

1-16-43W

X *Find*  
~~TIGHT HOLE~~  
*ker*

TXO PRODUCTION CORP.  
EDSALL "F" #13  
NESWNE SEC. 1  
T16S R43W  
GREELEY COUNTY  
KANSAS

**MAR 22 1986**

KANSAS CORPORATION COMMISSION  
WICHITA, KANSAS

STATE CORPORATION COMMISSION  
**MAR 17 1986**  
CONSERVATION DIVISION  
Wichita, Kansas

RICHARD E. BACON  
GEOLOGIST

1-16-43W

SUMMARY AND CONCLUSION

THE EDSALL "F" #13 WAS DRILLED TO A TOTAL DEPTH OF 5252' SUBSEA -1362', THE PRIMARY OBJECTIVE WAS THE JOHANNES SAND AND AN UPPER SAND JUST ABOVE THE JOHANNES. BOTH SANDS ARE LOWER MORROW MEMBERS.

THE UPPER SAND CAME IN AT 5087' -1197. THIS 5' INTERVAL AVERAGED 12% POROSITY AND 6 OHMS RESISTIVITY. USING .035 RW YIELDS A WATER SATURATION OF 58%. SAMPLE CUTTINGS WERE EXTREMELY POOR QUALITY AND DEVOID OF ANY SAND.

THE JOHANNES SAND IS INTERPETED TO BE AT 5108'-1218'. THIS INTERVAL WAS TOO THIN TO BE SURE. HOWEVER, SAMPLE QUALITY VASTLY IMPROVED AT SAMPLE 5130-5140'. THIS SAMPLE AND THE NEXT TWO HAD TRACES OF A SAND. THE SAND WAS WHITE, CLEAR, MEDIUM TO VERY COARSE GRAIN, SUBANGULAR TO ROUND, FIRM TO HARD, POORLY SORTED, CALCAREOUS IN PART, SLIGHTLY GLAUCONITIC IN PART WITH SOME QUARTZ OVERGROWTH IN PART. NO SHOWS WERE NOTED.

NEITHER SAND GAVE ANY INDICATION OF PRODUCTION POSSIBILITIES. THUS THE EDSALL "F" #13 WAS PLUGGED AND ABANDON ACCORDING TO STATE REGULATIONS.

APR 22 1943  
KANSAS GEOLOGICAL SURVEY  
WICHITA BRANCH

1-16-43W

LITHOLOGIC TOPS

	EDSALL "F" #13	EDSALL "F" #14	EDSALL "F" #10
STONE CORRAL	2739 +1151	2773 +1147	2751 +1149
FORAKER	3539 +351	3580 +342	3558 +342
TOPEKA	3890 0	3928 -6	3900 0
HEEBNER	4115 -225	4152 -230	4122 -222
LANSING	4212 -322	4250 -328	4223 -323
MARMATON	4597 -707	4643 -721	4607 -707
FT. SCOTT	4681 -791	4730 -808	4691 -791
CHEROKEE	4727 -837	4775 -853	4737 -837
ATOKA	4851 -961	4899 -977	4861 -961
MORROW	5012 -1122	5074 -1152	5021 -1121
UPPER SAND	5087 -1197	ABSENT	5100 -1200
JOHANNES SAND	5108 -1218	5137 -1215	5116 -1216
LOWER LIME	5124 -1234	5192 -1270	5132 -1232
MISSISSIPPIAN	5167 -1277	5258 -1336	5183 -1283

APR 22 1966

MISSOURI GEOLOGICAL SURVEY  
D. M. GARDNER, DIRECTOR

1-16-43W

RESUME

OPERATOR: TXO PRODUCTION CORP.

WELL NAME & NUMBER: EDSALL "F" #13

LOCATION: NESWNE SEC. 1 T16S R43W

COUNTY: GREELEY

STATE: KANSAS

SPUD DATE: FEBRUARY 8, 1986 3:00pm

COMPLETION DATE (TD): FEBRUARY 15, 1986 4:20am

ELEVATIONS: GL 3880' KB 3890

TOTAL DPETHS: DRILLER 5252' LOGGER 5252'

CONTRACTOR: MURFIN DRILLING COMPANY RIG #21

GEOLOGIST: RICHARD E. BACON

ENGINEER: PHIL KRIZ

TOOL PUSHER: TERRY McRAE

MUD COMPANY: SERVICE MUD JIM HERNANDEZ ENGINEER

HOLE SIZES: 12 1/4" SURFACE TO 390'  
7 7/8" 390' TO 5252'

CASING: 9 JOINTS 8 5/8" K-55 24# TALLY 378.60' SET 390'

CORES: NONE

DST: NONE

LOGS BY: WELEX (LIBERAL, KANSAS)  
RICHARD SALLY ENGINEER

LOG SUITE: DIL/GR/SP 5250' TO 388'  
DSN/DEN/GR 5250' TO 3185'  
CAVL/GR/CAL 5245' TO 388'

BOTTOM FORMATION: STE. GENEVIEVE (MISSISSIPPIAN)

WELL STATUS: PLUG AND ABANDON

APR 22 1986

LAND SURVEY

1-16-43W

WELL CHRONOLOGY

<u>DATE</u>	<u>7:00am DEPTH</u>	<u>FOOTAGE</u>	<u>ACTIVITY</u>
2-8-86	-	-	SPUD 3:00pm, DRILLED TO 390', DEV. 1/4° RUN CASING, 9 JOINTS 8 5/8" 24# K-55 378.60' SET AT 390' CEMENT WITH 100 SACKS HOWCO LITE 3% CaCl <sub>2</sub> & 100 SACKS COMM. 3% CaCl <sub>2</sub> WOC
2-9-86	390'	390'	RESUME DRILLING AT 10:45am, BIT TRIP AT 1795' DEV. 1°
2-10-86	2196'	1806'	TRIP OUT TWICE FOR CRACKED PIPE
2-11-86	3436'	1240'	SWIVEL LOCKED UP AT 3531'. ALSO CRACK PIPE, LAY DOWN PIPE, REPLACE SWIVEL, WAIT ON ALL NEW DRILL PIPE, PICK UP PIPE, CLEAN THREADS, GO IN HOLE
2-12-86	3531'	95'	RESUME DRILLING AT 8:25am
2-13-86	4324'	793'	LOST CIRCULATION AT 3956', TRIP OUT FOR CRACK IN PIPE. CRACK FOUND ON SECOND COLLAR, COLLAR BROKE OFF AT BASE OF THREADS, CALL IN WELDER, RESUME DRILLING DRILLING AT 7:55pm
2-14-86	4832'	508'	DRILLING
2-15-86	5252'	420'	TD 5252' AT 4:20am, CIRCULATE 1 1/2 HOURS, SHORT TRIP 15 STANDS CIRCULATE 2 HOURS, STRAP OUT OF HOLE, DEV. 1 1/4° RUN LOGS

APR 22 1986

KANSAS GEOLOGICAL SURVEY  
WICHITA BRANCH

1-16-43W

SAMPLE DESCRIPTIONS  
(NOT LAGGED)

- 3990-4020 LS-70% off white, white, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, trace oolimoldic fair Ø  
SH-30% red orange, maroon, medium-dark grey, firm, massive, flakey, calcareous & micromicaceous in part, some silty
- 4020-4050 LS-50% off white, white, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky samples finely crushed  
SH-50% red orange, maroon, medium-dark grey, as above
- 4050-4080 LS-50% off white, white, light grey, buff, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-50% red orange, maroon, medium-dark grey, as above
- 4080-4110 LS-70% white, off white, buff, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, trace oolitic round-buff  
SH-30% red orange, maroon, medium-dark grey, as above
- 4110-4140 LS-70% white, off white, light-medium grey, crypto-fine xln, firm-hard, dense, lithic, chalky, trace oolitic round-white, trace dolomitic  
SH-30% red orange, maroon, medium-dark grey, as above samples finely crushed
- 4140-4170 LS-60% white, off white, light-medium grey, buff, crypto-fine xln, firm-hard, dense, lithic, chalky, trace dolomitic  
SH-40% red orange, maroon, medium-dark grey, as above
- 4170-4200 LS-60% off white, white, buff, light grey, tan, crypto-very fine xln, firm-hard, dense, lithic, chalky, some argillaceous  
TRACE EVEN BRIGHT YELLOW FLUORESCENCE  
SLOW, PALE YELLOW STREAMING  
NO RING
- 4200-4230 SH-80% red orange, maroon, medium-dark grey, as above, largely cavings  
LS-20% white, off white, light grey, crypto-microxln, firm-hard, dense, lithic, chalky
- 4230-4270 SH-95% red orange, maroon, medium-dark grey, as above, largely cavings  
LS-5% white, off white, light grey, crypto-microxln, firm-hard, dense, lithic, chalky

APR 23 1956  
GEOLOGICAL SURVEY

1-16-43W

- 4270-4300 SH-80% red orange, maroon, medium-dark grey, firm, massive, flakey, calcareous & micromicaceous in part, largely cavings  
LS-20% off white, white, buff, crypto-microxln, firm-hard, dense, lithic, chalky
- 4300-4330 SH-70% red orange, maroon, medium-dark grey, as above  
LS-30% off white, white, buff, crypto-microxln, firm-hard, dense, lithic, chalky
- 4330-4360 SH-90% red orange, maroon, medium-dark grey, firm, massive, flakey, calcareous & micromicaceous in part, largely cavings  
LS-10% white, off white, buff, crypto-microxln, firm-hard, dense, lithic, chalky
- 4360-4390 LS-70% white, off white, light grey, crypto-microxln, firm-hard, dense, lithic, chalky, trace pyritic, trace cherty  
SH-30% red orange, maroon, medium-dark grey, as above
- 4390-4420 LS-70% white, off white, buff, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, some argillaceous  
SH-30% red orange, medium-dark grey, black, firm, massive, flakey, blocky, calcareous & micromicaceous in part, carbonaceous in part
- 4420-4450 LS-70% white, off white, buff, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, some argillaceous  
SH-30% red orange, medium-dark grey, black, as above
- 4450-4480 SH-60% red orange, maroon, medium-dark grey, firm, massive, flakey, calcareous & micromicaceous in part, largely cavings  
LS-40% white, off white, buff, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, some argillaceous
- 4480-4510 LS-80% off white, white, light grey, buff, crypto-very fine xln, firm-hard, dense, lithic, chalky, trace cherty  
SH-20% medium-dark grey, black, red orange, firm, flakey, blocky, massive, calcareous & micromicaceous in part, carbonaceous in part
- 4510-4540 LS-80% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic  
SH-20% medium-dark grey, black, red orange, as above samples finely crushed

APR 22 1965

FEDERAL BUREAU OF SURVEY  
WASH DC

1-16-43W

- 4540-4570 SH-60% medium-dark grey, black, red orange, firm, flakey, blocky, massive, calcareous & micromicaceous in part, carbonaceous in part largely cavings  
LS-40% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic
- 4570-4600 SH-80% medium-dark grey, black, red orange, as above largely cavings  
LS-20% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic
- 4600-4630 SH-70% medium-dark grey, black, red orange, as above largely cavings  
LS-30% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic
- 4630-4660 SH-50% medium-dark grey, black, red orange, as above largely cavings  
LS-50% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic  
samples finely crushed
- 4660-4690 SH-70% red orange, medium-dark grey, blue green, firm, massive, flakey, calcareous & micromicaceous in part, largely cavings  
LS-30% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic
- 4690-4720 SH-60% red orange, medium-dark grey, blue green, as above, largely cavings  
LS-40% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, trace cherty
- 4720-4750 SH-60% red orange, medium-dark grey, blue green, as above, largely cavings  
LS-40% off white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic  
samples finely crushed
- 4750-4780 LS-60% light-medium grey, off white, crypto-very fine xln, firm-hard, dense, lithic, becoming argillaceous  
SH-40% red orange, medium-dark grey, blue green, as above, largely cavings
- 4780-4810 LS-70% light-medium grey, off white, crypto-very fine xln, firm-hard, dense, lithic, argillaceous in part  
SH-30% red orange, medium-dark grey, blue green, as above, largely cavings

APR 22 1966

GEOLOGICAL SURVEY  
MONTANA BRANCH

1-16-43W

- 4810-4840 LS-60% light-dark grey, off white, buff, crypto-microxln, firm-very hard, dense, lithic, argillaceous-very argillaceous, sample finely crushed  
SH-40% red orange, medium-dark grey, blue green, firm, massive, flakey, calcareous & micromicaceous in part, largely cavings
- 4840-4870 SH-95% red orange, medium-dark grey, blue green, as above, largely cavings  
LS-5% off white, buff, crypto-microxln, firm-hard, dense
- 4870-4900 SH-95% red orange, medium-dark grey, blue green, as above, largely cavings  
LS-5% off white, buff, medium grey, crypto-microxln, firm-hard, dense, lithic, some argillaceous
- 4900-4930 SH-85% red orange, medium-dark grey, blue green, as above, largely cavings  
LS-5% buff, light-medium grey, crypto-microxln, firm-very hard, dense, lithic, some argillaceous
- 4930-4960 SH-90% red orange, medium-dark grey, blue green, as above, largely cavings  
LS-10% off white, buff, crypto-microxln, firm-hard, dense, lithic
- 4960-4990 SH-80% red orange, medium-dark grey, black, firm, massive, flakey, blocky, calcareous & micromicaceous in part, carbonaceous in part, largely cavings  
LS-20% light-dark grey, off white, buff, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous in part
- 4990-5020 SH-80% red orange, medium-dark grey, black, as above, largely cavings  
LS-20% light-dark grey, off white, buff, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous in part
- 5020-5050 SH-80% medium-dark grey, black, red orange, firm, flakey, blocky, massive, calcareous & micromicaceous in part, carbonaceous in part, abundant cavings  
LS-20% buff, tan, medium grey, crypto-microxln, firm-very hard, dense, lithic, argillaceous in part  
CHT-black

APR 22 1986

PALEONTOLOGICAL SURVEY  
WASH DC BRANCH

- 5050-5060 SH-60% medium-dark grey, black, red orange, firm, flakey, blocky, massive, calcareous & micromicaceous in part, carbonaceous in part  
 LS-40% off white, buff, medium grey, cryptomicroxln, firm-very hard, dense, lithic, argillaceous in part  
 CHT-opaque, black
- 5060-5070 SH-50% medium-dark grey, black, red orange, as above abundant cavings  
 LS-50% off white, buff, medium grey, cryptomicroxln, firm-very hard, dense, lithic, argillaceous in part  
 CHT-black
- 5070-5080 SH-60% medium-dark grey, black, red orange, as above abundant cavings  
 LS-40% off white, buff, medium grey, tan, cryptomicroxln, firm-very hard, dense, lithic, argillaceous in part
- 5080-5090 SH-85% medium-dark grey, black, red orange, as above abundant cavings  
 LS-15% off white, buff, medium grey, tan, cryptomicroxln, firm-very hard, dense, lithic, argillaceous in part  
 Tr LSE QTZ-clear, translucent, very coarse grain, subround, NO SHOW
- 5090-5100 SH-90% medium-dark grey, black, red orange, as above abundant cavings  
 LS-10% off white, buff, medium grey, tan, cryptomicroxln, firm-very hard, dense, lithic, argillaceous in part  
 COAL-black, brittle, bitumenous  
 Tr LSE QTZ-clear, translucent, very coarse grain, subround, NO SHOW
- 5100-5110 SH-85% medium-dark grey, black, red orange, as above abundant cavings  
 LS-15% buff, tan, medium-dark grey, cryptomicroxln, firm-very hard, dense, lithic, some argillaceous  
 Tr LSE QTZ-clear, translucent, very coarse grain, subround, NO SHOW
- 5110-5120 SH-90% red orange, medium-dark grey, black, firm, massive, flakey, blocky, calcareous & micromicaceous in part, carbonaceous in part, abundant cavings  
 LS-10% buff, tan, medium-dark grey, cryptomicroxln, firm-very hard, dense, lithic, some argillaceous  
 TR LSE QTZ-clear, translucent, very coarse grain, subround-round, NO SHOW

APR 25 1955  
 GEOLOGICAL SURVEY  
 WASHINGTON

- 5120-5130 SH-80% red orange, medium-dark grey, black, firm, massive, flakey, blocky, calcareous & micromicaceous in part, carbonaceous in part, abundant cavings  
LS-20% buff, tan, medium grey, crypto-microxln, firm-hard, dense, lithic, some argillaceous
- 5130-5140 SH-75% medium-dark grey, black, grey brown, firm, flakey, fissile, micromicaceous in part, carbonaceous in part  
LS-25% light-medium grey, buff, crypto-microxln, firm-hard, dense, lithic, argillaceous in part  
TR SS-white-clear, medium-very coarse grain, subangular-subround, firm-hard, poor sorting, calcareous in part, trace slightly glauconitic, some quartz overgrowth, NO SHOW
- 5140-5150 SH-60% medium-dark grey, black, grey brown, grey green, firm, waxy, flakey, fissile, micromicaceous in part, carbonaceous in part  
LS-40% off white, buff, crypto-microxln, firm-hard, dense, lithic  
TR SS-white, clear, medium-very coarse grain, subangular-subround, firm-hard, poor sorting, calcareous in part, trace slightly glauconitic, some quartz overgrowth, NO SHOW  
CHT-dark tan, black,
- 5150-5160 LS-70% off white, buff, crypto-microxln, firm-hard, dense, lithic, some fossiliferous  
SH-30% medium-dark grey, black, grey green, firm, waxy, flakey, fissile, micromicaceous in part, carbonaceous in part  
CHT-dark tan, light grey
- 5160-5190 LS-60% off white, buff, tan, mottled, crypto-microxln, firm-hard, dense, lithic  
SH-40% medium-dark grey, black, grey green, as above
- 5190-5200 LS-50% off white, buff, tan, mottled, crypto-microxln, firm-hard, dense, lithic, some arenaceous  
SH-50% medium-dark grey, black, grey green, as above
- 5200-5210 SH-60% medium-dark grey, black, grey green, as above calcareous in part  
LS-40% off white, buff, tan, crypto-microxln, firm-hard, dense, lithic, more arenaceous

APR 22 1943

FEDERAL SURVEY  
ALTA BRANCH

1-16-43W

- 5210-5230 LS-60% off white, buff, tan, crypto-microxln,  
firm-hard, dense, lithic, arenaceous in part  
SH-40% medium-dark grey, black, grey green, firm,  
waxy, flakey, fissile, blocky, micromicaceous &  
calcareous in part, carbonaceous in part
- 5230-5240 LS-80% off white, buff, tan, crypto-microxln,  
firm-hard, dense, lithic, arenaceous in part  
SH-20% medium-dark grey, black, grey green, as above
- 5240-5250 LS-70% off white, buff, tan, crypto-microxln,  
firm-hard, dense, lithic, arenaceous in part  
SH-30% medium-dark grey, black, grey green, as above

APR 22 1986

KANSAS GEOLOGICAL SURVEY  
WICHITA, KANSAS

1-165-43w Edsall

F # 13

MUD RECORD

<u>DEPTH</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>PH</u>	<u>WATER LOSS</u>	<u>CHLORIDES</u>	<u>LCM</u>
3531	9.2	27	-	-	72,000	-
4364	9.2	27	-	-	70,000	TR
4832	8.9+	48	10.5	16.5	18,000	1#
4899	8.9	45	11.0	7.2	13,000	1#
5252	9.2	55	10.5	7.8	13,000	TR

BIT RECORD

<u>NO.</u>	<u>SIZE</u>	<u>MAKE</u>	<u>TYPE</u>	<u>DEPTH OUT</u>	<u>FOOTAGE</u>	<u>HOURS</u>
1	12 1/4	SEC	S33S	390	390	3 1/2
1	7 7/8	SEC	S33F	1795	1405	9 1/4
2	7 7/8	HTC	J-22	5252	3457	84 3/4

DRILLING PARAMETERS

<u>DEPTH</u>	<u>REVOLUTIONS</u>	<u>WEIGHT</u>	<u>PRESSURE</u>	<u>STROKES</u>
3000	75	40K	1000	64
3500	75	35/40K	1000	64
4000	75	40K	1000	64
4500	75	40K	1000	64
5000	75	35/35K	800	58
5252	75	30/35K	800	58

APR 22 1966

MINNESOTA GEOLOGICAL SURVEY  
MINNAPOLIS BRANCH