Timothy G. Pierce

Petroleum Geologist

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Jody Oil and Gas Inc.

LEASE Jack #5

FIELD Spivey-Grabs

LOCATION 1650' FSL & 3290' FEL

SEC 19 TWSP 31 S RGE 8 W

COUNTY Harper STATE Kansas

CONTRACTOR Duke Drilling Company Rig #7

SPUD 9-24-2021 COMP 10-02-2021

RTD 4780 LTD 4786

MUD UP 3104 TYPE MUD Chemical

SAMPLES SAVED FROM 2900 TO RTD

DRILLING TIME KEPT FROM 2300 TO RTD

SAMPLES EXAMINED FROM 3350 TO RTD

GEOLOGICAL SUPERVISION FROM 3415' to RTD

GEOLOGIST ON WELL Tim Pierce

ELEVATIONS

KB 1578'

DF

GL 1565'

Measurements Are All From Kelly Bushing

CASING

CONDUCTOR

SURFACE 8-5/8" at 260'

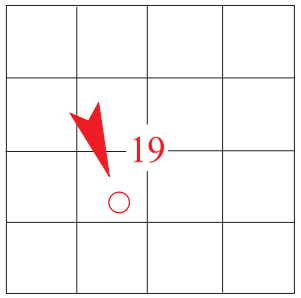
PRODUCTION 5-1/2" at 4779'

ELECTRICAL SURVEYS

DIL/CN-CD/Micro

ELI Wireline

FORMATION TOPS	ELECTRIC LOG	SAMPLE
Onaga Shale	2339 (-761)	2342 (-764)
Topeka LS	2933 (-1355)	2932 (-1354)
Heebner Shale	3382 (-1804)	3380 (-1802)
Lansing	3613 (-2035)	3609 (-2031)
Stark Shale	4038 (-2460)	4034 (-2456)
Cherokee Shale	4274 (-2696)	4273 (-2695)
Mississippi	4348 (-2770)	4353 (-2775)
Viola	4702 (-3124)	4706 (-3128)
Simpson	4755 (-3178)	4750 (-3172)



API# 15-077-22,187

REMARKS

The Jack #5 ran structurally similar to the Jack #1 well which was plugged due to a casing leak. Good oil and gas shows were observed in the top 75 feet of Mississippi Chert. Production pipe was set to produce The Mississippi. The well was drilled to the Simpson to check for possible deeper pay zones since no other wells in This section had been drilled deep. No shows were observed in any other zones.

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LEGEND

Dolomite

Chert

Cherty LS

Carb Sh

Shale

Limestone

Sandstone

Anhydrite

GAS SCALE

LITHOLO

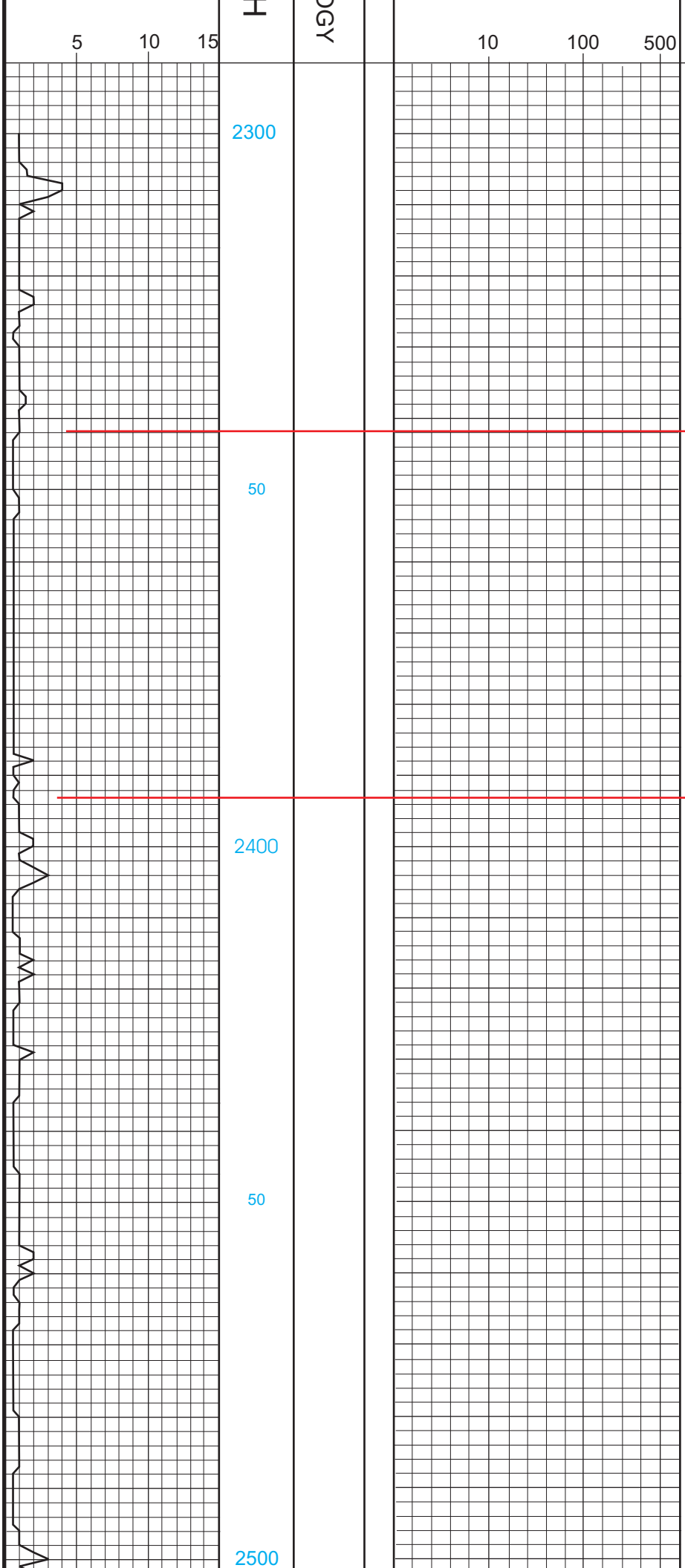
DEPTI

DRILLING TIME IN MINUTES PER FOOT

Rate of Penetration Decreases

SAMPLE DESCRIPTION

REMARKS



9-24-21 - MIRT
Spud @ 9:00 PM
Drill 12-/4" to 260'
Set 6 jts(253') of
8-5/8" X 23# @ 260'
w/175 sx 60/40 Poz
2% gel, 3% cc
PD 5:45 AM 9-25-21
cement did circ
Job by Hurricane
1/4 degree @ 260'

9-25-21 - 7:00 AM
WOC @ 260'

9-26-21 - 7:00 AM
drlg @ 1185'

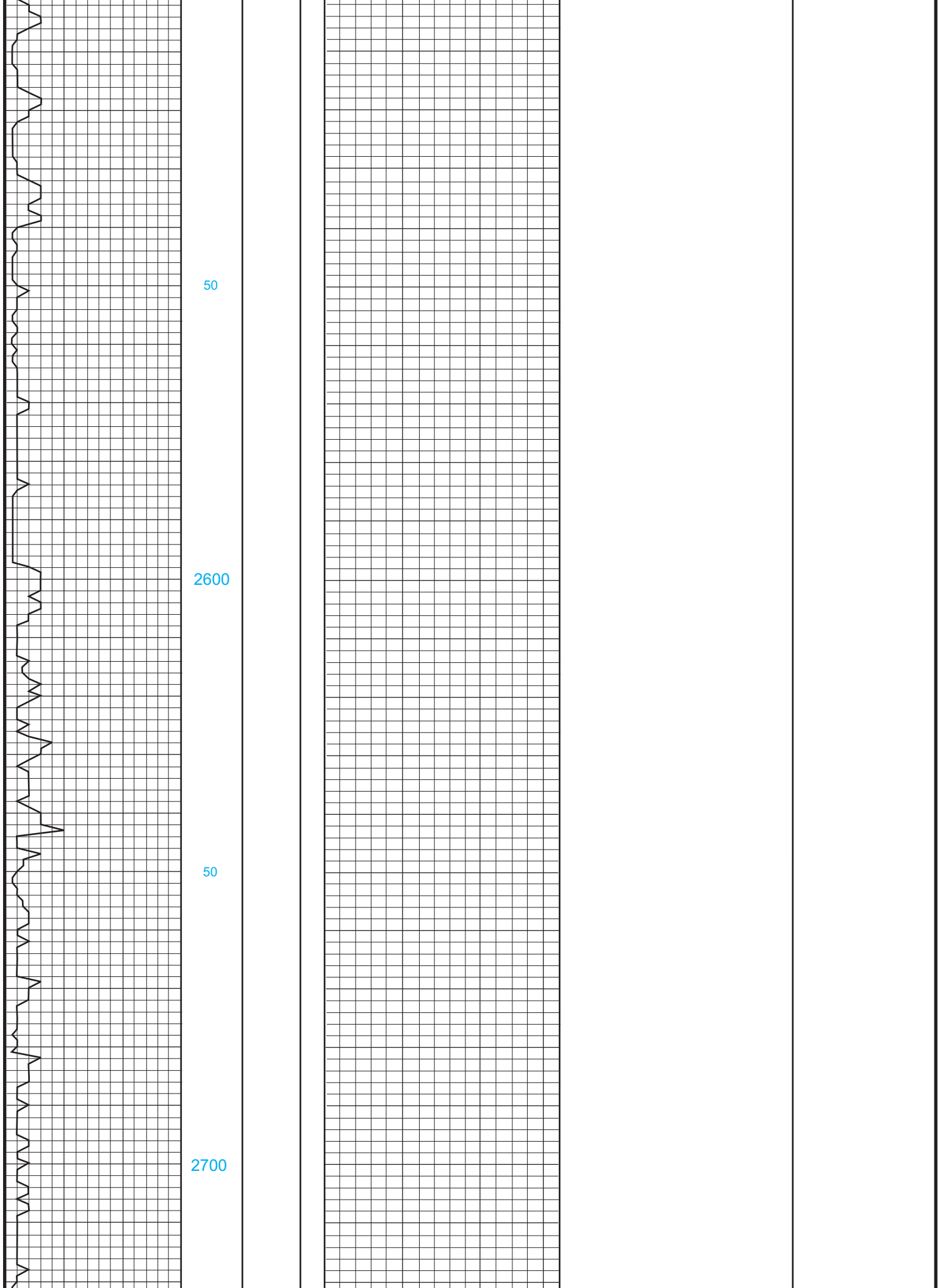
9-27-21 - 7:00 AM
drlg @ 2200'

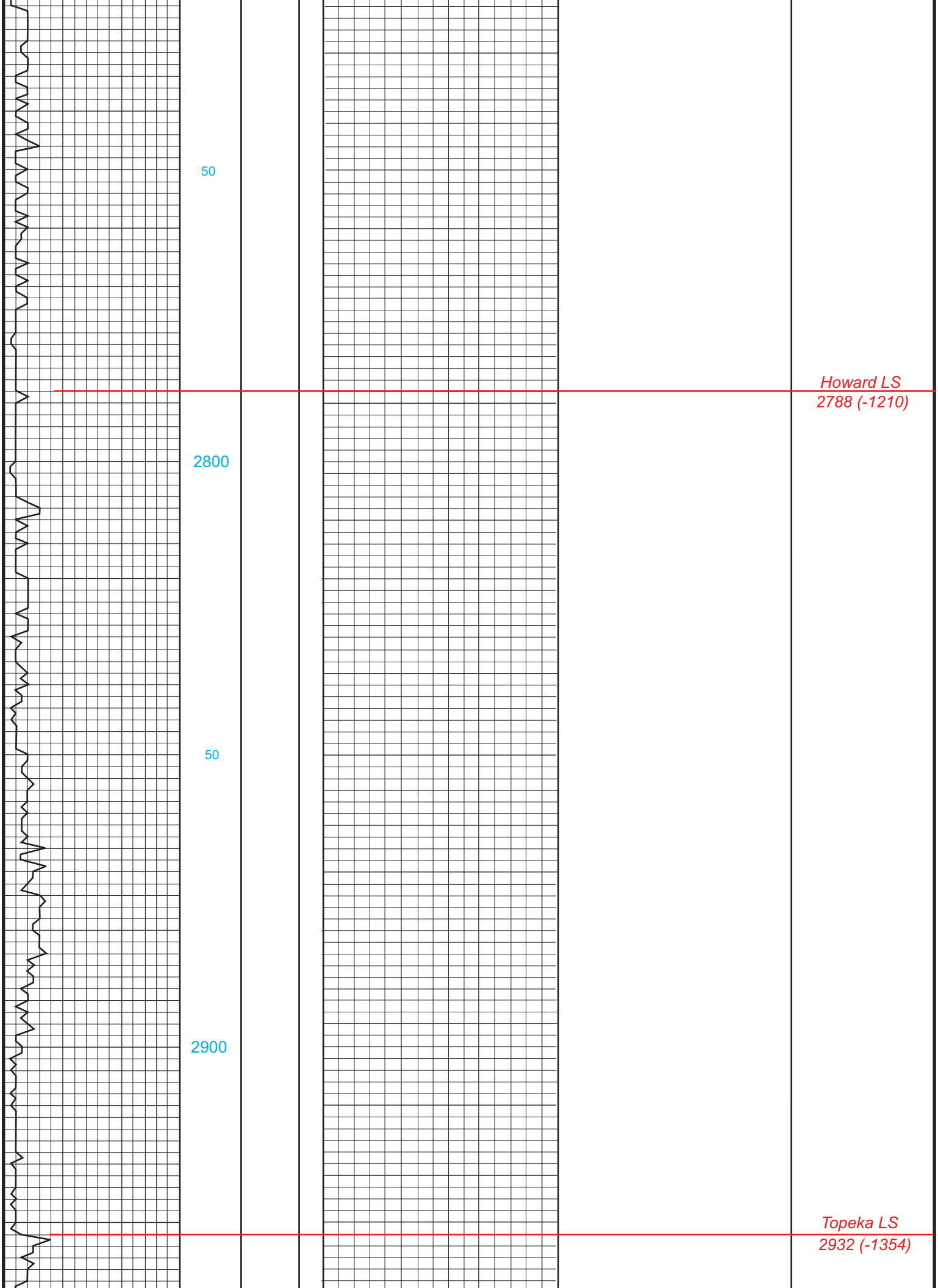
9-28-21 - 7:00 AM
drlg @ 3073'
displace mud 3104'

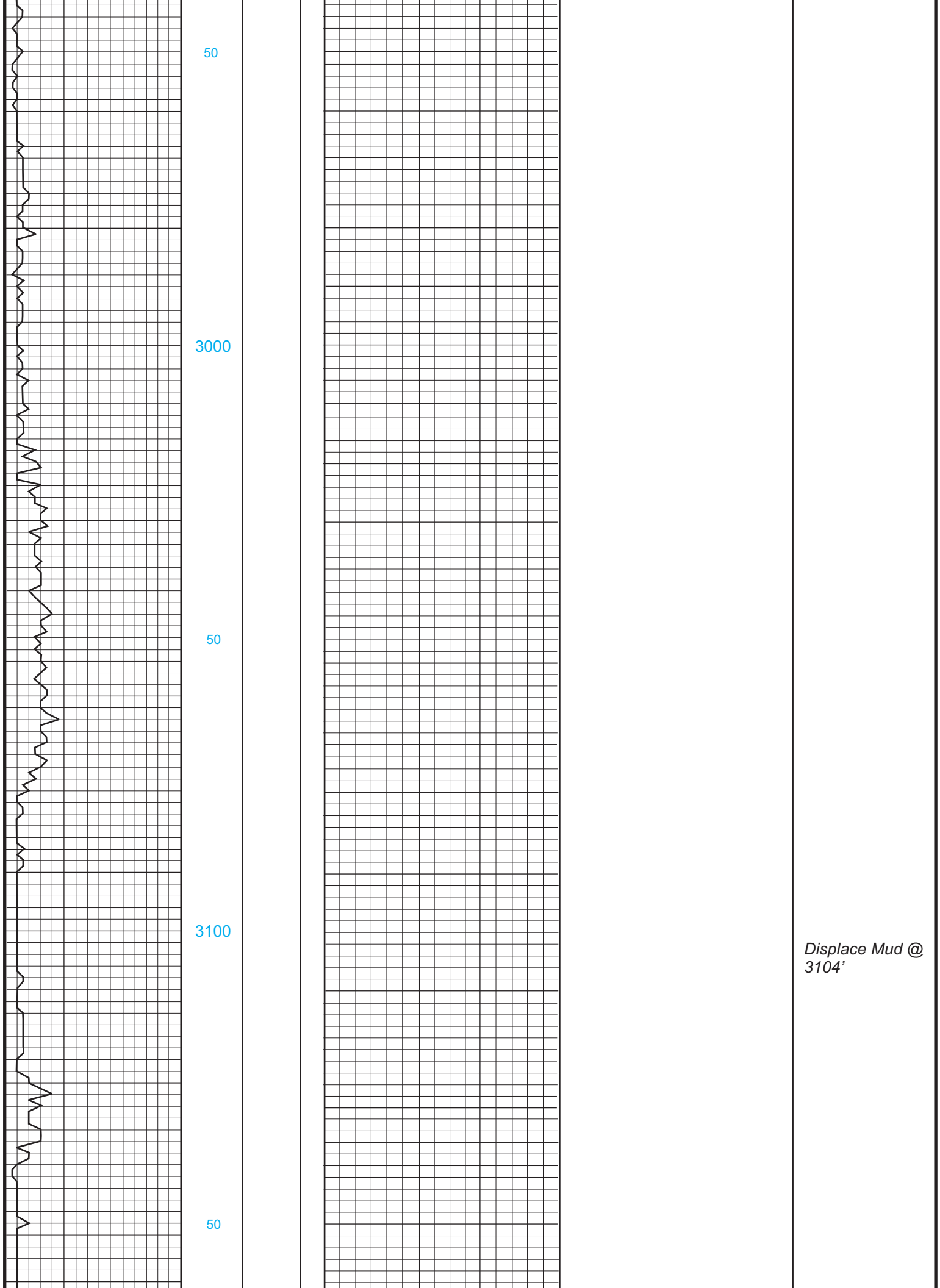
9-29-21 - 7:00 AM
drlg @ 3730'

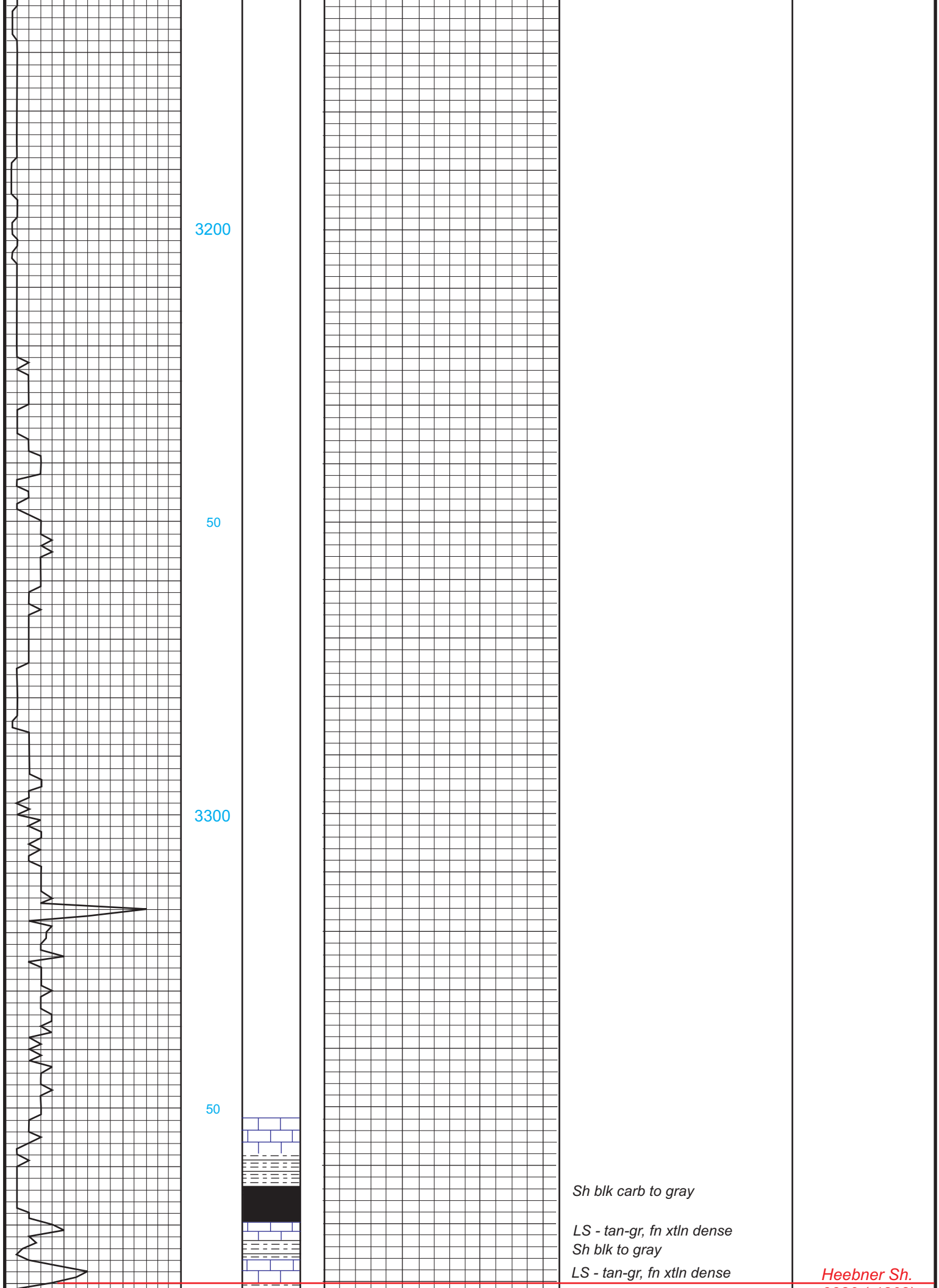
9-30-21 - 7:00 AM
drlg @ 4240'

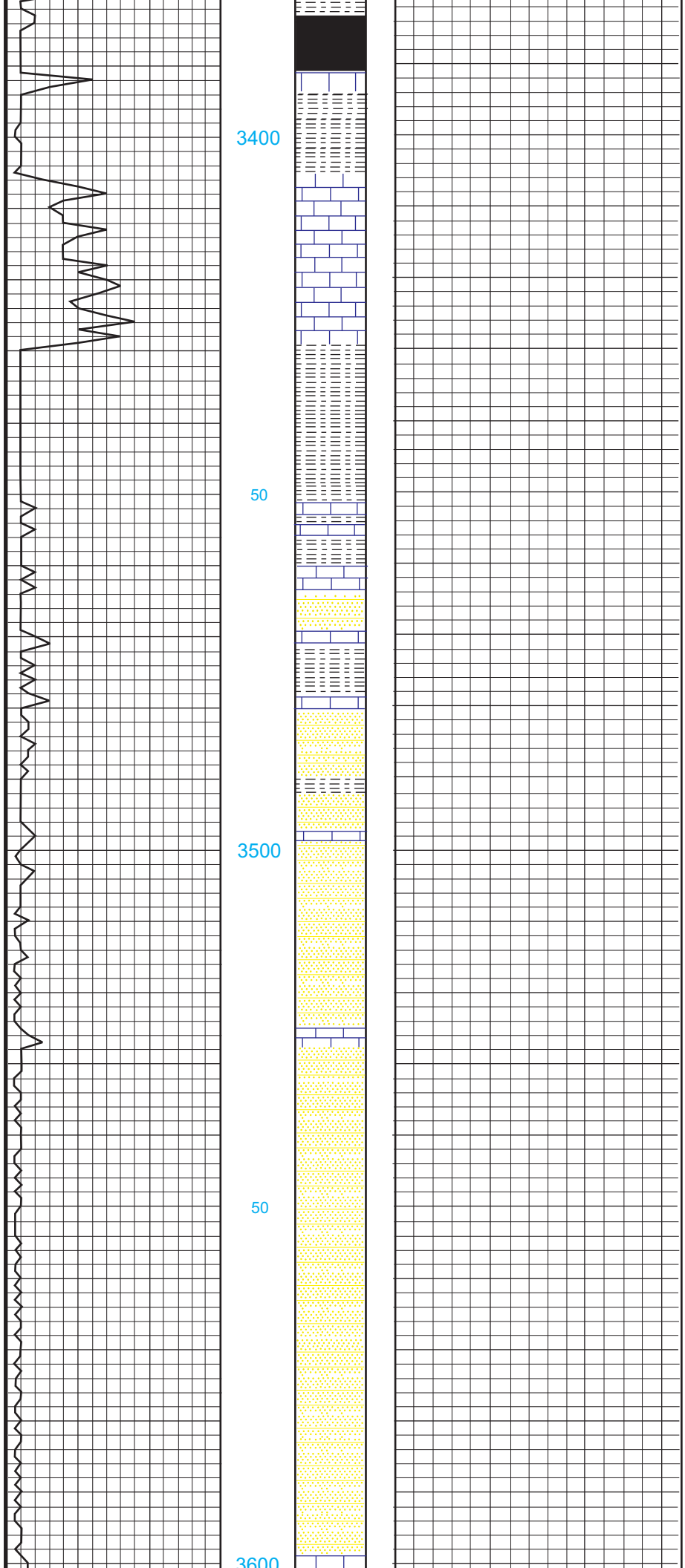
10-01-21 - 7:00 AM
TOH for logs,
RTD 4780'


50
2600
50
2700


50
Howard LS
2788 (-1210)
2800
50
2900
Topeka LS
2932 (-1354)


50
3000
50
3100
50
Displace Mud @ 3104’


3200
50
3300
50
Sh blk carb to gray
LS - tan-gr, fn xtln dense
Sh blk to gray
LS - tan-gr, fn xtln dense
Heebner Sh.



Sh - gr and blk carb

LS - tan-gr, fn xtln, dense

Sh blk to gray

LS - gr-tan, fn xtln, chalky to dense

LS - tan-gr, fn xtln dense

Sh blk to gray

Sh - gr-blk

SS - gr-tan, fn grained, tightly cem, and silty

LS - gr-wht, dense to chalky and Sh - gr

SS - gr-wht, fn grn, poorly sort, micaceous

SS - gr, fn grained, micaceous, to silty

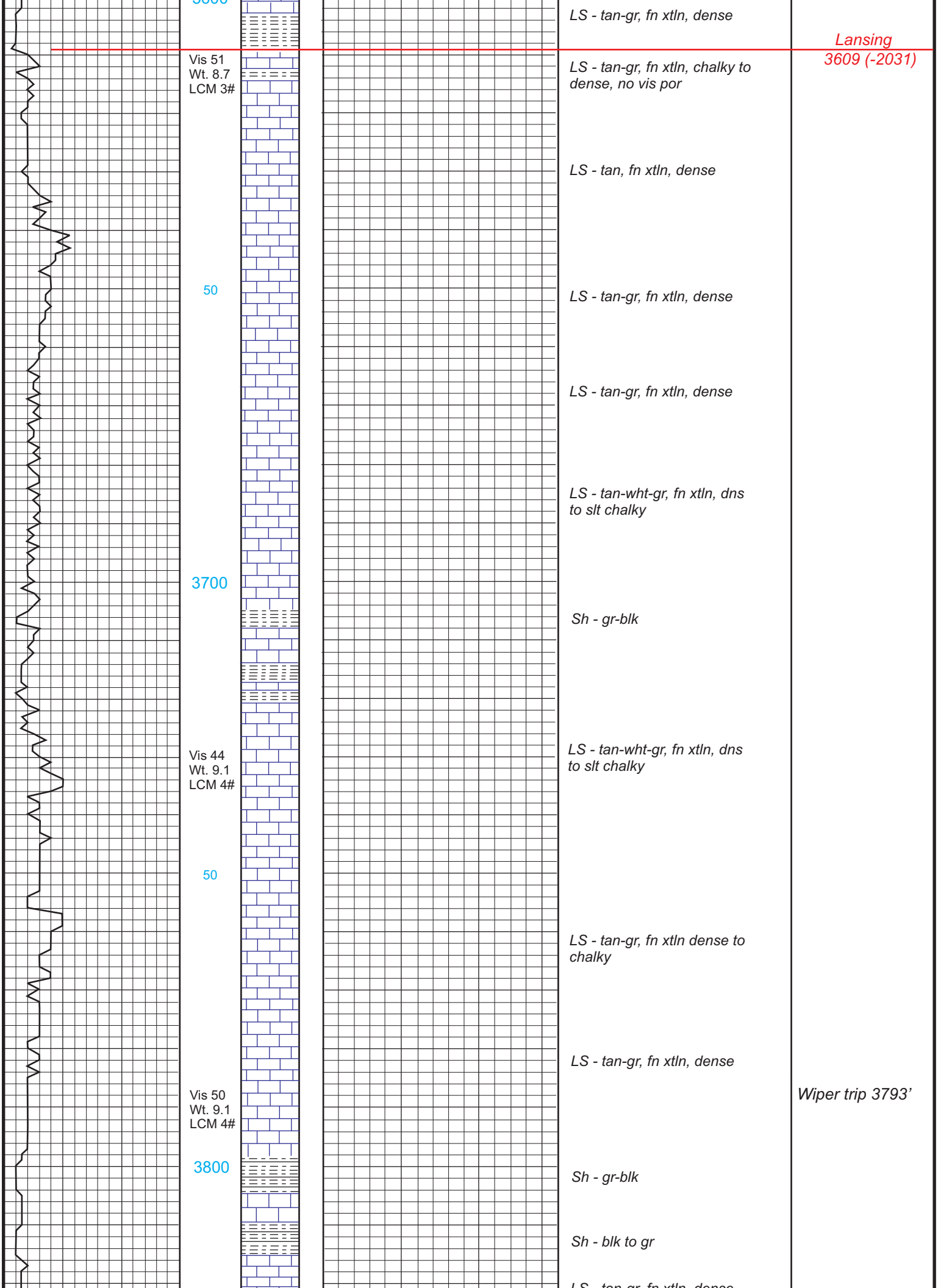
LS - gr-wht, dense

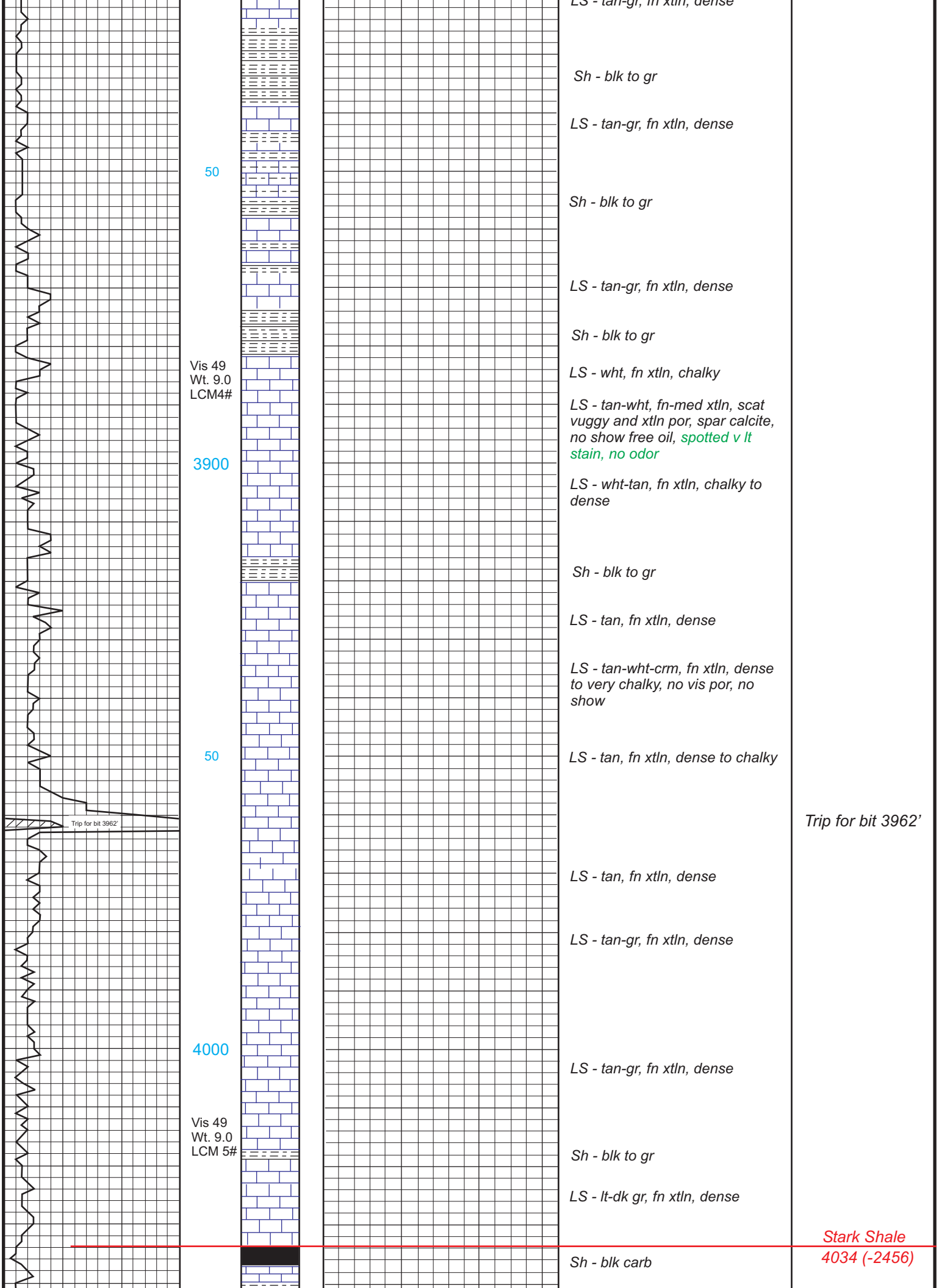
SS - gr-wht-tan, fn grn, poor sorted, semi-fria to friable

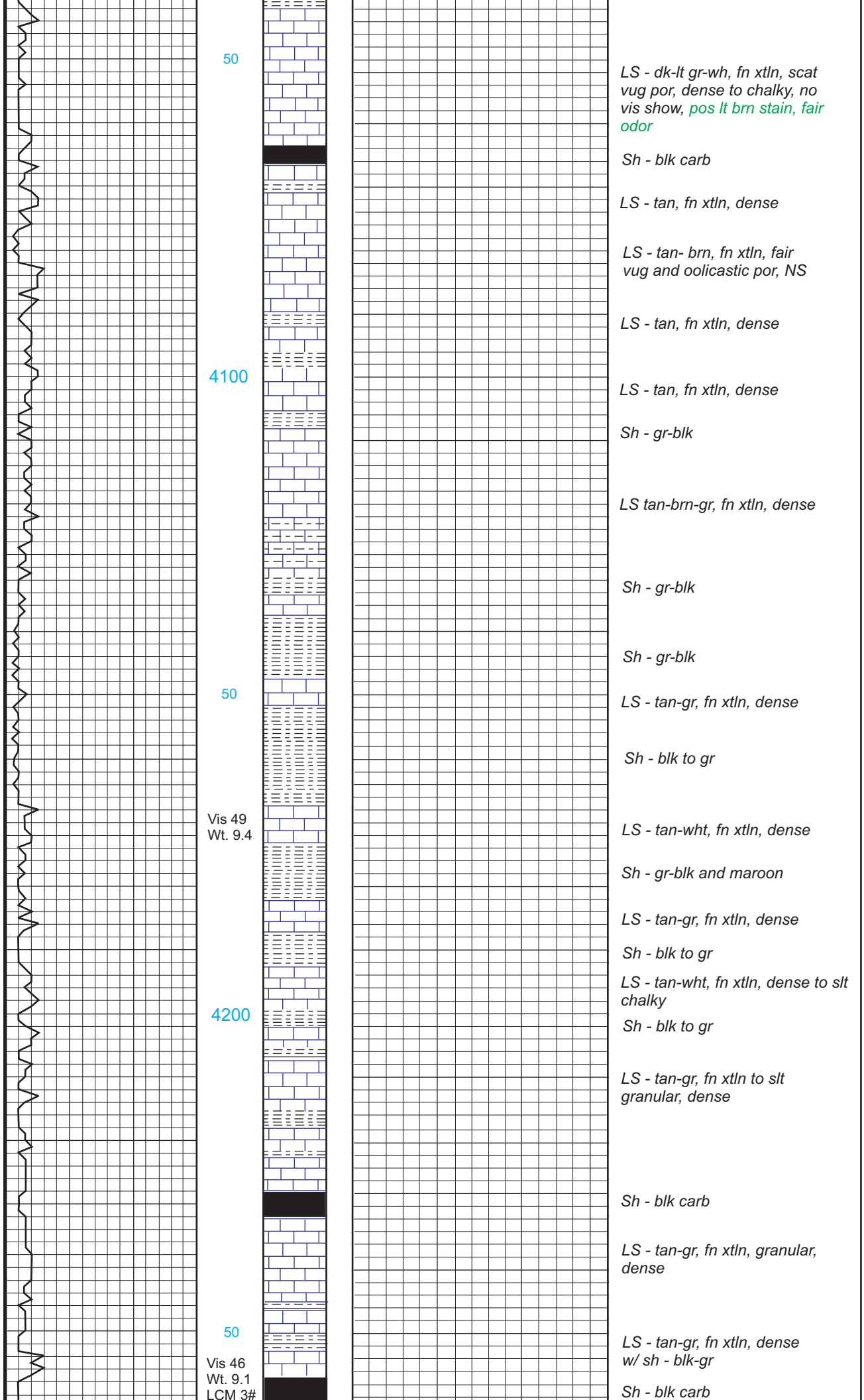
SS - wht-gr, fn grn, mica, friable

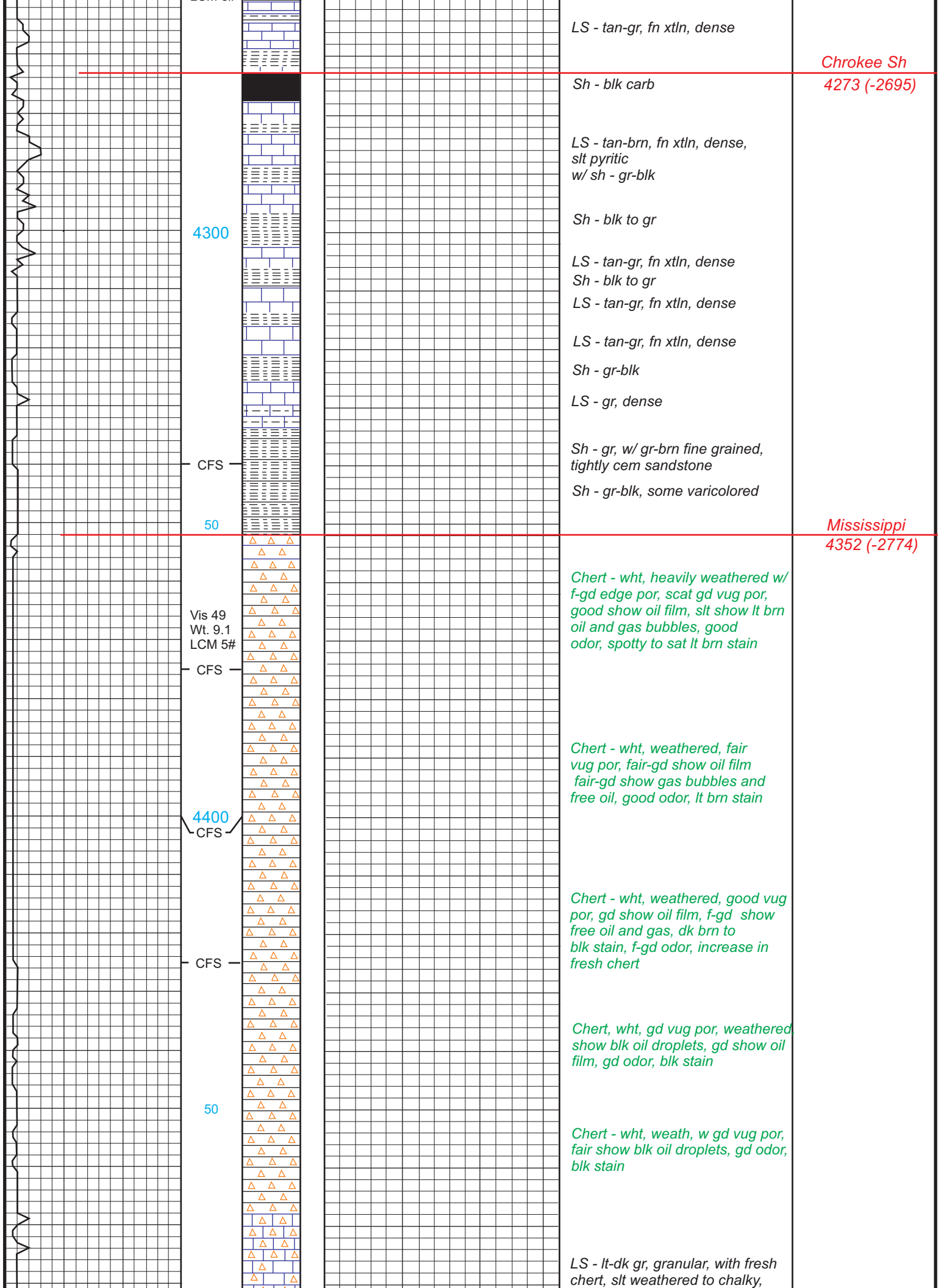
3380 (-1802)

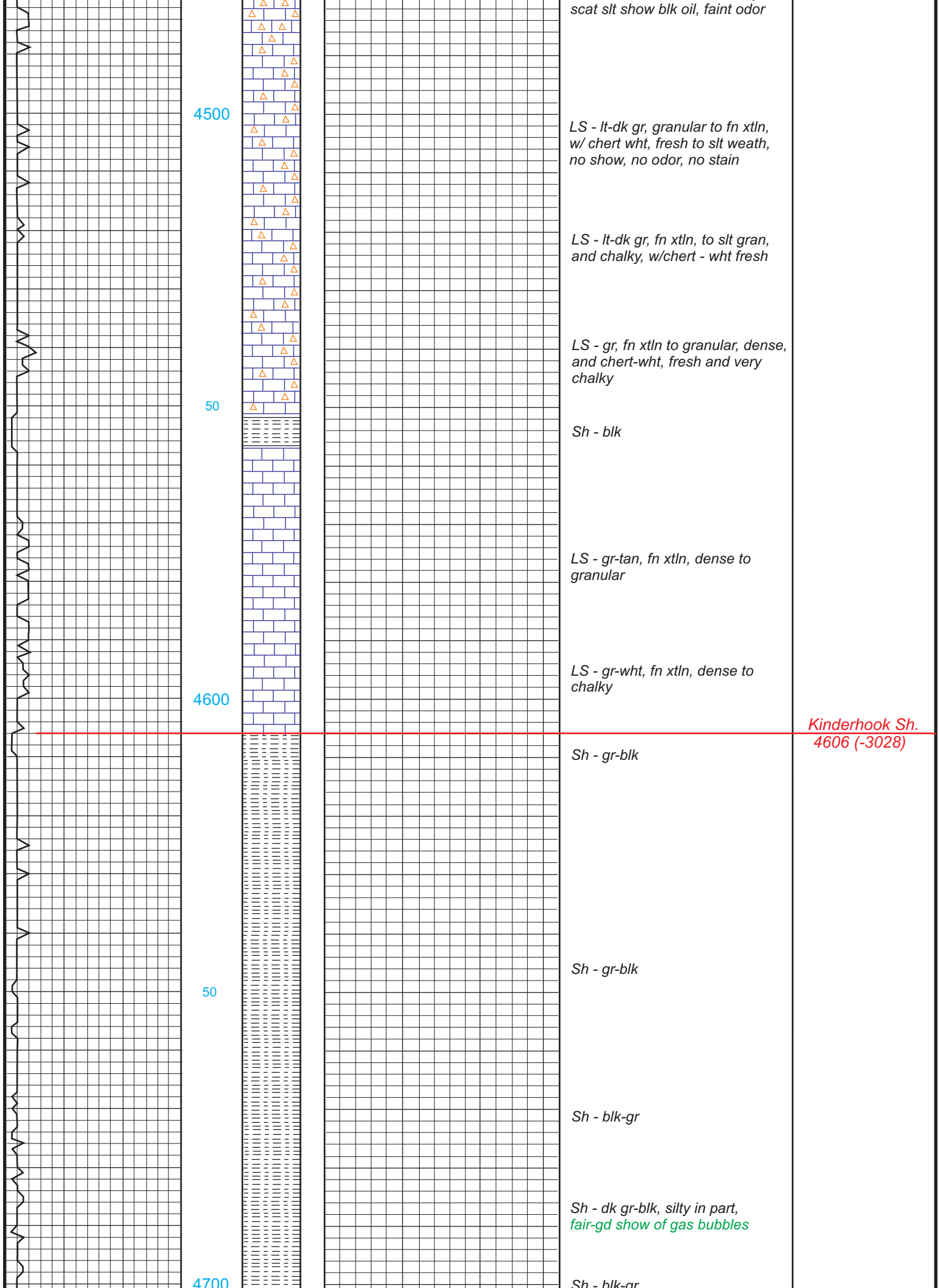
Geologist on Location 3415' 8:00 PM 9-28-21

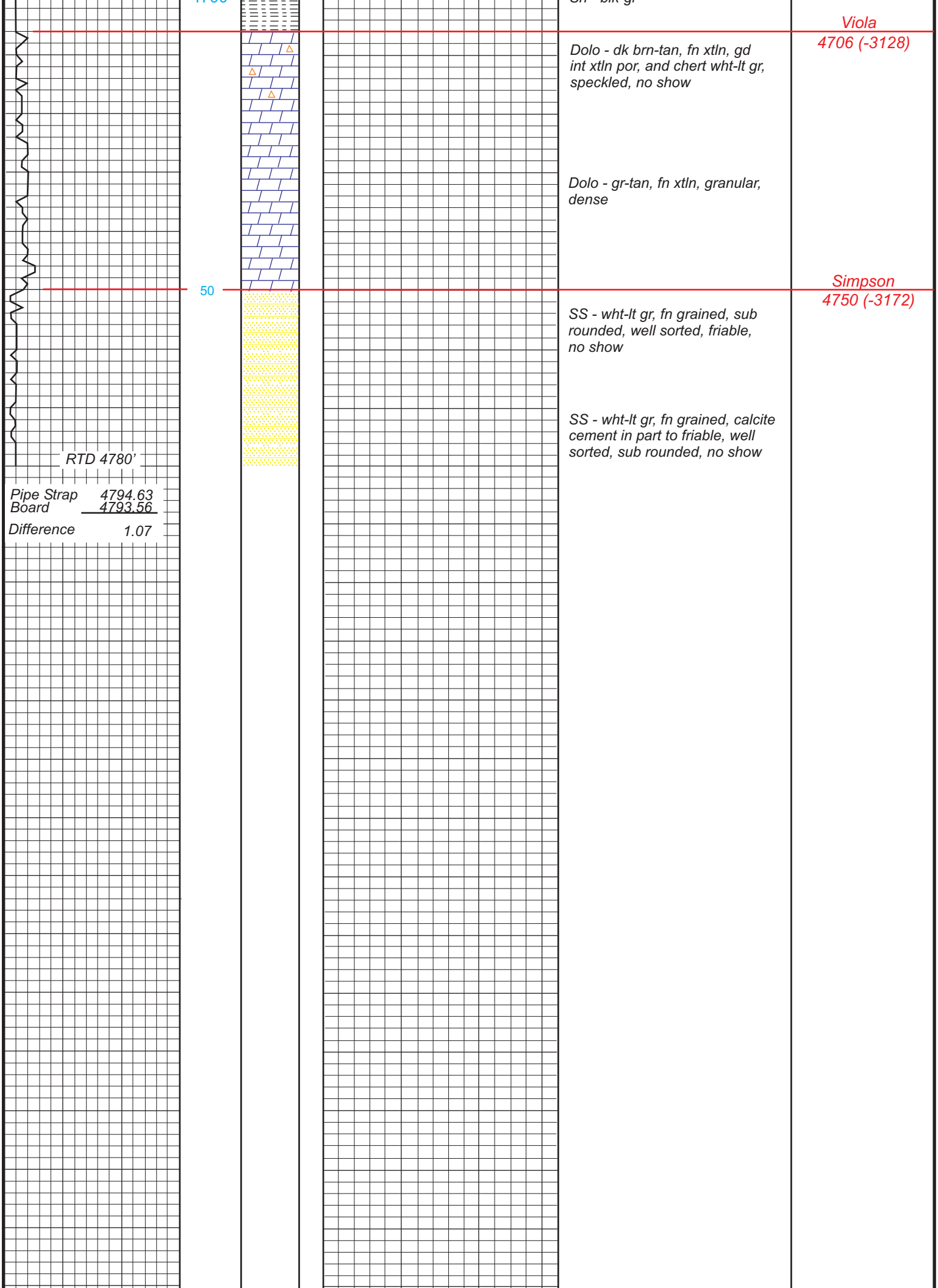

LS - tan-gr, fn xtln, dense
Lansing
3609 (-2031)
Vis 51
Wt. 8.7
LCM 3#
LS - tan-gr, fn xtln, chalky to dense, no vis por
LS - tan, fn xtln, dense
50
LS - tan-gr, fn xtln, dense
LS - tan-gr, fn xtln, dense
LS - tan-wht-gr, fn xtln, dns to slt chalky
3700
Sh - gr-blk
Vis 44
Wt. 9.1
LCM 4#
LS - tan-wht-gr, fn xtln, dns to slt chalky
50
LS - tan-gr, fn xtln dense to chalky
LS - tan-gr, fn xtln, dense
Vis 50
Wt. 9.1
LCM 4#
Wiper trip 3793'
3800
Sh - gr-blk
Sh - blk to gr


LS - tan-gr, fn xtln, dense
Sh - blk to gr
LS - tan-gr, fn xtln, dense
50
Sh - blk to gr
LS - tan-gr, fn xtln, dense
Sh - blk to gr
Vis 49
Wt. 9.0
LCM4#
LS - wht, fn xtln, chalky
LS - tan-wht, fn-med xtln, scat vuggy and xtln por, spar calcite, no show free oil, spotted v lt stain, no odor
3900
LS - wht-tan, fn xtln, chalky to dense
Sh - blk to gr
LS - tan, fn xtln, dense
LS - tan-wht-crm, fn xtln, dense to very chalky, no vis por, no show
50
LS - tan, fn xtln, dense to chalky
Trip for bit 3962'
Trip for bit 3962'
LS - tan, fn xtln, dense
LS - tan-gr, fn xtln, dense
4000
LS - tan-gr, fn xtln, dense
Vis 49
Wt. 9.0
LCM 5#
Sh - blk to gr
LS - lt-dk gr, fn xtln, dense
Stark Shale
4034 (-2456)
Sh - blk carb


50
4100
50
Vis 49
Wt. 9.4
4200
50
Vis 46
Wt. 9.1
LCM 3#
LS - dk-lt gr-wh, fn xtln, scat vug por, dense to chalky, no vis show, pos lt brn stain, fair odor
Sh - blk carb
LS - tan, fn xtln, dense
LS - tan- brn, fn xtln, fair vug and oolicastic por, NS
LS - tan, fn xtln, dense
LS - tan, fn xtln, dense
Sh - gr-blk
LS tan-brn-gr, fn xtln, dense
Sh - gr-blk
Sh - gr-blk
LS - tan-gr, fn xtln, dense
Sh - blk to gr
LS - tan-wht, fn xtln, dense
Sh - gr-blk and maroon
LS - tan-gr, fn xtln, dense
Sh - blk to gr
LS - tan-wht, fn xtln, dense to slt chalky
Sh - blk to gr
LS - tan-gr, fn xtln to slt granular, dense
Sh - blk carb
LS - tan-gr, fn xtln, granular, dense
LS - tan-gr, fn xtln, dense w/ sh - blk-gr
Sh - blk carb


LS - tan-gr, fn xtln, dense
Chrokee Sh
4273 (-2695)
Sh - blk carb
LS - tan-brn, fn xtln, dense,
slt pyritic
w/ sh - gr-blk
Sh - blk to gr
4300
LS - tan-gr, fn xtln, dense
Sh - blk to gr
LS - tan-gr, fn xtln, dense
LS - tan-gr, fn xtln, dense
Sh - gr-blk
LS - gr, dense
Sh - gr, w/ gr-brn fine grained,
tightly cem sandstone
CFS
Sh - gr-blk, some varicolored
50
Mississippi
4352 (-2774)
Chert - wht, heavily weathered w/
f-gd edge por, scat gd vug por,
good show oil film, slt show lt brn
oil and gas bubbles, good
odor, spotty to sat lt brn stain
Vis 49
Wt. 9.1
LCM 5#
CFS
Chert - wht, weathered, fair
vug por, fair-gd show oil film
fair-gd show gas bubbles and
free oil, good odor, lt brn stain
4400
CFS
Chert - wht, weathered, good vug
por, gd show oil film, f-gd show
free oil and gas, dk brn to
blk stain, f-gd odor, increase in
fresh chert
CFS
Chert, wht, gd vug por, weathered,
show blk oil droplets, gd show oil
film, gd odor, blk stain
50
Chert - wht, weath, w gd vug por,
fair show blk oil droplets, gd odor,
blk stain
LS - lt-dk gr, granular, with fresh
chert, slt weathered to chalky,


scat slt show blk oil, faint odor
4500
LS - lt-dk gr, granular to fn xtln, w/ chert wht, fresh to slt weath, no show, no odor, no stain
LS - lt-dk gr, fn xtln, to slt gran, and chalky, w/chert - wht fresh
LS - gr, fn xtln to granular, dense, and chert-wht, fresh and very chalky
50
Sh - blk
LS - gr-tan, fn xtln, dense to granular
LS - gr-wht, fn xtln, dense to chalky
4600
Kinderhook Sh.
4606 (-3028)
Sh - gr-blk
50
Sh - gr-blk
Sh - blk-gr
Sh - dk gr-blk, silty in part, fair-gd show of gas bubbles
4700
Sh - blk-gr


Viola
4706 (-3128)
Dolo - dk brn-tan, fn xtln, gd int xtln por, and chert wht-lt gr, speckled, no show
Dolo - gr-tan, fn xtln, granular, dense
50
Simpson
4750 (-3172)
SS - wht-lt gr, fn grained, sub rounded, well sorted, friable, no show
SS - wht-lt gr, fn grained, calcite cement in part to friable, well sorted, sub rounded, no show
RTD 4780'
Pipe Strap 4794.63
Board 4793.56
Difference 1.07

