



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

Well Name: SWOB #1
Well Id: 15-165-22144
Location: 407' FSL & 523' FWL SEC. 26 - T 18 S - R 16W
License Number: 15-165-22144
Spud Date: 4/13/2017
Region: RUSH CO., KS
Drilling Completed: 4/17/2017
Surface Coordinates:

Bottom Hole
Coordinates:
Ground Elevation (ft): 1,962' K.B. Elevation (ft): 1,971'
Logged Interval (ft): 1700 To: TD Total Depth (ft): 3,619'
Formation: REAGAN SAND
Type of Drilling Fluid: CHEMICAL MUD

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

OPERATOR

Company: BLACKSTONE PETROLEUM LLC
Address: 363 N VASSAR ST
WICHITA, KANSAS 67208

GEOLOGIST

Name: ROBERT P. (BOB) BAYER II
Company:
Address: 10119 W. Harvest
Wichita, Kansas 67212

Summary

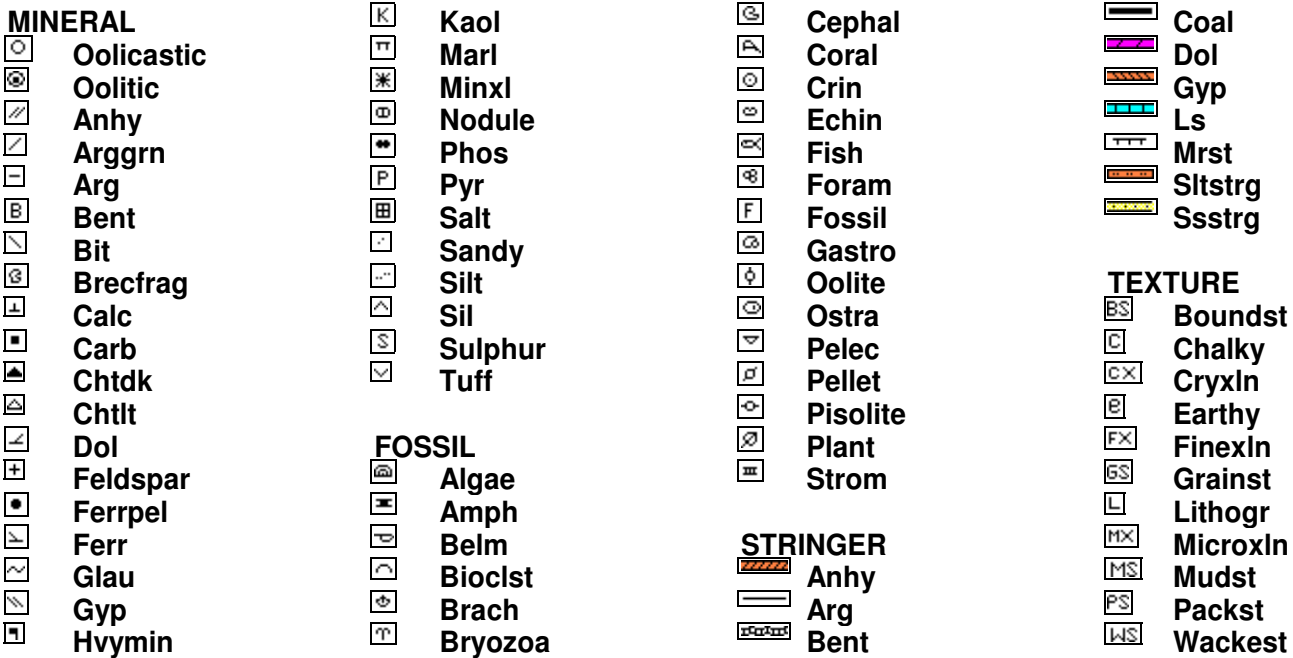
DSTs

Comments

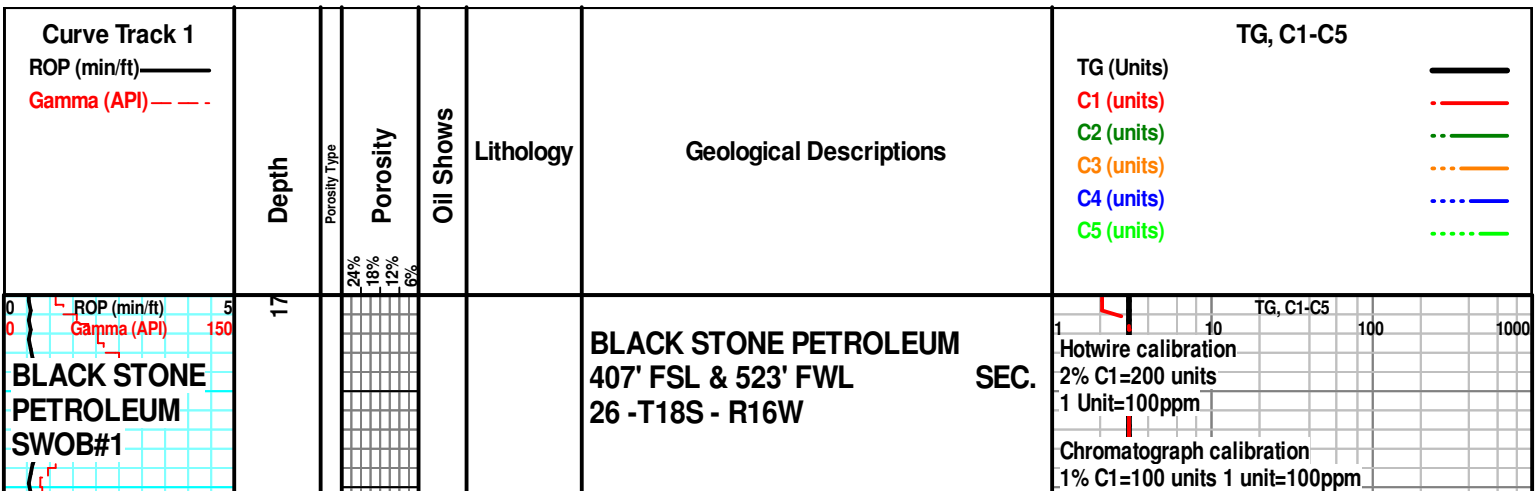
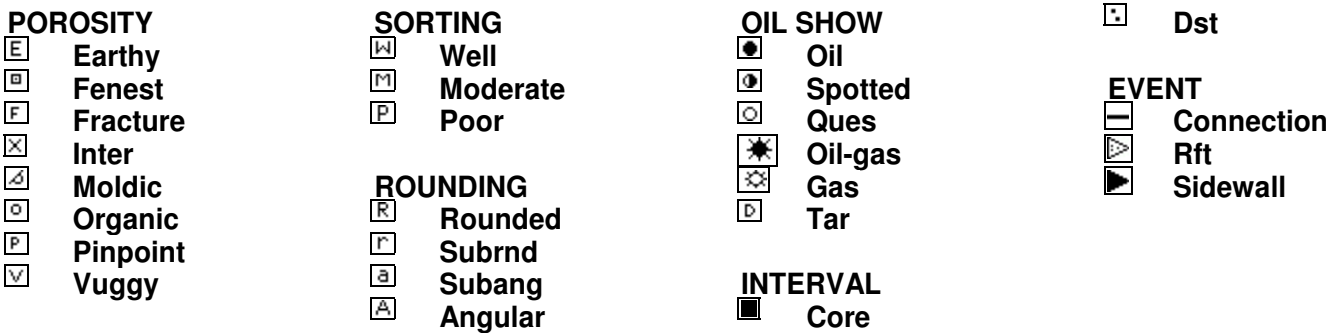
ROCK TYPES



ACCESSORIES



OTHER SYMBOLS



SCALE: 5" = 100'
1' AVERAGE ROP

KB 1971

1750

1800

1850

1900

ROP (min/ft) 5
Gamma (API) 150

Herington MD
1886' /
TVD +83

Krider
MD 1908'
TVD +63

E

E

C

ANHYDRITE, clr, wht, SHALE red, grey, silty sandy in part,

AA

AA

LIMESTONE, dolomitic, grey, firm, vf - med grn, NO SHOW, NO FLUORESENCE, NO ODOR, (NSFO)

LIMESTONE, dolomitic, grey, firm, very fine - medium grain, NSFO

LIMESTONE, dolomitic, some greyish brown, grey, firm, very fine - medium grain, NSFO

LIMESTONE, dolomite greyish brown, grey, some darker grey pelloids, firm, very fine - medium grain, some pinpoint porosity, NSFO

1% C2=100 units 1 unit=100ppm
1% C3=100 units 1 unit=100ppm
1% iC4=100 units 1 unit=100ppm
1% nC4=100 units 1 unit=100ppm

Geologist on location at 5:30 p.m. 4/14/2017

HW = Black
C1 = Blue
C2 = Yellow
C3 = Green
iC4 = Red
nC4 = Orange

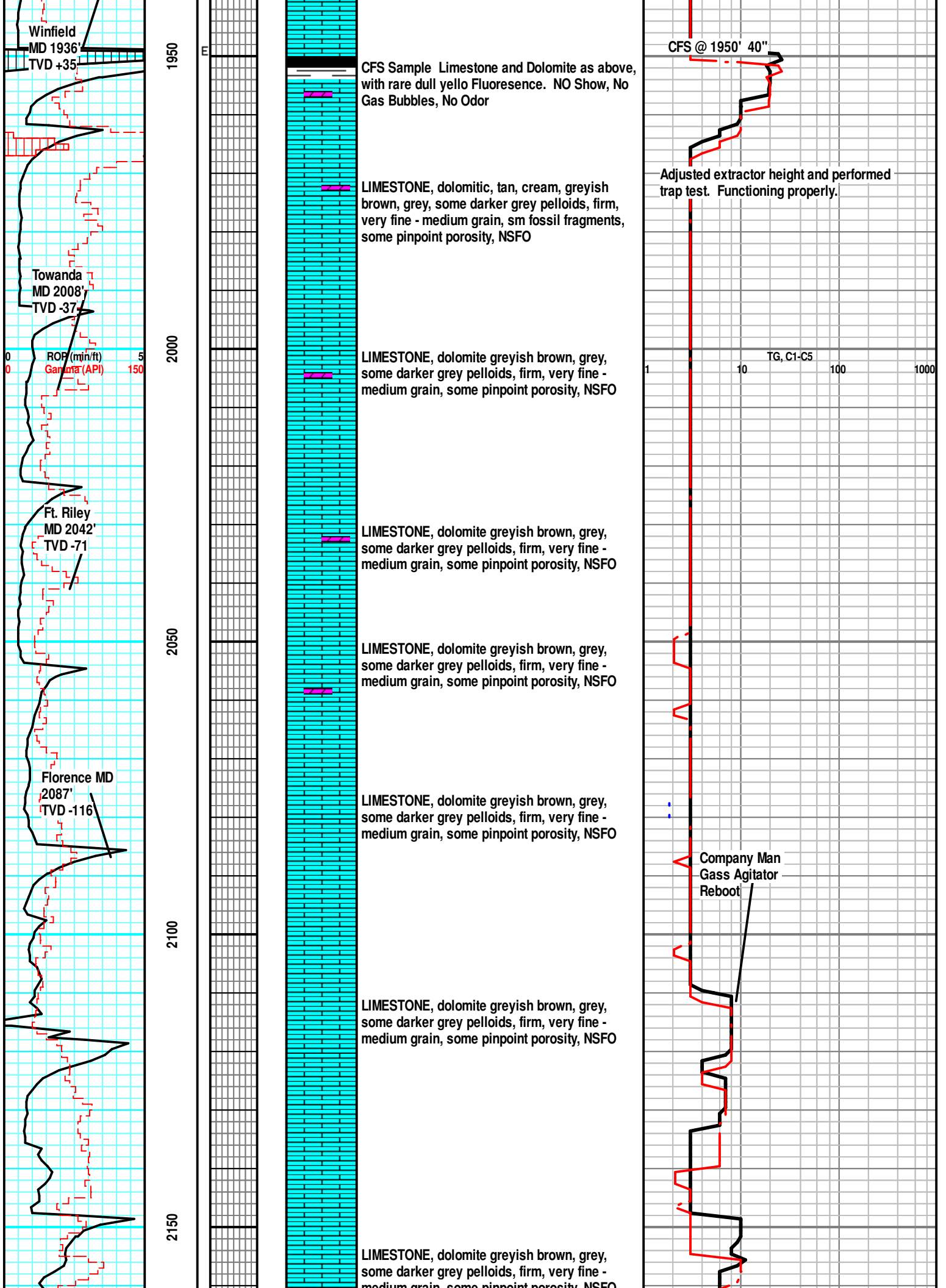
MUD DATA@ 2200': VIS 30, WT 8.9,
CL 150,000, LCM tr
4/15/2017 12:30 p.m.

TG, C1-C5

Background gas 3 units

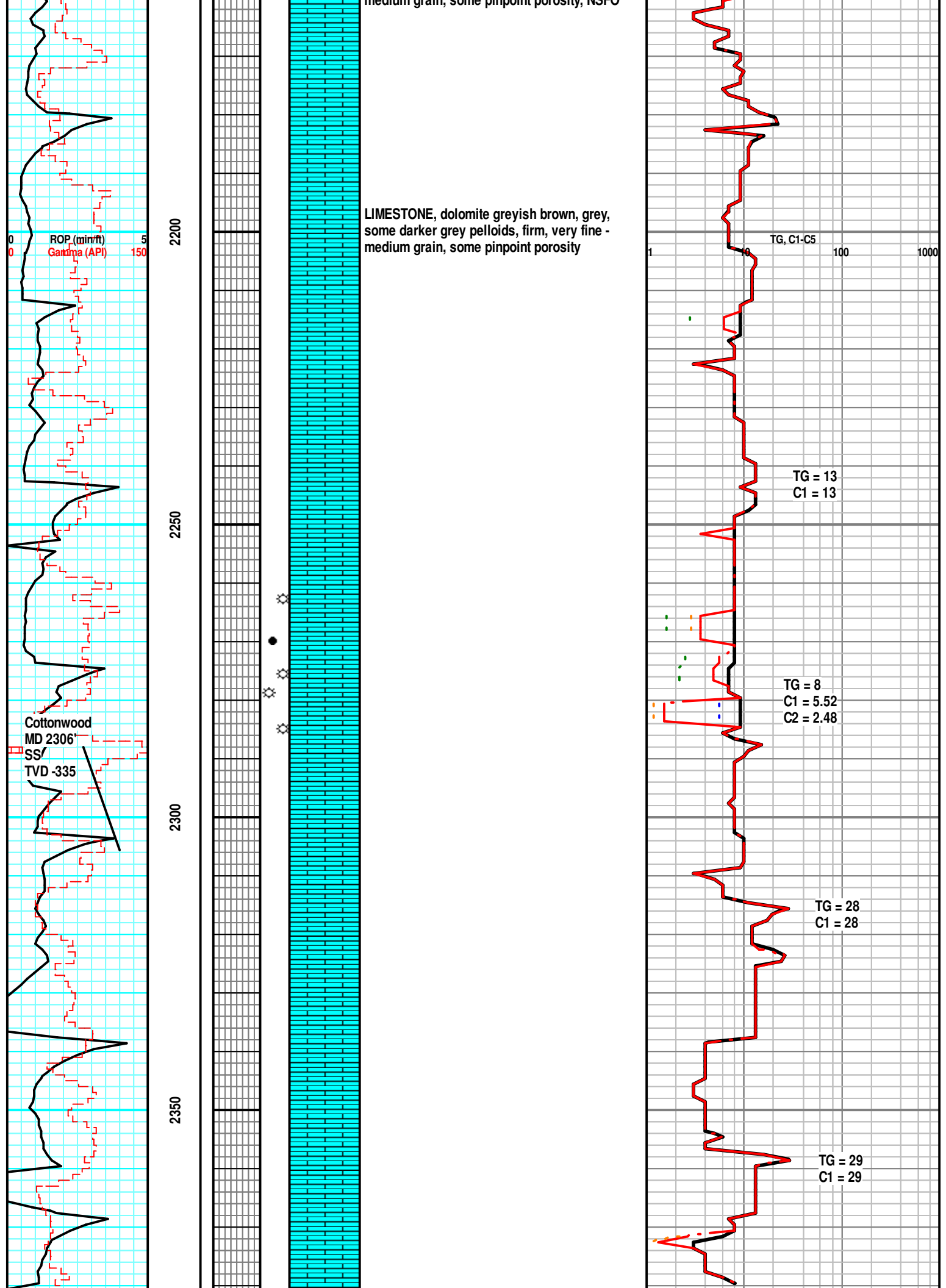
Checked the extractor at flow line no indication of malfunction. Bubbles were present in the antifreeze bowl.

Checked the extractor at flow line no indication of malfunction. Bubbles were present in the antifreeze bowl. Lowered extractor still no change in gas response.



medium grain, some pinpoint porosity, NSFO

LIMESTONE, dolomite greyish brown, grey,
some darker grey peloids, firm, very fine -
medium grain, some pinpoint porosity



ROP (min/ft)
Gamma (API)

Cottonwood
MD 2306
SS/
TVD -335

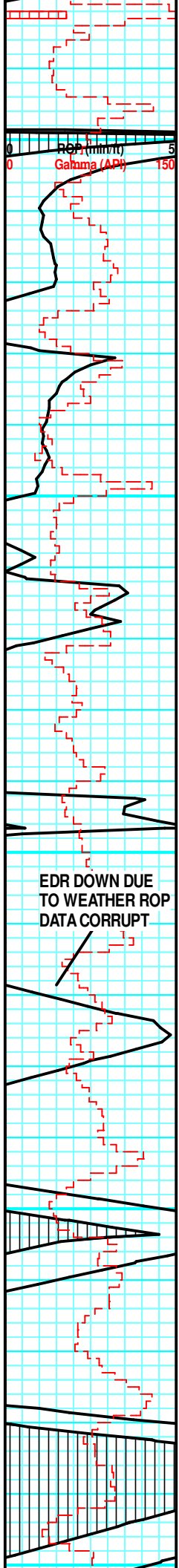
TG, C1-C5

TG = 13
C1 = 13

TG = 8
C1 = 5.52
C2 = 2.48

TG = 28
C1 = 28

TG = 29
C1 = 29



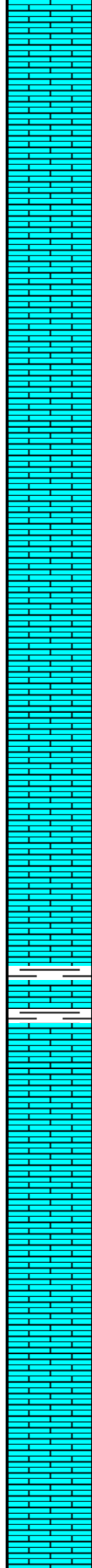
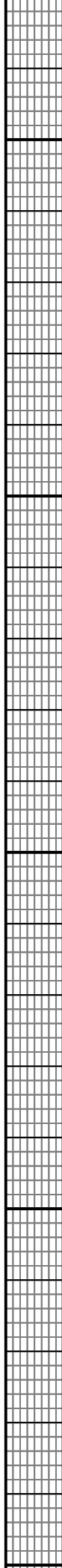
2400

2450

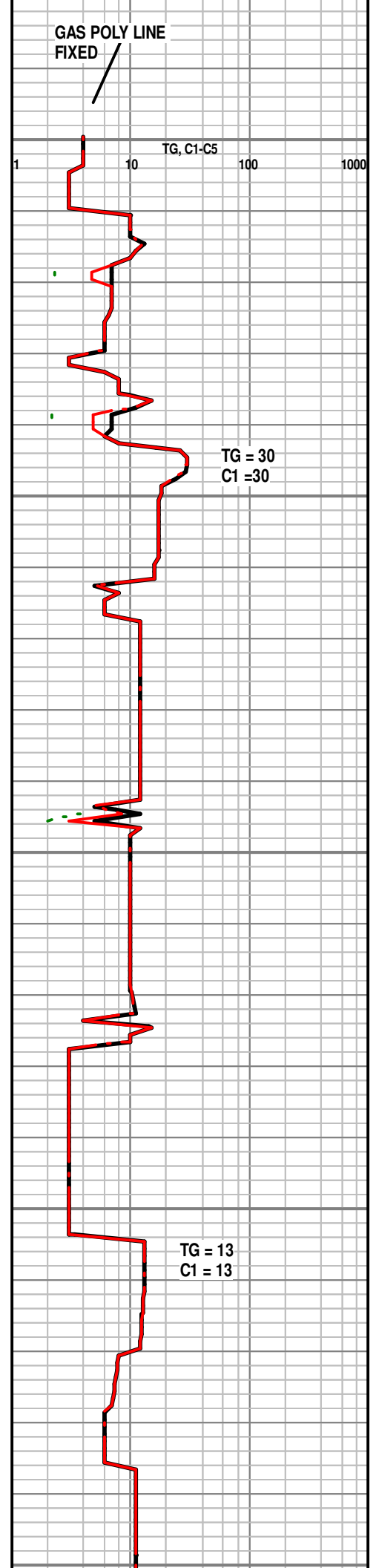
2500

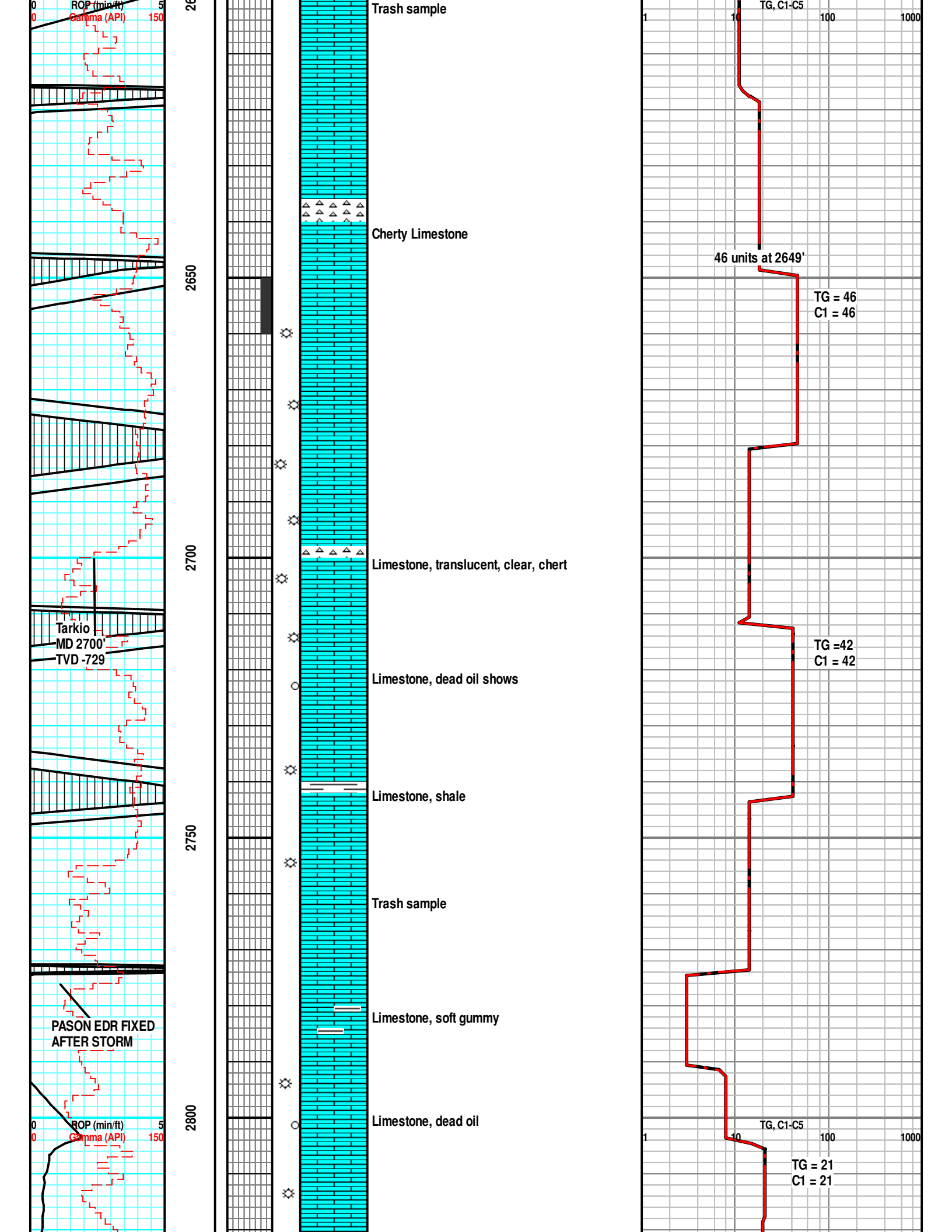
2550

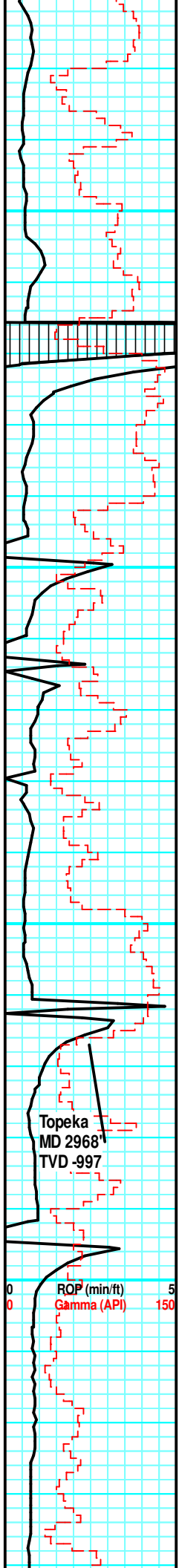
3000



Limestone, Shale stained lime, no shows







2850

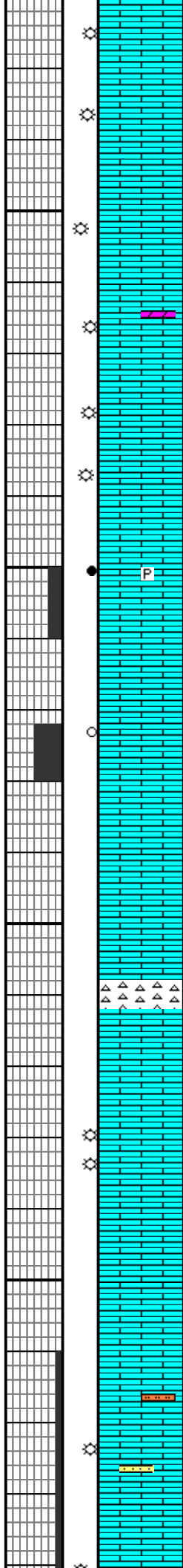
2900

2950

3000

Topeka
MD 2968
TVD -997

ROP (min/ft) 5
Gamma (API) 150



Limestone, dolomitic, greyish brown, grey, no shows

Limestone, pyrite, oil stain

Limestone, dead oil stain

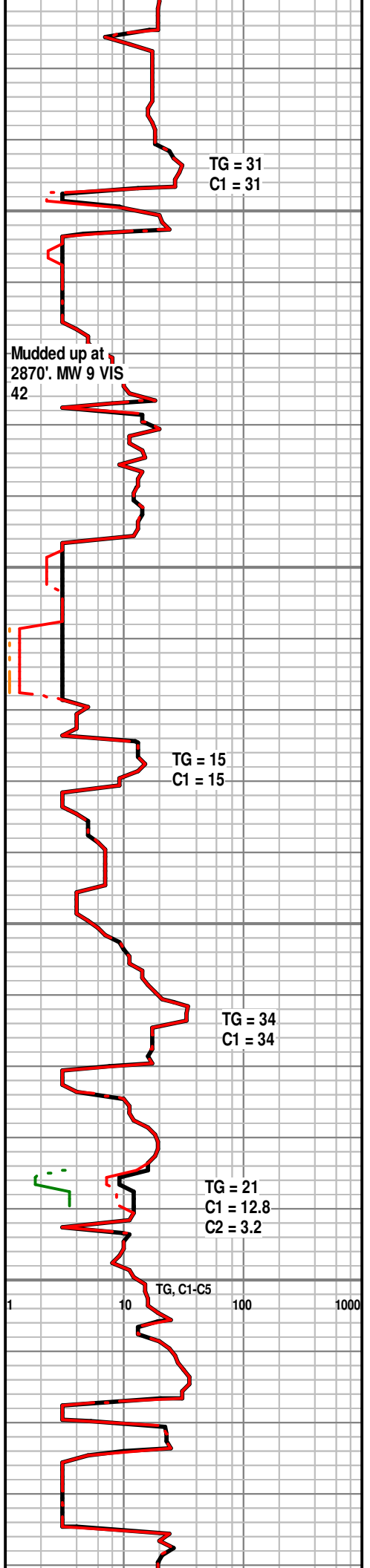
Limestone, dolomitic, greyish brown, grey, no show.

Limestone, grey, cherty

Limestone, dark grey, no shows

Limestone: Dark grey, chalky, blocky, poor porosity, no show

Limestone: Medium gray tan, chalky, blocky to subblocky, very fine crystalline, moderate rust orange siltstone, trace light gray, dark brown, calcareoussandstone, poor porosity, no show.



TG = 31
C1 = 31

Mudded up at
2870'. MW 9 VIS
42

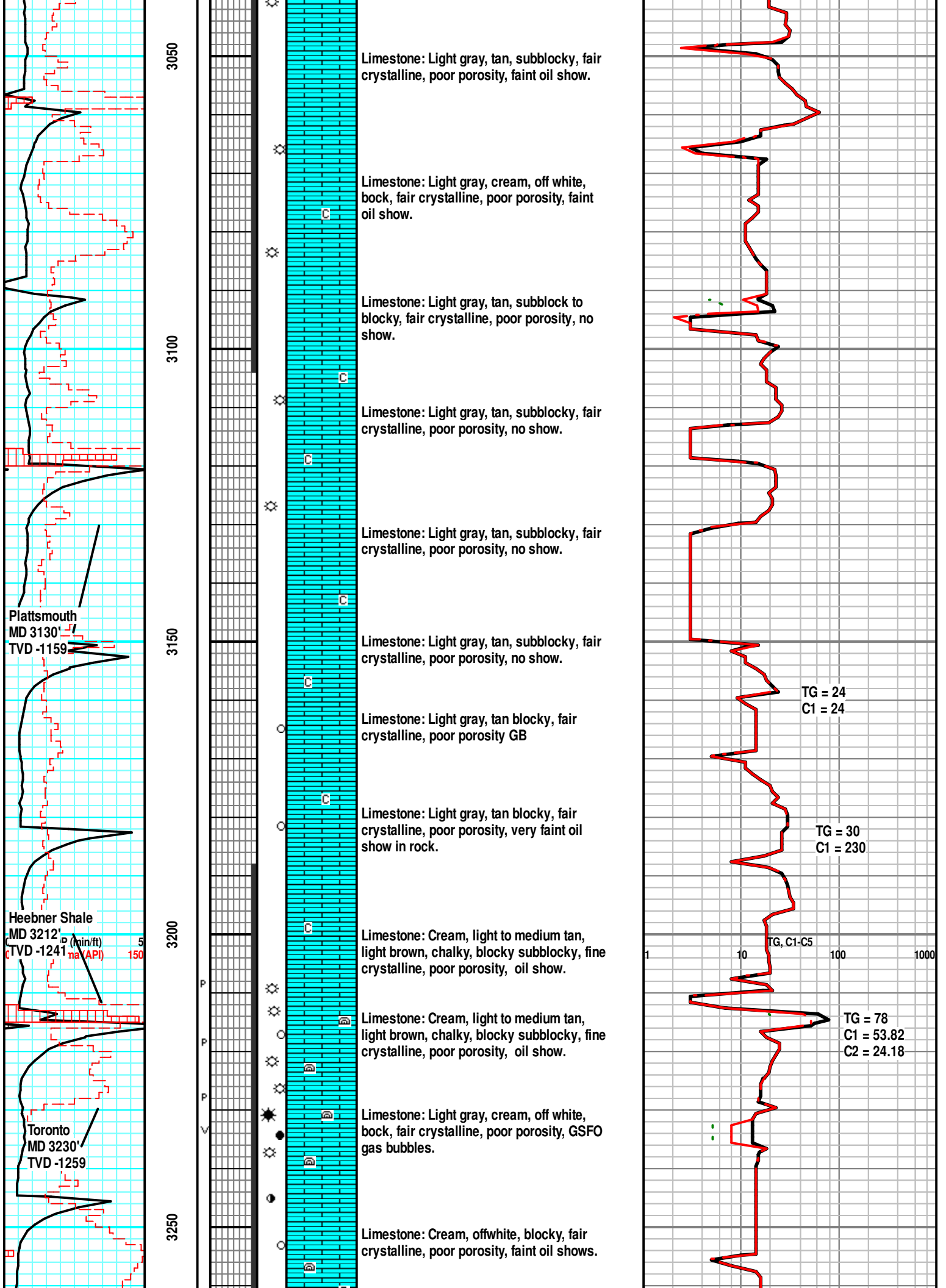
TG = 15
C1 = 15

TG = 34
C1 = 34

TG = 21
C1 = 12.8
C2 = 3.2

TG, C1-C5

1 10 100 1000



3050
3100
3150
3200
3250

Limestone: Light gray, tan, subblocky, fair crystalline, poor porosity, faint oil show.

Limestone: Light gray, cream, off white, blocky, fair crystalline, poor porosity, faint oil show.

Limestone: Light gray, tan, subblock to blocky, fair crystalline, poor porosity, no show.

Limestone: Light gray, tan, subblocky, fair crystalline, poor porosity, no show.

Limestone: Light gray, tan, subblocky, fair crystalline, poor porosity, no show.

Limestone: Light gray, tan, subblocky, fair crystalline, poor porosity, no show.

Limestone: Light gray, tan blocky, fair crystalline, poor porosity GB

Limestone: Light gray, tan blocky, fair crystalline, poor porosity, very faint oil show in rock.

Limestone: Cream, light to medium tan, light brown, chalky, blocky subblocky, fine crystalline, poor porosity, oil show.

Limestone: Cream, light to medium tan, light brown, chalky, blocky subblocky, fine crystalline, poor porosity, oil show.

Limestone: Light gray, cream, off white, blocky, fair crystalline, poor porosity, GSFO gas bubbles.

Limestone: Cream, offwhite, blocky, fair crystalline, poor porosity, faint oil shows.

Plattsmouth
MD 3130
TVD -1159

Heebner Shale
MD 3212
TVD -1241
na (API) 150

Toronto
MD 3230
TVD -1259

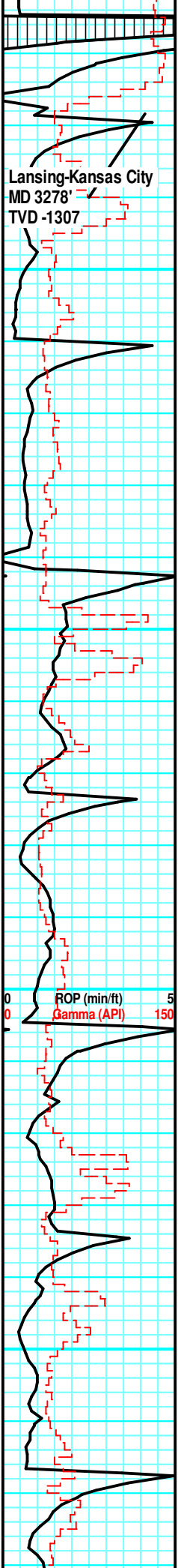
TG = 24
C1 = 24

TG = 30
C1 = 230

TG = 78
C1 = 53.82
C2 = 24.18

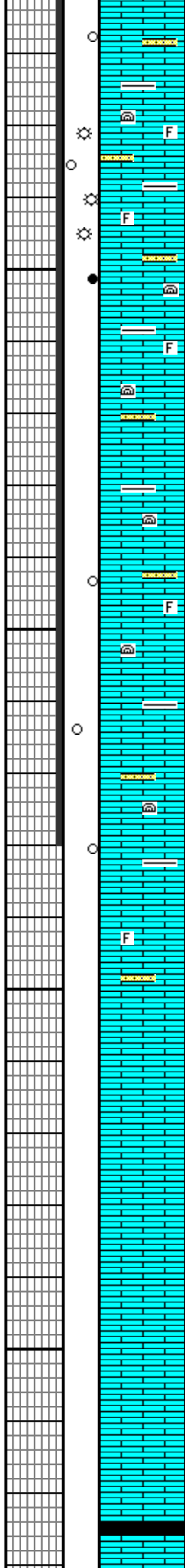
TG, C1-C5

1 10 100 1000



Lansing-Kansas City
MD 3278'
TVD -1307

3300
3350
3400
3450



Limestone: Light gray, offwhite, cream tan, blocky, fair crystalline, fair porosity moderate oil shows.

Limestone: Light gray, offwhite, cream tan, blocky, fair crystalline, fair porosity moderate oil shows.

Limestone: Light gray, offwhite, cream tan, blocky, fair crystalline, fair porosity oil shows.

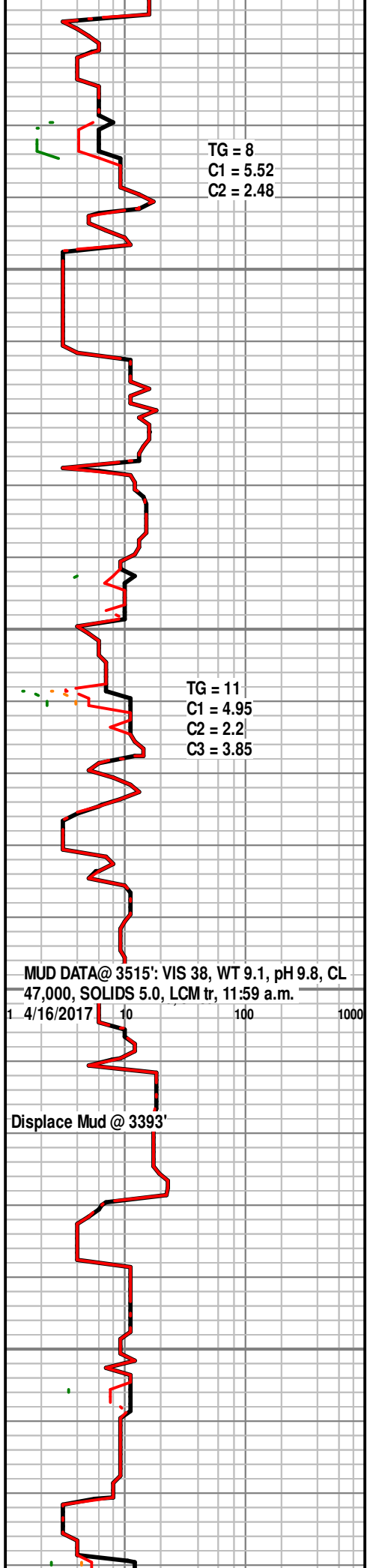
Limestone: Tan cream, light brown, subblocky, fine crystalline, poor porosity, no oil show.

Limestone: Offwhite, light gray, blocky, fair crystalline, poor porosity, faint oil shows.

Limestone: Offwhite, light gray, blocky, fair crystalline, poor porosity, faint oil shows.

Limestone: Offwhite, light gray, blocky, fair crystalline, poor porosity, faint oil shows.

Limestone: Offwhite, light gray, blocky, fair crystalline, poor porosity, faint oil shows.

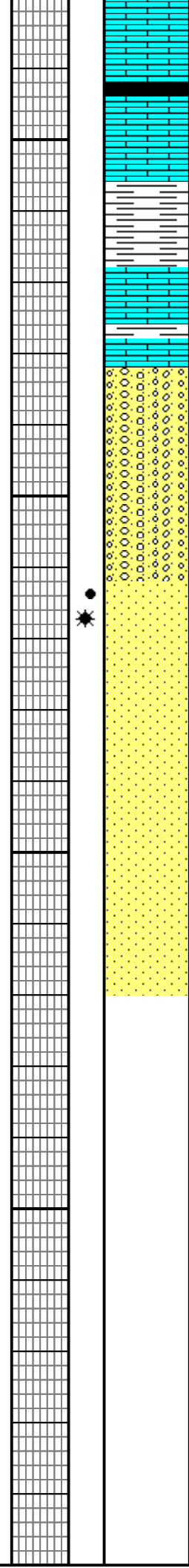
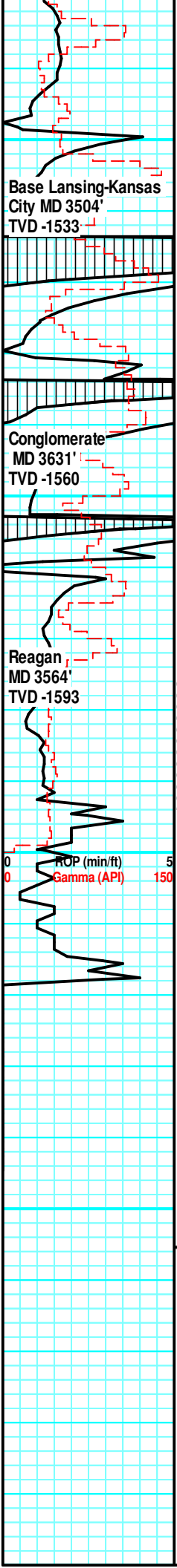


TG = 8
C1 = 5.52
C2 = 2.48

TG = 11
C1 = 4.95
C2 = 2.2
C3 = 3.85

MUD DATA@ 3515': VIS 38, WT 9.1, pH 9.8, CL 47,000, SOLIDS 5.0, LCM tr, 11:59 a.m.
1 4/16/2017 10 100 1000

Displace Mud @ 3393'



Limestone, White, veryfine crystalline, dense in part, some chert, poor visible porosity, NSFO

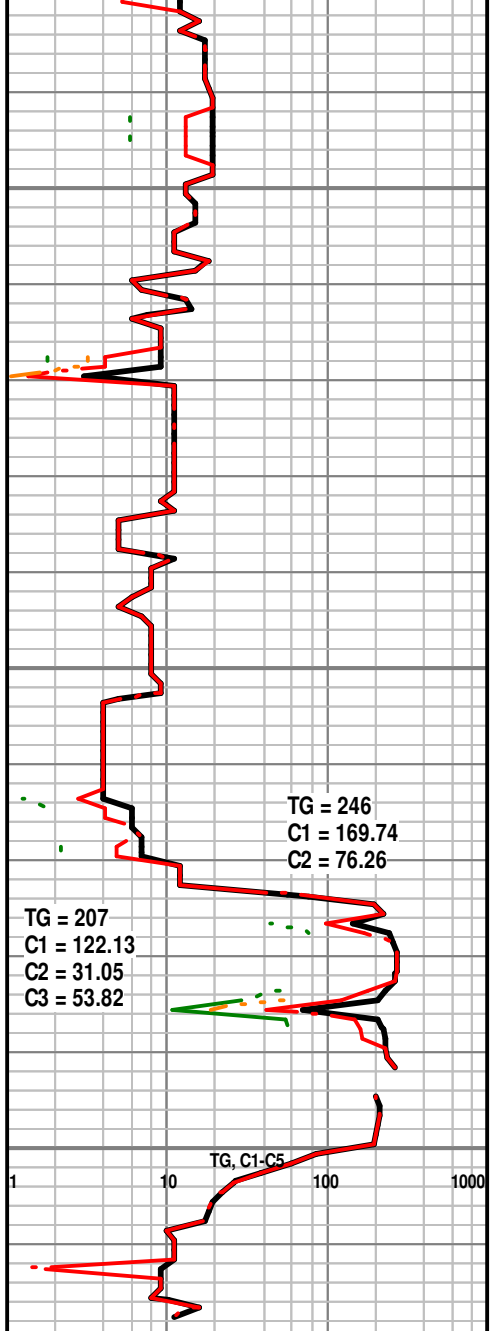
Cherty Conglomerate, Shale, grey and maroon, some reddish brown, silty with chert fragments.

Sandstone, clear, to white, very fine grain grain size increasing with depth, some brown staining, some free oil, bright yellow fluorescence, good intergranular porosity, strong petroleum odor, fast strreaming cut

Sandstone, clear, to white, very fine grain grain size increasing with depth, some brown staining, some bright yellow fluorescence, good intergranular porosity, questionable faint petroleum odor, slow lazy cut, moderate when cluster crushed

7:24 p.m. 4/16/2017 Target Formation reached, began TOOH Operations for DST #1 on the Reagan Sand. 11:48 p.m. Make up TT, TIH for DST #1. 02:33 a.m. on bottom with TT for DST #1. 3:38 TOOH With TT. 06:06 a.m. on Bank with TT

RTD 3619' 10:32 a.m. 4/17/2017



DST #1 3577' - 3593' 30-30, Recovered 100' Gas in pipe and 140' Muddy Salt Water, Flow pressures 56-79# Shut in Pressure 820# Clorides 93,000

DST #2 3577' - 3619' 30-30-19-3, Recovered 95' Slight Mud Cut Water (7% M) and 180' Water Cut Mud (80% M) Flow pressures 96-135/126-161# Shut in Pressures 852-824# Clorides 99,000 NOTE: tool slid 25 feet to bottom, tool opened while sliding last 4 feet to bottom. Evidence of plugging during flow periods.