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11-16-43W^{PI}



State Geological Survey
WICHITA BRANCH

TXO PRODUCTION
EVANS "E" #6
SE 1/4 SEC. 11
T16S R43W
GREELEY COUNTY
KANSAS

RICHARD E. BACON
GEOLOGIST

RECEIVED
STATE CORPORATION COMMISSION

NOV 2 1983

CONSERVATION DIVISION
Wichita, Kansas

SUMMARY

THE EVANS "E" #2 WAS DRILLED TO A TOTAL DEPTH OF 5300' SUBSEA -1380'. THE PRIMARY OBJECTIVE WAS THE LOWER MORROW SAND, THE PRODUCING ZONE OF THE STOCKHOLM FIELD.

UPHOLE SHOW WERE VERY MINOR IN BOTH ROCK SAMPLES AND IN FLUORESCENCE AND CUT. THE TOPEKA HAD THREE SHOWS WITH A TRACE OF FLUORESCENCE WITH A FAINT STREAMING CUT. THE UPPER LANSING HAD A TRACE OF FLUORESCENCE AND A FAINT CUT. THE ROCK IN A FOUR SHOWS WAS A CRYPTOCRYSTALLINE LIMESTONE WITH SLIGHT PINPOINT POROSITY. LOGS LOGS REVEALED NOTHING ADDITIONAL IN THIS AREA.

THE LOWER MORROW SAND WAS DISAPPOINTING IN SAMPLE QUALITY & QUANTITY. SHOWS WERE OF A MORE SIGNIFICANT NATURE YET RATED ONLY FAIR AT BEST. HOWEVER LOGS ESTABLISHED A 16 FOOT PAY ZONE WITH AN AVERAGE POROSITY OF 20% AND A RESISTIVITY OF 7 TO 9 OHMS.

PIPE WAS RUN TO COMPLETE AS A MORROW SAND OIL WELL THUS EXTENDING THE DEVELOPMENT OF THE STOCKHOLM FIELD.

FORMATION TOPS

	EVANS "E" #6		CHEEK "A" #1	
STONE CORRAL	2740	+1180	2732	+1188
NEVA	3460	+468	3453	+467
FORAKER	3550	+366	3544	+376
WABAUNSEE	3662	+252	3657	+263
TOPEKA	3895	+25	3886	+34
HEEBNER	4122	-202	4114	-194
LANSING	4224	-304	4216	-296
MARMATON	4620	-700	4616	-696
FT. SCOTT	4700	-780	4694	-774
CHEROKEE	4748	-828	4743	-823
ATOKA	4882	-962	4878	-958
MORROW	5052	-1132	5050	-1130
BLUE LS	ABSENT		5106	-1186
LOWER SAND	5158	-1238	5151	-1231
LOWER LS	5178	-1258	5167	-1247
KEYES	5224	-1290	5214	-1294
STE. GENEVIEVE	5242	-1322	5242	-1322

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RESUME

OPERATOR: TXO PRODUCTION
WELL NAME & LOCATION EVANS "E" #6 SE1/4 SEC. 11 T16S R43W
COUNTY: GREELEY
STATE: KANSAS
SPUD DATE: OCTOBER 15, 1983
COMPLETION DATE: OCTOBER 24, 1983
ELEVATIONS: KB 3920' GL 3910'
TOTAL DEPTHS: DRILLER 5300' LOGGER 5302'
CONTRACTOR: J.W. GIBSON RIG #93
GEOLOGIST: RICHARD E. BACON
TOOL PUSHER: DALE CARBERRY
MUD COMPANY: SERVICE MUD ART DAVIS ENGINEER
TYPE OF MUD: CHEMICAL GEL
HOLE SIZES: 12 1/4" to 460' 7 7/8" to TD
CASING: 11 JOINTS 8 5/8" 24# K-55 SET AT 460' CEMENT WITH 275
SACKS CLASS H 3% cc
CORES: NONE
DST: NONE
ELECTRIC LOGS: GEARHART SAM DEAN ENGINEER
TYPE OF LOGS: DIL TD to 458'
CDL/CNS TD to 3265'
BOTTOM FORMATION: STE. GENEVIEVE, MISSISSIPPIAN
WELL STATUS: TO COMPLETE AS AN OIL WELL IN THE MORROW SAND

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6'E' Evans

WELL CHRONOLOGY

DATE	DEPTH 7:00am	ACTIVITY
10-15-83	-	SPUD 1:00pm RUN CASING, 11 JOINTS OF 8 5/8" 24# K-55 449.97' SET AT 460' CEMENT WITH 275 SACKS CLASS H 3% cc WAIT ON CEMENT
10-16-83	470'	RESUME DRILLING AT 7:45am DEV. 1 1/4° LOST CIRCULATION AT 1460' MIX MUD AND HULLS. BACK TO DRILLING AT 11:00pm
10-17-83	1820'	BIT TRIP AT 1762' DEV. 1 1/2° ON BOTTOM AT 5:45am
10-18-83	2813'	DRILLING
10-19-83	3392'	DRILLING
10-20-83	3836'	DRILLING
10-21-83	4209'	PLUGGED JET PULL OUT OF HOLE AT 4409'
10-22-83	4484'	ON BOTTOOME A T 2:35am DEV. 1/2° PIPE STRAP SHOW HOLE 3 FEET DEEPER THAN PIPE TALLY
10-23-83	4821'	DRILLING
10-24-83	5133'	TD AT 9:00pm CONDITION HOLE FOR LOGGING
10-25-83	5300'	PIPE STRAP SHOWS HOLE 3 FEET DEEPER THAN PIPE TALLY. COMPLETE LOGGING AT 9:30am

SAMPLE DESCRIPTIONS
(NOT LAGGED)

- 3890-3920 SH-60% red-orange, medium-dark grey, blue grey, blocky, subfissile, waxy, silty in part, some with anhydritic inclusions.
LS-40% off white-cream, light grey, grey brown, crypto-very fine xln, firm, dense, some grainy,
Trace ANHY-white, red-orange, firm, massive, xln free pyrite
- 3920-3950 LS-70% off white-cream, buff, crypto-very fine xln, firm, dense, some grainy, tr pinpoint porosity poor, some micro-sucrosic
SH-30% red-orange, medium-dark grey, blue grey, firm, blocky, subfissile, waxy, silty in part,
Trace ANHY-white, red-orange, firm, massive, xln
- 3950-3980 LS-90% off white-cream, white, buff, crypto-fine xln, firm, dense, chalky, some micro-sucrosic, with fair interxln, porosity, tr pyritic
TRACE EVEN BRIGHT YELLOW FLUORESCENCE
SLOW YELLOW-WHITE STREAMING
FAINT YELLOW RING, DRY CUT POOR SHOW
SH-10% red-orange, medium-dark grey, firm, blocky, subfissile, silty in part
- 3980-4010 LS-85% off white-cream, buff, crypto-very fine xln, firm, dense, some pinpoint porosity, poor
TRACE BRIGHT YELLOW FLUORSCENCE
VERY SLOW YELLOW-WHITE STREAMING
VERY FAINT YELLOW RING, DRY CUT POOR SHOW
SH-15% red-orange, medium-dark grey, firm, blocky, subfissile, silty in part
- 4010-4040 LS-90% off white-cream, buff, light grey, crypto-very fine xln, firm, dense, tr fossiliferous, some pinpoint porosity poor to fair
SH-10% red-orange, medium-dark grey, firm, blocky, subfissile, silty in part
- 4040-4070 LS-95% off white-cream, buff, white, light grey, crypto-very fine xln, firm-hard, dense, chalky, tr arenaceous, tr calcite xls, some pinpoint porosity poor to fair
SH-5% red-orange, medium dark grey, firm, blocky, subfissile, silty in part some slightly calcareous
- 4070-4100 LS-95% white-off white, cream, light grey, crypto-fine xln, firm-hard, dense, lithic, chalky, tr grainy
SH-5% red-orange, medium-dark grey, firm, blocky, subfissile, silty in part

- 4100-4130 LS-100% white-off white, cream, buff, light grey,
crypto-very fine xln, firm-hard, dense, litnic,
cnalky, becoming slightly argillaceous
free pyrite
- 4130-4160 LS-100% white-off white, cream, buff, light grey,
crypto-very fine xln, firm-hard, dense, litnic,
chalky, tr arenaceous, tr pyritic, tr pinpoint
porosity fair
FOSS-coral
Trace SH-medium-dark grey, firm, subfissile, very
slightly calc, micromicaeous
- 4160-4190 LS-100% off white-cream, white, buff, light grey,
crypto-microxln, firm-hard, dense, litnic, cnalky,
less argillaceous, tr pyritic
TRACE UNEVEN BRIGHT YELLOW FLUORESCENCE
SLOW YELLOW-WHITE STREAMING
BRIGHT YELLOW-GREEN RING, DRY CUT POOR SHOW
Trace SH-medium-dark grey, firm, subfissile, very
slightly calc, micromica
- 4190-4220 LS-100% off white-cream, white, buff, light grey,
crypto-very fine xln, firm-hard, dense, litnic,
cnalky, slightly argillaceous, traces pinpoint
porosity fair
Trace SH-medium-dark grey, firm, subfissile, very
slightly calc, micromica
- 4220-4250 LS-100% cream, white, buff, crypto-microxln, firm
hard, dense, lithic, chalky, tr arenaceous,
tr pinpoint porosity fair
- 4250-4280 LS-100% cream-light grey, white, buff, grey brown,
crypto-microxln, firm-hard, dense, litnic, cnalky,
tr pyritic
TRACE UNEVEN BRIGHT YELLOW FLUORESCENCE
SLOW FAINT YELLOW-WHITE STREAMING
VERY FAINT YELLOW-GREEN RING, DRY CUT POOR SHOW
Trace CHT-white, light pink
- 4280-4310 LS-95% cream, buff, white, crypto-very fine xln,
firm-hard, dense, lithic, cnalky, trace pinpoint
porosity poor to fair
SH-5% medium-dark grey, grey green, firm, blocky,
massive, slightly calc
Trace CHT-light amber
FOSS-byrozoa
- 4310-4340 LS-95% cream, buff, white, crypto-microxln, firm-
hard, dense, lithic, cnalky, tr pyritic, tr silty
and arenaceous, tr fossiliferous
SH-5% medium-dark grey, grey green, firm, blocky,
massive, sl more calc

- 4340-4370 LS-100% cream, buff, white, light tan, crypto-very fine xln, firm-hard, dense, lithic, cnalky, tr pinpoint porosity poor to fair
 Trace CHT-white
 Trace SH-medium-dark grey, grey green, firm, blocky, massive, calc
- 4370-4400 LS-100% cream, white, light grey, light tan, crypto-microxln, firm-hard, dense, lithic, cnalky, tr micro-sucrosic
 Trace SH-medium-dark grey, firm, flakey, calcareous
- 4400-4430 LS-100% cream, off white-white, buff, light-medium grey, crypto-very fine xln, firm-hard, dense, lithic, cnalky, argillaceous in part
 Trace SH-medium-dark grey, firm, flakey, calcareous
 Sample caught after bit trip
- 4430-4460 LS-100% light-medium grey, cream, white, light tan, crypto-microxln, firm-hard, dense, lithic, cnalky, some pyritic, some argillaceous
 Trace SS-medium grey, very fine grain, subangular, firm, calcareous, silty, micaeous, argillaceous, tight free pyrite
- 4460-4490 LS-100% cream, buff, light grey, light tan, crypto-very fine xln, firm-hard, dense, lithic, cnalky, some argillaceous
 FOSS-pelecypod Shale cavings
- 4490-4520 LS-100% cream, buff, light grey, crypto-microxln, firm-hard, dense, lithic, becoming silty
 Trace SH-medium-dark grey, black, firm, blocky,
 Trace CHT-white free pyrite
- 4520-4550 LS-100% cream, buff, light grey, light tan, crypto-microxln, dense, lithic, tr faintly oolitic round-buff
 Trace SH-medium-darkgrey, firm, flakey, calcareous
 Shale cavings free pyrite
- 4550-4580 LS-100% cream, buff, crypto-microxln, firm-hard, dense, lightc abundant shale cavings poor sample
- 4580-4610 LS-100% cream, light grey, light tan, crypto-microxln, firm-hard, dense, lithic, tr oolimoldic good porosity
 Less shale cavings
- 4610-4640 LS-100% off white-cream, light grey, crypto-microxln, firm-hard, dense, lithic, tr grainy, tr oolimoldic good porosity, tr pinpoint porosity poor

- 4640-4670 LS-100% off white-cream, light grey, grey brown, crypto-microxln, firm-hard, lithic, dense, some argillaceous
- 4670-4700 LS-100% cream, light-medium grey, light tan, grey brown, crypto-very fine xln, firm-hard, dense, lithic, becoming more argillaceous
Trace SH-medium-dark grey, black, firm, subfissile-fissile, slightly calcareous, micromica
- 4700-4730 LS-100% light-medium grey, cream, crypto-microxln, firm-hard, dense, lithic, argillaceous, some silty, tr pyritic
Trace SH-medium-dark grey, black, firm, subfissile blocky, slightly calc, some silty, micromica
Trace CHT-dark amber
- 4730-4760 LS-100% light-medium grey, cream, grey brown, mottled, crypto-very fine xln, firm-hard, dense, lithic, argillaceous, silty
- 4760-4790 LS-100% light-medium grey, grey brown, crypto-microxln, firm-hard, dense, lithic, argillaceous, silty in part
Trace CHT-black, amber, translucent, grey brown
- 4790-4820 LS-100% light-dark grey, cream, mottled, grey brown, crypto-fine xln, firm-very hard, dense, lithic, argillaceous, some silty, tr pyritic
Trace SH-medium-dark grey, firm, flakey, slightly calcareous, micromicaeous
Trace CHT-grey brown, dark grey
- 4820-4850 LS-100% light-dark grey, cream, buff, mottled, grey brown, crypto-very fine xln, firm-very hard, dense, lithic, argillaceous, some silty
Trace SH-medium-dark grey, firm, flakey, slightly calcareous, micromicaeous
Trace CHT-dark grey, opaque, buff
- 4850-4880 LS-100% light-medium grey, cream, grey brown, crypto-microxln, firm-very hard, dense, lithic, argillaceous
Trace SH-medium-dark grey, firm, flakey, slightly calc, micromicaeous
Trace CHT-dark grey, dark tan, spotted
- 4880-4910 LS-100% light-medium grey, cream, grey brown, buff, crypto-microxln, firm-very hard, dense, lithic, argillaceous, some silty
Trace SH-medium-dark grey, firm, flakey, slightly calcareous, micromicaeous
Trace CHT-dark grey, dark tan, spotted

- 4910-4940 LS-100% light-medium grey, cream, grey brown, buff, crypto-microxln, firm-very hard, dense, lithic argillaceous, some silty
Trace CHT-dark grey, dark tan, spotted
- 4940-4970 LS-95% light-medium grey, buff, grey brown, crypto-microxln, firm-hard, dense, lithic, tr oolitic round-white
SH-5% medium-dark grey, black, firm, flakey, subfissile, calc, micromica in part
CHT-dark grey, grey brown, spotted
- 4970-5000 LS-90% light-medium grey, buff, grey brown, light tan, crypto-microxln, firm-hard, dense, lithic, arg
SH-10% medium-dark grey, black, firm, flakey, subfissile, calcareous in part, micromica in part
Trace CHT-amber, light tan, spotted, pyritic in part
- 5000-5020 LS-90% light-medium grey, buff, grey brown, light tan, crypto-microxln, firm-hard, dense, lithic, arg
SH-10% medium-dark grey, black, firm, flakey, subfissile, calcareous in part, micromica in part
Trace CHT-amber, spotted
- 5020-5040 LS-85% light-dark grey, grey brown, light tan, crypto-very fine xln, firm-hard, dense, lithic, argillaceous, silty in part, tr pyritic
SH-15% medium-dark grey, black, firm, flakey, subfissile, calcareous in part, micromica in part
Trace CHT-black, spotted in part
- 5040-5060 LS-90% light-dark grey, grey brown, light tan, crypto-very fine xln, firm-hard, dense, lithic, argillaceous, silty in part, tr pyritic
Trace CHT-black
- 5060-5070 LS-85% light-dark grey, grey brown, light tan as above
SH-15% medium-dark grey, black, firm, as above also grey green, flakey, waxy
Trace CHT-black, spotted
- 5070-5090 LS-90% light-dark grey, grey brown, light tan as above
SH-10% medium-dark grey, black, grey green, firm, flakey, subfissile, waxy, calc in part, micromica in part
Trace CHT-dark amber, dark grey
- 5090-5110 LS-85% light-dark grey, grey brown, light tan as above
SH-15% medium-dark grey, black, grey green as above
Trace CHT-black, spotted, tr pyritic

- 5110-5130 LS-90% light-dark grey, grey brown, light tan, crypto-very fine xln, firm-hard, dense, lithic, argillaceous silty in part,
 SH-10% medium-dark grey, black, grey green, firm, flakey subfissile, waxy in part, micromica in part
 Trace CHT-black, tan, tr fractured
- 5130-5140 LS-80% light-dark grey, grey brown, light tan as above
 SH-20% medium-dark grey, black, grey green as above
 Trace CHT-black
- 5140-5150 SH-60% medium-dark grey, black, grey green as above
 LS-40% light-dark grey, grey brown, light tan as above
 Trace SS-clear, translucent, coarse grain, quartzic, angular-subangular, friable-firm, calc cement, tr pyritic, good sorting, tight no visible \emptyset , no snow some quartz grains imbedded in pyritic matrix
- 5150-5160 SH-90% medium-dark grey, black, grey, green as above - also grey brown, flakey, some cherty
 LS-10% cream, light tan, mottled, crypto-very fine xln, firm, dense, trace tan, glauconitic, fossiliferous
 Trace SS-as above also clear, medium grain, subangular, friable, calc to slightly calc, tr slightly glauc, good sorting, tight no visible \emptyset , no snow
 Trace CHT-tan
- 5160-5170 SH-90% medium-dark grey, black, grey green, grey brown firm, flakey, subfissile, waxy, micromica in part
 LS-10% cream, light tan, mottled, as above
 Trace SS-as above slightly more in sample
- 5170-5180 SH-90% medium-dark grey, black, grey green, grey brown
 LS-10% cream, light to medium tan as above
 Trace SS-as above also white, fine grain, trace medium grain, subangular-subround, firm, slightly calc, clay filled, fair sorting, glauconitic, tight, no visible porosity
 TRACE EVEN GOLD FLUORESCENCE
 VERY FAINT YELLOW-WHITE STREAMING
 VERY FAINT YELLOW RING, DRY CUT POOR SHOW
- 5180-5190 SH-95% medium-dark grey, black, grey green as above
 LS-5% cream, light to medium tan as above
 Trace SS-as above also clear, medium grain, subround-subangular, firm, slightly calc to siliceous, good sorting, slight intergranular porosity
 TRACE UNEVEN YELLOW-GREEN FLUORESCENCE
 VERY FAINT YELLOW-WHITE STREAMING
 MODERATE YELLOW-GREEN RING, DRY CUT POOR SHOW

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6 E Evans

- 5190-5200 TRACE SS 2%-translucent, white, fine-medium grain, subround-subangular, firm, siliceous, fair sorting, tight some loose translucent, coarse grain quartz
TRACE EVEN BRIGAT YELLOW-GREEN FLUORESCENCE
IMMEDIATE YELLOW-WHITE STREAMING
GOOD YELLOW-GREEN RING, DRY CUT FAIR SHOW
- 5200-5210 SS-5% translucent, clear, white, fine-medium grain, some medium-coarse grain, subround-subangular, firm, clay filled, siliceous, slightly calcareous, fair sorting, tight, trace slight oil stain, some loose very coarse grain quartz
TRACE EVEN YELLOW-GREEN FLUORESCENCE
IMMEDIATE TO SLOW YELLOW-WHITE STREAMING
FIAR YELLOW-GREEN RING, DRY CUT POOR TO FAIR SHOW
LS-45% cream-buff, tan, crypto-very fine xln, firm-hard, dense, chalky, tr glauconitic
SH-50% medium-dark grey, black, grey geen, grey brown firm, flakey, subfissile, waxy in part, micromica ip
- 5210-5220 SS-less than 5% as above trace show as above
LS-40% cream-buff, tan as above also lithic
SH-55% medium-dark grey, black, grey green as above
- 5220-5230 LS-40% cream-buff, tan as above
SH-60% medium-dark grey, black, greygreen as above
Trace SS-translucent, clear as above No show
- 5230-5240 LS-50% cream, buff, light tan, grey brown, mottled, crypto-medium xln, firm-hard, dense, chalky, becoming arenaceous, tr glauconitic, tr pyritic, tr fossiliferous, tr oolitic round-dark grey
SH-50% medium-dark grey, black, grey green as above
Trace SS-translucent, clear as above No show
- 5240-5250 LS-60% cream, buff, tan, mottled, crypto-fine xln, firm-hard, dense, chalky, more arenaceous to very arenaceous
SH-40% medium-dark grey, black, grey green as above
Trace loose quartz grains some consolidated
- 5250-5260 LS-70% cream, buff, tan mottled as above very aren in part also cream, cryptoxln, friable to firm, dense, arenaceous micro-oolitic round, eliptical-buff
SH-30% medium-dark grey, black, grey green as above
Trace SS- translucent, clear, as above
- 5260-5300 LS-80% cream, buff, tan, becoming more arenaceous and micro-oolitic
SH-20% medium-dark grey, black, grey green as above

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6'E' Evans

MUD RECORD

DEPTH	WEIGHT	VISCOSITY	pH	WATER LOSS	CHLORIDES
3860	9.3	32	9.0	22	-
4311	9.2	42	9.5	20	18,000
4525	9.3	40	9.5	10	18,000
4840	9.2	43	9.0	8	16,000
5150	9.1	42	10.0	8	16,000

BIT RECORD

NO.	SIZE	MAKE	TYPE	OUT	FOOTAGE	HOURS
-	12 1/4"	HTC	J-2	470'	470'	6 1/2
1	7 7/8"	WM	03J	1762'	1292'	15 1/2
2	7 7/8"	HTC	J-22	4409'	2647'	101 1/2
3	7 7/8"	HTC	J-33	5300'	891'	64 1/4

DRILLING PARAMETERS

DEPTH	RPM	WEIGHT	PUMP PRESSURE
3832	70/75	30/35K	1200
4200	65/70	35/40K	1100/1200
4475	65/70	35/40K	950 PLUGGED JET
4820	65/70	35/40K	1200
5128	50/55	35K	1050

Formation Tops - Con't

Morrow	5060'
L-1 SS	5140'
L-Morrow	5162'
Ste Genevieve	5202'
LTD	5249'
DTD	5255'