



WELLS RANCH STATE AA27-79HN 1":100' TVD

Company: NOBLE ENERGY
Well Name: WELLS RANCH STATE AA27-79HN
API: 05-123-37717
Rig Id: H&P 277
State: CO
County/Parish: WELD COUNTY
Country: USA
Survey Company: DRILTECH, LLC
Job number: 2013-383-IDDT-CO
MARK LARUE MWD OPERATOR
JOSH CAYLOR MWD OPERATOR

Log measurements:
Depth measured from:
Maximum temperature: 242

Depth Date
Start: 630 ft 12/12/2013
End: 14568 ft 12/20/2013

Casing Depth Size
Surface: 916 9.625
Intermediate: 6957 7.0

Mud Type: WATER BASE
Density: 9.0
Viscosity: 30
Rm: Rm: Rmc:

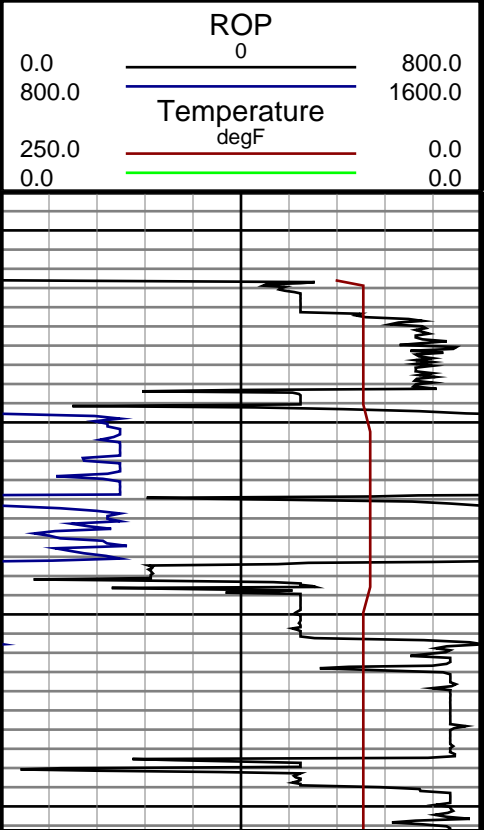
Elevations
KB: 4727
GL: 4727
DF:

Run	Bit Size	Offsets	Gamma	Survey	Start	End	Start	End	Dates
1	8 3/4	46.00	58.00	608	6009	6967	12/13/2013	12/14/2013	
2	8 3/4	35.00	47.00	6009	6967	12/14/2013	12/15/2013	12/15/2013	
3	6 1/8	42.00	53.00	6967	14568	12/17/2013	12/20/2013	12/20/2013	
4									
5									
6									
7									
8									
9									
10									

DRILTECH, LLC uses its best efforts to provide its customers with accurate information and interpretations in conjunction with services performed but will not be held liable or responsible for the accuracy of such information or interpretation.

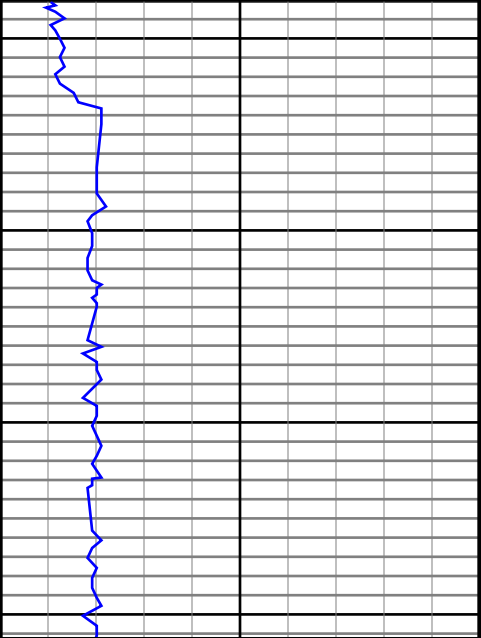
TVD

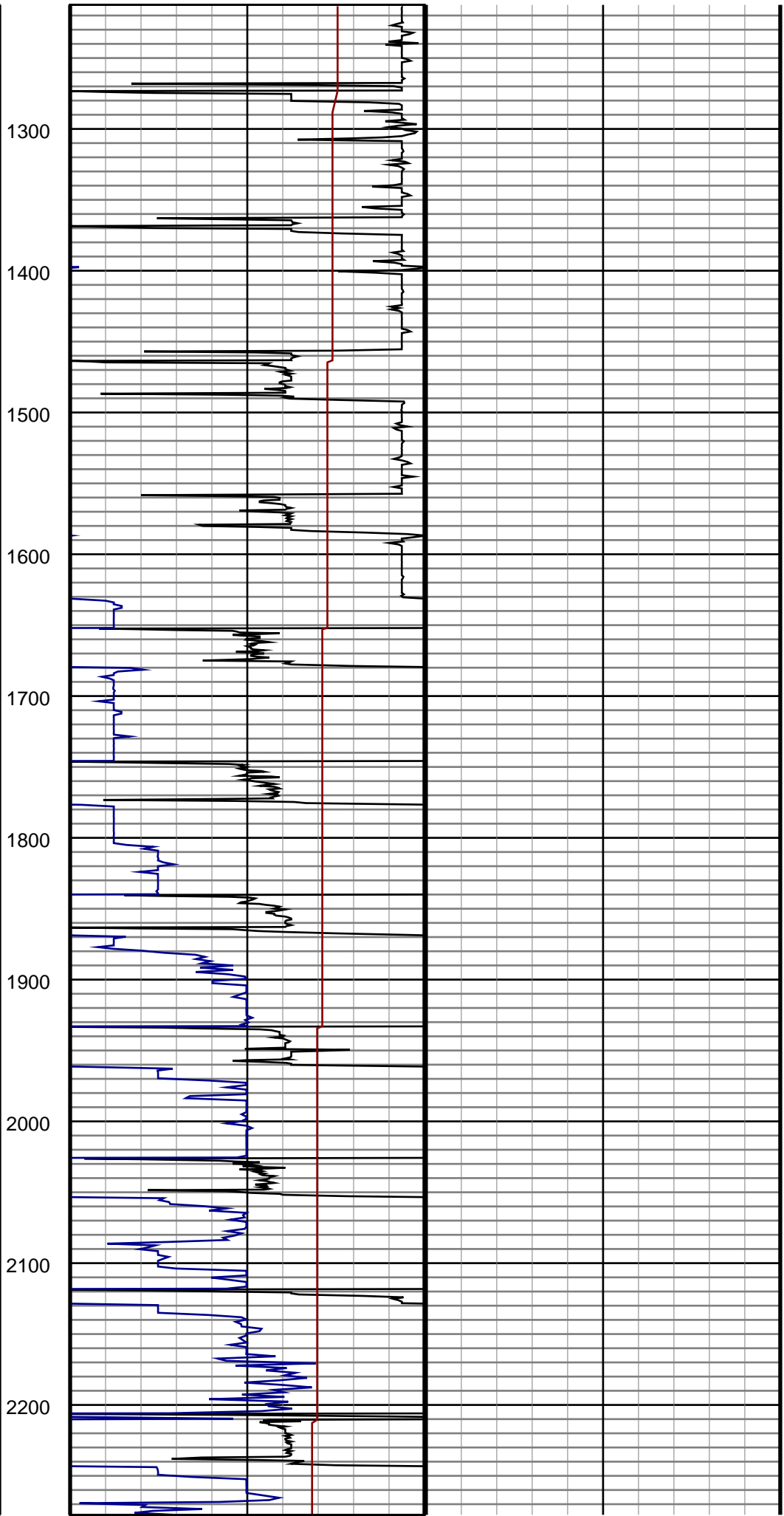
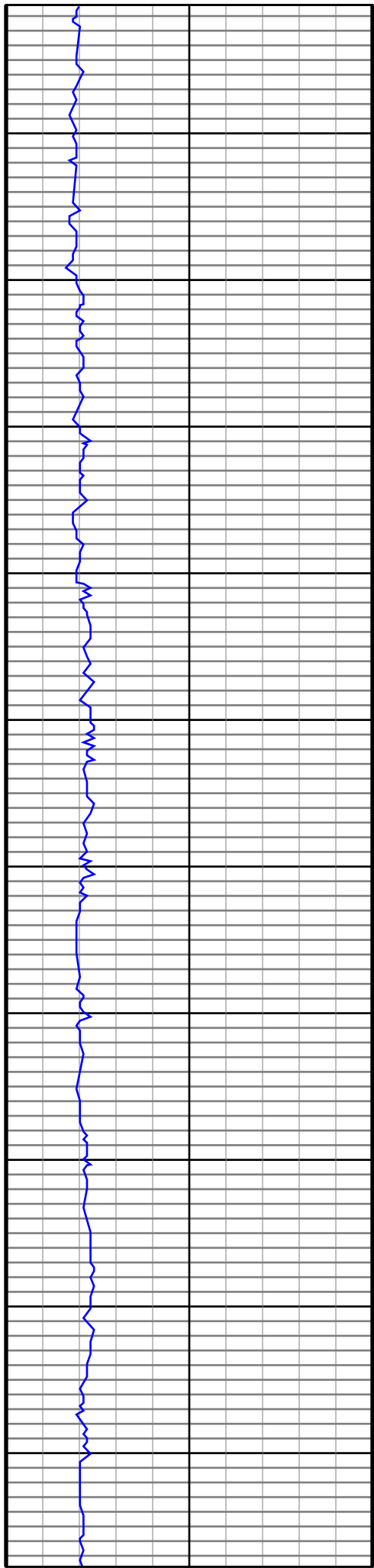
900
1000
1100
1200

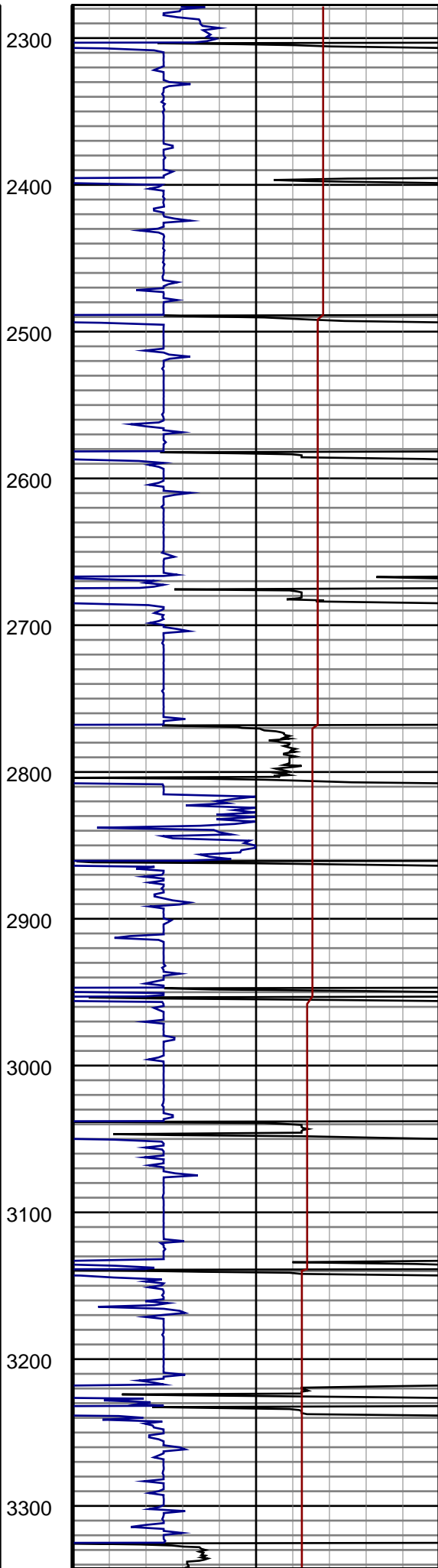
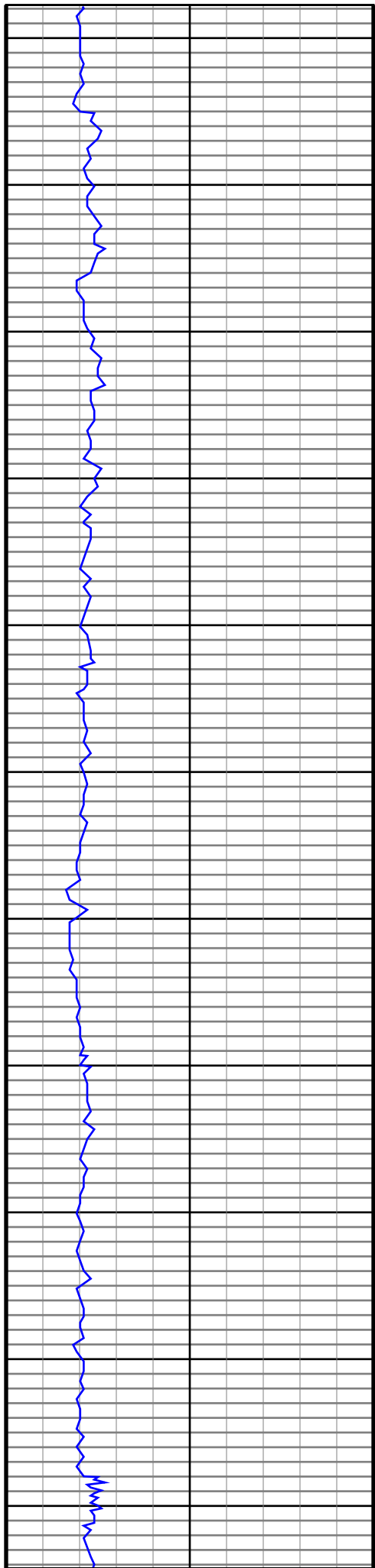


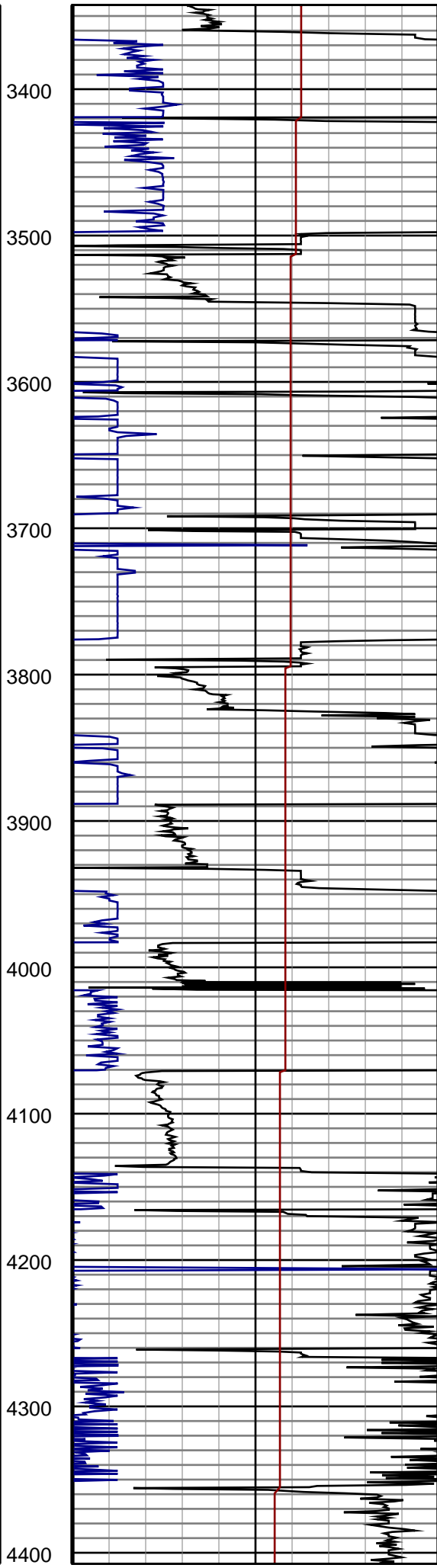
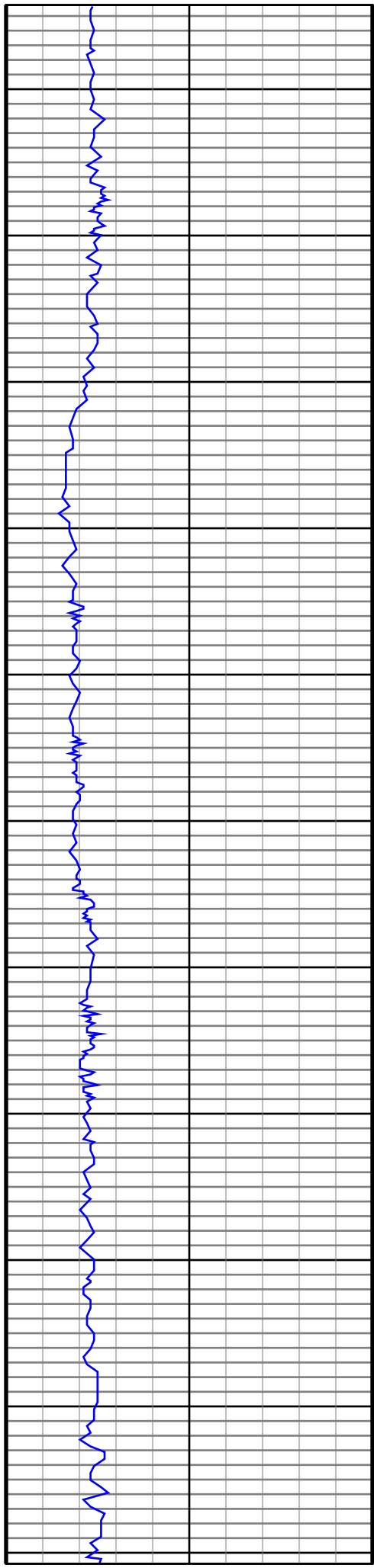
Gamma
API

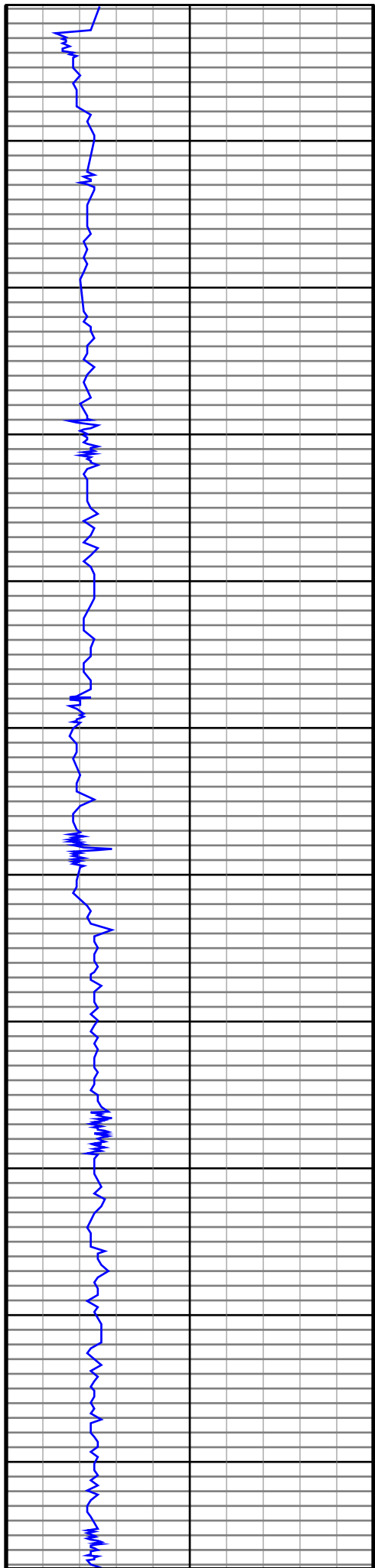
0.0 250.0 500.0



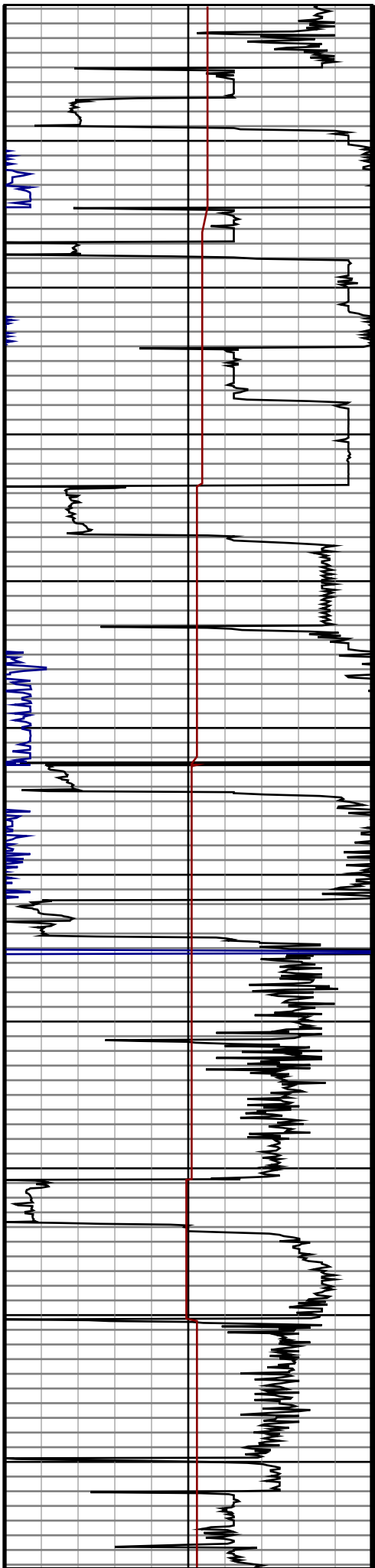


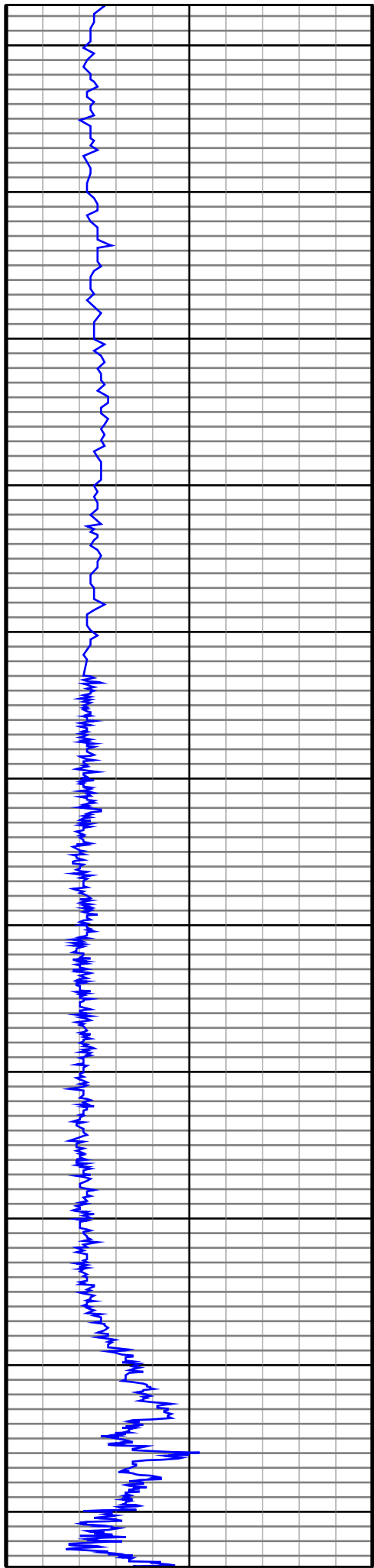




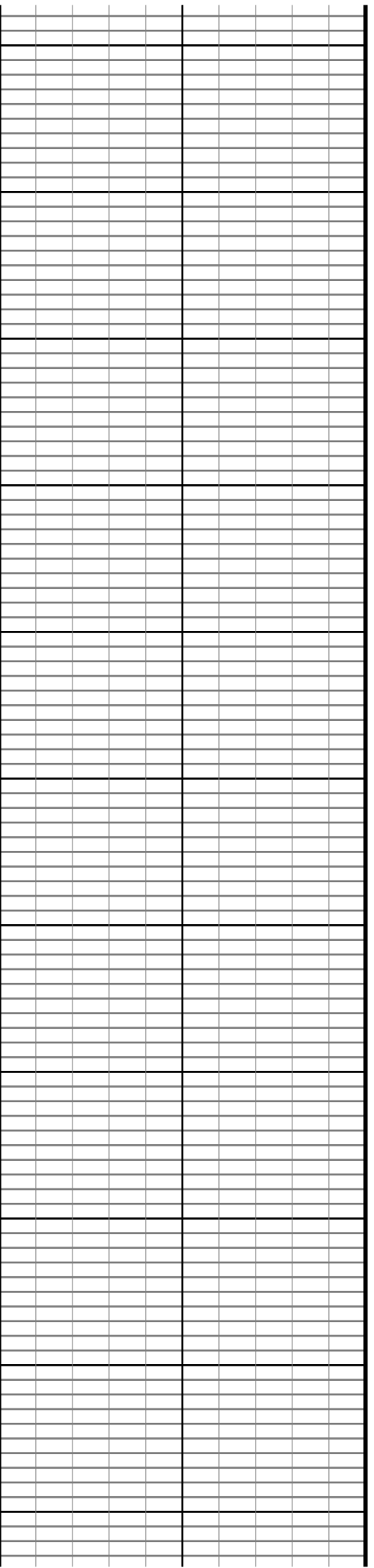
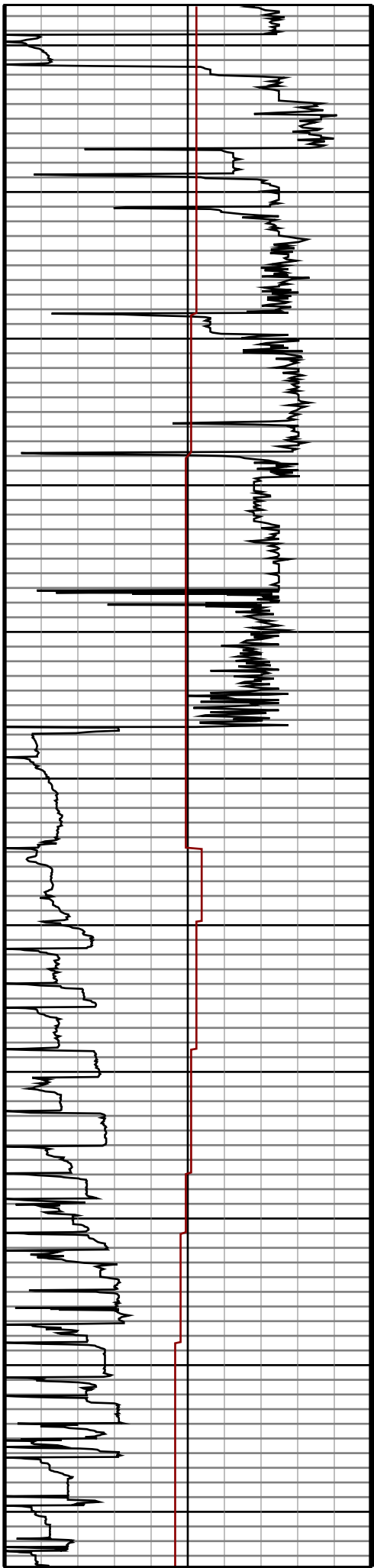


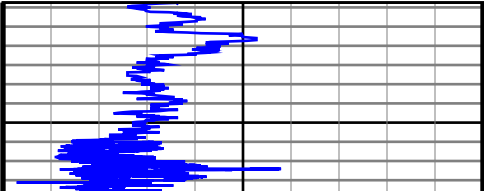
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400



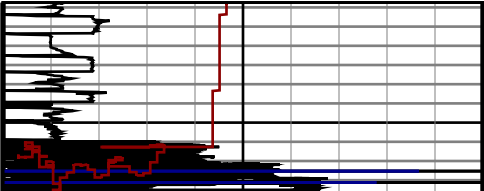


5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500





6600



Gamma
API

0.0	—	250.0
250.0	—	500.0

ROP
0

0.0	—	800.0
800.0	—	1600.0

Temperature
degF

250.0	—	0.0
0.0	—	0.0