

Geologic Report  
**Aaron L. Young**

Drilling Time and Sample Log

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

Well Name: Triple M #1-18  
API: 15-151-22473  
Location: Section 18 - T26S - R11W  
License Number: 3180  
Spud Date: 07 / 05 / 2018  
Surface Coordinates: 330' FNL and 330' FEL  
Approx. NE - NE - NE  
Region: Pratt Co., KS  
Drilling Completed: 07 / 17 / 2018  
Bottom Hole Coordinates:  
Ground Elevation (ft): 1858' K.B. Elevation (ft): 1865'  
Logged Interval (ft): 3300' To: 4285' Total Depth (ft): 4285'  
Formation: Viola  
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	308'	301'	3.25
2	7-7/8	JZ HA23	14-14-14	4256'	3955'	95.00
3	7-7/8	JZ RR	14-14-14	4285'	29'	2.25

Surveys: 307'-1, 825'-1, 1329'-1, 1835'-1, 2340'-.5, 2846'-.5, 3812'-1, 4285'-1

**GENERAL DRILLING AND PUMP INFORMATION:**

Drilling with 36,000 -38,000 lbs. on bit and approx 70-80 RPM.  
Running 9 stands of collars; 533.14'  
Pumping approx 850-900 psi at standpipe.

## Daily Status

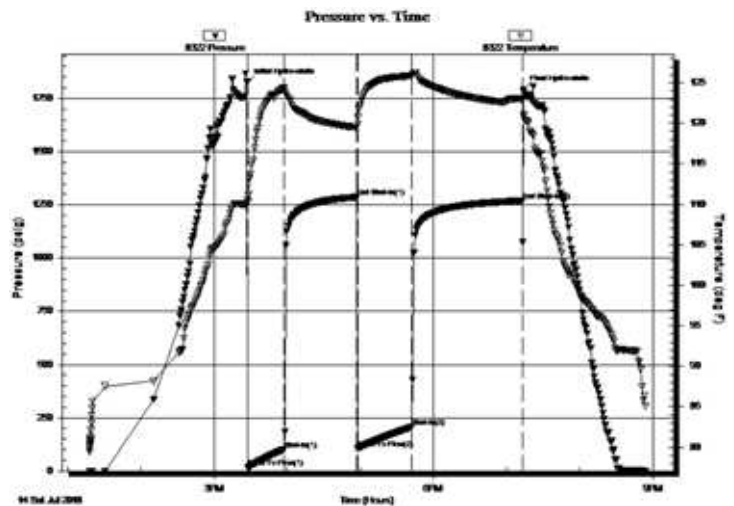
07/05/18- Spud @ 12:30pm, Drilled to 308', ran 7 jts of new 8 5/8" 23# surface casing set @ 304' (tally 292'), cemented w/ 300 sx 60/40 pozmix, 2% gel & 3% CC, 1/4# cellflake/sx. Plug down @ 8:45pm.  
 07/06/18 - TD 308' Working on mud pump  
 07/07/18 - TD 308' Working on mud pump  
 07/08/18 - TD 308' Working on mud pump  
 07/09/18 - TD 308' Working on mud pump  
 07/10/18 - Drilling at 575'  
 07/11/18 - Drilling at 1828'  
 07/12/18- Drilling at 2500'  
 07/13/18 - Drilling at 3111'  
 07/14/18 - DST #1 TD 3812'  
 07/15/18 - DST #2 TD 4097'  
 07/16/18 - DST #3 TD 4256'  
 07/17/18 - RTD 4285', ran e-logs. Ran 100 jts. of 17#, 5-1/2" production casing. Set at 4275'. Cem w/ 175 sx of AA2, 10% salt, .5% defoamer, .3% friction reducer, .4% fluid loss, 5# gilsonite/sx. Plug down at 6:15am. Cem RH with 35 sx 60/40 pozmix, 2% gel, 3% CC.

**DST #1 LKC 'H'**  
 3792' - 3812'

IF: BOB in 24 min, 13.5 inches  
 ISI: No blow back  
 FF: BOB in 29 min, 15 inches  
 FSI: No blow back

Rec'd: 124' MW (20% M, 80% W), 279' MW (5% M, 95% W)

SIP: 1286-1270#, FP: 16-102#, 106-207#, HP: 1825-1790#

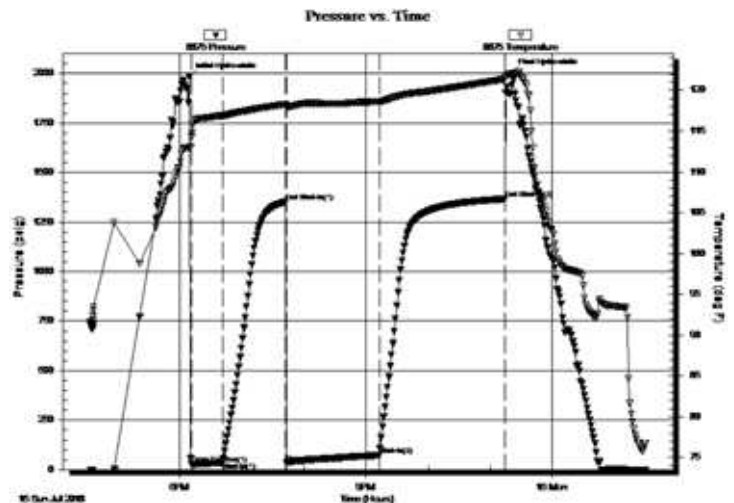


**DST #2 Mississippi**  
 4038'-4097'

IF: BOB in 2 min, 120 inches  
 ISI: No blow back  
 FF: BOB immediately, 334 inches  
 FSI: No blow back

Rec'd: 3296' GIP, 120' GOCM (20% G, 20% O, 60% M)

SIP: 1351-1367#, FP: 28-37#, 34-74#, HP: 1983-2003#

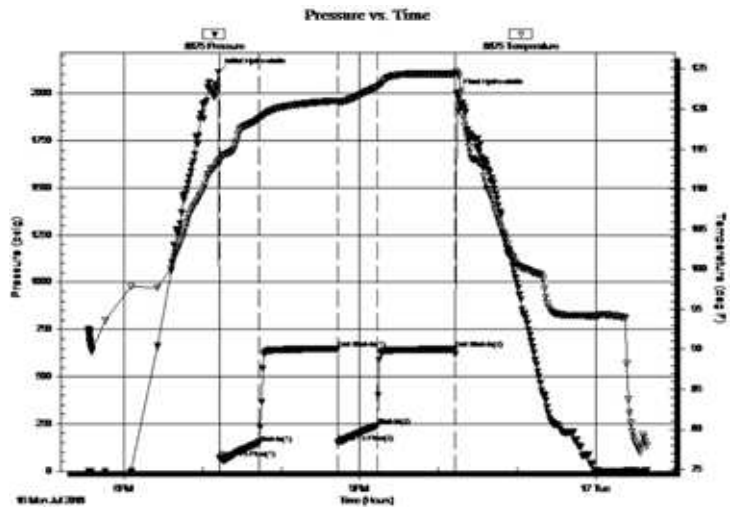


DST #3 Viola  
4146' - 4256'

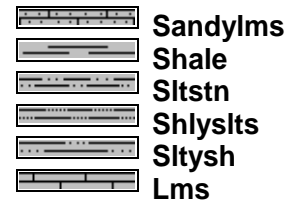
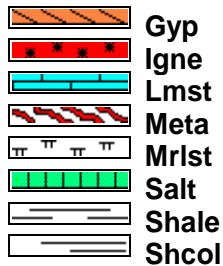
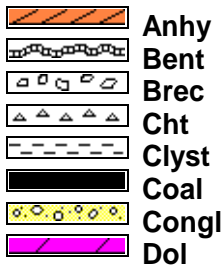
IF: BOB in 90 sec, 60.5 inches  
ISI: No blow back  
FF: BOB in 8 min, 38.5 inches  
FSI: No blow back

Rec'd: 372' MCW (30% M, 70% W), 92' GMCW (5% G, 20% W, 75% M)

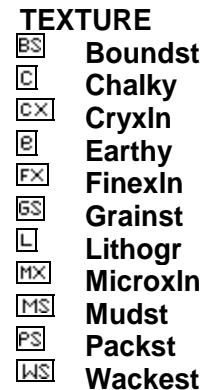
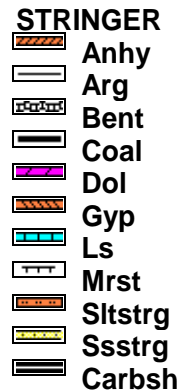
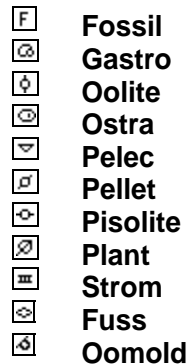
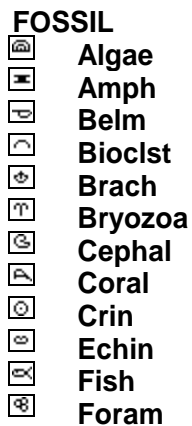
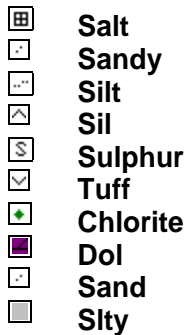
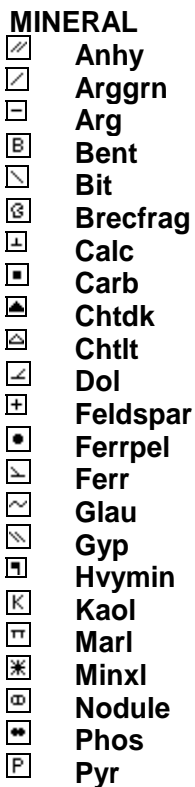
SIP: 646-645#, FP: 67-148#, 152-239#, HP: 2112-2003#



### ROCK TYPES



### ACCESSORIES



### OTHER SYMBOLS

#### POROSITY TYPE

- E Earthy
- F Fenest
- X Fracture
- I Inter
- M Moldic
- P Organic
- V Pinpoint
- V Vuggy

#### SORTING

- W Well
- M Moderate
- P Poor

#### ROUNDING

- R Rounded
- F Subrnd
- a Subang
- A Angular

#### OIL SHOWS

- Even
- ◉ Spotted
- ◻ Ques
- ◻ Dead
- ◻ Gas show

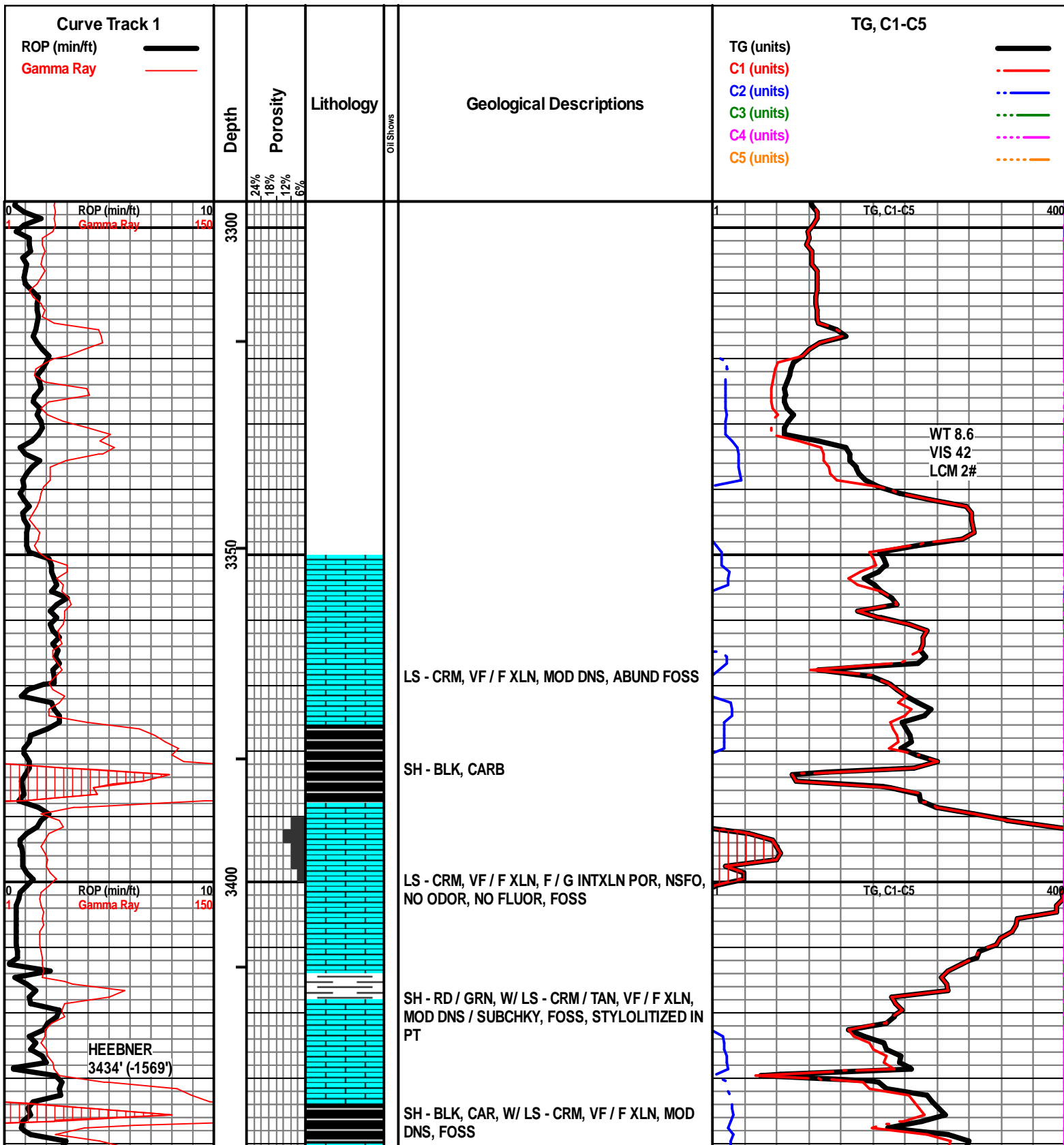
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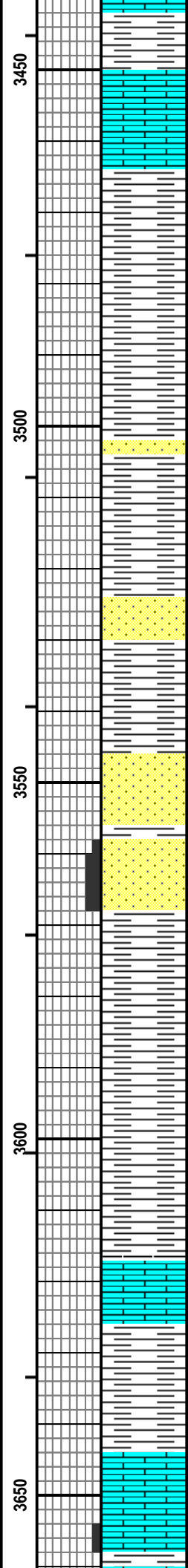
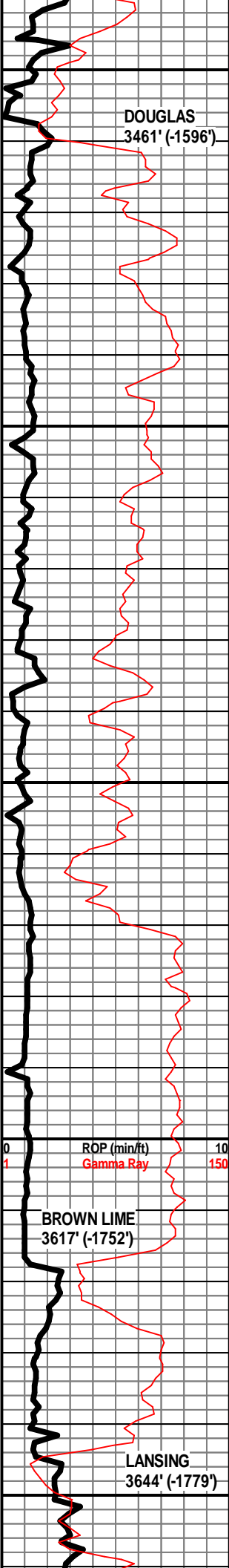
- Core
- ◻ Dst

- Dst

#### EVENTS

- ▽ Rft
- ▾ Sidewall
- ▬ Conn





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

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

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

SH - GY / GRN IN PT

SH - GRN / GY / RD / MAR

SH - LT GRN / GY, W/ SS - CLR / GY, VF / F GR, SUB-RND, W CEM, POORLY SRTD, PYRITIC IN PT

SH - GY / GRN, SLTY / SNDY IN PT

SS - GY, VF / F GR, SUB-ANG / SUB-RND, W CEM, POORLY SRTD, NS, NO ODOR

SH - LT GY, SLI SLTY

SH - LT GY / GY, SLI SLTY IN PT

SS - CLR / GY, VF / F GR, SHLY IN PT, SUB RND, POORLY SRTD, W CEM, DNS, NS

SS - CLR / GY, VF / F GR, SUB-RND, POORLY SRTD, F INTGR POR, NS, NO ODOR

SH - GY, SLI SLTY

SH - LT GY / GY, SLI SLTY

SH - GY, SLI SLTY / SNDY

SH - GY, SLI SLTY IN PT

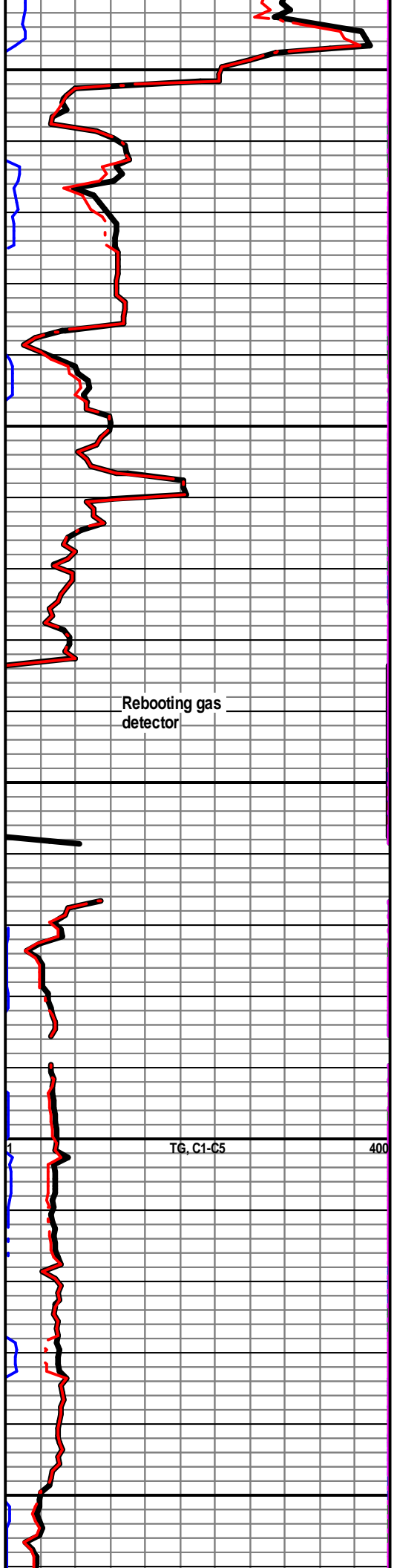
SH - GY, V SLI SLTY IN PT

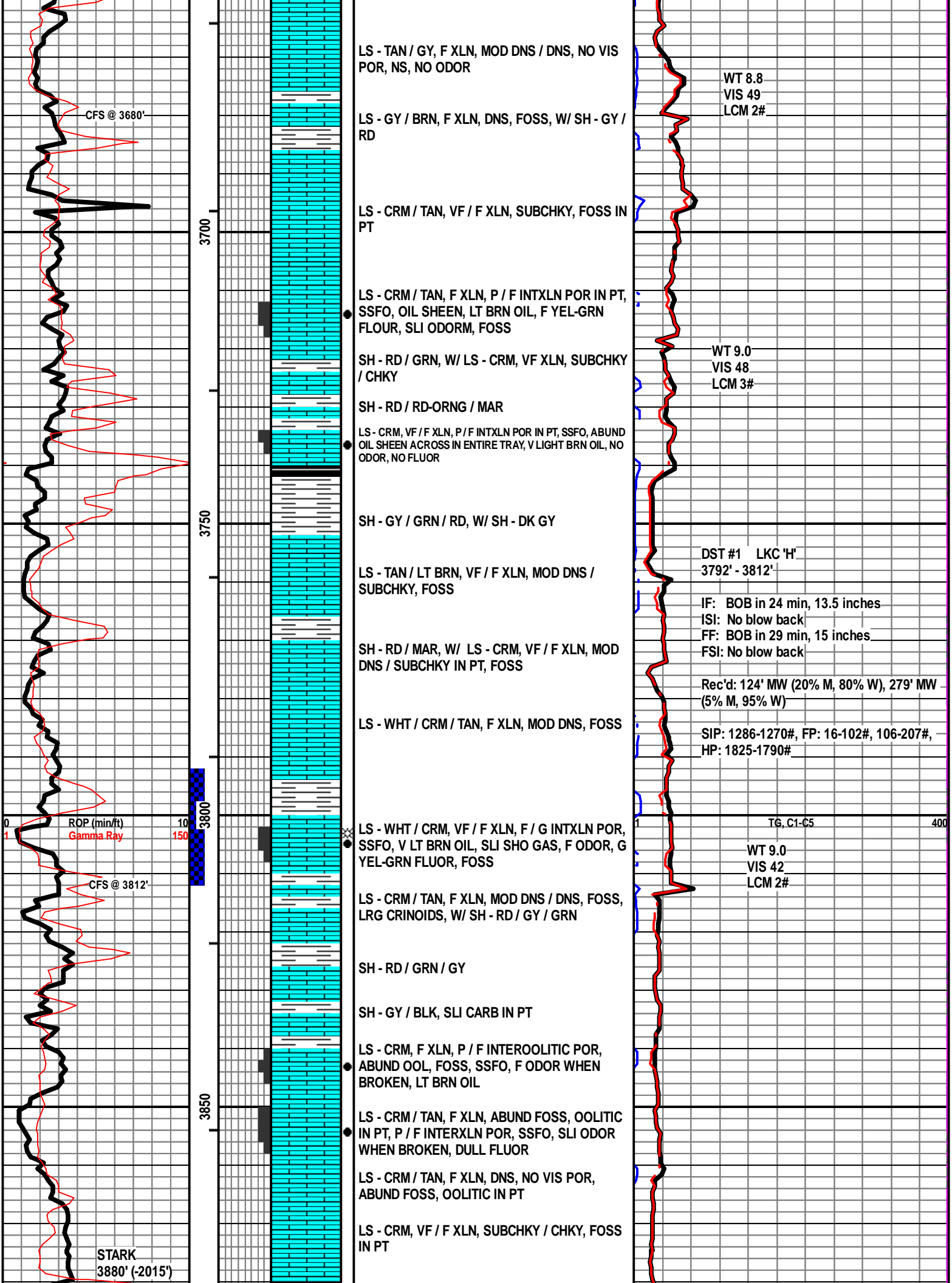
LS - BRN / TAN, F XLN, MOD DNS / DNS

SH - GY

LS - CRM / TAN, VF / F XLN, MOD DNS / SUBCHKY, NS, NO ODOR

LS - GY / TAN, F XLN, MOD DNS, P INTXLN POR IN, SSFO IN PT, SLI SHO GAS,





CFS @ 3680'

3700

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

WT 8.8  
VIS 49  
LCM 2#

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

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

LS - CRM / TAN, F XLN, P / F INTXLN POR IN PT, SSFO, OIL SHEEN, LT BRN OIL, F YEL-GRN FLOUR, SLI ODORM, FOSS

WT 9.0  
VIS 48  
LCM 3#

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

SH - RD / RD-ORNG / MAR

LS - CRM, VF / F XLN, P / F INTXLN POR IN PT, SSFO, ABUND OIL SHEEN ACROSS IN ENTIRE TRAY, V LIGHT BRN OIL, NO ODOR, NO FLUOR

3750

SH - GY / GRN / RD, W/ SH - DK GY

DST #1 LKC 'H'  
3792' - 3812'

LS - TAN / LT BRN, VF / F XLN, MOD DNS / SUBCHKY, FOSS

IF: BOB in 24 min, 13.5 inches  
ISI: No blow back  
FF: BOB in 29 min, 15 inches  
FSI: No blow back

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

Rec'd: 124' MW (20% M, 80% W), 279' MW (5% M, 95% W)

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

SIP: 1286-1270#, FP: 16-102#, 106-207#, HP: 1825-1790#

ROP (min/ft) 10 150  
Gamma Ray

3800

LS - WHT / CRM, VF / F XLN, F / G INTXLN POR, SSFO, V LT BRN OIL, SLI SHO GAS, F ODOR, G YEL-GRN FLUOR, FOSS

TG, C1-C5 400

WT 9.0  
VIS 42  
LCM 2#

CFS @ 3812'

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

SH - RD / GRN / GY

SH - GY / BLK, SLI CARB IN PT

LS - CRM, F XLN, P / F INTEROOLITIC POR, ABUND OOL, FOSS, SSFO, F ODOR WHEN BROKEN, LT BRN OIL

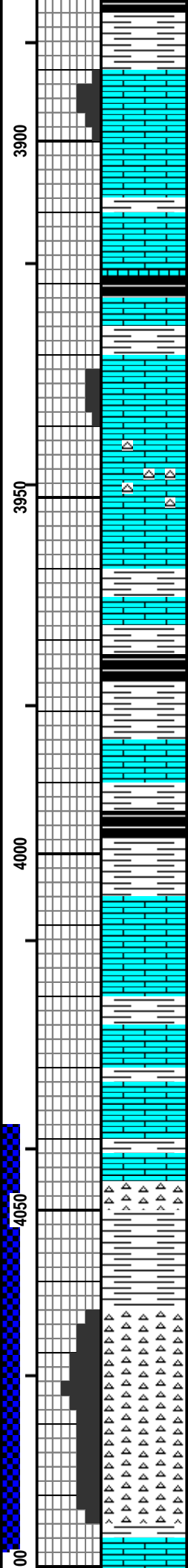
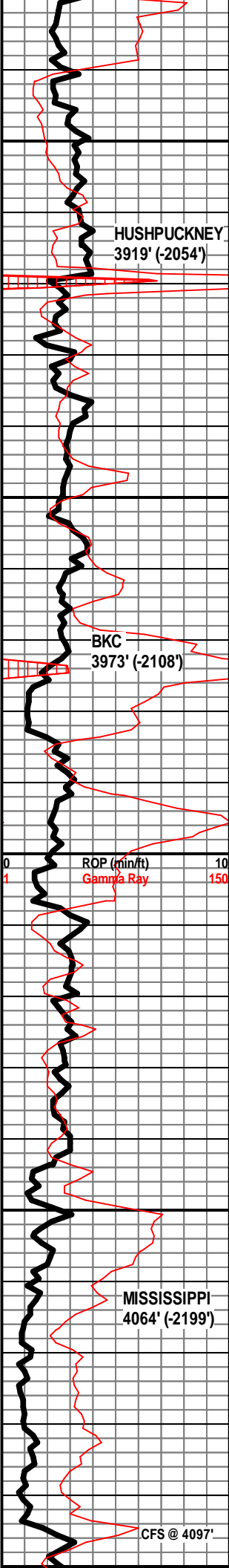
3850

LS - CRM / TAN, F XLN, ABUND FOSS, OOLITIC IN PT, P / F INTERXLN POR, SSFO, SLI ODOR WHEN BROKEN, DULL FLUOR

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

STARK 3880' (-2015')

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



SH - BLK, CARB, W/ SH - GY / GRN / RD

LS - WHT / CRM, VF / F XLN, F INTERXLN POR, FSFO, F ODOR WHEN BROKEN, DULL FLUOR, ABUND FOSS, ONE PIECE OOLITIC W/ P INTEROOLITIC POR, SSFO

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

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

LS - CRM, VF / F XLN, F INTERXLN POR, SSFO, SLI CUP ODOR, G ODOR WHEN BROKEN, ABUND FOSS, F YEL-GRN FLOUR

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

LS - TAN, F / M XLN, DNS, W/ CHT - TAN / WHT, FRSH, PRED OPAQ, TRANSLUCNT IN PT

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

SH - BLK, CARB

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

SH - BLK, CARB, W/ SH - RD / GRN / GY

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

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

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

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

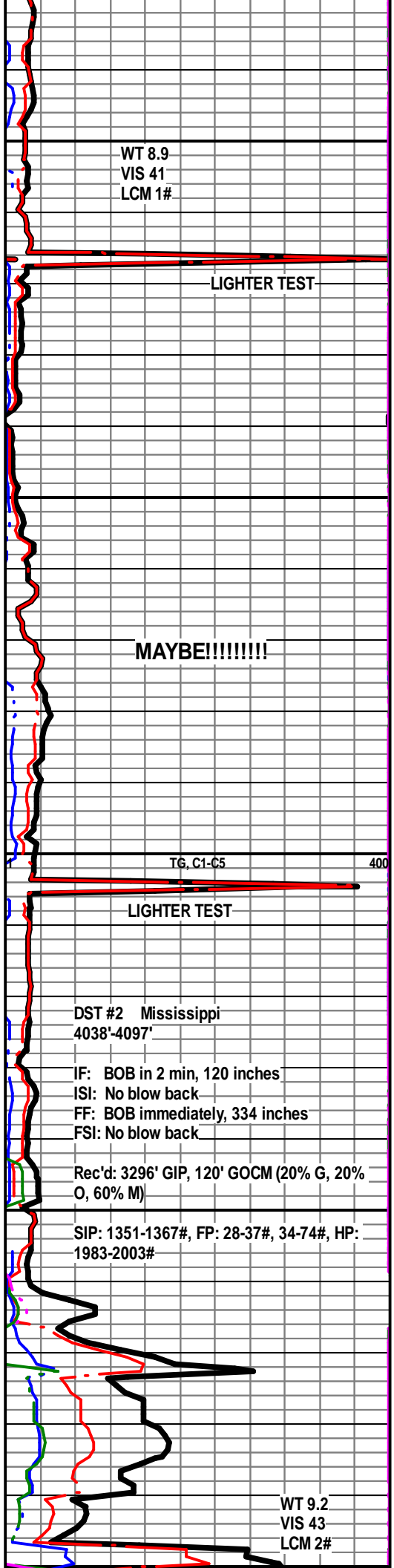
SH - RD / GRN / GY / MAR

LS - CRM / TAN, F / M XLN, DNS, FOSS, LRG FUSILINIDS

CHT - WHT, OPAQ, SLI TRANSLUCNT IN PT, PRED WEATH, FRSH IN PT, G WEATH POR, FSFO, G SHO GAS, G ODOR, BRI YEL-GRN FLUOR

CHT - WHT, OPAQ & TRANSLUCNT, F / G WEATH POR, FSFO, G SHO GAS, G ODOR, BRI YEL-GRN FLUOR

SH - GY



WT 8.9  
VIS 41  
LCM 1#

LIGHTER TEST

MAYBE!!!!!!!!!!

TG, C1-C5

LIGHTER TEST

DST #2 Mississippi  
4038'-4097'

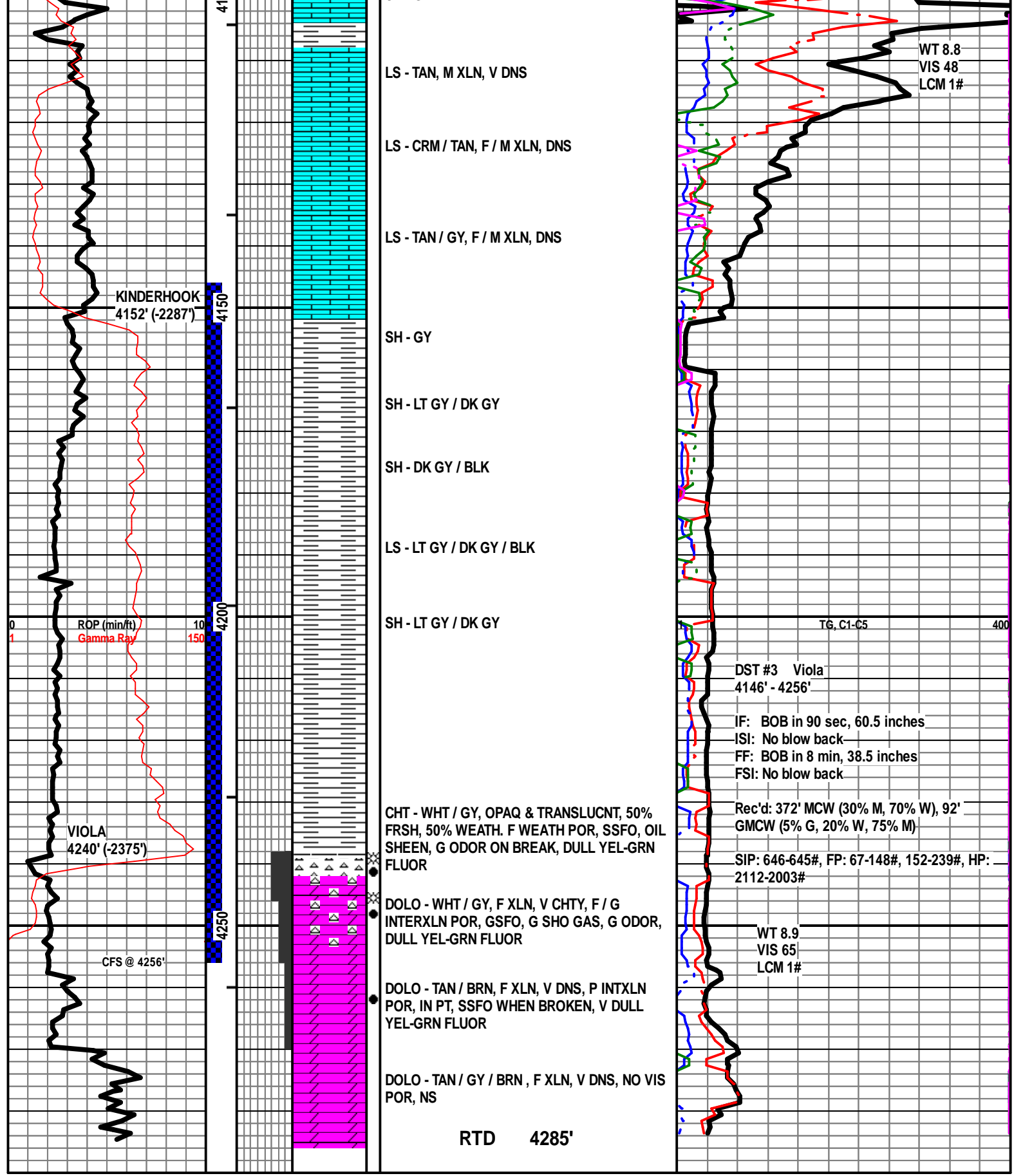
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ISI: No blow back  
FF: BOB immediately, 334 inches  
FSI: No blow back

Rec'd: 3296' GIP, 120' GOCM (20% G, 20% O, 60% M)

SIP: 1351-1367#, FP: 28-37#, 34-74#, HP: 1983-2003#

WT 9.2  
VIS 43  
LCM 2#





RTD 4285'