



FILE NO:
US091582
API NO:
05045224600000

COMPANY
WELL
FIELD
COUNTY

COACHMAN ENERGY
FEDERAL 14 15-7-21
KOKOPELLI
GARFIELD

STATE CO

Ver. 4.01

PAD: FEDERAL 21B
RIG: FRONTIER 28

LOCATION:
SHL: SWNE 2345' FNL 713' FEL
LAT: 39.51358000; LON: -107.55279000

SEC 21 TWP 6S RGE 91W

OTHER SERVICES
NONE

PERMANENT DATUM
LOG MEASURED FROM
DRILL MEAS. FROM
GL
KB
KB
ELEVATION
23 FT
ABOVE P.D.

ELEVATIONS:
KB 6956 FT
DF
GL 6932 FT

DATE	31-Dec-2014
RUN	1
SERVICE ORDER	US091582
DEPTH DRILLER	9065 FT
DEPTH LOGGER	9001 FT
BOTTOM LOGGED INTERVAL	8998 FT
TOP LOGGED INTERVAL	0 FT
CASING DRILLER	9.625 IN @ 1510 FT
CASING LOGGER	1503 FT
BIT SIZE	8.75 IN
TYPE OF FLUID IN HOLE	LSND
DENSITY	9.2 LB/G
PH	8.7
SOURCE OF SAMPLE	FLOWLINE
RM AT MEAS. TEMP.	1.2 OHMM @ 56 DEGF
RMF AT MEAS. TEMP.	9 OHMM @ 51 DEGF
RMC AT MEAS. TEMP.	1.5 OHMM @ 51 DEGF
SOURCE OF RMF	CALCULATED
RM AT BHT	854 OHMM @ 186 DEGF
TIME SINCE CIRCULATION	6 HR
MAX. RECORDED TEMP.	189 DEGF
EQUIP. NO.	6685
RECORDED BY	D SMITH
WITNESSED BY	P BLACKMER

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE THE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

BOREHOLE RECORD		
BIT SIZE	FROM	TO
13.5 IN	0 FT	1510 FT
8.75 IN	1510 FT	9065 FT

CASING RECORD				
SIZE	WEIGHT	GRADE	FROM	TO
9.625 IN	36 LB/F	J-55	0 FT	1510 FT

REMARKS

RUN 1 TRIP 1: HDIL DAL ZDL CN RAN IN COMBINATION

BVOL CVOL CALCULATED IN CUBIC FT
CVOL CALCULATED USING PROPOSED 7" CASING
CALIPER VERIFIED INSIDE CASING

RHO MATRIX: 2.65 G/CC
RHO FLUID: 1.00 G/CC

DT MATRIX: 53 USEC

CN MATRIX: SANDSTONE
CN RAN DECENTRALIZED

HDIL RAN WITH 1.5" STANDOFFS
ABC TO CALCULATE MUD CONDUCTIVITY

THANK YOU FOR CHOOSING BAKER HUGHES WIRELINE SERVICES

CREW: OLSON/HOLLER/SMITH

RIG: FRONTIER 28

RUN 1: BRIDGED AT 3500 FT POOH FOR BIT TRIP

RUN 2: BRIDGED AT 6370 FT POOH FOR FULL WIPER TRIP

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	SWIVEL	3950XA	10102176	FREE
1	1	TTMA	3980XA	10121559	FREE
1	1	TEL/GR	3518FB/EG	10126400/10139870	FREE
1	1	NEUTRON	2436XA	10137930	FREE
1	1	DENSITY	2223XA	10123024	DECENTRALIZED
1	1	KNUCKLE	3930XA	10102172/10087285	FREE
1	1	DAL	1630EA	10146207	CENTRALIZED
1	1	DAL	1630MA	10142582	CENTRALIZED
1	1	HDIL	1530XA	10118612	STOOD OFF

BOREHOLE PROFILE

ECLIPS 6.2i ECLIPS General Release Rel 6.2i Wed Jun 12 12:21:40 CDT 2013
Updates: 1 Patches: 5

Plotted: Fri Jan 2 09:47:53 2015

PARAMETER AND FILTER SUMMARY REPORT

File: /dat1a/OH091582/n970a03.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 1393.000 ft BOTTOM DEPTH: 9013.995 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR MED RES	FILTER Q	medium (1)		TOP	BOTTOM
CALIPER	FILTER Q	medium (1)		"	"
TENSION	FILTER Q	medium (1)		"	"

BOREHOLE & CEMENT

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CASING - BOREHOLE & CEMENT VOLUME	CASING O.D.	7.000	in	TOP	BOTTOM
BIT SIZE	BIT SIZE	8.750	in	"	"

ACCELERATION PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
ACCEL CORR SWITCH	ACCEL DEPTH CORR	CORRECTION ON		TOP	BOTTOM

CURVE DESCRIPTION REPORT

CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:BIT	Jan 2 06:28:17 2015	BIT SIZE
F1:VOLUME	Jan 2 06:28:17 2015	CASING & CEMENT VOLUME

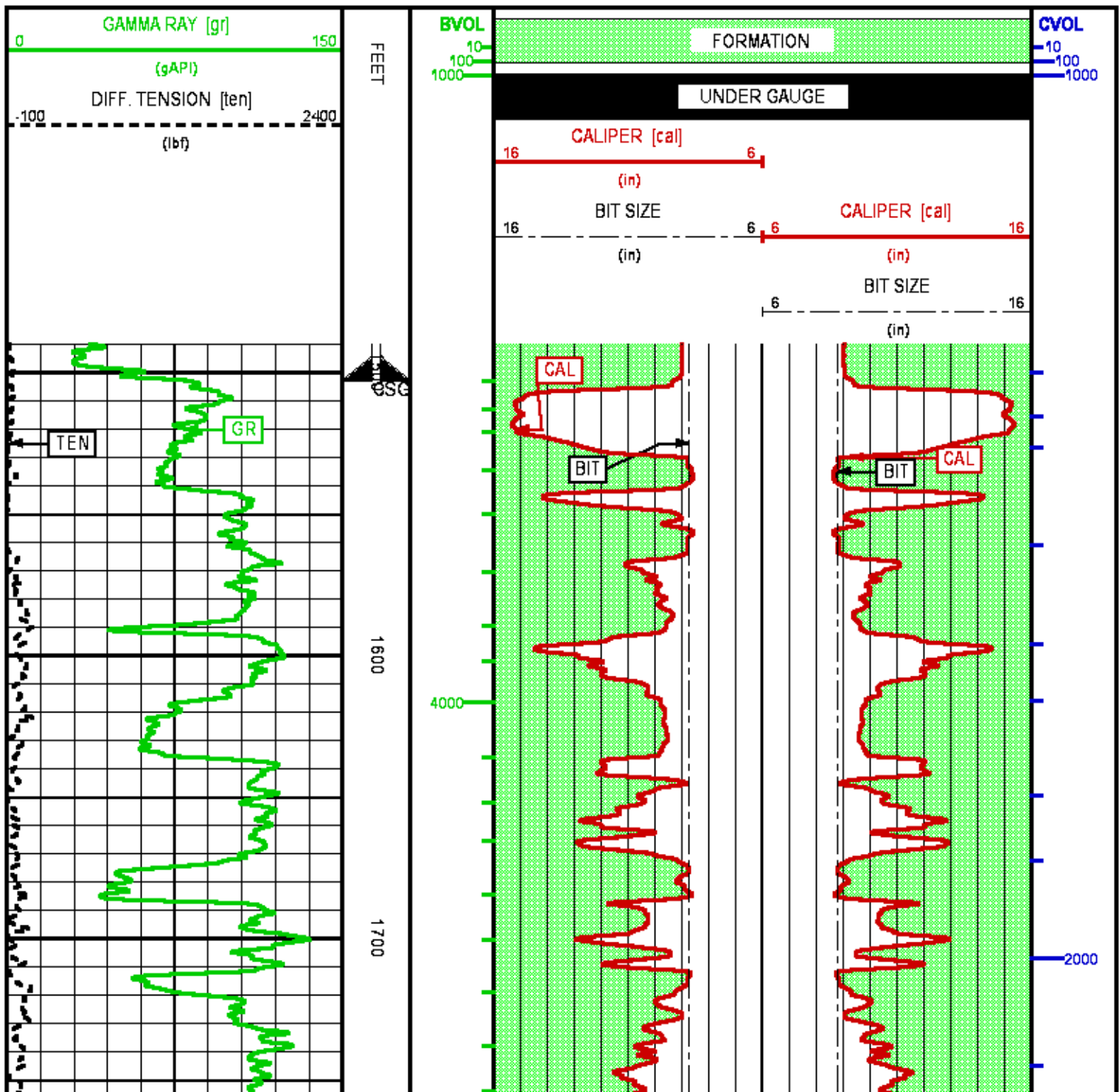
F1:BVOL	Jan 2 06:28:17 2015	BOREHOLE VOLUME
F1:CAL	Jan 2 06:28:17 2015	CALIPER
F1:CVOL	Jan 2 06:28:17 2015	CEMENT VOLUME
F1:GR	Jan 2 06:28:17 2015	GAMMA RAY
F1:TEN	Jan 2 06:28:17 2015	DIFFERENTIAL TENSION

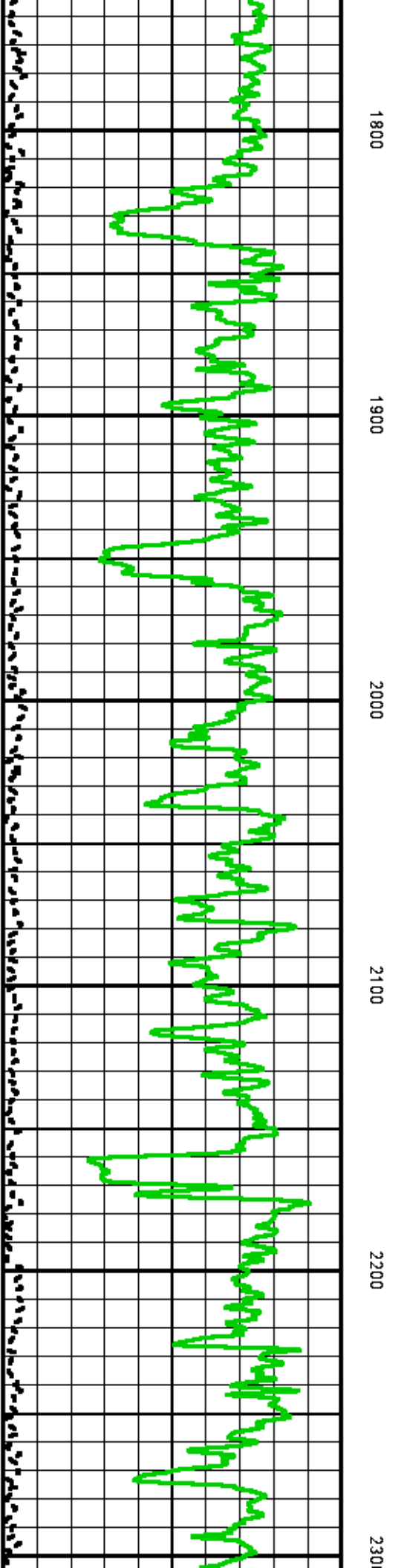
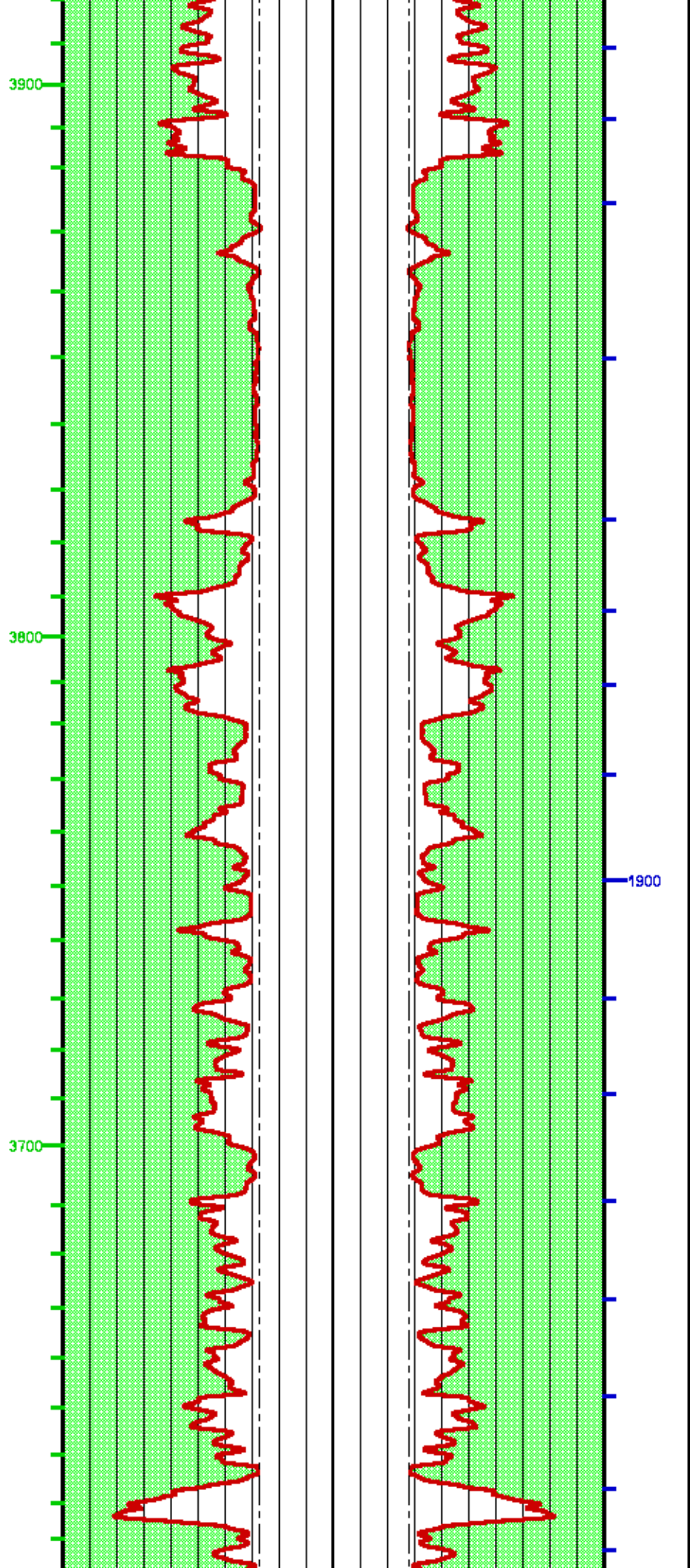
CURVE MEASURE POINT OFFSET

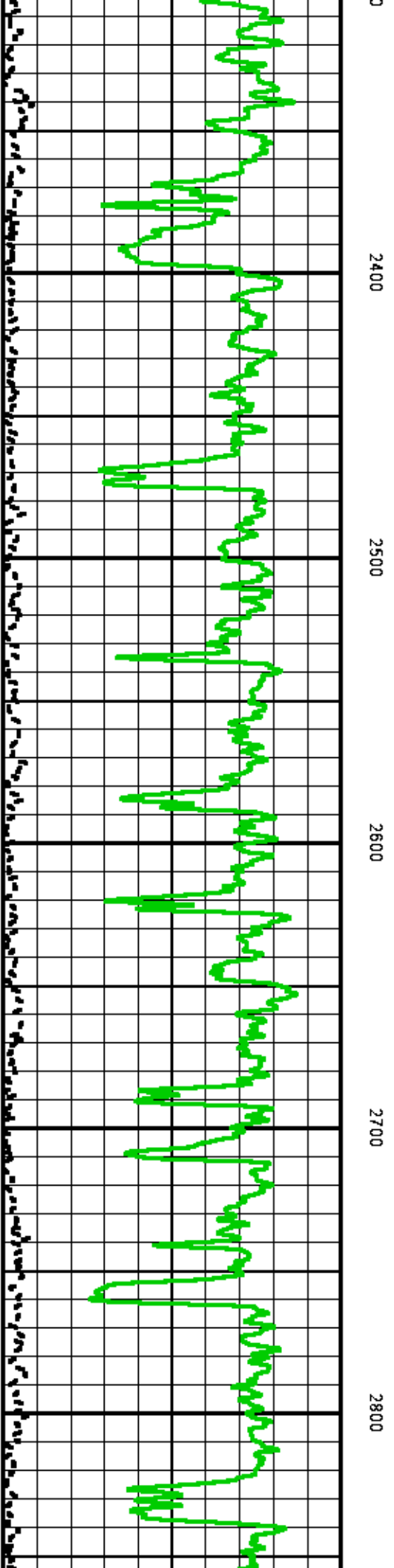
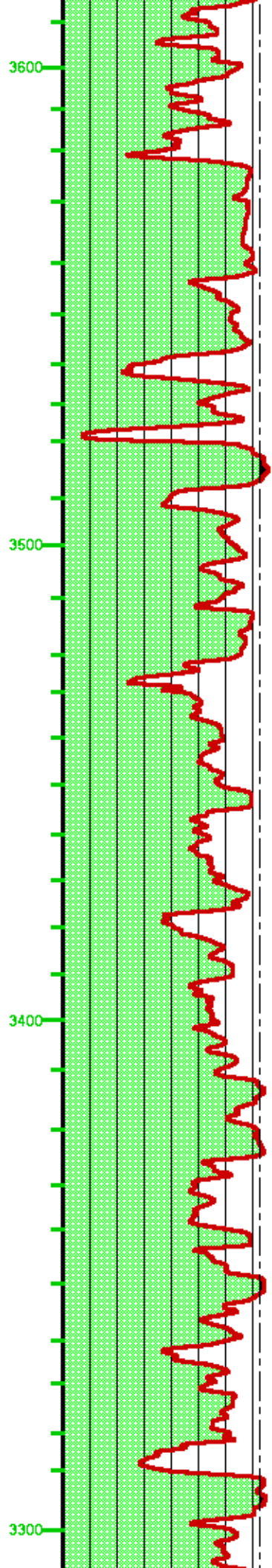
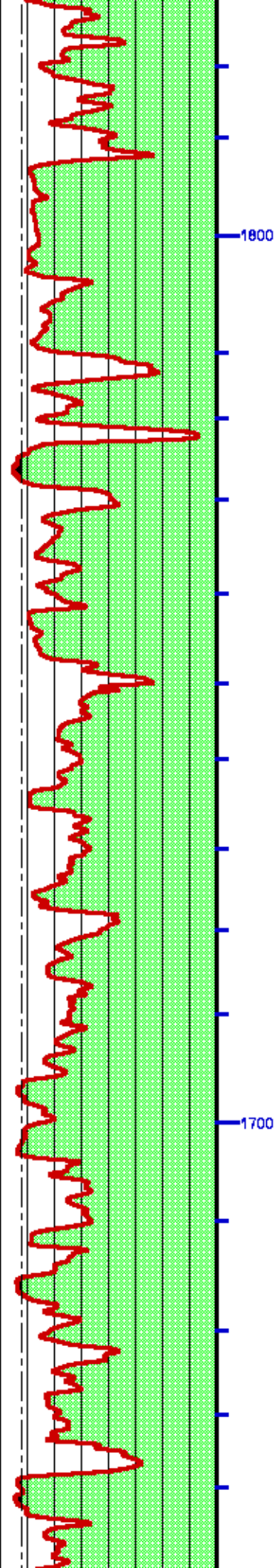
CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
BIT	0.00	CAL	29.12	GR	46.00	TEN	0.00

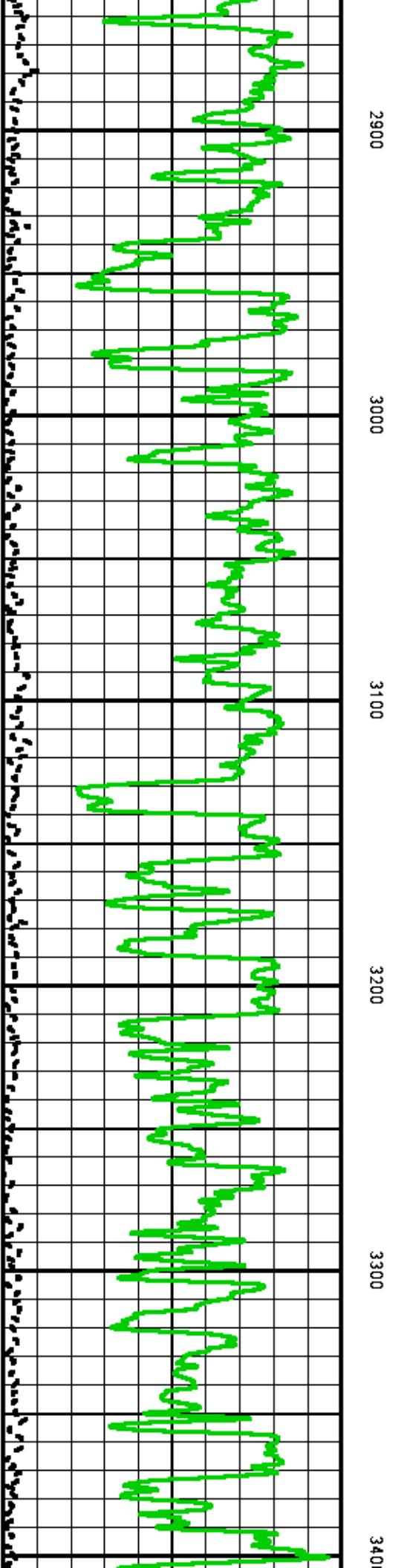
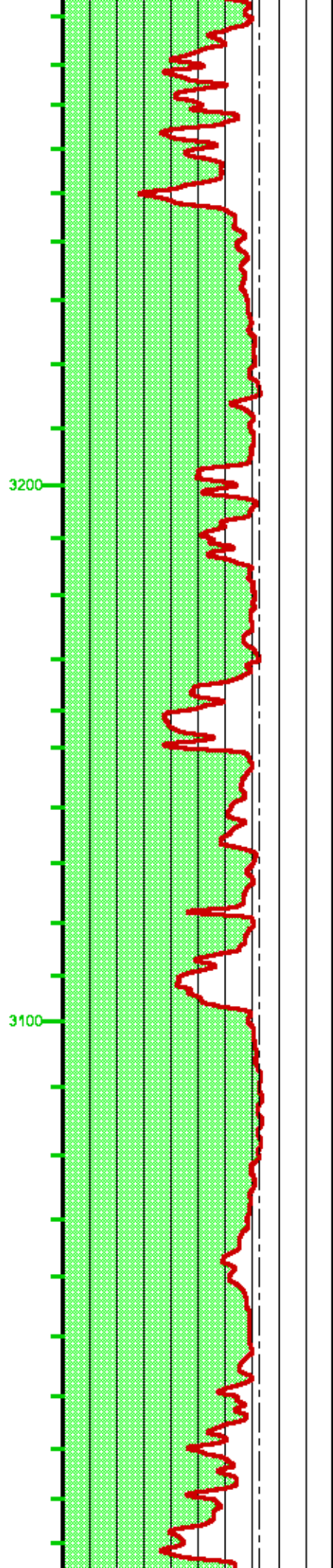
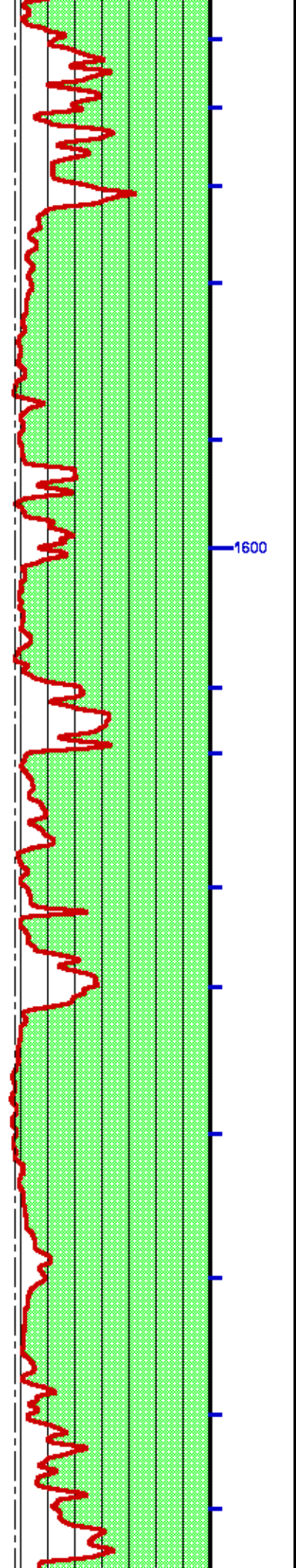
Presentation : cas6685: BHP.fvpdf [2"/100' Scale]
Plot Interval : 1490 - 9017 Feet

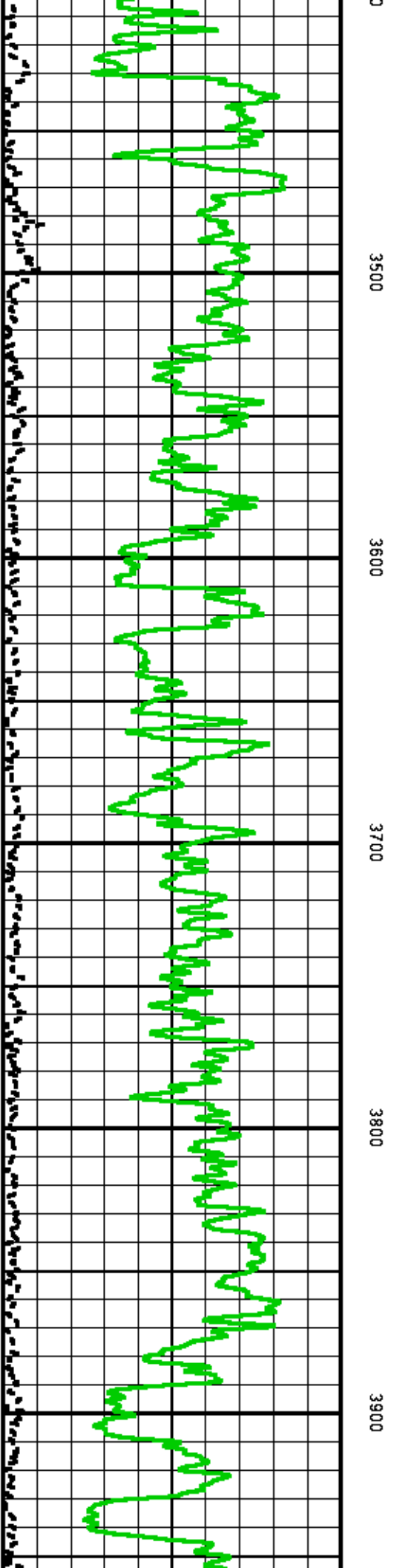
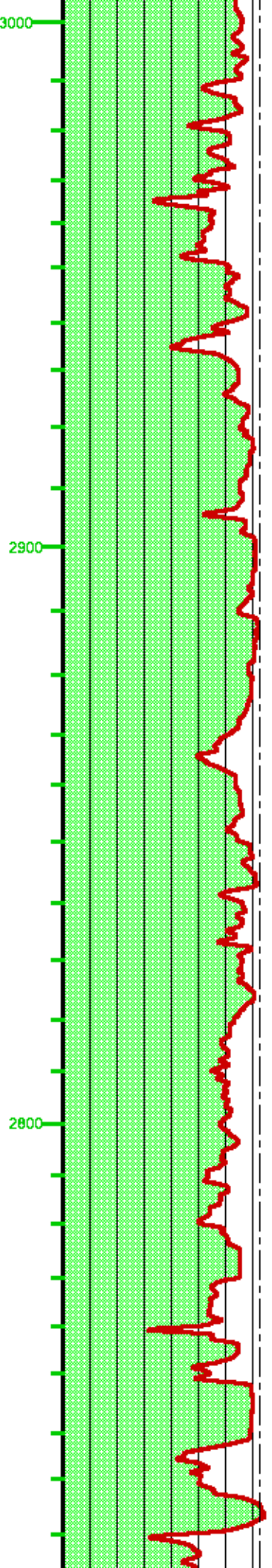
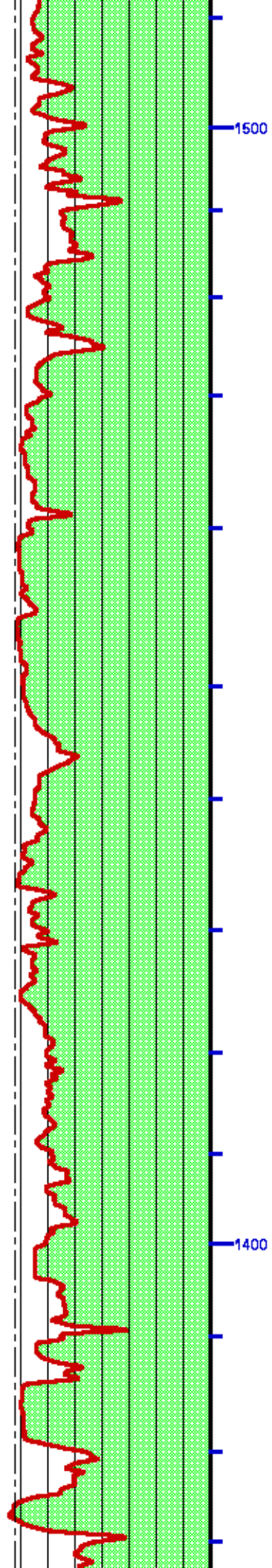
Data File 1 : F1: cas6685:/dat1a/OH091582/MAIN.xtf
Created On : Jan 2 06:28:17 2015
Company : COACHMAN ENERGY
Well : FEDERAL 14 15-7-21
Field : KOKOPELLI
File Interval : 0 - 11287 Feet
OCT : n970a

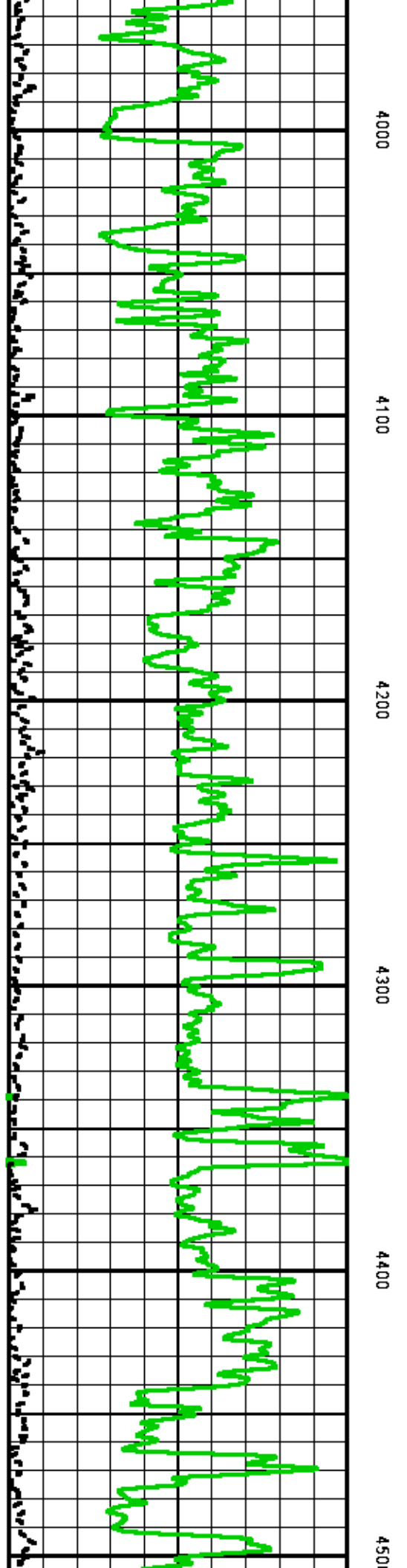
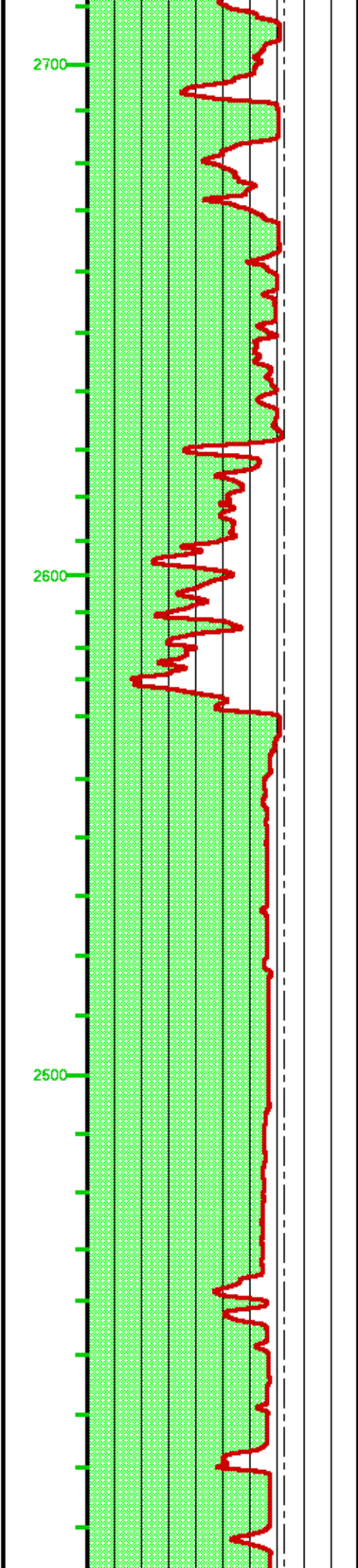
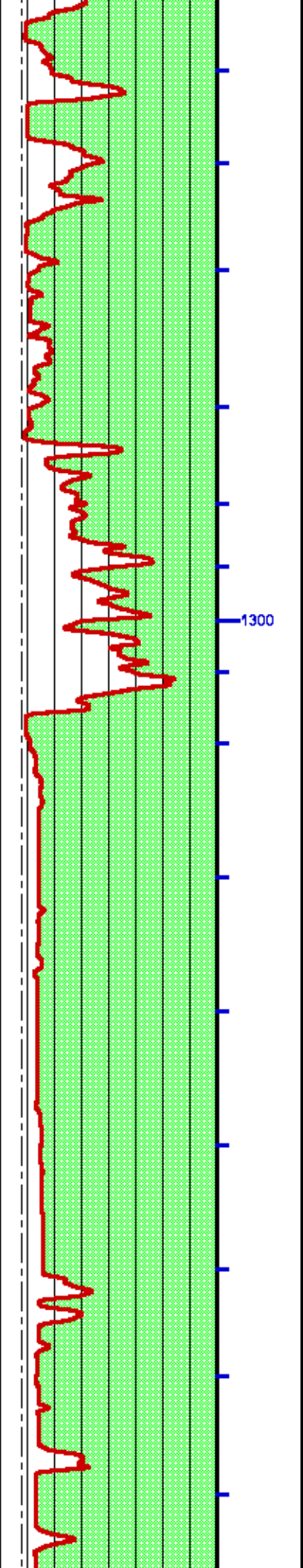


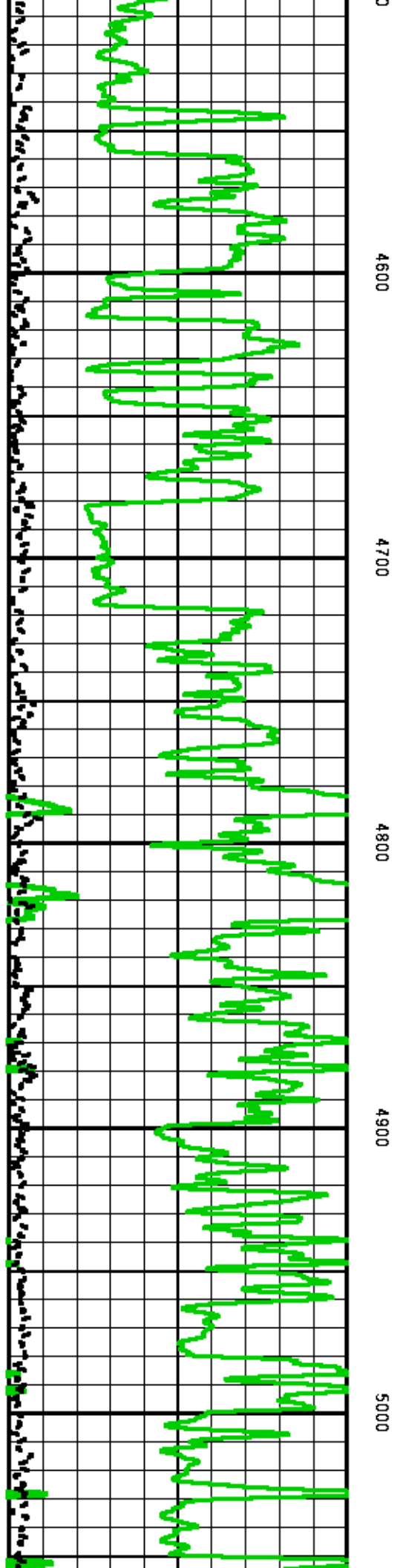
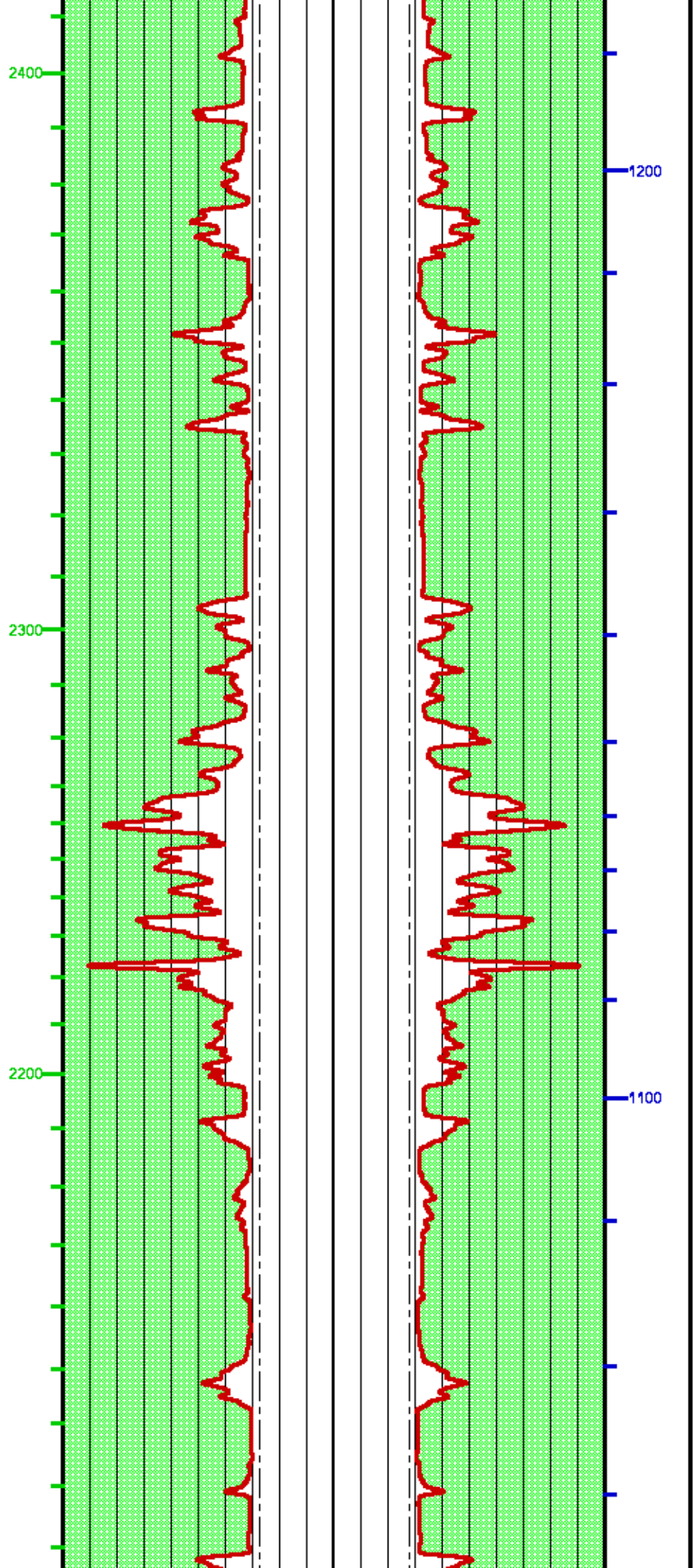


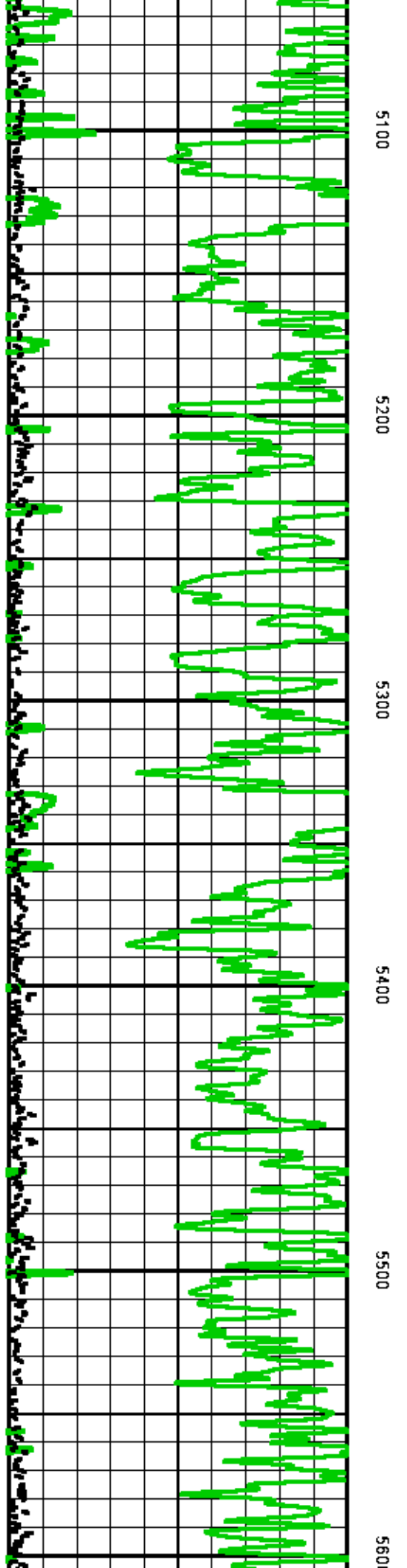
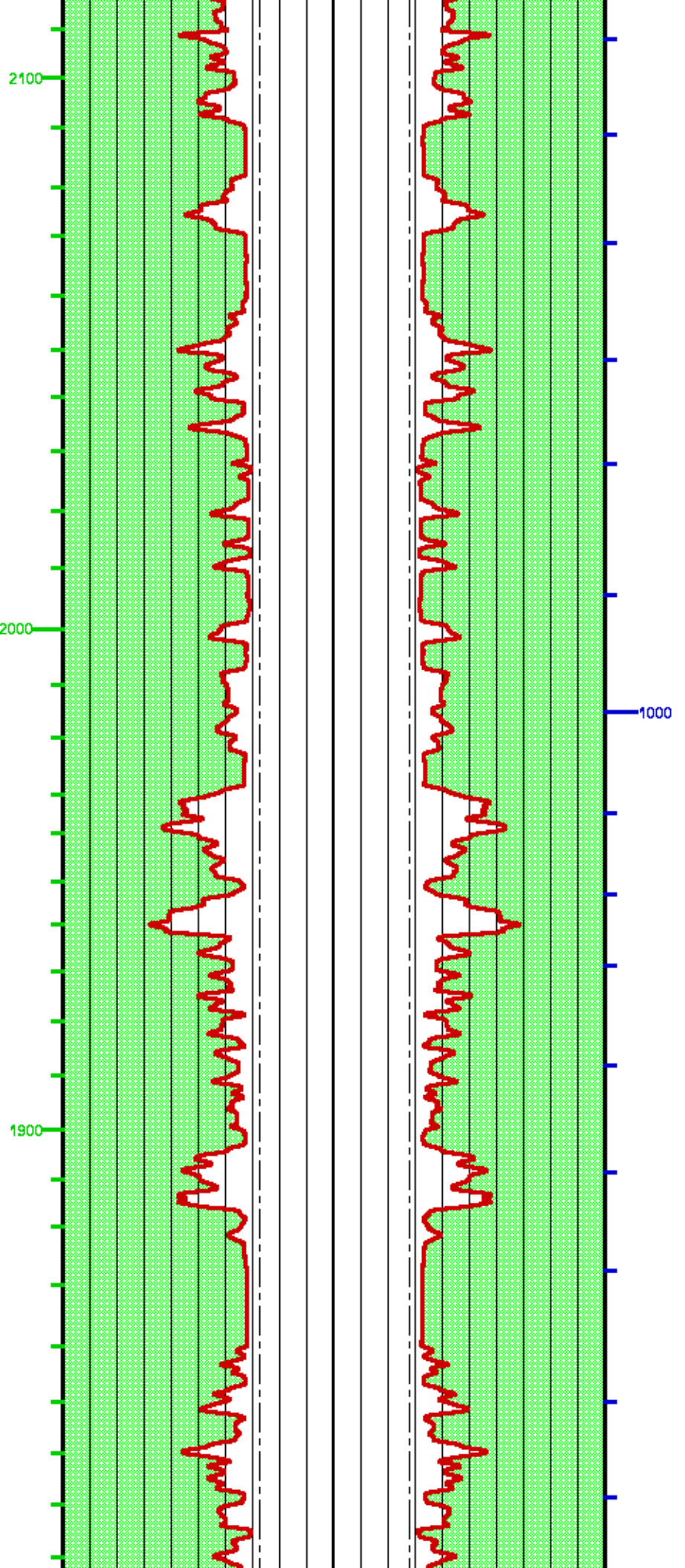


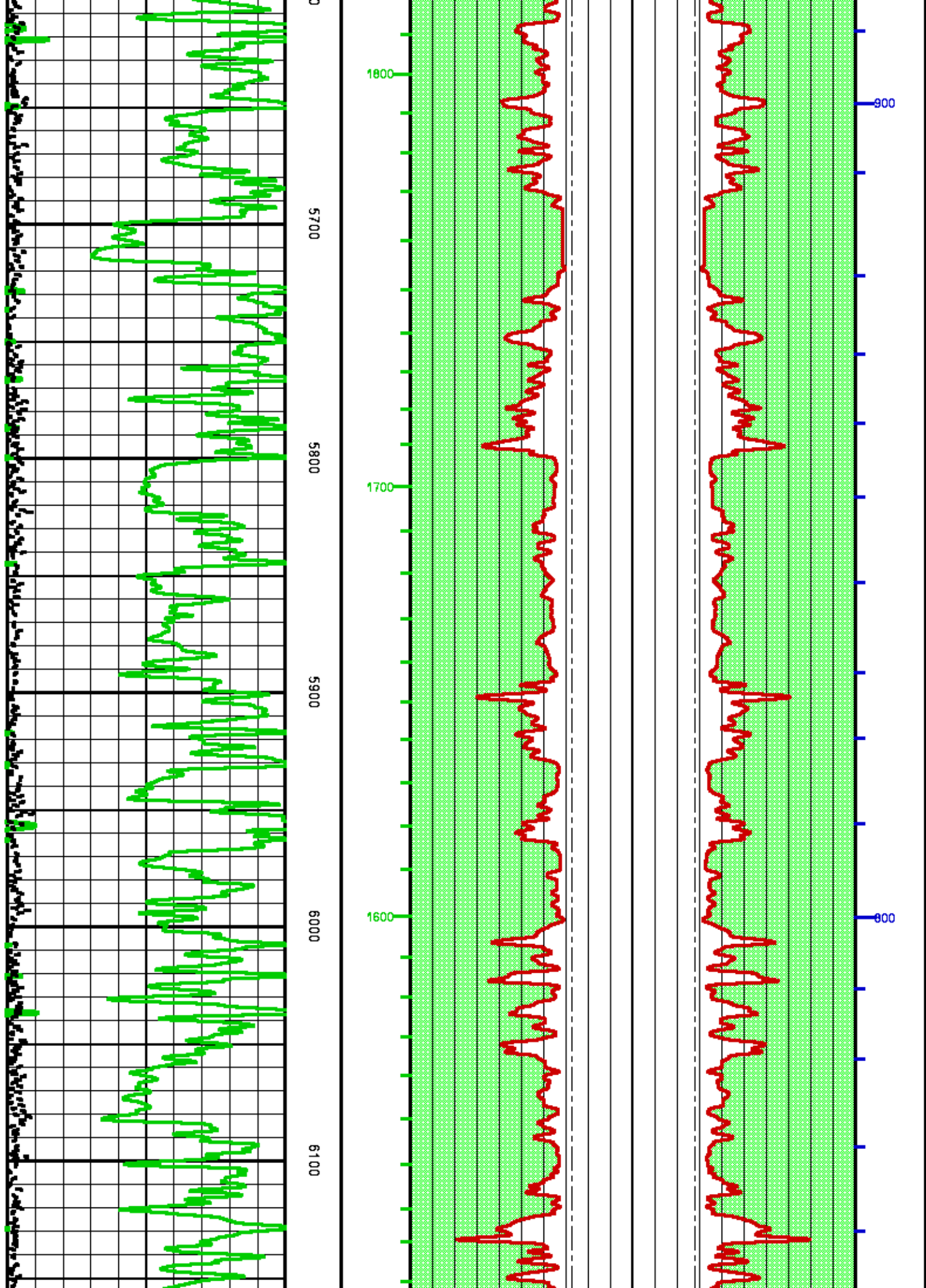


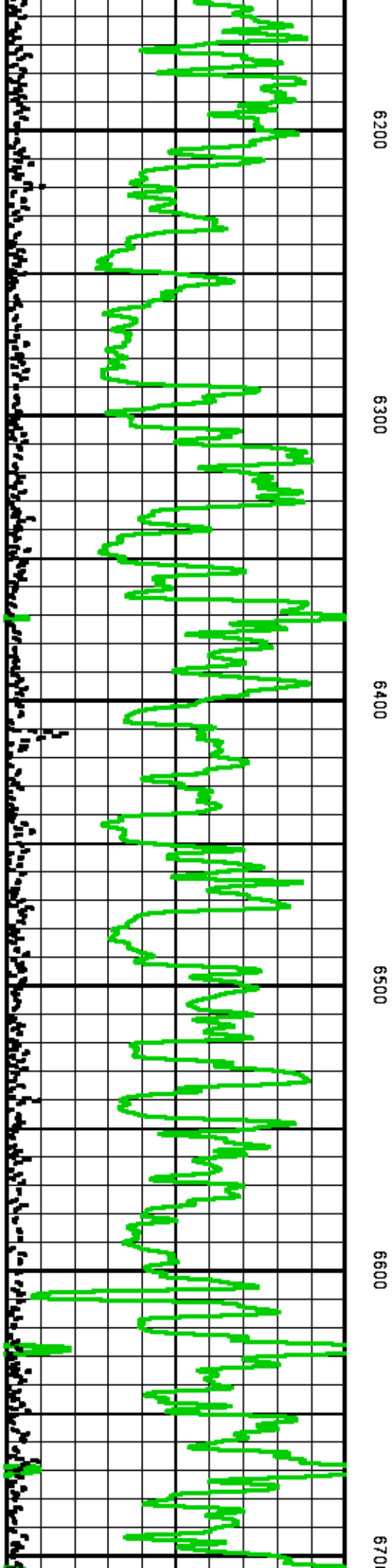
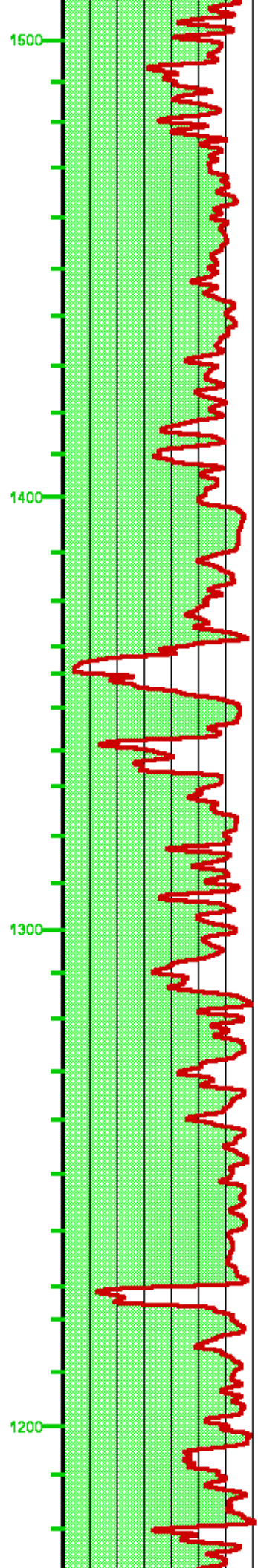
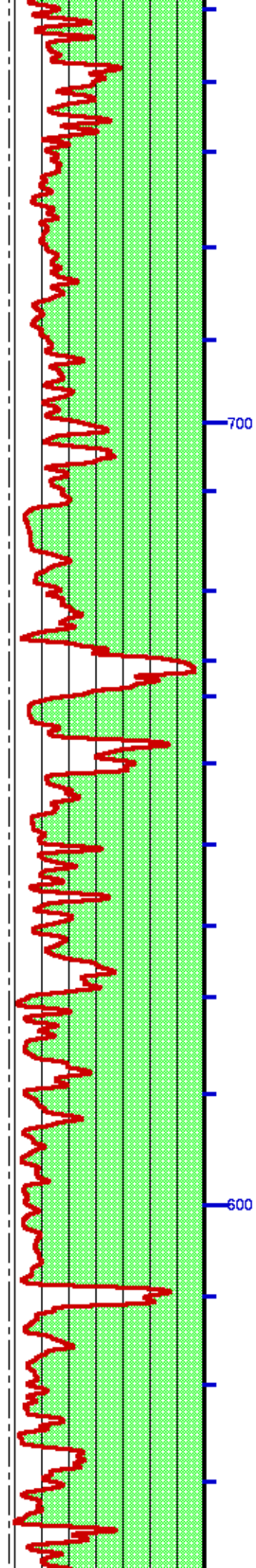


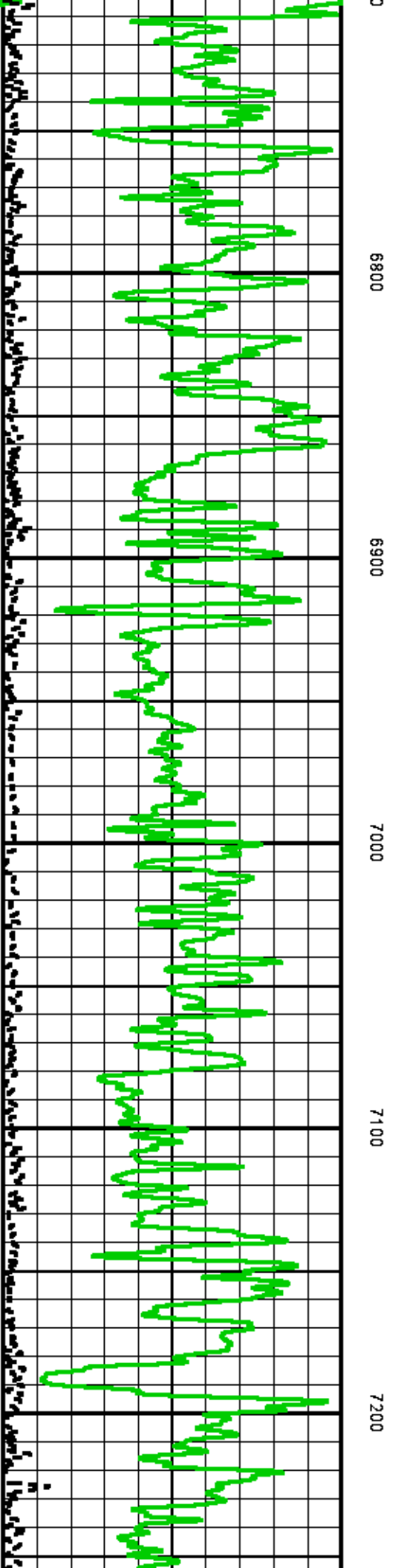
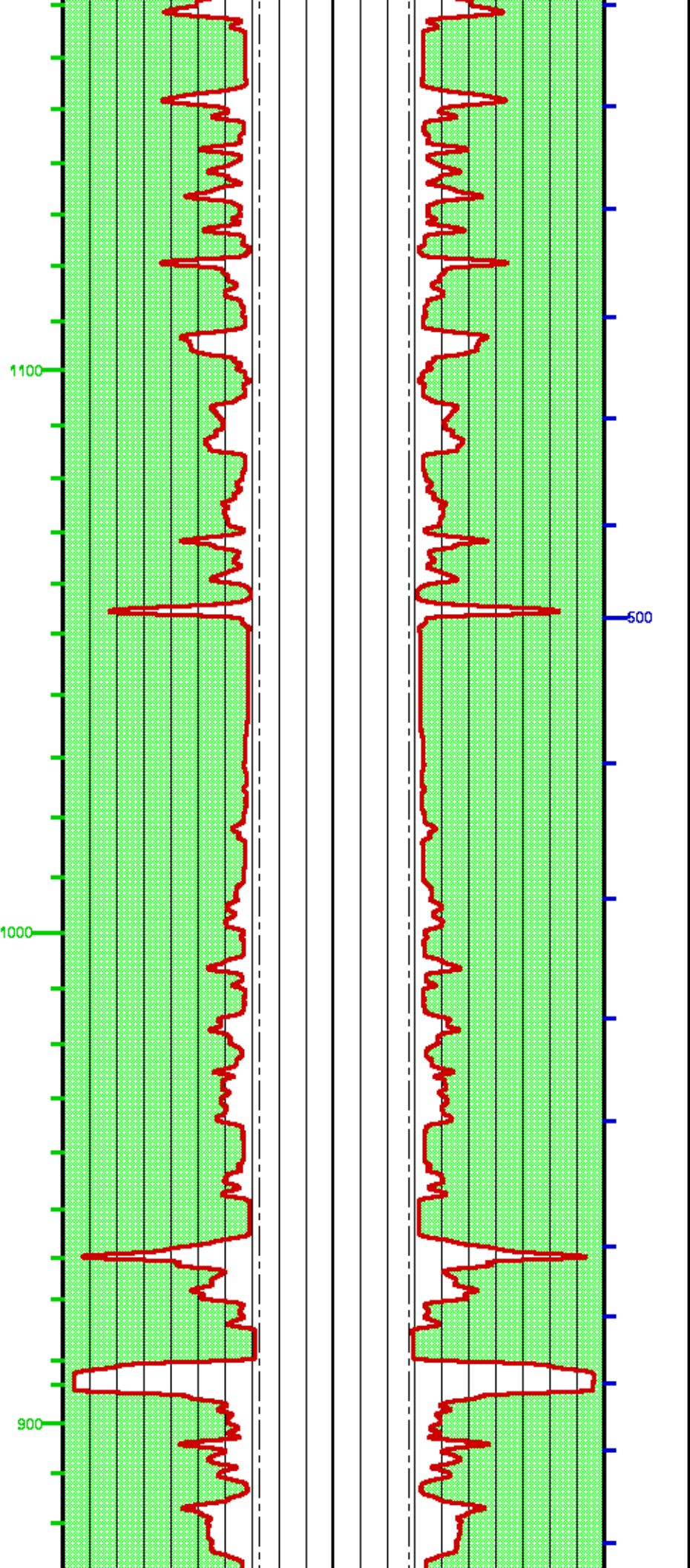


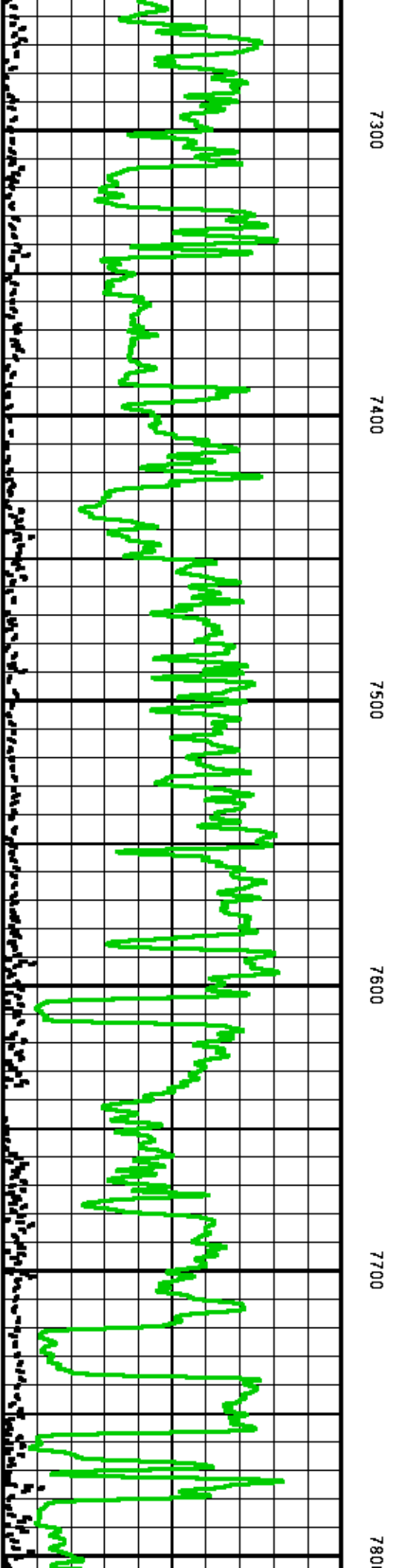
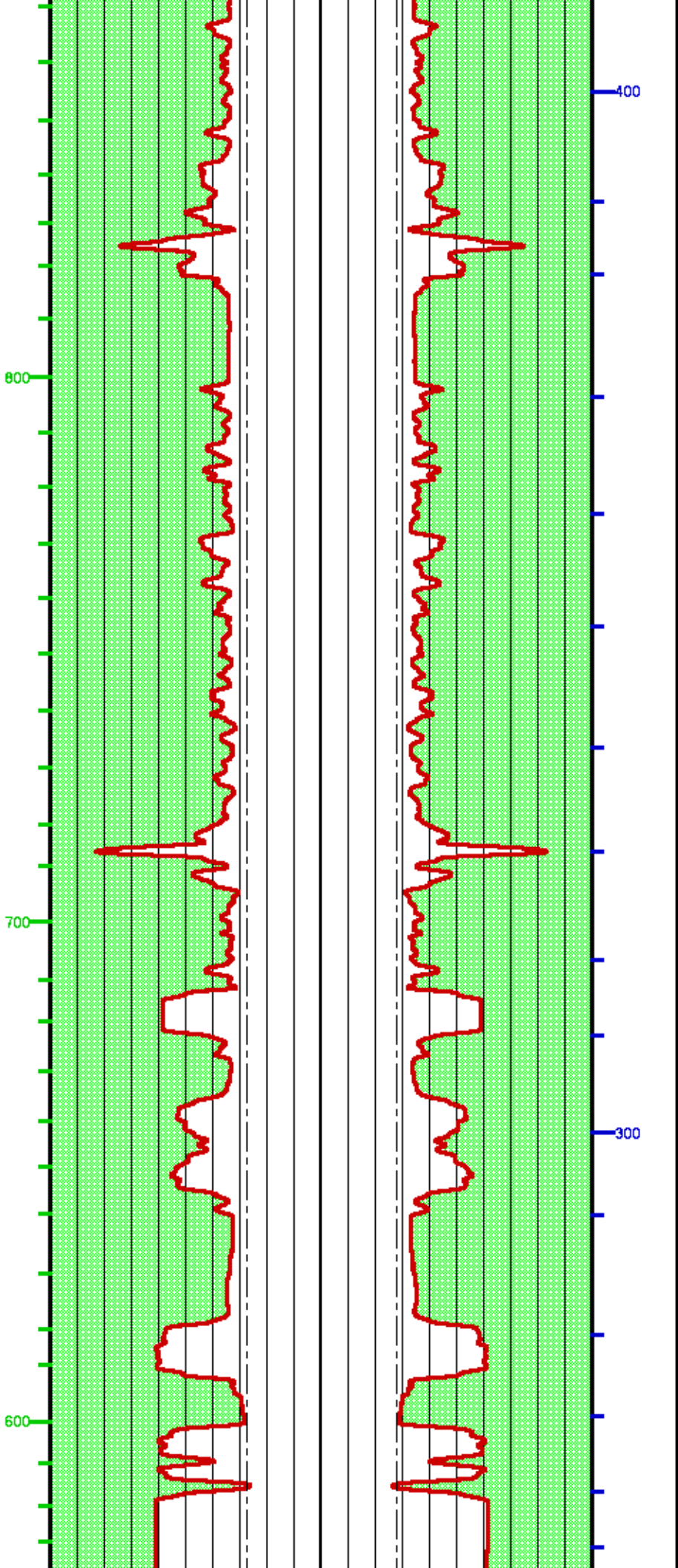


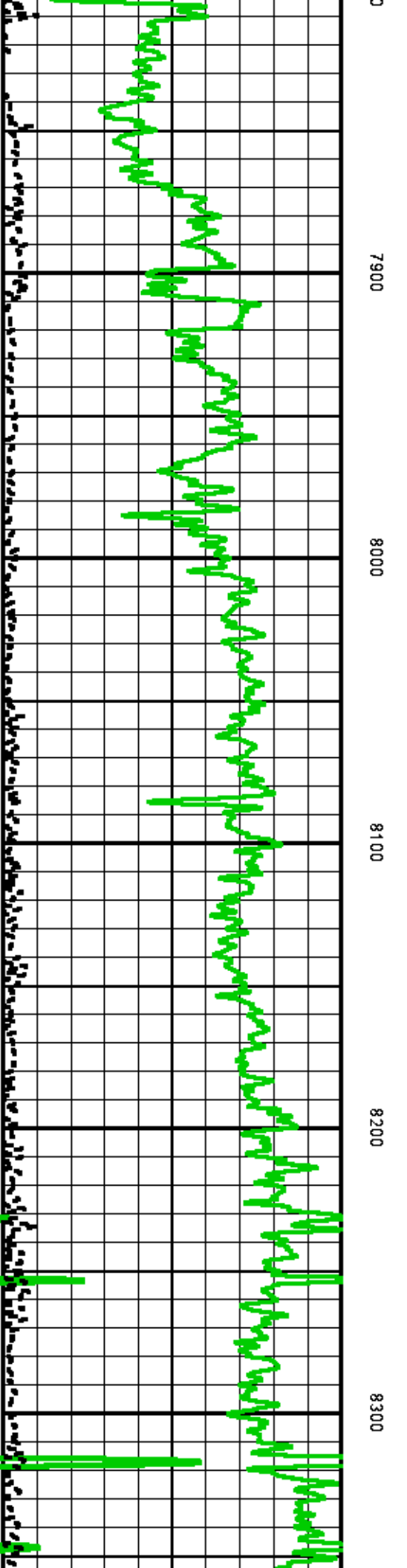
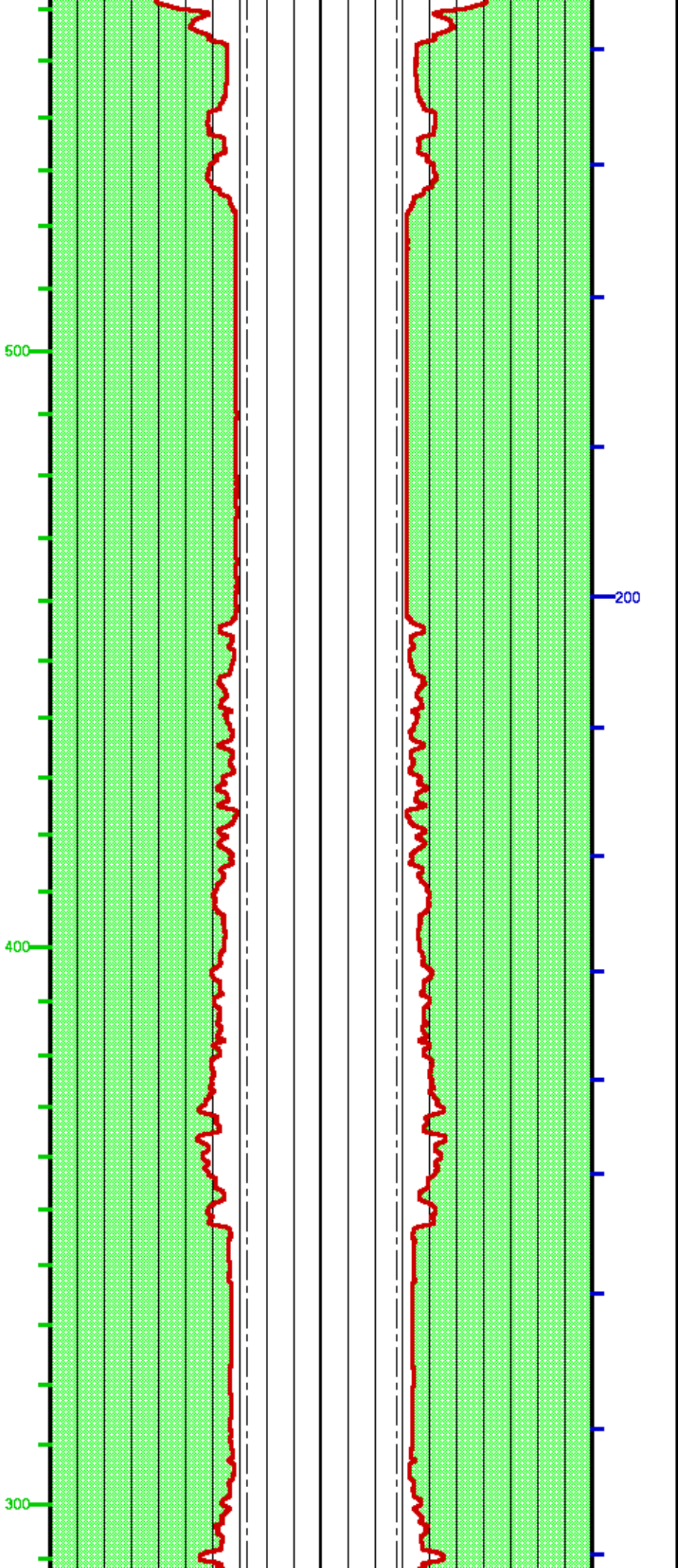


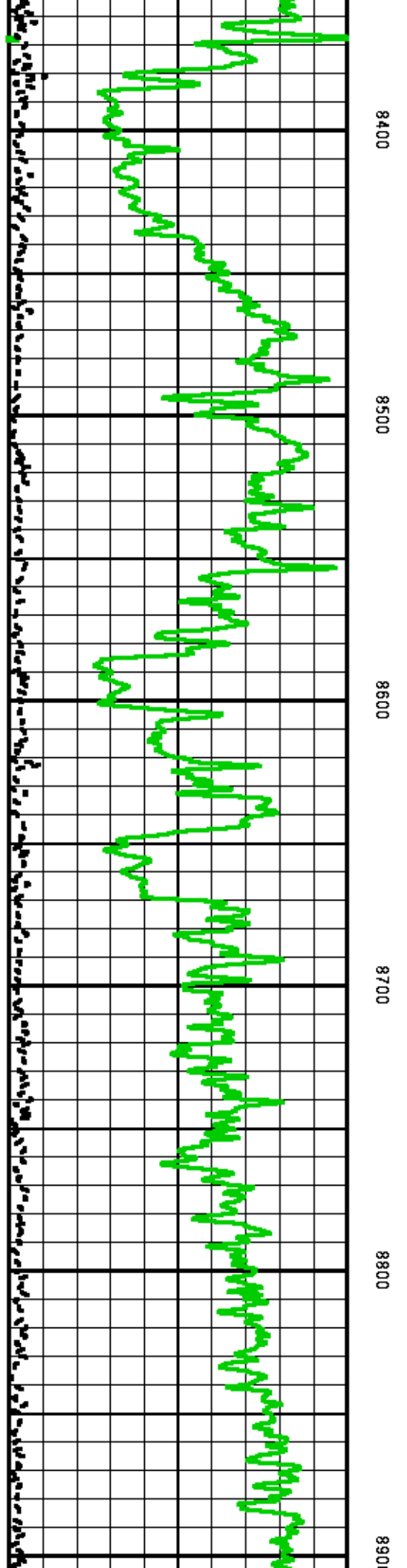
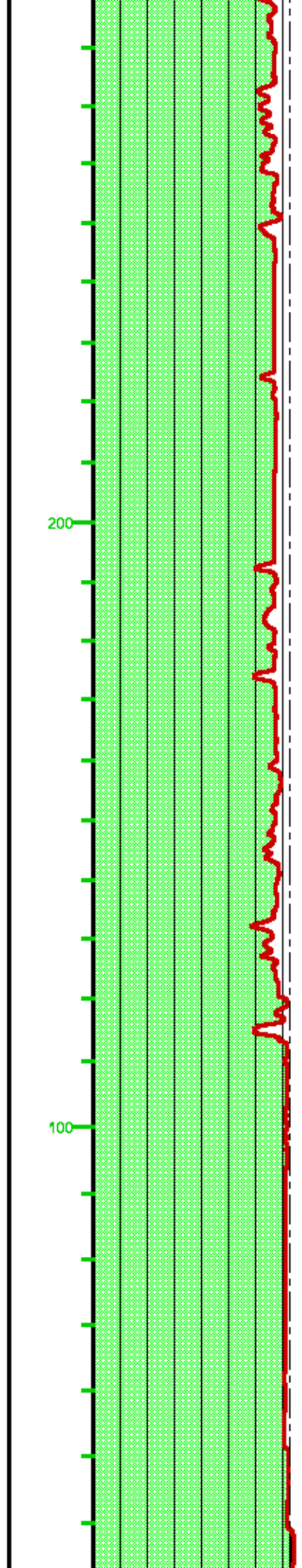
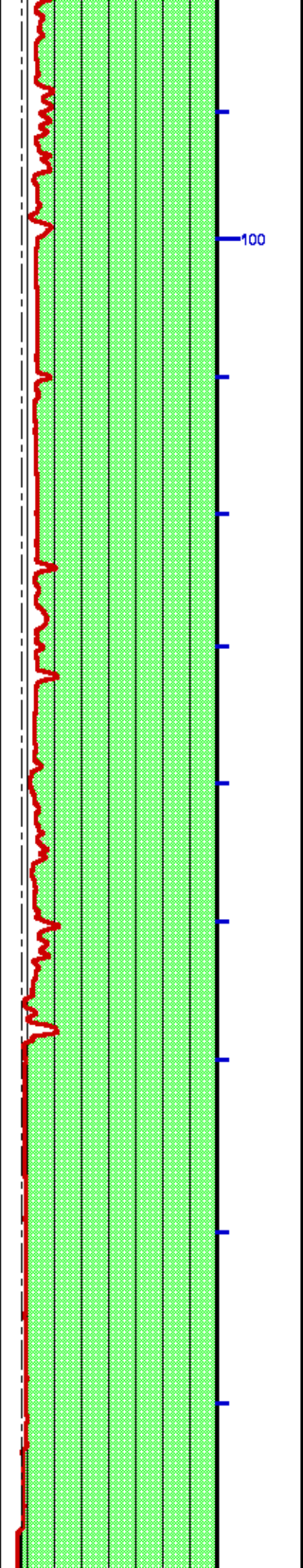


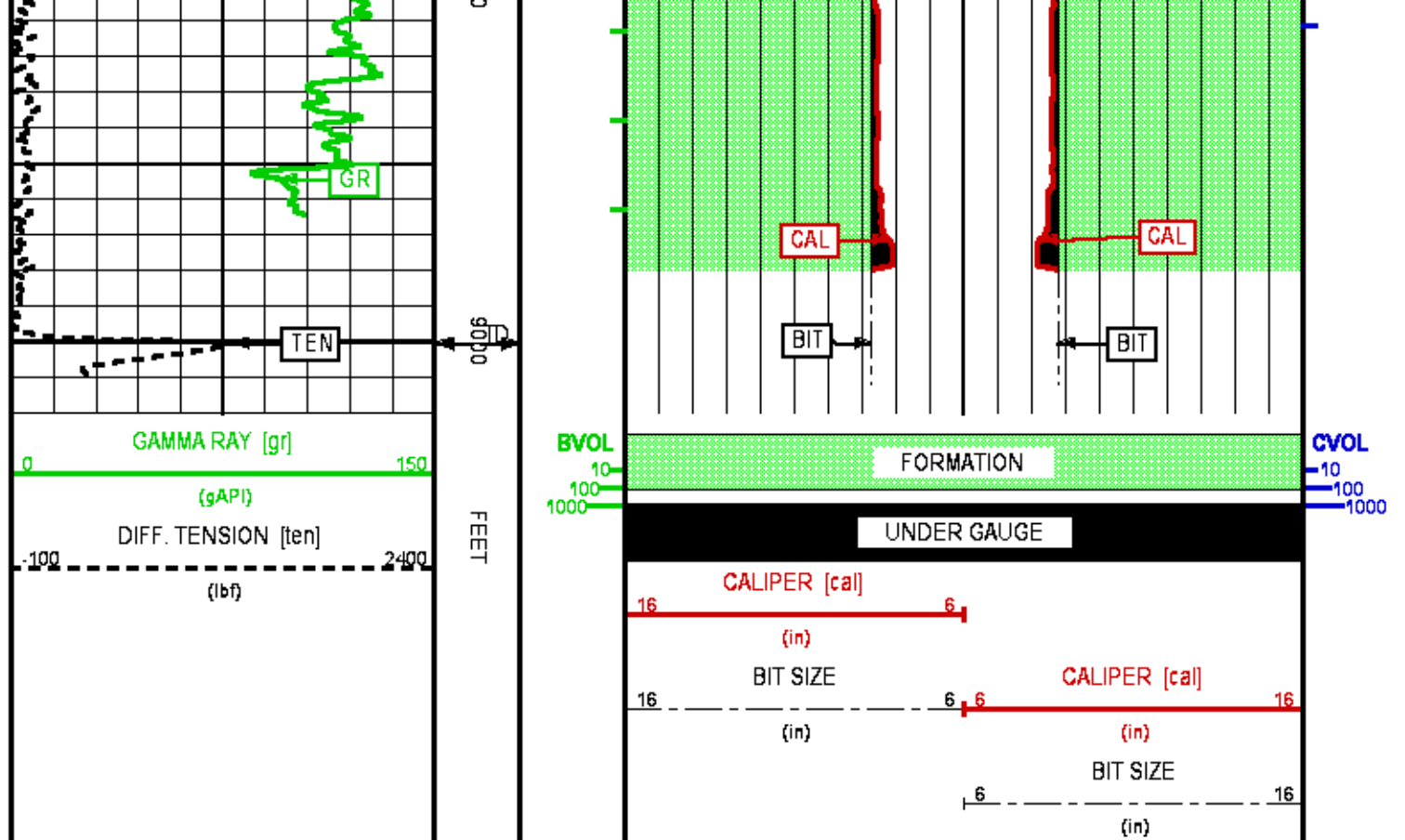












CALIBRATION / VERIFICATION SUMMARY

Source File: /data/OHD91582/FINAL_n970a.tp1

TTMA PRIMARY CALIBRATION SUMMARY

TOOL #: 3980XA 1D121559

DATE/TIME PERFORMED: Wed Dec 31 11:31:24 2014

UNIT #: 3885TC 6685

ACCEL #: 3980XA 1D121559

ACCEL CAL DATE: 13:40 06/07/2004

		GAIN		OFFSET			
		Rm K Factors		(ohm.m)			
		0.14570		-0.01679			
		Sig Low	Sig High	Mult Factor	Add Factor	Engr Low	Engr High
		(ohm)	(ohm)			(ohm)	(ohm)
Rm Measurements		0.25	9.99	1.001301	-0.000164	0.25	10.00
		0.20 0.30	8.00 12.00				

TTMA BEFORE LOG VERIFICATION SUMMARY

TOOL #: 3980XA 1D121559

DATE/TIME PERFORMED: Thu Jan 1 01:26:15 2015

DAYS SINCE CAL: 0

UNIT #: 3885TC 6685

	CHT	MUD TEMP	RES M Q	ACCEL Q
	(lbF)	(degF)	(ohm)	
CAL	19446	499.49	9.99	1001.94
	18669 20269	489.20 509.60	8.00 12.00	980.00 1020.00
ZERO	-24412	-436.02	0.250	1001.935
	-25212 -23612	-443.20 -428.80	0.200 0.300	980.000 1020.000

TTMA AFTER LOG VERIFICATION SUMMARY

PIMA AFTER LOG VERIFICATION SUMMARY											
TOOL #:		398DXA 10121559		DATE/TIME PERFORMED:		Fri Jan 2 09:41:12 2015		DAYS SINCE CAL:		1	
				UNIT #:		3885TC 6685					
		CHT (lbf)		MUD TEMP (degF)		RES M Q (ohm)		ACCEL Q			
CAL		19460		501.17		9.98		1005.55			
		18659 20259		489.20 503.60		8.00 12.00		980.00 1030.00			
ZERO		-24412		-436.02		0.250		1004.423			
		-25212 -23612		-443.20 -428.80		0.200 0.300		980.000 1030.000			

GR PRIMARY CALIBRATION SUMMARY											
Tool #:		3518EG 10139870		DATE/TIME PERFORMED:		Sun Dec 21 08:10:41 2014					
		Unit #:		3885TC 6685		Jig Series:		4702NK VBA-905			
Background		Calibrator ON		Jig Value (gAPI)		Mult		Background (gAPI)		Calibrator ON (gAPI)	
47.34		826.11		185		0.238		11.25		196.25	
						0.230 0.260					

GR BEFORE LOG VERIFICATION SUMMARY											
TOOL #:		3518EG 10139870		DATE/TIME PERFORMED:		Thu Jan 1 01:26:31 2015		DAYS SINCE CAL:		10	
				UNIT #:		3885TC 6685		Jig:		INTRNL N/A	
		Counts		TEMP (degF)		HV (V)					
		976.67		43.14		1361.74					
		509.00 1027.00		536.00		1237.00 1512.00					

GR AFTER LOG VERIFICATION SUMMARY											
TOOL #:		3518EG 10139870		DATE/TIME PERFORMED:		Fri Jan 2 09:40:48 2015		DAYS SINCE CAL:		12	
				UNIT #:		3885TC 6685		Jig:		INTRNL N/A	
		Counts		TEMP (degF)		HV (V)					
		976.67		98.45		1363.22					
		509.00 1027.00		536.00		1237.00 1512.00					

CAL PRIMARY CALIBRATION SUMMARY									
TOOL #:		2223XA 10123024		DATE/TIME PERFORMED:		Sun Dec 21 11:42:49 2014			
				UNIT #:		3885TC 6685			
		SIZE (in)		VALUE		MULTIPLIER		ADD	
SMALL RING (Arm)		7.000		1428.0					
LARGE RING (Arm)		11.000		2684.0		0.00318		2.45223	
PAD CLOSED				1208.4		0.00250		-3.02100	

CAL BEFORE LOG VERIFICATION SUMMARY											
TOOL #:		2223XA 10123024		DATE/TIME PERFORMED:		Thu Jan 1 01:52:39 2015		DAYS SINCE CAL:		10	
				UNIT #:		3885TC 6685					
		VALUE		MULTIPLIER		ADD		SIZE (in)			
ARM		2020.0		0.00318		2.45223		8.9			

PAD	1414.8	0.00250	-3.02100	0.5
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	ACTUAL (in)	MEASURED (in)
DIAMETER (arm+pad)	8.921	8.9
	8.5	9.3


CAL AFTER LOG VERIFICATION SUMMARY

TOOL #: 2223XA 10123024 DATE/TIME PERFORMED: Fri Jan 2 09:37:08 2015 DAYS SINCE CAL: 11

UNIT #: 3885TC 6685

	VALUE	MULTIPLIER	ADD	SIZE (in)
ARM	2152.0	0.00318	2.45223	9.3
PAD	1338.8	0.00250	-3.02100	0.3

	ACTUAL (in)	MEASURED (in)
DIAMETER (arm+pad)	8.921	8.9
	8.5	9.3

	COMPANY <u>COACHMAN ENERGY</u>		FILE NO: <u>US091582</u>
	WELL <u>FEDERAL 14 15-7-21</u>		API NO: <u>05045224600000</u>
	FIELD <u>KOKOPELLI</u>		
	COUNTY <u>GARFIELD</u>	STATE <u>CO</u>	
LOCATION: SHL: SWNE 2345' FNL 713' FEL LAT: 39.51358000; LON: -107.55279000		ELEVATIONS: KB 6956 FT DF GL 6932 FT	PAD: FEDERAL 21B RIG: FRONTIER 28
SEC <u>21</u>	TWP <u>6S</u>	RGE <u>91W</u>	DATE <u>31-Dec-2014</u>