



HIGH RESOLUTION INDUCTION COMPENSATED DENSITY COMPENSATED NEUTRON

Pioneer Energy Services

Company Augustus Energy Resources, LLC
Well Barber 34-07 5N46W
Field Wildcat
County Yuma
State Colorado

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Field Wildcat
County Yuma
State Colorado

Location: API #: 05 125 12105

605' FSL & 1805' FEL SWSE

SEC 7 TWP 5N RGE 46W

Permanent Datum GL
Log Measured From KB
Drilling Measured From KB

Elevation
K.B. 3929
D.F. 3928
G.L. 3923

Other Services
None

Date August 26, 2014

| | |
|------------------------------|-------------------|
| Run Number | 1 |
| Depth Driller | 2912 |
| Depth Logger | 2889 |
| Bottom Logged Interval | 2889 |
| Top Log Interval | Casing |
| Casing Driller | 518 |
| Casing Logger | 524 |
| Bit Size | 6.25" |
| Type Fluid in Hole | WBM |
| Density / Viscosity | 8.6 / 31 |
| pH / Fluid Loss | 8.0 / 8.0 |
| Source of Sample | Mudpit |
| Rm @ Meas. Temp | 0.27 @ 70 F |
| Rmt @ Meas. Temp | 0.20 @ 70 F |
| Rmc @ Meas. Temp | 0.34 @ 70 F |
| Source of Rmt / Rmc | Calc / Calc |
| Rm @ BHT | 0.18 @ 108 F |
| Time Circulation Stopped | 0845 |
| Time Logger on Bottom | 1330 |
| Maximum Recorded Temperature | 108 F |
| Equipment Number | 49 |
| Location | Ft. Morgan, CO |
| Recorded By | Clint Christensen |
| Witnessed By | Justin Stone |

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

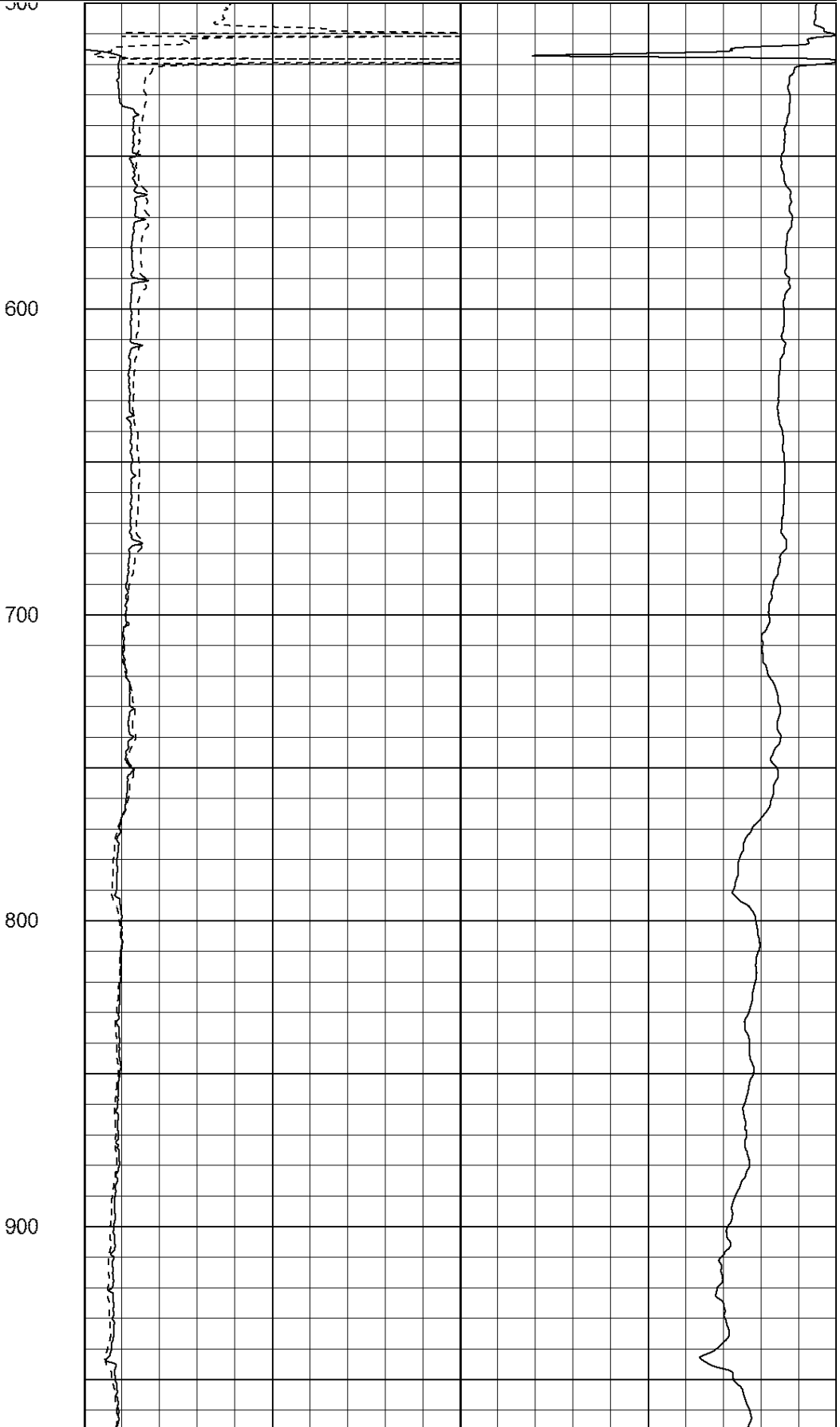
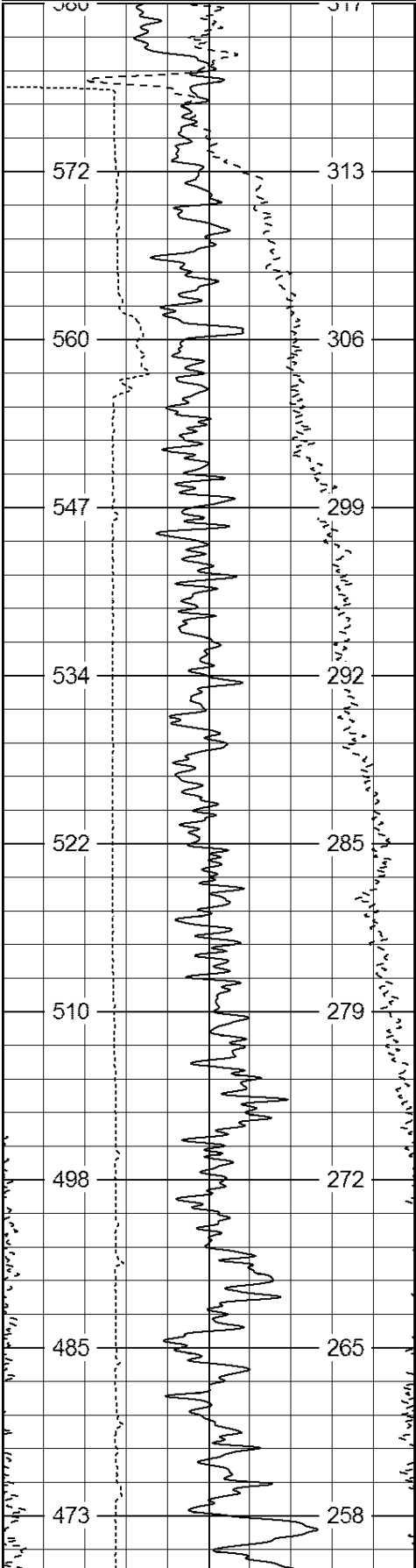
Annular volume calculated for 4.5" casing
Excell Drilling Rig 2
Thank you for using Pioneer Energy Services.
SO# 2-013678

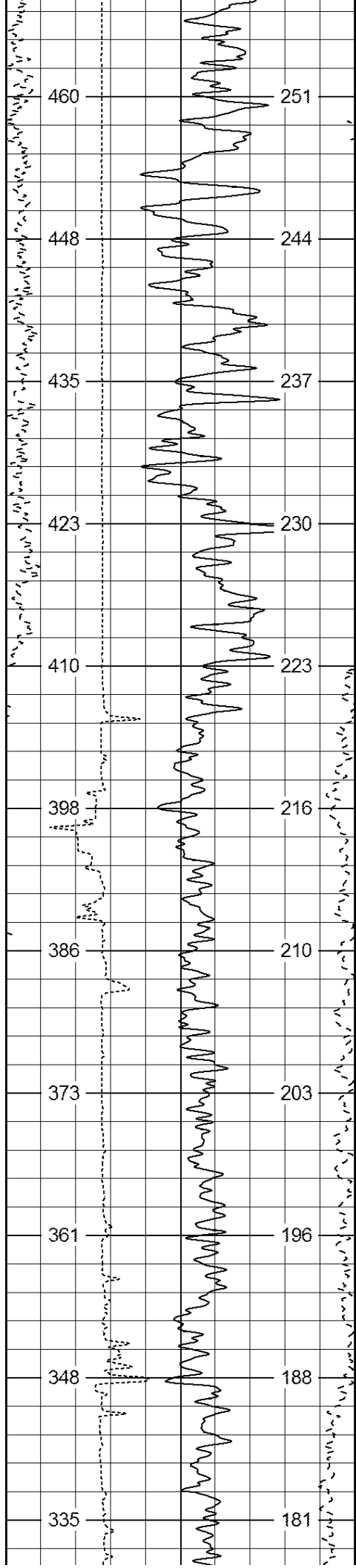
| Sensor | Offset (ft) | Schematic | Description | Len (ft) | OD (in) | Wt (lb) |
|--------|-------------|-----------|-------------|----------|---------|---------|
| | | | CHD (~0) | 2.00 | 3.50 | 30.00 |

| | | | | | | |
|--|--------|--|---------------|-------|------|--------|
| GR | 0.00 | | GR-PSI (43) | 2.92 | 3.50 | 40.00 |
| CNLSC | -3.67 | | CNT-PSI (822) | 5.00 | 3.50 | 70.00 |
| CNSSC | -4.17 | | | | | |
| | | | | | | |
| | | | CDL-PSI (771) | 8.50 | 5.00 | 285.00 |
| DCAL | -11.84 | | | | | |
| LSD | -12.67 | | | | | |
| SSD | -13.17 | | | | | |
| | | | | | | |
| RLL3 | -17.52 | | | | | |
| | | | | | | |
| | | | DIL-PSI (53) | 18.25 | 3.75 | 175.00 |
| CILD | -24.97 | | | | | |
| | | | | | | |
| CILM | -28.42 | | | | | |
| | | | | | | |
| SP | -32.42 | | | | | |
| <div> <div>Dataset:</div> <div>13678.db: field/well/run1/Final</div> <div>Total Length:</div> <div>36.67 ft</div> <div>Total Weight:</div> <div>600.00 lb</div> <div>O.D.:</div> <div>5.00 in</div> </div> | | | | | | |

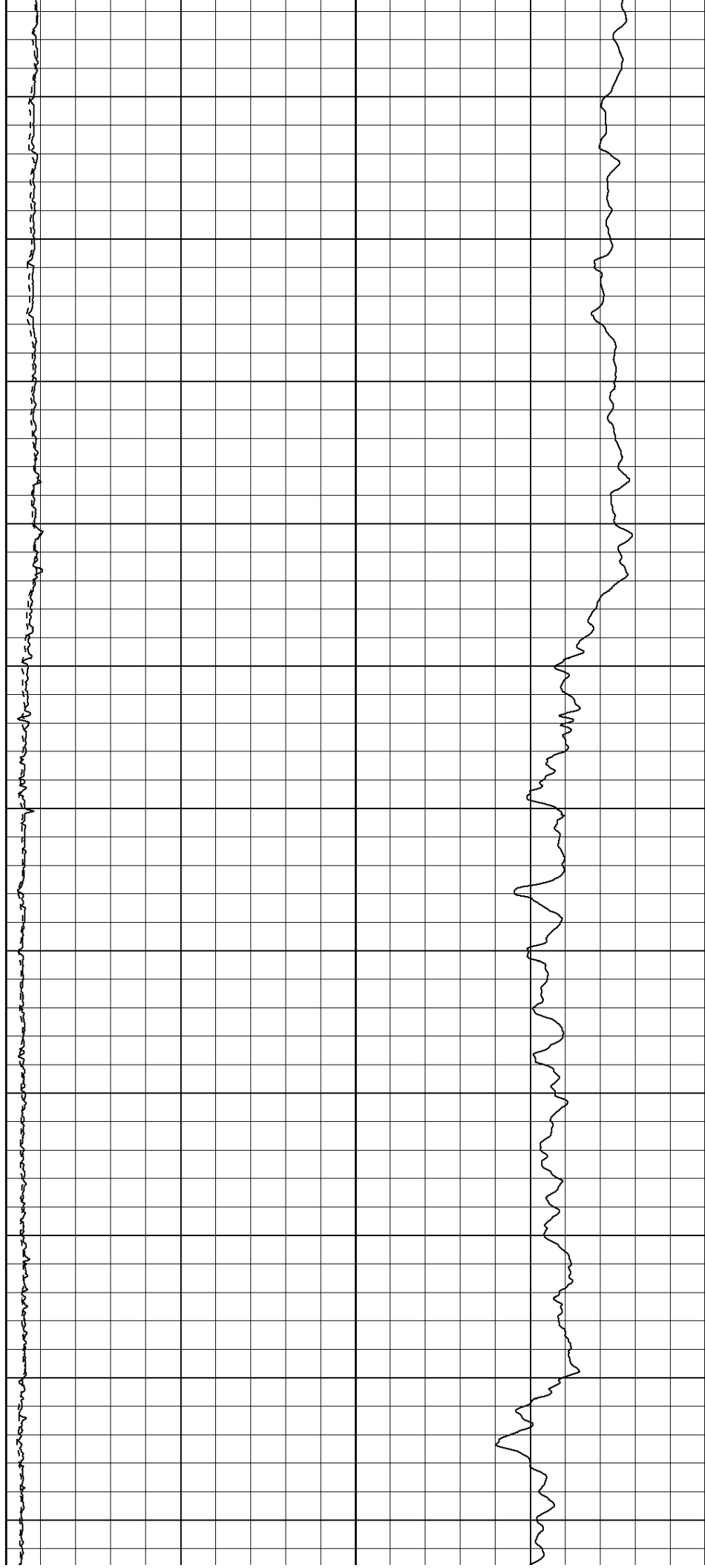
| | | |
|------------|------------------|------------|
| 0 | Gamma Ray (GAPI) | 200 |
| 0 | SP (mV) | 200 |
| 4 | Caliper (in) | 14 |
| TBHV (ft3) | | ABHV (ft3) |

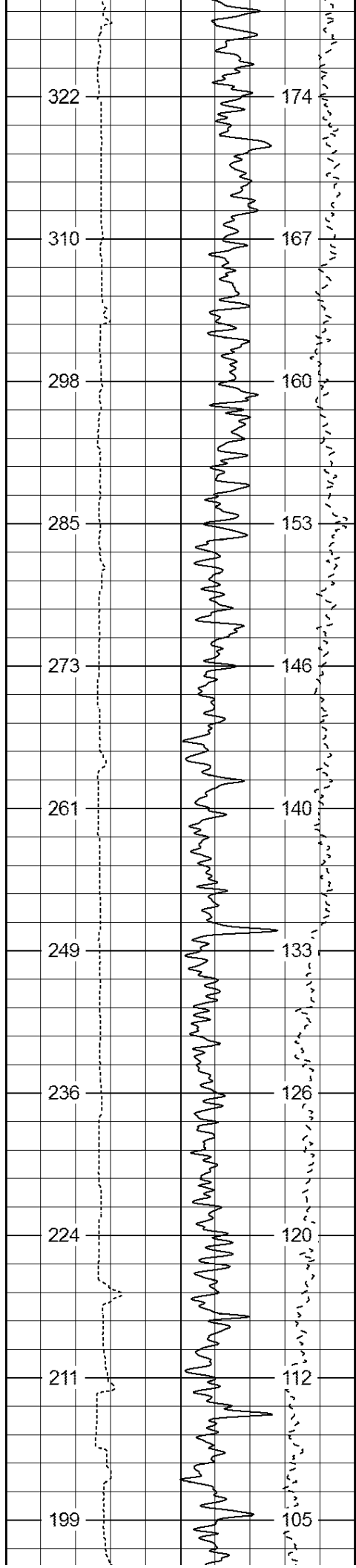
| | | | | | |
|----|-----------------------------|-----|------|---------------|---|
| 0 | Deep Resistivity (Ohm-m) | 50 | 1000 | CILD (mmho/m) | 0 |
| 0 | Shallow Resistivity (Ohm-m) | 50 | | | |
| 50 | RILD (Ohm-m) | 500 | | | |
| 50 | RLL3 (Ohm-m) | 500 | | | |





1000
1100
1200
1300
1400
1500





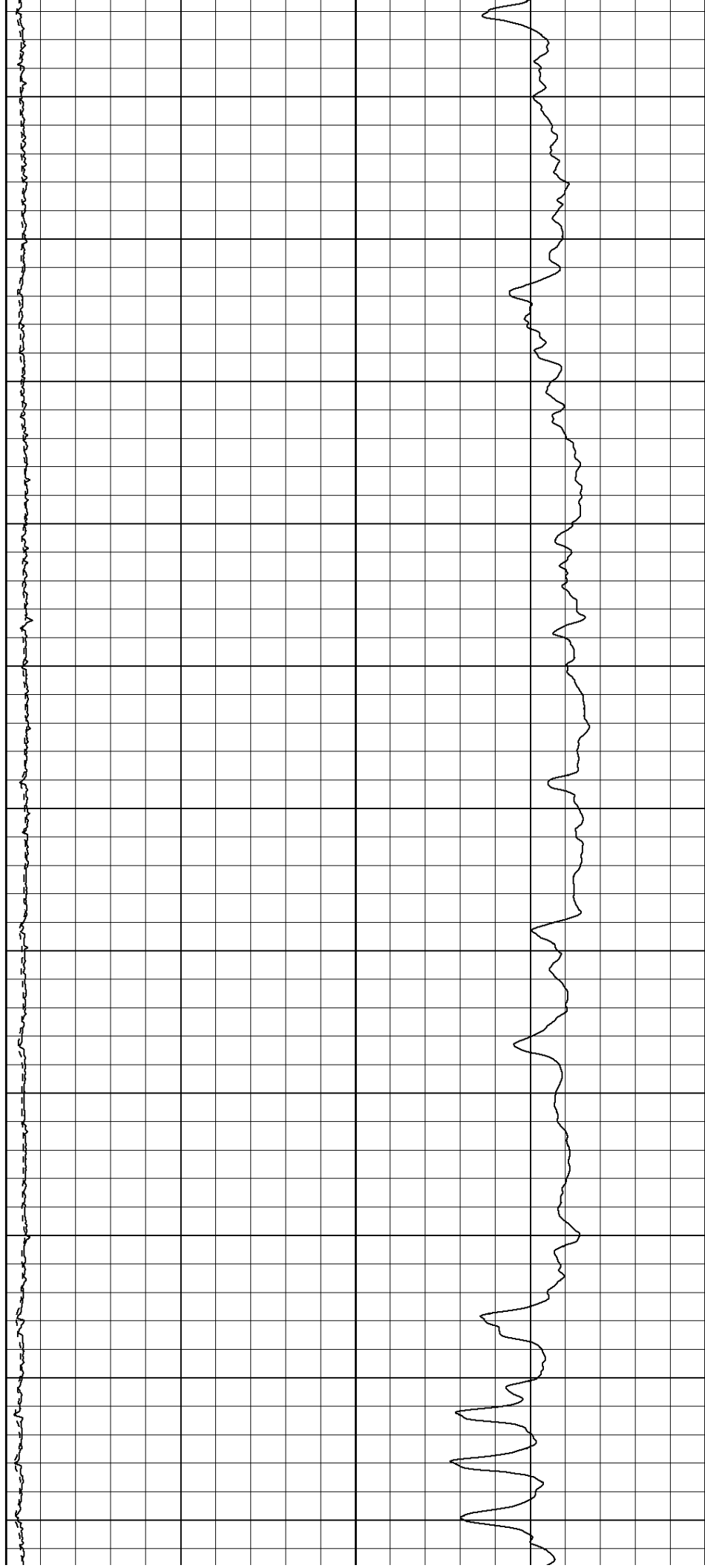
1600

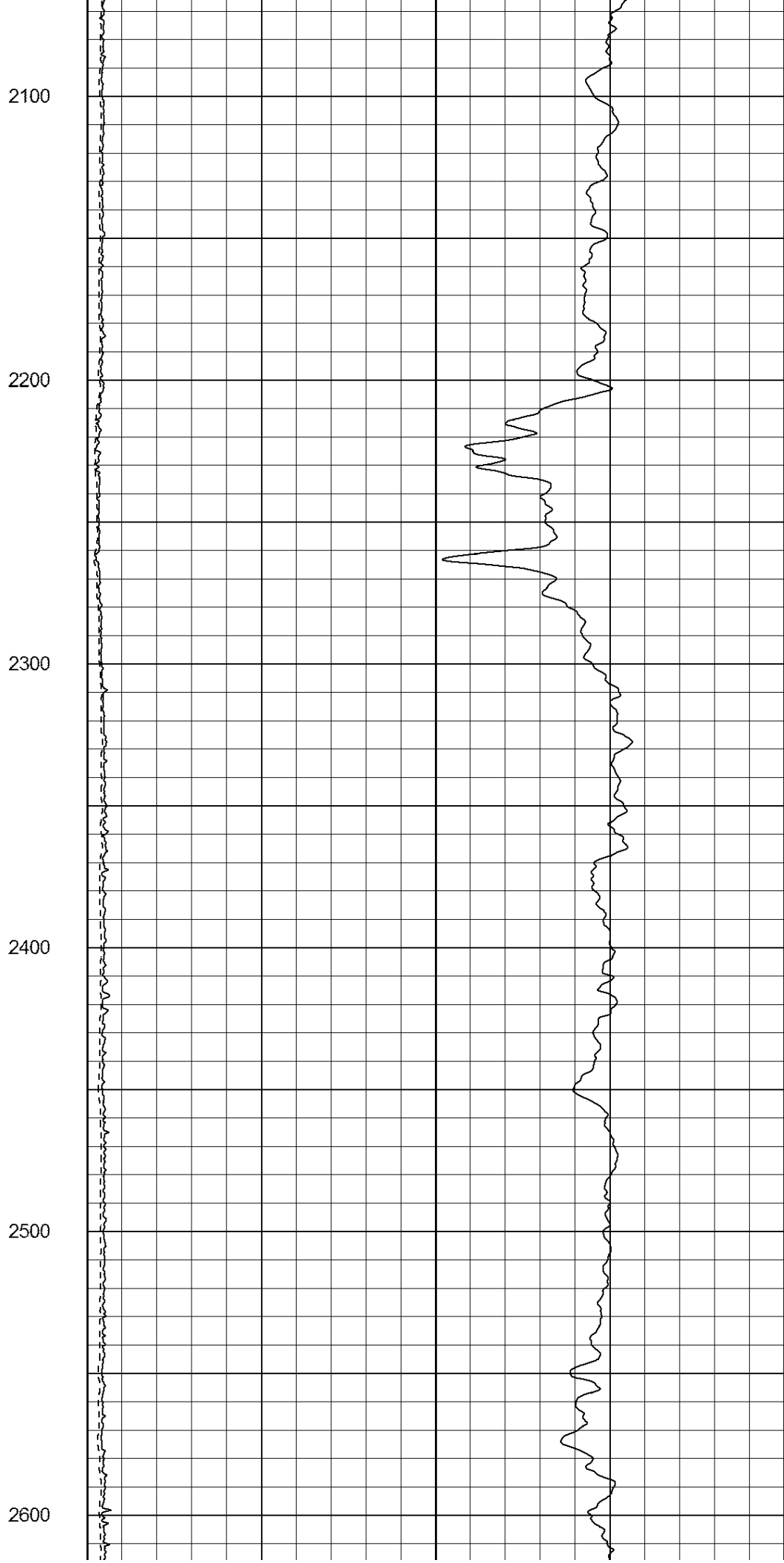
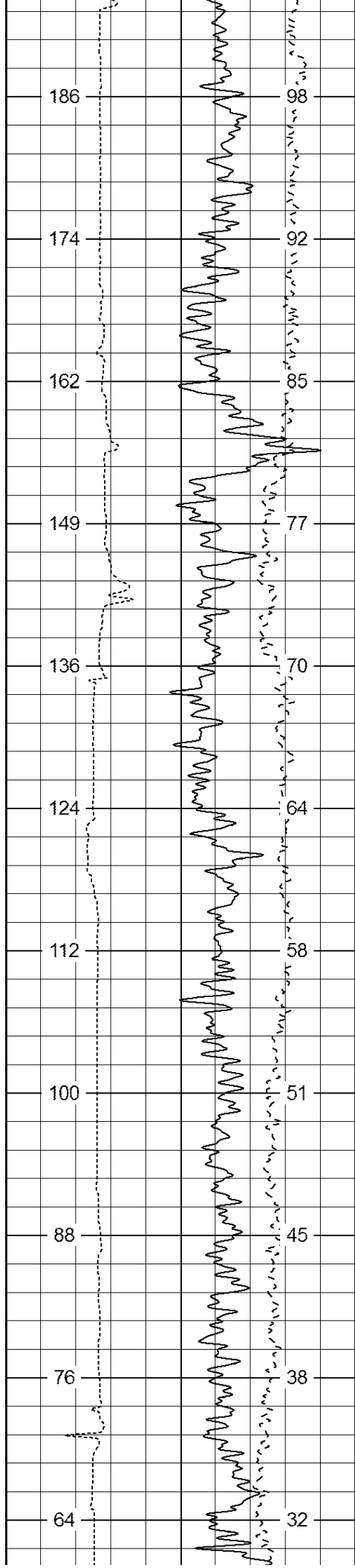
1700

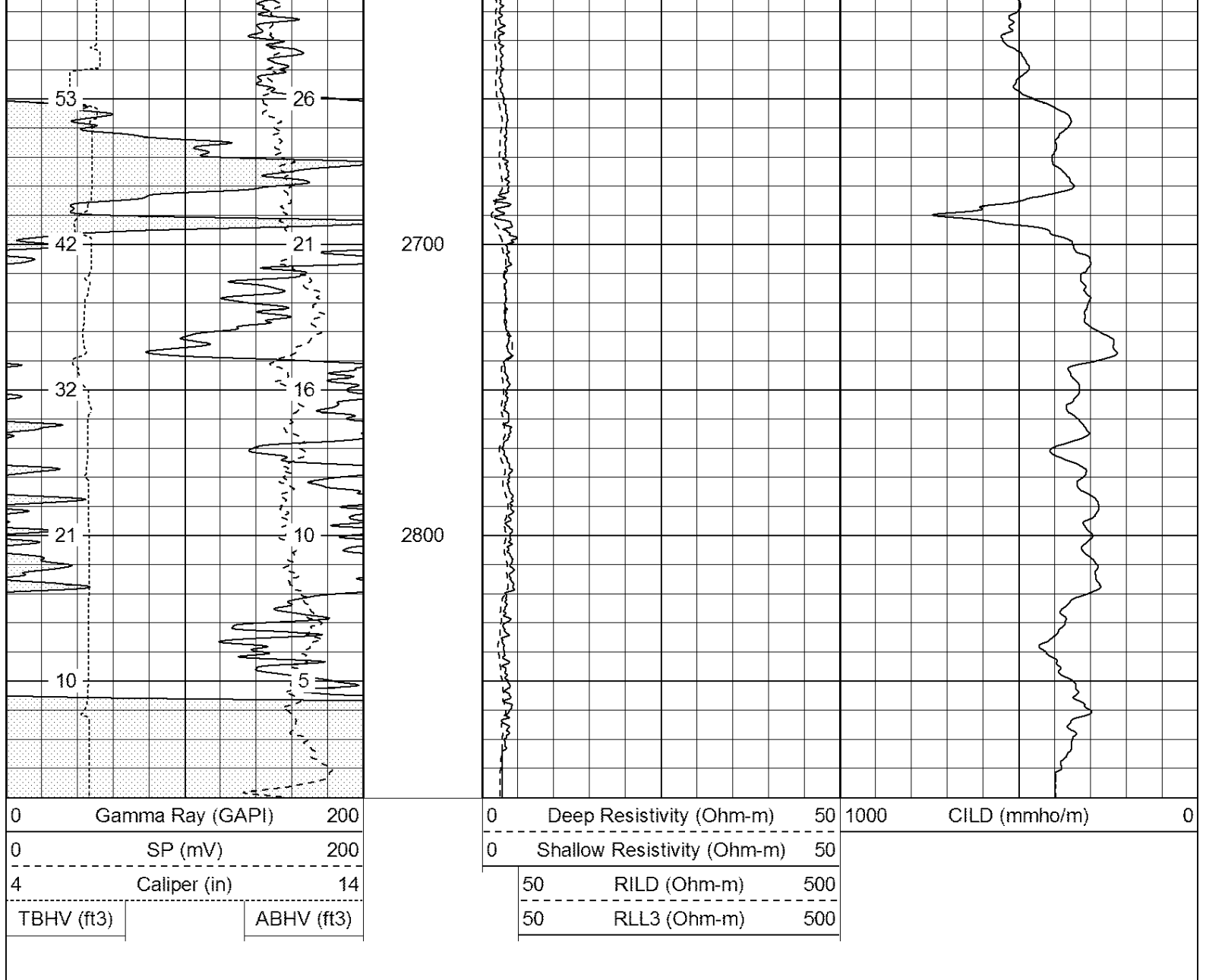
1800

1900

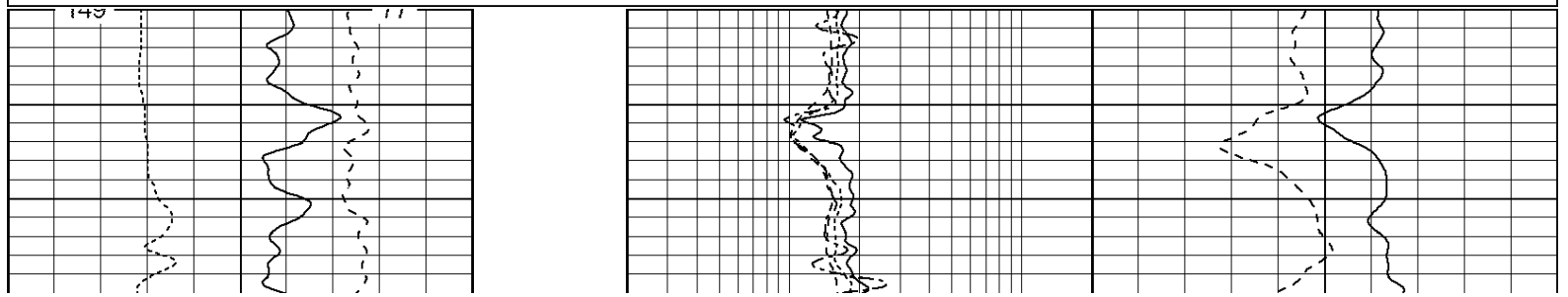
2000

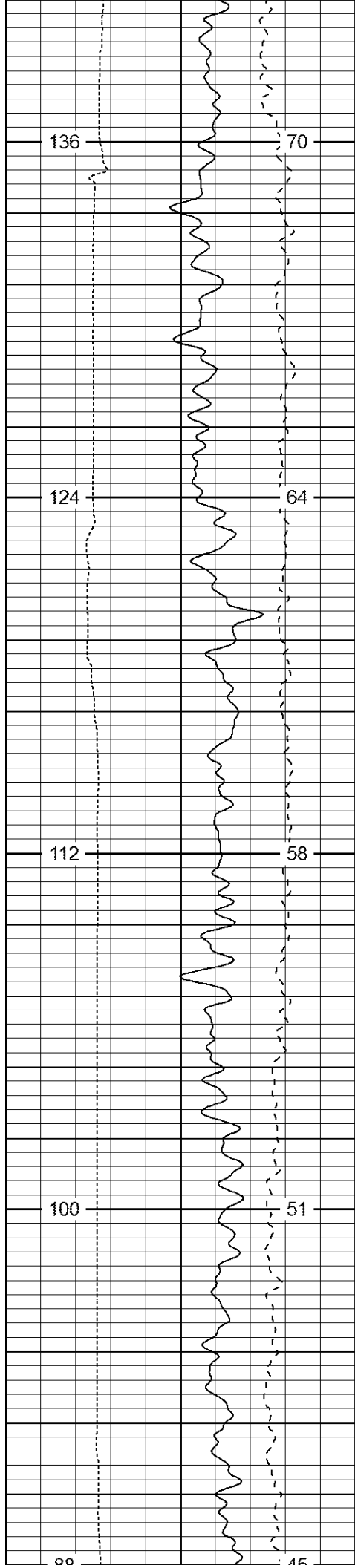






| | | | | | | | | | |
|--|--|----------------|------------------------------------|---------------------------------|--|--|----------------------------|--|--|
| Database File: 13678.db | | | | | | | | | |
| Dataset Pathname: Final | | | | | | | | | |
| Presentation Format: pdce | | | | | | | | | |
| Dataset Creation: Tue Aug 26 15:34:47 2014 | | | | | | | | | |
| Charted by: Depth in Feet scaled 1:240 | | | | | | | | | |
| 0 Gamma Ray (GAPI) 200 | | | 0.2 Deep Resistivity (Ohm-m) 20 | | | | 60 Density Porosity (pu) 0 | | |
| 0 SP (mV) 200 | | | 0.2 Shallow Resistivity (Ohm-m) 20 | | | | 60 Neutron Porosity (pu) 0 | | |
| 4 Caliper (in) 14 | | | 0.2 Medium Resistivity (Ohm-m) 20 | | | | | | |
| TBHV (cu. ft.) | | ABHV (cu. ft.) | | 0.2 True Resistivity (Ohm-m) 20 | | | | | |
| (ft3) | | (ft3) | | | | | | | |

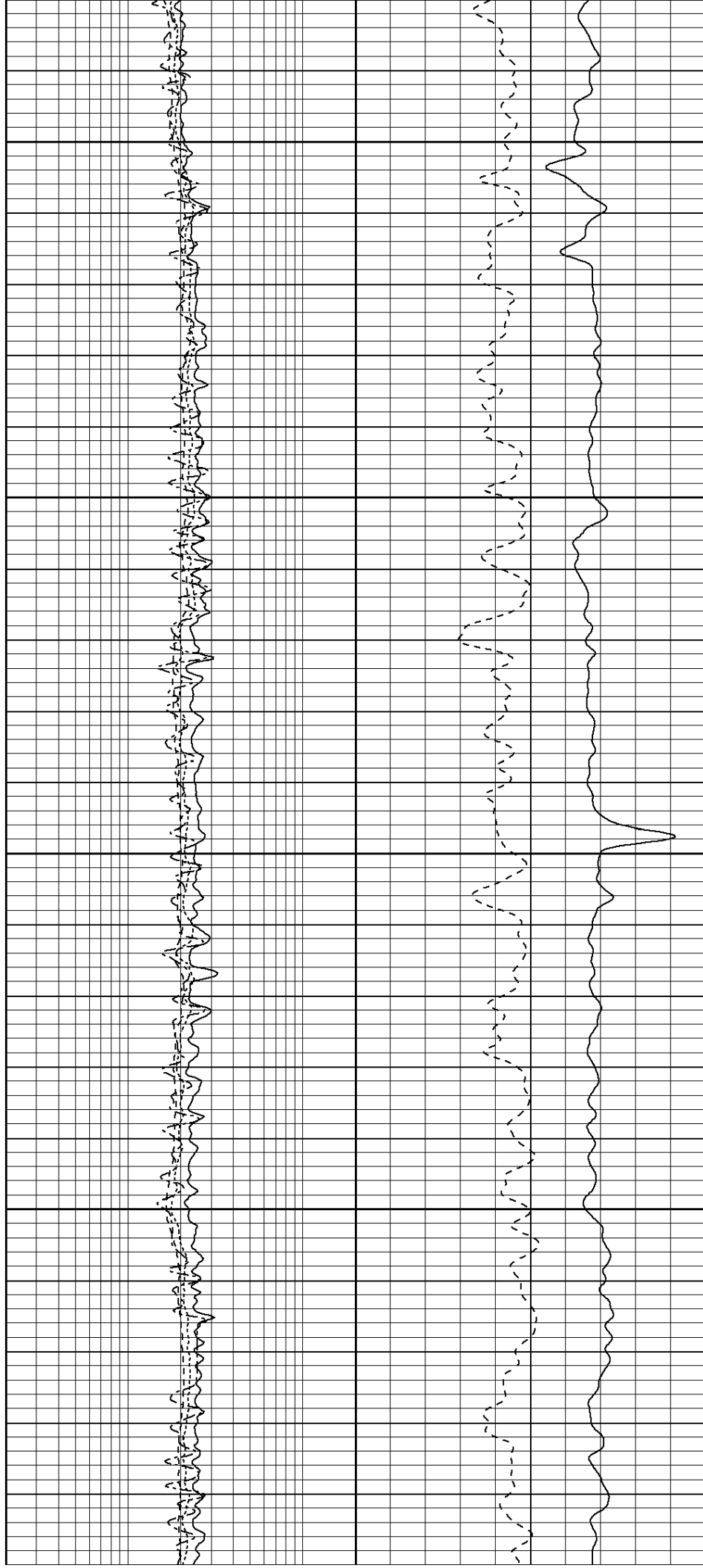


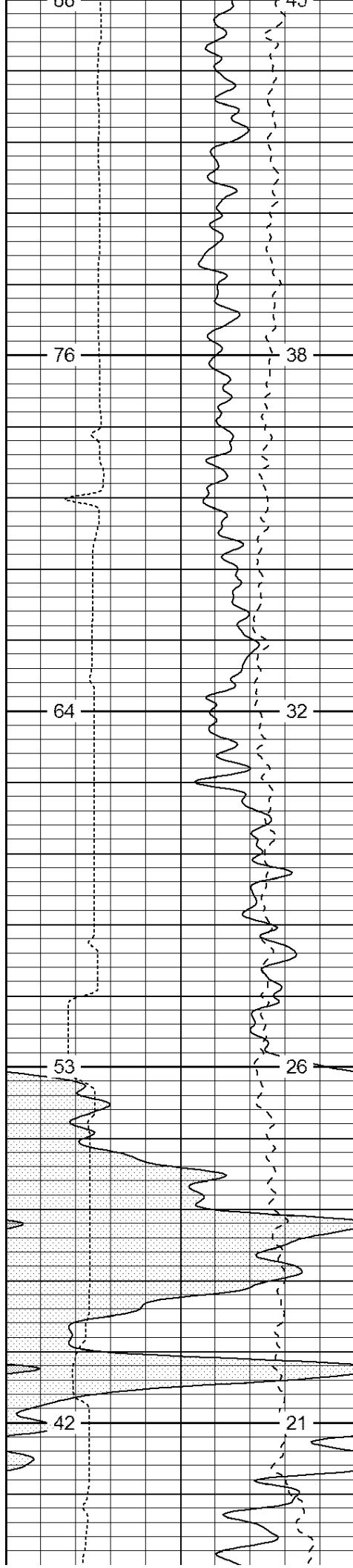


2300

2400

2500

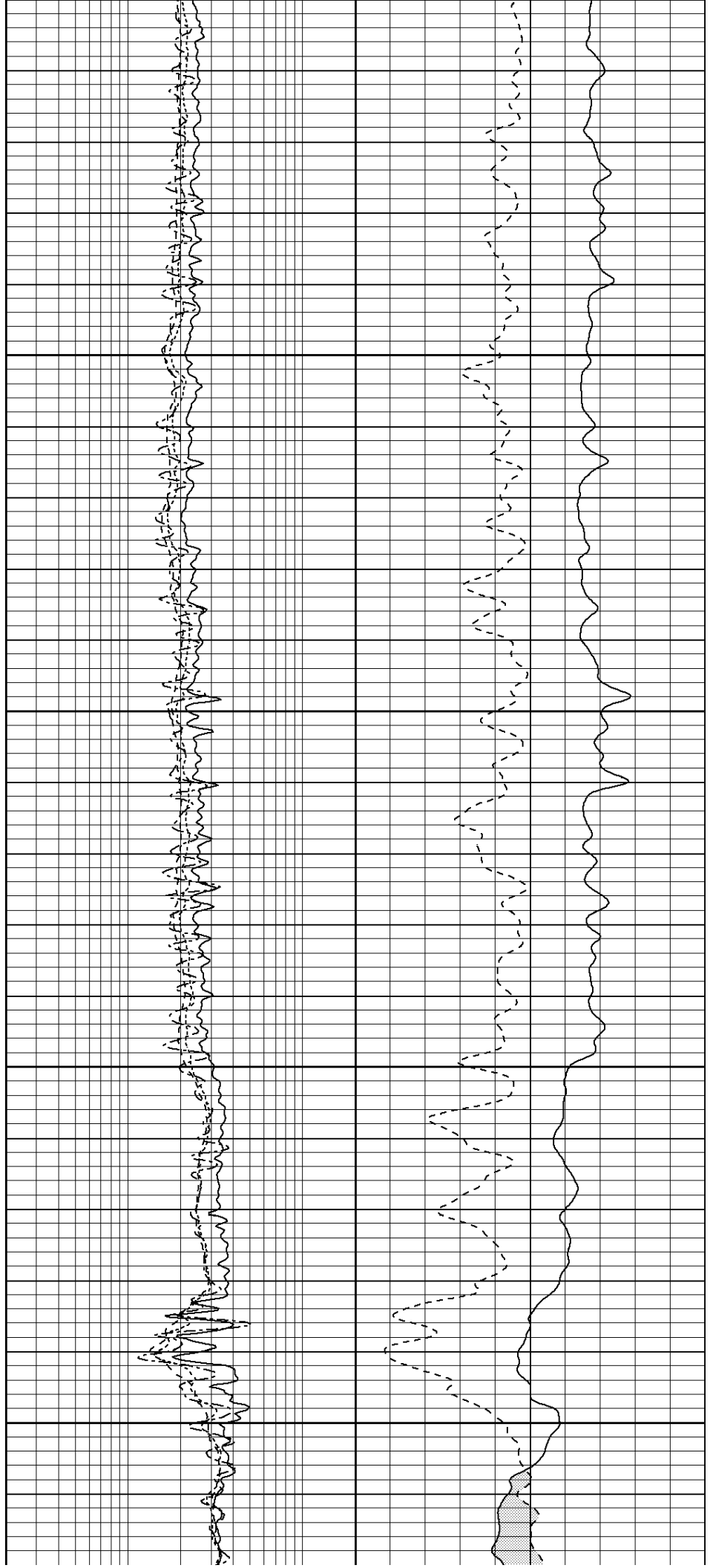


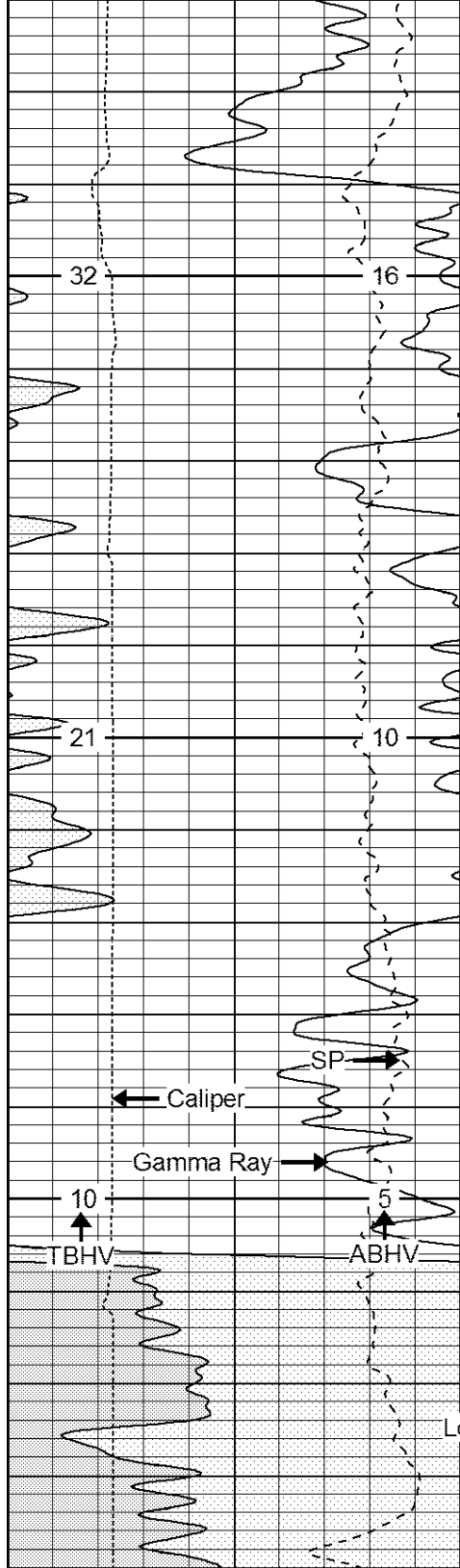


2500

2600

2700

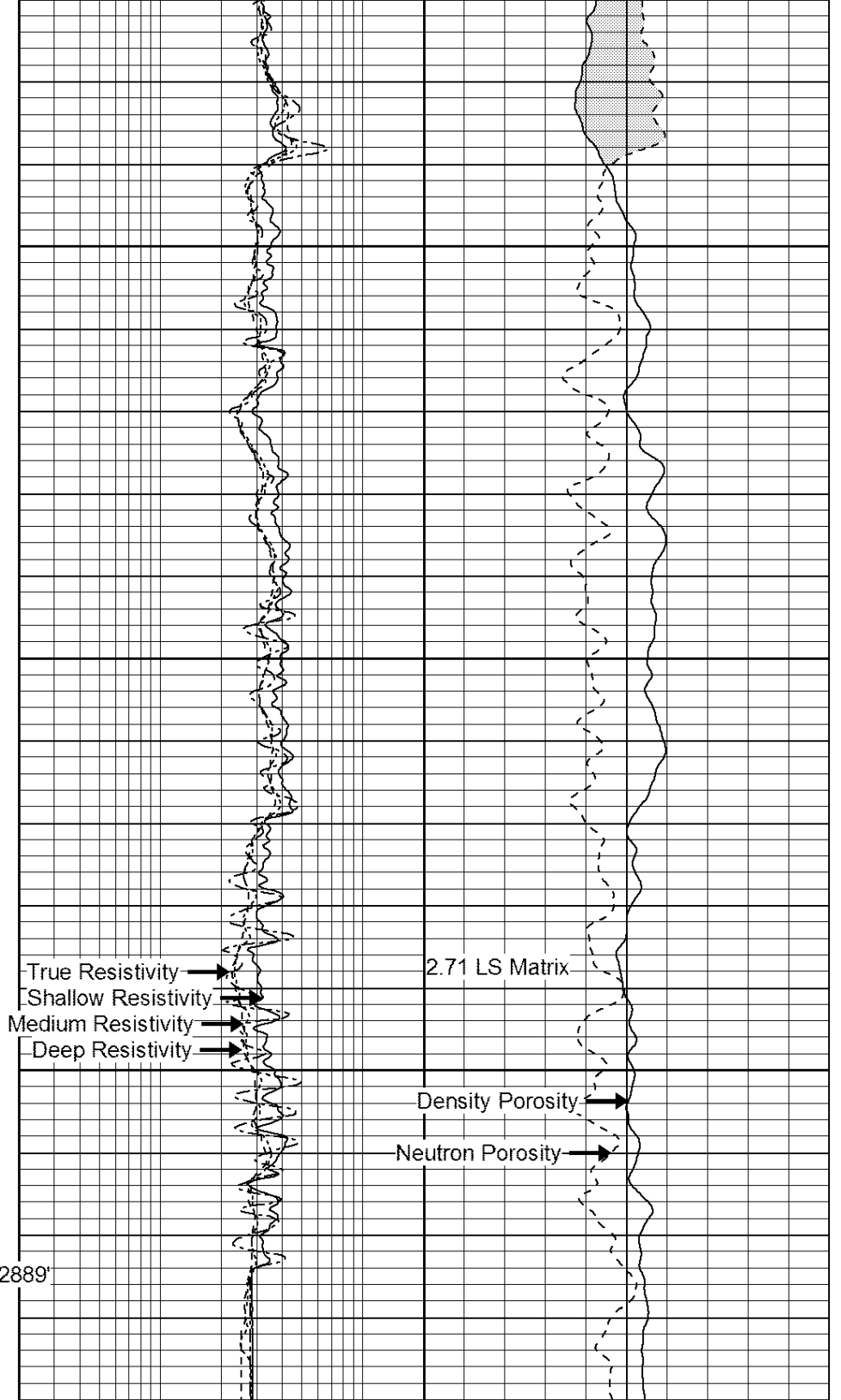




2800

Loggers TD: 2889'

| | | |
|----------------|------------------|-----|
| 0 | Gamma Ray (GAPI) | 200 |
| 0 | SP (mV) | 200 |
| 4 | Caliper (in) | 14 |
| TBHV (cu. ft.) | ABHV (cu. ft.) | |
| (ft3) | (ft3) | |



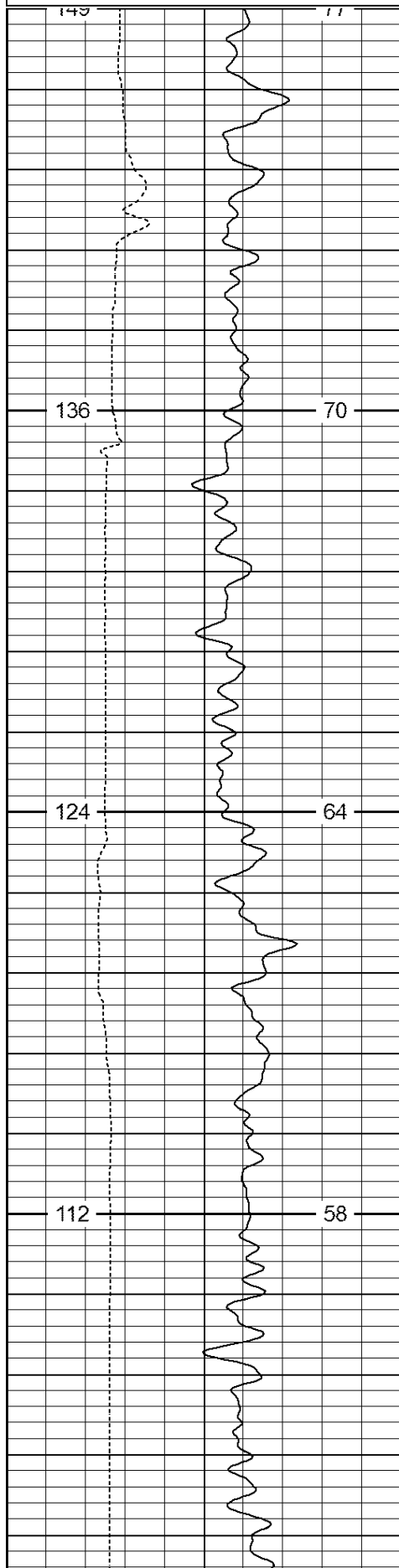
| | | | | | |
|-----|-----------------------------|----|----|-----------------------|---|
| 0.2 | Deep Resistivity (Ohm-m) | 20 | 60 | Density Porosity (pu) | 0 |
| 0.2 | Shallow Resistivity (Ohm-m) | 20 | 60 | Neutron Porosity (pu) | 0 |
| 0.2 | Medium Resistivity (Ohm-m) | 20 | | | |
| 0.2 | True Resistivity (Ohm-m) | 20 | | | |

Charted by:

Depth in Feet scaled 1:240

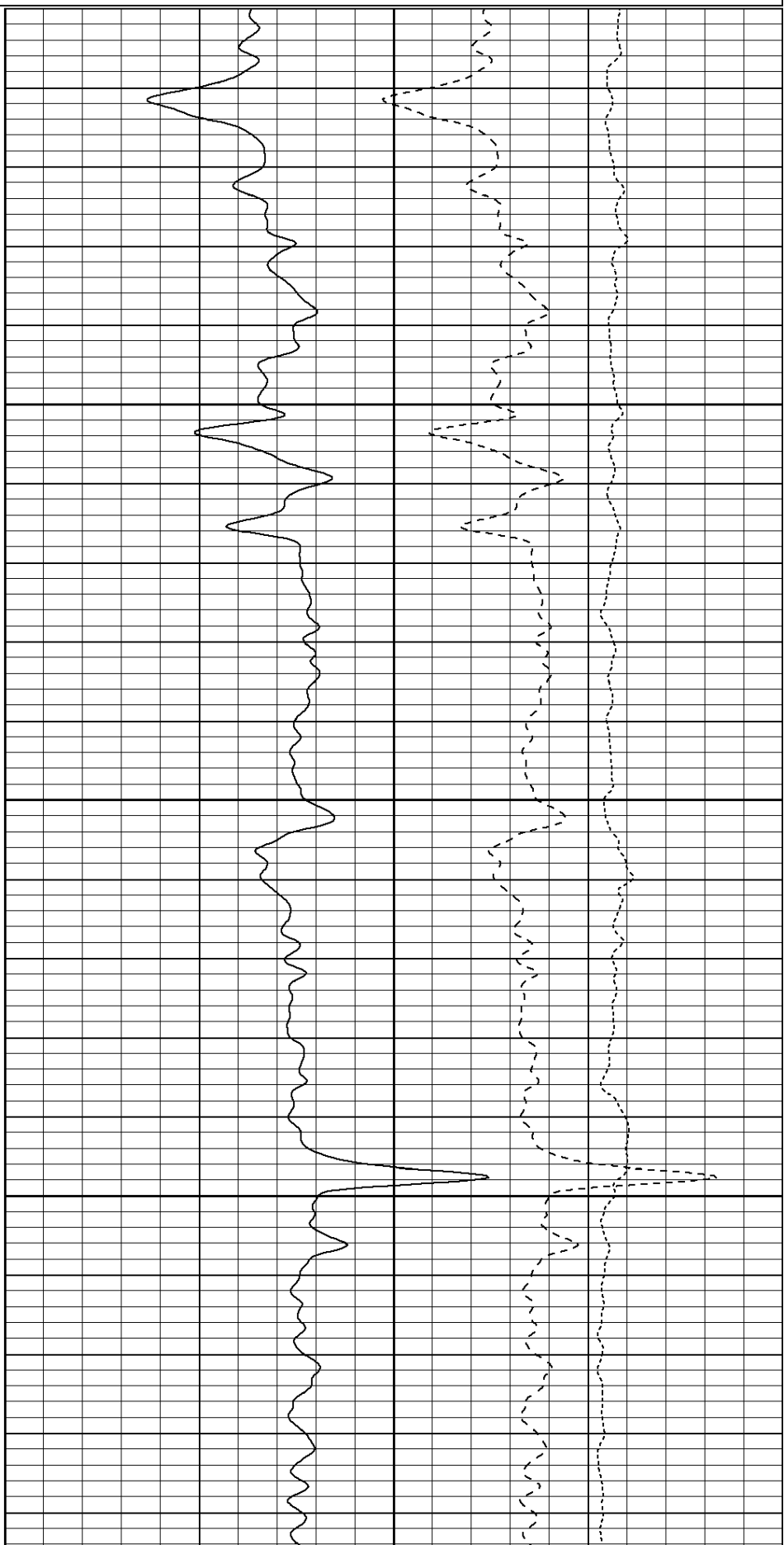
| | | |
|------------|------------------|------------|
| 4 | Caliper (in) | 14 |
| 0 | Gamma Ray (GAPI) | 200 |
| TBHV (ft3) | | ABHV (ft3) |

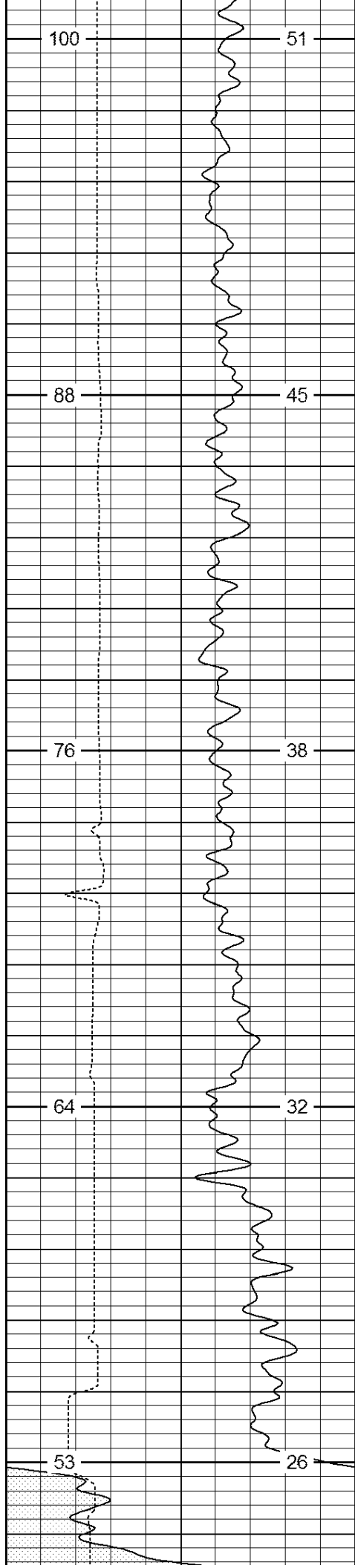
| | | |
|------|-----------------------|-----|
| 2 | Bulk Density (g/cc) | 3 |
| 60 | Density Porosity (pu) | 0 |
| -0.5 | Corr (g/cc) | 0.5 |



2300

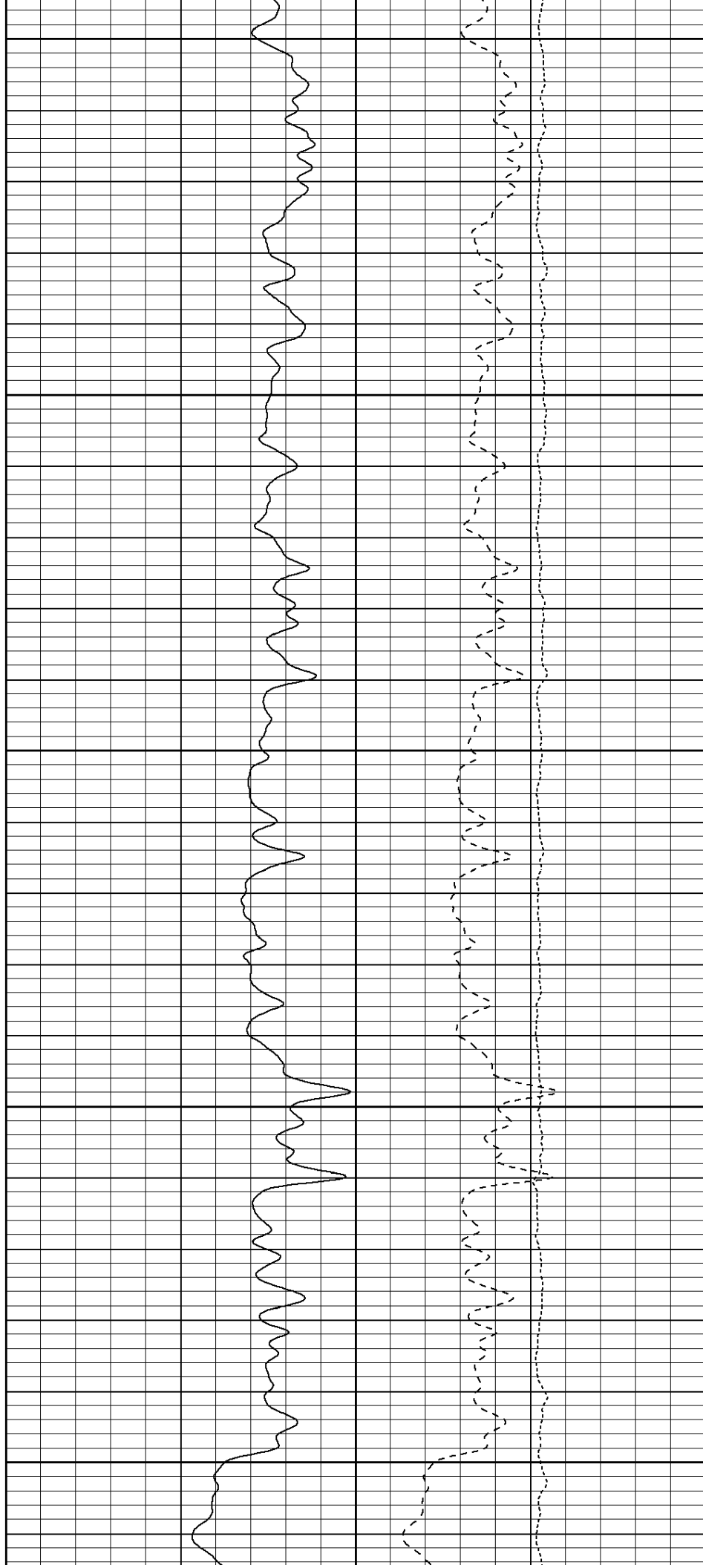
2400

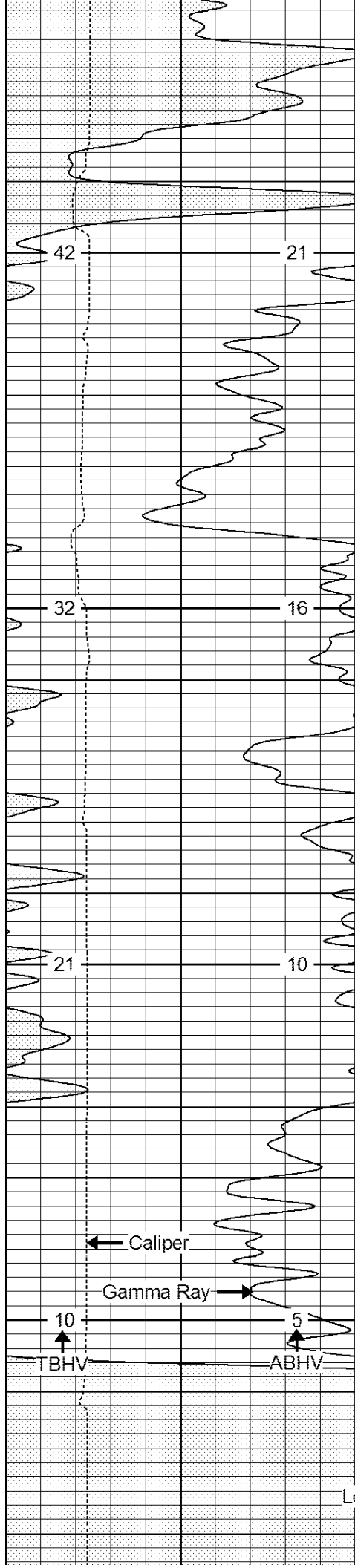




2500

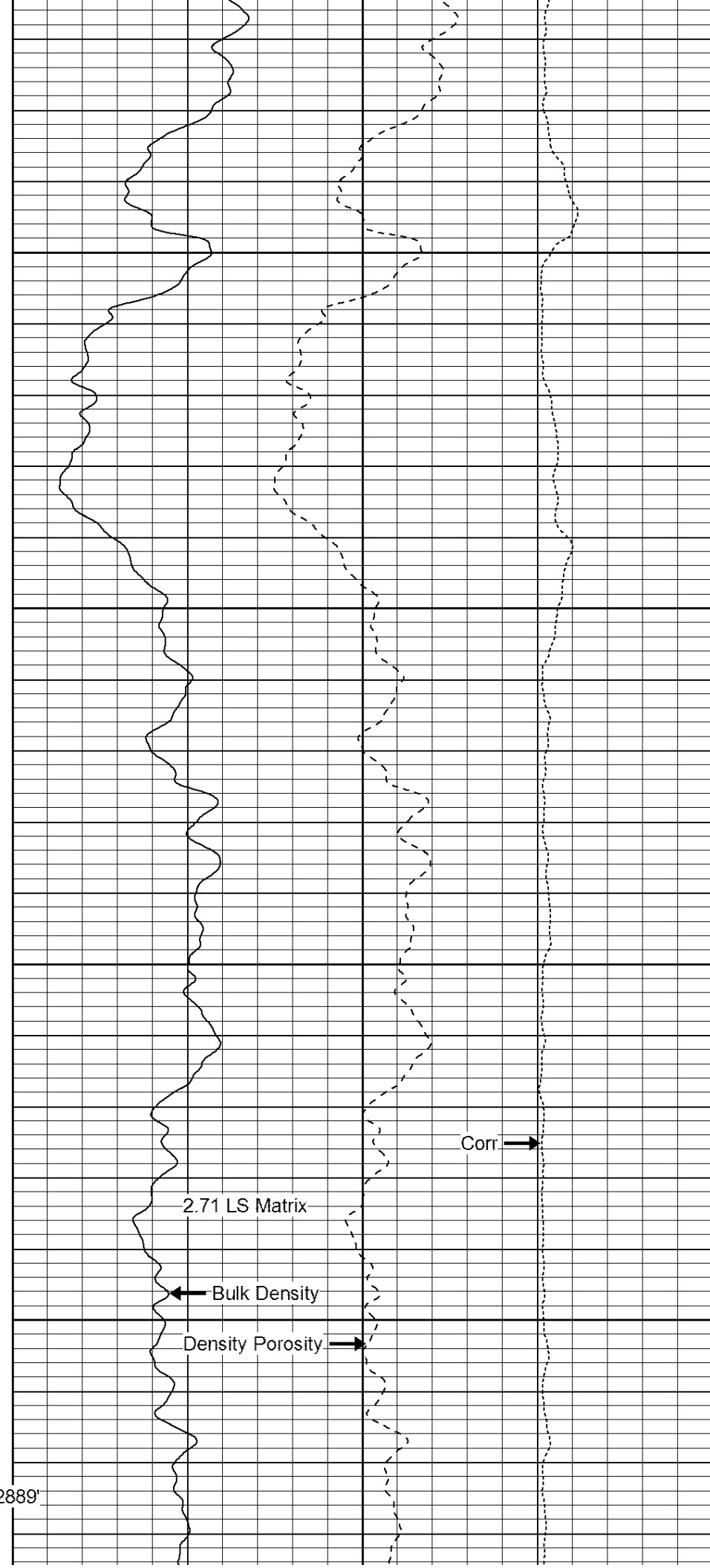
2600





2700

2800



Corr. →

2.71 LS Matrix

← Bulk Density

Density Porosity →

| | | | | | |
|------------|------------------|------------|------|-----------------------|-----|
| 4 | Caliper (in) | 14 | 2 | Bulk Density (g/cc) | 3 |
| 0 | Gamma Ray (GAPI) | 200 | 60 | Density Porosity (pu) | 0 |
| TBHV (ft3) | | ABHV (ft3) | -0.5 | Corr (g/cc) | 0.5 |

| | | | | | |
|--------------------|--------------------------|--|--|--|--|
| Calibration Report | | | | | |
| Database File: | 13678.db | | | | |
| Dataset Pathname: | Final | | | | |
| Dataset Creation: | Tue Aug 26 15:34:47 2014 | | | | |

| | | | | | |
|-----------------------------------|--|--|--|--|--|
| Dual Induction Calibration Report | | | | | |
|-----------------------------------|--|--|--|--|--|

| | | | | | |
|------------------------|--------|--|--|--|--|
| Serial-Model: | 53-PSI | | | | |
| Surface Cal Performed: | | | | | |

| | | Readings | | References | | Results | |
|--------|-------|----------|-------|------------|--------|---------|---------|
| Loop: | Air | Loop | Air | Loop | | m | b |
| Deep | 0.000 | 1.000 | 0.000 | 1.000 | mmho/m | 0.650 | -18.000 |
| Medium | 0.000 | 1.000 | 0.000 | 1.000 | mmho/m | 0.415 | -16.000 |

| | | | | | |
|--|--|--|--|--|--|
| Compensated Density Calibration Report | | | | | |
|--|--|--|--|--|--|

| | | | | | |
|-------------------------------|--------------------------|--|--|--|--|
| Serial-Model: | 771-PSI | | | | |
| Master Calibration Performed: | Wed Aug 20 14:19:31 2014 | | | | |

| | | | | | |
|--------------------|---------|------|--------------|---------------|-----|
| Master Calibration | | | | | |
| | Density | | Far Detector | Near Detector | |
| Magnesium | 1.750 | g/cc | 6323.60 | 8557.33 | cps |
| Aluminum | 2.690 | g/cc | 1148.13 | 5455.46 | cps |
| | Size | | Reading | | |
| Small Ring | | in | | | |
| Medium Ring | | in | | | |
| Large Ring | | in | | | |

| | | | | | |
|--|--|--|--|--|--|
| Compensated Neutron Calibration Report | | | | | |
|--|--|--|--|--|--|

| | | | | | |
|----------------|-----|--|--|--|--|
| Serial Number: | 822 | | | | |
| Tool Model: | PSI | | | | |

| | | | | | |
|-------------|----------|-----|--------|-----|---------------|
| CALIBRATION | | | | | |
| Detector | Readings | | Target | | Normalization |
| Short Space | 1.00 | cps | 1.00 | cps | 1.9000 |
| Long Space | 1.00 | cps | 1.00 | cps | 2.1500 |

| | | | | | |
|------------------------------|--|--|--|--|--|
| Gamma Ray Calibration Report | | | | | |
|------------------------------|--|--|--|--|--|

| | | | | | |
|-------------------|--------------------------|--|------|--|--|
| Serial Number: | 43 | | | | |
| Tool Model: | PSI | | | | |
| Performed: | Tue Oct 18 17:42:20 2011 | | | | |
| Calibrator Value: | 275.0 | | GAPI | | |

| | | |
|---------------------|--------|----------|
| Background Reading: | 32.0 | cps |
| Calibrator Reading: | 340.0 | cps |
| Sensitivity: | 0.6000 | GAPI/cps |