

Geologic Report
Aaron L. Young

Drilling Time and Sample Log

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

Well Name: Younkin E #1-35
API: 15-109-21516
Location: Section 35 - T14S - R34W
License Number: 9408
Spud Date: 8 / 21 / 2017
Surface Coordinates: 2265' FNL and 1174' FEL
Approx. NW - SW - SE - NE
Region: Logan Co., KS
Drilling Completed: 9 / 02 / 2017
Bottom Hole Coordinates:
Ground Elevation (ft): 2948' K.B. Elevation (ft): 2956'
Logged Interval (ft): 3600' To: 4650' Total Depth (ft): 4650'
Formation: Mississippi
Type of Drilling Fluid: Chemical - MudCo

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

OPERATOR

Company: Trans Pacific Oil Corporation
Address: 100 S Main Ste 200
Wichita, KS 67202

GEOLOGIST

Name: Aaron L. Young, M. S.
Company: Young Consulting LLC
Address: 100 S Main Ste 505
Wichita, KS 67202

General Info

CONTRACTOR: Duke Drilling, Rig #2

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	RR	15-15-15	265'	257'	2.0
2	7-7/8	JZ HA20	15-15-15	4650'	4393'	128.75

SURVEYS: 265'-.75, 3904'-.5, 4508'-.75, 4650'-.25

GENERAL DRILLING AND PUMP INFORMATION:

Drilling with 38,000 -40,000 lbs. on bit and approx 70 RPM.
Running 8 stands of collars; 482.50'
Pumping approx 800 psi at standpipe.

Daily Status

8/21/17 - MIRU, Spud @ 4:45pm, Drilled to 265', ran 6 jts of new 8 5/8" 23# surface casing set @ 263', cemented w/ 185 sx. Com, w/ 2% gel & 3% CC, cem circ. WOC

8/22/17 - Drilling, @ 263'

8/23/17 - Drilling, @ 1950'

8/24/17 - Drilling, @ 2830'

8/25/17 - Drilling, @ 3355', DST #1

8/26/17 - Drilling, @ 3483', DST #2

8/27/17 - Drilling, @ 3930', DST #3

8/28/17 - Drilling, @ 4055'

8/29/17 - CFS, @ 4183', DST #4

8/30/17 - CFS, @ 4276', DST #5

8/31/17 - Drilling, @ 4405'

9/1/17 - CFS, @ 4508', DST #6

9/2/17 - RTD, 4650', Ran 56 jt of new 4 1/2" 10.5# csg. set with packer shoe on bottom. Set pkr. shoe @ 2352'.

Centralized every 120' from 2352' to 1530'. Cement basket on 1st joint. MIRU Swift. Pump 500 gal mud flush, followed by 485 sx SMD cement. Cement circulated to pit. Plug rat hole w/ 25 sx, mouse hole w/ 15 sx. Plug down @ 1:35 PM.

DST #1 LKC 'C' 3878'-3904'
30"-75"-60"-90"

IF: BOB in 21 min

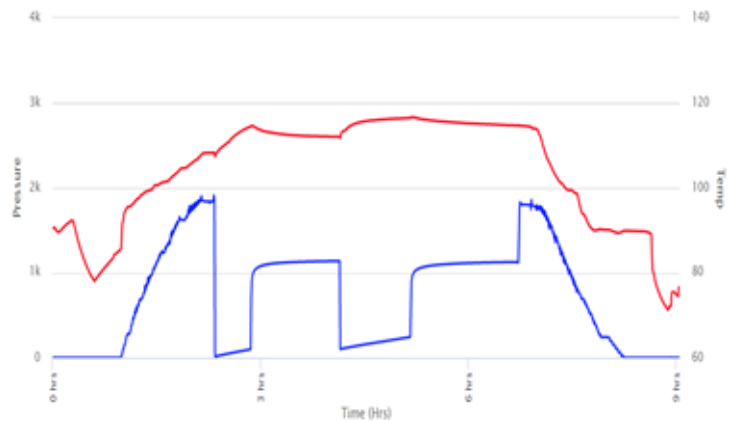
ISI: No blow

FF: BOB in 25 min

FSI: No blow

Rec': 270' VSOCMW (tr% O, 67% W, 33% M), 250'
VSOCMW (tr O, 93% W, 7% M)

SIP: 1138-1127# FP: 12-98#, 100-243# HP: 1820-1817#



DST #2 LKC 'E' & 'F' 3930'-3967'
30"-75"-60"-90"

IF: BOB in 2 min 15 sec

ISI: No blow

FF: BOB in 3 min

FSI: No blow

Rec': 100' HMCW (65% W, 35% M), 315' HMCW (68% W, 32% M), 1950' SMCW (95% W, 5% M)

SIP: 1159-1158# FP: 68-584#, 588-1057# HP: 1840-1832#

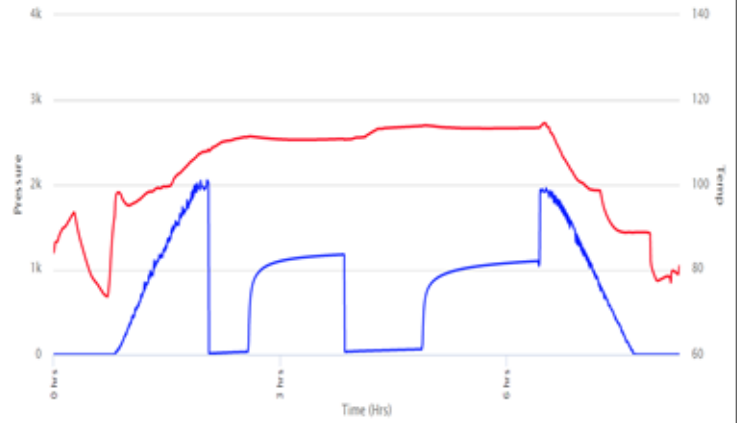


DST #3 LKC 'I' & 'F' 4073'-4107'
30"-75"-60"-90"

IF: Built to 3"
ISI: No blow
FF: Built to 2.5"
FSI: No blow

Rec': Rec'd: 115' WCM w/ tr of Oil (84% M, 16% W, 0.1% O)

SIP: 1177-1101# FP: 11-32#, 32-62# HP: 1942-1939#

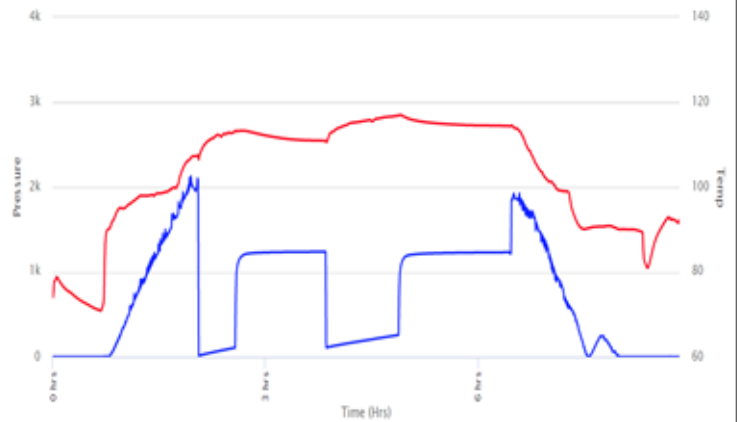


DST #4 LKC 'K' & 'L' 4107'-4183'
30"-75"-60"-90"

IF: BOB in 19.5 min
ISI: No blow
FF: BOB in 26.5 min
FSI: No blow

Rec': 100' SOCWM (1% O, 40% W, 59% M), 250' HMCW (53% W, 47% M), 190' HMCW (69% W, 31% M)

SIP: 1232-1131# FP: 16-107#, 110-257# HP: 1952-1926#

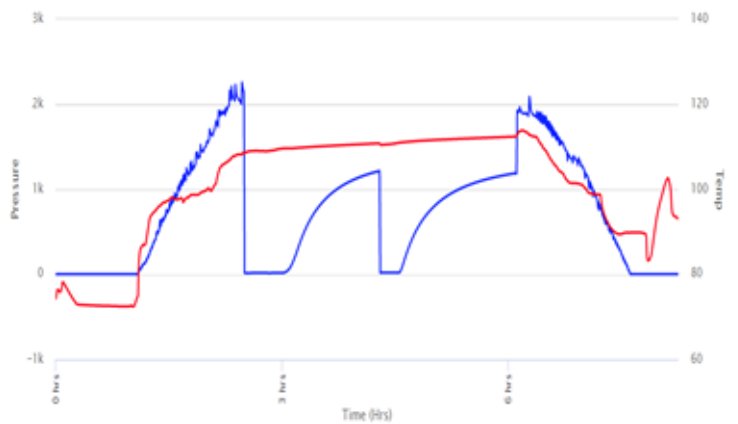


DST #5 MARMATON 4206'-4276'
30"-60"-15"-90"

IF: Built to .7"
ISI: No blow
FF: No blow
FSI: No blow

Rec': 15' M (100% M)

SIP: 1215-1188# FP: 14-15#, 18-18# HP: 2040-2032#

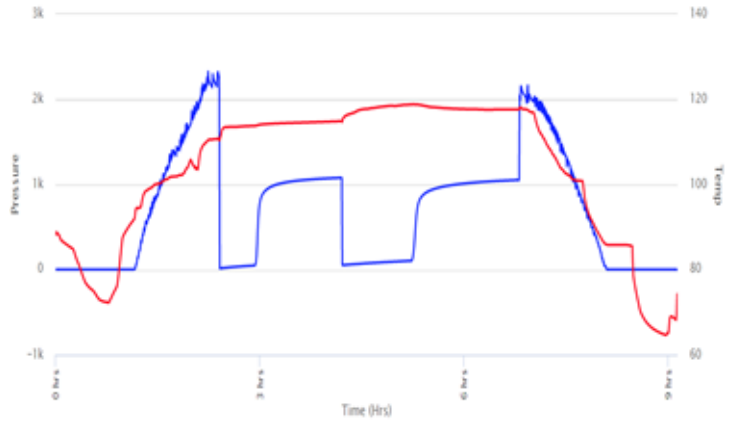


DST #6 FT. SCOTT, CHEROKEE, & JOHNSON
 4390'-4508'
 30"-60"-75"-90"

IF: Built to 6"
 ISI: No blow
 FF: Built to 6.5"
 FSI: No blow

Rec': 200' WCM w/ trace of Oil (.2% O, 24% W, 76% M)

SIP: 1079-1052# FP: 14-49#, 54-104# HP: 2151-2144#



ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol

- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol

- Shgy
- Sltst
- Ss
- Till
- Carb sh
- Dol
- Dtd
- Gry sh

- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltysch
- Lms

ACCESSORIES

- #### MINERAL
- Anhy
 - Arggrn
 - Arg
 - Bent
 - Bit
 - Brecfrag
 - Calc
 - Carb
 - Chtdk
 - Chtlt
 - Dol
 - Feldspar
 - Ferrpel
 - Ferr
 - Glau
 - Gyp
 - Hvymin
 - Kaol
 - Marl
 - Minxl
 - Nodule
 - Phos
 - Pyr

- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Sltly

- #### FOSSIL
- Algae
 - Amph
 - Belm
 - Bioclst
 - Brach
 - Bryozoa
 - Cephal
 - Coral
 - Crin
 - Echin
 - Fish
 - Foram

- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh

- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

OIL SHOWS

- Even
- Spotted
- Ques
- Dead
- Gas show

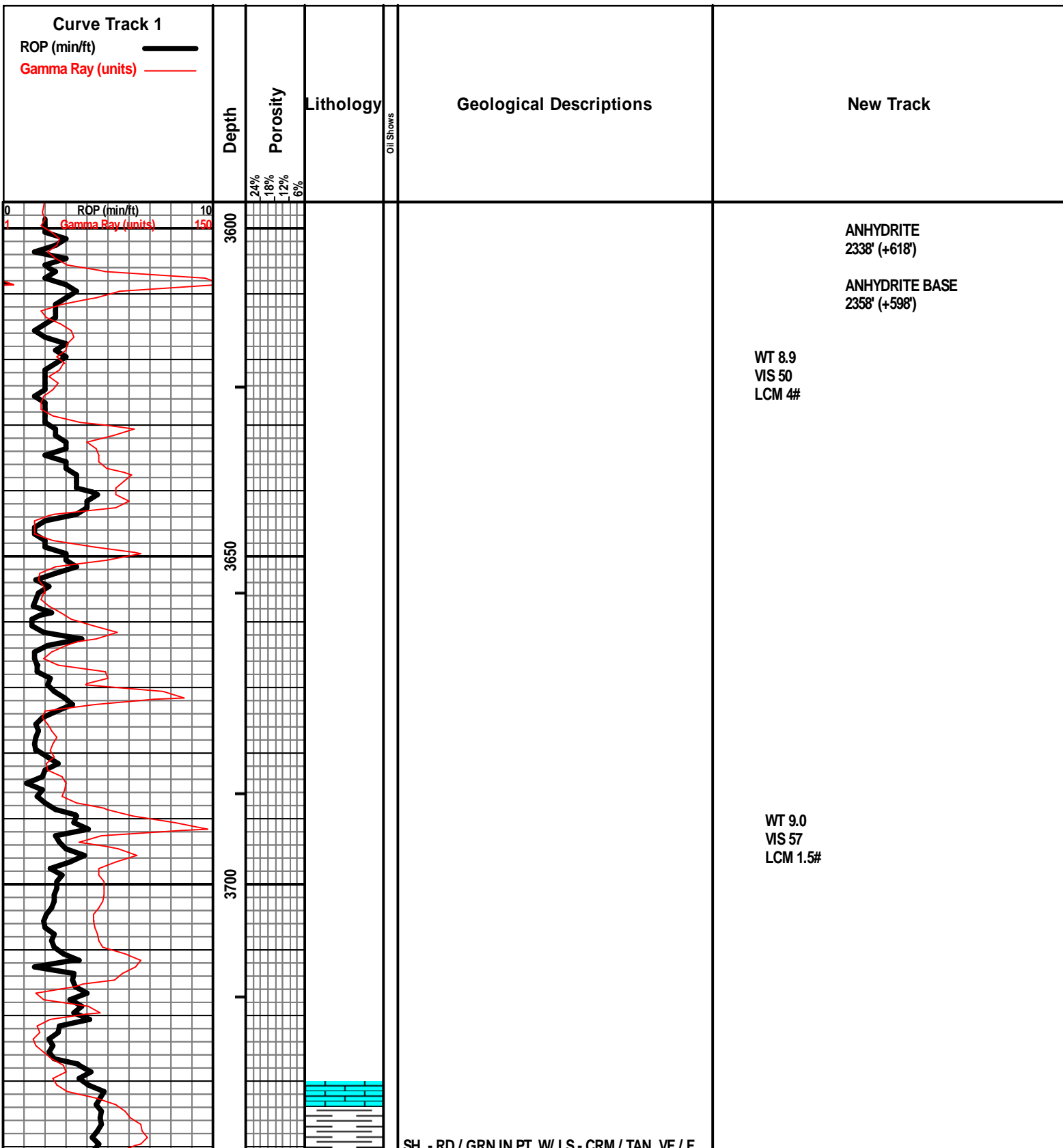
INTERVALS

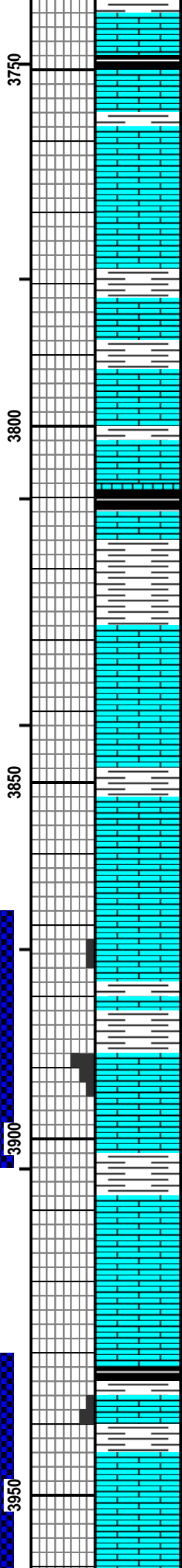
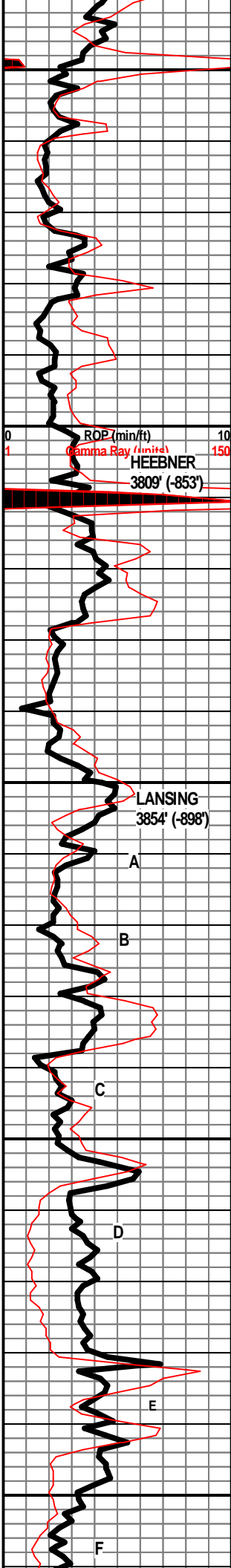
- Core
- Dst

Dst

EVENTS

- Rft
- Sidewall
- Conn





SH - BLK, SLI CARB, W/ LS - TAN, VF / F XLN, MOD DNS, FOSS

LS - TAN / CRM / WHT IN PT, VF / F XLN, MOD DNS / SUBCHKY, CHKY IN PT, FOSS (LRG FUSUL), W / SH - RD

LS - CRM / WHT, VF XLN, SUBCHKY / CHKY

LS - CRM, VF / F XLN, MOD DNS, W / SH - GY

LS - CRM, VF XLN, MOD DNS / SUBCHKY, W / SH IN PT - GY

SH - GY / BLK, W / LS - CRM, VF XLN, SUBCHKY

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

SH - BLK, V CARB, W / LS - TAN / GY, V XLN, DNS, FOSS

SH - GY / GRN, V SOFT

SH - GRN, WAXY IN PT

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

SH - GRN / GY, W / LS - TAN / LT BRN, VF XLN, SUBCHKY, FOSS

LS - CRM / TAN, F XLN, DNS, FOSS

LS - TAN / CRM / WHT, VF / F XLN, SUBCHKY / MOD DNS, CHKY IN PT, VPINTXLN POR IN PT, SHO OF DEAD OIL IN ONE PIECE, NO ODOR, NO FLUOR

SH - GRN / GY / MAR / RD

LS - WHT / CRM, F XLN, P / F INTXLN POR, GSFO, SHO GAS BUBB, DK BRN OIL, VS ODOR, VS YEL-GRN FLUOR, FOSS

LS - CRM, VF XLN, SUBCHKY / CHKY

SH - RD / GRN / GY

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS, ABUND FUSUL

LS - WHT / CRM, VF XLN, CHKY / SUBSHKY

SH - DK GY / BLK, SLI CARB

LS - CRM, VF / F XLN, P / F INTXLN POR, FSFO, NO ODOR, SLI YEL-GRN FLUOR

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

LS - CRM / TAN, F XLN, MOD DNS / DNS, ABUND OF FOSS IN PT, OOL IN PT, NO VIS POR

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

WT 9.0
VIS 55
LCM 1#

WT 9.0
VIS 54

WT 8.9
VIS 53

DST #1 LANSING 'C'
3878' - 3904'
30" - 75" - 60" - 90"

IF: BOB in 21 min
ISI: No Blow
FF: BOB in 25 min
FSI: No Blow

Rec'd: 270' VSOCMW (tr O, 67% W, 33% M), 250' VSOCMW (tr O, 93% W, 7% M)

IH: 1820#
IF: 12-98#
ISI: 1138#
FF: 100-243#
FSI: 1127#
FH: 1817#

Strap 1.96' short to board

temp 117

DST #2 LANSING 'E' & 'F'
3930' - 3967'
30" - 75" - 60" - 90"

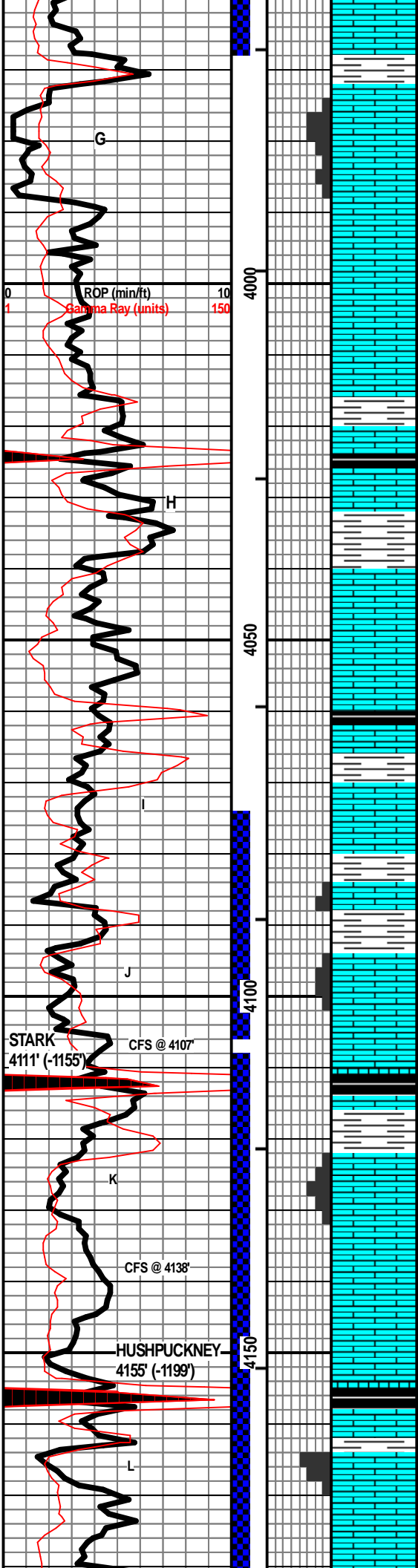
WT 8.9
VIS 51

IF: BOB in 2 min 15 sec
ISI: No Blow
FF: BOB in 3 min
FSI: No Blow

Rec'd: 100' HMCW (65% W, 35% M), 315' HMCW (68%

W, 32% M), 1950' SMCW (95% W, 5% M)

W, 32% M), 1950' SMCW (95% W, 5% M)



SH - GRN / RD
 LS - CRM / TAN, F XLN, P / F OOLMOLDIC POR, FOSS IN PT, NSFO, NO ODOR, SLI MIN FLUOR, W/ CHT - WHT / GY, FRSH, SLI TRANSLUCNT

IH: 1840#
 IF: 68-584#
 ISI: 1159#
 FF: 588-1057#
 FSI: 1158#
 FH: 1832#
 WT 9.0
 VIS 50

LS - CRM / TAN, F XLN, P / F OOLMOLDIC POR, NS, W/ LS - WHT, VF XLN, V CHKY

temp 119

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

LS - TAN / GY / WHT, VF XLN, SUBCHKY / CHKY IN PT, MOD DNS IN PT, SLI FOSS IN PT

SH - BLK, CARB

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

SH - LT GY / GY, W/ LS - TAN / GY, V XLN, DNS, FOSS, STYLOLITIZED

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

LS - CRM / TAN, VF / F XLN, MOD DNS, FOSS, W/ CHT - CLR / GY, TRANSLUCNT IN PT, OPAQ IN PT, W/ SH - BLK, CARB

SH - GY, V SOFT, W/ LS - CRM / TAN, F XLN, MOD DNS / DNS

DST #3 LANSING 'I' & 'J'
 4073' - 4107'
 30" - 75" - 60" - 90"
 WT 9.1
 VIS 51

LS - GY, F / M XLN, MOD DNS / DNS, FOSS, NS

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

IF: Built to 3"
 ISI: No Blow
 FF: Built to 2.5"
 FSI: No Blow

LS - CRM / WHT, VF / F XLN, PRED CHKY, P INTXLN POR IN PT, SSFO,

Rec'd: 115' WCM w/ tr of Oil (84% M, 16% W, 0.1% O)

LS - CRM, VF / F XLN, P / F INTXLN POR, F FRAC POR, OIL IN FRACT PLANES, FOSS, GSFO, LT BRN OIL, F ODOR, SLI YEL-GRN FLUOR

IH: 1942#
 IF: 11-32#
 ISI: 1177#
 FF: 32-62#
 FSI: 1101#
 FH: 1939#
 WT 9.0
 VIS 60

SH - BLK, CARB

SH - GRN / GY, W/ LS - WHT / CRM, VF / F XLN, MOD DNS, ARG

temp 114

LS - TAN / GY, F XLN, F / G INTXLN POR, VUG POR IN PT, FOSS, FEW OOL IN PT, GSFO, LT BRN OIL, SLI ODOR, ABUND OIL SHEEN, V SLI YEL-GRN FLUOR

DST #4 LANSING 'K' & 'L'
 4107' - 4183'
 30" - 75" - 60" - 90"

LS - TAN / GY, F XLN MOD DNS / DNS, FOSS, NS, NO ODOR

IF: BOB in 19.5 min
 ISI: No Blow
 FF: BOB in 26.5 min
 FSI: No Blow

LS - WHT / CRM, VF / F XLN, SUBCHKY / CHKY

Rec'd: 100' SOCWM (1% O, 40% W, 59% M), 250' HMCW (53% W, 47% M), 190' HMCW (69% W, 31% M)

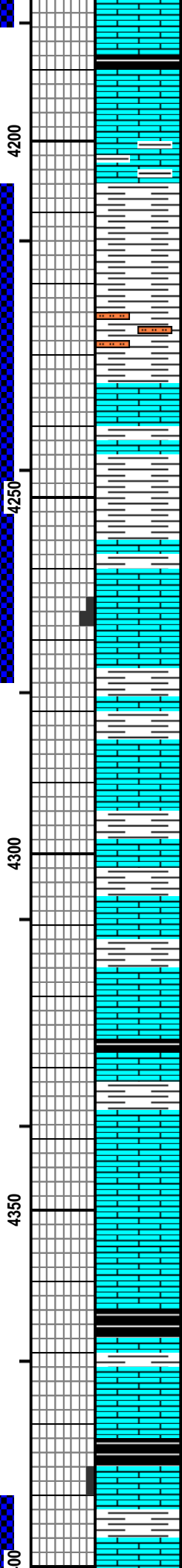
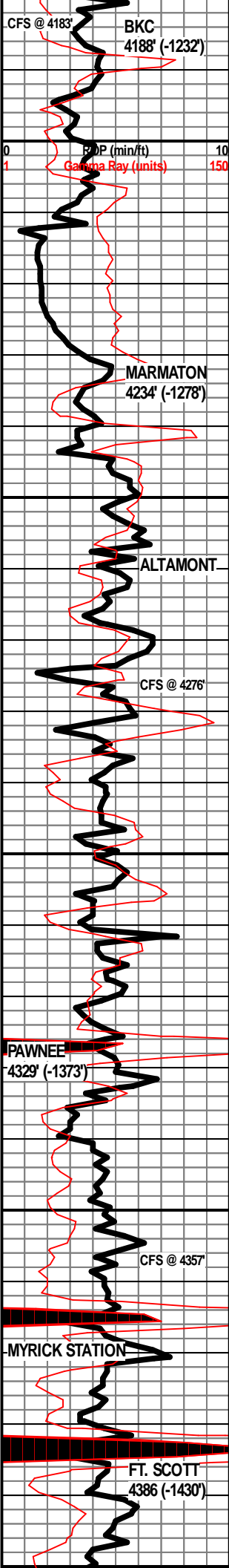
SH - BLK, CAR, W/ LS - TAN, F XLN, MOD DNS / DNS, W/ SH - GRN / RD

SH - GRN / RD-ORNG

LS - WHT / GY, VF / F XLN, PRED P / F INTXLN POR, G INTXLN POR IN PT, GSFO, LT BRN OIL, G ODOR, SLI YEL-GRN FLUOR, FOSS

IH: 1952#
 IF: 16-107#
 ISI: 1232#
 FF: 110-257#
 FSI: 1131#

LS - CRM / TAN / GY, VF / F XLN, MOD DNS / SUBCHKY, ARG IN PT



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

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

LS - WHT / GY, VF / F XLN, MOD DNS / DNS,
FOSS, ARG IN PT

SH - GY / GRN / MAR / RD / RD-ORNG

SH - GY / GRN, SLTY IN PT, WAXY IN PT

SH - LT BRN, V SLTY, V SOFT

LS - CRM, VF / F XLN, SUBCHKY, W/ SH - GY

SH - RD-ORNG / GRN, W/ LS - CRM / TAN, VF / F XLN, MOD
DNS / DNS, FOSS IN PT, NO VIS POR, NS

LS - CRM, VF / F XLN, PRED MOD DNS, SUBCHKY IN PT, ARG
IN PT W/ GRN SH

LS - TAN / LT GY, VF / F XLN, P / F INTXLN POR, VUG POR IN
PT, FSFO, LT BRN OIL, SLI ODOR, SLI YEL-GRN FLUOR

SH - RD / GRN / GY, W/ LS - CRM / TAN, VF / F
XLN, MOD DNS / SUBCHKY, ARG IN PT, NS, NO
ODOR

LS - TAN / GY, F XLN, MOD DNS / DNS, NS, NO
ODOR

LS - CRM / TAN, F XLN, PRED DNS, MOD DNS /
SUBCHKY IN PT, NS, NO ODOR

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

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

LS - WHT / GY, VF / F XLN, SUBCHKY, W/ SH -
BLK, CARB

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

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

LS - GY / TAN, VF / F XLN, MOD DNS, FOSS, LRG FUSILINIDS,
W/ CHT - GY, FRSH, SLI TRANSLUCNT

LS - TAN / GY, F XLN, DNS, FOSS, FUSIL & CRINOIDS, W/ CHT
- GY / TAN, FRSH, SLI TRANSLUCNT

SH - BLK, CARB, W/ LS - CRM / TAN, VF / F XLN,
MOD DNS, FOSS, W/ SH - GY

LS - TAN / GY, F XLN, DNS, FOSS

SH - BLK, W/ LS - TAN / GY, F XLN, PRED DNS, P INTXLN POR
IN 3 PIECES, SSFO, SLI ODOR, G YEL GRN FLUOR

SH - GY / GRN, W/ LS - CRM / TAN / GY, VF / F XLN, MOD DNS /
SUBCHKY, DNS IN PT, FOSS, W/ CHT - GY, FRSH, SLI
TRANSLUCNT, FOSS (FUSIL)

FH: 1926#

temp 117

DST #5 MARMATON
4206' - 4276'
30" - 75" - 15" - 90"

IF: Built to .7"
ISI: No Blow
FF: No Blow
FSI: No Blow

Rec'd: 15' Mud (100% M)

IH: 2040#
IF: 14-15#
ISI: 1215#
FF: 18-18#
FSI: 1188#
FH: 2032#

temp 113

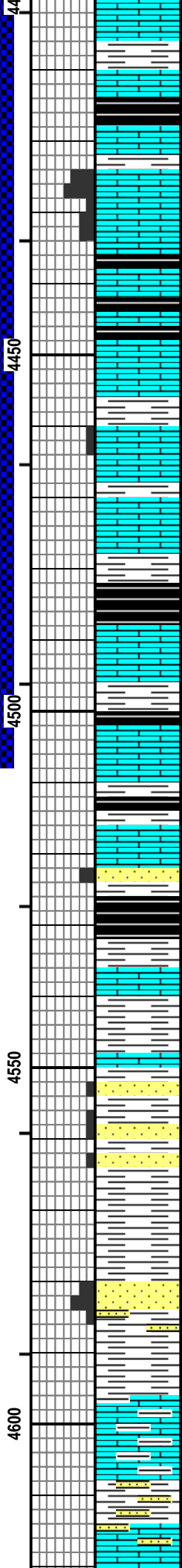
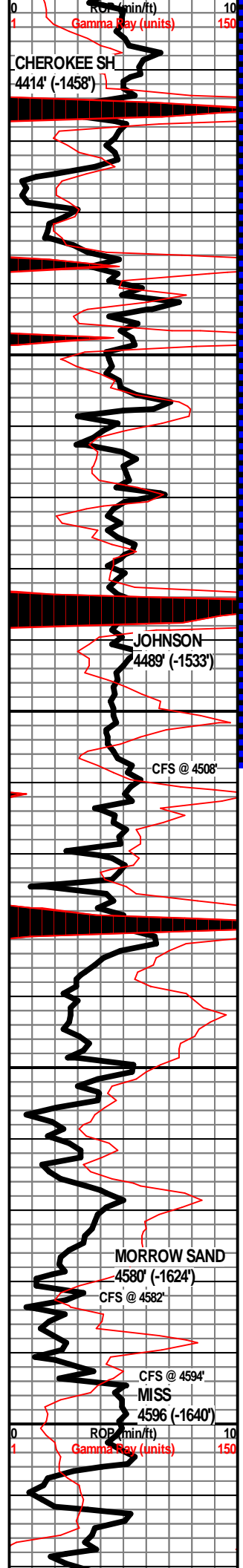
VIS 60
WT 9.2

WT 9.2
VIS 60+
ADDED PREMIX

WT 9.1
VIS 50
LCM 1#

WT 9.2
VIS 60
LCM 1#

WT 9.2
VIS 58
LCM 1#



LS - WHT / CRM, VF / F XLN, PRED SUBCHKY, V CHKY IN PT, W SH - GY

LS - CRM / TAN, F XLN, MOD DNS, OOLITIC, NO VIS POR, NS, NO ODOR

SH - BLK, CARB, W LS - LT BRN / DR BRN, F XLN, DNS

LS - TAN / GY, F XLN, F INTXLN POR IN PT, GSFO, SLI ODOR, SLI YEL-GRN FLUOR, ONE PIECE WAS OOL, F INTEROOL + VUG POR, GSFO

LS - TAN / BRN, F XLN, ABUND FOSS + OOL, P / F INTERXLN + INTEROOLITIC POR, FSFO, SLI ODOR, SLI YEL-GRN FLUOR

SH - BLK, CARB, W LS - TAN / GY, F XLN, DNS

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

LS - TAN / GY, VF / F XLN, MOD DNS, P VUG POR IN 3 PIECES, SSFO, NO ODOR

LS - TAN / GY, F XLN, DNS, NS, W / SH - GY / GRN IN PT

SH - BLK, CARB

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

SH - BLK, CARB, W SH - RD / GRN / GY, W LS - TAN / GY, VF / F XLN, MOD DNS / SUBCHKY, NS

LS - CRM / TAN, VF / F XLN, SUBCHKY, CHKY IN PT

SH - GY / BLK, V SLI CARB

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

SS - WHT / GY, VF / F GR, SUBRND, P SRTD, MOD / W CEM, FRI IN PT, P INTGR POR, NS, NO FLUOR, GRN SPECS, W / SH - BLK, CARB

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

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

SH - LT GY, SLTY IN PT, W / SS - WHT / GY, VF / F GR, SUBANG, P SRTED, W CEM, DNS

SH - LT GRN / RD ORNG / MAR, W / SS - VF / F GRN, SUBANG, P SRTED, W CEM, DNS, GRN SPECS, V SHLY IN PT, SOFT

SH - GRN, GY IN PT, RD IN PT

SS - GY, VF / F GR, SUBRND, MOD SRTD, F INTGRN POR, FRI IN PT, GLAUC, NS, NO ODOR, NO FLUOR, SH - GRN, WAXY IN PT

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

LS - CRM / TAN, VF / F XLN, SUBCHKY / CHKY, FOSS, W / SH - GRN

SH - DK GY, SANDY IN PT, PYRITIC IN PT, W / LS - CRM, VF / F XLN, MOD DNS / SUBCHKY, FEW SANDY PIECES

DST #6 FT. SCOTT, CHEROKEE, & JOHNSON
4390' - 4508'
30" - 75" - 60" - 90"

IF: Built to 6"
ISI: No Blow
FF: Built to 6.5"
FSI: No Blow

Rec'd: 200' WCM w/ trc of Oil (.2% O, 24% W, 76% M)

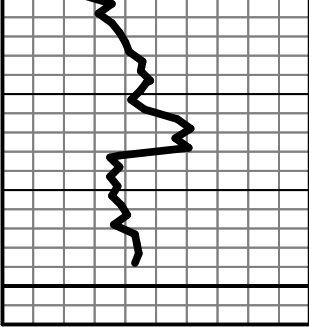
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IF: 14-49#
ISI: 1079#
FF: 54-104#
FSI: 1052#
FH: 2144#

WT 9.0
VIS 56
LCM 3#

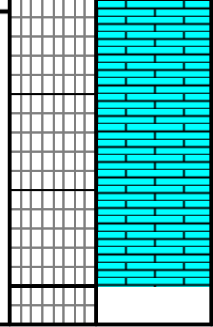
temp 119

WT 9.0
VIS 67

JET #1
ADD PREMIX



4650



LS - CRM / TAN, VF / F XLN, SUBCHKY, CHKY. V
CHKY IN PT

LS - CRM / TAN, F XLN, MOD DNS / DNS, FOSS IN
PT, W/ CHT - CRM / TAN, FRSH, OPAQ

LS - CRM / TAN, VF / FLXN, MOD DNS /
SUBHCHKY IN PT, SANDY IN PT, FOSS IN PT, W/
CHT - CRM / TAN, FRSH, OPAQ

RTD 4650'

Strap 0.68' short to
board