

1-16-43W

TXO PRODUCTION CORP. <sup>A</sup> *Truel*  
EDSALL "F" #14  
NENWSE SEC. 1  
T16S R43W  
CREELEY COUNTY  
KANSAS

~~TIGHT HOLE~~ *cycle*

APR 22 1966

MINERAL SURVEY  
MOUNTAIN BRANCH

RICHARD E. BACON  
GEOLOGIST

1-16-43W

SUMMARY AND CONCLUSIONS

THE EDSALL "F" #14 WAS DRILLED TO A TOTAL DEPTH OF 5260' SUBSEA -1338'. THE PRIMARY OBJECTIVE WAS THE JOHANNES SAND. A SECONDARY OBJECTIVE IN AN UPPER SAND JUST ABOVE THE JOHANNES ALSO EXISTED.

THE UPPER SAND WAS ABSENT BUT THE JOHANNES SAND COME IN AT 5137' SUBSEA -1215'. THIS 32' INTERVAL CONSISTED OF A SAND THAT WAS WHITE, CLEAR, MEDIUM TO VERY COARSE GRAINED, SUBANGULAR TO SUBROUND, FIRM TO HARD, SLIGHTLY CALCAREOUS, POORLY SORTED, WITH TRACES OF GLAUCONITE AND SOME TAN STAIN. VISIBLE PROSITY IN THE CUTTINGS WAS APPROXIMATELY 16%. FREE QUARTZ GRAINS, CLEAR TO WHITE, COARSE TO VERY COARSE GRAINED WAS ABUNDANT IN THE CUTTINGS. SAMPLES DISPLAYED UP TO 50% BRIGHT YELLOW FLUORESCENCE IN THE SAND. A SLOW TO MODERATE MILKY WHITE STREAMING, LEAVING AN EVEN, MODERATE YELLOW GREEN RING.

LOGS GAVE THE UPPER 12' AN AVERAGE POROSITY OF 19% WITH A Rt OF 6 OHMS AND, USING A .035 R<sub>w</sub>, A S<sub>w</sub> OF 40%. THE REMAINDER OF THE SAND VARIED IN POROSITY BUT AVERAGED 17%, AN Rt OF 9 OHMS, YIELDING A S<sub>w</sub> OF 37%.

THUS THE DECISION WAS MADE TO RUN PIPE ON THE EDSALL "F" #14 FOR COMPLETION AS A JOHANNES SAND OIL WELL.

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REGIONAL SURVEY  
WICHITA BRANCH

1-16-43W

LITHOLOGIC TOPS

	EDSALL "F" #14	EDSALL "F" #10
STONE CORRAL	2773' +1147'	2751' +1149'
FORAKER	3580' +342'	3558' +342'
TOPEKA	3928' -6'	3900' 0'
HEEBNER	4152' -230'	4122' -222'
LANSING	4250' -328'	4223' -323'
MARMATON	4643' -721'	4607' -707'
FT. SCOTT	4730' -808'	4686' -786'
CHEROKEE	4775' -853'	4737' -837'
ATOKA	4899' -977'	4861' -961'
MORROW	5074' -1152	5021' -1121'
UPPER SAND	ABSENT	5100' -1200'
JOHANNES SAND	5137' -1215	5116' -1216'
LOWER LIME	5192' -1270'	5132' -1232'
MISSISSIPPIAN	5258' -1336'	5183' -1283'

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MISSOURI GEOLOGICAL SURVEY  
TOPEKA BRANCH

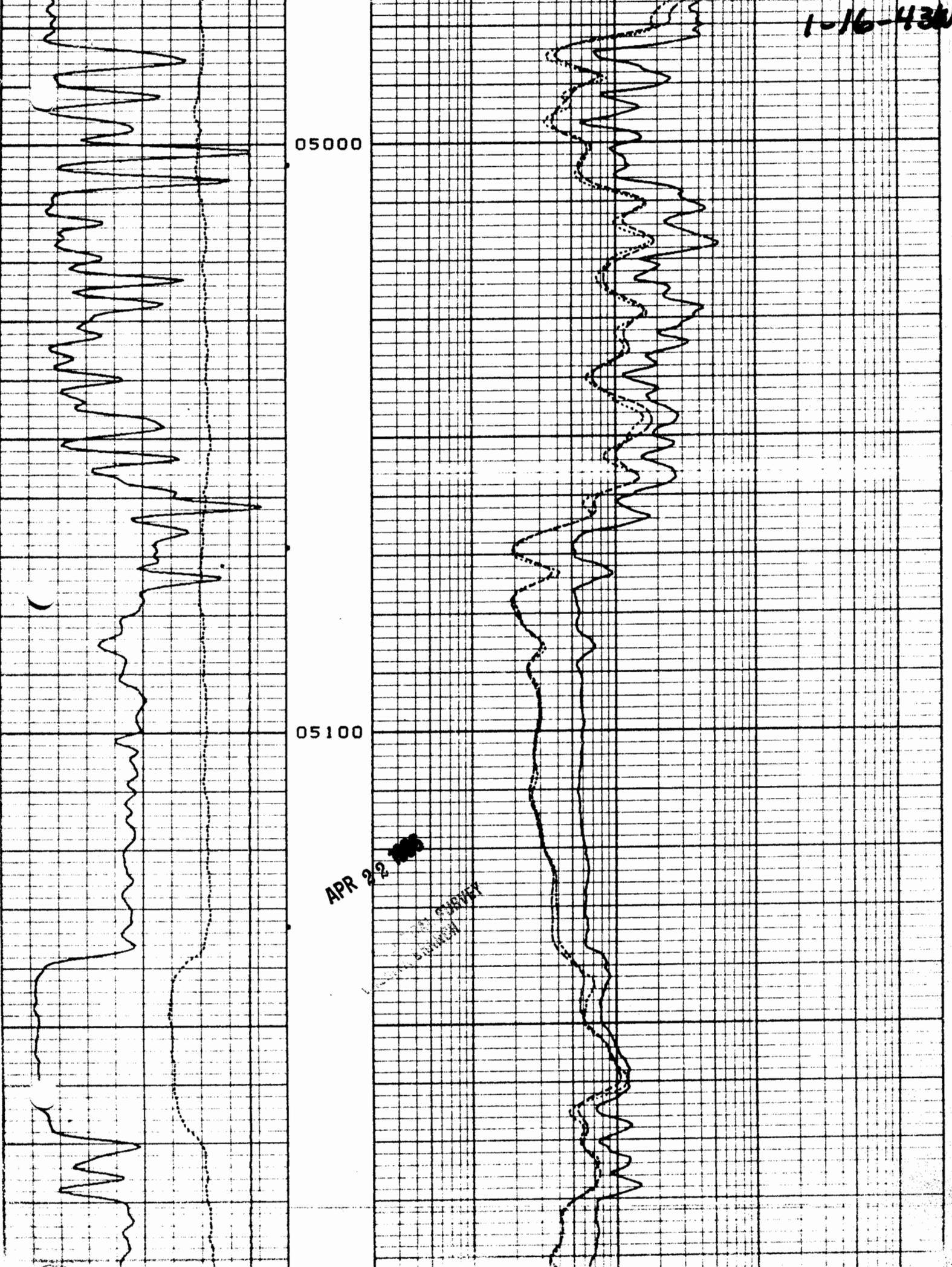
1-16-430

05000

05100

APR 22 1954

RECONSTRUCTION SURVEY



1-16-79

05100

05200

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WELL SURVEY  
W. A. D. W. H. C. H.

2.680

1.000 2.000 5260

2.060 55.130

2.710 1.000

0 GR API 200

2.00

P(B)

-0.25

$\Delta P$

0.25

6 CALIPER X 16

30

$\phi$  (CDL)

3.0

1-16-43w

RESUME

OPERATOR: TXO PRODUCTION CORP.

WELL NAME & NUMBER: EDSALL "F" #14

LOCATION: NENWSE SEC. 1 T16S R43W

COUNTY: GREELEY

STATE: KANSAS

SPUD DATE: JANUARY 26, 1986 1:00pm

COMPLETION DATE (TD): JANUARY 31, 1986 10:15 pm

ELEVATIONS: GL 3912' KB 3922'

TOTAL DEPTHS: DRILLER 5260' LOGGER 5260'

CONTRACTOR: MURFIN DRILLING COMPANY RIG #21

GEOLOGIST: RICHARD E. BACON

ENGINEER: PHIL KRIZ

TOOL PUSHER: TERRY McRAE

MUD COMPANY: SERVICE MUD JIM HERNANDEZ ENGINEER

TYPE OF MUD: CHEMICAL GEL

HOLE SIZES: 12 1/4" SURFACE TO 385'  
7 7/8" 385' TO 5260'

CASING: 9 JOINTS 8 5/8" K-55 24# SET AT 385'

CORES: NONE

DST: NONE

E-LOGS BY: GEARHART (FORT MORGAN, CO) STEVE MULKERN ENGINEER

LOG SUITE: DIL/GR/SP TD TO 385'  
CDL/CNL/GR TD TO 3200'

BOTTOM FORMATION: STE. GENEVIEVE (MISSISSIPPIAN)

WELL STATUS: TO COMPLETE AS A JOHANNES SAND OIL WELL

APR 22 1986  
SURVEY

1-16-43W

WELL CHRONOLOGY

<u>DATE</u>	<u>7:00am DEPTH</u>	<u>FOOTAGE</u>	<u>ACTIVITY</u>
1-26-86	-	-	SPUD 1:00pm, DRILL TO 385' DEV. 0° RUN CASING, 9 JOINTS 8 5/8" 24# K-55 375.08' SET AT 385'. CEMENT WITH 100 SACKS BJ LITE & 100 SACKS COMM. 3% CaCl <sub>2</sub> WOC
1-27-86	385'	385'	RESUME DRILLING AT 6:00am. LOST CIRCULATION AT 1440', 1540' BIT TRIP AT 1785' DEV. MISRUN
1-28-86	2628'	2243'	DRILLING
1-29-86	3680'	1052'	DRILLING
1-30-86	4464'	784'	LOST CIRCULATION AT 4215'
1-31-86	5001'	537'	LOST CIRCULATION AT 5183 & 5215' TOTAL OF 430 BBLs TD 5260' AT 10:15pm CIRCULATE 1 1/2 HOURS
2-1-86	5260'	259'	SHORT TRIP 15 STANDS, CIRCULATE 2 HOURS PULL OUT OF HOLE DEV. 3° BEGIN LOG RUN, HIT BRIDGE, GO BACK IN HOLE, COMPLETE LOG RUN

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GEOLOGICAL SURVEY  
MADRID BRANCH

1-16-43W

SAMPLE DESCRIPTIONS  
(NOT LAGGED)

- 3090-4020 LS-70% off white, white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, some silty  
SH-30% red orange, maroon, blue green, medium grey, firm, massive, blocky, calcareous & micromicaceous in part, sample finely crushed
- 4020-4050 SH-60% red orange, maroon, blue green, medium grey, as above  
LS-40% off white, white, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, chalky, some silty
- 4050-4080 LS-60% off white, white, light-medium grey, buff, mottled, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-40% red orange, maroon, blue green, medium-dark grey, firm, massive, blocky, calcareous & micromicaceous in part
- 4080-4110 LS-70% off white, white, buff, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-30% red orange, maroon, blue green, medium-dark grey, as above
- 4110-4140 LS-80% white, off white, buff, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-20% red orange, maroon, blue green, medium-dark grey, as above samples finely crushed
- 4140-4170 LS-80% white, off white, buff, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-20% red orange, maroon, medium-dark grey, blue green, as above
- 4170-4200 LS-70% white, off white, buff, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-30% red orange, maroon, medium-dark grey, blue green, as above sample finely crushed
- 4200-4230 LS-80% white, off white, buff, light grey, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-20% red orange, maroon, medium-dark grey, blue green, as above

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U.S. GEOLOGICAL SURVEY  
WATER RESOURCES DIVISION  
WASHINGTON, D.C.

- 4230-4260 LS-80% white, off white, light grey, buff, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-20% red orange, maroon, medium-dark grey, blue green, firm, massive, blocky, calcareous & micromicaceous in part, samples finely crushed
- 4260-4290 LS-60% off white, white, light grey, buff, crypto-microxln, firm-hard, dense, lithic, chalky  
SH-40% red orange, maroon, medium-dark grey, blue green, as above, largely cavings
- 4290-4320 LS-70% white, off white, light grey, buff, crypto-microxln, firm-hard, dense, lithic, chalky  
SH-30% red orange, maroon, medium-dark grey, as above
- 4320-4350 LS-50% off white, white, light grey, buff, crypto-microxln, firm-hard, dense, lithic, chalky  
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4350-4380 LS-60% off white, white, light grey, buff, crypto-microxln, firm-hard, dense, lithic, chalky  
SH-40% red orange, maroon, medium-dark grey, as above, largely cavings
- 4380-4410 LS-50% light grey, off white, white, crypto-microxln, firm-hard, dense, lithic, chalky, trace oolmoldic good  $\emptyset$   
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4410-4440 LS-50% off white, white, light grey, crypto-microxln, firm-hard, dense, lithic, chalky  
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4440-4470 LS-60% off white, white, light grey, crypto-microxln, firm-hard, dense, lithic, chalky  
trace oolimoldic good  $\emptyset$ , trace arenaceous  
SH-40% red orange, maroon, medium-dark grey, as above, largely cavings
- 4470-4500 LS-50% off white, white, light grey, buff, crypto-microxln, firm-hard, dense, lithic, chalky, trace oolimoldic good  $\emptyset$   
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4500-4530 LS-50% off white, white, light-medium grey, buff, crypto-microxln, firm-hard, dense, lithic, chalky, some silty  
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings

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 WASHINGTON, D.C.

- 4530-4560 LS-80% off white, light-medium grey, white, buff, crypto-microxln, firm-hard, dense, lithic, chalky, some argillaceous  
SH-20% red orange, maroon, medium-dark grey, firm, massive, blocky, calcareous & micromicaceous in part
- 4560-4590 LS-50% off white, light-medium grey, white, buff, crypto-microxln, firm-hard, dense, lithic, chalky, some argillaceous  
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4590-4620 LS-80% off white, white, light grey, buff, crypto-very fine xln, firm-hard, dense, lithic, chalky  
SH-20% red orange, medium-dark grey, black, firm, massive, blocky, calcareous & micromicaceous in part, carbonaceous in part
- 4620-4650 LS-80% off white, light-medium grey, white, buff, crypto-very fine xln, firm-hard, dense, lithic, chalky, some argillaceous, trace cherty  
SH-20% red orange, maroon, medium-dark grey, as above
- 4650-4680 SH-80% red orange, maroon, medium-dark grey, as above, largely cavings  
LS-20% off white, white, light grey, buff, crypto-very fine xln, firm-hard, dense, lithic, chalky, some argillaceous
- 4680-4710 LS-50% off white, light-medium grey, buff, grey brown, crypto-very fine xln, firm-hard, dense, lithic, some argillaceous  
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4710-4740 LS-50% off white, light-medium grey, buff, crypto-very fine xln, firm-hard, dense, lithic, some argillaceous  
SH-50% red orange, maroon, medium-dark grey, as above, largely cavings
- 4740-4770 LS-60% off white, light-dark grey, buff, crypto-very fine xln, firm-hard, dense, lithic, more argillaceous  
SH-40% red orange, maroon, medium-dark grey, as above, largely cavings

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GEOLOGICAL SURVEY  
DENVER

- 4770-4800 LS-70% light-dark grey, off white, tan, crypto-  
microxln, firm-hard, dense, lithic, argillaceous-  
very argillaceous  
SH-30% red orange, maroon, medium-dark grey, as  
above, largely cavings
- 4800-4830 LS-70% light-dark grey, off white, tan, crypto-  
very fine xln, firm-very hard, dense, lithic,  
argillaceous-very argillaceous in part  
SH-30% medium-dark grey, black, red orange, firm,  
blocky, flakey, massive, calcareous & micromicaceous  
in part, carbonaceous in part
- 4830-4860 LS-70% light-dark grey, off white, tan, crypto-  
very fine xln, firm-very hard, dense, lithic,  
argillaceous-very argillaceous in part  
SH-30% medium-dark grey, black, red orange, firm,  
blocky, flakey, massive, calcareous & micromicaceous  
in part, carbonaceous in part
- 4860-4890 LS-80% light-dark grey, off white, tan, crypto-  
very fine xln, firm-very hard, dense, lithic,  
argillaceous-very argillaceous in part  
SH-20% medium-dark grey, black, red orange, as above
- 4890-4920 LS-80% light-dark grey, off white, tan, crypto-  
very fine xln, firm-very hard, dense, lithic,  
argillaceous-very argillaceous in part  
SH-20% medium-dark grey, black, red orange, as above  
CHT-dark grey
- 4920-4950 LS-90% light-dark grey, off white, tan, crypto-  
very fine xln, firm-very hard, dense, lithic,  
argillaceous-very argillaceous in part  
SH-10% medium-dark grey, black, firm, flakey,  
blocky, calcareous & micromicaceous in part,  
carbonaceous in part
- 4950-4980 LS-90% light-dark grey, off white, buff, crypto-  
microxln, firm-hard, dense, lithic, argillaceous  
in part  
SH-10% medium-dark grey, black, firm, flakey,  
blocky, calcareous & micromicaceous in part  
carbonaceous in part
- 4980-5010 LS-85% light-dark grey, off white, buff, crypto-  
fine xln, firm-hard, dense, lithic, argillaceous  
in part  
SH-15% medium-dark grey, black, firm, flakey,  
blocky, calcareous & micromicaceous in part,  
carbonaceous in part  
CHT-dark tan, spotted

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U.S. GEOLOGICAL SURVEY  
WATER RESOURCES DIVISION

- 5010-5040 LS-85% light-dark grey, off white, buff, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous in part, trace fossiliferous  
SH-15% medium-dark grey, black, firm, flakey, blocky, calcareous & micromicaceous in part, carbonaceous in part  
CHT-black, spotted
- 5040-5070 LS-80% light-dark grey, off white, tan, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous-very argillaceous in part  
SH-20% medium-dark grey, black, as above
- 5070-5080 LS-85% light-dark grey, off white, tan, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous-very argillaceous in part  
SH-15% medium-dark grey, black, as above  
CHT-black
- 5080-5090 LS-80% light-dark grey, off white, tan, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous-very argillaceous in part  
SH-20% medium-dark grey, black, grey green, firm, waxy, flakey, blocky, calcareous & micromicaceous in part, carbonaceous in part
- 5090-5100 LS-80% light-dark grey, off white, tan, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous-very argillaceous in part  
SH-20% medium-dark grey, black, grey green, as above
- 5100-5120 LS-85% light-medium grey, off white, buff, crypto-microxln, firm-very hard, dense, lithic, argillaceous in part  
SH-15% medium-dark grey, black, grey green, as above  
CHT-black, spotted free pyrite
- 5120-5140 LS-85% light-medium grey, off white, buff, crypto-microxln, firm-very hard, dense, lithic, argillaceous in part  
SH-15% medium-dark grey, black, grey green, as above
- 5140-5150 LS-75% light-medium grey, off white, buff, crypto-microxln, firm-very hard, dense, lithic, argillaceous in part  
SH-25% medium-dark grey, black, grey green, firm, waxy, flakey, blocky, fissile, calcareous & micromicaceous in part, carbonaceous in part  
CHT-black, spotted, amber
- 5150-5160 SH-80% medium-dark grey, black, grey green, as above  
LS-20% off white, light-medium grey, tan, crypto-microxln, firm-hard, dense, lithic, argillaceous ip

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 WASHINGTON, D.C.

- 5160-5170 SH-80% medium-dark grey, black, grey green, firm, waxy, flakey, blocky, fissile, calcareous & micromicaceous in part, carbonaceous in part  
 LS-10% off white, light-medium grey, tan, crypto-microxln, firm-hard, dense, lithic, argillaceous ip  
 SS-10% white, clear, medium-coarse grain, some fine grain, subangular, firm, poor sorting, slightly calcareous, slightly glauconitic, trace of spotty tan stain, some poor visible porosity  
 TRACES EVEN-SPOTTY BRIGHT YELLOW FLUORESCENCE  
 SLOW-MODERATE, MILKY WHITE STREAMING  
 EVEN BRIGHT YELLOW GREEN RING, DRY CUT
- 5170-5180 SH-75% medium-dark grey, black, grey green, as above, trace pyritic  
 LS-10% off white, light-medium grey, tan, as above  
 SS15% white, clear, medium-very coarse grain, subangular-subround, firm-hard, slightly calcareous, poor sorting, traces glauconite, some visible  $\emptyset$  15%, traces tan stain  
 TRACES EVEN-SPOTTY BRIGHT YELLOW FLUORESCENCE  
 SLOW, FAINT, MILKY WHITE STREAMING  
 EVEN, PALE YELLOW GREEN RING, DRY CUT
- 5180-5190 SH-70% medium-dark grey, black, grey green, as above  
 LS-10% off white, buff, mottled, light grey, crypto-microxln, firm-very hard, dense, lithic  
 SS-20% clear-white, fine-medium grain, subangular-subround, firm-hard, poor-fair sorting, slightly calcareous, slightly glauconitic, fair visible  $\emptyset$ , abundant coarse-very coarse grains, unconsolidated  
 50% EVEN BRIGHT YELLOW FLUORESCENCE  
 SLOW-MODERATE, MILKY WHITE STREAMING  
 EVEN, MODERATE, YELLOW GREEN RING, DRY CUT
- 5190-5200 SH-60% medium-dark grey, black, grey green, as above  
 LS-15% off white, buff, mottled, light grey, as above  
 SS-25% clear-white, fine-medium, grain, subangular, subround, firm-hard, poor-fair sorting, slightly calcareous, traces finely disseminated pyrite, some fair visible porosity  
 30% EVEN-SPOTTY BRIGHT YELLOW FLUORESCENCE  
 SLOW, PALE MILKY WHITE STREAMING  
 EVEN, PALE YELLOW GREEN RING, DRY CUT

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GEOLOGICAL SURVEY  
 WASHINGTON FIELD OFFICE

1-165-43w

Edsall F

#14

MUD RECORD

<u>DEPTH</u>	<u>WEIGHT</u>	<u>VISCOSITY</u>	<u>pH</u>	<u>WATER LOSS</u>	<u>CHLORIDES</u>	<u>LCM</u>
3690	9.3	27	-	-	72,000	-
4465	9.3	27	-	-	62,000	TR
5004	9.2	38	11.0	7.8	27,000	1#
5185	9.3	46	9.5	19.0	27,000	1#
5215	9.1	52	12.0	8.9	15,000	5#
5260	9.2	50	11.5	7.8	15,000	8#

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	385	385	3 1/2
1	7 7/8	HTC	R-1	1785	1400	9 1/4
2	7 7/8	HTC	J-22	5260	3475	90 1/2

DRILLING PARAMETERS

<u>DEPTH</u>	<u>REVOLUTIONS</u>	<u>WEIGHT</u>	<u>PRESSURE</u>	<u>SPM</u>
3500	75	40	1000	64
4000	75	40	1000	64
4500	75	40	1000	64
5000	75	35	800	58
5260	75	35	800	58

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NEAS GEOTECHNICAL SURVEY  
WICHITA BRANCH

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- 5200-5210 SH-55% medium-dark grey, black, grey green, firm, waxy, flakey, blocky, fissile, calcareous & micromicaceous in part, carbonaceous in part  
LS-20% off white, buff, mottled, light grey, crypto-microxln, firm-very hard, dense, lithic  
SS-25% white, clear, medium-coarse grain, angular-subround, firm-hard, poor sorting, slightly calcareous, abundant coarse-very coarse grain, unconsolidated  
TRACES EVEN-SPOTTY BRIGHT YELLOW FLUORESCENCE  
SLOW, FAINT, MILKY WHITE, STREAMING  
EVEN, PALE YELLOW GREEN RING, DRY CUT
- 5210-5220 SH-55% medium-dark grey, black, grey green, as above  
LS-20% off white, buff, mottled, light grey, as above  
SS-25% white, clear, medium-coarse grain, angular-subround, firm-hard, poor sorting, slightly calcareous, abundant coarse-very coarse grain, unconsolidated  
30% EVEN-SPOTTY BRIGHT YELLOW FLUORESCENCE  
SLOW, FAINT MILKY WHITE STREAMING  
EVEN, PALE YELLOW GREEN RING, DRY CUT
- 5220-5230 SH-50% medium-dark grey, black, grey green, as above  
LS-30% off white, grey brown, tan, crypto-microxln, firm-very hard, dense, lithic  
SS-20% clear-opaque, fine-very coarse grain, subangular-subround, firm-hard, siliceous, poor sorting, abundant very coarse grain, unconsolidated  
30% EVEN-SPOTTY, BRIGHT YELLOW FLUORESCENCE  
SLOW, FAINT MILKY WHITE STREAMING  
EVEN, PALE YELLOW GREEN RING, DRY CUT
- 5230-5240 SH-55% medium-dark grey, black, grey green, as above  
LS-30% off white, grey brown, tan, as above  
SS-15% clear-opaque, fine-very coarse grain, as above  
30% EVEN-SPOTTY, BRIGHT YELLOW FLUORESCENCE  
SLOW, FAINT MILKY WHITE STREAMING  
EVEN, PALE YELLOW GREEN RING, DRY CUT
- 5240-5250 SH-50% medium-dark grey, black, grey green, as above  
LS-40% off white, grey brown, tan, as above  
SS-10% clear-opaque, fine-very coarse grain, as above largely unconsolidated  
30% EVEN-SPOTTY, BRIGHT YELLOW FLUORESCENCE  
SLOW, VERY FAINT MILKY WHITE STREAMING  
EVEN-SPOTTY, PALE YELLOW GREEN RING, DRY CUT
- 5250-5260 LS-60% off white, light grey, crypto-microxln, firm-very hard, dense, lithic  
SH-30% medium-dark grey, black, grey green, as above  
SS-10% clear-opaque, coarse-very coarse grain, unconsolidated NO SHOW

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UNCLASSIFIED  
DATE 11/19/01 BY SP-10/BJW