



DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING  
 CHLORIDES REPORTED AT 2000 ppm

HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

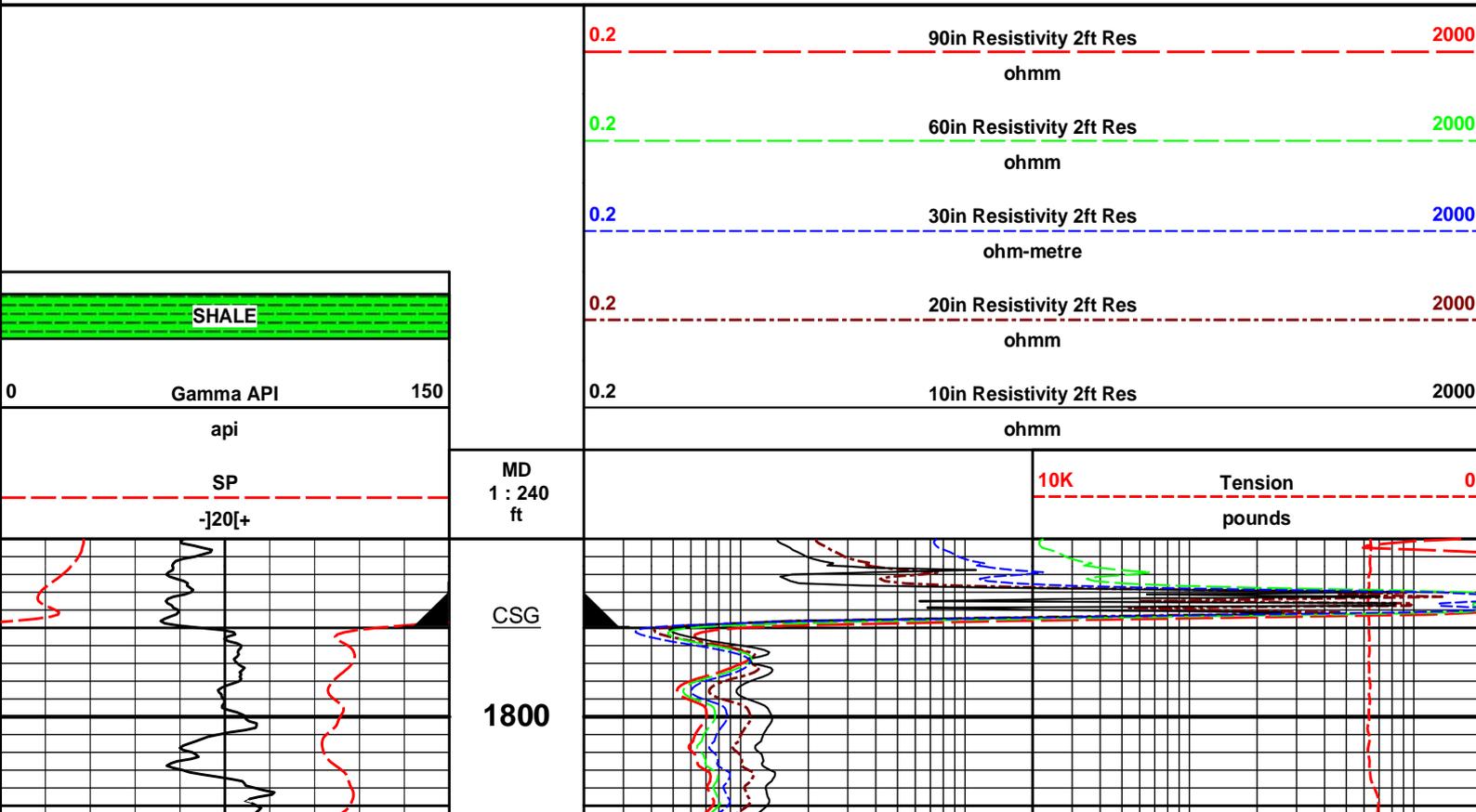
HALLIBURTON

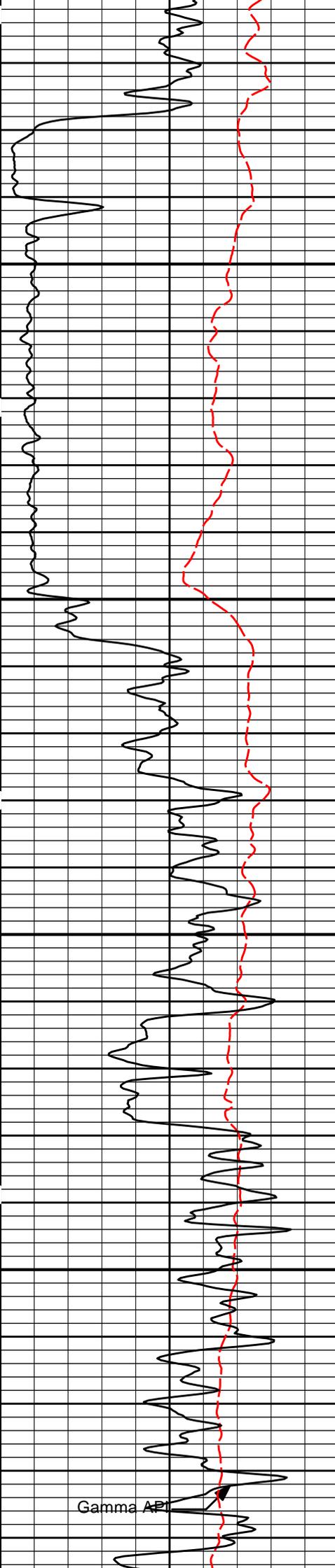
**HALLIBURTON**

Plot Time: 15-Jan-18 22:25:20  
 Plot Range: 1780 ft to 5690.75 ft  
 Data: JACQUART\_3\Well Based\MAIN\  
 Plot File: \\-LOCAL-JACQUART\_3\Well Based\ACRT5\ACRT\_5\_main\_lib

**5 INCH MAIN LOG**

MEASURED DEPTH  
 MAIN SECTION 5" PER 100'

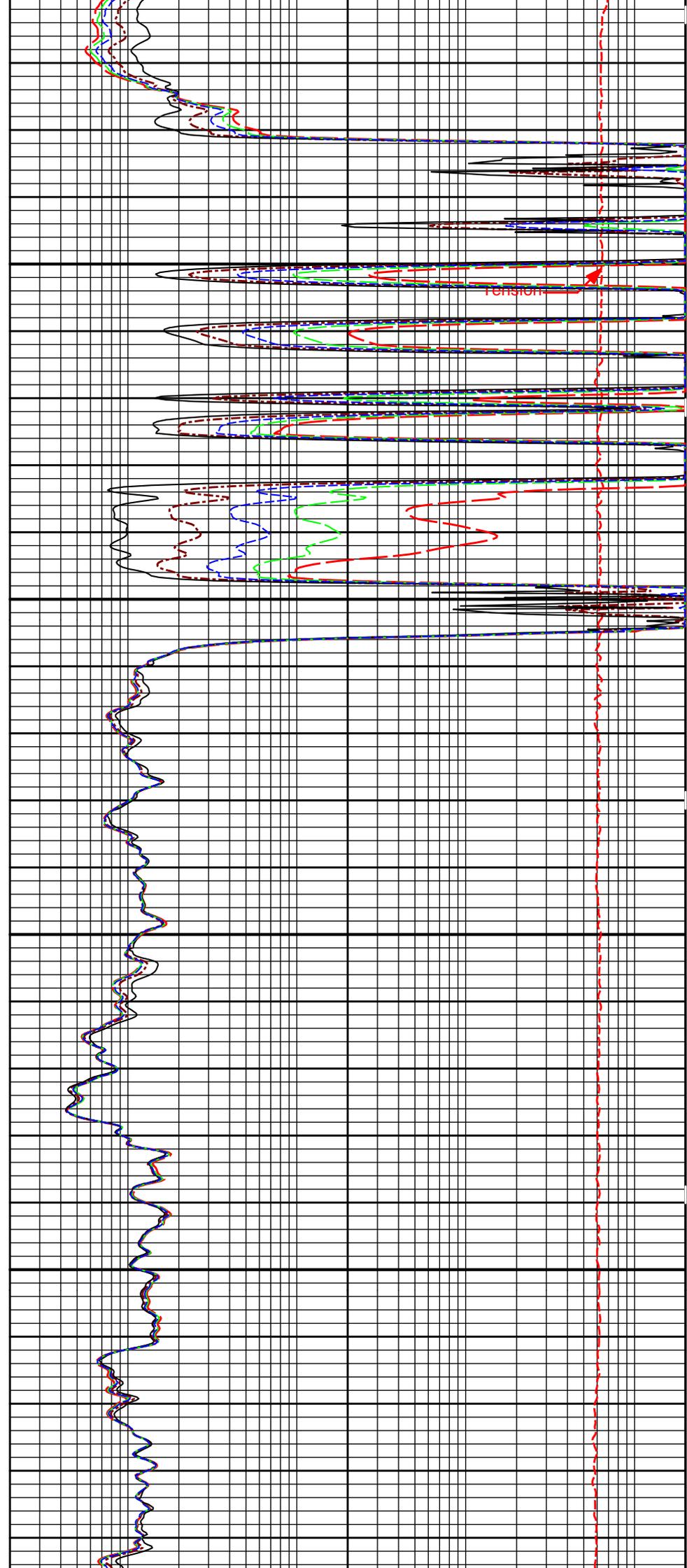




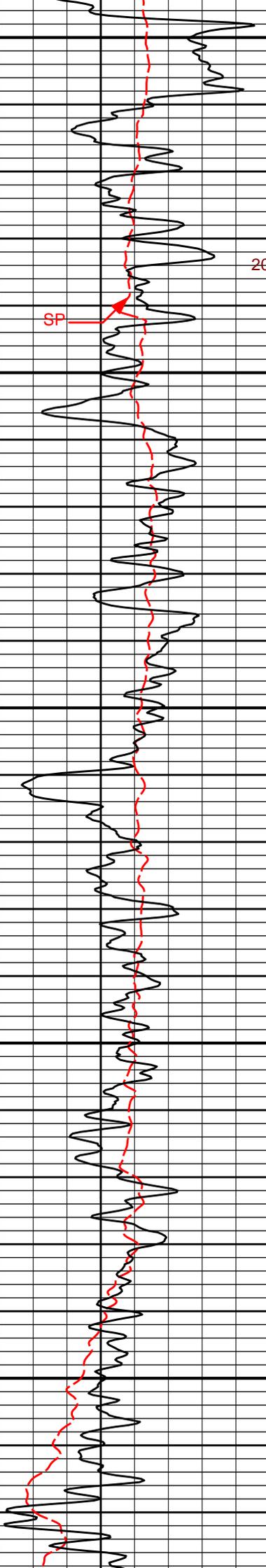
1900

2000

Gamma API



Tension

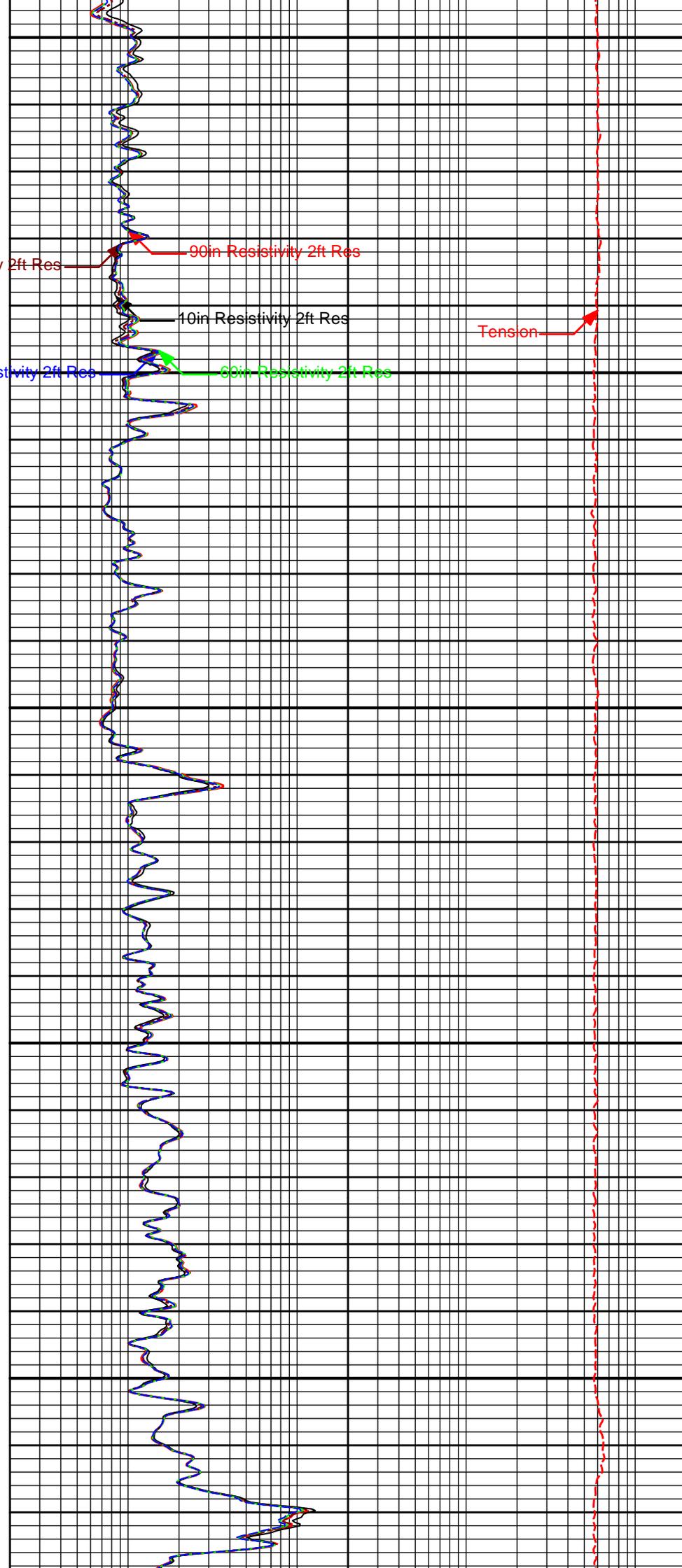


SP

20in Resistivity 2ft Res

2100 Resistivity 2ft Res

2200

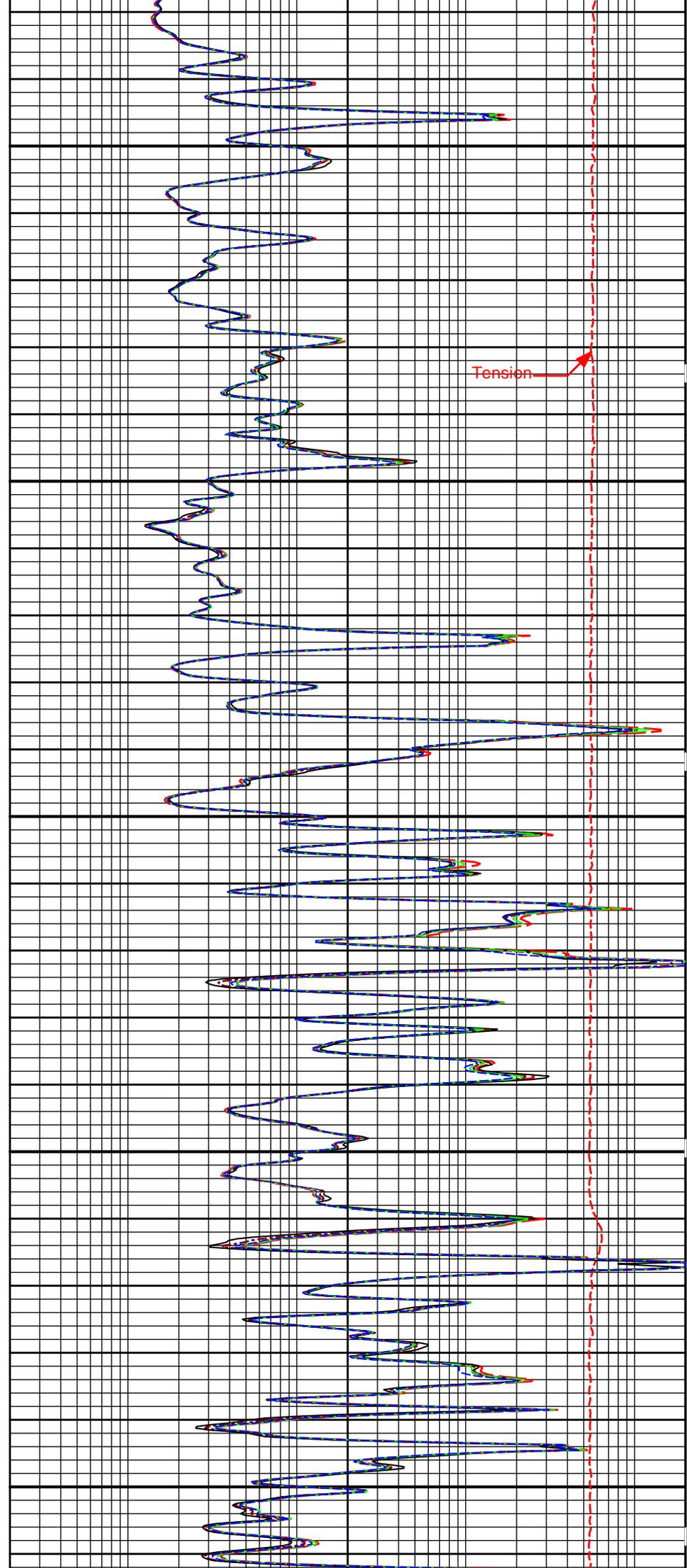
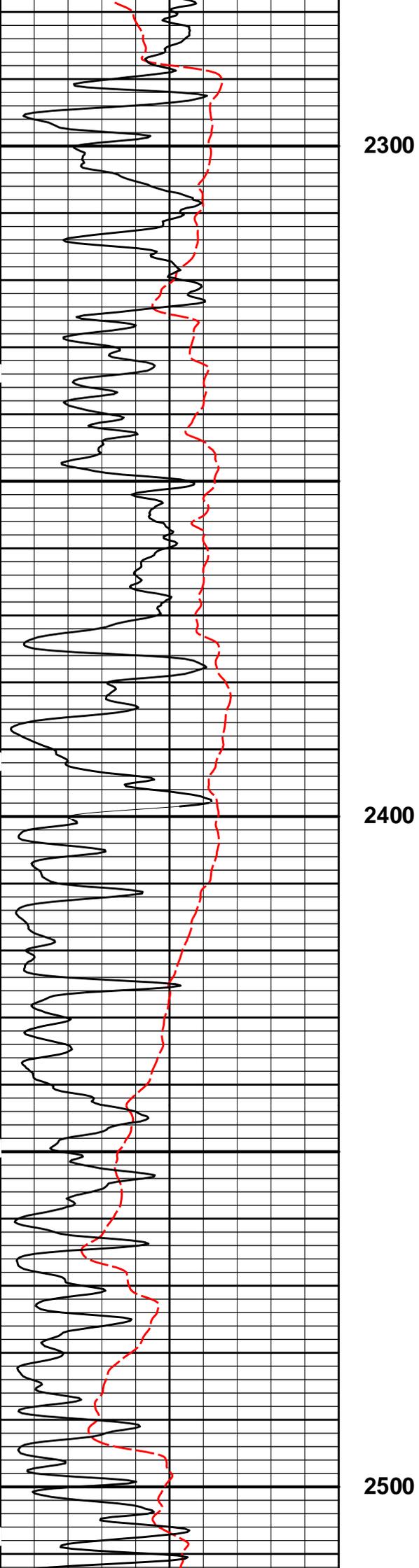


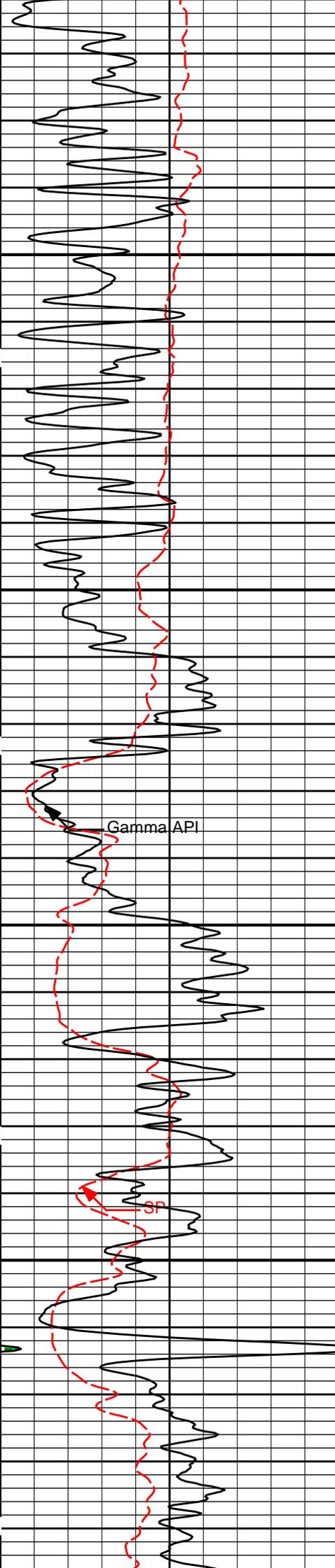
90in Resistivity 2ft Res

10in Resistivity 2ft Res

60in Resistivity 2ft Res

Tension



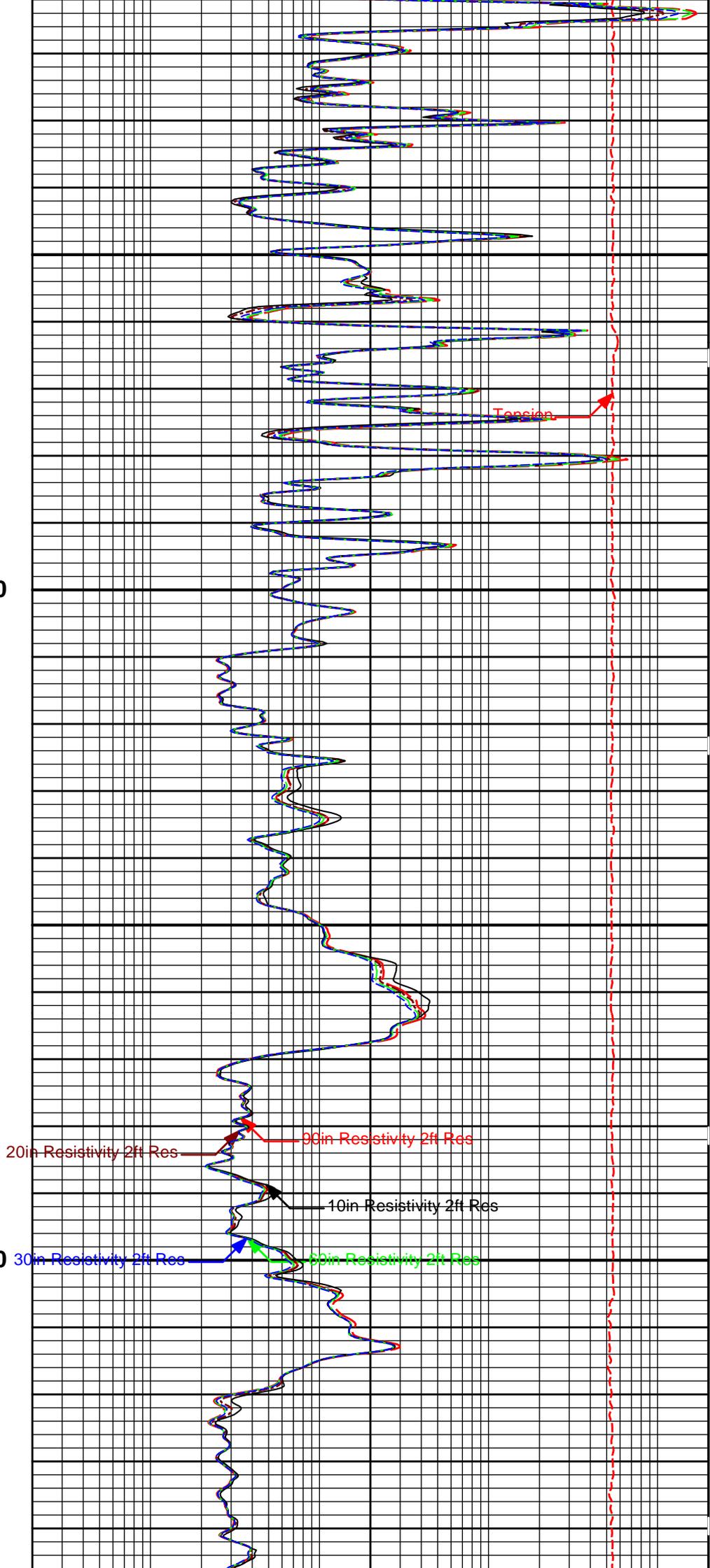


2600

Gamma API

SP

2700



20in Resistivity 2ft Res

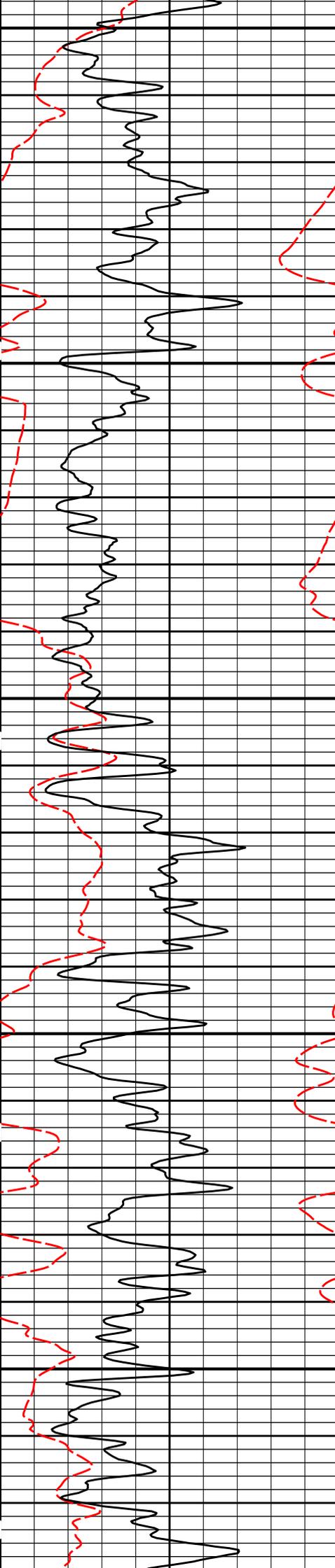
90in Resistivity 2ft Res

10in Resistivity 2ft Res

30in Resistivity 2ft Res

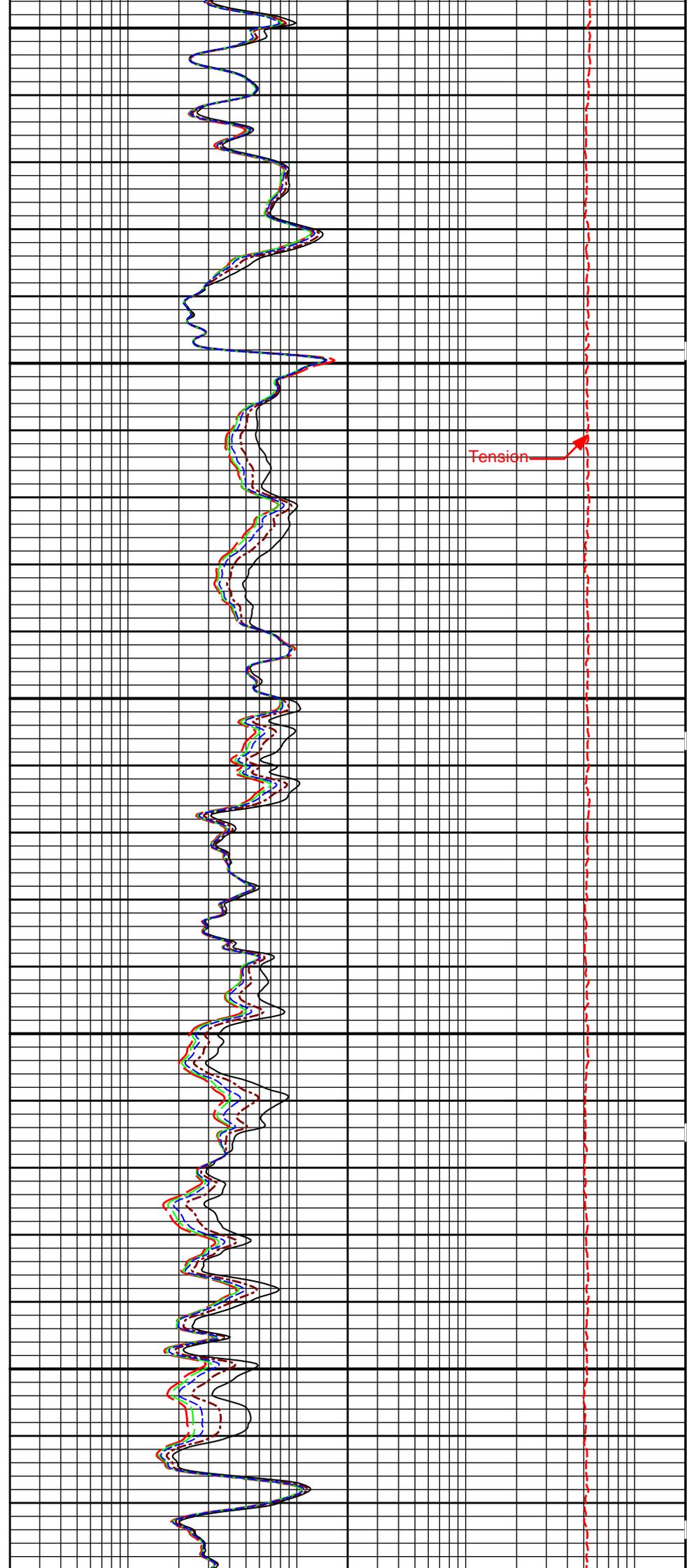
60in Resistivity 2ft Res

Tension

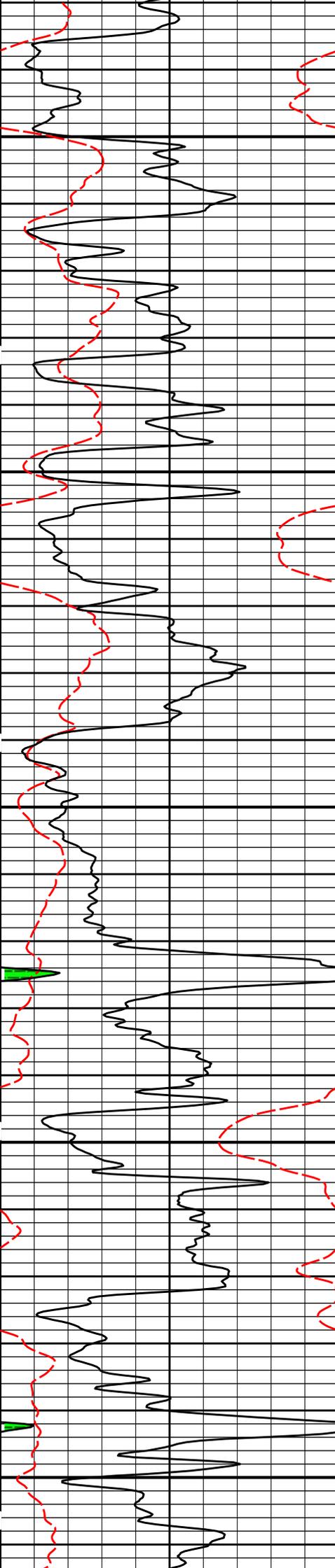


2800

2900



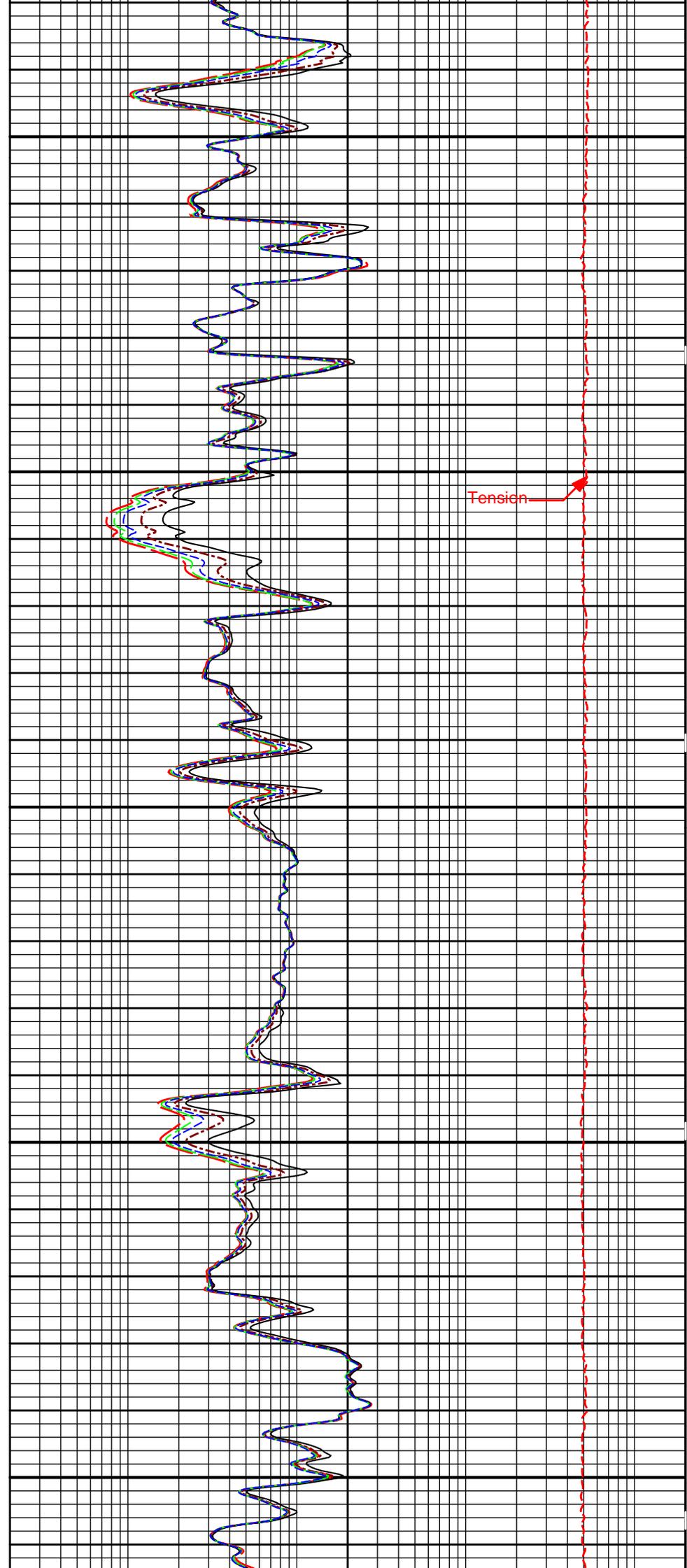
Tension



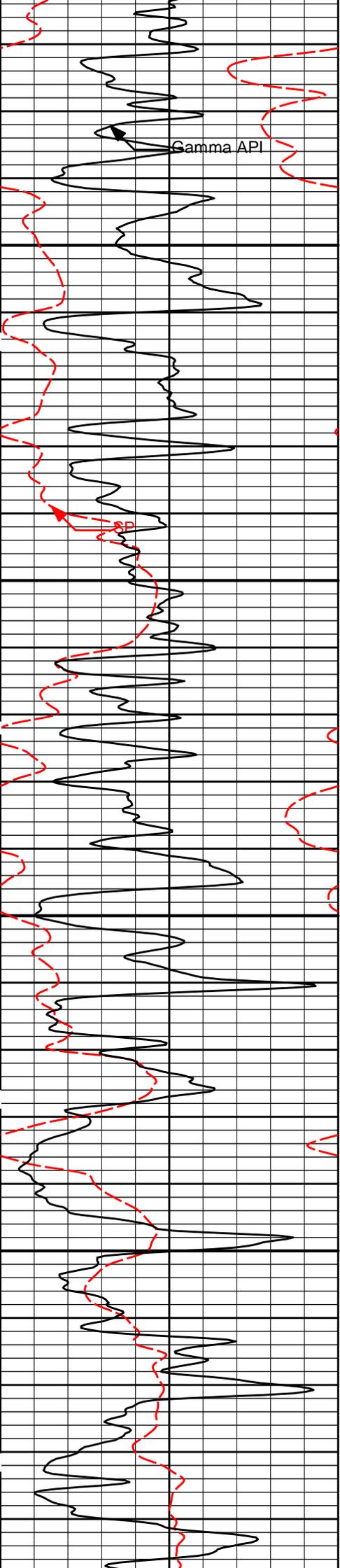
3000

3100

3200

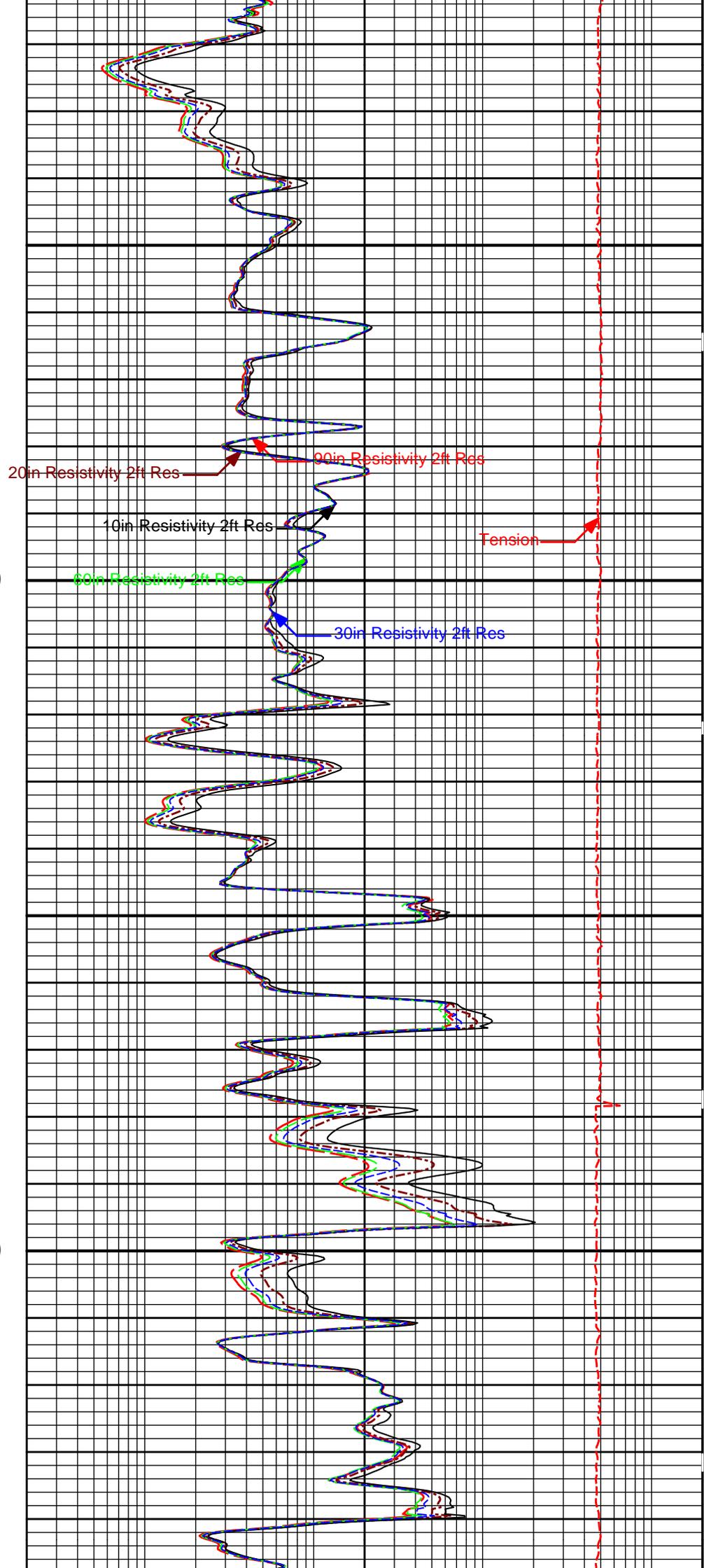


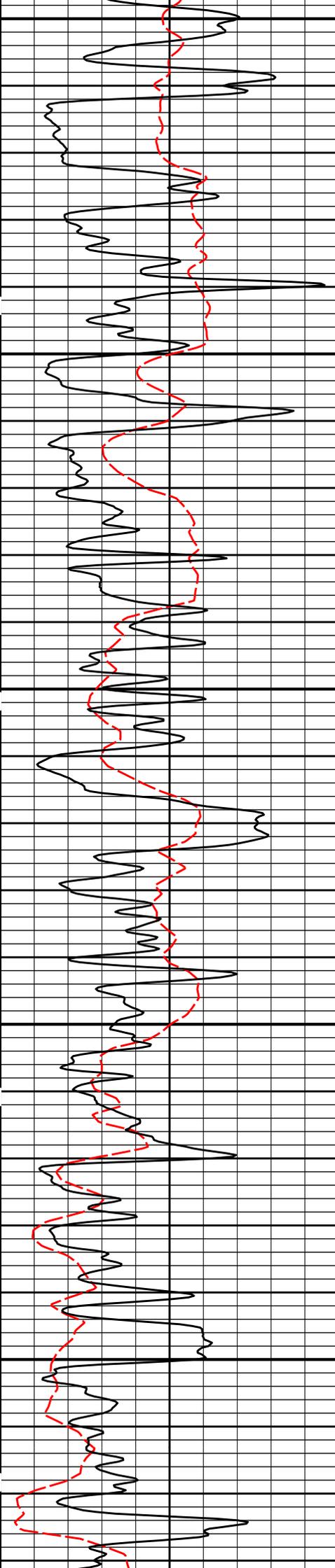
Tension



3300

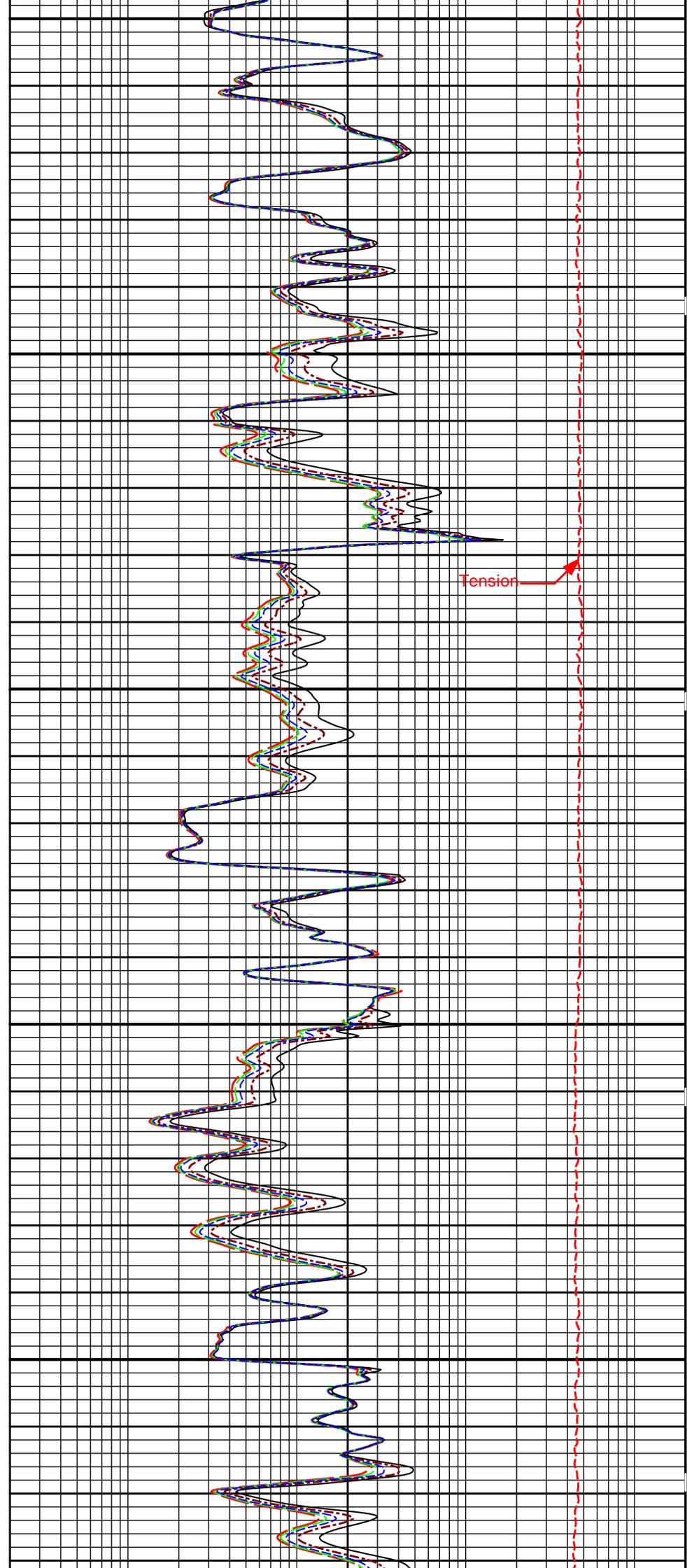
3400



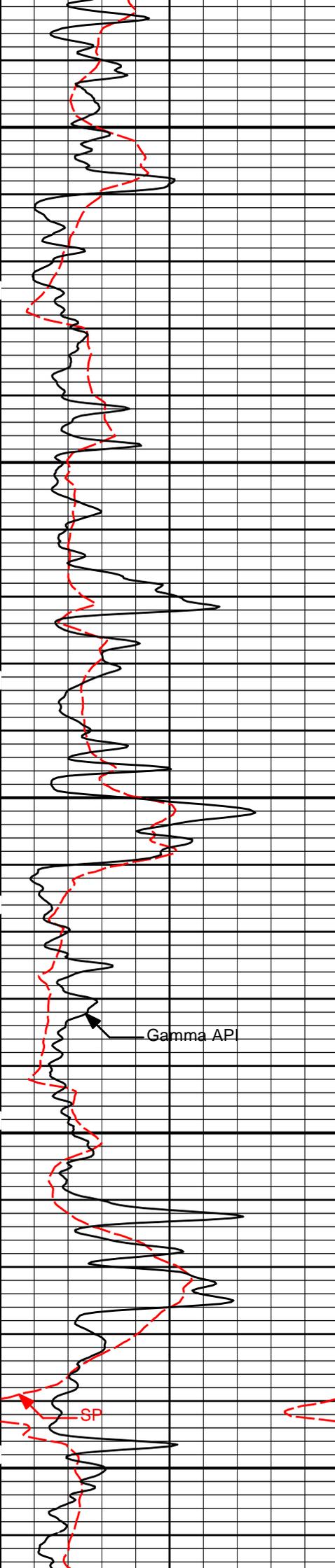


3500

3600



Tension



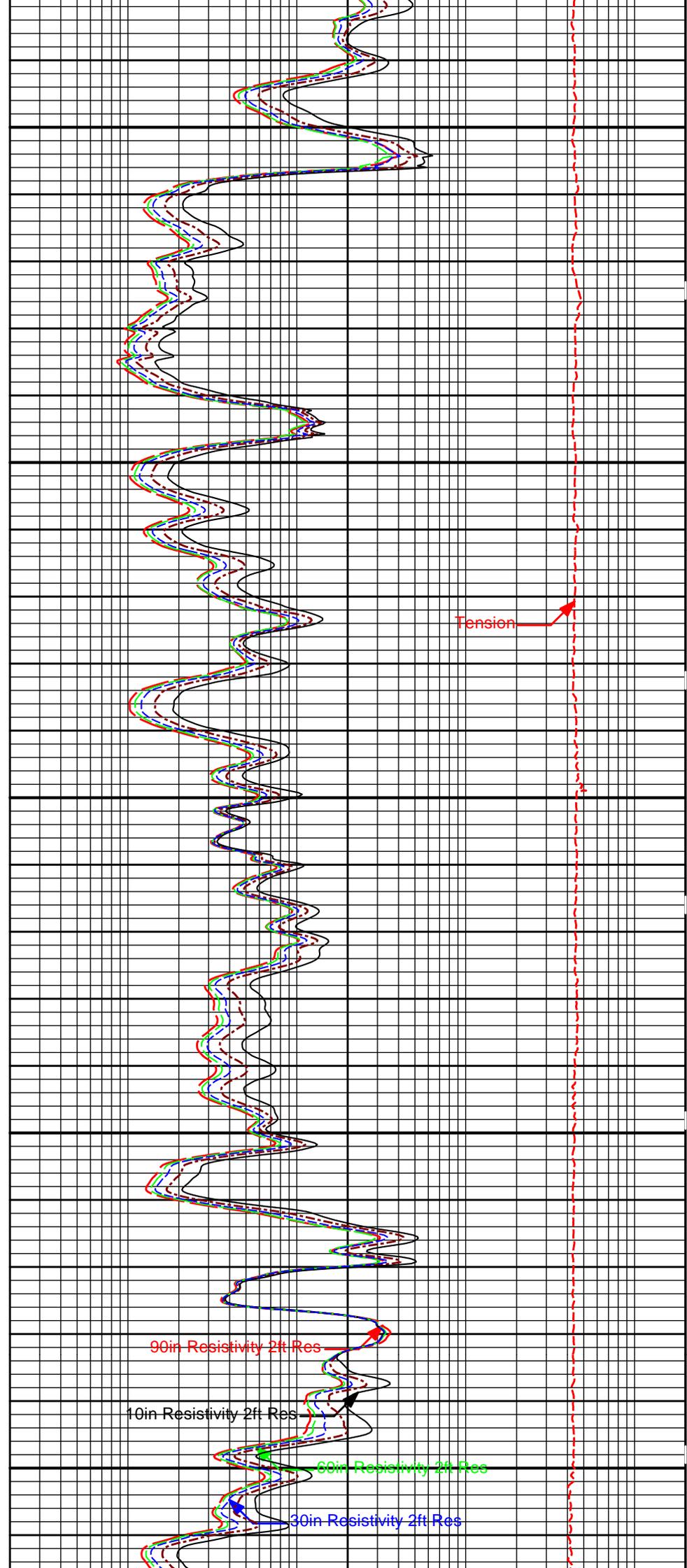
3700

3800

3900

Gamma API

SP



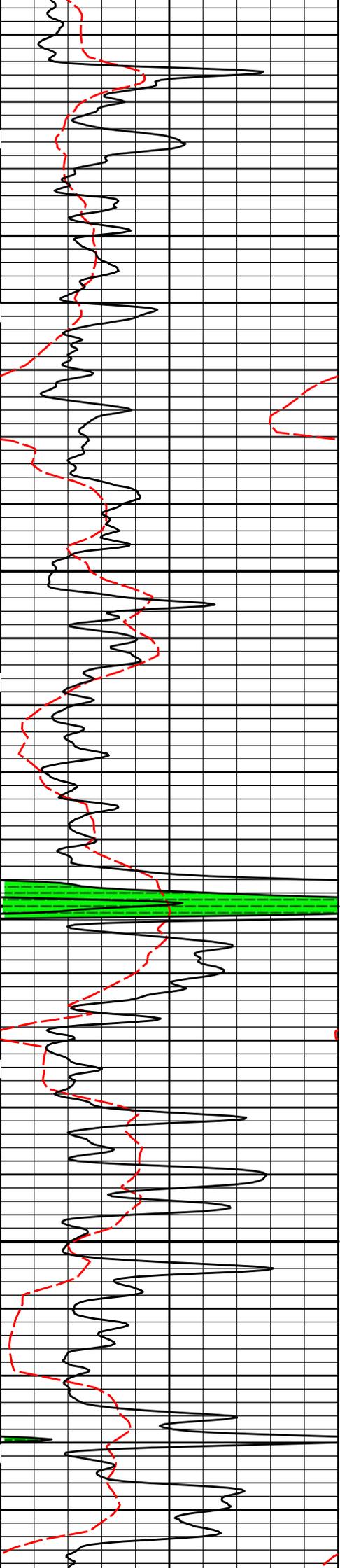
Tension

90in Resistivity 2ft Res

10in Resistivity 2ft Res

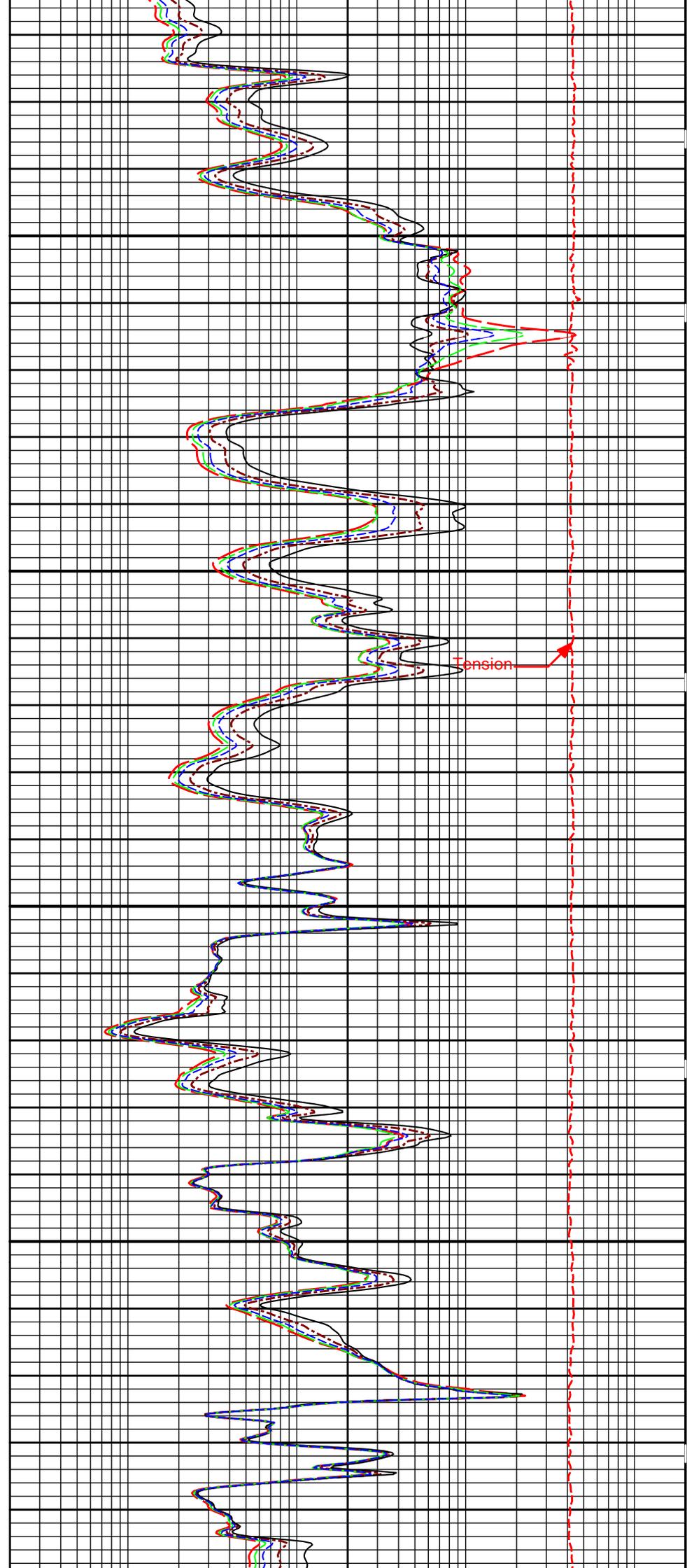
60in Resistivity 2ft Res

30in Resistivity 2ft Res

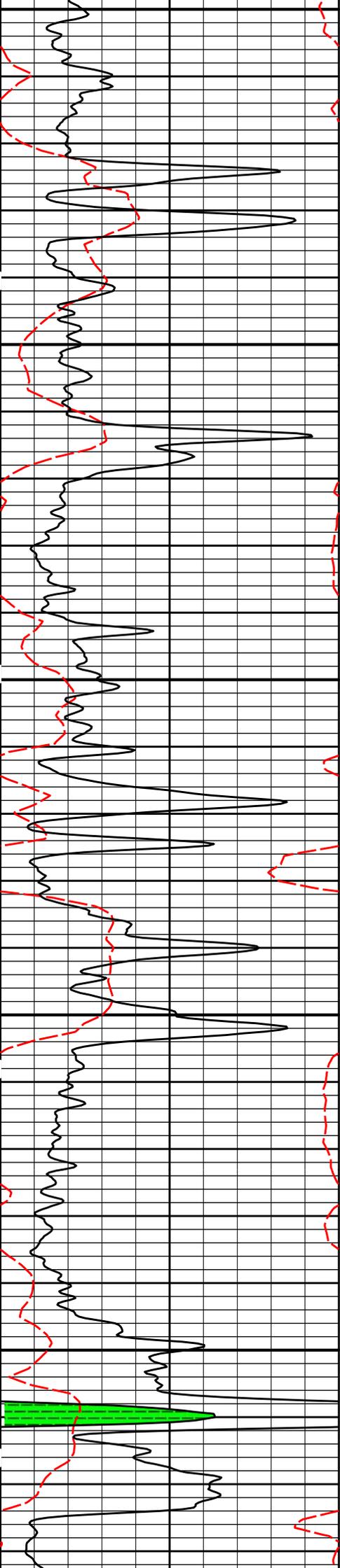


4000

4100

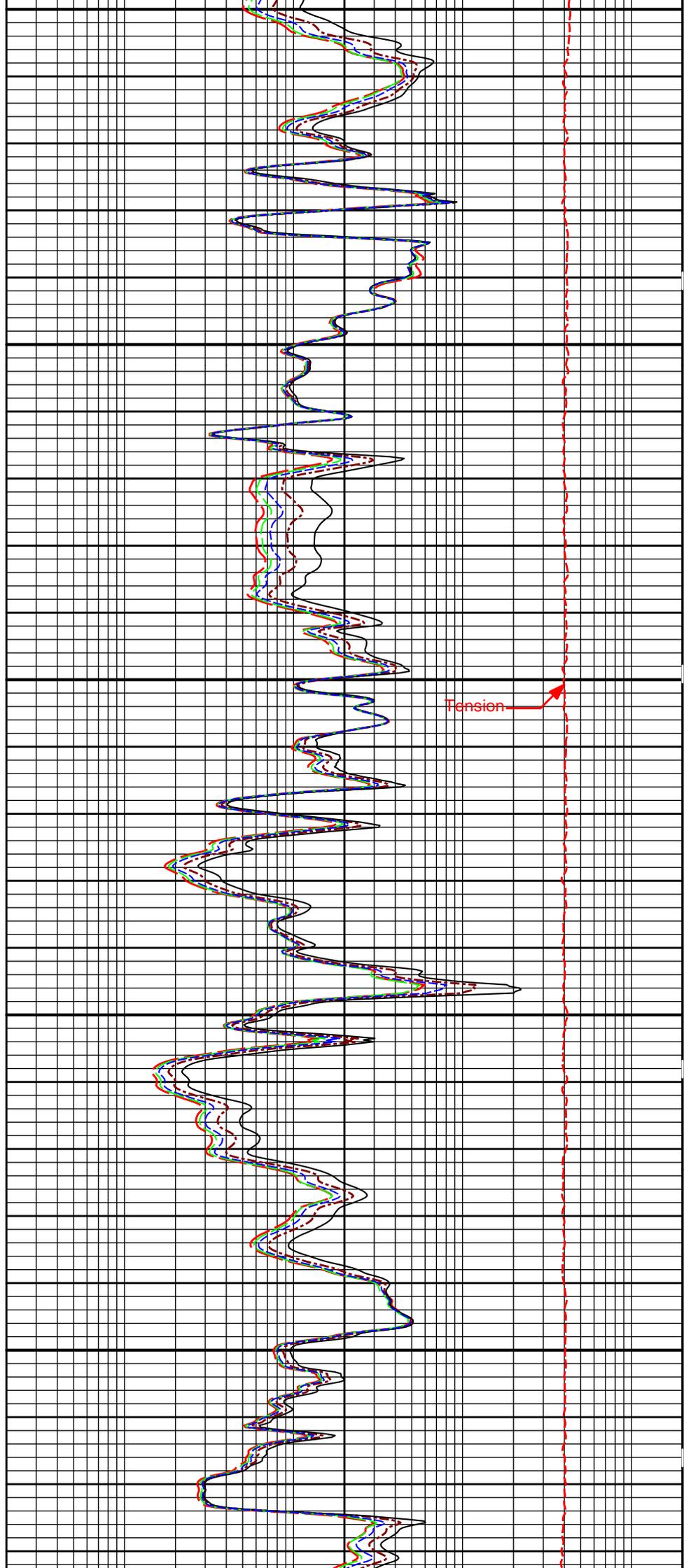


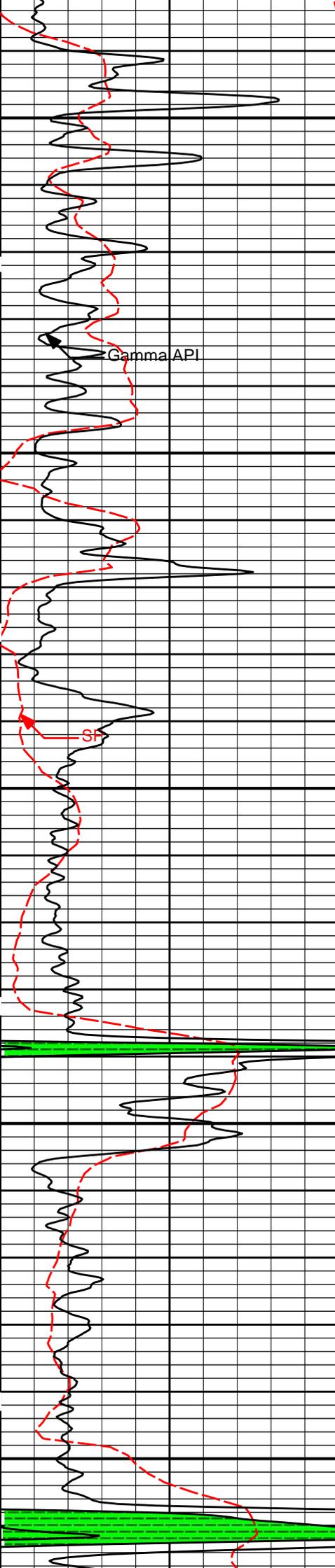
Tension



4200

4300





4400

Gamma API

SP

4500

4600

20in Resistivity 2ft Res

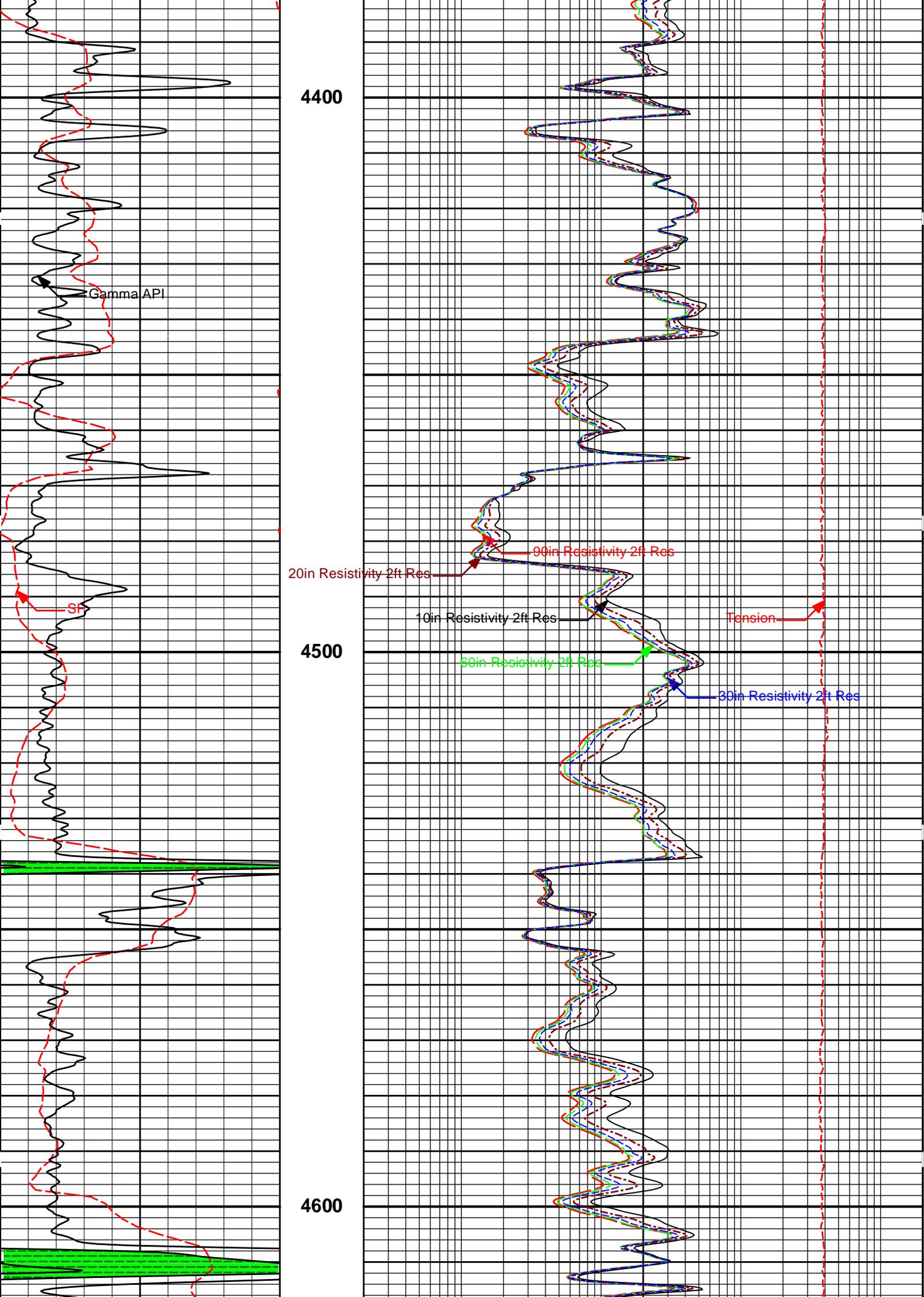
10in Resistivity 2ft Res

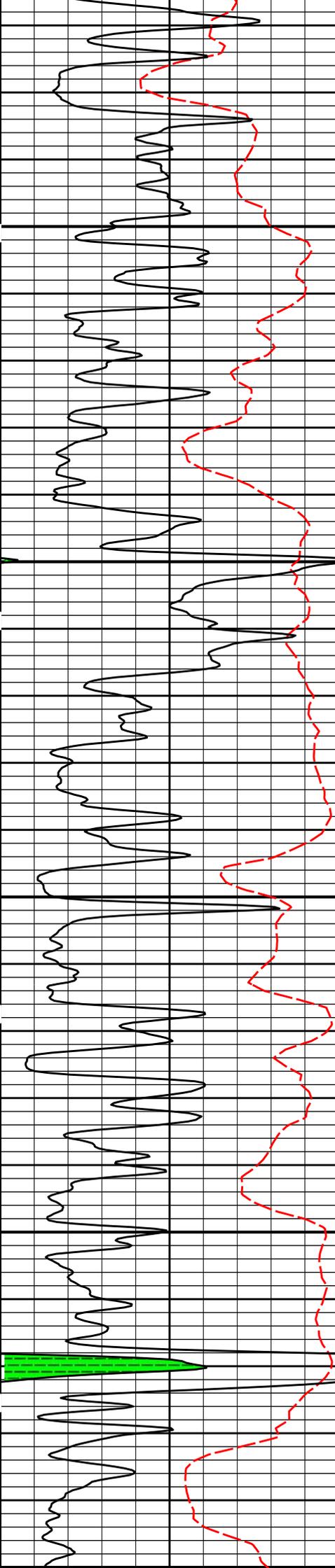
60in Resistivity 2ft Res

Tension

30in Resistivity 2ft Res

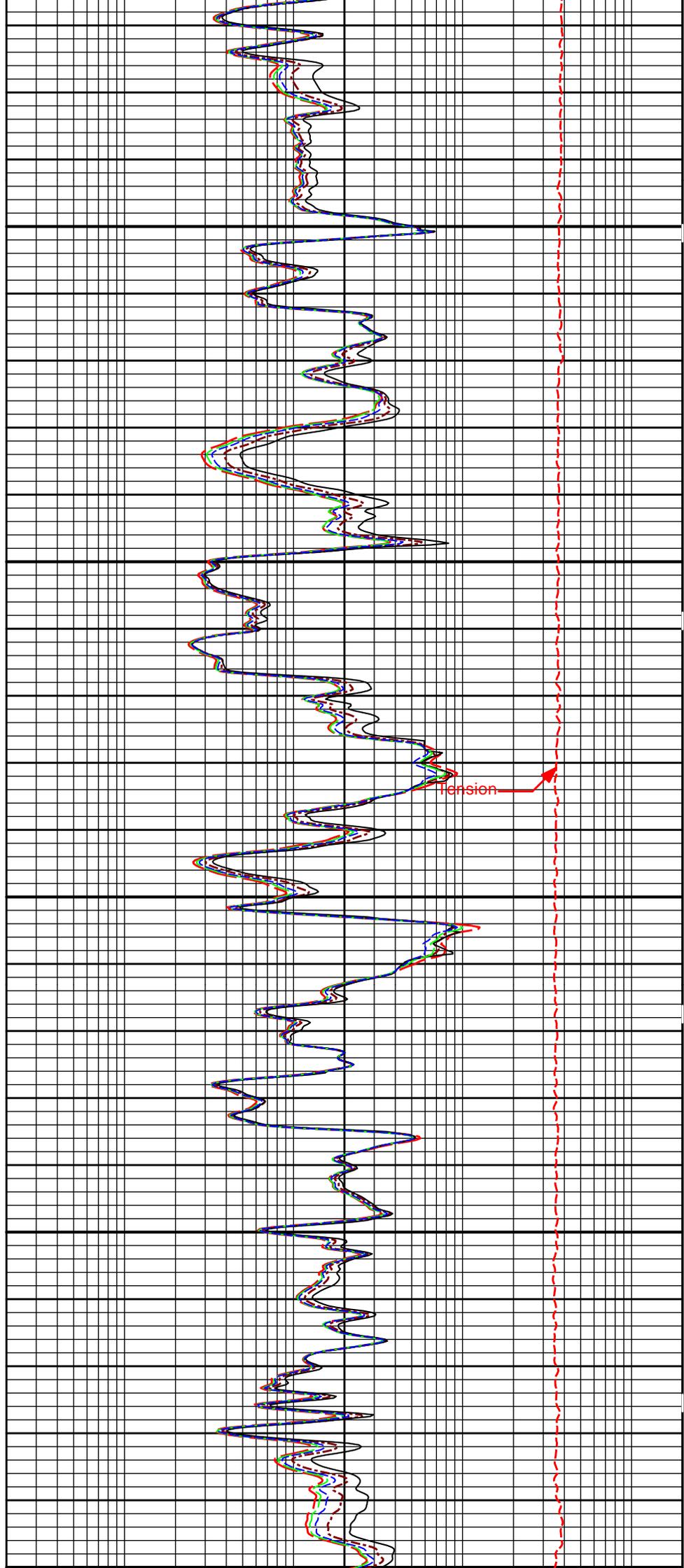
90in Resistivity 2ft Res

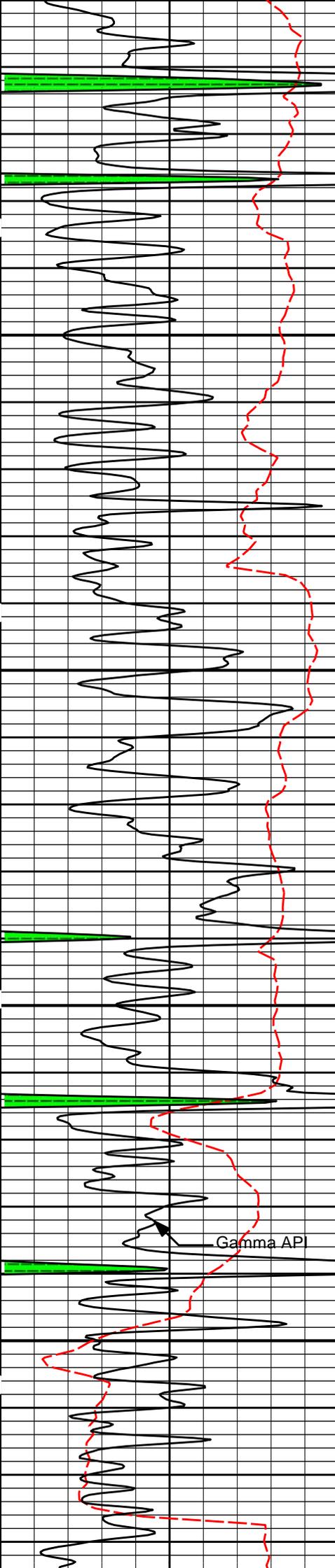




4700

4800

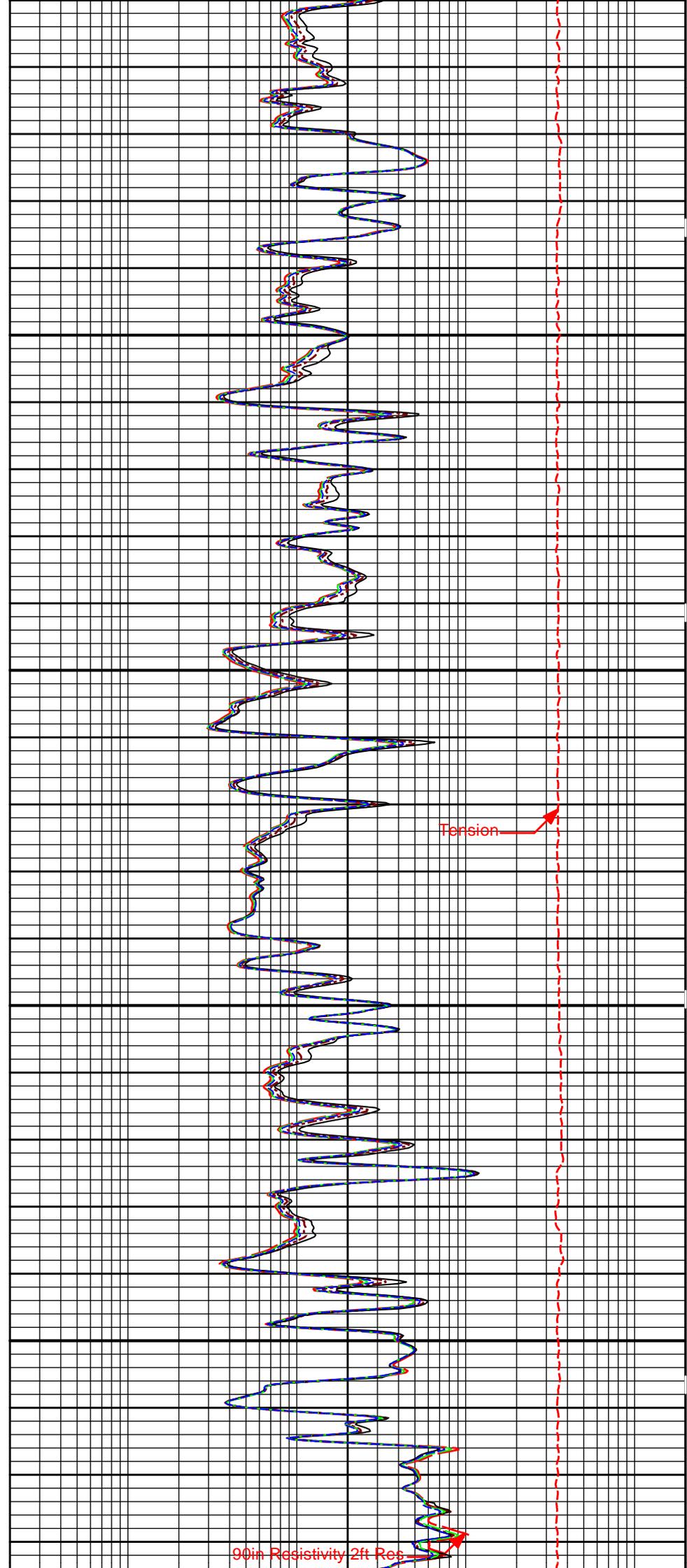




4900

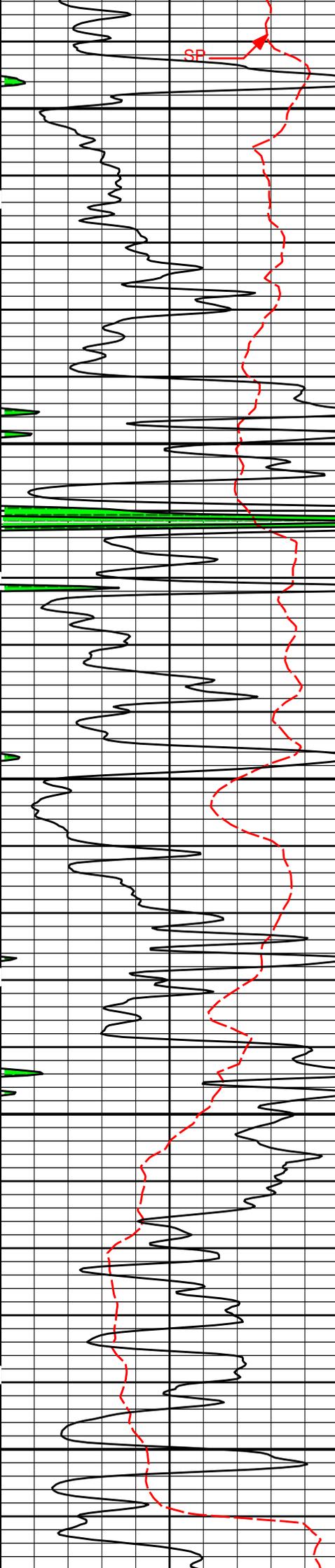
5000

Gamma API



Tension

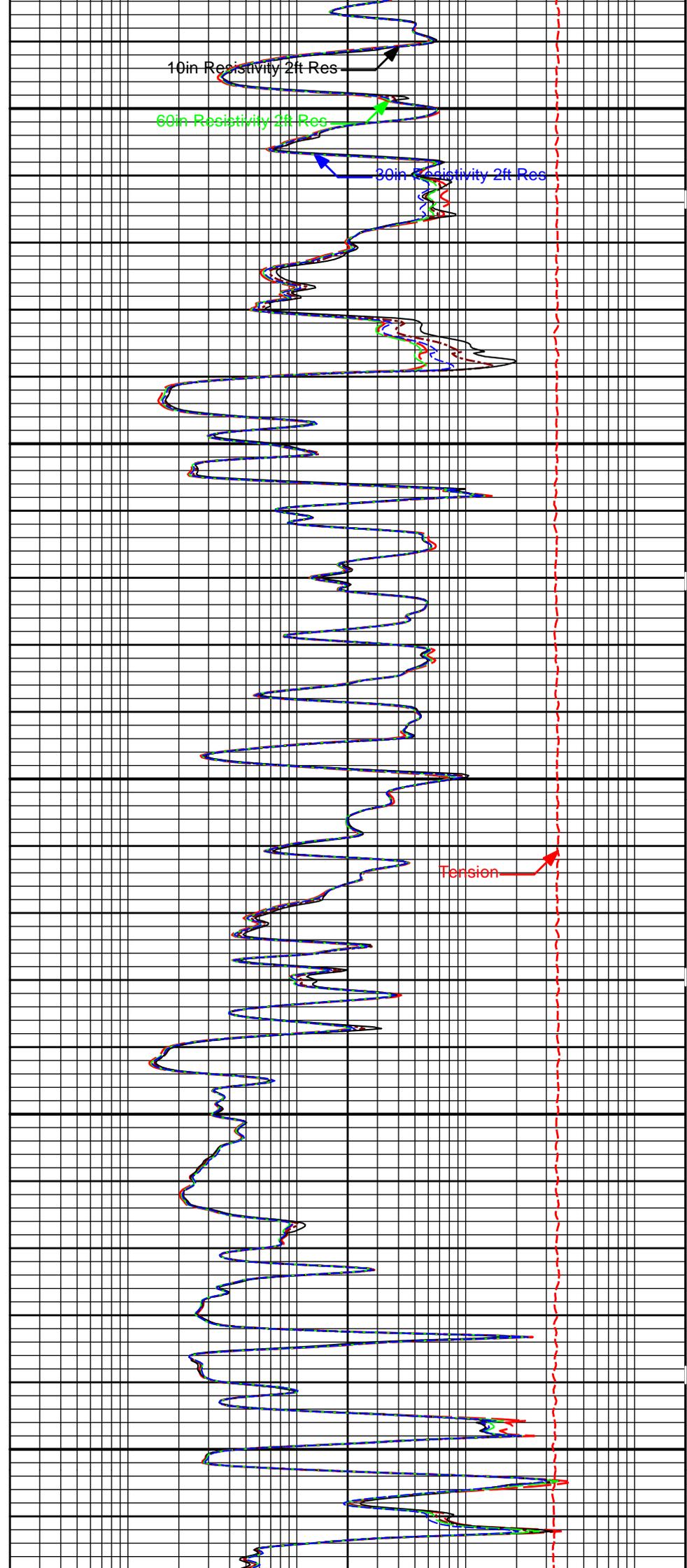
90in Resistivity 2ft Res



5100

5200

5300

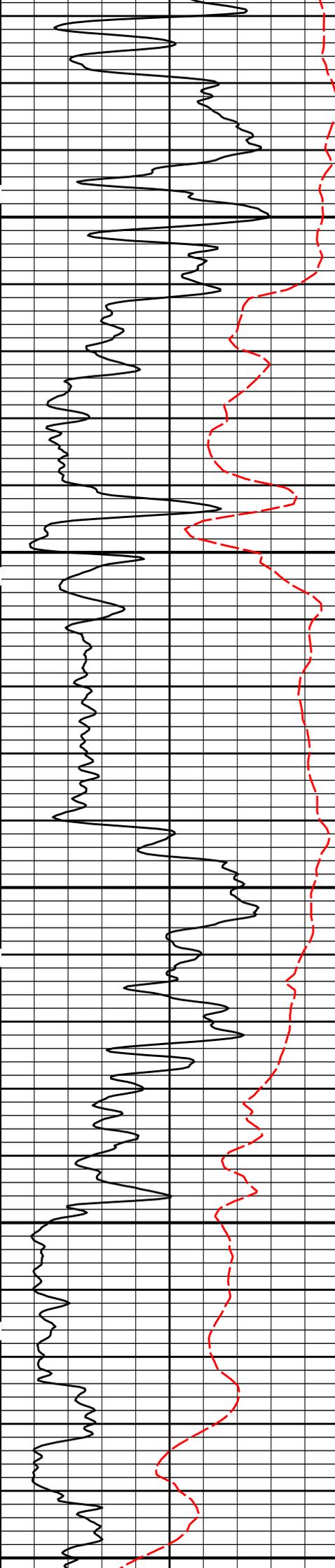


10in Resistivity 2ft Res

60in Resistivity 2ft Res

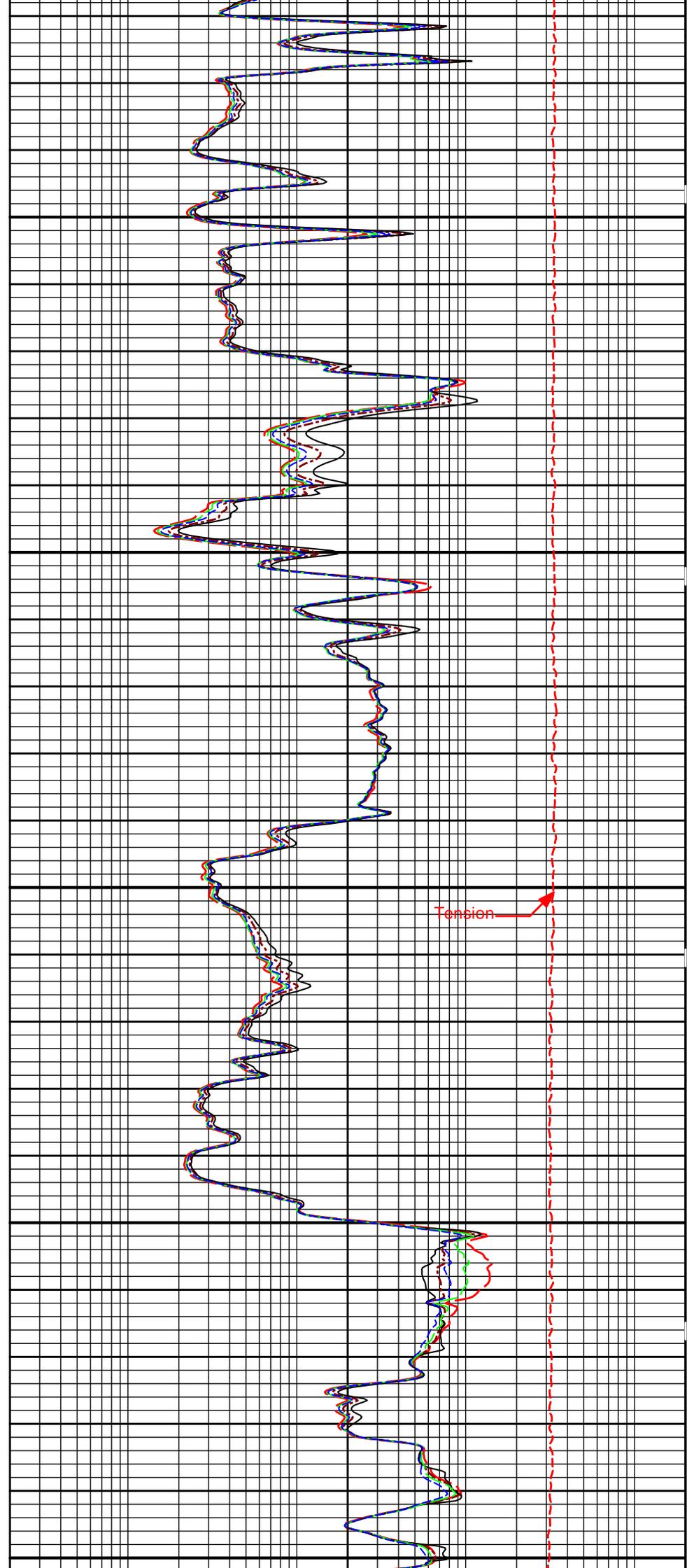
30in Resistivity 2ft Res

Tension

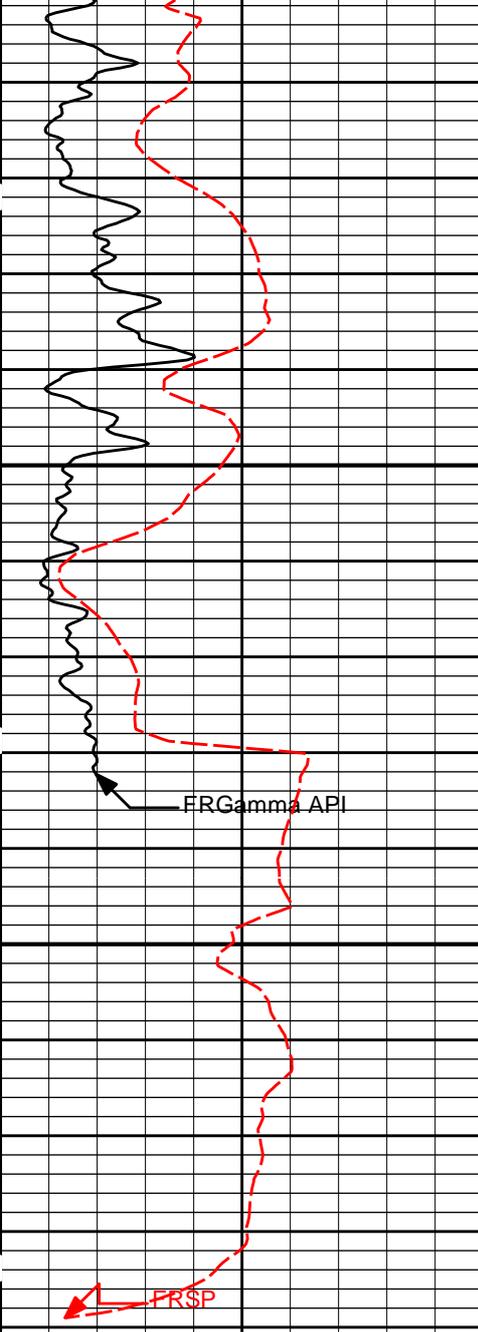


5400

5500

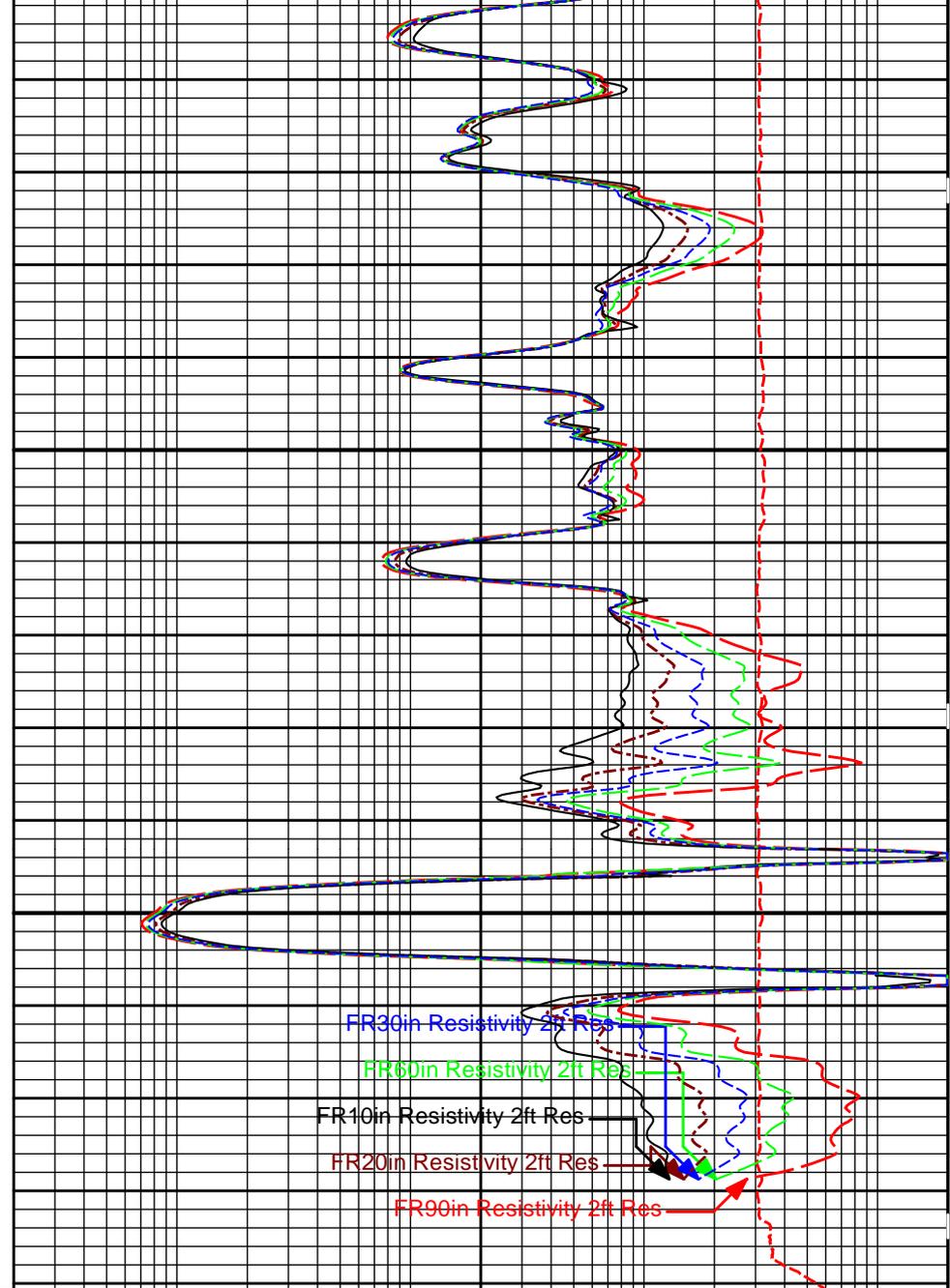


Tension



5600

TD



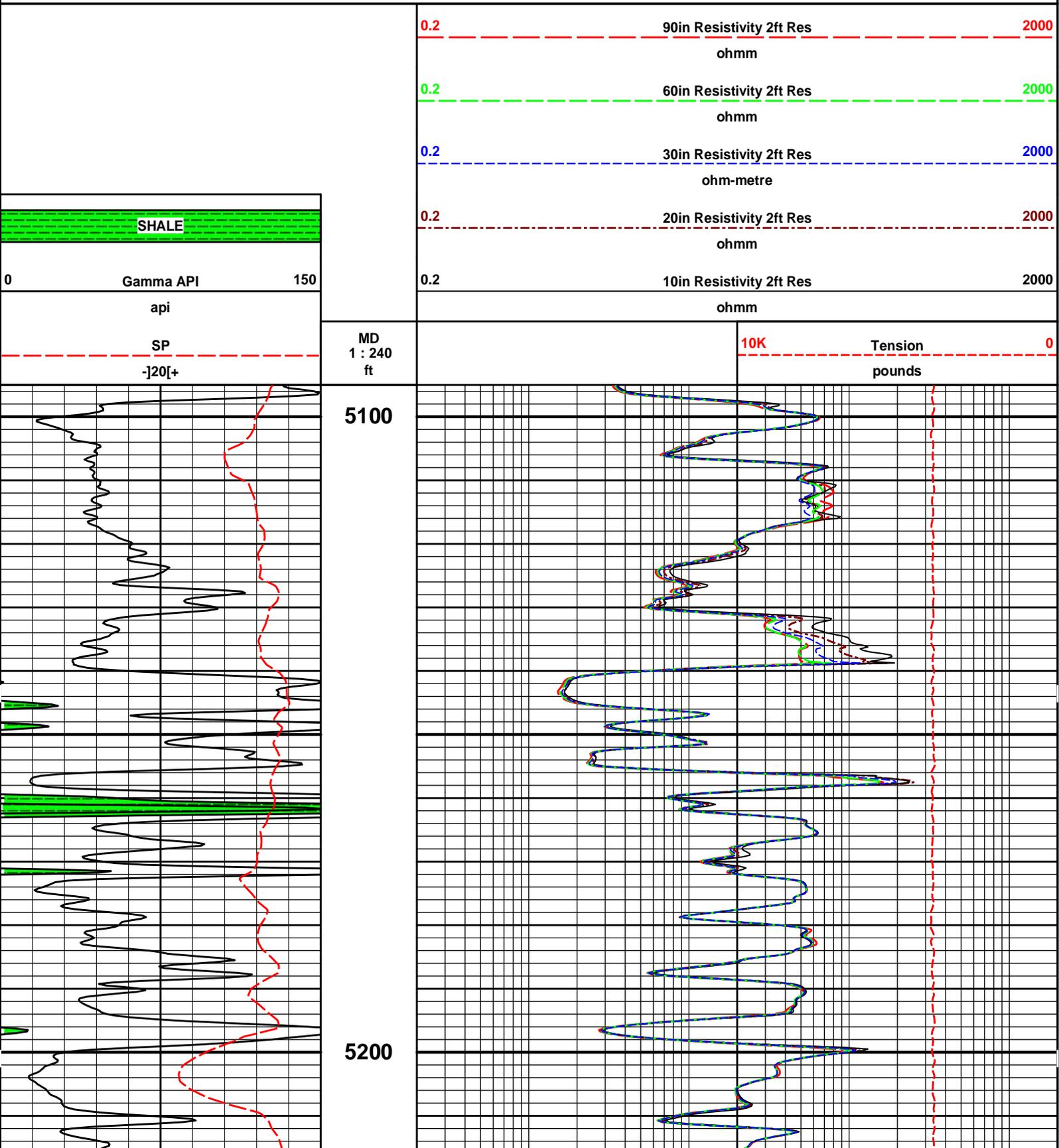
|           |         |     |                          |
|-----------|---------|-----|--------------------------|
| SP        | MD      | 10K | Tension                  |
| - 20 +    | 1 : 240 |     | pounds                   |
| 0         | ft      |     | 0                        |
| Gamma API |         | 0.2 | 10in Resistivity 2ft Res |
| api       |         |     | ohmm                     |
| 150       |         | 0.2 | 20in Resistivity 2ft Res |
|           |         |     | ohmm                     |
| SHALE     |         | 0.2 | 30in Resistivity 2ft Res |
|           |         |     | ohm-metre                |
|           |         | 0.2 | 60in Resistivity 2ft Res |
|           |         |     | ohmm                     |
|           |         | 0.2 | 90in Resistivity 2ft Res |
|           |         |     | ohmm                     |

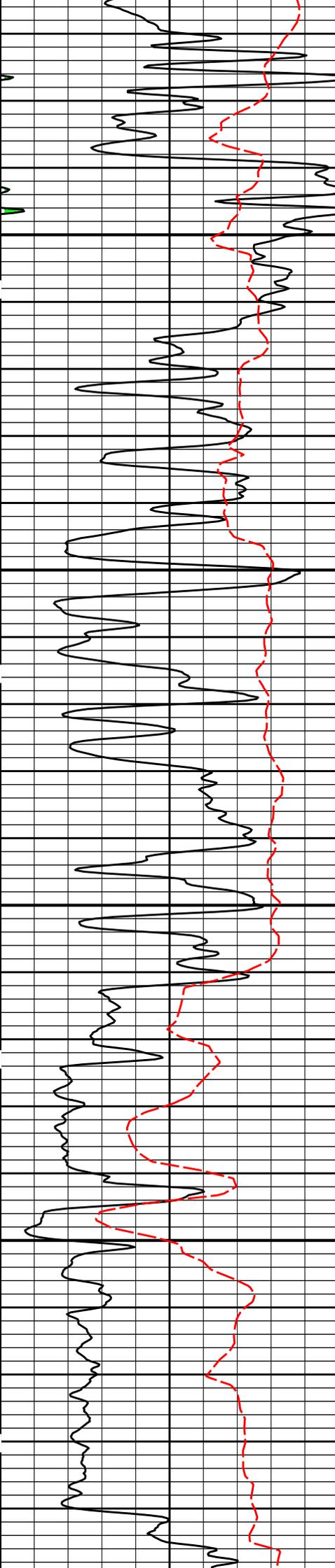
|   |           |     |     |                          |      |
|---|-----------|-----|-----|--------------------------|------|
| 0 | Gamma API | 150 | 0.2 | 10in Resistivity 2ft Res | 2000 |
|   | api       |     |     | ohmm                     |      |
|   | SHALE     |     | 0.2 | 20in Resistivity 2ft Res | 2000 |
|   |           |     |     | ohmm                     |      |
|   |           |     | 0.2 | 30in Resistivity 2ft Res | 2000 |
|   |           |     |     | ohm-metre                |      |
|   |           |     | 0.2 | 60in Resistivity 2ft Res | 2000 |
|   |           |     |     | ohmm                     |      |
|   |           |     | 0.2 | 90in Resistivity 2ft Res | 2000 |
|   |           |     |     | ohmm                     |      |

**HALLIBURTON**

Plot Time: 15-Jan-18 22:25:33  
 Plot Range: 5095 ft to 5691.5 ft  
 Data: JACQUART\_3\Well Based\REPEAT\  
 Plot File: \\-LOCAL-JACQUART\_3\Well Based\ACRT5\ACRT\_5\_repeat\_lib

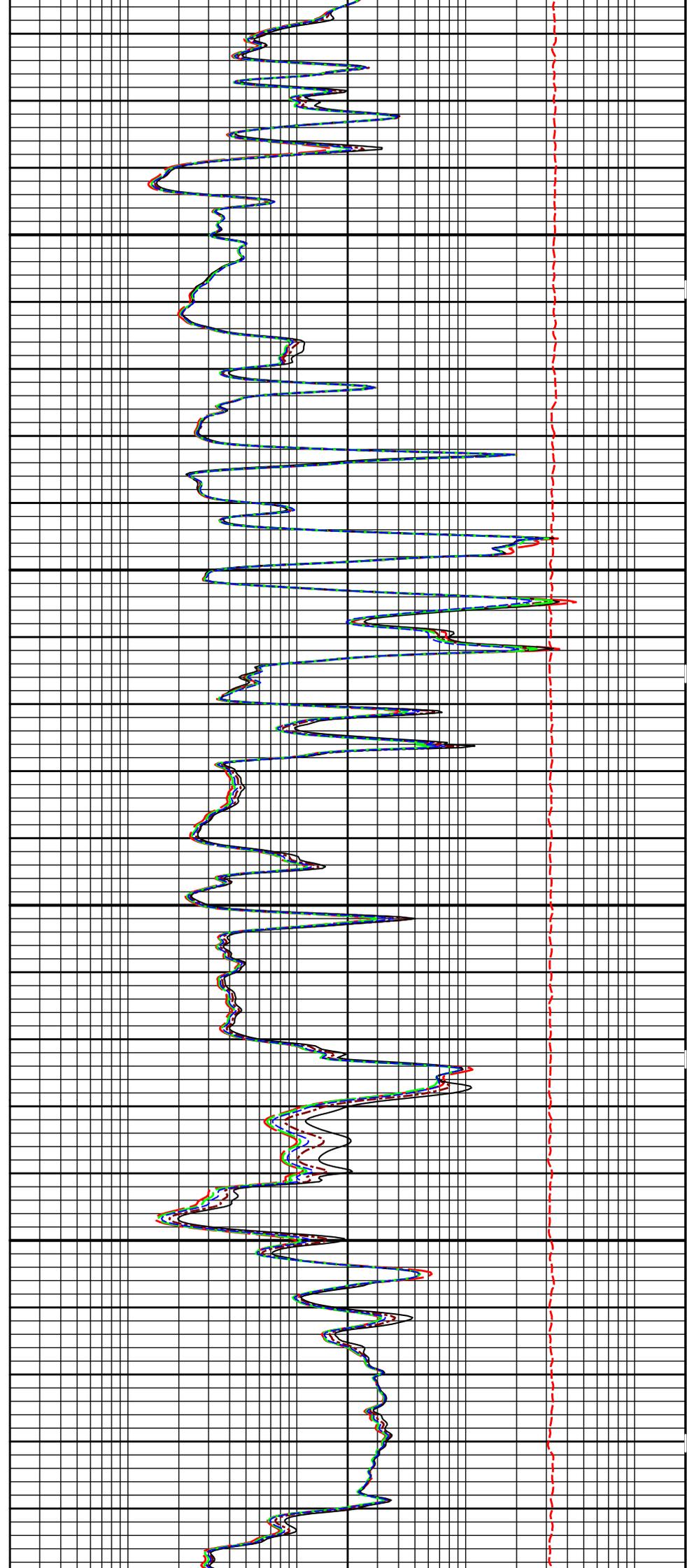
**REPEAT SECTION**

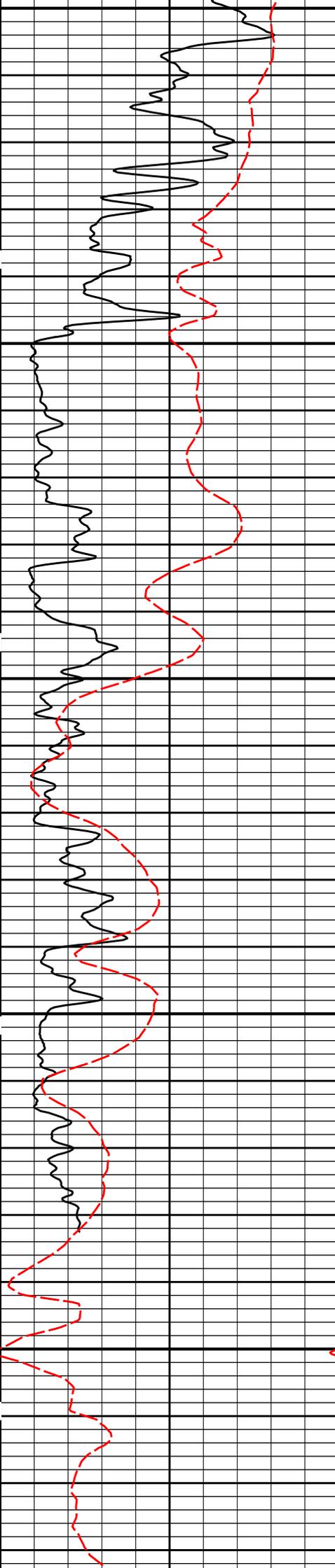




5300

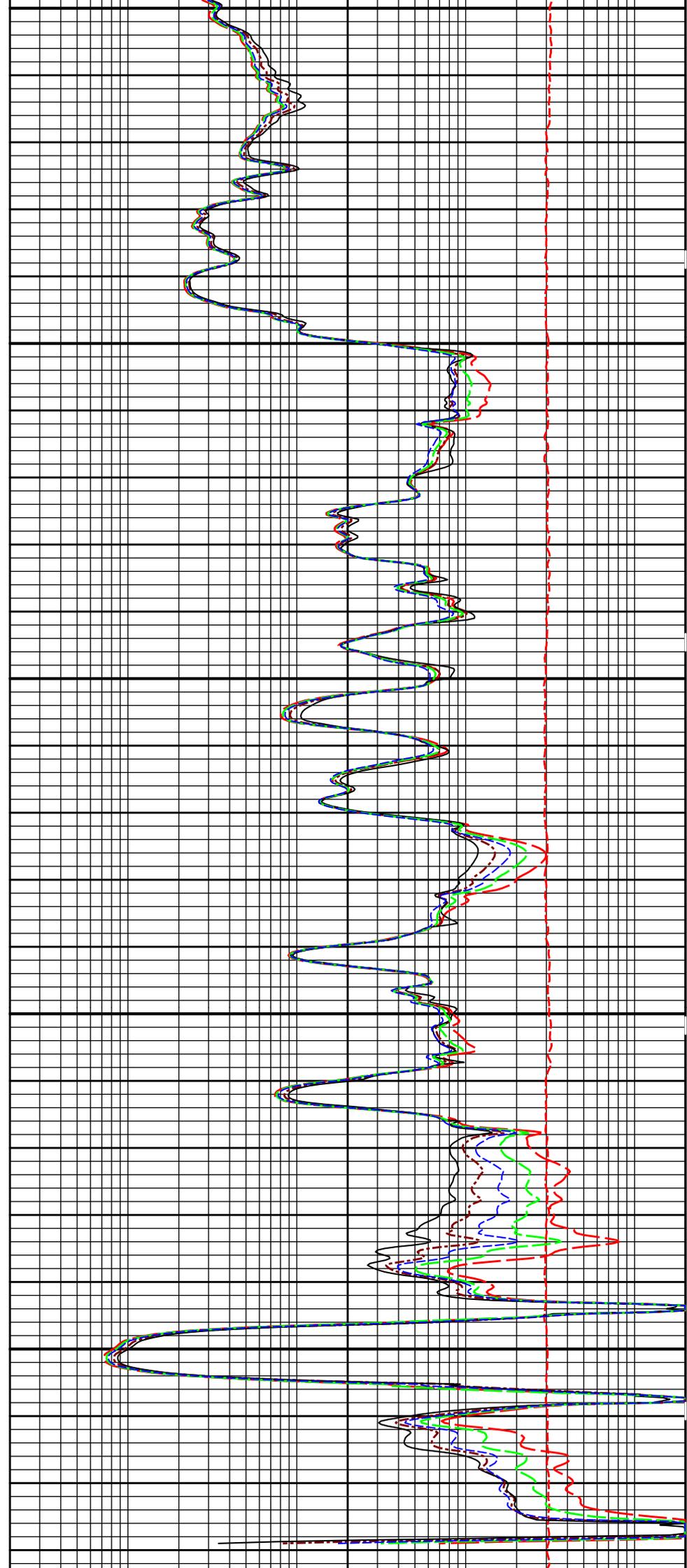
5400

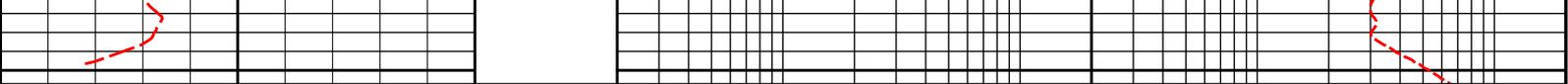




5500

5600





|                           |                     |     |                          |      |
|---------------------------|---------------------|-----|--------------------------|------|
| SP<br>-J20[+              | MD<br>1 : 240<br>ft | 10K | Tension<br>pounds        | 0    |
| 0      Gamma API      150 |                     | 0.2 | 10in Resistivity 2ft Res | 2000 |
| api                       |                     |     | ohmm                     |      |
| SHALE                     |                     | 0.2 | 20in Resistivity 2ft Res | 2000 |
|                           |                     |     | ohmm                     |      |
|                           |                     | 0.2 | 30in Resistivity 2ft Res | 2000 |
|                           |                     |     | ohm-metre                |      |
|                           |                     | 0.2 | 60in Resistivity 2ft Res | 2000 |
|                           |                     |     | ohmm                     |      |
|                           |                     | 0.2 | 90in Resistivity 2ft Res | 2000 |
|                           |                     |     | ohmm                     |      |

**HALLIBURTON**

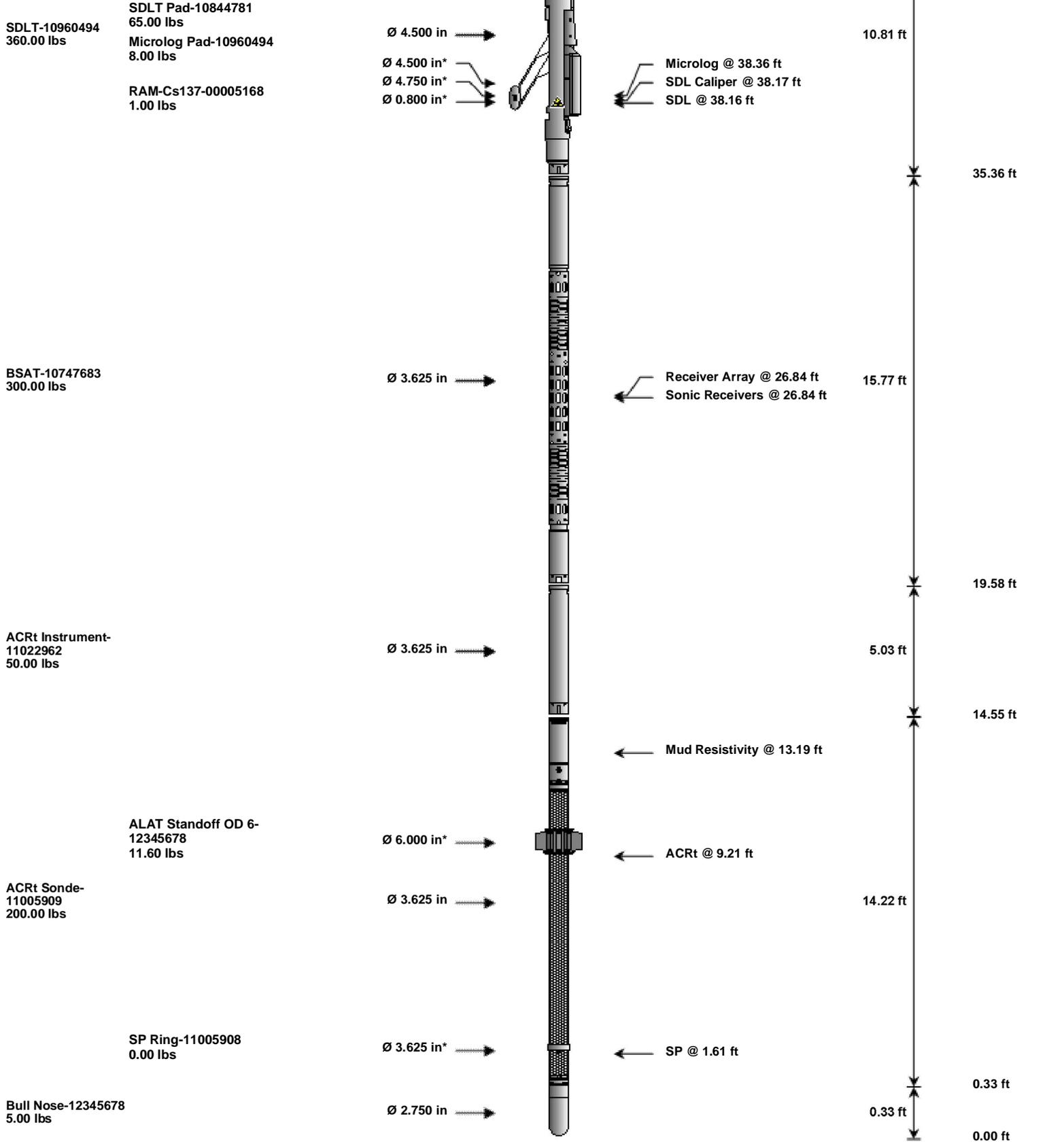
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 Plot Range: 5095 ft to 5691.5 ft  
 Data: JACQUART\_3\Well Based\REPEAT\  
 Plot File: \\-LOCAL-JACQUART\_3\Well Based\ACRT5\ACRT\_5\_repeat\_lib

## REPEAT SECTION

**HALLIBURTON**

## TOOL STRING DIAGRAM REPORT

| Description                                | Overbody Description | O.D.                          | Diagram | Sensors @ Delays                              | Length  | Accumulated Length   |
|--|----------------------|-------------------------------|---------|---|---------|----------------------|
| CH_HOS-11459024<br>37.50 lbs               |                      | Ø 2.750 in →                  |         | ← Temperature @ 67.33 ft                      | 2.50 ft | 67.83 ft             |
| XOHD-11572809<br>20.00 lbs                 |                      | Ø 2.750 in →<br>Ø 3.625 in →  |         | ← Z-Accelerometer @ 63.93 ft                  | 0.95 ft | 65.33 ft<br>64.38 ft |
| GTET-11958947<br>165.00 lbs                |                      | Ø 3.625 in →                  |         | ← GammaRay @ 58.32 ft                         | 8.52 ft | 55.86 ft             |
| DSN Decentralizer-<br>11055304<br>6.60 lbs |                      | Ø 5.000 in* →<br>Ø 3.625 in → |         | ← DSN Far @ 48.92 ft<br>← DSN Near @ 48.17 ft | 9.69 ft | 46.17 ft             |
| DSNT-11055304<br>174.00 lbs                |                      |                               |         |   |         |                      |



| Mnemonic | Tool Name   | Serial Number | Weight (lbs) | Length (ft) | Accumulated Length (ft) | Max. Log. Speed (fpm) |
|----------|---|---------------|--------------|-------------|-------------------------|-----------------------|
| CH_HOS   | Hostile Cable Head with Load Cell                     | 11459024      | 37.50        | 2.50        | 65.33                   | 300.00                |
| XOHD     | Hostile to Dits Cross Over                            | 11572809      | 20.00        | 0.95        | 64.38                   | 300.00                |
| GTET     | Gamma Telemetry Tool                                  | 11958947      | 165.00       | 8.52        | 55.86                   | 60.00                 |
| DSNT     | Dual Spaced Neutron                                   | 11055304      | 174.00       | 9.69        | 46.17                   | 60.00                 |
| DCNT     | DSN Decentralizer                                     | 11055304      | 6.60         | 5.13        | 49.50                   | 300.00                |
| SDLT     | Spectral Density Tool                                 | 10960494      | 360.00       | 10.81       | 35.36                   | 60.00                 |
| SDLP     | Density Insite Pad                                    | 10844781      | 65.00        | 2.55        | 37.57                   | 60.00                 |
| Cs137    | Logging Source, SDLT-I, 1.78 Ci - Cs137               | 00005168      | 1.00         | 0.80        | 37.80                   | 300.00                |
| MICP     | Microlog Pad  | 10960494      | 8.00         | 1.00        | 37.86                   | 60.00                 |
| BSAT     | Borehole Sonic Array Tool                             | 10747683      | 300.00       | 15.77       | 19.58                   | 60.00                 |
| ACRt     | Array Compensated True Resistivity Instrument Section | 11022962      | 50.00        | 5.03        | 14.55                   | 120.00                |
| ACRt     | Array Compensated True Resistivity Sonde Section      | 11005909      | 200.00       | 14.22       | 0.33                    | 120.00                |
| SP       | SP Ring   | 11005908      | 0.00         | 0.25        | 1.61                    | 300.00                |
| ALATS    | Array Laterolog Tool OD 6 Standoff                    | 12345678      | 11.60        | 1.00        | 9.23                    | 60.00                 |
| BLNS     | Bull Nose   | 12345678      | 5.00         | 0.33        | 0.00                    | 300.00                |

Total 1,403.70 67.83

\* Not included in Total Length and Length Accumulation.

Data: JACQUART\_3\0001 GTET-DSNT-SDLT-BSAT-ACRTIDLE

Date: 15-Jan-18 18:57:22



### PARAMETERS REPORT

| Depth (ft) | Tool Name       | Mnemonic | Description   | Value      | Units |
|------------|-----------------|----------|---|------------|-------|
| TOP        |                 |          |   |            |       |
|            | SHARED          | BS       | Bit Size  | 7.875      | in    |
|            | SHARED          | UBS      | Use Bit Size instead of Caliper for all applications. | No         |       |
|            | SHARED          | MDBS     | Mud Base  | Water      |       |
|            | SHARED          | MDWT     | Borehole Fluid Weight                                 | 9.200      | ppg   |
|            | SHARED          | WAGT     | Weighting Agent                                       | Natural    |       |
|            | SHARED          | BSAL     | Borehole salinity                                     | 0.00       | ppm   |
|            | SHARED          | FSAL     | Formation Salinity NaCl                               | 0.00       | ppm   |
|            | SHARED          | KPCT     | Percent K in Mud by Weight?                           | 0.00       | %     |
|            | SHARED          | RMUD     | Mud Resistivity                                       | 2.000      | ohmm  |
|            | SHARED          | TRM      | Temperature of Mud                                    | 75.0       | degF  |
|            | SHARED          | CSD      | Logging Interval is Cased?                            | No         |       |
|            | SHARED          | ICOD     | AHV Casing OD   | 5.500      | in    |
|            | SHARED          | CSTR     | Compressive Strength                                  | 1000.00    | psia  |
|            | SHARED          | ST       | Surface Temperature                                   | 75.0       | degF  |
|            | SHARED          | TD       | Total Well Depth                                      | 5675.00    | ft    |
|            | SHARED          | BHT      | Bottom Hole Temperature                               | 147.0      | degF  |
|            | SHARED          | SVTM     | Navigation and Survey Master Tool                     | NONE       |       |
|            | SHARED          | AZTM     | High Res Z Accelerometer Master Tool                  | GTET       |       |
|            | SHARED          | TEMM     | CBM Temperature Master Tool                           | GTET       |       |
|            | Rwa / CrossPlot | XPOK     | Process Crossplot?                                    | Yes        |       |
|            | Rwa / CrossPlot | FCHO     | Select Source of F                                    | Automatic  |       |
|            | Rwa / CrossPlot | AFAC     | Archie A factor                                       | 0.6200     |       |
|            | Rwa / CrossPlot | MFAC     | Archie M factor                                       | 2.1500     |       |
|            | Rwa / CrossPlot | RMFR     | Rmf Reference   | 0.10       | ohmm  |
|            | Rwa / CrossPlot | TMFR     | Rmf Ref Temp  | 75.00      | degF  |
|            | Rwa / CrossPlot | RWA      | Resistivity of Formation Water                        | 0.05       | ohmm  |
|            | Rwa / CrossPlot | ADP      | Use Air Porosity to calculate CrossplotPhi            | No         |       |
|            | Rwa / CrossPlot | BHSM     | Borehole Size Source Tool                             | SDLT       |       |
|            | Rwa / CrossPlot | ROIN     | Input for RO Calculation                              | Rwa        |       |
|            | GTET            | GROK     | Process Gamma Ray?                                    | Yes        |       |
|            | GTET            | GEOK     | Process Gamma Ray EVR?                                | No         |       |
|            | GTET            | TPOS     | Tool Position for Gamma Ray Tools.                    | Eccentered |       |
|            | GTET            | BHSM     | Borehole Size Source Tool                             | SDLT       |       |
|            | DSNT            | DNOK     | Process DSN?  | Yes        |       |
|            | DSNT            | DEOK     | Process DSN EVR?                                      | No         |       |
|            | DSNT            | NLIT     | Neutron Lithology                                     | Limestone  |       |
|            | DSNT            | DNSO     | DSN Standoff - 0.25 in (6.35 mm) Recommended          | 0.250      | in    |
|            | DSNT            | DNTT     | Temperature Correction Type                           | None       |       |
|            | DSNT            | DPRS     | DSN Pressure Correction Type                          | None       |       |
|            | DSNT            | SHCO     | View More Correction Options                          | No         |       |

|              |      |                                   |                 |      |
|--------------|------|-----------------------------------|-----------------|------|
| DSNT         | UTVD | Use TVD for Gradient Corrections? | No              |      |
| DSNT         | LHWT | Logging Horizontal Water Tank?    | No              |      |
| DSNT         | BHSM | Borehole Size Source Tool         | SDLT            |      |
| SDLT         | CLOK | Process Caliper Outputs?          | Yes             |      |
| Microlog Pad | MLOK | Process MicroLog Outputs?         | Yes             |      |
| SDLT Pad     | DNOK | Process Density?                  | Yes             |      |
| SDLT Pad     | DNOK | Process Density EVR?              | No              |      |
| SDLT Pad     | CB   | Logging Calibration Blocks?       | No              |      |
| SDLT Pad     | SPVT | SDLT Pad Temperature Valid?       | Yes             |      |
| SDLT Pad     | DTWN | Disable temperature warning       | No              |      |
| SDLT Pad     | DMA  | Formation Density Matrix          | 2.710           | g/cc |
| SDLT Pad     | DFL  | Formation Density Fluid           | 1.000           | g/cc |
| SDLT Pad     | BHSM | Borehole Size Source Tool         | SDLT            |      |
| BSAT         | MBOK | Compute BCAS Results?             | Yes             |      |
| BSAT         | FLLO | Frequency Filter Low Pass Value?  | 5000            | Hz   |
| BSAT         | FLHI | Frequency Filter High Pass Value? | 27000           | Hz   |
| BSAT         | DTFL | Delta -T Pore Fluid               | 189.00          | uspf |
| BSAT         | DTMT | Delta -T Matrix Type              | Limestone 47.6  |      |
| BSAT         | DTSH | Delta -T Shale                    | 100.00          | uspf |
| BSAT         | SPEQ | Acoustic Porosity Equation        | Wylie           |      |
| ACRt Sonde   | RTOK | Process ACRt?                     | Yes             |      |
| ACRt Sonde   | MNSO | Minimum Tool Standoff             | 1.50            | in   |
| ACRt Sonde   | TCS1 | Temperature Correction Source     | FP Lwr & FP Upr |      |
| ACRt Sonde   | TPOS | Tool Position                     | Free Hanging    |      |
| ACRt Sonde   | RMOP | Rmud Source                       | Mud Cell        |      |
| ACRt Sonde   | RMIN | Minimum Resistivity for MAP       | 0.20            | ohmm |
| ACRt Sonde   | RMAX | Maximum Resistivity for MAP       | 200.00          | ohmm |
| ACRt Sonde   | THQY | Threshold Quality                 | 0.50            |      |
| ACRt Sonde   | MRFX | Fixed mud resistivity             | 2000            | ohmm |
| ACRt Sonde   | BHSM | Borehole Size Source Tool         | SDLT            |      |
| ACRt Sonde   | MBFL | Apply Corkscrew Effect?           | No              |      |

BOTTOM

Data: JACQUART\_3\0001 GTET-DSNT-SDLT-BSAT-ACRT004 15-Jan-18 20:05 Up @5692.5f

Date: 15-Jan-18 20:51:11

**HALLIBURTON**

## CALIBRATION REPORT

### NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11958947

Reference Calibration Date: 08-Dec-17 09:10:57

Engineer: HARRIS

Calibration Date: 08-Dec-17 09:13:31

Software Version: WL INSITE R5.0.5 (Build 8)

Calibration Version: 1

Calibrator Source S/N: TB-185

Calibrator API Reference:228.00 api

Equivalent Calibrator API Reference:232.0 api

| Measurement             | Measured | Calibrated | Units |
|-------------------------|----------|------------|-------|
| Background              | 33.1     | 32.7       | api   |
| Background + Calibrator | 267.5    | 264.7      | api   |
| Calibrator              | 234.4    | 232.0      | api   |

### NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11958947

Reference Calibration Date: 08-Dec-17 09:13:31

Engineer: JORGE ORLANDO PEREZ

Calibration Date: 14-Jan-18 10:40:47

Software Version: WL INSITE R5.0.5 (Build 8)

Calibration Version: 1

Calibrator Source S/N: TB-185

Calibrator API Reference:228.00 api

| Field Verification      | Shop  | Field | Units |
|-------------------------|-------|-------|-------|
| Background              | 32.7  | 22.9  | api   |
| Background + Calibrator | 264.7 | 255.8 | api   |
| Calibrator              | 232.0 | 232.9 | api   |

| Shop  | Field | Difference | Tolerance |
|-------|-------|------------|-----------|
| 232.0 | 232.9 | -0.9       | +/- 9.00  |

**ARRAY COMPENSATED TRUE RESISTIVITY SHOP CALIBRATION**

|   |   |
|---|---|
| <b>Tool Name:</b> ACRt Sonde - 11005909             | <b>Reference Calibration Date:</b> 28-Dec-17 09:46:29 |
| <b>Engineer:</b> JORGE ORLANDO PEREZ                | <b>Calibration Date:</b> 13-Jan-18 11:09:47           |
| <b>Software Version:</b> WL INSITE R5.0.5 (Build 8) | <b>Calibration Version:</b> 1                         |
| <b>Host Tool Name:</b> ACRt Instrument - 11022962   |   |

**TYPICAL GAIN RANGE**

| Subarray | R12KHz |          |       | R36KHz |          |       | R72KHz |          |       |
|----------|--------|----------|-------|--------|----------|-------|--------|----------|-------|
|          | Lower  | (mmho/m) | Upper | Lower  | (mmho/m) | Upper | Lower  | (mmho/m) | Upper |
| A1 (80") | 0.95   | 1.0371   | 1.05  | 0.95   | 1.0178   | 1.05  | 0.95   | 1.0085   | 1.05  |
| A2 (50") | 0.95   | 1.0444   | 1.05  | 0.95   | 1.0252   | 1.05  | 0.95   | 1.0173   | 1.05  |
| A3 (29") | 0.95   | 1.0335   | 1.05  | 0.95   | 1.0140   | 1.05  | 0.95   | 1.0048   | 1.05  |
| A4 (17") | 0.95   | 1.0448   | 1.05  | 0.95   | 1.0271   | 1.05  | 0.95   | 1.0210   | 1.05  |
| A5 (10") | N/A    | N/A      | N/A   | 0.95   | 0.9989   | 1.05  | 0.95   | 0.9901   | 1.05  |
| A6 (6")  | N/A    | N/A      | N/A   | 0.95   | 0.9889   | 1.05  | 0.95   | 0.9797   | 1.05  |

**SONDE OFFSET**

| Subarray | R12KHz   |  | R36KHz   |  | R72KHz   |  |
|----------|----------|--|----------|--|----------|--|
|          | (mmho/m) |  | (mmho/m) |  | (mmho/m) |  |
| A1 (80") | 1.317    |  | -3.682   |  | -6.264   |  |
| A2 (50") | -0.212   |  | -3.726   |  | -5.359   |  |
| A3 (29") | -14.553  |  | -5.090   |  | -3.096   |  |
| A4 (17") | -105.501 |  | -31.725  |  | -26.050  |  |
| A5 (10") | N/A      |  | -101.243 |  | -44.240  |  |
| A6 (6")  | N/A      |  | 282.208  |  | 152.425  |  |

**TRANSMITTER CURRENT GAIN**

| Signal | Lower | R    | Upper |
|--------|-------|------|-------|
| 12K    | 0.6   | 0.85 | 1.3   |
| 36K    | 1.0   | 1.33 | 2.0   |
| 72K    | 1.0   | 1.57 | 2.0   |

**R-MUD VERIFICATION**

| Signal   | Lower (ohm-m) | Measured (ohm-m) | Upper (ohm-m) |
|----------|---------------|------------------|---------------|
| Mud Cell | 0.95          | 1.00             | 1.05          |

**PASS/FAIL SUMMARY**

|                  |      |
|------------------|------|
| GAIN RANGE CHK   | PASS |
| SONDE OFFSET CHK | PASS |

TOOL OK TO LOG

**CALIBRATION SUMMARY**

| Sensor                     | Shop  | Field | Post  | Difference | Tolerance | Units |
|----------------------------|-------|-------|-------|------------|-----------|-------|
| <b>GTET-11958947</b>       |       |       |       |            |           |       |
| Gamma Ray Calibrator       | 232.0 | 232.9 | ----- | -0.9       | +/- 9.00  | api   |
| <b>ACRt Sonde-11005909</b> |       |       |       |            |           |       |
| Mud Cell                   | 1.00  | ----- | ----- | 0          | -----     | ohm-m |

**HALLIBURTON****INPUTS, DELAYS AND FILTERS TABLE**

| Mnemonic               | Input Description                                       | Delay (ft) | Filter Type | Filter Length (ft) |
|------------------------|---|------------|-------------|--------------------|
| <b>Depth Panel</b>     |   |            |             |                    |
| TENS                   | Tension   | 0.00       | NO          |                    |
| <b>Rwa / CrossPlot</b> |   |            |             |                    |
| TPUL                   | Tension Pull  | 67.83      | NO          |                    |
| BS                     | Bit Size  | 67.83      | NO          |                    |
| HDIA                   | Measured Hole Diameter                                  | 0.00       | NO          |                    |
| <b>CH_HOS</b>          |   |            |             |                    |
| DHTN                   | DownholeTension   | 0.00       | BLK         | 0.000              |
| <b>GTET</b>            |   |            |             |                    |
| TPUL                   | Tension Pull  | 58.32      | NO          |                    |
| GR                     | Natural Gamma Ray API                                   | 58.32      | TRI         | 1.750              |
| GRU                    | Unfiltered Natural Gamma Ray API                        | 58.32      | NO          |                    |
| EGR                    | Natural Gamma Ray API with Enhanced Vertical Resolution | 58.32      | W           | 1.416 , 0.750      |
| HDIA                   | Measured Hole Diameter                                  | 0.00       | NO          |                    |
| ACCZ                   | Accelerometer Z   | 0.00       | BLK         | 0.083              |
| DEVI                   | Inclination   | 0.00       | NO          |                    |
| <b>DSNT</b>            |   |            |             |                    |
| TPUL                   | Tension Pull  | 48.07      | NO          |                    |
| RNDS                   | Near Detector Telemetry Counts                          | 48.17      | BLK         | 1.417              |
| RFDS                   | Far Detector Telemetry Counts                           | 48.92      | TRI         | 0.583              |
| DNTT                   | DSN Tool Temperature                                    | 48.17      | NO          |                    |
| DSNS                   | DSN Tool Status   | 48.07      | NO          |                    |
| ERNR                   | Near Detector Telemetry Counts EVR                      | 48.17      | BLK         | 0.000              |
| ERFD                   | Far Detector Telemetry Counts EVR                       | 48.92      | BLK         | 0.000              |
| ENTM                   | DSN Tool Temperature EVR                                | 48.17      | NO          |                    |
| HDIA                   | Measured Hole Diameter                                  | 0.00       | NO          |                    |
| <b>SDLT</b>            |   |            |             |                    |
| TPUL                   | Tension Pull  | 38.17      | NO          |                    |
| PCAL                   | Pad Caliper   | 38.17      | TRI         | 0.250              |
| ACAL                   | Arm Caliper   | 38.17      | TRI         | 0.250              |
| <b>BSAT</b>            |   |            |             |                    |
| TPUL                   | Tension Pull  | 26.84      | NO          |                    |
| STAT                   | Status  | 26.84      | NO          |                    |
| DLYT                   | Delay Time  | 26.84      | NO          |                    |
| SI                     | Sample Interval   | 26.84      | NO          |                    |
| TXRX                   | Raw Telemetry 10 Receivers                              | 26.84      | NO          |                    |
| FRMC                   | Tool Frame Count  | 26.84      | NO          |                    |
| GMOD                   | Gain processing mode                                    | 19.58      | NO          |                    |
| <b>ACRt Sonde</b>      |   |            |             |                    |
| TPUL                   | Tension Pull  | 2.73       | NO          |                    |
| F1R1                   | ACRT 12KHz - 80in R value                               | 8.98       | BLK         | 0.000              |
| F1X1                   | ACRT 12KHz - 80in X value                               | 8.98       | BLK         | 0.000              |
| F1R2                   | ACRT 12KHz - 50in R value                               | 6.48       | BLK         | 0.000              |
| F1X2                   | ACRT 12KHz - 50in X value                               | 6.48       | BLK         | 0.000              |
| F1R3                   | ACRT 12KHz - 29in R value                               | 4.98       | BLK         | 0.000              |
| F1X3                   | ACRT 12KHz - 29in X value                               | 4.98       | BLK         | 0.000              |

|                     |   |       |     |       |
|---------------------|---|-------|-----|-------|
| F1R4                | ACRT 12KHz - 17in R value                     | 3.98  | BLK | 0.000 |
| F1X4                | ACRT 12KHz - 17in X value                     | 3.98  | BLK | 0.000 |
| F1R5                | ACRT 12KHz - 10in R value                     | 3.48  | BLK | 0.000 |
| F1X5                | ACRT 12KHz - 10in X value                     | 3.48  | BLK | 0.000 |
| F1R6                | ACRT 12KHz - 6in R value                      | 3.23  | BLK | 0.000 |
| F1X6                | ACRT 12KHz - 6in X value                      | 3.23  | BLK | 0.000 |
| F2R1                | ACRT 36KHz - 80in R value                     | 8.98  | BLK | 0.000 |
| F2X1                | ACRT 36KHz - 80in X value                     | 8.98  | BLK | 0.000 |
| F2R2                | ACRT 36KHz - 50in R value                     | 6.48  | BLK | 0.000 |
| F2X2                | ACRT 36KHz - 50in X value                     | 6.48  | BLK | 0.000 |
| F2R3                | ACRT 36KHz - 29in R value                     | 4.98  | BLK | 0.000 |
| F2X3                | ACRT 36KHz - 29in X value                     | 4.98  | BLK | 0.000 |
| F2R4                | ACRT 36KHz - 17in R value                     | 3.98  | BLK | 0.000 |
| F2X4                | ACRT 36KHz - 17in X value                     | 3.98  | BLK | 0.000 |
| F2R5                | ACRT 36KHz - 10in R value                     | 3.48  | BLK | 0.000 |
| F2X5                | ACRT 36KHz - 10in X value                     | 3.48  | BLK | 0.000 |
| F2R6                | ACRT 36KHz - 6in R value                      | 3.23  | BLK | 0.000 |
| F2X6                | ACRT 36KHz - 6in X value                      | 3.23  | BLK | 0.000 |
| F3R1                | ACRT 72KHz - 80in R value                     | 8.98  | BLK | 0.000 |
| F3X1                | ACRT 72KHz - 80in X value                     | 8.98  | BLK | 0.000 |
| F3R2                | ACRT 72KHz - 50in R value                     | 6.48  | BLK | 0.000 |
| F3X2                | ACRT 72KHz - 50in X value                     | 6.48  | BLK | 0.000 |
| F3R3                | ACRT 72KHz - 29in R value                     | 4.98  | BLK | 0.000 |
| F3X3                | ACRT 72KHz - 29in X value                     | 4.98  | BLK | 0.000 |
| F3R4                | ACRT 72KHz - 17in R value                     | 3.98  | BLK | 0.000 |
| F3X4                | ACRT 72KHz - 17in X value                     | 3.98  | BLK | 0.000 |
| F3R5                | ACRT 72KHz - 10in R value                     | 3.48  | BLK | 0.000 |
| F3X5                | ACRT 72KHz - 10in X value                     | 3.48  | BLK | 0.000 |
| F3R6                | ACRT 72KHz - 6in R value                      | 3.23  | BLK | 0.000 |
| F3X6                | ACRT 72KHz - 6in X value                      | 3.23  | BLK | 0.000 |
| RMUD                | Mud Resistivity                               | 12.52 | BLK | 0.000 |
| F1RT                | Transmitter Reference 12 KHz Real Signal      | 2.73  | BLK | 0.000 |
| F1XT                | Transmitter Reference 12 KHz Imaginary Signal | 2.73  | BLK | 0.000 |
| F2RT                | Transmitter Reference 36 KHz Real Signal      | 2.73  | BLK | 0.000 |
| F2XT                | Transmitter Reference 36 KHz Imaginary Signal | 2.73  | BLK | 0.000 |
| F3RT                | Transmitter Reference 72 KHz Real Signal      | 2.73  | BLK | 0.000 |
| F3XT                | Transmitter Reference 72 KHz Imaginary Signal | 2.73  | BLK | 0.000 |
| TFPU                | Upper Feedpipe Temperature Calculated         | 2.73  | BLK | 0.000 |
| TFPL                | Lower Feedpipe Temperature Calculated         | 2.73  | BLK | 0.000 |
| ITMP                | Instrument Temperature                        | 2.73  | BLK | 0.000 |
| TCVA                | Temperature Correction Values Loop Off        | 2.73  | NO  |       |
| TIDV                | Instrument Temperature Derivative             | 2.73  | NO  |       |
| TUDV                | Upper Temperature Derivative                  | 2.73  | NO  |       |
| TLDV                | Lower Temperature Derivative                  | 2.73  | NO  |       |
| TRBD                | Receiver Board Temperature                    | 2.73  | NO  |       |
| HDIA                | Measured Hole Diameter                        | 0.00  | NO  |       |
| <b>Microlog Pad</b> |   |       |     |       |
| TPUL                | Tension Pull                                  | 38.36 | NO  |       |
| MINV                | Microlog Lateral                              | 38.36 | BLK | 0.750 |
| MNOR                | Microlog Normal                               | 38.36 | BLK | 0.750 |
| <b>SDLT Pad</b>     |   |       |     |       |
| TPUL                | Tension Pull                                  | 38.16 | NO  |       |
| NAB                 | Near Above                                    | 37.99 | BLK | 0.920 |
| NHI                 | Near Cesium High                              | 37.99 | BLK | 0.920 |
| NLO                 | Near Cesium Low                               | 37.99 | BLK | 0.920 |
| NVA                 | Near Valley                                   | 37.99 | BLK | 0.920 |
| NBA                 | Near Barite                                   | 37.99 | BLK | 0.920 |

|      |                            |       |     |       |
|------|----------------------------|-------|-----|-------|
| NDE  | Near Density               | 37.99 | BLK | 0.920 |
| NPK  | Near Peak                  | 37.99 | BLK | 0.920 |
| NLI  | Near Lithology             | 37.99 | BLK | 0.920 |
| NBAU | Near Barite Unfiltered     | 37.99 | BLK | 0.250 |
| NLIU | Near Lithology Unfiltered  | 37.99 | BLK | 0.250 |
| FAB  | Far Above                  | 38.34 | BLK | 0.250 |
| FHI  | Far Cesium High            | 38.34 | BLK | 0.250 |
| FLO  | Far Cesium Low             | 38.34 | BLK | 0.250 |
| FVA  | Far Valley                 | 38.34 | BLK | 0.250 |
| FBA  | Far Barite                 | 38.34 | BLK | 0.250 |
| FDE  | Far Density                | 38.34 | BLK | 0.250 |
| FPK  | Far Peak                   | 38.34 | BLK | 0.250 |
| FLI  | Far Lithology              | 38.34 | BLK | 0.250 |
| PTMP | Pad Temperature            | 38.17 | BLK | 0.920 |
| NHV  | Near Detector High Voltage | 37.57 | NO  |       |
| FHV  | Far Detector High Voltage  | 37.57 | NO  |       |
| ITMP | Instrument Temperature     | 37.57 | NO  |       |
| DDHV | Detector High Voltage      | 37.57 | NO  |       |
| HDIA | Measured Hole Diameter     | 0.00  | NO  |       |

**SP Ring**

|      |                              |      |     |       |
|------|------------------------------|------|-----|-------|
| PLTC | Plot Control Mask            | 1.61 | NO  |       |
| SP   | Spontaneous Potential        | 1.61 | BLK | 1.250 |
| SPR  | Raw Spontaneous Potential    | 1.61 | NO  |       |
| SPO  | Spontaneous Potential Offset | 1.61 | NO  |       |

Data: JACQUART\_3\0001 GTET-DSNT-SDLT-BSAT-ACRTVDLE

Date: 15-Jan-18 18:59:31

|         |                      |       |        |
|---------|----------------------|-------|--------|
| COMPANY | MERIT ENERGY COMPANY |       |        |
| WELL    | JACQUART 3           |       |        |
| FIELD   | EUBANK               |       |        |
| COUNTY  | HASKELL              | STATE | KANSAS |

**HALLIBURTON**

ARRAY COMPENSATED  
TRUE RESISTIVITY  
LOG