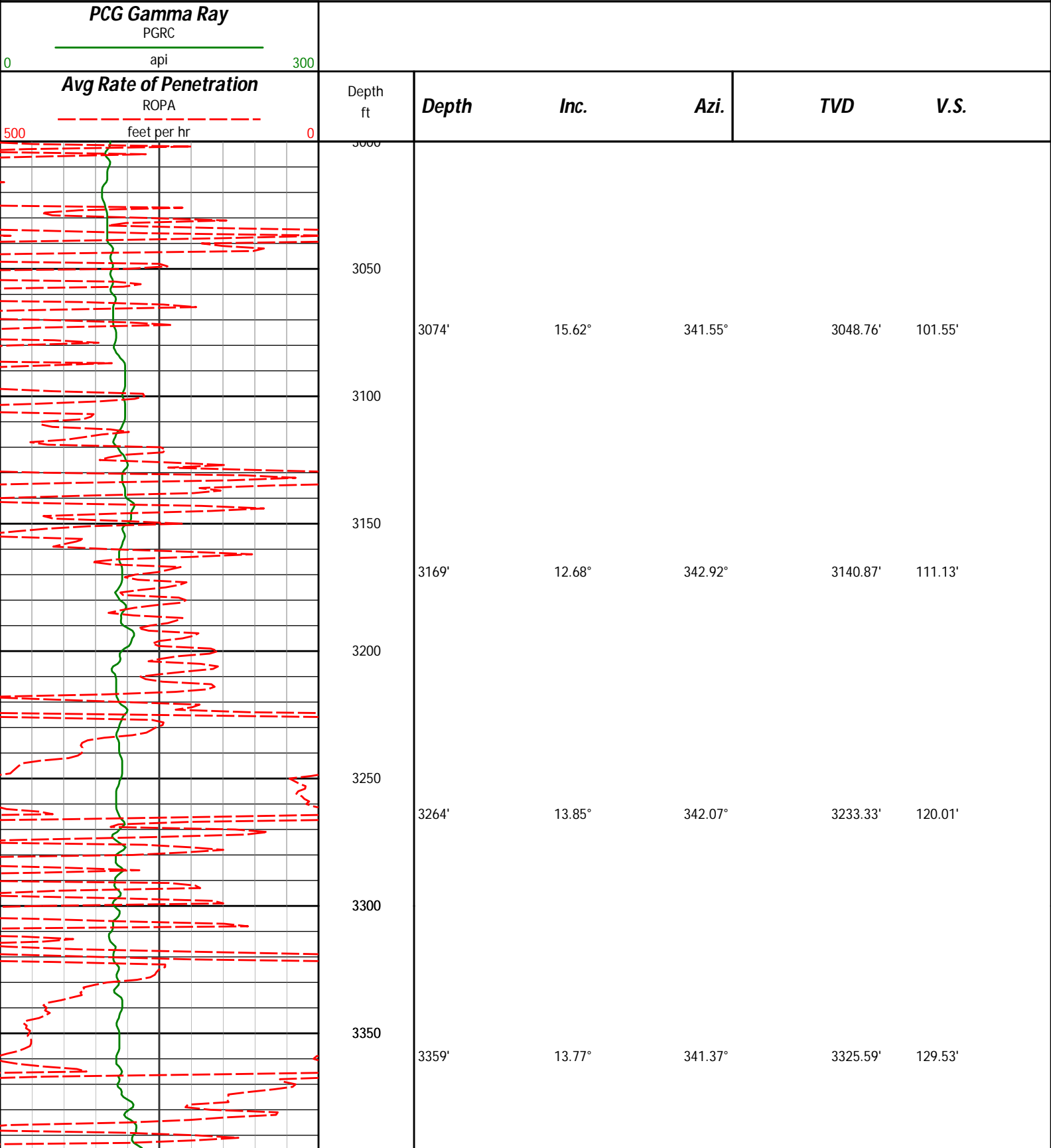
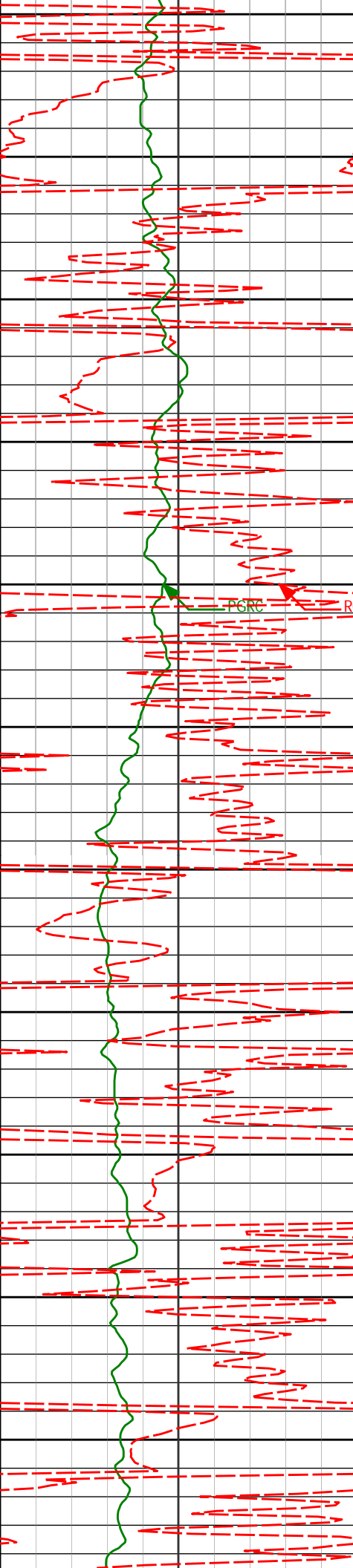


MD Main Log 1:600

Noble Energy  
Wells Ranch USX AA23-63HN  
H&P 343  
T6N-R63W





3400

3450

3500

3550

3600

3650

3700

3750

3800

3850

3900

3454'

13.31°

339.90°

3417.95'

139.24'

3549'

11.85°

345.61°

3510.67'

147.62'

3643'

9.82°

346.99°

3602.98'

153.75'

3738'

10.16°

343.96°

3696.54'

159.68'

3833'

10.03°

336.27°

3790.08'

167.07'

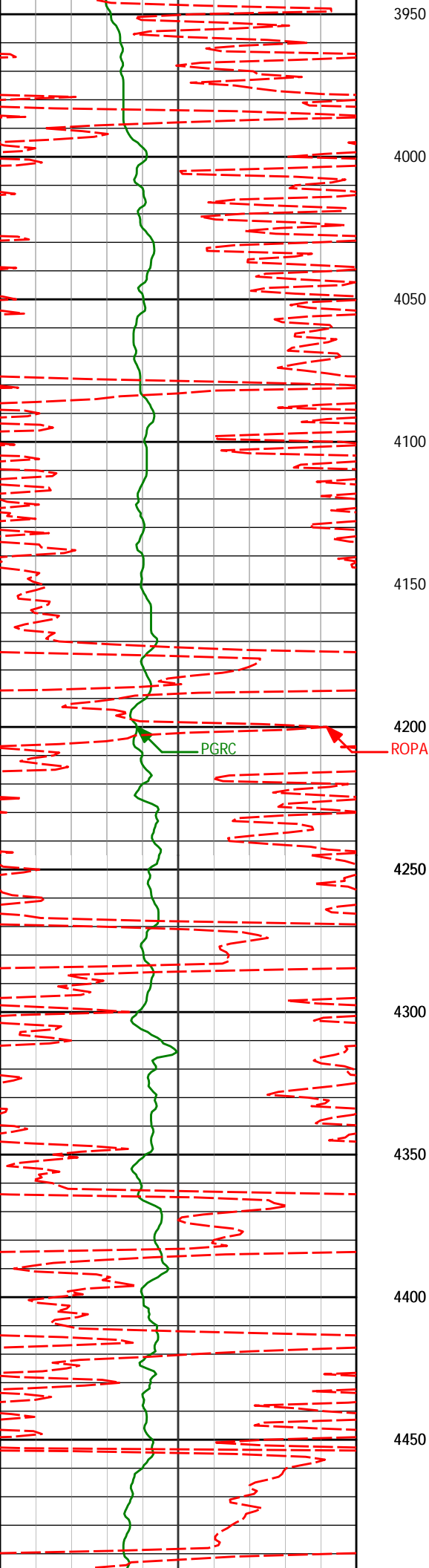
3928'

10.85°

339.32°

3883.50'

175.32'



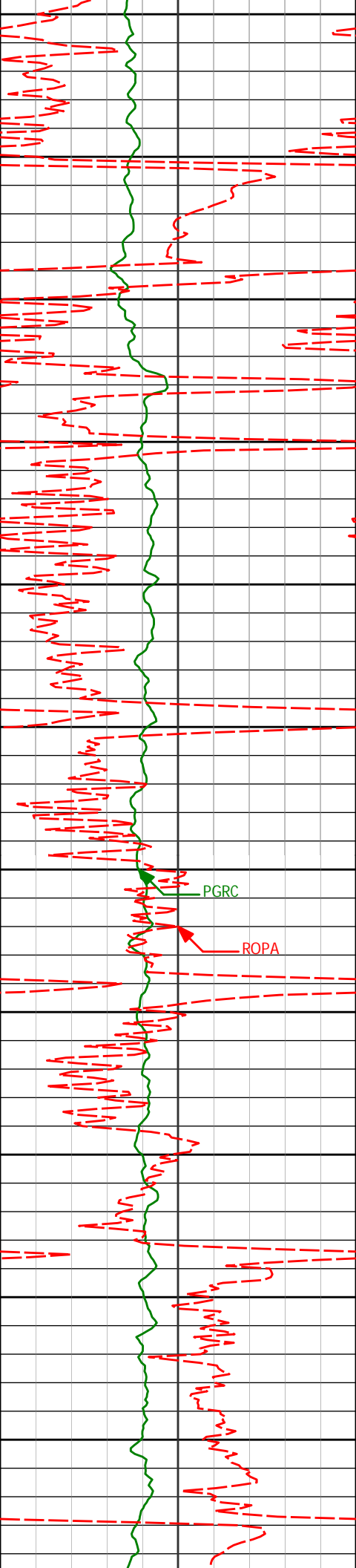
4023' 10.57° 341.70° 3976.85' 183.07'

4118' 10.07° 342.09° 4070.31' 190.17'

4213' 8.58° 344.18° 4164.05' 196.30'

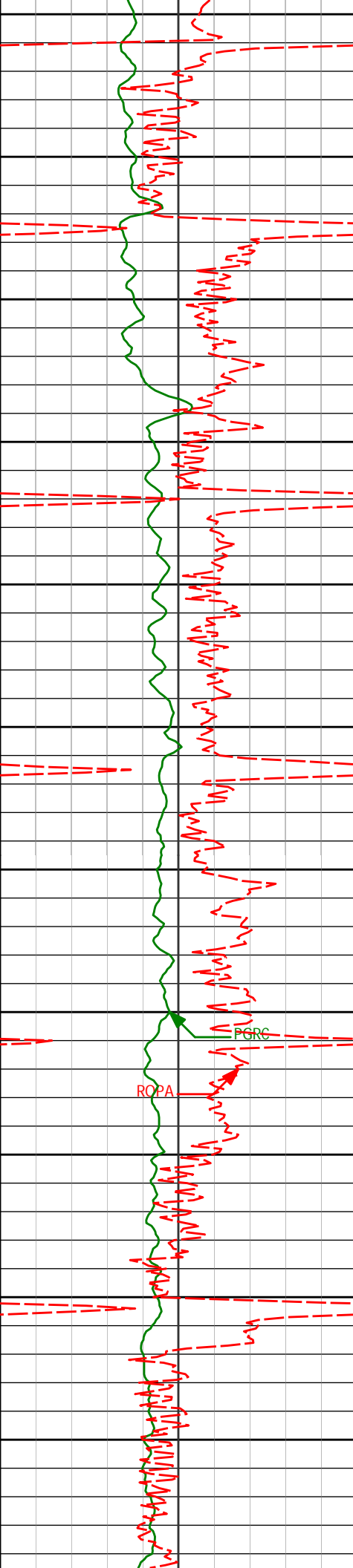
4308' 6.76° 340.71° 4258.20' 201.43'

4403' 4.90° 340.89° 4352.70' 205.62'

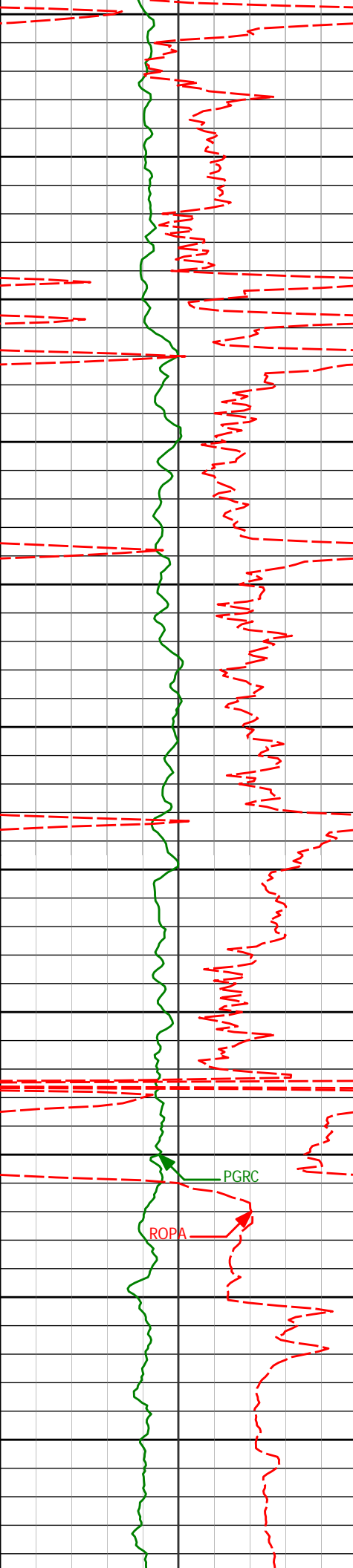


4500  
4550  
4600  
4650  
4700  
4750  
4800  
4850  
4900  
4950  
5000

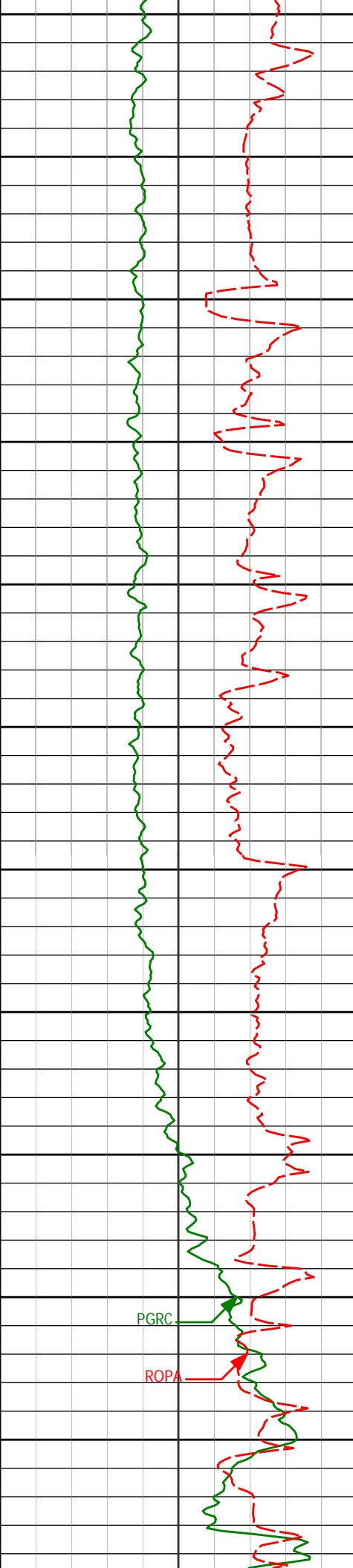
4497'	2.78°	341.20°	4446.49'	208.34'
4592'	0.81°	341.35°	4541.44'	209.61'
4687'	0.46°	32.85°	4636.43'	209.73'
4782'	1.32°	35.56°	4731.42'	209.03'
4877'	1.85°	64.12°	4826.38'	207.20'
4972'	2.38°	78.93°	4921.32'	204.03'



5050				
5067'	1.40°	71.25°	5016.27'	201.10'
5100				
5150				
5162'	1.54°	72.03°	5111.23'	198.89'
5200				
5250				
5257'	1.26°	66.88°	5206.21'	196.82'
5300				
5350				
5351'	1.20°	68.72°	5300.19'	195.06'
5400				
5446'	1.76°	39.18°	5395.15'	193.39'
5500				
5541'	1.79°	58.34°	5490.11'	191.44'
5550				



5600				
5635'	1.85°	47.20°	5584.06'	189.30'
5650				
5700				
5730'	1.08°	55.84°	5679.03'	187.63'
5750				
5800				
5825'	1.18°	75.87°	5774.01'	186.04'
5850				
5900				
5920'	0.47°	58.28°	5869.00'	184.82'
5950				
6000				
<Run 200> 6013'	0.77°	152.89°	5962.00'	184.17'
6050				
6100				
6108'	5.89°	264.94°	6056.84'	188.60'



6150

6200

6250

6300

6350

6400

6450

6500

6550

6600

6650

6203'

15.71°

277.15°

6150.05'

206.28'

6251'

18.75°

279.12°

6195.89'

220.49'

6298'

20.46°

270.43°

6240.18'

236.20'

6392'

27.18°

267.16°

6326.12'

273.77'

6487'

37.57°

270.89°

6406.25'

324.14'

6535'

45.25°

272.40°

6442.23'

355.75'

6582'

47.55°

271.92°

6474.64'

389.69'

6630'

48.48°

267.64°

6506.75'

425.11'

6676'

49.43°

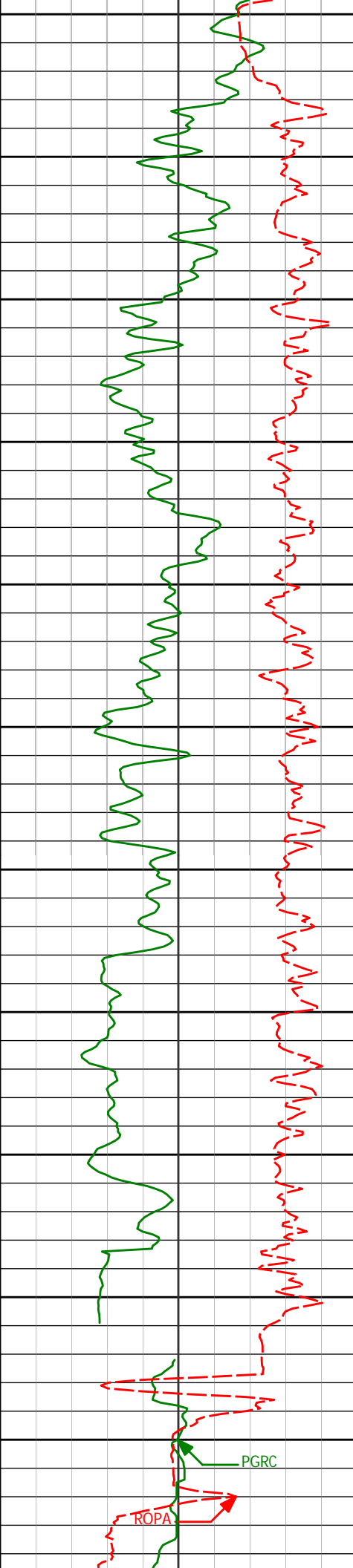
264.73°

6536.96'

459.23'

PGRC

ROPA



6700				
6724'	50.36°	264.08°	6567.88'	495.12'
6750				
6771'	52.75°	263.65°	6597.10'	531.03'
6800				
6819'	56.45°	265.36°	6624.91'	569.29'
6850				
6866'	60.91°	267.36°	6649.33'	608.80'
6900				
6914'	67.34°	269.34°	6670.27'	651.53'
6950				
6961'	70.90°	267.89°	6687.02'	695.01'
7000				
7009'	73.76°	265.67°	6701.59'	740.08'
7050				
7056'	77.88°	265.37°	6713.10'	784.80'
7100				
7122'	83.77°	267.89°	6723.62'	848.95'
7150				
	▲ Casing Set @ 7,167' MD			
	<Run 300>			
7200				

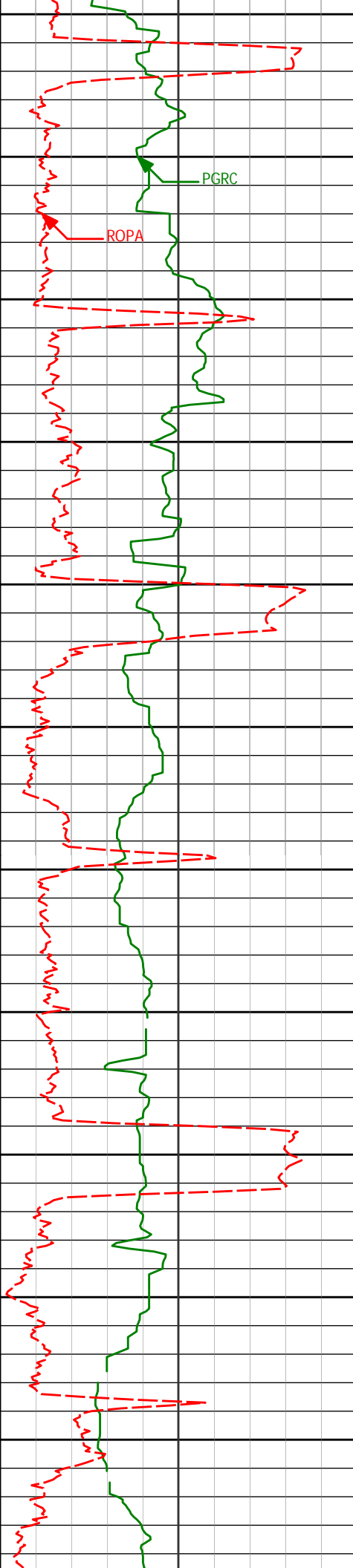


7250  
7300  
7350  
7400  
7450  
7500  
7550  
7600  
7650  
7700  
7750

7247'	87.81°	267.78°	6732.80'	972.16'
7342'	88.83°	267.26°	6735.58'	1065.94'
7437'	91.05°	267.74°	6735.68'	1159.76'
7532'	89.35°	266.16°	6735.35'	1253.43'
7627'	89.57°	265.89°	6736.25'	1346.83'
7722'	90.68°	267.79°	6736.04'	1440.47'



7817'	92.99°	268.71°	6733.00'	1534.43'
7912'	92.78°	270.32°	6728.22'	1628.59'
8007'	92.56°	269.96°	6723.80'	1722.90'
8102'	89.54°	269.60°	6722.06'	1817.21'
8197'	89.20°	270.41°	6723.11'	1911.59'
8292'	91.36°	271.28°	6722.65'	2006.12'



8387'	90.37°	270.98°	6721.22'	2100.68'
8482'	89.41°	270.11°	6721.39'	2195.16'
8577'	91.57°	270.85°	6720.58'	2289.62'
8672'	92.74°	270.21°	6717.00'	2384.04'
8767'	90.74°	271.28°	6714.11'	2478.50'
8862'	92.28°	271.43°	6711.61'	2573.08'



8900

8950

9000

9050

9100

9150

9200

9250

9300

9350

9400

8957'

92.19°

269.80°

6707.91'

2667.50'

9052'

91.45°

269.70°

6704.89'

2761.79'

9147'

91.79°

269.79°

6702.21'

2856.08'

9242'

91.94°

269.80°

6699.12'

2950.38'

9337'

90.68°

267.64°

6696.94'

3044.46'

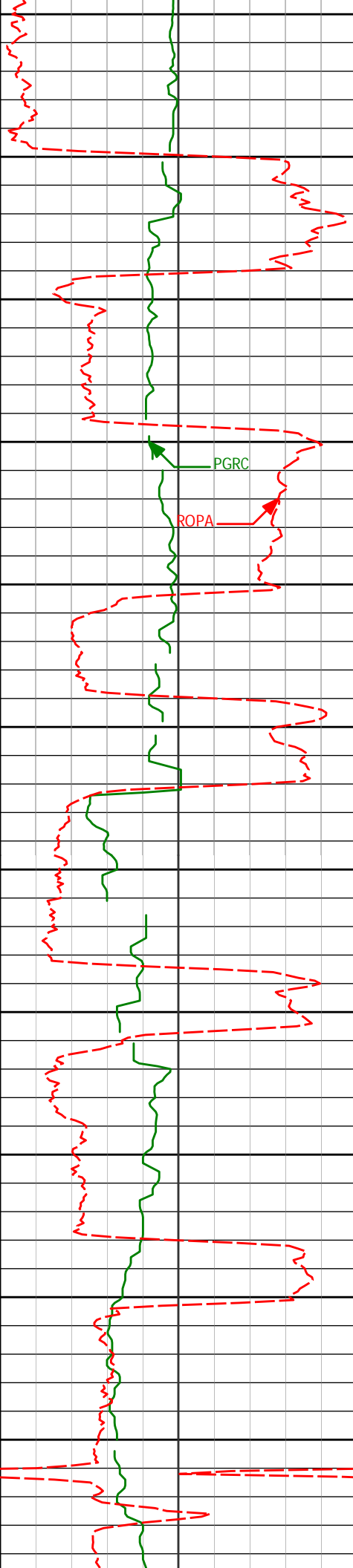
9432'

90.00°

262.55°

6696.38'

3137.54'



9527'	91.76°	259.86°	6694.92'	3229.14'
9622'	93.12°	264.48°	6690.88'	3321.06'
9717'	91.60°	269.34°	6686.97'	3414.62'
9812'	91.39°	270.34°	6684.49'	3508.94'
9907'	89.97°	271.68°	6683.36'	3603.49'

