



Pioneer Energy Services

Dual Compensated Porosity Log

| | | | |
|------------------------|----------------------------------|-------------------------|-----------------------------------|
| API No. | 15-145-21,763-00-00 | | |
| Company | Downing-Nelson Oil Company, Inc. | | |
| Well | Brenda #1-8 | | |
| Field | Browns Grove | | |
| County | Pawnee | State | Kansas |
| Location | 1370' FSL & 2310' FEL | | |
| Sec: 8 | Twp: 20S | Rge: 20W | Other Services DIL MEI/BHCS |
| Permanent Datum | Ground Level | Elevation 2180 | Elevation |
| Log Measured From | Kelly Bushing | 8 Ft. Above Perm. Datum | K.B. 2188 |
| Drilling Measured From | Kelly Bushing | | D.F. 2180 |
| Date | 4/21/2104 | | |

| | | | |
|------------------------|------------|------|--|
| Run Number | One | | |
| Type Log | CNL / CDL | | |
| Depth Driller | 4336 | | |
| Depth Logger | 4337 | | |
| Bottom Logged Interval | 4316 | | |
| Top Logged Interval | 3400 | | |
| Type Fluid In Hole | Chemical | | |
| Salinity, PPM CL | 5000 | | |
| Density | 9.5 | | |
| Level | Full | | |
| Max. Rec. Temp. F | 119 | | |
| Operating Rig Time | 6 Hours | | |
| Equipment -- Location | 15 | Days | |
| Recorded By | D Kerr | | |
| Witnessed By | AI Downing | | |

| Borehole Record | | | | Casing Record | | | |
|-----------------|-------|------|------|---------------|------|------|------|
| Run No. | Bit | From | To | Size | Wgt. | From | To |
| One | 12.25 | 00 | 1171 | 8.625 | 23# | 00 | 1171 |
| Two | 7.875 | 1171 | TD | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Thank you for using Log-Tech, Inc.
(785) 625-3858

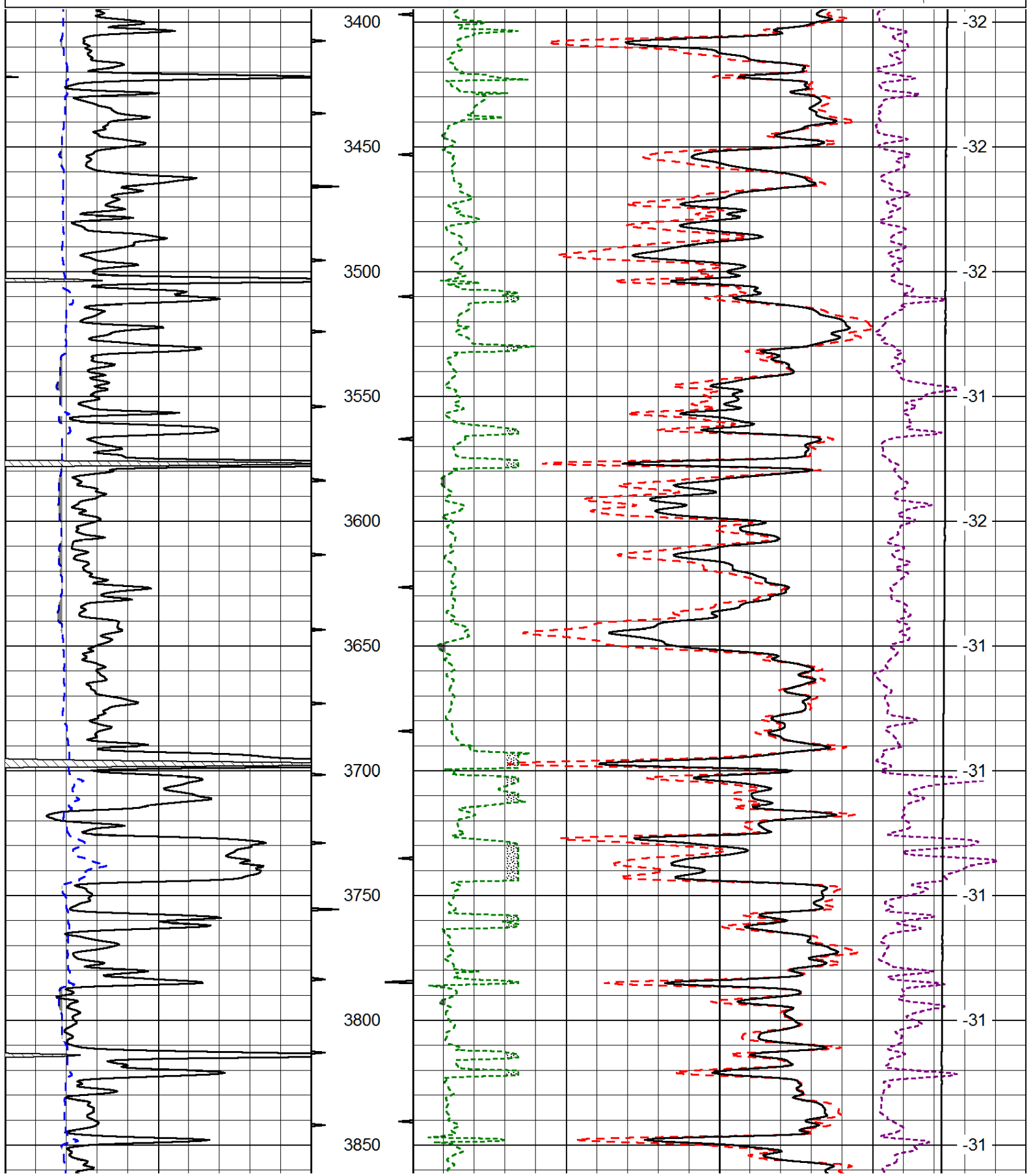
Alexander KS, 10 South to X RD,
1/4 West, North Into

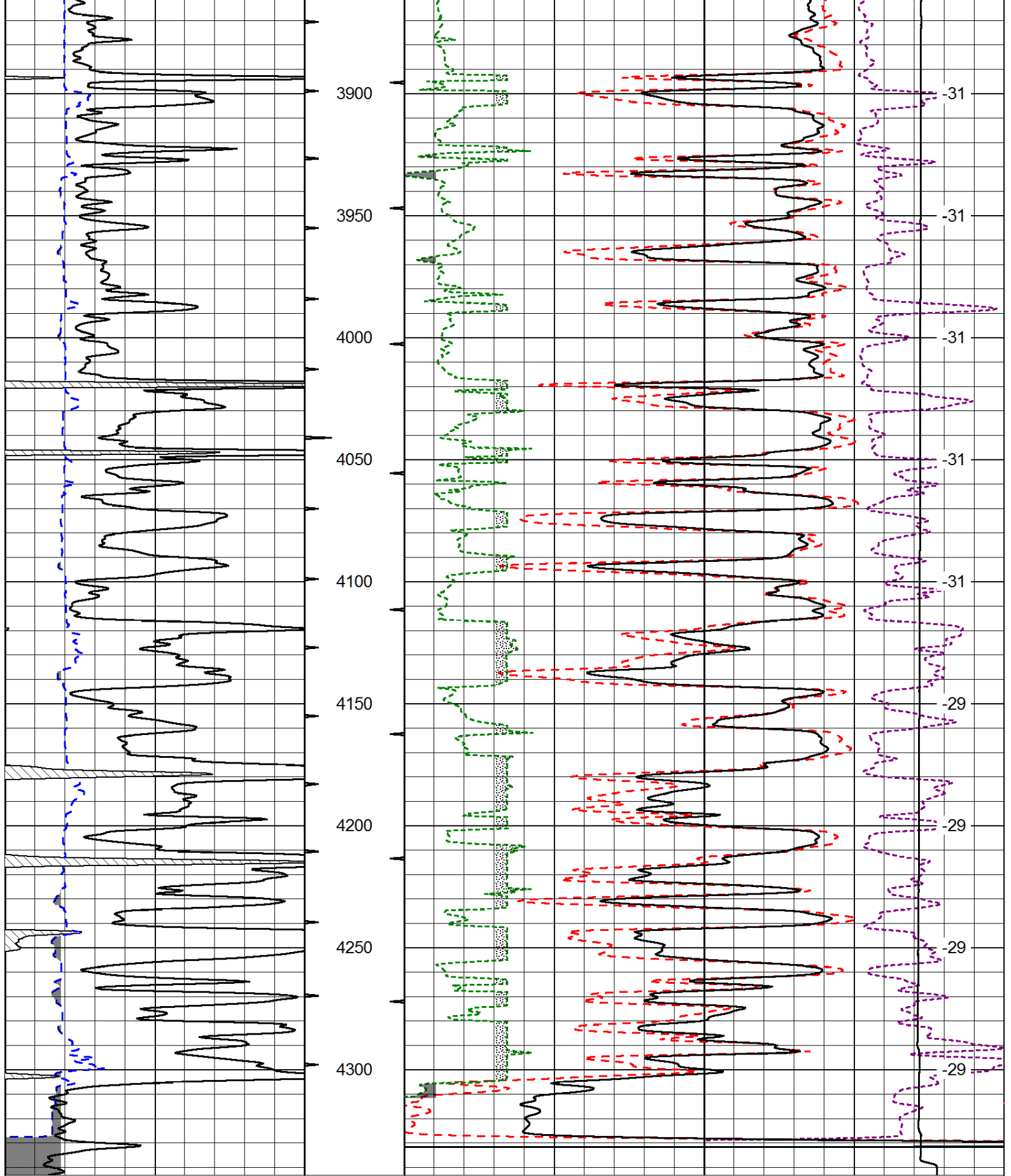
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 Dataset Pathname: DIL/dnstk
 Presentation Format: cdl
 Dataset Creation: Mon Apr 21 22:14:22 2014
 Charted by: Depth in Feet scaled 1:600

| | | |
|---|------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 |
| 6 | Caliper (in) | 16 |

| | | | |
|-------|--------------------------|-------|-------------------|
| 30 | Compensated Density (pu) | | -10 |
| 2 | Bulk Density (g/cc) | | 3 |
| 15000 | Line Tension (lb) | | 0 |
| 2.625 | DGA (g/cc) | 3.425 | -0.25 |
| | | | Correction (g/cc) |
| | | | 0.25 |

LSPD
(ft/min)





| | | |
|---|------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 |
| 6 | Caliper (in) | 16 |

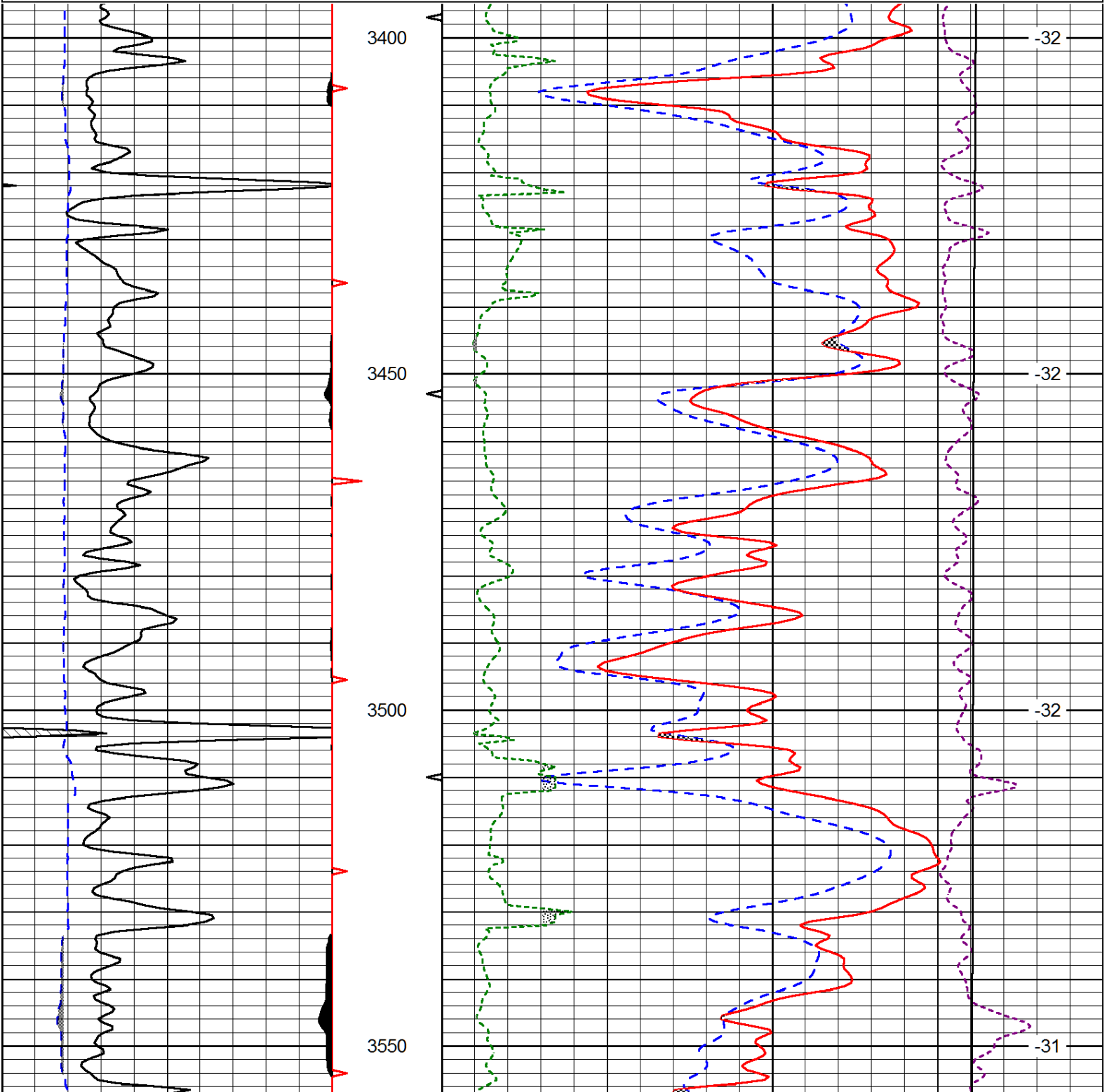
| | | |
|-------|--------------------------|-------------|
| 30 | Compensated Density (pu) | -10 |
| 2 | Bulk Density (g/cc) | 3 |
| 15000 | Line Tension (lb) | 0 |
| 2.625 | DGA (g/cc) | 3.425 -0.25 |
| | Correction (g/cc) | 0.25 |

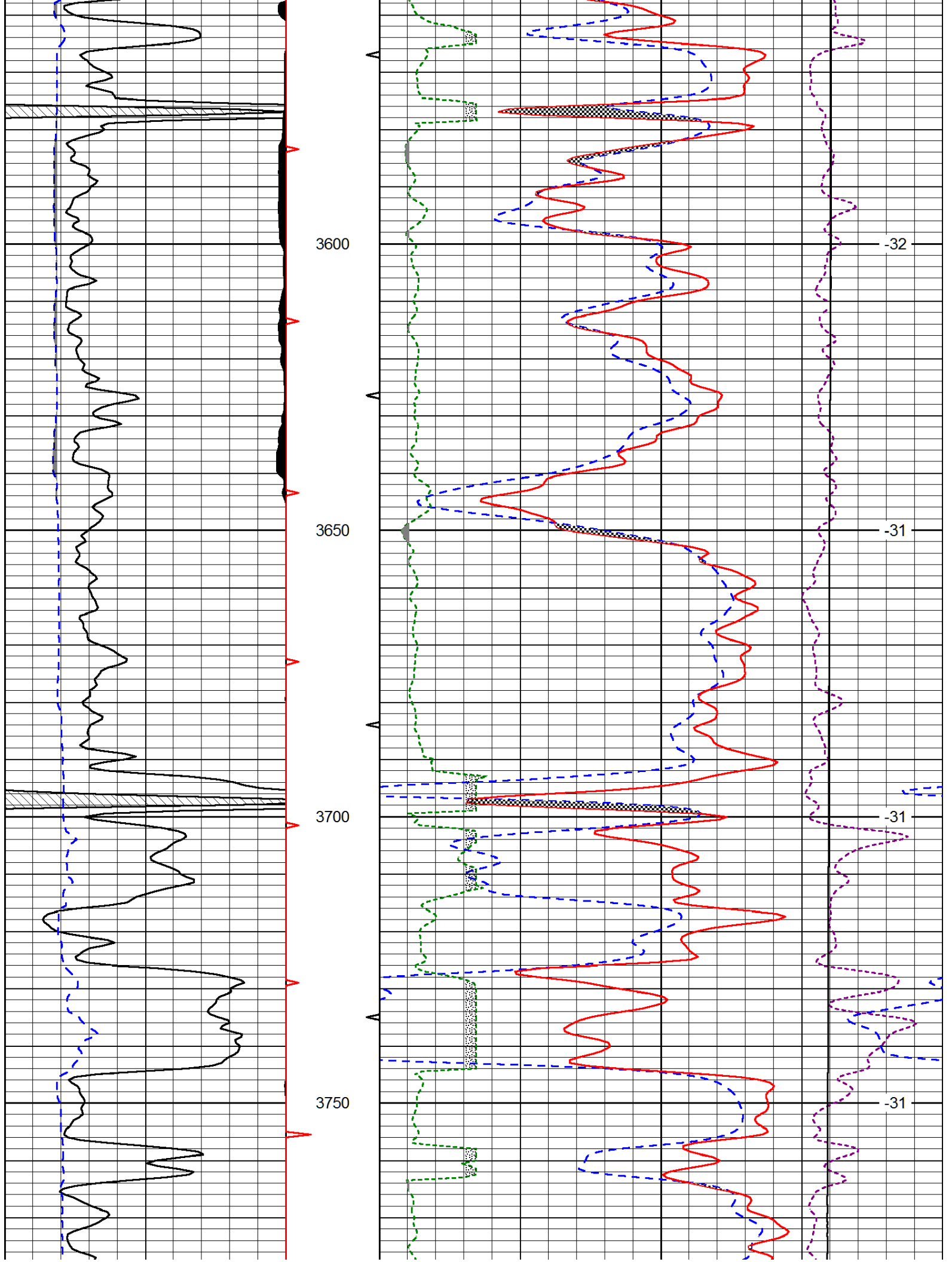
LSPD
(ft/min)

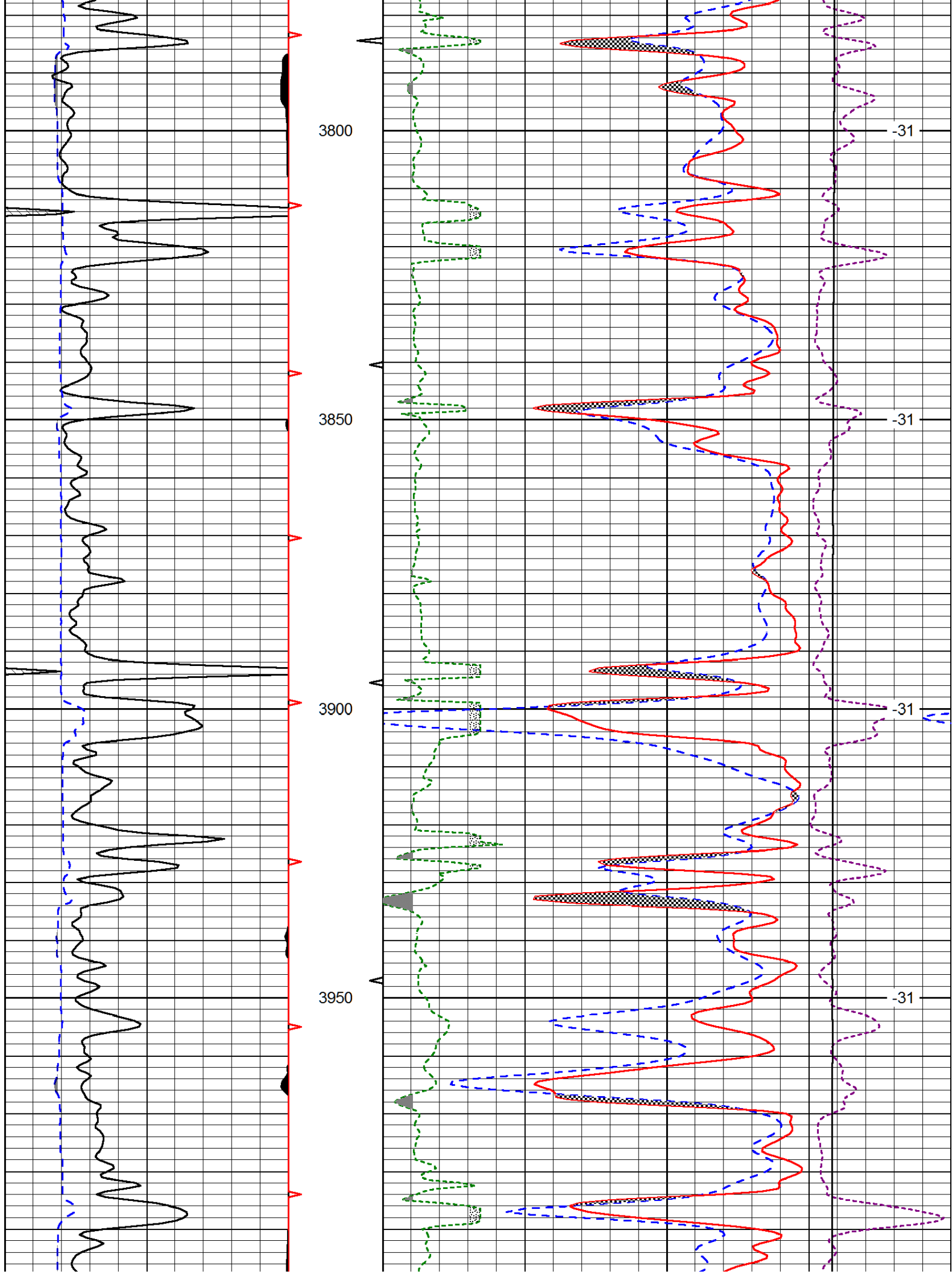
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 Dataset Pathname: DIL/dnstk
 Presentation Format: cndlspec
 Dataset Creation: Mon Apr 21 22:14:22 2014
 Charted by: Depth in Feet scaled 1:240

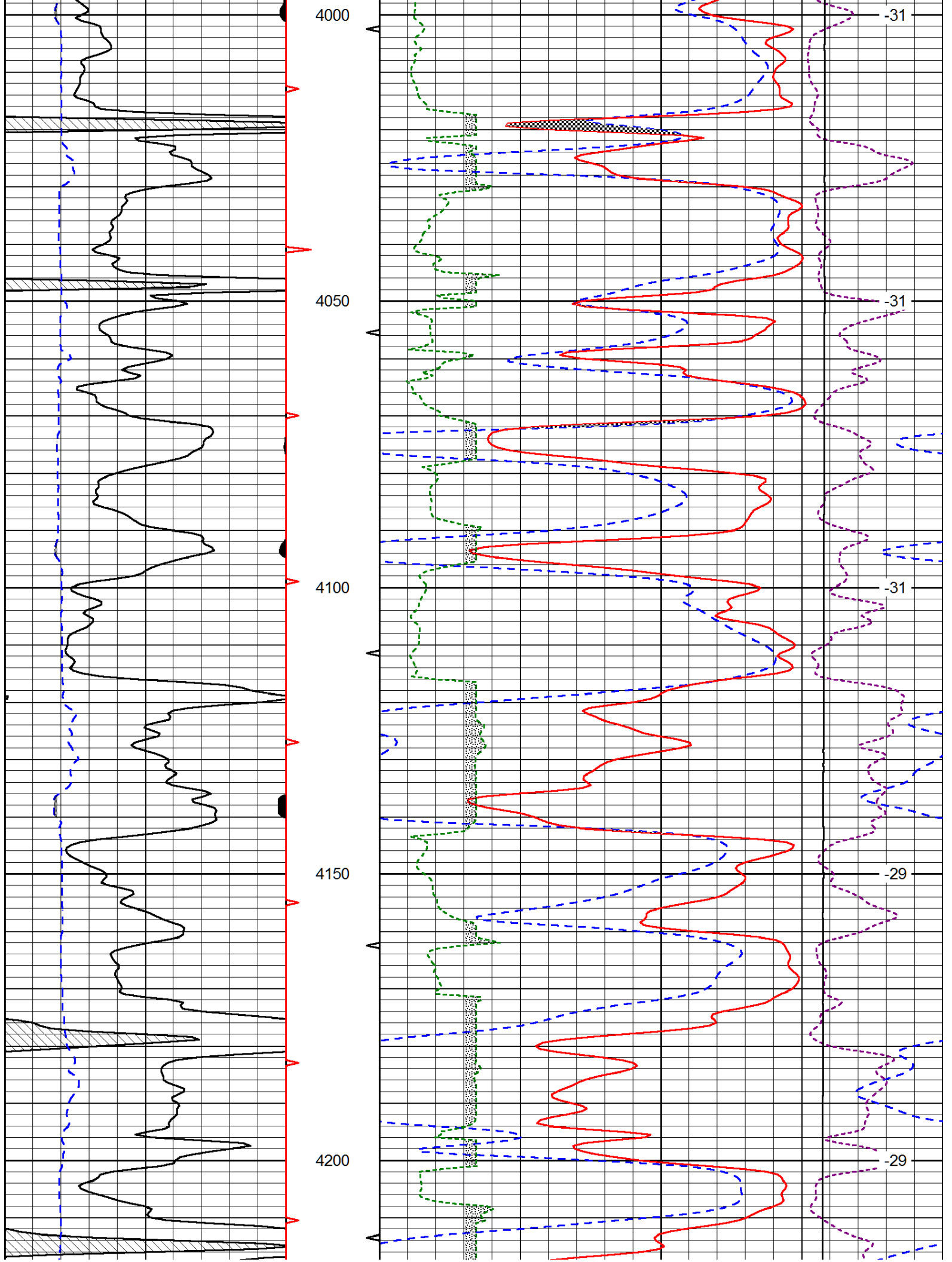
| | | | | | | |
|---|------------------|-----|-------|------------------------------------|-------------------|-------|
| 0 | Gamma Ray (GAPI) | 150 | 30 | CNPOR (pu) | | -10 |
| 6 | Caliper (in) | 16 | 30 | Compensated Density (2.71 ma) (pu) | | -10 |
| | | | 2.625 | DGA (g/cc) | 3.425 | -0.25 |
| | | | | | Correction (g/cc) | 0.25 |
| | | | 10000 | Line Tension (lb) | | 0 |

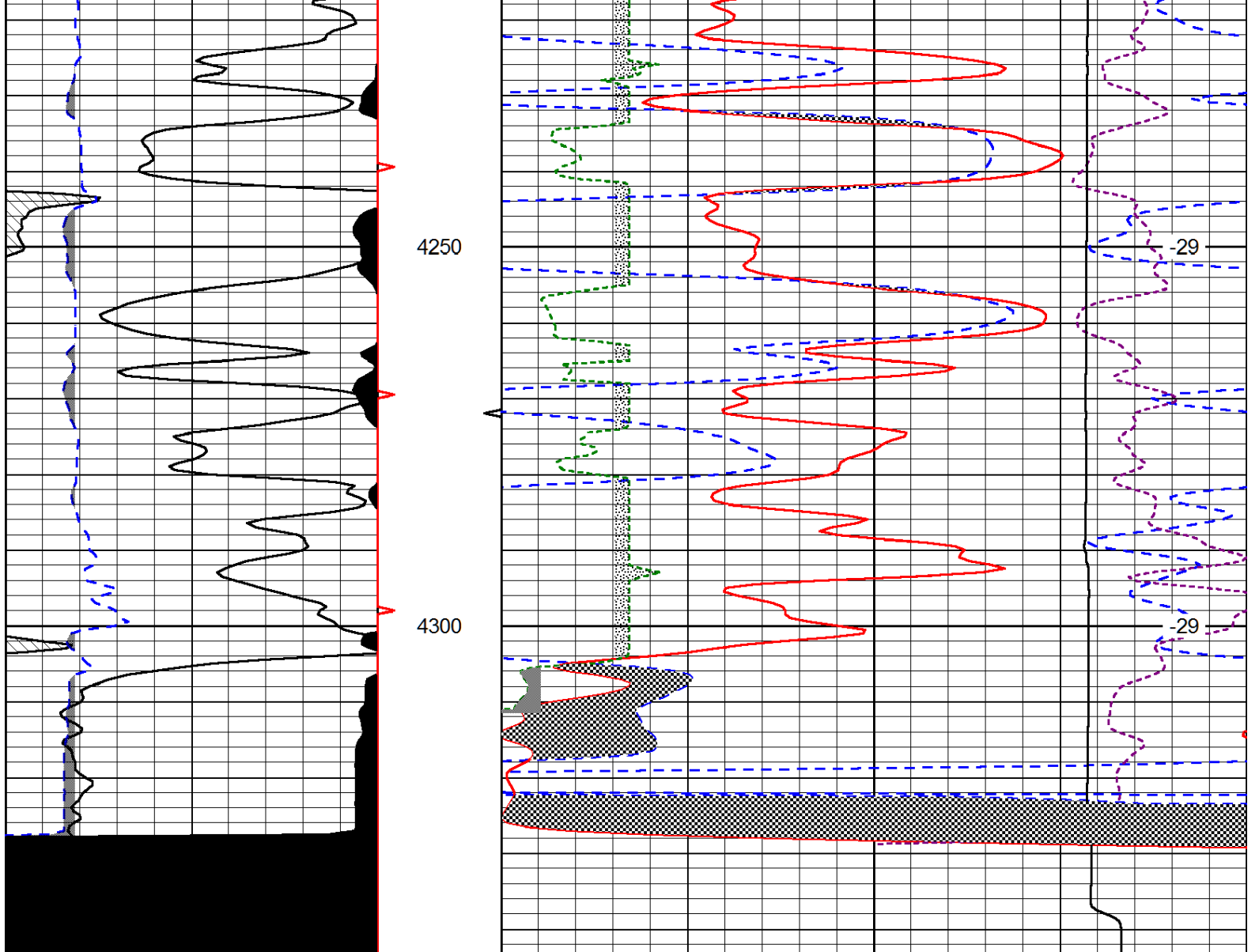
LSPD
(ft/min)











| | | |
|---|------------------|-----|
| 0 | Gamma Ray (GAPI) | 150 |
| 6 | Caliper (in) | 16 |

| | | | | | |
|-------|------------------------------------|-------|-------|-------------------|------|
| 30 | CNPQR (pu) | | | -10 | |
| 30 | Compensated Density (2.71 ma) (pu) | | | -10 | |
| 2.625 | DGA (g/cc) | 3.425 | -0.25 | Correction (g/cc) | 0.25 |
| 10000 | Line Tension (lb) | | | 0 | |

LSPD
(ft/min)