gray shale
 1850-1855 Dark gray shale
 1855-1860 Dark gray shale
 1860-1865 Light greenish gray shale, Sporangites huronense
 1865-1870 Light greenish gray shale, Sporangites huronense
 1870-1875 Light greenish gray shale, " "
 1875-1880 Dark gray shale, " "
 1880-1885 Dark gray shale, " "
 1885-1890 Light greenish gray shale, " "

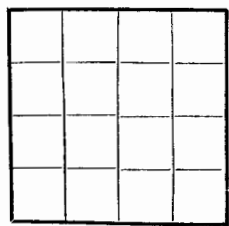
SAMPLE RECORD

State Kansas Co. Douglas Farm Smith No. 1 Sec. 28 Twp. 12 Rge. 19 E.

Location _____

Company Smith et al Date Drilled _____

Elevation _____ Total Depth 2370



Viola-Urschel

- 1890-1895 Gray and brown dense limestone.
- 1895-1900 White and cream colored dense limestone.
- 1900-1910 White and cream colored dense limestone, greenish gray shale.
- 1910-1915 " " " " " " " " " "
- 1915-1920 " " " " " " " " " "
- 1920-1925 Coarse rounded frosted sand, white crystalline limestone.
- 1925-1930 " " " " " " " " " "
- 1930-1935 White and cream colored crystalline limestone.
- 1935-1940 White and gray dense limestone.
- 1940-1945 Coarse rounded frosted sand.
- 1945-1950 Fine angular and coarse rounded frosted sand.
- 1950-1955 " " " " " " " " " "
- 1955-1960 Hard bluish chert, dull white chert, white crystalline limestone.
- 1960-1965 " " " " " " " " " "
- 1965-1970 " " " " " " " " " "
- 1970-1975 Brown chert, brown dolomiticls.
- 1975-1980 Brown coarsely crystalline dolomite, brown chert.
- 1980-1985 " " " " " " " " " "
- 1985-1990 " " " " " " " " " "
- 1990-1995 " " " " " " " " " "
- 1995-2000 " " " " " " " " " "
- 2000-2005 " " " " " " " " " "
- 2005-2010 " " " " " " " " " "
- 2010-2015 Hard white chert, white dolomite.
- 2015-2020 Brown coarsely crystalline dolomite, white chert
- 2020-2025 " " " " " " " " " "
- 2025-2030 " " " " " " " " " "
- 2030-2035 " " " " " " " " " "
- 2035-2040 " " " " " " " " " "
- 2040-2045 " " " " " " " " " "
- 2045-2050 " " " " " " " " " "
- 2050-2055 " " " " " " " " " "
- 2055-2060 " " " " " " " " " "
- 2060-2065 " " " " " " " " " "
- 2065-2070 " " " " " " " " " "
- 2070-2075 " " " " " " " " " "

Simpson formation

- 2075-2080 Coarse rounded frosted sand, pale greenish shale.
- 2080-2085 " " " " " " " " " "
- 2085-2090 " " " " " " " " " "
- 2090-2095 " " " " " " " " " "
- 2095-2100 " " " " " " " " " "
- 2100-2105 " " " " " " " " " "
- 2105-2110 Fine angular and coarse rounded frosted sand
- 2110-2115 Coarse rounded frosted sand
- 2115-2120 Fine angular and coarse rounded frosted sand
- 2120-2125 " " " " " " " " " "
- 2125-2130 " " " " " " " " " "
- 2130-2135 " " " " " " " " " "

180' Viola Ls

1895-1900	Brown porous shale. Greenish gray shale. <u>Marcasite.</u>
1900-1905	Greenish gray fissile shale.
1905-1910	" " " "
1910-1915	" " " "
1915-1920	" with hard white translucent chert.
1920-1925	"
1925-1930	Moderate coarse subangular and rounded frosted sand; white, quartzose chert--translucent.
1930-1935	As above with greenish gray fissile shale.
1935-1940	Greenish gray fissile shale, coarse rounded frosted sand.
1940-1945	Coarse rounded and frosted sand, very little quartzose material.
1945-1950	"
1950-1955	"
1955-1960	White to gray opaque chert, little white earthy chert.
1960-1965	Bluish gray translucent to opaque chert.
1965-1970	" " " with little white porous chert.
1970-1975	Brown mottled chert, brown porous chert, partially dolocastic.
1975-1980	"
1980-1985	" " " with little bluish gray translucent chert.
1985-1990	" " " with r.f. sand and greenish gray shale.
1990-1995	Greenish gray shale, rounded frosted sand, bluish gray translucent chert.
1995-2000	Hard white opaque chert.
2000-2020	Hard white and buff mottled chert.
2020-2025	Buff colored mottled chert.
2025-2030	" " " " "
2030-2035	" " " " "
2035-2040	" " " " "
2040-2045	Brown " " " "
2045-2050	" " " " "
2050-2055	" " " " "
2055-2060	" " " " "
2060-2065	" " " " "
2065-2070	" " " " "
2070-2075	White and bluish translucent chert, white earthy chert.

Wilcox.

Greenish shale

Sand + granular chert
green shale

White hard chert

Br. mottled porous

Shale

Br + Buff mottled

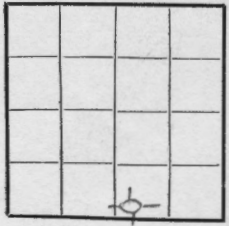
SAMPLE RECORD

State Kans Co. Nowg Farm Smith No. 1 Sec. 28 Twp. 12 Rge. 19 E

Location Sw cor SE

Company Smith et al Date Drilled _____

Elevation _____ Total Depth 2382



Douglas Group
Oread limestone.

- 18-36 Limestone
- 36-39 Grey shale.
- 39-43 Buff and gray siliceous limestone.
- 43-48 Soft gray shale
- 48-63 Top cream colored crystalline to earthy limestone. - B P₅₀
- 63-68 Soft gray shale.
- 68-73 Soft red shale.
- 73-214 Soft greenish gray shale
- 214-219 Fine angular sandstone, gray + buff crystalline limestone - P_{2h}
- 219-290 Soft greenish gray shale
- 290-315 Fine angular micaceous sandstone
- 315-358 Light gray sandy shale.
- 358-375 Fine angular sand
- 375-383 Very soft dark gray shale. - T₁₅
- 383-391 Cream colored chalky limestone.
- 391-407 Soft greenish gray shale.
- 407-425 " " " "
- 425-465 " " " "