

BLANCO

Geological Services LLC

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

Well Name: Overload 23-19
Location: NE/SW Sec 19 T32S R67W
Licence Number: 05-071-08280-00
Spud Date: 10/02/05
Surface Coordinates: 2056' FSL 1873' FWL

Region: Purgatoire River
Drilling Completed: 10/18/05

Bottom Hole Coordinates:

Ground Elevation (ft): 8010' K.B. Elevation (ft): 8014'
Logged Interval (ft): 390' To: 3013' Total Depth (ft): 3013'
Formation: Poison Canyon / Raton / Vermejo / Trinidad
Type of Drilling Fluid: Air/Mist

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

OPERATOR

Company: Pioneer Natural Resources USA Inc.
Address: 1401 17th Street Suite 1200
Denver CO 80202

GEOLOGIST

Name: Teresa Rensink / Ross Barrett / Alan Seeling / Robert Wick / Nicholas Gonzales
Company: BLANCO Geological Services LLC
Address: 806 Robinson
Trinidad CO 81082
(719) 846-3364

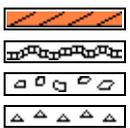
Rig

Pense #18

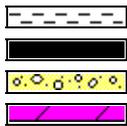
Comments

8 5/8" #24 Surface Casing set to 439.09'

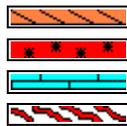
ROCK TYPES



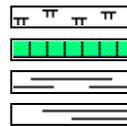
Anhy
Bent
Brec
Cht



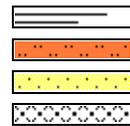
Clyst
Coal
Congl
Dol



Gyp
Igne
Lmst
Meta



Mrlst
Salt
Shale
Shcol



Shgy
Sltst
Ss
Till

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brefracg
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau

- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite

- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst

- Siltstrg
- Ssstrg

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

- Spotted
- Ques
- Dead

- Srfcsg
- Cv-v
- Cv-c

INTERVALS

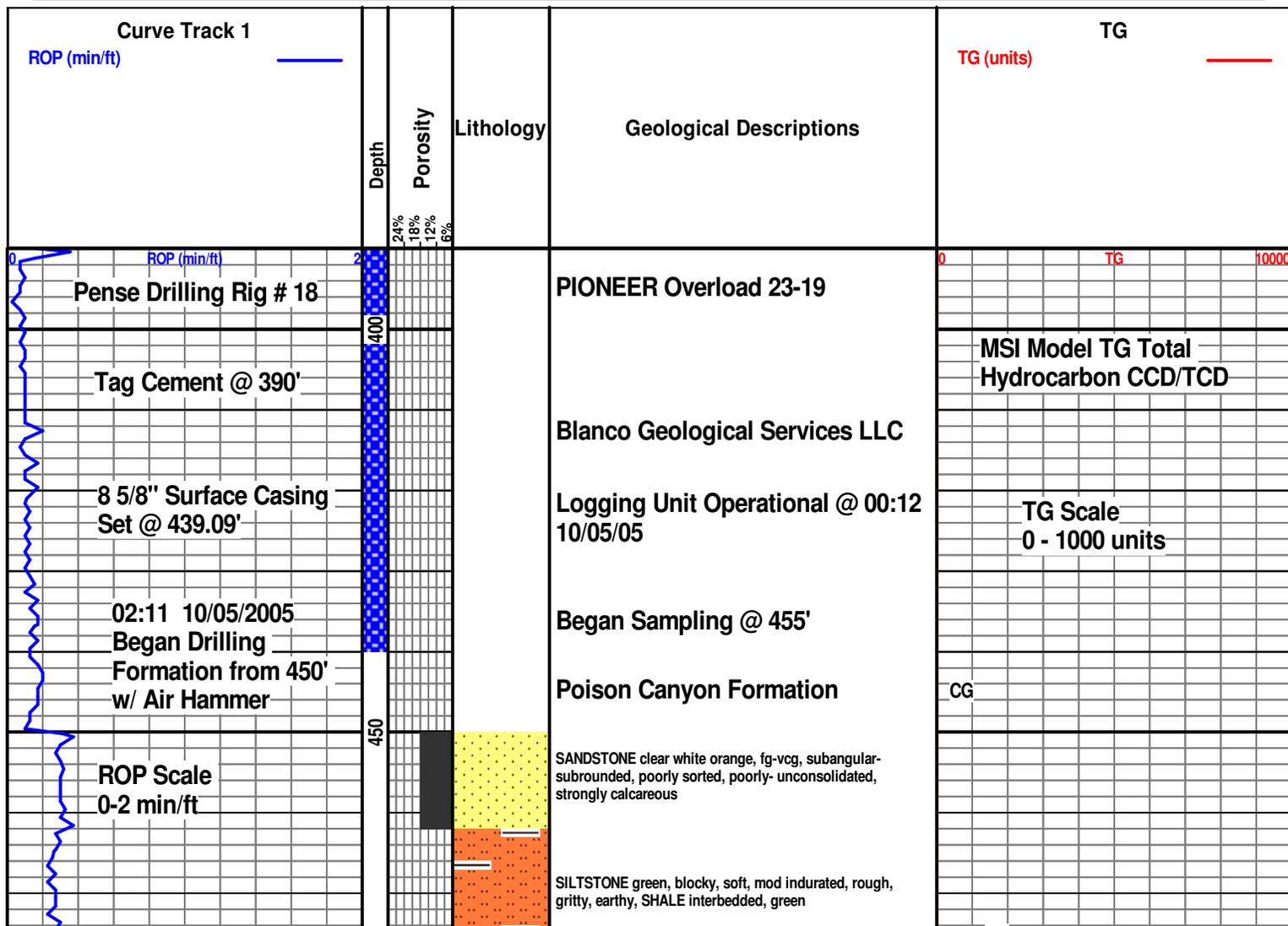
- Core
- Core run
- Dst

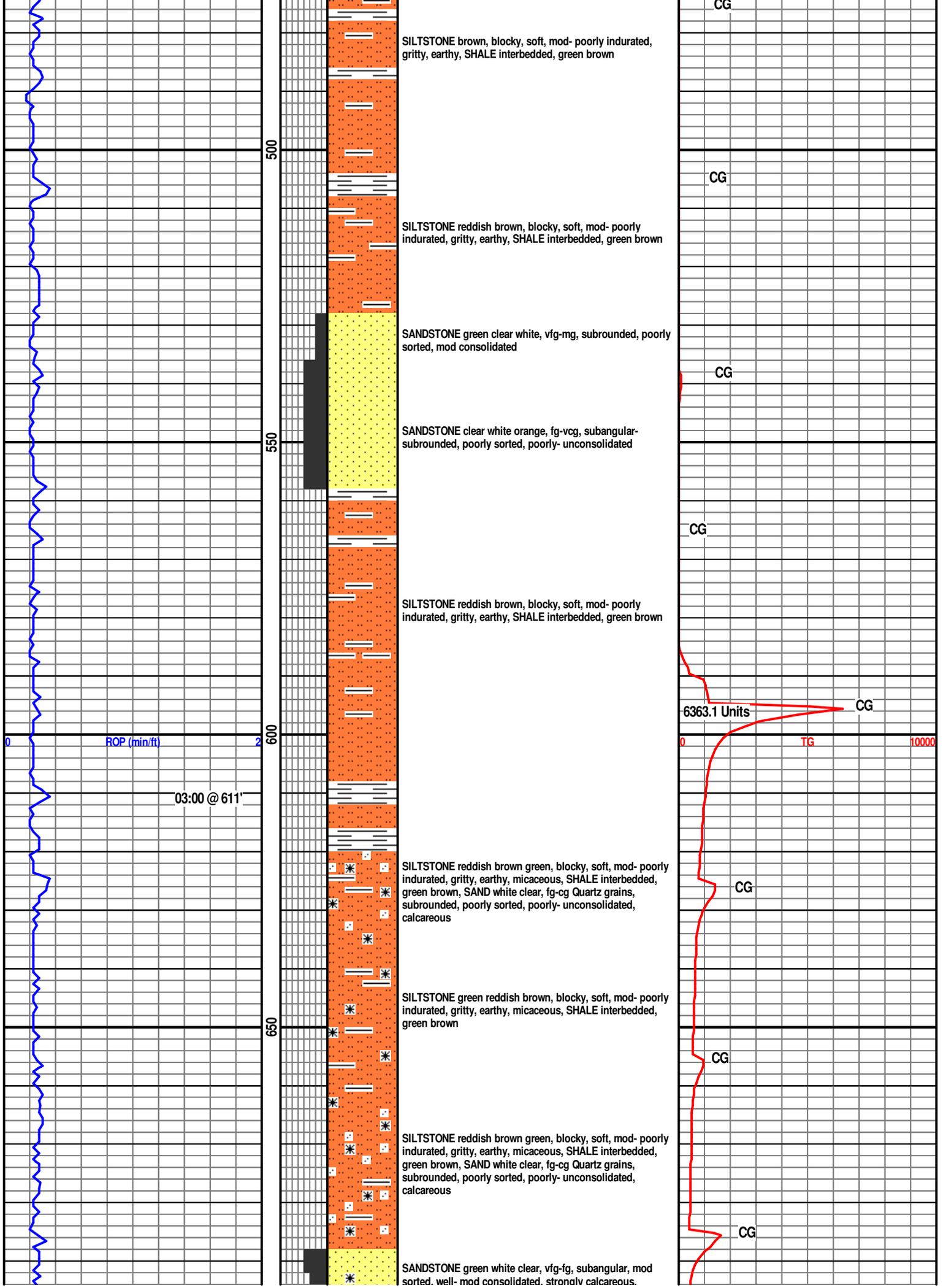
OIL SHOWS

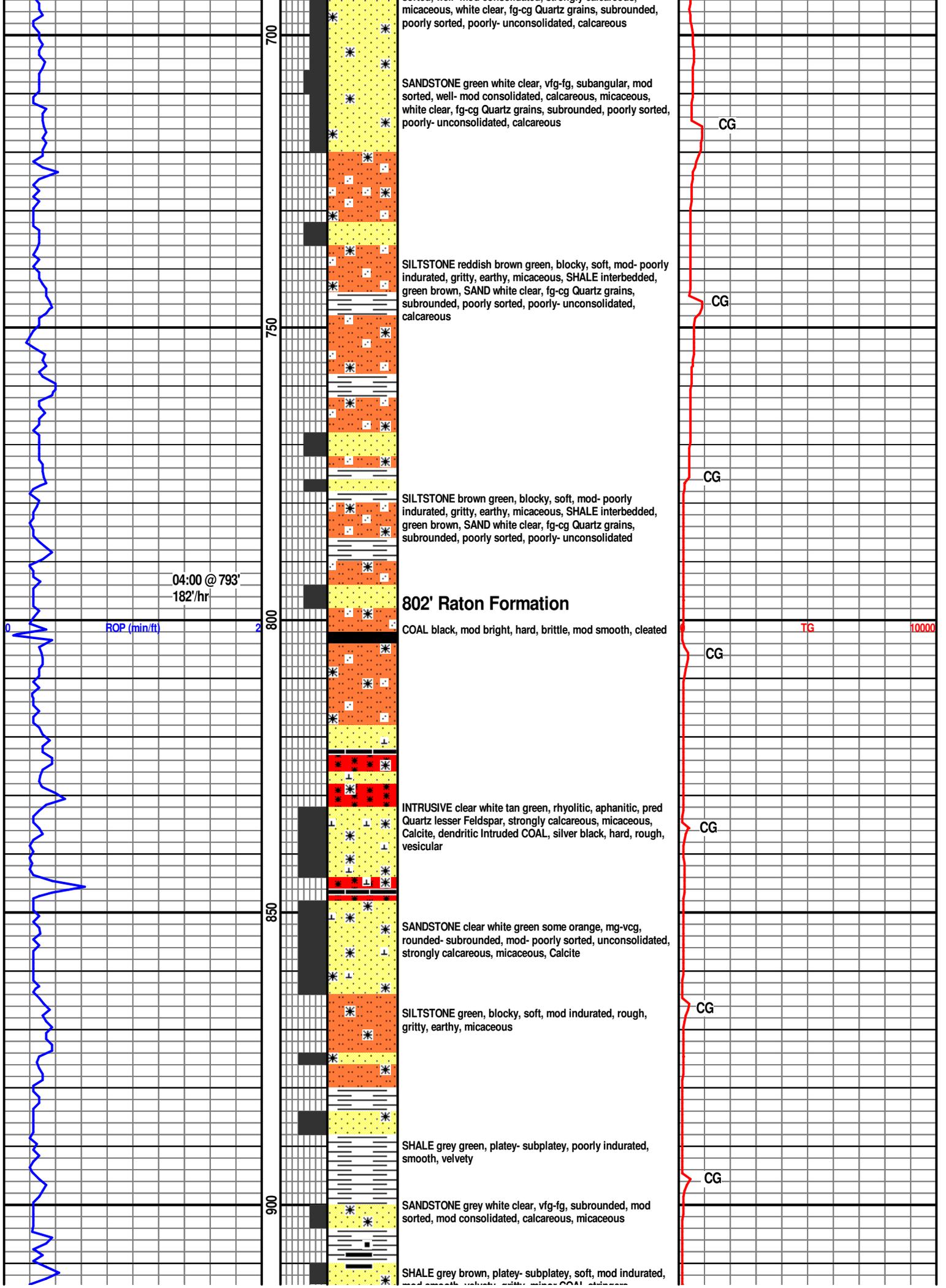
- Even

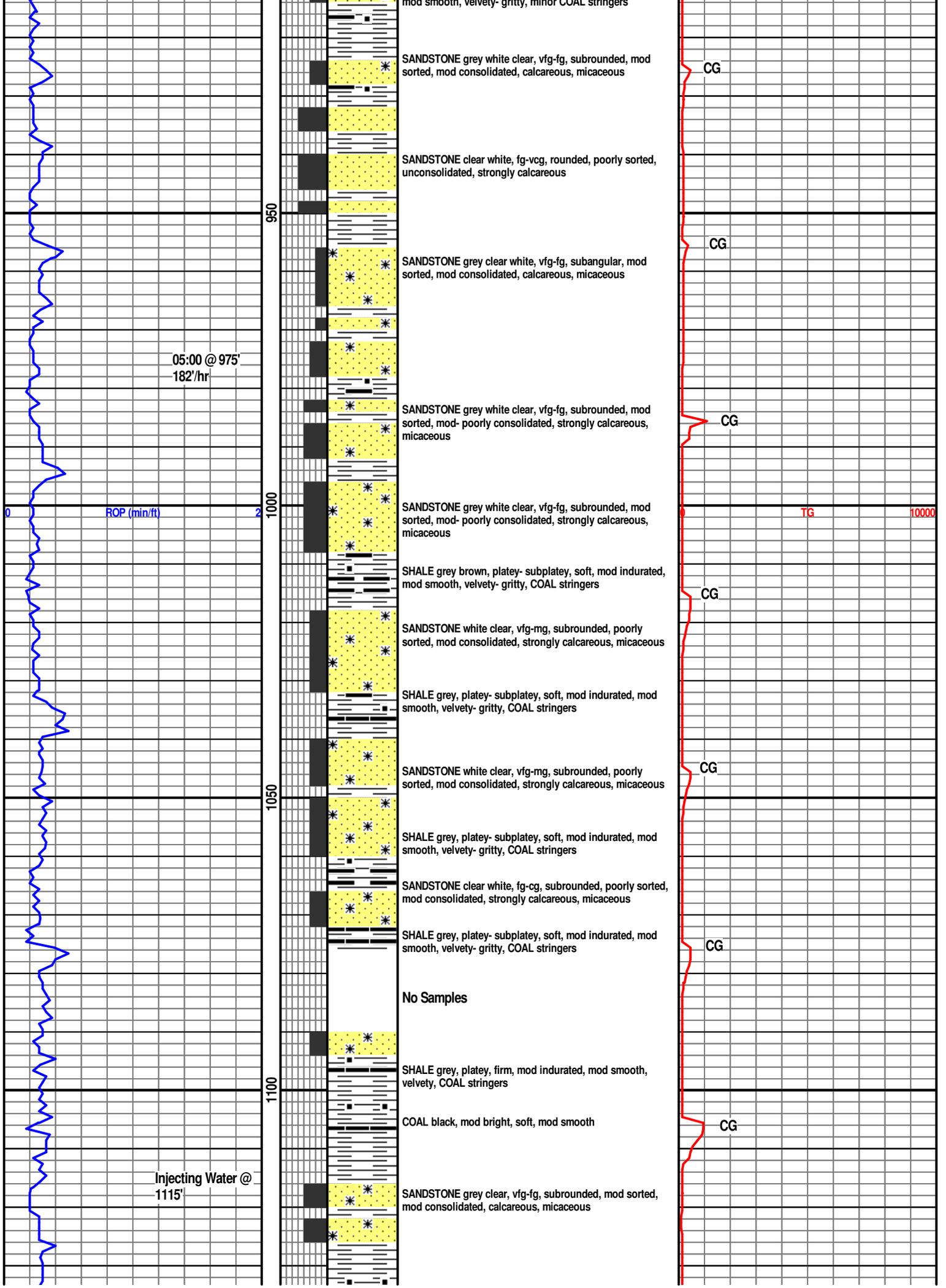
EVENTS

- Rft
- Sidewall
- Srfcsg









Tricone - Reamed
1332'-1360' @ 22:48

CR #4 - 16'20"
1360'-1380'
Drilled @ 09:09
10/07/05

CR #5 - 16'6"18"
1380'-1398'
Drilled @ 14:27

CR #6 - 18'9"20"
1398'-1418'
Drilled @ 16:16

CR #7 - 20'20"
1418'-1438'
Drilled @ 18:16

CR #8 - 21'21"
1438' - 1459'
Drilled @ 19:46

CR #9 - 20'20"
1459'-1479'
Drilled @ 21:30

CR #10 - 17'10"20"
1479'-1499'
Drilled @ 00:18
10/09/05

CR #11 - 15' 4"20"
1499' - 1519'
Drilled @ 01:59

04:00 @ 1544'

ROP (min/ft)

1400

1450

1500

1550

SHALE brown tan, platy, mod indurated, smooth, velvety,
COAL stringer

SANDSTONE clear white tan, vfg-fg, subangular, mod
sorted, mod consolidated, calcareous, micaceous

SHALE grey brown, platy- subplaty, mod indurated, mod
smooth- smooth, velvety- earthy, Slickensides and vertical
fractures 1365'-1366', SANDSTONE interbedded, white clear,
vfg-fg, mod sorted, mod consolidated, calcareous,
micaceous

SHALE tan brown, platy, mod- poorly indurated, smooth,
velvety- waxy, Slickensides, SANDSTONE interbedded, white
clear tan, vfg-mg, subrounded, poorly sorted, mod
consolidated, strongly calcareous, micaceous

SANDSTONE tan clear, vfg, subrounded, well sorted, well
consolidated, mildly calcareous, micaceous

SHALE tan brown, platy, mod indurated, mod smooth,
waxy- velvety, Slickensides 1412', 3" COAL stringer 1416',
black, bright, hard, cleated

SHALE tan brown, platy- subplaty, mod- poorly indurated,
mod smooth- smooth, velvety- waxy, Slickensides,
SANDSTONE interbedded, vfg, subangular, well sorted, mod
consolidated, calcareous, micaceous

INTRUSIVE tan milky clear, aphanitic, rhyolitic, Quartz,
Feldspar, strongly calcareous, micaceous
Ross Barrett

SHALE grey- brown, platy- subplaty, mod- well indurated,
smooth, velvety- earthy, Slickensides 1441' - 1442', 1445' -
1446', vert fracture 1449', 1457' - 1459', 3" COAL stringer
1444'

INTRUSIVE tan brown, aphanitic, Feldspar, Quartz, strongly
calcareous, Calcite

Teresa Rensink

SHALE grey tan, platy, mod indurated, mod smooth,
velvety, Slickensides and vertical fractures 1460'-1467'

INTRUSIVE tan brown, aphanitic, Feldspar, Quartz, strongly
calcareous, Calcite

SANDSTONE tan grey clear, vfg-fg, subrounded, well- mod
sorted, mod consolidated, calcareous, micaceous

COAL stringers, black, mod bright, hard, mod smooth-
smooth, subvitreous, cleated, conchoidal

Ross Barrett

COAL 1499' - 1501', stringer 1512', black, mod bright, hard,
blocky

SANDSTONE clear - tan, fgr - mgr, well consolidated,
calcareous, micaceous

SHALE dark grey, platy, mod - well indurated, smooth,
Slickensides and vertical fractures, 1504', 1506', 1512' - 1513'

SHALE dark grey brown, soft - firm, smooth, mod platy,
SANDSTONE interbedded

COAL black - dark brown, firm - hard, sl/brittle, dull, blocky,
occ conchoidal frac, suity in pt.

SHALE dark grey brown, soft - firm, smooth, mod platy,
SANDSTONE interbedded

SHALE grey brown, soft - firm, smooth, mod platy,
SANDSTONE interbedded, COAL stringers

INTRUSIVE clear - white- brown, aphanitic, rhyolitic, soft -
firm, mgr - cgr, sub angular - round, very calcareous, mod

DTG 6500.3 Units

DTG 8901 Units

DTG 8102.2 Units

DTG 3262.5 Units

TG

10000

DTG 6309.2 Units

DTG 1881.2-5127 Units

DTG 4341.2 Units

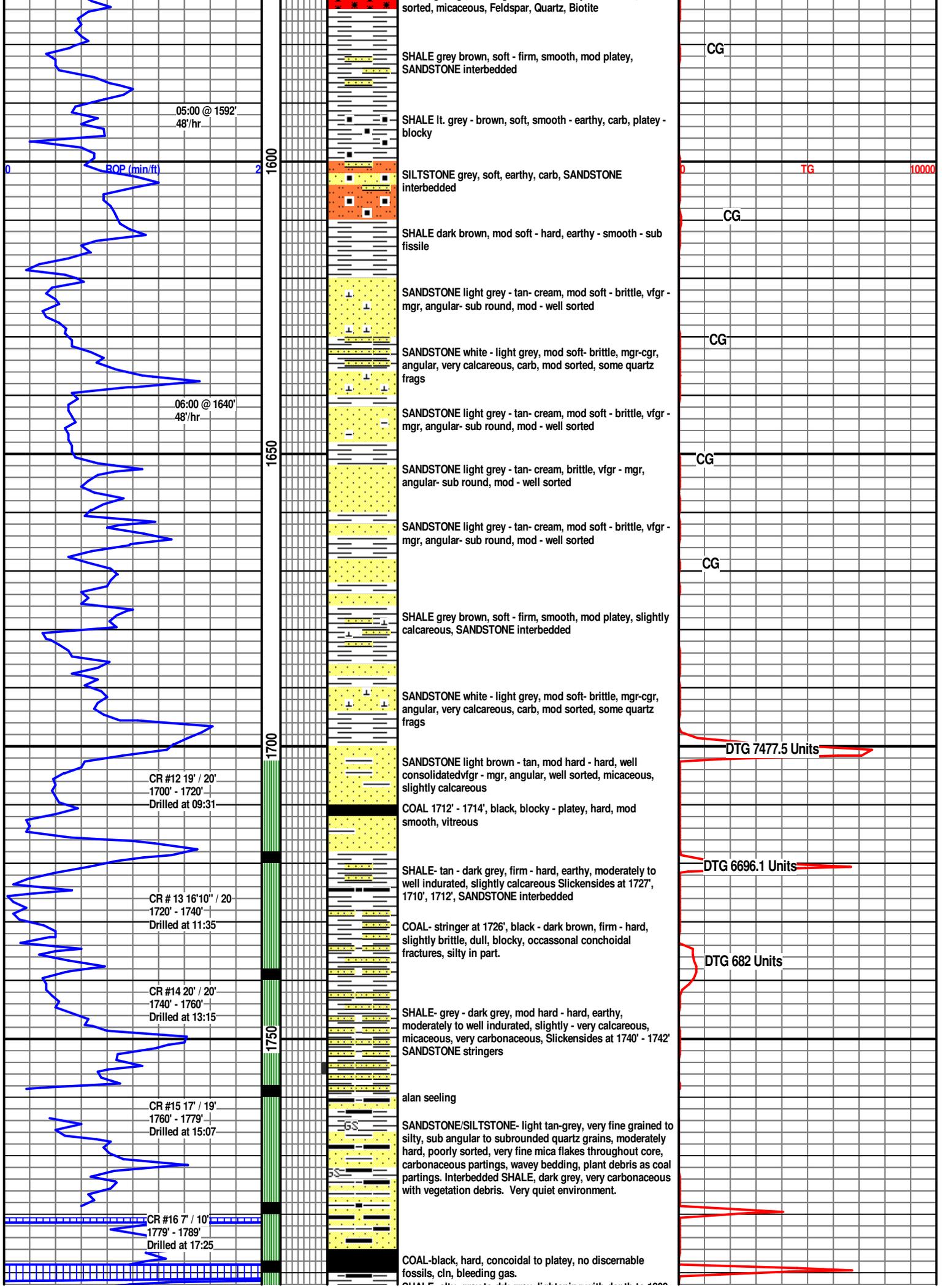
DTG 7503.2 Units

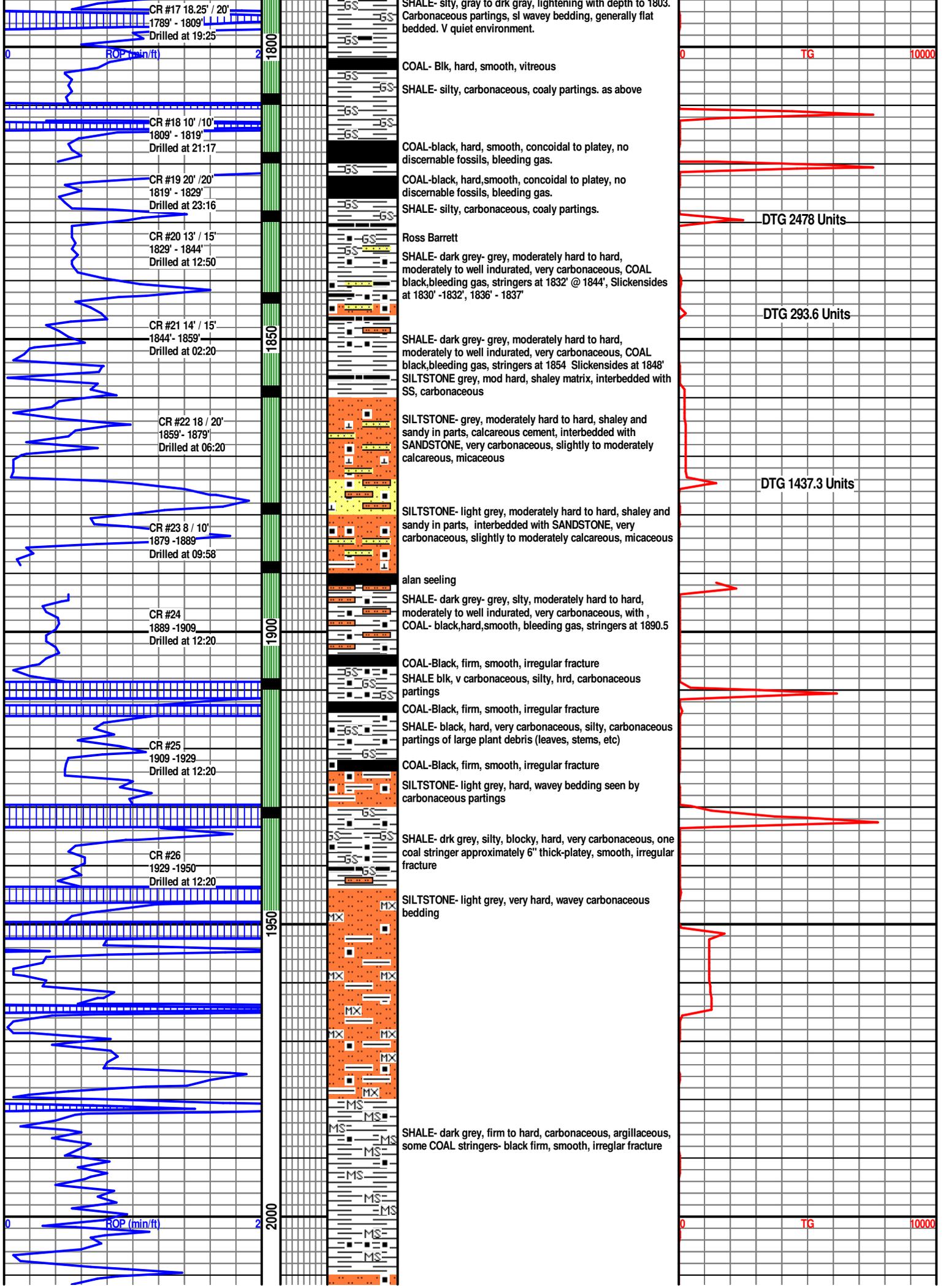
DTG 6799.5 Units

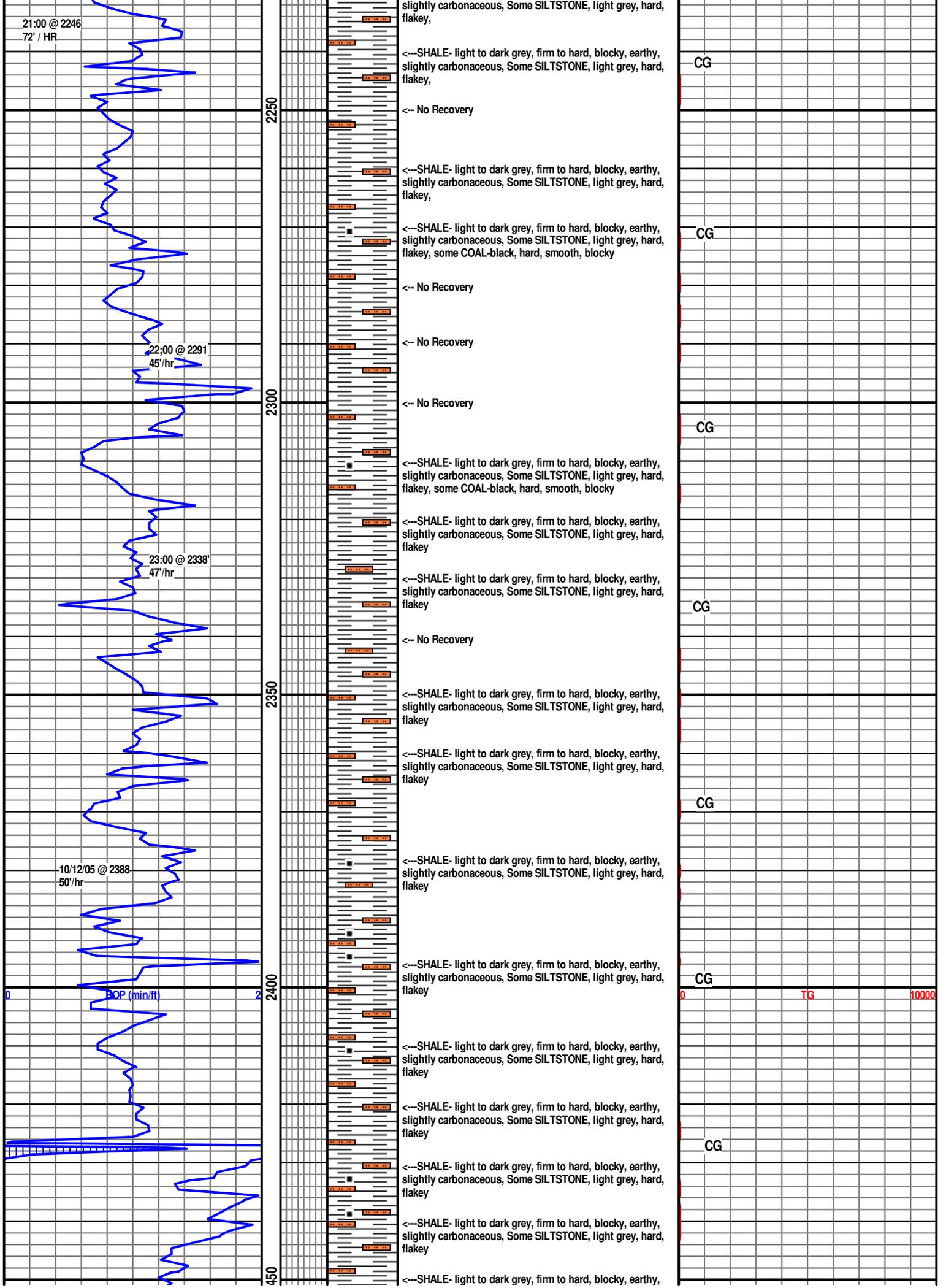
DTG 8660 Units

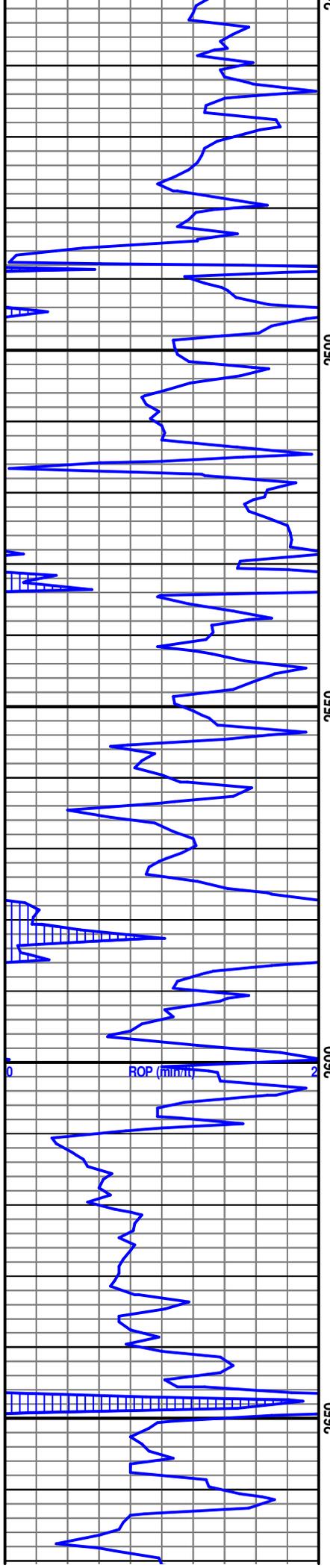
CG

CG









slightly carbonaceous, Some SILTSTONE, light grey, hard, flakey

<--SHALE- light to dark grey, firm to hard, blocky, earthy, slightly carbonaceous, Some SILTSTONE, light grey, hard, flakey

<--SHALE- light to dark grey, firm to hard, blocky, earthy, slightly carbonaceous, Some SILTSTONE, light grey, hard, flakey

<--SHALE- light to dark grey, firm to hard, blocky, earthy, slightly carbonaceous, Some SILTSTONE, light grey, hard, flakey

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<--SHALE- light to dark grey, firm to hard, blocky, earthy, slightly carbonaceous, Some SILTSTONE, light grey, hard, flakey

<--SHALE- light to dark grey, firm to hard, blocky, earthy, carbonaceous, Some SILTSTONE, light grey, hard, flakey,

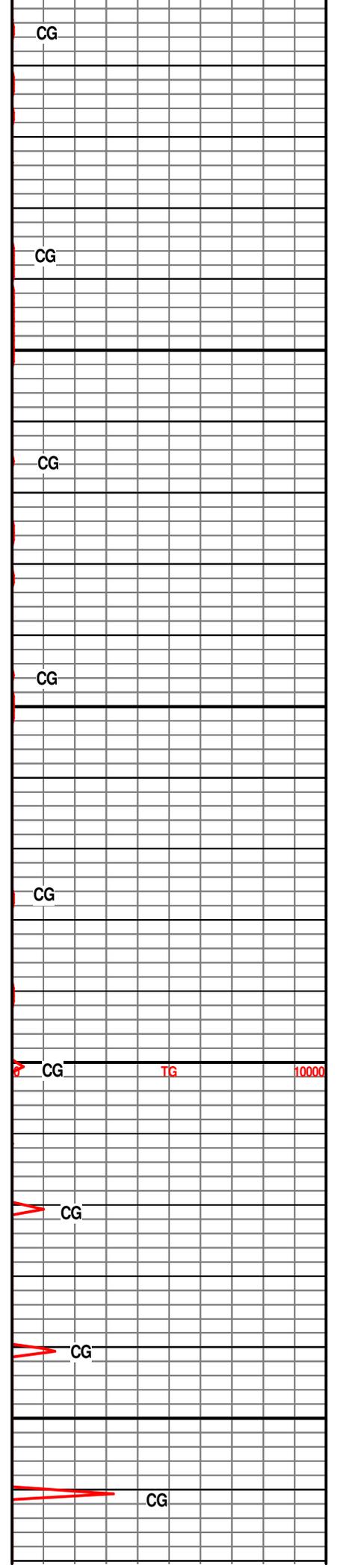
<--SHALE- light to dark grey to black, firm to hard, blocky, earthy, carbonaceous, Some SILTSTONE, light grey, hard, flakey,

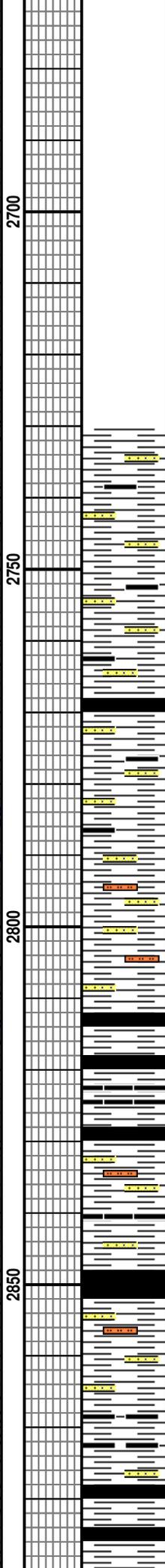
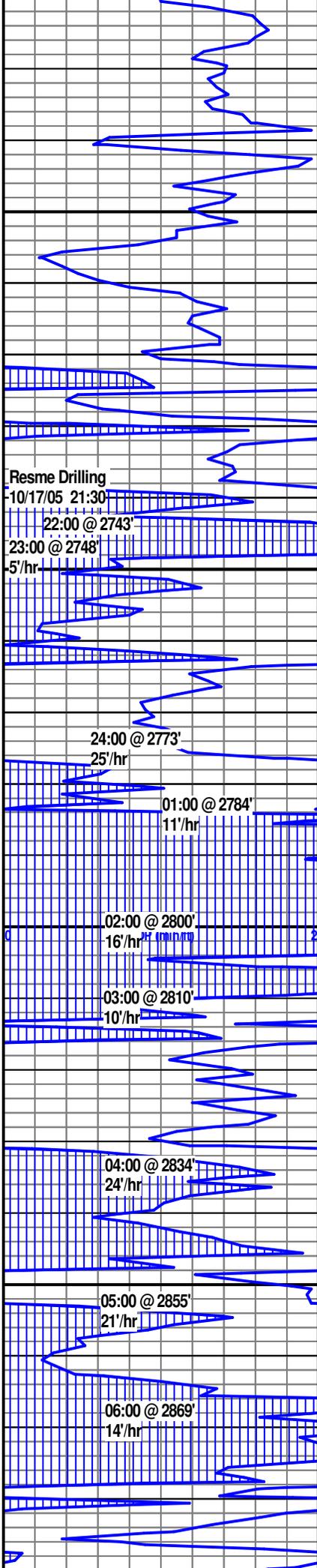
<--SHALE- light to dark grey to black, firm to hard, blocky, earthy, carbonaceous, Some SILTSTONE, light grey, hard, flakey, COAL-black,

<--SHALE- light to dark grey to black, firm to hard, blocky, earthy, carbonaceous, Some SILTSTONE, light grey, hard, flakey,

<--SHALE- light to dark grey to black, firm to hard, blocky, earthy, carbonaceous, Some SILTSTONE, light grey, hard, flakey,

<--SHALE- light to dark grey to black, firm to hard, blocky, earthy, carbonaceous, Some SILTSTONE, light grey, hard, flakey,





Bob logging

SHALE, gray-brown dk-brown, firm, platy - blocky, earthy, dull, SANDSTONE stringers, minor COALS

COAL, black, firm, cleated, blocky, smooth, waxy

SHALE, dk-brown gray-brown, firm-hard, platy - sub blocky, earthy-gritty, dull, SILTSTONE stringers, brown

SANDSTONE stringers, milky-lt-gray, vfg, sub angular - sub rounded, well sorted, well consolidated

COAL, black, firm, irregular - cleated, blocky - sub blocky, smooth - rough, waxy

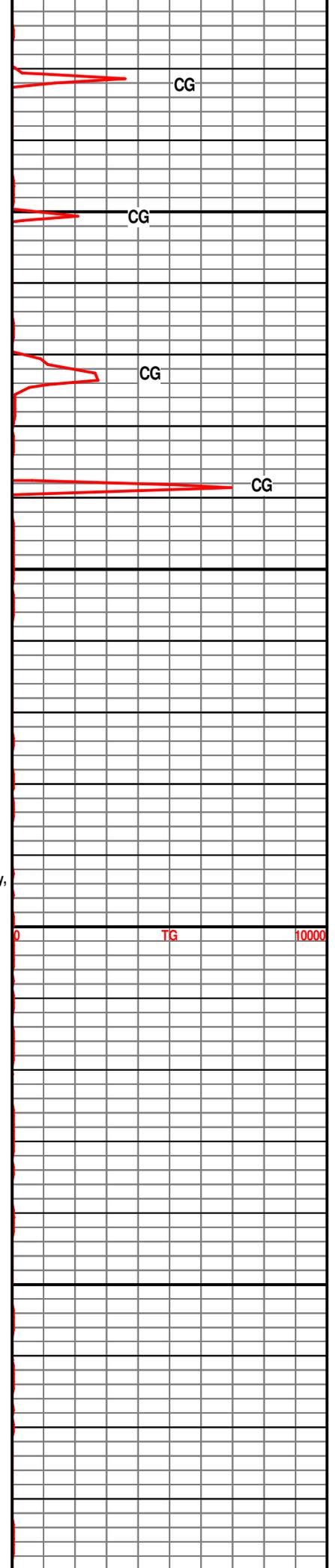
COAL, black, firm, irregular - cleated, blocky - sub blocky, smooth - rough, waxy

Minor COAL, black, firm, irregular - cleated, blocky - sub blocky, smooth - rough, waxy

COAL, black, firm, irregular - cleated, blocky - sub blocky, smooth - rough, waxy

Minor COALS, black, firm, irregular - cleated, blocky - sub blocky, smooth - rough, waxy

COALS, black, firm, irregular - cleated, blocky - sub blocky, smooth - rough, waxy



07:00 @ 2893'
24'/hr

2900

COAL, black, firm - soft, irregular - cleated fragmented, blocky - sub blocky, smooth - rough, waxy - vitreous

COALS, black, firm - soft, irregular - cleated fragmented, blocky - sub blocky, smooth - rough, waxy - vitreous

08:00 @ 2023'
30'/hr

2930' Trinidad Sandstone

SANDSTONE, milky-clear, vfg, sub rounded, well sorted, unconsolidated

09:00 @ 2941'
18'/hr

2950

10:00 @ 2953'
12'/hr

11:00 @ 2971'
18'/hr

SANDSTONE, milky-clear, vfg - fg, angular, poorly sorted, unconsolidated, mildly calcareous

12:00 @ 2992'
21'/hr

ROP (min/ft)

3000

0

TG

10000

10/18/2005
12:45 @ 3023' TD

Overload 23-19