

Company: Esso Australia Pty Ltd.

Well: A-6L  
Field: Tuna  
Rig: Prod 4 / Crane

Country: Australia

RST-C  
Sigma Survey  
23-Dec-2009

Prod 4 / Crane  
Tuna  
Gippsland  
A-6L  
Esso Australia Pty Ltd.

| LOCATION                |        |         |                   |
|-------------------------|--------|---------|-------------------|
| Gippsland               | Elev.: | K.B.    | 32.90 m           |
| Basin                   |        | G.L.    | -59.00 m          |
| Bass Strait             |        | D.F.    | 32.90 m           |
| Permanent Datum:        | M.S.L  |         |                   |
| Log Measured From:      | K.B    | 32.90 m | above Perm. Datum |
| Drilling Measured From: | K.B    |         |                   |

|                 |                               |                               |                             |
|-----------------|-------------------------------|-------------------------------|-----------------------------|
| State: Victoria | Max. Well Deviation<br>59 deg | Longitude<br>148° 25' 05.29"E | Latitude<br>38° 10' 16.00"S |
|-----------------|-------------------------------|-------------------------------|-----------------------------|

|                               |                   |          |               |
|-------------------------------|-------------------|----------|---------------|
| Logging Date                  | 23-Dec-2009       |          |               |
| Run Number                    | 1                 |          |               |
| Depth Driller                 | 3290 m            |          |               |
| Schlumberger Depth            | 3102.2 m          |          |               |
| Bottom Log Interval           | 3102.2 m          |          |               |
| Top Log Interval              | 2925 m            |          |               |
| Casing Fluid Type             | Production Fluids |          |               |
| Salinity                      |                   |          |               |
| Density                       |                   |          |               |
| Fluid Level                   | 1361 m            |          |               |
| BIT/CASING/TUBING STRING      |                   |          |               |
| Bit Size                      | 8.500 in          |          |               |
| From                          | 2318 m            |          |               |
| To                            | 3280 m            |          |               |
| Casing/Tubing Size            | 7.000 in          |          |               |
| Weight                        | 23 lbn/ft         |          |               |
| Grade                         | K-55              |          |               |
| From                          | 2218 m            |          |               |
| To                            | 3277.5 m          |          |               |
| Maximum Recorded Temperatures | 203 degF          |          |               |
| Logger On Bottom              | 23-Dec-2009       | Time     | 11:00         |
| Unit Number                   | 889               | Location | Prod 4 / AUSL |
| Recorded By                   | Owen Darby        |          |               |
| Witnessed By                  | Barry White       |          |               |

| PVT DATA                      |         |       |   |
|-------------------------------|---------|-------|---|
| Oil Density                   | Run 1   | Run 2 | R |
| Water Salinity                |         |       |   |
| Gas Gravity                   |         |       |   |
| Bo                            |         |       |   |
| Bw                            |         |       |   |
| 1/Bg                          |         |       |   |
| Bubble Point Pressure         |         |       |   |
| Bubble Point Temperature      |         |       |   |
| Solution GOR                  |         |       |   |
| Maximum Deviation             | 59 deg  |       |   |
| CEMENTING DATA                |         |       |   |
| Primary/Squeeze               | Primary |       |   |
| Casing String No              |         |       |   |
| Lead Cement Type              |         |       |   |
| Volume                        |         |       |   |
| Density                       |         |       |   |
| Water Loss                    |         |       |   |
| Additives                     |         |       |   |
| Tail Cement Type              |         |       |   |
| Volume                        |         |       |   |
| Density                       |         |       |   |
| Water Loss                    |         |       |   |
| Additives                     |         |       |   |
| Expected Cement Top           |         |       |   |
| Logging Date                  |         |       |   |
| Run Number                    |         |       |   |
| Depth Driller                 |         |       |   |
| Schlumberger Depth            |         |       |   |
| Bottom Log Interval           |         |       |   |
| Top Log Interval              |         |       |   |
| Casing Fluid Type             |         |       |   |
| Salinity                      |         |       |   |
| Density                       |         |       |   |
| Fluid Level                   |         |       |   |
| BIT/CASING/TUBING STRING      |         |       |   |
| Bit Size                      |         |       |   |
| From                          |         |       |   |
| To                            |         |       |   |
| Casing/Tubing Size            |         |       |   |
| Weight                        |         |       |   |
| Grade                         |         |       |   |
| From                          |         |       |   |
| To                            |         |       |   |
| Maximum Recorded Temperatures |         |       |   |
| Logger On Bottom              |         |       |   |
| Unit Number                   |         |       |   |
| Recorded By                   |         |       |   |
| Witnessed By                  |         |       |   |

## Depth System Equipment

Date Created: 23-DEC-2009 15:54:53

| Depth Measuring Device    |            | Tension Device                |            | Logging Cable      |                |
|---------------------------|------------|-------------------------------|------------|--------------------|----------------|
| Type:                     | IDW-EB     | Type:                         | PSDS/OSDS  | Type:              | 2-32ZT         |
| Serial Number:            | 6373       | Serial Number:                | 854        | Serial Number:     | 208558         |
| Calibration Date:         | 9-Oct-2009 | Calibration Date:             | 23-11-2009 | Length:            | 6401 M         |
| Calibrator Serial Number: | 30         | Calibrator Serial Number:     | 1174       | Conveyance Method: | Wireline       |
| Calibration Cable Type:   | 2-32ZT     | Number of Calibration Points: | 10         | Rig Type:          | Offshore Fixed |
| Wheel Correction 1:       | 0          | Calibration RMS:              | 231        |                    |                |
| Wheel Correction 2:       | 2          | Calibration Peak Error:       | 310        |                    |                |

|                                      |                             |
|--------------------------------------|-----------------------------|
| Log Sequence:                        | Subsequent Trip To the Well |
| Reference Log Name:                  |                             |
| Reference Log Run Number:            | Tyna A6L                    |
| Reference Log Date:                  |                             |
| Subsequent Trip Down Log Correction: | 2.00 M                      |

1. Correlated to ExxonMobil composite log provide by client
2. Used IDW as primary depth control
3. Used Z-Chart as secondary depth control
4. All depths are drillers depths
- 5.
- 6.

THE USE OF AND RELIANCE UPON THIS RECORDED-DATA BY THE HEREIN NAMED COMPANY (AND ANY OF ITS AFFILIATES, PARTNERS, REPRESENTATIVES, AGENTS, CONSULTANTS AND EMPLOYEES) IS SUBJECT TO THE TERMS AND CONDITIONS AGREED UPON BETWEEN SCHLUMBERGER AND THE COMPANY, INCLUDING: (a) RESTRICTIONS ON USE OF THE RECORDED-DATA; (b) DISCLAIMERS AND WAIVERS OF WARRANTIES AND REPRESENTATIONS REGARDING COMPANY'S USE OF AND RELIANCE UPON THE RECORDED-DATA; AND (c) CUSTOMER'S FULL AND SOLE RESPONSIBILITY FOR ANY INFERENCE DRAWN OR DECISION MADE IN CONNECTION WITH THE USE OF THIS RECORDED-DATA.

| OTHER SERVICES1           | OTHER SERVICES2 |
|---------------------------|-----------------|
| OS1: 2-1/8" PowerJet Perf | OS1:            |
| OS2: 4-1/2" MPBT Plug     | OS2:            |
| OS3: 2-1/8" Dump bailers  | OS3:            |
| OS4:                      | OS4:            |
| OS5:                      | OS5:            |

|                       |                       |
|-----------------------|-----------------------|
| REMARKS: RUN NUMBER 1 | REMARKS: RUN NUMBER 2 |
|-----------------------|-----------------------|

Correlated to ExxonMobil solar composite log provided by client

Objective:

Make up toolstring incorporating RST, GR & CCL.

RIH correlate on depth, position toolstring at HUD 3099m MDKB. Power up

RST minitron and allow tool to stabilise for 15mins.

With well shut in complete 1 pass over the intervals in SIGMA mode:

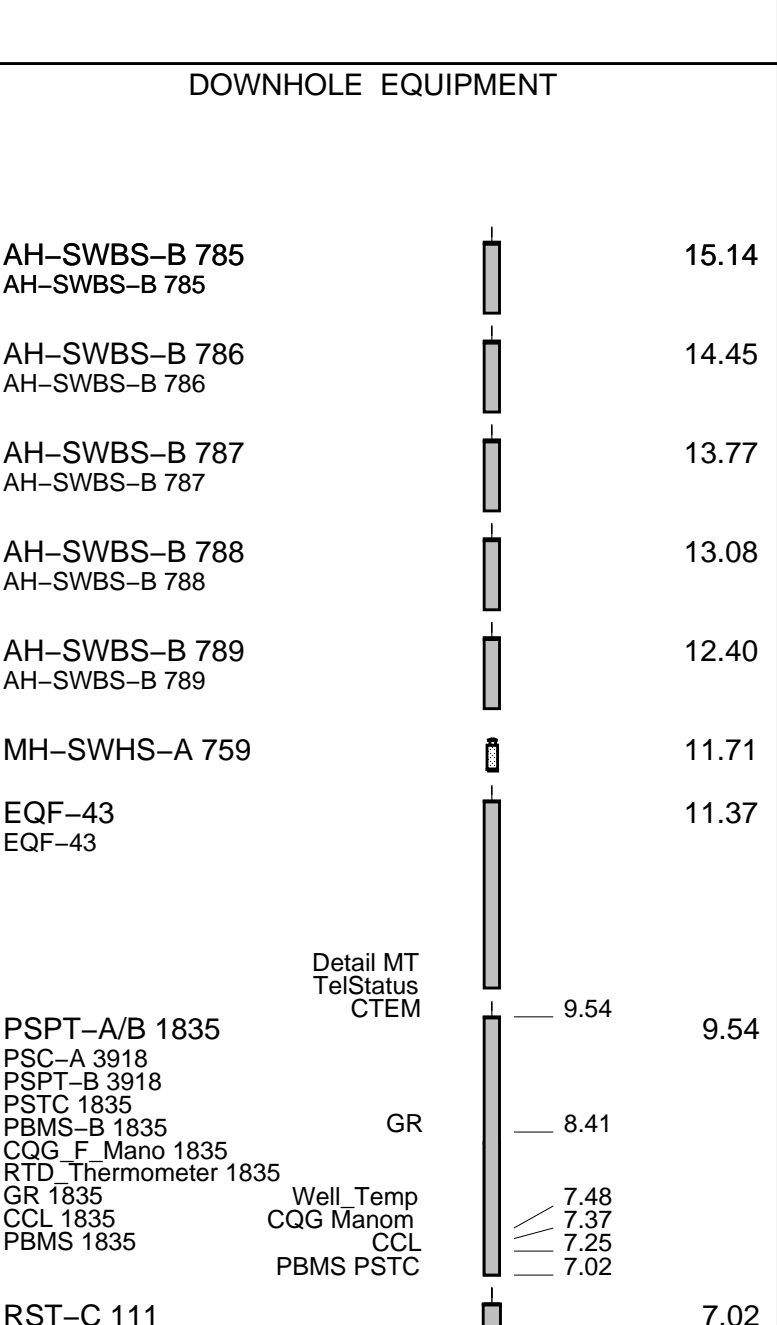
|                               |
|-------------------------------|
| 2925 – 3106m MDKB             |
| 2525 – 2862m MDKB (in tubing) |
| POOH rig down                 |
|                               |
|                               |
|                               |
|                               |
|                               |
|                               |
|                               |
| Crew:                         |
| Rick Murray & Gary Blandford  |

| RUN 1            |       |                    | RUN 2            |       |      |
|------------------|-------|--------------------|------------------|-------|------|
| SERVICE ORDER #: |       | 17C0-154<br>1361 m | SERVICE ORDER #: |       |      |
| PROGRAM VERSION: |       |                    | PROGRAM VERSION: |       |      |
| FLUID LEVEL:     |       |                    | FLUID LEVEL:     |       |      |
| LOGGED INTERVAL  | START | STOP               | LOGGED INTERVAL  | START | STOP |
|                  |       |                    |                  |       |      |
|                  |       |                    |                  |       |      |
|                  |       |                    |                  |       |      |
|                  |       |                    |                  |       |      |

| EQUIPMENT DESCRIPTION |  |  |       |  |  |
|-----------------------|--|--|-------|--|--|
| RUN 1                 |  |  | RUN 2 |  |  |

SURFACE EQUIPMENT

WITM–A 1835  
PSC\_16MHZ 1835



RSCH-A 111  
RSC-C 111  
RSS-A 108  
RSXH-A 145  
RSX-C 145

RSC-A Far  
RSC-A PNG  
RSC-A Nea  
RSX-A PNG

4.24  
4.09

Tension HV 0.00  
TOOL ZERO

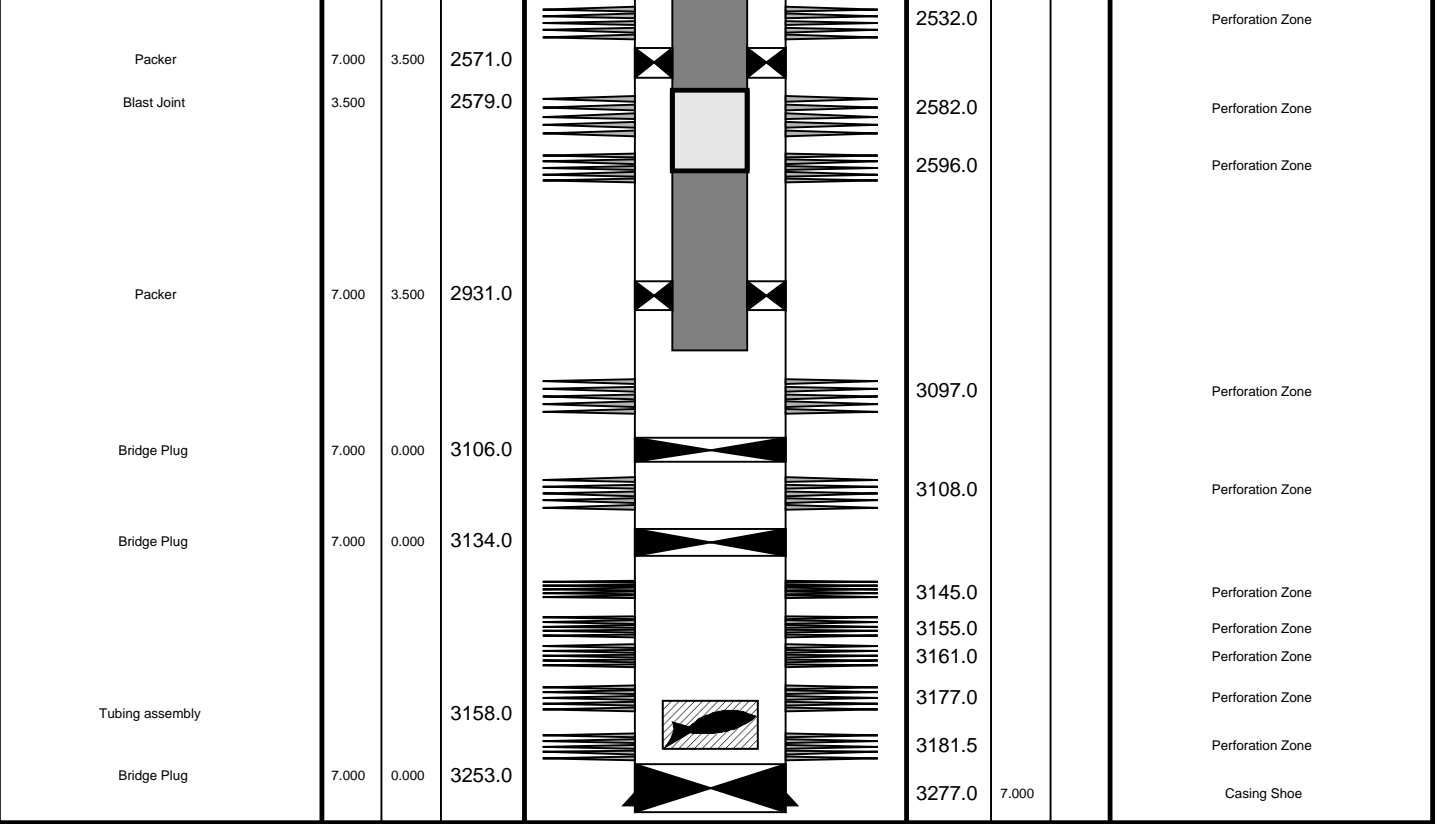
MAXIMUM STRING DIAMETER 1.72 IN  
MEASUREMENTS RELATIVE TO TOOL ZERO  
ALL LENGTHS IN METERS

Client: Esso Australia  
Well: TNA A6L  
Field: Bass Strait  
State: Victoria  
Country: Australia

Drawing Date: 12/23/2009  
API #:

Rig Name:  
Reference Datum:  
Elevation: 32.9 m

| Production String | (in)  |       | (m)    | Well Schematic | (m)    | (in)   |       | Casing String    |
|-------------------|-------|-------|--------|----------------|--------|--------|-------|------------------|
|                   | OD    | ID    | MD     |                | MD     | OD     | ID    |                  |
| Tubing            | 3.500 |       | 14.0   |                | 14.8   | 13.375 |       | Casing String    |
| Tubing Hanger     | 9.625 | 3.500 | 14.0   |                | 14.5   | 13.375 | 9.625 | Liner Hanger     |
| SSSV              | 3.500 |       | 451.0  |                |        |        |       |                  |
| Gas Lift Mandrel  | 3.500 |       | 1361.0 |                | 722.1  | 13.375 |       | Casing Shoe      |
| Gas Lift Mandrel  | 3.500 |       | 1370.0 |                |        |        |       |                  |
| Landing Nipple    | 3.500 |       | 1379.0 |                |        |        |       |                  |
| Packer            | 9.625 | 3.500 | 2142.0 |                |        |        |       |                  |
| Nipple            | 3.500 |       | 2147.0 |                | 2218.0 | 7.000  |       | Casing String    |
|                   |       |       |        |                | 2218.0 | 9.625  | 7.000 | Liner Hanger     |
| Tubing patch      | 3.500 |       | 2531.8 |                | 2318.0 | 9.625  |       | Casing Shoe      |
|                   |       |       |        |                | 2326.0 |        |       | Perforation Zone |
|                   |       |       |        |                | 2333.0 |        |       | Perforation Zone |
| No Go locator     | 3.500 |       | 2571.0 |                | 2386.0 |        |       | Perforation Zone |
|                   |       |       |        |                | 2392.0 |        |       | Perforation Zone |



## Job Events Summary

### MAXIS Field Log

### Schlumberger Job Event Summary

| Time | Elapsed Time | Depth (M) | File |
|------|--------------|-----------|------|
|------|--------------|-----------|------|

|  |                          |                 |                |
|--|--------------------------|-----------------|----------------|
| Log Pass (up)  | 23-Dec-2009 8:49 000:19  | 3103.3 - 2904.7 | RST_PSP_025LUP |
| RST-C Shut in GR pass over interval 3104 - 2925m MDKB    |                          |                 |                |
| Log Pass (up)  | 23-Dec-2009 9:24 000:45  | 3101.2 - 2901.5 | RST_PSP_028LUP |
| RST-C Shut in SIGMA pass over interval 3104 - 2925m MDKB |                          |                 |                |
| Log Pass (up)  | 23-Dec-2009 10:11 000:17 | 2875.6 - 2509.6 | RST_PSP_029LUP |
| RST-C Shut in GR pass over interval 2862 - 2525m MDKB    |                          |                 |                |
| Log Pass (up)  | 23-Dec-2009 10:43 001:17 | 2878.8 - 2503.0 | RST_PSP_031LUP |
| RST-C Shut in SIGMA pass over interval 2862 - 2525m MDKB |                          |                 |                |

Company: Esso Australia Pty Ltd. Well: A-6L

Input DLIS Files

RST\_PSP\_031LUP FN:38 23-Dec-2009 12:05 2878.8 M 2503.0 M

Output DLIS Files

DEFAULT RST\_PSP\_017PUP FN:46 PRODUCER 23-Dec-2009 12:19 2879.3 M 2503.5 M  
ESSO\_CUSTOMERRST\_PSP\_017PUP FN:47 PRODUCER 23-Dec-2009 12:19 2879.3 M 2503.5 M  
ESSO\_CUSTOMERRST\_PSP\_017PUC FN:48 CUSTOMER 23-Dec-2009 12:19 2879.3 M 2503.5 M

OP System Version: 17C0-154

RST-C 17C0-154 PSPT-A/B 17C0-154

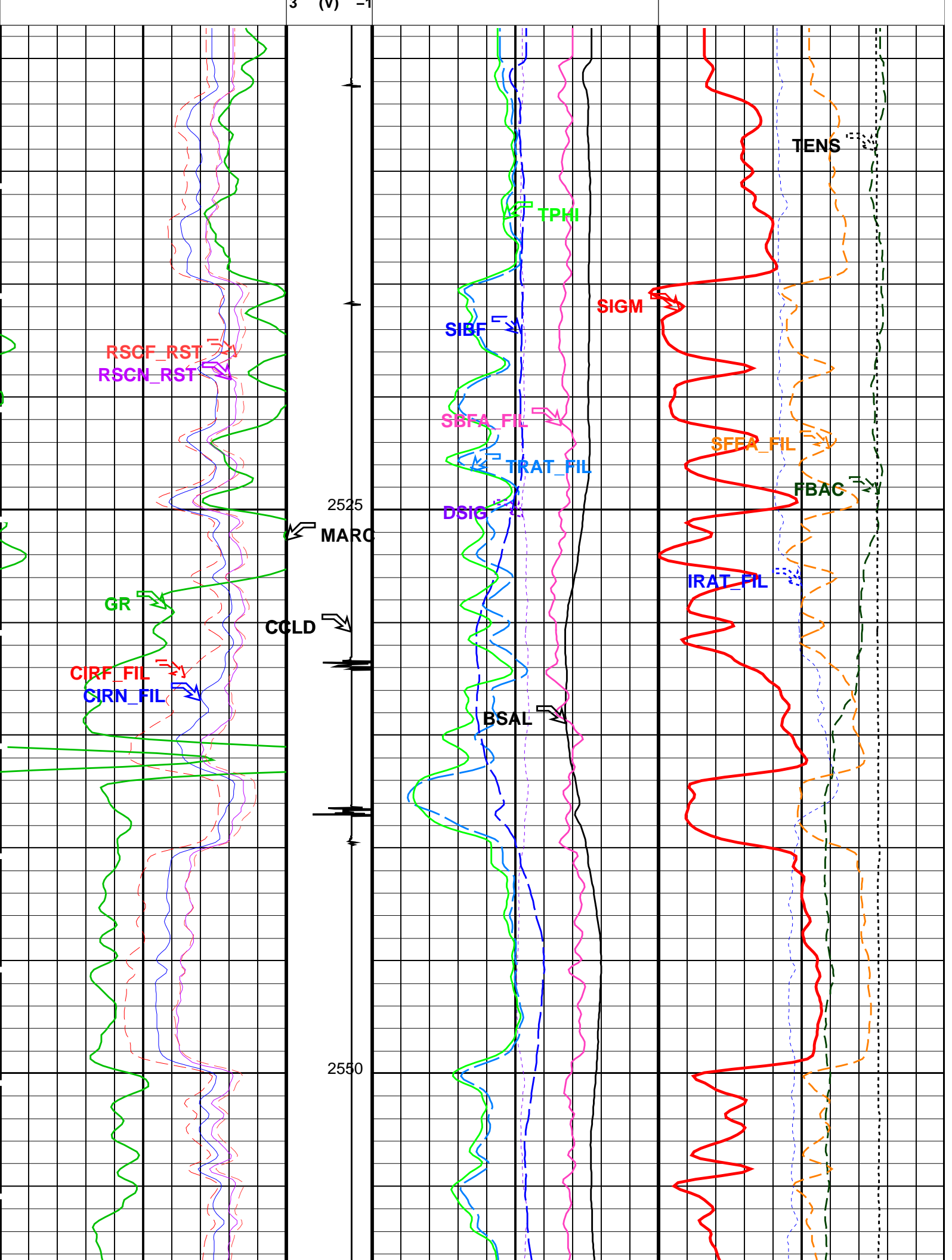
Changed Parameter Summary

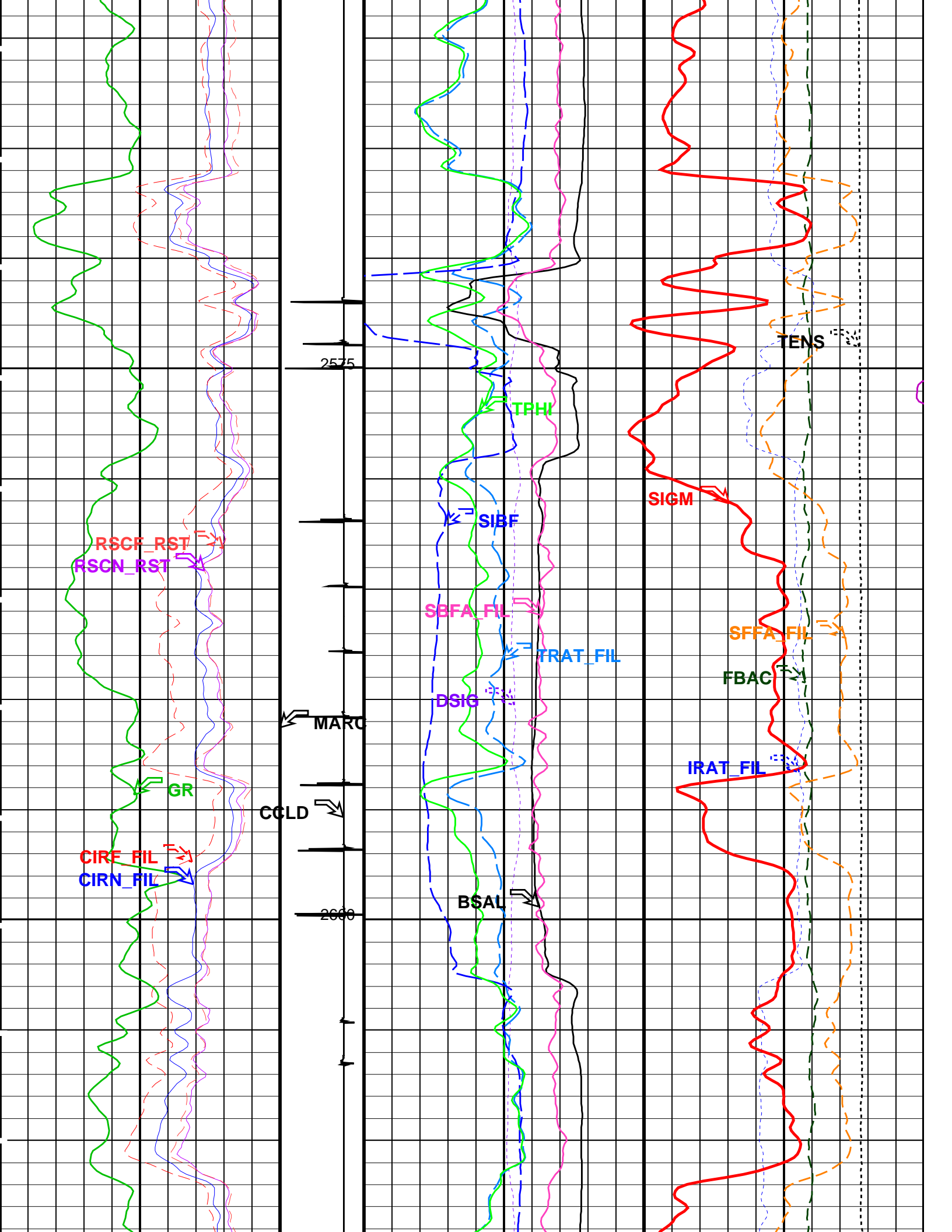
| DLIS Name | New Value  | Previous Value | Depth & Time    |
|-----------|------------|----------------|-----------------|
| CWEI      | 32.20 LB/F | 32.20 LB/F     | 2879.3 12:19:13 |

PIP SUMMARY

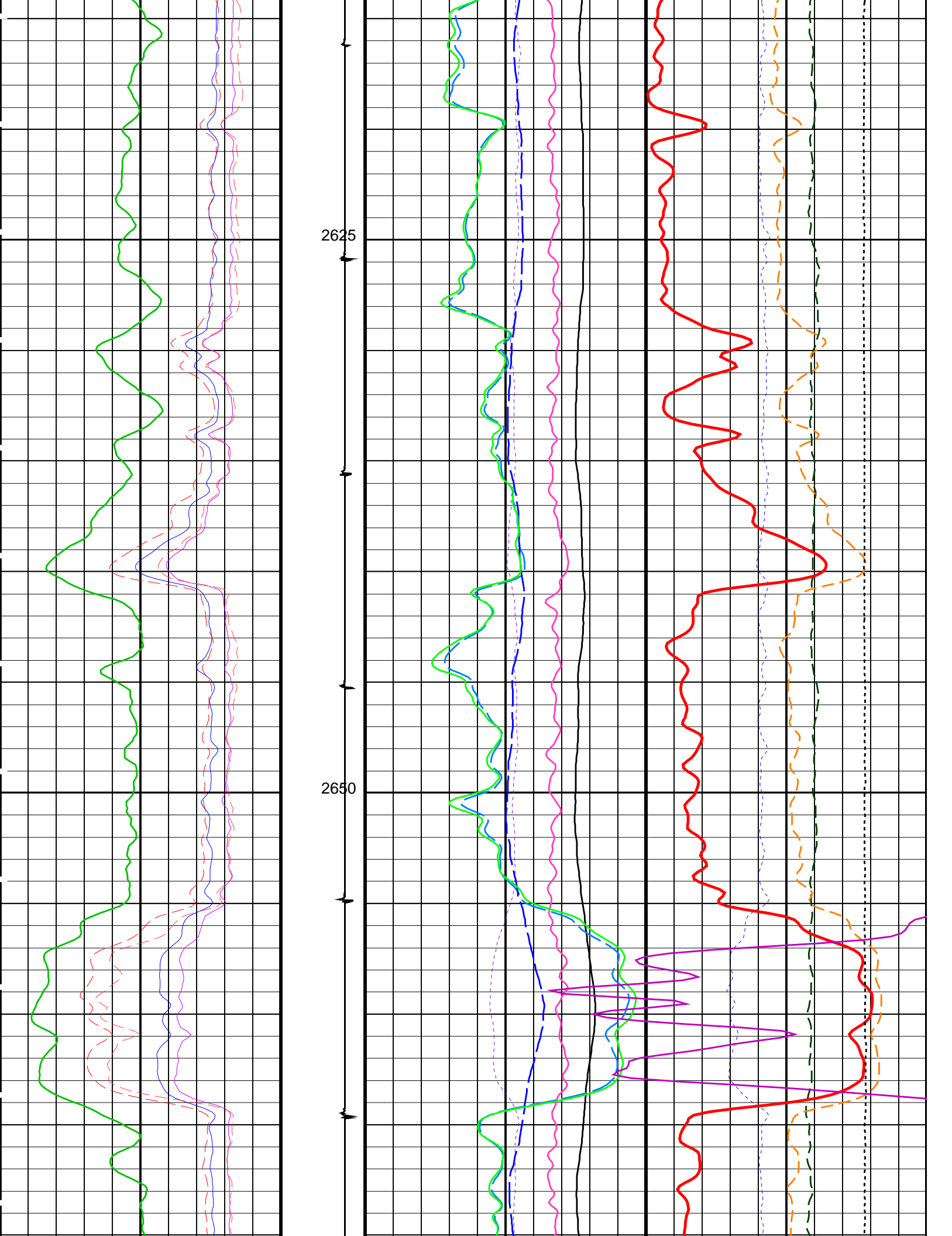
Time Mark Every 60 S

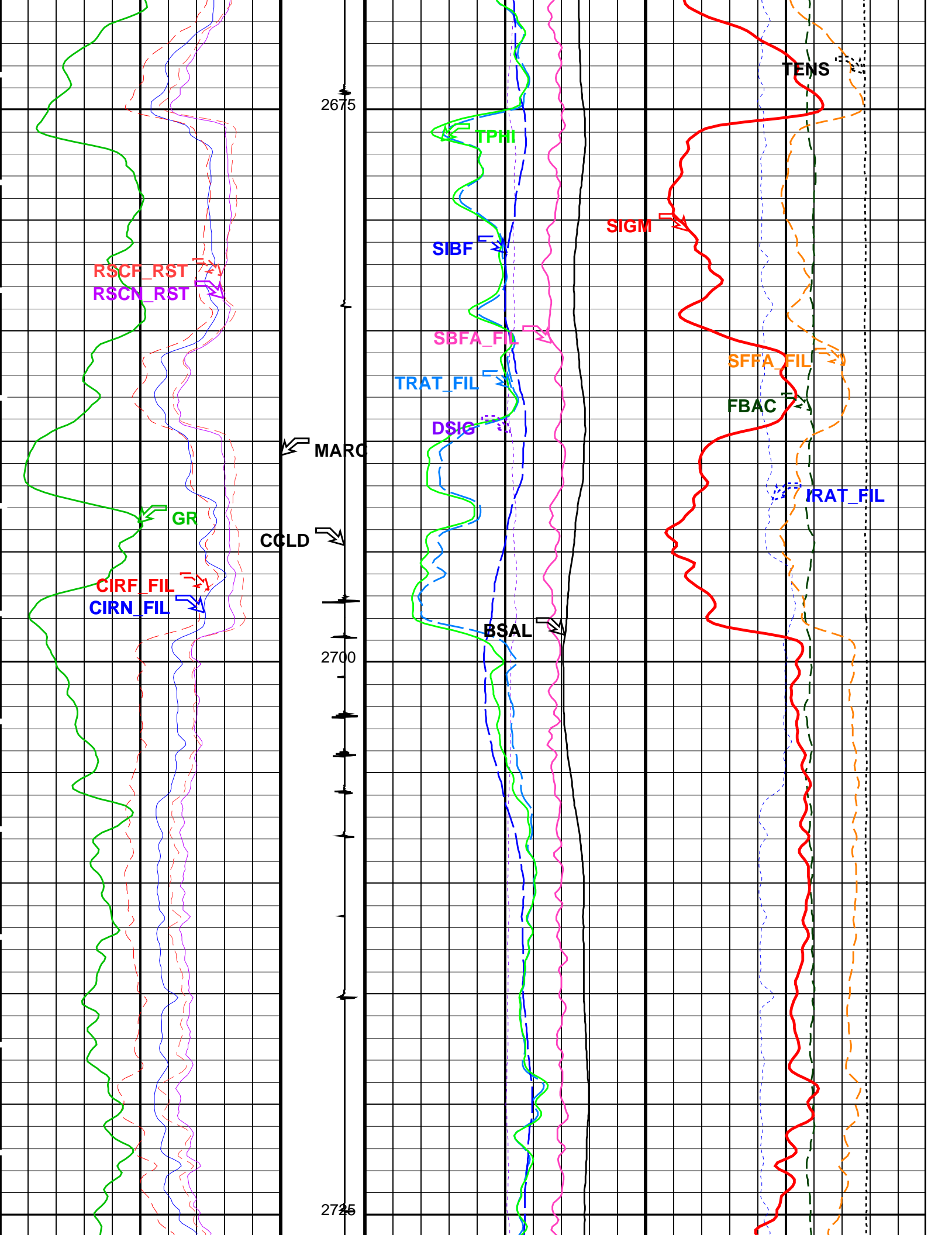
|  |  |   |     |
|--|--|---|-----|
|  |  | RST Sigma (SIGM)                        |     |
| 60   |  | (CU)                                    | 0   |
|  |  | RST Weighted Inelastic Ratio (WINR_RST) |     |
| 0.4  |  | (----                                   | 0   |
|  |  | RST Porosity (TPHI)                     |     |
| 0.6  |  | (V/V)                                   | 0   |
| RST Far Effective Capture CR (RSCF_RST)        |  | RST Sigma Borehole Fluid (SIBF)         |     |
| 45   |  | 100                                     | 0   |
| RST Near Effective Capture CR (RSCN_RST)       |  | Sigma Borehole Far Apparent (SBFA_FIL)  |     |
| 45   |  | 150                                     | 0   |
|  |  | Tension (TENS)                          |     |
|  |  | 0 (LBF) 3000                            |     |
| RST Capture to Inelastic Ratio Far (CIRF_FIL)  |  | RST Capture Ratio (TRAT_FIL)            |     |
| 5  |  | 1.5                                     | 0.5 |
|  |  | Sigma Formation Far Apparent (SFFA_FIL) |     |
|  |  | 60 (CU)                                 |     |
| RST Capture to Inelastic Ratio Near (CIRN_FIL) |  | RST Sigma Difference (DSIG)             |     |
| 2.5  |  | -30                                     | 30  |
|  |  | MCS Far Background (filtered) (FBAC)    |     |
|  |  | 0 (CPS) 5000                            |     |
|  |  | Minitron Arc Detection (MARC)           |     |
|  |  | 0 (---- 5                               |     |
|  |  | Discriminat ed CCL (CCLD)               |     |
| Gamma Ray (GR)                                 |  | RST Borehole Salinity (BSAL)            |     |
| 0  |  | 450                                     | -50 |
|  |  | RST Inelastic Ratio (IRAT_FIL)          |     |
|  |  | 0.75 (----                              |     |
|  |  | 0                                       |     |

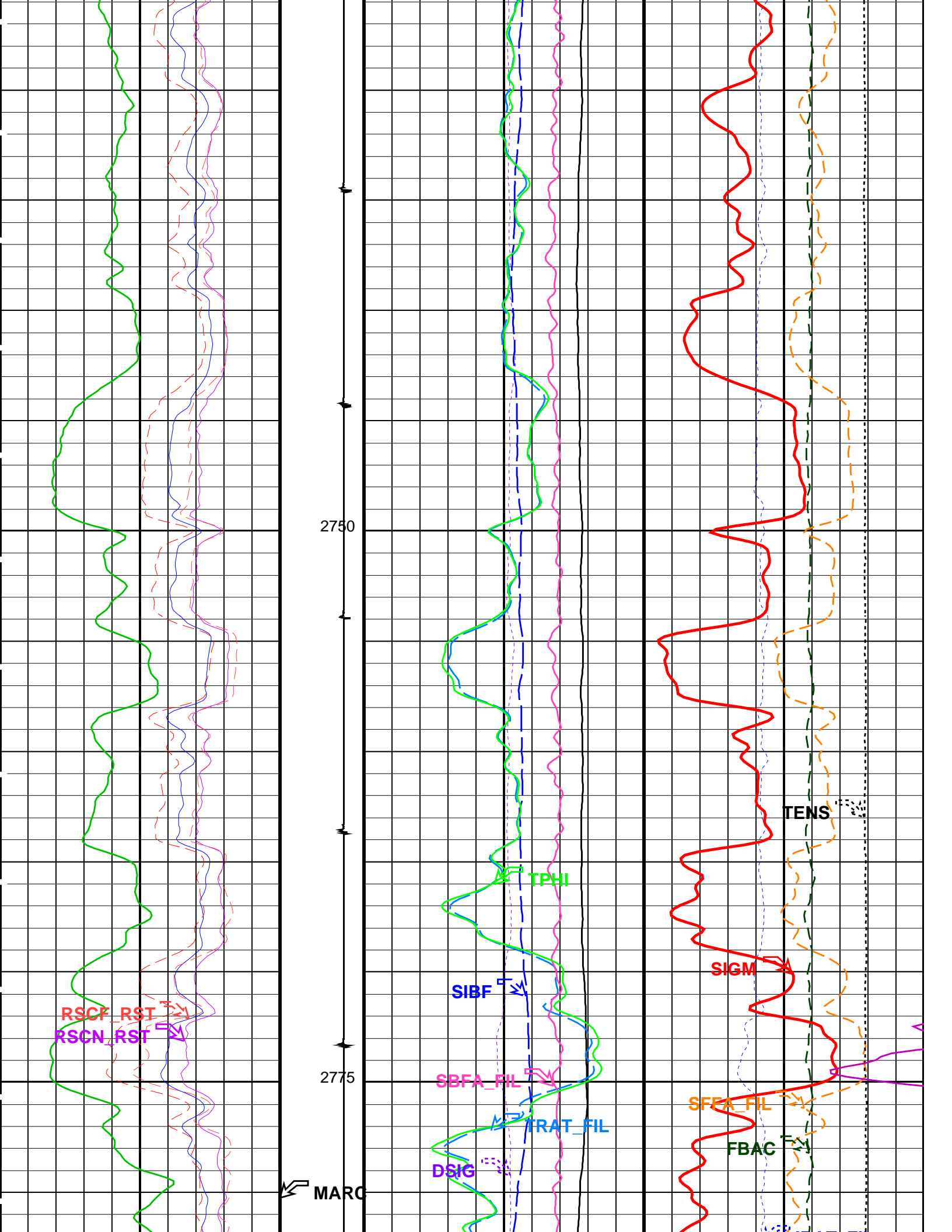


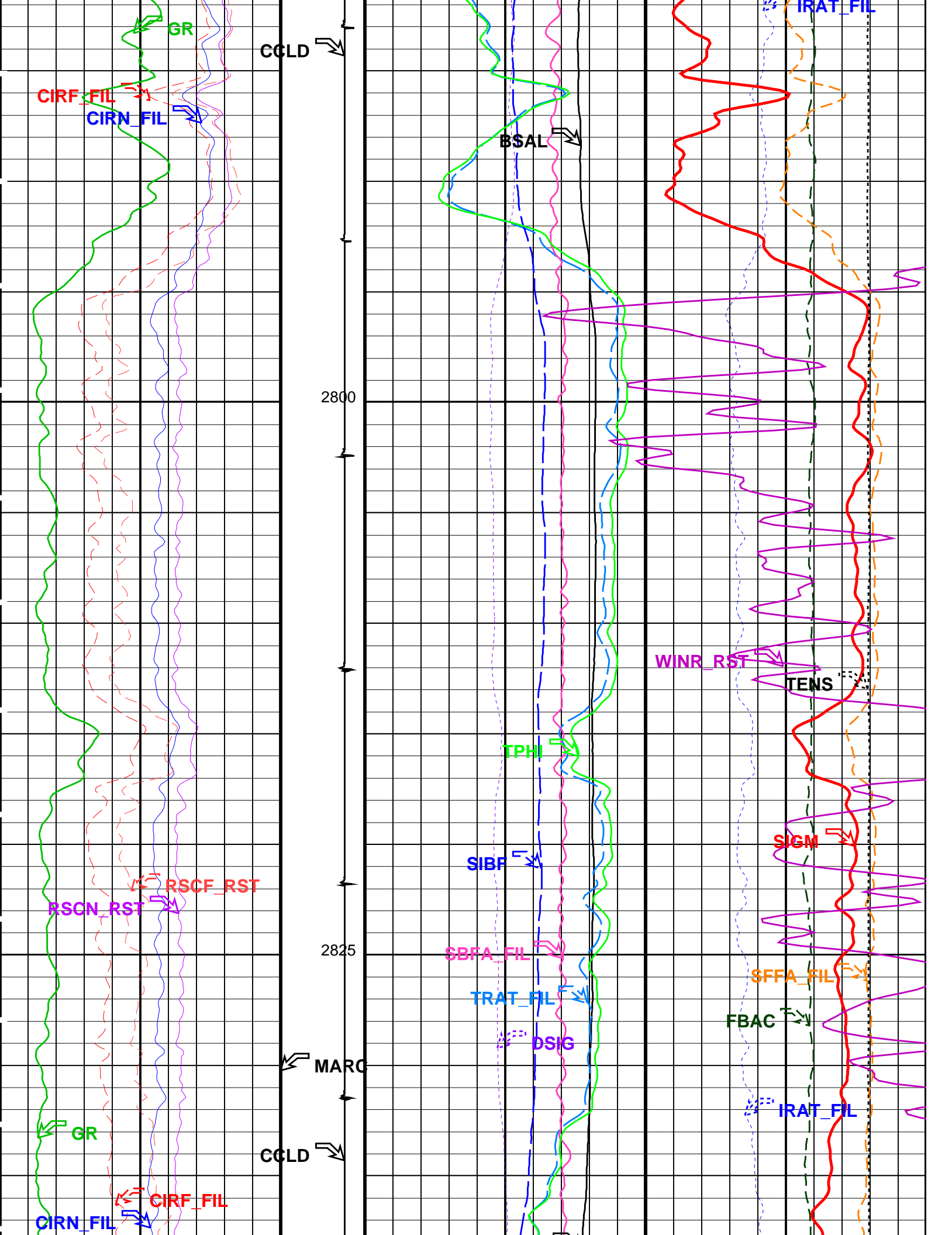


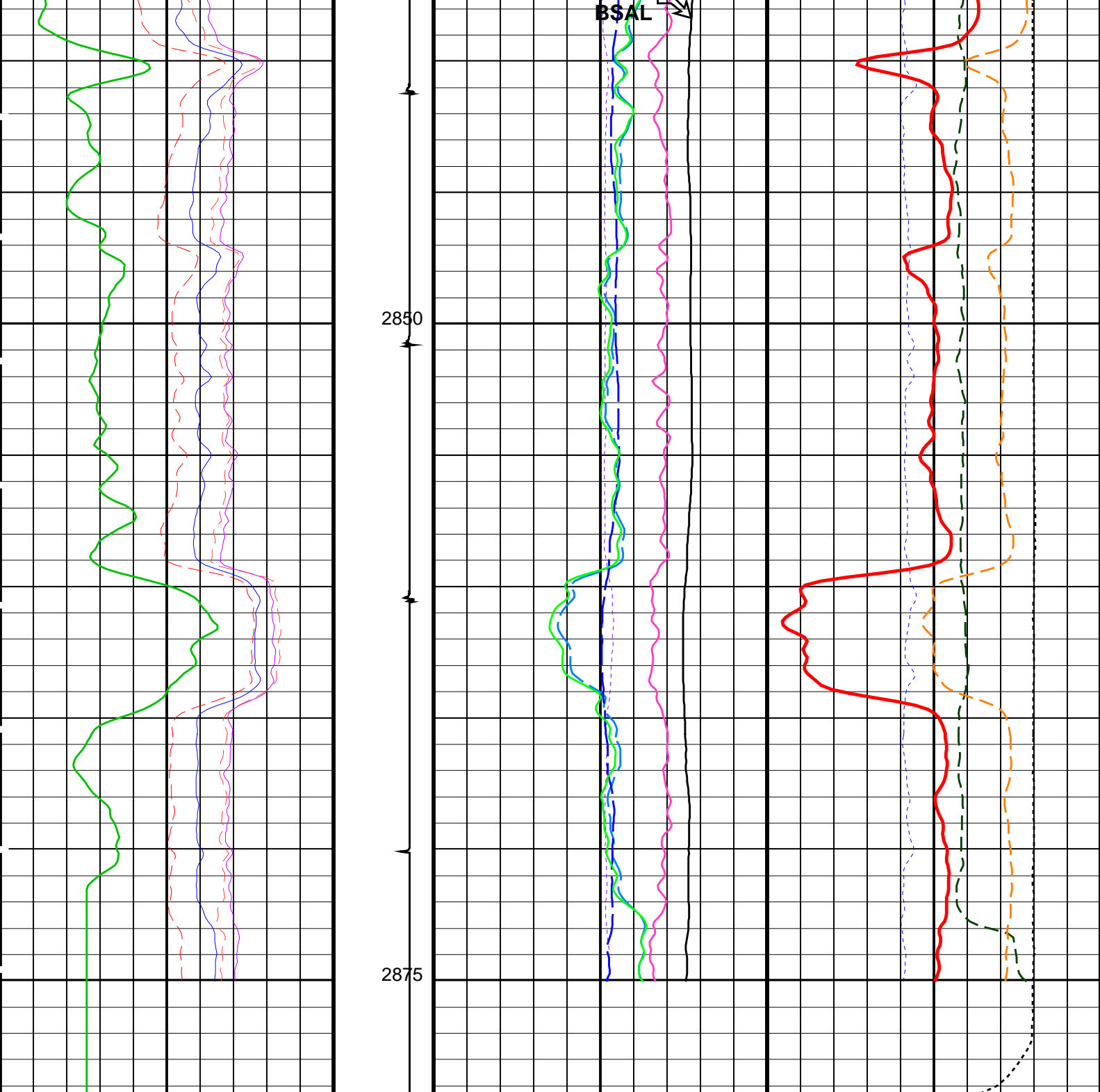












|  |  |                                    |        |                                      |                |
|--|--|------------------------------------|--------|--------------------------------------|----------------|
| <div>Gamma Ray (GR)<br/>(GAPI)</div> <div>0150</div>                                   | Discriminat<br>ed CCL<br>(CCLD)        | RST Borehole Salinity (BSAL)       |        | RST Inelastic Ratio (IRAT_FIL)       |                |
|  | 3 (V) -1                               | 450                                | (PPK)  | -50                                  | 0.75 (----) 0  |
| <div>RST Capture to Inelastic Ratio Near<br/>(CIRN_FIL)</div> <div>2.5 (----) 0</div>  | Minitron<br>Arc<br>Detection<br>(MARC) | RST Sigma Difference (DSIG)        |        | MCS Far Background (filtered) (FBAC) |                |
|  | 0 (----) 5                             | -30                                | (CU)   | 30                                   | 0 (CPS) 5000   |
| <div>RST Capture to Inelastic Ratio Far<br/>(CIRF_FIL)</div> <div>5 (----) 0</div>     |  | RST Capture Ratio (TRAT_FIL)       |        | Sigma Formation Far Apparent (SFFA_  |                |
|  |  | 1.5                                | (----) | 0.5                                  | FIL) (CU) 60 0 |
| <div>RST Near Effective Capture CR (RSCN_</div> <div>RST)</div> <div>45 (----) 0</div> |  | Sigma Borehole Far Apparent (SBFA_ |        | Tension (TENS)                       |                |
|  |  | 150                                | (CU)   | 0                                    | 0 (LBF) 3000   |

|   |       |   |          |
|---|-------|---|----------|
| RST Far Effective Capture CR (RSCF_RST) |       | RST Sigma Borehole Fluid (SIBF)         |          |
| 45                                      | (---- | 100                                     | (CU) 0   |
|   |       | RST Porosity (TPHI)                     |          |
|   |       | 0.6                                     | (V/V) 0  |
|   |       | RST Weighted Inelastic Ratio (WINR_RST) |          |
|   |       | 0.4                                     | (----) 0 |
|   |       | RST Sigma (SIGM)                        |          |
|   |       | 60                                      | (CU) 0   |

|                      |  |
|----------------------|--|
| PIP SUMMARY          |  |
| Time Mark Every 60 S |  |

| Parameters                                     |   |             |      |
|--|---|-------------|------|
| DLIS Name                                      | Description                                     | Value       |      |
| RST-C: Reservoir Saturation Pro Tool C         |   |             |      |
| AIRB   | RST Air Borehole                                | No          |      |
| BHS  | Borehole Status                                 | CASED       |      |
| BSALOPT  | RST Borehole Salinity Option                    | Unknown     |      |
| BSFL   | RST Borehole Salinity Filter Length             | 51          |      |
| DFPC   | RST Depth Filter Processing Constant            | One         |      |
| DFPC_TDTL                                      | RST Depth Filter Processing Constant (TDT-like) | Two         |      |
| MATR   | Rock Matrix for Neutron Porosity Corrections    | SANDSTONE   |      |
| NORM_IRAT_RST                                  | RST Normalized Inelastic Ratio                  | 0.48        |      |
| NORM_SIGM_RST                                  | RST Normalized Sigma                            | 30          | CU   |
| RGAI   | Near/Far Gain Calibration Ratio                 | 1           |      |
| TIER_SIGM                                      | RST Sigma Acquisition Mode                      | 0_RST_Sigma |      |
| PSPT-A/B: Production Services Logging Platform |   |             |      |
| BHS  | Borehole Status                                 | CASED       |      |
| MATR   | Rock Matrix for Neutron Porosity Corrections    | SANDSTONE   |      |
| System and Miscellaneous                       |   |             |      |
| BS   | Bit Size  | 8.500       | IN   |
| BSAL   | Borehole Salinity                               | -50000.00   | PPM  |
| CSIZ   | Current Casing Size                             | 7.000       | IN   |
| CWEI   | Casing Weight                                   | 32.20       | LB/F |
| DO   | Depth Offset for Playback                       | 0.4         | M    |
| PP   | Playback Processing                             | NORMAL      |      |

|                      |                       |  |
|----------------------|-----------------------|--|
| Format: RST_SIG_ANSW | Vertical Scale: 1:200 | Graphics File Created: 23-Dec-2009 12:19 |
|----------------------|-----------------------|--|

|                             |          |          |          |
|-----------------------------|----------|----------|----------|
| OP System Version: 17C0-154 |          |          |          |
| RST-C                       | 17C0-154 | PSPT-A/B | 17C0-154 |

| Input DLIS Files  |                |       |                   |                   |          |
|-------------------|----------------|-------|-------------------|-------------------|----------|
|                   | RST_PSP_031LUP | FN:38 | 23-Dec-2009 12:05 | 2878.8 M          | 2503.0 M |
| Output DLIS Files |                |       |                   |                   |          |
| DEFAULT           | RST_PSP_017PUP | FN:46 | PRODUCER          | 23-Dec-2009 12:19 |          |
| ESSO_CUSTOMERRST  | PSP_017PUP     | FN:47 | PRODUCER          | 23-Dec-2009 12:19 |          |
| ESSO_CUSTOMERRST  | PSP_017PUC     | FN:48 | CUSTOMER          | 23-Dec-2009 12:19 |          |

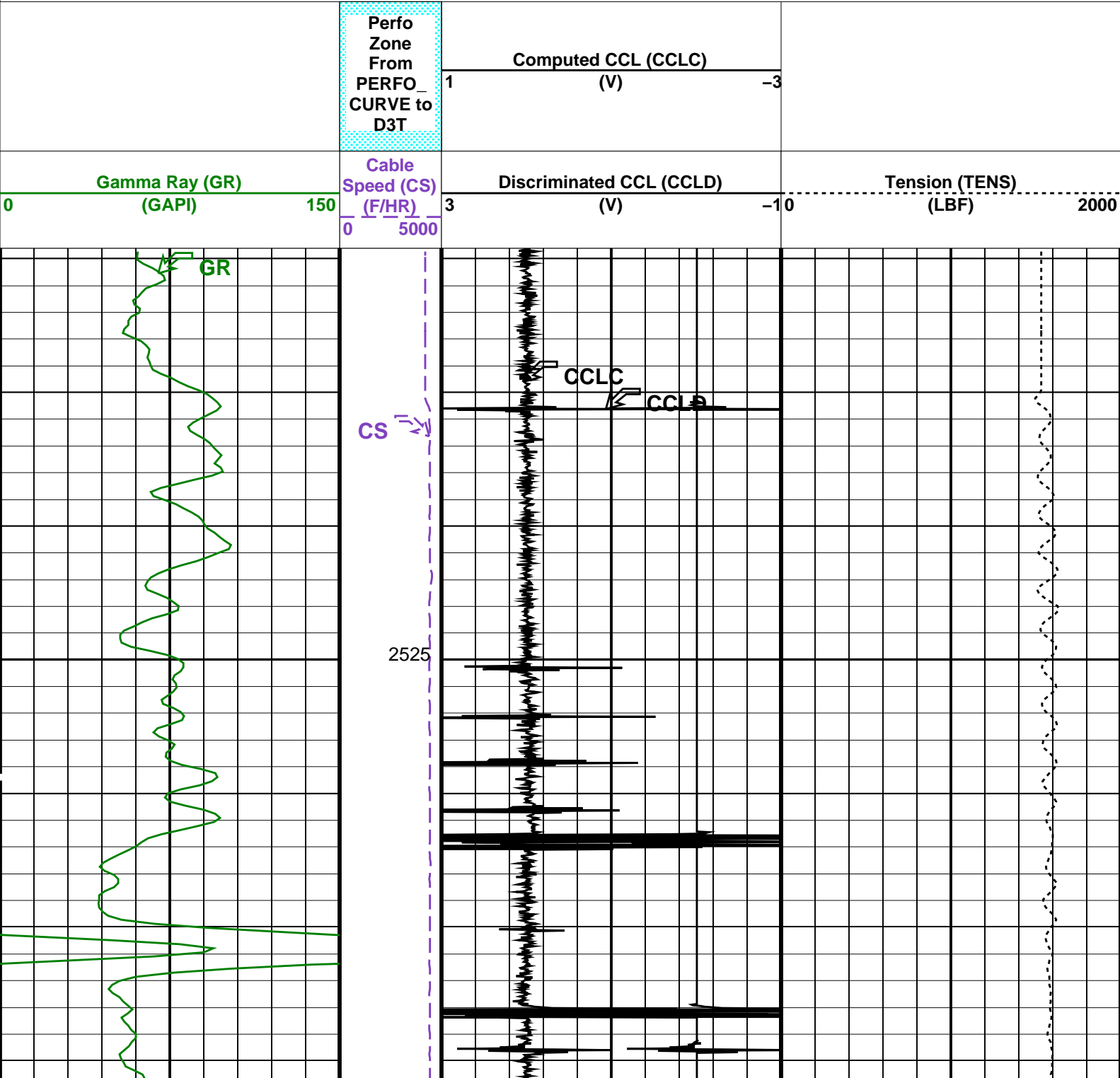


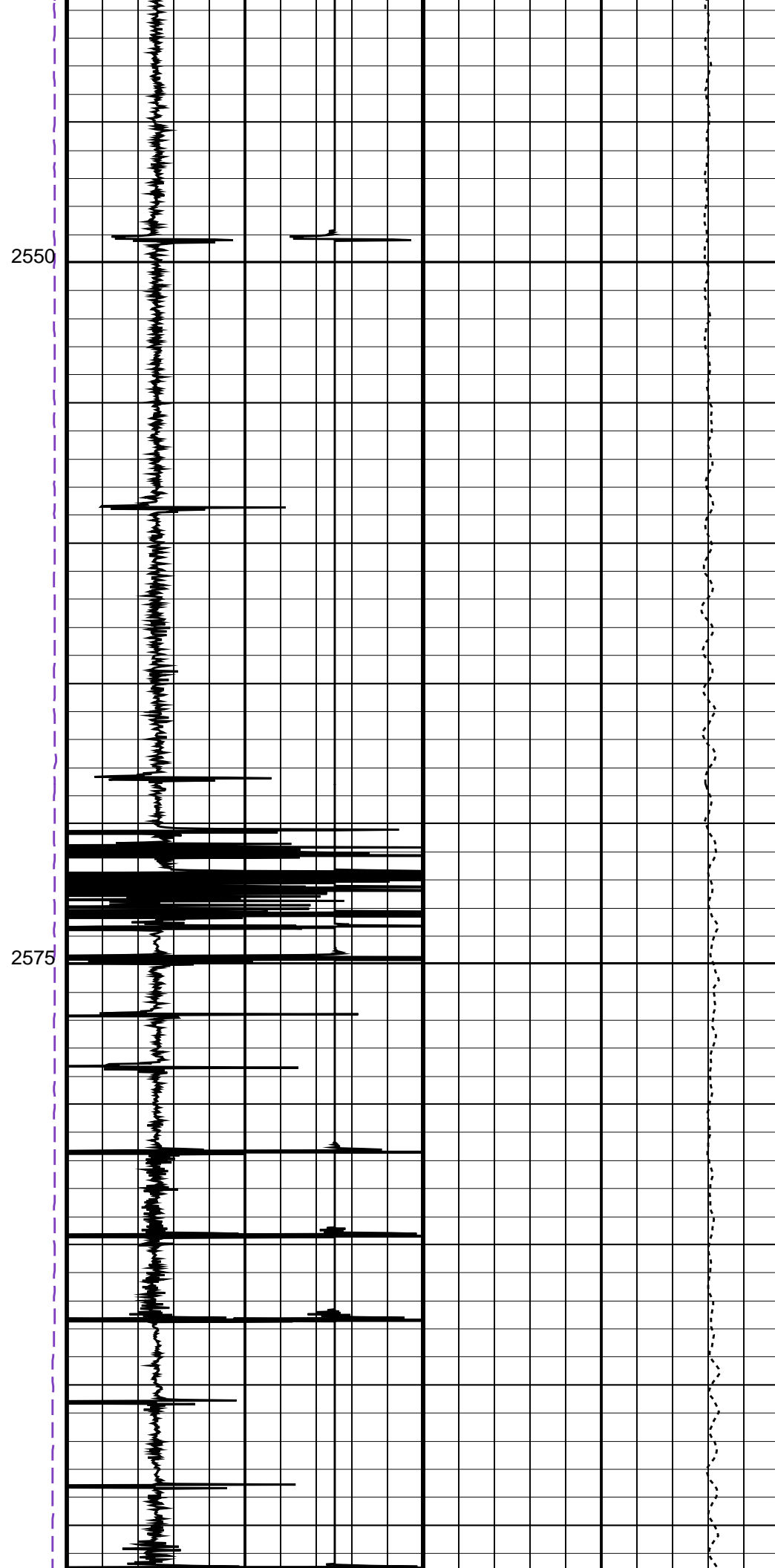
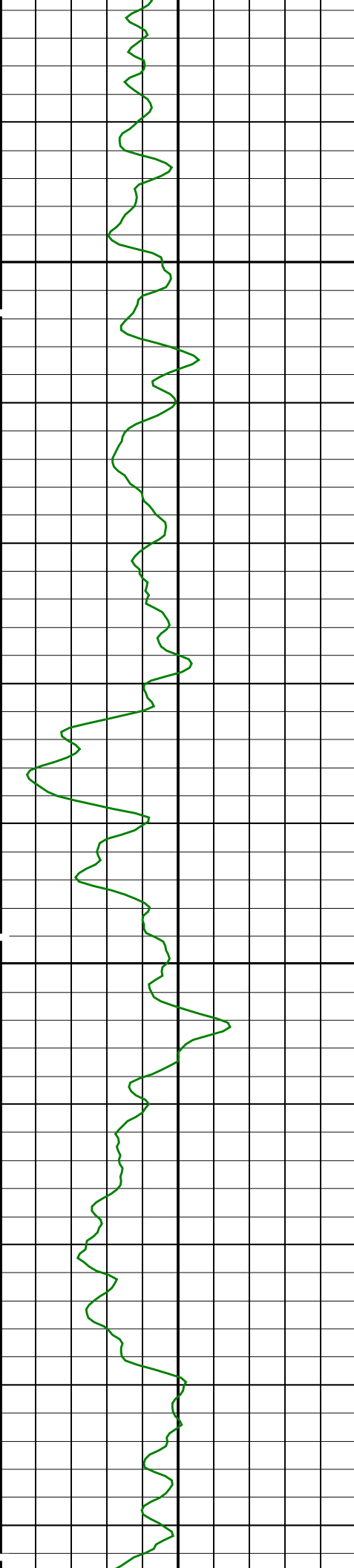
RST-C Correlation Pass  
Static 2525m – 2862m MDKB

| Input DLIS Files  |                |       |          |                   |          |          |
|-------------------|----------------|-------|----------|-------------------|----------|----------|
| DEFAULT           | RST_PSP_029LUP | FN:34 | PRODUCER | 23-Dec-2009 10:11 | 2875.6 M | 2509.6 M |
| Output DLIS Files |                |       |          |                   |          |          |
| DEFAULT           | RST_PSP_045PUP | FN:62 | PRODUCER | 23-Dec-2009 18:51 | 2875.6 M | 2509.6 M |
| ESSO_CUSTOMERRPT  | RST_PSP_045PUP | FN:63 | PRODUCER | 23-Dec-2009 18:51 | 2875.6 M | 2509.6 M |

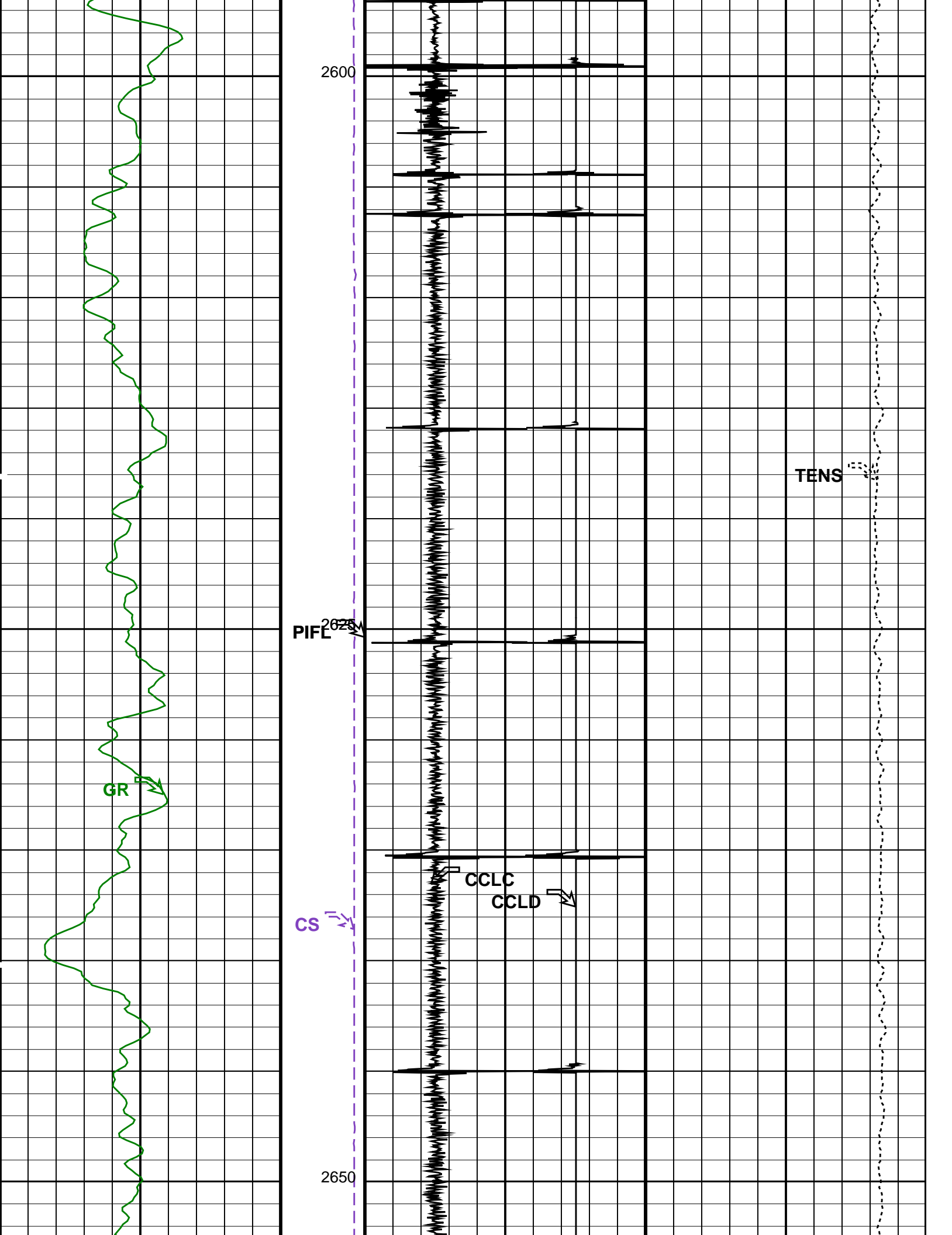
| OP System Version: 17C0-154 |          |          |          |  |  |  |
|-----------------------------|----------|----------|----------|--|--|--|
| RST-C                       | 17C0-154 | PSPT-A/B | 17C0-154 |  |  |  |

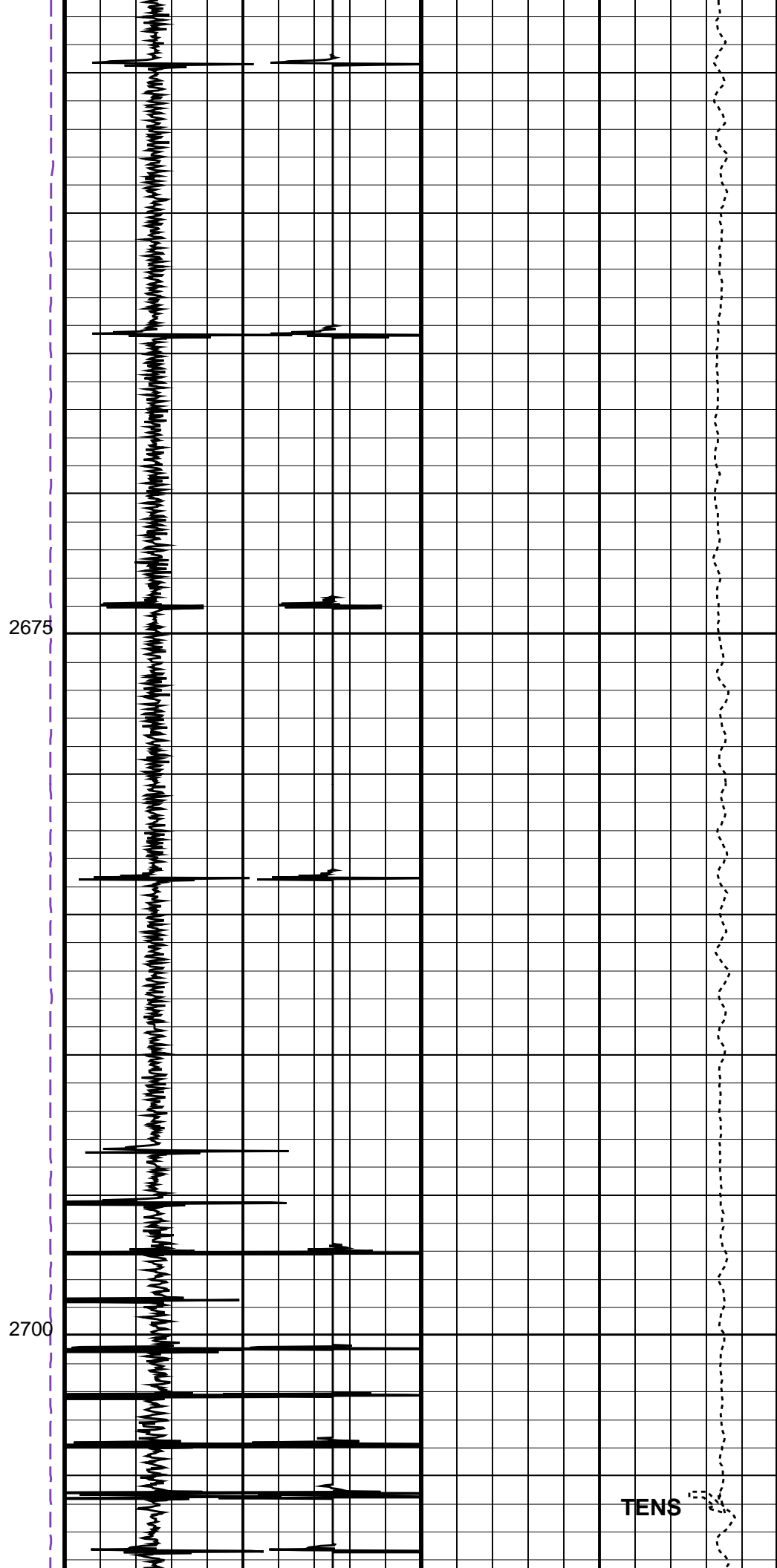
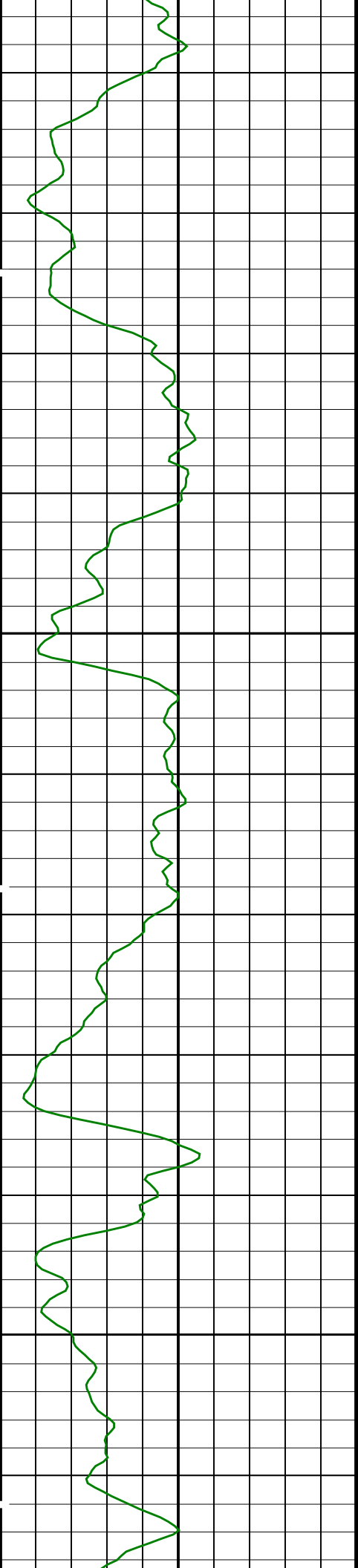
| PIP SUMMARY          |  |  |  |  |  |  |
|----------------------|--|--|--|--|--|--|
| Time Mark Every 60 S |  |  |  |  |  |  |







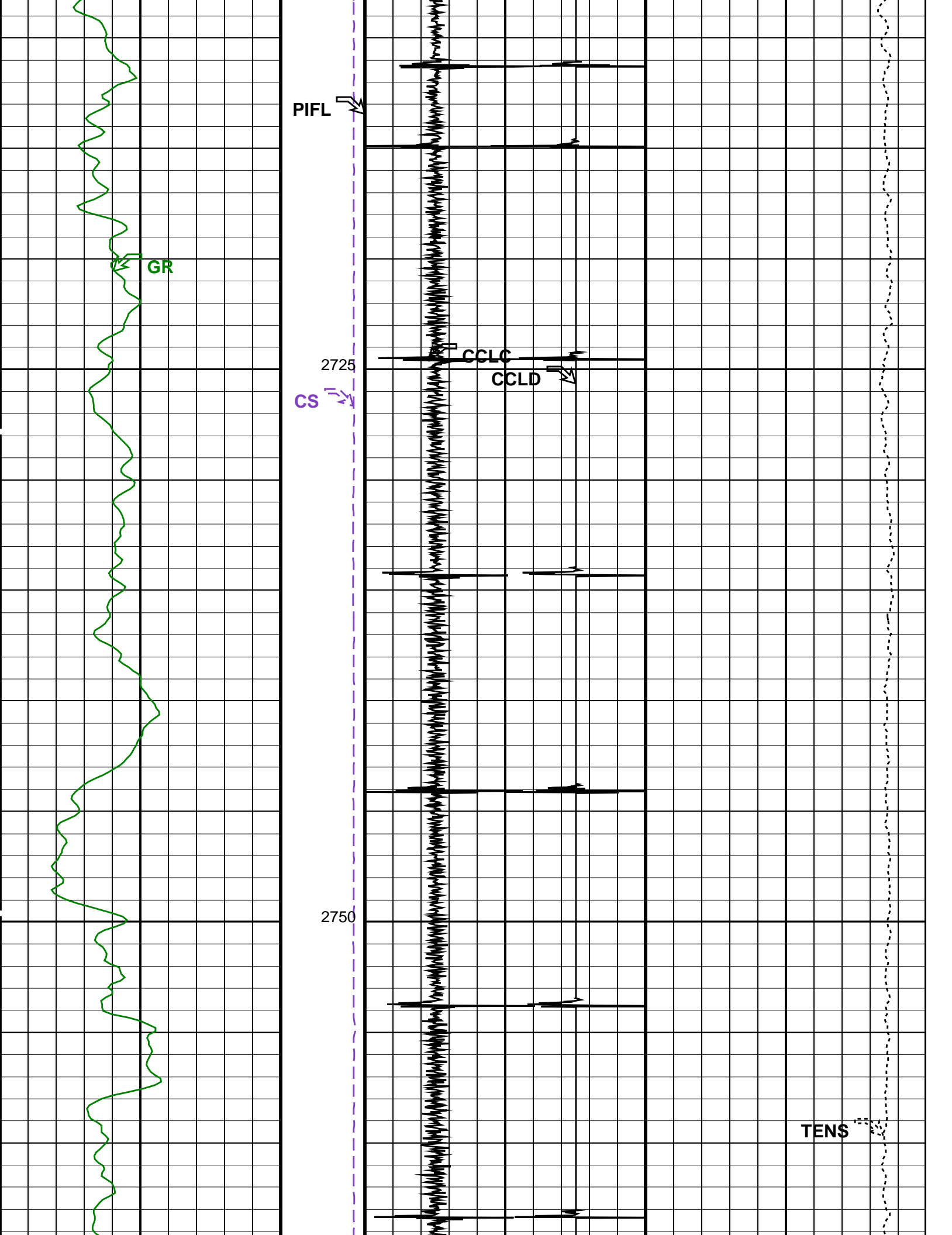


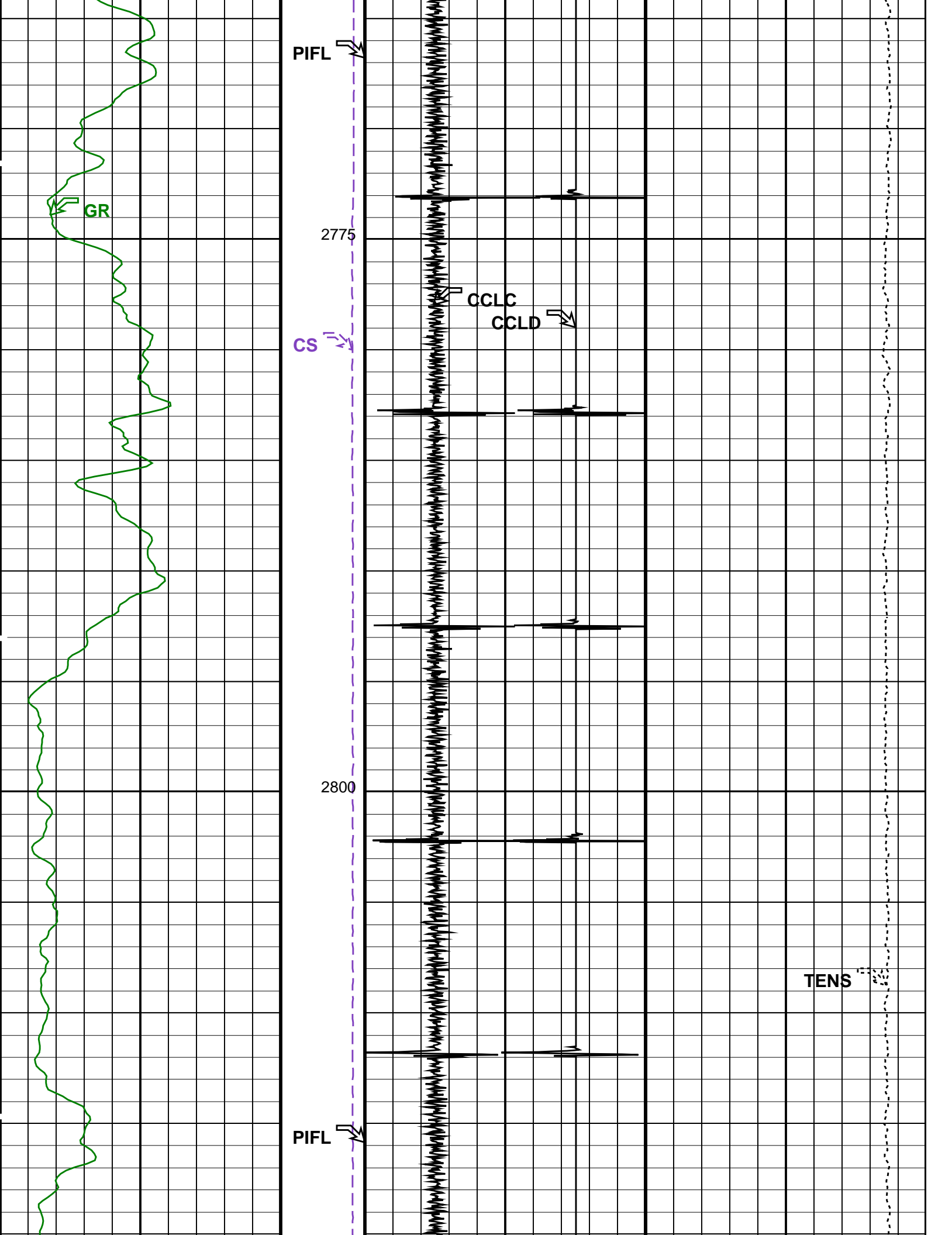


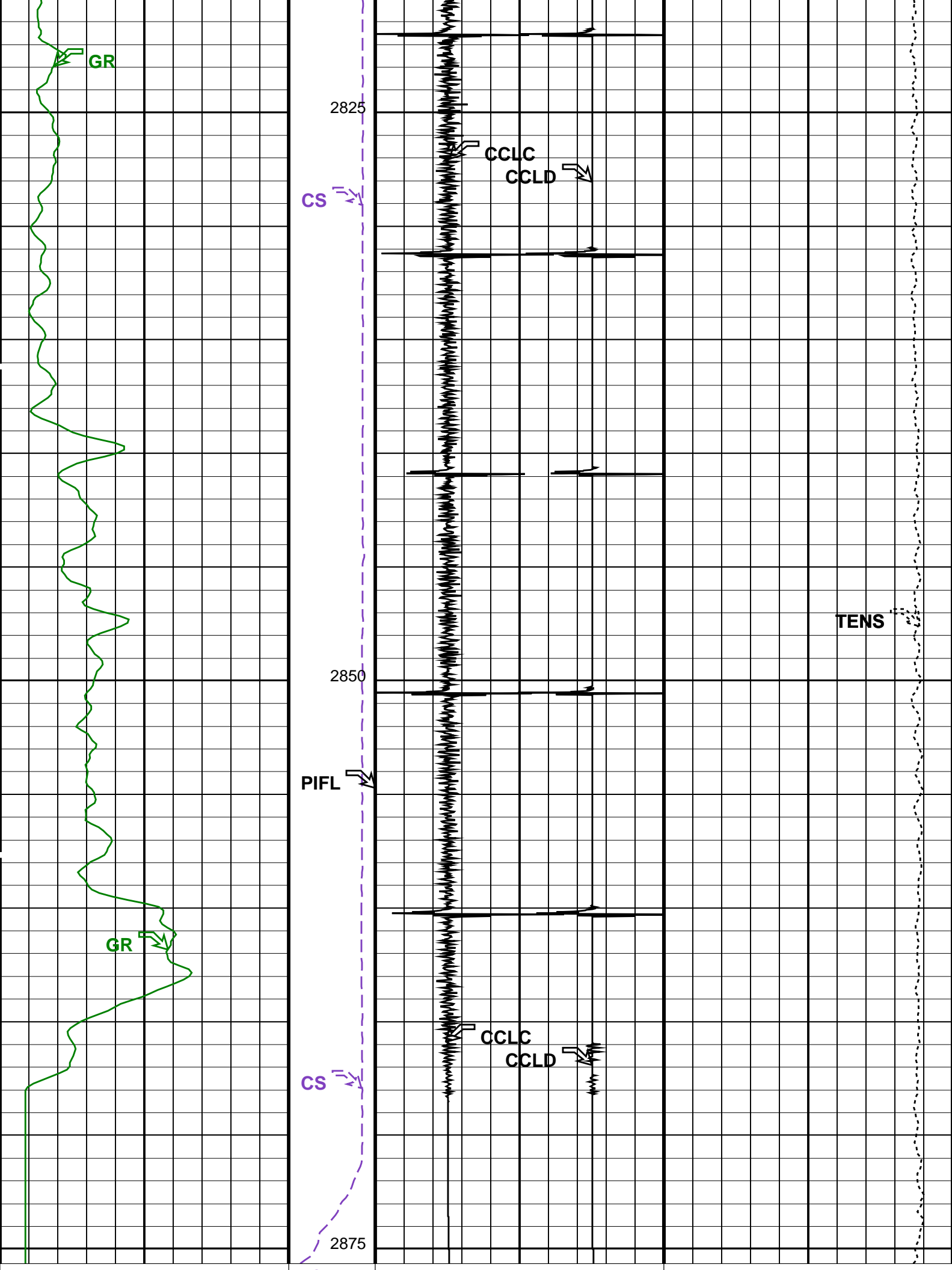
2675

2700

TENS







|                          |  |     |  |  |   |                                 |  |     |                         |  |      |
|--------------------------|--|-----|--|--|---|---------------------------------|--|-----|-------------------------|--|------|
| Gamma Ray (GR)<br>(GAPI) |  | 150 | Cable<br>Speed (CS)<br>(F/HR)                      |  | 3 | Discriminated CCL (CCLD)<br>(V) |  | -10 | Tension (TENS)<br>(LBF) |  | 2000 |
|                          |  |     | 0 5000   |  |   |                                 |  |     |                         |  |      |
|                          |  |     | Perfo<br>Zone<br>From<br>PERFO_<br>CURVE to<br>D3T |  |   | Computed CCL (CCLC)<br>(V)      |  | -3  |                         |  |      |
|                          |  |     |  |  | 1 |                                 |  |     |                         |  |      |

|                      |  |  |  |                       |  |  |  |  |  |  |  |
|----------------------|--|--|--|-----------------------|--|--|--|--|--|--|--|
| PIP SUMMARY          |  |  |  |                       |  |  |  |  |  |  |  |
| Time Mark Every 60 S |  |  |  |                       |  |  |  |  |  |  |  |
| Format: PSP_1        |  |  |  | Vertical Scale: 1:200 |  |  |  | Graphics File Created: 23-Dec-2009 18:51 |  |  |  |

| OP System Version: 17C0-154  |  |                           |  |          |  |                   |          |                                     |  |
|------------------------------|--|---------------------------|--|----------|--|-------------------|----------|-------------------------------------|--|
| RST-C                        |  | 17C0-154                  |  | PSPT-A/B |  |                   | 17C0-154 |                                     |  |
| Parameters                   |  |                           |  |          |  |                   |          |                                     |  |
| DLIS Name                    |  | Description               |  |          |  |                   | Value    |                                     |  |
| DO                           |  | System and Miscellaneous  |  |          |  |                   | 0.0      |                                     |  |
| PP                           |  | Depth Offset for Playback |  |          |  |                   | M        |                                     |  |
|                              |  | Playback Processing       |  |          |  |                   | NORMAL   |                                     |  |
| Input DLIS Files             |  |                           |  |          |  |                   |          |                                     |  |
| DEFAULT                      |  | RST_PSP_029LUP            |  | FN:34    |  | PRODUCER          |          | 23-Dec-2009 10:11 2875.6 M 2509.6 M |  |
| Output DLIS Files            |  |                           |  |          |  |                   |          |                                     |  |
| DEFAULT                      |  | RST_PSP_045PUP            |  | FN:62    |  | PRODUCER          |          | 23-Dec-2009 18:51                   |  |
| ESSO_CUSTOMERRSAT_PSP_045PUP |  | FN:63                     |  | PRODUCER |  | 23-Dec-2009 18:51 |          |                                     |  |

|   |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|
| <div> <div>Schlumberger</div> <div>RST-C SIGMA Pass<br/>Static 2925m – 3102m MDKB</div> </div> <div>MAXIS Field Log</div> |  |  |  |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|--|--|

|                                  |                |       |          |                   |                   |          |          |          |          |            |  |
|----------------------------------|----------------|-------|----------|-------------------|-------------------|----------|----------|----------|----------|------------|--|
| Company: Esso Australia Pty Ltd. |                |       |          |                   |                   |          |          |          |          | Well: A-6L |  |
| Input DLIS Files                 |                |       |          |                   |                   |          |          |          |          |            |  |
| RST_PSP_028LUP                   |                | FN:32 |          | 23-Dec-2009 10:34 |                   | 3101.2 M |          | 2901.5 M |          |            |  |
| Output DLIS Files                |                |       |          |                   |                   |          |          |          |          |            |  |
| DEFAULT                          | RST_PSP_010PUP |       | FN:25    | PRODUCER          | 23-Dec-2009 11:14 |          | 3101.2 M |          | 2901.5 M |            |  |
| ESSO_CUSTOMERRST_PSP_010PUP      |                |       | FN:26    | PRODUCER          | 23-Dec-2009 11:14 |          | 3101.2 M |          | 2901.5 M |            |  |
| ESSO_CUSTOMERRST_PSP_010PUC      |                |       | FN:27    | CUSTOMER          | 23-Dec-2009 11:14 |          | 3101.2 M |          | 2901.5 M |            |  |
| OP System Version: 17C0-154      |                |       |          |                   |                   |          |          |          |          |            |  |
| RST-C                            | 17C0-154       |       | PSPT-A/B |                   | 17C0-154          |          |          |          |          |            |  |

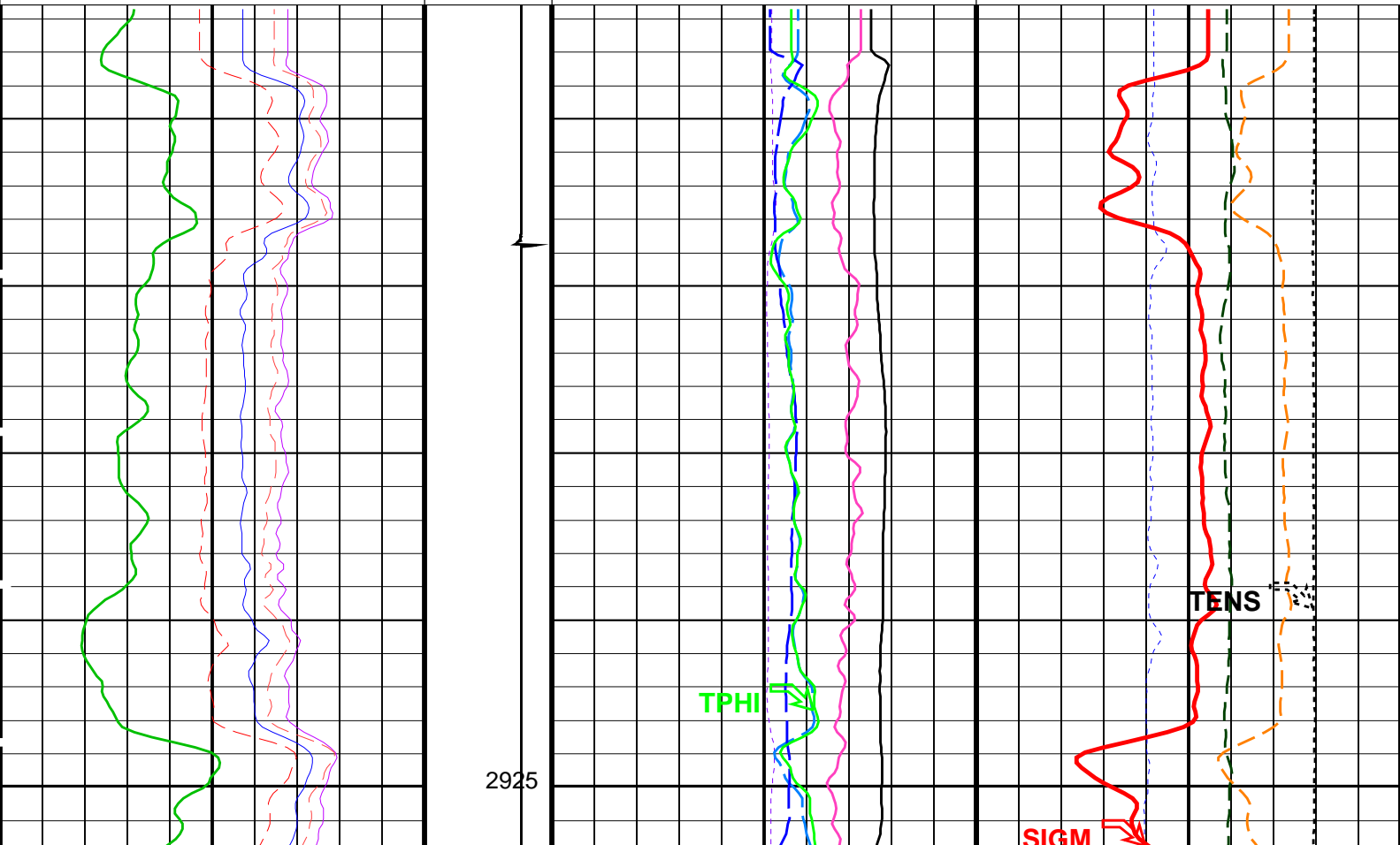
Changed Parameter Summary

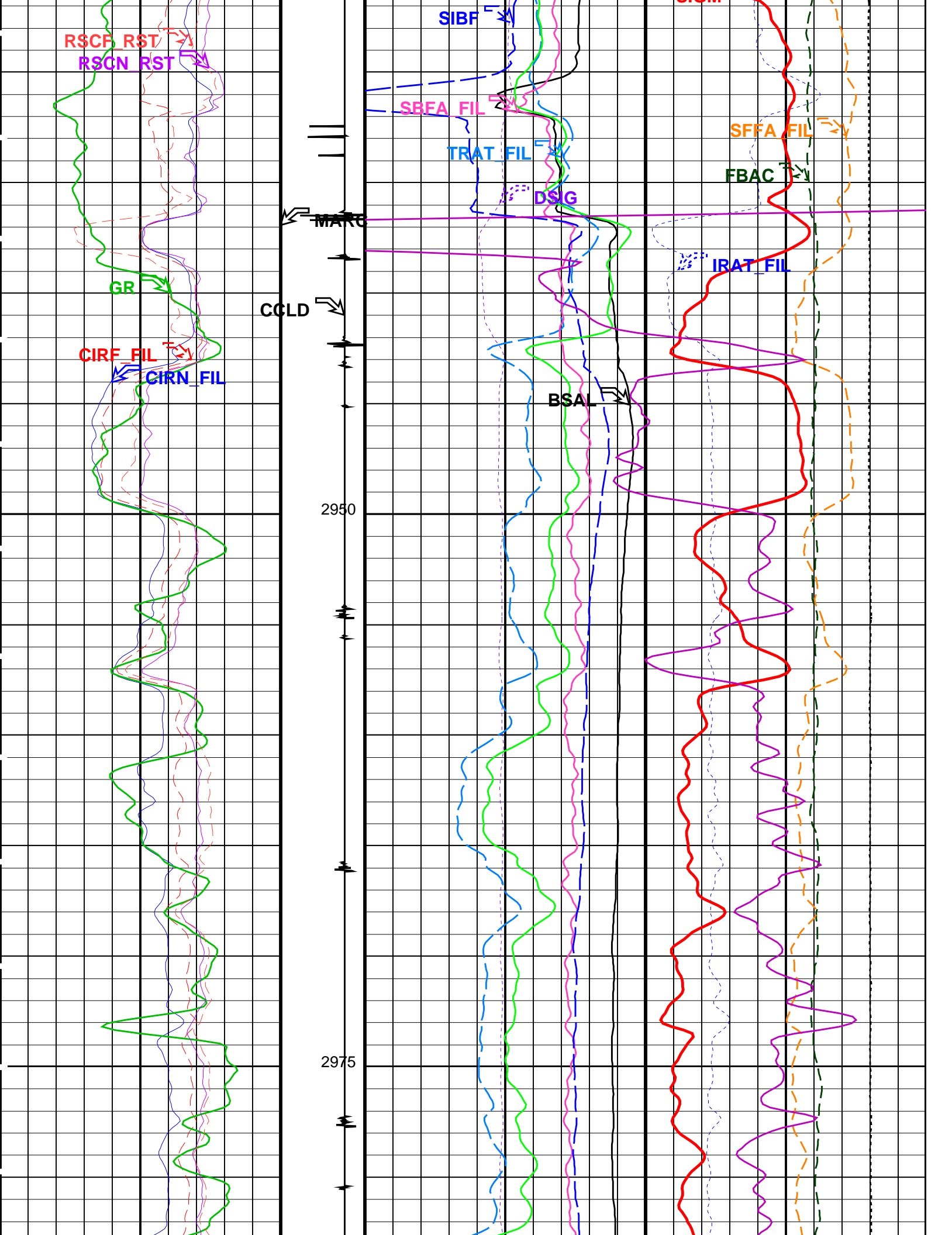
| DLIS Name | New Value  | Previous Value | Depth & Time    |
|-----------|------------|----------------|-----------------|
| CWEI      | 32.20 LB/F | 32.20 LB/F     | 3101.2 11:14:55 |

PIP SUMMARY

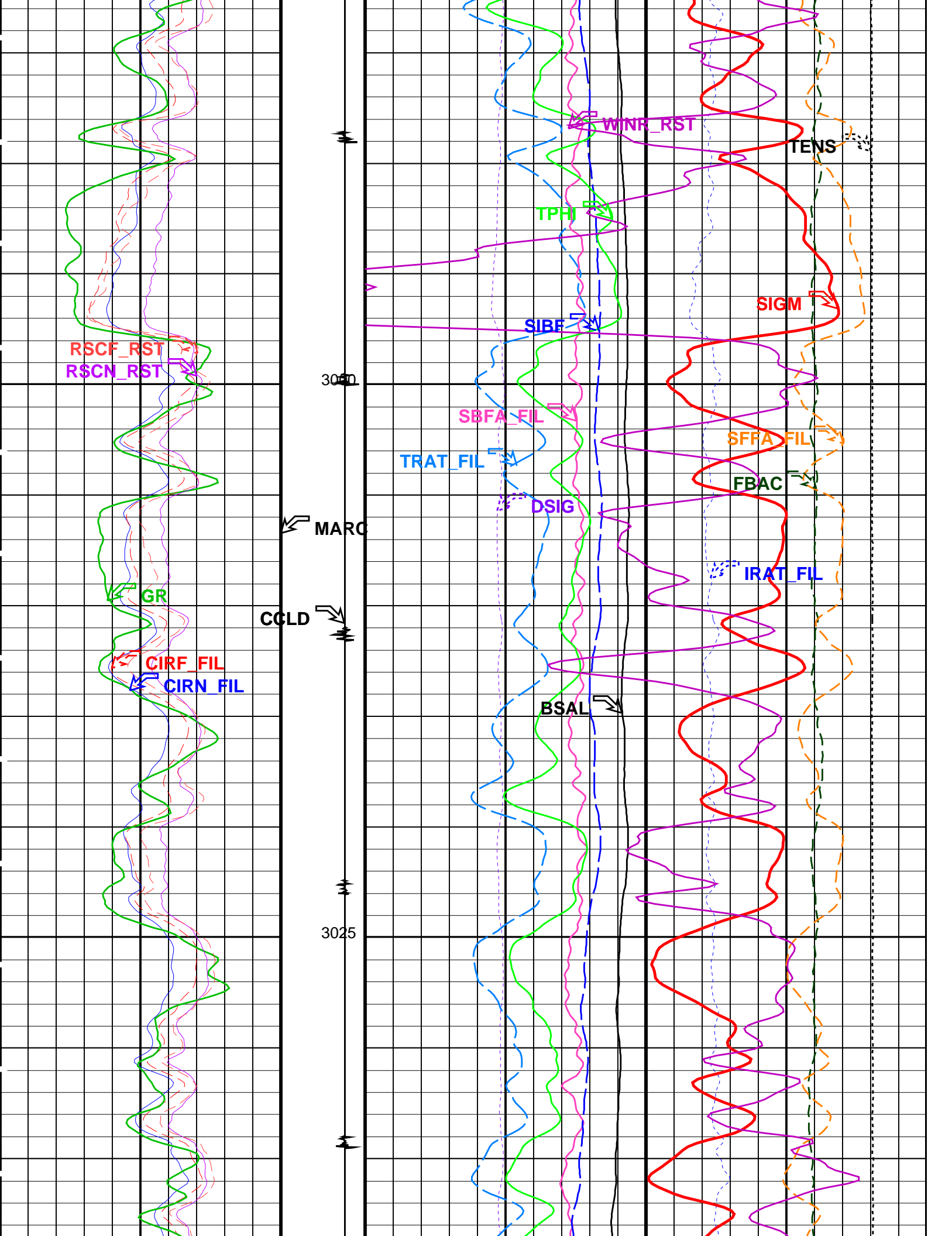
Time Mark Every 60 S

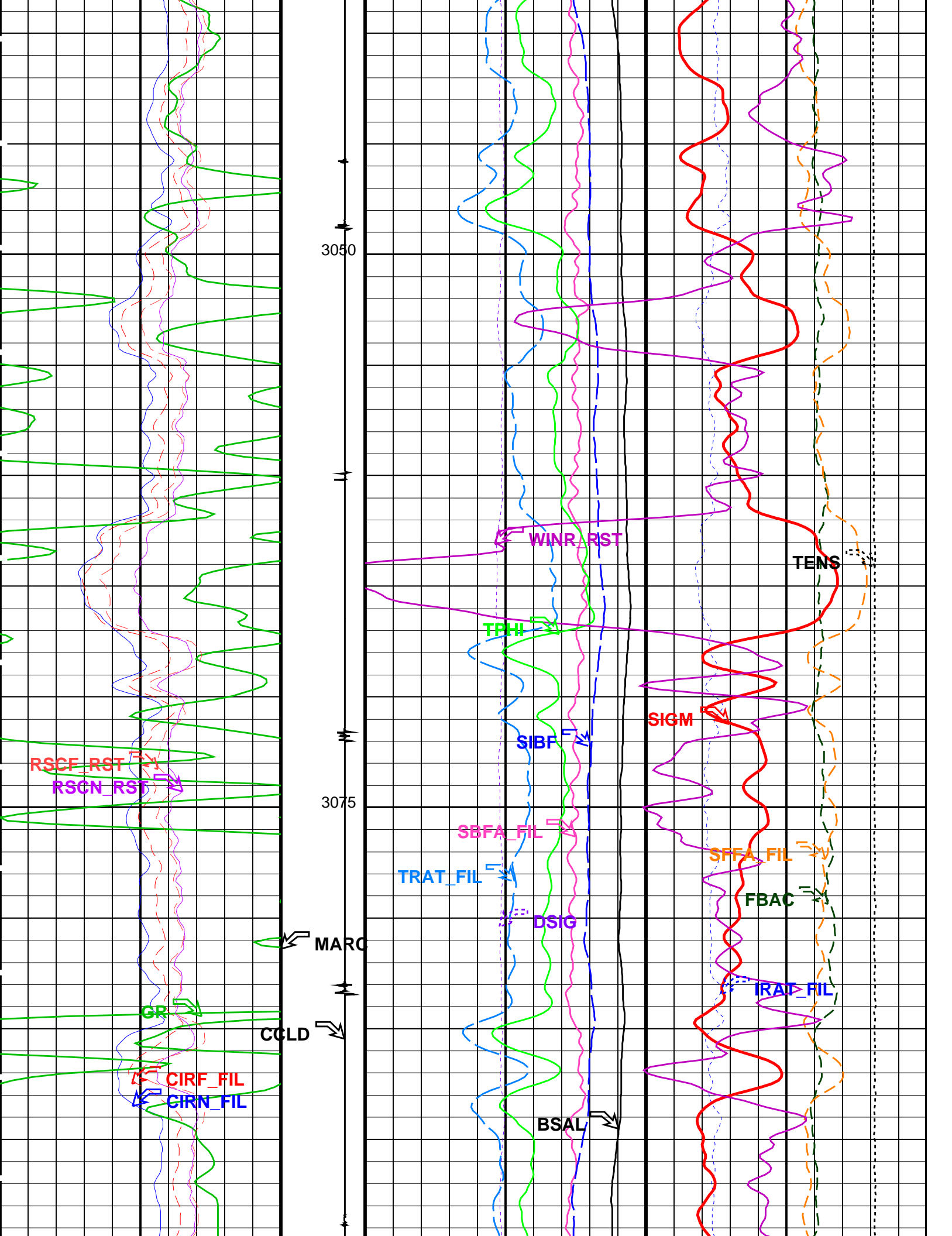
|   |   |  |   |
|---|---|--|---|
| <div>RST Far Effective Capture CR (RSCF_RST)</div> <div>45 (----) 0</div> <div>RST Near Effective Capture CR (RSCN_RST)</div> <div>45 (----) 0</div> <div>RST Capture to Inelastic Ratio Far (CIRF_FIL)</div> <div>5 (----) 0</div> <div>RST Capture to Inelastic Ratio Near (CIRN_FIL)</div> <div>2.5 (----) 0</div> <div>Gamma Ray (GR)</div> <div>0 (GAPI) 150</div> | <div>Minitron Arc Detection (MARC)</div> <div>0 (----) 5</div> <div>Discriminat ed CCL (CCLD)</div> <div>3 (V) -1</div> | <div>RST Sigma (SIGM)</div> <div>60 (CU) 0</div> | <div>RST Weighted Inelastic Ratio (WINR_RST)</div> <div>0.4 (----) 0</div> <div>RST Porosity (TPHI)</div> <div>0.6 (V/V) 0</div> <div>RST Sigma Borehole Fluid (SIBF)</div> <div>100 (CU) 0</div> <div>Sigma Borehole Far Apparent (SBFA_FIL)</div> <div>150 (CU) 0</div> <div>Tension (TENS)</div> <div>0 (LBF) 3000</div> <div>RST Capture Ratio (TRAT_FIL)</div> <div>1.5 (----) 0.5</div> <div>Sigma Formation Far Apparent (SFFA_FIL)</div> <div>60 (CU) 0</div> <div>RST Sigma Difference (DSIG)</div> <div>-30 (CU) 30</div> <div>MCS Far Background (filtered) (FBAC)</div> <div>0 (CPS) 5000</div> <div>RST Borehole Salinity (BSAL)</div> <div>450 (PPK) -50</div> <div>RST Inelastic Ratio (IRAT_FIL)</div> <div>0.75 (----) 0</div> |
|   |   |  |   |
|   |   |  |   |
|   |   |  |   |
|   |   |  |   |

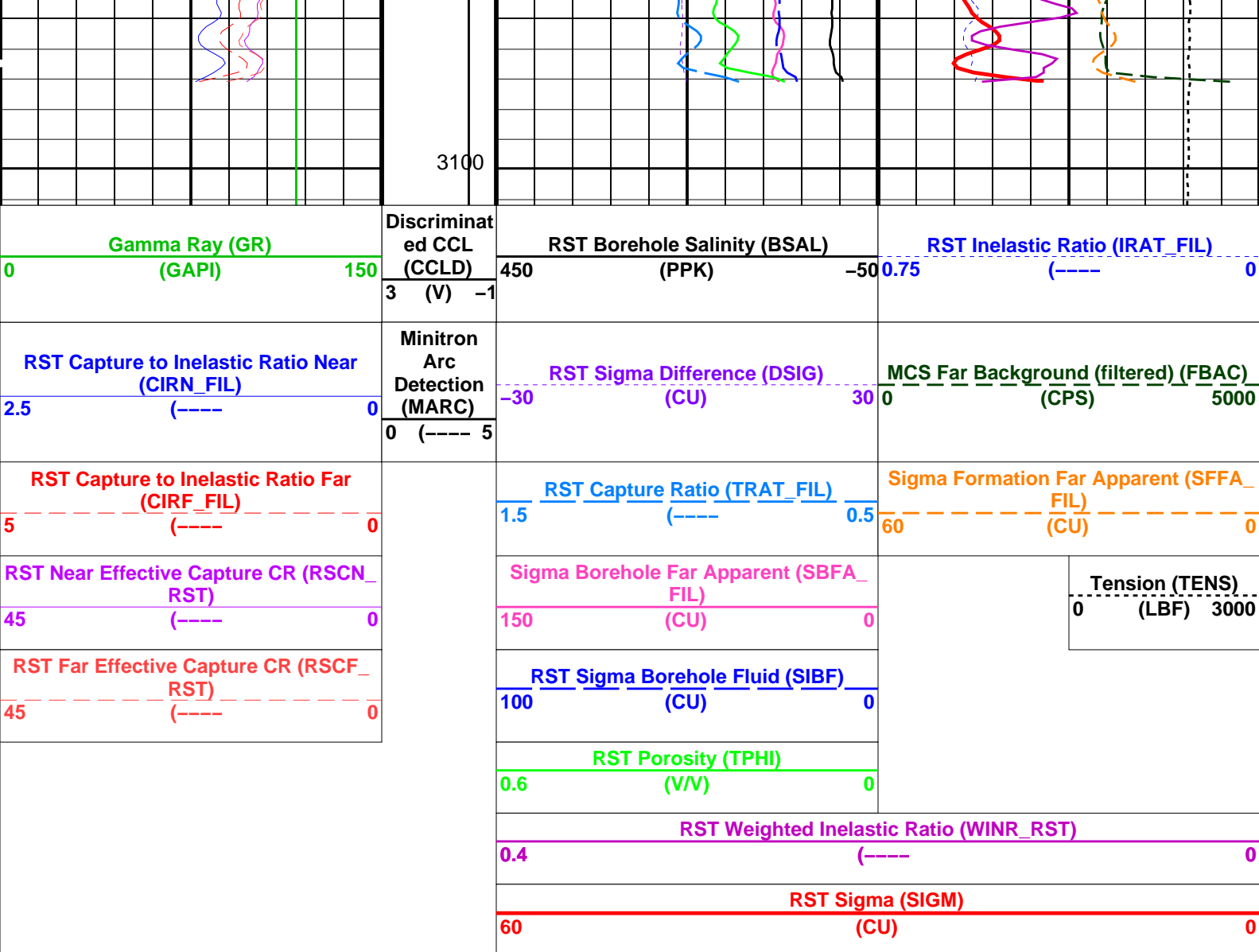












#### PIP SUMMARY

Time Mark Every 60 S

### Parameters

| DLIS Name                                      | Description                                     | Value       |      |
|--|---|-------------|------|
| RST-C: Reservoir Saturation Pro Tool C         |   |             |      |
| AIRB   | RST Air Borehole                                | No          |      |
| BHS  | Borehole Status                                 | CASED       |      |
| BSALOPT  | RST Borehole Salinity Option                    | Unknown     |      |
| BSFL   | RST Borehole Salinity Filter Length             | 51          |      |
| DFPC   | RST Depth Filter Processing Constant            | One         |      |
| DFPC_TDTL                                      | RST Depth Filter Processing Constant (TDT-like) | Two         |      |
| MATR   | Rock Matrix for Neutron Porosity Corrections    | SANDSTONE   |      |
| NORM_IRAT_RST                                  | RST Normalized Inelastic Ratio                  | 0.48        |      |
| NORM_SIGM_RST                                  | RST Normalized Sigma                            | 30          | CU   |
| RGAI   | Near/Far Gain Calibration Ratio                 | 1           |      |
| TIER_SIGM                                      | RST Sigma Acquisition Mode                      | 0_RST_Sigma |      |
| PSPT-A/B: Production Services Logging Platform |   |             |      |
| BHS  | Borehole Status                                 | CASED       |      |
| MATR   | Rock Matrix for Neutron Porosity Corrections    | SANDSTONE   |      |
| System and Miscellaneous                       |   |             |      |
| BS   | Bit Size  | 8.500       | IN   |
| BSAL   | Borehole Salinity                               | -50000.00   | PPM  |
| CSIZ   | Current Casing Size                             | 7.000       | IN   |
| CWEI   | Casing Weight                                   | 32.20       | LB/F |
| DO   | Depth Offset for Playback                       | 0.0         | M    |
| PP   | Playback Processing                             | NORMAL      |      |

Format: RST\_SIG\_ANSW

Vertical Scale: 1:200

Graphics File Created: 23-Dec-2009 11:14

RST-C17C0-154PSPT-A/B17C0-154

Input DLIS Files

RST\_PSP\_028LUP

FN:3223-Dec-2009 10:343101.2 M2901.5 M

Output DLIS Files

DEFAULTRST\_PSP\_010PUP

FN:25PRODUCER23-Dec-2009 11:14

ESSO\_CUSTOMERRST\_PSP\_010PUP

FN:26PRODUCER23-Dec-2009 11:14

ESSO\_CUSTOMERRST\_PSP\_010PUC

FN:27CUSTOMER23-Dec-2009 11:14

Schlumberger

RST-C Correlation Pass  
Static 2925m – 3102m MDKB

MAXIS Field Log

Company: Esso Australia Pty Ltd.

Well: A-6L

Input DLIS Files

DEFAULTRST\_PSP\_025LUP

FN:26PRODUCER23-Dec-2009 08:493103.3 M2904.7 M

Output DLIS Files

DEFAULTRST\_PSP\_043PUP

FN:58PRODUCER23-Dec-2009 18:473107.3 M2908.7 M

ESSO\_CUSTOMERRSAT\_PSP\_043PUP

FN:59PRODUCER23-Dec-2009 18:473107.3 M2908.7 M

OP System Version: 17C0-154

RST-C17C0-154PSPT-A/B17C0-154

PIP SUMMARY

Time Mark Every 60 S

Perfo Zone From PERFO\_CURVE to D3T

Computed CCL (CCLC)  
(V)

Discriminated CCL (CCLD)  
(V)

Tension (TENS)  
(LBF)

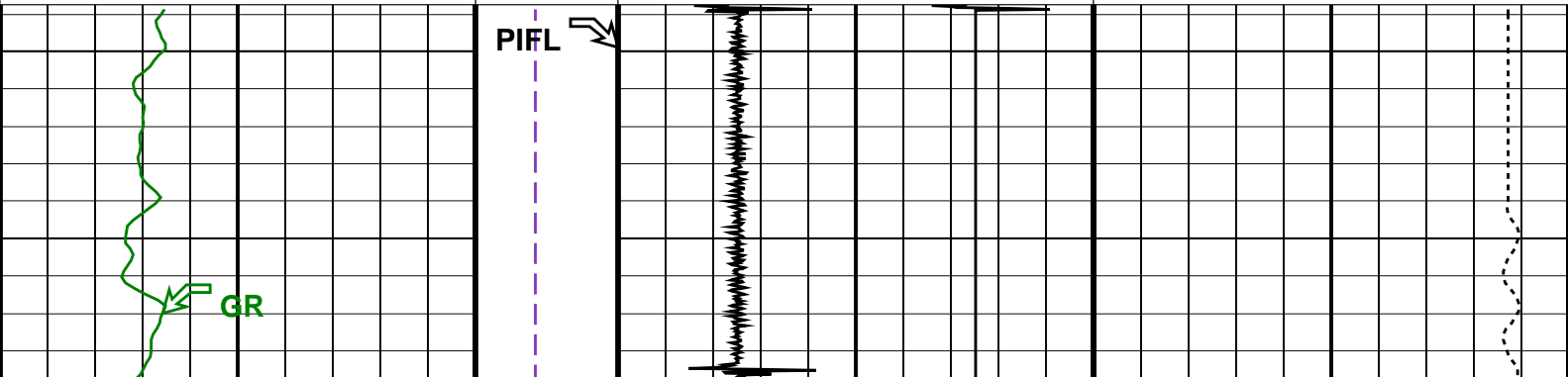
Gamma Ray (GR)  
(GAPI)

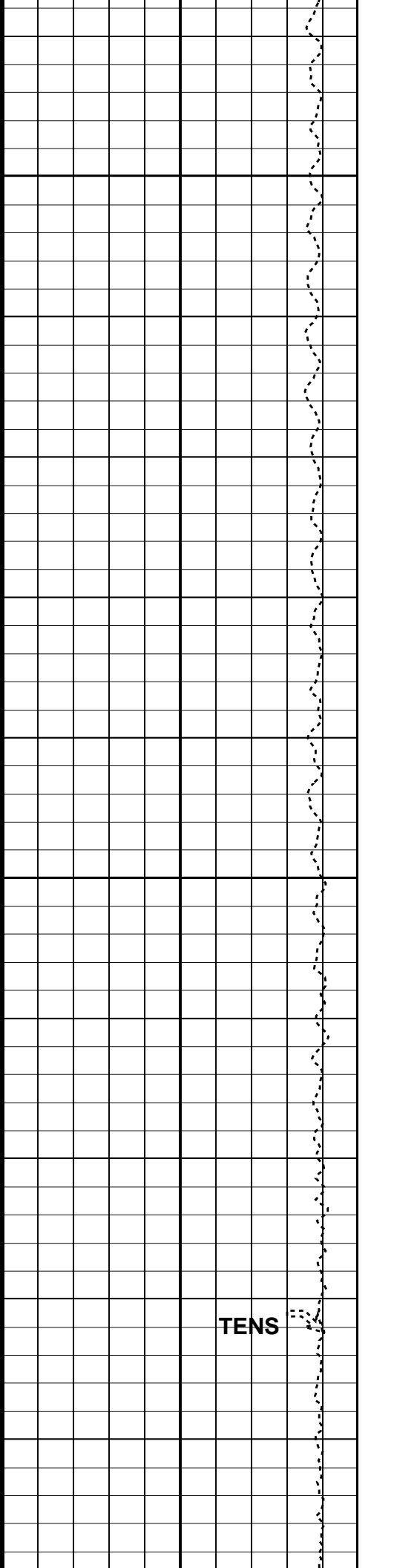
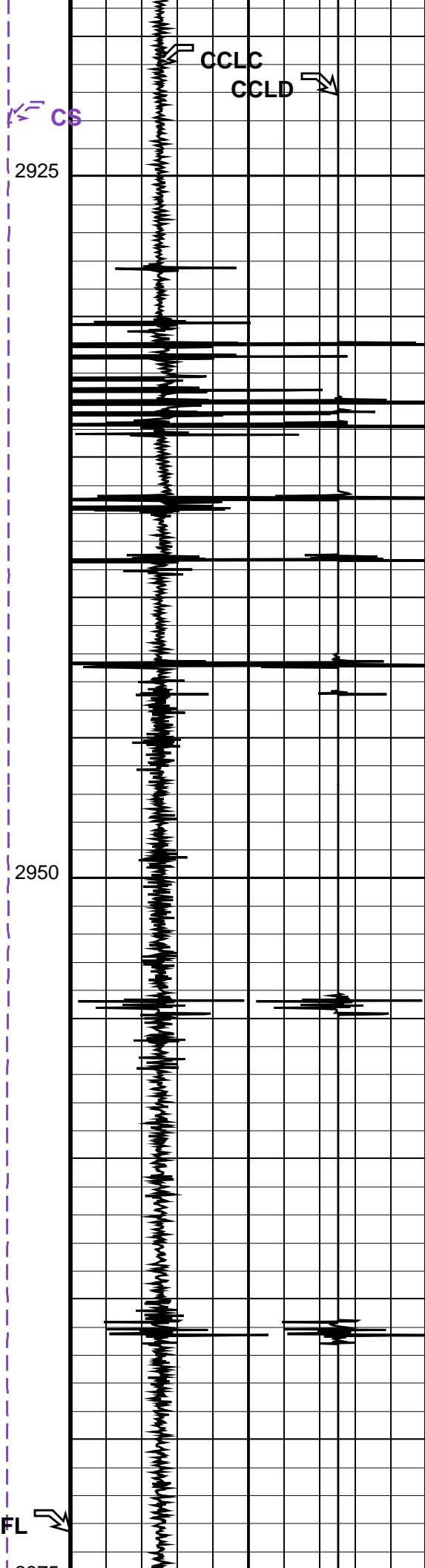
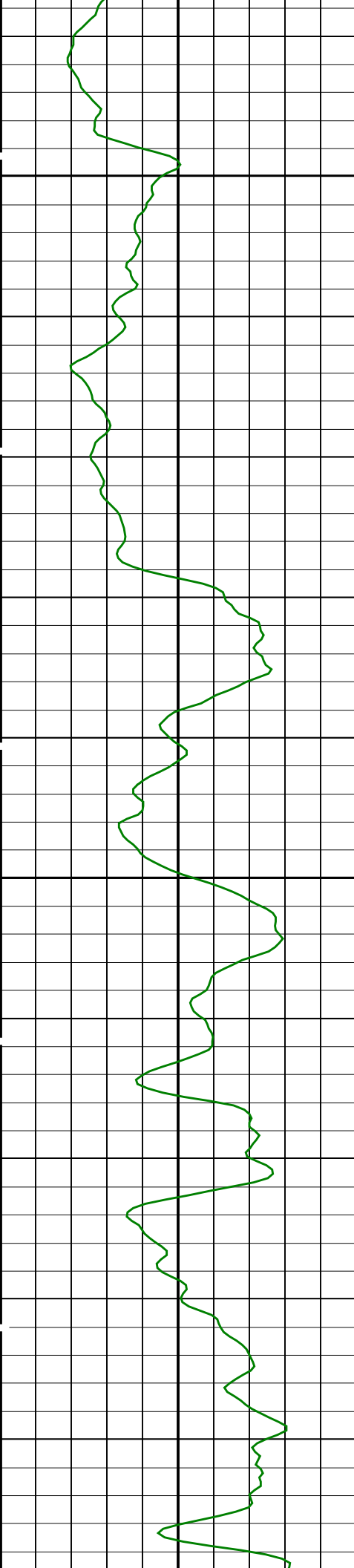
Cable Speed (CS)  
(F/HR)

PIFL

015005000

3-102000



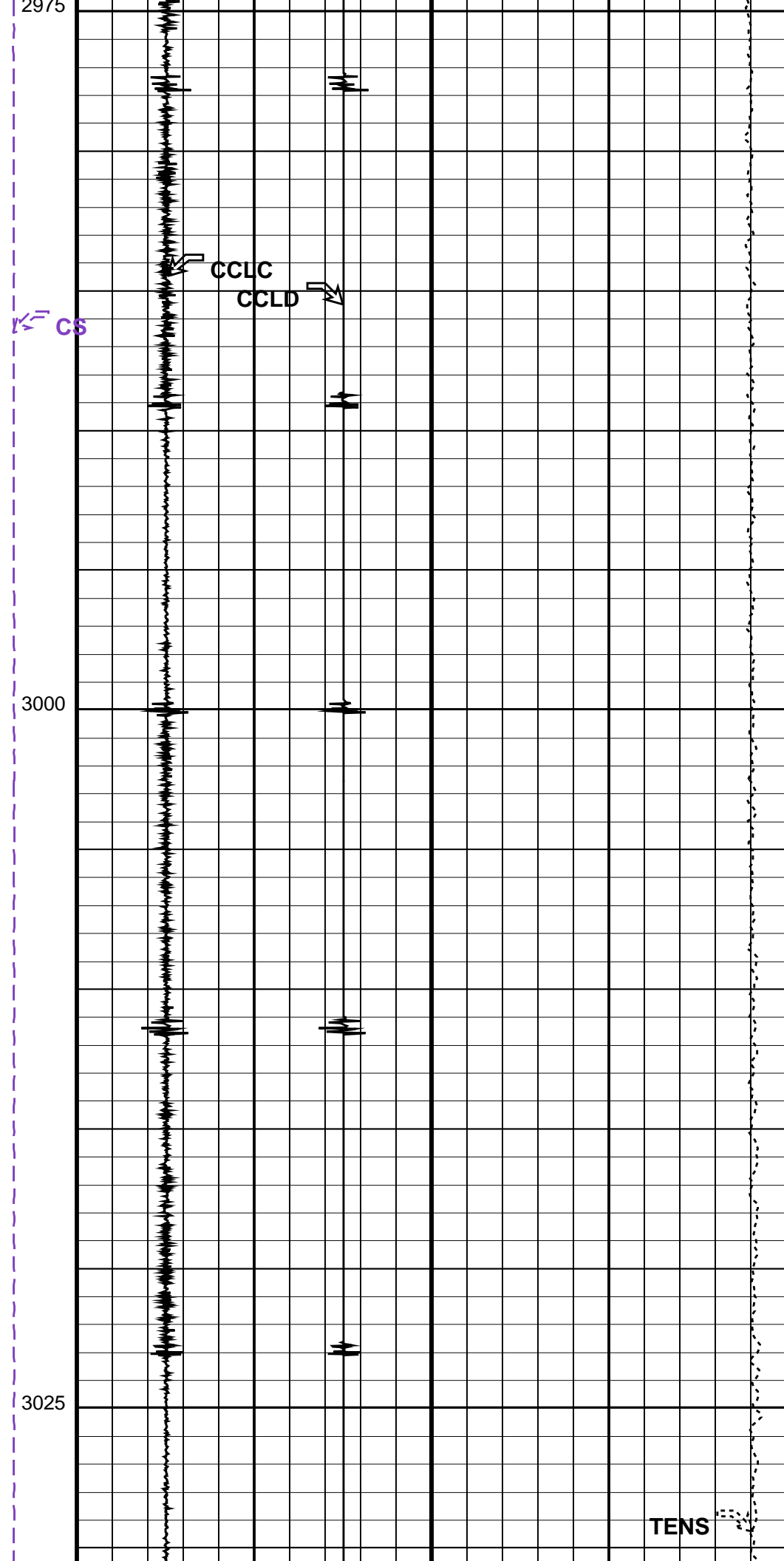
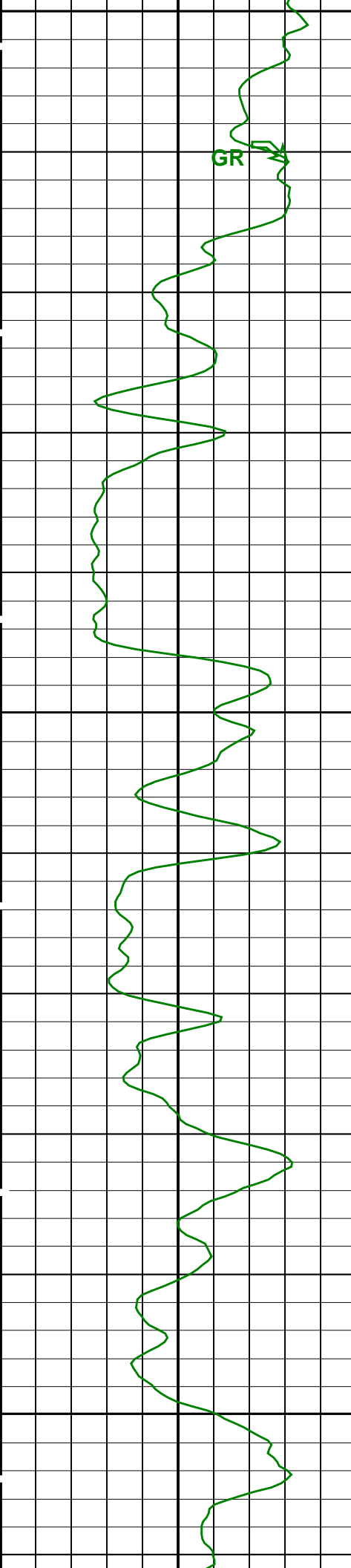


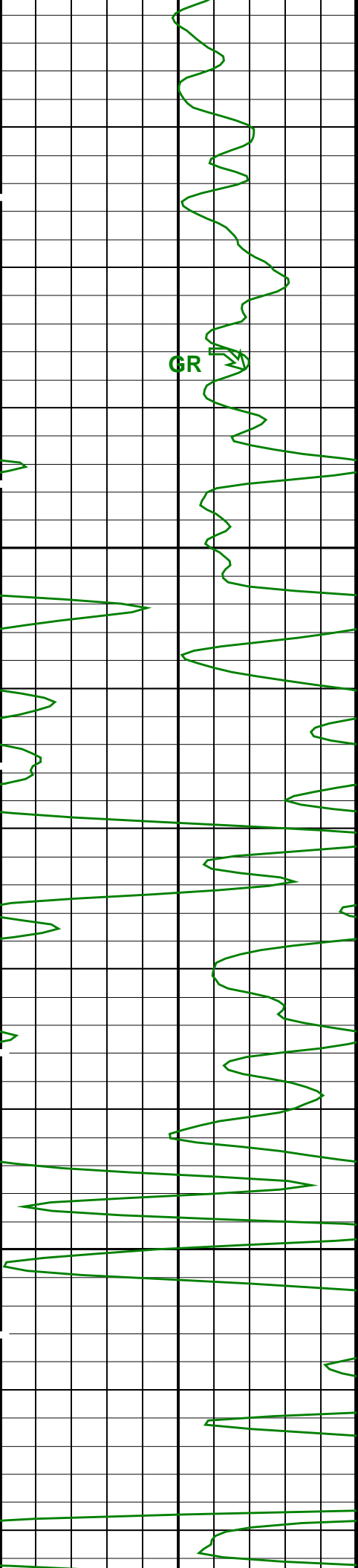
CS

2925

2950

TENS



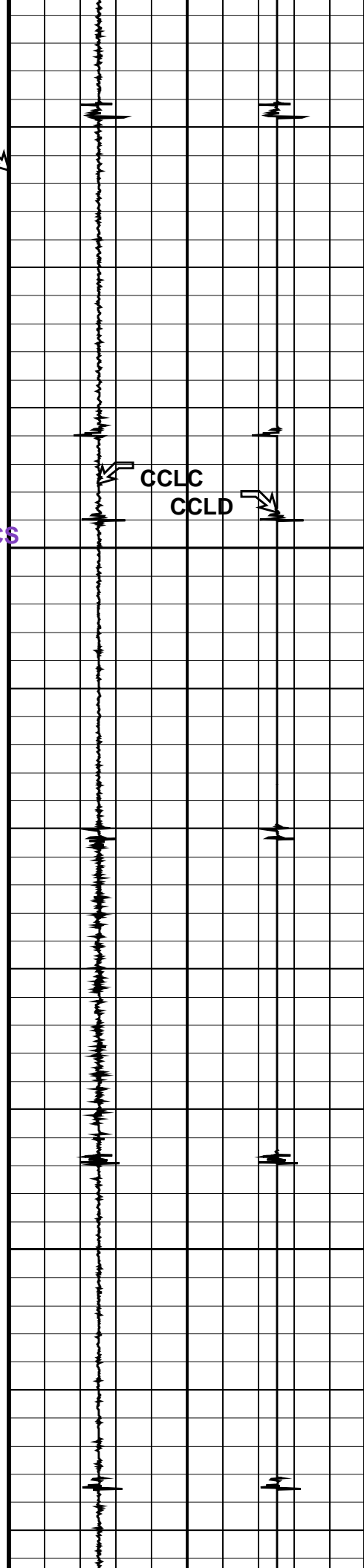


GR

PIFL

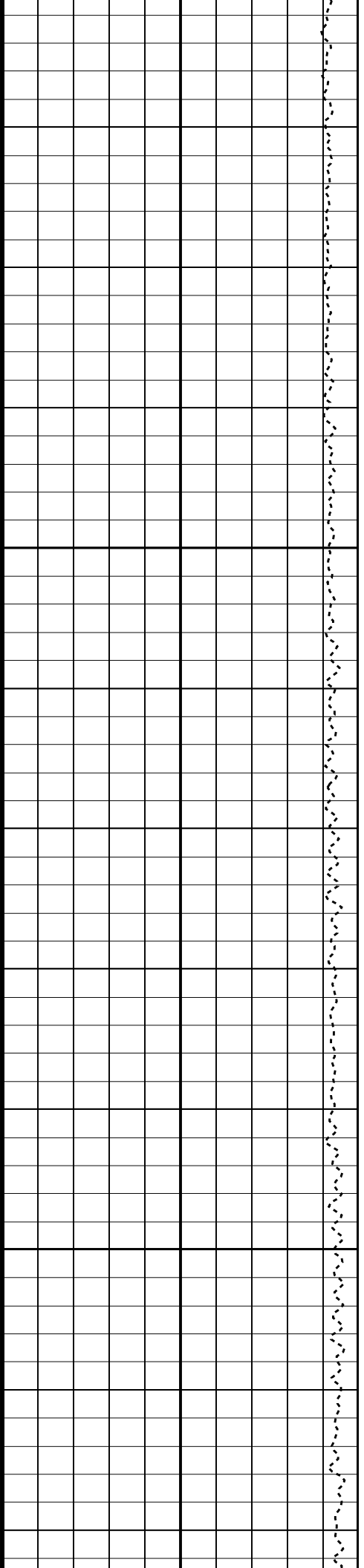
3050

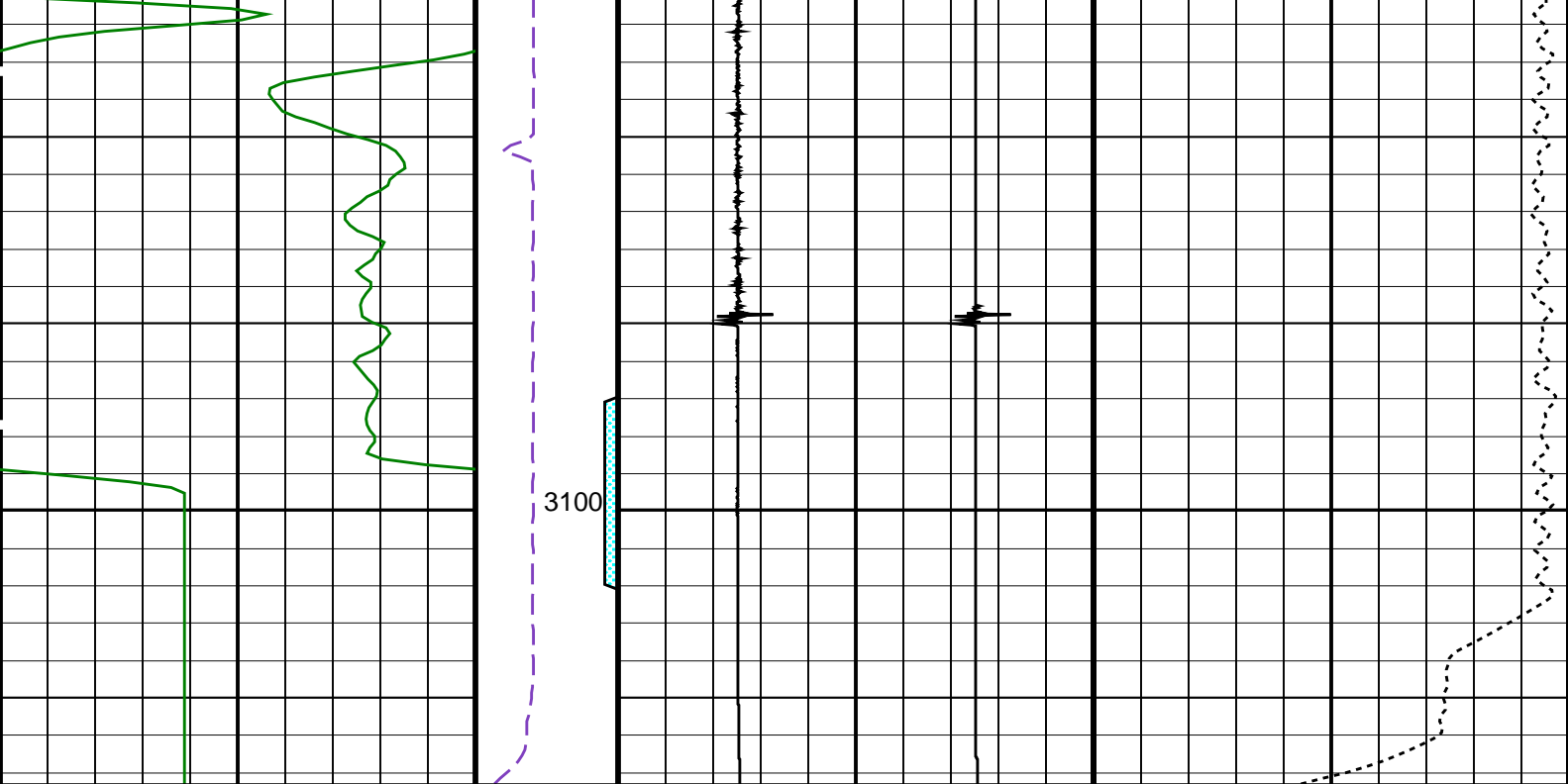
3075



CCLC

CCLD





|                          |  |  |                                 |                         |
|--------------------------|--|--|---------------------------------|-------------------------|
| Gamma Ray (GR)<br>(GAPI) |  | Cable<br>Speed (CS)<br>(F/HR)                      | Discriminated CCL (CCLD)<br>(V) | Tension (TENS)<br>(LBF) |
| 0 150                    |  | 0 5000   | 3 -10                           | 0 2000                  |
|                          |  | Perfo<br>Zone<br>From<br>PERFO_<br>CURVE to<br>D3T | Computed CCL (CCLC)<br>(V)      |                         |
|                          |  |  | 1 -3                            |                         |

PIP SUMMARY

Time Mark Every 60 S

Format: PSP\_1 Vertical Scale: 1:200

Graphics File Created: 23-Dec-2009 18:47

OP System Version: 17C0-154

RST-C 17C0-154 PSPT-A/B 17C0-154

Parameters

| DLIS Name | Description  | Value           |
|-----------|--|-----------------|
| DO<br>PP  | System and Miscellaneous<br>Depth Offset for Playback<br>Playback Processing | 3.9 M<br>NORMAL |

Input DLIS Files

|         |                |       |          |                   |          |          |
|---------|----------------|-------|----------|-------------------|----------|----------|
| DEFAULT | RST_PSP_025LUP | FN:26 | PRODUCER | 23-Dec-2009 08:49 | 3103.3 M | 2904.7 M |
|---------|----------------|-------|----------|-------------------|----------|----------|

Output DLIS Files

|                   |                |       |          |                   |
|-------------------|----------------|-------|----------|-------------------|
| DEFAULT           | RST_PSP_043PUP | FN:58 | PRODUCER | 23-Dec-2009 18:47 |
| ESSO_CUSTOMERRSAT | RST_PSP_043PUP | FN:59 | PRODUCER | 23-Dec-2009 18:47 |

Company: Esso Australia Pty Ltd.

Well: A-6L

Schlumberger



Field: **Tuna**  
Rig: **Prod 4 / Crane**  
Country: **Australia**

RST-C  
Sigma Survey  
23-Dec-2009