

Geologic Report
Aaron L. Young

Drilling Time and Sample Log

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

Well Name: Clark Fraley #3-5
API: 15-151-22477
Location: Section 5 - T26S - R11W
License Number: 3180
Spud Date: 10 / 30 / 2018
Surface Coordinates: 2310' FSL and 2310' FEL
Approx. NW - NW - SE
Region: Pratt Co., KS
Drilling Completed: 11 / 09 / 2018
Bottom Hole Coordinates:
Ground Elevation (ft): 1845' K.B. Elevation (ft): 1852'
Logged Interval (ft): 3300' To: 4390' Total Depth (ft): 4390'
Formation: Arbuckle
Type of Drilling Fluid: Mud-Co

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

OPERATOR

Company: Deutsch Oil Company
Address: 8100 E 22nd St N, Bldg 600
Wichita, KS 67226

GEOLOGIST

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

General Info

CONTRACTOR: Pickrell Drilling, Rig #10

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	RR	15-15-15	314'	307'	3.25
2	7-7/8	HA 20C	14-14-14	4083'	3769'	81.25
3	7-7/8	HF 44	14-14-14	4390'	307'	20.75

Surveys: 314-.25, 825'-.75, 1327'-.25, 1802'-.75, 2338'-.75, 2844'-.75, 4175'-1

GENERAL DRILLING AND PUMP INFORMATION:

Drilling with 38,000 -40,000 lbs. on bit and approx 70-80 RPM.
Running 9 stands of collars; 533.22'
Pumping approx 950-1050 psi at standpipe; 60 strokes/min

Daily Status

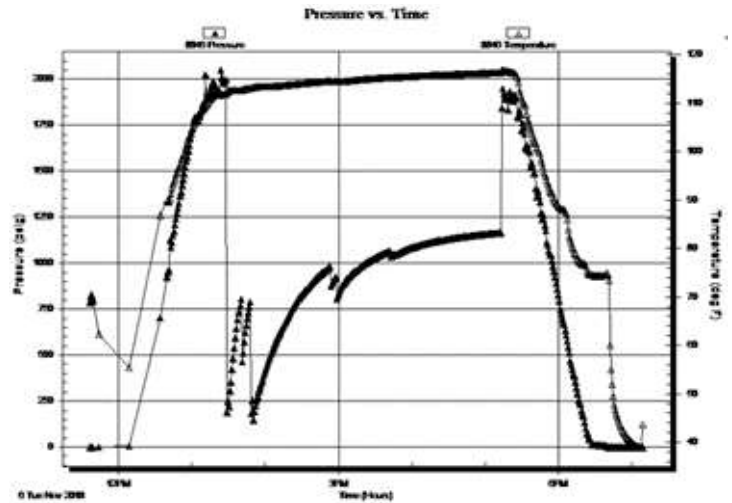
10/30/18- Spud @ 7:45pm, ran 7 jts of new 8 5/8" 23# surface casing set @ 310', cemented w/ 320 sx. 60/40 common, 2% gel & 3% CC, 1/2# cellflake. Plug down at 4:14am. Cement did circulate.
 10/31/18 - WOC. Cement dropped 20' from surface, topped off with 20 sx common.
 11/01/18 - Drilling, @ 625'
 11/02/18 - Drilling, @ 1845'
 11/03/18 - Drilling, @ 2720'
 11/04/18 - Drilling, @ 3545'
 11/05/18 - DST #1
 11/06/18 - TD @ 4175', running Elogs.
 11/07/18 - DST #2
 11/08/18 - CFS @ 4380'
 11/09/18 - RTD 4390', Decision made to plug well. Plugged with 50 sx at 4370', 50 sx at 630', 50 sx at 360', 20 sx at 60', 30 sx in rat hole. Cement: 60/40 pozmix, 4% gel. Plug down at 10:10pm.

DST #1 MISSISSIPPI
 4020'-4175' 30"-60"-45"-90"

IF: Weak blow built to 4"
 FF: Weak blow building to 1/2"

Rec'd: 25' M (100% M)

SIP's: 929-1169#
 FP's: 106-381#, 785-1070#
 HP's: 1978-1898#

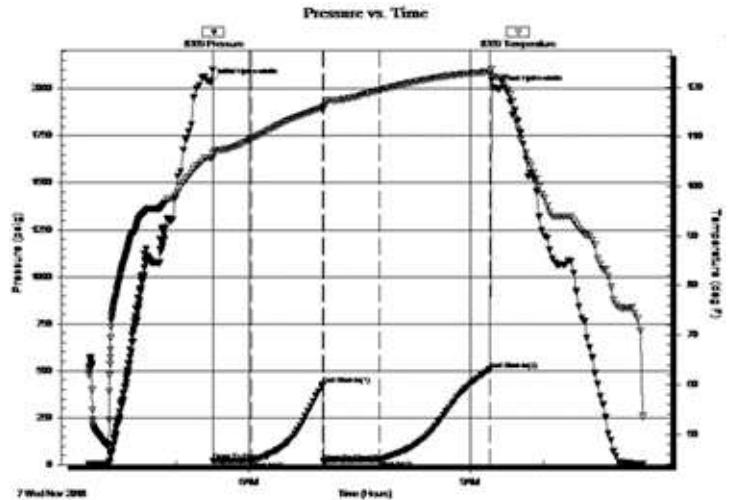


DST #2 VIOLA
 4202'-4210' 30"-60"-45"-90"

IF: Weak blow built to 3"
 FF: Weak blow built to 3"

Rec'd: 20' M (100% M) Slightly oil spotted

SIP's: 426-506#
 FP's: 18-20#, 16-26#
 HP's: 2035-1999#



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
	Slttysh
	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

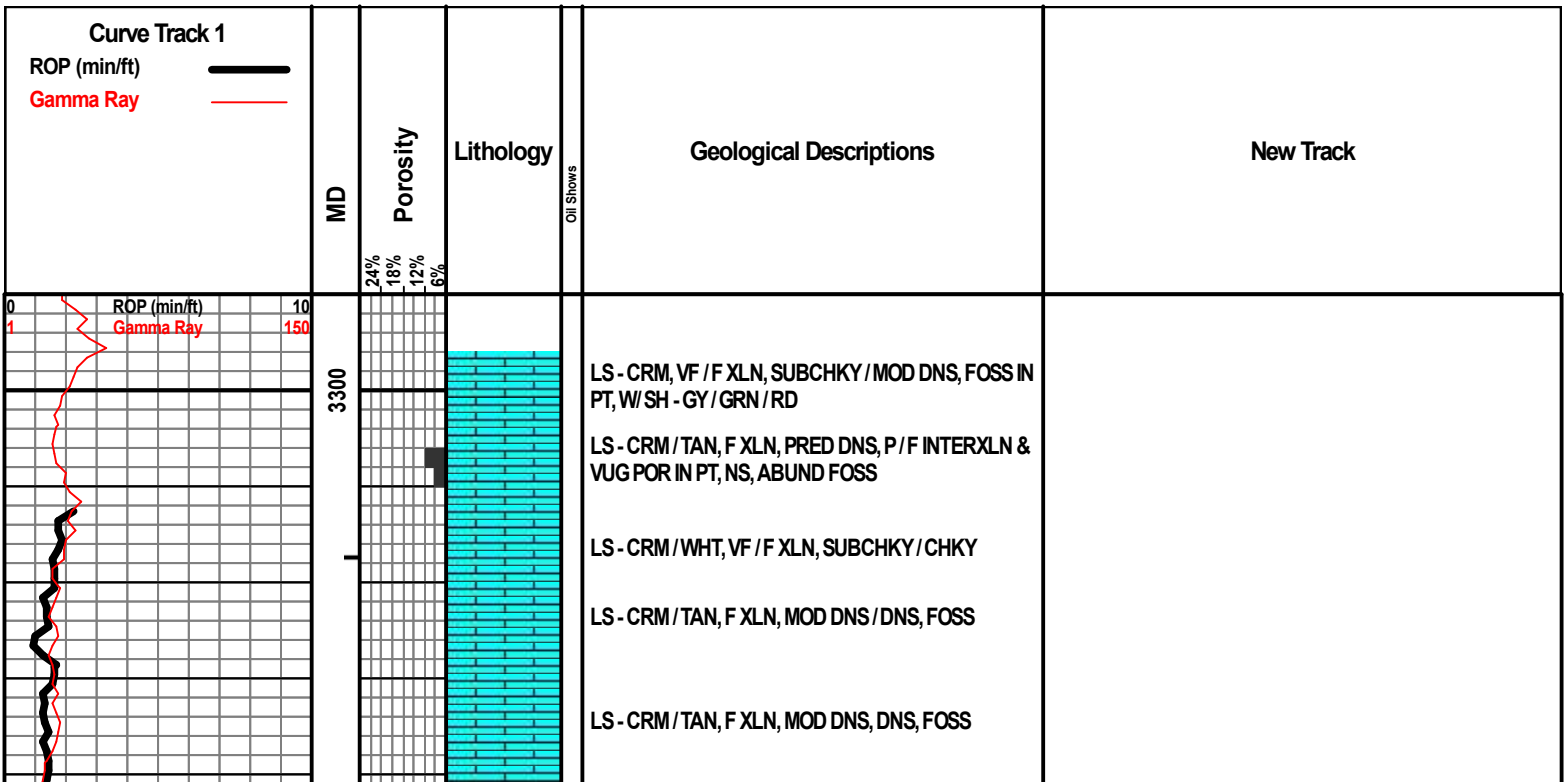
INTERVALS

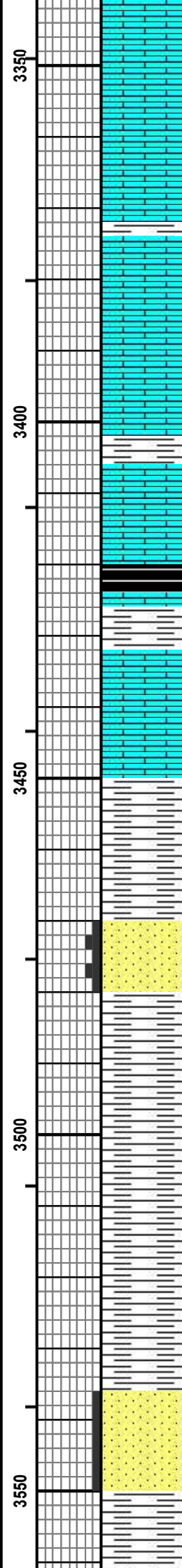
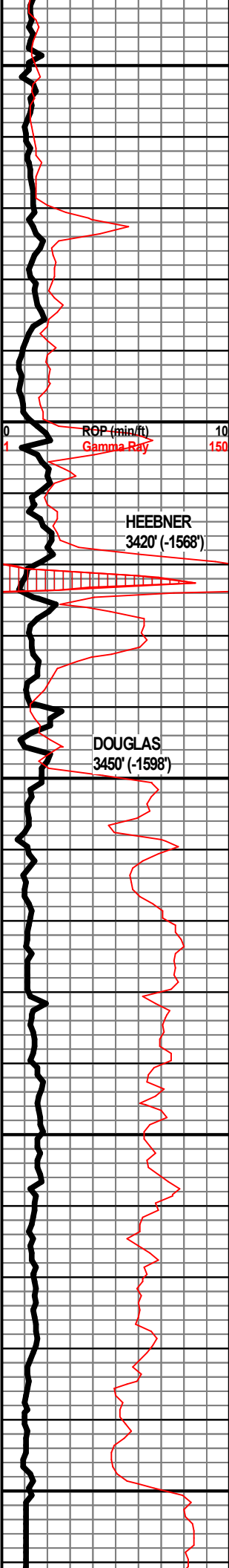
- Core
- Dst

- Dst

EVENTS

- Rft
- Sidewall
- Conn





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

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

LS - TAN / BRN, F XLN, MOD DNS, P / F OOLMOLDIC POR, NS, NO ODOR, ABUND OF OOLITES, FOSS, W / SH - GRN / RD / GY

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

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

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

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

SH - DK GY / BLK, CARB

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

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

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

SH - GY / DK GY, PYRITIC IN PT

SS - CLR / GY, VF GR, SUB-RND, W SRTED, W CEM, P INTGR POR IN PT, NS, NO ODOR, GLAUC IN PT

SH - LT GY / GY, SLTY IN PT

SH - LT GY / GY, SLTY IN PT

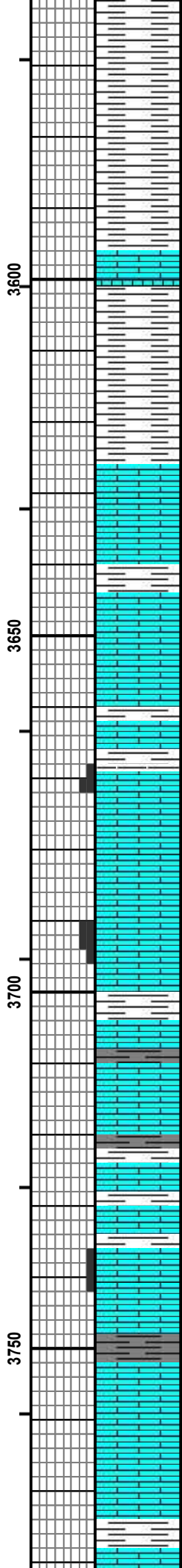
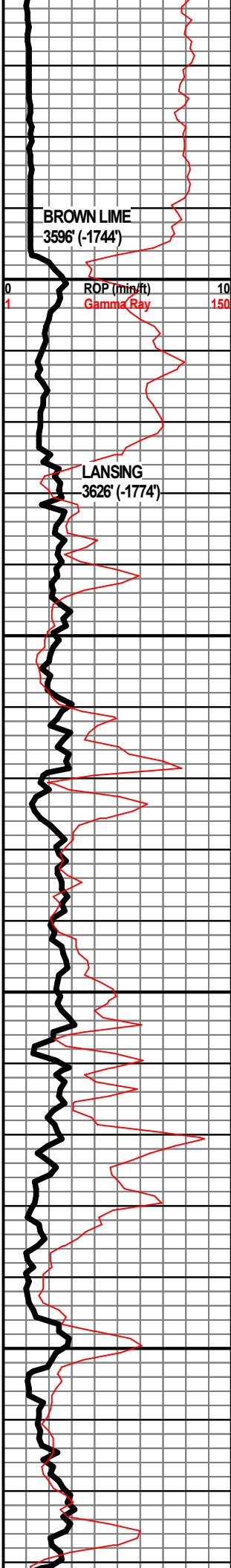
SS - CLR / GY, VF GR, SUB-ANG / SUB-RND, W SRTD, W CEM, PRED DNS, P INTGR POR IN PT, W, SH - LT GY / GY

SH - LT GY / GY

WT 8.5
VIS 50
LCM 2#

WT 8.5
VIS 49
LCM 2#

WT 8.9



SH - LT GY / GY

SH - LT GY / GY

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

SH - LT GY

SH - GY / RD

LS - CRM, VF / F XLN, SUBCHKY

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

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

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

LS - CRM, VF / F XLN, F / G INTXLN POR, FSFO, VLT BRN OIL DROPLET, SHO OF GAS BUB, F YEL-GRN FLUOR, G ODOR

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

LS - CRM, VF / F XLN, P / F INTXLN POR, VSSFO, ABUND OIL SHEEN, G ODOR, DULL FLUOR

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

SH - DK GY, SLI CARB IN PT, W / LS - CRM / WHT, VF XLN, SUBCHKY / CHKY

SH - DK GY / BLK, SLI CARB, W / LS - DK GY, F / M XLN, MOD DNS / DNS

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

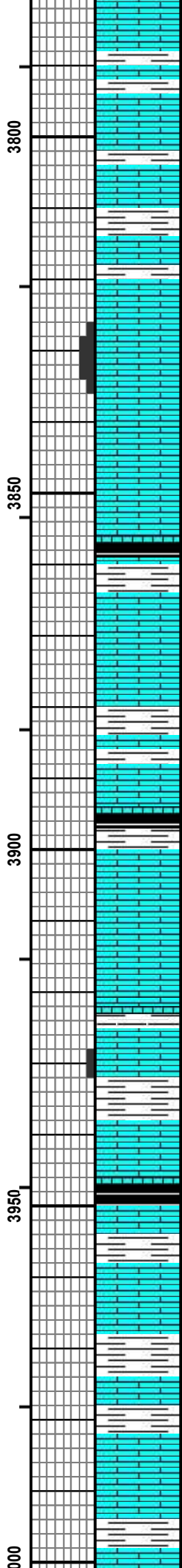
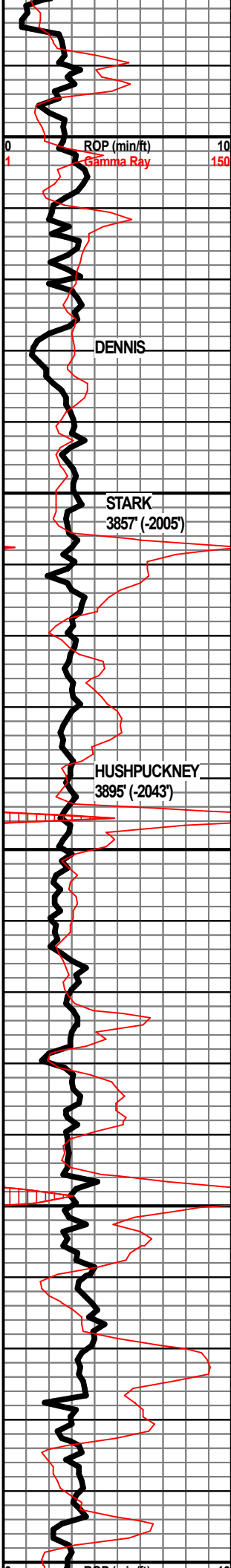
LS - CRM / TAN, VF XLN, CHKY, P INTXLN POR IN PT, VSSFO UPON BREAK, SLI ODOR UPON BREAK, F FLUOR

SH - GY / DK GY, W / LS - TAN / BRN / GY, F XLN, MOD DNS / DNS, ABUND FOSS

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

WT 9.0
VIS 50
LCM 2#

WT 9.2
VIS 50
LCM 2#



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

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

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

SH - GRN / RD / GY, W/LS - CRM / WHT, VF XLN, SUBCHKY / CHKY, VCHKY IN PT

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

LS - CRM / TAN, VF / F XLN, MOD DNS / DNS, FOSS, SUBCHKY IN PT, P / F INTERXLN POR IN POR, NSFO, SLI OIL SHEEN, SLI ODOR, FOSS

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

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

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

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

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

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

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

LS - CRM / TAN / GY, F XLN, MOD DNS, ABUND OF FOSS IN GY PIECES

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

LS - CRM / WHT IN PT, VF / F XLN, P INTXLN POR IN PT, VSSFO, V LT BRN OIL, OIL SHEEN UPON BREAK, G ODOR UPON BREAK, YEL-GRN FLUOR

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

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

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

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

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

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

WT 9.1
VIS 48
LCM 2#

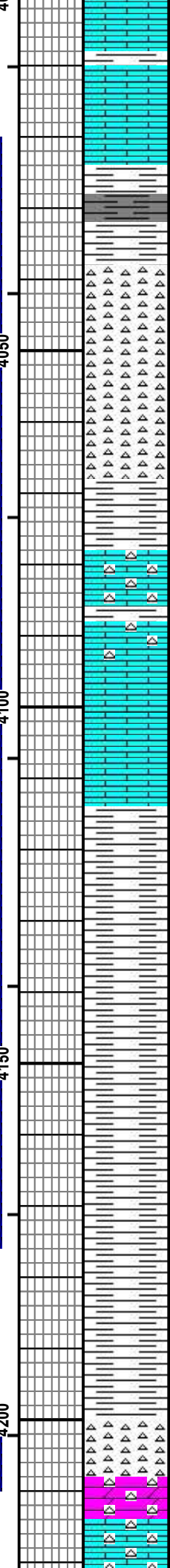
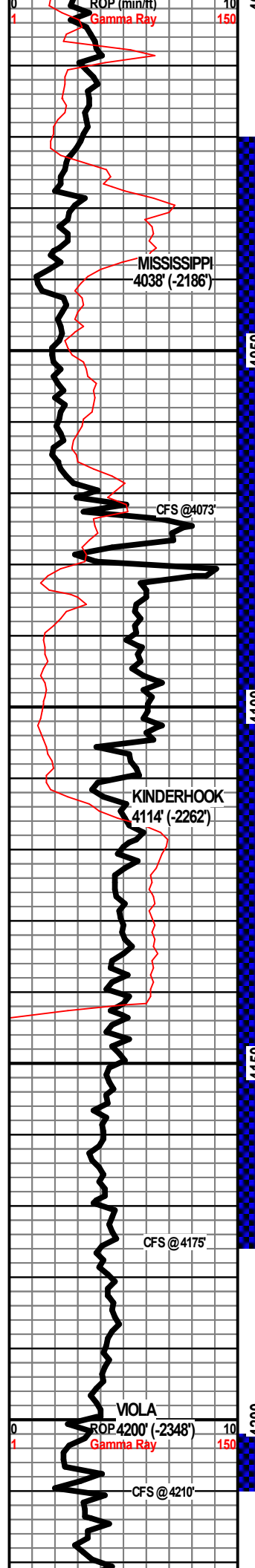
WT 9.2
VIS 53
LCM 2#

WT 9.2
VIS 58
LCM 2#

WT 9.1
VIS 57
LCM 2#

WT 9.2
VIS 58
LCM 2#

WT 9.2
VIS 59
LCM 1.5#



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

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

SH - RD / GRN / GY

SH - DK GY BLK, SLI CARB IN PT

CHT - WHT / GY, SLI TRANSLUCNT, FRSH IN PT, PRED WEATH, F / G WEATH POR, FSFO, G SHO OF GAS, DULL YEL-GRN FLUOR

CHT - WHT / GY, SLI TRANSLUCNT IN PT, 50% FRSH, 50% WEATH, F WEATH POR, FSFO, G SHO GAS, DULL YEL-GRN FLUOR

CHT - WHT / GY, SLI TRANSLUCNT, FRSH IN PT, PRED WEATH, F / G WEATH POR, FSFO, G SHO GAS, DULL YEL-GRN FLUOR

SH - LT GY

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY, V CHTY W/ FRSCH CHT - WHT / YEL IN PT, FRSH, TRANSLUCNT

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

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

SH - TURQ / GRN / GY

SH - GRN / GY

SH - GRN / GY

SH - LT GY / GY

SH - LT GY, V SOFT

SH - LT GY / DK GY, FOSS IN PT, PYRITIC IN PT

SH - GY / PURP / GRN

SH - LT GY / GRN, V SOFT IN PT

CHT - WHT, PRED WEATH, FRSH IN PT, PRED P WEATH POR, F WEATH POR IN PT, PIN POINT VUGS IN PT, SLI DOLOMITIC, NSFO, G SHO GAS, G ODOR, ABUND RAINBOW OIL SHEEN, V BRI NEON GRN FLUOR

DOLO - TAN / CRM / WHT, VF / XLN, SUBCHKY, V CHKY, NO VIS POR, NS

LS - CRM / WHT, VF XLN, SUBCHKY / CHKY, NO VIS POR, NS, V CHTY

DST #1
MISSISSIPPI
4020'-4175'
30"-60"-45"-90"

IF: Weak blow built to 4"
FF: Weak blow building to 1/2"

Rec'd: 25' M (100% M)

SIP's: 929-1169#
FP's: 106-381#, 785-1070#
HP's: 1978-1898#

WT 9.2
VIS 59
LCM 2#

WT 9.1
VIS 60
LCM 3#

WT 9.1
VIS 58
LCM 2#

RAN ELOGS

DST #2
VIOLA
4202'-4210'
30"-60"-45"-90"

IF: Weak blow built to 3"
FF: Weak blow built to 3"

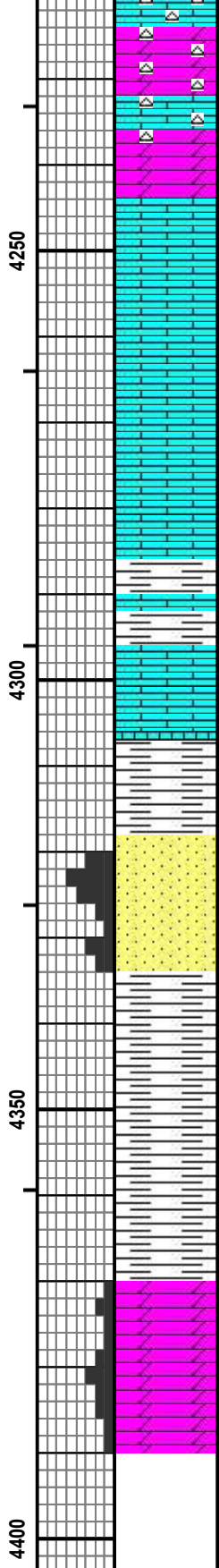
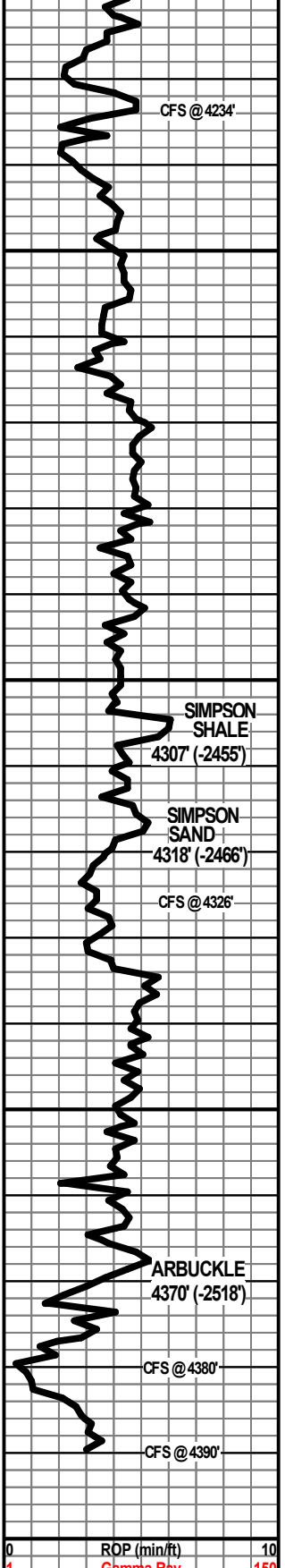
Rec'd: 20' M (100% M) Slightly oil spotted

SIP's: 426-506#
FP's: 18-20#, 16-26#
HP's: 2035-1999#

WT 9.1
VIS 47
LCM 2#

WT 9.1
VIS 49
LCM 3#

WT 8.9



DOLO - TAN / CRM, VF XLN, P / F INTXLN POR, SUCROSIC IN PT, NS, NO ODOR, DULL FLUOR, W/ CHT - TAN / WHT / GY, FRSH, PRED OPAQ, TRANSLUCNT IN PT

LS - WHT / CRM, VF XLN, CHKY, CHTY IN PT

DOLO - TAN, VF / F XLN, F / G INTXLN POR, SUCROSIC IN PT, NS, NO ODOR,

LS - WHT / CRM, VF XLN, CHKY, V CHKY IN PT, W/ CHT - WHT / TAN / GY, FRSH, OPAQ

LS - TAN / BRN, VF / F XLN, MOD DNS / DNS, W/ CHT - TAN, LT BRN, FRSH, PRED OPAQ, SLI TRANSLUCNT IN PT

LS - TAN / GY, F / M XLN, MOD DNS / DNS, W/ CHT - TAN / GY, FRSH, OPAQ

SH - RD / GY / GY / PURP

LS - TAN, F XLN, MOD DNS / DNS, W/ CHT - TAN, / GY, FRSH, OPAQ, W/ SH - GRN / GY

SH - GRN / GY / RD

SS - CLR, M GR, SUB-ANG, P SRTD, P CEM, UNCONSOLIDATED IN PT, F / G INTGR POR, NS, NO ODER, NO FLUOR, W/ FEW PIECES
SS - VF GR, SUB-RND, W SRTD, V W CEM, V DNS, NO VIS POR, NS

SS - CLR / GY, F / M GR, SUB-ANG, MOD SRTD, MOD / W CEM, P / F INTGR POR, NS, NO ODOR, NO FLUOR, PYRITIC IN PT

SH - GY

SH - GY / GRN

SH - GY / GRN

DOLO - TAN / LT BRN, F XLN, V DNS, CAN BARELY BREAK, P OOLMOLDIC & INTXLN POR, NS, NO ODOR, MOD YEL FLUOR

DOLO - TAN / LT BRN, F XLN, DNS, P / F OOLMOLDIC & INTXLN POR, NS, NO ODOR, MOD YEL FLUOR

WT 9.1
VIS 51
LCM 4#

WT 9.2
VIS 50
LCM 4#

WT 9.1
VIS 52
LCM 4#

WT 9.2
VIS 50
LCM 4#

RTD 4390'

0 ROP (min/ft) 10
1 Gamma Ray 150