



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1081569
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- Deepening Re-perf. Conv. to ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1081569

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Caerus Kansas LLC
Well Name	Mortimer 31-32
Doc ID	1081569

All Electric Logs Run

Dual Induction
MicroLog
Porosity
Sonic



SUPERIOR
Hays,
Kansas

SONIC
LOG

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Location: 2310' FNL & 1490' FEL
E-2/SE/SW/NE
API # : 15-009-25680-0000
SEC 31 TWP 17S RGE 13W
Permanent Datum GROUND LEVEL Elevation 1851
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 1864
D.F. 1862
G.L. 1851

Date	4/25/12
Run Number	TWO
Depth Driller	3420
Depth Logger	3421
Bottom Logged Interval	3411
Top Log Interval	820
Casing Driller	8 5/8" @ 846'
Casing Logger	843
Bit Size	7 7/8
Type Fluid in Hole	CHEMICAL MUD
Density / Viscosity	9.0/56
pH / Fluid Loss	9.0/8.0
Source of Sample	FLOWLINE
Rin @ Meas. Temp	.52 @ 82F
Rmf @ Meas. Temp	.39 @ 82F
Rmc @ Meas. Temp	.62 @ 82F
Source of Rmf / Rmc	MEASURED
Rin @ BHT	.38 @ 110F
Time Circulation Stopped	2 HOURS
Time Logger on Bottom	
Maximum Recorded Temperature	110F
Equipment Number	680
Location	HAYS, KS.
Recorded By	JASON CAPPELLUCCI
Witnessed By	JEFF LAWLER

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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 SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
RUSSELL, KS. - S. TO INTERSECTION OF HWY 281 & HWY 4
3 E. TO CURVE - 1/2 S. ON CURVE - W. INTO

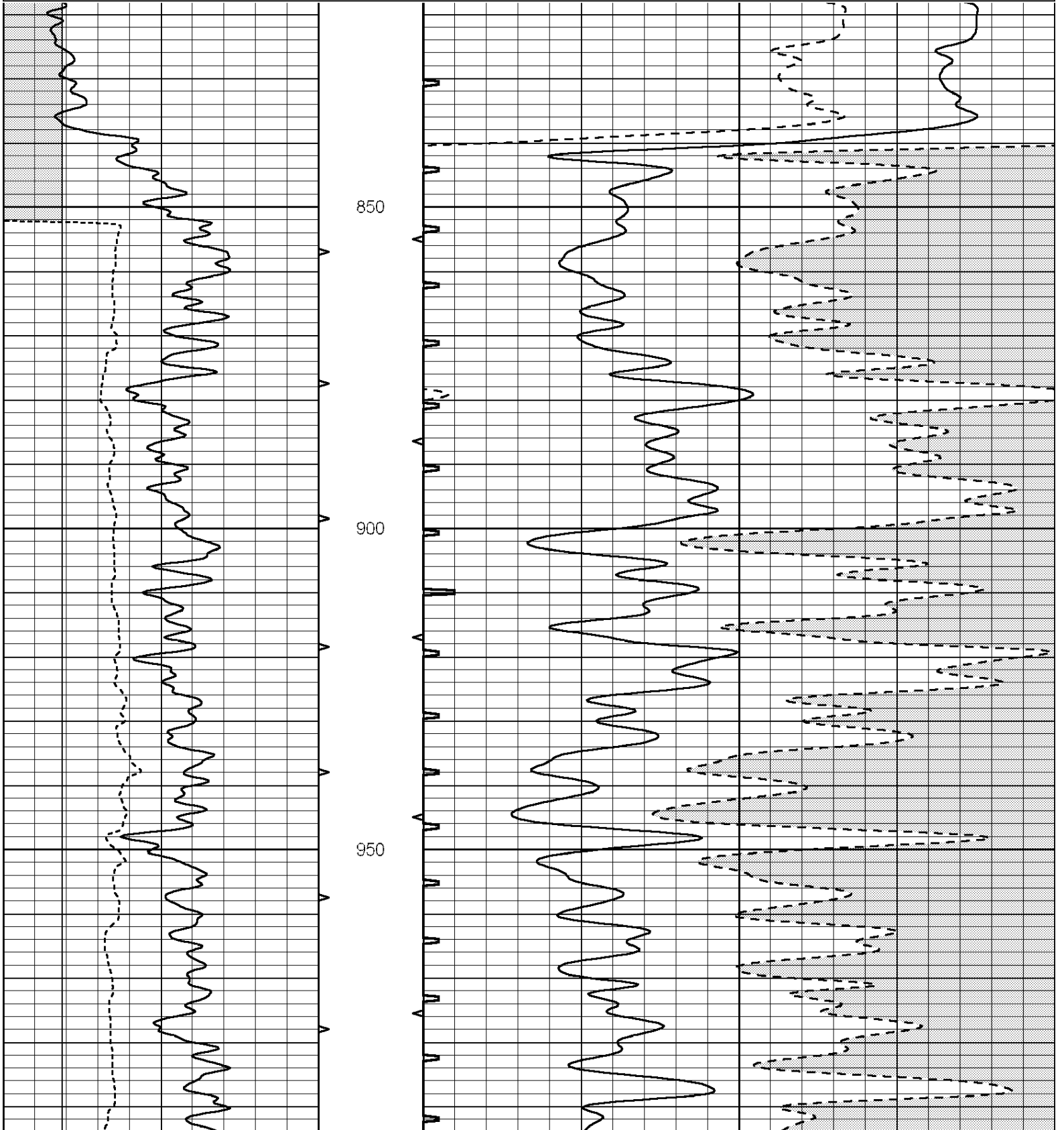


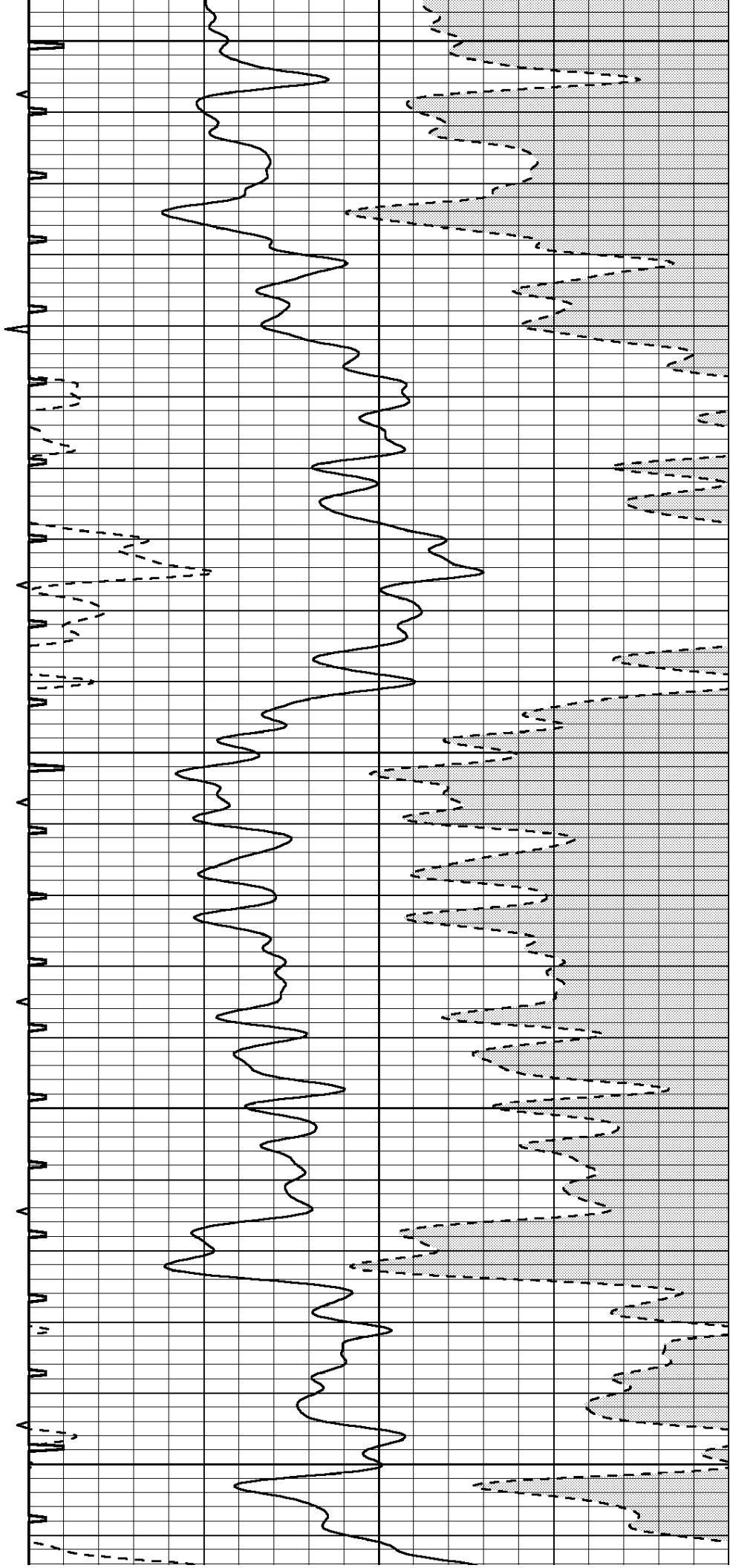
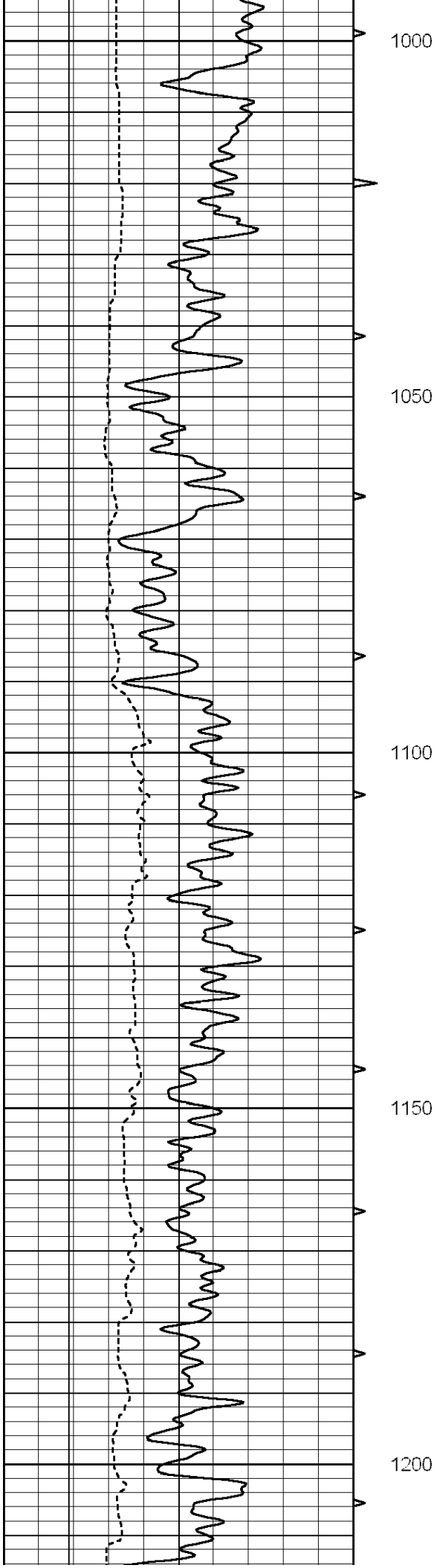
SUPERIOR
Hays,
Kansas

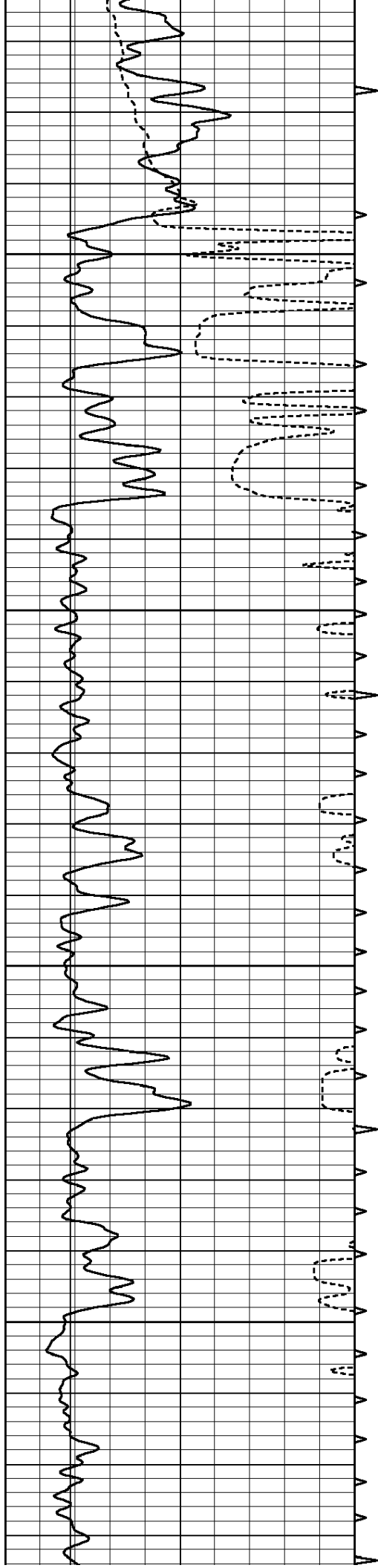
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6	CALIPER (in)	16	10 (ft3)	0	30	SONIC POROSITY (pu)	-10
			TBHV	0	ITT (msec)	20	
			0 (ft3)	10			





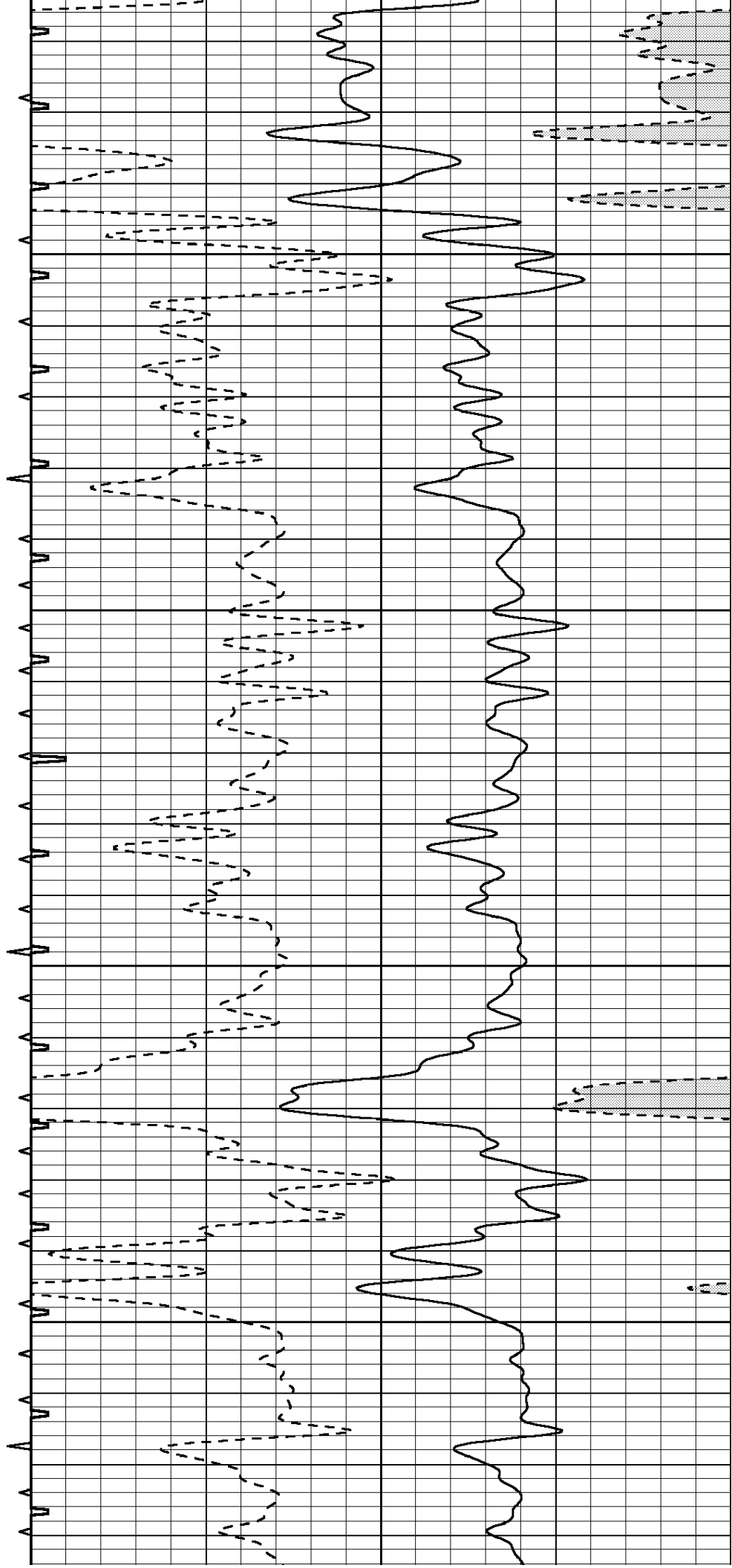


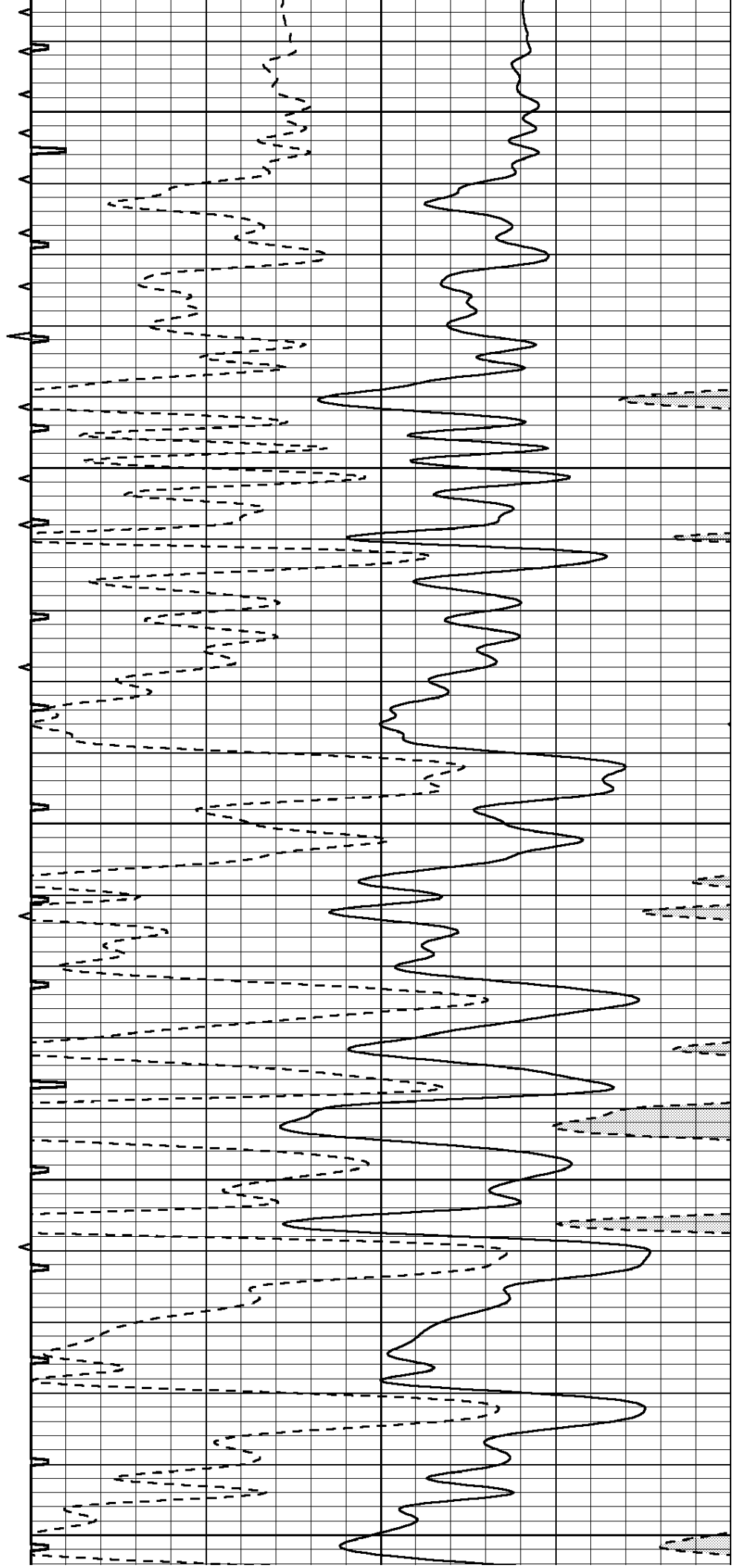
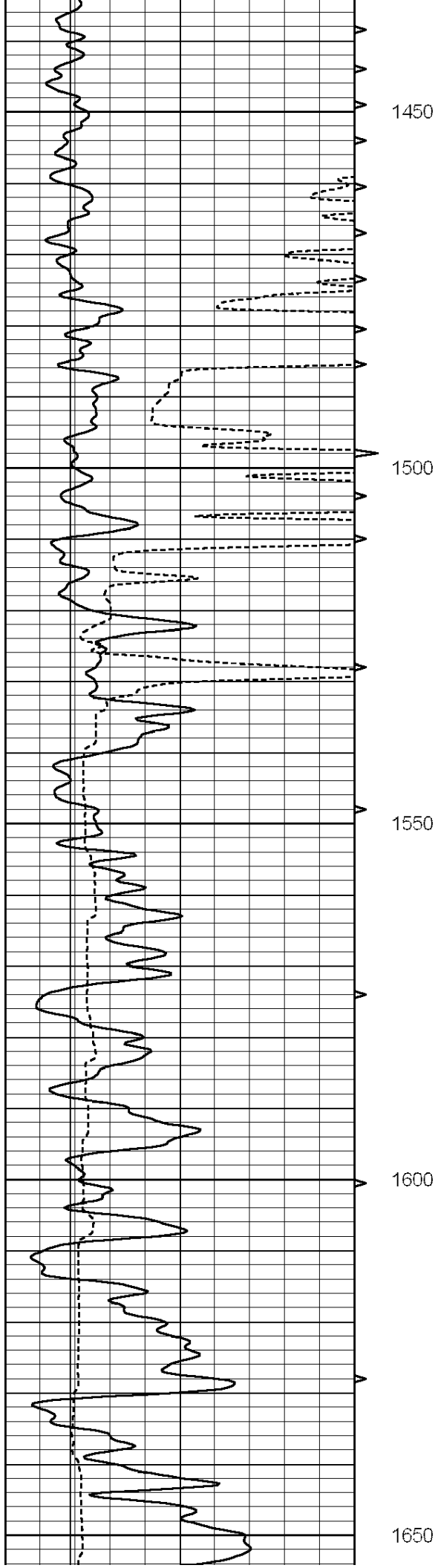
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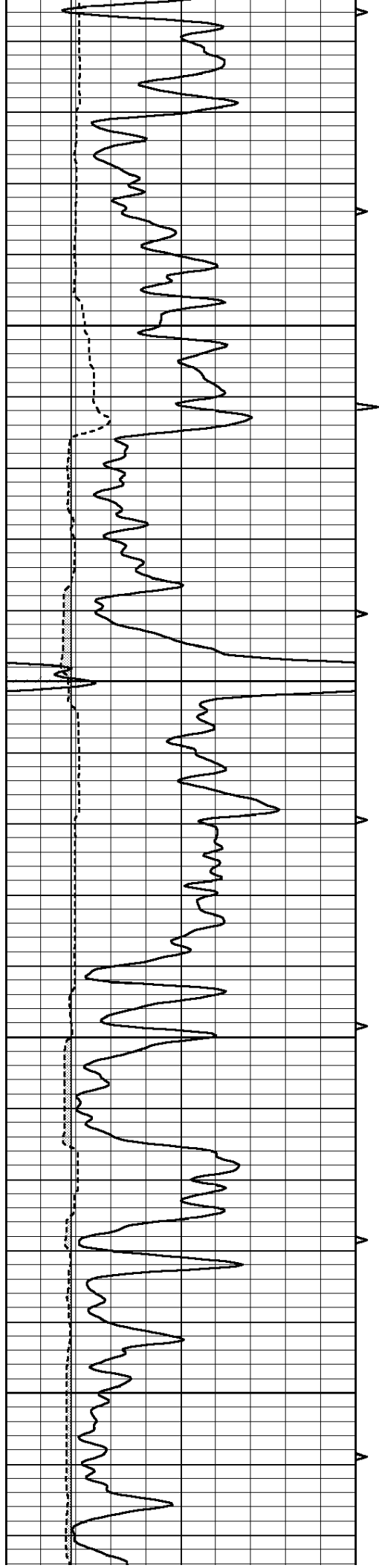
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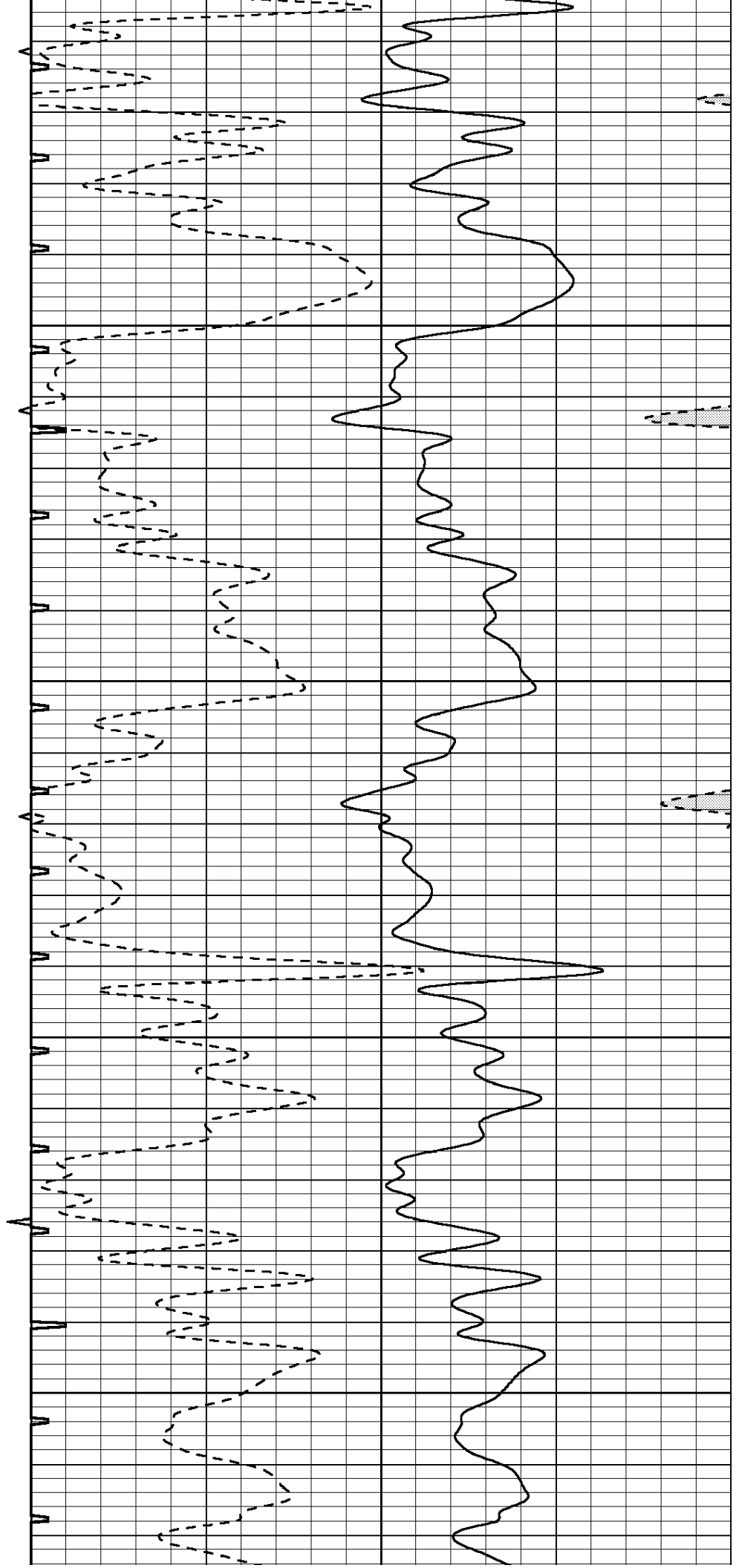


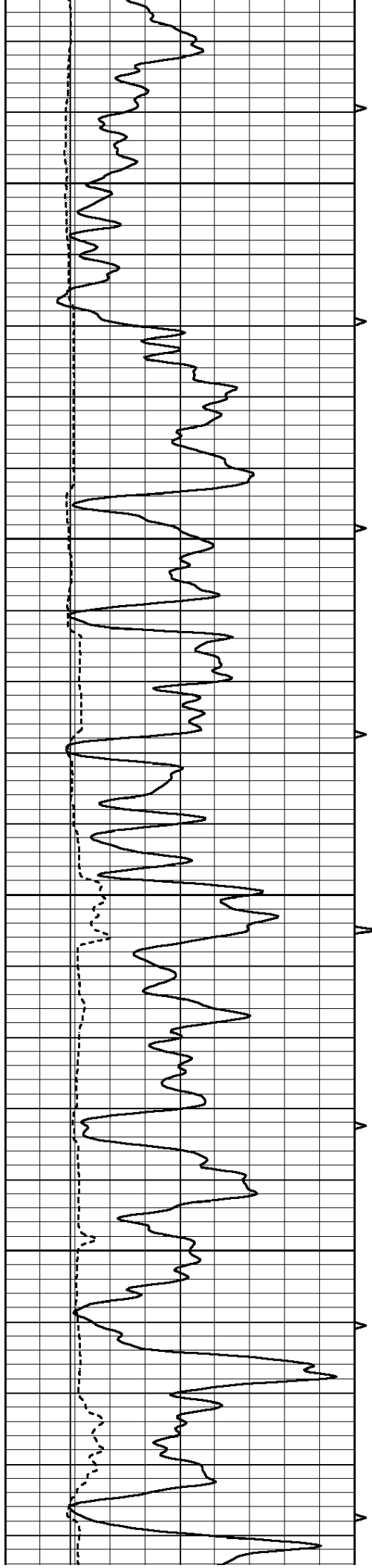
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1850



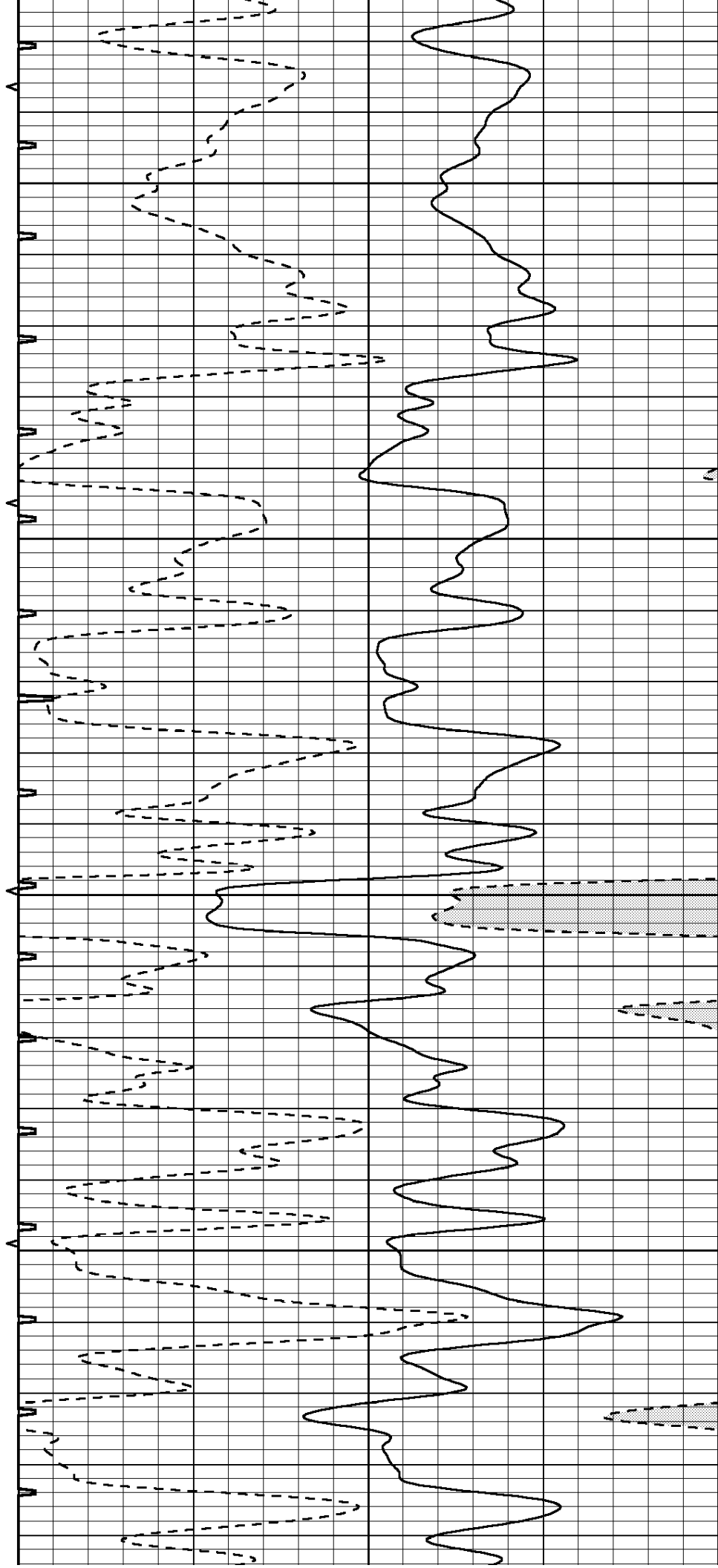


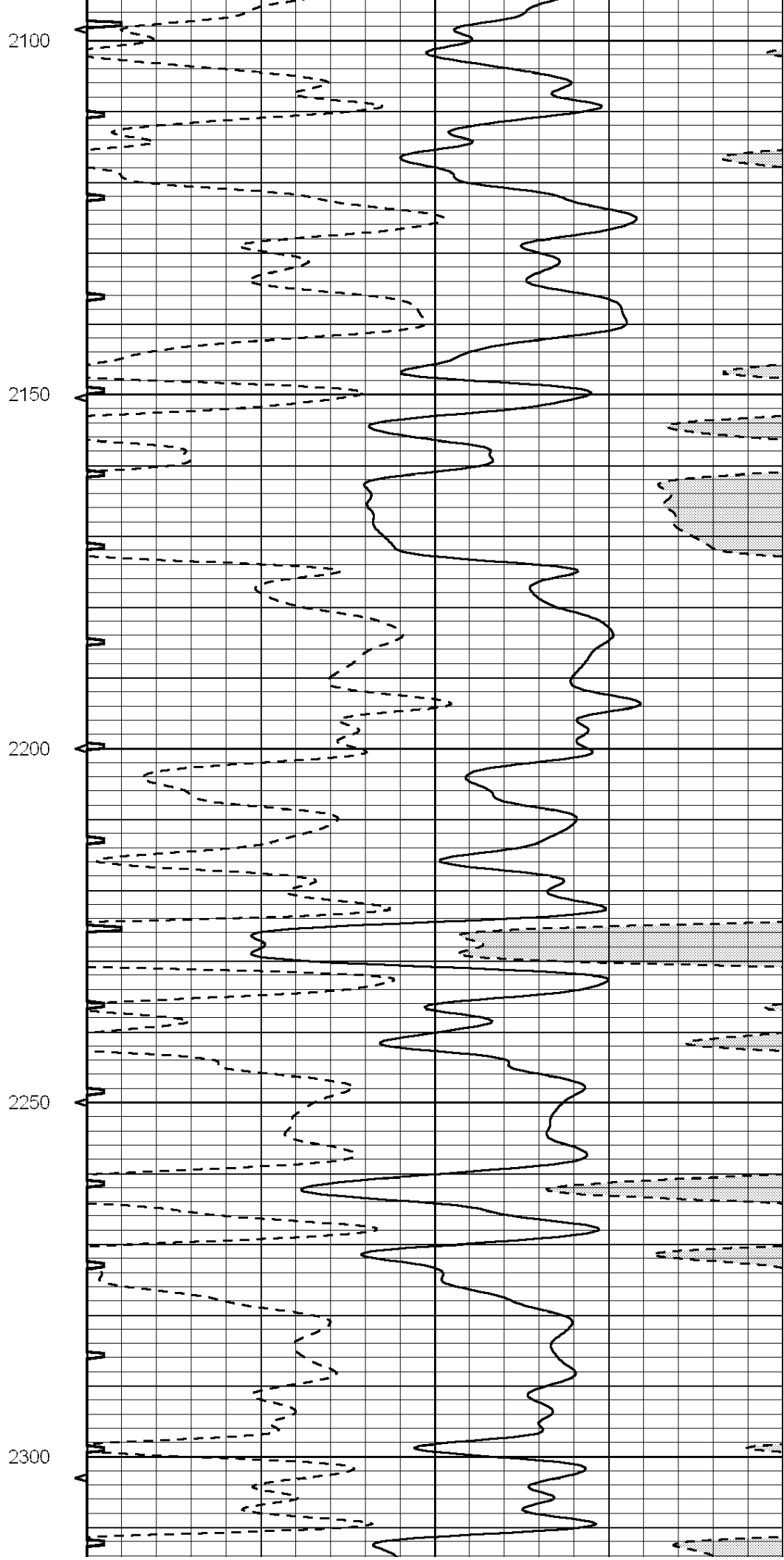
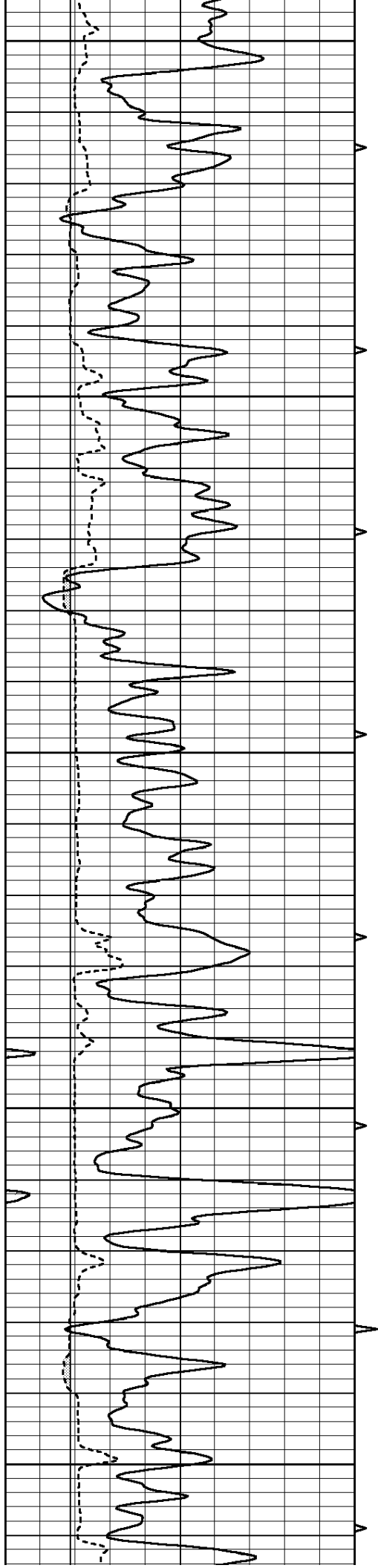
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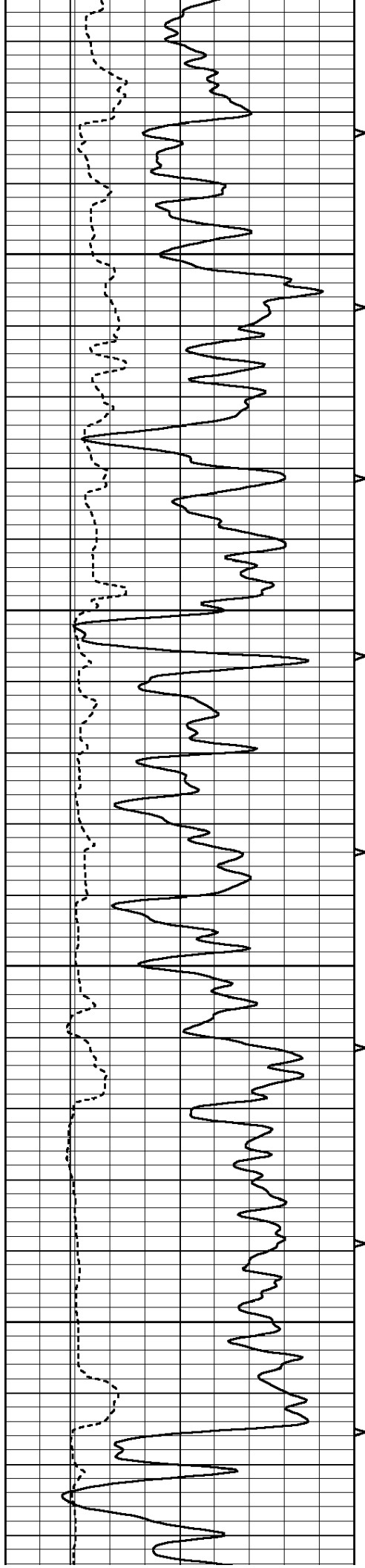
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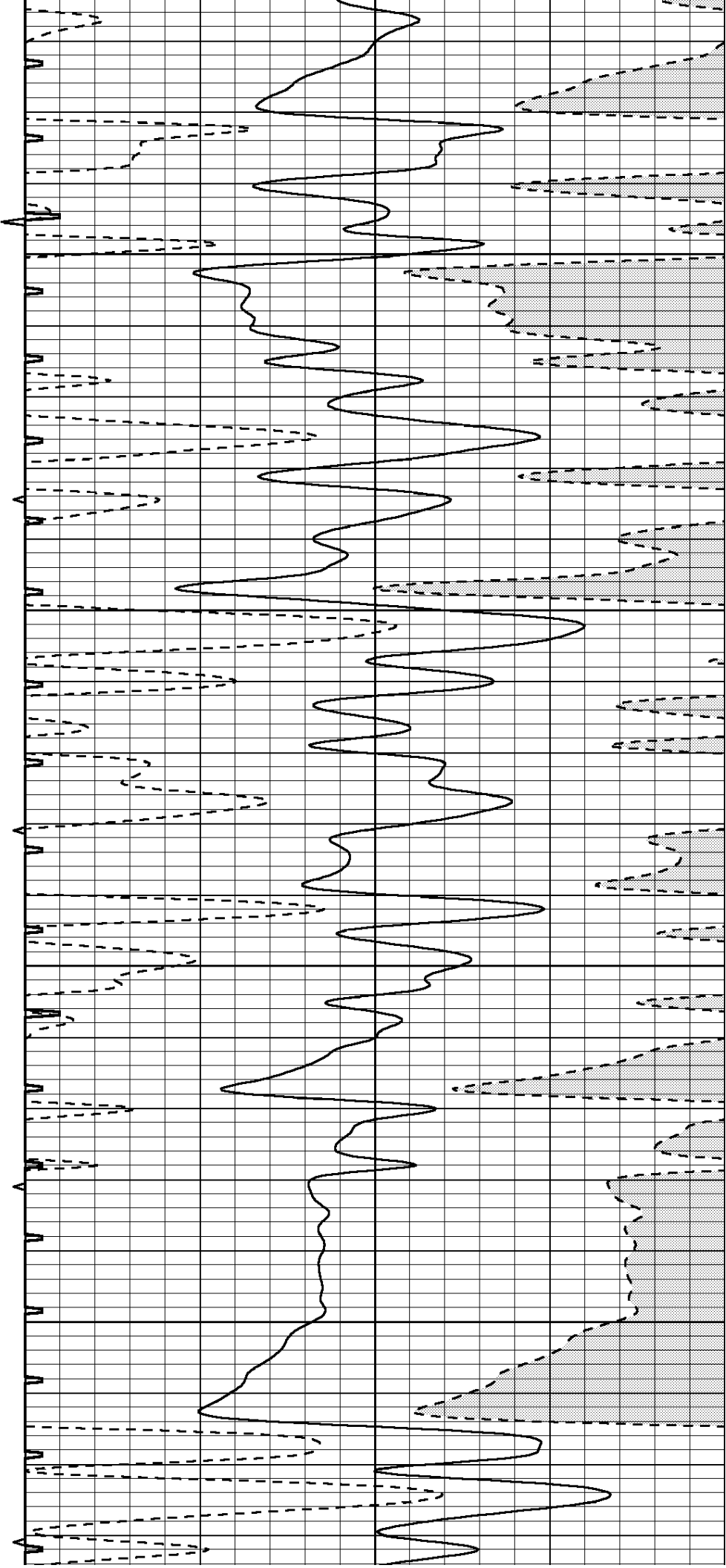


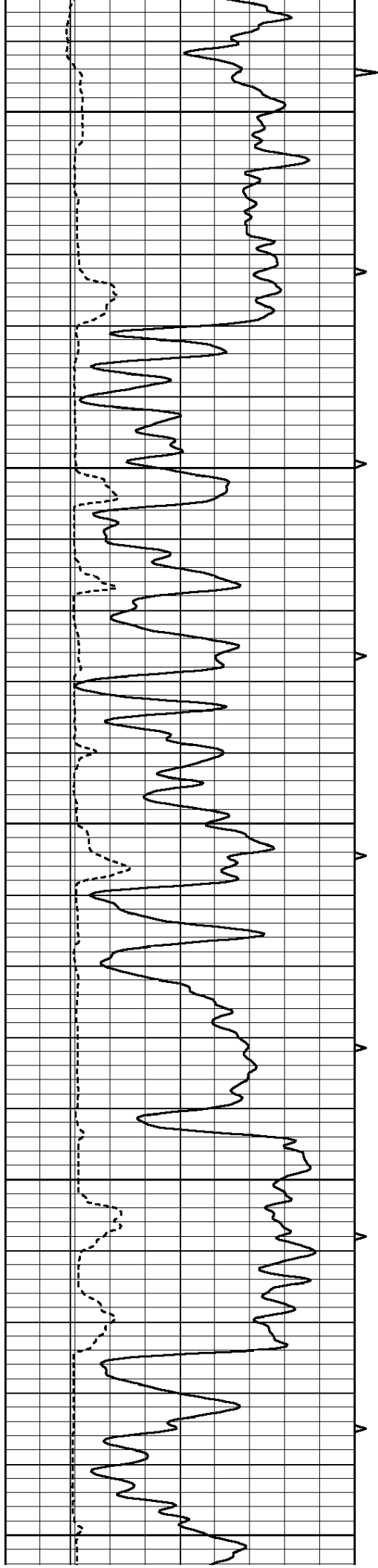
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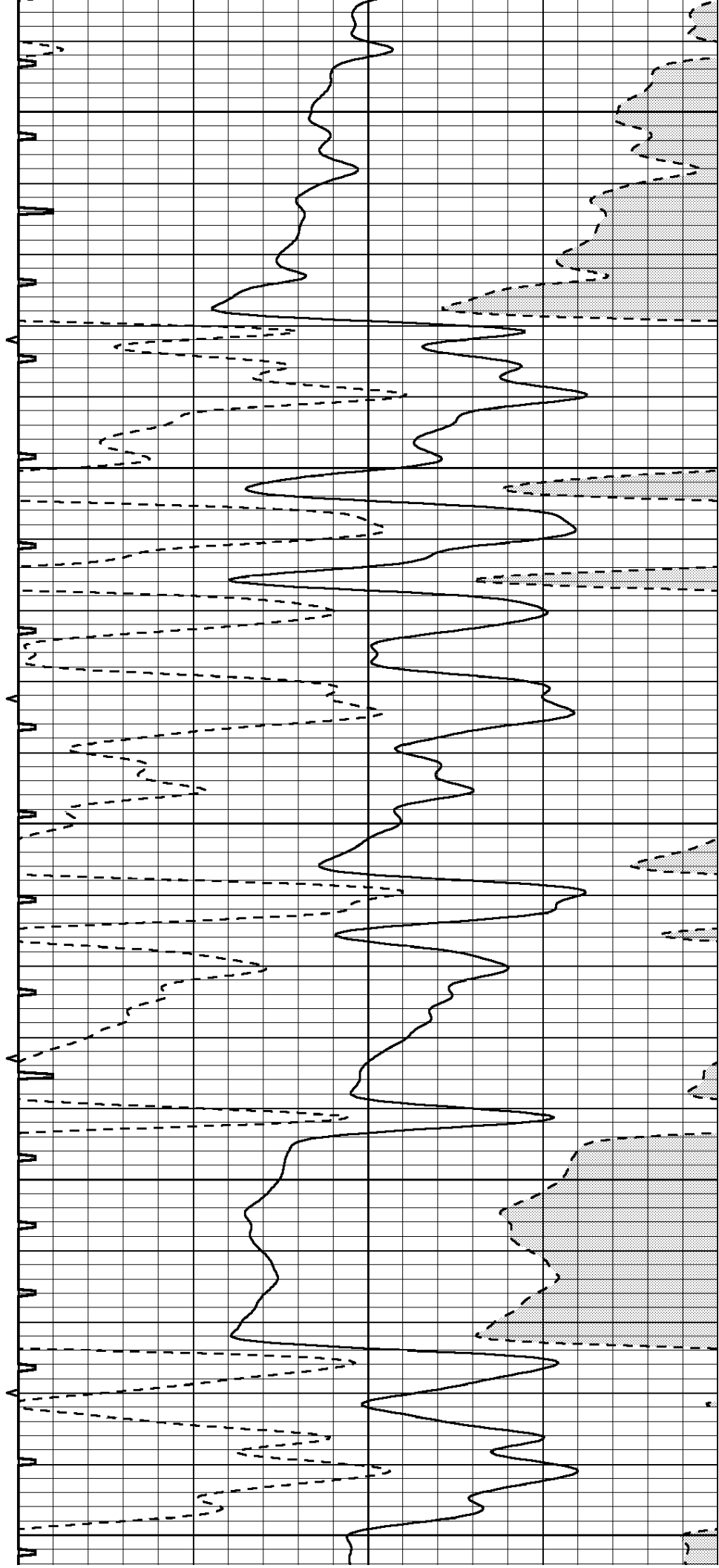
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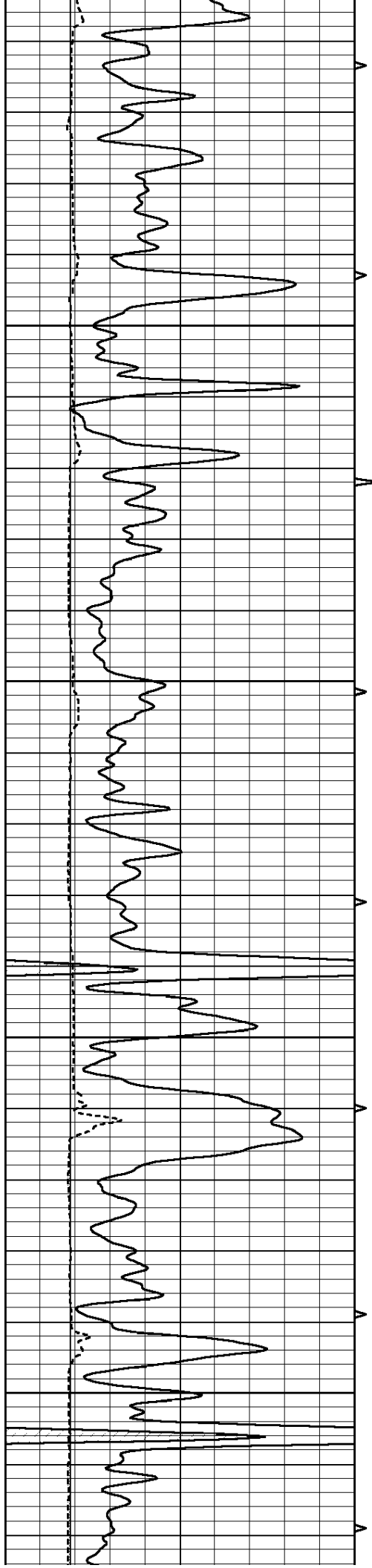
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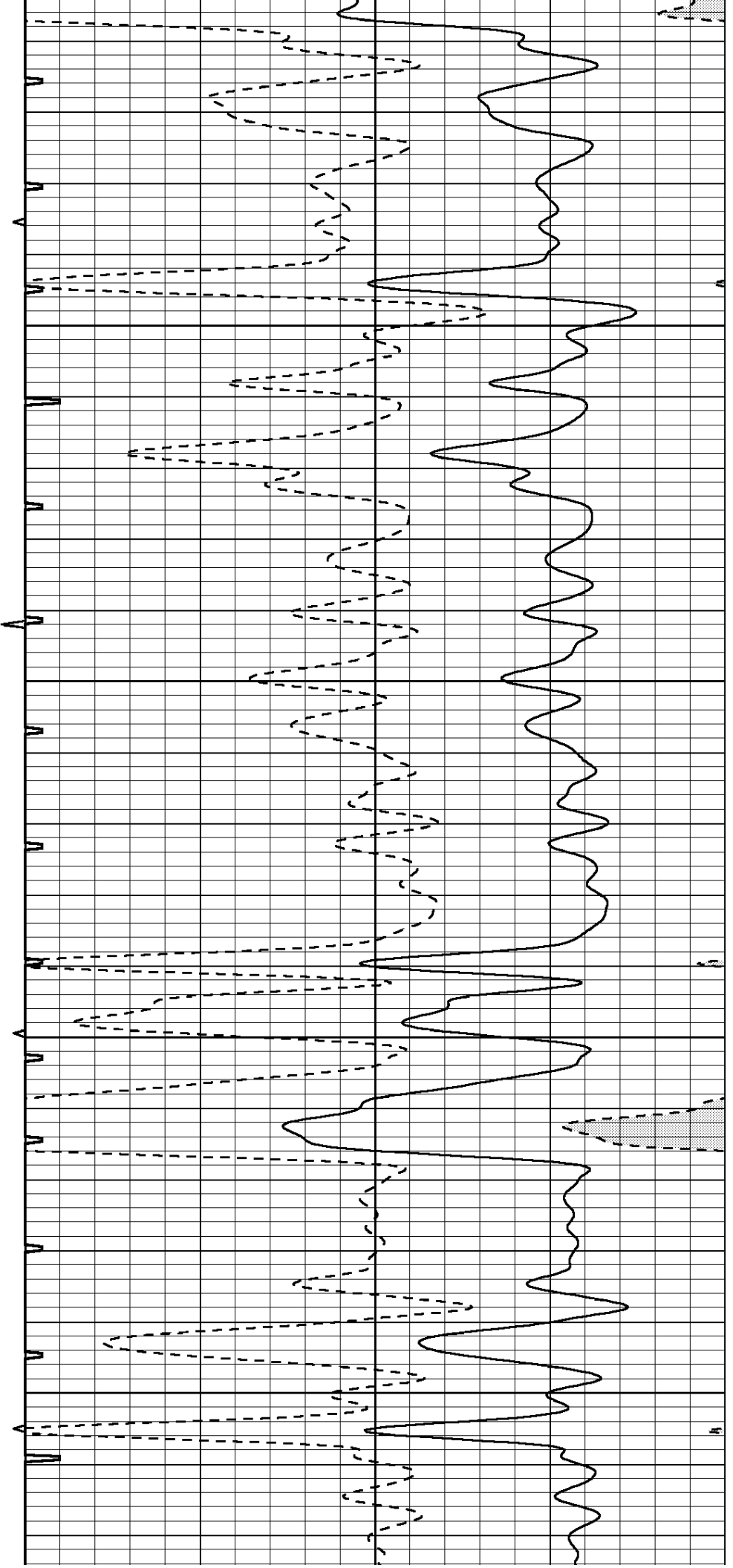


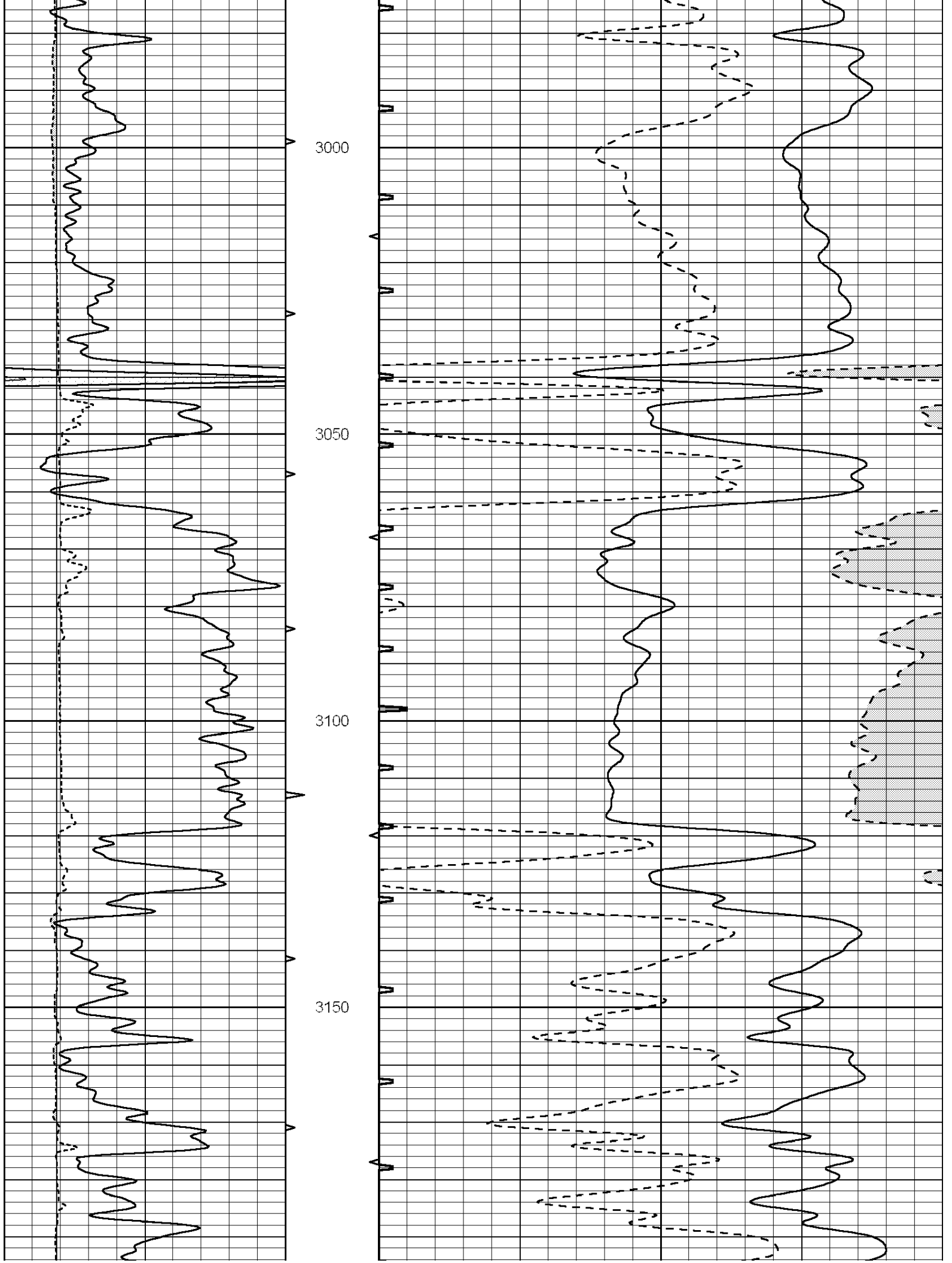
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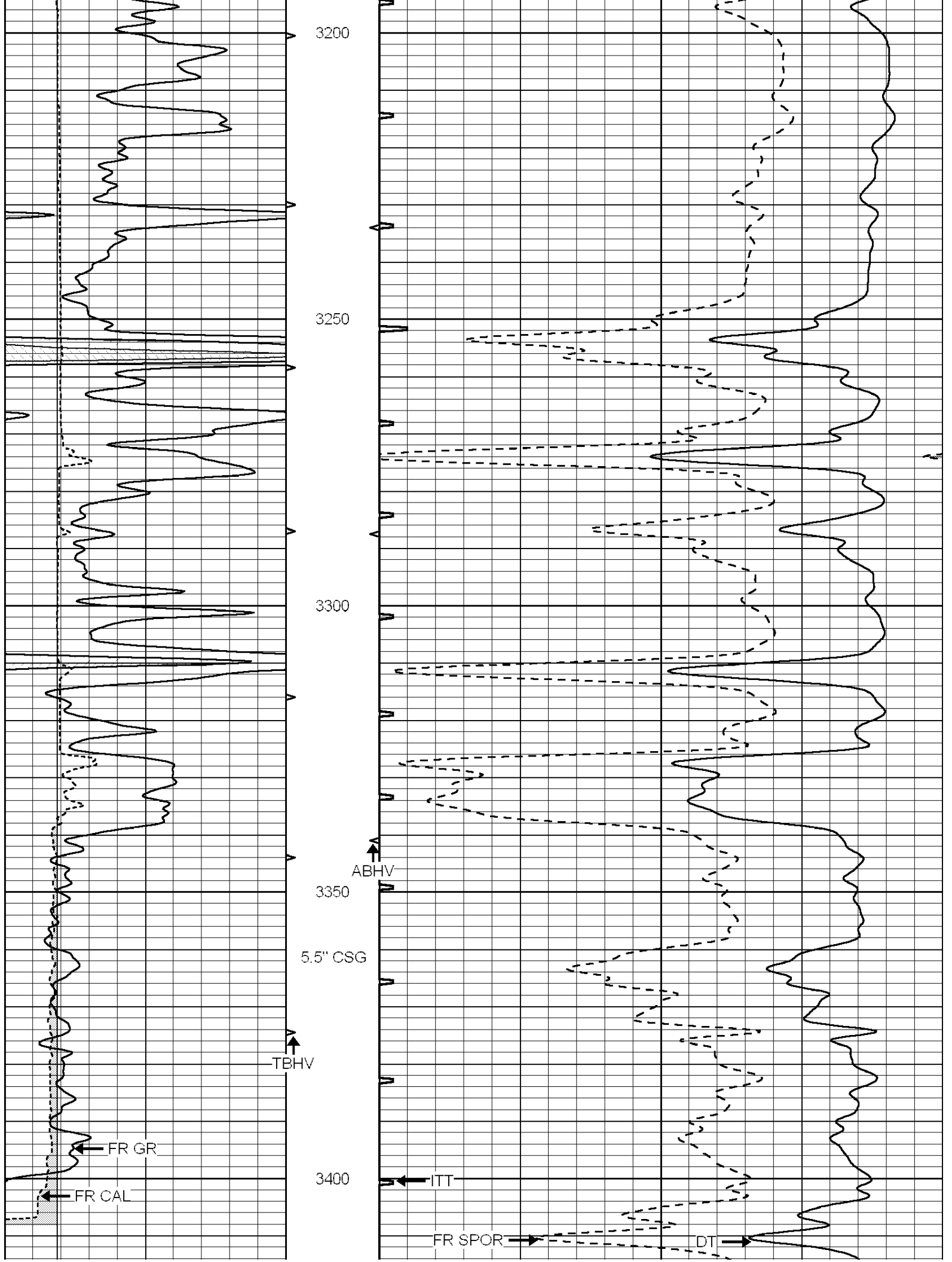
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2900

2950







			LTD 3421			
0	GAMMA RAY (GAPI)	150	ABHV	140	DELTA TIME (usec/ft)	40
6	CALIPER (in)	16	10 (ft3)	0 30	SONIC POROSITY (pu)	-10
			TBHV	0	ITT (msec)	20
			0 (ft3)	10		

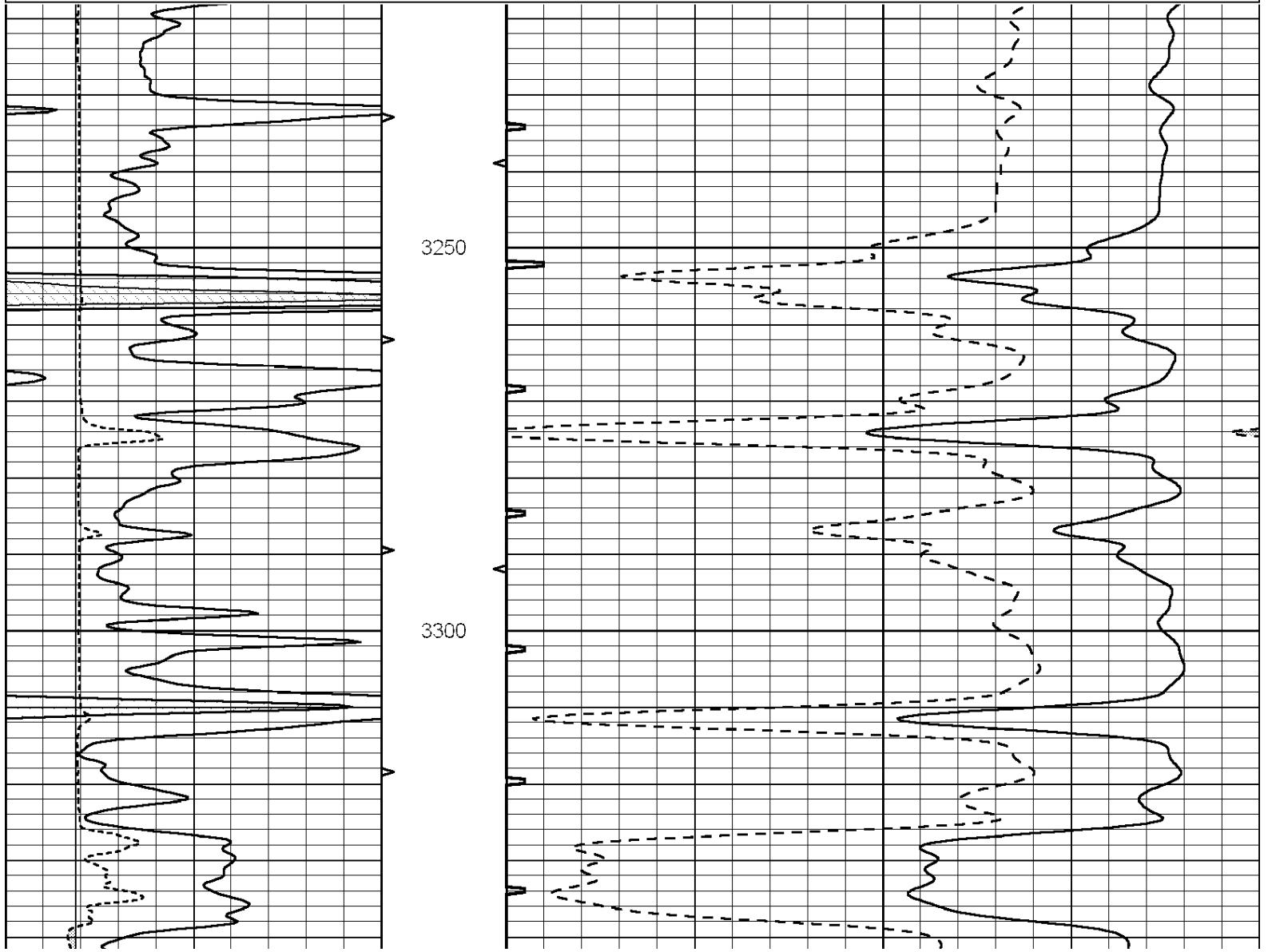


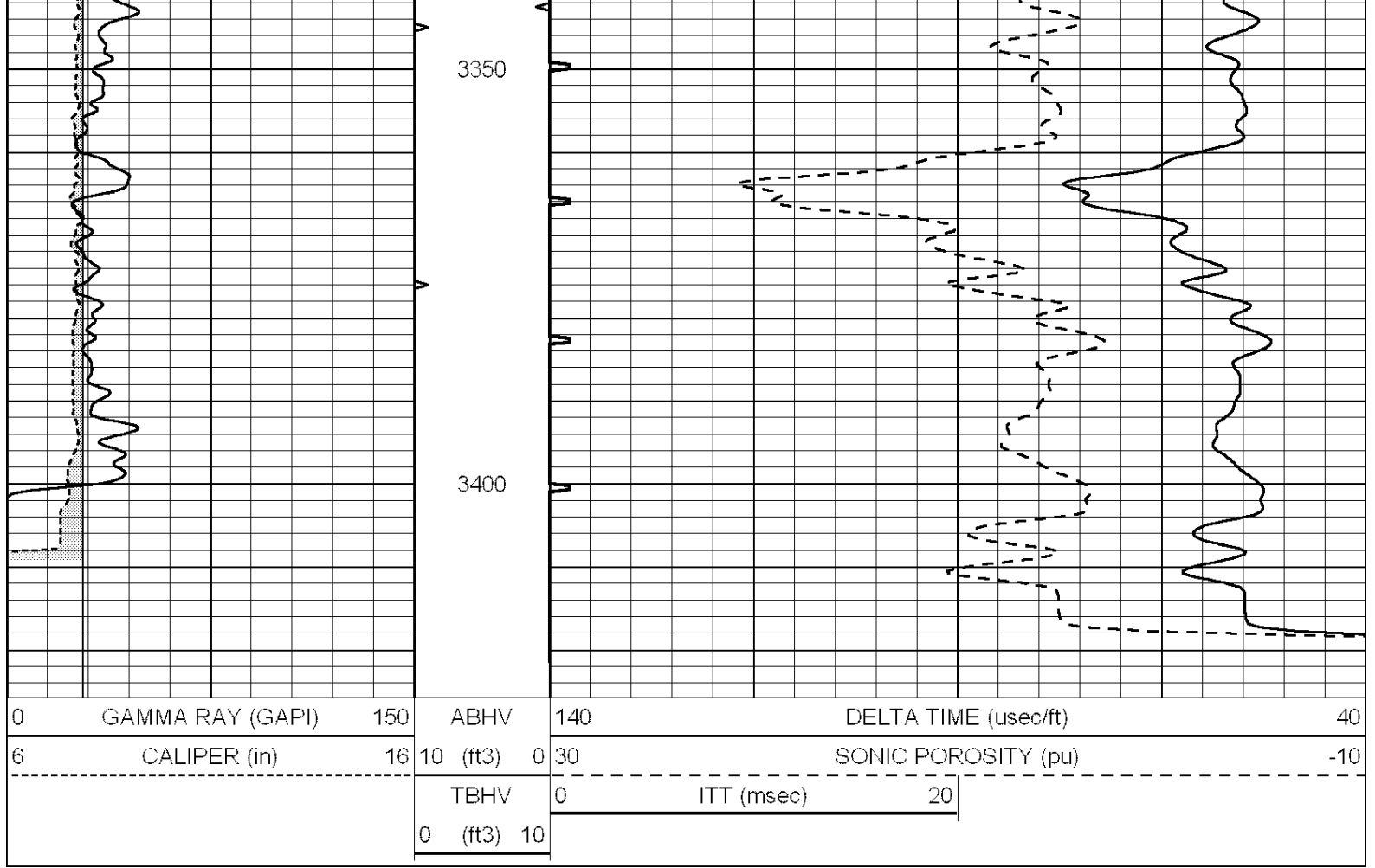
SUPERIOR
Hays,
Kansas

REPEAT SECTION

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 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	140	DELTA TIME (usec/ft)	40
6	CALIPER (in)	16	10 (ft3)	0 30	SONIC POROSITY (pu)	-10
			TBHV	0	ITT (msec)	20
			0 (ft3)	10		







**SUPERIOR
Hays,
Kansas**

**COMPENSATED
NEUTRON / DENSITY
LOG**

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Location: API # : 15-009-25680-0000
2310' FNL & 1490' FEL
E-2/SE/SW/NE
SEC 31 TWP 17S RGE 13W
Permanent Datum GROUND LEVEL Elevation 1851
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Other Services
DIL/MEL
SON
Elevation
K.B. 1864
D.F. 1862
G.L. 1851

Date	4/25/12		
Run Number	ONE		
Depth Driller	3420		
Depth Logger	3421		
Bottom Logged Interval	3397		
Top Log Interval	2550		
Casing Driller	8 5/8" @ 846'		
Casing Logger	843		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM	
Density / Viscosity	9.0/56		
pH / Fluid Loss	9.0/8.0		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.52 @ 82F		
Rmf @ Meas. Temp	.39 @ 82F		
Rmc @ Meas. Temp	.62 @ 82F		
Source of Rmf / Rmc	MEASURED		
Rin @ BHT	.38 @ 110F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	110F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	JEFF LAWLER		

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Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
RUSSELL, KS. - S. TO INTERSECTION OF HWY 281 & HWY 4
3 E. TO CURVE - 1/2 S. ON CURVE - W. INTO

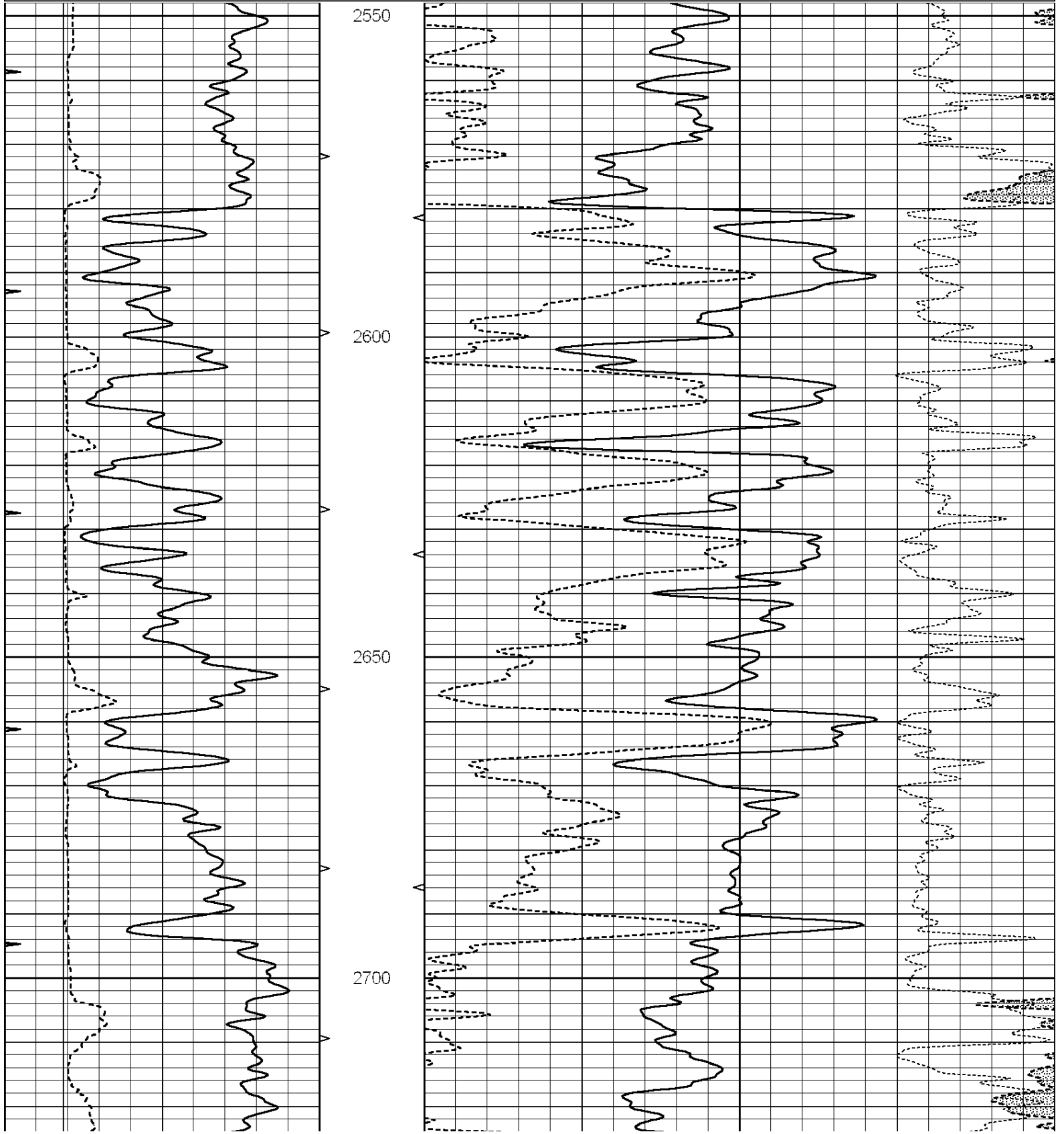


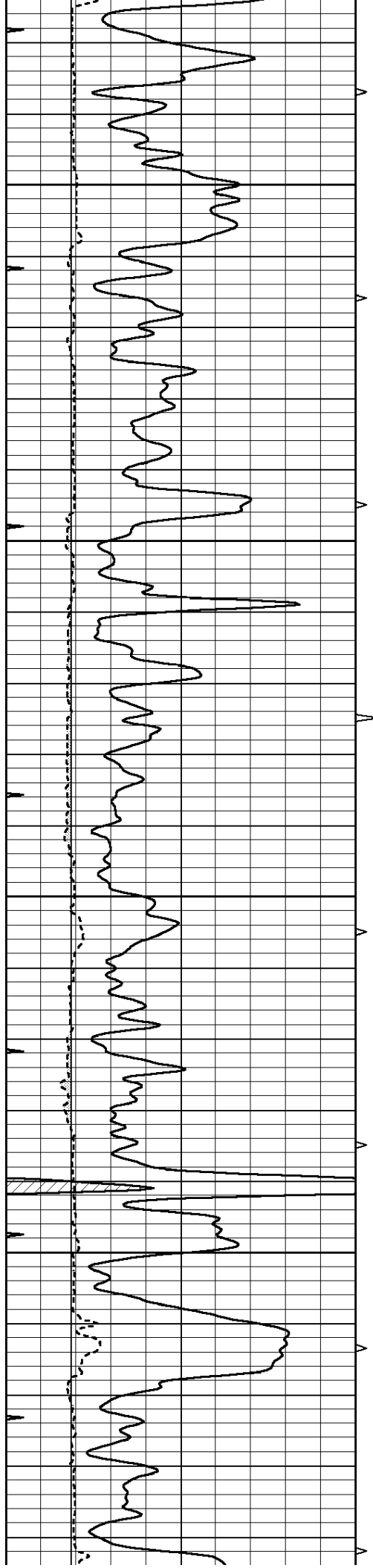
**SUPERIOR
Hays,
Kansas**

MAIN SECTION

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6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		



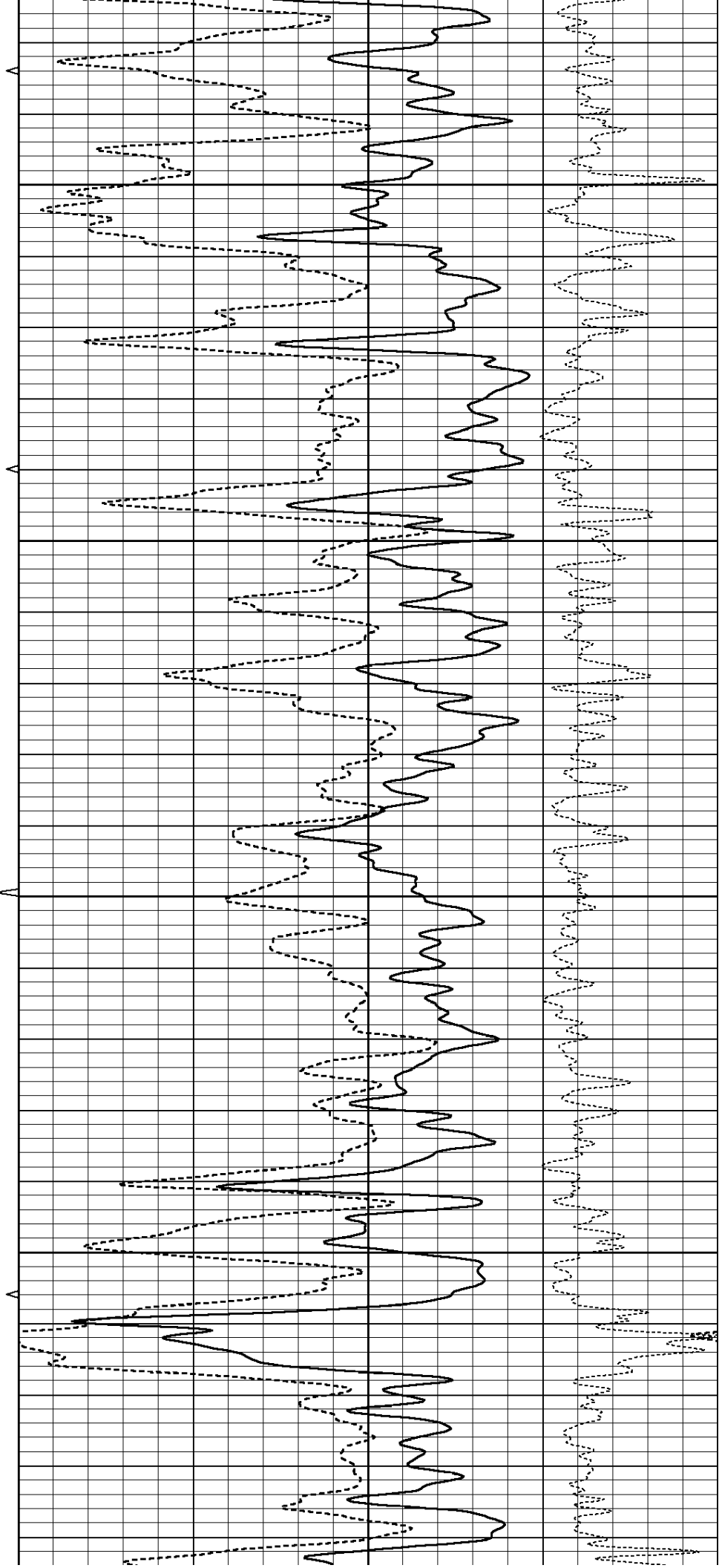


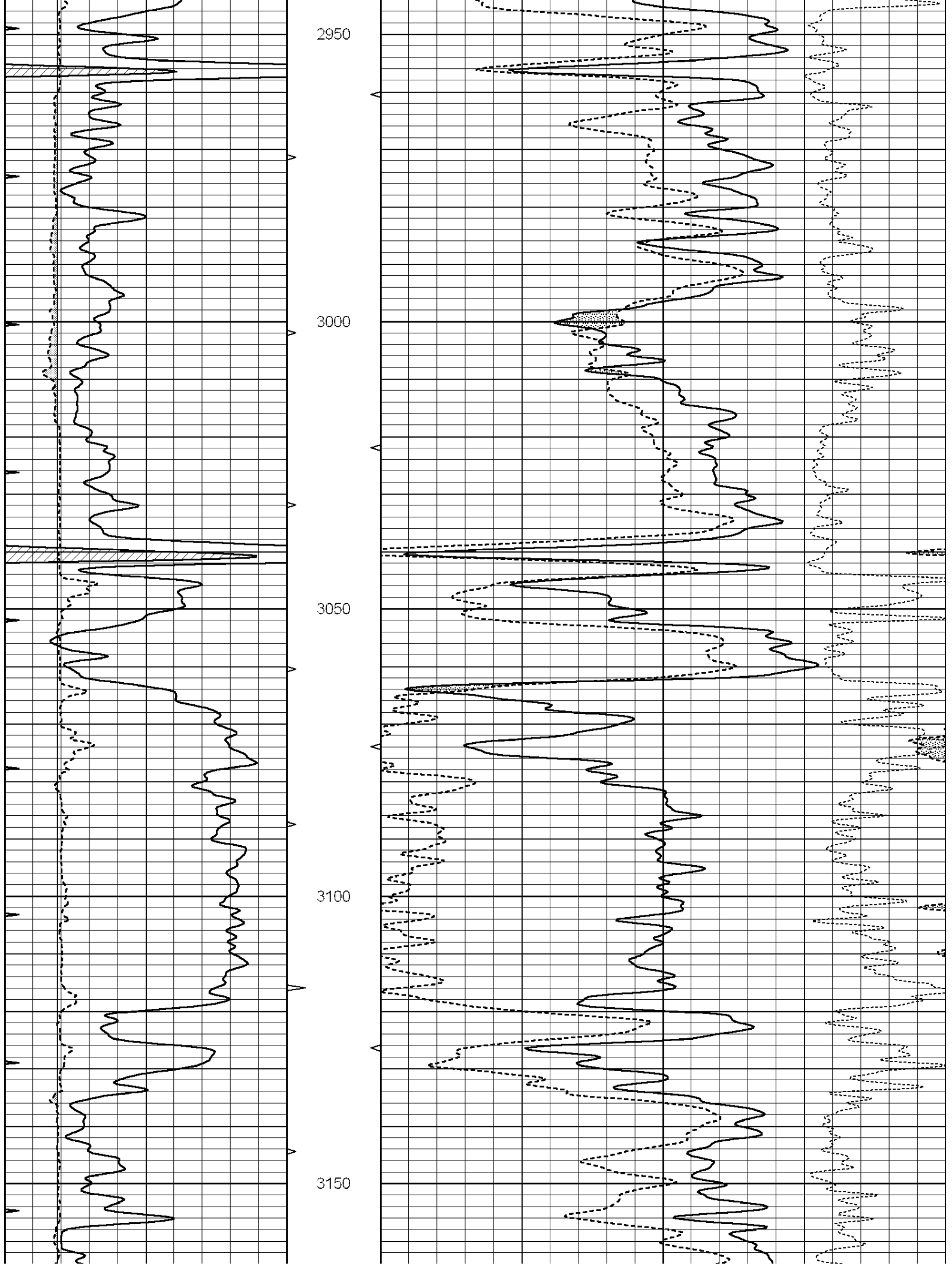
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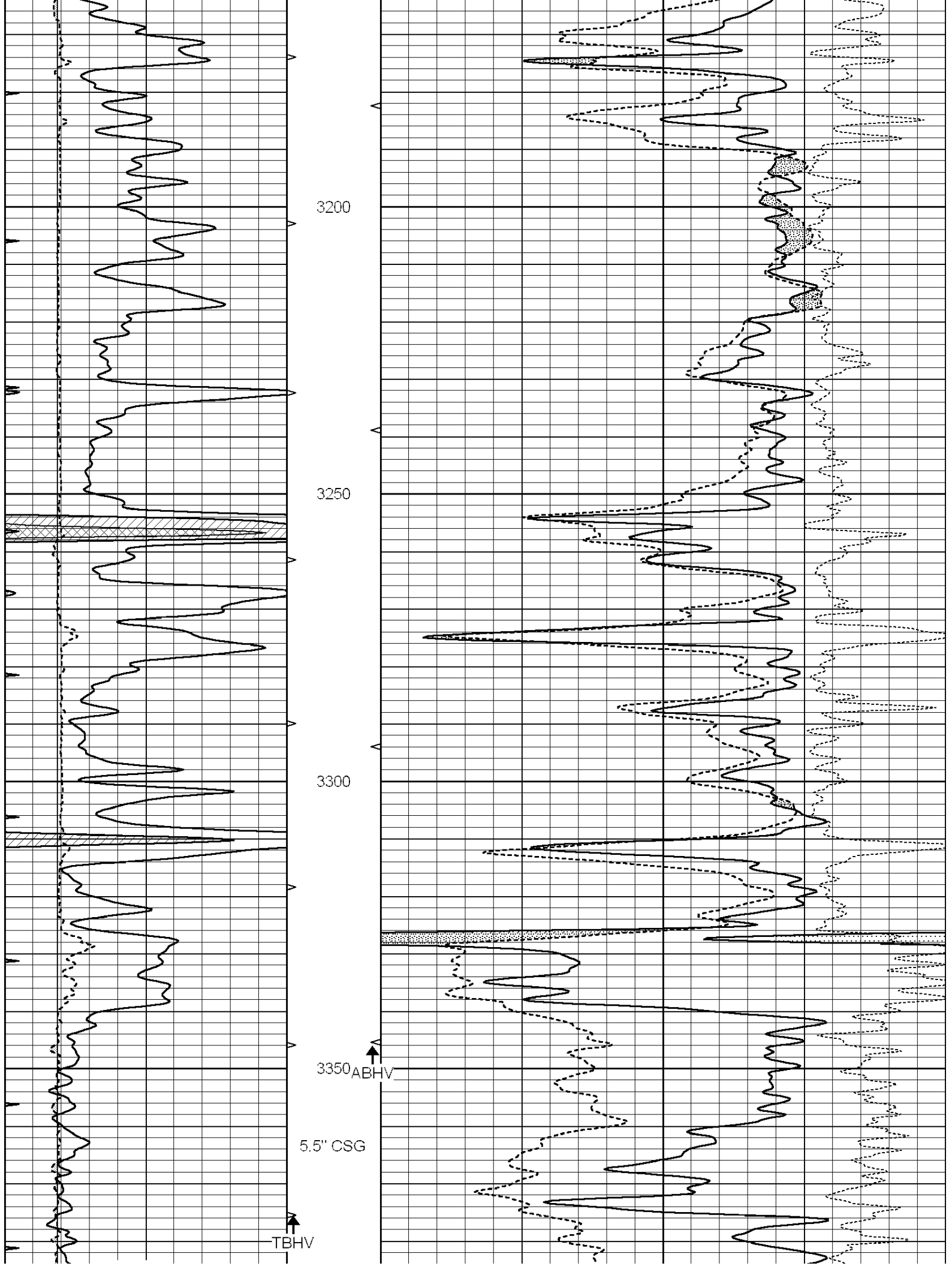
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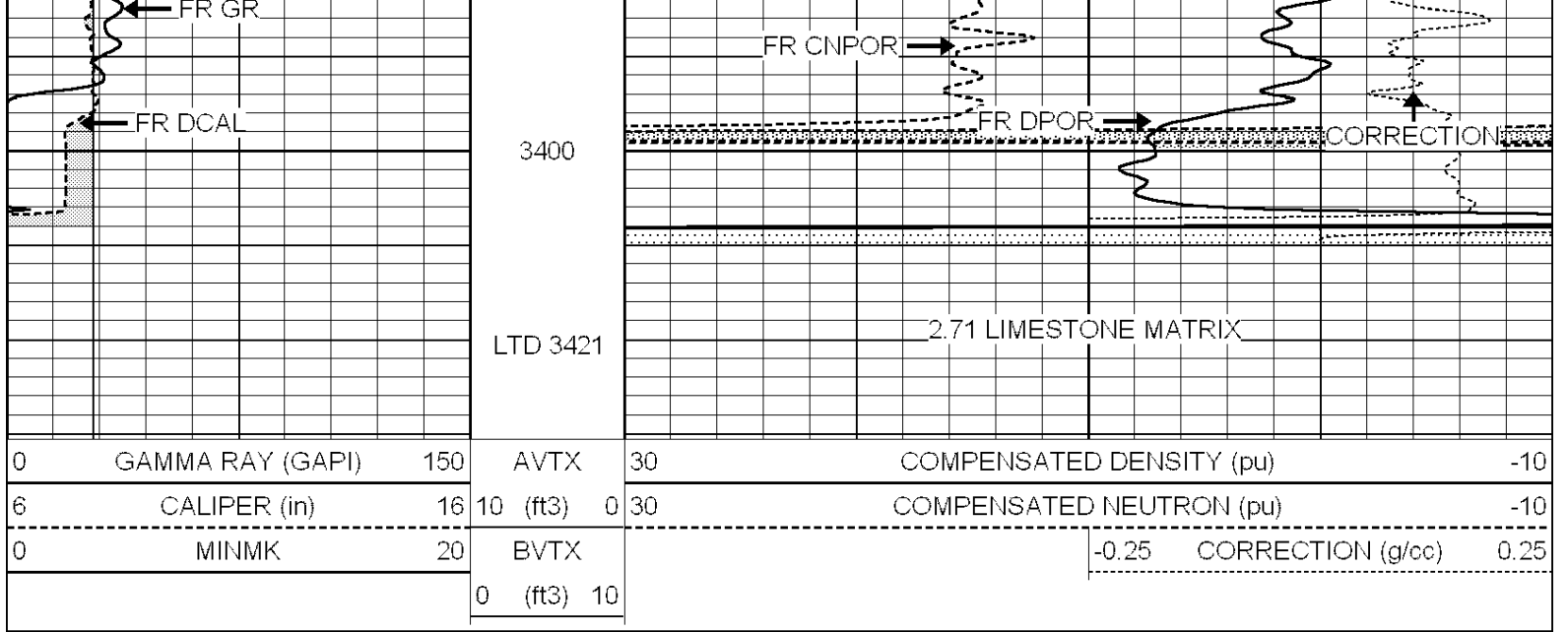
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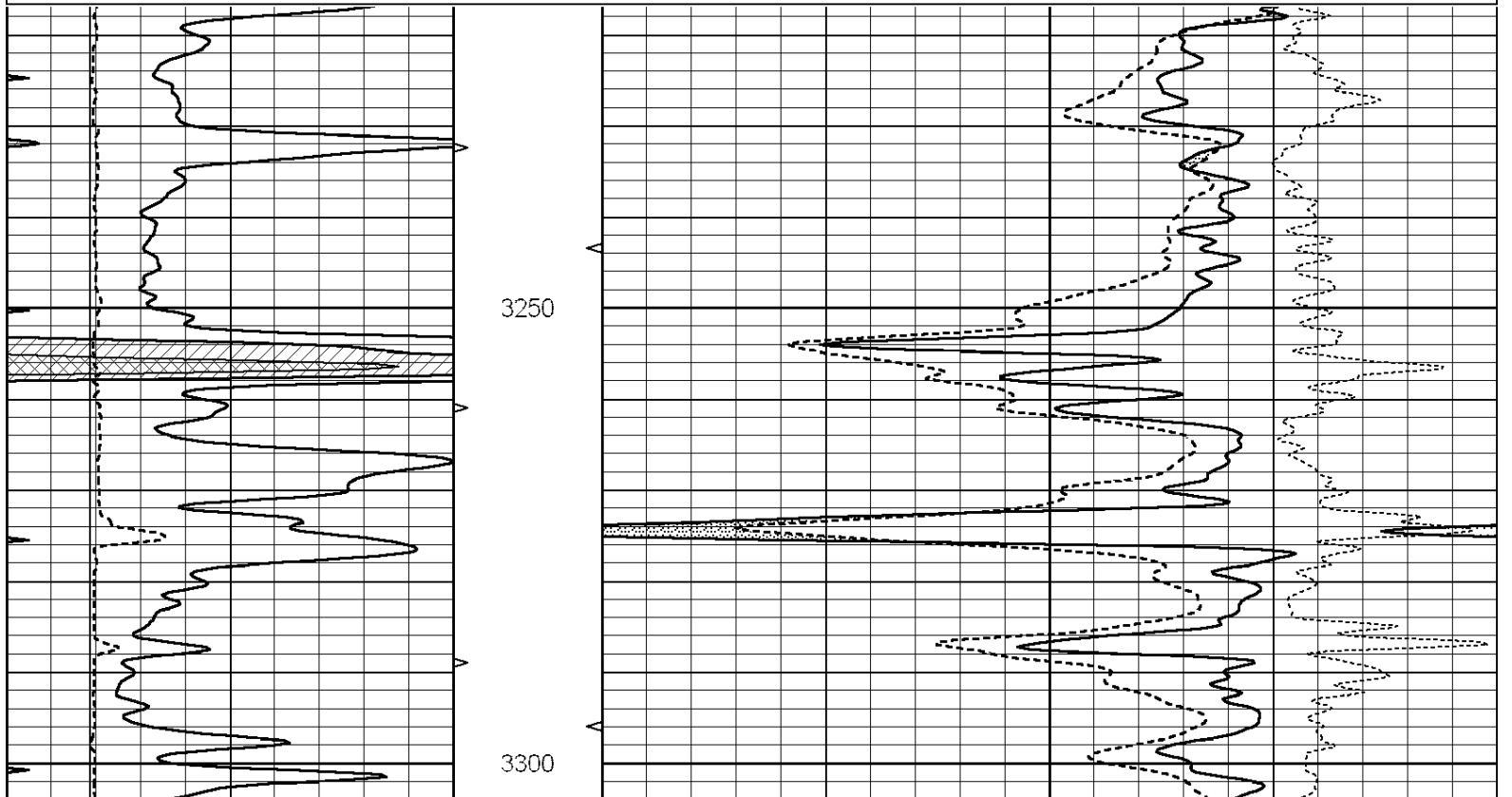


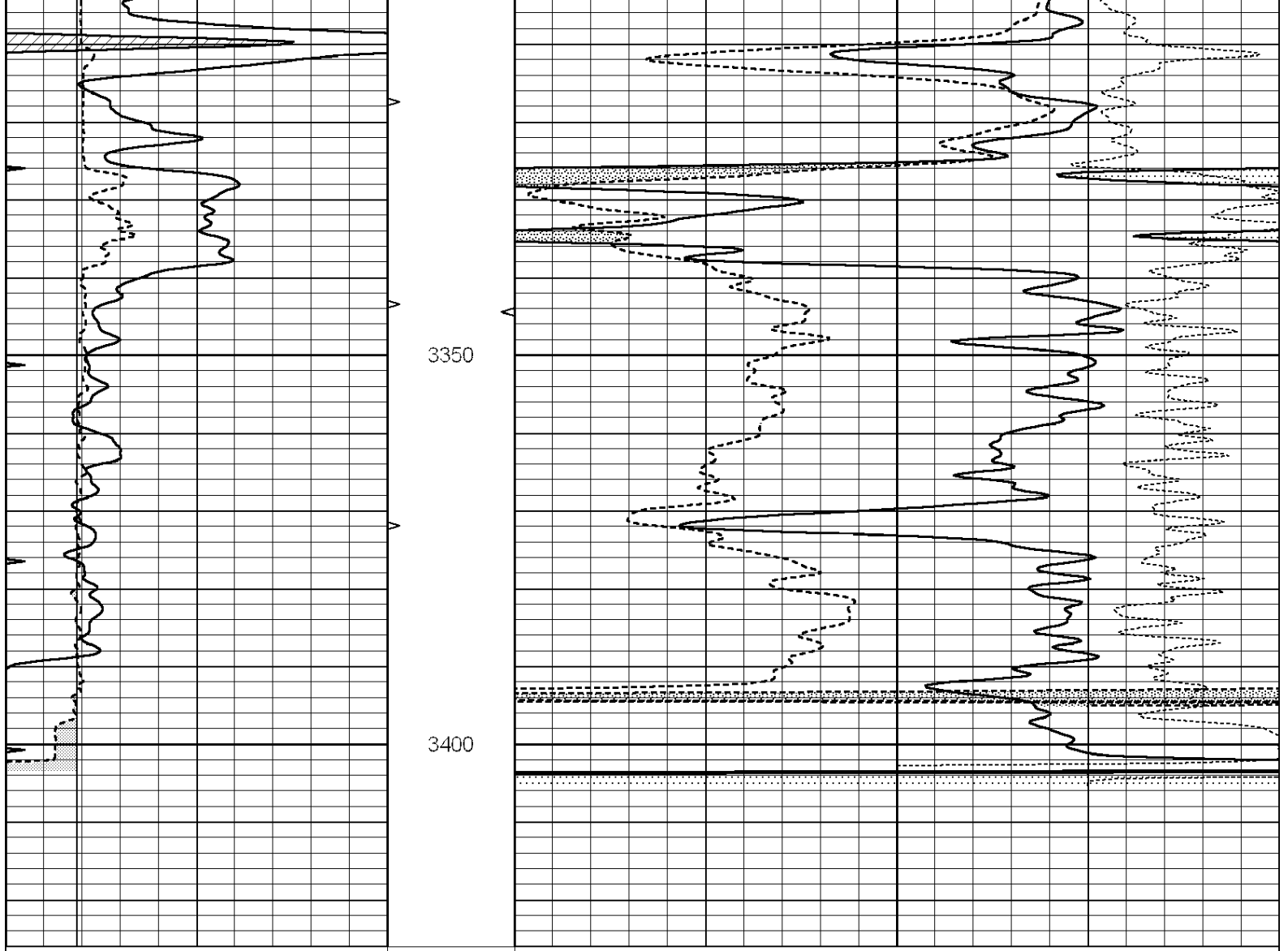
SUPERIOR
Hays,
Kansas

REPEAT SECTION

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6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

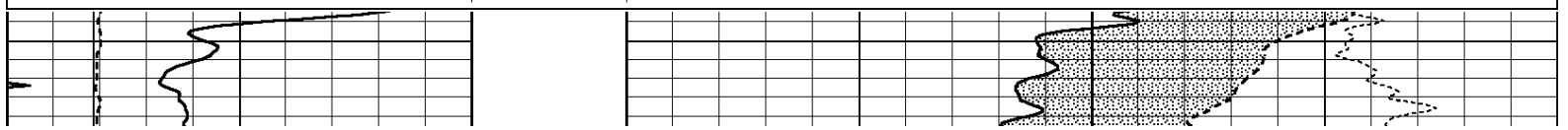


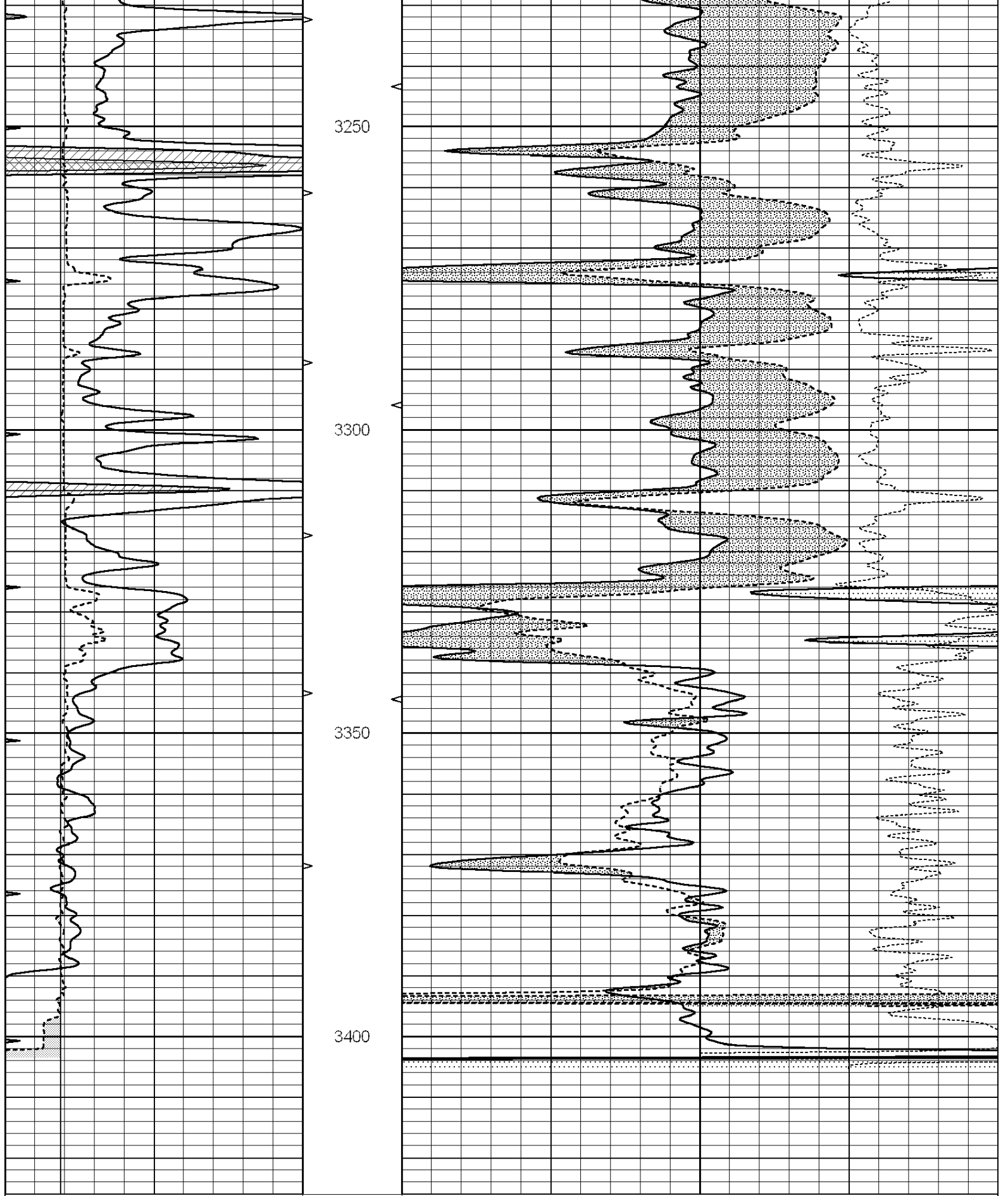
SUPERIOR
Hays,
Kansas

DOLOMITE MATRIX

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 Charted by: Depth in Feet scaled 1:240

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6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		





0	GAMMA RAY (GAPI)	150	AVTX	30	COMPENSATED DENSITY (pu)	-10
6	CALIPER (in)	16	10 (ft3)	0 30	COMPENSATED NEUTRON (pu)	-10
0	MINMK	20	BVTX		-0.25 CORRECTION (g/cc)	0.25
			0 (ft3)	10		

Calibration Report

Database File: 008849ddn.db
 Dataset Pathname: pass3.2
 Dataset Creation: Wed Apr 25 21:17:10 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings			References			Results	
	Air	Loop		Air	Loop		m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: GEAR3-GEARHART
 Source / Verifier: 143 / 143
 Master Calibration Performed: Thu Jan 26 19:46:16 2012

Master Calibration

	Density			Far Detector	Near Detector	
Magnesium	1.710	g/cc		971.18	557.33	cps
Aluminum	2.580	g/cc		212.31	367.26	cps
Spine Angle = 74.66			Density/Spine Ratio = 0.552			
	Size			Reading		
Small Ring	8.00	in		4.29	V	
Large Ring	14.00	in		6.24	V	

Compensated Neutron Calibration Report

Serial Number: 6I
Tool Model: G

CALIBRATION

Detector	Readings	Target	Normalization
Short Space	1.00 cps	1.00 cps	1.0000
Long Space	1.00 cps	1.00 cps	1.0000

Gamma Ray Calibration Report

Serial Number: #8
Tool Model: OPEN
Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps



SUPERIOR
Hays,
Kansas

MICRO
LOG

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Location: 2310' FNL & 1490' FEL
E-2/SE/SW/NE
API # : 15-009-25680-0000
SEC 31 TWP 17S RGE 13W
Permanent Datum GROUND LEVEL Elevation 1851
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 1864
D.F. 1862
G.L. 1851

Date	4/25/12		
Run Number	TWO		
Depth Driller	3420		
Depth Logger	3421		
Bottom Logged Interval	3403		
Top Log Interval	2550		
Casing Driller	8 5/8" @ 846'		
Casing Logger	843		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM	
Density / Viscosity	9.0/56		
pH / Fluid Loss	9.0/8.0		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.52 @ 82F		
Rmf @ Meas. Temp	.39 @ 82F		
Rmc @ Meas. Temp	.62 @ 82F		
Source of Rmf / Rmc	MEASURED		
Rin @ BHT	.38 @ 110F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	110F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	JEFF LAWLER		

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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 SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
RUSSELL, KS. - S. TO INTERSECTION OF HWY 281 & HWY 4
3 E. TO CURVE - 1/2 S. ON CURVE - W. INTO

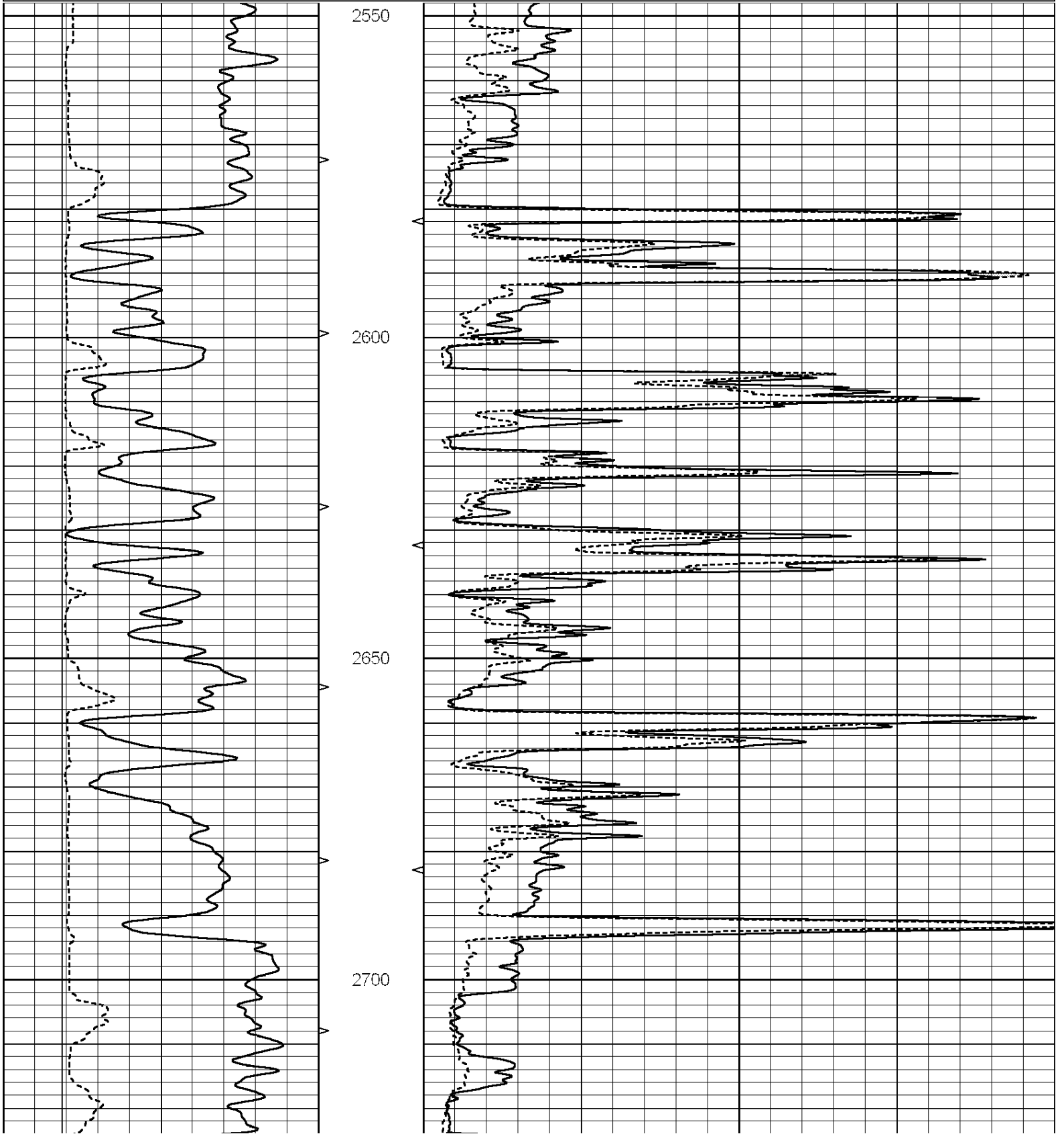


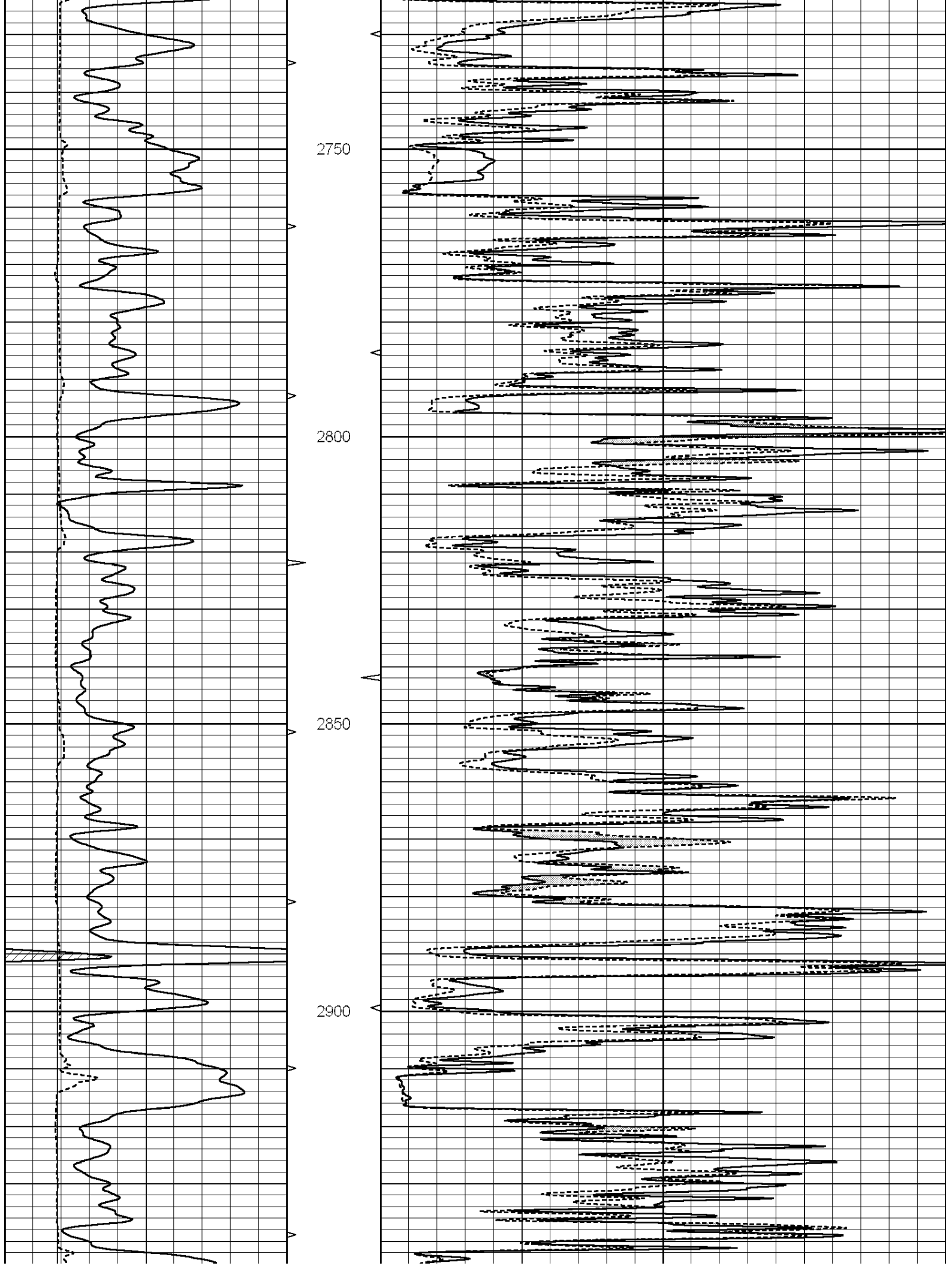
SUPERIOR
Hays,
Kansas

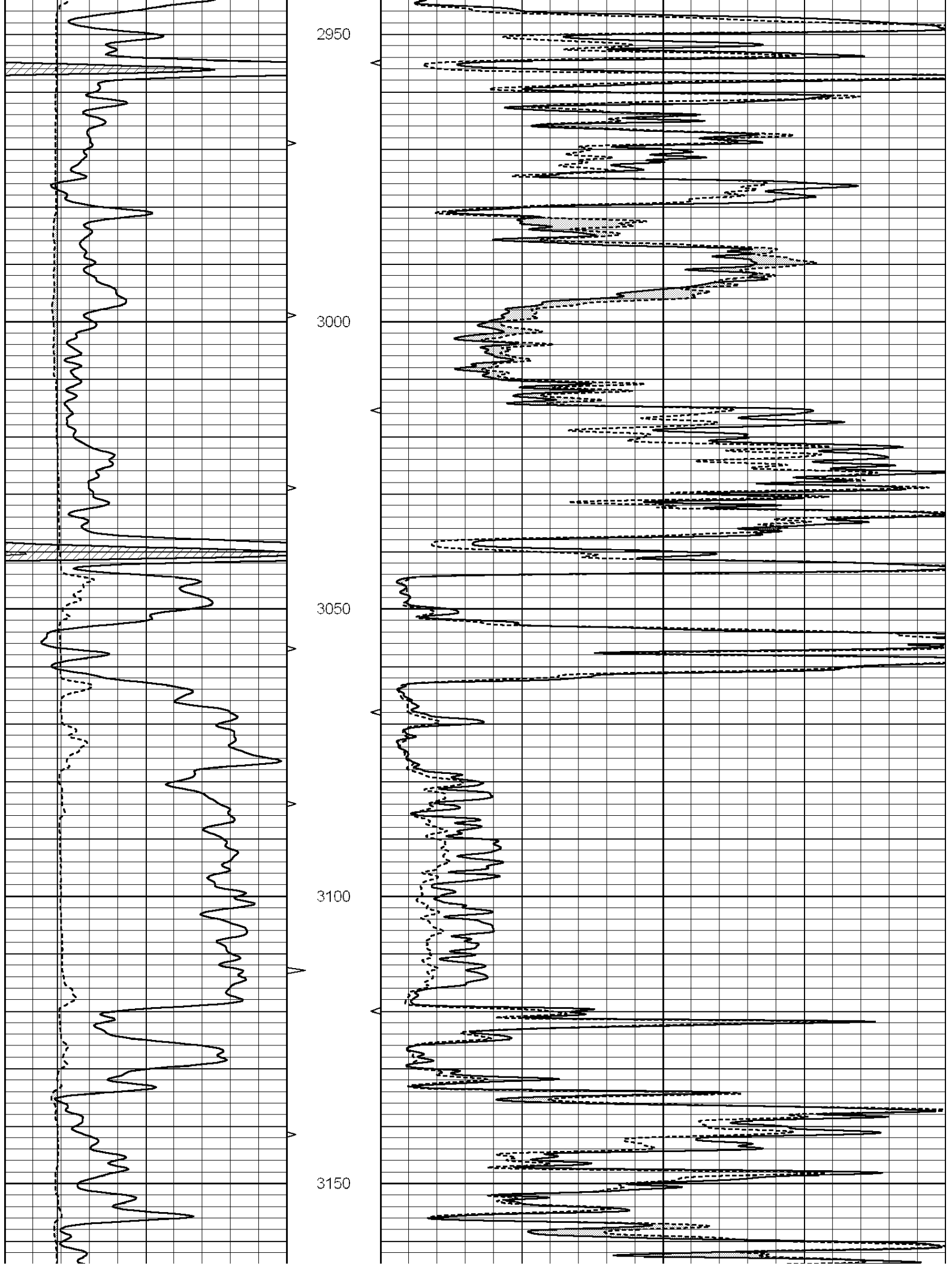
MAIN SECTION

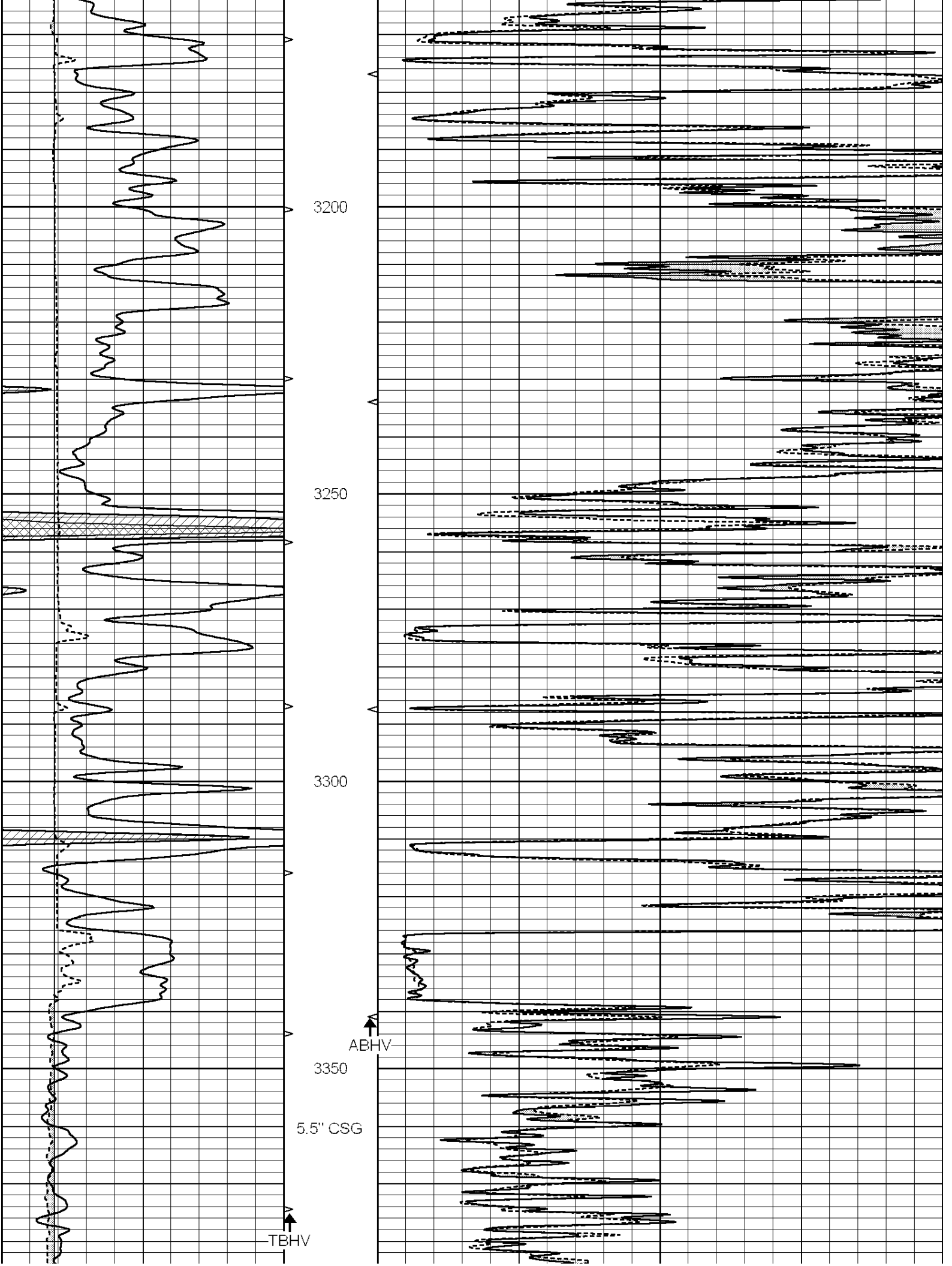
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 Charted by: Depth in Feet scaled 1:240

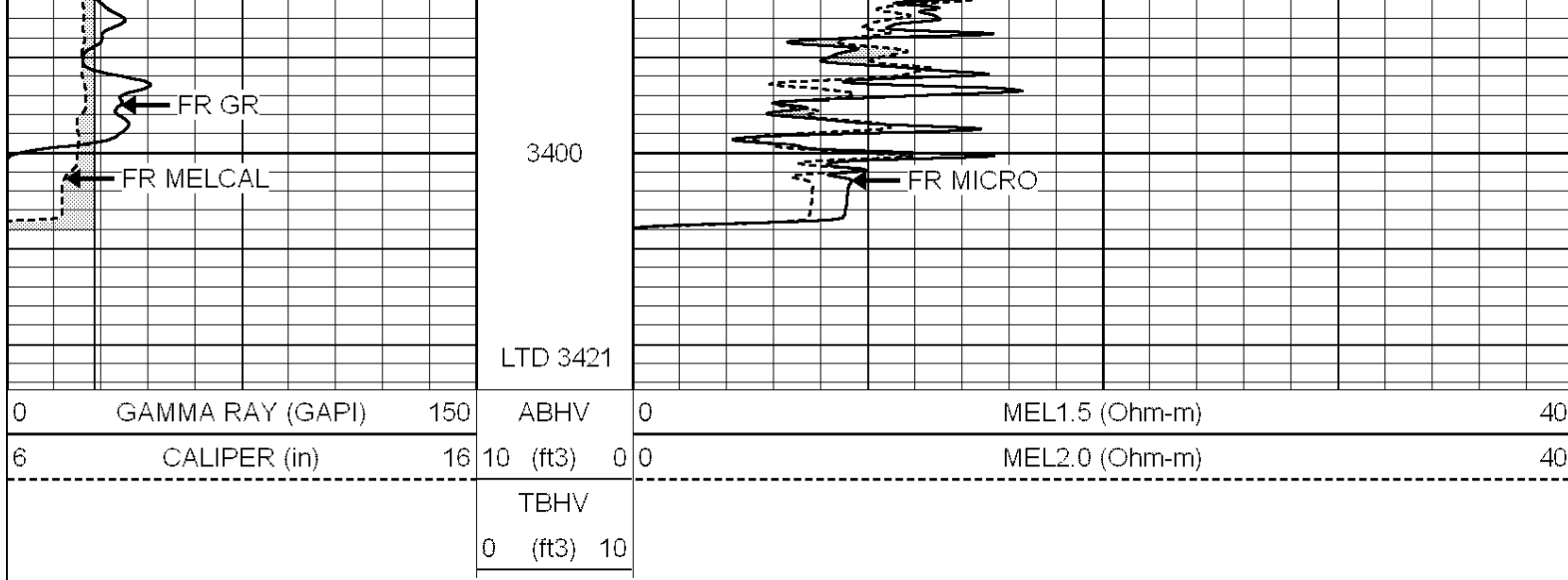
0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3)	10		









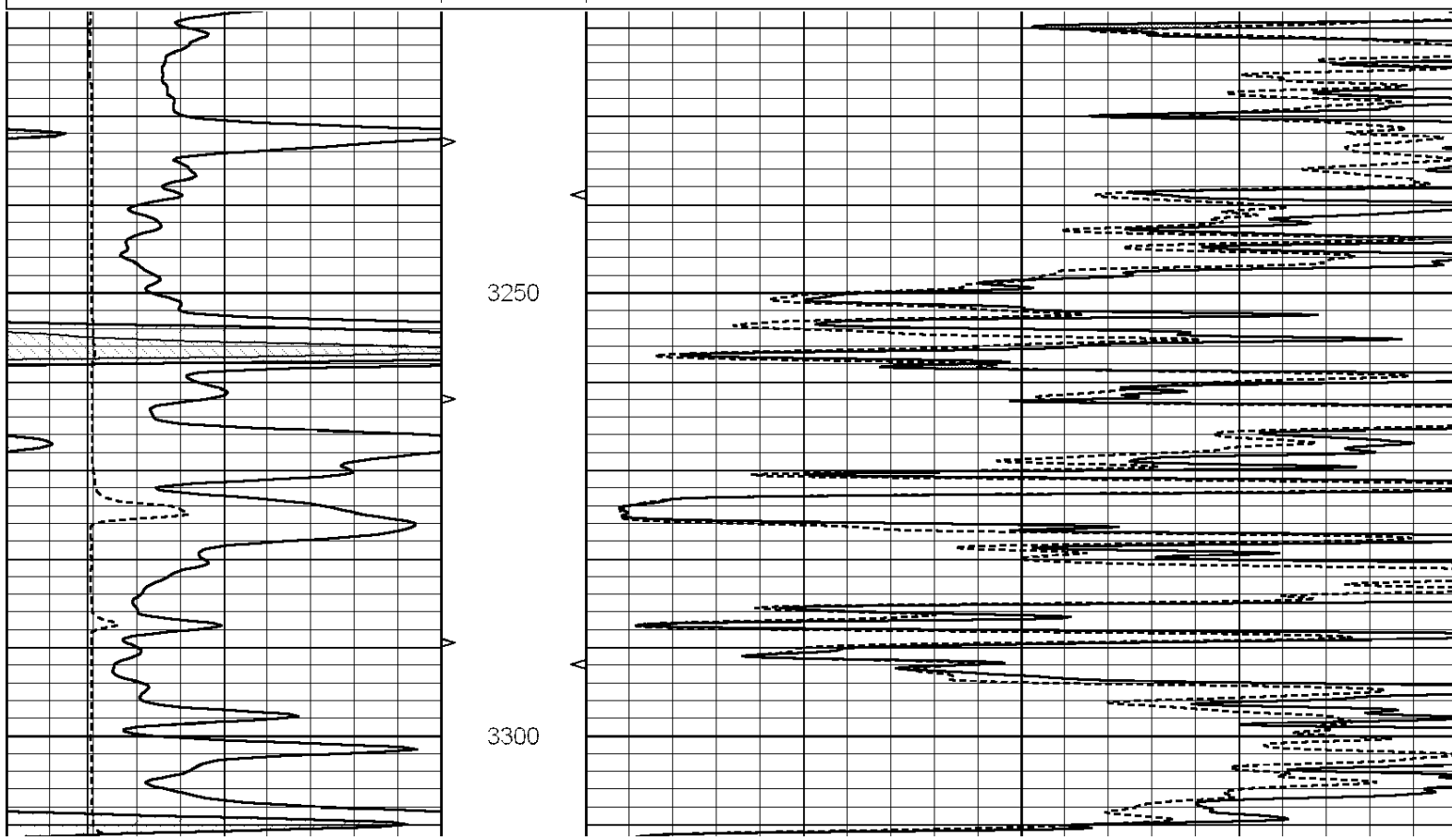


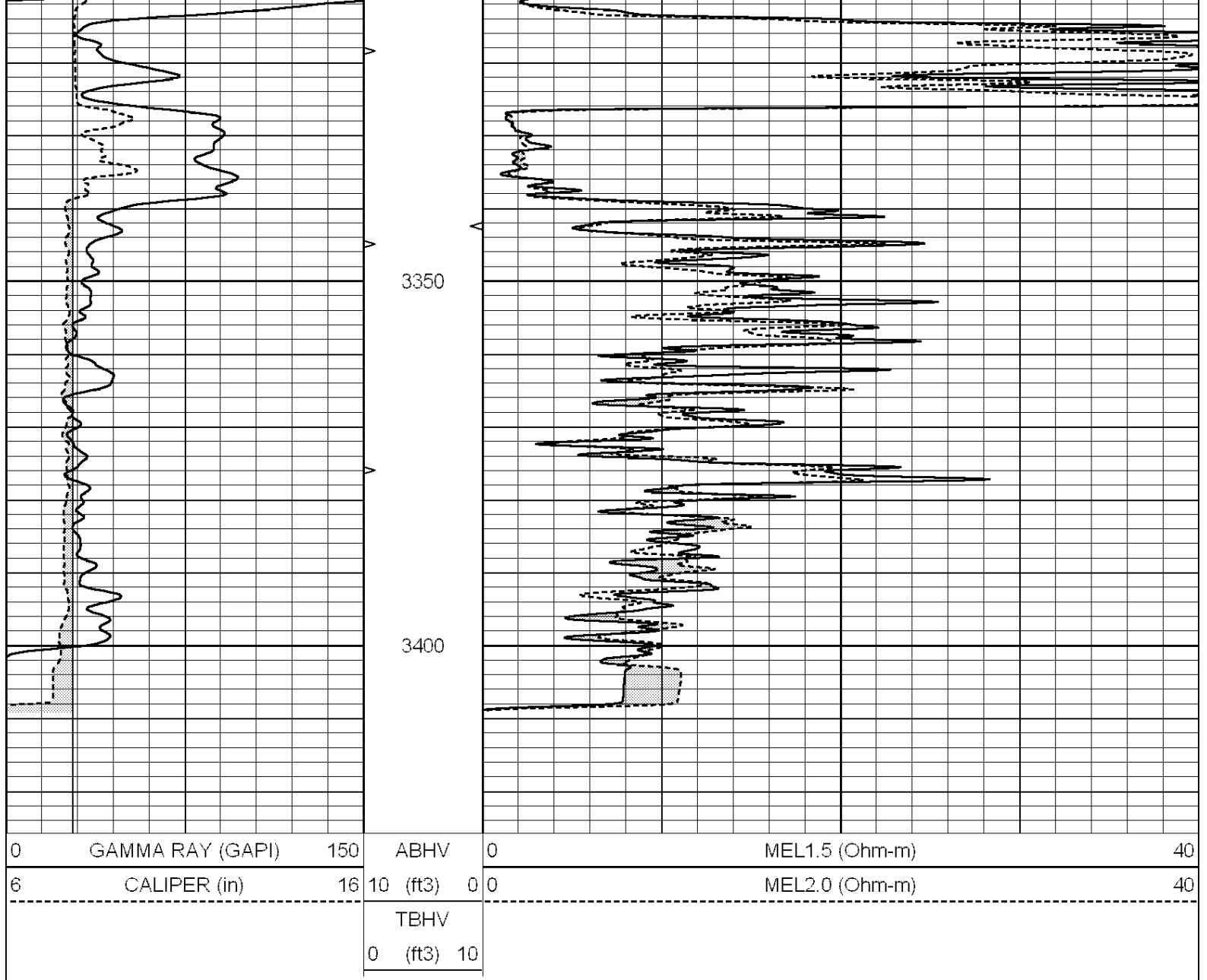
SUPERIOR
Hays,
Kansas

REPEAT SECTION

Database File: 008849ddn.db
 Dataset Pathname: pass6.2
 Presentation Format: _micro
 Dataset Creation: Wed Apr 25 23:07:11 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	0	MEL1.5 (Ohm-m)	40
6	CALIPER (in)	16	10 (ft3)	0	MEL2.0 (Ohm-m)	40
			TBHV			
			0 (ft3)	10		





Calibration Report

Database File: 008849ddn.db
 Dataset Pathname: pass6.2
 Dataset Creation: Wed Apr 25 23:07:11 2012 by Calc Open-Cased 090629

MICRO Calibration Report

Serial Number:	MICRO6	
Tool Model:	PROBE	
Performed:	Sat Mar 24 05:25:46 2012	
Caliper Calibration:	Gain=6.253	Offset=-1.368
References	Low Cal	High Cal
Readings	5.800	13.000
	1.178	2.330
1.5" Calibration:	Gain=30.075	Offset=-0.200
References	Low Cal	High Cal
Readings	0.000	20.000
	0.004	1.196
2" Calibration:	Gain=33.041	Offset=-0.300

References
Readings

Low Cal
0.000
0.006

High Cal
20.000
0.913

Gamma Ray Calibration Report

Serial Number: #8
Tool Model: OPEN
Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps



SUPERIOR
Hays,
Kansas

**DUAL
INDUCTION
LOG**

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON
State KANSAS

Company CAERUS KANSAS, LLC.
Well MORTIMER #31-32
Field SETTE
County BARTON State KANSAS

Location: API # : 15-009-25680-0000
2310' FNL & 1490' FEL
E-2/SE/SW/NE
SEC 31 TWP 17S RGE 13W
Permanent Datum GROUND LEVEL Elevation 1851
Log Measured From KELLY BUSHING 13' A.G.L.
Drilling Measured From KELLY BUSHING
Elevation
K.B. 1864
D.F. 1862
G.L. 1851

Date	4/25/12		
Run Number	ONE		
Depth Driller	3420		
Depth Logger	3421		
Bottom Logged Interval	3419		
Top Log Interval	00		
Casing Driller	8 5/8" @ 846'		
Casing Logger	843		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 4000 PPM	
Density / Viscosity	9.0/56		
pH / Fluid Loss	9.0/8.0		
Source of Sample	FLOWLINE		
Rin @ Meas. Temp	.52 @ 82F		
Rmf @ Meas. Temp	.39 @ 82F		
Rmc @ Meas. Temp	.62 @ 82F		
Source of Rmf / Rmc	MEASURED		
Rin @ BHT	.38 @ 110F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom			
Maximum Recorded Temperature	110F		
Equipment Number	680		
Location	HAYS, KS.		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	JEFF LAWLER		

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Comments

THANK YOU FOR USING SUPERIOR WELL SERVICE (785) 628-6395
DIRECTIONS
RUSSELL, KS. - S. TO INTERSECTION OF HWY 281 & HWY 4
3 E. TO CURVE - 1/2 S. ON CURVE - W. INTO



SUPERIOR
Hays,
Kansas

MAIN SECTION

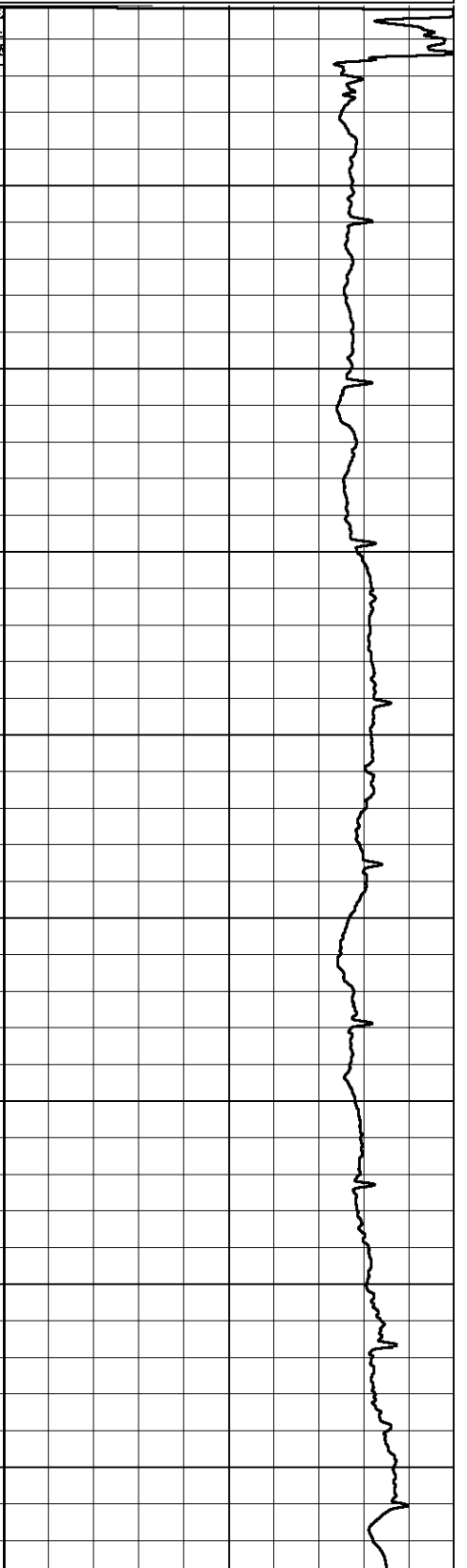
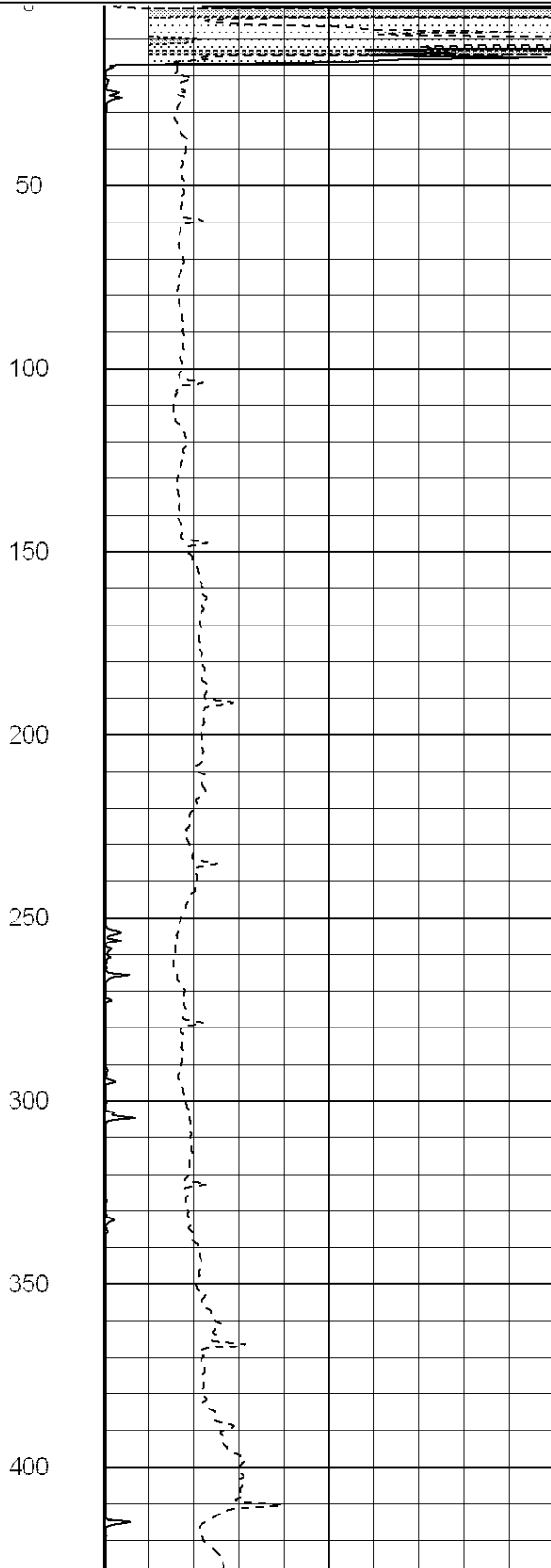
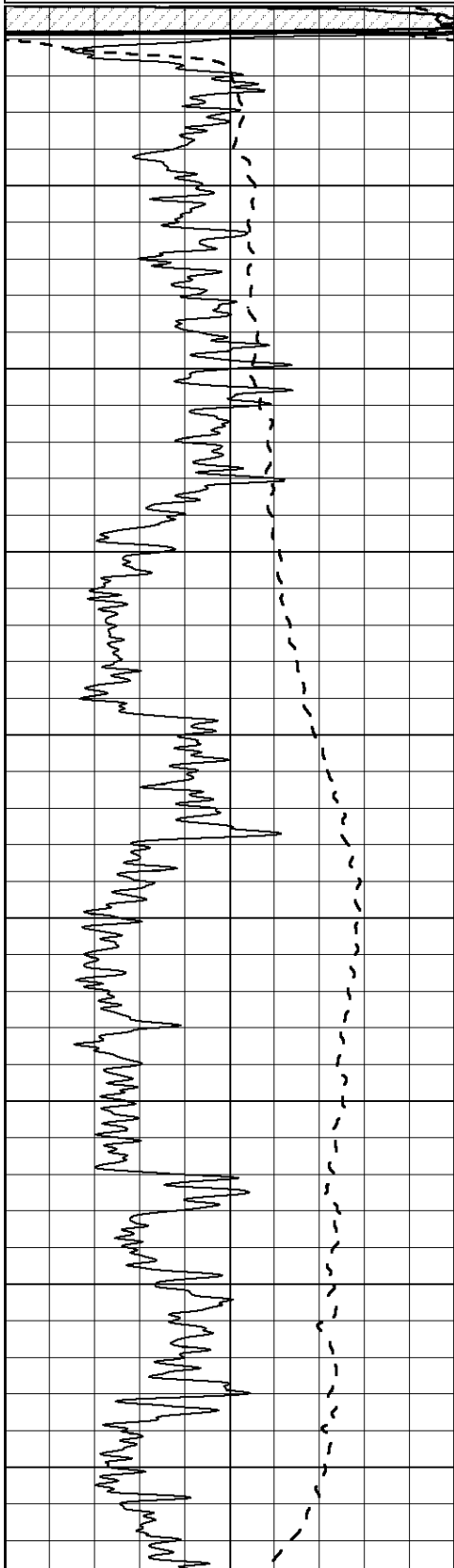
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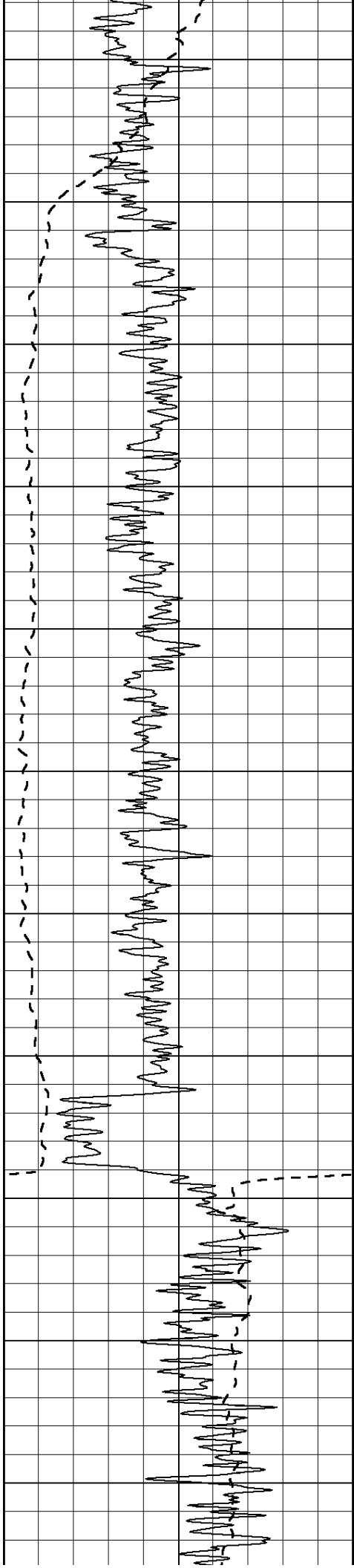
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-100	SP (mV)	100

0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50

1000	CILD (mmho/m)	0
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50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500





450

500

550

600

650

700

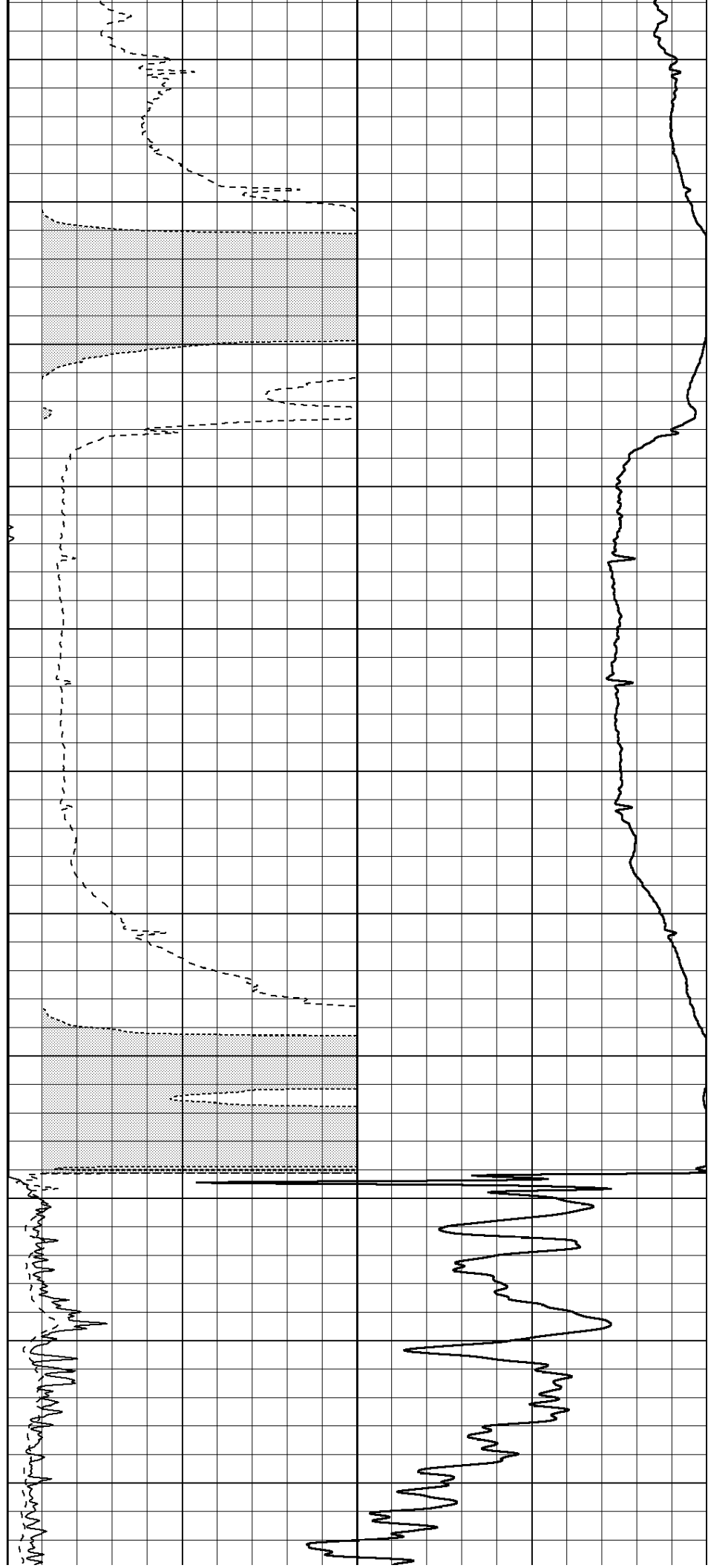
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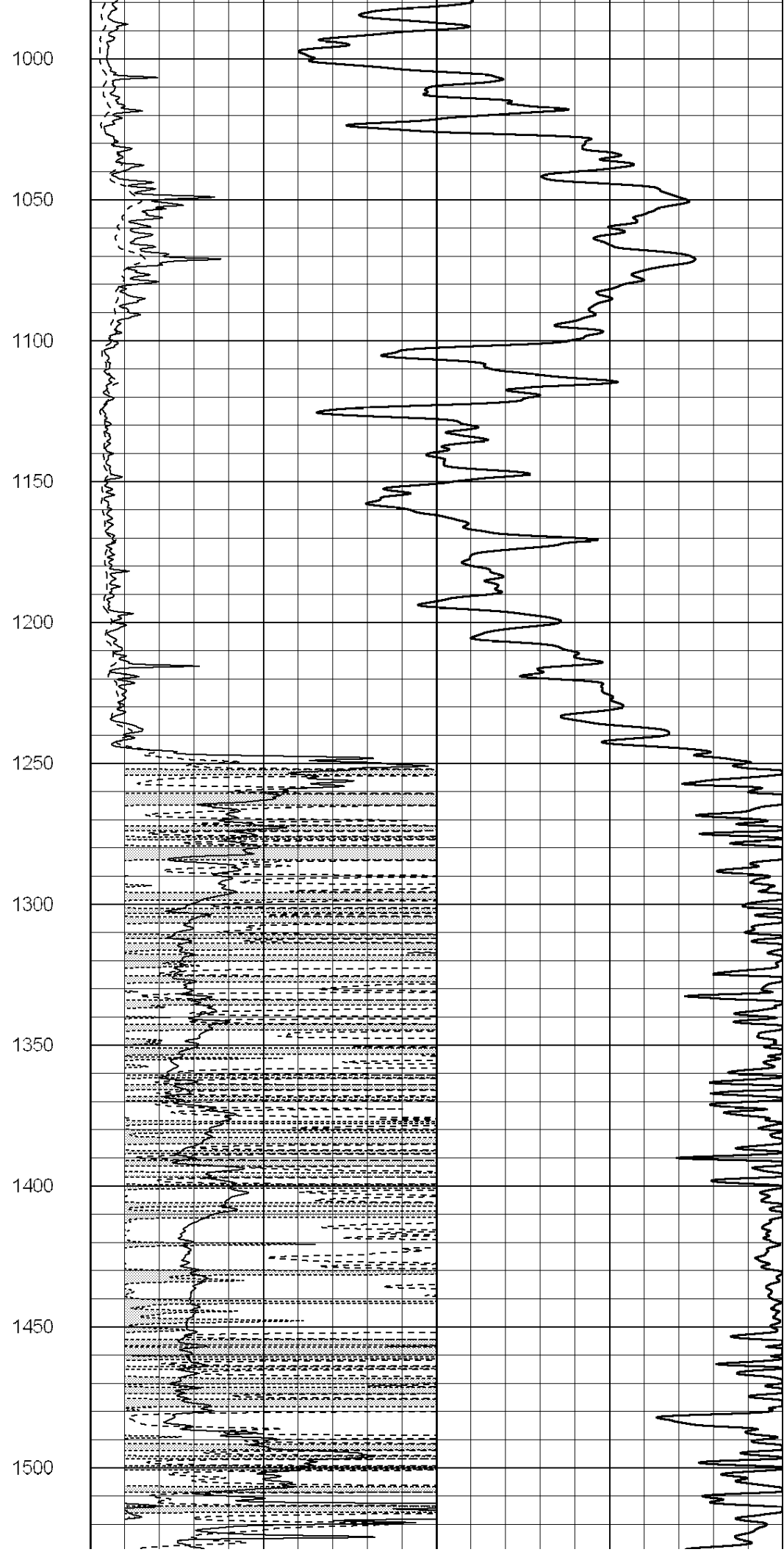
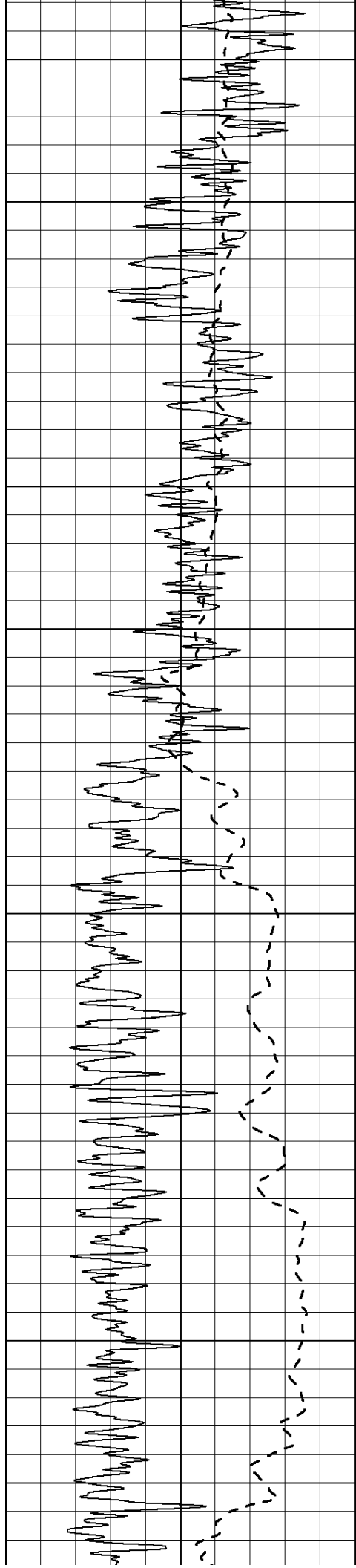
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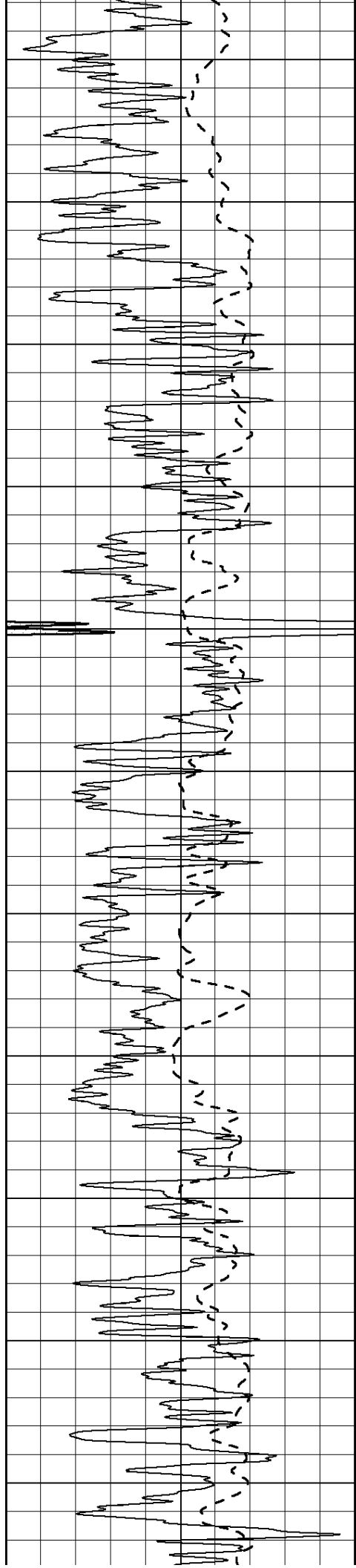
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900

950







1550

1600

1650

1700

1750

1800

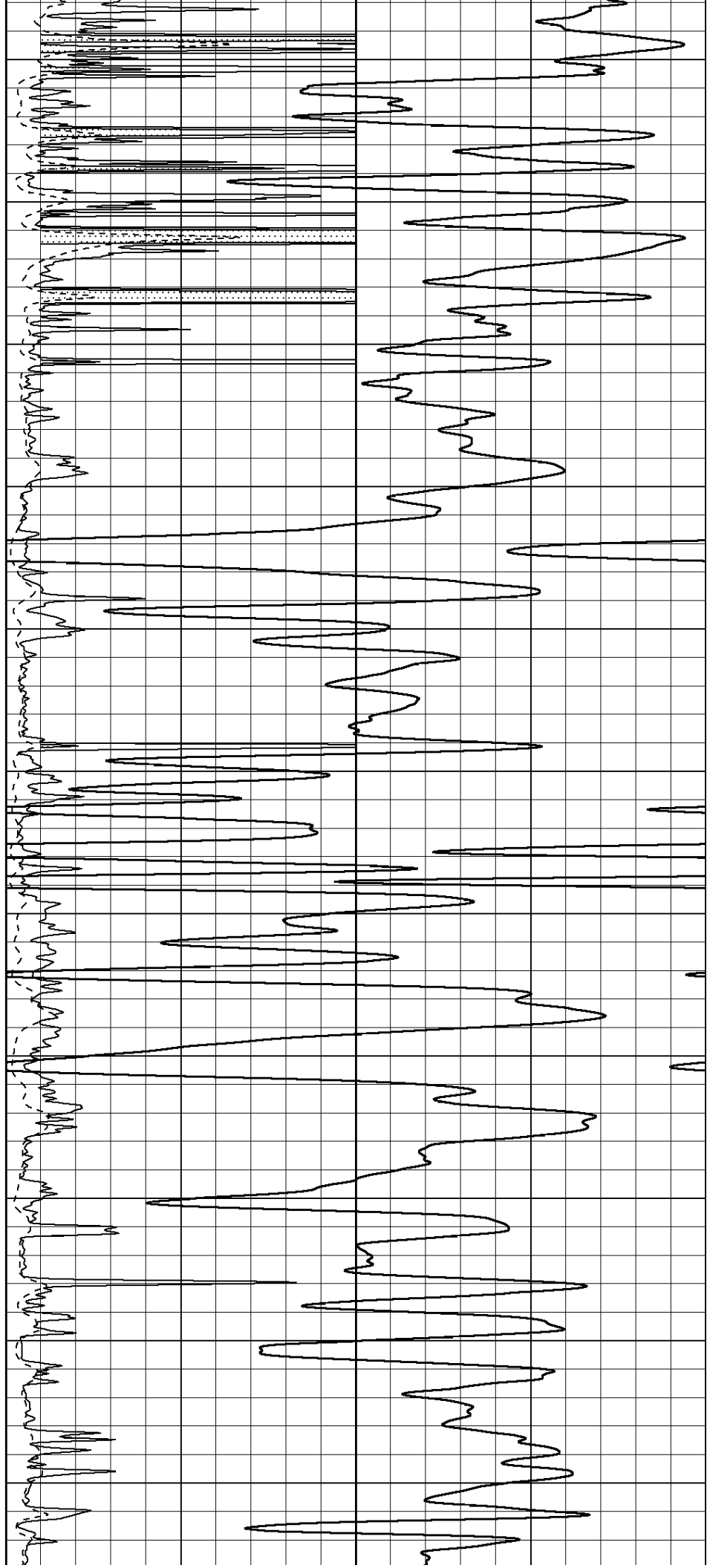
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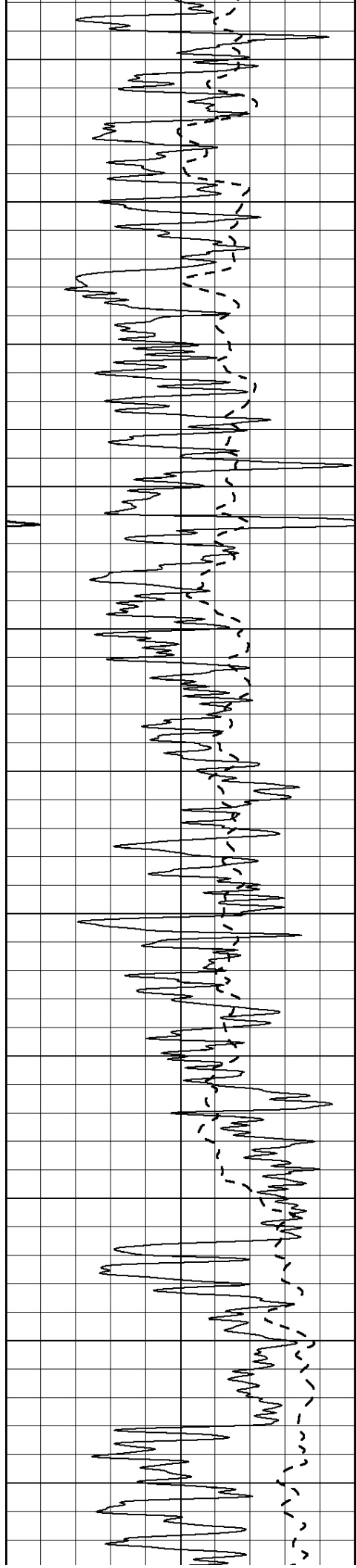
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1950

2000

2050





2100

2150

2200

2250

2300

2350

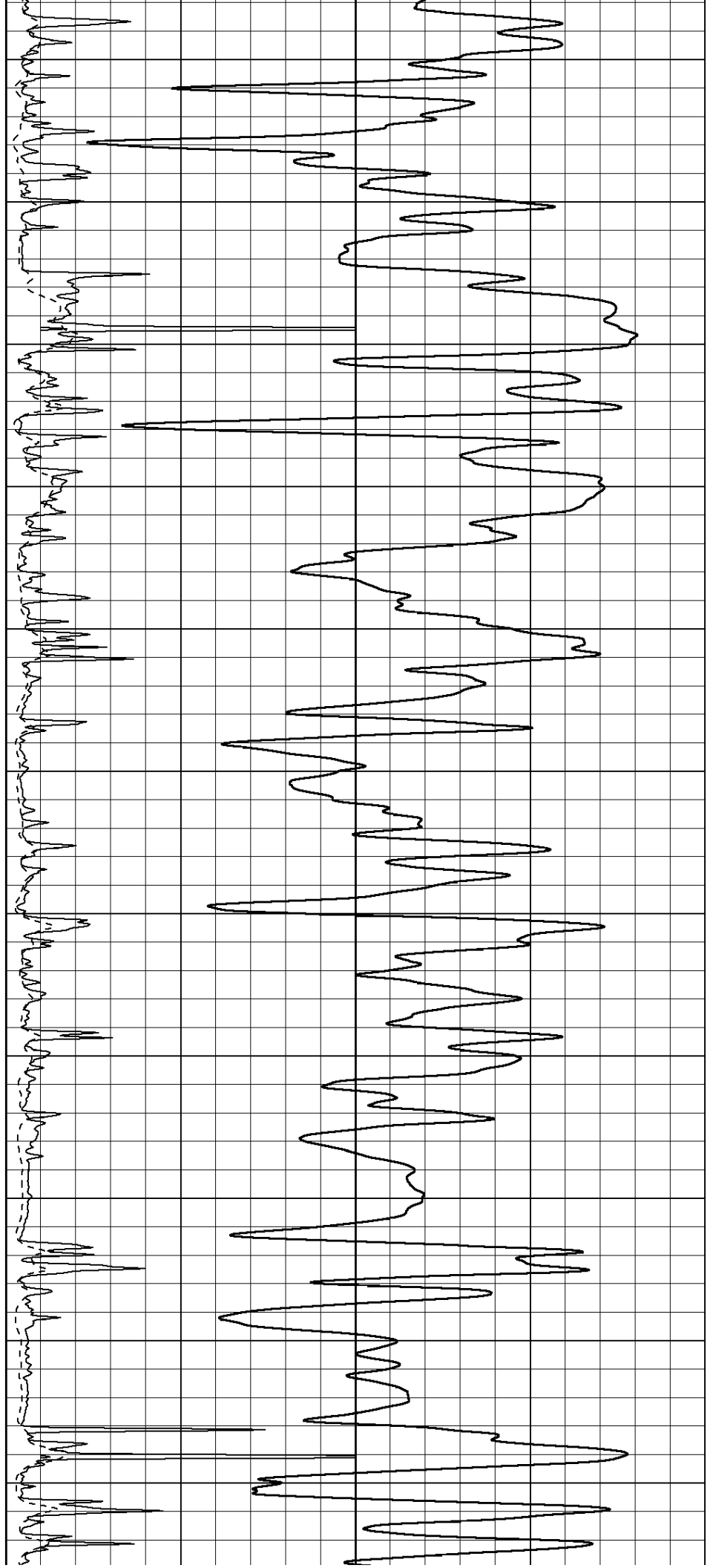
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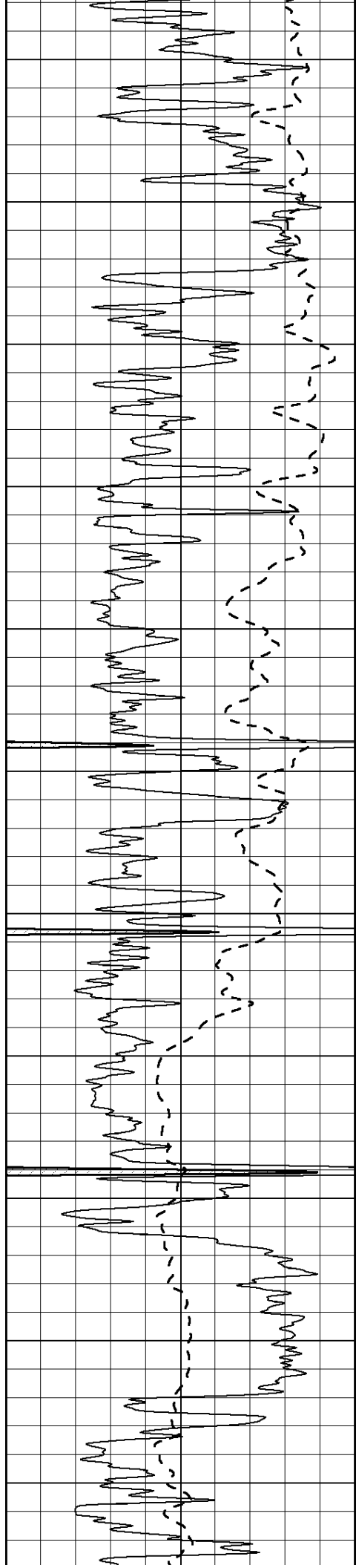
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2500

2550

2600





2650

2700

2750

2800

2850

2900

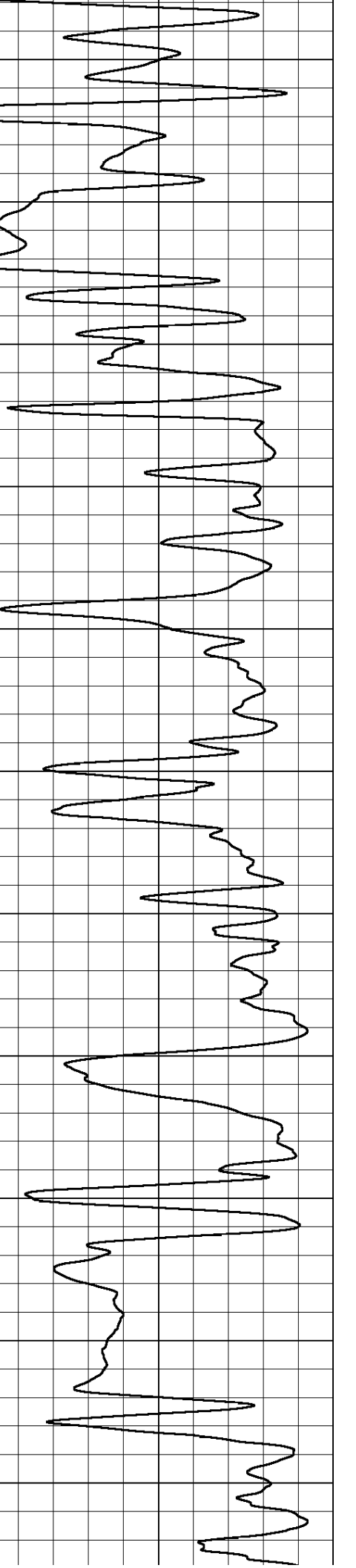
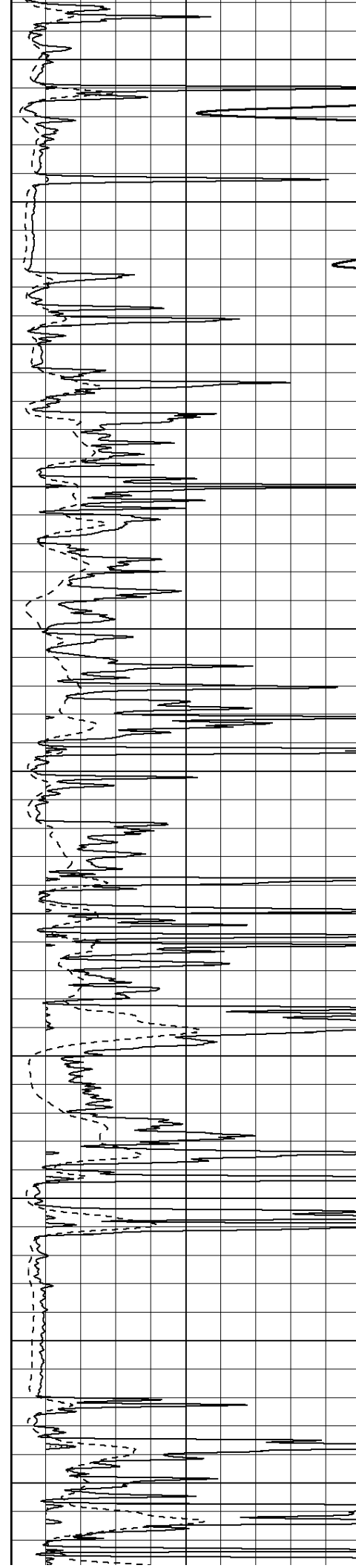
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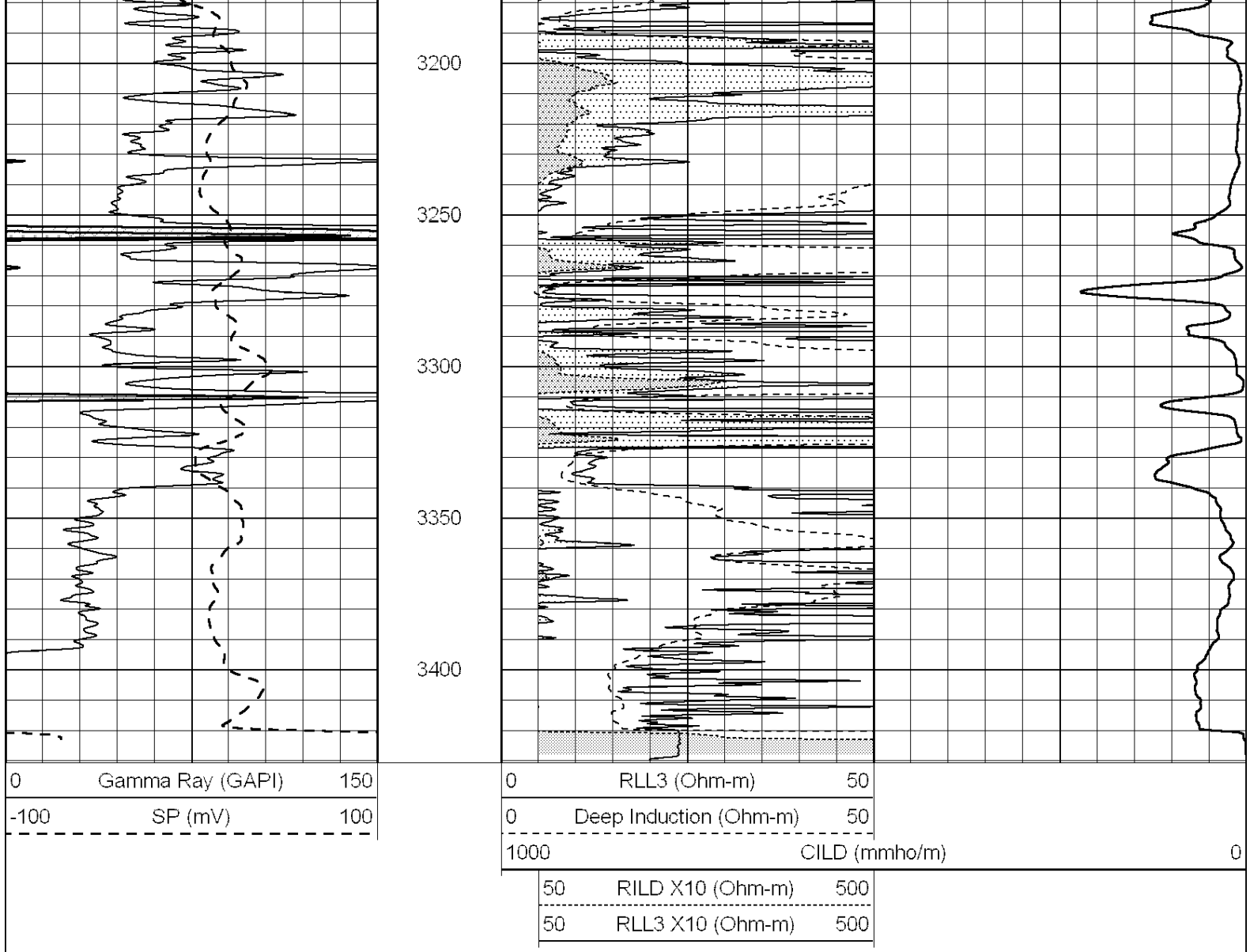
3000

3050

3100

3150

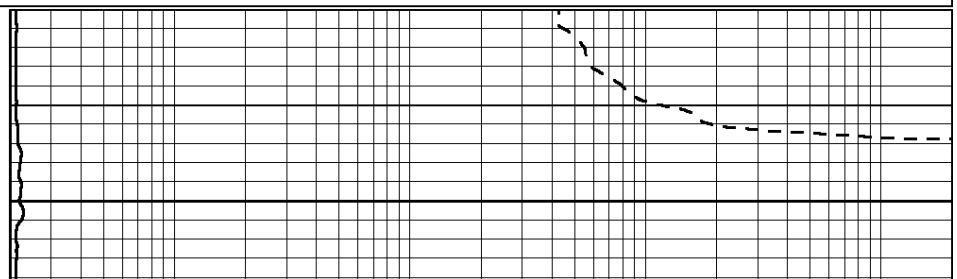
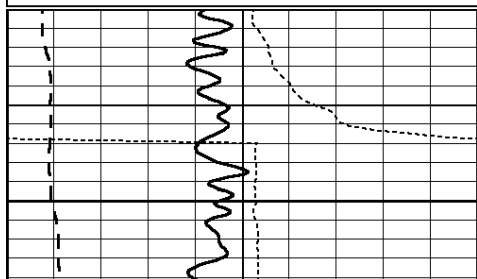
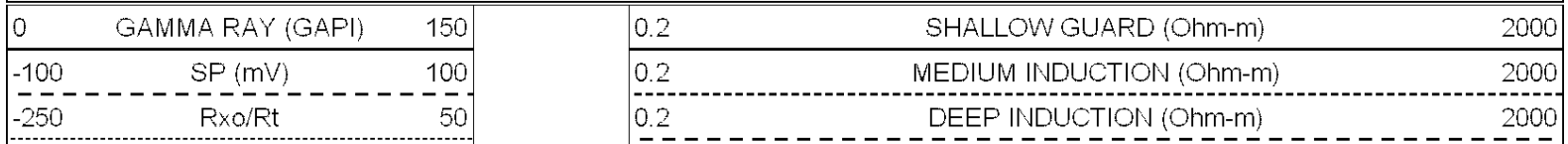


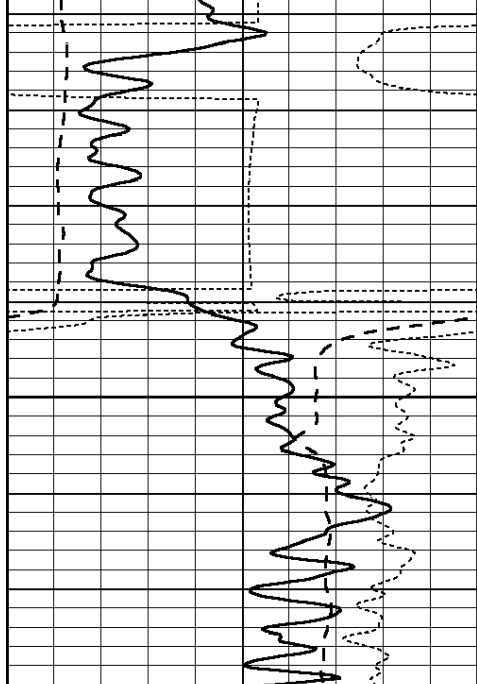


SUPERIOR
Hays,
Kansas

ANHYDRITE

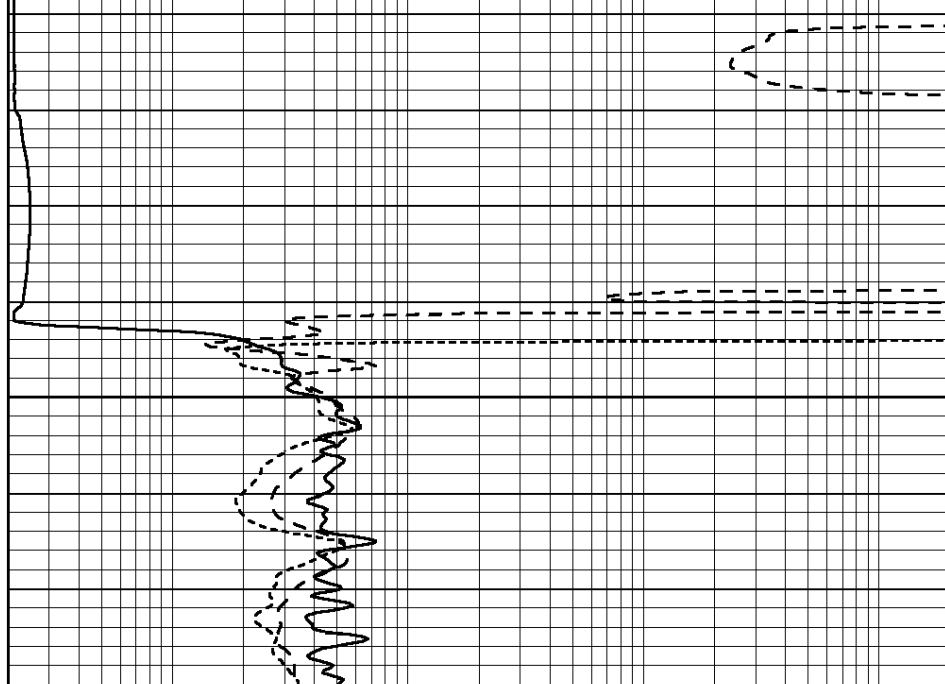
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 Dataset Creation: Wed Apr 25 21:33:07 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

850



0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



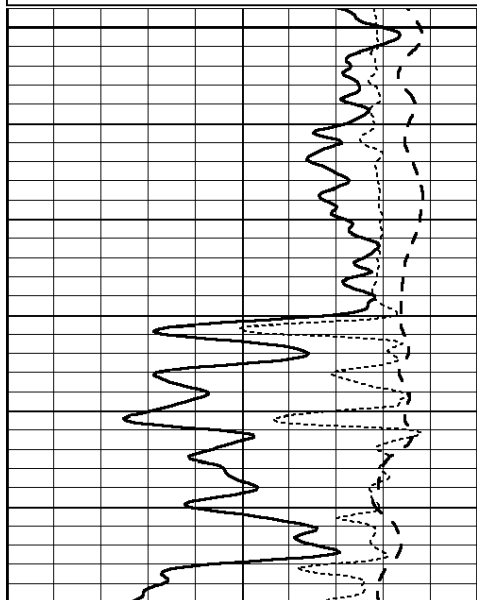
SUPERIOR
Hays,
Kansas

MAIN SECTION

Database File: 008849ddn.db
 Dataset Pathname: pass4.1
 Presentation Format: _dil
 Dataset Creation: Wed Apr 25 21:23:30 2012 by Calc Open-Cased 090629
 Charted by: Depth in Feet scaled 1:240

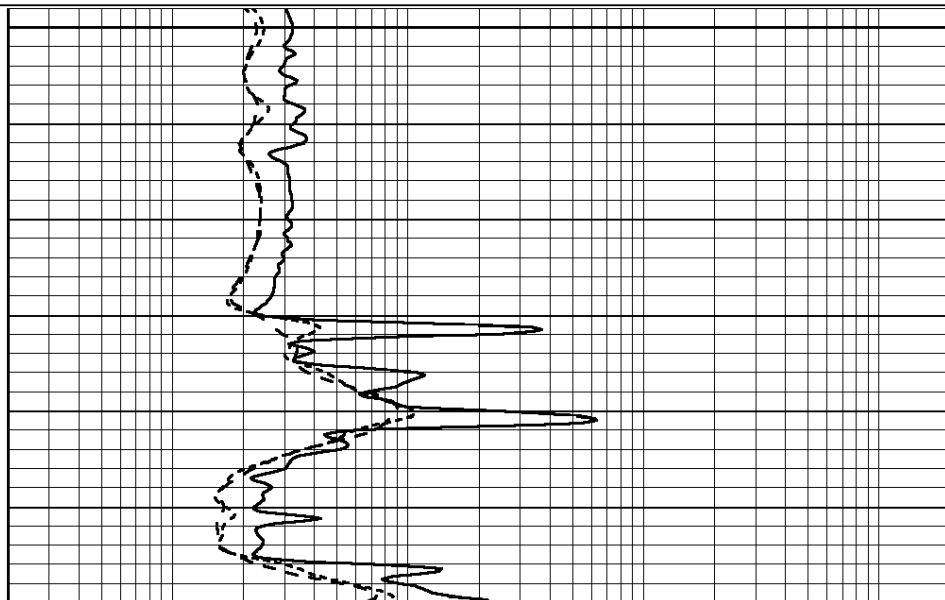
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-100	SP (mV)	100
-250	Rxo/Rt	50

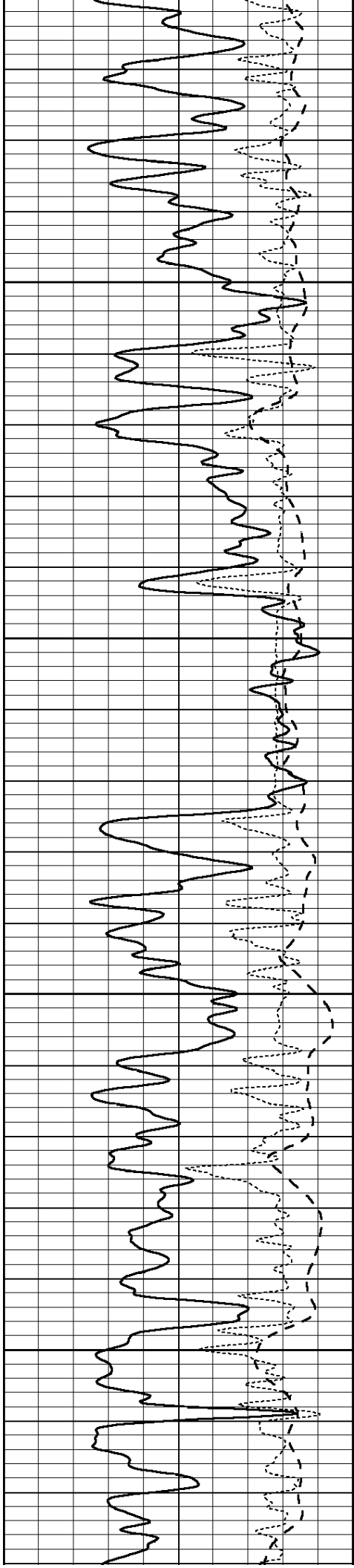
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0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000



2550

2600



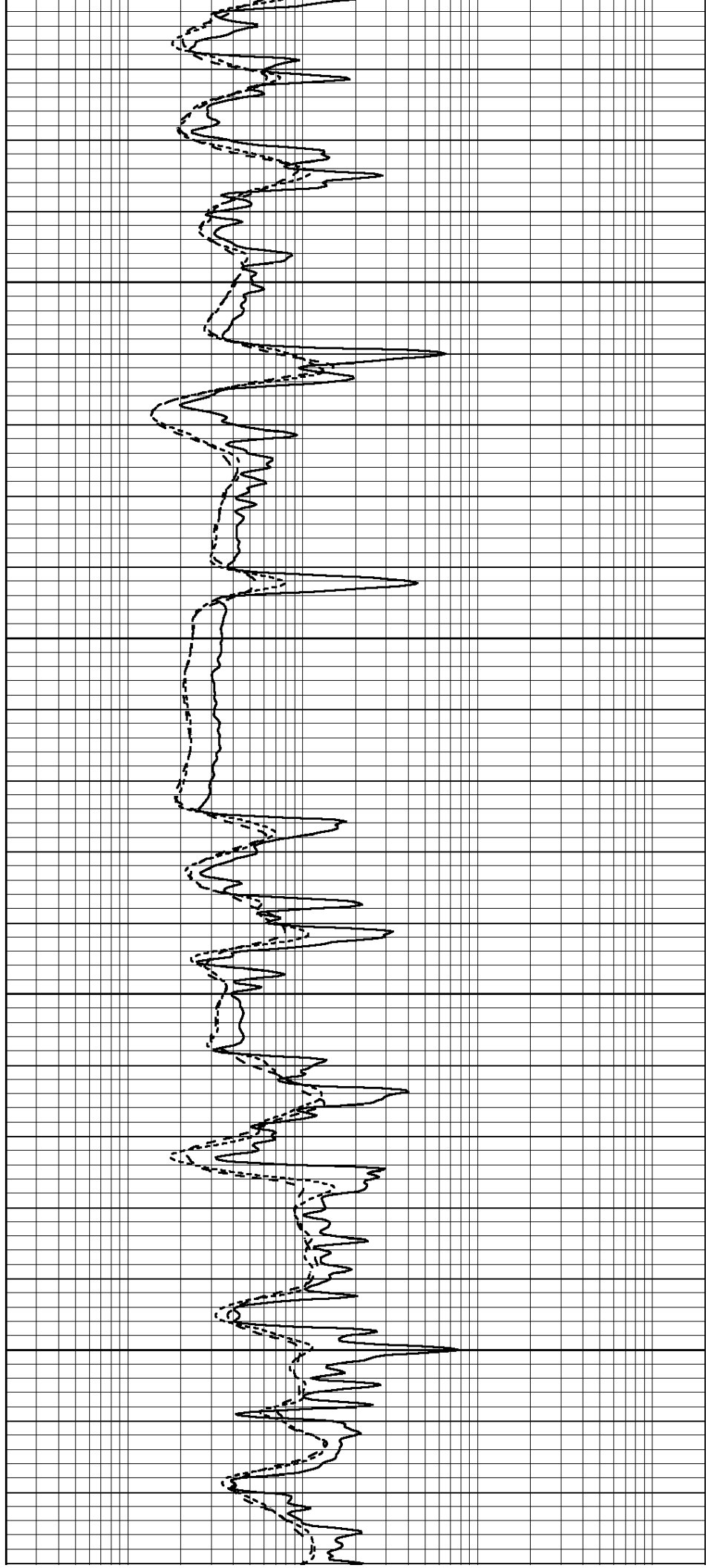


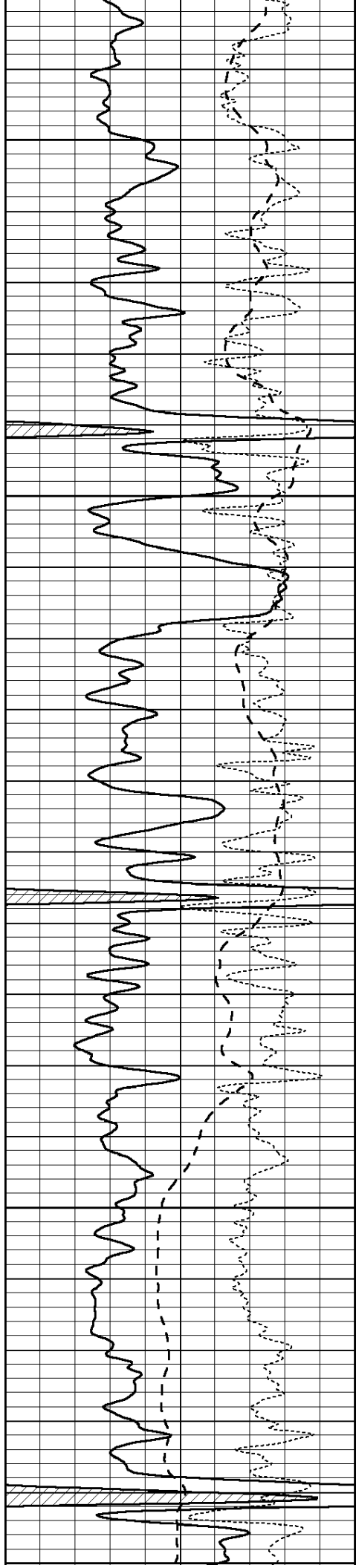
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2700

2750

2800





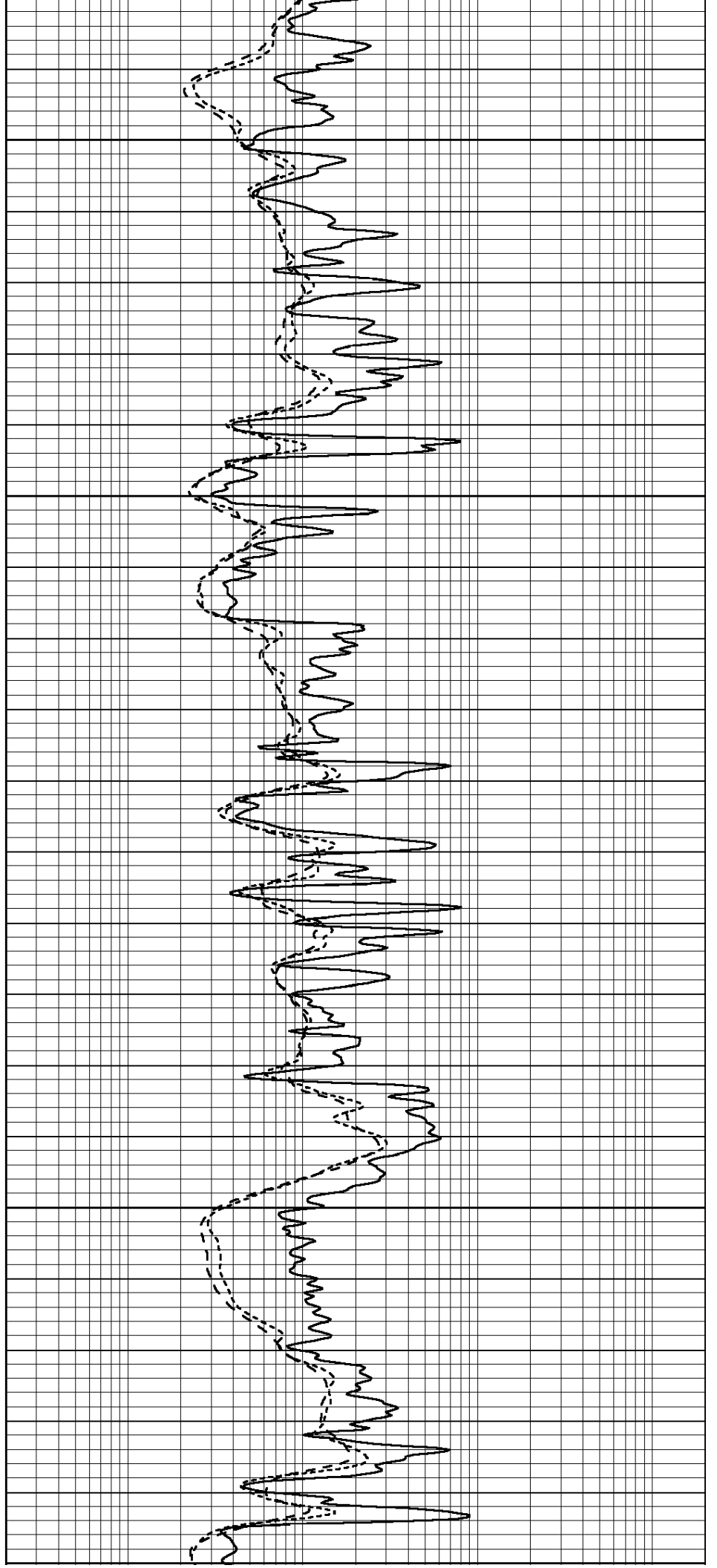
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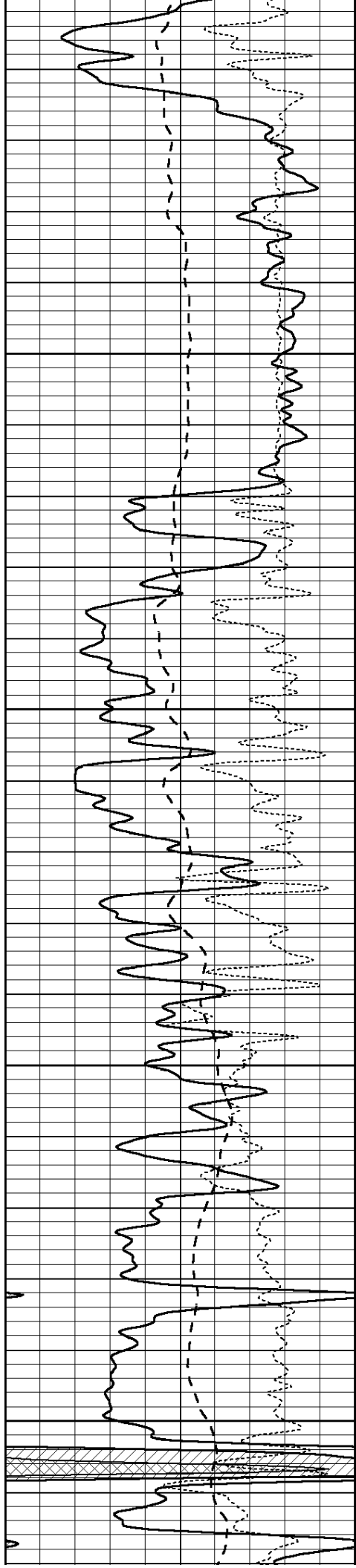
2900

2950

3000

3050





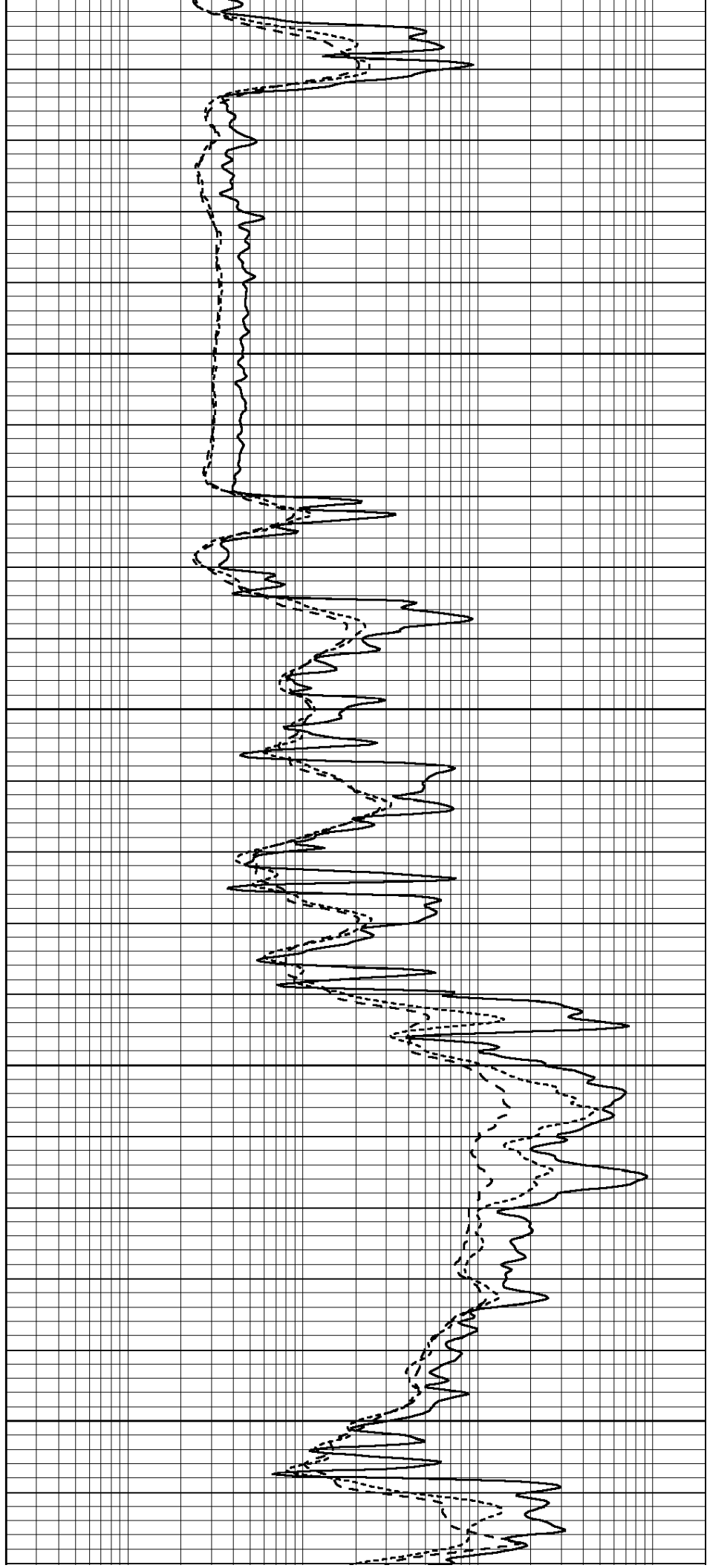
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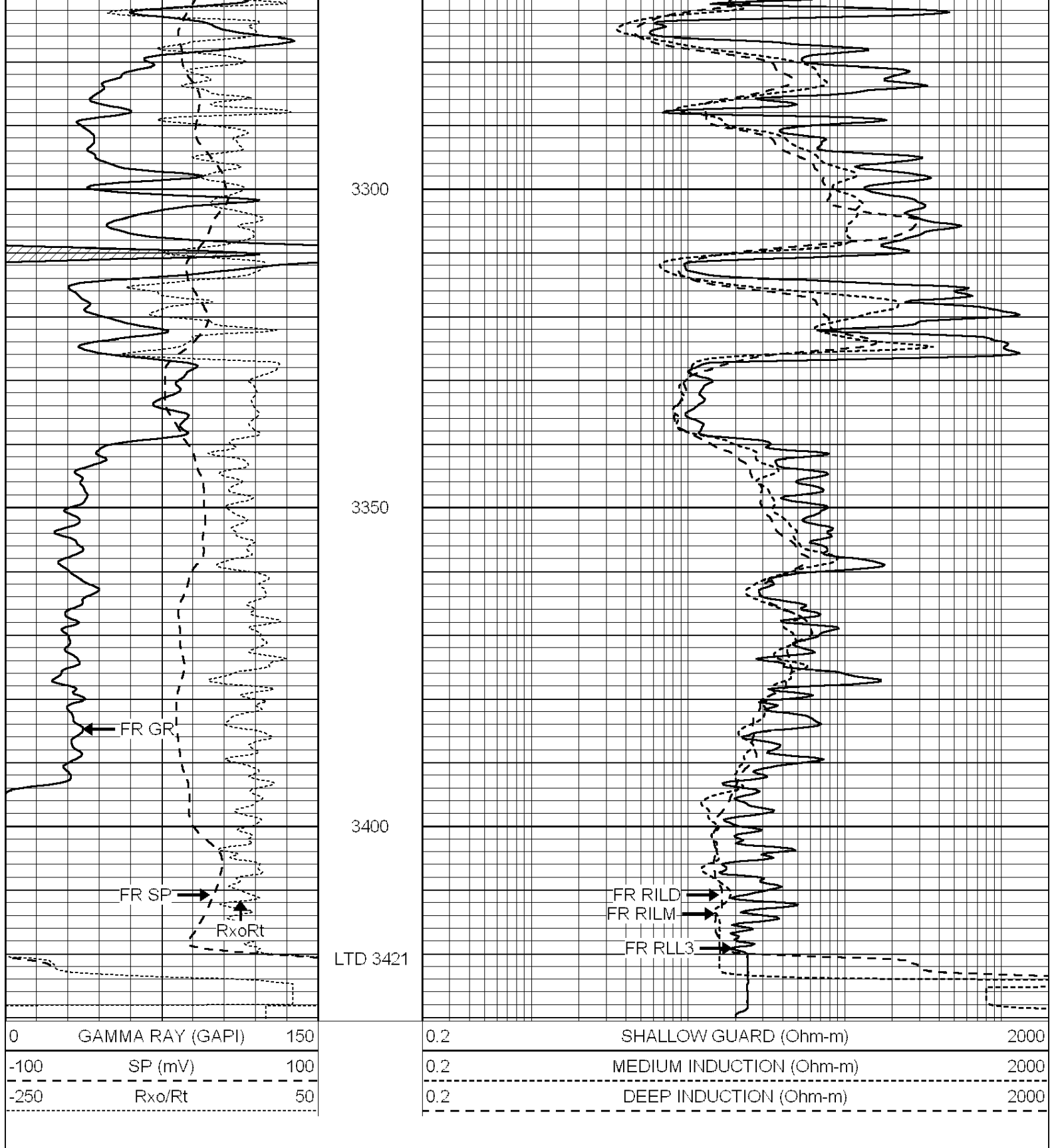
3100

3150

3200

3250





SUPERIOR
Hays,
Kansas

REPEAT SECTION

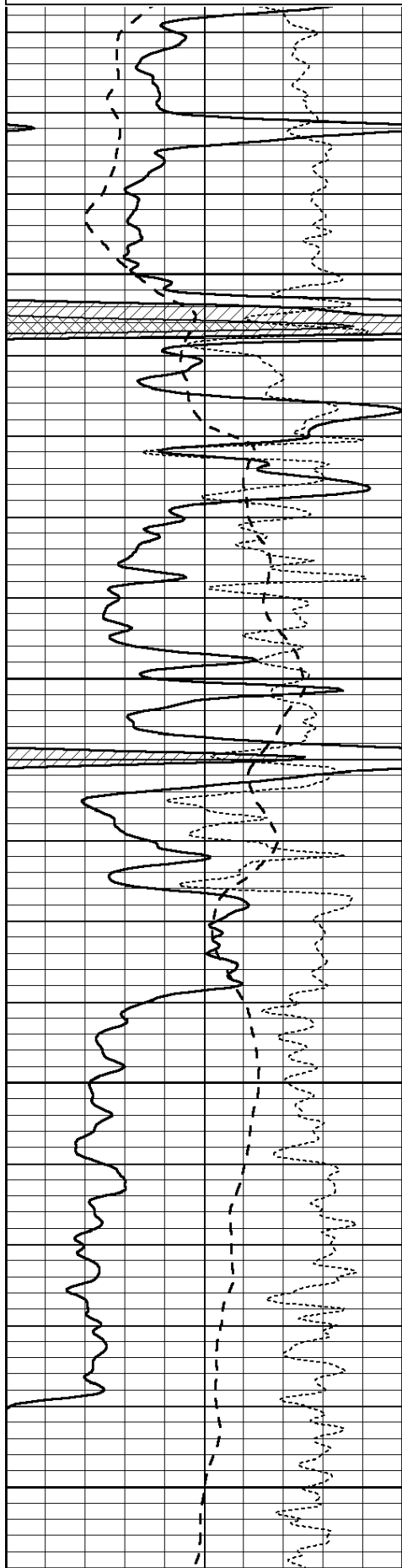
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 Presentation Format: _dil
 Dataset Creation: Wed Apr 25 21:17:10 2012 by Calc Open-Cased 090629

Charted by:

Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

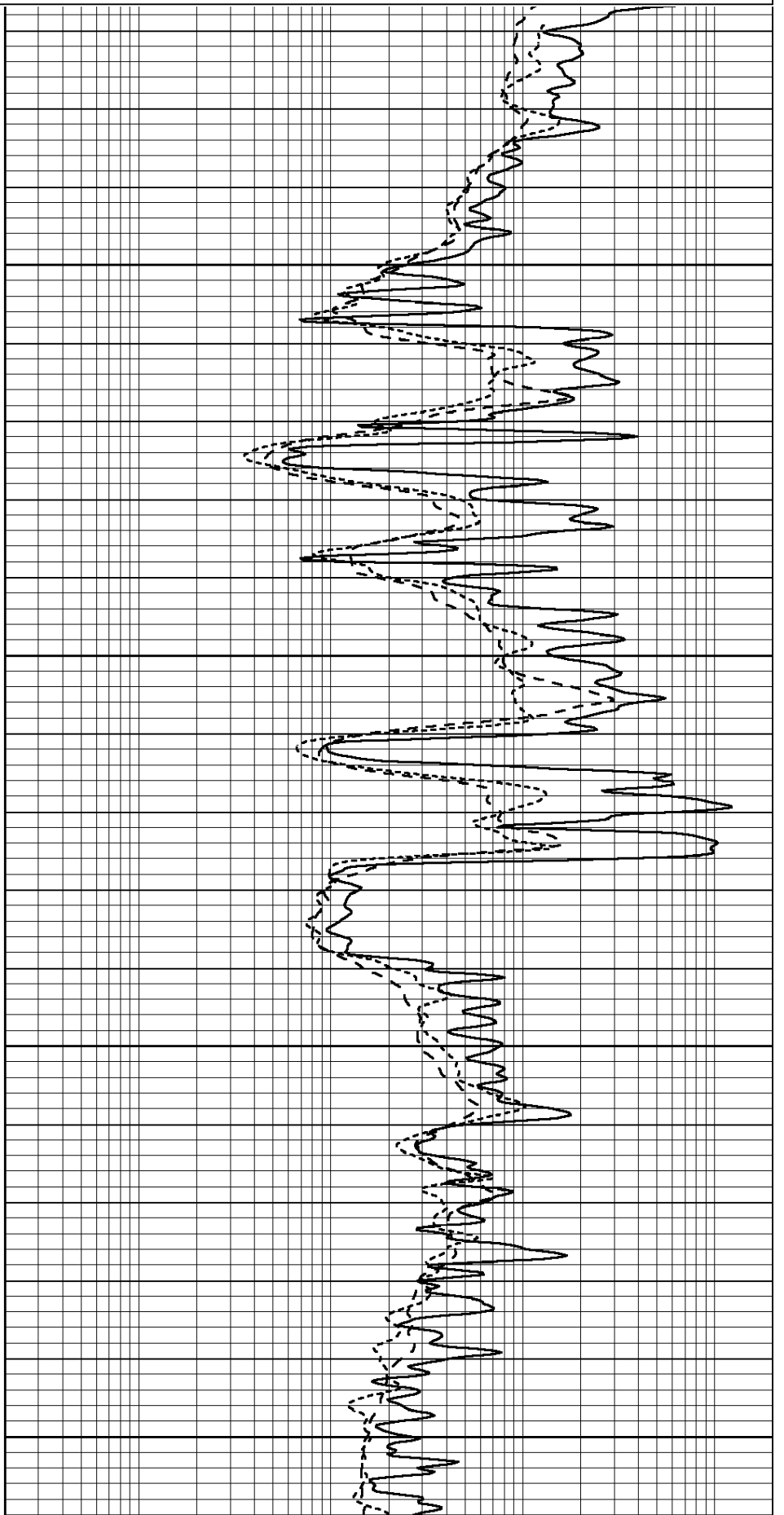


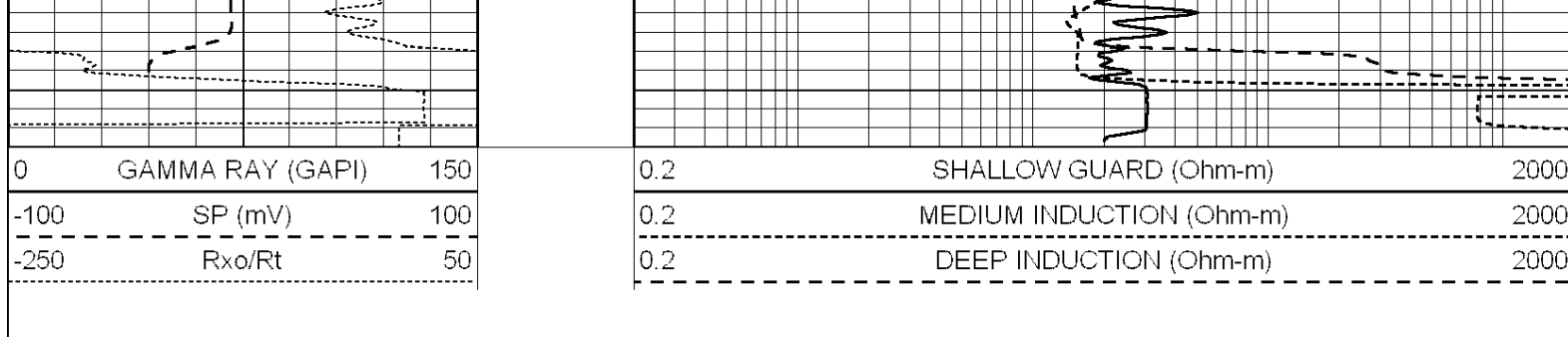
3250

3300

3350

3400





Calibration Report

Database File: 008849ddn.db
 Dataset Pathname: pass3.2
 Dataset Creation: Wed Apr 25 21:17:10 2012 by Calc Open-Cased 090629

Dual Induction Calibration Report

Serial-Model: PROBE8-DILG
 Surface Cal Performed: Fri Aug 01 06:33:19 2008
 Downhole Cal Performed: Mon Jul 28 11:08:27 2008
 After Survey Verification Performed: Mon Jul 28 11:08:27 2008

Surface Calibration

Loop:	Readings				References		Results	
	Air	Loop			Air	Loop	m	b
Deep	0.015	0.648	V	0.000	400.000	mmho/m	632.616	-9.730
Medium	0.029	0.796	V	0.000	464.000	mmho/m	605.049	-17.680
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.017	0.657	V	0.000	400.000	mmho/m	625.153	-10.619
Medium	0.016	0.757	V	0.000	464.000	mmho/m	625.992	-9.739

Downhole Calibration

	Readings				References		Results	
	Zero	Cal			Zero	Cal	m'	b'
Deep	0.000	0.000	mmho/m	2.011	405.777	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	7.590	503.393	mmho/m	1.000	0.000
LL3		7.500	V		1500.000	Ohm-m		
		0.000	V		20.000	Ohm-m		
		-7.200	V		3800.000	mmho-m		

After Survey Verification

	Readings				Targets		Results	
	Zero	Cal			Zero	Cal	m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	0.000	0.000
LL3		1.000	Ohm-m		1.000	Ohm-m		
		0.000	Ohm-m		0.000	Ohm-m		
		1.000	mmho-m		1.000	mmho-m		

Compensated Density Calibration Report

Serial-Model: GEAR3-GEARHART
 Source / Verifier: 143 / 143
 Master Calibration Performed: Thu Jan 26 19:46:16 2012

Master Calibration

Density Far Detector Near Detector

Magnesium	1.710	g/cc	971.18	557.33	cps
Aluminum	2.580	g/cc	212.31	367.26	cps

Spine Angle = 74.66

Density/Spine Ratio = 0.552

	Size		Reading	
Small Ring	8.00	in	4.29	V
Large Ring	14.00	in	6.24	V

Compensated Neutron Calibration Report

Serial Number: 6I
Tool Model: G

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.0000
Long Space	1.00	cps	1.00	cps	1.0000

Gamma Ray Calibration Report

Serial Number: #8
Tool Model: OPEN
Performed: Mon Jun 13 16:56:43 2011

Calibrator Value: 150.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 175.0 cps

Sensitivity: 0.8371 GAPI/cps



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47366

DST#: 1

ATTN: Jeff Lawler

Test Start: 2012.04.23 @ 01:50:00

GENERAL INFORMATION:

Formation: **LKC "DE & F"**

Deviated: No Whipstock: 1864.00 ft (KB)

Time Tool Opened: 04:51:30

Time Test Ended: 08:58:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 42

Interval: 3162.00 ft (KB) To 3198.00 ft (KB) (TVD)

Reference Elevations: 1864.00 ft (KB)

Total Depth: 3198.00 ft (KB) (TVD)

1851.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8700 Outside

Press @ Run Depth: 13.17 psig @ 3165.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.23

End Date:

2012.04.23

Last Calib.:

2012.04.23

Start Time: 01:50:05

End Time:

08:57:59

Time On Btm:

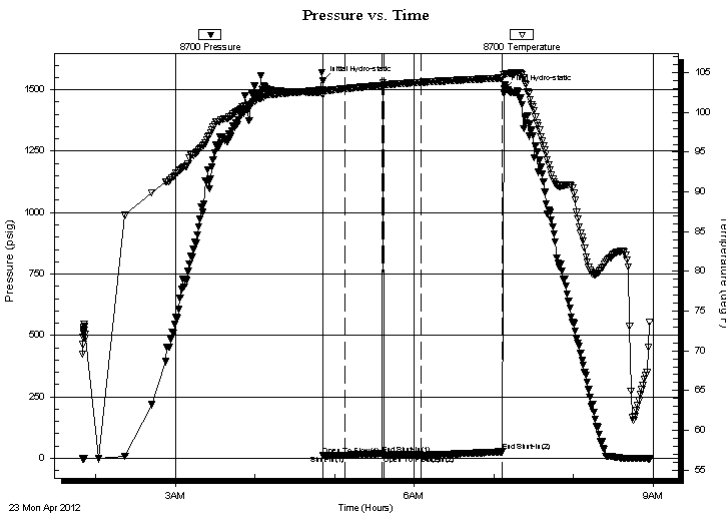
2012.04.23 @ 04:51:00

Time Off Btm:

2012.04.23 @ 07:08:00

TEST COMMENT: 15-IFP- No Blow
30-ISIP- No Blow
30-FFP- No Blow
60-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1535.18	102.88	Initial Hydro-static
1	12.87	102.22	Open To Flow (1)
17	12.87	103.00	Shut-In(1)
45	18.32	103.40	End Shut-In(1)
47	13.69	103.38	Open To Flow (2)
75	13.17	103.81	Shut-In(2)
136	26.83	104.34	End Shut-In(2)
137	1501.69	104.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	No Fluid	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47366

DST#: 1

ATTN: Jeff Lawler

Test Start: 2012.04.23 @ 01:50:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

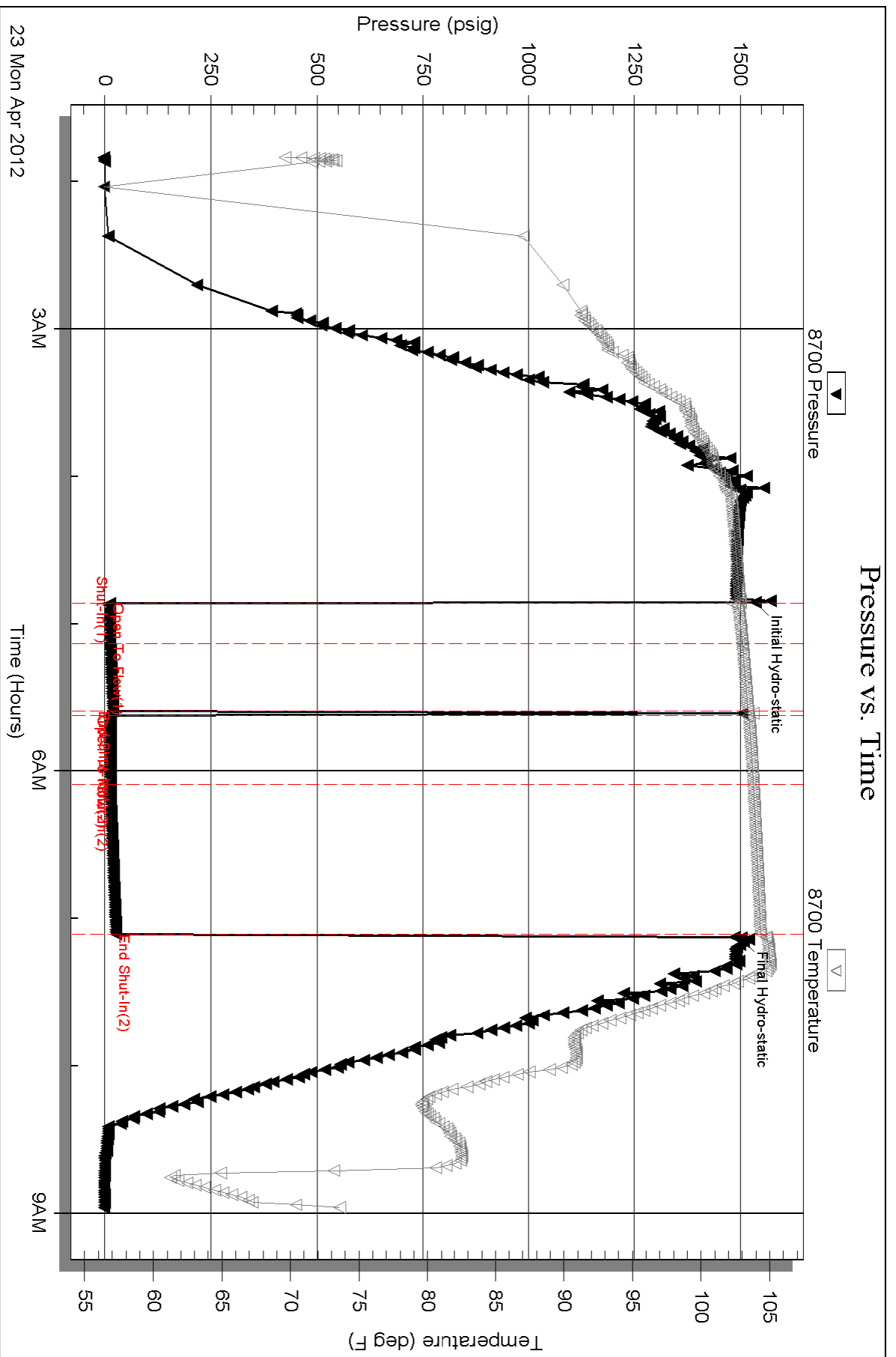
Length ft	Description	Volume bbl
0.00	No Fluid	0.000

Total Length: ft Total Volume: bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47367

DST#: 2

ATTN: Jeff Lawler

Test Start: 2012.04.23 @ 19:00:00

GENERAL INFORMATION:

Formation: **LKC " H "**

Deviated: No Whipstock: 1864.00 ft (KB)

Time Tool Opened: 20:55:30

Time Test Ended: 02:53:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 42

Interval: 3252.00 ft (KB) To 3280.00 ft (KB) (TVD)

Reference Elevations: 1864.00 ft (KB)

Total Depth: 3280.00 ft (KB) (TVD)

1851.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8700 Outside

Press @ Run Depth: 13.87 psig @ 3253.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.23

End Date:

2012.04.24

Last Calib.: 2012.04.24

Start Time: 19:00:05

End Time:

02:53:29

Time On Btm: 2012.04.23 @ 20:55:00

Time Off Btm: 2012.04.24 @ 00:40:30

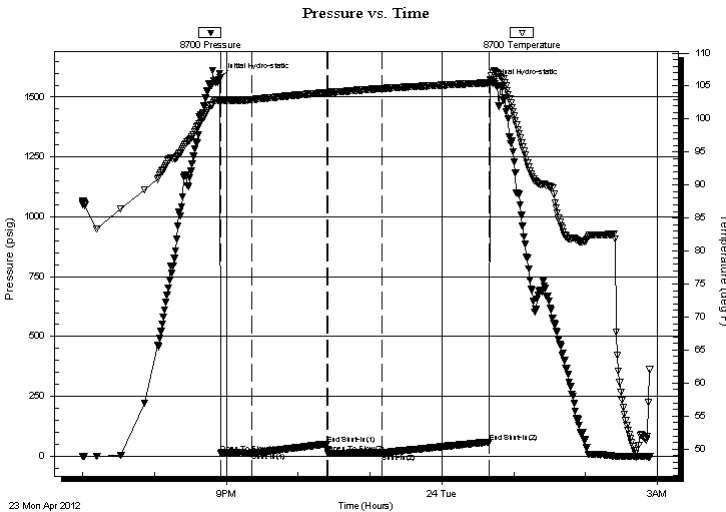
TEST COMMENT: 30-IFP- Surface Blow Died in 12 min

60-ISIP- No Blow

45-FFP- No Blow

90-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1581.59	102.92	Initial Hydro-static
1	12.64	102.59	Open To Flow (1)
27	13.96	102.95	Shut-In(1)
89	50.81	104.00	End Shut-In(1)
90	10.64	104.00	Open To Flow (2)
135	13.87	104.62	Shut-In(2)
225	59.38	105.48	End Shut-In(2)
226	1557.31	105.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SLOCM 1% @ 99% m	0.07

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47367

DST#: 2

ATTN: Jeff Lawler

Test Start: 2012.04.23 @ 19:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.95 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	SLOCM 1%o 99%m	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

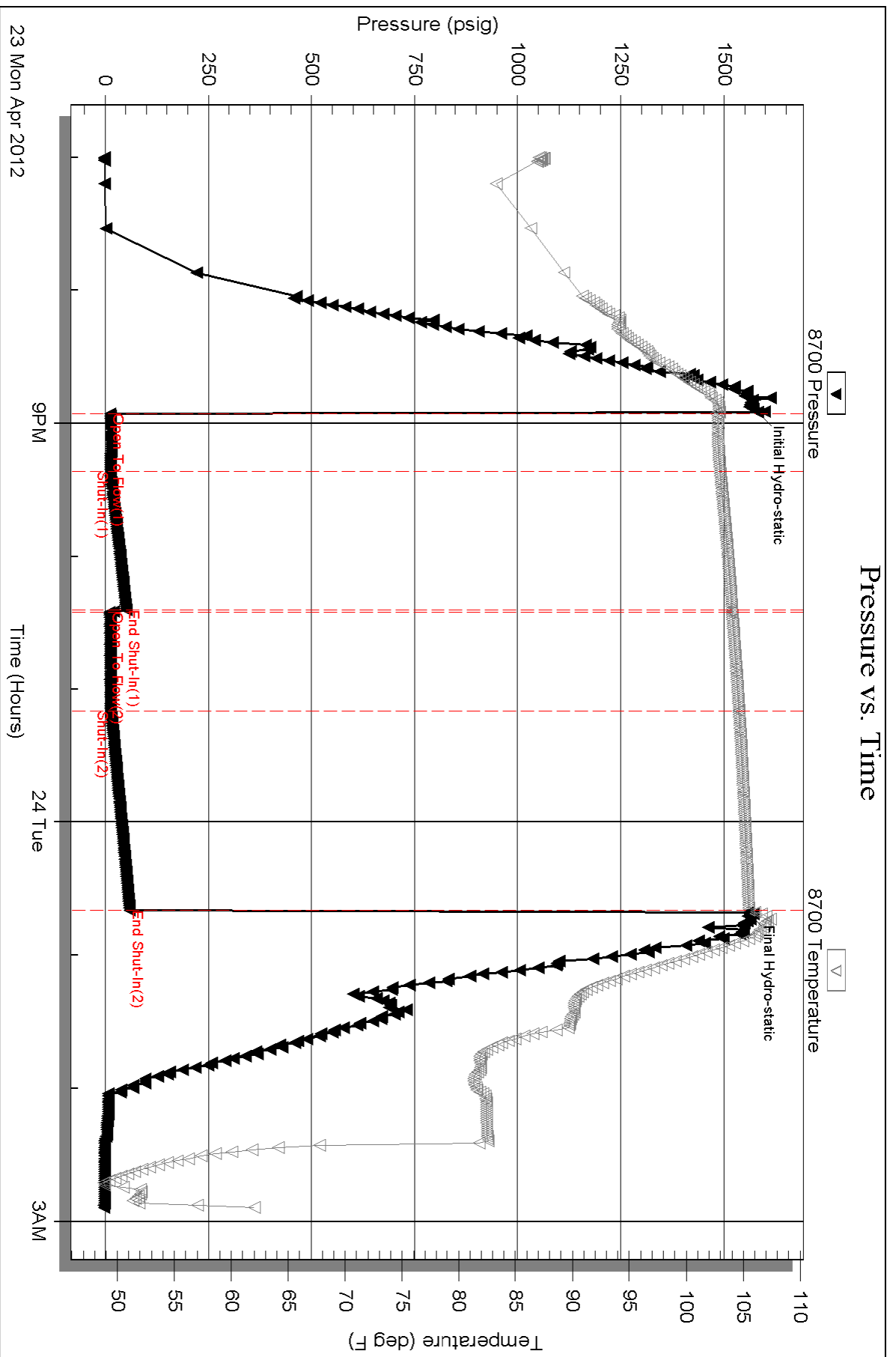
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47368

DST#: 3

ATTN: Jeff Lawler

Test Start: 2012.04.24 @ 12:30:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: 1864.00 ft (KB)

Time Tool Opened: 15:02:30

Time Test Ended: 21:28:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 42

Interval: 3325.00 ft (KB) To 3355.00 ft (KB) (TVD)

Reference Elevations: 1864.00 ft (KB)

Total Depth: 3355.00 ft (KB) (TVD)

1851.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8700 Outside

Press @ Run Depth: 14.65 psig @ 3326.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.24

End Date:

2012.04.24

Last Calib.:

2012.04.24

Start Time: 12:30:05

End Time:

23:45:30

Time On Btm:

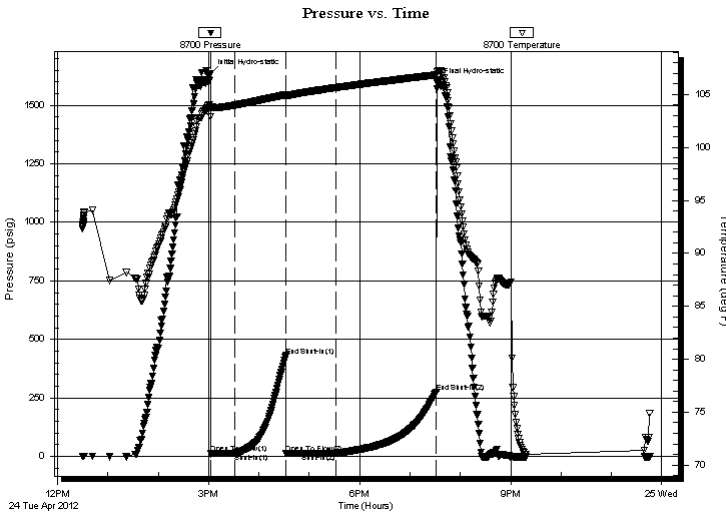
2012.04.24 @ 15:02:00

Time Off Btm:

2012.04.24 @ 19:32:00

TEST COMMENT: 30-IFP- Weak Surface Blow Died in 5min
60-ISIP- No Blow
60-FFP- No Blow
120-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1634.41	104.06	Initial Hydro-static
1	11.59	102.94	Open To Flow (1)
29	14.30	103.99	Shut-In(1)
90	430.56	104.99	End Shut-In(1)
91	14.73	104.83	Open To Flow (2)
150	14.65	105.65	Shut-In(2)
270	274.99	106.86	End Shut-In(2)
270	1598.12	107.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	SLOCM 1% @ 99% m	0.03

* Recovery from multiple tests

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47368

DST#: 3

ATTN: Jeff Lawler

Test Start: 2012.04.24 @ 12:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	SLOCM 1%o 99%m	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

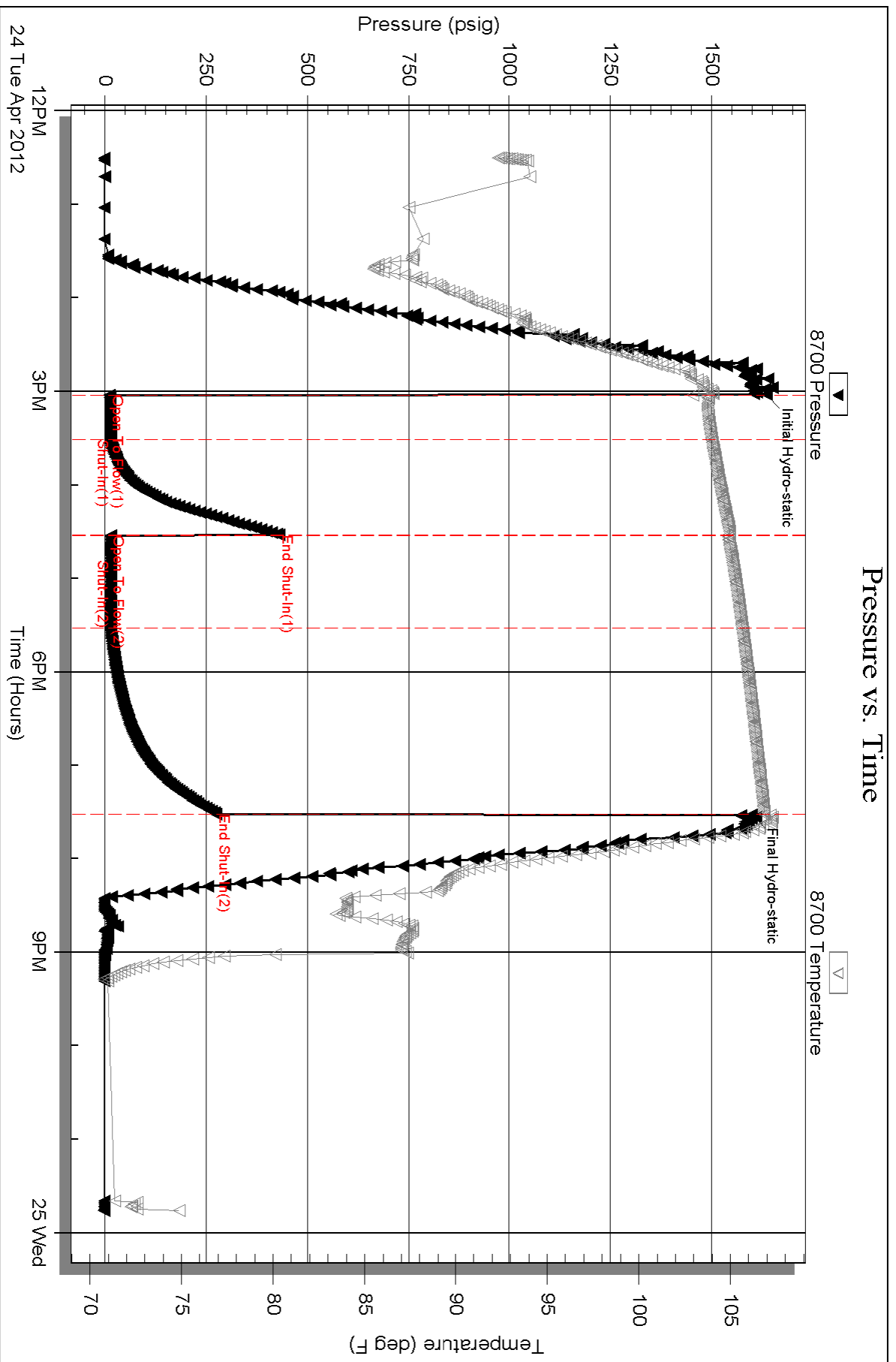
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47369

DST#: 4

ATTN: Brian Karlin

Test Start: 2012.04.25 @ 02:55:10

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:53:05

Time Test Ended: 12:16:35

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 42

Interval: 3355.00 ft (KB) To 3369.00 ft (KB) (TVD)

Reference Elevations: 1864.00 ft (KB)

Total Depth: 3369.00 ft (KB) (TVD)

1851.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 6625 Inside

Press @ Run Depth: 360.88 psig @ 3356.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.04.25

End Date:

2012.04.25

Last Calib.:

2012.04.25

Start Time: 02:55:10

End Time:

12:16:35

Time On Btm:

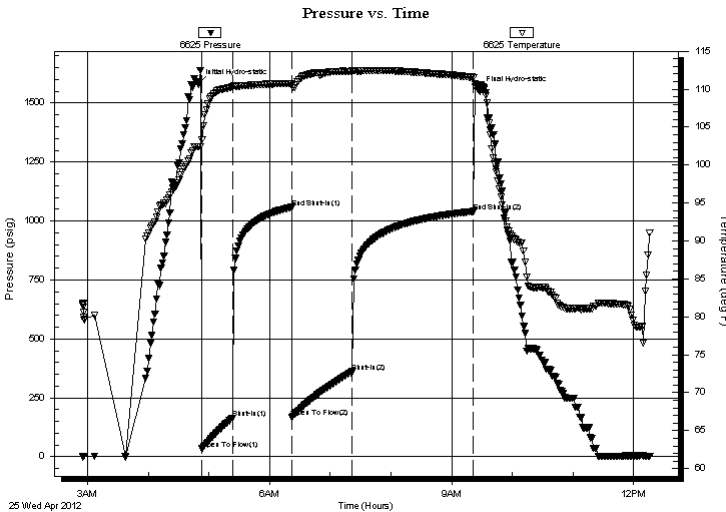
2012.04.25 @ 04:49:35

Time Off Btm:

2012.04.25 @ 09:26:34

TEST COMMENT: 30-IFP-w k to strg in 5min
60-ISIP-surface bl bk
60-FFP-w k to strg in 9min
120-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1580.87	102.41	Initial Hydro-static
4	34.04	103.37	Open To Flow (1)
34	164.69	110.26	Shut-In(1)
92	1058.05	110.73	End Shut-In(1)
93	168.39	110.48	Open To Flow (2)
152	360.88	112.38	Shut-In(2)
272	1040.88	111.56	End Shut-In(2)
277	1554.00	110.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	90'GIP	0.00
920.00	CO	12.91
40.00	MGO 25%G20%M55%O	0.56

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Caerus Kansas LLC
P. O. Box 1378
Hays KS 67601
ATTN: Brian Karlin

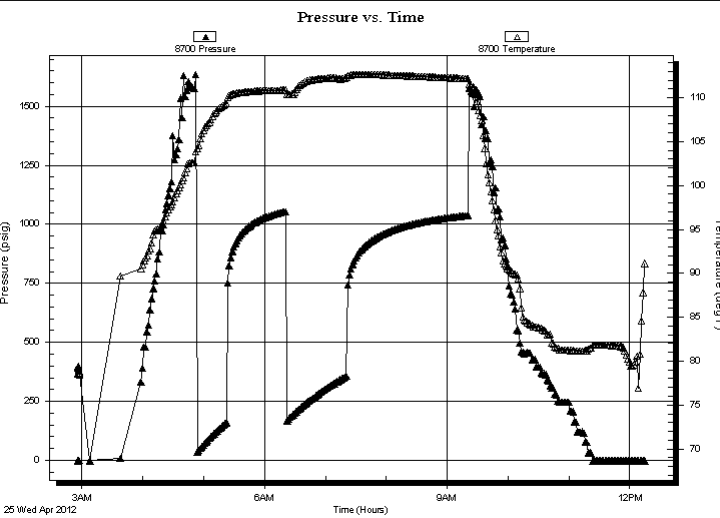
31 17s 13w Barton
Mortimer 31-32
Job Ticket: 47369 **DST#: 4**
Test Start: 2012.04.25 @ 02:55:10

GENERAL INFORMATION:

Formation: Arbuckle				
Deviated: No Whipstock:		ft (KB)		Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 04:53:05				Tester: Ray Schwager
Time Test Ended: 12:16:35				Unit No: 42
Interval: 3355.00 ft (KB) To 3369.00 ft (KB) (TVD)				Reference Elevations: 1864.00 ft (KB)
Total Depth: 3369.00 ft (KB) (TVD)				1851.00 ft (CF)
Hole Diameter: 7.85 inches	Hole Condition: Fair			KB to GR/CF: 13.00 ft

Serial #: 8700	Outside				
Press @ Run Depth:	psig @	3356.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2012.04.25	End Date:	2012.04.25	Last Calib.:	2012.04.25
Start Time:	02:55:39	End Time:	12:15:04	Time On Btm:	
				Time Off Btm:	

TEST COMMENT: 30-IFP-w k to strg in 5min
60-ISIP-surface bl bk
60-FFP-w k to strg in 9min
120-FSIP-no bl



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	90'GIP	0.00
920.00	CO	12.91
40.00	MGO 25%G20%M55%O	0.56

* Recovery from multiple tests

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Caerus Kansas LLC

31 17s 13w Barton

P. O. Box 1378
Hays KS 67601

Mortimer 31-32

Job Ticket: 47369

DST#: 4

ATTN: Brian Karlin

Test Start: 2012.04.25 @ 02:55:10

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.16 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	90'GIP	0.000
920.00	CO	12.905
40.00	MGO 25%G20%M55%O	0.561

Total Length: 960.00 ft Total Volume: 13.466 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

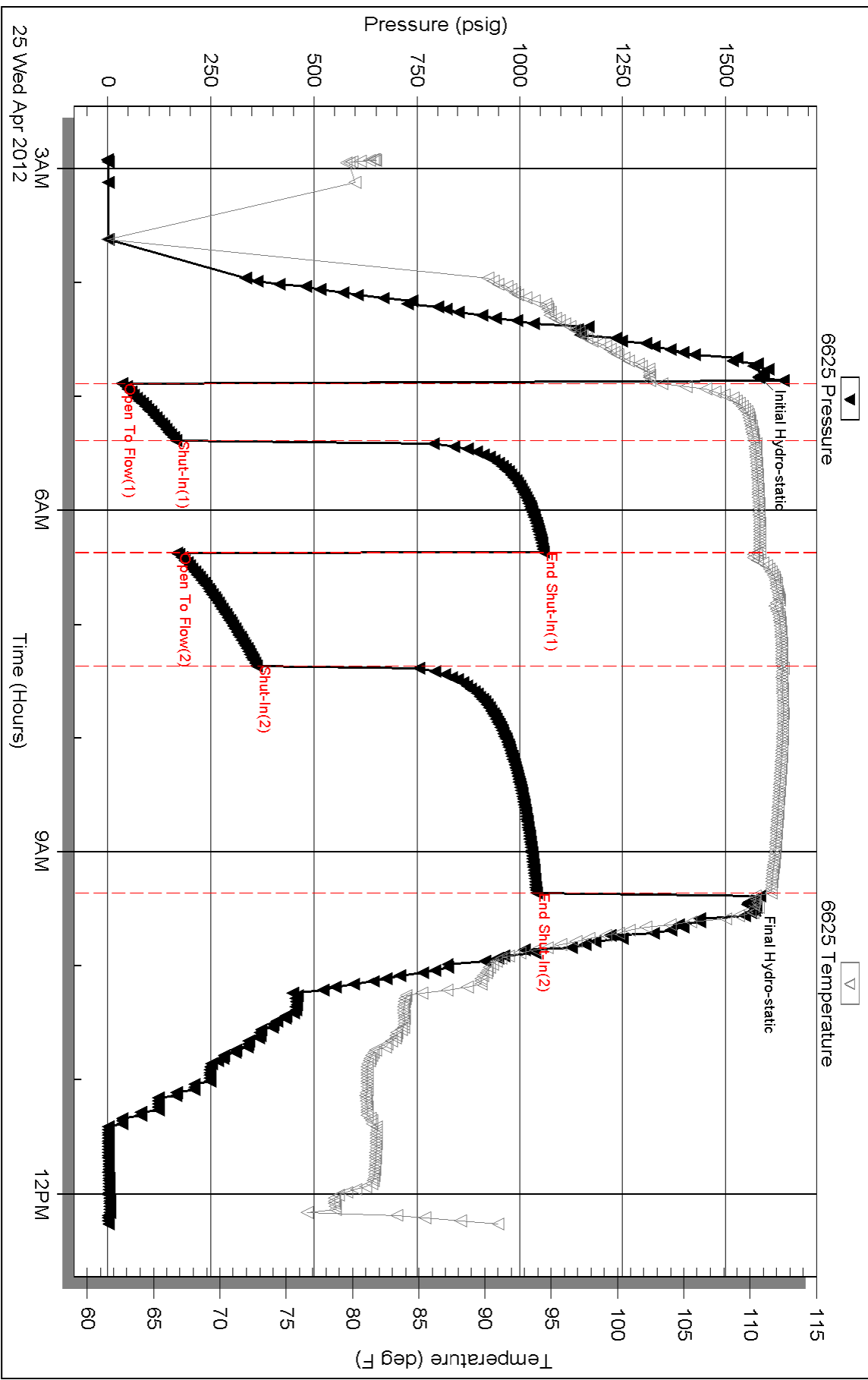
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

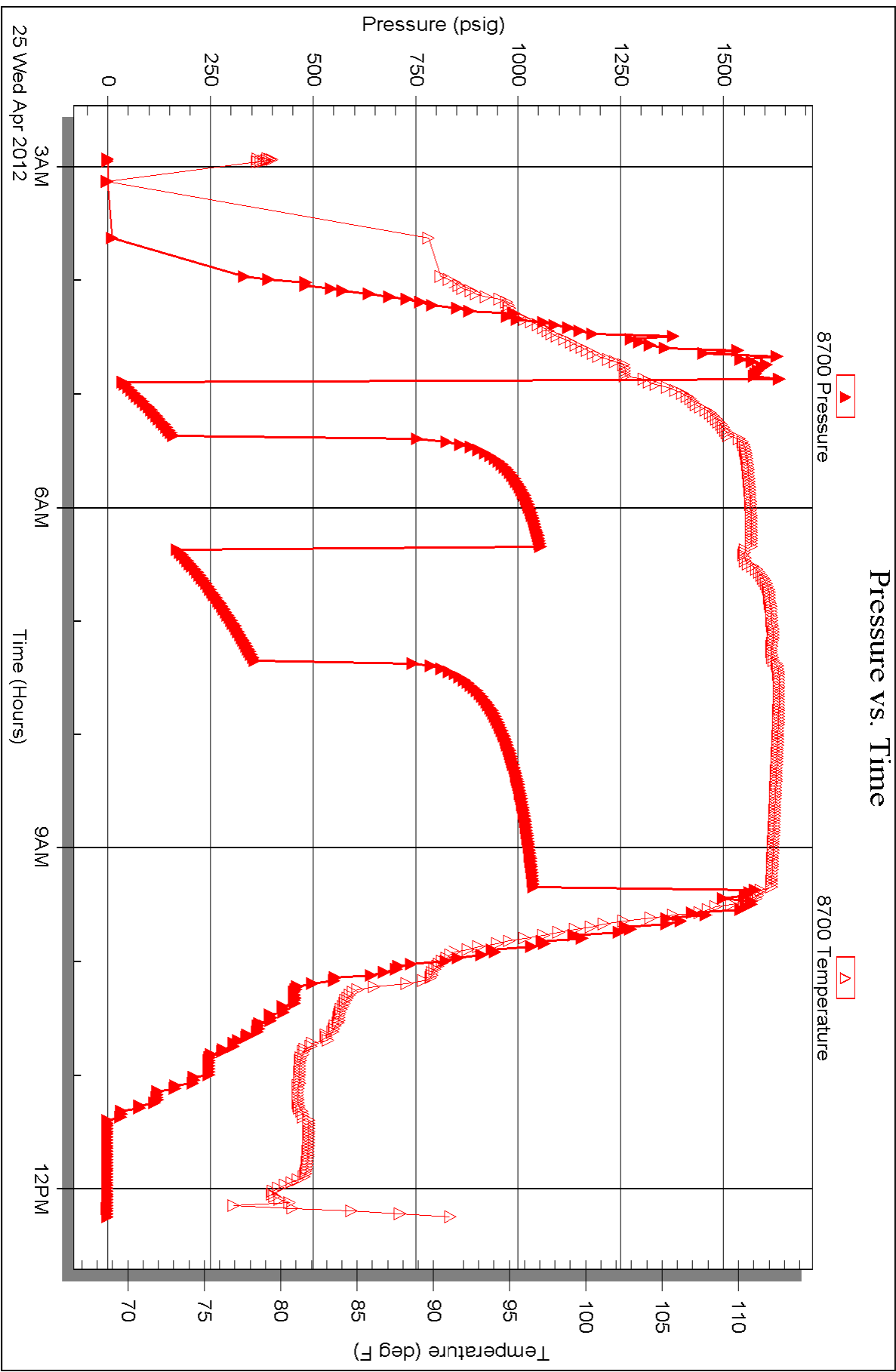


Serial #: 8700

Outside Caerus Kansas LLC

Mortimer 31-32

DST Test Number: 4



Customer Caerus Oper, LLC.	Lease No.	Date 4-26-12
Lease Mortimer	Well # 31-32	
Field Order # 6118	Station Pratt, Kansas	Casing" 5 1/2
Type Job C.N.W. - Longstring	Depth 3,604	County Barton
	Formation	State Kansas
		Legal Description 31-175-13W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME	
Casing Size 5 1/2	Tubing Size 5 LB/FT	Shots/Ft 150	From 50	To 1585	Fluid 150 sacks 60/40 Poz with 5% salt, 5 lb/sk. G. 11.50 p.p.t.	RATE 1.52	PRESS Friction
Depth 3,604	Depth 5	From 50	From 50	To 1585	Rate 5 lb/sk. G. 11.50 p.p.t.	Max 11.50 p.p.t.	ISIP 5 Min.
Volume 82.3 Bbl.	Volume 15.28	From 50	From 50	To 1585	Rate 4.30	Min 2.0	ISIP 10 Min.
Max Press 1750	Max Press 1750	From 50	From 50	To 1585	Rate 4.30	Avg 1.18	ISIP 15 Min.
Well Connection Plug Container	Annulus Vol. 50	From 50	From 50	To 1585	Fluid 50 sacks 60/40 Poz to plug Rat (20 sacks) and Mouse (20 sacks) Holes	HHP Used 0	Annulus Pressure 0
Plug Depth 3583	Packer Depth 3583	From 50	From 50	To 1585	Flush 82.3 Bbl. Fresh Water	Gas Volume 0	Total Load 0

Customer Representative Brian Karlin	Station Manager David Scott	Treater Clarence R. Messick
Service Units 37,216	19,903	19,905
Driver Names Messick	Mattal	Lawrence
21,010		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
7:00					Cement and Float Equipment on location.
9:00					Trucks on location and hold safety meeting.
10:20					Minnescah Drilling start to run Auto Fill Float Shoe, Shoe Joint with Latch Down Baffle screwed into collar and a total of 89 Joints new & used. Tested 15.5 LB/FT 5 1/2 casing. A Basket was installed on top of collar #1. Turbolizers were installed on Collars # 3, 5, 7, 9, 11 and # 13.
12:40					Casing in well. Circulate and Rotate for 1 hour.
1:45		2,500			Shut in well. Pressure Test. Open Well.
1:48	300			6	Start Fresh Water Pre Flush.
			20	6	Start Mud Flush.
			32	6	Start Fresh Water spacer.
1:57	300		52	5	Start mixing 150 sacks 60/40 Poz cement.
	0		83		Stop pumping. Shut in well. Wash pump and lines. Release Latch Down Plug. Open Well.
2:15	100			6.5	Start Fresh Water Displacement.
			65	5	start to lift cement.
2:27	700		82.3		Plug down.
	1,750				Pressure up.
					Release pressure. Float Shoe held.
			7.5	3	Plug Rat and Mouse holes.
					Wash up pump truck.
3:15					Job Complete.

QUALITY WELL SERVICE, INC.

5527

Federal Tax I.D. # 481187368

Home Office 324 Simpson St., Pratt, KS 67124

Heath's Cell 620-727-3410
Office / Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Date	4-20-12	Sec.	31	Twp.	17	Range	13	County	Barton	State	KS	On Location		Finish	7:00pm	
Lease	Northmer		Well No.		31-32		Location									Washington, KS 1 1/2 W Winto
Contractor	Minnescah Drilling							Owner								
Type Job	Surface							To Quality Well Service, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.								
Hole Size	12 1/4		T.D.		850		Charge To									Coerus Kansas LLC
Csg.	8 5/8		Depth		846		Street									
Tbg. Size			Depth				City									State
Tool			Depth				The above was done to satisfaction and supervision of owner agent or contractor.									
Cement Left in Csg.	44.09		Shoe Joint		44.09		Cement Amount Ordered									450 sx com 3% cc 2% gel
Meas Line			Displace		51 bbl											
EQUIPMENT																
Pumptrk	No.	8	David		Common											
Bulktrk	No.	7	Mike		Poz. Mix											
Bulktrk	No.				Gel.											
Pickup	No.				Calcium											
JOB SERVICES & REMARKS																
Rat Hole	Hulls															
Mouse Hole	Salt															
Centralizers	Flowseal															
Baskets	Kol-Seal															
D/V or Port Collar	Mud CLR 48															
	CFL-117 or CD110 CAF 38															
	Sand															
	Handling															
	Mileage															
	FLOAT EQUIPMENT															
	Guide Shoe															
	Centralizer															
	Baskets															
	AFU Inserts															
	Float Shoe															
	Latch Down															
	Rubber Plug															
	Cement did circulate !!															
	Pumptrk Charge															
	Mileage															
	Thank you !!															
	Tax															
	Discount															
	Total Charge															
X Signature	Richard A. G. [Signature]															

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Ward Loyd, Commissioner
Thomas E. Wright, Commissioner

Sam Brownback, Governor

May 29, 2012

Amy Lay
Caerus Kansas LLC
600 17TH ST, STE 1600 N
DENVER, CO 80202

Re: ACO1
API 15-009-25680-00-00
Mortimer 31-32
NE/4 Sec.31-17S-13W
Barton County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Amy Lay