

GEOLOGIC REPORT

DAVID J. GOLDAK

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

Well Name: Thissen #4-27
Location: Section 27 - T27S - R7W
License Number: API: 15-095-22253
Spud Date: 04 / 19 / 2012
Surface Coordinates: 2520' FNL and 1965' FWL
Approx. C - E/2 - W/2
Region: Kingman Co., KS
Drilling Completed: 04 / 27 / 2012
Bottom Hole Coordinates:
Ground Elevation (ft): 1597' K.B. Elevation (ft): 1606'
Logged Interval (ft): 1900' To: 4360' Total Depth (ft): 4360'
Formation: Simpson
Type of Drilling Fluid: Chemical - Mud-Co

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

OPERATOR

Company: American Energies Corporation
Address: 155 N. Market., Suite 710
Wichita, Kansas 67202

GEOLOGIST

Name: David J. Goldak
Company: D. J. GOLDAK, INC.
Address: 155 N. Market, Suite 710
Wichita, Kansas 67202

General Info

CONTRACTOR: Landmark Drilling, Rig #6

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	JZ- ? - RR	15-15-15	310	310	6.75
2	7-7/8	JZ-QX20	15-15-14	4360	4050	98.25

SURVEYS: 310'-1.0, 3576'-0.75, 4260'-1.5, 4360'-0.75

GENERAL DRILLING AND PUMP INFORMATION:

Drilling with 30,000-35,000 lbs. on bit and 75-80 RPM.
Running 9 stands of collars; 526.58'
Pumping 60 S/M, 7.7 B/M, and 750 psi at standpipe.

Daily Status

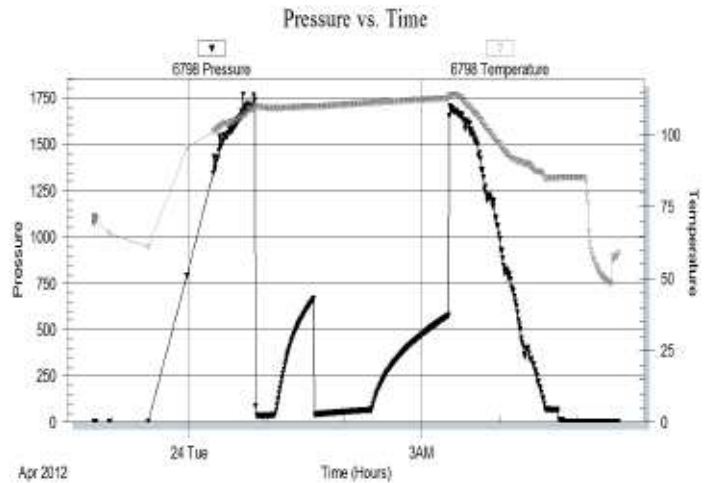
04/19/12 - Spud @ 11:15 AM; Set 8-5/8" Csg at 307'
 04/20/12 - 310' Drilling Plug
 04/21/12 - 1,780' Drilling
 04/22/12 - 2,676' Drilling
 04/23/12 - 3,395' Drilling; Trip for hole in pipe @ 3,423'
 04/24/12 - 3,576' TIH after DST #1
 04/25/12 - 3,940' CFS
 04/26/12 - 4,260' TIH with DST #2
 04/27/12 - 4,360' TOOH for logs

DST #1: 3,542' - 3,576' (Dennis)
 15" - 30" - 45" - 60"

IF: Strong blow, BOB in 20 sec.
ISI: No blow back
FF: Strong blow, BOB in 10 sec.; GTS in 9 min., TSTM
FSI: No blow back

RECOVERY: 125' Total Fluid, consisting of:
 10' GO (20% G, 80% O); Gravity: 36
 115' GOCM (30% G, 20% O, 50% M)

SIP: 667-578; **FP:** 35-40, 38-68; **HP:** 1764-1704;
BHT: 113

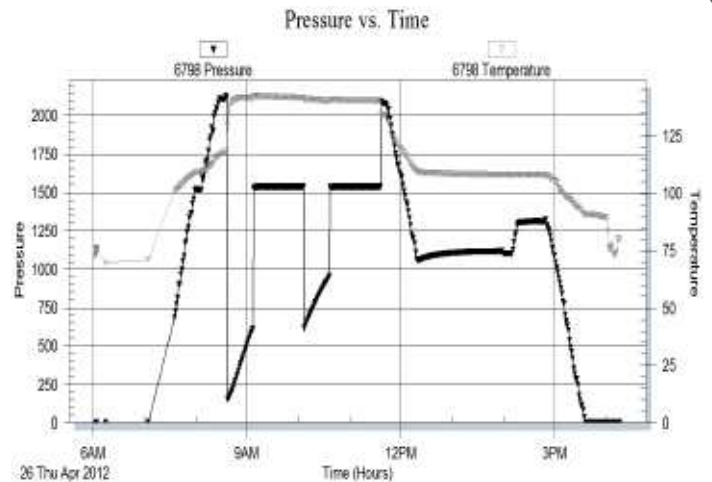


DST #2: 4,256' - 4,260' (Viola) 30" - 60" - 30" - 60"

IF: Strong blow, BOB in 30 sec.
ISI: 2 inch blow back
FF: Strong blow, BOB in 90 sec.; GTS in 3 min., TSTM
FSI: BOB in 10 min. blow back

RECOVERY: 2730' Total Fluid, consisting of:
 2615' CGO; Gravity: 41; Rev circ & Rec approx 30 bbls.
 115' GOWCM (5% G, 13% O, 30% W, 52% M)
 Chlorides recovery water: 65,000 ppm

SIP: 1537-1537; **FP:** 156-616, 617-958; **HP:** 2118-2091;
BHT: 140



ROCK TYPES

	Anhy
	Bent
	Brec
	Cht
	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta
	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Slstst
	Ss
	Till
	Carb sh
	Dol
	Dtd
	Gry sh

	Sandylms
	Shale
	Slststn
	Shlyslts
	Sltysh
	Lms

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- 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
- Silty

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

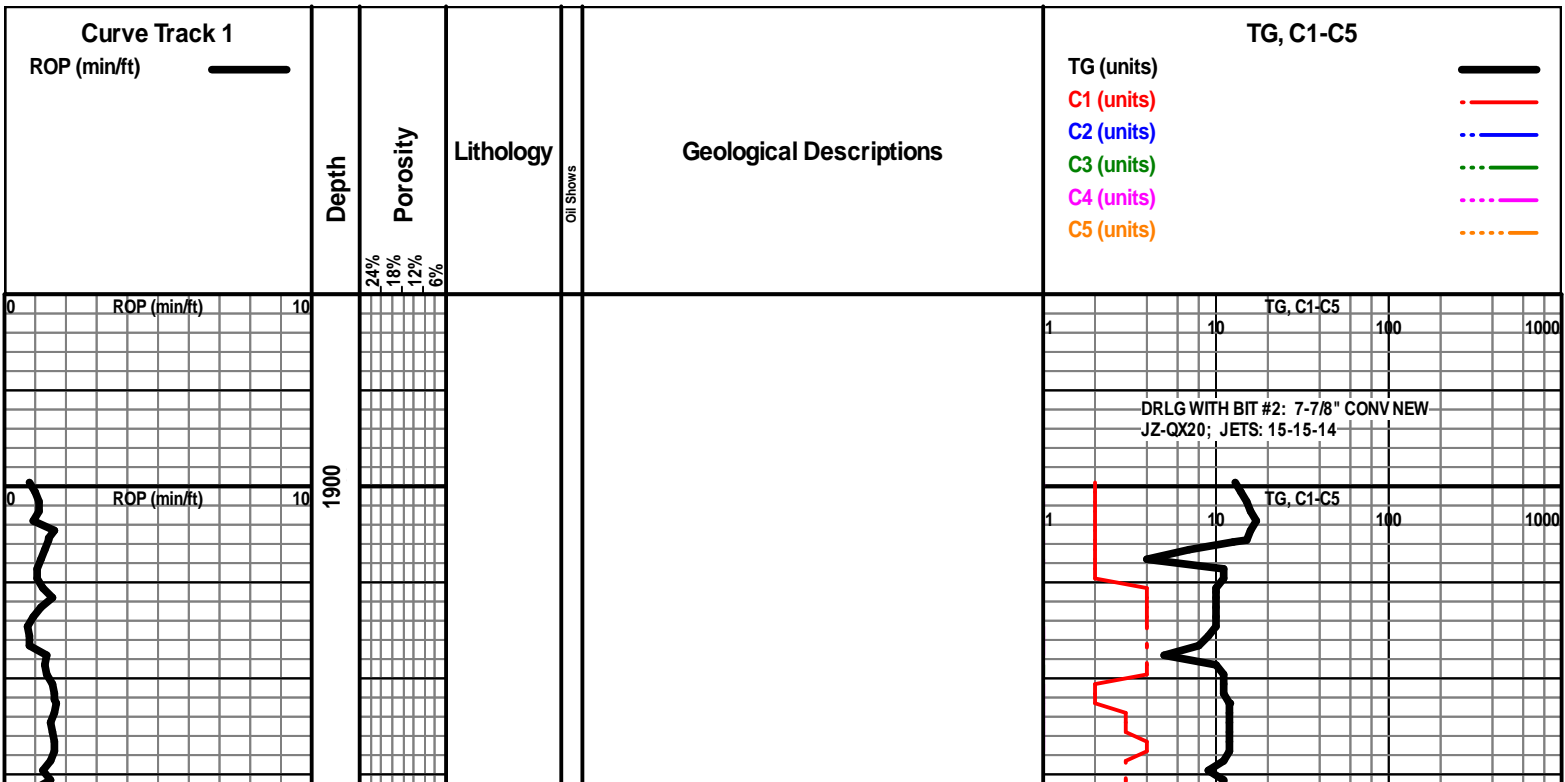
- Core
- Dst

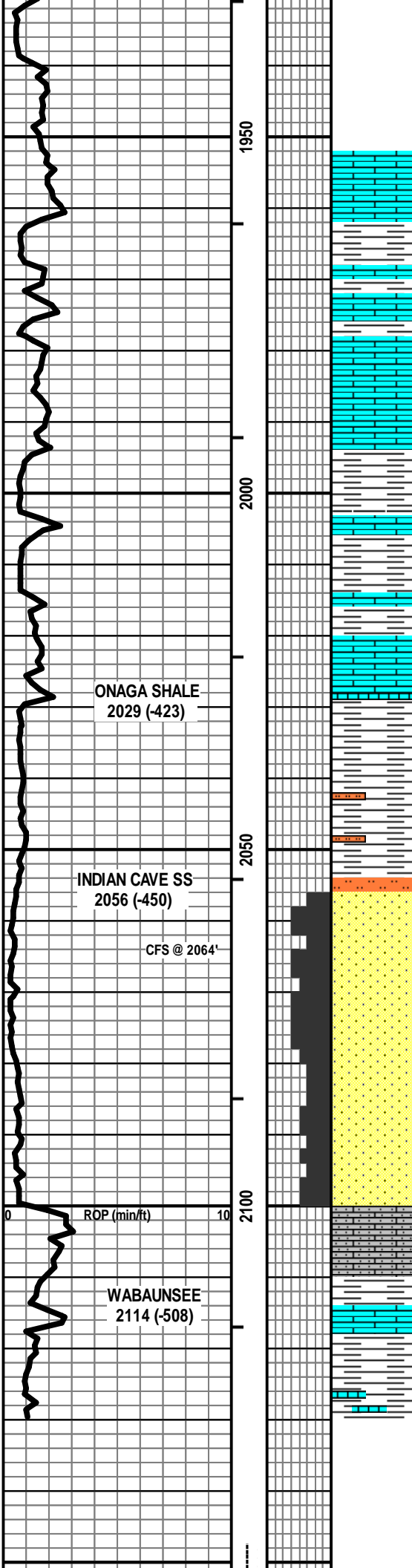


Dst

EVENTS

- Rft
- Sidewall
- Conn





LS - CRM / TAN / GY, MOT IN PT, VF / F XLN, FOSS, PRED DNS, NS W/SH - GY / GRN

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

LS - CRM / TAN, VF / F XLN, SL FOSS, PRED DNS, NS W/SH - GY

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

ONAGA SHALE
2029 (-423)

SH - GY, SLTY IN PT

INDIAN CAVE SS
2056 (-450)

SS - LT GY, VF QTZ GR, SLTY IN PT, W SRTD, SA / SR, PRED SIL CEM, MIC, SCAT GLAUC, F / G INTGR POR, FRI IN PT, NS

CFS @ 2064'

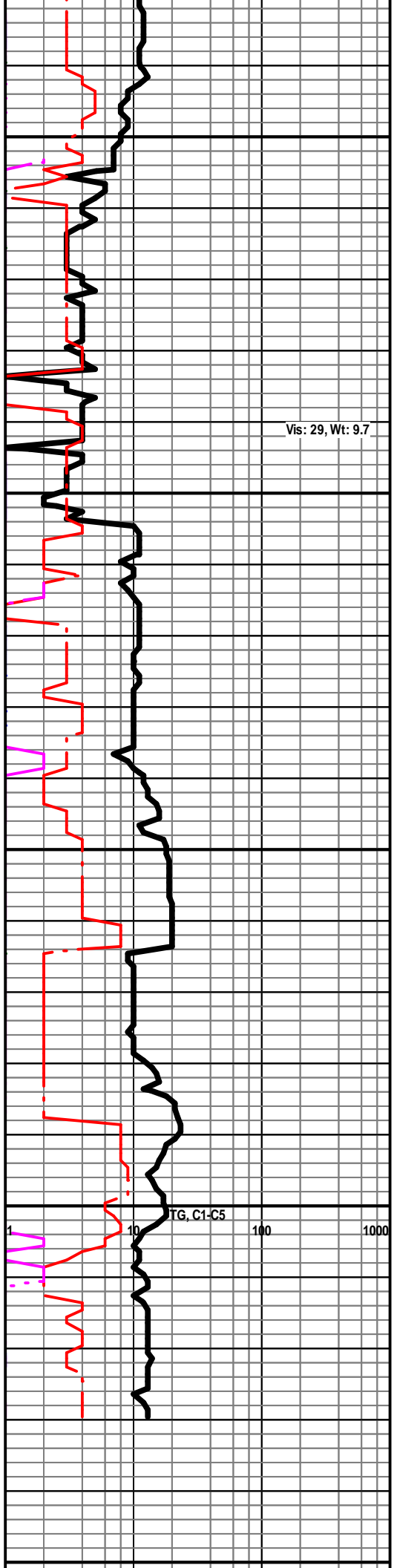
SS - ASABOVE, F / G INTGR POR, FRI IN PT, NS

ROP (min/ft)

SS - ASABOVE W/LS - GY / CRM, VF / F XLN, AREN IN PT, PRED DNS, NS

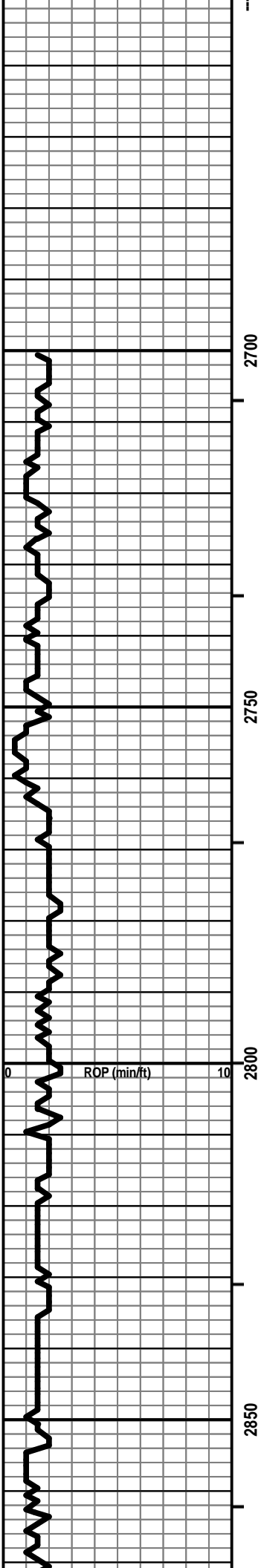
WABAUNSEE
2114 (-508)

LS - GY / CRM / SCAT TAN, VF / F XLN, FOSS IN PT, PRED DNS, NS



Vis: 29, Wt: 9.7

10 TG, C1-C5



2700

2750

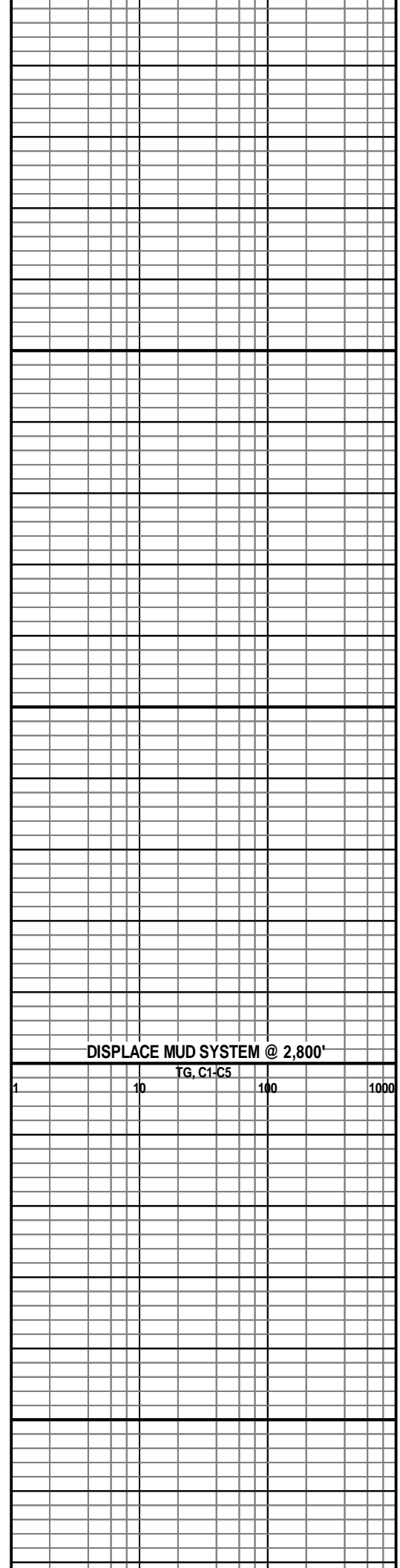
2800

2850

ROP (min/ft)

10

0



DISPLACE MUD SYSTEM @ 2,800'

TG, C1-C5

1

10

100

1000

Vis: 47, Wt: 8.9

2900

LS - CRM / GY / TAN, MOT IN PT, VF / F XLN, FOSS, CHKY IN PT, PRED DNS, NS

SH - DK GY / BLK, CARB IN PT

2950

LS - CRM / TAN / BRN, MOT IN PT, VF / F XLN, FOSS, PRED DNS, NS

HEEBNER
2973 (-1367)

LS - TAN / BRN / SCAT GY, MOT IN PT, F XLN, FOSS, PRED DNS, NS W/SH - DK GY / BLK, CARB IN PT

LS - TAN / CRM, PRED VF / F XLN, SCAT M XLN, FOSS IN PT, PRED DNS, NS

3000

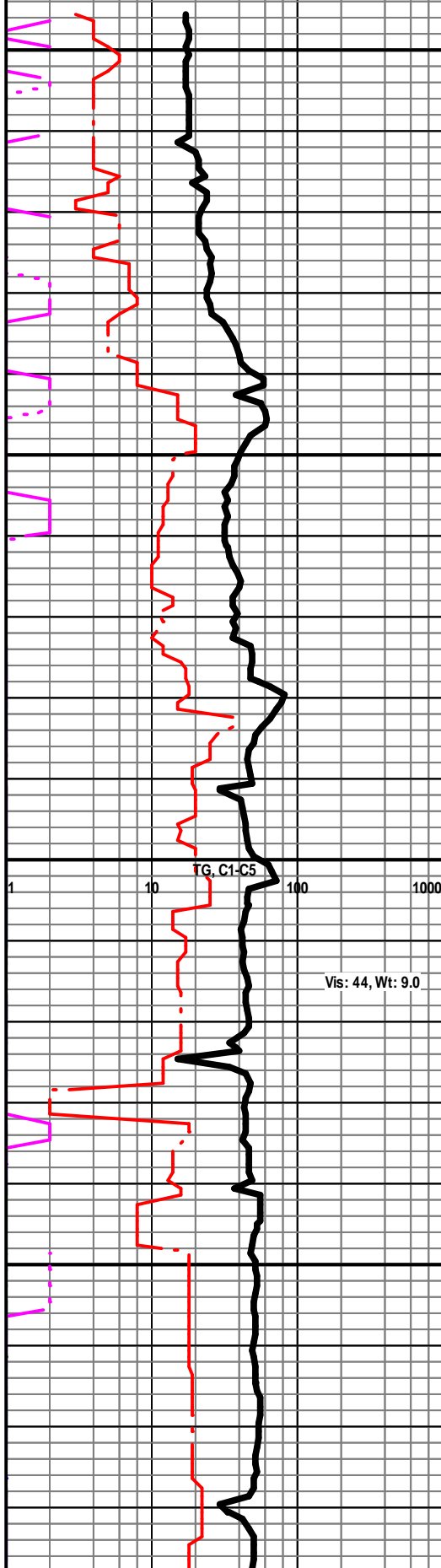
ROP (min/ft)

SH - GY / SCAT GRN W/SS - LT GY, VF QTZ GR, W SRTD, SA / R, SL / MOD CALC CEM, MIC, F INTGR POR, NS W/SLTST - LT MED GY

3050

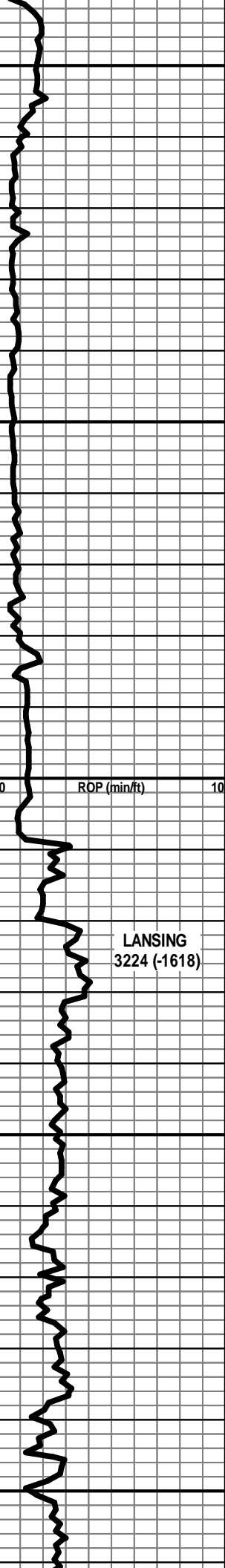
SS - LT GY, VF / F QTZ GR, W SRTD, SR / R, SL / MOD CALC CEM, MIC, F / G INTGR POR, NS

SS - LT GY, VF / F QTZ GR, W SRTD, SR / R, SL / MOD CALC CEM, MIC, F / G INTGR POR, NS

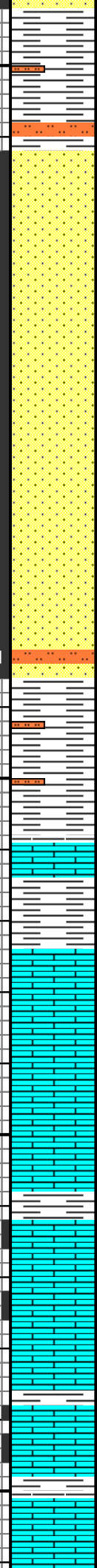


Vis: 44, Wt: 9.0

3100
3150
3200
3250
3300



LANSING
3224 (-1618)



SS - LT GY, VF / F QTZ GR, W SRTD, SR / R, SL / MOD CALC
CEM, MIC, TR GLAUC, F / G INTGR POR, NS

SS - LT GY, VF / F QTZ GR, W SRTD, SR / R, SL / MOD CALC
CEM, MIC, TR GLAUC, F / G INTGR POR, NS

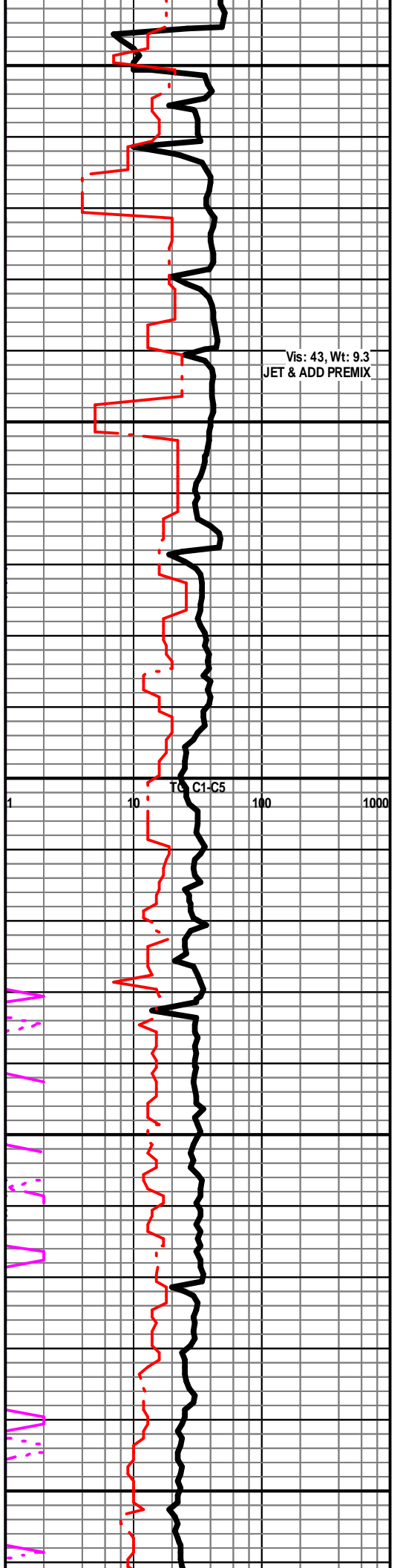
SS - LT GY, VF / F QTZ GR, W SRTD, SR / R, SL / MOD CALC
CEM, MIC, TR GLAUC, F / G INTGR POR, NS

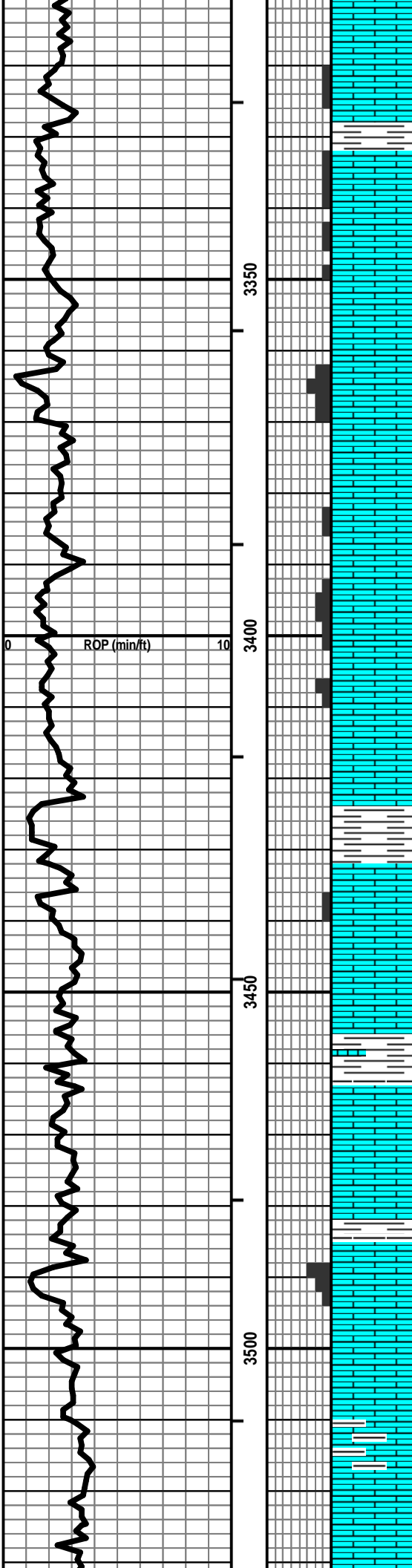
SH - GY, SLTY IN PT

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

LS - TAN / CRM, VF / F XLN, SCAT REXLN CALC, FOSS,
CHKY IN PT, TR P INTXLN POR, PRED DNS, NS

LS - CRM / TAN / BRN, VF / F XLN, FOSS IN PT, SUBCHKY IN
PT, TR P INTXLN POR, PRED DNS, NS





LS - CRM / TAN / SCAT GY, MOT IN PT, VF / F XLN, FOSS, PRED DNS, NS

Vis: 47, Wt: 9.3,
 YP: 14, Gels: 10/36,
 pH: 10.5, WL: 9.2,
 Chl: 5,000, Sol: 6.8,
 LCM: 0#

LS - CRM / TAN, VF / F XLN, FOSS IN PT, SCAT P INTXLN POR, SUBCHKY IN PT, PRED DNS, NS

LS - CRM / TAN, VF / F XLN, FOSS, OOL IN PT, P / F INTXLN + VUG POR IN PT, NS

POOR SMPL QUAL; LS - CRM / TAN, VF / F XLN, FOSS, SCAT OOL, TR P / F INTXLN + VUG POR, CHKY IN PT, NS

TG, C1-C5

TRIP FOR HOLE IN THE PIPE @ 3,423'

LS - TAN / BRN / SCAT CRM, VF / F XLN, SCAT REXLN CALC, FOSS IN PT, TR P INTXLN POR, PRED DNS, NS

LS - CRM / TAN / GY, MOT IN PT, VF / F XLN, SL FOSS, CHKY IN PT, PRED DNS, NS

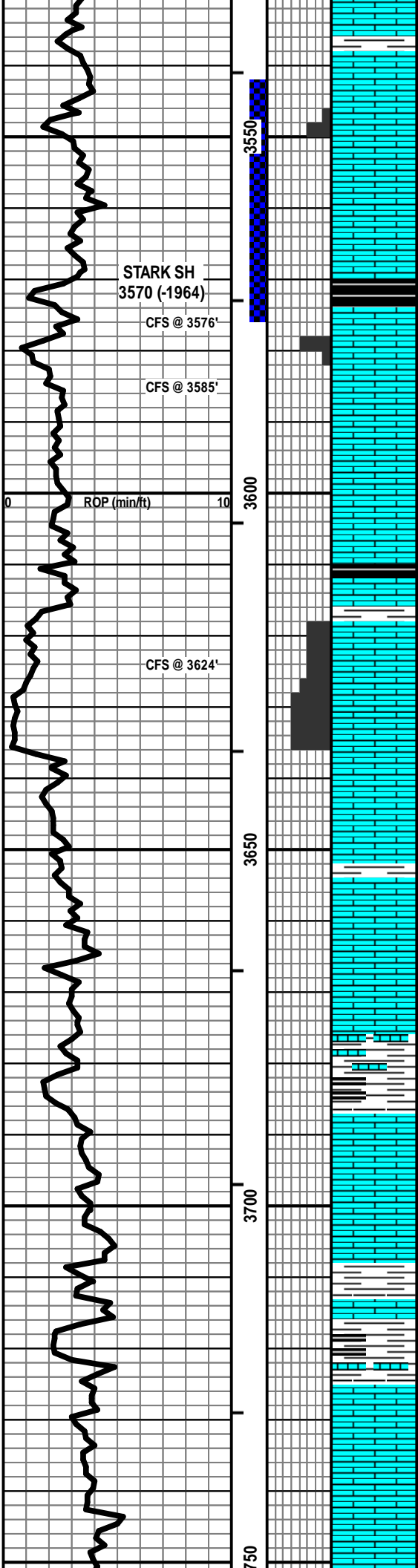
Vis: 48, Wt: 9.3

LS - CRM / GY / TAN, VF / F XLN, OOL, FOSS, F OOM + INTXLN POR IN PT TO PRED DNS, NS

DST #1 (Dennis) 3,542'-3,576'
 15" - 30" - 45" - 60"

LS - TAN / CRM, VF / F XLN, SCAT CRYPTO XLN, FOSS IN PT, PRED DNS, NS

IF: Strg blow, BOB in 20 sec.
 JS: No blow back
 FF: BOB in 10 sec.; GTS in 9 min., TSTM
 FS: No blow back



LS - CRM / TAN, F XLN, SL FOSS, TR P / F INTXLN + PPT POR, GSGB, FSFO, V FT ODOR, SPTY / SAT STN, G FLOUR + CUT

LS - CRM / TAN / GY, VF / F XLN, SCAT M XLN, FOSS + OOL ON PT, PRED DNS, NS W/SH - BLK, CARB

LS - CRM / TAN, F XLN, OOL, F / G OOM + INTXLN POR, MOD P POR, CHKY IN PT, TR GB + FO, NO ODOR, NO STN, TR FLOUR, SCAT P / G CUT, PRED NO CUT

LS - CRM / TAN, VF / F XLN, CHKY IN PT, PRED DNS, NS

LS - CRM / TAN, F XLN, OOL, F / G OOM + INTXLN POR, SCAT P POR, NS, NO ODOR, NO STN, NO FLOUR, NO CUT

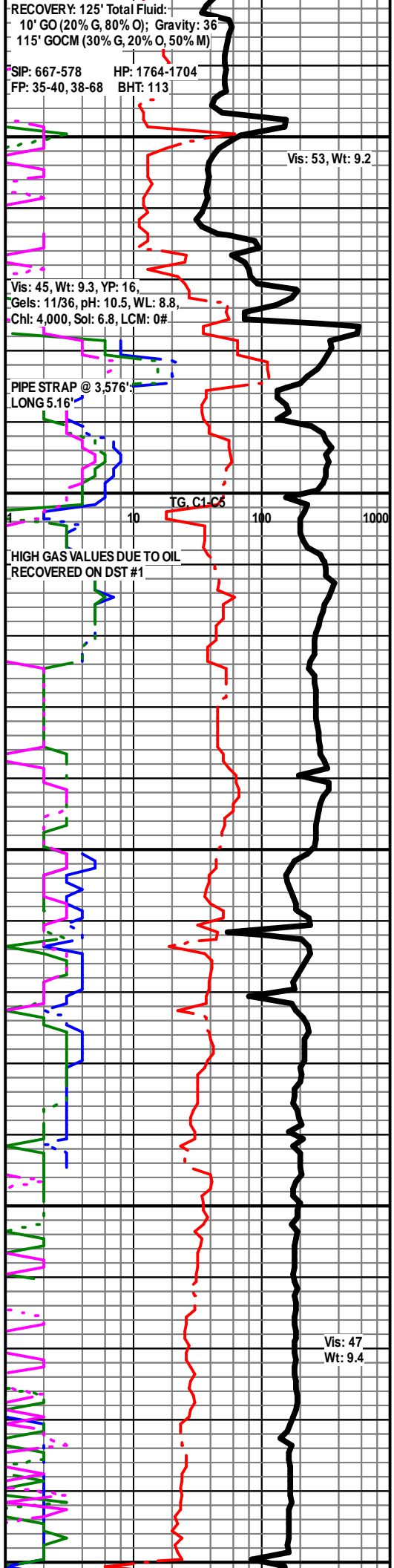
LS - ASABOVE, G OOM + INTXLN POR, NS W/LS - TAN / SCAT BRN, MOT IN PT, VF / F XLN, SCAT CRYPTO XLN, CHKY IN PT, PRED DNS, NS

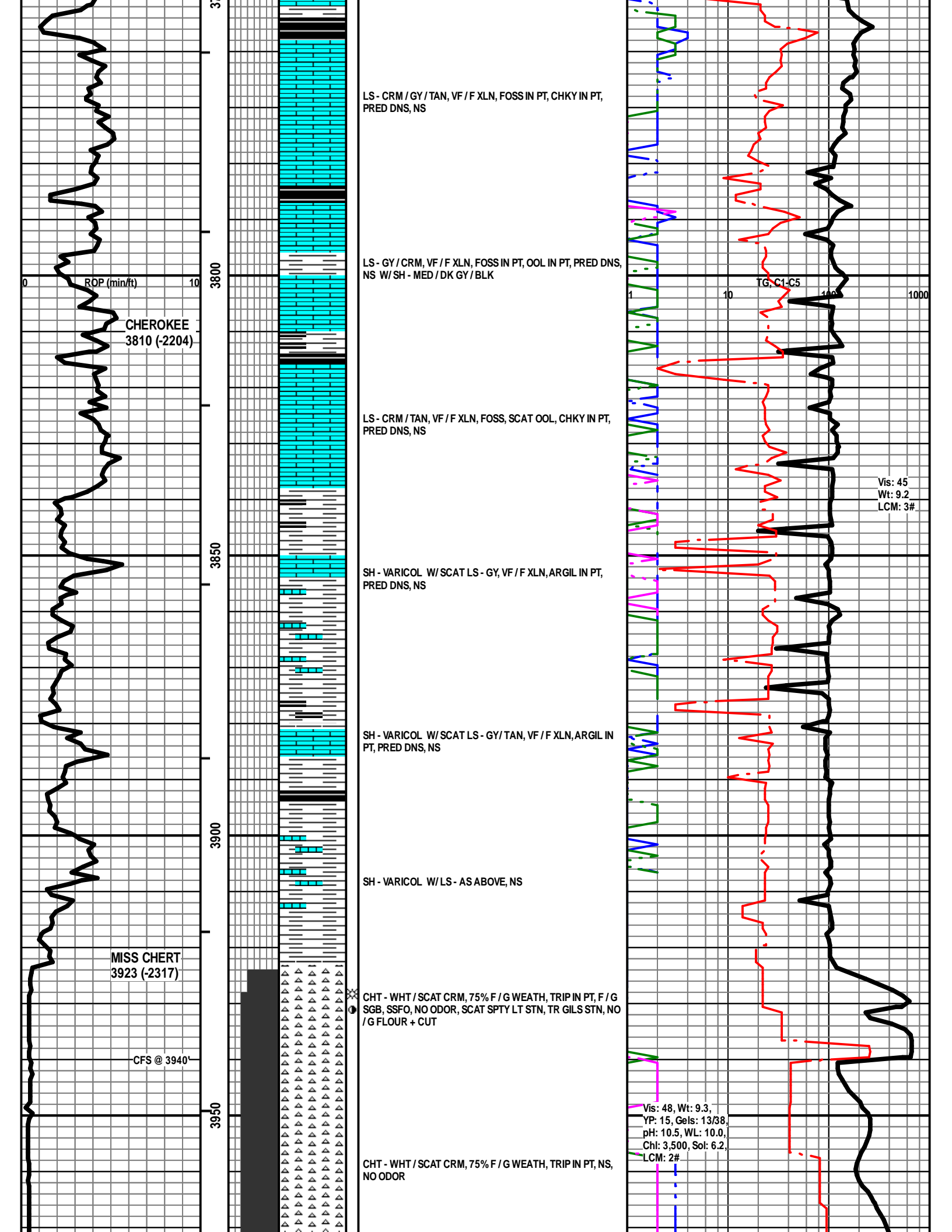
LS - TAN / CRM / GY, MOT IN PT, VF / F XLN, SCAT FOSS, PRED DNS, NS

LS - CRM / LT GY, VF / F XLN, SCAT REXLN CALC, OOL IN PT, SUBCHKY IN PT, PRED DNS, NS

LS - ASABOVE W/SH - DK GY / BLK, SCAT CARB

LS - TAN / BRN / GY, MOT IN PT, VF / F XLN, FOSS IN PT, PRED DNS, NS





ROP (min/ft)

CHEROKEE
3810 (-2204)

MISS CHERT
3923 (-2317)

CFS @ 3940'

LS - CRM / GY / TAN, VF / F XLN, FOSS IN PT, CHKY IN PT, PRED DNS, NS

LS - GY / CRM, VF / F XLN, FOSS IN PT, OOL IN PT, PRED DNS, NS W/ SH - MED / DK GY / BLK

LS - CRM / TAN, VF / F XLN, FOSS, SCAT OOL, CHKY IN PT, PRED DNS, NS

SH - VARICOL W/ SCAT LS - GY, VF / F XLN, ARGIL IN PT, PRED DNS, NS

SH - VARICOL W/ SCAT LS - GY / TAN, VF / F XLN, ARGIL IN PT, PRED DNS, NS

SH - VARICOL W/ LS - AS ABOVE, NS

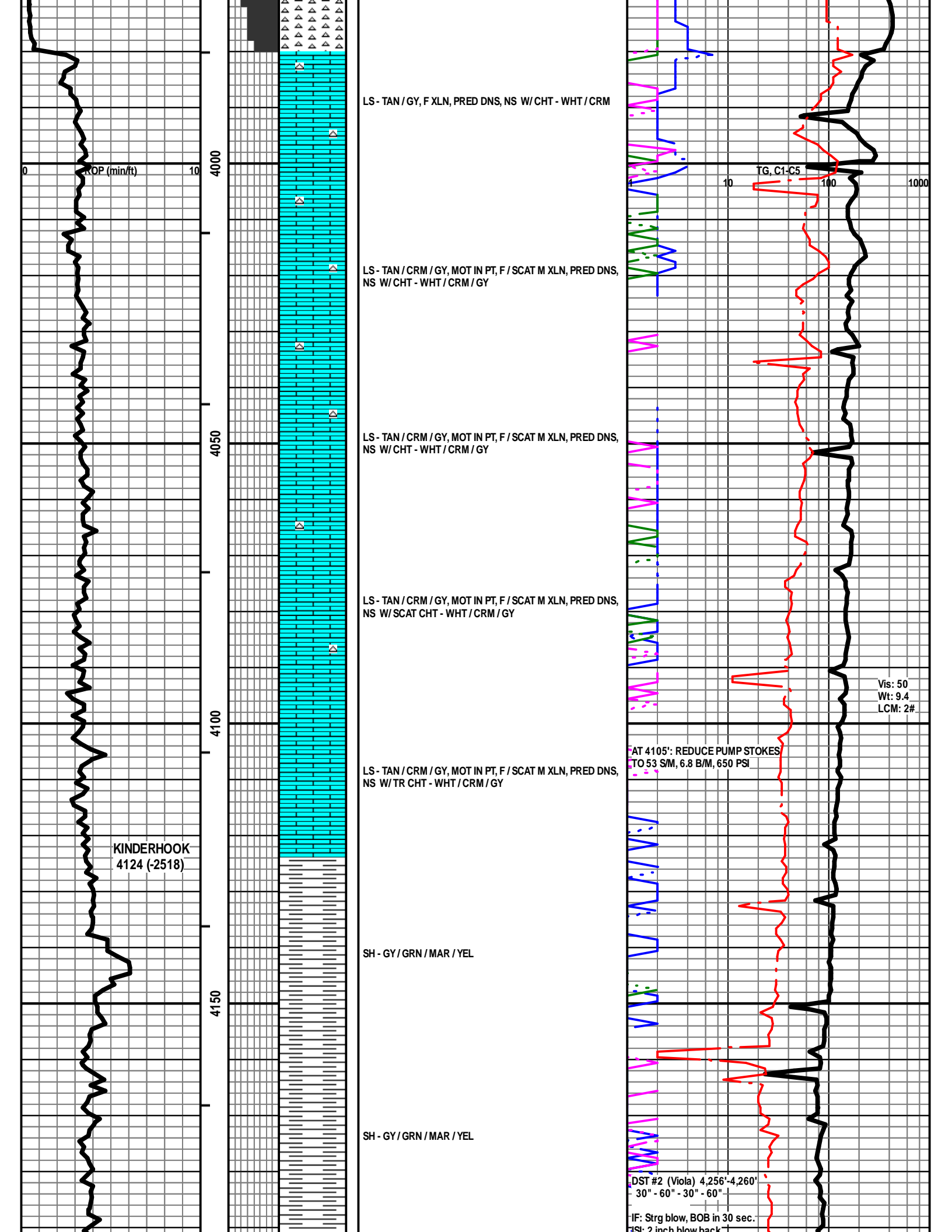
CHT - WHT / SCAT CRM, 75% F / G WEATH, TRIP IN PT, F / G SGB, SSFO, NO ODOR, SCAT SPY LT STN, TR GILS STN, NO / G FLOUR + CUT

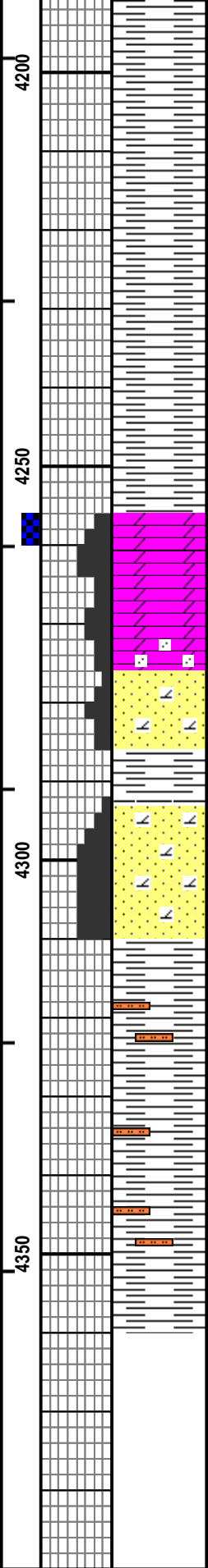
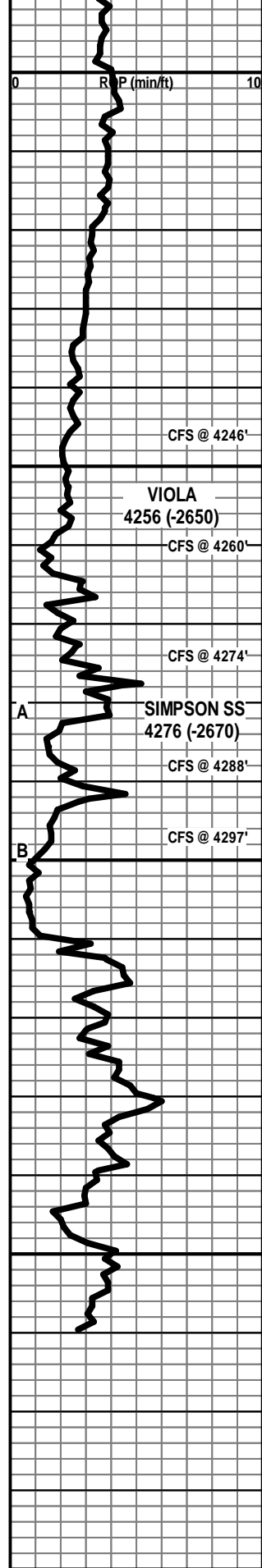
CHT - WHT / SCAT CRM, 75% F / G WEATH, TRIP IN PT, NS, NO ODOR

TG, C1-C5

Vis: 45
Wt: 9.2
LCM: 3#

Vis: 48, Wt: 9.3,
YP: 15, Gels: 13/38,
pH: 10.5, WL: 10.0,
Chl: 3,500, Sol: 6.2,
LCM: 2#





SH - GY / GRN / MAR / YEL

SH - GY / GRN / MAR / YEL / SCAT BLK

DOLO - LT GY / WHT, F / M XLN, SCAT C XLN, RHO MBIC IN PT, F / G INTX LN POR, P / F SGB IN PT, P / F SFO, V FT ODOR, SCAT SPTY STN, NO / G FLOUR + CUT

DOLO - LT GY / WHT, F / M XLN, SCAT C XLN, PRED RHO MBIC, TR F XLN SU CR, TR AREN, VF / F GR, P / G INTX LN POR, P / F SGB IN PT, P / F SFO IN PT, SCAT BARR POR, NO ODOR, SCAT SPTY / SAT STN, SCAT GILS STN, NO / G FLOUR + CUT

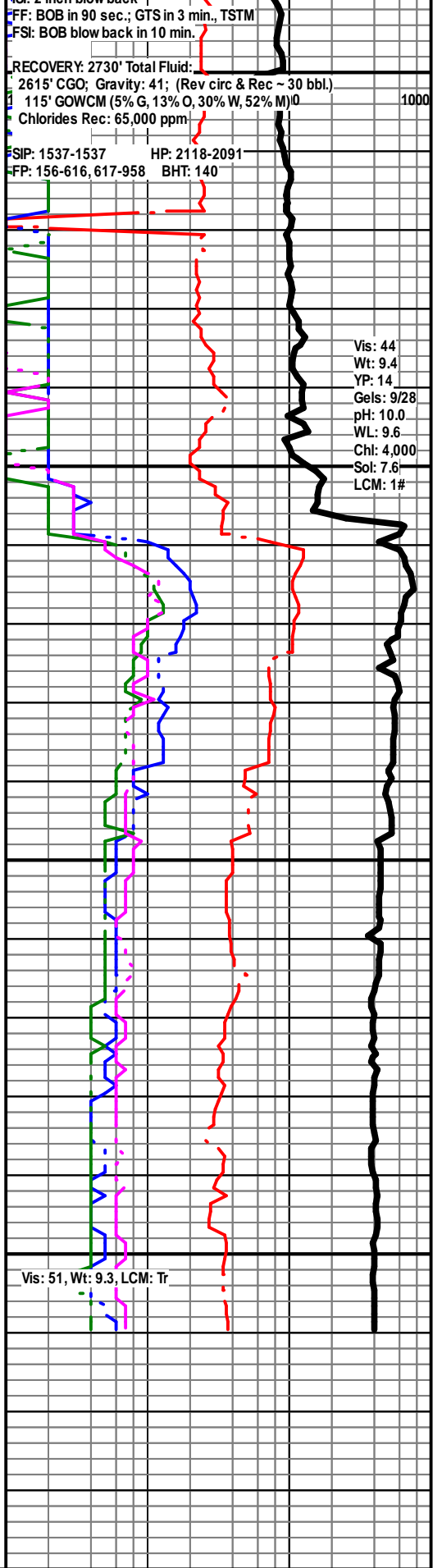
SS - LT GY, DOLOMITIC IN PT, F / M QTZ GR, SCAT C GR, P / F SRTD, R / WR, P / F INTGR POR, NS, NO ODOR, NO STN

SS - LT GY, DOLOMITIC IN PT, PRED F / M QTZ GR, P / F SRTD, R / WR, P / G INTGR POR, TR FO, TR ASPH, PRED NS, NO ODOR, TR GILS STN

SH - PRED GY / GRN, SLTY IN PT

SH - PRED GY / GRN, SLTY IN PT

TOTAL DEPTH 4360 (-2754)



RECOVERY: 2730' Total Fluid:
2615' CGO; Gravity: 41; (Rev circ & Rec ~ 30 bbl.)
115' GOWCM (5% G, 13% O, 30% W, 52% M)
Chlorides Rec: 65,000 ppm

SIP: 1537-1537 HP: 2118-2091
FP: 156-616, 617-958 BHT: 140

Vis: 44
Wt: 9.4
YP: 14
Gels: 9/28
pH: 10.0
WL: 9.6
Chl: 4,000
Sol: 7.6
LCM: 1#

Vis: 51, Wt: 9.3, LCM: Tr