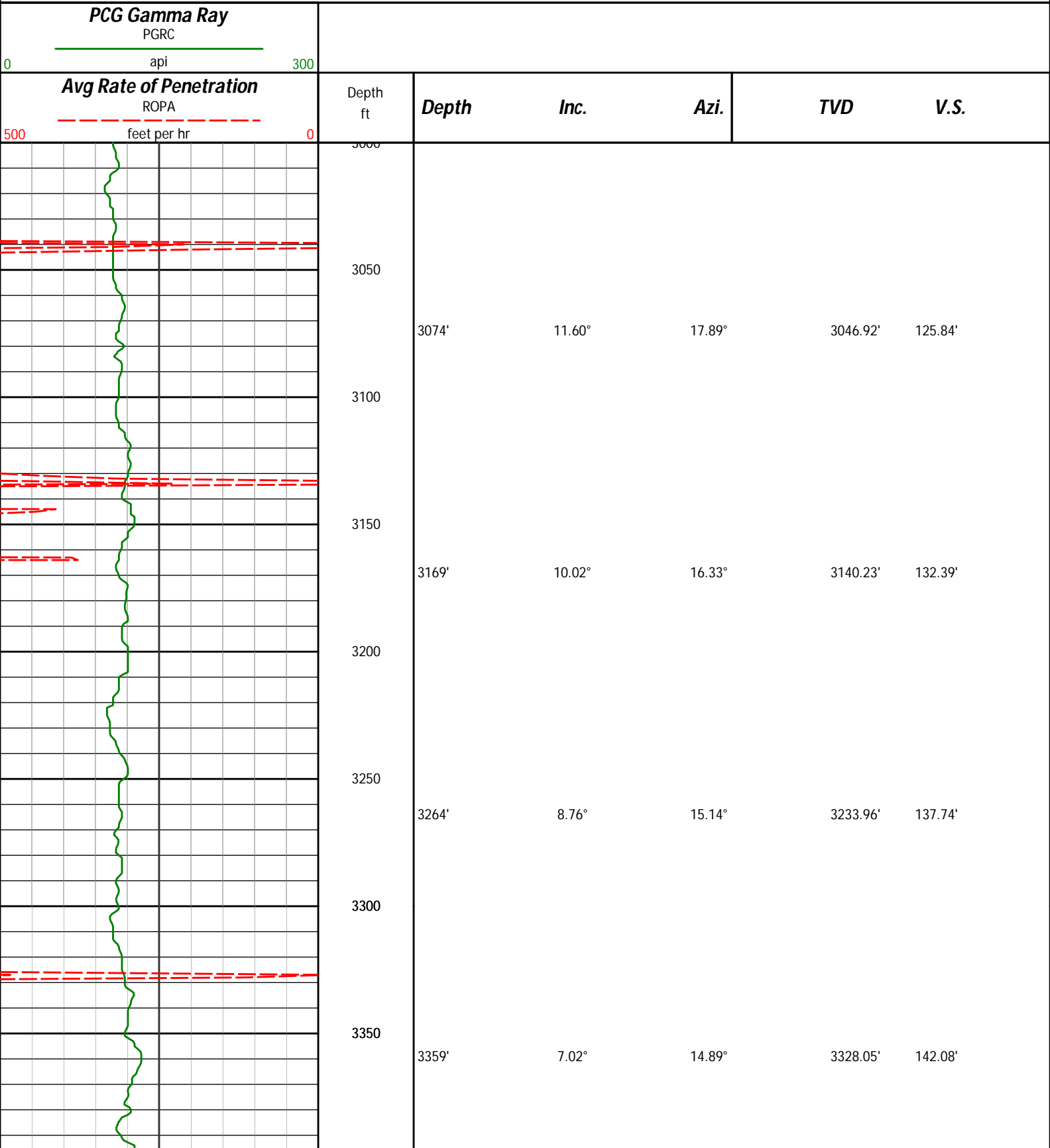
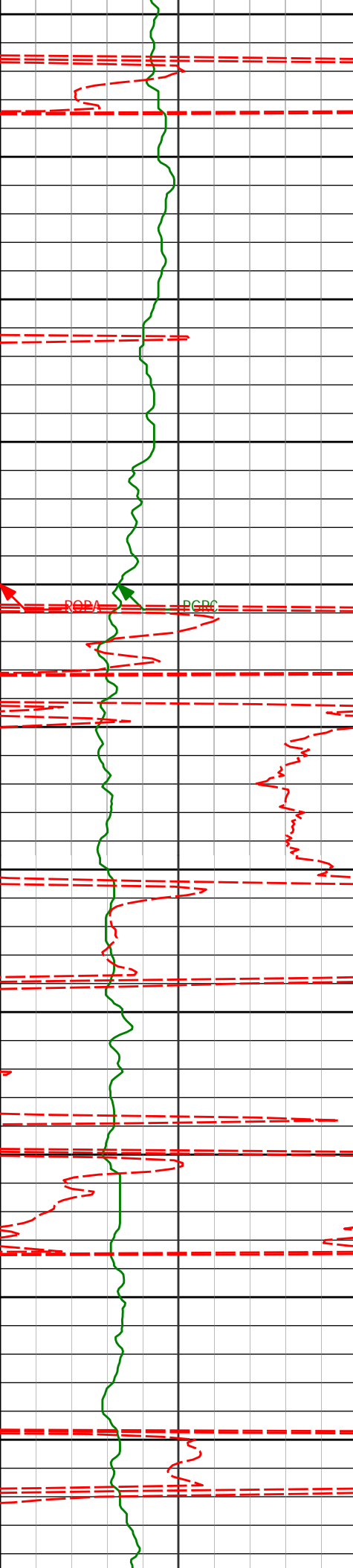


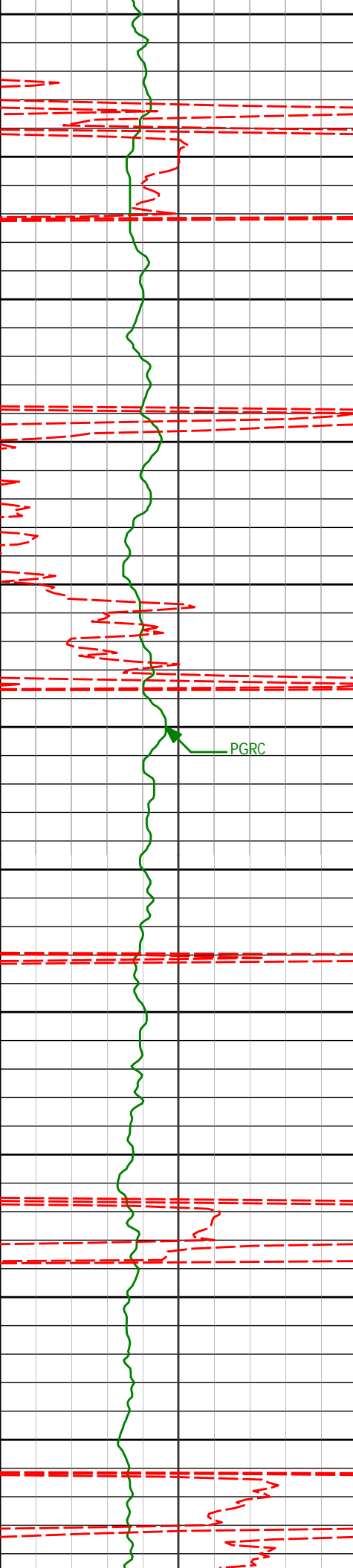
MD Main Log 1:600

Noble Energy  
Wells Ranch AE20-64HN  
H&P 343  
T6N-R62W





3400				
3450	3454'	7.44°	24.00°	3422.30' 146.92'
3500				
3550	3549'	7.36°	25.44°	3516.51' 152.88'
3600				
3650	3644'	6.33°	17.39°	3610.83' 157.85'
3700				
3750	3739'	4.50°	8.21°	3705.41' 160.61'
3800				
3850	3834'	2.35°	338.88°	3800.24' 160.87'
3900				
	3929'	3.02°	319.12°	3895.14' 158.82'



3950

4000

4050

4100

4150

4200

4250

4300

4350

4400

4450

4023'

1.02°

293.42°

3989.07'

156.61'

4118'

0.79°

271.90°

4084.06'

155.21'

4213'

0.72°

328.60°

4179.06'

154.29'

4308'

1.09°

313.03°

4274.04'

153.41'

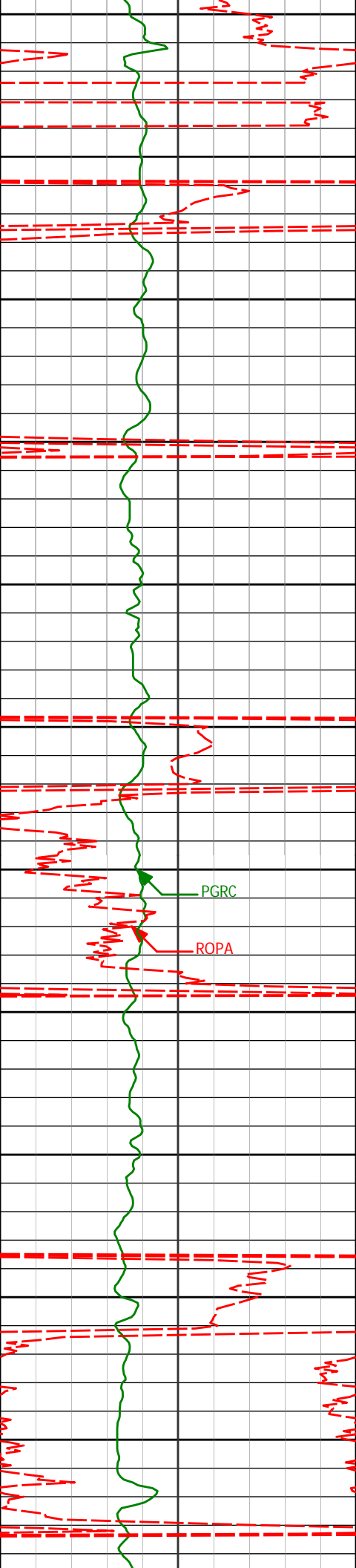
4403'

1.41°

303.02°

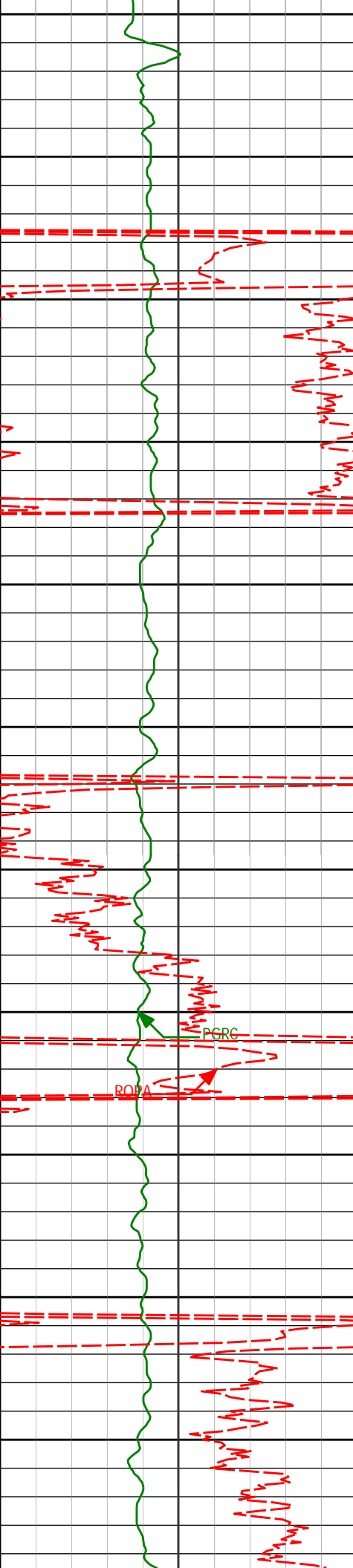
4369.02'

151.87'



4500  
4550  
4600  
4650  
4700  
4750  
4800  
4850  
4900  
4950  
5000

4498'	1.00°	306.34°	4464.00'	150.31'
4593'	0.68°	65.53°	4559.00'	150.21'
4688'	1.38°	69.35°	4653.98'	151.84'
4783'	1.65°	137.31°	4748.95'	153.78'
4878'	0.88°	129.65°	4843.93'	155.16'
4973'	0.36°	152.19°	4938.92'	155.80'

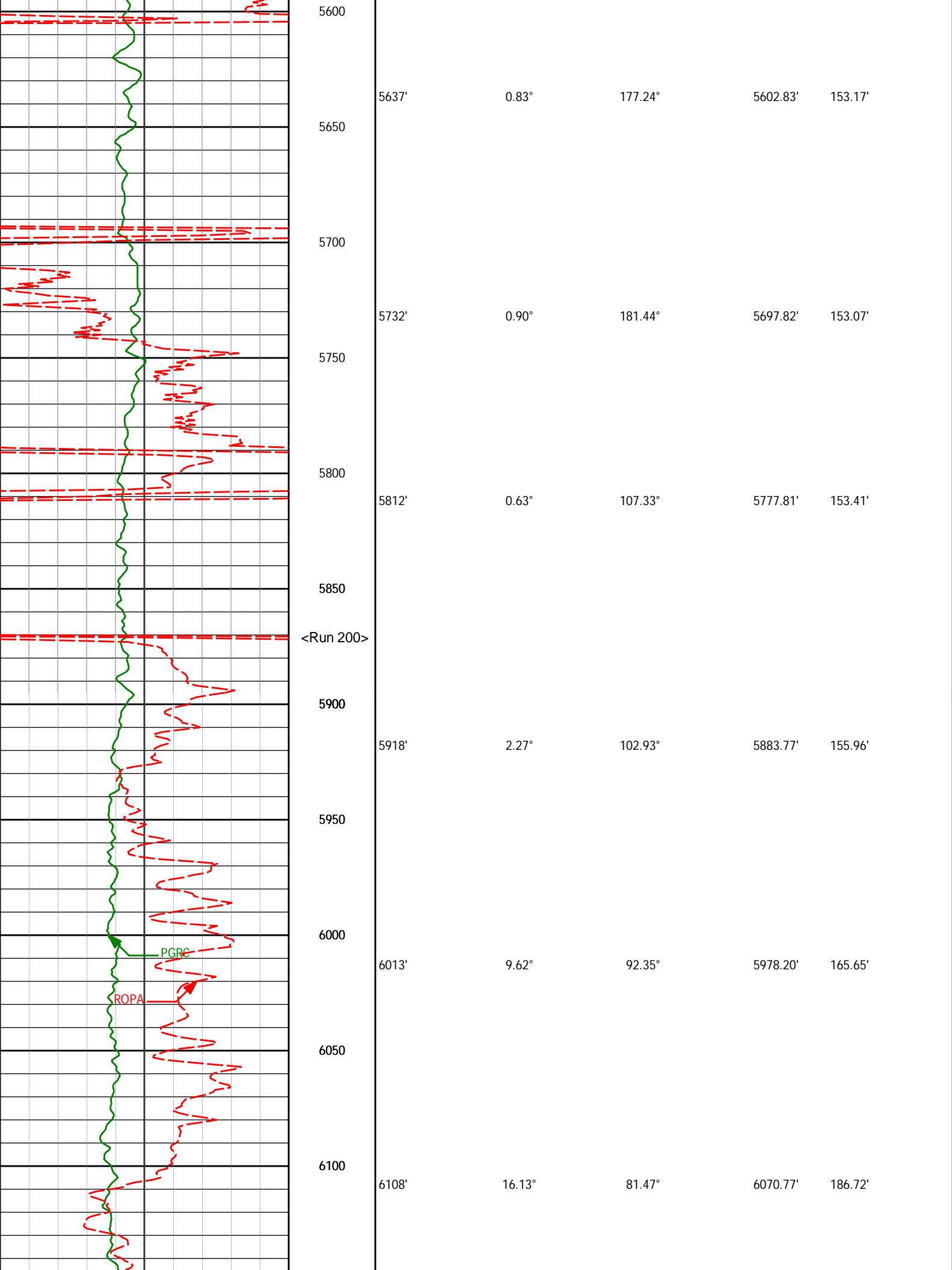


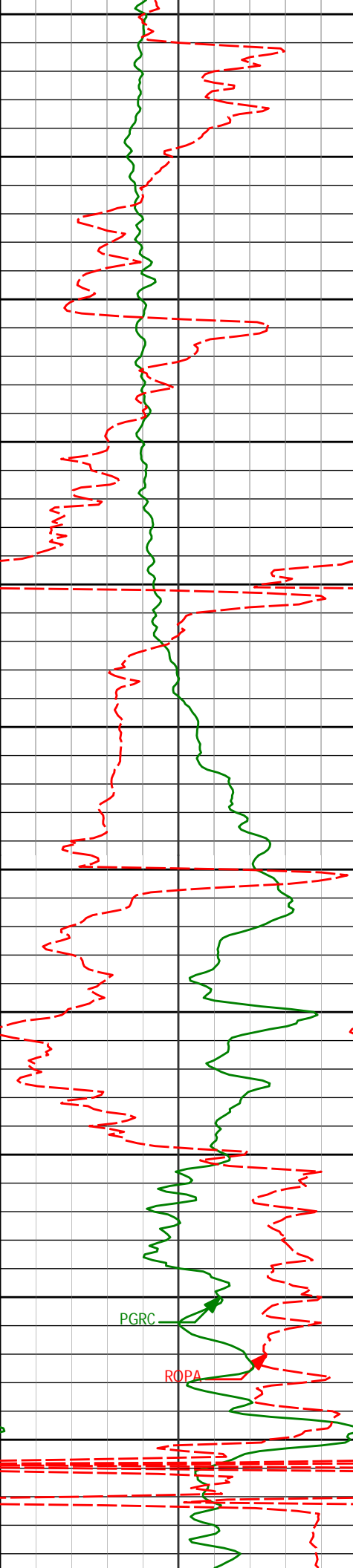
5050  
5100  
5150  
5200  
5250  
5300  
5350  
5400  
5450  
5500  
5550

5068'	0.44°	150.71°	5033.92'	156.07'
5162'	1.57°	183.88°	5127.91'	156.04'
5257'	0.98°	188.77°	5222.88'	155.66'
5352'	1.08°	181.70°	5317.87'	155.38'
5447'	1.01°	232.93°	5412.85'	154.58'
5542'	0.96°	201.40°	5507.84'	153.53'

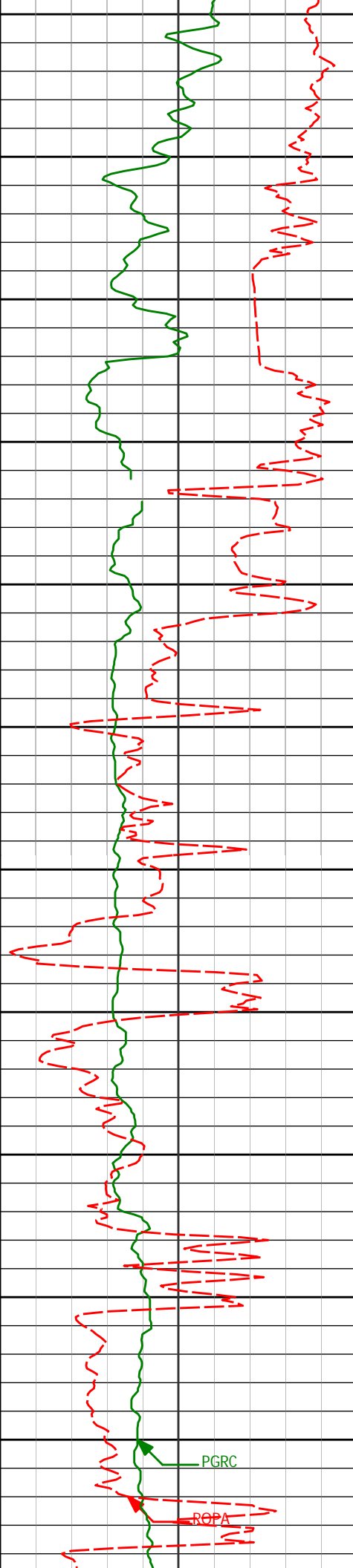
PGRC

ROPA





6150				
6200	6203'	23.57°	76.89°	6160.07' 218.71'
6250				
6300	6298'	31.45°	79.40°	6244.27' 262.19'
6350				
6400	6393'	39.74°	76.92°	6321.45' 316.95'
6450				
6500	6488'	48.22°	79.43°	6389.76' 382.31'
6550				
6600	6583'	51.95°	90.99°	6450.82' 454.94'
<Run 300>				
6650				
6678'	6678'	63.58°	95.18°	6501.43' 534.42'

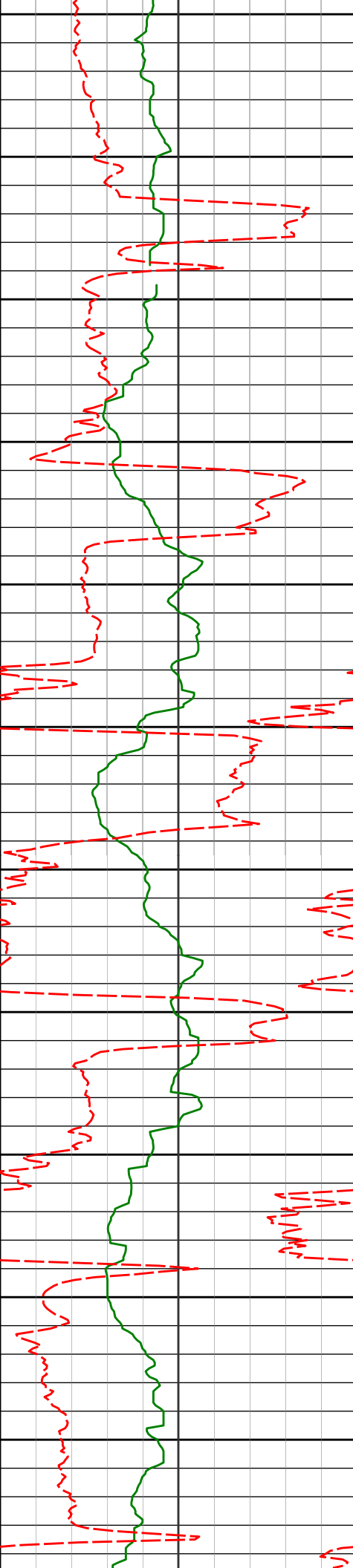


6700				
6726'	72.78°	93.43°	6519.25'	578.42'
6750				
6772'	80.83°	91.37°	6529.74'	622.85'
6800				
6810'	82.17°	90.18°	6535.36'	660.28'
6850	Casing Set @ 6,854' MD			
<Run 400>				
6900				
6928'	89.63°	89.02°	6543.79'	777.60'
6950				
6973'	90.65°	90.14°	6543.68'	822.49'
7000				
7066'	91.11°	90.74°	6542.25'	915.15'
7100				
7150				
7159'	90.00°	89.60°	6541.35'	1007.84'
7200				

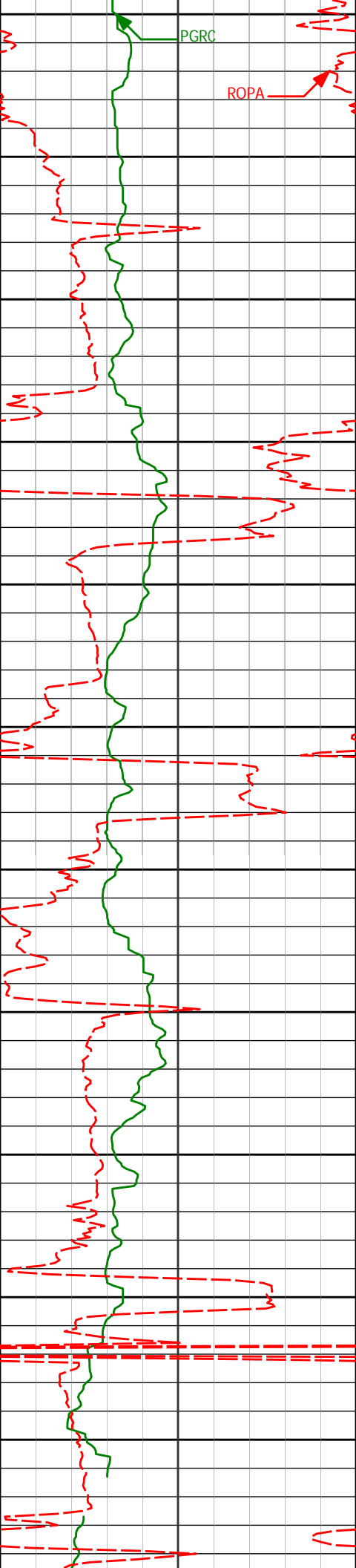
PGRC

ROPA

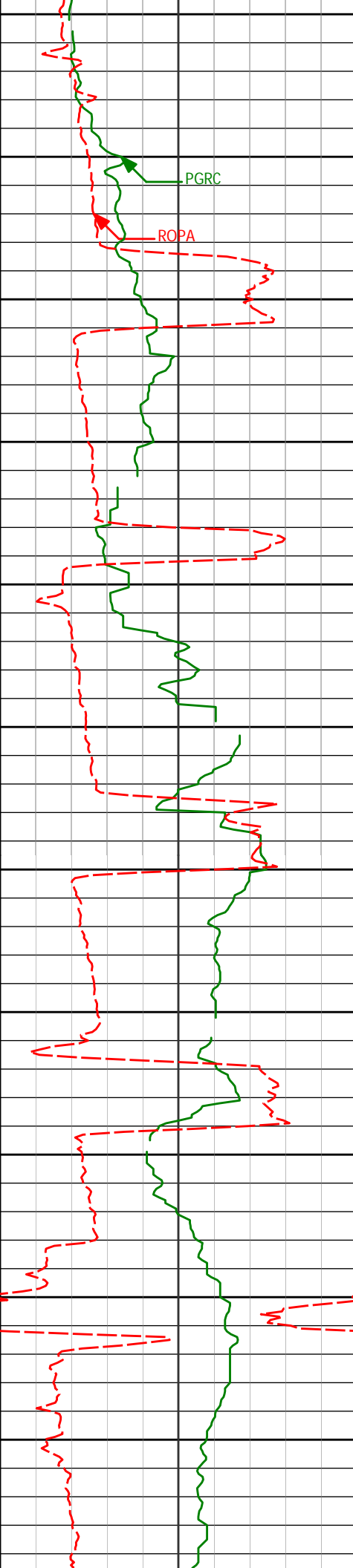




7250	7251'	90.18°	89.46°	6541.21'	1099.62'
7300					
7350	7344'	91.20°	90.34°	6540.09'	1192.35'
7400					
7450	7437'	91.82°	91.92°	6537.64'	1284.88'
7500					
7550	7530'	89.51°	92.69°	6536.56'	1377.23'
7600					
7650	7622'	88.58°	90.80°	6538.09'	1468.68'
7700					
7750	7716'	89.14°	90.63°	6539.96'	1562.29'



7808'	89.63°	90.17°	6540.95'	1653.96'
7900'	92.10°	91.06°	6539.56'	1745.59'
7991'	91.85°	91.32°	6536.42'	1836.10'
8084'	89.48°	92.05°	6535.34'	1928.56'
8179'	90.06°	92.25°	6535.72'	2022.94'
8274'	90.06°	91.74°	6535.63'	2117.34'



8350

8369'

91.76°

92.51°

6534.12'

2211.71'

8400

PGRC

ROPA

8450

8464'

90.86°

91.07°

6531.94'

2306.13'

8500

8550

8559'

91.45°

91.02°

6530.03'

2400.68'

8600

8650

8654'

91.02°

90.61°

6527.98'

2495.26'

8700

8750

8748'

89.32°

89.92°

6527.70'

2588.94'

8800

8850

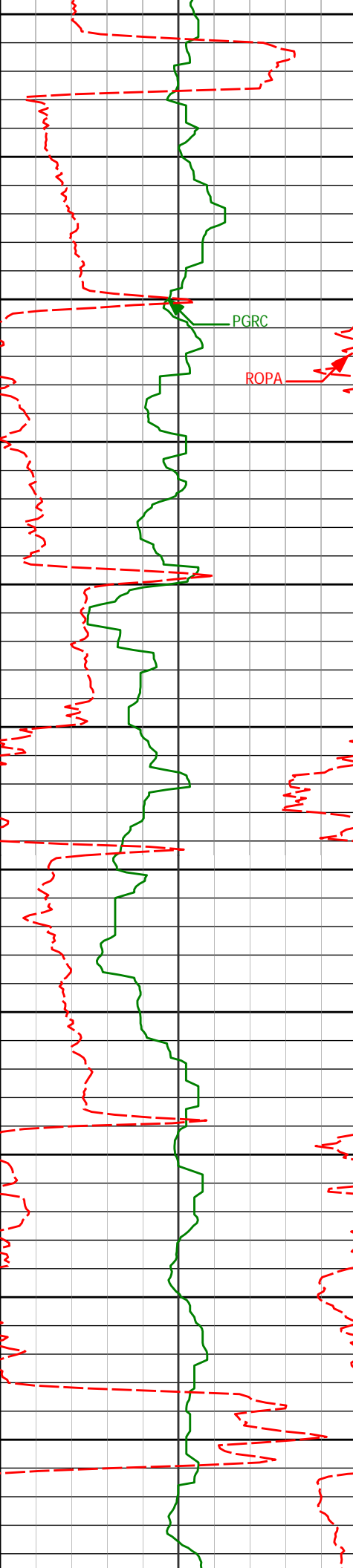
8843'

90.25°

90.38°

6528.06'

2683.64'



8900

8938'

89.11°

89.80°

6528.59'

2778.34'

8950

9000

PGRC

9033'

89.26°

90.07°

6529.94'

2873.06'

9050

9100

9128'

89.63°

90.05°

6530.86'

2967.77'

9150

9200

9223'

90.55°

90.35°

6530.71'

3062.46'

9250

9300

9318'

91.54°

90.18°

6528.98'

3157.13'

9350

9400

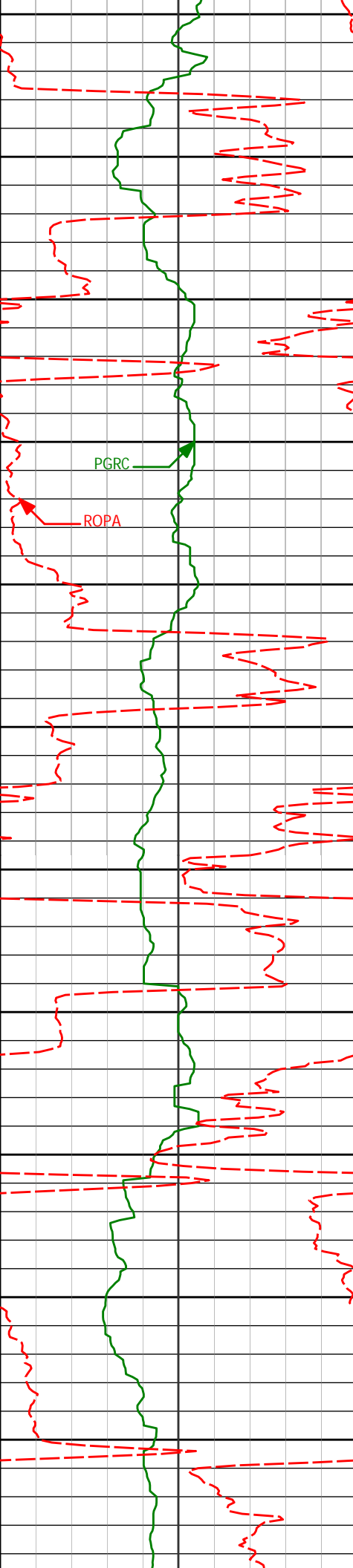
9413'

92.44°

90.51°

6525.68'

3251.74'



9450

9500

9550

9600

9650

9700

9750

9800

9850

9900

9950

9508'

90.49°

89.61°

6523.25'

3346.41'

9603'

91.26°

90.12°

6521.80'

3441.14'

9698'

90.80°

90.06°

6520.09'

3535.83'

9793'

88.67°

90.05°

6520.53'

3630.53'

9888'

89.69°

89.92°

6521.89'

3725.24'

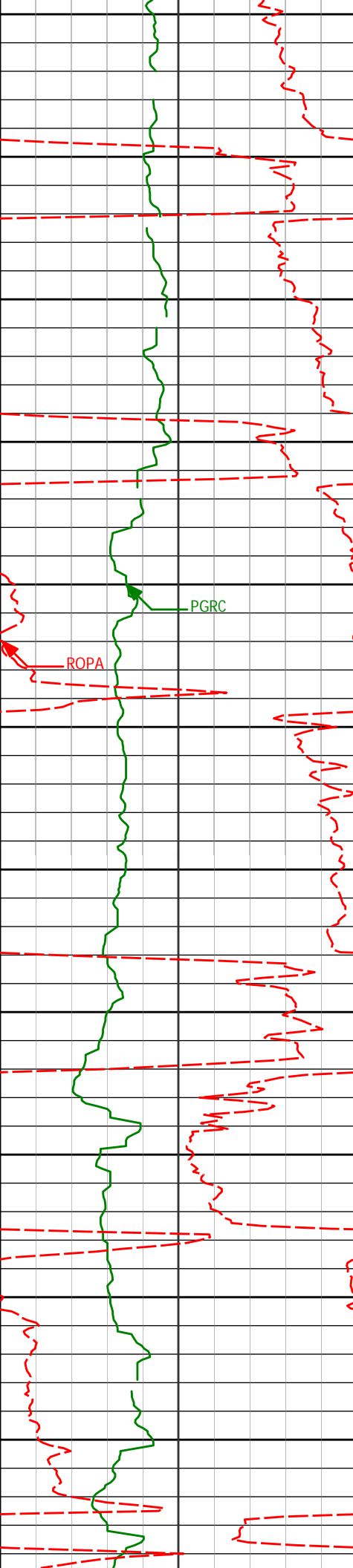
9983'

90.77°

89.21°

6521.51'

3820.01'



10077'	90.31°	91.03°	6520.63'	3913.71'
10172'	89.57°	89.89°	6520.73'	4008.37'
10267'	91.17°	90.31°	6520.11'	4103.07'
10362'	88.49°	89.97°	6520.39'	4197.76'
10457'	89.48°	91.24°	6522.08'	4292.38'

