

Timothy G. Pierce

Petroleum Geologist

GEOLOGIST'S REPORT DRILLING TIME AND SAMPLE LOG

COMPANY R & B Oil and Gas, Inc.

LEASE Colborn 'A' #1

FIELD Wildcat

LOCATION 2285' FSL & 1320' FWL

SEC 23 TWPSP 33S RGE 12W

COUNTY Barber STATE Kansas

CONTRACTOR Hardt Drilling Rig #1

SPUD 9-24-2012 COMP 10-02-2012

RTD 4940 LTD 4941

MUD UP 2960 TYPE MUD Chemical

SAMPLES SAVED FROM 2600 TO RTD

DRILLING TIME KEPT FROM 2600 TO RTD

SAMPLES EXAMINED FROM 2600 TO RTD

GEOLOGICAL SUPERVISION FROM 2475 TO RTD

GEOLOGIST ON WELL Tim Pierce

ELEVATIONS

KB 1498'

DF _____

GL 1488'

Measurements Are All
From Kelly Bushing

CASING

CONDUCTOR _____

SURFACE 8-5/8" at 263'

PRODUCTION 5-1/2" at 4932'

ELECTRICAL SURVEYS

DIL / CN-CD

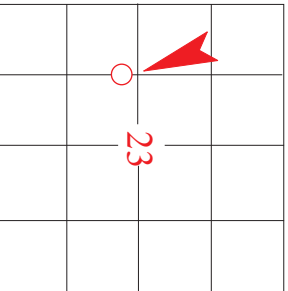
Pioneer Energy Svcs

FORMATION TOPS

ELECTRIC LOG

SAMPLE

| | | |
|--------------|--------------|--------------|
| Onaga Sh. | 2693 (-1195) | 2693 (-1195) |
| Heebner Sh. | 3708 (-2210) | 3707 (-2209) |
| Lansing | 3885 (-2387) | 3884 (-2386) |
| Stark Sh. | 4330 (-2832) | 4330 (-2832) |
| Cherokee Sh. | 4538 (-3040) | 4544 (-3046) |
| Mississippi | 4580 (-3082) | 4580 (-3082) |
| Viola | NA | 4927 (-3429) |



API # 15-007-23,945


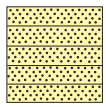
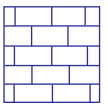
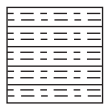

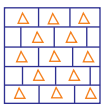
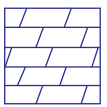
REMARKS 5-1/2" casing was set to produce the Mississippi.

Shows in the KC Swope and Hertha, and the Viola were evaluated with DST with negative results

No other zones of interest were indicated by logs or samples

Timothy G. Pierce

LEGEND

| | | | | | | | |
|--|---|---|---|---|--|---|---|
|  |  |  |  |  |  |  |  |
| Anhydrite | Sandstone | Limestone | Shale | Carb Sh | Cherty LS | Chert | Dolomite |

DRILLING TIME IN MINUTES PER FOOT

Rate of Penetration Decreases →

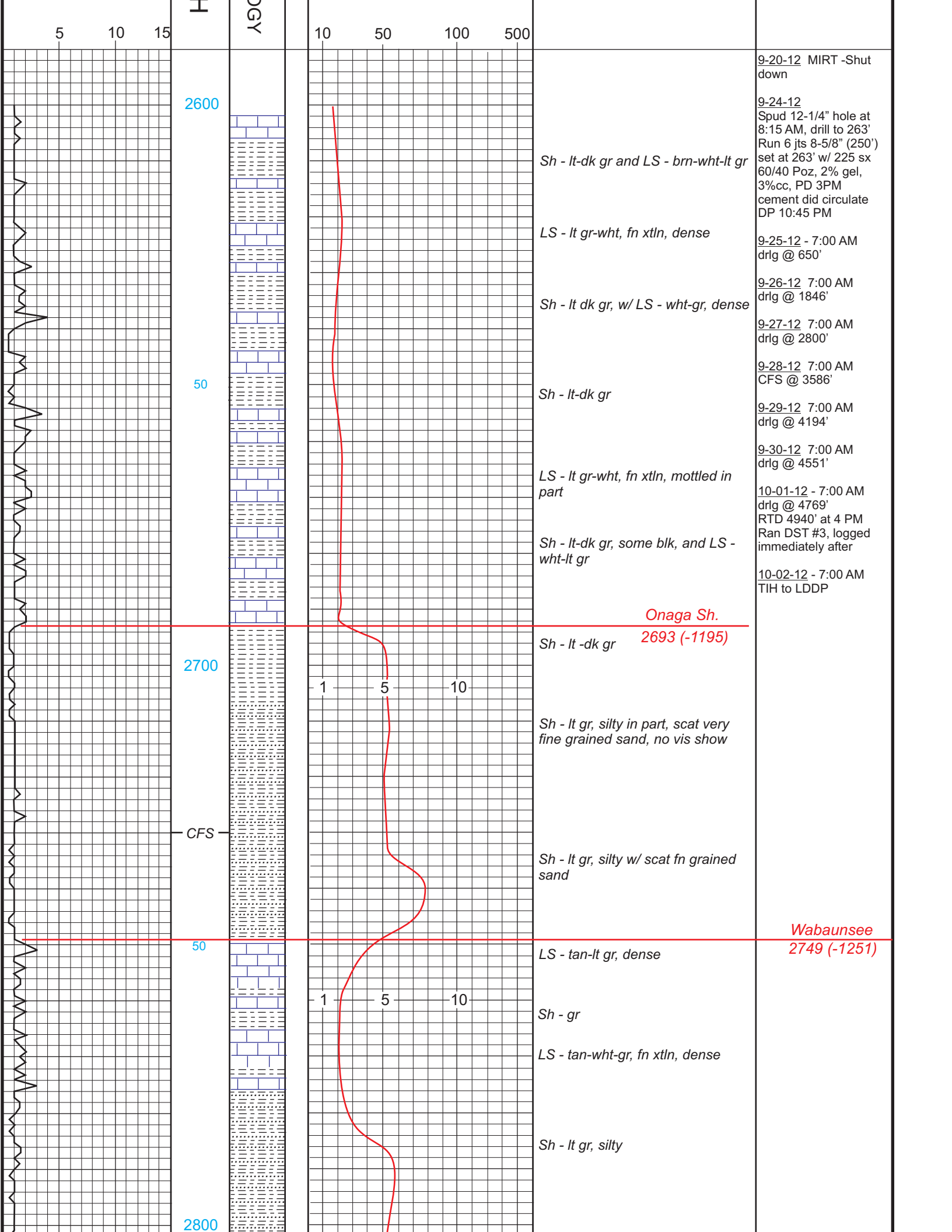
DEPTH

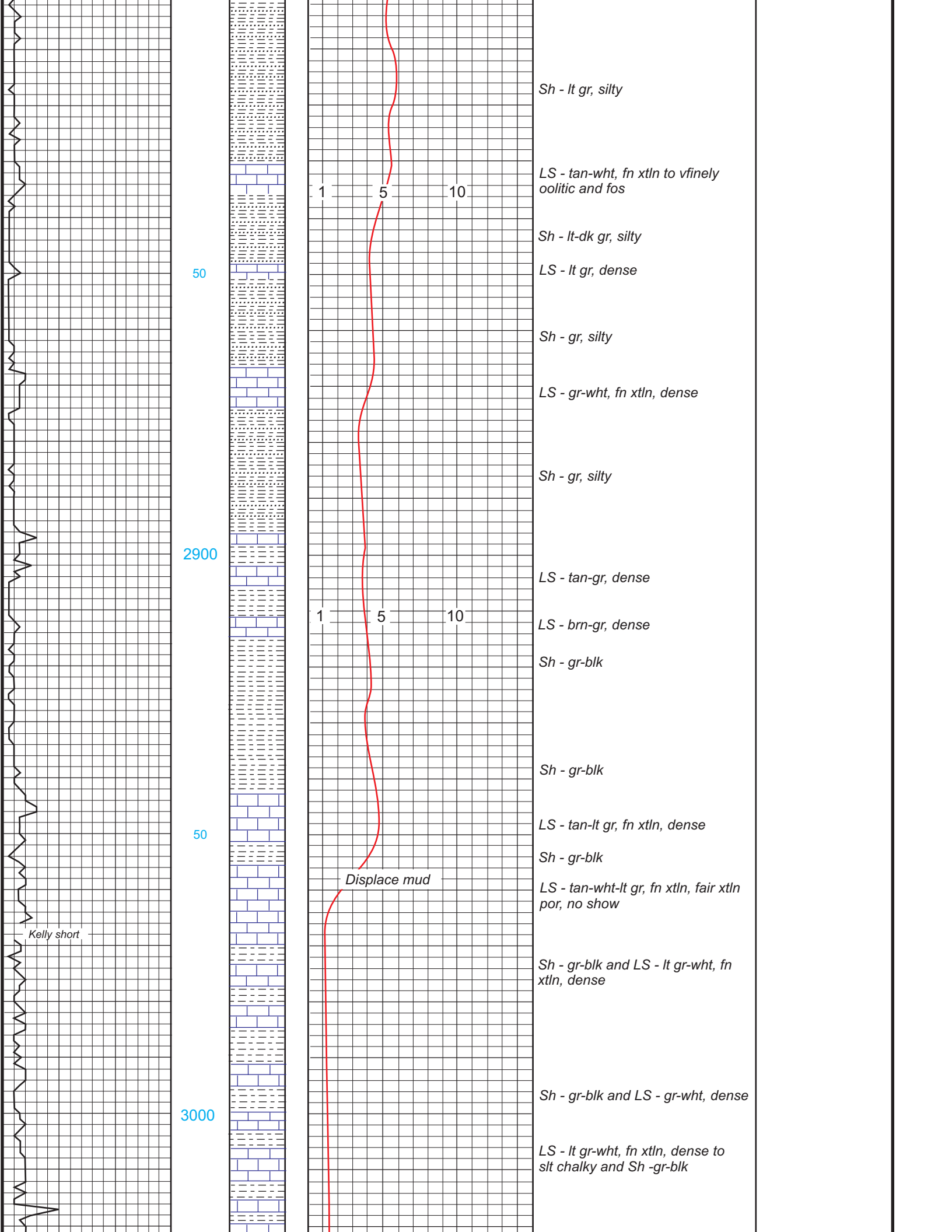
LITHOLOG

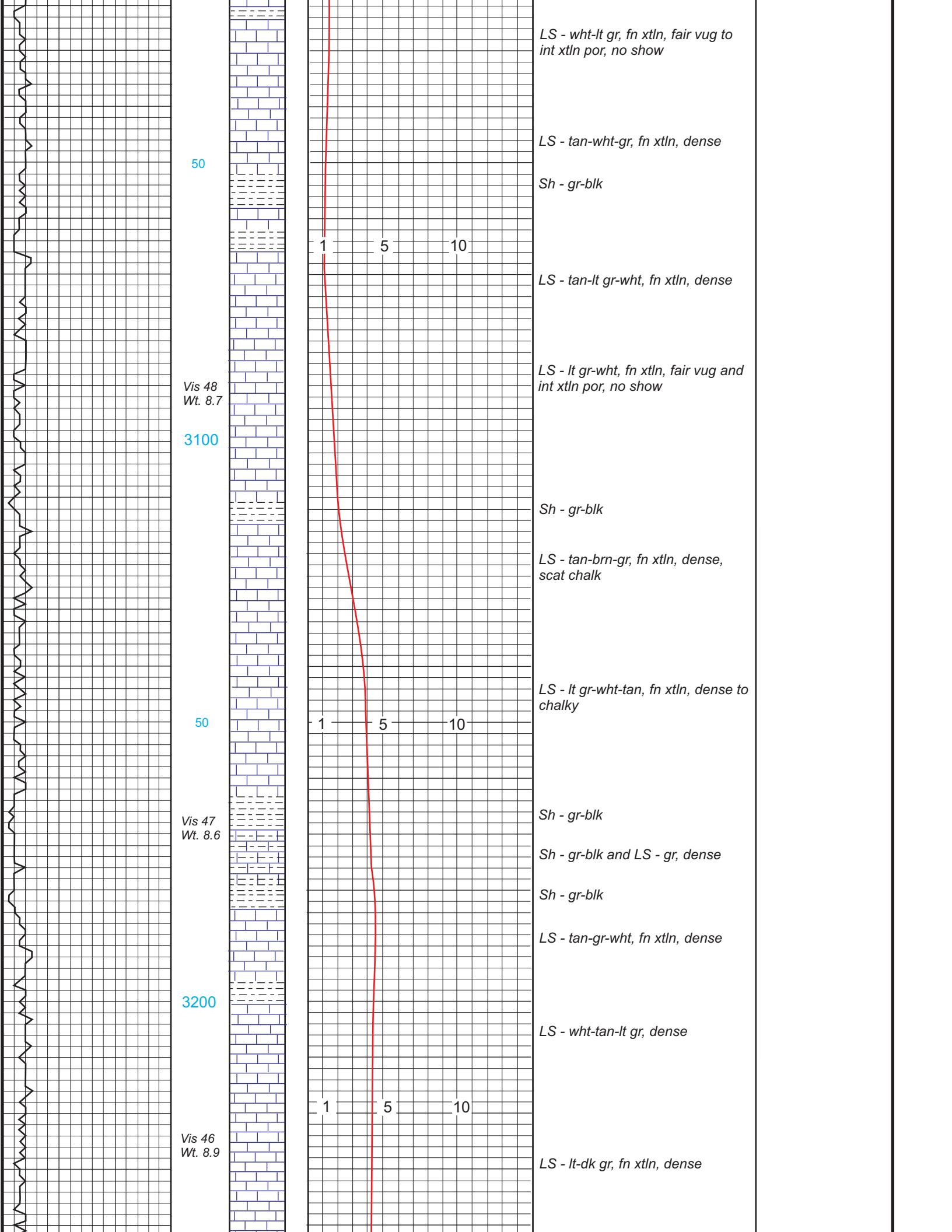
GAS SCALE

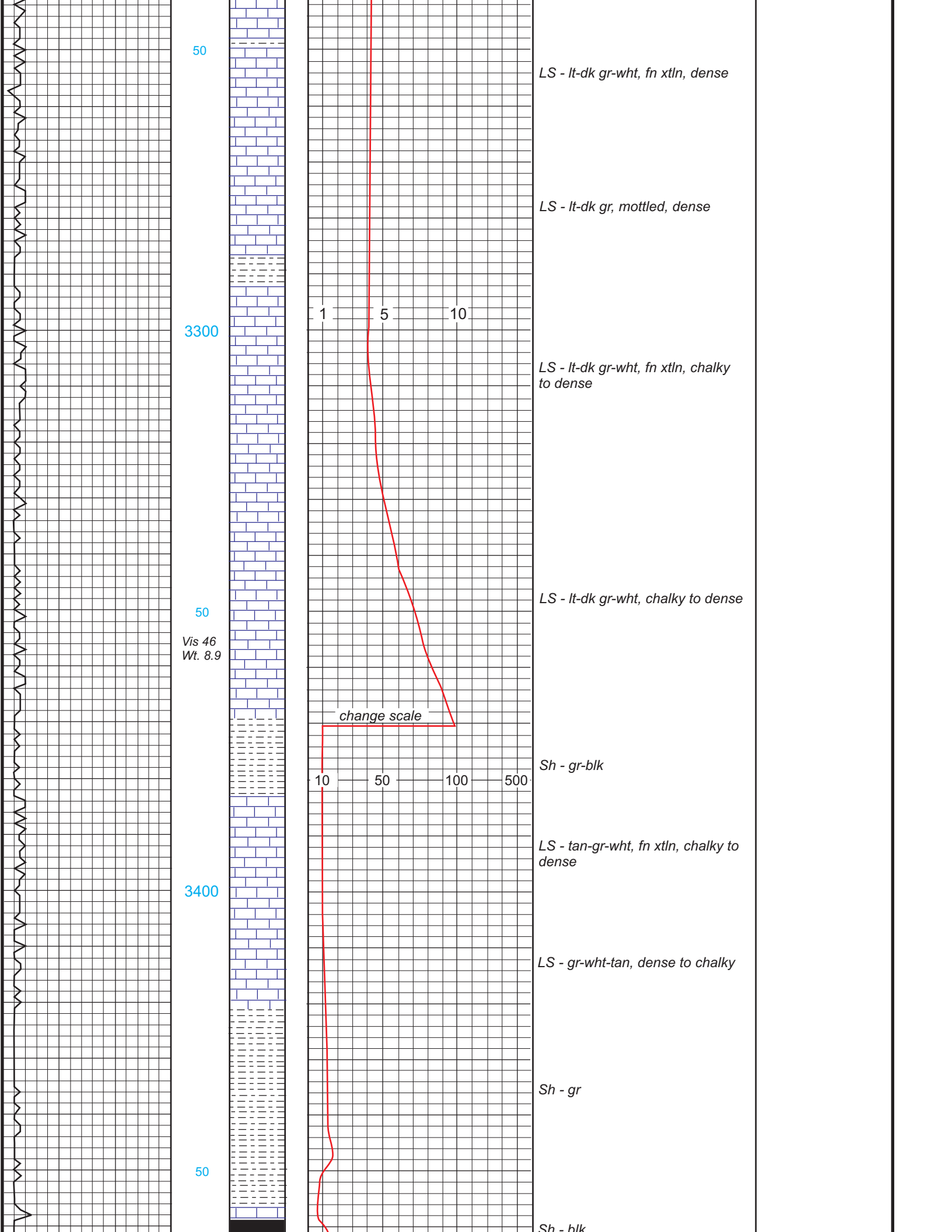
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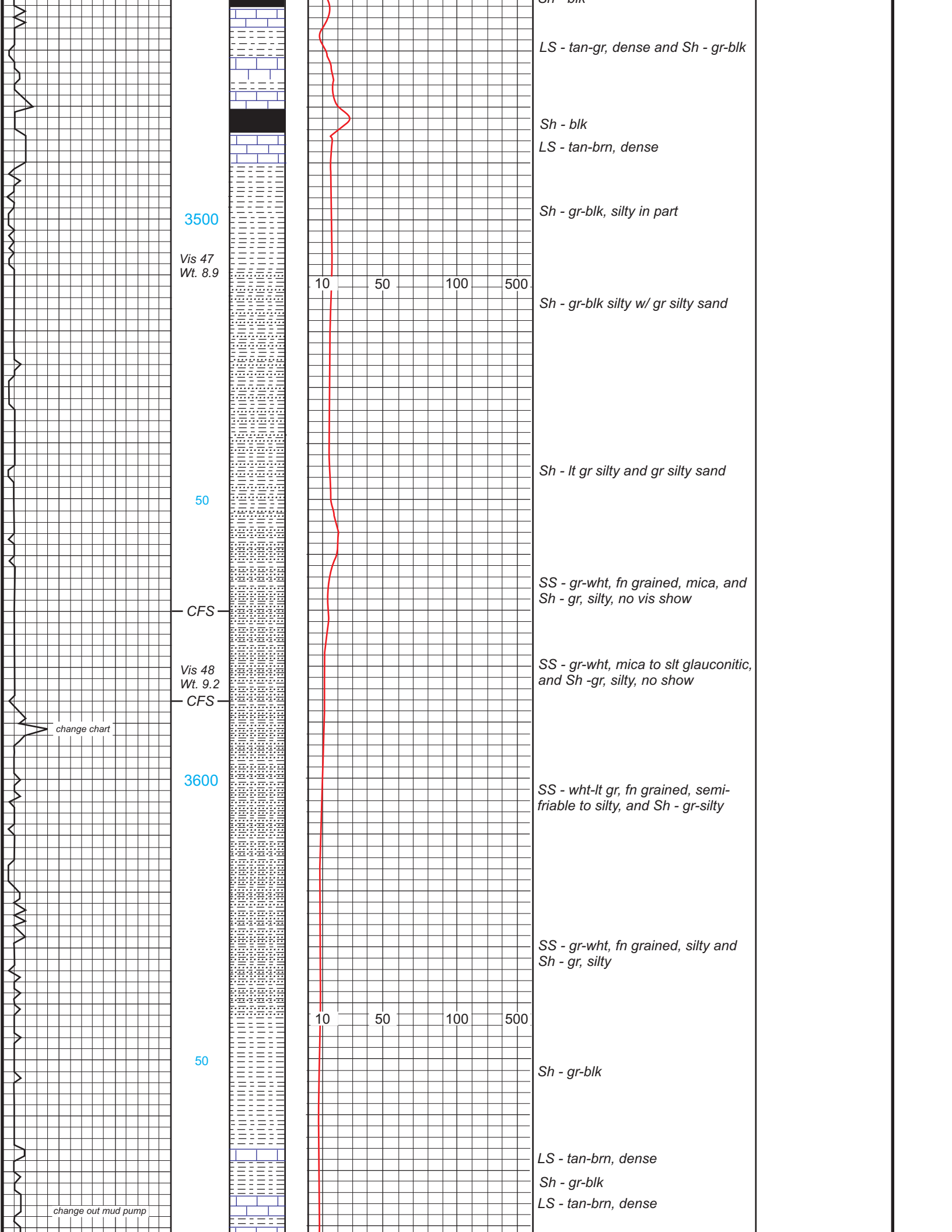
REMARKS

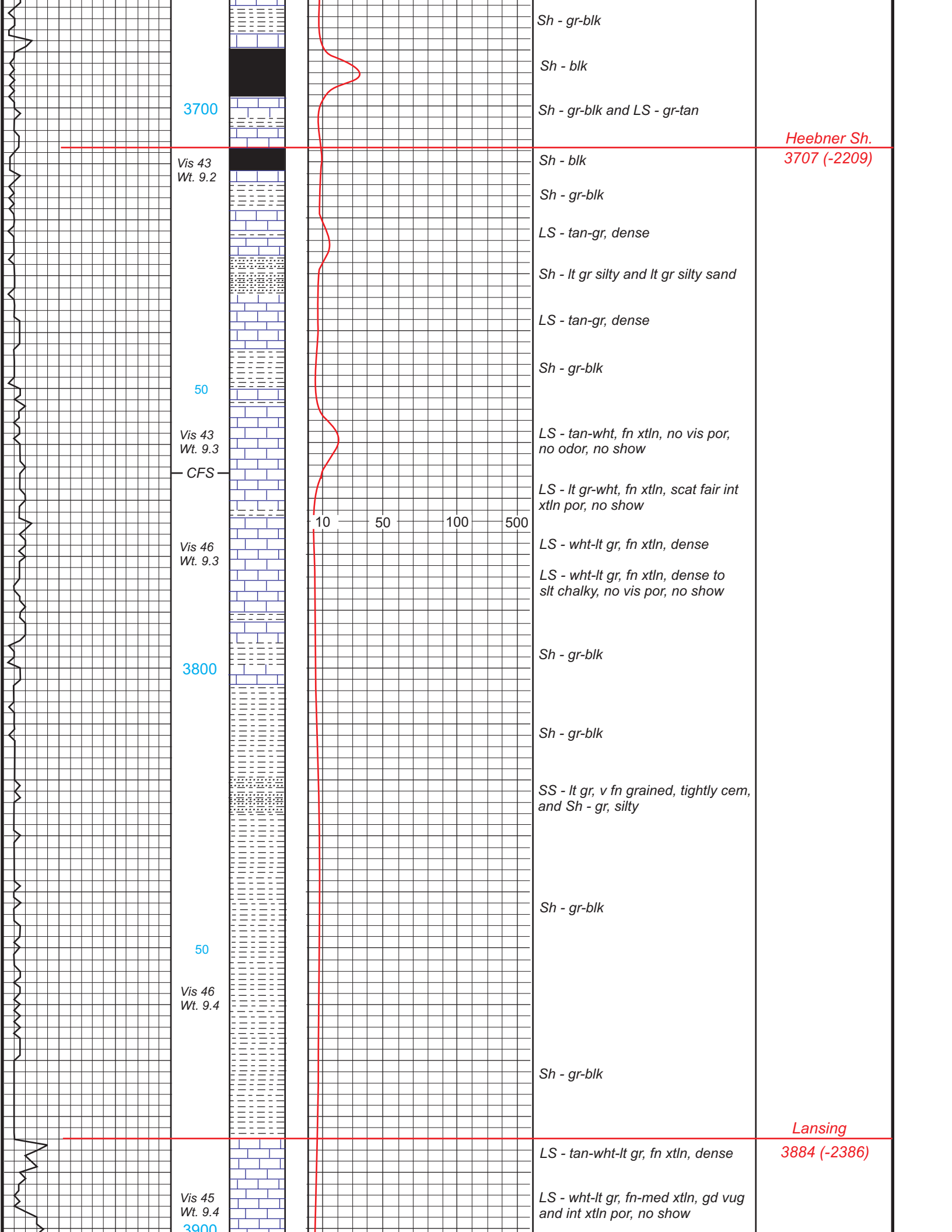


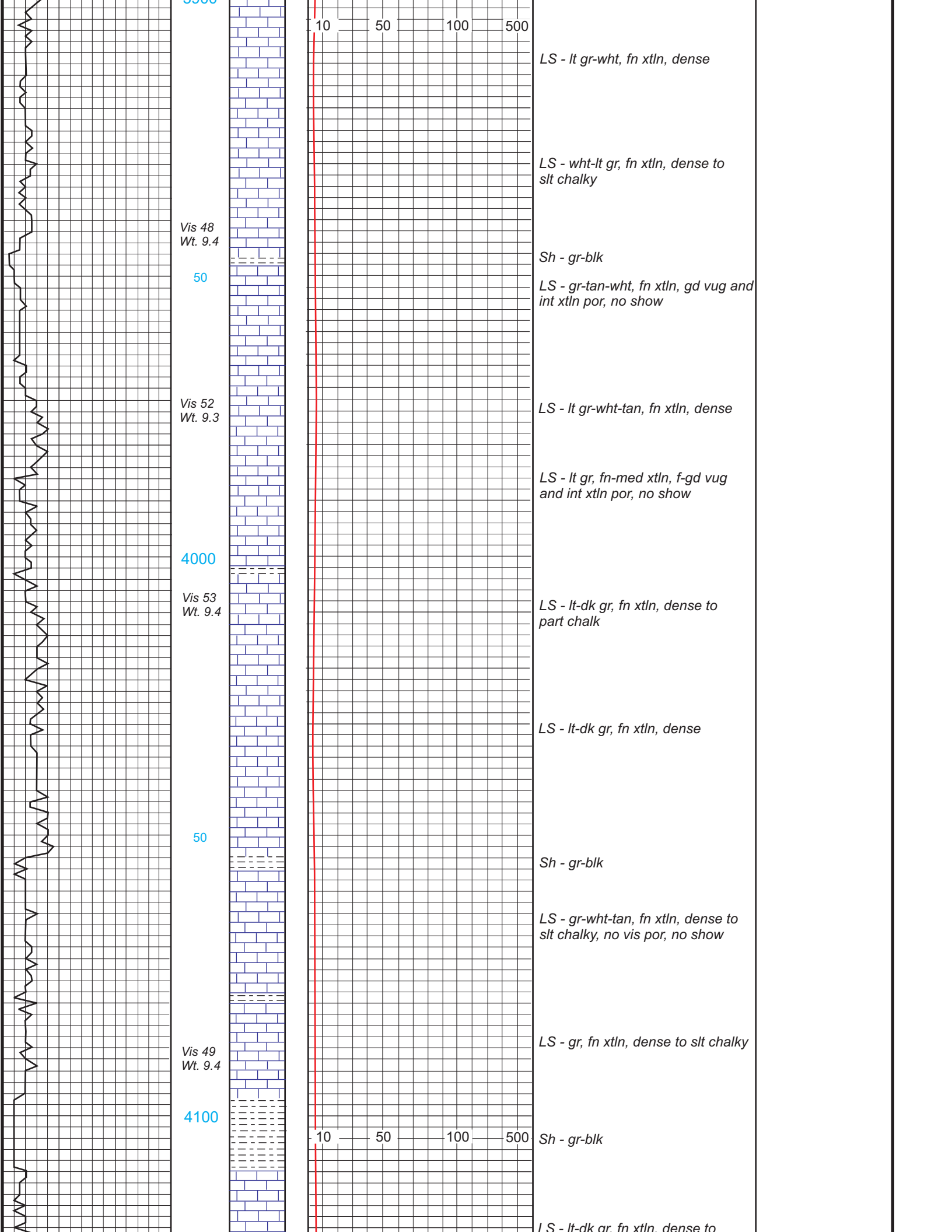


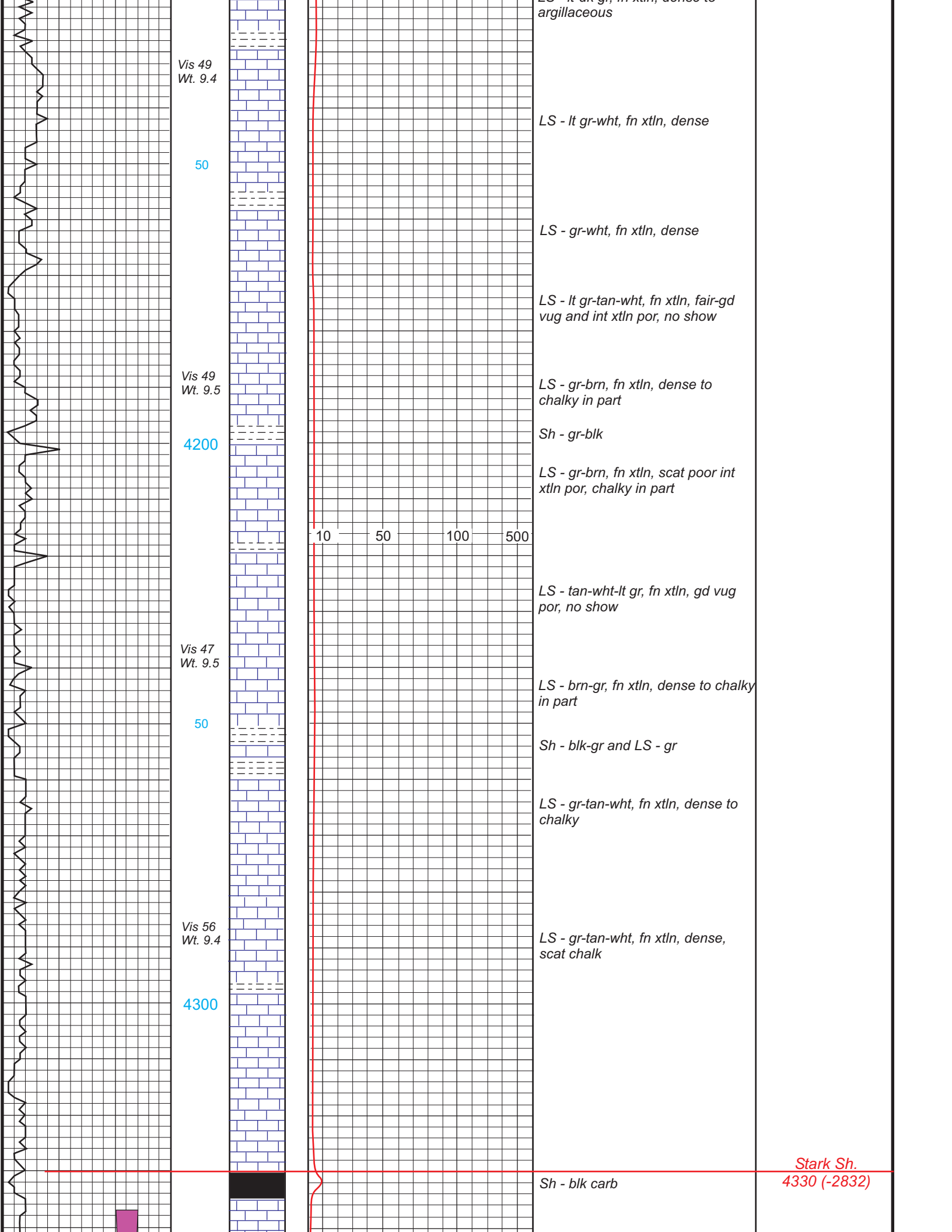












*Vis 49
Wt. 9.4*

50

*Vis 49
Wt. 9.5*

4200

*Vis 47
Wt. 9.5*

50

*Vis 56
Wt. 9.4*

4300

10 50 100 500

LS - lt gr, fn xtlr, dense to argillaceous

LS - lt gr-wht, fn xtlr, dense

LS - gr-wht, fn xtlr, dense

LS - lt gr-tan-wht, fn xtlr, fair-gd vug and int xtlr por, no show

LS - gr-brn, fn xtlr, dense to chalky in part

Sh - gr-blk

LS - gr-brn, fn xtlr, scat poor int xtlr por, chalky in part

LS - tan-wht-lt gr, fn xtlr, gd vug por, no show

LS - brn-gr, fn xtlr, dense to chalky in part

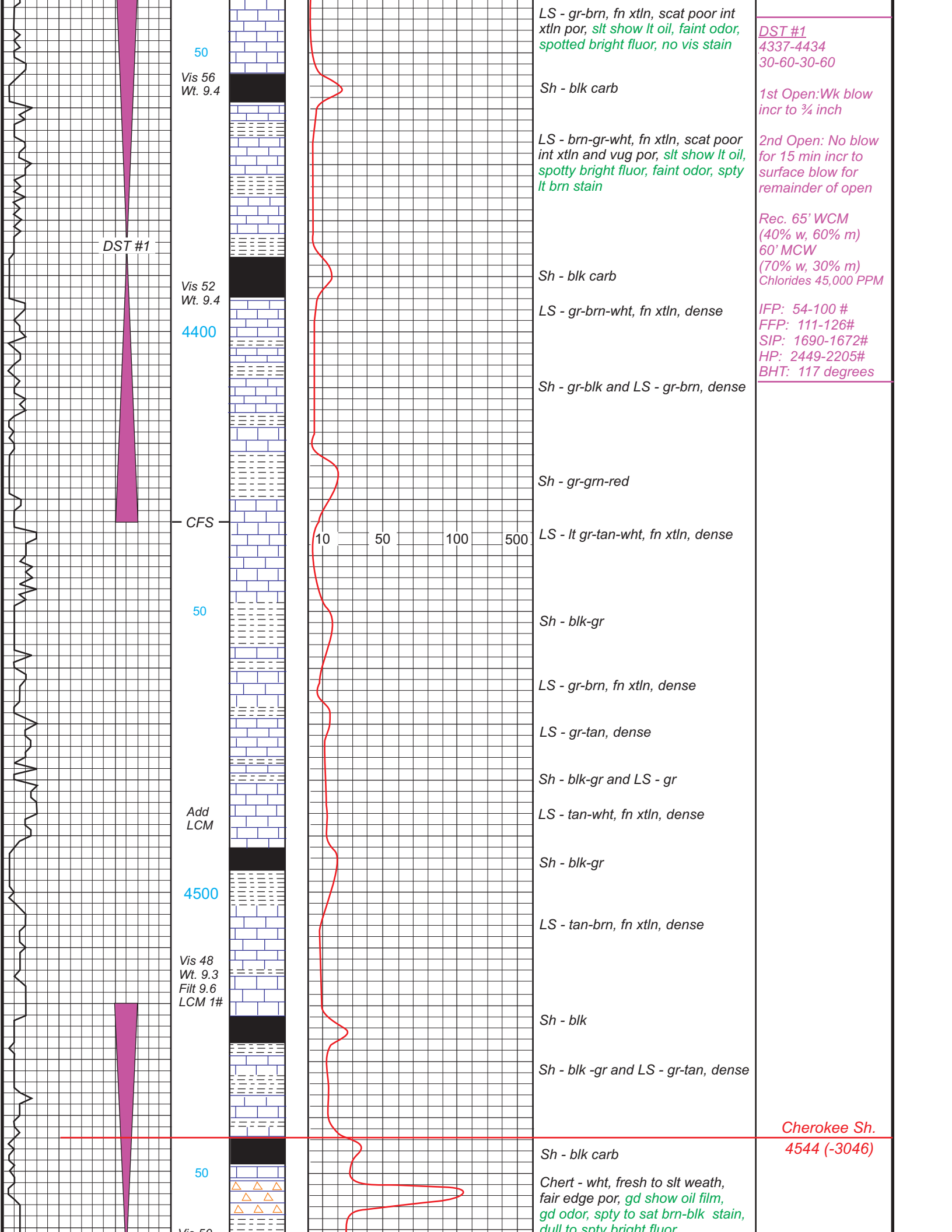
Sh - blk-gr and LS - gr

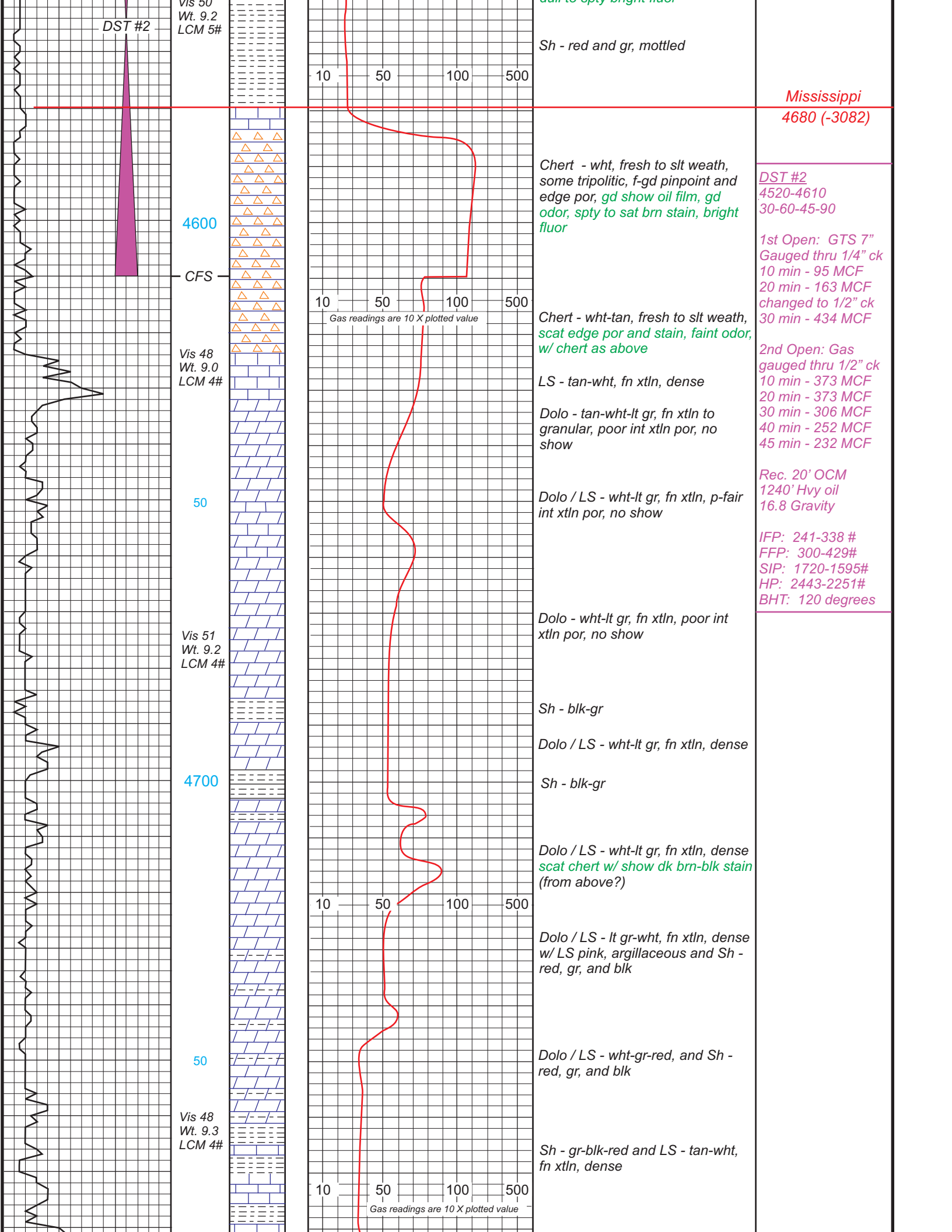
LS - gr-tan-wht, fn xtlr, dense to chalky

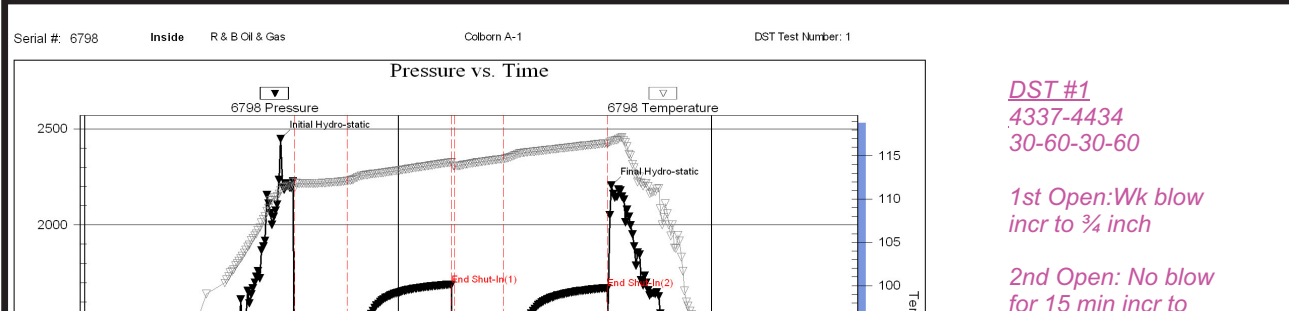
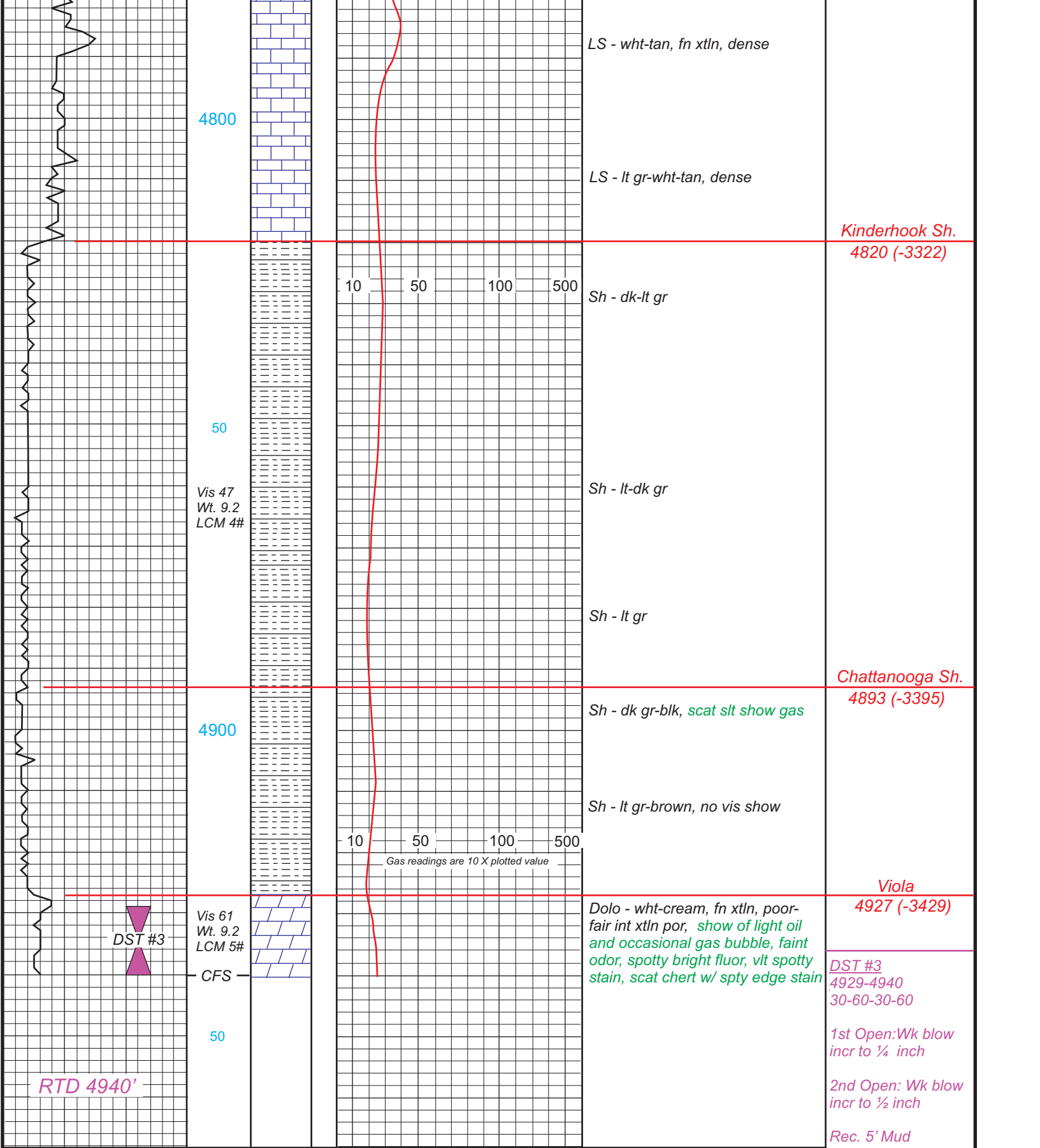
LS - gr-tan-wht, fn xtlr, dense, scat chalk

Sh - blk carb

*Stark Sh.
4330 (-2832)*







DST #3
4929-4940
30-60-30-60

1st Open: Wk blow
incr to ¼ inch

2nd Open: Wk blow
incr to ½ inch

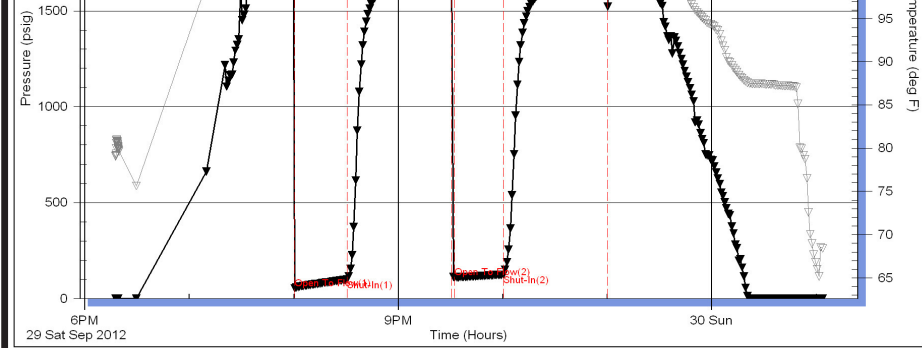
Rec. 5' Mud

IFP: 16-22 #
FFP: 17-21#
SIP: 84-85#
HP: 2614-2461#
BHT: 124 degrees

DST #1
4337-4434
30-60-30-60

1st Open: Wk blow
incr to ¾ inch

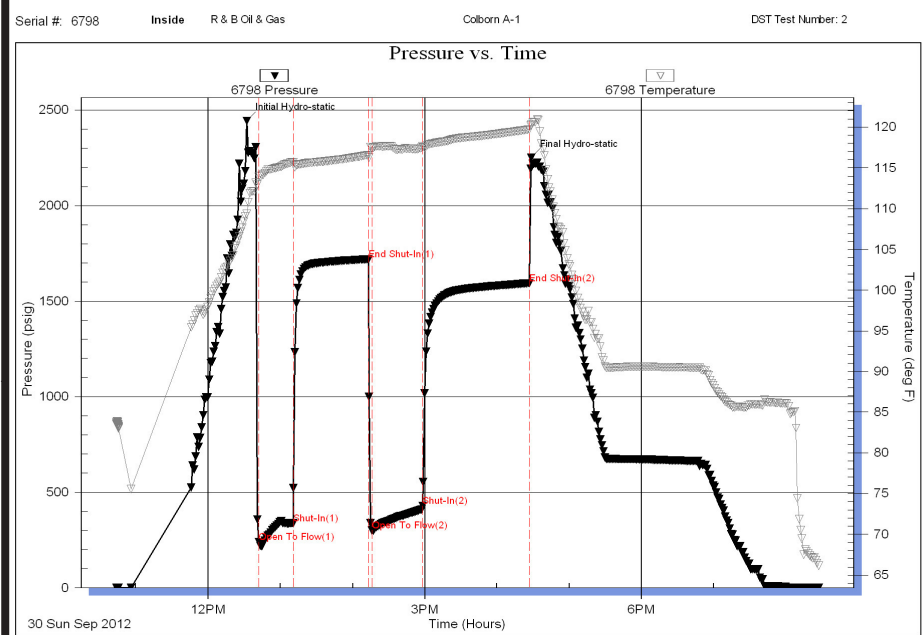
2nd Open: No blow
for 15 min incr to



13: 5000 psi
 surface blow for remainder of open

Rec. 65' WCM
 (40% w, 60% m)
 60' MCW
 (70% w, 30% m)
 Chlorides 45,000 PPM

IFP: 54-100 #
 FFP: 111-126#
 SIP: 1690-1672#
 HP: 2449-2205#
 BHT: 117 degrees



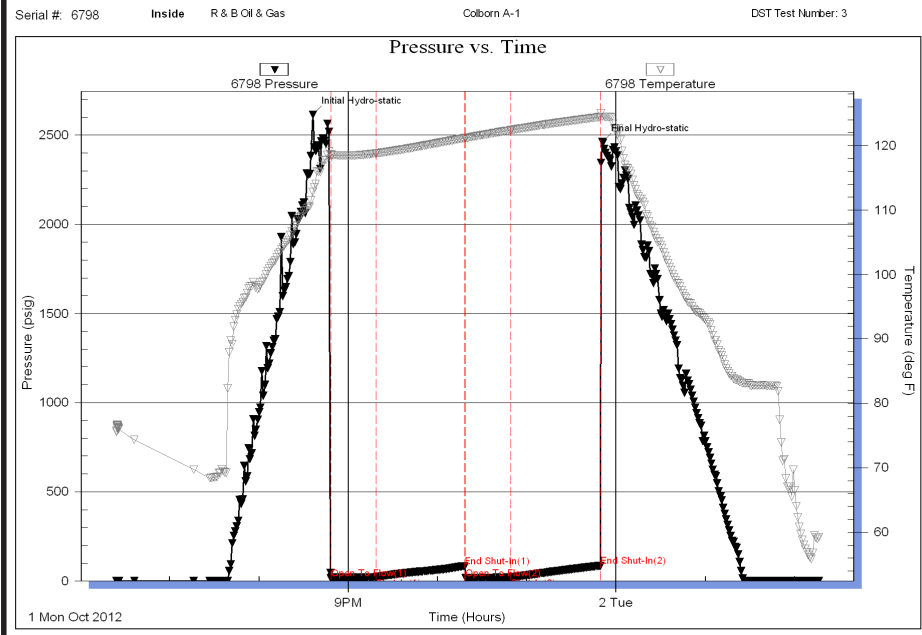
DST #2
 4520-4610
 30-60-45-90

1st Open: GTS 7"
 Gauged thru 1/4" ck
 10 min - 95 MCF
 20 min - 163 MCF
 changed to 1/2" ck
 30 min - 434 MCF

2nd Open: Gas
 gauged thru 1/2" ck
 10 min - 373 MCF
 20 min - 373 MCF
 30 min - 306 MCF
 40 min - 252 MCF
 45 min - 232 MCF

Rec. 20' OCM
 1240' Hvy oil
 16.8 Gravity

IFP: 241-338 #
 FFP: 300-429#
 SIP: 1720-1595#
 HP: 2443-2251#
 BHT: 120 degrees



DST #3
 4929-4940
 30-60-30-60

1st Open: Wk blow
 incr to 1/4 inch
 2nd Open: Wk blow
 incr to 1/2 inch

Rec. 5' Mud

IFP: 16-22 #
 FFP: 17-21#
 SIP: 84-85#
 HP: 2614-2461#
 BHT: 124 degrees

