MIDWEST WIRELINE

# DUAL COMPENSATED POROSITY / MICRO LOG

Company Berexco LLC
Well Gene #1
Field
County Russell State Kansas

Location: API # : 15-167-24117-00-00
330 FSL & 330 FEL
SEC 8 TWP 11S RGE 15W

Other Services
DIL
BHCS

Permanent Datum Ground Level Elevation 1903
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing

Elevation
K.B. 1913
D.F.
G.L. 1903

| | | | |
|---|---|---|---|
| Date | 2/14/2022 | | |
| Run Number | One | | |
| Type Log | CNL / CDL / ML | | |
| Depth Driller | 3500 | | |
| Depth Logger | 3504 | | |
| Bottom Logged Interval | 3475 | | |
| Top Logged Interval | 2600 | | |
| Type Fluid In Hole | Chemical | | |
| Salinity, PPM CL | 2000 | | |
| Density | 8.9 | | |
| Level | Full | | |
| Max. Rec. Temp. F | 111 | | |
| Operating Rig Time | 4 Hours | | |
| Equipment -- Location | P-108 HAYS | | |
| Recorded By | J. Henrickson | | |
| Witnessed By | Bryan Bynog | | |

| Borehole Record | | | | Casing Record | | | |
|---|---|---|---|---|---|---|---|
| Run No. | Bit | From | To | Size | Wgt. | From | To |
| One | 12.25 | 0 | 265 | 8.625 | 24 | 0 | 265 |
| Two | 7.875 | 265 | TD | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

Paradise Ks
3/4 West on Tower Rd to Fork, Left at fork for 3 Miles,
N Into

Log Measured From: Kelly Bushing 10 Ft. Above Permanent Datum

THANK YOU FOR USING Midwest Wireline LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: J. Henrickson
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Bryan Bynog
Secondary Witness:
Secondary Witness:
Secondary Witness:

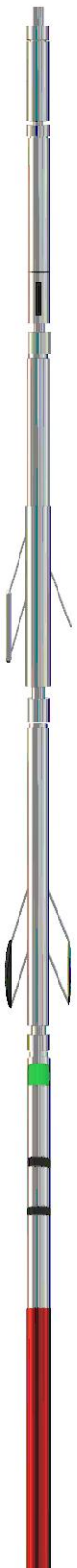
# Log Variables

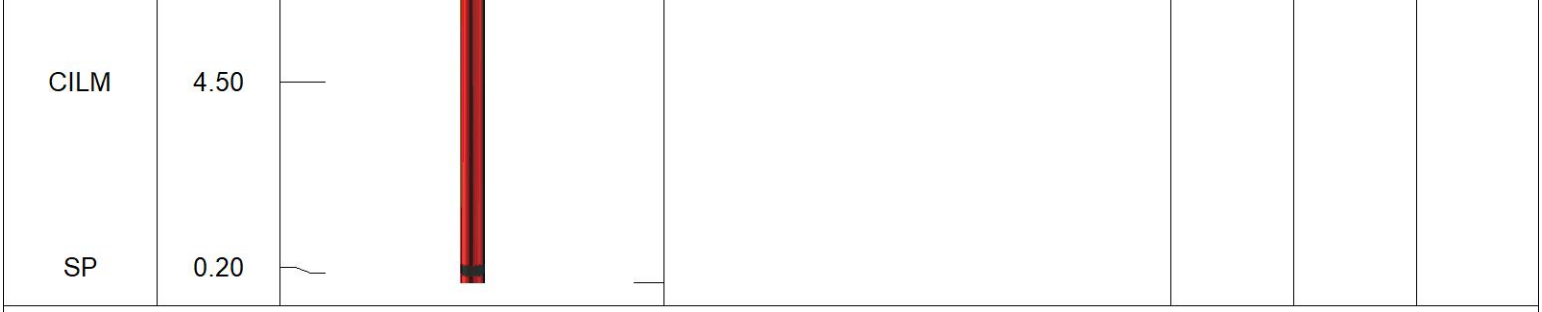
DatabaseC:\ProgramData\Warrior\Data\berexco_gene_1.db
Dataset field/well/stackml/pass4.1/_vars_

**Top - Bottom**

| A | BOREID in | BOTTEMP degF | CASEOD in | CASETHCK in | FLUIDDEN g/cc | M | MATRXDEN g/cc |
|---|---|---|---|---|---|---|---|
| 1 | 7.875 | 111 | 5.5 | 0 | 1 | 2 | 2.71 |

| NPORSEL | PERFS | SNDERR mmho/m | SNDERRM mmho/m | SPSHIFT mV | SRFTEMP degF | SZCOR | TDEPTH ft |
|---|---|---|---|---|---|---|---|
| Limestone | 0 | 0 | 0 | 455 | 50 | Off | 3504 |

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb |
|---|---|---|---|---|---|---|
| GR | 40.33 |  | GR-M&W (103) | 3.00 | 3.50 | 50.00 |
| CNLSC | 37.23 | | CNT-M&W (210) | 5.00 | 3.50 | 100.00 |
| CNSSC | 36.48 | | | | | |
| | | | CDL-M&W (303-03) | 8.50 | 4.00 | 250.00 |
| LSD | 28.18 | | | | | |
| DCAL | 28.17 | | | | | |
| SSD | 27.68 | | | | | |
| | | | ML-PSI STKBL ML (402) | 7.58 | 4.00 | 65.00 |
| MCAL | 19.58 | | | | | |
| MI | 19.58 | | | | | |
| MN | 19.58 | | | | | |
| RLL3F | 15.50 | | | | | |
| RLL3 | 15.50 | | | | | |
| | | | DIL-M&W (504 HT) | 18.25 | 3.50 | 220.00 |
| CILD | 8.33 | | | | | |




Dataset: berexco_gene_1.db: field/well/stackml/pass4.1
Total length: 42.33 ft
Total weight: 685.00 lb
O.D.: 4.00 in

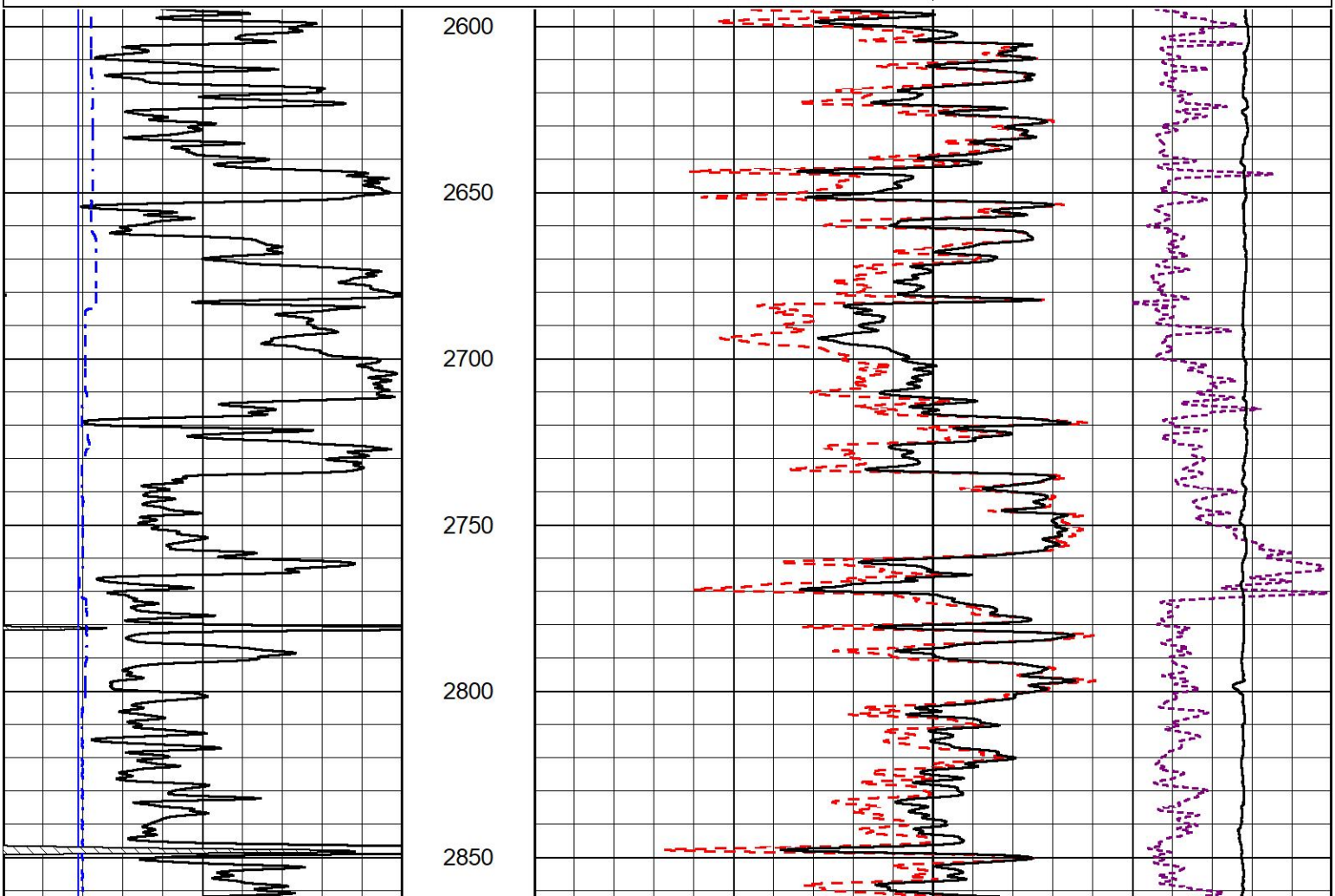
MIDWEST WIRELINE

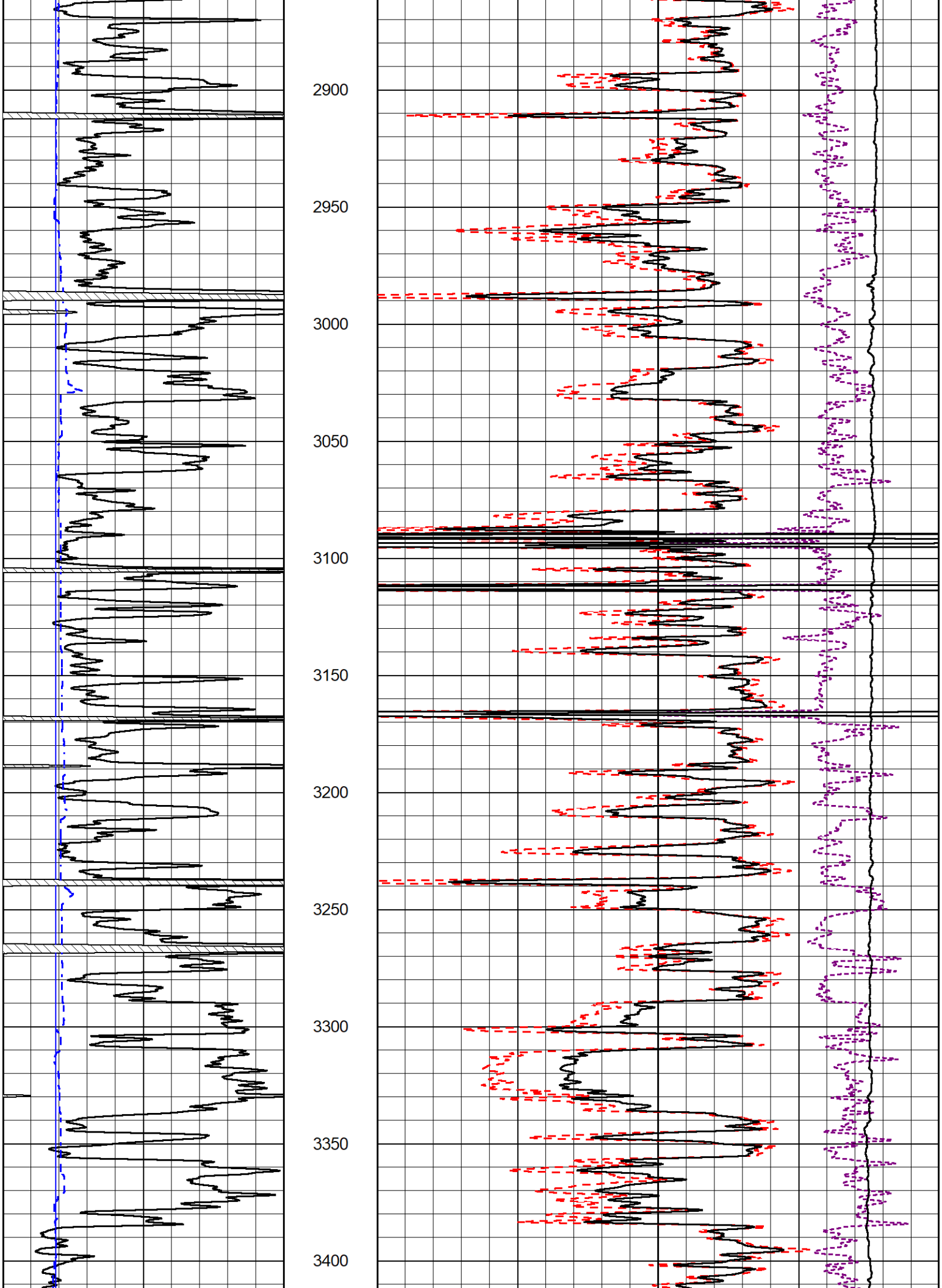
# 2" SCALE BULK DENSITY

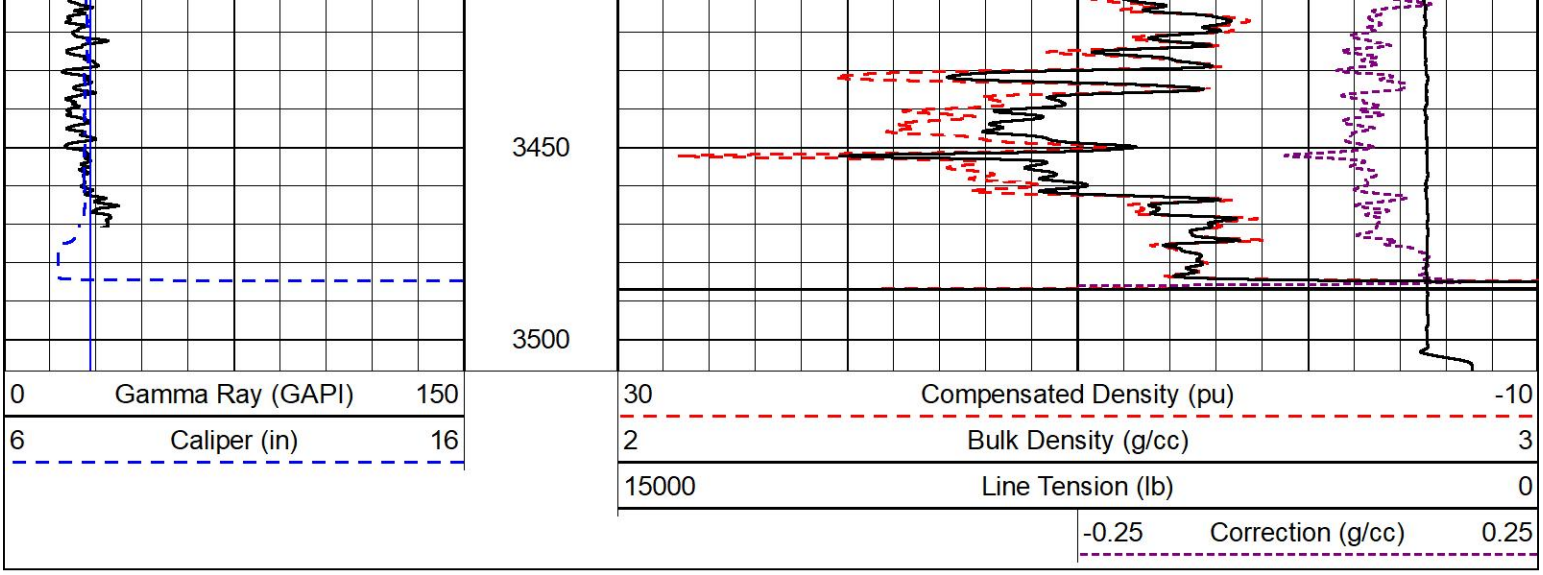
## MAIN PASS

| | |
|---|---|
| Database File | berexco_gene_1.db |
| Dataset Pathname | stackml/pass3.1 |
| Presentation Format | _cdl |
| Dataset Creation | Mon Feb 14 07:57:01 2022 |
| 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 |
| -0.25 | Correction (g/cc) | 0.25 |




2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400

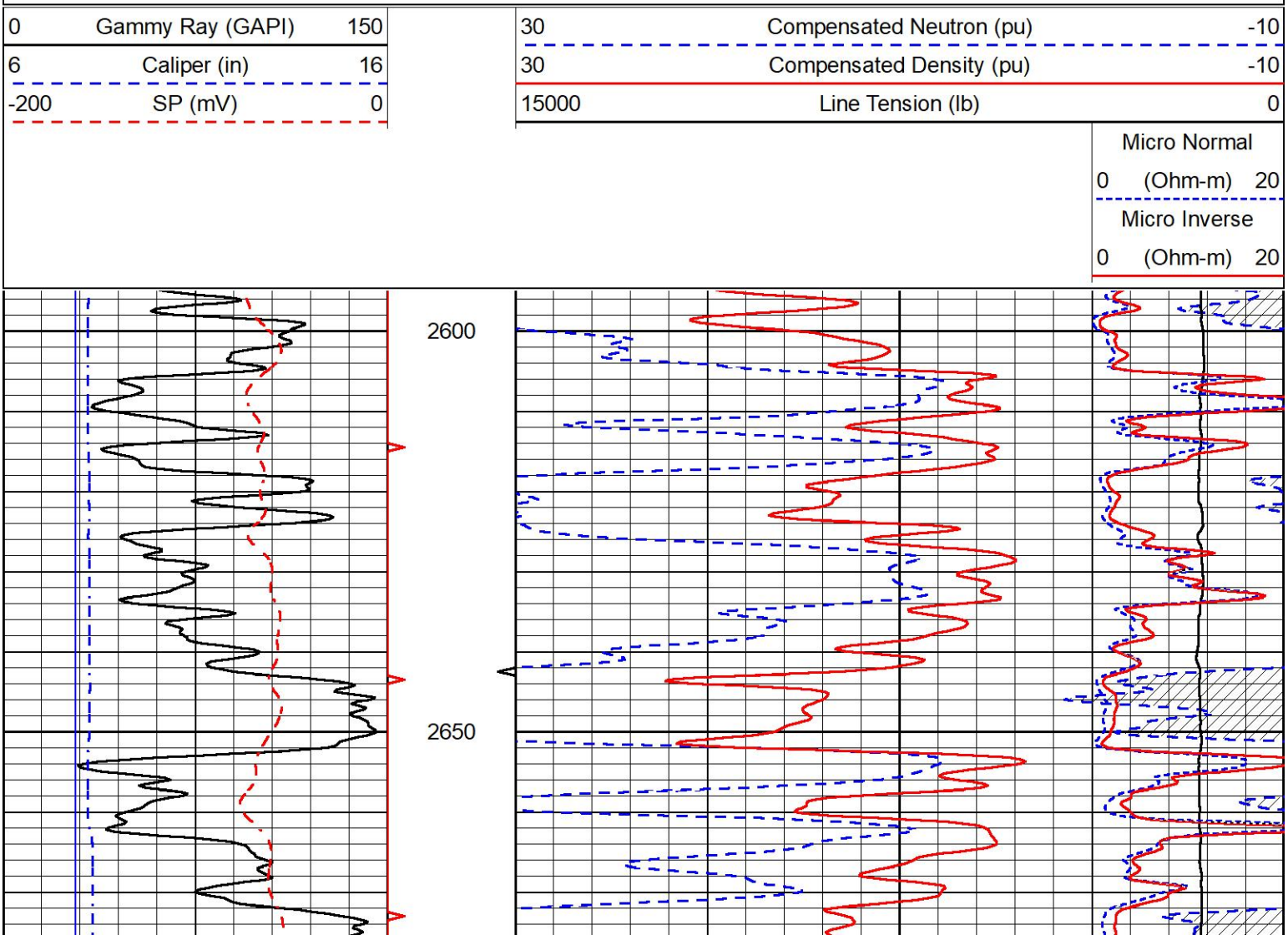


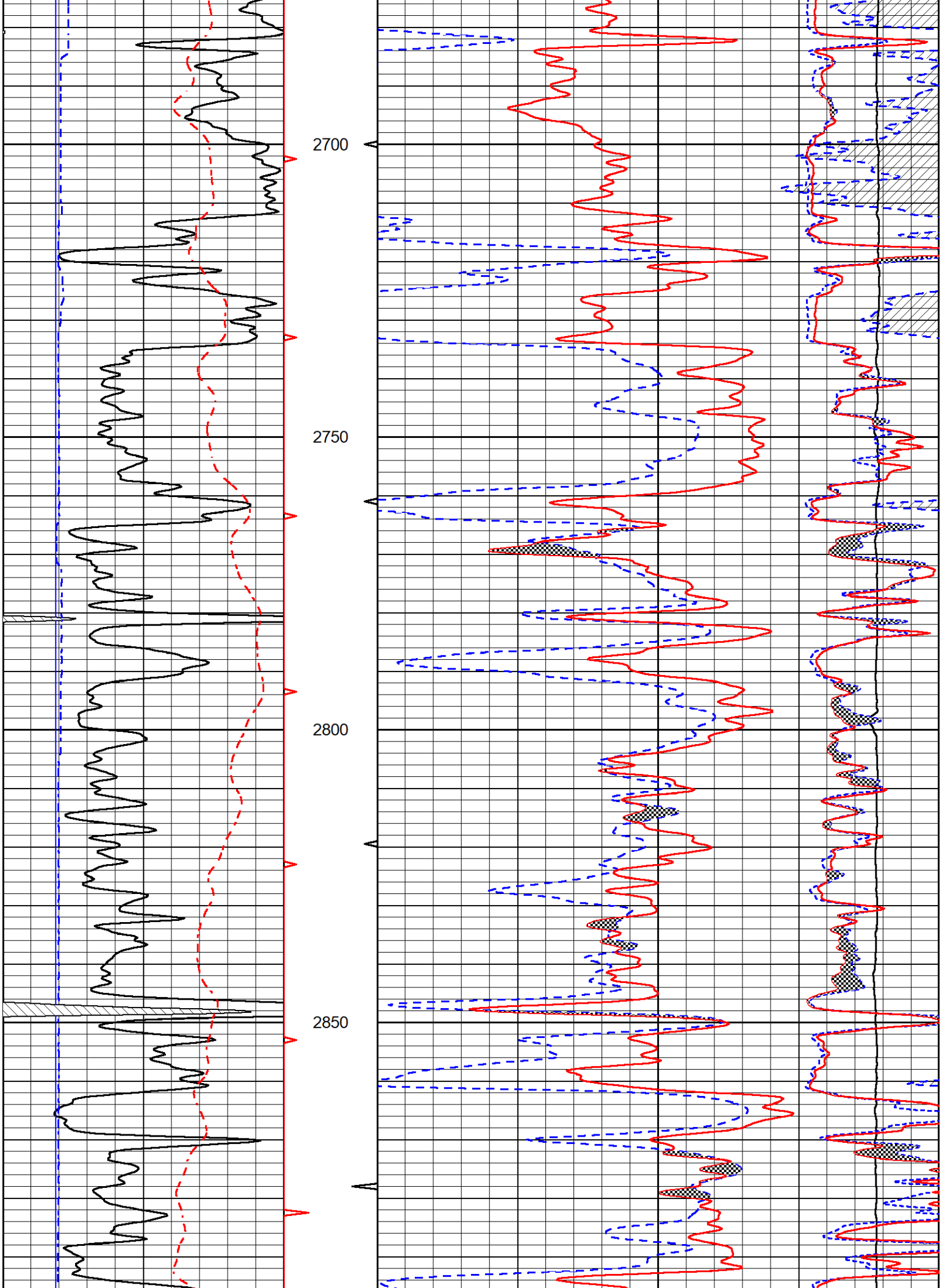

MIDWEST WIRELINE

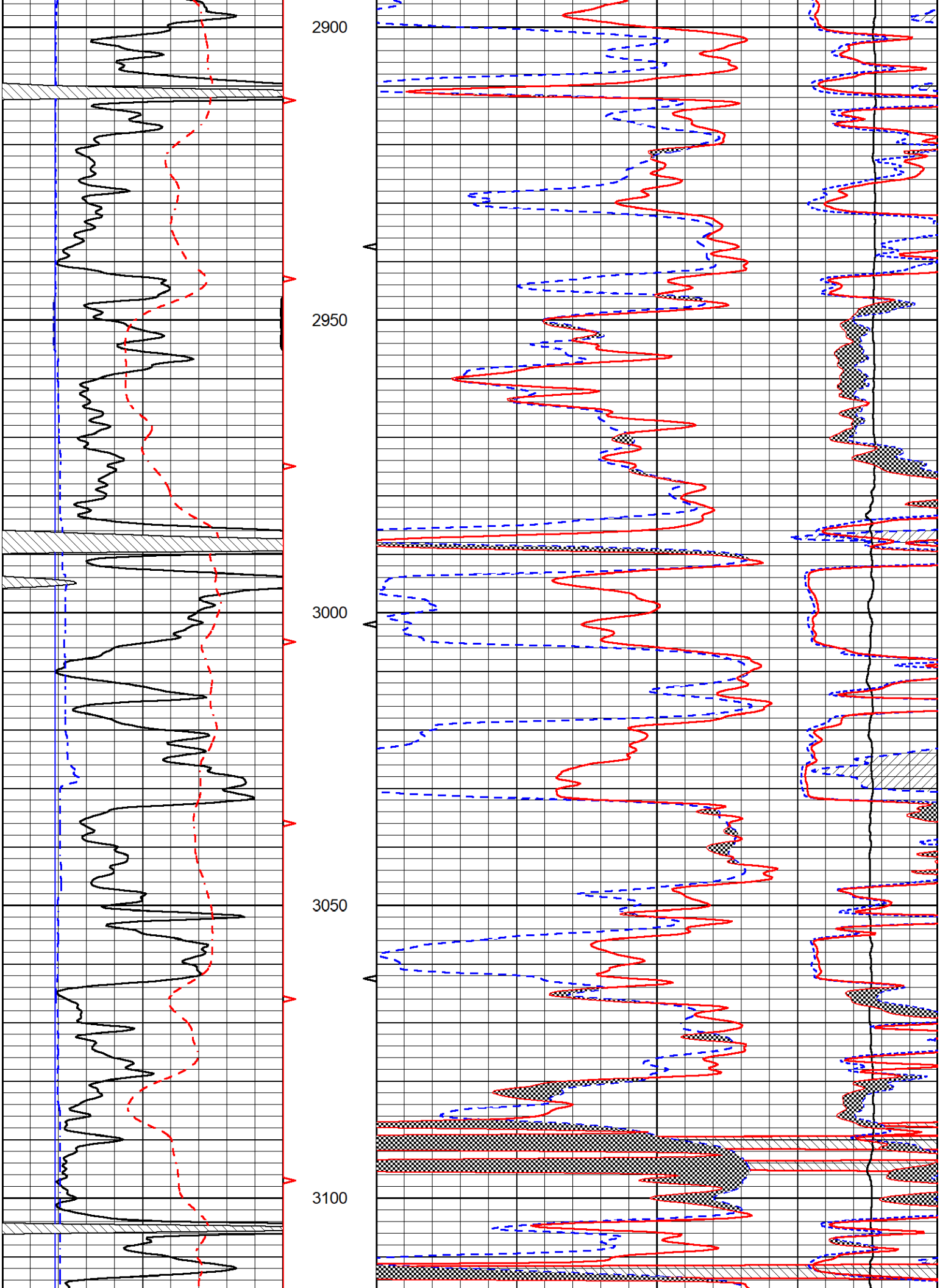
# DETAIL SECTION

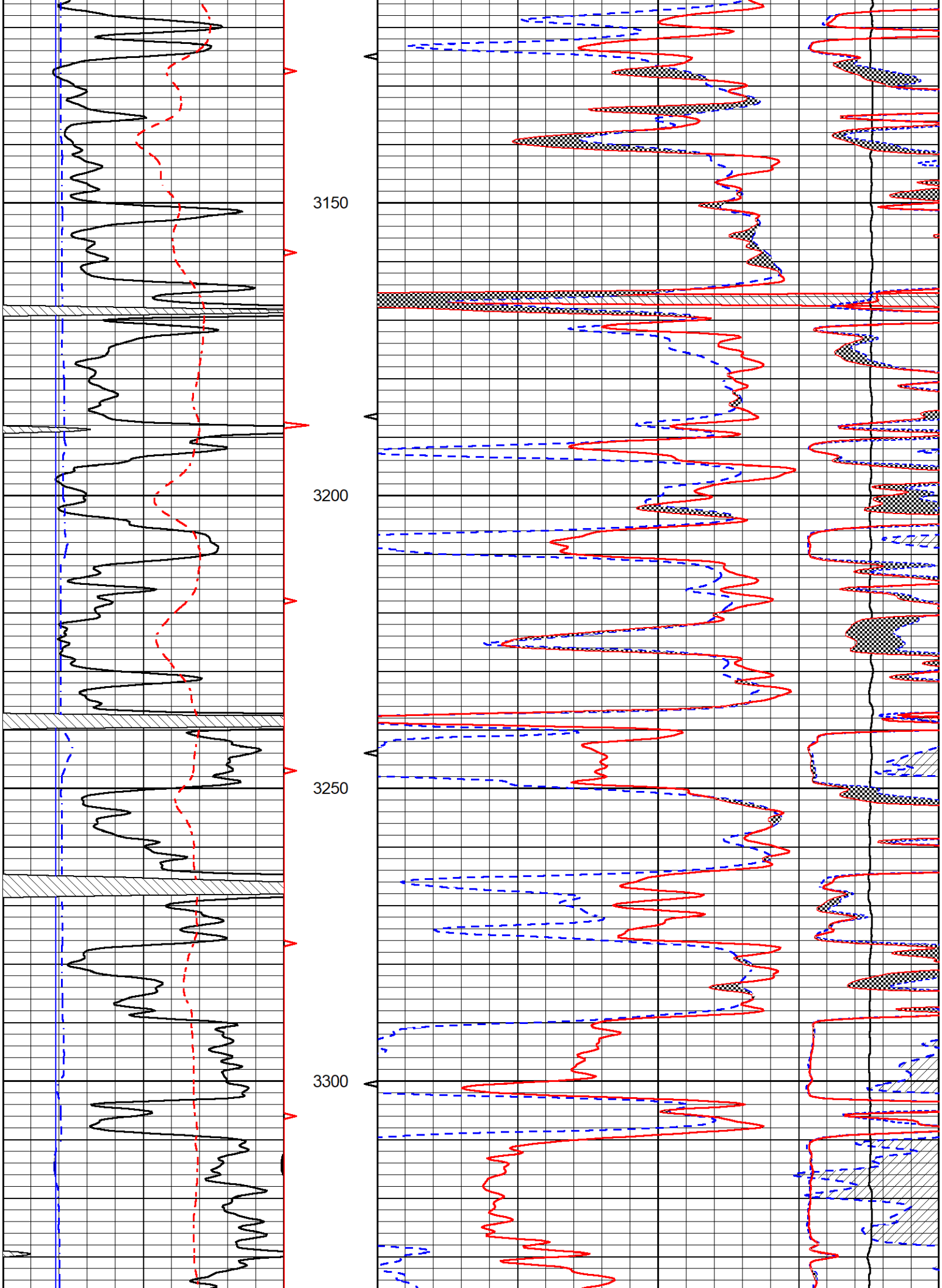
## MAIN PASS

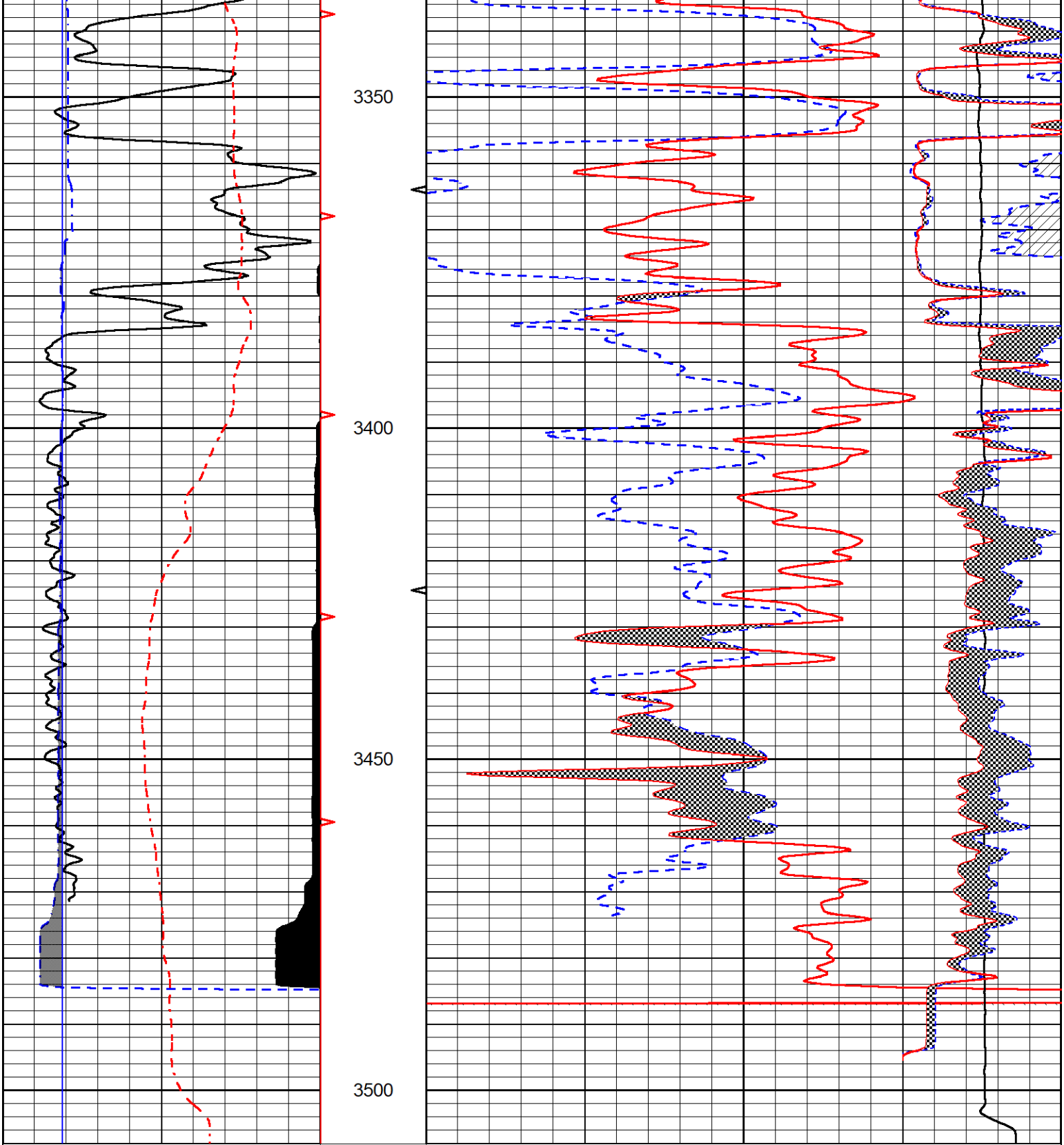
| | |
|---|---|
| Database File | berexco_gene_1.db |
| Dataset Pathname | stackml/pass4.1 |
| Presentation Format | _CNDLS~2 |
| Dataset Creation | Mon Feb 14 07:58:00 2022 |
| Charted by | Depth in Feet scaled 1:240 |




2700
2750
2800
2850


2900
2950
3000
3050
3100


3150
3200
3250
3300




REPEAT SECTION

MIDWEST WIRELINE

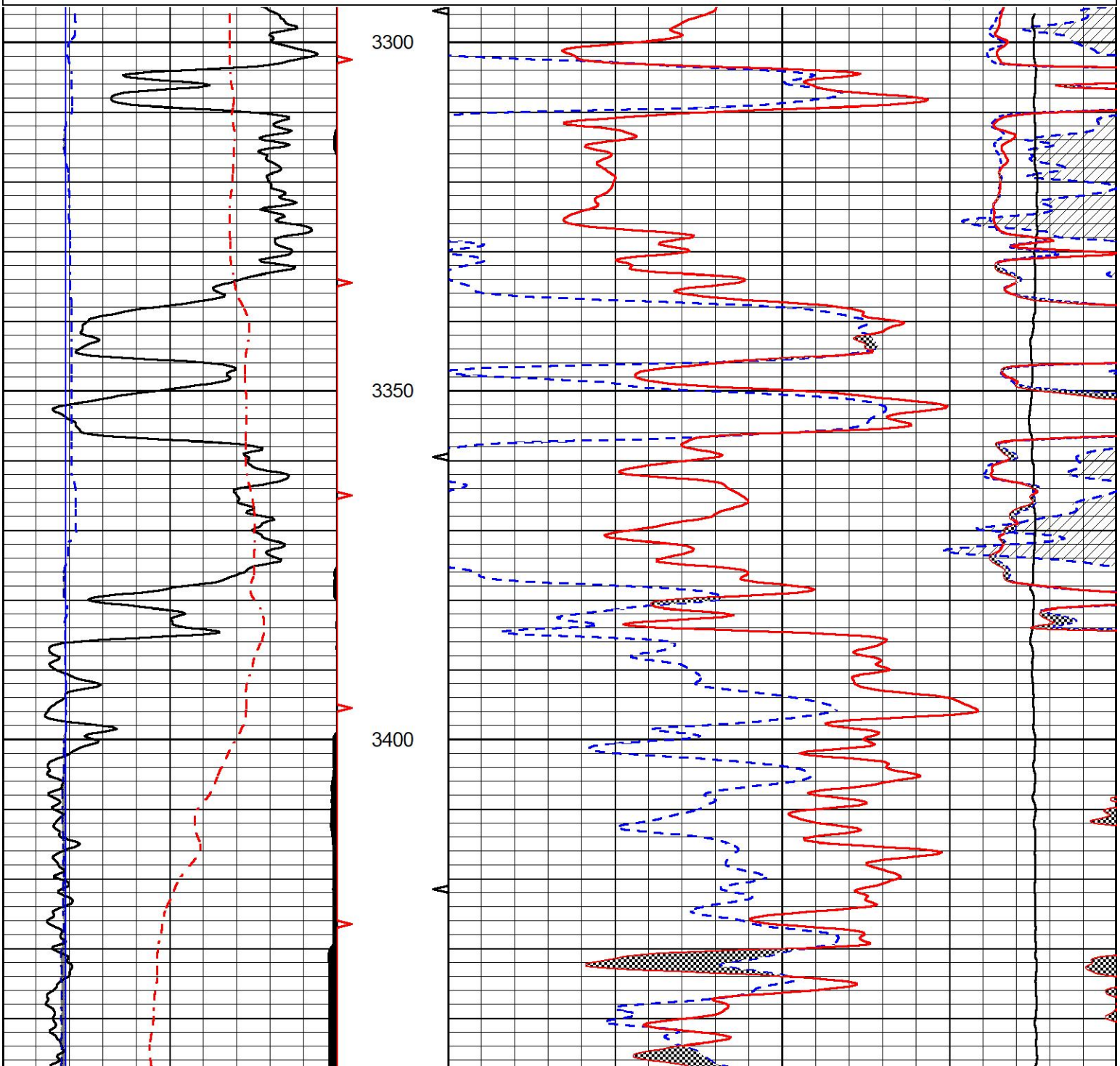
# REPEAT PASS

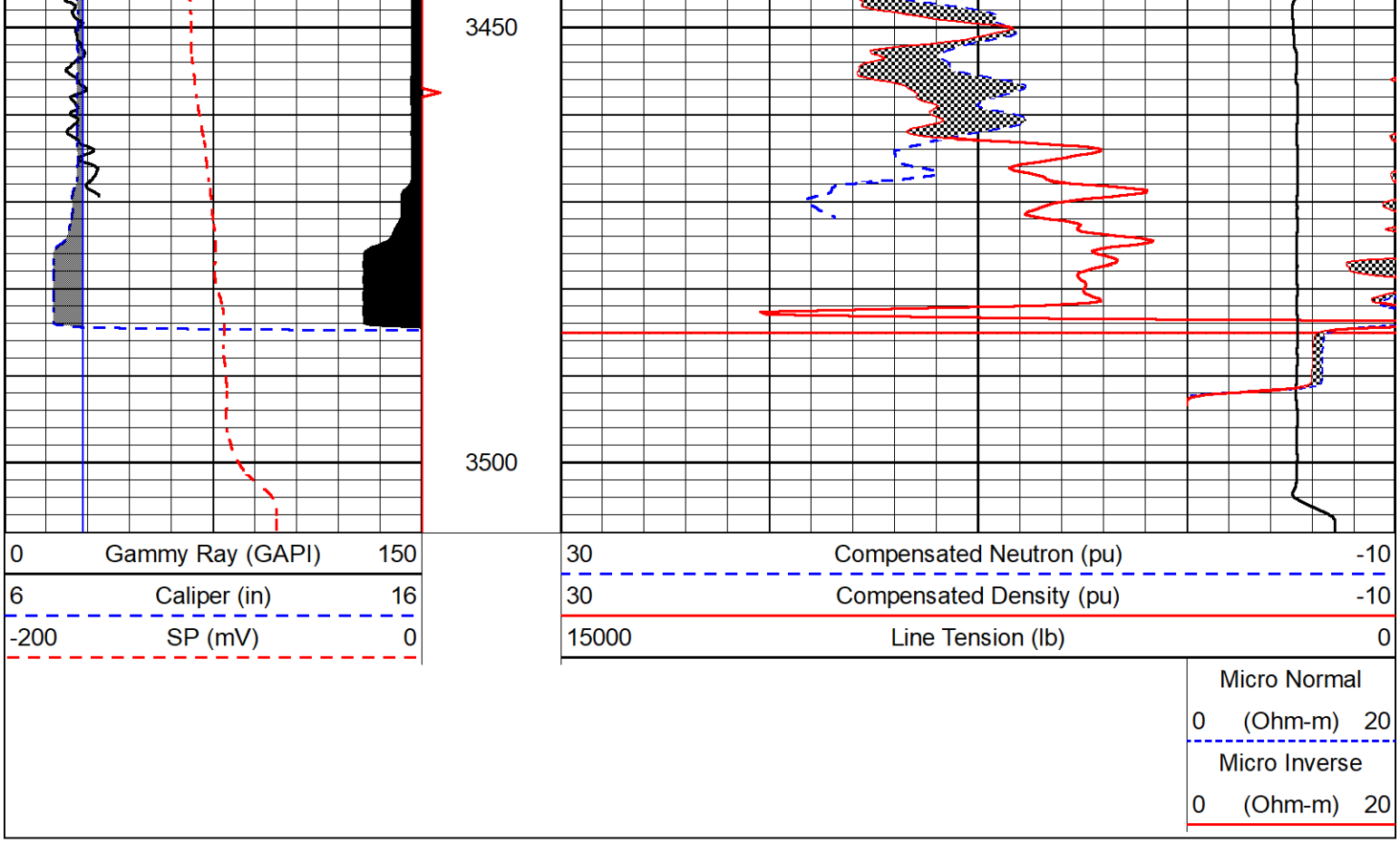
| | |
|---|---|
| Database File | berexco_gene_1.db |
| Dataset Pathname | stackml/pass2.1 |
| Presentation Format | _CNDLS~2 |
| Dataset Creation | Mon Feb 14 07:56:38 2022 |
| Charted by | Depth in Feet scaled 1:240 |

| | | |
|---|---|---|
| 0 | Gammy Ray (GAPI) | 150 |
| 6 | Caliper (in) | 16 |
| -200 | SP (mV) | 0 |

| | | |
|---|---|---|
| 30 | Compensated Neutron (pu) | -10 |
| 30 | Compensated Density (pu) | -10 |
| 15000 | Line Tension (lb) | 0 |

| | | |
|---|---|---|
| | Micro Normal | |
| 0 | (Ohm-m) | 20 |
| | Micro Inverse | |
| 0 | (Ohm-m) | 20 |






## Calibration Report

| | |
|---|---|
| Database File | berexco_gene_1.db |
| Dataset Pathname | stackml/pass4.1 |
| Dataset Creation | Mon Feb 14 07:58:00 2022 |

### Dual Induction Calibration Report

| | |
|---|---|
| Serial-Model: | 504 HT-M&W |
| Surface Cal Performed: | Thu Dec 16 22:32:49 2021 |

| | Readings | | References | | | Results | |
|---|---|---|---|---|---|---|---|
| Loop: | Air | Loop | Air | Loop | | m | b |
| Deep | 178.615 | 710.235 | 0.000 | 255.800 | mmho/m | 0.650 | -19.000 |
| Medium | 161.982 | 1441.110 | 0.000 | 255.800 | mmho/m | 0.450 | -45.500 |

### Microlog Calibration Report

| | |
|---|---|
| Serial-Model: | 402-PSI STKBL ML |
| Performed: | Thu Dec 16 22:29:48 2021 |

| | Readings | | References | | | Results | |
|---|---|---|---|---|---|---|---|
| | Zero | Cal | Zero | Cal | | m | b |
| Normal | 0.0037 | 0.0043 | 0.0000 | 10.0000 | Ohm-m | 9000.0000 | -1.0000 |
| Inverse | 0.1208 | 0.0013 | 0.0000 | 10.0000 | Ohm-m | 6000.0000 | 0.0000 |
| Caliper | 1.0020 | 1.0834 | 5.5000 | 16.5000 | in | 135.1520 | -131.2000 |

### Compensated Density Calibration Report

| | |
|---|---|
| Serial-Model: | 303-03-M&W |
| Source #: | 21170B |

| | |
|---|---|
| Master Calibration Performed: | Thu Dec 16 23:28:34 2021 |

Master Calibration

| | Density | | Far Detector | Near Detector | |
|---|---|---|---|---|---|
| Magnesium | 1.755 | g/cc | 3841.78 | 5151.73 | cps |
| Aluminum | 2.670 | g/cc | 700.98 | 3068.49 | cps |

Spine Angle = 73.06 Density/Spine Ratio = 0.515

| | Size | | Reading |
|---|---|---|---|
| Small Ring | 4.00 | in | 1.17 |
| Large Ring | 14.00 | in | 1.05 |

## Compensated Neutron Calibration Report

| | |
|---|---|
| Serial-Model: | 210-M&W |
| Source #: | N-1238 |
| Master Calibration Performed: | Fri Dec 3 09:16:24 2021 |

Master Calibration

| Detector | Readings | | Target | | Normalization |
|---|---|---|---|---|---|
| Short Space | 6240.00 | cps | 1000.00 | cps | 1.6025 |
| Long Space | 460.00 | cps | 1000.00 | cps | 1.9500 |

## Gamma Ray Calibration Report

| | | |
|---|---|---|
| Serial Number: | 103 | |
| Tool Model: | M&W | |
| Performed: | Fri Dec 3 12:13:24 2021 | |
| Calibrator Value: | 500.0 | GAPI |
| Background Reading: | 28.0 | cps |
| Calibrator Reading: | 986.0 | cps |
| Sensitivity: | 0.5700 | GAPI/cps |

MIDWEST WIRELINE

| | |
|---|---|
| Company | Berexco LLC |
| Well | Gene #1 |
| Field | |
| County | Russell |
| State | Kansas |