

Geologic Report
Aaron L. Young

Drilling Time and Sample Log

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Norton J #5
API: 15-135-26061
Location: Section 19 - T17S - R25W
License Number: 5123
Spud Date: 03/28/19
Surface Coordinates: 1025' FNL and 1525' FEL
Approx. SE - SE - NW - NE
Region: Ness Co., KS
Drilling Completed: 04/05/19
Bottom Hole Coordinates:
Ground Elevation (ft): 2487' K.B. Elevation (ft): 2494'
Logged Interval (ft): 3750' To: 4458' Total Depth (ft): 4458'
Formation: Mississippi
Type of Drilling Fluid: Chemical - Mud-Co

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Pickrell Drilling Company, Inc.
Address: 100 S Main Ste 505
Wichita, KS 67202+3738

GEOLOGIST

Name: Aaron L. Young, M.S.
Company: Pickrell Drilling Company, Inc.
Address: 100 S Main, Suite 505
Wichita, Kansas 67202

General Info

CONTRACTOR: Pickrell Drilling, Rig #10

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	Tooth	15-15-15	233	233	4.00
2	7-7/8	HA23	15-15-15	2803	2570	34.50
3	7-7/8	23C	15-15-15	4458	1655	62.25

SURVEYS: 233'--.25, 724'-.75, 1228'-.75, 1730'-.25, 2266'-1, 2772'-.5, 4344'-.75

GENERAL DRILLING AND PUMP INFORMATION:

Drilling with 32,000 - 36,000 lbs. on bit and approx 70-75 RPM.
Running 9 stands of collars; 526.43'
Pumping approx 900 psi at standpipe at 59-60 SPM

Daily Status

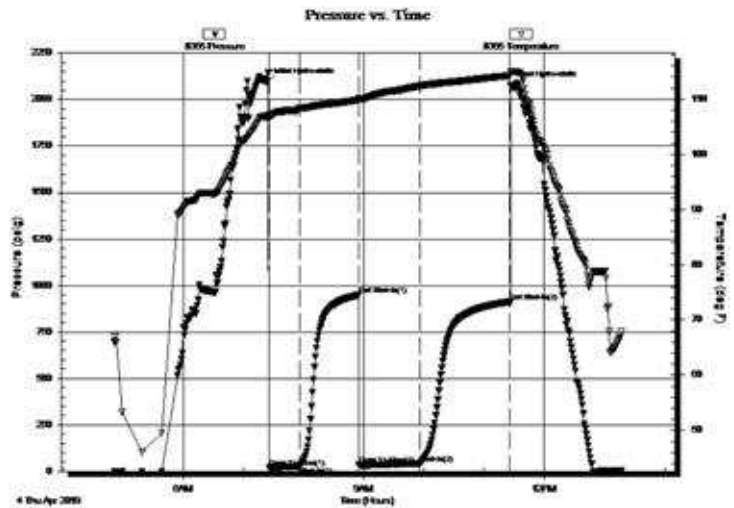
03/28/19 - Spud @ 1:00PM. Drilled 12 1/4" hole to 233', SHT @ 233' = 1/4°. Ran 5jts of new 8 5/8" 23# surface casing, set @ 213' (tally 204'), cement w/150sx 80-20 Pozmix, 2%gel, 3%CC. PD @ 8:45PM. Cement circulated.
 03/29/19 - Drilling @ 313'
 03/30/19 - Drilling @ 1983'. SHT @ 724' = 3/4°, @ 1228' = 1°, @ 1730' = 1/4°. Drillers Anyhdrite 1815-1846.
 03/31/19 - TD 2772'. Stuck on bottom after survey. Waiting on oil truck to spot oil. Made bit trip. SHT @ 2266' = 1°, @ 2772' = 1/2°.
 04/01/19 - Drilling @ 3208
 04/02/19 - Drilling @ Drilling @ 3791'. Displaced mud from 3450-3500'
 04/03/19 - Drilling @ 4179'
 04/04/19 - Drilling @ TD 4344'. TIH w/DST #1: 4290-4344 (Ft Scott). Ft Sct 4319(-1825)+8. SHT @ 4344' = 3/4°.
 04/05/19 - Testing @ 4446" DST #2: 4418-4446 (Miss), TD'd @ 4458', DST #3
 04/06/19 - Ran OH logs. P&A as follows: 50sx @ 1875', 80sx @ 1100', 50sx @ 650', 40sx @ 270', 20sx @ 6', 30sx in RH, all 60-40 Pozmix, 4% gel. Plugging completed @ 6:30 PM.

DST #1 FT SCOTT
 4290' - 4344'
 30-60-60-90

IF - Blow built to 2 1/4"
 ISI - No blow back
 FF - Blow built to 4"
 FSI - No blow back

Rec'd: 55' VLOSPM (100% M), 5' GIP

SIP: 949-913#
 FP: 19-27#, 34-43#
 HP: 2095-2078#

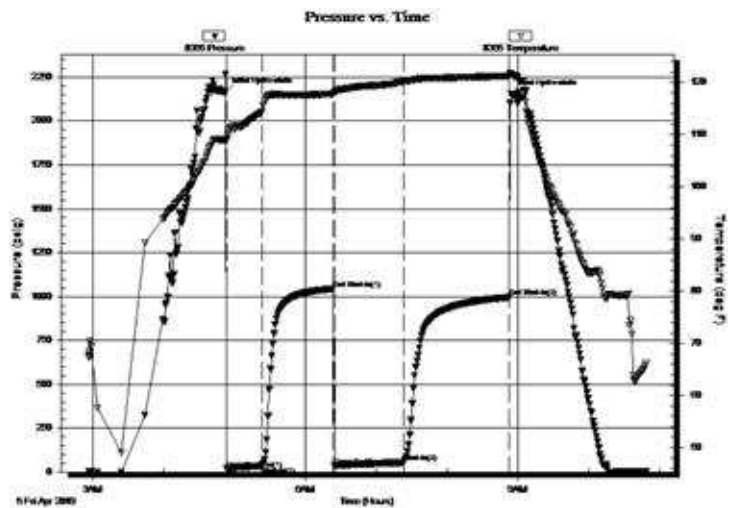


DST #2 MISSISSIPPI
 4418' - 4446'
 30-60-60-90

IF - Blow built to 4"
 ISI - No blow back
 FF - Blow built to 2 1/4"
 FSI - No blow back

Rec'd: 30' CO (100% O), 60' OCWM (10% W, 30% W, 60% M)

SIP: 1043-996# FP: 19-34#, 35-55# HP: 2164-2154#

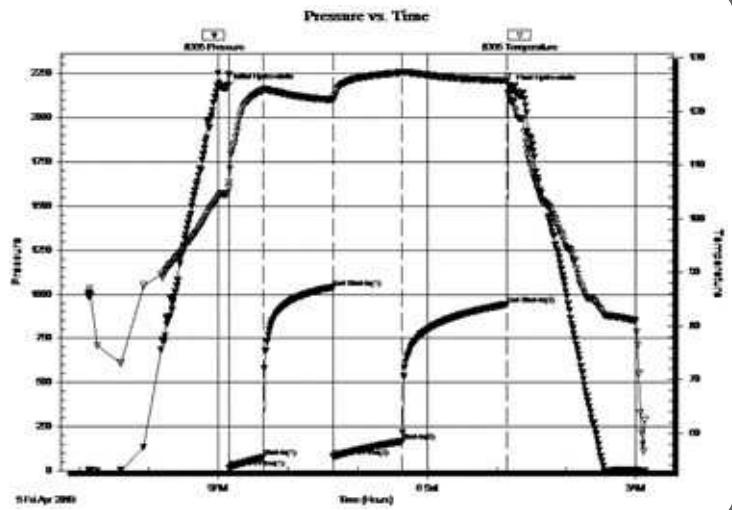


DST #3 MISSISSIPPI
 4446' - 4458'
 30-60-60-90





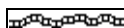



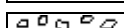
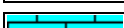
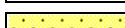

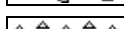








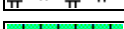






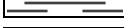
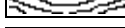
IF - Blow built to BOB in 28min, total 12.25"
 ISI - No blow back
 FF - Blow built to BOB in 42min, total 18"
 FSI - No blow back

Rec'd: 1' CO (100% O), 340' VSOCMW (2% O, 10% M, 88% W)























































































SIP: 1039-943# FP: 15-75#, 79-167# HP: 2168-2161#

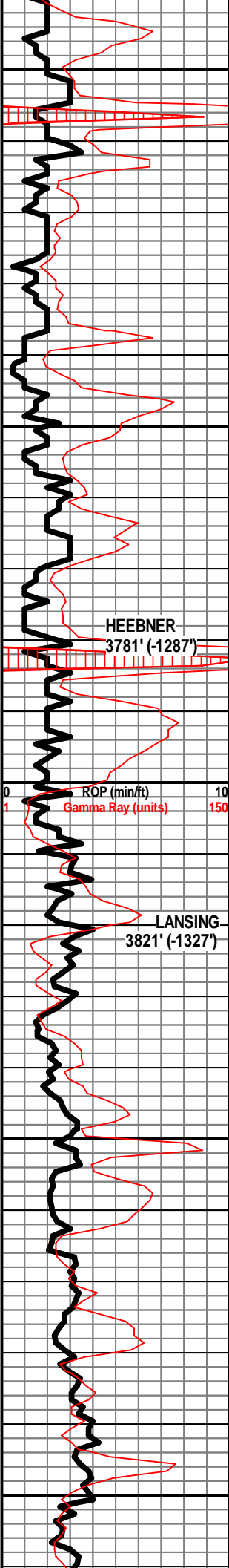


ROCK TYPES

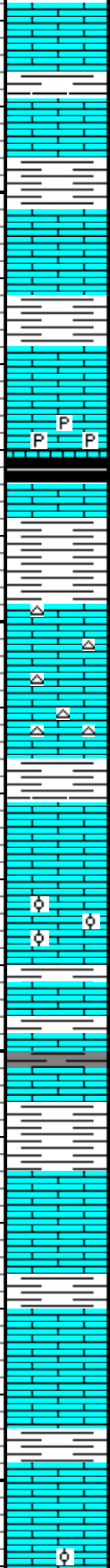
 Anhy	 Gyp	 Shgy	 Sandylms
 Bent	 Igne	 Sltst	 Shale
 Brec	 Lmst	 Ss	 Sltstn
 Cht	 Meta	 Till	 Shlyslts
 Clyst	 Mrlst	 Carb sh	 Slttysh
 Coal	 Salt	 Dol	 Lms
 Congl	 Shale	 Dtd	
 Dol	 Shcol	 Gry sh	

ACCESSORIES

MINERAL	 Salt	 Fossil	 Clystn
 Anhy	 Sandy	 Gastro	 Dol
 Arggrn	 Silt	 Oolite	 Grysh
 Arg	 Sil	 Ostra	 Gryst
 Bent	 Sulphur	 Pelec	 Lms
 Bit	 Tuff	 Pellet	 Sandylms
 Brecfrag	 Chlorite	 Pisolite	 Sh
 Calc	 Dol	 Plant	 Sltstn
 Carb	 Sand	 Strom	
 Chtdk	 Silty	 Fuss	
 Chtlt		 Oomold	
 Dol	FOSSIL		TEXTURE
 Feldspar	 Algae	STRINGER	 Boundst
 Ferrpel	 Amph	 Anhy	 Chalky
 Ferr	 Belm	 Arg	 Cryxln
 Glau	 Bioclst	 Bent	 Earthy
 Gyp	 Brach	 Coal	 Finexln
 Hvymin	 Bryozoa	 Dol	 Grainst
 Kaol	 Cephal	 Gyp	 Lithogr
 Marl	 Coral	 Ls	 Microxln
 Minxl	 Crin	 Mrst	 Mudst
 Nodule	 Echin	 Sltstrg	 Packst
 Phos	 Fish	 Ssstrg	 Wackest
 Pyr	 Foram	 Carbsh	



3700
3750
3800
3850
3900



LS - TAN / GY, VF / F XLN, MOD DNS, SUBCHKY IN PT, FOSS, W/ SH - GRN / RD

SH - RD / GRN / GY, W/ LS - TAN / GY, VF / F XLN, MOD DNS / SUBCHKY, CHKY IN PT, FOSS IN PT

LS - TAN / GY / CRM IN PT, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT, W/ SH - RD / GRN

LS - CRM / TAN / GY, MOD DNS / DNS, FOSS IN PT, W/ SH - PRED RD, GRN IN PT

SH - BLK, CARB, W/ LS - LT BRN / GY, F XLN, MOD DNS / DNS, FOSS, W/ ABUND PYRITE CLUSTERS

LS - CRM / TAN / GY, VF / F XLN, MOD DNS, FOSS IN PT, W/ SH - GRN / RD / GY

LS - CRM / TAN / GY, F XLN, DNS / MOD DNS, FOSS, W/ SH - RD / GRN / GY

LS - CRM, F / VF XLN, MOD DNS / DNS, SUBCHKY IN PT, FOSS, W/ CHT - WHT, SLI TRANLUCNT, FRSH, SHARP, FOSS

SH - GRN / GY

LS - CRN / TAN, F XLN, DNS / MOD DNS, FOSS, FEW PP VUGS

LS - CRM / TAN / LT BRN, F XLN, DNS / MOD DNS, ABUND FOSS, SCAT OOLITES

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS IN PT, W/ SH - GRN / GY

SH - DK GY / BLK, SLI CARB

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS, SCAT OOLITES, W/ CHT - WHT / TAN / GY, FRSH, SLI TRANSLCNT IN PT, PRED OPAQ, W/ SH - GRN / RD-ORNG / RD

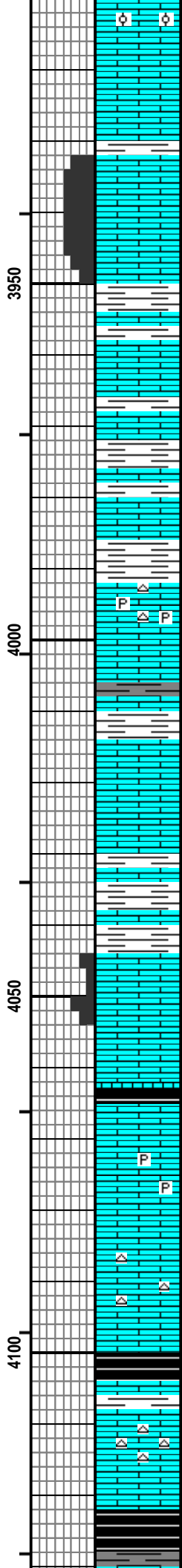
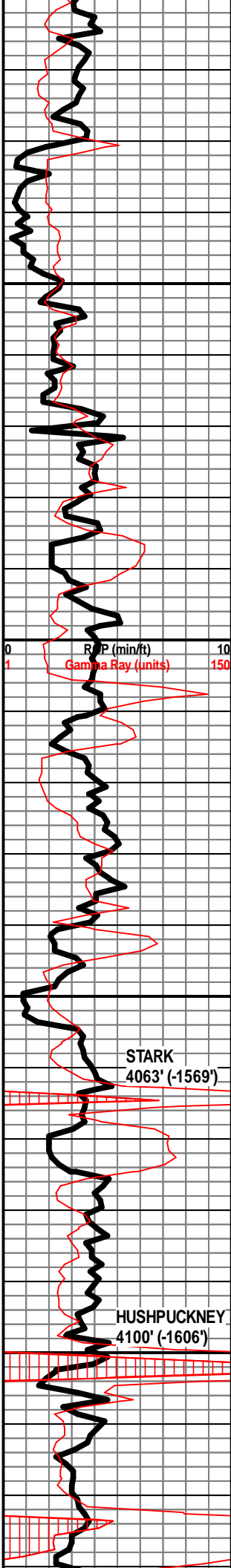
LS - CRM, F XLN, MOD DNS / DNS, SUBCHKY / CHKY IN PT, ABUND FOSS, W/ SH - GRN / GRN / RD

LS - CRM, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT

SH - GY / GRN / RD, W/ LS - GY, F XLN, MOD DNS / DNS,

LS - CRM, F / VF XLN, MOD DNS / SUBCHY, PRED FOSS

WT 8.8
VIS 51
LCM TRC



LS - CRM, F XLN, MOD DNS, OOLITIC, CALCTE CEM MATRIX, NO VIS POR

LS - CRM, VF / F XLN, SUBCHKY / MOD DNS, FOSS IN PT

LS - CRM, VF XLN, SUBCHKY / CHKY, W/ SH - RD-ORNG / DK RD / GRN

LS - CRM, F XLN, F / G OOLMOLDIC POR, NS, NO ODOR

SH - GY / GRN / RD, W/ LS - WHT, CHKY

LS - GY / TAN, F XLN, MOD DNS / DNS, FOSS IN PT, SH - GY / DK GRN / MAR

SH - GRN / GY / MAR, W/ LS - CRM, VF / F XLN, SUBCHKY, CHKY IN PT

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS IN PT, PYRITIC IN PT, W/ SCAT CHT - GY, SLI TRANSLUCNT, FRSH, W/ SH - GY / GRN / RD

SH - DK GY / GY / GRN / RD, W/ LS - CRM, VF XLN, SUBCHKY / MOD DNS, CHKY IN PT

LS - CRM / TAN, F XLN, MOD DNS, W/ SH - GRN / RD-ORNG/ RD / MAR

LS - CRM / TAN, F XLN, DNS / MOD DNS, FOSS IN PT

SH - DK GY / BLK, CARB, W/ SH - GY / GRN / RD / RD-ORNG, W/ LS - CRM, VF / F XLN, MOD DNS / SUBCHKY, FOSS IN PT

LS - CRM / TAN, F XLN, FOSS, P / F OOLMOLDIC POR IN PT, NS

LS - CRM / TAN, F / VF XLN, F OOLMOLDIC POR IN PT, NS, SUBCHKY IN PT, FOSS IN PT

SH - BLK, CARB, W/ LS - CRM, VF / F XLN, MOD DNS / SUBCHKY, OOLITIC IN PT

LS - BRN / GY, F / M XLN, MOD DNS, FOSS IN PT, PYRITIC IN PT

LS - CRM / LT GY / WHT, VF XLN, SUBCHKY / CHKY IN PT

LS - GY / TAN / LT BRN, F XLN, MOD DNS / DNS, FOSS IN PT, W/ CHT - TAN / GY, SLI TRANSLUCNT, FRSH

SH - BLK, CARB, W/ LS - CRM, VF XLN, MOD DNS / SUBCHKY

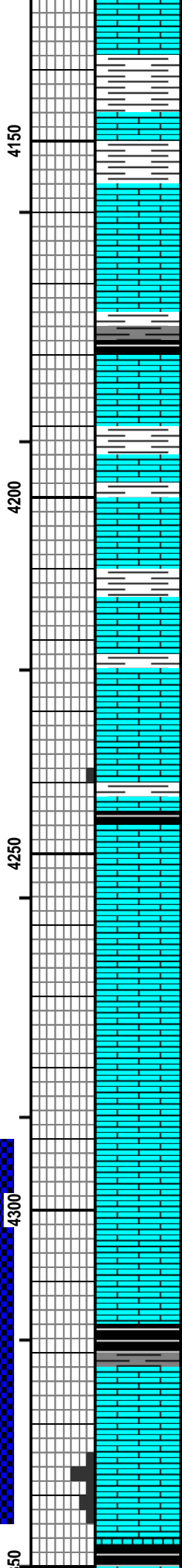
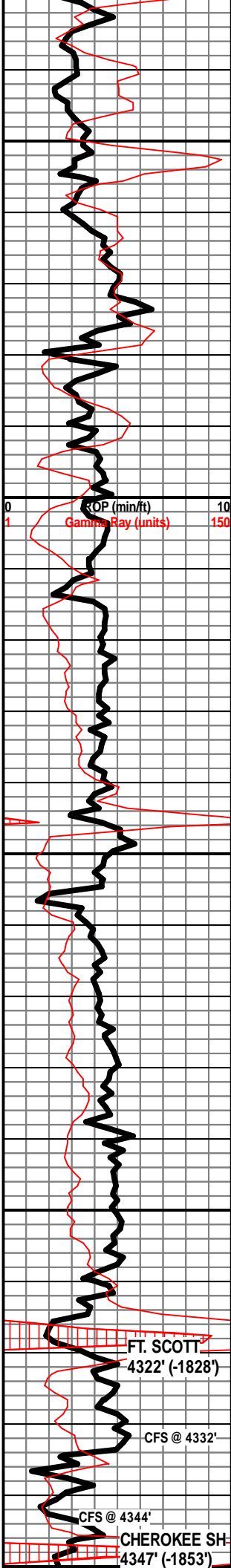
LS - CRM / TAN / GY IN PT, VF XLN, MOD DNS / SUBCHKY, CHKY IN PT, W/ CHT - TAN / GY, MOD TRANSLUCNT, FRSH, W/ SH - GRN / GY

SH - BLK, CARB, W/ LS - GY / LT BRN / TAN, F / M XLN, DNS, FOSS IN PT

WT 9.0
VIS 45
LCM 1#

WT 9.1
VIS 45
LCM 1#

WT 9.1
VIS 52
LCM 1#



WT 9.1
VIS 53
LCM 1#

LS - CRM / GY / WHT, VF XLN, SUBCHKY /
CHKY, W/ SH - GY

SH - LT GRN / LT GY / LT RD, V SOFT / SOFT, W/
LS - CRM / TAN, VF / F XLN, MOD DNS /
SUBCHKY

LS - TAN / LT GY IN PT, F XLN, MOD DNS / DNS,
FOSS IN PT, W/ SH - GRN / RD / RD-ORNG

LS - BRN / GY, F / M XLN, V DNS / DNS, FOSS

SH - GRN / GY / DK GY / BLK, CARB IN PT

LS - CRM / TAN / GY IN PT, F XLN, MOD DNS /
DNS, FOSS IN PT, W/ SH - GRN / RD / GY

LS - CRM / TAN, F / VF XLN, MOD DNS / DNS,
FOSS IN PT, W/ SH - RD / GRN

WT 9.3
VIS 61
LCM 1#

LS - PRED CRM, TAN IN PT, F XLN, MOD DNS /
DNS, FOSS IN PT

LS - CRM / TAN, VF / F XLN, MOD DNS /
SUBCHKY, FOSS IN PT, W/ SH - RD / GRN / GY

WT 9.2
VIS 56
LCM 1#

LS - CRM / TAN / GY, F XLN, MOD DNS / DNS,
FOSS IN PT, W/ SH - GY

LS - GY / TAN, F XLN, DNS / MOD DNS, FOSS IN
PT

WT 9.1
VIS 57
LCM 1#

LS - CRM, F XLN, DNS, FOSS, ONE LOOSE FUSULINID W/P
MOLDIC POR, ONE PIECE W/P INTERXLN POR, SSFO,
BLEEDING OIL, LT BRN OIL DROPLETS, NO ODOR, DULL
FLUOR

WT 9.1
VIS 51
LCM 1#

SH - DK GY / GY / GRN / RD, W/ LS - CRM / TAN,
F XLN, DNS, FOSS, OOLITIC IN PT

LS - CLM / TAN, F XLN, DNS, ABUND FOSS,
OOLITIC IN PT

WT 9.3
VIS 52
LCM 1#

LS - GY, TAN IN PT, F XLN, DNS, FOSS IN PT

SH - DK GY, F XLN, DNS / MOD DNS

LS - DK GY, VF / F XLN, DNS / MOD DNS /
SUBCHKY IN PT

SH - BLK, CARB

DST #1
FT SCOTT
4290' - 4344'
30-60-60-90

JET #1
ADD PREMIX

IF - Blow built to 2 1/4"
ISI - No blow back
FF - Blow built to 4"
FSI - No blow back

LS - TAN / LT BRN / CRM, F / M XLN, DNS,
FOSS, NO VIS POR, NS, NO ODOR, MINERAL
FLUOR IN PT, PYRITIC IN PT

LS - CRM, F XLN, ABUND MICRO FOSS, P / F
INTERXLN & INTERPART POR, VUG POR IN PT,
FSFO, SLI SHO GAS BUB, STRONG CUP ODOR,
BRI YEL-GRN FLUOR

Rec'd: 55' VLOSPM (100% M), 5'
GIP

WT 9.3
VIS 51
LCM 1#

SH - BLK, CARB, PYRITIC IN PT

WT 9.1
VIS 53
LCM 1#

WT 9.3
VIS 61
LCM 1#

WT 9.2
VIS 56
LCM 1#

WT 9.1
VIS 57
LCM 1#

WT 9.1
VIS 51
LCM 1#

WT 9.3
VIS 52
LCM 1#

DST #1
FT SCOTT
4290' - 4344'
30-60-60-90

JET #1
ADD PREMIX

IF - Blow built to 2 1/4"
ISI - No blow back
FF - Blow built to 4"
FSI - No blow back

Rec'd: 55' VLOSPM (100% M), 5'
GIP

WT 9.3
VIS 51
LCM 1#

FT. SCOTT
4322' (-1828')

CFS @ 4332'

CFS @ 4344'

CHEROKEE SH
4347' (-1853')

