

Company **VAUGHN GOOD OIL COMPANY**  
 Well **NUSSER #2-16**  
 Field **SE HARDNER**  
 County **BARBER**  
 State **KANSAS**

**RECON**  
 MICROLOG  
 X-Y CALIPER  
 GAMMA RAY

SEC	TWP	RGE	OTHER SERVICES:	
16	35S	12W	DIL	CNL
Location: 400' FNL & 1320' FWL			LDT	
SURF. SAME			APR#: 015-007-23856	
Permanent Datum			Ground Level	Elev
Log Measured From			Kelly Bushing	1410
Drilling Measured From			Kelly Bushing	
			<b>ELEVATIONS</b>	
			K.B.	1422
			G.L.	1410
			D.F.	1420

Date	29-APR-2012	
Run No.	ONE	
TD Driller	5500	ft
TD RECON	5497	ft
Bot Logged Interval	5496	ft
Top Logged Interval	425	ft
Casing Depth Driller	8 5/8	in. @ 410
Casing Depth RECON	8 5/8	in. @ 425
Bit Size	7 7/8	in.
Drilling Fluid Type	CHEMICAL	
Density	8.8	ppg
Viscosity	11.2	cm <sup>3</sup> /30min
Fluid Loss	PH	10.0 strip
Source Of Sample	Flowline	
RM @ Measured Temp	1.17	Ohmm @ 75
RMF @ Measured Temp	0.88	Ohmm @ 75
RMC @ Measured Temp	1.47	Ohmm @ 75
RM @ MRT	0.68	Ohmm @ 135
Max Recorded Temp	135	DegF
Time Drilling Stopped	29-APR-2012	05:30
Time Circulation Stopped	29-APR-2012	09:45
Time Logger On Bottom	29-APR-2012	16:35
Unit Num	S408	OKLAHOMA CITY, OK
Location		
Recorded By	H. GARCIA	
Witnessed By	MR. M. GOOD	

All interpretations are based on inferences from electrical or other readings, and therefore, RECON cannot and will not guarantee the accuracy of any interpretations of log data. RECON shall not be liable for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from

interpretations made by any of our officers, agents or employees, except in the case of provable Gross Negligence or willfull damage. Interpretations are also subject to the terms and conditions of our Price Schedule and General Service Agreement.

**RIG INFORMATION**

Drill Contr/Rig#	MENDENHALL DRLG. #3
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**GENERAL REMARKS SECTION**

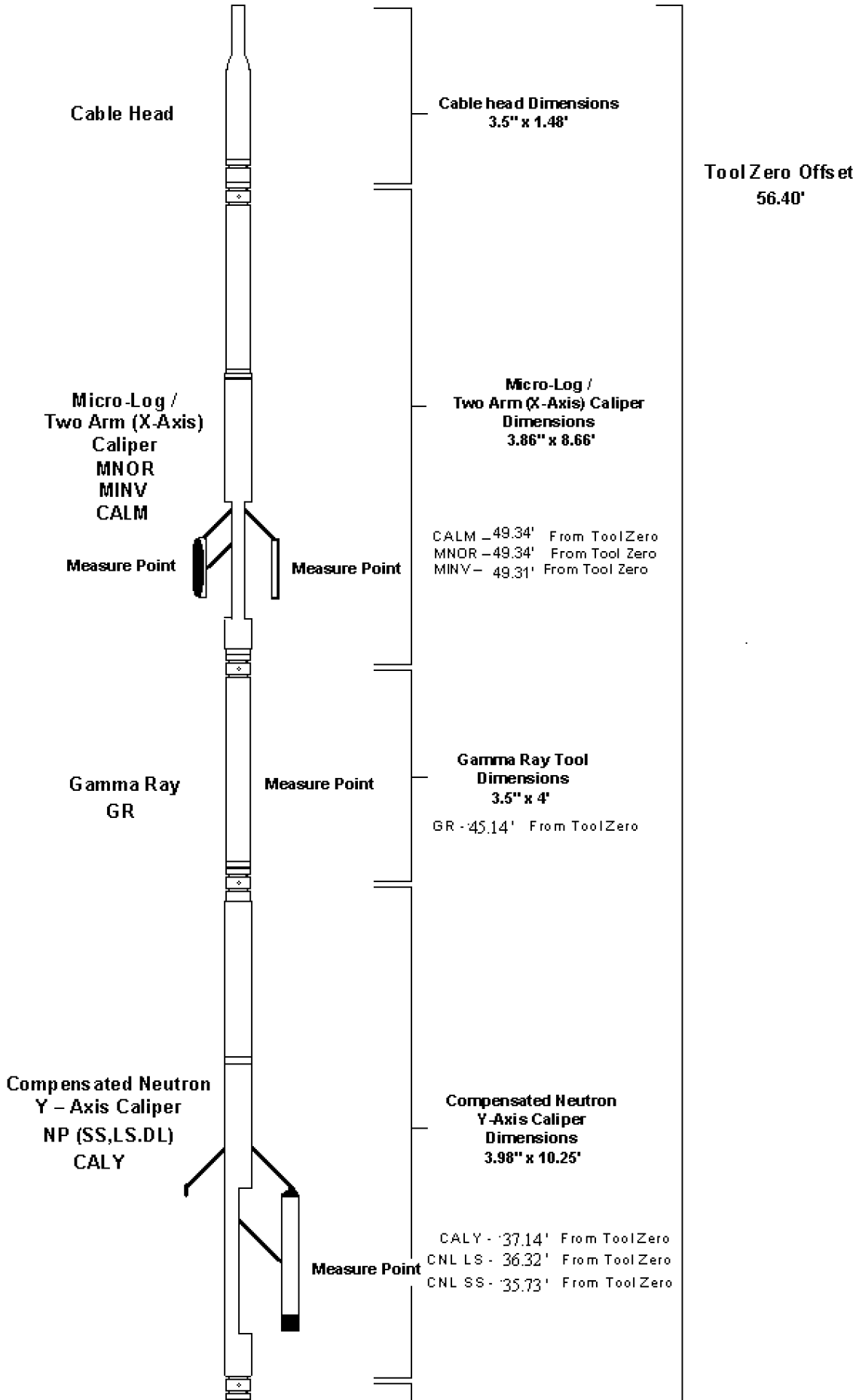
FIRST RUN IN THE HOLE  
 CNL AND LDT LOGGED IN A LIMESTONE MATRIX  
 TOP MARK - 539, BOTTOM MARK - 5442.7  
 CNL/LDT LOGGED MATRIX: 2.71 g/cc.  
 CHLORIDES: 5000 mg/l  
 LCM: 8 lb/bbl

AHV CALCULATED ON 5.5" PROD. CASING

THANK YOU FOR USING RECON PETROTECHNOLOGIES LTD.

CREW: J. ROSE

**DUAL INDUCTION – SP / GAMMA RAY /  
 COMPENSATED LITHO-DENSITY / X-CALIPER  
 COMPENSATED NEUTRON / Y-CALIPER  
 MICRO - LOG / M-CALIPER**



**Digital Telemetry**

**Digital Telemetry Section  
Dimensions**  
3.5" x 3.15'

**Tool String  
Length Total**  
57.89'

**Compensated  
Litho-Density (Pe)  
X - Axis Caliper**

DP( SS,LS,DL)  
RHOB  
DRHO  
PE  
CALX  
Measure Point

**Compensated Litho-Density  
X-Axis Caliper  
Dimensions**  
3.98" x 9.35'

CALX - 23.20' From ToolZero  
LDT w1 -  
LDT w2 -  
LDT w3 - 22.93' From ToolZero  
LDT w4 -  
LDT SS - 22.44' From ToolZero

**Dual Induction**

SP  
ILD  
ILM  
LL3

**Dual Induction Tool  
Dimensions**  
3.62" x 21'

**S.P. / CILD  
Measure Point**

SP - 10.96' From ToolZero  
ILD - 10.96' From ToolZero

**CILM Measure  
Point**

ILM - 7.22' From ToolZero

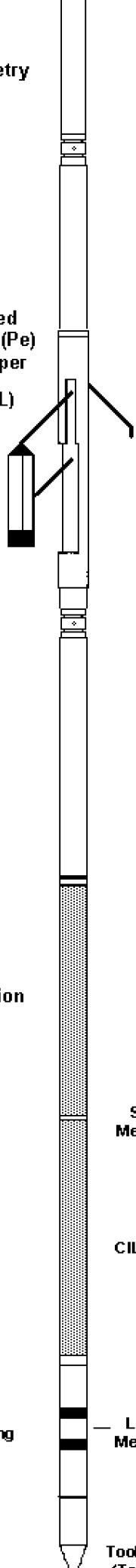
**Tool First Reading  
Point**

**Laterolog 3  
Measure Point**

LL3 - 1.67' From ToolZero

**Tool Zero Point  
(Tool Bottom)**

**All Measurements are  
taken from Tool Zero**



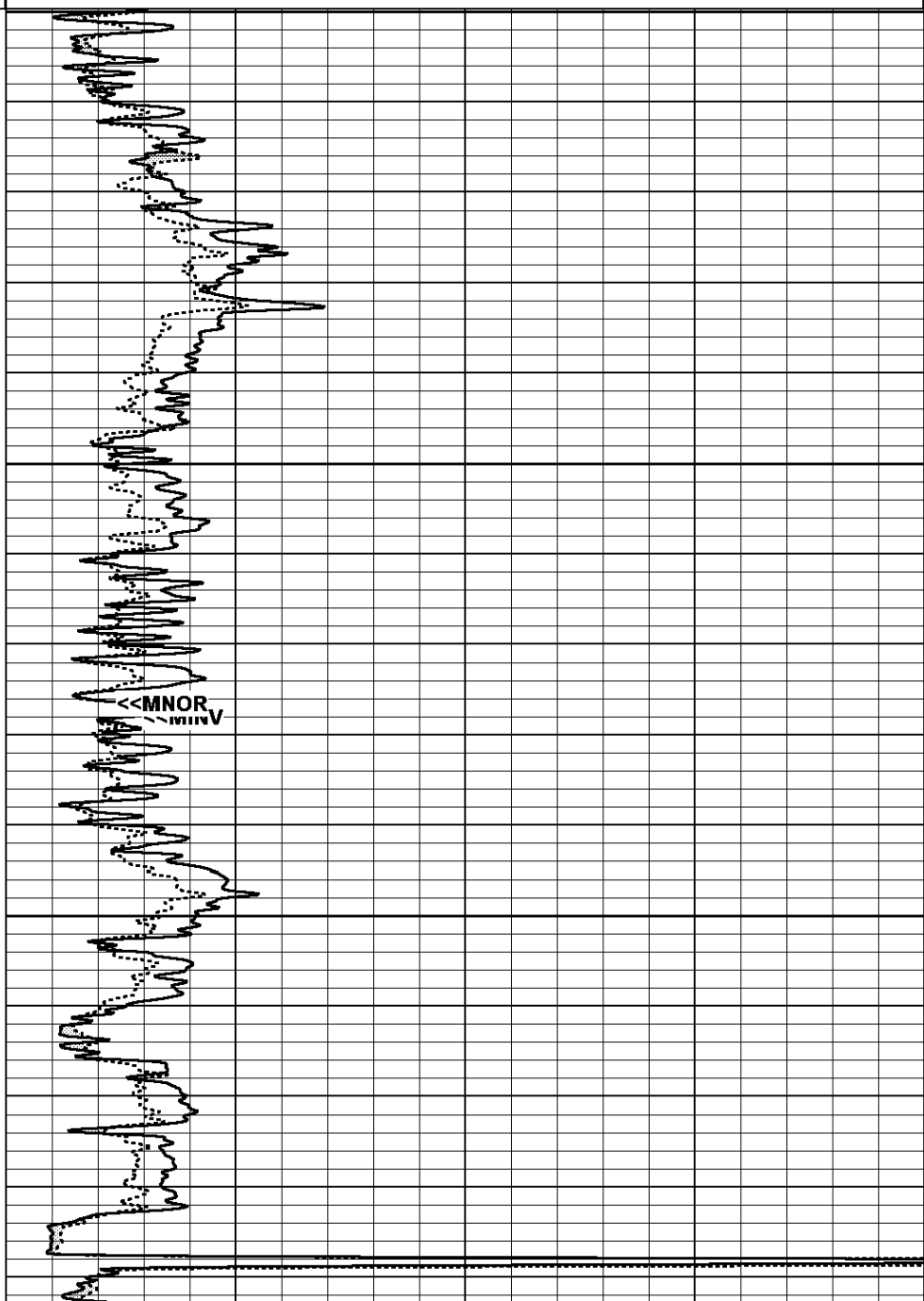
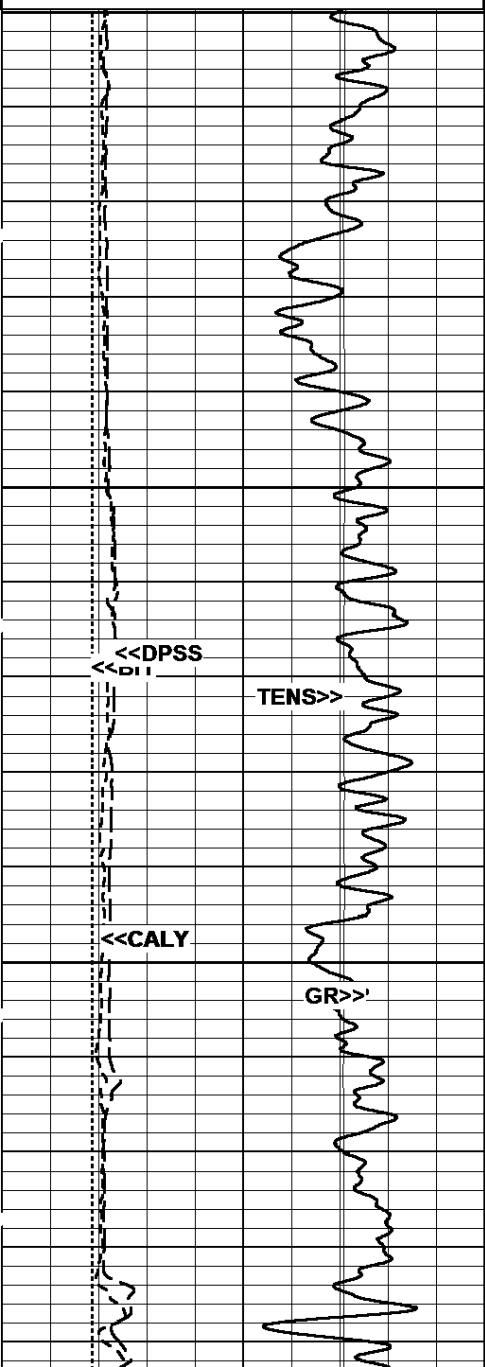
04/29/2012  
18:25:12 => End Time

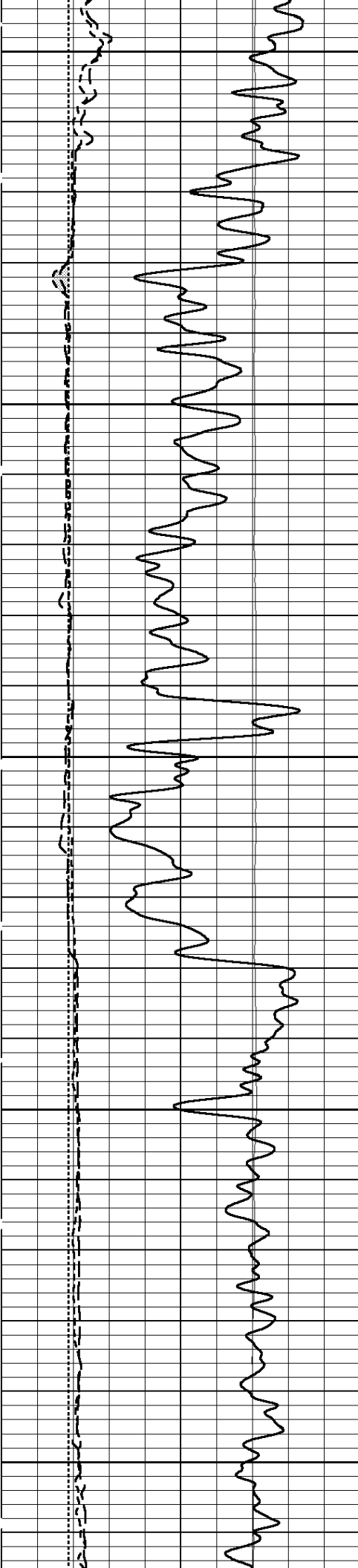
# MAIN PASS (5"/100Ft)

Log UP - (VER 11.08)  
End Depth=> 3999.90 Feet

MicroLog-Caliper		
6.	in	16.
Bit Size (BIT)		
6.	Ref in	16.
Tension (TENS)		
10000.	Lbs	0.
Y-Caliper (CALY)		
6.	in	16.
Gamma Ray (GR)		
0.	API	150.

Micro-Normal{2"} (MNOR)		
0.	ohms	40.
Micro-Inverse{1"} (MINV)		
0.	ohms	40.





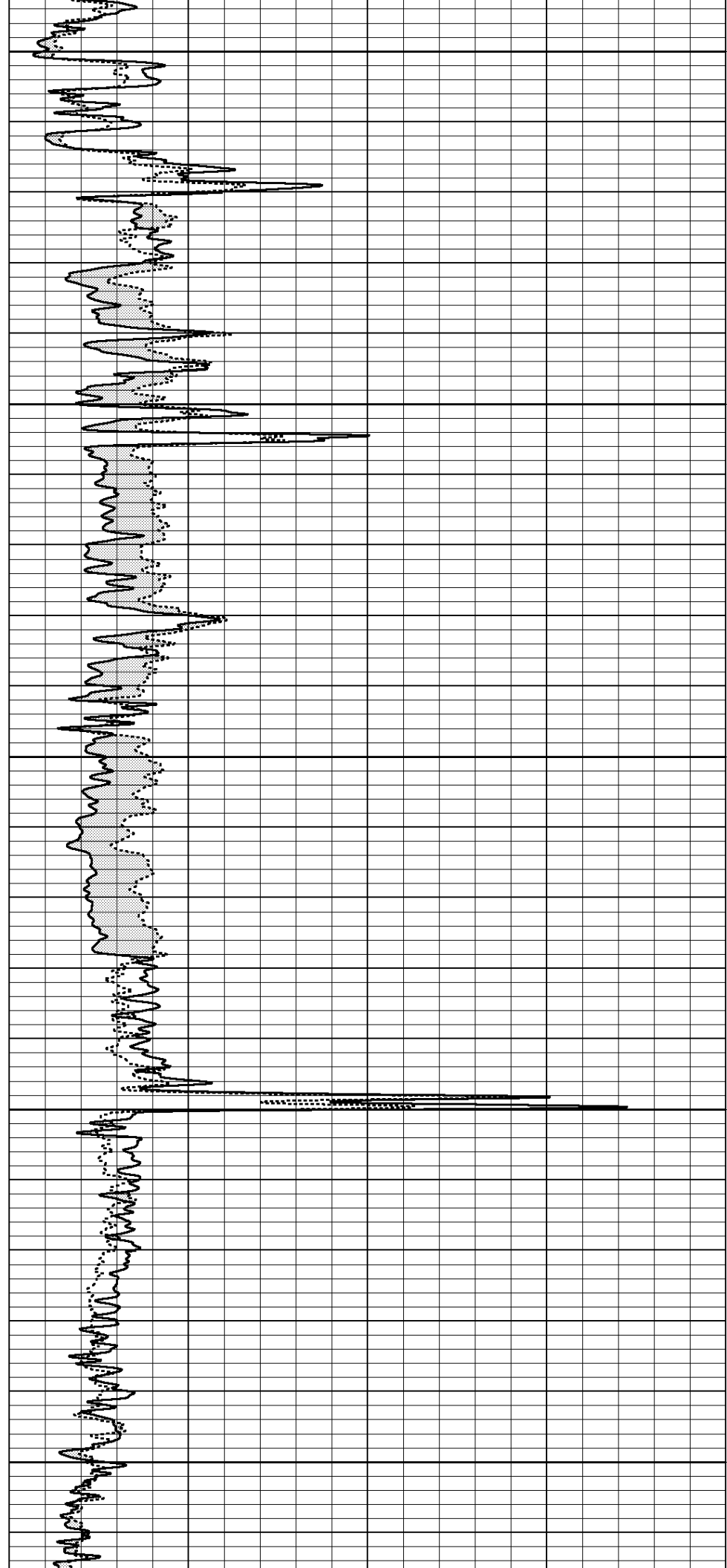
4150

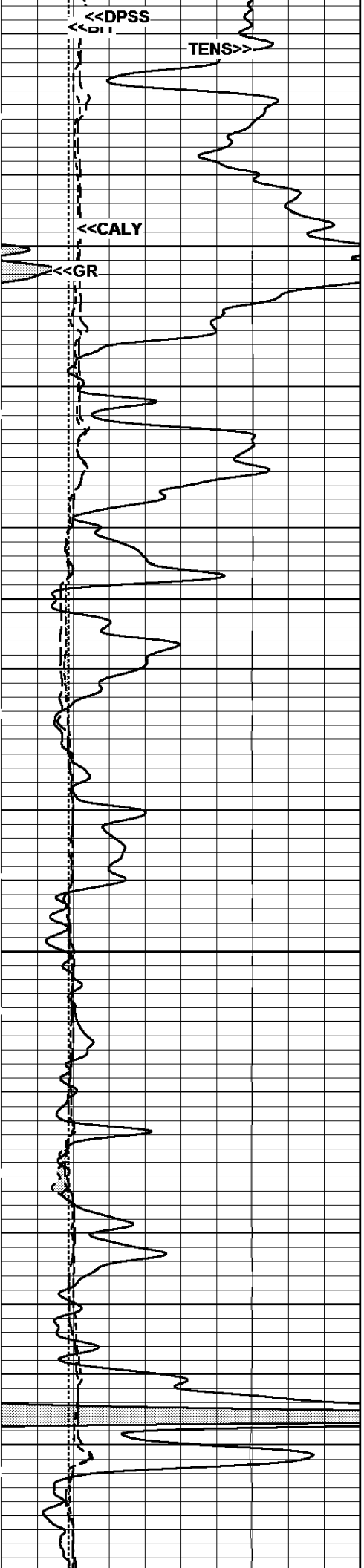
4200

4250

4300

4350



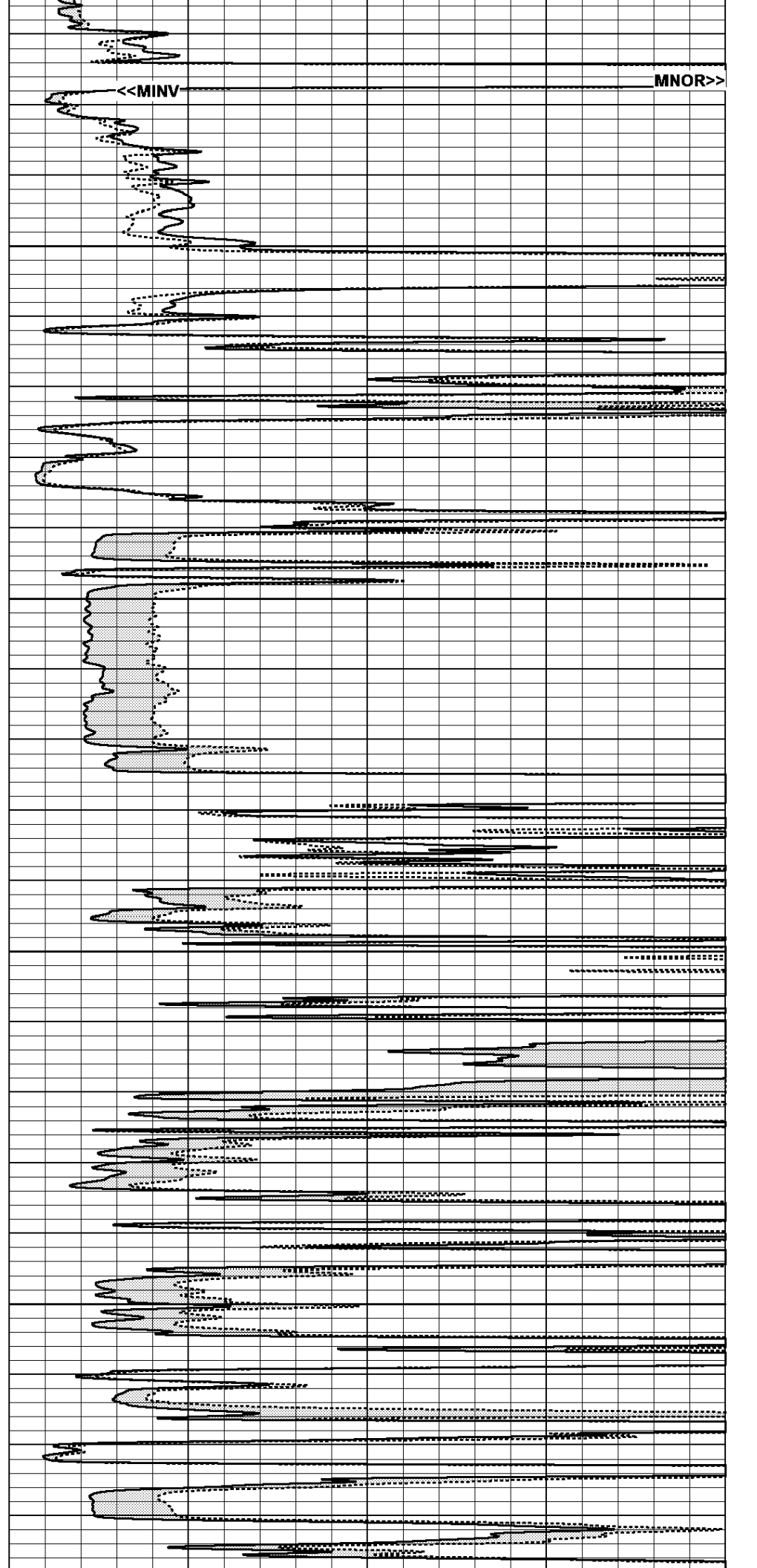


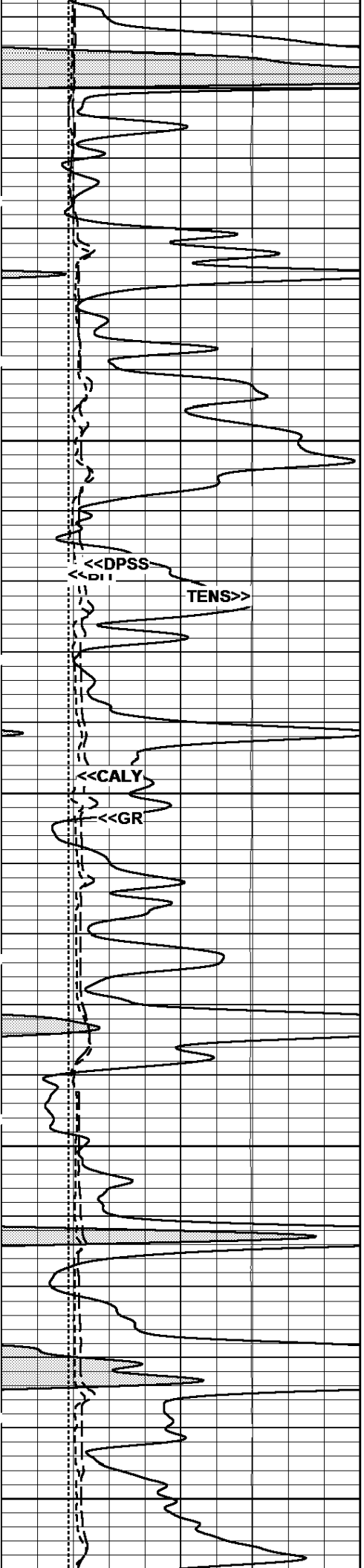
4400

4450

4500

4550





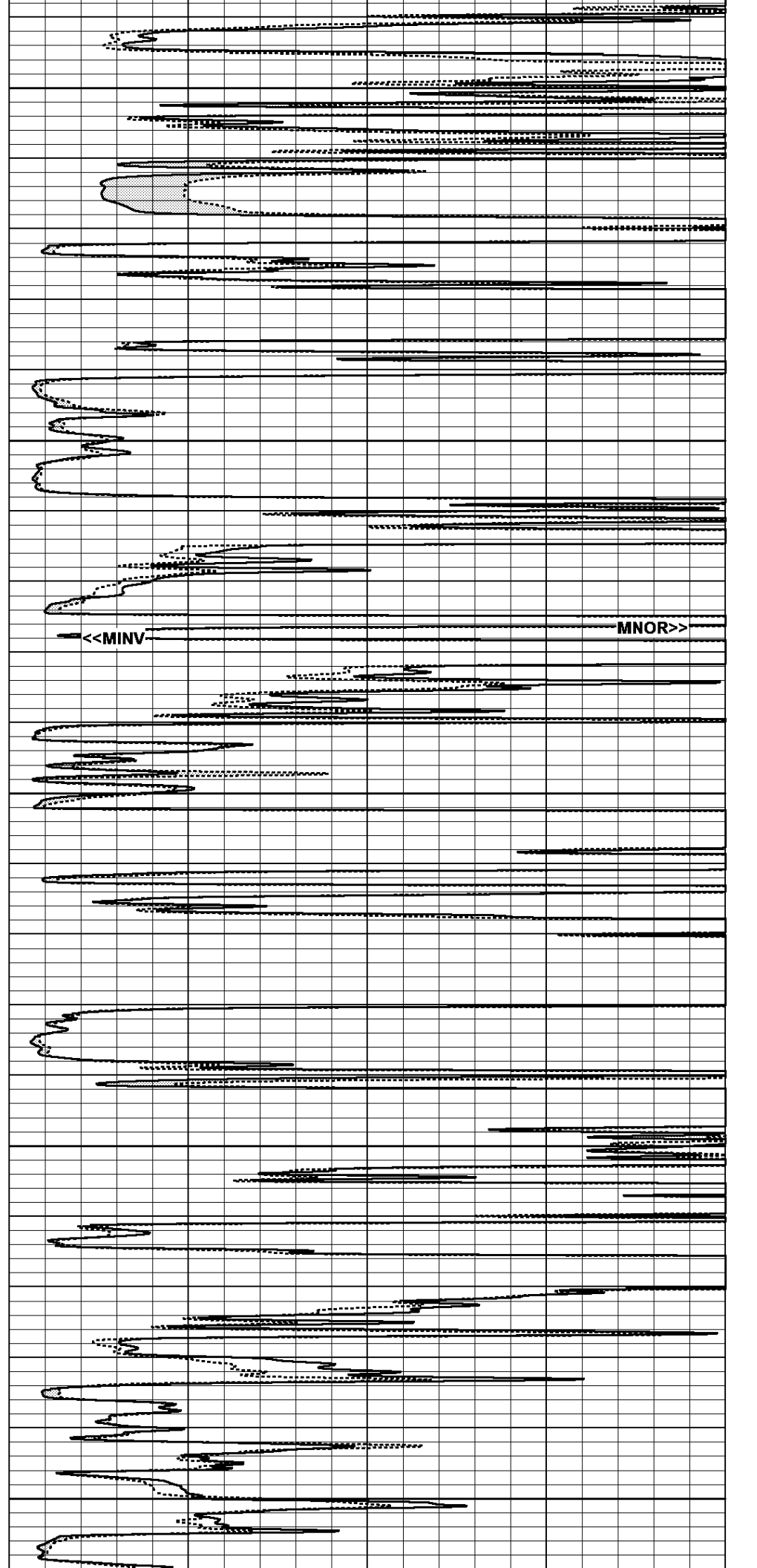
4600

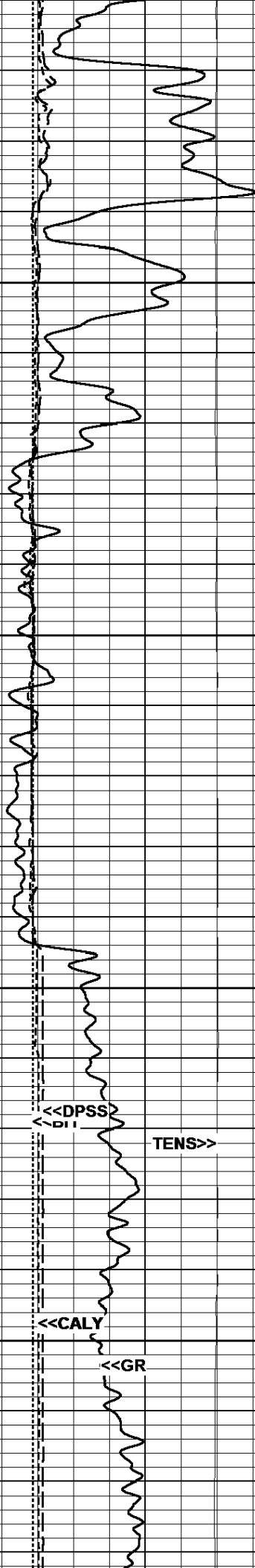
4650

4700

4750

4800



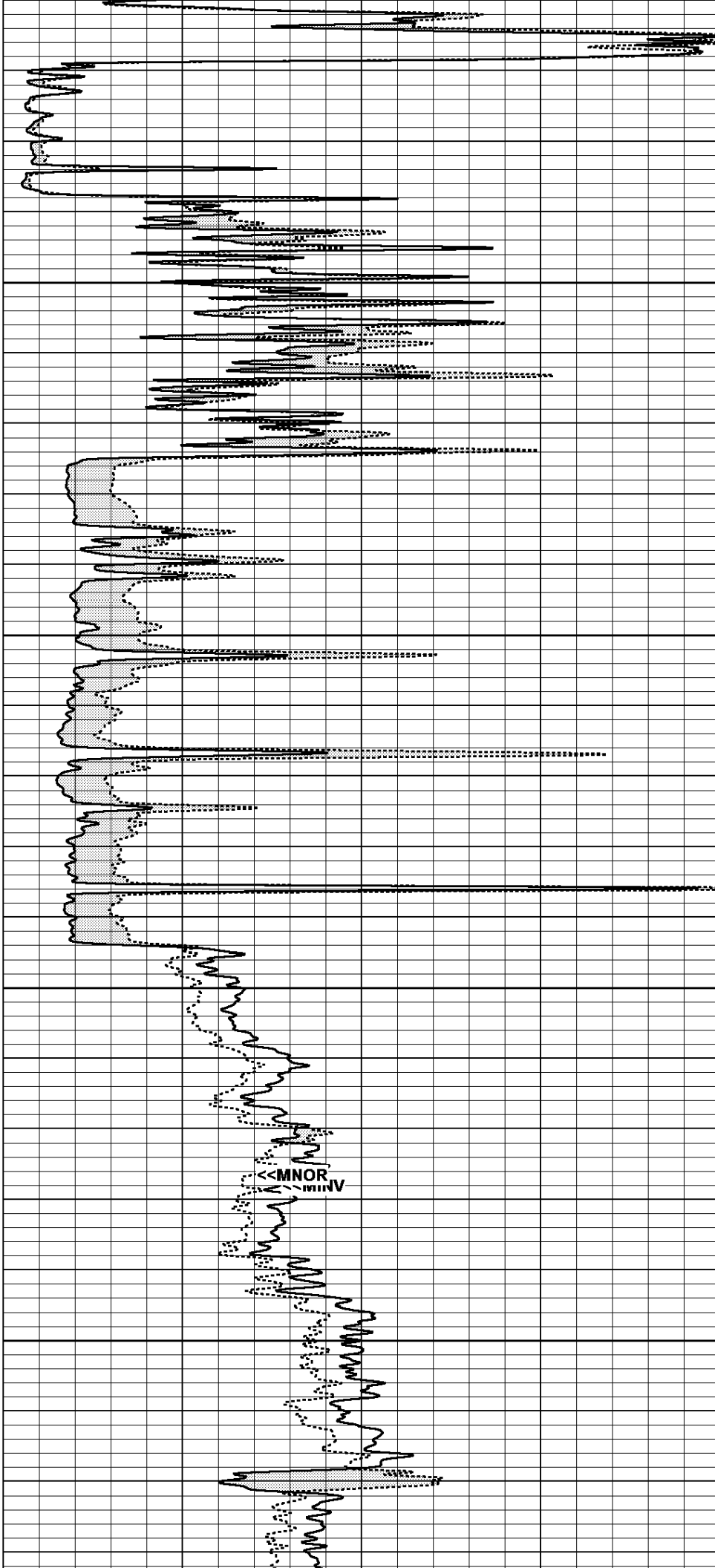


4850

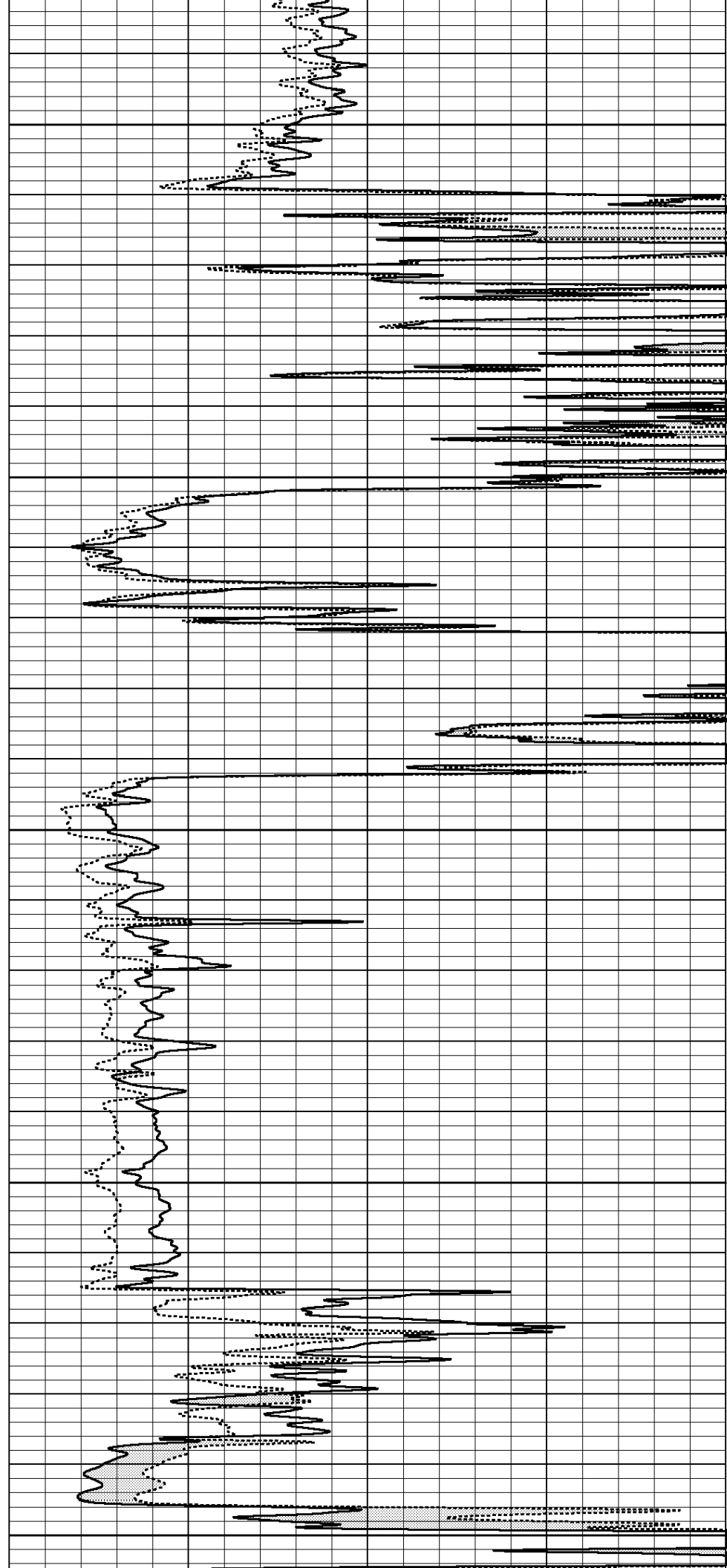
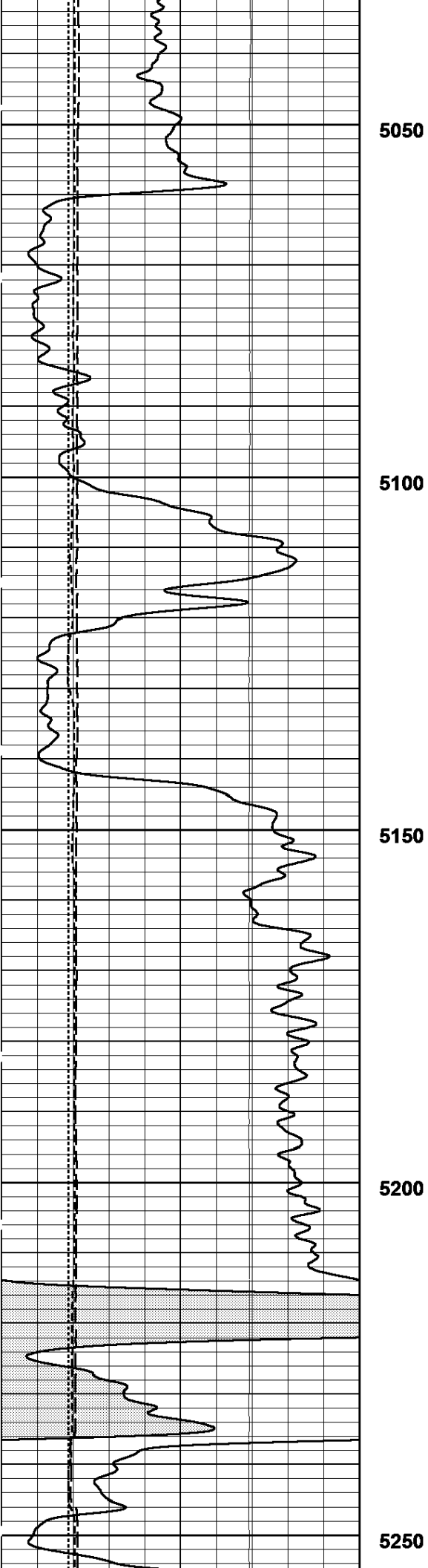
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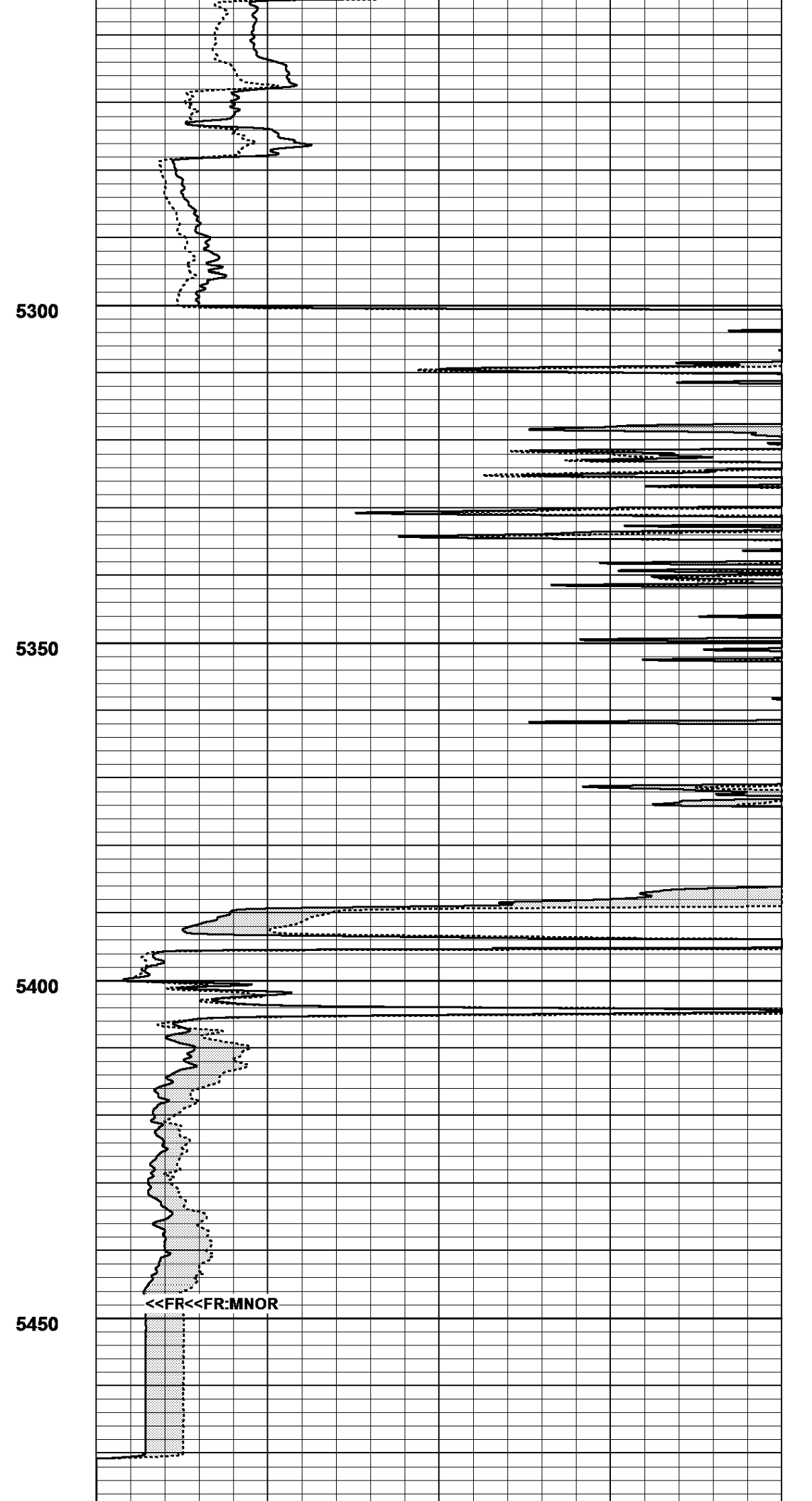
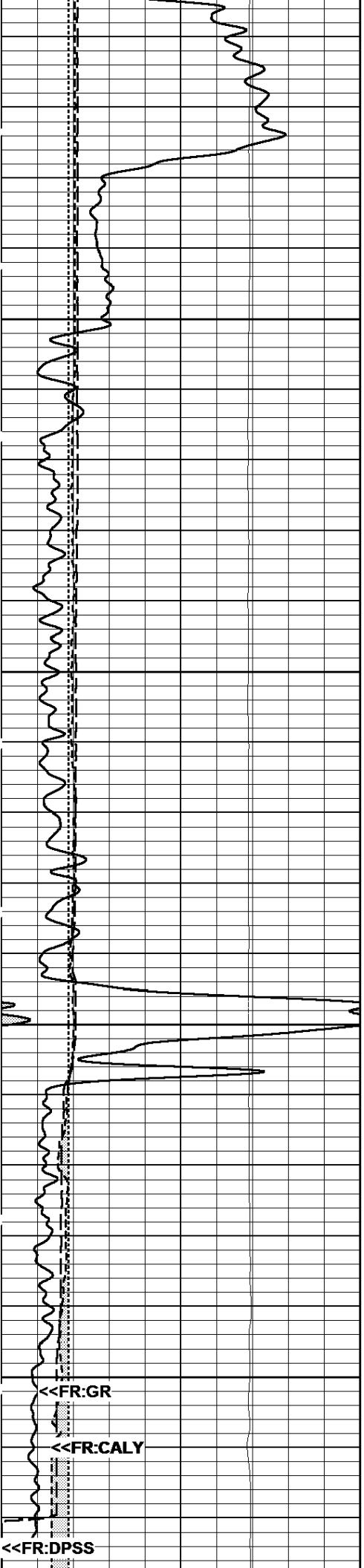
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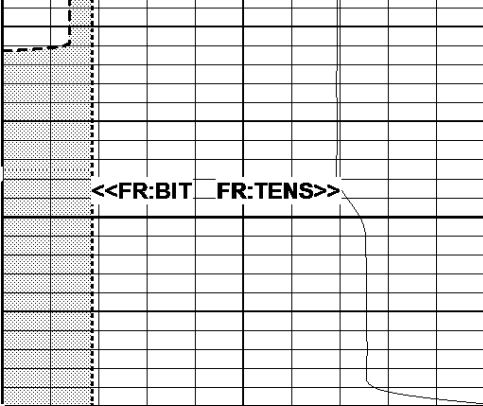
5000



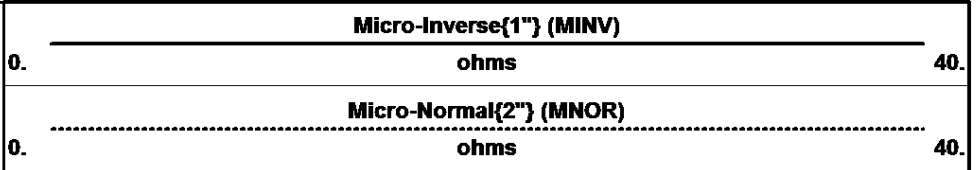
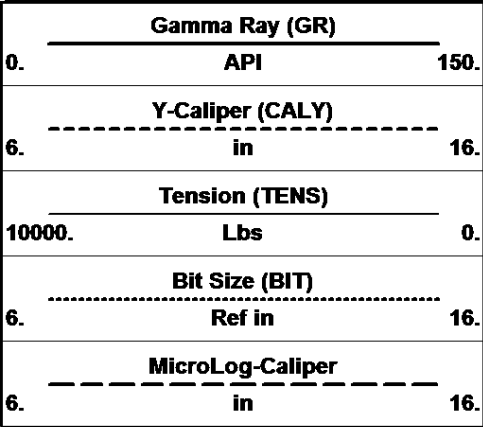
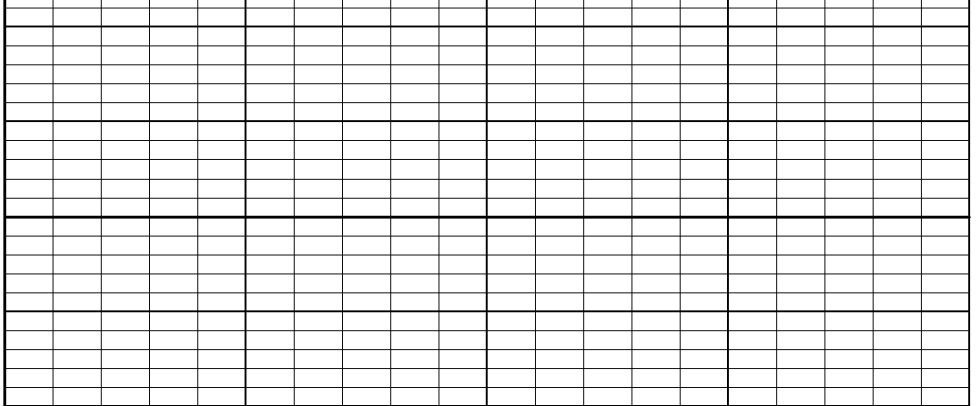








TD  
5500



04/29/2012  
16:52:36 => Start Time

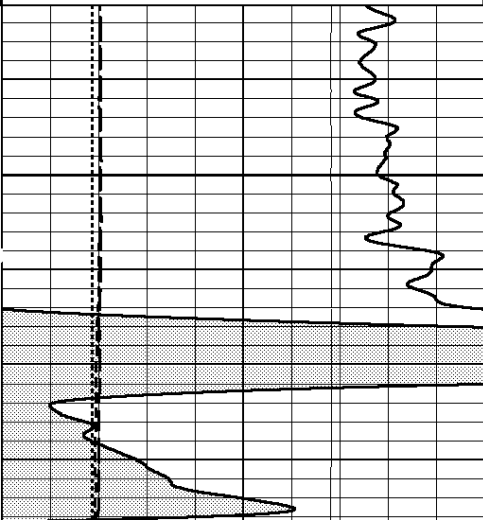
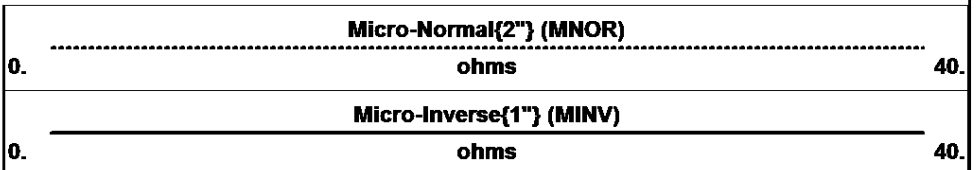
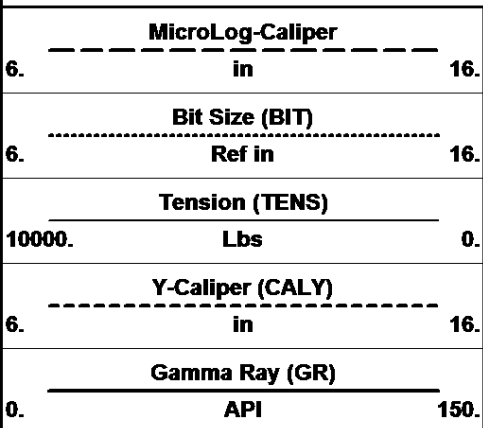
**MAIN PASS (5"/100ft)**

Log UP - (VER 11.08)  
Start Depth=> 5520.00 Feet

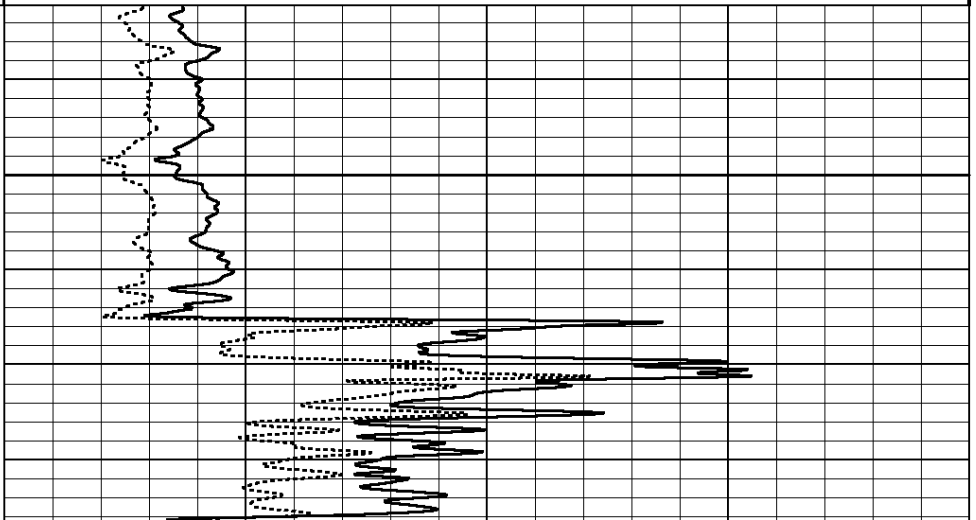
04/29/2012  
16:46:46 => End Time

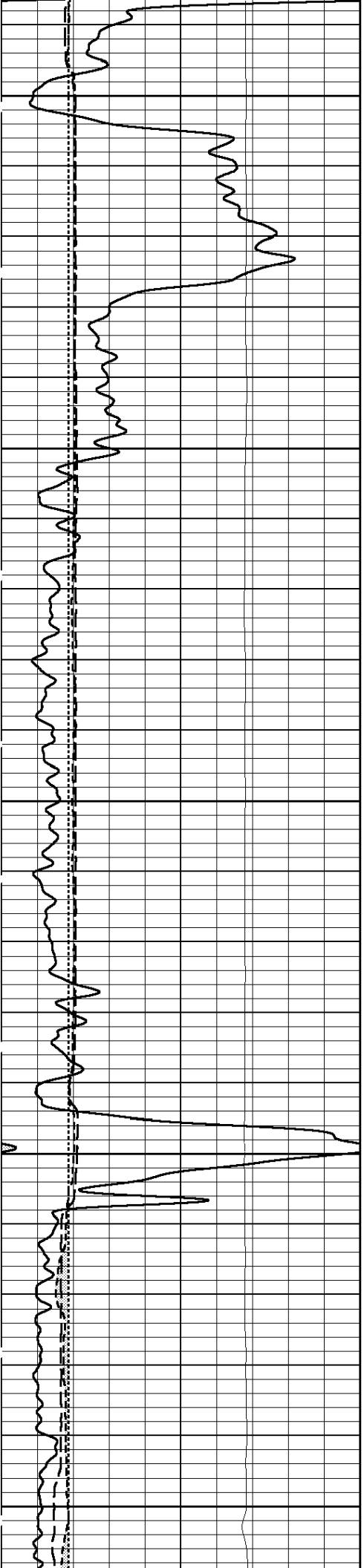
**REPEAT PASS (5"/100ft)**

Log UP - (VER 11.08)  
End Depth=> 5182.40 Feet



5200





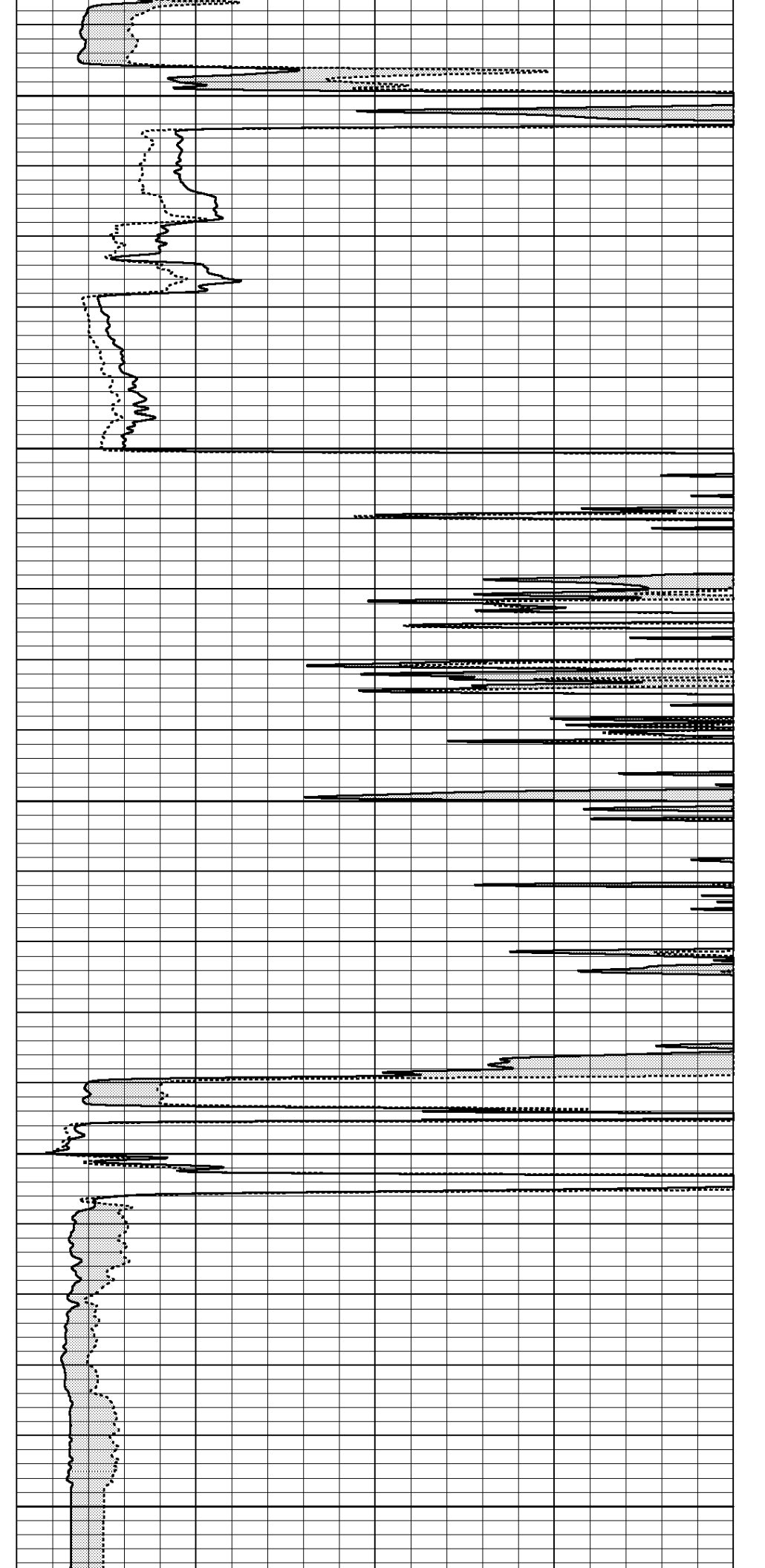
5250

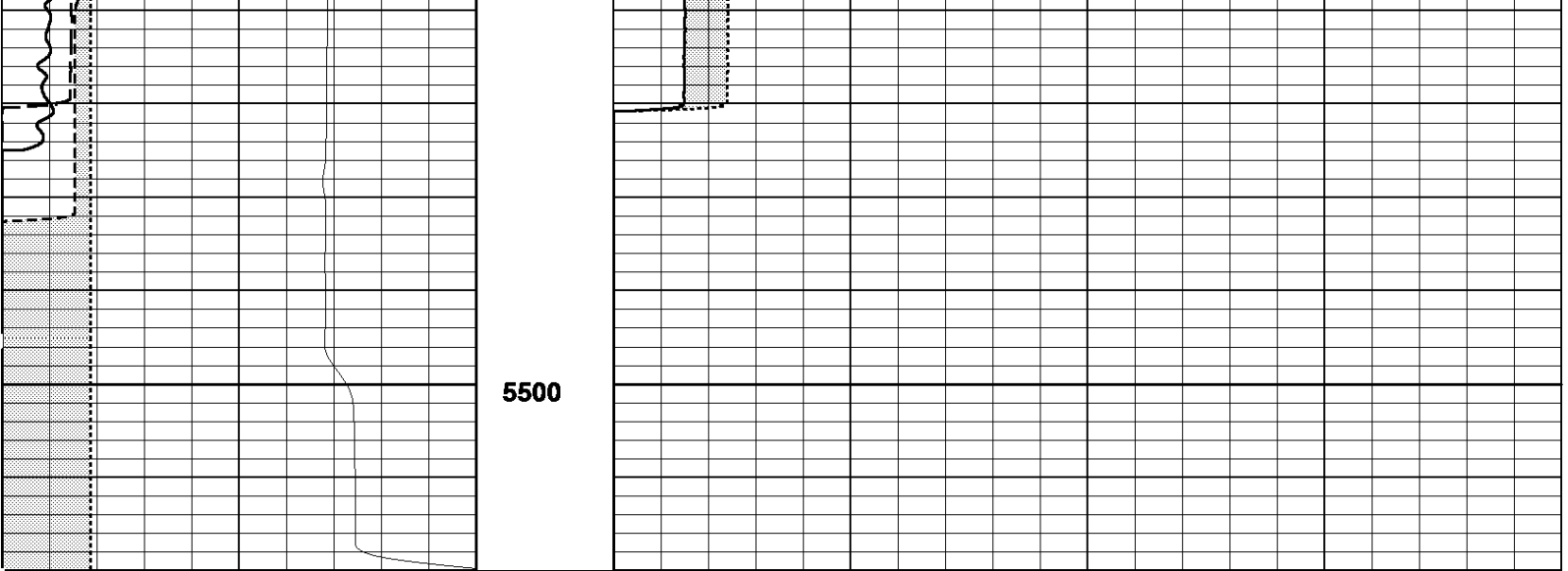
5300

5350

5400

5450





<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;"><b>Gamma Ray (GR)</b></td> </tr> <tr> <td style="text-align: center;">0.</td> <td style="text-align: center;">API</td> <td style="text-align: center;">150.</td> </tr> <tr> <td colspan="3" style="text-align: center;">-----</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Y-Caliper (CALY)</b></td> </tr> <tr> <td style="text-align: center;">6.</td> <td style="text-align: center;">in</td> <td style="text-align: center;">16.</td> </tr> <tr> <td colspan="3" style="text-align: center;">-----</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Tension (TENS)</b></td> </tr> <tr> <td style="text-align: center;">10000.</td> <td style="text-align: center;">Lbs</td> <td style="text-align: center;">0.</td> </tr> <tr> <td colspan="3" style="text-align: center;">-----</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Bit Size (BIT)</b></td> </tr> <tr> <td style="text-align: center;">6.</td> <td style="text-align: center;">Ref in</td> <td style="text-align: center;">16.</td> </tr> <tr> <td colspan="3" style="text-align: center;">-----</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>MicroLog-Caliper</b></td> </tr> <tr> <td style="text-align: center;">6.</td> <td style="text-align: center;">in</td> <td style="text-align: center;">16.</td> </tr> </table>	<b>Gamma Ray (GR)</b>			0.	API	150.	-----			<b>Y-Caliper (CALY)</b>			6.	in	16.	-----			<b>Tension (TENS)</b>			10000.	Lbs	0.	-----			<b>Bit Size (BIT)</b>			6.	Ref in	16.	-----			<b>MicroLog-Caliper</b>			6.	in	16.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td colspan="3" style="text-align: center;"><b>Micro-Inverse{1"} (MINV)</b></td> </tr> <tr> <td style="text-align: center;">0.</td> <td style="text-align: center;">ohms</td> <td style="text-align: center;">40.</td> </tr> <tr> <td colspan="3" style="text-align: center;">-----</td> </tr> <tr> <td colspan="3" style="text-align: center;"><b>Micro-Normal{2"} (MNOR)</b></td> </tr> <tr> <td style="text-align: center;">0.</td> <td style="text-align: center;">ohms</td> <td style="text-align: center;">40.</td> </tr> <tr> <td colspan="3" style="text-align: center;">-----</td> </tr> </table>	<b>Micro-Inverse{1"} (MINV)</b>			0.	ohms	40.	-----			<b>Micro-Normal{2"} (MNOR)</b>			0.	ohms	40.	-----		
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04/29/2012 **REPEAT PASS (5"/100ft)** Log UP - (VER 11.08)  
 16:36:54 ⇒ Start Time Start Depth⇒ 5520.00 Feet

<b>MICRO INVERSE CALIBRATIONS</b>					
<b>SERIAL NUM</b>	RM8006				
<b>MASTER CALIBRATIONS</b>					
	ZeroVal: 0.200 ohmm	CalVal: 10.000 ohmm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
<b>BASE CALS</b>	16.461 - raw	292.800 - raw	0.035 - gain -0.384 - off	M/D/Y> 2/10/2012	H:M:S> 13:7:37

<b>MICRO NORMAL CALIBRATIONS</b>					
<b>SERIAL NUM</b>	RM8006				
<b>MASTER CALIBRATIONS</b>					
	ZeroVal: 0.200 ohmm	CalVal: 10.000 ohmm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
<b>BASE CALS</b>	40.840 - raw	405.560 - raw	0.027 - gain -0.897 - off	M/D/Y> 2/10/2012	H:M:S> 13:13:22

## GAMMA RAY CALIBRATION

SERIAL NUM	RG3010
BLANKET NUM	1A

**MASTER CALIBRATIONS**

	BackGrnd	CalVal: 122.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	112.627 - raw	699.200 - raw	0.208 - gain 0.000 - off	M/D/Y> 2/1/2012	H:M:S> 8:47:22

**WELL SITE CALIBRATIONS**

	BackGrnd	CalVal: 100.000 Mknuts	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
PRE CAL	-0.059 - raw	26.967 - raw	3.700 - gain	M/D/Y> 11/12/2004	H:M:S> 12:40:27

**Y CALIPER CALIBRATIONS**

SERIAL NUM	RN2002
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**MASTER CALIBRATIONS**

	ZeroVal: 6.000 mm	CalVal: 12.000 mm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	1142.560 - raw	2310.576 - raw	0.005 - gain 0.131 - off	M/D/Y> 7/11/2011	H:M:S> 16:15:34

**MICRO CALIPER CALIBRATIONS**

SERIAL NUM	RM8006
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**MASTER CALIBRATIONS**

	ZeroVal: 6.000 in	CalVal: 11.900 in	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	1928.939 - raw	5170.712 - raw	0.002 - gain 2.489 - off	M/D/Y> 2/10/2012	H:M:S> 13:31:30

Company	VAUGHN GOOD OIL COMPANY
Well	NUSSER #2-16
Field	SE HARDNER
County	BARBER
State	KANSAS



MICROLOG  
X-Y CALIPER  
GAMMA RAY



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RECON  
Petrotechnologies  
Ltd.