



Weatherford®

PND-S CASED HOLE TRIPLE COMBO

Company DELTA PETROLEUM CORPORATION
 Well DELTA 27-421
 Field NORTH VEGA
 County MESA State COLORADO Country U.S.A.
 Location BHL: 990'FEL & 1620'FNL

Section 27 Township 09S Range 93W API Num 0507709334
 Permanent Datum G.L. Elevation 7665' K.B. 7677'
 Log Measured From K.B., 12' Above Perm Datum D.F. 7676'
 Drilling Meas From K.B. G.L. 7665'

Date

Depth - Driller

Depth - Logger

Btm Log Interval

Top Log Interval

Casing - Driller

Casing - Logger

Bitsize

Type Fluid in Hole

Dens. /Visc.

pH / Fluid Loss

Source of Sample

Rm @ Meas. Temp

Rmf @ Meas. Temp

Rmc @ Meas. Temp

Source: Rmf / Rmc

Rm @ BHT

Max. Rec. Temp.

Run 1	Run 2	Run 3
23-DEC-2007		
8448'		
8264'		
8256'		
4600'		
N/A		
N/A		
7.875"		
WATER		
8.3 / N/A		
N/A / N/A		
NONE		
N/A @ N/A		
N/A @ N/A		
N/A @ N/A		
N/A / N/A		
N/A @ N/A		
247 F		

PLOT TYPE: PLOT TYPE: PND-S *CASED HOLE TRIPLE COMBO LOG*

REMARKS:

Project: 142242
 Company: DELTA PETROLEUM CORPORATION
 Well: VEGA UNIT 27-421
 Field: NORTH VEGA
 County: MESA
 State: COLORADO

State: COLORADO
Country: USA
Log Date: 23-DEC-2007

Delta 27-421 P1D CHI (01-08)

Log ran on wireline depths and is on depth with Weatherford CBL-VDL Logged 23-Dec-2007.
No Open Hole data Available.
Log was run with 12' KB.
Porosity data computed from (PND-S, AI) Neutron/Density data.
Matrix model = AIPN (ss), AIPD (2.68)

Coal flag activated when:

GRPH < 55 gapi
SIGC > 15 cu
AIPN > 0.20 dec(ss)
COR1F > 1.35

CBL-VDL log shows TOC @ 4150'.

Well SHUT-IN while logging.
Reported Hole Deviation: N/A
Reported Borehole Chlorides: N/A mg/L
Reported Formation Chlorides: N/A mg/L
Reported Production: N/A

NOTE: PND-S Inelastic Porosity, Psuedo-Resistivity and Saturation estimates will be affected adversely by inconsistent cement, multiple casing/tubing strings and/or large borehole sections of the well. Pulsed neutron measurements in recently-drilled wells will be subject to the effects of drilling fluid invasion and must be considered to be of a relative nature.

CURVE DESCRIPTIONS:

CURVE LEGEND:

CSG = Graphical Representation of 4.50" Casing.
TENS = Line Tension
CCL = Collar Locator, from (PND-S) data.
GRPH = Gamma Ray, from (PND-S) data, normalized
CCL_CBL = Collar Locator, from (PND-S) data.
GR_CBLH = Gamma Ray, from (PND-S) data, normalized
BGN = Near Background Counts, from (PND-S) data.
BGF = Far Background Counts, from (PND-S) data.
NEAR = Near Detector Counts, from (PND-S) data.
FAR = Far Detector Counts, from (PND-S) data.
RATI = Formation Ratio, from (PND-S) data.
RBNF = Ratio of (Near/Far) Bulk Inelastic data
SIGC = Formation Sigma, from (PND-S) data.
DELI = Inelastic Data Quality Indicator, from (PND-S) Inelastic data.
AIPN = Inelastic (Neutron Type) Porosity, from (PND-S) data.
AIPD = Inelastic (Density Type) Porosity, from (PND-S) data.
RPNDS = Psuedo-Resistivity, from (PND-S) Inelastic data
HICFF = Hydrogen Index from (PND-S) Inelastic Spectrometry
COR1F = Carbon/Oxygen Ration from (PND-S) Inelastic Spectrometry
COAL = Coal flag when conditions met

BOREHOLE ENVIRONMENT:

BOREHOLE RECORD:

Size	Top	-	Bottom
24.00"	Surface	-	60'
11.00"	60'	-	2000'
7.88"	2000'	-	8448'

CASING RECORD:

Size	Top	-	Bottom
24.000"	Surface	-	60'

8.625" Surface - 2000'
4.500" Surface - 8448'

Delta 27-421 P1D CHI (01-08)

PBTD : 8263'
PND FR: 8257'

MARKER JOINTS:
5811' - 5833'
7590' - 7612'

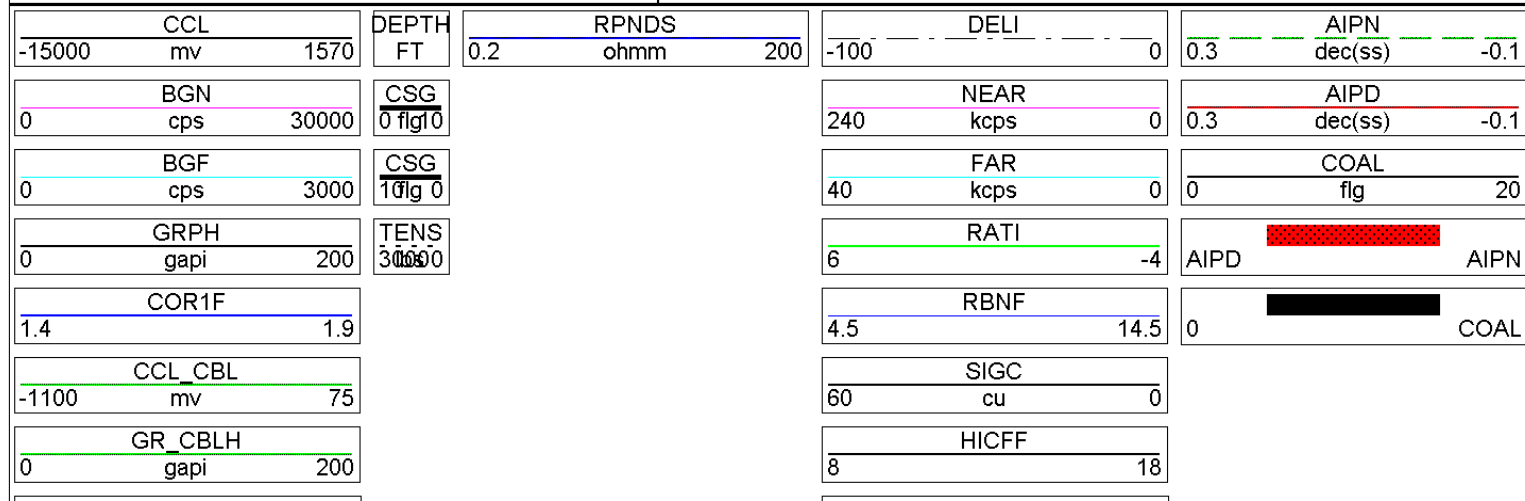
ANALYST: Nilesh Kadam
PROGRAM: p4bbhss4.wts; p4rocksh.wts

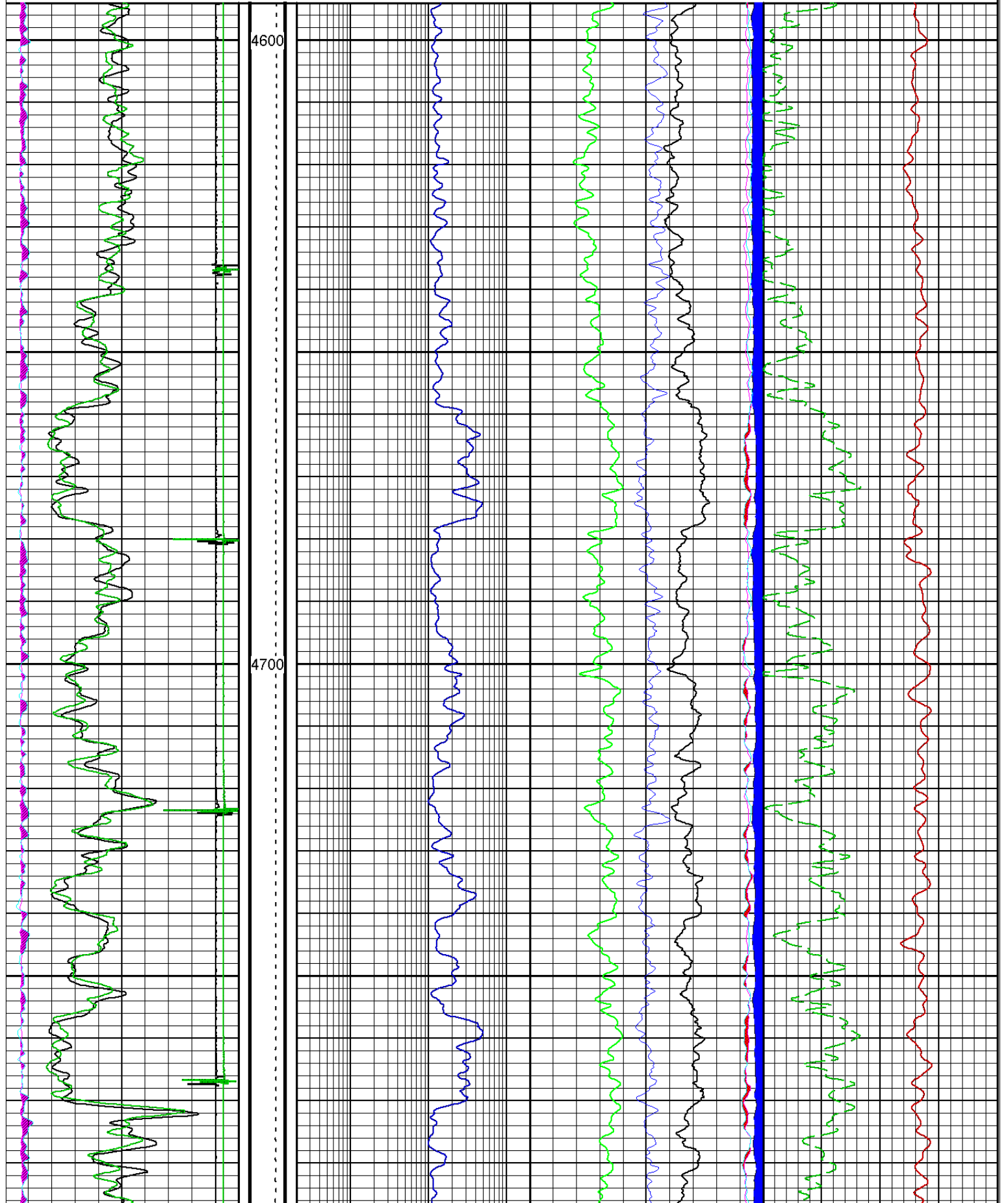
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WEATHERFORD INTERNATIONAL INC.

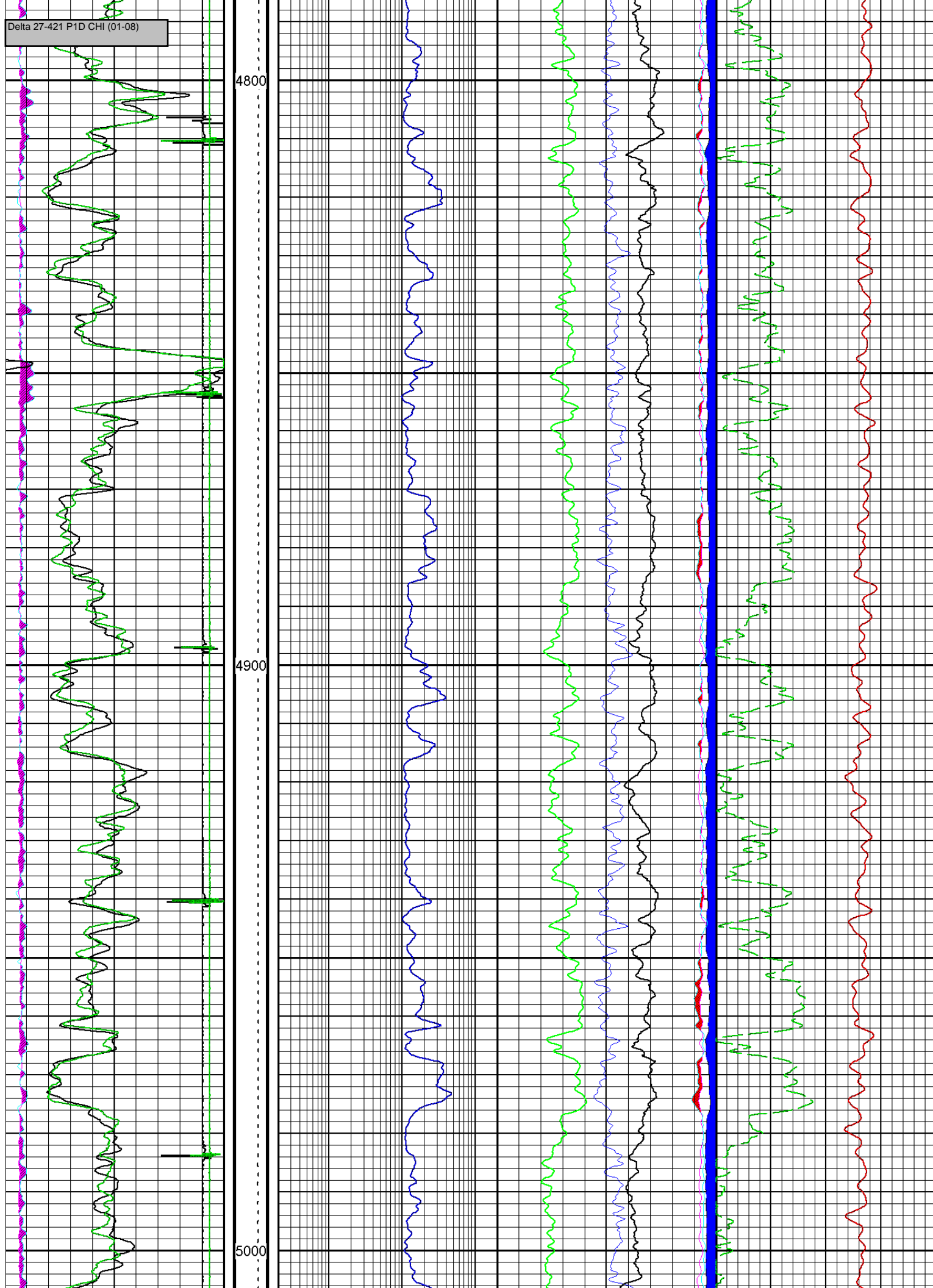


DELTA 27-421
27 Dec 2007 @ 9:45
DEPTH (FT)
Interval: 4594.00 to 8274.70
Depth Scale Ratio: 1/240

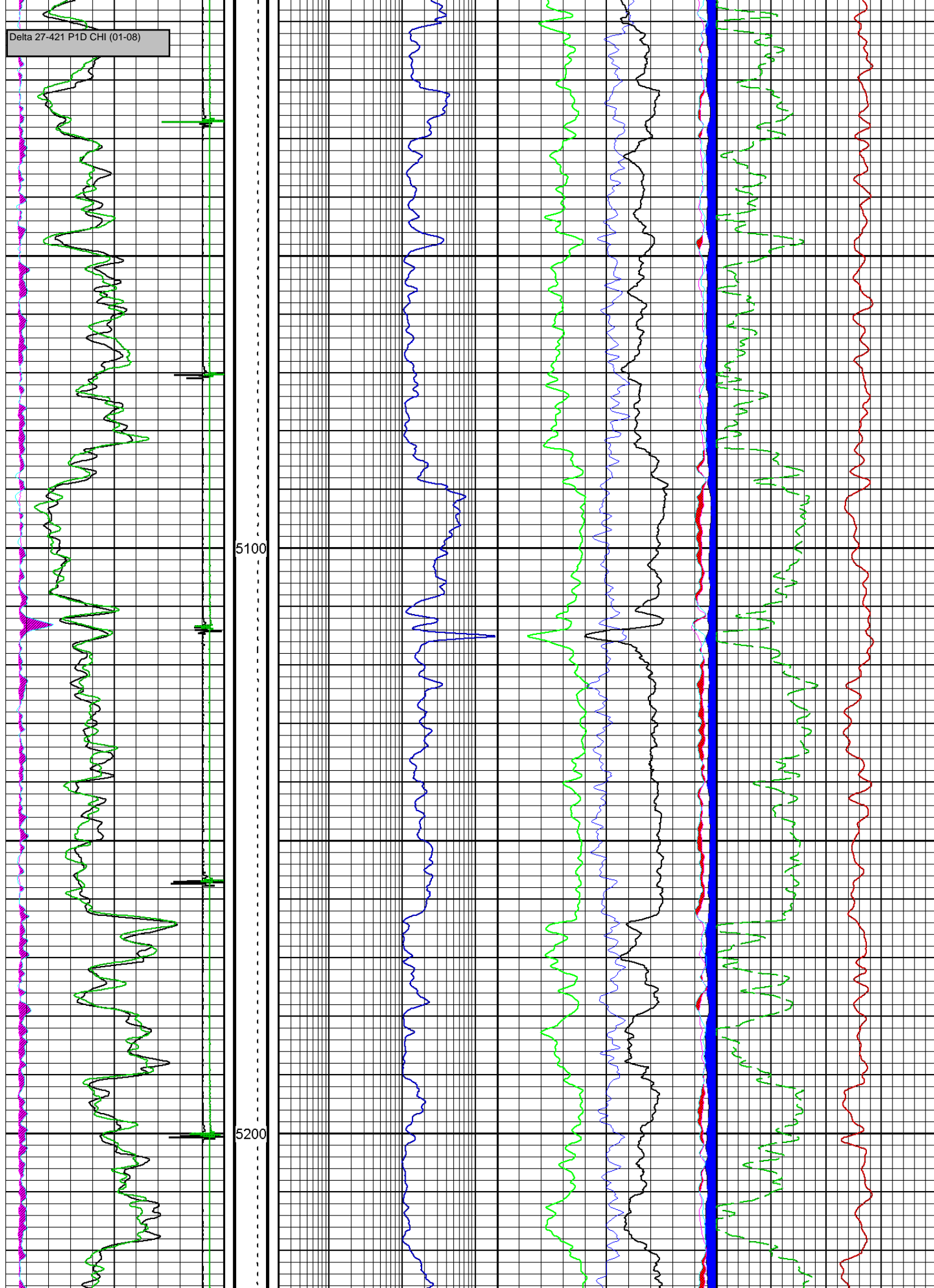




Delta 27-421 P1D CHI (01-08)

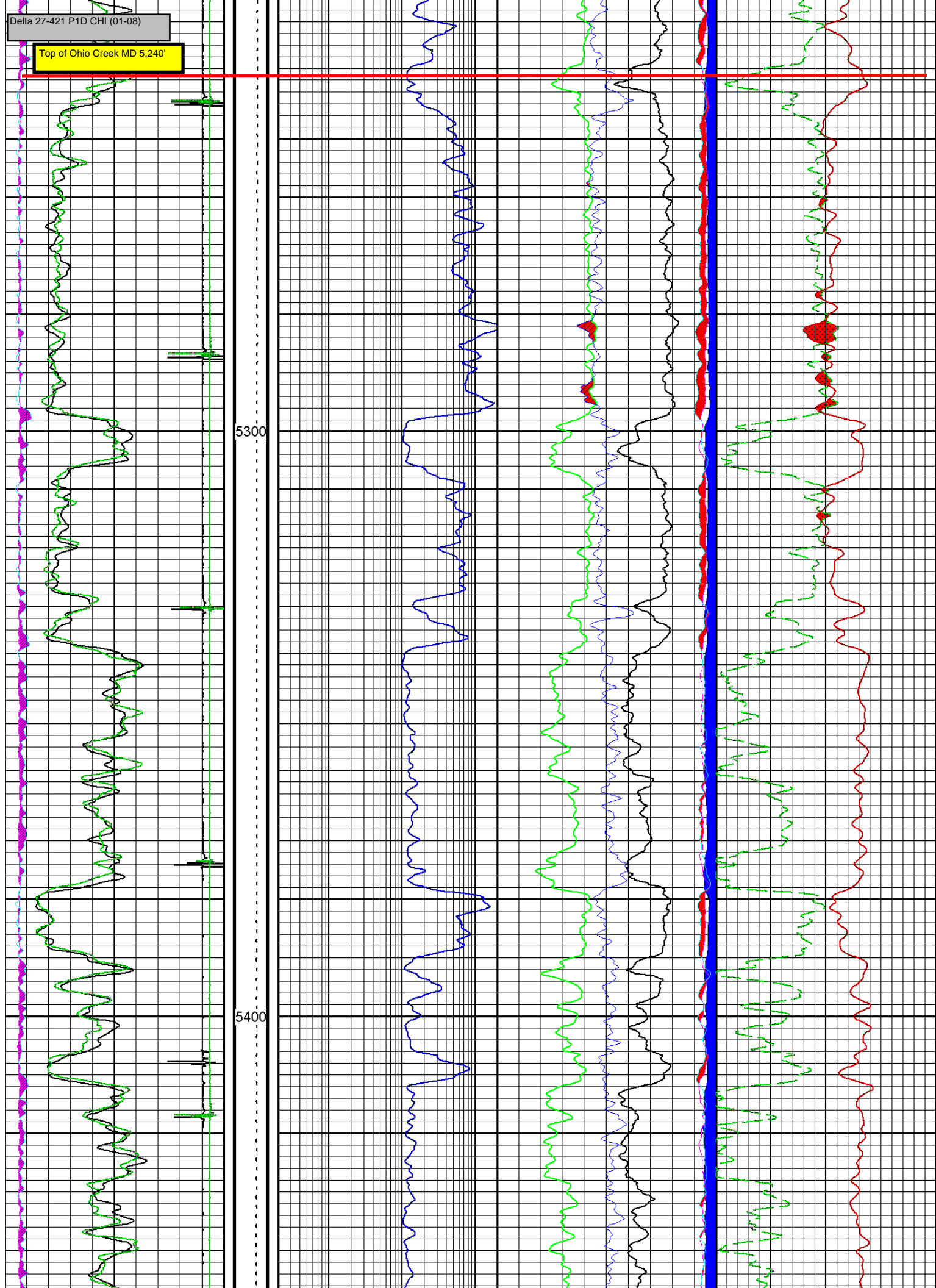


Delta 27-421 P1D CHI (01-08)



Delta 27-421 P1D CHI (01-08)

Top of Ohio Creek MD 5,240'

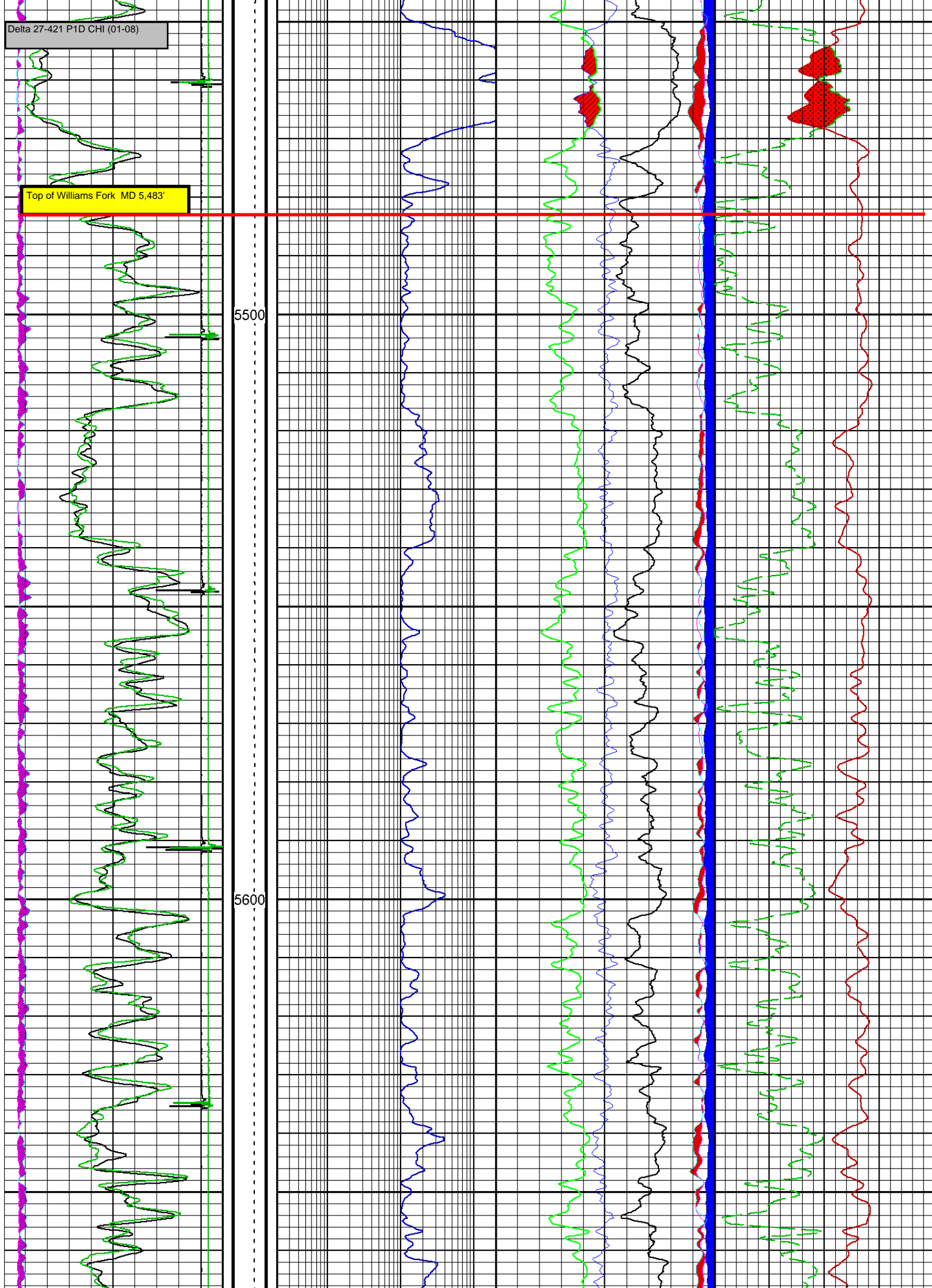


Delta 27-421 P1D CHI (01-08)

Top of Williams Fork MD 5,483'

5500

5600

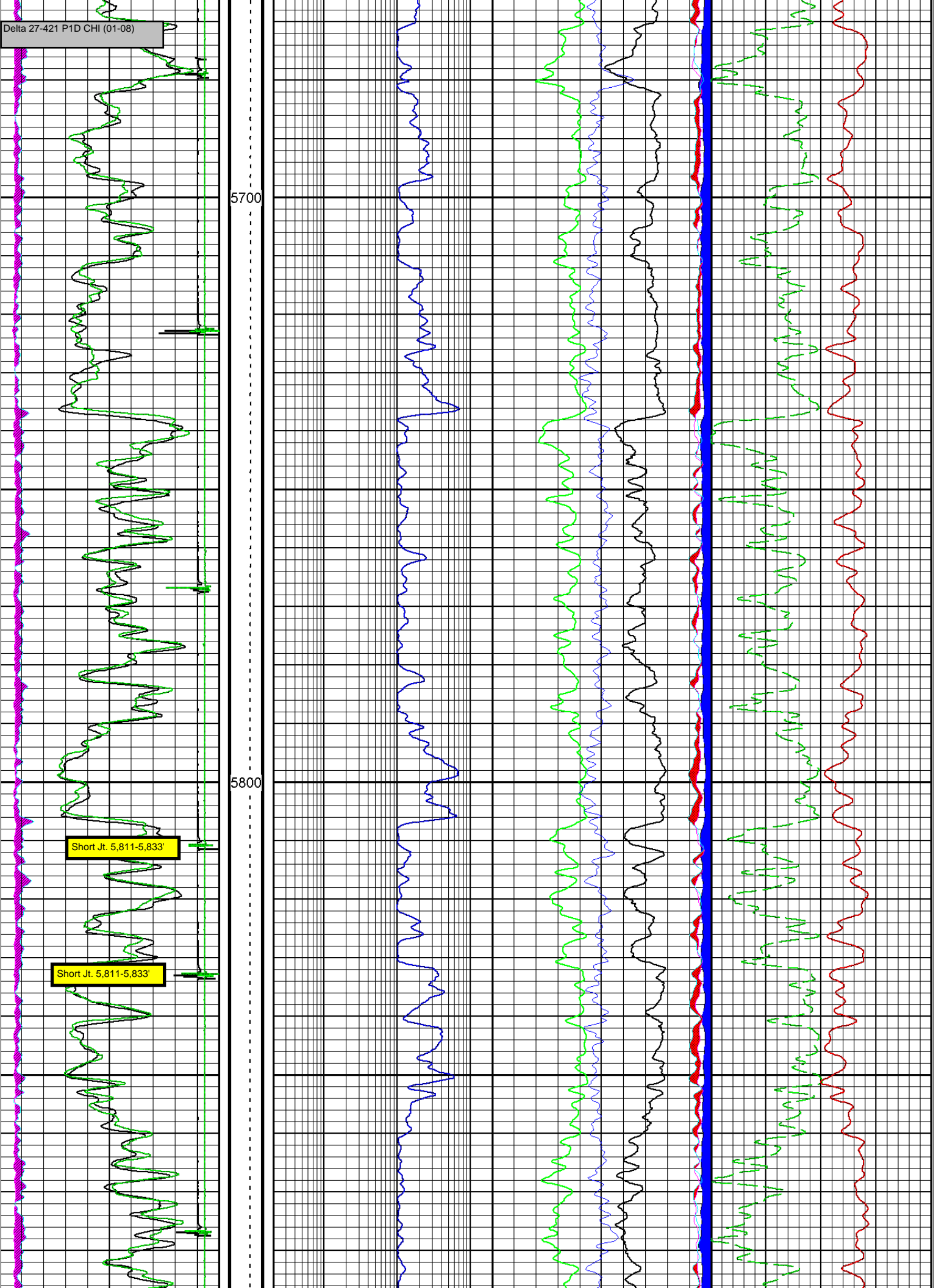


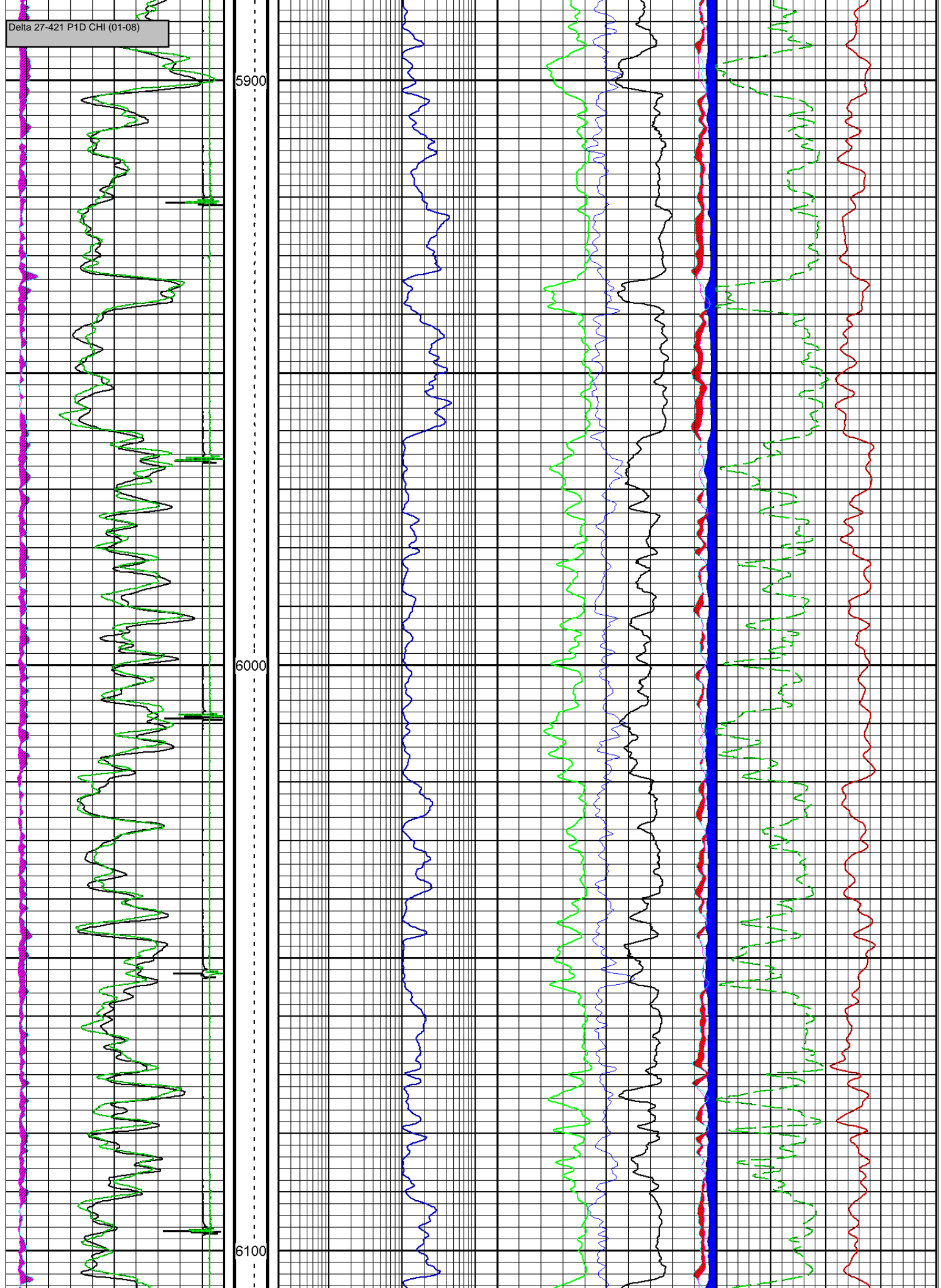
5700

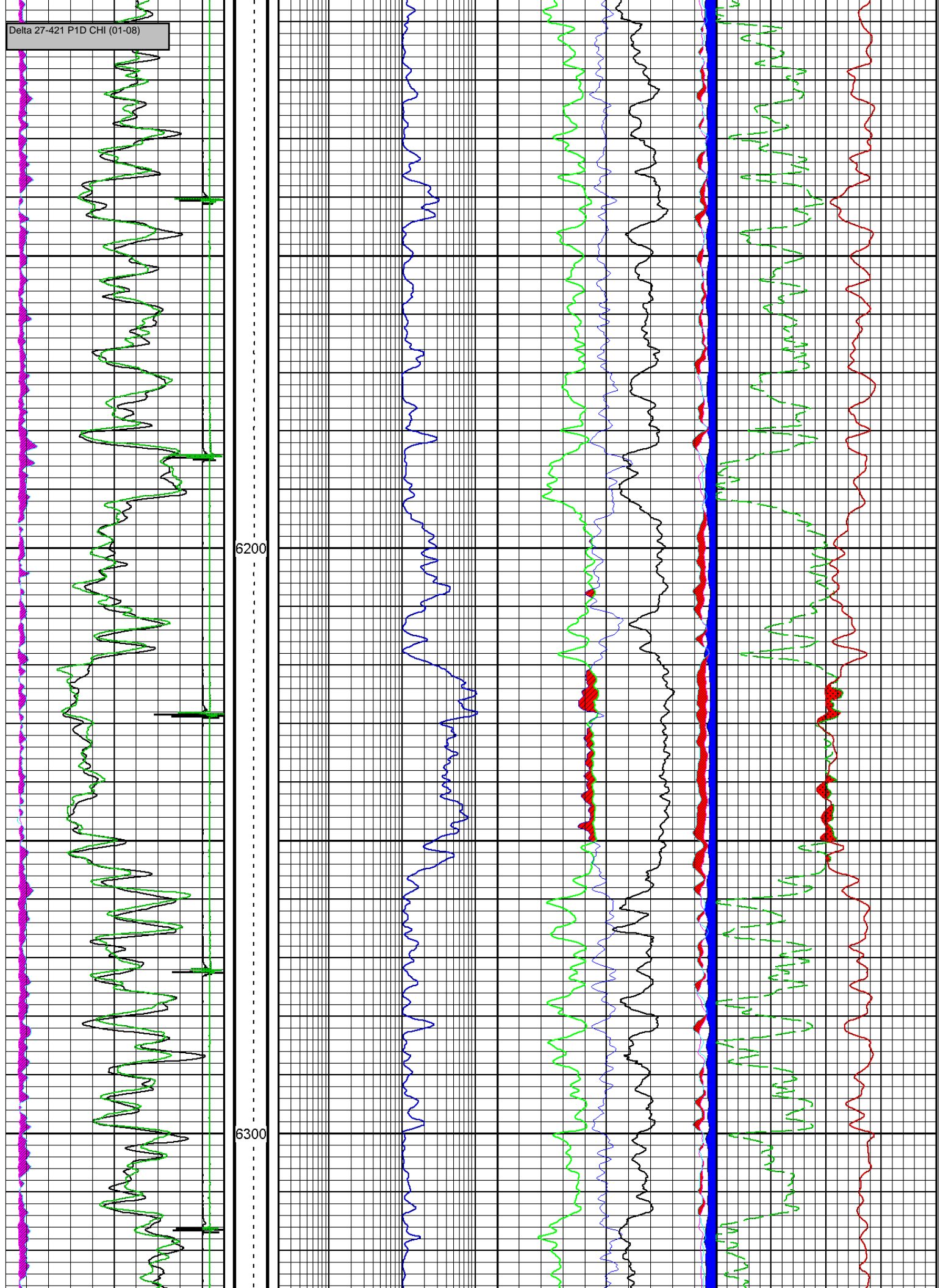
5800

Short Jt. 5,811-5,833'

Short Jt. 5,811-5,833'







TOG 6,336'

Delta 27-421 P1D CHI (01-08)

6400

11' perms net
22 holes total

Stage 8

6500

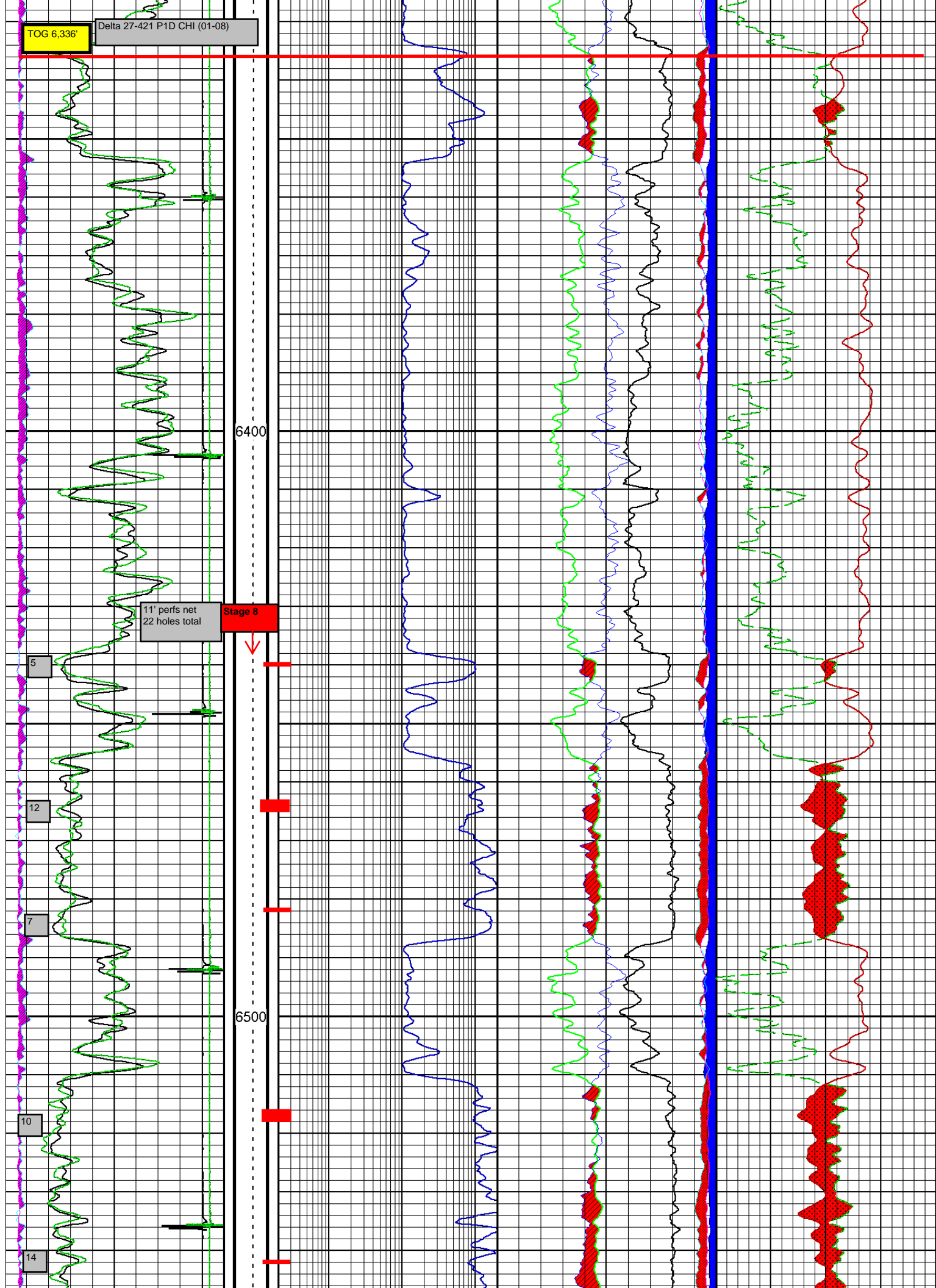
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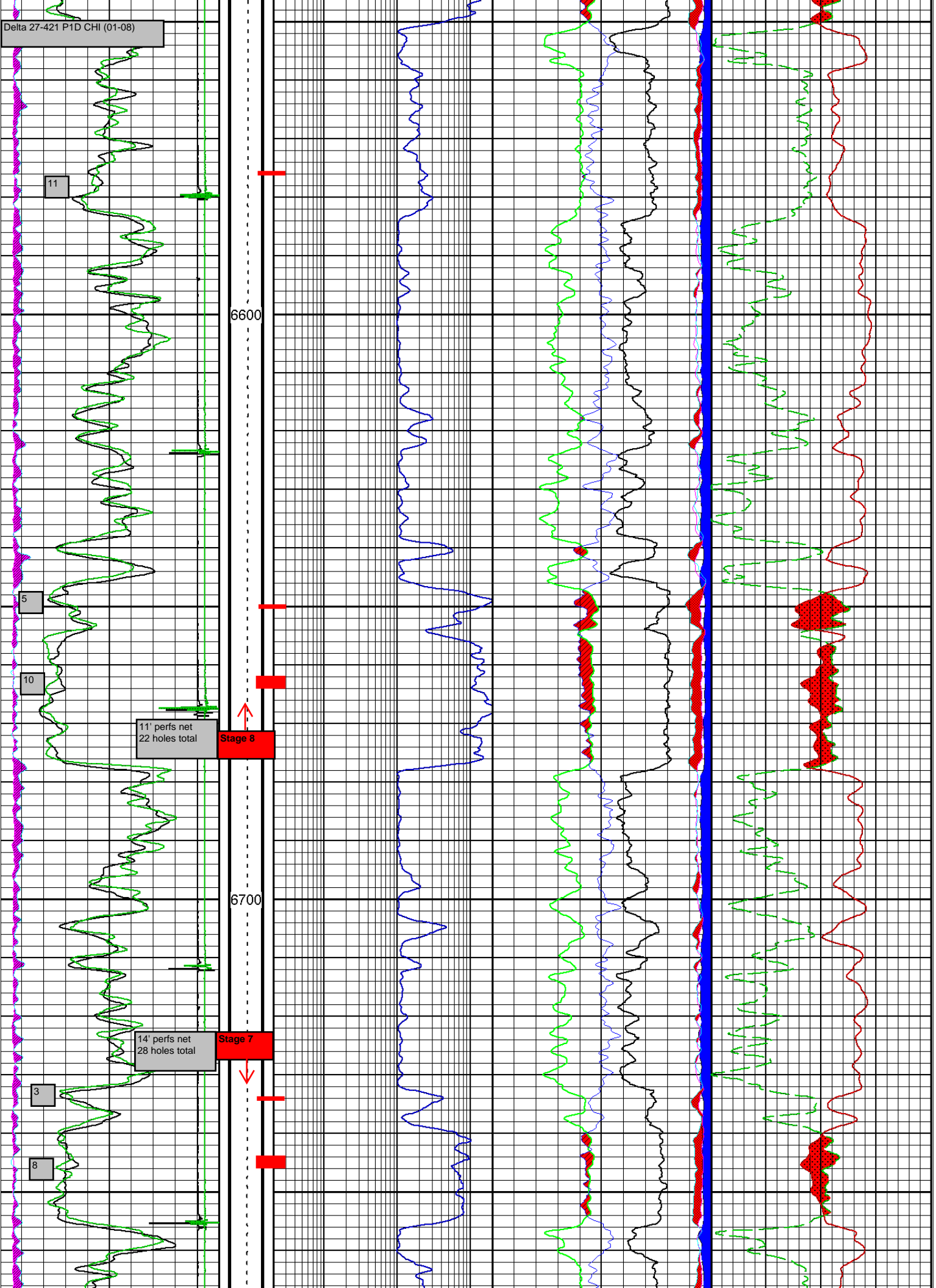
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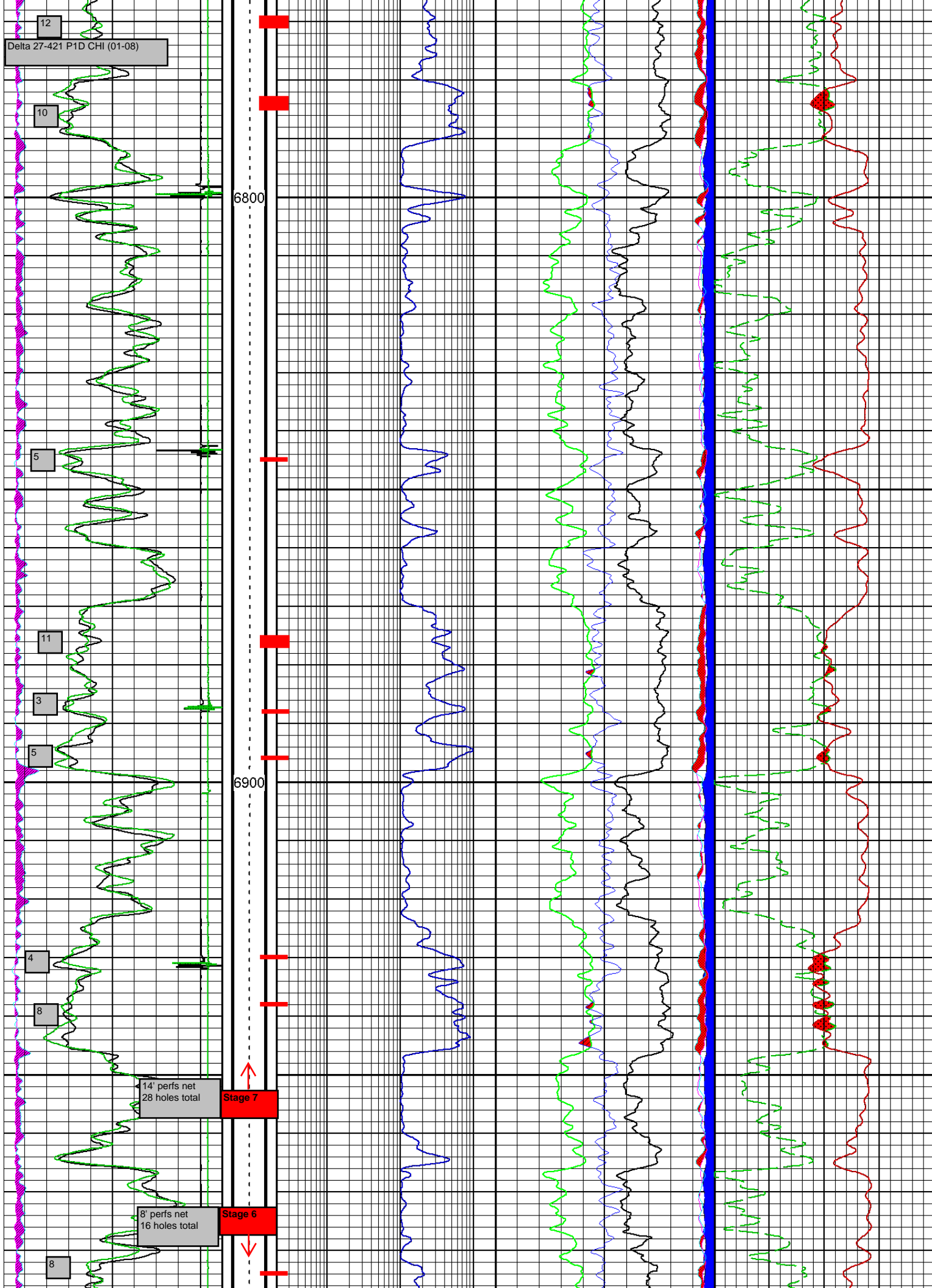
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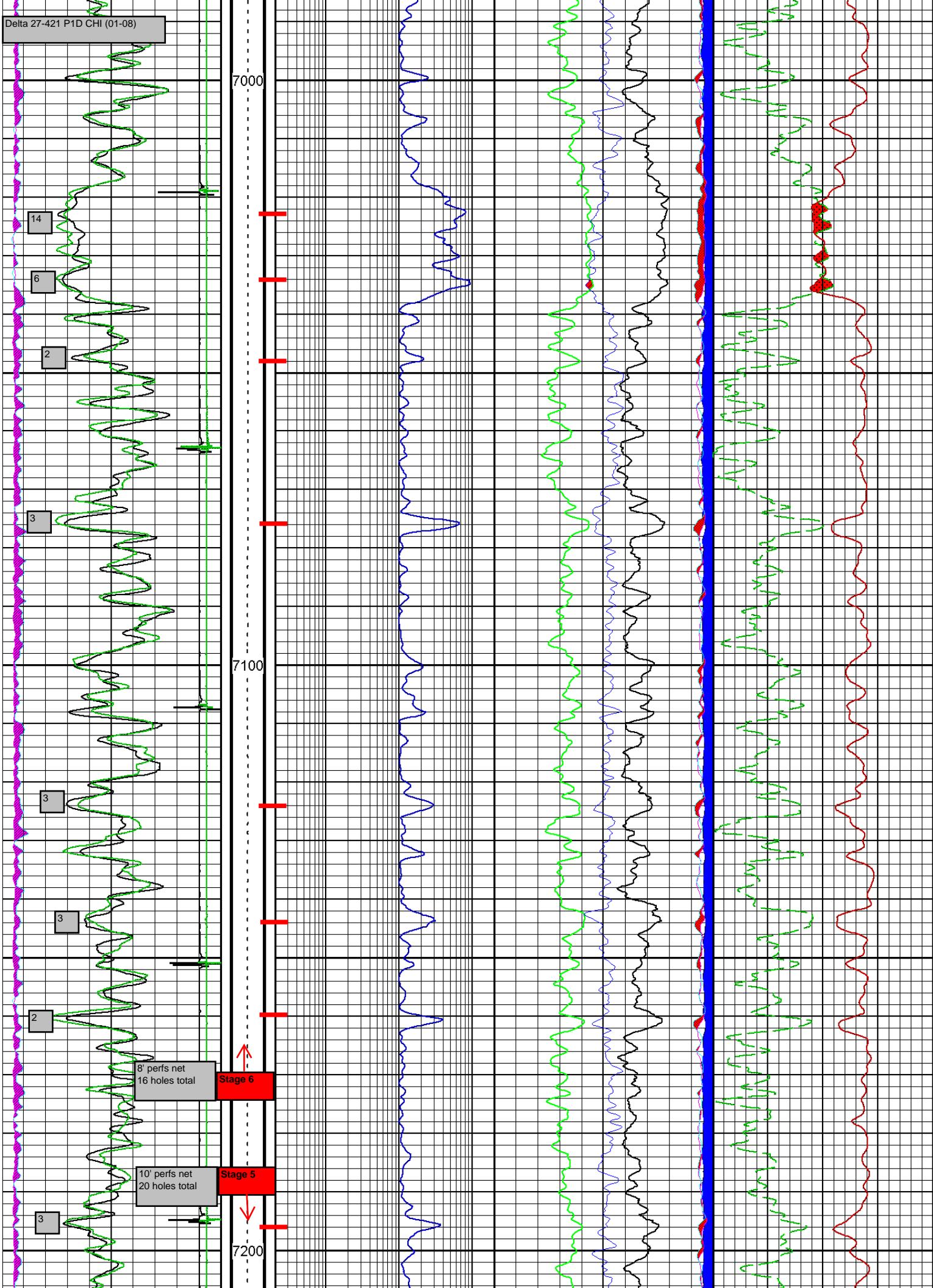
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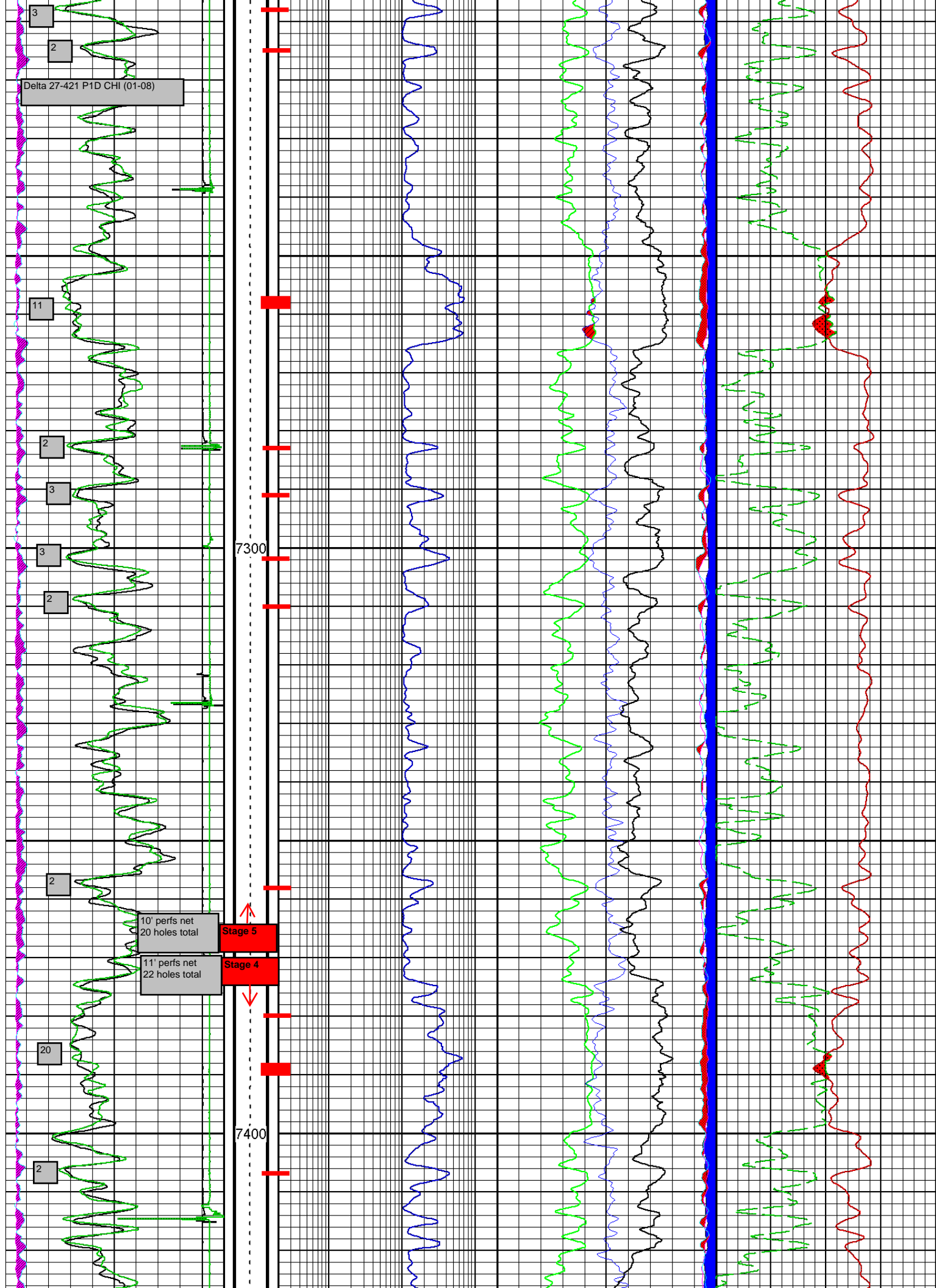
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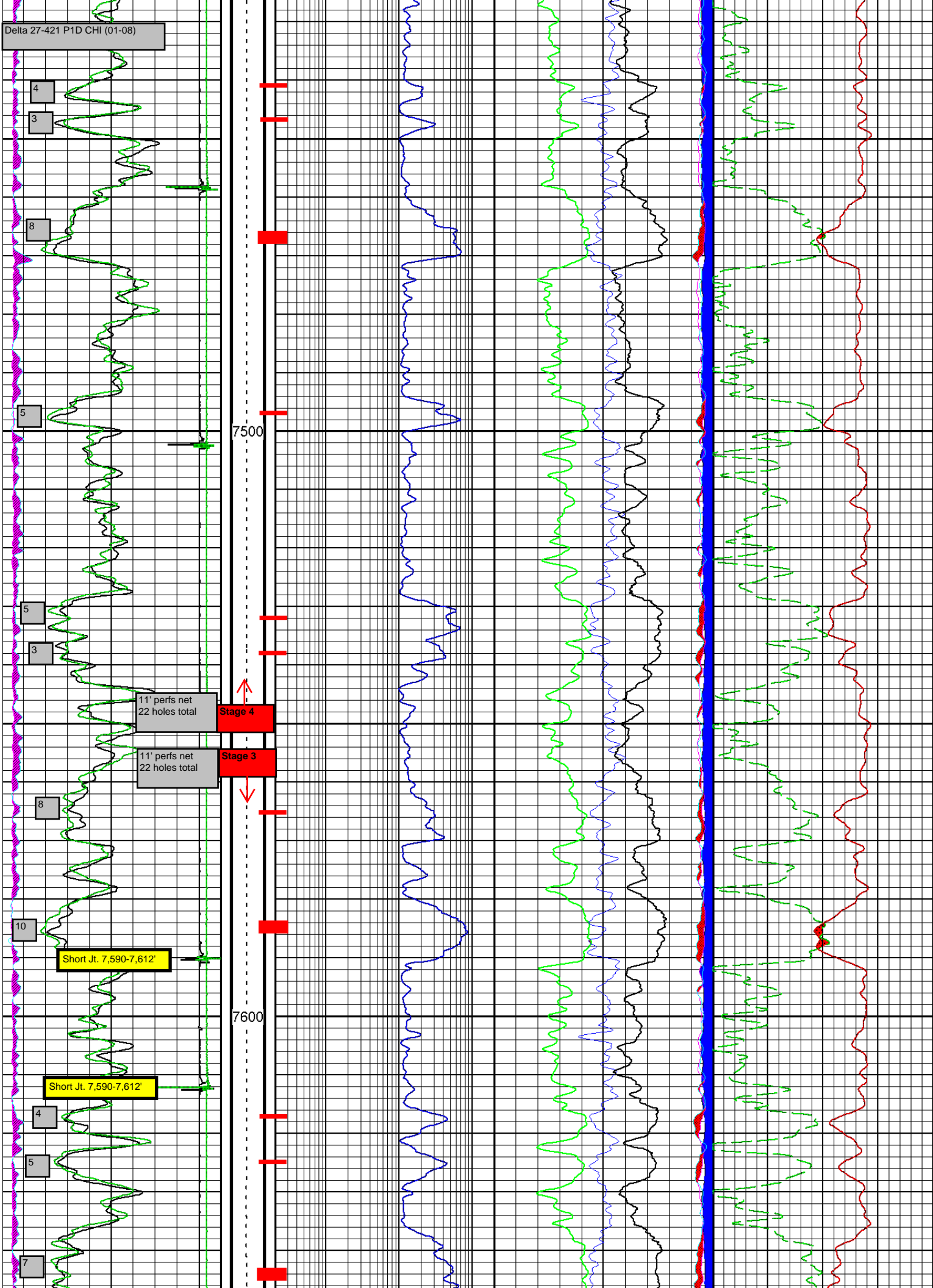








Delta 27-421 P1D CHI (01-08)



Delta 27-421 P1D CHI (01-08)

4

3

4

3

11' perms net
22 holes total

Stage 3

10' perms net
20 holes total

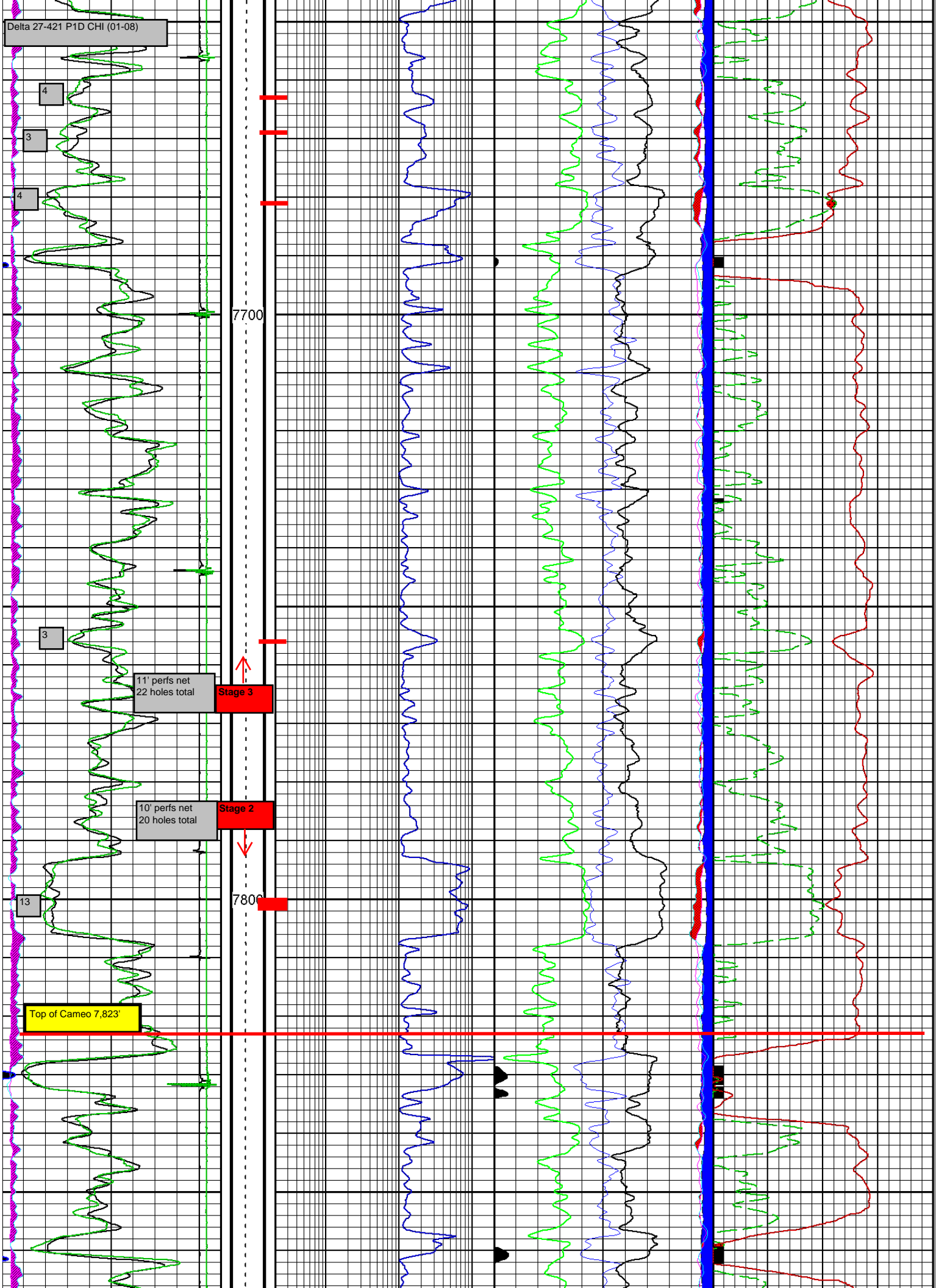
Stage 2

13

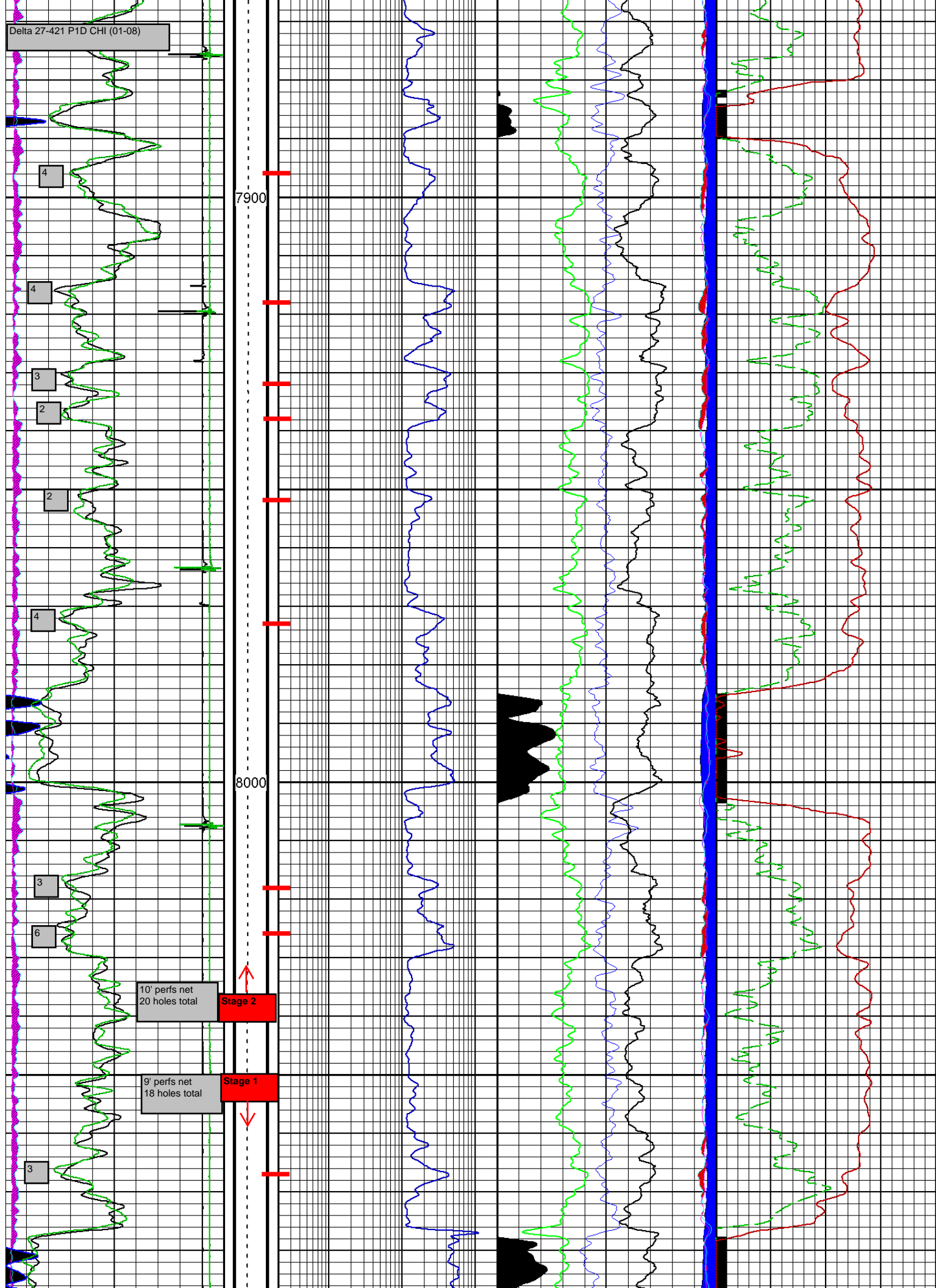
Top of Cameo 7,823'

7700

7800



Delta 27-421 P1D CHI (01-08)



Delta 27-421 P1D CHI (01-08)

Top of Rollins 8,101'

8100

8200

9' perms net
18 holes total

Stage 1

CCL
-15000 mv 1570

BGN
0 cps 30000

BGF
0 cps 3000

GRPH
0 gapi 200

COR1F

DEPTH
FT

CSG
0 flg 0

CSG
10 flg 0

TENS
3000

RPNDS
0.2 ohmm 200

DELI
-100 0

NEAR
240 kcps 0

FAR
40 kcps 0

RATI
6 -4

RBNE

AIPN
0.3 dec(ss) -0.1

AIPD
0.3 dec(ss) -0.1

COAL
0 flg 20

AIPD AIPN

