



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
- Conv. to GSW
- Plug Back: _____ Plug Back Total Depth _____
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date Date Reached TD Completion Date or Recompletion Date

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

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total 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

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



1118917

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

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

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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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
_____ Perforate _____ Protect Casing _____ Plug Back TD _____ Plug Off Zone				

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
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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> _____ <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Mid-Con Energy Operating, Inc.
Well Name	Holland 1-12H
Doc ID	1118917

All Electric Logs Run

Micrology
DIL
DNL
FMI
GR
SP

Form	ACO1 - Well Completion
Operator	Mid-Con Energy Operating, Inc.
Well Name	Holland 1-12H
Doc ID	1118917

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	Stage 1 - 2 ft	30,000#s 20/40 sand	5920-5922
4	Stage 1 - 2 ft	621 mcf N2	5894-5896
4	Stage 1 - 2 ft	486 bbls gel wtr	5854-5856
4	Stage 2 - 2 ft	33,750#s 20/40 sand	5771-5773
4	Stage 2 - 2 ft	710 mcf N2	5749-5751
4	Stage 2 - 2 ft	495 bbls gel wtr	5729-5731
4	Stage 3 - 2 ft	33,750#s 20/40 sand	5649-5651
4	Stage 3 - 2 ft	713 mcf N2	5629-5631
4	Stage 3 - 2 ft	477 bbls gel wtr	5599-5601
4	Stage 4 - 2 ft	33,750#s 20/40 sand	5469-5471
4	Stage 4 - 2 ft	682 mcf N2	5449-5451
4	Stage 4 - 2 ft	486 bbls gel wtr	5404-5406
4	Stage 5 - 2 ft	33,750#s 20/40 sand	5319-5321
4	Stage 5 - 2 ft	656 mcf N2	5274-5276
4	Stage 5 - 2 ft	486 bbls gel wtr	5224-5226
4	Stage 6 - 2 ft	33,750#s 20/40 sand	5089-5091
4	Stage 6 - 2 ft	639 mcf N2	5059-5061
4	Stage 6 - 2 ft	467 bbls gel wtr	5029-5031
4	Stage 7 - 2 ft	33,750#s 20/40 sand	4924-4926
4	Stage 7 - 2 ft	675 mcf N2	4899-4901
4	Stage 7 - 2 ft	463 bbls gel wtr	4874-4876
4	Stage 8 - 2 ft	33,750#s 20/40 sand	4784-4786
4	Stage 8 - 2 ft	641 mcf N2	4714-4716
4	Stage 8 - 2 ft	461 bbls gel wtr	4659-4661

Form	ACO1 - Well Completion
Operator	Mid-Con Energy Operating, Inc.
Well Name	Holland 1-12H
Doc ID	1118917

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	Stage 9 - 2 ft	50,010#s 20/40 sand	4594-4596
4	Stage 9 - 2 ft	748 mcf N2	4549-4551
4	Stage 9 - 2 ft	491 bbls gel wtr	4499-4501

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
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

February 19, 2013

Ryan Logsdon
Mid-Con Energy Operating, Inc.
2431 E 61ST ST
STE 850
TULSA, OK 74136-1236

Re: ACO1
API 15-195-22811-01-00
Holland 1-12H
SW/4 Sec.12-12S-22W
Trego County, Kansas

Dear Production Department:

We are herewith requesting that the attached logs 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,
Ryan Logsdon

ALLIED OIL & GAS SERVICES, LLC 056525

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Russell KS

DATE <u>9-12-12</u>	SEC. <u>12</u>	TWP. <u>12</u>	RANGE <u>2-2</u>	CALLED OUT	ON LOCATION	JOB START <u>11:00 am</u>	JOB FINISH <u>11:30 pm</u>
LEASE <u>Holland</u>	WELL # <u>1-12 H</u>	LOCATION <u>Ogallah - I-70 exit 135 NW 1E</u>			Trigo	COUNTY <u>Trigo</u>	STATE <u>KS</u>
OLD OR NEW (Circle one)		1/4 1/2 E N into					

CONTRACTOR Trinidad 215 OWNER _____

TYPE OF JOB surface

HOLE SIZE 13 1/2 T.D. 255 CEMENT _____

CASING SIZE 9 5/8 32.3# DEPTH 234 237 AMOUNT ORDERED 220 com 320cc 290gel

TUBING SIZE _____ DEPTH _____

DRILL PIPE _____ DEPTH _____

TOOL _____ DEPTH _____

PRES. MAX _____ MINIMUM _____ COMMON 220 @ 17.90 3938.00

MEAS. LINE _____ SHOE JOINT 15' POZMIX _____ @ _____

CEMENT LEFT IN CSG. 15' GEL 4 @ 23.45 93.80

PERFS. _____ CHLORIDE 8 @ 64.00 512.00

DISPLACEMENT 17 1/2 @ 17.90 311.25 ASC _____ @ _____

EQUIPMENT

PUMP TRUCK CEMENTER Robert Y Bob S

409 HELPER Tony P

BULK TRUCK _____ @ _____

481 DRIVER Kevin R

BULK TRUCK _____ @ _____

_____ DRIVER _____ @ _____

HANDLING 238.01 ft³ @ 2.48 590.28

MILEAGE 293.22 +/m 2.60 762.37

TOTAL 5896.45

REMARKS:

ran bits of 9 5/8 32.3# csg received circulation mixed 170 com 320cc 290gel displaced ~~17 1/2~~ 17 1/2 of water shut in washup

SERVICE

DEPTH OF JOB 255

PUMP TRUCK CHARGE 1512.25

EXTRA FOOTAGE _____ @ _____

MILEAGE 27 HVMI @ 7.70 207.90

MANIFOLD _____ @ _____

27 LVMI @ 4.40 118.80

TOTAL 1838.95

Thanks!!

CHARGE TO: MidCon Energy Operating

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

SALES TAX (If Any) 308.97

TOTAL CHARGES 7735.40

DISCOUNT 2080.82 IF PAID IN 30 DAYS

net 5654.58 BS 9-13
before tax

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Ryan Loyndon

SIGNATURE [Signature]

ALLIED OIL & GAS SERVICES, LLC 053889

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Medicine Lodge, KS

DATE <i>09-18-12</i>	SEC. <i>17</i>	TWP. <i>12s</i>	RANGE <i>22W</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <i>1:00 AM</i>
LEASE <i>Holland</i>	WELL # <i>1-24</i>	LOCATION			COUNTY <i>Trego</i>	STATE <i>KS</i>	
OLD OR <u>NEW</u> (Circle one)						<i>2-02 6.8</i>	

CONTRACTOR *trained #*
 TYPE OF JOB *35 sy - 8 ft -*
 HOLE SIZE *8 7/8* T.D. *4513*
 CASING SIZE *7* DEPTH *4452*
 TUBING SIZE *5 7/8* DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX *1800 #* MINIMUM *-*
 MEAS. LINE SHOE JOINT *39*
 CEMENT LEFT IN CSG. *39*
 PERFS.
 DISPLACEMENT *100 Bbls East # 70 & 70 Bbls West*
 EQUIPMENT

OWNER *Midcon*
 CEMENT
 AMOUNT ORDERED *365 sy class A + 5% salt + 2% gel + .5% FL-160 + 1/4" Debarment # 12 Bbls ASF #*

COMMON <i>class A</i>	<i>365 sy</i>	@ <i>17.90</i>	<i>6533.50</i>
POZMIX		@	
GEL	<i>7 sy</i>	@ <i>23.40</i>	<i>163.80</i>
CHLORIDE		@	
ASC		@	
Salt	<i>10 sy</i>	@ <i>26.35</i>	<i>263.50</i>
FL-160	<i>17 #</i>	@ <i>19.40</i>	<i>3297.80</i>
Debarment	<i>91 #</i>	@ <i>9.10</i>	<i>828.10</i>
ASF	<i>12 Bbls</i>	@ <i>58.70</i>	<i>704.40</i>
HANDLING	<i>397.2 ft</i>	@ <i>2.48</i>	<i>985.06</i>
MILEAGE	<i>25.18.34</i>	@ <i>2.60</i>	<i>65.27</i>
			<i>458.50 TOTAL 13966.06</i>

PUMP TRUCK CEMENTER *D. Felio* 1
 # *558-545* HELPER *H. Piper* 2
 BULK TRUCK
 # *421-* DRIVER *Boo* 3
 BULK TRUCK
 # *356290* DRIVER *R. Beers* 1

REMARKS:

see Bbl log -

Bump Plug - Operator - circ. for 4 hrs

THX ☺

CHARGE TO: *Midcon Energy Operating*

STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB	<i>4452</i>		
PUMP TRUCK CHARGE			<i>2765.15</i>
EXTRA FOOTAGE		@	
MILEAGE	<i>25</i>	@ <i>7.70</i>	<i>192.50</i>
MANIFOLD head rental		@	<i>275.00</i>
<i>High chloride</i>	<i>25</i>	@ <i>4.40</i>	<i>110.00</i>
			<i>TOTAL 3343.25</i>

PLUG & FLOAT EQUIPMENT

<i>1 - Sure Seal Float Shoe</i>	@	<i>712.53</i>	
<i>1 - Latchdown Plug Assy.</i>	@	<i>376.63</i>	
<i>2 - Baskets</i>	@ <i>462.15</i>	<i>924.30</i>	
<i>5 - centralizers</i>	@ <i>65.52</i>	<i>327.60</i>	
<i>Stoye Collar - DV 700/</i>	@	<i>6502.50</i>	
<i>886.13</i>			
			<i>TOTAL 8863.56</i>

SALES TAX (If Any) _____
 TOTAL CHARGES *26172.87*

DISCOUNT *9945.69* IF PAID IN 30 DAYS
16227.18 net - see field ticket #53890 for both net prices.

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME *Ryan Logsdon*

SIGNATURE *Ryan Logsdon*

7ⁿ

ALLIED OIL & GAS SERVICES, LLC 053890

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Medicine Lodge KS

DATE <i>09-19-12</i>	SEC. <i>12</i>	TWP. <i>12S</i>	RANGE <i>22W</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE <i>Holland</i>	WELL# <i>1-12 H</i>	LOCATION	COUNTY	STATE			
OLD OR NEW (Circle one)					<i>Trego</i>	<i>KS</i>	

CONTRACTOR *Trinidad*
 TYPE OF JOB *2-Stage - top*
 HOLE SIZE *8 1/4* T.D. *4513*
 CASING SIZE *7"* DEPTH *1823*
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL DEPTH
 PRES. MAX *1800#* MINIMUM *---*
 MEAS. LINE SHOE JOINT *N/A*
 CEMENT LEFT IN CSG. *min*
 PERFS.
 DISPLACEMENT *6.934 Bbls Fresh H₂O*

OWNER *Midcon*
 CEMENT AMOUNT ORDERED *275sx 6S:35:6% gel + 2%*
cc + 1/4# Flo Seal

EQUIPMENT
 PUMP TRUCK CEMENTER *D. Felco 1*
#548-595 HELPER Hu Pipes 2
 BULK TRUCK
#356-290 DRIVER R. Reeves 1
 BULK TRUCK
 # DRIVER

COMMON	@		
POZMIX	@		
GEL	@		
CHLORIDE	<i>6sx @ N/A</i>		
ASC	@		
<i>Lite weight</i>	<i>275sx @ 16.50</i>	<i>4537.50</i>	
<i>Flo Seal</i>	<i>75 # @ 2.97</i>	<i>222.75</i>	
	@		
	@		
	@		
	@		
	@		
HANDLING <i>300.5 ft³</i>	@ <i>2.48</i>	<i>745.24</i>	
MILEAGE <i>25.12.40 .2.60</i>	@	<i>809.90</i>	

REMARKS:
See Job Log
Bump Plug - close tool
Cement Did Cure
THX ☺

311.50 TOTAL *6315.39*

SERVICE

DEPTH OF JOB	<i>1823'</i>	
PUMP TRUCK CHARGE		<i>2406.25</i>
EXTRA FOOTAGE	@	
MILEAGE	<i>25 @ N/A</i>	
MANIFOLD <i>hand rental</i>	@ <i>N/A</i>	
	<i>25 @ N/A</i>	

TOTAL *2406.25*

CHARGE TO: *Midcon Energy Operating*
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

<i>None</i>	@	
	@	
	@	
	@	

TOTAL _____

To: Allied Oil & Gas Services, LLC.
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME *Ryan Logsdon*
 SIGNATURE *Ry LL*

SALES TAX (If Any) *323.69*
 TOTAL CHARGES *8721.64*
 DISCOUNT *3351.78* IF PAID IN 30 DAYS
 Net *21594.09*
Right time = -1040.00
2x520
 New Net *20,554.09 NR*

38470

ALLIED OIL & GAS SERVICES, LLC 053894

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Medicine Lodge KS

DATE <i>10-08-12</i>	SEC. <i>12</i>	TWP. <i>12s</i>	RANGE <i>22w</i>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <i>10:15 AM</i>
LEASE <i>Holland</i>	WELL # <i>1-12H</i>	LOCATION <i>Ogallah, KS, 1E, 1 1/2 N, 1/8 E, N5</i>			COUNTY <i>Trego</i>	STATE <i>KS</i>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)							

CONTRACTOR *Trinidad #215*

TYPE OF JOB *Production Casing*

HOLE SIZE *6 7/8* T.D. *7456*

CASING SIZE *4 1/2* DEPTH *6073*

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM *-*

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS.

DISPLACEMENT *B66 Fresh H₂O*

EQUIPMENT

PUMP TRUCK CEMENTER *D. Felix 1*

548-545 HELPER *H. Piper 2*

BULK TRUCK

381-250 DRIVER *S. Fejos 3*

BULK TRUCK

DRIVER

REMARKS:

See Job Log

THX ☺

CHARGE TO: *Mid-con Energy Operating*

STREET _____

CITY _____ STATE _____ ZIP _____

To: Allied Oil & Gas Services, LLC.

You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME *Ryan Logsdon*

SIGNATURE *Ry Log*

OWNER *Mid-con Energy*

CEMENT

AMOUNT ORDERED *250sxc class H + 3#Koi-Seal + .8% FL-160 + .25% C-45 + .1% C-20 + 1/4" Deformers*

COMMON <i>class H 250s</i>	@ <i>21.20</i>	<i>5300.00</i>
POZMIX	@	
GEL	@	
CHLORIDE	@	
ASC	@	
<i>Kalsol</i>	<i>750 # @ .98</i>	<i>735.00</i>
<i>FL-160</i>	<i>188 # @ 18.25</i>	<i>3431.00</i>
<i>C-45</i>	<i>59 # @ 17.53</i>	<i>1035.45</i>
<i>CR-20</i>	<i>23 # @ 4.50</i>	<i>103.50</i>
<i>Powered Deformers</i>	<i>62 # @ 9.80</i>	<i>607.60</i>
<i>Super Flush</i>	<i>0 @ N/A</i>	<i>N/A</i>
HANDLING	<i>273 # @ 2.48</i>	<i>677.04</i>
MILEAGE	<i>12.3 hr @ 25.260</i>	<i>799.50</i>
TOTAL		<i>12689.09</i>

307.50

SERVICE

DEPTH OF JOB *6073*

PUMP TRUCK CHARGE *3651.21*

EXTRA FOOTAGE @

MILEAGE *25 @ 7.70* *192.50*

MANIFOLD *headrental @ 275.00*

Light Vehicle 25 @ 4.40 *110.00*

TOTAL *4228.75*

PLUG & FLOAT EQUIPMENT

1-trp @ 83.07

TOTAL *83.07*

SALES TAX (if Any) *768.10*

TOTAL CHARGES *17,000.95*

DISCOUNT *5950.31* IF PAID IN 30 DAYS

Bid Net 11,050.60

Adjusted

ALLIED CEMENTING CO., LLC. 034668

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
RUSSELL

DATE <u>10-22-12</u>	SEC <u>12</u>	TWP. <u>5</u>	RANGE <u>22</u>	CALLED OUT	ON LOCATION	JOB START <u>10 AM</u>	JOB FINISH <u>11 AM</u>
LEASE <u>Holland</u>	WELL # <u>1-12 H</u>		LOCATION <u>COAHIAH KS</u>		COUNTY <u>TREGO</u>	STATE <u>KS</u>	
<input checked="" type="radio"/> OLD OR NEW (Circle one)			<u>1E-2ⁿ-1/8^e-N INTU</u>				

CONTRACTOR <u>None</u>	OWNER
TYPE OF JOB <u>MISC.</u>	
HOLE SIZE _____ T.D. _____	CEMENT
CASING SIZE _____ DEPTH _____	AMOUNT ORDERED <u>50 SK 60/40 4% 6cc</u>
TUBING SIZE _____ DEPTH _____	
DRILL PIPE _____ DEPTH _____	
TOOL _____ DEPTH _____	
PRES. MAX _____ MINIMUM _____	COMMON _____ @ <u>17.9</u> <u>537⁰⁰</u>
MEAS. LINE _____ SHOE JOINT _____	POZMIX _____ @ <u>9.35</u> <u>187⁰⁰</u>
CEMENT LEFT IN CSG. _____	GEL _____ @ <u>23.4</u> <u>46.80</u>
PERFS. _____	CHLORIDE _____ @ _____
DISPLACEMENT _____	ASC _____ @ _____

EQUIPMENT

PUMP TRUCK CEMENTER <u>Bob Smith</u>
<u>409</u> HELPER <u>Kevin</u>
BULK TRUCK
<u>473</u> DRIVER <u>WALTER</u>
BULK TRUCK
_____ DRIVER _____

HANDLING <u>53.33 Ft³</u>	@ <u>2.48</u>	<u>400⁰⁰</u>
MILEAGE <u>65.257/m x 2.6 =</u>		<u>169.65</u>
TOTAL		<u>1340.45</u>

REMARKS:

RAT Hole cement to surface
mouse Hole cement to surface

RAT Hole dumped dry cement
on top.

HAD the WATER TRUCK Suck out
the cement.

SERVICE

DEPTH OF JOB		
PUMP TRUCK CHARGE		<u>2058.50</u>
EXTRA FOOTAGE	@	
MILEAGE <u>Hay</u>	@ <u>7.7</u>	<u>223.30</u>
MANIFOLD	@	
<u>LDV</u>	@ <u>4.4</u>	<u>127.60</u>
TOTAL		<u>2409.4</u>

CHARGE TO: midcon energy operating

STREET _____

CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
_____	@	_____
TOTAL		<u>0</u>

To Allied Cementing Co., LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)	<u>25% 98</u>
TOTAL CHARGES	<u>3749.85</u>
DISCOUNT <u>1499.94</u>	IF PAID IN 30 DAYS
<u>net 2249.91 BS 10-22</u> <u>before tax</u>	

PRINTED NAME _____

SIGNATURE _____

ACTUAL WELLPATH REPORT (CSV version)

Prepared by Baker Hughes

Software System: WellArchitect®3.0.0

REFERENCE WELLPATH IDENTIFICATION

Operator MidCon Energy
Area Kansas
Field Trego County, Kansas (MidCon Operating) NAD 83 / Grid
Facility Holland 1-12H Sec 12-12S-22W
Slot Holland 1-12H SL 150 FSL, 1415 FWL
Well Subject
Wellbore Holland 1-12H AWB
Wellpath AWP
Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD83 / Lambert Kansas SP, Northern Zone (1501), US feet
North Refe Grid
Scale 0.999965
Convergen 1.09° West
Software S WellArchitect®
User Dehamard
Report Ger 10/3/2012 at 9:08:50 AM
DataBase/ Oklahoma City/ev01.xml

Table with 7 columns: WELLPATH, Local North [ft], Local East [ft], Grid East [ft], Grid North [ft], Latitude, Longitude. Rows include Slot Locatic, Facility Ref, and Field Refer.

WELLPATH DATUM

Calculation Minimum curvature
Horizontal Facility Center
Vertical Re Trinidad 215 (KB)
MD Refere Trinidad 215 (KB)
Field Vertic Mean Sea Level
Trinidad 21 10.00ft
Trinidad 21 2337.20ft
Trinidad 21 1415 FWL) 10.00ft
Section Ori 0.00ft
Section Ori 0.00ft
Section Azi 349.98°

W E L L P A T H D A T A Wellbore: Holland 1-12H AWB Wellpath: AWP † = interpolated/extrapolated station
MD Inclination Azimuth TVD Vert Sect North East Grid East Grid North

	[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]
†	0	0	183.07	0	0	0	0	824007.9	253320.2
	10	0	183.07	10	0	0	0	824007.9	253320.2
	623	0.22	183.07	623	-1.15	-1.18	-0.06	824007.9	253319.1
	1189	0	6.88	1189	-2.2	-2.26	-0.12	824007.8	253318
	1855	0.52	286.6	1854.99	-0.85	-1.4	-3.02	824004.9	253318.8
	2325	0.09	170.13	2324.98	-0.26	-1.15	-5	824002.9	253319.1
	2748	0.35	99.633	2747.98	-1.03	-1.69	-3.67	824004.2	253318.5
	3360	1.08	239.99	3359.95	-3.63	-4.89	-6.82	824001.1	253315.3
	3392	1.43	263.2	3391.94	-3.71	-5.09	-7.48	824000.4	253315.1
	3423	2.35	307.89	3422.92	-3.22	-4.75	-8.36	823999.6	253315.5
	3455	4.05	330.3	3454.87	-1.67	-3.36	-9.44	823998.5	253316.9
	3485	6.18	341.78	3484.75	0.93	-0.91	-10.47	823997.4	253319.3
	3517	8.7	343.99	3516.48	5.04	3.06	-11.68	823996.2	253323.3
	3549	11.49	344.78	3547.98	10.62	8.46	-13.18	823994.7	253328.7
	3580	14.62	345.81	3578.18	17.6	15.23	-14.95	823993	253335.5
	3611	18.09	347.18	3607.92	26.31	23.72	-16.98	823990.9	253344
	3643	21.51	349.16	3638.02	37.15	34.33	-19.18	823988.7	253354.6
	3675	25.04	349.86	3667.42	49.79	46.76	-21.48	823986.4	253367
	3706	28.65	350.61	3695.07	63.78	60.56	-23.85	823984.1	253380.8
	3738	31.83	352.12	3722.71	79.89	76.49	-26.26	823981.7	253396.7
	3770	34.9	352.15	3749.44	97.48	93.92	-28.67	823979.2	253414.2
	3801	38.89	352	3774.22	116.07	112.35	-31.23	823976.7	253432.6
	3833	42.49	352.22	3798.48	136.92	133.01	-34.09	823973.8	253453.2
	3864	46.1	351.93	3820.67	158.55	154.45	-37.08	823970.8	253474.7
	3896	48.93	351.54	3842.28	182.13	177.8	-40.47	823967.4	253498
	3926	51.9	351.31	3861.39	205.24	200.66	-43.92	823964	253520.9
	3957	54.86	351.35	3879.88	230.11	225.25	-47.67	823960.2	253545.5
	3989	58.12	351.32	3897.55	256.78	251.63	-51.69	823956.2	253571.9
	4018	62.09	351.02	3912	281.91	276.47	-55.55	823952.4	253596.7
	4050	65.35	351.03	3926.16	310.6	304.8	-60.03	823947.9	253625
	4081	68.12	351.38	3938.41	339.07	332.94	-64.38	823943.5	253653.2
	4112	70.29	351.1	3949.41	368.04	361.59	-68.79	823939.1	253681.8
	4143	72.33	350.51	3959.34	397.4	390.57	-73.49	823934.4	253710.8
	4175	74.33	350.05	3968.52	428.05	420.78	-78.66	823929.3	253741
	4207	76.29	349.7	3976.64	459.01	451.25	-84.11	823923.8	253771.5
	4238	78.76	349.8	3983.33	489.27	481.04	-89.49	823918.4	253801.3
	4270	80.5	350.19	3989.09	520.75	512.04	-94.96	823913	253832.3
	4301	82.43	350	3993.69	551.4	542.23	-100.23	823907.7	253862.4
	4333	84.48	350	3997.34	583.19	573.54	-105.75	823902.2	253893.8
	4364	86.2	350.09	3999.86	614.09	603.97	-111.09	823896.8	253924.2
	4396	88.52	350.94	4001.33	646.05	635.5	-116.36	823891.6	253955.7
	4428	90.65	350.65	4001.57	678.04	667.08	-121.48	823886.4	253987.3
	4483	92.16	350.9	4000.22	733.02	721.35	-130.29	823877.6	254041.6
	4578	91.48	350.33	3997.2	827.97	815.03	-145.78	823862.1	254135.2
	4642	88.43	349.6	3997.25	891.96	878.05	-156.93	823851	254198.2
	4706	88.64	349.14	3998.89	955.93	940.93	-168.73	823839.2	254261.1

4769	88.95	349.09	4000.21	1018.91	1002.78	-180.62	823827.3	254323
4832	88.92	348.43	4001.38	1081.89	1064.56	-192.9	823815	254384.8
4894	89.91	348.85	4002.02	1143.87	1125.34	-205.11	823802.8	254445.5
4958	89.57	348.91	4002.31	1207.85	1188.14	-217.46	823790.5	254508.3
5021	89.54	348.61	4002.8	1270.84	1249.93	-229.74	823778.2	254570.1
5084	88.46	348.63	4003.9	1333.81	1311.68	-242.16	823765.8	254631.9
5148	88.98	349.62	4005.32	1397.78	1374.52	-254.24	823753.7	254694.7
5211	89.85	351.32	4005.97	1460.78	1436.64	-264.67	823743.3	254756.8
5275	90	351.5	4006.05	1524.76	1499.92	-274.22	823733.7	254820.1
5338	88.86	351.37	4006.68	1587.73	1562.21	-283.61	823724.3	254882.4
5402	88.8	351.01	4007.99	1651.7	1625.45	-293.41	823714.5	254945.6
5465	88.28	350.36	4009.59	1714.68	1687.59	-303.6	823704.3	255007.8
5526	88.71	350.09	4011.19	1775.66	1747.69	-313.95	823694	255067.9
5589	89.14	350.15	4012.37	1838.64	1809.74	-324.76	823683.2	255129.9
5653	88.89	350.57	4013.47	1902.63	1872.83	-335.48	823672.5	255193
5716	88.15	350.1	4015.1	1965.61	1934.91	-346.05	823661.9	255255.1
5779	88.15	349.51	4017.14	2028.58	1996.89	-357.2	823650.7	255317
5842	89.48	349.31	4018.44	2091.56	2058.8	-368.77	823639.2	255379
5905	89.29	347.83	4019.12	2154.54	2120.54	-381.25	823626.7	255440.7
5968	87.91	349.48	4020.65	2217.5	2182.29	-393.64	823614.3	255502.4
6031	87.66	350.16	4023.09	2280.45	2244.25	-404.77	823603.2	255564.4
6094	86.57	350.48	4026.26	2343.37	2306.28	-415.35	823592.6	255626.4
6158	89.95	351.83	4028.2	2407.31	2369.48	-425.18	823582.7	255689.6
6221	91.36	352.43	4027.48	2470.26	2431.88	-433.81	823574.1	255752
6284	91.91	351.33	4025.69	2533.2	2494.22	-442.7	823565.2	255814.4
6347	92	350.62	4023.54	2596.15	2556.4	-452.58	823555.4	255876.5
6411	89.26	349.32	4022.83	2660.14	2619.41	-463.72	823544.2	255939.6
6471	91.57	349.88	4022.4	2720.14	2678.42	-474.55	823533.4	255998.6
6535	89.23	349.62	4021.95	2784.13	2741.39	-485.94	823522	256061.5
6598	91.63	350.79	4021.48	2847.12	2803.47	-496.66	823511.3	256123.6
6661	95.46	351.98	4017.58	2909.97	2865.62	-506.08	823501.9	256185.8
6724	95.86	351.65	4011.37	2972.63	2927.68	-515	823492.9	256247.8
6778	96.36	352.13	4005.62	3026.29	2980.83	-522.58	823485.4	256301
6841	94.78	351.55	3999.51	3088.96	3042.9	-531.48	823476.5	256363
6904	91.17	350.44	3996.24	3151.85	3105.03	-541.32	823466.6	256425.1
6967	89.82	349.89	3995.69	3214.85	3167.1	-552.08	823455.9	256487.2
7030	89.91	349.85	3995.84	3277.85	3229.12	-563.17	823444.8	256549.2
7094	91.63	349.56	3994.98	3341.84	3292.08	-574.6	823433.3	256612.2
7157	90.12	350.01	3994.02	3404.83	3354.07	-585.77	823422.2	256674.2
7220	91.72	350.17	3993.01	3467.82	3416.12	-596.61	823411.3	256736.2
7346	88.43	349.4	3992.84	3593.8	3540.1	-618.95	823389	256860.2
7422	88.43	348.78	3994.93	3669.76	3614.7	-633.33	823374.6	256934.8

T A R G E T S

Name	MD	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape
	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			
Holland 1-12H PBHL		3985.2	4930.92	-871.3	823136.6	258251	39°01'46.6	99°43'19.7	point

WELLPATH COMPOSITION Ref Wellbore: Holland 1-12H AWB Ref Wellpath: AWP

Log Name/	Start MD	End MD	Pos Unc	Model
	[ft]	[ft]		
Inteq MWE	10	7422		NaviTrak (Standard)

DLS

Build Rate Turn Rate

[°/100ft]	[°/100ft]	[°/100ft]
0	0	0
0	0	0
0.04	0.04	0
0.04	-0.04	0
0.08	0.08	0
0.12	-0.09	-24.78
0.08	0.06	-16.67
0.22	0.12	22.93
1.91	1.09	72.53
5.39	2.97	144.16
6.5	5.31	70.03
7.84	7.1	38.27
7.92	7.87	6.91
8.73	8.72	2.47
10.12	10.1	3.32
11.26	11.19	4.42
10.89	10.69	6.19
11.06	11.03	2.19
11.7	11.65	2.42
10.22	9.94	4.72
9.59	9.59	0.09
12.87	12.87	-0.48
11.26	11.25	0.69
11.66	11.65	-0.94
8.89	8.84	-1.22
9.92	9.9	-0.77
9.55	9.55	0.13
10.19	10.19	-0.09
13.72	13.69	-1.03
10.19	10.19	0.03
9	8.94	1.13
7.05	7	-0.9
6.82	6.58	-1.9
6.4	6.25	-1.44
6.22	6.12	-1.09
7.97	7.97	0.32
5.57	5.44	1.22
6.26	6.23	-0.61
6.41	6.41	0
5.56	5.55	0.29
7.72	7.25	2.66
6.72	6.66	-0.91
2.78	2.75	0.45
0.93	-0.72	-0.6
4.9	-4.77	-1.14
0.79	0.33	-0.72

0.5	0.49	-0.08
1.05	-0.05	-1.05
1.73	1.6	0.68
0.54	-0.53	0.09
0.48	-0.05	-0.48
1.71	-1.71	0.03
1.75	0.81	1.55
3.03	1.38	2.7
0.37	0.23	0.28
1.82	-1.81	-0.21
0.57	-0.09	-0.56
1.32	-0.83	-1.03
0.83	0.7	-0.44
0.69	0.68	0.1
0.76	-0.39	0.66
1.39	-1.17	-0.75
0.94	0	-0.94
2.13	2.11	-0.32
2.37	-0.3	-2.35
3.41	-2.19	2.62
1.15	-0.4	1.08
1.8	-1.73	0.51
5.69	5.28	2.11
2.43	2.24	0.95
1.95	0.87	-1.75
1.14	0.14	-1.13
4.74	-4.28	-2.03
3.96	3.85	0.93
3.68	-3.66	-0.41
4.24	3.81	1.86
6.36	6.08	1.89
0.82	0.63	-0.52
1.28	0.93	0.89
2.67	-2.51	-0.92
5.99	-5.73	-1.76
2.31	-2.14	-0.87
0.16	0.14	-0.06
2.73	2.69	-0.45
2.5	-2.4	0.71
2.55	2.54	0.25
2.68	-2.61	-0.61
0.82	0	-0.82

Comment

	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Sairav Parab	14/Sep/2012	07/Oct/2012	David Luttrell	14/Sep/2012	22/Sep/2012	Wes Thornhill	22/Sep/2012	30/Sep/2012
Jose Rodriguez	15/Sep/2012	06/Oct/2012	Andrew Sims	15/Sep/2012	05/Oct/2012	Gary Igleheart	30/Sep/2012	07/Oct/2012

Witness

Name	LWD Run Number
Ryan Logsdon	1, 2, 3, 4, 5, 6

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
18/Sep/2012 07:30	1	4077.0	Water Based	9.0	18	9.5	4.2	0/95.4	Flow Line	6000	N/A
21/Sep/2012 07:30	2	4477.0	Water Based	9.0	18	9.5	4.2	0/99	Flow Line	6000	N/A
23/Sep/2012 07:30	3	5815.0	Water Based	8.4	18	9.5	6.4	0/99	Flow Line	6000	N/A
27/Sep/2012 07:30	4	6806.0	Water Based	9.0	26	9.5	2.5	0/95.2	Flow Line	400	N/A
28/Sep/2012 07:30	5	7050.0	Water Based	8.8	25	9.5	6.4	0/96.5	Flow Line	400	N/A
01/Oct/2012 17:30	6	7476.0	Water Based	8.9	27	9.0	6.4	0/95.7	Flow Line	400	N/A

Mud Resistivity Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Surface Temp (deg F)	Surface			BHCT (deg F)	Downhole		
				Rm (ohm.m)	Rmf (ohm.m)	Rmc (ohm.m)		Rm @ BHCT (ohm.m)	Rmf @ BHCT (ohm.m)	Rmc @ BHCT (ohm.m)
21/Sep/2012 07:00	2	4077.0	78	1.50	1.50	1.50	128	0.93	0.93	0.93
23/Sep/2012 12:01	3	5896.0	87	1.50	1.50	1.50	134	0.99	0.99	0.99
27/Sep/2012 12:01	4	6806.0	75	1.50	1.50	1.50	134	1.11	1.11	1.11
28/Sep/2012 23:00	5	7050.0	70	1.50	1.50	1.50	134	0.81	0.81	0.81
01/Oct/2012 01:45	6	7422.0	87	1.50	1.50	1.50	139	0.95	0.95	0.95

Mnemonics

Curve	Description	Units
GRAX	Average Gamma Ray Apparent, 0.5 ft average	API
INNX	Survey Inclination	deg
ROP	Rate of Penetration	ft / hr
GRTVDX	Gamma Ray True Vertical Depth	ft
GRAUX	Gamma Ray Apparent – Up Quadrant	API
GRADX	Gamma Ray Apparent – Down Quadrant	API
RPCHX	Compensated and Corrected Resistivity, 2 Mhz, Long Space, Phase Difference	ohm.m
RACHX	Compensated and Corrected Resistivity, 2 Mhz, Long Space, Attenuation	ohm.m

Equipment and Service Data

LWD Run	Tool	Serial Number	Measurement	Bit Offset	Max O.D.	Min I.D.

No.				(ft)	(in.)	(in.)
1	SRIG	10433831	Gamma	47.21	6.750	2.569
1	DIR	12168817	Directional	42.21	6.750	2.569
2	DIR	11592386	Directional	47.14	4.750	2.569
2	GAM	11592386	Gamma	42.46	4.750	1.750
2	MPR	11592386	Multiple Propagation Resistivity	33.97	4.750	1.750
2	APR	11592383	Azimuthal Propagation Resistivity	33.97	4.750	1.750
2	AP	11592386	Annular Pressure	38.40	4.750	1.750
3	DIR	11592386	Directional	47.14	4.750	1.750
3	GAM	11592386	Gamma	42.46	4.750	1.750
3	MPR	11592386	Multiple Propagation Resistivity	33.97	4.750	1.750
3	APR	11592386	Azimuthal Propagation Resistivity	33.97	4.750	1.750
3	AP	11592386	Annular Pressure	38.40	4.750	1.750
4	DIR	11592386	Directional	45.23	4.750	1.750
4	GAM	11592386	Gamma	40.55	4.750	1.750
4	MPR	11592386	Multiple Propagation Resistivity	32.06	4.750	1.750
4	APR	11592386	Azimuthal Propagation Resistivity	32.06	4.750	1.750
4	AP	11592386	Annular Pressure	36.49	4.750	1.750
5	DIR	11592386	Directional	40.91	4.750	1.750
5	GAM	11592386	Gamma	36.23	4.750	1.750
5	MPR	11592386	Multiple Propagation Resistivity	27.74	4.750	1.750
5	APR	11592386	Azimuthal Propagation Resistivity	27.74	4.750	1.750
5	AP	11592386	Annular Pressure	32.17	4.750	1.750
6	DIR	12517557	Directional	38.43	4.750	1.750
6	GAM	12517557	Gamma	25.27	4.750	1.750
6	MPR	12517557	Multiple Propagation Resistivity	32.46	4.750	1.750
6	APR	12517557	Azimuthal Propagation Resistivity	27.74	4.750	1.750
6	AP	12517557	Annular Pressure	27.90	4.750	1.750

Service and Tool Mnemonics

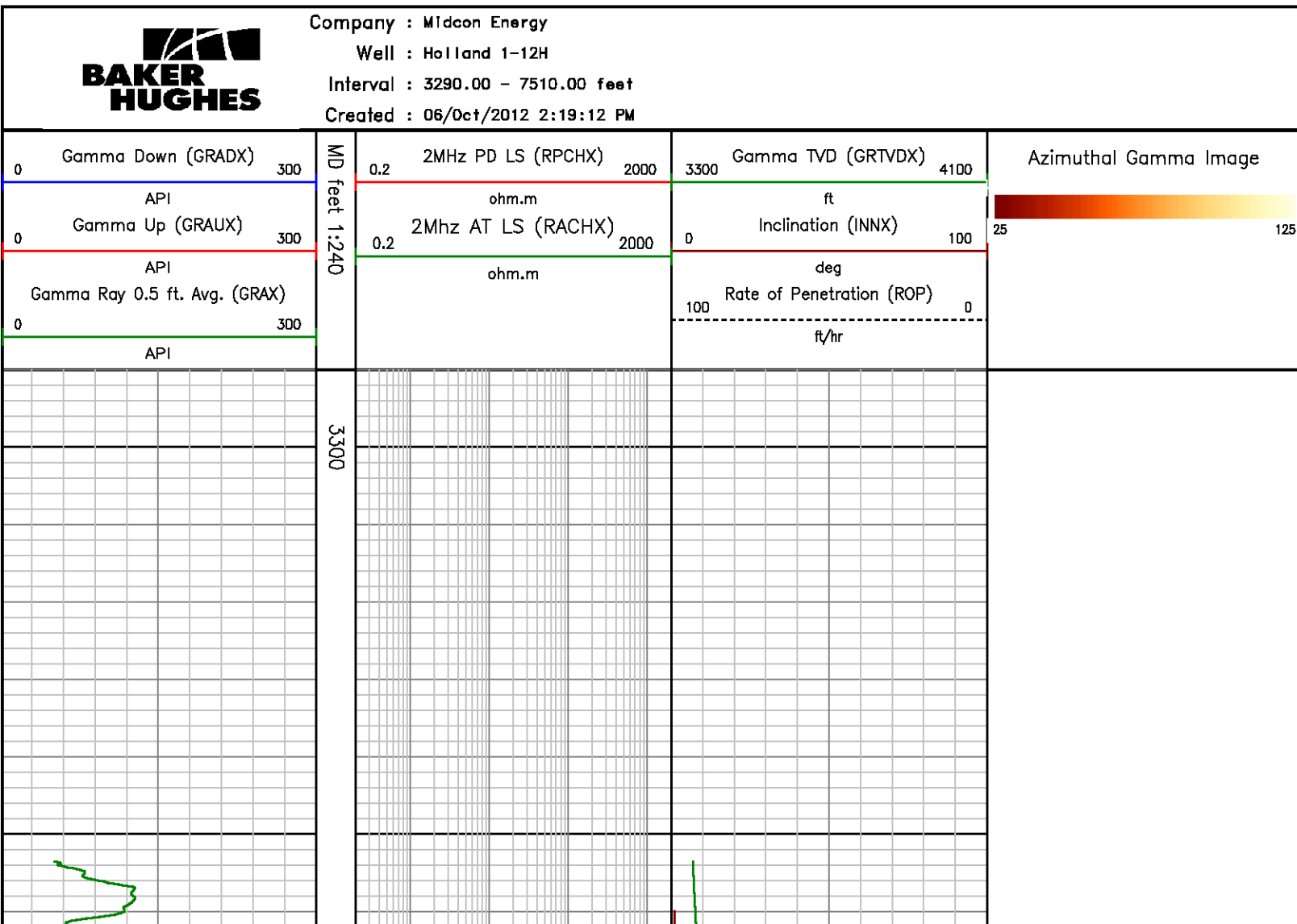
Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module
GAM	Gamma	Collar based Azimuthal Gamma Ray Module
MPR	Resistivity	Collar based Multiple Propagation Resistivity Module
AP	Annular Pressure	Annular Pressure Sensor
APR	Azimuthal Resistivity	Azimuthal Propagation Resistivity Module

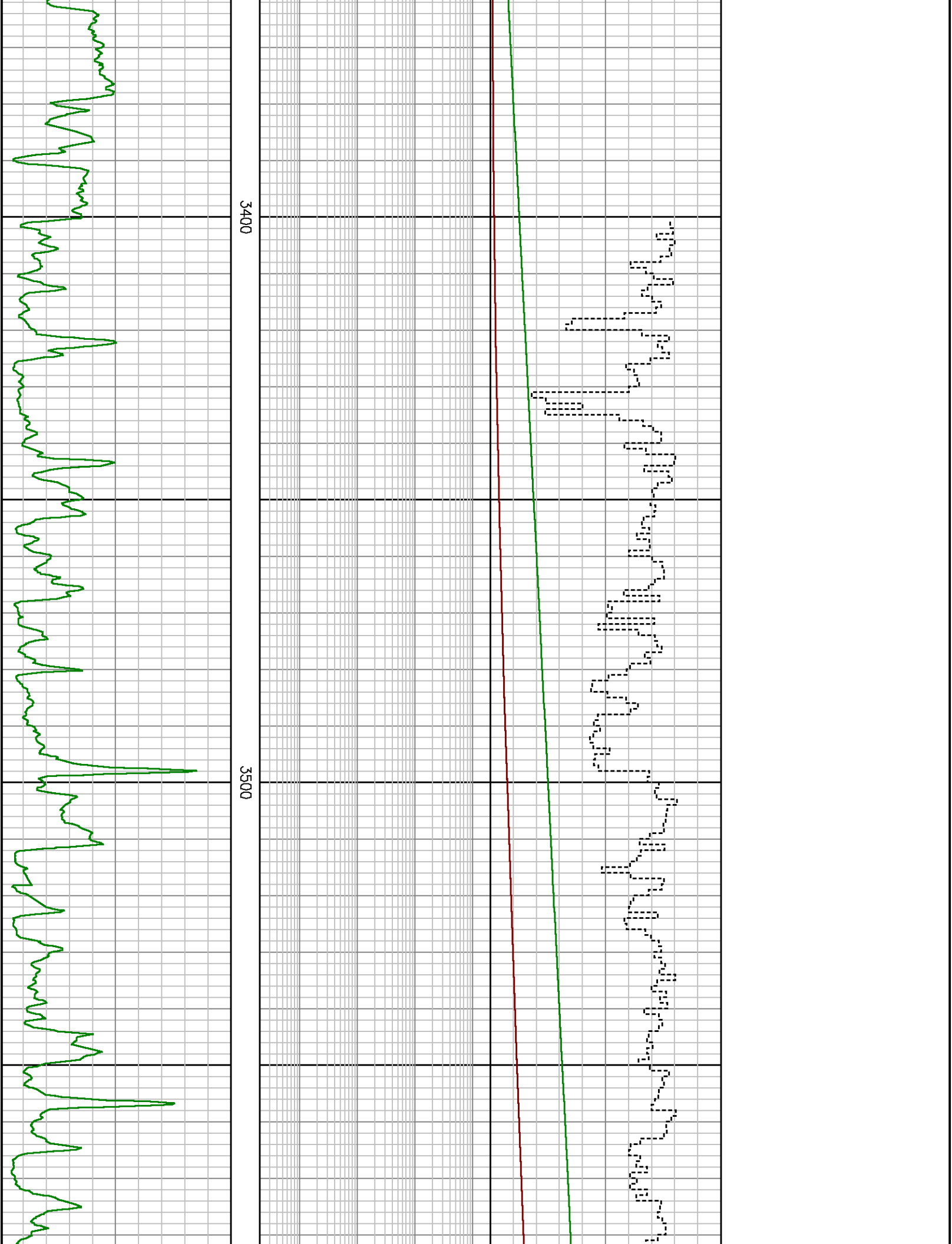
Comments

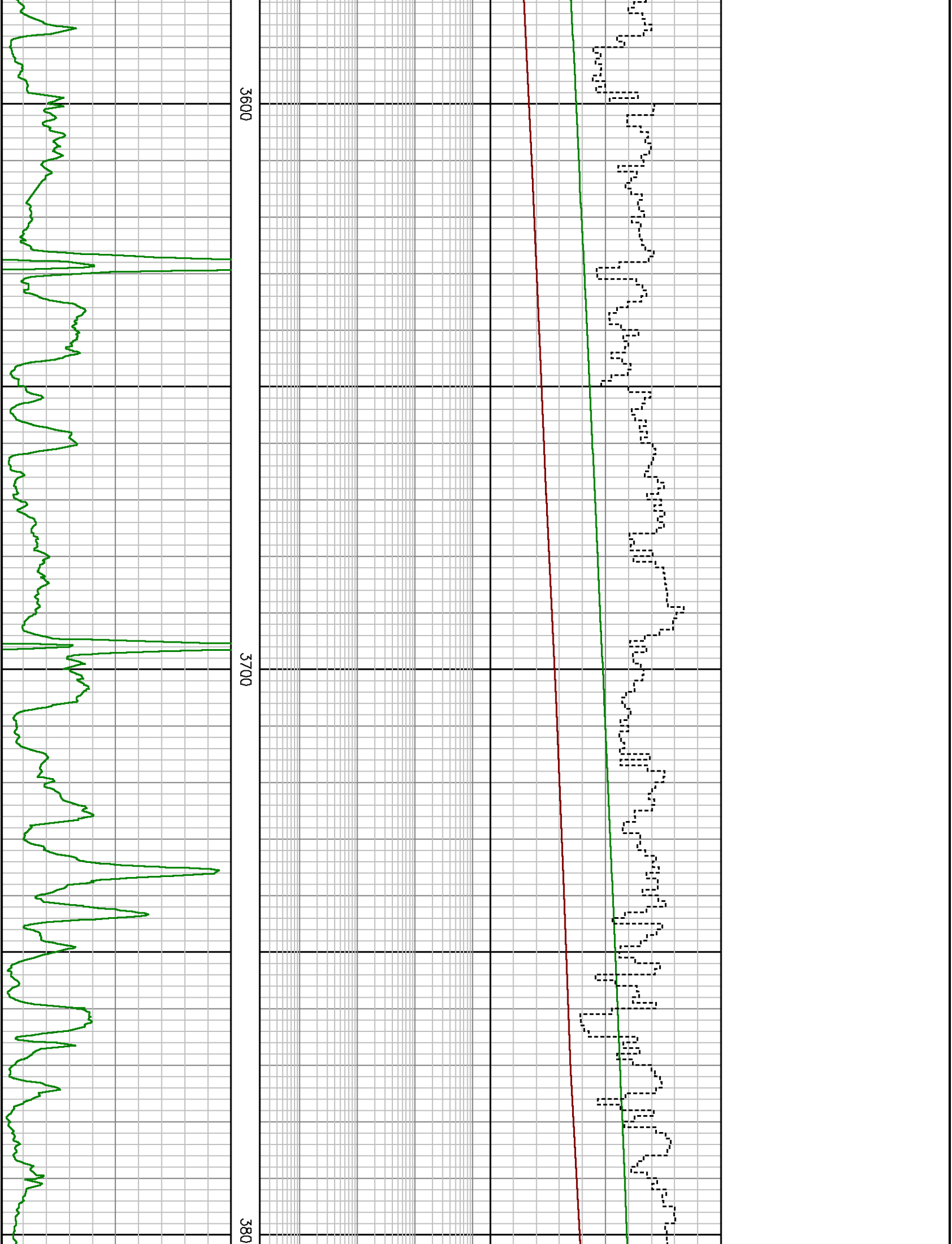
- 1) Baker Hughes Inteq run 1 utilized 6 3/4 NaviGamma Service (Directional and Gamma Ray) behind an 8 3/4 inch bit and steerable assembly from 3353 to 4475 feet MD (3353 to 3999 feet TVD).
- 2) Baker Hughes Inteq runs 2 through x utilized 4 3/4 Multiple Propagation Resistivity Service (Azitrak) behind a 6 1/8 inch bit and steerable assembly from 4476 to 7476 feet MD (3999 to 3997 feet TVD).
- 3) Depth measurements were obtained from a depth control system not supplied by Baker Hughes INTEQ. Due to the lack of control by Baker Hughes INTEQ logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to INTEQ are being used to present logging data.

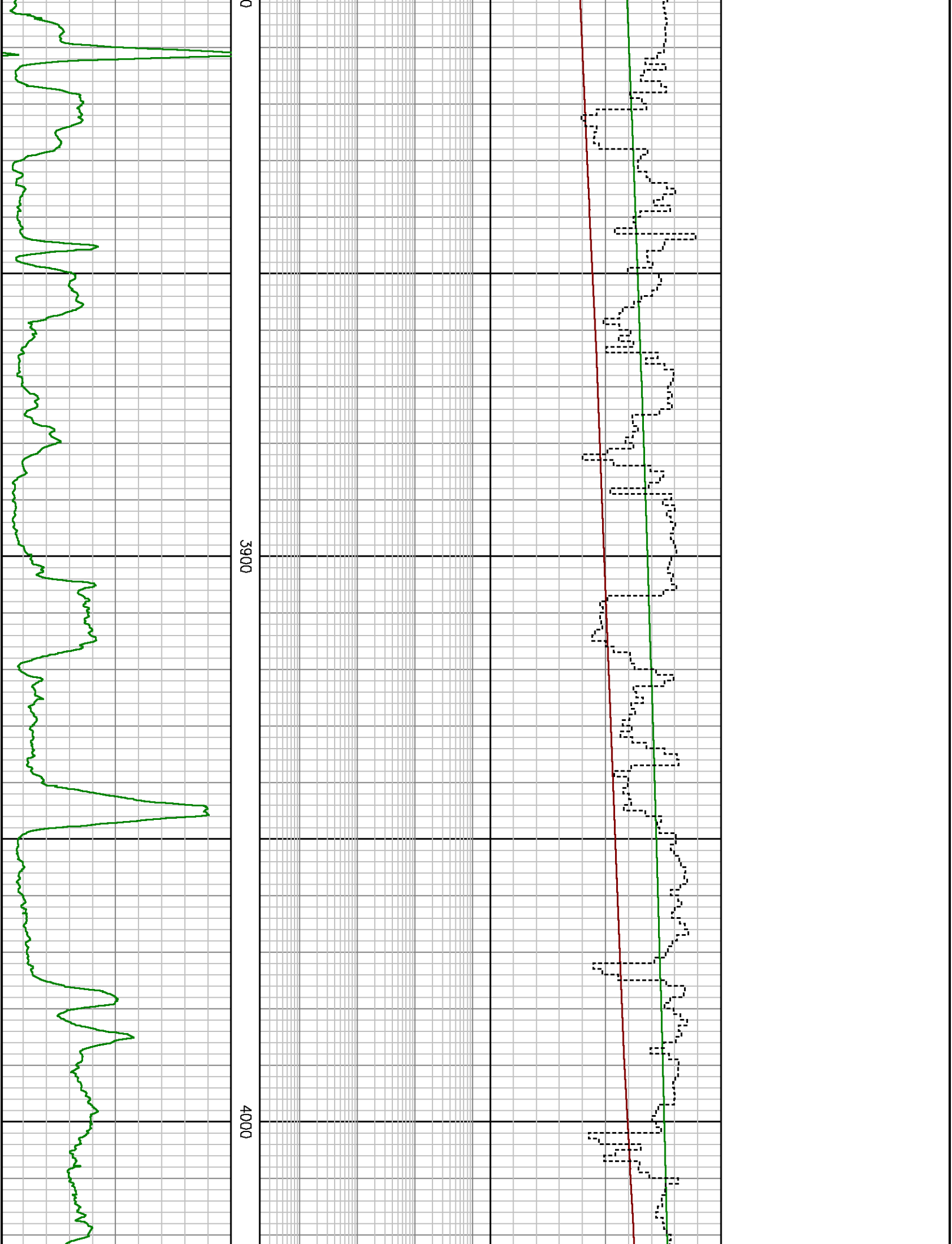
Remarks

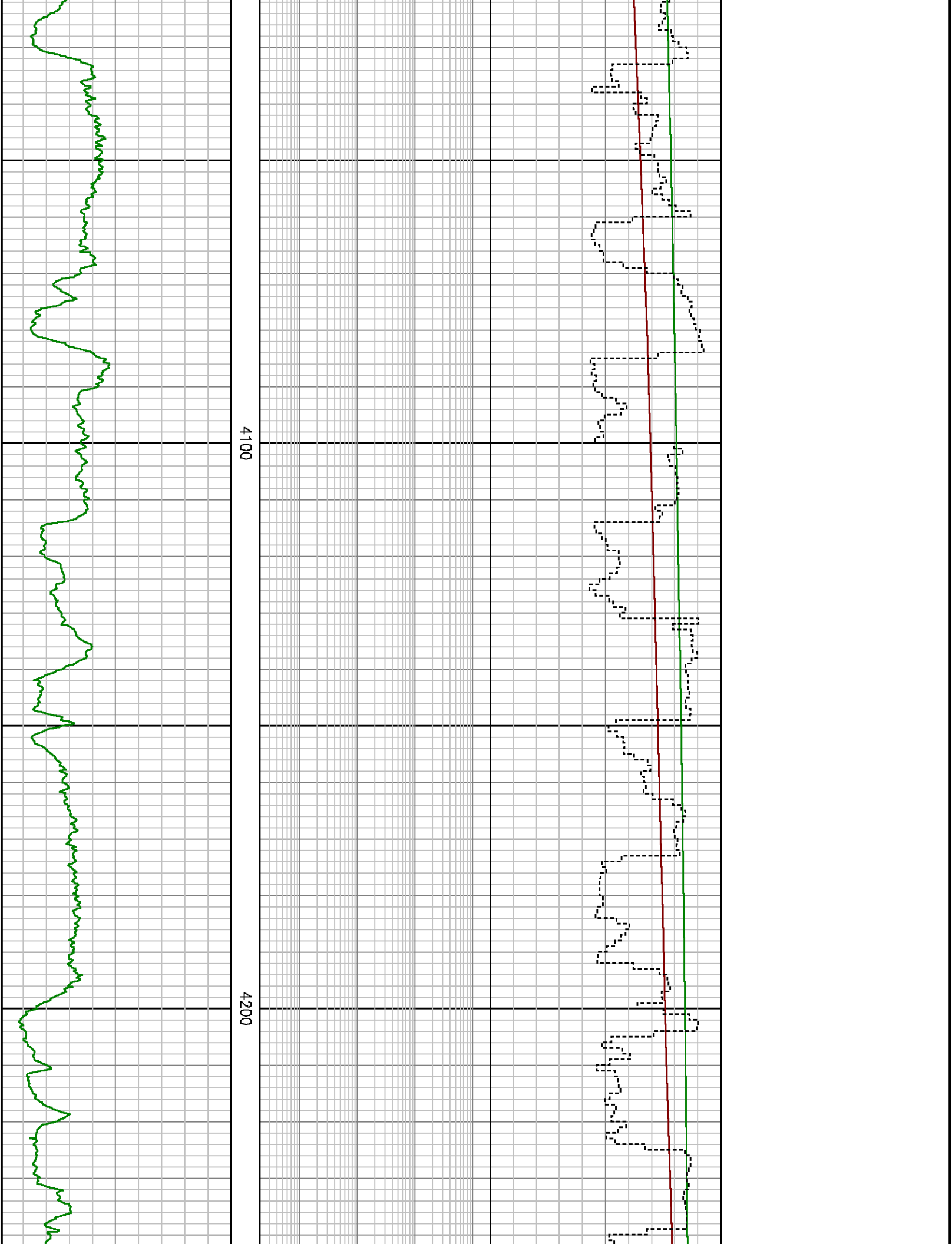
Number	Measured Depth (ft)	Hole Section (in.)	LWD Run No.	Remark
1	3353	8.750	1	The interval from 3353 to 3401 feet MD (3353 to 3400 feet TVD) was logged due to Gamma Ray sensor to bit offset at the start of well logging.
2	4428	6.125	1	The interval from 4428 to 4476 feet MD (4001 to 3999 feet TVD) was logged upto 53 hours after being drilled due to a trip out of hole to run the casing and pickup lateral assembly.
3	5473	6.125	2	The interval from 5473 to 5514 feet MD (4009 to 4011 feet TVD) was logged up to 9 hours after being drilled due to a trip out of hole to change the bit.
4	6547	6.125	3	The interval from 6547 to 6592 feet MD (4022 to 4023 feet TVD) was logged up to 10 hours after being drilled due to a trip out of hole to change the bit.
5	6767	6.125	4	The interval from 6767 to 6811 feet MD (4007 to 4002 feet TVD) was logged up to 13 hours after being drilled due to a trip out of hole to pick up an Agitator and change the bit.
6	7344	6.125	5	The interval from 7344 to 7407 feet MD (3944 to 3995 feet TVD) was logged up to 42.3 hours after being drilled due to a trip out of hole to pick up an Agitator and change the bit.
7	7476	6.125	6	The interval from 7452 to 7476 feet MD (3997 to 3997 feet TVD) was not logged due to Gamma Ray sensor to bit offset at well TD.

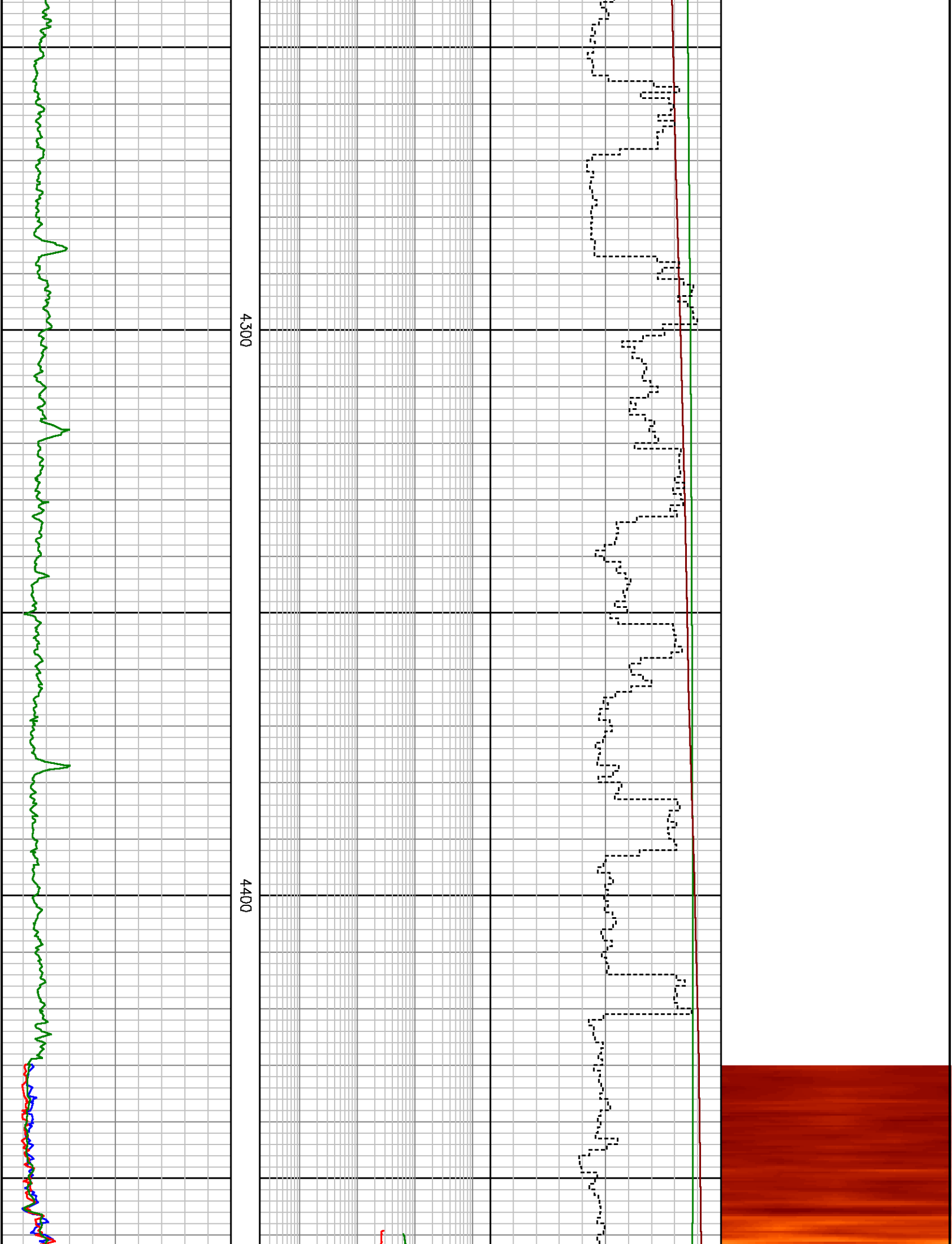


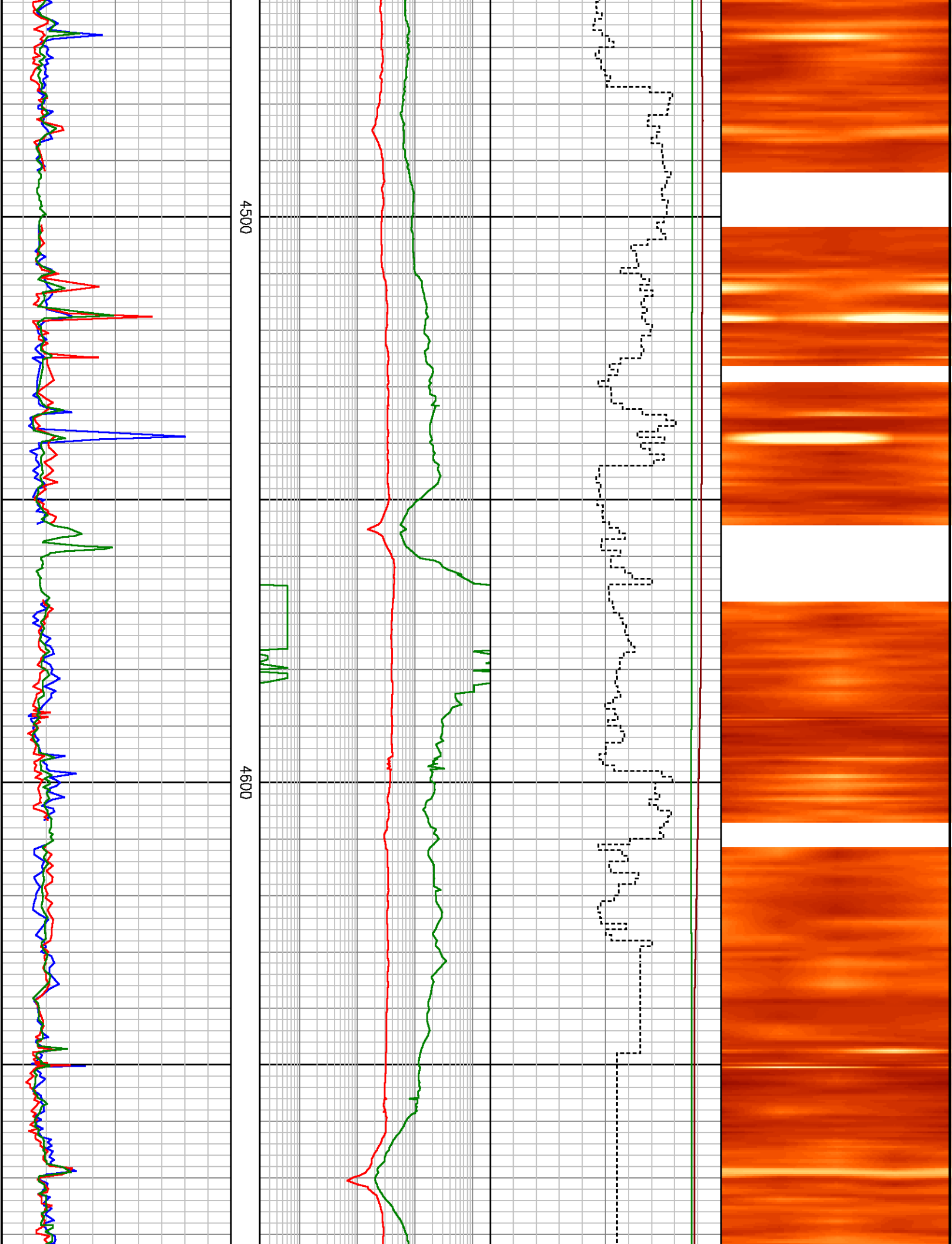


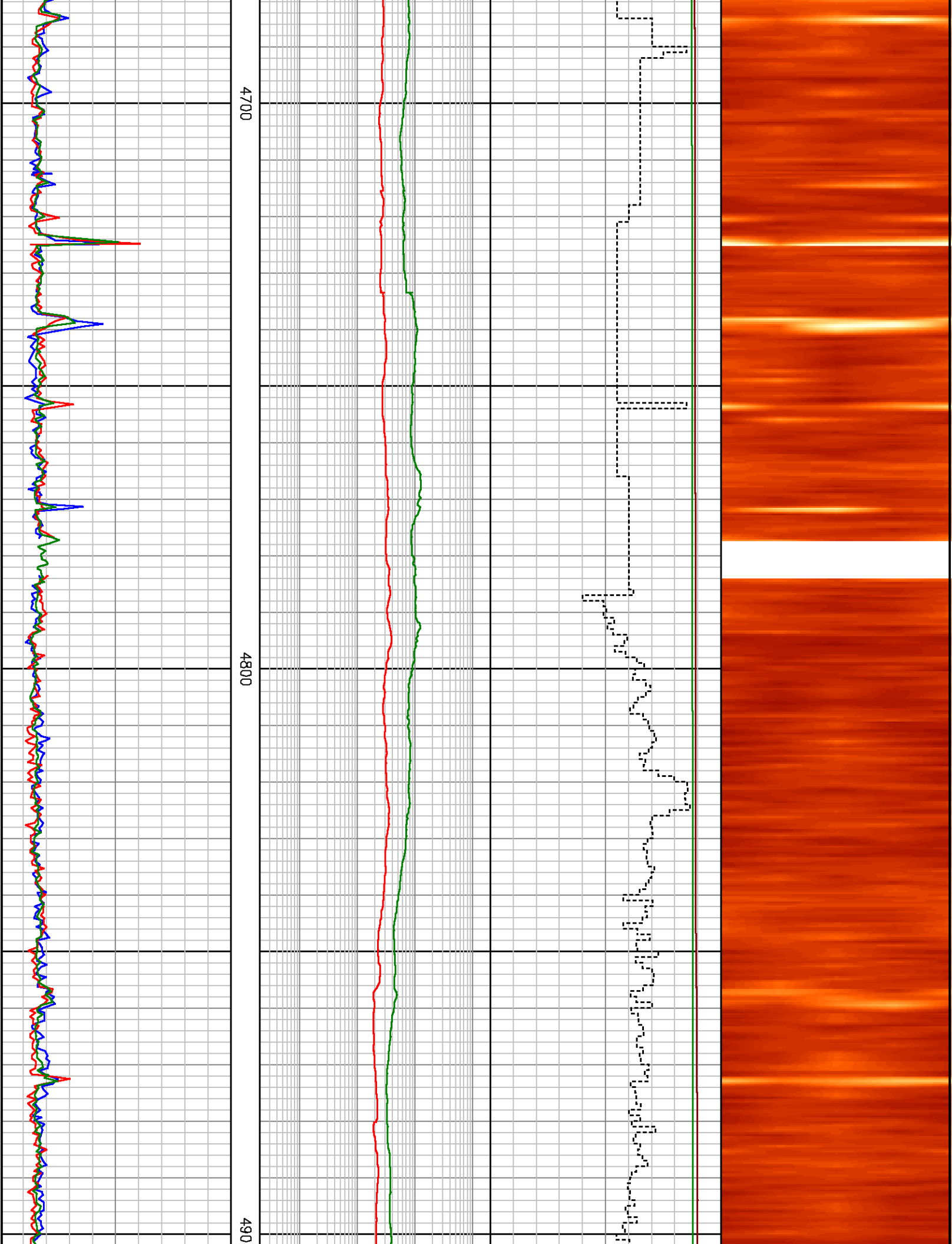


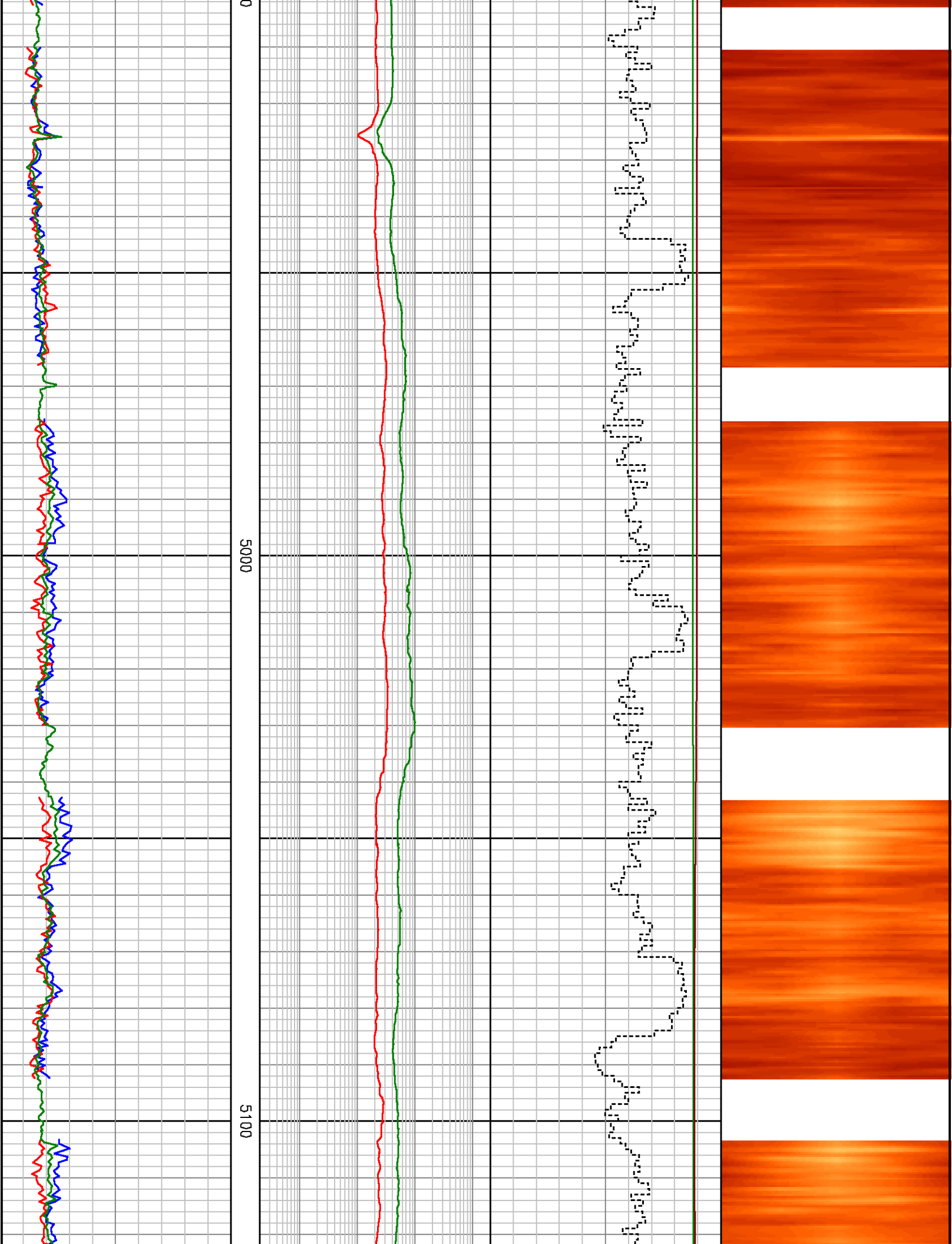


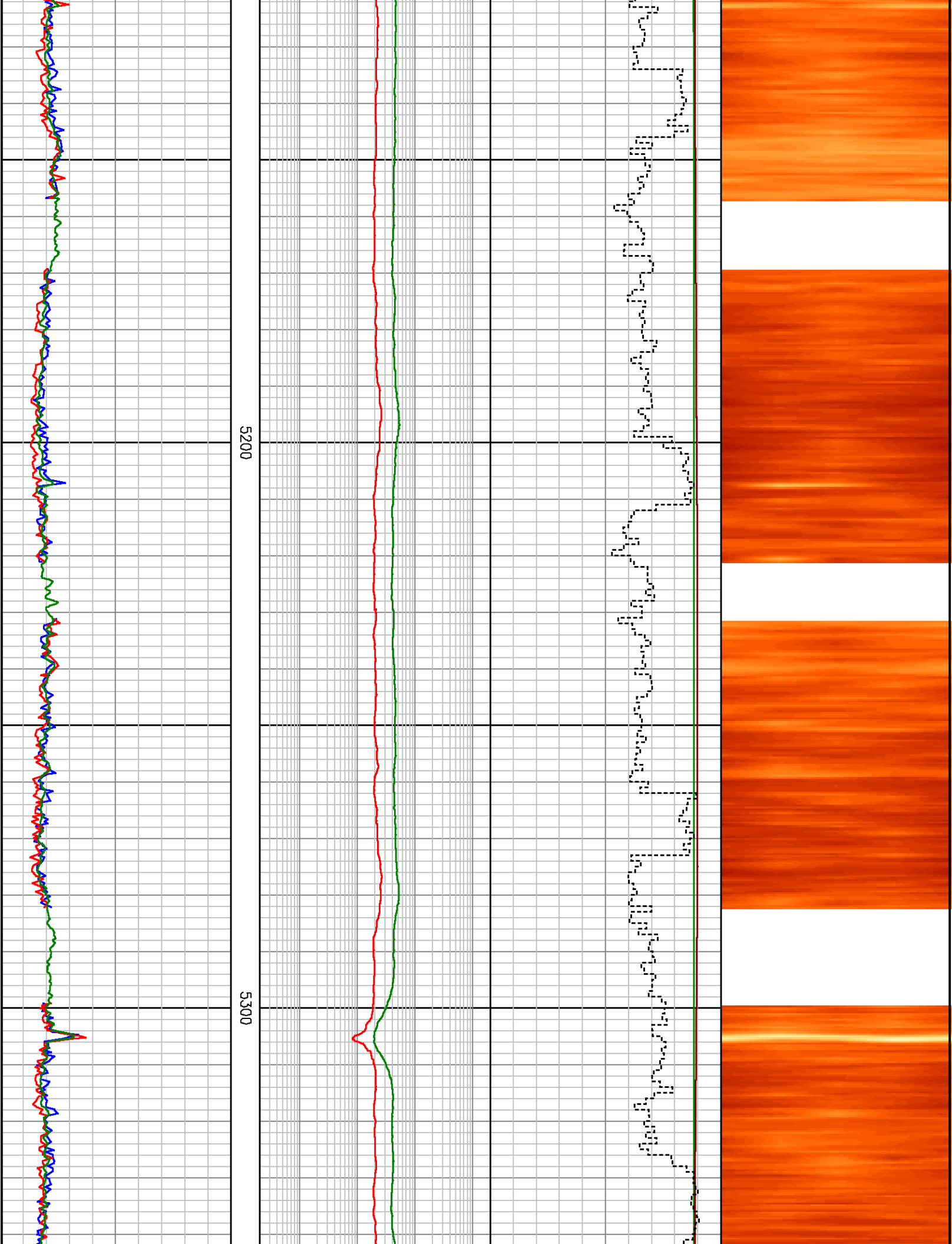


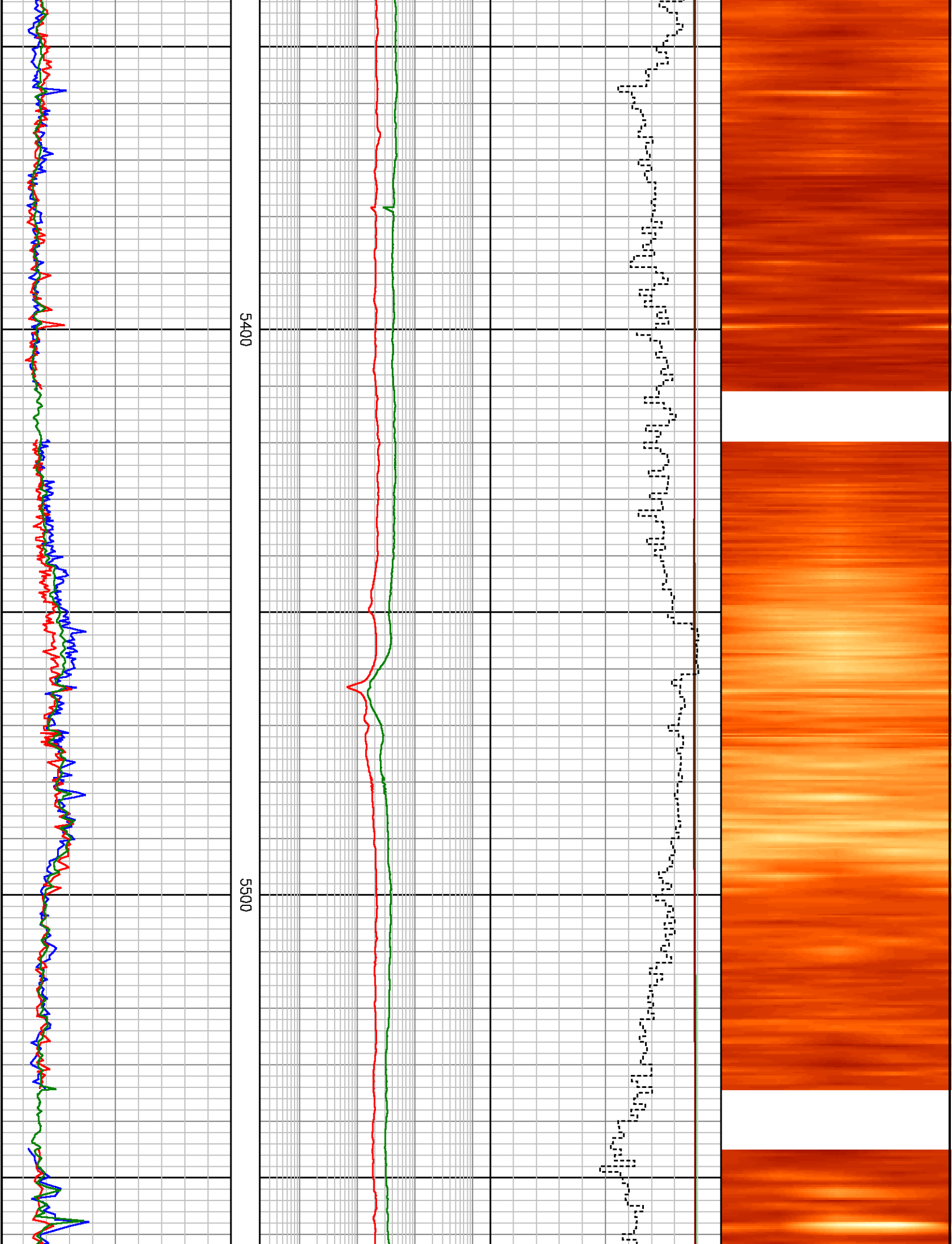


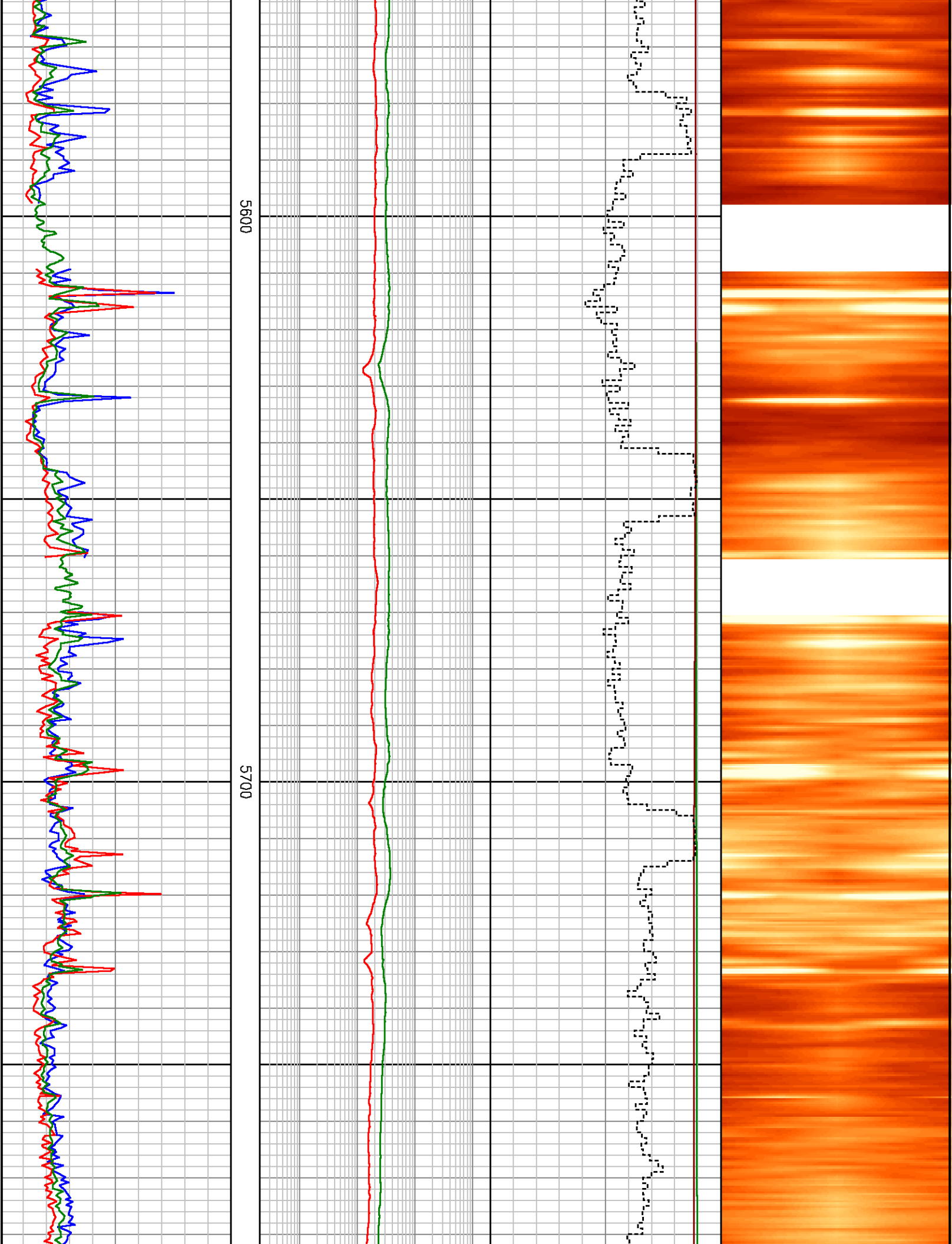


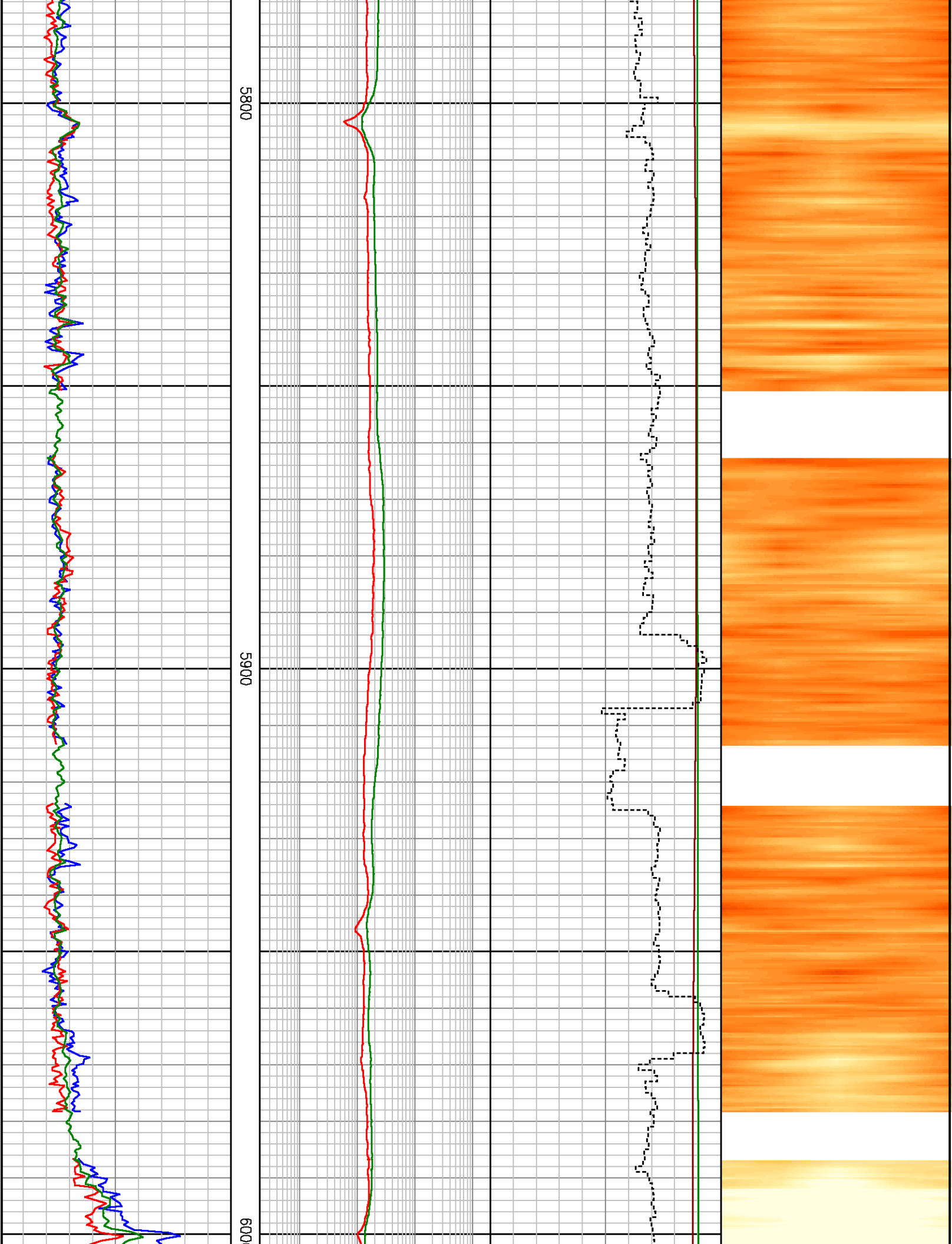


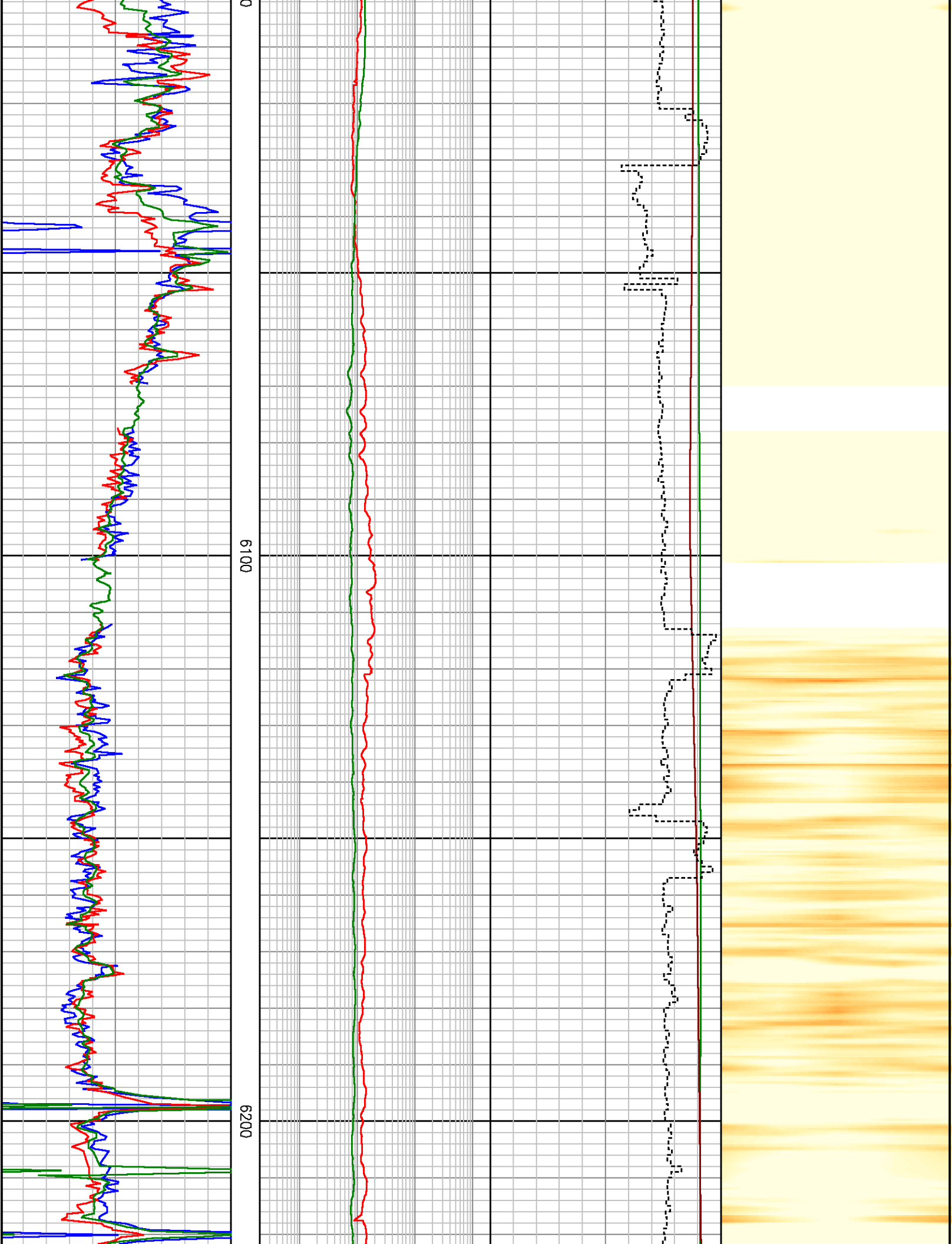


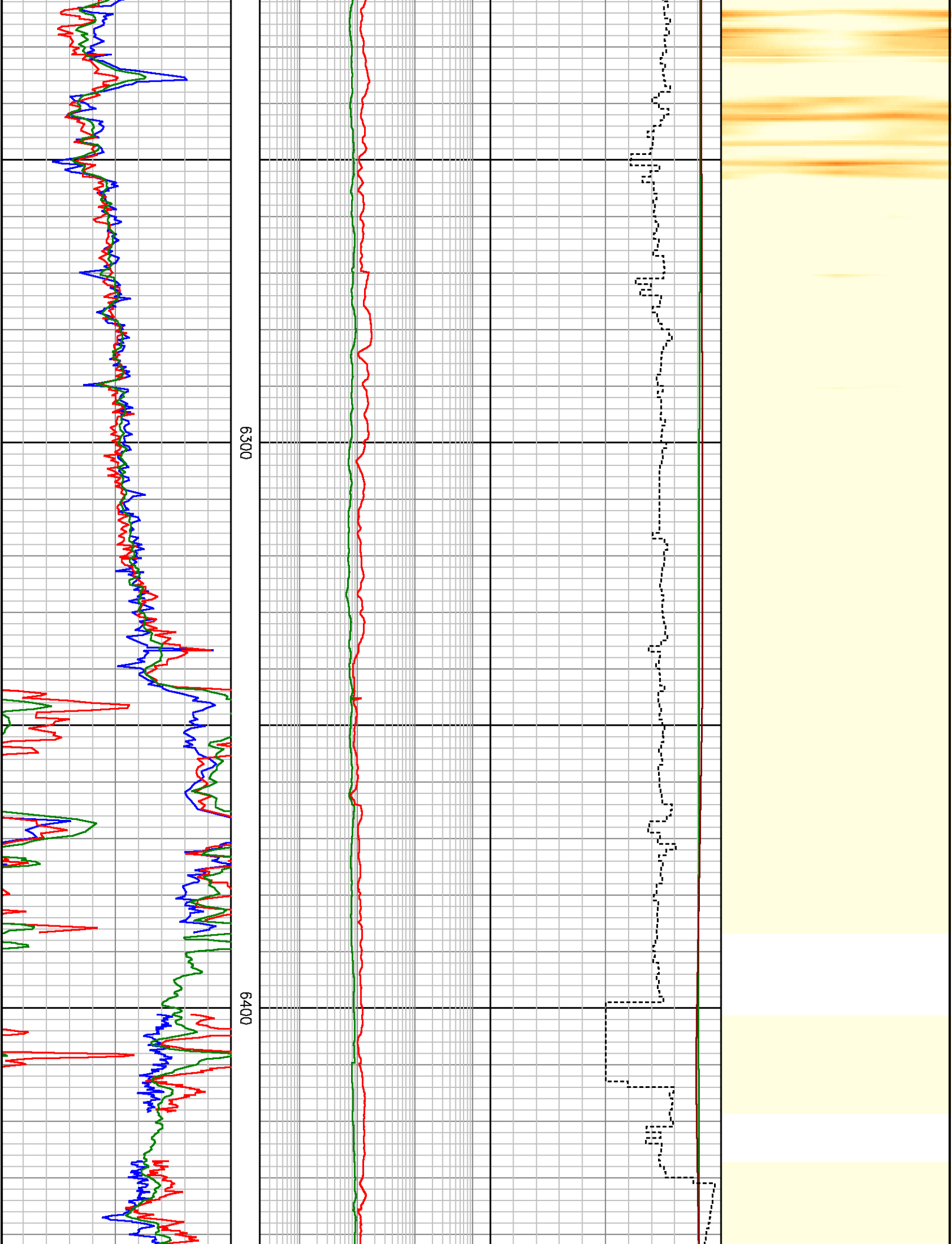


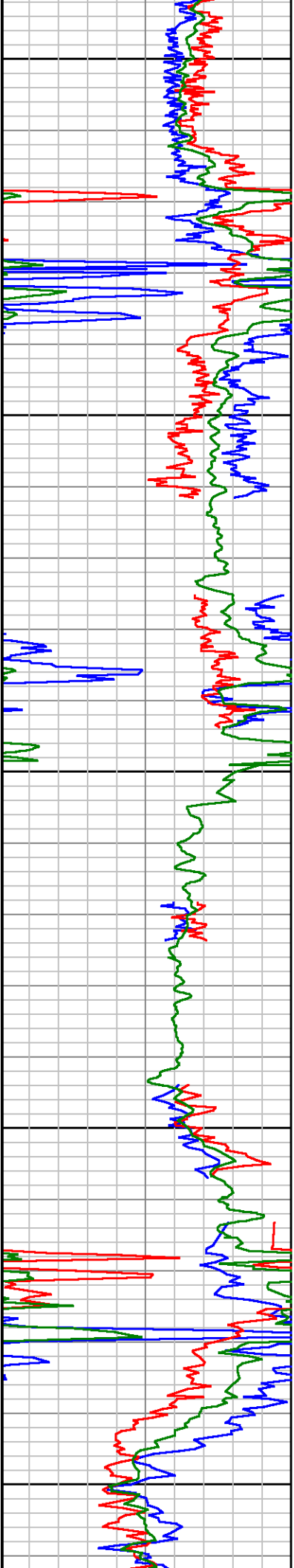






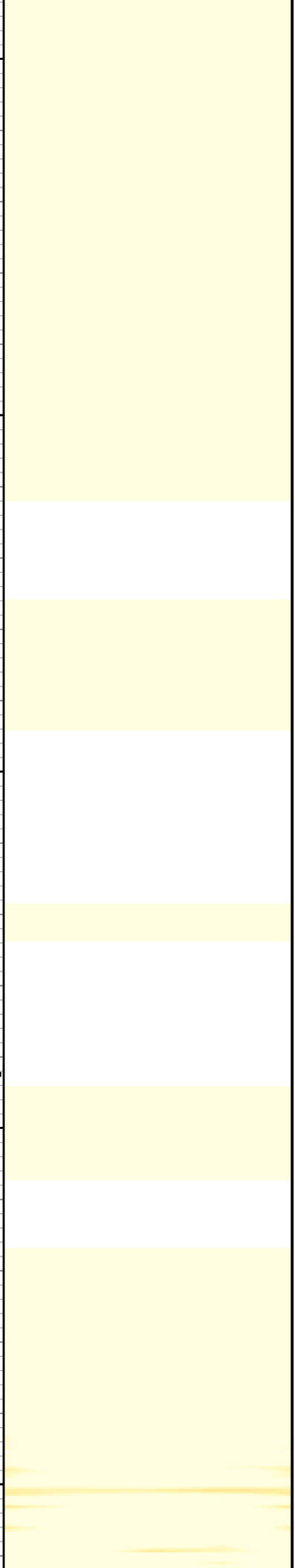
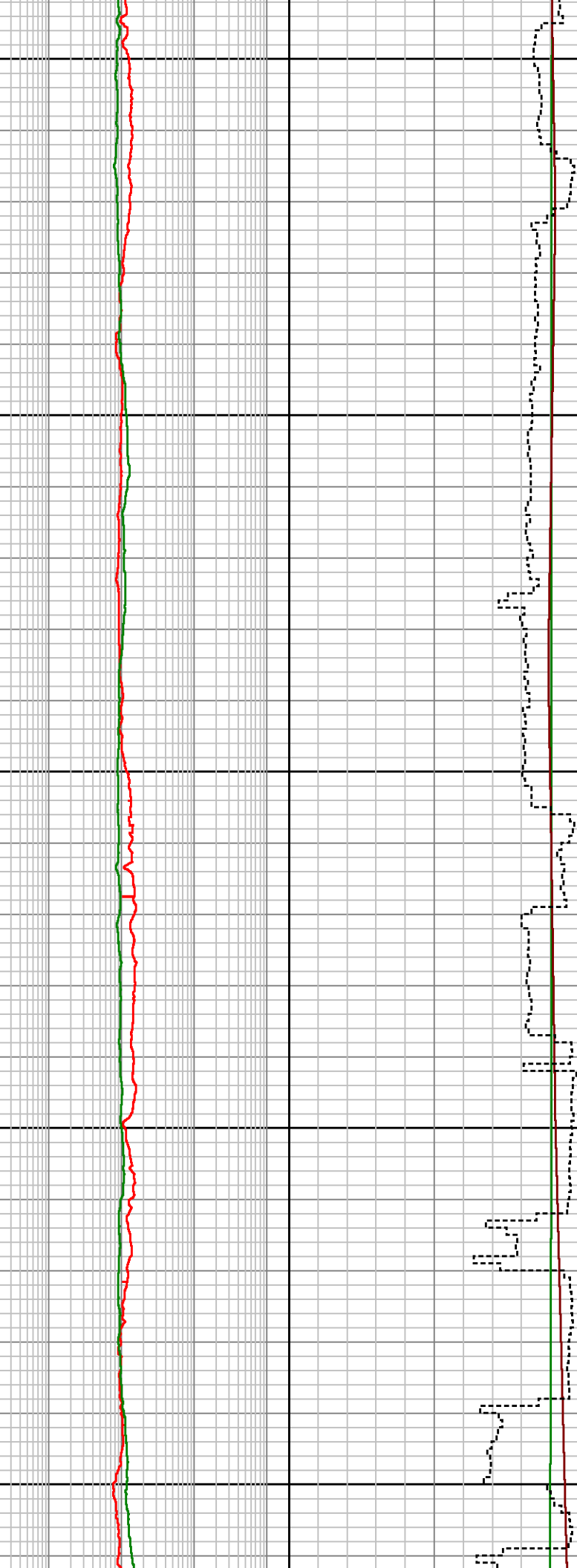


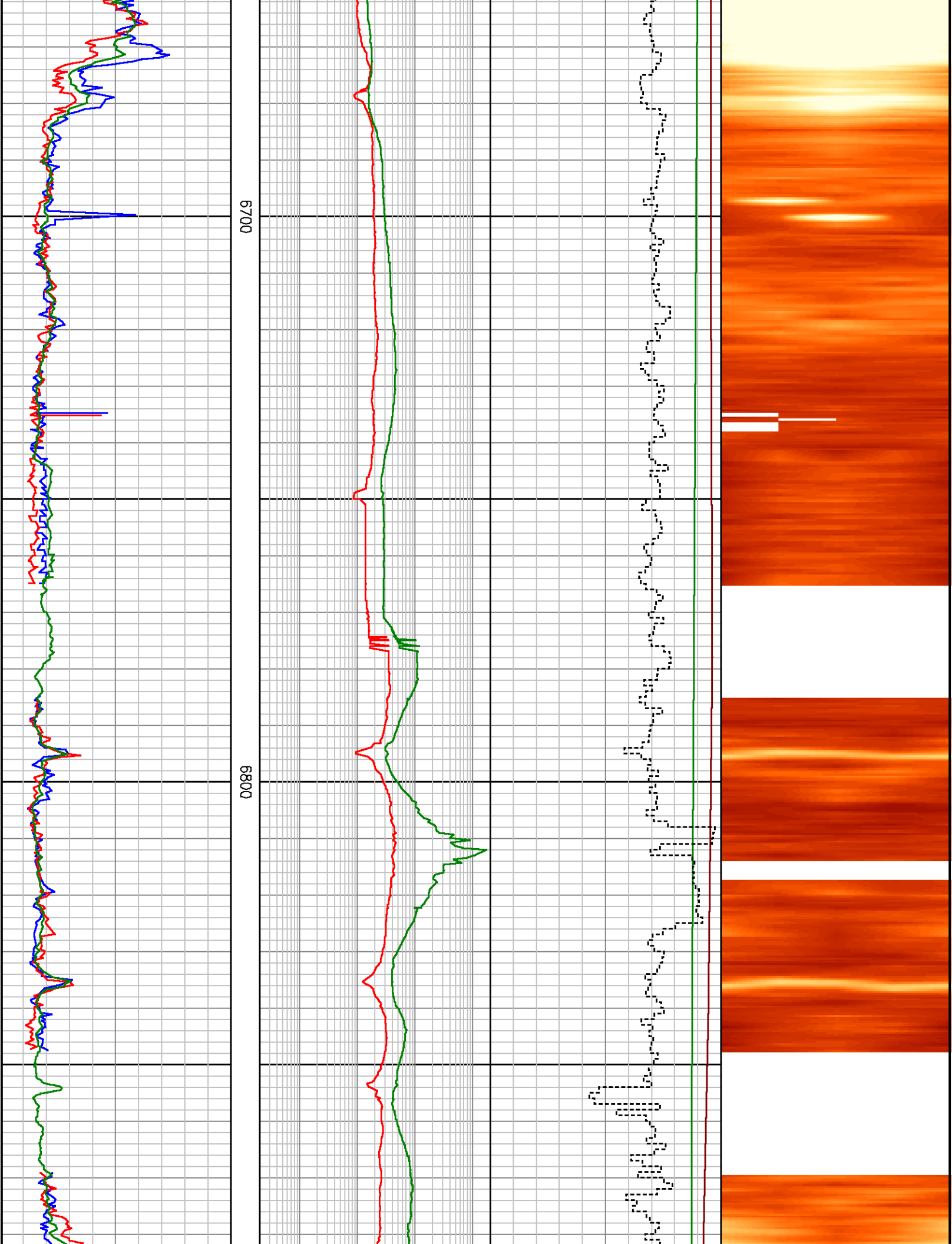


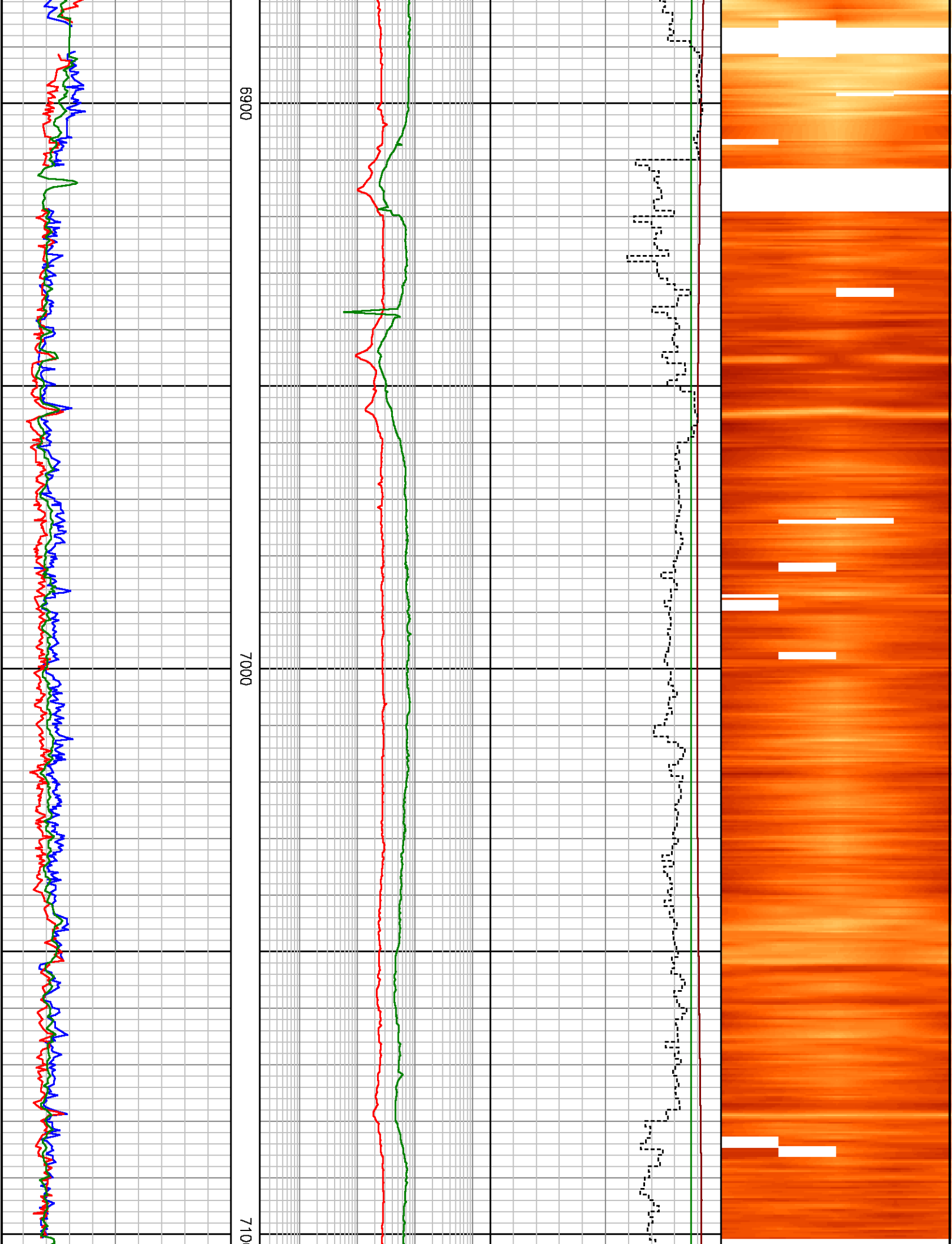


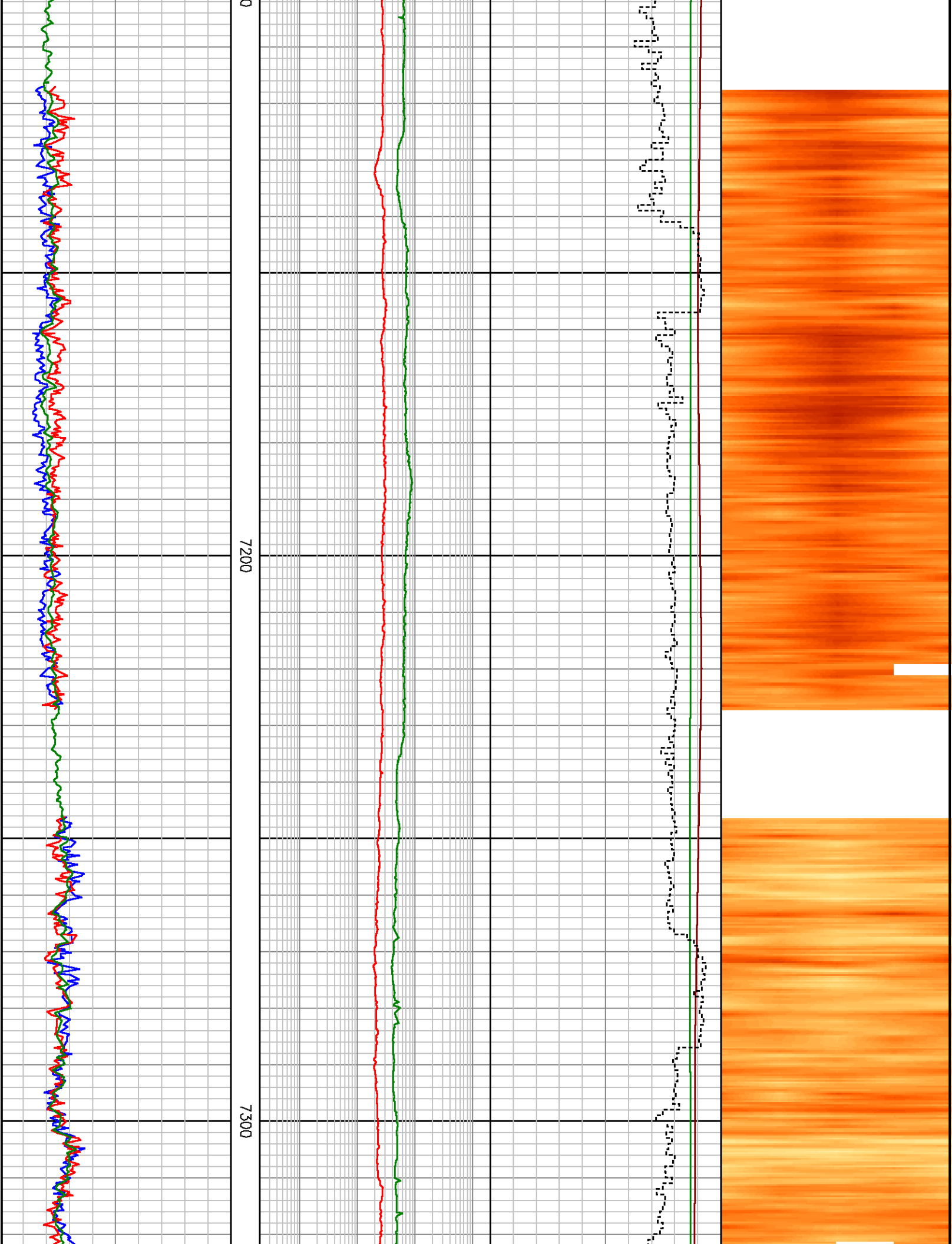
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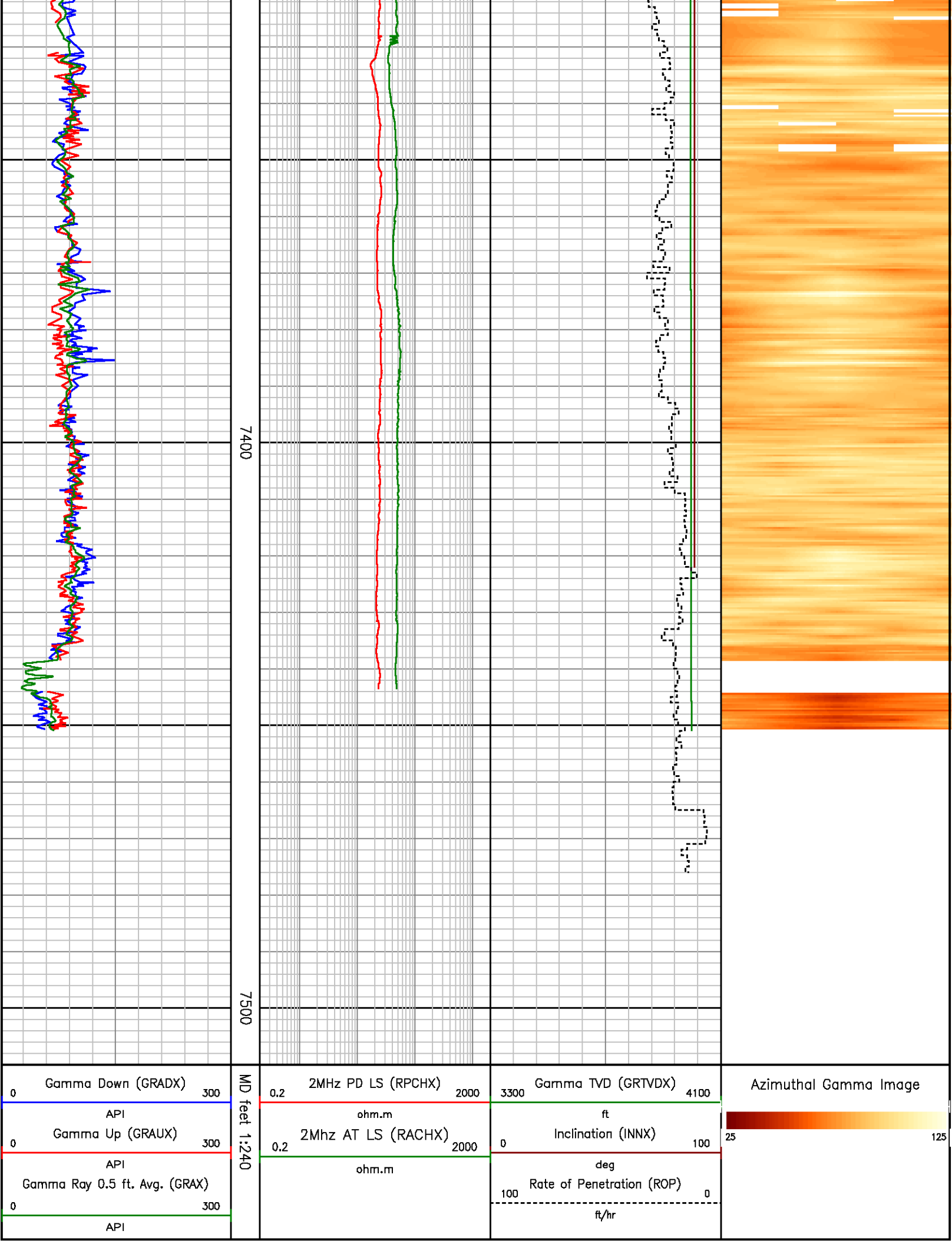
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7400

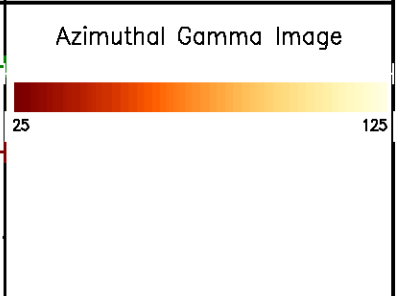
7500

0	Gamma Down (GRADX)	300
API		
0	Gamma Up (GRAUX)	300
API		
0	Gamma Ray 0.5 ft. Avg. (GRAX)	300
API		

MD feet 1:240

0.2	2MHz PD LS (RPCHX)	2000
ohm.m		
0.2	2MHz AT LS (RACHX)	2000
ohm.m		

3300	Gamma TVD (GRTV DX)	4100
ft		
0	Inclination (INNX)	100
deg		
100	Rate of Penetration (ROP)	0
ft/hr		



	Wellsite	Wellsite		Wellsite	Wellsite		Wellsite	Wellsite
Sairav Parab	14/Sep/2012	07/Oct/2012	David Luttrell	14/Sep/2012	22/Sep/2012	Wes Thornhill	22/Sep/2012	30/Sep/2012
Jose Rodriguez	15/Sep/2012	06/Oct/2012	Andrew Sims	15/Sep/2012	05/Oct/2012	Gary Igleheart	30/Sep/2012	07/Oct/2012

Witness

Name	LWD Run Number
Ryan Logsdon	1, 2, 3, 4, 5, 6

Mud Properties Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Mud Type	Density (ppg)	Viscosity (cp)	pH	Fluid Loss (cc)	Oil / Water	Source	Total Chlorides (ppm)	K+ (%)
18/Sep/2012 07:30	1	4077.0	Water Based	9.0	18	9.5	4.2	0/95.4	Flow Line	6000	N/A
21/Sep/2012 07:30	2	4477.0	Water Based	9.0	18	9.5	4.2	0/99	Flow Line	6000	N/A
23/Sep/2012 07:30	3	5815.0	Water Based	8.4	18	9.5	6.4	0/99	Flow Line	6000	N/A
27/Sep/2012 07:30	4	6806.0	Water Based	9.0	26	9.5	2.5	0/95.2	Flow Line	400	N/A
28/Sep/2012 07:30	5	7050.0	Water Based	8.8	25	9.5	6.4	0/96.5	Flow Line	400	N/A
01/Oct/2012 17:30	6	7476.0	Water Based	8.9	27	9.0	6.4	0/95.7	Flow Line	400	N/A

Mud Resistivity Record

Date / Time	LWD Run No.	Measured Depth (ft.)	Surface Temp (deg F)	Surface			BHCT (deg F)	Downhole		
				Rm (ohm.m)	Rmf (ohm.m)	Rmc (ohm.m)		Rm @ BHCT (ohm.m)	Rmf @ BHCT (ohm.m)	Rmc @ BHCT (ohm.m)
21/Sep/2012 07:00	2	4077.0	78	1.50	1.50	1.50	128	0.93	0.93	0.93
23/Sep/2012 12:01	3	5896.0	87	1.50	1.50	1.50	134	0.99	0.99	0.99
27/Sep/2012 12:01	4	6806.0	75	1.50	1.50	1.50	134	1.11	1.11	1.11
28/Sep/2012 23:00	5	7050.0	70	1.50	1.50	1.50	134	0.81	0.81	0.81
01/Oct/2012 01:45	6	7422.0	87	1.50	1.50	1.50	139	0.95	0.95	0.95

Mnemonics

Curve	Description	Units
GRAX	Average Gamma Ray Apparent, 0.5 ft average	API
INNX	Survey Inclination	deg
ROP	Rate of Penetration	ft / hr
GRTVDX	Gamma Ray True Vertical Depth	ft
GRAUX	Gamma Ray Apparent – Up Quadrant	API
GRADX	Gamma Ray Apparent – Down Quadrant	API
RPCHX	Compensated and Corrected Resistivity, 2 Mhz, Long Space, Phase Difference	ohm.m
RACHX	Compensated and Corrected Resistivity, 2 Mhz, Long Space, Attenuation	ohm.m

Equipment and Service Data

LWD Run	Tool	Serial Number	Measurement	Bit Offset	Max O.D.	Min I.D.

No.				(ft)	(in.)	(in.)
1	SRIG	10433831	Gamma	47.21	6.750	2.569
1	DIR	12168817	Directional	42.21	6.750	2.569
2	DIR	11592386	Directional	47.14	4.750	2.569
2	GAM	11592386	Gamma	42.46	4.750	1.750
2	MPR	11592386	Multiple Propagation Resistivity	33.97	4.750	1.750
2	APR	11592383	Azimuthal Propagation Resistivity	33.97	4.750	1.750
2	AP	11592386	Annular Pressure	38.40	4.750	1.750
3	DIR	11592386	Directional	47.14	4.750	1.750
3	GAM	11592386	Gamma	42.46	4.750	1.750
3	MPR	11592386	Multiple Propagation Resistivity	33.97	4.750	1.750
3	APR	11592386	Azimuthal Propagation Resistivity	33.97	4.750	1.750
3	AP	11592386	Annular Pressure	38.40	4.750	1.750
4	DIR	11592386	Directional	45.23	4.750	1.750
4	GAM	11592386	Gamma	40.55	4.750	1.750
4	MPR	11592386	Multiple Propagation Resistivity	32.06	4.750	1.750
4	APR	11592386	Azimuthal Propagation Resistivity	32.06	4.750	1.750
4	AP	11592386	Annular Pressure	36.49	4.750	1.750
5	DIR	11592386	Directional	40.91	4.750	1.750
5	GAM	11592386	Gamma	36.23	4.750	1.750
5	MPR	11592386	Multiple Propagation Resistivity	27.74	4.750	1.750
5	APR	11592386	Azimuthal Propagation Resistivity	27.74	4.750	1.750
5	AP	11592386	Annular Pressure	32.17	4.750	1.750
6	DIR	12517557	Directional	38.43	4.750	1.750
6	GAM	12517557	Gamma	25.27	4.750	1.750
6	MPR	12517557	Multiple Propagation Resistivity	32.46	4.750	1.750
6	APR	12517557	Azimuthal Propagation Resistivity	27.74	4.750	1.750
6	AP	12517557	Annular Pressure	27.90	4.750	1.750

Service and Tool Mnemonics


Mnemonic	Name	Description
DIR	Directional	Wellbore directional survey
SRIG	Inclination and Gamma	Probe based gamma ray and inclination module
GAM	Gamma	Collar based Azimuthal Gamma Ray Module
MPR	Resistivity	Collar based Multiple Propagation Resistivity Module
AP	Annular Pressure	Annular Pressure Sensor
APR	Azimuthal Resistivity	Azimuthal Propagation Resistivity Module

Comments

- 1) Baker Hughes Inteq run 1 utilized 6 3/4 NaviGamma Service (Directional and Gamma Ray) behind an 8 3/4 inch bit and steerable assembly from 3353 to 4475 feet MD (3353 to 3999 feet TVD).
- 2) Baker Hughes Inteq runs 2 through x utilized 4 3/4 Multiple Propagation Resistivity Service (Azitrak) behind a 6 1/8 inch bit and steerable assembly from 4476 to 7476 feet MD (3999 to 3997 feet TVD).
- 3) Depth measurements were obtained from a depth control system not supplied by Baker Hughes INTEQ. Due to the lack of control by Baker Hughes INTEQ logging engineers, depth calibrations and measurements could not be independently verified and the unverified depths as supplied to INTEQ are being used to present logging data.

Remarks

Number	Measured Depth (ft)	Hole Section (in.)	LWD Run No.	Remark
1	3353	8.750	1	The interval from 3353 to 3401 feet MD (3353 to 3400 feet TVD) was logged due to Gamma Ray sensor to bit offset at the start of well logging.
2	4428	6.125	1	The interval from 4428 to 4476 feet MD (4001 to 3999 feet TVD) was logged upto 53 hours after being drilled due to a trip out of hole to run the casing and pickup lateral assembly.
3	5473	6.125	2	The interval from 5473 to 5514 feet MD (4009 to 4011 feet TVD) was logged up to 9 hours after being drilled due to a trip out of hole to change the bit.
4	6547	6.125	3	The interval from 6547 to 6592 feet MD (4022 to 4023 feet TVD) was logged up to 10 hours after being drilled due to a trip out of hole to change the bit.
5	6767	6.125	4	The interval from 6767 to 6811 feet MD (4007 to 4002 feet TVD) was logged up to 13 hours after being drilled due to a trip out of hole to pick up an Agitator and change the bit.
6	7344	6.125	5	The interval from 7344 to 7407 feet MD (3944 to 3995 feet TVD) was logged up to 42.3 hours after being drilled due to a trip out of hole to pick up an Agitator and change the bit.
7	7476	6.125	6	The interval from 7452 to 7476 feet MD (3997 to 3997 feet TVD) was not logged due to Gamma Ray sensor to bit offset at well TD.




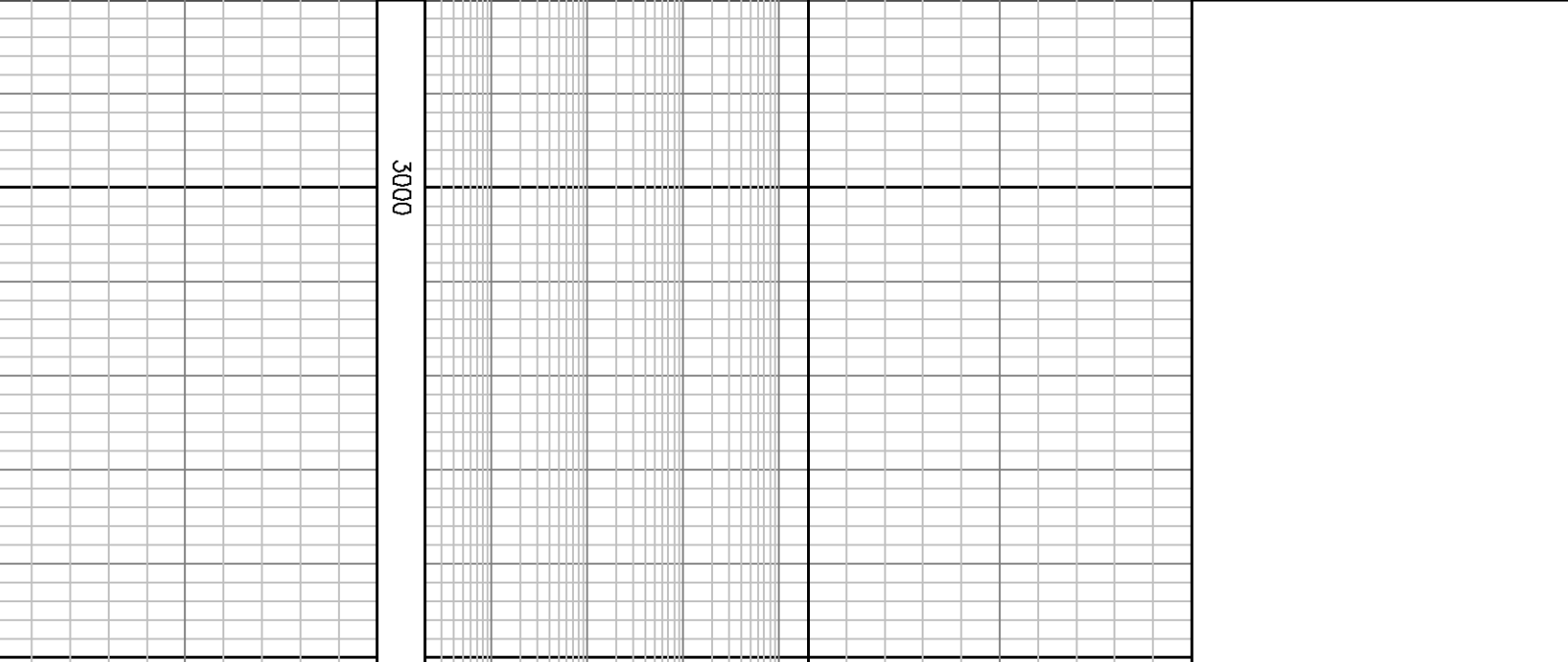
Company : Midcon Energy

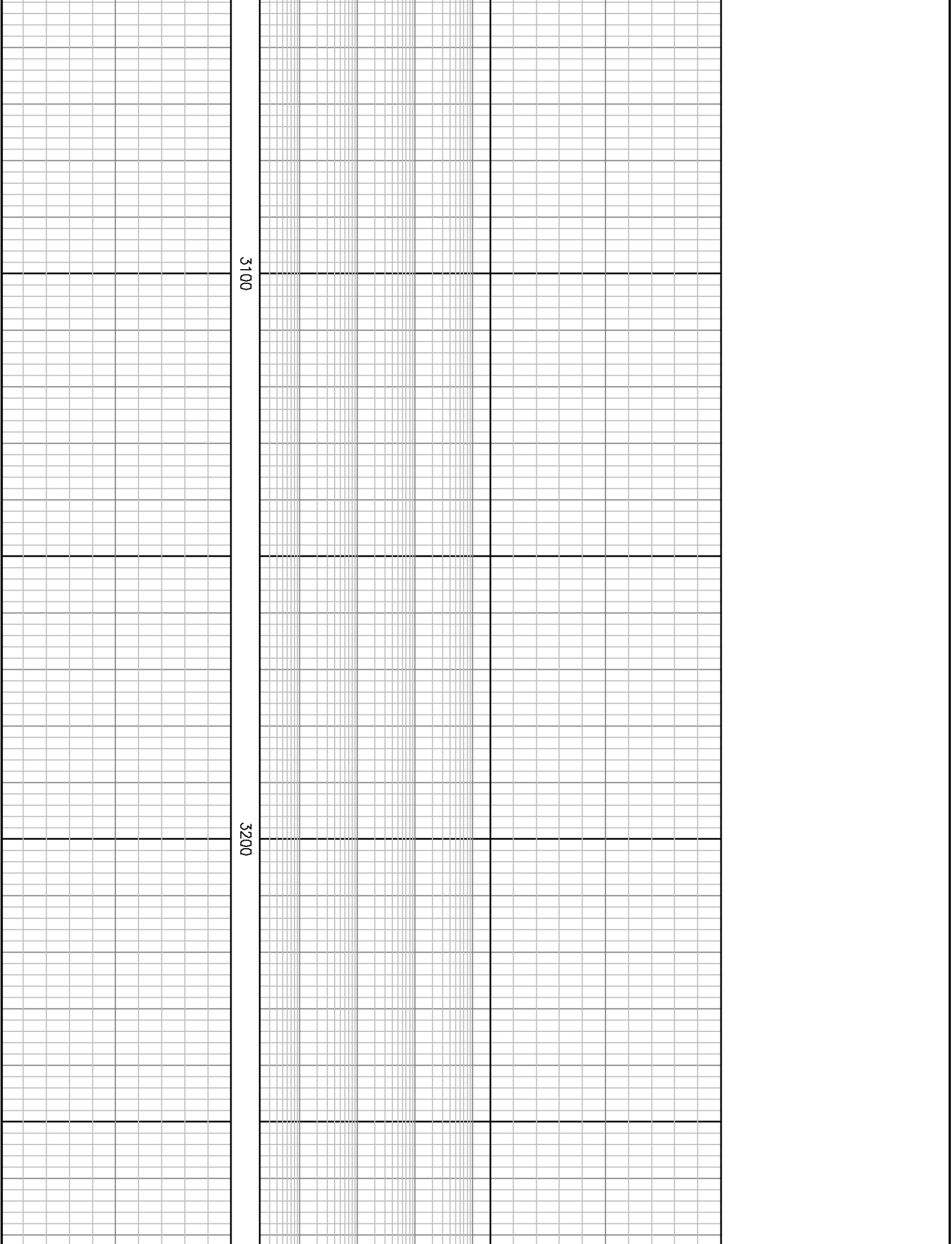
Well : Holland 1-12H

Interval : 2980.00 - 4110.00 feet

Created : 06/Oct/2012 2:19:12 PM

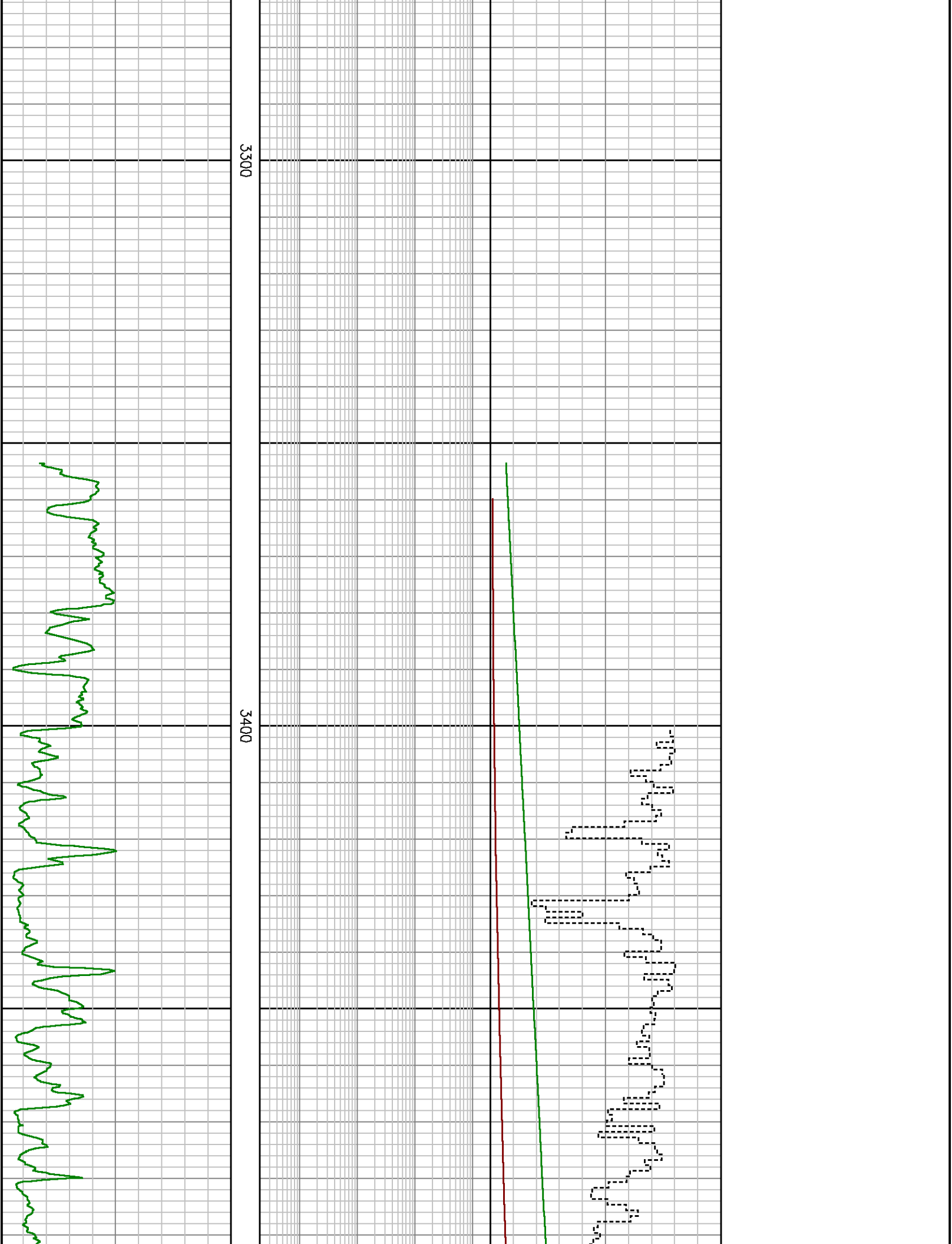
0 Gamma Down (GRADX) 300 API 0 Gamma Up (GRAUX) 300 API 0 Gamma Ray 0.5 ft. Avg. (GRAX) 300 API	TVD feet 1:240	0.2 2MHz PD LS (RPCHX) 2000 ohm.m 0.2 2Mhz AT LS (RACHX) 2000 ohm.m	3300 Gamma TVD (GRTVDX) 4100 ft 0 Inclinatio (INNX) 100 deg 100 Rate of Penetration (ROP) 0 ft/hr	Azimuthal Gamma Image 
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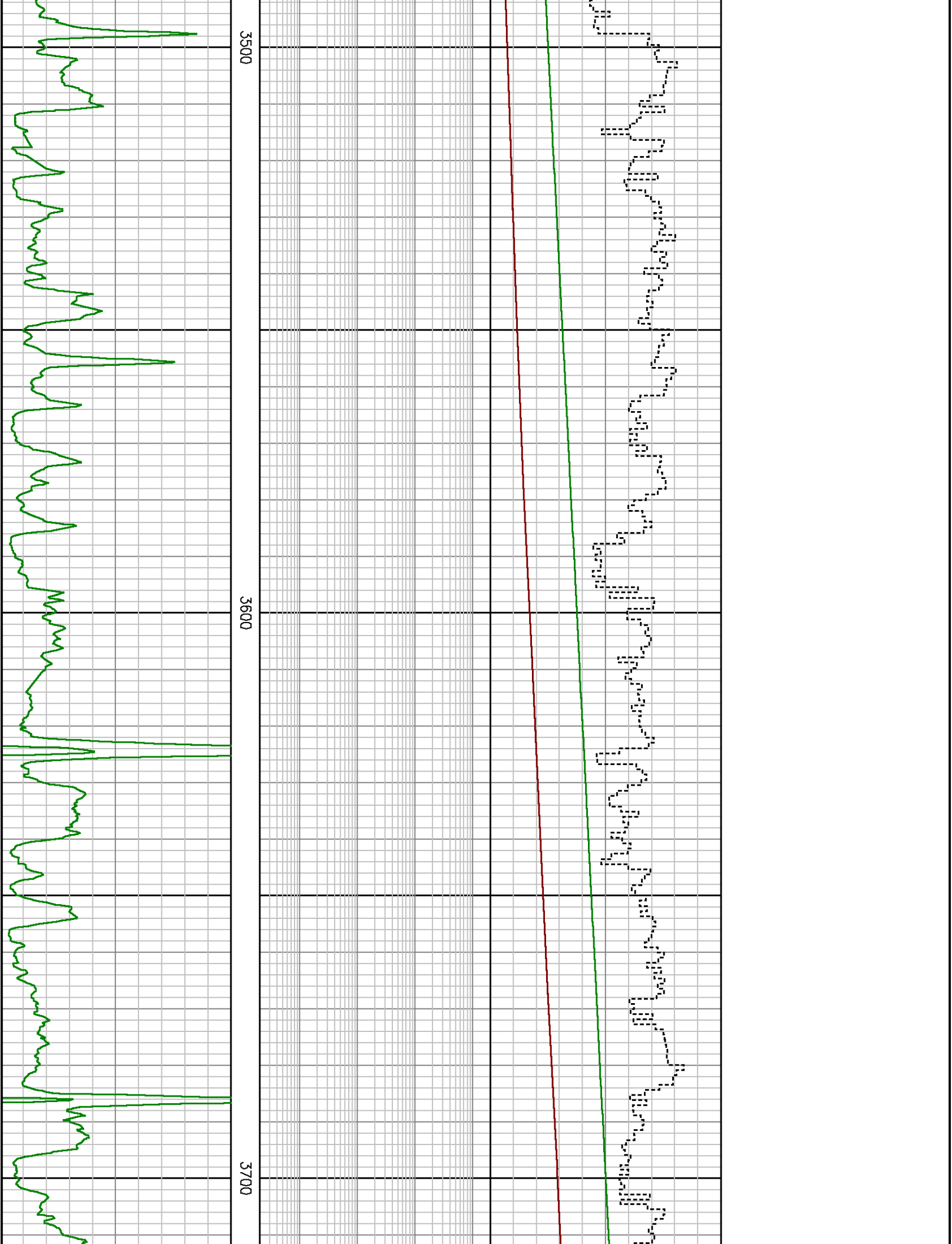


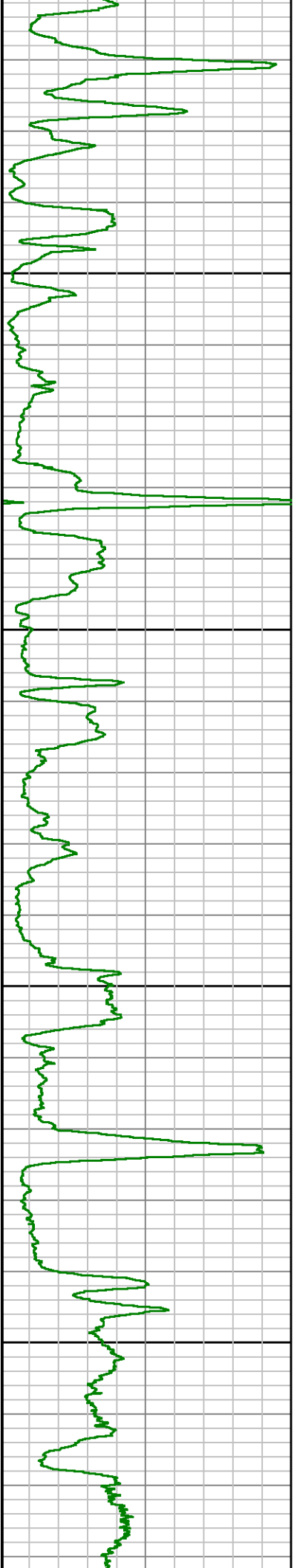


3100

3200

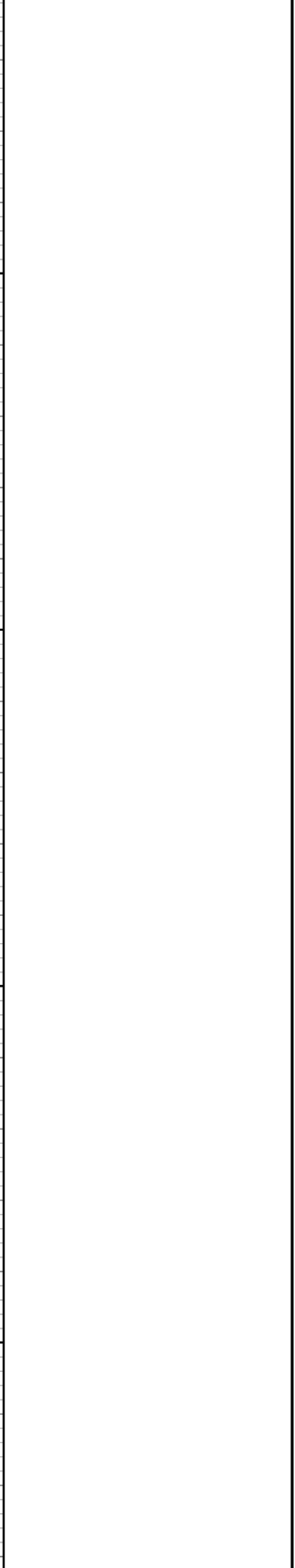
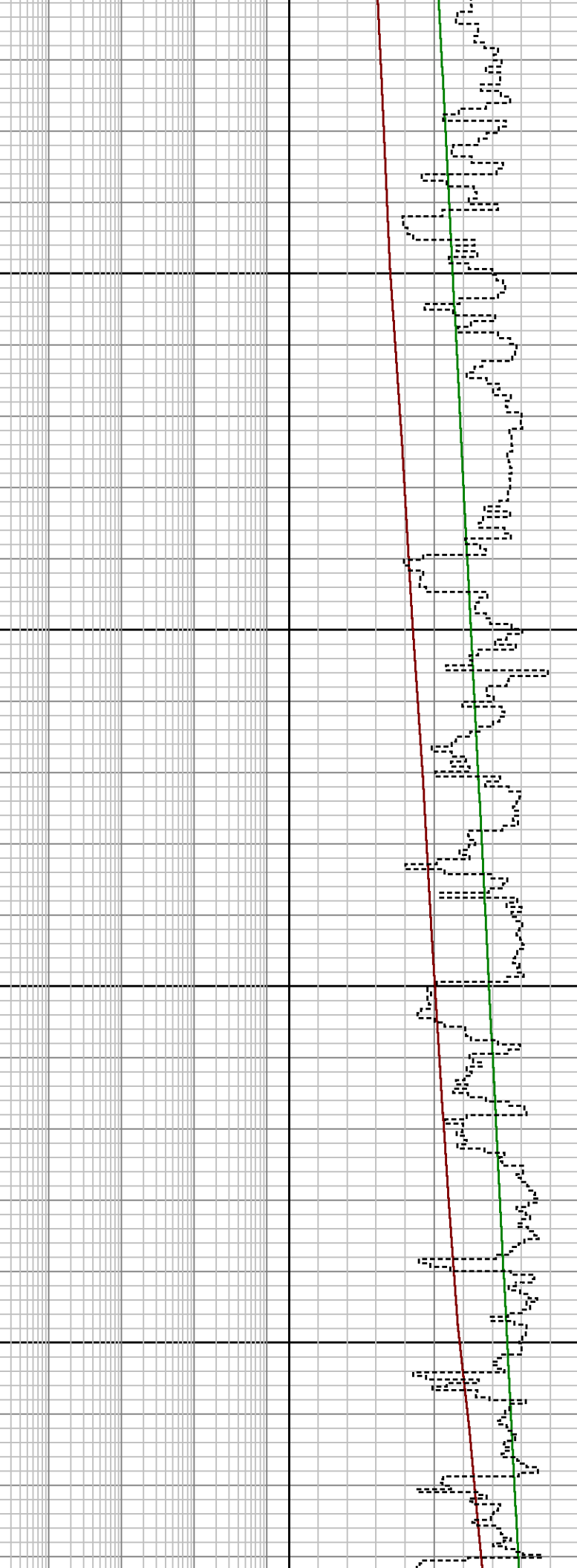


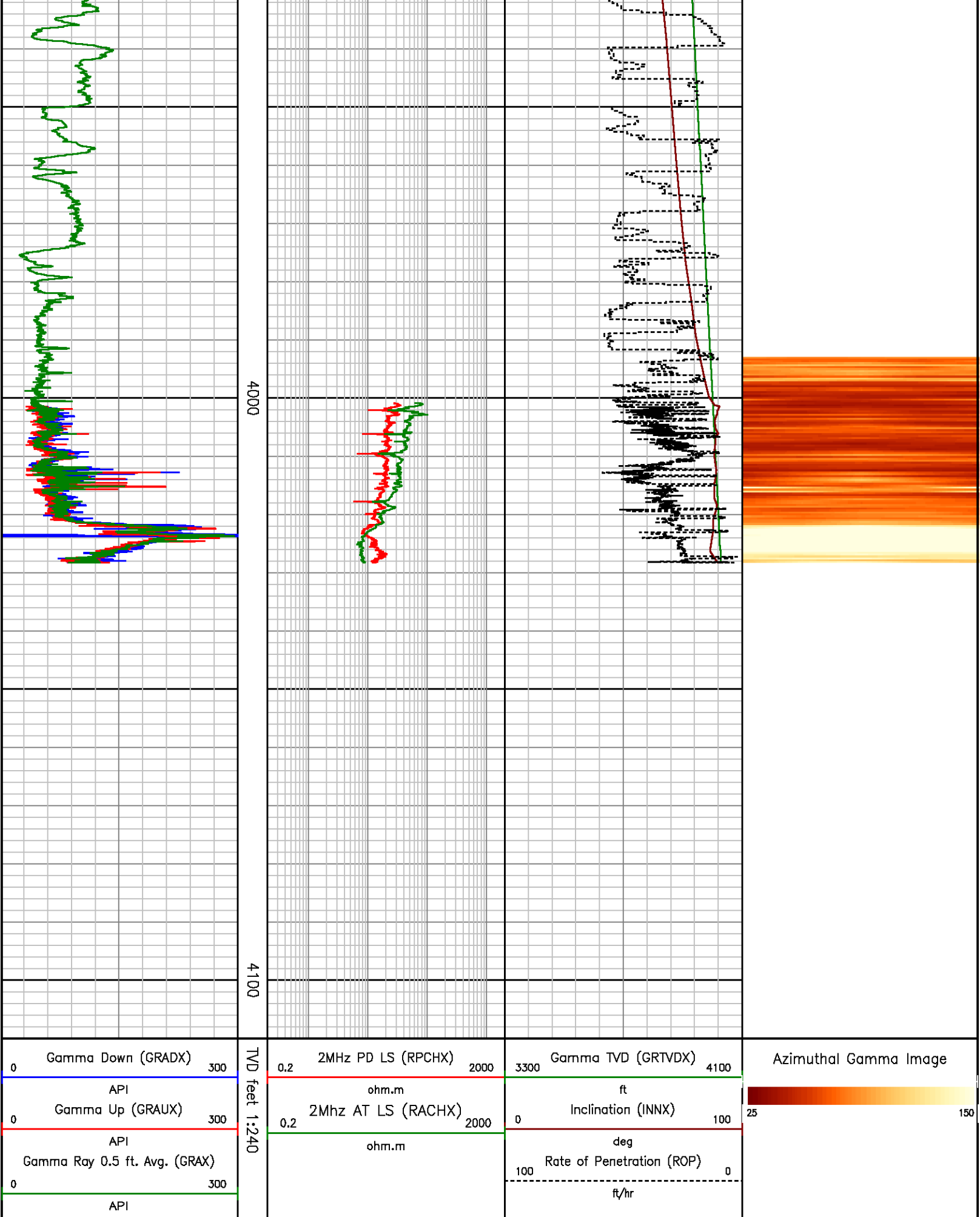




3800

3900



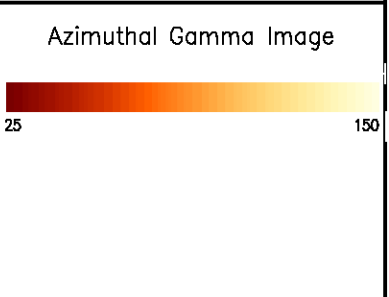


0	Gamma Down (GRADX)	300
API		
0	Gamma Up (GRAUX)	300
API		
0	Gamma Ray 0.5 ft. Avg. (GRAX)	300
API		

TVD feet 1:240

0.2	2MHz PD LS (RPCHX)	2000
ohm.m		
0.2	2MHz AT LS (RACHX)	2000
ohm.m		

3300	Gamma TVD (GRTVDX)	4100
ft		
0	Inclination (INNX)	100
deg		
100	Rate of Penetration (ROP)	0
ft/hr		



ADVANTAGE Final Survey Listing

Operator : Midcon Energy Field : LKC API No : 15195228110100
 Well : Holland 1-12H Rig : Trinidad 215 Job : 4945920
 Wellbore : Holland 1-12H Orig Hole

Well Origin

Latitude 39.02 deg Longitude -99.72 deg
 North Reference Grid Drill Depth Zero Kelly Bushing
 Vertical Datum is Ground Level Vertical Datum to DDZ 10.00 ft
 Vertical Section North 0.00 ft Vertical Section East 0.00 ft
 Vertical Section Azimuth 349.98 deg Vertical Section Depth 0.00ft
 Grid Convergence 1.09 deg Magnetic Declination 5.79 deg
 Total Correction 6.88 deg TVD Calculation Method Minimal Curvature
 D-Raw Calculation Magcorr1 Local Magnetic Field 52674 nT
 Local Magnetic Dip Angle 66.64 deg Local Gravity Field 0.9992 gravity

Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
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0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
623.00	0.22	183.07	-1.18	-0.06	623.00	-1.15	1.18	623.00	0.03	0.03	-28.40	
1194.00	0.00	6.88	-2.27	-0.12	1194.00	-2.21	2.27	571.00	0.04	-0.04	-30.86	
1856.00	0.52	286.60	-1.42	-2.98	1854.99	-0.88	5.25	661.00	0.08	0.08	-12.14	
2325.00	0.09	170.13	-1.16	-4.94	2324.98	-0.28	7.23	470.00	0.12	-0.09	-24.78	
2748.00	0.35	99.63	-1.70	-3.61	2747.98	-1.04	6.67	423.00	0.08	0.06	-16.67	
3380.00	1.08	239.99	-4.89	-6.75	3359.95	-3.64	13.15	612.00	0.22	0.12	22.93	
3392.00	1.43	283.20	-5.09	-7.41	3391.94	-3.72	13.84	32.00	1.92	1.11	72.54	
3423.00	2.35	307.89	-4.74	-8.29	3422.92	-3.23	14.79	31.00	5.39	2.96	144.16	
3455.00	4.05	330.30	-3.36	-9.37	3454.87	-1.68	16.54	32.00	6.49	5.30	70.04	

3485.00	6.18	341.78	-0.91	-10.40	3484.75	0.92	19.21	30.00	7.85	7.11	38.25	
3517.00	8.70	343.99	3.06	-11.61	3516.48	5.03	23.35	32.00	7.93	7.88	6.92	
3549.00	11.49	344.78	8.46	-13.11	3547.98	10.62	28.98	32.00	8.72	8.71	2.44	
3580.00	14.62	345.81	15.24	-14.88	3578.18	17.59	35.98	31.00	10.11	10.08	3.32	
3611.00	18.09	347.18	23.72	-16.91	3607.92	26.30	44.69	31.00	11.26	11.20	4.43	
3643.00	21.51	349.16	34.33	-19.12	3638.03	37.13	55.52	32.00	10.90	10.70	6.19	
3675.00	25.04	349.86	46.76	-21.41	3667.42	49.78	68.16	32.00	11.08	11.03	2.20	
3706.00	28.65	350.61	60.56	-23.78	3695.07	63.77	82.16	31.00	11.71	11.66	2.40	
3738.00	31.83	352.12	76.49	-26.19	3722.71	79.88	98.27	32.00	10.20	9.92	4.72	
3770.00	34.90	352.15	93.92	-28.60	3749.44	97.46	115.87	32.00	9.60	9.60	0.10	

3801.00	38.89	352.00	112.35	-31.17	3774.22	116.06	134.48	31.00	12.89	12.88	-0.46	
3833.00	42.49	352.22	133.01	-34.03	3798.48	136.91	155.34	32.00	11.26	11.25	0.68	
3864.00	46.10	351.93	154.45	-37.01	3820.67	158.54	176.98	31.00	11.64	11.62	-0.93	
3896.00	48.93	351.54	177.80	-40.41	3842.28	182.12	200.58	32.00	8.92	8.87	-1.23	
3926.00	51.90	351.31	200.66	-43.86	3861.39	205.23	223.70	30.00	9.92	9.90	-0.77	
3957.00	54.86	351.35	225.28	-47.61	3879.88	230.10	248.58	31.00	9.54	9.54	0.12	
3989.00	58.12	351.32	251.63	-51.63	3897.54	256.77	275.25	32.00	10.17	10.17	-0.09	
4018.00	62.09	351.02	276.47	-55.49	3912.00	281.90	300.39	29.00	13.73	13.70	-1.02	
4050.00	65.35	351.03	304.80	-59.96	3926.16	310.59	329.08	32.00	10.20	10.20	0.03	
4081.00	68.12	351.38	332.95	-64.31	3938.40	339.06	357.55	31.00	9.00	8.94	1.12	

4112.00	70.29	351.10	361.59	-68.73	3949.41	368.03	386.53	31.00	7.04	6.99	-0.90	
4143.00	72.33	350.51	390.57	-73.42	3959.34	397.39	415.90	31.00	6.82	6.58	-1.89	
4175.00	74.33	350.05	420.79	-78.59	3968.52	428.04	446.55	32.00	6.39	6.23	-1.46	
4207.00	76.29	349.70	451.28	-84.04	3976.64	459.00	477.50	32.00	6.24	6.15	-1.08	
4238.00	78.76	349.80	481.04	-89.42	3983.33	489.26	507.77	31.00	7.97	7.96	0.33	
4270.00	80.50	350.19	512.04	-94.89	3989.09	520.74	539.24	32.00	5.58	5.45	1.20	
4301.00	82.43	350.00	542.24	-100.16	3993.89	551.39	569.90	31.00	6.25	6.22	-0.60	
4333.00	84.48	350.00	573.54	-105.68	3997.34	583.18	601.69	32.00	6.40	6.40	0.00	
4364.00	86.20	350.09	603.98	-111.02	3999.85	614.08	632.59	31.00	5.56	5.55	0.30	
4396.00	88.52	350.94	635.50	-116.29	4001.33	646.04	664.55	32.00	7.71	7.24	2.66	

4428.00	90.65	350.65	667.09	-121.40	4001.56	678.04	696.55	32.00	6.72	6.65	-0.93	
4483.00	92.16	350.90	721.36	-130.22	4000.21	733.01	751.53	55.00	2.78	2.74	0.47	
4528.00	91.42	350.33	815.04	-145.69	3997.25	827.96	846.48	95.00	0.98	-0.78	-0.60	

4578.00	91.42	330.33	810.04	-143.89	3997.23	827.98	840.48	93.00	0.98	-0.78	-0.88
4642.00	88.43	349.60	878.06	-158.84	3997.34	891.95	910.47	64.00	4.80	-4.87	-1.14
4706.00	88.64	349.14	940.94	-168.64	3998.97	955.93	974.45	64.00	0.80	0.34	-0.73
4789.00	88.95	349.09	1002.79	-180.53	4000.29	1018.91	1037.44	63.00	0.49	0.49	-0.07
4832.00	88.92	348.43	1064.57	-192.81	4001.46	1081.88	1100.43	63.00	1.05	-0.05	-1.05
4894.00	89.91	348.85	1125.35	-205.01	4002.09	1143.86	1162.42	62.00	1.73	1.59	0.67
4958.00	89.57	348.91	1188.15	-217.35	4002.39	1207.85	1226.42	64.00	0.54	-0.53	0.09
5021.00	89.54	348.61	1249.94	-229.63	4002.88	1270.83	1289.42	63.00	0.49	-0.05	-0.48

Tie	MD ft	Incl deg	Azim deg	North ft	East ft	TVD ft	VS ft	Incr VS ft	Crs Len ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft
	5084.00	88.46	348.63	1311.69	-242.06	4003.98	1333.80	1352.41	63.00	1.71	-1.71	0.04
	5148.00	88.98	349.62	1374.53	-254.13	4005.41	1397.78	1416.39	64.00	1.74	0.82	1.54
	5211.00	89.85	351.32	1436.65	-264.56	4006.05	1460.77	1479.39	63.00	3.03	1.37	2.70
	5275.00	90.00	351.50	1499.93	-274.12	4006.13	1524.75	1543.39	64.00	0.36	0.24	0.27
	5338.00	88.86	351.37	1562.23	-283.51	4006.76	1587.73	1606.38	63.00	1.82	-1.81	-0.21
	5402.00	88.80	351.01	1625.46	-293.32	4008.07	1651.70	1670.37	64.00	0.57	-0.10	-0.56
	5465.00	88.28	350.36	1687.60	-303.51	4009.68	1714.67	1733.35	63.00	1.32	-0.83	-1.03
	5526.00	88.71	350.09	1747.70	-313.87	4011.28	1775.65	1794.33	61.00	0.83	0.71	-0.44
	5589.00	89.14	350.15	1809.75	-324.67	4012.47	1838.64	1857.32	63.00	0.69	0.69	0.09
	5653.00	88.89	350.57	1872.84	-335.39	4013.57	1902.63	1921.31	64.00	0.77	-0.38	0.66
	5716.00	88.18	350.10	1934.92	-345.96	4015.18	1965.61	1984.28	63.00	1.36	-1.13	-0.76
	5779.00	88.15	349.51	1996.90	-357.11	4017.19	2028.57	2047.25	63.00	0.93	-0.05	-0.92
	5842.00	89.48	349.31	2058.81	-368.68	4018.50	2091.55	2110.24	63.00	2.13	2.11	-0.32
	5905.00	89.29	347.83	2120.56	-381.16	4019.17	2154.53	2173.23	63.00	2.36	-0.29	-2.34
	5968.00	87.91	349.48	2182.30	-393.55	4020.71	2217.49	2236.21	63.00	3.41	-2.20	2.61
	6031.00	87.66	350.16	2244.26	-404.68	4023.15	2280.44	2299.16	63.00	1.15	-0.39	1.08
	6094.00	86.58	350.38	2306.28	-415.31	4026.32	2343.36	2362.08	63.00	1.75	-1.71	0.36
	6158.00	89.85	351.83	2369.47	-425.20	4028.31	2407.31	2426.04	64.00	5.58	5.10	2.28
	6221.00	91.36	352.43	2431.87	-433.82	4027.65	2470.26	2489.03	63.00	2.58	2.40	0.96
	6284.00	91.91	351.33	2494.21	-442.72	4025.86	2533.20	2552.01	63.00	1.97	0.88	-1.76
	6347.00	92.00	350.62	2556.39	-452.59	4023.71	2596.15	2614.97	63.00	1.12	0.15	-1.12
	6411.00	89.26	349.32	2619.41	-463.74	4023.00	2660.14	2678.96	64.00	4.74	-4.28	-2.04
	6471.00	91.57	349.88	2678.41	-474.56	4022.57	2720.13	2738.95	60.00	3.96	3.85	0.94
	6535.00	89.23	349.62	2741.39	-485.95	4022.12	2784.12	2802.95	64.00	3.68	-3.66	-0.42
	6599.00	91.63	350.79	2804.45	-496.84	4021.64	2848.12	2866.94	64.00	4.17	3.75	1.83
	6661.00	95.46	351.98	2865.62	-506.11	4017.81	2909.97	2928.81	62.00	6.46	6.17	1.93
	6724.00	95.86	351.65	2927.67	-515.04	4011.60	2972.63	2991.50	63.00	0.83	0.64	-0.52
	6778.00	96.36	352.13	2980.83	-522.61	4005.85	3026.29	3045.19	54.00	1.28	0.93	0.88
	6841.00	94.78	351.55	3042.89	-531.51	3999.73	3088.96	3107.89	63.00	2.68	-2.52	-0.92
	6904.00	91.17	350.44	3105.02	-541.35	3996.46	3151.85	3170.80	63.00	5.99	-5.73	-1.77
	6967.00	89.82	349.89	3167.09	-552.11	3995.92	3214.85	3233.79	63.00	2.32	-2.15	-0.87
	7030.00	89.91	349.85	3229.11	-563.19	3996.08	3277.85	3296.79	63.00	0.16	0.15	-0.06
	7094.00	91.63	349.56	3292.07	-574.63	3995.22	3341.84	3360.79	64.00	2.73	2.69	-0.46
	7157.00	90.12	350.01	3354.06	-585.80	3994.25	3404.83	3423.78	63.00	2.50	-2.39	0.72
	7220.00	91.72	350.17	3416.11	-596.64	3993.23	3467.82	3486.77	63.00	2.55	2.54	0.25
	7283.00	88.98	349.32	3478.10	-607.86	3992.84	3530.81	3549.76	63.00	4.55	-4.35	-1.34
	7346.00	88.43	349.40	3540.00	-619.49	3994.27	3593.79	3612.74	63.00	0.89	-0.88	0.13
	7422.00	88.43	348.78	3614.60	-633.86	3996.35	3669.75	3688.71	76.00	0.82	-0.00	-0.82
	Projection to TD:											
	7476.00	88.43	348.78	3667.55	-644.36	3997.83	3723.72	3742.69	54.00	0.00	0.00	0.00

ACTUAL WELLPATH REPORT (CSV version)

Prepared by Baker Hughes

Software System: WellArchitect®3.0.0

REFERENCE WELLPATH IDENTIFICATION

Operator MidCon Energy
Area Kansas
Field Trego County, Kansas (MidCon Operating) NAD 83 / Grid
Facility Holland 1-12H Sec 12-12S-22W
Slot Holland 1-12H SL 150 FSL, 1415 FWL
Well Subject
Wellbore Holland 1-12H AWB
Wellpath AWP
Sidetrack (none)

REPORT SETUP INFORMATION

Projection NAD83 / Lambert Kansas SP, Northern Zone (1501), US feet
North Refe Grid
Scale 0.999965
Convergen 1.09° West
Software S WellArchitect®
User Dehamard
Report Ger 10/3/2012 at 9:08:50 AM
DataBase/ Oklahoma City/ev01.xml

Table with 7 columns: WELLPATH, Local North [ft], Local East [ft], Grid East [ft], Grid North [ft], Latitude, Longitude. Rows include Slot Locatic, Facility Ref, and Field Refer.

WELLPATH DATUM

Calculation Minimum curvature
Horizontal Facility Center
Vertical Re Trinidad 215 (KB)
MD Refere Trinidad 215 (KB)
Field Vertic Mean Sea Level
Trinidad 21 10.00ft
Trinidad 21 2337.20ft
Trinidad 21 1415 FWL) 10.00ft
Section Ori 0.00ft
Section Ori 0.00ft
Section Azi 349.98°

W E L L P A T H D A T A Wellbore: Holland 1-12H AWB Wellpath: AWP † = interpolated/extrapolated station
MD Inclination Azimuth TVD Vert Sect North East Grid East Grid North

	[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]
†	0	0	183.07	0	0	0	0	824007.9	253320.2
	10	0	183.07	10	0	0	0	824007.9	253320.2
	623	0.22	183.07	623	-1.15	-1.18	-0.06	824007.9	253319.1
	1189	0	6.88	1189	-2.2	-2.26	-0.12	824007.8	253318
	1855	0.52	286.6	1854.99	-0.85	-1.4	-3.02	824004.9	253318.8
	2325	0.09	170.13	2324.98	-0.26	-1.15	-5	824002.9	253319.1
	2748	0.35	99.633	2747.98	-1.03	-1.69	-3.67	824004.2	253318.5
	3360	1.08	239.99	3359.95	-3.63	-4.89	-6.82	824001.1	253315.3
	3392	1.43	263.2	3391.94	-3.71	-5.09	-7.48	824000.4	253315.1
	3423	2.35	307.89	3422.92	-3.22	-4.75	-8.36	823999.6	253315.5
	3455	4.05	330.3	3454.87	-1.67	-3.36	-9.44	823998.5	253316.9
	3485	6.18	341.78	3484.75	0.93	-0.91	-10.47	823997.4	253319.3
	3517	8.7	343.99	3516.48	5.04	3.06	-11.68	823996.2	253323.3
	3549	11.49	344.78	3547.98	10.62	8.46	-13.18	823994.7	253328.7
	3580	14.62	345.81	3578.18	17.6	15.23	-14.95	823993	253335.5
	3611	18.09	347.18	3607.92	26.31	23.72	-16.98	823990.9	253344
	3643	21.51	349.16	3638.02	37.15	34.33	-19.18	823988.7	253354.6
	3675	25.04	349.86	3667.42	49.79	46.76	-21.48	823986.4	253367
	3706	28.65	350.61	3695.07	63.78	60.56	-23.85	823984.1	253380.8
	3738	31.83	352.12	3722.71	79.89	76.49	-26.26	823981.7	253396.7
	3770	34.9	352.15	3749.44	97.48	93.92	-28.67	823979.2	253414.2
	3801	38.89	352	3774.22	116.07	112.35	-31.23	823976.7	253432.6
	3833	42.49	352.22	3798.48	136.92	133.01	-34.09	823973.8	253453.2
	3864	46.1	351.93	3820.67	158.55	154.45	-37.08	823970.8	253474.7
	3896	48.93	351.54	3842.28	182.13	177.8	-40.47	823967.4	253498
	3926	51.9	351.31	3861.39	205.24	200.66	-43.92	823964	253520.9
	3957	54.86	351.35	3879.88	230.11	225.25	-47.67	823960.2	253545.5
	3989	58.12	351.32	3897.55	256.78	251.63	-51.69	823956.2	253571.9
	4018	62.09	351.02	3912	281.91	276.47	-55.55	823952.4	253596.7
	4050	65.35	351.03	3926.16	310.6	304.8	-60.03	823947.9	253625
	4081	68.12	351.38	3938.41	339.07	332.94	-64.38	823943.5	253653.2
	4112	70.29	351.1	3949.41	368.04	361.59	-68.79	823939.1	253681.8
	4143	72.33	350.51	3959.34	397.4	390.57	-73.49	823934.4	253710.8
	4175	74.33	350.05	3968.52	428.05	420.78	-78.66	823929.3	253741
	4207	76.29	349.7	3976.64	459.01	451.25	-84.11	823923.8	253771.5
	4238	78.76	349.8	3983.33	489.27	481.04	-89.49	823918.4	253801.3
	4270	80.5	350.19	3989.09	520.75	512.04	-94.96	823913	253832.3
	4301	82.43	350	3993.69	551.4	542.23	-100.23	823907.7	253862.4
	4333	84.48	350	3997.34	583.19	573.54	-105.75	823902.2	253893.8
	4364	86.2	350.09	3999.86	614.09	603.97	-111.09	823896.8	253924.2
	4396	88.52	350.94	4001.33	646.05	635.5	-116.36	823891.6	253955.7
	4428	90.65	350.65	4001.57	678.04	667.08	-121.48	823886.4	253987.3
	4483	92.16	350.9	4000.22	733.02	721.35	-130.29	823877.6	254041.6
	4578	91.48	350.33	3997.2	827.97	815.03	-145.78	823862.1	254135.2
	4642	88.43	349.6	3997.25	891.96	878.05	-156.93	823851	254198.2
	4706	88.64	349.14	3998.89	955.93	940.93	-168.73	823839.2	254261.1

4769	88.95	349.09	4000.21	1018.91	1002.78	-180.62	823827.3	254323
4832	88.92	348.43	4001.38	1081.89	1064.56	-192.9	823815	254384.8
4894	89.91	348.85	4002.02	1143.87	1125.34	-205.11	823802.8	254445.5
4958	89.57	348.91	4002.31	1207.85	1188.14	-217.46	823790.5	254508.3
5021	89.54	348.61	4002.8	1270.84	1249.93	-229.74	823778.2	254570.1
5084	88.46	348.63	4003.9	1333.81	1311.68	-242.16	823765.8	254631.9
5148	88.98	349.62	4005.32	1397.78	1374.52	-254.24	823753.7	254694.7
5211	89.85	351.32	4005.97	1460.78	1436.64	-264.67	823743.3	254756.8
5275	90	351.5	4006.05	1524.76	1499.92	-274.22	823733.7	254820.1
5338	88.86	351.37	4006.68	1587.73	1562.21	-283.61	823724.3	254882.4
5402	88.8	351.01	4007.99	1651.7	1625.45	-293.41	823714.5	254945.6
5465	88.28	350.36	4009.59	1714.68	1687.59	-303.6	823704.3	255007.8
5526	88.71	350.09	4011.19	1775.66	1747.69	-313.95	823694	255067.9
5589	89.14	350.15	4012.37	1838.64	1809.74	-324.76	823683.2	255129.9
5653	88.89	350.57	4013.47	1902.63	1872.83	-335.48	823672.5	255193
5716	88.15	350.1	4015.1	1965.61	1934.91	-346.05	823661.9	255255.1
5779	88.15	349.51	4017.14	2028.58	1996.89	-357.2	823650.7	255317
5842	89.48	349.31	4018.44	2091.56	2058.8	-368.77	823639.2	255379
5905	89.29	347.83	4019.12	2154.54	2120.54	-381.25	823626.7	255440.7
5968	87.91	349.48	4020.65	2217.5	2182.29	-393.64	823614.3	255502.4
6031	87.66	350.16	4023.09	2280.45	2244.25	-404.77	823603.2	255564.4
6094	86.57	350.48	4026.26	2343.37	2306.28	-415.35	823592.6	255626.4
6158	89.95	351.83	4028.2	2407.31	2369.48	-425.18	823582.7	255689.6
6221	91.36	352.43	4027.48	2470.26	2431.88	-433.81	823574.1	255752
6284	91.91	351.33	4025.69	2533.2	2494.22	-442.7	823565.2	255814.4
6347	92	350.62	4023.54	2596.15	2556.4	-452.58	823555.4	255876.5
6411	89.26	349.32	4022.83	2660.14	2619.41	-463.72	823544.2	255939.6
6471	91.57	349.88	4022.4	2720.14	2678.42	-474.55	823533.4	255998.6
6535	89.23	349.62	4021.95	2784.13	2741.39	-485.94	823522	256061.5
6598	91.63	350.79	4021.48	2847.12	2803.47	-496.66	823511.3	256123.6
6661	95.46	351.98	4017.58	2909.97	2865.62	-506.08	823501.9	256185.8
6724	95.86	351.65	4011.37	2972.63	2927.68	-515	823492.9	256247.8
6778	96.36	352.13	4005.62	3026.29	2980.83	-522.58	823485.4	256301
6841	94.78	351.55	3999.51	3088.96	3042.9	-531.48	823476.5	256363
6904	91.17	350.44	3996.24	3151.85	3105.03	-541.32	823466.6	256425.1
6967	89.82	349.89	3995.69	3214.85	3167.1	-552.08	823455.9	256487.2
7030	89.91	349.85	3995.84	3277.85	3229.12	-563.17	823444.8	256549.2
7094	91.63	349.56	3994.98	3341.84	3292.08	-574.6	823433.3	256612.2
7157	90.12	350.01	3994.02	3404.83	3354.07	-585.77	823422.2	256674.2
7220	91.72	350.17	3993.01	3467.82	3416.12	-596.61	823411.3	256736.2
7346	88.43	349.4	3992.84	3593.8	3540.1	-618.95	823389	256860.2
7422	88.43	348.78	3994.93	3669.76	3614.7	-633.33	823374.6	256934.8

T A R G E T S

Name	MD	TVD	North	East	Grid East	Grid North	Latitude	Longitude	Shape
	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			
Holland 1-12H PBHL		3985.2	4930.92	-871.3	823136.6	258251	39°01'46.6	99°43'19.7	point

WELLPATH COMPOSITION Ref Wellbore: Holland 1-12H AWB Ref Wellpath: AWP

Log Name/	Start MD	End MD	Pos Unc	Model
	[ft]	[ft]		
Inteq MWE	10	7422		NaviTrak (Standard)

DLS

Build Rate Turn Rate

[°/100ft]	[°/100ft]	[°/100ft]
0	0	0
0	0	0
0.04	0.04	0
0.04	-0.04	0
0.08	0.08	0
0.12	-0.09	-24.78
0.08	0.06	-16.67
0.22	0.12	22.93
1.91	1.09	72.53
5.39	2.97	144.16
6.5	5.31	70.03
7.84	7.1	38.27
7.92	7.87	6.91
8.73	8.72	2.47
10.12	10.1	3.32
11.26	11.19	4.42
10.89	10.69	6.19
11.06	11.03	2.19
11.7	11.65	2.42
10.22	9.94	4.72
9.59	9.59	0.09
12.87	12.87	-0.48
11.26	11.25	0.69
11.66	11.65	-0.94
8.89	8.84	-1.22
9.92	9.9	-0.77
9.55	9.55	0.13
10.19	10.19	-0.09
13.72	13.69	-1.03
10.19	10.19	0.03
9	8.94	1.13
7.05	7	-0.9
6.82	6.58	-1.9
6.4	6.25	-1.44
6.22	6.12	-1.09
7.97	7.97	0.32
5.57	5.44	1.22
6.26	6.23	-0.61
6.41	6.41	0
5.56	5.55	0.29
7.72	7.25	2.66
6.72	6.66	-0.91
2.78	2.75	0.45
0.93	-0.72	-0.6
4.9	-4.77	-1.14
0.79	0.33	-0.72

0.5	0.49	-0.08
1.05	-0.05	-1.05
1.73	1.6	0.68
0.54	-0.53	0.09
0.48	-0.05	-0.48
1.71	-1.71	0.03
1.75	0.81	1.55
3.03	1.38	2.7
0.37	0.23	0.28
1.82	-1.81	-0.21
0.57	-0.09	-0.56
1.32	-0.83	-1.03
0.83	0.7	-0.44
0.69	0.68	0.1
0.76	-0.39	0.66
1.39	-1.17	-0.75
0.94	0	-0.94
2.13	2.11	-0.32
2.37	-0.3	-2.35
3.41	-2.19	2.62
1.15	-0.4	1.08
1.8	-1.73	0.51
5.69	5.28	2.11
2.43	2.24	0.95
1.95	0.87	-1.75
1.14	0.14	-1.13
4.74	-4.28	-2.03
3.96	3.85	0.93
3.68	-3.66	-0.41
4.24	3.81	1.86
6.36	6.08	1.89
0.82	0.63	-0.52
1.28	0.93	0.89
2.67	-2.51	-0.92
5.99	-5.73	-1.76
2.31	-2.14	-0.87
0.16	0.14	-0.06
2.73	2.69	-0.45
2.5	-2.4	0.71
2.55	2.54	0.25
2.68	-2.61	-0.61
0.82	0	-0.82

Comment

Reservoir Navigation Final Report

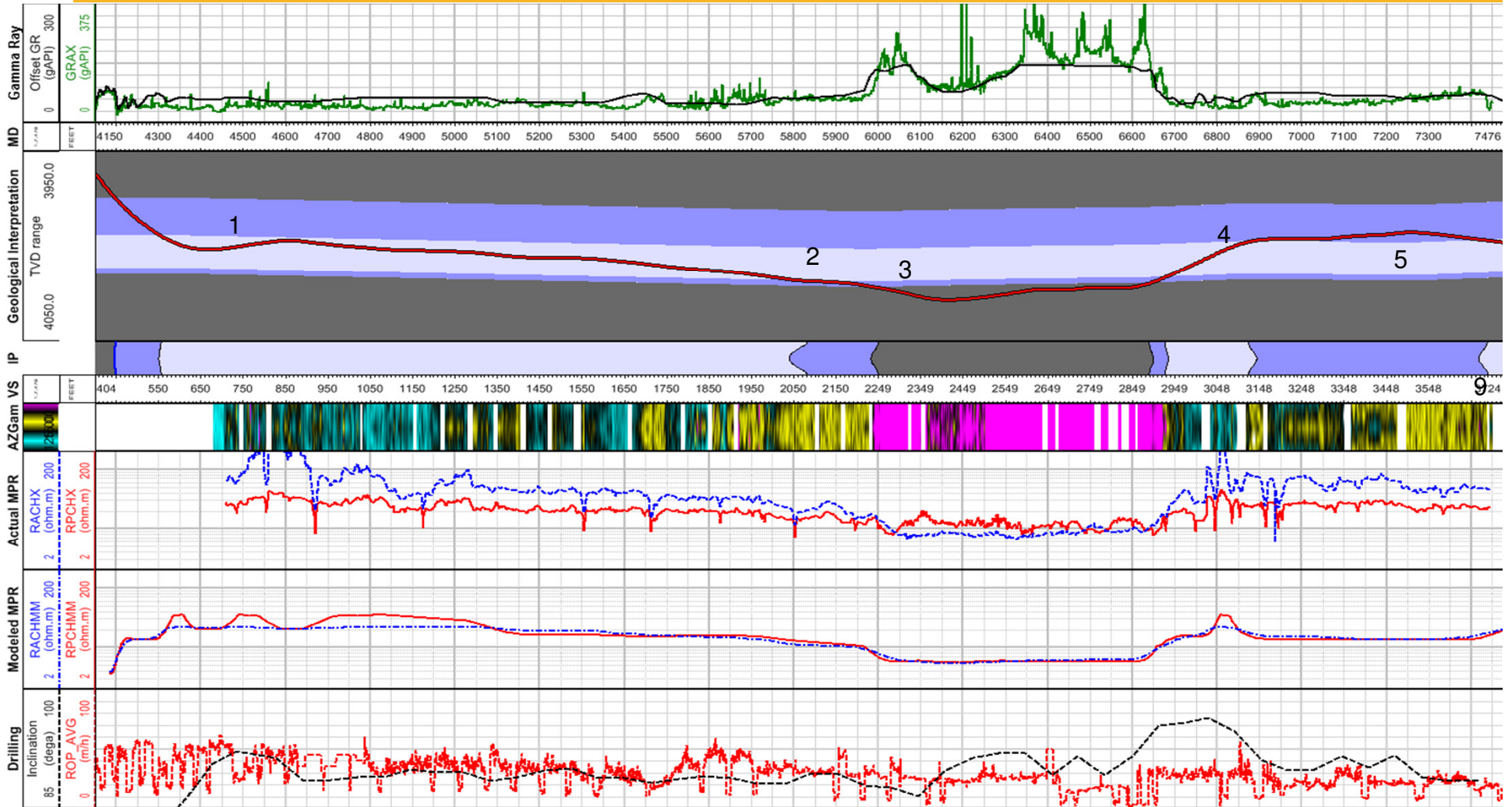
Midcon Energy Holland 1-12H

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MidCon Energy_Holland 1-12H FINAL RNS INTERPRETATION



See page 4 for additional remarks

Percentage In Formation, Fault Identification, Steering Recommendations and Remarks

- **Percent in Formation**

- Footage Drilled in lateral: 3046 ft.
- Footage and Percentage of lateral drilled within the Target Window: 1626 ft. MD or ~53%
- Footage and Percentage of lateral drilled below the Target Zone: 228 ft. MD or ~8%
- Footage and Percentage of lateral drilled above the Target Zone: 541 ft. MD or ~18%
- Footage and Percentage of lateral drilled Below the Base of the Marmaton: 651 ft. MD or ~21%

- **Steering Recommendations and Remarks**

- At ~4018' MD it was decided to lower the LP TVD by 15' to 4,005.00' TVD. This would allow us to land ~10-11' Below the Top of the target Window.
- (1) At ~4483' MD a Target Line of 3,999.60' TVD @ 0' VS with an 89.5 deg INC was issued which would allow us to maintain in the lower half of the Target Window.
- (2) At ~ 5850' MD a Target Line of 4,019' TVD @ 0' VS with 90 deg INC was issued as this would allow us to stop our downward movement and begin drilling with bedding.
- At 5,988' MD we exited the Base of the Marmaton due to INC's of near 87-87.5 deg.
- (3) At ~ 6030' MD a Target Line of 4028.9' TVD @ 0' VS with 90.5 was issued. This new Target line would get us up near the Top of the Target Window and maintain with bedding till TD.
- From 6,000' MD – 6650' MD we maintained out the Base of the Marmaton as Sliding became difficult due to the shale. We entered back into the Marmaton at ~6650' MD with a wellbore INC of 95 deg. At this time we were moving up section ~8' TSD per 100' MD Drilled.
- (4) At ~ 6841' MD we were at a wellbore INC of 94.8 deg and approaching the Top of the target Window. I called and advised that we needed to have an INC of 89 deg as this would stop our movement up section and begin moving back down to the 4028.9' TVD @ 0' VS with 90.5 Target Line.
- (5) At ~ 7250' MD a Target Line of 3,998' TVD @ 0' VS with 90 deg INC was issued as this would allow us to slowly cut down through the structure to well TD.
- At ~7476' MD the well was called due to a lost BHA down hole that could not be retrieved.

Baker Hughes INTEQ does not guarantee the accuracy or correctness of interpretations provided. Since all interpretations are opinions based on measurements, Baker Hughes INTEQ shall under no circumstances be held responsible for consequential damages or any other loss, costs, damages or expenses incurred or sustained in connection with the use of any such interpretations. Baker Hughes INTEQ disclaims all expressed and implied warranties related to its service which is governed by Baker Hughes INTEQ's standard terms and conditions.



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Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

April 19, 2013

Ryan Logsdon
Mid-Con Energy Operating, Inc.
2431 E 61ST ST
STE 850
TULSA, OK 74136-1236

Re: ACO-1
API 15-195-22811-01-00
Holland 1-12H
SW/4 Sec.12-12S-22W
Trego County, Kansas

Dear Ryan Logsdon:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 9/12/2012 and the ACO-1 was received on April 18, 2013 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department